Environmental Review for Activity/Project that is Categorically Excluded Subject to Section 58.5 Pursuant to 24 CFR 58.35(a)

Project Information

Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Rio y Remocion de Adoquines del Casco Urbano del Municipio de Jayuya (PR-CRP-000053)

Responsible Entity: Puerto Rico Department of Housing (PRDOH)

Grant Recipient (if different than Responsible Entity): Municipality of Jayuya

State/Local Identifier: Puerto Rico / Municipality of Jayuya

Preparer: Lizzette de Hoyos, POC, Municipality of Jayuya

Certifying Officer Name and Title:

Aldo A. Rivera Vázquez - Director, Permits and Environmental Compliance Division
Angel G. López Guzmán - Deputy Director, Permits and Environmental Compliance Division
Maria T. Torres-Bregón - Permits and Environmental Compliance Manager
Sally Z. Acevedo-Cosme - Permits and Environmental Compliance Specialist
Limary Vélez Marrero - Permits and Environmental Compliance Specialist
Ivelisse Lorenzo Torres - Permits and Environmental Compliance Specialist
Mónica Machuca Rios - Permits and Environmental Compliance Specialist
Janette I. Cambrelen - Permits and Environmental Compliance Specialist
Santa Ramírez Lebrón - Permits and Environmental Compliance Specialist
Abdul Feliciano Plaza - Permits and Environmental Compliance Specialist
Pedro A. De León Rodríguez - Permits and Environmental Compliance Specialist
Javier Mercado Barrera - Permits and Environmental Compliance Specialist
Priscilla Toro Rivera - Permits and Environmental Compliance Specialist

Consultant (if applicable): Environmental & Ecological Services LLC (EES)
163 calle José Rodríguez Iriz., Ste. 1A
Arecibo, PR 00612-4600
787-212-8598, jose.baez@ees-pr.com

Direct Comments to: PRDOH at comentariosambiental@vivienda.pr.gov

Project Location: The project site is located in the urban center of the Municipality of Jayuya, including the segments of state roads PR-141 and PR-144 (also known as Guillermo Esteves Street), Mattei Street, Torrado Street and Canales Street. The project's center point is approximately 18.218990, -66.591780. A project location map can be found in **Attachment 1**.

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:** The Municipality of Jayuya (the applicant) proposes improvements to sidewalks and to the pedestrian pathway known as "Ventana del Río," located within the urban center of Jayuya. The proposed improvements will take place along the following streets:

- Guillermo Estevez (PR-141) from 18.2184420, -66.5950295 to 18.22137995, -66.588343
- Figueras St. from 18.218246, -66.594458 to 18.219008, -66.5917799
- Torrado St. from 18.219105, -66.592754 to 18.2183142, -66.5922555
- Libertad St. from 18.218802, -66.5913661 to 18.21919037, -66.59020280
- San Felipe St. from 18.219825, -66.594061 to 18.219608, -66.592455
- Canales St. from 18.218937, -66.592598 to 18.219791, -66.590109
- PR-532 from 18.218442, -66.595030 to 18.219140, -66.594710
- Mattei St. from 18.219608, -66.592755 to 18.218677, -66.591589
- Massini St. from 18.219587, -66.591066 to 18.219238, -66.590782
- Hoyo Frio St. from 18.220536, -66.590200 to 18.220076, -66.589742
- Ventana al Rio Bridge from 18.218316, -66.592251 to 18.217507, -66.591983

The proposed improvements/rehabilitation include: the replacement of concrete in damaged sidewalks, curbs, and gutters; removal of pavers; concrete stamping; crosswalk markings; traffic safety signage; among other improvements that will facilitate pedestrian traffic within the urban center of Jayuya. In addition, solar-powered lights will be installed along Nemesio Canales Street from its intersection with Mattei Street to PR-141, continuing along PR-141 to the Plaza de la Música. Furthermore, repairs will be made to the mosaic, lighting fixtures, and handrail paint on the Ventana al Río bridge. Lastly, at the stairways, handrails, lighting, and green areas will be repaired. The proposed project has a total footprint of 6,061 square meters (1.50 acres). Project drawings can be found in **Attachment 2**.

Level of Environmental Review Determination:
Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5: 58.35(a)1 and 58.35 (a)2

Funding Information

Grant Number	HUD Program	Funding Amount
B-17-DM-72-0001; B-18-DP-72-0001; B-19-DP-78-0002; B-18-DE-72-0001	Community Development Block Grant – Disaster Recovery (CDBG-DR)	$11,938,162,230

Estimated Total HUD Funded Amount: $2,170,672.21

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]: $2,170,672.21

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Record below the compliance or conformance determinations for each statute, executive order, or regulation. Provide credible, traceable, and supportive source documentation for each authority. Where applicable, complete the necessary reviews or consultations and obtain or note applicable permits of approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	**Are formal compliance steps or mitigation required?**	**Compliance Determinations**
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 and 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	The project is not located within an FAA-designated civilian airport Runway Protection Zone (RPZ), or Accident Potential Zone (APZ). The project is not within 15,000 feet of a military airport nor 2,500 feet of a civilian airport. The nearest civil airport is the Mercedita Airport (PSE), located in Ponce and is approximately 78,720 feet south from the project, measured from the project boundary to the runway. The nearest military airport is Luis Muñoz Marín (SJU) Joint Military Airfield Muñiz Air National Guard, approximately 222,982 feet east from the project site, measured from the project boundary to the runway. Therefore, the project is in compliance with 24 C.F.R. Part 51, Subpart D. See Airport Hazards documentation in **Attachment 3**.
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	The proposed project is not located within a Coastal Barrier Resources Unit. The CBRS Unit closest to the Project is PR-56, [Punta Cabullones], located to the south of the project site at an approximate distance of 16.30 miles (85,825 feet). Therefore, the Project is in compliance with the Coastal Barrier Resources Act (CBRA). See Coastal Barrier Resources documentation in **Attachment 4**.
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	The project site is partially located within Zone AE of the Special Flood Hazard Area (SFHA)/ 100-year floodplain as designated in FIRM Panel number 72000C1105H, effective date: 4/19/2005. However, the proposed project does not involve insurable property, as the proposed improvements are limited to sidewalks, pedestrian pathways, curbs, gutters,

		stairways, and green areas. Therefore, the project does not require flood insurance in accordance with the Flood Disaster Protection Act of 1973 and the National Flood Insurance Reform Act of 1994. Therefore, the project is in compliance with 42 U.S.C. §§ 4001-4128 and 42 U.S.C. § 5154a. See Flood Insurance documentation in **Attachment 5**.
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	The project is located in the Municipality of Jayuya, which is designated as being in attainment for all criteria pollutants, according to the U.S. Environmental Protection Agency's (USEPA) Online Green Book on Nonattainment Areas for Criteria Pollutants as per data obtained on 7/31/2025. Emissions would occur intermittently throughout the construction period and would not occur as a constant plume of emissions from the project site. Given the construction schedule, varying buffer distances to the nearest sensitive receptor as construction moves across the project site, and the highly dispersive nature of diesel particulate matter (PM) emissions, construction of the project would not expose sensitive receptors to substantial toxic air contaminant (TAC) concentrations. Implementation of the Puerto Rico Department of Natural and Environmental Resources (DNER) Regulation for the Control of Atmospheric Pollution (Regulation Number 5300 of August 28, 1995, as amended) for basic construction practices for construction-related emissions would reduce diesel PM emissions during construction by minimizing vehicle idling and maintaining construction equipment properly tuned in accordance with manufacturer's specifications. The project applicant shall implement all the following applicable air pollution control measures during construction of the project: • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered as needed to control dust. • All haul trucks transporting soil, sand, or other loose material shall be covered. • All visible mud or dirt track-out onto adjacent public roads shall be removed at least once per day.

		• All vehicle speeds on unpaved roads shall be limited to 15 miles per hour. • All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. • Construction equipment will be properly maintained according to manufacturer's specifications. • Employee parking areas and temporary equipment storage will be established. These would be located on paved surfaces or unpaved compacted surfaces. • The contractor shall obtain a General Consolidated Permit prior to conducting construction activities. During construction, Rule 204(c) of the Puerto Rico Air Pollution Control Regulations for the temporary operation of an emission source (power generator) will be complied with. Therefore, the proposed project complies with the National Attaining Air Quality Standards (NAAQS). Due to its scope, no impact on air quality will be expected during its construction and operation. The proposed the project is in compliance with the Clean Air Act and 40 C.F.R. Parts 6, 51 and 93. No formal compliance steps or mitigation are required. See Clean Air documentation in **Attachment 6**.
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	The project is not located within the coastal zone of Puerto Rico, as defined by the State's Coastal Zone Management Program (CZMP). The proposed project is located inland, approximately 15.60 miles (82,354 feet) miles away from a Coastal Zone as determined by the Puerto Rico Coastal Zone Management Program (PRCZM). There would be no adverse impacts related to coastal zone management. Therefore, the project is in compliance with Section 307(c) and (d) of the Coastal Zone Management Act. See Coastal Zone Management documentation in **Attachment 7**.
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☒ No ☐	The site was evaluated for its proximity to known hazardous sites, including those listed on the EPA Superfund National Priorities List, state equivalent lists, and sites within 3,000 feet of a toxic or solid waste landfill. Within a 3,000-feet radius measured from the Project perimeter, four (4) were identified in NEPAssist with contamination and toxic substances. Of

		the four (4) sites identified, one (1) water discharger (Prasa Jayuya Urbano, FRS ID 110009814914) located approximately 2,380 feet east from site has a violation identified by the Enforcement Compliance History Online (ECHO) report. Due to the nature of the project activities, no impact is anticipated. There are no Superfund or Brownfield sites within one mile of the project location. The EPA UST Finder tool was used to identify underground storage tanks (USTs) within 3,000 feet of the project area. One (1) release and three (3) USTs were identified within the radius. The release at Carr. #144, Km. 4.4, Bo. Coabey in Jayuya has a status of "No Further Action." While the three USTs have very little information available in the report, impacts are not anticipated due to the limited scope of the proposed project. A field inspection was conducted on 9/24/2025 by Environmental & Ecological Services LLC personnel (see field inspection documentation on page 12) No evidence of soil contamination, water contamination, or hazardous materials were found on site. Lead based paint (LBP) testing was conducted on 10/10/2024, 10/14/2024, and 10/15/2024 by Elme Rivera of AESI Inc. Positive LBP was identified on curbs, water hydrants, curb ramps, sidewalk floor lines, light posts, bridge barriers, and guardrails in the project area. Standard LBP mitigation measures apply to all LBP-positive components that will be disturbed during project activities. Asbestos containing materials (ACM) testing was conducted on 10/15/2024 by Elme Rivera of AESI Inc. No positive ACM was identified in the project area. Please note that LBP and ACM testing were conducted for the Jayuya urban center and therefore, the associated hazards testing reports include results from some components not included in this project. The project is limited to improvements to sidewalks, pedestrian pathways, curbs, gutters, stairways, and green areas. The proposed project does not involve structures that are occupied or are intended to be occupied at least four (4) hours a day, as defined by HUD Notice CPD-23-103. Therefore, HUD radon requirements are not applicable and the project is exempt from radon testing.

		If any hazardous materials are encountered during construction, the contractor will notify the project owner before the continuation of work. Therefore, the project is in compliance with 24 CFR 50.3(i) and 58.5(i)(2). See Contamination and Toxic Substances documentation in **Attachment 8**.
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☐ No ☒	PRDOH, as the Responsible Entity, is conducting due diligence to assess Federally Listed Threatened and Endangered Species, in accordance with the Endangered Species Act Section 7. This involves consulting the U.S. Fish and Wildlife Service (USFWS). The project meets the criteria of the USFWS Blanket Clearance Letter, and a Blanket Clearance Letter was submitted to the agency for determination, which identified the proposed project's range within the habitat of federally listed species and critical habitats on 6/27/2024. The agency responded on 7/11/2024 with the determination that the proposed project qualifies for the blanket clearance letter and is not likely to adversely affect federally-listed species. In accordance with the BCL, the project is considered compliant with Section 7 of the Endangered Species Act, no further consultation is required, and no mitigation or conservation measures are required. If a Puerto Rican Boa is found in the Project action site, work shall cease until the Boa moves off on its own. If the Boa does not move off, the construction manager shall contact the Puerto Rico Department of Natural and Environmental Resources and ask for them to relocate the Boa. Therefore, the project is in compliance with the Endangered Species Act of 1973, particularly section 7 and 50 CFR Part 402. See Endangered Species documentation in **Attachment 9**.
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	The proposed project does not include development construction, rehabilitation that will increase residential densities, or conversion. Furthermore, the project site is not located in proximity to, nor will it expose people or structures to, above-ground storage tanks or facilities containing explosive or flammable fuels or chemicals that fall within the regulatory

		thresholds established under 24 CFR Part 51, Subpart C. Therefore, the Project is in compliance with the 24 CFR Part 51 Subpart C.
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	According to the Farmland Protection Map, there is no Prime Farmland or Farmland of Statewide Importance in the project area. The proposed project area has been previously developed with streets, sidewalks, and gutters. Therefore, the proposed project does not involve new construction, acquisition of undeveloped land, or conversion of land use. Additionally, the proposed project is located in the urban center of the municipality of Jayuya. The Farmland Protection Policy Act does not apply to projects already in or committed to urban development. Therefore, the project is in compliance with the Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658. See Farmlands Protection documentation in **Attachment 10**.
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☒ No ☐	The project is located within the floodplain. According to the Advisory Base Flood Elevation (ABFE) map issued 10/18/2024, the project is located in the floodplain. According to the Flood Insurance Rate Map (FIRM), Panel number 72000C1105H, effective 4/19/2005, the project is in the floodplain. The Preliminary FIRM Map is not available for the project area. Due to the project's location within the floodplain, completion of the floodplain decision-making process was required. Based on the scope of work, the proposed project met the requirements of 24 CFR 55.14(e) and was eligible to be evaluated with the modified 5-step decision making process. The 5-step process was conducted and documented. All mitigation measures and best management practices identified during the 5-Step analysis will be implemented to avoid, minimize, and mitigate potential adverse impacts to floodplain values and functions to the maximum extent practicable. Therefore, the Project is in compliance with Executive Order 11988, particularly section 2(a) and 24 CFR Part 55 See Floodplain Management documentation in **Attachment 11**.

Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☒ No ☐	The project was assessed for its potential effects on identified historic properties. This assessment considered direct, indirect, and cumulative impacts on the integrity and significance of the properties. Jaqueline López Meléndez (SOI-Qualified Archaeologist) and Francisco J. Moreno Orama (SOI-Qualified Architect/Architectural Historian) conducted historical archaeological and architectural evaluations for the property. The evaluation concluded that project actions will not affect the historic properties that compose the Area of Potential Effect (APE). Based on this finding, SHPO consultation was initiated on 9/4/2025 for review and concurrence with a determination of No Adverse Effect. On 9/29/2025, SHPO concurred with the determination that the project will have no adverse effect on historic properties conditioned to archaeological monitoring during all ground disturbing activities. On 11/11/2025, an Archaeological Monitoring Plan was submitted to SHPO. In a letter dated 11/20/2025, the State Historic Preservation Officer Carlos A. Rubio Cancela approved the plan and asked that SHPO be notified of the archaeological monitoring start date 48 hours prior to the initiation of work. Therefore, the project is in compliance with the National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800. See Historic Preservation documentation in **Attachment 12**.
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☐ No ☒	The project does not involve the development of noise-sensitive uses such as housing, schools, or healthcare facilities. The project scope is limited to improvements to sidewalks, pedestrian pathways, curbs, and gutters, which are not considered a noise-sensitive land use under HUD environmental standards and is already subject to urban noise levels. Temporary noise impacts related to construction activities are expected but will be limited to standard daytime hours. The project applicant shall implement noise control measures during construction of the project, which may include:

		• Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment. • Prohibit unnecessary idling of internal combustion engines. • Locate stationary noise-generating equipment such as air compressors or portable power generators as far as possible from sensitive receptors (e.g. Benjamin Harrison Vocational School). If necessary, construct temporary noise barriers to screen stationary noise-generating equipment when located near adjoining sensitive land uses. • Utilize "quiet" air compressors and other stationary noise sources where technology exists. • Prior to the start of construction, notify all adjacent property owners and other noise-sensitive land uses of the construction schedule, in writing, and provide a written schedule of "noisy" construction activities to the adjacent land uses and nearby properties. • Limit construction hours to avoid nighttime constriction whenever possible. Therefore, the project is in compliance with the Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51, Subpart B.
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	There are no sole source aquifers in Puerto Rico. Therefore, the proposed project site is not located within a sole source aquifer, nor will it directly or indirectly impact one. The nearest sole source aquifer is the Biscayne Aquifer SSA, located in the state of Florida in the continental United States. This SSA is located approximately 1,007.40 miles from the project site. Therefore, the project is in compliance with the Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149. See Sole Source Aquifer documentation in **Attachment 13**.
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	According to the National Wetland Inventory, the proposed project is within 100 feet of a riverine wetland. However, the project area is already developed and no work is proposed outside of existing

		paved surfaces. Therefore, there are no wetlands on site and no direct wetland impacts are anticipated. Indirect wetland impacts will be avoided through the use of standard construction best management practices. Based on these findings, no mitigation measures are required. All findings are consistent with the regulatory requirements of 24 CFR § 55.9. The proposed project complies with the requirements of Executive Order 11990, particularly sections 2 and 5. See Wetlands Protection documentation in **Attachment 14**.
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	The wild and scenic rivers in Puerto Rico are in the El Yunque National Forest. These rivers include La Mina River, Icacos River, and Mameyes River, with the Icacos River being the closest, approximately 55.47 miles (292,868 feet) east of the project site. The Municipality of Jayuya does not contain any rivers that are listed or proposed for inclusion in the National Wild and Scenic Rivers System. The proposed project site is not located within the watershed of, nor will it directly or indirectly affect, any designated wild and scenic river. Therefore, the project is in compliance with Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c). See Wild and Scenic Rivers documentation in **Attachment 15**.

Figure 1: North view of State Road PR-532

Figure 2: West view of State Road PR-144 and PR-532 Intersection

Figure 3: East view of PR-144 / Guillermo Estevez Street

Figure 4: North view of Torrado Street

Field Inspection (Date and completed by)**:** On September 24, 2025, Environmental & Ecological Services LLC (EES) consultant José L. Báez Romero conducted a walking inspection of the proposed project areas. Weather conditions during the inspection were warm (mid-80s °F) and partly cloudy. Selected field inspection photographs dated September 24, 2025, are provided below.

Figure 5: South view of Ventana al Rio pedestrian bridge

Figure 6: East-southeast view of the intersection of Torrado Street and Nemesio Canales Street

Figure 7: East view of Libertad Street

Figure 8: north view of Hoyo Frio Street

Figure 9: East view along PR-144 / Guillermo Estevez Street toward the Mattei Street intersection

Figure 10: West view of Figueras Street

Figure 11: East-northeast view of PR-144 / Guillermo Estevez Street toward Massini Street intersection

The following table summarizes EES observations during the field inspection:

Observations	Description/Location
Hazardous Substances and Petroleum Products as Defined by CERCLA 42 USC §9601(14):	No hazardous substances or petroleum products were observed at the project site, other than the lead-based paint (LBP) identified in roadway components by AESI's ACM and LBP Environmental Survey (see Attachment 8). Roadway and other non-residential improvements are exempt from HUD's lead-based paint regulations pursuant to 24 CFR §35.115(a)(7). Nevertheless, the Municipality will implement LBP abatement prior to the start of construction in accordance with the Puerto Rico Regulation for the Control of Lead-Based Paint Abatement and Renovation Activities, Regulation No. 9098 of July 16, 2019, as amended.
Drums (≥ 5 gallons):	None observed.
Strong, Pungent, or Noxious Odors:	None identified.
Pools of Liquid:	None observed.
Unidentified Substance Containers:	None observed.
PCBs-Containing Equipment:	None observed.
Other Observed Evidence of Hazardous Substances or Petroleum Products:	None observed.
Heating/Cooling Method:	N/A
Surface Stains or Corrosion	None observed.
Floor Drains and Sumps:	None observed.
Other Interior Observations:	None.
On-site Pits, Ponds, or Lagoons:	None observed.
Stained Soil or Pavement:	None observed.
Stressed Vegetation:	None observed.
Waste Streams and Waste Collection Areas:	None observed.

Observations	Description/Location
Solid Waste Disposal:	No areas suggesting solid waste disposal activities were identified during the field inspection.
Potential Areas of Fill Placement:	No mounds, piles, or surface depressions suggestive of fill material placement were identified during the field inspection.
Wastewater:	No exterior wastewater discharges were identified during the field inspection.
Stormwater:	Stormwater runoff generated on impermeable surfaces is directed to the curbs of State Road PR-141 (Guillermo Esteves Street) and Libertad Street.
Wells:	No wells were identified during the field inspection.
Septic Systems:	No visible indications of a septic system were identified during the field inspection.
Other Exterior Observations:	None.
Existing USTs:	No visible evidence (e.g., fill pipes, vent pipes, dispensers, or surface patches) indicative of underground storage tanks (USTs) was observed during the site inspection.
Other Underground Structures:	None observed.
Existing ASTs:	No visible evidence (e.g., fill pipes, vent pipes, dispensers, or containment dikes), indicative of aboveground storage tanks (ASTs), was observed during the field inspection.

The field inspection did not identify any on-site or nearby hazardous substances or conditions, other than the lead-based paint (LBP) identified in roadway components by AESI's ACM and LBP Environmental Survey (see Attachment 8). Roadway and other non-residential improvements are exempt from HUD's lead-based paint regulations pursuant to 24 CFR §35.115(a)(7). Nonetheless, the Municipality will implement LBP abatement prior to the start of construction in accordance with the Puerto Rico Regulation for the Control of Lead-Based Paint Abatement and Renovation Activities, Regulation No. 9098 of July 16, 2019, as amended.

Summary of Findings and Conclusions:

The proposed project, located in the urban center of Jayuya, Puerto Rico, involves improvements to sidewalks, pedestrian pathways, and related infrastructure. The project area is previously developed, with no new land acquisition or conversion of undeveloped land. The improvements are limited to existing streets, sidewalks, and green areas, ensuring minimal disruption to the urban environment and no displacement of residents. The project complies with all relevant statutes, executive orders, and regulations reviewed. No hazardous substances, petroleum products, or evidence of contamination were observed on site, except for lead-based paint (LBP) identified in certain roadway components. Standard LBP mitigation measures will be implemented prior to construction. No asbestos-containing materials (ACM) were found.

The site is partially located within the floodplain, but the project's scope and mitigation measures ensure compliance with Executive Order 11988 and 24 CFR Part 55. The area is adjacent to a riverine wetland, but all work remains within existing paved surfaces, avoiding direct wetland impacts. The State Historic Preservation Office (SHPO) concurred with a determination of No Adverse Effect, contingent upon archaeological monitoring during ground-disturbing activities. A qualified

archaeologist will oversee excavation, and protocols are in place for the discovery of historic materials. Temporary impacts from construction activities are expected but will be mitigated through best management practices, including dust and noise control, proper equipment maintenance, and adherence to local and federal regulations.

Based on the comprehensive review and field inspection, the project will not result in significant environmental impact. All identified risks are mitigated through established measures, and the project complies with applicable federal, state, and local regulations. The improvements will enhance pedestrian safety and accessibility in Jayuya's urban center while preserving environmental and cultural resources.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Summarize below all mitigation measures adopted by the Responsible Entity to reduce, avoid, or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements, and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Law, Authority, or Factor	Mitigation Measure
Contamination and Toxic Substances	Lead based paint (LBP) testing was conducted on 10/10/2024, 10/14/2024, and 10/15/2024 by Elme Rivera of AESI Inc. Positive LBP was identified on curbs, water hydrants, curb ramps, sidewalk floor lines, light posts, bridge barriers, and guardrails in the project area. Standard LBP mitigation measures apply to all LBP-positive components that will be disturbed during project activities.
Floodplain Management	The project site is located within the floodplain as identified by the Puerto Rico Advisory Base Flood Elevation (ABFE) map and FIRM panel 72000C1105H, effective 4/19/2005. To address potential flood risks, the project completed HUD's Floodplain Decision-Making Process under Executive Order 11988 and 24 CFR Part 55. Based on the scope of work, the proposed project met the requirements of 24 CFR 55.14(e) and was eligible to be evaluated with the modified 5-step decision making process. The 5-step process was conducted and documented. All mitigation measures and best management practices identified during the 5-Step analysis will be implemented to avoid, minimize, and mitigate potential adverse impacts to floodplain values and functions to the maximum extent practicable.
Historic Preservation	On September 29, 2025, SHPO concurred with a determination of No Adverse Effect, subject to the condition that an archaeological monitoring plan be implemented during all ground-disturbing activities. The required monitoring plan was subsequently submitted and approved, with SHPO concurrence

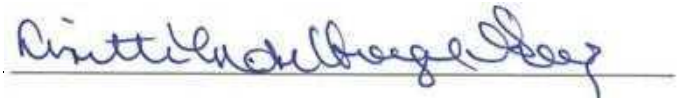
	on November 20, 2025, confirming that the plan is adequate to mitigate potential impacts to cultural resources (se Historic Preservation documentation in **Attachment 12**). A qualified professional archaeologist will be present to monitor excavation and other ground-disturbing activities. SHPO will be notified of the archaeological monitoring start date 48 hours prior to the initiation of work. Should any historic or pre-contact archaeological materials or features be encountered, the archaeologist will follow the approved protocol, ensuring proper documentation, evaluation, and coordination with SHPO prior to resuming work.
Transportation and Accessibility	During construction activities, a Maintenance of Traffic (MOT) plan shall be developed and maintained pursuant the United States Department of Transportation (DOT) Federal Highway Administration (FHWA) 2009 Manual on Uniform Traffic Control Devices (MUTCD). Once the project is completed, permanent pavement markings and traffic signaling shall be installed pursuant to FWHA requirements

Determination:

☐ This categorically excluded activity/project converts to Exempt, per 58.34(a)(12) because there are no circumstances which require compliance with any of the federal laws and authorities cited at §58.5. **Funds may be committed and drawn down after certification of this part** for this (now) EXEMPT project; OR

☒ This categorically excluded activity/project cannot convert to Exempt because there are circumstances which require compliance with one or more federal laws and authorities cited at §58.5. Complete consultation/mitigation protocol requirements, **publish NOI/RROF and obtain "Authority to Use Grant Funds"** (HUD 7015.16) per Section 58.70 and 58.71 before committing or drawing down any funds; OR

☐ This project is now subject to a full Environmental Assessment according to Part 58 Subpart E due to extraordinary circumstances (Section 58.35(c)).

Preparer Signature:  Date: 12/4/2025

Name/Title/Organization: Lizzette de Hoyos / POC / Municipality of Jayuya

Certifying Officer Signature: Date: December 10, 2025

Name/Title: Santa D. Ramírez Lebrón / Permits and Environmental Compliance Specialist

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

List of Attachments

1	Project Location
2	90% Construction Plans
3	Airport Hazards
4	Coastal Barrier Resources
5	Flood Insurance
6	Clean Air
7	Coastal Zone Management
8	Contamination and Toxic Substances
9	Endangered Species
10	Farmland Protection
11	Floodplain Management
12	Historic Preservation
13	Sole Source Aquifers
14	Wetlands Protection
15	Wild and Scenic Rivers

Attachment 1:
Project Location Map

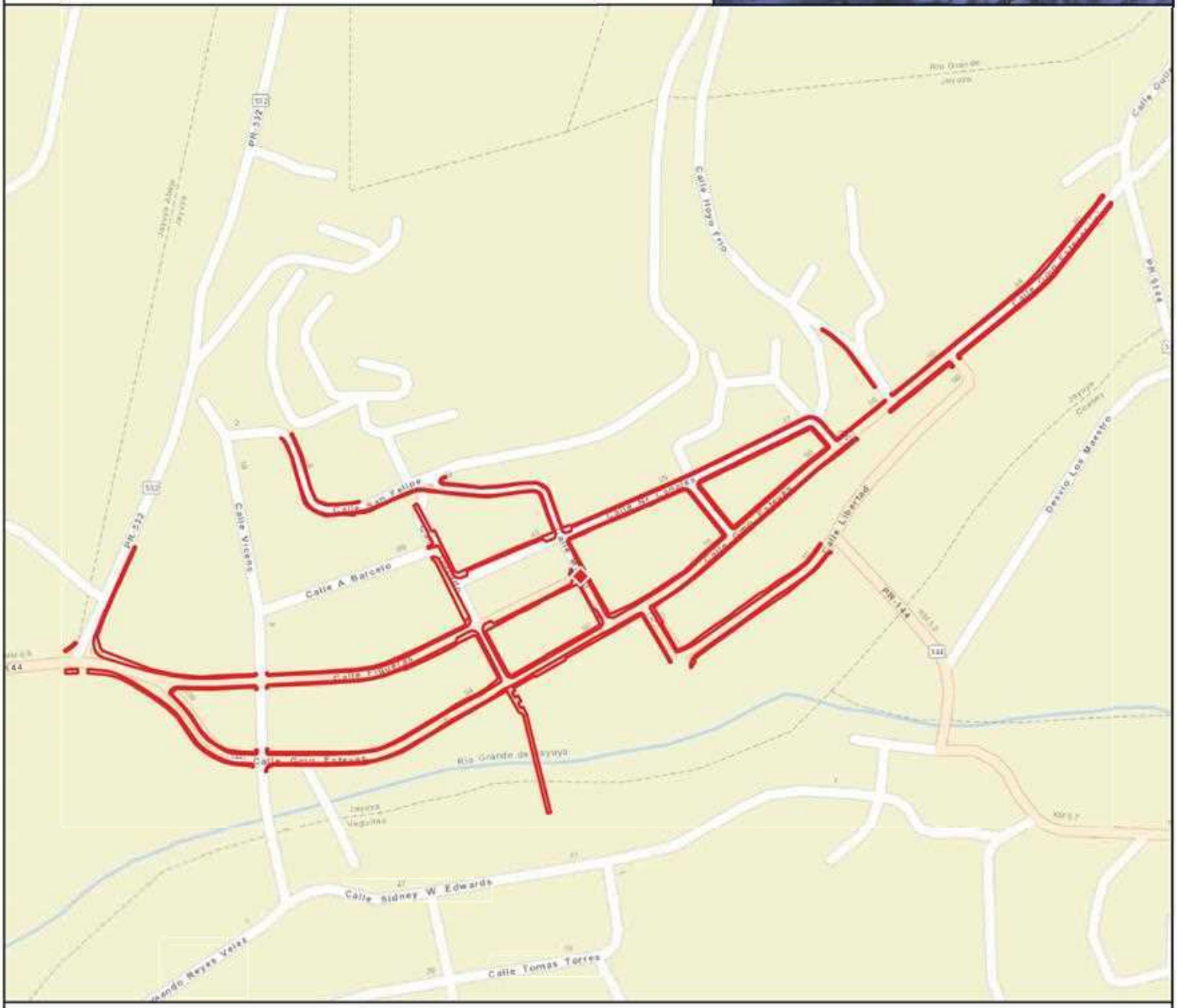
Site Location Map - PR-CRP-000053

Project:: Mejoras Aceras, Paseo Peatonal Ventana al Rio y Remocion de Adoquines del Casco Urbano del Municipio de Jayuya

Address: Urban Center, Municipality of Jayuya, Puerto Rico

Coordinates: 18.218990°, -66.591780° (WGS 1984)

EES



Legend

- Project Location
- Project Footprint
- 18.218990, -66591780
- Municipalities

N

Scale: 1: 4,000

1 inch equals 0.10 kilometers

0 75 150 m

Spatial Reference:
NAD 1983 State Plane Puerto Rico Virgin Islands FIPS 5200 meters

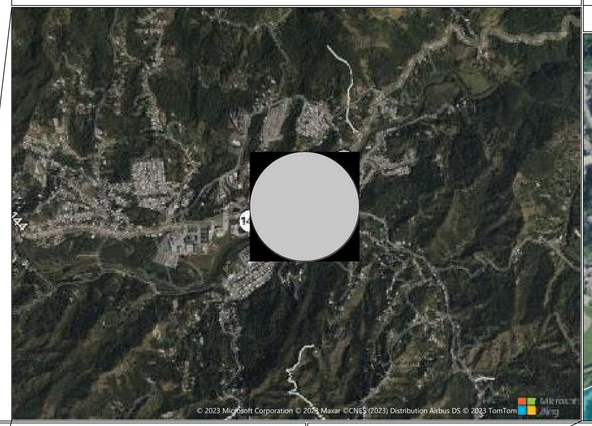
Sources:
PRITS Web Feature Services (http://geoserver2.pr.gov/geoserver/pr_geodata/wfs). ESRI Streets Map (https://server.arcgisonline.com/arcgis/rest/services/World_Street_Map/).

Attachment 2:
Construction Drawings

SATELLITE MAP

SCALE: 1:20,000

LAMBERT COORDINATES: X=183,333.357 Y=242,231.231 NAD 83

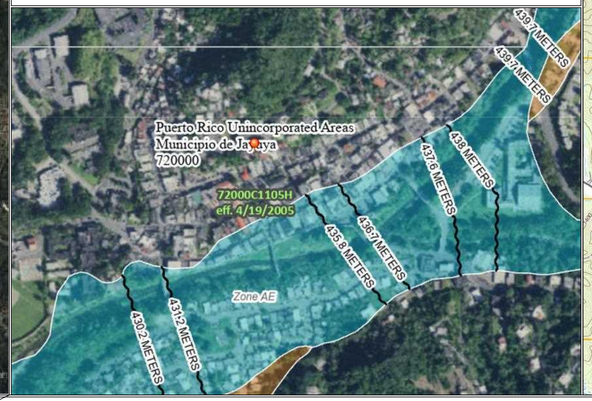


FLOOD MAP

SCALE: 1:5,000

MAP NUMBER: 72000C1105H ZONE X

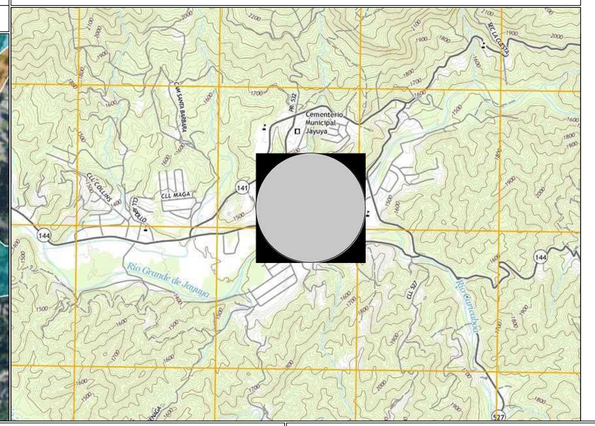
REVISION DATE: APRIL 19, 2005

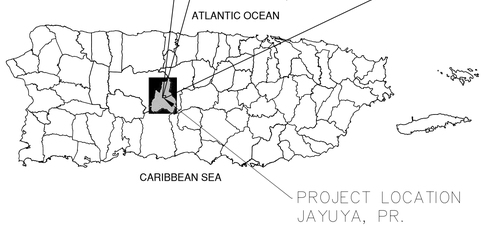


USGS TOPOGRAPHIC MAP

SCALE: 1:20,000

LAMBERT COORDINATES: X=183,333.357 Y=242,231.231 NAD 83





CONSTRUCTION PLANS
FOR
SIDEWALK REVITALIZATION JAYUYA URBAN CENTER PR-CRP-00053
IN
JAYUYA, PR.
Monday, April 15, 2024

PREPARED FOR
MUNICIPALITY OF JAYUYA
JAYUYA, PR.
CONTACT: PMO. VILMA I. PEREIRA, P.E.
TEL. 787-771-5071
EMAIL: VILMA.PEREIRA@AEGROUP-PR.COM

ENGINEER
DELGADO TORRES ENGINEERING, LLC.
URB. LINDA MAR # 53 C. LINDA MAR
MANATI, PR. 00674
CONTACT: JOSE A. DELGADO, PE.
TEL. 787-854-7591
EMAIL: JDELGADO@DELTORRE-ENG.COM

0 500 m 1000 m 2000 m

SCALE: 1:20000

PR-CRP-000053 Sheet Index Table		
Sheet No.	**Sheet Count**	**Sheet Title**
C100	1	Title Sheet
GN01	1	General Notes
S101-S102	2	Topography (by Others)
C200	1	Overview Plan
C301-C305	5	Demolition Plan
C401-C406	6	Site Plan
C501-C521	21	Grading & Paving Dtl
DTL-01	1	Curb & Gutter Details
C601-C605	5	Construction Sequence
E01	1	Luminaire Detail
C701-C705	5	Utility Plan
C801-C805	5	Erosion Control Plan
Standard Detail Sheets		
MOT 01-08	8	Maintenance of Traffic
RDWY 01-08	8	Roadway Standards
SW3P 01-04	4	Erosion Control Plan

90% DESIGN

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE TO OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

TITLE SHEET

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: 4/15/2024

PROJECT NO.: DTE23-004

SHEET NO.: C100

g:\users\jesusdelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-000053\dte23-004 cad\production drawings\c100 title sheet.dwg

GENERAL NOTES:

1. Prior to any construction, the Contractor shall familiarize himself with the Contract Documents and Specifications, the Plans, including all notes, the PRDOT Standard Details and Specifications and any other applicable standards or specifications relevant to the proper completion of the work specified. Failure on the part of the Contractor to familiarize himself with all Standards and Specifications pertaining to this work shall in no way relieve the Contractor of responsibility for performing the work in accordance with all such applicable Standards and Specifications.

2. The Contractor shall have in his possession, prior to construction, all necessary permits, licenses, etc. The Contractor shall have at least one set of approved Engineering Plans and Specifications on-site at all times. The Contractor shall notify the Municipality of Jayuya 48 hours prior to the commencement of any work.

3. All materials and construction shall conform to the PRDOT Standard Construction Details for Paving, Drainage, Water and Sanitary Sewer Facilities and be installed in accordance with the City Specifications and the Puerto Rico Department of Transportation. These specifications shall be made part of these plans.

4. In the event an item of work is not covered in the sheets provided in this set, Construction Standards, Specifications and Details; or the Puerto Rico Department of Transportation (PRDOT); the City Engineer or the Engineer of records shall have the final decision on all materials, methods and procedures.

5. Construction inspection may be performed by representatives of the Owner, Engineer, City, Geotechnical Engineer and Reviewing Authorities and Agencies. Unrestricted access shall be provided to them at all times. The Contractor is responsible for understanding and scheduling required inspections.

6. All contractors must confine their activities to the work area. No encroachments outside of the defined work area will be allowed, unless specifically noted on the plans. Any damage resulting therefrom shall be the Contractor's responsibility to repair.

7. It will be the responsibility of each contractor to protect all existing public and private utilities throughout the construction of this project. The Contractor shall contact the appropriate utility companies for line locations prior to commencement of construction and shall assume full liability to those companies for any damages caused to their facilities.

8. The Contractor shall be responsible for providing the required construction staking necessary to complete the construction in accordance with the plans and specifications.

9. The Contractor shall be responsible for providing and maintaining all necessary barricading and all other warning and safety devices to protect the public safety and health until all work has been completed and accepted.

10. If unforseen problems or conflicts are encountered in the course of construction, for which an immediate solution is not apparent, the Engineer and Owner shall be notified immediately.

11. The Contractor shall be responsible for field locating existing utilities and improvements prior to construction. The locations of existing utilities shown on these plans are approximate. The Contractor shall call 1-800-344-8377 (DIG-TESS), other utility locating services or the underground utility companies a minimum of 48 hours prior to beginning work.

12. The Contractor shall employ an Owner approved engineering testing laboratory for all required density, construction and materials testing and water bacteria testing. The testing laboratory shall make tests necessary to insure that construction is in accordance with the approved plans and specifications. Any retesting necessary to insure that a prior failing test meets the plan requirements, shall be at the Contractor's expense. The testing laboratory shall submit testing reports to the Engineer, the Owner and the Municipality.

13. The existing utilities shown on these plans have been located from reference information obtained from the respective owner of the utility. The Engineer and Owner do not accept responsibility for the utility locations as shown. It shall be the responsibility of the Contractor to verify the location of all existing utilities prior to construction, to take necessary precautions to protect all facilities encountered and to notify the Engineer promptly of any conflicts with existing facilities.

14. The Contractor shall be responsible for removing any existing structures, fences, debris or trees that are located within the boundaries of this project, unless otherwise noted on the plans.

15. The Contractor shall remove and dispose of all unsuitable excavated materials and construction debris at no additional cost to the Owner.

16. The Contractor shall be solely responsible for maintaining trench safety requirements in accordance with the trench safety plan prepared by others and in accordance with City Standards, PR State Law and the Occupational Safety and Health Administration Standards.

17. All concrete shall meet the minimum compressive strengths as noted and specified on the plans or other specifications. As a minimum, no concrete shall have a compressive strength less than 3,000 psi at 28 days.

18. Refer to the architectural plans for building and foundation dimensions.

19. The Contractor shall be responsible for providing a two (2) year, 100% maintenance bond to the Owner for all improvements associated with the approved plans.

GRADING NOTES:

1. All grading shall be performed in accordance with these plans and the geotechnical report prepared by others.

2. New finished contours shown are top of paving in areas to receive pavement and top of soil in areas to be seeded.

3. Areas outside of parking lot perimeter shown to be seeded shall receive a minimum of four (4) inches of top soil (or to depth identified on the Landscaping Plans). This topsoil to be placed and leveled by the grading contractor. This material may be stockpiled during stripping operations.

4. Rough grading elevations shall be as follows:
   A. Four (4) inches below finished contours in seeded areas.
   B. Six (6) inches below finished contours in paved areas, unless noted otherwise.

5. Dimensions on buildings are for grading purposes only and are not intended for use in laying out the building foundation.

6. Contractor shall pay all costs associated with raising or lowering existing utility appurtenances as required to match finished grades in conformance with City of Frisco Standards and these plans.

7. The Contractor shall use whatever measures are required to prevent silt and construction debris from leaving the site. Contractor shall comply with all Federal, State and Local erosion, conservation and siltation regulations. Contractor shall remove all temporary erosion control devices upon completion of permanent drainage facilities and the establishment of vegetation sufficient to prevent erosion. Any damage to adjacent properties; downstream channels, ponds or lakes; or wildlife shall be corrected by the Contractor at his expense.

8. The Contractor shall take all available precautions to control dust at no additional cost to owner.

9. All excavation is unclassified and shall include all materials encountered.

10. All areas not covered by the building, paving or proposed landscaping shall be grassed on this lot including adjacent street parkways.

11. Prior to the commencement of construction activities, the Contractor shall stake out and mark the items established by the site plan.

12. Temporary erosion control devices shall be installed prior to the commencement of grading activities. Contractor shall inspect and maintain all temporary erosion control devices as required.

13. All disturbed areas shall be seeded with hydromulch unless otherwise noted. The Contractor shall maintain as much existing vegetation as possible. Grass buffer strips shall remain around the perimeter of the property to aid in the filtering of sedimentation. Sufficient temporary or permanent groundcover shall be established on all slopes, berms and swales to prevent erosion.

14. All site grading and earthwork shall comply to the geotechnical report recommendations.

15. These specifications do not include grading and preparation of the building foundation area. The Contractor shall confirm the foundation compaction, moisture control, select fill and/or treatment with the Owner, the project geotechnical engineer and structural engineer.

16. Areas within five (5) feet horizontally of the parking pavement and/or embankment slopes adjacent to the parking area shall be constructed as per the project geotechnical engineer's recommendations. The specifications identified below are minimum requirements and shall be superseded by the project geotechnical engineer's recommendations if in conflict. The specifications are as follows:

   A. The area shall be stripped of vegetation a minimum of six (6) inches or as directed by the project geotechnical engineer and proofrolled. Proofrolling consists of rolling the entire area of prepared subgrade with a heavy (25 ton or greater total weight) pneumatic tired roller. The roller shall make several passes over the area. Any soft, wet or weak areas which do not compact by proofrolling shall be removed and recompacted as outlined herein. The proofrolling operation must be performed under the observation of a qualified geotechnical engineer or his representative and density control tested.

   B. On-site soils with a plasticity index (PI) anticipated to be greater than 15 and less than 20, which includes any dark colored surface clay soils, can be used as grade raise fill outside the proposed building area. These clay soils shall be compacted to a dry density of at least 95 percent of standard proctor density. The compacted moisture content of the clays during placement shall be between optimum and four (4) percentage points above optimum.

   C. Compaction shall be accomplished by placing the fill in six (6) to eight (8) inch thick lifts and compacting each lift to at least the minimum specified dry density. It is imperative that the fill particle sizes be less than six (6) inches in diameter. If larger clods are encountered during grading, these clods must be broken down or removed prior to final placement of the fill.

   D. In order for the fill materials to perform as intended, the fill material must be placed in a manner which produces a good uniform fill that is compacted within the density and moisture ranges outlined above. Field density tests shall be performed to confirm this performance as construction progresses. For the proposed parking and driveway areas, testing at a frequency of no less than one (1) test per each lift per each 5,000 square feet shall be provided.

17. All underground work shall be completed prior to subgrade preparation and placement of paving.

PAVING NOTES:

1. All dimensions are to the face of curb unless shown otherwise.
2. All proposed curb radii are 2.0 feet unless shown otherwise.
3. The Contractor shall remove and replace any concrete pavement within five (5) days of saw cutting the existing pavement.
4. The use of fly ash is not allowed in the concrete mix design.
5. All subgrade shall be tested for sulfates prior to the placement of concrete pavement. If sulfates are found, any treatments shall be in accordance with the recommendations of the geotechnical engineer.
6. All concrete shall meet the minimum compressive strengths as noted and specified on the plans or other specifications. Unless noted otherwise, the concrete pavement shall have a minimum compressive strength of 3,600 psi at 28 days.
7. It is the Contractor's responsibility to ensure compliance with all handicapped accessibility requirements, including signage, textures, colorings, markings and slopes of ADA accessible routes and parking spaces.
8. All signs, pavement markings and other traffic control devices shall conform to the Texas Manual on Uniform Traffic Control Devices.
9. All existing signs within the limits of the proposed pavement shall be relocated a minimum of five (5) feet from the proposed back of curb.
10. The contractor shall submit a pavement jointing plan to the Engineer for approval prior to the placement of concrete paving.
11. Saw joints shall be made as soon as the new concrete can support the weight of the machine and operator without tracking.

STORM DRAINAGE NOTES:

1. Drainage improvements to the existing system is not included in this project unless directed by the Engineer.
2. All storm drainage pipe shall be Class III RCP, C-76, unless shown otherwise.
3. The Contractor shall use Gifford-Hill "B-2" (Radius Pipe) or equal for all horizontal or vertical curves with a radius greater than 100 feet. Pre-fabricated bends shall be used if the radius is less than 100 feet.
4. Use pre-fabricated Wyes at all pipe intersections and concrete collars at pipe size changes if a junction device (manhole, junction box, inlet, etc.) is not used.
5. Open ends of storm drainage pipes shall be adequately protected at the end of each day by the contractor.
6. Water jetting is not allowed.
7. All embedment and backfill shall be wetted to approximate optimum moisture and compacted in 8 inch lifts to 95% Standard Proctor Density or as directed by the Geotechnical Engineer. Density tests shall be obtained for each lift and for each 150 lineal feet of trench or increment thereof or as directed by the Geotechnical Engineer.
8. All excavation is unclassified and shall include all materials encountered.

EROSION CONTROL NOTES:

1. Erosion control design and specifications are included in these drawings in accordance with the minimum requirements of the City of Frisco. Responsibility for compliance with State and Federal Best Management Practices (BMPs), the implementation of erosion control BMP measures and/or the filing of permits or notices shall solely rest with the Contractor(s) and Owner(s). The Junta de Calidad Ambiental (JCA) requires permits for both small and large construction sites under the authority of the Environmental Protection Agency (EPA) General Permit, if required. General Permit requirements will require the developer/owner and responsible Contractor(s) to complete the following:

   Small Construction Sites – will disturb (alone or as part of a larger development) between 1 acre and 5 acres of land.
   A. Must develop and implement a Storm Water Pollution Prevention Plan (SWPPP)
   B. Must post copy of the Construction Site Notice at the project site.
   C. Must submit a copy of the JCA Construction Site Notice to the overseer Govermental Agency, if required.

   Delgado Torres Eng. LLC.. assumes no responsibility or liability for failure to do so by the Owner, Developer or Contractor.

2. The Contractor shall obtain a General Permit in compliance with Govermental Agency and implement a SWPPP according to permit requirements and applicable laws.
3. The Contractor shall preserve existing vegetation when possible and must stabilize any disturbed area where construction activity has temporarily or permanently ceased. The stabilization must take place within 14 days of the end of activities unless construction will resume within 21 days.
4. All of the erosion control devices shown on the erosion control plan for the project shall be installed prior to the start of land disturbing activities.
5. If the erosion control plan as approved cannot control erosion and off-site sedimentation from the project, then the erosion control plan will be required to be revised and/or additional erosion control devices will be required on-site.
6. The Contractor shall use whatever measures are required to prevent silt and construction debris from leaving the site. Contractor shall comply with all Federal, State and Local erosion, conservation and siltation regulations. Contractor shall remove all temporary erosion control devices upon completion of permanent drainage facilities and the establishment of vegetation sufficient to prevent erosion. Any damage to adjacent properties; downstream channels, ponds or lakes; or wildlife shall be corrected by the Contractor at his expense.
7. The Contractor shall take all available precautions to control dust at no additional cost to owner.

DRAWING GENERAL NOTES:

1. metric system has been used throughout the project unless otherwise specified.
2. all elevations are referred to mean sea level and given in meters.
3. all horizontal coordinates used are meters, NAD83(Rev. 1993) system.
4. North indication points to true north.
5. New construction shall meet horizontal and vertical alignments of existing facilities.
6. Attention is called to all bidders that there are utilities installed in the construction area of this project, which are the property of the fallowing entities p.r. telephone co. puerto rico electric & power authority and the puerto rico aqueduct sewer authority and others. although these utilities were shown on the plans using the information obtained from the respective owners, the contractor shall exercise utmost care not to cause any damage to these utilities and shall coordinate with the owners of such utilities for the exact location of the same or any other that might be in the area prior to the commencement of any work in the vicinity of these utilities.
7. For standard models drawings, refer to the standard drawings book adopted by the puerto rico highway and transportation authority.
8. The lateral offset of the signs to be installed shall be according to the standards, recommendations and options indicated in Chapter 2a of the MUTCD 2023 edition.
9. Historical buildings are identified (from the Oficina Estatal de Conservacion Historica de PR) in the plans, although is the sole responsibility of the contractor to obtain any permits to perform any work adjacent to these buildings. the contractor shall not impact in any way these historical buildings to complete the construction shown here.

CRP-053 Sidewalk Revitalization Jayuya Urban Center

Project limit information (Coordinates)

Street		Project Limit Beginning Coordinates (m)	Latitude	Longitude	Project Limit I Coordinates (m)	Latitude
PR-144	Northing	242,631.74	18.2184420	66.5950295	242,956.31	18.22137
	Easting	182,869.88			183,604.39	
Figueras	Northing	242,609.96	18.2182457	66.5944579	Ends at Mattei Intersection	
	Easting	182,957.33				
Torrado	Northing	242,704.93	18.2191051	66.5927545	Ends at PR-141 Intersection	
	Easting	183,137.58				
Libertad	Northing	Begins at PR-141 Intersection			242,714.13	18.21919
	Easting				183,407.49	
San Felipe	Northing	242,784.72	18.2198249	66.5940610	Ends at Mattei Intersection	
	Easting	182,999.46				
PR-532	Northing	Begins at PR-141 Intersection			242,709.02	18.21914
	Easting				182,930.70	
PR-534	Northing	242,757.49	18.2195580	66.5927012	Ends at PR-141 Intersection	
	Easting	183,143.26				
Hoyo Frio	Northing	242,863.10	18.2205363	66.5902000	Ends at PR-141 Intersection	
	Easting	183,407.91				
Ventana al Mar (Bridge)	Northing	Begins at PR-141 Intersection			242,527.98	18.2175
	Easting				183,219.08	

ABBREVIATIONS

ABUT.	ABUTMENT
AGG.	AGGREGATE
AH.	AHEAD
AL.	ALUMINUM
ASB.	ASBESTOS
ASPH.	ASPHALT
BK.	BACK
B.L.	BASE LINE
B.W.F.	BARBED WIRE FENCE
B.V.	BALL VALVE
B. & S.	BELL & SPIGOT
B.M.	BENCH MARK
BIT. CONC.	BITUMINOUS CONCRETE
BLDG.	BUILDING
BW	BOTTOM OF WALL
C.I.	CAST IRON
C.I.P.	CAST IRON PIPE
C.B.	CATCH BASIN
C.L.	CENTER LINE
C. TO C.	CENTER TO CENTER
CTD.	COATED
COL.	COLUMN
COM.	COMMUNICATION
CONC.	CONCRETE
C.O.A.	CONTROL OF ACCESS
COORD.	COORDINATES
C.M.	CORRUGATED METAL
C.M.P.	CORRUGATED METAL PIPE
CU.M.	CUBIC METER
CULV.	CULVERT
C.S.	CURVED TO SPIRAL
C.	CUT
DEG.	DEGREE
DIA.	DIAMETER
DIM.	DIMENSION
DWG.	DRAWING
DWY.	DRIVEWAY
ELEV.	ELEVATION
E. TO E.	END TO END
ENGR.	ENGINEER
EST.	ESTIMATE
EXC.	EXCAVATION
EXIST.	EXISTING
E.G.	EXISTING GROUND
EXP.	EXPANSION
EXT.	EXTERNAL
EGL	ENERGY GRADE LINE
EOP	EDGE OF PAVEMENT
F. TO F.	FACE TO FACE
F.A.	FEDERAL AID
F.A.P.	FEDERAL AID PRIMARY
F.A.S.	FEDERAL AID SECONDARY
F.	FILL
F.L.	FLOW LINE
FWD.	FORWARD
G.I.	GALVANIZED IRON
G.	GAS
G.V.	GAS VALVE
GRAV.	GRAVEL
GRD.	GROUND
HW.	HEADWALL
HWL.	HIGH WATER LEVEL
HGL	HYDRAULIC GRADE LINE
HYD.	HYDRANT
INV.	INVERT
I.E.	INVERT ELEVATION
J.B.	JUNCTION BOX
LT.	LEFT
L.	LENGTH OF CURVE
L.P.	LIGHT POLE
M.B.	MAIN BOX
M.L.	MAIN LINE
MH.	MANHOLE
MAX.	MAXIMUM
M.H.W.	MEAN HIGH WATER
M.S.L.	MEAN SEA LEVEL
MED.	MEDIAN
MIN.	MINIMUM
MON.	MONUMENT
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OFF.	OFFSET
O. TO O.	OUTSIDE TO OUTSIDE
PVMT.	PAVEMENT
PCC.	POINT OF COMPOUND CURVATURE
P.C.	POINT OF CURVATURE
P.I.	POINT OF INTERSECTION
P.R.C.	POINT OF REVERSE CURVE
P.T.	POINT OF TANGENCY
P.C.C.	PORTLAND CEMENT CONCRETE
PWR.	POWER
P.P.	POWER POLE
P.L.	PROPERTY LINE
PROP.	PROPOSED
P.G.	PROPOSED GRADE
P.V.I.	POINT OF VERTICAL INTERSECTION
R.	RADIUS OF CURVATURE
RR.	RAILROAD
R.C.P.	REINFORCED CONCRETE PIPE
RET.	RETAINING
RT.	RIGHT
R.O.W.	RIGHT OF WAY
RD.	ROAD
RDWAY.	ROADWAY
SAN. S.	SANITARY SEWER
S.M.H.	SANITARY SEWER MANHOLE
SHDR.	SHOULDER
SW.	SIDEWALK
S.C.	SPIRAL TO CURVE
S.T.	SPIRAL TO TANGENT
SQ.M.	SQUARE METER
STA.	STATION
S.S.	STORM SEWER
STR.	STRUCTURE
SG.	SUBGRADE
S.L.	SURVEY LINE
TW	TOP OF WALL
T.S.	TANGENT TO SPIRAL
TEL.	TELEPHONE
TYP	TYPICAL (APPLY TO SIMILAR)
TY	TYPE (MATERIAL TYPE)
T.E.	TOP ELEVATION
T.G. TOC	TOP OF GRATE TOP OF CURB
UG.	UNDERGROUND
V.C.	VERTICAL CURVE
VERT.	VERTICAL
W.M.	WATER MAIN
W. MTR.	WATER METER
W.V.	WATER VALVE
W.W.	WING WALL
W.M.F.	WIRE MESH FENCE
W.I.	WROUGHT IRON
W/F	WATER FAUCET BOX

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

GENERAL NOTES

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

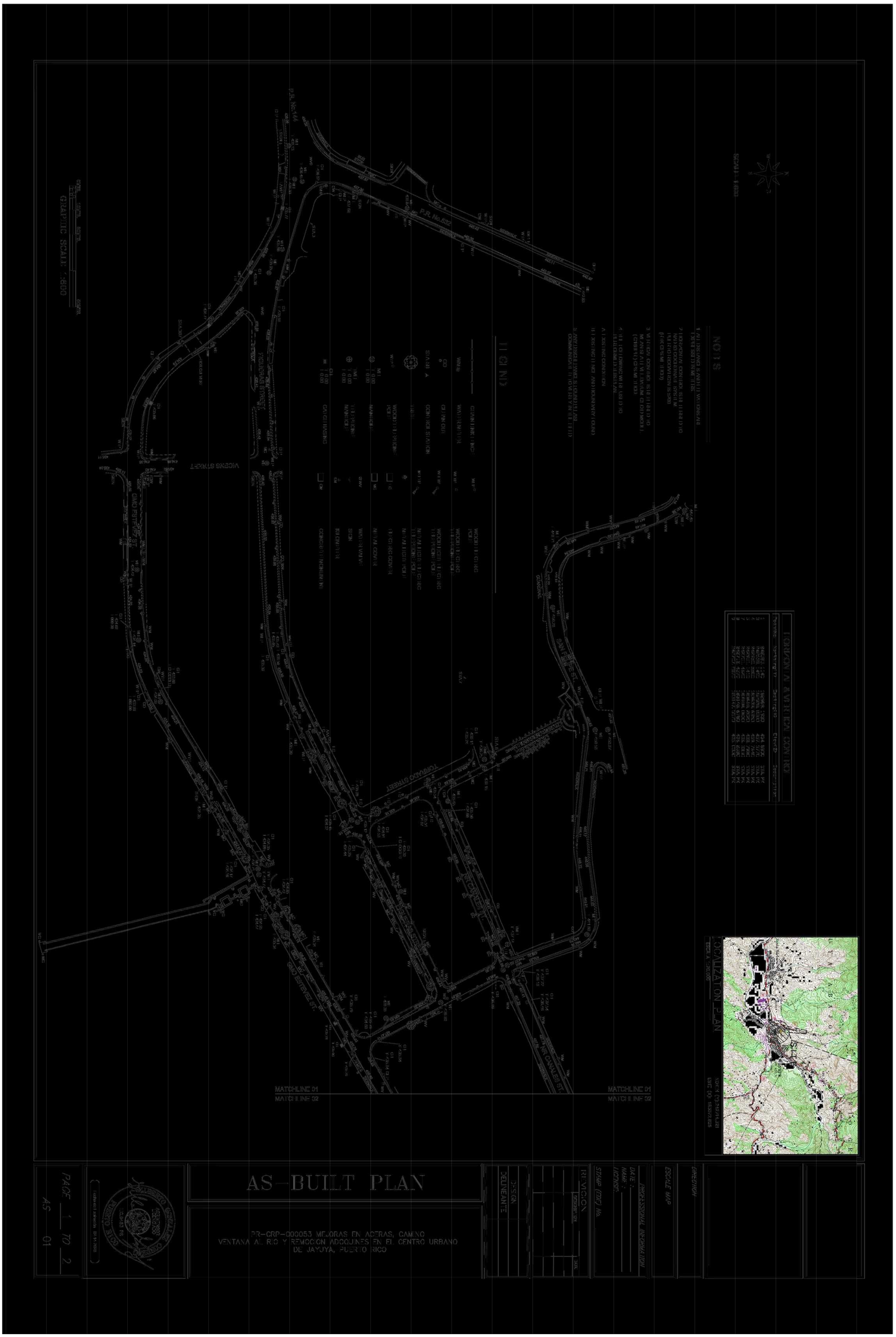
DATE: April 15, 2024

PROJECT NO.: DTE23-004

SHEET NO.: GN01

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\gn01 general notes.dwg

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\s100 survey.dwg



S101	DRAWING NO.		
	PROJECT NO. DTE23-004		
	DRAWN BY: JAD DESIGNED BY: REVIEWED BY:		
	DATE: April 15, 2024		

REVISIONS	SYMBOL	DATE	BY

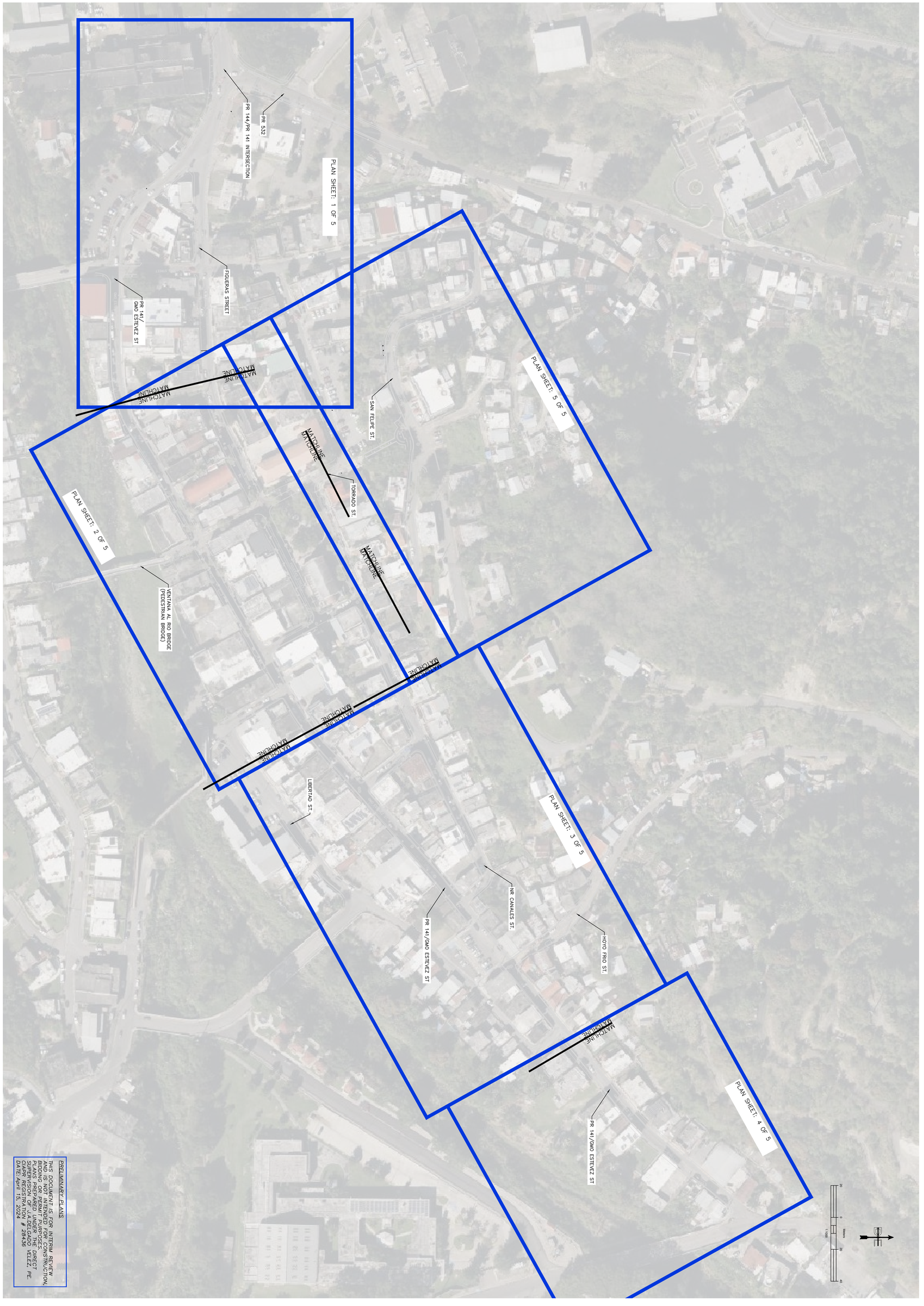
TOPOGRAPHIC SURVEYING MAP

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

DELTORRE ENGINEERING LLC
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\s100 survey.dwg

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c200 overall plan.dwg



C200	DTE23-004	April 15, 2024	DRAWN: JAD DESIGNED: REVIEWED: LTI		

REVISIONS	SYMBOL	DATE	BY

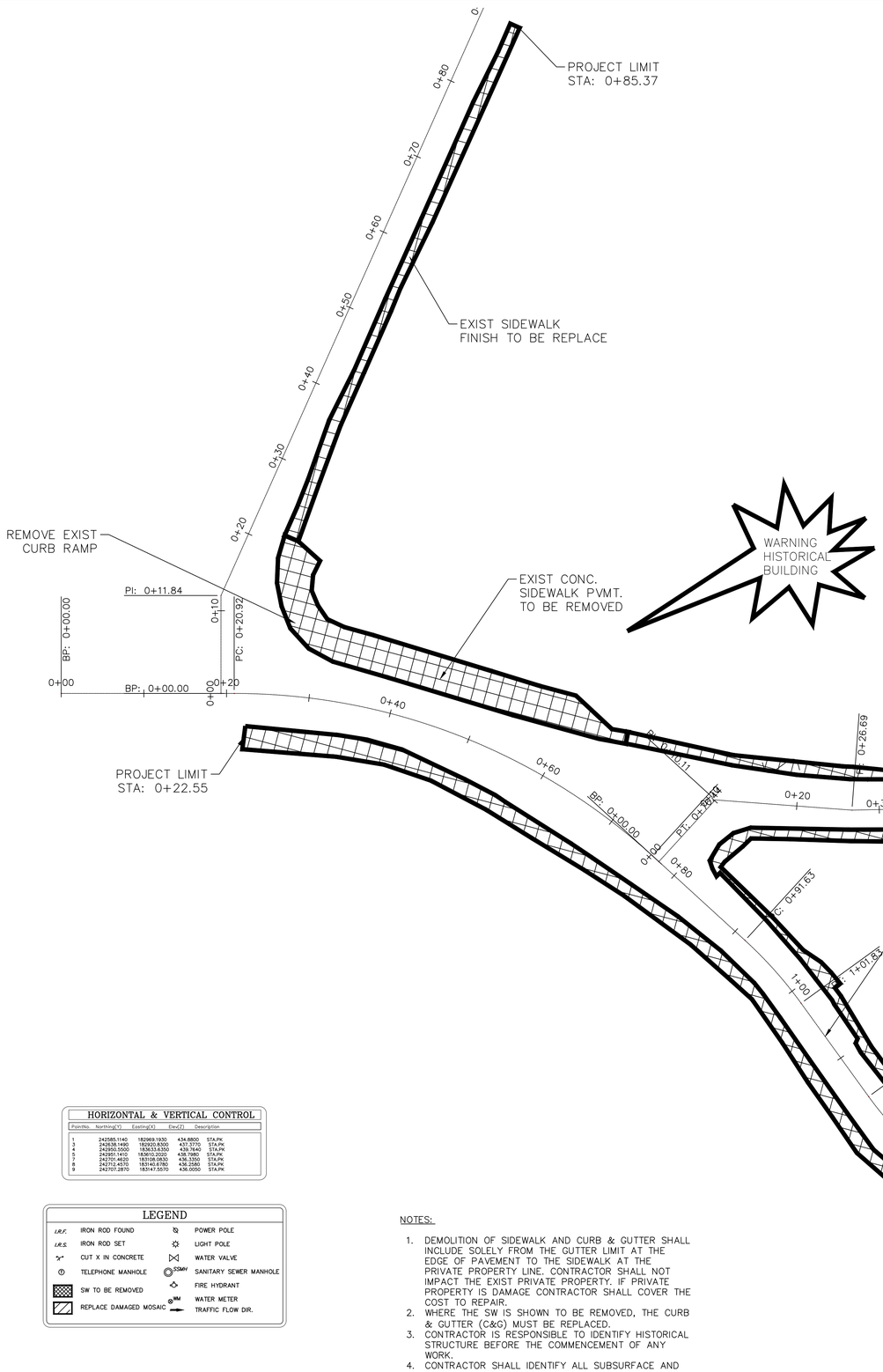
SHEET NAME

OVERALL PLAN
KEY MAP

PROJECT NAME

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre



HORIZONTAL & VERTICAL CONTROL				
PointNo.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
3	242636.1490	182920.8300	437.3770	STA.PK
4	242950.5500	183633.6350	439.7640	STA.PK
6	242701.4620	183108.0830	436.3350	STA.PK
7	242701.4620	183108.0830	436.3350	STA.PK
8	242712.4570	183140.6780	436.2580	STA.PK
9	242707.2870	183147.5570	436.0050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
T	TELEPHONE MANHOLE	SSMH	SANITARY SEWER MANHOLE
	SW TO BE REMOVED		FIRE HYDRANT
	REPLACE DAMAGED MOSAIC	WM	WATER METER
			TRAFFIC FLOW DIR.

NOTES:

1. DEMOLITION OF SIDEWALK AND CURB & GUTTER SHALL INCLUDE SOLELY FROM THE GUTTER LIMIT AT THE EDGE OF PAVEMENT TO THE SIDEWALK AT THE PRIVATE PROPERTY LINE. CONTRACTOR SHALL NOT IMPACT THE EXIST PRIVATE PROPERTY. IF PRIVATE PROPERTY IS DAMAGE CONTRACTOR SHALL COVER THE COST TO REPAIR.
2. WHERE THE SW IS SHOWN TO BE REMOVED, THE CURB & GUTTER (C&G) MUST BE REPLACED.
3. CONTRACTOR IS RESPONSIBLE TO IDENTIFY HISTORICAL STRUCTURE BEFORE THE COMMENCEMENT OF ANY WORK.
4. CONTRACTOR SHALL IDENTIFY ALL SUBSURFACE AND EXTERNAL UTILITIES BEFORE BEGINNING OF ANY WORK.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE TO OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
DEMOLITION PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 14, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C301

c:\users\jaesodelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c305 demolition plan.dwg

MATCHLINE
SHEET: C305

MATCHLINE
SHEET: C305

MATCHLINE
SHEET: C301

MATCHLINE
SHEET: C303

MATCHLINE
SHEET: C301

MATCHLINE
SHEET: C303

MATCHLINE
SHEET: C303

WARNING HISTORICAL BUILDING

WARNING HISTORICAL BUILDING

WARNING HISTORICAL BUILDING

MATTEI ST.

EXIST CONC. SIDEWALK PVMT. TO BE REMOVED

REMOVE EXIST CURB RAMP

EXIST GUTTER TO REMAIN

REMOVE PLANTER EX. TREE TO REMAIN

REMOVE AND REPLACE EXIST DAMAGED MOSAIC FINISH AT BRIDGE VENTANA AL RIO

PROJECT LIMIT STA: 0+41.92

PC: 1+08.42

PT: 1+24.45

PI: 2+16.82

PI: 2+39.89

PI: 3+02.69

PC: 3+33.21

PC: 3+40.69

PI: 0+04.78

PI: 0+24.21

PI: 1+76.80

EP: 1+87.48

BP: 0+00.00

PI: 0+39.96

HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
2	242638.1490	182920.8300	437.3770	STA.PK
4	242950.5500	183633.6350	439.7640	STA.PK
5	242851.1410	183610.2020	438.7980	STA.PK
7	242701.4620	183108.0830	436.3350	STA.PK
8	242707.4620	183108.0830	436.3350	STA.PK
9	242707.2870	183147.5570	436.0050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
T	TELEPHONE MANHOLE	SSMH	SANITARY SEWER MANHOLE
	SW TO BE REMOVED		FIRE HYDRANT
	REMOVE & REPLACE	WM	WATER METER
			TRAFFIC FLOW DIR.

NOTES:

1. DEMOLITION OF SIDEWALK AND CURB & GUTTER SHALL INCLUDE SOLELY FROM THE GUTTER LIMIT AT THE EDGE OF PAVEMENT TO THE SIDEWALK AT THE PRIVATE PROPERTY LINE. CONTRACTOR SHALL NOT IMPACT THE EXIST PRIVATE PROPERTY. IF PRIVATE PROPERTY IS DAMAGE CONTRACTOR SHALL COVER THE COST TO REPAIR.
2. WHERE THE SW IS SHOWN TO BE REMOVED, THE CURB & GUTTER (C&G) MUST BE REPLACED.
3. CONTRACTOR IS RESPONSIBLE TO IDENTIFY HISTORICAL STRUCTURE BEFORE THE COMMENCEMENT OF ANY WORK.
4. CONTRACTOR SHALL IDENTIFY ALL SUBSURFACE AND EXTERNAL UTILITIES BEFORE BEGINNING OF ANY WORK.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

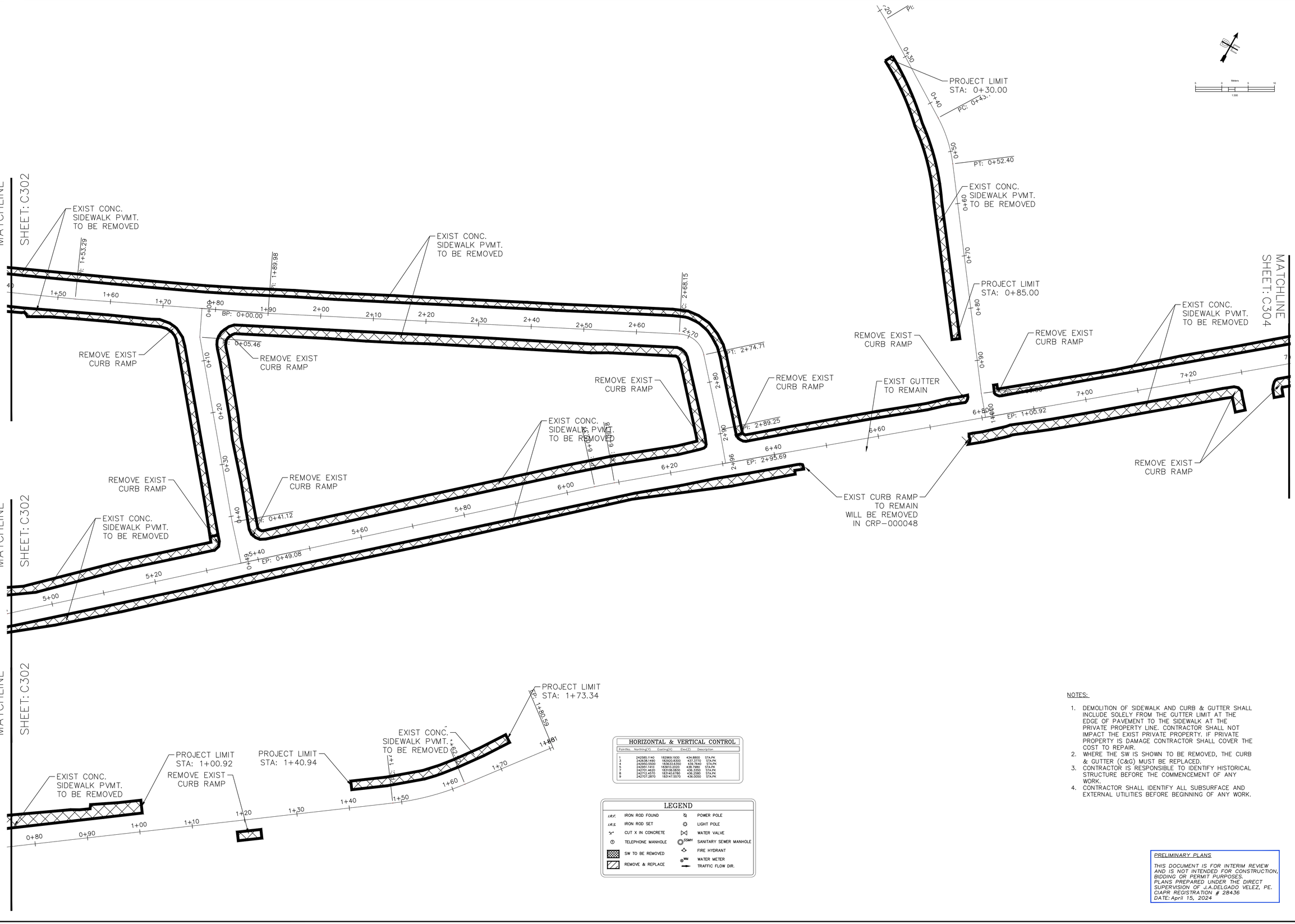
SHEET NAME
DEMOLITION PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 14, 2024
PROJECT NO.:
DTE23-004

SHEET NO.:
C302

c:\users\pesedelgado\onedrive - delgado torres engineering, llc\documents - proyectos\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c305 demolition plan.dwg



HORIZONTAL & VERTICAL CONTROL				
Point No.	Northing(Y)	Easting(X)	Elev.(Z)	Description
1	242585.1140	182969.1830	434.8800	STA.PK
2	242585.5500	183033.6350	436.7640	STA.PK
4	242950.5500	183033.6350	439.7640	STA.PK
5	242951.1410	183610.2020	438.7980	STA.PK
7	242701.4620	183108.0830	436.3350	STA.PK
8	242712.4570	183140.6780	436.2580	STA.PK
9	242707.2870	183147.5570	436.0050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
T	TELEPHONE MANHOLE	SSMH	SANITARY SEWER MANHOLE
	SW TO BE REMOVED		FIRE HYDRANT
	REMOVE & REPLACE	WM	WATER METER
			TRAFFIC FLOW DIR.

NOTES:

1. DEMOLITION OF SIDEWALK AND CURB & GUTTER SHALL INCLUDE SOLELY FROM THE GUTTER LIMIT AT THE EDGE OF PAVEMENT TO THE SIDEWALK AT THE PRIVATE PROPERTY LINE. CONTRACTOR SHALL NOT IMPACT THE EXIST PRIVATE PROPERTY. IF PRIVATE PROPERTY IS DAMAGE CONTRACTOR SHALL COVER THE COST TO REPAIR.
2. WHERE THE SW IS SHOWN TO BE REMOVED, THE CURB & GUTTER (C&G) MUST BE REPLACED.
3. CONTRACTOR IS RESPONSIBLE TO IDENTIFY HISTORICAL STRUCTURE BEFORE THE COMMENCEMENT OF ANY WORK.
4. CONTRACTOR SHALL IDENTIFY ALL SUBSURFACE AND EXTERNAL UTILITIES BEFORE BEGINNING OF ANY WORK.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
DEMOLITION PLAN

REVISIONS	SYMBOL	DATE	BY

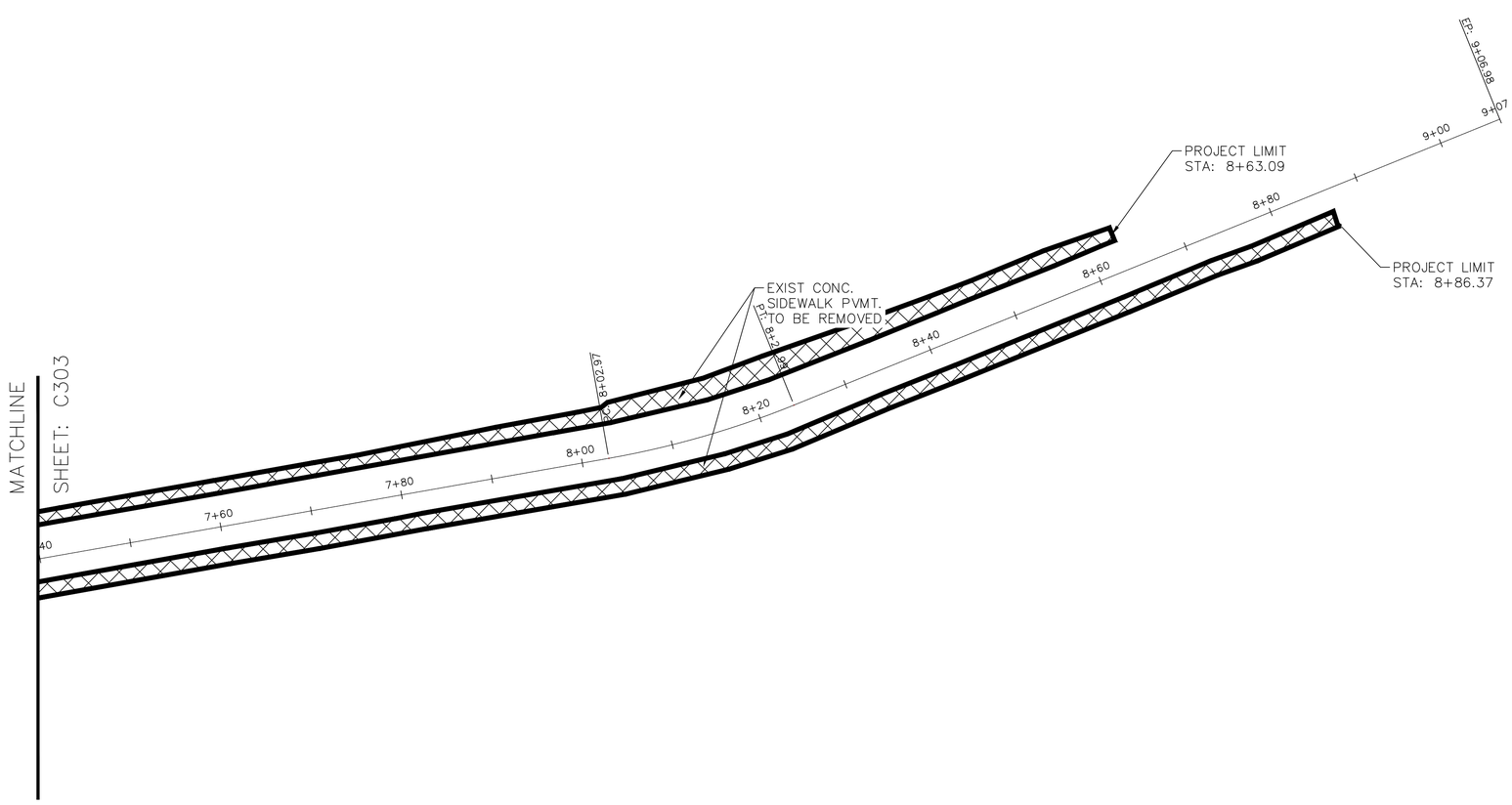
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

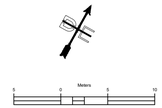
DATE:
April 14, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C303

c:\users\jeacedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c305 demolition plan.dwg





HORIZONTAL & VERTICAL CONTROL

Point No.	Northing (Y)	Easting (X)	Elev (Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
3	242638.1490	182920.8300	437.3770	STA.PK
4	242902.0500	183633.8350	439.7640	STA.PK
5	242951.1410	183610.2020	438.7980	STA.PK
7	242701.4820	183108.0830	436.3350	STA.PK
8	242712.4570	183140.6170	436.2580	STA.PK
9	242707.2870	183147.3070	436.0050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
T	TELEPHONE MANHOLE	SSMH	SANITARY SEWER MANHOLE
	SW TO BE REMOVED		FIRE HYDRANT
	REMOVE & REPLACE	WM	WATER METER
			TRAFFIC FLOW DIR.

NOTES:

1. DEMOLITION OF SIDEWALK AND CURB & GUTTER SHALL INCLUDE SOLELY FROM THE GUTTER LIMIT AT THE EDGE OF PAVEMENT TO THE SIDEWALK AT THE PRIVATE PROPERTY LINE. CONTRACTOR SHALL NOT IMPACT THE EXIST PRIVATE PROPERTY. IF PRIVATE PROPERTY IS DAMAGE CONTRACTOR SHALL COVER THE COST TO REPAIR.
2. WHERE THE SW IS SHOWN TO BE REMOVED, THE CURB & GUTTER (C&G) MUST BE REPLACED.
3. CONTRACTOR IS RESPONSIBLE TO IDENTIFY HISTORICAL STRUCTURE BEFORE THE COMMENCEMENT OF ANY WORK.
4. CONTRACTOR SHALL IDENTIFY ALL SUBSURFACE AND EXTERNAL UTILITIES BEFORE BEGINNING OF ANY WORK.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
DEMOLITION PLAN

REVISIONS	SYMBOL	DATE	BY

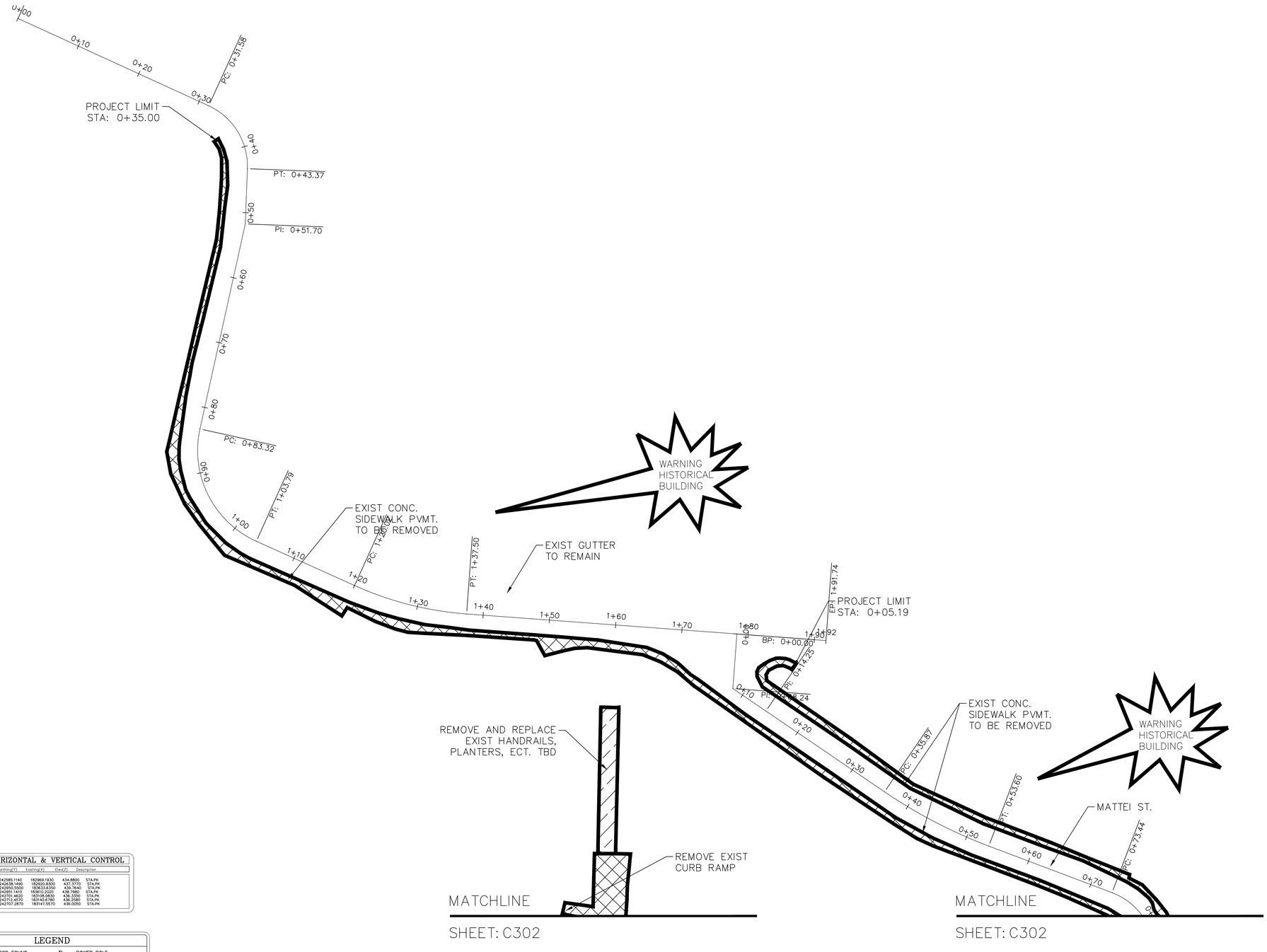
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 14, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C304

c:\users\jdelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c305 demolition plan.dwg



HORIZONTAL & VERTICAL CONTROL				
Point No.	Northing(Y)	Easting(X)	Elev.(Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
2	242585.5550	183033.8350	436.7640	STA.PK
4	242952.5500	183633.8350	436.7640	STA.PK
5	242951.1410	183610.2020	438.7980	STA.PK
7	242701.4620	183108.0830	436.3350	STA.PK
8	242712.4570	183140.6780	436.2580	STA.PK
9	242707.2870	183147.5570	436.0050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
T	TELEPHONE MANHOLE	SSMH	SANITARY SEWER MANHOLE
	SW TO BE REMOVED		FIRE HYDRANT
	REMOVE & REPLACE	WM	WATER METER
			TRAFFIC FLOW DIR.

NOTES:

1. DEMOLITION OF SIDEWALK AND CURB & GUTTER SHALL INCLUDE SOLELY FROM THE GUTTER LIMIT AT THE EDGE OF PAVEMENT TO THE SIDEWALK AT THE PRIVATE PROPERTY LINE. CONTRACTOR SHALL NOT IMPACT THE EXIST PRIVATE PROPERTY. IF PRIVATE PROPERTY IS DAMAGE CONTRACTOR SHALL COVER THE COST TO REPAIR.
2. WHERE THE SW IS SHOWN TO BE REMOVED, THE CURB & GUTTER (C&G) MUST BE REPLACED.
3. CONTRACTOR IS RESPONSIBLE TO IDENTIFY HISTORICAL STRUCTURE BEFORE THE COMMENCEMENT OF ANY WORK.
4. CONTRACTOR SHALL IDENTIFY ALL SUBSURFACE AND EXTERNAL UTILITIES BEFORE BEGINNING OF ANY WORK.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
DEMOLITION PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 14, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C305

c:\users\joseodelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c305 demolition plan.dwg

PROJECT LIMIT
STA: 0+85.37
OFF=4.19
N=242,709.02
E=182,930.70

℄ PR532

PROP CURB RAMP
TYPE 1

PROP CONCRETE STAMP
PATTERN #2

PROP CURB RAMP
TYPE 1

WARNING
HISTORICAL
BUILDING

WARNING
HISTORICAL
BUILDING

PROJECT LIMIT
STA: 0+39.77
OFF=-3.12
N=242,621.02
E=182,986.19

PROJECT LIMIT
STA: 0+53.04
OFF=-3.20
N=242,621.76
E=182,999.37

CONFLICT AREA
SIDEWALK DO NOT
MEET ADA WIDTH
REQUIREMENTS

℄ FIGUERAS

PROJECT LIMIT
STA: 0+22.55
OFF=4.20
N=242,627.53
E=182,900.11

℄ PR141

PROP CURB RAMP
TYPE 8

ALIGN=CL-EXST-PR144
STA=0+77.51
OFF=0.00
N=242611.39
E=182949.84

PROJECT LIMIT
STA: 0+83.83
OFF=-3.99
N=242,609.96
E=182,957.33

PROP CURB RAMP
TYPE 8

PROJECT LIMIT
STA: 1+51.14
OFF=3.14
N=242,615.32
E=182,997.79

PROJECT LIMIT
STA: 1+03.79
OFF=-3.92
N=242,594.61
E=182,970.90

PROP CURB RAMP
TYP. 1

PROJECT LIMIT
STA: 1+51.88
OFF=-3.24
N=242,568.82
E=183,005.95

100 YR FLOOD ZONE

PROP CURB RAMP
TYP. 8
EXIST CONC. POLE
TO REMAIN

EXIST UTILITY BOX
TO REMAIN (TYP.)

PROP CURB RAMP
TYPE 8

MATCHLINE SHEET C402

MATCHLINE SHEET C402

ALIGN=CL-EXST-PR144
STA=0+00.00
OFF=0.00
N=242631.74
E=182877.55

ALIGN=CL-EXST-PR144
STA=0+19.33
OFF=0.00
N=242631.74
E=182896.88

PI: 0+11.84
BP: 0+00.00
PC: 0+20.92
0+10
0+20

PI: 0+40.94
16.69

HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(ft)	Easting(ft)	Elev(ft)	Description
1	242585.1140	182769.9330	434.8800	STA/PK
3	242638.1490	182925.8300	437.3770	STA/PK
4	242950.5500	183633.6300	439.7640	STA/PK
5	242951.1410	183600.2020	438.7980	STA/PK
7	242710.4620	183108.9830	436.3350	STA/PK
9	242702.4570	183040.6700	436.2580	STA/PK
11	242787.2870	183047.5570	436.0050	STA/PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
"X"	CUT X IN CONCRETE		WATER VALVE
	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
	EXIST WATER LINE	WM	WATER METER
	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX 100YR FLOOD PLAIN		PROP STAMP CONCRETE
	FINISH REPLACEMENT		PROP 4" SIDEWALK
	PROP SOLAR LUMINARE		PROP CONC STAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE TO OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
SITE PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C401

C:\Users_joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c405 site plan.dwg

MATCHLINE SHEET C401

MATCHLINE SHEET: C405

MATCHLINE SHEET: C405

MATCHLINE SHEET: C403

MATCHLINE SHEET: C403

MATTEI ST.

PROP. CURB RAMP TYPE 1

PROP. CURB RAMP TYPE 1

PROP. CURB RAMP TYPE 1

EX. GRATE INLET TO BE RELOCATED OUTSIDE OF ADA PATH (TYP.)

PROP. LUMINAIRE SEE SHEET E01 FOR DETAILS (TYP.)

℄ CANALES

ALIGN=CL-EXST-CANALES
STA=0+80.36
OFF=0.00
N=242718.07
E=183227.89

ALIGN=CL-EXST-TORRADO
STA=0+28.32
OFF=0.00
N=242686.33
E=183154.09

WARNING HISTORICAL BUILDING

℄ FIGUERAS

100 YR FLOOD ZONE

ALIGN=CL-EXST-TORRADO
STA=0+60.25
OFF=0.00
N=242658.09
E=183168.97

PI: 3+02.69

EP: 1+24.45

PROP. CURB RAMP TYPE 8

PROP. CURB RAMP AT CROSSING

ALIGN=CL-EXST-MATTEI
STA=1+45.73
OFF=0.00
N=242694.04
E=183240.66

℄ NATTEI

℄ TORRADO

PROP. CURB RAMP AT CROSSING

WARNING HISTORICAL BUILDING

CONFLICT AREA SIDEWALK DO NOT MEET ADA WIDTH REQUIREMENTS

ALIGN=CL-EXST-PR144
STA=3+49.60
OFF=0.00
N=242617.34
E=183190.29

℄ PR141

ALIGN=CL-EXST-PR144
STA=3+50.12
OFF=0.00
N=242617.57
E=183190.76

ALIGN=CL-EXST-PR144
STA=4+58.11
OFF=0.00
N=242671.27
E=183284.41

EP: 1+87.48

ALIGN=CL-EXST-PR144
STA=4+30.75
OFF=0.00
N=242657.46
E=183260.79

PROP. CURB RAMP AT CROSSING

PI: 0+08.63

CONFLICT AREA CURB RAMP AREA DO NOT MEET ADA REQUIREMENTS

PROP CONCRETE STAMP PATTERN #2

PROP MOSAIC REPLACEMENT IN MISSING SPOTS, REPAIR OR REPLACE ALL NONFUNCTIONAL LIGHTING FIXTURES, REPAINT AND POWER WASHING AT BRIDGE.

CONFLICT AREA SLOPE TOO STEEP DO NOT MEET ADA REQUIREMENTS

PROP. CURB RAMP TYPE 8

PROJECT LIMIT
STA: 0+41.92
OFF=3.91
N=242,632.30
E=183,303.84

HORIZONTAL & VERTICAL CONTROL

PointNo.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	2425851140	1829691930	434.8800	STA/PK
3	2426638.1490	1829203.8300	437.3770	STA/PK
4	2426638.1490	1829203.8300	437.3770	STA/PK
5	2425911.410	1836532.0920	436.7980	STA/PK
7	2427.01.4600	1831086.0830	436.3350	STA/PK
8	2427.12.4570	1831454.6780	436.2580	STA/PK
9	2427.07.2870	1831475570	436.0050	STA/PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
	EXIST WATER LINE	WM	WATER METER
	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX 100YR FLOOD PLAIN		PROP STAMP CONCRETE
	FINISH REPLACEMENT		PROP 4" SIDEWALK
	PROP SOLAR LUMINARE		PROP CONC STAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
SITE PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C402

C:\Users\JoseDelgado\OneDrive - delgado torres engineering, llc\Documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c405 site plan.dwg

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c405 site planding

MATCHLINE
SHEET: C402

MATCHLINE
SHEET: C402

MATCHLINE
SHEET: C404

PROJECT LIMIT
STA: 8+86.70
OFF=2.34
N=242,863.10
E=183,407.91

PROJECT LIMIT
STA: 8+86.70
OFF=2.68
N=242,822.54
E=183,445.17

PROJECT LIMIT
STA: 1+73.34
OFF=-3.72
N=242,714.13
E=183,407.49

PROJECT LIMIT
STA: 1+40.94
OFF=-3.11
N=242,691.80
E=183,385.67

PROJECT LIMIT
STA: 1+00.92
OFF=-3.22
N=242,668.65
E=183,353.04

ALIGN=CL-EXST-CANALES
STA=1+77.41
OFF=0.00
N=242758.10
E=183316.27

ALIGN=CL-EXST-PR1
STA=5+36.69
OFF=0.00
N=242719.41
E=183346.21

ALIGN=CL-EXST-PR144
STA=6+30.62
OFF=0.00
N=242780.61
E=183417.44

ALIGN=CL-EXST-PR144
STA=6+80.71
OFF=0.00
N=242812.15
E=183456.36

PROP. LUMINAIRE
SEE SHEET E01
FOR DETAILS (TYP.)

PROP. LUMINAIRE
SEE SHEET E01
FOR DETAILS (TYP.)

CONFLICT AREA
SLOPE TOO STEEP
DO NOT MEET ADA
REQUIREMENTS

MATCH PROP SW WITH
PROJECT CRP-000048

PROP. CURB RAMP
TYPE 8

PROP. CURB RAMP
TYPE 8
POSSIBLE CONFLICT

PROP. CURB RAMP
TYPE 8
EX. CURB INLET
TO BE RELOCATED
(TYP.)

℄ CANALES

℄ HOYOFRIO

℄ PR141

℄ LIBERTAD

100 YR FLOOD ZONE

PC: 2+68.15
PT: 2+74.71
EP: 2+95.59
PI: 0+21.98
PC: 0+43.19
PT: 0+52.40
BP: 0+00.00
PT: 0+96.30

HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1149	182969.1930	434.8800	STAPK
3	242638.1490	182928.8300	437.3770	STAPK
4	242950.5500	183633.6350	439.7640	STAPK
6	242751.4620	183188.0830	436.3350	STAPK
7	242751.4620	183188.0830	436.3350	STAPK
8	242712.4578	183146.6780	436.2580	STAPK
9	242747.2870	183147.5570	436.9050	STAPK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
	EXIST WATER LINE	WM	WATER METER
	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX 100YR FLOOD PLAIN		PROP STAMP CONCRETE
	FINISH REPLACEMENT		PROP 4" SIDEWALK
	PROP SOLAR LUMINARE		PROP CONC STAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
SITE PLAN

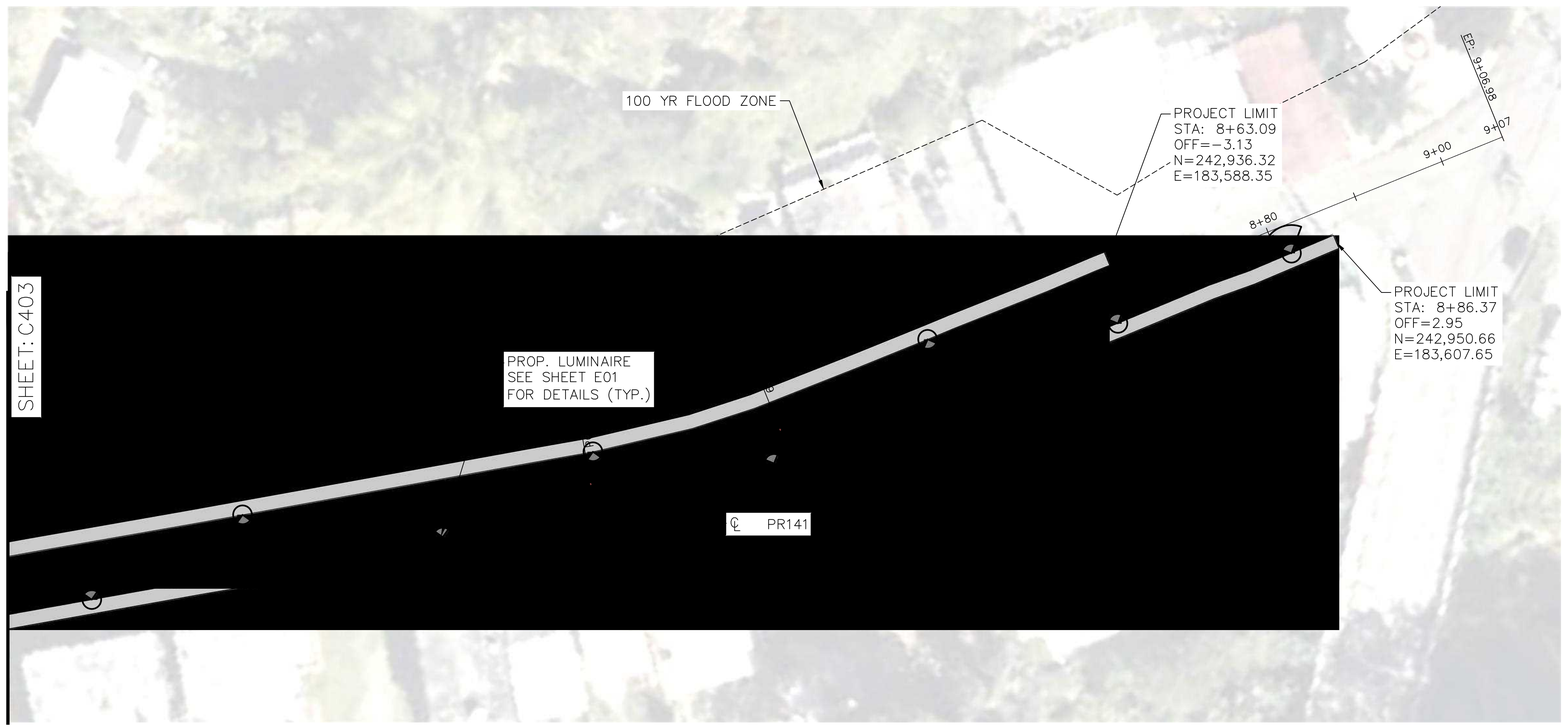
REVISIONS	SYMBOL	DATE	BY

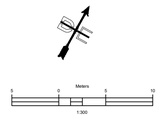
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C403





HORIZONTAL & VERTICAL CONTROL				
PointNo.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA/PK
2	242760.3560	183033.6490	436.3350	STA/PK
4	242930.3330	183633.6350	439.7640	STA/PK
5	242951.1410	183610.2020	438.7980	STA/PK
7	242701.4620	183038.8830	436.3350	STA/PK
8	242710.4570	183140.6780	436.2580	STA/PK
9	242707.2970	183147.5570	436.0050	STA/PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
"x"	CUT X IN CONCRETE		WATER VALVE
	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
	EXIST WATER LINE	WM	WATER METER
	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX 100YR FLOOD PLAIN		PROP STAMP CONCRETE
	FINISH REPLACEMENT		PROP 4" SIDEWALK
	PROP SOLAR LUMINARE		PROP CONC STAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
SITE PLAN

REVISIONS	SYMBOL	DATE	BY

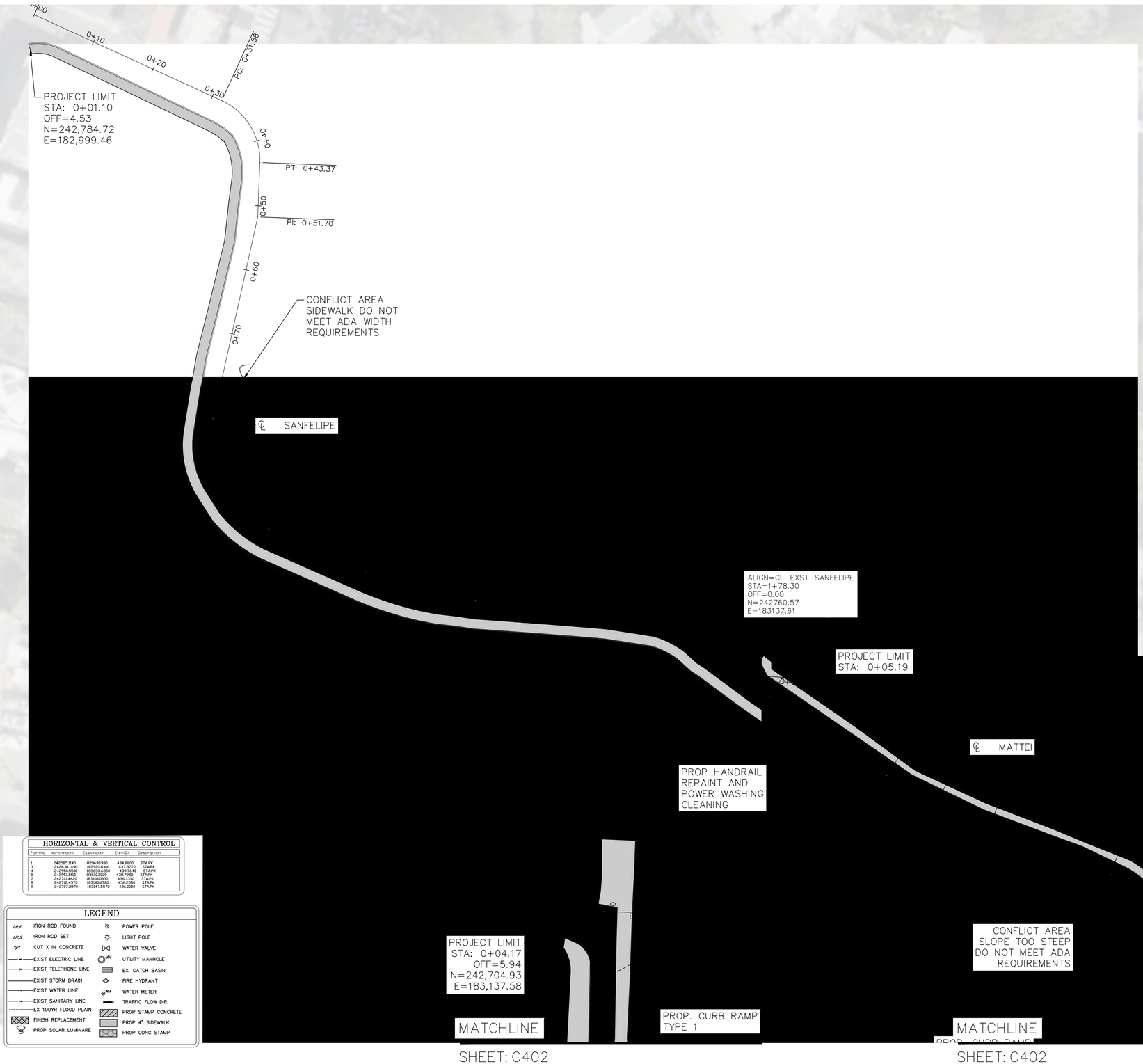
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C404

C:\Users\Jose.delgado\OneDrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c405 site plan.dwg



HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA/PK
3	242638.1490	182925.8350	437.3770	STA/PK
4	242950.5500	183633.6350	439.7640	STA/PK
5	242951.1410	183610.2020	438.7980	STA/PK
7	242721.4620	183036.8830	436.3350	STA/PK
8	242715.4570	183043.6780	436.2590	STA/PK
9	242707.2870	183047.5570	436.0650	STA/PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
	EXIST WATER LINE	WM	WATER METER
	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX 100YR FLOOD PLAIN		PROP STAMP CONCRETE
	FINISH REPLACEMENT		PROP 4" SIDEWALK
	PROP SOLAR LUMINARE		PROP CONC STAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

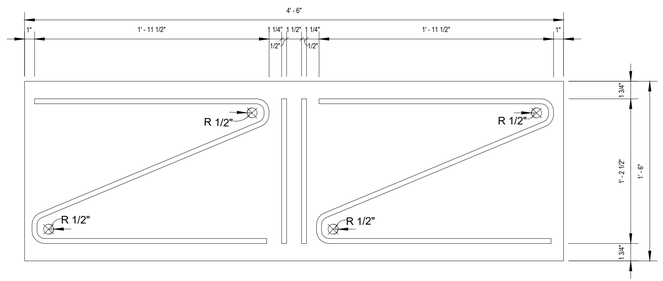
SHEET NAME
SITE PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004

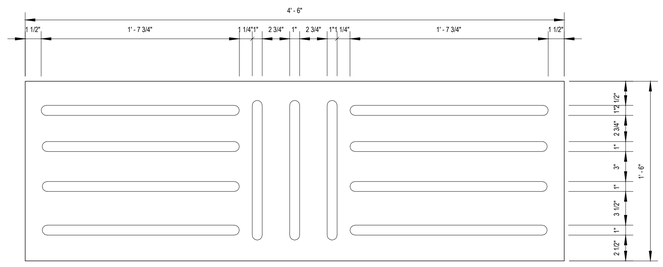
SHEET NO.:
C405

c:\users\josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c405 site planding



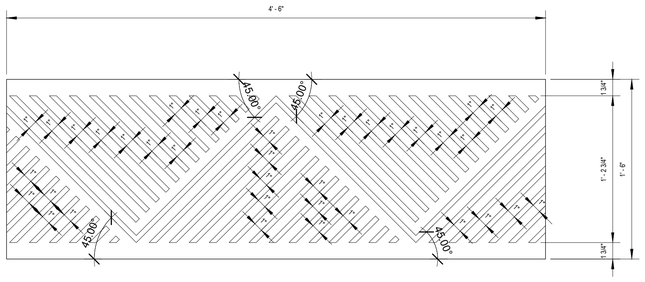
TOP VIEW

PAVEMENT STAMP PATTERN #3



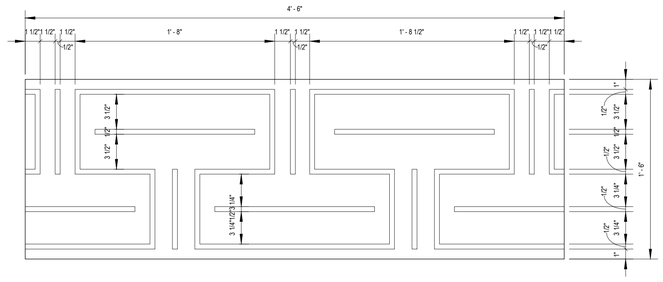
TOP VIEW

PAVEMENT STAMP PATTERN #1



TOP VIEW

PAVEMENT STAMP PATTERN #4



TOP VIEW

PAVEMENT STAMP PATTERN #2

NOTES:

1. WORK ASSOCIATED WITH THE INSTALLATION OF THE STAMPED CONCRETE SURFACES SHALL BE PERFORMED BY A TRAINED AND CERTIFIED CONTRACTOR FOR THE PRODUCT USED. ALL WORK SHALL MEET THE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS FOR AN INSTALLATION OF THIS TYPE.
2. CONCRETE STAMP SHALL HAVE A PERMANENT COLOR (BEIGE–ALIKE) CHOSEN BY THE MUNICIPALITY OF JAYUYA BEFORE ANY INSTALLATION OF CONCRETE STAMP. THIS COLOR MAY NOT BE SPRAYED OR PAINTED OVER AFTER STAMPING. CONTRACTOR SHALL USE IRON OXIDE, CHROMIUM OXIDE OR SIMILAR TECHNIQUES IN THE MIX FOR COLOURING CONCRETE.
3. CONSTRUCTION METHODS FOR THE INSTALLATION SHALL CONFORM WITH THE MANUFACTURE'S GUIDELINES FOR BEST RESULTS.
4. MATERIAL SHALL BE APPROVED BY THE ENGINEER ON RECORD.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
CONCRETE STAMP DETAIL

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C406

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c405 site planing

SEE PR532 PLAN FOR DETAILS

MATCHLINE STA 0+70

SEE FIGUERAS PLANS FOR DETAIL

MATCHLINE STA 0+70

MATCHLINE STA 1+50

LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP TBD	PROP ADA CURB RAMP

PI: 0+11.84

℄ PR532

PROP TY 1
CURB RAMP

PROP 5"
CONC SW

℄ PR141

ALIGN=CL-EXST-PR144
STA=0+19.33
OFF=0.00
N=242631.74
E=182896.88

PC: 0+20.92

BP: 0+00.00

MATCH EXIST SW
CRP-000053
PROJECT LIMIT

CATCH BASIN
TO REMAIN

PROP TY 3
CURB RAMP

ALIGN=CL-EXST-PR144
STA=0+00.00
OFF=0.00
N=242631.74
E=182877.55

℄ FIGUERAS

PT: 0+76.44

PC: 0+91.63

PT: 1+01.83

PC: 1+15.76

ALIGN=CL-EXST-PR144
STA=0+77.51
OFF=0.00
N=242611.39
E=182949.84

PROP TY 3A
CURB RAMP

DRIVEWAY
OPENING
TO REMAIN

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR [illegible] OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL [illegible] SMOOTH BARS @ 24" CEN[illegible] TO EXISTING CONCRETE ED[illegible] JOINT & SELF LEVELING JO[illegible]
3. SIDEWALK TO BE AS A MIN[illegible] (1.2 MTS) WIDE 3,600 PSI [illegible] #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING
DETAIL PLAN
PR-141

REVISIONS	SYMBOL	DATE	BY

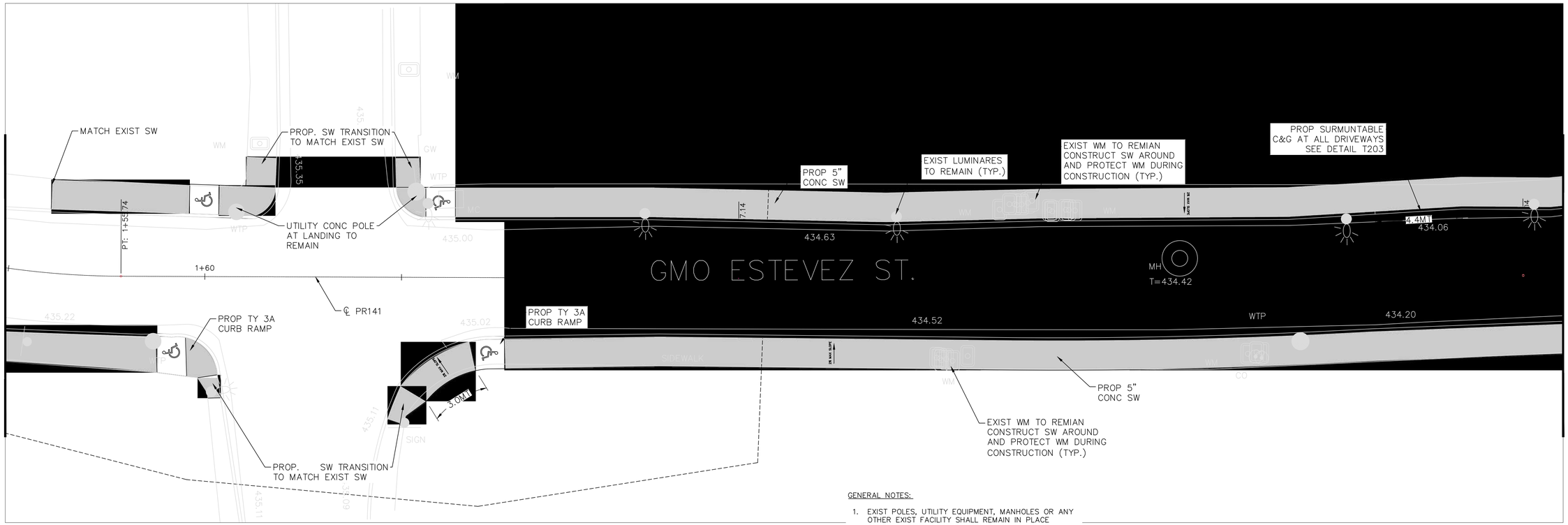
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C501

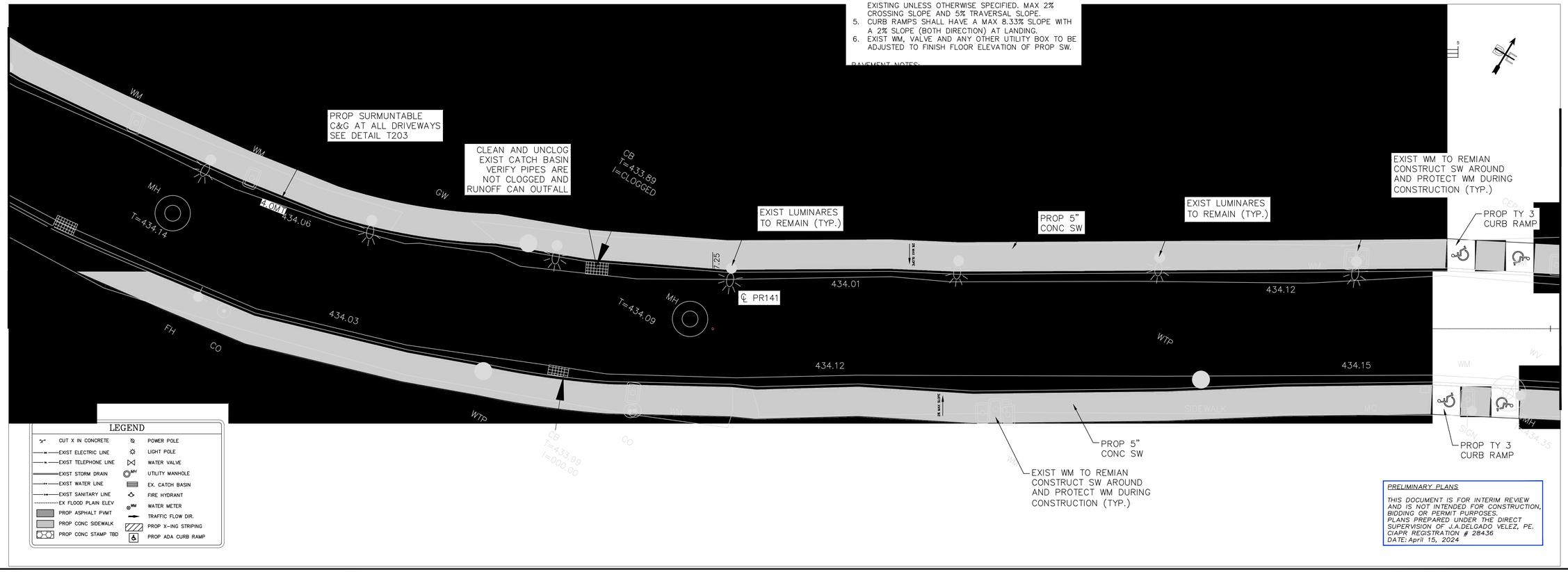
C:\Users\JoseAdelgado\OneDrive - delgado torres engineering, llc\Documents - Projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg



GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:



LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP TBD	PROP ADA CURB RAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN
PR-141

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: C502

C:\Users\joseadelgado\OneDrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

SEE TORRADO PLANS FOR DETAIL

MATCHLINE STA 3+10

MATCHLINE STA 3+60

ALIGN=CL-EXST-PR144
STA=3+49.60
OFF=0.00
N=242617.34
E=183190.29

℄ TORRADO

MATCH EXIST SW
ALIGN=CL-EXST-PR144
STA=3+50.12
OFF=0.00
N=242617.57
E=183190.76

EXIST MH TO REMIAN
CONSTRUCT MH AROUND
AND PROTECT MH DURING
CONSTRUCTION (TYP.)

EXIST TREE
TO REMAIN

PROP 5"
CONC SW

EXIST TREE
TO REMAIN

PROP 5"
CONC SW

℄ PR141

PROP 5"
CONC SW

PROP 5"
CONC SW

EXIST WM TO REMIAN
CONSTRUCT SW AROUND
AND PROTECT WM DURING
CONSTRUCTION (TYP.)

PROP CONC STAMP
TBD

℄ VENTANA

EXIST TREE
TO REMAIN

SEE VENTANA PLAN FOR DETAILS

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

SEE TORRADO PLAN FOR DETAILS

MATCHLINE STA 3+90

MATCHLINE STA 4+70

℄ TORRADO

PROP TY 3
CURB RAMP

PROP 5"
CONC SW

℄ PR141

PROP 5"
CONC SW

PROP TY 3
CURB RAMP

PROP 5"
CONC SW

PROP TY 3
CURB RAMP

ALIGN=CL-EXST-PR144
STA=4+58.11
OFF=0.00
N=242671.27
E=183284.41

PROP 5"
CONC SW

PROP SURMUNTABLE
C&G AT ALL DRIVEWAYS
SEE DETAIL T203

PROP 5"
CONC SW

PROP TY 3
CURB RAMP

ALIGN=CL-EXST-PR144
STA=4+50.75
OFF=0.00
N=242657.46
E=183260.79

PROP TY 3A
CURB RAMP

PROP ADA RAMP
MAX 8.33% SLOPE

PROP TY 3A
CURB RAMP

LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP TBD	PROP ADA CURB RAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE:April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING
DETAIL PLAN
PR-141

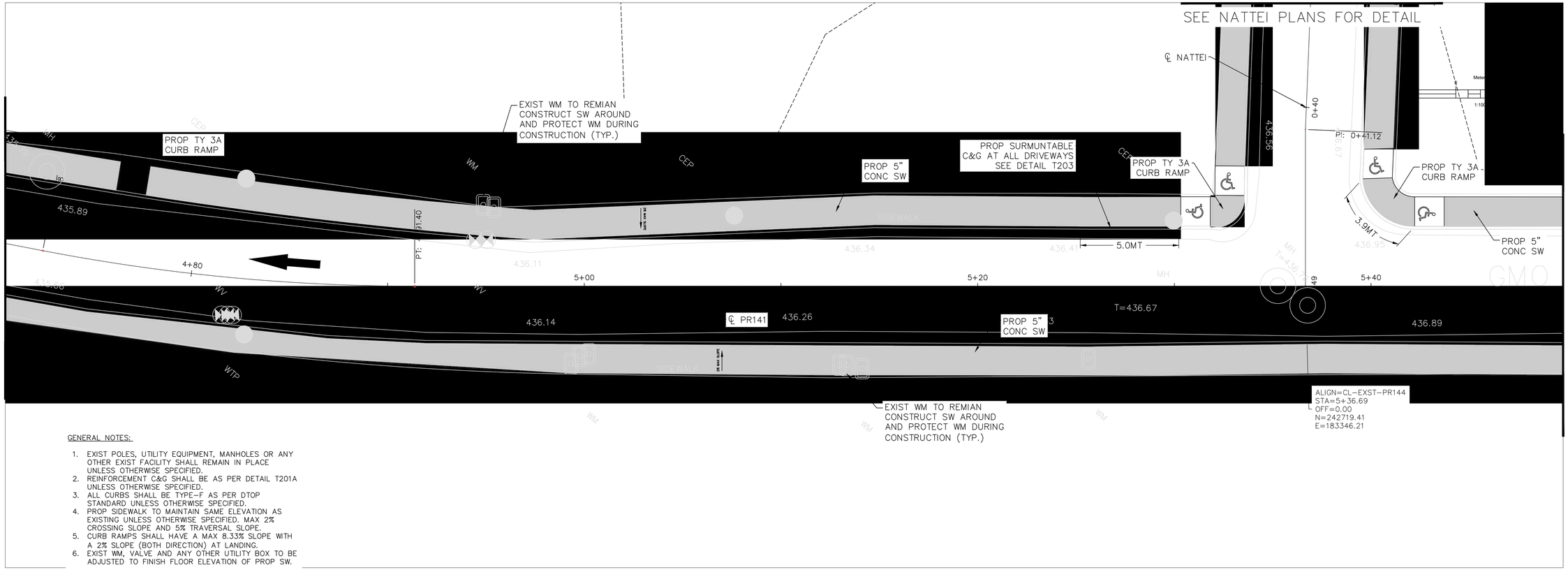
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004

SHEET NO.:
C503

C:\Users\JoseAdelgado\OneDrive - delgado torres engineering, llc\Documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg



GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN PR-141

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C504

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

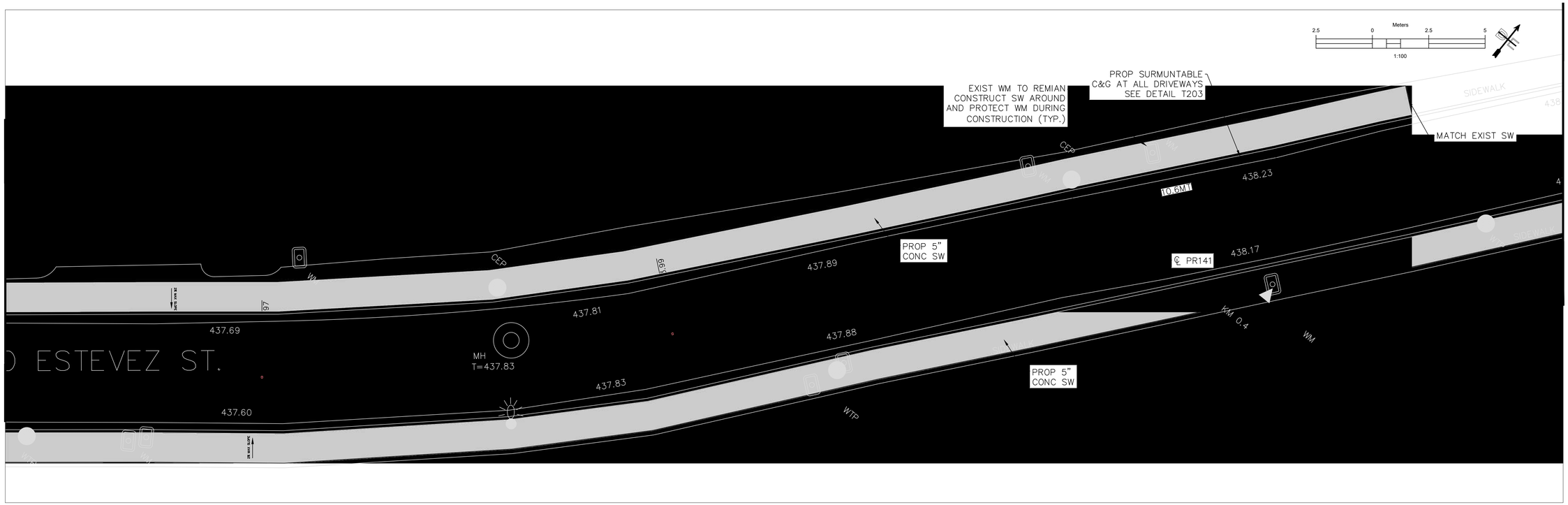
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

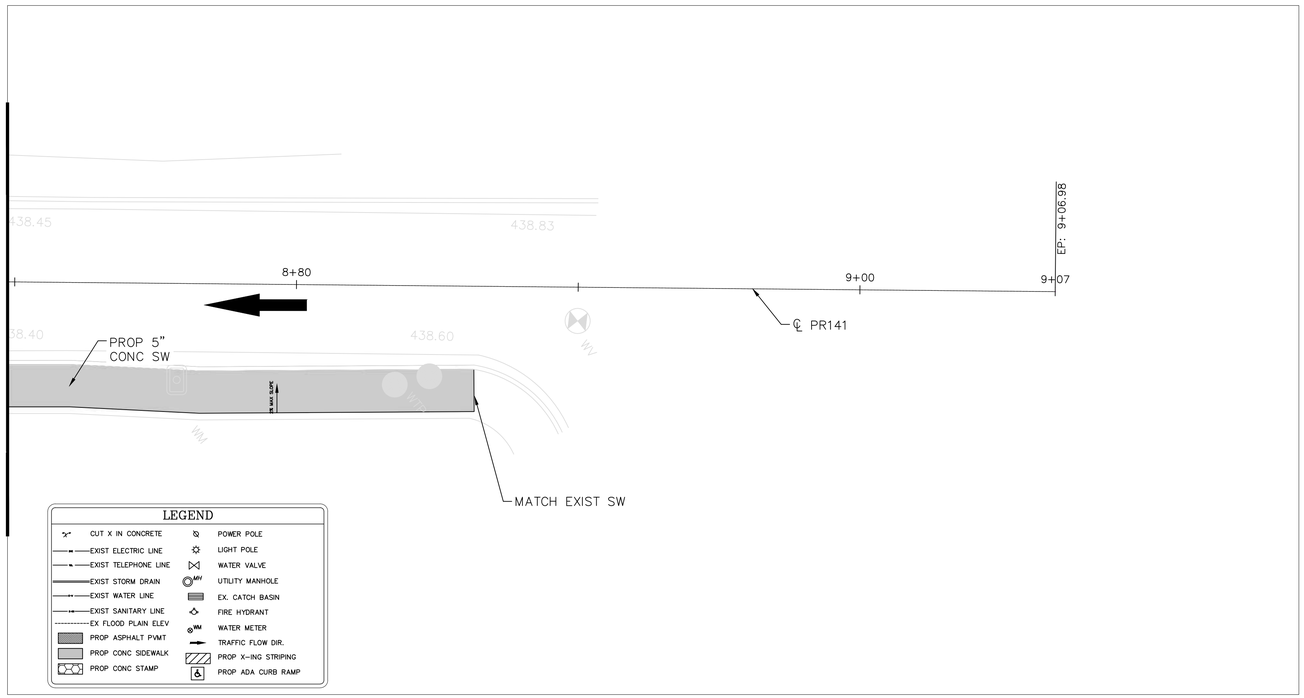
SHEET NAME
GRADING & PAVING DETAIL PLAN
PR-141

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C505

C:\Users\Josedelgado\OneDrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 civil\production drawings\c0501 gr - pvg dtl plan.dwg





GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

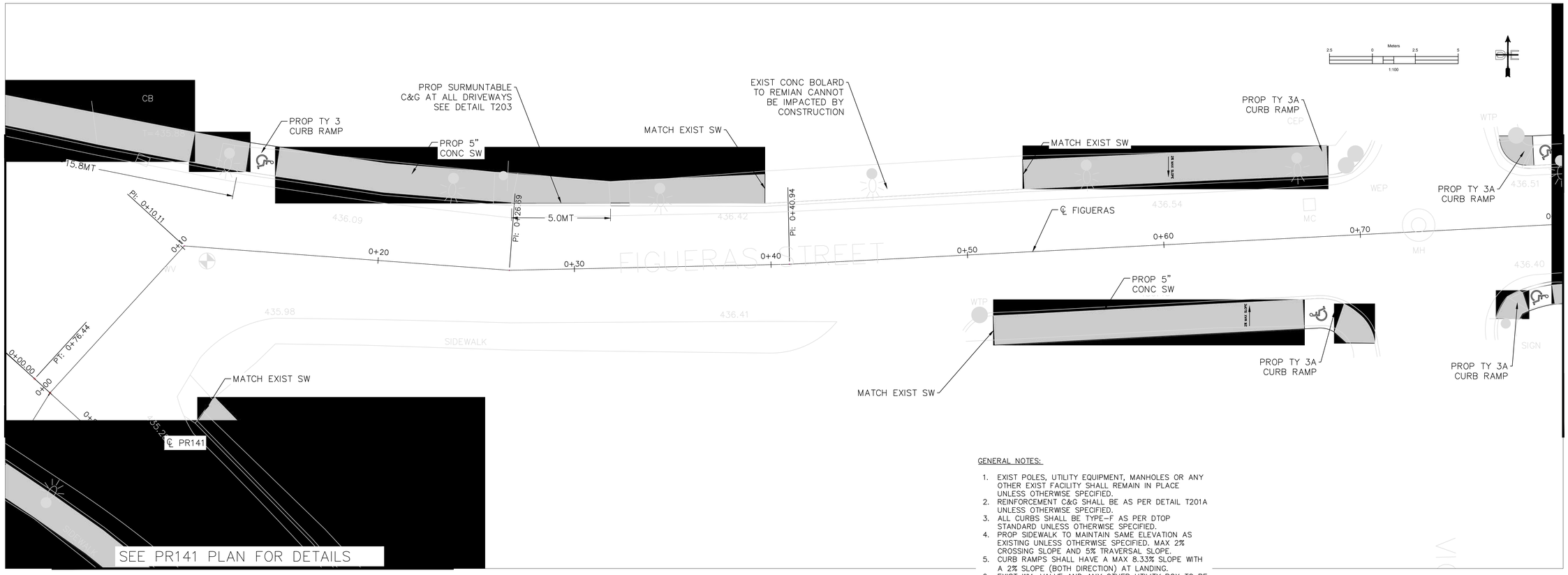
SHEET NAME
GRADING & PAVING
DETAIL PLAN
PR-141

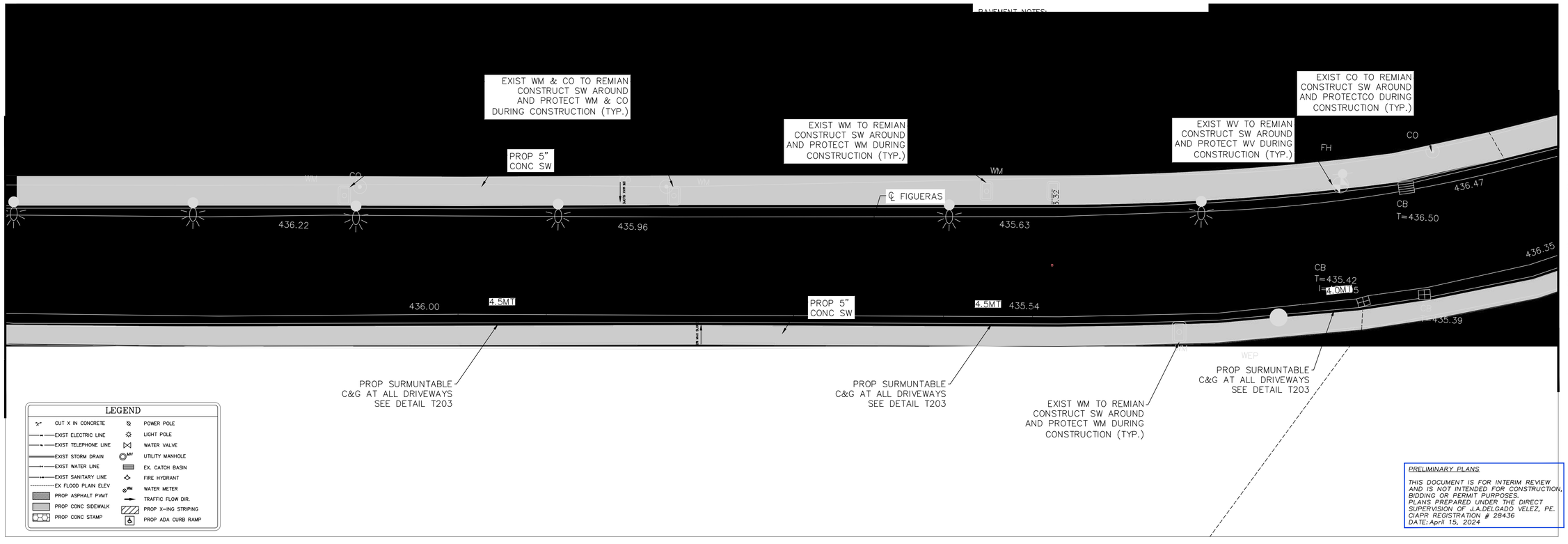
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C506

C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

C:\Users\JoseAdelgado\OneDrive - delgado torres engineering, llc\Documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg





LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN FIGUERAS ST

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: C507

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

SEE TORRADO PLANS FOR DETAIL

Meters 2.5 0 2.5 5 — 1:100

MATCHLINE STA 1+60

MATCHLINE STA 2+40

PROP 5" CONC SW

435.36

435.37

435.19

435.15

435.34

435.28

435.25

435.16

435.12

435.32

435.30

435.38

435.16

435.31

435.57

435.85

436.17

436.60

436.68

436.44

436.30

PI: 1+51.30

PI: 2+16.

PI: 2+39.89

PI: 3+02.69

EP: 3+10.47

1+70 1+80 1+90 2+00 2+10 2+20 2+30 2+40 2+50 2+60 2+70 2+80 2+90 3+00 3+10 3+20

0+50 0+60 0+70 1+40 1+50

℄ FIGUERAS

℄ TORRADO

℄ SAN FELIPE

FIGUERAS STREET

EXIST TREE TO REMAIN AND PROTECT DURING CONSTRUCTION

ALIGN=CL-EXST-TORRADO
STA=0+60.25
OFF=0.00
N=242658.09
E=183168.97

MATCH EXIST SW

PROP TY 1 CURB RAMP

ALIGN=CL-EXS
STA=1+45.73
OFF=0.00
N=242694.04
E=183240.66

4.2MT

2% MAX SLOPE

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

LEGEND

- CONCRETE
- CURB LINE
- GUARDRAIL LINE
- GUTTER
- CURB
- POWER POLE
- LIGHT POLE
- WATER VALVE
- UTILITY MANHOLE
- EX. CATCH BASIN
- FIRE HYDRANT
- WATER METER
- TRAFFIC FLOW DIR.
- STOP X-ING STRIPING
- ADA CURB RAMP

EXIST LUMINARE TO REMAIN

EXIST WM & WV TO REMIAN CONSTRUCT SW AROUND AND PROTECT WM & WV DURING CONSTRUCTION (TYP.)

EXIST WM TO REMIAN CONSTRUCT SW AROUND AND PROTECT WM DURING CONSTRUCTION (TYP.)

SEE PR141 PLAN FOR DETAILS

SEE SAN FELIPE PLANS FOR DETAIL

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN
FIGUERAS ST

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004

SHEET NO.:
C508

SEE PR141 PLAN FOR DETAILS

TORRADO STREET

CB T=435.50 I=434.68

435.69

CURB RAMP TY. 1

TMH T=435.05

MATCH EXIST SW

EXIST WM TO REMIAN CONSTRUCT SW AROUND AND PROTECT WM DURING CONSTRUCTION (TYP.)

EXIST LUMINARE TO REMAIN (TYP)

EXIST WM TO REMIAN CONSTRUCT SW AROUND AND PROTECT WM DURING CONSTRUCTION (TYP.)

PROP 5" CONC SW

CB T=435.54

MH

0+00

0+10

0+20

℄ CANALES

0+30

0+40

0+50

0+60

435.65

435.96

436.41

436.87 EC

NR CANALES ST.

MATCHLINE STA 0+70

435.66

435.93

T=436.85

CB T=435.51 I=434.87

ALIGN=CL-EXST-TORRADO
STA=0+28.32
OFF=0.00
N=242686.33
E=183154.09

℄ PR141

0+40

SEE PR141 PLAN FOR DETAILS

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

SEE MATTEI PLAN FOR DETAILS

CURB RAMP TY. 1

TMH T=437.14

T=437.02

MH

FH

+08.42

CURB RAMP TY. 1

CB T=437.54 T=436.46

CFP

0+86.17

437.41

EC

MH T=436.98

EXIST WM TO REMIAN CONSTRUCT SW AROUND AND PROTECT WM DURING CONSTRUCTION (TYP.)

WM

WM

WM

PROP 5" CONC SW

℄ CANALES

437.76

NR CANALES ST.

MATCHLINE STA 0+70

436.86

437.23

437.60

438.24

438.06

1+20

1+30

1+40

5.0MT

SIDEWALK

PROP 5" CONC SW

ALIGN=CL-EXST-CANALES
STA=0+80.36
OFF=0.00
N=242718.07
E=183227.89

CURB RAMP TY. 3A

PT: 1+24.45

CB T=436.99

℄ MATTEI

1+30

MATCHLINE STA 1+50

PROP SURMUNTABLE C&G AT ALL DRIVEWAYS SEE DETAIL T203

EXIST WM TO REMIAN CONSTRUCT SW AROUND AND PROTECT WM DURING CONSTRUCTION (TYP.)

LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

SEE MATTEI PLAN FOR DETAILS

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

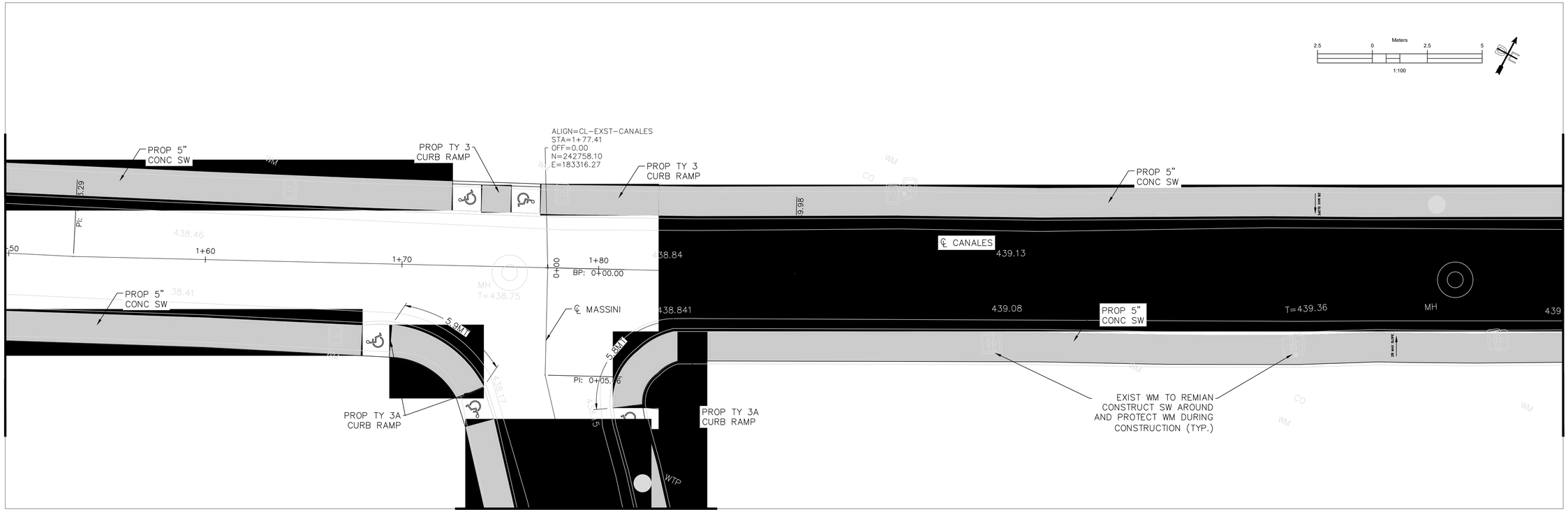
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN
NR CANALES ST

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C509

C:\Users\joseadelgado\OneDrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg



SEE PR141 PLANS FOR DETAIL

SEE PR141 PLANS FOR DETAIL

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

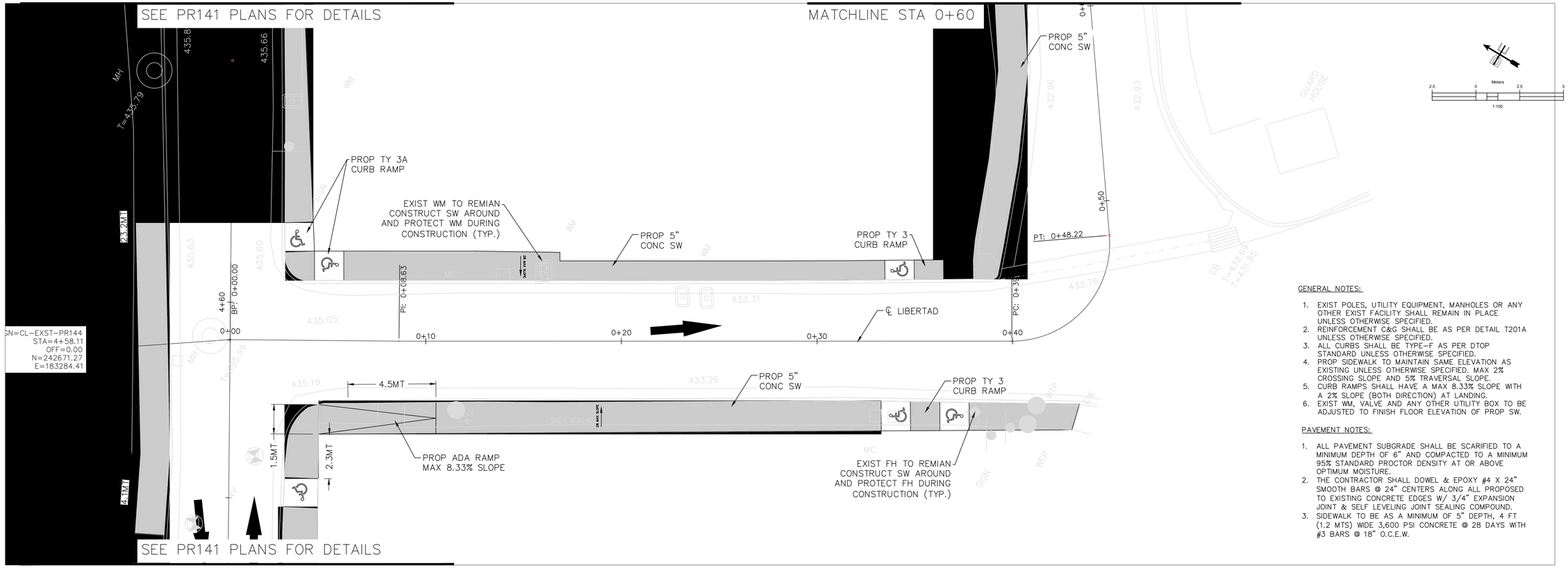
SHEET NAME
GRADING & PAVING DETAIL PLAN
NR CANALES ST

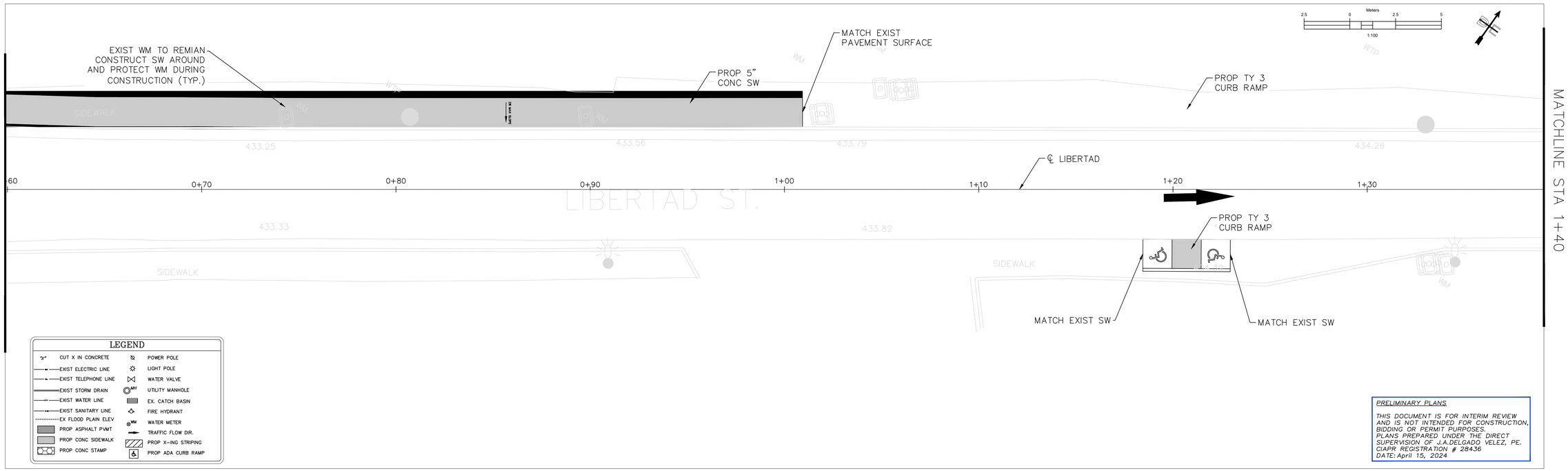
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C510

C:\Users\Josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

c:\users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c0501 gr - pvg dtl plan.dwg





LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN LIBERTAD ST

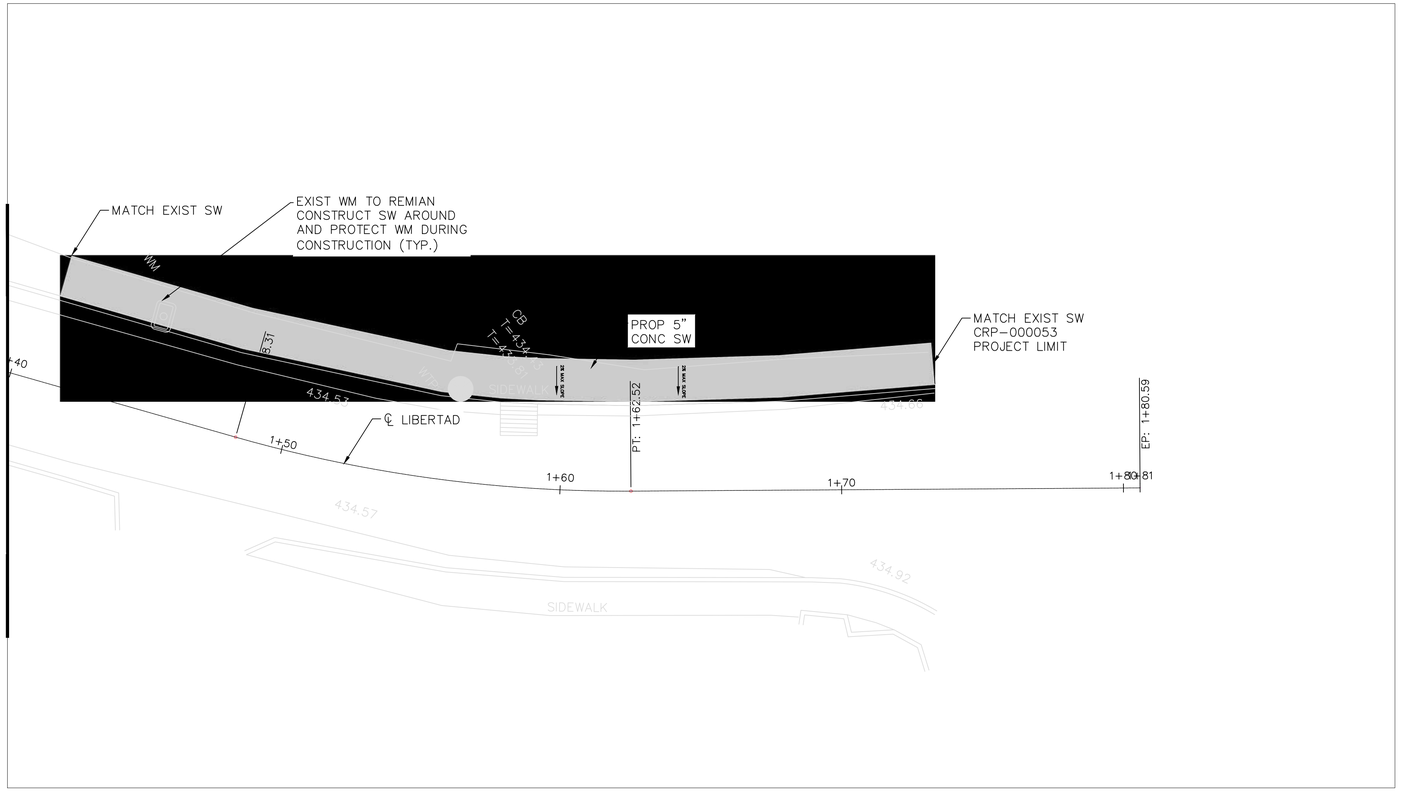
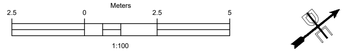
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C511



LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMPd	PROP ADA CURB RAMP

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING
DETAIL PLAN
LIBERTAD ST

REVISIONS	SYMBOL	DATE	BY

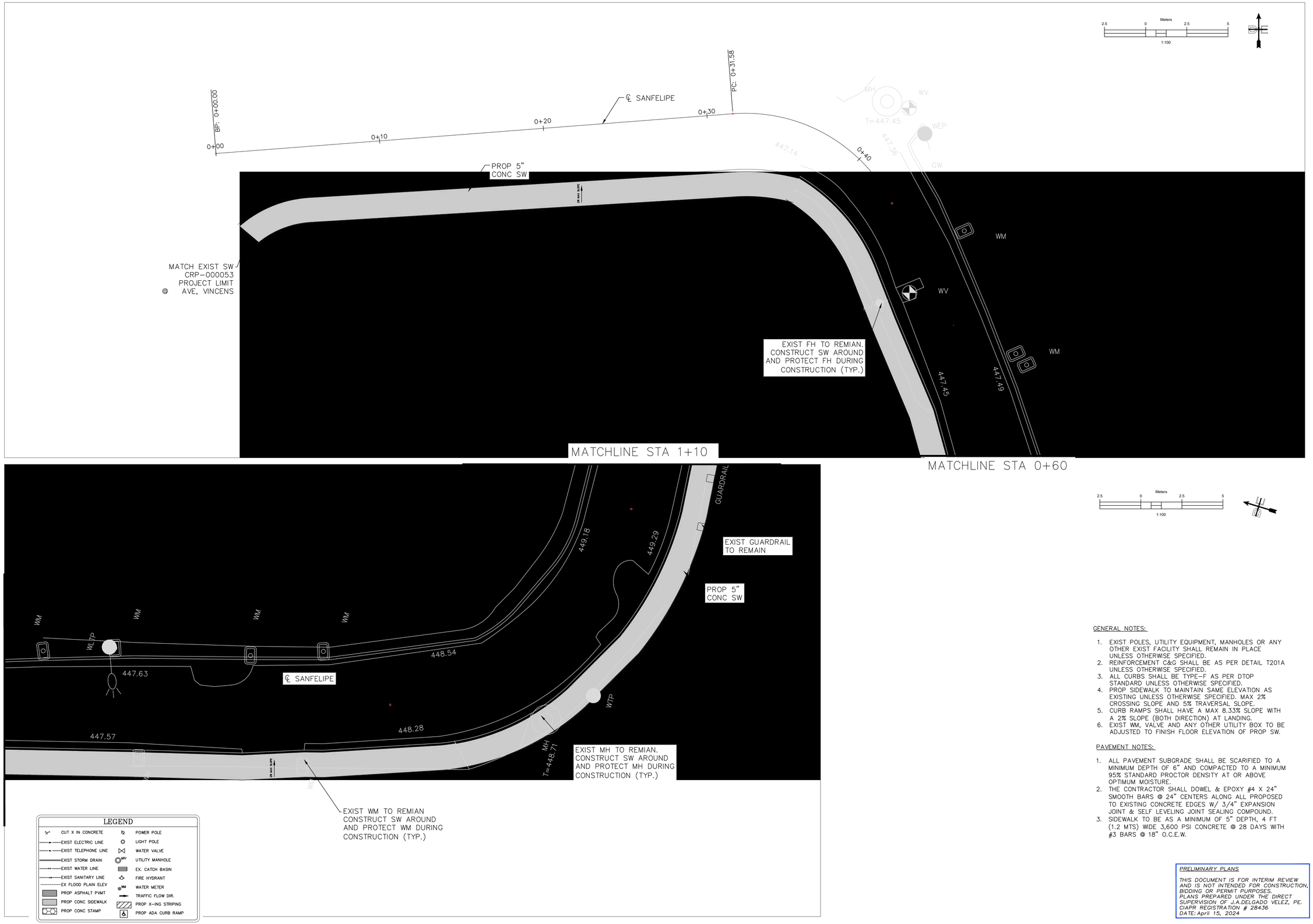
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C512

C:\Users_joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c0501 gr - pvg dtl plan.dwg



GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN SAN FELIPE ST

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: C513

c:\users\josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING
DETAIL PLAN
MATTEI ST

REVISIONS	SYMBOL	DATE	BY

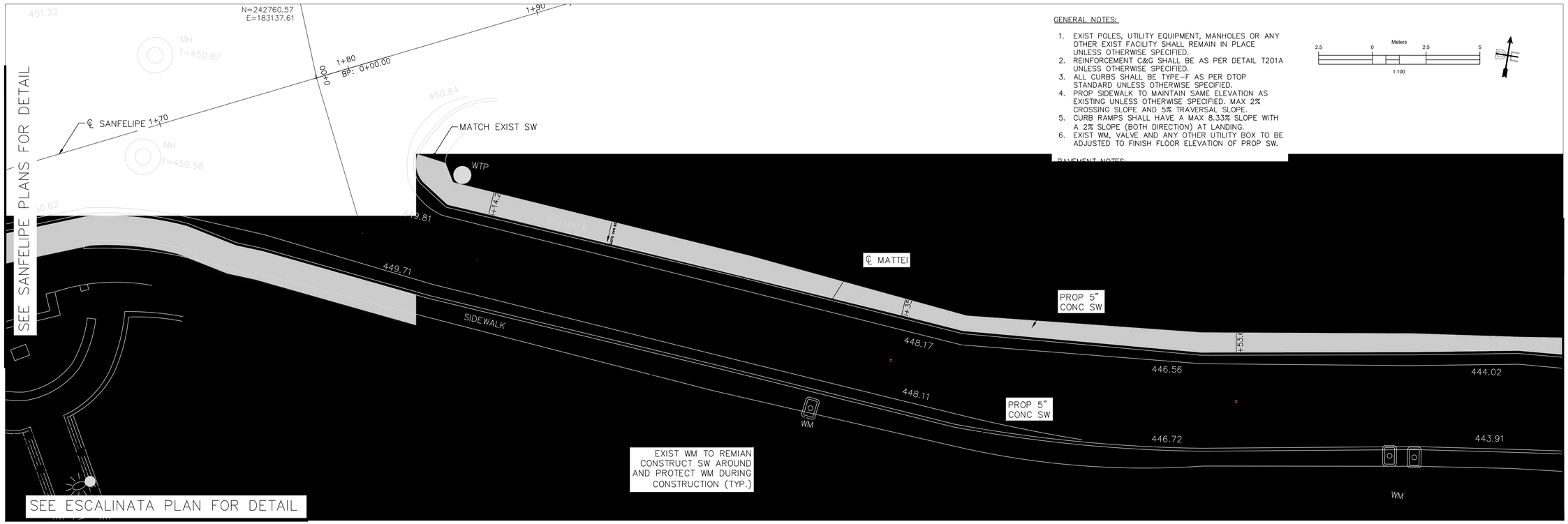
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C514

c:\users\josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg



PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

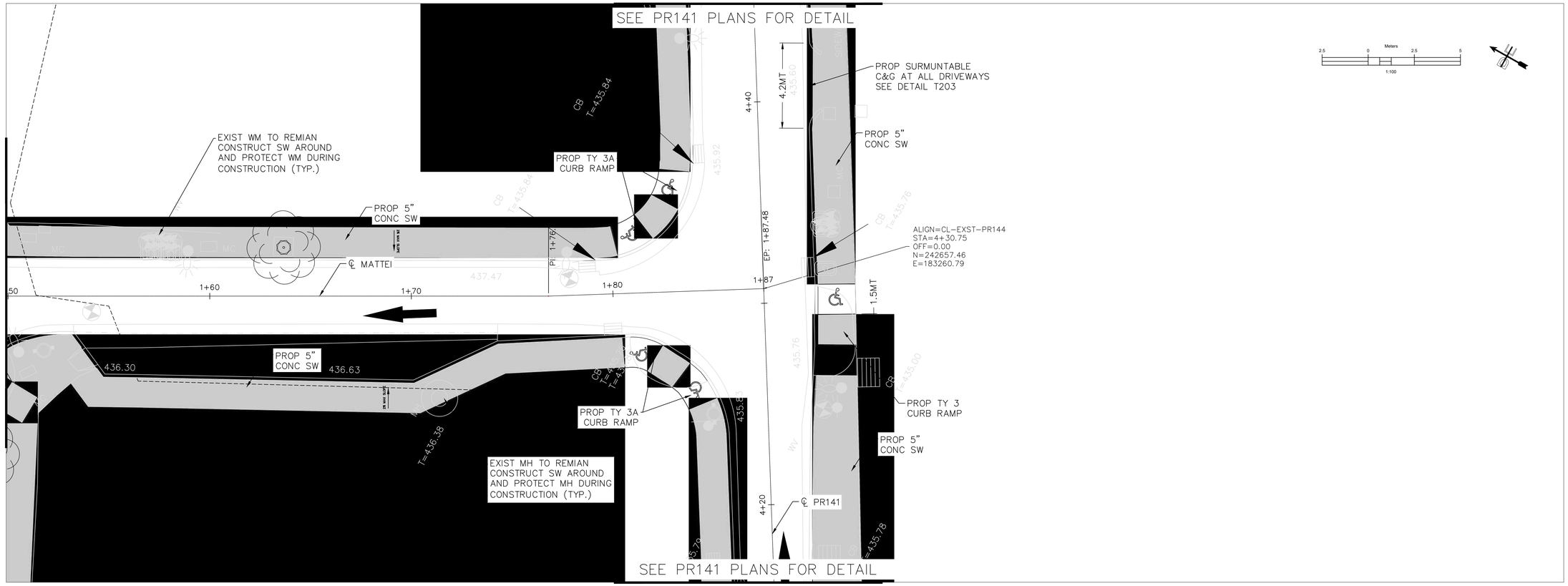
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN MATTEI ST

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: C515

C:\Users\Jose\delgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg



LEGEND

CUT X IN CONCRETE		POWER POLE	
EXIST ELECTRIC LINE		LIGHT POLE	
EXIST TELEPHONE LINE		WATER VALVE	
EXIST STORM DRAIN		UTILITY MANHOLE	
EXIST WATER LINE		EX. CATCH BASIN	
EXIST SANITARY LINE		FIRE HYDRANT	
EX FLOOD PLAIN ELEV		WATER METER	
PROP ASPHALT PVMT		TRAFFIC FLOW DIR.	
PROP CONC SIDEWALK		PROP X-ING STRIPING	
PROP CONC STAMP		PROP ADA CURB RAMP	

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

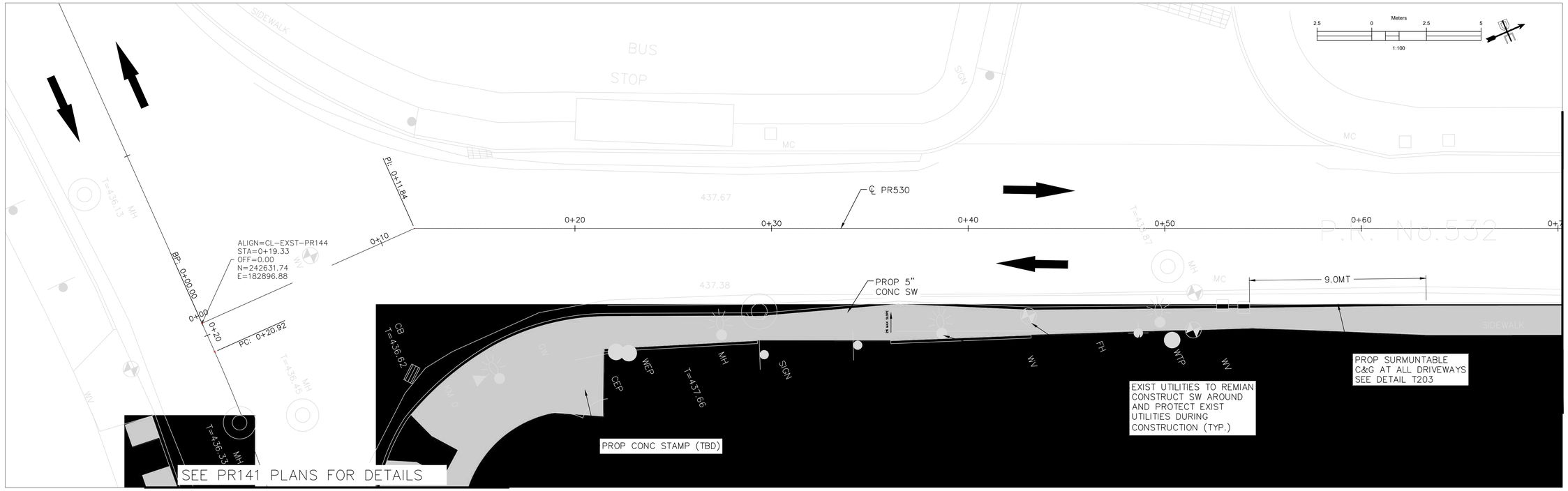
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

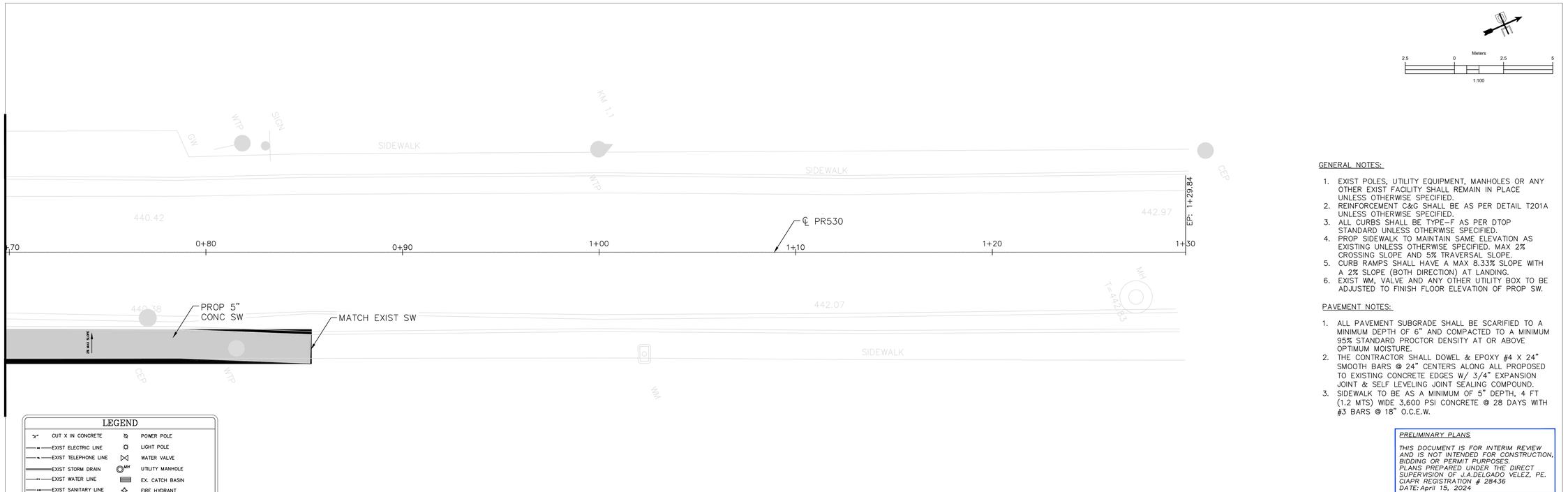
SHEET NAME
GRADING & PAVING
DETAIL PLAN
MATTEI ST

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C516

c:\users\josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg





LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN
PR-530

REVISIONS	SYMBOL	DATE	BY

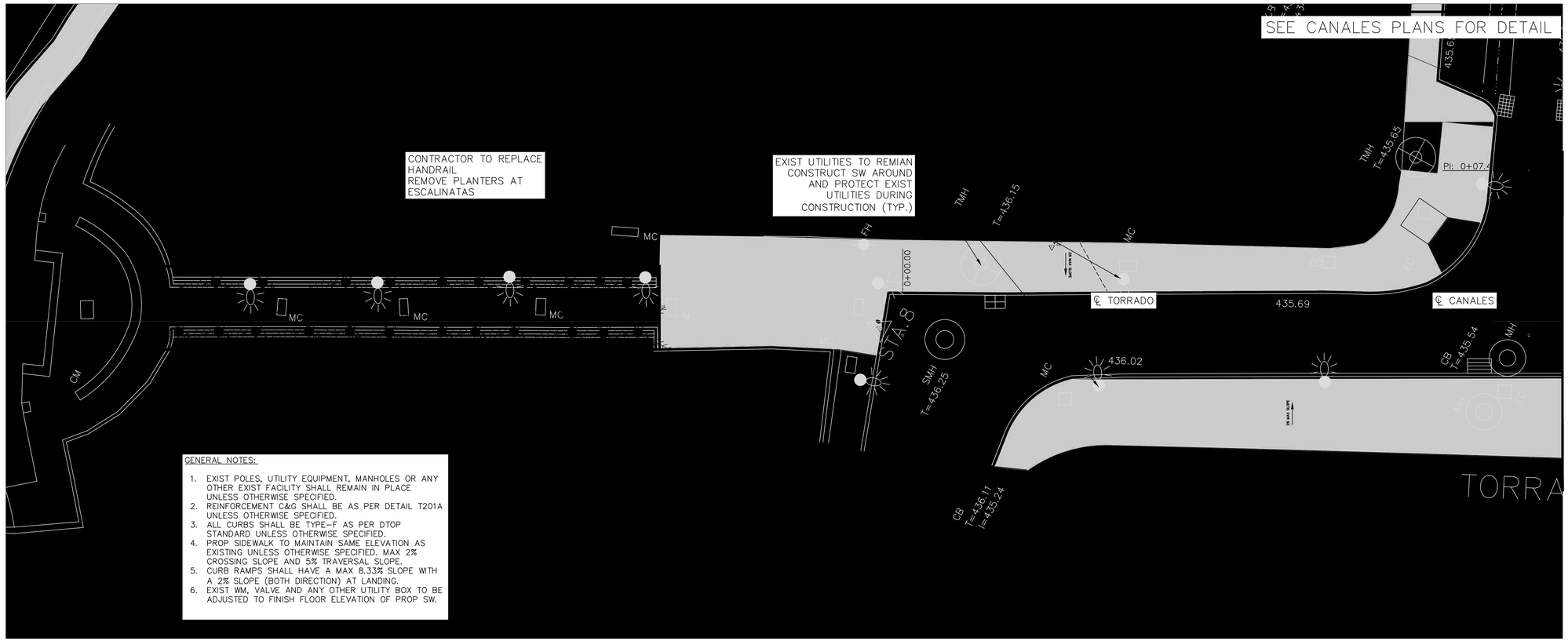
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

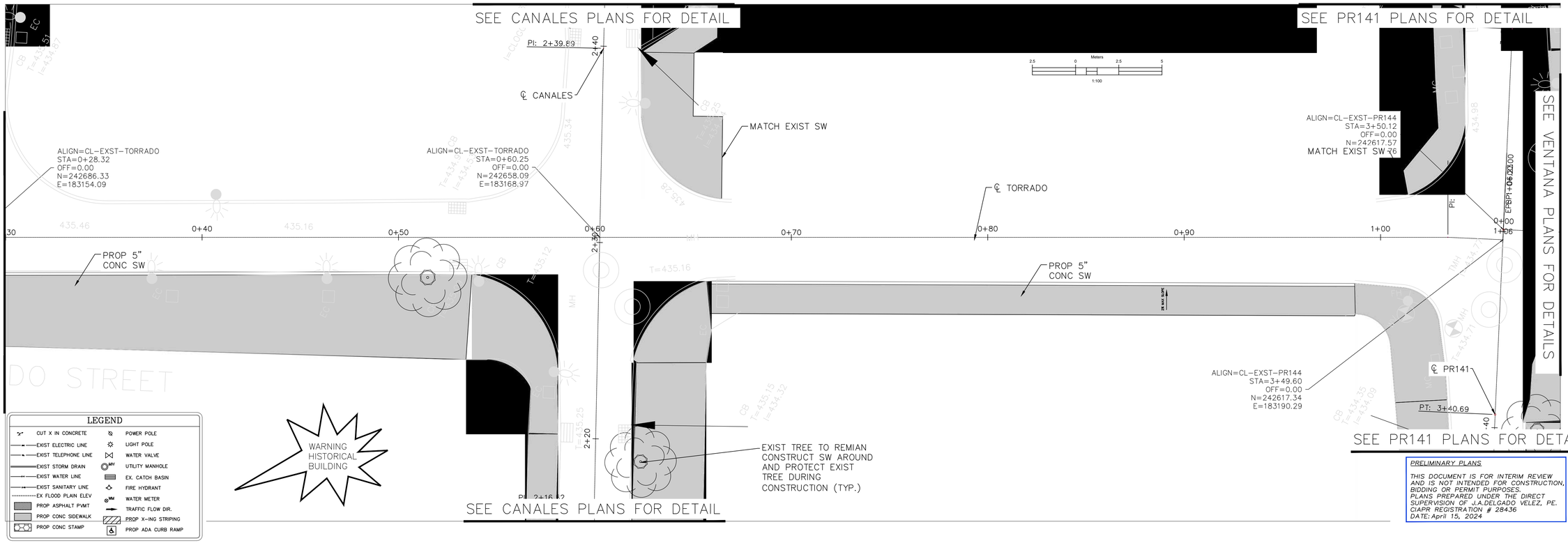
SHEET NO.:
C517

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg



GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.



LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

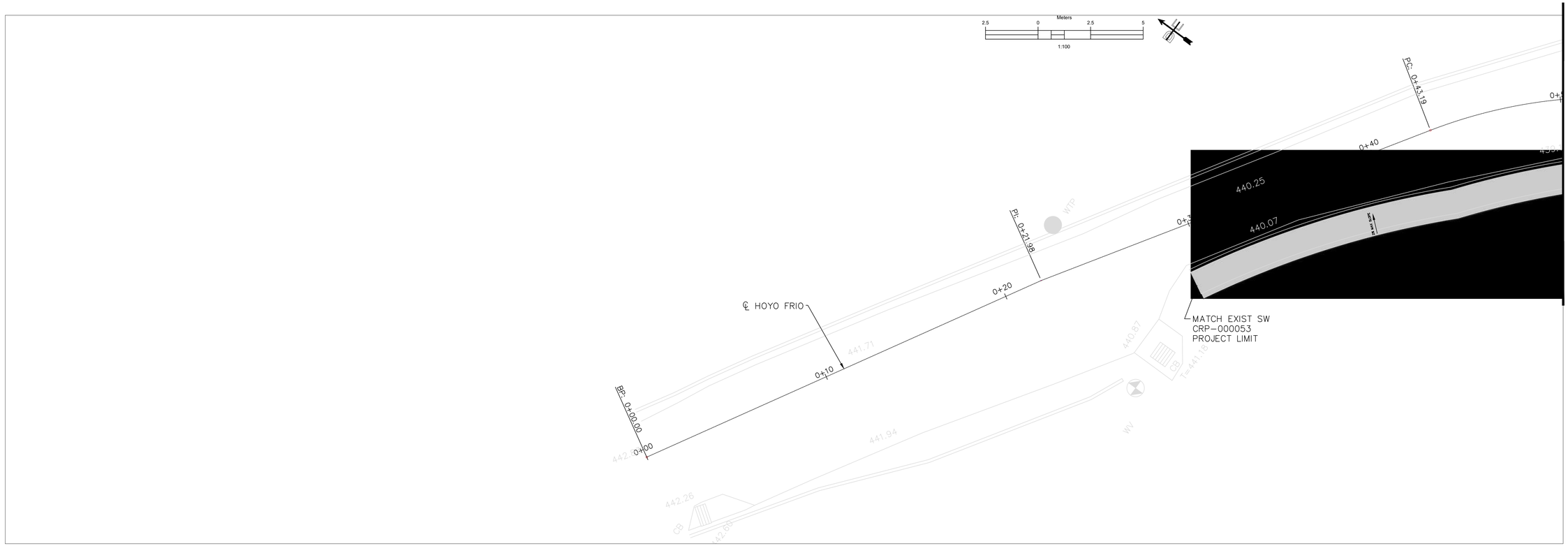
SHEET NAME
GRADING & PAVING DETAIL PLAN
ESCALINATAS & TORRADO ST

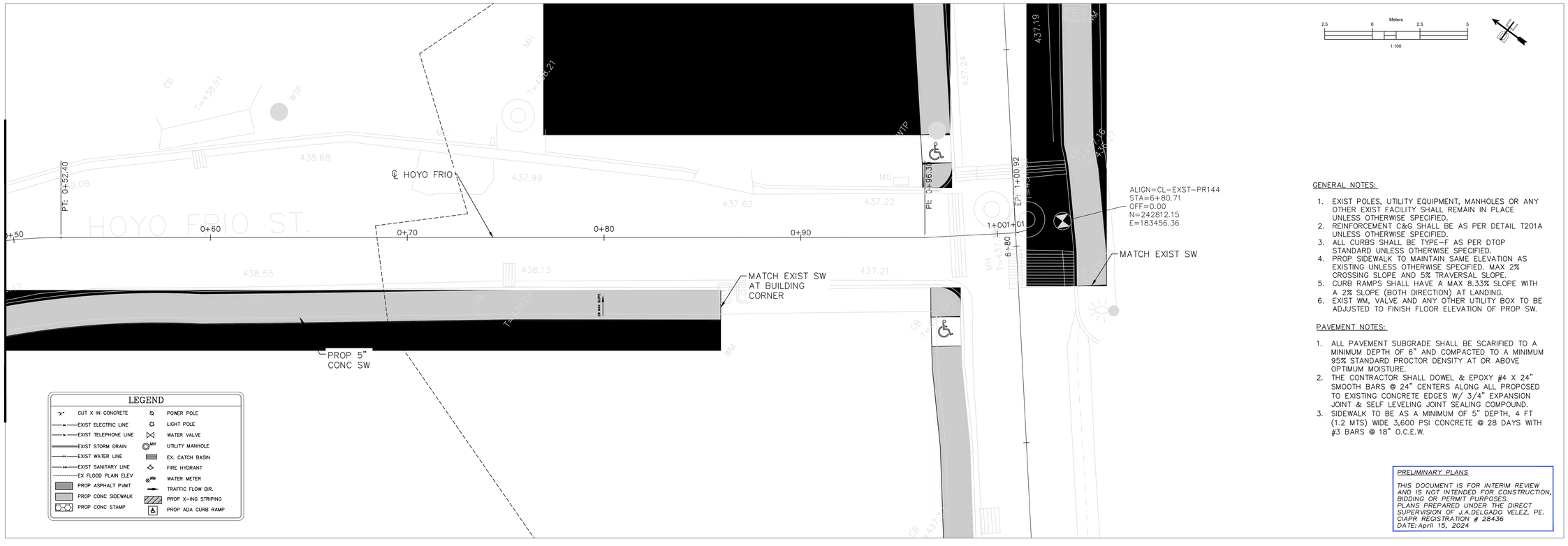
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: C518

C:\Users\josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

C:\Users_joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg





LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING
DETAIL PLAN
HOYO FRIO ST

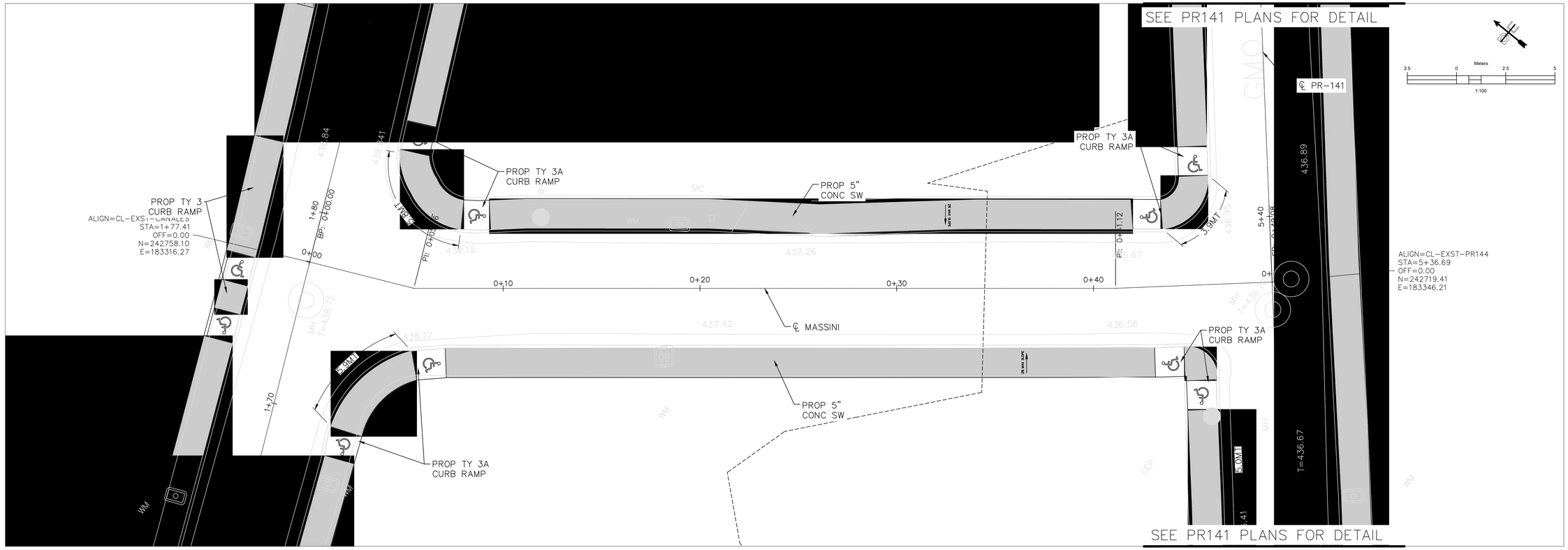
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C519



LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

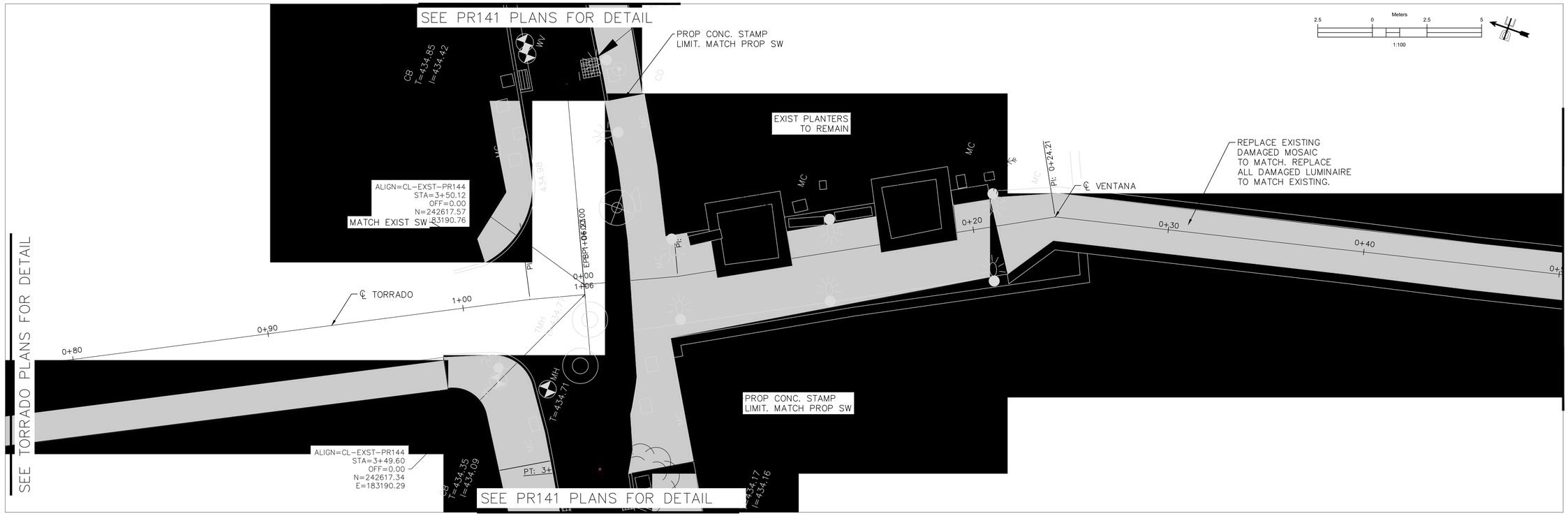
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

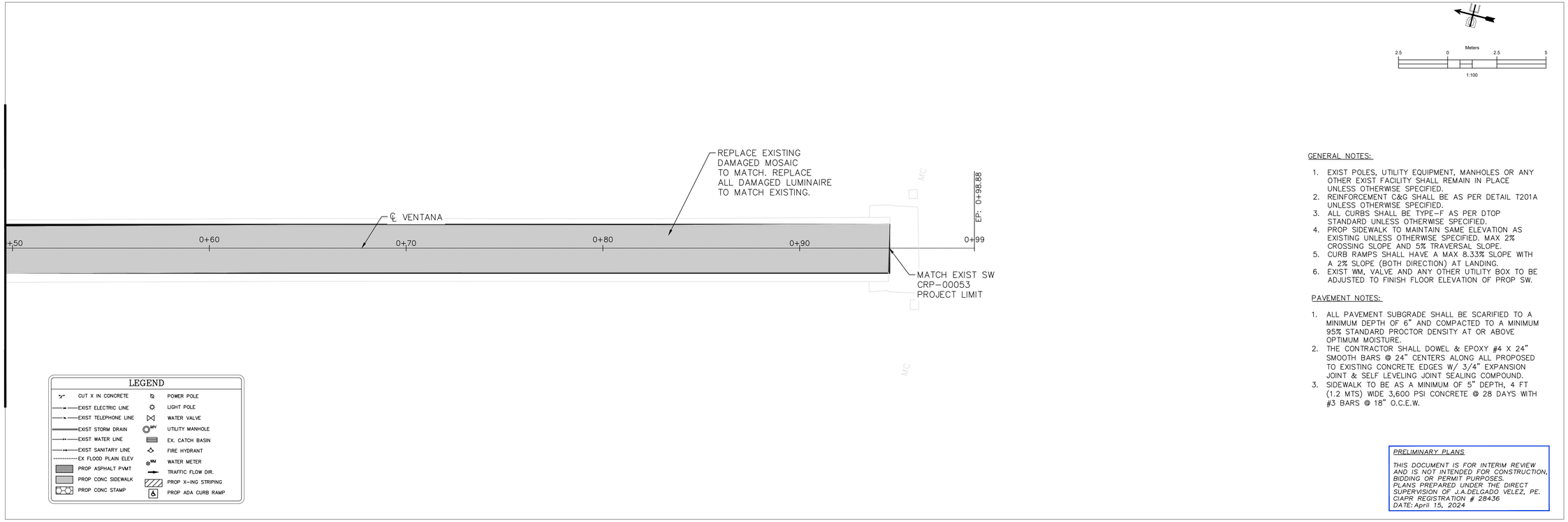
SHEET NAME
GRADING & PAVING DETAIL PLAN
MASSINI ST

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C520

C:\Users\JoseAdelgado\OneDrive - delgado torres engineering, llc\Documents - Projects\DTE-2023-004 sidewalk revitalization Jayuya urban center crp-053\DTE23-004 Cad\Production drawings\C0501 gr - pvg dtl plan.dwg





LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN
VENTANA AL RIO BRIDGE

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C521

c:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

NOTES:
1. REINFORCEMENT SHALL BE #4 BARS UNLESS OTHERWISE SPECIFIED
2. USE MINIMUM CLASS P1 CONCRETE
3. TRANSVERSE BARS ON 24" CENTERS

STANDARD CURB AND GUTTER SECTION WITH ASPHALT PAVING

T201A

NOTES:
1. REINFORCEMENT SHALL BE #4 [illegible] UNLESS OTHERWISE SPECIFIED
2. USE MINIMUM CLASS P1 CONCRETE
3. TRANSVERSE BARS ON [illegible] CENTERS

STANDARD MONOLITHIC CURB AND GUTTER SECTION WITH CONCRETE PAVING

T201C

NOTES:
1. REINFORCEMENT SHALL BE #4 BARS UNLESS OTHERWISE SPECIFIED
2. VERTICAL DOWEL BARS SHALL BE 6" LONG ON 24" CENTERS
3. USE MINIMUM CLASS P1 CONCRETE
4. WHEN ATTACHING NEW CURB TO EXISTING CONCRETE, DRILL ¾" DIA. HOLES INTO EXISTING CONCRETE. BLOW HOLES CLEAN AND SECURE REBAR OF CORRECT SIZE AS REQUIRED FOR PAVEMENT WITH EPOXY GROUT

CONCRETE PAVEMENT ALTERNATE CURB DOWELED CURB SECTION (UPON APPROVAL BY CITY ENGINEER)

T202

NOTES:
1. REINFORCEMENT SHALL BE #4 BARS UNLESS OTHERWISE SPECIFIED
2. USE MINIMUM CLASS P1 CONCRETE
3. TRANSVERSE BARS ON 24" CENTERS

SURMOUNTABLE CURB AND GUTTER SECTION WITH ASPHALT PAVING

T204A

NOTES:
1. REINFORCEMENT [illegible] BE #4 BARS UNLESS OTHERWISE SPECIFIED
2. USE MINIMUM [illegible] CLASS P1 CONCRETE
3. TRANSVERSE [illegible] BARS ON 24" CENTERS

SURMOUNTABLE MONOLITHIC CURB AND GUTTER SECTION WITH CONCRETE PAVING

T204C

NOTES:
1. USE MINIMUM CLASS P1 CONCRETE
2. PAVEMENT THICKNESS SHALL BE [illegible] #4 ACCORDANCE [illegible] TABLE ON ASPHALT CONCRETE PAVEMENT [illegible] STANDARD DETAIL SHEET [illegible] STREET TYPE
3. REINFORCEMENT SHALL BE [illegible] #4 BARS UNLESS OTHERWISE [illegible] NOTED
4. TRANSVERSE BARS [illegible] ON 24" CENTERS

PORTLAND CEMENT CONCRETE EDGE RESTRAINT FOR RURAL/SUBURBAN ASPHALT STREET

T205

NOTE:
1. FOR PAVEMENT OUTSIDE AN INTERSECTION'S PCs:
   (a) TRANVERSE/LATERAL SAWED JOINT SHALL BE PLACED EVERY 20' EXCEPT AT EXPANSION JOINT OR CONSTRUCTION JOINT
   (b) LONGITUDINAL SAWED JOINT SHALL BE PLACED AT CENTER OF PAVEMENT WHEN THERE IS NO CONSTRUCTION JOINT
2. FOR PAVEMENT INSIDE AN INTERSECTION'S PCs, BOTH TRANSVERSE/LATERAL AS WELL AS LONGITUDINAL SAW JOINTS SHALL BE PLACED EVERY 20' OR AT AN AVERAGE AS CLOSE TO 20' AS REASONABLY POSSIBLE
3. SAW JOINT IS TO BE CONTINUOUS THROUGH CURB, WHERE APPLICABLE

SAWED JOINT FOR CONCRETE PAVEMENT

T207

NOTES:
1. TO BE PLACED AT THE PC'S OF AN INTERSECTION AND THEN EVERY 200' MAXIMUM THEREAFTER AWAY FROM THE INTERSECTION (EXCEPT AS NOTED)
2. IF THE LAST PROPOSED EXPANSION JOINT PRIOR TO THE NEXT INTERSECTION'S PC'S EXPANSION JOINT IS LESS THAN 50', THEN NO EXPANSION JOINT (THE LAST PANEL WILL BE GREATER THAN 200' BUT LESS THAN 250')
3. IF THE LAST PROPOSED EXPANSION JOINT PRIOR TO THE NEXT INTERSECTION'S PC'S EXPANSION JOINT IS 50' OR GREATER BUT LESS THAN 200', THEN PLACE THE LAST EXPANSION JOINT SUCH THAT EACH CONCRETE PANEL (ON EACH SIDE OF SAID EXPANSION JOINT) ARE EQUAL TO EACH OTHER (AND EACH IS LESS THAN 200')

EXPANSION JOINT FOR CONCRETE PAVEMENT

T208

NOTES:
1. FOR NEW ASPHALTIC CONCRETE PAVEMENT TO EXISTING ASPHALTIC CONCRETE PAVEMENT, REBAR IS NOT REQUIRED.
2. FOR NEW PORTLAND CEMENT CONCRETE TO EXISTING PORTLAND CEMENT CONCRETE, REBAR IS REQUIRED.
3. IF REBAR IS REQUIRED AS NOTED ABOVE:
   (a) DRILL DOWEL AND EPOXY #3 REBAR INTO EXISTING PAVEMENT
   (b) #3 REBAR TO EXTEND A MINIMUM OF 12" INTO BOTH PAVEMENTS
   (c) #3 REBAR TO BE A MAXIMUM OF 18" ON CENTER

CONSTRUCTION JOINT

T209

NOTES:
1. REINFORCEMENT SHALL BE #4 BARS UNLESS OTHERWISE SPECIFIED
2. USE MINIMUM CLASS P1 CONCRETE
3. TRANSVERSE BARS ON 24" CENTERS

SURMOUNTABLE TRAFFIC CALMING CURB AND GUTTER WITH TRANSITION TO FULL HEIGHT CURB

T203

NOTES:
1. REFER TO CONC. PAVEMENT DETAIL SHT. FOR JOINT DETAILS
2. CONCRETE SHALL BE MACHINE PLACED-CLASS P1 OR HAND PLACED-CLASS P2
3. #4 TRANSVERSE BARS ON 18" CENTERS

VALLEY GUTTER

T206

GENERAL NOTES:

1. SURMOUNTABLE CURB AND GUTTER SHALL BE INSTALLED WHENEVER THERE IS A PRIVATE DRIVEWAY FOR VEHICLE ACCESS.
2. PAVEMENT DEPTHS INDICATED ARE MINIMUM AND MAY BE INCREASED UPON RECOMMENDATION OF ENGINEER OF RECORD. PAVEMENT DEPTH SHALL BE CONSISTENT FOR ALL APPLICABLE DETAILS.
3. REBAR INDICATED ARE MINIMUM AND MAY BE INCREASED UPON RECOMMENDATION OF ENGINEER OF RECORD. REBAR SIZE SHALL BE CONSISTENT FOR ALL APPLICABLE DETAILS.

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH.: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

CURB & GUTTER DETAIL
REINFORCED CONC. DETAIL

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

PROJECT NO.: DTE23-004

SHEET NO.: DTL-01

C:\Users\JoseadelgadoOneDrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\rvtdwy dtl.dwg

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c605 construction sequence plan.dwg

MOT NOTES:

1. CONTRACTOR IS RESPONSIBLE TO PROVIDED SIGNAGE UTILIZING THE LATEST VERSION OF THE MUTCD FOR DEVICES AND TECHNOLOGIES WHILE AT ALL TIMES DURING CONSTRUCTION.
2. TO AVOID TRAFFIC SUGGESTIONS FROM THE ENGINEER, CONTRACTOR IS RESPONSIBLE ON ALLOWING TRAFFIC AND PEDESTRIAN FLOW/CIRCULATION AT ALL TIMES DURING CONSTRUCTION.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF LA DELGADO VELEZ, PE.
CAPA REGISTRATION # 28436
DATE: April 15, 2024

REVISIONS	SYMBOL	DATE	BY

SHEET NAME

CONSTRUCTION SEQUENCE PLAN

PROJECT NAME

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE TO OUR COMMUNITIES

53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

SHEET NO.: C601
PROJECT NO.: DTE23-004
DATE: April 15, 2024
DRAWN/ADD REVISED BY:
REVISED (1):

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c605 construction sequence plan.dwg

MATCHLINE SHEET C601

MATCHLINE SHEET: C605

MATCHLINE SHEET: C605

MATCHLINE SHEET: C603

MATCHLINE SHEET: C603

WARNING HISTORICAL BUILDING

WARNING HISTORICAL BUILDING

WARNING HISTORICAL BUILDING

HORIZONTAL & VERTICAL CONTROL

PointNo.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	2425851.1140	1829619.1930	434.8800	STA/PK
2	2426.38.1490	1829518.1300	437.3770	STA/PK
3	2429551.5500	1830633.6350	439.7640	STA/PK
4	2427.01.4500	1830.38.0000	436.3.50	STA/PK
5	2427.01.4620	1831.08.0830	436.3050	STA/PK
6	2427.12.4570	1831.43.6780	436.2580	STA/PK
9	2427.07.2870	1831.47.5570	436.0050	STA/PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
	EXIST WATER LINE	WM	WATER METER
	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX FLOOD PLAIN ELEV		

CONSTRUCTION SEQ. LEGEND

	PHASE I		SMALL TRAFFIC SIGN
	PHASE II	I	BARRICADE
	PHASE III		

MOT NOTES:

1. CONTRACTOR IS RESPONSIBLE TO PROVIDED SIGNAGE UTILIZING THE LATEST VERSION OF THE MUTCD FOR DEVICES AND TECHNOLOGIES WHILE AT ALL TIMES DURING CONSTRUCTION.
2. TCP/MOT PLANS ARE SUGGESTIONS FROM THE ENGINEER. CONTRACTOR IS RESPONSIBLE ON ALLOWING TRAFFIC AND PEDESTRIAN FLOW/CIRCULATION AT ALL TIMES DURING CONSTRUCTION.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

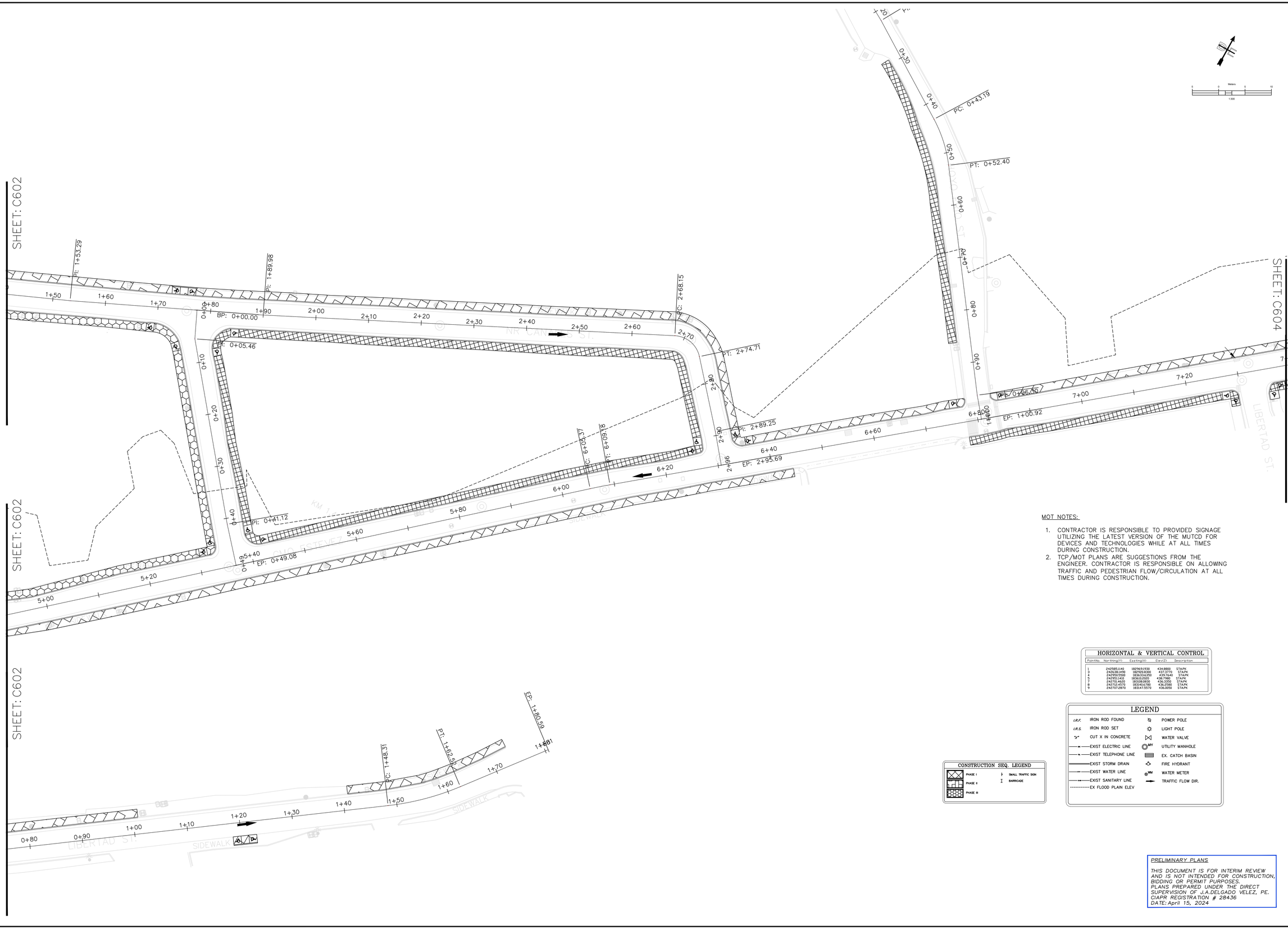
DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
CONSTRUCTION SEQUENCE PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: C602



MOT NOTES:

1. CONTRACTOR IS RESPONSIBLE TO PROVIDED SIGNAGE UTILIZING THE LATEST VERSION OF THE MUTCD FOR DEVICES AND TECHNOLOGIES WHILE AT ALL TIMES DURING CONSTRUCTION.
2. TCP/MOT PLANS ARE SUGGESTIONS FROM THE ENGINEER. CONTRACTOR IS RESPONSIBLE ON ALLOWING TRAFFIC AND PEDESTRIAN FLOW/CIRCULATION AT ALL TIMES DURING CONSTRUCTION.

HORIZONTAL & VERTICAL CONTROL

PointNo	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.9300	434.8800	STA/PK
2	242583.1490	182903.8280	441.3370	STA/PK
3	242550.0500	182823.6300	439.7640	STA/PK
5	242551.1400	183632.0500	436.7980	STA/PK
7	242701.4620	183108.0830	436.3350	STA/PK
8	242712.4570	183140.6780	436.3580	STA/PK
9	242707.2870	183147.5570	436.0050	STA/PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
	EXIST WATER LINE	WM	WATER METER
	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX FLOOD PLAIN ELEV		

CONSTRUCTION SEQ. LEGEND

PHASE I	SMALL TRAFFIC SIGN
PHASE II	BARRICADE
PHASE III	

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

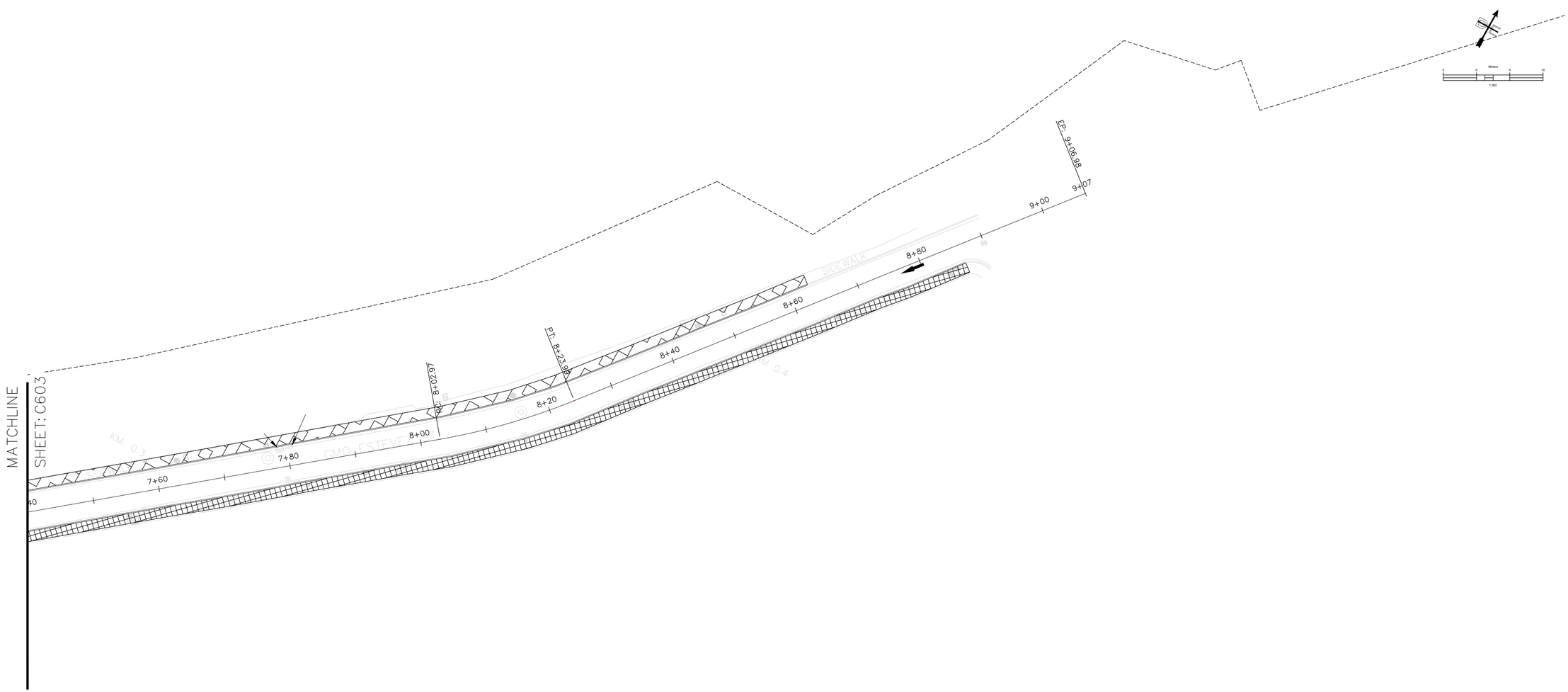
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
CONSTRUCTION SEQUENCE PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C603

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c605 construction sequence plan.dwg



HORIZONTAL & VERTICAL CONTROL				
Point No.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
3	242638.1490	182920.8300	437.3770	STA.PK
4	242958.5500	183639.6.250	435.7640	STA.PK
5	242951.1410	183610.0320	438.7980	STA.PK
7	242712.4570	183.466.780	436.2580	STA.PK
8	242712.4570	183.466.780	436.2580	STA.PK
9	242707.2870	183147.5570	436.0050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
"x"	CUT X IN CONCRETE		WATER VALVE
E	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
T	EXIST TELEPHONE LINE		EX. CATCH BASIN
SD	EXIST STORM DRAIN		FIRE HYDRANT
W	EXIST WATER LINE	WM	WATER METER
S	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
FP	EX FLOOD PLAIN ELEV		

CONSTRUCTION SEQ. LEGEND

	PHASE I		SMALL TRAFFIC SIGN
	PHASE II	I	BARRICADE
	PHASE III		

MOT NOTES:

1. CONTRACTOR IS RESPONSIBLE TO PROVIDED SIGNAGE UTILIZING THE LATEST VERSION OF THE MUTCD FOR DEVICES AND TECHNOLOGIES WHILE AT ALL TIMES DURING CONSTRUCTION.
2. TCP/MOT PLANS ARE SUGGESTIONS FROM THE ENGINEER. CONTRACTOR IS RESPONSIBLE ON ALLOWING TRAFFIC AND PEDESTRIAN FLOW/CIRCULATION AT ALL TIMES DURING CONSTRUCTION.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
CONSTRUCTION SEQUENCE PLAN

REVISIONS	SYMBOL	DATE	BY

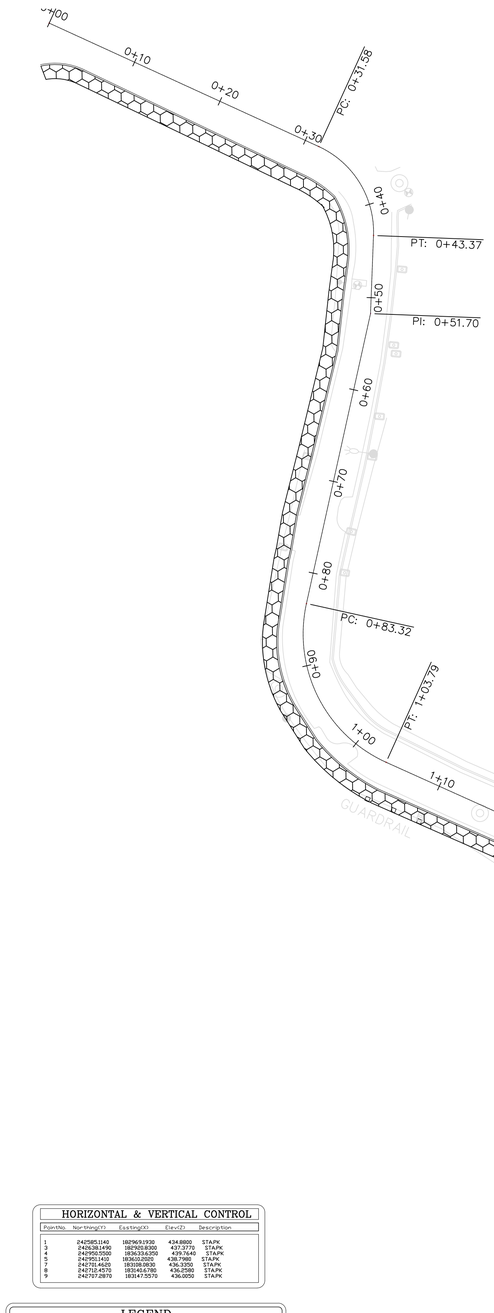
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

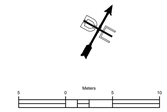
DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C604

C:\Users\Joseu\delgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c605 construction sequence plan.dwg





HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
3	242638.1490	182923.8380	435.0770	STA.PK
4	242751.2400	182903.7200	437.3240	STA.PK
5	242951.1410	183063.0200	438.7980	STA.PK
7	242731.4620	183108.0830	436.3350	STA.PK
8	242712.4570	183143.6780	436.2580	STA.PK
9	242707.2870	183147.5570	436.0650	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
E	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
T	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
W	EXIST WATER LINE	WM	WATER METER
S	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX FLOOD PLAIN ELEV		

CONSTRUCTION SEQ. LEGEND

	PHASE I		SMALL TRAFFIC SIGN
	PHASE II		BARRICADE
	PHASE III		

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
CONSTRUCTION SEQUENCE PLAN

REVISIONS	SYMBOL	DATE	BY

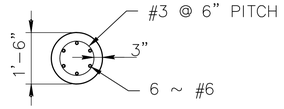
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

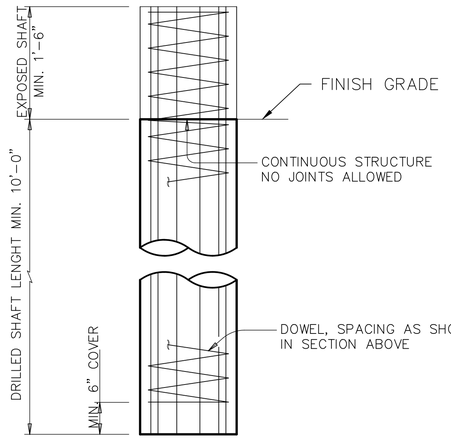
SHEET NO.:
C605

C:\Users\josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c605 construction sequence plan.dwg

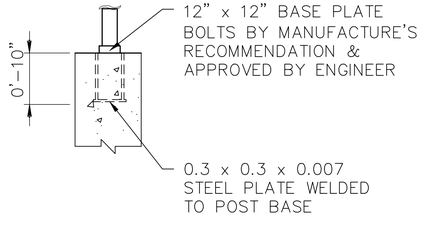


SECTION

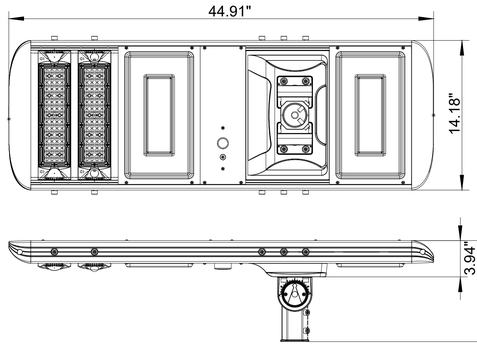
18" DRILLED SHAFT
FOUNDATION FOR
PROP. LUMINAIRE
(NOT TO SCALE)

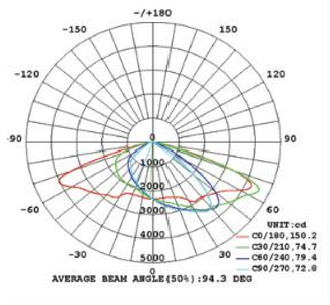


DRILLED SHAFT PROFILE
NOT TO SCALE



POLE BASE CONNECTION DETAIL
NOT TO SCALE





LUMINAIRE MIN. SPECIFICATION
(OR SIMILAR)

SOLAR LUMINAIRE

Solar Lighting 80W
(20' Pole)

LUMINAIRE

- Three light modes are available. Timed mode (6 hr, 9hr, 12 hr) set to 50%, 70$ or 100%. Sensor control mode will turn the light on at 33% and switch to 100% when motion is detected. Mixed mode will turn the light on at full power for x hours then switch to motion sensor for remainder of the night.
- Select desired lighting mode with included remote control
- 80 Watt emits 8,500 lm
- 14800 Lumens (MIN.)
- 6000-6500K LED color temperature
- Aluminum and glass construction
- IP65 rating
- 80 Watt Di mensions: 44" x 14" x 4" (112cm x 35cm x 10cm)
- Working temperature -22 F to 158F
- Gray / aluminum finish

SOLAR PANEL

Glass covered solar panel is built in to the top of the lamp
80 Watt fitted with 18V 85 Watt solar panel

ATTERY

Lithium battery pack installed within unit
80 Watt supplied with 12.8V 403 Watt-hour battery
Replaceble battery

OLE

Light arm is not included. Light fixture will mount to the top of pole.
20' (6m) galvanized steel pole
20' pole is fitted with a 12." x 12.5" base plate

HARGE CONTROL

Internal battery over-charge and dis-charge protection
Automatic light activation at sunset

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

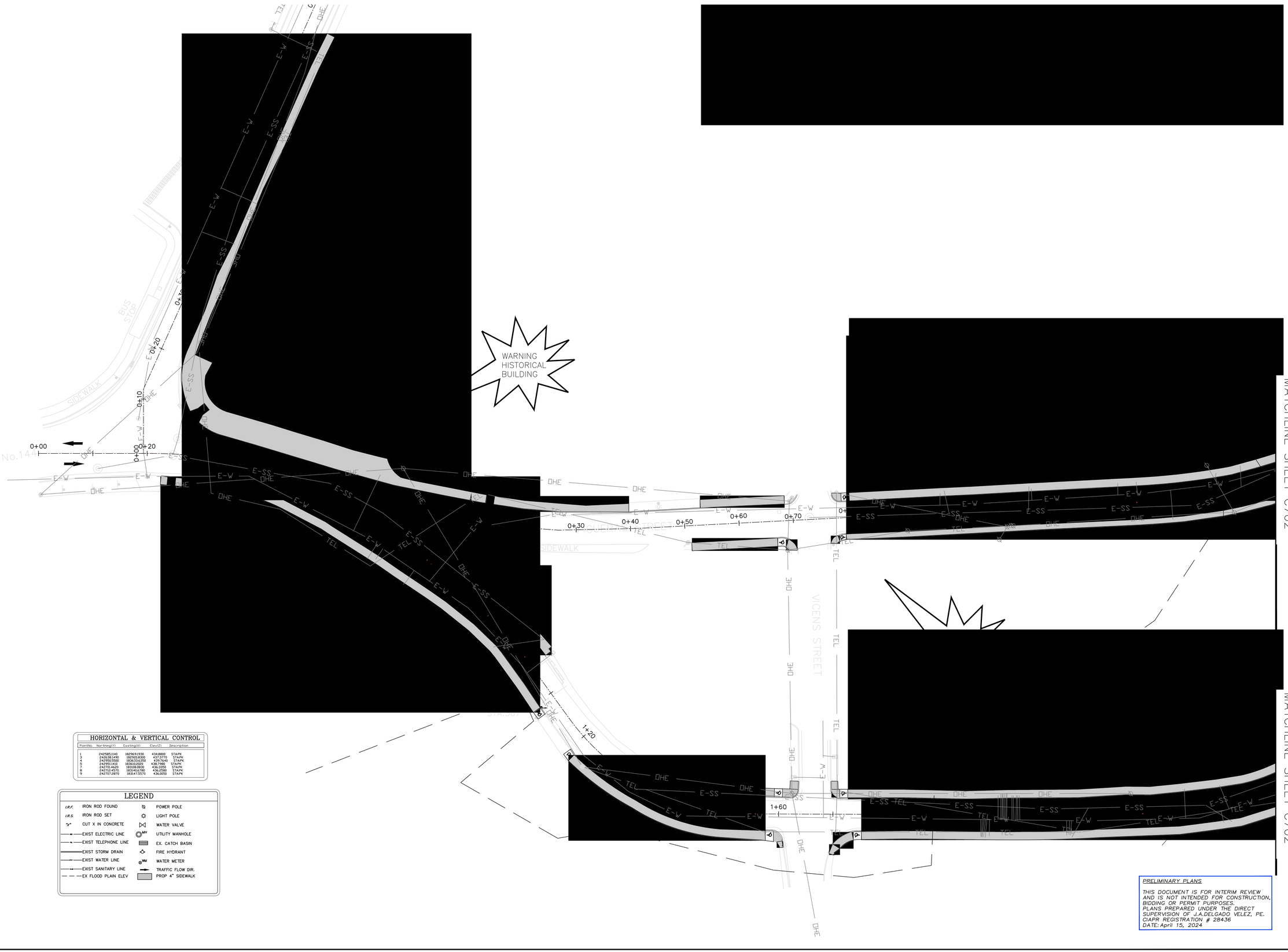
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SOLAR LUMINAIRE
SOLAR LIGHTING AND
FOUNDATION DETAILS

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: E01

C:\Users\josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\e01 luminaires details.dwg



MATCHLINE SHEET C702

MATCHLINE SHEET C702

HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev.(Z)	Description
1	242585.1140	1829619.1930	434.8800	STA.PK
2	242583.0550	1836334.3350	434.7640	STA.PK
3	242583.0550	1836334.3350	439.7640	STA.PK
5	242951.1410	1836610.2020	438.7980	STA.PK
7	242751.4620	1831018.8830	436.3350	STA.PK
8	242712.4570	1831414.6780	436.2580	STA.PK
9	242707.2870	1831147.5570	436.2050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
	EXIST WATER LINE	WM	WATER METER
	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX FLOOD PLAIN ELEV		PROP 4" SIDEWALK

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE TO OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
UTILITIES PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
October 4, 2023

PROJECT NO.:
DTE23-004

SHEET NO.:
C701

C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c705 utilities plan.dwg

MATCHLINE SHEET C701

MATCHLINE
SHEET: C04E

MATCHLINE
SHEET: C04E

MATCHLINE SHEET: C703

MATCHLINE SHEET: C703

MATCHLINE SHEET C701

WARNING
HISTORICAL
BUILDING

WARNING
HISTORICAL
BUILDING

GMO ESTEVEZ ST.

SIDEWALK

GUARD
PROTECTION

HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev.(Z)	Description
1	2425851.1140	1829693.1930	434.8800	STA.PK
3	2426238.1490	1829293.8300	437.3770	STA.PK
4	2426611.1490	1829293.8300	438.7770	STA.PK
5	2427051.1410	1830631.2920	436.7980	STA.PK
7	2427181.4620	1831086.0830	436.3350	STA.PK
8	2427121.4570	1831414.1780	436.2580	STA.PK
9	2427127.2870	1831475.5570	436.0050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
"x"	CUT X IN CONCRETE		WATER VALVE
E	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
T	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
W	EXIST WATER LINE	WM	WATER METER
S	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX FLOOD PLAIN ELEV		PROP 4" SIDEWALK

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/in/deltorre

PROJECT NAME
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
UTILITIES PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
October 4, 2023

PROJECT NO.:
DTE23-004

SHEET NO.:
C702

C:\Users\Jose\Delgado\OneDrive - Delgado Torres Engineering, LLC\Documents - Projects\DTE-2023-004 Sidewalk Revitalization Jayuya Urban Center CRP-053\DTE23-004_Cad\Production drawings\C705 utilities plan.dwg

HORIZONTAL & VERTICAL CONTROL

PointNo.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1149	182969.1930	434.8800	STA/PK
3	242636.1490	182908.8300	437.3770	STA/PK
4	242950.0500	183633.6350	439.7640	STA/PK
5	242951.1410	183610.2020	436.7980	STA/PK
7	242701.4620	183108.0830	436.3250	STA/PK
8	242707.4970	183147.5570	436.3590	STA/PK
9	242707.2870	183147.5570	436.8050	STA/PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
⁵⁄₈"	CUT X IN CONCRETE		WATER VALVE
E	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
T	EXIST TELEPHONE LINE		EX. CATCH BASIN
SD	EXIST STORM DRAIN		FIRE HYDRANT
W	EXIST WATER LINE	WM	WATER METER
S	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
FP	EX FLOOD PLAIN ELEV		PROP 4" SIDEWALK

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
UTILITIES PLAN

REVISIONS	SYMBOL	DATE	BY

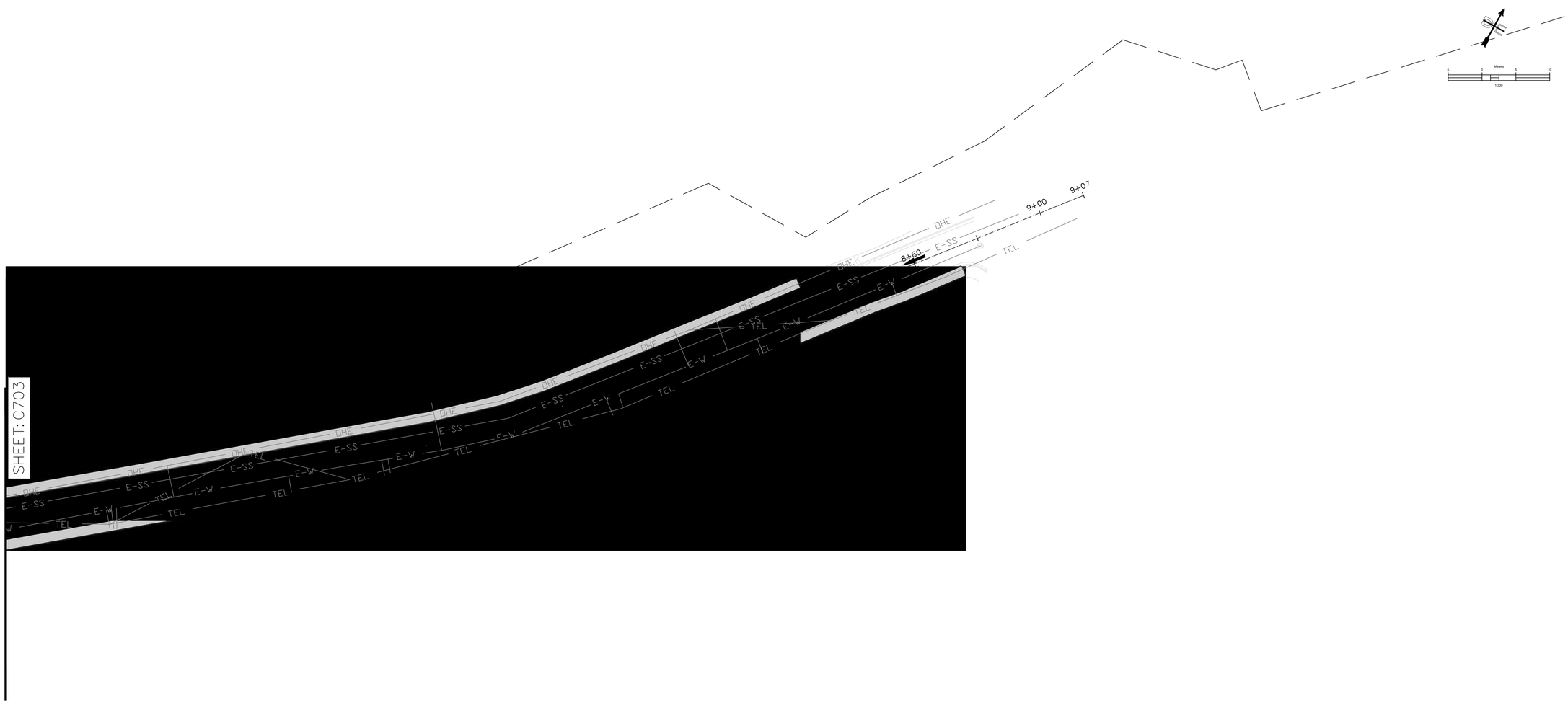
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
October 4, 2023

PROJECT NO.:
DTE23-004

SHEET NO.:
C703

C:\Users\josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c705 utilities plan.dwg



HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
2	242638.1490	182925.8300	437.3770	STA.PK
3	242677.1440	182893.8250	439.1790	STA.PK
5	242951.1400	183612.0620	450.7760	STA.PK
7	242751.4620	183008.9830	436.3350	STA.PK
8	242712.4570	183140.6780	436.2580	STA.PK
9	242707.2870	183147.5570	436.6050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
—E—	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
—T—	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
—W—	EXIST WATER LINE	WM	WATER METER
—SS—	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
— — —	EX FLOOD PLAIN ELEV		PROP 4" SIDEWALK

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

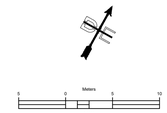
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
UTILITIES PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
October 4, 2023
PROJECT NO.:
DTE23-004
SHEET NO.:
C704

C:\Users\Joseadelgado\OneDrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c705 utilities plan.dwg



LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
—E—	EXIST ELECTRIC LINE	UM	UTILITY MANHOLE
—T—	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
—W—	EXIST WATER LINE	WM	WATER METER
—SS—	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
— — —	EX FLOOD PLAIN ELEV		PROP 4" SIDEWALK

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
UTILITIES PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
October 4, 2023

PROJECT NO.:
DTE23-004

SHEET NO.:
C705

C:\Users_joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c705 utilities plan.dwg

PRELIMINARY PLANS
THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PREPARED UNDER THE DIRECT SUPERVISION OF: J.A. DELGADO VELEZ, PE.
DATE: April 15, 2024 # 28436

C801	DTE23-004	October 4, 2023	DRAWN: JAD DESIGNED: JAD REVIEWED: ITI		

REVISIONS	SYMBOL	DATE	BY

SHEET NAME

STORMWATER POLLUTION CONTROL PLAN

PROJECT NAME

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE TO OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c805 stormwater pollution control plan.dwg

C802						
SHEET NO.						
DTE23-004	October 4, 2023	DRAWN: JAD DESIGNED: JAD REVIEWED: ITI				
DESIGNATION	DATE					

REVISIONS	SYMBOL	DATE	BY

SHEET NAME

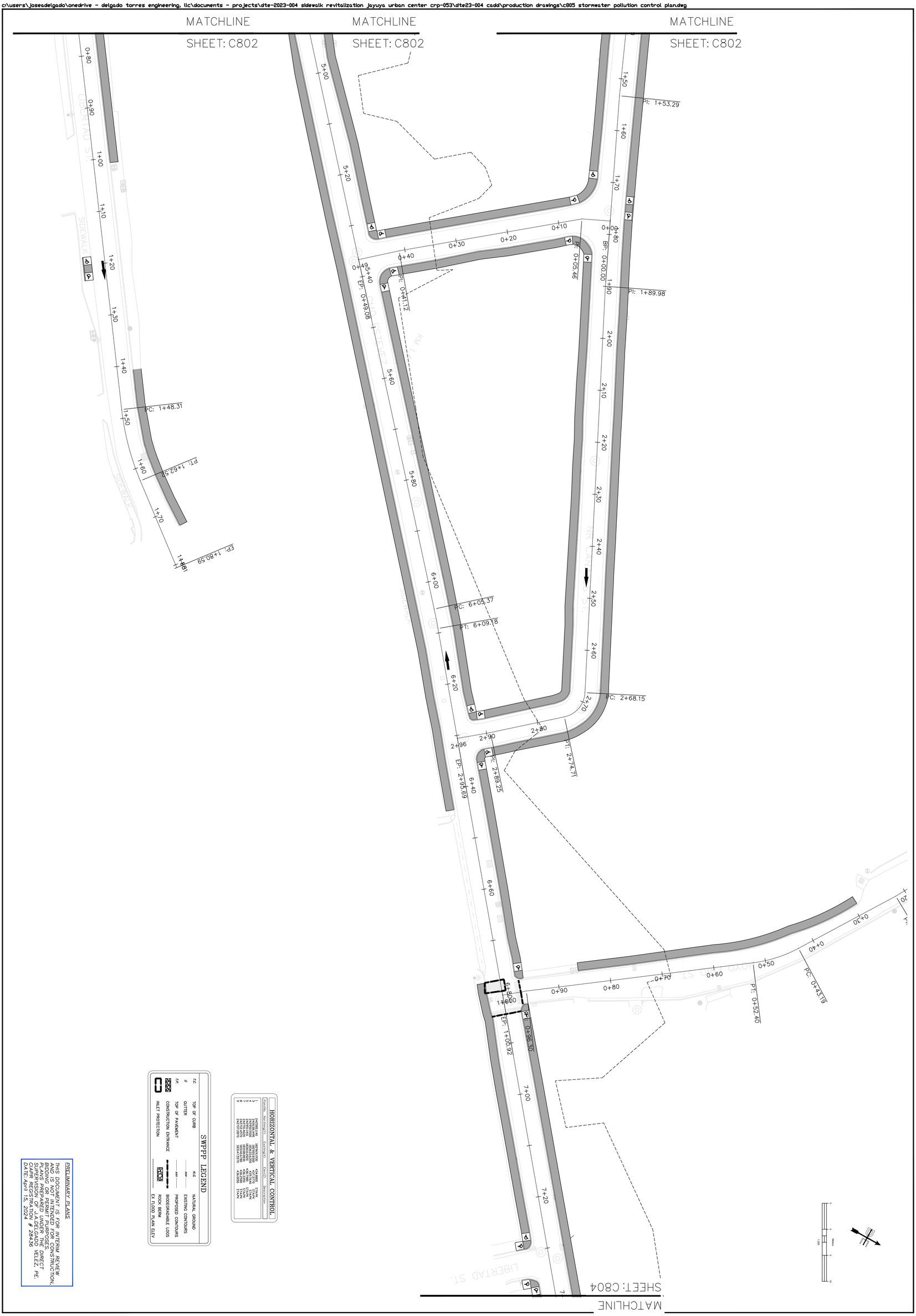
STORMWATER POLLUTION CONTROL PLAN

PROJECT NAME

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c805 stormwater pollution control plan.dwg

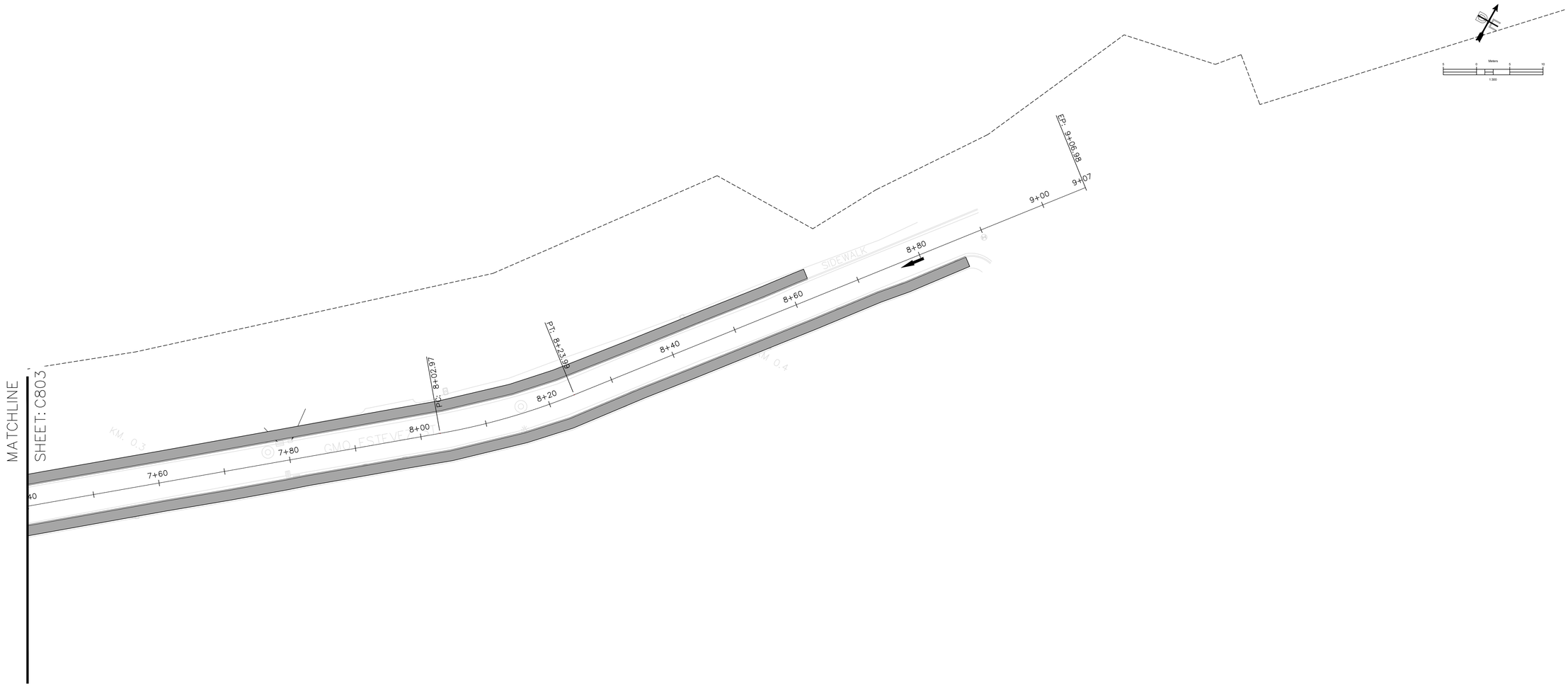


C803			
PROJECT NO.: DTE23-004	DRAWN: JAD	REVISIONS	SYMBOL	DATE	BY
DATE: October 4, 2023	DESIGNED: JAD				
	REVIEWED: JTI				

SHEET NAME
STORMWATER POLLUTION CONTROL PLAN

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre



HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA/PK
3	242583.1490	182903.8280	430.2770	STA/PK
4	242582.9500	182903.6200	429.7640	STA/PK
5	242701.1400	183612.0300	438.7980	STA/PK
7	242701.4620	183018.8830	436.3350	STA/PK
8	242712.4570	183140.6780	436.2580	STA/PK
9	242707.2870	183147.5570	436.0050	STA/PK

SWPPP LEGEND

T.C.	TOP OF CURB	N.G.	NATURAL GROUND
G	GUTTER	XXX	EXISTING CONTOURS
T.P.	TOP OF PAVEMENT	XXX	PROPOSED CONTOURS
	CONSTRUCTION ENTRANCE		BIODEGRADABLE LOGS
	INLET PROTECTION		ROCK BERM
			EX FLOOD PLAIN ELEV

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

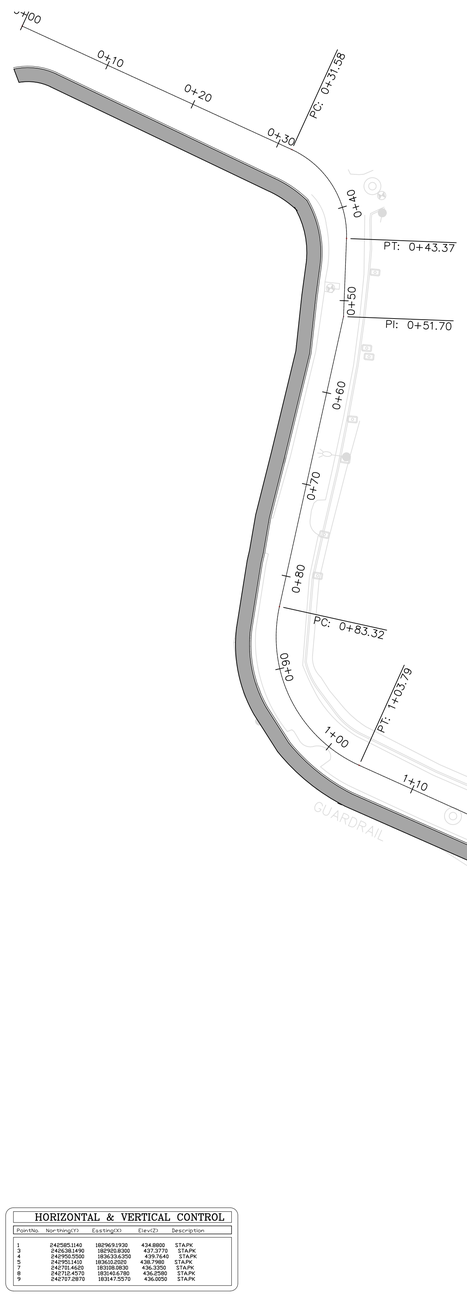
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

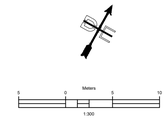
SHEET NAME
STORMWATER POLLUTION CONTROL PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
October 4, 2023
PROJECT NO.:
DTE23-004
SHEET NO.:
C804

c:\users\josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c805 stormwater pollution control plan.dwg





HORIZONTAL & VERTICAL CONTROL

PointNo.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
2	242638.1490	182903.8380	434.9720	STA.PK
3	242760.1430	182902.6300	437.3240	STA.PK
4	242951.1410	183618.0200	438.7980	STA.PK
7	242701.4620	183018.0830	436.3350	STA.PK
8	242712.4570	183145.6780	436.2580	STA.PK
9	242707.2870	183147.5570	436.0650	STA.PK

SWPPP LEGEND

T.C.	TOP OF CURB	N.G.	NATURAL GROUND
G	GUTTER	xxx	EXISTING CONTOURS
T.P.	TOP OF PAVEMENT	xxx	PROPOSED CONTOURS
	CONSTRUCTION ENTRANCE		BIODEGRADABLE LOGS
	INLET PROTECTION		ROCK BERM
			EX FLOOD PLAIN ELEV

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
STORMWATER POLLUTION CONTROL PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
October 4, 2023

PROJECT NO.:
DTE23-004

SHEET NO.:
C805

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c805 stormwater pollution control plan.dwg

DWG BY: LMARTINEZ 2934

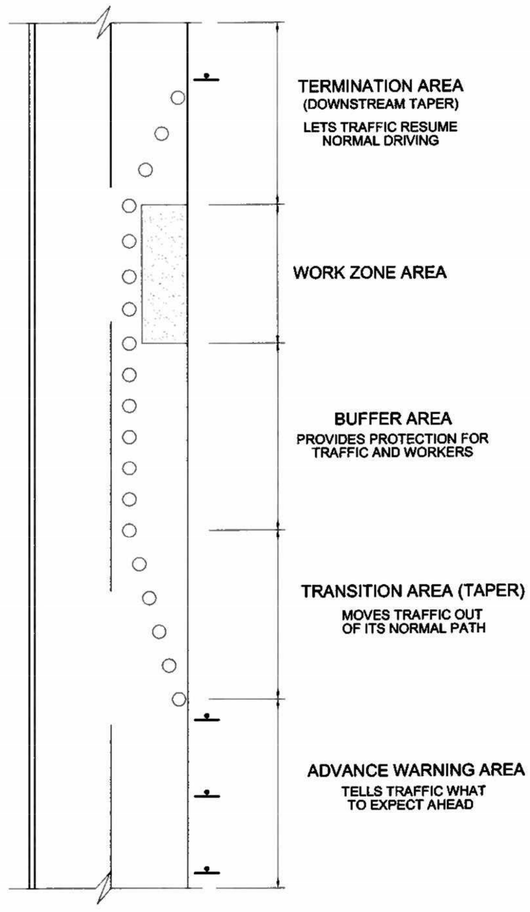
NUMBER OF CHANNELIZING DEVICES NEEDED

LENGTH (FT.)	V < 35 MPH		35 MPH < V ≤ 45 MPH		45 MPH < V ≤ 55 MPH	
	TAPER	BUFFER/ WORK	TAPER	BUFFER/ WORK	TAPER	BUFFER/ WORK
≤ 100	5	2-3	5	2-3	5	2-3
150	6	3-5	6	2-4	6	2-3
200	7	3-6	6	3-5	6	2-4
250	9	4-8	7	3-6	6	3-5
300	10	5-9	8	4-7	6	3-6
350	11	5-10	9	4-8	8	4-7
400	13	6-12	10	5-9	9	4-8
450	14	7-13	11	5-10	10	5-9
500	16	8-15	13	6-12	11	5-10
550	17	8-16	14	7-13	11	5-10
600	19	9-18	15	7-14	12	6-11
650	20	10-19	16	8-15	13	6-12

LEGEND:

- TRAFFIC SIGNS
- FLAGGER
- CHANNELIZING DEVICE
- WORK ZONE AREA

V - POSTED SPEED IN MPH



FIVE PARTS OF A TRAFFIC CONTROL ZONE

TAPER LENGTH CRITERIA FOR WORK ZONES

TYPE OF TAPER	TAPER LENGTH
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/3 L MINIMUM
ONE-LANE, TWO-WAY TRAFFIC TAPER	50 FT. MINIMUM 100 FT. MAXIMUM
DOWNSTREAM TAPER	50 FT. MINIMUM 100 FT. MAXIMUM
FORMULAS FOR L (FT.)	
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR GREATER	L = WxS

ADVANCE WARNING SIGN MINIMUM SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS (*)		
	A	B	C
URBAN (LOW SPEED)	100 FEET	100 FEET	100 FEET
URBAN (HIGH SPEED)	350 FEET	350 FEET	350 FEET
RURAL	500 FEET	500 FEET	500 FEET
EXPRESSWAY / FREEWAY	1,000 FEET	1,500 FEET	2,640 FEET

(*) THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "FIRST SIGN" IS THE SIGN IN A THREE-SIGN SERIES THAT IS CLOSEST TO THE TEMPORARY TRAFFIC CONTROL ZONE. THE "THIRD SIGN" IS THE SIGN THAT IS FURTHEST UPSTREAM FROM THE TEMPORARY TRAFFIC CONTROL ZONE.)

LEGEND:

L - TAPER LENGTH IN FEET
W - WIDTH OF OFFSET IN FEET
S - POSTED SPEED LIMIT OR OFF-PEAK 85 PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH.

NOTICE

TEMPORARY CONCRETE BARRIER UNITS PRODUCED ON AND AFTER OCTOBER 1, 2002 FOR USE ON STATE HIGHWAY PROJECTS MUST MEET NCHRP 350 CRITERIA.

CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE	DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS
6/27/12		6/27/12	

MAINTENANCE AND PROTECTION OF TRAFFIC
WORK ZONE DESIGN CRITERIA

MPT-10
JUNE 2012

DATE	REVISION	BY
APR. 96	ORIGINAL (MPT-10)	JMO
JUN. 12	GENERAL REVISION AS PER MUTCD 2009	

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

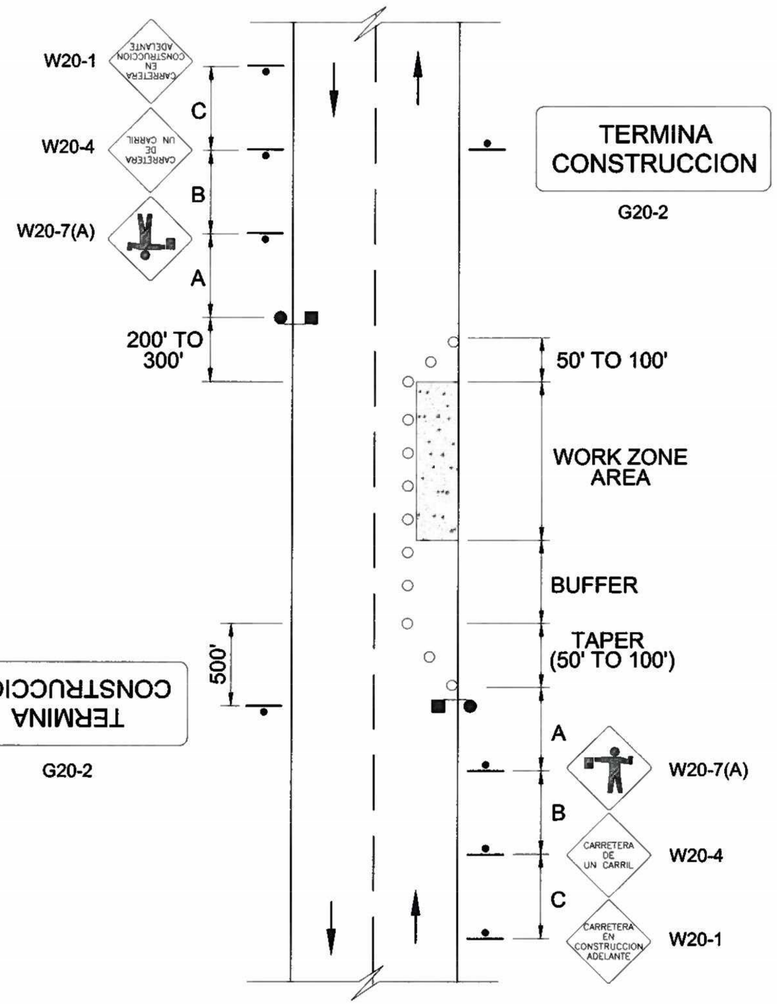
TRAFFIC CONTROL STANDARDS

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: MOT-01

ENGINEERING STANDARDS OFFICE

C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\mot-08 traffic control standards.dwg



TWO LANE TWO-WAY TRAFFIC CONTROL

TWO LANE: BUFFER TABLE		
SPEED LIMIT (S, MPH)	WORK ZONE AREA	LENGTH (FEET) ALL LANE WIDTHS
20	BUFFER	90
25	BUFFER	115
30	BUFFER	150
35	BUFFER	185
40	BUFFER	230
45	BUFFER	340
50	BUFFER	370
55	BUFFER	400

NOTES:

1. FOR TWO LANE CITY STREETS WITH POSTED SPEED OF 35 MPH OR LESS, A 200 FEET SIGN SPACING SHALL BE USED.
2. A TWO WAY TRAFFIC TAPER SHOULD BE 50 TO 100 FEET IN LENGTH AND MADE UP OF FIVE DEVICES 20 FEET APART.
3. FOR THE WORK AND BUFFER SPACE, DEVICES SHALL BE SPACED AT A DISTANCE OF TWICE THE SPEED LIMIT IN FEET.
4. THE DOWNSTREAM TAPER LENGTH SHOULD BE 100 FEET AND MADE UP OF FIVE CHANNELIZING DEVICES SPACED 20 FEET APART.
5. THE NUMBER OF CHANNELIZING DEVICES FOR PARTS OF TRAFFIC CONTROL ZONE IS SHOWN ON DRAWING MPT-10.
6. THE A, B AND C DIMENSIONS ARE SHOWN ON DRAWING MPT-10.

GENERAL NOTE:

THE DESIGN OF SIGN PLATES SHALL BE IN ACCORDANCE WITH THE "MANUAL DE SEÑALES DE TRÁNSITO PARA LAS VÍAS PÚBLICAS DE PUERTO RICO" AND THE STANDARD DRAWINGS MPT-24 AND-27.

DATE	REVISION	BY
APR. 96	ORIGINAL (MPT-11)	
JUN. 12	RELOCATED DETAILS (MPT-12)	JMO
JUN. 12	GENERAL REVISION AS PER AUT(CD-2009	JMO

DWG BY: LMARTINEZ 2934

CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

DATE: 3/31/12 — ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE

DATE: 6/07/12 — ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS

MAINTENANCE AND PROTECTION OF TRAFFIC
TYPICAL APPLICATION DIAGRAMS

MPT-11

JUNE 2012

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

TRAFFIC CONTROL STANDARDS

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004

SHEET NO.: MOT-02

ENGINEERING STANDARDS OFFICE

C:\Users\Jose\delgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\mot-08 traffic control standards.dwg

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\vol1-08 traffic control standards.dwg

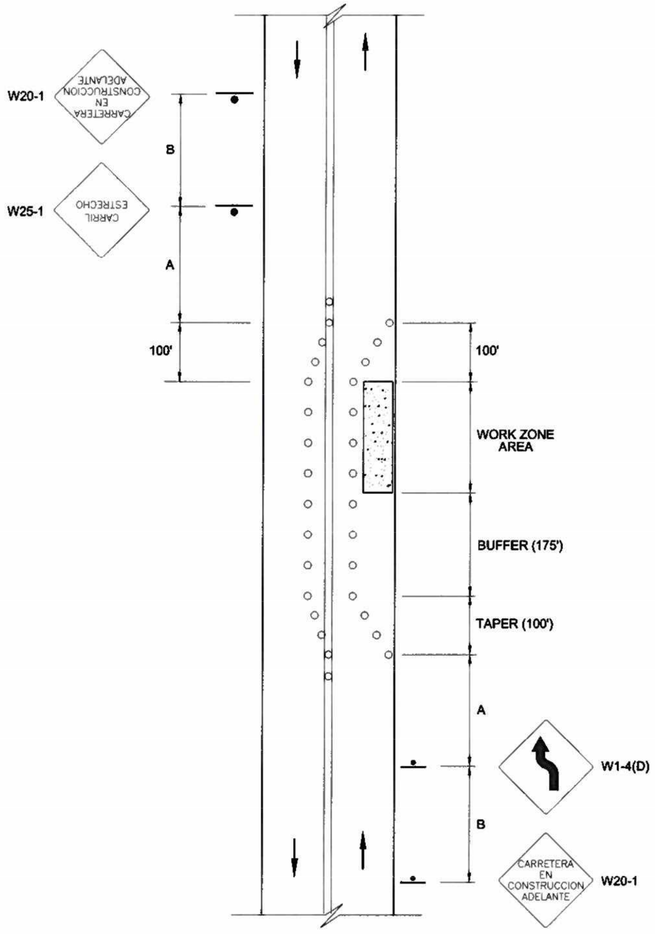
DWG BY: LMARTINEZ 2934

DATE	REVISION	BY

DATE	REVISION	BY

DATE	REVISION	BY

DATE	REVISION	BY
APR '96	ORIGINAL (MPT-15)	JMO
JUN. '12	SHEET RENUMBERING (MPT-17)	
JUN. '12	GENERAL REVISION AS PER AUTCD 2009	JMO

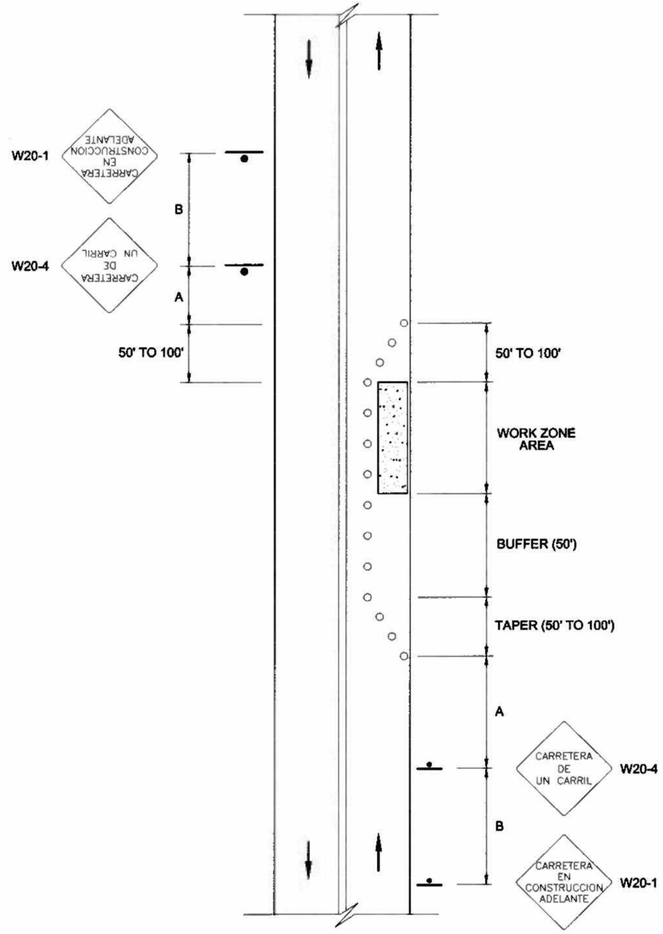


WORK IN TRAVEL LANE ON MINOR URBAN STREET

MAINTAINING TWO-WAY TRAFFIC

NOTES:

1. THIS LAYOUT IS ONLY APPROPRIATE FOR LOW-VOLUME, LOW-SPEED (35 MPH OR LESS) URBAN STREETS.
2. A MINIMUM LANE WIDTH OF 10' SHOULD BE PROVIDED IN BOTH DIRECTIONS (THE LANE WIDTH SHOULD NOT EXTEND BEYOND THE EDGE OF PAVEMENT.)
3. ADDITIONAL ADVANCE WARNING MAY BE APPROPRIATE, SUCH AS "LANE SHIFTS" (W1-4(D)) AND "CARRIL ESTRECHO" SIGNS (W25-1).
4. THE NUMBER OF CHANNELIZING DEVICES FOR PARTS OF TRAFFIC CONTROL ZONE IS SHOWN ON DRAWING MPT-10.
5. THE A, B AND C DIMENSIONS ARE SHOWN ON DRAWING MPT-10.



LANE CLOSURE ON A MINOR URBAN STREET

NO FLAGGER, TRAFFIC SELF-REGULATING

NOTES:

1. THIS LAYOUT IS ONLY APPROPRIATE FOR LOW-VOLUME, LOW-SPEED (35 MPH OR LESS) STREETS, SUCH AS LOCAL RESIDENTIAL STREETS. THIS PROCEDURE IS NOT TO BE USED IN RURAL AREAS.
2. TRAFFIC CAN REGULATE ITSELF WHILE VOLUMES ARE LOW AND THE LENGTH OF THE WORK SPACE IS SHORT, THUS ALLOWING TRAFFIC TO READILY SEE THE ROADWAY BEYOND.
3. WHERE TRAFFIC DOES NOT SELF-REGULATE EFFECTIVELY, USE ONE OR TWO FLAGGERS. (SEE DRAWING MPT-20).
4. THE NUMBER OF CHANNELIZING DEVICES FOR PARTS OF TRAFFIC CONTROL ZONE IS SHOWN ON DRAWING MPT-10.
5. THE A, B AND C DIMENSIONS ARE SHOWN ON DRAWING MPT-10.

GENERAL NOTE:

THE DESIGN OF SIGN PLATES SHALL BE IN ACCORDANCE WITH THE "MANUAL DE SEÑALES DE TRÁNSITO PARA LAS VÍAS PÚBLICAS DE PUERTO RICO" AND THE STANDARD DRAWINGS MPT-24 TO MPT-27.

ENGINEERING STANDARDS OFFICE

CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE	DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS
31/Jul/12		6/VIII/12	

MAINTENANCE AND PROTECTION OF TRAFFIC
TYPICAL APPLICATION DIAGRAMS

MPT-17
JUNE 2012

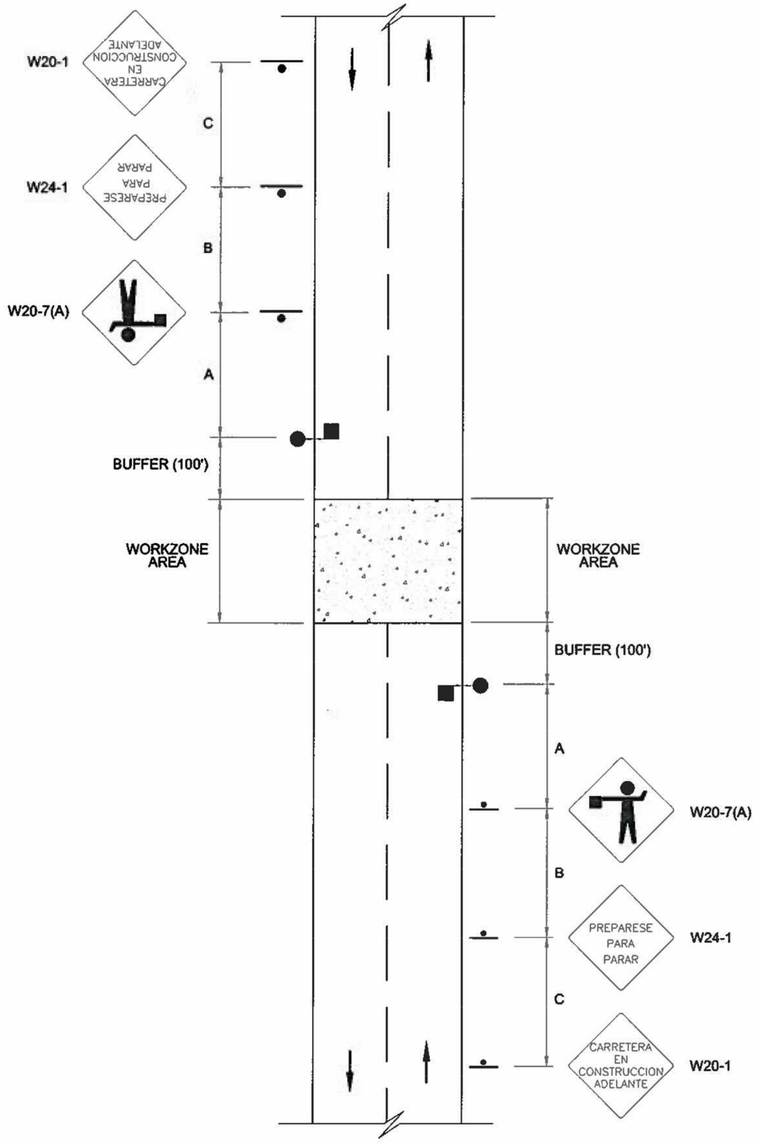
DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

TRAFFIC CONTROL STANDARDS

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: MOT-03



TEMPORARY ROAD CLOSURE
NOT TO EXCEED 15-20 MINUTES

NOTES:

1. CONDITIONS REPRESENTED ARE FOR WORK WHICH REQUIRES CLOSURE DURING DAYTIME HOURS ONLY.
2. THIS APPLICATION IS INTENDED FOR A PLANNED TEMPORARY CLOSURE NOT TO EXCEED 15-20 MINUTES.
3. FOR HIGH VOLUME ROADS, A POLICE PATROL CAR IS RECOMMENDED.
4. FOR TWO-LANE, LOW-SPEED (35 MPH OR LESS) URBAN STREETS, A 200 FEET SIGN SPACING SHALL BE USED.
5. COST OF FLAGGER WILL BE A SUBSIDIARY OBLIGATION.
6. THE A, B AND C DIMENSIONS ARE SHOWN ON DRAWING MPT-10.

GENERAL NOTE:

1. THE DESIGN OF SIGN PLATES SHALL BE IN ACCORDANCE WITH THE "MANUAL DE SEÑALES DE TRÁNSITO PARA LAS VÍAS PÚBLICAS DE PUERTO RICO" AND THE STANDARD DRAWINGS MPT-24 TO MPT-27.

ENGINEERING STANDARDS OFFICE

DWG BY: LMARTINEZ 2934

DATE	REVISION	BY
FEB. 97	GENERAL REVISION (MPT-17)	JMO
JUN. 97	SHEET RENUMBERED (MPT-19)	JMO
JUN. 12	GENERAL REVISION AS PER MUTCD 2009	JMO

CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

6/11/12 — ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE — DATE:

6/III/12 — ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS — DATE:

MAINTENANCE AND PROTECTION OF TRAFFIC
TYPICAL APPLICATION DIAGRAMS

MPT-19
JUNE 2012

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

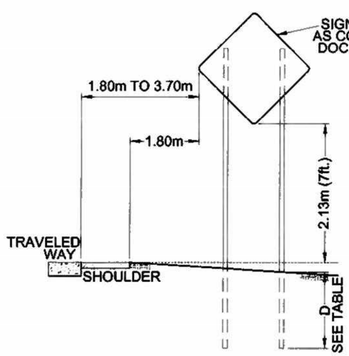
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

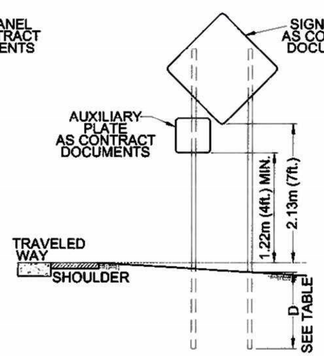
TRAFFIC CONTROL STANDARDS

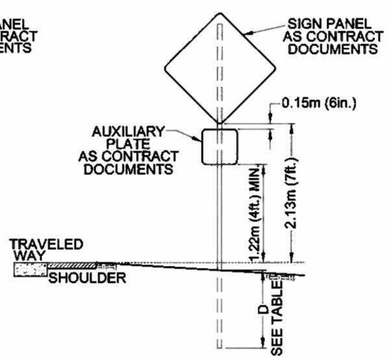
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: MOT-04

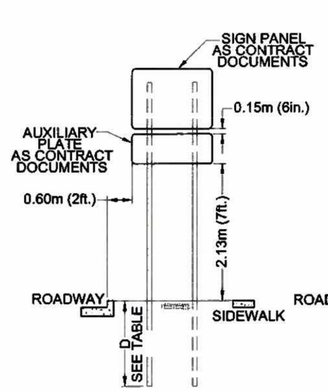
C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\mot-08 traffic control standards.dwg

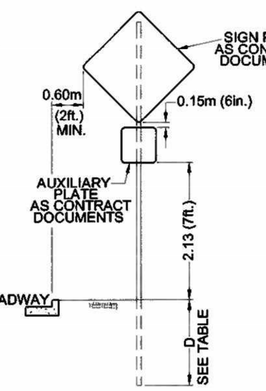


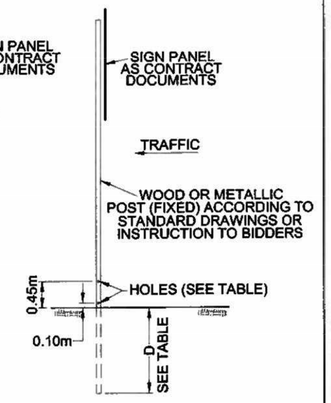




RURAL AREA



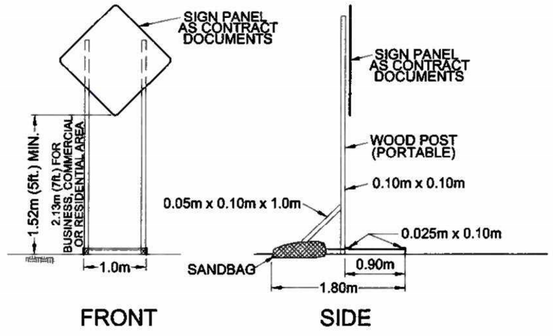




URBAN AREA

BREAKAWAY SUPPORT DETAIL
(FIXED SIGNS - 0.10m x 0.10m AND GREATER POSTS)

FIXED ROADWAY SIGNS



FRONT SIDE

PORTABLE SIGNS

WOOD POST SIZE		D (MINIMUM)		HOLE DIAMETER		MAXIMUN SIGN PANEL AREA (SQUARE METERS)	
MT. x MT.	IN. x IN.	MT.	FT.	MT.	IN.	1 POST	2 POSTS
0.10 x 0.10	4 x 4	1.22	4	NONE REQ'D		1.0	2.0
0.10 x 0.15	4 x 6	1.22	4	0.04	1.5	N/A	3.0
0.15 x 0.15	6 x 6	1.52	5	0.05	2.0	N/A	4.5
0.15 x 0.20	6 x 8	1.52	5	0.07	3.0	N/A	8.0

NOTES:

1. UNLESS OTHERWISE SHOWN, DIMENSIONS ARE IN METERS.
2. MOUNT SIGNS THAT ARE WIDER THAN 0.90 METER OR LARGER THAN 1.0 SQUARE METER ON TWO POSTS. SEE TABLE.
3. ALL LUMBER DIMENSIONS ARE NOMINAL.
4. THE CONTRACTOR MAY SUBMIT, FOR APPROVAL BY THE ENGINEER, ALTERNATE TEMPORARY SIGN MOUNTING WHICH FULLY COMPLIES WITH NCHRP REPORT 350 TL-3.
5. FOR POSTS GREATER THAN 0.10m X 0.10m, SEE THE BREAKAWAY SUPPORT DETAIL.
6. THE PORTABLE SIGNS SHALL NOT BE LEANED IN THE SHOULDER AND/OR ROADSIDE AT ANY TIME.
7. MOUNTING FOR PORTABLE SIGNS SHALL HOLD THE SIGN FACE IN A VERTICAL PLANE.
8. FOR SIGNS REQUIRING POSTS 0.15m X 0.15m AND GREATER, SIGNS ARE CONSIDERED TO BE NON-BREAKAWAY IF MULTIPLE POSTS ARE REQUIRED AND THE POSTS CANNOT BE SPACED A MINIMUM OF 2.1 METERS APART. DO NOT PLACE HOLES IN POST OF NON-BREAKAWAY SIGNS.
9. SIGN MOUNTED ON PORTABLE SUPPORTS SHALL NOT BE USED FOR A DURATION OF MORE THAN THREE DAYS.
10. THE BACKGROUND FOR CONSTRUCTION WARNING SIGNS SHALL BE FLUORESCENT ORANGE COLOR ACCORDING TO SUPPLEMENTAL SPECIFICATION 638-2.02.
11. THE FINAL LOCATION OF TEMPORARY TRAFFIC SIGNS SHALL BE AS DIRECTED BY THE ENGINEER CONSIDERING OPTIMUM VISIBILITY AND, SAFETY IN EXISTING FIELD CONDITIONS.

ENGINEERING STANDARDS OFFICE

DWG BY: LMARTINEZ 2934

DATE	BY	REVISION
SEP. 09	JMO	ORIGINAL (MPT-23)
JUN. 12	JMO	GENERAL REVISION AS PER MUTCD 2009

CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

3/Jul/12 — DATE: — ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE

6/Jul/12 — DATE: — ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS

~~MAINTENANCE~~ AND PROTECTION OF TRAFFIC
TEMPORARY TRAFFIC SIGNS MOUNTING DETAILS

MPT-23

JUNE 2012

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

TRAFFIC CONTROL STANDARDS

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

PROJECT NO.: DTE23-004

SHEET NO.: MOT-05

C:\Users_joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\mot-08 traffic control standards.dwg

C:\Users\JoseDelgado\OneDrive - delgado torres engineering, llc\Documents - Projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\vol1-08 traffic control standards.dwg

DWG BY: LMARTINEZ 2934

REVISION	DATE	BY

REVISION	DATE	BY

REVISION	DATE	BY
ORIGINAL (MPT-23)	APR. 06	JMO
SHEET REMARKING (MPT-23)	APR. 12	JMO
RELOCATED DETAILS (MPT-25)	JUN. 12	JMO

WARNING SIGNS USE IN TEMPORARY TRAFFIC CONTROL ZONE

SPEED LIMIT (MPH)	W1-4(D)	W1-4(bD)	W1-6	W4-2	W20-1	W20-4	W20-5	W20-7(A)	W21-5	W23-1	W24-1	W25-1	G20-2	R4-7
20	30"x30"	30"x30"	36"x36"	30"x30"	36"x36"	36"x36"	36"x36"	30"x30"	24"x24"	30"x30"	30"x30"	30"x30"	40"x16"	24"x24"
25	30"x30"	30"x30"	36"x36"	30"x30"	36"x36"	36"x36"	36"x36"	30"x30"	24"x24"	30"x30"	30"x30"	30"x30"	40"x16"	24"x24"
30	36"x36"	36"x36"	48"x48"	36"x36"	48"x48"	48"x48"	48"x48"	36"x36"	30"x30"	36"x36"	36"x36"	36"x36"	50"x20"	36"x36"
35	36"x36"	36"x36"	48"x48"	36"x36"	48"x48"	48"x48"	48"x48"	36"x36"	30"x30"	36"x36"	36"x36"	36"x36"	50"x20"	36"x36"
40	36"x36"	36"x36"	48"x48"	36"x36"	48"x48"	48"x48"	48"x48"	36"x36"	30"x30"	36"x36"	36"x36"	36"x36"	50"x20"	36"x36"
45	48"x48"	48"x48"	60"x60"	48"x48"	60"x60"	60"x60"	60"x60"	48"x48"	36"x36"	48"x48"	48"x48"	48"x48"	60"x24"	48"x48"
50	48"x48"	48"x48"	60"x60"	48"x48"	60"x60"	60"x60"	60"x60"	48"x48"	36"x36"	48"x48"	48"x48"	48"x48"	60"x24"	48"x48"
55	48"x48"	48"x48"	60"x60"	48"x48"	60"x60"	60"x60"	60"x60"	48"x48"	36"x36"	48"x48"	48"x48"	48"x48"	60"x24"	48"x48"

ENGINEERING STANDARDS OFFICE

CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

DATE: 6/11/12 — ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE

DATE: 6/11/12 — ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS

MAINTENANCE AND PROTECTION OF TRAFFIC
WARNING SIGNS

MPT-24

JUNE 2012

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

TRAFFIC CONTROL
STANDARDS

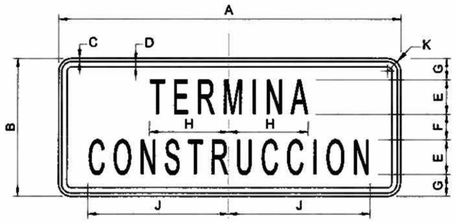
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

PROJECT NO.: DTE23-004

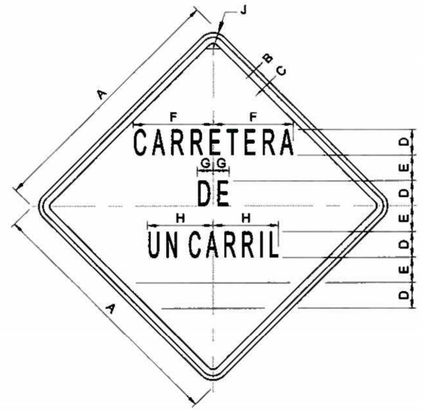
SHEET NO.: MOT-06



G20-2

COLORS
LEGEND - NON REFLECTORIZED BLACK
BACKGROUND - REFLECTORIZED ORANGE

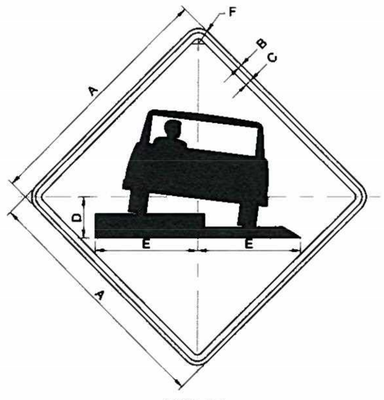
	DIMENSIONS (INCHES)									
	A	B	C	D	E	F	G	H	J	K
MINIMUM	40.00	16.00	0.38	0.63	4C	3.00	2.50	9.28	16.54	1.50
NORMAL	50.00	20.00	0.38	0.63	5C	3.00	3.50	11.59	20.66	1.50
SPECIAL	60.00	24.00	0.38	0.63	6C	4.00	4.00	13.92	24.81	1.50



W20-4

COLORS
LEGEND - NON REFLECTORIZED BLACK
BACKGROUND - REFLECTORIZED ORANGE

	DIMENSIONS (INCHES)								
	A	B	C	D	E	F	G	H	J
MINIMUM	36.00	0.63	0.88	4C	2.00	15.46	2.52	12.25	2.25
NORMAL	48.00	0.75	1.25	5C	4.00	15.62	3.14	15.29	3.00
SPECIAL	60.00	0.75	1.25	6C	6.00	18.77	7.54	18.36	3.00



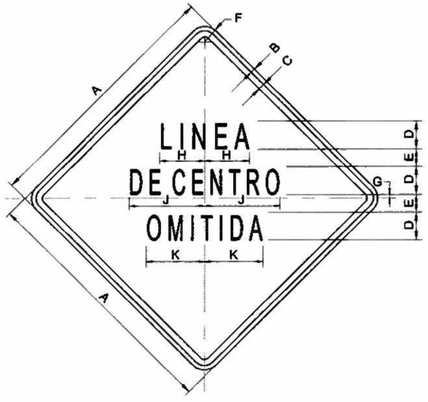
W8-9A

COLORS
LEGEND - NON REFLECTORIZED BLACK
BACKGROUND - REFLECTORIZED ORANGE

	DIMENSIONS (INCHES)					
	A	B	C	D	E	F
MINIMUM	24.00	0.38	0.63	4.00	10.00	1.50
STANDARD	30.00	0.50	0.75	5.00	12.50	1.88
NORMAL	36.00	0.63	0.88	6.00	15.00	2.25
SPECIAL	48.00	0.75	1.25	8.00	20.00	3.00

NOTE:

SEE TABLE ON DRAWING MPT-24.



W8-12

COLORS
LEGEND - NON REFLECTORIZED BLACK
BACKGROUND - REFLECTORIZED ORANGE

	DIMENSIONS (INCHES)								
	A	B	C	D	E	F	G	H	J
MINIMO	36.00	0.00	0.88	5C	5.00	2.25	7.53	15.78	10.77
NORMAL	48.00	0.75	1.25	6C	6.00	3.00	9.04	18.95	12.94
SPECIAL	60.00	0.75	1.25	8C	8.00	3.75	12.05	25.26	17.25

CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

DATE: 3/27/12 — ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE

DATE: 4/27/12 — ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS

MAINTENANCE AND PROTECTION OF TRAFFIC
WARNING SIGNS

MPT-25

JUNE 2012

ENGINEERING STANDARDS OFFICE

DATE	REVISION	BY
APR. 96	ORIGINAL MPT-25TN	JMO
JUN. 12	RELOCATED DETAILS (MPT-25)	JMO
JUN. 12	GENERAL REVISION	JMO

DWG BY: LMARTINEZ 2934

DATE	REVISION	BY

DATE	REVISION	BY

DATE	REVISION	BY

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

TRAFFIC CONTROL
STANDARDS

REVISIONS	SYMBOL	DATE	BY

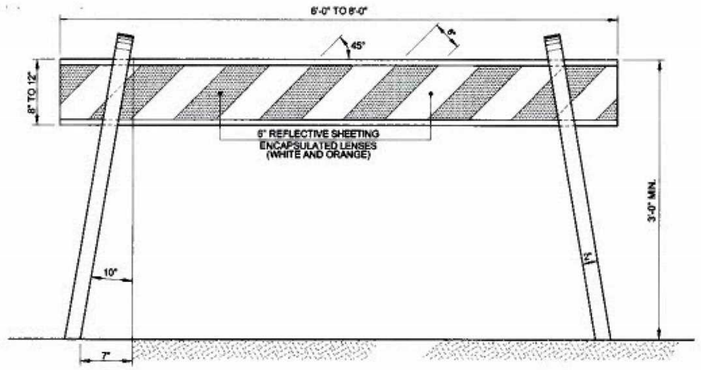
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

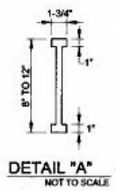
DATE: April 15, 2024

PROJECT NO.: DTE23-004

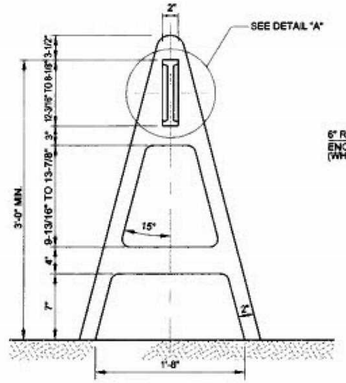
SHEET NO.: MOT-07

C:\Users\Jose.delgado\Onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\mot-08 traffic control standards.dwg

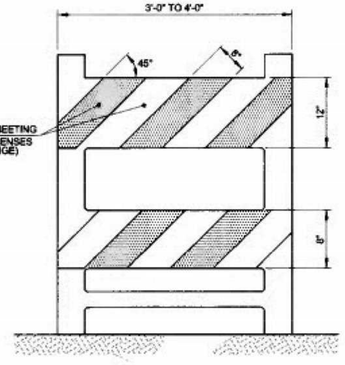


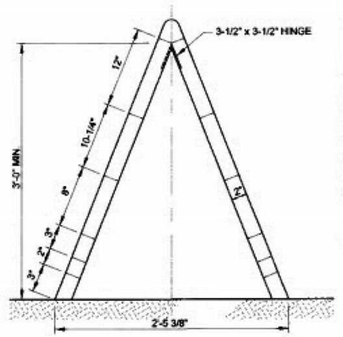


DETAIL "A"
NOT TO SCALE

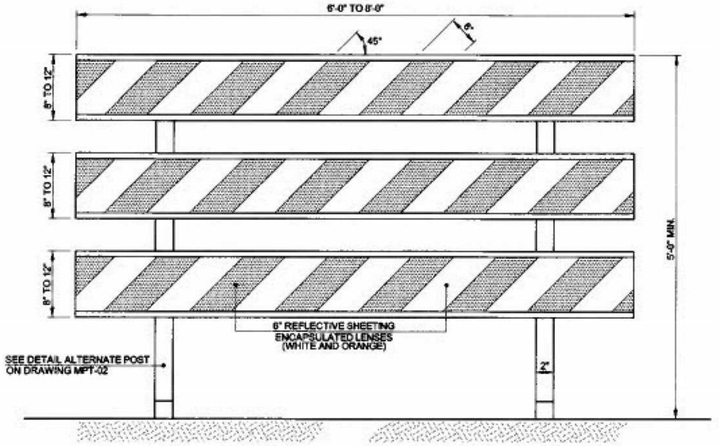


TYPE I BARRICADE
NOT TO SCALE

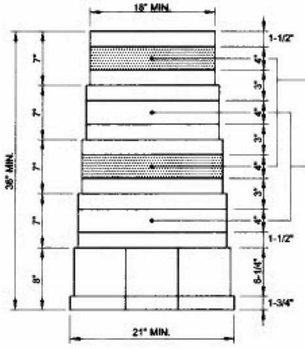




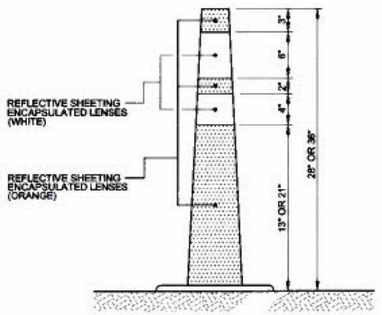
TYPE II BARRICADE
NOT TO SCALE



TYPE III BARRICADE
NOT TO SCALE



REFLECTORIZED PLASTIC DRUM
NOT TO SCALE



CONE
NOT TO SCALE

GENERAL NOTES:

1. ALL TRAFFIC CONTROL DEVICES AND TRAFFIC CONTROL OPERATIONS SHALL BE IN ACCORDANCE WITH PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2009 EDITION OR A LATER EDITION ADOPTED AND APPROVED BY THE PUERTO RICO HIGHWAY AND TRANSPORTATION AUTHORITY.
2. STRIPES ON BARRICADE SHALL BE 6 INCHES WIDE, EXCEPT WHERE RAIL LENGTHS ARE LESS THAN 36 INCHES, WHEN 4 INCH WIDE STRIPES MAY BE USED.
3. DRUMS FOR TRAFFIC WARNING OR CHANNELIZATION SHALL BE CONICROUND OR WITH A SQUARE SECTION, APPROXIMATELY 36" IN HEIGHT AND A MINIMUM OF 18" IN DIAMETER OR 18" SQUARE AT THE TOP. THE MARKINGS ON DRUMS SHALL BE HORIZONTAL AND IN THE TOTAL PERIMETER OF THE DEVICE.
4. THERE SHALL BE TWO 4" ORANGE AND TWO 4" WHITE REFLECTIVE SHEETING STRIPES ON EACH DRUM. NONREFLECTORIZED SPACES SHALL BE ORANGE.
5. REFLECTIVE SHEETING FOR USE ON PLASTIC REBOUNDABLE DEVICES SUCH AS DRUMS AND FLEXIBLE DELINEATORS POSTS, SUFFICIENT ELONGATION CAPABILITY TO RESIST REPEATED IMPACTING AND REBOUNDING CYCLES WITHOUT CRACKING OR LOSING ADHESION.
6. DRUMS, CONES AND BARRICADES SHALL BE CONSTRUCTED OF PLASTIC.
7. DRUMS, BARRICADES AND CONES SHALL REMAIN UPRIGHT AS DESIGNED.
8. ALL TRAFFIC CONTROL DEVICES SHALL BE PROVIDED AS A SUBSIDIARY OBLIGATION WITH WATER OR SAND BALLAST OR OTHER APPROVED DEVICES WHICH WILL PREVENT THEM FROM BEING BLOWN AWAY BY THE DRAFTS CAUSED BY PASSING TRAFFIC.
9. ALL TRAFFIC CHANNELIZING DEVICES FOR EACH PROJECT SHALL BE OF UNIFORM CONSTRUCTION AND APPEARANCE.
10. CONES SHALL BE 36" IN HEIGHT, EXCEPT WHEN USED FOR PAVEMENT MARKING IT SHALL BE 28".
11. ALL TRAFFIC CONTROL DEVICES SHALL BE CLEANED, PAINTED, REFLECTORIZED OR REPLACED AS NECESSARY TO PROVIDE ADEQUATE VISIBILITY AND LEGIBILITY AT ALL TIMES.
12. TRAFFIC CONTROL DEVICES MANUFACTURED WITH SUBSTANTIALLY SIMILAR DIMENSIONS WOULD BE ACCEPTABLE SUBJECT TO THE APPROVAL OF THE P.R.H.T.A.
13. REFLECTIVE SHEETING USED ON ALL SIGNS AND TRAFFIC CONTROL DEVICES EITHER TEMPORARY OR PERMANENT, SHALL CONFORM TO ASTM D4956, TYPE III. FOR PERMANENT INSTALLATIONS, THE ADHESIVE BACKING OF REFLECTIVE SHEETING SHALL BE CLASS 1 OR 2.
14. ALL TRAFFIC CHANNELIZING DEVICES SHALL COMPLY WITH NCHRP 350. IT SHALL BE THE CONTRACTOR AND VENDORS RESPONSIBILITY TO CERTIFY THAT THEIR PRODUCT IS CRASHWORTHY. ARROW PANELS ARE EXCEPTED.
15. REFLECTIVE SHEETING FROM DIFFERENT MANUFACTURERS SHALL NOT BE MIXED WITHIN THE SAME SIGN PANEL. SIGN PANELS FABRICATE WITH REFLECTIVE SHEETING FROM DIFFERENT MANUFACTURERS SHALL NOT BE MIXED WITHIN THE SAME SIGN SUPPORT.

IMPORTANT NOTE:

THESE STANDARD DRAWINGS PROVIDE FOR THE DESIGN OF TRAFFIC CONTROL DEVICES FOR USE IN THE MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION. HOWEVER, THE DECISION TO USE A PARTICULAR DEVICE AT A PARTICULAR LOCATION SHOULD BE BASED ON AN ENGINEERING STUDY OF THE LOCATION AND THE APPLICATION OF ENGINEERING JUDGEMENT BY THOSE RESPONSIBLE FOR THE WORK. THESE DRAWINGS ARE INTENDED TO PROVIDE STANDARDS FOR TRAFFIC CONTROL DEVICES BUT NOT AS LEGAL REQUIREMENT FOR THEIR INSTALLATION.

DATE	REVISION	BY
DEC. '98	GENERAL NOTE 8	IV
DEC. '99	GENERAL NOTE 14	IV
SEPT. '09	ADDED NOTE 15	IV

DATE	REVISION	BY
JUN. '12	GENERAL REVISION	JMO

DWG BY: LMARTINEZ 2934

DTOP CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

3/27/12 — DATE: — ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE

4/11/12 — DATE: — ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS

MAINTENANCE AND PROTECTION OF TRAFFIC
CHANNELIZING DEVICES

MPT-01

JUNE 2012

ENGINEERING STANDARDS OFFICE

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

TRAFFIC CONTROL STANDARDS

REVISIONS	SYMBOL	DATE	BY

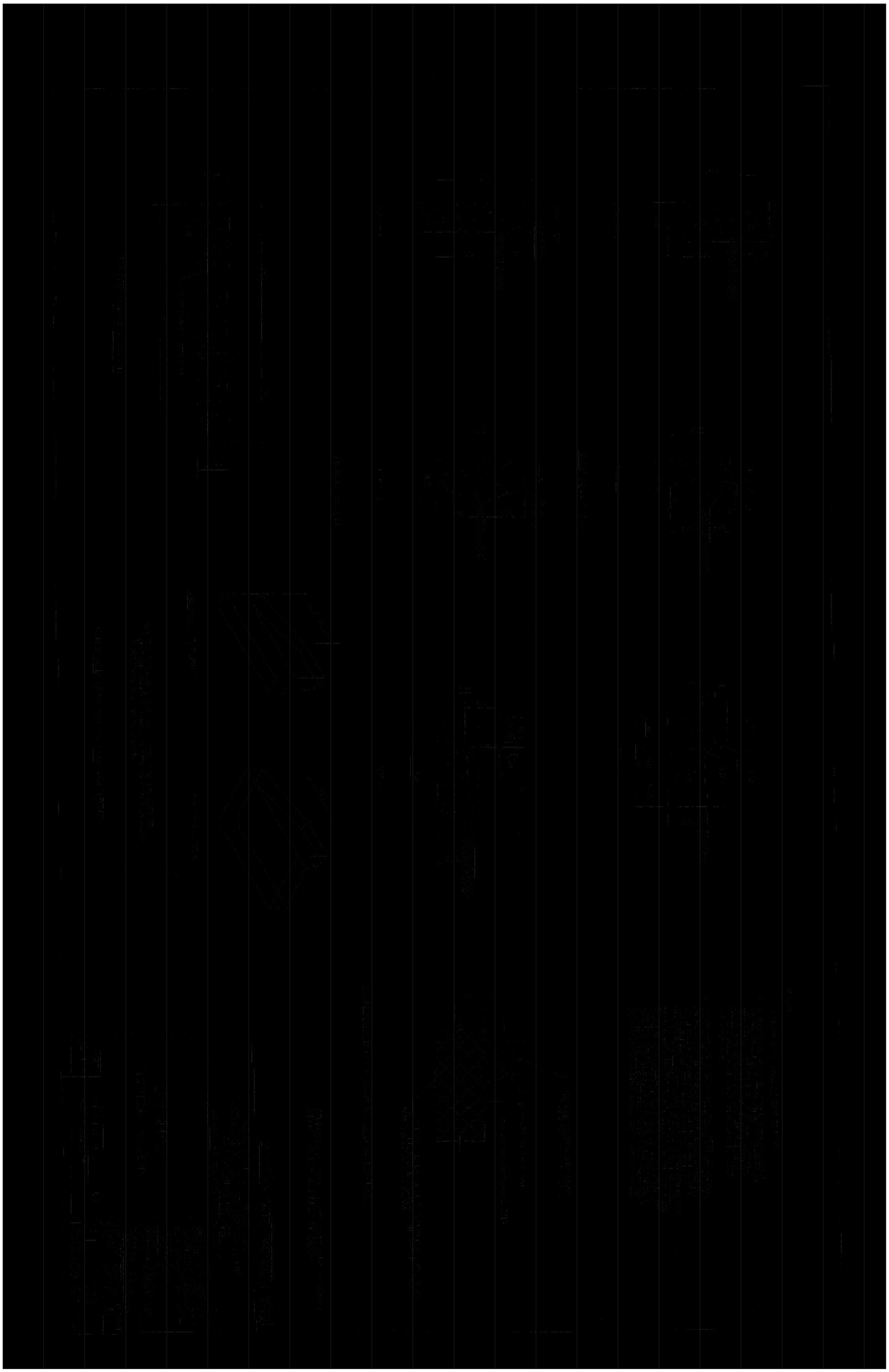
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

PROJECT NO.: DTE23-004

SHEET NO.: MOT-08

C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\mot-08 traffic control standards.dwg



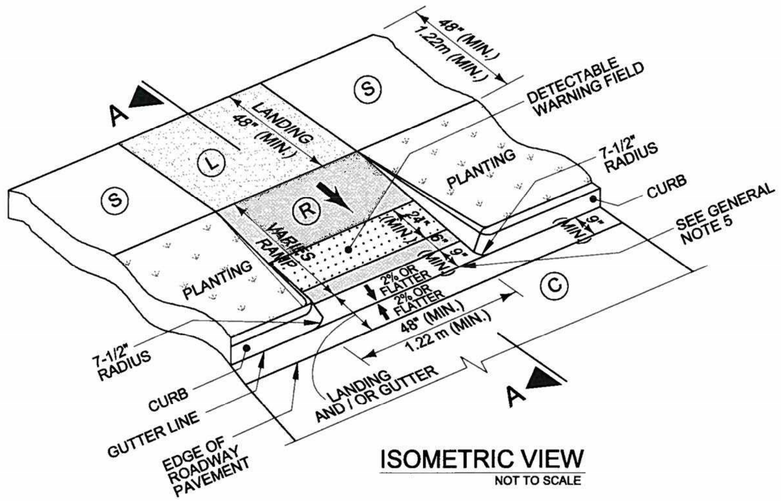
SHEET NO.: RDWY-01	PROJECT NO.: DTE23-004	DATE: April 15, 2024	DRAWN, CAD & DESIGNED BY: REVIEWED BY:

REVISIONS	SYMBOL	DATE	BY

CURB & GUTTER
STANDARD
TYPICAL CURBS

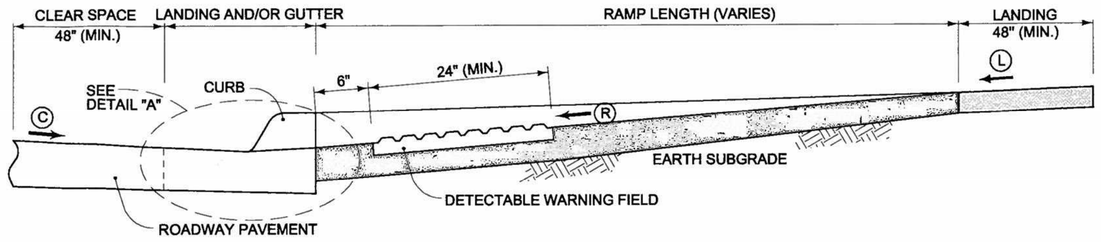
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

DELTORRE ENGINEERING LLC
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre



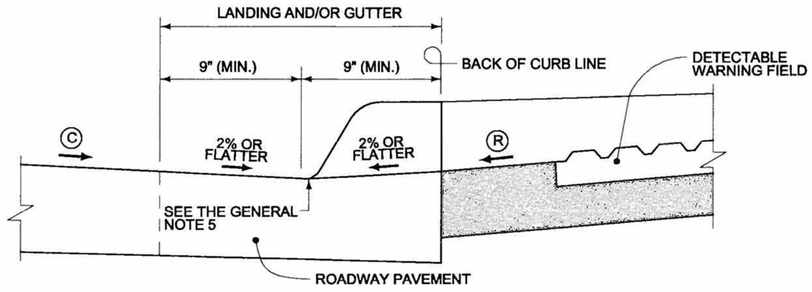
ISOMETRIC VIEW

NOT TO SCALE



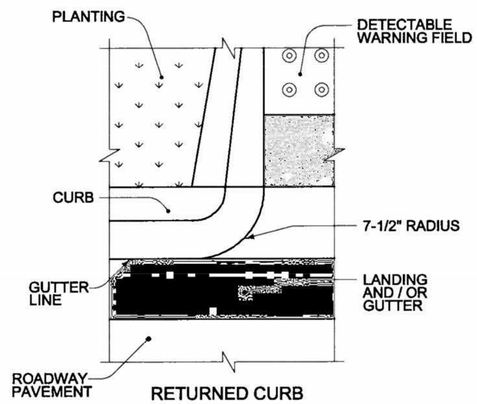
SECTION A-A

TYPICAL SELECTION THROUGH RAMP RUN AND LANDINGS
WITH UPPER LANDING AT NORMAL SIDEWALK ELEVATION



DETAIL "A"

NOT TO SCALE



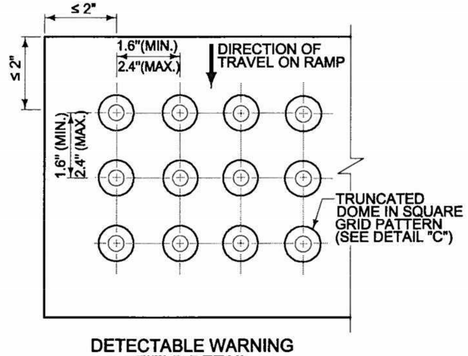
RETURNED CURB

DETAIL "B"

NOT TO SCALE

GENERAL NOTES:

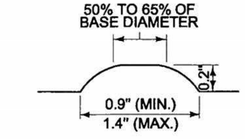
1. THE MAXIMUM CROSS SLOPES OF RAMPS MUST NOT EXCEED 2% IN ANY DIRECTION.
2. USE A COARSE BROOM FINISH RUNNING PERPENDICULAR TO THE SLOPE TO CREATE A SLIP RESISTANT SURFACE ON CONCRETE RAMP SURFACES, EXCLUSIVE OF THE DETECTABLE WARNING FIELDS.
3. CONSTRUCT CURB RAMP PERPENDICULAR TO THE CURB. AVOID SKEWING THE RAMP FACE.
4. CONSTRUCT RAMP TRANSITIONS BETWEEN WALKS, GUTTERS, OR STREET THAT ARE FLUSH AND FREE OF ABRUPT VERTICAL CHANGES NOT TO EXCEED 2.5 INCHES.
5. AT POINTS WHERE A CHANGE IN SLOPE OCCURS, THE ALGEBRAIC GRADE DIFFERENCE SHALL NOT EXCEED 11%.
6. LOCATE DRAINAGE INLETS AND MANHOLES OUTSIDE OF RAMP WALKING SURFACES OR LANDINGS.
7. LOCATE DETECTABLE WARNING FIELD 6 INCHES BEHIND BACK OF CURB.
8. WALKING SURFACE WITH DETECTABLE WARNING FIELD (TRUNCATED DOMES) SHALL BE A SUBSIDIARY OBLIGATION TO THE CONTRACTOR AND PAID UNDER SPECIFICATION 608.
9. ANY TYPE OF ADA RAMPS, INCLUDING LANDING, FOR WHEEL CHAIRS AND HANDICAPPED PERSONS WILL BE MEASURED BY THE SQUARE METER OF COMPLETED AND ACCEPTED RAMP SURFACE.
10. THE DIMENSIONS AND MATERIALS OF SIDEWALK SHALL BE IN CONFORMITY WITH THE DETAILS, LINES AND GRADES SHOWN ON THE CONTRACT PLANS OR AS ESTABLISHED BY THE ENGINEER.
11. THE RAMPS AND SIDEWALKS SHALL MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATION 608-"SIDEWALKS".
12. THE DETECTABLE WARNING FIELD SHALL BE YELLOW IN COLOR TO PROVIDE HIGH VISIBILITY TO THE VISUALLY IMPAIRED.



DETECTABLE WARNING FIELD DETAIL

PLAN VIEW

NOT TO SCALE



SECTION OF TRUNCATED DOME

DETAIL "C"

NOT TO SCALE

SLOPE TABLE			
	DESCRIPTION	MAX. RUNNING SLOPE *	MAX. CROSS SLOPE **
(L)	LANDING	2% (1V:50H)	2% (1V:50H)
(R)	RAMP	8.33% (1V:12H)	2% (1V:50H)
(P)	PARALLEL RAMP	7.1% (1V:14H)	2% (1V:50H)
(C)	CLEAR SPACE	5% (1V:20H)	2% (1V:50H)
(S)	SIDEWALK	----------	2% (1V:50H)
(T)	TRANSVERSABLE SURFACE	10% (1V:10H)	----------

* RUNNING SLOPE IS IN DIRECTION OF PEDESTRIAN TRAVEL.
** CROSS SLOPE IS PERPENDICULAR TO PEDESTRIAN TRAVEL.

CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE	DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS

ADA RAMPS

GENERAL NOTES AND TYPICAL DETAILS

ADA-01

JUNE 2012

DESIGN AREA

REVISIONS | SYMBOL | DATE | BY

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

CURB & GUTTER STANDARD
CURB RAMP DETAILS

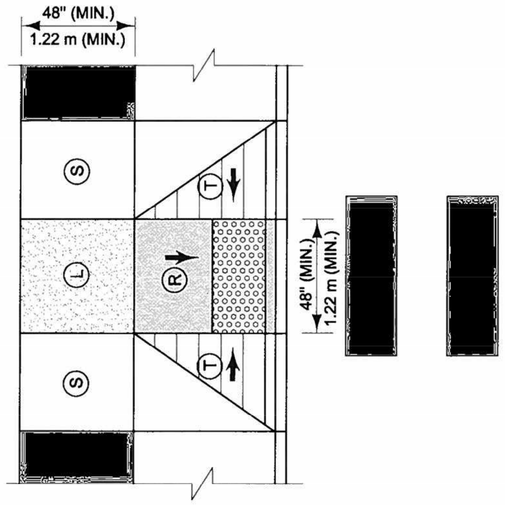
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

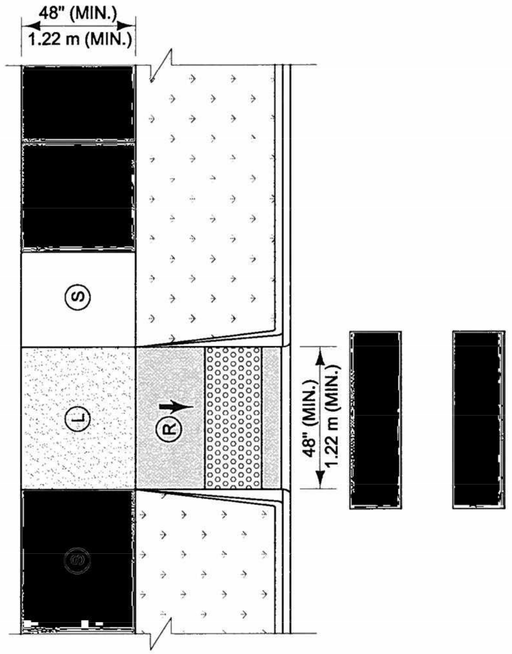
PROJECT NO.: DTE23-004

SHEET NO.: RDWY-02

C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\r-day-1 standards.dwg



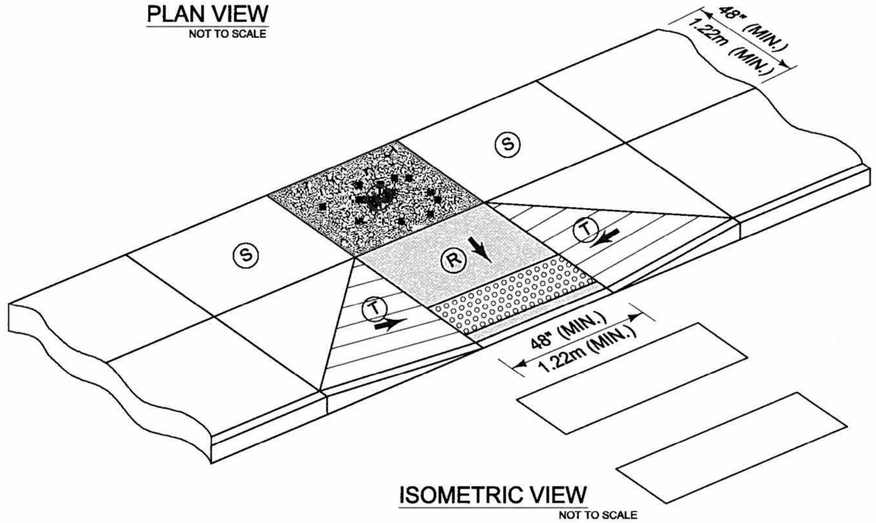
PLAN VIEW
NOT TO SCALE



PLAN VIEW
NOT TO SCALE

LEGEND

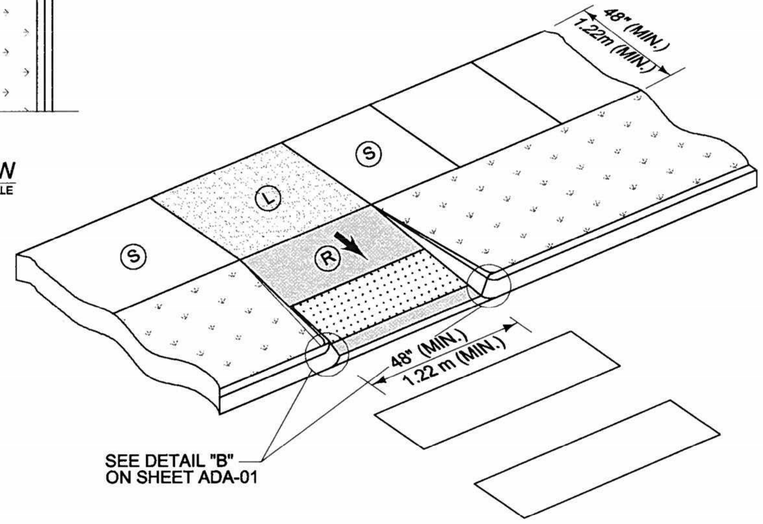
- CURB RAMP
- LANDING AREA (PROVIDE A 4' (MIN.) x 4' (MIN.) LANDING AREA AT ALL CURB RAMPS).
- DETECTABLE WARNING FIELD
- PLANTING
- PEDESTRIAN CROSSWALK



ISOMETRIC VIEW
NOT TO SCALE

CURB RAMP TYPE 1

(PERPENDICULAR CURB RAMP WITH FLARED CURBS)



ISOMETRIC VIEW
NOT TO SCALE

CURB RAMP TYPE 2

(PERPENDICULAR CURB RAMP WITH RETURNED CURBS)

NOTE:

1. REFER TO SHEET ADA-01 FOR GENERAL NOTES, TYPICAL DETAILS AND SLOPE TABLE.

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE	DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS

ADA RAMPS
PEDESTRIAN CURB RAMPS
CURB RAMPS TYPE 1 AND 2

ADA-02
JUNE 2012

REVISION | BY | DATE
JUN. 12

DESIGN AREA

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

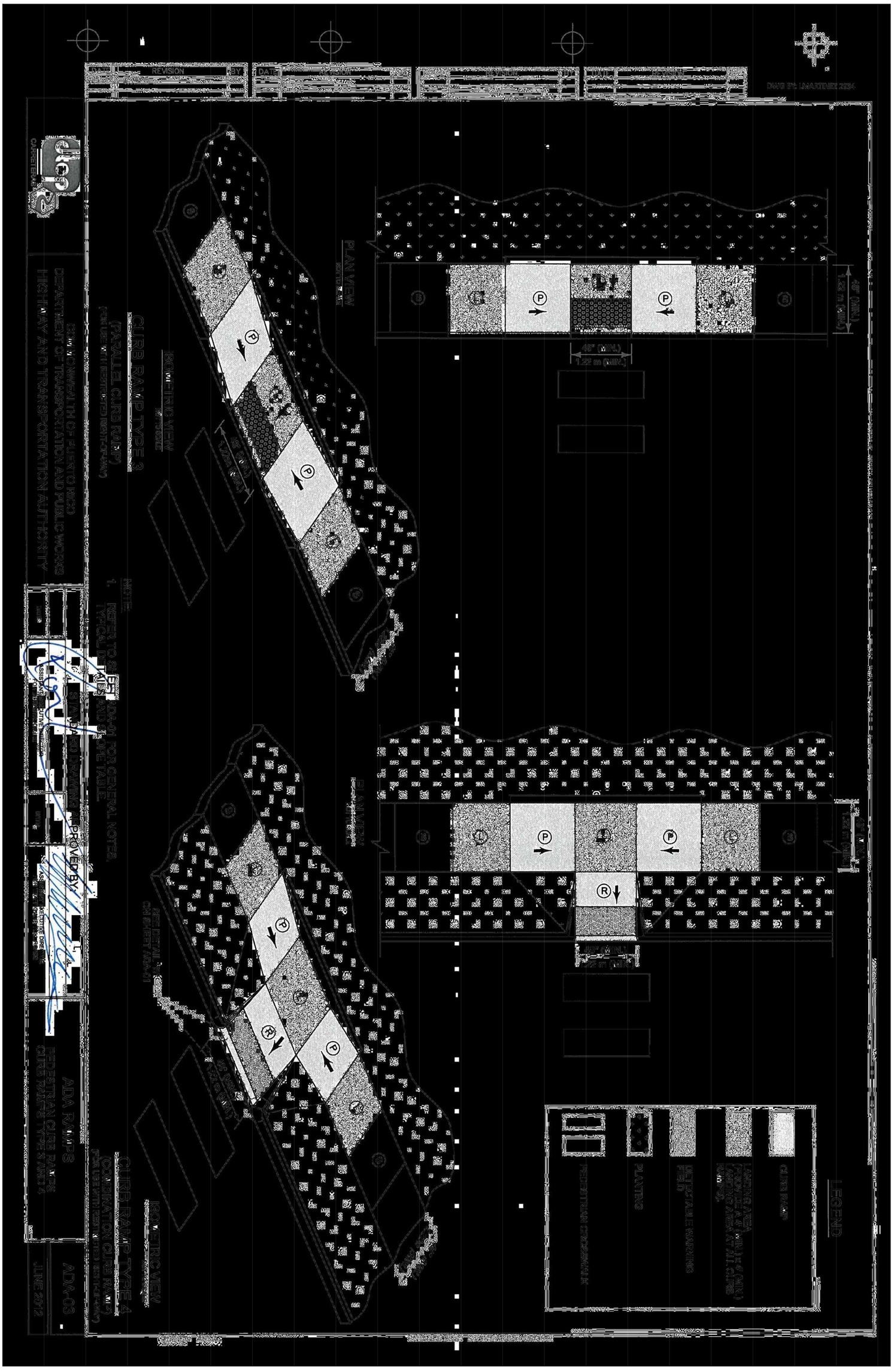
ADA CURB RAMP STANDARD
CURB RAMP TY. 1 & 2

REVISIONS | SYMBOL | DATE | BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: RDWY-03

C:\Users\joseadelgado\OneDrive - delgado torres engineering, llc\Documents - Projects\DTE-2023-004 sidewalk revitalization jayuya urban center crp-053\DTE23-004 cadd\production drawings\rdwy-1 standards.dwg

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\rdwy-1 standards.dwg



RDWY-04

DRAWING NO.

DTE23-004

PROJECT NO.

April 15, 2024

DRAWN: JAD
CHECKED:
REVIEWED: EJ

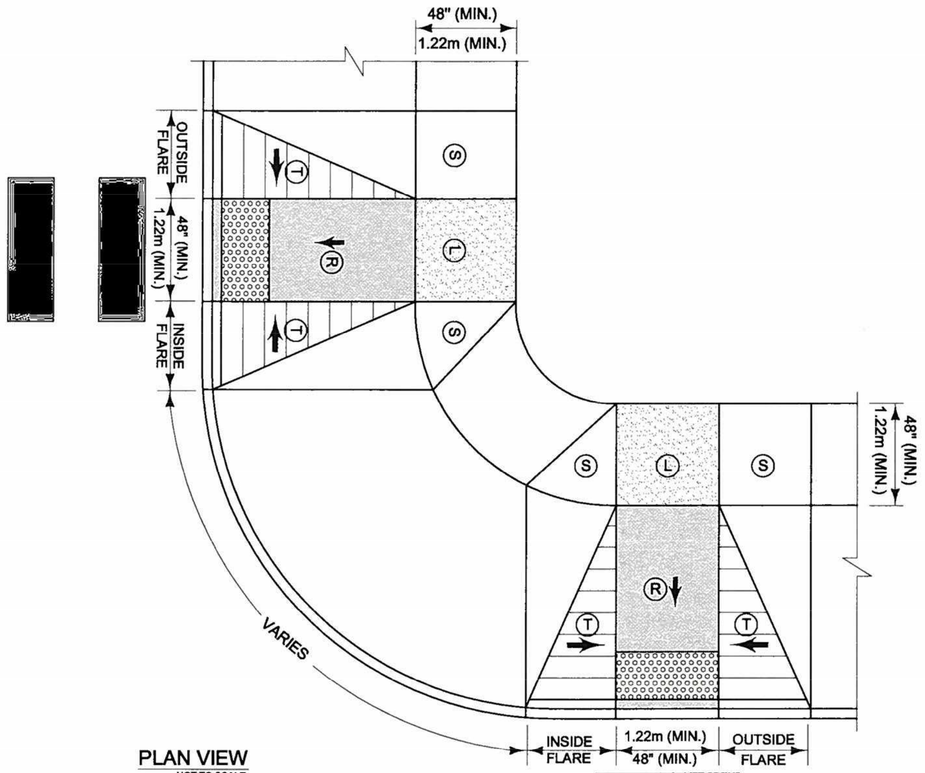
DATE

REVISIONS	SYMBOL	DATE	BY

ADA CURB RAMP
STANDARD
CURB RAMP TY. 3 & 4

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

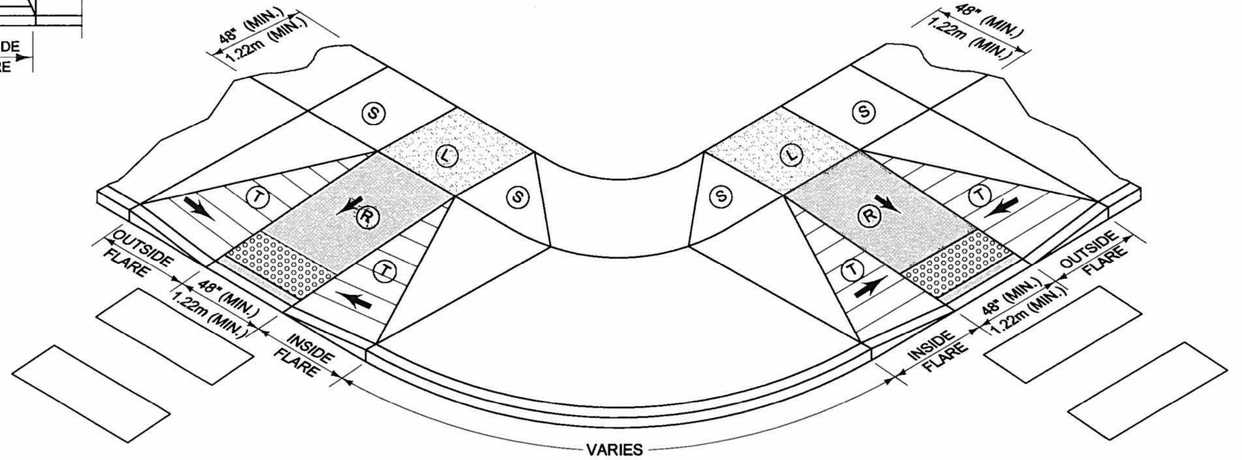
DELTORRE ENGINEERING LLC
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre



PLAN VIEW
NOT TO SCALE

LEGEND

- CURB RAMP
- LANDING AREA (PROVIDE A 4' (MIN.) x 4' (MIN.) LANDING AREA AT ALL CURB RAMPS).
- DETECTABLE WARNING FIELD
- PLANTING
- PEDESTRIAN CROSSWALK



ISOMETRIC VIEW
NOT TO SCALE

NOTES:

1. THE RAMPS SHALL BE PERPENDICULAR TO RADIUS.
2. REFER TO SHEET ADA-01 FOR GENERAL NOTES, TYPICAL DETAILS AND SLOPE TABLE.

CURB RAMP TYPE 5

(PERPENDICULAR CURB RAMP WITH FLARED CURBS AT A CORNER)

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE	DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS

ADA RAMPS
PEDESTRIAN CURB RAMPS
CURB RAMP TYPE 5

ADA-04
JUNE 2012

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

ADA CURB RAMP STANDARD
CURB RAMP TY. 5

REVISIONS	SYMBOL	DATE	BY

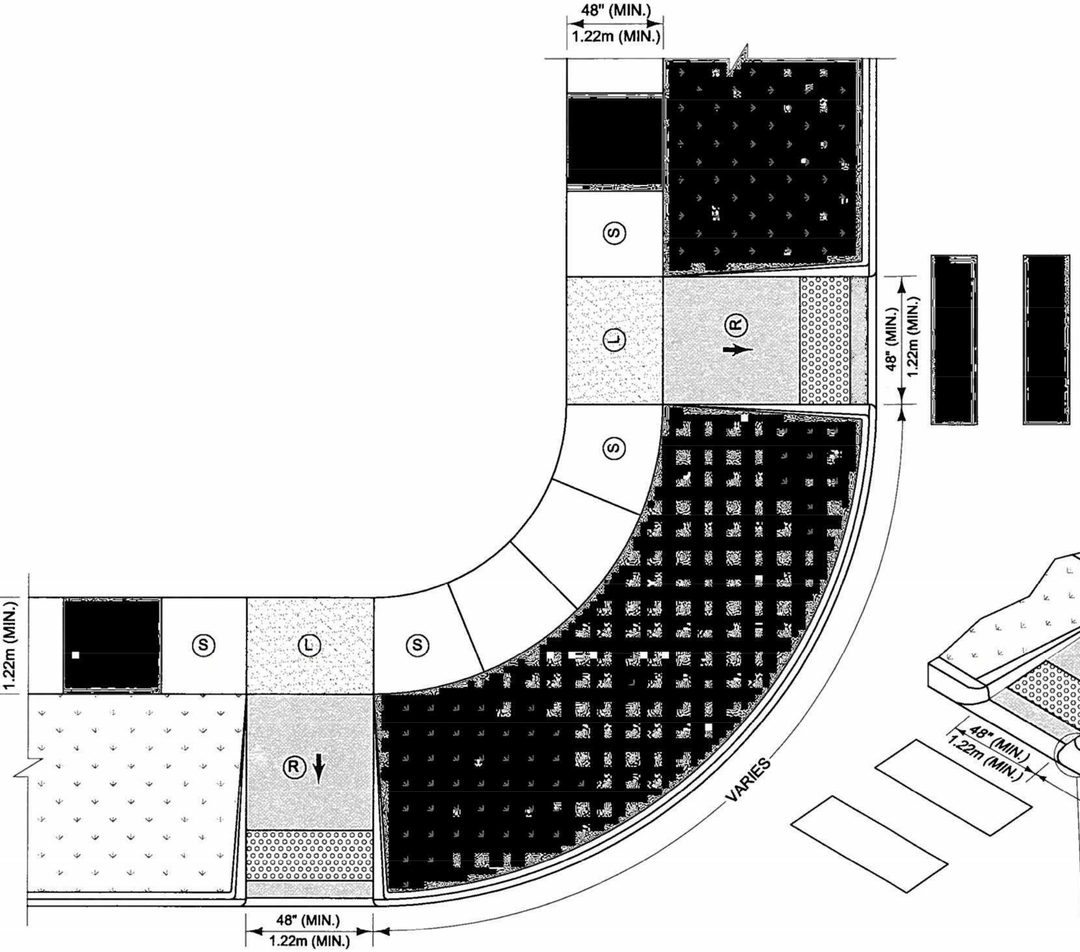
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

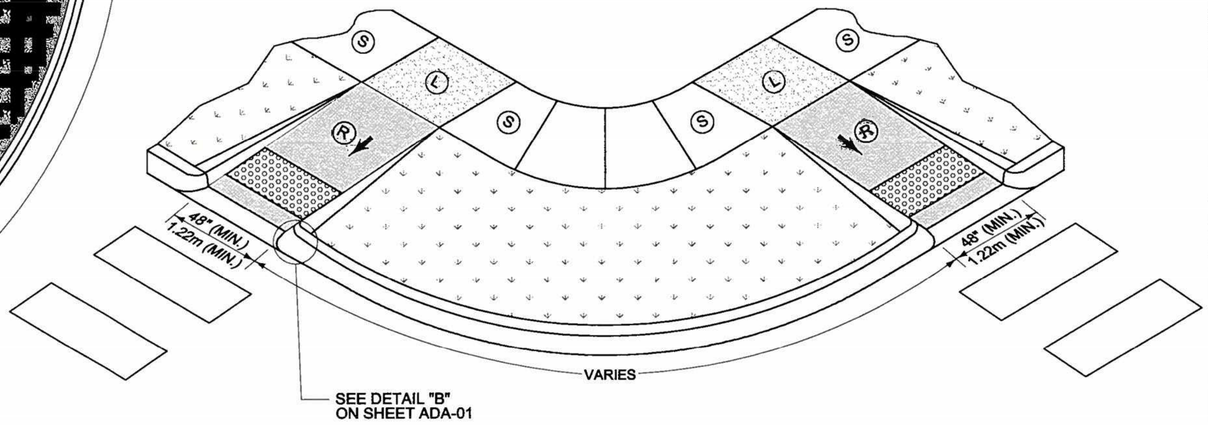
PROJECT NO.: DTE23-004

SHEET NO.: RDWY-05

C:\Users\Josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\rdwy-1 standards.dwg



PLAN VIEW
NOT TO SCALE



ISOMETRIC VIEW
NOT TO SCALE

CURB RAMP TYPE 6

(PERPENDICULAR CURB RAMP WITH RETURNED CURBS AT A CORNER)

LEGEND

- CURB RAMP
- LANDING AREA (PROVIDE A 4' (MIN.) x 4' (MIN.) LANDING AREA AT ALL CURB RAMPS).
- DETECTABLE WARNING FIELD
- PLANTING
- PEDESTRIAN CROSSWALK

NOTES:

1. THE RAMPS SHALL BE PERPENDICULAR TO RADIUS.
2. REFER TO SHEET ADA-01 FOR GENERAL NOTES, TYPICAL DETAILS AND SLOPE TABLE.

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE	DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS

ADA RAMPS
PEDESTRIAN CURB RAMPS
CURB RAMP TYPE 6

ADA-05
JUNE 2012

DESIGN AREA

REVISIONS | SYMBOL | DATE | BY

DATE: JUN. '12 ORIGINAL | JWO

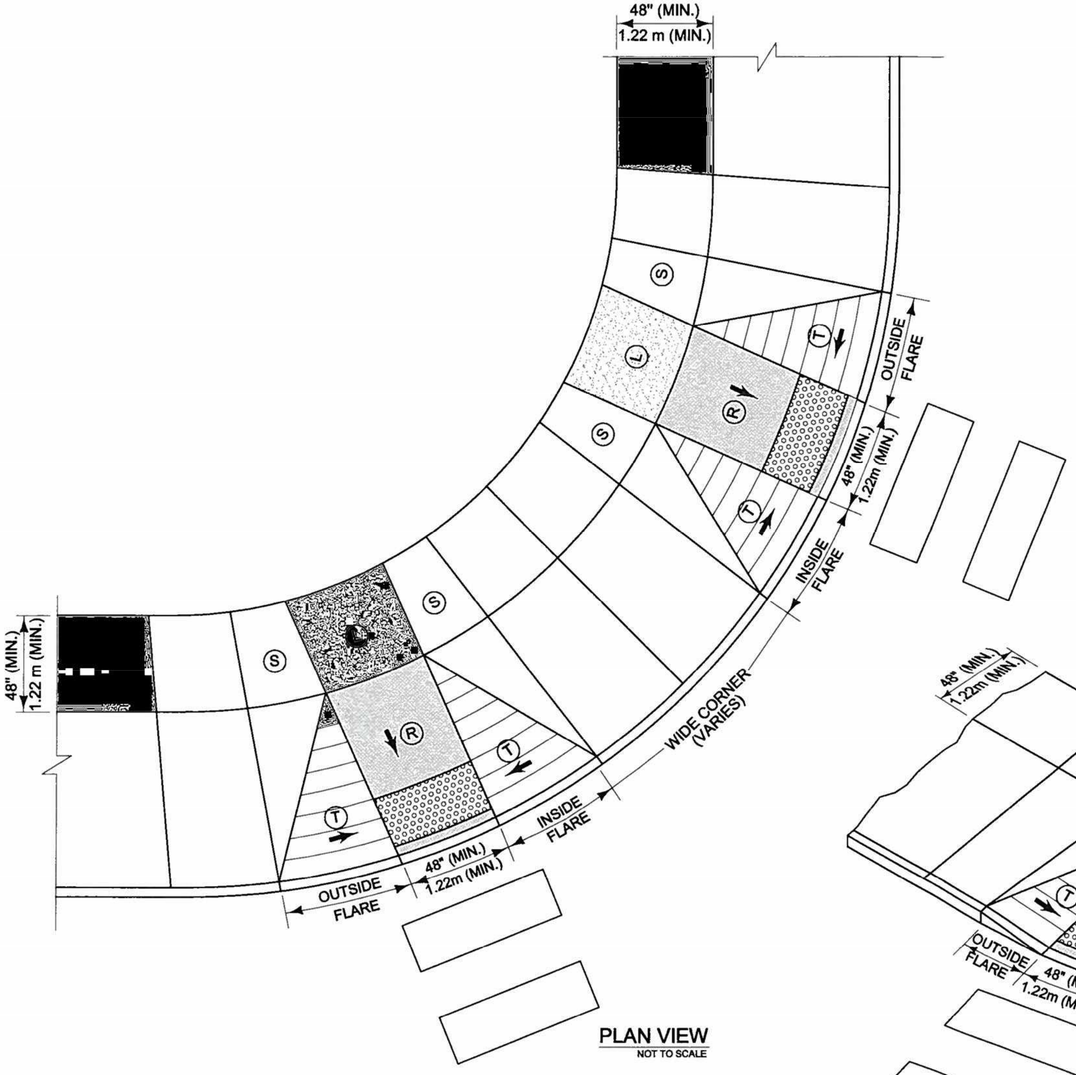
DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

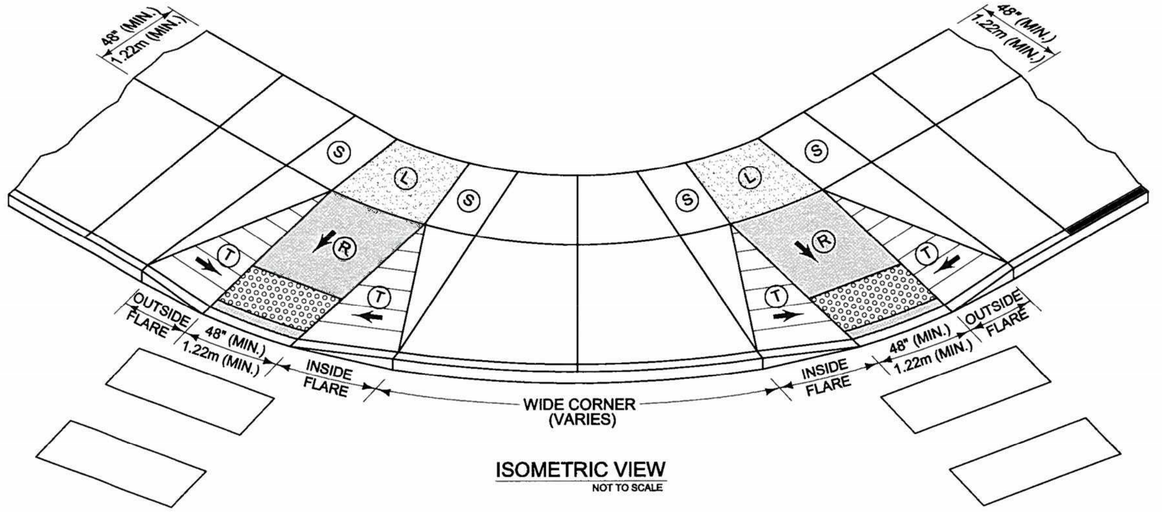
ADA CURB RAMP
STANDARD
CURB RAMP TY. 6

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: RDWY-06

C:\Users\Josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\rdwy-1 standards.dwg



PLAN VIEW
NOT TO SCALE



ISOMETRIC VIEW
NOT TO SCALE

LEGEND

- CURB RAMP
- LANDING AREA (PROVIDE A 4' (MIN.) x 4' (MIN.) LANDING AREA AT ALL CURB RAMPS).
- DETECTABLE WARNING FIELD
- PLANTING
- PEDESTRIAN CROSSWALK

NOTE:

1. REFER TO SHEET ADA-01 FOR GENERAL NOTES, TYPICAL DETAILS AND SLOPE TABLE.

CURB RAMP TYPE 7

(PERPENDICULAR CURB RAMPS WITH FLARED CURBS AT A WIDE CORNER)

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE	DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS

ADA RAMPS
PEDESTRIAN CURB RAMPS
CURB RAMP TYPE 7

ADA-06
JUNE 2012

DESIGN AREA

DATE | REVISION | BY
JUN. 12 | ORIGINAL | JAD

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

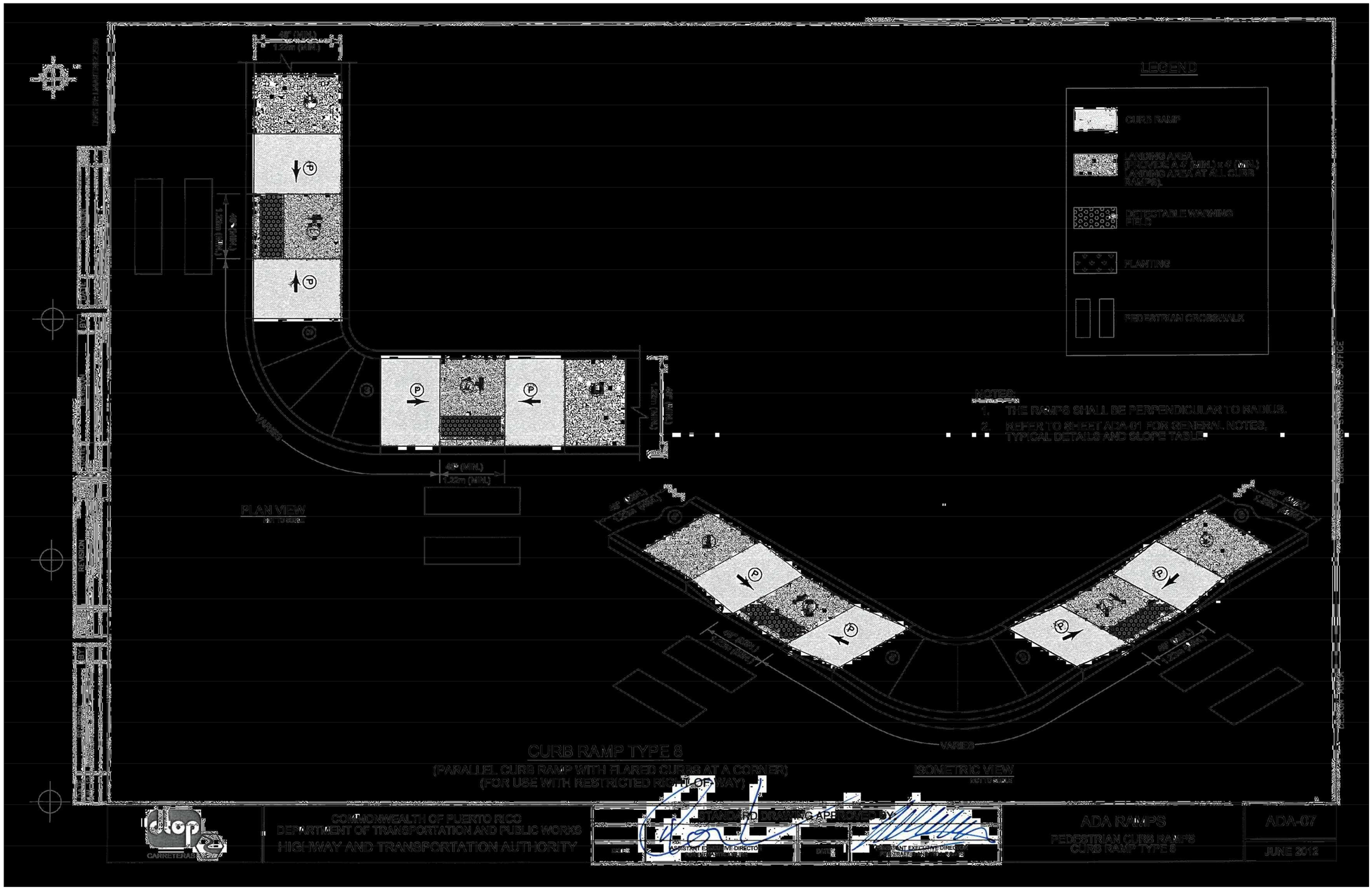
ADA CURB RAMP
STANDARD
CURB RAMP TY. 7

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: RDWY-07

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\rdwy-1 standards.dwg

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\rdwy-1 standards.dwg



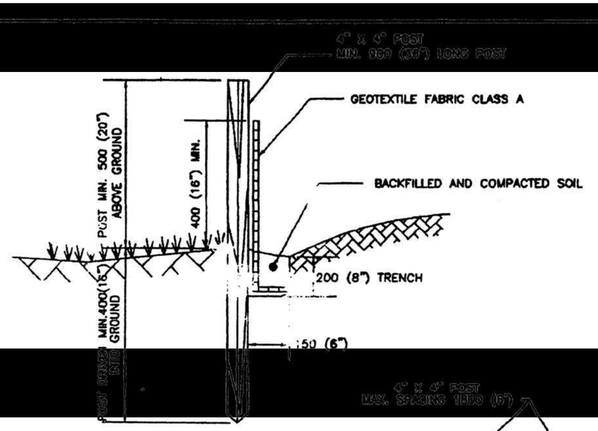
DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

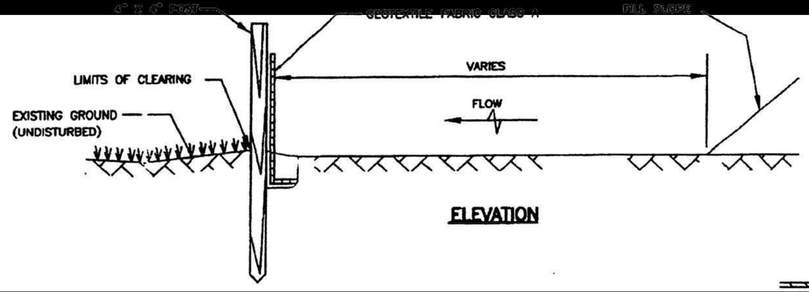
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

ADA CURB RAMP
STANDARD
CURB RAMP TY. 8

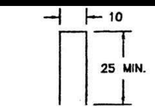
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: RDWY-08

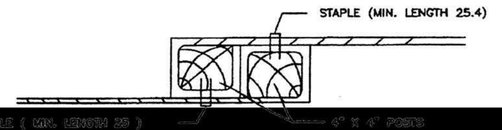




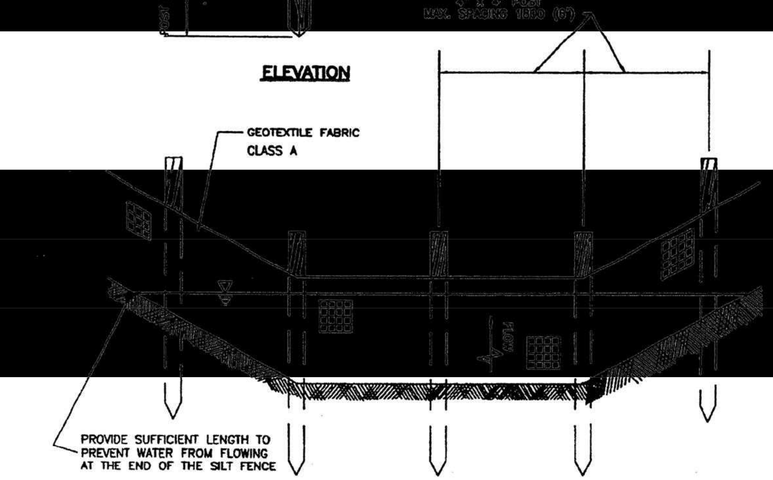
ELEVATION



STAPLE DETAIL

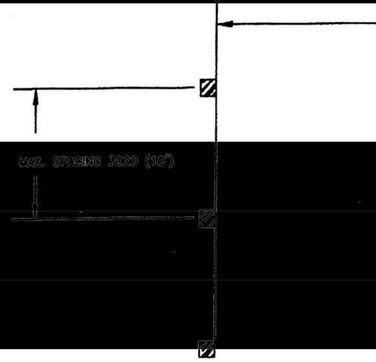


TOP VIEW

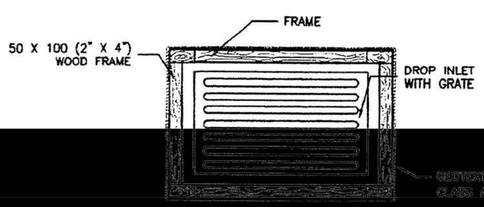


ELEVATION

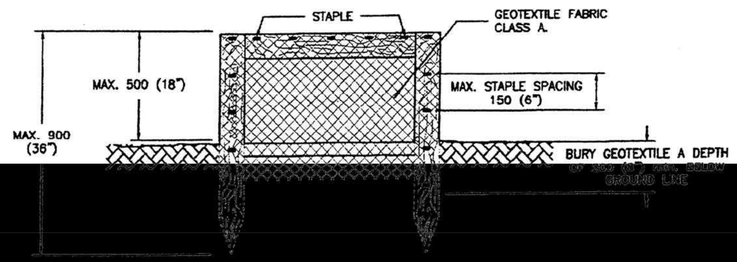
INSTALLATION IN A DRAINAGE DITCH



INSTALLATION AT TOE OF FILL



TOP VIEW



FRONT VIEW

DROP INLET PROTECTION

NOTES:

1– SILT FENCES SHALL BE CONSTRUCTED AT THE LOCATION INDICATED IN THE CONSTRUCTIONS PLANS.

2– ALTERNATE PRE–ASSEMBLED SILT FENCE OPTIONS WILL BE ALLOWED AS LONG AS SPECIFIED MINIMUMS ARE SATISFIED. FOLLOW MANUFACTURER'S INFORMATION FOR INSTALLATION PROCEDURES.

3– EXCAVATION, BACKFILL, STAPLES AND POSTS ARE SUBSIDIARY OBLIGATIONS.

4– THE SILT FENCE GEOTEXTILE FABRIC SHALL COMPLY WITH AASHTO M288.

5– SILT FENCE SHALL BE INSPECTED FOR DAMAGE WEEKLY. AFTER RAINFALL ANY DAMAGE FENCE SHALL BE REPAIRED IMMEDIATELY. ACCUMULATED SEDIMENT SHALL BE REMOVED AND PROPERLY DISPOSED OF BEFORE THE NEXT RAINFALL EVENT. NO ADDITIONAL PAYMENT WILL BE MADE FOR SUCH MAINTENANCE WORK.

6– WHEN THE DISTURBED AREA HAVE BEEN PROPERLY STABILIZED THE FENCE MAY BE REMOVED AND ANY REMAINING AREAS STABILIZED. THIS WORK WILL BE PERFORMED AS DIRECTED BY THE ENGENEER AS A SUBSIDIARY OBLIGATION.

7– 'TOP VIEW' AND 'STAPLE DETAIL' APPLY TO ALL APPLICATIONS SHOWN IN THIS SHEET.

8– FOR ALL APPLICATIONS, THE MAXIMUM STAPLE SPACING SHALL BE 150 MM (6")

9– ALL DIMENSIONS SHOWN ARE IN MILIMETERS UNLESS OTHERWISE SPECIFIED.

EFFECTIVE DATE: OCTOBER 1998

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

RECOMMENDED BY:
DESIGN AREA DIRECTOR
DATE: 12/6/2024

EROSION CONTROL DEVICES
SILT FENCE

DATE	REVISION	BY
12-06-24	GENERAL REVISION	ES
12-06-2024	GENERAL REVISION	ES

STD. DWG. ER 1 OF 20

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

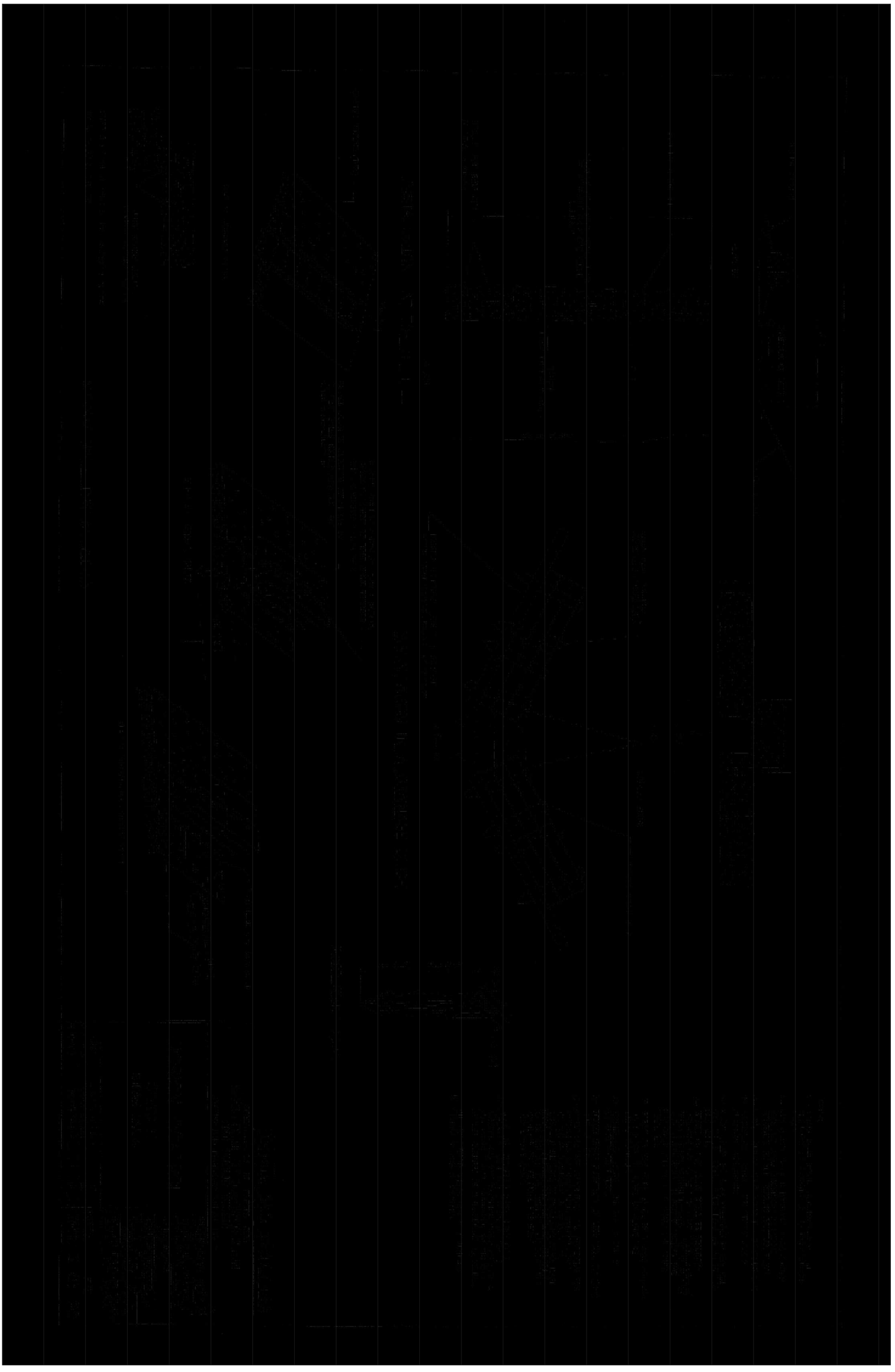
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

EROSION CONTROL STANDARD DEVICES

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: SW3P-01

C:\Users\joseadelgado\OneDrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\sw3p-erosion control standards.dwg



SHEET NO.: SW3P-02

PROJECT NO.: DTE23-004

DATE: April 15, 2024

DRAWN: JAD
DESIGNED:
REVIEWED: JT

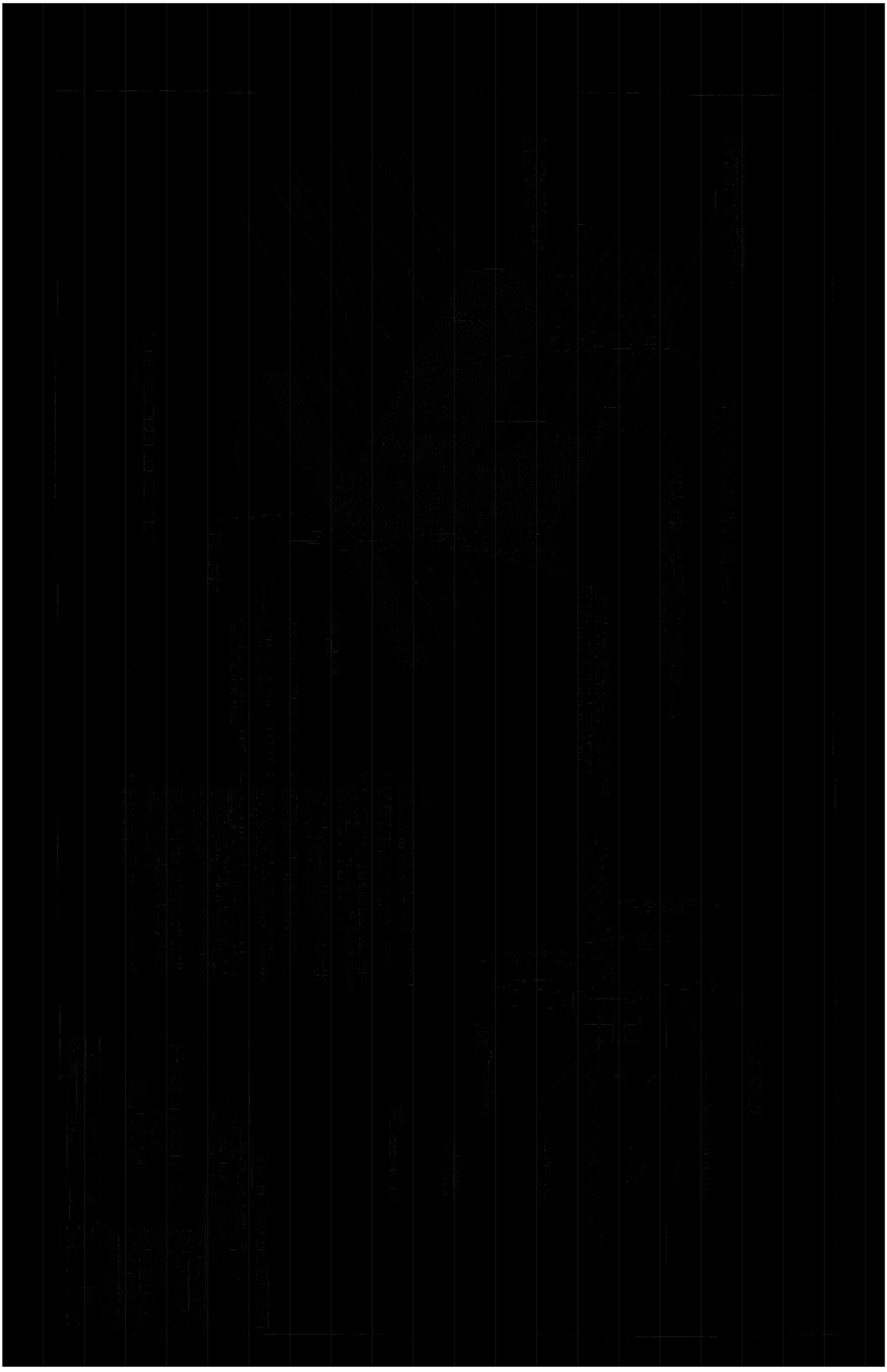
REVISIONS	SYMBOL	DATE	BY

EROSION CONTROL STANDARD DEVICES

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

DELTORRE ENGINEERING LLC
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\sw3p-erosion control standards.dwg



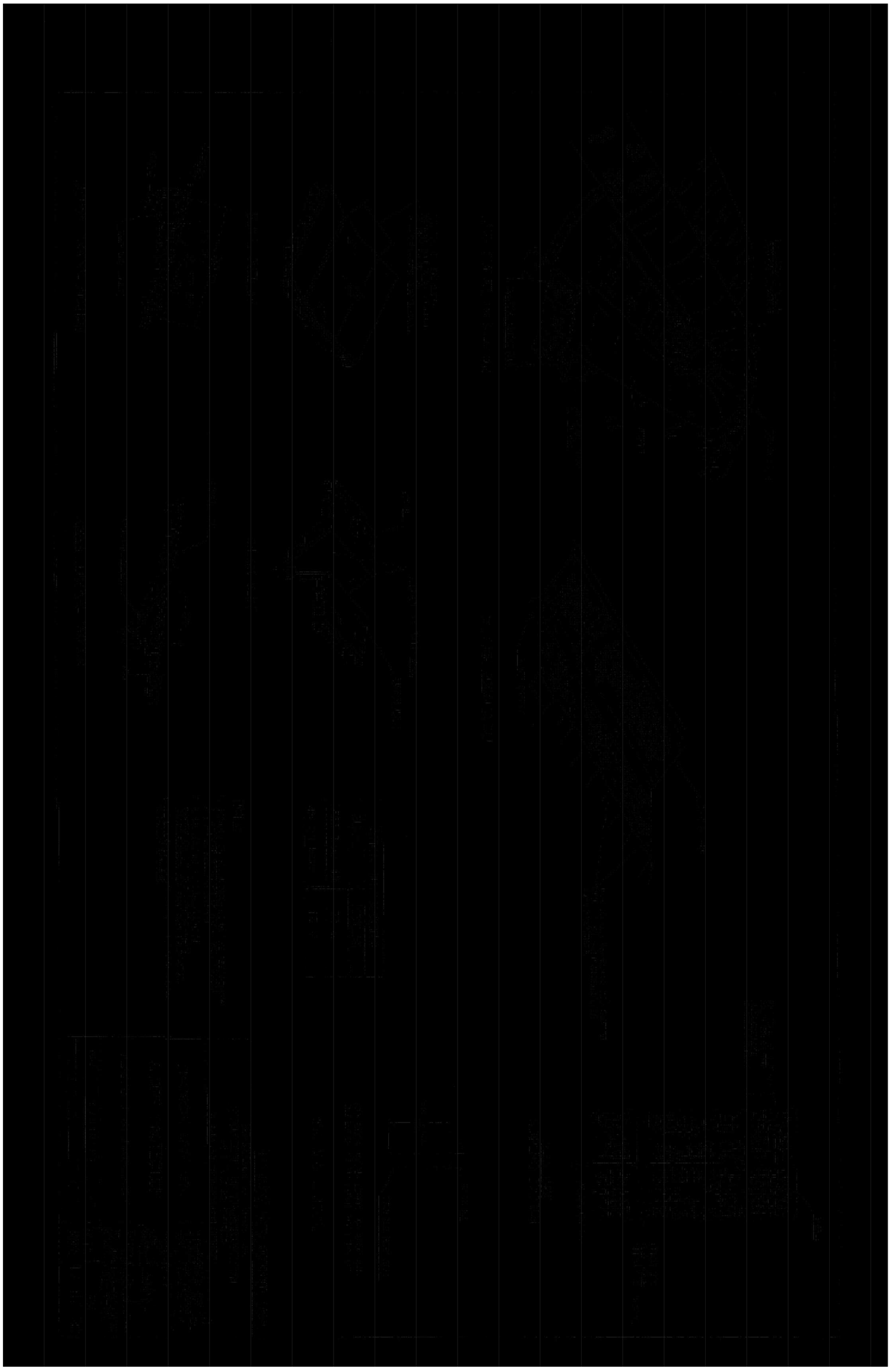
SHEET NO.: SW3P-03	PROJECT NO.: DTE23-004	DATE: April 15, 2024	DRAWN: JAD DESIGNED: REVIEWED: JET

REVISIONS	SYMBOL	DATE	BY

EROSION CONTROL
STANDARD
DEVICES

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

DELTORRE ENGINEERING LLC
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre



SHEET NO.: SW3P-04

PROJECT NO.: DTE23-004

DATE: April 15, 2024

DRAWN: JAD
DESIGNED:
REVIEWED: JD

REVISIONS	SYMBOL	DATE	BY

EROSION CONTROL
STANDARD
SLOPE PROTECTION

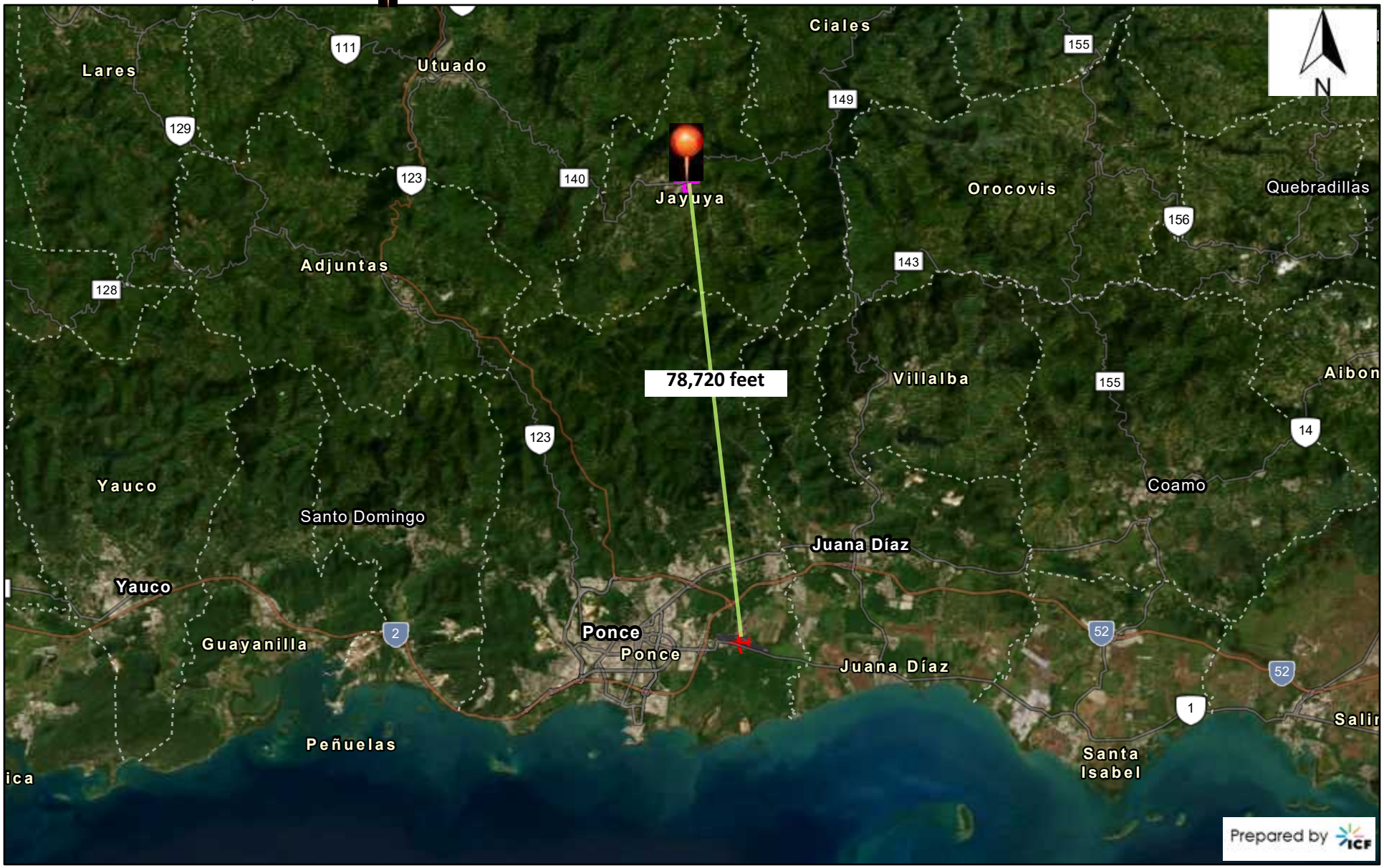
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

DELTORRE ENGINEERING LLC
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

Attachment 3:
Airport Hazards

PR-CRP-000053 Civil Airports Map

Address: Urban Center, Jayuya, PR 00664
Coordinates: 18.218990°, -66.591780°



August 22, 2025

Search Result (point) Airport Polygons

Airport Points

1:288,895

0 2.25 4.5 9 mi

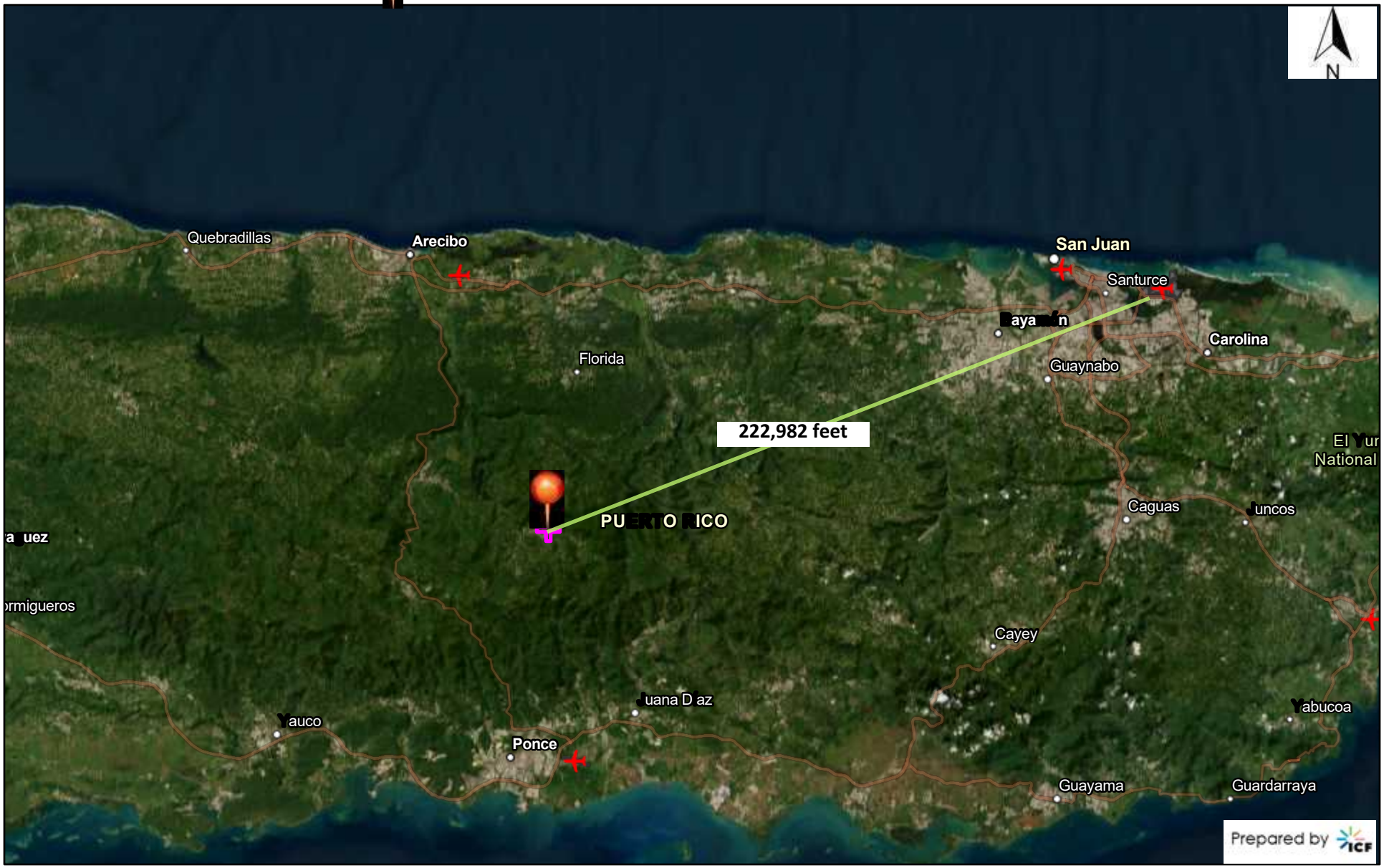
0 3.75 7.5 15 km

Earthstar Geographics, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, EPA

Source: EPA NEPAssist (https://nepassisttool.epa.gov/nepassist/nepamap.aspx)

PR-CRP-000053 Military Airports Map

Address: Urban Center, Jayuya, PR 00664
Coordinates: 18.218990°, -66.591780°



August 22, 2025

Search Result (point) Airport Polygons

Airport Points

1:577,791

0 4.75 9.5 19 mi

0 5 10 20 km

Earthstar Geographics, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, EPA

Source: EPA NEPAssist (https://nepassisttool.epa.gov/nepassist/nepamap.aspx)

Attachment 4:
Coastal Barrier Resources

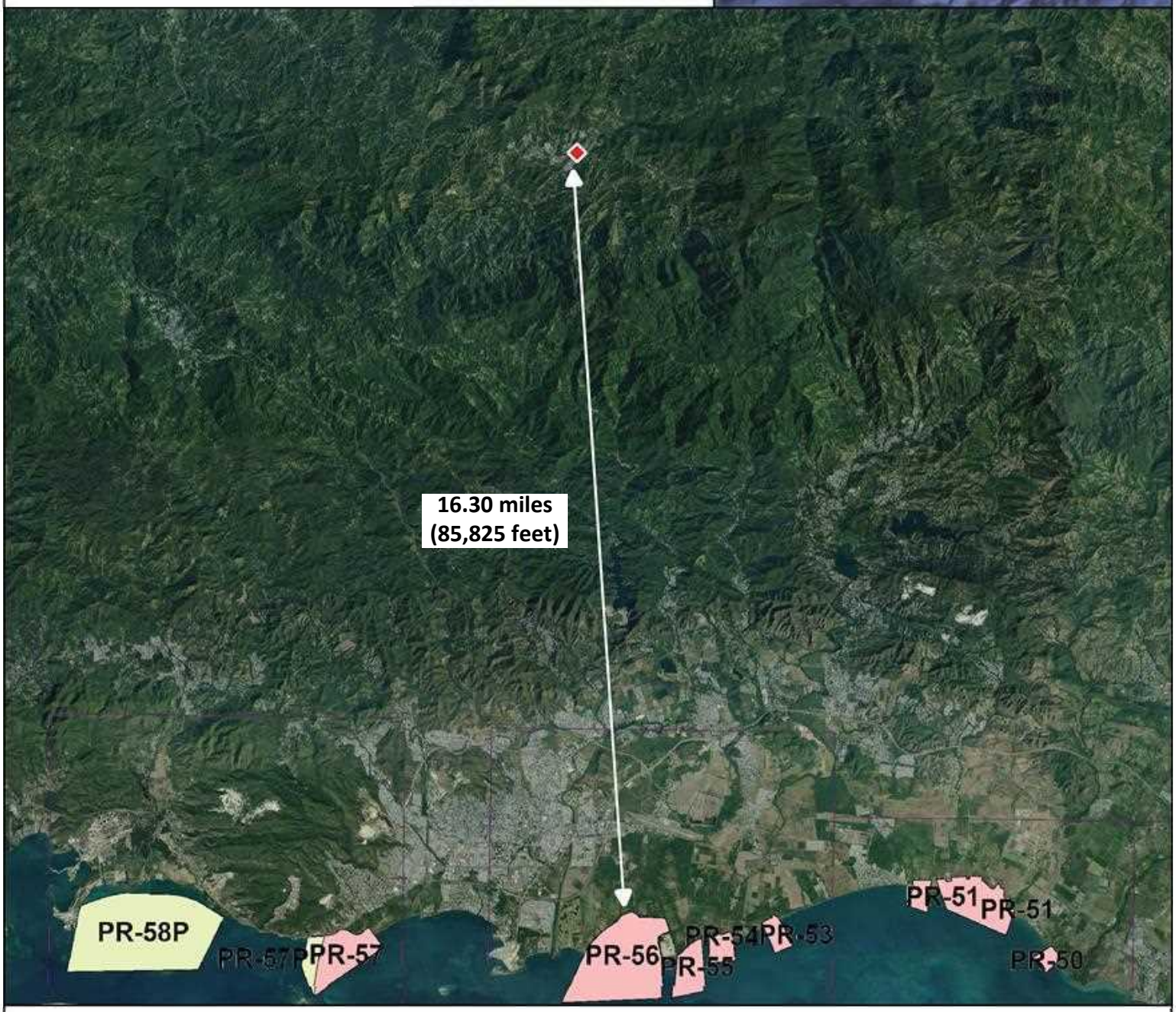
Coastal Barrier Resources Map - PR-CRP-000053

Project: Mejoras Aceras, Paseo Peatonal Ventana al Rio y Remocion de Adoquines del Casco Urbano del Municipio de Jayuya

Address: Urban Center, Municipality of Jayuya, Puerto Rico

Coordinates: 18.218990°, -66.591780° (WGS 1984)

EES



Legend

- Project Location
- 18.218990, -66591780
- Municipalities
- CBRS Buffer Zone
- CBRS Prohibitions
- Otherwise Protected Area
- System Unit
- Generalized Units
- CBRS Map Panels

N

Scale: 1: 200,000

1 inch equals 5.08 kilometers

2.5 0 2.5 5 km

Spatial Reference:
NAD 1983 State Plane Puerto Rico Virgin Islands FIPS 5200 meters

Sources:
PRITS Web Feature Services (http://geoserver2.pr.gov/geoserver/pr_geodata/wfs). CBRS (https://gis1.wim.usgs.gov/server/rest/services/CBRSMapper/CoastalBarrierResourcesSystem/). Hexagon AB Satellite Imagery Service.

Attachment 5:
Flood Insurance

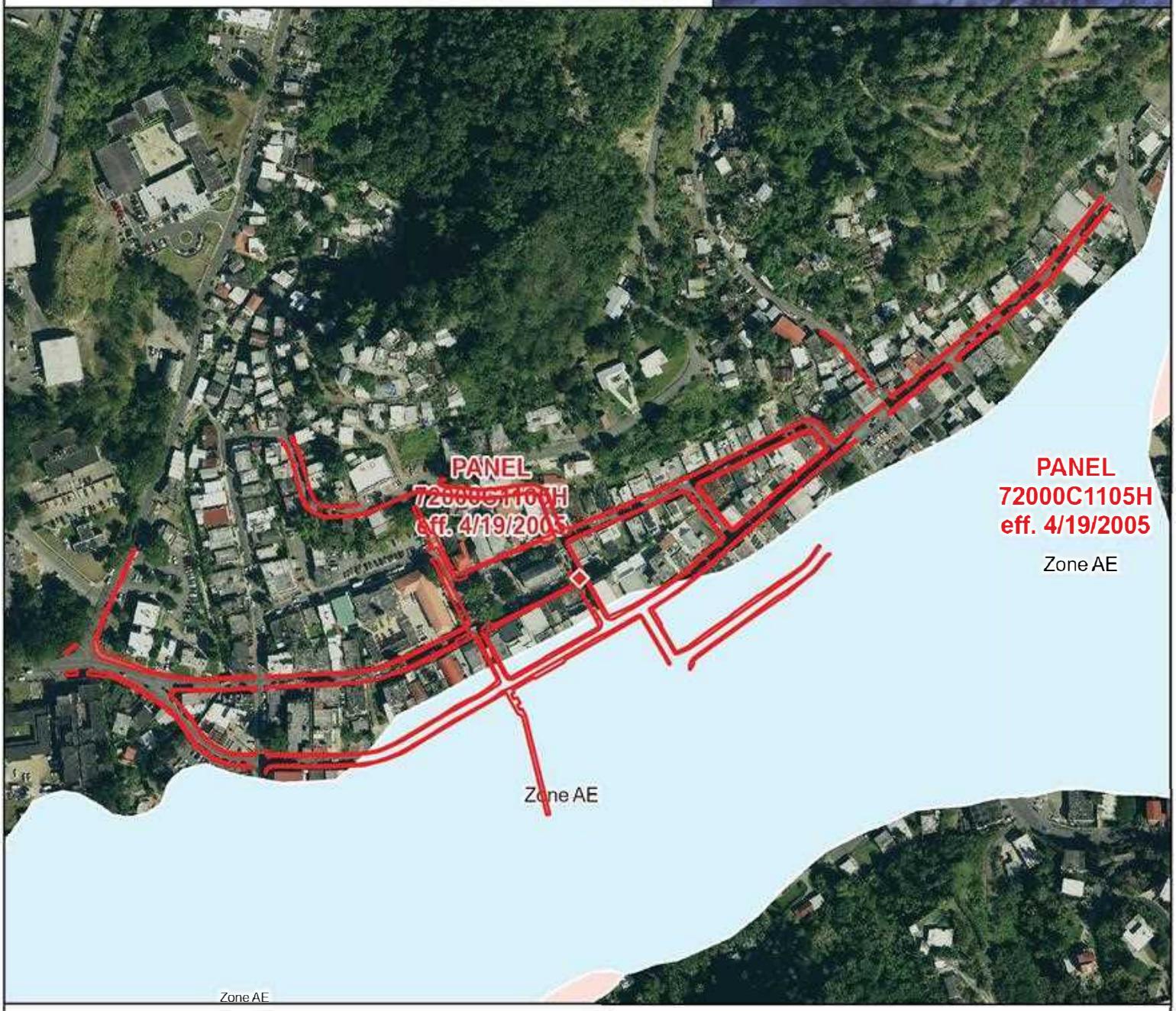
FEMA National Flood Hazard Layer Map - PR-CRP-000053

Project: Mejoras Aceras, Paseo Peatonal Ventana al Rio y Remocion de Adoquines del Casco Urbano del Municipio de Jayuya

Address: Urban Center, Municipality of Jayuya, Puerto Rico

Coordinates: 18.218990°, -66.591780° (WGS 1984)

EES



Legend

- Project Location
- Project Footprint
- 18.218990, -6659178(
- Municipalities

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee

N

Scale: 1: 4,000

1 inch equals 0.10 kilometers

0 75 150 m

Spatial Reference:
NAD 1983 State Plane Puerto Rico Virgin Islands FIPS 5200 meters

Sources:
PRITS WFS Server (http://geoserver2.pr.gov/geoserver/pr_geodata/wfs).
FEMA NFHL Data (https://hazards.fema.gov/arcgis/rest/services/public/NFHL/MapServer). 2022 Hexagon AB Imagery BasemapService .

Attachment 6:
Clean Air

PR-CRP-000053 Clean Air Map

Address: Urban Center, Jayuya, PR 00664
Coordinates: 18.218990°, -66.591780°

August 22, 2025

Search Result (point)

SO2 1-hr (2010 standard)
Nonattainment

PM10 (1987 standard)
Maintenance

ead (2008 standard)
Nonattainment

1:1,155,581

0 5 10 20 mi

0 15 30 60 km

Earthstar Geographics, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, U.S.

Source: EPA NEPAssist (https://nepassisttool.epa.gov/nepassist/nepamap.aspx)

Puerto Rico Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants

Data is current as of July 31, 2025

Listed by County, NAAQS, Area. The 8-hour Ozone (1997) standard was revoked on April 6, 2015 and the 1-hour Ozone (1979) standard was revoked on June 15, 2005.

* The 1997 Primary Annual PM-2.5 NAAQS (level of 15 μg/m^3) is revoked in attainment and maintenance areas for that NAAQS. For additional information see the PM-2.5 NAAQS SIP Requirements Final Rule, effective October 24, 2016. (81 FR 58009)

Change the State:
PUERTO RICO GO

Important Notes

Download National Dataset: dbf | xls | Data dictionary (PDF)

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/ Part County	Population (2010)
PUERTO RICO							
Arecibo Municipio	Lead (2008)	Arecibo, PR	11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	/ /		Part	32,185
Bayamon Municipio	Sulfur Dioxide (2010)	San Juan, PR	18 19 20 21 22 23 24 25	/ /		Part	22,921
Catano Municipio	Sulfur Dioxide (2010)	San Juan, PR	18 19 20 21 22 23 24 25	/ /		Whole	28,140
Guaynabo Municipio	PM-10 (1987)	Mun. of Guaynabo, PR	92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09	02/11/2010	Moderate	Part	90,470
Guaynabo Municipio	Sulfur Dioxide (2010)	San Juan, PR	18 19 20 21 22 23 24 25	/ /		Part	23,802
Salinas Municipio	Sulfur Dioxide (2010)	Guayama-Salinas, PR	18 19 20 21 22 23 24 25	/ /		Part	23,401
San Juan Municipio	Sulfur Dioxide (2010)	San Juan, PR	18 19 20 21 22 23 24 25	/ /		Part	147,963
Toa Baja Municipio	Sulfur Dioxide (2010)	San Juan, PR	18 19 20 21 22 23 24 25	/ /		Part	52,441

Important Notes

Attachment 7:
Coastal Zone Management

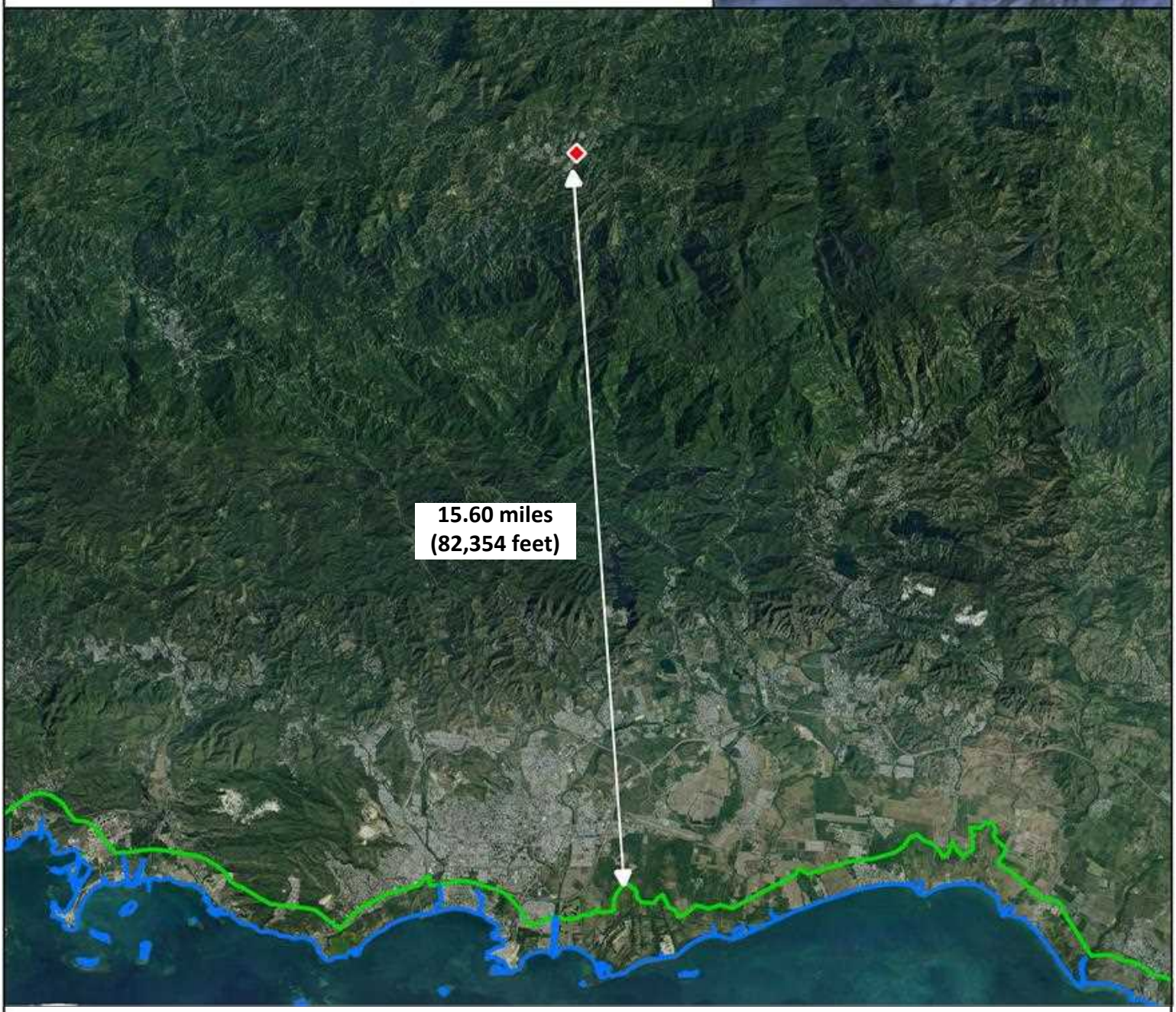
Coastal Barrier Resources Map - PR-CRP-000053

Project: Mejoras Aceras, Paseo Peatonal Ventana al Rio y Remocion de Adoquines del Casco Urbano del Municipio de Jayuya

Address: Urban Center, Municipality of Jayuya, Puerto Rico

Coordinates: 18.218990°, -66.591780° (WGS 1984)

EES



Legend

- Project Location
- 18.218990, -66591780
- Municipalities

Coastal Zones Boundaries (DNER,2010)

- Coastal Zone Inland Boundary
- Coastal Zone Maritime Boundary

N

Scale: 1: 200,000

1 inch equals 5.08 kilometers

2.5 0 2.5 5 km

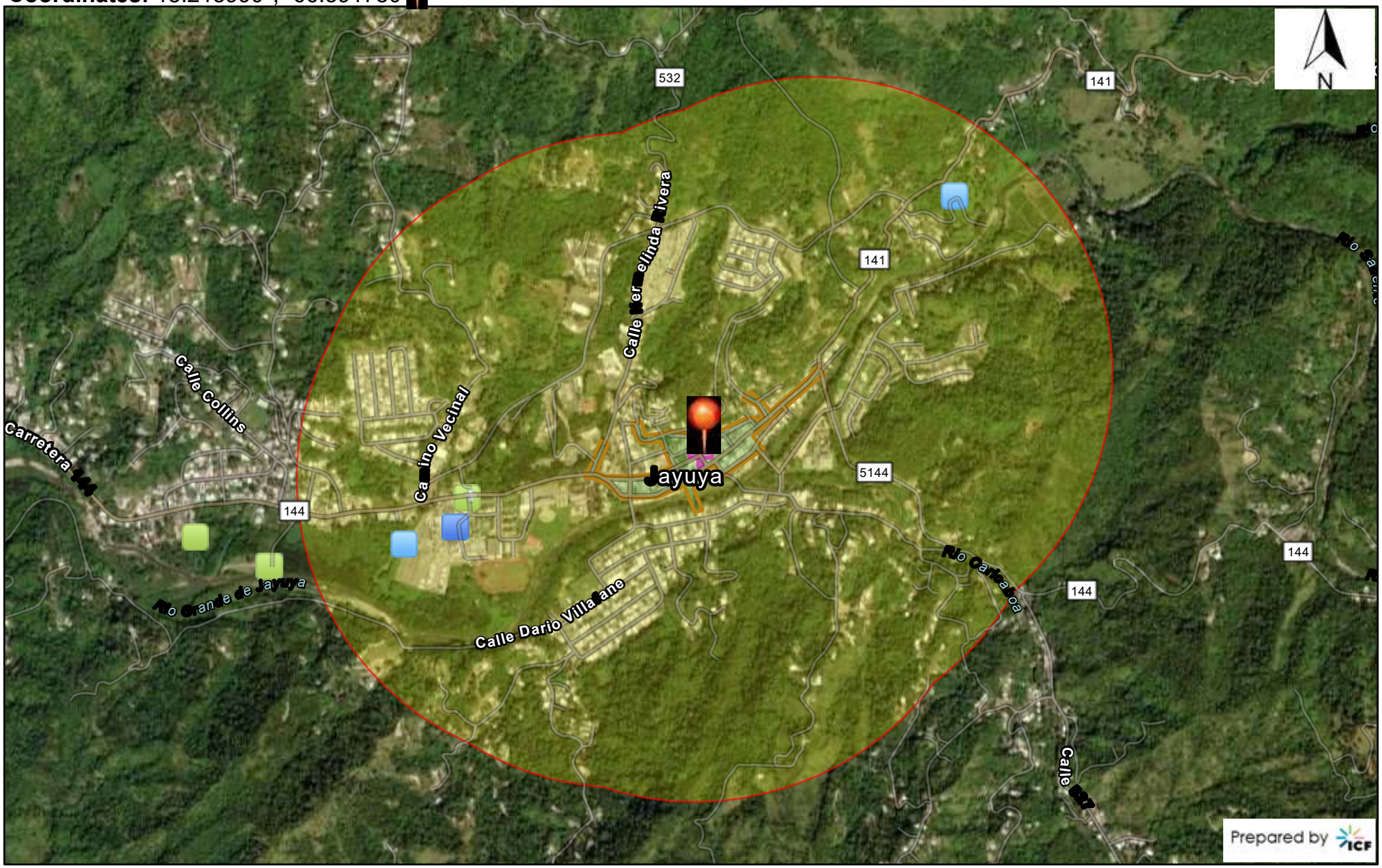
Spatial Reference:
NAD 1983 State Plane Puerto Rico Virgin Islands FIPS 5200 meters

Sources:
PRITS Web Feature Services; 2010 DNER Coastal Zone Boundaries (http://geoserver2.pr.gov/geoserver/pr_geodata/wfs). Hexagon AB Satellite Imagery Service.

Attachment 8: Contamination and Toxic Substances

PR-CRP-000053 EPA Facilities Map

Address: Urban Center, Jayuya, PR 00664
Coordinates: 18.218990°, -66.591780°



August 28, 2025

1:18,056

0 0.13 0.25 0.5 mi

0 0.23 0.45 0.9 km

Air Pollution (ICIS-AIR)

azardous aste (RCRAIn o)

azardous aste (RCRAIn o)

To ic Releases (TRI)

ater Dischargers (NPDES)

Project u er

Project Area

Search Result (point)

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, Ma ar

Source: EPA NEPAssist (https://nepassisttool.epa.gov/nepassist/nepamap.aspx)

Detailed Facility Report

Facility Summary

BAXTER HEALTHCARE OF PUERTO RICO - JAYUYA OPERATIONS

STATE ROAD 144 KM 20.6, JAYUYA, PR 00664

FRS (Facility Registry Service) ID: 110071670953

EPA Region: 02

Latitude: 18.216466

Longitude: -66.600675

Locational Data Source: NPDES

Industries: --

Indian Country: N

Enforcement and Compliance Summary

Statute	CWA
Compliance Monitoring Activities (5 years)	--
Date of Last Compliance Monitoring Activity	--
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): Non-Major, Permit Effective (PRR05J03J)

Resource Conservation and Recovery Act (RCRA): No Information

Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110071670953					N	18.216466	-66.600675
ICIS-NPDES	CWA	PRR05J03J	Non-Major: General Permit Covered Facility	Effective	Industrial Stormwater	02/28/2026	N	18.2167	-66.5995

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110071670953	BAXTER HEALTHCARE OF PUERTO RICO - JAYUYA OPERATIONS	STATE ROAD 144 KM 20.6, JAYUYA, PR 00664	
ICIS-NPDES	CWA	PRR05J03J	BAXTER HEALTHCARE OF PUERTO RICO - JAYUYA OPERATIONS	STATE ROAD 144 KM 20.6, JAYUYA, PR 00664	

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description
ICIS-NPDES	PRR05J03J	2834	Pharmaceutical Preparations

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description

No data records returned

Facility Industrial Effluent Guidelines

Identifier	Effluent Guideline (40 CFR Part)	Effluent Guideline Description

No data records returned

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
CWA	PRR05J03J	No	03/31/2025	0	08/22/2025

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11
CWA (Source ID: PRR05J03J)		04/01-06/30/22	07/01-09/30/22	10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24	04/01-06/30/24	07/01-09/30/24	10/01-12/31/24
	Facility-Level Status	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified
	Quarterly Noncompliance Report History											

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?
210100020408	Rio Caonillas at Lago Caonillas Dam	POLA CREEK, RIO GRANDE DE JAYUYA	No	No	--	Yes

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use
PR	2024	PRNR7C1	RIO CAONILLAS	Impaired - 303(d) Listed - With Restoration Plan	METALS (OTHER THAN MERCURY) | NUTRIENTS | PATHOGENS	Fully Supporting	Not Supporting	--	Not Supporting	--

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

CWA (Clean Water Act) Discharge Monitoring Report (DMR) Pollutant Loadings

DMR and TRI Multi-Year Loading Report

NPDES ID	Description

No data records returned

Community

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (ACS (American Community Survey))	
Total Persons	4,523
Population Density	1,449/sq.mi.
Housing Units in Area	1,900
Percent People of Color	98%
Households in Area	1,569
Households on Public Assistance	283
Persons With Low Income	3,822
Percent With Low Income	85%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.216466
Center Longitude	-66.600675
Total Area	3.121 sq.mi.
Land Area	100%
Water Area	0%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than $15,000	604 (38.52%)
$15,000 - $25,000	230 (14.67%)
$25,000 - $50,000	543 (34.63%)
$50,000 - $75,000	117 (7.46%)
Greater than $75,000	74 (4.72%)

Age Breakdown (ACS (American Community Survey)) - Persons (%)	
Children 5 years and younger	214 (5%)
Minors 17 years and younger	981 (22%)
Adults 18 years and older	3,539 (78%)
Seniors 65 years and older	864 (19%)

Race Breakdown (ACS (American Community Survey)) - Persons (%)	
White	2,747 (61%)
African-American	57 (1%)
Hispanic-Origin	4,438 (98%)
Asian	0 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	0 (0%)
Other/Multiracial	1,565 (35%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	415 (13.18%)
9th through 12th Grade	77 (2.45%)
High School Diploma	1,175 (37.31%)
Some College/2-year	590 (18.74%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	658 (20.9%)

Detailed Facility Report

Facility Summary

BAXTER HEALTHCARE OF PUERTO RICO

CARR 144 KM 20.6, JAYUYA, PR 00664

FRS (Facility Registry Service) ID: 110070343713

EPA Region: 02

Latitude: 18.217368

Longitude: -66.597802

Locational Data Source: Zip Code Centroid

Industries: --

Indian Country: N

Enforcement and Compliance Summary

Statute	CAA
Compliance Monitoring Activities (5 years)	--
Date of Last Compliance Monitoring Activity	--
Compliance Status	--
Qtrs in Noncompliance (of 12)	--
Qtrs with Significant Violation	--
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): No Information

Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): CEDRI10105980

Go To Enforcement/Compliance Details

Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110070343713					N		
CEDRI	CAA	CEDRI10105980					N		

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110070343713	BAXTER HEALTHCARE OF PUERTO RICO	CARR 144 KM 20.6, JAYUYA, PR 00664	
CEDRI	CAA	CEDRI10105980	BAXTER HEALTHCARE OF PUERTO RICO	CARR 144 KM 20.6, JAYUYA, PR 00664	

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description

No data records returned

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description

No data records returned

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>*.*

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed

No data records returned

Three-Year Compliance History by Quarter

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

Community

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

No demographic profile information available for this facility.

Detailed Facility Report

Facility Summary

PR PUBLIC HOUSING ADMIN LA MONTANA

PR-144 KM 4.4, JAYUYA, PR 00664

FRS (Facility Registry Service) ID: 110007816417

EPA Region: 02

Latitude: 18.217791

Longitude: -66.598781

Locational Data Source: RCRAINFO

Industries: --

Indian Country: N

Enforcement and Compliance Summary

Statute	RCRA
Compliance Monitoring Activities (5 years)	--
Date of Last Compliance Monitoring Activity	--
Compliance Status	No Violation Identified
Qtrs in Noncompliance (of 12)	0
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	--
Penalties from Formal Enforcement Actions (5 years)	--
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): No Information

Resource Conservation and Recovery Act (RCRA): Active VSQG, (PRR000001255)

Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110007816417					N	18.217791	-66.598781
RCRAInfo	RCRA	PRR000001255	VSQG	Active (H)			N	18.217791	-66.598781

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110007816417	PR PUBLIC HOUSING ADMIN LA MONTANA	PR-144 KM 4.4, JAYUYA, PR 00664	Jayuya Municipio
RCRAInfo	RCRA	PRR000001255	PR PUBLIC HOUSING ADMIN LA MONTANA	STATE RD PR 144 KM 4.4, JAYUYA, PR 00664	Jayuya Municipio

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description

No data records returned

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description

No data records returned

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)

No data records returned

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
RCRA	PRR000001255	No	08/23/2025	0	08/22/2025

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type		QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11
RCRA (Source ID: PRR000001255)			10/01-12/31/22	01/01-03/31/23	04/01-06/30/23	07/01-09/30/23	10/01-12/31/23	01/01-03/31/24	04/01-06/30/24	07/01-09/30/24	10/01-12/31/24	01/01-03/31/25	04/01-06/30/25
	Facility-Level Status		No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified
	Violation	Agency											

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost

No data records returned

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use

No data records returned

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

Community

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (ACS (American Community Survey))	
Total Persons	5,017
Population Density	1,607/sq.mi.
Housing Units in Area	2,116
Percent People of Color	98%
Households in Area	1,730
Households on Public Assistance	317
Persons With Low Income	4,258
Percent With Low Income	85%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.217791
Center Longitude	-66.598781
Total Area	3.121 sq.mi.
Land Area	100%
Water Area	0%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than $15,000	659 (38.14%)
$15,000 - $25,000	252 (14.58%)
$25,000 - $50,000	607 (35.13%)
$50,000 - $75,000	130 (7.52%)
Greater than $75,000	80 (4.63%)

Age Breakdown (ACS (American Community Survey)) - Persons (%)	
Children 5 years and younger	238 (5%)
Minors 17 years and younger	1,117 (22%)
Adults 18 years and older	3,900 (78%)
Seniors 65 years and older	965 (19%)

Race Breakdown (ACS (American Community Survey)) - Persons (%)	
White	3,025 (60%)
African-American	56 (1%)
Hispanic-Origin	4,933 (98%)
Asian	0 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	0 (0%)
Other/Multiracial	1,736 (35%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	452 (13.01%)
9th through 12th Grade	85 (2.45%)
High School Diploma	1,286 (37.02%)
Some College/2-year	652 (18.77%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	726 (20.9%)

Detailed Facility Report

Facility Summary

PRASA JAYUYA URBANO

PR-141 KM 0.1 INT, JAYUYA, PR 00664

FRS (Facility Registry Service) ID: 110009814914

EPA Region: 02

Latitude: 18.226388

Longitude: -66.584166

Locational Data Source: FRS

Industries: --

Indian Country: N

Enforcement and Compliance Summary

Statute	CWA
Compliance Monitoring Activities (5 years)	1
Date of Last Compliance Monitoring Activity	09/12/2024
Compliance Status	Violation Identified
Qtrs in Noncompliance (of 12)	1
Qtrs with Significant Violation	0
Informal Enforcement Actions (5 years)	--
Formal Enforcement Actions (5 years)	1
Penalties from Formal Enforcement Actions (5 years)	$0
EPA Cases (5 years)	--
Penalties from EPA Cases (5 years)	--

Regulatory Information

Clean Air Act (CAA): No Information

Clean Water Act (CWA): Non-Major, Permit Not Needed (PR0020541), Non-Major, Permit Effective (PR0024121)

Resource Conservation and Recovery Act (RCRA): No Information

Safe Drinking Water Act (SDWA): No Information

Other Regulatory Reports

Air Emissions Inventory (EIS): No Information

Greenhouse Gas Emissions (eGGRT): No Information

Toxic Releases (TRI): No Information

Compliance and Emissions Data Reporting Interface (CEDRI): No Information

Go To Enforcement/Compliance Details

Known Data Problems <https://epa.gov/resources/echo-data/known-data-problems>

Facility/System Characteristics

Facility/System Characteristics

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110009814914					N	18.226388	-66.584166
ICIS		2658693					N	18.224401	-66.583784
ICIS		32229					N	18.224401	-66.583784
ICIS-NPDES	CWA	PR0020541	Non-Major: NPDES Individual Permit	Not Needed			N	18.224401	-66.583784
ICIS-NPDES	CWA	PR0024121	Non-Major: NPDES Individual Permit	Effective		11/30/2027	N	18.226389	-66.584167

Facility Address

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110009814914	PRASA JAYUYA URBANO	PR-141 KM 0.1 INT, JAYUYA, PR 00664	Jayuya Municipio
ICIS		2658693	PRASA JAYUYA URBANO	CARRETERA 141 KM. 0.1 INTERIOR, JAYUYA, PR 00664	Jayuya Municipio
ICIS		32229	PRASA JAYUYA	CARRETERA 141 KM. 0.1 INTERIOR, JAYUYA, PR 00664	Jayuya Municipio
ICIS-NPDES	CWA	PR0020541	PRASA JAYUYA URBANO	CARRETERA 141 KM. 0.1 INTERIOR, JAYUYA, PR 00664	Jayuya Municipio
ICIS-NPDES	CWA	PR0024121	PRASA JAYUYA WTP	ROAD 141 KM 0.1 INT, JAYUYA, PR 00664	Jayuya Municipio

Facility SIC (Standard Industrial Classification) Codes

System	Identifier	SIC Code	SIC Description
ICIS-NPDES	PR0020541	4941	Water Supply
ICIS-NPDES	PR0024121	4941	Water Supply

Facility NAICS (North American Industry Classification System) Codes

System	Identifier	NAICS Code	NAICS Description

No data records returned

Facility Industrial Effluent Guidelines

Identifier	Effluent Guideline (40 CFR Part)	Effluent Guideline Description
PR0024121	000	No Applicable Effluent Guidelines

Facility Tribe Information

Reservation Name	Tribe Name	EPA Tribal ID	Distance to Tribe (miles)

No data records returned

Enforcement and Compliance

Compliance Monitoring History

Last 5 Years

Statute	Source ID	System	Activity Type	Compliance Monitoring Type	Lead Agency	Date	Finding (if applicable)
CWA	PR0024121	ICIS-NPDES	Inspection/Evaluation	Base Program - Evaluation	EPA	09/12/2024	

Entries in italics are not included in ECHO's Compliance Monitoring Activity counts because they are not compliance monitoring strategy <https://www.epa.gov/compliance/compliance-monitoring-programs> *activities or because they are not counted as inspections within EPA's Annual Results* <https://www.epa.gov/enforcement/enforcement-data-and-results>.

Compliance Summary Data

Statute	Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
CWA	PR0020541	No	03/31/2025	0	08/22/2025
CWA	PR0024121	No	03/31/2025	1	08/22/2025

Three-Year Compliance History by Quarter

Statute	Program/Pollutant/Violation Type	Disch Point	Mon Loc	Freq	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	Q
	CWA (Source ID: PR0020541)				**04/01-06/30/22**	**07/01-09/30/22**	**10/01-12/31/22**	**01/01-03/31/23**	**04/01-06/30/23**	**07/01-09/30/23**	**10/01-12/31/23**	**01/01-03/31/24**	**04/01-06/30/24**	**07/01**
	Facility-Level Status				Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not A
	Quarterly Noncompliance Report History													
	CWA (Source ID: PR0024121)				**04/01-06/30/22**	**07/01-09/30/22**	**10/01-12/31/22**	**01/01-03/31/23**	**04/01-06/30/23**	**07/01-09/30/23**	**10/01-12/31/23**	**01/01-03/31/24**	**04/01-06/30/24**	**07/01**
	Facility-Level Status				No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Violation Identified	No Ide
	Quarterly Noncompliance Report History				Resolved - Pending	Resolved - Pending	Resolved - Pending	Resolved - Pending	Resolved - Pending	Resolved - Pending	Resolved - Pending	Resolved - Pending	Resolved - Pending	Res Pe
	Pollutant	**Disch Point**	**Mon Loc**	**Freq**										
CWA	Ammonia & ammonium- total <effluent-charts#pr0024121/82230> ■ <https://epa.gov/effluent-charts#pr0024121/82230>	001 - A	Effluent Gross	NMth				207%						
CWA	BOD, 5-day, 20 deg. C <effluent-charts#pr0024121/00310> ■ <https://epa.gov/effluent-charts#pr0024121/00310>	001 - A	Effluent Gross	NMth						**104%**			**186%**	

Statute	Program/Pollutant/Violation Type				QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	Q
CWA	Copper, total [as Cu] <effluent-charts#pr0024121/01042> [redacted] <https://epa.gov/effluent-charts#pr0024121/01042>	001 - A	Effluent Gross	NMth										
CWA	Lead, total [as Pb] <effluent-charts#pr0024121/01051> [redacted] <https://epa.gov/effluent-charts#pr0024121/01051>	001 - A	Effluent Gross	NMth								34%		
CWA	Phosphorus, total [as P] <effluent-charts#pr0024121/00665> [redacted] <https://epa.gov/effluent-charts#pr0024121/00665>	001 - Q	Effluent Gross	NMth					167%					

Informal Enforcement Actions

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date

No data records returned

Entries in italics are not counted as "informal enforcement actions" in EPA policies pertaining to enforcement response tools.

Formal Enforcement Actions

Last 5 Years

Statute	System	Law/ Section	Source ID	Type of Action	Case No.	Lead Agency	Case Name	Issued/ Filed Date	Settlements/ Actions	Settlement/ Action Date	Federal Penalty Assessed	State/ Local Penalty Assessed	Penalty Amount Collected	SEP Value	Comp Action Cost
CWA	ICIS-NPDES	301	NPDES/PR0024121	Judicial	02-2011-0007	EPA	PRASA - Puerto Nuevo Regional WWTP et al.	09/15/2015	2	05/23/2016	$0	--	--	--	$700,000,000
										03/22/2024	$0	--	--	--	$530,000,000

Environmental Conditions

Watersheds

12-Digit WBD (Watershed Boundary Dataset) HUC (RAD (Reach Address Database))	WBD (Watershed Boundary Dataset) Subwatershed Name (RAD (Reach Address Database))	State Water Body Name (ICIS (Integrated Compliance Information System))	Beach Closures Within Last Year	Beach Closures Within Last Two Years	Pollutants Potentially Related to Impairment	Watershed with ESA (Endangered Species Act)-listed Aquatic Species?
210100020408	Rio Caonillas at Lago Caonillas Dam	JAYUYA GRANDE RIVIER, RIO GRANDE DE JAYUYA	No	No	Ammonia & ammonium- total | Copper, total (as Cu) | Lead, total (as Pb) | Phosphorus, total (as P)	Yes

Assessed Waters From Latest State Submission (ATTAINS)

State	Report Cycle	Assessment Unit ID	Assessment Unit Name	Water Condition	Cause Groups Impaired	Drinking Water Use	Ecological Use	Fish Consumption Use	Recreation Use	Other Use
PR	2024	PRNR7C1	RIO CAONILLAS	Impaired - 303(d) Listed - With Restoration Plan	METALS (OTHER THAN MERCURY) | NUTRIENTS | PATHOGENS	Fully Supporting	Not Supporting	--	Not Supporting	--

Air Quality Nonattainment Areas

Pollutant	Within Nonattainment Status Area?	Nonattainment Status Applicable Standard(s)	Within Maintenance Status Area?	Maintenance Status Applicable Standard(s)

No data records returned

Pollutants

Toxics Release Inventory History of Reported Chemicals Released or Transferred in Pounds per Year at Site

TRI Facility ID	Year	Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs (Publicly Owned Treatment Works)	Underground Injections	Disposal to Land	Total On-Site Releases	Total Off-Site Transfers

No data records returned

Toxics Release Inventory Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name

No data records returned

CWA (Clean Water Act) Discharge Monitoring Report (DMR) Pollutant Loadings

DMR and TRI Multi-Year Loading Report

NPDES ID	Description	2020	2021	2022	2023	2024
PR0024121	DMR Pollutant Loadings (lb/year)	128,328,378	35,525,298	23,159,615	221,606	290,033
PR0024121	DMR Pollutant Loadings - Load Over Limit (lb/year)	0.7428	0.2666	0.1437	1,717	3,706
PR0024121	DMR Conventional Loadings (lb/year)	--	--	--	--	9,985
PR0024121	DMR Conventional Loadings - Load Over Limit (lb/year)	--	--	--	--	3,692
PR0024121	DMR Toxic-Weighted Loadings (lb-eq/year)	2,245	1,173	1,842	8.30	153
PR0024121	DMR Toxic-Weighted Loadings - Load Over Limit (lb-eq/year)	1.66	0.5971	0.3218	0	9.21

Community

Demographic Profile of Surrounding Area (1-Mile Radius)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2022 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. Census boundaries and demographic data for U.S. Territories are based on the "2020 Island Areas Demographic Profiles" from the U.S. Census Bureau. EPA's spatial processing methodology considers the overlap between the selected radii and ACS census block groups in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <https://epa.gov/help/reports/dfr-data-dictionary#demographic>.

General Statistics (ACS (American Community Survey))	
Total Persons	3,257
Population Density	1,044/sq.mi.
Housing Units in Area	1,394
Percent People of Color	99%
Households in Area	1,063
Households on Public Assistance	207
Persons With Low Income	2,889
Percent With Low Income	89%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	18.226388
Center Longitude	-66.584166
Total Area	3.121 sq.mi.
Land Area	100%
Water Area	0%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than $15,000	395 (37.16%)
$15,000 - $25,000	166 (15.62%)
$25,000 - $50,000	390 (36.69%)
$50,000 - $75,000	79 (7.43%)
Greater than $75,000	33 (3.1%)

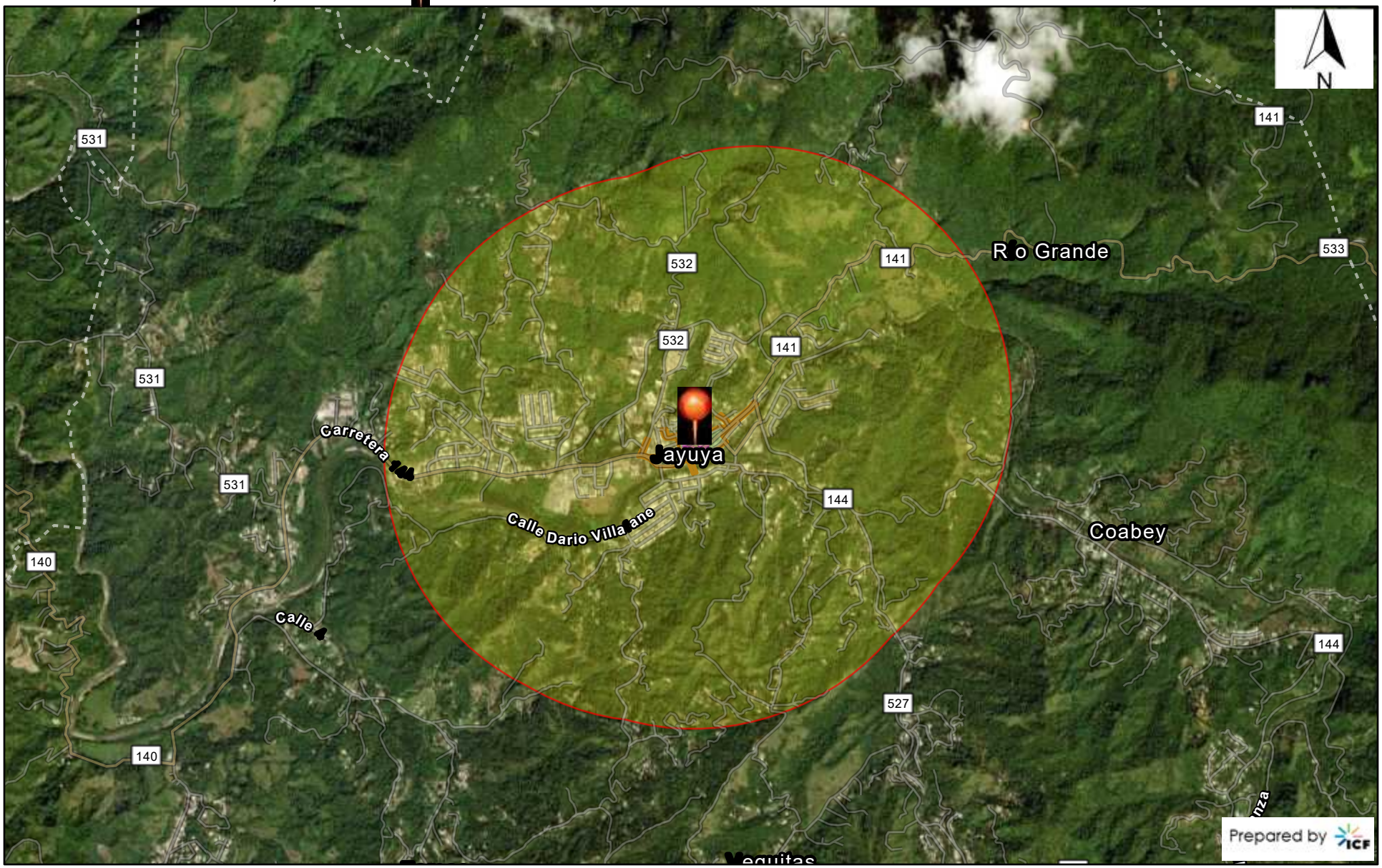
Age Breakdown (ACS (American Community Survey)) - Persons (%)	
Children 5 years and younger	149 (5%)
Minors 17 years and younger	816 (25%)
Adults 18 years and older	2,443 (75%)
Seniors 65 years and older	602 (18%)

Race Breakdown (ACS (American Community Survey)) - Persons (%)	
White	1,780 (55%)
African-American	72 (2%)
Hispanic-Origin	3,233 (99%)
Asian	0 (0%)
Hawaiian/Pacific Islander	0 (0%)
American Indian	0 (0%)
Other/Multiracial	1,170 (36%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	287 (13.24%)
9th through 12th Grade	66 (3.04%)
High School Diploma	761 (35.1%)
Some College/2-year	409 (18.87%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	439 (20.25%)

PR-CRP-000053 NPL & Brownfields Map

Address: Urban Center, Jayuya, PR 00664
Coordinates: 18.218990°, -66.591780°



August 28, 2025

Project u er

Search Result (point)

Project Area

1:36,112

0 0.28 0.55 1.1 mi

0 0.45 0.9 1.8 km

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, Ma ar

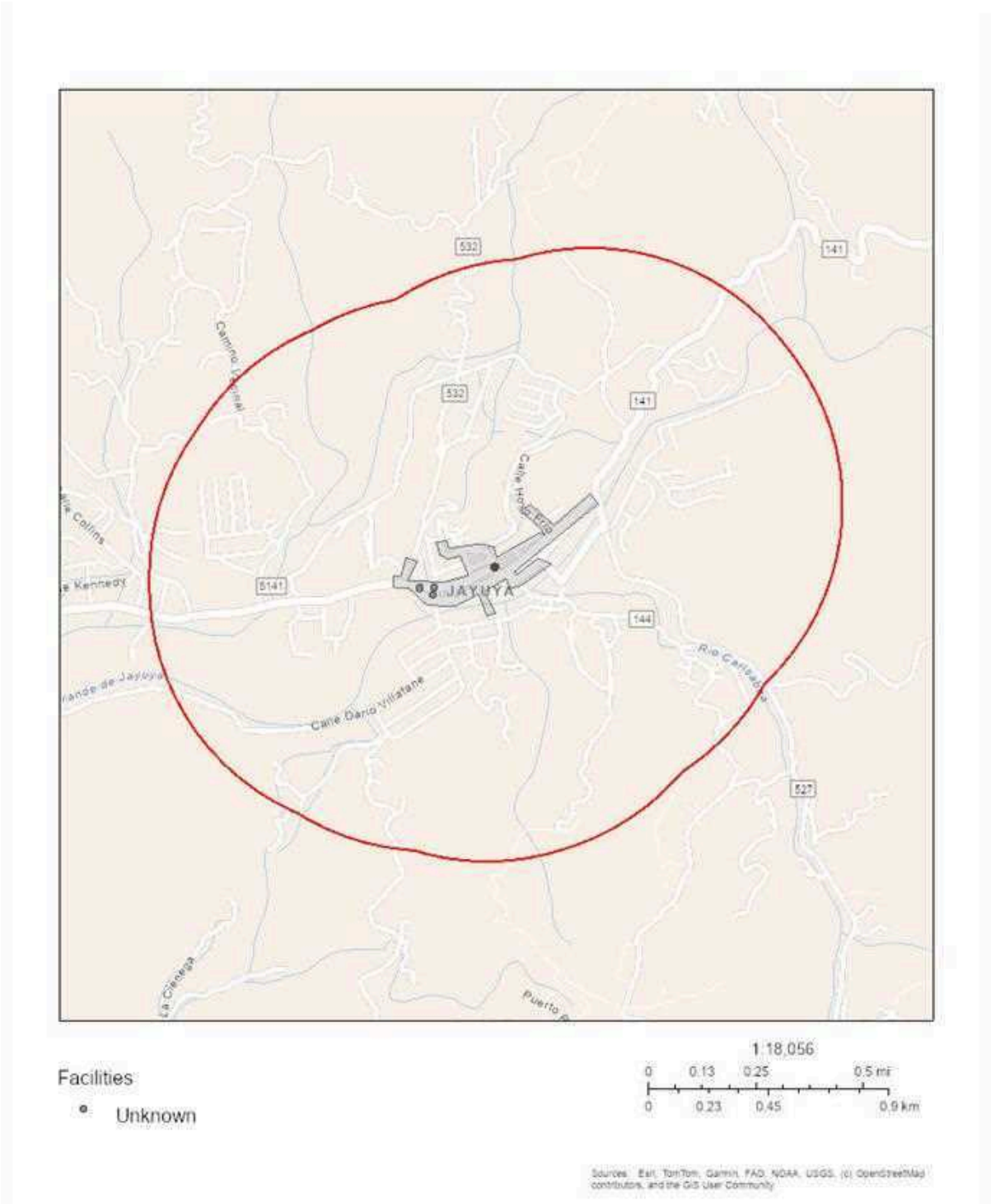
Source: EPA NEPAssist (https://nepassisttool.epa.gov/nepassist/nepamap.aspx)

PR-CRP-000053 UST Screening Report

Area of Interest (AOI) Information

Area : 48,509,054.04 ft²

Aug 28 2025 11:43:52 Eastern Daylight Time



Source: EPA UST Finder (https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=b03763d3f2754461adf86f121345d7bc)

Summary

Name	Count	Area(ft²)	Length(ft)
Releases	1	N/A	N/A
Facilities	3	N/A	N/A

Releases

#	Facility_ID	LUST_ID	Name	Address	City
1	*No Data*	92-0001	Esso SC-441	Carr. #144, Km. 4.4, Bo. Coabey	Jayuya

#	County	Zip_Code	State	Latitude	Longitude
1	*No Data*	*No Data*	Puerto Rico	18.2178	-66.5988

#	Coordinate_Source	Address_Match_Type	Reported_Date	Status	Substance
1	Geocode	DistanceMarker	*No Data*	No Further Action	*No Data*

#	Population_within_1500ft	DomesticWells_within_1500ft	LandUse	Within_SPA	SPA_PWS_FacilityID
1	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*

#	SPA_Water_Type	SPA_Facility_Type	SPA_HUC12	Within_WHPA	WHPA_PWS_FacilityID
1	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*

#	WHPA_Water_Type	WHPA_Facility_Type	WHPA_HUC12	Within_100yr_Floodplain	Closed_With_Residual_Contaminat
1	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*

#	EPA_Region	NFA_Letter	Tribe	Count
1	2		*No Data*	1

Facilities

#	Facility_ID	Name	Address	City	County
1	PR_18295-24261	GASOLINERA CARIBE (HJ GAS STATION)	CALLE FIGUEROA # 25	JAYUYA	*No Data*
2	PR_18300-24258	TOTAL SERVICE STATION 861301 (JW S/S)	GUILLERMO ESTEVES # 01	JAYUYA	*No Data*
3	PR_18301-24261	PUERTO RICO TELEPHONE JAYUYA	CALLE FIGUEROA 28 AVE VICENS	JAYUYA	*No Data*

#	State	Zip_Code	Latitude	Longitude	Coordinate_Source
1	Puerto Rico	*No Data*	18.2183	-66.5944	State
2	Puerto Rico	*No Data*	18.2181	-66.5940	State
3	Puerto Rico	*No Data*	18.2183	-66.5939	State

#	Address_Match_Type	Open_USTs	Closed_USTs	TOS_USTs	Facility_Status
1	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
2	*No Data*	*No Data*	*No Data*	*No Data*	Unknown
3	*No Data*	*No Data*	*No Data*	*No Data*	Unknown

#	LandUse	Population_1500ft	Private_Wells_1500ft	Within_SPA	SPA_PWS_FacilityID
1	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
2	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
3	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*

#	SPA_Water_Type	SPA_Facility_Type	SPA_HUC12	Within_WHPA	WHPA_PWS_FacilityID
1	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
2	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
3	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*

#	WHPA_Water_Type	WHPA_Facility_Type	WHPA_HUC12	Within_100yr_Floodplain	Date_of_Last_Inspection
1	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
2	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*
3	*No Data*	*No Data*	*No Data*	*No Data*	*No Data*

#	EPA_Region	Tribe	Count
1	2	*No Data*	1
2	2	*No Data*	1
3	2	*No Data*	1

ENVIRONMENTAL SURVEY
FOR
LEAD BASED PAINT (LBP)
AND
ASBESTOS CONTAINING MATERIALS (ACM)
FOR
JAYUYA URBAN CENTER, SIDEWALKS AND PUBLIC PARKING LOT
JAYUYA, PUERTO RICO

Prepared For:
Del Torre Engineering

November 2024

Analytical Environmental
Services International, Inc.
611 Monserrate Street
2nd Floor, Santurce, PR 00907
(787) 722-0220 / Fax (787) 724-5788

AES International Inc.

LEAD

TABLE OF CONTENTS

I. SUMMARY

1.0 INTRODUCTION

2.0 TESTING PROCEDURES

3.0 LEAD BASED PAINT TESTING METHODOLOGY

4.0 RESULTS

5.0 CONCLUSIONS

APPENDIX I - AESI Credentials

APPENDIX II - PCS Data Sheet

APPENDIX III - XRF Data

APPENDIX IV - Site Location and Selective Photos

APPENDIX V - Lead Based Paint Component Location

I. SUMMARY

Analytical Environmental Services International, Inc. (AES International) was contracted to perform a Lead Based Paint (LBP) survey for Jayuya Urban Center. The subject of the survey consists of the sidewalks of streets Hoyo Frío, Nemesio Canales, Mattei, Massini, Torrado, San Felipe, Catalino Figueroa, Guillermo Esteves, Libertad, states roads PR-141, PR-144, PR-532, Río Jayuya pedestrian bridge (Camino Ventana al Río) and a public parking lot on Libertad Street. The LBP inspection was conducted on 10/10, 10/14 and 10/15/2024 by Elme Rivera, a DRNA/EPA Certified LBP Risk Assessor.

The following components were found to be painted with LBP:

Structure/Room	Components	Substrate	Color	Quantity*
JAYUYA URBAN CENTER				
Public Parking				
Lower Level (East)	Floor Lines (10)	Asphalt	Yellow	160 ln.ft.
	Wheel Stops (10)	Concrete	Yellow	80 sq.ft.
Upper Level	Left Curb	Concrete	Yellow	70 sq.ft.
	Floor Lines	Asphalt	Blue/Yellow	16 ln.ft.
	Floor Lines (8)	Asphalt	Yellow	128 ln.ft.
	Wheel Stops (9)	Concrete	Yellow	72 sq.ft.
Sidewalks				
Hoyo Frío Street	Left Curbs	Concrete	Yellow	120 sq.ft.
	Right Curbs	Concrete	Yellow	30 sq.ft.
Hoyo Frío Street, front of Basketball Court	Right Curb	Concrete	Yellow	12 sq.ft.
PR-141, Km. 0.4 to 0.3	Water Hydrant	Metal	Yellow	1 Unit
PR-141, Km. 0.3 to 0.2	Left Curb Ramp	Concrete	Yellow	♣
	Left Curbs	Concrete	Yellow	
	Right Curbs	Concrete	Yellow	

PR-141, Km. 0.2	Sidewalk Floor Lines, Right	Concrete	Yellow	♣
	Light Post, Right	Wood	Brown	
	Light Post, Right	Concrete	Brown	
	Right Curbs	Concrete	Yellow	
	Light Post, Left	Wood	Gray	
	Light Post, Left Lower	Metal	Red	
PR-141, Km. 0.1	Light Posts, Left (4)	Wood	Brown	♣
	Left Curbs	Concrete	Yellow	
	Water Hydrant	Metal	Yellow	1 Unit
PR-141, Km. 0.1 to 0.0	Left Curbs	Concrete	White	♣
	Left Curbs	Concrete	Yellow	
	Light Post, Right (2)	Concrete	Gray	
	Right Curbs	Concrete	Yellow	
	Sidewalk Line	Concrete	Yellow	4 sq.ft.
PR-144	Water Hydrant, Left	Metal	Yellow	1 Unit
	Right Curbs	Concrete	Yellow	700 sq.ft.
	Left Curbs	Concrete	Yellow	
	Bridge Curb, Right	Concrete	Yellow	
	Right Curbs	Concrete	White	
PR-532, Km. 0.0 to 0.6	Left Curbs	Concrete	Yellow	400 sq.ft.
	Right Curbs	Concrete	Yellow	
	Manhole, Right	Metal	Yellow	
Catalino Figueroa Street	Water Register	Concrete	Yellow	680 sq.ft.
	Left Curbs	Concrete	Yellow	
	Bridge Curb, Left	Concrete	Yellow	
	Bridge Barriers, Left (9)	Concrete	White	
	Right Curb	Concrete	Yellow	
	Right Curb	Concrete	White	
	Bridge Curb, Right	Concrete	Yellow	
	Bridge Barriers, Right	Concrete	White	
	Water Hydrant	Metal	Yellow	1 Unit
	Water Hydrant, Left	Metal	White/Yellow	1 Unit

			Red/Black	
Massini Street	Left Curbs	Concrete	Yellow	110 sq.ft.
San Felipe Street	Guardrail, Left	Metal	Yellow	30 sq.ft.
	Left Curbs & Ramp	Concrete	Yellow	48 sq.ft.
	Right Curbs	Concrete	Yellow	38 sq.ft.
	Water Hydrant, Left	Metal	Yellow	1 Unit
Nemesio Canales Street	Right Curbs	Concrete	Yellow	540 sq.ft.
Guillermo Estevez Street (PR-144)	Left Curbs	Concrete	Yellow	140 sq.ft.
	Right Curbs	Concrete	Yellow	
	Water Hydrant	Metal	White/Yellow Red/Black	1 Unit
Libertad Street	Left Curbs	Concrete	Yellow	200 sq.ft.
	Right Curbs	Concrete	Yellow	
	Ramps, Left	Concrete	Yellow	

**** Quantities presented are approximate estimates.***

♣ These Components are approximately 2,600 sq.ft. in total.

If demolition, or renovation activities, are conducted in the nearest future it is recommended to establish a lead hazard control strategy that will account for the potential LBP risks present in the site.

1.0 INTRODUCTION

Analytical Environmental Services International, Inc. (AES International) was contracted to perform an LBP survey for Jayuya Urban Center. The subject of the survey consists of the sidewalks of streets Hoyo Frío, Nemesio Canales, Mattei, Massini, Torrado, San Felipe, Catalino Figueroa, Guillermo Esteves, Libertad, states roads PR-141, PR-144, PR-532, Río Jayuya pedestrian bridge (Camino Ventana al Río) and a public parking lot on Libertad Street.

The LBP inspection was conducted on 10/10, 10/14 and 10/15/2024 by Elme Rivera, a DRNA/EPA Certified LBP Risk Assessor. The credentials of AESI are attached in Appendix I. The survey, performed with an XRF instrument manufactured by Sci-Aps, Model X-550, was conducted using HUD protocol of 1997, revised in 2012.

2.0 TESTING PROCEDURES

The testing was performed with an XRF instrument Model X-550 (03210) manufactured by SciAps (see PCS in Appendix II). The selected mode allows reference to the abatement level set at 1.0 mg/cm^2. The results are reported at 95% confidence levels.

3.0 LEAD BASED PAINT TESTING METHODOLOGY

The hazard level of lead in paint has been determined by the department of Housing & Urban Development as 1.0 mg/cm^2, as measured by XRF, or AAS (Atomic Absorption Spectroscopy), or 0.5% be weight (or 5000 ppm) as measured by AAS, or Inductive Coupled Plasma (ICP). The same level was adopted by EPA Regulations published in 1992, under Title X.

The only lead-based paint testing protocol officially available at this time was published by HUD initially in 1990, revised in 1991 and finalized in 1995 (see above HUD reference). A revised Chapter 7 was published in 1997. In accordance with the new protocol, almost all surfaces present in the units must be tested. The above modified guidelines were used to perform lead-based-paint testing for this project. Since road components are not included in the HUD Guidelines, the same main steps used in a single-family inspection were used in this project.

The main steps involved in an inspection are:

1. Perform inventory of all testing combinations;
2. Select painted area to be tested;
3. Perform XRF testing (including calibration checks);
4. Collect and analyze paint chip samples, for inconclusive results;
5. Classify XRF and paint chips results;
6. Review and evaluate the data;
7. Report on findings.

AES International personnel classify each XRF lead reading as positive, negative, or inconclusive. This classification is based on manufacturer XRF performance characteristic sheet (PCS), for each substrate. Samples and/or additional readings are taken from inconclusive areas.

Calibration verification of the instrument was performed prior to beginning of daily task, when the instrument was turned on, and at the end of the day. The verification was conducted on a NIST standard of 1.0 mg/cm^2. Acceptance criteria used was +-0.2 mg/cm^2. The data for calibration verification is attached in Appendix III.

At the completion of the testing, surfaces were retested to assess precision of the testing. Statistical calculations performed on test-retest results suggest that the results are within the tolerance limits and therefore acceptable.

4.0 RESULTS

4.1 Results of XRF inspection

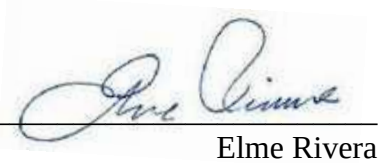
The results of the tested components are shown in Appendix III. Four hundred and three (403) XRF readings were taken. LBP components were detected and presented herein.

5.0 CONCLUSIONS

An LBP survey was conducted for Jayuya Urban Center. The subject of the survey consists of the sidewalks of streets Hoyo Frío, Nemesio Canales, Mattei, Massini, Torrado, San Felipe, Catalino Figueroa, Guillermo Esteves, Libertad, states roads PR-141, PR-144, PR-532, Río Jayuya pedestrian bridge (Camino Ventana al Río) and a public parking lot on Libertad Street. LBP findings are presented herein.

Some painted surfaces may contain levels of lead below 1.0 mg/cm^2, which could create lead dust, or lead contaminated soil hazards if the paint is turned into dust by abrasion, scraping, or sanding.

This report shall be kept by the owner and all future owners. A copy of the relevant report shall be given to each tenant, buyer or lessor, to comply with federal requirements for disclosure under the lead disclosure rule of 1996 (see also section 1018 of Title X). The LBP survey relates to surfaces accessible and not covered by rigid barriers. Should any hidden painted surfaces or components be present, they must be assumed as LBP.



Elme Rivera
Lead Risk Assessor
DRNA Lic# LBPRA-22524-243

Table 1. Summary of LBP Positive Components at Jayuya Urban Center, Sidewalks and Public Parking - Jayuya, Puerto Rico

Structure/Room	Components	Substrate	Color	Quantity*
JAYUYA URBAN CENTER				
Public Parking				
Lower Level (East)	Floor Lines (10)	Asphalt	Yellow	160 ln.ft.
	Wheel Stops (10)	Concrete	Yellow	80 sq.ft.
Upper Level	Left Curb	Concrete	Yellow	70 sq.ft.
	Floor Lines	Asphalt	Blue/Yellow	16 ln.ft.
	Floor Lines (8)	Asphalt	Yellow	128 ln.ft.
	Wheel Stops (9)	Concrete	Yellow	72 sq.ft.
Sidewalks				
Hoyo Frío Street	Left Curbs	Concrete	Yellow	120 sq.ft.
	Right Curbs	Concrete	Yellow	30 sq.ft.
Hoyo Frío Street, front of Basketball Court	Right Curb	Concrete	Yellow	12 sq.ft.
PR-141, Km. 0.4 to 0.3	Water Hydrant	Metal	Yellow	1 Unit
PR-141, Km. 0.3 to 0.2	Left Curb Ramp	Concrete	Yellow	♣
	Left Curbs	Concrete	Yellow	
	Right Curbs	Concrete	Yellow	
PR-141, Km. 0.2	Sidewalk Floor Lines, Right	Concrete	Yellow	♣
	Light Post, Right	Wood	Brown	
	Light Post, Right	Concrete	Brown	
	Right Curbs	Concrete	Yellow	
	Light Post, Left	Wood	Gray	
	Light Post, Left Lower	Metal	Red	
PR-141, Km. 0.1	Light Posts, Left (4)	Wood	Brown	♣
	Left Curbs	Concrete	Yellow	
	Water Hydrant	Metal	Yellow	1 Unit

Table 1. Summary of LBP Positive Components at Jayuya Urban Center, Sidewalks and Public Parking - Jayuya, Puerto Rico

PR-141, Km. 0.1 to 0.0	Left Curbs	Concrete	White	♣
	Left Curbs	Concrete	Yellow	
	Light Post, Right (2)	Concrete	Gray	
	Right Curbs	Concrete	Yellow	
	Sidewalk Line	Concrete	Yellow	4 sq.ft.
PR-144	Water Hydrant, Left	Metal	Yellow	1 Unit
	Right Curbs	Concrete	Yellow	700 sq.ft.
	Left Curbs	Concrete	Yellow	
	Bridge Curb, Right	Concrete	Yellow	
	Right Curbs	Concrete	White	
PR-532, Km. 0.0 to 0.6	Left Curbs	Concrete	Yellow	400 sq.ft.
	Right Curbs	Concrete	Yellow	
	Manhole, Right	Metal	Yellow	
Catalino Figueroa Street	Water Register	Concrete	Yellow	680 sq.ft.
	Left Curbs	Concrete	Yellow	
	Bridge Curb, Left	Concrete	Yellow	
	Bridge Barriers, Left (9)	Concrete	White	
	Right Curb	Concrete	Yellow	
	Right Curb	Concrete	White	
	Bridge Curb, Right	Concrete	Yellow	
	Bridge Barriers, Right	Concrete	White	
	Water Hydrant	Metal	Yellow	1 Unit
	Water Hydrant, Left	Metal	White/Yellow Red/Black	1 Unit
Massini Street	Left Curbs	Concrete	Yellow	110 sq.ft.
San Felipe Street	Guardrail, Left	Metal	Yellow	30 sq.ft.
	Left Curbs & Ramp	Concrete	Yellow	48 sq.ft.
	Right Curbs	Concrete	Yellow	38 sq.ft.
	Water Hydrant, Left	Metal	Yellow	1 Unit
Nemesio Canales Street	Right Curbs	Concrete	Yellow	540 sq.ft.

Table 1. Summary of LBP Positive Components at Jayuya Urban Center, Sidewalks and Public Parking - Jayuya, Puerto Rico

Guillermo Estevez Street (PR-144)	Left Curbs	Concrete	Yellow	140 sq.ft.
	Right Curbs	Concrete	Yellow	
	Water Hydrant	Metal	White/Yellow Red/Black	1 Unit
Libertad Street	Left Curbs	Concrete	Yellow	200 sq.ft.
	Right Curbs	Concrete	Yellow	
	Ramps, Left	Concrete	Yellow	

**** Quantities presented are approximate estimates.***

♣ These Components are approximately 2,600 sq.ft. in total.

Appendix I

AIHA Laboratory Accreditation Programs, LLC

acknowledges that

Analytical Environmental Services International, Inc.

611 Monserrate St. Suite 2 Santurce, PR 00907

Laboratory ID: LAP-102702

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA LAP), LLC accreditation to the ISO/IEC 17025:2017 international standard, General Requirements for the Competence of Testing and Calibration Laboratories in the following:

LABORATORY ACCREDITATION PROGRAMS

☑	**INDUSTRIAL HYGIENE**	Accreditation Expires: July 01, 2025
☑	**ENVIRONMENTAL LEAD**	Accreditation Expires: July 01, 2025
☐	**ENVIRONMENTAL MICROBIOLOGY**	Accreditation Expires:
☐	**FOOD**	Accreditation Expires:
☐	**UNIQUE SCOPES**	Accreditation Expires:
☐	**BERYLLIUM FIELD/MOBILE**	Accreditation Expires:

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached Scope of Accreditation. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2017 and AIHA LAP, LLC requirements. This certificate is not valid without the attached Scope of Accreditation. Please review the AIHA LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

Cheryl O. Morton

Cheryl O Morton
Managing Director, AIHA Laboratory Accreditation Programs, LLC

Revision21: 05/15/2023

Date Issued: 07/01/2023

United States Environmental Protection Agency

This is to certify that

AES International, Inc.

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint renovation, repair, and painting activities pursuant to 40 CFR Part 745.89

In the Jurisdiction of:

All EPA Administered States, Tribes, and Territories

This certification is valid from the date of issuance and expires November 15, 2025

NAT-87801-3

Certification #

September 04, 2020

Issued On

Michelle Price, Chief

Lead, Heavy Metals, and Inorganics Branch

GOBIERNO DE PUERTO RICO

Departamento de Recursos Naturales y Ambientales

Este certificado es otorgado a:

Analytical Environmenta Services nternationa (AESI)

Por haber cumplido con los requisitos establecidos en el Capítulo VI, Regla 127 del Reglamento para el Manejo Adecuado de Actividades de Pintura con Base de Plomo. Se le otorga esta certificación como **Firma** para llevar a cabo actividades relacionadas a Mitigación de Pintura con base de plomo en la jurisdicción de Puerto Rico.

Número de Certificado

LBPF-08024-014

Fecha de emisión: Abril 6, 2024

Fecha de Expiración: Abril 5, 2025

Roque Juliá
Jefe
División Desperdicios Tóxicos

DRNA Lead Risk Assessor Credential

Appendix II

Performance Characteristic Sheet

EFFECTIVE DATE: **February 1, 2022**

MANUFACTURER AND MODEL:

Make: ***SciAps***
Models: ***Model X-550***
X-Ray Source: ***Rhodium (Rh) or Gold (Au) Anode***

FIELD OPERATION GUIDANCE

ACTION LEVEL SETTING:

1.0 mg/cm^2

OPERATING PARAMETERS:

Timed mode: fixed 10-second reading.

Quick mode: variable-time reading (approximately 2-6 seconds).

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm^2 (inclusive) on NIST SRM 2579 (1.02 mg/cm^2)/NIST SRM 2573, or equivalent

SUBSTRATE CORRECTION:

Not applicable

INCONCLUSIVE RANGE OR THRESHOLD:

Au Anode (quick) **READING DESCRIPTION**	**SUBSTRATE**	**THRESHOLD (mg/cm^2)**
Results not corrected for substrate bias on any substrate	Brick Concrete Drywall Metal Plaster Wood	1.0 1.0 1.0 1.0 1.0 1.0
Rh Anode (Timed or Quick), Au Anode (Timed) **READING DESCRIPTION**	**SUBSTRATE**	**THRESHOLD (mg/cm^2)**
Results not corrected for substrate bias on any substrate	Brick Concrete Drywall Metal Plaster Wood	0.9 0.9 0.9 0.9 0.9 0.9

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*, 2012 Edition ("HUD Guidelines"). Performance parameters shown on this sheet are calculated using test results on building components in the HUD archive. Testing was conducted on 146 test samples in February 2022, with two separate instruments of each Anode type, operated in both Timed and Quick modes.

OPERATING PARAMETERS

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

XRF CALIBRATION CHECK:

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm^2 in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm^2 film; for NIST SRM 2579a, use film 2573 (1.04 mg/cm^2).

If the average (rounded to 1 decimal place) of three readings is outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instrument into control before XRF testing proceeds.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing.

Conduct XRF re-testing at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below. Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. In single-family and multi-family housing, a result is defined as a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and the retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF readings.

Compute the average of all ten re-test XRF readings.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this

procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

The reading time in Archive tests was 10 seconds in Timed mode and from 2-6 seconds in Quick mode, for both the Rh Anode and Au Anode.

CLASSIFICATION OF RESULTS:

XRF results for the Au Anode in Quick mode are classified as **positive** if they are **greater than or equal** to 1.0 mg/cm^2 and ***negative*** if they are ***less than*** *to* 1.0 mg/cm^2. XRF results for the Au Anode in Timed mode and for the Rh Anode in Timed or Quick mode are classified as **positive** if they are **greater than or equal** to 0.9 mg/cm^2 and ***negative*** if they are ***less than*** *to* 0.9 mg/cm^2

DOCUMENTATION:

A report titled *Methodology for XRF Performance Characteristic Sheets* (EPA 747-R-95-008) provides an explanation of the statistical methodology used to develop Performance Characteristic Sheets at the Federal standard (Action Level) of 1.0 mg/cm^2 and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. The report may be downloaded at http://www2.epa.gov/lead/methodology-xrf-performance-characteristic-sheets-epa-747-r-95-008-september-1997.

Appendix III

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/10/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
1					Calibration	1.0
2					Calibration	1.0
3					Calibration	1.0
4	Public Parking	Lower Level (East)	Concrete	Blue	Handicapped Ramp, Left	0.1
5	Public Parking	Lower Level (East)	Concrete	Blue	Curb	0.2
6	Public Parking	Lower Level (East)	Concrete	White	Curb	0.1
7	Public Parking	Lower Level (East)	Metal	Green	Handrail	0.1
8	Public Parking	Lower Level (East)	Asphalt	Blue	Floor Patch	0.2
9	**Public Parking**	**Lower Level (East)**	**Asphalt**	**Yellow**	**Floor Line**	**4.6**
10	**Public Parking**	**Lower Level (East)**	**Concrete**	**Yellow**	**Wheel Stop**	**4.1**
11	Public Parking	Lower Level (East)	Metal	Gray	Light Post, Right	0.1
12	Public Parking	Lower Level (East)	Concrete	White	Curb	0.2
13	Public Parking	Lower Level (East)	Concrete	Blue	Curb	0.1
14	Public Parking	Lower Level (East)	Concrete	Blue	Handicapped Ramp, Right	0.1
15	Public Parking	Lower Level (East)	Metal	Green	Handrail	0.1
16	Public Parking	Lower Level (East)	Concrete	Blue	Ramp Wall	0.1

Approved By: Ady Padan Ph.D. **Date: 10/10/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/10/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
17	Public Parking	Lower Level (East)	Concrete	Gray	Ramp Wall	0.2
18	Public Parking	Lower Level (East)	Metal	Green	Handrail	0.1
19	**Public Parking**	**Upper Level**	**Concrete**	**Yellow**	**Left Curb**	**2.1**
20	Public Parking	Upper Level	Concrete	Blue	Left Curb	0.1
21	Public Parking	Upper Level	Concrete	Blue	Handicapped Ramp	0.1
22	Public Parking	Upper Level	Concrete	Gray	Light Post Base	0.1
23	Public Parking	Upper Level	Metal	Gray	Light Post	0.2
24	Public Parking	Upper Level	Metal	Green	Handrail	0.1
25	Public Parking	Upper Level	Asphalt	Blue	Floor Patch	0.2
26	Public Parking	Upper Level	Asphalt	Blue	Floor Line	0.1
27	**Public Parking**	**Upper Level**	**Asphalt**	**Blue/Yellow**	**Floor Line**	**4.1**
28	Public Parking	Upper Level	Concrete	Blue	Wheel Stop (2)	0.1
29	**Public Parking**	**Upper Level**	**Concrete**	**Yellow**	**Wheel Stop**	**4.3**
30	**Public Parking**	**Upper Level**	**Asphalt**	**Yellow**	**Floor Line**	**4.1**
31	Public Parking	Upper Level	Concrete	White	Curb	0.1
32	Public Parking	Upper Level	Metal	Green	Handrail	0.2

Approved By: Ady Padan Ph.D. **Date: 10/10/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/10/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
33	Public Parking	Upper Level	Metal	Gray	Light Post	0.1
34	Public Parking	Upper Level	Concrete	Gray	Light Post Base	0.3
35	Public Parking	Upper Level	Concrete	White	Right Curb	0.1
36	Public Parking	Upper Level	Metal	Green	Handrail	0.2
37	Public Parking	Upper Level	Concrete	Gray	Light Post Base	0.1
38	Public Parking	Upper Level	Metal	Gray	Light Post	0.2
39	Public Parking	Upper Level	Concrete	Blue	Curb	0.1
40	Public Parking	Upper Level	Concrete	Blue	Handicapped Ramp	0.1
41	Public Parking	Upper Level	Concrete	Gray	Column	0.1
42	Public Parking	Upper Level	Concrete	Gray	Column Trim	0.2
43	Public Parking	Upper Level	Concrete	Gray	Column Overhanging	0.1
44	**Sidewalks**	**Hoyo Frío Street**	**Concrete**	**Yellow**	**Left Curb**	**1.8**
45	**Sidewalks**	**Hoyo Frío Street**	**Concrete**	**Yellow**	**Right Curb**	**1.8**
46	Sidewalks	Hoyo Frío Street	Concrete	White	Left Curb	0.1
47	Sidewalks	Hoyo Frío Street	Concrete	White	Right Curb	0.1
48	Sidewalks	Hoyo Frío St., front of Basketball Court, PR-141 Km. 0.5	Concrete	Blue	Right Curb	0.2

Approved By: Ady Padan Ph.D. **Date: 10/10/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/10/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
49	Sidewalks	Hoyo Frío St., front of Basketball Court, PR-141 Km. 0.5	Concrete	White	Left Curb	0.1
50	Sidewalks	Hoyo Frío St., front of Basketball Court, PR-141 Km. 0.5	Concrete	White	Left Curb	0.2
51	Sidewalks	Hoyo Frío St., front of Basketball Court, PR-141 Km. 0.5	Concrete	Yellow	Left Ramp	0.1
52	**Sidewalks**	**Hoyo Frío St., front of Basketball Court, PR-141 Km. 0.5**	**Concrete**	**Yellow**	**Right Curb**	**1.9**
53	Sidewalks	PR-141, Km. 0.5	Concrete	Yellow	Right Curb	0.1
54	Sidewalks	PR-141, Km. 0.5	Concrete	White	Left Curb	0.2
55	Sidewalks	PR-141, Km. 0.4	Concrete	Yellow	Right Curb	0.1
56	Sidewalks	PR-141, Km. 0.4	Concrete	Yellow	Right Curb	0.2
57	Sidewalks	PR-141, Km. 0.4	Metal	Yellow	Baseboard	0.1
58	Sidewalks	PR-141, Km. 0.4	Concrete	Yellow	Ramp Curb	0.5
59	Sidewalks	PR-141, Km. 0.4	Concrete	White	Left Curb	0.1
60	Sidewalks	PR-141, Km. 0.4	Concrete	Yellow	Right Curb	0.1
61	Sidewalks	PR-141, Km. 0.4	Concrete	Brown	Light Post, Right	0.2
62	Sidewalks	PR-141, Km. 0.4	Concrete	White	Left Curb	0.2
63	Sidewalks	PR-141, Km. 0.4	Concrete	Yellow	Left Ramp Curb	0.1
64	Sidewalks	PR-141, Km. 0.4	Wood	Brown	Light Post, Left	0.2

Approved By: Ady Padan Ph.D. **Date: 10/10/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/10/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
65	Sidewalks	PR-141, Km. 0.4	Concrete	Brown	Light Post, Right	0.3
66	Sidewalks	PR-141, Km. 0.4 to 0.3	Concrete	White	Left Curb	0.1
67	Sidewalks	PR-141, Km. 0.4 to 0.3	Concrete	White	Left Curb	0.2
68	Sidewalks	PR-141, Km. 0.4 to 0.3	Concrete	White	Left Curb	0.1
69	Sidewalks	PR-141, Km. 0.4 to 0.3	Concrete	White	Left Curb	0.3
70	Sidewalks	PR-141, Km. 0.4 to 0.3	Concrete	Yellow	Right Curb	0.1
71	Sidewalks	PR-141, Km. 0.4 to 0.3	Concrete	Yellow	Right Curb	0.2
72	Sidewalks	PR-141, Km. 0.4 to 0.3	Concrete	Yellow	Right Curb	0.1
73	Sidewalks	PR-141, Km. 0.4 to 0.3	Concrete	Yellow	Right Curb	0.2
74	Sidewalks	PR-141, Km. 0.4 to 0.3	Concrete	Yellow	Right Curb Ramp	0.1
75	Sidewalks	PR-141, Km. 0.4 to 0.3	Wood	Brown	Light Post, Left	0.2
76	**Sidewalks**	**PR-141, Km. 0.4 to 0.3**	**Metal**	**Yellow**	**Water Hydrant**	**2.9**
77	Sidewalks	PR-141, Km. 0.3	Concrete	White	Left Curb	0.3
78	Sidewalks	PR-141, Km. 0.3	Concrete	White	Left Curb	0.1
79	Sidewalks	PR-141, Km. 0.3	Concrete	Yellow	Left Curb Ramp	0.1
80	Sidewalks	PR-141, Km. 0.3	Wood	Blue	Light Post, Left	0.3

Approved By: Ady Padan Ph.D. **Date: 10/10/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/10/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
81	Sidewalks	PR-141, Km. 0.3	Concrete	Yellow	Right Curb	0.1
82	Sidewalks	PR-141, Km. 0.3	Concrete	Yellow	Right Curb	0.2
83	Sidewalks	PR-141, Km. 0.3	Concrete	Brown	Light Post, Right	0.1
84	Sidewalks	PR-141, Km. 0.3	Concrete	Yellow	Left Curb	0.2
85	Sidewalks	PR-141, Km. 0.3	Concrete	Yellow	Left Curb	0.1
86	Sidewalks	PR-141, Km. 0.3	Concrete	Yellow	Left Curb	0.2
87	Sidewalks	PR-141, Km. 0.3	Concrete	Yellow	Right Curb	0.1
88	Sidewalks	PR-141, Km. 0.3	Concrete	Yellow	Right Curb	0.2
89	Sidewalks	PR-141, Km. 0.3	Concrete	Yellow	Right Curb	0.3
90	Sidewalks	PR-141, Km. 0.3 to 0.2	Concrete	Yellow	Left Curb	0.1
91	Sidewalks	PR-141, Km. 0.3 to 0.2	Concrete	Yellow	Left Curb	0.2
92	**Sidewalks**	**PR-141, Km. 0.3 to 0.2**	**Concrete**	**Yellow**	**Right Curb**	**1.7**
93	Sidewalks	PR-141, Km. 0.3 to 0.2	Concrete	Yellow	Right Curb	0.7
94	Sidewalks	PR-141, Km. 0.3 to 0.2	Concrete	Brown	Light Post, Right	0.1
95	Sidewalks	PR-141, Km. 0.3 to 0.2	Wood	Brown	Light Post, Left	0.1
96	**Sidewalks**	**PR-141, Km. 0.3 to 0.2**	**Concrete**	**White**	**Left Curb Ramp**	**1.8**

Approved By: Ady Padan Ph.D. **Date: 10/10/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/10/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
97	**Sidewalks**	**PR-141, Km. 0.3 to 0.2**	**Concrete**	**White**	**Left Curb**	**2.0**
98	Sidewalks	PR-141, Km. 0.3 to 0.2	Concrete	White	Left Curb	0.3
99	Sidewalks	PR-141, Km. 0.3 to 0.2	Asphalt	Yellow	Ramp, Patch	0.1
100	Sidewalks	PR-141, Km. 0.3 to 0.2	Asphalt	White	Arrow Inside Ramp, Patch	0.3
101	Sidewalks	PR-141, Km. 0.2	Concrete	Yellow	Left Curb	0.1
102	Sidewalks	PR-141, Km. 0.2	Concrete	Yellow	Left Curb	0.3
103	Sidewalks	PR-141, Km. 0.2	Concrete	Yellow	Right Curb	0.3
104	Sidewalks	PR-141, Km. 0.2	Concrete	Yellow	Right Curb	0.1
105	**Sidewalks**	**PR-141, Km. 0.2**	**Concrete**	**Yellow**	**Floor Lines Sidewalk, Right**	**2.3**
106	**Sidewalks**	**PR-141, Km. 0.2**	**Wood**	**Brown**	**Light Post, Right**	**1.7**
107	**Sidewalks**	**PR-141, Km. 0.2**	**Concrete**	**Brown**	**Light Post, Right**	**2.3**
108	**Sidewalks**	**PR-141, Km. 0.2**	**Concrete**	**Yellow**	**Right Curb**	**2.3**
109	Sidewalks	PR-141, Km. 0.2	Concrete	White	Left Curb	0.1
110	**Sidewalks**	**PR-141, Km. 0.2**	**Wood**	**Gray**	**Light Post, Left**	**4.6**
111	**Sidewalks**	**PR-141, Km. 0.2**	**Wood**	**Red**	**Light Post, Left Lower**	**1.8**
112	Sidewalks	PR-141, Km. 0.2	Wood	White	Light Post, Left Upper	0.1

Approved By: Ady Padan Ph.D. **Date: 10/10/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/10/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
113	Sidewalks	PR-141, Km. 0.2	Wood	Green	Light Post, Left Upper	0.1
114	Sidewalks	PR-141, Km. 0.2 to 0.1	Concrete	White	Left Curb	0.1
115	Sidewalks	PR-141, Km. 0.2 to 0.1	Concrete	White	Left Curb	0.2
116	Sidewalks	PR-141, Km. 0.2 to 0.1	Concrete	White	Left Curb	0.1
117	Sidewalks	PR-141, Km. 0.2 to 0.1	Concrete	Yellow	Right Curb	0.1
118	Sidewalks	PR-141, Km. 0.2 to 0.1	Concrete	Yellow	Right Curb	0.1
119	Sidewalks	PR-141, Km. 0.2 to 0.1	Concrete	Yellow	Right Curb	0.3
120	Sidewalks	PR-141, Km. 0.2 to 0.1	Concrete	Brown	Light Post, Right	0.1
121	Sidewalks	PR-141, Km. 0.2 to 0.1	Concrete	White	Left Curb	0.2
122	Sidewalks	PR-141, Km. 0.2 to 0.1	Concrete	Yellow	Left Curb	0.1
123	**Sidewalks**	**PR-141, Km. 0.1**	**Wood**	**Brown**	**Light Post, Left**	**1.3**
124	**Sidewalks**	**PR-141, Km. 0.1**	**Wood**	**Brown**	**Light Post, Left**	**3.6**
125	Sidewalks	PR-141, Km. 0.1	Concrete	Yellow	Right Curb	0.1
126	**Sidewalks**	**PR-141, Km. 0.1**	**Concrete**	**White**	**Left Curb**	**3.1**
127	Sidewalks	PR-141, Km. 0.1	Concrete	Yellow	Right Curb	0.1
128	**Sidewalks**	**PR-141, Km. 0.1**	**Concrete**	**Yellow**	**Left Curb**	**2.1**

Approved By: Ady Padan Ph.D. **Date: 10/10/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/10/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
129	**Sidewalks**	**PR-141, Km. 0.1**	**Metal**	**Yellow**	**Water Hydrant, New Beauty**	**6.3**
130	**Sidewalks**	**PR-141, Km. 0.1**	**Wood**	**Brown**	**Light Post, Left (2)**	**3.2**
131	**Sidewalks**	**PR-141, Km. 0.1 to 0.0**	**Concrete**	**White**	**Left Curb**	**2.6**
132	**Sidewalks**	**PR-141, Km. 0.1 to 0.0**	**Concrete**	**Gray**	**Light Post, Right**	**1.7**
133	**Sidewalks**	**PR-141, Km. 0.1 to 0.0**	**Concrete**	**Gray**	**Light Post, Right**	**1.8**
134	Sidewalks	PR-141, Km. 0.1 to 0.0	Concrete	Gray	Left Curb	0.1
135	Sidewalks	PR-141, Km. 0.1 to 0.0	Concrete	Blue	Right Curb	0.1
136	**Sidewalks**	**PR-141, Km. 0.1 to 0.0**	**Concrete**	**White**	**Left Curb**	**2.3**
137	**Sidewalks**	**PR-141, Km. 0.1 to 0.0**	**Concrete**	**White**	**Left Curb**	**2.3**
138	**Sidewalks**	**PR-141, Km. 0.1 to 0.0**	**Concrete**	**White**	**Left Curb**	**2.4**
139	Sidewalks	PR-141, Km. 0.1 to 0.0	Concrete	Blue	Handicapped Ramp	0.1
140	**Sidewalks**	**PR-141, Km. 0.1 to 0.0**	**Concrete**	**Yellow**	**Sidewalk Line**	**4.1**
141	Sidewalks	PR-141, Km. 0.1 to 0.0	Concrete	Yellow	Right Curb	0.1
142	Sidewalks	PR-141, Km. 0.1 to 0.0	Concrete	Yellow	Left Curb	0.1
143	**Sidewalks**	**PR-141, Km. 0.1 to 0.0**	**Concrete**	**Yellow**	**Left Curb**	**4.6**
144	**Sidewalks**	**PR-141, Km. 0.1 to 0.0**	**Concrete**	**Yellow**	**Left Curb**	**2.0**

Approved By: Ady Padan Ph.D. **Date: 10/10/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/10/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
145	**Sidewalks**	**PR-141, Km. 0.1 to 0.0**	**Concrete**	**Yellow**	**Right Curb**	**3.9**
146	Sidewalks	PR-141, Km. 0.1 to 0.0	Concrete	Blue	Left Curb	0.1
147	Sidewalks	PR-141, Km. 0.1 to 0.0	Concrete	Yellow	Right Curb	0.2
148	Sidewalks	PR-141, Km. 0.1 to 0.0	Metal	Yellow	Water Hydrant, Left	0.1
149	Sidewalks	PR-141, Km. 0.1 to 0.0	Concrete	Yellow	Left Curb	0.3
150	Sidewalks	PR-141, Km. 0.1 to 0.0	Concrete	Yellow	Right Curb	0.1
151	Sidewalks	PR-141, Km. 0.1 to 0.0	Metal	Yellow	Water Hydrant, Right	0.2
152	Sidewalks	PR-141, Km. 0.1 to 0.0	Concrete	Yellow	Right Curb	0.1
153	Sidewalks	PR-141, Km. 0.1 to 0.0	Concrete	White	Left Curb	0.1
154	Sidewalks	PR-144	Concrete	Yellow	Left Curb	0.2
155	Sidewalks	PR-144	Concrete	White	Left Curb	0.1
156	Sidewalks	PR-144	Concrete	White	Left Curb	0.2
157	Sidewalks	PR-144	Concrete	Yellow	Right Curb Ramp	0.1
158	Sidewalks	PR-144	Concrete	Yellow	Right Curb Ramp	0.2
159	Sidewalks	PR-144	Concrete	Yellow	Left Curb	0.1
160	**Sidewalks**	**PR-144**	**Metal**	**Yellow**	**Water Hydrant, Left**	**2.4**

Approved By: Ady Padan Ph.D. **Date: 10/10/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/10/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
161	Sidewalks	PR-144	Concrete	Yellow	Left Curb Ramp	0.1
162	Sidewalks	PR-144	Concrete	White	Left Curb	0.6
163	Sidewalks	PR-144 (near Coop)	Concrete	White/Yellow	Left Curb	0.3
164	**Sidewalks**	**PR-144**	**Concrete**	**Yellow**	**Right Curb**	**4.3**
165	**Sidewalks**	**PR-144**	**Concrete**	**Yellow**	**Left Curb**	**4.3**
166	**Sidewalks**	**PR-144**	**Concrete**	**Yellow**	**Right Curb**	**2.9**
167	Sidewalks	PR-144	Concrete	White	Left Curb	0.1
168	**Sidewalks**	**PR-144**	**Concrete**	**Yellow**	**Left Curb**	**3.1**
169	Sidewalks	PR-144 (front of Total Gas)	Concrete	Yellow	Left Curb	0.1
170	**Sidewalks**	**PR-144**	**Concrete**	**Yellow**	**Bridge Curb, Right**	**4.8**
171	Sidewalks	PR-144	Concrete	White	Barrier Bridge, Right	0.1
172	**Sidewalks**	**PR-144**	**Concrete**	**Yellow**	**Left Curb**	**3.1**
173	Sidewalks	PR-144	Metal	Yellow	Bollard, Left	0.2
174	**Sidewalks**	**PR-144**	**Concrete**	**White**	**Right Curb**	**2.6**
175					Calibration	1.0
176					Calibration	1.0

Approved By: Ady Padan Ph.D. **Date: 10/10/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/10/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
177					Calibration	1.0
RE-TESTING						
178	Sidewalks	PR-144	Concrete	Yellow	Left Curb	**4.0**
179	Sidewalks	PR-144	Concrete	Yellow	Right Curb	**2.6**
180	Sidewalks	PR-144	Concrete	White	Left Curb	0.1
181	Sidewalks	PR-144	Concrete	Yellow	Left Curb	**3.0**
182	Sidewalks	PR-144	Concrete	Yellow	Left Curb	0.2
183	Sidewalks	PR-144	Concrete	Yellow	Bridge Curb, Right	**4.0**
184	Sidewalks	PR-144	Concrete	White	Barrier Bridge, Right	0.1
185	Sidewalks	PR-144	Concrete	Yellow	Left Curb	**3.4**
186	Sidewalks	PR-144	Metal	Yellow	Bollard, Left	0.1
187	Sidewalks	PR-144	Concrete	White	Right Curb	**2.5**
188					Calibration	1.0
189					Calibration	1.1
190					Calibration	1.0

Approved By: Ady Padan Ph.D. **Date: 10/10/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/14/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
1					Calibration	1.1
2					Calibration	1.0
3					Calibration	1.1
4	**Sidewalks**	**PR-532, Km. 0.0 to 0.6**	**Concrete**	**Yellow**	**Left Curb**	**3.1**
5	**Sidewalks**	**PR-532, Km. 0.0 to 0.6**	**Concrete**	**Yellow**	**Left Curb**	**2.6**
6	Sidewalks	PR-532, Km. 0.0 to 0.6	Concrete	Yellow	Left Curb	0.1
7	**Sidewalks**	**PR-532, Km. 0.0 to 0.6**	**Concrete**	**Yellow**	**Right Curb**	**4.1**
8	**Sidewalks**	**PR-532, Km. 0.0 to 0.6**	**Concrete**	**Yellow**	**Right Curb**	**3.3**
9	**Sidewalks**	**PR-532, Km. 0.0 to 0.6**	**Concrete**	**Yellow**	**Right Curb**	**2.6**
10	Sidewalks	PR-532, Km. 0.0 to 0.6	Concrete	Yellow	Right Curb	0.1
11	Sidewalks	PR-532, Km. 0.0 to 0.6	Asphalt	White	Floor Line, Left	0.1
12	Sidewalks	PR-532, Km. 0.0 to 0.6	Asphalt	White	Floor Line, Left	0.3
13	Sidewalks	PR-532, Km. 0.0 to 0.6	Asphalt	White	Floor Line, Left	0.2
14	Sidewalks	PR-532, Km. 0.0 to 0.6	Asphalt	White	Floor Line, Right	0.1
15	Sidewalks	PR-532, Km. 0.0 to 0.6	Asphalt	White	Floor Line, Right	0.0
16	Sidewalks	PR-532, Km. 0.0 to 0.6	Asphalt	White	Manhole, Right	0.1

Approved By: Ady Padan Ph.D. **Date: 10/14/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/14/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
17	**Sidewalks**	**PR-532, Km. 0.0 to 0.6**	**Concrete**	**Yellow**	**Manhole, Right**	**2.3**
18	**Sidewalks**	**Catalino Figueroa Street**	**Concrete**	**Yellow**	**Water Register**	**4.0**
19	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Left Curb	0.1
20	**Sidewalks**	**Catalino Figueroa Street**	**Concrete**	**Yellow**	**Left Curb**	**2.3**
21	**Sidewalks**	**Catalino Figueroa Street**	**Concrete**	**Yellow**	**Left Curb**	**1.7**
22	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Left Curb	0.3
23	**Sidewalks**	**Catalino Figueroa Street**	**Metal**	**Yellow**	**Water Hydrant**	**7.6**
24	**Sidewalks**	**Catalino Figueroa Street**	**Concrete**	**Yellow**	**Left Curb**	**4.6**
25	**Sidewalks**	**Catalino Figueroa Street**	**Concrete**	**Yellow**	**Bridge Curb, Left**	**3.9**
26	**Sidewalks**	**Catalino Figueroa Street**	**Concrete**	**White**	**Bridge Barrier, Left**	**4.0**
27	**Sidewalks**	**Catalino Figueroa Street**	**Concrete**	**Yellow**	**Left Curb**	**4.2**
28	**Sidewalks**	**Catalino Figueroa Street**	**Concrete**	**Yellow**	**Right Curb**	**5.0**
29	**Sidewalks**	**Catalino Figueroa Street**	**Concrete**	**White**	**Bridge Barrier, Right**	**3.3**
30	**Sidewalks**	**Catalino Figueroa Street**	**Concrete**	**White**	**Bridge Barrier, Right**	**4.6**
31	**Sidewalks**	**Catalino Figueroa Street**	**Concrete**	**Yellow**	**Bridge Curb, Right**	**3.9**
32	**Sidewalks**	**Catalino Figueroa Street**	**Concrete**	**White**	**Right Curb**	**4.0**

Approved By: Ady Padan Ph.D. **Date: 10/14/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/14/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
33	**Sidewalks**	**Catalino Figueroa Street**	**Concrete**	**Yellow**	**Right Curb**	**3.8**
34	Sidewalks	Catalino Figueroa Street	Concrete	Blue	Handicapped Ramp	0.3
35	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Left Curb	0.1
36	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Left Curb	0.3
37	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Left Curb	0.1
38	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Left Curb	0.2
39	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Right Curb	0.1
40	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Right Curb	0.1
41	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Right Curb	0.2
42	Sidewalks	Catalino Figueroa Street	Concrete	White	Right Curb	0.3
43	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Ramp, Right	0.1
44	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Left Curb	0.2
45	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Left Curb	0.1
46	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Left Curb	0.2
47	**Sidewalks**	**Catalino Figueroa Street**	**Metal**	**White/Red**	**Water Hydrant, Left**	**4.9**
48	Sidewalks	Catalino Figueroa Street	Metal	Gray	Light Post	0.1

Approved By: Ady Padan Ph.D. **Date: 10/14/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/14/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
49	Sidewalks	Catalino Figueroa Street	Concrete	Gray	Light Post Base	0.1
50	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Right Curb Corner	0.2
51	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Right Curb	0.3
52	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Right Curb	0.1
53	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Right Curb	0.0
54	Sidewalks	Catalino Figueroa Street	Concrete	White	Right Curb	0.1
55	Sidewalks	Catalino Figueroa Street	Concrete	White	Right Curb	0.2
56	Sidewalks	Catalino Figueroa Street	Concrete	Blue	Right Curb	0.3
57	Sidewalks	Catalino Figueroa Street	Concrete	Blue	Right Curb	0.4
58	Sidewalks	Catalino Figueroa Street	Concrete	Blue	Right Curb	0.1
59	Sidewalks	Catalino Figueroa Street	Concrete	Blue	Right Curb	0.2
60	Sidewalks	Catalino Figueroa Street	Concrete	Blue	Right Curb	0.3
61	Sidewalks	Catalino Figueroa Street	Concrete	Blue	Right Curb	0.1
62	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Left Curb	0.2
63	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Left Curb	0.1
64	Sidewalks	Catalino Figueroa Street	Concrete	White	Left Curb	0.2

Approved By: Ady Padan Ph.D. **Date: 10/14/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/14/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
65	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Left Curb	0.1
66	Sidewalks	Catalino Figueroa Street	Metal	Yellow	Water Hydrant, Left	0.1
67	Sidewalks	Catalino Figueroa Street	Concrete	Blue	Left Curb	0.1
68	Sidewalks	Catalino Figueroa Street	Concrete	Blue	Right Curb	0.2
69	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Right Curb	0.1
70	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Right Curb	0.3
71	Sidewalks	Catalino Figueroa Street	Concrete	White	Right Curb	0.1
72	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Right Curb	0.3
73	Sidewalks	Catalino Figueroa Street	Concrete	White	Right Curb	0.1
74	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Ramp, Right	0.2
75	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Left Curb	0.1
76	Sidewalks	Catalino Figueroa Street	Concrete	Yellow	Left Curb	0.4
77	Sidewalks	Catalino Figueroa Street	Concrete	White	Left Curb	0.1
78	Sidewalks	Catalino Figueroa Street	Concrete	Cream	Left Curb	0.2
79	Sidewalks	Catalino Figueroa Street	Concrete	Cream	Left Curb	0.1
80	Sidewalks	Catalino Figueroa Street	Concrete	White	Left Curb	0.2

Approved By: Ady Padan Ph.D. **Date: 10/14/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/14/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
81					Calibration	1.1
82					Calibration	1.0
83					Calibration	1.0
84	Sidewalks	Massini Street	Concrete	Yellow	Left Curb	0.1
85	Sidewalks	Massini Street	Concrete	Blue	Left Curb	0.2
86	Sidewalks	Massini Street	Concrete	White	Left Curb	0.3
87	Sidewalks	Massini Street	Concrete	White	Left Curb	0.1
88	Sidewalks	Massini Street	Concrete	Yellow	Left Curb	0.2
89	Sidewalks	Massini Street	Concrete	Blue	Left Curb	0.1
90	Sidewalks	Massini Street	Concrete	Blue	Handicapped Ramp	0.2
91	**Sidewalks**	**Massini Street**	**Concrete**	**Yellow**	**Left Curb**	**1.3**
92	Sidewalks	Torrado Street	Metal	Gray	Light Post, Left	0.1
93	Sidewalks	Torrado Street	Concrete	Gray/Yellow	Light Post Base, Left	0.3
94	Sidewalks	Torrado Street	Metal	Gray	Light Post, Left	0.1
95	Sidewalks	Torrado Street	Concrete	Gray	Light Post Base, Left	0.2
96	Sidewalks	Torrado Street	Metal	Gray	Light Post, Right	0.3

Approved By: Ady Padan Ph.D. **Date: 10/14/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/14/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
97	Sidewalks	Torrado Street	Concrete	Gray/Yellow	Light Post Base, Right	0.1
98	Sidewalks	Torrado Street	Metal	Gray	Light Post, Right	0.2
99	Sidewalks	Torrado Street	Concrete	Gray	Light Post Base, Right	0.3
100	Sidewalks	Torrado Street	Metal	Gray	Light Post, Left	0.1
101	Sidewalks	Torrado Street	Concrete	Gray	Light Post Base, Left	0.1
102	Sidewalks	Torrado Street	Metal	Gray	Light Post, Right	0.1
103	Sidewalks	Torrado Street	Concrete	Gray	Light Post Base, Right	0.2
104	Sidewalks	Torrado Street	Metal	Yellow	Water Hydrant, Right	0.3
RE-TESTING						
105	Sidewalks	Torrado Street	Metal	Yellow	Water Hydrant, Right	0.4
106	Sidewalks	Torrado Street	Metal	Gray	Light Post, Right	0.1
107	Sidewalks	Torrado Street	Concrete	Gray/Yellow	Light Post Base, Right	0.3
108	Sidewalks	Torrado Street	Metal	Gray	Light Post, Right	0.1
109	Sidewalks	Torrado Street	Concrete	Gray	Light Post Base, Right	0.1
110	Sidewalks	Torrado Street	Metal	Gray	Light Post, Left	0.1
111	Sidewalks	Torrado Street	Concrete	Gray	Light Post Base, Left	0.2

Approved By: Ady Padan Ph.D. **Date: 10/14/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/14/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
112	Sidewalks	Torrado Street	Metal	Gray	Light Post, Right	0.3
113	Sidewalks	Torrado Street	Concrete	Gray	Light Post Base, Right	0.1
114	Sidewalks	Torrado Street	Metal	Yellow	Light Post, Right	0.1
115					Calibration	1.1
116					Calibration	1.0
117					Calibration	1.1

Approved By: Ady Padan Ph.D. **Date: 10/14/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/15/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
1					Calibration	1.0
2					Calibration	1.1
3					Calibration	1.1
4	Sidewalks	Mattei Street	Concrete	Yellow	Left Curb	0.1
5	Sidewalks	Mattei Street	Concrete	Yellow	Left Curb	0.3
6	Sidewalks	Mattei Street	Concrete	Yellow	Left Curb	0.1
7	Sidewalks	Mattei Street	Concrete	Yellow	Left Curb	0.1
8	Sidewalks	Mattei Street	Concrete	Yellow	Right Curb	0.2
9	Sidewalks	Mattei Street	Concrete	Yellow	Right Curb	0.1
10	Sidewalks	Mattei Street	Concrete	Yellow	Right Curb	0.1
11	Sidewalks	Mattei Street	Concrete	Yellow	Right Curb	0.2
12	Sidewalks	Mattei Street	Concrete	Yellow	Right Curb	0.1
13	Sidewalks	Mattei Street	Concrete	Yellow	Ramp, Right	0.1
14	Sidewalks	Mattei Street	Concrete	Yellow	Left Curb	0.1
15	Sidewalks	Mattei Street	Concrete	Yellow	Left Curb	0.2
16	Sidewalks	Mattei Street	Concrete	Yellow	Left Curb	0.1

Approved By: Ady Padan Ph.D. **Date: 10/15/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/15/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
17	Sidewalks	Mattei Street	Concrete	Yellow	Right Curb	0.1
18	Sidewalks	Mattei Street	Concrete	Yellow	Right Curb	0.2
19	Sidewalks	Mattei Street	Concrete	Yellow	Right Curb	0.1
20	Sidewalks	Mattei Street	Concrete	Blue	Handicapped Ramp, Right	0.1
21	Sidewalks	Mattei Street	Concrete	Blue	Handicapped Ramp, Left	0.4
22	Sidewalks	Mattei Street	Concrete	Yellow	Left Curb	0.5
23	Sidewalks	Mattei Street	Concrete	Yellow	Left Curb	0.4
24	Sidewalks	Mattei Street	Concrete	Yellow	Left Curb	0.5
25	Sidewalks	Mattei Street	Concrete	Yellow	Left Curb	0.6
26	Sidewalks	Mattei Street	Concrete	Yellow	Ramp, Left	0.4
27	Sidewalks	Mattei Street	Concrete	Yellow	Left Curb	0.3
28	Sidewalks	Mattei Street	Concrete	Yellow	Left Curb	0.4
29	Sidewalks	Mattei Street	Concrete	Yellow	Ramp, Left	0.4
30	Sidewalks	San Felipe Street	Metal	Yellow	Water Hydrant, Left	0.3
31	Sidewalks	San Felipe Street	Concrete	Yellow	Curb, Left	0.1
32	**Sidewalks**	**San Felipe Street**	**Metal**	**Yellow**	**Guardrail, Left**	**2.3**

Approved By: Ady Padan Ph.D. **Date: 10/15/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/15/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
33	Sidewalks	San Felipe Street	Concrete	Yellow	Column of Guardrail, Left	0.1
34	Sidewalks	San Felipe Street	Concrete	White	Right Curb	0.1
35	**Sidewalks**	**San Felipe Street**	**Concrete**	**Yellow**	**Left Curb**	**2.3**
36	**Sidewalks**	**San Felipe Street**	**Concrete**	**Yellow**	**Ramp, Left**	**3.9**
37	Sidewalks	San Felipe Street	Concrete	Yellow	Right Curb	0.1
38	**Sidewalks**	**San Felipe Street**	**Concrete**	**Yellow**	**Right Curb**	**3.3**
39	**Sidewalks**	**San Felipe Street**	**Concrete**	**Yellow**	**Left Curb**	**2.6**
40	**Sidewalks**	**San Felipe Street**	**Concrete**	**Yellow**	**Water Hydrant, Left**	**4.9**
41	**Sidewalks**	**San Felipe Street**	**Concrete**	**Yellow**	**Right Curb**	**2.4**
42	Sidewalks	San Felipe Street	Concrete	Blue	Handicapped Ramp, Left	0.1
43	Sidewalks	San Felipe Street	Concrete	Blue	Left Curb	0.1
44	Sidewalks	San Felipe Street	Concrete	White	Left Curb	0.1
45	Sidewalks	San Felipe Street	Concrete	Yellow	Left Curb	0.3
46	Sidewalks	San Felipe Street	Concrete	White	Left Curb	0.1
47	Sidewalks	San Felipe Street	Concrete	Yellow	Left Curb	0.1
48	**Sidewalks**	**San Felipe Street**	**Concrete**	**Yellow**	**Right Curb**	**2.9**

Approved By: Ady Padan Ph.D. **Date: 10/15/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/15/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
49	Sidewalks	Nemesio Canales Street	Concrete	Yellow	Left Curb	0.1
50	Sidewalks	Nemesio Canales Street	Concrete	Yellow	Left Curb	0.3
51	Sidewalks	Nemesio Canales Street	Concrete	White	Left Curb	0.1
52	Sidewalks	Nemesio Canales Street	Concrete	Yellow	Right Curb	0.2
53	Sidewalks	Nemesio Canales Street	Concrete	Yellow	Right Curb	0.1
54	Sidewalks	Nemesio Canales Street	Concrete	White	Right Curb	0.2
55	Sidewalks	Nemesio Canales Street	Concrete	Yellow	Right Curb	0.1
56	Sidewalks	Nemesio Canales Street	Metal	Yellow	Water Hydrant, Right	0.2
57	Sidewalks	Nemesio Canales Street	Concrete	Yellow	Sidewalk Patch, Right	0.1
58	Sidewalks	Nemesio Canales Street	Concrete	White	Right Curb	0.2
59	Sidewalks	Nemesio Canales Street	Concrete	Yellow	Right Curb	0.1
60	**Sidewalks**	**Nemesio Canales Street**	**Concrete**	**Yellow**	**Right Curb**	**2.3**
61	Sidewalks	Nemesio Canales Street	Concrete	Yellow	Left Curb	0.1
62	Sidewalks	Nemesio Canales Street	Concrete	Yellow	Left Curb	0.2
63	Sidewalks	Nemesio Canales Street	Concrete	Yellow	Left Curb	0.1
64	Sidewalks	Nemesio Canales Street	Concrete	Yellow	Left Curb	0.2

Approved By: Ady Padan Ph.D. **Date: 10/15/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/15/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
65					Calibration	1.0
66					Calibration	1.0
67					Calibration	1.0
68	Sidewalks	Nemesio Canales Street	Concrete	Yellow	Left Curb	0.1
69	Sidewalks	Nemesio Canales Street	Concrete	Yellow	Left Curb	0.3
70	Sidewalks	Nemesio Canales Street	Concrete	Yellow	Handicapped Ramp, Left	0.1
71	Sidewalks	Nemesio Canales Street	Concrete	Yellow	Right Curb	0.2
72	Sidewalks	Nemesio Canales Street	Concrete	Yellow	Right Curb	0.1
73	Sidewalks	Nemesio Canales Street	Concrete	Yellow	Right Curb	0.2
74	Sidewalks	Nemesio Canales Street	Concrete	Blue	Right Curb	0.1
75	Sidewalks	Nemesio Canales Street	Concrete	Blue	Left Curb	0.4
76	Sidewalks	Nemesio Canales Street	Metal	Yellow	Water Hydrant, Right	0.1
77	Sidewalks	Nemesio Canales Street	Concrete	Blue	Right Curb	0.2
78	Sidewalks	Nemesio Canales Street	Concrete	Blue	Left Curb	0.3
79	Sidewalks	Nemesio Canales Street	Concrete	Blue/Yellow	Left Curb	0.1
80	Sidewalks	Nemesio Canales Street	Concrete	Yellow	Left Curb	0.1

Approved By: Ady Padan Ph.D. **Date: 10/15/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/15/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
81	Sidewalks	Nemesio Canales Street	Concrete	Yellow	Left Curb	0.2
82	Sidewalks	Nemesio Canales Street	Concrete	White	Right Curb	0.1
83	Sidewalks	Nemesio Canales Street	Concrete	Yellow	Ramp, Right	0.2
84	**Sidewalks**	**Nemesio Canales Street**	**Concrete**	**Yellow**	**Right Curb**	**1.3**
85	Bridge	Ventana al Río Pathway	Concrete	Gray	Left Side Wall	0.1
86	Bridge	Ventana al Río Pathway	Concrete	Gray	Left Side Wall	0.2
87	Bridge	Ventana al Río Pathway	Concrete	Gray	Left Side Wall	0.1
88	Bridge	Ventana al Río Pathway	Concrete	Gray	Left Side Wall	0.1
89	Bridge	Ventana al Río Pathway	Metal	Red	Left Handrail	0.1
90	Bridge	Ventana al Río Pathway	Metal	Red	Left Handrail	0.4
91	Bridge	Ventana al Río Pathway	Metal	Red	Left Handrail	0.1
92	Bridge	Ventana al Río Pathway	Metal	Red	Left Handrail	0.2
93	Bridge	Ventana al Río Pathway	Concrete	Gray	Right Side Wall	0.1
94	Bridge	Ventana al Río Pathway	Concrete	Gray	Right Side Wall	0.1
95	Bridge	Ventana al Río Pathway	Concrete	Gray	Right Side Wall	0.1
96	Bridge	Ventana al Río Pathway	Concrete	Gray	Right Side Wall	0.0

Approved By: Ady Padan Ph.D. **Date: 10/15/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/15/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
97	Bridge	Ventana al Río Pathway	Metal	Red	Right Handrail	0.1
98	Bridge	Ventana al Río Pathway	Metal	Red	Right Handrail	0.3
99	Bridge	Ventana al Río Pathway	Metal	Red	Right Handrail	0.1
100	Bridge	Ventana al Río Pathway	Metal	Red	Right Handrail	0.2
101	Bridge	Ventana al Río Pathway	Ceramic	Black	Floor Tile Mosaic	0.1
102	Bridge	Ventana al Río Pathway	Ceramic	Yellow	Floor Tile Mosaic	0.2
103	Bridge	Ventana al Río Pathway	Ceramic	Red	Floor Tile Mosaic	0.1
104	Bridge	Ventana al Río Pathway	Ceramic	Blue	Floor Tile Mosaic	0.2
105	Bridge	Ventana al Río Pathway	Ceramic	White	Floor Tile Mosaic	0.1
106	Bridge	Ventana al Río Pathway	Ceramic	Lt. Blue	Floor Tile Mosaic	0.2
107	Stairs	Staircase, Torrado & San Felipe St.	Concrete	Gray	Wall B	0.1
108	Stairs	Staircase, Torrado & San Felipe St.	Ceramic	Brown	Wall B	0.3
109	Stairs	Staircase, Torrado & San Felipe St.	Concrete	Lt. Brown	Handrail Base, Left	0.1
110	Stairs	Staircase, Torrado & San Felipe St.	Metal	Brown	Handrail	0.1
111	Stairs	Staircase, Torrado & San Felipe St.	Concrete	Lt. Brown	Handrail Base, Right	0.2
112	Stairs	Staircase, Torrado & San Felipe St.	Metal	Brown	Handrail	0.1

Approved By: Ady Padan Ph.D. **Date: 10/15/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/15/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
113	Stairs	Staircase, Torrado & San Felipe St.	Ceramic	Blue	Step Riser Mosaic	0.2
114	Stairs	Staircase, Torrado & San Felipe St.	Ceramic	Brown	Step Riser Mosaic	0.3
115	Stairs	Staircase, Torrado & San Felipe St.	Ceramic	Yellow	Step Riser Mosaic	0.1
116	Stairs	Staircase, Torrado & San Felipe St.	Ceramic	Green	Step Riser Mosaic	0.2
117	Stairs	Staircase, Torrado & San Felipe St.	Ceramic	Yellow	Step Riser Mosaic	0.1
118	Stairs	Staircase, Torrado & San Felipe St.	Ceramic	Red	Step Riser Mosaic	0.2
119	Stairs	Staircase, Torrado & San Felipe St.	Metal	Gray	Light Post	0.3
120	Stairs	Staircase, Torrado & San Felipe St.	Metal	Gray	Light Post	0.1
121	Stairs	Staircase, Torrado & San Felipe St.	Metal	Gray	Light Post	0.2
122	Stairs	Staircase, Torrado & San Felipe St.	Metal	Gray	Light Post	0.1
123	Stairs	Staircase, Torrado & San Felipe St.	Metal	Gray	Light Post	0.1
124	**Sidewalks**	**Guillermo Estevez Street (PR-141)**	**Concrete**	**Yellow**	**Left Curb**	**3.2**
125	**Sidewalks**	**Guillermo Estevez Street (PR-141)**	**Concrete**	**Yellow**	**Left Curb**	**4.1**
126	**Sidewalks**	**Guillermo Estevez Street (PR-141)**	**Concrete**	**Yellow**	**Right Curb**	**4.0**
127	**Sidewalks**	**Guillermo Estevez Street (PR-141)**	**Concrete**	**Yellow**	**Right Curb**	**3.7**
128	Sidewalks	Guillermo Estevez Street (PR-141)	Concrete	Yellow	Right Curb	0.1

Approved By: Ady Padan Ph.D. **Date: 10/15/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/15/2024
Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
129	**Sidewalks**	**Guillermo Estevez Street (PR-141)**	**Metal**	**White/Yellow Red/Black**	**Water Hydrant**	**4.6**
130	**Sidewalks**	**Libertad Street**	**Concrete**	**Yellow**	**Left Curb**	**3.1**
131	**Sidewalks**	**Libertad Street**	**Concrete**	**Yellow**	**Left Curb**	**2.1**
132	Sidewalks	Libertad Street	Concrete	White	Left Curb	0.1
133	**Sidewalks**	**Libertad Street**	**Concrete**	**Yellow**	**Right Curb**	**3.7**
134	**Sidewalks**	**Libertad Street**	**Concrete**	**Yellow**	**Right Curb**	**3.3**
135	Sidewalks	Libertad Street	Concrete	White	Left Curb	0.1
136	**Sidewalks**	**Libertad Street**	**Concrete**	**Yellow**	**Ramp, Left**	**2.3**
137	**Sidewalks**	**Libertad Street**	**Concrete**	**Yellow**	**Left Curb**	**2.0**
138	**Sidewalks**	**Libertad Street**	**Concrete**	**Yellow**	**Right Curb**	**3.0**
139	**Sidewalks**	**Libertad Street**	**Concrete**	**Yellow**	**Ramp, Left**	**2.4**
140	Sidewalks	Libertad Street	Concrete	White	Left Curb	0.1
RE-TESTING						
141	**Sidewalks**	**Libertad Street**	**Concrete**	**Yellow**	**Left Curb**	**2.0**
142	Sidewalks	Libertad Street	Concrete	White	Left Curb	0.1
143	**Sidewalks**	**Libertad Street**	**Concrete**	**Yellow**	**Right Curb**	**3.4**

Approved By: Ady Padan Ph.D. **Date: 10/15/2024**

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

611 Monserrate Street, 2nd Floor, Santurce, Puerto Rico 00907

LEAD BASED PAINT TESTING DATA SHEET

Client Name: **Del Torre Engineering** Date: 10/15/2024

Project Name: Jayuya Urban Center, Sidewalks and Public Parking Inspector: Elme Rivera

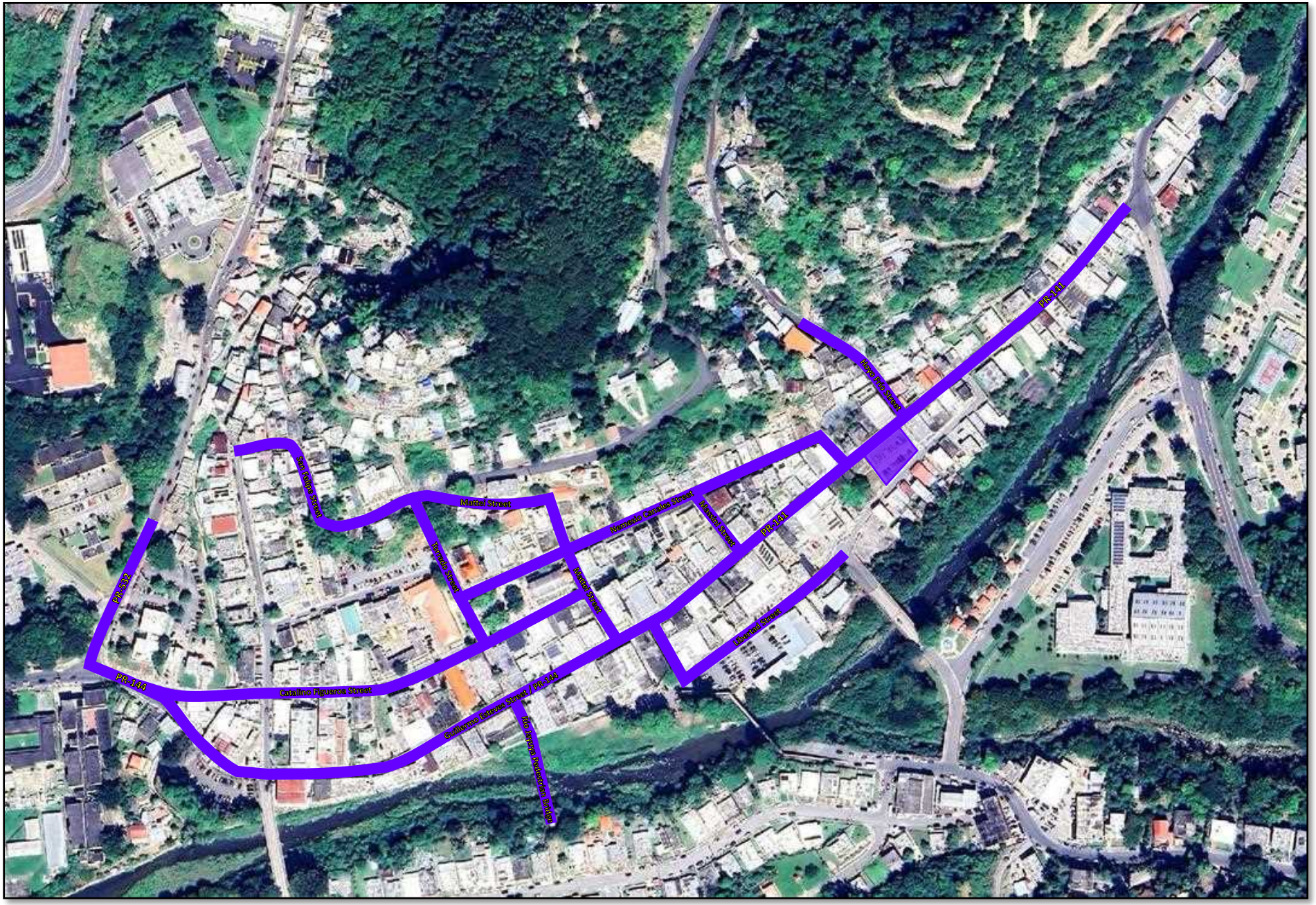
Address: Jayuya, Puerto Rico XRF Serial No.: 03210

Reading #	Building	Room	Substrate	Color	Component & Location	XRF Reading (mg/cm^2)
144	**Sidewalks**	**Libertad Street**	**Concrete**	**Yellow**	**Right Curb**	**3.3**
145	Sidewalks	Libertad Street	Concrete	White	Left Curb	0.1
146	**Sidewalks**	**Libertad Street**	**Concrete**	**Yellow**	**Ramp, Left**	**2.0**
147	**Sidewalks**	**Libertad Street**	**Concrete**	**Yellow**	**Left Curb**	**1.9**
148	**Sidewalks**	**Libertad Street**	**Concrete**	**Yellow**	**Right Curb**	**2.9**
149	**Sidewalks**	**Libertad Street**	**Concrete**	**Yellow**	**Ramp, Left**	**2.3**
150	Sidewalks	Libertad Street	Concrete	White	Left Curb	0.2
151					Calibration	1.1
152					Calibration	1.0
153					Calibration	1.0

Approved By: Ady Padan Ph.D. **Date: 10/15/2024**

Appendix I

Site Location: Jayuya Urban Center
Jayuya, Puerto Rico



SELECTIVE PHOTOS

JAYUYA URBAN CENTER

Jayuya, Puerto Rico

GENERAL VIEW
Public Parking Lot (Lower Level)

GENERAL VIEW
Public Parking Lot (Upper Level)

Public Parking Lot, Upper Level
Blue/White LBP Asphalt Floor Lines

Public Parking Lot, Lower Level
Yellow LBP Concrete Wheel Stops &
Yellow LBP Asphalt Floor Lines

SELECTIVE PHOTOS

JAYUYA URBAN CENTER

Jayuya, Puerto Rico

Hoyo Frío Street
Yellow LBP Left Concrete Curb

Hoyo Frío Street
Yellow LBP Right Concrete Curb

State Road PR-141
Yellow LBP Metal Water Hydrant

State Road PR-141
Yellow/Blue LBP Concrete Curb Ramp

SELECTIVE PHOTOS

JAYUYA URBAN CENTER

Jayuya, Puerto Rico

State Road PR-141
Yellow LBP Concrete Curb

State Road PR-141
Yellow LBP Concrete Curb

State Road PR-141
Yellow LBP Concrete Curb &
Brown LBP Concrete Light Post

State Road PR-141
White LBP Concrete Curb

SELECTIVE PHOTOS

JAYUYA URBAN CENTER

Jayuya, Puerto Rico

State Road PR-141
Yellow LBP Concrete Curb &
Red LBP Wood Light Post

State Road PR-144
Yellow LBP Concrete Curb

State Road PR-144
White LBP Concrete Curb

State Road PR-144
Yellow LBP Concrete Curb

SELECTIVE PHOTOS

JAYUYA URBAN CENTER

Jayuya, Puerto Rico

State Road PR-144
Yellow LBP Metal Water Hydrant

State Road PR-144
LBP Yellow Bridge Curb

State Road PR-144
Yellow LBP Concrete Curb

State Road PR-144
Yellow LBP Concrete Curb

SELECTIVE PHOTOS

JAYUYA URBAN CENTER

Jayuya, Puerto Rico

State Road PR-144
Yellow LBP Concrete Curb

State Road PR-144
Yellow LBP Concrete Curb

State Road PR-532
Yellow LBP Concrete Curb

State Road PR-532
Yellow LBP Concrete Curb &
LBP Yellow Metal Manhole

SELECTIVE PHOTOS

JAYUYA URBAN CENTER

Jayuya, Puerto Rico

Catalino Figueroa Street
Yellow LBP Concrete Water Register

Catalino Figueroa Street
Yellow LBP Concrete Curb

Catalino Figueroa Street
Yellow LBP Concrete Curb

Catalino Figueroa Street
Yellow LBP Concrete Bridge Curbs &
White LBP Concrete Bridge Barriers

SELECTIVE PHOTOS

JAYUYA URBAN CENTER

Jayuya, Puerto Rico

Catalino Figueroa Street
Yellow LBP Concrete Curb

San Felipe Street
Yellow LBP Concrete Curb

San Felipe Street
Yellow LBP Concrete Curb

San Felipe Street
Yellow LBP Metal Water Hydrant

SELECTIVE PHOTOS

JAYUYA URBAN CENTER

Jayuya, Puerto Rico

Libertad Street
Yellow LBP Concrete Curb

Libertad Street
Yellow LBP Concrete Curb

Libertad Street
Yellow LBP Concrete Ramp

AES International Inc.

Appendix □

Distribution of LBP Components
Jayuya Urban Center, Sidewalks and Public Parking
Jayuya, Puerto Rico

LEGEND:

- LBP Metal Water Hydrant
- LBP Concrete Wheel Stops & Floor Lines
- LBP Concrete Curbs & Ramps

Environmental Consulting, Training, and Laboratory Services
(787) 722-0220 / (787) 724-5788

NOT AT SCALE

AES International Inc.

ASBESTOS

TABLE OF CONTENTS

I. SUMMARY

1.0 INTRODUCTION

2.0 GENERAL BACKGROUND

3.0 PROJECT IDENTIFICATION/DESCRIPTION

4.0 METHODS OF BUILDING INSPECTIONS

5.0 SAMPLING METHODS

6.0 INSPECTION RESULTS

7.0 CONCLUSIONS

APPENDIX I - AESI Certifications and Accreditations

APPENDIX II - Hazard Assessment

APPENDIX III - Bulk Samples Results

APPENDIX IV - Schematic Distribution of ACM Sampling Points

APPENDIX V - Site Location & Selective Photos

I. SUMMARY

A survey for Asbestos Containing Materials (ACM) was conducted by Analytical Environmental Services International (AESI), Inc. for Jayuya Urban Center. The survey included the sidewalks of streets Hoyo Frío, Nemesio Canales, Mattei, Massini, Torrado, San Felipe, Catalino Figueroa, Guillermo Esteves, Libertad, states roads PR-141, PR-144, PR-532, Río Jayuya pedestrian bridge (Camino Ventana al Río) and a public parking lot on Libertad Street.

The survey was conducted on 10/15/2024 by Elme Rivera, a DRNA/AHERA Certified Asbestos Inspector.

The scope of the survey included sampling and physical assessments of suspected ACM from the road sections.

Three (3) samples were collected from suspected ACM materials. Asbestos fibers were not detected in any of the samples collected and analyzed.

1.0 INTRODUCTION

A survey for Asbestos Containing Materials (ACM) was conducted by Analytical Environmental Services International (AESI), Inc. for Jayuya Urban Center. The survey included the sidewalks of streets Hoyo Frío, Nemesio Canales, Mattei, Massini, Torrado, San Felipe, Catalino Figueroa, Guillermo Esteves, Libertad, states roads PR-141, PR-144, PR-532, Río Jayuya pedestrian bridge (Camino Ventana al Río) and a public parking lot on Libertad Street.

The inspection was conducted on 10/15/2024 by Elme Rivera, a DRNA/AHERA Certified Asbestos Building Inspector (see Appendix I for credentials).

The inspection was performed based on modified Asbestos Hazards Emergency Response Act (AHERA) protocol, according to the following scenario:

- The road was divided into functional spaces (in Km).
- A visual inspection was performed.

Suspected materials were observed during visual inspection.

2.0 GENERAL BACKGROUND

Asbestos was used in the construction industry from 1900 to 1989. It is still being used today in various products. The health effects of asbestos have been studied since the 1930's. More health studies have been conducted in asbestos than any other natural substance. The mere presence of asbestos containing materials does not necessarily constitute a health hazard. However, when these materials become disturbed from building renovation, maintenance, or other everyday activities that allow fibers to be released into the environment, a potential hazard does exist.

The relationship between exposure level and health risk is very complex. Although this relationship is not completely understood, asbestos exposure has been associated with various types of lung diseases including a debilitating lung disease called ASBESTOSIS; a rare cancer of chest called MESOTHELIOMA; and cancers of the esophagus, stomach, colon and other organs. Asbestosis is not fatal; it is, however, incurable. One who has it cannot breathe easily, and physical activity becomes limited. MESOTHELIOMA is 100% fatal, as there is no cure. These diseases can be directly linked to asbestos because of the mineral particles that can be found in the lining of the lungs and stomach, since the body cannot absorb these minerals. Tests have determined that asbestos can cause cancer, but scientists disagree on the amount of asbestos fibers that must be inhaled to cause cancer. The nose filters out all visible particles. Therefore, only the microscopic fibers are the ones who cause the problems.

Studies indicate different health effects resulting from exposure to chrysotile asbestos versus exposure to the amphibole form of asbestos. The later, which include tremolite, amosite, actinolite, anthophyllite and crocidolite have more significant health impact than chrysotile.

Some scientists cite studies concluding that is the size of the fibers deposited in the lungs that result in cancer. Long, thin fibers, greater than 8 microns in length and less than 0.25 microns in diameter show the highest potential of cancer development.

2.1 National Emission Standards for Hazardous Air Pollutants (NESHAP)

The EPA Asbestos NESHAP standard defines friable ACM as any material containing more than one (1) percent asbestos that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Non-friable ACM is any material that contains more than one (1) percent asbestos and cannot be crumbled, pulverized, or reduced to powder by hand pressure.

The EPA's rules concerning the application, removal, and disposal of ACM, as well as manufacturing, spraying and fabricating of ACM were issued under the asbestos NESHAP regulation (U.S. EPA National Emission Standards for Hazardous Air Pollutants, 40 CFR 61 Subpart M, October 30, 1987). The asbestos NESHAP regulation governs asbestos demolition and renovation projects in all facilities. The NESHAP rule usually requires owners or operators to have all friable ACM removed before the building is demolished and may require its removal before renovation. If friable ACM shall be disturbed, the NESHAP rule may require appropriate work practices, or procedures for emission control. The rule states that any ACM, which may become friable, poses a potential hazard that should be addressed.

A revised NESHAP ruling was released on November 20, 1990, effective February 20, 1991 which includes as the responsibility of the owner, or operator, to "prior to the commencement of the demolition or renovation, thoroughly inspect the affected facility or part of the facility where demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II non-friable ACM." (40 CFR, Part 61, National Emission Standards for hazardous Air Pollutants, Asbestos NESHAP Revision, Final Rule, November 20, 1990).

3.0 PROJECT IDENTIFICATION/DESCRIPTION

The project consists of the rehabilitation of sidewalks of selected streets of Jayuya Urban Center, Jayuya, Puerto Rico.

4.0 METHODS OF ROAD INSPECTION

Each sample collected was classified according to the condition of Asbestos Containing Materials (ACM) in that location and the potential for material disturbance. All the areas were visually inspected for components such as sidewalks, curbs and a parking lot.

5.0 SAMPLING METHODS

Three (3) samples were collected from suspected ACM materials from black rubber joints of the bridge located on Ventana al Rio pathway.

6.0 INSPECTION RESULTS

Suspected materials were observed during visual inspection. Results are presented in Appendix III. Asbestos fibers were not found in any of the samples collected and analyzed.

7.0 CONCLUSIONS

A survey for ACM was conducted for Jayuya Urban Center. The subject of the survey consists of the sidewalks of streets Hoyo Frío, Nemesio Canales, Mattei, Massini, Torrado, San Felipe, Catalino Figueroa, Guillermo Esteves, Libertad, states roads PR-141, PR-144, PR-532, Río Jayuya pedestrian bridge (Camino Ventana al Río) and a public parking lot on Libertad Street.

No ACM were detected.

The ACM survey results do not include materials which are non-accessible, non-visible and may be present behind/inside the walls or hidden inside the structures. These materials must be assessed at the time of the renovation.

Elme Rivera
Asbestos Inspector
DRNA Lic# ASB-1223-0581-SI

Appendix I

National Vo untary
Laboratory Accreditation Program

NV

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

AES International
611 Monserrate
Santurce, PR 00907
Mr. Ady Padan
Phone: 787-722-0220 Fax: 787-724-5788
Email: yota1@bellsouth.net
http://www.aesipr.org

ASBESTOS FIBER ANALYSIS **NVLAP LAB CODE 200051-0**

Bulk Asbestos Analysis

Code	***Description***
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

United States Department of Com erce
at ona nst tute of Standards and Technology

®

NVLAP LAB CODE: 200051-0

A S nter atio a
Santurce, PR

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

As estos Fi er A a sis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

OF

2024-01-01 through 2024-12-31
Effective Dates

UNITED OF AMERICA

Program

DRNA Asbestos Inspector Credential

TARJETA DE REGISTRO
PARA LA REMOCION DE ASBESTO

Esta tarjeta autoriza a:

Elme Rivera Pérez

Inspector

A trabajar en la remoción de asbesto en Puerto Rico. Esta persona **NO** es un empleado del DRNA.

ASB-1223-0581-SI
Número de Registro

14-nov-2024
Fecha de vencimiento

Firma Autorizada - Departamento Recursos Naturales y Ambientales

AES International Inc.

Appendix II

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.

ASBESTOS SAMPLE INSPECTION FORM FOR PHYSICAL & HAZARD ASSESSMENT

Client Name **Del Torre Engineering**

Structure: "Ventana Al Río" Pathway

Project Name: ACM Survey for Jayuya Urban Center, Sidewalks & Public Parking

Inspection Date: 10/15/2024

Page: 1 of 1

Homogeneous Material Description		Material Category	Asbestos Content	Friability	Location of Materials	Asbestos Contents	Total Square Feet of ACM	AHERA Assessment Category (1-7, X, None)	Hazard Ranking (1-7)
I.D. Number	Material Description								
J-ER-1	Black Rubber, Joint of Bridge Floor, North	Misc.	No	NF	Bridge Floor	ND		X	
J-ER-2	Black Rubber, Joint of Bridge Floor, Northeast	Misc.	No	NF		ND		X	
J-ER-3	Black Rubber, Joint of Bridge Floor, South	Misc.	No	NF		ND		X	

Inspected by: Elme Rivera

Date: 10/15/2024

Friability: F = friable, NF = nonfriable, X = not applicable (material is non-ACBM)

AHERA Assessment Category: 1 = Damaged of significantly damaged TSI ACBM; 2 = Damaged friable surfacing ACBM; 3 = Significantly damaged friable surfacing ACBM; 4 = Damaged or significantly damaged friable miscellaneous ACBM; 5 = ACBM with potential for damage; 6 = ACBM with potential for significant damage; 7 = Any remaining friable ACBM or friable suspected ACBM; X = Not applicable (material is non-ACBM, non-friable surfacing or miscellaneous materials); None = No assessment category provided in original inspection.

Hazard Ranking Category: 1 = Significantly damaged; 2 = Damaged and potential of significant damage; 3 = Damaged and potential for damage; 4 = Damaged; 5 = Potential for significant damage; 6 = Potential for damage; 7 = All remaining ACBM

*** - Unless Specified, the Asbestos Type is Chrysotile; ND - None Detected**

AES International Inc.

Appendix III

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
Inc. 611 Monserrate Street, 2nd. Floor, Santurce, P.R. 00907
PH. (787) 722-0220 Fax (787) 724-5788

NV TESTING

Job ID: B24100043

REPORT NUMBER

RP24102209

POLARIZED LIGHT MICROSCOPY (PLM) BULK SAMPLE ANALYSIS REPORT

Client Name:	Del Torre Engineering	Date Collected:	10/15/2024
Project Name	Urban Center Sidewalks & Public Building, Jayuya P.R	Date Received	10/18/2024

RESULT OF ANALYSIS (BY % AREA VISUAL ESTIMATE)

Lab Sample ID / Client Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
B24100043.01 B24100043.01.A J-ER1 Layer % of Total :100% Date Analyzed: 10/21/2024 Sample Location: Comments: Paint included as binder.	Semi Hard, Rubber with Fibers and Paint Black	No		Cellulose 2	Rubber 93 Binders/Paint 5
B24100043.02 B24100043.02.A J-ER2 Layer % of Total :100% Date Analyzed: 10/21/2024 Sample Location: Comments:	Semi Hard, Rubber with Fibers Black	No		Cellulose 2	Rubber 98
B24100043.03 B24100043.03.A J-ER3 Layer % of Total :100% Date Analyzed: 10/21/2024 Sample Location: Comments:	Semi Hard, Rubber with Fibers Black	No		Cellulose 1	Rubber 99

Comments:
For all heterogeneous and layered samples easily separated into sublayers, each component is analyzed and reported separately.
Samples are analyzed by PLM using dispersion staining techniques in accordance with US EPA methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.

MICROANALYST: Jessica Garcia

QUALITY CONTROL: Ady Padan Ph.D

PLM is not consistently reliable in detecting small concentrations of asbestos in floor tiles and similar nonfriable materials. Quantitative TEM is currently the only method that can be used to get the conclusive asbestos content. This report relates only to the items tested as received. This report shall not be reproduced except in full and not without written approval of the laboratory. This report shall not be used to claim endorsement by NVLAP or any agency of the US Government. Methods used for determination of asbestos in bulk samples are found in both methods App. E to Sub. E of 40 CFR Part 763 and EPA/600/R-93/116.

ANALYTICAL ENVIRONMENTAL SERVICES INTERNATIONAL, INC.
611 Monserrate, 2nd. Floor, Santurce, P.R. 00907
Ph: (787) 722-0220 Fax: (787) 724-5788

Transmittal Sheet for Bulk Sample Analysis

J-
J-
J-

14:30 ✓
14:36 ✓
10/15/14 14:42 ✓

Relinquished By
Date/ Time:
Received B
Date/ Time:

Lab. Recipient:

Date:

Job ID:B24100043
Del Torre Engineering

Appendix I

DISTRIBUTION OF ACM SAMPLING POINTS
Jayuya Urban Center, Sidewalks and Public Parking
Jayuya, Puerto Rico

LEGEND:

♦**J-ER#** ACM Sampling Point

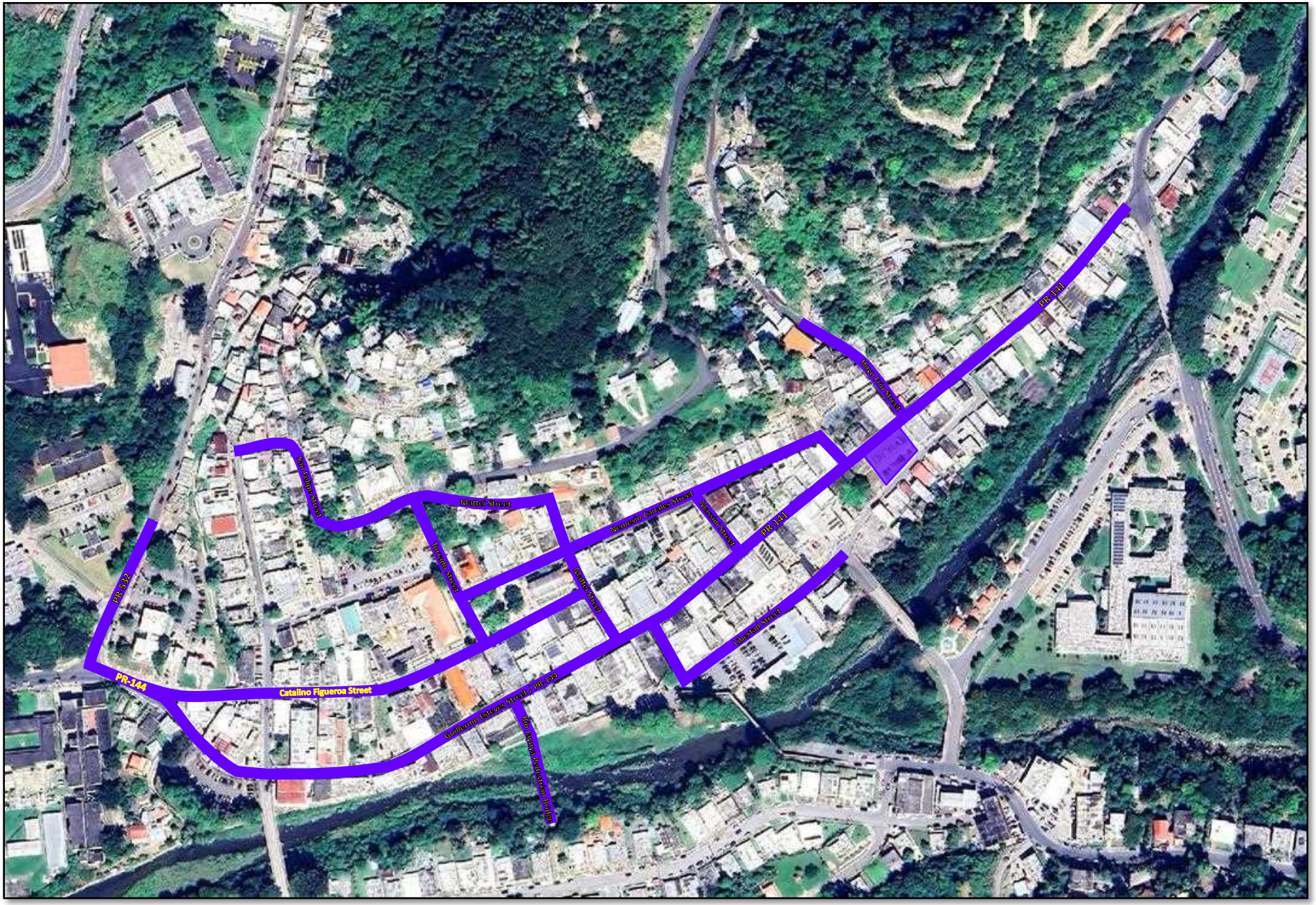
Environmental Consulting, Training, and Laboratory Services
(787) 722-0220 / (787) 724-5788

NOT AT SCALE

AES International Inc.

Appendix □

Site Location: Jayuya Urban Center
Jayuya, Puerto Rico



SELECTIVE PHOTOS

JAYUYA URBAN CENTER

Jayuya, Puerto Rico

GENERAL VIEW
Public Parking Lot (Lower Level)

GENERAL VIEW
Public Parking Lot (Upper Level)

GENERAL VIEW
Hoyo Frío Street

GENERAL VIEW
State Road PR-141

SELECTIVE PHOTOS

JAYUYA URBAN CENTER

Jayuya, Puerto Rico

GENERAL VIEW
State Road PR-144

GENERAL VIEW
State Road PR-532

GENERAL VIEW
Catalino Figueroa Street

GENERAL VIEW
San Felipe Street

SELECTIVE PHOTOS

JAYUYA URBAN CENTER

Jayuya, Puerto Rico

GENERAL VIEW
Libertad Street

GENERAL VIEW
Mattei Street

GENERAL VIEW
Torrado Street

GENERAL VIEW
Río Jayuya Pedestrian Bridge
(Camino Ventana al Río)

SELECTIVE PHOTOS

JAYUYA URBAN CENTER

Jayuya, Puerto Rico

GENERAL VIEW
Río Jayuya Pedestrian Bridge
(Camino Ventana al Río)

GENERAL VIEW
Río Jayuya Pedestrian Bridge
(Camino Ventana al Río)

Attachment 9:
Endangered Species

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Caribbean Ecological Services Field Office
Post Office Box 491
Boqueron, PR 00622-0491
Phone: (939) 320-3135 Fax: (787) 851-7440
Email Address: CARIBBEAN_ES@FWS.GOV

In Reply Refer To: 04/04/2024 14:58:59 UTC
Project Code: 2024-0072773
Project Name: CRP-000053 Sidewalk Revitalization Jayuya Urban Center

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

THE FOLLOWING SPECIES LIST IS NOT A SECTION 7 CONSULTATION. PLEASE CONTACT OUR OFFICE TO COMPLETE THE CONSULTATION PROCESS

The purpose of the Endangered Species Act (Act) is to provide a means whereby threatened, and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect those species and/or their designated critical habitat.

Federal agencies are required to "request of the Secretary of Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action". The enclosed species list provides information to assist with the U.S. Fish and Wildlife Service (Service) consultation process under section 7 of the Act. However, **the enclosed species list does not complete the required consultation process.** The species list identifies threatened, endangered, proposed and candidate species, as well as proposed and designated critical habitats, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. A discussion between the Federal agency and the Service should include what types of listed species may occur in the proposed action area and what effect the proposed action may have on those species. This process initiates informal consultation.

Once a species list is obtained for the proposed project, an effect determination for endangered and threatened species should be made. The applicant could make an effect determination by using available keys on IPaC for specific species. For species with no determination keys, the applicant should request concurrence from the Service by sending a project package

to caribbean_es@fws.gov. To obtain guidance for completing this process and the minimum requirements for project packages, please visit:

https://www.fws.gov/sites/default/files/documents/consultation-under-section-7-of-the-endangered-species-act-with-the-caribbean-ecological%20Services-field-office-template-letter.pdf

When a federal agency, after discussions with the Service, determines that the proposed action is not likely to adversely affect any listed species, or adversely modify any designated critical habitat, and the Service concurs, the informal consultation is complete, and the proposed project moves ahead. If the proposed action is suspected to affect a listed species or modify designated critical habitat, the Federal agency may then prepare a Biological Assessment (B.A.) to assist in its determination of the project's effects on species and their habitat. However, a B.A. is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a B.A. where the agency provides the Service with an evaluation on the likely effects of the action to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a B.A. are described at 50 CFR 402.12.

If a federal agency determines, based on its B.A. or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to further consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species, and proposed critical habitat be addressed within the consultation process. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species.

This list is provided pursuant to Section 7 of the Endangered Species Act and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action". Please use this list to determine whether your project requires consultation and to make your effects determination. For more guidance, use the Guideline for Consultation under Section 7 of the Endangered Species Act with the Caribbean Ecological Services Field Office by clicking here.

This species list is provided by:

Caribbean Ecological Services Field Office
caribbean_es@fws.gov
Post Office Box 491
Boqueron, PR 00622-0491
(786) 244-0081

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Caribbean Ecological Services Field Office
Post Office Box 491
Boqueron, PR 00622-0491
(939) 320-3135

PROJECT SUMMARY

Project Code: 2024-0072773
Project Name: CRP-000053 Sidewalk Revitalization Jayuya Urban Center
Project Type: Road Repair
Project Description: The Municipality of Jayuya, in coordination with the Puerto Rico Department of Housing (PRDOH), proposes to carry out improvements to roads and sidewalks within the urban center. The proposed project includes improvements to pedestrian infrastructure in Jayuya urban area including the reconstruction of existing sidewalk surface, ADA curb ramps, pavement markings, also the refurbish of the mosaic's tiles in the pathway "Ventana al Río" and improvements to handrails, luminaries and green areas of the staircase "Escalinatas" located between Torrado and San Felipe Street. The improvement for the pedestrian infrastructure includes replacement of the concrete sidewalk and curb & gutter only for sections that need repair in the urban center of Jayuya. The streets that will be replaced with sidewalks and curb & gutter (if needed) in the entirety of the roads are: Catalino Figueras, Guillermo Esteves (PR-141), Torrado, Mattei, and Nemesio Canales. On the other hand, the streets that will be partially replaced are Libertad, Hoyo Frio, San Felipe, and PR-532. Improvements include: removal/replacement of the entire cobblestone of the Guillermo Esteves Street and replacement with concrete finishing (stamped concrete); repairing the entire mosaic of the "Ventana al Río" pedestrian bridge; repairing handicap ramps at affected intersections; eliminating architectural barriers that affect ADA compliance; green initiatives will be implemented; relocating drains if these are located in the ADA path, cleaning or unclogging of drains and storm sewers; installation of thermoplastic pavement marking at pedestrian crossing and at traffic sign locations; installation of solar lighting pole systems at Nemesio Canales St. from Mattei St. to PR-141 Intersection and at PR-141 from Mattei St. to Plaza de la Musica; and installation of traffic signs. The proposed activity has a total footprint of 20,223 square meters (4.99 acres), but it will impact 1,715.95 square meters (0.42 acres) of the 100-year floodplain (zone AE). The project does not contemplate removing additional earth other than the necessary removal of existing sidewalks.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@18.2184122,-66.59293644862277,14z

Counties: Jayuya County, Puerto Rico

ENDANGERED SPECIES ACT SPECIES

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

BIRDS

NAME	STATUS
Puerto Rican Broad-winged Hawk *Buteo platypterus brunnescens*	Endangered

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/5512

Puerto Rican Parrot *Amazona vittata*	Endangered

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/3067

REPTILES

NAME	STATUS
Puerto Rican Boa *Chilabothrus inornatus*	Endangered

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/6628
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/G4M5YTCZV5GOLG4AATIXXE6PZA/documents/generated/7159.pdf

INSECTS

NAME	STATUS
Puerto Rican Harlequin Butterfly *Atlantea tulita*	Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/9005
General project design guidelines:
https://ipac.ecosphere.fws.gov/project/G4M5YTCZV5GOLG4AATIXXE6PZA/documents/generated/7168.pdf

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

---

1. The Bald and Golden Eagle Protection Act of 1940.
2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

THERE ARE NO BALD AND GOLDEN EAGLES WITHIN THE VICINITY OF YOUR PROJECT AREA.

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

---

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

THERE ARE NO FWS MIGRATORY BIRDS OF CONCERN WITHIN THE VICINITY OF YOUR PROJECT AREA.

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

RIVERINE

- R5UBH

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Jose Baez
Address: P.O. Box 1868
City: Hatillo
State: PR
Zip: 00659-1868
Email jose.baez@ees-pr.com
Phone: 7873281637

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Department of Housing and Urban Development

Transmittal Letter

June 28, 2024

Based on the information provided, we determined the project proposed qualifies for the blanket clearance letter. Nevertheless, if the project is modified this office should be contacted concerning the need for the initiation of consultation under section 7 of Endangered Species Act of 1973.

Reviewer DAMARIS ROMAN RUIZ Digitally signed by DAMARIS ROMAN RUIZ Date: 2024.07.11 10:59:02 -04'00'

SILMARIE PADRON Digitally signed by SILMARIE PADRON Date: 2024.07.11 12:36:07 -04'00'

Acting Caribbean ES Field Supervisor

Caribbean Ecological Services Field Office
U.S. Fish and Wildlife Service
P.O. Box 491
Boquerón, Puerto Rico 00622
Email: caribbean@es@fws.gov

RE: USFWS Endangered Species Act Certifications
CRP Program – June 2024

We are submitting the following Self-Certifications for projects under the CDBG-DR City Revitalization Program. Attached are included the Self-Certifications that certify that the projects are in compliance and are not likely to adversely affect federally-listed species.

The following table includes the projects that are in compliance with the Blanket Clearance Letter for the Endangered Species act of 1973, as amended, and the Fish and Wildlife Coordination Act.

Project Number	Project Name
PR-CRP-000048	Nuevo Estacionamiento Público en la Calle Libertad
PR-CRP-000053	Sidewalk Revitalization Jayuya Urban Center
PR-CRP-000209	Iniciativa para la Rehabilitación de Integral de la Comunidad Especial "El Cerro"
PR-CRP-000342	Alumbrado y Reconstrucción de Aceras Ave. Emérito Estrada Rivera
PR-CRP-000446	Rehabilitación Plaza de Recreo Cristobal Colón
PR-CRP-000655	Plaza Urbanización Roosevelt
PR-CRP-000775	Revitalization of Architecture and Historical Facades in the Urban Center
PR-CRP-000988	Construcción de Ampliación de Estacionamiento Público
PR-CRP-001026	Conversion Of Del Valle Avenue into a Complete Street
PR-CRP-001192	Public Facilities Plaza Rafael Hernández Marín Río Piedras

For more information, please contact the Permits and Environmental Compliance Division at environmentcdbg@vivienda.pr.gov or at (787)274.2527 ext. 4320.

Sincerely,

Permits and Environmental Compliance Division
Office of Disaster Recovery

Self-Certification

http://www.fws.gov/caribbean/ES/Index.html

Endangered Species Act Certification

The U.S. Fish and Wildlife Service, Caribbean Ecological Services Field Office developed a Blanket Clearance Letter in compliance with Endangered Species Act of 1973, as amended, and the Fish and Wildlife Coordination Act for federally funded projects.

The Service determined that projects in compliance with the following criteria are not likely to adversely affect federally-listed species.

The Puerto Rico Department of Housing (PRDOH) certifies that the following project **Sidewalk Revitalization Jayuya Urban Center (PR-CRP-000053)** consisting of improvements to pedestrian infrastructure in Jayuya urban area, including the reconstruction of existing sidewalks surfaces, ADA curb ramps, pavement markings, the refurbishment of the mosaic's tiles in the pathway "Ventana al Río", and improvements to handrails, luminaries, storm sewers and green areas on streets located within the urban center of the Municipality of Jayuya, Puerto Rico, complies with:

Check	Project Criteria
☒	1. Street resurfacing.
☒	2. Construction of gutters and sidewalks along existing roads.
☐	3. Reconstruction or emergency repairs of existing buildings, facilities and homes.
☐	4. Rehabilitation of existing occupied single-family homes, and buildings; provided that equipment storage or staging areas are not located on vacant property harboring a wetland and/or forested vegetation and that the lighting associated to the new facilities is not visible directly or indirectly from a beach.
☐	5. Demolition of dilapidated single-family homes or buildings; provided that the demolition debris is disposed in certified receiving facilities; equipment storage or staging areas are not located on vacant property harboring a wetland and/or forested vegetation.

☐	6. Rebuilding of demolished single-family homes or buildings, provided that the new construction is within the existing footprint of the previous structure and/or within pre- existing grassed or paved areas, and that the lighting associated to the new facilities are not visible directly or indirectly from a beach.
☐	7. Activities within existing Right of Ways (ROWs) of roads, bridges and highways, when limited to actions that do not involve cutting native vegetation or mayor earth moving; and are not located within, or adjacent to, drainages, wetlands, or aquatic systems. These activities include the installation of potable water and sanitary pipelines.
☐	8. Improvements to existing recreational facilities, including the installation of roofs to existing basketball courts, provided that the lighting associated to the facilities are not visible directly or indirectly from the beach.
☐	9. Construction of electric underground systems in existing towns and communities, provided that the property is not a wetland area and the lighting associated to the facilities are not visible directly or indirectly from the beach.
☐	10. Construction of facilities on vacant properties covered with grasses in urban areas, provided that the lighting associated to the facilities are not visible directly or indirectly from the beach.
☐	11. Construction of houses, buildings or acquiring lands in urban areas covered by grass for relocation of low-income families and/or facilities that have been affected by weather conditions.

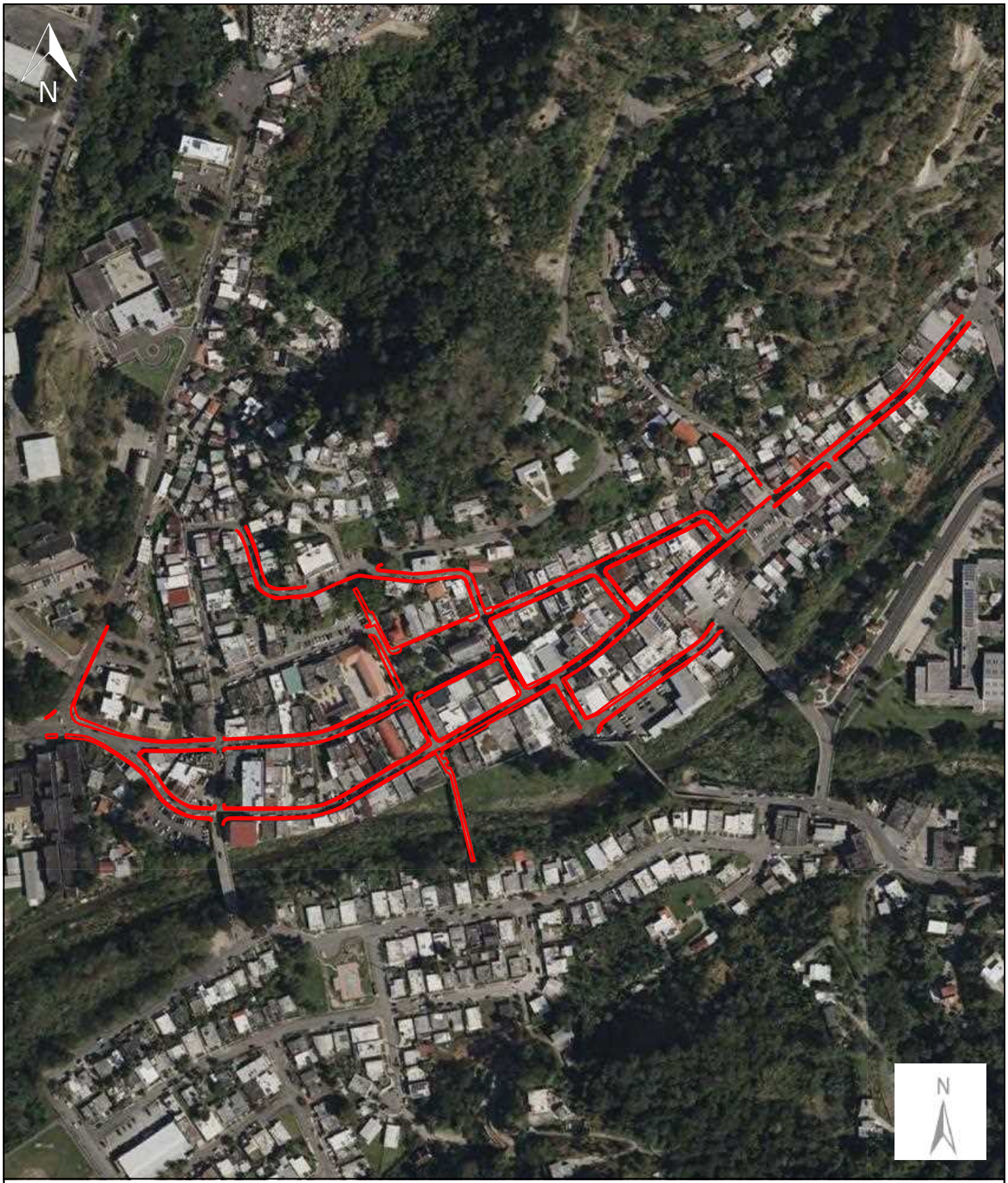
June 24, 2024

Ángel G. López-Guzmán
Deputy Director
Permits and Environmental Compliance Division

Office of Disaster Recovery
Address: P.O. Box 21365 San Juan, PR 00928
Telephone and Ext: 787-274-2527 ext. 4320
Email: environmentcdbg@vivienda.pr.gov

Date

Attachment 1. Location Map and Project Description



Aerial View Map

Project: Jayuya Urban Center Sidewalks Revitalization

Project Number: PR-CRP-000053
Address: Ventana al Río Pathway, "Escalinatas" between Maxar Torrado & San Felipe Streets, and Sidewalks on Catalino Figueras, Guillemo Esteves, Torrado, Mattei, & Nemesio Canales Streets, Jayuya, PR 00664

Legend

PR-CRP-000053 footprint

2023 Vexcel Imaging Inc. Imagery

(Lat.18.218990, Long.-66.591780)

75 150 m

Environmental & Ecological Services

CRP-000053 Sidewalk Revitalization Jayuya Urban Center

Project Description

The project includes improvements to pedestrian infrastructure in Jayuya urban area including the reconstruction of existing sidewalk surface, ADA curb ramps, pavement markings, the refurbishment of the mosaic's tiles in the pathway "Ventana al Río" and improvements to handrails, luminaries and green areas of the staircase "Escalinatas" located between Torrado and San Felipe Street.

The proposed activity has a total footprint of 20,223 square meters (4.99 acres), but it will impact 1,715.95 square meters (0.42 acres) of the 100-year floodplain (zone AE). The project does not contemplate removing additional earth other than the necessary removal of existing sidewalks.

The improvement for the pedestrian infrastructure includes:

- replacement of the concrete sidewalk and curb & gutter only for sections that need repair in the urban center of Jayuya.

The streets that will be replaced with sidewalks and curb & gutter (if needed) in the entirety of the road are:

- Catalino Figueras,
- Guillermo Esteves (PR-141),
- Torrado,
- Mattei
- Nemesio Canales.

The streets that will be partially replaced are:

- Libertad, Hoyo Frio,
- San Felipe,
- PR-532.

Improvements include:

- removal/replacement of the entire cobblestone of the Guillermo Esteves Street and replacement with concrete finishing (stamped concrete)
- repairing the entire mosaic of the "Ventana al Río" pedestrian bridge
- repairing handicap ramps at affected intersections;
- eliminating architectural barriers that affect ADA compliance;
- green initiatives will be implemented
- relocating drains if they are located in the ADA path
- cleaning of drains and storm sewers;

- installation of thermoplastic pavement marking at pedestrian crossing and at traffic sign locations;
- installation of solar lighting pole systems at Figueras Street;
- installation of traffic signs.

Project Photos

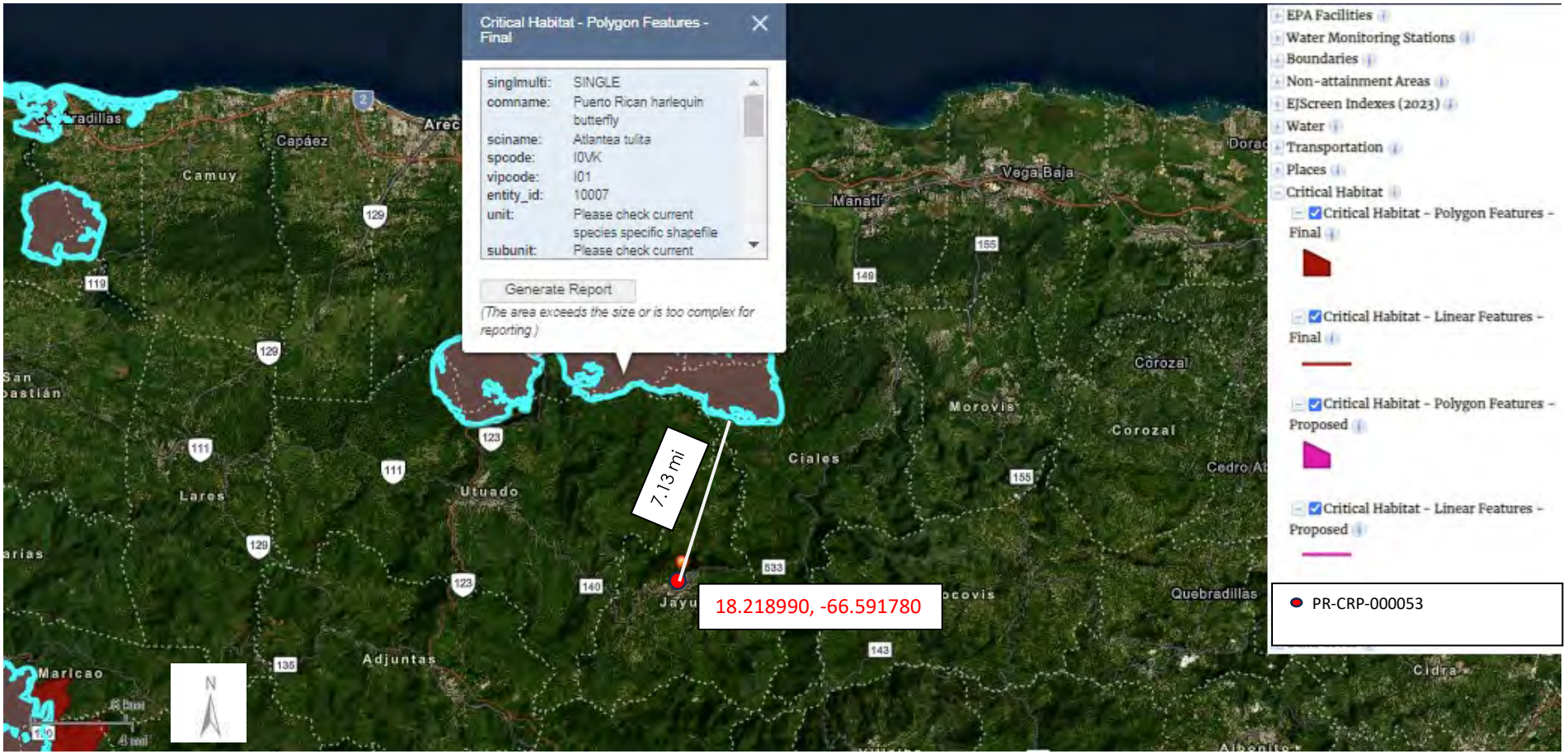
Photo 1. Existing cobblestone

Photo 2. Existing mosaic

Critical Habitat Map

PR-CRP-000053 –Jayuya Urban Center Sidewalk Revitalization

Coord: Lat. 18.218990°, Long. -66.591780°
Address: Ventana al Río Pathway, "Escalinatas" between Torrado & San Felipe Streets, and Sidewalks on Catalino Figueras, Guillemo Esteves, Torrado, Mattei, & Nemesio Canales Streets, Jayuya, PR 00664



Source: EPA NEPAssist (Spatial Reference: GRS80), accessed June 14, 2024 at URL https://nepassisttool.epa.gov/nepassist/nepamap.aspx

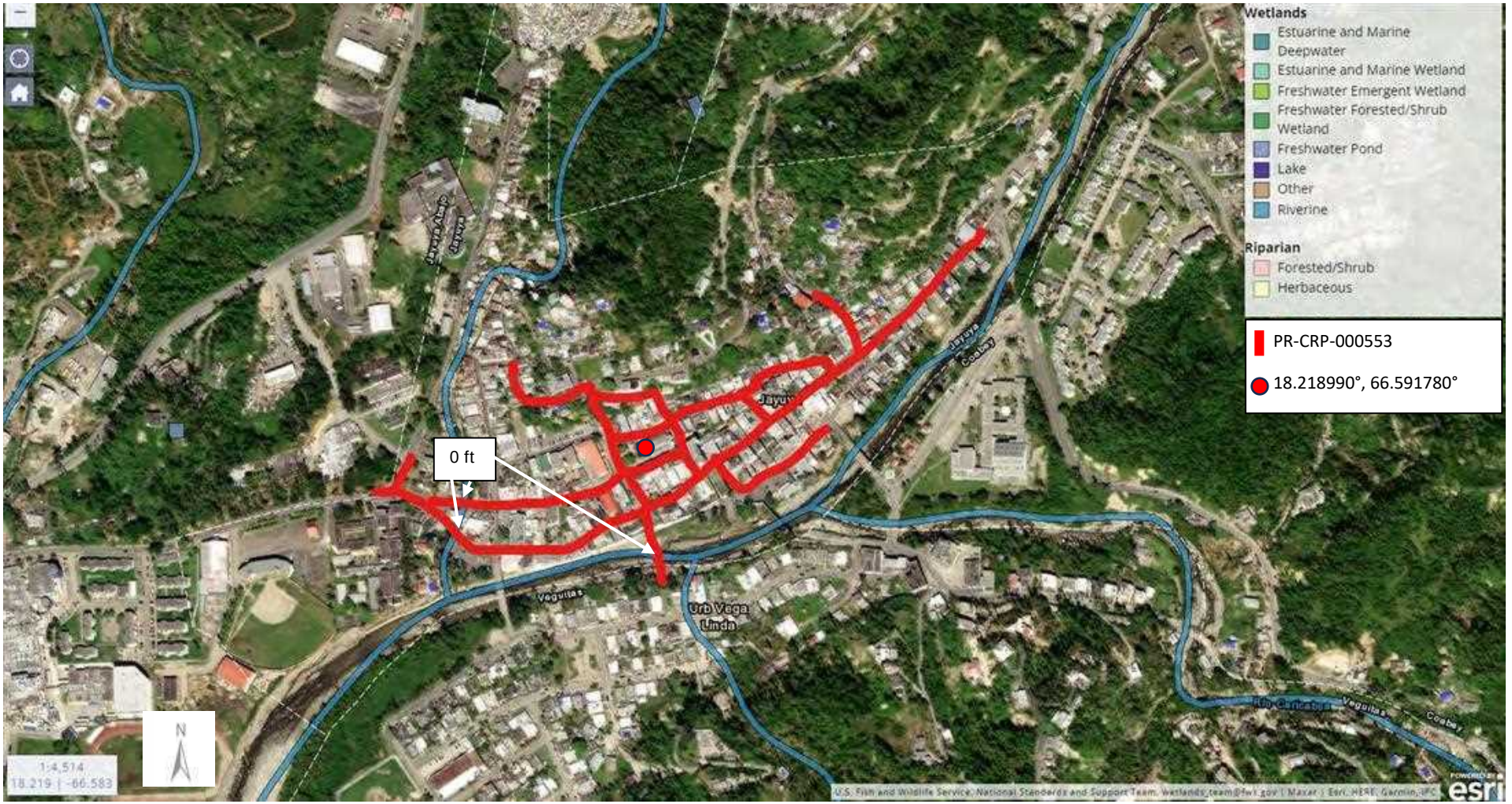
Prepared by ICF

Wetlands Map

PR-CRP-000053 –Jayuya Urban Center Sidewalk Revitalization

Coord: Lat. 18.218990°, Long. -66.591780°

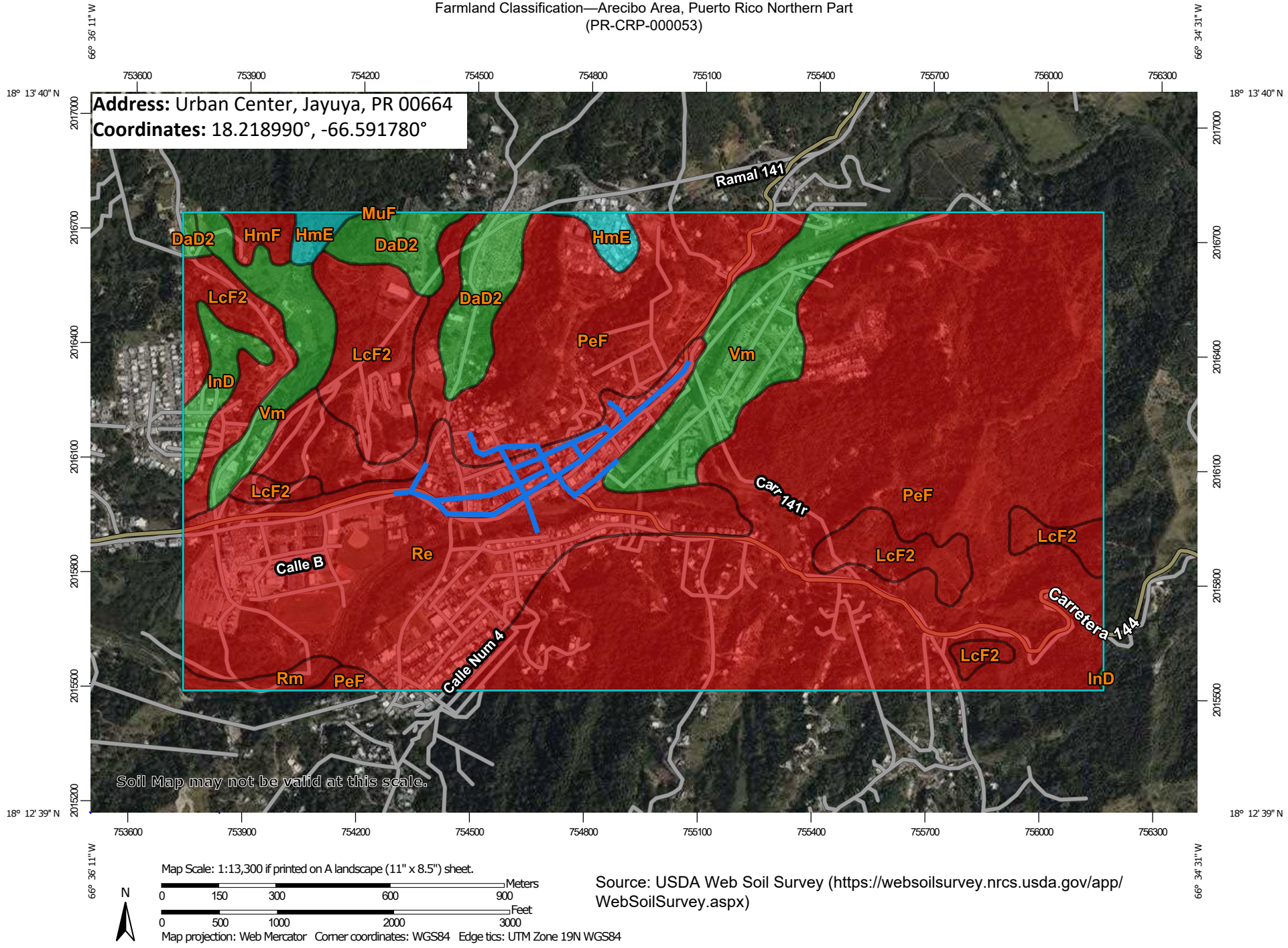
Address: Ventana al Río Pathway, "Escalinatas" between Torrado & San Felipe Streets, and Sidewalks on Catalino Figueras, Guillemo Esteves, Torrado, Mattei, & Nemesio Canales Streets, Jayuya, PR 00664



Source: USFWS National Wetlands Inventory (NWI) (Spatial Reference: WGS84), accessed June 14, 2024 at URL https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/

Prepared by ICF

Attachment 10:
Farmland Protection



Map Scale: 1:13,300 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 150 300 600 900

Feet: 0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

Source: USDA Web Soil Survey (https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx)

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated
- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated
- Farmland of unique importance
- Not rated or not available

Soil Rating Lines

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated
- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated
- Farmland of unique importance
- Not rated or not available

Soil Rating Points

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of statewide importance, if drained
- Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated

- Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if irrigated and drained
- Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
- Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
- Farmland of statewide importance, if warm enough
- Farmland of statewide importance, if thawed
- Farmland of local importance
- Farmland of local importance, if irrigated
- Farmland of unique importance
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Arecibo Area, Puerto Rico Northern Part
Survey Area Data: Version 20, Sep 10, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 23, 2022—Mar 1, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
DaD2	Daguey clay, 12 to 20 percent slopes, eroded	All areas are prime farmland	28.4	3.8%
HmE	Humatas clay, 20 to 40 percent slopes	Farmland of statewide importance	7.6	1.0%
HmF	Humatas clay, 40 to 60 percent slopes	Not prime farmland	4.9	0.7%
InD	Ingenio clay loam, 5 to 20 percent slopes	All areas are prime farmland	9.0	1.2%
LcF2	Lirios clay loam, 40 to 60 percent slopes	Not prime farmland	73.0	9.7%
MuF	Mucara clay, 40 to 60 percent slopes	Not prime farmland	0.1	0.0%
PeF	Pellejas clay loam, 40 to 60 percent slopes	Not prime farmland	419.6	55.8%
Re	Reilly gravelly silt loam	Not prime farmland	144.1	19.2%
Rm	Riverwash	Not prime farmland	4.5	0.6%
Vm	Vivi loam	All areas are prime farmland	61.1	8.1%
Totals for Area of Interest			**752.5**	**100.0%**

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

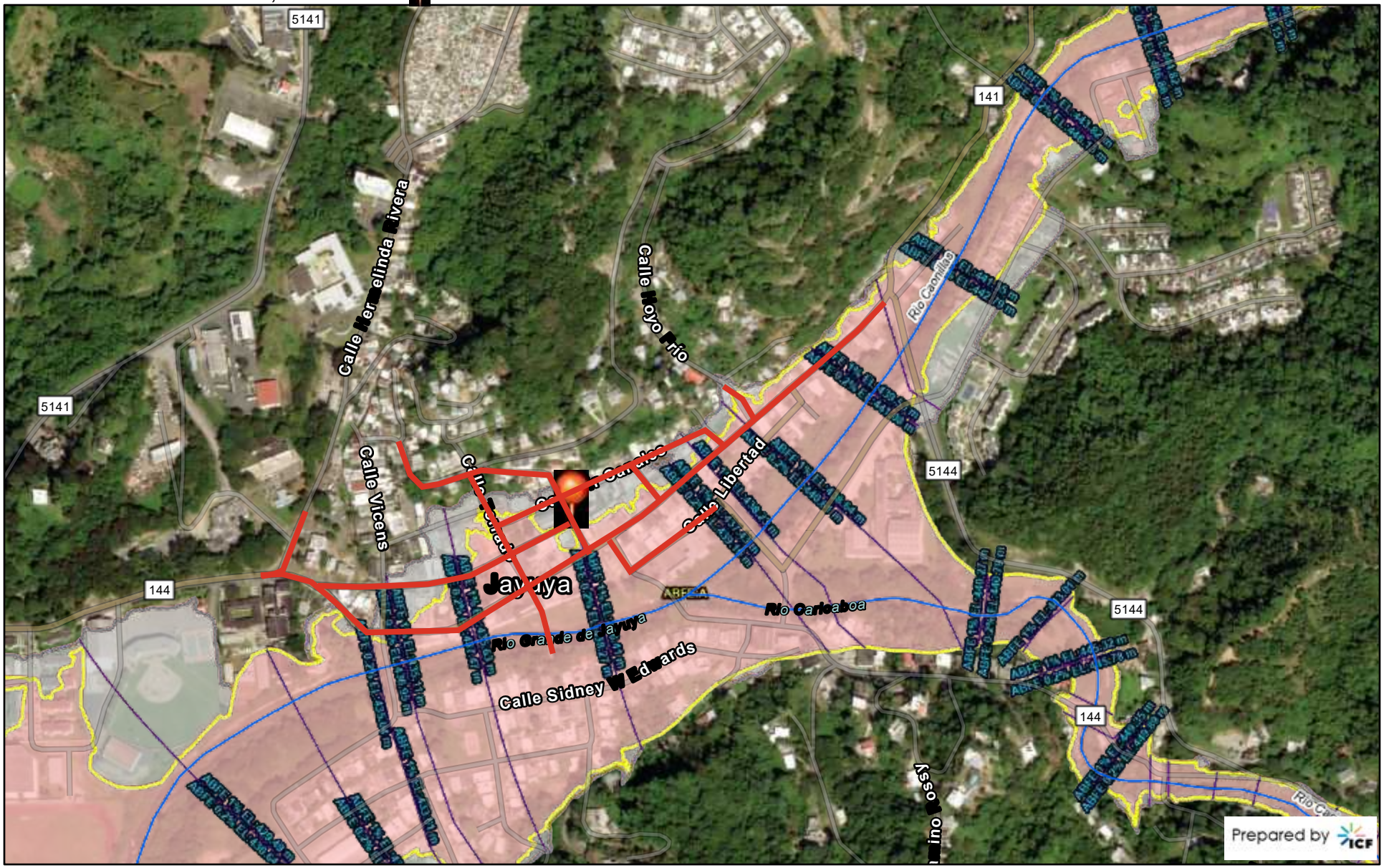
Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

Attachment 11:
Floodplain Management

PR-CRP-000053 Advisory Base Flood Elevation (ABFE) Map

Address: Urban Center, Jayuya, PR 00664
Coordinates: 18.218990°, -66.591780°



9 8 2025, 3:00:17 PM

- Streamline (zoom in to make visible)
- Advisory ase Flood Elevation (zoom in to make visible)
- imit o Moderate ave Action (iM A)
- Flood azard E tent
- 1 Annual Chance Flood
- 0.2 Annual Chance Flood
- one FE oundary
- Flood azard Area (zoom in to make visible)
- A
- AO
- AE
- Coastal A one
- E
- 0.2 Annual Chance Flood one
- A-Flood ay
- AE-Flood ay
- Coastal A one and Flood ay
- orld Imagery
- o Resolution 15m Imagery
- igh Resolution 60cm Imagery
- igh Resolution 30cm Imagery
- Citations
- 1.2m Resolution Metadata

1:6,745

0 0.05 0.1 0.2 mi

0 0.07 0.15 0.3 km

FEMA, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, OpenStreetMap contributors, and the GIS User Community, Ma ar

Source: FEMA Puerto Rico Advisory Base Flood Elevations (https://experience.arcgis.com/experience/2be181b530e74669b33e3edaafef2ebf/page/Page)

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

5-STEP DECISION-MAKING PROCESS

Project number:	PR-CRP-000053
Project name:	Mejoras Aceras, Paseo Peatonal Ventana al Rio y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya
Municipality:	Jayuya
Date:	05/15/2025
Decision-Making Process for E.O. 11988 and E.O. 13690 as Provided by 24 CFR §55.20	

Project Description:

The project area involves improvements to streets and sidewalks located within the Traditional Urban Center of Jayuya. The project will be developed along Nemesio Canales, Mattei, Figueras, Torrado, Libertad, San Felipe, Hoyo Frío and Guillermo Esteves streets, as well as PR-141, PR-532, PR-534 and PR-144 roads. The main objective of this project is to optimize the existing pedestrian infrastructure in the Jayuya Urban Center. The streets that will be upgraded with sidewalks and curbs on both sides are: Catalino Figueras, Guillermo Esteves (PR-141), Torrado, Mattei, and Nemesio Canales. On the other hand, the streets that will have the sidewalk and curb & gutter replaced on one side of the road are Libertad, Hoyo Frio, San Felipe, and PR-532. All curb ramps will be replaced at urban center intersections. These curb ramps will be connected via thermoplastic pavement markings at crossings within the project limits and the utilization of traffic signs to provide a new layer of safety for pedestrians. Find the following list indicating the coordinates for each street with the intention of providing the project limits.

1. Guillermo Estevez (PR-141) from 18.2184420, -66.5950295 to 18.22137995, -66.588343;

2. Figueras St. from 18.218246, -66.594458 to 18.219008, -66.5917799;

3. Torrado St. from 18.219105, -66.592754 to 18.2183142, -66.5922555;

4. Libertad St. from 18.218802, -66.5913661 to 18.21919037, -66.59020280;

5. San Felipe St. from 18.219825, -66.594061 to 18.219608, -66.592455;

6. Canales St. from 18.218937, -66.592598 to 18.219791, -66.590109;

7. PR-532 from 18.218442, -66.595030 to 18.219140, -66.594710;

8. Mattei St. from 18.219608, -66.592755 to 18.218677, -66.591589;

9. Massini St. from 18.219587, -66.591066 to 18.219238, -66.590782;

10. Hoyo Frio St. from 18.220536, -66.590200 to 18.220076, -66.589742;

11. Ventana al Rio Bridge from 18.218316, -66.592251 to 18.217507, -66.591983.

At Guillermo Estevez, there are cobblestones that will be removed and replaced with stamped concrete. These cobblestones are located at the Municipal Building and at the entrance of the Ventana al Rio Bridge. Additionally, the damaged mosaic at the Ventana al Rio Bridge will be repaired or replaced, and the damaged lighting fixtures will be replaced. The metal railing on the bridge will also be repainted with the same color.

The Escalinatas (stairs) will undergo some improvements, which include repainting the existing handrails, replacing the existing landscaping with new and adequate plants in the surrounding area, and replacing the damaged lighting bulbs.

Currently there are two (2) existing grate inlets that are located inside the ADA path at Mattei/Canales intersection and Torrado/Figueras. This activity includes the cutting of existing drainage piping to then connect to the relocated grate inlet outside of the ADA path. The exact location of the proposed grate relocations are shown below. Both of these locations occur well outside of the wetland (**see attachment 5, drawings C402, C403 and supporting photographs**).

1. NE corner of C. Canales and C. Mattei
2. SW Corner of PR-141 and C. Libertad

Additionally, the cleaning and unclogging of the existing (32) grate inlets and piping in the Jayuya Urban Center within the project limits. The installation of individual solar lighting pole systems at Nemesio Canales St. from Mattei/Canales intersection to Canales/PR-141 intersection and continuing at PR-141 from Canales/PR-141 intersection to Plaza de la Musica.

Categories of proposed actions for which the modified 5-step decision making process applies are described in 24 CFR 55.14. Based on the scope of work described above, this project meets the requirements under 24 CFR 55.14(e):

> HUD's or the recipient's actions under any HUD program involving the repair, rehabilitation, or replacement of existing nonstructural improvements including streets, curbs, and gutters, where any increase of the total impervious surface area of the facility is de minimis. This provision does not include critical actions, levee systems, chemical storage facilities (including any tanks), wastewater facilities, or sewer lagoons.

According to the updated 24 CFR Part 55 and based on the proposed project scope of work, the responsible entity has determined that a 5-step decision making process is the appropriate approach for evaluation under 24 CFR Part 55.

Step 1: Determine whether the action is located in the FFRMS floodplain or wetland

PRDOH will identify the floodplain, and use best available information including the Flood Insurance Rate Map (FIRM), Preliminary Flood Insurance Rate Map (PFIRM), or Advisory Base Flood Elevation (ABFE) maps, whichever is most protective. The horizontal extent of the floodplain includes the 100-year floodplain (1% annual chance) and 500-year floodplain (0.2 percent-annual chance) based on FEMA maps.

The project has a total footprint of 6,061 square meters (1.5 acres), of which 1,122 square meters are outside the floodplain and 4,939 square meters are within the floodplain (**see attachment 1**). The floodplain information was pulled from the Advisory Base Flood Elevation (ABFE) map, effective 12/11/2018, obtained from https://gis-r2-fema.hub.arcgis.com/pages/puertorico (**see attachment 2**). It was found that 1,181 square meters (19.5% of total area) is located within the 500-year floodplain and 3,758 square meters (62% of total area) is located within the 100-year floodplain (**see attachment 1)**. Also, according to the National Wetlands Inventory (NWI) (https://www.fws.gov/program/national-wetlands-inventory), project areas are within 100 feet of a riverine wetland, but these will not be impacted by the actions (**see attachment 3**). Best management practices will be implemented to ensure the wetland is not impacted by the project.

Step 2: Notify the public for early review of the proposal and involve the affected and interested public in the decision-making process.

According to 24 CFR Part 55.14, Steps 2, 3, and 7 do not apply to the modified 5-step decision making process.

Step 3: Identify and evaluate practicable alternatives to locating the proposed action in the FFRMS floodplain or wetland.

According to 24 CFR Part 55.14, Steps 2, 3, and 7 do not apply to the modified 5-step decision making process.

Step 4: Identify and evaluate the potential direct and indirect impacts associated with the occupancy or modification of the floodplain or the wetland.

The proposed project will not expand the footprint of the existing site or encroach further into the floodplain, as no new construction is planned. Therefore, the project will not disrupt the natural and beneficial functions of the floodplain such as floodwater retention, water quality maintenance, and groundwater recharge. The project scope is limited to minor civil improvements to the Urban Center within the project boundaries and no project components will be subject to elevation requirements.

No project expansion or changes to stormwater infrastructure will occur within the riverine wetland. The activities occurring where the riverine wetland crosses the project area at the PR 144/PR141 intersection include curb and sidewalk repair/replacement. The cutting and relocation of existing drainage pipe will not occur in this area.

The activities occurring where the riverine wetland crosses the project area at Ventana Al Rio Bridge (**see attachment 4**) include pressure washing, repair/replacement of mosaic, lighting fixture improvements and handrail painting (**see attachment 5, drawing C402**). Standard best management practices will be implemented for erosion control and slope protection including silt fences, straw bales and/or plastic liners.

Preventing the loss of life due to flooding is the highest priority. While the proposed project will revitalize the urban center through various civic improvements, there will be no permanently occupied structures, no new critical infrastructure, and no increase in population density within the floodplain as a result of the project. Therefore, the proposed project will not create any additional risk to human life.

The proposed project will not create any additional risk of property damage due to flooding. The project is limited to actions that will rehabilitate and revitalize public areas and does not include any structures that could potentially be damaged by a flood. The stormwater improvements are expected to support the natural and beneficial function of the floodplain by improving floodwater transport and conveyance. There will be no additional risk of health impacts from exposure to toxic substances or damage to the community due to project failure.

The proposed project's potential impacts on the natural and beneficial functions of the floodplain were evaluated. As the footprint of the Urban Center will not be expanded and there will be no additional impervious surfaces produced, the natural and beneficial functions of the floodplain including groundwater recharge, water quality maintenance, and natural moderation of floods will be maintained. The proposed project will improve the cultural and recreational values of the floodplain by rehabilitating the Urban Center, which serves as a place for the LMI residents of the municipality of Jayuya to gather and enjoy festivals and other events. The cultural values will be further improved through repairing or replacing the mosaic at the Ventana al Rio Bridge and replacing the existing landscaping.

Due to damage caused by Hurricanes Irma and Maria, the Urban Center is in a state of disrepair and needs rehabilitation. The proposed project will undertake various actions to rehabilitate and revitalize the Urban Center and attract residents and visitors. Agricultural, aquacultural, and forestry resources will not be impacted by the proposed project.

Step 5: Where practicable, design or modify the proposed action to minimize the potential adverse impacts to and from the floodplain or wetland and to restore and preserve their natural and beneficial functions and values.

The proposed project will not involve any insurable structures or new construction, and it will be limited to minor civil improvements consisting of repair and rehabilitation of existing sidewalks, stormwater systems and roads. Therefore, floodproofing and elevation are not required. To preserve property, all infrastructure improvements will utilize water-resistant materials to reduce potential flood damage. Solar lighting systems will be anchored to the existing concrete slab to avoid displacement during flood events. The project ensures compliance with FEMA and local floodplain management standards.

The project sites that are within 100ft of the riverine wetland will implement best management practices (BMPs) to ensure no alteration of the wetland occurs. The contractor will utilize silt fences, straw bales and/or plastic liners for erosion control and slope protection. No cutting and relocation of drainpipes will occur within the wetland.

The project will not create any additional risk of loss of life because there will be no permanently occupied structures, no critical infrastructure, and no increase in population density within the floodplain. Since the sites are public areas with no permanent occupants, an evacuation plan or warning system is not required.

The proposed project will not introduce any structures that could be damaged by a flood or that could harm other properties or the community as a whole in the case of project failure. Potential harm to and within the floodplain will be minimized by maintaining the footprint of the areas, avoiding unnecessary ground disturbance, and limiting excavation. As a result of these measures, the natural and beneficial functions of the floodplain such as groundwater recharge, water quality maintenance, and natural moderation of floods will be maintained. The plant features will use native vegetation to complement the natural characteristics of the area.

Step 6: Reevaluate the alternatives.

The proposed project remains practicable given its minimal impact on the floodplain and its design to avoid exacerbating existing hazards. No new construction or expansion of the project footprint is planned, and the project will not disrupt the natural and beneficial functions of the floodplain such as floodwater retention, water quality maintenance, and groundwater recharge. Additionally, the project does not involve critical infrastructure or increase the exposure of human life or property to flood-related risks. The proposed project remains practicable given its minimal impact on the floodplain and its design to avoid exacerbating existing hazards. The site's historical and community significance as an Urban Center necessitates its retention in its current location. Moreover, no feasible alternatives exist that would further minimize floodplain impacts while achieving the project's objectives.

Step 7: Determination of no practicable alternative and publication of final notice

According to 24 CFR Part 55.14, Steps 2, 3, and 7 do not apply to the modified 5-step decision making process.

Step 8: Implement the proposed action

The Responsible Entity will implement this plan, as described above, to ensure that impacts to the floodplain are managed and mitigated to the extent possible. The activities will be executed, and necessary language will be included in all agreements with participating parties. Active monitoring of the construction process will take place to ensure no unnecessary impacts occur nor unnecessary risks are taken. Finally, the Responsible Entity will provide maintenance to the project elements to ensure it operates as intended.

Attachment 1

Flood Hazard

Area Determinations

21 de abril de 2025

City Rev. Project No.: **PR-CRP-000053**
DelTorre Project No.: **DTE2023-004**

RE: Determination Flood Hazard Areas Inside and Outside of Project Limits

Project: CRP-000053 Sidewalk Revitalization Jayuya Urban Center

As part of the Level of Environmental Review Determination process for the 5-steps publication, we have created the attached Floodplain Plan which includes the delineation for the 100-YR and 500-YR rain events. Additionally, we have included a map obtained from FEMA Puerto Rico Advisory Base Flood Elevation website as a supporting document which was used to draw the limits shown in the Floodplain Plan.

After delineating the limits for both events, we have calculated and divided the areas inside and outside the floodplain as follows:

1. Outside of Floodplain = 1,122 SQMT (18.5% of total area)
2. 500-YR (0.2% Annual Chance) = 1,181 SQMT (19.5% of total area)
3. 100-YR (1% Annual Chance) = 3,758 SQMT (62% of total area)

If any additional information is required to complete this step, please let us know.

Regards,

Ismarie Torres, P.E.
Delgado Torres Engineering, LLC
Email: itorres@deltorre-eng.com
Tel. 787-854-0264

Attachment 2

Floodplain Management

Maps

c:\users\lamarietorres\onedrive - delgado torres engineering, llc\projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c201 floodplain map.dwg

C201	DTE23-004	April 21, 2025	DRAWN: JAD DESIGNED: JAD REVIEWED: ITI	REVISIONS	SYMBOL / DATE / BY

SHEET NAME

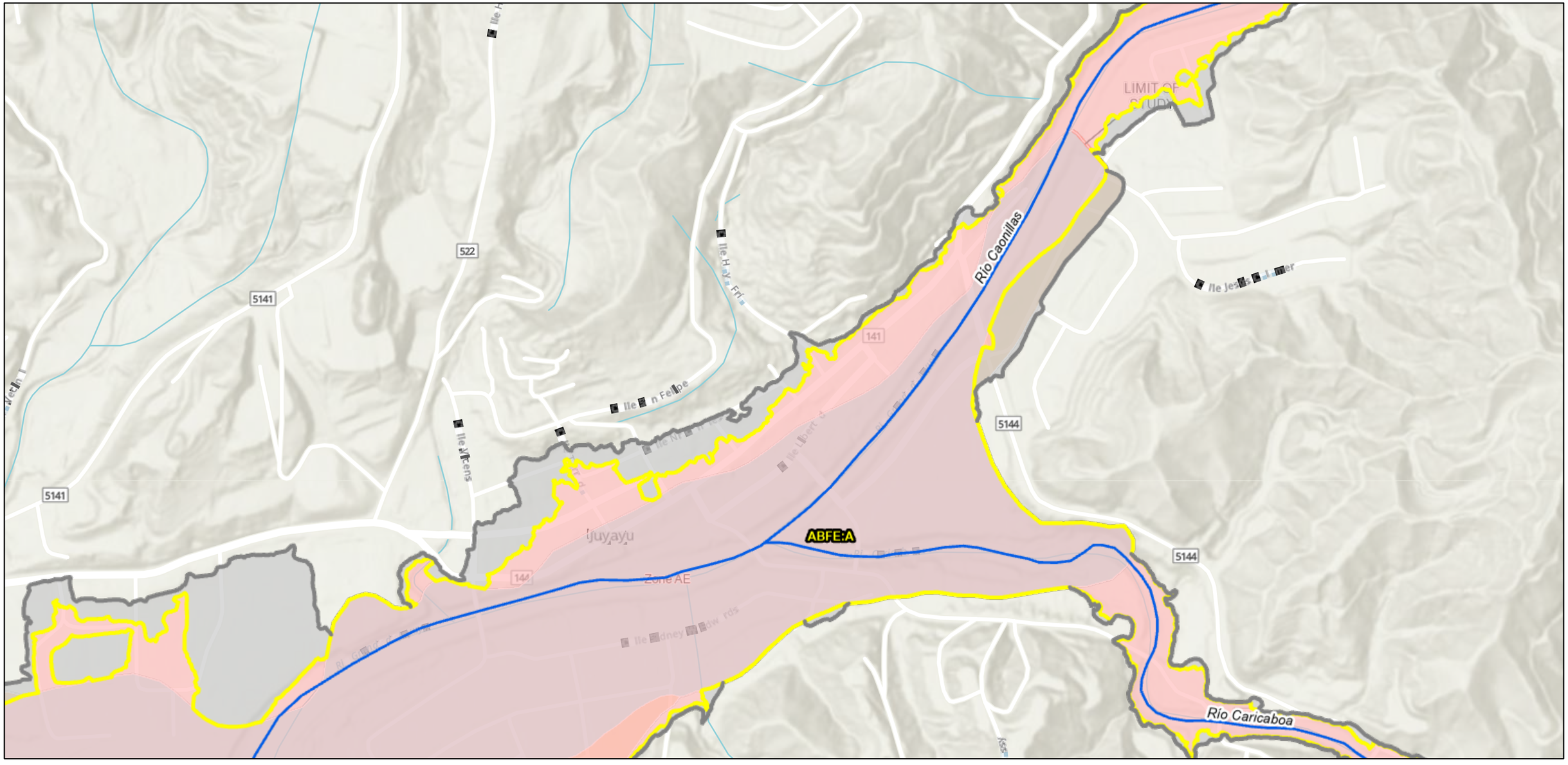
FLOODPLAIN MAP

PROJECT NAME

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

FEMA Puerto Rico Advisory Base Flood Elevations



4 21 2025, 10:52:25 AM

Flood azard Area (zoom in to make visible)

A

0.2 Annual Chance Flood one

one FE oundary

Flood azard E tent

1 Annual Chance Flood

0.2 Annual Chance Flood

Streamline (zoom in to make visible)

Flood azard ones

1 Annual Chance Flood azard

0.2 Annual Chance Flood azard

Flood azard oundaries

imit ines

SF A Flood one oundary

1:5,000

0 290 580 1,160 t

0 90 180 360 m

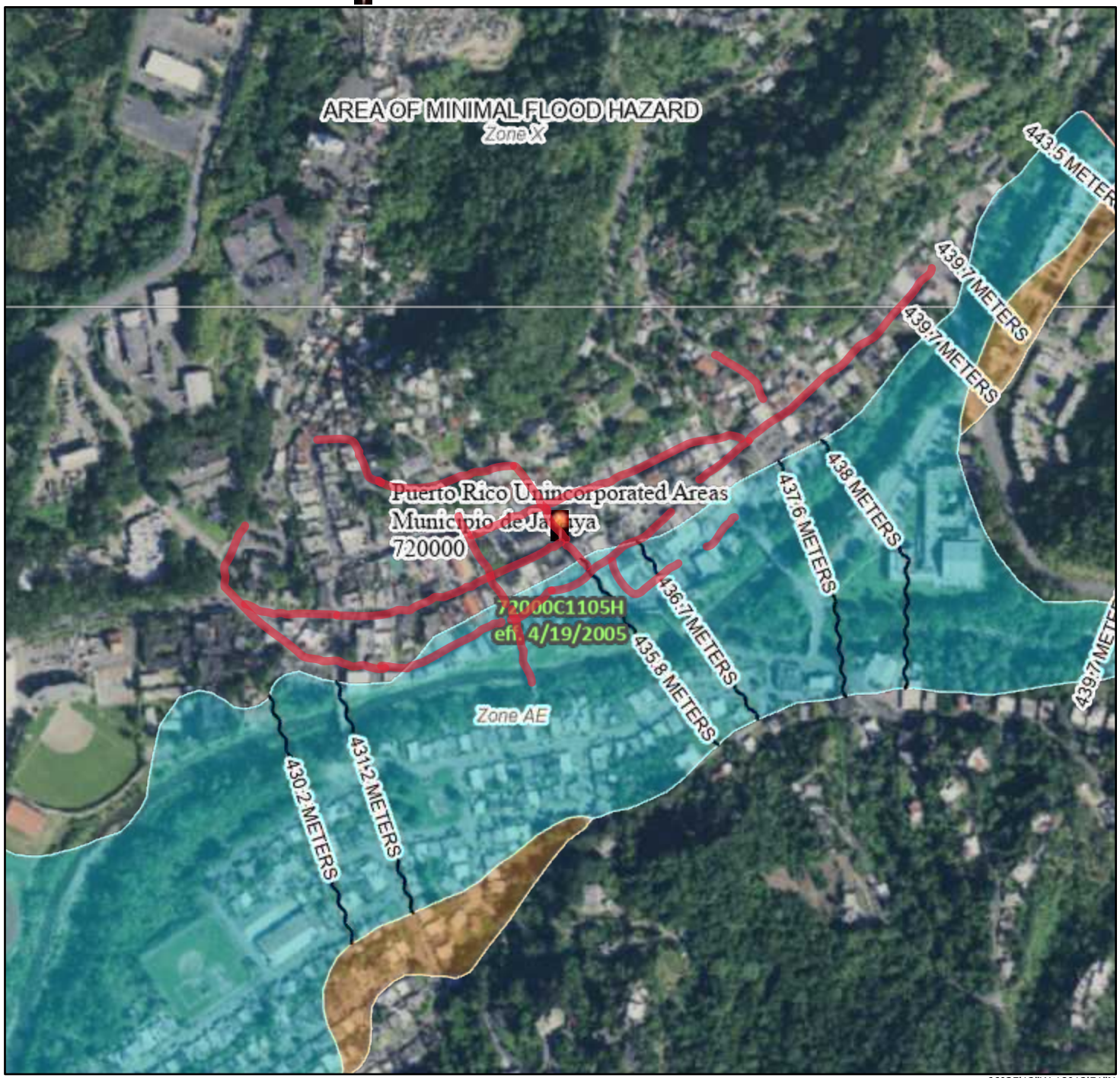
FEMA, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, OpenStreetMap contributors, and the GIS User Community, Sources: Esri, Ma ar, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, N S, OS, NMA, Geodatastyrelsen, Rijks aterstaat, GSA, Geoland, FEMA, Intermap, and the GIS user

ArcGIS eb App uilder

Esri Community Maps Contributors, Esri, TomTom, Garmin, Sa eGraph, GeoTechnologies, Inc, METI NASA, USGS, NPS, US Census ureau, USF S FEMA

FIRMETTE - PR-CRP-000053

Address: Calle Guillermo Estevez, Jayuya PR
Coordinates: 18.218990, -66.591780



0 250 500 1,000 1,500 2,000 Feet

1:6,000

66°35'12"W 18°12'51"N

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE)
- With BFE or Depth
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Flood Risk due to Levee. See Notes.
- Area with Flood Risk due to Levee

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard
- Effective LOMRs
- Area of Undetermined Flood Hazard

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 — Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/14/2024 at 8:51 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Attachment 3

Wetlands Map

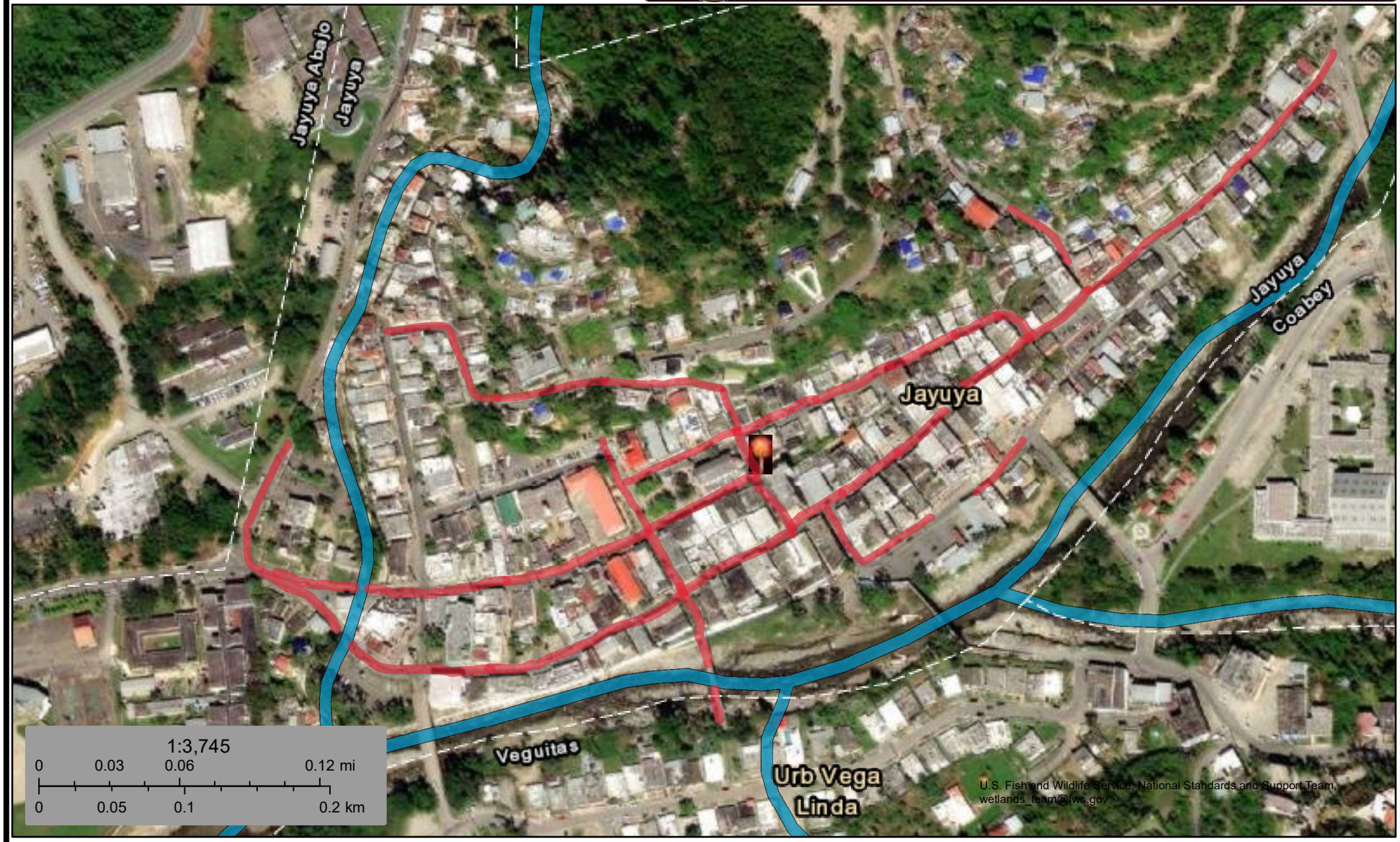
Wetlands Map - PR-CRP-000053

Address: Calle Guillermo Estevez, Jayuya PR

Coordinates: 18.218990, -66.591780

U.S. Fish and Wildlife Service

National Wetlands Inventory



May 1, 2024

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

N

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Attachment 4

Project Photos

(Bridge)

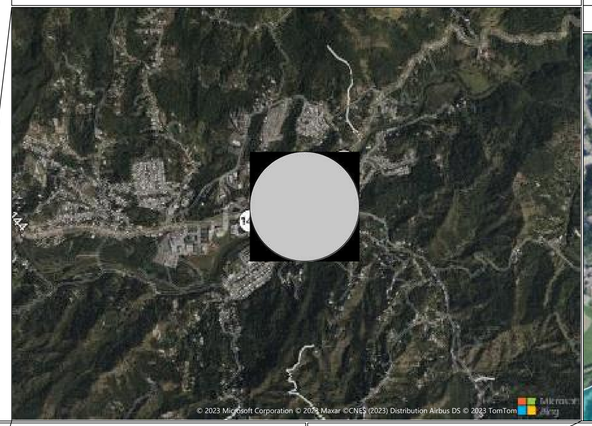
Attachment 5

Project Plans

SATELLITE MAP

SCALE: 1:20,000

LAMBERT COORDINATES: X=183,333.357 Y=242,231.231 NAD 83

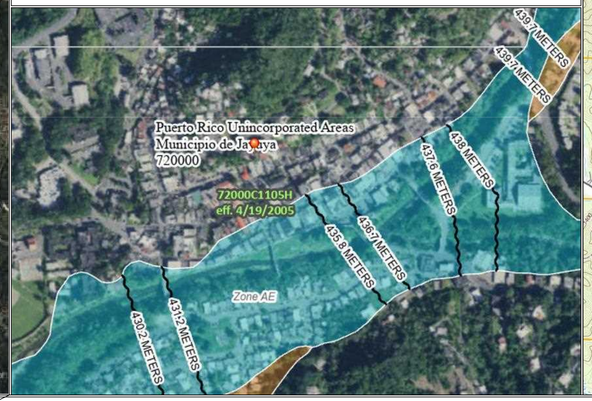


FLOOD MAP

SCALE: 1:5,000

MAP NUMBER: 72000C1105H ZONE X

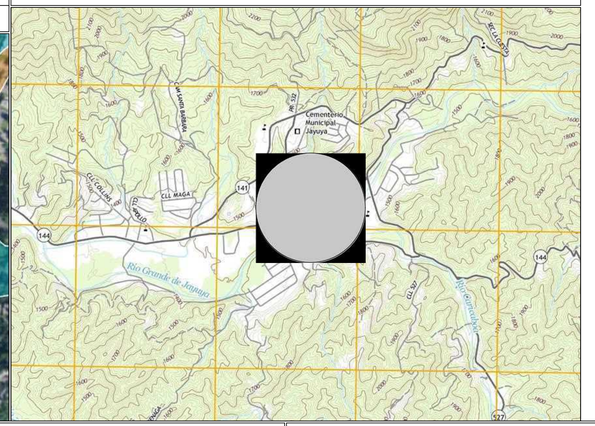
REVISION DATE: APRIL 19, 2005

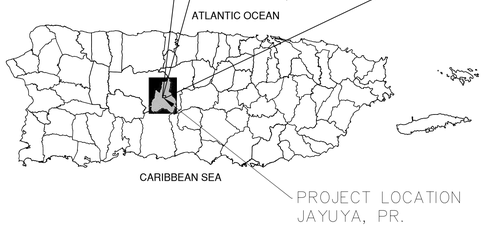


USGS TOPOGRAPHIC MAP

SCALE: 1:20,000

LAMBERT COORDINATES: X=183,333.357 Y=242,231.231 NAD 83





CONSTRUCTION PLANS
FOR
SIDEWALK REVITALIZATION JAYUYA URBAN CENTER PR-CRP-00053
IN
JAYUYA, PR.
Monday, April 15, 2024

PREPARED FOR
MUNICIPALITY OF JAYUYA
JAYUYA, PR.
CONTACT: PMO. VILMA I. PEREIRA, P.E.
TEL. 787-771-5071
EMAIL: VILMA.PEREIRA@AEGROUP-PR.COM

ENGINEER
DELGADO TORRES ENGINEERING, LLC.
URB. LINDA MAR # 53 C. LINDA MAR
MANATI, PR. 00674
CONTACT: JOSE A. DELGADO, PE.
TEL. 787-854-7591
EMAIL: JDELGADO@DELTORRE-ENG.COM

0 500 m 1000 m 2000 m

SCALE: 1:20000

PR-CRP-000053 Sheet Index Table		
Sheet No.	**Sheet Count**	**Sheet Title**
C100	1	Title Sheet
GN01	1	General Notes
S101-S102	2	Topography (by Others)
C200	1	Overview Plan
C301-C305	5	Demolition Plan
C401-C406	6	Site Plan
C501-C521	21	Grading & Paving Dtl
DTL-01	1	Curb & Gutter Details
C601-C605	5	Construction Sequence
E01	1	Luminaire Detail
C701-C705	5	Utility Plan
C801-C805	5	Erosion Control Plan
Standard Detail Sheets		
MOT 01-08	8	Maintenance of Traffic
RDWY 01-08	8	Roadway Standards
SW3P 01-04	4	Erosion Control Plan

90% DESIGN

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE TO OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

TITLE SHEET

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: 4/15/2024

PROJECT NO.: DTE23-004

SHEET NO.: C100

g:\users\jesusdelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-000053\dte23-004 cad\production drawings\c100 title sheet.dwg

GENERAL NOTES:

1. Prior to any construction, the Contractor shall familiarize himself with the Contract Documents and Specifications, the Plans, including all notes, the PRDOT Standard Details and Specifications and any other applicable standards or specifications relevant to the proper completion of the work specified. Failure on the part of the Contractor to familiarize himself with all Standards and Specifications pertaining to this work shall in no way relieve the Contractor of responsibility for performing the work in accordance with all such applicable Standards and Specifications.

2. The Contractor shall have in his possession, prior to construction, all necessary permits, licenses, etc. The Contractor shall have at least one set of approved Engineering Plans and Specifications on-site at all times. The Contractor shall notify the Municipality of Jayuya 48 hours prior to the commencement of any work.

3. All materials and construction shall conform to the PRDOT Standard Construction Details for Paving, Drainage, Water and Sanitary Sewer Facilities and be installed in accordance with the City Specifications and the Puerto Rico Department of Transportation. These specifications shall be made part of these plans.

4. In the event an item of work is not covered in the sheets provided in this set, Construction Standards, Specifications and Details; or the Puerto Rico Department of Transportation (PRDOT); the City Engineer or the Engineer of records shall have the final decision on all materials, methods and procedures.

5. Construction inspection may be performed by representatives of the Owner, Engineer, City, Geotechnical Engineer and Reviewing Authorities and Agencies. Unrestricted access shall be provided to them at all times. The Contractor is responsible for understanding and scheduling required inspections.

6. All contractors must confine their activities to the work area. No encroachments outside of the defined work area will be allowed, unless specifically noted on the plans. Any damage resulting therefrom shall be the Contractor's responsibility to repair.

7. It will be the responsibility of each contractor to protect all existing public and private utilities throughout the construction of this project. The Contractor shall contact the appropriate utility companies for line locations prior to commencement of construction and shall assume full liability to those companies for any damages caused to their facilities.

8. The Contractor shall be responsible for providing the required construction staking necessary to complete the construction in accordance with the plans and specifications.

9. The Contractor shall be responsible for providing and maintaining all necessary barricading and all other warning and safety devices to protect the public safety and health until all work has been completed and accepted.

10. If unforseen problems or conflicts are encountered in the course of construction, for which an immediate solution is not apparent, the Engineer and Owner shall be notified immediately.

11. The Contractor shall be responsible for field locating existing utilities and improvements prior to construction. The locations of existing utilities shown on these plans are approximate. The Contractor shall call 1-800-344-8377 (DIG-TESS), other utility locating services or the underground utility companies a minimum of 48 hours prior to beginning work.

12. The Contractor shall employ an Owner approved engineering testing laboratory for all required density, construction and materials testing and water bacteria testing. The testing laboratory shall make tests necessary to insure that construction is in accordance with the approved plans and specifications. Any retesting necessary to insure that a prior failing test meets the plan requirements, shall be at the Contractor's expense. The testing laboratory shall submit testing reports to the Engineer, the Owner and the Municipality.

13. The existing utilities shown on these plans have been located from reference information obtained from the respective owner of the utility. The Engineer and Owner do not accept responsibility for the utility locations as shown. It shall be the responsibility of the Contractor to verify the location of all existing utilities prior to construction, to take necessary precautions to protect all facilities encountered and to notify the Engineer promptly of any conflicts with existing facilities.

14. The Contractor shall be responsible for removing any existing structures, fences, debris or trees that are located within the boundaries of this project, unless otherwise noted on the plans.

15. The Contractor shall remove and dispose of all unsuitable excavated materials and construction debris at no additional cost to the Owner.

16. The Contractor shall be solely responsible for maintaining trench safety requirements in accordance with the trench safety plan prepared by others and in accordance with City Standards, PR State Law and the Occupational Safety and Health Administration Standards.

17. All concrete shall meet the minimum compressive strengths as noted and specified on the plans or other specifications. As a minimum, no concrete shall have a compressive strength less than 3,000 psi at 28 days.

18. Refer to the architectural plans for building and foundation dimensions.

19. The Contractor shall be responsible for providing a two (2) year, 100% maintenance bond to the Owner for all improvements associated with the approved plans.

GRADING NOTES:

1. All grading shall be performed in accordance with these plans and the geotechnical report prepared by others.

2. New finished contours shown are top of paving in areas to receive pavement and top of soil in areas to be seeded.

3. Areas outside of parking lot perimeter shown to be seeded shall receive a minimum of four (4) inches of top soil (or to depth identified on the Landscaping Plans). This topsoil to be placed and leveled by the grading contractor. This material may be stockpiled during stripping operations.

4. Rough grading elevations shall be as follows:
   A. Four (4) inches below finished contours in seeded areas.
   B. Six (6) inches below finished contours in paved areas, unless noted otherwise.

5. Dimensions on buildings are for grading purposes only and are not intended for use in laying out the building foundation.

6. Contractor shall pay all costs associated with raising or lowering existing utility appurtenances as required to match finished grades in conformance with City of Frisco Standards and these plans.

7. The Contractor shall use whatever measures are required to prevent silt and construction debris from leaving the site. Contractor shall comply with all Federal, State and Local erosion, conservation and siltation regulations. Contractor shall remove all temporary erosion control devices upon completion of permanent drainage facilities and the establishment of vegetation sufficient to prevent erosion. Any damage to adjacent properties; downstream channels, ponds or lakes; or wildlife shall be corrected by the Contractor at his expense.

8. The Contractor shall take all available precautions to control dust at no additional cost to owner.

9. All excavation is unclassified and shall include all materials encountered.

10. All areas not covered by the building, paving or proposed landscaping shall be grassed on this lot including adjacent street parkways.

11. Prior to the commencement of construction activities, the Contractor shall stake out and mark the items established by the site plan.

12. Temporary erosion control devices shall be installed prior to the commencement of grading activities. Contractor shall inspect and maintain all temporary erosion control devices as required.

13. All disturbed areas shall be seeded with hydromulch unless otherwise noted. The Contractor shall maintain as much existing vegetation as possible. Grass buffer strips shall remain around the perimeter of the property to aid in the filtering of sedimentation. Sufficient temporary or permanent groundcover shall be established on all slopes, berms and swales to prevent erosion.

14. All site grading and earthwork shall comply to the geotechnical report recommendations.

15. These specifications do not include grading and preparation of the building foundation area. The Contractor shall confirm the foundation compaction, moisture control, select fill and/or treatment with the Owner, the project geotechnical engineer and structural engineer.

16. Areas within five (5) feet horizontally of the parking pavement and/or embankment slopes adjacent to the parking area shall be constructed as per the project geotechnical engineer's recommendations. The specifications identified below are minimum requirements and shall be superseded by the project geotechnical engineer's recommendations if in conflict. The specifications are as follows:

   A. The area shall be stripped of vegetation a minimum of six (6) inches or as directed by the project geotechnical engineer and proofrolled. Proofrolling consists of rolling the entire area of prepared subgrade with a heavy (25 ton or greater total weight) pneumatic tired roller. The roller shall make several passes over the area. Any soft, wet or weak areas which do not compact by proofrolling shall be removed and recompacted as outlined herein. The proofrolling operation must be performed under the observation of a qualified geotechnical engineer or his representative and density control tested.

   B. On-site soils with a plasticity index (PI) anticipated to be greater than 15 and less than 20, which includes any dark colored surface clay soils, can be used as grade raise fill outside the proposed building area. These clay soils shall be compacted to a dry density of at least 95 percent of standard proctor density. The compacted moisture content of the clays during placement shall be between optimum and four (4) percentage points above optimum.

   C. Compaction shall be accomplished by placing the fill in six (6) to eight (8) inch thick lifts and compacting each lift to at least the minimum specified dry density. It is imperative that the fill particle sizes be less than six (6) inches in diameter. If larger clods are encountered during grading, these clods must be broken down or removed prior to final placement of the fill.

   D. In order for the fill materials to perform as intended, the fill material must be placed in a manner which produces a good uniform fill that is compacted within the density and moisture ranges outlined above. Field density tests shall be performed to confirm this performance as construction progresses. For the proposed parking and driveway areas, testing at a frequency of no less than one (1) test per each lift per each 5,000 square feet shall be provided.

17. All underground work shall be completed prior to subgrade preparation and placement of paving.

PAVING NOTES:

1. All dimensions are to the face of curb unless shown otherwise.
2. All proposed curb radii are 2.0 feet unless shown otherwise.
3. The Contractor shall remove and replace any concrete pavement within five (5) days of saw cutting the existing pavement.
4. The use of fly ash is not allowed in the concrete mix design.
5. All subgrade shall be tested for sulfates prior to the placement of concrete pavement. If sulfates are found, any treatments shall be in accordance with the recommendations of the geotechnical engineer.
6. All concrete shall meet the minimum compressive strengths as noted and specified on the plans or other specifications. Unless noted otherwise, the concrete pavement shall have a minimum compressive strength of 3,600 psi at 28 days.
7. It is the Contractor's responsibility to ensure compliance with all handicapped accessibility requirements, including signage, textures, colorings, markings and slopes of ADA accessible routes and parking spaces.
8. All signs, pavement markings and other traffic control devices shall conform to the Texas Manual on Uniform Traffic Control Devices.
9. All existing signs within the limits of the proposed pavement shall be relocated a minimum of five (5) feet from the proposed back of curb.
10. The contractor shall submit a pavement jointing plan to the Engineer for approval prior to the placement of concrete paving.
11. Saw joints shall be made as soon as the new concrete can support the weight of the machine and operator without tracking.

STORM DRAINAGE NOTES:

1. Drainage improvements to the existing system is not included in this project unless directed by the Engineer.
2. All storm drainage pipe shall be Class III RCP, C-76, unless shown otherwise.
3. The Contractor shall use Gifford-Hill "B-2" (Radius Pipe) or equal for all horizontal or vertical curves with a radius greater than 100 feet. Pre-fabricated bends shall be used if the radius is less than 100 feet.
4. Use pre-fabricated Wyes at all pipe intersections and concrete collars at pipe size changes if a junction device (manhole, junction box, inlet, etc.) is not used.
5. Open ends of storm drainage pipes shall be adequately protected at the end of each day by the contractor.
6. Water jetting is not allowed.
7. All embedment and backfill shall be wetted to approximate optimum moisture and compacted in 8 inch lifts to 95% Standard Proctor Density or as directed by the Geotechnical Engineer. Density tests shall be obtained for each lift and for each 150 lineal feet of trench or increment thereof or as directed by the Geotechnical Engineer.
8. All excavation is unclassified and shall include all materials encountered.

EROSION CONTROL NOTES:

1. Erosion control design and specifications are included in these drawings in accordance with the minimum requirements of the City of Frisco. Responsibility for compliance with State and Federal Best Management Practices (BMPs), the implementation of erosion control BMP measures and/or the filing of permits or notices shall solely rest with the Contractor(s) and Owner(s). The Junta de Calidad Ambiental (JCA) requires permits for both small and large construction sites under the authority of the Environmental Protection Agency (EPA) General Permit, if required. General Permit requirements will require the developer/owner and responsible Contractor(s) to complete the following:

   Small Construction Sites – will disturb (alone or as part of a larger development) between 1 acre and 5 acres of land.
   A. Must develop and implement a Storm Water Pollution Prevention Plan (SWPPP)
   B. Must post copy of the Construction Site Notice at the project site.
   C. Must submit a copy of the JCA Construction Site Notice to the overseer Govermental Agency, if required.

   Delgado Torres Eng. LLC.. assumes no responsibility or liability for failure to do so by the Owner, Developer or Contractor.

2. The Contractor shall obtain a General Permit in compliance with Govermental Agency and implement a SWPPP according to permit requirements and applicable laws.
3. The Contractor shall preserve existing vegetation when possible and must stabilize any disturbed area where construction activity has temporarily or permanently ceased. The stabilization must take place within 14 days of the end of activities unless construction will resume within 21 days.
4. All of the erosion control devices shown on the erosion control plan for the project shall be installed prior to the start of land disturbing activities.
5. If the erosion control plan as approved cannot control erosion and off-site sedimentation from the project, then the erosion control plan will be required to be revised and/or additional erosion control devices will be required on-site.
6. The Contractor shall use whatever measures are required to prevent silt and construction debris from leaving the site. Contractor shall comply with all Federal, State and Local erosion, conservation and siltation regulations. Contractor shall remove all temporary erosion control devices upon completion of permanent drainage facilities and the establishment of vegetation sufficient to prevent erosion. Any damage to adjacent properties; downstream channels, ponds or lakes; or wildlife shall be corrected by the Contractor at his expense.
7. The Contractor shall take all available precautions to control dust at no additional cost to owner.

DRAWING GENERAL NOTES:

1. metric system has been used throughout the project unless otherwise specified.
2. all elevations are referred to mean sea level and given in meters.
3. all horizontal coordinates used are meters, NAD83(Rev. 1993) system.
4. North indication points to true north.
5. New construction shall meet horizontal and vertical alignments of existing facilities.
6. Attention is called to all bidders that there are utilities installed in the construction area of this project, which are the property of the fallowing entities p.r. telephone co. puerto rico electric & power authority and the puerto rico aqueduct sewer authority and others. although these utilities were shown on the plans using the information obtained from the respective owners, the contractor shall exercise utmost care not to cause any damage to these utilities and shall coordinate with the owners of such utilities for the exact location of the same or any other that might be in the area prior to the commencement of any work in the vicinity of these utilities.
7. For standard models drawings, refer to the standard drawings book adopted by the puerto rico highway and transportation authority.
8. The lateral offset of the signs to be installed shall be according to the standards, recommendations and options indicated in Chapter 2a of the MUTCD 2023 edition.
9. Historical buildings are identified (from the Oficina Estatal de Conservacion Historica de PR) in the plans, although is the sole responsibility of the contractor to obtain any permits to perform any work adjacent to these buildings. the contractor shall not impact in any way these historical buildings to complete the construction shown here.

CRP-053 Sidewalk Revitalization Jayuya Urban Center

Project limit information (Coordinates)

Street		Project Limit Beginning Coordinates (m)	Latitude	Longitude	Project Limit I Coordinates (m)	Latitude
PR-144	Northing	242,631.74	18.2184420	66.5950295	242,956.31	18.22137
	Easting	182,869.88			183,604.39	
Figueras	Northing	242,609.96	18.2182457	66.5944579	Ends at Mattei Intersection	
	Easting	182,957.33				
Torrado	Northing	242,704.93	18.2191051	66.5927545	Ends at PR-141 Intersection	
	Easting	183,137.58				
Libertad	Northing	Begins at PR-141 Intersection			242,714.13	18.21919
	Easting				183,407.49	
San Felipe	Northing	242,784.72	18.2198249	66.5940610	Ends at Mattei Intersection	
	Easting	182,999.46				
PR-532	Northing	Begins at PR-141 Intersection			242,709.02	18.21914
	Easting				182,930.70	
PR-534	Northing	242,757.49	18.2195580	66.5927012	Ends at PR-141 Intersection	
	Easting	183,143.26				
Hoyo Frio	Northing	242,863.10	18.2205363	66.5902000	Ends at PR-141 Intersection	
	Easting	183,407.91				
Ventana al Mar (Bridge)	Northing	Begins at PR-141 Intersection			242,527.98	18.2175
	Easting				183,219.08	

ABBREVIATIONS

ABUT.	ABUTMENT
AGG.	AGGREGATE
AH.	AHEAD
AL.	ALUMINUM
ASB.	ASBESTOS
ASPH.	ASPHALT
BK.	BACK
B.L.	BASE LINE
B.W.F.	BARBED WIRE FENCE
B.V.	BALL VALVE
B. & S.	BELL & SPIGOT
B.M.	BENCH MARK
BIT. CONC.	BITUMINOUS CONCRETE
BLDG.	BUILDING
BW	BOTTOM OF WALL
C.I.	CAST IRON
C.I.P.	CAST IRON PIPE
C.B.	CATCH BASIN
C.L.	CENTER LINE
C. TO C.	CENTER TO CENTER
CTD.	COATED
COL.	COLUMN
COM.	COMMUNICATION
CONC.	CONCRETE
C.O.A.	CONTROL OF ACCESS
COORD.	COORDINATES
C.M.	CORRUGATED METAL
C.M.P.	CORRUGATED METAL PIPE
CU.M.	CUBIC METER
CULV.	CULVERT
C.S.	CURVED TO SPIRAL
C.	CUT
DEG.	DEGREE
DIA.	DIAMETER
DIM.	DIMENSION
DWG.	DRAWING
DWY.	DRIVEWAY
ELEV.	ELEVATION
E. TO E.	END TO END
ENGR.	ENGINEER
EST.	ESTIMATE
EXC.	EXCAVATION
EXIST.	EXISTING
E.G.	EXISTING GROUND
EXP.	EXPANSION
EXT.	EXTERNAL
EGL	ENERGY GRADE LINE
EOP	EDGE OF PAVEMENT
F. TO F.	FACE TO FACE
F.A.	FEDERAL AID
F.A.P.	FEDERAL AID PRIMARY
F.A.S.	FEDERAL AID SECONDARY
F.	FILL
F.L.	FLOW LINE
FWD.	FORWARD
G.I.	GALVANIZED IRON
G.	GAS
G.V.	GAS VALVE
GRAV.	GRAVEL
GRD.	GROUND
HW.	HEADWALL
HWL.	HIGH WATER LEVEL
HGL	HYDRAULIC GRADE LINE
HYD.	HYDRANT
INV.	INVERT
I.E.	INVERT ELEVATION
J.B.	JUNCTION BOX
LT.	LEFT
L.	LENGTH OF CURVE
L.P.	LIGHT POLE
M.B.	MAIN BOX
M.L.	MAIN LINE
MH.	MANHOLE
MAX.	MAXIMUM
M.H.W.	MEAN HIGH WATER
M.S.L.	MEAN SEA LEVEL
MED.	MEDIAN
MIN.	MINIMUM
MON.	MONUMENT
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OFF.	OFFSET
O. TO O.	OUTSIDE TO OUTSIDE
PVMT.	PAVEMENT
PCC.	POINT OF COMPOUND CURVATURE
P.C.	POINT OF CURVATURE
P.I.	POINT OF INTERSECTION
P.R.C.	POINT OF REVERSE CURVE
P.T.	POINT OF TANGENCY
P.C.C.	PORTLAND CEMENT CONCRETE
PWR.	POWER
P.P.	POWER POLE
P.L.	PROPERTY LINE
PROP.	PROPOSED
P.G.	PROPOSED GRADE
P.V.I.	POINT OF VERTICAL INTERSECTION
R.	RADIUS OF CURVATURE
RR.	RAILROAD
R.C.P.	REINFORCED CONCRETE PIPE
RET.	RETAINING
RT.	RIGHT
R.O.W.	RIGHT OF WAY
RD.	ROAD
RDWAY.	ROADWAY
SAN. S.	SANITARY SEWER
S.M.H.	SANITARY SEWER MANHOLE
SHDR.	SHOULDER
SW.	SIDEWALK
S.C.	SPIRAL TO CURVE
S.T.	SPIRAL TO TANGENT
SQ.M.	SQUARE METER
STA.	STATION
S.S.	STORM SEWER
STR.	STRUCTURE
SG.	SUBGRADE
S.L.	SURVEY LINE
TW	TOP OF WALL
T.S.	TANGENT TO SPIRAL
TEL.	TELEPHONE
TYP	TYPICAL (APPLY TO SIMILAR)
TY	TYPE (MATERIAL TYPE)
T.E.	TOP ELEVATION
T.G. TOC	TOP OF GRATE TOP OF CURB
UG.	UNDERGROUND
V.C.	VERTICAL CURVE
VERT.	VERTICAL
W.M.	WATER MAIN
W. MTR.	WATER METER
W.V.	WATER VALVE
W.W.	WING WALL
W.M.F.	WIRE MESH FENCE
W.I.	WROUGHT IRON
W/F	WATER FAUCET BOX

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

GENERAL NOTES

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

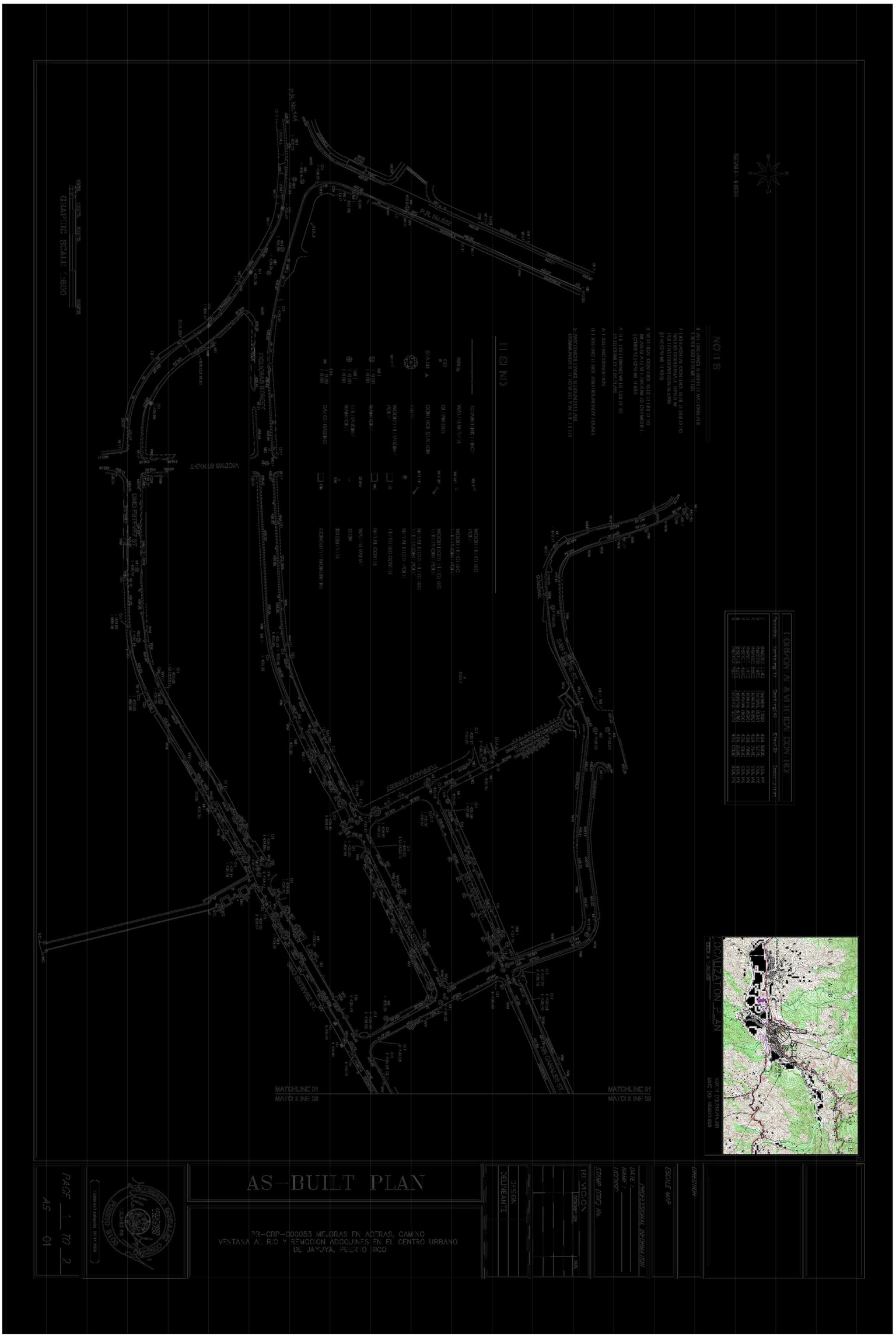
DATE: April 15, 2024

PROJECT NO.: DTE23-004

SHEET NO.: GN01

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\gn01 general notes.dwg

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\s100 survey.dwg



S101	DRAWING NO.		
	PROJECT NO. DTE23-004		
	DRAWN BY: JAD DESIGNED BY: REVIEWED BY:		
	DATE: April 15, 2024		

REVISIONS	SYMBOL	DATE	BY

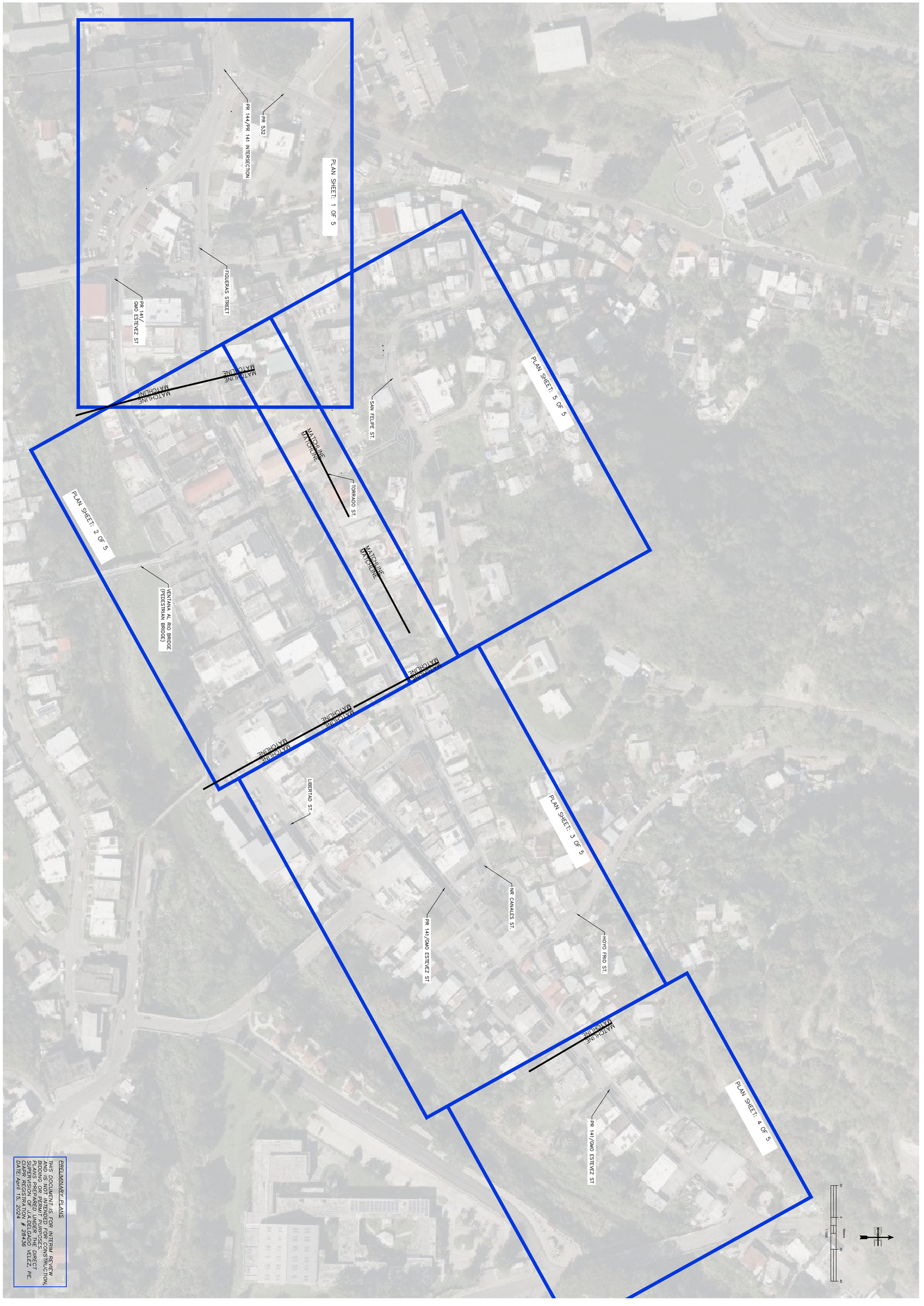
TOPOGRAPHIC SURVEYING MAP

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

DELTORRE ENGINEERING LLC
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\s100 survey.dwg

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c200 overall plan.dwg



C200	DTE23-004	April 15, 2024	DRAWN: JAD CHECKED: LD REVIEWED: ITI	REVISIONS	SYMBOL / DATE / BY

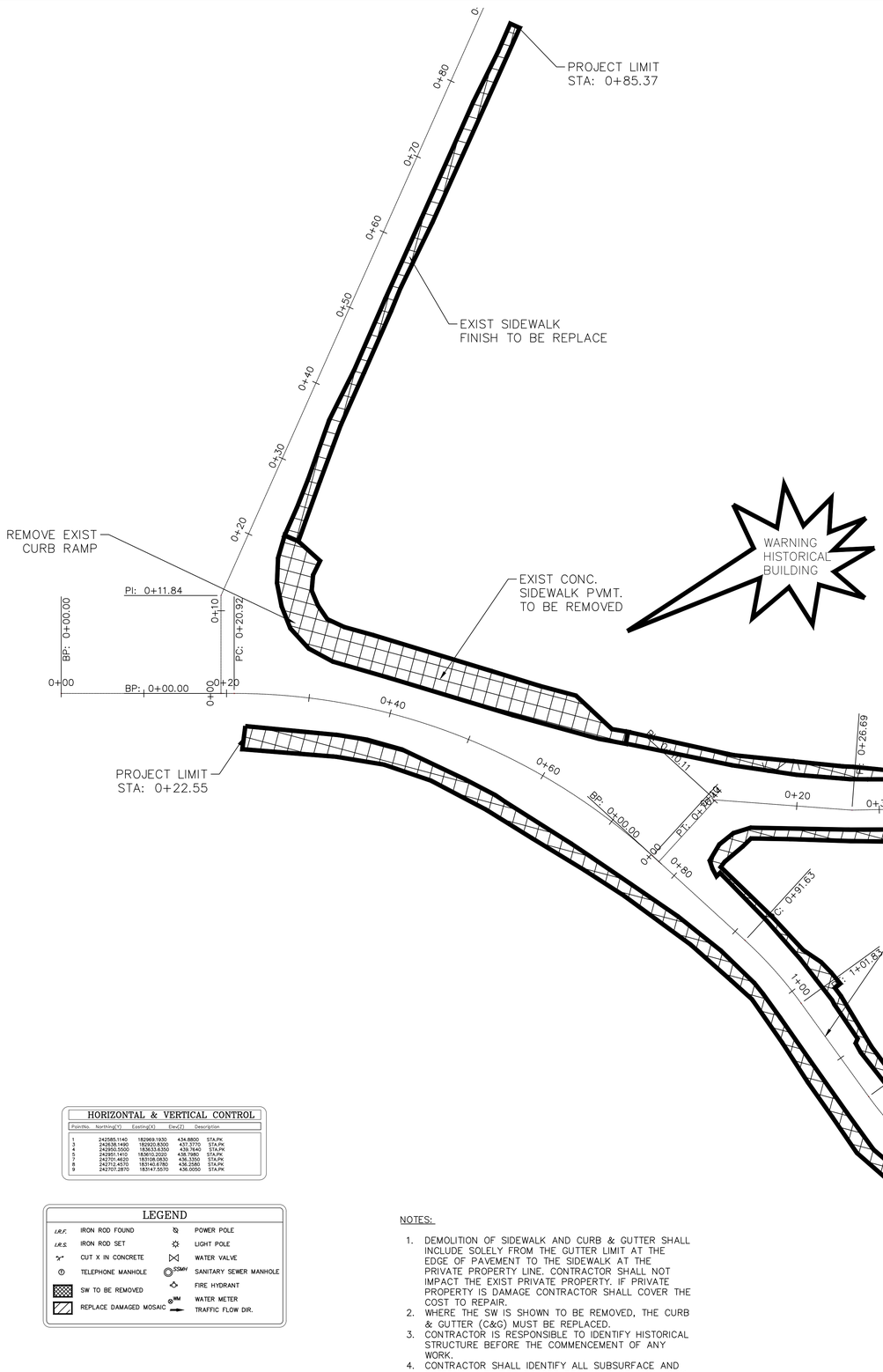
SHEET NAME

OVERALL PLAN
KEY MAP

PROJECT NAME

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre



HORIZONTAL & VERTICAL CONTROL				
PointNo.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
3	242636.1490	182920.8300	437.3770	STA.PK
4	242950.5500	183633.6350	439.7640	STA.PK
6	242701.4620	183108.0830	436.3350	STA.PK
7	242701.4620	183108.0830	436.3350	STA.PK
8	242712.4570	183140.6780	436.2580	STA.PK
9	242707.2870	183147.5570	436.0050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
T	TELEPHONE MANHOLE	SSMH	SANITARY SEWER MANHOLE
	SW TO BE REMOVED		FIRE HYDRANT
	REPLACE DAMAGED MOSAIC	WM	WATER METER
			TRAFFIC FLOW DIR.

NOTES:

1. DEMOLITION OF SIDEWALK AND CURB & GUTTER SHALL INCLUDE SOLELY FROM THE GUTTER LIMIT AT THE EDGE OF PAVEMENT TO THE SIDEWALK AT THE PRIVATE PROPERTY LINE. CONTRACTOR SHALL NOT IMPACT THE EXIST PRIVATE PROPERTY. IF PRIVATE PROPERTY IS DAMAGE CONTRACTOR SHALL COVER THE COST TO REPAIR.
2. WHERE THE SW IS SHOWN TO BE REMOVED, THE CURB & GUTTER (C&G) MUST BE REPLACED.
3. CONTRACTOR IS RESPONSIBLE TO IDENTIFY HISTORICAL STRUCTURE BEFORE THE COMMENCEMENT OF ANY WORK.
4. CONTRACTOR SHALL IDENTIFY ALL SUBSURFACE AND EXTERNAL UTILITIES BEFORE BEGINNING OF ANY WORK.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE TO OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
DEMOLITION PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 14, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C301

c:\users\jaesodelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c305 demolition plan.dwg

MATCHLINE
SHEET: C305

MATCHLINE
SHEET: C305

MATCHLINE
SHEET: C301

MATCHLINE
SHEET: C303

MATCHLINE
SHEET: C301

MATCHLINE
SHEET: C303

MATCHLINE
SHEET: C303

WARNING HISTORICAL BUILDING

WARNING HISTORICAL BUILDING

WARNING HISTORICAL BUILDING

MATTEI ST.

EXIST CONC. SIDEWALK PVMT. TO BE REMOVED

REMOVE EXIST CURB RAMP

EXIST GUTTER TO REMAIN

REMOVE PLANTER EX. TREE TO REMAIN

REMOVE AND REPLACE EXIST DAMAGED MOSAIC FINISH AT BRIDGE VENTANA AL RIO

PROJECT LIMIT STA: 0+41.92

PC: 1+08.42

PT: 1+24.45

PI: 2+16.82

PI: 2+39.89

PI: 3+02.69

PC: 3+33.21

PC: 3+40.69

PI: 0+04.78

PI: 0+24.21

PI: 1+76.80

EP: 1+87.48

BP: 0+00.00

PI: 0+39.96

HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
2	242638.1490	182920.8300	437.3770	STA.PK
4	242950.5500	183633.6350	439.7640	STA.PK
5	242851.1410	183610.2020	438.7980	STA.PK
7	242701.4620	183108.0830	436.3350	STA.PK
8	242707.4620	183108.0830	436.3350	STA.PK
9	242707.2870	183147.5570	436.0050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
T	TELEPHONE MANHOLE	SSMH	SANITARY SEWER MANHOLE
	SW TO BE REMOVED		FIRE HYDRANT
	REMOVE & REPLACE	WM	WATER METER
			TRAFFIC FLOW DIR.

NOTES:

1. DEMOLITION OF SIDEWALK AND CURB & GUTTER SHALL INCLUDE SOLELY FROM THE GUTTER LIMIT AT THE EDGE OF PAVEMENT TO THE SIDEWALK AT THE PRIVATE PROPERTY LINE. CONTRACTOR SHALL NOT IMPACT THE EXIST PRIVATE PROPERTY. IF PRIVATE PROPERTY IS DAMAGE CONTRACTOR SHALL COVER THE COST TO REPAIR.
2. WHERE THE SW IS SHOWN TO BE REMOVED, THE CURB & GUTTER (C&G) MUST BE REPLACED.
3. CONTRACTOR IS RESPONSIBLE TO IDENTIFY HISTORICAL STRUCTURE BEFORE THE COMMENCEMENT OF ANY WORK.
4. CONTRACTOR SHALL IDENTIFY ALL SUBSURFACE AND EXTERNAL UTILITIES BEFORE BEGINNING OF ANY WORK.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

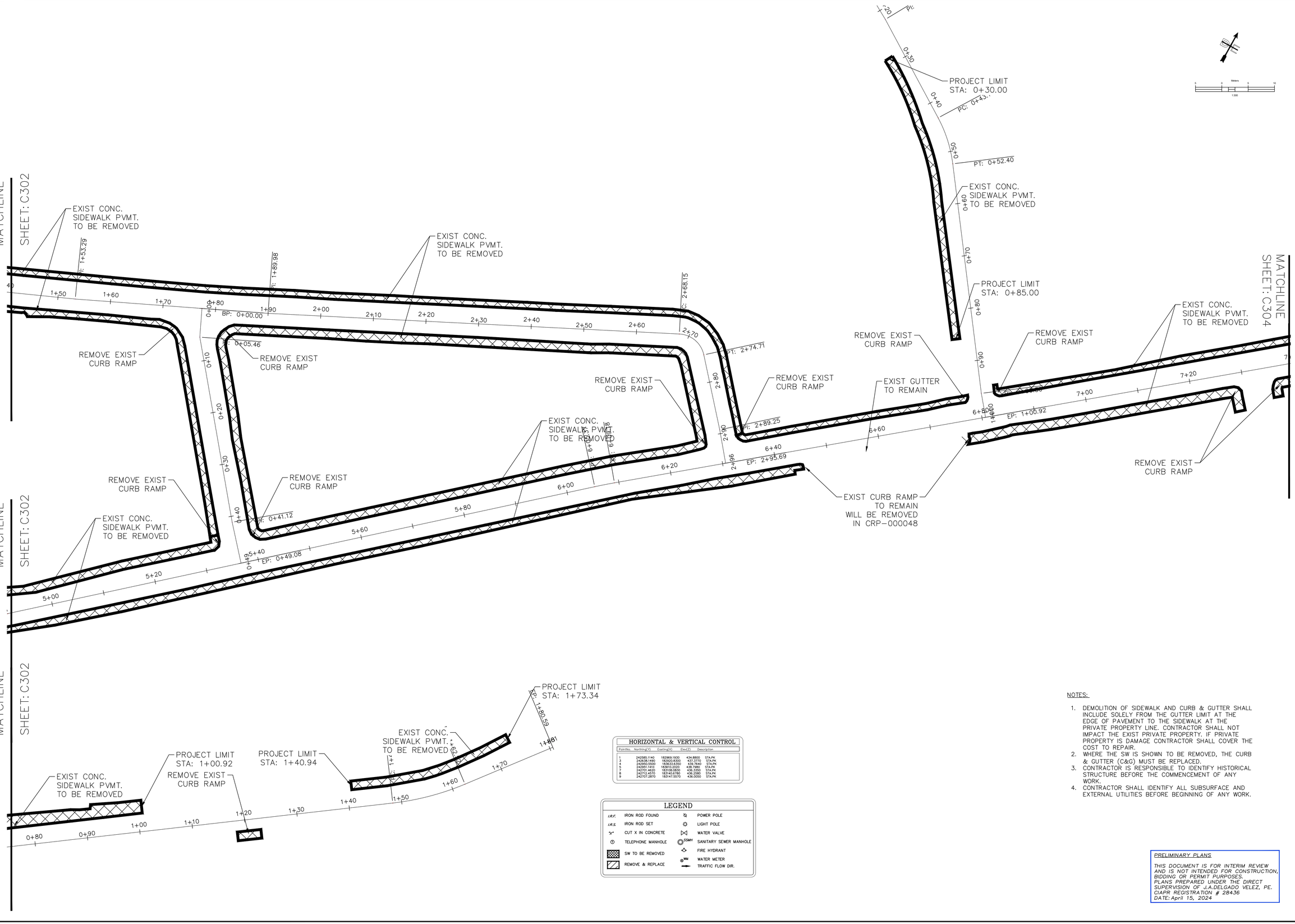
SHEET NAME
DEMOLITION PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 14, 2024
PROJECT NO.:
DTE23-004

SHEET NO.:
C302

c:\users\pesedelgado\onedrive - delgado torres engineering, llc\documents - proyectos\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c305 demolition plan.dwg



HORIZONTAL & VERTICAL CONTROL				
Point No.	Northing(Y)	Easting(X)	Elev.(Z)	Description
1	242585.1140	182969.1830	434.8800	STA.PK
2	242585.5500	183033.6350	436.7640	STA.PK
4	242950.5500	183033.6350	439.7640	STA.PK
5	242951.1410	183610.2020	438.7980	STA.PK
7	242701.4620	183108.0830	436.3350	STA.PK
8	242712.4570	183140.6780	436.2580	STA.PK
9	242707.2870	183147.5570	436.0050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
T	TELEPHONE MANHOLE	SSMH	SANITARY SEWER MANHOLE
	SW TO BE REMOVED		FIRE HYDRANT
	REMOVE & REPLACE	WM	WATER METER
			TRAFFIC FLOW DIR.

NOTES:

1. DEMOLITION OF SIDEWALK AND CURB & GUTTER SHALL INCLUDE SOLELY FROM THE GUTTER LIMIT AT THE EDGE OF PAVEMENT TO THE SIDEWALK AT THE PRIVATE PROPERTY LINE. CONTRACTOR SHALL NOT IMPACT THE EXIST PRIVATE PROPERTY. IF PRIVATE PROPERTY IS DAMAGE CONTRACTOR SHALL COVER THE COST TO REPAIR.
2. WHERE THE SW IS SHOWN TO BE REMOVED, THE CURB & GUTTER (C&G) MUST BE REPLACED.
3. CONTRACTOR IS RESPONSIBLE TO IDENTIFY HISTORICAL STRUCTURE BEFORE THE COMMENCEMENT OF ANY WORK.
4. CONTRACTOR SHALL IDENTIFY ALL SUBSURFACE AND EXTERNAL UTILITIES BEFORE BEGINNING OF ANY WORK.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
DEMOLITION PLAN

REVISIONS	SYMBOL	DATE	BY

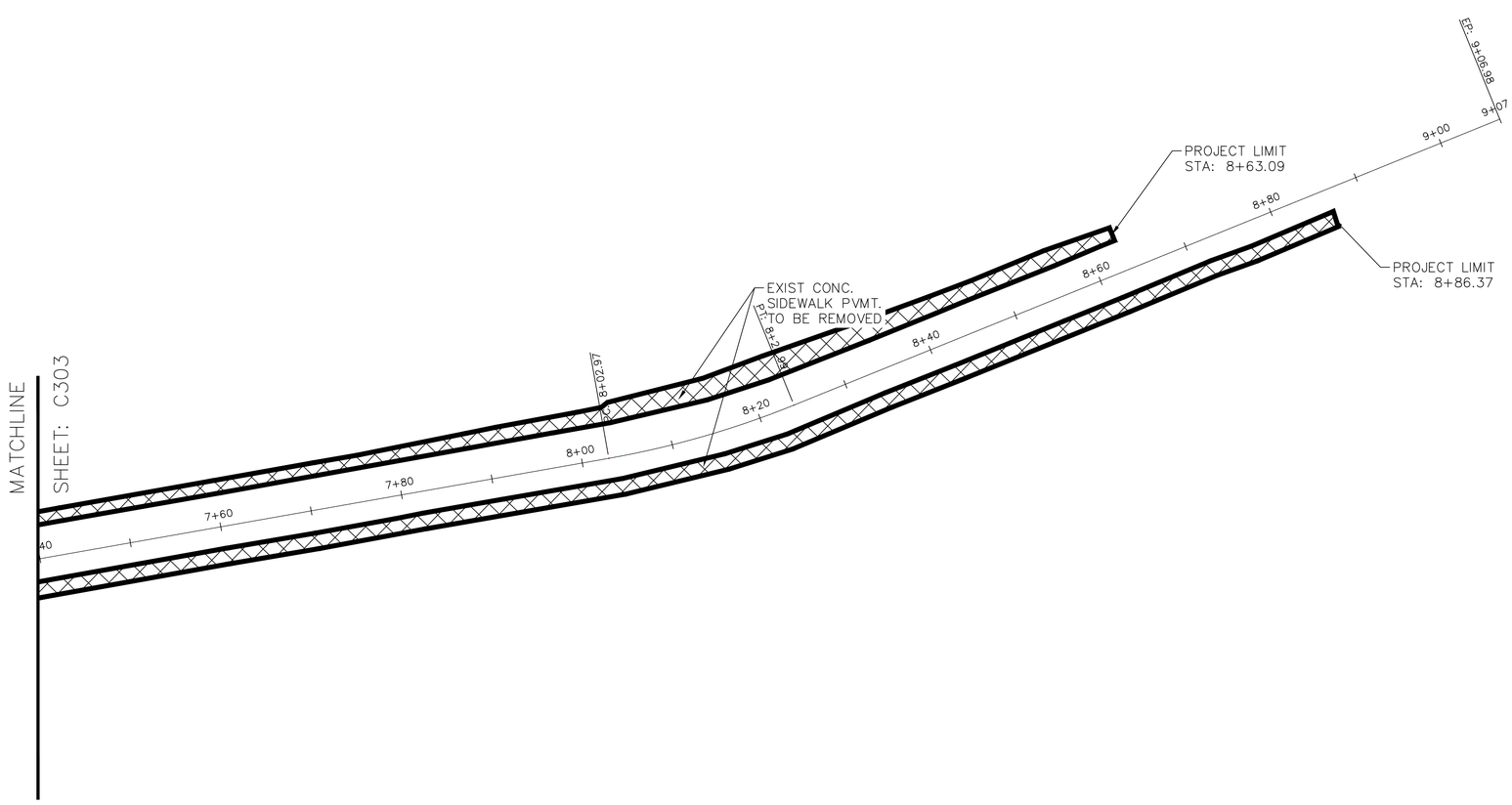
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

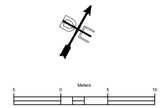
DATE:
April 14, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C303

c:\users\jeacedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c305 demolition plan.dwg





HORIZONTAL & VERTICAL CONTROL

Point No.	Northing (Y)	Easting (X)	Elev (Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
3	242638.1490	182920.8300	437.3770	STA.PK
4	242902.0500	183633.8350	439.7640	STA.PK
5	242951.1410	183610.2020	438.7980	STA.PK
7	242701.4820	183108.0830	436.3350	STA.PK
8	242712.4570	183140.6170	436.2580	STA.PK
9	242707.2870	183147.3070	436.0050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
T	TELEPHONE MANHOLE	SSMH	SANITARY SEWER MANHOLE
	SW TO BE REMOVED		FIRE HYDRANT
	REMOVE & REPLACE	WM	WATER METER
			TRAFFIC FLOW DIR.

NOTES:

1. DEMOLITION OF SIDEWALK AND CURB & GUTTER SHALL INCLUDE SOLELY FROM THE GUTTER LIMIT AT THE EDGE OF PAVEMENT TO THE SIDEWALK AT THE PRIVATE PROPERTY LINE. CONTRACTOR SHALL NOT IMPACT THE EXIST PRIVATE PROPERTY. IF PRIVATE PROPERTY IS DAMAGE CONTRACTOR SHALL COVER THE COST TO REPAIR.
2. WHERE THE SW IS SHOWN TO BE REMOVED, THE CURB & GUTTER (C&G) MUST BE REPLACED.
3. CONTRACTOR IS RESPONSIBLE TO IDENTIFY HISTORICAL STRUCTURE BEFORE THE COMMENCEMENT OF ANY WORK.
4. CONTRACTOR SHALL IDENTIFY ALL SUBSURFACE AND EXTERNAL UTILITIES BEFORE BEGINNING OF ANY WORK.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
DEMOLITION PLAN

REVISIONS	SYMBOL	DATE	BY

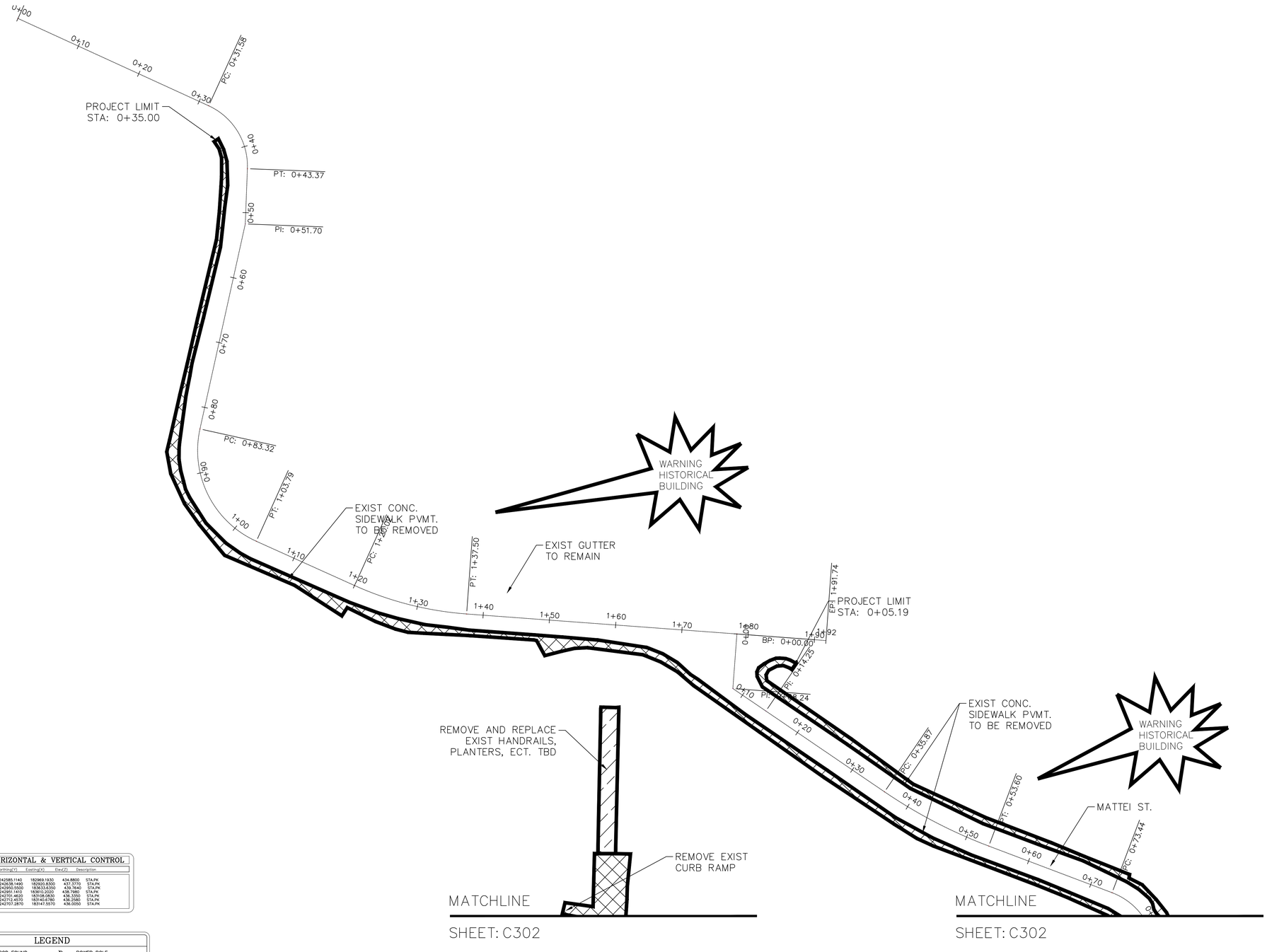
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 14, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C304

c:\users\jdelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c305 demolition plan.dwg



HORIZONTAL & VERTICAL CONTROL				
Point No.	Northing(Y)	Easting(X)	Elev.(Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
2	242585.5550	183033.8350	436.7640	STA.PK
4	242952.5500	183633.8350	436.7640	STA.PK
5	242951.1410	183610.2020	438.7980	STA.PK
7	242701.4620	183108.0830	436.3350	STA.PK
8	242712.4570	183140.6780	436.2580	STA.PK
9	242707.2870	183147.5570	436.0050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
T	TELEPHONE MANHOLE	SSMH	SANITARY SEWER MANHOLE
	SW TO BE REMOVED		FIRE HYDRANT
	REMOVE & REPLACE	WM	WATER METER
			TRAFFIC FLOW DIR.

NOTES:

1. DEMOLITION OF SIDEWALK AND CURB & GUTTER SHALL INCLUDE SOLELY FROM THE GUTTER LIMIT AT THE EDGE OF PAVEMENT TO THE SIDEWALK AT THE PRIVATE PROPERTY LINE. CONTRACTOR SHALL NOT IMPACT THE EXIST PRIVATE PROPERTY. IF PRIVATE PROPERTY IS DAMAGE CONTRACTOR SHALL COVER THE COST TO REPAIR.
2. WHERE THE SW IS SHOWN TO BE REMOVED, THE CURB & GUTTER (C&G) MUST BE REPLACED.
3. CONTRACTOR IS RESPONSIBLE TO IDENTIFY HISTORICAL STRUCTURE BEFORE THE COMMENCEMENT OF ANY WORK.
4. CONTRACTOR SHALL IDENTIFY ALL SUBSURFACE AND EXTERNAL UTILITIES BEFORE BEGINNING OF ANY WORK.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
DEMOLITION PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 14, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C305

c:\users\joseodelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c305 demolition plan.dwg

C:\Users\joseudelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c405 site planding

PROJECT LIMIT
STA: 0+85.37
OFF=4.19
N=242,709.02
E=182,930.70

℄ PR532

PROP CURB RAMP TYPE 1

PROP CONCRETE STAMP PATTERN #2

PROP CURB RAMP TYPE 1

WARNING HISTORICAL BUILDING

WARNING HISTORICAL BUILDING

PROJECT LIMIT
STA: 0+39.77
OFF=-3.12
N=242,621.02
E=182,986.19

PROJECT LIMIT
STA: 0+53.04
OFF=-3.20
N=242,621.76
E=182,999.37

CONFLICT AREA SIDEWALK DO NOT MEET ADA WIDTH REQUIREMENTS

MATCHLINE SHEET C402

PI: 0+11.84

BP: 0+00.00

PC: 0+20.92

ALIGN=CL-EXST-PR144
STA=0+00.00
OFF=0.00
N=242631.74
E=182877.55

ALIGN=CL-EXST-PR144
STA=0+19.33
OFF=0.00
N=242631.74
E=182896.88

PROJECT LIMIT
STA: 0+22.55
OFF=4.20
N=242,627.53
E=182,900.11

℄ PR141

PROP CURB RAMP TYPE 8

℄ FIGUERAS

PI: 0+40.94

PROJECT LIMIT
STA: 0+83.83
OFF=-3.99
N=242,609.96
E=182,957.33

ALIGN=CL-EXST-PR144
STA=0+77.51
OFF=0.00
N=242611.39
E=182949.84

PROJECT LIMIT
STA: 1+03.79
OFF=-3.92
N=242,594.61
E=182,970.90

PROJECT LIMIT
STA: 1+51.14
OFF=3.14
N=242,615.32
E=182,997.79

PROP CURB RAMP TYPE 8

PROP CURB RAMP TYP. 1

PROJECT LIMIT
STA: 1+51.88
OFF=-3.24
N=242,568.82
E=183,005.95

100 YR FLOOD ZONE

PROP CURB RAMP TYP. 8 EXIST CONC. POLE TO REMAIN

EXIST UTILITY BOX TO REMAIN (TYP.)

PROP CURB RAMP TYPE 8

MATCHLINE SHEET C402

HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(ft)	Easting(ft)	Elev.(ft)	Description
1	2427585.1140	182764.9.1930	434.8800	STA/PK
3	2426381.490	182925.8300	437.3770	STA/PK
4	2429502.5500	183623.6.3700	439.7640	STA/PK
5	2429511.410	183600.20200	438.7980	STA/PK
7	2427.10.4620	183108.98530	436.3350	STA/PK
8	2427.12.4570	183.18.6.5.70	436.2580	STA/PK
9	2427.17.2870	183.18.7.5570	436.0050	STA/PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
"X"	CUT X IN CONCRETE		WATER VALVE
	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
	EXIST WATER LINE	WM	WATER METER
	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX 100YR FLOOD PLAIN		PROP STAMP CONCRETE
	FINISH REPLACEMENT		PROP 4" SIDEWALK
	PROP SOLAR LUMINARE		PROP CONC STAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE TO OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
SITE PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C401

MATCHLINE SHEET C401

MATCHLINE SHEET: C405

MATCHLINE SHEET: C405

MATCHLINE SHEET: C403

MATCHLINE SHEET: C403

MATTEI ST.

PROP. CURB RAMP TYPE 1

PROP. CURB RAMP TYPE 1

PROP. CURB RAMP TYPE 1

EX. GRATE INLET TO BE RELOCATED OUTSIDE OF ADA PATH (TYP.)

PROP. LUMINAIRE SEE SHEET E01 FOR DETAILS (TYP.)

℄ CANALES

ALIGN=CL-EXST-CANALES
STA=0+80.36
OFF=0.00
N=242718.07
E=183227.89

ALIGN=CL-EXST-TORRADO
STA=0+28.32
OFF=0.00
N=242686.33
E=183154.09

WARNING HISTORICAL BUILDING

℄ FIGUERAS

100 YR FLOOD ZONE

ALIGN=CL-EXST-TORRADO
STA=0+60.25
OFF=0.00
N=242658.09
E=183168.97

PI: 3+02.69

EP: 1+24.45

PROP. CURB RAMP TYPE 8

PROP. CURB RAMP AT CROSSING

ALIGN=CL-EXST-MATTEI
STA=1+45.73
OFF=0.00
N=242694.04
E=183240.66

℄ NATTEI

℄ TORRADO

PROP. CURB RAMP AT CROSSING

WARNING HISTORICAL BUILDING

CONFLICT AREA SIDEWALK DO NOT MEET ADA WIDTH REQUIREMENTS

ALIGN=CL-EXST-PR144
STA=3+49.60
OFF=0.00
N=242617.34
E=183190.29

℄ PR141

ALIGN=CL-EXST-PR144
STA=3+50.12
OFF=0.00
N=242617.57
E=183190.76

ALIGN=CL-EXST-PR144
STA=4+58.11
OFF=0.00
N=242671.27
E=183284.41

EP: 1+87.48

ALIGN=CL-EXST-PR144
STA=4+30.75
OFF=0.00
N=242657.46
E=183260.79

PROP. CURB RAMP AT CROSSING

PI: 0+08.63

CONFLICT AREA CURB RAMP AREA DO NOT MEET ADA REQUIREMENTS

PROP CONCRETE STAMP PATTERN #2

PROP MOSAIC REPLACEMENT IN MISSING SPOTS, REPAIR OR REPLACE ALL NONFUNCTIONAL LIGHTING FIXTURES, REPAINT AND POWER WASHING AT BRIDGE.

CONFLICT AREA SLOPE TOO STEEP DO NOT MEET ADA REQUIREMENTS

PROP. CURB RAMP TYPE 8

PROJECT LIMIT
STA: 0+41.92
OFF=3.91
N=242,632.30
E=183,303.84

HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA/PK
3	242638.1490	182920.8300	437.3770	STA/PK
4	242601.1430	183003.2100	436.7980	STA/PK
5	242951.1410	183632.2020	438.7980	STA/PK
7	242781.4620	183108.0830	436.3350	STA/PK
8	242712.4570	183143.6780	436.2580	STA/PK
9	242707.2870	183147.5570	436.0050	STA/PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
	EXIST WATER LINE	WM	WATER METER
	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX 100YR FLOOD PLAIN		PROP STAMP CONCRETE
	FINISH REPLACEMENT		PROP 4" SIDEWALK
	PROP SOLAR LUMINARE		PROP CONC STAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
SITE PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C402

C:\Users\JoseDelgado\OneDrive - delgado torres engineering, llc\Documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c405 site plan.dwg

MATCHLINE

SHEET: C402

MATCHLINE

SHEET: C402

MATCHLINE

SHEET: C404

PROJECT LIMIT
STA: 8+86.70
OFF=2.34
N=242,863.10
E=183,407.91

PROJECT LIMIT
STA: 8+86.70
OFF=2.68
N=242,822.54
E=183,445.17

PROJECT LIMIT
STA: 1+73.34
OFF=-3.72
N=242,714.13
E=183,407.49

PROJECT LIMIT
STA: 1+40.94
OFF=-3.11
N=242,691.80
E=183,385.67

PROJECT LIMIT
STA: 1+00.92
OFF=-3.22
N=242,668.65
E=183,353.04

ALIGN=CL-EXST-CANALES
STA=1+77.41
OFF=0.00
N=242758.10
E=183316.27

ALIGN=CL-EXST-PR144
STA=6+80.71
OFF=0.00
N=242812.15
E=183456.36

ALIGN=CL-EXST-PR144
STA=6+30.62
OFF=0.00
N=242780.61
E=183417.44

ALIGN=CL-EXST-PR1
STA=5+36.69
OFF=0.00
N=242719.41
E=183346.21

PROP. LUMINAIRE
SEE SHEET E01
FOR DETAILS (TYP.)

PROP. LUMINAIRE
SEE SHEET E01
FOR DETAILS (TYP.)

CONFLICT AREA
SLOPE TOO STEEP
DO NOT MEET ADA
REQUIREMENTS

PROP. CURB RAMP
TYPE 8

PROP. CURB RAMP
TYPE 8

PROP. CURB RAMP
TYPE 8

PROP. CURB RAMP
TYPE 8

PROP. CURB RAMP
TYPE 8
POSSIBLE CONFLICT

PROP. CURB RAMP
TYPE 8
POSSIBLE CONFLICT

PROP. CURB RAMP
TYPE 8

PROP. CURB RAMP
TYPE 8

PROP. CURB RAMP
TYPE 8

PROP. CURB RAMP
TYPE 8
EX. CURB INLET
TO BE RELOCATED
(TYP.)

℄ CANALES

℄ HOYOFRIO

℄ PR141

℄ LIBERTAD

100 YR FLOOD ZONE

MATCH PROP SW WITH
PROJECT CRP-000048

PC: 2+68.15
PT: 2+74.71
EP: 2+95.59
PI: 0+21.98
PT: 0+52.40
PC: 0+43.19
PT: 0+96.30
EP: 1+88.59

HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev.(Z)	Description
1	242585.1149	182969.1930	434.8800	STAPK
3	242638.1490	182928.8300	437.3770	STAPK
4	242950.5500	183633.6350	439.7640	STAPK
6	242752.4620	183188.0830	436.3350	STAPK
7	242751.4620	183188.0830	436.3350	STAPK
8	242712.4578	183146.6780	436.2580	STAPK
9	242747.2870	183147.5570	436.9050	STAPK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
	EXIST WATER LINE	WM	WATER METER
	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX 100YR FLOOD PLAIN		PROP STAMP CONCRETE
	FINISH REPLACEMENT		PROP 4" SIDEWALK
	PROP SOLAR LUMINARE		PROP CONC STAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
SITE PLAN

REVISIONS	SYMBOL	DATE	BY

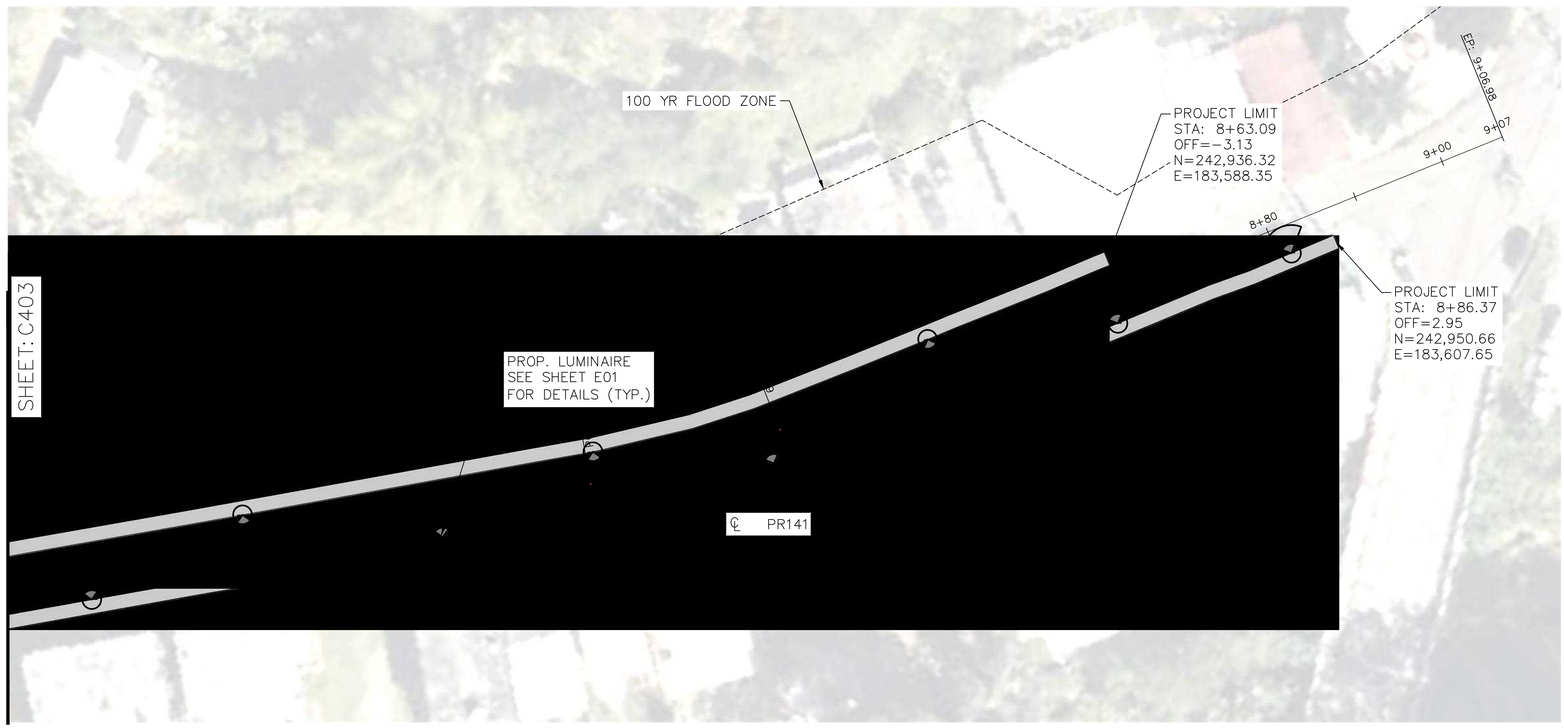
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

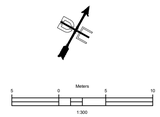
DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C403

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c405 site plan.dwg





HORIZONTAL & VERTICAL CONTROL				
PointNo.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA/PK
3	242793.4260	183633.6260	436.7140	STA/PK
4	242900.3330	183633.6350	439.7640	STA/PK
5	242951.1410	183610.2020	438.7980	STA/PK
7	242701.4620	183308.8830	436.3350	STA/PK
8	242710.4570	183140.6780	436.2580	STA/PK
9	242707.2970	183147.5570	436.0050	STA/PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
"x"	CUT X IN CONCRETE		WATER VALVE
	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
	EXIST WATER LINE	WM	WATER METER
	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX 100YR FLOOD PLAIN		PROP STAMP CONCRETE
	FINISH REPLACEMENT		PROP 4" SIDEWALK
	PROP SOLAR LUMINARE		PROP CONC STAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
SITE PLAN

REVISIONS	SYMBOL	DATE	BY

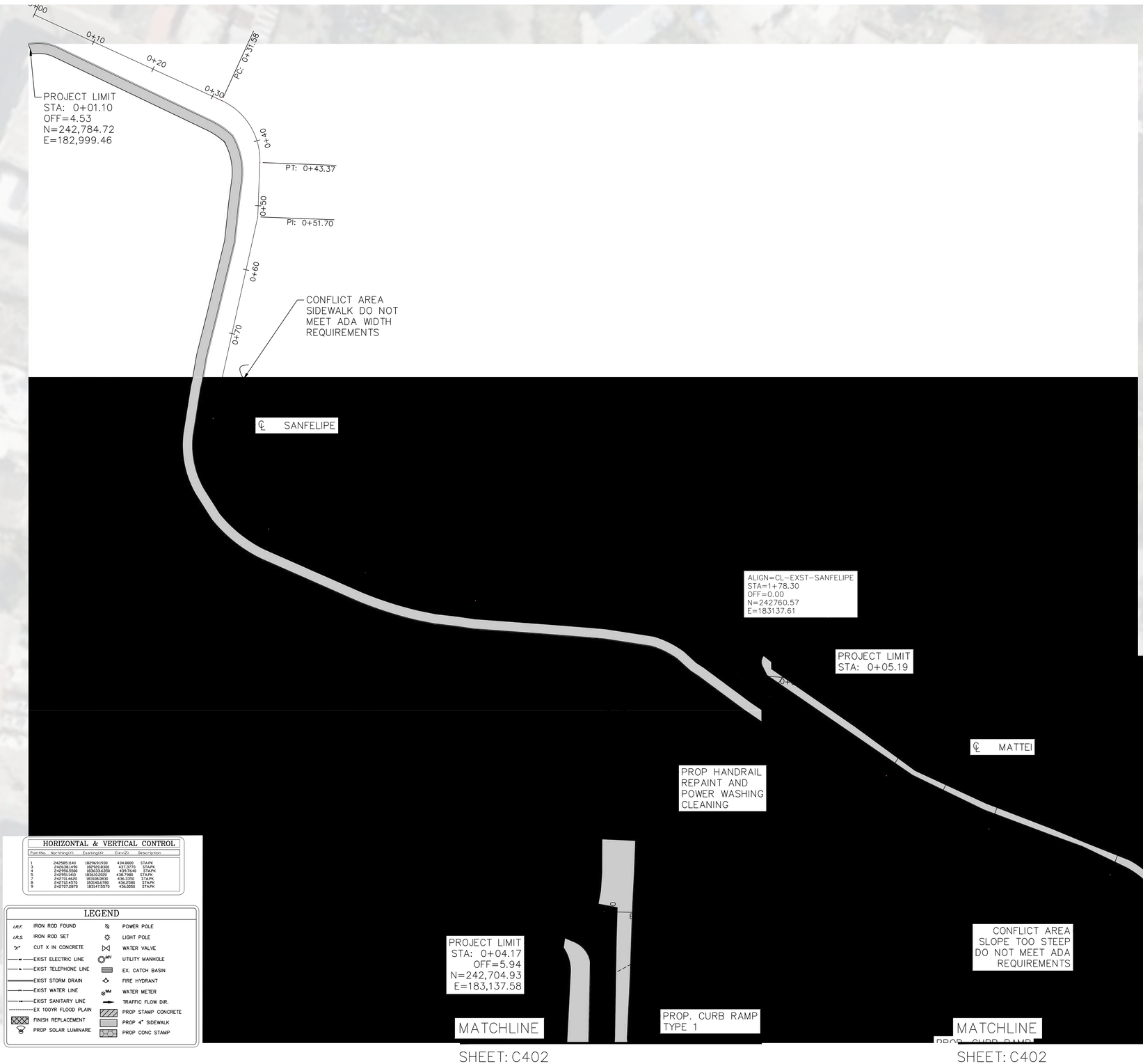
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C404

C:\Users\Jose.delgado\OneDrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c405 site plan.dwg



HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA/PK
3	242638.1490	182925.8350	437.3770	STA/PK
4	242950.5500	183633.6350	439.7640	STA/PK
5	242951.1410	183610.2020	438.7980	STA/PK
7	242721.4620	183036.8830	436.3350	STA/PK
8	242715.4570	183043.6780	436.2590	STA/PK
9	242707.2870	183047.5570	436.0650	STA/PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
	EXIST WATER LINE	WM	WATER METER
	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX 100YR FLOOD PLAIN		PROP STAMP CONCRETE
	FINISH REPLACEMENT		PROP 4" SIDEWALK
	PROP SOLAR LUMINARE		PROP CONC STAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

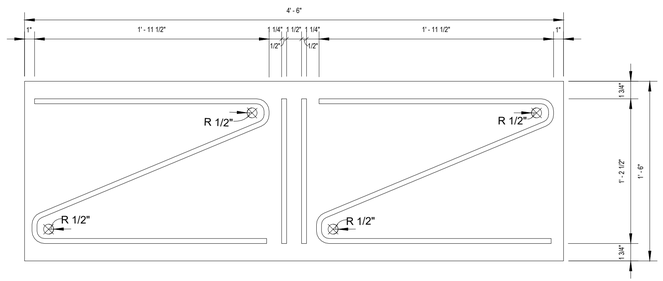
SHEET NAME
SITE PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004

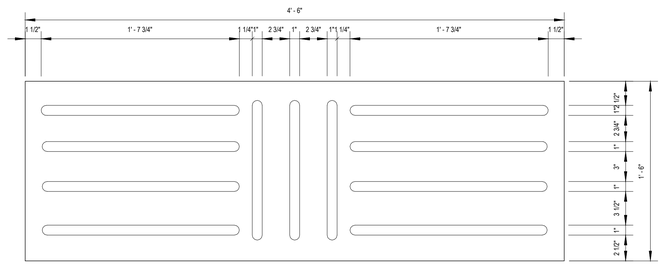
SHEET NO.:
C405

c:\users\josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c405 site planding



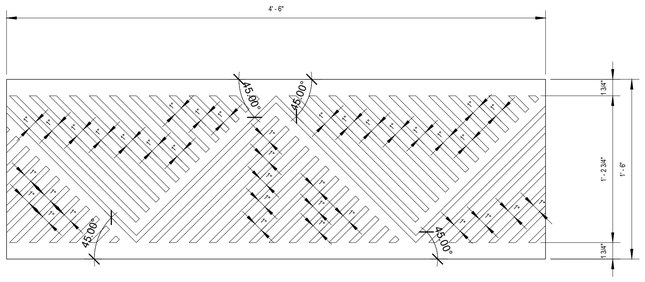
TOP VIEW

PAVEMENT STAMP PATTERN #3



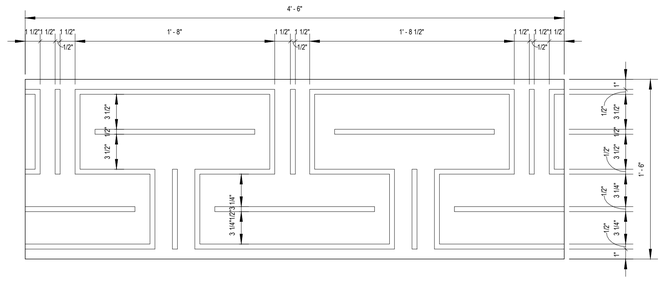
TOP VIEW

PAVEMENT STAMP PATTERN #1



TOP VIEW

PAVEMENT STAMP PATTERN #4



TOP VIEW

PAVEMENT STAMP PATTERN #2

NOTES:

1. WORK ASSOCIATED WITH THE INSTALLATION OF THE STAMPED CONCRETE SURFACES SHALL BE PERFORMED BY A TRAINED AND CERTIFIED CONTRACTOR FOR THE PRODUCT USED. ALL WORK SHALL MEET THE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS FOR AN INSTALLATION OF THIS TYPE.
2. CONCRETE STAMP SHALL HAVE A PERMANENT COLOR (BEIGE–ALIKE) CHOSEN BY THE MUNICIPALITY OF JAYUYA BEFORE ANY INSTALLATION OF CONCRETE STAMP. THIS COLOR MAY NOT BE SPRAYED OR PAINTED OVER AFTER STAMPING. CONTRACTOR SHALL USE IRON OXIDE, CHROMIUM OXIDE OR SIMILAR TECHNIQUES IN THE MIX FOR COLOURING CONCRETE.
3. CONSTRUCTION METHODS FOR THE INSTALLATION SHALL CONFORM WITH THE MANUFACTURE'S GUIDELINES FOR BEST RESULTS.
4. MATERIAL SHALL BE APPROVED BY THE ENGINEER ON RECORD.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
CONCRETE STAMP DETAIL

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C406

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c405 site planing

SEE PR532 PLAN FOR DETAILS

MATCHLINE STA 0+70

SEE FIGUERAS PLANS FOR DETAIL

MATCHLINE STA 0+70

MATCHLINE STA 1+50

LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP TBD	PROP ADA CURB RAMP

PI: 0+11.84

℄ PR532

PROP TY 1
CURB RAMP

PROP 5"
CONC SW

℄ PR141

ALIGN=CL-EXST-PR144
STA=0+19.33
OFF=0.00
N=242631.74
E=182896.88

PC: 0+20.92

BP: 0+00.00

MATCH EXIST SW
CRP-000053
PROJECT LIMIT

CATCH BASIN
TO REMAIN

PROP TY 3
CURB RAMP

ALIGN=CL-EXST-PR144
STA=0+00.00
OFF=0.00
N=242631.74
E=182877.55

℄ FIGUERAS

PT: 0+76.44

PC: 0+91.63

PT: 1+01.83

PC: 1+15.76

ALIGN=CL-EXST-PR144
STA=0+77.51
OFF=0.00
N=242611.39
E=182949.84

PROP TY 3A
CURB RAMP

DRIVEWAY
OPENING
TO REMAIN

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR [illegible] OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL [illegible] SMOOTH BARS @ 24" CEN[illegible] TO EXISTING CONCRETE ED[illegible] JOINT & SELF LEVELING JO[illegible]
3. SIDEWALK TO BE AS A MIN[illegible] (1.2 MTS) WIDE 3,600 PSI [illegible] #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING
DETAIL PLAN
PR-141

REVISIONS	SYMBOL	DATE	BY

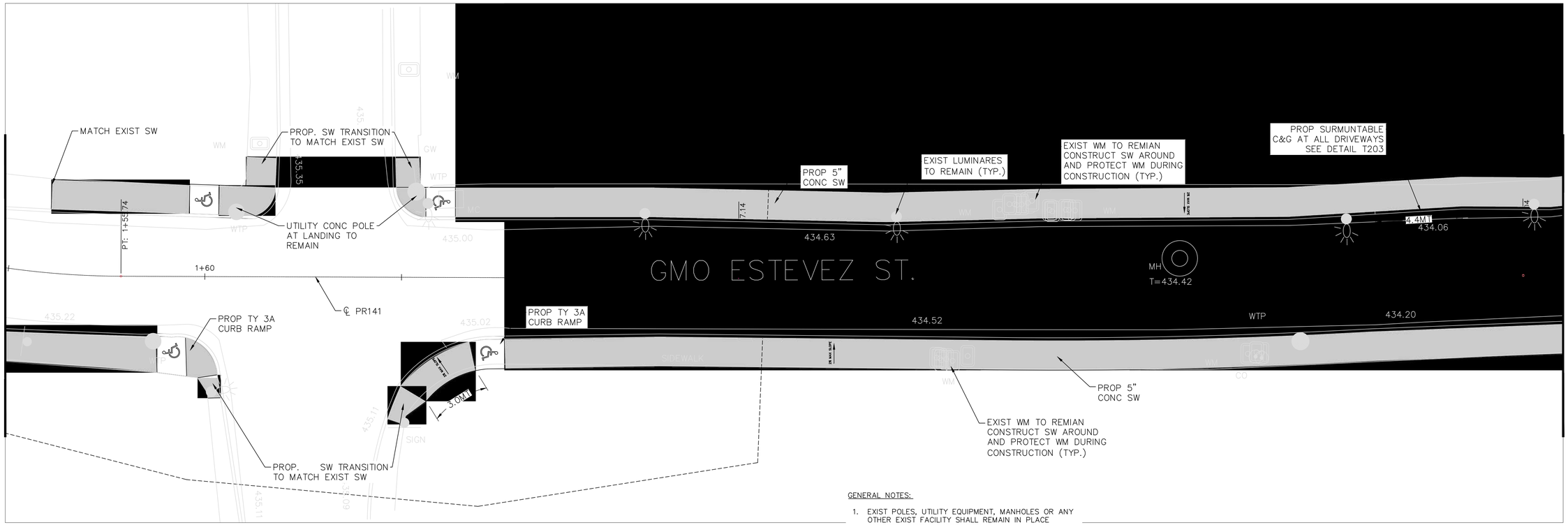
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C501

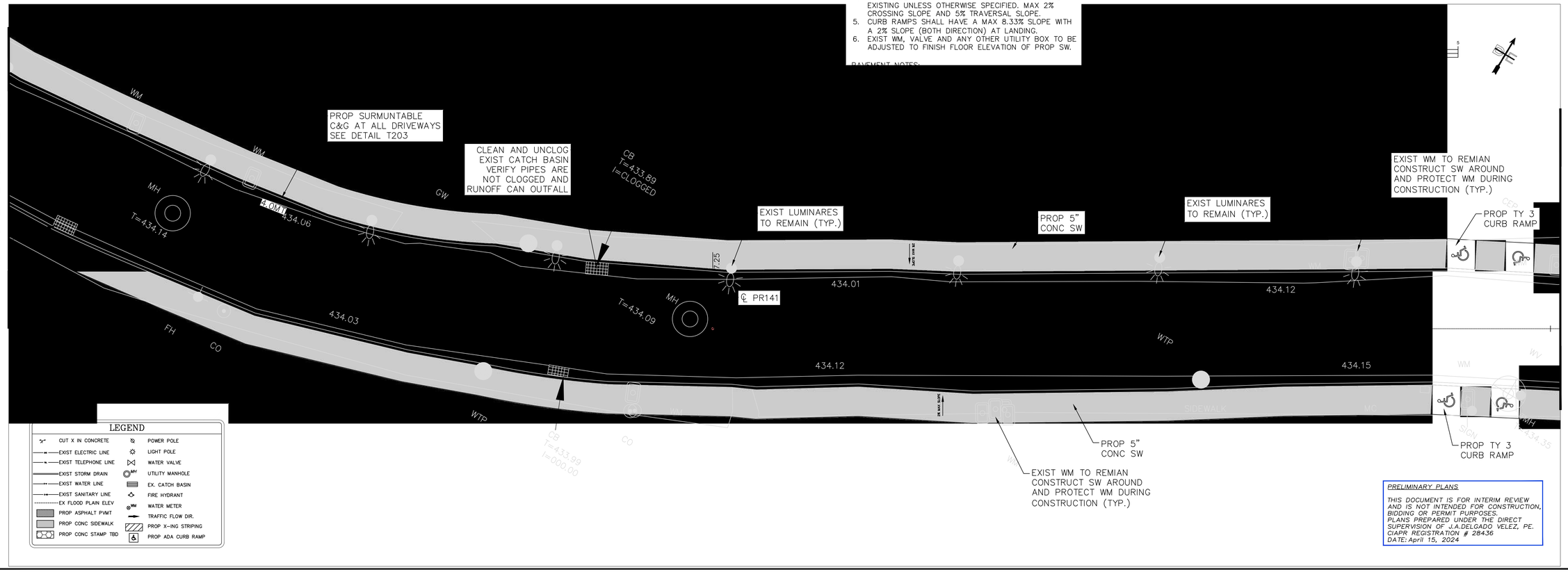
C:\Users\JoseAdelgado\OneDrive - delgado torres engineering, llc\Documents - Projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg



GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:



LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP TBD	PROP ADA CURB RAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN
PR-141

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: C502

C:\Users\joseadelgado\OneDrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

SEE TORRADO PLANS FOR DETAIL

MATCHLINE STA 3+10

MATCHLINE STA 3+60

ALIGN=CL-EXST-PR144
STA=3+49.60
OFF=0.00
N=242617.34
E=183190.29

℄ TORRADO

MATCH EXIST SW
ALIGN=CL-EXST-PR144
STA=3+50.12
OFF=0.00
N=242617.57
E=183190.76

EXIST MH TO REMIAN
CONSTRUCT MH AROUND
AND PROTECT MH DURING
CONSTRUCTION (TYP.)

EXIST TREE
TO REMAIN

PROP 5"
CONC SW

EXIST TREE
TO REMAIN

PROP 5"
CONC SW

℄ PR141

PROP 5"
CONC SW

PROP 5"
CONC SW

EXIST WM TO REMIAN
CONSTRUCT SW AROUND
AND PROTECT WM DURING
CONSTRUCTION (TYP.)

PROP CONC STAMP
TBD

℄ VENTANA

EXIST TREE
TO REMAIN

SEE VENTANA PLAN FOR DETAILS

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

SEE TORRADO PLAN FOR DETAILS

MATCHLINE STA 3+90

MATCHLINE STA 4+70

℄ TORRADO

PROP TY 3
CURB RAMP

PROP 5"
CONC SW

℄ PR141

PROP 5"
CONC SW

PROP TY 3
CURB RAMP

PROP 5"
CONC SW

PROP TY 3
CURB RAMP

ALIGN=CL-EXST-PR144
STA=4+58.11
OFF=0.00
N=242671.27
E=183284.41

PROP 5"
CONC SW

PROP SURMUNTABLE
C&G AT ALL DRIVEWAYS
SEE DETAIL T203

PROP 5"
CONC SW

PROP TY 3
CURB RAMP

ALIGN=CL-EXST-PR144
STA=4+50.75
OFF=0.00
N=242657.46
E=183260.79

PROP TY 3A
CURB RAMP

PROP ADA RAMP
MAX 8.33% SLOPE

PROP TY 3A
CURB RAMP

LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP TBD	PROP ADA CURB RAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE:April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING
DETAIL PLAN
PR-141

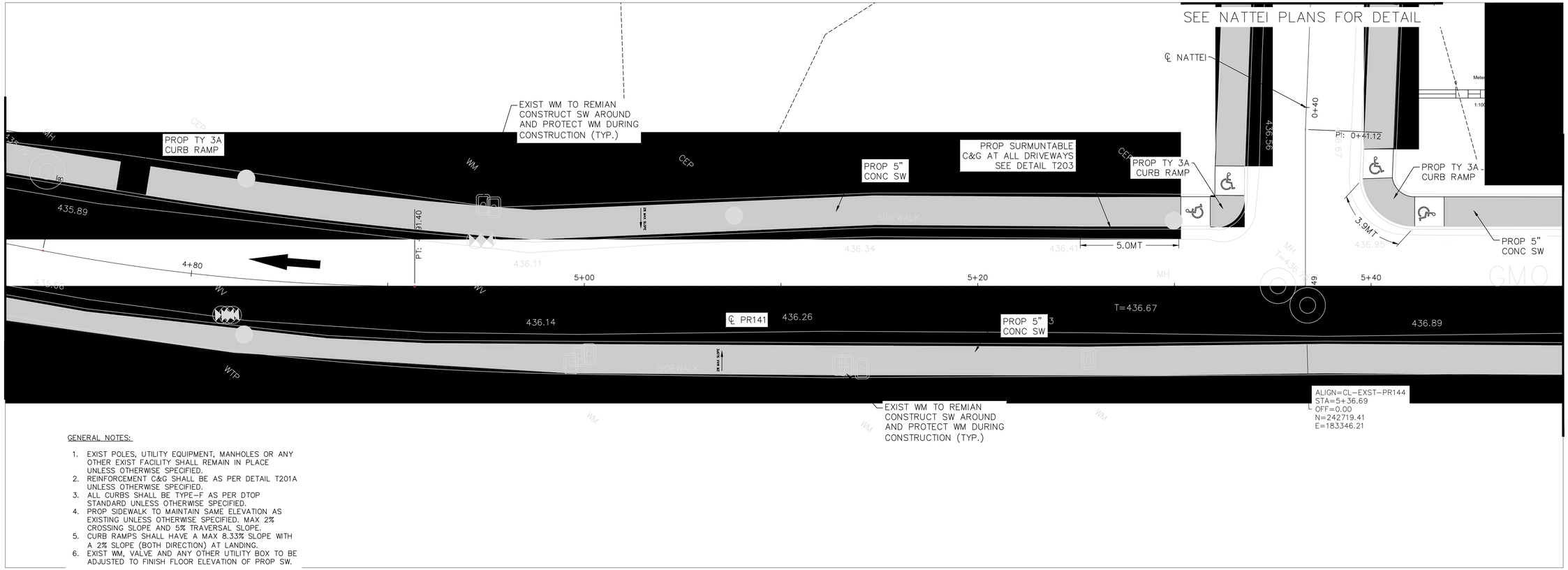
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004

SHEET NO.:
C503

C:\Users\JoseAdelgado\OneDrive - delgado torres engineering, llc\Documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg



GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN PR-141

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C504

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

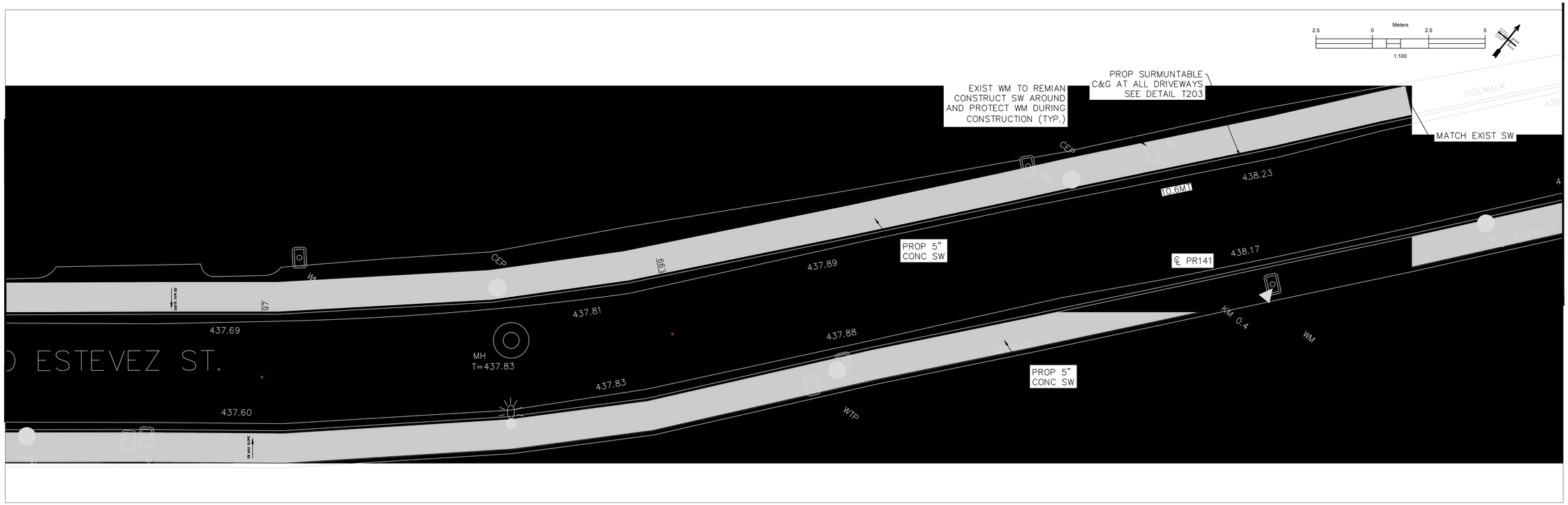
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

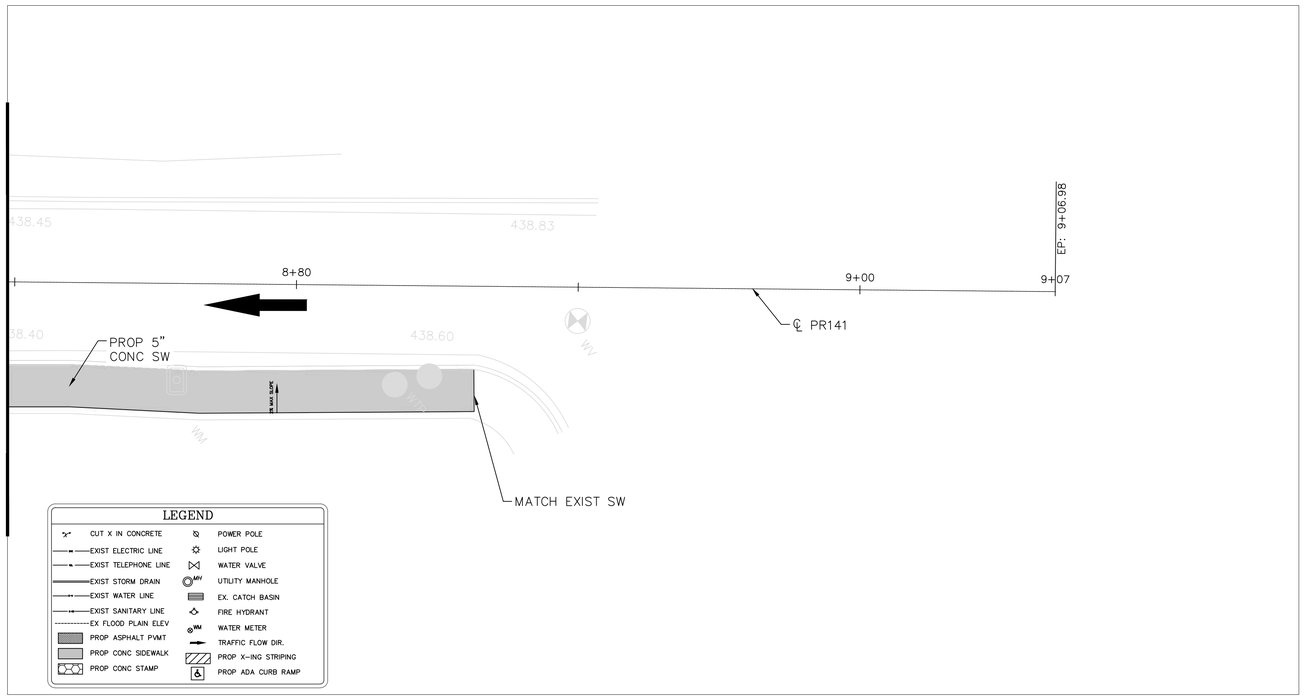
SHEET NAME
GRADING & PAVING DETAIL PLAN
PR-141

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C505

C:\Users\Josedelgado\OneDrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 civil\production drawings\c0501 gr - pvg dtl plan.dwg





GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

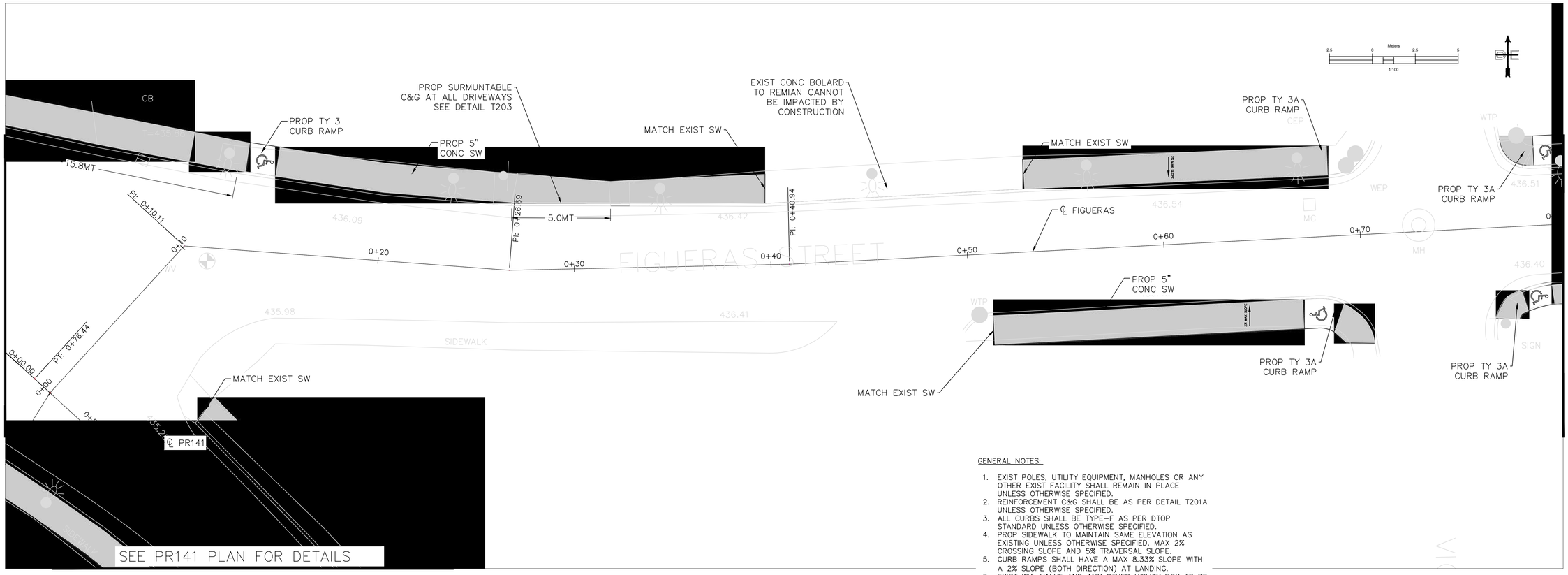
SHEET NAME
GRADING & PAVING
DETAIL PLAN
PR-141

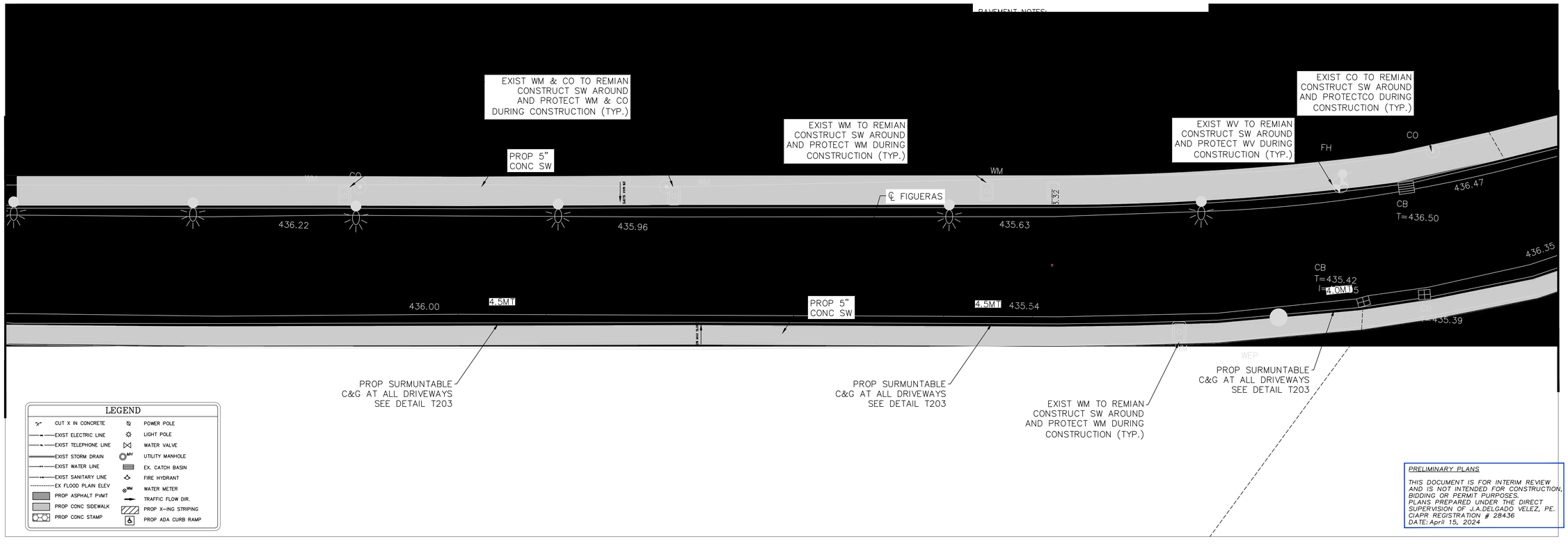
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C506

C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

C:\Users\JoseAdelgado\OneDrive - delgado torres engineering, llc\Documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg





LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN FIGUERAS ST

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: C507

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

SEE TORRADO PLANS FOR DETAIL

Meters 2.5 0 2.5 5 — 1:100

MATCHLINE STA 1+60

MATCHLINE STA 2+40

PROP 5" CONC SW

435.36

435.37

435.19

435.15

435.34

435.28

435.25

435.16

435.12

435.32

435.30

435.38

435.16

435.31

435.57

435.85

436.17

436.60

436.68

436.44

436.30

PI: 1+51.30

PI: 2+16.

PI: 2+39.89

PI: 3+02.69

EP: 3+10.47

1+70 1+80 1+90 2+00 2+10 2+20 2+30 2+40 2+50 2+60 2+70 2+80 2+90 3+00 3+10 3+20

0+50 0+60 0+70 1+40 1+50

℄ FIGUERAS

℄ TORRADO

℄ SAN FELIPE

FIGUERAS STREET

EXIST TREE TO REMAIN AND PROTECT DURING CONSTRUCTION

ALIGN=CL-EXST-TORRADO
STA=0+60.25
OFF=0.00
N=242658.09
E=183168.97

MATCH EXIST SW

PROP TY 1 CURB RAMP

ALIGN=CL-EXS
STA=1+45.73
OFF=0.00
N=242694.04
E=183240.66

4.2MT

2% MAX SLOPE

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

LEGEND

- CONCRETE
- CURB LINE
- GUARDRAIL LINE
- GUTTER
- CURB
- POWER POLE
- LIGHT POLE
- WATER VALVE
- UTILITY MANHOLE
- EX. CATCH BASIN
- FIRE HYDRANT
- WATER METER
- TRAFFIC FLOW DIR.
- STOP X-ING STRIPING
- ADA CURB RAMP

EXIST LUMINARE TO REMAIN

EXIST WM & WV TO REMIAN CONSTRUCT SW AROUND AND PROTECT WM & WV DURING CONSTRUCTION (TYP.)

EXIST WM TO REMIAN CONSTRUCT SW AROUND AND PROTECT WM DURING CONSTRUCTION (TYP.)

SEE PR141 PLAN FOR DETAILS

SEE SAN FELIPE PLANS FOR DETAIL

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN
FIGUERAS ST

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004

SHEET NO.:
C508

SEE PR141 PLAN FOR DETAILS

TORRADO STREET

CB T=435.50 I=434.68

435.69

CURB RAMP TY. 1

TMH T=435.05

MATCH EXIST SW

EXIST WM TO REMIAN CONSTRUCT SW AROUND AND PROTECT WM DURING CONSTRUCTION (TYP.)

EXIST LUMINARE TO REMAIN (TYP)

EXIST WM TO REMIAN CONSTRUCT SW AROUND AND PROTECT WM DURING CONSTRUCTION (TYP.)

PROP 5" CONC SW

CB T=435.54

MH

0+00

0+10

0+20

℄ CANALES

0+30

0+40

0+50

0+60

435.65

435.96

436.41

436.87 EC

NR CANALES ST.

MATCHLINE STA 0+70

435.66

435.93

T=436.85

CB T=435.51 I=434.87

ALIGN=CL-EXST-TORRADO
STA=0+28.32
OFF=0.00
N=242686.33
E=183154.09

℄ PR141

0+40

SEE PR141 PLAN FOR DETAILS

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

SEE MATTEI PLAN FOR DETAILS

CURB RAMP TY. 1

TMH T=437.14

T=437.02

MH

FH

+08.42

CURB RAMP TY. 1

CB T=437.54 T=436.46

CFP

0+86.17

437.41

EC

MH T=436.98

EXIST WM TO REMIAN CONSTRUCT SW AROUND AND PROTECT WM DURING CONSTRUCTION (TYP.)

WM

WM

WM

PROP 5" CONC SW

℄ CANALES

437.76

NR CANALES ST.

MATCHLINE STA 0+70

436.86

437.23

437.60

438.24

438.06

1+20

1+30

1+40

5.0MT

SIDEWALK

PROP 5" CONC SW

ALIGN=CL-EXST-CANALES
STA=0+80.36
OFF=0.00
N=242718.07
E=183227.89

CURB RAMP TY. 3A

PT: 1+24.45

CB T=436.99

℄ MATTEI

1+30

MATCHLINE STA 1+50

PROP SURMUNTABLE C&G AT ALL DRIVEWAYS SEE DETAIL T203

EXIST WM TO REMIAN CONSTRUCT SW AROUND AND PROTECT WM DURING CONSTRUCTION (TYP.)

LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

SEE MATTEI PLAN FOR DETAILS

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

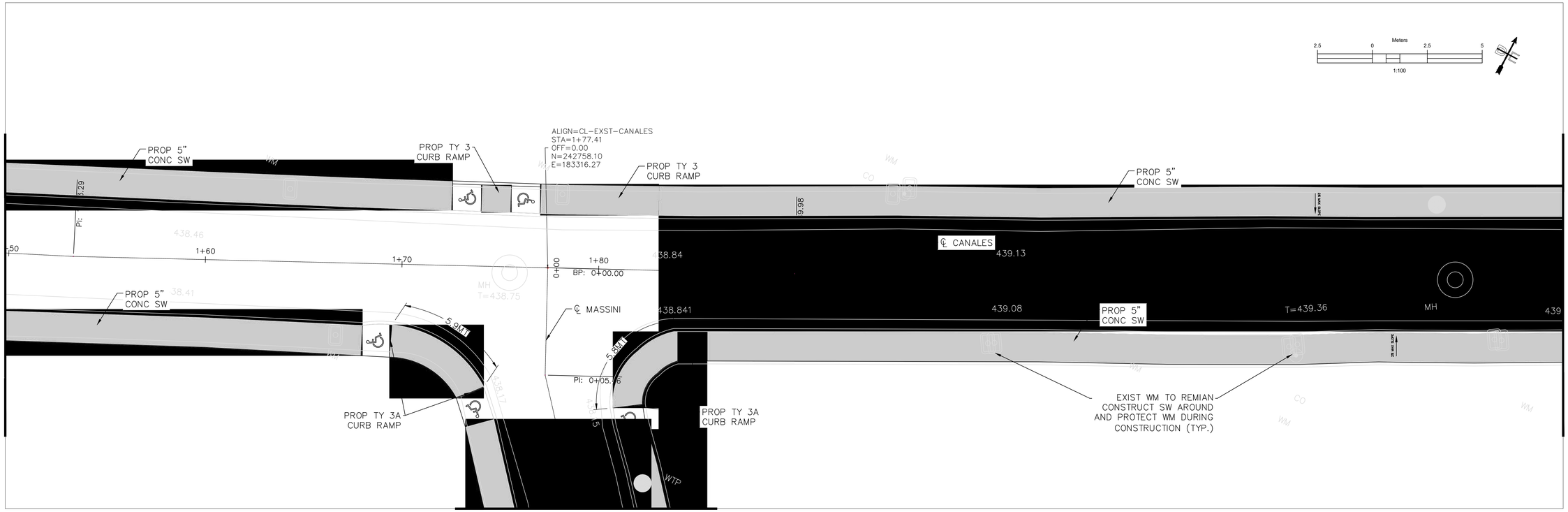
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN
NR CANALES ST

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C509

C:\Users\joseadelgado\OneDrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg



SEE PR141 PLANS FOR DETAIL

SEE PR141 PLANS FOR DETAIL

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

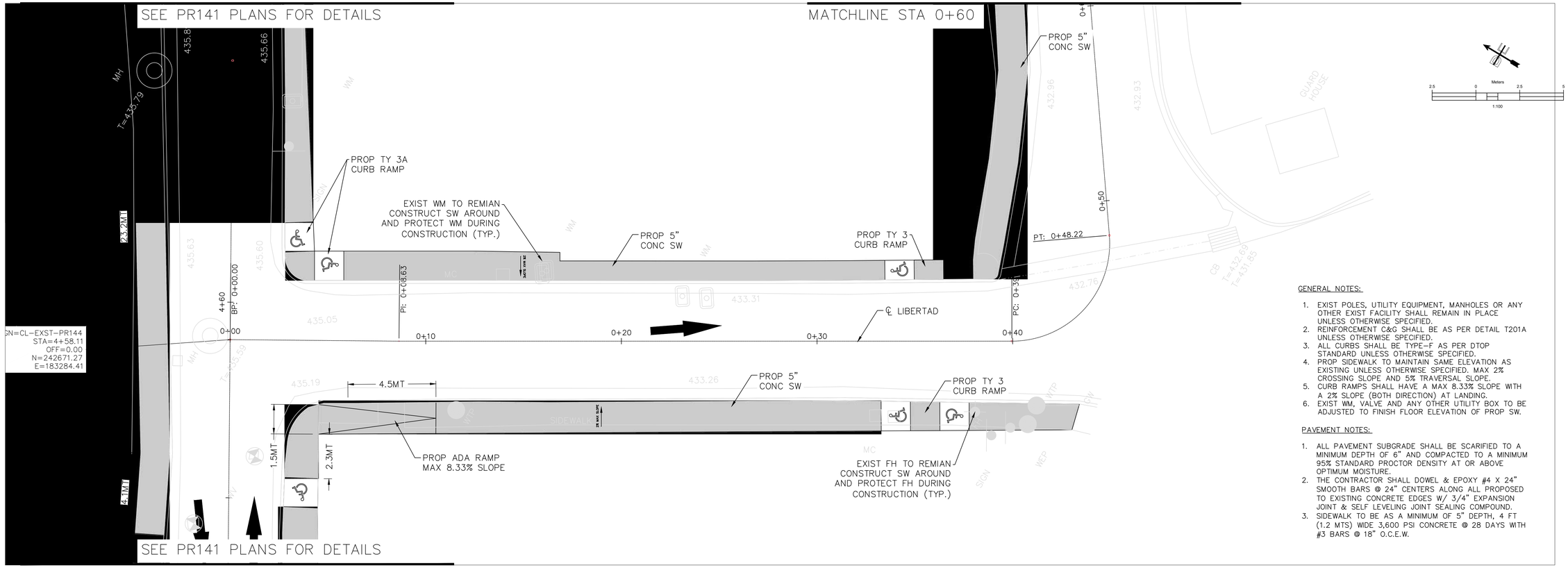
SHEET NAME
GRADING & PAVING DETAIL PLAN
NR CANALES ST

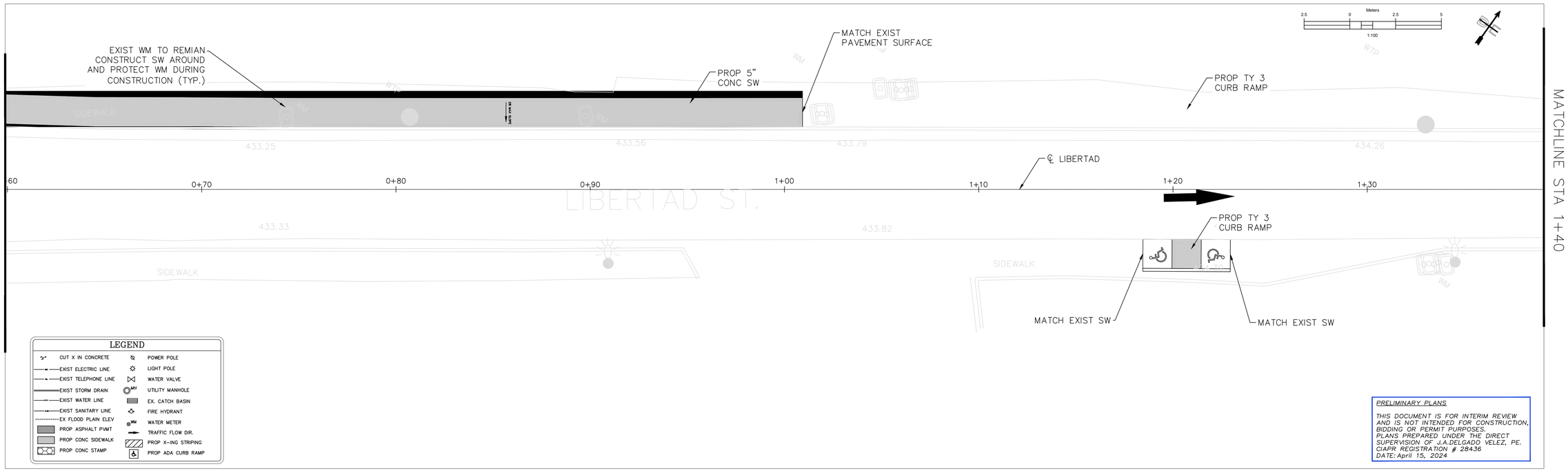
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C510

C:\Users\Josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

c:\users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c0501 gr - pvg dtl plan.dwg





LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN LIBERTAD ST

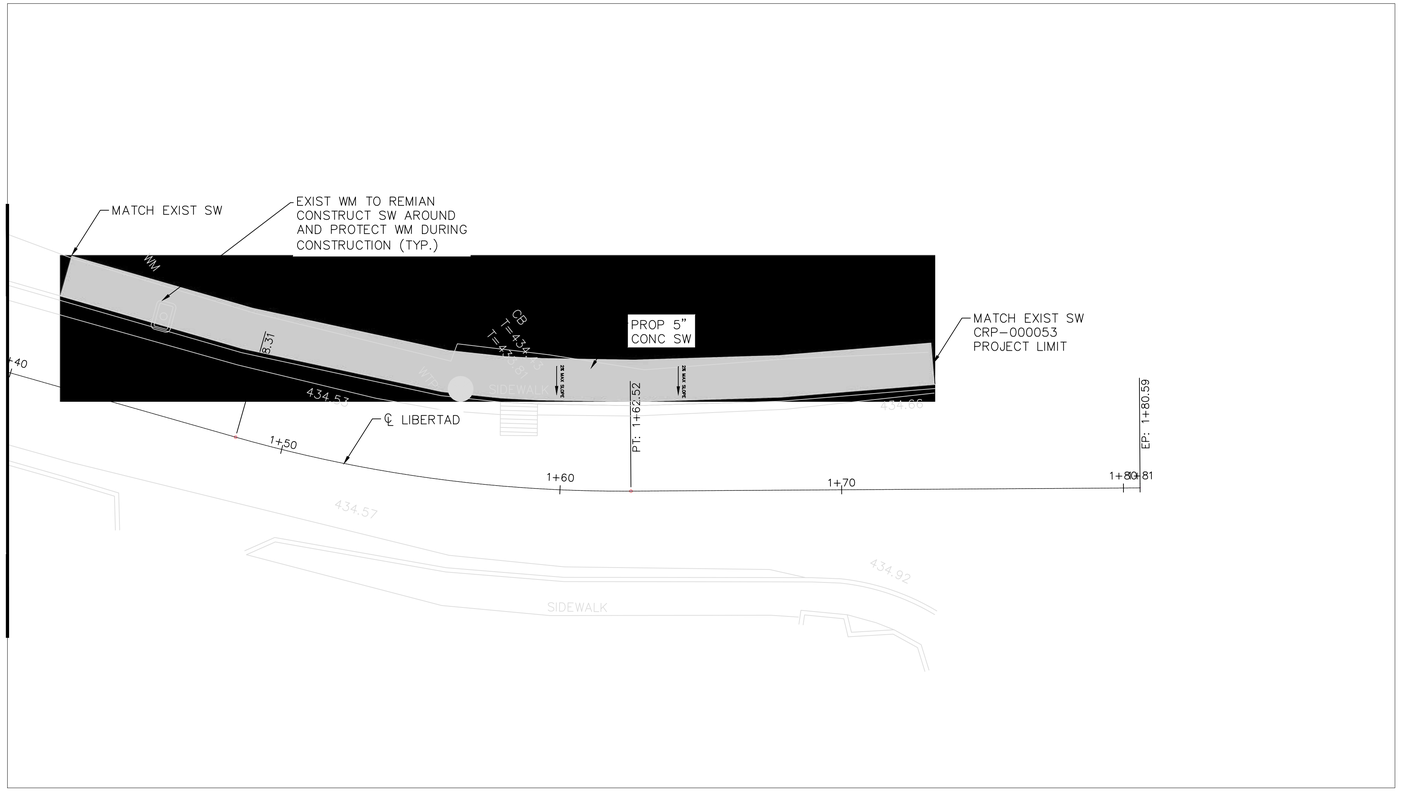
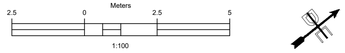
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C511



LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMPd	PROP ADA CURB RAMP

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING
DETAIL PLAN
LIBERTAD ST

REVISIONS	SYMBOL	DATE	BY

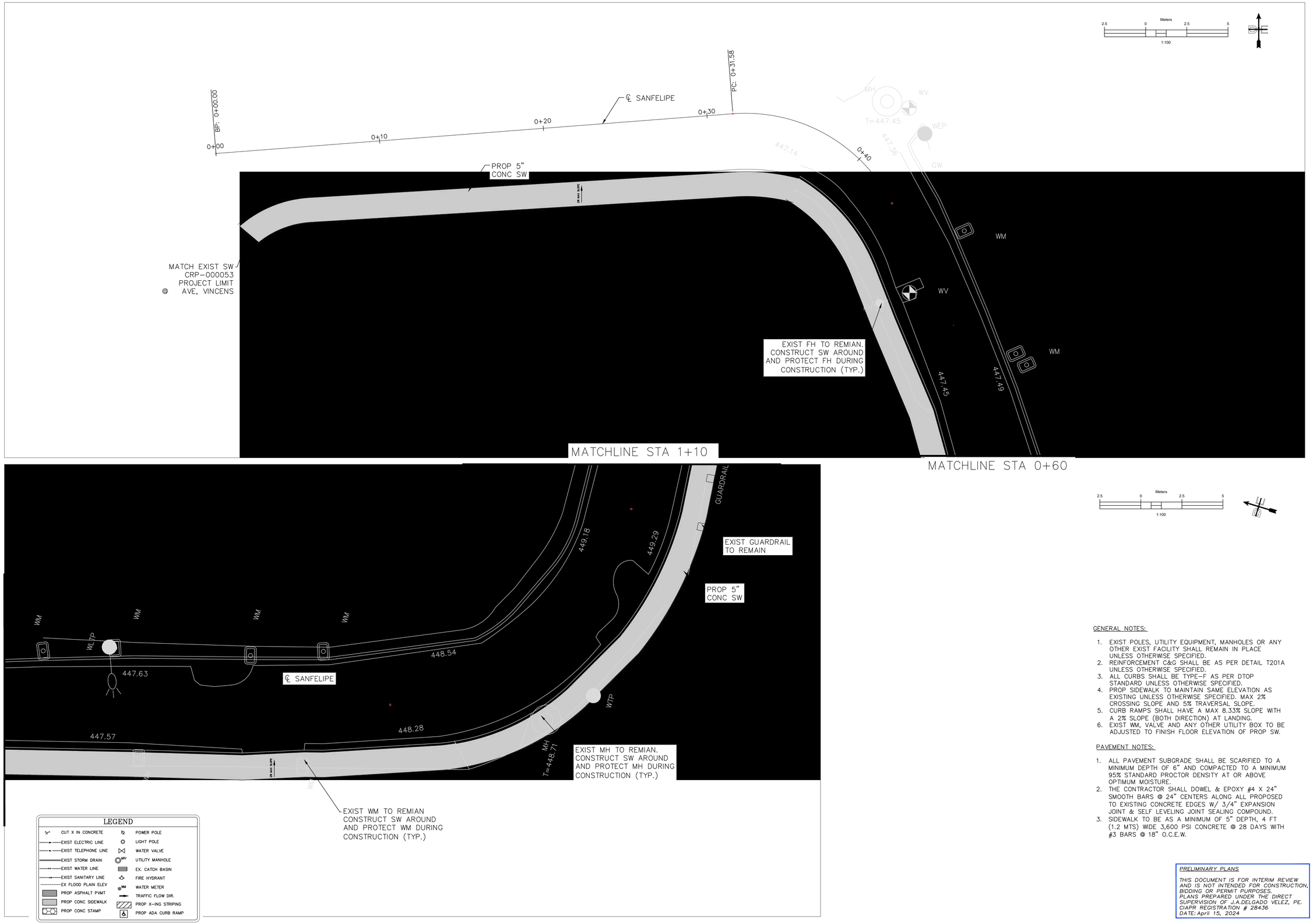
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C512

C:\Users_joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c0501 gr - pvg dtl plan.dwg



GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN SAN FELIPE ST

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: C513

c:\users\josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING
DETAIL PLAN
MATTEI ST

REVISIONS	SYMBOL	DATE	BY

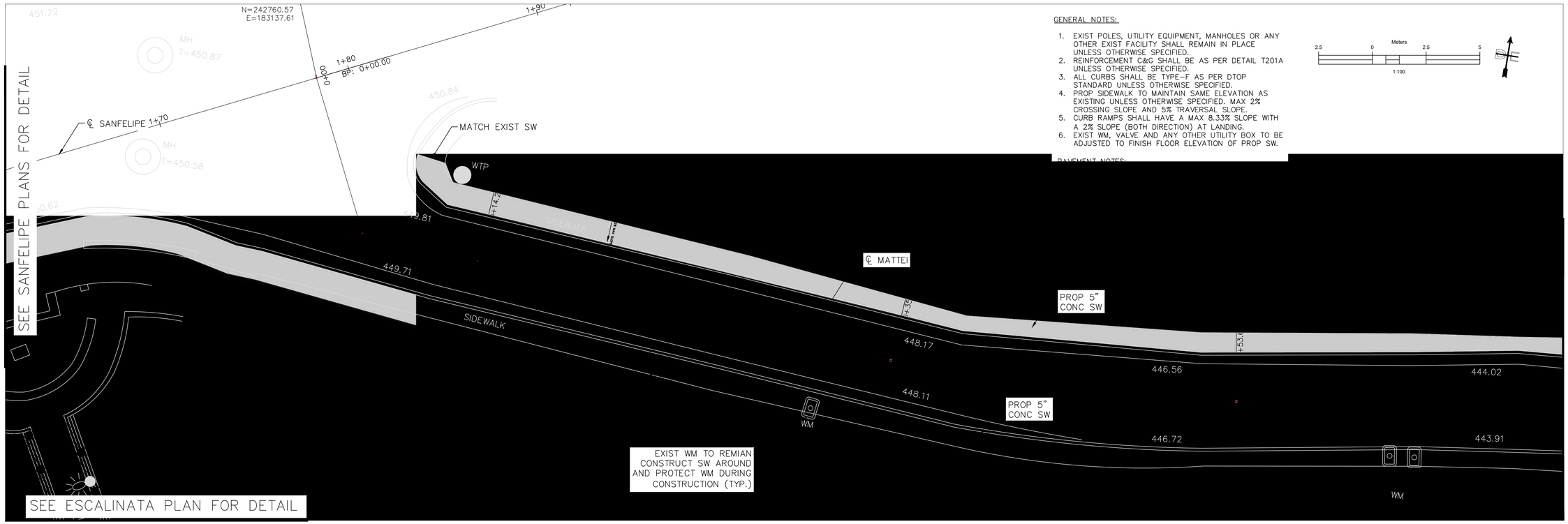
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C514

c:\users\josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg



PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

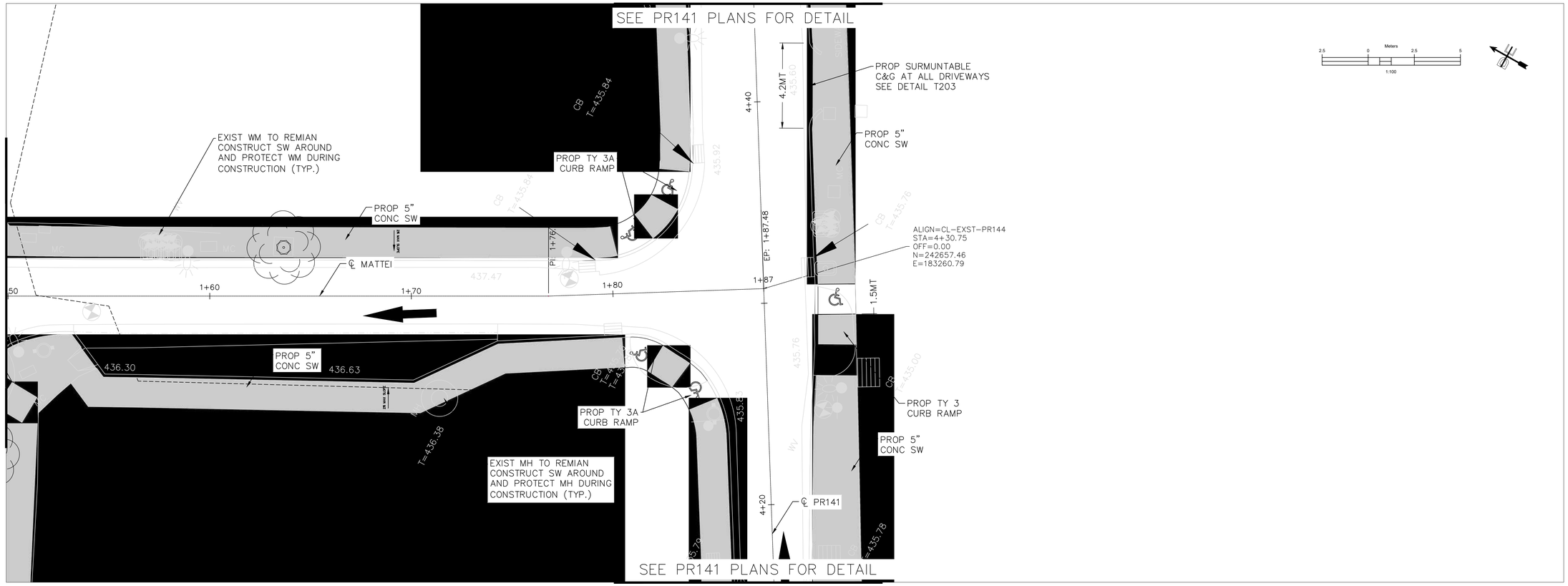
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN MATTEI ST

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: C515

C:\Users\Jose\delgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg



LEGEND

CUT X IN CONCRETE		POWER POLE	
EXIST ELECTRIC LINE		LIGHT POLE	
EXIST TELEPHONE LINE		WATER VALVE	
EXIST STORM DRAIN		UTILITY MANHOLE	
EXIST WATER LINE		EX. CATCH BASIN	
EXIST SANITARY LINE		FIRE HYDRANT	
EX FLOOD PLAIN ELEV		WATER METER	
PROP ASPHALT PVMT		TRAFFIC FLOW DIR.	
PROP CONC SIDEWALK		PROP X-ING STRIPING	
PROP CONC STAMP		PROP ADA CURB RAMP	

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

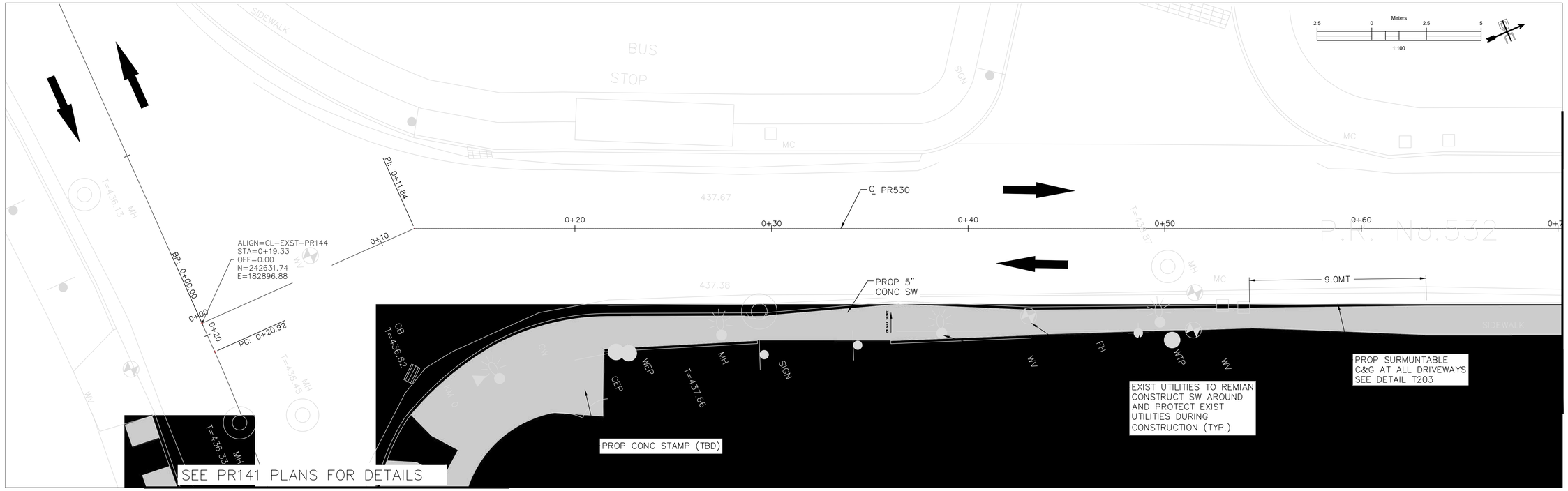
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

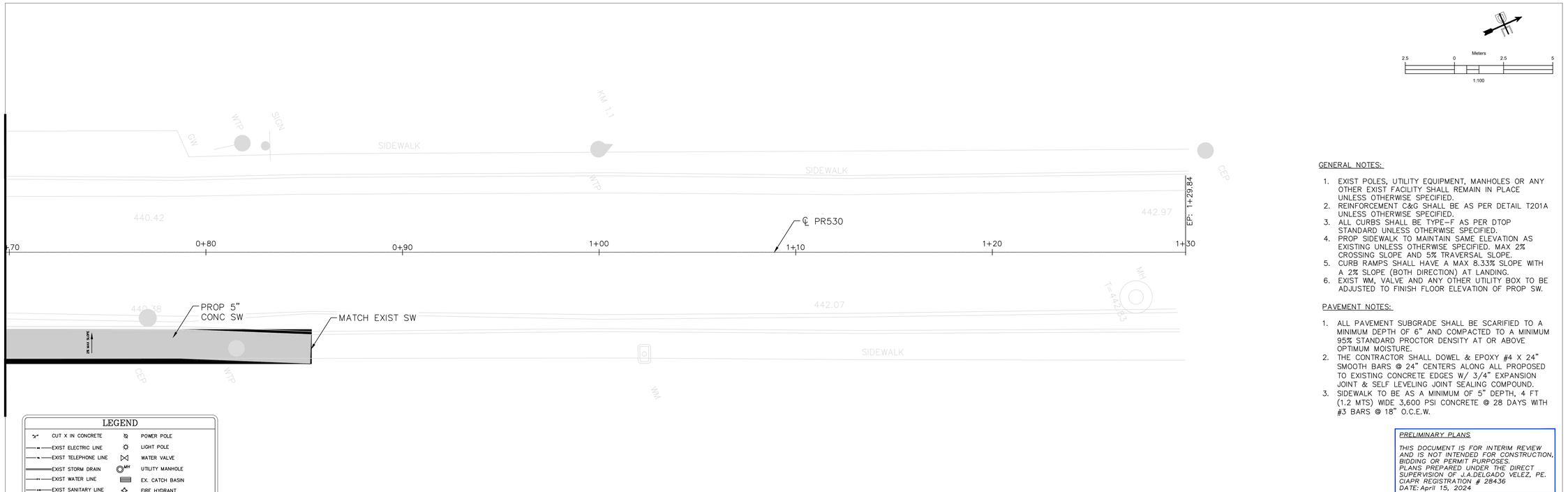
SHEET NAME
GRADING & PAVING
DETAIL PLAN
MATTEI ST

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C516

c:\users\josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg





LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN
PR-530

REVISIONS	SYMBOL	DATE	BY

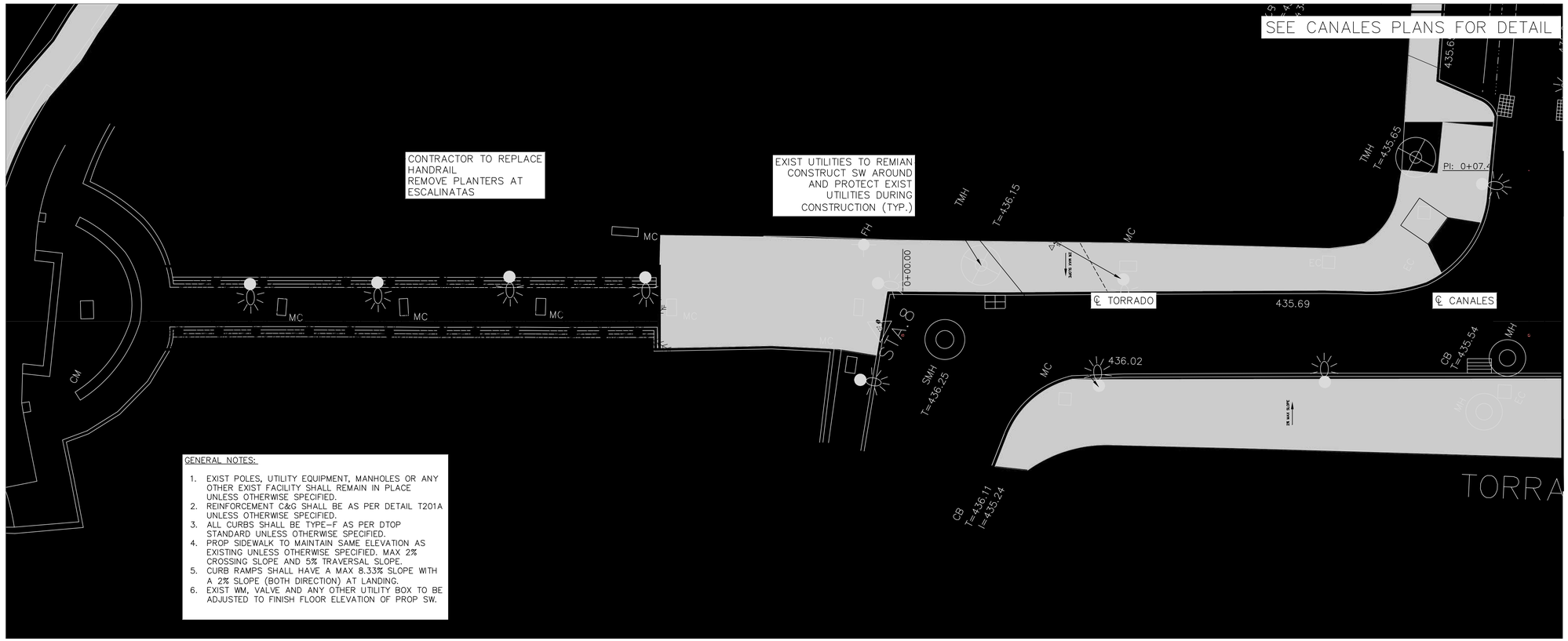
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

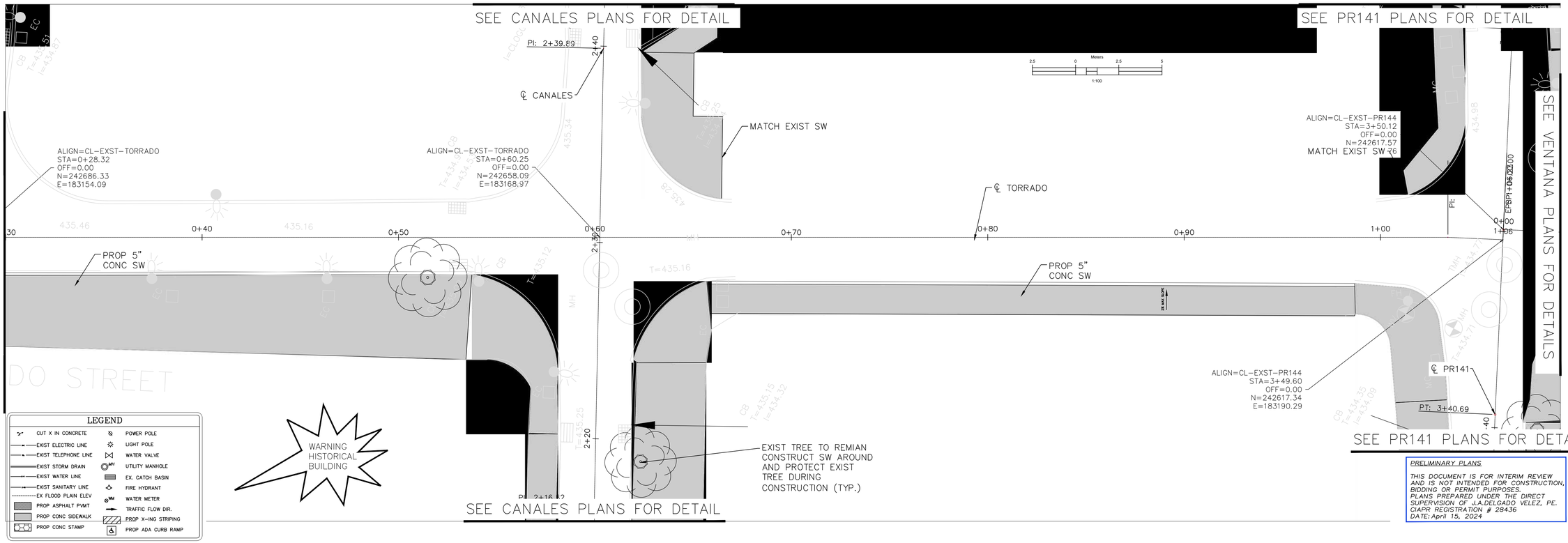
SHEET NO.:
C517

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg



GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.



LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

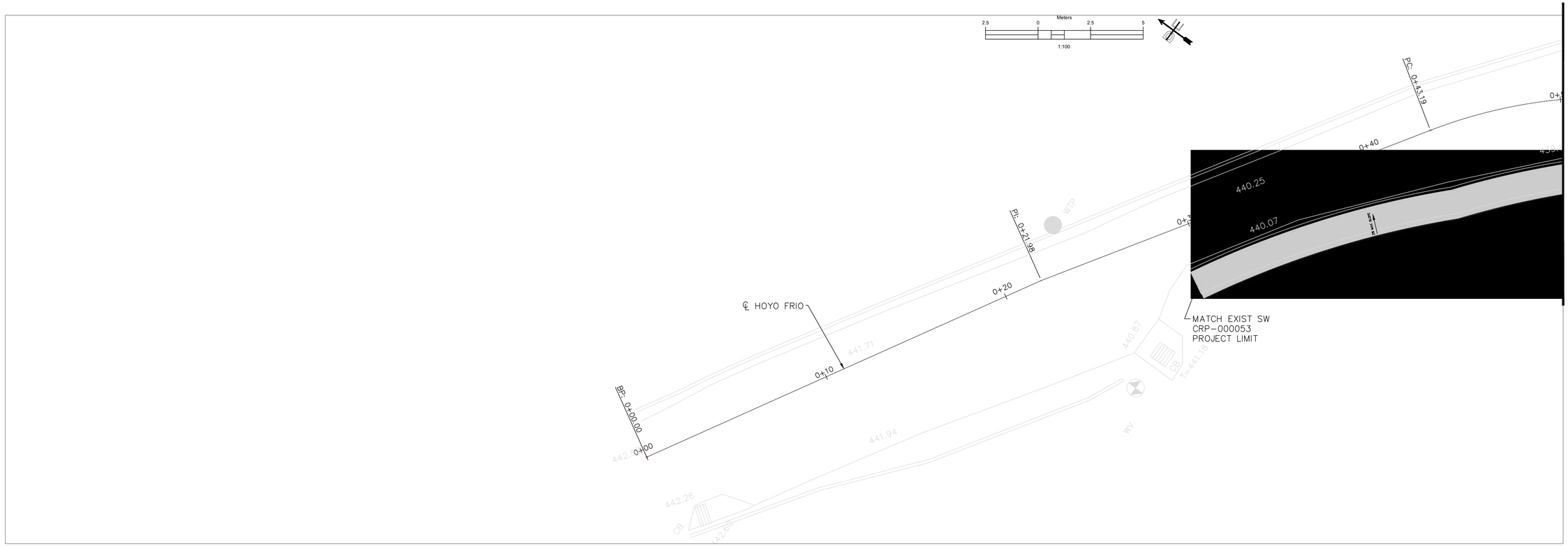
SHEET NAME
GRADING & PAVING DETAIL PLAN
ESCALINATAS & TORRADO ST

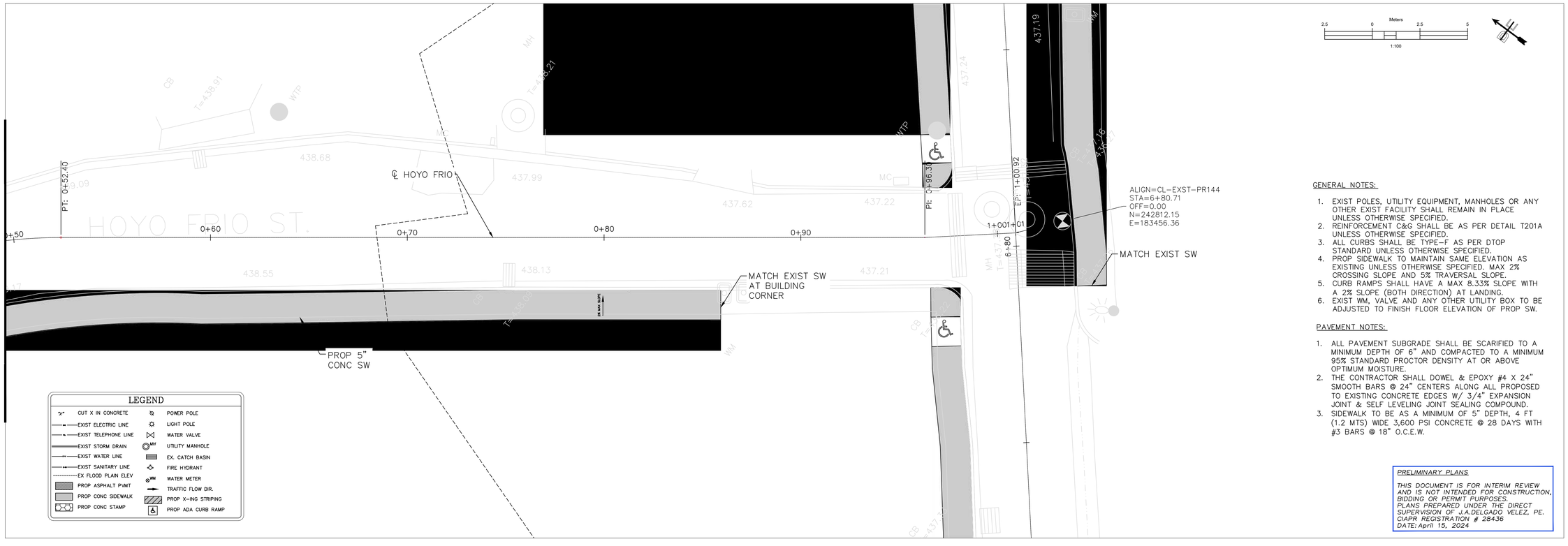
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: C518

C:\Users\josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

C:\Users_joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg





LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING
DETAIL PLAN
HOYO FRIO ST

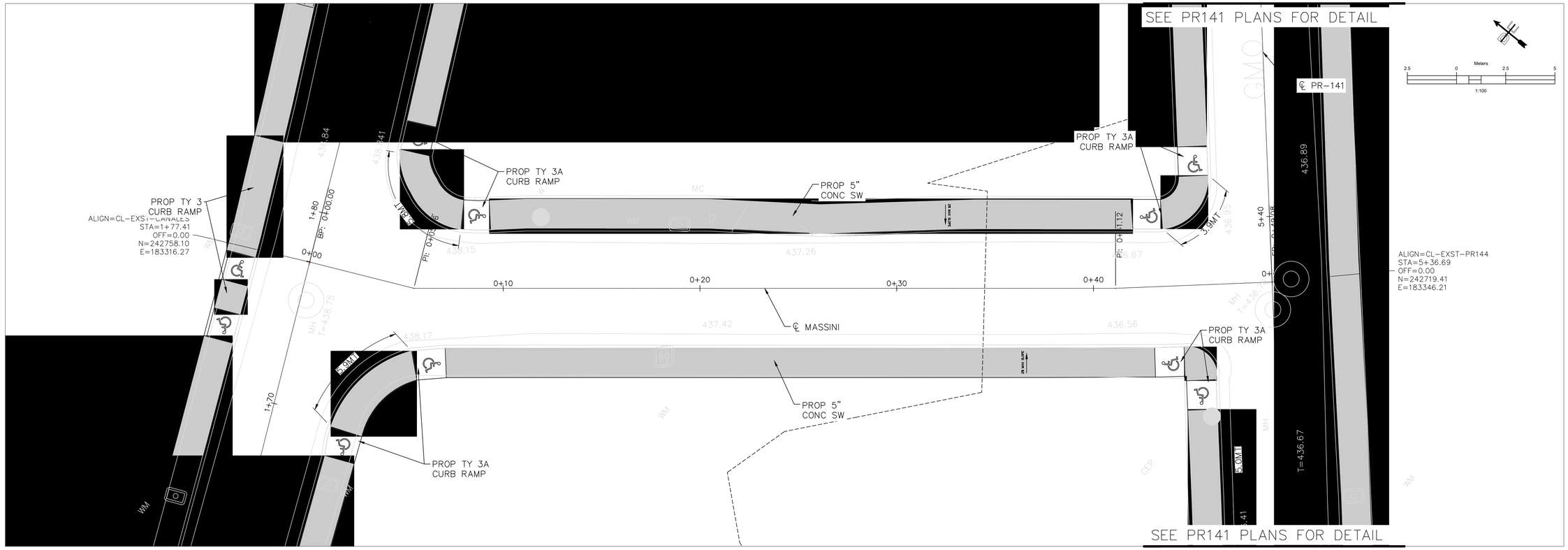
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C519



LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

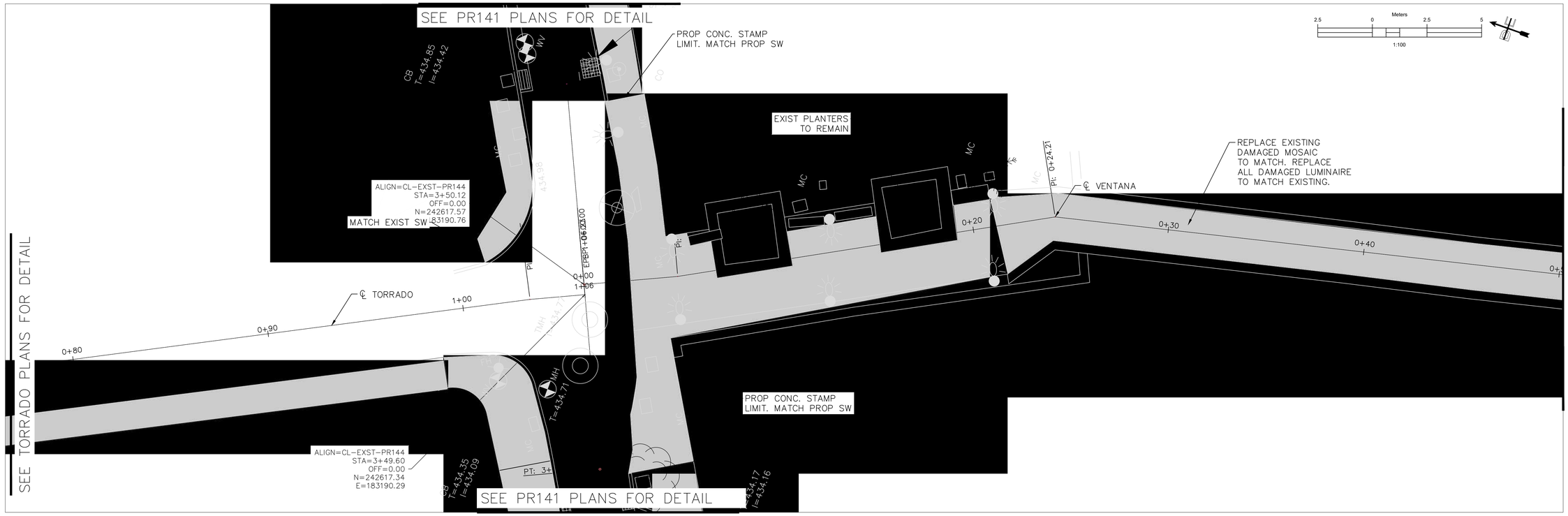
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

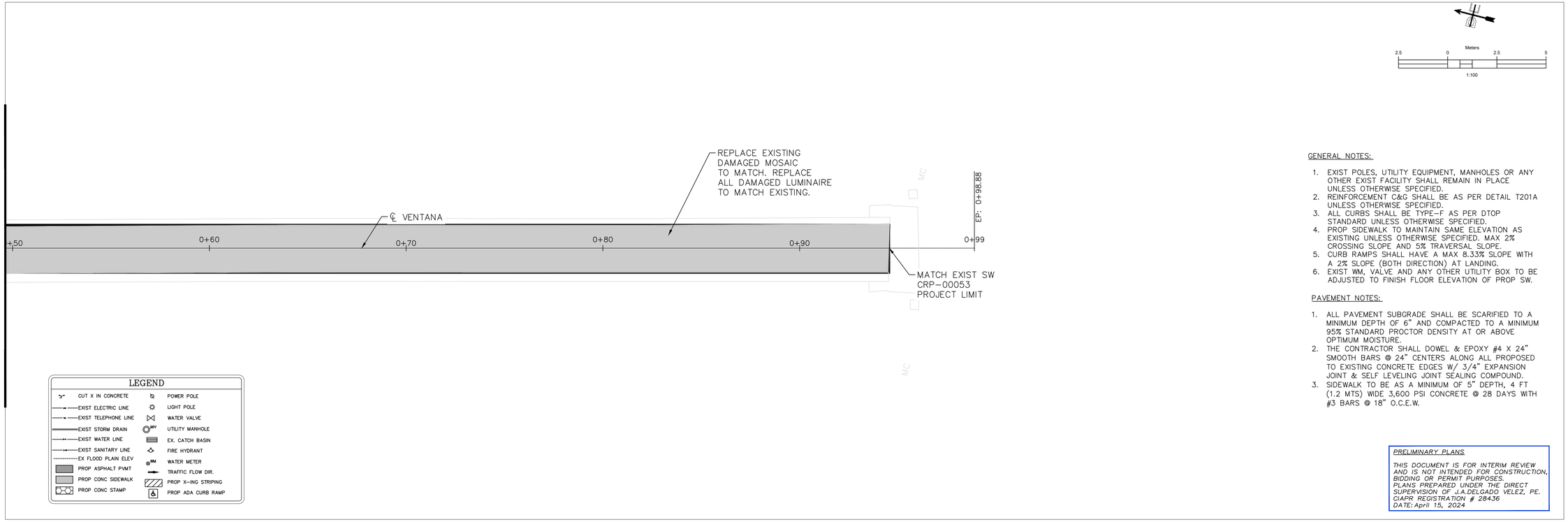
SHEET NAME
GRADING & PAVING DETAIL PLAN
MASSINI ST

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C520

C:\Users\JoseAdelgado\OneDrive - delgado torres engineering, llc\Documents - Projects\DTE-2023-004 sidewalk revitalization Jayuya urban center crp-053\DTE23-004 Cad\Production drawings\C0501 gr - pvg dtl plan.dwg





LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN
VENTANA AL RIO BRIDGE

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C521

c:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

NOTES:
1. REINFORCEMENT SHALL BE #4 BARS UNLESS OTHERWISE SPECIFIED
2. USE MINIMUM CLASS P1 CONCRETE
3. TRANSVERSE BARS ON 24" CENTERS

STANDARD CURB AND GUTTER SECTION WITH ASPHALT PAVING

T201A

NOTES:
1. REINFORCEMENT SHALL BE #4 [illegible] UNLESS OTHERWISE SPECIFIED
2. USE MINIMUM CLASS P1 CONCRETE
3. TRANSVERSE BARS ON [illegible] CENTERS

STANDARD MONOLITHIC CURB AND GUTTER SECTION WITH CONCRETE PAVING

T201C

NOTES:
1. REINFORCEMENT SHALL BE #4 BARS UNLESS OTHERWISE SPECIFIED
2. VERTICAL DOWEL BARS SHALL BE 6" LONG ON 24" CENTERS
3. USE MINIMUM CLASS P1 CONCRETE
4. WHEN ATTACHING NEW CURB TO EXISTING CONCRETE, DRILL ¾" DIA. HOLES INTO EXISTING CONCRETE. BLOW HOLES CLEAN AND SECURE REBAR OF CORRECT SIZE AS REQUIRED FOR PAVEMENT WITH EPOXY GROUT

CONCRETE PAVEMENT ALTERNATE CURB DOWELED CURB SECTION (UPON APPROVAL BY CITY ENGINEER)

T202

NOTES:
1. REINFORCEMENT SHALL BE #4 BARS UNLESS OTHERWISE SPECIFIED
2. USE MINIMUM CLASS P1 CONCRETE
3. TRANSVERSE BARS ON 24" CENTERS

SURMOUNTABLE CURB AND GUTTER SECTION WITH ASPHALT PAVING

T204A

NOTES:
1. REINFORCEMENT [illegible] BE #4 BARS UNLESS OTHERWISE SPECIFIED
2. USE MINIMUM [illegible] CLASS P1 CONCRETE
3. TRANSVERSE [illegible] BARS ON 24" CENTERS

SURMOUNTABLE MONOLITHIC CURB AND GUTTER SECTION WITH CONCRETE PAVING

T204C

NOTES:
1. USE MINIMUM CLASS P1 CONCRETE
2. PAVEMENT THICKNESS SHALL BE [illegible] #4 ACCORDANCE [illegible] TABLE ON ASPHALT CONCRETE PAVEMENT [illegible] STANDARD DETAIL SHEET [illegible] STREET TYPE
3. REINFORCEMENT SHALL BE [illegible] #4 BARS UNLESS OTHERWISE [illegible] NOTED
4. TRANSVERSE BARS [illegible] ON 24" CENTERS

PORTLAND CEMENT CONCRETE EDGE RESTRAINT FOR RURAL/SUBURBAN ASPHALT STREET

T205

NOTE:
1. FOR PAVEMENT OUTSIDE AN INTERSECTION'S PCs:
   (a) TRANVERSE/LATERAL SAWED JOINT SHALL BE PLACED EVERY 20' EXCEPT AT EXPANSION JOINT OR CONSTRUCTION JOINT
   (b) LONGITUDINAL SAWED JOINT SHALL BE PLACED AT CENTER OF PAVEMENT WHEN THERE IS NO CONSTRUCTION JOINT
2. FOR PAVEMENT INSIDE AN INTERSECTION'S PCs, BOTH TRANSVERSE/LATERAL AS WELL AS LONGITUDINAL SAW JOINTS SHALL BE PLACED EVERY 20' OR AT AN AVERAGE AS CLOSE TO 20' AS REASONABLY POSSIBLE
3. SAW JOINT IS TO BE CONTINUOUS THROUGH CURB, WHERE APPLICABLE

SAWED JOINT FOR CONCRETE PAVEMENT

T207

NOTES:
1. TO BE PLACED AT THE PC'S OF AN INTERSECTION AND THEN EVERY 200' MAXIMUM THEREAFTER AWAY FROM THE INTERSECTION (EXCEPT AS NOTED)
2. IF THE LAST PROPOSED EXPANSION JOINT PRIOR TO THE NEXT INTERSECTION'S PC'S EXPANSION JOINT IS LESS THAN 50', THEN NO EXPANSION JOINT (THE LAST PANEL WILL BE GREATER THAN 200' BUT LESS THAN 250')
3. IF THE LAST PROPOSED EXPANSION JOINT PRIOR TO THE NEXT INTERSECTION'S PC'S EXPANSION JOINT IS 50' OR GREATER BUT LESS THAN 200', THEN PLACE THE LAST EXPANSION JOINT SUCH THAT EACH CONCRETE PANEL (ON EACH SIDE OF SAID EXPANSION JOINT) ARE EQUAL TO EACH OTHER (AND EACH IS LESS THAN 200')

EXPANSION JOINT FOR CONCRETE PAVEMENT

T208

NOTES:
1. FOR NEW ASPHALTIC CONCRETE PAVEMENT TO EXISTING ASPHALTIC CONCRETE PAVEMENT, REBAR IS NOT REQUIRED.
2. FOR NEW PORTLAND CEMENT CONCRETE TO EXISTING PORTLAND CEMENT CONCRETE, REBAR IS REQUIRED.
3. IF REBAR IS REQUIRED AS NOTED ABOVE:
   (a) DRILL DOWEL AND EPOXY #3 REBAR INTO EXISTING PAVEMENT
   (b) #3 REBAR TO EXTEND A MINIMUM OF 12" INTO BOTH PAVEMENTS
   (c) #3 REBAR TO BE A MAXIMUM OF 18" ON CENTER

CONSTRUCTION JOINT

T209

NOTES:
1. REINFORCEMENT SHALL BE #4 BARS UNLESS OTHERWISE SPECIFIED
2. USE MINIMUM CLASS P1 CONCRETE
3. TRANSVERSE BARS ON 24" CENTERS

SURMOUNTABLE TRAFFIC CALMING CURB AND GUTTER WITH TRANSITION TO FULL HEIGHT CURB

T203

NOTES:
1. REFER TO CONC. PAVEMENT DETAIL SHT. FOR JOINT DETAILS
2. CONCRETE SHALL BE MACHINE PLACED-CLASS P1 OR HAND PLACED-CLASS P2
3. #4 TRANSVERSE BARS ON 18" CENTERS

VALLEY GUTTER

T206

GENERAL NOTES:

1. SURMOUNTABLE CURB AND GUTTER SHALL BE INSTALLED WHENEVER THERE IS A PRIVATE DRIVEWAY FOR VEHICLE ACCESS.
2. PAVEMENT DEPTHS INDICATED ARE MINIMUM AND MAY BE INCREASED UPON RECOMMENDATION OF ENGINEER OF RECORD. PAVEMENT DEPTH SHALL BE CONSISTENT FOR ALL APPLICABLE DETAILS.
3. REBAR INDICATED ARE MINIMUM AND MAY BE INCREASED UPON RECOMMENDATION OF ENGINEER OF RECORD. REBAR SIZE SHALL BE CONSISTENT FOR ALL APPLICABLE DETAILS.

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH.: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

CURB & GUTTER DETAIL
REINFORCED CONC. DETAIL

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

PROJECT NO.: DTE23-004

SHEET NO.: DTL-01

C:\Users\JoseadelgadoOneDrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\rvtdwy dtl.dwg

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c605 construction sequence plan.dwg

MOT NOTES:

1. CONTRACTOR IS RESPONSIBLE TO PROVIDED SIGNAGE UTILIZING THE LATEST VERSION OF THE MUTCD FOR DEVICES AND TECHNOLOGIES WHILE AT ALL TIMES DURING CONSTRUCTION.
2. TO AVOID TRAFFIC SUGGESTIONS FROM THE ENGINEER, CONTRACTOR IS RESPONSIBLE ON ALLOWING TRAFFIC AND PEDESTRIAN FLOW/CIRCULATION AT ALL TIMES DURING CONSTRUCTION.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF LA DELGADO VELEZ, PE.
CAPA REGISTRATION # 28436
DATE: April 15, 2024

REVISIONS	SYMBOL	DATE	BY

SHEET NAME

CONSTRUCTION SEQUENCE PLAN

PROJECT NAME

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE TO OUR COMMUNITIES

53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

SHEET NO.: C601
PROJECT NO.: DTE23-004
DATE: April 15, 2024
DRAWN/ADD REVISED BY:
REVISED (1):

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c605 construction sequence plan.dwg

MATCHLINE SHEET C601

MATCHLINE SHEET: C605

MATCHLINE SHEET: C605

MATCHLINE SHEET: C603

MATCHLINE SHEET: C603

WARNING HISTORICAL BUILDING

WARNING HISTORICAL BUILDING

WARNING HISTORICAL BUILDING

HORIZONTAL & VERTICAL CONTROL

PointNo.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	2425851.1140	1829619.1930	434.8800	STA/PK
2	2426.38.1490	1829518.1300	437.3770	STA/PK
3	2429551.5500	1830633.6350	439.7640	STA/PK
4	2427.01.4500	1830.38.0000	436.3.50	STA/PK
5	2427.01.4620	1831.08.0830	436.3050	STA/PK
6	2427.12.4570	1831.43.6780	436.2580	STA/PK
9	2427.07.2870	1831.47.5570	436.0050	STA/PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
	EXIST WATER LINE	WM	WATER METER
	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX FLOOD PLAIN ELEV		

CONSTRUCTION SEQ. LEGEND

	PHASE I		SMALL TRAFFIC SIGN
	PHASE II	I	BARRICADE
	PHASE III		

MOT NOTES:

1. CONTRACTOR IS RESPONSIBLE TO PROVIDED SIGNAGE UTILIZING THE LATEST VERSION OF THE MUTCD FOR DEVICES AND TECHNOLOGIES WHILE AT ALL TIMES DURING CONSTRUCTION.
2. TCP/MOT PLANS ARE SUGGESTIONS FROM THE ENGINEER. CONTRACTOR IS RESPONSIBLE ON ALLOWING TRAFFIC AND PEDESTRIAN FLOW/CIRCULATION AT ALL TIMES DURING CONSTRUCTION.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

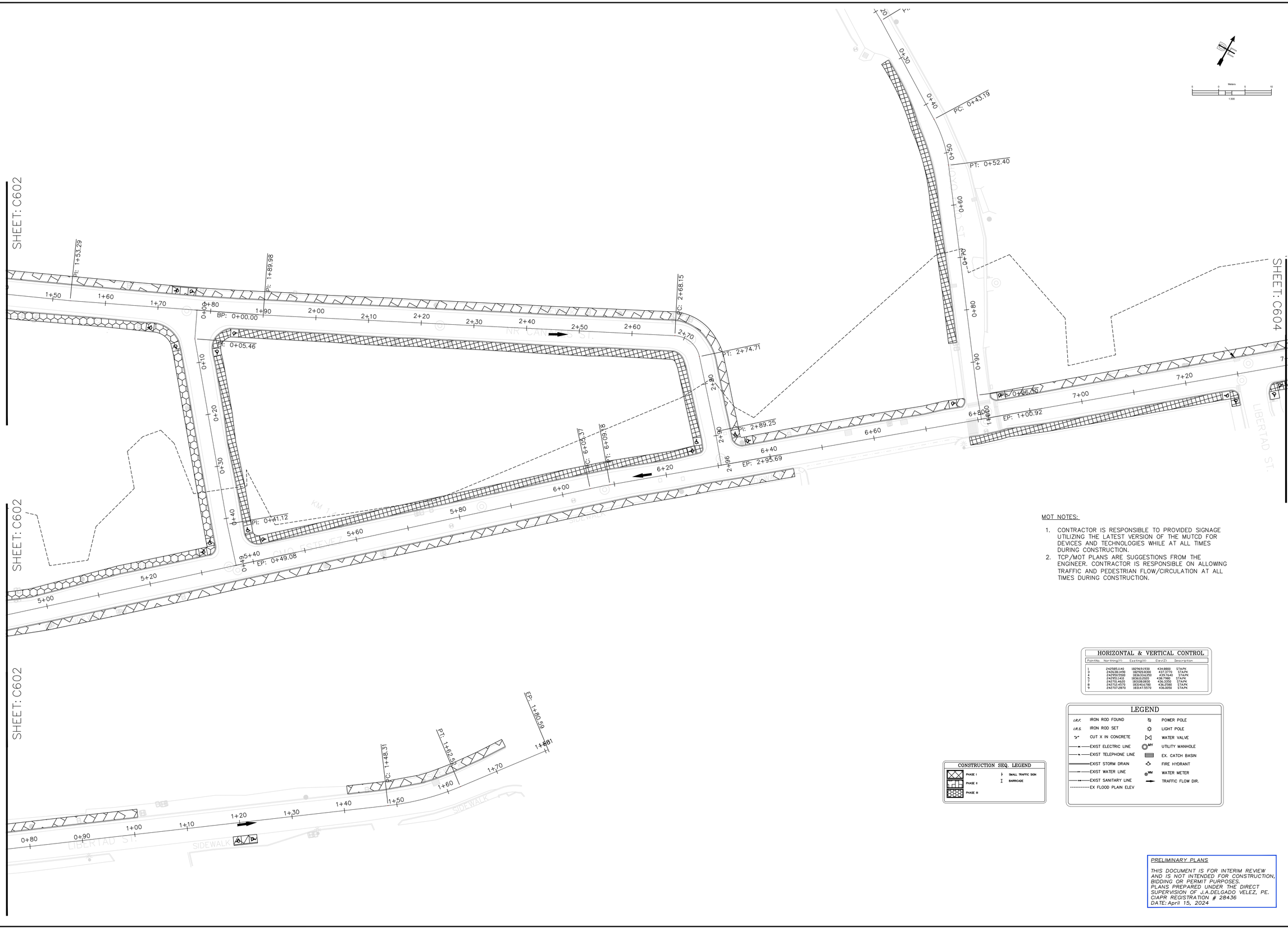
DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
CONSTRUCTION SEQUENCE PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: C602



MOT NOTES:

1. CONTRACTOR IS RESPONSIBLE TO PROVIDED SIGNAGE UTILIZING THE LATEST VERSION OF THE MUTCD FOR DEVICES AND TECHNOLOGIES WHILE AT ALL TIMES DURING CONSTRUCTION.
2. TCP/MOT PLANS ARE SUGGESTIONS FROM THE ENGINEER. CONTRACTOR IS RESPONSIBLE ON ALLOWING TRAFFIC AND PEDESTRIAN FLOW/CIRCULATION AT ALL TIMES DURING CONSTRUCTION.

HORIZONTAL & VERTICAL CONTROL

PointNo	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.9300	434.8800	STA/PK
2	242583.1490	182903.8280	441.3370	STA/PK
3	242550.0500	182823.6300	439.7640	STA/PK
5	242551.1400	183632.0500	436.7980	STA/PK
7	242701.4620	183108.0830	436.3350	STA/PK
8	242712.4570	183140.6780	436.3580	STA/PK
9	242707.2870	183147.5570	436.0050	STA/PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
	EXIST WATER LINE	WM	WATER METER
	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX FLOOD PLAIN ELEV		

CONSTRUCTION SEQ. LEGEND

PHASE I	SMALL TRAFFIC SIGN
PHASE II	BARRICADE
PHASE III	

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

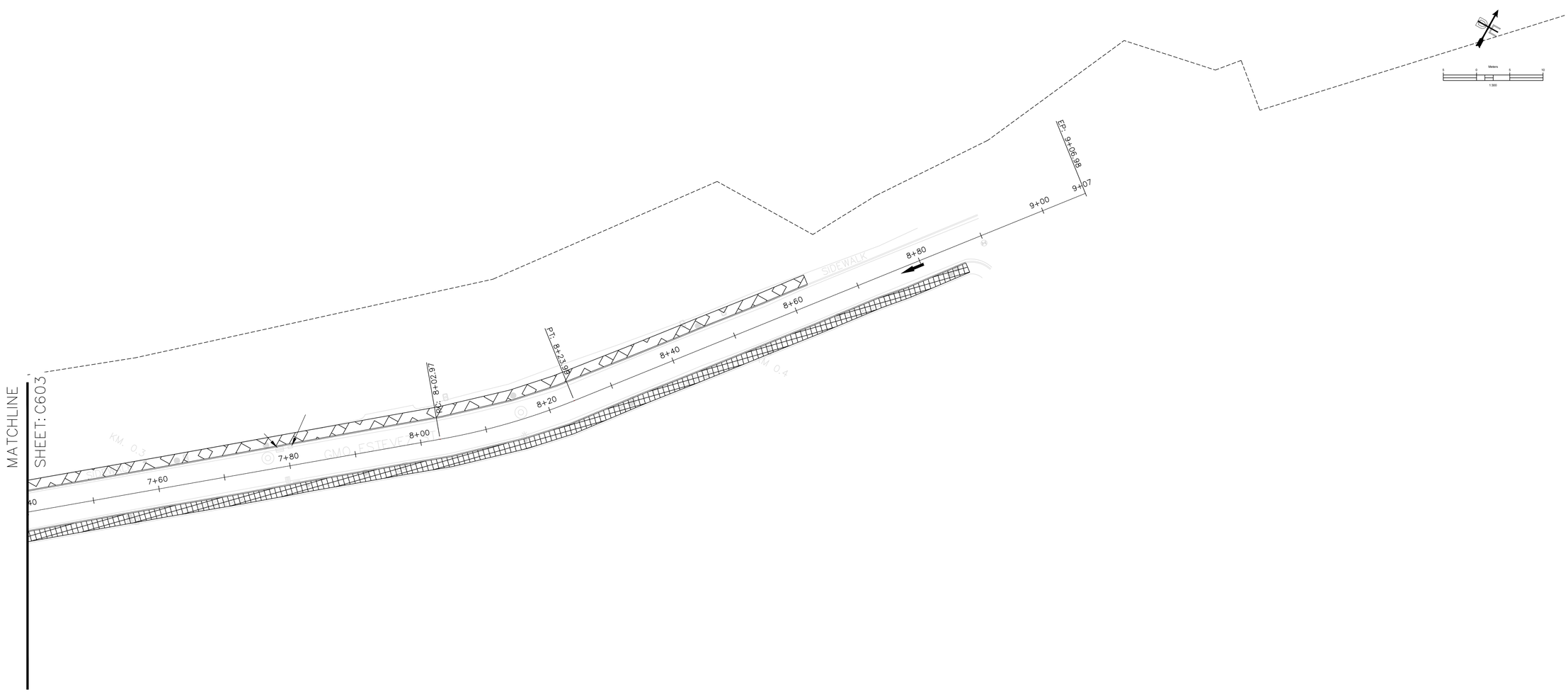
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
CONSTRUCTION SEQUENCE PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C603

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c605 construction sequence plan.dwg



HORIZONTAL & VERTICAL CONTROL				
Point No.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
3	242638.1490	182920.8300	437.3770	STA.PK
4	242958.5500	183639.6.250	435.7640	STA.PK
5	242951.1410	183610.0320	438.7980	STA.PK
7	242712.4570	183.466.780	436.2580	STA.PK
8	242712.4570	183.466.780	436.2580	STA.PK
9	242707.2870	183147.5570	436.0050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
"x"	CUT X IN CONCRETE		WATER VALVE
E	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
T	EXIST TELEPHONE LINE		EX. CATCH BASIN
SD	EXIST STORM DRAIN		FIRE HYDRANT
W	EXIST WATER LINE	WM	WATER METER
S	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
FP	EX FLOOD PLAIN ELEV		

CONSTRUCTION SEQ. LEGEND

	PHASE I		SMALL TRAFFIC SIGN
	PHASE II	I	BARRICADE
	PHASE III		

MOT NOTES:

1. CONTRACTOR IS RESPONSIBLE TO PROVIDED SIGNAGE UTILIZING THE LATEST VERSION OF THE MUTCD FOR DEVICES AND TECHNOLOGIES WHILE AT ALL TIMES DURING CONSTRUCTION.
2. TCP/MOT PLANS ARE SUGGESTIONS FROM THE ENGINEER. CONTRACTOR IS RESPONSIBLE ON ALLOWING TRAFFIC AND PEDESTRIAN FLOW/CIRCULATION AT ALL TIMES DURING CONSTRUCTION.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
CONSTRUCTION SEQUENCE PLAN

REVISIONS	SYMBOL	DATE	BY

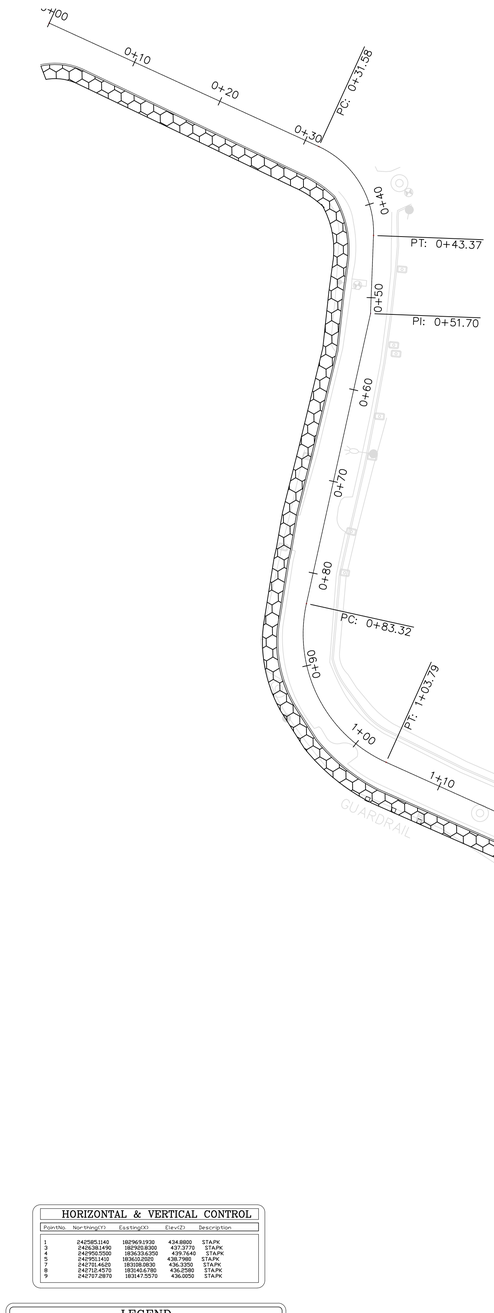
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

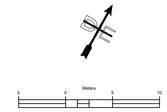
DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C604

C:\Users\Joseu\delgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c605 construction sequence plan.dwg





HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
3	242638.1490	182923.8380	435.0770	STA.PK
4	242751.2400	182903.7200	437.3240	STA.PK
5	242951.1410	183063.0200	438.7980	STA.PK
7	242731.4620	183108.0830	436.3350	STA.PK
8	242712.4570	183143.6780	436.2580	STA.PK
9	242707.2870	183147.5570	436.0650	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
E	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
T	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
W	EXIST WATER LINE	WM	WATER METER
S	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX FLOOD PLAIN ELEV		

CONSTRUCTION SEQ. LEGEND

	PHASE I		SMALL TRAFFIC SIGN
	PHASE II		BARRICADE
	PHASE III		

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
CONSTRUCTION SEQUENCE PLAN

REVISIONS	SYMBOL	DATE	BY

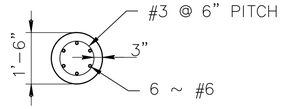
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

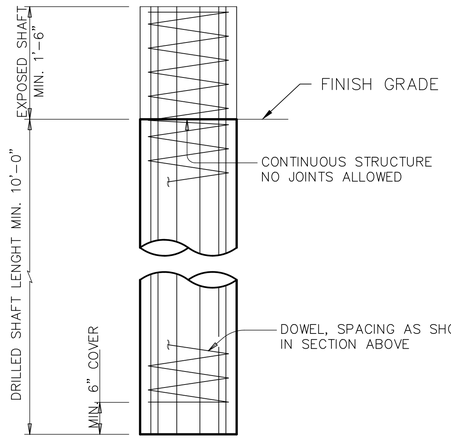
SHEET NO.:
C605

C:\Users\josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c605 construction sequence plan.dwg

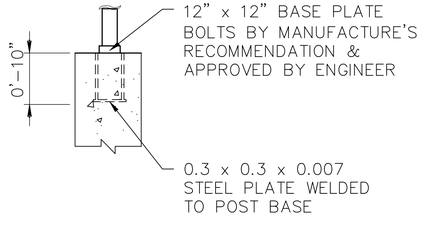


SECTION

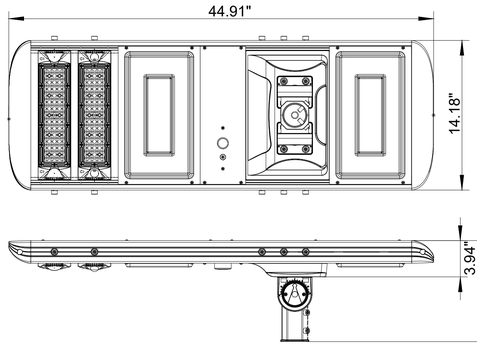
18" DRILLED SHAFT
FOUNDATION FOR
PROP. LUMINAIRE
(NOT TO SCALE)

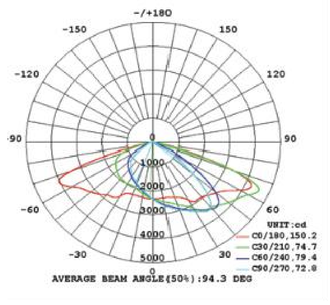


DRILLED SHAFT PROFILE
NOT TO SCALE



POLE BASE CONNECTION DETAIL
NOT TO SCALE





LUMINAIRE MIN. SPECIFICATION
(OR SIMILAR)

SOLAR LUMINAIRE

Solar Lighting 80W
(20' Pole)

LUMINAIRE

- Three light modes are available. Timed mode (6 hr, 9hr, 12 hr) set to 50%, 70$ or 100%. Sensor control mode will turn the light on at 33% and switch to 100% when motion is detected. Mixed mode will turn the light on at full power for x hours then switch to motion sensor for remainder of the night.
- Select desired lighting mode with included remote control
- 80 Watt emits 8,500 lm
- 14800 Lumens (MIN.)
- 6000-6500K LED color temperature
- Aluminum and glass construction
- IP65 rating
- 80 Watt Di mensions: 44" x 14" x 4" (112cm x 35cm x 10cm)
- Working temperature -22 F to 158F
- Gray / aluminum finish

SOLAR PANEL

Glass covered solar panel is built in to the top of the lamp
80 Watt fitted with 18V 85 Watt solar panel

ATTERY

Lithium battery pack installed within unit
80 Watt supplied with 12.8V 403 Watt-hour battery
Replaceble battery

OLE

Light arm is not included. Light fixture will mount to the top of pole.
20' (6m) galvanized steel pole
20' pole is fitted with a 12." x 12.5" base plate

HARGE CONTROL

Internal battery over-charge and dis-charge protection
Automatic light activation at sunset

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

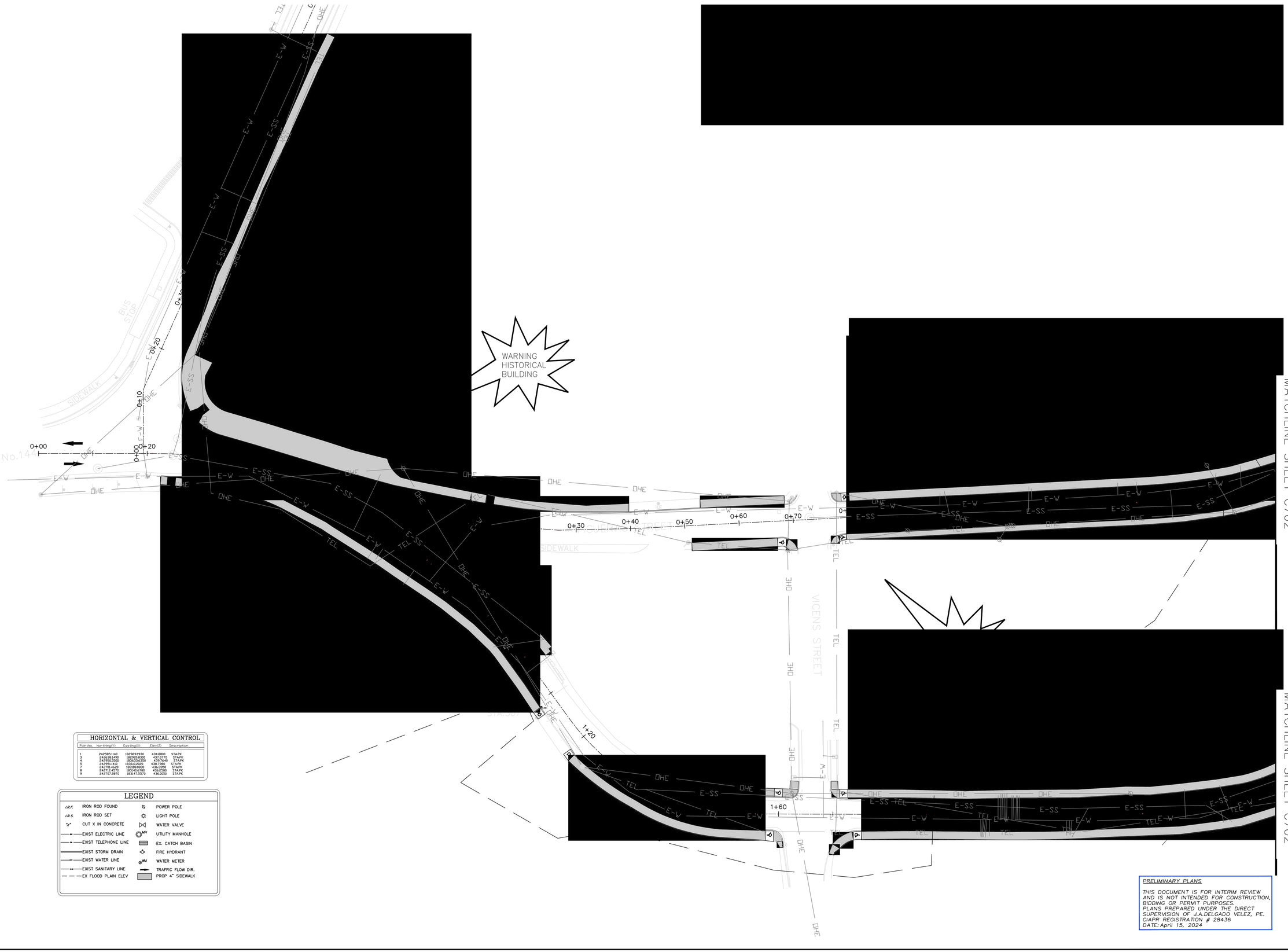
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SOLAR LUMINAIRE
SOLAR LIGHTING AND
FOUNDATION DETAILS

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: E01

C:\Users\josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\e01 luminaires details.dwg



MATCHLINE SHEET C702

MATCHLINE SHEET C702

HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev.(Z)	Description
1	242585.1140	1829619.1930	434.8800	STA.PK
2	242583.0550	1836334.3350	434.7640	STA.PK
3	242953.2550	1836334.3350	439.7640	STA.PK
5	242951.1410	1836610.2020	438.7980	STA.PK
7	242712.4620	1831018.8830	436.3350	STA.PK
8	242712.4570	1831414.6780	436.2580	STA.PK
9	242707.2870	1831417.5570	436.2050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
	EXIST WATER LINE	WM	WATER METER
	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX FLOOD PLAIN ELEV		PROP 4" SIDEWALK

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE TO OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
UTILITIES PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
October 4, 2023

PROJECT NO.:
DTE23-004

SHEET NO.:
C701

C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c705 utilities plan.dwg

MATCHLINE SHEET C701

MATCHLINE
SHEET: C04E

MATCHLINE
SHEET: C04E

MATCHLINE SHEET: C703

MATCHLINE SHEET: C703

WARNING
HISTORICAL
BUILDING

WARNING
HISTORICAL
BUILDING

GMO ESTEVEZ ST.

HORIZONTAL & VERTICAL CONTROL

PointNo.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	2425851140	1829693930	434.8800	STA/PK
3	2426381490	1829293830	437.3770	STA/PK
4	2426951430	1829293830	438.7980	STA/PK
5	2427051410	1829632820	438.7980	STA/PK
7	2427814600	1830180830	436.3350	STA/PK
8	2427124570	1830414780	436.2580	STA/PK
9	2427972870	1831475570	436.0050	STA/PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
"x"	CUT X IN CONCRETE		WATER VALVE
	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
	EXIST WATER LINE	WM	WATER METER
	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX FLOOD PLAIN ELEV		PROP 4" SIDEWALK

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/in/deltorre

PROJECT NAME
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
UTILITIES PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
October 4, 2023

PROJECT NO.:
DTE23-004

SHEET NO.:
C702

C:\Users\JoseADelgado\OneDrive - delgado torres engineering, llc\Documents - Projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c705 utilities plan.dwg

HORIZONTAL & VERTICAL CONTROL

PointNo.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1149	182969.1930	434.8800	STA/PK
3	242636.1490	182908.8300	437.3770	STA/PK
4	242950.0500	183633.6350	439.7640	STA/PK
5	242951.1410	183610.2020	436.7980	STA/PK
7	242701.4620	183108.0830	436.3250	STA/PK
8	242707.4970	183147.5570	436.3590	STA/PK
9	242707.2870	183147.5570	436.8050	STA/PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
⁵⁄₈"	CUT X IN CONCRETE		WATER VALVE
E	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
T	EXIST TELEPHONE LINE		EX. CATCH BASIN
SD	EXIST STORM DRAIN		FIRE HYDRANT
W	EXIST WATER LINE	WM	WATER METER
S	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
FP	EX FLOOD PLAIN ELEV		PROP 4" SIDEWALK

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
UTILITIES PLAN

REVISIONS	SYMBOL	DATE	BY

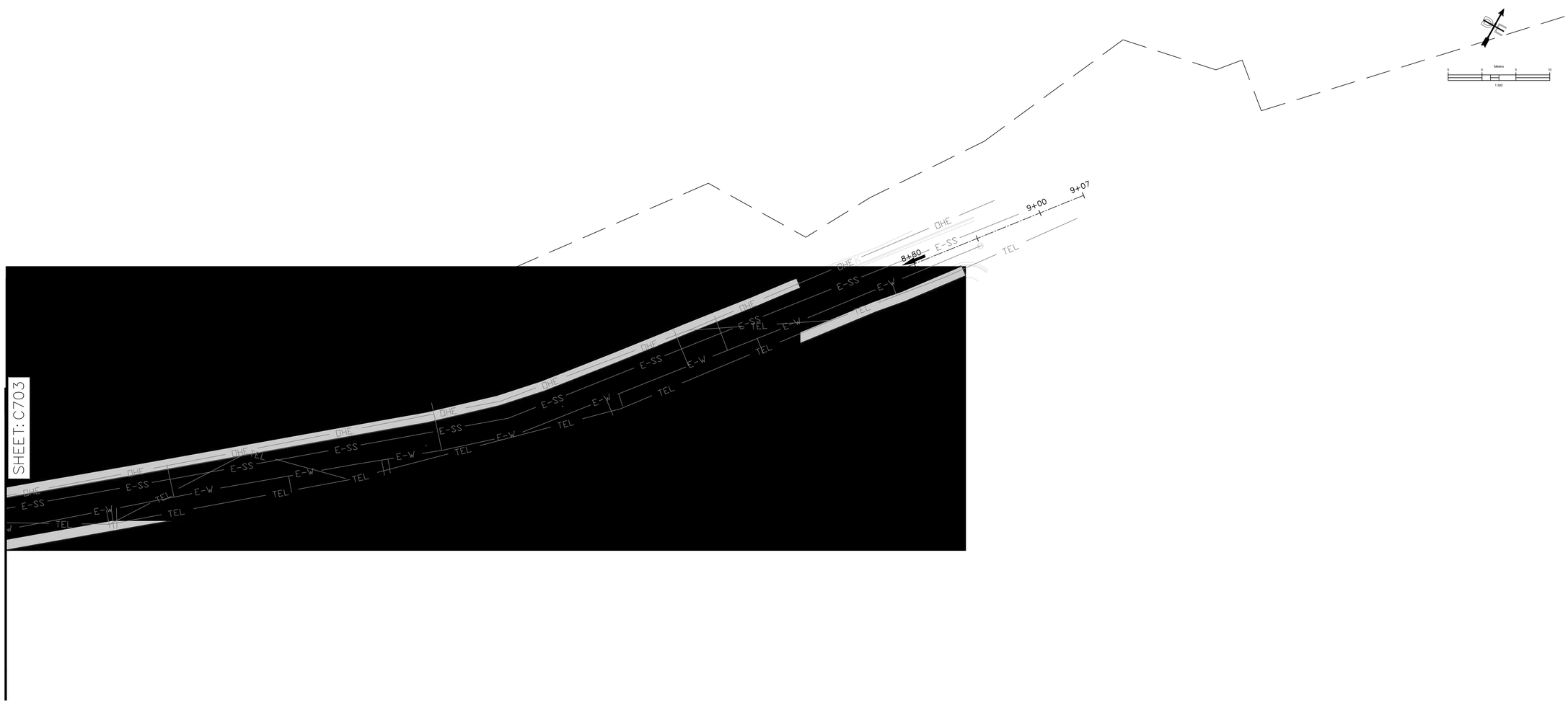
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
October 4, 2023

PROJECT NO.:
DTE23-004

SHEET NO.:
C703

C:\Users\josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c705 utilities plan.dwg



HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
2	242638.1490	182925.8300	437.3770	STA.PK
3	242677.1440	182893.8250	439.1790	STA.PK
5	242951.1400	183612.0620	450.7760	STA.PK
7	242751.4620	183008.9830	436.3350	STA.PK
8	242712.4570	183140.6780	436.2580	STA.PK
9	242707.2870	183147.5570	436.6050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
—E—	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
—T—	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
—W—	EXIST WATER LINE	WM	WATER METER
—SS—	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
— — —	EX FLOOD PLAIN ELEV		PROP 4" SIDEWALK

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

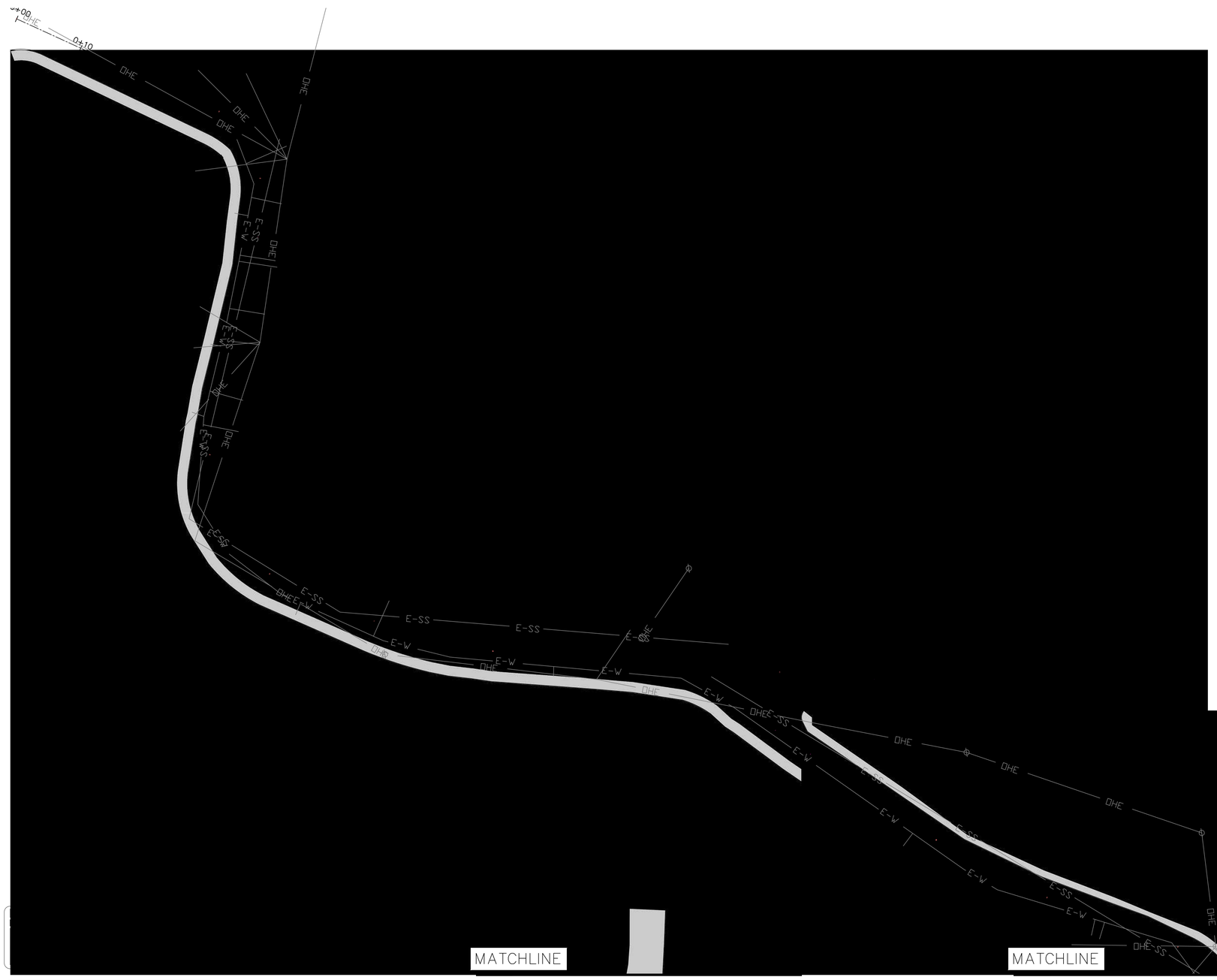
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

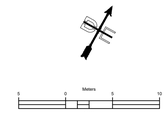
SHEET NAME
UTILITIES PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
October 4, 2023
PROJECT NO.:
DTE23-004
SHEET NO.:
C704

C:\Users\Joseadelgado\OneDrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c705 utilities plan.dwg





LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
—E—	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
—T—	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
—W—	EXIST WATER LINE	WM	WATER METER
—SS—	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
— — —	EX FLOOD PLAIN ELEV		PROP 4" SIDEWALK

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
UTILITIES PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
October 4, 2023

PROJECT NO.:
DTE23-004

SHEET NO.:
C705

C:\Users_joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c705 utilities plan.dwg

PRELIMINARY PLANS
THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PREPARED UNDER THE DIRECT SUPERVISION OF: J.A. DELGADO VELEZ, PE.
DATE: April 15, 2024 # 28436

C801	DTE23-004	October 4, 2023	DRAWN: JAD DESIGNED: JAD REVIEWED: ITI		

REVISIONS	SYMBOL	DATE	BY

SHEET NAME

STORMWATER POLLUTION CONTROL PLAN

PROJECT NAME

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE TO OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c805 stormwater pollution control plan.dwg

C802						
SHEET NO.						
DTE23-004	October 4, 2023	DRAWN: JAD DESIGNED: JAD REVIEWED: ITI				
DESIGNATION	DATE					

REVISIONS	SYMBOL	DATE	BY

SHEET NAME

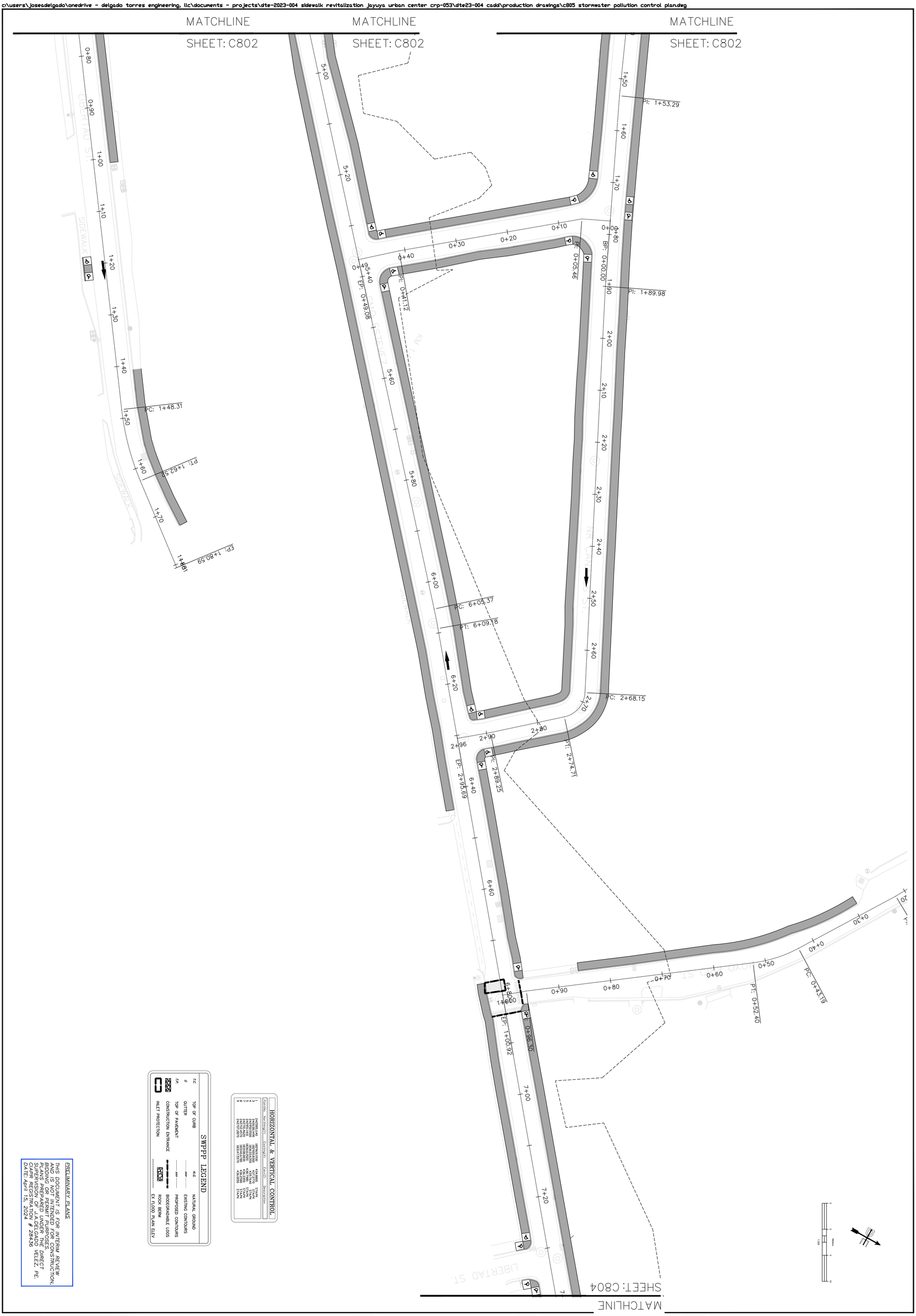
STORMWATER POLLUTION CONTROL PLAN

PROJECT NAME

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c805 stormwater pollution control plan.dwg

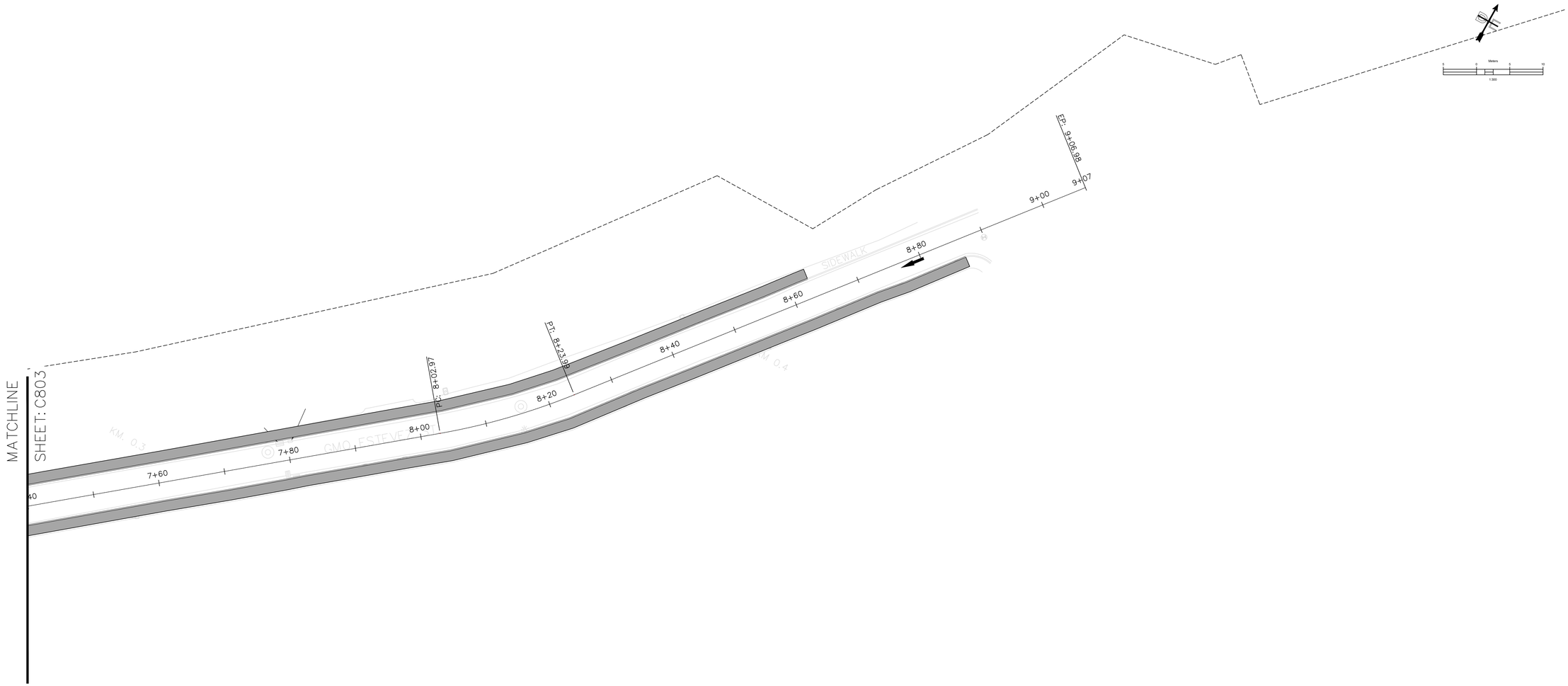


C803			
PROJECT NO.: DTE23-004	DRAWN: JAD	REVISIONS	SYMBOL	DATE	BY
DATE: October 4, 2023	DESIGNED: JAD				
	REVIEWED: JTI				

SHEET NAME
STORMWATER POLLUTION CONTROL PLAN

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre



HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA/PK
3	242583.1490	182903.8280	430.2770	STA/PK
4	242582.9500	182903.6200	429.7640	STA/PK
5	242701.1400	183612.0300	438.7980	STA/PK
7	242701.4620	183018.8830	436.3350	STA/PK
8	242712.4570	183140.6780	436.2580	STA/PK
9	242707.2870	183147.5570	436.0050	STA/PK

SWPPP LEGEND

T.C.	TOP OF CURB	N.G.	NATURAL GROUND
G	GUTTER	XXX	EXISTING CONTOURS
T.P.	TOP OF PAVEMENT	XXX	PROPOSED CONTOURS
	CONSTRUCTION ENTRANCE		BIODEGRADABLE LOGS
	INLET PROTECTION		ROCK BERM
			EX FLOOD PLAIN ELEV

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

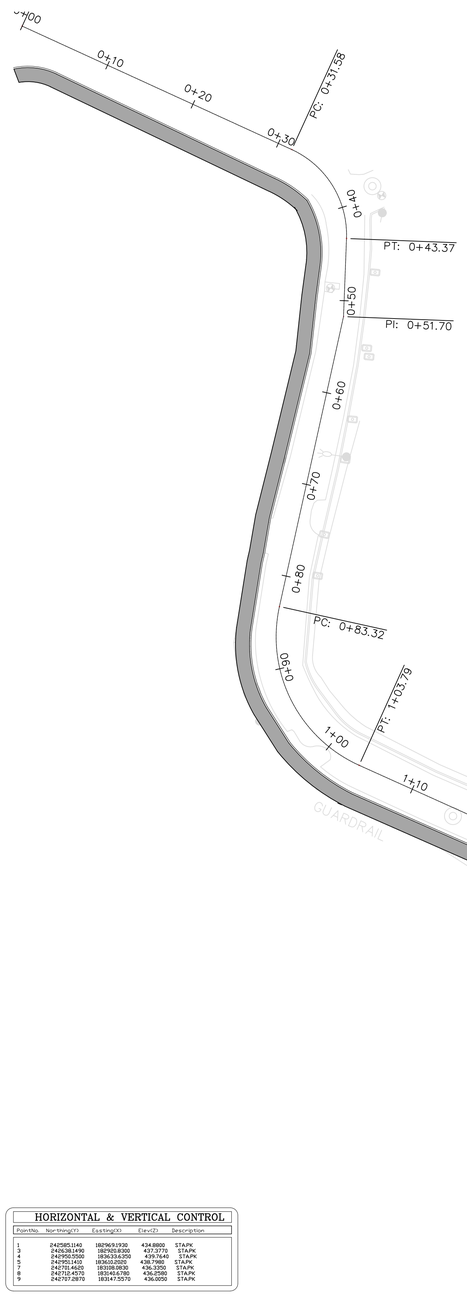
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

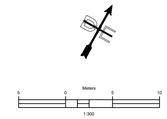
SHEET NAME
STORMWATER POLLUTION CONTROL PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
October 4, 2023
PROJECT NO.:
DTE23-004
SHEET NO.:
C804

c:\users\josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c805 stormwater pollution control plan.dwg





HORIZONTAL & VERTICAL CONTROL

PointNo.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
2	242638.1490	182903.8380	434.9720	STA.PK
3	242760.1430	182902.6300	437.3240	STA.PK
4	242951.1410	183618.0200	438.7980	STA.PK
7	242701.4620	183018.0830	436.3350	STA.PK
8	242712.4570	183145.6780	436.2580	STA.PK
9	242707.2870	183147.5570	436.0650	STA.PK

SWPPP LEGEND

T.C.	TOP OF CURB	N.G.	NATURAL GROUND
G	GUTTER	xxx	EXISTING CONTOURS
T.P.	TOP OF PAVEMENT	xxx	PROPOSED CONTOURS
	CONSTRUCTION ENTRANCE		BIODEGRADABLE LOGS
	INLET PROTECTION		ROCK BERM
			EX FLOOD PLAIN ELEV

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
STORMWATER POLLUTION CONTROL PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
October 4, 2023

PROJECT NO.:
DTE23-004

SHEET NO.:
C805

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c805 stormwater pollution control plan.dwg

DWG BY: LMARTINEZ 2934

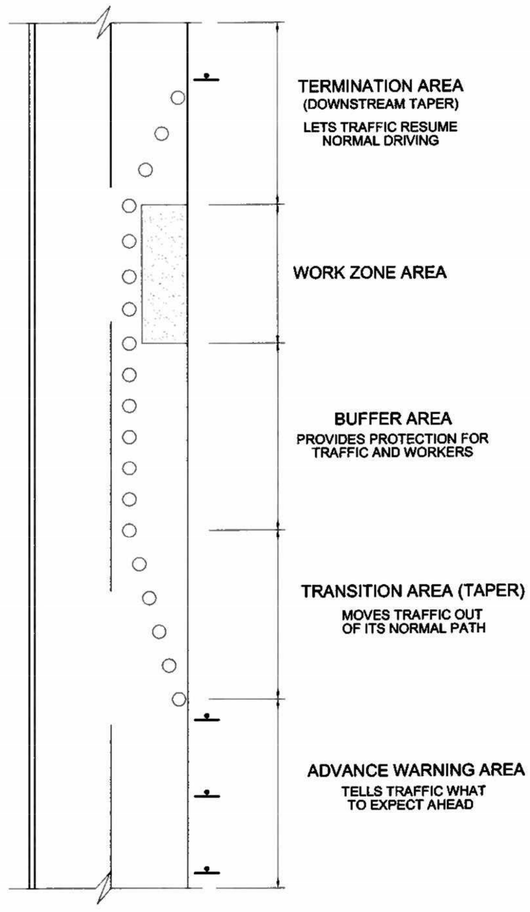
NUMBER OF CHANNELIZING DEVICES NEEDED

LENGTH (FT.)	V < 35 MPH		35 MPH < V ≤ 45 MPH		45 MPH < V ≤ 55 MPH	
	TAPER	BUFFER/ WORK	TAPER	BUFFER/ WORK	TAPER	BUFFER/ WORK
≤ 100	5	2-3	5	2-3	5	2-3
150	6	3-5	6	2-4	6	2-3
200	7	3-6	6	3-5	6	2-4
250	9	4-8	7	3-6	6	3-5
300	10	5-9	8	4-7	6	3-6
350	11	5-10	9	4-8	8	4-7
400	13	6-12	10	5-9	9	4-8
450	14	7-13	11	5-10	10	5-9
500	16	8-15	13	6-12	11	5-10
550	17	8-16	14	7-13	11	5-10
600	19	9-18	15	7-14	12	6-11
650	20	10-19	16	8-15	13	6-12

LEGEND:

- TRAFFIC SIGNS
- FLAGGER
- CHANNELIZING DEVICE
- WORK ZONE AREA

V - POSTED SPEED IN MPH



FIVE PARTS OF A TRAFFIC CONTROL ZONE

TAPER LENGTH CRITERIA FOR WORK ZONES

TYPE OF TAPER	TAPER LENGTH
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/3 L MINIMUM
ONE-LANE, TWO-WAY TRAFFIC TAPER	50 FT. MINIMUM 100 FT. MAXIMUM
DOWNSTREAM TAPER	50 FT. MINIMUM 100 FT. MAXIMUM
FORMULAS FOR L (FT.)	
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR GREATER	L = WxS

ADVANCE WARNING SIGN MINIMUM SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS (*)		
	A	B	C
URBAN (LOW SPEED)	100 FEET	100 FEET	100 FEET
URBAN (HIGH SPEED)	350 FEET	350 FEET	350 FEET
RURAL	500 FEET	500 FEET	500 FEET
EXPRESSWAY / FREEWAY	1,000 FEET	1,500 FEET	2,640 FEET

(*) THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "FIRST SIGN" IS THE SIGN IN A THREE-SIGN SERIES THAT IS CLOSEST TO THE TEMPORARY TRAFFIC CONTROL ZONE. THE "THIRD SIGN" IS THE SIGN THAT IS FURTHEST UPSTREAM FROM THE TEMPORARY TRAFFIC CONTROL ZONE.)

LEGEND:

L - TAPER LENGTH IN FEET
W - WIDTH OF OFFSET IN FEET
S - POSTED SPEED LIMIT OR OFF-PEAK 85 PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH.

NOTICE

TEMPORARY CONCRETE BARRIER UNITS PRODUCED ON AND AFTER OCTOBER 1, 2002 FOR USE ON STATE HIGHWAY PROJECTS MUST MEET NCHRP 350 CRITERIA.

CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE	DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS
6/27/12		6/27/12	

MAINTENANCE AND PROTECTION OF TRAFFIC
WORK ZONE DESIGN CRITERIA

MPT-10
JUNE 2012

DATE	REVISION	BY
APR. 96	ORIGINAL (MPT-10)	JMO
JUN. 12	GENERAL REVISION AS PER MUTCD 2009	

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

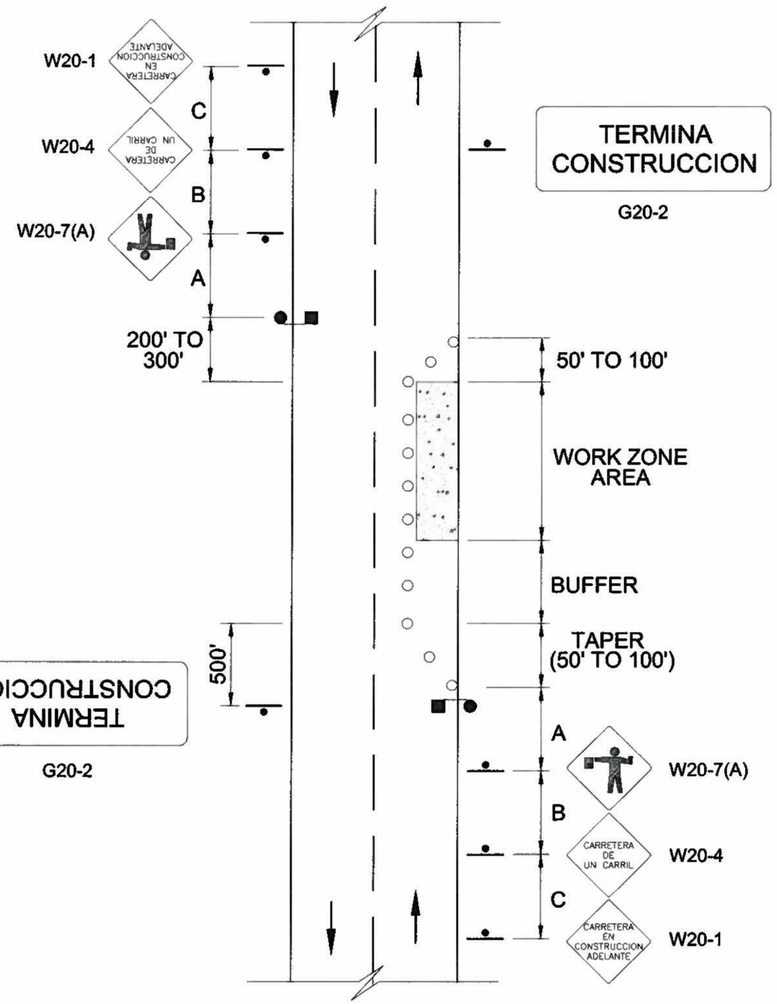
TRAFFIC CONTROL STANDARDS

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: MOT-01

ENGINEERING STANDARDS OFFICE

C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\mot-08 traffic control standards.dwg



TWO LANE TWO-WAY TRAFFIC CONTROL

TWO LANE: BUFFER TABLE		
SPEED LIMIT (S, MPH)	WORK ZONE AREA	LENGTH (FEET) ALL LANE WIDTHS
20	BUFFER	90
25	BUFFER	115
30	BUFFER	150
35	BUFFER	185
40	BUFFER	230
45	BUFFER	340
50	BUFFER	370
55	BUFFER	400

NOTES:

1. FOR TWO LANE CITY STREETS WITH POSTED SPEED OF 35 MPH OR LESS, A 200 FEET SIGN SPACING SHALL BE USED.
2. A TWO WAY TRAFFIC TAPER SHOULD BE 50 TO 100 FEET IN LENGTH AND MADE UP OF FIVE DEVICES 20 FEET APART.
3. FOR THE WORK AND BUFFER SPACE, DEVICES SHALL BE SPACED AT A DISTANCE OF TWICE THE SPEED LIMIT IN FEET.
4. THE DOWNSTREAM TAPER LENGTH SHOULD BE 100 FEET AND MADE UP OF FIVE CHANNELIZING DEVICES SPACED 20 FEET APART.
5. THE NUMBER OF CHANNELIZING DEVICES FOR PARTS OF TRAFFIC CONTROL ZONE IS SHOWN ON DRAWING MPT-10.
6. THE A, B AND C DIMENSIONS ARE SHOWN ON DRAWING MPT-10.

GENERAL NOTE:

THE DESIGN OF SIGN PLATES SHALL BE IN ACCORDANCE WITH THE "MANUAL DE SEÑALES DE TRÁNSITO PARA LAS VÍAS PÚBLICAS DE PUERTO RICO" AND THE STANDARD DRAWINGS MPT-24 AND-27.

DATE	REVISION	BY
APR. 96	ORIGINAL (MPT-11)	
JUN. 12	RELOCATED DETAILS (MPT-12)	JMO
JUN. 12	GENERAL REVISION AS PER AUT(CD-2009	JMO

DWG BY: LMARTINEZ 2934

CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

DATE: 3/31/12 — ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE

DATE: 6/07/12 — ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS

MAINTENANCE AND PROTECTION OF TRAFFIC
TYPICAL APPLICATION DIAGRAMS

MPT-11

JUNE 2012

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

TRAFFIC CONTROL STANDARDS

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004

SHEET NO.: MOT-02

ENGINEERING STANDARDS OFFICE

C:\Users\Jose\delgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\mot-08 traffic control standards.dwg

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\vol1-08 traffic control standards.dwg

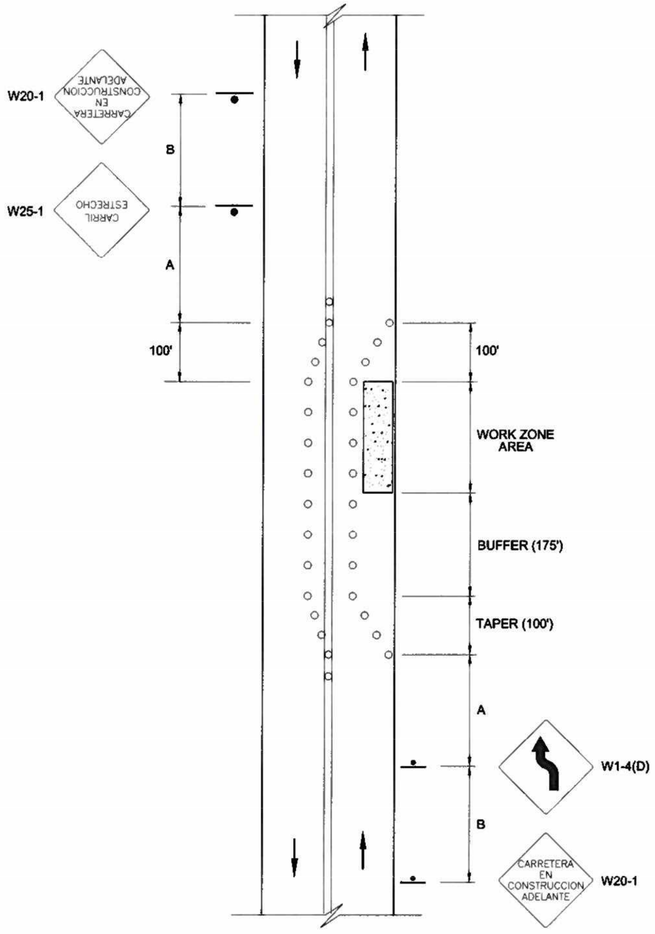
DWG BY: LMARTINEZ 2934

DATE	REVISION	BY

DATE	REVISION	BY

DATE	REVISION	BY

DATE	REVISION	BY
APR '96	ORIGINAL (MPT-15)	JMO
JUN. '12	SHEET RENUMBERING (MPT-17)	
JUN. '12	GENERAL REVISION AS PER AUTCD 2009	JMO

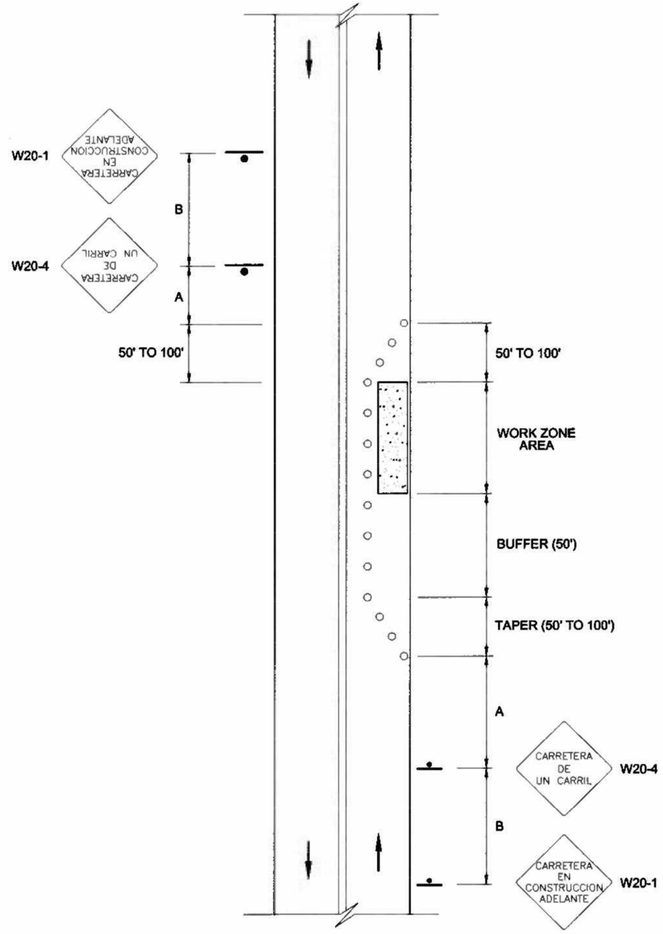


WORK IN TRAVEL LANE ON MINOR URBAN STREET

MAINTAINING TWO-WAY TRAFFIC

NOTES:

1. THIS LAYOUT IS ONLY APPROPRIATE FOR LOW-VOLUME, LOW-SPEED (35 MPH OR LESS) URBAN STREETS.
2. A MINIMUM LANE WIDTH OF 10' SHOULD BE PROVIDED IN BOTH DIRECTIONS (THE LANE WIDTH SHOULD NOT EXTEND BEYOND THE EDGE OF PAVEMENT.)
3. ADDITIONAL ADVANCE WARNING MAY BE APPROPRIATE, SUCH AS "LANE SHIFTS" (W1-4(D)) AND "CARRIL ESTRECHO" SIGNS (W25-1).
4. THE NUMBER OF CHANNELIZING DEVICES FOR PARTS OF TRAFFIC CONTROL ZONE IS SHOWN ON DRAWING MPT-10.
5. THE A, B AND C DIMENSIONS ARE SHOWN ON DRAWING MPT-10.



LANE CLOSURE ON A MINOR URBAN STREET

NO FLAGGER, TRAFFIC SELF-REGULATING

NOTES:

1. THIS LAYOUT IS ONLY APPROPRIATE FOR LOW-VOLUME, LOW-SPEED (35 MPH OR LESS) STREETS, SUCH AS LOCAL RESIDENTIAL STREETS. THIS PROCEDURE IS NOT TO BE USED IN RURAL AREAS.
2. TRAFFIC CAN REGULATE ITSELF WHILE VOLUMES ARE LOW AND THE LENGTH OF THE WORK SPACE IS SHORT, THUS ALLOWING TRAFFIC TO READILY SEE THE ROADWAY BEYOND.
3. WHERE TRAFFIC DOES NOT SELF-REGULATE EFFECTIVELY, USE ONE OR TWO FLAGGERS. (SEE DRAWING MPT-20).
4. THE NUMBER OF CHANNELIZING DEVICES FOR PARTS OF TRAFFIC CONTROL ZONE IS SHOWN ON DRAWING MPT-10.
5. THE A, B AND C DIMENSIONS ARE SHOWN ON DRAWING MPT-10.

GENERAL NOTE:

THE DESIGN OF SIGN PLATES SHALL BE IN ACCORDANCE WITH THE "MANUAL DE SEÑALES DE TRÁNSITO PARA LAS VÍAS PÚBLICAS DE PUERTO RICO" AND THE STANDARD DRAWINGS MPT-24 TO MPT-27.

ENGINEERING STANDARDS OFFICE

CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE	DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS
31/Jul/12		6/VIII/12	

MAINTENANCE AND PROTECTION OF TRAFFIC
TYPICAL APPLICATION DIAGRAMS

MPT-17
JUNE 2012

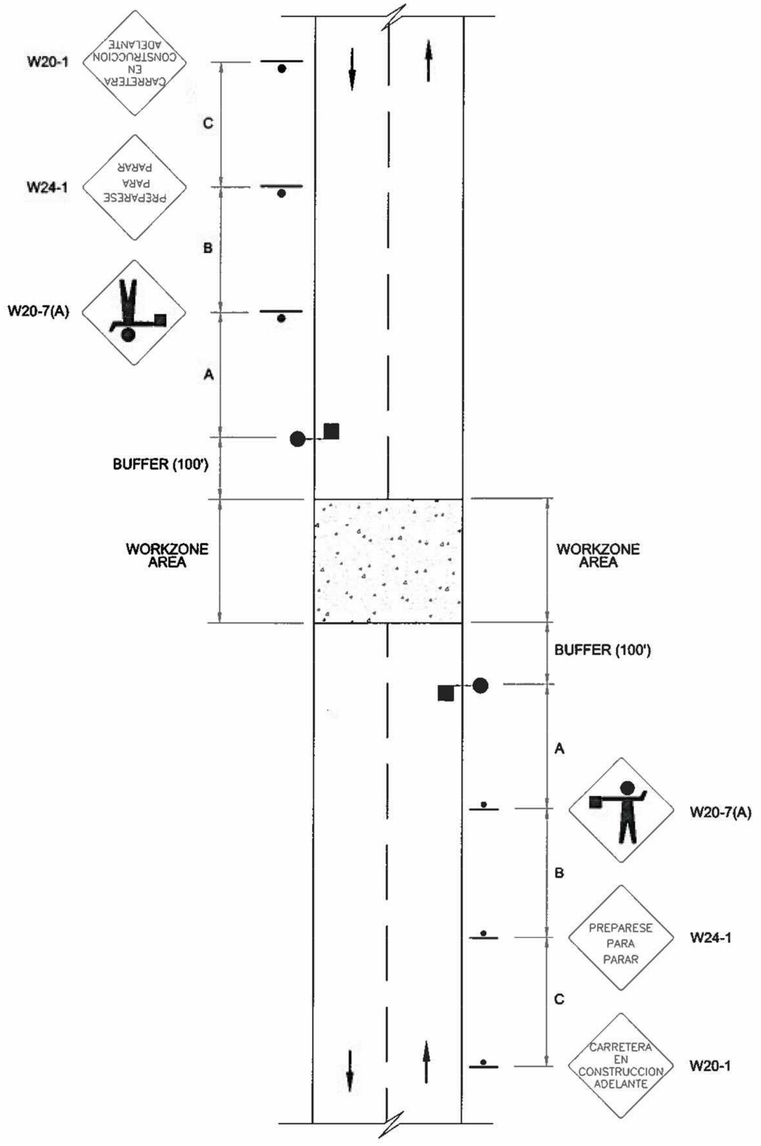
DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

TRAFFIC CONTROL STANDARDS

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: MOT-03



TEMPORARY ROAD CLOSURE
NOT TO EXCEED 15-20 MINUTES

NOTES:

1. CONDITIONS REPRESENTED ARE FOR WORK WHICH REQUIRES CLOSURE DURING DAYTIME HOURS ONLY.
2. THIS APPLICATION IS INTENDED FOR A PLANNED TEMPORARY CLOSURE NOT TO EXCEED 15-20 MINUTES.
3. FOR HIGH VOLUME ROADS, A POLICE PATROL CAR IS RECOMMENDED.
4. FOR TWO-LANE, LOW-SPEED (35 MPH OR LESS) URBAN STREETS, A 200 FEET SIGN SPACING SHALL BE USED.
5. COST OF FLAGGER WILL BE A SUBSIDIARY OBLIGATION.
6. THE A, B AND C DIMENSIONS ARE SHOWN ON DRAWING MPT-10.

GENERAL NOTE:

1. THE DESIGN OF SIGN PLATES SHALL BE IN ACCORDANCE WITH THE "MANUAL DE SEÑALES DE TRÁNSITO PARA LAS VÍAS PÚBLICAS DE PUERTO RICO" AND THE STANDARD DRAWINGS MPT-24 TO MPT-27.

ENGINEERING STANDARDS OFFICE

DWG BY: LMARTINEZ 2934

DATE	REVISION	BY
FEB. 97	GENERAL REVISION (MPT-17)	JMO
JUN. 97	SHEET RENUMBERED (MPT-19)	JMO
JUN. 12	GENERAL REVISION AS PER MUTCD 2009	JMO

CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

6/11/12 — ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE — DATE:

6/III/12 — ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS — DATE:

MAINTENANCE AND PROTECTION OF TRAFFIC
TYPICAL APPLICATION DIAGRAMS

MPT-19
JUNE 2012

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

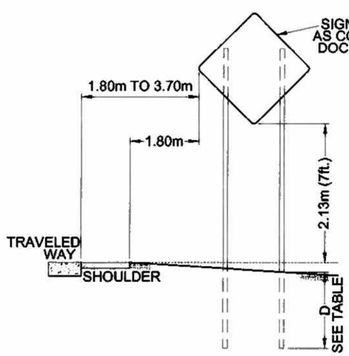
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

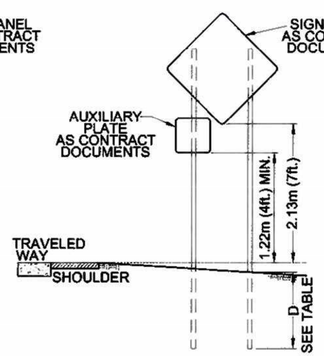
TRAFFIC CONTROL STANDARDS

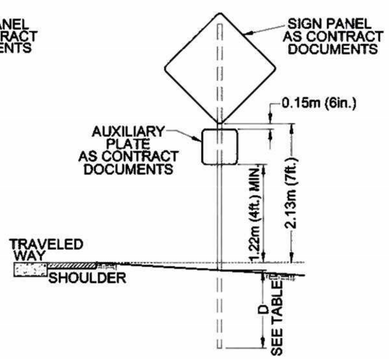
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: MOT-04

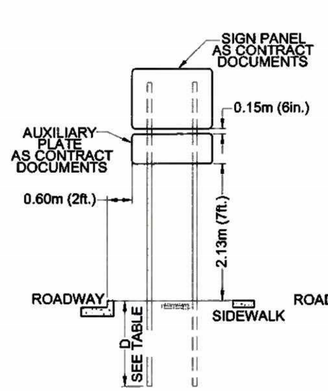
C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\mot-08 traffic control standards.dwg

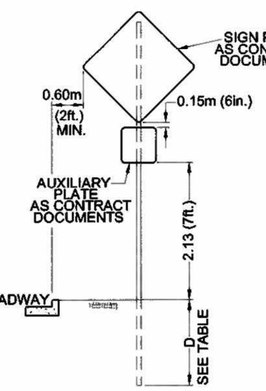


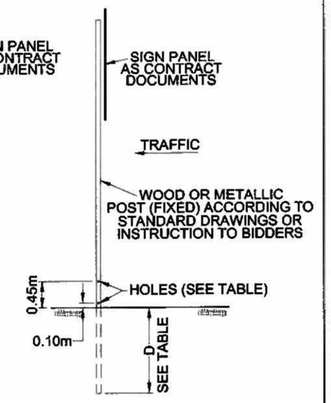




RURAL AREA



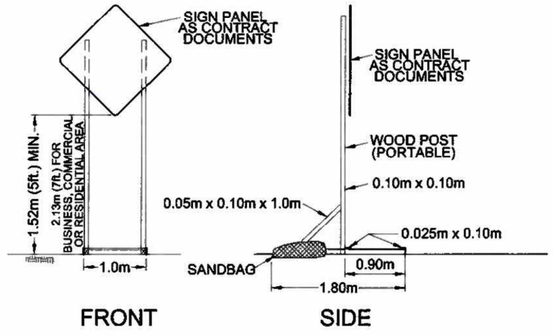




URBAN AREA

BREAKAWAY SUPPORT DETAIL
(FIXED SIGNS - 0.10m x 0.10m AND GREATER POSTS)

FIXED ROADWAY SIGNS



FRONT SIDE

PORTABLE SIGNS

WOOD POST SIZE		D (MINIMUM)		HOLE DIAMETER		MAXIMUN SIGN PANEL AREA (SQUARE METERS)	
MT. x MT.	IN. x IN.	MT.	FT.	MT.	IN.	1 POST	2 POSTS
0.10 x 0.10	4 x 4	1.22	4	NONE REQ'D		1.0	2.0
0.10 x 0.15	4 x 6	1.22	4	0.04	1.5	N/A	3.0
0.15 x 0.15	6 x 6	1.52	5	0.05	2.0	N/A	4.5
0.15 x 0.20	6 x 8	1.52	5	0.07	3.0	N/A	8.0

NOTES:

1. UNLESS OTHERWISE SHOWN, DIMENSIONS ARE IN METERS.
2. MOUNT SIGNS THAT ARE WIDER THAN 0.90 METER OR LARGER THAN 1.0 SQUARE METER ON TWO POSTS. SEE TABLE.
3. ALL LUMBER DIMENSIONS ARE NOMINAL.
4. THE CONTRACTOR MAY SUBMIT, FOR APPROVAL BY THE ENGINEER, ALTERNATE TEMPORARY SIGN MOUNTING WHICH FULLY COMPLIES WITH NCHRP REPORT 350 TL-3.
5. FOR POSTS GREATER THAN 0.10m X 0.10m, SEE THE BREAKAWAY SUPPORT DETAIL.
6. THE PORTABLE SIGNS SHALL NOT BE LEANED IN THE SHOULDER AND/OR ROADSIDE AT ANY TIME.
7. MOUNTING FOR PORTABLE SIGNS SHALL HOLD THE SIGN FACE IN A VERTICAL PLANE.
8. FOR SIGNS REQUIRING POSTS 0.15m X 0.15m AND GREATER, SIGNS ARE CONSIDERED TO BE NON-BREAKAWAY IF MULTIPLE POSTS ARE REQUIRED AND THE POSTS CANNOT BE SPACED A MINIMUM OF 2.1 METERS APART. DO NOT PLACE HOLES IN POST OF NON-BREAKAWAY SIGNS.
9. SIGN MOUNTED ON PORTABLE SUPPORTS SHALL NOT BE USED FOR A DURATION OF MORE THAN THREE DAYS.
10. THE BACKGROUND FOR CONSTRUCTION WARNING SIGNS SHALL BE FLUORESCENT ORANGE COLOR ACCORDING TO SUPPLEMENTAL SPECIFICATION 638-2.02.
11. THE FINAL LOCATION OF TEMPORARY TRAFFIC SIGNS SHALL BE AS DIRECTED BY THE ENGINEER CONSIDERING OPTIMUM VISIBILITY AND, SAFETY IN EXISTING FIELD CONDITIONS.

ENGINEERING STANDARDS OFFICE

DWG BY: LMARTINEZ 2934

DATE	BY	REVISION
SEP. 09	JMO	ORIGINAL (MPT-23)
JUN. 12	JMO	GENERAL REVISION AS PER MUTCD 2009

CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

3/Jul/12 — DATE: — ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE

6/Jul/12 — DATE: — ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS

~~MAINTENANCE~~ AND PROTECTION OF TRAFFIC
TEMPORARY TRAFFIC SIGNS MOUNTING DETAILS

MPT-23

JUNE 2012

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

TRAFFIC CONTROL STANDARDS

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

PROJECT NO.: DTE23-004

SHEET NO.: MOT-05

C:\Users_joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\mot-08 traffic control standards.dwg

C:\Users\JoseDelgado\OneDrive - delgado torres engineering, llc\Documents - Projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\vol1-08 traffic control standards.dwg

DWG BY: LMARTINEZ 2934

REVISION	DATE	BY

REVISION	DATE	BY

REVISION	DATE	BY
ORIGINAL (MPT-23)	APR. 06	JMO
SHEET REMARKING (MPT-23)	APR. 12	JMO
RELOCATED DETAILS (MPT-25)	JUN. 12	JMO

WARNING SIGNS USE IN TEMPORARY TRAFFIC CONTROL ZONE

SPEED LIMIT (MPH)	W1-4(D)	W1-4(bD)	W1-6	W4-2	W20-1	W20-4	W20-5	W20-7(A)	W21-5	W23-1	W24-1	W25-1	G20-2	R4-7
20	30"x30"	30"x30"	36"x36"	30"x30"	36"x36"	36"x36"	36"x36"	30"x30"	24"x24"	30"x30"	30"x30"	30"x30"	40"x16"	24"x24"
25	30"x30"	30"x30"	36"x36"	30"x30"	36"x36"	36"x36"	36"x36"	30"x30"	24"x24"	30"x30"	30"x30"	30"x30"	40"x16"	24"x24"
30	36"x36"	36"x36"	48"x48"	36"x36"	48"x48"	48"x48"	48"x48"	36"x36"	30"x30"	36"x36"	36"x36"	36"x36"	50"x20"	36"x36"
35	36"x36"	36"x36"	48"x48"	36"x36"	48"x48"	48"x48"	48"x48"	36"x36"	30"x30"	36"x36"	36"x36"	36"x36"	50"x20"	36"x36"
40	36"x36"	36"x36"	48"x48"	36"x36"	48"x48"	48"x48"	48"x48"	36"x36"	30"x30"	36"x36"	36"x36"	36"x36"	50"x20"	36"x36"
45	48"x48"	48"x48"	60"x60"	48"x48"	60"x60"	60"x60"	60"x60"	48"x48"	36"x36"	48"x48"	48"x48"	48"x48"	60"x24"	48"x48"
50	48"x48"	48"x48"	60"x60"	48"x48"	60"x60"	60"x60"	60"x60"	48"x48"	36"x36"	48"x48"	48"x48"	48"x48"	60"x24"	48"x48"
55	48"x48"	48"x48"	60"x60"	48"x48"	60"x60"	60"x60"	60"x60"	48"x48"	36"x36"	48"x48"	48"x48"	48"x48"	60"x24"	48"x48"

ENGINEERING STANDARDS OFFICE

CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

DATE: 6/11/12 — ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE

DATE: 6/11/12 — ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS

MAINTENANCE AND PROTECTION OF TRAFFIC
WARNING SIGNS

MPT-24

JUNE 2012

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

TRAFFIC CONTROL
STANDARDS

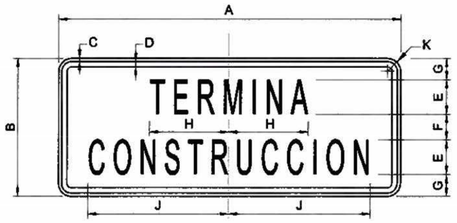
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

PROJECT NO.: DTE23-004

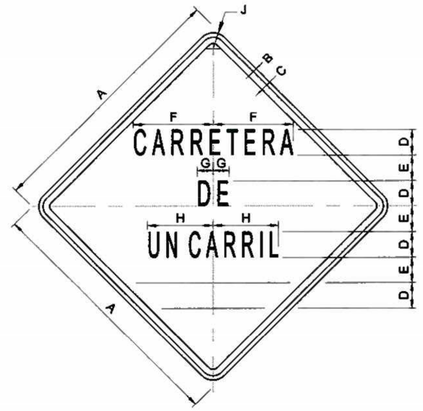
SHEET NO.: MOT-06



G20-2

COLORS
LEGEND - NON REFLECTORIZED BLACK
BACKGROUND - REFLECTORIZED ORANGE

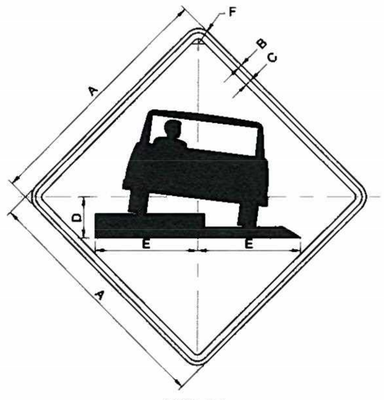
	DIMENSIONS (INCHES)									
	A	B	C	D	E	F	G	H	J	K
MINIMUM	40.00	16.00	0.38	0.63	4C	3.00	2.50	9.28	16.54	1.50
NORMAL	50.00	20.00	0.38	0.63	5C	3.00	3.50	11.59	20.66	1.50
SPECIAL	60.00	24.00	0.38	0.63	6C	4.00	4.00	13.92	24.81	1.50



W20-4

COLORS
LEGEND - NON REFLECTORIZED BLACK
BACKGROUND - REFLECTORIZED ORANGE

	DIMENSIONS (INCHES)								
	A	B	C	D	E	F	G	H	J
MINIMUM	36.00	0.63	0.88	4C	2.00	15.46	2.52	12.25	2.25
NORMAL	48.00	0.75	1.25	5C	4.00	15.62	3.14	15.29	3.00
SPECIAL	60.00	0.75	1.25	6C	6.00	18.77	7.54	18.36	3.00



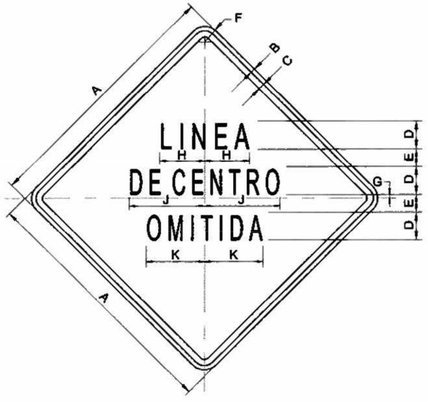
W8-9A

COLORS
LEGEND - NON REFLECTORIZED BLACK
BACKGROUND - REFLECTORIZED ORANGE

	DIMENSIONS (INCHES)					
	A	B	C	D	E	F
MINIMUM	24.00	0.38	0.63	4.00	10.00	1.50
STANDARD	30.00	0.50	0.75	5.00	12.50	1.88
NORMAL	36.00	0.63	0.88	6.00	15.00	2.25
SPECIAL	48.00	0.75	1.25	8.00	20.00	3.00

NOTE:

SEE TABLE ON DRAWING MPT-24.



W8-12

COLORS
LEGEND - NON REFLECTORIZED BLACK
BACKGROUND - REFLECTORIZED ORANGE

	DIMENSIONS (INCHES)								
	A	B	C	D	E	F	G	H	J
MINIMO	36.00	0.00	0.88	5C	5.00	2.25	7.53	15.78	10.77
NORMAL	48.00	0.75	1.25	6C	6.00	3.00	9.04	18.95	12.94
SPECIAL	60.00	0.75	1.25	8C	8.00	3.75	12.05	25.26	17.25

CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

DATE: 3/27/12 — ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE

DATE: 4/27/12 — ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS

MAINTENANCE AND PROTECTION OF TRAFFIC
WARNING SIGNS

MPT-25

JUNE 2012

ENGINEERING STANDARDS OFFICE

DATE	REVISION	BY
APR. 96	ORIGINAL MPT-25TN	JMO
JUN. 12	RELOCATED DETAILS (MPT-25)	JMO
JUN. 12	GENERAL REVISION	JMO

DWG BY: LMARTINEZ 2934

DATE	REVISION	BY

DATE	REVISION	BY

DATE	REVISION	BY

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

TRAFFIC CONTROL
STANDARDS

REVISIONS	SYMBOL	DATE	BY

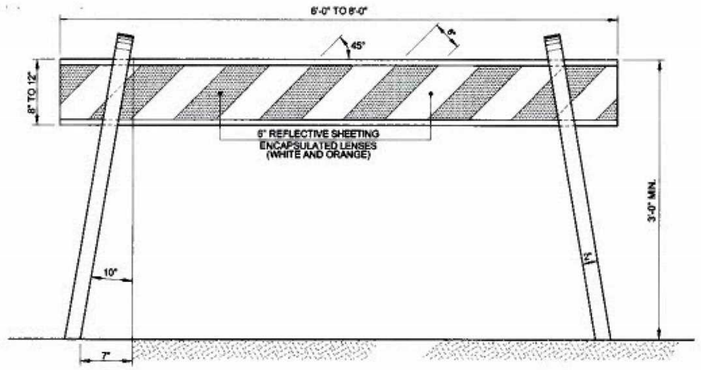
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

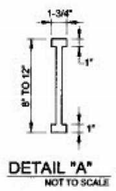
DATE: April 15, 2024

PROJECT NO.: DTE23-004

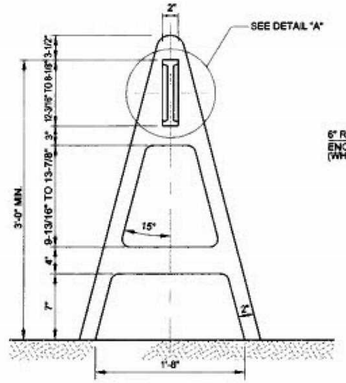
SHEET NO.: MOT-07

C:\Users\Jose.delgado\Onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\mot-08 traffic control standards.dwg

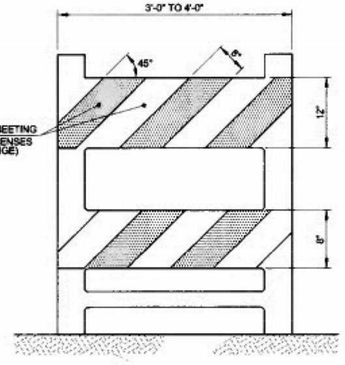


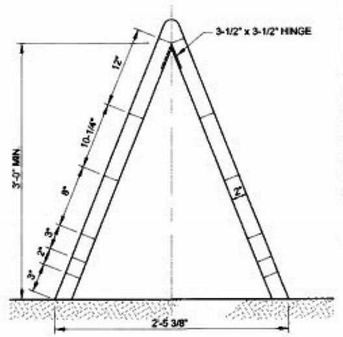


DETAIL "A"
NOT TO SCALE

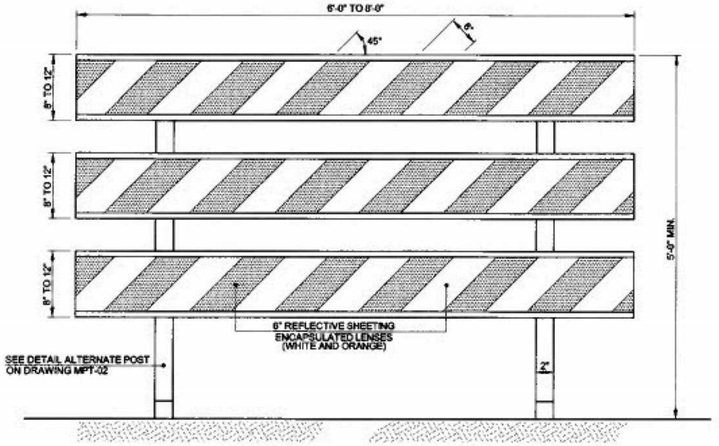


TYPE I BARRICADE
NOT TO SCALE

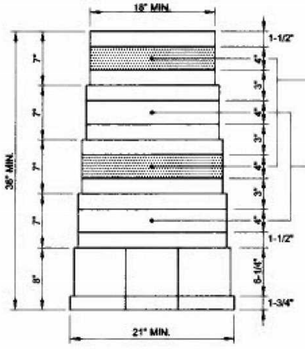




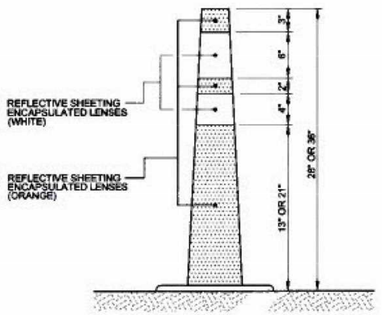
TYPE II BARRICADE
NOT TO SCALE



TYPE III BARRICADE
NOT TO SCALE



REFLECTORIZED PLASTIC DRUM
NOT TO SCALE



CONE
NOT TO SCALE

GENERAL NOTES:

1. ALL TRAFFIC CONTROL DEVICES AND TRAFFIC CONTROL OPERATIONS SHALL BE IN ACCORDANCE WITH PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2009 EDITION OR A LATER EDITION ADOPTED AND APPROVED BY THE PUERTO RICO HIGHWAY AND TRANSPORTATION AUTHORITY.
2. STRIPES ON BARRICADE SHALL BE 6 INCHES WIDE, EXCEPT WHERE RAIL LENGTHS ARE LESS THAN 36 INCHES, WHEN 4 INCH WIDE STRIPES MAY BE USED.
3. DRUMS FOR TRAFFIC WARNING OR CHANNELIZATION SHALL BE CONICROUND OR WITH A SQUARE SECTION, APPROXIMATELY 36" IN HEIGHT AND A MINIMUM OF 18" IN DIAMETER OR 18" SQUARE AT THE TOP. THE MARKINGS ON DRUMS SHALL BE HORIZONTAL AND IN THE TOTAL PERIMETER OF THE DEVICE.
4. THERE SHALL BE TWO 4" ORANGE AND TWO 4" WHITE REFLECTIVE SHEETING STRIPES ON EACH DRUM. NONREFLECTORIZED SPACES SHALL BE ORANGE.
5. REFLECTIVE SHEETING FOR USE ON PLASTIC REBOUNDABLE DEVICES SUCH AS DRUMS AND FLEXIBLE DELINEATORS POSTS, SUFFICIENT ELONGATION CAPABILITY TO RESIST REPEATED IMPACTING AND REBOUNDING CYCLES WITHOUT CRACKING OR LOSING ADHESION.
6. DRUMS, CONES AND BARRICADES SHALL BE CONSTRUCTED OF PLASTIC.
7. DRUMS, BARRICADES AND CONES SHALL REMAIN UPRIGHT AS DESIGNED.
8. ALL TRAFFIC CONTROL DEVICES SHALL BE PROVIDED AS A SUBSIDIARY OBLIGATION WITH WATER OR SAND BALLAST OR OTHER APPROVED DEVICES WHICH WILL PREVENT THEM FROM BEING BLOWN AWAY BY THE DRAFTS CAUSED BY PASSING TRAFFIC.
9. ALL TRAFFIC CHANNELIZING DEVICES FOR EACH PROJECT SHALL BE OF UNIFORM CONSTRUCTION AND APPEARANCE.
10. CONES SHALL BE 36" IN HEIGHT, EXCEPT WHEN USED FOR PAVEMENT MARKING IT SHALL BE 28".
11. ALL TRAFFIC CONTROL DEVICES SHALL BE CLEANED, PAINTED, REFLECTORIZED OR REPLACED AS NECESSARY TO PROVIDE ADEQUATE VISIBILITY AND LEGIBILITY AT ALL TIMES.
12. TRAFFIC CONTROL DEVICES MANUFACTURED WITH SUBSTANTIALLY SIMILAR DIMENSIONS WOULD BE ACCEPTABLE SUBJECT TO THE APPROVAL OF THE P.R.H.T.A.
13. REFLECTIVE SHEETING USED ON ALL SIGNS AND TRAFFIC CONTROL DEVICES EITHER TEMPORARY OR PERMANENT, SHALL CONFORM TO ASTM D4956, TYPE III. FOR PERMANENT INSTALLATIONS, THE ADHESIVE BACKING OF REFLECTIVE SHEETING SHALL BE CLASS 1 OR 2.
14. ALL TRAFFIC CHANNELIZING DEVICES SHALL COMPLY WITH NCHRP 350. IT SHALL BE THE CONTRACTOR AND VENDORS RESPONSIBILITY TO CERTIFY THAT THEIR PRODUCT IS CRASHWORTHY. ARROW PANELS ARE EXCEPTED.
15. REFLECTIVE SHEETING FROM DIFFERENT MANUFACTURERS SHALL NOT BE MIXED WITHIN THE SAME SIGN PANEL. SIGN PANELS FABRICATE WITH REFLECTIVE SHEETING FROM DIFFERENT MANUFACTURERS SHALL NOT BE MIXED WITHIN THE SAME SIGN SUPPORT.

IMPORTANT NOTE:

THESE STANDARD DRAWINGS PROVIDE FOR THE DESIGN OF TRAFFIC CONTROL DEVICES FOR USE IN THE MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION. HOWEVER, THE DECISION TO USE A PARTICULAR DEVICE AT A PARTICULAR LOCATION SHOULD BE BASED ON AN ENGINEERING STUDY OF THE LOCATION AND THE APPLICATION OF ENGINEERING JUDGEMENT BY THOSE RESPONSIBLE FOR THE WORK. THESE DRAWINGS ARE INTENDED TO PROVIDE STANDARDS FOR TRAFFIC CONTROL DEVICES BUT NOT AS LEGAL REQUIREMENT FOR THEIR INSTALLATION.

DATE	REVISION	BY
DEC. '98	GENERAL NOTE 8	IV
DEC. '99	GENERAL NOTE 14	IV
SEPT. '09	ADDED NOTE 15	IV

DATE	REVISION	BY
JUN. '12	GENERAL REVISION	JMO

DWG BY: LMARTINEZ 2934

DTOP CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

3/27/12 — DATE: — ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE

4/11/12 — DATE: — ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS

MAINTENANCE AND PROTECTION OF TRAFFIC
CHANNELIZING DEVICES

MPT-01

JUNE 2012

ENGINEERING STANDARDS OFFICE

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

TRAFFIC CONTROL STANDARDS

REVISIONS	SYMBOL	DATE	BY

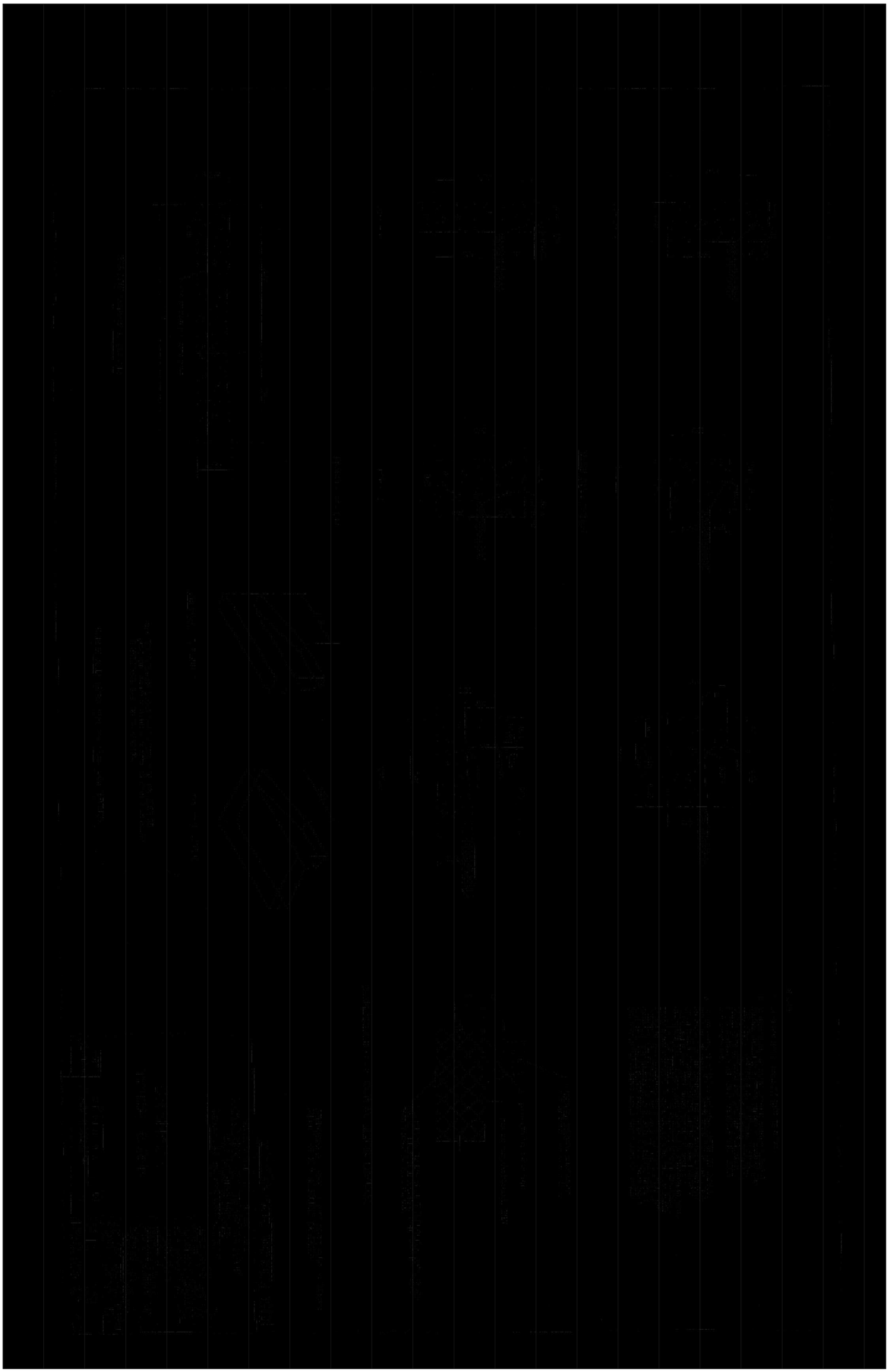
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

PROJECT NO.: DTE23-004

SHEET NO.: MOT-08

C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\mot-08 traffic control standards.dwg



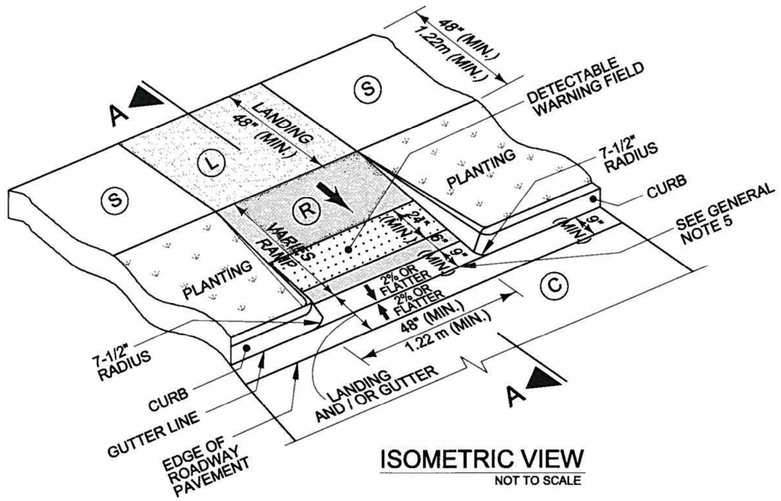
SHEET NO.: RDWY-01	PROJECT NO.: DTE23-004	DATE: April 15, 2024	DRAWN, CAD & DESIGNED BY: REVIEWED BY:

REVISIONS	SYMBOL	DATE	BY

CURB & GUTTER
STANDARD
TYPICAL CURBS

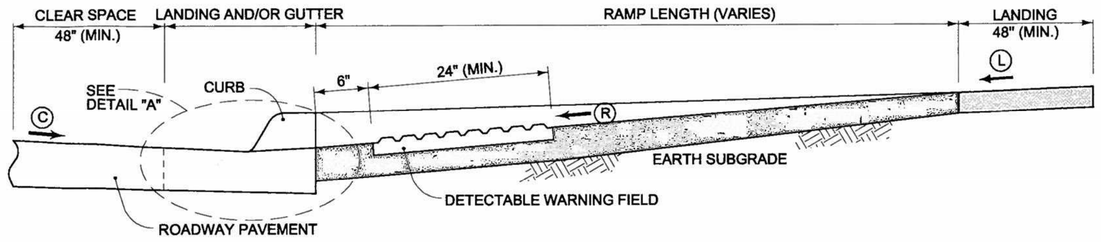
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

DELTORRE ENGINEERING LLC
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre



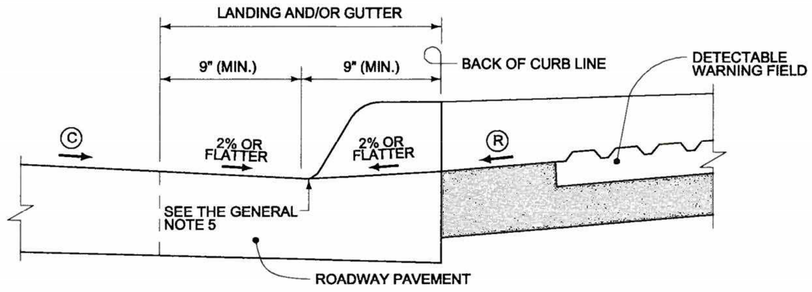
ISOMETRIC VIEW

NOT TO SCALE



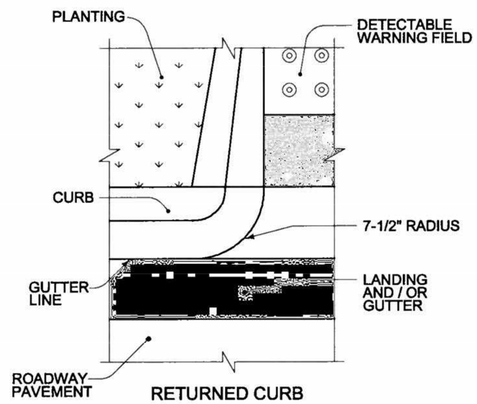
SECTION A-A

TYPICAL SELECTION THROUGH RAMP RUN AND LANDINGS
WITH UPPER LANDING AT NORMAL SIDEWALK ELEVATION



DETAIL "A"

NOT TO SCALE



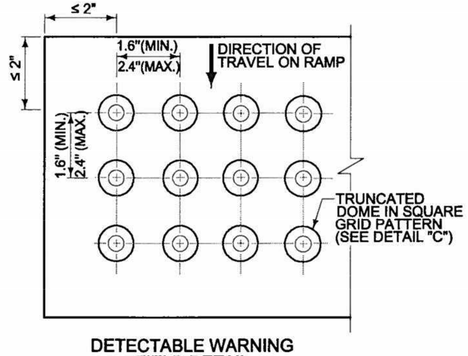
RETURNED CURB

DETAIL "B"

NOT TO SCALE

GENERAL NOTES:

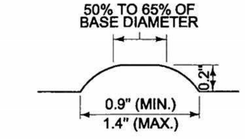
1. THE MAXIMUM CROSS SLOPES OF RAMPS MUST NOT EXCEED 2% IN ANY DIRECTION.
2. USE A COARSE BROOM FINISH RUNNING PERPENDICULAR TO THE SLOPE TO CREATE A SLIP RESISTANT SURFACE ON CONCRETE RAMP SURFACES, EXCLUSIVE OF THE DETECTABLE WARNING FIELDS.
3. CONSTRUCT CURB RAMP PERPENDICULAR TO THE CURB. AVOID SKEWING THE RAMP FACE.
4. CONSTRUCT RAMP TRANSITIONS BETWEEN WALKS, GUTTERS, OR STREET THAT ARE FLUSH AND FREE OF ABRUPT VERTICAL CHANGES NOT TO EXCEED 2.5 INCHES.
5. AT POINTS WHERE A CHANGE IN SLOPE OCCURS, THE ALGEBRAIC GRADE DIFFERENCE SHALL NOT EXCEED 11%.
6. LOCATE DRAINAGE INLETS AND MANHOLES OUTSIDE OF RAMP WALKING SURFACES OR LANDINGS.
7. LOCATE DETECTABLE WARNING FIELD 6 INCHES BEHIND BACK OF CURB.
8. WALKING SURFACE WITH DETECTABLE WARNING FIELD (TRUNCATED DOMES) SHALL BE A SUBSIDIARY OBLIGATION TO THE CONTRACTOR AND PAID UNDER SPECIFICATION 608.
9. ANY TYPE OF ADA RAMPS, INCLUDING LANDING, FOR WHEEL CHAIRS AND HANDICAPPED PERSONS WILL BE MEASURED BY THE SQUARE METER OF COMPLETED AND ACCEPTED RAMP SURFACE.
10. THE DIMENSIONS AND MATERIALS OF SIDEWALK SHALL BE IN CONFORMITY WITH THE DETAILS, LINES AND GRADES SHOWN ON THE CONTRACT PLANS OR AS ESTABLISHED BY THE ENGINEER.
11. THE RAMPS AND SIDEWALKS SHALL MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATION 608-"SIDEWALKS".
12. THE DETECTABLE WARNING FIELD SHALL BE YELLOW IN COLOR TO PROVIDE HIGH VISIBILITY TO THE VISUALLY IMPAIRED.



DETECTABLE WARNING FIELD DETAIL

PLAN VIEW

NOT TO SCALE



SECTION OF TRUNCATED DOME

DETAIL "C"

NOT TO SCALE

SLOPE TABLE			
	DESCRIPTION	MAX. RUNNING SLOPE *	MAX. CROSS SLOPE **
(L)	LANDING	2% (1V:50H)	2% (1V:50H)
(R)	RAMP	8.33% (1V:12H)	2% (1V:50H)
(P)	PARALLEL RAMP	7.1% (1V:14H)	2% (1V:50H)
(C)	CLEAR SPACE	5% (1V:20H)	2% (1V:50H)
(S)	SIDEWALK	----------	2% (1V:50H)
(T)	TRANSVERSABLE SURFACE	10% (1V:10H)	----------

* RUNNING SLOPE IS IN DIRECTION OF PEDESTRIAN TRAVEL.
** CROSS SLOPE IS PERPENDICULAR TO PEDESTRIAN TRAVEL.

CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE	DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS

ADA RAMPS

GENERAL NOTES AND TYPICAL DETAILS

ADA-01

JUNE 2012

DESIGN AREA

REVISIONS | SYMBOL | DATE | BY

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

CURB & GUTTER STANDARD
CURB RAMP DETAILS

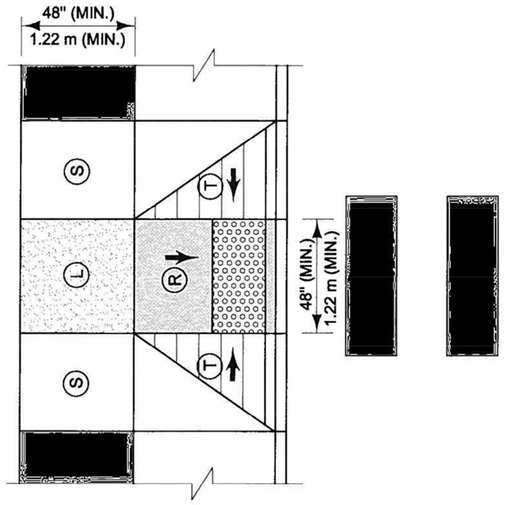
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

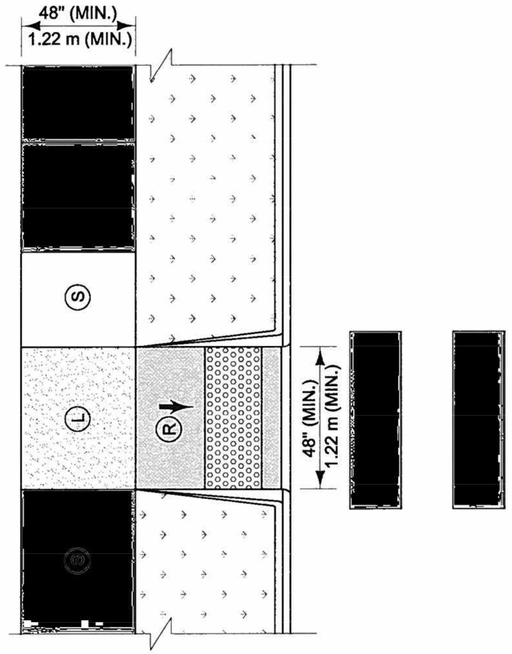
PROJECT NO.: DTE23-004

SHEET NO.: RDWY-02

C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\r-day-1 standards.dwg



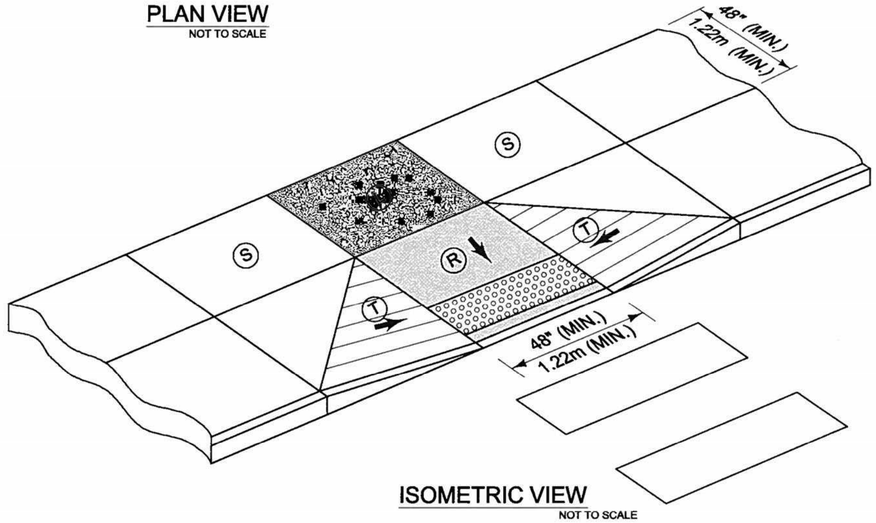
PLAN VIEW
NOT TO SCALE



PLAN VIEW
NOT TO SCALE

LEGEND

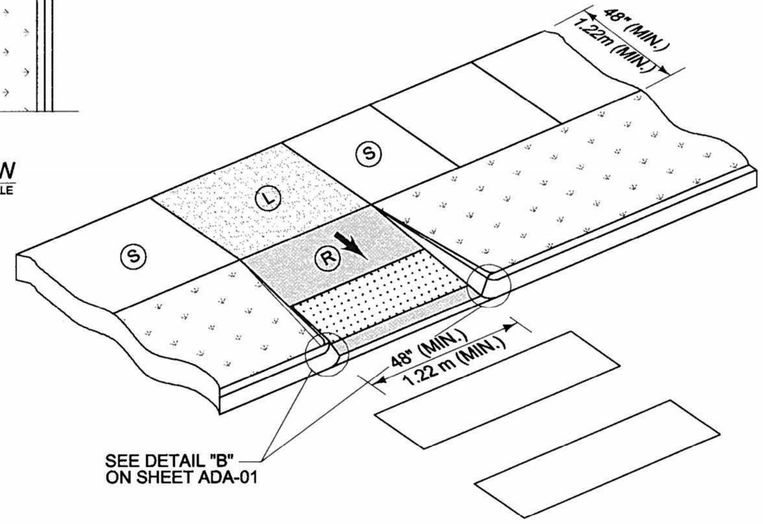
- CURB RAMP
- LANDING AREA (PROVIDE A 4' (MIN.) x 4' (MIN.) LANDING AREA AT ALL CURB RAMPS).
- DETECTABLE WARNING FIELD
- PLANTING
- PEDESTRIAN CROSSWALK



ISOMETRIC VIEW
NOT TO SCALE

CURB RAMP TYPE 1

(PERPENDICULAR CURB RAMP WITH FLARED CURBS)



ISOMETRIC VIEW
NOT TO SCALE

CURB RAMP TYPE 2

(PERPENDICULAR CURB RAMP WITH RETURNED CURBS)

NOTE:

1. REFER TO SHEET ADA-01 FOR GENERAL NOTES, TYPICAL DETAILS AND SLOPE TABLE.

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE	DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS

ADA RAMPS
PEDESTRIAN CURB RAMPS
CURB RAMPS TYPE 1 AND 2

ADA-02
JUNE 2012

REVISION | BY | DATE
JUN. 12

DESIGN AREA

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

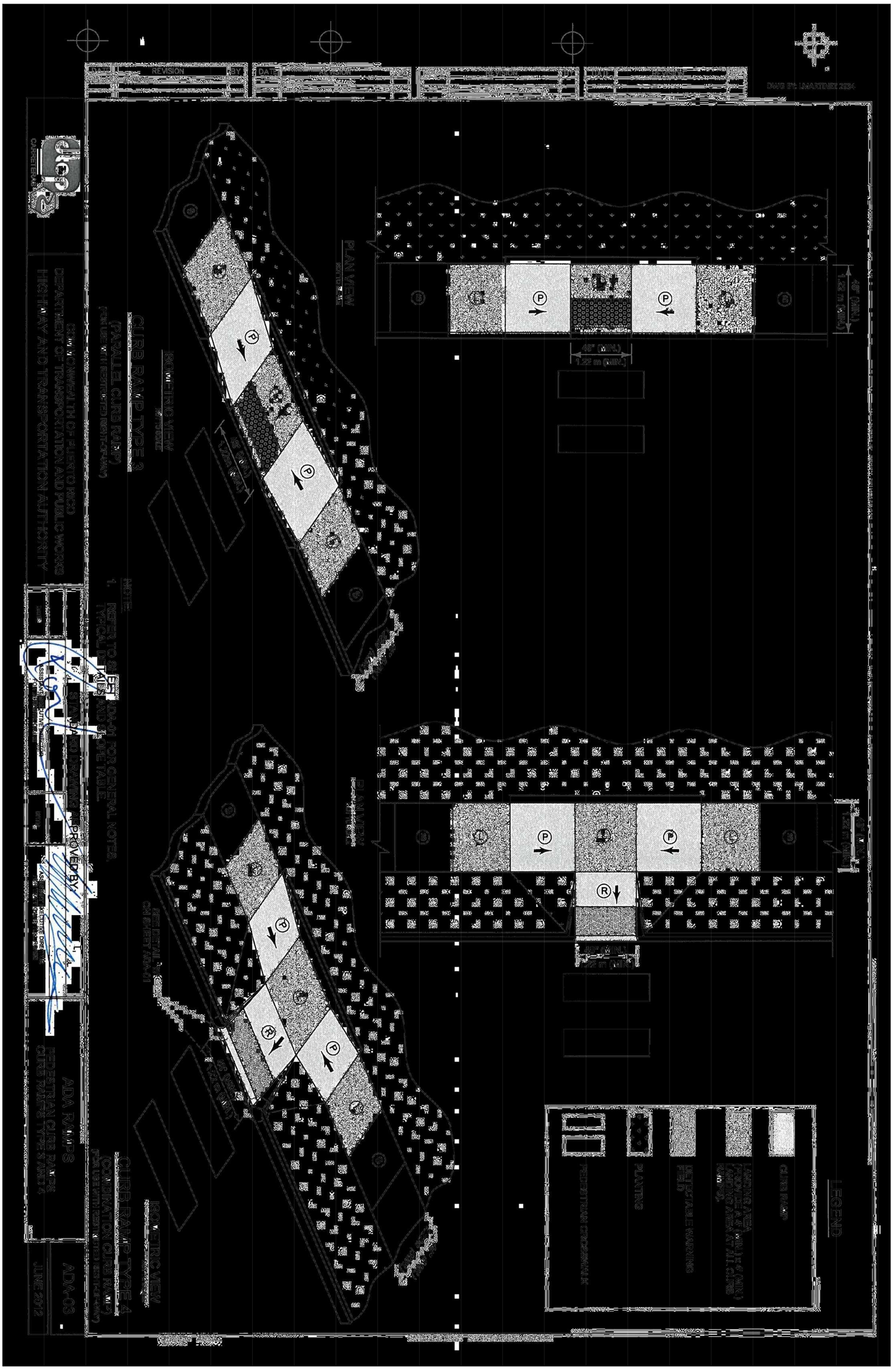
ADA CURB RAMP STANDARD
CURB RAMP TY. 1 & 2

REVISIONS | SYMBOL | DATE | BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: RDWY-03

C:\Users\joseadelgado\OneDrive - delgado torres engineering, llc\Documents - Projects\DTE-2023-004 sidewalk revitalization jayuya urban center crp-053\DTE23-004 cadd\production drawings\rdwy-1 standards.dwg

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\rdwy-1 standards.dwg



RDWY-04

DRAWING NO.

DTE23-004

PROJECT NO.

April 15, 2024

DRAWN: JAD
CHECKED:
REVIEWED: EJ

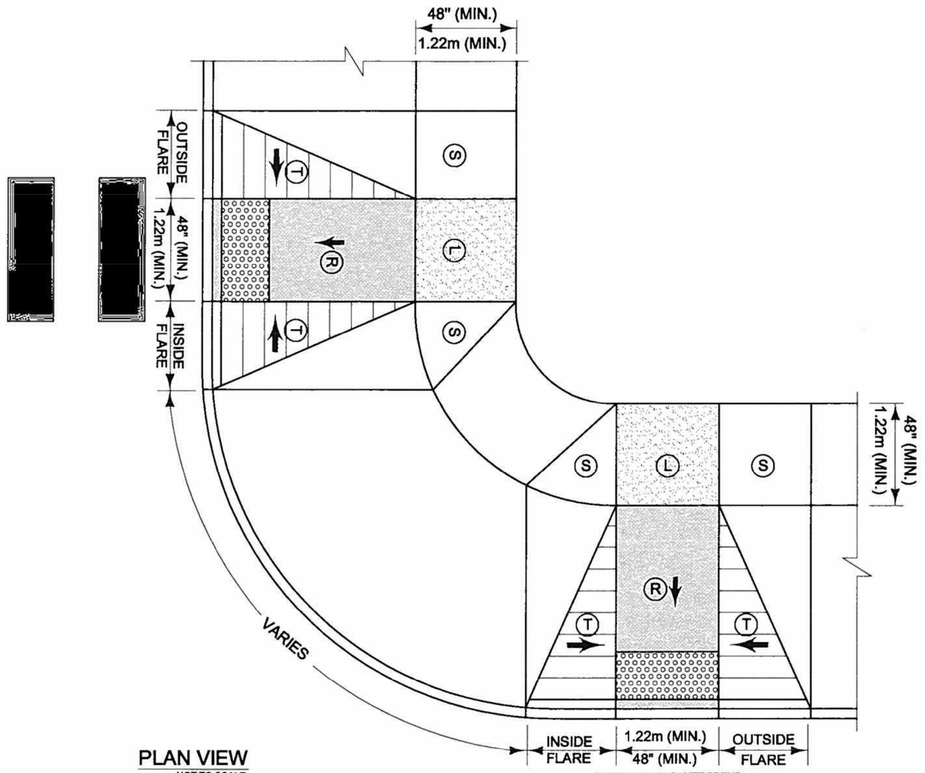
DATE

REVISIONS	SYMBOL	DATE	BY

ADA CURB RAMP
STANDARD
CURB RAMP TY. 3 & 4

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

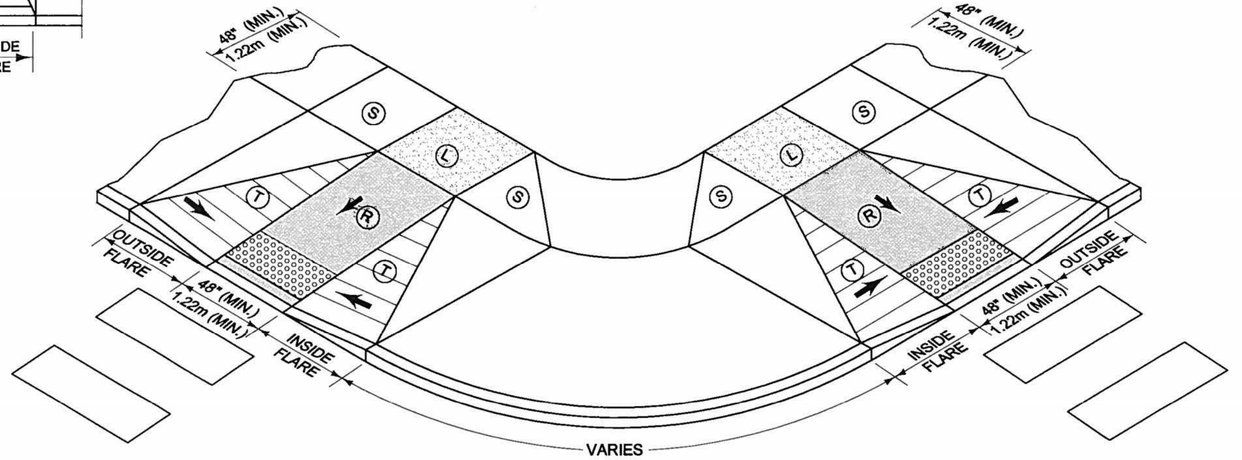
DELTORRE ENGINEERING LLC
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre



PLAN VIEW
NOT TO SCALE

LEGEND

- CURB RAMP
- LANDING AREA (PROVIDE A 4' (MIN.) x 4' (MIN.) LANDING AREA AT ALL CURB RAMPS).
- DETECTABLE WARNING FIELD
- PLANTING
- PEDESTRIAN CROSSWALK



ISOMETRIC VIEW
NOT TO SCALE

NOTES:

1. THE RAMPS SHALL BE PERPENDICULAR TO RADIUS.
2. REFER TO SHEET ADA-01 FOR GENERAL NOTES, TYPICAL DETAILS AND SLOPE TABLE.

CURB RAMP TYPE 5

(PERPENDICULAR CURB RAMP WITH FLARED CURBS AT A CORNER)

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE	DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS

ADA RAMPS
PEDESTRIAN CURB RAMPS
CURB RAMP TYPE 5

ADA-04
JUNE 2012

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

ADA CURB RAMP STANDARD
CURB RAMP TY. 5

REVISIONS	SYMBOL	DATE	BY

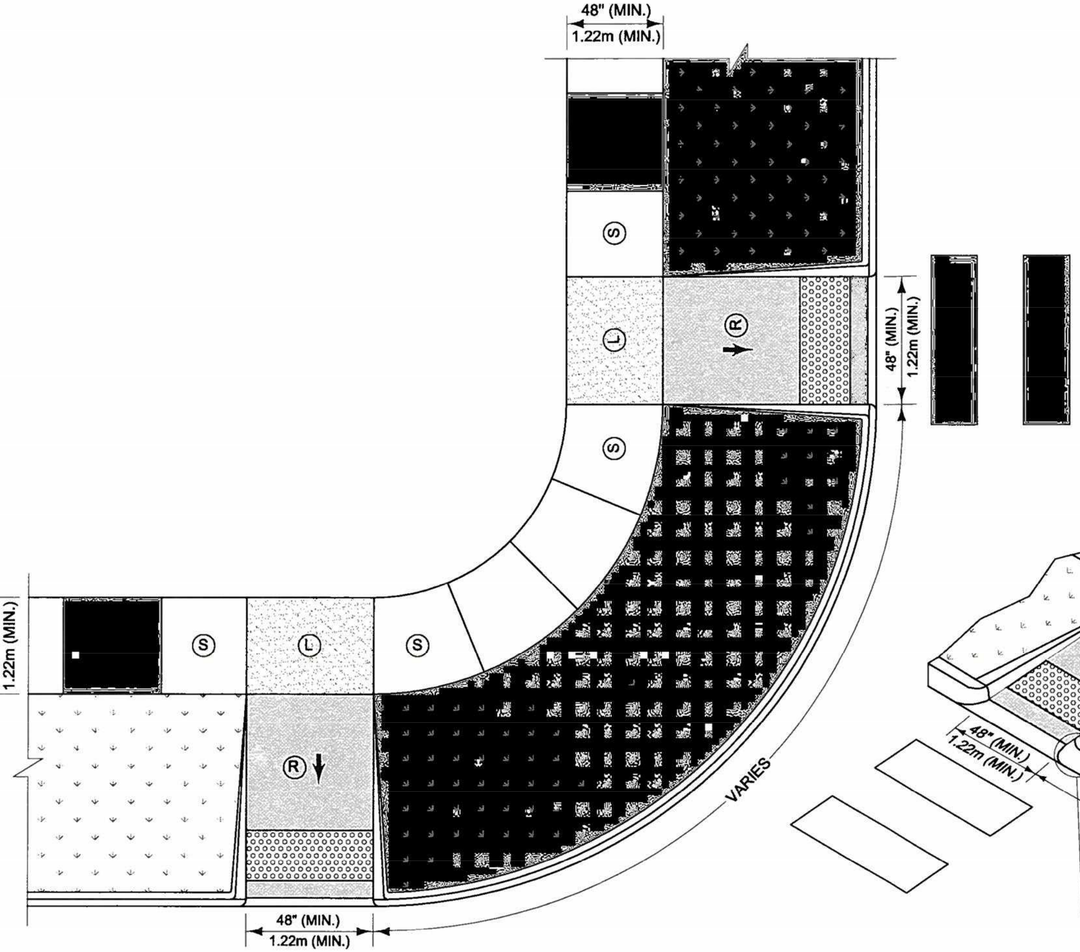
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

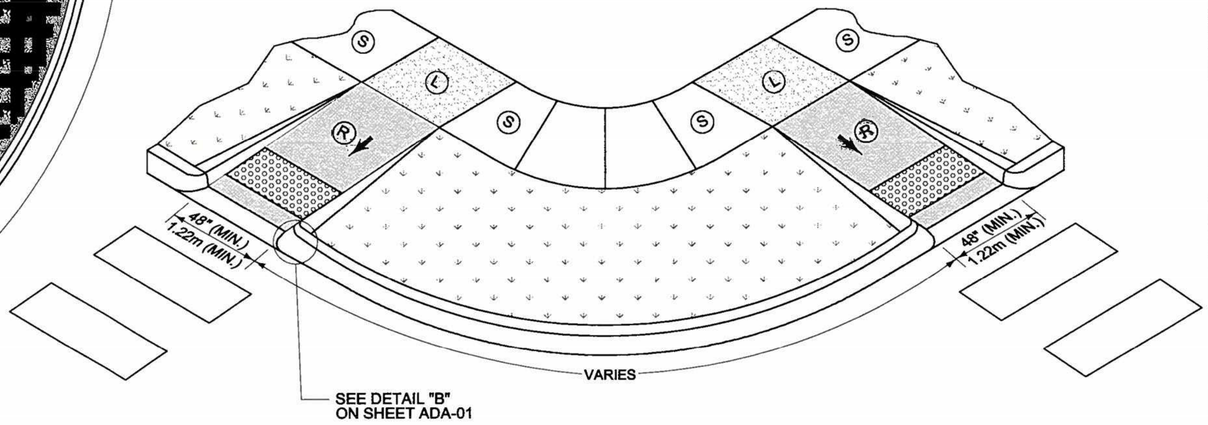
PROJECT NO.: DTE23-004

SHEET NO.: RDWY-05

C:\Users\Josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\rdwy-1 standards.dwg



PLAN VIEW
NOT TO SCALE



ISOMETRIC VIEW
NOT TO SCALE

CURB RAMP TYPE 6

(PERPENDICULAR CURB RAMP WITH RETURNED CURBS AT A CORNER)

LEGEND

- CURB RAMP
- LANDING AREA (PROVIDE A 4' (MIN.) x 4' (MIN.) LANDING AREA AT ALL CURB RAMPS).
- DETECTABLE WARNING FIELD
- PLANTING
- PEDESTRIAN CROSSWALK

NOTES:

1. THE RAMPS SHALL BE PERPENDICULAR TO RADIUS.
2. REFER TO SHEET ADA-01 FOR GENERAL NOTES, TYPICAL DETAILS AND SLOPE TABLE.

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE	DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS

ADA RAMPS
PEDESTRIAN CURB RAMPS
CURB RAMP TYPE 6

ADA-05
JUNE 2012

DESIGN AREA

REVISIONS | SYMBOL | DATE | BY

DATE: JUN. '12 ORIGINAL | JWO

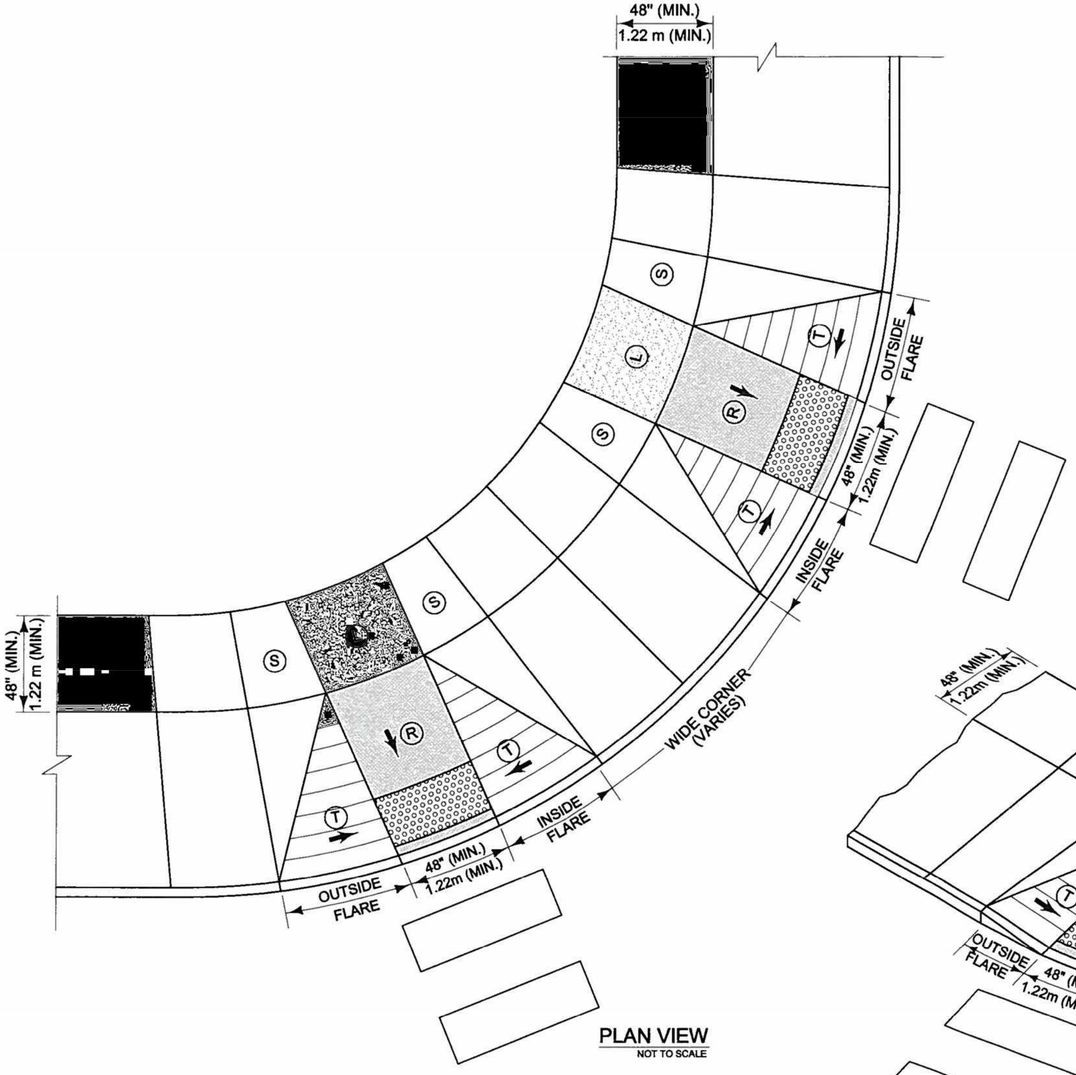
DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

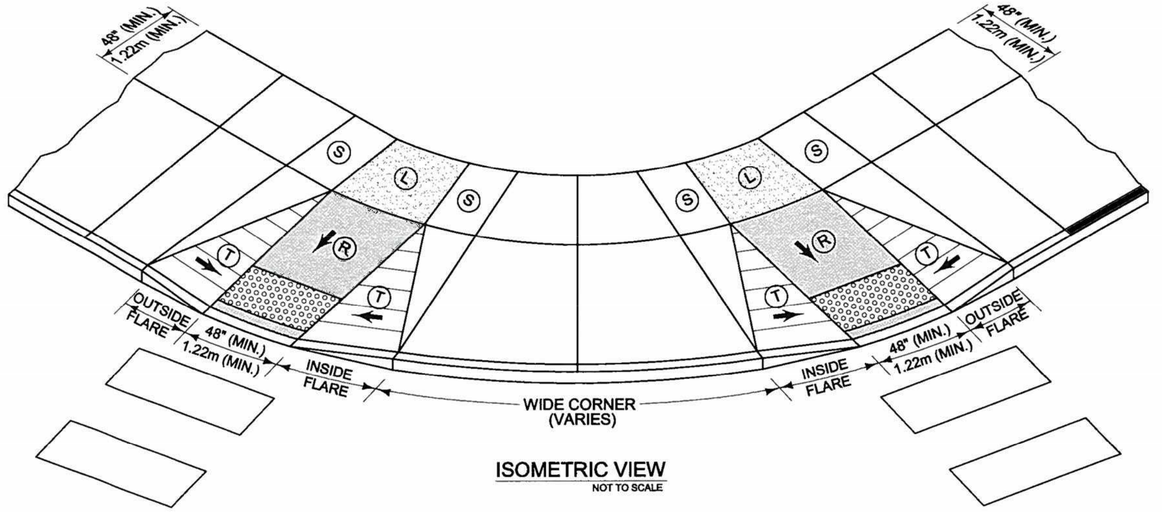
ADA CURB RAMP
STANDARD
CURB RAMP TY. 6

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: RDWY-06

C:\Users\Josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\rdwy-1 standards.dwg



PLAN VIEW
NOT TO SCALE



ISOMETRIC VIEW
NOT TO SCALE

LEGEND

- CURB RAMP
- LANDING AREA (PROVIDE A 4' (MIN.) x 4' (MIN.) LANDING AREA AT ALL CURB RAMPS).
- DETECTABLE WARNING FIELD
- PLANTING
- PEDESTRIAN CROSSWALK

NOTE:

1. REFER TO SHEET ADA-01 FOR GENERAL NOTES, TYPICAL DETAILS AND SLOPE TABLE.

CURB RAMP TYPE 7

(PERPENDICULAR CURB RAMPS WITH FLARED CURBS AT A WIDE CORNER)

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY:

DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR INFRASTRUCTURE	DATE:	ASSISTANT EXECUTIVE DIRECTOR FOR TRAFFIC AND TOLL ROADS

ADA RAMPS
PEDESTRIAN CURB RAMPS
CURB RAMP TYPE 7

ADA-06
JUNE 2012

DESIGN AREA

DATE | REVISION | BY
JUN. 12 | ORIGINAL | JAD

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

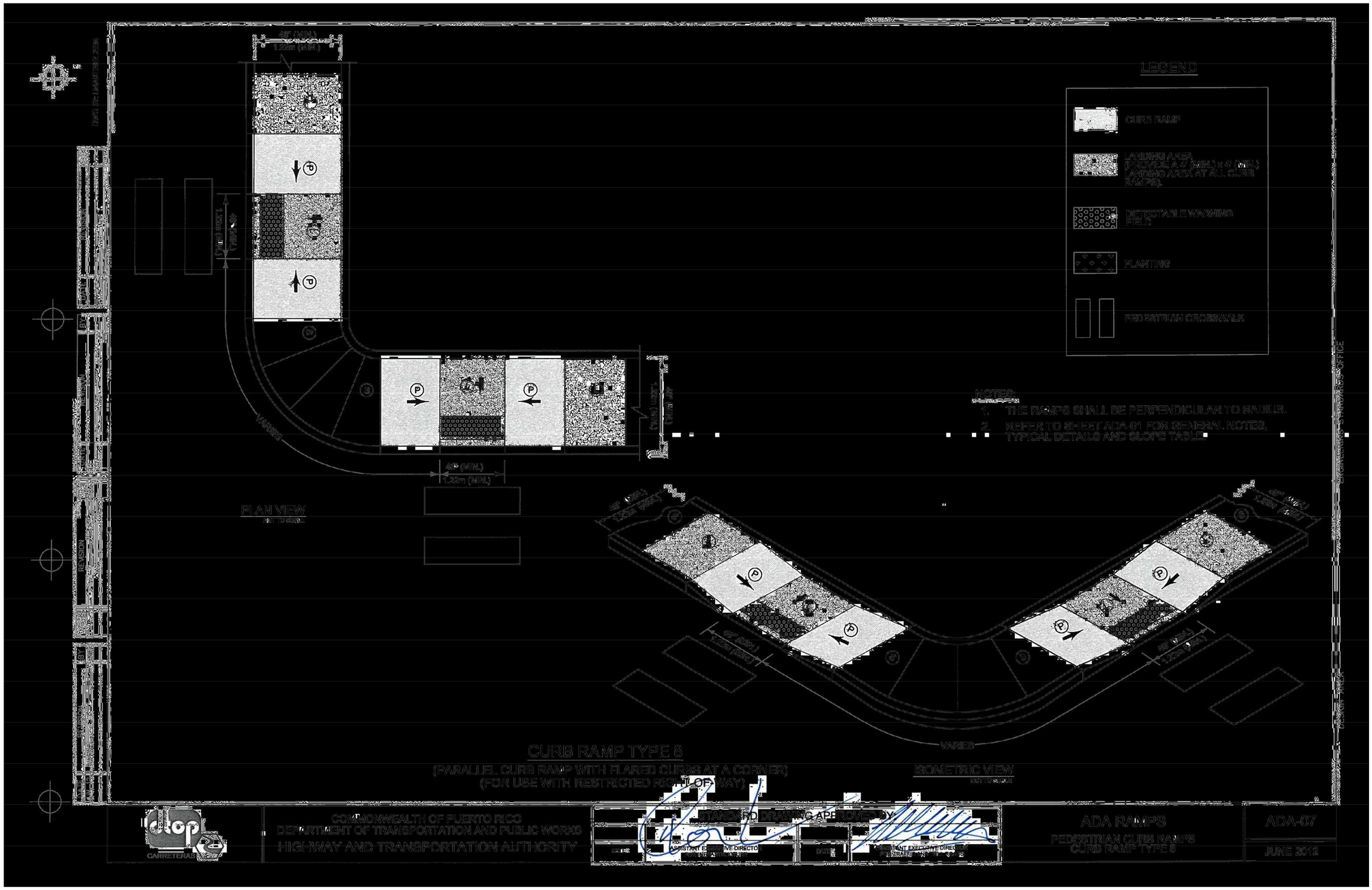
ADA CURB RAMP
STANDARD
CURB RAMP TY. 7

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: RDWY-07

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\rdwy-1 standards.dwg

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\rdwy-1 standards.dwg



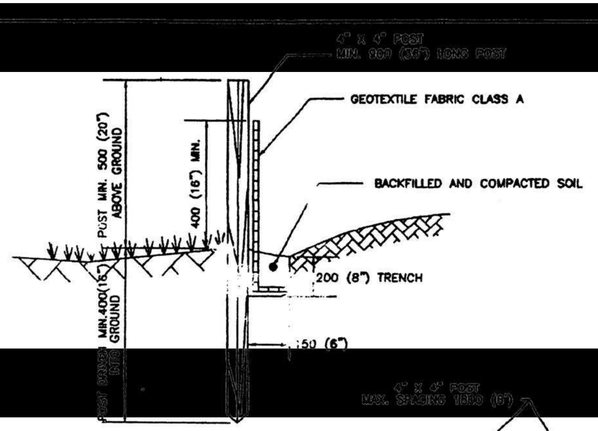
DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

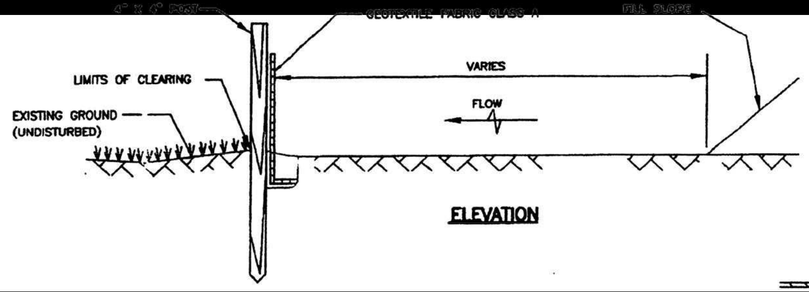
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

ADA CURB RAMP
STANDARD
CURB RAMP TY. 8

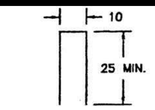
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: RDWY-08

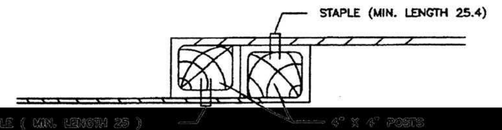




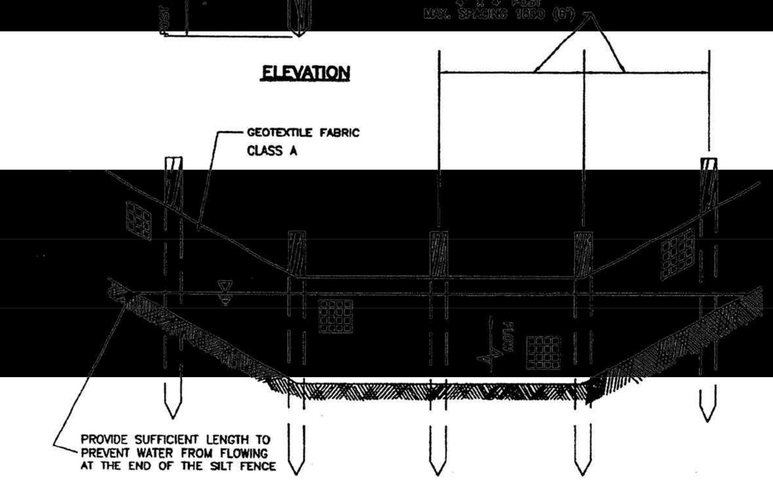
ELEVATION



STAPLE DETAIL

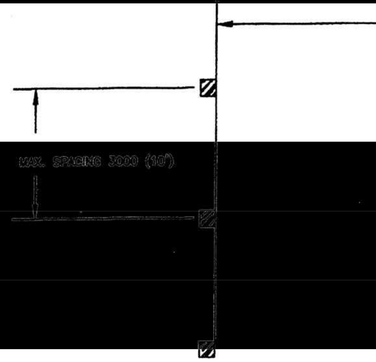


TOP VIEW

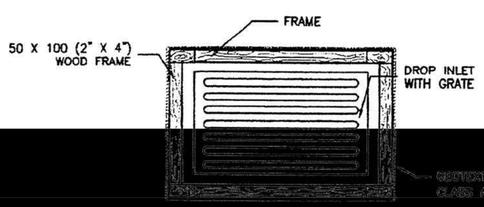


ELEVATION

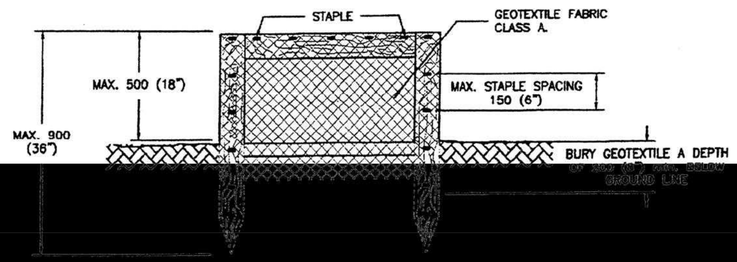
INSTALLATION IN A DRAINAGE DITCH



INSTALLATION AT TOE OF FILL



TOP VIEW



FRONT VIEW

DROP INLET PROTECTION

NOTES:

1– SILT FENCES SHALL BE CONSTRUCTED AT THE LOCATION INDICATED IN THE CONSTRUCTIONS PLANS.

2– ALTERNATE PRE–ASSEMBLED SILT FENCE OPTIONS WILL BE ALLOWED AS LONG AS SPECIFIED MINIMUMS ARE SATISFIED. FOLLOW MANUFACTURER'S INFORMATION FOR INSTALLATION PROCEDURES.

3– EXCAVATION, BACKFILL, STAPLES AND POSTS ARE SUBSIDIARY OBLIGATIONS.

4– THE SILT FENCE GEOTEXTILE FABRIC SHALL COMPLY WITH AASHTO M288.

5– SILT FENCE SHALL BE INSPECTED FOR DAMAGE WEEKLY. AFTER RAINFALL ANY DAMAGE FENCE SHALL BE REPAIRED IMMEDIATELY. ACCUMULATED SEDIMENT SHALL BE REMOVED AND PROPERLY DISPOSED OF BEFORE THE NEXT RAINFALL EVENT. NO ADDITIONAL PAYMENT WILL BE MADE FOR SUCH MAINTENANCE WORK.

6– WHEN THE DISTURBED AREA HAVE BEEN PROPERLY STABILIZED THE FENCE MAY BE REMOVED AND ANY REMAINING AREAS STABILIZED. THIS WORK WILL BE PERFORMED AS DIRECTED BY THE ENGENEER AS A SUBSIDIARY OBLIGATION.

7– 'TOP VIEW' AND 'STAPLE DETAIL' APPLY TO ALL APPLICATIONS SHOWN IN THIS SHEET.

8– FOR ALL APPLICATIONS, THE MAXIMUM STAPLE SPACING SHALL BE 150 MM (6")

9– ALL DIMENSIONS SHOWN ARE IN MILIMETERS UNLESS OTHERWISE SPECIFIED.

EFFECTIVE DATE: OCTOBER 1998

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

RECOMMENDED BY:
DESIGN AREA DIRECTOR
DATE: 12/6/2024

EROSION CONTROL DEVICES
SILT FENCE

DATE	REVISION	BY
12-06-24	GENERAL REVISION	ES
12-06-2024	GENERAL REVISION	ES

STD. DWG. ER 1 OF 20

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

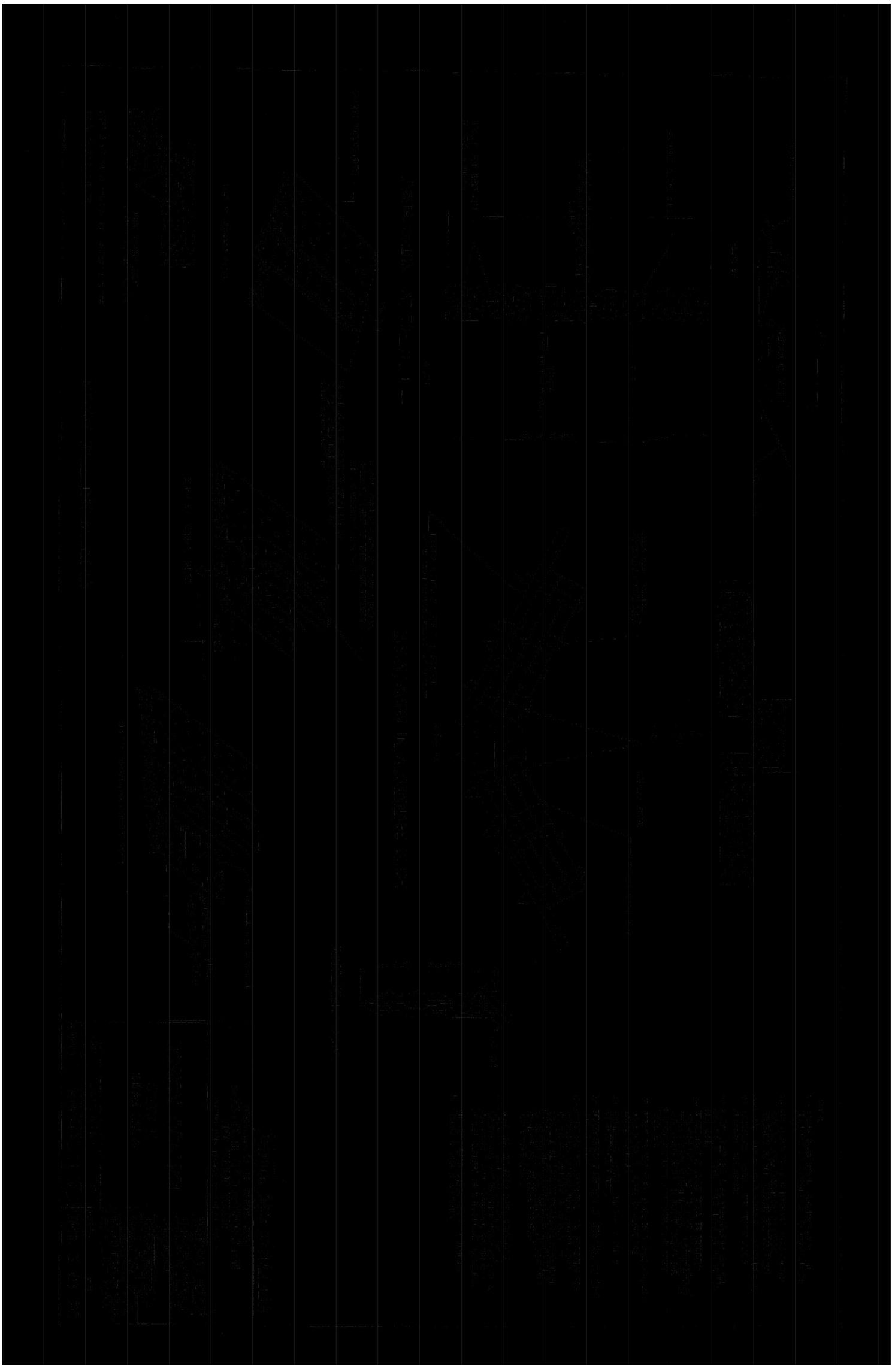
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

EROSION CONTROL STANDARD DEVICES

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: SW3P-01

C:\Users\joseadelgado\OneDrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\sw3p-erosion control standards.dwg



SHEET NO.: SW3P-02

PROJECT NO.: DTE23-004

DATE: April 15, 2024

DRAWN: JAD
DESIGNED:
REVIEWED: JT

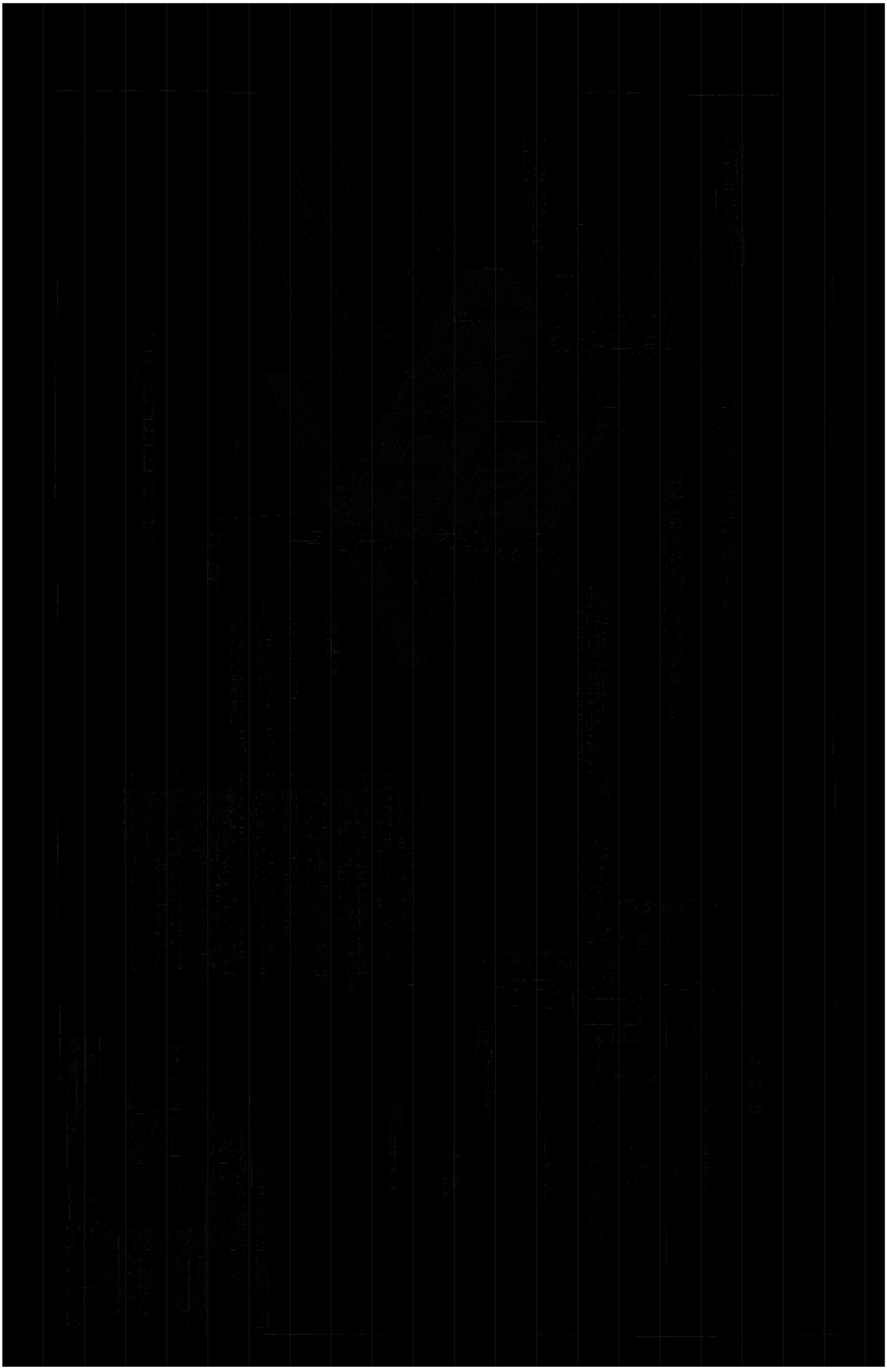
REVISIONS	SYMBOL	DATE	BY

EROSION CONTROL STANDARD DEVICES

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

DELTORRE ENGINEERING LLC
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\sw3p-erosion control standards.dwg



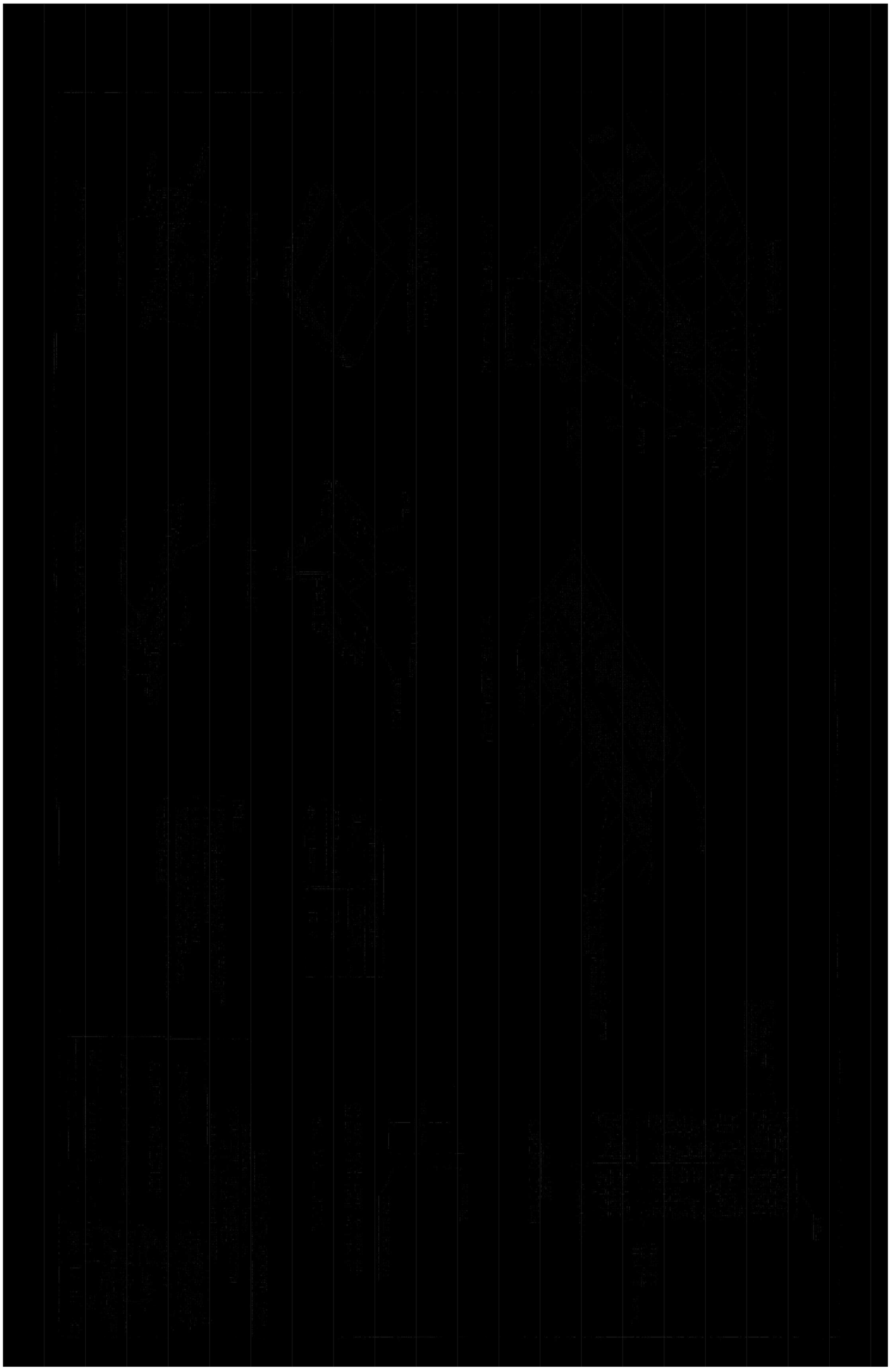
SHEET NO.: SW3P-03	PROJECT NO.: DTE23-004	DATE: April 15, 2024	DRAWN: JAD DESIGNED: REVIEWED: JET

REVISIONS	SYMBOL	DATE	BY

EROSION CONTROL
STANDARD
DEVICES

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

DELTORRE ENGINEERING LLC
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre



SHEET NO.: SW3P-04

PROJECT NO.: DTE23-004

DATE: April 15, 2024

DRAWN: JAD
DESIGNED:
REVIEWED: JD

REVISIONS	SYMBOL	DATE	BY

EROSION CONTROL
STANDARD
SLOPE PROTECTION

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

DELTORRE ENGINEERING LLC
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

Attachment 12:
Historic Preservation

STATE HISTORIC PRESERVATION OFFICE
GOVERMENT OF PUERTO RICO

Executive Director | Carlos A. Rubio Cancela | carubio@prshpo.pr.gov

November 20, 2025

Kristin Sanders
269 Avenida Ponce de León
San Juan, PR 00917

Referencia: SHPO-CF-09-04-25-02 - PR-CRP-000053 (Jayuya), Mejoras aceras, Paseo Peatonal Ventana al Rio

Dear Ms. Sanders,

We acknowledge receipt of the archaeological monitoring work plan dated November 11, 2025, for the case mentioned above. The plan is deemed acceptable, and we concur with its implementation. Please notify the PRSHPO the archaeological monitoring start date 48 hours prior to the initiation of work.

If you have any questions concerning our comments, do not hesitate to contact our Office.

Sincerely,

Carlos A. Rubio Cancela
State Historic Preservation Officer

SHPO OFICINA ESTATAL DE CONSERVACIÓN HISTÓRICA
OFICINA DEL GOBERNADOR
STATE HISTORIC PRESERVATION OFFICE
OFFICE OF THE GOVERNOR
OECH

CARC/GMO/OJR

SHPO
OFICINA ESTATAL DE CONSERVACIÓN HISTÓRICA
OFICINA DEL GOBERNADOR
STATE HISTORIC PRESERVATION OFFICE
OFFICE OF THE GOVERNOR
OECH

Cuartel de Ballajá (tercer piso), Calle Norzagaray, esq. Beneficencia, Viejo San Juan, PR 00901 | PO Box 9023935, San Juan, PR 00902-3935

787.721.3737

oech.pr.gov

DEPARTMENT OF
HOUSING
GOVERNMENT OF PUERTO RICO

March 24, 2025

Samir El Hage Arocho
General Partner, HORNE LLP
269 Juan Ponce de León Ave.
Hato Rey, Puerto Rico 00917-00918

Via email: samir.elhage@horne.com

RE: Authorization for Grant Management (GM) to Conduct the Required Environmental Consultations with Federal and Local Agencies on PRDOH's Behalf

Dear Mr. El Hage,

Provisions at 24 C.F.R. Part 58 establish the environmental review procedures for entities assuming the U.S. Department of Housing and Urban Development (**HUD**) environmental responsibilities under the National Environmental Policy Act (**NEPA**) and other applicable laws. The Puerto Rico Department of Housing (**PRDOH**), as the designated CDBG-DR/MIT grantee, has assumed HUD's environmental responsibilities under NEPA and related laws (**Responsible Entity**) by directly implementing multiple CDBG-DR/MIT projects.

One of the Responsible Entity's many responsibilities under 24 C.F.R. Part 58 is consulting with State, Federal, and non-federal entities in preparing an Environmental Review Record (**ERR**). Regarding a Responsible Entity's interactions with State, Federal, and non-Federal entities, 24 C.F.R. § 58.14 states that:

> *A responsible entity shall consult with appropriate environmental agencies, State, Federal and non-Federal entities and the public in the preparation of an EIS, EA or other environmental reviews undertaken under the related laws and authorities cited in § 58.5 and § 58.6. [...].*

In conducting its role as a Responsible Entity that directly undertakes a project, as per 24 C.F.R. § 58.4(b)(1), PRDOH *"must assume the environmental review responsibilities for the State's activities* ***and those of any non-governmental entity that may participate in the project.***" Accordingly, a Responsible Entity may delegate certain tasks in the preparation of ERRs but retains full legal responsibility for compliance with environmental requirements.

To effectively manage available environmental resources and expedite the preparation of ERRs, PRDOH—as Responsible Entity—wishes to delegate the task of consulting with State, Federal, and non-Federal entities contained in 24 C.F.R. § 58.14. Therefore, PRDOH hereby authorizes Alberto Mercado Vargas, GM Environmental SME, or his authorized representative) to conduct on its behalf the environmental consultations with Federal and local agencies required to prepare ERRs for the implementation of CDBG-DR and CDBG-MIT projects, while still maintaining the ultimate and full legal responsibility for compliance with environmental requirements. This authorization extends to both early and formal consultations before Federal agencies such as the U.S. Fish and Wildlife Service (**USFWS**) and the State Historic Preservation Office (**SHPO**), among others required for compliance with applicable laws and regulations as established in 24 C.F.R. § 58.14 and § 58.5. GM should include and copy the PRDOH Environmental Division in all communications with Federal and local agencies for these purposes.

PRDOH appreciates GM's commitment to Puerto Rico's recovery and is confident in its ability to execute this task effectively. Please feel free to contact me with any questions.

Sincerely,

Ciary Pérez Peña
Secretary
Puerto Rico Department of Housing

Cc. Alberto Mercado Vargas
GM Environmental SME
alberto.mercadovargas@horne.com

Tel: 939-910-9300
www.bdo.com

269 Ponce de León Ave,
Hato Rey, PR 00918

November 11, 2025

Carlos A. Rubio Cancela
State Historic Preservation Officer
Puerto Rico State Historic Preservation Office
Cuartel de Ballajá (Tercer Piso)
San Juan, PR 00902-3935

Puerto Rico Disaster Recovery, CDBG-DR City Revitalization (City-Rev) Program

Re: SHPO-CF-09-04-25-02 –PR-CRP-000053, Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya Project, Jayuya, Puerto Rico Archaeology Monitoring Work Plan Submission

Dear Architect Rubio Cancela,

On behalf of the Puerto Rico Department of Housing (PRDOH), we thank you for your letter dated September 29, 2025, in response to the submission of documentation for PR-CRP-000053, Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya project. The letter stated your office had determined your records supported the finding of no adverse effect for the proposed undertaking conditioned to archaeological monitoring all excavations for the installation of the solar lighting poles, and the preparation and submission of an archaeological monitoring work plan for review and concurrence.

As such, we are submitting the requested Archaeological Monitoring Plan prepared by Archaeologist David Sherman and reviewed by Archaeologist Karen Anderson-Córdova. We are requesting your review of the prepared plan and concurrence that the implementation of the plan is appropriate for the undertaking.

Please contact me with any questions or concerns by email at kristin.sanders@bdogov.com or phone at 225-276-2109.

Kindest regards,

Kristin P. Sanders

Kristin P. Sanders
Historic Preservation Manager

Attachments

BDO Government Services, LLC is a separate legal entity affiliated with BDO USA, P.C., a Virginia professional corporation.

BDO USA, P.C. is the U.S. member of BDO International Limited, a UK company limited by guarantee, and forms part of the international BDO network of independent member firms.

BDO is the brand name for the BDO network and for each of the BDO Member Firms

PR-CRP-000053

Archaeological Monitoring Plan

Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano de Jayuya PR

SHPO-CF-09-04-25-02

Submitted to:

PR State Historic Preservation Office

Prepared By:

David Sherman, MA

Archaeologist – ICF

Reviewed By:

Karen Anderson-Córdova, PhD

Archaeologist – HCC for ICF

Date:

November 5, 2025

Table of Contents

Preamble 3

Description and Development of the APE 5

Description of Proposed Project 8

Ground Disturbing Activities 9

Archaeological Evaluation and Monitoring Procedure 10

A) Before Construction Begins 12

B) During Demolition and Construction 12

C) After Construction Ends 16

D) Human Remains 16

Summary of Anticipated Products 18

References 19

Appendices 20

Appendix A: SHPO Concurrence Letter 20

Appendix B: Monitoring Daily Activity Sheet 21

Appendix C: 90 Percent Design Plans 22

Table of Figures

Figure 1. APE Overview 5

Figure 2. Soil Map. 7

Figure 3. APE Depicting Streets (highlighted in purple) where New Solar Lights Will be Installed 10

Preamble

The Municipality of Jayuya is seeking Community Development Block Grant Disaster Recovery (CDBG-DR) funds financed by the federal Department of Housing and Urban Development due to damage received by the 2017 Hurricanes Irma and María. The Puerto Rico Department of Housing (PRDOH) has established an Agreement between PRDOH and the Municipality of Jayuya for the City Revitalization Program (CRP) as part of the CDBG-DR.

The Municipality of Jayuya proposes improvements to several sidewalks, a small section of Guillermo Esteves Street, and the Ventana al Río Bridge. The project is located within the boundary of the Jayuya Traditional Urban Center (TUC), a National Register eligible historic district. The proposed project will have no adverse effect on historic properties for this undertaking conditioned to archaeological monitoring during all excavations for the installation of the solar lighting poles.

A formal consultation with the PRSHPO was prepared for the project in compliance with Stipulation II.A.4 of the Section 106 Programmatic Agreement[1] (PA) as amended in the form of an Effect Determination Form (EDF). PRSHPO, in a letter dated September 29, 2025, concurred with a finding of No Adverse Effect for this undertaking provided the condition to implement an archaeological monitoring plan during all excavations for the installation of the solar lighting poles (see Appendix A). This monitoring plan is based on the Archaeological Monitoring Work Plan Template developed by Archaeologist Sharon Meléndez Ortiz, Horne PR, 2023.

The following description of the direct and indirect APE is a summary of the information presented in the NHPA Section 106 EDF Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya (PR-CRP-000053) completed 8/13/2025.

The Program has determined that the direct APE for this project (Figure 1) consists of the sidewalks along the ten streets, a small section of Guillermo Esteves Street, and the Ventana al Río Bridge that comprise the project area within the Jayuya TUC Historic District, encompassing approximately 1.5 acres. The temporary staging area will be located on an existing gravel parking lot south of Libertad Street, covering approximately 0.21 acres (838.5 m²). The proposed undertaking will have no adverse effect on the Jayuya TUC.

The Visual APE includes the ten streets along the sidewalks (project area), the five feet of front gardens of residences and buildings adjacent to those sidewalks, as well as five feet along the sides of the Escaleras. The Visual APE also includes the

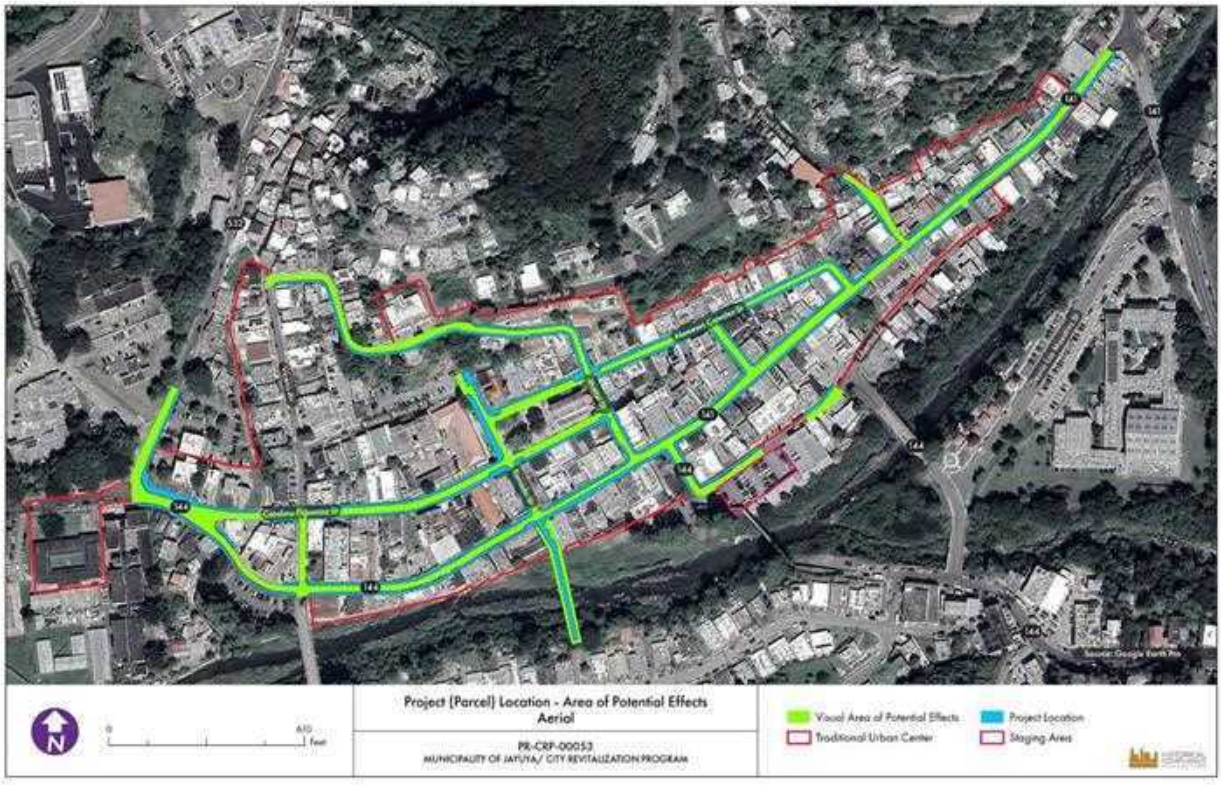
[1] An addendum to the FEMA prototype PA was completed to include the PRDOH and CDBG-DR program (FEMA 2019).

Plaza Nemesio Rosario Canales Rivera, as well as the streets surrounding the Plaza.

The project coordinates are:

- Figueras Street (in Google Maps, the street name is Catalino Figueroa): 18.218246, -66.594458; To: 18.219008, -66.5917799
- Torrado Street: 18.219105, -66.592754; To: 18.2183142, -66.5922555
- Libertad Street: 18.218802, -66.5913661; To: 18.21919037, -66.59020280
- San Felipe Street: 18.219825, -66.594061; To: 18.219608, -66.592455
- PR-532: 18.218442, -66.595030; To: 18.219140, -66.594710
- Mattei Street: 18.219608, -66.592755; To: 18.218677, -66.591589
- Massini Street: 18.219587, -66.591066; To: 18.219238, -66.590782
- Hoyo Frío Street: 18.220536, -66.590200; To: 18.220076, -66.589742
- Guillermo Esteves Street (PR-144; PR-141) 18.2184420, -66.5950295; To: 18.22137995, -66.588343.
- Nemesio Canales Street: 18.218937, To: -66.592598
- Ventana al Río (Bridge): 18.218316, -66.592251; To: 18.217507, -66.591983

Figure 1. APE Overview



The plan is consistent with the Secretary of the Interior's (SOI) Guidelines for Archeological Documentation, the Advisory Council on Historic Preservation's (ACHP) recommendations on the recovery of significant information from archaeological sites, PR Regulation #8932 of the Council for Protection of the Puerto Rico Terrestrial Patrimony and PR Regulation #9233 of the OGPe (Puerto Rico Permits Management Office). The monitoring plan was prepared by archaeologist David Sherman, MA with ICF. A technical review of the monitoring plan was performed by archaeologist Karen Anderson-Córdova, PhD with Historical Compliance Consulting. Both archaeologists exceed the requirements set forth in 36 CFR Part 61.

Description and Development of the APE

The information in this section is a summary of the information presented in NHPA Section 106 EDF entitled "NHPA Section 106 EDF Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya (PR-CRP-000053) completed 8/13/2025.

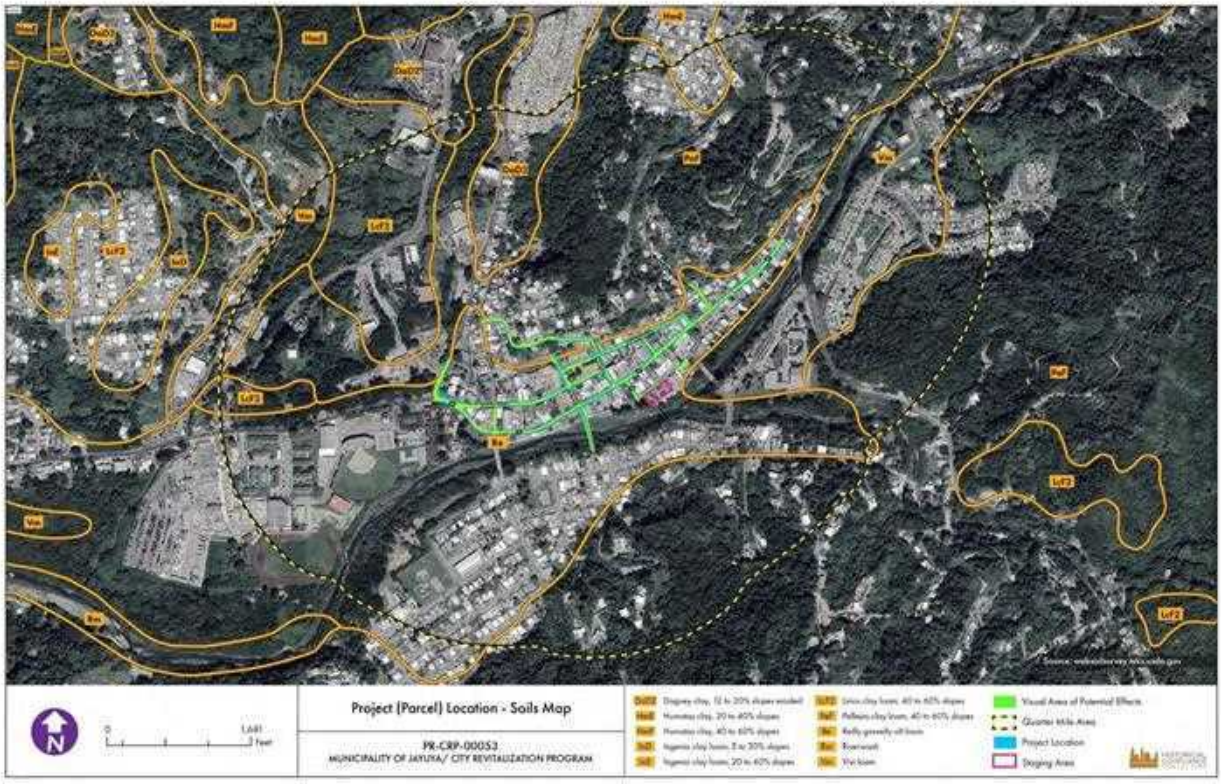
PHYSIOGRAPHIC REGION AND SOILS

Jayuya is situated in the expansive central mountainous region of Puerto Rico. The project area is located within the NRHP eligible Jayuya TUC. The TUC Center is located in the foothills and north of the Jayuya River. It is bordered to the south by the Jayuya River and to the north by a mountainous area. The project area is flat to gently sloping and ranges in elevation from approximately 434 meters (m) above mean sea level (amsl) to 450 m amsl. The Río Jayuya is crossed by the APE and represents the nearest body of water.

The surface geology of the APE (Figure 3) is dominated by Quaternary alluvium (Qa). These deposits possess some potential to have aggraded since the arrival of human populations to Puerto Rico. The southern terminus of the Ventana al Río Bridge is underlain by post upper-Paleocene, potentially Santonian Granodiorite-quartz diorite of the Utuado batholith (Ku). These deposits are ancient and unlikely to have aggraded since the arrival of human populations to Puerto Rico.

Soils mapped within the APE (Figure 2) include Reilly gravelly silt loam (Re) and Pellejas clay loam, 40 – 60 percent slopes (PeF). Areas mapped as Re soils are 95 percent Reilly soils and 5 percent Bajura soils. Most of the APE is underlain by Re soils which typically form on natural levees along waterways and possess some potential to have aggraded since the arrival of human populations to Puerto Rico. PeF soils are found along the northern limits of the APE. Areas mapped as PeF are 80 percent Pellejas soils, 10 percent Lirios soils, 5 percent Pandura soils, and 5 percent Ingenio soils. PeF soils form in residuum weathered from Plutonic or granitic rock on mountain and hill slopes and are unlikely to have aggraded since the arrival of human populations to Puerto Rico.

Figure 2. Soil Map



Description of Proposed Project

The Jayuya Municipality, assisted by the Puerto Rico Department of Housing (Departamento de la Vivienda de Puerto Rico) (PRDOH) and the Puerto Rico 2017 Disaster Recovery, CDBG-DR Program – City Revitalization Program (Programa de Revitalización de la Ciudad del Gobierno Federal) (CITY-REV), proposes improvements to several sidewalks, a small section of Guillermo Esteves Street, and the Ventana al Río Bridge within Jayuya's Traditional Urban Center (TUC), which is eligible for inclusion in the NRHP under Criteria A and C.

The main objective of this project is to optimize the existing pedestrian infrastructure in the Jayuya Urban Center. The sidewalks, as well as the curbs and gutters are to be replaced on both sides of the following roads: Catalino Figueras, Guillermo Esteves (PR-141 and PR-144), Torrado, Mattei, and Nemesio Canales Streets. The sidewalks and curb and gutter to be replaced on one side of the road are Libertad, Hoyo Frío, and San Felipe Streets, and PR-532. All curb ramps of the urban center intersections will be replaced. These curb ramps, connected via thermoplastic pavement markings at crossings within the project's limits and the utilization of traffic signs will provide an added layer of safety for pedestrians. The project also includes new traffic signs.

The Guillermo Esteves Street cobblestones are non-historic and will be removed and replaced with stamped concrete. These cobblestones are located at the Municipal Building and at the entrance of the Ventana al Río Bridge. Additionally, the damaged mosaic at the Ventana al Río Bridge will be repaired or replaced, and the damaged lighting fixtures will be replaced. The metal railing on the bridge will be repainted in the same color.

The Escaleras on San Felipe Street (also known as Escaleras al Centro Cultural de Jayuya and Escaleras) will undergo improvements, which include repainting of the existing handrails, replacing the existing landscaping with new and adequate plants in the surrounding area, and replacing the damaged light bulbs. Currently there are two existing grate inlets that are located inside the ADA path at Mattei and Nemesio Canales Streets intersection, and PR-141 and Libertad Street intersection. This activity includes cutting of the existing drainage piping to

connect to the relocated grate inlet outside of the ADA path. Additionally, the project includes the cleaning and unclogging of 32 grate inlets and piping within the project limits.

Another part of the project is the installation of individual solar lighting poles at Nemesio Canales Street from Mattei and Canales Streets intersection to Canales Street and PR-141 intersection and at PR-141 from Canales Street and PR-141

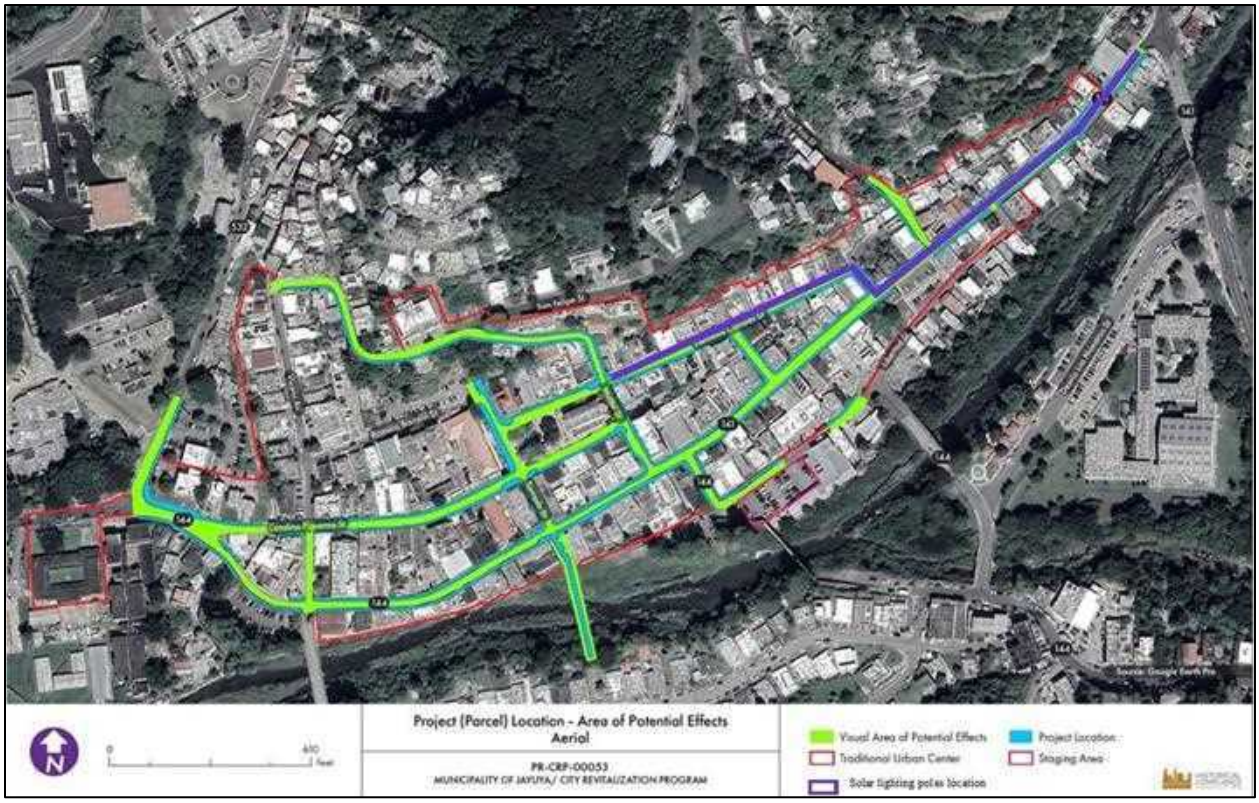
intersection to the Plaza de la Música.

The proposed activity has a total footprint of 6,061 square meters (1.5 acres), of which 1,122 square meters are outside the floodplain and 4,939 square meters are within the floodplain. (The floodplain information was obtained from the Advisory Base Flood Elevation (ABFE) map, effective 2018.) The temporary staging area will be located at an existing gravel parking lot located south on Libertad Street, with an approximate area of 0.21 acres (838.5 m2).

Ground Disturbing Activities

Ground disturbing activities for this project include demolition of sidewalks preparatory to construction of replacement sidewalks, and installation of new solar lights on Canales Street and PR-141. Sidewalk demolition and construction of replacement sidewalks will occur within areas previously disturbed by sidewalk construction. For these reasons, sidewalk demolition and construction are not anticipated to result in impact to undisturbed archaeological deposits. The installation of new solar lights will require excavation to a depth of 10 feet. This excavation has the potential to impact buried archaeological deposits associated with the early settlement of the town of Jayuya, such as water wells, septic tanks, canals, foundations of early structures, refuse dumbs with historic artifacts, among others. The potential that this excavation could impact prehistoric archaeological deposits (such as hearths, pits, or other features) cannot be completely ruled out.

Figure 3. APE Depicting Streets (highlighted in purple) where New Solar Lights Will be Installed



Archaeological Evaluation and Monitoring Procedure

The objectives of this archaeological monitoring plan are: (1) to establish measures to prevent direct adverse effects on historic properties; (2) to establish the protocol to be followed by the monitor and construction crew before, during, and after construction; (3) to establish the protocol to be followed in the event of an inadvertent discovery of archaeological resources; (4) to establish the protocol to be followed in the event of an inadvertent discovery of human remains; (5) to outline the documentation required and relevant timelines for deliverables; and lastly (6) to ensure the protection of cultural resources throughout the proposed scope of work.

The monitoring activities are divided into three groups: activities before the project begins, activities during construction, and post-construction activities. Monitoring is limited to ground-disturbing activities associated with installation of new solar lights. Other project activities do not require an archaeological monitor. The monitor shall not defer their monitoring

responsibilities to any other person who does not meet the minimum professional qualifications outlined in the Professional Qualifications section.

The background research on historic properties within the direct APE suggests that there may be potential for prehistoric and historic archaeological resources within the APE.

The immediate topography of the APE, the proximity of the Río Grande de Jayuya, would have made it attractive to prehistoric populations. These observations, along with the density of recorded archaeological sites in the municipality suggest the APE is within an archaeological high probability area. The soils within most of the APE are mapped as Reilly gravelly silt loam, which form in deep alluvial deposits. These soils are thought to have some potential to have aggraded since the advent of human occupation in Jayuya. For this reason, the APE is thought to possess some potential to harbor buried prehistoric and historic archaeological resources below the level of previous construction.

Although limited ground disturbance is anticipated, the following activities have the potential to affect archaeological resources and are subject to archaeological monitoring: excavation of up to a depth of ten feet for installation of new solar lights (see Figure 2).

It is important to distinguish between the treatment of expected finds (for which the plan is being implemented) and unanticipated historically significant archaeological resources. Expected finds for this project include cultural materials representative of construction of existing roads and sidewalks, as well as those that post-date the period of significance of the Jayuya TUC. If encountered, such finds will be considered modern refuse and discarded and then follow the course of the project without triggering consultation with PRSHPO. Expected finds for this project also include historic deposits that date to the period of significance for the TUC but possess limited data potential, including old road alignments, curbs, sidewalks and foundations. If encountered, such finds would be exposed, documented, and then follow the course of the project without triggering consultation with PRSHPO.

Unanticipated finds of historically significant archaeological resources for this project include the discovery of historic archaeological remains that date to, or prior to, the period of significance of the Jayuya TUC that possess a high data potential, such as privies, cisterns, or other historic features. Unanticipated finds of historically significant archaeological resources would also include interpretable prehistoric archaeological deposits and features, such as hearths, storage pits, and prehistoric

architectural remains. If encountered, the treatment of historically significant finds shall follow the inadvertent discovery plan process outlined in bullet 6 of the During Demolition and Construction section.

A) Before Construction Begins

1. The Municipality and Contractor (C) will notify the Program Manager (PM), and contracted SOI-qualified archaeological monitor (monitor) of the proposed activities' start date at least one (1) week in advance of the proposed start date.
2. The PM will notify GM. The GM shall in turn notify the PRSHPO of the start date of the project and of the archaeologist who will be conducting the monitoring at least 48 hours prior to the initiation of any work.
3. Before any demolition or construction begins, the Municipality, PM, C, GM, and monitor will have a monitoring kickoff meeting to discuss the procedure for archaeological monitoring, including the coordination protocol between the monitor and the C. The monitor will provide an orientation on the area's cultural resources and their proper treatment. The monitor will also explain to construction staff which project activities require archaeological monitoring based on the archaeological analysis of the design plans performed within the Section 106 EDF.
4. The Municipality, C, PM, and construction crew will complete and sign a statement outlining the activities that may not be performed without the monitor's presence, demonstrating their understanding and commitment to following the archaeological monitoring procedures.

   The C will ensure that all personnel in the field are aware that the monitor can provide instructions directly to the construction field crew personnel concerning how to proceed when there is the potential to impact an archaeological resource. The construction field personnel will abide by these requests' examples of which include excavating slowly, stopping the excavation to evaluate a finding, etc.

B) During Demolition and Construction

1. The monitor shall be in the field during all ground-disturbing activities, as specified in Table 1, with full access and clear sightlines. If ground-disturbing work is conducted in multiple locations simultaneously, then a monitor shall be present at each site. Therefore, the number of monitors required

in the field will vary based on the number of locations where ground-disturbing work is occurring.

2. The monitor shall provide instructions directly to the construction field personnel concerning how to proceed when there is the potential to impact an archaeological resource. The construction field personnel shall abide by these requests and exercise caution when excavating in areas that may contain buried archaeological resources.
3. The monitor shall keep a record of monitored activities and complete the Daily Record of Activities Form (see Appendix B). These forms shall be compiled weekly and sent to the PM who will submit it to the GM for review. These reports will be included in the final report.
4. After the demolition and removal of surfaces, the monitor shall document any exposed subsurface feature and shall complete a scale plan drawing. The amount, size, and placement of excavation units needed to document the features, if any, shall depend on the size and complexity of the feature being documented. If necessary to understand the context of the identified resource, the monitor should conduct archival research of primary sources (like previous project files, newspapers, journals), cartographic sources, and historical images.
5. The monitor shall document all other archaeological remains identified during construction activities, except for previously unidentified historically significant findings. The documentation shall include a detailed description of the discovery, context, horizontal and vertical provenience, photos, and a plan drawing. This documentation shall be done within a reasonable amount of time, trying not to impact on the project schedule as much as possible.
6. If historically significant archaeological materials are encountered, per stipulations III.B.1.a. and III.B.1.b of the PA, an inadvertent discovery plan shall be implemented and the monitor shall instruct the construction crew to immediately cease work within the vicinity of the inadvertent discovery; take all reasonable measures to avoid or minimize harm to the property; notify the Municipality, PM, C, and GM of which the GM shall immediately notify the PRSHPO; and adhere to the following protocol:

    i. The monitor shall make a preliminary assessment in an

Inadvertent Discovery Report. The assessment shall include a description of the discovery, location, horizontal and vertical extent (if known), context, photographs, and drawings including a site plan. Additionally, the assessment shall include an NRHP-eligibility determination. Lastly, the assessment shall also implement a work plan for continuing construction in recognition of the inadvertent discovery.

ii. The Inadvertent Discovery Report shall be submitted via email to the PM and GM within 24 hours of the discovery. Construction shall not continue in the vicinity of the inadvertent discovery until the following steps have been completed and the PRSHPO has concurred with the NRHP-eligibility determination.

1. The GM shall notify the PRSHPO of the NRHP-eligibility determination. If the finding is **not eligible** to the NRHP, the GM shall notify the PRSHPO and provide supporting documentation. Construction activities may resume under archaeological monitoring unless the PRSHPO disagrees with the NRHP determination and makes a timely objection within 48 hours of notification.
2. If the finding is **eligible** to the NRHP, the criteria of adverse effect shall be applied. If the project activities do not adversely affect the finding, the GM shall notify the PRSHPO and provide supporting documentation. Construction activities may resume under archaeological monitoring unless the PRSHPO makes a timely objection within 48 hours of the notification.
3. If the project activities have an **adverse effect** on the NRHP-eligible finding, a data recovery plan will be implemented as a treatment measure per Appendix F.H of the PA. The monitor shall develop a data recovery plan with a research design consistent with the Secretary of the Interior's Guidelines for Archeological Documentation (NPS 1983) and the Advisory Council on Historic Preservation's (ACHP 2009) recommendations on the recovery of significant information from archaeological sites. The data recovery

plan and research design shall be submitted to the GM for comments, who after review shall submit the plan to the PRSHPO for comments and approval. The PRSHPO shall have two weeks to comment on the data recovery plan. This treatment measure does not apply to burials or human remains.

4. PRDOH in consultation with the PM, GM and Municipality shall determine a specific plan for the curation of artifacts as well as field and laboratory records in accordance with the provisions of 36 CFR Part 79, per stipulation III.C.2.a. of the PA.

7. If any construction activities are added or design changes are made after the project has begun, the Municipality, CM and PM shall inform the GM and the monitor prior to performing the work. The monitor, in conjunction with the GM, shall evaluate these activities and apply the adverse effect criteria. If it is determined that the effect is adverse, the monitor will provide recommendations on how to avoid, minimize, or mitigate the adverse effect. These recommendations will be consulted with the PRSHPO prior to implementation. The PRSHPO will have fifteen days to comment on the recommendations. If no communication is received within that time frame it will be assumed that the PRSHPO has no objection and concurs with the recommendations outlined.
8. If during construction activities a known historic property is affected in an unanticipated manner, the CM shall stop work immediately, and inform the Municipality, PM, GM. The monitor, in conjunction with GM, shall evaluate the unanticipated effects and apply the adverse effect criteria within no more than 24 hours. If the effect is determined to be adverse, the monitor and GM will provide recommendations on how to avoid, minimize, or mitigate such adverse effects. The GM shall consult with the PRSHPO prior to implementation. The PRSHPO will have 48 hours to comment on the recommendations. If no communication is received within that timeframe, it will be understood that the PRSHPO has no objection and concurs with the recommendations outlined.

C) After Construction Ends

1. Upon the completion of archaeological monitoring, the Municipality, PM and GM shall be notified. The PM shall be responsible for submitting the last weekly report to the GM, who after review will forward it to the PRSHPO.

2. A technical report shall be prepared detailing monitored construction activities, documentation for archaeological features or other findings, location of temporary curatorial repository for any artifacts, and analysis and interpretation of the results. The report must include visual information, such as drawings, photographs, an overview map of the APE with all archaeological resources encountered plotted on the map to scale, and sketch maps of any archaeological features. The report shall be submitted to the GM no later than four to eight weeks after completing the archaeological monitoring work. The GM shall submit the report to the PRSHPO no later than one (1) week after receiving it.

D) Human Remains

If any member of the construction team believes an inadvertent discovery involving possible human remains has occurred, they shall call a stop work in the immediate vicinity and notify the monitor. The archaeological monitor must adhere to the following protocol:

1. Stop work immediately.
2. Project personnel should not take photographs of potential remains and the remains should be treated with dignity and respect, left in situ and protected from further disturbance or harm.
3. Per stipulation III.B.1.a. and III.B.1.b of the PA, the monitor shall immediately notify the local law enforcement office and the coroner/ medical examiner, following applicable Commonwealth statute(s).
4. The monitor shall notify the GM who in turn shall notify the PRSHPO within 24 hours of identifying human remains.
5. The coroner or law enforcement office will make the official ruling

on the nature of whether the remains are forensic or archaeological.

6. If the remains are determined to be archaeological and native to Puerto Rico, then per stipulation III.B.1.d.iii. of the PA, subsequent actions concerning the remains shall follow the guidelines outlined in the ACHP's *Policy Statement Regarding the Treatment of Burial Sites, Human Remains, and Funerary Objects* (ACHP 2023).
7. The decision concerning whether to mitigate potential impacts to the remains by avoidance, or whether to disinter the remains for reinterment in a new location shall be made by the GM in consultation with the PRSHPO and shall be consistent with all applicable state statutes and regulations.
8. Construction shall not continue in the area around the human remains as determined by the archaeological monitor until a determination from the GM and PRSHPO has been made, and the plan has been executed on-site by the archaeological monitor.

Summary of Anticipated Products

Daily Monitoring Record of Activities Form – This form should include a description of daily tasks completed including but not limited to demolition activities, construction activities, and their results. It should be completed daily and compiled weekly for submission to the PM and GM for review.

Inadvertent Discovery Report – This report should include identification of any historically significant findings, their location, a detailed description, context, provenience, photos, to-scale plan drawing, the integrity and importance of the findings, and clear recommendations for eligibility status. This shall be submitted to the PM and GM within 48 hours of the inadvertent discovery.

Archaeological Monitoring Plan Final Report – The final report will include the following sections at a minimum: Introduction, Methods, Results, Discussion, and Conclusion. Additionally, the report shall include any relevant photographs of artifacts, features, fieldwork and any relevant maps that show the location of any archaeological resources encountered. Lastly, all fieldwork paperwork such as the Daily Record of Activities Forms, Weekly Reports, and Inadvertent Discovery Reports shall be included and the results summarized in the report. The final report shall be submitted to the PM and GM no later than four to eight weeks after completion of the archaeological monitoring work. The GM shall review the report and submit it to the PRSHPO no later than one week after receiving it.

Professional Qualifications

The monitor must meet the minimum Secretary of the Interior Professional Qualifications Standards for Archaeology established in 36 CFR Part 61 (NPS 1983). These are: a graduate degree in archaeology, anthropology, or closely related field; at least one (1) year of full-time professional experience or equivalent specialized training in archaeological research, administration, or management; at least four (4) months of supervised field and analytic experience in general Puerto Rican archaeology; the demonstrated ability to carry research to completion; and at least one (1) year of full-time professional experience at a supervisory level in the study of archaeological resources of the historic period.

References

Advisory Council on Historic Preservation (ACHP)

2023 Policy Statement Regarding the Treatment of Burial Sites, Human Remains, and Funerary Objects. ACHP, Washington, DC. https://www.achp.gov/digital-library-section-106-landing/achp-policy-statement-burial-sites- human-remains-and-funerary

2009 Section 106 Archaeology Guidance. ACHP, Washington, DC. https://www.achp.gov/protecting-historic-properties/Section_106_Archaeology_Guidance

Delgado Torres Engineering, LLC

2024 90% Design Plans for the Sidewalk Revitalization Jayuya Urban Center PR-CRP-00053 project.

Federal Emergency Management Agency

2019 Second Amendment to Programmatic Agreement among the Federal Emergency Management Agency, the Puerto Rico State Historic Preservation Officer, and the Puerto Rico Central Office for Recovery, Reconstruction and Resiliency.

Francisco J. Moreno Orama and Jaqueline López Meléndez

2025 Puerto Rico 2017 Disaster Recovery, CDBG-DR Program. City Revitalization Program (City-Rev) Section 106 NHPA Effect Determination Form entitled Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya (PR-CRP-000053) completed 8/13/2025.

National Park Service

1983 Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines for Archaeological Documentation. https://www.nps.gov/subjects/historicpreservation/upload/standards-guidelines-archeology-historic-preservation.pdf

Appendices

Appendix A: SHPO Concurrence Letter

STATE HISTORIC
PRESERVATION
OFFICE
GOVERMENT OF PUERTO RICO

Executive Director | Carlos A. Rubio Cancela | carubio@prshpo.pr.gov

September 29, 2025

Kristin Sanders
269 Avenida Ponce de León
San Juan, PR 00917

Referencia: SHPO-CF-09-04-25-02 - PR-CRP-000053 (Jayuya), Mejoras aceras, Paseo Peatonal Ventana al Rio

Dear Ms. Sanders,

Our Office has received and reviewed the above referenced project in accordance with 54 USC 306108 (commonly known as Section 106 of the National Historic Preservation Act, as amended), 36 CFR Part 800: Protection of Historic Properties and the Programmatic Agreement executed in 2016, as amended.

After a review of all the documentation, the SHPO agrees with your finding that the proposed project with the established conditions, will have no adverse effect upon historic properties:

1. Implementation of an archaeological monitoring during all excavations for the installation of the solar lighting poles.

2. An archaeology monitoring work plan must be summited to PRSHPO for its review and concurrence before any works initiates.

Please note that should the Agency discover other historic properties

at any point during project implementation, you should notify the SHPO immediately. If you have any questions concerning our comments, do not hesitate to contact our Office.

Sincerely,

Carlos A. Rubio Cancela
State Historic Preservation Officer
CARC/GMO/OJR

SHPO
OFICINA ESTATAL DE CONSERVACIÓN HISTÓRICA
OFICINA DEL GOBERNADOR
STATE HISTORIC PRESERVATION OFFICE
OFFICE OF THE GOVERNOR
OECH

Cuartel de Ballajá (tercer piso), Calle Norzagaray, esq. Beneficencia, Viejo San Juan, PR 00901 | PO Box 9023935, San Juan, PR 00902-3935

787.721.3737

oech.pr.gov

Appendix B: Monitoring Daily Activity Sheet

PUERTO RICO 2017 DISASTER RECOVERY CDBG-DR PROGRAM - CITY REVITALIZATION PROGRAM (CRP) **ARCHAEOLOGICAL MONITORING DAILY RECORD OF ACTIVITIES**	

Subrecipient:	**Project/Case ID**:
Project Name:	
Project Location/Address:	
Coordinates (Lat/Long):	

SOI-Qualified Archaeologist:
Date of Monitoring:
Work Hours:

Description of work performed by Contractor and supervised by the Monitor:

ACTIVITIES	YES	NO
Was an archaeological remain documented during the day. If yes, include required information below.	☐	☐
Was an exceptional archaeological remain identified during the day? If yes, explain below.	☐	☐
Have the construction activities affected a previously unidentified property or a known historic property in an unanticipated manner? If yes, explain below.	☐	☐
Has there been a change in the scope of work of the project? If yes, explain below.	☐	☐

PUERTO RICO 2017 DISASTER RECOVERY CDBG-DR PROGRAM - CITY REVITALIZATION PROGRAM (CRP) **ARCHAEOLOGICAL MONITORING DAILY RECORD OF ACTIVITIES**	

Subrecipient:	**Project/Case ID**:
Project Name:	
Project Location/Address:	
Coordinates (Lat/Long):	

Site Photos	
Direction of Photo: Description:	
Direction of Photo: Description:	

PUERTO RICO 2017 DISASTER RECOVERY CDBG-DR PROGRAM - CITY REVITALIZATION PROGRAM (CRP) **ARCHAEOLOGICAL MONITORING DAILY RECORD OF ACTIVITIES**	
Subrecipient:	**Project/Case ID**:
Project Name:	
Project Location/Address:	
Coordinates (Lat/Long):	

Site Photos	
Direction of Photo: Description:	
Direction of Photo: Description:	

Appendix C: 90 Percent Design Plans

STATE HISTORIC PRESERVATION OFFICE
GOVERMENT OF PUERTO RICO

Executive Director | Carlos A. Rubio Cancela | carubio@prshpo.pr.gov

September 29, 2025

Kristin Sanders
269 Avenida Ponce de León
San Juan, PR 00917

Referencia: SHPO-CF-09-04-25-02 - PR-CRP-000053 (Jayuya), Mejoras aceras, Paseo Peatonal Ventana al Rio

Dear Ms. Sanders,

Our Office has received and reviewed the above referenced project in accordance with 54 USC 306108 (commonly known as Section 106 of the National Historic Preservation Act, as amended), 36 CFR Part 800: Protection of Historic Properties and the Programmatic Agreement executed in 2016, as amended.

After a review of all the documentation, the SHPO agrees with your finding that the proposed project with the established conditions, will have no adverse effect upon historic properties:

1. Implementation of an archaeological monitoring during all excavations for the installation of the solar lighting poles.

2. An archaeology monitoring work plan must be summited to PRSHPO for its review and concurrence before any works initiates.

Please note that should the Agency discover other historic properties

at any point during project implementation, you should notify the SHPO immediately. If you have any questions concerning our comments, do not hesitate to contact our Office.

Sincerely,

Carlos A. Rubio Cancela
State Historic Preservation Officer
CARC/GMO/OJR

SHPO
OFICINA ESTATAL DE CONSERVACIÓN HISTÓRICA
OFICINA DEL GOBERNADOR
STATE HISTORIC PRESERVATION OFFICE
OFFICE OF THE GOVERNOR
OECH

Cuartel de Ballajá (tercer piso), Calle Norzagaray, esq. Beneficencia, Viejo San Juan, PR 00901 | PO Box 9023935, San Juan, PR 00902-3935

787.721.3737

oech.pr.gov

DEPARTMENT OF
HOUSING
GOVERNMENT OF PUERTO RICO

March 24, 2025

Samir El Hage Arocho
General Partner, HORNE LLP
269 Juan Ponce de León Ave.
Hato Rey, Puerto Rico 00917-00918

Via email: samir.elhage@horne.com

RE: Authorization for Grant Management (GM) to Conduct the Required Environmental Consultations with Federal and Local Agencies on PRDOH's Behalf

Dear Mr. El Hage,

Provisions at 24 C.F.R. Part 58 establish the environmental review procedures for entities assuming the U.S. Department of Housing and Urban Development (**HUD**) environmental responsibilities under the National Environmental Policy Act (**NEPA**) and other applicable laws. The Puerto Rico Department of Housing (**PRDOH**), as the designated CDBG-DR/MIT grantee, has assumed HUD's environmental responsibilities under NEPA and related laws (**Responsible Entity**) by directly implementing multiple CDBG-DR/MIT projects.

One of the Responsible Entity's many responsibilities under 24 C.F.R. Part 58 is consulting with State, Federal, and non-federal entities in preparing an Environmental Review Record (**ERR**). Regarding a Responsible Entity's interactions with State, Federal, and non-Federal entities, 24 C.F.R. § 58.14 states that:

> *A responsible entity shall consult with appropriate environmental agencies, State, Federal and non-Federal entities and the public in the preparation of an EIS, EA or other environmental reviews undertaken under the related laws and authorities cited in § 58.5 and § 58.6. [...].*

In conducting its role as a Responsible Entity that directly undertakes a project, as per 24 C.F.R. § 58.4(b)(1), PRDOH *"must assume the environmental review responsibilities for the State's activities* ***and those of any non-governmental entity that may participate in the project.***" Accordingly, a Responsible Entity may delegate certain tasks in the preparation of ERRs but retains full legal responsibility for compliance with environmental requirements.

To effectively manage available environmental resources and expedite the preparation of ERRs, PRDOH—as Responsible Entity—wishes to delegate the task of consulting with State, Federal, and non-Federal entities contained in 24 C.F.R. § 58.14. Therefore, PRDOH hereby authorizes Alberto Mercado Vargas, GM Environmental SME, or his authorized representative) to conduct on its behalf the environmental consultations with Federal and local agencies required to prepare ERRs for the implementation of CDBG-DR and CDBG-MIT projects, while still maintaining the ultimate and full legal responsibility for compliance with environmental requirements. This authorization extends to both early and formal consultations before Federal agencies such as the U.S. Fish and Wildlife Service (**USFWS**) and the State Historic Preservation Office (**SHPO**), among others required for compliance with applicable laws and regulations as established in 24 C.F.R. § 58.14 and § 58.5. GM should include and copy the PRDOH Environmental Division in all communications with Federal and local agencies for these purposes.

PRDOH appreciates GM's commitment to Puerto Rico's recovery and is confident in its ability to execute this task effectively. Please feel free to contact me with any questions.

Sincerely,

Ciary Pérez Peña
Secretary
Puerto Rico Department of Housing

Cc. Alberto Mercado Vargas
GM Environmental SME
alberto.mercadovargas@horne.com

9/4/2025

Carlos A. Rubio Cancela
State Historic Preservation Officer
Puerto Rico State Historic Preservation Office
Cuartel de Ballajá (Tercer Piso)
San Juan, PR 00902-3935

Puerto Rico Disaster Recovery, CDBG-DR City Revitalization (City-Rev) Program

Section 106 NHPA Effect Determination Submittal for PR-CRP-000053, Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya Project, Jayuya, Puerto Rico – *No Adverse Effect, Conditioned*

Dear Architect Rubio Cancela,

On February 9, 2018, an allocation of Community Development Block Grant - Disaster Recovery (CDBG-DR) funds was approved by the United States Department of Housing and Urban Development (HUD) under the Federal Register Volume 83, No. 28, 83 FR 5844, to assist the Commonwealth of Puerto Rico in meeting unmet needs in the wake of Hurricanes Irma and Maria. On August 14, 2018, an additional $8.22 billion recovery allocation was allocated to Puerto Rico under the Federal Register Volume 83, No. 157, 83 FR 40314. With these funding allocations, the Puerto Rico Department of Housing (PRDOH) aims to lead a comprehensive and transparent recovery for the benefit of Puerto Rico residents. To faithfully comply with HUD's environmental requirements, the Puerto Rico Department of Housing contracted Horne Federal, LLC (HORNE) to provide environmental records review services that will support the objectives of the Puerto Rico Department of Housing (PRDOH) for CDBG-DR.

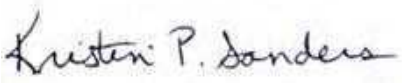
On behalf of PRDOH, HORNE is submitting documentation for the Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya Project,

located within the Jayuya Traditional Urban Center. The Municipality of Jayuya proposes improvements to several sidewalks, a small section of Guillermo Esteves Street, and the Ventana al Río Bridge. The full scope of the project is described in the submitted documentation, which includes mapping, photographs, and 90% design plans.

Based on the documentation provided, the Program requests a concurrence with a determination that "**No Adverse Effect**" is appropriate for this undertaking, conditioned to archaeological monitoring during all excavations for the installation of the solar lighting poles.

If you have any questions or concerns, please contact me by email at kristin.sanders@horne.com or phone at 225-276-2109.

Kindest regards,



Kristin P. Sanders
Historic Preservation Manager

Attachments

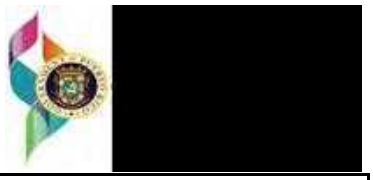
PR-CRP-000053

Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya Jayuya, Puerto Rico

Section 106 Effect Determination Form

Section 106 NHPA Effect Determination

Puerto Rico 2017 Disaster Recovery, CDBG-DR Program
City Revitalization Program (City-Rev)



Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

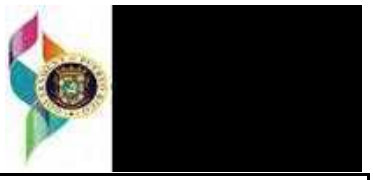
Project Location: Barrio Pueblo, Jayuya, Puerto Rico	
Project Coordinates[1]: Figueras Street (in Google Maps, the street name is Catalino Figueroa): 18.218246, -66.594458; To: 18.219008, -66.5917799 Torrado Street: 18.219105, -66.592754; To: 18.2183142, -66.5922555 Libertad Street: 18.218802, -66.5913661; To: 18.21919037, -66.59020280 San Felipe Street: 18.219825, -66.594061; To: 18.219608, -66.592455 PR-532: 18.218442, -66.595030; To: 18.219140, -66.594710 Mattei Street: 18.219608, -66.592755; To: 18.218677, -66.591589 Massini Street: 18.219587, -66.591066; To: 18.219238, -66.590782 Hoyo Frío Street: 18.220536, -66.590200; To: 18.220076, -66.589742 Guillermo Esteves Street (PR-144; PR-141) 18.2184420, -66.5950295; To: 18.22137995, -66.588343. Nemesio Canales Street: 18.218937, To: -66.592598 Ventana al Río (Bridge): 18.218316, -66.592251; To: 18.217507, -66.591983	
TPID (Numero de Catastro) The Centro de Recaudaciones Municipales de Puerto Rico (CRIM) does not assign a cadaster number to streets.	
Type of Undertaking: ☒ Substantial Repair ☐ New Construction	
Construction Date (AH est.): 2nd half of the 19th century	Property Size (acres): 1.5 acres

SOI-Qualified Architect/Architectural Historian: Architect Francisco J Moreno Orama
Date Reviewed: 02/22/2024, 06/20/2024 - Revision 4
SOI-Qualified Archaeologist: Jaqueline López Meléndez
Date Reviewed: February 27, 2024, April 11, 2024 – Revised, August 13, 2025-Revised

The last time the Historic Preservation Grants Manager (GM) reviewed the Section 106 NHPA Effect Determination Form (EDF) for the project was on March 17, 2025. The GM returned the form to PM for corrections, October 2024. According to the GM, (i) the Project Description, Area of Potential Effects (APE), (ii) Identification of Historic Properties-Architecture, and (III) mandatory maps needed to be prepared in compliance with the Puerto Rico Department of Housing CDBG-DR City Revitalization Program Historic Preservation Guidance (May 2023 version).[2] Historical Compliance Consulting (HCC) SOI Qualified Professionals for ICF revised and edited, as well as prepared said sections in the present form. The Program did not comment on the Identification of Historic Properties - Archaeology, Determination, and Recommendation Sections. Therefore, these were not revised by HCC. Only the historic properties table was deleted from the Archaeology

[1] These coordinate numbers were taken from the US Department of Housing and Urban Development 5-Step Decision-Making Process Form.

[2] Section 106 NHPA Effect Determination Forms (EDFs) prepared by Mr Francisco J Moreno Orama and Ms Jaqueline López Meléndez were reviewed and returned by the Program on: 22 February 2024, 20 June 2024, 27 February 2024, and 11 April 2024. The last time revised, it was returned for a new Architecture Section to be written and for some editing to be carried out. The present EDF Architecture Section, prepared by Historical Compliance Consulting (HCC) for ICF, is a completely new version based on new methodology, as well as research and interpretative activities. Dr Arleen Pabón-Charneco and Ms Berenice Sueiro-Vázquez authored the Architecture Section and edited selected sections. The Section 106 NHPA EDF was QC'd by Dr Karen Anderson-Córdova and Architect Marla López.



Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Section as per the new guidelines for preparation of the form. None of the properties listed in the table provided included below-ground archaeological materials associated with the properties.

SOI-Qualified Architect/Architectural Historian:	Berenice Sueiro-Vázquez BArch Arleen Pabón-Charneco PhD JD
Date Reviewed: June-July 2025	
SOI-Qualified Reviewers:	Karen Anderson-Córdova PhD and Carmen Marla López MA
Date Reviewed: July 2025	

In compliance with Section 106 of the National Historic Preservation Act (NHPA), the Program is responsible for identifying historic properties listed in the National Register of Historic Places (NRHP) and any properties not listed that would be considered eligible for listing that are located within the geographic APE of the proposed project and assessing the potential effects of its undertakings on these historic properties.

Project Description

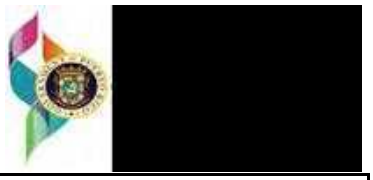
The Jayuya Municipality, assisted by the Puerto Rico Department of Housing (Departamento de la Vivienda de Puerto Rico) (PRDOH) and the Puerto Rico 2017 Disaster Recovery, CDBG-DR Program - City Revitalization Program (Programa de Revitalización de la Ciudad del Gobierno Federal) (CITY-REV), proposes improvements to several sidewalks, a small section of Guillermo Esteves Street, and the Ventana al Río Bridge within Jayuya's Traditional Urban Center (TUC), which is eligible for inclusion in the NRHP under Criteria A and C. (See Attachment 1: "Project Architectural Plans, Jayuya, Puerto Rico – Drawing Plans 90% dated 15 April 2024.")

The main objective of this project is to optimize the existing pedestrian infrastructure in the Jayuya Urban Center.[3] (See Maps 1 and 2.) The sidewalks, as well as the curbs and gutters are to be replaced on both sides of the following roads: Catalino Figueras, Guillermo Esteves (PR-141 and PR-144), Torrado, Mattei, and Nemesio Canales Streets. On the other hand, the sidewalks and curb & gutter to be replaced on one side of the road are Libertad, Hoyo Frío, and San Felipe Streets, and PR-532. All curb ramps of the urban center intersections will be replaced. These curb ramps, connected via thermoplastic pavement markings at crossings within the project's limits and the utilization of traffic signs will provide an added layer of safety for pedestrians. The project also includes new traffic signs.

The Guillermo Esteves Street cobblestones (non-historic) will be removed and replaced with stamped concrete. These cobblestones are located at the Municipal Building and at the entrance of the Ventana al Río Bridge. Additionally, the damaged mosaic at the Ventana al Río Bridge will be repaired or replaced, and the damaged lighting fixtures will be replaced. The metal railing on the bridge will be repainted in the same color.

The Escaleras on San Felipe Street (also known as Escaleras al Centro Cultural de Jayuya and Escaleras) will undergo improvements, which include repainting of the existing handrails, replacing the existing landscaping with new and adequate plants in the surrounding area, and replacing the damaged light bulbs.

[3] The description of the project, measurements, and related information was taken from the US Department of Housing and Urban Development 5-Step Decision-Making Process Form. It was edited by HCC.



Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Currently there are two existing grate inlets that are located inside the ADA path at Mattei and Nemesio Canales Streets intersection, and PR-141 and Libertad Street intersection. This activity includes cutting of the existing drainage piping to connect to the relocated grate inlet outside of the ADA path. See Attachment 1: Drawing Plans 90% dated 15 April 2024, (i.) northeast corner of Canales and Mattei Streets (Plan Sheet – C 402) and (ii.) southwest corner of PR-141) and Libertad Street (Plan Sheet C-403). Additionally, the project includes the cleaning and unclogging of 32 grate inlets and piping within the project limits.

Another part of the project is the installation of individual solar lighting poles at Nemesio Canales Street from Mattei and Canales Streets intersection to Canales Street and PR-141 intersection and at PR-141 from Canales Street and PR-141 intersection to the Plaza de la Música.

The proposed activity has a total footprint of 6,061 square meters (1.5 acres), of which 1,122 square meters are outside the floodplain and 4,939 square meters are within the floodplain. (The floodplain information was obtained from the Advisory Base Flood Elevation (ABFE) map, effective 2018.)

The temporary staging area will be located at an existing gravel parking lot located south on Libertad Street, with an approximate area of 0.21 acres (838.5 m2).

Area of Potential Effects
As defined in 36 CFR §800.16(d), the APE is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties if any such properties exist. Based on this definition and the nature and scope of the Undertaking, the Program has determined that the Direct APE consists of the sidewalks along the ten streets, a small section of Guillermo Esteves Street, and the Ventana al Río Bridge that comprise the project area within the Jayuya TUC Historic District, encompassing approximately 1.5 acres. As previously mentioned, the temporary staging area will be located on an existing gravel parking lot south of Libertad Street, covering approximately 0.21 acres (838.5 m^2). The proposed undertaking will have no adverse effect on the Jayuya TUC. (See Maps 3 and 4.)

The Visual APE includes the ten streets along the sidewalks (project area), the five feet of front gardens of residences and buildings adjacent to those sidewalks, as well as five feet along the sides of the Escaleras. The Visual APE also includes the Plaza Nemesio Rosario Canales Rivera, as well as the streets surrounding the Plaza.

Identification of Historic Properties – Archaeology
Existing information on previously identified historic properties has been reviewed to determine if any such properties are located within the APE of this undertaking. The review of this existing information, by a Program contracted Historic Preservation Specialist meeting the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61), shows that the project area has a high archaeological potential.

The project area is located within the Traditional Urban Center of Jayuya. The project will be developed along Nemesio Canales, Mattei, Figueras, Torrado, Libertad, San Felipe, Hoyo Frío and Guillermo Esteves Streets, as well as PR-141, PR-532, PR-534 and PR-144 roads. The Traditional Urban Center is located in the foothills and north of the Jayuya River. It has a mostly flat topography, at an altitude of approximately 1,411 to 1,444 feet above sea level. It is bordered to the south by the Jayuya River and to the north by a mountainous area. The nearest bodies of water to the project area are the following: unnamed creek located 0.01 miles northwest; another unnamed creek located 0.02 miles east; the Rio Grande de Jayuya located 0.02 miles south; and the Rio Caricaboa located 0.04 miles south. Reilly gravelly silt loam (Re) soils predominate in the project area. This soil is deep, nearly level, and excessively drained. It is on flood plains near

streams and rivers. The permeability of this Reilly soil is rapid, and the available water capacity is very low. Runoff is slow. Fertility is medium. This soil is subject to occasional flooding. (See Map 5.)

Its geographical area and its good land for planting allowed this municipality to be populated very early in history by Indians, especially in the mid-sixteenth century when they received their freedom. Jayuya has 65 reported archeological sites of which 25 are pre-Columbian. The great majority of these sites are *bateyes* and petroglyphs.

The town of Jayuya was officially founded in 1911. Until that time, it was a neighborhood of the town of Utuado. During the 19th century its economy was based exclusively on agriculture and cattle raising. Since the 18th century coffee was planted on its lands. This is still its main agricultural product.

In the map of the Jayuya ward made in 1887 by the Army Topographic Commission (Figure 1) we observe a single street passing through the community and structures at some points located along the street. It identifies some of the structures such as the church and the cemetery. The church appears to be located approximately 0.10 miles southwest of where the Catholic church is currently located. The cemetery is located where the Jayuyano Cultural Center is today.

In the map of the Jayuya ward made in 1897 by the Army Topographic Commission (Figure 2) we observe a slight growth of the town in relation to the 1887 map. In that year it did not have a plaza because it was a neighborhood of Utuado. There are more structures than in 1887 located along the only street in the town.

Figure 1. Segment of the Itinerario de Barros a Utuado por los barrios de Cacaos, Recodo y Jayuya, 1887.
Archivo Nacional Digital de Puerto Rico. Source: https://archivonacional.com/PL/1/1/1230

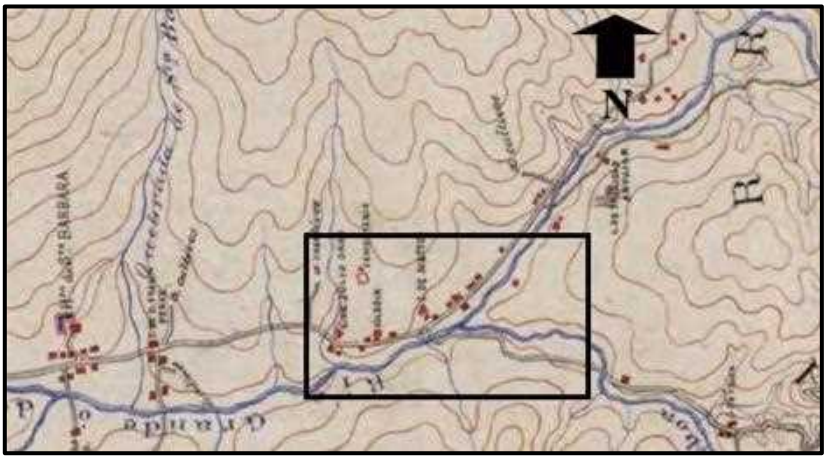


Figure 2. Segment of the Itinerario de Barrio del Coto al poblado de Jayuya, 1897
Archivo Nacional Digital de Puerto Rico. Source: https://archivonacional.com/PL/1/1/1400

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Although the municipality of Jayuya was founded in 1911, by 1908 it was already considered a town. In that year William H Armstrong tells us the following about Jayuya:

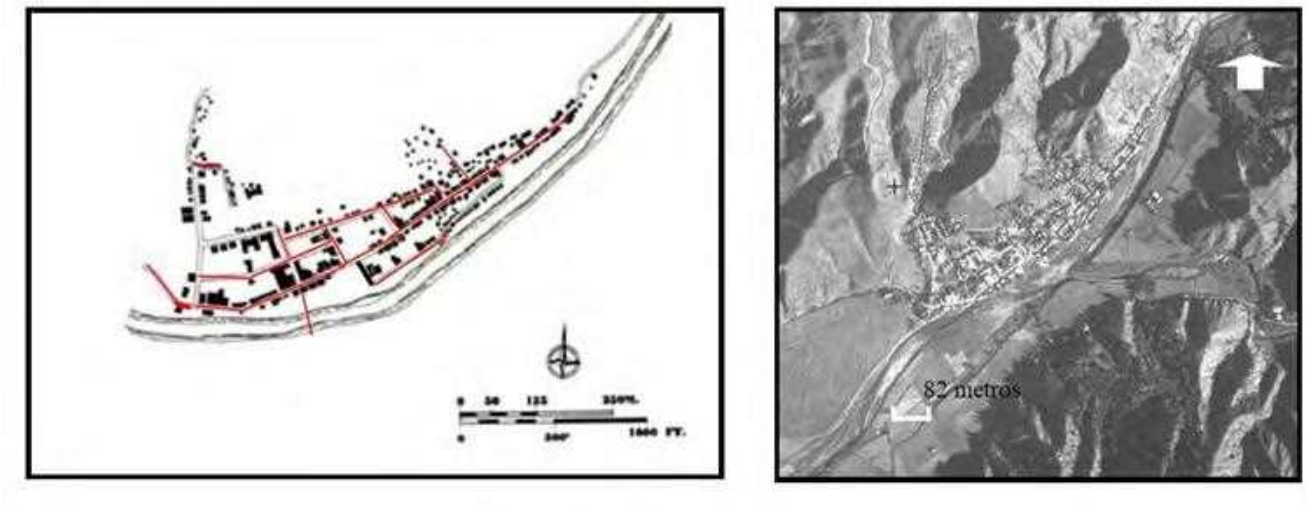
"Jayuya is a miserable little (town) lying in a narrow valley at the S.E. base of the Morales peak. The town has one street which begins at a rivulet on the west side and runs towards the east. This town is in the very center of the island lying at the base of the Morales mountains. There is but one narrow dirty main street unpaved and without walks. This street begins near a rivulet from the Ponce Road and extends about due East for half a mile (Figure 3).

The town is bounded by very high mountains on all sides. The river runs along the edge of the town and is a very dangerous stream when high. The town has about 60 houses of all classes, a drug store, about 10, 2 story houses, a lively stable, a carpenter shop, 4 general stores, a coffee mill and a cigar factory. There is no water or sewer system. Water is taken from the river. The population in the town is about 450-500, but for the district there are several thousand. There is no hospital. There is no regular school building. There is small modern concrete Protestant church building, capacity 50. The people are anti American, poor and mostly of the illiterate class. The sanitary conditions are filthy in every way."

Figure 3. Photo of Jayuya's main street (1910), looking east.
(Sepúlveda 2004: p. 212, Vol. 3)

In the 1936 aerial photo we observe that the urban center of Jayuya developed and grew to the north and west of the Rio Grande de Jayuya (Figure 4). By this year almost all the streets of the project were laid out. The town reached Vicens Street to the west, Barceló and Nemesio Canales Streets to the north, and to the east it ended about 0.10 miles northeast on PR-141 at the intersection with Nemesio Canales Street. At the southern end of the project there were no properties or streets bordering the Rio Grande de Jayuya. We note in this photo that the largest structures, possibly governmental and commercial, are located to the southwest of the urban center while most of the housing structures are located mostly to the north, northwest.

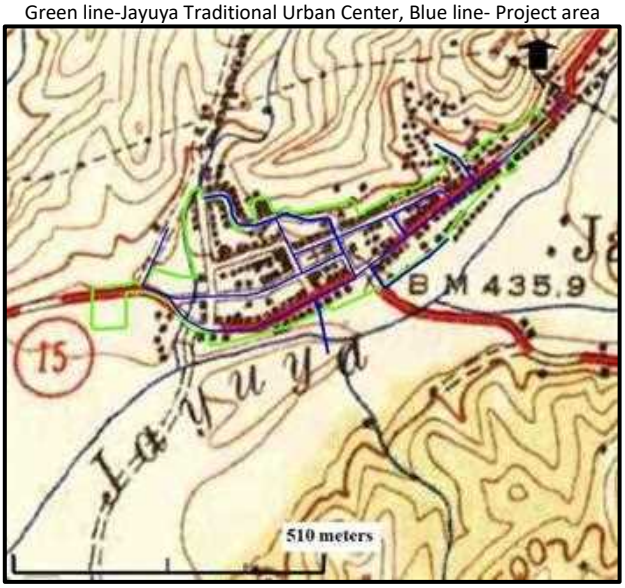
Figure 4. Background and figure and aerial photo of Jayuya 1936 (Sepúlveda 2004: p. 232, Vol. 4).
Red line - Project area



The 1946 topographic map shows all the streets that make up the project except for Hoyo Frio Street and the Jayuya River pedestrian bridge (Figure 5).

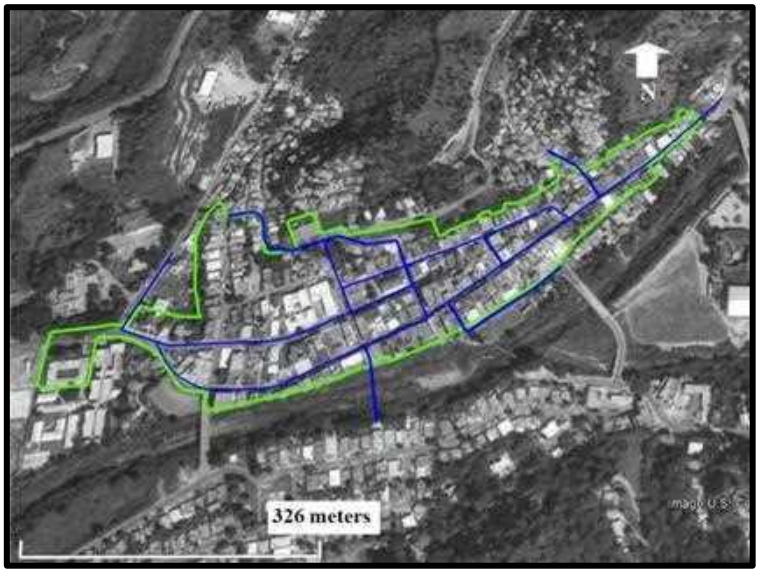
Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Figure 5. Project Area in the 1946 USGS Topographic Quadrangle of Jayuya
Green line-Jayuya Traditional Urban Center, Blue line- Project area



The Hoyo Frío Street is first seen in the 1993 aerial photo (Figure 6). Also evident is the growth of the urban area to the north and south of the city on the mountainous area and south of the Rio Grande de Jayuya.

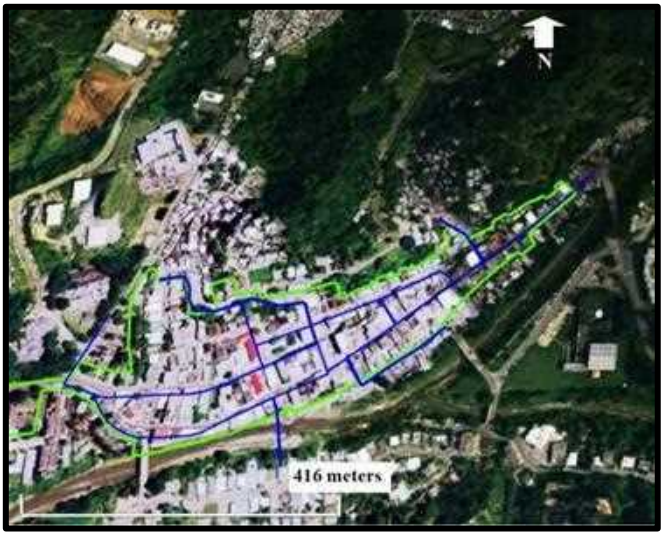
Figure 6. Project area in the 1993s aerial photograph (Green line-Jayuya Traditional Urban Center, Blue line- Project area)



It is in the 2004 aerial photo that we first see Libertad Street (Figure 7).

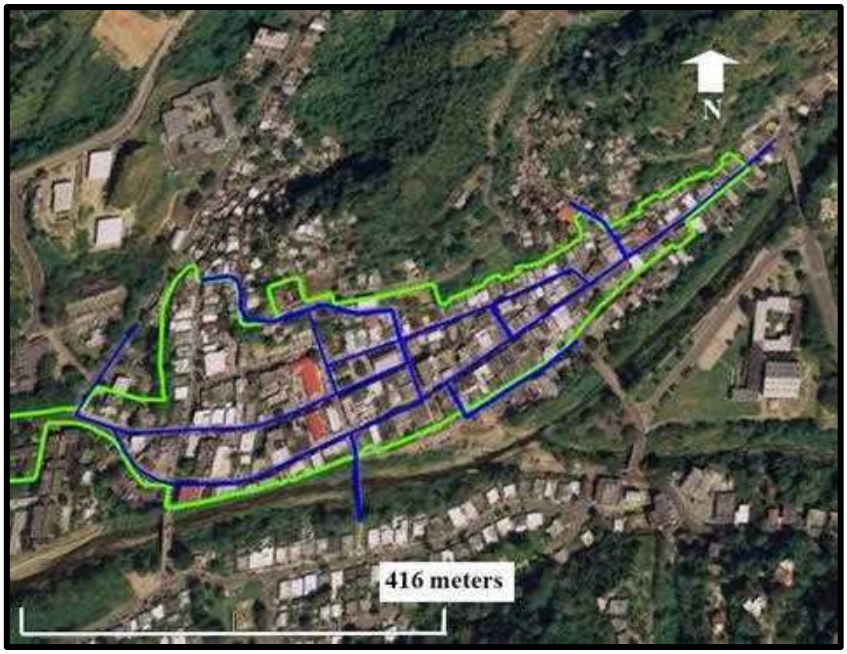
Figure 7. Project area in the 2004s aerial photograph
Green line-Jayuya Traditional Urban Center, Blue line- Project area

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053



The Ventana al Río pedestrian bridge is first seen in the 2006 aerial photo (Figure 8).

Figure 8. Project area in the 2006s aerial photograph
Green line-Jayuya Traditional Urban Center, Blue line- Project area



In the archives of the State Historic Preservation Office (SHPO) and the Institute of Puerto Rican Culture (ICP), fourteen (14) archaeological studies were found within a 0.25 miles study radius of the project area (Table 1). Of these fourteen studies, four were conducted within the project area. These are: Alvarado (2005); Martinez (1998, 2002) and Daubón (1987). Of these four studies, the only positive one was the one conducted by Alvarado (2005).

Alvarado (2005) wrote the final monitoring report for the project of Undergrounding of Electrical Lines, Urban Fabric Reform and Paseo Ventana al Río in the Municipality of Jayuya. These monitoring works were carried out by archaeologists Maurás and Alvarado between June 2003 and February 2005 (Figure 9). This report is available in the basement of the ICP where the inactive documents are located.

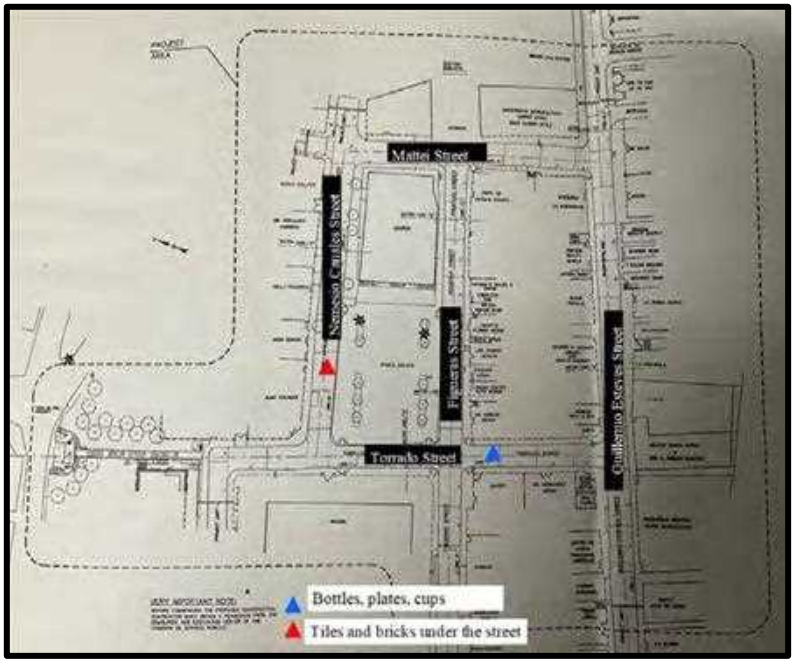
Alvarado mentions that the first part of the monitoring work was carried out by Arql. Maurás between June 2003 and June 2004. Maurás worked on Canales, Torrado, and Figueras streets. These streets border the Jayuya plaza. Alvarado monitored Guillermo Esteves and Mattei streets between August 2004 and February 2005. The works monitored by Alvarado were the following: undergrounding of electrical lines, location of street lights, excavation of manholes for electrical purposes, placement of telephone and Cable TV system piping. He also monitored the excavations for the removal of the existing sanitary and potable piping, the placement of the new piping for these purposes, demolition of sidewalks, curbs and roads.

During the Maurás works, he documented a large number of fragments of tiles and bricks along Canales Street at a depth of approximately 25 centimeters. These fragments were deposited wherever they were found with the purpose of compacting the road. Maurás was able to corroborate that the origin of these artifacts was the Gripiñas Hacienda. According to the current owner, between the 1920s and 1930s the hacienda was rebuilt and the fragments of bricks and tiles removed from the hacienda during the reconstruction were deposited by the municipality on Canales Street because this road had poor drainage and when it rained it flooded easily. These fragments served as backfill. On Torrado Street, Maurás found a deposit of bottles, plates, cups and materials used in the kitchen. According to informants in the area on the corner where the El Rey bakery is located, by the early 1900s there was a small house where the owner cooked for the wealthy of the time. The report does not specify the depth of the deposit. Using a photo in the report, which has no scale, we estimate that the deposit is more than 1 meter deep.

No archaeological remains or significant features were documented during the Intervention by archaeologist Alvarado. Alvarado attributed this to the fact that the street he monitored is Esteves Street, which is the most recent road with respect to the others. The Grande de Jayuya River used to run through this road, which was displaced to the south by a retaining wall built in the 1940s. This wall can still be seen on the north bank of the riverbed. The old riverbed was filled in and then Estévez Street was built. No cultural remains were found on Mattei Street either.

Figure 9. Map of monitored area and findings by Maurás and Alvarado (Alvarado: 2005)

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053



Daubón (1987) excavated for Phase IB of the Improvements to the water supply system project, mechanical borings in the green areas and sidewalks of Catalino Figueroa Street. Daubón, marked 18 boreholes and excavated 15, all negative. He did not specify the depth or intervals of the borings (Figures 10-14).

Figure 10. Borings 1-5 excavated by Daubón (1987).

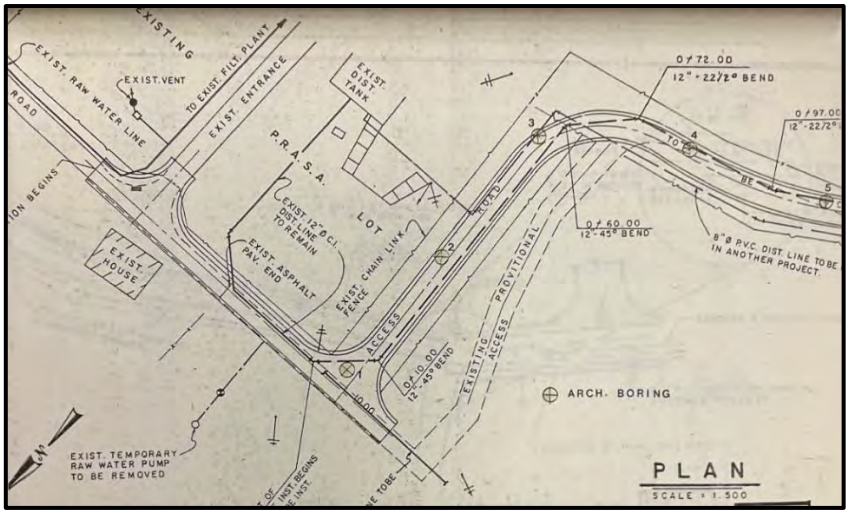


Figure 11. Borings 6-8 excavated by Daubón (1987).

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

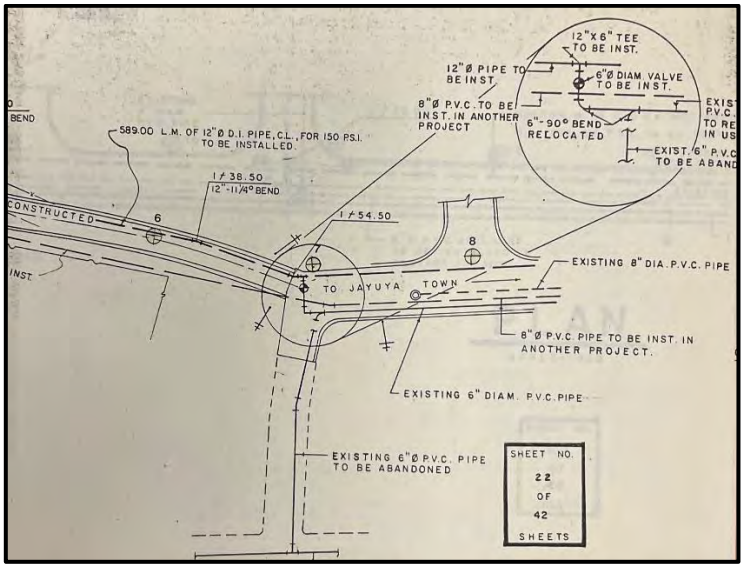


Figure 12. Borings 9-13 excavated by Daubón (1987).

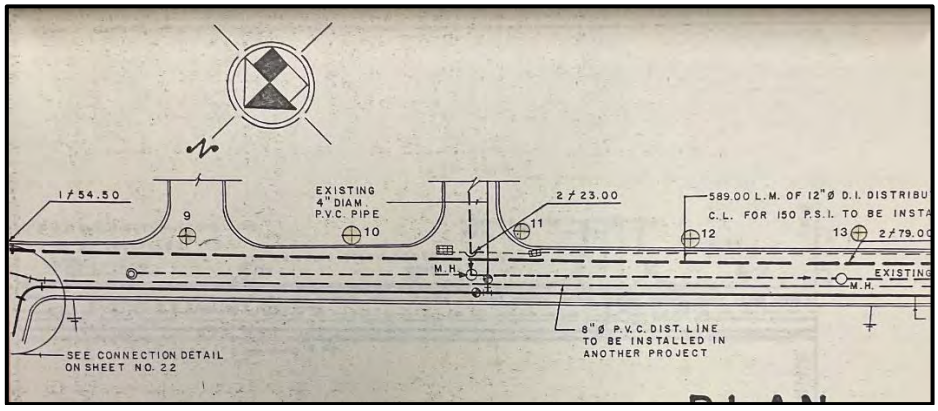


Figure 13. Borings 14-17 excavated by Daubón (1987).

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

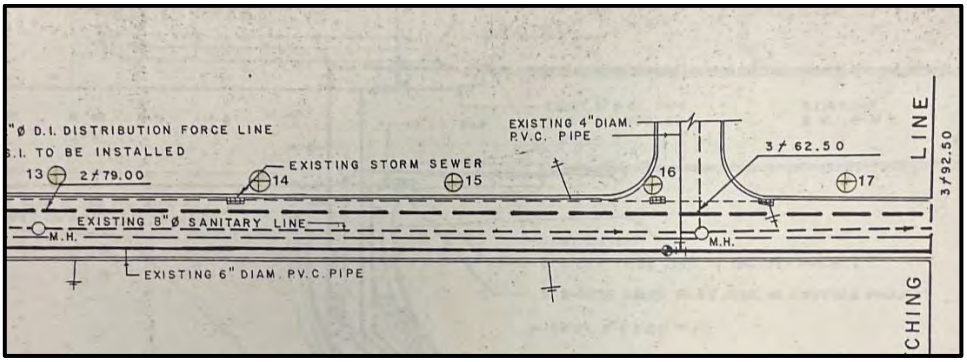
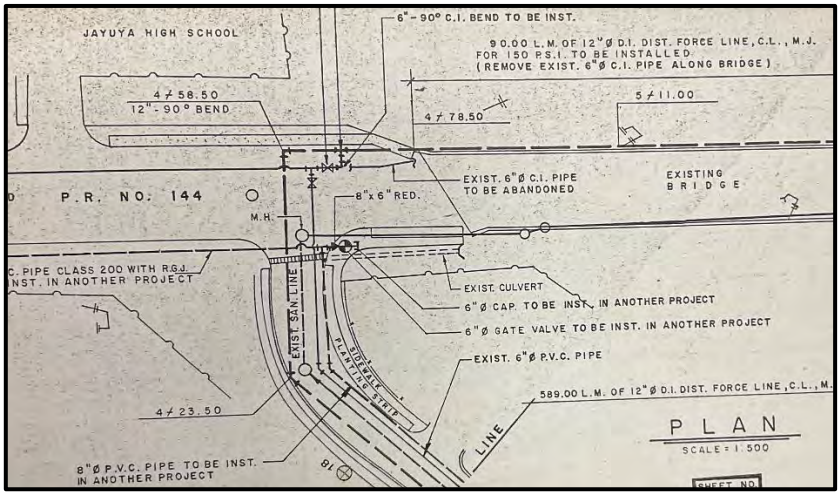


Figure 14. Borings 18 excavated by Daubón (1987).



In 1998, Martínez carried out a phase IA-IB for the relocation project of the wastewater treatment plant in the municipality of Jayuya. This project was developed on the PR-144 highway until it reached the Río Grande de Jayuya bridge, then it passes through a vacant lot to where the wastewater treatment plant will be located. The researcher took into account the degree of impact on the roads due to the use of heavy machinery during construction. She did a surface walkover, inspection of the exposed profiles, some scraping of the cuts to inspect the stratigraphy. Excavated 20 boreholes with a maximum depth of 40 to 98.5 cm. They also conducted interviews with neighbors. All the excavated pits yielded negative results. He does not recommend additional studies. For this same project, Martinez performed an addendum in 2002 to include the sanitary piping to be installed on Guillermo Esteves Street. This project consists of the installation of approximately 1,250 linear meters of 8-inch diameter pipe starting at km. 1.5 of PR-539, running along Guillermo Esteves Street, connecting with PR-144 until reaching the pump station where it joins the project proposed and evaluated in 1999. Martinez performed the excavation of 15 mechanical boreholes with depths between 170 to 185cm with negative results. Martinez did not specify the interval between wells and did not recommend additional studies.

Figure 15. Location of boreholes 1-5 (Martínez 2002)

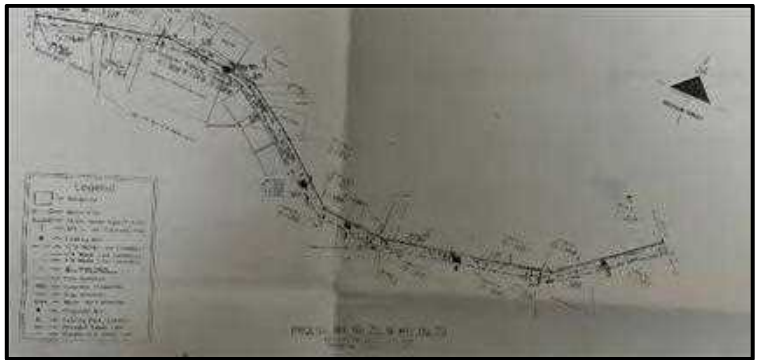


Figure 16. Location of boreholes 6-11 (Martínez 2002)

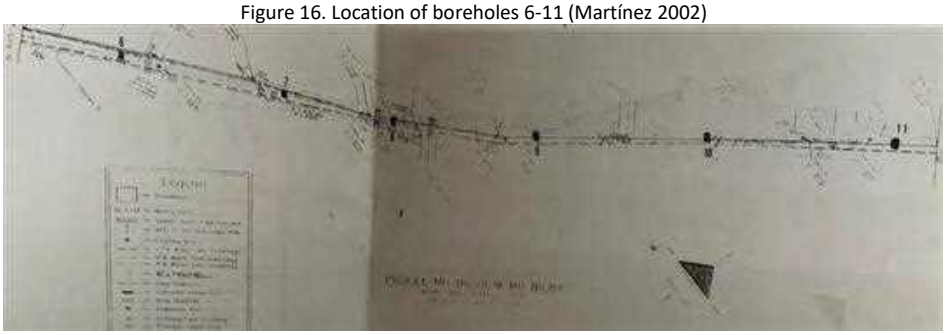
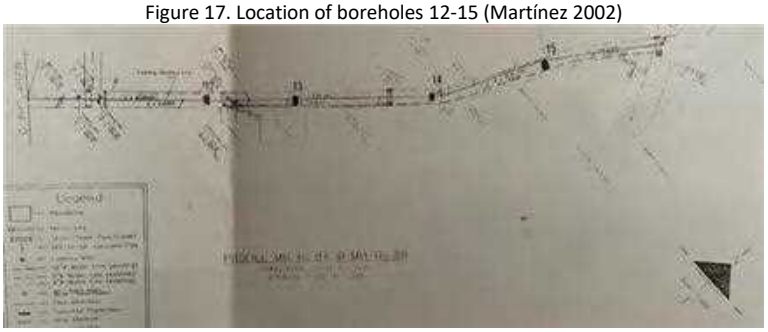
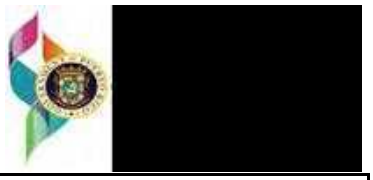


Figure 17. Location of boreholes 12-15 (Martínez 2002)



In 1996, archaeologist Antonio Daubón conducted a phase IA for the Restoration, Restructuring and Remodeling of the Jayuya Urban Center project. This project aims to integrate diverse functions in the central urban enclave. It consists of the construction of the following structures: underground parking, multi-purpose structure, theater, cinema and café; artisan center-urban hostel structure; restoration and remodeling of the plaza. It will be developed in the plaza and in the block to the west of the plaza between Romero Barceló Street to the north, Torrado Street to the east, Vicens Street to the west and Catalino Figueroa Street to the south. Daubón concludes that there are no pre-Columbian cultural deposits in the project area and no historic structures or archaeological remains listed in the NRHP or the ICP. Daubón concludes that his research yielded negative results and does not recommend further studies.

Table 1. Table of cultural resources surveys conducted within the project area or within a 0.25-miles radius.



Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Author	Phase/Title	Year	SHPO / IPRC code	Results	Distance/ Direction
Miguel Rodríguez	IA-IB/ Urbanización Hayuya III	2002	ICP/CAT-JY-02-02-03, SHPO: 08-21-02-01	Negative	0.16 mi NE
Antonio Daubón	IA/Restauración, Re-Estructuración y Remodelación del Centro Urbano de Jayuya	1996	ICP/CAT-JY-96-01-03, SHPO: 05-28-96-01	Negative	Adjacent
Marisol Martínez	IA-IB/ Plaza del Mercado de Jayuya	2002	ICP/CAT-JY-02-02-04	Negative	Adjacent
Ivor Hernández	IA/ Construcción edificio Cooperativa de Ahorro y Crédito	2012	ICP/CAT-JY-12-04-01	Sensitive Area Recommends monitoring during excavations for the foundations because there is a possibility of historical waste disposal.	Adjacent
Marisol Martínez	IA-IB/ Reubicación de la Planta de Tratamiento de Aguas Usadas del Municipio de Jayuya	1998	ICP/CAT-JY-98-01-06	Negative	Within
Marisol Martínez	Addendum IA-IB/ Reubicación de la Planta de Tratamiento de Aguas Usadas para incluir reemplazo de la tubería sanitaria en la calle Guillermo Esteves de Jayuya	2002	ICP/CAT-JY-98-01-06	Negative	Within
Antonio Daubón	IB/ Improvements to the water supply system, 589.00 L.M. of 12" Dist. Force Line to be installed	1987	ICP/CAT-JY-87-01-01, SHPO: 12-03-86-01	Negative	Within
Jesús Figueroa	IA/ Parque Ecuestre	2003	ICP/CAT-JY-03-02-07	Negative	0.15 mi SW
Jesús Figueroa	IA-IB/ Edificio Multifabril	2004	SHPO: 06-20-01-26	Negative	0.07 mi W
Juan González	IA-IB/ Sistema Alcantarillado Sanitario	2003	SHPO: 07-09-98-01	Negative	0.04 mi E
Virginia Rivera	IA-IB/ Urbanización Hayuya	1991	SHPO: 03-08-90-01	Negative	0.06 mi SE
Miguel Rodríguez	IA-IB/ Urbanización Hayuya II	1996	SHPO: 03-17-94-02	Negative	0.12 mi SE
Eduardo Questell	IA-IB/ Mejoras al Sistema de Agua Sector Santa Bárbara y la Comunidad Colberg en los barrios Jayuya Abajo y Memeyes Arriba	1996	SHPO: 02-27-96-02	Negative	0.25 mi W
Fernando Alvarado	Soterrado de Líneas Eléctricas, Reforma Tejido Urbano y Paseo Ventana al Río del Municipio de Jayuya, PR	2005	-	Positive Historic remains	Within

The project area is located in a valley between mountains, north of the Rio Grande de Jayuya. The characteristics of the soils do not make it suitable for establishing settlements in pre-colonial times. The project area is dominated by soils composed of gravel, with medium fertility and susceptible to flooding. The documentation reviewed indicates that Jayuya

was a neighborhood of Utuado and by 1887 there was already a street or dirt road and some structures including a church and a cemetery. By 1936 there was already a town with most of the streets of the Traditional Urban Center laid out and in use. Some areas of the project will be developed on streets that by 1936 were already in use, others that were widened and others such as San Felipe Street and the extensions of Catalino Figueroa Street, the northern part of Torrado Street, the northern area of Mattei Street, the northeastern part of Canales Street and the area of the pedestrian bridge where there could be historical archaeological resources with research potential.

In summary, the archaeological monitoring conducted by Maurás and Alvarado documented historic remains in the area, so the potential for finding unknown archaeological resources with research potential is high. Most of the excavation work carried out in this project will be for the replacement of sidewalks, which will not exceed a depth of 6 inches. The existing sidewalks will be removed and new sidewalks will be built on the land previously impacted by the current sidewalks. However, the installation of individual solar lighting poles at Nemesio Canales street from Mattei and Canales streets intersection to Canales Street and PR-141 intersection and at PR-141 from Canales Street and PR-141 intersection to the Plaza de la Música will require excavation to a depth of 10 feet. We recommend that archaeological monitoring be carried out during the excavation for the installation of the solar lighting poles.

Figure 18. Area where solar lighting poles will be installed

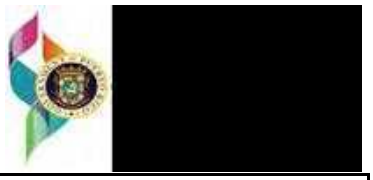
References

Armstrong, William
1910 *Progressive Military Map of Porto Rico*, (Vol. 3, pp. 54-56). https://issuu.com/coleccionpuertorriquena/docs/3v_libro

Sepúlveda, Aníbal
2004 *Puerto Rico Urbano, Atlas Histórico de la Ciudad Puertorriqueña*, Vol. 3 (Entresiglos 1880s- 1910s). Carimar, San Juan, Puerto Rico.

Identification of Historic Properties-Architectural Properties

Existing information on previously identified historic properties has been reviewed to determine if any such properties are located within the APE of this undertaking. The review of this existing information by a Program contracted Historic



Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Preservation Specialist meeting the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61) shows that there are significant cultural properties within a quarter-mile radius of the proposed project location. The project area is located within Jayuya's TUC, a historic district eligible for inclusion in the NRHP under Criteria A and C.

Historic Properties – Architectural Resources

NATIONAL REGISTER OF HISTORIC PLACES LISTED PROPERTIES IN THE JAYUYA MUNICIPALITY

The Jayuya Municipality has one property included in the NRHP. This listed cultural resource is an archaeological site associated to the "Prehistoric Rock Art of Puerto Rico" NRHP nomination. (See Table 2.)

TABLE 2
JAYUYA PROPERTIES LISTED IN THE NATIONAL REGISTER OF HISTORIC PLACES

NAME AND ADDRESS	INCLUSION DATE	NRHP ID NUMBER	CATEGORY	NRHP CRITERION
La Piedra Escrita PR-144 Kilometer 7.5	15 January 2003	02001720	Site	C & D

The property is not sited within the quarter-mile radius area or Jayuya's TUC. The NRHP-listed Jayuya property will **not** be affected by the proposed project.

PUERTO RICO PLANNING BOARD

The Puerto Rico Planning Board (PRPB) has a list of properties declared "historic" by means of the organism's resolutions. It is known as the "Registro Oficial de Sitios y Zonas Históricas designados por la Junta de Planificación de Puerto Rico Revisado 7 de diciembre de 2022." In most cases, the list is comparable to the NRHP one. Jayuya has no listing according to the PRPB.[4]

NATIONAL REGISTER OF HISTORIC PLACES ELIGIBLE PROPERTIES

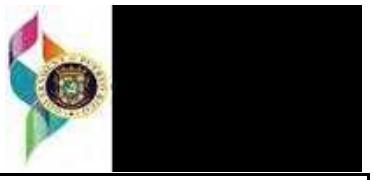
To interpret the architectural properties eligible for inclusion in the NRHP, archival research activities were undertaken. In addition, a detailed visit to Jayuya was carried out to study the TUC environment. The visit included photographic documentation of all the properties forming the Visual APE of the project. The following studies were also interpreted and reviewed.

1. Puerto Rico State Historic Preservation Office, San Juan, Puerto Rico, "Proyecto de reconocimiento de inventario de centros urbanos de los 78 municipios de Puerto Rico" (MS: San Juan, Puerto Rico, 2020-In Progress).

According to this PRSHPO inventory, Jayuya has 16 properties eligible for inclusion in the NRHP. (See Table 3.)

TABLE 3

[4] Junta de Planificación, Gobierno de Puerto Rico, San Juan, Puerto Rico, "Registro Oficial de Sitios y Zonas Históricas designados por la Junta de Planificación de Puerto Rico Revisado 7 de diciembre de 2022" (MS: San Juan, Puerto Rico, 2022), Access: https://jp.pr.gov/wp-content/uploads/2022/12/REGISTRO-OFICIAL-DE-SITIOS-Y-ZONAS-HISTORICAS-DESIGNADAS-Rev.-DIC-2022.pdf.



Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

JAYUYA NRHP ELIGIBLE PROPERTIES
(AS PER THE PRSHPO 2020 IN-PROGRESS INVENTORY)[5]

NAME	APPROXIMATE DATE	CATEGORY	NRHP CRITERIA
Alcaldía	c 1911	Building (Town Hall)	A and C
Cemetery[6]*	1st half 20th century	Site (Cemetery)	A and C
Tumba del Indio Puertorriqueño	2nd half 20th century	---	---
Escuela Catalina Figueras[7]	1920s	Building (School)	A and C
Edificio Luis Muñoz Rivera[8]	1930s	Building (School)	A and C
Escuela Antonio R Barceló[9]	1st half 20th century	Building (School)	A and C
Escuela Agustín Ortiz Rivera*	2nd half 20th century	Building (School)	A and C
Central Santa Bárbara**	c 1910	Structure (Chimney)	D
Estación de Bomberos	mid-20th century	Building (Fire Station)	C
Iglesia Nuestra Señora de la Monserrate[10]	1930s	Building (Church)	A and C
Plaza de Recreo (Plaza Nemesio Rosario Canales Rivera)	1st half 20th century	Site (Plaza)	A and C
Hospital de Jayuya	1st half 20th century	Building (Hospital)	C
House (Libertad Street corner of PR-141)	c 1939	Building (House)	C
House (3 Vicéns Avenue Street corner Romero Barceló Street)	1st half 20th century	Building (House)	C
Parish House (13 Catalino Figueroa Street)	mid-20th century	Building (House)	C
Teatro Dávila	c 1940	Building (Theater)	C

The properties marked with an asterisk (*) are not within the Visual APE. They are, however, sited within the quarter-mile area. The Central Santa Bárbara is outside the quarter mile area (marked with two asterisks). **None** of the properties listed in Table 2 will be impacted by the proposed project. (See Map 6.)

INSTITUTE OF PUERTO RICAN CULTURE

1. Institute of Puerto Rican Culture, San Juan, Puerto Rico, "Inventario Jayuya" (MS: San Juan: No name, No date).

This document is a handwritten compilation of sites considered "*de interés histórico*" (in English, sites of historic interest) prepared by the IPRC many years ago. Apparently, it is the work of Mr Jorge Luis Carballo. Photographs in the Xerox copy available are of poor quality and the handwritten notes are at times difficult to read. No date appears in any of the pages. The inventory lists sculptural busts and private prehistoric and historic collections, as well as menhirs with prehistoric, incised drawings. (See Table 5. Only properties as per the NRHP – sites, buildings, and objects – were included in this table.)

The inventory refers to each one of these properties as *lugar de interés histórico*. The HCC team has equated this notion of "historic interest" with the NRHP's concept of "significance." There is no information regarding whether this inventory

[5] The NRHP Category and Criteria evaluations appearing in Table 2 were carried out by the HCC Team.
[6] It is assumed the cemetery listed is the Cementerio Histórico, built during the first decade of the 20th century.
[7] The building was designed by Rafael Carmoega (1894-1968), one of Puerto Rico's stellar architects. At present, it houses the Ana G Méndez University.
[8] At present, the building houses the Ana G Méndez University.
[9] At present, the building houses the Ana G Méndez University.
[10] According to the PRSHPO inventory, the Church was designed by Francisco L Porrata Doria (1890-1971), one of Puerto Rico's distinguished architects, during the first half of the 20th century. Research activities found a 1930s photograph of the Church which seems to evidence the building was quite old by this date.

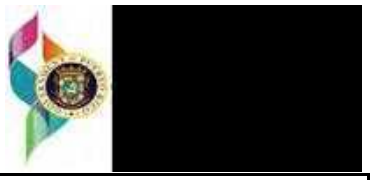
was considered or not a first step in an IPRC study. In fact, there is no information regarding whether it was indeed prepared by this agency. (See Table 4.)

TABLE 4
"INVENTARIO JAYUYA"
(AS PER THE INSTITUTE OF PUERTO RICAN CULTURE?)

NAME	INFORMATION
Tumba del Indio Puertorriqueño	Barrio Pueblo
Monumento al Indio Puertorriqueño	Town Plaza, Barrio Pueblo
Escalinata al Antiguo Hospital	Barrio Pueblo, San Felipe Street
Monumento a Nemesio Canales	Town Plaza, Barrio Pueblo
Monumento al Indígena de Saliente	Escuela Aníbal Ojeda Rábago, Barrio Saliente
Tumba de Chuíto[11]	Cementerio Municipal
Tumba de Eusebio Pérez del Castillo	Cementerio Municipal; Considered the "founder" of Comerío
Residencia de Familia Canales	Originally belonged to Nemesio Rosario Canales
Residencia de Eusebio Pérez del Castillo	PR-144
Chimenea Hacienda Santa Bárbara (1) Chimenea Hacienda Santa Bárbara (2)[12]	PR-144, Kilometer 20.4 Sugar plantation founded in 1851 by Eusebio Pérez del Castillo
Escuela Figueras	Figueras Street; c 1910
Hospital Figueras (Hospital Municipal)	San Felipe Street; Donated by Catalina Figueras
Iglesia Católica Nuestra Señora de la Monserrate	Nemesio Canales Street; Listed as: "*edificio en mampostería del siglo pasado*"
Casa Alcaldía	Barrio Pueblo; Early 20th century
Hacienda Eusebio Batllé	Coffee plantation
Hacienda Gripiñas	Coffee plantation
Piedra Escrita	PR-144, Sector Coabey

[11] Jesús Ríos Robles (1910-1979), known as "Chuíto el de Cayey, *el cantante de tierra adentro*" was a *décima* composer and singer of the traditional Puerto Rican song type. David Morales, "Following the trail of Jesús Ríos Robles, Chuíto el de Cayey," *Our Country Music*, Access: http://www.cuatro-pr.org/node/280.

[12] Central Santa Bárbara, Jayuya, Puerto Rico, Access: https://www.jaimemontilla.com/santa-barbara.



Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

INVENTORIES OF COFFEE PLANTATIONS
HISTORIC AMERICAN ENGINEERING RECORD (HAER) AND
INVENTARIO HISTÓRICO DE INGENIERÍA E INDUSTRIA DE PUERTO RICO (IHIIPR)

1. Sergio Santiago and Luis Pumarada, "HABS/HAER, "Inventory of Coffee Haciendas in Puerto Rico" (MS: University of Puerto Rico, 1977) and "Inventario Histórico de Ingeniería e Industria De Puerto Rico" (MS: University of Puerto Rico, 1977).

Four haciendas are listed in these inventories. (See Table 5.)

TABLE 5
HISTORIC COFFEE PLANTATIONS IN JAYUYA

NAME	ADDRESS	DATE
Hacienda Los Planes	PR-577	Established c 1860
Hacienda Santa Marina	Barrio Mameyes Arriba	Established c 1885
Hacienda Gripiñas	PR-527	Established c 1858
Hacienda Santa Rosa	PR-527 Kilometer 1.5	Established c 1870

SELECTED SOURCES CONSULTED (ARCHITECTURE SECTION)

Institute of Puerto Rican Culture, San Juan, Puerto Rico, "Inventario Jayuya," MS: San Juan: No name, No date.

Junta de Planificación, Gobierno de Puerto Rico, San Juan, Puerto Rico, "Registro Oficial de Sitios y Zonas Históricas designados por la Junta de Planificación de Puerto Rico Revisado 7 de diciembre de 2022" (MS: San Juan, Puerto Rico, 2022), Access: https://jp.pr.gov/wp-content/uploads/2022/12/REGISTRO-OFICIAL-DE-SITIOS-Y-ZONAS-HISTORICAS-DESIGNADAS-Rev.-DIC-2022.pdf.

Morales, David, "Following the trail of Jesús Ríos Robles, Chuíto el de Cayey," *Our Country Music*, Access: http://www.cuatro-pr.org/node/280.

National Register of Historic Places, National Park Service, "Prehistoric Rock Art of Puerto Rico: La Piedra Escrita National Register of Historic Places Nomination," MS: Washington DC, 2003.

Puerto Rico State Historic Preservation Office, San Juan, Puerto Rico, "In-Progress Inventory," MS: San Juan, Puerto Rico, 2020-In Progress.

Santiago, Sergio and Luis Pumarada, "HABS/HAER Inventory of Coffee Haciendas in Puerto Rico," MS: University of Puerto Rico, 1977.

_____, "Inventario Histórico de Ingeniería e Industria De Puerto Rico," MS: University of Puerto Rico, 1977.

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

DETERMINATION OF ELIGIBILITY OF JAYUYA TUC AND VISUAL APE

According to the National Park Service (NPS), eligibility to the NRHP is determined by several characteristics: "The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association . . ." To be eligible, a property must also be associated to an important historic context by meeting at least one of four criteria:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
B. That are associated with the lives of persons significant in our past; or
C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
D. That have yielded, or may be likely to yield, information important in prehistory or history.[13]

Additionally, although there may be exceptions to this rule, a property must be at least 50 years old to merit inclusion in the NRHP.

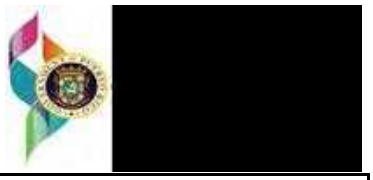
Jayuya TUC

Jayuya TUC is eligible for inclusion in the NRHP as a historic district under Criteria A and C. In terms of Criterion A, although the Municipality was officially founded in 1911, it is associated with "events that have made a significant contribution to the broad patterns" of Puerto Rican history. Despite this late foundational date as a municipality (when compared to other municipalities throughout the Archipelago), Jayuya is one of the oldest settlements of the Puerto Rican Archipelago. There is mention that, as early as the first half of the 16th century, it was considered the middle point and a resting place, the midpoint of the arduous travel route from Caparra to San Germán.[14] Evidence of this relevance was the fact that on 11 July 1883 it was formally constituted as a parish, even though it was part of the Utuado Municipality. A hermitage that existed at the site was formally established by 1878.

Under Criterion C, Jayuya's TUC embodies the "distinctive characteristics of a type, period, and method of construction" associated with urban development. Its layout reflects significant patterns of community planning influenced by Spanish urban design principles of Classical inspiration. The town plaza, church, and government buildings form a cohesive civic core that exemplifies the traditional structure of towns in the Puerto Rican Archipelago. The surrounding properties – including a school, theater, residences, and commercial buildings – showcase a range of architectural styles that document the town's historical development. Collectively, these elements illustrate the continuity of the cultural, urban, and architectural identity, reinforcing the district's historic significance and integrity.

[13] Department of the Interior, National Park Service, National Register of Historic Places, "National Register Bulletin How to Apply the National Register Criteria for Evaluation," pp 2; 12-24, Access: https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf.

[14] At this time, Puerto Rico was divided into two *partidos*, San Juan Bautista and San Germán de Auxerre. Since Caparra, the first *ciudad del Puerto Rico*, was abandoned by 1521 when the capital was moved to San Juan Islet, and the dates mentioned are 1533-1534, Jayuya could have been the middle point between present day Old San Juan, the first city to be founded in the Archipelago and San Germán, the second one.



Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Determination

Direct Effects: A direct effect is expected. There is potential for underground archaeological finds in areas where the solar lighting poles will be installed, reaching depths of up to 10 feet. There is potential for underground archaeological finds at Nemesio Canales Street from Mattei and Canales streets intersection to Canales Street and PR-141 intersection, and at PR-141 from Canales Street and PR-141 intersection to the Plaza de la Música.

Indirect Effects: No indirect effect is expected. The historic buildings, sites and district within the visual APE will not be visually affected by the undertaking.

The Program has determined that project actions will not affect the historic properties within the Area of Potential Effects. This determination is based on the evaluation of project documentation, and identified historic properties, which resulted in five key findings:

1. The construction activities of the undertaking will attempt to bring various non-conforming curbs and sidewalks up to accessible standards. No visible historic materials are to be replaced by this action, and no significant direct disturbance of visible historic materials is expected.
2. The demolition activities related to the replacement of concrete curb and sidewalk pavement are described as shallow, ranging between 4 to 6 inches deep into material that is visibly not historical. However, it is expected that there will be disturbances to undiscovered historical materials underground in the areas where the solar lighting poles will be installed on Canales and PR-141 streets. These will reach a maximum depth of 10 feet.
3. The elevation of the proposed construction is limited to approximately 6 inches above the crown of the road. This limited elevation reduces the visual APE to the viewsheds of the different streets. No significant visual disturbances inside or outside those viewsheds that can alter the character of the identified historic properties, including the district as a unit, are expected.
4. The staging area activities will take place on paved surfaces and are not expected to cause the disturbance of underground historical material. Visual disturbances from staging activities will not be permanent and will primarily take place outside the area's main viewsheds.
5. Audible effects are not expected, apart from temporary typical construction noise.
6. The potential for finding historic cultural remains below the surface in the project area is high. Looking at the graphic documentation we can see that the urban layout has not varied greatly. Some sections of the roads within the project area were developed or were widened after 1936, possibly over urbanized areas or where there is the possibility of finding historic cultural remains associated with the early settlement of the town of Jayuya, such as water wells, septic tanks, canals, foundations of early structures, dumpsters with historic artifacts, among others. The streets are the following: PR-144 between Libertad Street and PR-141; San Felipe Street; the western extension of Catalino Figueroa Street; PR-532; the northern extension of Torrado Street; the northern area of Mattei Street; the area of the Jayuya River pedestrian bridge, Hoyo Frío Street and the northeastern area of Canales Street. Despite the modifications that the project area has undergone due to the installation of public utilities, there could be archaeological resources in the project area with research potential. However, it is unlikely that remains will be documented under the sidewalks because the current sidewalks will be demolished and new sidewalks will be built in the same area. On the other hand, new solar lights will be installed on Canales Street and PR-141, which will require excavation to a depth of 10 feet. It is in this area where the lights will be installed that additional archaeological studies are necessary to conclusively determine their sensitivity (Refer to Figure 18, blue line). Any historical archaeological remains found during construction must be documented and evaluated.

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Recommendation
The Puerto Rico Department of Housing requests that the Puerto Rico SHPO concur that the following determination is appropriate for the undertaking:

☐ **No Historic Properties Affected**

☒ **No Adverse Effect**
Condition: Archaeological supervision by an archaeologist will be required during all excavations for the installation of the solar lighting poles.

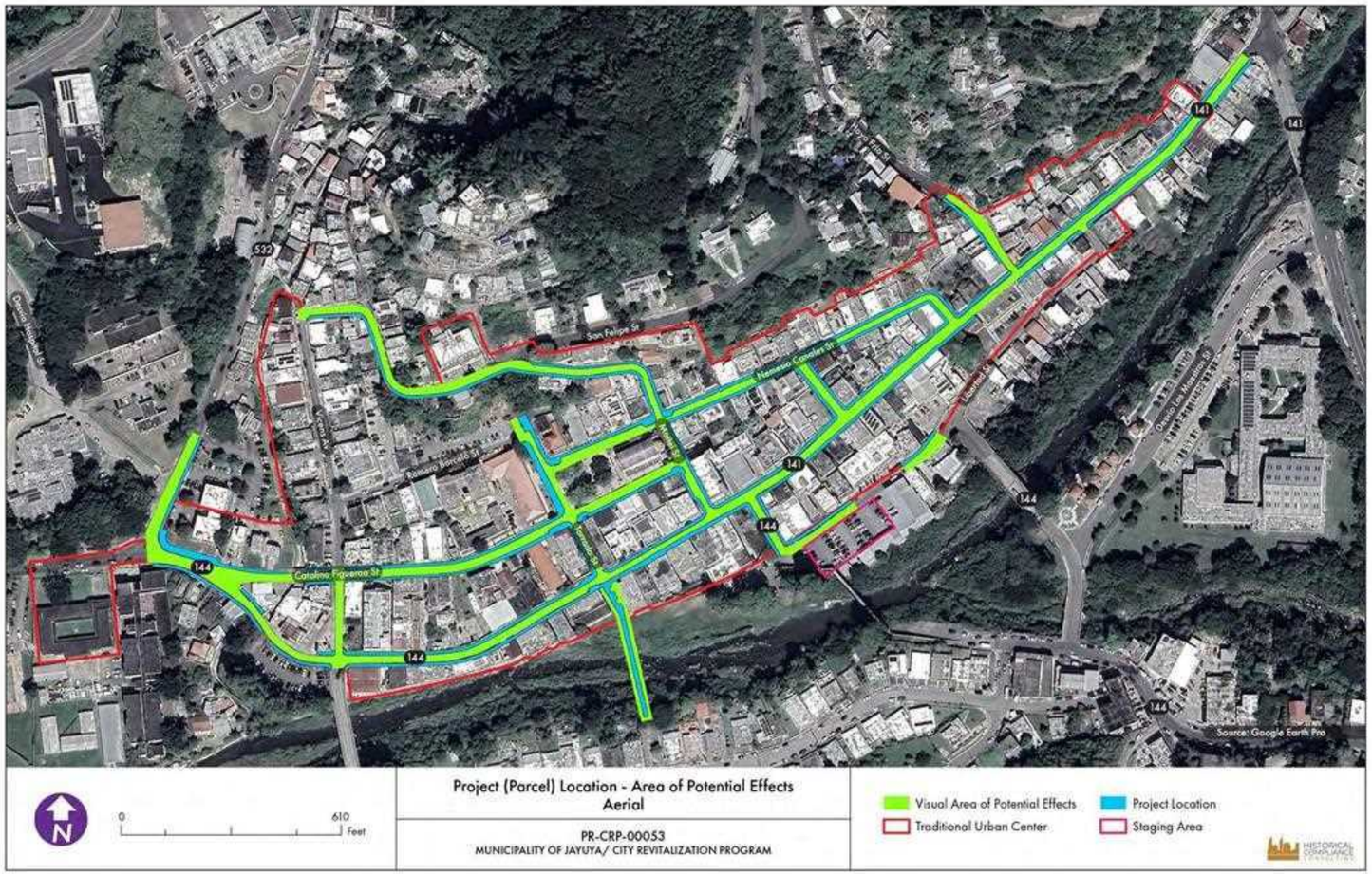
☐ **Adverse Effect**
Proposed Resolution: N/A

This Section is to be Completed by SHPO Staff Only

The Puerto Rico State Historic Preservation Office has reviewed the above information and: ☐ **Concurs** with the information provided. ☐ **Does not concur** with the information provided.	
Comments:	
Carlos Rubio-Cancela State Historic Preservation Officer	Date:

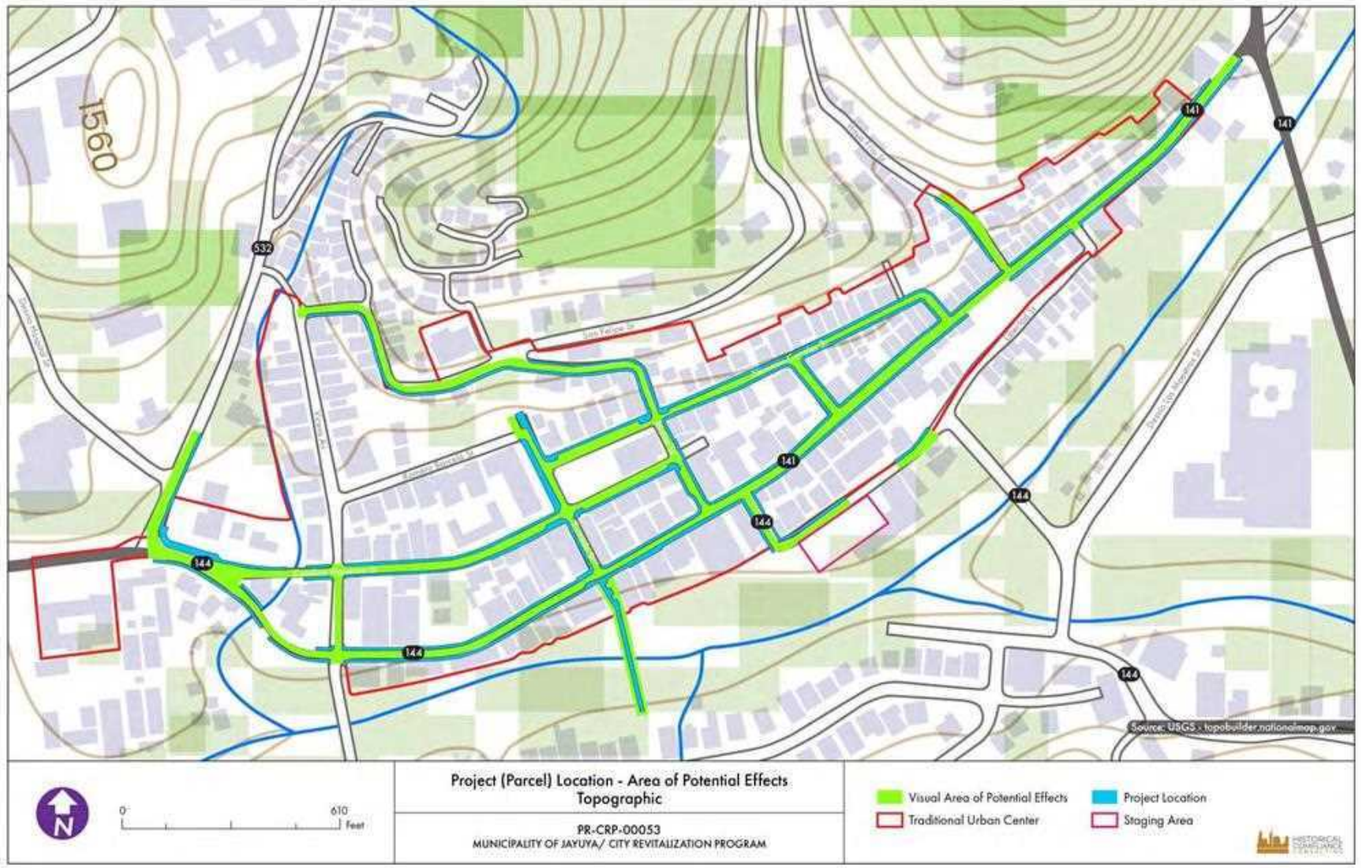
Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Map 1 – Project (Parcel) Location – Area of Potential Effect Map (Aerial)



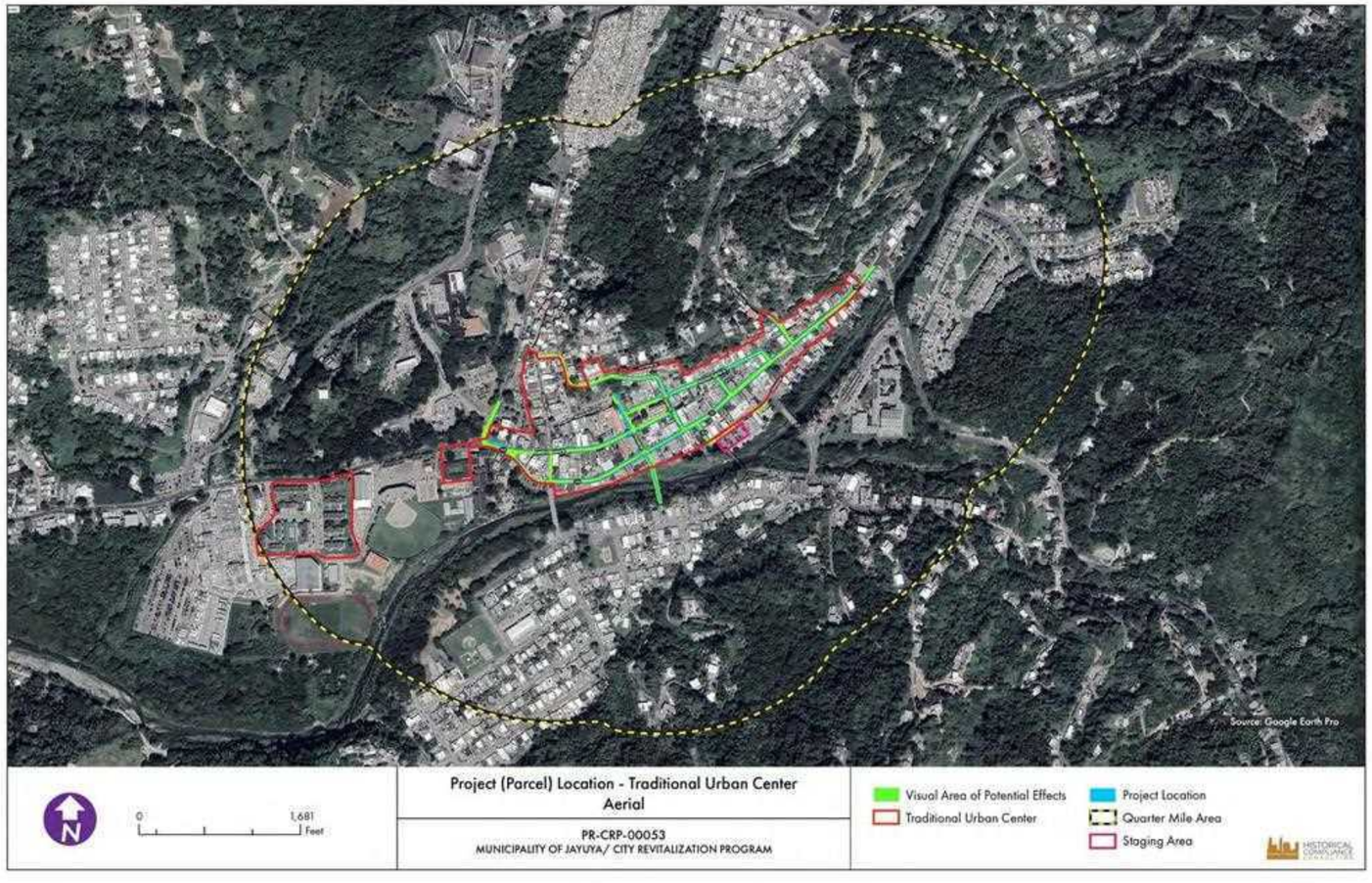
Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Map 2 – Project (Parcel) Location – Area of Potential Effect Map (USGS Topographic)



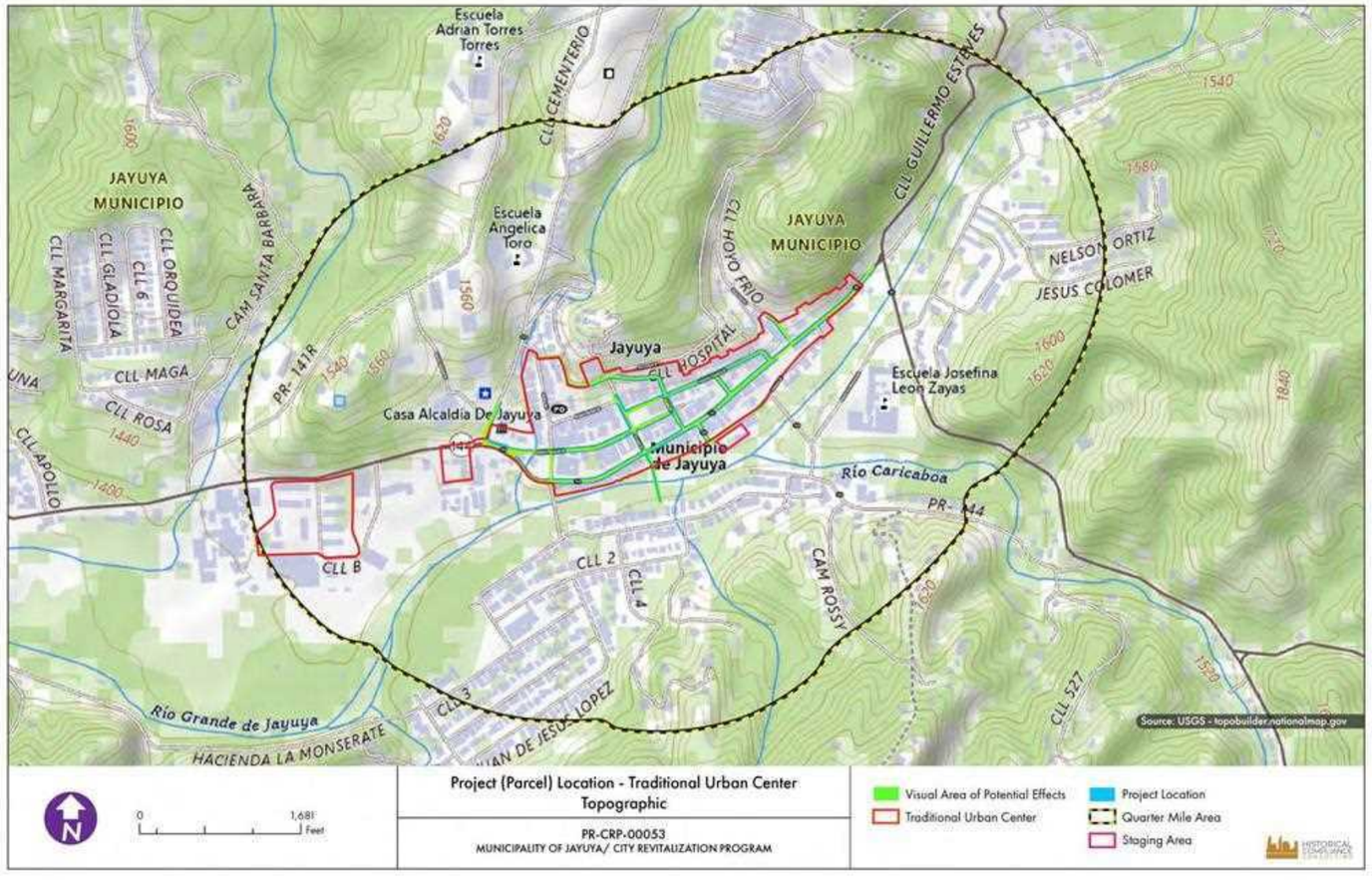
Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Map 3 – Project (Parcel) Location – Traditional Urban Center (Aerial)



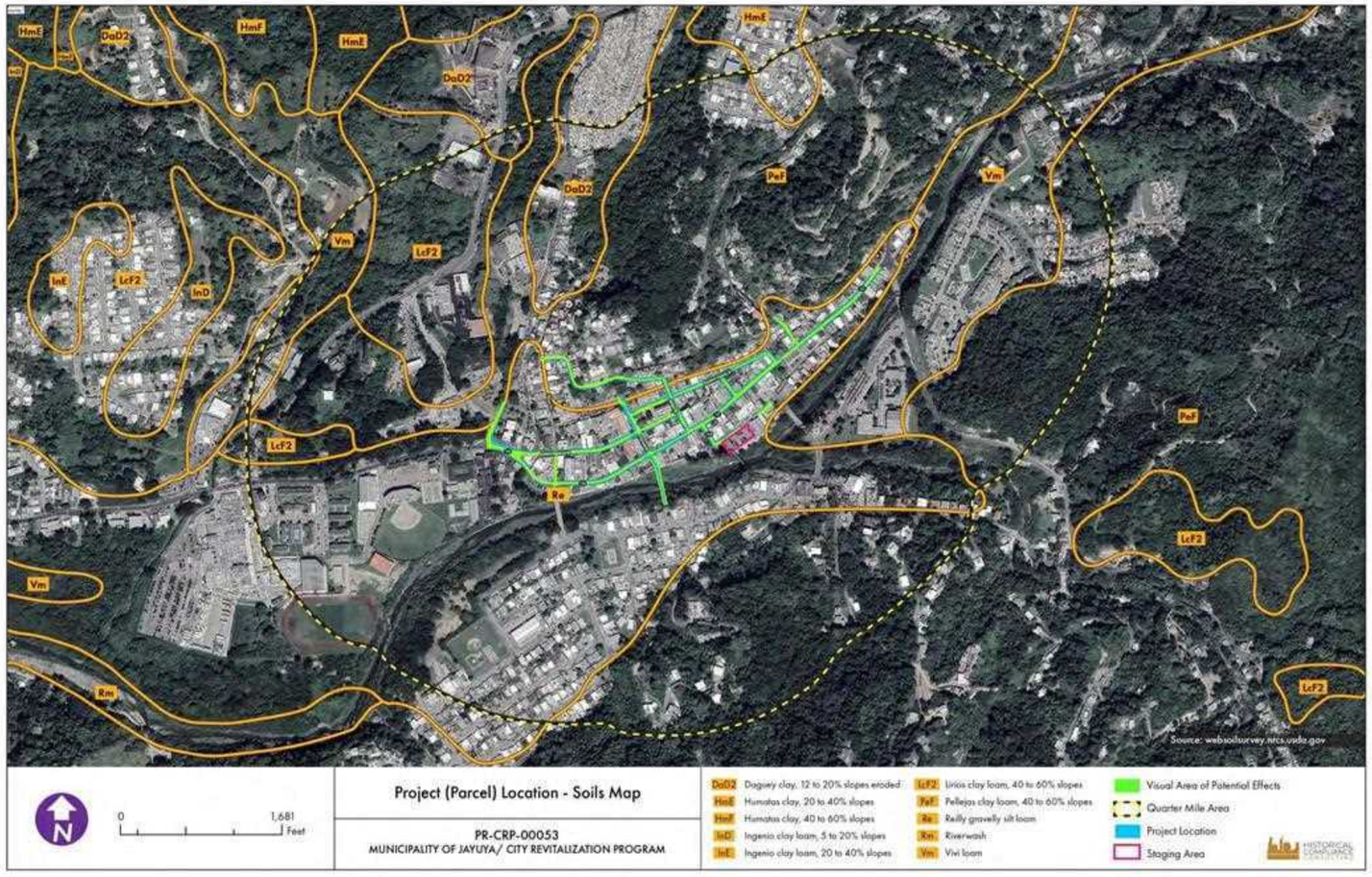
Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Map 4 – Project (Parcel) Location – Traditional Urban Center (USGS Topographic)



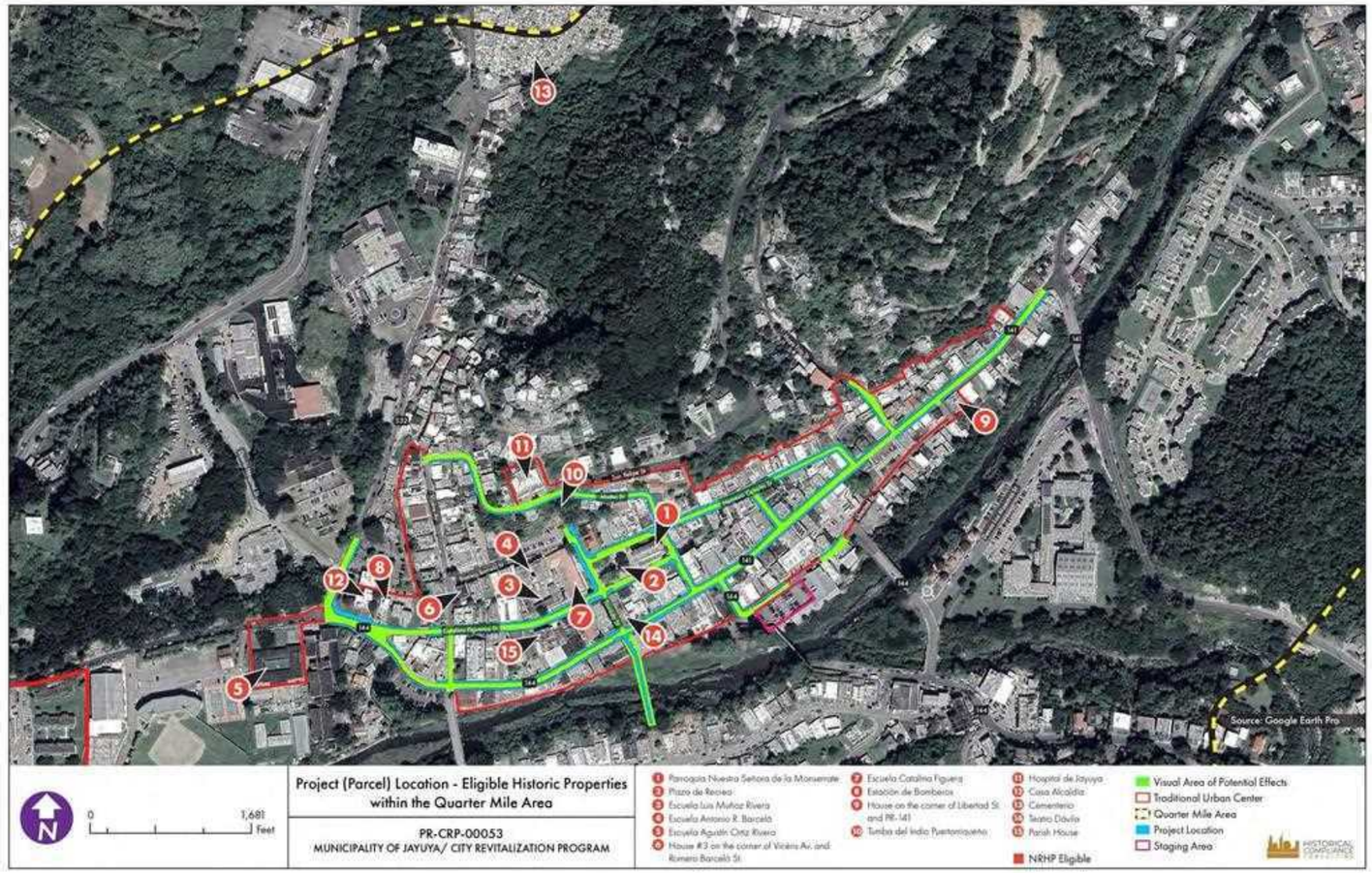
Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Map 5 – Project (Parcel) Location – Soils Map (Aerial)



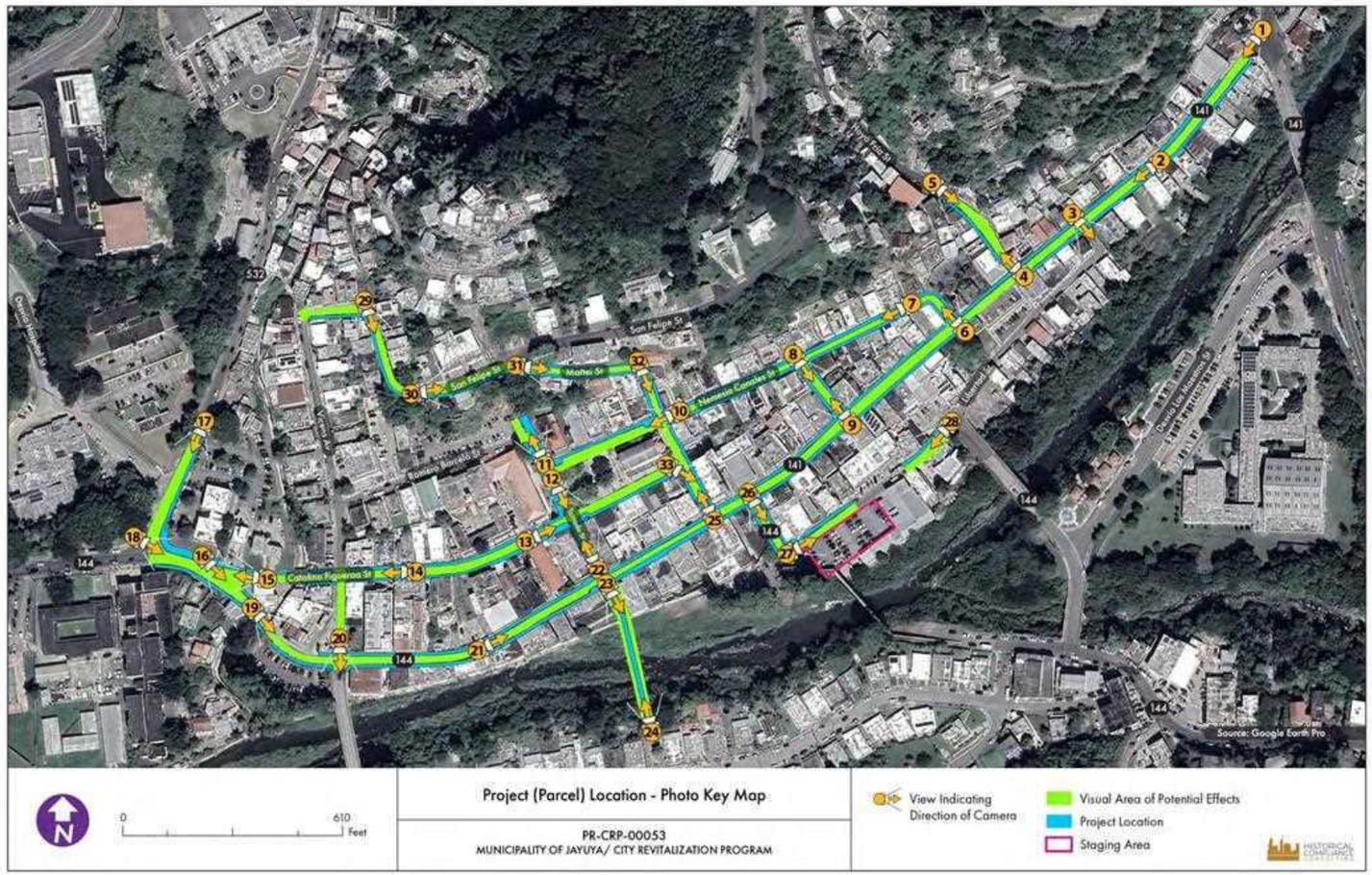
Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Map 6 – Project (Parcel) Location with Previous Identified Historic Properties Map (Aerial)



Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Map 7– Project (Parcel) Location – Photo Key Map



Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

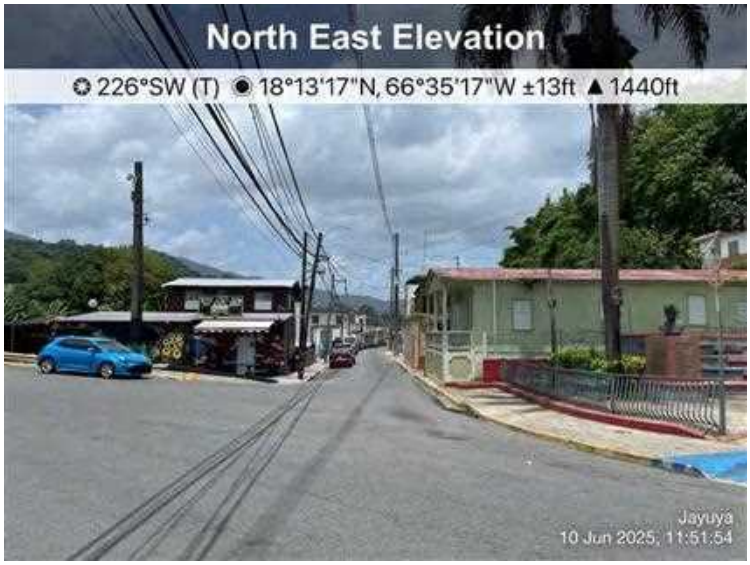


Photo #: 1 **Date**: 06/10/25	**Description:** View of entrance to Jayuya's TUC along PR-141, looking southwest.

Photo #: 2 **Date:** 06/10/25	**Description:** View of PR-141, looking southwest**.**

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Photo #: 3 **Date:** 06/10/25	**Description:** View of Libertad Street and PR-141 intersection, looking southeast**.**

Photo #: 4 **Date:** 06/10/25	**Description:** View of Hoyo Frío Street and PR-141 intersection, looking northwest.

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Photo #: 5 **Date:** 06/10/25	**Description:** View of Hoyo Frío Street, looking southeast**.**

Photo #: 6 **Date:** 06/10/25	**Description:** View of Nemesio Canales Street and PR-141 intersection, looking northwest.

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Photo #: 7 **Date:** 06/10/25	**Description:** View of Nemesio Canales Street, looking southwest.

Photo #: 8 **Date:** 06/10/25	**Description:** View of Nemesio Canales Street and Massini Avenue intersection, looking southeast.

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Photo #: 9 **Date:** 06/10/25	**Description:** View of Massini Avenue and PR-141 intersection, looking northwest.

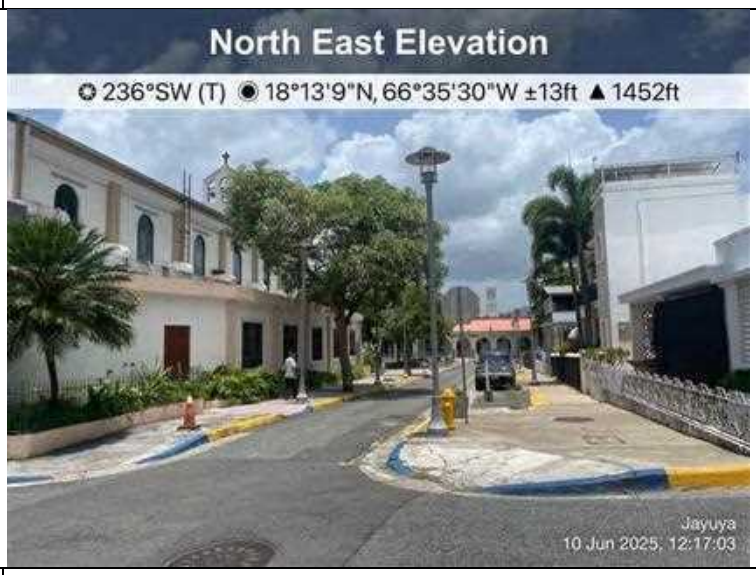


Photo #: 10 **Date:** 06/10/25	**Description:** View of Nemesio Canales and Mattei Streets intersection, looking southwest.

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Photo #: 11 **Date:** 06/10/2**5**	**Description:** View of Nemesio Canales and Torrado Streets intersection, looking northwest.

Photo #: 12 **Date:** 06/10/25	**Description:** View of Torrado Street, looking southeast**.**

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Photo #: 13 **Date:** 06/10/25	**Description:** View of Catalino Figueroa Street, looking northeast.

Photo #: 14 **Date:** 06/10/25	**Description:** View of Catalino Figueroa Street, looking west.

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Photo #: 15 **Date:** 06/10/25	**Description:** View of Catalino Figueroa Street, approaching PR-144 intersection, looking west.

Photo #: 16 **Date**: 06/10/25	**Description:** View of Catalino Figueroa Street and PR-144 intersection, looking southeast.

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Photo #: 17 **Date:** 06/10/25	**Description:** View of PR-532, looking southwest**.**

Photo #: 18 **Date:** 06/10/25	**Description:** View of PR-144, looking southeast**.**

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Photo #: 19 **Date:** 06/10/25	**Description:** View of PR-144, looking southeast.

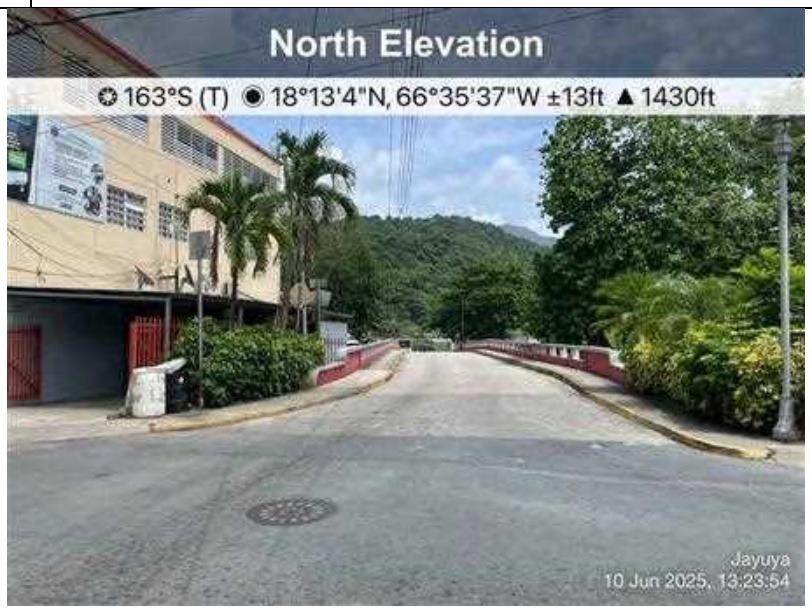


Photo #: 20 **Date:** 06/10/25	**Description:** View of Vicéns Avenue and PR-144 intersection, looking south.

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Photo #: 21 **Date:** 06/10/2**5**	**Description:** View of PR-144, looking northeast.

Photo #: 22 **Date:** 06/10/25	**Description:** View of Torrado Street and PR-144, looking northwest**.**

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Photo #: 23 **Date:** 06/10/25	**Description:** View of pedestrian bridge from PR-144, looking southeast.

Photo #: 24 **Date:** 06/10/25	**Description:** View of the pedestrian bridge, looking northwest.

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Photo #: 25 **Date:** 06/10/25	**Description:** View of Mattei Street and PR-144 intersection, looking northwest**.**

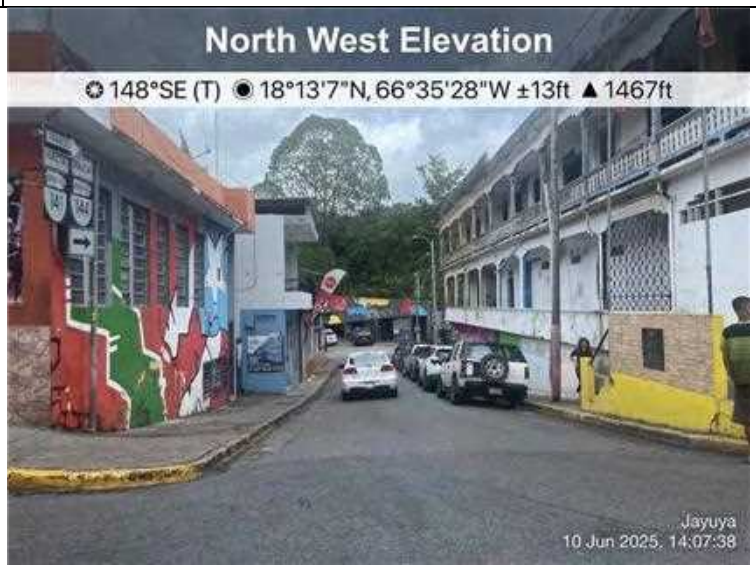


Photo #: 26 **Date:** 06/10/25	Description: View of detour of PR-144. PR-141 continues to the left, looking southeast.

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Photo #: 27 **Date:** 06/10/25	**Description:** View of Libertad Street, looking northeast**.**

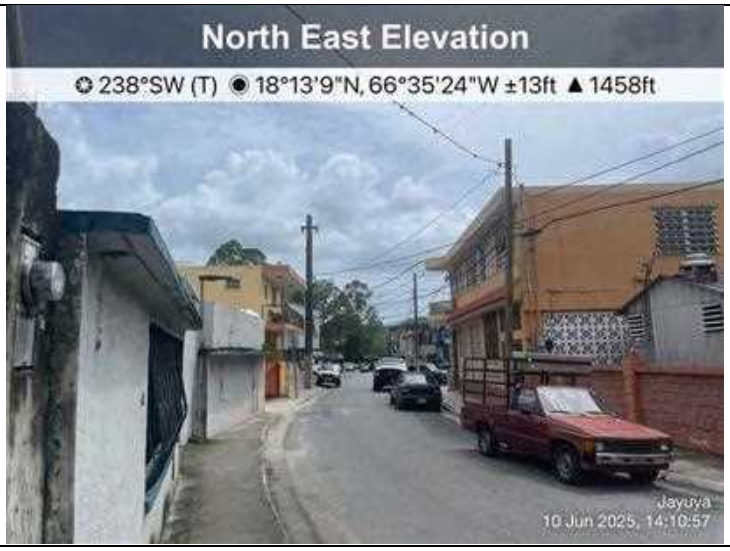


Photo #: 28 **Date:** 06/10/25	**Description:** View of Libertad Street, looking southwest.

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Photo #: 29 **Date:** 06/10/25	**Description:** View of San Felipe Street, looking south.

Photo #: 30 **Date:** 06/10/25	**Description:** View of San Felipe Street, looking east**.**

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Photo #: 31 **Date:** 06/10/25	**Description:** View of Mattei Street, looking east.

Photo #: 32 **Date:** 06/10/25	**Description:** View of Mattei Street approaching the corner Nemesio Canales Street, looking southeast.

Subrecipient: Municipio Autónomo de Jayuya	
Project Name: Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya	Project ID: PR-CRP-000053

Photo #: 33	**Description:** View of Catalino Figueroa and Mattei Streets, looking southeast.
Date: 06/10/25	

PR-CRP-000053

Mejoras Aceras, Paseo Peatonal Ventana al Río y Remoción de Adoquines del Casco Urbano del Municipio de Jayuya

Jayuya, Puerto Rico

90% Design Drawings

SATELLITE MAP

SCALE: 1:20,000

LAMBERT COORDINATES: X=183,333.357 Y=242,231.231 NAD 83

FLOOD MAP

SCALE: 1:5,000

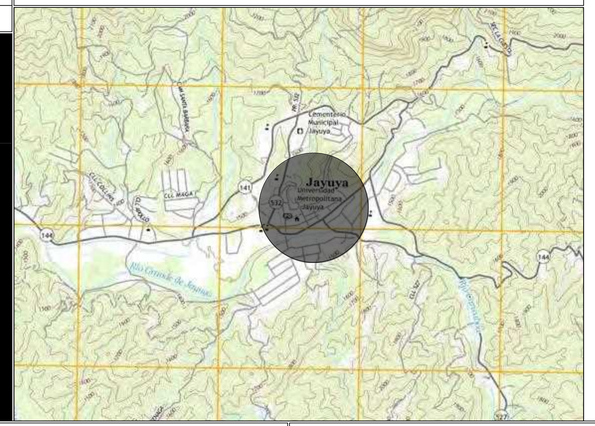
MAP NUMBER: 72000C1105H ZONE X

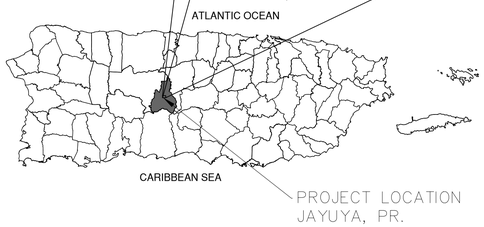
REVISION DATE: APRIL 19, 2005

USGS TOPOGRAPHIC MAP

SCALE: 1:20,000

LAMBERT COORDINATES: X=183,333.357 Y=242,231.231 NAD 83





CONSTRUCTION PLANS
FOR
SIDEWALK REVITALIZATION JAYUYA URBAN CENTER PR-CRP-00053
IN
JAYUYA, PR.
Monday, April 15, 2024

PREPARED FOR
MUNICIPALITY OF JAYUYA
JAYUYA, PR.
CONTACT: PMO. VILMA I. PEREIRA, P.E.
TEL. 787-771-5071
EMAIL: VILMA.PEREIRA@AEGROUP-PR.COM

ENGINEER
DELGADO TORRES ENGINEERING, LLC.
URB. LINDA MAR # 53 C. LINDA MAR
MANATI, PR. 00674
CONTACT: JOSE A. DELGADO, PE.
TEL. 787-854-7591
EMAIL: JDELGADO@DELTORRE-ENG.COM

0 500 m 1000 m 2000 m

SCALE: 1:20000

PR-CRP-000053 Sheet Index Table		
Sheet No.	**Sheet Count**	**Sheet Title**
C100	1	Title Sheet
GN01	1	General Notes
S101-S102	2	Topography (by Others)
C200	1	Overview Plan
C301-C305	5	Demolition Plan
C401-C406	6	Site Plan
C501-C521	21	Grading & Paving Dtl
DTL-01	1	Curb & Gutter Details
C601-C605	5	Construction Sequence
E01	1	Luminaire Detail
C701-C705	5	Utility Plan
C801-C805	5	Erosion Control Plan
Standard Detail Sheets		
MOT 01-08	8	Maintenance of Traffic
RDWY 01-08	8	Roadway Standards
SW3P 01-04	4	Erosion Control Plan

90% DESIGN

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE TO OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

TITLE SHEET

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: 4/15/2024

PROJECT NO.: DTE23-004

SHEET NO.: C100

G:\Users\jdelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-00053\dte23-004 cad\production drawings\c100 title sheet.dwg

C:\Users\josedelgado\Onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\gn01 general notes.dwg

GENERAL NOTES:

1. Prior to any construction, the Contractor shall familiarize himself with the Contract Documents and Specifications, the Plans, including all notes, the PRDOT Standard Details and Specifications and any other applicable standards or specifications relevant to the proper completion of the work specified. Failure on the part of the Contractor to familiarize himself with all Standards and Specifications pertaining to this work shall in no way relieve the Contractor of responsibility for performing the work in accordance with all such applicable Standards and Specifications.

2. The Contractor shall have in his possession, prior to construction, all necessary permits, licenses, etc. The Contractor shall have at least one set of approved Engineering Plans and Specifications on-site at all times. The Contractor shall notify the Municipality of Jayuya 48 hours prior to the commencement of any work.

3. All materials and construction shall conform to the PRDOT Standard Construction Details for Paving, Drainage, Water and Sanitary Sewer Facilities and be installed in accordance with the City Specifications and the Puerto Rico Department of Transportation. These specifications shall be made part of these plans.

4. In the event an item of work is not covered in the sheets provided in this set, Construction Standards, Specifications and Details; or the Puerto Rico Department of Transportation (PRDOT); the City Engineer or the Engineer of records shall have the final decision on all materials, methods and procedures.

5. Construction inspection may be performed by representatives of the Owner, Engineer, City, Geotechnical Engineer and Reviewing Authorities and Agencies. Unrestricted access shall be provided to them at all times. The Contractor is responsible for understanding and scheduling required inspections.

6. All contractors must confine their activities to the work area. No encroachments outside of the defined work area will be allowed, unless specifically noted on the plans. Any damage resulting therefrom shall be the Contractor's responsibility to repair.

7. It will be the responsibility of each contractor to protect all existing public and private utilities throughout the construction of this project. The Contractor shall contact the appropriate utility companies for line locations prior to commencement of construction and shall assume full liability to those companies for any damages caused to their facilities.

8. The Contractor shall be responsible for providing the required construction staking necessary to complete the construction in accordance with the plans and specifications.

9. The Contractor shall be responsible for providing and maintaining all necessary barricading and all other warning and safety devices to protect the public safety and health until all work has been completed and accepted.

10. If unforseen problems or conflicts are encountered in the course of construction, for which an immediate solution is not apparent, the Engineer and Owner shall be notified immediately.

11. The Contractor shall be responsible for field locating existing utilities and improvements prior to construction. The locations of existing utilities shown on these plans are approximate. The Contractor shall call 1-800-344-8377 (DIG-TESS), other utility locating services or the underground utility companies a minimum of 48 hours prior to beginning work.

12. The Contractor shall employ an Owner approved engineering testing laboratory for all required density, construction and materials testing and water bacteria testing. The testing laboratory shall make tests necessary to insure that construction is in accordance with the approved plans and specifications. Any retesting necessary to insure that a prior failing test meets the plan requirements, shall be at the Contractor's expense. The testing laboratory shall submit testing reports to the Engineer, the Owner and the Municipality.

13. The existing utilities shown on these plans have been located from reference information obtained from the respective owner of the utility. The Engineer and Owner do not accept responsibility for the utility locations as shown. It shall be the responsibility of the Contractor to verify the location of all existing utilities prior to construction, to take necessary precautions to protect all facilities encountered and to notify the Engineer promptly of any conflicts with existing facilities.

14. The Contractor shall be responsible for removing any existing structures, fences, debris or trees that are located within the boundaries of this project, unless otherwise noted on the plans.

15. The Contractor shall remove and dispose of all unsuitable excavated materials and construction debris at no additional cost to the Owner.

16. The Contractor shall be solely responsible for maintaining trench safety requirements in accordance with the trench safety plan prepared by others and in accordance with City Standards, PR State Law and the Occupational Safety and Health Administration Standards.

17. All concrete shall meet the minimum compressive strengths as noted and specified on the plans or other specifications. As a minimum, no concrete shall have a compressive strength less than 3,000 psi at 28 days.

18. Refer to the architectural plans for building and foundation dimensions.

19. The Contractor shall be responsible for providing a two (2) year, 100% maintenance bond to the Owner for all improvements associated with the approved plans.

GRADING NOTES:

1. All grading shall be performed in accordance with these plans and the geotechnical report prepared by others.

2. New finished contours shown are top of paving in areas to receive pavement and top of soil in areas to be seeded.

3. Areas outside of parking lot perimeter shown to be seeded shall receive a minimum of four (4) inches of top soil (or to depth identified on the Landscaping Plans). This topsoil to be placed and leveled by the grading contractor. This material may be stockpiled during stripping operations.

4. Rough grading elevations shall be as follows:
   A. Four (4) inches below finished contours in seeded areas.
   B. Six (6) inches below finished contours in paved areas, unless noted otherwise.

5. Dimensions on buildings are for grading purposes only and are not intended for use in laying out the building foundation.

6. Contractor shall pay all costs associated with raising or lowering existing utility appurtenances as required to match finished grades in conformance with City of Frisco Standards and these plans.

7. The Contractor shall use whatever measures are required to prevent silt and construction debris from leaving the site. Contractor shall comply with all Federal, State and Local erosion, conservation and siltation regulations. Contractor shall remove all temporary erosion control devices upon completion of permanent drainage facilities and the establishment of vegetation sufficient to prevent erosion. Any damage to adjacent properties; downstream channels, ponds or lakes; or wildlife shall be corrected by the Contractor at his expense.

8. The Contractor shall take all available precautions to control dust at no additional cost to owner.

9. All excavation is unclassified and shall include all materials encountered.

10. All areas not covered by the building, paving or proposed landscaping shall be grassed on this lot including adjacent street parkways.

11. Prior to the commencement of construction activities, the Contractor shall stake out and mark the items established by the site plan.

12. Temporary erosion control devices shall be installed prior to the commencement of grading activities. Contractor shall inspect and maintain all temporary erosion control devices as required.

13. All disturbed areas shall be seeded with hydromulch unless otherwise noted. The Contractor shall maintain as much existing vegetation as possible. Grass buffer strips shall remain around the perimeter of the property to aid in the filtering of sedimentation. Sufficient temporary or permanent groundcover shall be established on all slopes, berms and swales to prevent erosion.

14. All site grading and earthwork shall comply to the geotechnical report recommendations.

15. These specifications do not include grading and preparation of the building foundation area. The Contractor shall confirm the foundation compaction, moisture control, select fill and/or treatment with the Owner, the project geotechnical engineer and structural engineer.

16. Areas within five (5) feet horizontally of the parking pavement and/or embankment slopes adjacent to the parking area shall be constructed as per the project geotechnical engineer's recommendations. The specifications identified below are minimum requirements and shall be superseded by the project geotechnical engineer's recommendations if in conflict. The specifications are as follows:

   A. The area shall be stripped of vegetation a minimum of six (6) inches or as directed by the project geotechnical engineer and proofrolled. Proofrolling consists of rolling the entire area of prepared subgrade with a heavy (25 ton or greater total weight) pneumatic tired roller. The roller shall make several passes over the area. Any soft, wet or weak areas which do not compact by proofrolling shall be removed and recompacted as outlined herein. The proofrolling operation must be performed under the observation of a qualified geotechnical engineer or his representative and density control tested.

   B. On-site soils with a plasticity index (PI) anticipated to be greater than 15 and less than 20, which includes any dark colored surface clay soils, can be used as grade raise fill outside the proposed building area. These clay soils shall be compacted to a dry density of at least 95 percent of standard proctor density. The compacted moisture content of the clays during placement shall be between optimum and four (4) percentage points above optimum.

   C. Compaction shall be accomplished by placing the fill in six (6) to eight (8) inch thick lifts and compacting each lift to at least the minimum specified dry density. It is imperative that the fill particle sizes be less than six (6) inches in diameter. If larger clods are encountered during grading, these clods must be broken down or removed prior to final placement of the fill.

   D. In order for the fill materials to perform as intended, the fill material must be placed in a manner which produces a good uniform fill that is compacted within the density and moisture ranges outlined above. Field density tests shall be performed to confirm this performance as construction progresses. For the proposed parking and driveway areas, testing at a frequency of no less than one (1) test per each lift per each 5,000 square feet shall be provided.

17. All underground work shall be completed prior to subgrade preparation and placement of paving.

PAVING NOTES:

1. All dimensions are to the face of curb unless shown otherwise.
2. All proposed curb radii are 2.0 feet unless shown otherwise.
3. The Contractor shall remove and replace any concrete pavement within five (5) days of saw cutting the existing pavement.
4. The use of fly ash is not allowed in the concrete mix design.
5. All subgrade shall be tested for sulfates prior to the placement of concrete pavement. If sulfates are found, any treatments shall be in accordance with the recommendations of the geotechnical engineer.
6. All concrete shall meet the minimum compressive strengths as noted and specified on the plans or other specifications. Unless noted otherwise, the concrete pavement shall have a minimum compressive strength of 3,600 psi at 28 days.
7. It is the Contractor's responsibility to ensure compliance with all handicapped accessibility requirements, including signage, textures, colorings, markings and slopes of ADA accessible routes and parking spaces.
8. All signs, pavement markings and other traffic control devices shall conform to the Texas Manual on Uniform Traffic Control Devices.
9. All existing signs within the limits of the proposed pavement shall be relocated a minimum of five (5) feet from the proposed back of curb.
10. The contractor shall submit a pavement jointing plan to the Engineer for approval prior to the placement of concrete paving.
11. Saw joints shall be made as soon as the new concrete can support the weight of the machine and operator without tracking.

STORM DRAINAGE NOTES:

1. Drainage improvements to the existing system is not included in this project unless directed by the Engineer.
2. All storm drainage pipe shall be Class III RCP, C-76, unless shown otherwise.
3. The Contractor shall use Gifford-Hill "B-2" (Radius Pipe) or equal for all horizontal or vertical curves with a radius greater than 100 feet. Pre-fabricated bends shall be used if the radius is less than 100 feet.
4. Use pre-fabricated Wyes at all pipe intersections and concrete collars at pipe size changes if a junction device (manhole, junction box, inlet, etc.) is not used.
5. Open ends of storm drainage pipes shall be adequately protected at the end of each day by the contractor.
6. Water jetting is not allowed.
7. All embedment and backfill shall be wetted to approximate optimum moisture and compacted in 8 inch lifts to 95% Standard Proctor Density or as directed by the Geotechnical Engineer. Density tests shall be obtained for each lift and for each 150 lineal feet of trench or increment thereof or as directed by the Geotechnical Engineer.
8. All excavation is unclassified and shall include all materials encountered.

EROSION CONTROL NOTES:

1. Erosion control design and specifications are included in these drawings in accordance with the minimum requirements of the City of Frisco. Responsibility for compliance with State and Federal Best Management Practices (BMPs), the implementation of erosion control BMP measures and/or the filing of permits or notices shall solely rest with the Contractor(s) and Owner(s). The Junta de Calidad Ambiental (JCA) requires permits for both small and large construction sites under the authority of the Environmental Protection Agency (EPA) General Permit, if required. General Permit requirements will require the developer/owner and responsible Contractor(s) to complete the following:

   Small Construction Sites – will disturb (alone or as part of a larger development) between 1 acre and 5 acres of land.
   A. Must develop and implement a Storm Water Pollution Prevention Plan (SWPPP)
   B. Must post copy of the Construction Site Notice at the project site.
   C. Must submit a copy of the JCA Construction Site Notice to the overseer Govermental Agency, if required.

   Delgado Torres Eng. LLC., assumes no responsibility or liability for failure to do so by the Owner, Developer or Contractor.

2. The Contractor shall obtain a General Permit in compliance with Govermental Agency and implement a SWPPP according to permit requirements and applicable laws.
3. The Contractor shall preserve existing vegetation when possible and must stabilize any disturbed area where construction activity has temporarily or permanently ceased. The stabilization must take place within 14 days of the end of activities unless construction will resume within 21 days.
4. All of the erosion control devices shown on the erosion control plan for the project shall be installed prior to the start of land disturbing activities.
5. If the erosion control plan as approved cannot control erosion and off-site sedimentation from the project, then the erosion control plan will be required to be revised and/or additional erosion control devices will be required on-site.
6. The Contractor shall use whatever measures are required to prevent silt and construction debris from leaving the site. Contractor shall comply with all Federal, State and Local erosion, conservation and siltation regulations. Contractor shall remove all temporary erosion control devices upon completion of permanent drainage facilities and the establishment of vegetation sufficient to prevent erosion. Any damage to adjacent properties; downstream channels, ponds or lakes; or wildlife shall be corrected by the Contractor at his expense.
7. The Contractor shall take all available precautions to control dust at no additional cost to owner.

DRAWING GENERAL NOTES:

1. metric system has been used throughout the project unless otherwise specified.
2. all elevations are referred to mean sea level and given in meters.
3. all horizontal coordinates used are meters, NAD83(Rev. 1993) system.
4. North indication points to true north.
5. New construction shall meet horizontal and vertical alignments of existing facilities.
6. Attention is called to all bidders that there are utilities installed in the construction area of this project, which are the property of the fallowing entities p.r. telephone co. puerto rico electric & power authority and the puerto rico aqueduct sewer authority and others. although these utilities were shown on the plans using the information obtained from the respective owners, the contractor shall exercise utmost care not to cause any damage to these utilities and shall coordinate with the owners of such utilities for the exact location of the same or any other that might be in the area prior to the commencement of any work in the vicinity of these utilities.
7. For standard models drawings, refer to the standard drawings book adopted by the puerto rico highway and transportation authority.
8. The lateral offset of the signs to be installed shall be according to the standards, recommendations and options indicated in Chapter 2a of the MUTCD 2023 edition.
9. Historical buildings are identified (from the Oficina Estatal de Conservacion Historica de PR) in the plans, although is the sole responsibility of the contractor to obtain any permits to perform any work adjacent to these buildings. the contractor shall not impact in any way these historical buildings to complete the construction shown here.

[redacted]

ABBREVIATIONS

ABUT.	ABUTMENT
AGG.	AGGREGATE
AH.	AHEAD
AL.	ALUMINUM
ASB.	ASBESTOS
ASPH.	ASPHALT
BK.	BACK
B.L.	BASE LINE
B.W.F.	BARBED WIRE FENCE
B.V.	BALL VALVE
B. & S.	BELL & SPIGOT
B.M.	BENCH MARK
BIT. CONC.	BITUMINOUS CONCRETE
BLDG.	BUILDING
BW	BOTTOM OF WALL
C.I.	CAST IRON
C.I.P.	CAST IRON PIPE
C.B.	CATCH BASIN
C.L.	CENTER LINE
C. TO C.	CENTER TO CENTER
CTD.	COATED
COL.	COLUMN
COM.	COMMUNICATION
CONC.	CONCRETE
C.O.A.	CONTROL OF ACCESS
COORD.	COORDINATES
C.M.	CORRUGATED METAL
C.M.P.	CORRUGATED METAL PIPE
CU.M.	CUBIC METER
CULV.	CULVERT
C.S.	CURVED TO SPIRAL
C.	CUT
DEG.	DEGREE
DIA.	DIAMETER
DIM.	DIMENSION
DWG.	DRAWING
DWY.	DRIVEWAY
ELEV.	ELEVATION
E. TO E.	END TO END
ENGR.	ENGINEER
EST.	ESTIMATE
EXC.	EXCAVATION
EXIST.	EXISTING
E.G.	EXISTING GROUND
EXP.	EXPANSION
EXT.	EXTERNAL
EGL	ENERGY GRADE LINE
EOP	EDGE OF PAVEMENT
F. TO F.	FACE TO FACE
F.A.	FEDERAL AID
F.A.P.	FEDERAL AID PRIMARY
F.A.S.	FEDERAL AID SECONDARY
F.	FILL
F.L.	FLOW LINE
FWD.	FORWARD
G.I.	GALVANIZED IRON
G.	GAS
G.V.	GAS VALVE
GRAV.	GRAVEL
GRD.	GROUND
HW.	HEADWALL
HWL.	HIGH WATER LEVEL
HGL	HYDRAULIC GRADE LINE
HYD.	HYDRANT
INV.	INVERT
I.E.	INVERT ELEVATION
J.B.	JUNCTION BOX
L.T.	LEFT
L.	LENGTH OF CURVE
L.P.	LIGHT POLE
M.B.	MAIN BOX
M.L.	MAIN LINE
MH.	MANHOLE
MAX.	MAXIMUM
M.H.W.	MEAN HIGH WATER
M.S.L.	MEAN SEA LEVEL
MED.	MEDIAN
MIN.	MINIMUM
MON.	MONUMENT
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OFF.	OFFSET
O. TO O.	OUTSIDE TO OUTSIDE
PVMT.	PAVEMENT
PCC.	POINT OF COMPOUND CURVATURE
P.C.	POINT OF CURVATURE
P.I.	POINT OF INTERSECTION
P.R.C.	POINT OF REVERSE CURVE
P.T.	POINT OF TANGENCY
P.C.C.	PORTLAND CEMENT CONCRETE
PWR.	POWER
P.P	POWER POLE
P.L.	PROPERTY LINE
PROP.	PROPOSED
P.G.	PROPOSED GRADE
P.V.I.	POINT OF VERTICAL INTERSECTION
R.	RADIUS OF CURVATURE
RR.	RAILROAD
R.C.P.	REINFORCED CONCRETE PIPE
RET.	RETAINING
RT.	RIGHT
R.O.W.	RIGHT OF WAY
RD.	ROAD
RDWAY.	ROADWAY
SAN. S.	SANITARY SEWER
S.M.H.	SANITARY SEWER MANHOLE
SHDR.	SHOULDER
SW.	SIDEWALK
S.C.	SPIRAL TO CURVE
S.T.	SPIRAL TO TANGENT
SQ.M.	SQUARE METER
STA.	STATION
S.S.	STORM SEWER
STR.	STRUCTURE
SG.	SUBGRADE
S.L.	SURVEY LINE
TW	TOP OF WALL
T.S.	TANGENT TO SPIRAL
TEL.	TELEPHONE
TYP	TYPICAL (APPLY TO SIMILAR)
TY	TYPE (MATERIAL TYPE)
T.E.	TOP ELEVATION
T.G.	TOP OF GRATE
TOC	TOP OF CURB
UG.	UNDERGROUND
V.C.	VERTICAL CURVE
VERT.	VERTICAL
W.M.	WATER MAIN
W. MTR.	WATER METER
W.V.	WATER VALVE
W.W.	WING WALL
W.M.F.	WIRE MESH FENCE
W.I.	WROUGHT IRON
W/F	WATER FAUCET BOX

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

GENERAL NOTES

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

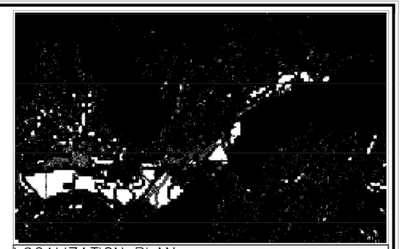
PROJECT NO.: DTE23-004

SHEET NO.: GN01

SCALE=1:600

HORIZONTAL & VERTICAL CONTROL

PointNo.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA PK
3	242638.1490	182920.8300	437.3770	STA PK
4	242950.5500	183633.6350	439.7640	STA PK
5	242931.1410	183610.2020	438.7980	STA PK
7	242701.4620	183108.0830	436.3350	STA PK
8	242712.4270	183140.6780	436.2380	STA PK
9	242707.2870	183147.5570	436.0050	STA PK



LOCALIZATION PLAN
ESCALA 1:20,000

NORTH (Y): 242714.321
ESTE (X): 183072.826

NOTES

1- ALL DISTANCES AND ELEVATIONS ARE

SIGN WTP SIGN SIDEWALK WM WM CO CB T=434.02 I=000.00 MC MC

LIC.9463 PS
PUERTO RICO
Fecha de Expiración: 02-14-2028

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

TOPOGRAPHIC SURVEYING MAP

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
S101

C:\Users_josealdelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\s100 survey.dwg

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

TOPOGRAPHIC
SURVEYING MAP

REVISIONS	SYMBOL	DATE	BY

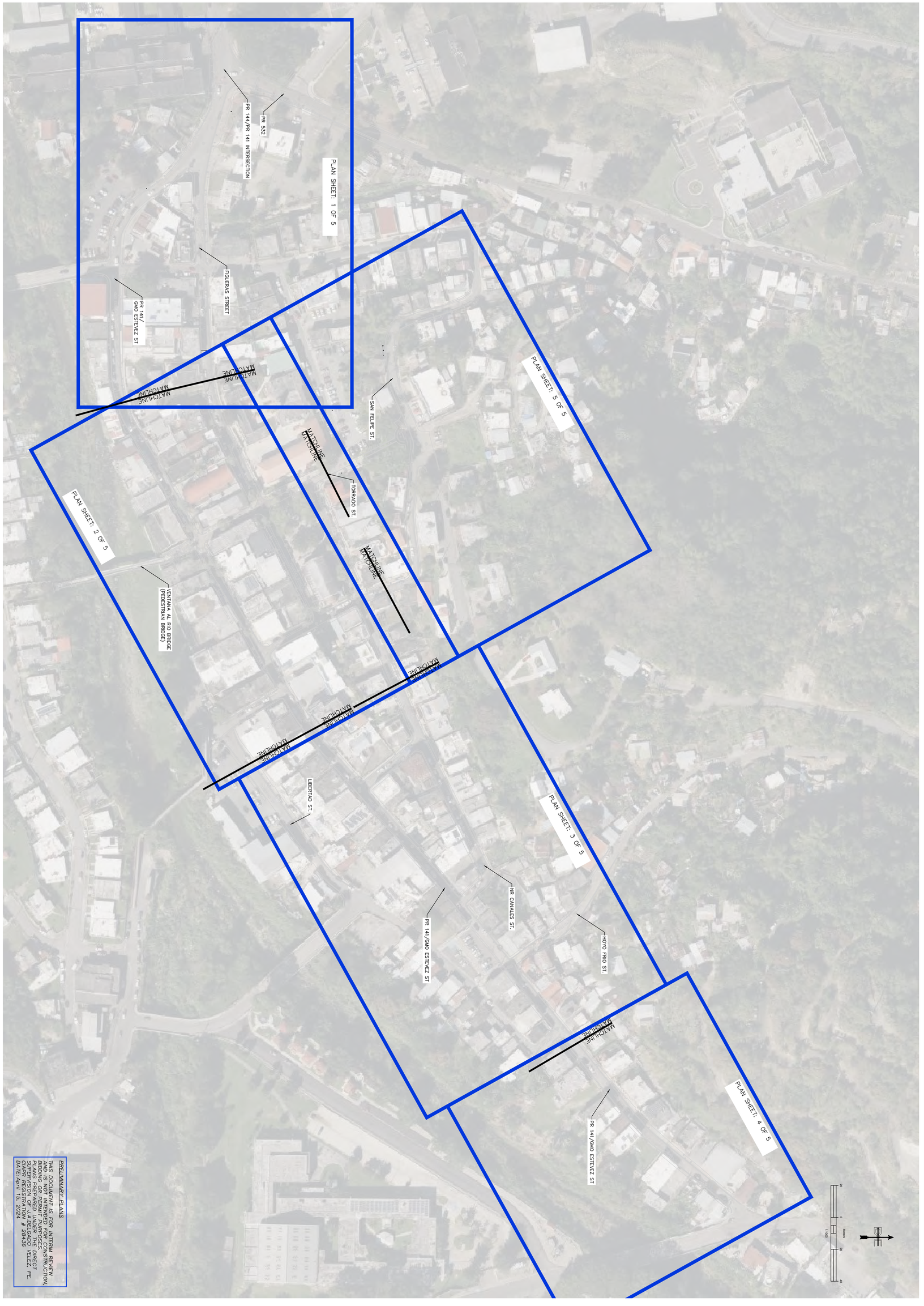
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
S102

C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\s100 survey.dwg



C200	DTE23-004	April 15, 2024	DRAWN: JAD CHECKED: LD REVIEWED: ITI	REVISIONS	SYMBOL / DATE / BY

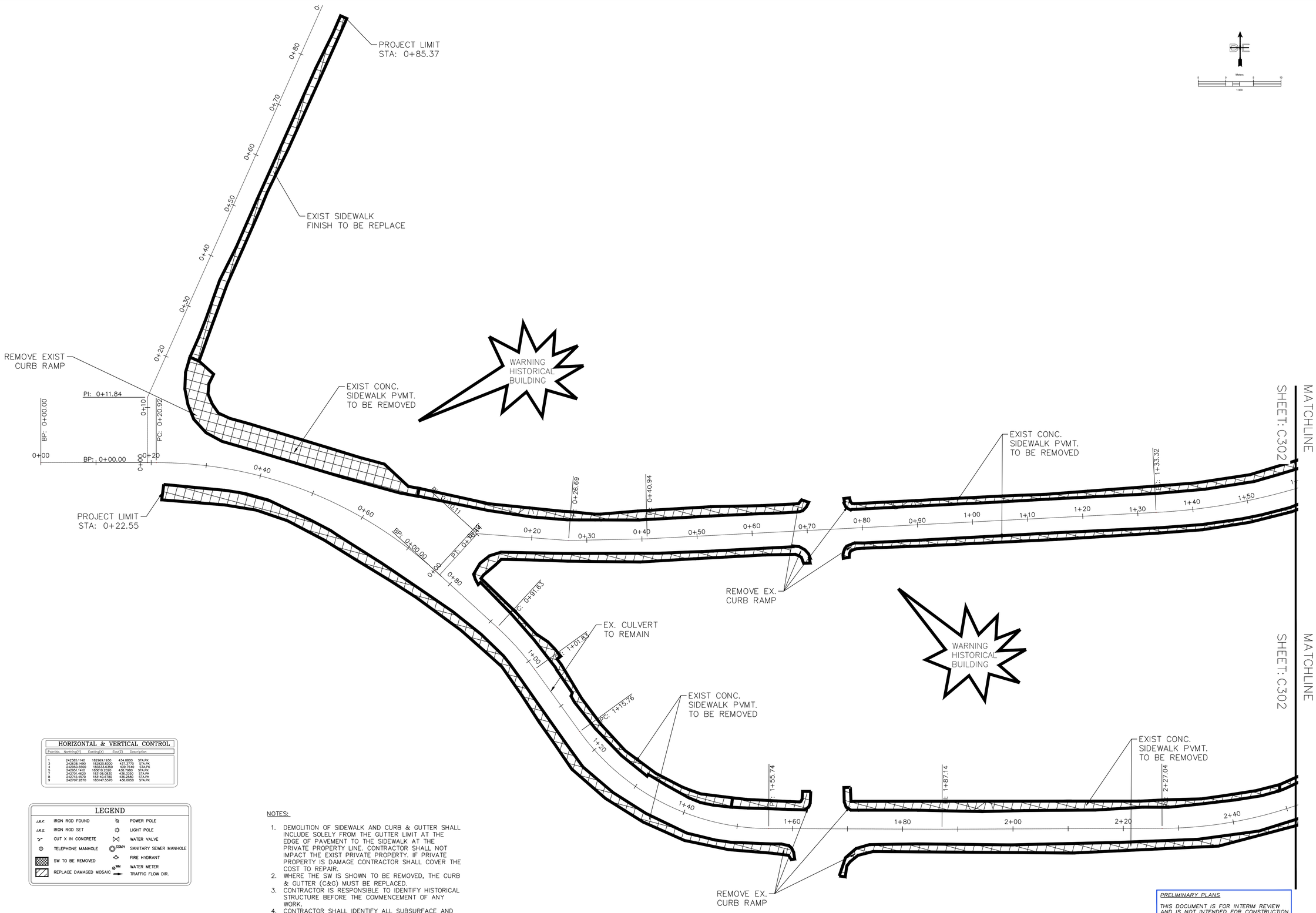
SHEET NAME

OVERALL PLAN
KEY MAP

PROJECT NAME

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre



HORIZONTAL & VERTICAL CONTROL				
PointNo.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
3	242636.1490	182920.8300	437.3770	STA.PK
4	242950.5500	183633.6350	439.7640	STA.PK
6	242701.4620	183708.0830	436.3350	STA.PK
7	242701.4620	183708.0830	436.3350	STA.PK
8	242712.4570	183140.6780	436.2580	STA.PK
9	242707.2870	183147.5570	436.0050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
T	TELEPHONE MANHOLE	SSMH	SANITARY SEWER MANHOLE
	SW TO BE REMOVED		FIRE HYDRANT
	REPLACE DAMAGED MOSAIC	WM	WATER METER
			TRAFFIC FLOW DIR.

NOTES:

1. DEMOLITION OF SIDEWALK AND CURB & GUTTER SHALL INCLUDE SOLELY FROM THE GUTTER LIMIT AT THE EDGE OF PAVEMENT TO THE SIDEWALK AT THE PRIVATE PROPERTY LINE. CONTRACTOR SHALL NOT IMPACT THE EXIST PRIVATE PROPERTY. IF PRIVATE PROPERTY IS DAMAGE CONTRACTOR SHALL COVER THE COST TO REPAIR.
2. WHERE THE SW IS SHOWN TO BE REMOVED, THE CURB & GUTTER (C&G) MUST BE REPLACED.
3. CONTRACTOR IS RESPONSIBLE TO IDENTIFY HISTORICAL STRUCTURE BEFORE THE COMMENCEMENT OF ANY WORK.
4. CONTRACTOR SHALL IDENTIFY ALL SUBSURFACE AND EXTERNAL UTILITIES BEFORE BEGINNING OF ANY WORK.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE TO OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
DEMOLITION PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 14, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C301

c:\users\jaesodelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c305 demolition plan.dwg

MATCHLINE
SHEET: C305

MATCHLINE
SHEET: C305

MATCHLINE
SHEET: C301

MATCHLINE
SHEET: C303

MATCHLINE
SHEET: C301

MATCHLINE
SHEET: C303

MATCHLINE
SHEET: C303

MATCHLINE

WARNING HISTORICAL BUILDING

WARNING HISTORICAL BUILDING

WARNING HISTORICAL BUILDING

MATTEI ST.

EXIST CONC. SIDEWALK PVMT. TO BE REMOVED

REMOVE EXIST CURB RAMP

EXIST GUTTER TO REMAIN

REMOVE PLANTER EX. TREE TO REMAIN

REMOVE AND REPLACE EXIST DAMAGED MOSAIC FINISH AT BRIDGE VENTANA AL RIO

PROJECT LIMIT STA: 0+41.92

PC: 1+08.42

PT: 1+24.45

PI: 1+76.80

EP: 1+87.48

BP: 0+00.00

PI: 0+08.63

PI: 0+39.96

PI: 0+48.22

PI: 0+04.78

PI: 0+24.21

PI: 2+16.82

PI: 2+39.89

PI: 3+02.69

PC: 3+33.21

PC: 3+40.69

PI: 1+81.35

PI: 1+33.32

PI: 2+67.25

PI: 0+07.45

BP: 0+00.00

PI: 1+14.44

PI: 1+71.77

PI: 3+10.47

PI: 3+60.35

PI: 1+00.00

PI: 1+08.20

PI: 0+03.66

PI: 0+08.20

PI: 0+08.20

PI: 0+08.20

MATCHLINE
SHEET: C302

EXIST CONC. SIDEWALK PVMT. TO BE REMOVED

REMOVE EXIST CURB RAMP

REMOVE EXIST CURB RAMP

EXIST CONC. SIDEWALK PVMT. TO BE REMOVED

REMOVE EXIST CURB RAMP

REMOVE EXIST CURB RAMP

EXIST CONC. SIDEWALK PVMT. TO BE REMOVED

REMOVE EXIST CURB RAMP

REMOVE EXIST CURB RAMP

EXIST CONC. SIDEWALK PVMT. TO BE REMOVED

EXIST CURB RAMP TO REMAIN WILL BE REMOVED IN CRP-000048

EXIST GUTTER TO REMAIN

PROJECT LIMIT STA: 0+30.00

PROJECT LIMIT STA: 0+85.00

PROJECT LIMIT STA: 1+00.92

PROJECT LIMIT STA: 1+40.94

PROJECT LIMIT STA: 1+73.34

MATCHLINE
SHEET: C304

MATCHLINE
SHEET: C302

MATCHLINE
SHEET: C302

HORIZONTAL & VERTICAL CONTROL				
Point No.	Northing(Y)	Easting(X)	Elev.(Z)	Description
1	242585.1140	182969.1830	434.8800	STA.PK
2	242585.5500	183033.6350	436.7640	STA.PK
4	242950.5500	183033.6350	439.7640	STA.PK
5	242951.1410	183610.2020	438.7980	STA.PK
7	242701.4620	183108.0830	436.3350	STA.PK
8	242712.4570	183140.6780	436.2580	STA.PK
9	242707.2870	183147.5570	436.0050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
T	TELEPHONE MANHOLE	SSMH	SANITARY SEWER MANHOLE
	SW TO BE REMOVED		FIRE HYDRANT
	REMOVE & REPLACE	WM	WATER METER
			TRAFFIC FLOW DIR.

NOTES:

1. DEMOLITION OF SIDEWALK AND CURB & GUTTER SHALL INCLUDE SOLELY FROM THE GUTTER LIMIT AT THE EDGE OF PAVEMENT TO THE SIDEWALK AT THE PRIVATE PROPERTY LINE. CONTRACTOR SHALL NOT IMPACT THE EXIST PRIVATE PROPERTY. IF PRIVATE PROPERTY IS DAMAGE CONTRACTOR SHALL COVER THE COST TO REPAIR.
2. WHERE THE SW IS SHOWN TO BE REMOVED, THE CURB & GUTTER (C&G) MUST BE REPLACED.
3. CONTRACTOR IS RESPONSIBLE TO IDENTIFY HISTORICAL STRUCTURE BEFORE THE COMMENCEMENT OF ANY WORK.
4. CONTRACTOR SHALL IDENTIFY ALL SUBSURFACE AND EXTERNAL UTILITIES BEFORE BEGINNING OF ANY WORK.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
DEMOLITION PLAN

REVISIONS	SYMBOL	DATE	BY

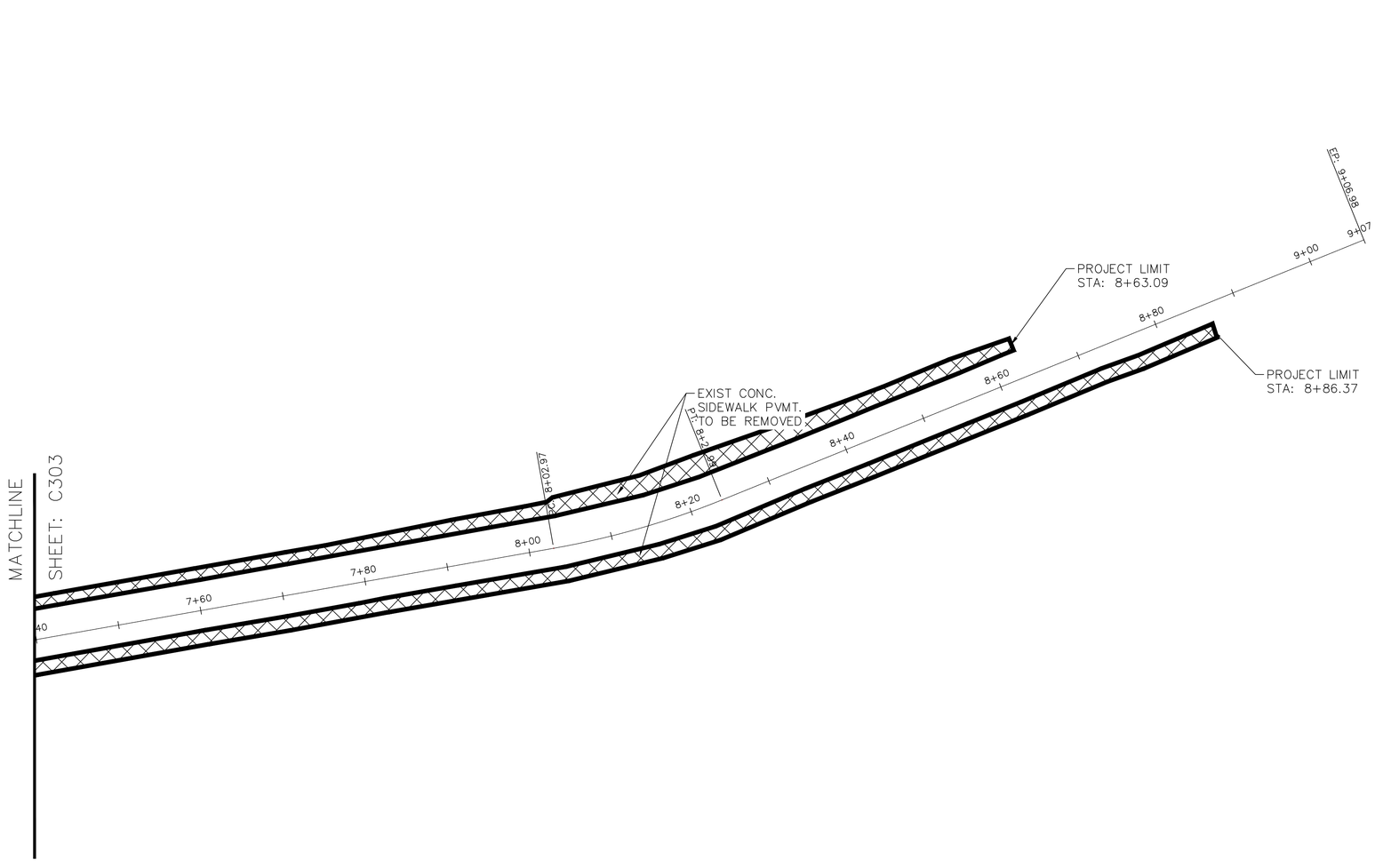
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 14, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C303

c:\users\jaxcadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c305 demolition plan.dwg



HORIZONTAL & VERTICAL CONTROL

Point No.	Northing (Y)	Easting (X)	Elev (Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
3	242638.1490	182920.8300	437.3770	STA.PK
4	242902.0500	183633.8350	439.7640	STA.PK
5	242951.1410	183610.2020	438.7980	STA.PK
6	242701.4820	183108.0830	436.3350	STA.PK
8	242712.4570	183140.6170	436.2580	STA.PK
9	242707.2870	183147.3070	436.0050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
	TELEPHONE MANHOLE	SSMH	SANITARY SEWER MANHOLE
	SW TO BE REMOVED		FIRE HYDRANT
	REMOVE & REPLACE	WM	WATER METER
			TRAFFIC FLOW DIR.

NOTES:

1. DEMOLITION OF SIDEWALK AND CURB & GUTTER SHALL INCLUDE SOLELY FROM THE GUTTER LIMIT AT THE EDGE OF PAVEMENT TO THE SIDEWALK AT THE PRIVATE PROPERTY LINE. CONTRACTOR SHALL NOT IMPACT THE EXIST PRIVATE PROPERTY. IF PRIVATE PROPERTY IS DAMAGE CONTRACTOR SHALL COVER THE COST TO REPAIR.
2. WHERE THE SW IS SHOWN TO BE REMOVED, THE CURB & GUTTER (C&G) MUST BE REPLACED.
3. CONTRACTOR IS RESPONSIBLE TO IDENTIFY HISTORICAL STRUCTURE BEFORE THE COMMENCEMENT OF ANY WORK.
4. CONTRACTOR SHALL IDENTIFY ALL SUBSURFACE AND EXTERNAL UTILITIES BEFORE BEGINNING OF ANY WORK.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
DEMOLITION PLAN

REVISIONS	SYMBOL	DATE	BY

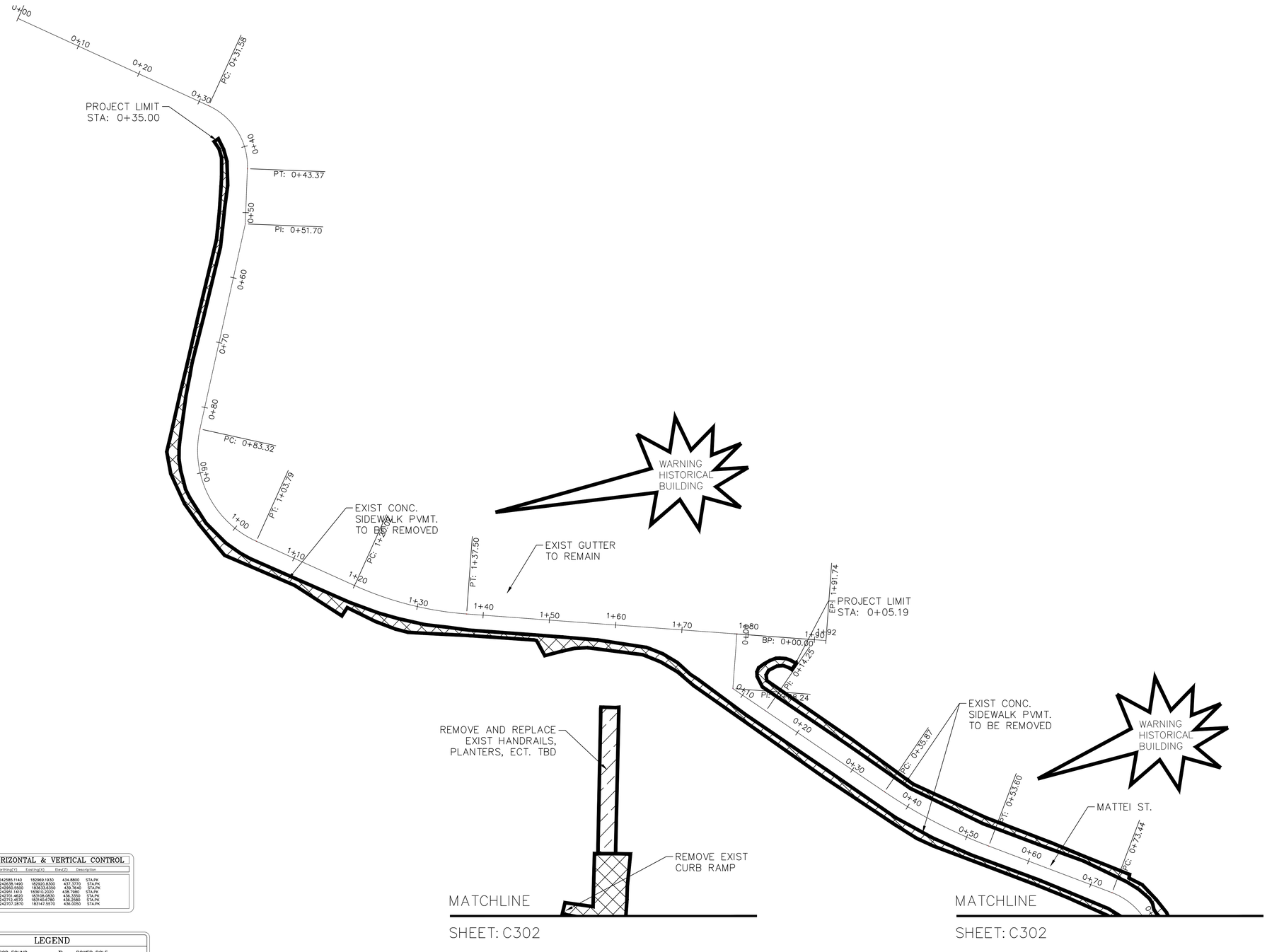
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 14, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C304

c:\users\jdelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c305 demolition plan.dwg



HORIZONTAL & VERTICAL CONTROL				
Point No.	Northing(Y)	Easting(X)	Elev.(Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
2	242585.5550	183033.8350	436.7640	STA.PK
4	242952.5500	183633.8350	436.7640	STA.PK
5	242951.1410	183610.2020	438.7980	STA.PK
7	242701.4620	183108.0830	436.3350	STA.PK
8	242712.4570	183140.6780	436.2580	STA.PK
9	242707.2870	183147.5570	436.0050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
T	TELEPHONE MANHOLE	SSMH	SANITARY SEWER MANHOLE
	SW TO BE REMOVED		FIRE HYDRANT
	REMOVE & REPLACE	WM	WATER METER
			TRAFFIC FLOW DIR.

NOTES:

1. DEMOLITION OF SIDEWALK AND CURB & GUTTER SHALL INCLUDE SOLELY FROM THE GUTTER LIMIT AT THE EDGE OF PAVEMENT TO THE SIDEWALK AT THE PRIVATE PROPERTY LINE. CONTRACTOR SHALL NOT IMPACT THE EXIST PRIVATE PROPERTY. IF PRIVATE PROPERTY IS DAMAGE CONTRACTOR SHALL COVER THE COST TO REPAIR.
2. WHERE THE SW IS SHOWN TO BE REMOVED, THE CURB & GUTTER (C&G) MUST BE REPLACED.
3. CONTRACTOR IS RESPONSIBLE TO IDENTIFY HISTORICAL STRUCTURE BEFORE THE COMMENCEMENT OF ANY WORK.
4. CONTRACTOR SHALL IDENTIFY ALL SUBSURFACE AND EXTERNAL UTILITIES BEFORE BEGINNING OF ANY WORK.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
DEMOLITION PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 14, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C305

c:\users\joseodelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c305 demolition plan.dwg

PROJECT LIMIT
STA: 0+85.37
OFF=4.19
N=242,709.02
E=182,930.70

℄ PR532

PROP CURB RAMP TYPE 1

PROP CONCRETE STAMP PATTERN #2

WARNING HISTORICAL BUILDING

WARNING HISTORICAL BUILDING

PROJECT LIMIT
STA: 0+39.77
OFF=-3.12
N=242,621.02
E=182,986.19

PROP CURB RAMP TYPE 1

℄ FIGUERAS

PROJECT LIMIT
STA: 0+53.04
OFF=-3.20
N=242,621.76
E=182,999.37

CONFLICT AREA
SIDEWALK DO NOT MEET ADA WIDTH REQUIREMENTS

ALIGN=CL-EXST-PR144
STA=0+00.00
OFF=0.00
N=242631.74
E=182877.55

ALIGN=CL-EXST-PR144
STA=0+19.33
OFF=0.00
N=242631.74
E=182896.88

PROJECT LIMIT
STA: 0+22.55
OFF=4.20
N=242,627.53
E=182,900.11

℄ PR141

PROP CURB RAMP TYPE 8

PROJECT LIMIT
STA: 0+83.83
OFF=-3.99
N=242,609.96
E=182,957.33

ALIGN=CL-EXST-PR144
STA=0+77.51
OFF=0.00
N=242611.39
E=182949.84

PROJECT LIMIT
STA: 1+03.79
OFF=-3.92
N=242,594.61
E=182,970.90

PROP CURB RAMP TYP. 1

PROJECT LIMIT
STA: 1+51.88
OFF=-3.24
N=242,568.82
E=183,005.95

100 YR FLOOD ZONE

PROP CURB RAMP TYPE 8

PROJECT LIMIT
STA: 1+51.14
OFF=3.14
N=242,615.32
E=182,997.79

WARNING HISTORICAL BUILDING

PROP CURB RAMP TYP. 8
EXIST CONC. POLE TO REMAIN

EXIST UTILITY BOX TO REMAIN (TYP.)

MATCHLINE SHEET C402

MATCHLINE SHEET C402

HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev.(Z)	Description
1	242583.1140	182963.9130	424.8868	STA/PK
2	242655.5560	183026.2000	429.1070	STA/PK
4	242950.5580	183623.6350	429.7640	STA/PK
5	242951.1410	183610.0020	436.7980	STA/PK
7	242710.4620	183108.6830	436.3350	STA/PK
8	242710.4570	183140.6780	436.2580	STA/PK
9	242707.2870	183147.5570	436.3050	STA/PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
	EXIST WATER LINE	WM	WATER METER
	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX 100YR FLOOD PLAIN		PROP STAMP CONCRETE
	FINISH REPLACEMENT		PROP 4" SIDEWALK
	PROP SOLAR LUMINARE		PROP CONC STAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE TO OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
SITE PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: C401

C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization_jayuya urban center crp-053\dte23-004 cad\production drawings\c405 site planing

MATCHLINE SHEET C401

MATCHLINE SHEET: C405

MATCHLINE SHEET: C405

MATCHLINE SHEET: C403

MATCHLINE SHEET: C403

PROP. CURB RAMP TYPE 1

PROP. CURB RAMP TYPE 1

MATTEI ST.

PROP. CURB RAMP TYPE 1

EX. GRATE INLET TO BE RELOCATED OUTSIDE OF ADA PATH (TYP.)

PROP. LUMINAIRE SEE SHEET E01 FOR DETAILS (TYP.)

WARNING HISTORICAL BUILDING

WARNING HISTORICAL BUILDING

WARNING HISTORICAL BUILDING

℄ FIGUERAS

100 YR FLOOD ZONE

℄ CANALES

ALIGN=CL-EXST-TORRADO
STA=0+28.32
OFF=0.00
N=242686.33
E=183154.09

ALIGN=CL-EXST-CANALES
STA=0+80.36
OFF=0.00
N=242718.07
E=183227.89

ALIGN=CL-EXST-TORRADO
STA=0+60.25
OFF=0.00
N=242658.09
E=183168.97

PROP. CURB RAMP TYPE 8

PROP. CURB RAMP AT CROSSING

ALIGN=CL-EXST-MATTEI
STA=1+45.73
OFF=0.00
N=242694.04
E=183240.66

℄ NATTEI

PROP. CURB RAMP AT CROSSING

℄ TORRADO

CONFLICT AREA SIDEWALK DO NOT MEET ADA WIDTH REQUIREMENTS

℄ PR141

ALIGN=CL-EXST-PR144
STA=3+49.60
OFF=0.00
N=242617.34
E=183190.29

ALIGN=CL-EXST-PR144
STA=3+50.12
OFF=0.00
N=242617.57
E=183190.76

ALIGN=CL-EXST-PR144
STA=4+30.75
OFF=0.00
N=242657.46
E=183260.79

ALIGN=CL-EXST-PR144
STA=4+58.11
OFF=0.00
N=242671.27
E=183284.41

PROP CONCRETE STAMP PATTERN #2

PROP MOSAIC REPLACEMENT IN MISSING SPOTS, REPAIR OR REPLACE ALL NONFUNCTIONAL LIGHTING FIXTURES, REPAINT AND POWER WASHING AT BRIDGE.

CONFLICT AREA CURB RAMP AREA DO NOT MEET ADA REQUIREMENTS

PROP. CURB RAMP AT CROSSING

CONFLICT AREA SLOPE TOO STEEP DO NOT MEET ADA REQUIREMENTS

PROP. CURB RAMP TYPE 8

PROJECT LIMIT
STA: 0+41.92
OFF=3.91
N=242,632.30
E=183,303.84

GMO. ESTEVEZ ST.

HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	2425851140	1829691930	434.8800	STA/PK
3	2426381490	1829201830	437.3770	STA/PK
4	2426951430	1829201830	436.7980	STA/PK
5	2425951430	1829651920	436.7980	STA/PK
7	2427814600	1831080830	436.3350	STA/PK
8	2427124570	1831454780	436.2580	STA/PK
9	2427972870	1831475570	436.0050	STA/PK

LEGEND

- I.R.F. IRON ROD FOUND
- I.R.S. IRON ROD SET
- CUT X IN CONCRETE
- EXIST ELECTRIC LINE
- EXIST TELEPHONE LINE
- EXIST STORM DRAIN
- EXIST WATER LINE
- EXIST SANITARY LINE
- EX 100YR FLOOD PLAIN
- FINISH REPLACEMENT
- PROP SOLAR LUMINARE
- POWER POLE
- LIGHT POLE
- WATER VALVE
- UTILITY MANHOLE
- EX. CATCH BASIN
- FIRE HYDRANT
- WATER METER
- TRAFFIC FLOW DIR.
- PROP STAMP CONCRETE
- PROP 4" SIDEWALK
- PROP CONC STAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
SITE PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: C402

C:\Users\JoseDelgado\OneDrive - delgado torres engineering, llc\Documents - Projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c405 site plan.dwg

MATCHLINE
SHEET: C402

MATCHLINE
SHEET: C404

MATCHLINE
SHEET: C402

MATCHLINE
SHEET: C402

PROJECT LIMIT
STA: 8+86.70
OFF=2.34
N=242,863.10
E=183,407.91

PROJECT LIMIT
STA: 8+86.70
OFF=2.68
N=242,822.54
E=183,445.17

PROJECT LIMIT
STA: 1+00.92
OFF=-3.22
N=242,668.65
E=183,353.04

PROJECT LIMIT
STA: 1+40.94
OFF=-3.11
N=242,691.80
E=183,385.67

PROJECT LIMIT
STA: 1+73.34
OFF=-3.72
N=242,714.13
E=183,407.49

ALIGN=CL-EXST-CANALES
STA=1+77.41
OFF=0.00
N=242758.10
E=183316.27

ALIGN=CL-EXST-PR144
STA=6+80.71
OFF=0.00
N=242812.15
E=183456.36

ALIGN=CL-EXST-PR144
STA=6+30.62
OFF=0.00
N=242780.61
E=183417.44

ALIGN=CL-EXST-PR1
STA=5+36.69
OFF=0.00
N=242719.41
E=183346.21

℄ CANALES

℄ HOYOFRIO

℄ PR141

℄ LIBERTAD

PROP. LUMINAIRE
SEE SHEET E01
FOR DETAILS (TYP.)

PROP. LUMINAIRE
SEE SHEET E01
FOR DETAILS (TYP.)

CONFLICT AREA
SLOPE TOO STEEP
DO NOT MEET ADA
REQUIREMENTS

PROP. CURB RAMP
TYPE 8

PROP. CURB RAMP
TYPE 8
POSSIBLE CONFLICT

PROP. CURB RAMP
TYPE 8
EX. CURB INLET
TO BE RELOCATED
(TYP.)

100 YR FLOOD ZONE

MATCH PROP SW WITH
PROJECT CRP-000048

PI: 1+53.29
BP: 0+00.00
BP: 0+05.46
PC: 2+68.15
PT: 2+74.71
PI: 2+89.25
PI: 0+21.98
PC: 0+43.19
PT: 0+52.40
PI: 0+41.12
EP: 0+49.08
PC: 6+03.37
PT: 6+09.18
EP: 6+95.59
EP: 1+00.92
EP: 1+80.59
PT: 1+62.57
BP: 0+96.30

HORIZONTAL & VERTICAL CONTROL

PointNo	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1149	182969.9330	434.8800	STA/PK
3	242636.1490	182908.8300	437.3770	STA/PK
4	242950.0300	183633.6350	439.7640	STA/PK
5	242951.1410	183632.2005	436.7980	STA/PK
7	242710.4620	183108.0830	436.3350	STA/PK
8	242707.4970	183147.5570	436.3050	STA/PK
9	242707.2870	183147.5570	436.8050	STA/PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
"x"	CUT X IN CONCRETE		WATER VALVE
	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
	EXIST WATER LINE	WM	WATER METER
	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX 100YR FLOOD PLAIN		PROP STAMP CONCRETE
	FINISH REPLACEMENT		PROP 4" SIDEWALK
	PROP SOLAR LUMINARE		PROP CONC STAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

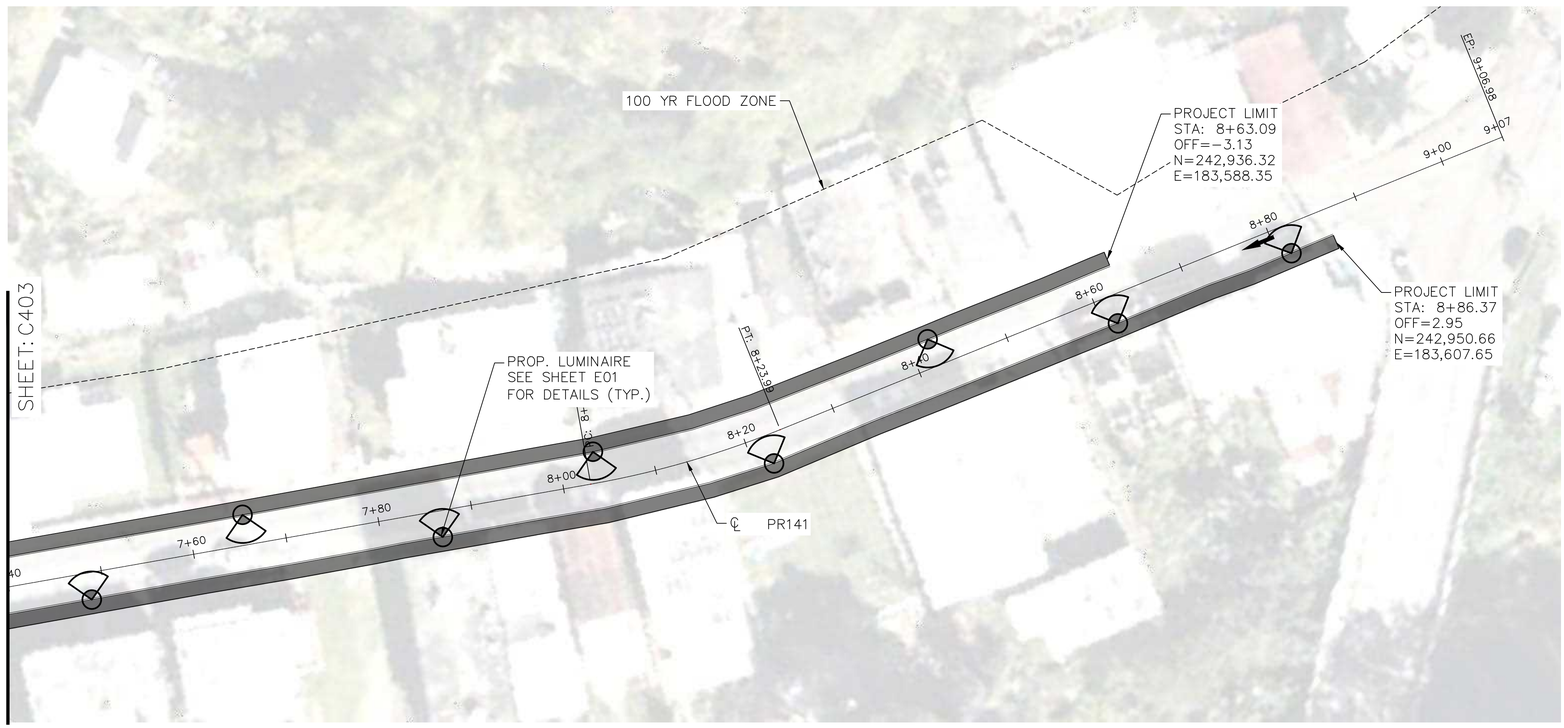
PROJECT NAME
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

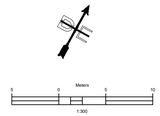
SHEET NAME
SITE PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C403

C:\Users\josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c405 site plan.dwg





HORIZONTAL & VERTICAL CONTROL

PointNo.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA/PK
4	242788.3590	183633.6260	436.7640	STA/PK
5	242951.1410	183610.2020	438.7980	STA/PK
7	242701.4620	183308.8830	436.3350	STA/PK
8	242710.4570	183140.6780	436.2580	STA/PK
9	242707.2970	183147.5570	436.0050	STA/PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
"x"	CUT X IN CONCRETE		WATER VALVE
	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
	EXIST WATER LINE	WM	WATER METER
	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX 100YR FLOOD PLAIN		PROP STAMP CONCRETE
	FINISH REPLACEMENT		PROP 4" SIDEWALK
	PROP SOLAR LUMINARE		PROP CONC STAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
SITE PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

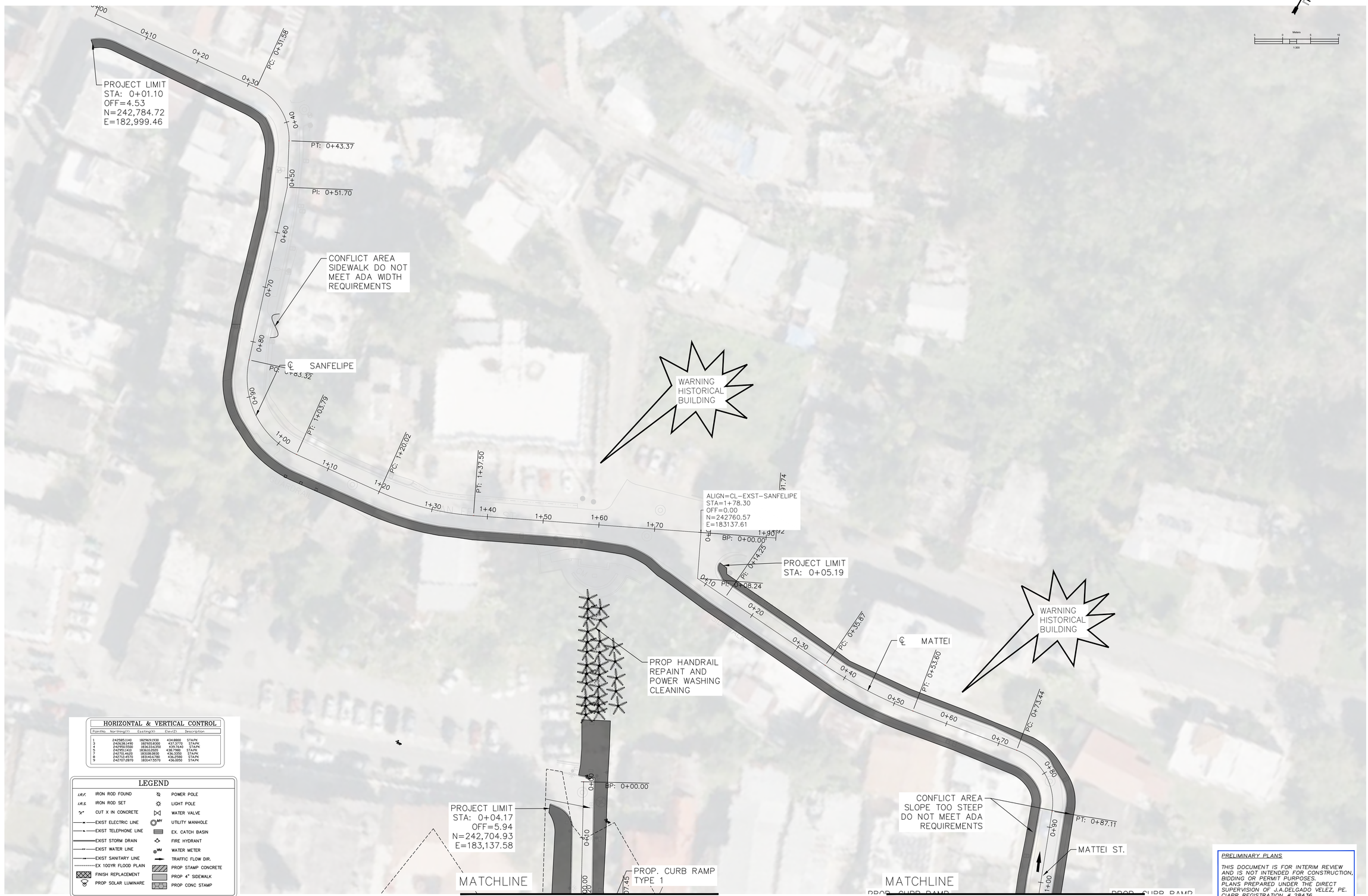
DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C404

C:\Users\Jose.delgado\OneDrive - delgado torres engineering, llc\Documents - Projects\DTE-2023-004 sidewalk revitalization Jayuya urban center crp-053\dte23-004 cad\production drawings\c405 site plan.dwg

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c405 site planding



HORIZONTAL & VERTICAL CONTROL

PointNo.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STAPK
3	242638.1490	182903.8380	435.0730	STAPK
4	242599.1490	182923.6300	437.3240	STAPK
5	242951.1410	183663.0200	436.7980	STAPK
7	242701.4620	183108.0830	436.3350	STAPK
8	242710.4570	183145.6780	436.2580	STAPK
9	242707.2870	183147.5570	436.0650	STAPK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
E	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
T	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
W	EXIST WATER LINE	WM	WATER METER
S	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX 100YR FLOOD PLAIN		PROP STAMP CONCRETE
	FINISH REPLACEMENT		PROP 4" SIDEWALK
	PROP SOLAR LUMINARE		PROP CONC STAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
SITE PLAN

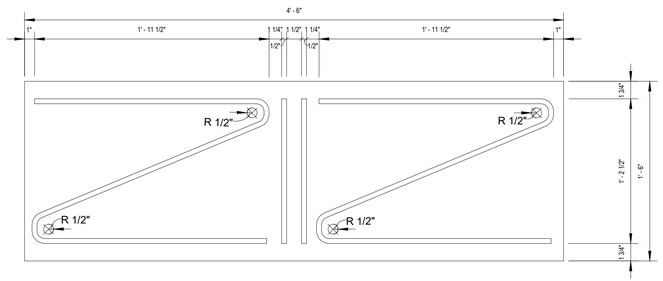
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

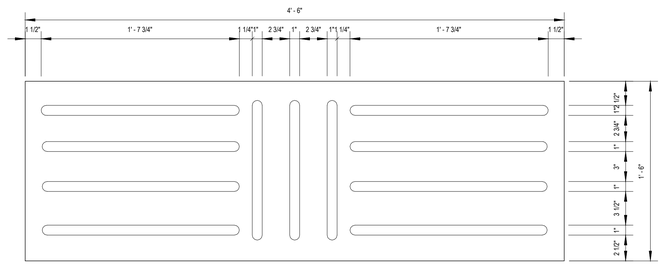
PROJECT NO.:
DTE23-004

SHEET NO.:
C405



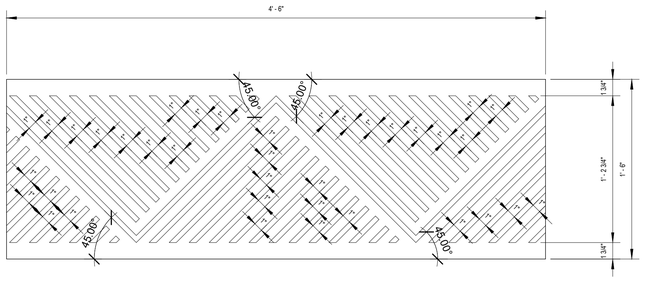
TOP VIEW

PAVEMENT STAMP PATTERN #3



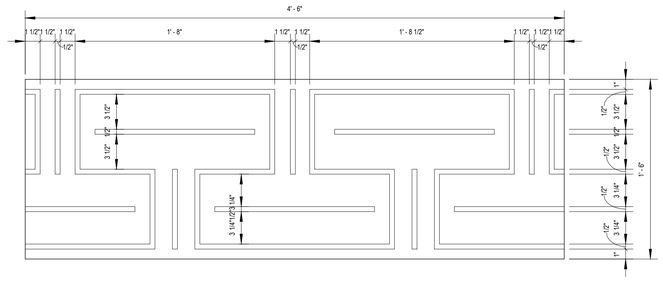
TOP VIEW

PAVEMENT STAMP PATTERN #1



TOP VIEW

PAVEMENT STAMP PATTERN #4



TOP VIEW

PAVEMENT STAMP PATTERN #2

NOTES:

1. WORK ASSOCIATED WITH THE INSTALLATION OF THE STAMPED CONCRETE SURFACES SHALL BE PERFORMED BY A TRAINED AND CERTIFIED CONTRACTOR FOR THE PRODUCT USED. ALL WORK SHALL MEET THE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS FOR AN INSTALLATION OF THIS TYPE.
2. CONCRETE STAMP SHALL HAVE A PERMANENT COLOR (BEIGE–ALIKE) CHOSEN BY THE MUNICIPALITY OF JAYUYA BEFORE ANY INSTALLATION OF CONCRETE STAMP. THIS COLOR MAY NOT BE SPRAYED OR PAINTED OVER AFTER STAMPING. CONTRACTOR SHALL USE IRON OXIDE, CHROMIUM OXIDE OR SIMILAR TECHNIQUES IN THE MIX FOR COLOURING CONCRETE.
3. CONSTRUCTION METHODS FOR THE INSTALLATION SHALL CONFORM WITH THE MANUFACTURE'S GUIDELINES FOR BEST RESULTS.
4. MATERIAL SHALL BE APPROVED BY THE ENGINEER ON RECORD.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
CONCRETE STAMP DETAIL

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C406

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c405 site planing

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

SEE PR532 PLAN FOR DETAILS

LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP TBD	PROP ADA CURB RAMP

PROP 5" CONC SW

PROP TY 1 CURB RAMP

℄ PR532

PI: 0+11.84

0+10

PC: 0+20.92

ALIGN=CL-EXST-PR144
STA=0+19.33
OFF=0.00
N=242631.74
E=182896.88

BP: 0+00.00

0+00

0+20

℄ PR141

0+40

0+60

PROP 5" CONC SW

CATCH BASIN TO REMAIN

MATCH EXIST SW CRP-000053 PROJECT LIMIT

PROP TY 3 CURB RAMP

ALIGN=CL-EXST-PR144
STA=0+00.00
OFF=0.00
N=242631.74
E=182877.55

BP: 0+00.00

0+00

Meters
2.5 0 2.5 5
1:100

MATCHLINE STA 0+70

SEE FIGUERAS PLANS FOR DETAIL

15.8MT

PI: 0+10.11

0+10

℄ FIGUERAS

MATCH EXIST SW

PROP 5" CONC SW

MATCH EXIST SW

BOX CULVERT

PT: 0+76.44

PC: 0+91.63

PT: 1+07.83

BP: 0+00.00

0+00

0+80

1+00

PC: 1+15.76

1+20

1+40

℄ PR141

100 YR FLOOD ZONE

PROP 5" CONC SW

SIDEWALK

PROP 5" CONC SW

PROP TY 3A CURB RAMP

PROP TY 3A CURB RAMP

PROP 5" CONC SW

DRIVEWAY OPENING TO REMAIN

ALIGN=CL-EXST-PR144
STA=0+77.51
OFF=0.00
N=242611.39
E=182949.84

MATCHLINE STA 1+50

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

Meters
2.5 0 2.5 5
1:100

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN
PR-141

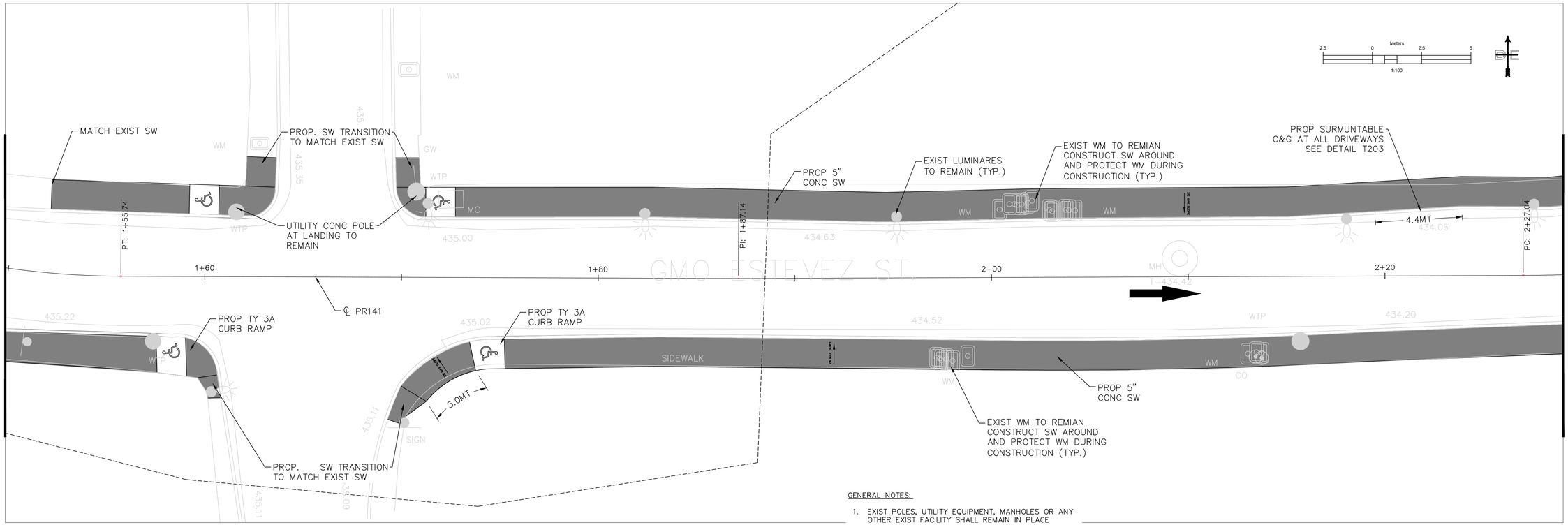
REVISIONS	SYMBOL	DATE	BY

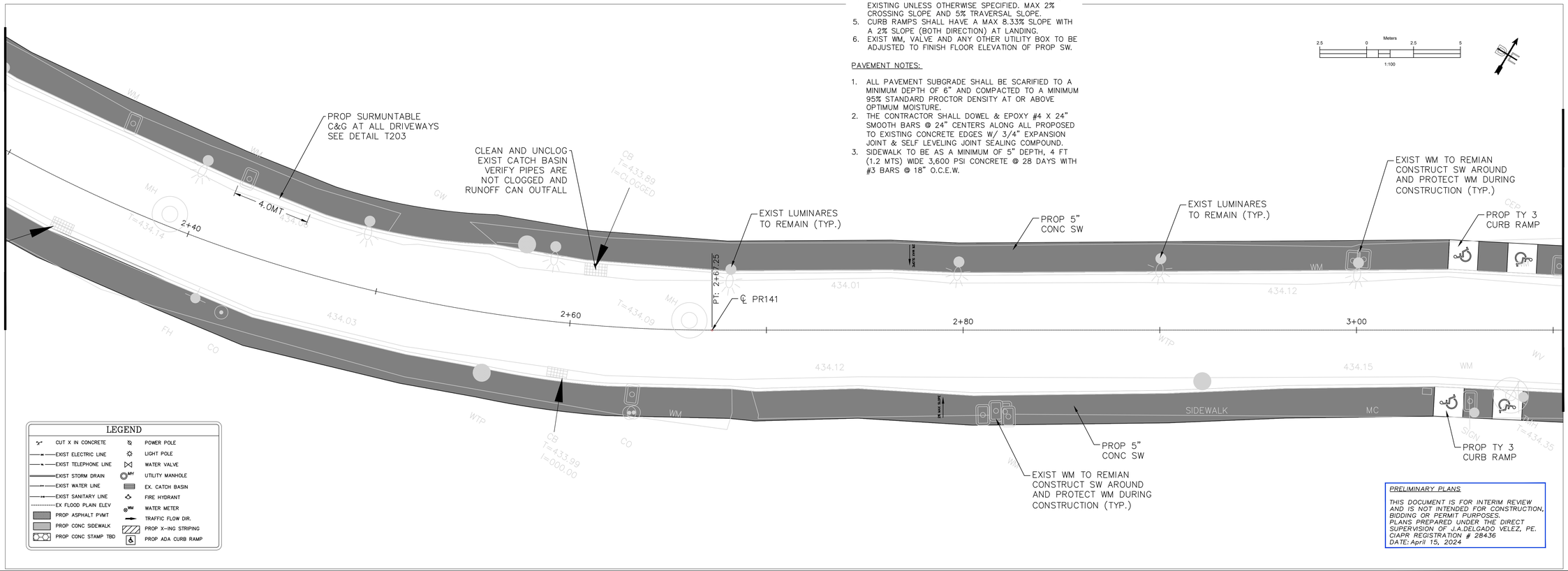
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C501





GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE–F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP TBD	PROP ADA CURB RAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN
PR-141

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: C502

C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

SEE TORRADO PLANS FOR DETAIL

MATCHLINE STA 3+10

MATCHLINE STA 3+60

ALIGN=CL-EXST-PR144
STA=3+49.60
OFF=0.00
N=242617.34
E=183190.29

℄ TORRADO

PROP 5" CONC SW

EXIST TREE TO REMAIN

MATCH EXIST SW
ALIGN=CL-EXST-PR144
STA=3+50.12
OFF=0.00
N=242617.57
E=183190.76

EXIST MH TO REMIAN CONSTRUCT MH AROUND AND PROTECT MH DURING CONSTRUCTION (TYP.)

PC: 3+33.21

PT: 3+40.69

4.5MT

PI: 1+03.43

PI: 3+60.35

℄ PR141

EP: 1+00.00

BP: 0+00.00

PROP CONC STAMP TBD

PI: 0+04.78

℄ VENTANA

EXIST WM TO REMIAN CONSTRUCT SW AROUND AND PROTECT WM DURING CONSTRUCTION (TYP.)

SEE VENTANA PLAN FOR DETAILS

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

SEE TORRADO PLAN FOR DETAILS

MATCHLINE STA 3+90

MATCHLINE STA 4+70

PROP TY 3 CURB RAMP

PROP 5" CONC SW

℄ PR141

EP: 1+87.48

PROP SURMUNTABLE C&G AT ALL DRIVEWAYS SEE DETAIL T203

BP: 0+00.00

PROP TY 3A CURB RAMP

PROP ADA RAMP MAX 8.33% SLOPE

ALIGN=CL-EXST-PR144
STA=4+50.75
OFF=0.00
N=242657.46
E=183260.79

ALIGN=CL-EXST-PR144
STA=4+58.11
OFF=0.00
N=242671.27
E=183284.41

PI: 1+76.80

PI: 0+08.63

SIDEWALK

WTP

LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP TBD	PROP ADA CURB RAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN
PR-141

REVISIONS	SYMBOL	DATE	BY

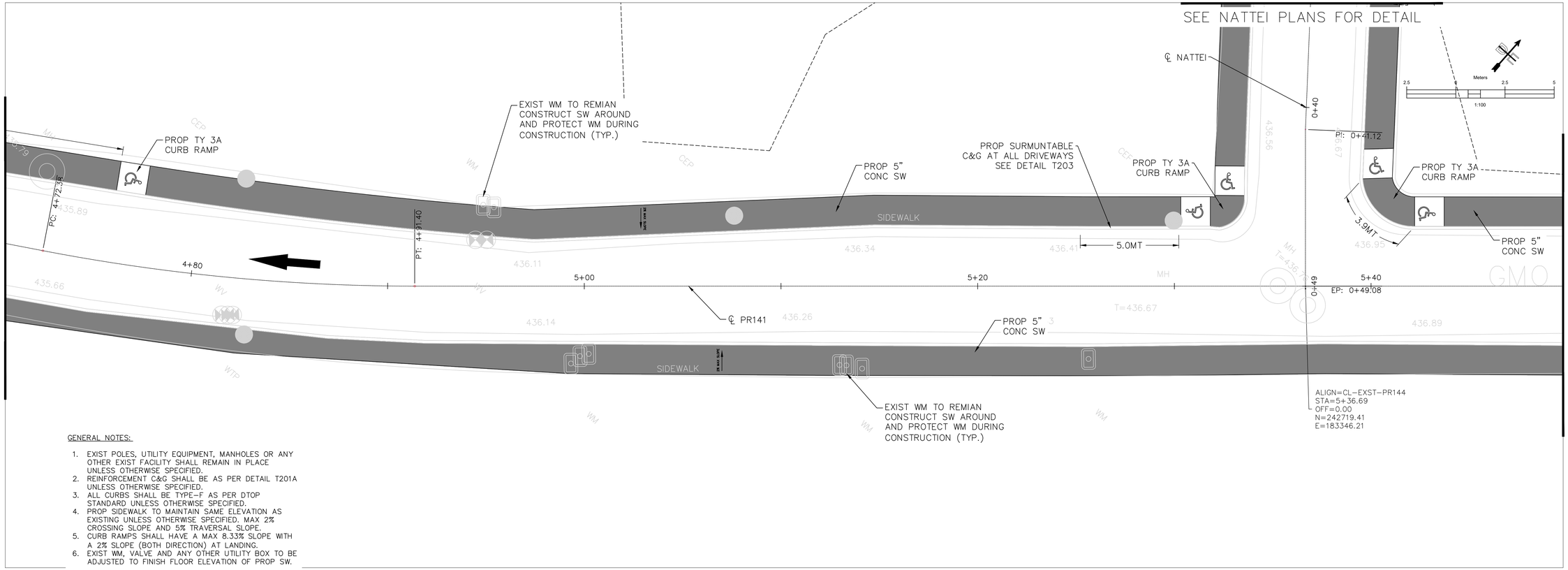
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C503

C:\Users\JoseDelgado\OneDrive - delgado torres engineering, llc\Documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

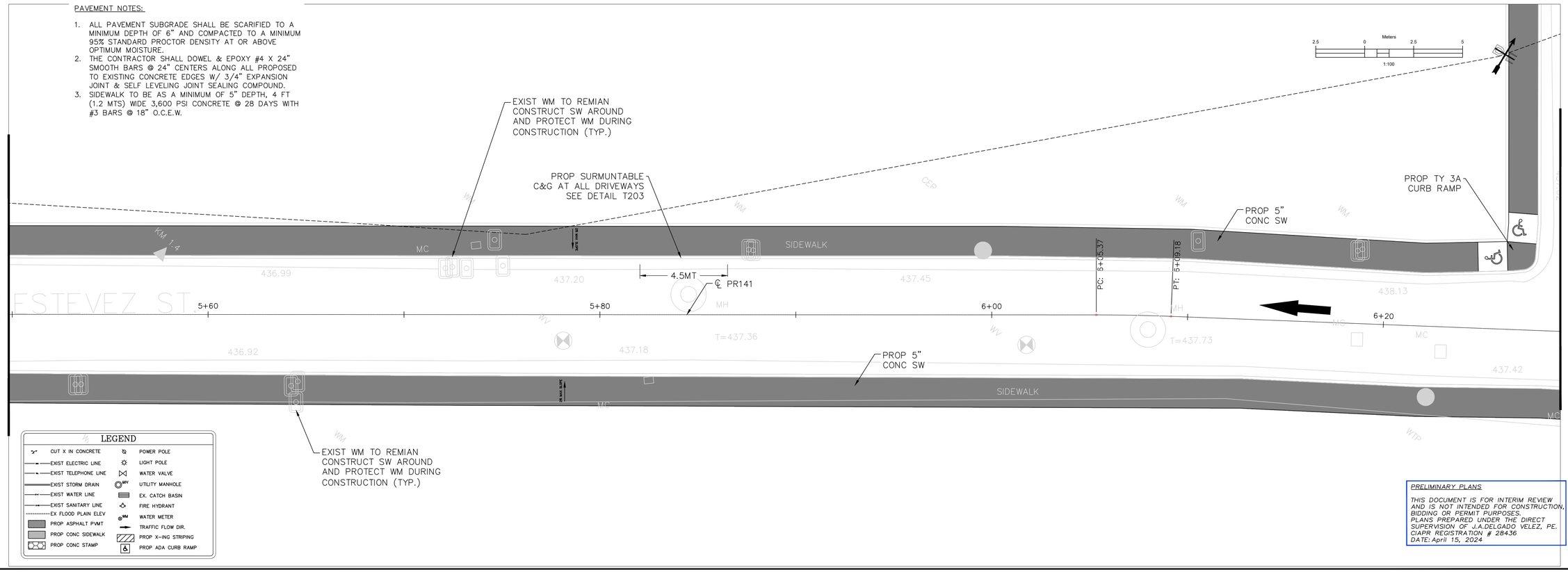


GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.



LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING
DETAIL PLAN
PR-141

REVISIONS	SYMBOL	DATE	BY

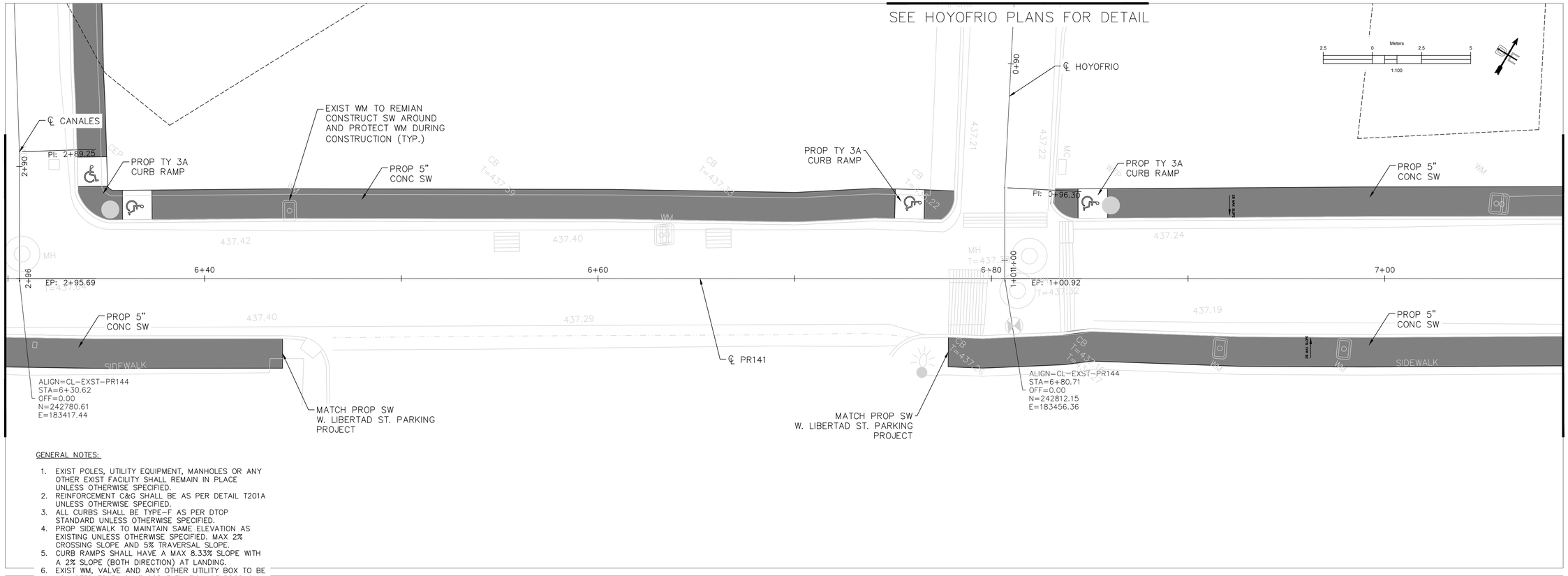
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C504

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg det plan.dwg

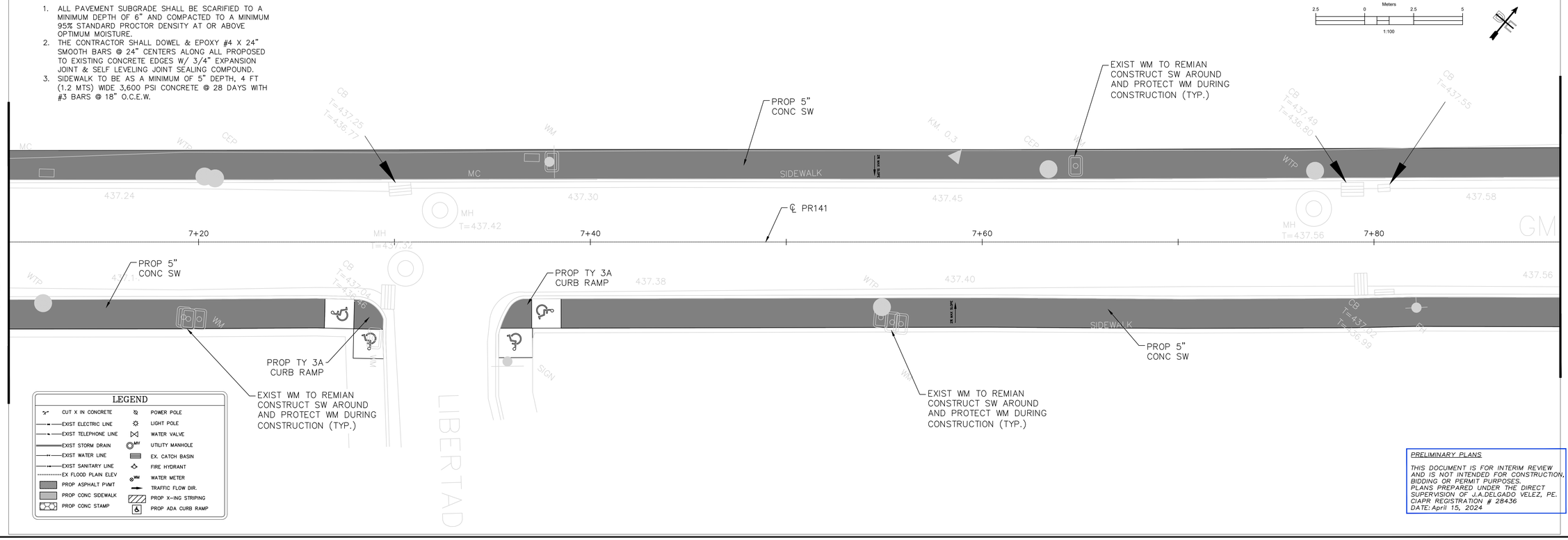


GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.



LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

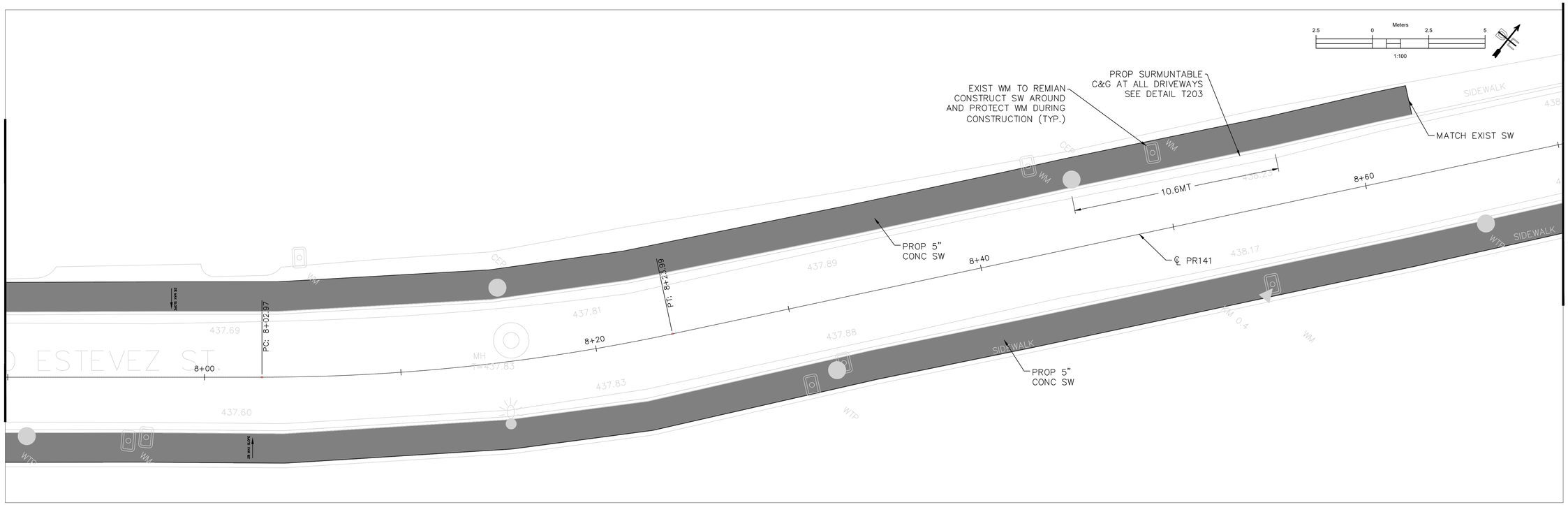
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

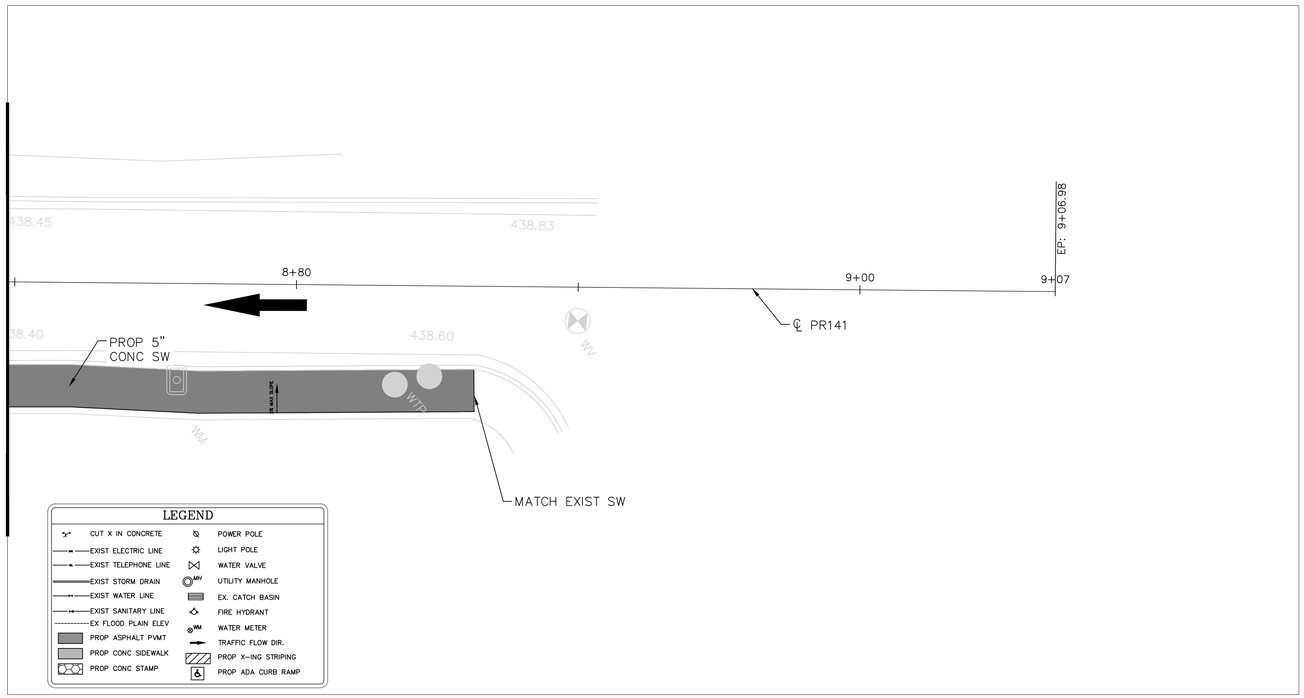
SHEET NAME
GRADING & PAVING DETAIL PLAN PR-141

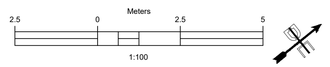
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: C505

C:\Users\Jaseadelgado\OneDrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg







GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

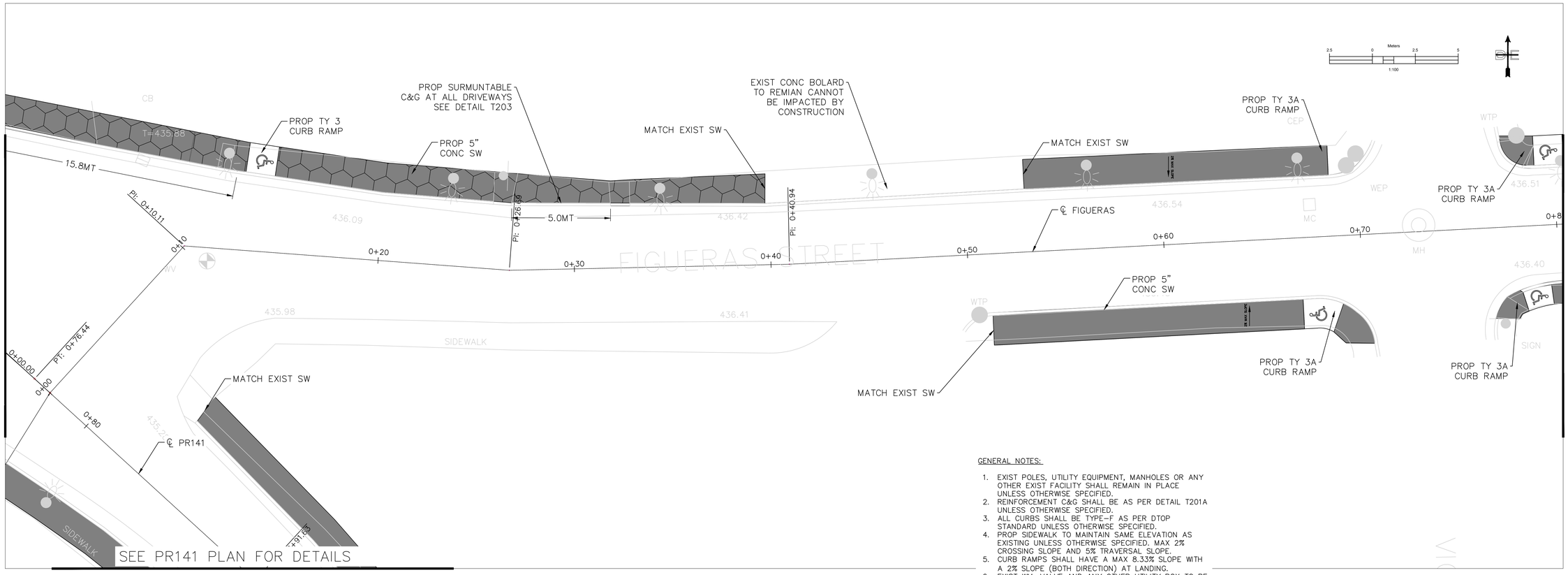
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN
PR-141

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C506

C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

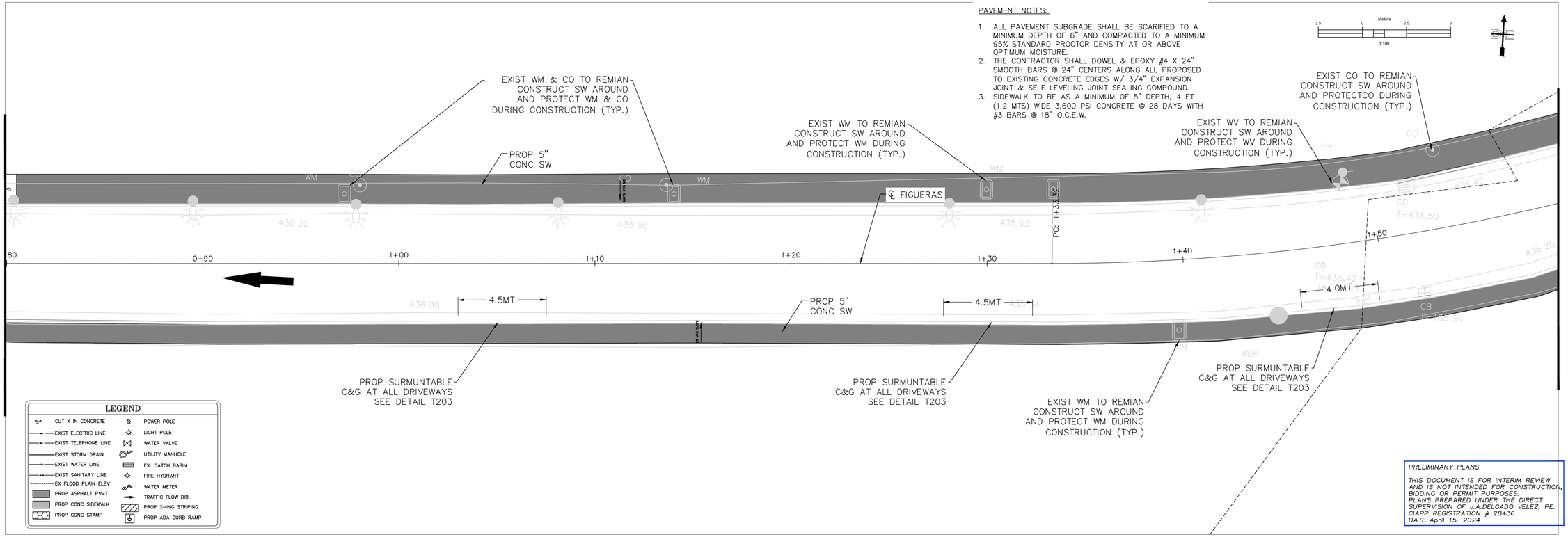


GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE–F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.



LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

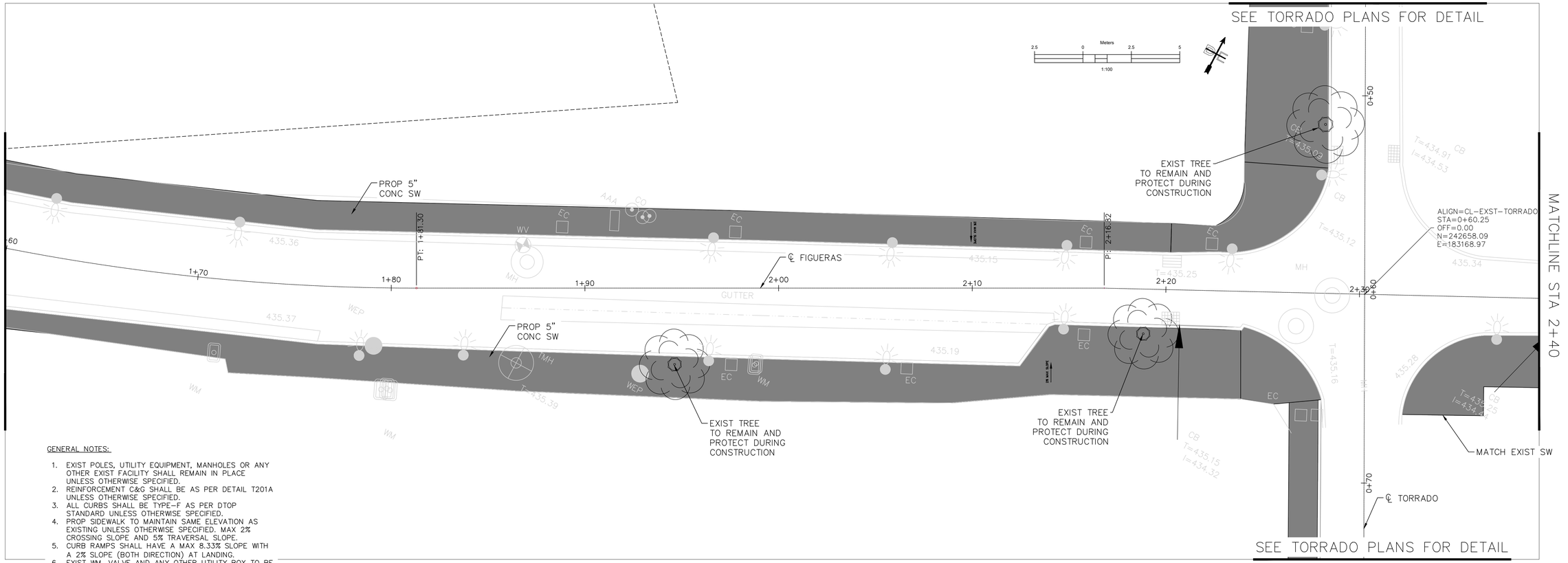
SHEET NAME
GRADING & PAVING DETAIL PLAN
FIGUERAS ST

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: C507

C:\Users\joseudelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

C:\Users\jose4delgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg



GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN FIGUERAS ST

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

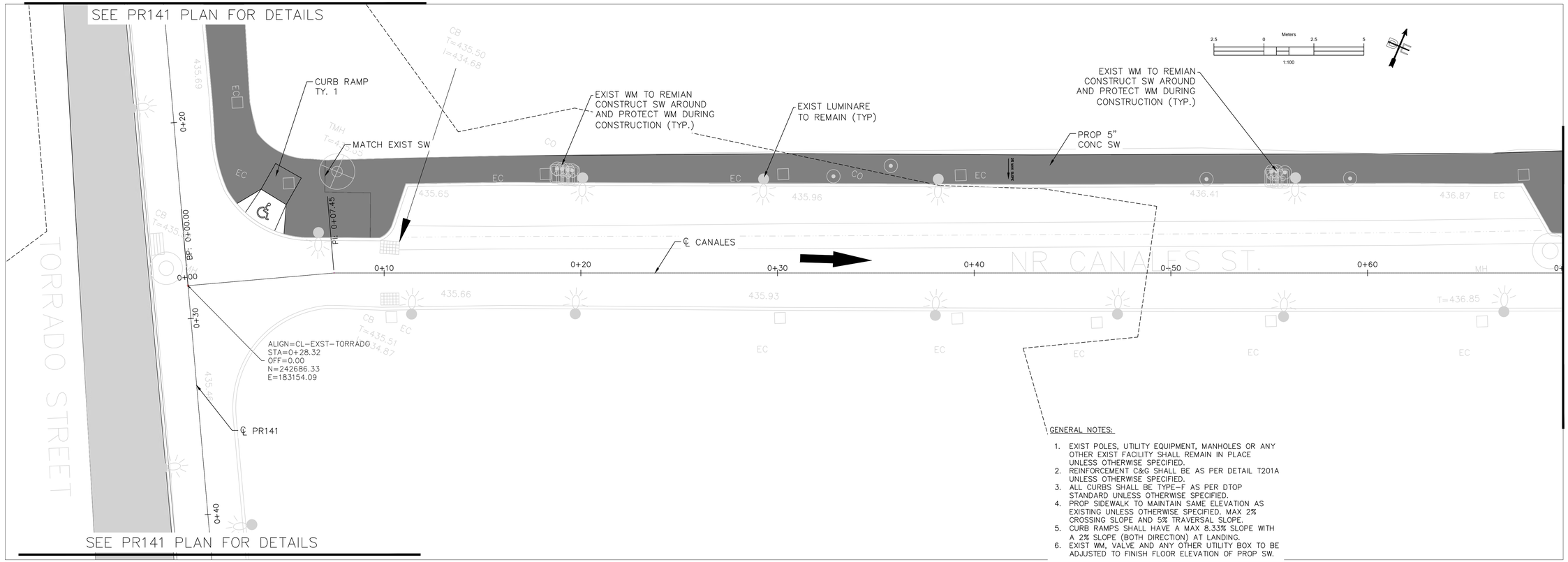
PROJECT NO.:
DTE23-004

SHEET NO.:
C508

PRELIMINARY PLANS

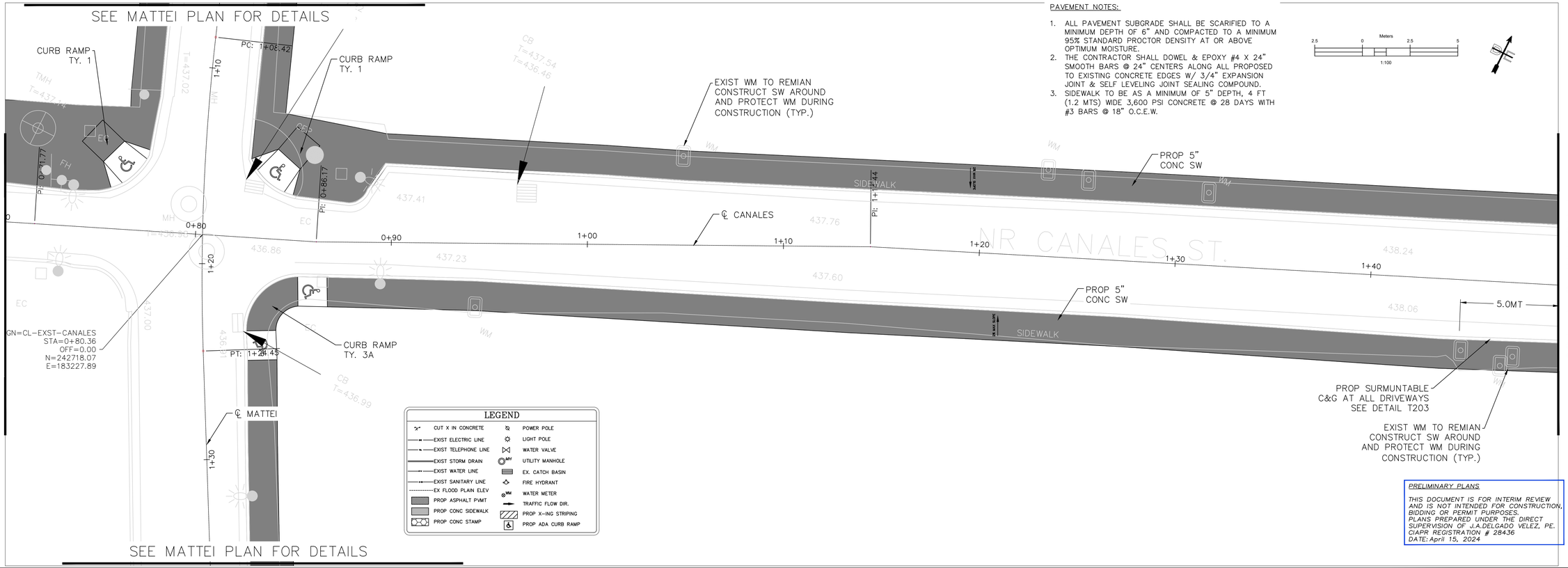
THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

SEE PR141 PLAN FOR DETAILS



SEE PR141 PLAN FOR DETAILS

SEE MATTEI PLAN FOR DETAILS



SEE MATTEI PLAN FOR DETAILS

LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

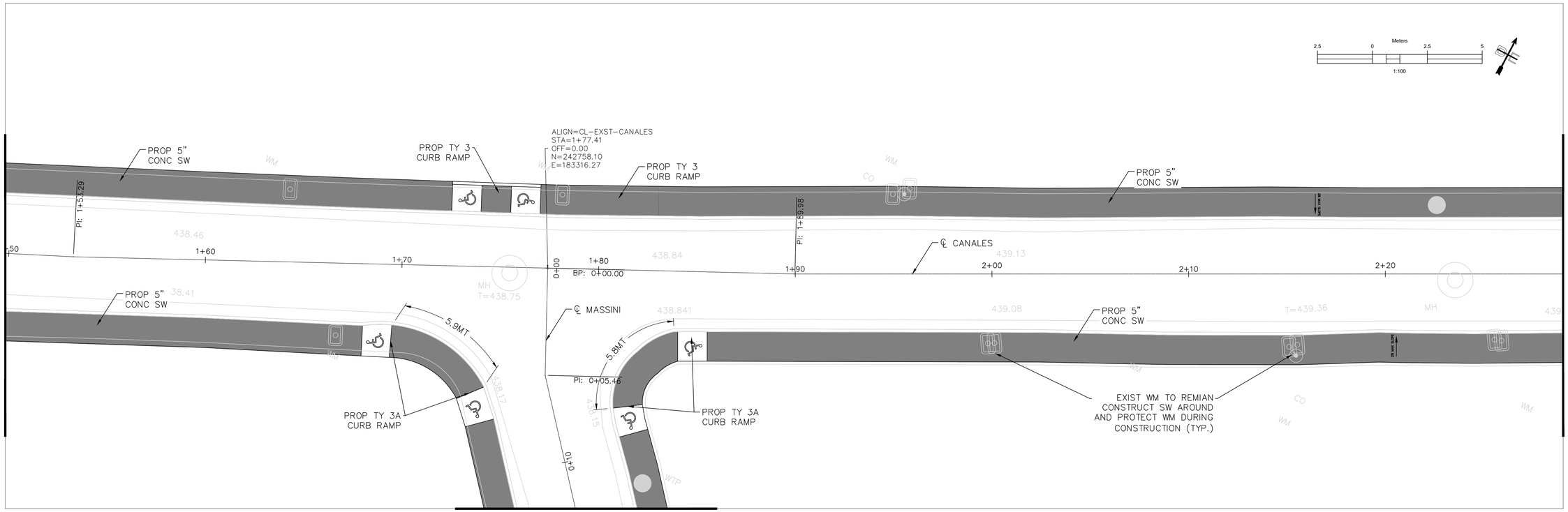
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN
NR CANALES ST

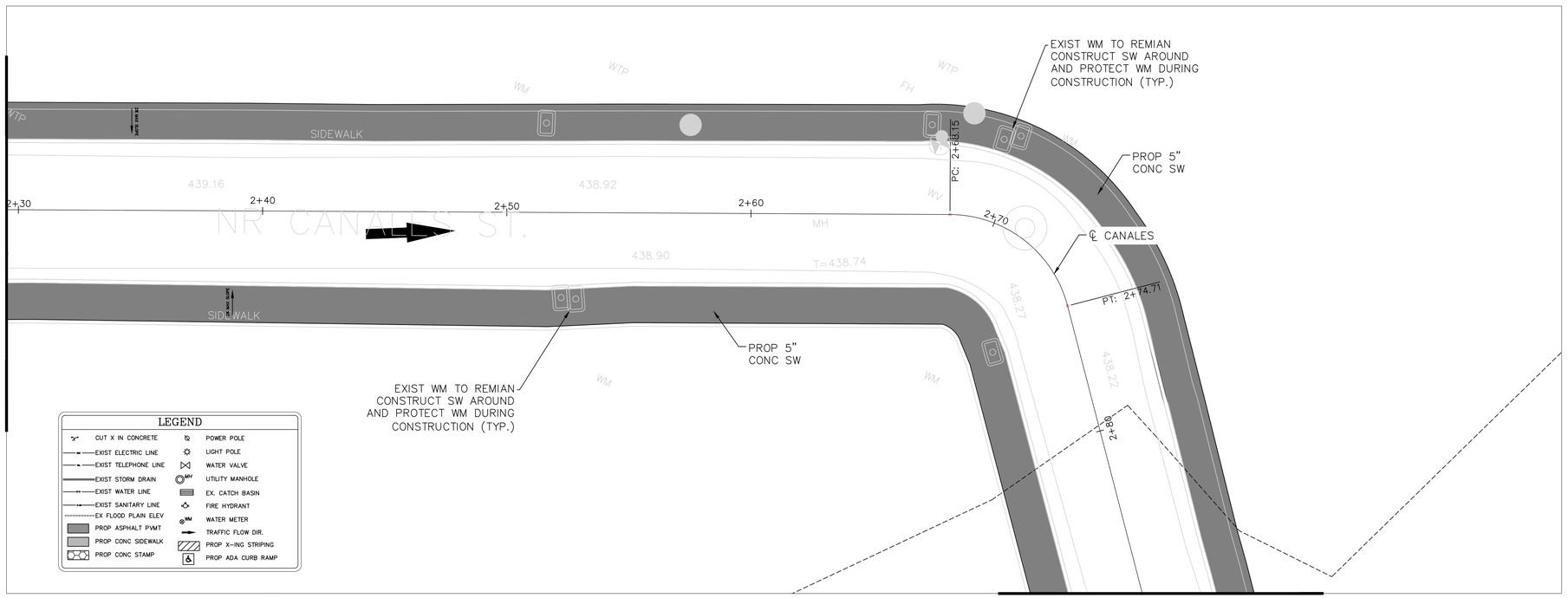
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C509

C:\Users\Joseadelgado\OneDrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg



SEE PR141 PLANS FOR DETAIL



SEE PR141 PLANS FOR DETAIL

LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

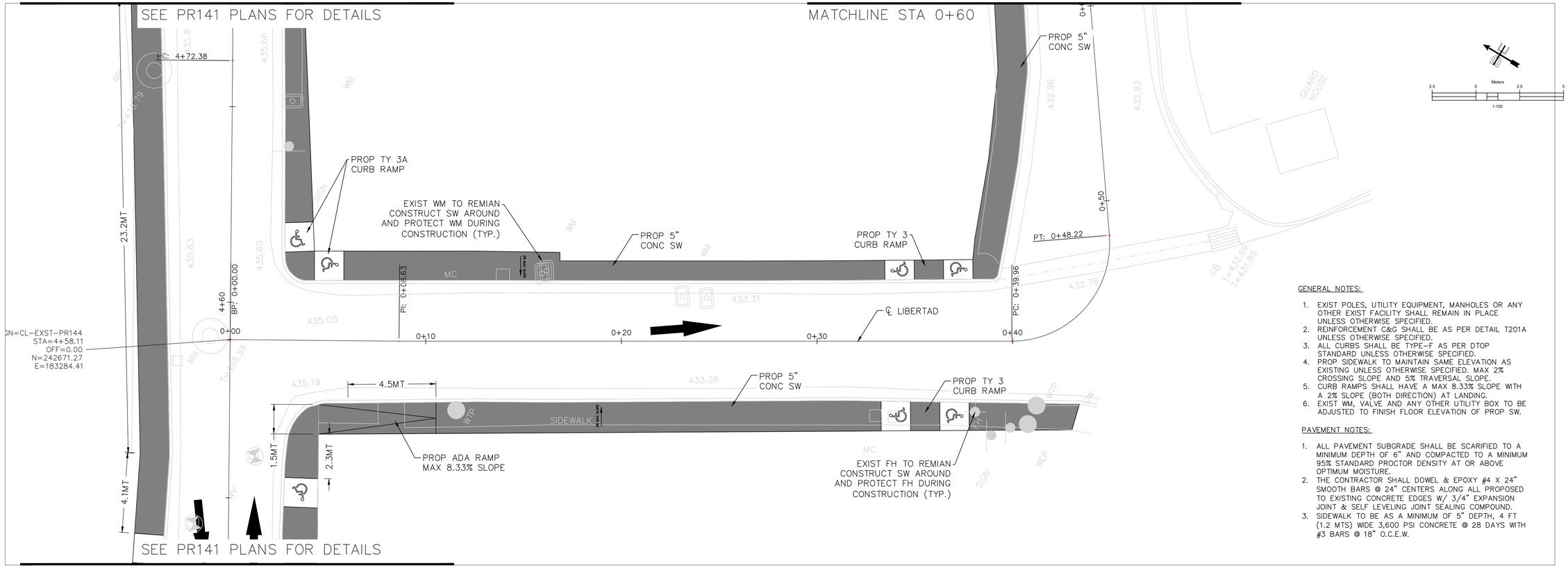
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN
NR CANALES ST

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C510

C:\Users\Josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

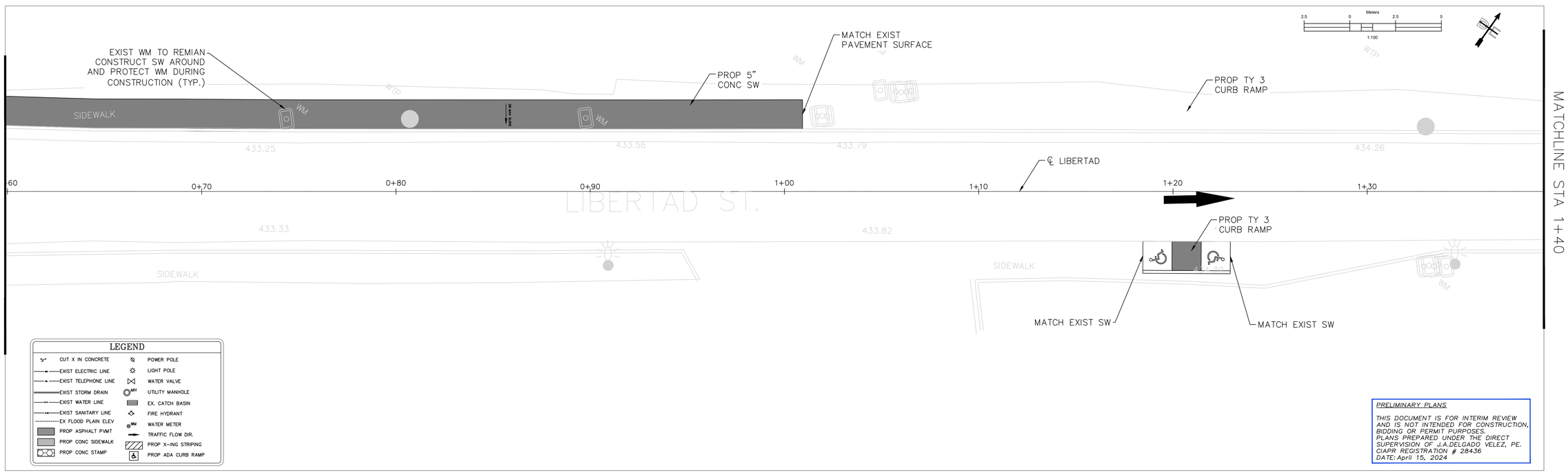


GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.



LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN LIBERTAD ST

REVISIONS	SYMBOL	DATE	BY

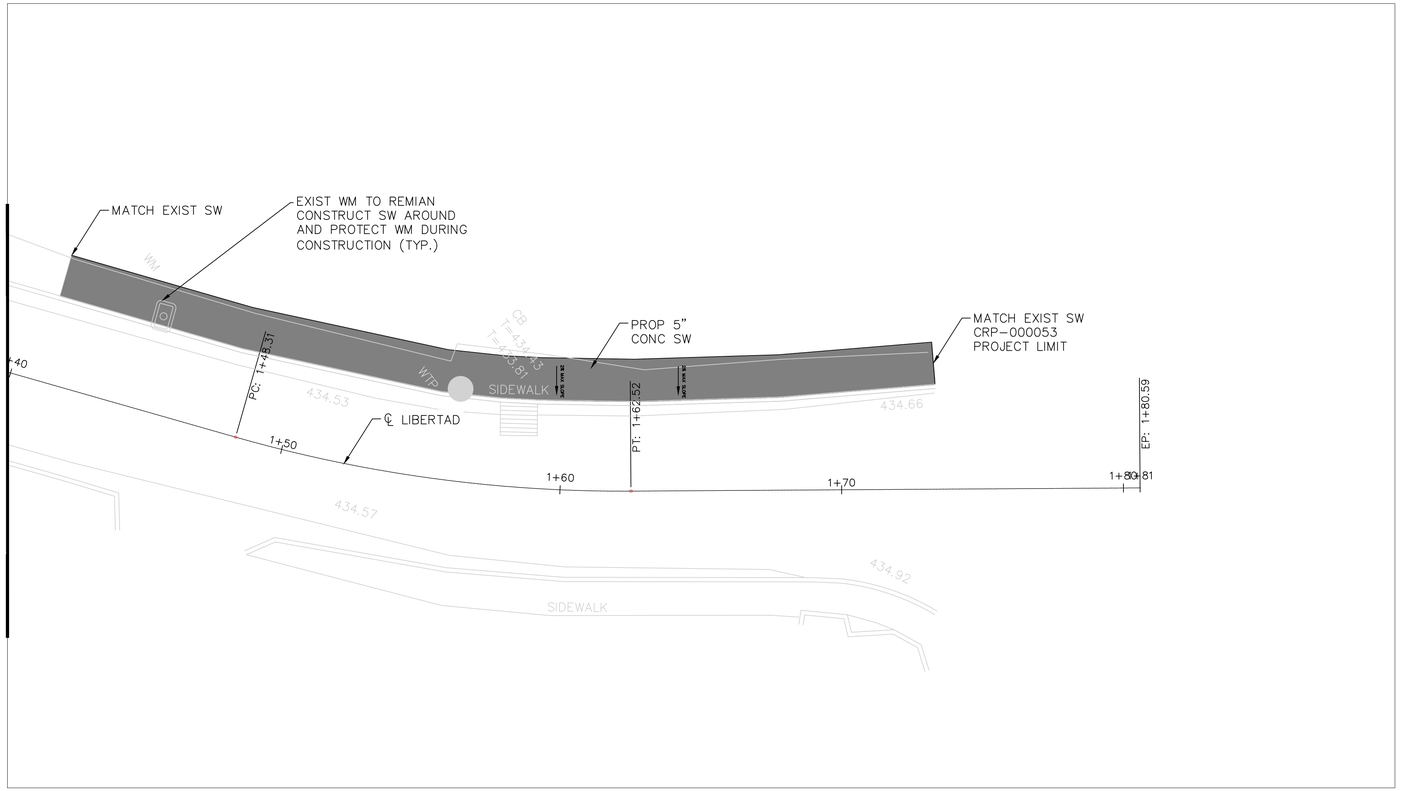
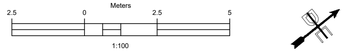
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C511

C:\Users_joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c0501 gr - pvg dtl plan.dwg



LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMPd	PROP ADA CURB RAMP

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING
DETAIL PLAN
LIBERTAD ST

REVISIONS	SYMBOL	DATE	BY

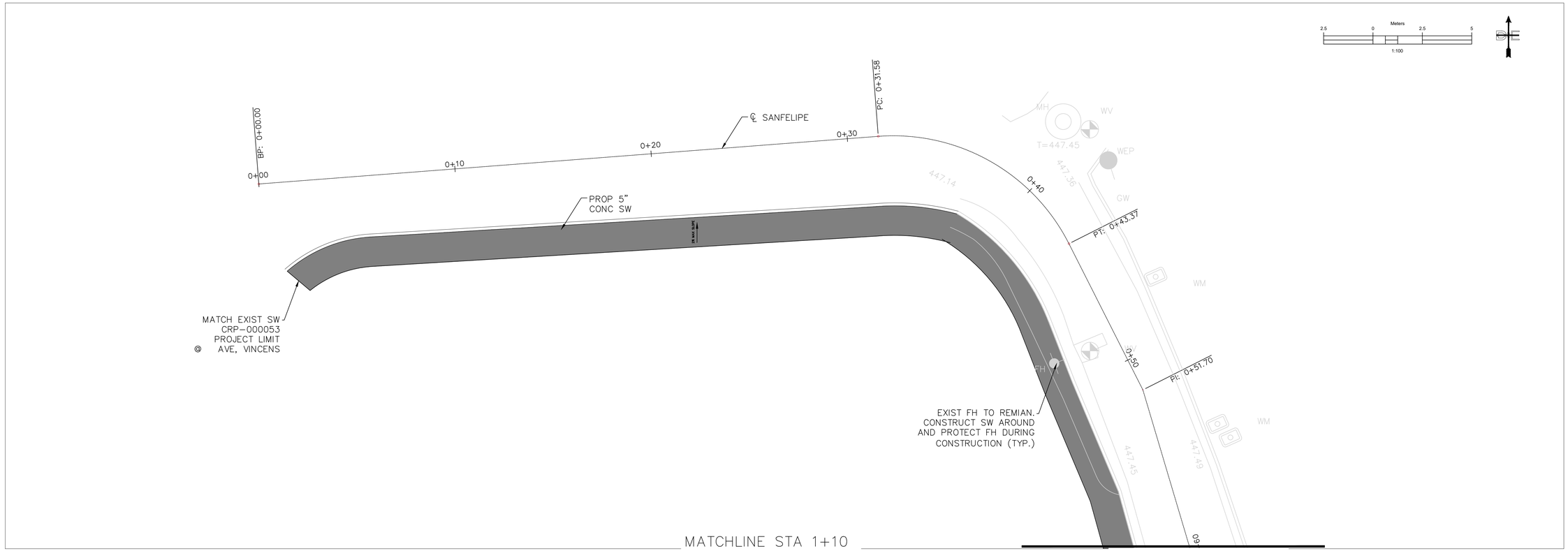
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

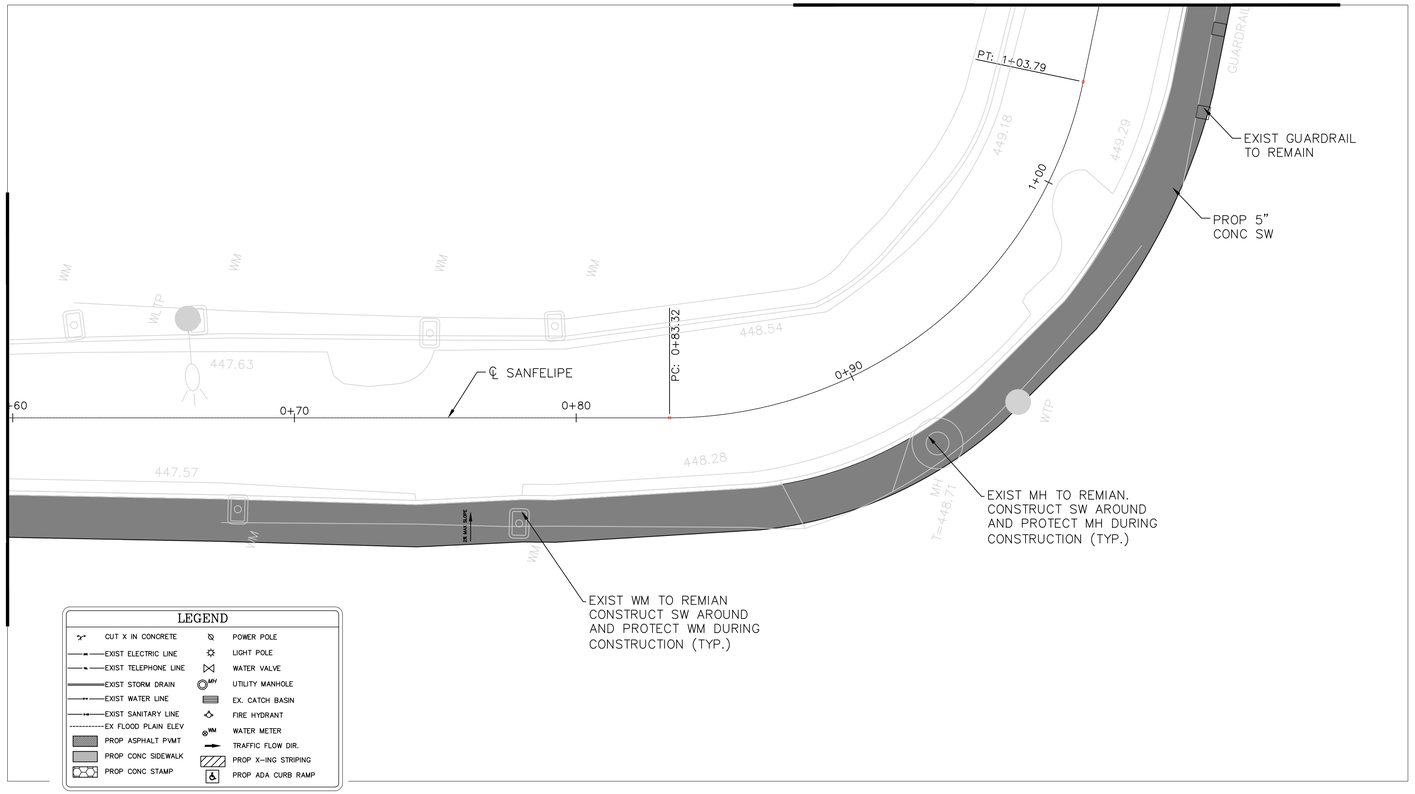
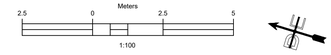
DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C512

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c0501 gr - pvg dtl plan.dwg





GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN SAN FELIPE ST

REVISIONS	SYMBOL	DATE	BY

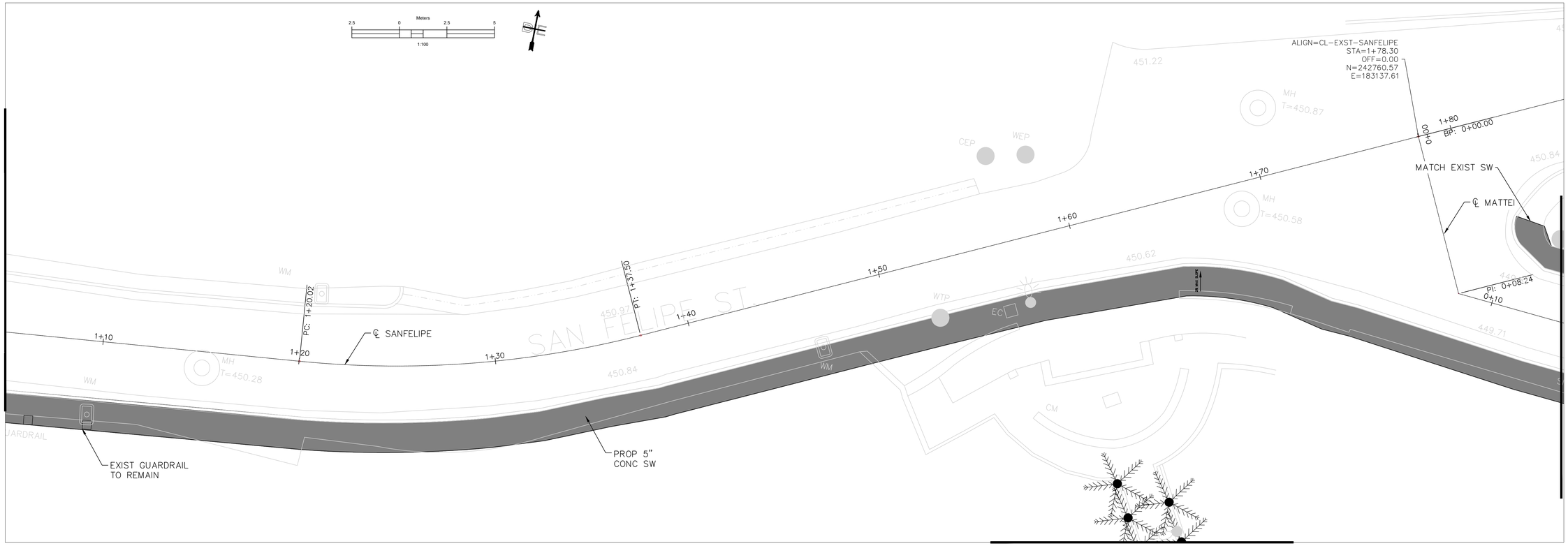
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C513

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg



LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

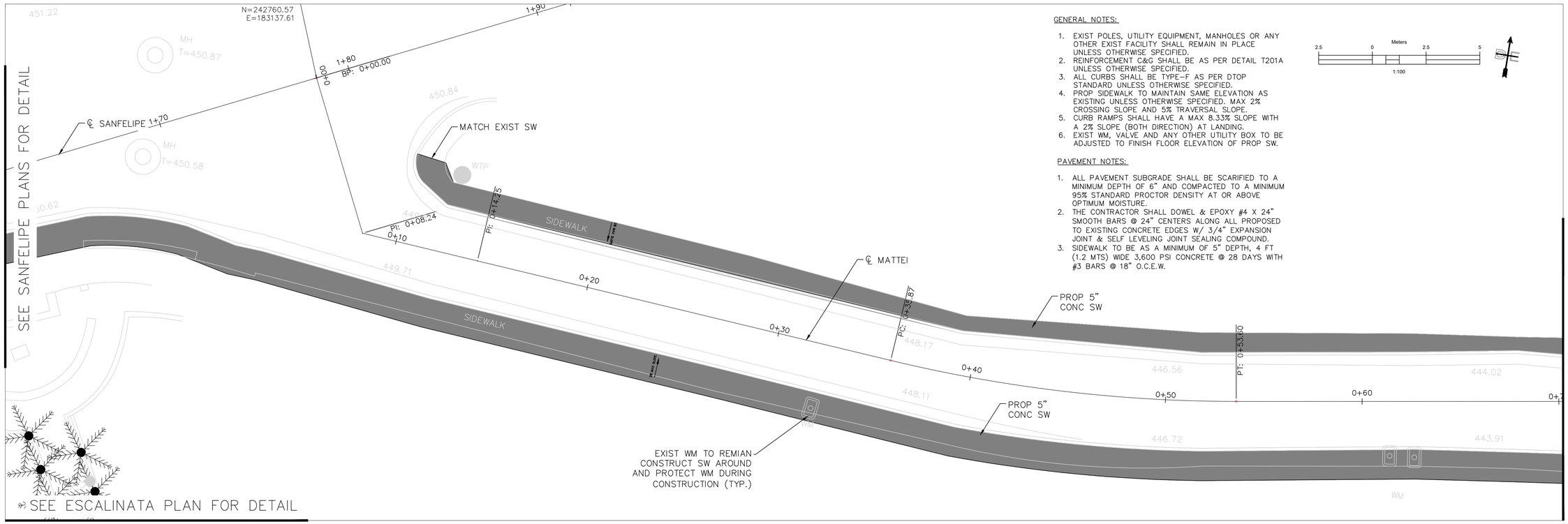
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN MATTEI ST

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C514

C:\Users\JoseDelgado\OneDrive - delgado torres engineering, llc\Documents - Projects\DTE-2023-004 sidewalk revitalization Jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg



DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

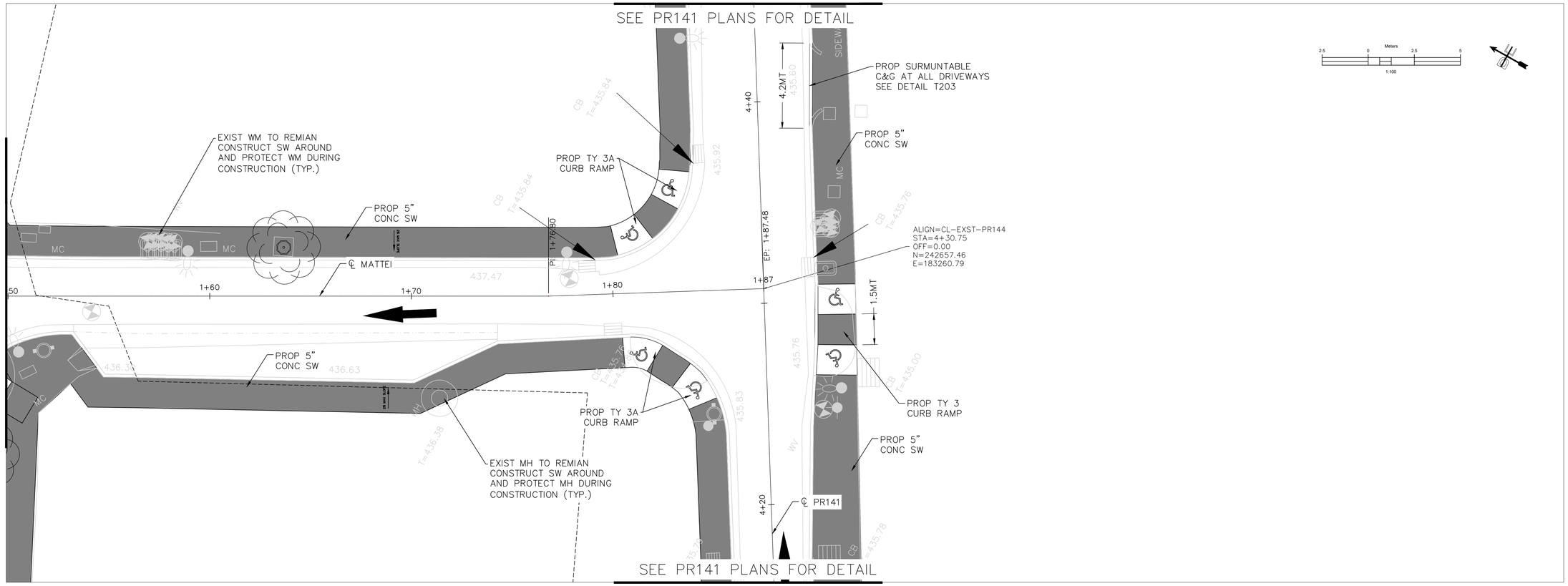
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN MATTEI ST

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: C515

C:\Users\Josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg



LEGEND

CUT X IN CONCRETE		POWER POLE	
EXIST ELECTRIC LINE		LIGHT POLE	
EXIST TELEPHONE LINE		WATER VALVE	
EXIST STORM DRAIN		UTILITY MANHOLE	
EXIST WATER LINE		EX. CATCH BASIN	
EXIST SANITARY LINE		FIRE HYDRANT	
EX FLOOD PLAIN ELEV		WATER METER	
PROP ASPHALT PVMT		TRAFFIC FLOW DIR.	
PROP CONC SIDEWALK		PROP X-ING STRIPING	
PROP CONC STAMP		PROP ADA CURB RAMP	

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

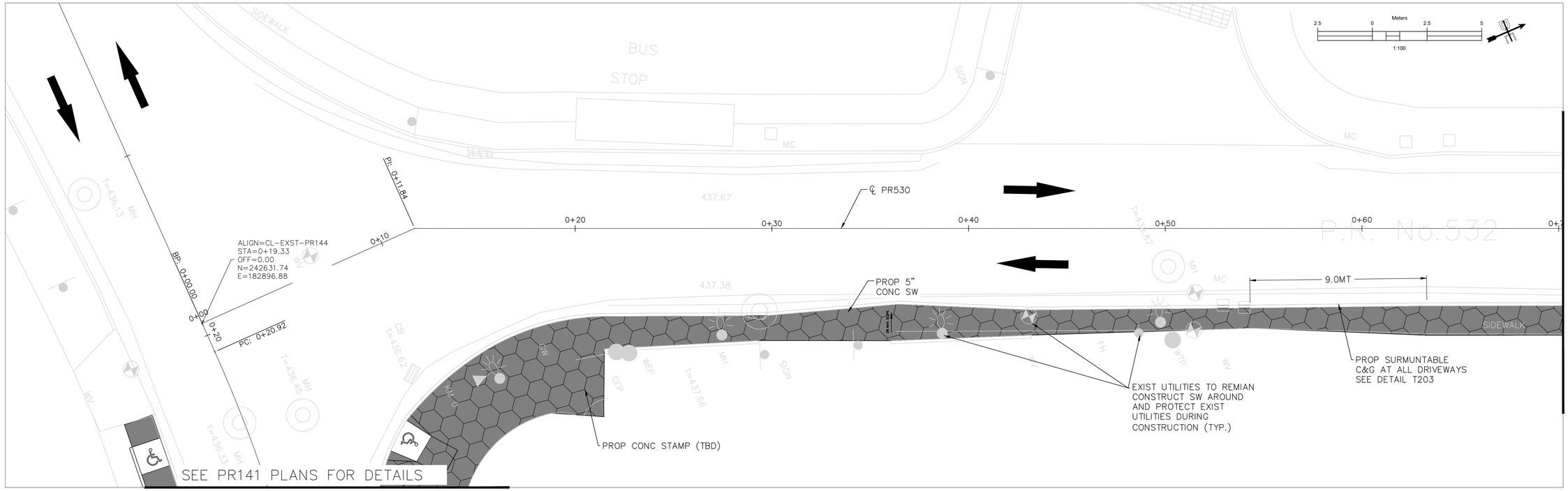
PROJECT NAME
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

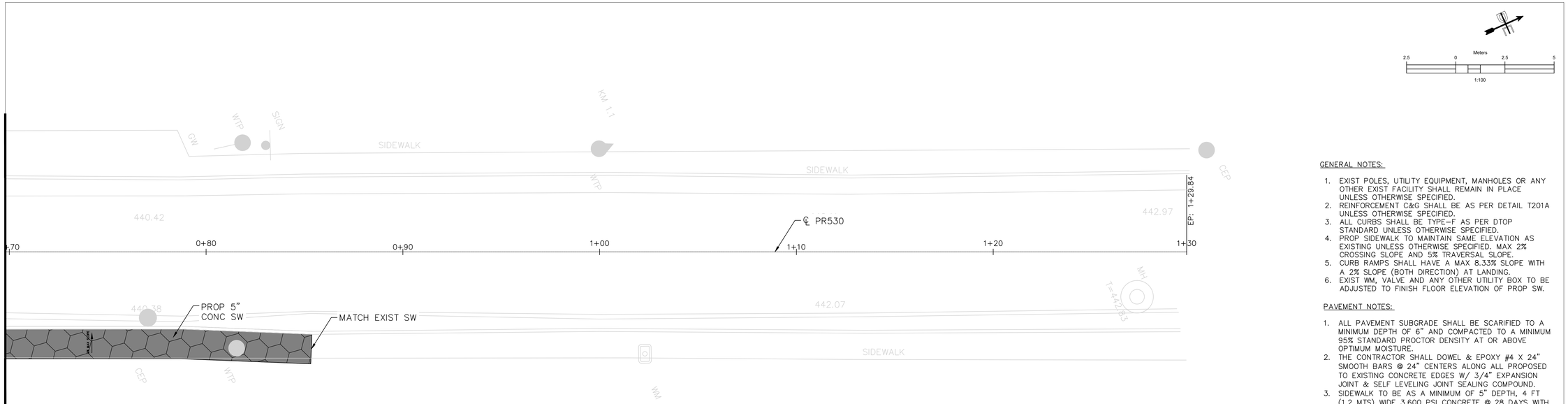
SHEET NAME
GRADING & PAVING
DETAIL PLAN
MATTEI ST

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C516

C:\Users\JoseDelgado\OneDrive - delgado torres engineering, llc\Documents - Projects\DTE-2023-004 sidewalk revitalization Jayuya urban center crp-053\DTE23-004 Cad\Production drawings\C0501 gr - pvg dtl plan.dwg





LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN
PR-530

REVISIONS	SYMBOL	DATE	BY

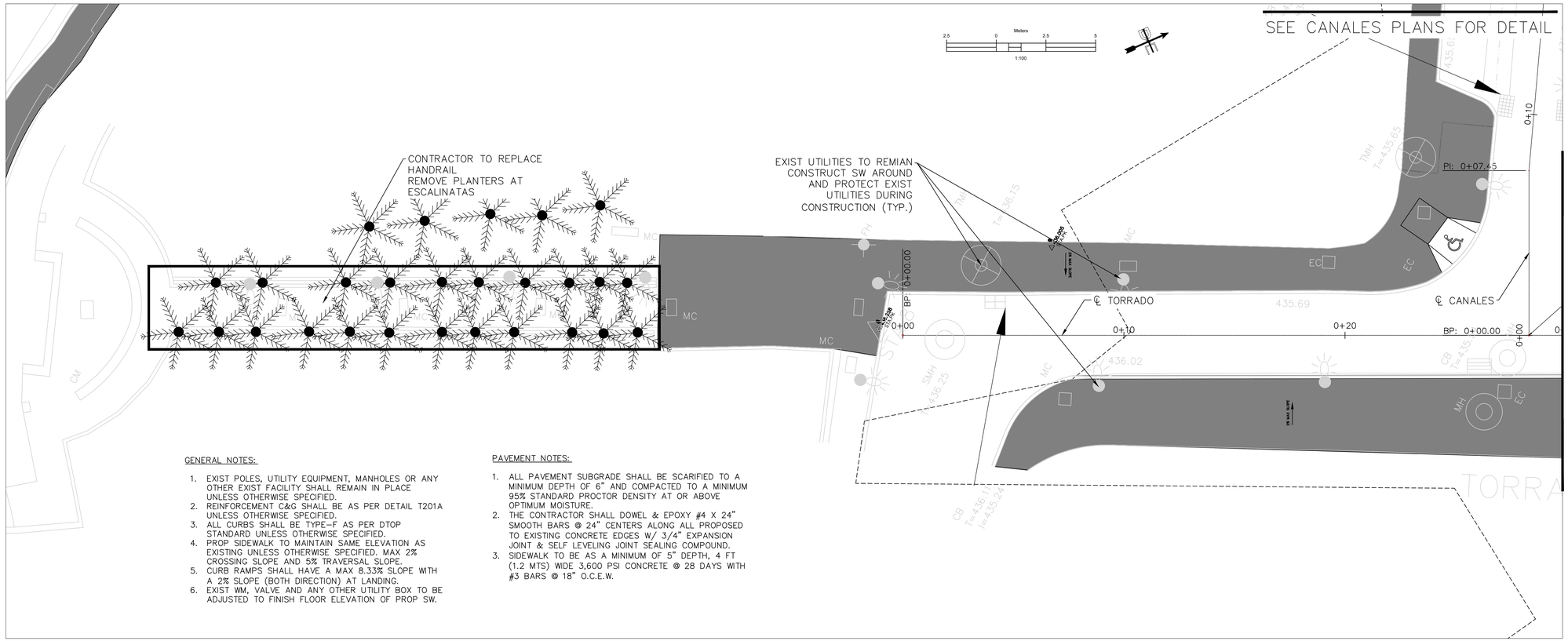
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C517

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg



DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN
ESCALINATAS & TORRADO ST

REVISIONS	SYMBOL	DATE	BY

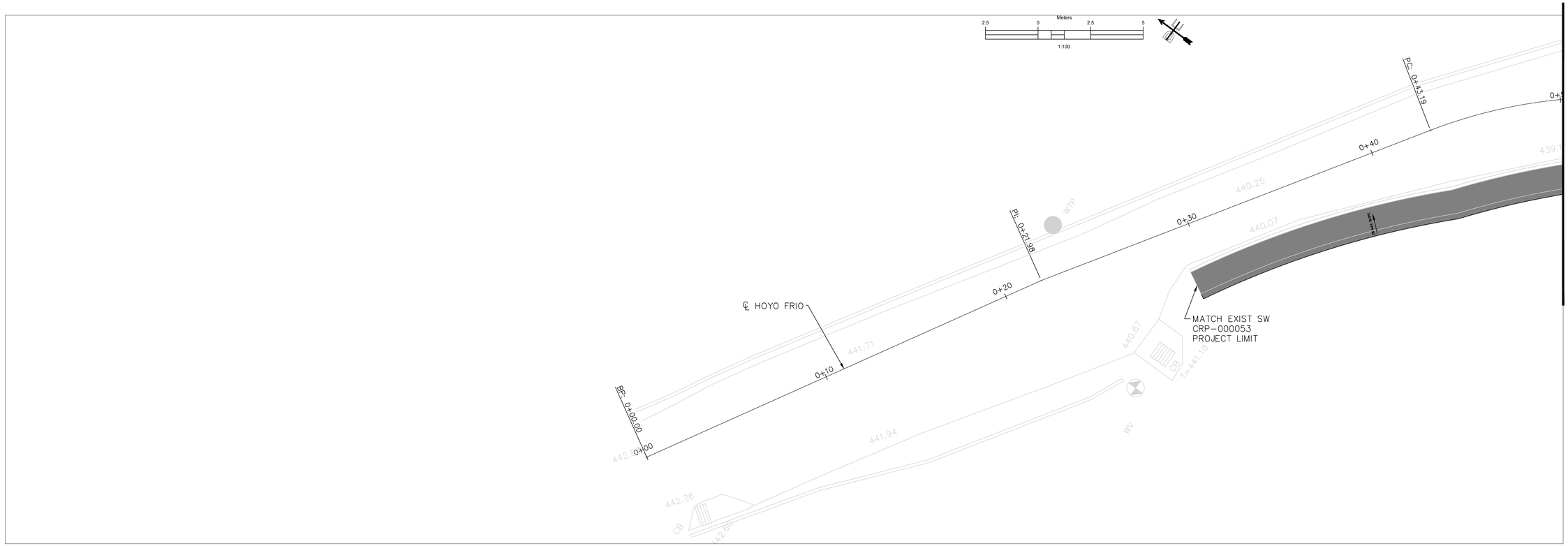
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004

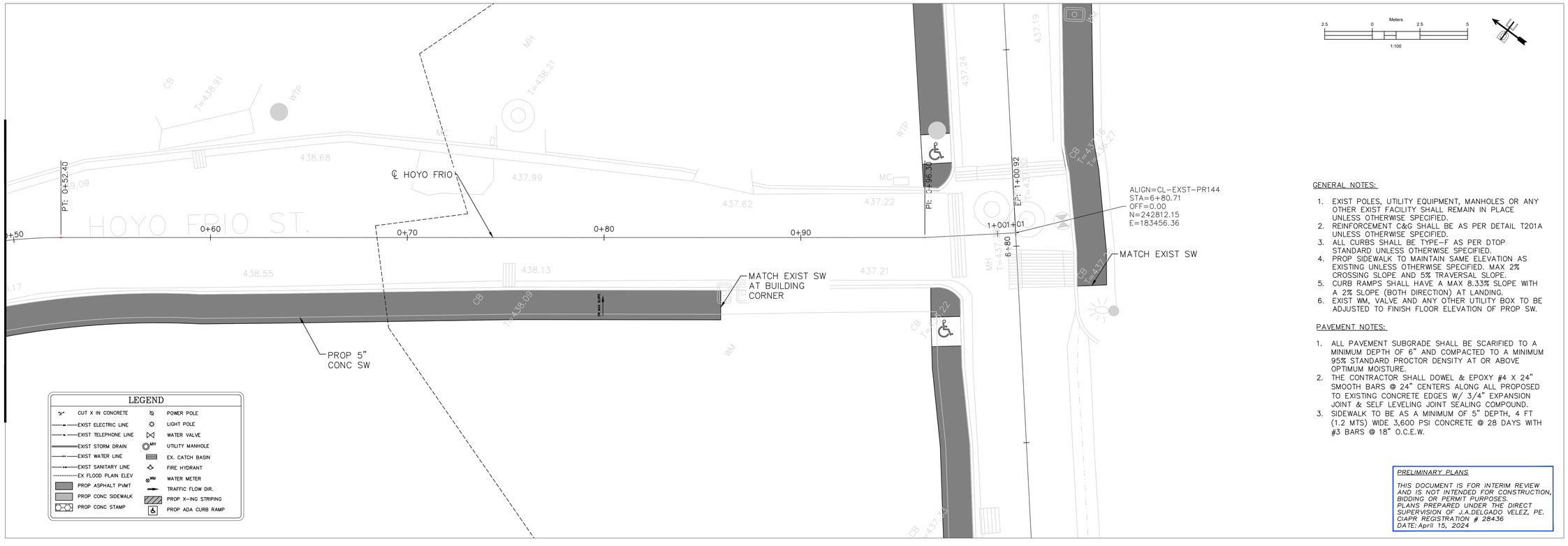
SHEET NO.:
C518

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436
DATE: April 15, 2024

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\cd501 gr - pvg dtl plan.dwg





GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING
DETAIL PLAN
HOYO FRIO ST

REVISIONS	SYMBOL	DATE	BY

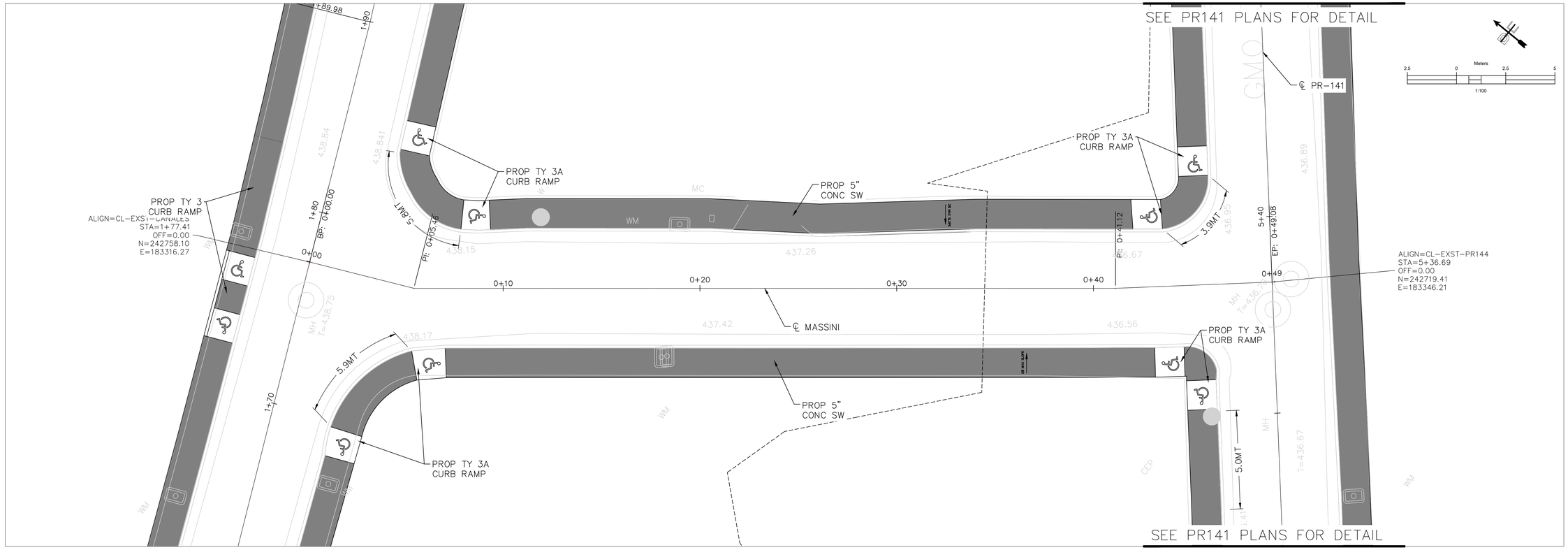
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C519

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg



LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

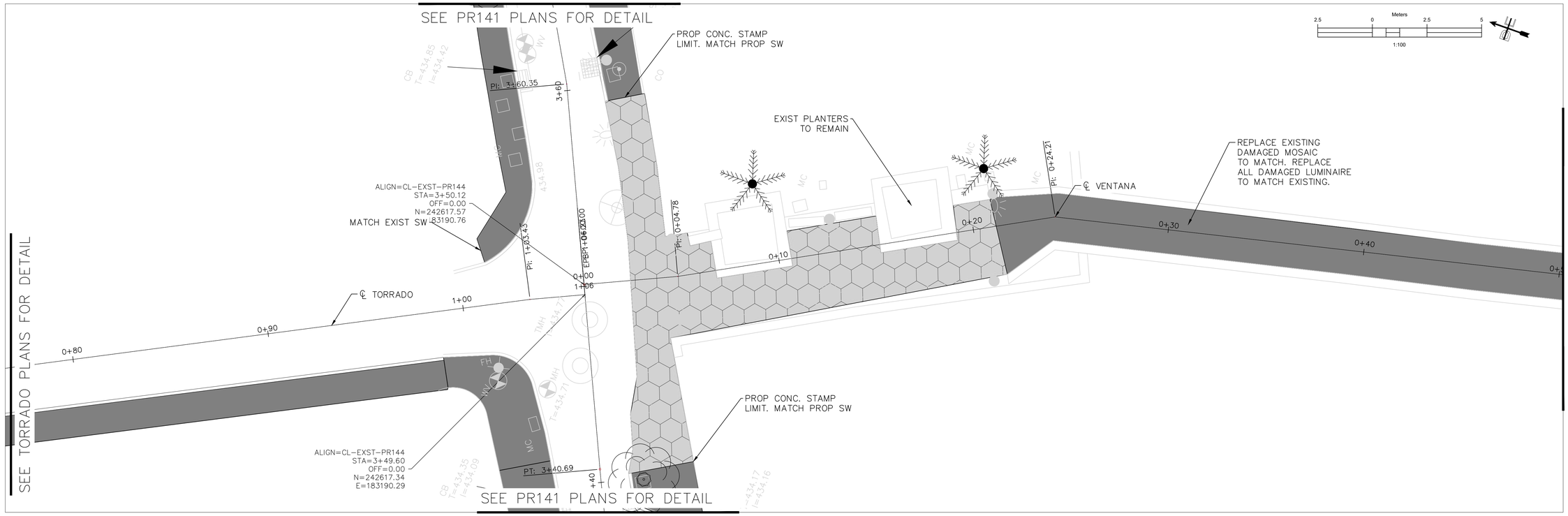
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

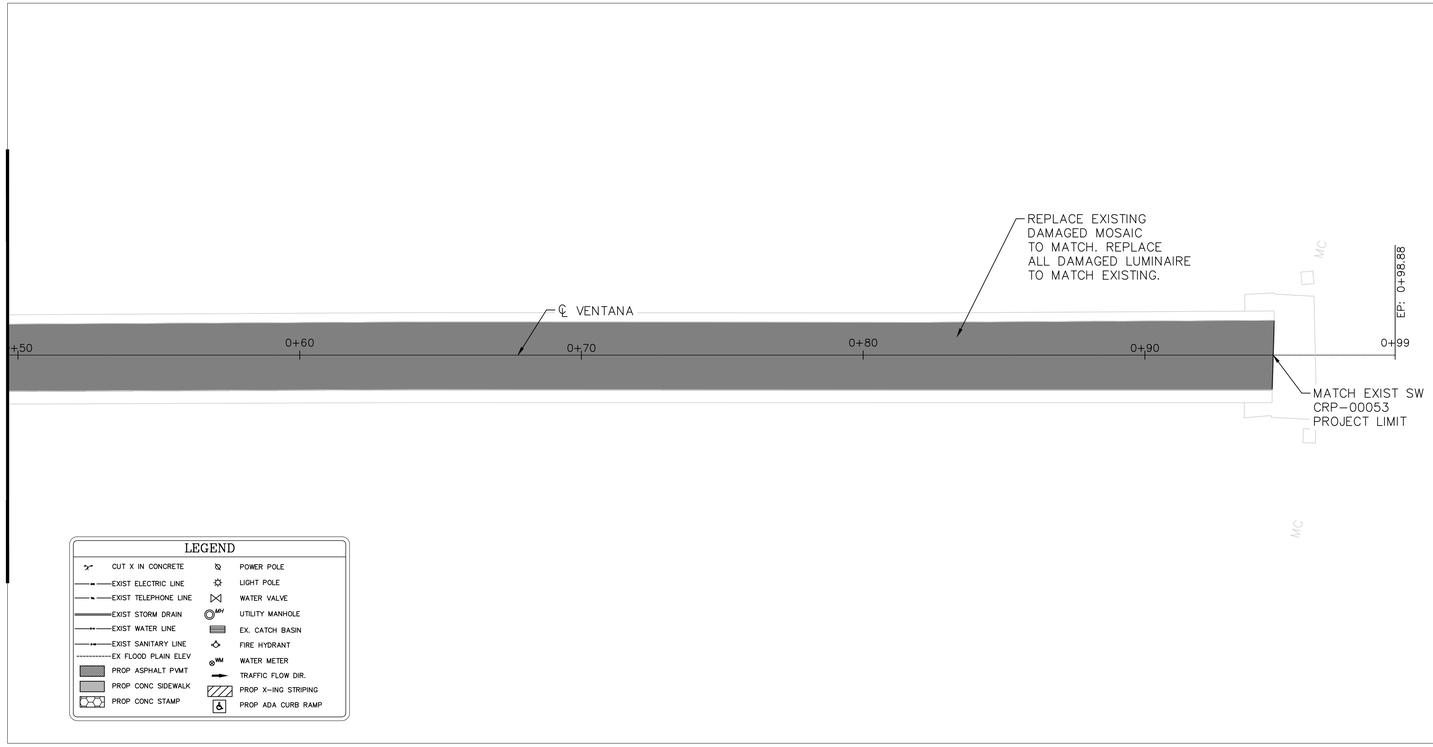
SHEET NAME
GRADING & PAVING DETAIL PLAN
MASSINI ST

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: C520

C:\Users\JoseDelgado\OneDrive - delgado torres engineering, llc\Documents - Projects\DTE-2023-004 sidewalk revitalization Jayuya urban center crp-053\DTE23-004 cad\production drawings\C0501 gr - pvg dtl plan.dwg





LEGEND

CUT X IN CONCRETE	POWER POLE
EXIST ELECTRIC LINE	LIGHT POLE
EXIST TELEPHONE LINE	WATER VALVE
EXIST STORM DRAIN	UTILITY MANHOLE
EXIST WATER LINE	EX. CATCH BASIN
EXIST SANITARY LINE	FIRE HYDRANT
EX FLOOD PLAIN ELEV	WATER METER
PROP ASPHALT PVMT	TRAFFIC FLOW DIR.
PROP CONC SIDEWALK	PROP X-ING STRIPING
PROP CONC STAMP	PROP ADA CURB RAMP

GENERAL NOTES:

1. EXIST POLES, UTILITY EQUIPMENT, MANHOLES OR ANY OTHER EXIST FACILITY SHALL REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.
2. REINFORCEMENT C&G SHALL BE AS PER DETAIL T201A UNLESS OTHERWISE SPECIFIED.
3. ALL CURBS SHALL BE TYPE-F AS PER DTOP STANDARD UNLESS OTHERWISE SPECIFIED.
4. PROP SIDEWALK TO MAINTAIN SAME ELEVATION AS EXISTING UNLESS OTHERWISE SPECIFIED. MAX 2% CROSSING SLOPE AND 5% TRAVERSAL SLOPE.
5. CURB RAMPS SHALL HAVE A MAX 8.33% SLOPE WITH A 2% SLOPE (BOTH DIRECTION) AT LANDING.
6. EXIST WM, VALVE AND ANY OTHER UTILITY BOX TO BE ADJUSTED TO FINISH FLOOR ELEVATION OF PROP SW.

PAVEMENT NOTES:

1. ALL PAVEMENT SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE.
2. THE CONTRACTOR SHALL DOWEL & EPOXY #4 X 24" SMOOTH BARS @ 24" CENTERS ALONG ALL PROPOSED TO EXISTING CONCRETE EDGES W/ 3/4" EXPANSION JOINT & SELF LEVELING JOINT SEALING COMPOUND.
3. SIDEWALK TO BE AS A MINIMUM OF 5" DEPTH, 4 FT (1.2 MTS) WIDE 3,600 PSI CONCRETE @ 28 DAYS WITH #3 BARS @ 18" O.C.E.W.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
GRADING & PAVING DETAIL PLAN
VENTANA AL RIO BRIDGE

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C521

C:\Users\josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c0501 gr - pvg dtl plan.dwg

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\rvtdwg dtl.dwg

SEAL WITH APPROVED SEALER

TOP OF STANDARD CURB TYPE

MATCH BACK OF CURB AND GUTTER SECTION

GENERAL NOTES:

1. SURMOUNTABLE CURB AND GUTTER SHALL BE INSTALLED WHENEVER THERE IS A PRIVATE DRIVEWAY FOR VEHICLE ACCESS.
2. PAVEMENT DEPTHS INDICATED ARE MINIMUM AND MAY BE INCREASED UPON RECOMMENDATION OF ENGINEER OF RECORD. PAVEMENT DEPTH SHALL BE CONSISTENT FOR ALL APPLICABLE DETAILS.
3. REBAR INDICATED ARE MINIMUM AND MAY BE INCREASED UPON RECOMMENDATION OF ENGINEER OF RECORD. REBAR SIZE SHALL BE CONSISTENT FOR ALL APPLICABLE DETAILS.

WITH TRANSITION TO FULL HEIGHT CURB

T203

T206

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

CURB & GUTTER DETAIL REINFORCED CONC. DETAIL

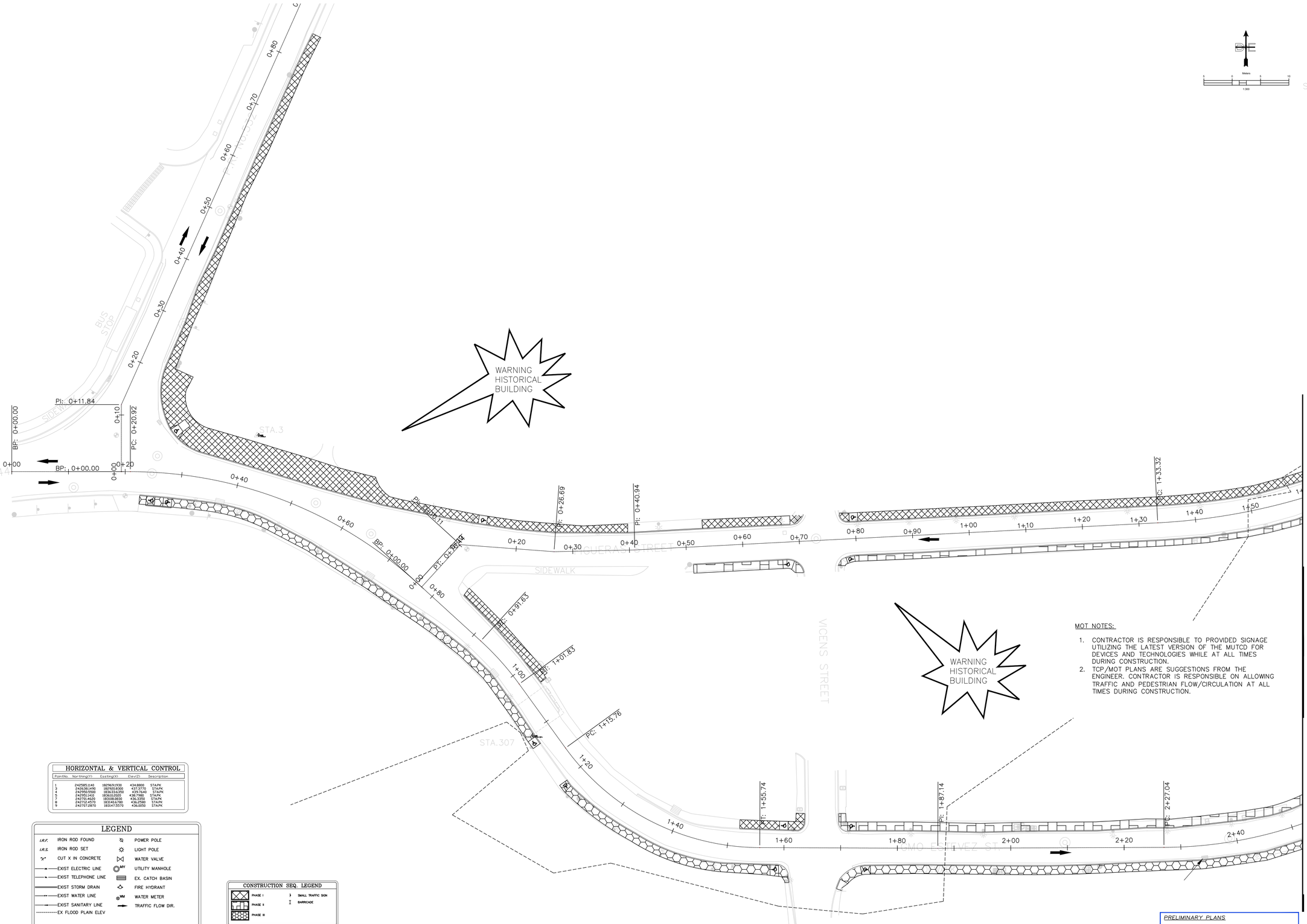
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

PROJECT NO.: DTE23-004

SHEET NO.: DTL-01



MOT NOTES:

1. CONTRACTOR IS RESPONSIBLE TO PROVIDED SIGNAGE UTILIZING THE LATEST VERSION OF THE MUTCD FOR DEVICES AND TECHNOLOGIES WHILE AT ALL TIMES DURING CONSTRUCTION.
2. TCP/MOT PLANS ARE SUGGESTIONS FROM THE ENGINEER. CONTRACTOR IS RESPONSIBLE ON ALLOWING TRAFFIC AND PEDESTRIAN FLOW/CIRCULATION AT ALL TIMES DURING CONSTRUCTION.

HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.9930	434.8800	STA/PK
3	242638.1490	182925.8300	437.3775	STA/PK
4	242950.5500	183633.6350	439.7640	STA/PK
5	242951.1410	183610.2020	438.7980	STA/PK
7	242701.4620	183108.8830	436.3250	STA/PK
8	242737.4570	183044.6530	436.2950	STA/PK
9	242767.2870	183147.5570	436.0050	STA/PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
E	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
T	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
W	EXIST WATER LINE	WM	WATER METER
S	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX FLOOD PLAIN ELEV		

CONSTRUCTION SEQ. LEGEND

	PHASE I		SMALL TRAFFIC SIGN
	PHASE II	I	BARRICADE
	PHASE III		

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE TO OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
CONSTRUCTION SEQUENCE PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004

SHEET NO.:
C601

C:\Users\joseadelgado\OneDrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c605 construction sequence plan.dwg

MATCHLINE SHEET C601

MATCHLINE SHEET: C605

MATCHLINE SHEET: C605

MATCHLINE SHEET: C603

MATCHLINE SHEET: C603

MATCHLINE SHEET C601

WARNING HISTORICAL BUILDING

WARNING HISTORICAL BUILDING

WARNING HISTORICAL BUILDING

BOULEVARD STREET

GMO ESTEVEZ ST.

SIDEWALK

GUARD HOUSE

Meters
5 0 5 10
1:300

HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
2	242638.1490	182909.8300	437.3770	STA.PK
3	242950.5500	183633.6350	439.7640	STA.PK
4	242751.4620	183586.0830	436.3350	STA.PK
7	242751.4620	183586.0830	436.3350	STA.PK
8	242718.4570	183143.6780	436.2580	STA.PK
9	242707.2870	183147.5570	436.0050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
	EXIST ELECTRIC LINE	UMH	UTILITY MANHOLE
	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
	EXIST WATER LINE	WM	WATER METER
	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX FLOOD PLAIN ELEV		

CONSTRUCTION SEQ. LEGEND

	PHASE I		SMALL TRAFFIC SIGN
	PHASE II	I	BARRICADE
	PHASE III		

MOT NOTES:

1. CONTRACTOR IS RESPONSIBLE TO PROVIDED SIGNAGE UTILIZING THE LATEST VERSION OF THE MUTCD FOR DEVICES AND TECHNOLOGIES WHILE AT ALL TIMES DURING CONSTRUCTION.
2. TCP/MOT PLANS ARE SUGGESTIONS FROM THE ENGINEER. CONTRACTOR IS RESPONSIBLE ON ALLOWING TRAFFIC AND PEDESTRIAN FLOW/CIRCULATION AT ALL TIMES DURING CONSTRUCTION.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

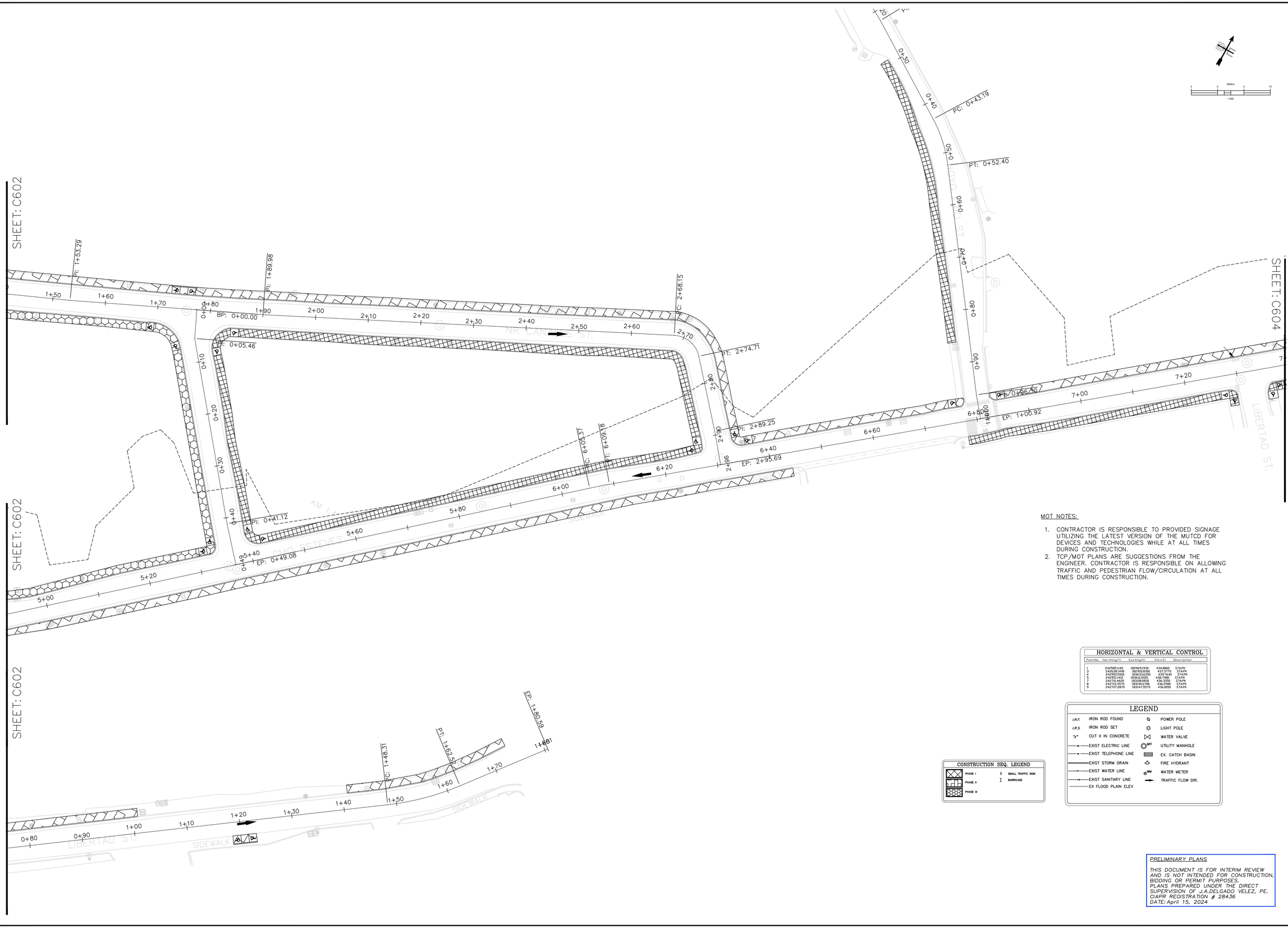
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
CONSTRUCTION SEQUENCE PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: C602

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c605 construction sequence plan.dwg



MOT NOTES:

1. CONTRACTOR IS RESPONSIBLE TO PROVIDED SIGNAGE UTILIZING THE LATEST VERSION OF THE MUTCD FOR DEVICES AND TECHNOLOGIES WHILE AT ALL TIMES DURING CONSTRUCTION.
2. TCP/MOT PLANS ARE SUGGESTIONS FROM THE ENGINEER. CONTRACTOR IS RESPONSIBLE ON ALLOWING TRAFFIC AND PEDESTRIAN FLOW/CIRCULATION AT ALL TIMES DURING CONSTRUCTION.

HORIZONTAL & VERTICAL CONTROL

PointNo	Northing(Y)	Easting(X)	Elev(Z)	Description
1	2421585.1140	182969.9300	434.8800	STA/PK
2	2421583.1490	182969.8280	434.3370	STA/PK
3	2421502.0500	183023.6200	435.7640	STA/PK
5	2421501.1400	183632.0500	436.7980	STA/PK
7	2421701.4620	183108.0830	436.3350	STA/PK
8	2421721.4570	183140.6780	436.3580	STA/PK
9	2421707.2870	183147.5570	436.0050	STA/PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
	EXIST WATER LINE	WM	WATER METER
	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX FLOOD PLAIN ELEV		

CONSTRUCTION SEQ. LEGEND

PHASE I	SMALL TRAFFIC SIGN
PHASE II	BARRICADE
PHASE III	

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

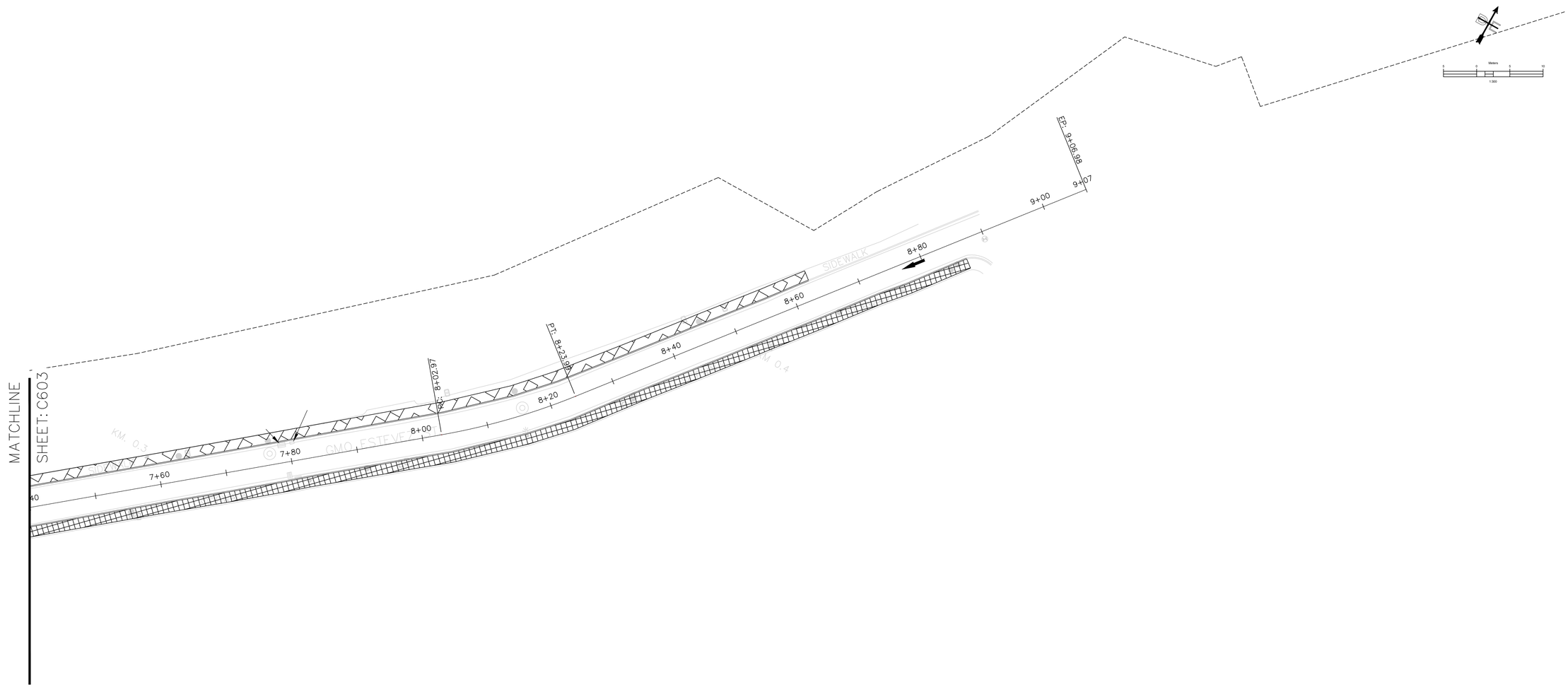
PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
CONSTRUCTION SEQUENCE PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
April 15, 2024
PROJECT NO.:
DTE23-004
SHEET NO.:
C603

C:\Users\Joseadelgado\OneDrive - delgado torres engineering, llc\Documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c605 construction sequence plan.dwg



HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
3	242638.1490	182920.8300	437.3770	STA.PK
4	242958.5500	183639.6.250	435.7640	STA.PK
5	242951.1410	183610.0320	438.7980	STA.PK
7	242712.4570	183.466.1.00	436.2.580	STA.PK
8	242712.4570	183.466.1.00	436.2580	STA.PK
9	242707.2870	183147.5570	436.0050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
"x"	CUT X IN CONCRETE		WATER VALVE
—E—	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
—T—	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
—W—	EXIST WATER LINE	WM	WATER METER
—S—	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX FLOOD PLAIN ELEV		

CONSTRUCTION SEQ. LEGEND

	PHASE I		SMALL TRAFFIC SIGN
	PHASE II	I	BARRICADE
	PHASE III		

MOT NOTES:

1. CONTRACTOR IS RESPONSIBLE TO PROVIDED SIGNAGE UTILIZING THE LATEST VERSION OF THE MUTCD FOR DEVICES AND TECHNOLOGIES WHILE AT ALL TIMES DURING CONSTRUCTION.
2. TCP/MOT PLANS ARE SUGGESTIONS FROM THE ENGINEER. CONTRACTOR IS RESPONSIBLE ON ALLOWING TRAFFIC AND PEDESTRIAN FLOW/CIRCULATION AT ALL TIMES DURING CONSTRUCTION.

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
CONSTRUCTION SEQUENCE PLAN

REVISIONS	SYMBOL	DATE	BY

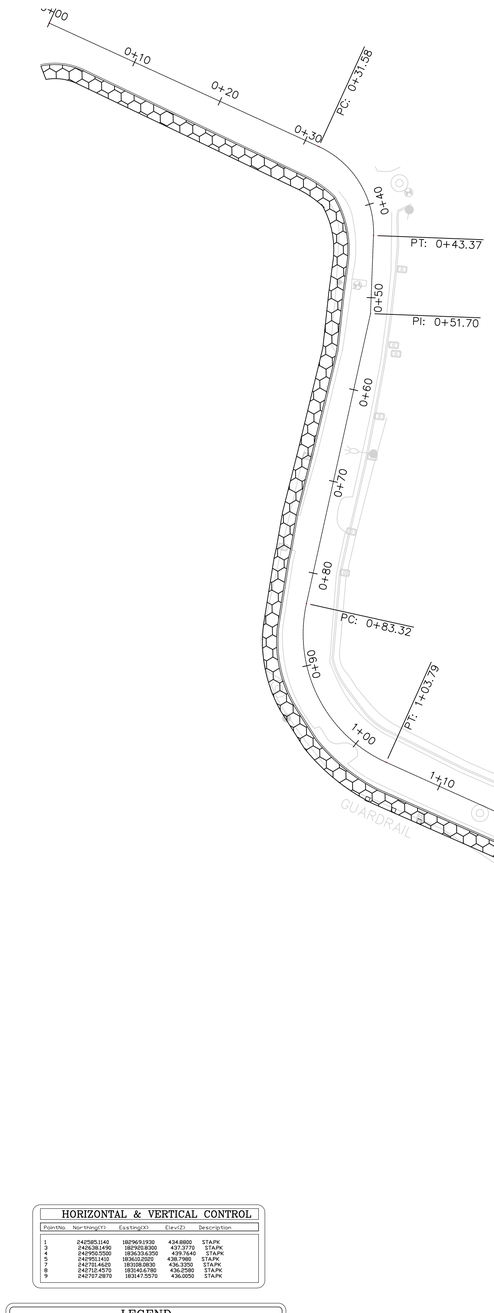
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

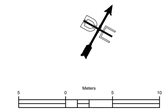
DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
C604

C:\Users_joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c605 construction sequence plan.dwg





HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
3	242638.1490	182923.8380	435.0770	STA.PK
4	242760.2430	182803.7200	437.3540	STA.PK
5	242951.1410	183635.0205	438.7980	STA.PK
7	242701.4620	183108.0830	436.3350	STA.PK
8	242712.4570	183540.6780	436.2580	STA.PK
9	242707.2870	183417.5570	436.0650	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
E	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
T	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
W	EXIST WATER LINE	WM	WATER METER
S	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX FLOOD PLAIN ELEV		

CONSTRUCTION SEQ. LEGEND

	PHASE I		SMALL TRAFFIC SIGN
	PHASE II	I	BARRICADE
	PHASE III		

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

SHEET NAME
CONSTRUCTION SEQUENCE PLAN

REVISIONS	SYMBOL	DATE	BY

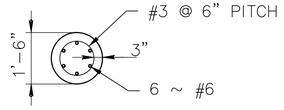
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

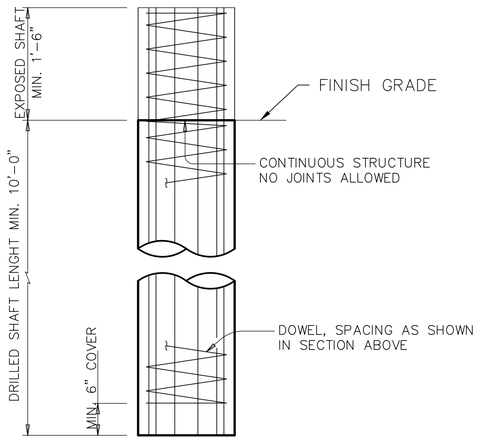
SHEET NO.:
C605

C:\Users\Jose\delgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c605 construction sequence plan.dwg

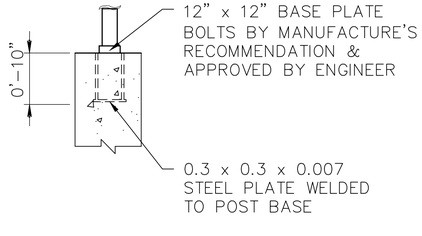


SECTION

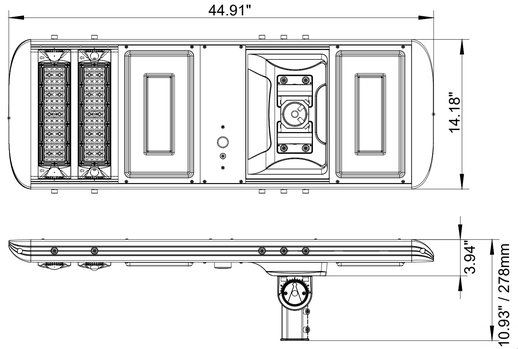
18" DRILLED SHAFT
FOUNDATION FOR
PROP. LUMINAIRE
(NOT TO SCALE)

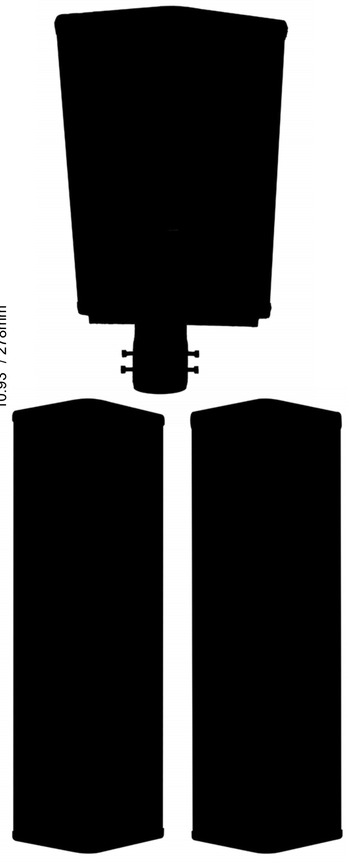


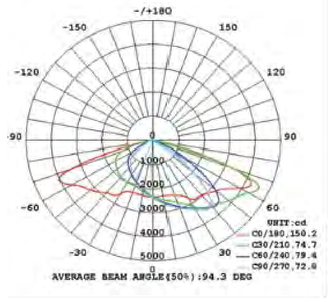
DRILLED SHAFT PROFILE
NOT TO SCALE



POLE BASE CONNECTION DETAIL
NOT TO SCALE







LUMINAIRE MIN. SPECIFICATION
(OR SIMILAR)

SOLAR LUMINAIRE

Solar Lighting 80W
(20' Pole)

LUMINAIRE

- Three light modes are available. Timed mode (6 hr, 9hr, 12 hr) set to 50%, 70$ or 100%. Sensor control mode will turn the light on at 33% and switch to 100% when motion is detected. Mixed mode will turn the light on at full power for x hours then switch to motion sensor for remainder of the night.
- Select desired lighting mode with included remote control
- 80 Watt emits 8,500 lm
- 14800 Lumens (MIN.)
- 6000-6500K LED color temperature
- Aluminum and glass construction
- IP65 rating
- 80 Watt Di mensions: 44" x 14" x 4" (112cm x 35cm x 10cm)
- Working temperature -22 F to 158F
- Gray / aluminum finish

SOLAR PANEL

- Glass covered solar panel is built in to the top of the lamp
- 80 Watt fitted with 18V 85 Watt solar panel

BATTERY

- Lithium battery pack installed within unit
- 80 Watt supplied with 12.8V 403 Watt-hour battery
- Replaceble battery

POLE

- Light arm is not included. Light fixture will mount to the top of pole.
- 20' (6m) galvanized steel pole
- 20' pole is fitted with a 12." x 12.5" base plate

CHARGE CONTROL

- Internal battery over-charge and dis-charge protection
- Automatic light activation at sunset

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SOLAR LUMINAIRE
SOLAR LIGHTING AND
FOUNDATION DETAILS

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: E01

C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\e01 luminaires details.dwg

PRELIMINARY PLANS
THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PREPARED UNDER THE DIRECT SUPERVISION OF: LA. DELGADO VELEZ, PE.
DATE: April 15, 2024 # 28436

SHEET NO.	C701
PROJECT NO.	DTE23-004
DATE	October 4, 2023
DRAWN BY	JAD
CHECKED BY	
REVIEWED BY	

REVISIONS	SYMBOL	DATE	BY

SHEET NAME

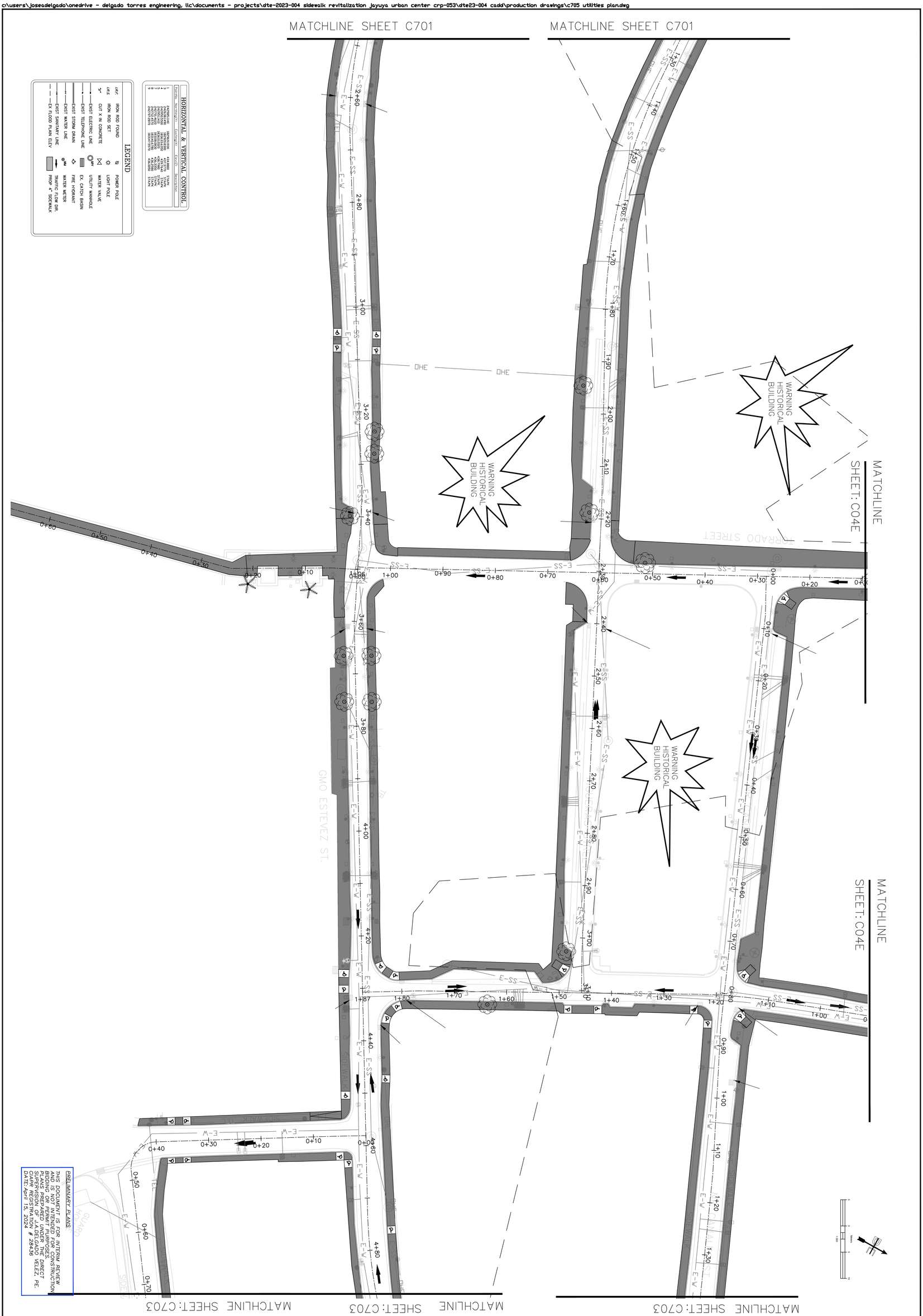
UTILITIES PLAN

PROJECT NAME

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE TO OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c705 utilities plan.dwg



PRELIMINARY PLANS
THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PREPARED UNDER THE DIRECT SUPERVISION OF: J.A. DELGADO VELEZ, PE.
DATE: April 15, 2024 # 28436

C702	
DTE23-004	
October 4, 2023	
DRAWN: JAD	
REVIEWED: ITI	

REVISIONS	SYMBOL	DATE	BY

SHEET NAME

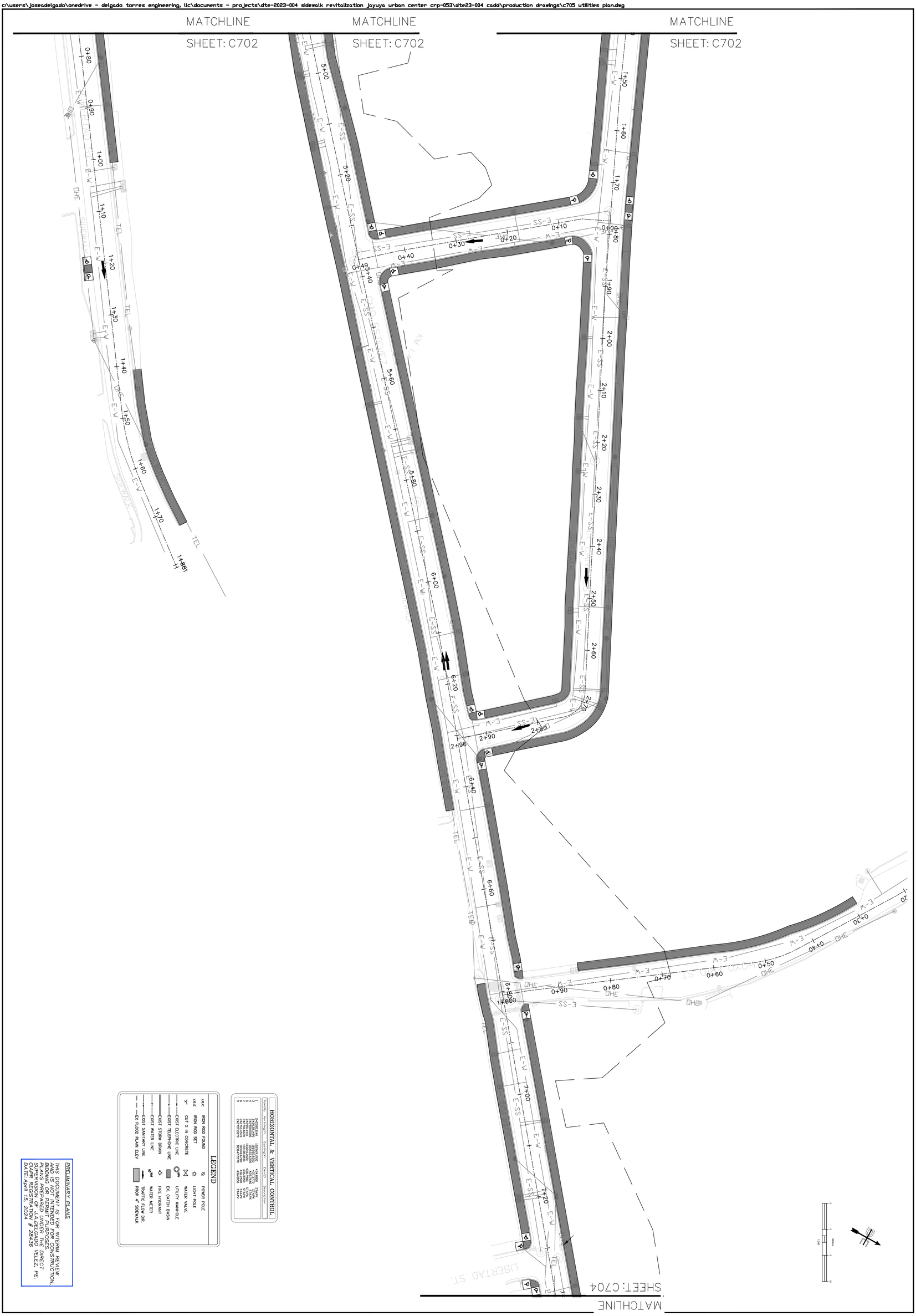
UTILITIES PLAN

PROJECT NAME

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c705 utilities plan.dwg



C703	DTE23-004	October 4, 2023	DRAWN: JAD DESIGNED: JAD REVIEWED: ITI

REVISIONS	SYMBOL	DATE	BY

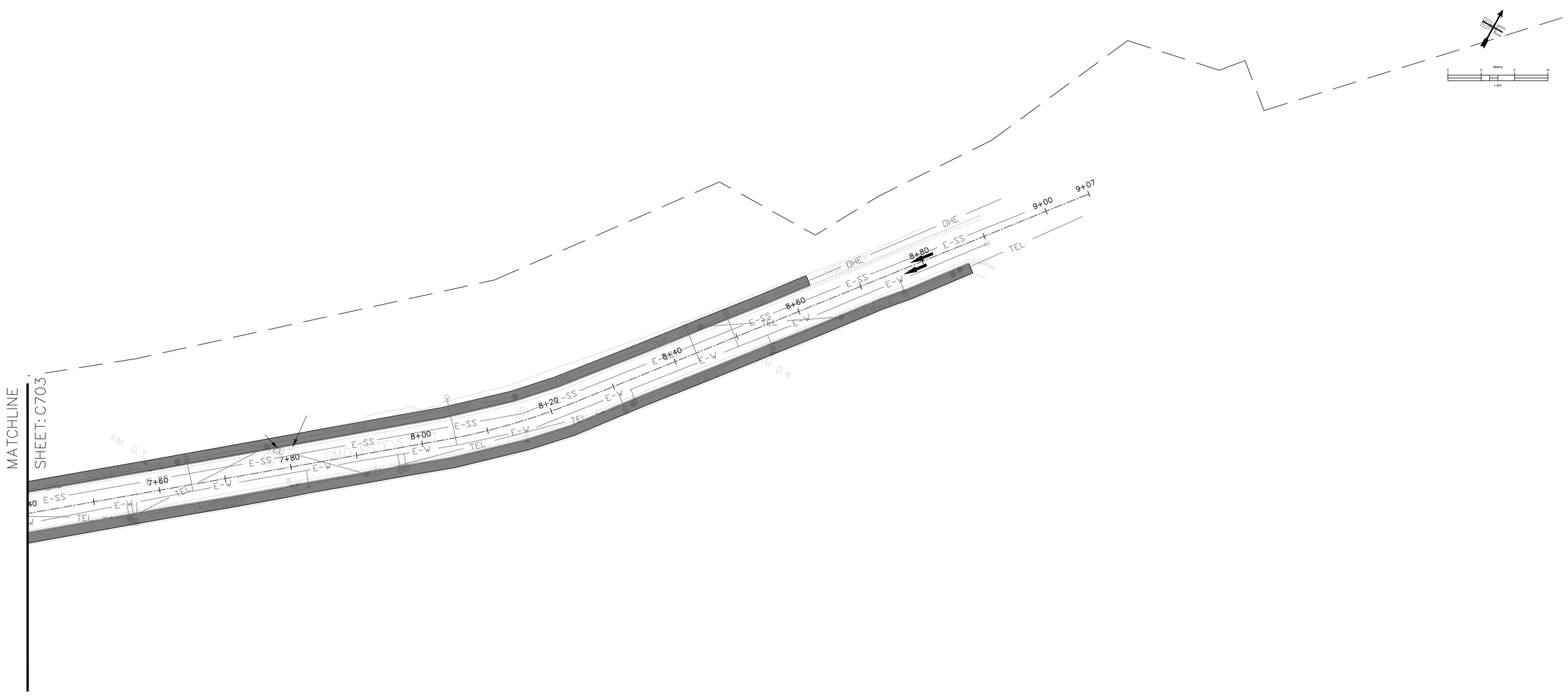
SHEET NAME

UTILITIES PLAN

PROJECT NAME

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre



HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
2	242638.1490	182925.8300	437.3770	STA.PK
3	242677.1440	182893.8250	439.1790	STA.PK
5	242751.1400	183612.0620	4503.7964	STA.PK
7	242751.4620	183008.8830	436.3350	STA.PK
8	242712.4570	183140.6780	436.2580	STA.PK
9	242707.2870	183147.5570	436.6050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
	CUT X IN CONCRETE		WATER VALVE
E	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
T	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
W	EXIST WATER LINE	WM	WATER METER
S	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX FLOOD PLAIN ELEV		PROP 4" SIDEWALK

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
UTILITIES PLAN

REVISIONS	SYMBOL	DATE	BY

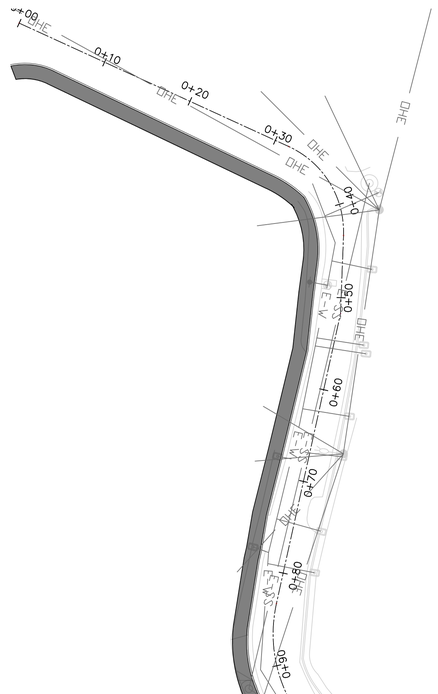
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
October 4, 2023

PROJECT NO.:
DTE23-004

SHEET NO.:
C704

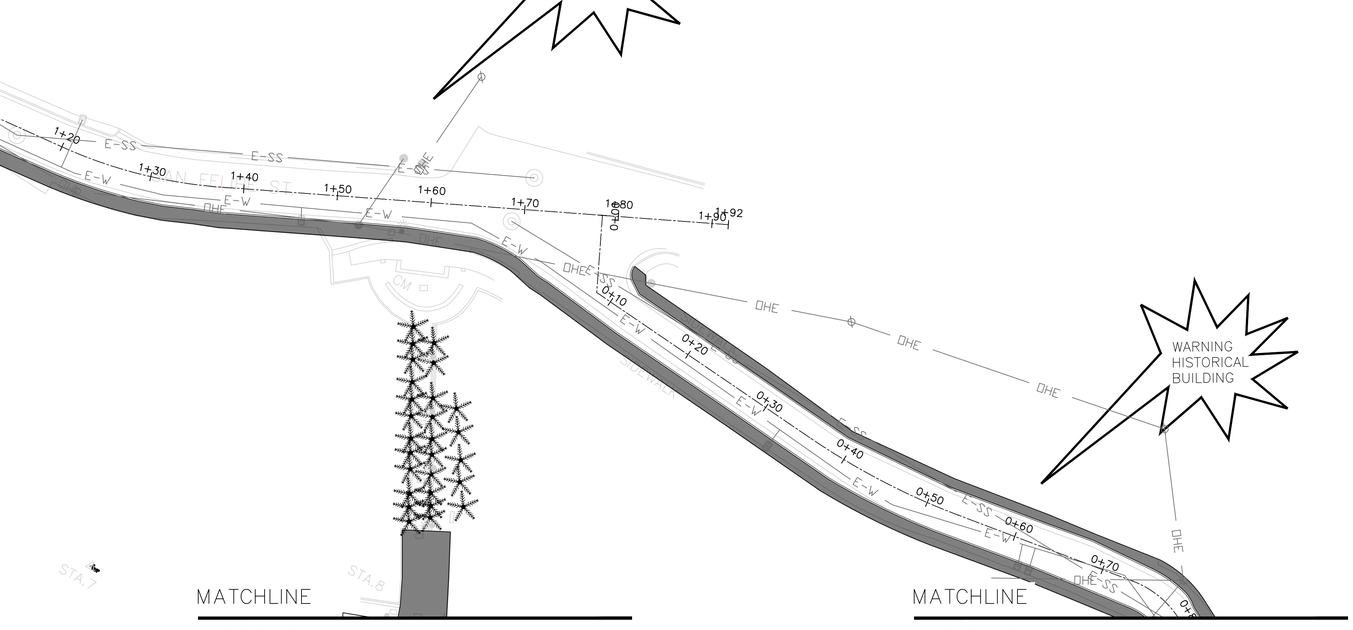
C:\Users\Joseadelgado\OneDrive - delgado torres engineering, llc\Documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c705 utilities plan.dwg



WARNING
HISTORICAL
BUILDING

MATCHLINE

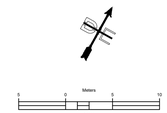
SHEET: C702



WARNING
HISTORICAL
BUILDING

MATCHLINE

SHEET: C702



HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev.(Z)	Description
1	242585.1140	182969.1930	434.8800	STA.PK
3	242638.1490	182900.8300	437.3770	STA.PK
4	242950.5500	183633.6350	439.7640	STA.PK
6	242751.4420	183098.0800	436.7250	STA.PK
7	242710.4570	183040.6780	436.2580	STA.PK
9	242707.2870	183147.5570	436.0050	STA.PK

LEGEND

I.R.F.	IRON ROD FOUND		POWER POLE
I.R.S.	IRON ROD SET		LIGHT POLE
X	CUT X IN CONCRETE		WATER VALVE
E	EXIST ELECTRIC LINE	MH	UTILITY MANHOLE
T	EXIST TELEPHONE LINE		EX. CATCH BASIN
	EXIST STORM DRAIN		FIRE HYDRANT
W	EXIST WATER LINE	WM	WATER METER
S	EXIST SANITARY LINE		TRAFFIC FLOW DIR.
	EX FLOOD PLAIN ELEV		PROP 4" SIDEWALK

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES. PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436 DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

SHEET NAME
UTILITIES PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE:
October 4, 2023
PROJECT NO.:
DTE23-004
SHEET NO.:
C705

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c705 utilities plan.dwg

PRELIMINARY PLANS
THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF LA. DELGADO VELEZ, PE.
DATE: April 15, 2024 # 28436

C801	DTE23-004	October 4, 2023	DRAWN: JAD REVIEWED: ITI

REVISIONS	SYMBOL	DATE	BY

SHEET NAME

STORMWATER POLLUTION CONTROL PLAN

PROJECT NAME

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE TO OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c805 stormwater pollution control plan.dwg

C802						
SHEET NO.						
DTE23-004	October 4, 2023	DRAWN: JAD DESIGNED: JAD REVIEWED: JTI				
PROJECT NO.	DATE					

REVISIONS	SYMBOL	DATE	BY

SHEET NAME

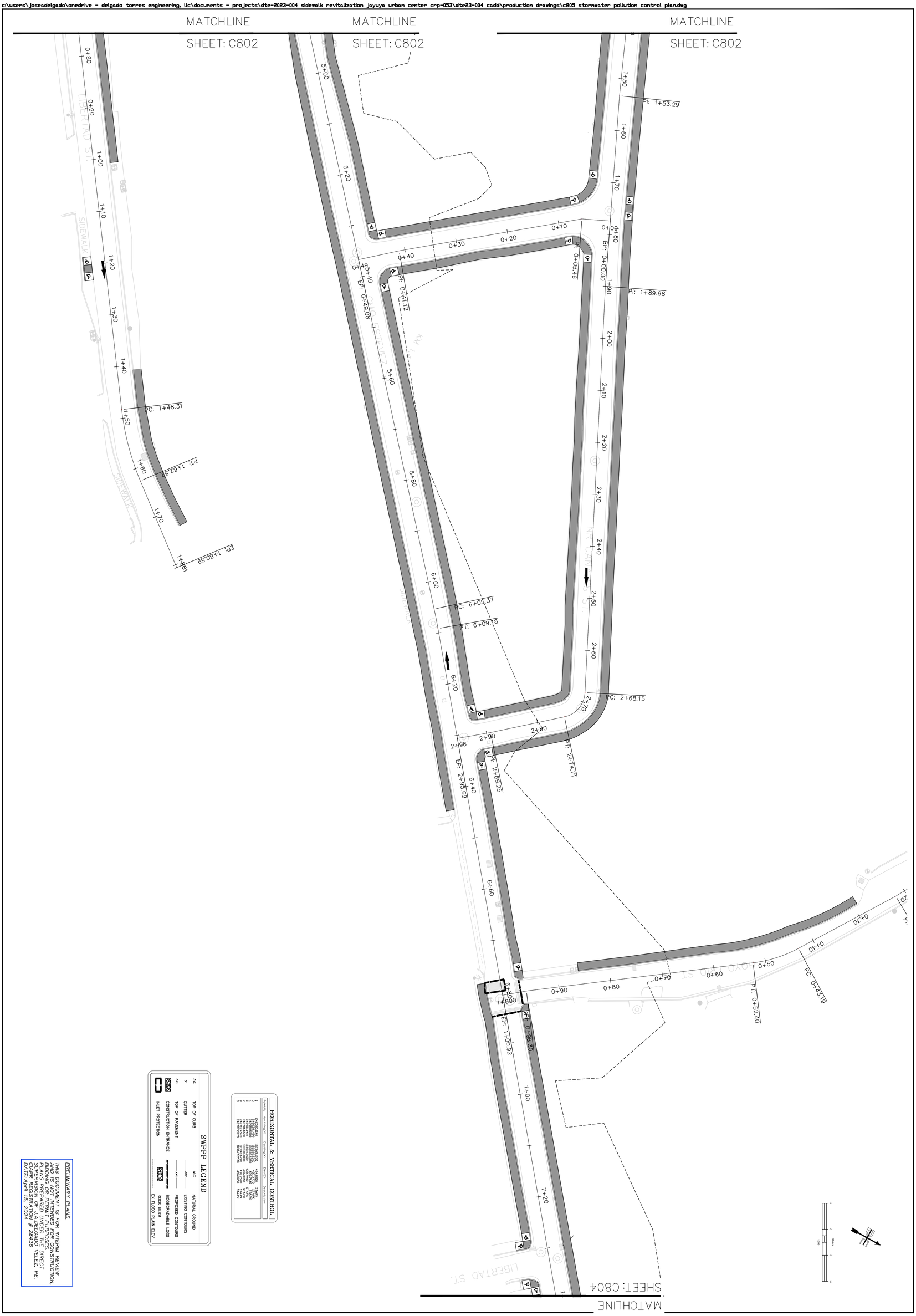
STORMWATER POLLUTION CONTROL PLAN

PROJECT NAME

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c805 stormwater pollution control plan.dwg



C803	DTE23-004	October 4, 2023	DRAWN: JAD DESIGNED: JAD REVIEWED: LTI	REVISIONS	SYMBOL / DATE / BY

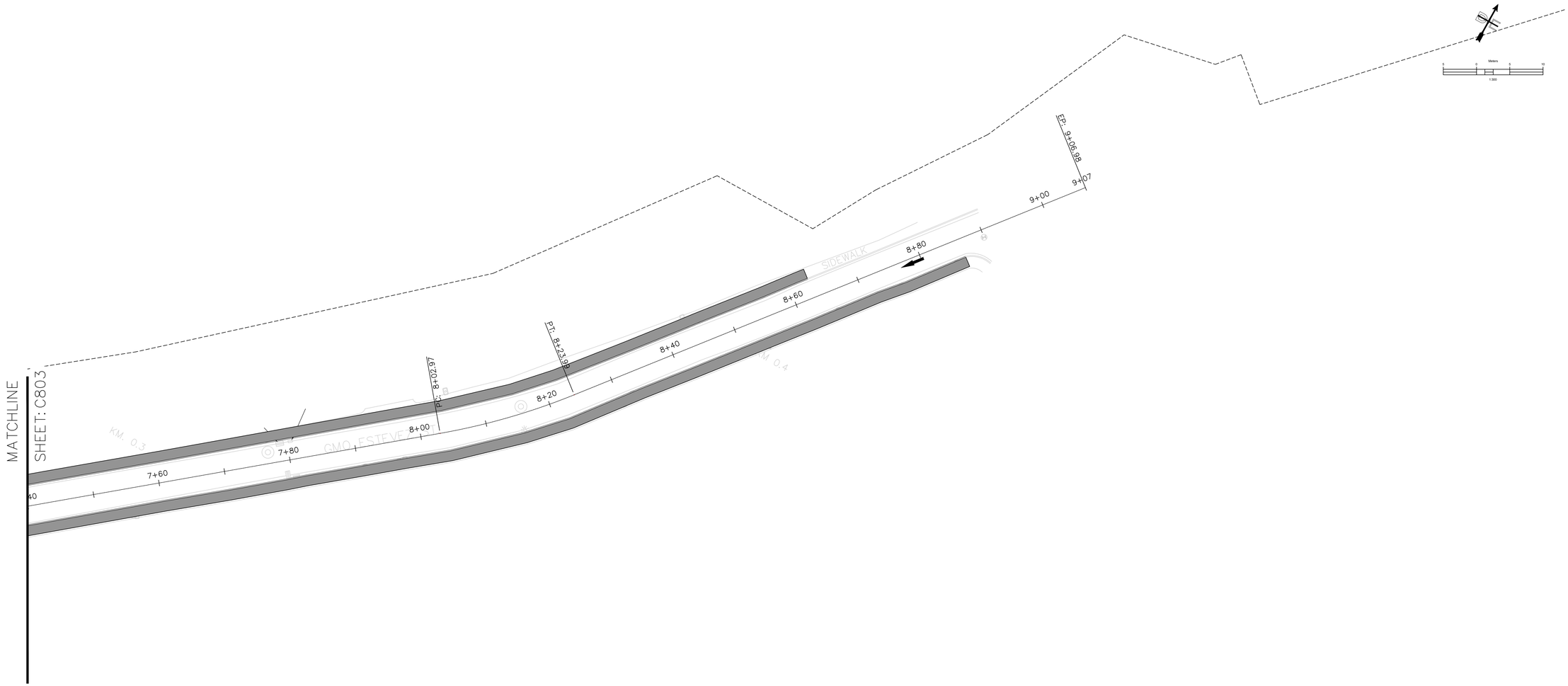
SHEET NAME

STORMWATER POLLUTION CONTROL PLAN

PROJECT NAME

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

DELTORRE ENGINEERING
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre



HORIZONTAL & VERTICAL CONTROL

Point No.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STA/PK
3	242583.1490	182903.8280	430.2770	STA/PK
4	242582.9500	182903.6200	429.7640	STA/PK
5	242701.1400	183612.0300	438.7980	STA/PK
7	242701.4620	183018.8830	436.3350	STA/PK
8	242712.4570	183140.6780	436.2580	STA/PK
9	242707.2870	183147.5570	436.0050	STA/PK

SWPPP LEGEND

T.C.	TOP OF CURB	N.G.	NATURAL GROUND
G	GUTTER	XXX	EXISTING CONTOURS
T.P.	TOP OF PAVEMENT	XXX	PROPOSED CONTOURS
	CONSTRUCTION ENTRANCE		BIODEGRADABLE LOGS
	INLET PROTECTION		ROCK BERM
			EX FLOOD PLAIN ELEV

PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE. CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
STORMWATER POLLUTION CONTROL PLAN

REVISIONS	SYMBOL	DATE	BY

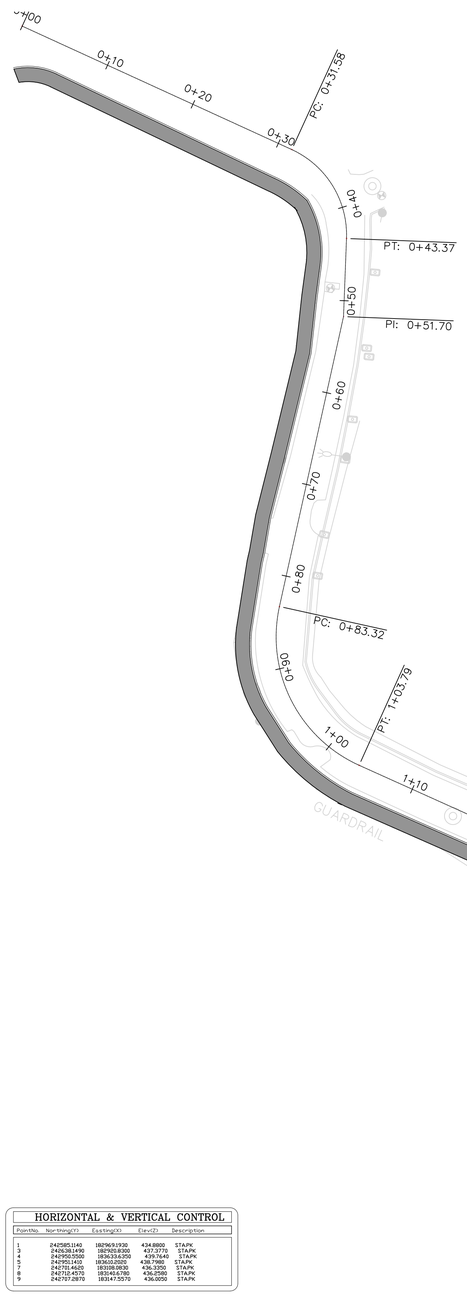
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
October 4, 2023

PROJECT NO.:
DTE23-004

SHEET NO.:
C804

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\c805 stormwater pollution control plan.dwg



MATCHLINE

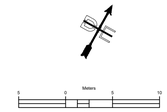
SHEET: C802

MATCHLINE

SHEET: C802

HORIZONTAL & VERTICAL CONTROL				
PointNo.	Northing(Y)	Easting(X)	Elev(Z)	Description
1	242585.1140	182969.1930	434.8800	STAPK
2	242638.1490	182903.8380	434.9720	STAPK
3	242760.2410	182762.6300	437.3240	STAPK
4	242951.1410	183618.0200	438.7980	STAPK
7	242701.4620	183108.0830	436.3350	STAPK
8	242712.4570	183145.6780	436.2580	STAPK
9	242707.2870	183147.5570	436.0650	STAPK

SWPPP LEGEND			
T.C.	TOP OF CURB	N.G.	NATURAL GROUND
G	GUTTER	xxx	EXISTING CONTOURS
T.P.	TOP OF PAVEMENT	xxx	PROPOSED CONTOURS
	CONSTRUCTION ENTRANCE		BIODEGRADABLE LOGS
	INLET PROTECTION		ROCK BERM
			EX FLOOD PLAIN ELEV



PRELIMINARY PLANS

THIS DOCUMENT IS FOR INTERIM REVIEW AND IS NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.
PLANS PREPARED UNDER THE DIRECT SUPERVISION OF J.A.DELGADO VELEZ, PE.
CIAPR REGISTRATION # 28436
DATE: April 15, 2024

DELTORRE ENGINEERING LLC
IMPROVING QUALITY OF LIFE FOR OUR COMMUNITIES
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

PROJECT NAME
CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER
JAYUYA, P.R.

SHEET NAME
STORMWATER POLLUTION CONTROL PLAN

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE:
October 4, 2023

PROJECT NO.:
DTE23-004

SHEET NO.:
C805

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\c805 stormwater pollution control plan.dwg

NUMBER OF CHANNELIZING DEVICES NEEDED

550	17	8-16	14	7-13	11	5-10
600	19	9-18	15	7-14	12	6-11

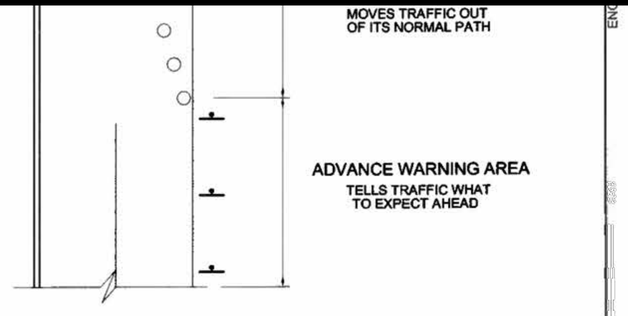
TAPER LENGTH CRITERIA

MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/3 L MINIMUM
ONE-LANE, TWO-WAY TRAFFIC TAPER	50 FT. MINIMUM 100 FT. MAXIMUM
DOWNSTREAM TAPER	50 FT. MINIMUM 100 FT. MAXIMUM
FORMULAS FOR L (FT.)	
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR GREATER	L = WxS

ADVANCE WARNING SIGN

	A	B	C
URBAN (LOW SPEED)	100 FEET	100 FEET	100 FEET
URBAN (HIGH SPEED)	350 FEET	350 FEET	350 FEET
RURAL	500 FEET	500 FEET	500 FEET
EXPRESSWAY / FREEWAY	1,000 FEET	1,500 FEET	2,640 FEET

(*) THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "FIRST SIGN" IS THE SIGN IN A THREE-SIGN SERIES THAT IS CLOSEST TO THE TEMPORARY TRAFFIC CONTROL ZONE. THE "THIRD SIGN" IS THE SIGN THAT IS FURTHEST UPSTREAM FROM THE TEMPORARY TRAFFIC CONTROL ZONE.)



FIVE PARTS OF A TRAFFIC CONTROL ZONE

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

TRAFFIC CONTROL
STANDARDS

REVISIONS	SYMBOL	DATE	BY

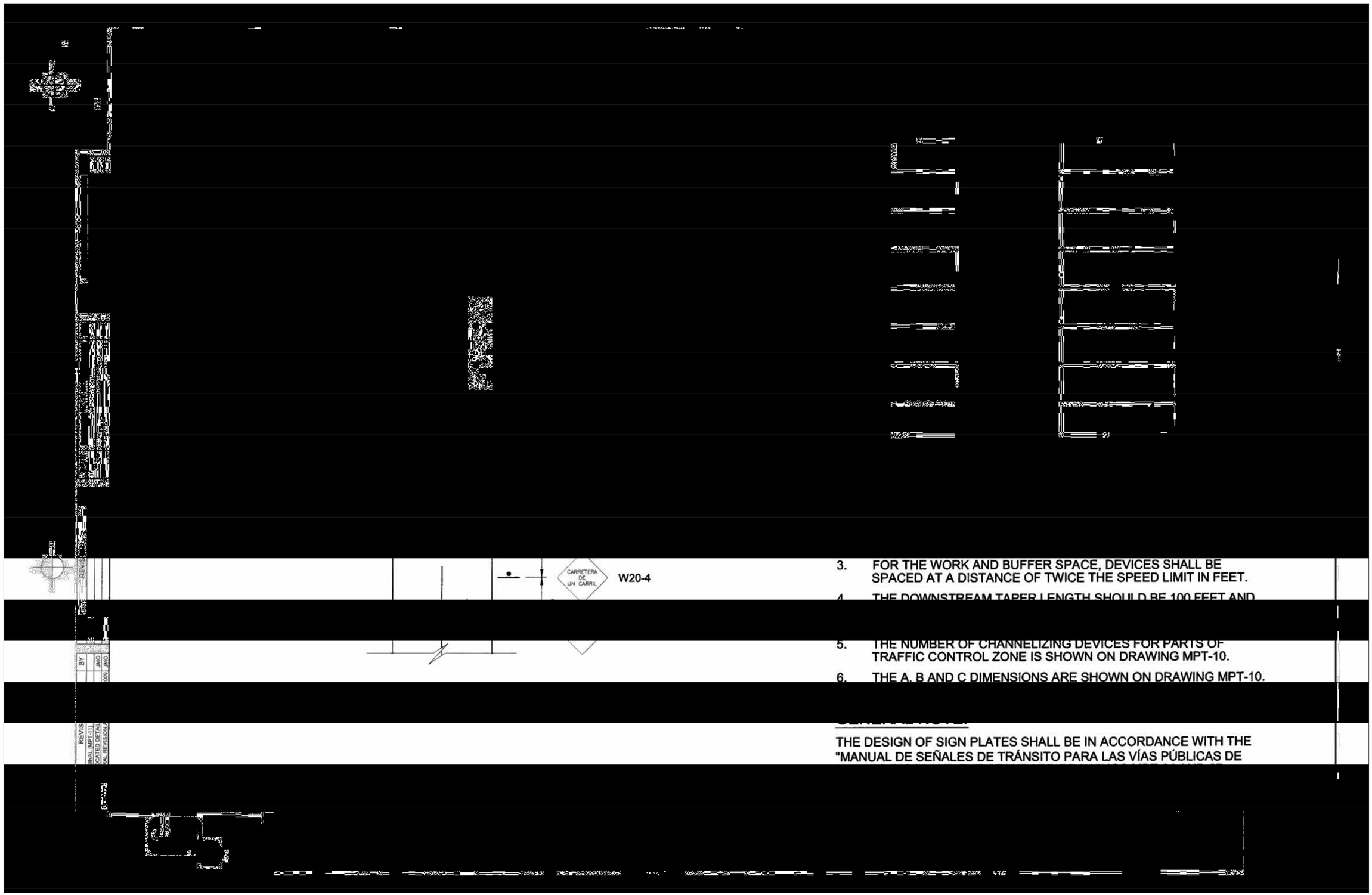
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

PROJECT NO.: DTE23-004

SHEET NO.: MOT-01

C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\mot-08 traffic control standards.dwg



3. FOR THE WORK AND BUFFER SPACE, DEVICES SHALL BE SPACED AT A DISTANCE OF TWICE THE SPEED LIMIT IN FEET.
4. THE DOWNSTREAM TAPER LENGTH SHOULD BE 100 FEET AND
5. THE NUMBER OF CHANNELIZING DEVICES FOR PARTS OF TRAFFIC CONTROL ZONE IS SHOWN ON DRAWING MPT-10.
6. THE A, B AND C DIMENSIONS ARE SHOWN ON DRAWING MPT-10.

THE DESIGN OF SIGN PLATES SHALL BE IN ACCORDANCE WITH THE "MANUAL DE SEÑALES DE TRÁNSITO PARA LAS VÍAS PÚBLICAS DE

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

TRAFFIC CONTROL STANDARDS

REVISIONS	SYMBOL	DATE	BY

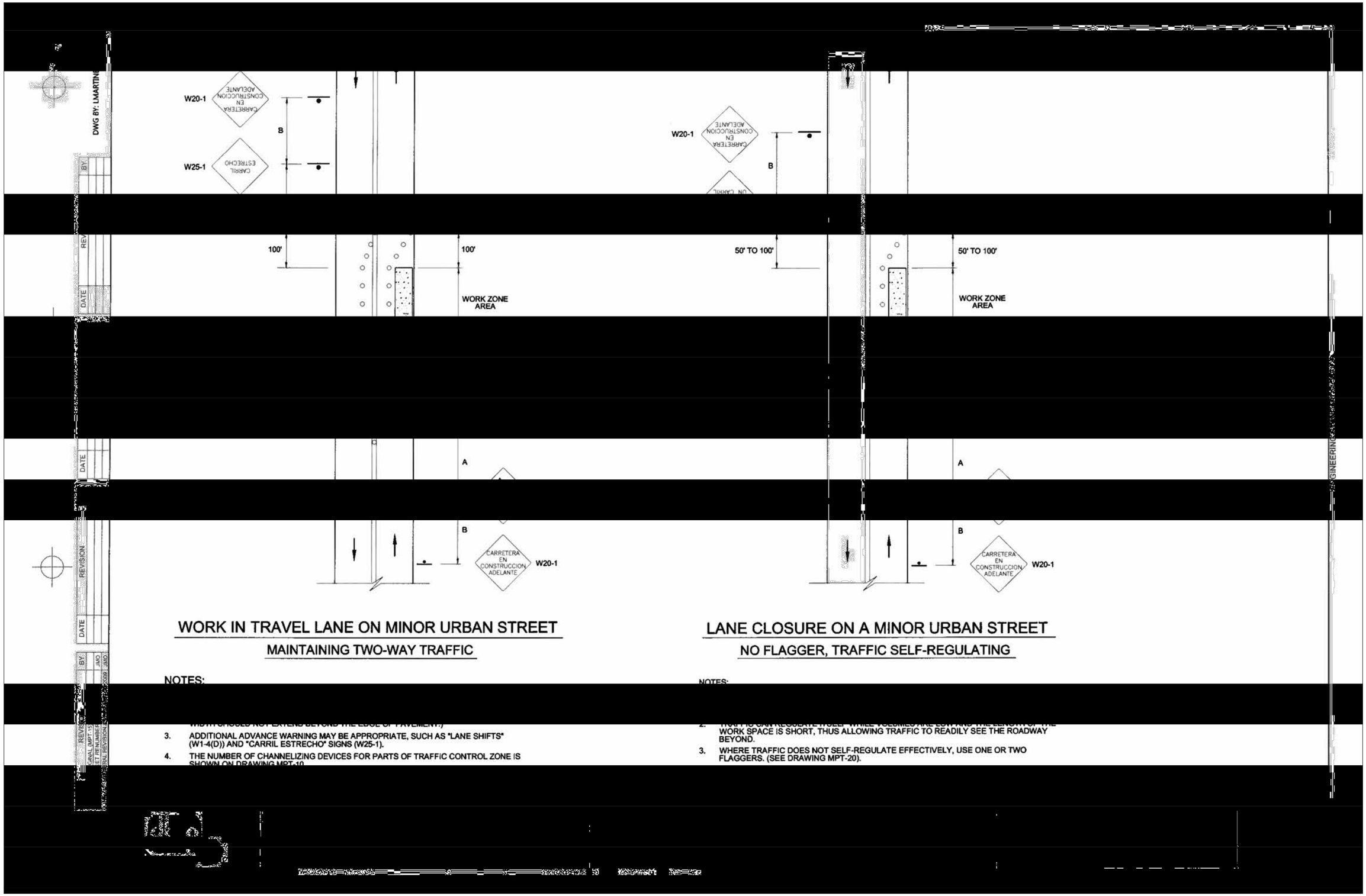
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

PROJECT NO.: DTE23-004

SHEET NO.: MOT-02

C:\Users\joseadelgado\OneDrive - delgado torres engineering, llc\Documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\mot-08 traffic control standards.dwg



WORK IN TRAVEL LANE ON MINOR URBAN STREET

MAINTAINING TWO-WAY TRAFFIC

NOTES:

3. ADDITIONAL ADVANCE WARNING MAY BE APPROPRIATE, SUCH AS "LANE SHIFTS" (W1-4(D)) AND "CARRIL ESTRECHO" SIGNS (W25-1).
4. THE NUMBER OF CHANNELIZING DEVICES FOR PARTS OF TRAFFIC CONTROL ZONE IS SHOWN ON DRAWING MPT-10.

LANE CLOSURE ON A MINOR URBAN STREET

NO FLAGGER, TRAFFIC SELF-REGULATING

NOTES:

2. WORK SPACE IS SHORT, THUS ALLOWING TRAFFIC TO READILY SEE THE ROADWAY BEYOND.
3. WHERE TRAFFIC DOES NOT SELF-REGULATE EFFECTIVELY, USE ONE OR TWO FLAGGERS. (SEE DRAWING MPT-20).

DWG BY: LMARTINEZ

REVISION | DATE | BY

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

TRAFFIC CONTROL STANDARDS

REVISIONS	SYMBOL	DATE	BY

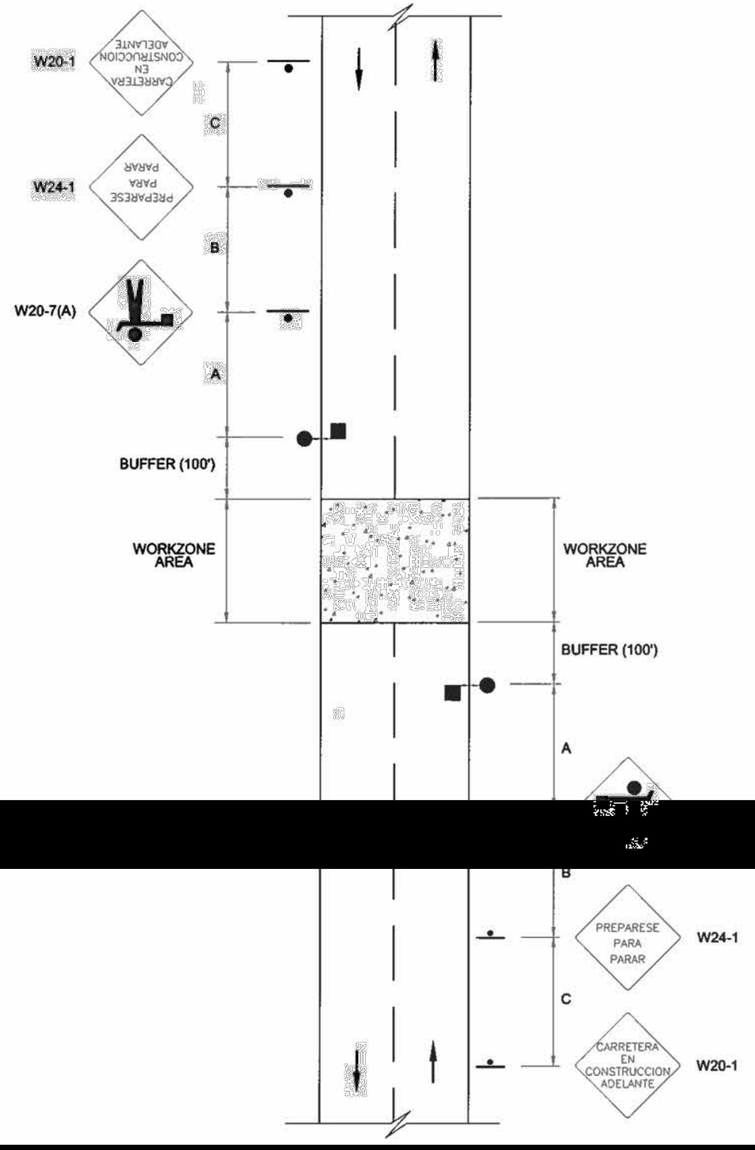
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

PROJECT NO.: DTE23-004

SHEET NO.: MOT-03

C:\Users\joseadelgado\OneDrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\mot-08 traffic control standards.dwg



NOTES:

1. CONDITIONS REPRESENTED ARE FOR WORK WHICH REQUIRES CLOSURE DURING DAYTIME HOURS ONLY.
2. THIS APPLICATION IS INTENDED FOR A PLANNED TEMPORARY CLOSURE NOT TO EXCEED 15-20 MINUTES.
3. FOR HIGH VOLUME ROADS, A POLICE PATROL CAR IS RECOMMENDED.
4. FOR TWO-LANE, LOW-SPEED (35 MPH OR LESS) URBAN STREETS, A 200 FEET SIGN SPACING SHALL BE USED.
5. COST OF FLAGGER WILL BE A SUBSIDIARY OBLIGATION.
6. THE A, B AND C DIMENSIONS ARE SHOWN ON DRAWING MPT-10.

GENERAL NOTE:

VIAS PUBLICAS DE PUERTO RICO" AND THE STANDARD DRAWINGS MPT-24 TO MPT-27.

DWG BY: LMARTINEZ 2934

ENGINEERING STANDARDS OFFICE

REVISIONS	SYMBOL	DATE	BY

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

TRAFFIC CONTROL STANDARDS

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

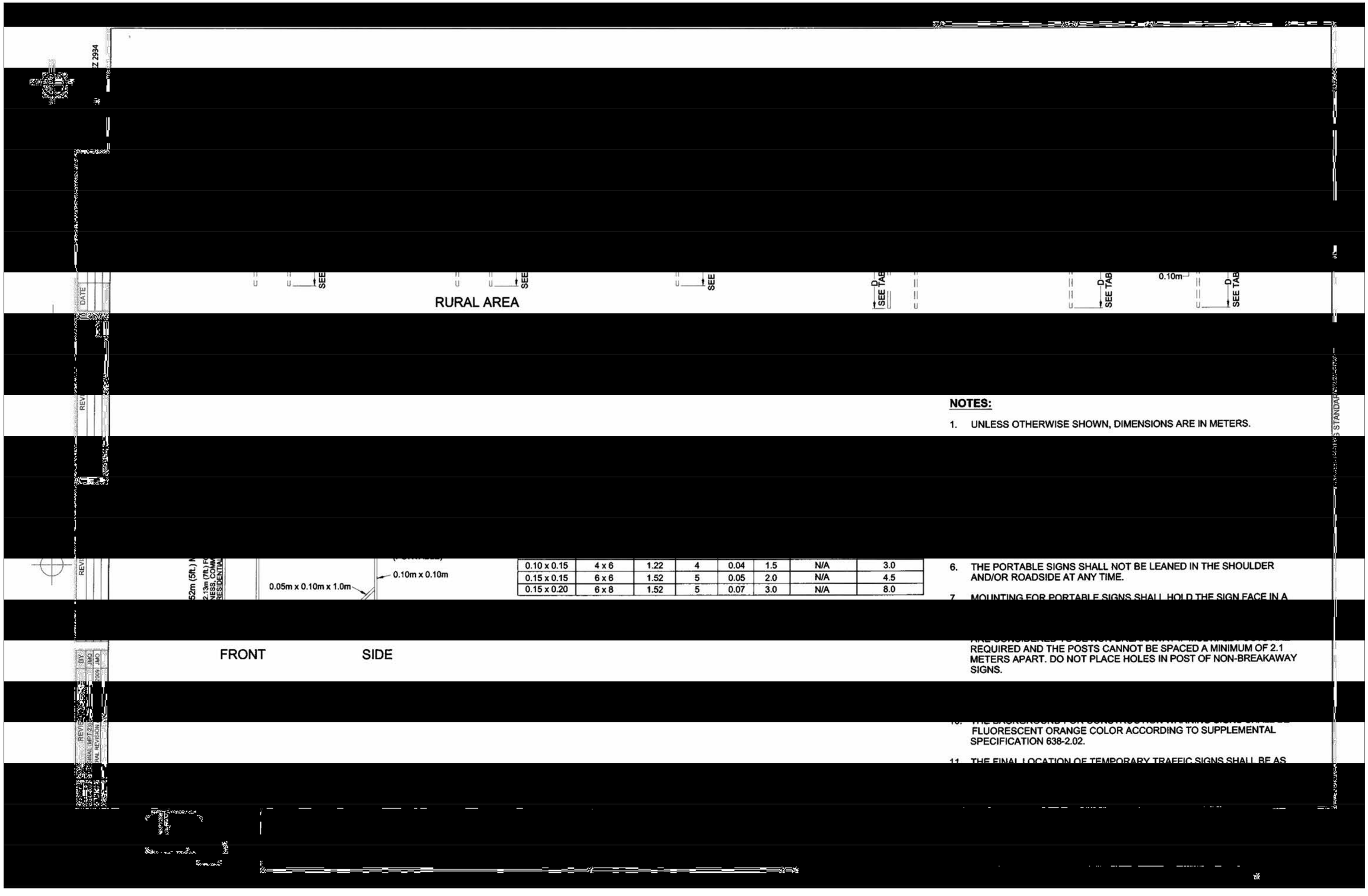
DATE: April 15, 2024

PROJECT NO.: DTE23-004

SHEET NO.: MOT-04

C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\mot-08 traffic control standards.dwg

C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\mot-08 traffic control standards.dwg



0.10 x 0.15	4 x 6	1.22	4	0.04	1.5	N/A	3.0
0.15 x 0.15	6 x 6	1.52	5	0.05	2.0	N/A	4.5
0.15 x 0.20	6 x 8	1.52	5	0.07	3.0	N/A	8.0

NOTES:

1. UNLESS OTHERWISE SHOWN, DIMENSIONS ARE IN METERS.

6. THE PORTABLE SIGNS SHALL NOT BE LEANED IN THE SHOULDER AND/OR ROADSIDE AT ANY TIME.

7. MOUNTING FOR PORTABLE SIGNS SHALL HOLD THE SIGN FACE IN A

REQUIRED AND THE POSTS CANNOT BE SPACED A MINIMUM OF 2.1 METERS APART. DO NOT PLACE HOLES IN POST OF NON-BREAKAWAY SIGNS.

FLUORESCENT ORANGE COLOR ACCORDING TO SUPPLEMENTAL SPECIFICATION 638-2.02.

11. THE FINAL LOCATION OF TEMPORARY TRAFFIC SIGNS SHALL BE AS

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

TRAFFIC CONTROL STANDARDS

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

PROJECT NO.: DTE23-004

SHEET NO.: MOT-05

30	36"x36"	36"x36"	48"x48"	36"x36"	48"x48"	48"x48"	48"x48"	36"x36"	30"x30"	36"x36"	36"x36"	36"x36"	50"x20"	36"x36"
45	48"x48"	48"x48"	60"x60"	48"x48"	60"x60"	60"x60"	60"x60"	48"x48"	36"x36"	48"x48"	48"x48"	48"x48"	60"x24"	48"x48"
50	48"x48"	48"x48"	60"x60"	48"x48"	60"x60"	60"x60"	60"x60"	48"x48"	36"x36"	48"x48"	48"x48"	48"x48"	60"x24"	48"x48"
55	48"x48"	48"x48"	60"x60"	48"x48"	60"x60"	60"x60"	60"x60"	48"x48"	36"x36"	48"x48"	48"x48"	48"x48"	60"x24"	48"x48"

REVISION	BY
ADDED NOTE (MPT-2.1)	JMO
ST FURNITURE NO (MPT-2.9)	JMO
ADDED DETAILS (MPT-2.25)	JMO

REVISIONS	SYMBOL	DATE	BY

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

TRAFFIC CONTROL
STANDARDS

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

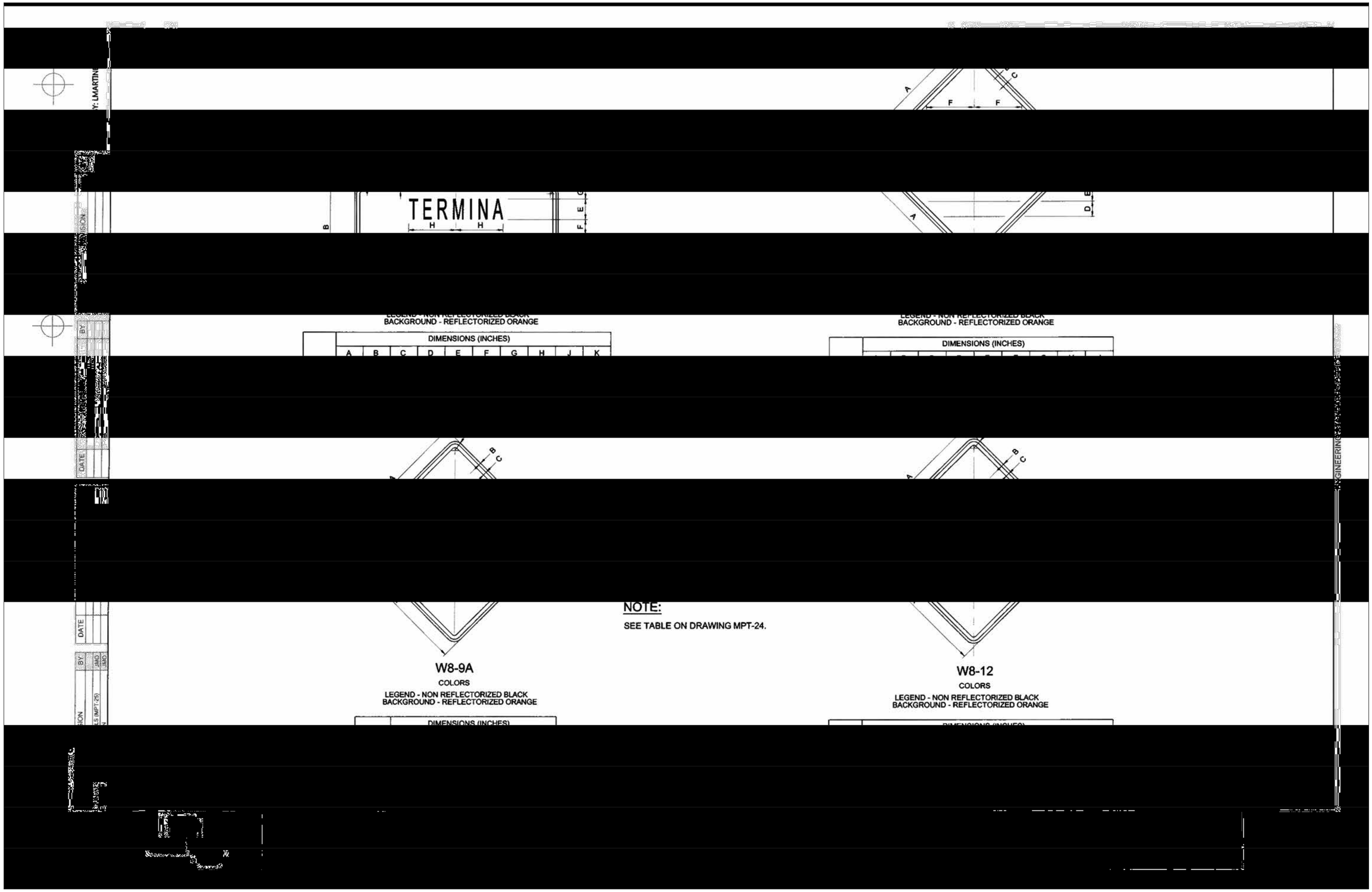
DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
MOT-06

C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\mot-08 traffic control standards.dwg

C:\Users\JoseAdelgado\OneDrive - delgado torres engineering, llc\Documents - Projects\DTE-2023-004 Sidewalk revitalization Jayuya urban center CRP-053\DTE23-004 CadD\Production drawings\MOT-08 Traffic control standards.dwg



DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

TRAFFIC CONTROL STANDARDS

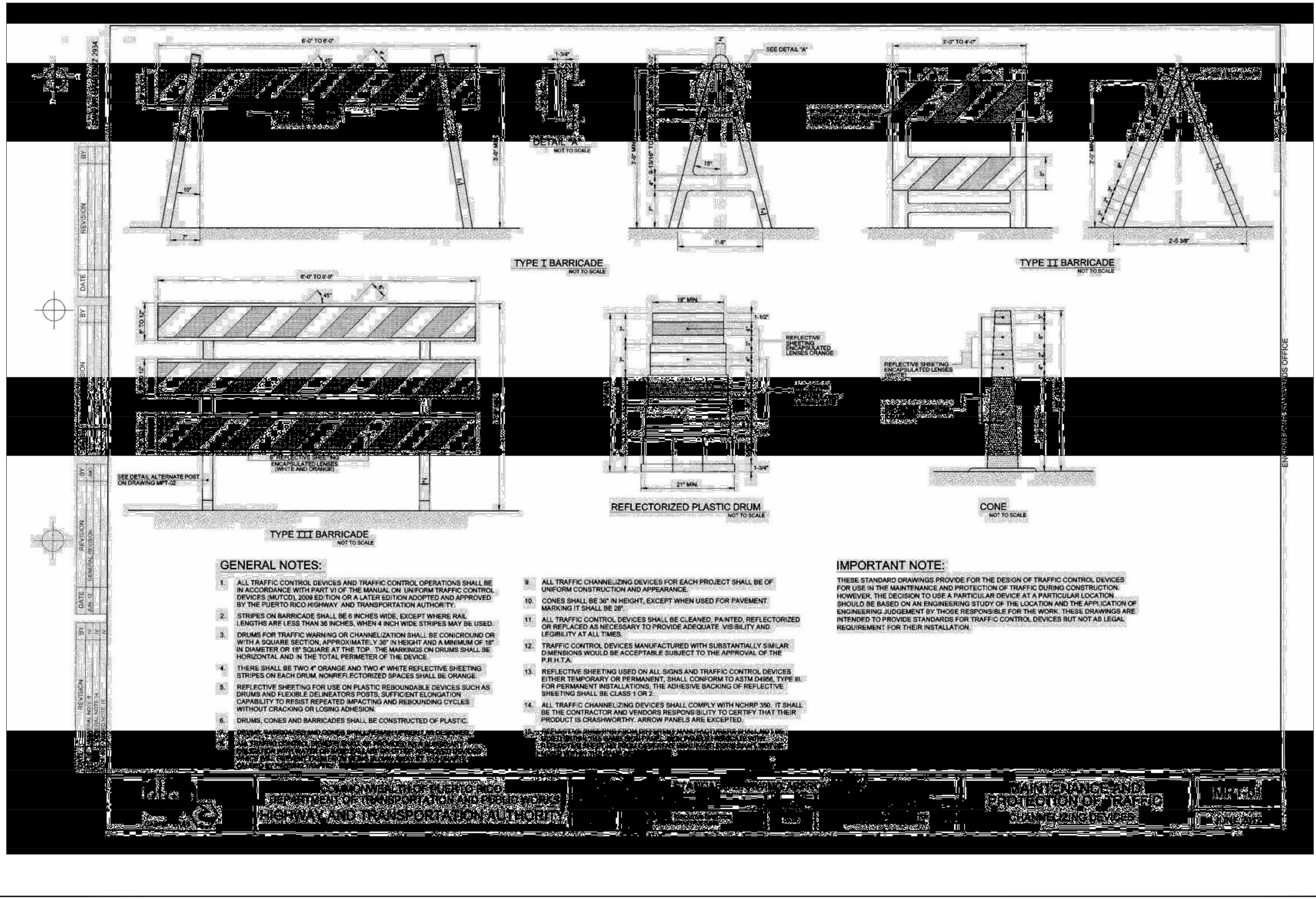
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

PROJECT NO.: DTE23-004

SHEET NO.: MOT-07



GENERAL NOTES:

1. ALL TRAFFIC CONTROL DEVICES AND TRAFFIC CONTROL OPERATIONS SHALL BE IN ACCORDANCE WITH PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 2009 EDITION OR A LATER EDITION ADOPTED AND APPROVED BY THE PUERTO RICO HIGHWAY AND TRANSPORTATION AUTHORITY.
2. STRIPES ON BARRICADE SHALL BE 6 INCHES WIDE, EXCEPT WHERE RAIL LENGTHS ARE LESS THAN 36 INCHES, WHEN 4 INCH WIDE STRIPES MAY BE USED.
3. DRUMS FOR TRAFFIC WARNING OR CHANNELIZATION SHALL BE CONICROUND OR WITH A SQUARE SECTION, APPROXIMATELY 36" IN HEIGHT AND A MINIMUM OF 18" IN DIAMETER OR 18" SQUARE AT THE TOP. THE MARKINGS ON DRUMS SHALL BE HORIZONTAL AND IN THE TOTAL PERIMETER OF THE DEVICE.
4. THERE SHALL BE TWO 4" ORANGE AND TWO 4" WHITE REFLECTIVE SHEETING STRIPES ON EACH DRUM. NONREFLECTORIZED SPACES SHALL BE ORANGE.
5. REFLECTIVE SHEETING FOR USE ON PLASTIC REBOUNDABLE DEVICES SUCH AS DRUMS AND FLEXIBLE DELINEATORS POSTS, SUFFICIENT ELONGATION CAPABILITY TO RESIST REPEATED IMPACTING AND REBOUNDING CYCLES WITHOUT CRACKING OR LOSING ADHESION.
6. DRUMS, CONES AND BARRICADES SHALL BE CONSTRUCTED OF PLASTIC.
9. ALL TRAFFIC CHANNELIZING DEVICES FOR EACH PROJECT SHALL BE OF UNIFORM CONSTRUCTION AND APPEARANCE.
10. CONES SHALL BE 36" IN HEIGHT, EXCEPT WHEN USED FOR PAVEMENT MARKING IT SHALL BE 28".
11. ALL TRAFFIC CONTROL DEVICES SHALL BE CLEANED, PAINTED, REFLECTORIZED OR REPLACED AS NECESSARY TO PROVIDE ADEQUATE VISIBILITY AND LEGIBILITY AT ALL TIMES.
12. TRAFFIC CONTROL DEVICES MANUFACTURED WITH SUBSTANTIALLY SIMILAR DIMENSIONS WOULD BE ACCEPTABLE SUBJECT TO THE APPROVAL OF THE P.R.H.T.A.
13. REFLECTIVE SHEETING USED ON ALL SIGNS AND TRAFFIC CONTROL DEVICES EITHER TEMPORARY OR PERMANENT, SHALL CONFORM TO ASTM D4956, TYPE III. FOR PERMANENT INSTALLATIONS, THE ADHESIVE BACKING OF REFLECTIVE SHEETING SHALL BE CLASS 1 OR 2.
14. ALL TRAFFIC CHANNELIZING DEVICES SHALL COMPLY WITH NCHRP 350. IT SHALL BE THE CONTRACTOR AND VENDORS RESPONSIBILITY TO CERTIFY THAT THEIR PRODUCT IS CRASHWORTHY. ARROW PANELS ARE EXCEPTED.

IMPORTANT NOTE:

THESE STANDARD DRAWINGS PROVIDE FOR THE DESIGN OF TRAFFIC CONTROL DEVICES FOR USE IN THE MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION. HOWEVER, THE DECISION TO USE A PARTICULAR DEVICE AT A PARTICULAR LOCATION SHOULD BE BASED ON AN ENGINEERING STUDY OF THE LOCATION AND THE APPLICATION OF ENGINEERING JUDGEMENT BY THOSE RESPONSIBLE FOR THE WORK. THESE DRAWINGS ARE INTENDED TO PROVIDE STANDARDS FOR TRAFFIC CONTROL DEVICES BUT NOT AS LEGAL REQUIREMENT FOR THEIR INSTALLATION.

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

MAINTENANCE AND PROTECTION OF TRAFFIC
CHANNELIZING DEVICES

DATE: JUN-12

REVISION: GENERAL REVISION

BY: JAD

REVISION: NOTE 9, NOTE 14

BY: JV

REVISION: NOTE 15

BY: JV

REVISION: EN

BY: JAD

REVISION: DOTD'S OFFICE

BY: JAD

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

TRAFFIC CONTROL STANDARDS

REVISIONS	SYMBOL	DATE	BY

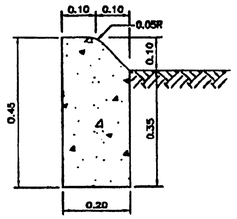
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

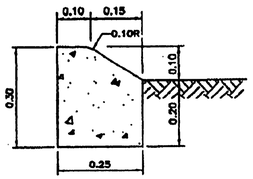
PROJECT NO.: DTE23-004

SHEET NO.: MOT-08

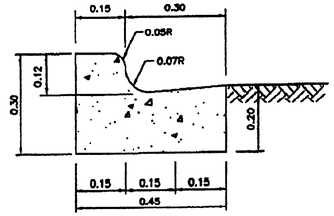
C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\mot-08 traffic control standards.dwg



TYPE – A

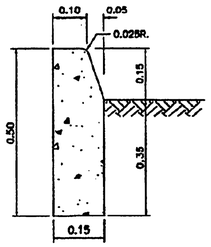


TYPE – B

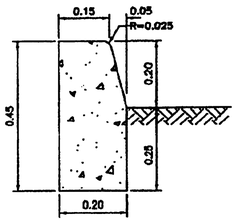


TYPE – C

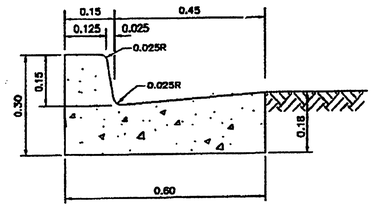
MOUNTABLE CURBS



TYPE – D

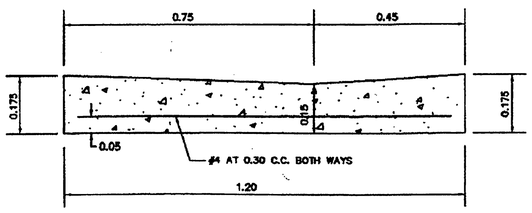


TYPE – E

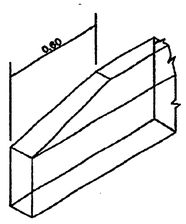


TYPE – F

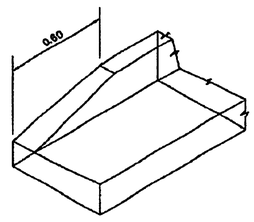
BARRIER CURBS



SHALLOW CONCRETE GUTTER



FOR TYPES A, B, D, AND E



FOR TYPES C, AND F

NOTE: THE TRANSITION LENGTH APPLIES BOTH WHEN THE CURB OR CURB AND GUTTER IS REDUCED TO ZERO OR WHEN A TRANSITION IS MADE FROM ONE TYPE TO ANOTHER.

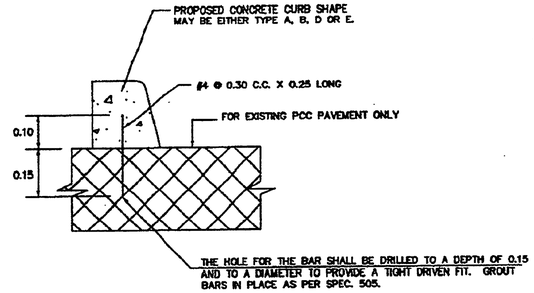
CURBS AND CURB AND GUTTERS END SECTION

NOTES:

1– PORTLAND CEMENT CONCRETE SHALL BE CLASS A.

2– CURBING SHALL BE CONSTRUCTED IN SECTIONS HAVING A UNIFORM LENGTH OF 3 METERS WITHOUT THE NEED OF ANY JOINT FILLER. SECTIONS SHALL BE SEPARATED BY OPEN JOINTS 0.003 WIDE. WHERE THE CURBING IS CONSTRUCTED ADJACENT TO CONCRETE PAVEMENT, THE OPEN JOINTS IN THE CURBING SHALL MATCH THE CONTRACTION JOINTS IN THE PAVEMENT.

3– FORMS SHALL BE OF METAL AND SHALL EXTEND FOR THE FULL DEPTH OF THE CONCRETE. WOODEN FORMS MAY BE USED, WHEN AUTHORIZED BY THE ENGINEER, ON SHORT RADIUS CURVES SUCH AS AT STREET INTERSECTIONS AND AT SUCH OTHER LOCATIONS FOR WHICH CURVED METAL FORMS MAY NOT BE AVAILABLE. ALL FORMS SHALL BE FREE FROM WARP AND OF SUFFICIENT STRENGTH TO RESIST THE PRESSURE OF THE CONCRETE WITHOUT DISPLACEMENT. BRACING AND STAKING OF FORMS SHALL BE SUCH THAT THE FORMS REMAIN IN BOTH HORIZONTAL AND VERTICAL ALIGNMENT UNTIL THEIR REMOVAL. ALL FORMS SHALL BE CLEANED AND COATED WITH AN APPROVED FORM RELEASE AGENT OR FORM OIL BEFORE CONCRETE IS PLACED. DIVIDER PLATES SHALL BE OF METAL. FORMS SHALL CONFORM TO THE SPECIFIED RADIUS WHEN PLACED ON CURVES.



CURB CONSTRUCTION OVER AN EXISTING PAVEMENT

REINFORCEMENT STEEL IN ANY CURB, CURB & GUTTER AND GUTTER IS A SUBSIDIARY OBLIGATION

EFFECTIVE DATE: DECEMBER 1998

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

DRAINAGE
TYPICAL CURBS

RECOMMENDED BY: [signature]
DESIGN AREA DIRECTOR
DATE : 12-8-98

APPROVED BY: [signature]
EXECUTIVE DIRECTOR
DATE : 12-21-98

APPROVED BY: [signature]
DIV. ADM. FHWA-PR DIVISION
DATE : 12-7-98

DATE	REVISION	BY
12-1998	PAGE RENUMBERED	I.V.

STD. DWG. DR 26 OF 40

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

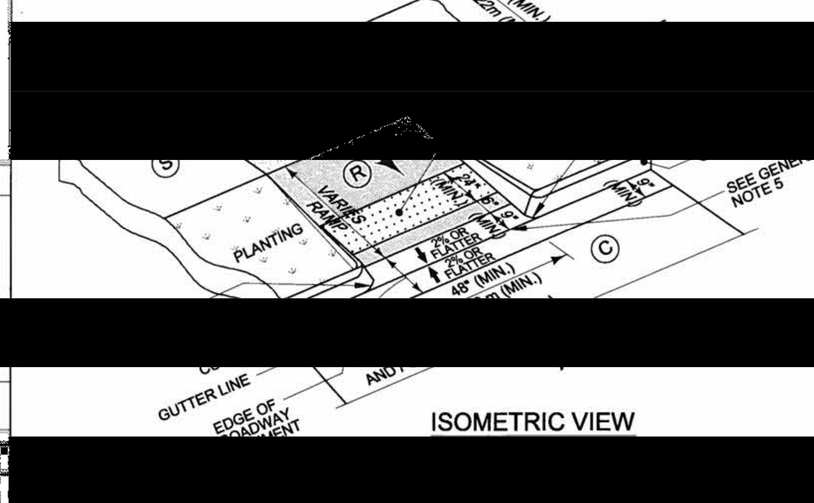
CURB & GUTTER
STANDARD
TYPICAL CURBS

REVISIONS	SYMBOL	DATE	BY

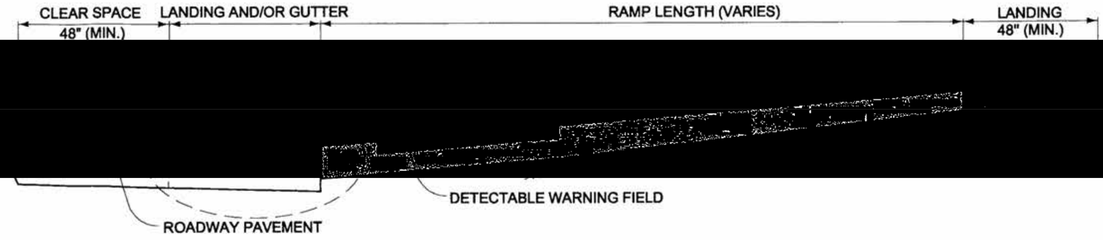
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: RDWY-01

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\rdwy-1 standards.dwg

DWG BY: LMARTINEZ 2934

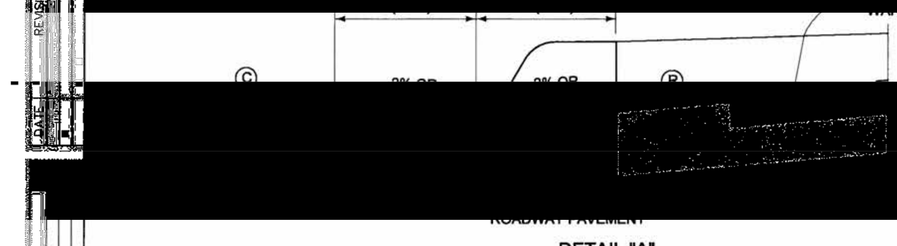


ISOMETRIC VIEW

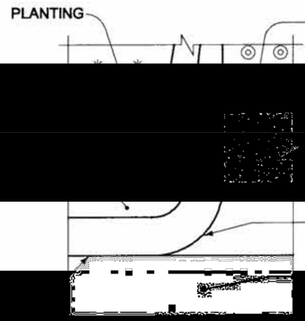


SECTION A-A

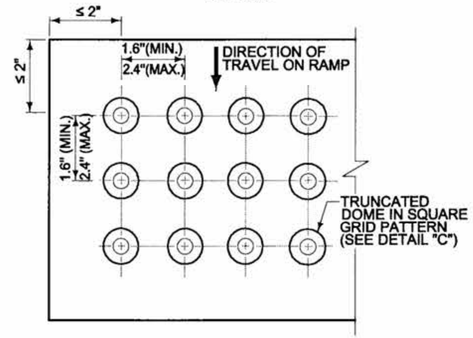
TYPICAL SELECTION THROUGH RAMP RUN AND LANDINGS WITH UPPER LANDING AT NORMAL SIDEWALK ELEVATION



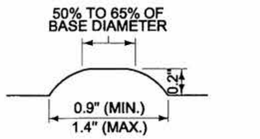
DETAIL "A"
NOT TO SCALE



DETAIL "B"
NOT TO SCALE



DETECTABLE WARNING FIELD DETAIL



SECTION OF TRUNCATED DOME

DETAIL "C"
NOT TO SCALE

EXCEED 2% IN ANY DIRECTION.

2. USE A COARSE BROOM FINISH RUNNING PERPENDICULAR TO THE SLOPE TO CREATE A SLIP RESISTANT SURFACE ON CONCRETE RAMP SURFACES, EXCLUSIVE OF THE

6. LOCATE DRAINAGE INLETS AND MANHOLES OUTSIDE OF RAMP WALKING SURFACES OR LANDINGS.
7. LOCATE DETECTABLE WARNING FIELD 6 INCHES BEHIND

10. THE DIMENSIONS AND MATERIALS OF SIDEWALK SHALL BE IN CONFORMITY WITH THE DETAILS, LINES AND GRADES SHOWN ON THE CONTRACT PLANS OR AS ESTABLISHED BY THE ENGINEER.
11. THE RAMPS AND SIDEWALKS SHALL MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATION 608-"SIDEWALKS".
12. THE DETECTABLE WARNING FIELD SHALL BE YELLOW IN COLOR TO PROVIDE HIGH VISIBILITY TO THE VISUALLY IMPAIRED.

SLOPE TABLE

	DESCRIPTION	MAX. RUNNING SLOPE *	MAX. CROSS SLOPE **
(L)	LANDING	2% (1V:50H)	2% (1V:50H)
(R)	RAMP	8.33% (1V:12H)	2% (1V:50H)
(P)	PARALLEL RAMP	7.1% (1V:14H)	2% (1V:50H)
(C)	CLEAR SPACE	5% (1V:20H)	2% (1V:50H)
(S)	SIDEWALK	----------	2% (1V:50H)
(T)	TRANSVERSABLE SURFACE	10% (1V:10H)	----------

CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

ADA-01

JUNE 2012

REVISION | BY | DATE

ORIGINAL | JMO
GENERAL REVISION | JMO

DESIGN AREA

ENGINEERING STANDARDS OFFICE

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

CURB & GUTTER STANDARD
CURB RAMP DETAILS

REVISIONS | SYMBOL | DATE | BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

PROJECT NO.: DTE23-004

SHEET NO.: RDWY-02

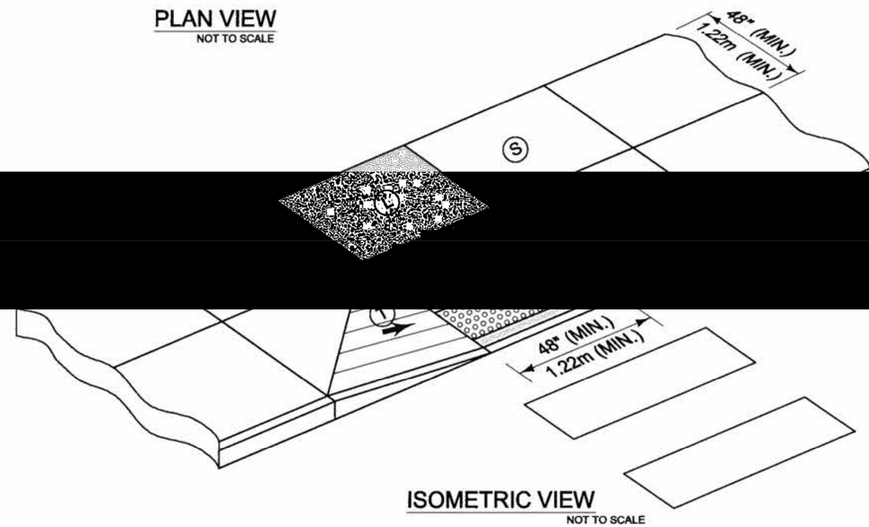
C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\rdwy-1 standards.dwg

DWG BY: LMARTINEZ 2934

LEGEND

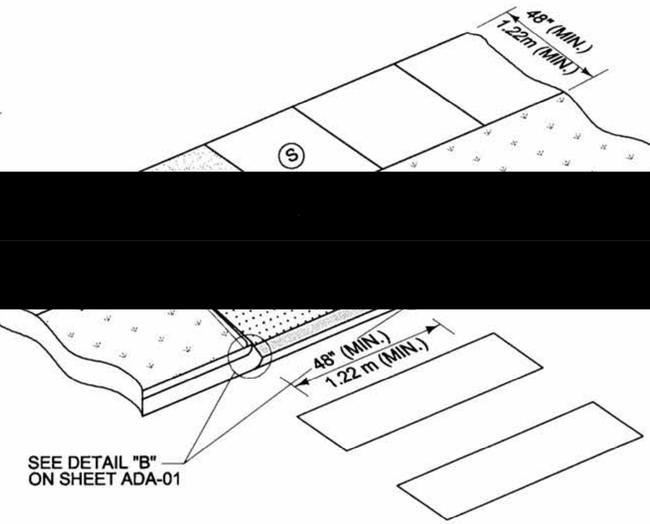
LANDING AREA
(PROVIDE A 4' (MIN.) x 4' (MIN.) LANDING AREA AT ALL CURB RAMPS).

PLAN VIEW
NOT TO SCALE



ISOMETRIC VIEW
NOT TO SCALE

CURB RAMP TYPE 1
(PERPENDICULAR CURB RAMP WITH FLARED CURBS)



ISOMETRIC VIEW
NOT TO SCALE

CURB RAMP TYPE 2

NOTE:

[redacted]

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

CARRETERAS

ADA-02

JUNE 2012

DESIGN AREA

REVISIONS | SYMBOL | DATE | BY

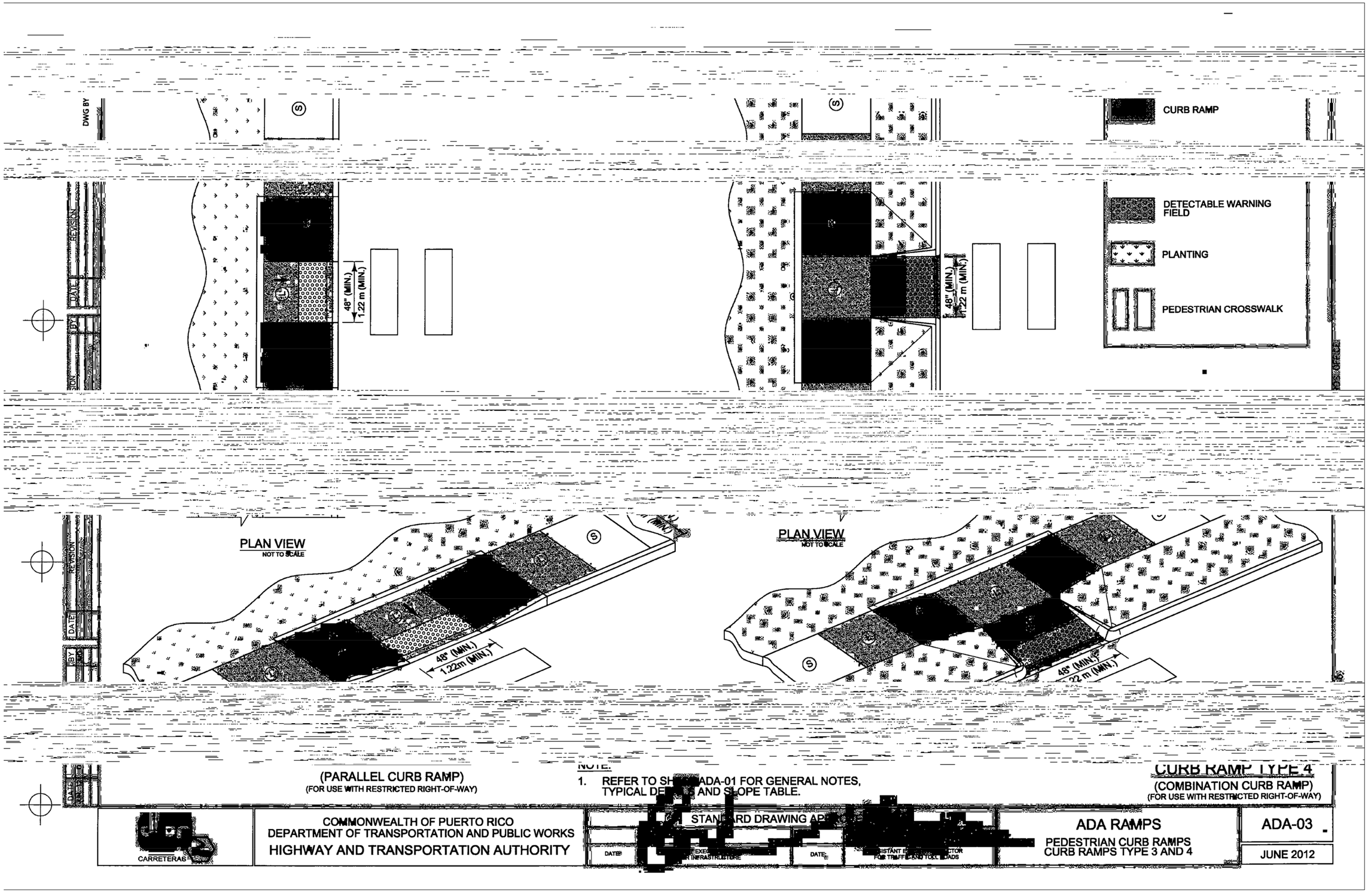
DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

ADA CURB RAMP
STANDARD
CURB RAMP TY. 1 & 2

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: RDWY-03

c:\users\josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\rdwy-1 standards.dwg



DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

ADA CURB RAMP
STANDARD
CURB RAMP TY. 3 & 4

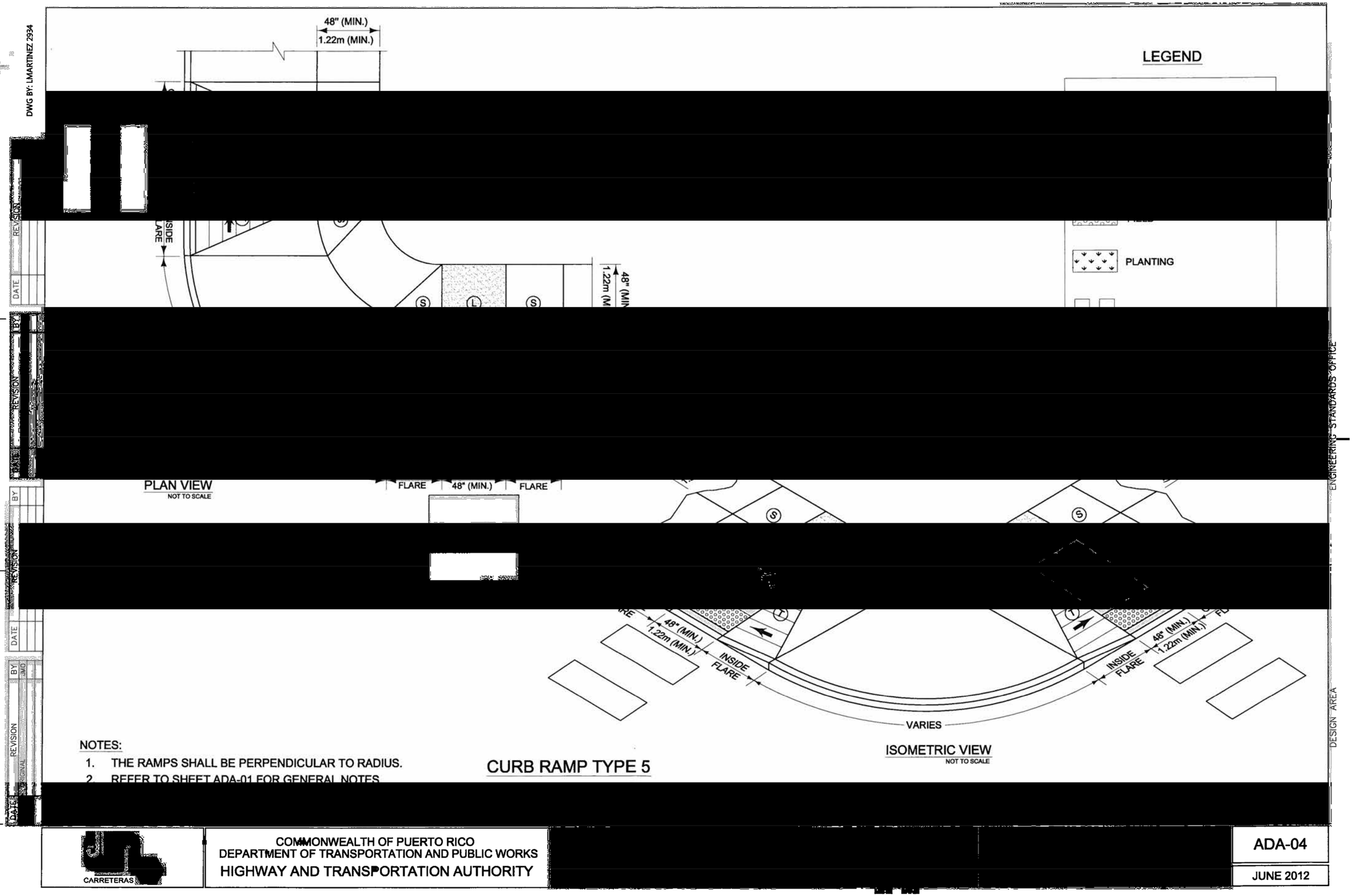
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: RDWY-04

C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\rdwy-1 standards.dwg

C:\Users\josedelgado\OneDrive - delgado torres engineering, llc\Documents - Projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\rdwy-1 standards.dwg

DWG BY: LMARTINEZ 2934



NOTES:

1. THE RAMPS SHALL BE PERPENDICULAR TO RADIUS.
2. REFER TO SHEET ADA-01 FOR GENERAL NOTES

CURB RAMP TYPE 5

CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

ADA-04

JUNE 2012

REVISION | BY | DATE

ENGINEERING STANDARDS OFFICE

DESIGN AREA

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

ADA CURB RAMP
STANDARD
CURB RAMP TY. 5

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

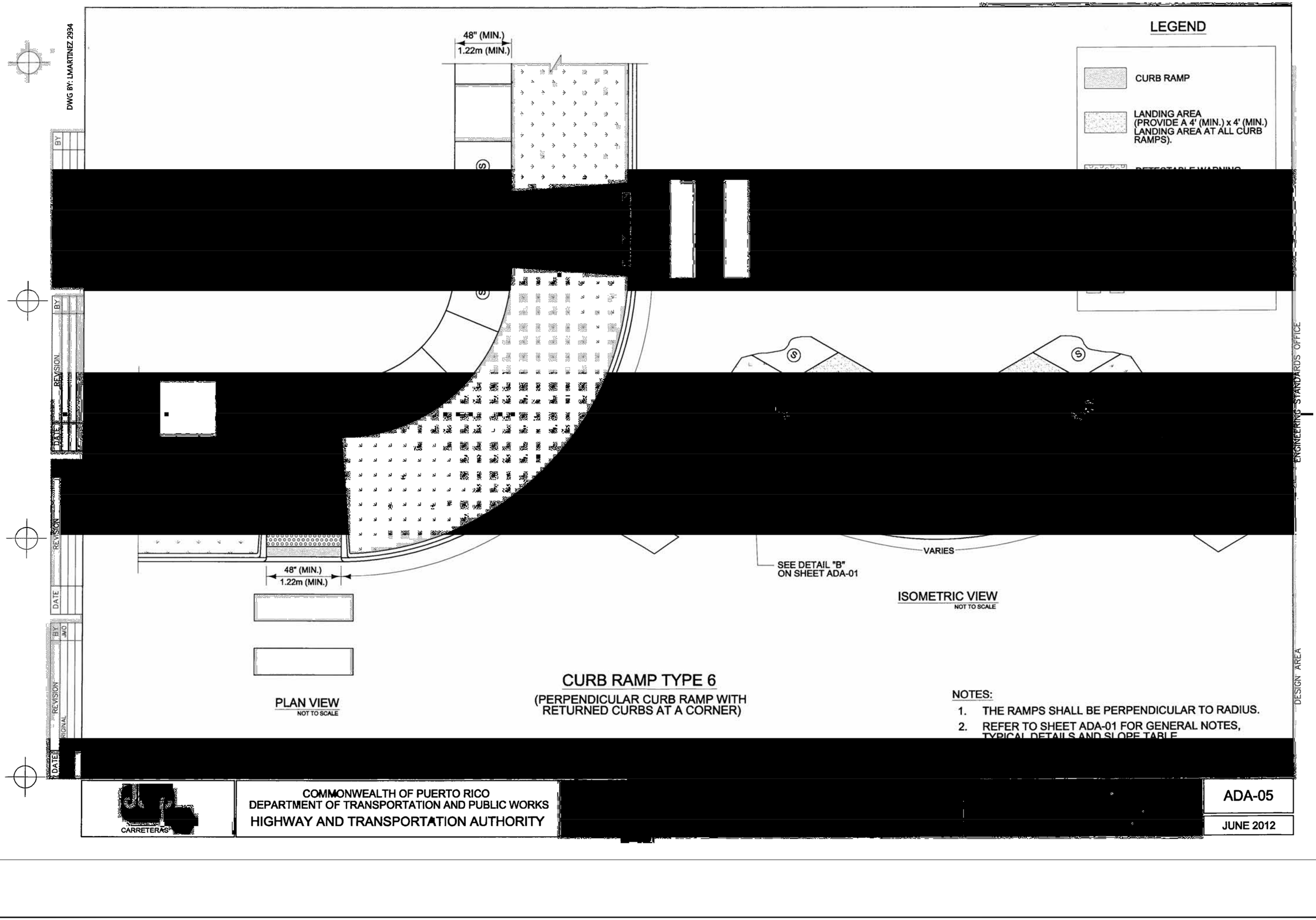
DATE: April 15, 2024

PROJECT NO.: DTE23-004

SHEET NO.: RDWY-05

C:\Users\Joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\rdwy-1 standards.dwg

DWG BY: LMARTINEZ 2934



ISOMETRIC VIEW
NOT TO SCALE

PLAN VIEW
NOT TO SCALE

CURB RAMP TYPE 6

(PERPENDICULAR CURB RAMP WITH RETURNED CURBS AT A CORNER)

NOTES:

1. THE RAMPS SHALL BE PERPENDICULAR TO RADIUS.
2. REFER TO SHEET ADA-01 FOR GENERAL NOTES, TYPICAL DETAILS AND SLOPE TABLE.

REVISION | BY | DATE

DESIGN AREA

ENGINEERING STANDARDS OFFICE

CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

ADA-05

JUNE 2012

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

ADA CURB RAMP
STANDARD
CURB RAMP TY. 6

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

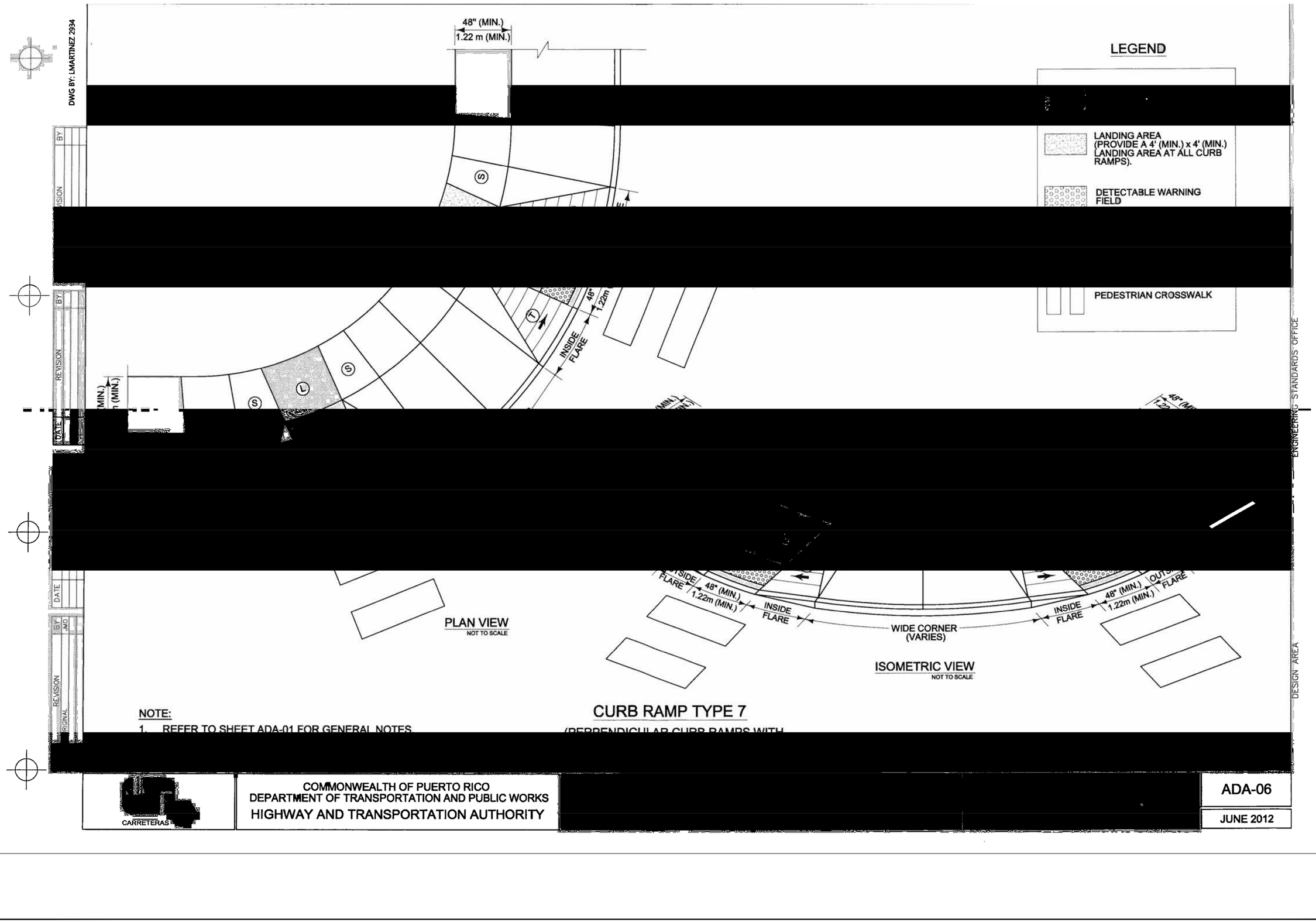
DATE:
April 15, 2024

PROJECT NO.:
DTE23-004

SHEET NO.:
RDWY-06

C:\Users\josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\rdwy-1 standards.dwg

DWG BY: LMARTINEZ 2934



NOTE:

1. REFER TO SHEET ADA-01 FOR GENERAL NOTES.

CURB RAMP TYPE 7

(PERPENDICULAR CURB RAMPS WITH

CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

ADA-06

JUNE 2012

REVISION | BY | JMO
REVISION | DATE | ORIGINAL
REVISIONS | SYMBOL | DATE | BY

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

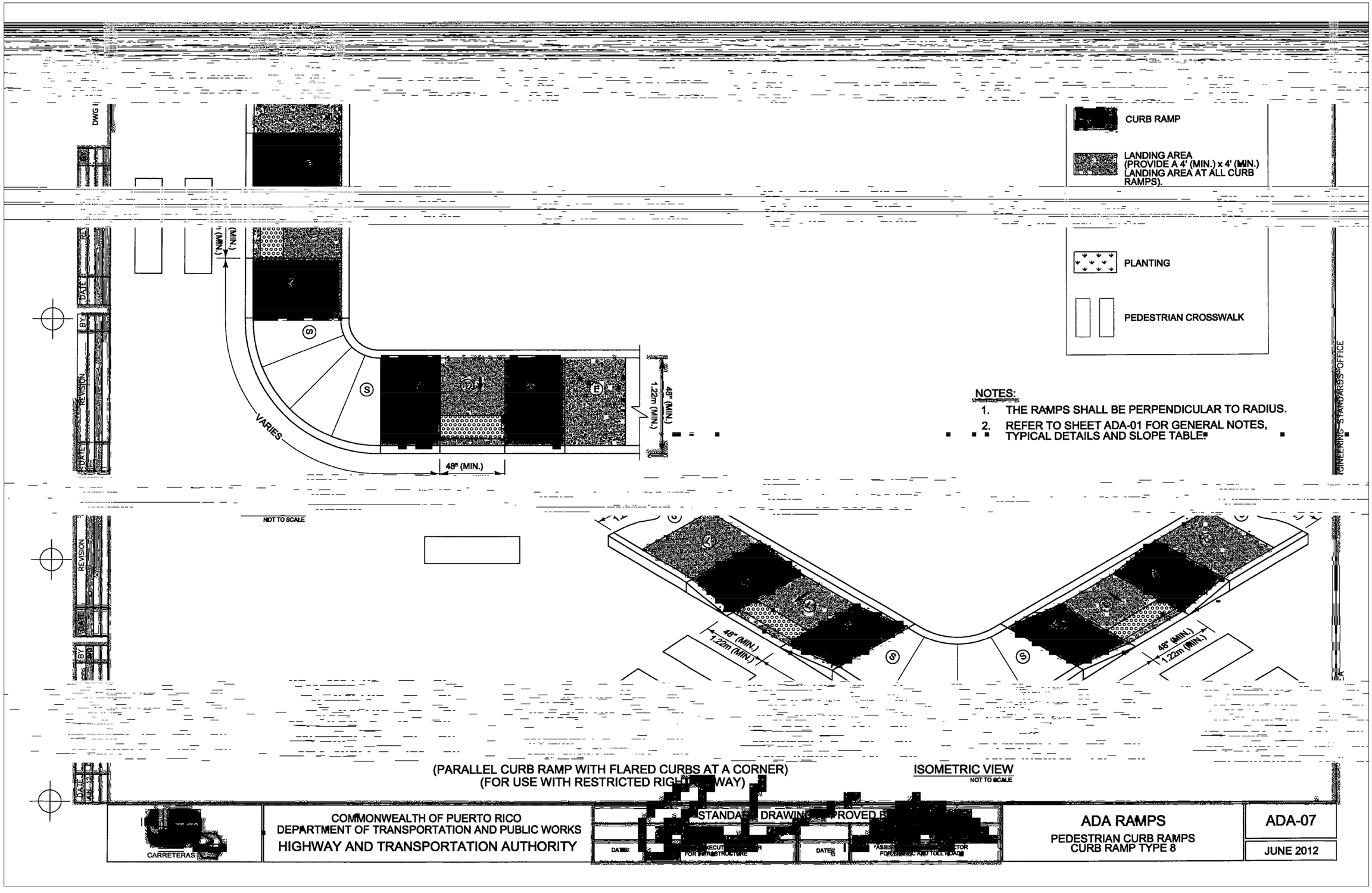
ADA CURB RAMP
STANDARD
CURB RAMP TY. 7

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

PROJECT NO.: DTE23-004

SHEET NO.: RDWY-07



(PARALLEL CURB RAMP WITH FLARED CURBS AT A CORNER)
(FOR USE WITH RESTRICTED RIGHT-OF-WAY)

ISOMETRIC VIEW
NOT TO SCALE

CARRETERAS

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

STANDARD DRAWING APPROVED BY

DATE

EXECUTIVE DIRECTOR FOR INFRASTRUCTURE

DATE

ASSISTANT EXECUTIVE DIRECTOR FOR TRANSPORTATION AND TOLL ROADS

ADA RAMPS
PEDESTRIAN CURB RAMPS
CURB RAMP TYPE 8

ADA-07

JUNE 2012

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

ADA CURB RAMP
STANDARD
CURB RAMP TY. 8

REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

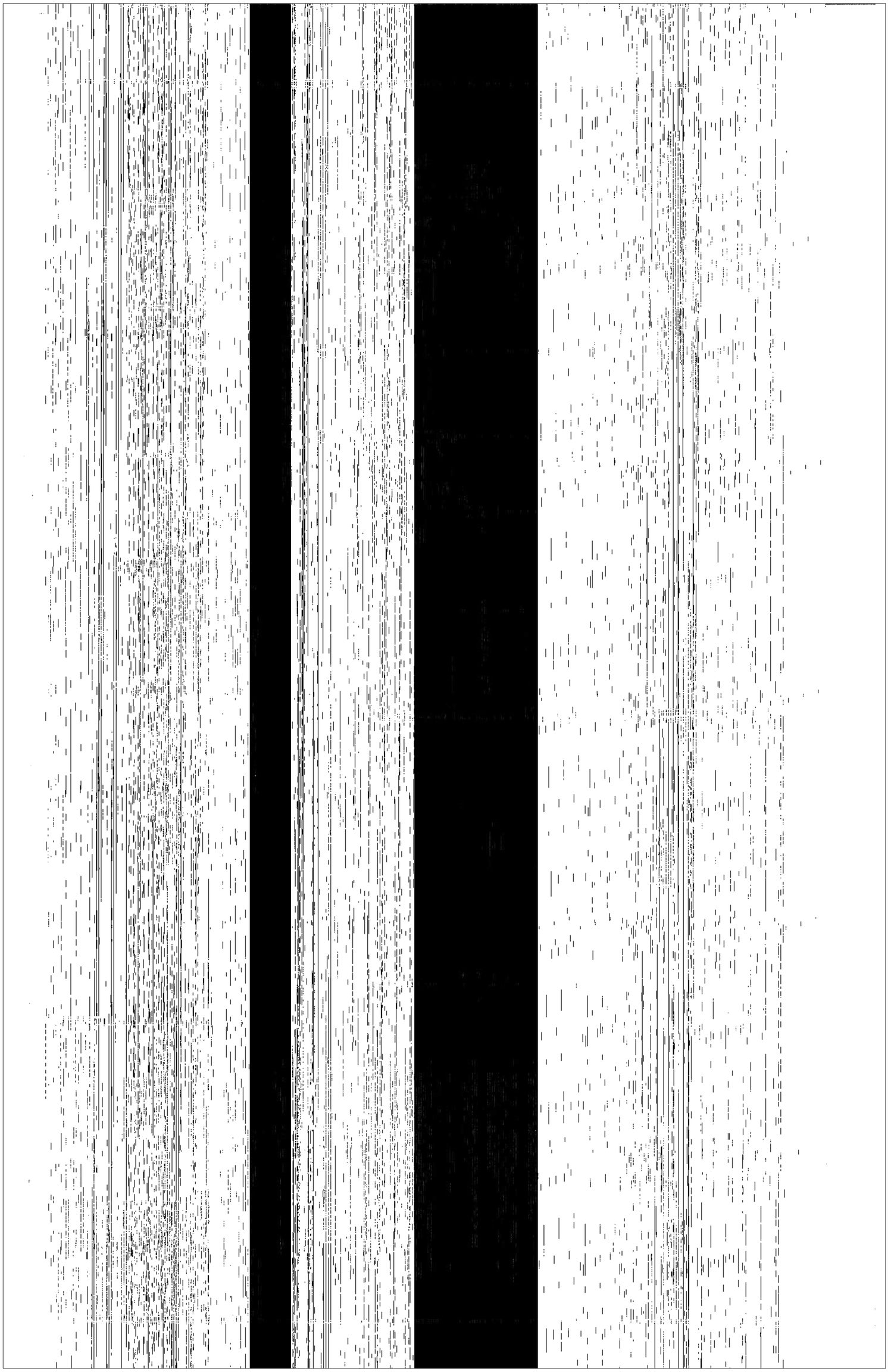
DATE: April 15, 2024

PROJECT NO.: DTE23-004

SHEET NO.: RDWY-08

C:\Users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\rdwy-1 standards.dwg

c:\users\joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\sw3p-erosion control standards.dwg



SW3P-01

SHEET NO.

DTE23-004

PROJECT NO.

April 15, 2024

DATE

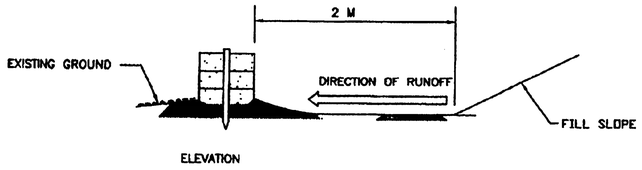
DRAWN: JAD
DESIGNED:
REVIEWED: JT

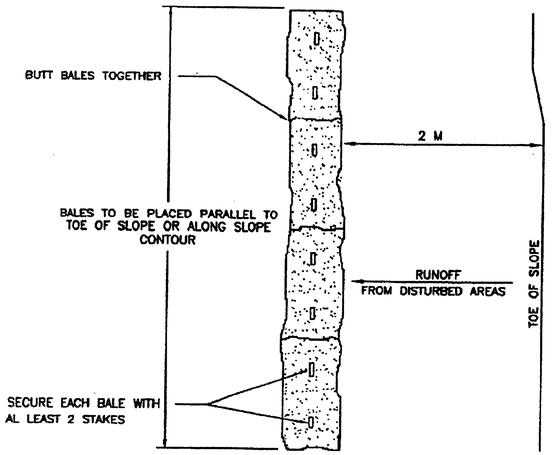
REVISIONS	SYMBOL	DATE	BY

EROSION CONTROL
STANDARD
DEVICES

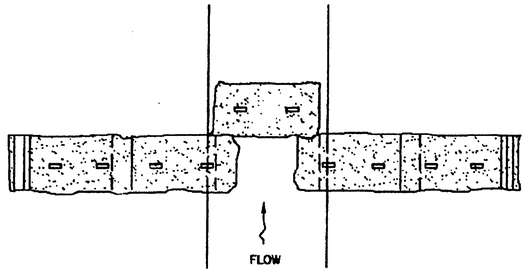
CRP-000053 SIDEWALK
REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

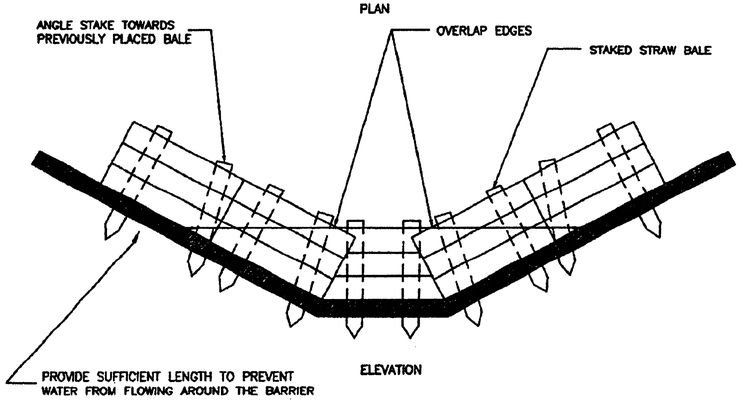
DELTORRE ENGINEERING LLC
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre





INSTALLATION AT TOE OF FILL





INSTALLATION IN A DRAINAGE DITCH

NOTES:

1- STRAW BALES SHALL BE CONSTRUCTED AT THE LOCATION INDICATED IN THE CONSTRUCTION PLANS.

2- USE STRAW BALES IN DRAINAGE DITCHES ONLY FOR LOW FLOW CONDITIONS AND WHEN SPECIFIED ON THE EROSION CONTROL PLANS.

3- INSTALL STRAW BALES ALONG THE CONTOUR LINE

4- EXCAVATION, BACKFILL AND STAKES ARE A SUBSIDIARY OBLIGATION.

5- STRAW BALES SHALL BE ENBEDDED IN THE SOIL AND WHERE POSSIBLE ONE-HALF THE HEIGHT OF THE BALE.

6- STRAW OR HAY BALES SHALL BE SECURELY ANCHORED IN PLACE WITH 4"X1" (100mmX25mm) WOOD STAKES, DRIVEN THROUGH THE BALES. THE FIRST STAKE SHALL BE ANGLED TOWARD THE PREVIOSLY LAID BALE TO FORCE THE BALES TOGETHER.

7- STRAW OR HAY BALES SHALL BE PLACED PARALLEL TO THE TOE OF SLOPE OR ALONG THE SLOPE CONTOUR.

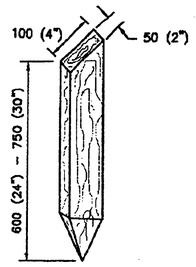
8- EXCAVATION, BACKFILL AND STAKES ARE A SUBSIDIARY OBLIGATION.

9- STAKES SHALL PENETRATE AT LEAST 300 MM (12") INTO THE SOIL.

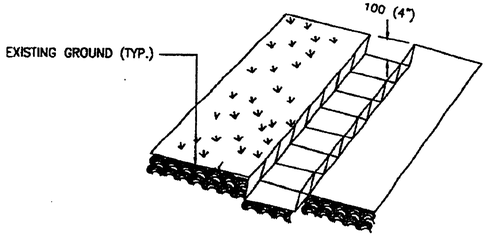
10- STRAW OR HAY BALES SHALL BE INSPECTED FOR DAMAGE WEEKLY AND AFTER RAINFALL. ANY DAMAGE OR DISPLACED BALES SHALL BE REPLACED IMMEDIATELY. ACCUMULATED SEDIMENT SHALL BE REMOVED AND PROPERLY DISPOSED OF BEFORE THE NEXT RAINFALL. NO ADDITIONAL PAYMENTS WILL BE MADE FOR SUCH MAINTENANCE WORK.

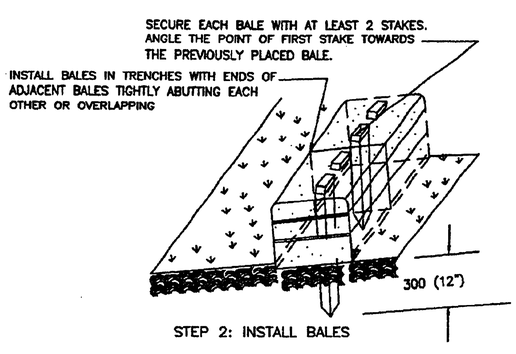
11- WHEN THE DISTURBED AREAS HAVE BEEN PROPERLY STABILIZED, THE BALES MAY BE REMOVED AND ANY REMAINING AREAS STABILIZED. THIS WORK WILL BE PERFORMED AS DIRECTED BY THE ENGINEER AS A SUBSIDIARY OBLIGATION.

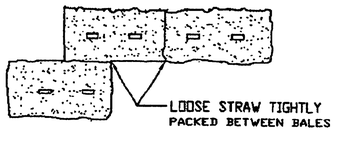
12- ALL DIMENSIONS SHOWN ARE IN MILLIMITERS UNLESS OTHERWISE SPECIFIED.

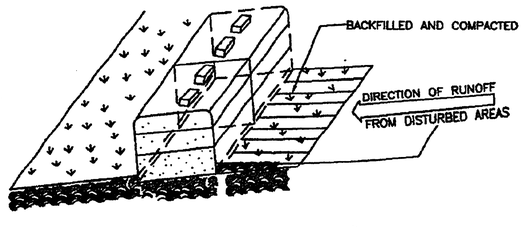


WOOD STAKE DETAIL









STRAW BALE INSTALLATION

EFFECTIVE DATE: OCTOBER 1998

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

EROSION CONTROL DEVICES
STRAW BALES

RECOMMENDED BY:
DESIGN AREA DIRECTOR
DATE : 12-7-98

APPROVED BY:
EXECUTIVE DIRECTOR
DATE : 12-24-98

APPROVED BY: Eddie Rivera
DIV. ADM. FHWA-PR DIVISION
DATE : 12-9-98

DATE	REVISION	BY
08-24-1997	GENERAL REVISION	I.V.
05-07-1998	GENERAL REVISION	I.V.

STD. DWG. ER 2 OF 20

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

EROSION CONTROL STANDARD DEVICES

REVISIONS	SYMBOL	DATE	BY

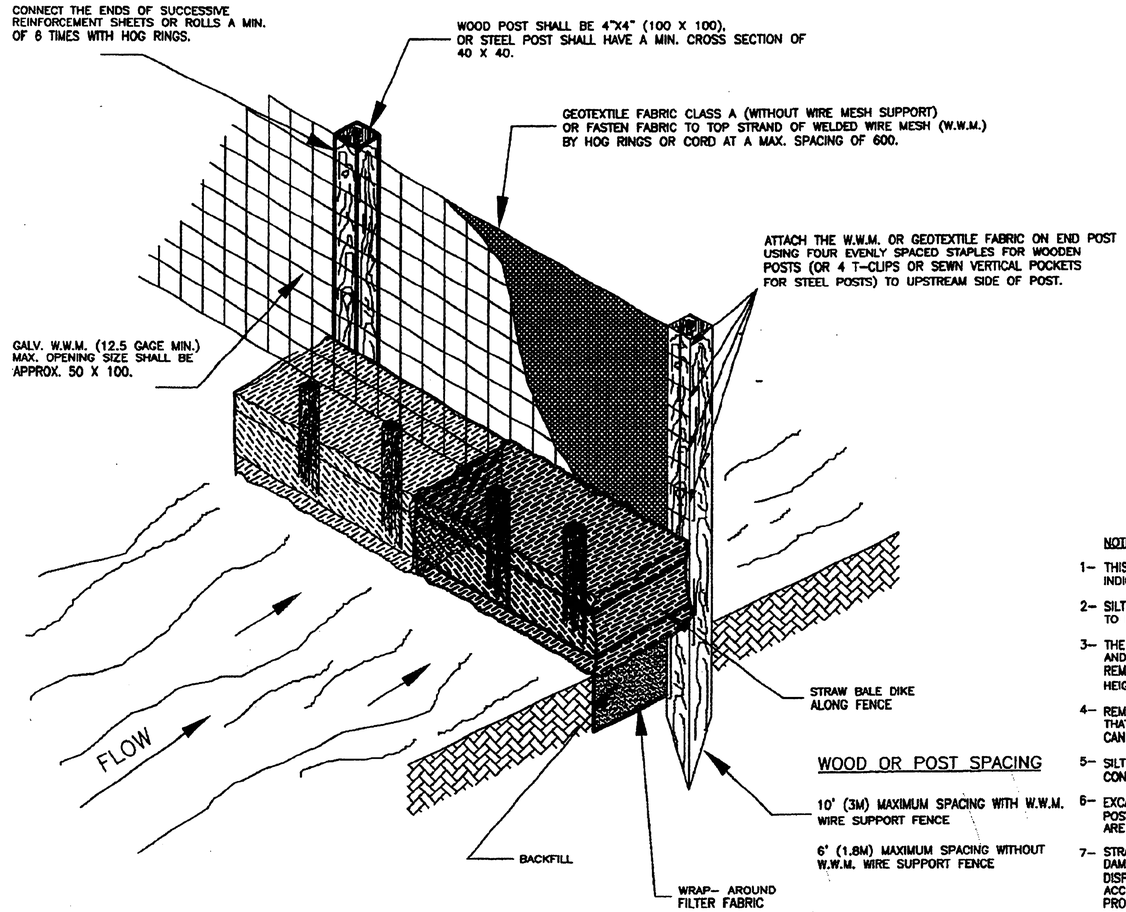
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI

DATE: April 15, 2024

PROJECT NO.: DTE23-004

SHEET NO.: SW3P-02

C:\Users_josedelgado\onedrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cad\production drawings\sw3p-erosion control standards.dwg



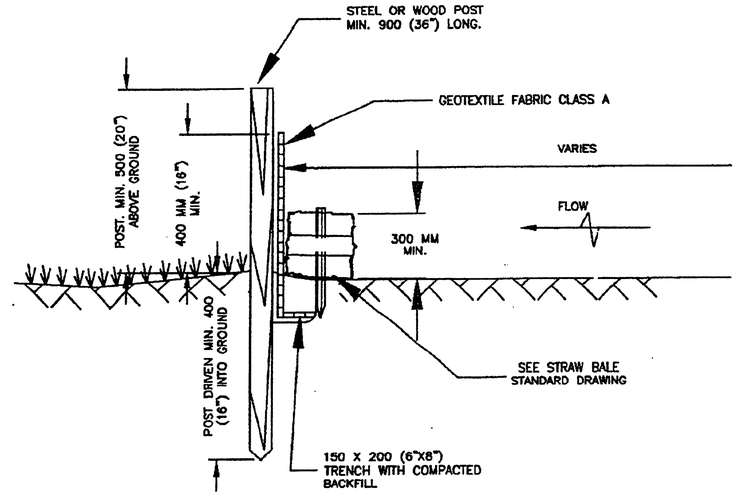
WOOD OR POST SPACING

10' (3M) MAXIMUM SPACING WITH W.W.M. WIRE SUPPORT FENCE

6' (1.8M) MAXIMUM SPACING WITHOUT W.W.M. WIRE SUPPORT FENCE

TEMPORARY SEDIMENT CONTROL FENCE

NOT TO SCALE



ELEVATION

NOT TO SCALE

NOTES

1- THIS DEVICE SHALL BE CONSTRUCTED AT THE LOCATION INDICATED IN THE CONSTRUCTION PLANS.

2- SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE POUNDING EFFICIENCY.

3- THE CONTRACTOR SHALL BE RESPONSIBLE TO INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. MAXIMUM STORAGE HEIGHT SHALL NOT EXCED 255mm (9").

4- REMOVED SEDIMENT SHALL BE DEPOSITED IN AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

5- SILT FENCE AND STRAWS BALES WILL BE PAID IN CONFORMANCE WITH STANDARD SPECIFICATION 210.

6- EXCAVATION, BACKFILL, STAKES STEEL OR WOOD POST, STAPLES, WELDED WIRE MESH AND INCIDENTALS ARE ARE SUBSIDIARY OBLIGATION.

7- STRAW OR HAY BALES SHALL BE INSPECTED FOR DAMAGE WEEKLY AND AFTER RAIFALL ANY DAMAGE OR DISPLACED BALES SHALL BE REPLACED INMEDIATELY. ACCUMULATE SEDIMENT SHLL BE REMOVED AND PROPERLY DISPOSED OF BEFORE THE NEXT RAINFALL. NO ADDITIONAL PAYMENTS SHALL BE MADE FOR SUCH MAINTENANCE WORK.

8- WHEN THE DISTURBED AREAS HAVE BEEN PROPERLY STABILIZED, THE BALE MAY BE REMOVED AND ANY REMAINING AREAS STABILIZED. THIS WORK WILL BE PERFORMED AS DIRECTED BY THE ENGINEER AS A SUBSIDISRY OBLIGATION.

9- ALL DIMENSION SHOWN ARE IN MILIMETERS UNLESS OTHERWISE SPECIFIED.

LEGEND:
W.W.M.= WELDED WIRE MESH

EFECTIVE DATE: OCTOBER 1998

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

EROSION CONTROL DEVICE
SILT FENCE WITH STRAW BALE DIKE

RECOMMENDED BY: DESIGN AREA DIRECTOR DATE: 12-1-98

APPROVED BY: EXECUTIVE DIRECTOR DATE: 12-11-98

APPROVED BY: DIV. ADM. FHWA-PR DIVISION DATE: 12-9-98

DATE	REVISION	BY
05-07-1998	GENERAL REVISION	LV.
08-31-1998	ADD NOTES	LV.

STD. DWG. ER 3 OF 20

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATI ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

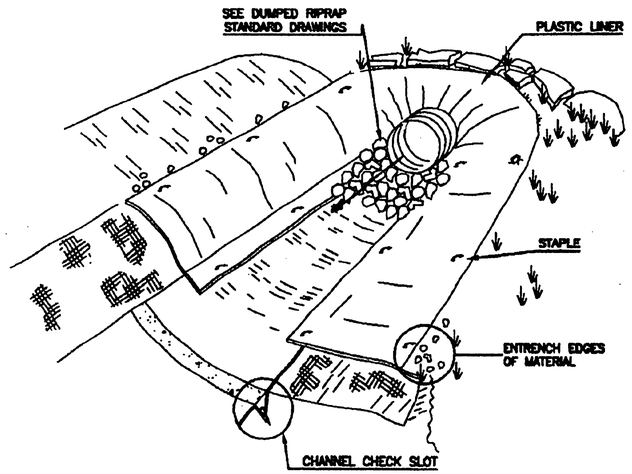
CRP-000053 SIDEWALK REVITALIZATION JAYUYA
URBAN CENTER
JAYUYA, P.R.

EROSION CONTROL STANDARD DEVICES

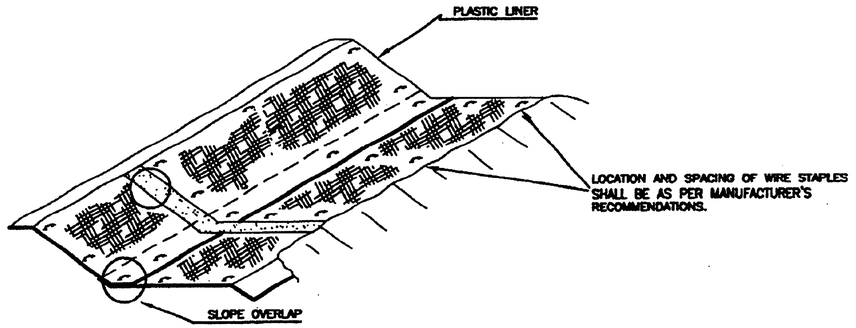
REVISIONS	SYMBOL	DATE	BY

DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: SW3P-03

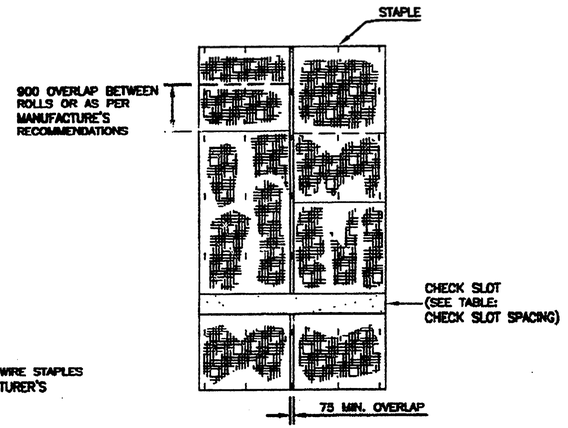
C:\Users\Joseadelgado\onedrive - delgado torres engineering, llc\documents - projects\dte23-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\sw3p-erosion control standards.dwg



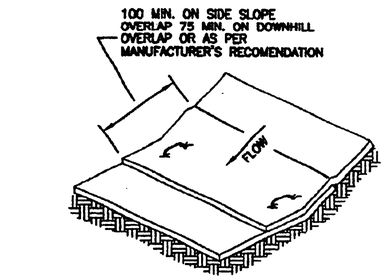
PIPE OUTLET INSTALLATION



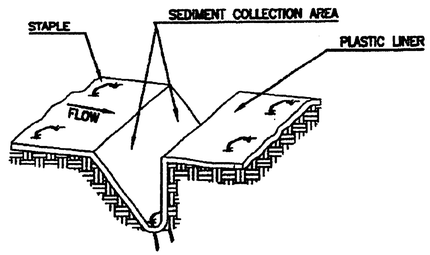
V DITCH INSTALLATION



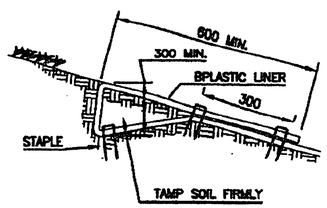
PLAN VIEW
STAPLING DIAGRAM



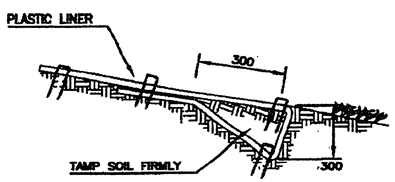
SLOPE OVERLAP



CHECK SLOT



UPPER TERMINAL ANCHOR

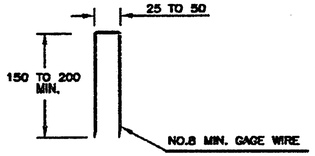


LOWER TERMINAL ANCHOR

CHECK SLOT SPACING	
SLOPE	SPACING
LESS THAN 4%	30 M
4% OR MORE	15 M

NOTE:

1. PLASTIC LINER SHALL CONFORM TO THE REQUIREMENTS OF STANDARD SPECIFICATION 210 – SOIL EROSION AND WATER POLLUTION CONTROL.
2. CHECK SLOT TO BE CONSTRUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION FOR PREFERRED INSTALLATION.
3. ALL DIMENSIONS SHOWN ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.



200 STAPLE MINIMUM LENGTH FOR SANDY SOIL.
150 STAPLE MINIMUM LENGTH FOR OTHER SOIL.

WIRE STAPLE DETAIL

EFFECTIVE DATE: OCTOBER 1998

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

EROSION CONTROL
SLOPE PROTECTION
PLASTIC LINER INSTALLATION

RECOMMENDED BY:
DESIGN AREA DIRECTOR
DATE : Dec. 7, 98

APPROVED BY:
EXECUTIVE DIRECTOR
DATE : 12-11-98

APPROVED BY:
INV. ADM. FHWA-PR DIVISION
DATE : 12-4-98

DATE	REVISION	BY

STD. DWG. ER 17 OF 20

DELTORRE ENGINEERING
PLANNING SMART FOR A BETTER FUTURE
53 C. LINDA MAR ♦ MANATÍ ♦ PUERTO RICO ♦ 00674
PH: 787-854-7591 ♦ info@deltorre-eng.com
www.linkedin.com/deltorre

CRP-000053 SIDEWALK REVITALIZATION JAYUYA URBAN CENTER JAYUYA, P.R.

EROSION CONTROL STANDARD SLOPE PROTECTION

REVISIONS	SYMBOL	DATE	BY

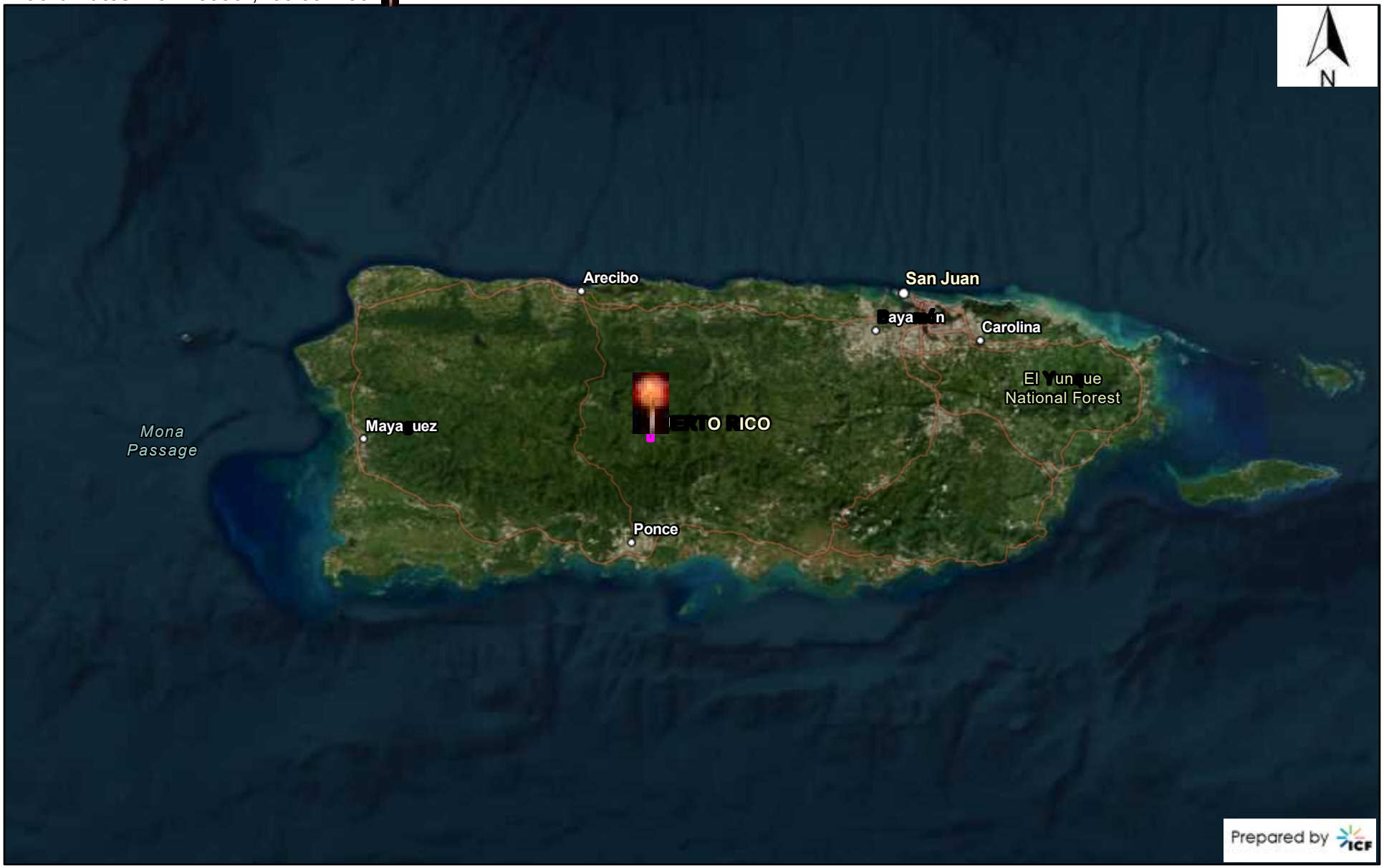
DRAWN: JAD
DESIGNED: JAD
REVIEWED: ITI
DATE: April 15, 2024
PROJECT NO.: DTE23-004
SHEET NO.: SW3P-04

C:\Users\joseadelgado\OneDrive - delgado torres engineering, llc\documents - projects\dte-2023-004 sidewalk revitalization jayuya urban center crp-053\dte23-004 cadd\production drawings\sw3p-erosion control standards.dwg

Attachment 13:
Sole Source Aquifers

PR-CRP-000053 Sole Source Aquifer Map

Address: Urban Center, Jayuya, PR 00664
Coordinates: 18.218990°, -66.591780°



August 22, 2025

Search Result (point)

1:1,155,581

0 5 10 20 mi

0 15 30 60 km

Earthstar Geographics, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community

Source: EPA NEPAssist (https://nepassisttool.epa.gov/nepassist/nepamap.aspx)

PR-CRP-000053 Sole Source Aquifer Map

Address: Urban Center, Jayuya, PR 00664
Coordinates: 8.218990°, -66.591780°

August 22, 2025

Search Result (point)

1:9,244,649

0 70 140 280 mi

0 115 230 460 km

Earthstar Geographics, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community

Source: EPA NEPAssist (https://nepassisttool.epa.gov/nepassist/nepamap.aspx)

*Please note that the Sole Source Aquifer layer is not visible at the extent required to display both Puerto Rico and the nearest SSA location on the map.

Attachment 14:
Wetlands Protection

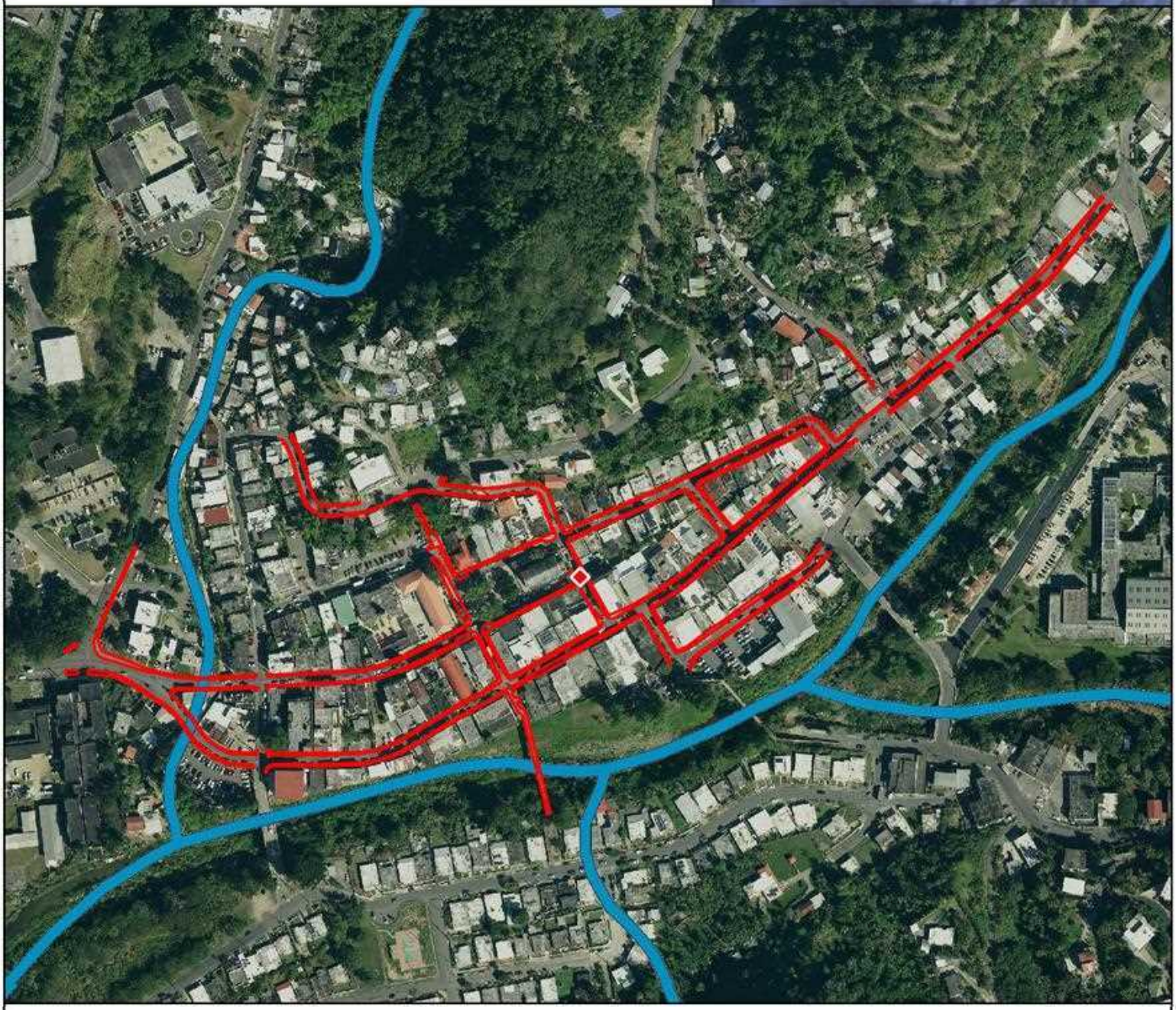
Wetlands Map - PR-CRP-000053

Project: Mejoras Aceras, Paseo Peatonal Ventana al Rio y Remocion de Adoquines del Casco Urbano del Municipio de Jayuya

Address: Urban Center, Municipality of Jayuya, Puerto Rico

Coordinates: 18.218990°, -66.591780° (WGS 1984)

EES



Legend

- Project Location
- Project Footprint
- 18.218990, -66591780
- Municipalities

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

N

Scale: 1: 4,000

1 inch equals 0.10 kilometers

0 75 150 m

Spatial Reference:
NAD 1983 State Plane Puerto Rico Virgin Islands FIPS 5200 meters

Sources:
PRITS WFS Server (http://geoserver2.pr.gov/geoserver/pr_geodata/wfs).
USFWS National Wetlands Inventory
(https://fwspublicservices.wim.usgs.gov/wetlandsmapservice/rest/services/Wetlands/MapServer).
2022 Hexagon AB Imagery Basemap Service.

Attachment 15:
Wild and Scenic Rivers

PR-CRP-000053 Wild and Scenic Rivers Map

Address: Urban Center, Jayuya, PR 00664
Coordinates: 8.218990°, -66.591780°

September 8, 2025

Search Result (point)

ild and Scenic Rivers

1:577,791

0 4.75 9.5 19 mi

0 5 10 20 km

Earthstar Geographics, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community

Source: EPA NEPAssist (https://nepassisttool.epa.gov/nepassist/nepamap.aspx)