

### U.S. Department of Housing and Urban Development

451 Seventh Street, SW Washington, DC 20410 www.hud.gov

espanol.hud.gov

# **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:** Multidisciplinary Citizen Service Center (formerly Guillermo

Godreau School) (PR-CRP-000135)

**Responsible Entity:** Puerto Rico Department of Housing (PRDOH)

**Grant Recipient** (if different than

Responsible Entity):

Municipality of Salinas

State/Local Identifier: Puerto Rico / Salinas

**Preparer:** Mildred M. Guzmán Zavala, Environmental Specialist

#### **Certifying Officer Name and Title:**

Juan Carlos Perez-Bofill - Director, Disaster Recovery CDBG-DR

Sally Z. Acevedo-Cosme - Permits and Environmental Compliance Specialist Pedro de León Rodriguez - Permits and Environmental Compliance Specialist Maria T. Torres-Bregón - Permits and Environmental Compliance Specialist

Angel G. López Guzmán - Deputy Director, Permits and Environmental Compliance Specialist

Ivelisse Lorenzo Torres - Permits and Environmental Compliance Specialist Santa Ramírez Lebrón - Permits and Environmental Compliance Specialist Janette I. Cambrelen - Permits and Environmental Compliance Specialist Limary Vélez Marrero - Permits and Environmental Compliance Specialist Mónica Machuca Rios - Permits and Environmental Compliance Specialist

**Consultant** (if applicable): ICF

**Direct Comments to:** PR Department of Housing: <a href="mailto:environmentcdbg@vivienda.pr.gov">environmentcdbg@vivienda.pr.gov</a>:

**Project Location:** The school is located at 23-73 Miguel Ten Street in the municipality of Salinas. The site coordinates are (lat., long.): 17.975548°, -66.298631°. Cadaster numbers: 417-073-049-10-000 and 417-073-049-13-000 (obtained from https://catastro.crimpr.net/cdprpc/).

### Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]:

The proposed project intends to remodel the existing Guillermo Godreau school complex, a three-building school complex located at Miguel Ten Street, near the urban center of Salinas. The property is relatively flat and occupies 3,329.06 square meters. The three buildings located in the property include:

- 1. Original school building (A). This two-story building was constructed in reinforced concrete and has a metal roof structure. Its floor area is 8,255.6 square feet per floor for a total of 16,511.2 square feet.
- 2. New classroom building (B). This two-story, reinforced concrete classroom building has 2,477 square feet at ground level and 718 square feet on the second floor of classroom space. It is located behind the original school building on the northern side of the lot.
- 3. Small service building (C). This one-story, 1,648.3 square feet reinforced concrete structure is located on the western side of the lot, next to the original school building.

Initially, the original classroom building (A) was to be remodeled and have its infrastructure updated to serve as the main Service Center. Structural studies performed revealed major material and structural deficiencies which do not allow for this building's use without extensive and costly structural retrofitting. This intervention was deemed beyond the scope for the current project.

This project will focus on the interior remodeling of buildings (B) & (C) as well as the paving and repairing of the grounds for these buildings which include the creation of new parking areas within the property. The original school building will be closed, its façade will be painted, and minor reparations will be performed on various windows to prevent pigeons and rodents from entering the building.

Classroom building (B) will have its electrical, plumbing, and mechanical infrastructure updated. This will include the installation of the properties' electrical substation and new diesel generator on the roof as a safeguard against flooding. Its interior floor level is to be raised approximately 8" to provide further resiliency. This new floor level is above past flood high-water marks.

The first floor of building (B) will house municipal services which include the offices of "Ayuda al Ciudadano", "CRIM", "Patente Municipal" as well as service/storage spaces. New ADA compliant restrooms will also be included in this renovation. The second floor will house additional services including "Capellanía Municipal" and "Programa: Tu Vales" with support areas (conference room and kitchenette). The second-floor spaces are to be made available in the event of a natural disaster for the municipalities' "Centro de Operaciones de Emergencias".

Building (C) is also to have its interior floor level raised to provide better flood protection and resiliency. It will house a new kitchen/food prep area which aims to serve the municipalities employees that will work on the property as well as adjacent municipal buildings. This new kitchen will also work for municipal programs that prepare meals. The building will have storage spaces and open dining/lounge areas. A new outdoor seating area is to be provided next to the indoor seating area for additional capacity.

The open courtyard at the rear of the property is to be finished with a mix of asphalt and permeable surfaces to provide absorption of storm water. The area is used as a makeshift parking area will be prepared and organized to hold fourteen (14) parking spaces, two of these designated for

handicapped use. This area is approximately 667.7 square meters. New trees and vegetation will be planted and the sidewalks fronting the property are to be reconstructed and repaired. The proposed project will not add any space to the existing structures.

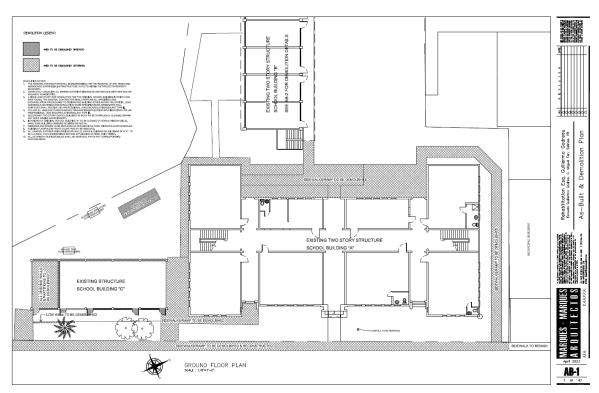


Figure 1 - Existing site layout

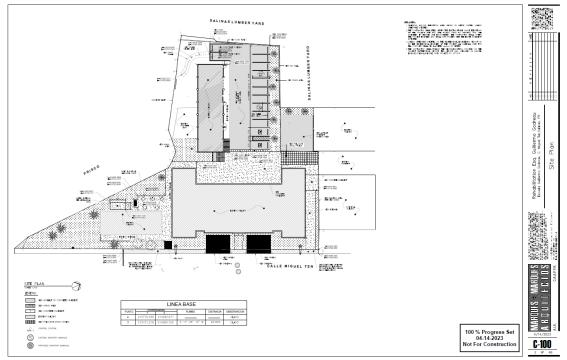


Figure 2 – Proposed Site layout

### The following are photos of the site's exterior existing conditions.



Figure 3 - View of Building A from Miguel Ten Street



Figure 4 - View of Building C form Miguel Ten Street



Figure 5 - View of the back of Building A from the courtyard (photo obtained from EDF included in Attachment 13)



Figure 6 - Building C and courtyard area (photo obtained from EDF included in Attachment 13)

#### **Level of Environmental Review Determination:**

Categorically Excluded per 24 CFR 58.35(a), and subject to laws and authorities at §58.5: (a)(3)(iii)

### **Funding Information**

Grant Numbers	HUD Program	Funding Amount
B-17-DM-72-0001	Community Development Block Grant -	\$11,938,162,230.00
B-18-DP-72-0001	Disaster Recovery (CDBG-DR)	
B-19-DP-78-0002		
B-18-DE-72-0001		

Estimated Total HUD Funded Amount: \$2,052,316.91

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]: \$2,052,316.91

### 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 REGULATION	ONS LISTED AT 24 CFR 50.4 & 58.6
Airport Hazards	Yes No	The nearest civil airport is Mercedita (PSE) located over 88,000 feet from the project

24 CFR Part 51 Subpart D		site, and the nearest Civil large/medium hub and joint military airfield is the Luis Muñoz Marín (SJU), located over 193,000 feet from the project site. Thus, the project site is outside the range of an Accident Potential Zone (APZ) or a Runway Protection Zone/Clear Zone (RPZ/CZ) and the project is in compliance with Airport Hazards requirements. See map in Attachment 1.
Coastal Barrier Resources  Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes No	According to the US Fish and Wildlife (USFWS) CBRS mapper, the project location is 0.82 miles northeast of the Coastal Barrier Resources System (CBRS). See map in Attachment 2.  Source: <a href="https://www.fws.gov/program/coastal-barrier-resources-act/maps-and-data">https://www.fws.gov/program/coastal-barrier-resources-act/maps-and-data</a>
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	As per FEMA's National Flood Hazard Layer FIRM, the project site is in Special Flood Hazard Area, Zone AE (Panel 72000C2085J, effective 11/18/2009) (see FIRM map in Attachment 3) Thus, the municipality must obtain flood insurance for the project site. Currently the facility does not have flood insurance, but it will be obtained before the project is closed out.  Source: https://msc.fema.gov/portal/home
STATUTES, EXECUTIVE ORDERS,	AND REGULATION	ONS 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 does not include new construction or conversion of land use which may facilitate the development of public, commercial, or industrial facilities. The former use of the site was a public facility as a school and it will remain as a public facility with a different use.
		EPA's Green Book was reviewed to identify non-attainment areas. According to the information published by the EPA (see Attachment 4) the municipality of Salinas in in a non-attainment area for Sulfur Dioxide (SO2). The data reviewed in this source was current as of October 31, 2023. The site itself is not within the non-attainment area.

Т		., , ,, ,, ,, ,,
		However, since the intended use will not increase the occupant density at the facility, this will not affect the proposed used of the site nor its occupants. Additionally, the activities will not increase emission that may further degrade air quality or discharge priority pollutants.
		The renovation of the site includes the installation of a new Emergency-power Generator Unit (EGU). However, this unit will not constitute a significant source of air pollution as it will only be used during emergencies and when there are power outages at the site. The unit will be compliant with the most recent requirements from the EPA for stationary engines. The operator of the unit will need to obtain the necessary permits from Puerto Rico Department of Natural and Environmental Resources (DNER) to comply with the installation and operation of the unit.
		Sources: <a href="https://www3.epa.gov/airquality/greenbook/ancl.html#PR">https://www3.epa.gov/airquality/greenbook/ancl.html#PR</a> <a href="https://www.epa.gov/nepa/nepassist">https://www.epa.gov/nepa/nepassist</a>
Coastal Zone Management  Coastal Zone Management Act, sections 307(c) & (d)	Yes No	The Project site is not located in a Coastal Zone. The Coastal Zone boundary is 0.10 miles west of the project. The scope of application or jurisdiction of the Coastal Zone Management Program is defined as one kilometer (1 km) strip inland, as well as additional distances to include key coastal natural systems. The marine component of the coastal zone three (3) nautical leagues (9 nautical miles or 10.35 statute miles), the ocean floor below them as well as all the islands and keys within the territorial waters. The proposed project does not affect a coastal zone as defined in the Coastal Zone Management Document. This project complies with the Coastal Zone Management Act without further evaluation.

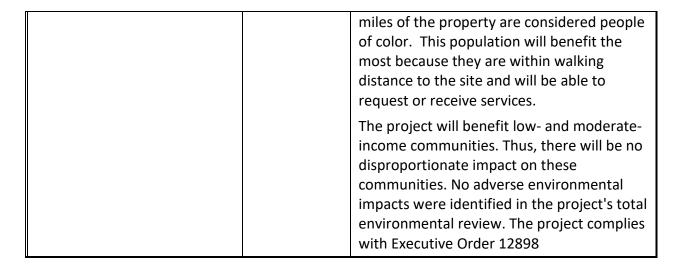
		See <b>Attachment 5</b> for Map.
		Source: https://www.drna.pr.gov/historico/oficinas/arn/recursosvivientes/costasreservasrefugios/pmzc/pmzc/pmzc2009/PMZCPR%20espanol%202009-final.pdf.
Contamination and Toxic Substances  24 CFR Part 50.3(i) & 58.5(i)(2)	Yes No	According to information published by the EPA (see <b>Attachment 6</b> ), the following can be found within a radius of 0.6 miles (3,000 to 1).
		<ul> <li>ft) from the site:</li> <li>Water Discharges – stormwater permit holders</li> <li>Air Pollution – emission site</li> <li>Toxic Release Inventory (TRI) sites</li> <li>Hazardous waste management facilities</li> <li>One brownfield</li> </ul>
		The property is approximately 415 feet to the north of an area designated for industrial use which has several facilities currently in operation and some empty lots. However, the presence of these areas will not affect or conflict with the intended use of the property. Mainly because the proposed project involves the rehabilitation of a site not for residential purposes. No concerns were found at the site.
		The brownfield site, "Aguirre Theater", is over 1700 feet from the site and will therefore have no impacts on the site.  Additionally, no deep subsurface work is anticipated for this project. A Phase I Environmental Assessment was completed on the brownfield in 2013. No active violations were noted for any facilities. The full Facility Reports for all EPA Facilities within 3,000 ft of the site have been included in Attachment 6.
		The environmental site inspection did not note potential RECs, and that there is no evidence of a historical land use at the site that could cause contamination prior to the school being constructed in 1925.

		According to information provided by Instituto de Cultura Puertorriqueña (ICP), the main building was constructed between 1925 and 1935. Thus, the construction materials and subsequent maintenance of the facility may include Asbestos Containing Materials (ACM) and/or Lead-based paint (LBP). Studies were conducted at the facility in December of 2021. No ACM were detected but LBP was identified in several surfaces. No historical uses that would be a concern were identified for the site.
		All material identified positive to Lead must be managed according to the appropriate local and federal environmental standards to mitigate LBP surfaces. Concurrently, all LBP material must be handled in accordance with OSHA Standards 29 CFR 1926.62.
		With proper management, the LBP will not affect the health and safety of the occupants or conflict with the intended use of the site.
		Reports of both ACM and LBP studies are included in <b>Attachments 7 and 8</b> .
		The are several underground storage tanks (UST) located at fuel stations near the site. Records from the planning board indicate the location of three nearest stations are 1,171 ft (Oro Blanco SS), 866 ft (Salinas SS) and 1,352 ft (Rio Jueves SS) from the site. These USTs do not represent a limitation or threat to the development of the project due to the distance from the site.
		See Attachment 9.  Source: https://www.epa.gov/nepa/nepassist and individual
Forder pared Constitution		studies and the studies
Endangered Species  Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes No	The project activities will take place in a previously developed urban property that lacks any significant natural areas. Thus, it will have no effect on natural habitats or federally protected species.

Explosive and Flammable	V	To certify this, the Blanket-Clearance Letter for Federally sponsored project, Housing and Urban Development, dated January 14, 2013 was applied to the evaluation process. The USFWS determined the project qualifies under the self-certification criteria and provided their concurrence. This concludes the Endangered Species Act consultation. Should be project be modified, new certification or consultation will be required. If a Puerto Rican Boa is encountered, work will cease until it moves off the site or, failing that, the Puerto Rico Department of Natural and Environmental Resources (PRDNER) Rangers will be notified for safe capture and relocation of the animal, in accordance with the USFWS Puerto Rican Boa Conservation Measures guidelines. See information in Attachment 10.
Hazards  24 CFR Part 51 Subpart C	Yes No	The project does not involve the development of a hazardous facility nor does it involve a development that will increase residential density or convert to a residential property. Thus, the project is in compliance with this Explosive and Flammable Hazard standard.  Source: https://gis.ip.pr.gov/mipr/
Farmlands Protection  Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes No	According to National Resources Conservation Service (NRCS) information published within the Web Soil Survey, the site is "Not prime Farmland". Thus, the project will have impact on Farmland.  See information in <b>Attachment 11</b> .  Source: <a href="https://websoilsurvey.nrcs.usda.gov/app/">https://websoilsurvey.nrcs.usda.gov/app/</a>
Floodplain Management  Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes No	Per the Advisory Base Flood Elevation (ABFE) map (Effective Date: 12/11/18), the project is within Flood Hazard Area, Zone A. The project does not meet any of the exceptions in 24 CFR 55.12 and therefore required an 8-step analysis of the direct and indirect

		impacts of the proposed activities within the floodplain.  The 8-step documentation was performed, with initial publication (dated Sept 11, 2023) and final publication (dated Nov 10, 2023) issued in newspapers of island wide distributions. No comments were presented by the public.  The following mitigation actions will be incorporated into the project: 1) provide waterproof masonry coating; 2) installation of the new emergency-power generator on the roof; 3) the building B will be provided with flood barricades for the doorways; and 4) the building C's electrical infrastructure will be raised above BFE levels.
		All the 8-step process documentation is included in <b>Attachment 12</b> .  Source for maps: <a href="https://gis-r2-fema.hub.arcgis.com/pages/puertorico">https://gis-r2-fema.hub.arcgis.com/pages/puertorico</a>
Historic Preservation  National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes No	Section 106 consultation was performed for the project. On August 25, 2023, SHPO issued their concurrence with the finding of "no adverse effect" conditioned to the elaboration and implementation of a maintenance plan to protect the main building from further deterioration. The plan was prepared and submitted to SHPO on December 11, 2023.
		The municipality of Salinas will be responsible for the implementation of the plan. Section 106 Consultation was finalized after the acceptance of the plan. For reference, all consultation documents are included in <b>Attachment 13</b> .
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 new construction for residential use or rehabilitation of residential property. In fact, the project does not involve residential use but a multidisciplinary service center for the population of Salinas. Thus, the project is in

		compliance with Noise Abatement and Control regulations.
Sole Source Aquifers  Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes No	According to information published by the US Environmental Protection Agency (USEPA) in the Interactive map of Sole Source Aquifers (SSA), there are no Sole Source Aquifers in Puerto Rico. Therefore, the project will have no impact over any SSA. See information in <b>Attachment 14</b> .  Source:  https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b
Wetlands Protection  Executive Order 11990, particularly sections 2 and 5	Yes No	According to US Fish and Wildlife Service's National Wetlands Inventory Mapper, the project site is not in or near a Wetland. Therefore, the project will have no impact on Wetlands. See information in Attachment 15.  Source: https://www.fws.gov/wetlands/data/mapper.html
Wild and Scenic Rivers  Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes No	There are only three rivers in Puerto Rico listed in the National Wild and Scenic Rivers System. These are Rio de la Mina, Rio Icacos and Rio Mameyes, all of which are located in the US Forest Service, Caribbean National Forest (also known as El Yunque), located over 30 miles to the northeast of the site. Therefore, the project will have no impact on any Wild and Scenic Rivers. See information in <b>Attachment 16</b> .  Source: <a href="https://rivers.gov/puerto-rico.php">https://rivers.gov/puerto-rico.php</a> US Dept of Agriculture, Caribbean National Forest, Wild and Scenic Rivers, Comprehensive River Management Plan, June 2010.
ENVIRONMENTAL JUSTICE		
Executive Order 12898	Yes No	The development of the project is meant to serve the population of Salinas, in particular those in areas neighboring the project site. According to information published by the EPA, the population within a radius of 0.5



**Field Inspection:** September 4, 2023 / Mildred M Guzman. Conditions of field inspection reflect those identified in the photos of the project description.

#### **Summary of Findings and Conclusions:**

The proposed action involves upgrades to existing infrastructure in the former Guillermo Godreau School to provide new uses that will benefit of the community.

Although the site is located in the floodplain, the proposed project will include mitigation strategies to support the use of the facility. These will be in compliance with floodplain management regulations. There will be no changes to flood volume or base flood elevation as a result of the project. The infrastructure improvements within the project area will not result in additional flooding risk to other properties in the vicinity since the structures already are in place and both permeable and impermeable surfaces will be used in the site to avoid changes to the flood levels.

Finally, the Section 106 consultation process resulted in the need to implement a maintenance plan to avoid further degradation of Building A. The municipality of Salinas will be responsible for the implementation of the plan presented to SHPO.

Completion of this environmental review and associated consultation confirms that the proposed project will not have a significant environmental impact and that further assessment is not necessary. Therefore, HUD funding of the proposed action will not have a significant impact on the quality of the human environment.

### 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
Flood Insurance	Flood insurance will be required for the property to assist in funding damages to the property from such an event.
Floodplain management	<ul> <li>Buildings "B" and "C" shall be structurally reinforced and will have their interior floor levels raised by 8" which was above the high-water mark left by previous flooding incidents. The new interior floor elevation shall be achieved by installing a concrete reinforced EPS system.</li> <li>Removable flood barriers have been incorporated into the design to protect door openings of Building "B". These "flood barricades" can easily be installed prior to a potential weather event and subsequently removed and prevent the entrance of flood water into the building.</li> <li>Buildings "B" and "C" will also be finished with waterproof exterior finishes which will help protect all interior areas (2 coats, Loxon XP Masonry Coating, distributed by Sherwin Williams).</li> <li>The electrical infrastructure on building "C" will be raised above BFE levels.</li> <li>The Emergency-power generator unit and other exterior-mounted electrical equipment will be elevated above the base flood elevation.</li> </ul>
Historic Preservation	The building maintenance plan submitted to SHPO must be implemented by the Municipality of Salinas, owner of the facility.
Contamination and Toxic substances	Lead-based paint (LBP) was detected in several surfaces of the property. All material identified positive to LBP will be managed according to the appropriate local and federal environmental standards to mitigate LBP surfaces.  Concurrently, all LBP material must be handled in accordance with OSHA Standards 29 CFR 1926.62.

Deteri	mination:
	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. <b>Funds may be committed and drawn down after certification of this part</b> 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)).
Prepai	rer Signature: Date: February 16, 2024
Name,	/Title/Organization: Mildred M. Guzmán / Environmental Specialist / ICF Inc.
Respo	nsible Entity Agency Official Signature:
	Date: February 22, 2024
Name	/Title: Santa D. Ramírez Lebrón / Permits and Environmental Compliance Specialist
Thic o	riginal signed document and related supporting material must be retained on file by the

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).

## PR-CRP-000135

## **ERR: List of Attachments**

1	Airport Hazards Map
2	Coastal Barrier Resources Map
3	Flood Insurance Rate Map (FIRM)
4	Non-attainment areas (listing and map)
5	Coastal Zone Boundary Map
6	Contamination and Toxic Substances (map and
	information)
7	Asbestos-Containing materials (ACM) study
8	Lead Based Paint (LBP) Study
9	Explosive and Flammable Hazards
10	Endangered Species Act
	<ul> <li>USFWS Self-Certification</li> </ul>
	Blanket Clearance Letter
11	Farmland Classification (map and information)
12	Floodplain management
	<ul> <li>8-step process documentation</li> </ul>
13	SHPO documentation
	<ul> <li>Conditioned Determination of "No Adverse</li> </ul>
	Effect" with Attachments (Structural Studies) and
	EDF
	Maintenance Plan and SHPO Submittal Evidence
14	Sole Source Aquifers Map
15	Wetlands Protection Map
16	Wild and Scenic Rivers (maps and information)
17	Complete drawings set

### **Attachment 1 – Airport Hazards**

### Distance to nearest airports

PR-CRP-000135 - Multidisciplinary Citizen Service Center, Salinas

**Coord: 17.975548°, -66.298631°** 23-73 Miguel Ten Street, Salinas, Puerto Rico



Source: Google Earth Pro

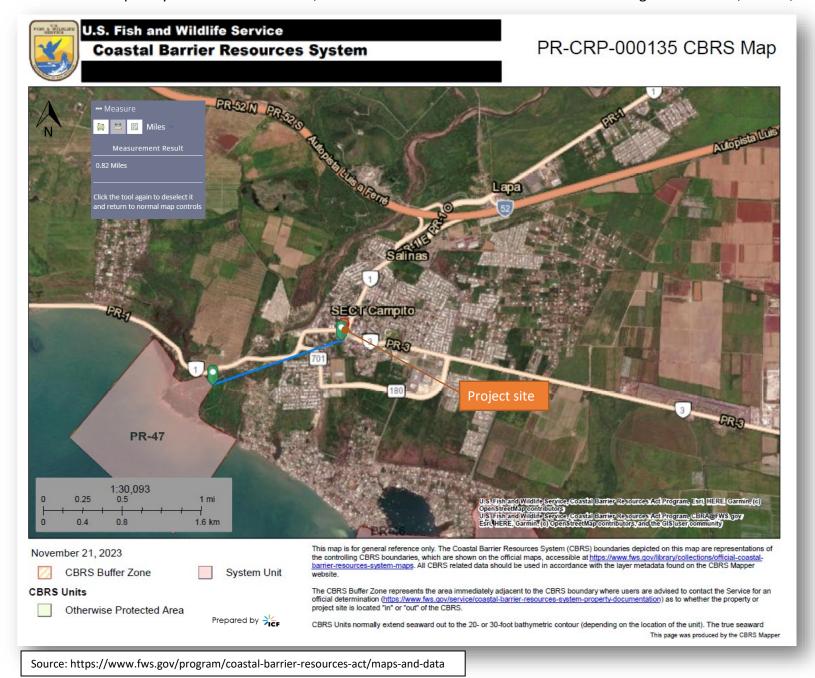
Prepared by

#### **Attachment 2 – Coastal Barrier Resources**

#### **CBRS Mapper**

PR-CRP-000135 - Multidisciplinary Citizen Service Center, Salinas

Coord: 17.975548°, -66.298631° 23-73 Miguel Ten Street, Salinas, Puerto Rico

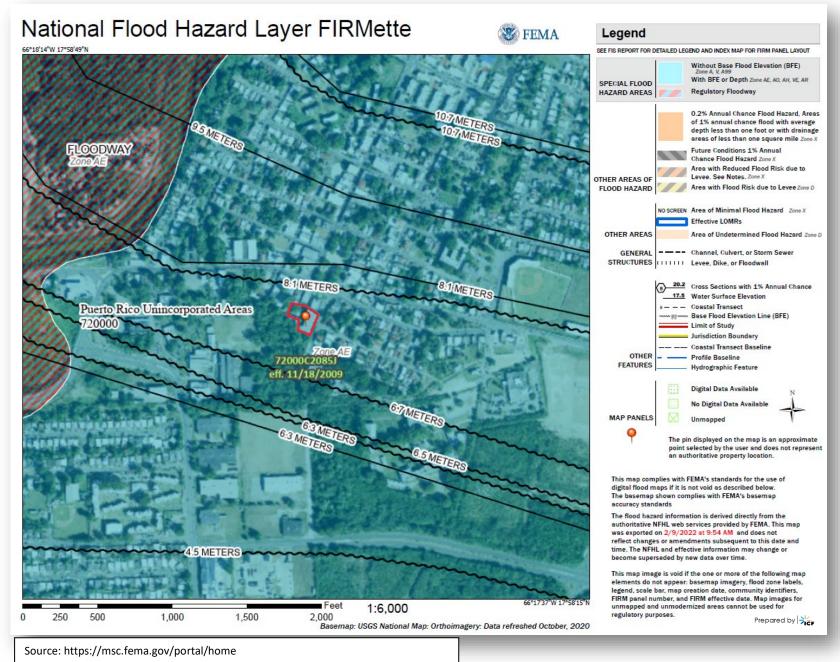


### **Attachment 3 – Flood Insurance Rate Map (FIRM)**

#### Flood Insurance Rate Map

PR-CRP-000135 - Multidisciplinary Citizen Service Center, Salinas

**Coord: 17.975548°, -66.298631°** 23-73 Miguel Ten Street, Salinas, Puerto Rico



### Attachment 4 - Non-attainment Areas

**Source:** https://www3.epa.gov/airquality/greenbook/ancl.html#PR



Cream Book

C------

You are here: FPA Home > Green Book > >National Area and County-Level Multi-Pollutant Information > Puerto Rico Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants

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

Data is current as of October 31, 2023

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/m³) 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 No	rtant Notes				onal Dataset: db	of   xls	Data diction	nary (PDF)
County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/ Part County	Population (2010)	State/ County FIPS Codes
PUERTO RIC	0							
Arecibo Municipio	Lead (2008)	Arecibo, PR	11 12 13 14 15 16 17 18 19 20 21 22 23	//		Part	32,185	72/013
Bayamon Municipio	Sulfur Dioxide (2010)	San Juan, PR	18 19 20 21 22 23	//		Part	22,921	72/021
Catano Municipio	Sulfur Dioxide (2010)	San Juan, PR	18 19 20 21 22 23	//		Whole	28,140	72/033
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	72/061
Guaynabo Municipio	Sulfur Dioxide (2010)	San Juan, PR	18 19 20 21 22 23	//		Part	23,802	72/061
Salinas Municipio	Sulfur Dioxide (2010)	Guayama- Salinas, PR	18 19 20 21 22 23	//		Part	23,401	72/123
San Juan Municipio	Sulfur Dioxide (2010)	San Juan, PR	18 19 20 21 22 23	//		Part	147,963	72/127
Toa Baja Municipio	Sulfur Dioxide (2010)	San Juan, PR	18 19 20 21 22 23	//		Part	52,441	72/137

### **Non-Attainment Area Map**

PR-CRP-000135 -Multidisciplinary Citizen Service Center, Salinas

Coord: 17.975548°, -66.298631°

23-73 Miguel Ten Street, Salinas, Puerto Rico



Source: https://www.epa.gov/nepa/nepassist

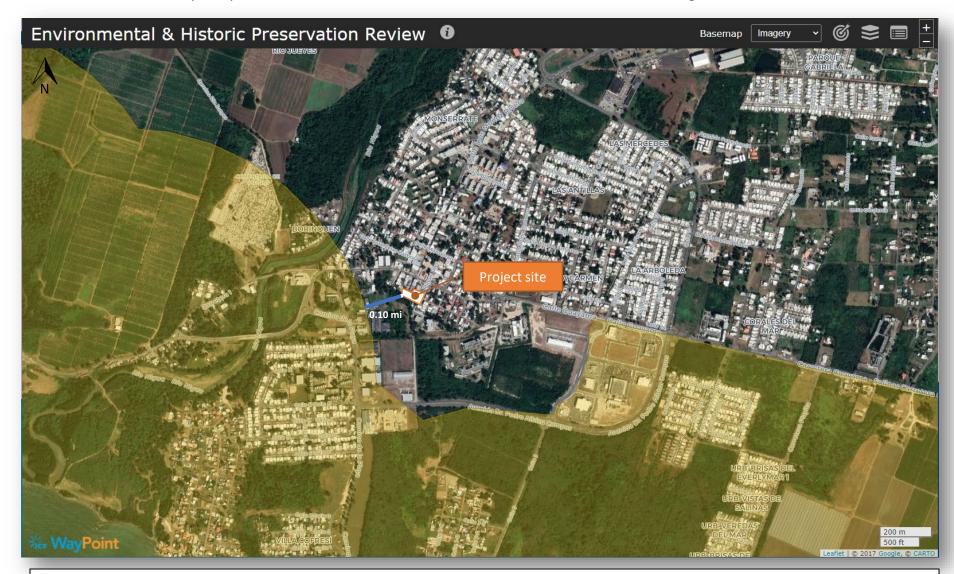
### Attachment 5 - Coastal Zone Boundary

### **Coastal Zone Boundary Map**

PR-CRP-000135 - Multidisciplinary Citizen Service Center, Salinas

**Coord: 17.975548°, -66.298631°** 23-73 Miguel Ten Street, Salinas, Puerto Rico

Prepared by



US National Oceanic and Atmospheric Administration (NOAA), 2018, US Coastal Zone Management Act boundary (Ver. 20180830), accessed September 13, 2019 at URL https://koordinates.com/layer/20522-us-coastal-zone-management-act-boundary/

### **Attachment 6 – Contamination and Toxic Substances**

**NEPA Assist map**PR-CRP-000135 -Multidisciplinary Citizen Service Center, Salinas

Coord: 17.975548°, -66.298631° 23-73 Miguel Ten Street, Salinas, Puerto Rico



Source: https://www.epa.gov/nepa/nepassist

# Contamina on and Toxic Substances Distance from property – PR-CRP-000135

ID	EPA facility	Distance from site (ft)	Direction from site	Description
1	Water Dischargers (NPDES) -stormwater MS4 permit	180	North	Salinas CALLE SANTO P. AMADEO 29 SALINAS, PR 00751
2	Water Dischargers (NPDES) – Stormwater	1,220	South	United Parcel Service - Salinas Facility STATE ROAD PR 701, KM 0.5 SALINAS, PR 00751
3	Air Pollution (ICIS-AIR) Toxic Releases (TRI)	1,288	South West	Steri-Tech, Inc. RD. 701 KM. 0.7 SALINAS, PR 00751-1145
4	Hazardous Waste (RCRAInfo)	1,754	South West	Pridco CARR 701 KM 0.5 SALINAS, PR 00751
5	Hazardous Waste (RCRAInfo)	2,864	South West	Salinas Stp STATE RD 701 KM 1.0 SALINAS, PR 00751

6	Hazardous Waste (RCRAInfo)	1,300	South West	Cottet Optical Corp RD 701 KM 0.5 LA PLAYA SALINAS, PR 00751
7	Hazardous Waste (RCRAInfo)	3,100	West	Shell Co Pr Ltd Ss 1260 Alvarado PR-1 KM 89.4 SALINAS, PR 00751 (Gas Station)
8	Brownfield (ACRES)	1,777	North West	Aguirre Theater Ave. B #44 Former Central Aguirre SALINAS, PR 00751
9	Hazardous Waste (RCRAInfo)	1,120	North West	Esso Standard Oil Co Pr 2p- 451 15 UNION ST SALINAS, PR 00751 (Gas Station)

### NEPAssist Report PR-CRP-000135

Project Location	17.975654,-66.2986
Within 0.6 miles of an Ozone 8-hr (1997 standard) Non-Attainment/Maintenance Area?	no
Within 0.6 miles of an Ozone 8-hr (2008 standard) Non-Attainment/Maintenance Area?	no
Within 0.6 miles of a Lead (2008 standard) Non-Attainment/Maintenance Area?	no
Within 0.6 miles of a SO2 1-hr (2010 standard) Non-Attainment/Maintenance Area?	yes
Within 0.6 miles of a PM2.5 24hr (2006 standard) Non-Attainment/Maintenance Area?	no
Within 0.6 miles of a PM2.5 Annual (1997 standard) Non-Attainment/Maintenance Area?	no
Within 0.6 miles of a PM2.5 Annual (2012 standard) Non-Attainment/Maintenance Area?	no
Within 0.6 miles of a PM10 (1987 standard) Non-Attainment/Maintenance Area?	no
Within 0.6 miles of a Federal Land?	no
Within 0.6 miles of an impaired stream?	no
Within 0.6 miles of an impaired waterbody?	yes
Within 0.6 miles of a waterbody?	no
Within 0.6 miles of a stream?	yes
Within 0.6 miles of an NWI wetland?	Available Online
Within 0.6 miles of a Brownfields site?	yes
Within 0.6 miles of a Superfund site?	no
Within 0.6 miles of a Toxic Release Inventory (TRI) site?	yes
Within 0.6 miles of a water discharger (NPDES)?	yes
Within 0.6 miles of a hazardous waste (RCRA) facility?	yes
Within 0.6 miles of an air emission facility?	yes
Within 0.6 miles of a school?	no
Within 0.6 miles of an airport?	no
Within 0.6 miles of a hospital?	yes
Within 0.6 miles of a designated sole source aquifer?	no
Within 0.6 miles of a historic property on the National Register of Historic Places?	no
Within 0.6 miles of a Toxic Substances Control Act (TSCA) site?	no
Within 0.6 miles of a Land Cession Boundary?	no
Within 0.6 miles of a tribal area (lower 48 states)?	no
Within 0.6 miles of the service area of a mitigation or conservation bank?	no
Within 0.6 miles of the service area of an In-Lieu-Fee Program?	no

Created on: 7/18/2022 10:35:58 PM

An official website of the United States government

MAIN MENU

Search EPA.gov

Related Topics: Envirofacts <../>

CONTACT US <a href="https://www.epa.gov/enviro/forms/contact-us-about-envirofacts">https://www.epa.gov/enviro/forms/contact-us-about-envirofacts</a>

Home <a href="https://enviro.epa.gov"> | Multisystem Search <a href="https://enviro.epa.gov/facts/multisystem.html"> | Topic Searches <a href="https://www.epa.gov/enviro/topic-searches"> | System Data Searches <a href="https://www.epa.gov/enviro/system-data-searches"> | About the Data <a href="https://www.epa.gov/enviro/about-data"> | Data Downloads <a href="https://www.epa.gov/enviro/data-downloads"> | Widgets <a href="https://www.epa.gov/enviro/widgets"> | Widgets <a href

**ICIS Detailed Reports** 



This page was created on JAN-16-2024
Results are based on data extracted on AUG-18-2023

**Note:** You are viewing results from the modernized data system, Integrated Compliance Information System (ICIS). The state reporting this data to EPA previously reported the data to a historic data system, Permit Compliance System (PCS). Use the following button to view the historic data from PCS. Run a PCS Search

# **Facility**

FACILITY NAME (1)	SALINAS	NPDES	PRR040071
STREET 1	CALLE SANTO P. AMADEO 29	SIC CODE	

СІТУ		MAJOR / MINOR	
COUNTY NAME	PR123	TYPE OF OWNERSHIP	
STATE	PR	ACTIVITY STATUS	EXP
ZIP CODE	00751	INACTIVE DATE	
REGION	02	TYPE OF PERMIT ISSUED	GPC
LATITUDE	+17.976	ORIGINAL PERMIT ISSUE DATE	18-FEB- 2010
LONGITUDE	-66.2985	PERMIT ISSUED DATE	27-JUL- 2016
LAT/LON CODE OF ACCURACY		PERMIT EXPIRED DATE	30-JUN- 2021
LAT/LON METHOD			
LAT/LON SCALE		USGS HYDRO BASIN CODE	
LAT/LON DATUM		FLOW	
RECEIVING WATERS		FEDERAL GRANT IND	
PRETREATMENT CODE		SLUDGE CLASS FAC	NON-POTW
MAILING NAME		SLUDGE RELATED PERMIT NUM	
MAILING STREET (1)		ANNUAL DRY SLUDGE PROD	
MAILING STREET (2)			
MAILING CITY			
MAILING STATE			

MAILING ZIP CODE		
COGNIZANT OFFICIAL	COGNIZANT OFFICIAL TEL	

# **Activity**

FACILITY NAME (1)	SALINAS	NPDES	PRR040071
-------------------	---------	-------	-----------

ACTIVITY NAME	ACTIVITY TYPE DESCRIPTION	ACTIVITY STATUS DESCRIPTION	ACTIVITY STATUS DATE	ACTUAL BEGIN DATE	ACTUAL END DATE
	Permit	Active	27-MAR- 2013		
	Permit	Active	09-OCT- 2019		
(ym) - MS4/71 - Salinas PWF	Inspection/Evaluation	Active	03-APR- 2013	18-FEB- 2013	18-FEB- 2013

## **Contacts**

FACILITY NAME (1)	SALINAS	NPDES	PRR040071

No Contacts Found.

# **Permit Tracking**

FACILITY NAME (1)	SALINAS	NPDES	PRR040071
	,		

PERMIT ISSUED BY		ORIGINAL DATE OF ISSUE	18-FEB-2010
PERMIT ISSUED DATE	27-JUL-2016	PERMIT EXPIRED DATE	30-JUN-2021
EFFECTIVE DATE	23-AUG-2018	RETIREMENT DATE	

FACILITY NAME (1)	SALINAS	NPDES	PRR040071
PERMIT ISSUED BY		ORIGINAL DATE OF ISSUE	18-FEB-2010
PERMIT ISSUED DATE	18-FEB-2010	PERMIT EXPIRED DATE	06-NOV-2011
EFFECTIVE DATE	18-FEB-2010	RETIREMENT DATE	22-AUG-2018

### **Permit Tracking Events:**

EVENT DESCRIPTION	EVENT DATE
PEX	30-JUN-2021
PEF	23-AUG-2018
PRT	22-AUG-2018
PIS	27-JUL-2016
PRE	27-JUL-2016
PEX	06-NOV-2011
PEF	18-FEB-2010
PIS	18-FEB-2010

# **Inspections**

FACILITY NAME (1)	SALINAS	NPDES	PRR040071	
-------------------	---------	-------	-----------	--

INSPECTION TYPE DATE OF INSPECTION INSPECTION PERFORMED BY
--

(ym) - MS4/71 - Salinas PWF	03-APR-2013	EP6	
, ,			

# **Outfalls/Pipe Schedules**

FACILITY NAME (1)	SALINAS	NPDES	PRR040071
OUTFALL TYPE		PIPE NUMBER	
ACTIVITY STATUS		REPORT DESIGNATOR	
LATITUDE		LONGITUDE	
LAT/LON ACCURACY		LAT/LON METHOD	
LAT/LON SCALE		LAT/LON DATUM	
INACTIVE DATE		USGS HYDRO BASIN CODE	
INIT DMR DUE DATE		SUBMISSION UNITS	
PIPE DESCRIPTION		UNITS IN SUBM. PERIOD	
INIT REPORTING DATE		REPORTING UNITS	
UNITS IN REPORTING PERIOD		DMR COMMENT	

# **Limits Report**

FACILITY NAME (1)	SALINAS	NPDES	PRR040071
PIPE NUMBER			
PIPE DESCRIPTION		REPORT DESIGNATOR	
DMR COMMENT		LIMIT SET TYPE	

No ICIS Limits Report Found.

## **Limits Report**

FACILITY NAME (1)	SALINAS	NPDES	PRR040071
-------------------	---------	-------	-----------

No ICIS Limits Information Found.

## **Measurements and Violations**

FACILITY NAME (1)	SALINAS	NPDES	PRR040071
-------------------	---------	-------	-----------

No ICIS Measurements Information Found.

# **Compliance Schedules and Violations**

FACILITY NAME (1)	SALINAS	NPDES	PRR040071
	i '		

No Compliance Schedules Found.

# **Pretreatment Inspections/Audits**

FACILITY NAME (1)	SALINAS	NPDES	PRR040071
-------------------	---------	-------	-----------

No ICIS Pretreatment Inspections Found.

## **Pretreatment Performance Summary**

FACILITY NAME (1)	SALINAS	NPDES	PRR040071
-------------------	---------	-------	-----------

No ICIS Pretreatment Performance Summary Information Found.

An official website of the United States government

MAIN MENU

Search EPA.gov

Related Topics: Envirofacts <../>

CONTACT US <a href="https://www.epa.gov/enviro/forms/contact-us-about-envirofacts">https://www.epa.gov/enviro/forms/contact-us-about-envirofacts</a>

Home <a href="https://enviro.epa.gov">https://enviro.epa.gov</a> | Multisystem Search <a href="https://enviro.epa.gov/facts/multisystem.html">https://enviro.epa.gov/facts/multisystem.html</a> | Topic Searches <a href="https://www.epa.gov/enviro/system-data-searches">https://www.epa.gov/enviro/system-data-searches</a> | About the Data <a href="https://www.epa.gov/enviro/about-data">https://www.epa.gov/enviro/system-data-searches</a> | About the Data <a href="https://www.epa.gov/enviro/data-downloads">https://www.epa.gov/enviro/data-downloads</a> | Widgets <a href="https://www.epa.gov/enviro/widgets">https://www.epa.gov/enviro/widgets</a> | Services <a href="https://www.epa.gov/enviro/web-services">https://www.epa.gov/enviro/web-services</a> | Mobile <a href="https://www.epa.gov/enviro/uv-index-mobile-app">https://www.epa.gov/enviro/web-services</a> | Mobile <a href="https://www.epa.gov/enviro/uv-index-mobile-app">https://www.epa.gov/enviro/web-services</a> | Mobile <a href="https://www.epa.gov/enviro/uv-index-mobile-app">https://www.epa.gov/enviro/other-datasets</a> | About the Data | About the

**ICIS Detailed Reports** 



This page was created on JAN-16-2024
Results are based on data extracted on AUG-18-2023

**Note:** You are viewing results from the modernized data system, Integrated Compliance Information System (ICIS). The state reporting this data to EPA previously reported the data to a historic data system, Permit Compliance System (PCS). Use the following button to view the historic data from PCS. Run a PCS Search

### **Facility**

FACILITY NAME (1)	UNITED PARCEL SERVICE - SALINAS FACILITY	NPDES	PRNOEJ01Q
STREET 1	STATE ROAD PR 701, KM 0.5	SIC CODE	4215 = Courier Services, Except By Air
CITY		MAJOR / MINOR	
COUNTY NAME		TYPE OF OWNERSHIP	
STATE	PR	ACTIVITY STATUS	EFF
ZIP CODE	00751	INACTIVE DATE	
REGION	02	TYPE OF PERMIT	GPC

LATITUDE	17.972002	ORIGINAL PERMIT ISSUE DATE	01-MAR-2022
LONGITUDE	-66.298960	PERMIT ISSUED DATE	01-MAR-2022
LAT/LON CODE OF ACCURACY		PERMIT EXPIRED DATE	01-MAR-2027
LAT/LON METHOD			
LAT/LON SCALE		USGS HYDRO BASIN CODE	
LAT/LON DATUM		FLOW	
RECEIVING WATERS		FEDERAL GRANT IND	
PRETREATMENT CODE		SLUDGE CLASS FAC	NON-POTW
MAILING NAME		SLUDGE RELATED PERMIT NUM	
MAILING STREET (1)		ANNUAL DRY SLUDGE PROD	
MAILING STREET (2)			
MAILING CITY			
MAILING STATE			
MAILING ZIP CODE			
COGNIZANT OFFICIAL		COGNIZANT OFFICIAL TEL	

# **Activity**

FACILITY NAME (1)	UNITED PARCEL SERVICE - SALINAS FACILITY	NPDES	PRNOEJ01Q	
-------------------	--	-------	-----------	--

ACTIVITY	ACTIVITY TYPE	ACTIVITY STATUS DESCRIPTION	ACTIVITY	ACTUAL	ACTUAL
NAME	DESCRIPTION		STATUS DATE	BEGIN DATE	END DATE
	Permit	Active	02-MAR-2022		

### **Contacts**

FIRST NAME	LAST NAME	ORGANIZATION FORMAL NAME	TELEPHONE NUMBER	TELEPHONE EXTENSION NUMBER	PHONE TYPE DESCRIPTION	AFFILIATION TYPE DESCRIPTION
Wilfredo	Rodriguez	United Parcel Service	7876889914		OFF	Permittee
Wilfredo	Rodriguez	united Parcel Services	7872532000		OFF	Preparer
Wilfredo	Rodriguez	united Parcel Services	7872532000		OFF	Stormwater Certifier

# **Permit Tracking**

FACILITY NAME (1)	UNITED PARCEL SERVICE - SALINAS FACILITY	NPDES	PRNOEJ01Q
PERMIT ISSUED BY	U.S. EPA	ORIGINAL DATE OF	01-MAR- 2022
PERMIT ISSUED DATE	01-MAR-2022	PERMIT EXPIRED DATE	01-MAR- 2027
EFFECTIVE DATE	01-MAR-2022	RETIREMENT DATE	

### **Permit Tracking Events:**

EVENT DESCRIPTION	EVENT DATE		
PEX	01-MAR-2027		
PEF	01-MAR-2022		
ANR	01-MAR-2022		
ANC	01-MAR-2022		
PIS	01-MAR-2022		

## **Inspections**

FACILITY NAME (1)	UNITED PARCEL SERVICE - SALINAS FACILITY	NPDES	PRNOEJ01Q	
-------------------	--	-------	-----------	--

No Inspections Found.

## **Outfalls/Pipe Schedules**

FACILITY NAME (1)	UNITED PARCEL SERVICE - SALINAS FACILITY	NPDES	PRNOEJ01Q
OUTFALL TYPE		PIPE NUMBER	
ACTIVITY STATUS		REPORT DESIGNATOR	
LATITUDE		LONGITUDE	
LAT/LON ACCURACY		LAT/LON METHOD	
LAT/LON SCALE		LAT/LON DATUM	
INACTIVE DATE		USGS HYDRO BASIN CODE	
INIT DMR DUE DATE		SUBMISSION UNITS	
PIPE DESCRIPTION		UNITS IN SUBM. PERIOD	
INIT REPORTING DATE		REPORTING UNITS	
UNITS IN REPORTING PERIOD		DMR COMMENT	

## **Limits Report**

FACILITY NAME (1)	UNITED PARCEL SERVICE - SALINAS FACILITY	NPDES	PRNOEJ01Q
PIPE NUMBER			
PIPE DESCRIPTION		REPORT DESIGNATOR	
DMR COMMENT		LIMIT SET TYPE	

No ICIS Limits Report Found.

## **Limits Report**

FACILITY NAME (1)	UNITED PARCEL SERVICE - SALINAS FACILITY	NPDES	PRNOEJ01Q

No ICIS Limits Information Found.

### **Measurements and Violations**

FACILITY NAME (1)	UNITED PARCEL SERVICE - SALINAS FACILITY	NPDES	PRNOEJ01Q	
-------------------	--	-------	-----------	--

No ICIS Measurements Information Found.

## **Compliance Schedules and Violations**

FACILITY NAME (1)	UNITED PARCEL SERVICE - SALINAS FACILITY	NPDES	PRNOEJ01Q	
-------------------	--	-------	-----------	--

No Compliance Schedules Found.

## **Pretreatment Inspections/Audits**

FACILITY NAME (1)	UNITED PARCEL SERVICE - SALINAS FACILITY	NPDES	PRNOEJ01Q
-------------------	--	-------	-----------

No ICIS Pretreatment Inspections Found.

## **Pretreatment Performance Summary**

FACILITY NAME (1) UNITED PARCEL SERVICE - SALINAS FACILITY NPDES PRNOEJ01Q
--

No ICIS Pretreatment Performance Summary Information Found.

**Note:** You are viewing results from the modernized data system, Integrated Compliance Information System (ICIS). The state reporting this data to EPA previously reported the data to a historic data system, Permit Compliance System (PCS). Use the following button to view the historic data from PCS. Run a PCS Search



# **Detailed Facility Report**

## **Facility Summary**

STERI-TECH, INC.

RD. 701 KM. 0.7, SALINAS, PR 00751

FRS (Facility Registry Service) ID: 110000602820

**EPA Region:** 02 **Latitude:** 17.97139 **Longitude:** -66.300278

**Locational Data Source: TRIS** 

Industries: Miscellaneous Manufacturing

**Indian Country:** N

### **Enforcement and Compliance Summary**

,		
Statute	CAA	
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)	1	
Formal Enforcement Actions (5 years)		
Penalties from Formal Enforcement Actions (5 years)		
EPA Cases (5 years)		
Penalties from EPA Cases (5 years)		

Statute	EPCRA
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): Operating Minor (PR0000007212300022)

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): 00751STRTCRD701

Compliance and Emissions Data Reporting Interface (CEDRI):

No Information

Go To Enforcement/Compliance Details

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

# **Facility/System Characteristics**

# **Facility/System Characteristics**

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110000602820					N	17.97139	-66.300278
ICIS		3600097925					N	17.97139	-66.300278
ICIS-Air	CAA	PR0000007212300022	Minor Emissions	Operating	CAAMACT, CAASIP		N	17.971389	-66.300278
TRI	EP313	00751STRTCRD701	Toxics Release Inventory	Last Reported for 2022			N	17.97139	-66.300278

# **Facility Address**

System	Statute	Identifier Facility Name		Facility Address	Facility County
FRS		110000602820	STERI-TECH, INC.	RD. 701 KM. 0.7, SALINAS, PR 00751	Salinas Municipio
ICIS		3600097925	STERI-TECH INC	RD. 701 KM. 0.7, SALINAS, PR 00751	Salinas Municipio
ICIS-Air	CAA	PR0000007212300022	STERI-TECH, INC.	RD.701 KM.7 SALINAS IND PARK, SALINAS, PR 00751	Salinas Municipio
TRI	EP313	00751STRTCRD701	STERI-TECH INC.	RD 701 KM. 0.7 SALINAS INDUSTRIAL PARK, SALINAS, PR 00751	Salinas Municipio

# Facility SIC (Standard Industrial Classification) Codes

# Facility NAICS (North American Industry Classification System)

System	Identifier	SIC Code	SIC Description
ICIS-Air	PR0000007212300022	8099	Health And Allied Services

### **Codes**

System	Identifier NAIC		NAICS Description
TRI	00751STRTCRD701	339112	Surgical and Medical Instrument Manufacturing
TRI	00751STRTCRD701	562112	Hazardous Waste Collection
ICIS-Air	PR0000007212300022	999999	

# **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)
CAA	PR0000007212300022	ICIS-Air	Inspection/Evaluation	PCE On-Site	EPA	11/07/2023	
CAA	PR0000007212300022	ICIS-Air	Inspection/Evaluation	PCE On-Site	EPA	12/04/2019	
CAA	PR0000007212300022	ICIS-Air	Information Request	Formal	EPA	08/22/2019	
EPCRA	00751STRTCRD701	ICIS	Information Request	Informal	EPA	10/27/2021	

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

# **Compliance Summary Data**

Statut	e Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
CAA	PR0000007212300022	No	01/13/2024	0	01/12/2024

# Three-Year Compliance History by Quarter

Statute	Progra	am/Pollu	tant/Violati	on Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
CA	CAA (Source ID: PR0000007212300022)			01/01- 03/31/21	04/01- 06/30/21	07/01- 09/30/21	10/01- 12/31/21	01/01- 03/31/22	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	
	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	
	HPV History															
	Violation Type Agency Programs Pollutants															

# **Informal Enforcement Actions**

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date	
CAA	ICIS-Air	PR0000007212300022	Notice of Violation	EPA	06/29/2021	

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

# Formal Enforcement Actions Last 5 Years

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

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)**

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 Air Pollutant Report TRI Pollution Prevention Report 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
00751STRTCRD701	2022	629		0			629	
00751STRTCRD701	2021	547		0			547	
00751STRTCRD701	2020	0		0			0	
00751STRTCRD701	2019			0			0	
00751STRTCRD701	2018			0			0	
00751STRTCRD701	2017			0			0	
00751STRTCRD701	2016			0			0	
00751STRTCRD701	2015			0			0	
00751STRTCRD701	2014			0			0	
00751STRTCRD701	2013			0			0	

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

Chemical Name	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Ethylene oxide	629	547	0	R	R	R	R	R	R	R

# **Community**

# **Environmental Justice**

This section shows indexes from EJScreen, EPA's screening tool for environmental justice (EJ) concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. Use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJScreen provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJScreen home page.

### **EJScreen Indexes Shown**



### **Related Reports**

**EJScreen Community Report** 

#### **Download Data**

Census Block Group ID: 721239532001	US (Percentile)					
Supplemental Indexes	Facility Census Block Group	1-mile Max				
Count of Indexes At or Above 80th Percentile	4	5				
Particulate Matter 2.5	0					
Ozone	0					
Diesel Particulate Matter	0					
Air Toxics Cancer Risk	34	<b>1</b> 99				
Air Toxics Respiratory Hazard Index	33	37				
Toxic Releases to Air	<b>9</b> 9	<b>1</b> 99				
Traffic Proximity	57	<b>1</b> 99				
Lead Paint	<b>9</b> 88	<b>9</b> 8				
Risk Management Plan (RMP) Facility Proximity	61	65				
Hazardous Waste Proximity	58	72				
Superfund Proximity	<b>9</b> 95	<b>9</b> 7				
Underground Storage Tanks (UST)	0					
Wastewater Discharge	<b>9</b> 85	85				

O Facility 1-mile Radius	☐ Facility Census Block Group
	K7 K2



# 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 2010 U.S. Census and 2017 - 2021 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. EPA's spatial processing methodology considers the overlap between the selected radii and the census blocks (for U.S. Census demographics) and census block groups (for ACS demographics) in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <a href="https://epa.gov/help/reports/dfr-data-dictionary#demographics">https://epa.gov/help/reports/dfr-data-dictionary#demographic></a>.

General Statistics (U.S. Census)	
Total Persons	7,366
Population Density	2,868/sq.mi.
Housing Units in Area	3,897

General Statistics (ACS (American Community Survey))	
Total Persons	5,996
Percent People of Color	100%
Households in Area	2,179
Households on Public Assistance	93
Persons With Low Income	4,638
Percent With Low Income	78%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	17.97139
Center Longitude	-66.300278
Land Area	82%
Water Area	18%

Income Breakdown (ACS (American Community Survey)) - Households (%)				
Less than \$15,000	782 (35.92%)			
\$15,000 - \$25,000	490 (22.51%)			
\$25,000 - \$50,000	615 (28.25%)			
\$50,000 - \$75,000	166 (7.63%)			
Greater than \$75,000	124 (5.7%)			

Age Breakdown (U.S. Census) - Persons (%)	
Children 5 years and younger	470 (6%)
Minors 17 years and younger	1,730 (23%)
Adults 18 years and older	5,636 (77%)
Seniors 65 years and older	1,306 (18%)

Race Breakdown (U.S. Census) - Persons (%)	
White	5,004 (68%)
African-American	1,266 (17%)
Hispanic-Origin	7,287 (99%)
Asian/Pacific Islander	14 (0%)
American Indian	41 (1%)
Other/Multiracial	1,041 (14%)

Education Level (Persons 25 & older) (ACS (American Commu (%)	nity Survey)) - Persons
Less than 9th Grade	477 (10.79%)
9th through 12th Grade	389 (8.8%)
High School Diploma	1,743 (39.44%)
Some College/2-year	463 (10.48%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	993 (22.47%)

An official website of the United States government

MAIN MENU

Search EPA.gov		

Related Topics: Envirofacts <../>

 $CONTACT\ US\ {\tt <https://www.epa.gov/enviro/forms/contact-us-about-envirofacts}$ 

Home < https://enviro.epa.gov | Multisystem Search < https://enviro.epa.gov/facts/multisystem.html> | Topic Searches < https://www.epa.gov/enviro/topic-searches> | System Data Searches < https://www.epa.gov/enviro/system-data-searches> | About the Data < https://www.epa.gov/enviro/about-data> | Data Downloads < https://www.epa.gov/enviro/data-downloads> | Widgets < https://www.epa.gov/enviro/widgets> | Services < https://www.epa.gov/enviro/web-services> | Mobile < https://www.epa.gov/enviro/uv-index-mobile-app> | Other Datasets < https://www.epa.gov/enviro/other-datasets> | Mobile < https://www.epa.gov/enviro/other-datasets> | Mobil

#### **Plant Information**

#### STERI-TECH, INC.

RD.701 KM.7 SALINAS IND PARK SALINAS, PR 00751 EPA Plant ID: 110038774109

Operating Status:	0	HPV Flag:				
Operating Status Description:	OPERATING	State Registration Number:	PFE63-0895-1113			
State County Compliance Source:	7212300022	Government Facility Code Description:	PRIVATELY OWNED/OPERATED			
Region Code:	02	Class Code:	В			
Primary SIC Code:	8091	Class Code Description:	POTENTIAL UNCONTROLLED EM 0			
Primary SIC Description:	HEALTH AND ALLIED SERVICE	Compliance Status:	C 6			
NAICS Code:		Compliance Status Description:	IN COMPLIANCE WITH PROCED   1			
NAICS Code Description:		Date Plant Information Last Updated:	03/19/2010			

### **Air Program Information**

Air Program Code	Air Program Description	Air Program Status	Air Program Status Description	Air Program Subpart	Air Program Subpart Description	Class Code	Class Code Description
0	SIP	0	OPERATING			В	POTENTIAL UNCONTROLLED EM
М	MACT (SECTION 63 NESHAPS)	0	OPERATING	0	ETHYLENE OXIDE STERILIZERS	В	POTENTIAL UNCONTROLLED EM

### **Pollutant Data**

Air Program Code	Pollutant Code / CAS Number	Pollutant / CAS Description	Attain Indicator	Attain Indicator Description	Pollutant Compliance Status	ES Pollutant Compliance Description	Pollutant Class Code	Poll Des
0	со	CARBON MONOXIDE	А	ATTAINMENT AREA FOR A GIV	3	IN COMPLIANCE - INSPECTIO	В	POT UNC EM
0	FACIL	FACILITY-WIDE PERMIT REQUIREMENTS	А	ATTAINMENT AREA FOR A GIV	3	IN COMPLIANCE - INSPECTIO	В	POT UNC EM
0	НС	TOTAL HYDROCARBONS	А	ATTAINMENT AREA FOR A GIV	3	IN COMPLIANCE - INSPECTIO	В	POT UNC EM
0	NO2	NITROGEN DIOXIDE	А	ATTAINMENT AREA FOR A GIV	3	IN COMPLIANCE - INSPECTIO	В	POT UNC EM
0	PM10	PARTICULATE MATTER < 10 UM	А	ATTAINMENT AREA FOR A GIV	3	IN COMPLIANCE - INSPECTIO	В	POT UNC EM

Air Program Code	Pollutant Code / CAS Number	Pollutant / CAS Description	Attain Indicator	Attain Indicator Description	Pollutant Compliance Status	ES Pollutant Compliance Description	Pollutant Class Code	Poll Des
0	SO2	SULFUR DIOXIDE	A	ATTAINMENT AREA FOR A GIV	3	IN COMPLIANCE - INSPECTIO	В	POT UNC EM
0	VOC	VOLATILE ORGANIC COMPOUNDS	A	ATTAINMENT AREA FOR A GIV	3	IN COMPLIANCE - INSPECTIO	В	POT UNC EM
М	EO	ETHYLENE OXIDE	A	ATTAINMENT AREA FOR A GIV	С	IN COMPLIANCE WITH PROCED	В	POT UNC EM

### **Compliance Monitoring Strategy**

CMS Start	FY2008 CMS	FY2008 CMS Indicator	FY2009 CMS	FY2009 CMS Indicator
Date	Indicator	Description	Indicator	Description

### **Plant Actions**

Action Number	Key Action Numbers	Air Program Codes	National Action Type	National Action Description	Action Type	Action Description	Date Achieved	Penalty Amount	Resul Code
00029		М	PX	STATE/LOCAL PCE/OFF- SITE	TP	PERIODIC REPORT	08-FEB- 05		МС
00028		М			AE	SUBMIT COMPLIANCE MONITORING REPORT	08-FEB- 05		МС
00027		М	PX	STATE/LOCAL PCE/OFF- SITE	TP	PERIODIC REPORT	07-FEB- 05		МС
00026		М	VR	VIOLATION RESOLVED	VR	VIOLATION RESOLVED	07-FEB- 05		МС

Action Number	Key Action Numbers	Air Program Codes	National Action Type	National Action Description	Action Type	Action Description	Date Achieved	Penalty Amount	Resul Code
00025		М	7C	STATE/LOCAL NOV ISSUED	L1	NOV ISSUED BY STATE	31-JAN- 04		MV
00024		М			06	GENERAL ACTION TYPE SPECIFIED BY COMMENTS	31-OCT- 04		MV
00023		М			AE	SUBMIT COMPLIANCE MONITORING REPORT	31-OCT- 03		MV
00022		0	PS	STATE/LOCAL PCE/ON-SITE	S8	INSPECTION BY STATE - LEVEL 2 OR GREATER	29-AUG- 02		МС
00022		М	PS	STATE/LOCAL PCE/ON-SITE	\$8	INSPECTION BY STATE - LEVEL 2 OR GREATER	29-AUG- 02		МС
00021		0	VR	VIOLATION RESOLVED	VR	VIOLATION RESOLVED	28-JAN- 02		МС
00021		М	VR	VIOLATION RESOLVED	VR	VIOLATION RESOLVED	28-JAN- 02		МС
00020		М			AE	SUBMIT COMPLIANCE MONITORING REPORT	31-JUL- 02		МС
00019		0			06	GENERAL ACTION TYPE SPECIFIED BY COMMENTS	17-SEP- 02		МС
00018		0			06	GENERAL ACTION TYPE SPECIFIED BY COMMENTS	30-SEP- 02		МС

Action Number	Key Action Numbers	Air Program Codes	National Action Type	National Action Description	Action Type	Action Description	Date Achieved	Penalty Amount	Resul Code
00018		М			06	GENERAL ACTION TYPE SPECIFIED BY COMMENTS	30-SEP- 02		МС
00017		0	ES	EPA PCE/ON- SITE	ES	EPA PCE/ON- SITE	29-AUG- 02		МС
00017		М	ES	EPA PCE/ON- SITE	ES	EPA PCE/ON- SITE	29-AUG- 02		МС
00016		0			06	GENERAL ACTION TYPE SPECIFIED BY COMMENTS	31-MAY- 02		01
00016		М			06	GENERAL ACTION TYPE SPECIFIED BY COMMENTS	31-MAY- 02		01
00015		0	ОТ	OTHER ADDRESSING ACTION	ОТ	OTHER ADDRESSING ACTION	31-MAY- 02		01
00015		М	ОТ	OTHER ADDRESSING ACTION	ОТ	OTHER ADDRESSING ACTION	31-MAY- 02		01
00014		0			06	GENERAL ACTION TYPE SPECIFIED BY COMMENTS	03-JUN- 02		03
00014		М			06	GENERAL ACTION TYPE SPECIFIED BY COMMENTS	03-JUN- 02		03
00013		0	ОТ	OTHER ADDRESSING ACTION	ОТ	OTHER ADDRESSING ACTION	03-JUN- 02		03
00013		М	ОТ	OTHER ADDRESSING ACTION	ОТ	OTHER ADDRESSING ACTION	03-JUN- 02		03

Action Number	Key Action Numbers	Air Program Codes	National Action Type	National Action Description	Action Type	Action Description	Date Achieved	Penalty Amount	Resul Code
00012		0			06	GENERAL ACTION TYPE SPECIFIED BY COMMENTS	27-NOV- 01		03
00011		0	7C	STATE/LOCAL NOV ISSUED	L1	NOV ISSUED BY STATE	27-NOV- 01		MV
00010		0	PS	STATE/LOCAL PCE/ON-SITE	\$8	INSPECTION BY STATE - LEVEL 2 OR GREATER	20-SEP- 01		MV
00010		М	PS	STATE/LOCAL PCE/ON-SITE	S8	INSPECTION BY STATE - LEVEL 2 OR GREATER	20-SEP- 01		MV
00009		М			AC	PERFORM STACK TEST (STATE)	30-NOV- 99		МС
00008		М	PS	STATE/LOCAL PCE/ON-SITE	S8	INSPECTION BY STATE - LEVEL 2 OR GREATER	16-SEP- 99		МС
00007		0	ES	EPA PCE/ON- SITE	50	EPA SOURCE INSPECTION - LEVEL 2 OR GREATER	02-APR- 98		МС
00007		М	ES	EPA PCE/ON- SITE	50	EPA SOURCE INSPECTION - LEVEL 2 OR GREATER	02-APR- 98		МС
00006		М	PS	STATE/LOCAL PCE/ON-SITE	S8	INSPECTION BY STATE - LEVEL 2 OR GREATER	02-APR- 98		МС
00005		М	7C	STATE/LOCAL NOV ISSUED	L1	NOV ISSUED BY STATE	08-APR- 97		MV
00004		М			00	INIT NOTI SUB O	17-APR- 97		МС

Action Number	Key Action Numbers	Air Program Codes	National Action Type	National Action Description	Action Type	Action Description	Date Achieved	Penalty Amount	Resul Code
00003		0	PS	STATE/LOCAL PCE/ON-SITE	S8	INSPECTION BY STATE - LEVEL 2 OR GREATER	09-JUN- 97		MV
00003		М	PS	STATE/LOCAL PCE/ON-SITE	S8	INSPECTION BY STATE - LEVEL 2 OR GREATER	09-JUN- 97		MV
00002		0	PS	STATE/LOCAL PCE/ON-SITE	S8	INSPECTION BY STATE - LEVEL 2 OR GREATER	02-APR- 97		MV
00002		М	PS	STATE/LOCAL PCE/ON-SITE	S8	INSPECTION BY STATE - LEVEL 2 OR GREATER	02-APR- 97		MV
00001		0	PS	STATE/LOCAL PCE/ON-SITE	S8	INSPECTION BY STATE - LEVEL 2 OR GREATER	07-AUG- 96		МС
00001		М	PS	STATE/LOCAL PCE/ON-SITE	S8	INSPECTION BY STATE - LEVEL 2 OR GREATER	07-AUG- 96		МС



### Discover.

### Accessibility

<a href="https://www.epa.gov/accessibility">https://www.epa.gov/accessibility</a>

### **Budget & Performance**

<a href="https://www.epa.gov/planandbudget">https://www.epa.gov/planandbudget</a>

### **Contracting**

<a href="https://www.epa.gov/contracts">https://www.epa.gov/contracts></a>

### **EPA www Web Snapshot**

<a href="https://www.epa.gov/home/wwwepagov-snapshots">https://www.epa.gov/home/wwwepagov-snapshots>

 $\pmb{Grants} \verb|<|https://www.epa.gov/grants>|$ 

### Connect.

### Data.gov ☑

<a href="https://www.data.gov/">https://www.data.gov/">

### **Inspector General**

<a href="https://www.epa.gov/office-inspector-general/about-epas-office-inspector-general">https://www.epa.gov/office-inspector-general/about-epas-office-inspector-general</a>

Jobs <a href="https://www.epa.gov/careers">https://www.epa.gov/careers</a>

### Newsroom

<a href="https://www.epa.gov/newsroom">https://www.epa.gov/newsroom</a>

#### **Open Government**

<https://www.epa.gov/data>

### Ask.

#### **Contact EPA**

<a href="https://www.epa.gov/home/forms/contact-epa">https://www.epa.gov/home/forms/contact-epa></a>

### **EPA Disclaimers**

<a href="https://www.epa.gov/web-policies-and-procedures/epa-disclaimers">https://www.epa.gov/web-policies-and-procedures/epa-disclaimers></a>

### **Hotlines**

<a href="https://www.epa.gov/aboutepa/epa-hotlines">https://www.epa.gov/aboutepa/epa-hotlines</a>

### **FOIA Requests**

<a href="https://www.epa.gov/foia">https://www.epa.gov/foia>



# **Detailed Facility Report**

# **Facility Summary**

STERI-TECH, INC.

RD. 701 KM. 0.7, SALINAS, PR 00751

FRS (Facility Registry Service) ID: 110000602820

**EPA Region:** 02 **Latitude:** 17.97139 **Longitude:** -66.300278

**Locational Data Source: TRIS** 

Industries: Miscellaneous Manufacturing

**Indian Country:** N

# **Enforcement and Compliance Summary**

Statute	CAA						
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)	1						
Formal Enforcement Actions (5 years)							
Penalties from Formal Enforcement Actions (5 years)							
EPA Cases (5 years)							
Penalties from EPA Cases (5 years)							

Statute	EPCRA
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): Operating Minor (PR0000007212300022)

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): 00751STRTCRD701

Compliance and Emissions Data Reporting Interface (CEDRI):

No Information

Go To Enforcement/Compliance Details

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

# **Facility/System Characteristics**

# **Facility/System Characteristics**

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110000602820					N	17.97139	-66.300278
ICIS		3600097925					N	17.97139	-66.300278
ICIS-Air	CAA	PR0000007212300022	Minor Emissions	Operating	CAAMACT, CAASIP		N	17.971389	-66.300278
TRI	EP313	00751STRTCRD701	Toxics Release Inventory	Last Reported for 2022			N	17.97139	-66.300278

# **Facility Address**

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110000602820	STERI-TECH, INC.	RD. 701 KM. 0.7, SALINAS, PR 00751	Salinas Municipio
ICIS		3600097925	STERI-TECH INC	RD. 701 KM. 0.7, SALINAS, PR 00751	Salinas Municipio
ICIS-Air	CAA	PR0000007212300022	STERI-TECH, INC.	RD.701 KM.7 SALINAS IND PARK, SALINAS, PR 00751	Salinas Municipio
TRI	EP313	00751STRTCRD701	STERI-TECH INC.	RD 701 KM. 0.7 SALINAS INDUSTRIAL PARK, SALINAS, PR 00751	Salinas Municipio

# Facility SIC (Standard Industrial Classification) Codes

# Facility NAICS (North American Industry Classification System)

System	Identifier	SIC Code	SIC Description
ICIS-Air	PR0000007212300022	8099	Health And Allied Services

### **Codes**

System	Identifier	NAICS Code	NAICS Description
TRI	00751STRTCRD701	339112	Surgical and Medical Instrument Manufacturing
TRI	00751STRTCRD701	562112	Hazardous Waste Collection
ICIS-Air	PR0000007212300022	999999	

# **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)
CAA	PR0000007212300022	ICIS-Air	Inspection/Evaluation	PCE On-Site	EPA	11/07/2023	
CAA	PR0000007212300022	ICIS-Air	Inspection/Evaluation	PCE On-Site	EPA	12/04/2019	
CAA	PR0000007212300022	ICIS-Air	Information Request	Formal	EPA	08/22/2019	
EPCRA	00751STRTCRD701	ICIS	Information Request	Informal	EPA	10/27/2021	

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

# **Compliance Summary Data**

Stat	ite Source ID	Current SNC (Significant Noncompliance)/HPV (High Priority Violation)	Current As Of	Qtrs with NC (Noncompliance) (of 12)	Data Last Refreshed
C.A	A PR0000007212300022	No	01/13/2024	0	01/12/2024

# Three-Year Compliance History by Quarter

Statute	Progra	am/Pollu	tant/Violati	on Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
CA	AA (Source l	D: PR000	0000721230	0022)	01/01- 03/31/21	04/01- 06/30/21	07/01- 09/30/21	10/01- 12/31/21	01/01- 03/31/22	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
		Facility-	Level Statu	s	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
	HPV History															
	Violation Type	Agency	Programs	Pollutants												

# **Informal Enforcement Actions**

Last 5 Years

Statute	System	Source ID	Type of Action	Lead Agency	Date	
CAA	ICIS-Air	PR0000007212300022	Notice of Violation	EPA	06/29/2021	

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 Case Action No. Agency No. Agen

# **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)**

Chaha	Report	Assessment Unit	Assessment Unit	Water	Cause Groups	<b>Drinking Water</b>	Ecological	Fish Consumption	Recreation	Other
State	Cycle	ID	Name	Condition	Impaired	Use	Use	Use	Use	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 Air Pollutant Report TRI Pollution Prevention Report 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
00751STRTCRD701	2022	629		0			629	
00751STRTCRD701	2021	547		0			547	
00751STRTCRD701	2020	0		0			0	
00751STRTCRD701	2019			0			0	
00751STRTCRD701	2018			0			0	
00751STRTCRD701	2017			0			0	
00751STRTCRD701	2016			0			0	
00751STRTCRD701	2015			0			0	
00751STRTCRD701	2014			0			0	
00751STRTCRD701	2013			0			0	

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

Chemical Name	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Ethylene oxide	629	547	0	R	R	R	R	R	R	R

# **Community**

# **Environmental Justice**

This section shows indexes from EJScreen, EPA's screening tool for environmental justice (EJ) concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. Use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJScreen provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJScreen home page.

### **EJScreen Indexes Shown**



### **Related Reports**

**EJScreen Community Report** 

#### **Download Data**

Census Block Group ID: 721239532001	US (Percentile)				
Supplemental Indexes	Facility Census Block Group	1-mile Max			
Count of Indexes At or Above 80th Percentile	4	5			
Particulate Matter 2.5	0				
Ozone	0				
Diesel Particulate Matter	0				
Air Toxics Cancer Risk	34	99			
Air Toxics Respiratory Hazard Index	33	37			
Toxic Releases to Air	<b>9</b> 9	99			
Traffic Proximity	57	99			
Lead Paint	<b>9</b> 88	98			
Risk Management Plan (RMP) Facility Proximity	61	65			
Hazardous Waste Proximity	58	72			
Superfund Proximity	95	<b>9</b> 7			
Underground Storage Tanks (UST)	0				
Wastewater Discharge	<b>1</b> 85	<ul><li>85</li></ul>			

O Facility 1-mile Radius	☐ Facility Census Block Group
	KN



# 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 2010 U.S. Census and 2017 - 2021 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. EPA's spatial processing methodology considers the overlap between the selected radii and the census blocks (for U.S. Census demographics) and census block groups (for ACS demographics) in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <a href="https://epa.gov/help/reports/dfr-data-dictionary#demographics">https://epa.gov/help/reports/dfr-data-dictionary#demographic></a>.

General Statistics (U.S. Census)								
Total Persons	7,366							
Population Density	2,868/sq.mi.							
Housing Units in Area	3,897							

General Statistics (ACS (American Community Survey))	
Total Persons	5,996
Percent People of Color	100%
Households in Area	2,179
Households on Public Assistance	93
Persons With Low Income	4,638
Percent With Low Income	78%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	17.97139
Center Longitude	-66.300278
Land Area	82%
Water Area	18%

Income Breakdown (ACS (American Community Survey)) - Households (%)				
Less than \$15,000	782 (35.92%)			
\$15,000 - \$25,000	490 (22.51%)			
\$25,000 - \$50,000	615 (28.25%)			
\$50,000 - \$75,000	166 (7.63%)			
Greater than \$75,000	124 (5.7%)			

Age Breakdown (U.S. Census) - Persons (%)	
Children 5 years and younger	470 (6%)
Minors 17 years and younger	1,730 (23%)
Adults 18 years and older	5,636 (77%)
Seniors 65 years and older	1,306 (18%)

Race Breakdown (U.S. Census) - Persons (%)				
White	5,004 (68%)			
African-American	1,266 (17%)			
Hispanic-Origin	7,287 (99%)			
Asian/Pacific Islander	14 (0%)			
American Indian	41 (1%)			
Other/Multiracial	1,041 (14%)			

Education Level (Persons 25 & older) (ACS (American Commun (%)	nity Survey)) - Persons
Less than 9th Grade	477 (10.79%)
9th through 12th Grade	389 (8.8%)
High School Diploma	1,743 (39.44%)
Some College/2-year	463 (10.48%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	993 (22.47%)

An official website of the United States government

MAIN MENU

Search EPA.gov

You are here: EPA Home

CONTACT US <a href="https://www.epa.gov/enviro/forms/contact-us-about-envirofacts">https://www.epa.gov/enviro/forms/contact-us-about-envirofacts</a>

<a href="https://www.epa.gov/">https://www.epa.gov/>

- » Envirofacts <a href="https://epa.gov/">https://epa.gov/>
- » RCRAInfo
- <a href="https://epa.gov/envirofacts/rcrainfo/">https://epa.gov/envirofacts/rcrainfo/>

Home <a href="https://epa.gov/">https://epa.gov/enviro/topic-search</a> | Topic Searches <a href="https://epa.gov/enviro/topic-searches">https://epa.gov/enviro/topic-searches</a> | System Data Searches <a href="https://www.epa.gov/enviro/system-data-searches">https://www.epa.gov/enviro/system-data-searches</a> | About the Data <a href="https://www.epa.gov/enviro/about-data">https://www.epa.gov/enviro/about-data</a> | Data Downloads <a href="https://www.epa.gov/enviro/widgets">https://www.epa.gov/enviro/widgets</a> | Services <a href="https://www.epa.gov/enviro/web-services">https://www.epa.gov/enviro/web-services</a> | Mobile <a href="https://www.epa.gov/enviro/uv-index-mobile-app">https://www.epa.gov/enviro/uv-index-mobile-app</a> | Other Datasets <a href="https://www.epa.gov/enviro/other-datasets">https://www.epa.gov/enviro/other-datasets</a>

# **RCRAInfo Facility**

### **Facility Information**

SALINAS STP Handler ID: PRD000691485 STATE RD 701 KM 1.0 SALINAS, PR 00751

County Name: SALINAS

Latitude: 17.968596 Latitude: -66.300927

**Hazardous Waste Generator:** 

**Owner Name: OWNERNAME** 

No Biennial Report data is available for the facility listed above.

### LIST OF FACILITY CONTACTS

NAME	STREET	CITY	STATE	ZIP COD
	PO BOX 7066 BO OBRERO STATION	SANTURCE	PR	00916
	PO BOX 7066 BO OBRERO STATION	SANTURCE	PR	00916
•				•

### HANDLER / FACILITY CLASSIFICATION

Unspecified Universe for the facility listed above.

### **HANDLER TYPE**

Not in a universe

NO PROCESS INFORMATION IS AVAILABLE FOR THE FACILITY LISTED ABOVE.

No NAICS Codes are available for the facility listed above.

No Waste Codes are available for the facility listed above.



# Discover.

### Accessibility Statement

<https://www.epa.gov/accessib
ility/epa-accessibilitystatement>

# Connect.

### Data.gov ☑

<a href="https://www.data.gov/">https://www.data.gov/">

### **Inspector General**

<https://www.epa.gov/officeinspector-general/about-epasoffice-inspector-general>

# Ask.

### **Contact EPA**

<a href="https://www.epa.gov/home/f">https://www.epa.gov/home/f</a> orms/contact-epa>

### **EPA Disclaimers**

<a href="https://www.epa.gov/web-policies-and-procedures/epa-disclaimers">https://www.epa.gov/web-policies-and-procedures/epa-disclaimers</a>

An official website of the United States government

MAIN MENU

Search EPA.gov

You are here: EPA Home

CONTACT US <a href="https://www.epa.gov/enviro/forms/contact-us-about-envirofacts">https://www.epa.gov/enviro/forms/contact-us-about-envirofacts</a>

<a href="https://www.epa.gov/">https://www.epa.gov/>

- » Envirofacts <a href="https://epa.gov/">https://epa.gov/>
- » RCRAInfo
- <a href="https://epa.gov/envirofacts/rcrainfo/">https://epa.gov/envirofacts/rcrainfo/>

Home <a href="https://epa.gov/">https://epa.gov/enviro/topic-search</a> | Topic Searches <a href="https://epa.gov/enviro/topic-searches">https://epa.gov/enviro/topic-searches</a> | System Data Searches <a href="https://www.epa.gov/enviro/system-data-searches">https://www.epa.gov/enviro/system-data-searches</a> | About the Data <a href="https://www.epa.gov/enviro/about-data">https://www.epa.gov/enviro/about-data</a> | Data Downloads <a href="https://www.epa.gov/enviro/widgets">https://www.epa.gov/enviro/widgets</a> | Services <a href="https://www.epa.gov/enviro/web-services">https://www.epa.gov/enviro/web-services</a> | Mobile <a href="https://www.epa.gov/enviro/uv-index-mobile-app">https://www.epa.gov/enviro/uv-index-mobile-app</a> | Other Datasets <a href="https://www.epa.gov/enviro/other-datasets">https://www.epa.gov/enviro/other-datasets</a>

# **RCRAInfo Facility**

### **Facility Information**

**SHELL CO PR LTD SS 1260 ALVARADO** 

Handler ID: PRR000005363 RD PR 1 KM 89.4 SALINAS, PR 00751

County Name: SALINAS

Latitude: 17.974793 Latitude: -66.307045

Hazardous Waste Generator:

**Owner Name: THE SHELL CO PR LTD** 

No Biennial Report data is available for the facility listed above.

### LIST OF FACILITY CONTACTS

NAME	STREET	CITY	STATE	ZIP COD
	PO BOX 366697	SAN JUAN	PR	00936-66!
	PO BOX 366697	SAN JUAN	PR	00936-66!
4				<b>&gt;</b>

### HANDLER / FACILITY CLASSIFICATION

Unspecified Universe for the facility listed above.

#### **HANDLER TYPE**

Not in a universe

NO PROCESS INFORMATION IS AVAILABLE FOR THE FACILITY LISTED ABOVE.

No NAICS Codes are available for the facility listed above.

No Waste Codes are available for the facility listed above.



# Discover.

### Accessibility Statement

<https://www.epa.gov/accessib
ility/epa-accessibilitystatement>

# Budget & Performance

<a href="https://www.epa.gov/planand">https://www.epa.gov/planand</a> budget>

# Connect.

### Data.gov ☑

<a href="https://www.data.gov/">https://www.data.gov/">

### **Inspector General**

<a href="https://www.epa.gov/office-inspector-general/about-epas-office-inspector-general">https://www.epa.gov/office-inspector-general/about-epas-office-inspector-general</a>

### **Jobs**

<a href="https://www.epa.gov/careers">https://www.epa.gov/careers</a>

# Ask.

### **Contact EPA**

<a href="https://www.epa.gov/home/f">https://www.epa.gov/home/f</a> orms/contact-epa>

### **EPA Disclaimers**

<a href="https://www.epa.gov/web-policies-and-procedures/epa-disclaimers">https://www.epa.gov/web-policies-and-procedures/epa-disclaimers</a>

### **Hotlines**

<a href="https://www.epa.gov/aboute">https://www.epa.gov/aboute</a>
pa/epa-hotlines>



# **Detailed Facility Report**

# **Facility Summary**

SHELL CO PR LTD SS 1260 ALVARADO

PR-1 KM 89.4, SALINAS, PR 00751

FRS (Facility Registry Service) ID: 110007818889

**EPA Region:** 02 **Latitude:** 17.974793 **Longitude:** -66.307045

**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):** Inactive

Other, (PRR000005363)

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 <a href="https://epa.gov/resources/echo-data/known-data-problems">https://epa.gov/resources/echo-data/known-data-problems</a>

# **Facility/System Characteristics**

### **Facility/System Characteristics**

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110007818889					N	17.974793	-66.307045
ICIS		1400002773					N	17.984722	-66.291667
RCRAInfo	RCRA	PRR000005363	Other	Inactive ( )			N		

### **Facility Address**

System	Statute	Identifier	Facility Name	Facility Address	Facility County
FRS		110007818889	SHELL CO PR LTD SS 1260 ALVARADO	PR-1 KM 89.4, SALINAS, PR 00751	Salinas Municipio
ICIS		1400002773	SHELL #1260 (204196)	RD 1, KM 89.4, SALINAS, PR 00751	Salinas Municipio
RCRAInfo	RCRA	PRR000005363	SHELL CO PR LTD SS 1260 ALVARADO	RD PR 1 KM 89.4, SALINAS, PR 00751	Salinas Municipio

# **Facility SIC (Standard Industrial Classification) Codes**

System 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**

**EPA Tribal ID** Distance to Tribe (miles)

No data records returned

# **Enforcement and Compliance**

### **Compliance Monitoring History**

Statute 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 <a href="https://www.epa.gov/compliance/compliance-monitoring-programs">https://www.epa.gov/compliance/compliance-monitoring-programs</a>> activities or because they are not counted as inspections within EPA's Annual Results <a href="https://www.epa.gov/enforcement/enforcement-data-and-results">https://www.epa.gov/enforcement/enforcement-data-and-results</a>.

# **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	PRR000005363	No	01/13/2024	0	01/12/2024

# Three-Year Compliance History by Quarter

Statute	Program/Polluta	•	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
RCRA (Source ID: PRR000005363)		01/01- 03/31/21	04/01- 06/30/21	07/01- 09/30/21	10/01- 12/31/21	01/01- 03/31/22	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	
	Facility-Lev	el Status	No Violation Identified											
	Violation	Agency												

# **Informal Enforcement Actions**

Last 5 Years

Source ID Type of Action Lead Agency

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

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

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

Within Last

Two Years

**Beach Closures 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)

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

No data records returned

# **Air Quality Nonattainment Areas**

Within Maintenance Status Within Nonattainment Status Nonattainment Status Applicable Maintenance Status Applicable Pollutant Area? Standard(s) Area? 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 Year Surface Water Off-Site Transfers to POTWs (Publicly Total Off-Site Underground Disposal to Total On-Site **Emissions** Discharges Owned Treatment Works) Injections Land Releases **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**

# **Environmental Justice**

This section shows indexes from EJScreen, EPA's screening tool for environmental justice (EJ) concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. Use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJScreen provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJScreen home page.

### **EJScreen Indexes Shown**

Compare to	US State
Index Type	O Environmental Justice O Supplemental

### **Related Reports**

**EJScreen Community Report** 

#### **Download Data**

US (Percentile)		
Facility Census Block Group	1-mile Max	
5	5	
0		
0		
0		
99	<b>9</b> 9	
36	37	
<b>9</b> 9	<b>1</b> 99	
<b>9</b> 89	<b>9</b> 9	
94	<b>9</b> 8	
56	65	
72	72	
<b>9</b> 95	<b>9</b> 7	
0		
59	<b>9</b> 85	
	Facility Census Block Group  5  0  0  0  1 99  36  99  89  94  56  72  1 95  0	

O Facility 1-mile Radius	☐ Facility Census Block Group
	KN



# 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 2010 U.S. Census and 2017 - 2021 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. EPA's spatial processing methodology considers the overlap between the selected radii and the census blocks (for U.S. Census demographics) and census block groups (for ACS demographics) in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <a href="https://epa.gov/help/reports/dfr-data-dictionary#demographic">https://epa.gov/help/reports/dfr-data-dictionary#demographic></a>.

General Statistics (U.S. Census)				
Total Persons	4,855			
Population Density	2,015/sq.mi.			
Housing Units in Area	2,653			

General Statistics (ACS (American Community Survey))	
Total Persons	3,655
Percent People of Color	100%
Households in Area	1,325
Households on Public Assistance	69
Persons With Low Income	2,979
Percent With Low Income	82%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	17.974793
Center Longitude	-66.307045
Land Area	78%
Water Area	22%

Income Breakdown (ACS (American Commun	nity Survey)) - Households (%)
Less than \$15,000	527 (39.77%)
\$15,000 - \$25,000	304 (22.94%)
\$25,000 - \$50,000	346 (26.11%)
\$50,000 - \$75,000	96 (7.25%)
Greater than \$75,000	52 (3.92%)

Age Breakdown (U.S. Census) - Persons (%)					
Children 5 years and younger	307 (6%)				
Minors 17 years and younger	1,141 (24%)				
Adults 18 years and older	3,714 (77%)				
Seniors 65 years and older	975 (20%)				

Race Breakdown (U.S. Census) - Persons (%)					
White	3,222 (66%)				
African-American	893 (18%)				
Hispanic-Origin	4,791 (99%)				
Asian/Pacific Islander	10 (0%)				
American Indian	39 (1%)				
Other/Multiracial	691 (14%)				

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)				
Less than 9th Grade	260 (10.14%)			
9th through 12th Grade	202 (7.88%)			
High School Diploma	1,026 (40.02%)			
Some College/2-year	299 (11.66%)			
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	546 (21.29%)			

An official website of the United States government

MENU

Search EPA.gov

You are here: EPA Home <a href="https://epa.gov//www.epa.gov/>>> Cleanups">>> Cleanups</a> <a href="https://epa.gov//www.epa.gov/cleanups">>> Cleanups In My Community (CIMC)</a>

CONTACT US <a href="https://www.epa.gov/cleanups/forms/contact-us">https://www.epa.gov/cleanups/forms/contact-us</a>

# **Property Details for Aguirre Theater**

#### On this page:

- Profile Information
- Property Location
- Property Progress
- CAs Associated with this Property
- Assessment Activities at this Property
- Contaminants and Media
- Cleanup Activities
- Institutional & Engineering Controls
- Redevelopment and Other Leveraged Accomplishments
- Additional Property Attributes

Legal Notices <a href="https://www.epa.gov/cleanups/cimc-legal-notices">https://www.epa.gov/cleanups/cimc-legal-notices</a>

# **Profile Information**

**Property Alias** 

Property Owner **Government** ACRES Property ID **164207** 

Property Address Ave. B #44 Former Central Aguirre Salinas, PR 00751

Size .27
Parcel Numbers S-0007

Latitude/Longitude 17.999743 / -66.34004700000002

Congressional District  $\, {f 1} \,$ 

Property Contact Torres, Ramon

torres.ramon@epa.gov

202-566-2505

Top of Pag

# **Property Location**

Top of Pag

# **Property Progress**

Assessment

C

Clean Up

Institutional Controls in Place

×

Engineering Controls in Place

×

Ready for Anticipated Use

×

Redevelopment Underway ...

Top of Pag

# **CAs Associated with this Property**

CA Name	CA#	State	Туре	Announcement Year	
Salinas, Municipality of	BF97243908	PR	Assessment	2008	

Top of Pag

# **Assessment Activities at this Property**

Activity	EPA Funding	Start Date	Completion Date	CA	Accomplishment Counted?	Counted When?
Phase I Environmental Assessment	\$2,900.00	07/13/2009	03/26/2013	Salinas, Municipality of	Υ	FY13

Is Cleanup Necessary? **Unknown**EPA Assessment Funding: **\$2,900.00**Leveraged Funding:
Total Funding: **\$2,900.00** 

Top of Pag

# **Contaminants and Media**

Contaminant Found Media Affected Remediating Action for Contaminants Remediating Action for Media

Top of Pag

# **Cleanup Activities**

There are no current cleanup activities.

Cleanup/Treatment Implemented: Cleanup/Treatement Categories: Addl Cleanup/Treatment info: Address of Data Source:

Top of Pag

# **Institutional and Engineering Controls**

Indicate whether Institutional Controls are required

Categories of Controls

Additional Institutional Controls Information

Address of Data Source (URL if available)

Are Institutional Controls in Place

Date Institutional Controls were put in place

Indicate whether Engineering Controls are required

Categories of Controls

Additional Engineering controls information

Address of Data Source (URL if available)

Indicate whether Engineering Controls are in place Date Engineering Controls were put in place

Top of Pag

# **Redevelopment and Other Leveraged Accomplishments**

There are no current redevelopment activities.

Number of Redevelopment Jobs Leveraged: Actual Acreage of Greenspace Created: Leveraged Funding:

Top of Pag

# **Additional Property Attributes**

Property Highlights Predominant Past Usage

What types of funding **Hazardous** are being used on this property?

State and Tribal Program Information

Date No Further Action Letter Received

Date Letter/Signed Report Received from a Qualified Professional

Other Cleanup Documentation

Top of Pag



### Discover.

#### Accessibility

<a href="https://www.epa.gov/accessi">https://www.epa.gov/accessi</a> bility>

# **Budget & Performance**

<a href="https://www.epa.gov/planandbudget">https://www.epa.gov/planandbudget></a>

### Connect.

### Data.gov **☑**

<a href="https://www.data.gov/">https://www.data.gov/>

### **Inspector General**

<a href="https://www.epa.gov/office-inspector-general/about-epas-office-inspector-general">https://www.epa.gov/office-inspector-general/about-epas-office-inspector-general</a>

### Ask.

#### **Contact EPA**

<a href="https://www.epa.gov/aboute">https://www.epa.gov/aboute</a>
pa/forms/contact-epa>

#### **EPA Disclaimers**

<a href="https://www.epa.gov/web-policies-and-procedures/epa-disclaimers">https://www.epa.gov/web-policies-and-procedures/epa-disclaimers</a>

An official website of the United States government

MAIN MENU

Search EPA.gov

You are here: EPA Home

CONTACT US <a href="https://www.epa.gov/enviro/forms/contact-us-about-envirofacts">https://www.epa.gov/enviro/forms/contact-us-about-envirofacts</a>

<a href="https://www.epa.gov/">https://www.epa.gov/>

- » Envirofacts <a href="https://epa.gov/">
- » RCRAInfo
- <a href="https://epa.gov/envirofacts/rcrainfo/">https://epa.gov/envirofacts/rcrainfo/>

Home <a href="https://epa.gov/">https://epa.gov/enviro/topic-search</a> | Topic Searches <a href="https://epa.gov/enviro/topic-searches">https://epa.gov/enviro/topic-searches</a> | System Data Searches <a href="https://www.epa.gov/enviro/system-data-searches">https://www.epa.gov/enviro/system-data-searches</a> | About the Data <a href="https://www.epa.gov/enviro/about-data">https://www.epa.gov/enviro/about-data</a> | Data Downloads <a href="https://www.epa.gov/enviro/widgets">https://www.epa.gov/enviro/widgets</a> | Services <a href="https://www.epa.gov/enviro/web-services">https://www.epa.gov/enviro/web-services</a> | Mobile <a href="https://www.epa.gov/enviro/uv-index-mobile-app">https://www.epa.gov/enviro/uv-index-mobile-app</a> | Other Datasets <a href="https://www.epa.gov/enviro/other-datasets">https://www.epa.gov/enviro/other-datasets</a>

# **RCRAInfo Facility**

### **Facility Information**

ESSO STANDARD OIL CO PR 2P-451 Handler ID: PRR000013102 15 UNION ST SALINAS, PR 00751

> County Name: SALINAS Latitude: 17.97653

Latitude: -66.30152

Hazardous Waste Generator:
Owner Name: JOSE R ZAYES SOTO

No Biennial Report data is available for the facility listed above.

### LIST OF FACILITY CONTACTS

NAME	STREET	CITY	STATE	ZIP COD
IRIS LOPEZ	UNION ST	SALINAS	PR	00751
IRIS LOPEZ	UNION ST	SALINAS	PR	00751
4				<b>•</b>

### HANDLER / FACILITY CLASSIFICATION

Unspecified Universe for the facility listed above.

#### **HANDLER TYPE**

Not in a universe

NO PROCESS INFORMATION IS AVAILABLE FOR THE FACILITY LISTED ABOVE.

No NAICS Codes are available for the facility listed above.

No Waste Codes are available for the facility listed above.



# Discover.

### Accessibility Statement

<https://www.epa.gov/accessib
ility/epa-accessibilitystatement>

# Budget & Performance

<a href="https://www.epa.gov/planand">https://www.epa.gov/planand</a> budget>

# Connect.

### Data.gov ☑

<a href="https://www.data.gov/">https://www.data.gov/">

### **Inspector General**

<a href="https://www.epa.gov/office-inspector-general/about-epas-office-inspector-general">https://www.epa.gov/office-inspector-general/about-epas-office-inspector-general</a>

### **Jobs**

<a href="https://www.epa.gov/careers">https://www.epa.gov/careers</a>

# Ask.

### **Contact EPA**

<a href="https://www.epa.gov/home/f">https://www.epa.gov/home/f</a> orms/contact-epa>

### **EPA Disclaimers**

<a href="https://www.epa.gov/web-policies-and-procedures/epa-disclaimers">https://www.epa.gov/web-policies-and-procedures/epa-disclaimers</a>

### **Hotlines**

<a href="https://www.epa.gov/aboute">https://www.epa.gov/aboute</a>
pa/epa-hotlines>



# **Detailed Facility Report**

# **Facility Summary**

ESSO STANDARD OIL CO PR 2P-451

15 UNION ST, SALINAS, PR 00751

FRS (Facility Registry Service) ID: 110004895819

EPA Region: 02 Latitude: 17.97653 Longitude: -66.30152

**Locational Data Source: FRS** 

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):** Inactive

Other, (PRR000013102)

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 <a href="https://epa.gov/resources/echo-data/known-data-problems">https://epa.gov/resources/echo-data/known-data-problems</a>

# **Facility/System Characteristics**

# **Facility/System Characteristics**

System	Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
FRS		110004895819					N	17.97653	-66.30152
RCRAInfo	RCRA	PRR000013102	Other	Inactive ( )			N		

### **Facility Address**

System	Statute	Identifier	Identifier Facility Name Facility Address			
FRS		110004895819	ESSO STANDARD OIL CO PR 2P-451	15 UNION ST, SALINAS, PR 00751	Salinas Municipio	
RCRAInfo	RCRA	PRR000013102	ESSO STANDARD OIL CO PR 2P-451	15 UNION ST, SALINAS, PR 00751	Salinas 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 <a href="https://www.epa.gov/compliance/compliance-monitoring-programs">https://www.epa.gov/compliance/compliance-monitoring-programs</a> activities or because they are not counted as inspections within EPA's Annual Results <a href="https://www.epa.gov/enforcement/enforcement-data-and-results">https://www.epa.gov/enforcement/enforcement-data-and-results</a> <a href="https://www.epa.gov/enforcement-data-and-results">https://www.epa.gov/enforcement-data-and-results</a> <a href="https://www.epa.gov/enforcement-data-and-results">https://www.epa.gov/enforcement-dat

# **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	PRR000013102	No	01/13/2024	0	01/12/2024

# **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	QTR 12+
RCRA	(Source ID: PRR000013102)	01/01- 03/31/21	04/01- 06/30/21	07/01- 09/30/21	10/01- 12/31/21	01/01- 03/31/22	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

Statute	Program/Polluta		QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12+
	Facility-Lev	el Status	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

			Source	Туре	Case	Load	Caca	Issued/Filed		Settlement/Action	Federal	State/Local	Penalty	SEP	Comp
Statute	System	Law/Section	in	of		Agency			Settlements/Actions	Date	Penalty	Penalty	Amount	Value	Action
			יוו	Action	NO.	Agency	Ivaille	Date		Date	Assessed	Assessed	Collected	value	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 Pollutants
Within Last Potentially Related
Two Years to Impairment

Watershed with ESA (Endangered Species Act)-listed Aquatic Species?

No data records returned

# **Assessed Waters From Latest State Submission (ATTAINS)**

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

No data records returned

### **Air Quality Nonattainment Areas**

Pollutant	Within Nonattainment Status	Nonattainment Status Applicable	Within Maintenance Status	Maintenance Status Applicable
	Area?	Standard(s)	Area?	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	Year	Air	Surface Water	Off-Site Transfers to POTWs (Publicly	Underground	Disposal to	Total On-Site	Total Off-Site
ID		Emissions	Discharges	Owned Treatment Works)	Injections	Land	Releases	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**

## **Environmental Justice**

This section shows indexes from EJScreen, EPA's screening tool for environmental justice (EJ) concerns. EPA uses these indexes to identify geographic areas that may warrant further consideration or analysis for potential EJ concerns. Use of these indexes does not designate an area as an "EJ community" or "EJ facility." EJScreen provides screening level indicators, not a determination of the existence or absence of EJ concerns. For more information, see the EJScreen home page.

## **EJScreen Indexes Shown**

Compare to	US State
Index Type	C Environmental Justice Supplemental

## **Related Reports**

**EJScreen Community Report** 

### **Download Data**

Census Block Group ID: 721239531002	US (Percentile)	
Supplemental Indexes	Facility Census Block Group	1-mile Max
Count of Indexes At or Above 80th Percentile	5	6
Particulate Matter 2.5	0	
Ozone	0	
Diesel Particulate Matter	0	
Air Toxics Cancer Risk	<b>9</b> 9	99
Air Toxics Respiratory Hazard Index	34	37
Toxic Releases to Air	<b>9</b> 99	99
Traffic Proximity	96	99
Lead Paint	92	98
Risk Management Plan (RMP) Facility Proximity	56	66
Hazardous Waste Proximity	63	72
Superfund Proximity	<b>9</b> 94	97
Underground Storage Tanks (UST)	0	
Wastewater Discharge	51	92

	O Facility 1-mile Radius	☐ Facility Census Block Group
- 		23



## 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 2010 U.S. Census and 2017 - 2021 American Community Survey (ACS) 5-year Summary and are accurate to the extent that the facility latitude and longitude listed below are correct. EPA's spatial processing methodology considers the overlap between the selected radii and the census blocks (for U.S. Census demographics) and census block groups (for ACS demographics) in determining the demographics surrounding the facility. For more detail about this methodology, see the DFR Data Dictionary <a href="https://epa.gov/help/reports/dfr-data-dictionary#demographic">https://epa.gov/help/reports/dfr-data-dictionary#demographic></a>.

General Statistics (U.S. Census)	
Total Persons	6,856
Population Density	2,326/sq.mi.
Housing Units in Area	3,550

General Statistics (ACS (American Community Survey))	
Total Persons	5,761
Percent People of Color	100%
Households in Area	2,095
Households on Public Assistance	97
Persons With Low Income	4,394
Percent With Low Income	76%

Geography	
Radius of Selected Area	1 mi.
Center Latitude	17.97653
Center Longitude	-66.30152
Land Area	95%
Water Area	5%

Income Breakdown (ACS (American Community Survey)) - Households (%)	
Less than \$15,000	749 (35.77%)
\$15,000 - \$25,000	470 (22.45%)
\$25,000 - \$50,000	582 (27.79%)
\$50,000 - \$75,000	168 (8.02%)
Greater than \$75,000	125 (5.97%)

Age Breakdown (U.S. Census) - Persons (%)	
Children 5 years and younger	437 (6%)
Minors 17 years and younger	1,634 (24%)
Adults 18 years and older	5,222 (76%)
Seniors 65 years and older	1,205 (18%)

Race Breakdown (U.S. Census) - Persons (%)	
White	4,695 (68%)
African-American	1,154 (17%)
Hispanic-Origin	6,779 (99%)
Asian/Pacific Islander	9 (0%)
American Indian	43 (1%)
Other/Multiracial	955 (14%)

Education Level (Persons 25 & older) (ACS (American Community Survey)) - Persons (%)	
Less than 9th Grade	422 (9.96%)
9th through 12th Grade	298 (7.03%)
High School Diploma	1,728 (40.79%)
Some College/2-year	459 (10.84%)
B.S./B.A. (Bachelor of Science/Bachelor of Arts) or More	945 (22.31%)

Attachment 7 – Asbestos-Containing Material (ACM) Study



## **SERVICES**

PREQB Accredited Asbestos Trainings
Environmental, Health, and Safety Trainings
Occupational Health and Safety Evaluations
General Environmental/Compliance Consulting
Waste Management Consulting
Indoor Air Quality Consulting
Water, Storm Water, and Wastewater Compliance

# ASBESTOS CONTAINING MATERIALS (ACM) INSPECTION SURVEY REPORT

Former Guillermo Godreau Elementary School Calle Miguel, Salinas, PR December 2021







Project No.: 664-202112 C4432 ACM Survey Report Guillermo Godreau School v3

> Prepared for: Mr. Bernardo Marqués, AIA Marques + Marques Arquitectos

# CHES Services Corp. d/b/a Fernando L. Rodríguez, P.E. & Associates

P.O. Box 193430 | San Juan, P.R. 00919-3430 | Web: <u>www.flraches.com</u> Tel.: <u>(787) 751-7810 | Fax (787) 751-8988</u> | Skype: flraches





P.O. Box 193430 | San Juan, P.R. 00919-3430 | Web: www.flraches.com

December 27, 2021

Mr. Bernardo Marqués, AIA Marques + Marques Arquitectos 701 Ponce De León Ave., Suite 201 San Juan, PR

RE: Asbestos Containing Materials (ACM) Inspection Survey, Former Former Guillermo Godreau Elementary School, Calle Miguel, Salinas PR 00751

Dear Mr. Marqués:

On Monday, December 6, 2021, as per your request and agreed upon, personnel from our office, *CHES Services Corporation, d/b/a Fernando L. Rodríguez, P.E. & Associates (FLRA)*, visited the subject site identified as Former Guillermo Godreau Elementary School, to conduct the reference suspected asbestos building construction materials inspection and sampling survey.

The inspection survey activities were conducted with the assistance of Mr. José Collazo representing the Salinas Municipal Emergency Response Office, who gave us access to the property. A brief explanation on the purpose of the visit and the scope of the bulk sampling to be conducted by FLRA personnel was given prior initiating the inspection walkthrough and sampling activity.

Based on the assessment activities performed and corresponding laboratory reports, conclusions and recommendations are presented at the end of this report for your perusal. Related photos on approximate suspected sampled materials were taken, as well as schematic maps of the surveyed property with identification points are included for reference purposes in this report.

We expect that this effort suffices requirements on this issue. Feel free to contact our office if there is any specific question on the contents of this report at your earliest convenience.

Respectfully,

Mr. Fernando L. Rodríguez, PE Consultant

Ref.: 664-202112 C4432 ACM Survey Report Guillermo Godreau School v5





P.O. Box 193430 | San Juan, P.R. 00919-3430 | Web: www.flraches.com

## 1. SUMMARY OF SURVEYED ACTIVITIES

On December 6, 2021, personnel from our office, FLRA, conducted an inspection survey with the aim of assessing site conditions and to determine the presence of Asbestos Containing Materials (ACM) in the property subject of a site improvement project.

The following FLRA personnel accredited as ACM inspectors were present or assisted in the coordination during the inspection survey period at the property:

Mr. Fernando L. Rodríguez Project Manager

Asbestos Accredited Inspector: ASB-0321-0188-SI

Miss Hanna Rodríguez
 Environmental Engineer

Asbestos Accredited Inspector: ASB-0921-0491-SI

Miss Stephanie Hall Chemical Engineer

**Asbestos Competent Person** 

Miss Monserrat González Environmental Engineer Graduate

Asbestos Accredited Inspector: ASB-0921-0489-SI

Random sampling protocol was followed to collect representative building materials of suspected ACM within the subject areas. These samples were sent to an accredited laboratory to perform the corresponding analysis.

## 1.1. Surveyed Property Description

The property subject to this Asbestos Containing Materials (ACM) Inspection Survey, is located at the Calle Miguel, Salinas, PR and is surrounded mostly by residential and commercial establishments. Refer to Figure 1 for an aerial location map of the subject property, which is composed by three structures herein described as one two-story main building and two annex buildings. As was informed, all structures were constructed in different years, and although aerial historical photos show all three structures in placed during 1994, exact construction dates are unknown. A preliminary review of publicly available information, the subject property, the Guillermo Godreau Elementary School, closed operations during 2016. Hence, at the moment of the visit, the school campus was vacant.



# CHES Services Corporation d/b/a Fernando L. Rodríguez, P.E. & Associates P.O. Box 193430 | San Juan, P.R. 00919-3430 | Web: www.flraches.com



Figure 1: Site Aerial Location Map



**Figure 2: Property Description** 

Size of property (approximate)	3,233.9251 m <sup>2</sup> (Puerto Rico Planning Board, 2021)
Buildings Description Interior and exterior finishes were observed as they were made safely accessible.	1) Main Building: A two-story building used for classrooms with restrooms facilities available. The building is constructed in reinforced concrete on lateral walls, floors and roof. No additional information on construction date nor maintenance efforts or improvements are known.
	2) Annex Building:  A two-story building used for classrooms with restroom facilities available. The building is constructed in reinforced concrete on lateral walls, floors and roof. No additional information on construction date nor maintenance efforts or improvements are known.
	3) Lunchroom: A one-story building used as a lunchroom with a single restroom. The building is constructed in reinforced concrete on lateral walls, floors and roof. No additional information on construction date nor maintenance efforts or improvements are known.
Additional Property Improvements	The property has parking lot with access from Miguel Street. All property border line is limited by concrete gate walls.





P.O. Box 193430 | San Juan, P.R. 00919-3430 | Web: www.flraches.com

## 2. ASBESTOS CONTAINING MATERIALS (ACM) SURVEY FINDINGS

The criteria established by the federal and local regulations to define an Asbestos Containing Material (ACM), is to contain more than 1% by volume in the sampled material. In addition, the material is evaluated on its ability to easily release asbestos fibers, described by the regulation as "friability". 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. In contrast, 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.

A visual assessment of the suspected building materials located throughout the subject spaces was completed prior to the collection of samples. During the visual assessment, the suspected ACM were categorized by homogeneous areas (appear uniform, have a consistent texture and appear to have been installed at the same time).

A sampling survey was performed in those areas where suspected ACM were identified. Although reasonable effort was made to survey accessible suspect materials; additional suspect but unsampled material could be in or behind hidden wall panels, in voids or in other concealed areas. Sampled materials were sent to an accredited laboratory to carry out a Polarized Light Microscopy (PLM) analysis.

This method is useful for the qualitative identification of asbestos and the semi-quantitative determination of asbestos content of bulk samples. The method measures percent asbestos as perceived by the analyst in comparison to standard area projections, photos, and drawings, or trained experience.

The contracted laboratory to conduct such analysis was EMLab P&K, located in Marlton, NJ. Copy of the analytical report presented by this laboratory and its accreditations are included in the Appendix 5-2, for reference purposes.

During the inspection efforts in designated areas of the subject property, a total of twenty (20) representative samples, identified as suspect ACM, were randomly collected and sent to the laboratory. The laboratory performed the corresponding analyses to associated layers for asbestos content in accordance with the recommended EPA Method for Determination of Asbestos in Bulk Samples (EPA-600/R-93/116). From the analytical report **none of the samples were identified to contain more than 1% asbestos fibers**. Figure 3 provides a summary of the analytical results along with the identification, location and description of each identified ACM sampled.





P.O. Box 193430 | San Juan, P.R. 00919-3430 | Web: www.flraches.com

Figure 3: Summary of Asbestos Content Analysis Results

Sample ID	Homogeneous area, if applicable	Material	% Asbestos (Asbestos Volume / Total Material Volume)¹
MES-001	Annex Building Room 20	Vinyl Floor Tile & Mastic	Not Detected
MES-002	Annex Building Room 20	Vinyl Floor Tile & Mastic	Not Detected
MES-003	Annex Building Room 20	Vinyl Floor Tile & Mastic	Not Detected
MES-004	Main Building Room #5	Three layers of Vinyl Floor Tile & Mastic	Not Detected
MES-005	Main Building Room #5	Three layers of Vinyl Floor Tile & Mastic	Not Detected
MES-006	Main Building Room #5	Three layers of Vinyl Floor Tile & Mastic	Not Detected
MES-007	Main Building	Roofing Treatment	Not Detected
MES-008	Main Building	Roofing Treatment Flashing	Not Detected
MES-009	Main Building	Roofing Treatment Flashing	Not Detected
MES-010	Main Building	Roofing Treatment	Not Detected
MES-011	Main Building	Roofing Treatment	Not Detected
MES-012	Main Building	Roofing Treatment Flashing	Not Detected
MES-013	Annex Building	Roofing Treatment	Not Detected
MES-014	Annex Building	Roofing Treatment	Not Detected
MES-015	Annex Building	Roofing Treatment	Not Detected
MES-016	Main Building Room #7	Cementitious Mastic/Glue	Not Detected
MES-017	Main Building Room #7	Cementitious Mastic/Glue	Not Detected
MES-018	Main Building Room #7	Cementitious Mastic/Glue	Not Detected
MES-019	Main Building Room #14	Board Mastic/Glue	Not Detected
MES-020	Main Building	Window Caulk	Not Detected

## 2.1. Exclusions

For the purpose of this survey inaccessible areas are building areas, systems, structural components or surfaces which could not be observed or inspected because it was unsafe or impractical to demolish, disassemble, or remove systems or covering. Areas that were inaccessible during the survey efforts are listed in Figure 4.

Figure 4: Inaccessible Areas and/or Materials

Location	Explanation
Room #4	Room was being used to stored sensitive equipment/materials. FLRA was not granted access.
Room #13	Posed a biological risk: unsafe conditions due to the uncontrolled presence of pigeons and other birds.

No inspection efforts were conducted by FLRA to determine the presence of ACM in these identified inaccessible areas. If any suspected material is installed or found in these areas should be considered ACM until sampled by an accredited inspector prior to impact by renovation or demolition.

-

<sup>&</sup>lt;sup>1</sup> Unless specified, asbestos fibers identified are Chrysotile





P.O. Box 193430 | San Juan, P.R. 00919-3430 | Web: www.flraches.com

## 3. INTERPRETATION OF RESULTS

During December 6, 2021, FLRA performed an *Asbestos Containing Materials (ACM) Inspection Survey* at designated areas of the subject property Former Guillermo Godreau Elementary School to evaluate the presence of ACM.

Several bulk samples were collected and sent to a contracted laboratory for corresponding analysis. Sample descriptions, locations, and analytical results are summarized in Figure 3. From the asbestos laboratory analytical reports, no sampled material was identified as containing asbestos fibers.

FLRA recommends that if any suspected asbestos-containing material is identified within the subject area that was not included in this survey, it should be sampled by an accredited inspector in order to determine if it does contain any of the tested contaminants.

Best Management Practices (BMPs) must be followed whenever handling and disposing of any construction debris, or non-hazardous solid waste from the subject facility areas during remodeling phase, as well as handling discarded materials and equipment that can be stored or exposed to or impacted by rainwater in different areas through the subject property during this activity.

The results, findings, and conclusions expressed in this report are based on conditions that were noted on December 6, 2021 during FLRA's assessment of this project. Any conditions or materials that could not be visually identified (i.e., inaccessible areas) or were out of the scope of work at hand, were not inspected and may differ from those conditions or materials noted. It was not within the scope of the inspection to remove surface installed materials to investigate portions of the structure or materials that may lay beneath or above the surface. FLRA's selection of sample locations and frequency of sampling was based on FLRA's observations and the assumption that like materials in the same area are homogeneous.

The report is designed to aid the building owner, architect, construction manager, general contractors, and potential asbestos abatement contractors in locating ACM. Under no circumstances is the report to be usesd as a solely bidding document or as a project specification document given that abatement bidders are responsible for visiting the project.





P.O. Box 193430 | San Juan, P.R. 00919-3430 | Web: www.flraches.com

## 4. SIGNATURE OF ENVIRONMENTAL ASSESSOR

**Fernando L. Rodríguez, P.E. & Associates (FLRA)** have performed an **Asbestos Containing Materials (ACM) Inspection Survey** to determine the presence of Asbestos Containing Materials at the Former Guillermo Godreau Elementary School property, located at Calle Miguel, Salinas, PR 00751. This study was performed as per the request of Mr. Bernardo A. Marqués, AIA, from Marques + Marques Arquitectos.

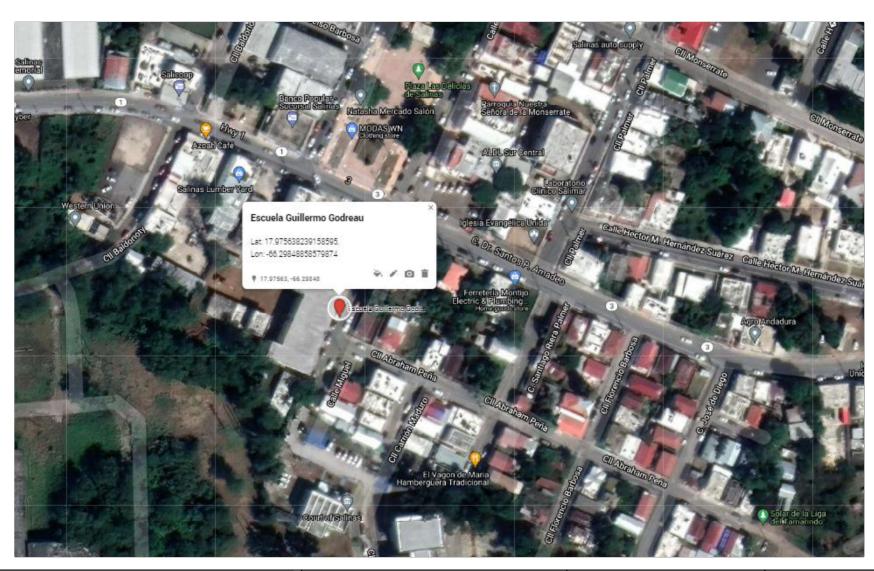
		December 27, 2021	
Environm	nental Professional's Signature	Date	
Name:	Mr. Fernando L. Rodríguez		
	Asbestos Accredited Inspector, ASB-03	21-0188-SI	

# 5. Appendix









CHES Services Corp. d/b/a Fernando L. Rodríguez, PE & Associates Chemical/Environmental Engineering & Industrial Hygiene Services

## **Drawing Not to Scale**

By: Stephanie Hall (12/10/2021)

## Description

## **Phase II ESA: ACM Survey**

Client: Marqués + Marques Arquitectos Facility: Guillermo Godreau Elementary School

## **Drawing ID**

File: 664-20211201 ACM Diagram GG Elementary School\_v2.vsdx Drawing: Location Map

## **Details**

17.97563, -66.29848

Calle Miguel, Salinas PR





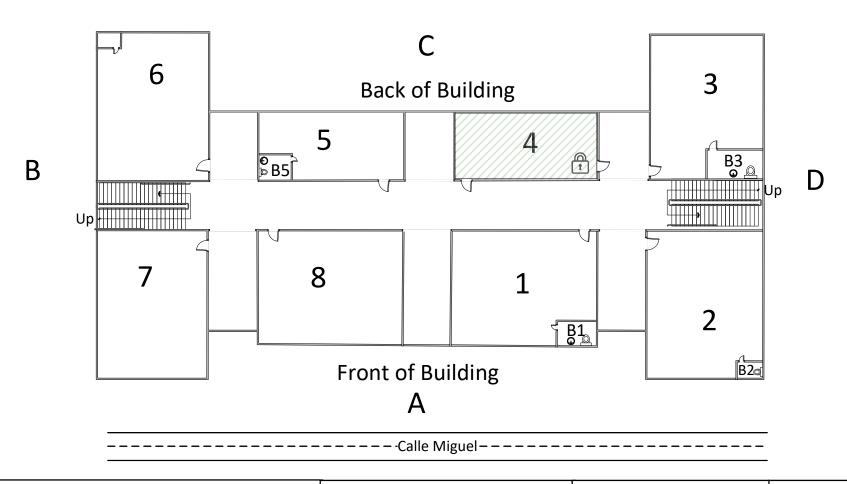


## Legend

No Asbestos Containing Material (ACM) identified. Refer to corresponding samples summary tables on the report.



Inaccessible Area





CHES Services Corp. d/b/a Fernando L. Rodríguez, PE & Associates Chemical/Environmental Engineering & Industrial Hygiene Services

## **Drawing Not to Scale**

Drafted by: Stephanie Hall (12/03/2021)

## **Description**

## **Phase II ESA: ACM Survey**

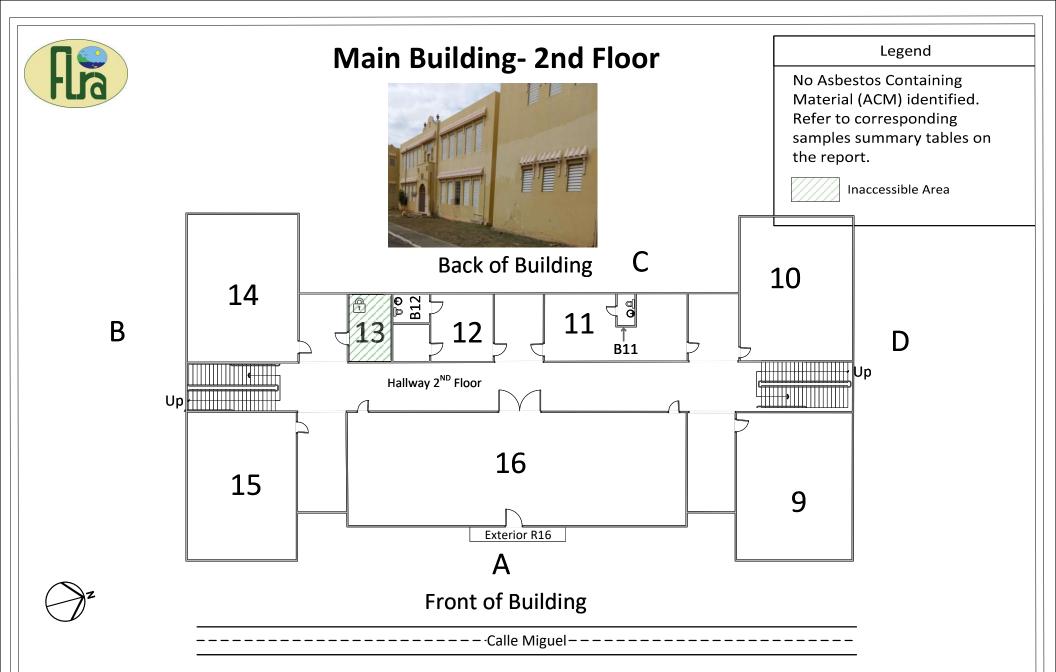
Client: Marqués + Marques Arquitectos Facility: Guillermo Godreau Elementary School

## **Details**

File: 664-20211201 ACM
Diagram GG Elementary
School\_v2.vsdx

**Drawing:** Main Building- 1st Floor

## Location



Chemical/Environmental Engineering & Industrial Hygiene Services

## **Drawing Not to Scale**

Drafted by: Stephanie Hall (12/03/2021)

## **Description**

## **Phase II ESA: ACM Survey**

Client: Marqués + Marques Arquitectos Facility: Escuela Guillermo GodreauElementary School

## Details

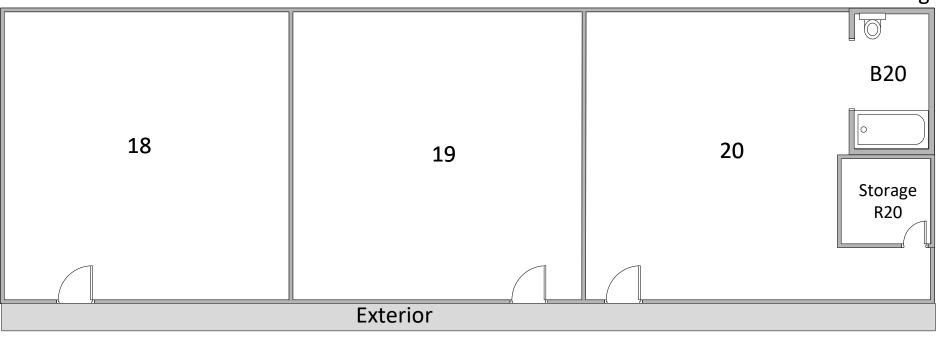
File: 664-20211201 ACM
Diagram GG Elementary
School\_v2.vsdx
Drawing: Main Building- 2nd
Floor

## Location



# **Annex Building -1st Floor**





# Front of Building

## Legend

No Asbestos Containing Material (ACM) identified.

Refer to corresponding samples summary tables on the report.



<u>CHES Services Corp. d/b/a Fernando L. Rodríguez, PE & Associates</u> Chemical/Environmental Engineering & Industrial Hygiene Services

## **Drawing Not to Scale**

Drafted by: Stephanie Hall (12/03/2021)

## **Description**

### **ACM Survey**

Client: Marqués + Marques Arquitectos Facility: Guillermo Godreau Elementary Schoo

## **Drawing ID**

File: 664-20211201 ACM Diagram GG Elementary School\_v2.vsdx Drawing: Annex Building -1st Floor

## **Details**



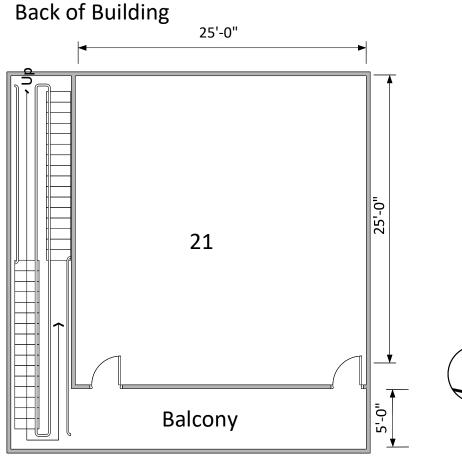
# **Annex Building- 2nd Floor**

## Legend

No Asbestos Containing Material (ACM) identified.

Refer to corresponding samples summary tables on the report.







CHES Services Corp. d/b/a Fernando L. Rodríguez, PE & Associates

Chemical/Environmental Engineering & Industrial Hygiene Services

## **Drawing Not to Scale**

Drafted by: Stephanie Hall (12/03/2021)

## **Description**

## Phase II ESA: ACM Survey

Client: Marqués + Marques Arquitectos Facility: Guillermo Godreau Elementary School

## **Drawing ID**

File: 664-20211201 ACM
Diagram GG Elementary
School\_v2.vsdx
Drawing: Annex Building- 2nd
Floor

2nd

## **Details**



# Lunchroom



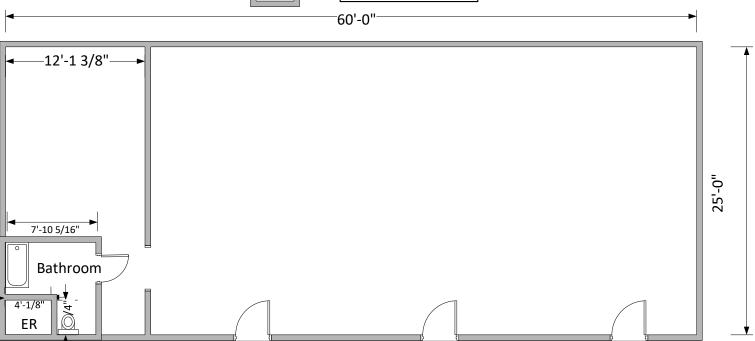
Legend

No Asbestos Containing Material (ACM) identified. Refer to corresponding samples summary tables on the report.

Utility Structure #2

Utility Structure #1

Back of Building





CHES Services Corp. d/b/a Fernando L. Rodríguez, PE & Associates Chemical/Environmental Engineering & Industrial Hygiene Services

## **Drawing Not to Scale**

Drafted by: Stephanie Hall (12/03/2021)

## Description

Exterior

## **Phase II ESA: ACM Survey**

Client: Marqués + Marques Arquitectos Facility: Guillermo Godreau Elementary School

## **Drawing ID**

File: 664-20211201 ACM
Diagram GG Elementary
School\_v2.vsdx
Drawing:Lunchroom

## **Details**

17.97563, -66.29848

Calle Miguel, Salinas PR 00751

# Asbestos Containing Materials (ACM) Manejo de Emergencia (Escuela Guillermo Godreau)

## **Surveyed Areas**

View of Main Building 1<sup>st</sup> and 2<sup>nd</sup> Floor









<u>CHES Services Corp. d/b/a</u> <u>Fernando L. Rodríguez, P.E. & Associates</u>

**Site Reconnaissance Photographs** *ACM Inspection Survey* 



Page 1 December 2021

Cliente: Marqués + Marques Arquitectos

# Asbestos Containing Materials (ACM) Manejo de Emergencia (Escuela Guillermo Godreau)

**Surveyed Areas** 

View of Annex Building 1<sup>st</sup> and 2<sup>nd</sup> Floor









<u>CHES Services Corp. d/b/a</u> <u>Fernando L. Rodríguez, P.E. & Associates</u>

**Site Reconnaissance Photographs** *ACM Inspection Survey* 



Page 2 December 2021

Cliente: Marqués + Marques Arquitectos

# Asbestos Containing Materials (ACM) Manejo de Emergencia (Escuela Guillermo Godreau)

**Surveyed Areas** 

View of Main Building 1<sup>st</sup> and 2<sup>nd</sup> Floor









<u>CHES Services Corp. d/b/a</u> <u>Fernando L. Rodríguez, P.E. & Associates</u>

**Site Reconnaissance Photographs** *ACM Inspection Survey* 



Page 3 December 2021

Cliente: Marqués + Marques Arquitectos



Report for:

Mr. Fernando Rodriguez IEMES, PSC 1522 Bori Street, Urb. Beliza San Juan, PR 00927

Regarding: Project: Manejo de Emergencias Salinas; Escuela Guillermo Godreau

EML ID: 2808041

Approved by:

Dates of Analysis: Asbestos PLM: 12-16-2021

Approved Signatory Balu Krishnan

Service SOPs: Asbestos PLM (EPA 40CFR App E to Sub E of Part 763 & EPA METHOD 600/R-93-116, SOP EM-AS-S-1267) NVLAP Lab Code 200738-0

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the samples as received and tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

Eurofins EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Lab ID-Version :: 13449098-1

Lab ID-Version 1: 13449099-1

Lab ID-Version :: 13449100-1

6301 NW 5th way, Suite#: 1410, Ft. Lauderdale, FL 33309

(866) 871-1984 Fax (954) 776-8485 www.emlab.com

Date of Sampling: 12-06-2021 Date of Receipt: 12-10-2021 Date of Report: 12-16-2021

Client: IEMES, PSC C/O: Mr. Fernando Rodriguez

Re: Manejo de Emergencias Salinas; Escuela

Guillermo Godreau

## ASBESTOS PLM REPORT

**Total Samples Submitted:** 20 **Total Samples Analyzed:** 20 **Total Samples with Layer Asbestos Content > 1%:** 0

Location: MES-001. Vinvl Floor Tile (VFT) & Mastic

Sample Layers	Asbestos Content	
Beige Floor Tile	ND	
Yellow Mastic	ND	
Sample Composite Homogeneity: Moderate		

Location: MES-002, Vinyl Floor Tile (VFT) & Mastic

Sample Layers	Asbestos Content	
Beige Floor Tile	ND	
Yellow Mastic	ND	
Sample Composite Homogeneity: Moderate		

Location: MES-003, Vinvl Floor Tile (VFT) & Mastic

Sample Layers	Asbestos Content	
Beige Baseboard	ND	
Yellow Mastic	ND	
Sample Composite Homogeneity: Moderate		

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government. Eurofins EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

6301 NW 5th way, Suite#: 1410, Ft. Lauderdale, FL 33309 (866) 871-1984 Fax (954) 776-8485 www.emlab.com

Client: IEMES, PSC

Date of Sampling: 12-06-2021 C/O: Mr. Fernando Rodriguez Date of Receipt: 12-10-2021 Re: Manejo de Emergencias Salinas; Escuela Guillermo Godreau Date of Report: 12-16-2021

## ASBESTOS PLM REPORT

Location: MES-004, Vinyl Floor Tile (VFT) & Mastic (Three VFT Layers)  Lab ID-Version‡:		
Sample Layers	Asbestos Content	
Beige Floor Tile	ND	
White Mastic 1	ND	
Blue Floor Tile	ND	
Yellow Mastic 1	ND	
White Mastic 2	ND	
Gray Floor Tile	ND	
Yellow Mastic 2	ND	
Sample Composite Homogeneity: Moderate		

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government. Eurofins EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

6301 NW 5th way, Suite#: 1410, Ft. Lauderdale, FL 33309 (866) 871-1984 Fax (954) 776-8485 www.emlab.com

Client: IEMES, PSC

C/O: Mr. Fernando Rodriguez

Re: Manejo de Emergencias Salinas; Escuela

Guillermo Godreau

Date of Sampling: 12-06-2021 Date of Receipt: 12-10-2021 Date of Report: 12-16-2021

## ASBESTOS PLM REPORT

Location: MES-005, Vinvl Floor Tile (VFT) & Mastic (Three VFT Layers)

Lab ID-Version‡: 13449102-1

Sample Layers	Asbestos Content
Beige Floor Tile	ND
White Mastic 1	ND
Blue Floor Tile	ND
Yellow Mastic 1	ND
White Mastic 2	ND
Gray Floor Tile	ND
Yellow Mastic 2	ND
Sample Composite Homogeneity: Moderate	

Location: MES-006, Vinyl Floor Tile (VFT) & Mastic (Three VFT Layers)

Lab ID-Version :: 13449103-1

Sample Layers	Asbestos Content	
White Coating	ND	
Black Roofing Material	ND	
Composite Non-Asbestos Content: 5% Glass Fibers		
Sample Composite Homogeneity:	Moderate	

**Location: MES-007, Roofing Treatment** 

Lab ID-Version :: 13449104-1

Sample Layers	Asbestos Content	
Gray Coating	ND	
Black Roofing Shingle with Gray Pebbles	ND	
Black Tar	ND	
Composite Non-Asbestos Content: 5% Glass Fibers		
Sample Composite Homogeneity: Moderate		

**Location: MES-008, Roofing Treatment Flashing** 

Lab ID-Version :: 13449105-1

Sample Layers	Asbestos Content	
Gray Coating	ND	
Black Roof Flashing	ND	
Composite Non-Asbestos Content: 5% Glass Fibers		
Sample Composite Homogeneity:	Moderate	

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government. Eurofins EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

Lab ID-Version‡: 13449106-1

Lab ID-Version 1: 13449108-1

Lab ID-Version 1: 13449109-1

6301 NW 5th way, Suite#: 1410, Ft. Lauderdale, FL 33309 (866) 871-1984 Fax (954) 776-8485 www.emlab.com

Client: IEMES, PSC

C/O: Mr. Fernando Rodriguez

Re: Manejo de Emergencias Salinas; Escuela

Guillermo Godreau

Date of Sampling: 12-06-2021 Date of Receipt: 12-10-2021 Date of Report: 12-16-2021

## ASBESTOS PLM REPORT

**Location: MES-009, Roofing Treatment Flashing** 

Sample Layers	Asbestos Content
Black Roof Flashing	ND
Composite Non-Asbestos Content:	5% Cellulose 5% Glass Fibers
Sample Composite Homogeneity:	Good

<b>Location: MES-010, Roofing Treatment</b>	Lab ID-Version‡: 13449107-1	
Sample Layers	Asbestos Content	
White Coating	ND	
Black Roofing Material	ND	
Composite Non-Asbestos Content:	5% Glass Fibers	
Sample Composite Homogeneity:	Moderate	

Location: MES-011, Roofing Treatment

Education: Wills 011, Rooming Treatment	
Sample Layers	Asbestos Content
Gray Coating	ND
Black Roofing Shingle with Gray Pebbles	ND
Black Tar	ND
<b>Composite Non-Asbestos Content:</b>	5% Glass Fibers
Sample Composite Homogeneity:	Moderate

Location: MES-012, Roofing Treatment Flashing

Location: NILS 012, Rooting 11 carment 1 tashing		
Sample Layers	Asbestos Content	
Black Roof Flashing	ND	
Composite Non-Asbestos Content:	5% Cellulose	
-	5% Glass Fibers	
Sample Composite Homogeneity:	Good	

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government. Eurofins EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

Lab ID-Version †: 13449112-1

Lab ID-Version :: 13449113-1

6301 NW 5th way, Suite#: 1410, Ft. Lauderdale, FL 33309 (866) 871-1984 Fax (954) 776-8485 www.emlab.com

Client: IEMES, PSC

C/O: Mr. Fernando Rodriguez

Re: Manejo de Emergencias Salinas; Escuela

Guillermo Godreau

Date of Sampling: 12-06-2021 Date of Receipt: 12-10-2021 Date of Report: 12-16-2021

## ASBESTOS PLM REPORT

Location: MES-013, Roofing Treatment

<b>Location: MES-013, Roofing Treatment</b>	Lab ID-Version‡: 13449110-1	
Sample Layers	Asbestos Content	
Silver Foil	ND	
Black Roofing Material	ND	
Composite Non-Asbestos Content:	5% Glass Fibers	
Sample Composite Homogeneity:	Good	

**Location: MES-014, Roofing Treatment** 

Lab ID-Version 1: 13449111-1 Sample Layers **Asbestos Content** Silver Foil ND ND Black Roofing Material Composite Non-Asbestos Content: 5% Glass Fibers Sample Composite Homogeneity: Good

Location: MES-015, Roofing Treatment

Location: WES-013, Rooming Treatment	Edo ID Version, 15 (1) 112 1	
Sample Layers	Asbestos Content	
Silver Foil	ND	
Black Roofing Material	ND	
<b>Composite Non-Asbestos Content:</b>	5% Glass Fibers	
Sample Composite Homogeneity:	Good	

Location: MES-016, Cementitious Mastic/Glue

Sample Layers	Asbestos Content
Gray Cementitious Material	ND
Sample Composite Homogeneity:	Good

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government. Eurofins EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

Lab ID-Version‡: 13449114-1

Lab ID-Version 1: 13449115-1

Lab ID-Version : 13449116-1

6301 NW 5th way, Suite#: 1410, Ft. Lauderdale, FL 33309 (866) 871-1984 Fax (954) 776-8485 www.emlab.com

Client: IEMES, PSC

Date of Sampling: 12-06-2021 C/O: Mr. Fernando Rodriguez Date of Receipt: 12-10-2021 Re: Manejo de Emergencias Salinas; Escuela Date of Report: 12-16-2021

Guillermo Godreau

## ASBESTOS PLM REPORT

**Location: MES-017, Cementitious Mastic/Glue** 

Sample Layers	Asbestos Content
Gray Cementitious Material	ND
Sample Composite Homogeneity:	Good

## Location: MES-018, Cementitious Mastic/Glue

Sample Layers	Asbestos Content
Gray Cementitious Material	ND
Sample Composite Homogeneity:	Good

### Location: MES-019, Board Mastic/Glue

Sample Layers	Asbestos Content
Yellow Mastic	ND
White Paint	ND
Sample Composite Homogeneity:	Good

### Location: MES-020, Window Caulk

Location: MES-020, Window Caulk	Lab ID-Version‡: 13449117-1
Sample Layers	Asbestos Content
White Caulk with Paint	ND
Sample Composite Homogeneity:	Good

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by any agency of the federal government. Eurofins EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

[ASBESTOS CONTAINING MATERIALS (ACM) INSPECTION SURVEY]	Former Guillermo Godreau Elementary School Calle Miguel, Salinas, PR

Appendix 5-3: FLRA Qualifications

# Asbestos Licenses relevant to this study 2021-2022



ASB-0321-0188-SI Número de Registro 14-Mar-2022

Fecha de vencimiento

TARJETA DE REGISTRO LA REMOCION PARA DE ASBESTO

Esta tarjeta autoriza a:

Fernando L. Rodríguez Ocasio

Inspector

A trabajar en la remoción de asbesto en Puerto Rico. Esta persona NO es un empleado del DRNA.

Firma Autorizada - Departamento Recursos Naturales y Ambientales



ASB-0921-0491-SI Número de Registro 14-Sep-2022

Fecha de vencimiento

TARJETA DE REGISTRO PARA LA REMOCION DE ASBESTO

Esta tarjeta autoriza a:

Hanna K. Rodríguez Morales

Inspectora

A trabajar en la remoción de asbesto en P.R. Esta persona NO es un empleado

Firma Autorizada - Departamento Recursos Naturales y Ambientales



ASB-0921-0489-SI Número de Registro

14-Sep-2022

Fecha de vencimiento

TARJETA DE REGISTRO LA REMOCION PARA DE ASBESTO

Esta tarjeta autoriza a:

Monserrat González Garro

Inspectora

A trabajar en la remoción de asbesto en Puerto Rico. Esta persona NO es un empleado del DRNA.

Firma Autorizada - Departamento Recursos Naturales y Ambientales

Attachment 8 – Lead Based Paint (LBP) Study



## **SERVICES**

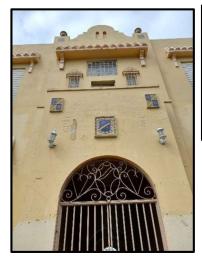
PREQB Accredited Asbestos Trainings
Environmental, Health, and Safety Trainings
Occupational Health and Safety Evaluations
General Environmental/Compliance Consulting
Waste Management Consulting
Indoor Air Quality Consulting
Water, Storm Water, and Wastewater Compliance

# ENVIRONMENTAL SITE ASSESSMENT REPORT

Lead-Based Paint Inspection Survey

Former Guillermo Godreau Elementary School Calle Miguel, Salinas, PR

December 2021







Project No.: 664-202112 C4432 LBP Survey Report Guillermo Godreau School v4

> Prepared for: Mr. Bernardo Marqués, AIA Marques + Marques Arquitectos

# CHES Services Corp. d/b/a Fernando L. Rodríguez, P.E. & Associates

P.O. Box 193430 | San Juan, P.R. 00919-3430 | Web: <u>www.flraches.com</u> Tel.: (787) 751-7810 | Fax (787) 751-8988 | Skype: flraches





P.O. Box 193430 | San Juan, P.R. 00919-3430 | Web: www.flraches.com

December 31, 2021

Mr. Bernardo Marques, AIA Marques + Marques Arquitectos 701 Ponce De León Ave., Suite 201 San Juan, PR

RE: Lead-Based Paint Inspection Survey

Former Guillermo Godreau Elementary School, Calle Miguel, Salinas PR

Dear Mr. Marques:

As per your request and agreed upon, personnel from our office, CHES Services Corporation, d/b/a Fernando L. Rodríguez, P.E. & Associates (FLRA), visited the subject site identified as Former Guillermo Godreau Elementary School, to conduct a Lead-Based Paint (LBP) inspection survey.

The inspection survey activities were conducted with the assistance of Mr. José Collazo representing the Salina's Municipal Emergency Response Office, who gave us access to the property. A brief explanation on the purpose of the visit and the scope of the sampling to be conducted by FLRA personnel was given prior initiating the inspection.

Based on the assessment activities performed and corresponding findings, conclusions and recommendations are presented at the end of this report for your perusal. Associated photos on identified Lead Based Paint (LBP) surfaces and/or components, as well as schematic diagrams of the surveyed property are included in the report for reference purposes.

We expect that this effort suffices requirements on this issue. Feel free to contact our office if there is any specific question on the contents of this report at your earliest convenience.

Respectfully,

Mr. Fernando L. Rodríguez, PE Consultant

Ref.: 664-202112 C4432 LBP Survey Report Guillermo Godreau School v4





P.O. Box 193430 | San Juan, P.R. 00919-3430 | Web: www.flraches.com

## 1. SUMMARY OF SURVEYED ACTIVITIES

On December 6, 2021, personnel from our office, FLRA, conducted an inspection survey with the aim of assessing site conditions and determine the presence of any additional Lead Based Paint (LBP) building materials in designated areas scheduled for a renovation project.

The following FLRA personnel accredited as LBP inspectors were present or assisted in the inspection survey efforts:

Mr. Fernando L. Rodríguez Project Manager

Lead Accredited Inspector: LBPI-28621-326

Miss Hanna K. Rodríguez Environmental Engineer

Lead Accredited Inspector: LBPI-14821-144

Miss Stephanie Hall Laureano Chemical Engineer Graduate

Lead Accredited Inspector: LBPI-34021-385

Miss Monserrat González Environmental Engineer Graduate

**Lead Competent Person** 

An XRF Lead Paint Analyzer (XRF), property of our office, was used to determine if surface paints and/or coatings are classified as LBP or if related building materials and/or surfaces existing in this facility contain LBP in concentrations above the established regulatory criteria.

## 1.1. Surveyed Property Description

The property subject to this *Lead-Based Paint Inspection Survey*, is located at the Calle Miguel, Salinas, PR and surrounded mostly by residential and commercial establishments. Refer to Figure 1 for an aerial location map of the subject property, which is composed by three structures herein described as one two-story main building and two annex buildings. As was made known, all structures were constructed in different years, and although aerial historical photos show all three structures in placed during 1994, exact construction dates are unknown. A preliminary review of publicly available information, the subject property, the Guillermo Godreau Elementary School, closed operations during 2016. Hence, at the moment of the visit, the school campus was vacant.



# CHES Services Corporation d/b/a Fernando L. Rodríguez, P.E. & Associates P.O. Box 193430 | San Juan, P.R. 00919-3430 | Web: www.flraches.com



Figure 1: Site Aerial Location Map



Figure 2: Property Description

Size of property	3,233.9251 m <sup>2</sup> (Puerto Rico Planning Board, 2021)
(approximate)	0,200.02 (. 00.00
<b>Buildings Description</b> Interior and exterior finishes were observed as they were made safely accessible.	1) Main Building:  A two-story building used for classrooms with several restrooms. The building is constructed in reinforced concrete on lateral walls, floor and roof. No additional information on construction date nor maintenance efforts or improvements are known.
	2) Annex Building:  A two-story building used for classrooms. The building is constructed in reinforced concrete on walls and roof. No additional information on construction date nor maintenance efforts or improvements are known.
	3) Lunchroom:  A one-story building used as a lunchroom with a single restroom. The building is constructed in reinforced concrete on lateral walls, floor and roof. No additional information on construction date nor maintenance efforts or improvements are known.
Additional Property Improvements	The property has parking lot with access from Miguel Street. The property border line is limited by concrete gate walls.





P.O. Box 193430 | San Juan, P.R. 00919-3430 | Web: www.flraches.com

### 2. LEAD-BASED PAINT (LBP) SURVEY FINDINGS

A Lead-Based Paint (LBP) is defined as a paint or other surface coating that contains more than one (1) milligram per centimeter square (mg/cm²) of lead or 5,000 parts per million (ppm) [(0.5 wt %)] of lead by dry weight. In addition, in 1978 the Consumer Product Safety Commission (CPSC) banned the residential use of paint that contained an amount greater than or equal to 600 ppm (0.06 wt %).

When inspecting suspected lead-based painted materials such as the ones herein sampled, the following clearance standards according to lead presence in different superficial areas must be accomplished (Figure 3):

Figure 3: Lead-Based Paint Clearance Standards

	Area	Concentration (μg/ft²)
Paint	Sampled Surface	1.0 mg/cm <sup>2</sup>

The common method employed for paint testing is with an X-Ray Fluorescent Lead Paint Analyzer (XRF). The XRF is designed to measure the lead content of surface coatings on a variety of building surfaces, substrates, and components. The measurement is rapid and nondestructive, and the instrument can detect lead concentrations within numerous layers of various surface coatings. Therefore, it is acceptable to take representative readings of lead content in paints with this unit.

This should result in readings of less than 1.0 mg/cm<sup>2</sup> to be considered as a "negative" result for lead presence. Any value over this limit is considered by the Puerto Rico Department of Natural and Environmental Resources (PRDNER) as an LBP material and may be subject to an abatement method. However, some painted surfaces may contain levels of lead below the established limit, which could create lead dust or lead-contaminated soil hazards if the paint is turned into dust by abrasion, scraping, or sanding.

The XRF Analyzer is used very often to inspect residences, commercial and industrial facilities due to its prompt reading output and precision. The LBP inspection survey was conducted at the property using an XRF unit described in Figure 4 coordinated by Mr. Fernando L. Rodríguez and performed by the previously mentioned personnel, as PRDNER Lead Accredited Risk Assessor and/or Inspectors. This Limited LBP Inspection Report should be maintained and updated as a permanent maintenance record for the subject property by the entity who occupies the same in the near future.





P.O. Box 193430 | San Juan, P.R. 00919-3430 | Web: www.flraches.com

**Figure 4: XRF Instrument Specifications** 

Instrument Manufacturer	Niton Thermo Scientific Portable XRF Analyzer
Model	•XLp300A
Serial Number	•19196
Modes of Operation	K&L Mode for Calibrations and Retesting     Standard Mode for Inspection
Radioactive Source	•Cadmium 109
Calibration Standard	•NIST Lead Paint Film (Red) Nominal 1.0 mg/cm <sup>2</sup>

A total number of 343 testing combinations were sampled within the subject building structures. Testing combinations included paints on concrete surfaces, metal, ceramic, among others. Lead content greater than the HUD standard (1.0 mg/cm²) was found on the painted surfaces described in Figure 5 below.

**Figure 5: Identified LBP Components** 

Component	Substrate	Color	Room Equivalent	Approximate Quantity <sup>1</sup>
Wall B	Concrete	Blue	Main Building 2 <sup>nd</sup> Floor Room 14	40 ft <sup>2</sup>
Wall C – Door	Wood	Beige	Main Building 2 <sup>nd</sup> Floor Room 16	1 Unit
Wall A – Door	Wood	Brown	Main Building 2 <sup>nd</sup> Floor B11	1 Unit
Wall A – Door Frame	Wood	Brown	Main Building 2 <sup>nd</sup> Floor B11	1 Unit
Wall D	Concrete	White	Main Building 2 <sup>nd</sup> Floor Room 10	40 ft <sup>2</sup>
Wall B	Concrete	Yellow	Main Building Exterior	576 ft <sup>2</sup>
Wall C	Concrete	Yellow	Main Building Exterior	1,128 ft <sup>2</sup>
Wall D	Concrete	Green	Main Building Exterior	120 ft <sup>2</sup>
Name of the state				1,904 ft <sup>2</sup>

Calibration checks for the XRF instrument must be performed immediately before, after and every four hours during the LBP survey to ensure the sample results were within the tolerance limits of the instrument's Performance Characteristics Sheet (PCS). This was performed utilizing Standard Reference Material (SRM) paint film (1.0 mg/cm²) approved or provided by National Institute of Standard. The instrument's calibration was verified according to the manufacturer's specifications in compliance with the PCS. Appendix 5-2 includes tabulated data that shows all instrument readings registered during the inspection survey exercise with their respective

<sup>&</sup>lt;sup>1</sup> Contractors completing proposals for LBP abatement are responsible for verifying or confirming the location, quantity, degree of damage and need for mitigating the identified materials.





P.O. Box 193430 | San Juan, P.R. 00919-3430 | Web: www.flraches.com

descriptions, such as component, substrate, location, and color. In compliance with required procedures and PCS specifications, a Quality Assurance protocol was performed, evidence also included in Appendix 5-2.

#### 2.1. Exclusions

To this survey inaccessible areas are building areas, systems, structural components, or surfaces which could not be observed because it was unsafe or impractical to demolish, disassemble, or remove systems or covering. Areas that were inaccessible during the survey efforts are listed in Figure 6.

Figure 6: Inaccessible Areas and/or Materials

Location	Explanation
Room #4	Room was being used to stored sensitive equipment/materials. FLRA was not granted access.
Room #13	Posed a biological risk: unsafe conditions due to the uncontrolled presence of pigeons and other birds.

No inspection efforts were conducted by FLRA to determine the presence of LBP in these two inaccessible areas. If any suspected surface and/or component should be found painted or coated in these areas should be considered LBP until sampled by an accredited inspector prior to impact by renovation or demolition.

#### 3. INTERPRETATION OF RESULTS

During December 6, 2021, FLRA performed a *Lead-Based Paint Inspection Survey* at designated areas of the Former Guillermo Godreau Elementary School to evaluate the presence of LBP. Lead concentration greater than 1.0 mg/cm<sup>2</sup> was detected on surfaces as listed or summarized in Figure 5. If any identified LBP materials were to be removed and/or disturbed at any moment, they must be managed according to the appropriate standards.

Regarding the Main Building Exterior surfaces identified as LBP, the current inspection survey efforts only detected LBP on walls B, C and D as marked in the schematic diagram included in the Appendix section. As observed, a green paint underneath the current yellow surface paint covered. It should be considered that these walls be encapsulated as an acceptable corrective action at an approximately height of eight feet from ground level. However, all remaining exterior paints in this building and the others were found in good condition.

Based o the inspection efforts, FLRA suggests that the material identified as positive to Lead must be managed according to the appropriate local and federal environmental standards established to mitigate LBP surfaces. Concurrently, all Lead concentration detected must be handled in accordance with OSHA Standards 29 CFR 1926.62





P.O. Box 193430 | San Juan, P.R. 00919-3430 | Web: www.flraches.com

Furthermore, FLRA also informs that if there any suspected lead-containing material is identified within the subject areas that were not included in this survey; these should be sampled by an accredited inspector in order to determine if they do contain any of the tested contaminants.

Best Management Practices (BMP's) must be followed whenever handling and disposing of any construction debris, or non-hazardous solid waste from the subject facility areas during any remodeling or demolition phase, as well as handling discarded materials and equipment that can be stored or exposed to or impacted by rainwater in different areas through the subject property during this activity.

The results, findings, and conclusions expressed in this report are based on conditions that were noted on Figure 5 during FLRA's assessment of this project. Any conditions or materials that could not be visually identified (i.e., inaccessible areas) or were out of the scope of work at hand, were not inspected and may differ from those conditions or materials noted. It was not within the scope of the inspection to remove surface installed materials to investigate portions of the structure or materials that may lay beneath or above the existing building surfaces. FLRA's random selection of sample locations and frequency of sampling or readings was based on FLRA's observations and the assumption that like materials in the same area are homogeneous.

The report is designed to assist the building owner, architect, construction manager, general contractors, and potential lead abatement contractors in locating LBP. Under no circumstances is the report to be utilized as a solely bidding document or as a project specification document given that abatement bidders are responsible for visiting and define the scope of the project.

### 4. Signature of Environmental Assessor

Representatives of *Fernando L. Rodríguez, P.E. & Associates (FLRA)* have performed a *Lead-Based Paint Inspection Survey* to determine the presence of Lead-Based Paint in designated areas of the Former Guillermo Godreau Elementary School, located at Calle Miguel, Salinas, PR. This study was performed as per the request of Mr. Bernardo Marqués, AIA.

	December 27, 2021
Environmental Professional's Signature	Date
Fernando L. Rodríguez	
Project Manager	

5. Appendix









CHES Services Corp. d/b/a Fernando L. Rodríguez, PE & Associates Chemical/Environmental Engineering & Industrial Hygiene Services

### **Drawing Not to Scale**

By: Stephanie Hall (Sep./3/2021)

### Description

Phase II ESA: LBP Survey
Client: Arq. Marqués
Facility: Escuela Guillermo Godreau
Manaiou

### **Drawing ID**

File: 664-202112 Diagrama LBP
- Escuela Guillermo Godreau
v2.vsdx
Drawing: Location Map

### **Details**



# **Main Building- 1st Floor**

Legend

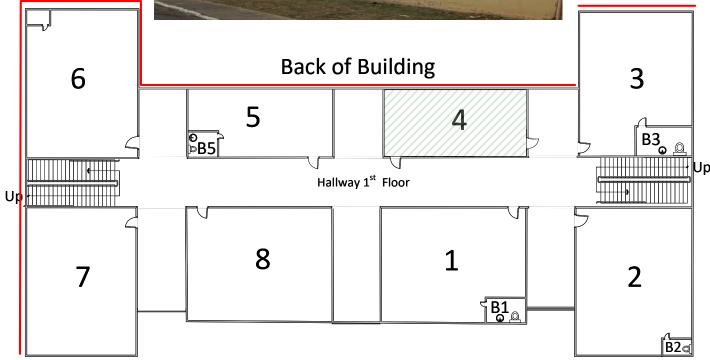


No access to Area



Identified LBP Surfaces/ Components







# Front of Building

CHES Services Corp. d/b/a Fernando L. Rodríguez, PE & Associates Chemical/Environmental Engineering & Industrial Hygiene Services

### **Drawing Not to Scale**

Drafted by: Stephanie Hall (12/03/2021)

### Description

### Phase II ESA: LBP Survey

Client: Marqués + Marques Arquitectos Facility: Guillermo Godreau Elementary School

### **Details**

File: 664-202112 Diagrama LBP - Escuela Guillermo Godreau v2.vsdx Drawing: Main Building- 1st Floor

#### Location



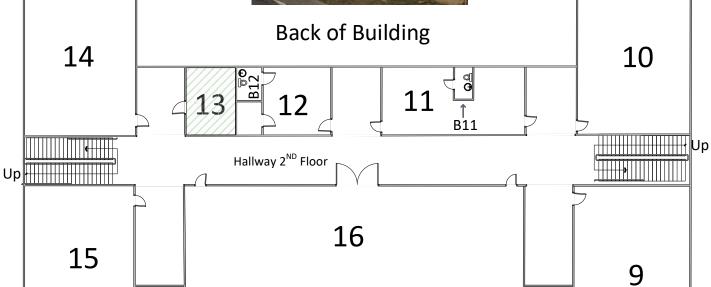
# **Main Building- 2nd Floor**

Legend



No access to Area





Front of Building

Exterior R16



CHES Services Corp. d/b/a Fernando L. Rodríguez, PE & Associates Chemical/Environmental Engineering & Industrial Hygiene Services

### **Drawing Not to Scale**

Drafted by: Stephanie Hall (12/03/2021)

### Description

### Phase II ESA: LBP Survey

Client: Marqués + Marques Arquitectos Facility: Guillermo Godreau Elementary School

#### **Details**

File: 664-202112 Diagrama LBP - Escuela Guillermo Godreau v2.vsdx Drawing: Main Building- 2nd Floor

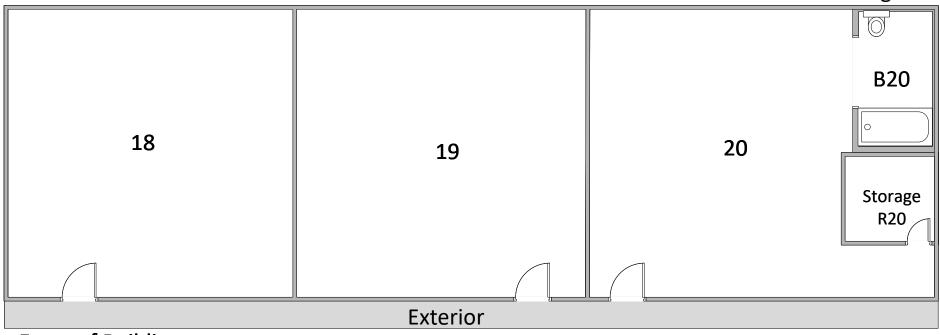
### Location



# **Annex Building -1st Floor**



# Back of Building



Front of Building



CHES Services Corp. d/b/a Fernando L. Rodríguez, PE & Associates Chemical/Environmental Engineering & Industrial Hygiene Services

### **Drawing Not to Scale**

Drafted by: Stephanie Hall (12/03/2021)

### Description

### Phase II ESA: LBP Survey

Client: Marqués + Marques Arquitectos Facility: Guillermo Godreau Elementary School

### **Drawing ID**

File: 664-202112 Diagrama LBP -Escuela Guillermo Godreau v2.vsdx Drawing:Annex Building -1st Floor

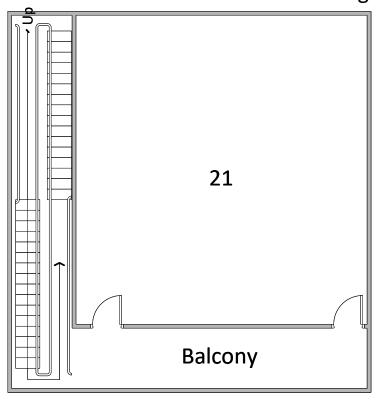
### **Details**



# **Annex Building- 2nd Floor**

## **Back of Building**





Front of Building



CHES Services Corp. d/b/a Fernando L. Rodríguez, PE & Associates Chemical/Environmental Engineering & Industrial Hygiene Services

### **Drawing Not to Scale**

Drafted by: Stephanie Hall (12/03/2021)

### **Description**

#### **Phase II ESA: LBP Survey**

Client: Marqués + Marques Arquitectos Facility: Guillermo Godreau Elementary School

### **Drawing ID**

File: 664-202112 Diagrama LBP Escuela Guillermo Godreau
v2.vsdx
Drawing:
Annex Building- 2nd Floor

### **Details**



# Lunchroom





Cutility Structure #2

Utility Structure #1

Back of Building

Lunchroom interior

Bathroom

ER

Exterior

# Front of Building

CHES Services Corp. d/b/a Fernando L. Rodríguez, PE & Associates Chemical/Environmental Engineering & Industrial Hygiene Services

### **Drawing Not to Scale**

Drafted by: Stephanie Hall (12/03/2021)

### Description

#### Phase II ESA: LBP Survey

Client: Marqués + Marques Arquitectos Facility: Guillermo Godreau Elementary School

### Drawing ID

File: 664-202112 Diagrama LBP Escuela Guillermo Godreau v2.vsdx Drawing: Lunchroom

### **Details**



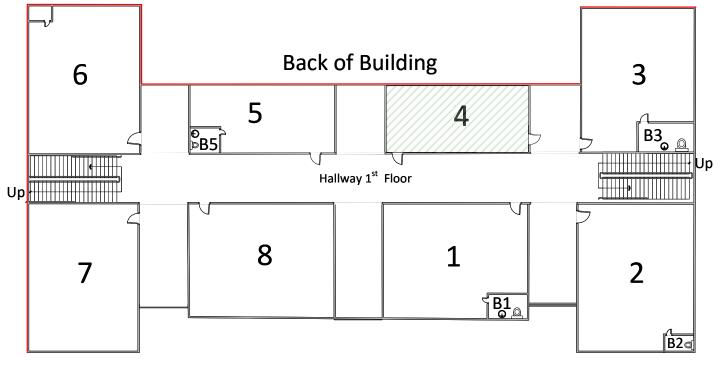
# **LBP Surfaces - Main Building 1st Floor**

Legend No access to Area Identified LBP Surfaces/ Components



### **Notes:**

1. The section of the 8 ft from the ground of the exterior walls were identified as LBP surfaces.





# Front of Building

CHES Services Corp. d/b/a Fernando L. Rodríguez, PE & Associates Chemical/Environmental Engineering & Industrial Hygiene Services

### **Drawing Not to Scale**

Drafted by: Stephanie Hall (12/03/2021)

### **Description**

#### **Phase II ESA: LBP Survey**

Client: Marqués + Marques Arquitectos Facility: Guillermo Godreau Elementary School

#### **Details**

File: 664-202112 Diagrama LBP - Escuela Guillermo Godreau v2.vsdx

**Drawing:** LBP Surfaces - Main **Building 1st Floor** 

#### Location



# **LBP Surfaces - Main Building 2nd Floor**

Legend



Inaccessible Areas

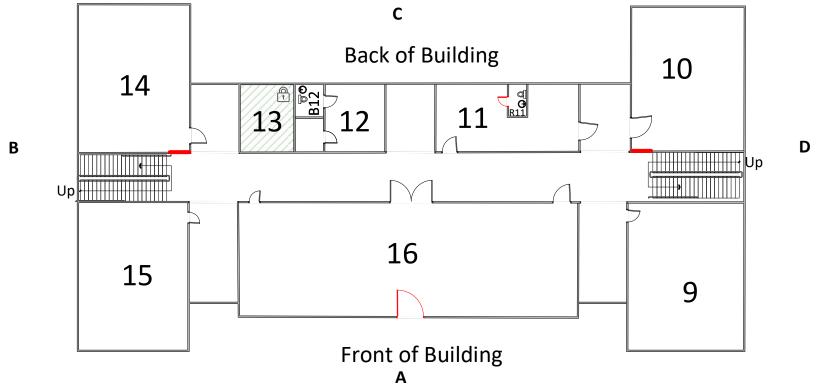


Identified LBP Surfaces/ Components



#### Notes:

- 1. A portion of Wall B of Room #14 was identified as an LBP surface.
- 2. A portion of Wall D of Room #10 was identified as an LBP surface.
- 3. The wooden door in the bathroom B11 was identified as an LBP surface.
- 4. The wooden door in Room #16 was identified as an LBP surface.
- 5. Within the structure Wall Side identification was assigned clockwise as A, B, C and D starting at the entrance of the room.



CHES Services Corp. d/b/a Fernando L. Rodríguez, PE & Associates Chemical/Environmental Engineering & Industrial Hygiene Services

### **Drawing Not to Scale**

Drafted by: Stephanie Hall (12/03/2021)

### **Description**

-----Calle Miguel-----

#### Phase II ESA: LBP Survey

Client: Marqués + Marques Arquitectos Facility: Guillermo Godreau Elementary School

#### **Details**

File: 664-202112 Diagrama LBP - Escuela Guillermo Godreau v2.vsdx Drawing: LBP Surfaces - Main Building 2nd Floor

### Location

# Lead-Based Paint (LBP) Manejo de Emergencia (Escuela Guillermo Godreau)

### **Surveyed Areas**

**Identified Lead-Based Paint Surfaces** 









CHES Services Corp. d/b/a
Fernando L. Rodríguez, P.E. & Associates

**Site Reconnaissance Photographs** *LBP Inspection Survey* 



Page 1 December 2021

Cliente: Arg. Bernardo A Marqués

Appendix 5-2: XRF Lead Readings



Chemical -Environmental Engineering and Industrial Hygiene Consultants
P.O. Box 193430 - San Juan, P.R. 00919-3430 | Tel. (787)751-7810 - Fax (787)751-8988
Information about our new company, a subsidiary, IEMES, PSC: www.iemespsc.com

Project:	Former Guillermo Godreau Elementary School	Date: December 6, 2021	XRF Serial No.: XLP19196
		Fernando L. Rodríguez (LBP-28621-326)	

Dooding	Cito	Site Substrate Component	Color	Floor	Room	Dogulto	Pb	
Reading	Site	Substrate	Component	COIOI	Floor	KOOIII	Results	[mg/cm <sup>2</sup> ]
16			Shutter Calibration					-
17			on Check - Using Standard SRM 2573 (1.04 $\pm$ 0	, ,			Positive	1
18		Initial Calibration	on Check - Using Standard SRM 2573 (1.04 $\pm$ 0	1.06 mg/cm <sup>2</sup> )			Positive	1.1
19		Initial Calibration	on Check - Using Standard SRM 2573 (1.04 ± 0				Positive	1.1
20	Annex Building	Concrete	Wall A	White	2	Room #21	Negative	0
21	Annex Building	Metal	Wall A - Door #1	Beige	2	Room #21	Negative	0
22	Annex Building	Metal	Wall A - Door #1 Frame	Beige	2	Room #21	Null	0.02
23	Annex Building	Metal	Wall A - Door #1 Frame	Beige	2	Room #21	Negative	0.01
24	Annex Building	Concrete	Wall B	White	2	Room #21	Negative	0
25	Annex Building	Concrete	Wall C	Yellow	2	Room #21	Negative	0
26	Annex Building	Concrete	Wall D	White	2	Room #21	Negative	0
27	Annex Building	Metal	Wall A - Door #2	Beige	2	Room #21	Negative	0
28	Annex Building	Metal	Wall A - Door #2 Frame	Beige	2	Room #21	Negative	0.01
29	Annex Building	Concrete	Wall A	Yellow	2	Balcony	Negative	0
30	Annex Building	Concrete	Wall A	Rose	2	Balcony	Negative	0
31	Annex Building	Concrete	Wall B	Yellow	2	Balcony	Negative	0
32	Annex Building	Concrete	Wall C	Rose	2	Balcony	Negative	0
33	Annex Building	Metal	Wall C - Handrail	Beige	2	Balcony	Negative	0.19
34	Annex Building	Concrete	Wall D	Rose	2	Balcony	Negative	0
35	Annex Building	Metal	Wall D - Handrail	Beige	2	Balcony	Negative	-0.25
36	Annex Building	Concrete	Wall A	Beige	2	Stairs	Negative	0
37	Annex Building	Concrete	Wall B	Yellow	2	Stairs	Negative	0
38	Annex Building	Metal	Wall B - Handrail	Yellow	2	Stairs	Negative	0.02
39	Annex Building	Concrete	Wall C	Rose	2	Stairs	Negative	0
40	Annex Building	Concrete	Wall C	Rose	2	Stairs	Negative	0
41	Annex Building	Concrete	Wall D	Yellow	2	Stairs	Null	0
42	Annex Building	Concrete	Wall D	Yellow	2	Stairs	Negative	0
43	Annex Building	Concrete	Wall A	Yellow	1	Exterior	Null	0
44	Annex Building	Concrete	Wall A	Rose	1	Exterior	Negative	0
45	Annex Building	Concrete	Ceiling	White	1	Exterior	Negative	0
46	Annex Building	Concrete	Wall B	Yellow	1	Exterior	Null	0
47	Annex Building	Concrete	Wall B	Yellow	1	Exterior	Negative	0
48	Annex Building	Concrete	Wall B	Rose	1	Exterior	Negative	0
49	Annex Building	Concrete	Wall C	Yellow	1	Exterior	Negative	0
50	Annex Building	Concrete	Wall C	Rose	1	Exterior	Negative	0
51	Annex Building	Metal	Wall C - Window Bars	Beige	1	Exterior	Negative	0
52	Annex Building	Concrete	Wall D	Yellow	1	Exterior	Negative	0
53	Annex Building	Concrete	Wall D	Rose	1	Exterior	Negative	0
54	Annex Building	Concrete	Wall A	Yellow	1	Room #20	Negative	0



Chemical -Environmental Engineering and Industrial Hygiene Consultants
P.O. Box 193430 - San Juan, P.R. 00919-3430 | Tel. (787)751-7810 - Fax (787)751-8988
Information about our new company, a subsidiary, IEMES, PSC: www.iemespsc.com

Project: Former Guillermo Godreau Elementary School Date: December 6, 2021 XRF Serial No.: XLP19196	Project:	Former Guillermo Godreau Elementary School	Date: December 6, 2021	XRF Serial No.: XLP19196
---	----------	--	------------------------	--------------------------

Fernando L. Rodríguez (LBP-28621-326)

Reading	Site	Substrate	Component	Color	Floor	Room	Results	Pb
	Site	Sabstrate	component	60101	11001	ROOM	resures	[mg/cm <sup>2</sup> ]
55	Annex Building	Concrete	Wall A	Beige	1	Room #20	Negative	0
56	Annex Building	Concrete	Wall B	Blue	1	Room #20	Negative	0
57	Annex Building	Concrete	Wall C	Yellow	1	Exterior	Negative	0
58	Annex Building	Concrete	Wall C	Beige	1	Room #20	Negative	0
59	Annex Building	Metal	Wall C - Gate	White	1	Room #20	Negative	0
60	Annex Building	Concrete	Wall D	Blue	1	Room #20	Negative	0
61	Annex Building	Concrete	Wall D	Beige	1	Room #20	Negative	0
62	Annex Building	Ceramic	Wall D	White	1	Room #20	Negative	0
63	Annex Building	Porcelain	Wall D - Sink	White	1	Room #20	Negative	0.01
64	Annex Building	Concrete	Wall A	White	1	B20	Negative	0
65	Annex Building	Ceramic	Wall A	White	1	B20	Negative	0
66	Annex Building	Concrete	Wall B	White	1	B20	Negative	0
67	Annex Building	Ceramic	Wall B	White	1	B20	Negative	0
68	Annex Building	Porcelain	Wall B - Toilet	White	1	B20	Negative	0.02
69	Annex Building	Wood	Wall C - Door Frame	White	1	B20	Negative	0
70	Annex Building	Concrete	Wall C	White	1	B20	Negative	0
71	Annex Building	Ceramic	Wall C	White	1	B20	Negative	0
72	Annex Building	Concrete	Wall D	White	1	B20	Negative	0
73	Annex Building	Ceramic	Wall D	White	1	B20	Negative	0
74	Annex Building	Ceramic	Floor Tile	Green	1	B20	Negative	0
75	Annex Building	Ceramic	Floor Tile	White	1	B20	Negative	0.07
76	Annex Building	Concrete	Wall A	White	1	Storage R20	Negative	0
77	Annex Building	Concrete	Wall B	White	1	Storage R20	Negative	0
78	Annex Building	Concrete	Wall C	White	1	Storage R20	Negative	0
79	Annex Building	Plastic	Wall C - Sink	Beige	1	Storage R20	Negative	0
80	Annex Building	Concrete	Wall D	Beige	1	Storage R20	Negative	0
81	Annex Building	Wood	Wall A - Door	Brown	1	Storage R20	Negative	0
82	Annex Building	Wood	Wall A - Door Frame	Brown	1	Storage R20	Negative	0
83	Annex Building	Concrete	Wall A	White	1	Room #19	Negative	0
84	Annex Building	Metal	Wall - Door	Beige	1	Room #19	Negative	0.07
85	Annex Building	Metal	Wall A - Door Frame	Green	1	Room #19	Negative	0
86	Annex Building	Metal	Wall A - Gate	White	1	Room #19	Null	0.01
87	Annex Building	Metal	Wall A - Gate	White	1	Room #19	Negative	0
88	Annex Building	Concrete	Wall B	White	1	Room #19	Negative	0
89	Annex Building	Concrete	Wall C	White	1	Room #19	Negative	0
90	Annex Building	Metal	Wall C - Window Bars	White	1	Room #19	Negative	0
91	Annex Building	Concrete	Wall D	White	1	Room #19	Negative	0
92	Annex Building	Metal	Wall A - Door	Beige	1	Room #18	Negative	0.02
93	Annex Building	Metal	Wall A - Door Frame	Beige	1	Room #18	Negative	0



Chemical -Environmental Engineering and Industrial Hygiene Consultants
P.O. Box 193430 - San Juan, P.R. 00919-3430 | Tel. (787)751-7810 - Fax (787)751-8988
Information about our new company, a subsidiary, IEMES, PSC: www.iemespsc.com

Project:	Former Guillermo Godreau Elementary School	Date: December 6, 2021	XRF Serial No.: XLP19196		
		Farranda I. Badríana (IRB 20021 220)			

Fernando L. Rodríguez (LBP-28621-326)

94   Annex Building	Reading	Site	Substrate Component	Color	Floor	Room	Results	Pb	
95   Annex Building   Concete   Wall D   White   1   Room #18   Negative   0	Reading	Site	Substrate	Component	Coloi	11001	Koom	Nesuits	[mg/cm <sup>2</sup> ]
96   Annex Buildring   Concrete   Wall D   White   1   Room #18   Negative   0   98   Annex Buildring   Concrete   Wall G   White   1   Room #18   Negative   0   99   Annex Buildring - Retesting   Concrete   Wall G   White   2   Room #19   Negative   0   100   Annex Buildring - Retesting   Metal   Wall A   Door Frame   Beige   2   Room #12   Negative   0   101   Annex Buildring - Retesting   Metal   Wall A   Door Frame   Beige   2   Room #12   Negative   0   102   Annex Buildring - Retesting   Metal   Wall A   Door Frame   Beige   2   Boom #12   Negative   0   103   Annex Buildring - Retesting   Metal   Wall B   Handral   Yellow   2   Stairs   Negative   0   104   Annex Buildring - Retesting   Metal   Wall B   Handral   Yellow   2   Stairs   Negative   0   105   Annex Buildring - Retesting   Concrete   Wall C   Yellow   2   Stairs   Negative   0   106   Annex Buildring - Retesting   Concrete   Celling   White   1   Room #18   Negative   0   107   Annex Buildring - Retesting   Ceramic   Wall D   White   1   Room #18   Negative   0   108   Annex Buildring - Retesting   Ceramic   Wall D   White   1   Room #18   Negative   0   109   Annex Buildring - Retesting   Concrete   Wall C   Wall D   White   1   Room #18   Negative   0   109   Annex Buildring - Retesting   Concrete   Wall D   White   1   Room #18   Negative   0   110   Annex Buildring - Retesting   Concrete   Wall D   White   1   Room #18   Negative   0   111   111   Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)   Positive   1.1   112   Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)   Positive   1.1   113   Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)   ER R   Negative   0   114   Uunchroom Buildring   Concrete   Wall D   Green   1   ER   Negative   0   115   Uunchroom Buildring   Concrete   Wall D   Green   1   ER   Negative   0   116   Uunchroom Buildring   Metal   Wall A   Door Fame   Beige   1   ER   Negative   0   117   Uunchroom Buildring   Metal   Wall A   Door Fame	94	Annex Building	Metal		White	1	Room #18	Negative	0
97   Annex Building   Concrete   Wall C   White   1   Room #18   Negative   0	95	_	Concrete	Wall A	White	1	Room #18	Negative	0
98   Annex Building	96	Annex Building	Concrete		White	1	Room #18	Negative	0
999   Annex Building - Retesting	97	Annex Building	Concrete	Wall C	White	1	Room #18	Negative	0
100   Annex Building - Retesting   Concrete   Wall D   White   2   Room #21   Negative   0	98	Annex Building	Concrete	Wall B	White		Room #19	Negative	0
101   Annex Building - Retesting   Metal   Wall A   Opor Frame   Beige   2   Balcony   Negative   0	99	Annex Building - Retesting	Concrete	Wall A	White	2	Room #21	Negative	0
102	100	Annex Building - Retesting	Metal	Wall A - Door Frame	Beige	2	Room #21	Negative	0.03
103   Annex Building - Retesting	101	Annex Building - Retesting	Concrete	Wall D	White	2	Room #21	Negative	0
104   Annex Building - Retesting   Concrete   Wall C   Yellow   2   Stairs   Negative   0	102	Annex Building - Retesting	Metal	Wall A - Door Frame	Beige	2	Balcony	Negative	0
105   Annex Building - Retesting   Concrete   Ceiling   White   1   Exterior   Negative   0	103	Annex Building - Retesting	Metal	Wall B - Handrail	Yellow	2	Stairs	Negative	-0.09
Annex Building - Retesting   Ceramic   Wall D   White   1   Room #20   Negative   0	104	Annex Building - Retesting	Concrete	Wall C	Yellow	2	Stairs	Negative	0
107   Annex Building - Retesting   Wood   Wall A - Door   Brown   1   Storage R20   Negative   0	105	Annex Building - Retesting	Concrete	Ceiling	White	1	Exterior	Negative	0
Annex Building - Retesting   Concrete   Wall D   White   1   Room #18   Negative   0	106	Annex Building - Retesting	Ceramic	Wall D	White	1	Room #20	Negative	0
Final Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)	107	Annex Building - Retesting	Wood	Wall A - Door	Brown	1	Storage R20	Negative	0
Final Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)   Positive   1.1	108	Annex Building - Retesting	Concrete	Wall D	White	1	Room #18	Negative	0
Final Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Shutter Calibration  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration  Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration  Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration  Initial Calibration Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration  Initial Calibration Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration  Initial Calibration  Initial Calibration  Initial Calibration  Initial Calibration  Initial Calibration Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration  Initial Calibration Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration  Initial Calibration Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration  Initial Calibration Standard SRM 2573 (1.04 ± 0.06	109		Final Calibration	n Check - Using Standard SRM 2573 (1.04 $\pm$ 0.	.06 mg/cm2)			Positive	1.1
Shutter Calibration  Shutter Calibration  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  Initia	110		Final Calibration	n Check - Using Standard SRM 2573 (1.04 ± 0.	.06 mg/cm2)			Positive	1.1
Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)   Positive   1.1	111		Final Calibration	n Check - Using Standard SRM 2573 (1.04 $\pm$ 0.	.06 mg/cm2)			Positive	1.1
Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)   Positive   1.1	112			Shutter Calibration					
Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)  116 Lunchroom Building Concrete Wall C Dark Gray 1 ER Negative 0  117 Lunchroom Building Concrete Wall B Gray 1 ER Negative 0  118 Lunchroom Building Concrete Wall A Dark Gray 1 ER Negative 0.02  119 Lunchroom Building Concrete Wall A Dark Gray 1 ER Negative 0.02  119 Lunchroom Building Concrete Wall A Green 1 ER Negative 0.01  120 Lunchroom Building Metal Wall A - Door Frame Beige 1 ER Negative 0  121 Lunchroom Building Metal Wall A - Door Beige 1 ER Negative 0  122 Lunchroom Building Concrete Wall B Green 1 Exterior Negative 0  123 Lunchroom Building Concrete Wall C Green 1 Exterior Negative 0  124 Lunchroom Building Concrete Wall D Green 1 Exterior Negative 0  125 Lunchroom Building Metal Wall A - Door Frame Beige 1 Exterior Negative 0  126 Lunchroom Building Metal Wall C Rose 1 Exterior Negative 0  127 Lunchroom Building Metal Wall A - Door Frame Beige 1 Interior Negative 0  128 Lunchroom Building Metal Wall A - Door Beige 1 Interior Negative 0  129 Lunchroom Building Concrete Wall Wall A - Door Frame Beige 1 Interior Negative 0  128 Lunchroom Building Metal Wall A - Door Beige 1 Interior Negative 0  129 Lunchroom Building Concrete Wall Wall A - Door Beige 1 Interior Negative 0  129 Lunchroom Building Concrete Wall Wall A - Door Beige 1 Interior Negative 0  130 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0  131 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0  131 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0	113		Initial Calibratio	n Check - Using Standard SRM 2573 (1.04 ± 0	).06 mg/cm <sup>2</sup> )			Positive	1.1
116 Lunchroom Building Concrete Wall C Dark Gray 1 ER Negative 0 117 Lunchroom Building Concrete Wall B Gray 1 ER Negative 0 118 Lunchroom Building Concrete Wall A Dark Gray 1 ER Negative 0 119 Lunchroom Building Concrete Wall A Green 1 ER Negative 0 120 Lunchroom Building Metal Wall A - Door Frame Beige 1 ER Negative 0 121 Lunchroom Building Metal Wall A - Door Beige 1 ER Negative 0 122 Lunchroom Building Metal Wall A - Door Green 1 Exterior Negative 0 123 Lunchroom Building Concrete Wall B Green 1 Exterior Negative 0 124 Lunchroom Building Concrete Wall C Green 1 Exterior Negative 0 125 Lunchroom Building Concrete Wall D Green 1 Exterior Negative 0 126 Lunchroom Building Metal Wall A - Door Frame Beige 1 Exterior Negative 0 127 Lunchroom Building Metal Wall A - Door Frame Beige 1 Interior Negative 0 128 Lunchroom Building Metal Wall A - Door Frame Beige 1 Interior Negative 0 128 Lunchroom Building Metal Wall A - Door Beige 1 Interior Negative 0 129 Lunchroom Building Concrete Wall D Yellow 1 Interior Negative 0 130 Lunchroom Building Concrete Wall C Grape 1 Interior Negative 0 131 Lunchroom Building Concrete Wall C Grape 1 Interior Negative 0 131 Lunchroom Building Concrete Wall C Grape 1 Interior Negative 0 131 Lunchroom Building Concrete Wall C Grape 1 Interior Negative 0 131 Lunchroom Building Concrete Wall C Grape 1 Interior Negative 0 131 Lunchroom Building Metal Wall C Grape 1 Interior Negative 0 131 Lunchroom Building Concrete Wall C Grape 1 Interior Negative 0	114		Initial Calibratio	n Check - Using Standard SRM 2573 (1.04 ± 0	).06 mg/cm <sup>2</sup> )			Positive	1.1
117 Lunchroom Building Concrete Wall B Gray 1 ER Negative 0 118 Lunchroom Building Concrete Wall A Dark Gray 1 ER Negative 0.02 119 Lunchroom Building Concrete Wall A Green 1 ER Null 0 120 Lunchroom Building Metal Wall A - Door Frame Beige 1 ER Negative 0 121 Lunchroom Building Metal Wall A - Door Frame Beige 1 ER Negative 0 122 Lunchroom Building Concrete Wall B Green 1 Exterior Negative 0 123 Lunchroom Building Concrete Wall B Green 1 Exterior Negative 0 124 Lunchroom Building Concrete Wall C Green 1 Exterior Negative 0 125 Lunchroom Building Concrete Wall D Green 1 Exterior Negative 0 126 Lunchroom Building Metal Wall A - Door Frame Beige 1 Exterior Negative 0 127 Lunchroom Building Metal Wall A - Door Frame Beige 1 Interior Negative 0 128 Lunchroom Building Metal Wall A - Door Frame Beige 1 Interior Negative 0 128 Lunchroom Building Metal Wall A - Door Beige 1 Interior Negative 0 129 Lunchroom Building Concrete Wall D Yellow 1 Interior Negative 0 130 Lunchroom Building Concrete Wall D Yellow 1 Interior Negative 0 131 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0 131 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0 131 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0	115		Initial Calibratio	n Check - Using Standard SRM 2573 (1.04 ± 0	0.06 mg/cm <sup>2</sup> )			Positive	1.1
118 Lunchroom Building Concrete Wall A Dark Gray 1 ER Negative 0.02 119 Lunchroom Building Concrete Wall A Green 1 ER Null 0 120 Lunchroom Building Metal Wall A - Door Frame Beige 1 ER Negative 0 121 Lunchroom Building Metal Wall A - Door Beige 1 ER Negative 0 122 Lunchroom Building Concrete Wall B Green 1 Exterior Negative 0 123 Lunchroom Building Concrete Wall B Green 1 Exterior Negative 0 124 Lunchroom Building Concrete Wall C Green 1 Exterior Negative 0 125 Lunchroom Building Concrete Wall D Green 1 Exterior Negative 0 126 Lunchroom Building Metal Wall A - Door Frame Beige 1 Exterior Negative 0 127 Lunchroom Building Metal Wall A - Door Frame Beige 1 Interior Negative 0 128 Lunchroom Building Metal Wall A - Door Beige 1 Interior Negative 0 129 Lunchroom Building Concrete Wall D Yellow 1 Interior Negative 0 130 Lunchroom Building Concrete Wall D Yellow 1 Interior Negative 0 131 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0 131 Lunchroom Building Metal Wall C Orange 1 Interior Negative 0 131 Lunchroom Building Metal Wall C Wall C Orange 1 Interior Negative 0 131 Lunchroom Building Metal Wall C Wall C Orange 1 Interior Negative 0	116	Lunchroom Building	Concrete	Wall C	Dark Gray	1	ER	Negative	0
119 Lunchroom Building Concrete Wall A Green 1 ER Null 0 120 Lunchroom Building Metal Wall A - Door Frame Beige 1 ER Negative 0 121 Lunchroom Building Metal Wall A - Door Beige 1 ER Negative 0 122 Lunchroom Building Concrete Wall B Green 1 Exterior Negative 0 123 Lunchroom Building Concrete Wall C Green 1 Exterior Negative 0 124 Lunchroom Building Concrete Wall D Green 1 Exterior Negative 0 125 Lunchroom Building Metal Wall C Rose 1 Exterior Negative 0 126 Lunchroom Building Metal Wall C Rose 1 Exterior Negative 0 127 Lunchroom Building Metal Wall A - Door Frame Beige 1 Interior Negative 0 128 Lunchroom Building Metal Wall A - Door Frame Beige 1 Interior Negative 0 129 Lunchroom Building Concrete Wall D Yellow 1 Interior Negative 0 130 Lunchroom Building Concrete Wall D Yellow 1 Interior Negative 0 131 Lunchroom Building Concrete Wall D Yellow 1 Interior Negative 0 131 Lunchroom Building Metal Wall C Orange 1 Interior Negative 0 131 Lunchroom Building Metal Wall C Wall C Orange 1 Interior Negative 0 131 Lunchroom Building Metal Wall C Wall C Orange 1 Interior Negative 0 131 Lunchroom Building Metal Wall C Wall C Orange 1 Interior Negative 0	117	Lunchroom Building	Concrete	Wall B	Gray	1	ER	Negative	0
Lunchroom Building Metal Wall A - Door Frame Beige 1 ER Negative 0  Lunchroom Building Metal Wall A - Door Beige 1 ER Negative 0  Lunchroom Building Concrete Wall B Green 1 Exterior Negative 0  Lunchroom Building Concrete Wall C Green 1 Exterior Negative 0  Lunchroom Building Concrete Wall D Green 1 Exterior Negative 0  Lunchroom Building Concrete Wall D Green 1 Exterior Negative 0  Lunchroom Building Metal Wall C Rose 1 Exterior Negative 0  Lunchroom Building Metal Wall A - Door Frame Beige 1 Interior Negative 0  Lunchroom Building Metal Wall A - Door Frame Beige 1 Interior Negative 0  Lunchroom Building Metal Wall A - Door Beige 1 Interior Negative 0  Lunchroom Building Concrete Wall A Yellow 1 Interior Negative 0  Lunchroom Building Concrete Wall A Yellow 1 Interior Negative 0  Lunchroom Building Concrete Wall D Yellow 1 Interior Negative 0  Lunchroom Building Concrete Wall D Yellow 1 Interior Negative 0  Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0  Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0  Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0  Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0	118	Lunchroom Building	Concrete	Wall A	Dark Gray	1	ER	Negative	0.02
Lunchroom Building Metal Wall A - Door Beige 1 ER Negative 0 Lunchroom Building Concrete Wall B Green 1 Exterior Negative 0 Lunchroom Building Concrete Wall C Green 1 Exterior Negative 0 Lunchroom Building Concrete Wall D Green 1 Exterior Negative 0 Lunchroom Building Concrete Wall D Green 1 Exterior Negative 0 Lunchroom Building Metal Wall C Rose 1 Exterior Negative 0 Lunchroom Building Metal Wall A - Door Frame Beige 1 Interior Negative 0 Lunchroom Building Metal Wall A - Door Beige 1 Interior Negative 0 Lunchroom Building Metal Wall A - Door Beige 1 Interior Negative 0 Lunchroom Building Concrete Wall A Yellow 1 Interior Negative 0 Lunchroom Building Concrete Wall D Yellow 1 Interior Negative 0 Lunchroom Building Concrete Wall D Yellow 1 Interior Negative 0 Lunchroom Building Concrete Wall D Yellow 1 Interior Negative 0 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0	119	Lunchroom Building	Concrete	Wall A	Green	1	ER	Null	0
Lunchroom Building Concrete Wall B Green 1 Exterior Negative 0 Lunchroom Building Concrete Wall C Green 1 Exterior Negative 0 Lunchroom Building Concrete Wall D Green 1 Exterior Negative 0 Lunchroom Building Metal Wall C Rose 1 Exterior Negative 0 Lunchroom Building Metal Wall A - Door Frame Beige 1 Interior Negative 0 Lunchroom Building Metal Wall A - Door Beige 1 Interior Negative 0 Lunchroom Building Metal Wall A - Door Beige 1 Interior Negative 0 Lunchroom Building Metal Wall A - Door Beige 1 Interior Negative 0 Lunchroom Building Concrete Wall A Yellow 1 Interior Negative 0 Lunchroom Building Concrete Wall D Yellow 1 Interior Negative 0 Lunchroom Building Concrete Wall D Yellow 1 Interior Negative 0 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0	120	Lunchroom Building	Metal	Wall A - Door Frame	Beige	1	ER	Negative	0
Lunchroom Building Concrete Wall C Green 1 Exterior Negative 0  124 Lunchroom Building Concrete Wall D Green 1 Exterior Negative 0  125 Lunchroom Building Metal Wall C Rose 1 Exterior Negative 0  126 Lunchroom Building Metal Wall A - Door Frame Beige 1 Interior Negative 0  127 Lunchroom Building Metal Wall A - Door Beige 1 Interior Negative 0  128 Lunchroom Building Concrete Wall A Yellow 1 Interior Negative 0  129 Lunchroom Building Concrete Wall D Yellow 1 Interior Negative 0  130 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0  131 Lunchroom Building Metal Wall C-Window Bars Yellow 1 Interior Negative 0	121	Lunchroom Building	Metal	Wall A - Door	Beige	1	ER	Negative	0
Lunchroom Building Concrete Wall D Green 1 Exterior Negative 0 Lunchroom Building Metal Wall C Rose 1 Exterior Negative 0 Lunchroom Building Metal Wall A - Door Frame Beige 1 Interior Negative 0 Lunchroom Building Metal Wall A - Door Beige 1 Interior Negative 0 Lunchroom Building Metal Wall A - Door Beige 1 Interior Negative 0 Lunchroom Building Concrete Wall A Yellow 1 Interior Negative 0 Lunchroom Building Concrete Wall D Yellow 1 Interior Negative 0 Lunchroom Building Concrete Wall D Yellow 1 Interior Negative 0 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0 Lunchroom Building Metal Wall C-Window Bars Yellow 1 Interior Negative 0	122	Lunchroom Building	Concrete	Wall B	Green	1	Exterior	Negative	0
Lunchroom Building Metal Wall C Rose 1 Exterior Negative 0 Lunchroom Building Metal Wall A - Door Frame Beige 1 Interior Negative 0 Lunchroom Building Metal Wall A - Door Beige 1 Interior Negative 0 Lunchroom Building Metal Wall A - Door Beige 1 Interior Negative 0 Lunchroom Building Concrete Wall A Yellow 1 Interior Negative 0 Lunchroom Building Concrete Wall D Yellow 1 Interior Negative 0 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0 Lunchroom Building Metal Wall C Orange 1 Interior Negative 0 Lunchroom Building Metal Wall C Window Bars Yellow 1 Interior Negative 0	123	Lunchroom Building	Concrete	Wall C	Green	1	Exterior	Negative	0
126 Lunchroom Building Metal Wall A - Door Frame Beige 1 Interior Negative 0 127 Lunchroom Building Metal Wall A - Door Beige 1 Interior Negative 0 128 Lunchroom Building Concrete Wall A Yellow 1 Interior Negative 0 129 Lunchroom Building Concrete Wall D Yellow 1 Interior Negative 0 130 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0 131 Lunchroom Building Metal Waal C- Window Bars Yellow 1 Interior Negative 0	124	Lunchroom Building	Concrete	Wall D	Green	1	Exterior	Negative	0
127Lunchroom BuildingMetalWall A - DoorBeige1InteriorNegative0128Lunchroom BuildingConcreteWall AYellow1InteriorNegative0129Lunchroom BuildingConcreteWall DYellow1InteriorNegative0130Lunchroom BuildingConcreteWall COrange1InteriorNegative0131Lunchroom BuildingMetalWaal C- Window BarsYellow1InteriorNegative0	125	Lunchroom Building	Metal	Wall C	Rose	1	Exterior	Negative	0
128 Lunchroom Building Concrete Wall A Yellow 1 Interior Negative 0 129 Lunchroom Building Concrete Wall D Yellow 1 Interior Negative 0 130 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0 131 Lunchroom Building Metal Waal C- Window Bars Yellow 1 Interior Negative 0	126	Lunchroom Building	Metal	Wall A - Door Frame	Beige	1	Interior	Negative	0
129 Lunchroom Building Concrete Wall D Yellow 1 Interior Negative 0 130 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0 131 Lunchroom Building Metal Waal C- Window Bars Yellow 1 Interior Negative 0	127	Lunchroom Building	Metal	Wall A - Door	Beige	1	Interior	Negative	0
130 Lunchroom Building Concrete Wall C Orange 1 Interior Negative 0 131 Lunchroom Building Metal Waal C- Window Bars Yellow 1 Interior Negative 0	128	Lunchroom Building	Concrete	Wall A	Yellow	1	Interior	Negative	0
131 Lunchroom Building Metal Waal C- Window Bars Yellow 1 Interior Negative 0	129	Lunchroom Building	Concrete	Wall D	Yellow	1	Interior	Negative	0
	130	Lunchroom Building	Concrete	Wall C	Orange	1	Interior	Negative	0
132 Lunchroom Building Concrete Wall B Yellow 1 Interior Negative 0	131	Lunchroom Building	Metal	Waal C- Window Bars	Yellow	1	Interior	Negative	0
	132	Lunchroom Building	Concrete	Wall B	Yellow	1	Interior	Negative	0



Chemical -Environmental Engineering and Industrial Hygiene Consultants
P.O. Box 193430 - San Juan, P.R. 00919-3430 | Tel. (787)751-7810 - Fax (787)751-8988
Information about our new company, a subsidiary, IEMES, PSC: www.iemespsc.com

Project:	Former Guillermo Godreau Elementary School	Date: December 6, 2021	XRF Serial No.: XLP19196

Fernando L. Rodríguez (LBP-28621-326)

Dooding	Site	Substrate	Component	Color	Floor	Poom	Docults.	Pb
Reading	Site	Substrate	Component	Color	FIOOI	Room	Results	[mg/cm <sup>2</sup> ]
133	Lunchroom Building	Concrete	Wall B	Yellow	1	Interior	Negative	0
134	Lunchroom Building	Ceramic	Wall B	White	1	Interior	Negative	0.4
135	Lunchroom Building	Ceramic	Wall B	White	1	Interior	Negative	0.24
136	Lunchroom Building	Concete	Wall B	Beige	1	Interior	Negative	0
137	Lunchroom Building	Concete	Wall C	Beige	1	Interior	Negative	0
138	Lunchroom Building	Concete	Wall C	Beige	1	Interior	Negative	0
139	Lunchroom Building	Concete	Wall D	Beige	1	Interior	Negative	0
140	Lunchroom Building	Concete	Wall A	Beige	1	Bathroom in lunchrrom	Negative	0
141	Lunchroom Building	Concete	Wall B	Orange	1	Bathroom in lunchrrom	Negative	0
142	Lunchroom Building	Concete	Wall C	Orange	1	Bathroom in lunchrrom	Negative	0
143	Lunchroom Building	Concrete	Wall C	Beige	1	Bathroom in lunchrrom	Negative	0
144	Lunchroom Building	Concrete	Wall C	Oange	1	Bathroom in lunchrrom	Negative	0
145	Lunchroom Building	Ceramic	Wall D	White	1	Bathroom in lunchrrom	Negative	0.4
146	Lunchroom Building	Porcelain	Wall D- Sink	White	1	Bathroom in lunchrrom	Negative	0.09
147	Lunchroom Building	Porcelain	Wall B- Toilet	White	1	Bathroom in lunchrrom	Negative	0.01
148	Lunchroom Building	Ceramic	Wall A	White	1	Bathroom in lunchrrom	Negative	0.24
149	Lunchroom Building	Porcelain	Wall A - Sink #1	White	1	Bathroom in lunchrrom	Negative	0
150	Lunchroom Building	Porcelain	Wall A - Sink #2	White	1	Bathroom in lunchrrom	Negative	0
151	Lunchroom Building	Concrete	Wall D	White	1	Exterior	Negative	0
152	Lunchroom Building	Concrete	Utility Structure #1	Yellow	1	Exterior	Negative	0
153	Lunchroom Building	Concrete	Utility Structure #2	Yellow	1	Exterior	Negative	0
154		Final Calibration	Check - Using Standard SRM 2573 (1.04 ± 0	0.06 mg/cm <sup>2</sup> )			Positive	1.1
155		Final Calibration	Check - Using Standard SRM 2573 (1.04 ±	0.06 mg/cm <sup>2</sup> )			Null	1
156		Final Calibration	Check - Using Standard SRM 2573 (1.04 ±	0.06 mg/cm <sup>2</sup> )			Positive	1
157		Final Calibration	Check - Using Standard SRM 2573 (1.04 ±	0.06 mg/cm <sup>2</sup> )			Positive	1
158			Shutter Calibration	<u>.</u>				
159		Initial Calibration	Check - Using Standard SRM 2573 (1.04 ±	0.06 mg/cm <sup>2</sup> )			Positive	1.1
160		Initial Calibration	Check - Using Standard SRM 2573 (1.04 ±	0.06 mg/cm <sup>2</sup> )			Positive	1
161		Initial Calibration	Check - Using Standard SRM 2573 (1.04 ±	0.06 mg/cm <sup>2</sup> )			Negative	0.9
162	Main Building	Decorative	West Ceiling	Rose	1	Exterior	Negative	0.27
163	Main Building	Decorative	West Ceiling	Beige	1	Exterior	Null	0
164	Main Building	Decorative	West Ceiling	Yellow	1	Exterior	Negative	0
165	Main Building	Decorative	East Ceiling	Rose	1	Exterior	Negative	0.5
166	Main Building	Decorative	East Ceiling	Beige	1	Exterior	Negative	0.02
167	Main Building	Decorative	East Ceiling	Yellow	1	Exterior	Negative	-0.15
168	Main Building	Concrete	Wall A	Orange	1	Room #3	Negative	0
169	Main Building	Concrete	Wall B	Yellow	1	Room #3	Negative	0
170	Main Building	Concrete	Wall C	Yellow	1	Room #3	Negative	0
171	Main Building	Concrete	Wall D	Orange	1	Room #3	Negative	0



Chemical -Environmental Engineering and Industrial Hygiene Consultants
P.O. Box 193430 - San Juan, P.R. 00919-3430 | Tel. (787)751-7810 - Fax (787)751-8988
Information about our new company, a subsidiary, IEMES, PSC: www.iemespsc.com

Project:	Former Guillermo Godreau Elementary School	Date: December 6, 2021	XRF Serial No.: XLP19196
Project:	Former Guillermo Godreau Elementary School	Date: December 6, 2021	XRF Serial No.: XLP19196

Fernando L. Rodríguez (LBP-28621-326)

Reading	Site	Substrate	Component	Color	Floor	Room	Results	Pb
Reduing	Site	Substrate	Component	Coloi	FIOOI	KOOIII	Results	[mg/cm <sup>2</sup> ]
172	Main Building	Metal	Wall A - Door	Beige	1	Room #3	Negative	0
173	Main Building	Metal	Wall A - Door Frame	Beige	1	Room #3	Negative	0
174	Main Building	Metal	Wall A - Gate	Beige	1	Room #3	Negative	0.02
175	Main Building	Concrete	Wall A	Orange	1	В3	Negative	0
176	Main Building	Concrete	Wall B	Orange	1	В3	Negative	0
177	Main Building	Concrete	Wall C	Orange	1	В3	Negative	0
178	Main Building	Concrete	Wall D	White	1	В3	Negative	0
179	Main Building	Ceramic	Floor Tile	White	1	В3	Negative	0.01
180	Main Building	Concrete	Floor	Red	1	В3	Negative	0
181	Main Building	Wood	Wall A- Door	Beige	1	В3	Negative	0
182	Main Building	Wood	Wall A - Door Frame	Beige	1	В3	Negative	0
183	Main Building	Concrete	Wall A	Violet	1	Room #2	Negative	0
184	Main Building	Concrete	Wall B	Light Blue	1	Room #2	Negative	0
185	Main Building	Concrete	Wall C	Violet	1	Room #2	Negative	0
186	Main Building	Concrete	Wall D	Light Blue	1	Room #2	Negative	0
187	Main Building	Metal	Wall A - Door	Beige	1	Room #2	Negative	0
188	Main Building	Metal	Wall A - Door Frame	Beige	1	Room #2	Negative	0
189	Main Building	Concrete	Floor	Red	1	Room #2	Negative	0
190	Main Building	Concrete	Wall A	Violet	1	B2	Negative	0
191	Main Building	Concrete	Wall B	Violet	1	B2	Negative	0
192	Main Building	Concrete	Wall C	Violet	1	B2	Negative	0
193	Main Building	Concrete	Wall D	Violet	1	B2	Negative	0
194	Main Building	Porcelain	Wall C - Sink	White	1	B2	Negative	0.03
195	Main Building	Porcelain	Wall C - Toilet	White	1	B2	Negative	0
196	Main Building	Concrete	Floor	Purple	1	B2	Negative	0
197	Main Building	Wood	Wall A - Door	Purple	1	B2	Negative	0
198	Main Building	Wood	Wall A - Door Frame	Purple	1	B2	Negative	0
199	Main Building	Concrete	Wall A	White	1	Room #1	Negative	0
200	Main Building	Metal	Wall A - Door	Beige	1	Room #1	Negative	0
201	Main Building	Metal	Wall A - Door Frame	Beige	1	Room #1	Negative	0
202	Main Building	Metal	Wall A - GAte	Beige	1	Room #1	Negative	0
203	Main Building	Concrete	Wall B	White	1	Room #1	Negative	0
204	Main Building	Concrete	Wall C	White	1	Room #1	Negative	0
205	Main Building	Concrete	Wall D	White	1	Room #1	Null	0
206	Main Building	Concrete	Wall D	White	1	Room #1	Null	0
207	Main Building	Concrete	Wall D	White	1	Room #1	Negative	0
208	Main Building	Concrete	Floor	Red	1	Room #1	Negative	0
209	Main Building	Wood	Wall A	White	1	B1	Negative	0
210	Main Building	Wood	Wall A - Door	White	1	B1	Negative	0



Chemical -Environmental Engineering and Industrial Hygiene Consultants
P.O. Box 193430 - San Juan, P.R. 00919-3430 | Tel. (787)751-7810 - Fax (787)751-8988
Information about our new company, a subsidiary, IEMES, PSC: www.iemespsc.com

Project:	Former Guillermo Godreau Elementary School	Date: December 6, 2021	XRF Serial No.: XLP19196
Project:	Former Guillermo Godreau Elementary School	Date: December 6, 2021	XRF Serial No.: XLP1919

Fernando L. Rodríguez (LBP-28621-326)

Reading Site Substrate Component Color Floor Room	Results	
		[mg/cm <sup>2</sup> ]
211 Main Building Wood Wall A - Door Frame White 1 B1	Negative	0
212 Main Building Wood Wall B White 1 B1	Negative	0
213 Main Building Concrete Wall C White 1 B1	Negative	0
214 Main Building Concrete Wall D White 1 B1	Negative	0
215 Main Building Porcelain Wall D - Sink White 1 B1	Negative	0.01
216 Main Building Porcelain Wall D - Toilet White 1 B1	Negative	0.01
217 Main Building Concrete Floor Red 1 B1	Negative	0
218 Main Building Concrete Wall A Beige 1 Room #5	Negative	0.01
219 Main Building Metal Wall A - Door Beige 1 Room #5	Negative	0
220 Main Building Metal Wall A - Door Frame Beige 1 Room #5	Negative	0
221 Main Building Metal Wall A - Gate Beige 1 Room #5	Negative	0
222 Main Building Concrete Wall B White 1 Room #5	Null	0.4
223 Main Building Concrete Wall B White 1 Room #5	Negative	0.3
224 Main Building Concrete Wall C White 1 Room #5	Negative	0
225 Main Building Concrete Wall D Orange 1 Room #5	Negative	0.02
226 Main Building Concrete Wall A White 1 Room #5	Negative	0
227 Main Building Wood Wall A - Door Beige 1 B5	Negative	0
228 Main Building Wood Wall A - Door Frame Beige 1 B5	Negative	0
229 Main Building Concrete Wall B White 1 B5	Negative	0.01
230 Main Building Concrete Wall C White 1 B5	Negative	0
231 Main Building Porcelain Wall C - Sink White 1 B5	Negative	0.01
232 Main Building Porcelain Wall C - Toilet White 1 B5	Negative	0
233 Main Building Concrete Wall A Beige 1 Room #8	Negative	0
234 Main Building Concrete Wall D White 1 B5	Negative	0
235 Main Building Metal Wall A - Door Beige 1 Room #8	Negative	0
236 Main Building Metal Wall A - Door Frame Beige 1 Room #8	Negative	0
237 Main Building Metal Wall A - Gate Beige 1 Room #8	Negative	0
238 Main Building Concrete Wall B Beige 1 Room #8	Negative	0
239 Main Building Concrete Wall C Beige 1 Room #8	Negative	0
240 Main Building Concrete Wall D Beige 1 Room #8	Negative	0
241 Main Building Metal Wall C - Window Bars Beige 1 Room #8	Negative	0
242 Main Building Concrete Floor Red 1 Room #8	Negative	0
243 Main Building Concrete Wall A Yellow 1 Room #7	Negative	0
244 Main Building Metal Wall A - Door Beige 1 Room #7	Negative	0.03
245 Main Building Metal Wall A - Door Frame Beige 1 Room #7	Negative	0
246 Main Building Concrete Wall B Yellow 1 Room #7	Negative	0
247 Main Building Concrete Wall C Yellow 1 Room #7	Negative	0
248 Main Building Concrete Wall D Yellow 1 Room #7	Negative	0
249 Main Building Concrete Floor Red 1 Room #7	Negative	0.01



Chemical -Environmental Engineering and Industrial Hygiene Consultants
P.O. Box 193430 - San Juan, P.R. 00919-3430 | Tel. (787)751-7810 - Fax (787)751-8988
Information about our new company, a subsidiary, IEMES, PSC: www.iemespsc.com

Project:	Former Guillermo Godreau Elementary School	Date: December 6, 2021	XRF Serial No.: XLP19196

Fernando L. Rodríguez (LBP-28621-326)

Reading	Site	Substrate	Component	Color	Floor	Room	Results	Pb
								[mg/cm <sup>2</sup> ]
250	Main Building	Concrete	Wall A - Baseboard	Red	1	Room #7	Negative	0.05
251	Main Building	Concrete	Wall B - Baseboard	Red	1	Room #7	Negative	0.01
252	Main Building	Concrete	Wall C - Baseboard	Red	1	Room #7	Negative	0.07
253	Main Building	Concrete	Wall D - Baseboard	Red	1	Room #7	Negative	0.11
254	Main Building	Concrete	Wall A	Green	1	Room #6	Negative	0.01
255	Main Building	Metal	Wall A - Door	Beige	1	Room #6	Negative	0.01
256	Main Building	Metal	Wall A - Door Frame	Beige	1	Room #6	Negative	0
257	Main Building	Concrete	Wall B	Orange	1	Room #6	Negative	0
258	Main Building	Concrete	Wall C	Green	1	Room #6	Negative	0
259	Main Building	Concrete	Wall D	Green	1	Room #6	Negative	0
260	Main Building	Concrete	Floor	Red	1	Room #6	Negative	0
261	Main Building	Concrete	Wall A	Blue	2	Room #14	Negative	0
262	Main Building	Metal	Wall A - Door	Blue	2	Room #14	Negative	0
263	Main Building	Metal	Wall A - Door Frame	Blue	2	Room #14	Negative	0
264	Main Building	Concrete	Wall B	Blue	2	Room #14	Positive	2.3
265	Main Building	Concrete	Wall B	Blue	2	Room #14	Positive	1.9
266	Main Building	Concrete	Wall C	Blue	2	Room #14	Negative	0
267	Main Building	Concrete	Wall D	Rose	2	Room #14	Negative	0
268	Main Building	Ceramic	Floor Tile	Gray	2	Room #14	Negative	0
269	Main Building	Concrete	Wall B	Beige	2	Room #14	Negative	0.4
270	Main Building	Concrete	Wall A	Rose	2	Room #15	Negative	0
271	Main Building	Metal	Wall A - Door	Rose	2	Room #15	Negative	0
272	Main Building	Metal	Wall A - Door Frame	Wine	2	Room #15	Negative	0
273	Main Building	Concrete	Wall B	Orange	2	Room #15	Negative	0
274	Main Building	Concrete	Wall C	Rose	2	Room #15	Negative	0
275	Main Building	Concrete	Wall D	Rose	2	Room #15	Negative	0
276	Main Building	Concrete	Floor	Red	2	Room #15	Negative	0
277	Main Building	Concrete	Wall A	Green	2	Room #16	Negative	0
278	Main Building	Wood	Wall A - Door	Beige	2	Room #16	Negative	0
279	Main Building	Wood	Wall A - Door Frame	Beige	2	Room #16	Negative	0
280	Main Building	Metal	Wall A - Gate	Beige	2	Room #16	Negative	0
281	Main Building	Concrete	Wall B	Orange	2	Room #16	Negative	0
282	Main Building	Concrete	Wall C	White	2	Room #16	Negative	0.01
283	Main Building	Wood	Wall C Door	Beige	2	Room #16	Positive	1.4
284	Main Building	Wood	Wall C - Door Frame	Beige	2	Room #16	Negative	0
285	Main Building	Ceramic	Decorative Tile	Green	2	Exterior R16	Negative	0.04
286	Main Building	Ceramic	Decorative Tile	Green	2	Exterior R16	Negative	0
287	Main Building	Concrete	Wall D	Green	2	Room #16	Negative	0
288	Main Building	Concrete	Floor	Red	2	Room #16	Negative	0



Chemical -Environmental Engineering and Industrial Hygiene Consultants
P.O. Box 193430 - San Juan, P.R. 00919-3430 | Tel. (787)751-7810 - Fax (787)751-8988
Information about our new company, a subsidiary, IEMES, PSC: www.iemespsc.com

Project: Former Guillermo Godreau Elementary School Date: December 6, 2021 XRF Serial No.: XLP19196	Project:	Former Guillermo Godreau Elementary School	Date: December 6, 2021	XRF Serial No.: XLP19196
---	----------	--	------------------------	--------------------------

Fernando L. Rodríguez (LBP-28621-326)

Reading	Site	Substrate	Component	Color	Floor	Room	Results	Pb
								[mg/cm <sup>2</sup> ]
289	Main Building	Concrete	Wall A	White	2	Room #12	Negative	0
290	Main Building	Concrete	Wall B	White	2	Room #12	Negative	0
291	Main Building	Concrete	Wall C	White	2	Room #12	Negative	0
292	Main Building	Concrete	Wall D	White	2	Room #12	Negative	0
293	Main Building	Concrete	Wall A	Beige	2	B12	Negative	0.03
294	Main Building	Concrete	Wall B	Beige	2	B12	Negative	0.02
295	Main Building	Concrete	Wall C	Beige	2	B12	Negative	-0.16
296	Main Building	Porcelain	Wall C - Sink	White	2	B12	Negative	0.01
297	Main Building	Porcelain	Wall C - Toilet	White	2	B12	Negative	0.01
298	Main Building	Ceramic	Decorative Floor Tile	White	2	Room #12	Negative	0
299	Main Building	Ceramic	Decorative Floor Tile	Wine	2	Room #12	Negative	0
300	Main Building	Ceramic	Decorative Floor Tile	Red	2	Room #12	Negative	0
301	Main Building	Concrete	Wall A	Yellow	2	Room #11	Negative	0.3
302	Main Building	Concrete	Wall B	Yellow	2	Room #11	Negative	0.28
303	Main Building	Concrete	Wall C	Yellow	2	Room #11	Negative	-0.02
304	Main Building	Concrete	Wall D	Yellow	2	Room #11	Negative	0.3
305	Main Building	Concrete	Wall A	Green	2	B11	Negative	0.04
306	Main Building	Concrete	Wall B	Beige	2	B11	Negative	0
307	Main Building	Concrete	Wall C	Green	2	B11	Negative	0
308	Main Building	Porcelain	Wall C - Sink	White	2	B11	Negative	0.01
309	Main Building	Porcelain	Wall C - Toilet	White	2	B11	Negative	0.02
310	Main Building	Concrete	Wall D	Beige	2	B11	Null	0.04
311	Main Building	Concrete	Wall D	Beige	2	B11	Negative	0.04
312	Main Building	Wood	Wall A - Door	Brown	2	B11	Positive	2.5
313	Main Building	Wood	Wall A - Door Frame	Brown	2	B11	Positive	3.2
314	Main Building	Wood	Wall A - Door Frame	Beige	2	Room #12	Negative	0
315	Main Building	Wood	Wall A - Door	Beige	2	Room #12	Negative	0
316	Main Building	Concrete	Wall A	Green	2	Room #9	Negative	0
317	Main Building	Concrete	Wall B	Green	2	Room #9	Negative	0
318	Main Building	Concrete	Wall C	Beige	2	Room #9	Negative	0
319	Main Building	Concrete	Wall D	Beige	2	Room #9	Negative	0
320	Main Building	Conrete	Wall A - Baseboard	Gray	2	Room #9	Negative	0.16
321	Main Building	Concrete	Wall A - Door #2	Beige	2	Room #11	Negative	0
322	Main Building	Concrete	Wall A	White	2	Room #10	Null	0.18
323	Main Building	Concrete	Wall A	White	2	Room #10	Negative	-0.09
324	Main Building	Metal	Wall A - Door	Wine	2	Room #10	Negative	0
325	Main Building	Concrete	Wall B	White	2	Room #10	Negative	0
326	Main Building	Concrete	Wall C	White	2	Room #10	Negative	0.15
327	Main Building	Concrete	Wall D	White	2	Room #10	Positive	3.3



Chemical -Environmental Engineering and Industrial Hygiene Consultants
P.O. Box 193430 - San Juan, P.R. 00919-3430 | Tel. (787)751-7810 - Fax (787)751-8988
Information about our new company, a subsidiary, IEMES, PSC: www.iemespsc.com

Project:	Former Guillermo Godreau Elementary School	Date: December 6, 2021	XRF Serial No.: XLP19196
		Fernando L. Rodríguez (LBP-28621-326)	
Address:	Calle Miguel, Salinas, PR	Inspector: Hanna K. Rodríguez (LBPI-14821-144)	Model No.: XLP300A

Reading	Site	Substrate	Component	Color	Floor	Room	Results	Pb
								[mg/cm <sup>2</sup> ]
328	Main Building	Concrete	Wall A	Yellow	2	Hallway 2nd Floor	Negative	0.03
329	Main Building	Concrete	Wall B	Orange	2	Hallway 2nd Floor	Negative	0
330	Main Building	Concrete	Wall C	Yellow	2	Hallway 2nd Floor	Negative	0
331	Main Building	Concrete	Wall D	Yellow	2	Hallway 2nd Floor	Negative	0
332	Main Building	Concrete	Handrail	Yellow	2	Northeast Stairs	Negative	0.12
333	Main Building	Concrete	Handrail	Yellow	2	Southwest Stairs	Negative	0.4
334	Main Building	Concrete	Wall A	Yellow	1	Hallway 1st Floor	Null	0.6
335	Main Building	Concrete	Wall A	Yellow	1	Hallway 1st Floor	Null	0.5
336	Main Building	Concrete	Wall A	Yellow	1	Hallway 1st Floor	Null	0.5
337	Main Building	Concrete	Wall A	Yellow	1	Hallway 1st Floor	Null	0.6
338	Main Building	Concrete	Wall A	Yellow	1	Hallway 1st Floor	Negative	0.3
339	Main Building	Concrete	Wall B	Yellow	1	Hallway 1st Floor	Negative	0.3
340	Main Building	Concrete	Wall C	Yellow	1	Hallway 1st Floor	Null	1
341	Main Building	Concrete	Wall C	Yellow	1	Hallway 1st Floor	Null	0.5
342	Main Building	Concrete	Wall C	Orange	1	Hallway 1st Floor	Null	7
343	Main Building	Concrete	Wall C	Orange	1	Hallway 1st Floor	Negative	0
344	Main Building	Concrete	Wall C	Orange	1	Hallway 1st Floor	Null	0
345	Main Building	Concrete	Wall D	Yellow	1	Hallway 1st Floor	Negative	0.02
346	Main Building - Retesting	Concrete	Wall D	Orange	1	Room #3	Negative	0
347	Main Building - Retesting	Concrete	Wall A	Purple	1	Room #2	Negative	0
348	Main Building - Retesting	Metal	Wall A - Door Frame	Beige	1	Room #2	Negative	0
349	Main Building - Retesting	Metal	Wall A - Door	Beige	1	Room #1	Negative	0
350	Main Building - Retesting	Porcelain	Wall C - Toilet	White	1	B5	Negative	0.01
351	Main Building - Retesting	Wood	Wall A - Door	Beige	1	Room #16	Negative	0
352	Main Building - Retesting	Metal	Wall A - Middle Gate	Beige	1	Room #16	Negative	0
353	Main Building - Retesting	Concrete	Wall C	White	1	Room #16	Negative	0
354	Main Building - Retesting	Concrete	Wall C	Yellow	2	Hallway 2nd Floor	Negative	0
355	Main Building - Retesting	Concrete	Wall D	Orange	2	Hallway 1st Floor	Null	1
356	Main Building - Retesting	Concrete	Wall D	Orange	2	Hallway 1st Floor	Null	1.3
357	Main Building - Retesting	Concrete	Wall D	Orange	2	Hallway 1st Floor	Null	1.1
358	Main Building - Retesting	Concrete	Wall D	Orange	2	Hallway 1st Floor	Null	1
359	Main Building - Retesting	Concrete	Wall D	Orange	2	Hallway 1st Floor	Negative	-0.03
360		Final Calibration	Check - Using Standard SRM 2573 (1.04 ± 0	0.06 mg/cm <sup>2</sup> )			Positive	1.1
361		Final Calibration	Check - Using Standard SRM 2573 (1.04 ± 0	).06 mg/cm <sup>2</sup> )			Positive	1.1
362		Final Calibration	Check - Using Standard SRM 2573 (1.04 ± 0	).06 mg/cm <sup>2</sup> )			Positive	1
363			Shutter Calibration					
364		Initial Calibration	n Check - Using Standard SRM 2573 (1.04 ± 0	0.06 mg/cm <sup>2</sup> )			Positive	1
365		Initial Calibration	n Check - Using Standard SRM 2573 (1.04 ± 0	0.06 mg/cm <sup>2</sup> )			Null	0.9
366		Initial Calibration	n Check - Using Standard SRM 2573 (1.04 ± 0	0.06 mg/cm <sup>2</sup> )			Positive	1.1



Chemical -Environmental Engineering and Industrial Hygiene Consultants
P.O. Box 193430 - San Juan, P.R. 00919-3430 | Tel. (787)751-7810 - Fax (787)751-8988
Information about our new company, a subsidiary, IEMES, PSC: www.iemespsc.com

Project:	Former Guillermo Godreau Elementary School	Date: December 6, 2021	XRF Serial No.: XLP19196	
		Fernando L. Rodríguez (LBP-28621-326)		
Address:	Calle Miguel, Salinas, PR	Inspector: Hanna K. Rodríguez (LBPI-14821-144)	Model No.: XLP300A	

B d'	C'L.	Cultaturata	Component	Color	Floor	Room	Results	Pb	
Reading	Site	Substrate						[mg/cm <sup>2</sup> ]	
367	367 Initial Calibration Check - Using Standard SRM 2573 (1.04 ± 0.06 mg/cm²)								
368	Main Building	Concrete	Wall A	Yellow	1	Exterior	Negative	0.15	
369	Main Building	Ceramic	Main Entrance Steps	Red	1	Exterior	Negative	0	
370	Main Building	Metal	Main Entrance Gate	Beige	1	Exterior	Negative	0	
371	Main Building	Concrete	Wall A - Baseboard	Orange	1	Exterior	Negative	0.04	
372	Main Building	Concrete	Flag Pole Base	Orange	1	Exterior	Null	0	
373	Main Building	Concrete	Flag Pole Base	Orange	1	Exterior	Negative	0.02	
374	Main Building	Concrete	Wall D	yellow	1	Exterior	Negative	-0.24	
375	Main Building	Metal	Wall D - Window Bars	Beige	1	Exterior	Negative	0.08	
376	Main Building	Concrete	Wall B	Yellow	1	Exterior	Positive	1.9	
377	Main Building	Concrete	Wall B - Baseboard	Orange	1	Exterior	Negative	0	
378	Main Building	Concrete	Wall B	Yellow	1	Exterior	Positive	2.1	
379	Main Building	Concrete	Wall C	Yellow	1	Exterior	Positive	2	
380	Main Building	Concrete	Wall C - Baseboard	Orange	1	Exterior	Negative	0	
381	Main Building	Concrete	Wall C	Yellow	1	Exterior	Positive	1.9	
382	Main Building	Concrete	Wall D	Green	1	Exterior	Positive	2	
383	Main Building	Metal	Wall C - Gate	Beige	1	Exterior	Negative	0	
384	Main Building	Concrete	Wall B	Brown	1	Exterior	Negative	0	
385	Main Building	Concrete	Wall C	Yellow	1	Exterior	Positive	2.3	
386		Final Calibration	Check - Using Standard SRM 2573 (1.04 ± 0.	.06 mg/cm2)			Positive	1	
387		Final Calibration	Check - Using Standard SRM 2573 (1.04 ± 0.	.06 mg/cm2)			Positive	1.1	
388		Final Calibration	Check - Using Standard SRM 2573 (1.04 ± 0.	.06 mg/cm2)			Positive	1.1	
389		Final Calibration	Check - Using Standard SRM 2573 (1.04 ± 0.	.06 mg/cm2)			Positive	1.1	



Project:

### CHES Services Corp. d/b/a Fernando L. Rodríguez, P.E. & Associates

Chemical/Environmental Engineering and Industrial Hygiene Consultants

Information about our new company, a subsidiary, IEMES, PSC: www.iemespsc.com

### **Quality XRF Testing**

Fernando L. Rodríguez (LBP-28621-326)

Former Guillermo Godreau Elementary School Inspector: Hanna K. Rodríguez (LBPI-14821-144)

Date: December 6, 2021 XRF Model & Serial No.: XLP300A | XLP19196

Original			Testing Combinat	tion Structure	e: Annex Building	Original	Retest	Avg Pb	<del>_</del> 2
Reading	Re-Test Reading #	Substrate	Component	Color	Room	Pb [mg/cm <sup>2</sup> ]	Pb [mg/cm <sup>2</sup> ]	[mg/cm <sup>2</sup> ]	Χ²
20	99	Concrete	Wall A	White	Room #21	0	0	0	0
23	100	Metal	Wall A - Door Frame	Beige	Room #21	0.01	0.03	0.02	0.0004
26	101	Concrete	Wall D	White	Room #21	0	0	0	0
28	102	Metal	Wall A - Door Frame	Beige	Balcony	0.01	0	0.005	0.000025
38	103	Metal	Wall B - Handrail	Yellow	Stairs	0.02	-0.09	-0.035	0.001225
42	104	Concrete	Wall C	Yellow	Stairs	0	0	0	0
45	105	Concrete	Ceiling	White	Exterior	0	0	0	0
62	106	Ceramic	Wall D	White	Room #20	0	0	0	0
81	107	Wood	Wall A - Door	Brown	Storage R20	0	0	0	0
96	108	Concrete	Wall D	White	Room #18	0	0	0	0

Total: 0.00165

### **Retest Tolerance Limit Calculations (TL):**

Calculate:

$$C = \sum \sigma^2 \qquad Original \ Pb_{avg} = \underbrace{\quad 0.004 \quad}_{D=\ 0.00001188} \qquad \begin{array}{c} E = D + 0.032 \\ E = 0.03201188 \end{array}$$

If Absolute difference < Retest Tolerance Limit, the inspection has passed the retest.

202112 EscGuillermo Godreau OA1



Chemical/Environmental Engineering and Industrial Hygiene Consultants

Information about our new company, a subsidiary, IEMES, PSC: www.iemespsc.com

### **Quality XRF Testing**

Fernando L. Rodríguez (LBP-28621-326)

Project: Former Guillermo Godreau Elementary School Inspector: Hanna K. Rodríguez (LBPI-14821-144)

 Date:
 December 6, 2021

 XRF Model & Serial No.:
 XLP300A | XLP19196

Original			Testing Combina	tion Structur	e: Main Building	Original	Retest	Avg Pb	$\overline{\mathbf{x}}^2$
Reading	Re-Test Reading #	Substrate	Component	Color	Room	Pb [mg/cm <sup>2</sup> ]	Pb [mg/cm <sup>2</sup> ]	[mg/cm <sup>2</sup> ]	\
171	346	Concrete	Wall D	Orange	Room #3	0	0	0	0
183	347	Concrete	Wall A	Purple	Room #2	0	0	0	0
188	348	Metal	Wall A - Door Frame	Beige	Room #2	0	0	0	0
200	349	Metal	Wall A - Door	Beige	Room #1	0	0	0	0
232	350	Porcelain	Wall C - Toilet	White	B5	0	0.01	0.005	0.000025
278	351	Wood	Wall A - Door	Beige	Room #16	0	0	0	0
280	352	Metal	Wall A - Middle Gate	Beige	Room #16	0	0	0	0
282	353	Concrete	Wall C	White	Room #16	0.01	0	0.005	0.000025
330	354	Concrete	Wall C	Yellow	Hallway 2nd Floor	0	0	0	0
345	359	Concrete	Wall D	Orange	Hallway 1st Floor	0.02	-0.03	-0.005	0.000025

Total: 0.000075

### **Retest Tolerance Limit Calculations (TL):**

Calculate:

$$C = \sum \sigma^2 \qquad Original \ Pb_{avg} = \underbrace{ 0.003 }_{D=0.00000054} \qquad D = C \times 0.0072 \\ C = 0.0000054 \qquad E = D + 0.032 \\ E = 0.03200054$$
 
$$F = \sqrt{E} \\ Retest \ Pb_{avg} = \underbrace{ -0.002 }_{D=0.00000054} \qquad F = 0.178886948 \qquad TL = \underbrace{ 0.294269029 }_{D=0.00000054}$$
 
$$Averages \ Absolute \ difference = \underbrace{ 0.005 }_{D=0.00000054} \qquad D = 0.0072$$

If Absolute difference < Retest Tolerance Limit, the inspection has passed the retest.

202112 EscGuillermo Godreau OA2

# Lead Licenses Relevant to this study 2020 - 2021









Estimado Ing. Fernando Rodríguez:

#### **CERTIFICACIÓN DE EMPRESA E INDIVIUOS**

Luego de haber evaluado las solicitudes de certificación de individuos para realizar actividades de mitigación de pintura con base de plomo, radicadas bajo la empresa **Fernando L. Rodríguez, PE & Associates,** se encontró que las mismas cumplen con los requisitos establecidos en el Capítulo VII, del *Reglamento para el Manejo Adecuado de Actividades de Pintura con Base de Plomo*. Las certificaciones otorgadas son las siguientes:

D	Nombre	Vigencia de la	Núm. De Certificación		
LI	Stephanie Hall Laureano	Diciembre 6, 2021	Noviembre 18, 2022	LBPI-34021-384	
LI	Carmen M. Figueroa Santiago	Diciembre 6, 2021	Noviembre 18, 2022	LBPI-34021-385	

Las tarjetas y los certificados están en proceso por lo que este comunicado podrá ser utilizado como evidencia de certificación.

Cualquier duda al respecto, favor comunicarse con esta servidora.

Cordialmente,

Magaly Ríos López

Oficial de Permisos Ambientales II División de Desperdicios Tóxicos





### **Attachment 9 – Explosive and Flammable Hazards**

Location of fuel stations nearest to the project site

PR-CRP-000135 - Multidisciplinary Citizen Service Center, Salinas

**Coord: 17.975548°, -66.298631°** 23-73 Miguel Ten Street, Salinas, Puerto Rico









### Municipio de Salinas

Karilyn Bonilla Colón Alcaldesa

February 22, 2022

Mr. Edwin Muñíz Field Supervisor U.S. Fish & Wildlife Service Boquerón Field Office PO Box 491 Boquerón, PR 00622

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

DAMARIS ROMAN Digitals agreed by Damaria ROMAN PLAN
Data Statistical Statistics of the

EDWIN MUNIZ Digitally signed by EDWIN MUNIZ Date: 2022.02.24 08:00.43 -0400\*

Caribbean ES Field Supervisor

Self-Certification under Blanket Clearance Letter for federally sponsored projects, Housing and Urban Development, for Multidisciplinary Citizen Service Center, Guillermo Godreau School, PR-CRP-000135, Salinas.

Dear Mr. Muniz:

I submit for your review the Self-Certification to fulfill requirements related with the Blanket Clearance Letter dated January 14, 2013. This information is submitted to comply with Section 7 of the Endangered Species Act (ESA) for a project that will be funded by US Housing and Urban Development funds, in association with Puerto Rico Department of Housing, under the CDBG-DR grant.

The project activity is limited to a previously developed urban property and thus the proposed action has no effect on any natural habitats or federally protected species. Please refer to enclosed maps and project description for details.

For any additional information, you may contact me via email salinasrevit2023@gmail.com or at the office phone number (787) 824-3060 Ext. 4007.

Cordially,

é C. Collazo Machado

so all

Manager







### Municipio de Salinas

Karilyn Bonilla Colón Alcaldesa

### **Endangered Species Act Certification**

In compliance with Endangered Species Act of 1973, as amended, and the Fish and Wildlife Coordination Act for federally funded projects, the Fish and Wildlife Service, Caribbean Field Office at Boquerón, Puerto Rico, decided that the following minor actions may be conducted thin a blanket clearance, without adversely affecting the recovery and survival of listed species:

The Municipality of Salinas, Puerto Rico, certifies that the Project: PR-CRP-000135 Multidisciplinary Citizen Service Center, Guillermo Godreau School, funded by the Department of Housing and Urban Development HUD) and located at 23-73 Miguel Ten Street, Salinas PR 00751, (17.975548°, -66.298631°, complies with:

	1.	Street resurfacing.
	2.	Construction of gutters and sidewalks along existing roads.
	2. 3.	Reconstruction or emergency repairs of existing buildings, facilities and homes.
$\boxtimes$	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.
$\boxtimes$	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
	40	wetland area and the lighting associated to the facilities are not visible directly or indirectly from the beach.
	10.	
П	44	associated to the facilities are not visible directly or indirectly from the beach.
Ш	11.	
		families and/or facilities that have been affected by weather conditions.
		1 1 sell
		Jack C. Collazo Machado February 22, 2022
		José C. Collazo Machado February 22, 2022

Attachments: Maps, photos, project description

Manager

### Multidisciplinary Citizen Service Center Escuela Guillermo Godreau, Salinas, Puerto Rico

#### Memorial

Se propone remodelar la antigua escuela Guillermo Godreau localizada en la calle Miguel Ten, Salinas Puerto Rico. El lote donde se ubica la escuela tiene un área de 3,329.06 metros cuadrados con coordenadas NAD83 x:214256.0662 y:215754.6029.

La propiedad cuenta con tres estructuras existentes.

- a) La escuela original, un edificio de dos plantas hecho en hormigón, bloque de cemento y estructura de techo en metal con un área de ocupación de 8,255.6p.c. El edificio es de dos plantas de 8,255.6p.c. cada una para un área bruta total de 16,511.2p.c. El edificio cuenta con dos escaleras interiores en hormigón.
- b) Edificio accesorio moderno de 1,648.3p.c. en una sola planta de hormigón y bloque de cemento.
- c) Edificio moderno de salones de clase de dos plantas con un área de ocupación de 2,931.2p.c. hecho en hormigón y bloque de cemento. El edificio cuenta con una escalera exterior en hormigón.

La remodelación se enfoca en el edificio original de la escuela al cual se le va a modernizar su infraestructura eléctrica, facilidades sanitarias, ventanas, accesos internos y construir un nuevo elevador de pasajeros para proveer acceso a ambos pisos a personas con incapacidades físicas.

Los espacios existentes se van a restaurar con el propósito de utilizarlos como salones de clases para adiestramiento de personal municipal o ofrecer clases multidisciplinarias a la ciudadanía de Salinas. Otros espacios se convertirán en almacén y oficinas para servicios al ciudadano con un salón de conferencias/reuniones. Los espacios no se pretenden subdividir. Las particiones para utilizarse son bajas para mantener la escala de los espacios existentes.

El edificio moderno de salones de dos plantas se le pretende modificar una de las puertas de entrada con la instalación de una puerta corrediza. Este edificio mantendrá su uso como salones de adiestramiento y se ubicará una oficina de personal de manejo de emergencias. La segunda planta no se pretende utilizar.

El edificio accesorio de 1,648.3p.c. se pretende demoler como parte del esfuerzo de verdecer y ambientar las áreas exteriores de la propiedad. Parte de la huella se utilizará para proveer tres nuevos estacionamientos para visitantes.

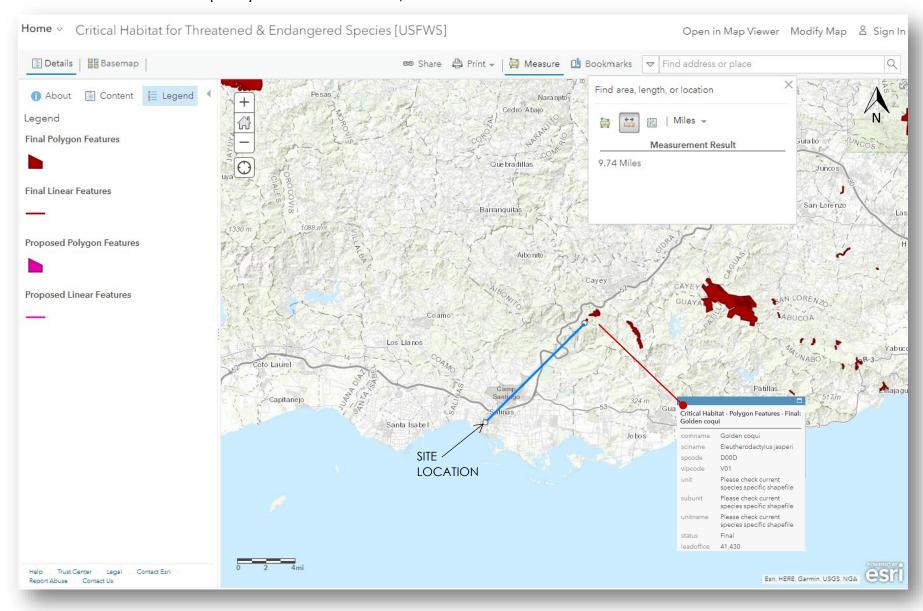
El área exterior detrás de la escuela se va a pavimentar para obtener doce (12) estacionamientos de los cuales dos (2) serán para uso de impedidos. Actualmente esta área (667.7m.c.) no está pavimentada.

Este proyecto no pretende añadir pies cuadrados a ninguna de las estructuras existentes. El mismo pretende proveer acceso sin abarreras a todos los espacios interiores de la escuela.

### **Nearest Critical Habitat Map**

PR-CRP-000135 - Multidisciplinary Citizen Service Center, Salinas

**Coord: 17.975548°, -66.298631°** 23-73 Miguel Ten Street, Salinas, Puerto Rico



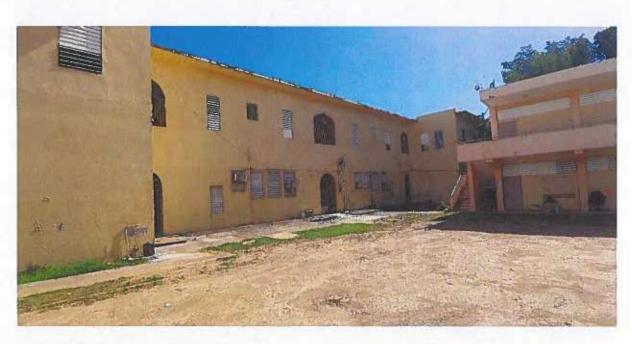
Source: USFWS https://www.fws.gov/project/critical-habitat, https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77

23-73 Miguel Ten Street, Salinas, Puerto Rico

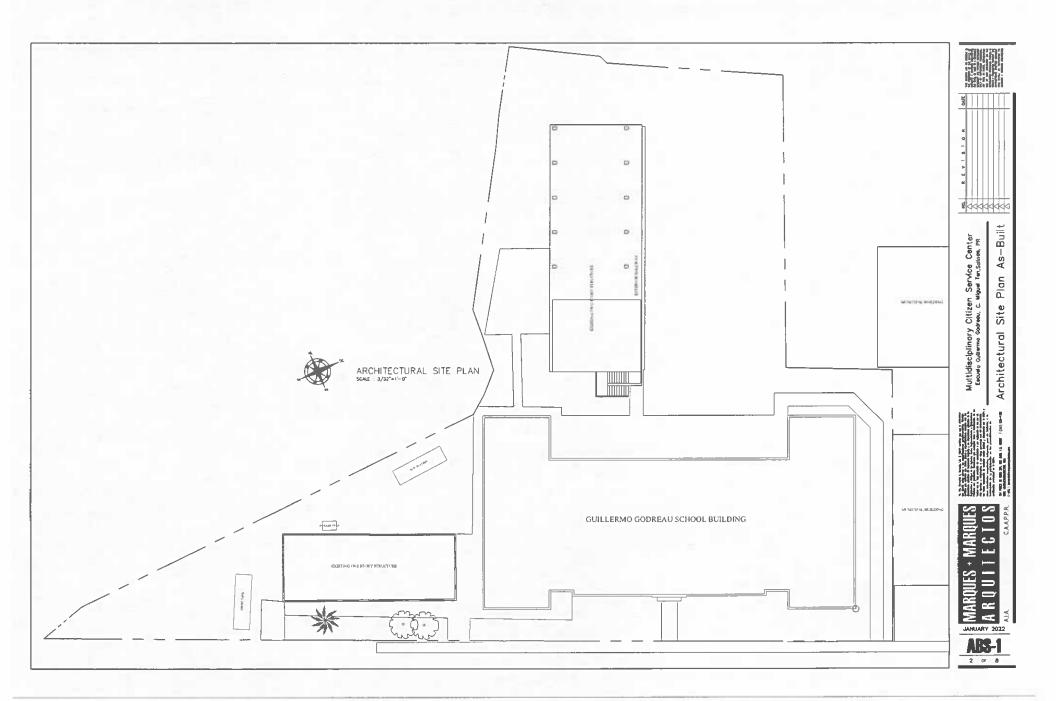


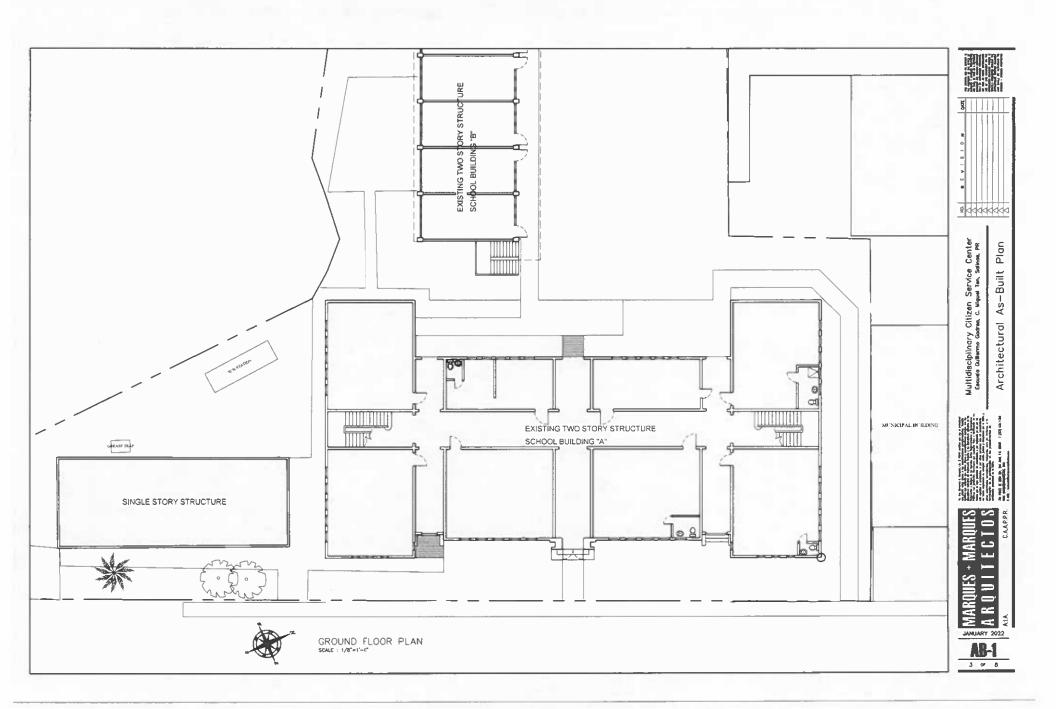


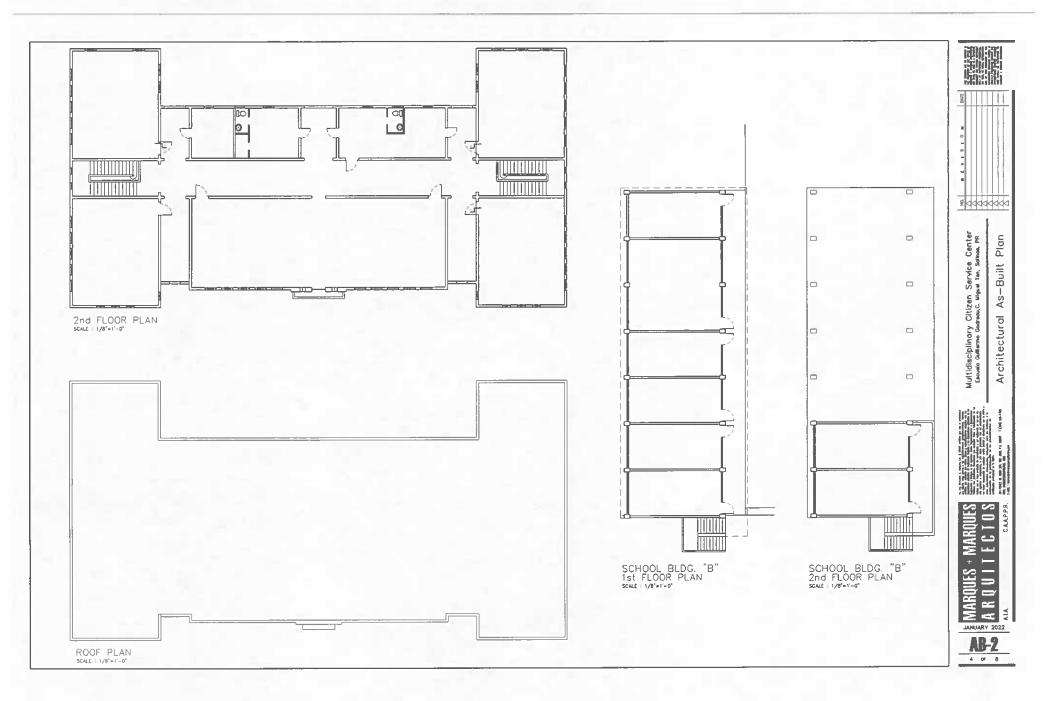
Vista frontal escuela Guillermo Godrea (calle Miguel Ten)

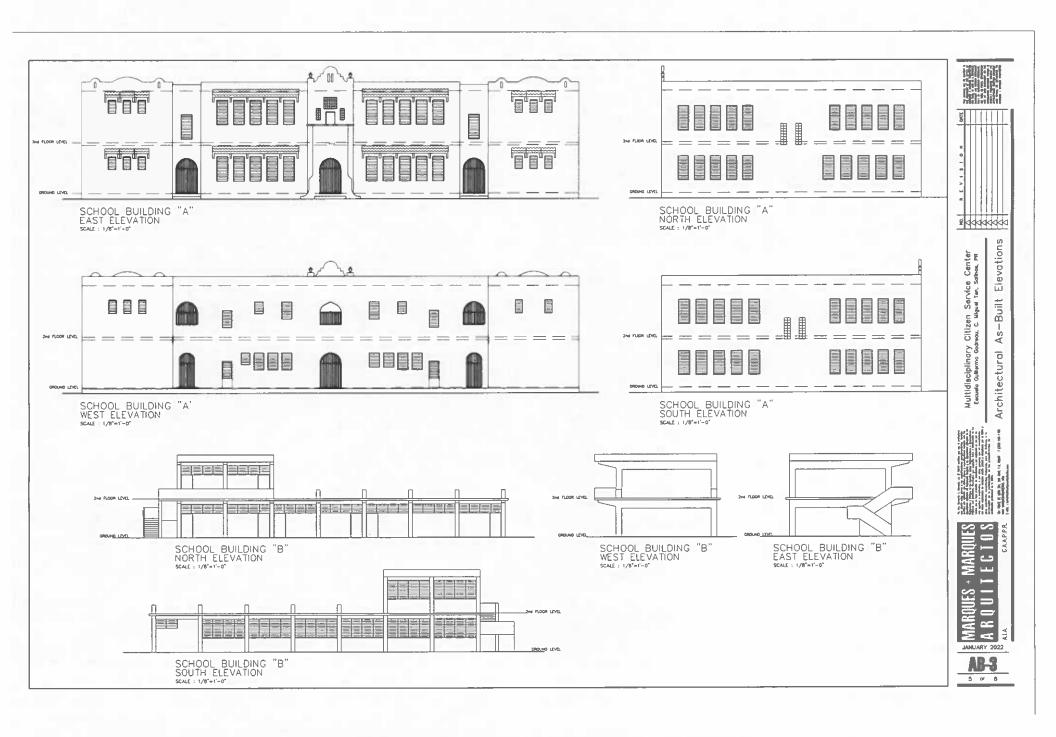


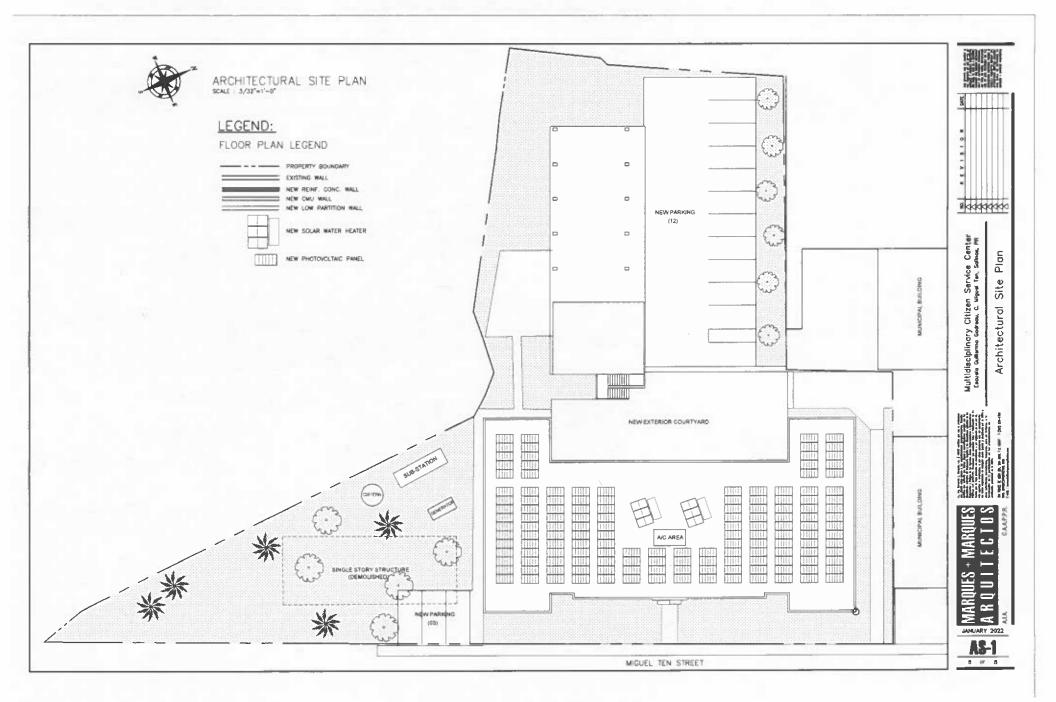
Vista trasera escuela Guillermo Godrea (patio trasero con edificio moderno escolar)

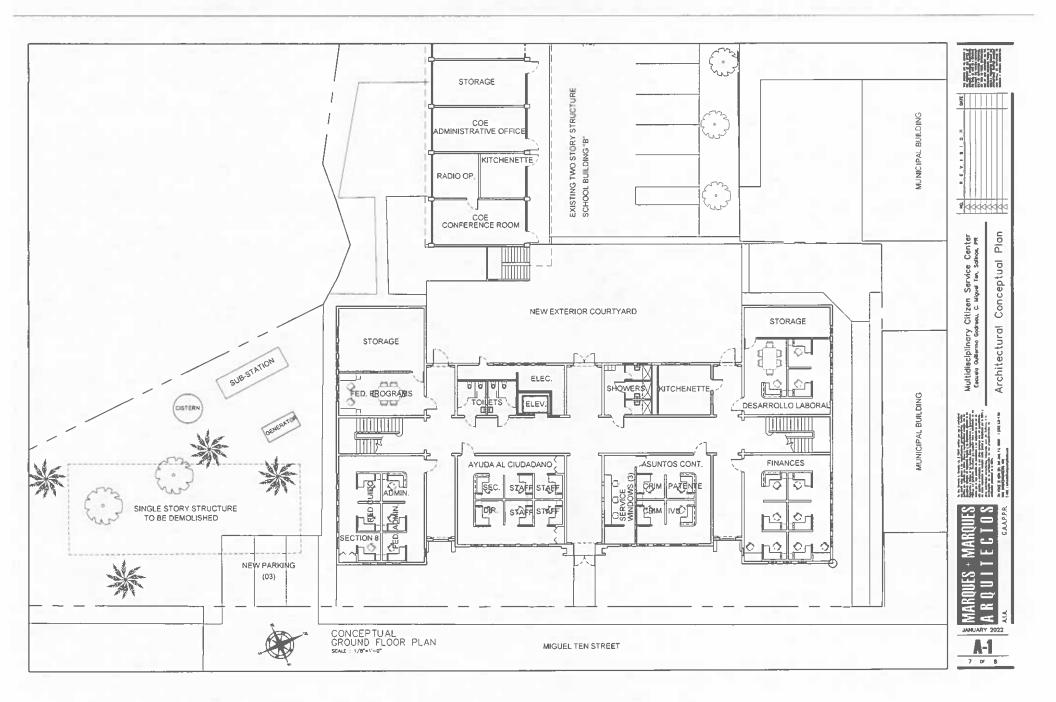


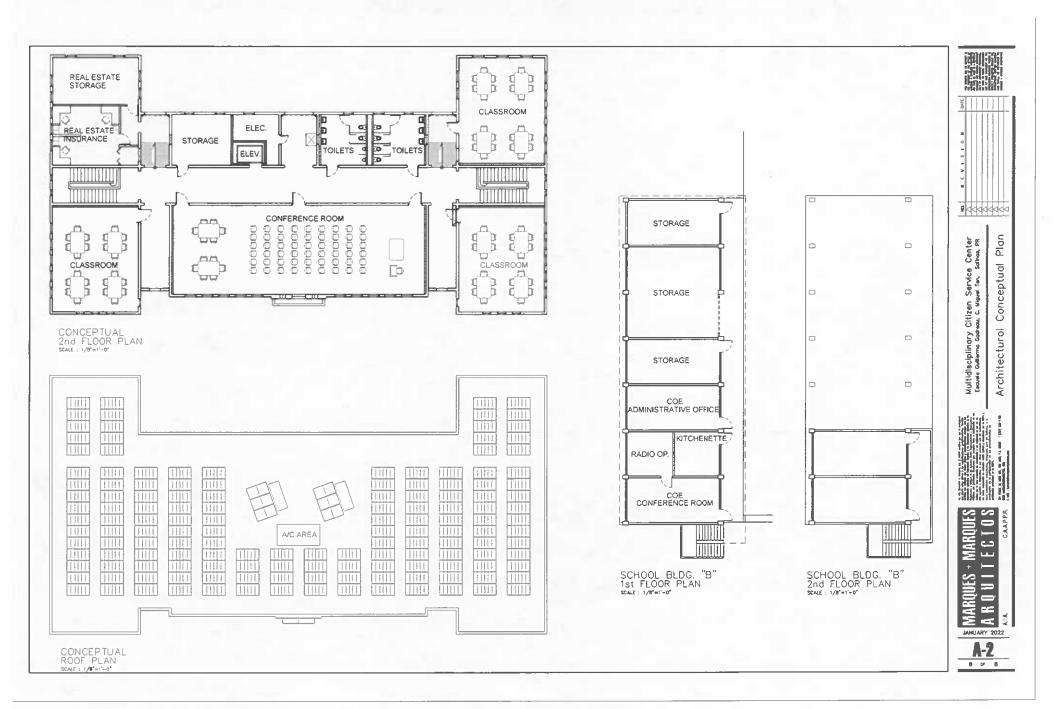














### United States Department of the Interior



#### FISH AND WILDLIFE SERVICE

Caribbean Ecological Services Field Office P.O. Box 491 Boqueron, PR 00622

In Reply Refer To: FWS/R4/CESFO/BKT/HUD

JAN 1 4 2013

Mr. Efrain Maldonado
Field Office Director
U.S. Department of Housing and Urban Development
235 Federico Costa Street, Suite 200
San Juan. Puerto Rico 00918

Re: Blanket Clearance Letter for Federally sponsored projects, Housing and Urban Development

Dear Mr. Maldonado:

The U.S. Fish and Wildlife Service (USFWS) is one of two lead Federal Agencies responsible for the protection and conservation of Federal Trust Resources, including threatened or endangered species listed under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) (ESA). In the U.S. Caribbean, the USFWS has jurisdiction over terrestrial plants and animals, the Antillean manatee and sea turtles when nesting. The National Marine Fisheries Service has jurisdiction over marine species, except for the manatee. The ESA directs all Federal agencies to participate in conserving these species. Specially, section 7 of the ESA requires Federal agencies to consult with the USFWS to ensure that actions they fund authorize, permit, or otherwise carry out will not jeopardize the continued existence of any listed species or adversely modify designated critical habitat. The USFWS issued regulations in 1986 detailing the consultation process. As part of this consultation process, the USFWS review development projects to assist Federal agencies on the compliance of the ESA.

The U.S. Department of Housing and Urban Development (HUD) typically allocate grant funds for rural and urban development projects. Obligations under the ESA, as well as the National Environmental Policy Act (NEPA), require HUD to perform consultation and an environmental impact review prior to the project's authorization. Primarily, these projects involve repair or reconstruction of existing facilities associated with developed land.

In order to expedite the consultation process, the Caribbean Ecological Services Field Office has developed this Blanket Clearance Letter (BCL) to cover for activities and projects that typically result in no adverse effects to federally-listed species under our jurisdiction. If projects comply with the project criteria discussed below, no further consultation with the USFWS is needed.

### Project Criteria

- 1. Street resurfacing.
- 2. Construction of gutters and sidewalks along existing roads.
- 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.
- 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.
- 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.

#### Determination:

Based on the nature of the projects described above and habitat characteristics described on project criteria, we have determined that the actions and type of projects described above may be conducted within this BCL without adversely affecting federally-listed

Mr. Maldonado

species under our jurisdiction. Thus, consultation under Section 7 of the Endangered Species Act is not required.

In all situations, HUD, and the municipalities are expected to implement Best Management Practices, where applicable, to ensure that impacts from erosion and stream sedimentation are appropriately minimized.

The Service encourages your agency to enhance the conservation of our trust resources (i.e.; listed species, wetlands, aquatic habitats, migratory birds and marine mammals). We therefore, provide the following recommendations that have proven to help in this way.

### Water Crossing Structures:

- 1. Use of bottomless culverts or single span bridges instead of traditional box or RCP culverts or any other water crossing structure that impacts the stream bottom, particularly in streams which support native fish. The use of bottomless culverts or a short span bridge would provide a more stable crossing and would not alter the stream habitat. However, if bottomless structures or bridges are not feasible due to cost or engineering constraints, we recommend the following criteria be used to maintain good habitat in the streams:
  - a. The stream should not be widened to fit the bridge since this can lead to sedimentation during low flows and possible bank erosion during high flows. Rather, the bridge should be designed to fit the stream channel at the point of crossing. Culverts should be sized to carry natural bank full flow. Additional flow can be capture by culverts placed at a higher elevation so as not to impact bank full flows.
  - b. Bridge abutments, wing walls or any other structures should not intrude into the active stream channel.
  - c. All culvert footings must be countersunk into the stream channel at both the invert and outlet ends at a minimum of 10% of the culvert height. This will align the water crossing structure with the slope of the stream.
  - d. Waterways must not be blocked as to impede the free movement of water and fish. Materials moved during construction, such as grubbing, earth fills, and earth cut materials must not be piled where they can fall back into the stream and block the drainage courses.
  - e. Appropriate erosion and/or sedimentation controls measures are to be undertaken to protect water quality until riverbanks are re-vegetated. It has been our experience that appropriate erosion and/or sedimentation control measures are not implemented properly by project contractors. In order to function properly, silt fences need to be buried 6" (proper depth is marked by a line on the silt fence) and supported at regular intervals by wood stakes. For that reason we are recommending that

- the enclosed drawing of proper silt fence installation is included in all final project construction plans.
- f. Upon completion of a water crossing construction, any temporary fill, must be removed from the construction area and disposed in a landfill.

#### Limitations:

Actions that do not meet the above project criteria, such as actions requiring placement of fill, disturbance, or modification to land outside of an existing access road or ROW; actions that occur on vacant property harboring a wetland and/or forest vegetation; actions requiring excavation, clearing of native vegetation, or alteration of storm water drainage patterns; or actions that require lighting which can be directly or indirectly seen from a beach, must be individually coordinated through the Caribbean Ecological Services Field Office and will be evaluated on a case by case basis.

### The Service reserves the right to revoke or modify this BCL if:

- New information reveals that the categories of work covered in this BCL may affect listed or designated critical habitat in a manner, or to an extent, not previously considered.
- 2. The categories of work included in this BCL are subsequently modified to include activities not considered in this review.
- 3. New species are listed or critical habitat designated that may be affected.

It is our mission to work with others, to conserve, protect and enhance fish wildlife and plants and their habitats for the continuing benefit of our people.

To obtain additional information on threatened and endangered species, you may visit our website <a href="http://www.fws.gov/caribbean/ES">http://www.fws.gov/caribbean/ES</a> where you will also find the Map of the Species by Municipality and the Map of Critical Habitat. The USFWS has also developed a web based tool called IPac. Please visit <a href="http://www.ecos.fws.gov/ipac">http://www.ecos.fws.gov/ipac</a> and familiarize yourself with the features we offer. We encourage you to begin your project planning process by requesting an **Official Species List** for your individual project that will include all species that may occur in the vicinity of the action area and includes a map of the action area. The site will also identify designated critical habitat, or other natural resources of concern that may be affected by your proposed project. At this time, best management practices or conservation measures are not available at the site but we expect the site to continue growing in its offering.

These maps provide information on the species/habitat relations within a municipality and could provide the applicants an insight if the proposed action is covered under this BCL or may affect a species, thus requiring individual review.

Mr. Maldonado 5

If you have any additional question regarding this BCL, please do not hesitate to contact Marelisa Rivera, Deputy Field Supervisor, at 787-851-7297 extension 206.

Sincerely yours,

Edwin E. Muñiz

Field Supervisor

Enclosures (Fact Sheets)

cc: OCAM, San Juan

Office of Federal Funds, 78 Municipalities of Puerto Rico

AAA

**PRFAA** 

**DNER** 





### Transmittal Letter

January 30, 2024

Caribbean Ecological Services Field Office U.S. Fish and Wildlife Service P.O. Box 491 Boquerón, Puerto Rico 00622

Email: caribbean@es@fws.gov



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

DAMARIS ROMAN RUIZ

Date: 2024.02.01 07:47:01 -04'00'

LOURDES MENA Digitally signed by LOURDES MENA Date: 2024.02.06 10:33:14 - 04'00' Adobe Acrobat version: 2023.008.20470

Acting Caribbean ES Field Supervisor

RE: **USFWS Endangered Species Act Certifications** City Revitalization Program

January 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-000073	Reconstrucción Edificio: Colaboratorio Tecnológico
PR-CRP-000127	Mejoras a la Plaza Pública José Ramón Figueroa Rivera
PR-CRP-000135	Centro Multidisciplinario de Servicios a la Comunidad
PR-CRP-000338	Mejoras a la Plaza de la Identidad
PR-CRP-000783	Centro de Actividades Municipal
PR-CRP-000996	Cine/Teatro Esperanza
PR-CRP-001094	Gimnasio Municipal

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 **Centro Multidisciplinario de Servicios a la Comunidad (PR-CRP-000135)** consisting on the remodeling of existing Guillermo Godreau school complex, a three-building school complex located at 23-73 Miguel Ten Street, Salinas, 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.

Ángel G. López-Guzmán Deputy Director

Permits and Environmental Compliance Division

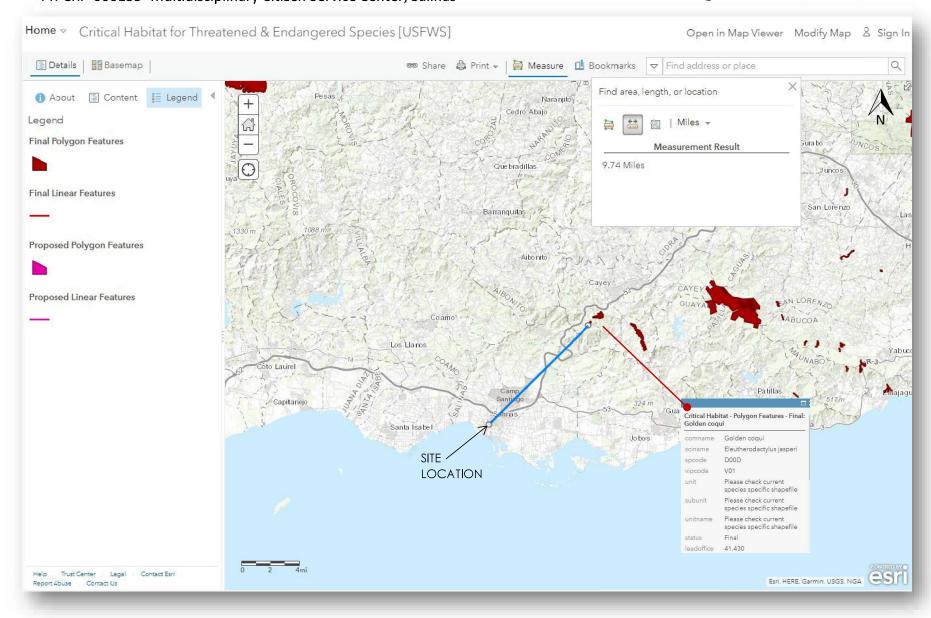
Office of Disaster Recovery

Address: P.O. Box 21365 San Juan, PR 00928 Telephone and Ext: 787-274-2527 ext. 4320 Email: environmentcdba@vivienda.pr.gov Jan. 24,2024
Date

23-73 Miguel Ten Street, Salinas, Puerto Rico



**Coord: 17.975548°, -66.298631°** 23-73 Miguel Ten Street, Salinas, Puerto Rico



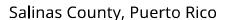
Source: USFWS https://www.fws.gov/project/critical-habitat, https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77

### IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to astrust resources) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of fects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI CONSI Wetlands) for additional information applicable to the trust resources addressed in that section.

### Location





### Local office

Caribbean Ecological Services Field Office

**(**787) 834-1600

**(787) 851-7440** 

CARIBBEAN ES@FWS.GOV

MAILING ADDRESS

Post Office Box 491 Boqueron, PR 00622-0491

PHYSICAL ADDRESS

Office Park I State Road #2 Km 156.5, Suite 303} Mayaguez, PR 00680



### Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly facted by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local force and a species list which fulfills this requirement canonly be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

- 1. Draw the project location and click CONTINUE.
- 2. Click DEFINE PROJECT.
- 3. Log in (if directed to do so).
- 4. Provide a name and description for your project.
- 5. Click REQUEST SPECIES LIST.

Listed species and their critical habitats are managed by the <u>Ecological Services Program</u> of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not**hown on this list. Please contact<u>NOAA Fisheries</u> for <u>species under their jurisdiction</u>.

1. Species listed under the <u>Endangered Species Actare</u> threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>Histing status page</u> for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an **f**oice of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

### Reptiles

NAME STATUS

Puerto Rican Boa Chilabothrus inornatus

**Endangered** 

Wherever found

No critical habitat has been designated for this species.

https://ecos.fws.gov/ecp/species/6628

### Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have feects on all above listed species.

### Bald & Golden Eagles

There are no documented cases of eagles being present at this location. However, if you believe eagles may be using your site, please reach out to the local Fish and Wildlife Service office.

Additional information can be found using the following links:

- Eagle Managment<u>https://www.fws</u>.g<u>ov/program/e</u>ag<u>le-man</u>ag<u>emen</u>t
- Measures for avoiding and minimizing impacts to birds
   <a href="https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds">https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds</a>
- Nationwide conservation measures for birds <a href="https://www.fws.gov/sites/defaultfiles/documents/nationwide-standard-conservation-measures.pdf">https://www.fws.gov/sites/defaultfiles/documents/nationwide-standard-conservation-measures.pdf</a>

 Supplemental Information for Migratory Birds and Eagles in IPaC <a href="https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action">https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action</a>

### What does IPaC use to generate the potential presence of bald and golden eagles in my specifical location?

The potential for eagle presence is derived from data provided by the vian Knowledge Network (AKN) The AKN data is based on a growing collection of urvey, banding, and citizen science dataset and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool

### What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFW<u>Sirds of Conservation Concern</u> (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by thevian Knowledge Network (AKN). The AKN data is based on a growing collection of Survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle Lagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the <u>Rapid Avian Information Locator</u> (<u>RAIL</u>) Tool

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the <u>Eagle Act</u> should such impacts occur. Please contact your local Fish and Wildlife Service Field to ce if you have questions.

### Migratory birds

Certain birds are protected under the Migratory Bird Treaty Aetand the Bald and Golden Eagle Protection Act.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.

2. The Bald and Golden Eagle Protection Actof 1940.

Additional information can be found using the following links:

- Eagle Managementhttps://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds
   <a href="https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds">https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds</a>
- Nationwide conservation measures for birdshttps://www.fws.gov/sites/defaultfiles/ documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC
   <a href="https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action">https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action</a>

The <u>data</u> in this location indicates there are no migratory<u>birds of conservation concern</u>expected to occur in this area.

There may be migratory birds in your project area, but we don �� thave any survey data available to provide further direction. For additional information, please refer to the links above for recommendations to minimize impacts to migratory birds or contact your local FWS ffice.

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my speciefol location?

The Migratory Bird Resource List is comprised of USFW<u>Sirds of Conservation Concern</u> (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the vian Knowledge Network (AKN). The AKN data is based on a growing collection of urvey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle gale Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Apid Avian Information Locator (RAIL) Tool

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the <u>Avian Knowledge Network (AKN)</u> This data is derived from a growing collection of <u>survey</u>, <u>banding</u>, and <u>citizen science datasets</u>

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the ALL Tool and look at the range maps provided for birds in your area at the bottom of the project provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

- 1. "BCC Rangewide" birds are <u>Birds of Conservation Concern</u> (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
- 2. "BCC BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
- 3. "Non-BCC Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the <a href="Eagle Act">Eagle Act</a> requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. foshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds,feorts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

#### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area **6** the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelproject webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegelor Pam Loring</u>.

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need tobtain a permit to avoid violating the Eagle Act should such impacts occur.

### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey fort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high surveyftort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey fort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

# Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refugesystem 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 at this location.

### Fish hatcheries

There are no fish hatcheries at this location.

## Wetlands in the National Wetlands Inventory (NWI)

Impacts to <u>NWI wetlands</u> 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.S. Army Corps of Engineers District.

This location did not intersect any wetlands mapped by NWI.

**NOTE:** This initial screening does **not**replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

#### **Data limitations**

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

#### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubelicid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

#### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may diene and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

CITY REVITALIZATION PROGRAM (CRP)

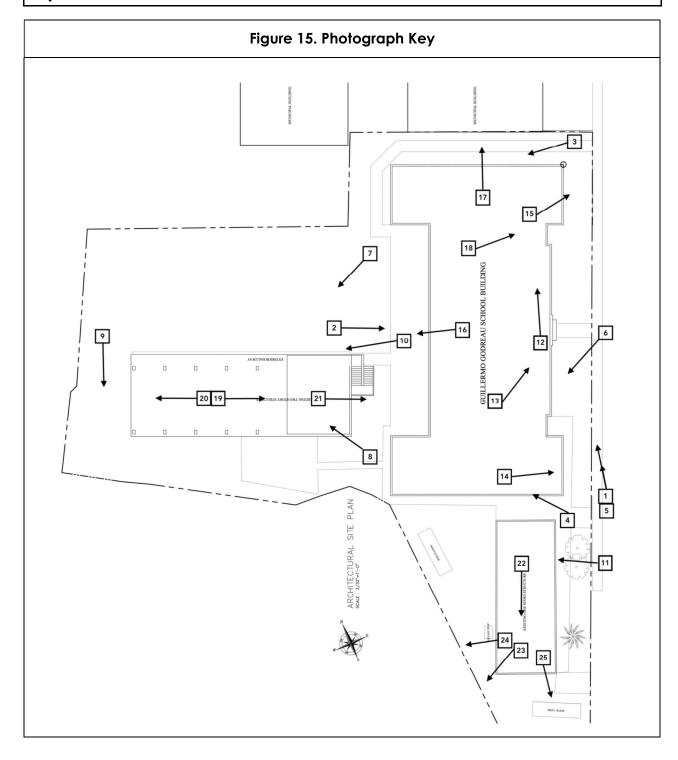
**Section 106 NHPA Effect Determination** 

**Subrecipient:** Municipal Government of Salinas

Project Name: Escuela Guillermo Godreau Manatau

Project Number: CRP-000135





CITY REVITALIZATION PROGRAM (CRP)

**Section 106 NHPA Effect Determination** 

**Subrecipient:** Municipal Government of Salinas

Project Name: Escuela Guillermo Godreau Manatau

**Project Number:** CRP-000135





**Photo #:** 1

**Description:** Full front elevation of principal school building.

**Date:** 11/30/21

**Direction:** Northwest



**Photo #:** 2

**Description:** Rear of structure of principal school building.

**Date:** 11/30/21

**Direction:** Southeast

CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

**Subrecipient:** Municipal Government of Salinas

Project Name: Escuela Guillermo Godreau Manatau

Project Number: CRP-000135





**Photo #:** 3

**Description:** Right side of structure of principal school building.

**Date:** 11/30/21

**Direction:** Southwest



**Photo #:** 4

**Description:** Left side of structure of principal school building.

**Date:** 11/30/21

**Direction:** Northwest

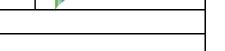
CITY REVITALIZATION PROGRAM (CRP)

**Section 106 NHPA Effect Determination** 

**Subrecipient:** Municipal Government of Salinas

Project Name: Escuela Guillermo Godreau Manatau

Project Number: CRP-000135



GOVERNMENT OF PUERTO RICO



**Photo #:** 5

**Description:** Streetscape.

**Date:** 11/30/21

**Direction:** Northwest



**Photo #:** 6

**Description:** Streetscape.

**Date:** 11/30/21

**Direction:** Southwest

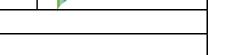
CITY REVITALIZATION PROGRAM (CRP)

**Section 106 NHPA Effect Determination** 

**Subrecipient:** Municipal Government of Salinas

Project Name: Escuela Guillermo Godreau Manatau

**Project Number:** CRP-000135





**Photo #:** 7

**Description:** Full front elevation of secondary school building.

**Date:** 11/30/21

**Direction:** Southwest



**Photo #:** 8

**Description:** Rear of structure of secondary school building.

**Date:** 11/30/21

**Direction:** Northwest

CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

**Subrecipient:** Municipal Government of Salinas

Project Name: Escuela Guillermo Godreau Manatau

**Project Number:** CRP-000135





**Photo #:** 9

**Description:** Right side of structure of secondary school building.

**Date:** 11/30/21

**Direction:** Southwest



**Photo #:** 10

**Description:** Left side of structure of secondary school building.

**Date:** 11/30/21

**Direction:** Southwest

CITY REVITALIZATION PROGRAM (CRP)

**Section 106 NHPA Effect Determination** 

**Subrecipient:** Municipal Government of Salinas

Project Name: Escuela Guillermo Godreau Manatau

**Project Number:** CRP-000135





**Photo #:** 11

**Description:** Full front elevation of accessory storage & utility building.

**Date:** 2/17/22

**Direction:** Northwest



**Photo #:** 12

**Description:** Rooftop, full front elevation of principal school building.

**Date:** 2/17/22

**Direction:** Northeast

CITY REVITALIZATION PROGRAM (CRP)

**Section 106 NHPA Effect Determination** 

**Subrecipient:** Municipal Government of Salinas

Project Name: Escuela Guillermo Godreau Manatau

Project Number: CRP-000135





**Photo #:** 13

**Description:** Conference room, front of principal school building. 2<sup>nd</sup> floor.

**Date:** 2/17/22

**Direction:** Northeast



**Photo #:** 14

**Description:** Conference room corner, front of principal school building. 2<sup>nd</sup> floor.

**Date:** 2/17/22

**Direction:** Northeast

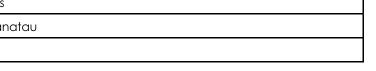
CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

**Subrecipient:** Municipal Government of Salinas

Project Name: Escuela Guillermo Godreau Manatau

Project Number: CRP-000135



GOVERNMENT OF PUERTO RICO



**Photo #:** 15

**Description:** Classroom, right side of principal school building. 2<sup>nd</sup> floor.

**Date:** 2/17/22

**Direction:** Northeast



**Photo #:** 16

**Description:** Central hallway, rear of principal school building. 1st floor.

**Date:** 2/17/22

**Direction:** Northwest

CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

**Subrecipient:** Municipal Government of Salinas

Project Name: Escuela Guillermo Godreau Manatau

Project Number: CRP-000135



GOVERNMENT OF PUERTO RICO

**Photo #:** 17

**Description:** Staircase, right side of principal school building. 1st floor.

**Date:** 2/17/22

**Direction:** Northeast



**Photo #:** 18

**Description:** Lateral hallway, right side of principal school building. 1st floor.

**Date:** 2/17/22

**Direction:** Southeast

CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

**Subrecipient:** Municipal Government of Salinas

Project Name: Escuela Guillermo Godreau Manatau

**Project Number:** CRP-000135



GOVERNMENT OF PUERTO RICO



**Photo #:** 19

**Description:** Third classroom, left side of secondary school building. 1st floor.

**Date:** 8/26/22

**Direction:** Southeast



**Photo #: 20** 

**Description:** Third classroom, right side of secondary school building. 1st floor.

**Date:** 8/26/22

**Direction:** Northwest

CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

**Subrecipient:** Municipal Government of Salinas

Project Name: Escuela Guillermo Godreau Manatau

Project Number: CRP-000135





**Photo #:** 21

**Description:** First classroom, left side of secondary school building. 1st floor.

**Date:** 8/26/22

**Direction:** Southeast



Photo #: 22

**Description:** Interior, left side of accessory storage & utility building. Ground floor.

**Date:** 8/26/22

**Direction:** Southwest

CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

**Subrecipient:** Municipal Government of Salinas

Project Name: Escuela Guillermo Godreau Manatau

**Project Number:** CRP-000135





**Photo #:** 23

**Description:** Corner, accessory storage & utility building. Ground floor.

**Date:** 8/26/22

**Direction:** Southwest



Photo #: 24

**Description:** Wall detail, accessory storage & utility building. Ground floor.

**Date:** 8/26/22

**Direction:** Southwest

CITY REVITALIZATION PROGRAM (CRP)

**Section 106 NHPA Effect Determination** 

**Subrecipient:** Municipal Government of Salinas

Project Name: Escuela Guillermo Godreau Manatau

**Project Number:** CRP-000135





**Photo #:** 25

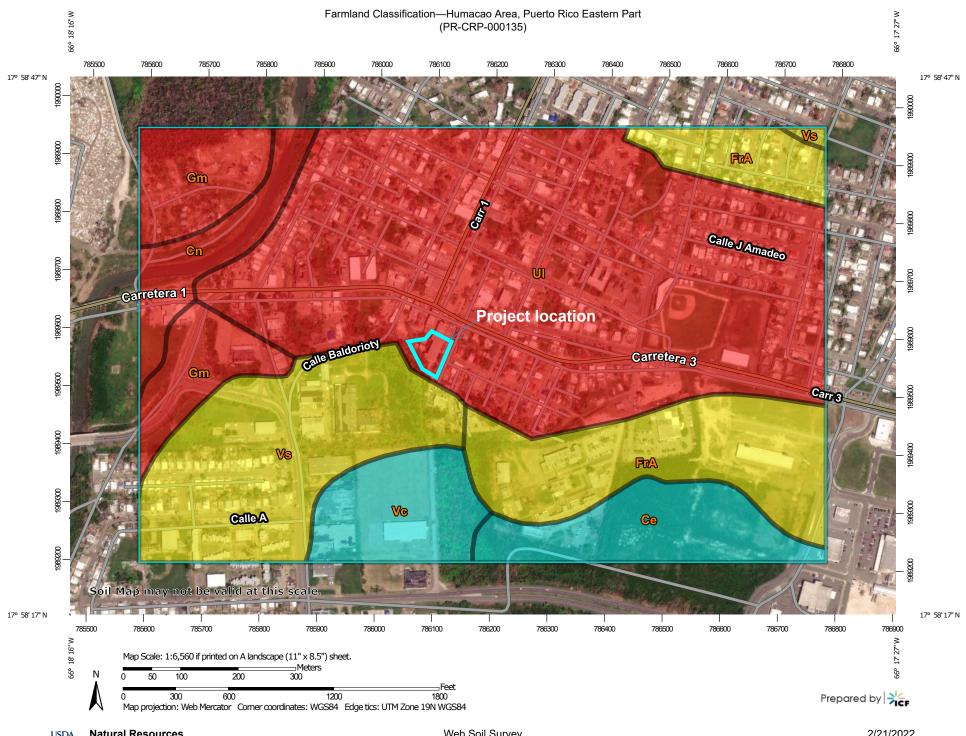
**Description:** Corner, accessory storage & utility building. Ground floor.

**Date:** 8/26/22

**Direction:** Southeast

**Attachment 11 – Farmland Classification (map and information)** 

# Attachment 11 – Farmland Classification (map and information)



		MAP LEGEND		
Area of Interest (AOI)  Area of Interest (AOI)  Area of Interest (AOI)  Area of Interest (AOI)  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 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 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 flood during the growing season  Prime farmland if irrigated  Prime farmland if drained and either protected from flooding or not frequently flood during the growing season  Prime farmland if irrigated and drained  Prime farmland if irrigated and drained  Prime farmland if irrigated and either protected from flooding or not frequently flooding or not frequently flooding the growing season

# Farmland Classification—Humacao Area, Puerto Rico Eastern Part (PR-CRP-000135)

,40,4	Prime farmland if subsoiled, completely removing the root inhibiting soil layer	~	Farmland of statewide importance, if drained and either protected from flooding or not frequently	~	Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium	~	Farmland of unique importance Not rated or not available		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	~	flooded during the growing season Farmland of statewide importance, if irrigated and drained	~	Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the	Soil Rat	ting Points  Not prime farmland  All areas are prime farmland	•	Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
? ? ? ? ?	factor) does not exceed	~ ~ ~	importance, if irrigated	<pre></pre>	flooding or not frequently				(climate factor) does not

#### Farmland Classification—Humacao Area, Puerto Rico Eastern Part (PR-CRP-000135)

- 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

- 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

04

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: Humacao Area, Puerto Rico Eastern Part Survey Area Data: Version 13, Sep 17, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 14, 2014—May 27, 2020

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	
Се	Cartagena clay	Farmland of statewide importance	14.5	6.5%	
Cn	Cobbly alluvial land	Not prime farmland	8.9	4.0%	
FrA	Fraternidad clay, 0 to 2 perecent slopes	Prime farmland if irrigated	32.2	14.5%	
Gm	Guamani silty clay loam	Not prime farmland	17.4	7.9%	
UI	Urban land	Not prime farmland	103.8	46.8%	
Vc	Vayas silty clay, frequently flooded	Farmland of statewide importance	12.4	5.6%	
Vs	Vives silty clay loam, high bottom	Prime farmland if irrigated	32.5	14.7%	
Totals for Area of Interest			221.6	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 12 – Floodplain management

• 8-step process documentation

#### U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

# **8-Step Process Documentation**

**Project number:** PR-CRP-000135

**Project name:** Multidisciplinary Center for Community Services

Municipality: Salinas

Date: November 29, 2023

Decision Process for E.O. 11988 as Provided by 24 CFR §55.20

#### Project description

The municipality of Salinas intends to create a multiuse space within the centralized urban area. This space will be used to provide services to the community and assist in the governance activities that regularly need to be conducted. The site selected is the Guillermo Godreau school, which is owned by the municipality of Salinas since May 2018. The site is located on 23-73 Calle Miguel Ten, in Salinas Puerto Rico. It is conveniently located adjacent to the municipality's city hall. As the name suggests, the municipality plans to use the site for a variety of services which will benefit the local citizenship. The following is a summary of the activities that will be performed at the site. For details refer to the memorandum included in Attachment 1.

The 3,329 square meter project site has three buildings: building A, a two-story, 16,511-square-foot main school building that was constructed with reinforced concrete and a metal roof; building B, a two-story, 3,195-square-foot school building constructed with reinforced concrete located on the northern portion of the lot; and building C, a one-story, 1,648-square-foot reinforced concrete structure on the western side of the lot.

The proposed project would remodel the interiors of buildings B and C, pave and repair the grounds, improve parking areas within the property, and support the closure of building A. The open courtyard at the rear of the property would be finished with a mix of asphalt and permeable surfaces. This 667 square meter area will be organized to establish 14 parking spaces. New trees and vegetation will be planted and sidewalks fronting the property will be reconstructed and repaired.

The facility will serve to establish a hub to provide services to the residents of Salinas, which include: "Ayuda al Ciudadano", "CRIM", "Patente Municipal" as well as service/storage spaces. New ADA compliant restrooms will also be included in this renovation. The second floor will house additional services including "Capellanía Municipal" and "Programa: Tu Vales" with support areas (conference room and kitchenette). The second-floor spaces are to be made available in the event of a natural disaster to support the municipality's "Centro de Operaciones de Emergencias".

This analysis will consider impacts to the floodway along with concerns for loss of life and property.

# List of attachments:

Attachment 1 - Project description memorandum

Attachment 2 - Step 2 Publication documents

Attachment 3 - Flood Barricade drawing

Attachment 4 - Step 7 Publication documents

# Step 1: Determine whether the action is located in a 100-year floodplain (or a 500-year floodplain for critical actions) or wetland.

The project location is within the 100-year floodplain. The entire site is located within Zone AE (area of special flood hazard with water surface elevations determined), as indicated on Flood Insurance Rate Map (FIRM) Panel no. 72000C2085J, effective date 11/18/2009 and within Flood Hazard Area, Zone A, on the Advisory Base Flood Elevation map (ABFE) (see Figures 1 and 2 below).

Due to the project's location in the floodplain, Floodplain Management activities need to be implemented and documented to ensure compliance with Executive Order 11988. The project does not meet any of the exceptions in 24 CFR 55.12 and therefore requires an 8-step analysis of the direct and indirect impacts associated with the action to be undertaken in the floodplain.

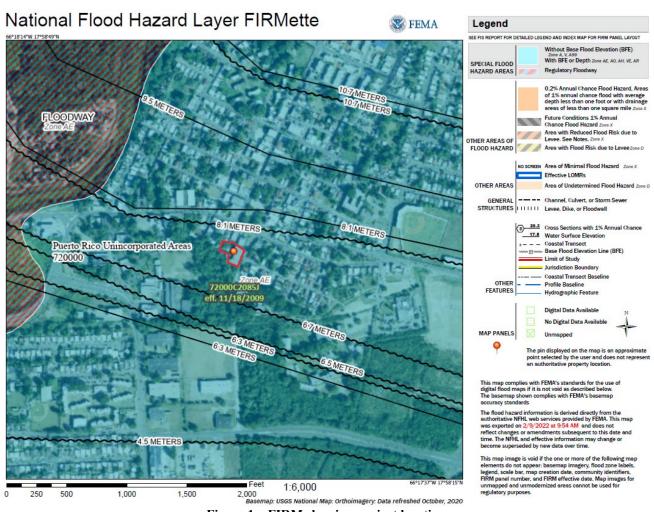


Figure 1 – FIRM showing project location

# PR-CRP-000135 ABFE map

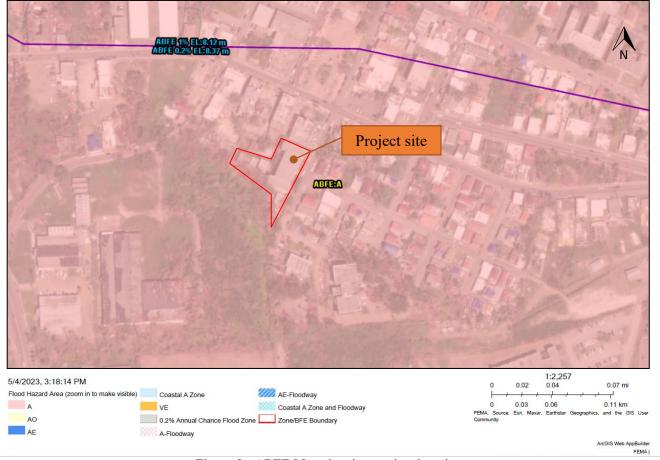


Figure 2 - ABFE Map showing project location

# Step 2: Notify the public for early review of the proposal and involve the affected and interested public in the decision-making process.

A public notice was published in the *Primera Hora* newspaper on September 27, 2023. This newspaper has circulation throughout the entire island of Puerto Rico. The ad was directed at interested agencies, groups and individuals and was published in Spanish and English. The notice also included the name, proposed location, a brief description of the activity, and the responsible entity's contact information. In this case, this person is a permits and environmental compliance specialist for Salinas. The notice also included the location at which a full description of the proposed action could be viewed. A copy of the published notification will be kept in the project's environmental review record and attached to this document (see Attachment 2).

The required 15 calendar days were allowed for public comment. This comment period ended on September 27, 2023. However, an additional 2 days were provided to allow for comments to come through in the event they were sent via regular mail. At the end of the waiting period, no comments were received.

#### Step 3: Identify and evaluate practicable alternatives.

Several criteria were evaluated for site selection:

- (a) located in a centralized area of the municipality; (this is part of the requirements for the City Revitalization Program as per https://cdbg-dr.pr.gov/en/city-revitalization/)
- (b) developed within a site that the municipality has ownership;
- (c) have public transportation nearby;
- (d) be accessible to the majority of residents of the municipality.

The municipality of Salinas had limited options while considering site selection for a multidisciplinary center. The municipality had ownership of the school and a former hospital, both located within the urban center of the municipality. However, both are located within the floodplain, as is most of the Salinas urban area.

#### A. Locate the Project Within the Floodplain

Another facility was initially considered as an alternate location for this action. It was the site of a former hospital. However, preliminary evaluations determined it was in more dire conditions than the Guillermo Godreau school. This would require increased expenditure on construction requirements to rehabilitate the facility and bring up to codes. It would also result in a longer construction time.

#### B. Locate the Project Outside of the Floodplain

It would be impossible for the Salinas Municipality to find a centralized location that is not in the floodplain because the central urban area of the municipality is within it. The municipality owns several properties outside the floodplain but these would not meet most of the criteria listed above. Primarily, these would not be easily accessible to most of the citizens. Also, the sites are also in bad conditions and would require intensive work and expenditures.

#### C. No Action or Alternative Actions that Serve the Same Purpose

A no action alternative was considered and rejected because the municipality wanted to provide purposeful use to the facility it owned since 2018. A no action alternative would also limit the municipality's ability to impact their community's development. This alternative will also keep the limitations of the services the municipality provides as well as limitations on available room for administrative matters which include meeting and learning spaces.

#### Step 4: Identify Potential Direct and Indirect Impacts of Associated with Floodplain Development.

The location of the project at 23-73 Calle Miguel Ten, Salinas will have minimal impacts to the floodplain because the structures are already existing. The design will also incorporate Aquafence floor barricades into designated doorways (see Attachment 2) of building B, waterproof masonry coating on the buildings, and elevation of electrical systems in building C. The property's electrical substation and new diesel generator will be installed on the roof of building B, and the interior floors of buildings B and C will have their interior floor levels raised by 8" which was above the high-water mark left by previous flooding incidents. The new interior floor elevation shall be achieved by installing a concrete reinforced EPS system. The "flood barricades" for Building B can easily be installed prior to a potential weather event and subsequently removed (see Attachment 2 for details).

The highest priority of this review is to prevent the loss of life. Since the project is not envisioned as a residential facility, there will not be an increase in the density of population in the area. Thus, in the event of a flood, there will be no potential threat to life because of this action.

The city of Salinas is a member of the National Flood Insurance Program and structures located in the flood zone must comply with the local flood ordinance. HUD requires projects located in the floodplain to maintain flood insurance for the life of the property. The city will obtain and maintain flood insurance for the site and all its structures to help mitigate any effects of flooding.

In addition to concerns for life and property, the city considered the natural and beneficial values of the floodplain. The natural resources of the floodplain include water, biological, and societal resources.

The fact that the municipality decided to use an existing building will avoid creating a new impervious surface within the floodplain area. As such the construction will have minimal effects on water resources. The design will incorporate new impervious areas and planting strips. This will allow water absorption in the soil rather than an increase in runoff. The design of the site plan will be managed so that natural flood and erosion control, water quality, and groundwater recharge are improved. In addition to the utilization of an existing impervious surface in the floodplain, the floodplain will be minimally impacted.

Societal resources were also considered during the design process. The action on this site is meant to enhance the location and offer an aesthetically pleasing structure. This has an effect on society as a whole. The site will not have an effect on agricultural lands and will restore some qualities to the main building, which is located within the municipality's historic district (as delineated by SHPO).

# Step 5: Where practicable, design or modify the proposed action to minimize the potential adverse impacts to lives, property, and natural values within the floodplain and to restore, and preserve the values of the floodplain.

- (a) **Preserving Lives:** As indicated previously, the proposed action will not use the site as a residential facility. Thus, in the event of a flood, there is a limited potential threat to life. In the rare event that lives need to be preserved at the site, local law enforcement and the emergency broadcast system will implement an early warning system should flooding conditions arise. In addition to the warning system, law enforcement has an emergency evacuation and relocation plan. Permanent users of the facility will be briefed and made aware of the location within a flood hazard area. Plans will be developed to manage human resources during possible flood events. The lowest floors of the buildings would be elevated, and floor barricades would be installed to increase the property's resiliency.
- (b) **Preserving Property:** To help mitigate flooding effects on the property, flood insurance will be acquired and maintained in order to mitigate possible flood damage.

Buildings "B" and "C" shall be structurally reinforced and will have their interior floor levels raised by 8" which is above the high-water mark left by previous flooding incidents. The new interior floor elevation shall be achieved by installing a concrete reinforced EPS system. For building B, removable flood barriers have been incorporated into the design to protect door openings. These "flood barricades" can easily be installed prior to a potential weather event and subsequently removed.

Building "C" is meant to be used primarily for storage and as a food preparation kitchen with integrated open spaces for dining. As this structure will be mostly open to the exterior, no flood barriers have been integrated into its remodeling. However, all new electrical infrastructure in this building will be raised to BFE levels to minimize any damage in the event of heavy flooding.

The lowest floor of the structures would be elevated to 8 inches in comparison with the FEMA BFE. Exterior electrical equipment will be elevated consistent with FEMA's Lowest Floor Guide (<a href="http://www.fema.gov/pdf/nfip/manual200605/07lfg.pdf">http://www.fema.gov/pdf/nfip/manual200605/07lfg.pdf</a>) and use flood resistant materials consistent with FEMA bulletins (see <a href="https://www.fema.gov/media-library/assets/documents/2655?id=1580">https://www.fema.gov/media-library/assets/documents/2655?id=1580</a>).

(a) Preserving Natural Values and Minimizing Impacts: The site design chosen as an alternative at Step 3 will reduce floodplain impacts and avoid new construction from occurring in the floodplain. New permeable surfaces and planting strips would be installed within the property to help allow water percolation and limit the runoff that can generate erosion in other areas. Since the site is not adjacent to water resources, its effect on these will be minimal. Impacts to the floodplain will also be limited due to construction occurring within a previously developed site. Landscaping practices will be implemented using, whenever possible, native vegetation.

(b)	Restore and Preserve the values of the floodplain: The chosen alternative will restore floodplain values in the sense that it would provide area for water percolation and horizontal movement as compared to the existing conditions.

#### Step 6: Reevaluate the Alternatives.

Although the Guillermo Godreau school is in a floodplain, the project has been adapted to minimize effects on floodplain values. Additionally, steps were taken to minimize risks to human life and property via evacuation plans, flood insurance, and floodproofing measures discussed above. The municipality will maintain the statutorily required flood insurance premiums for the life of the structure in accordance with the Flood Disaster Protection Act of 1973.

The alternative of using another location within the floodplain will not resolve the issue of the project site being in the floodplain. Another site the municipality owns, a former hospital, was considered for use. A preliminary evaluation of the site's conditions seemed to indicate that the rehabilitation of this facility will increase the costs of the project. Although the site meets the development criteria, it still places the project within the floodplain.

The municipality rejected the alternative of placing the multidisciplinary citizen service center in a location outside the floodplain because it would not meet the location and accessibility criteria. The distance will likely render the site useless as a citizen service center.

The no action alternative is also impracticable because it will not satisfy the needs of the citizenship and to provide a purposeful use to the site.

Due to concerns related to financial costs and inaccessibility, the proposed site location is the only location that satisfies the purpose and need for the projected action.

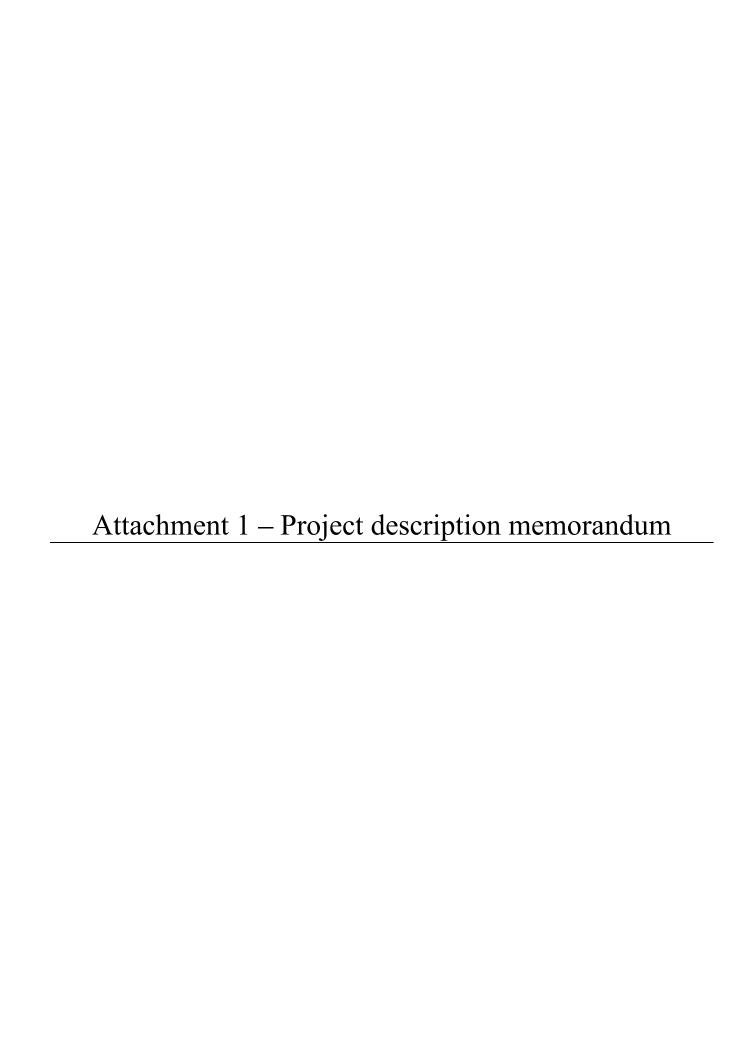
#### Step 7: Determination of No Practicable Alternative

It is the Municipality of Salinas' determination that there is no practicable alternative to locating the project in the flood zone. This is due to: 1) the need to provide services in an area accessible to its residents; 2) CRP program requirements to conduct activities within urban centers; 3) the desire of not having to displace residents great distances to obtain services; 4) the need to construct an economically feasible project; 5) the site's access to public transportation and centric location; and 6) the ability to mitigate and minimize impacts on human health, public property, and floodplain values.

A final notice was published on November 10, 2023, in Primera Hora newspaper and posted consistent with the prior notice. The notice explains the reasons why the modified project must be located in the floodplain, offers a list of alternatives considered at Steps 3 and 6, and describes the mitigation measures at Step 5 taken to minimize adverse impacts and preserve natural and beneficial floodplain values. The comment period ended on November 18, 2023, an additional day was reserved in case comments were received via postal mail. At the end of the period, no comments or concerns were expressed by the public regarding the proposed action. The Step 7 notice is included in Attachment 3.

#### Step 8: Implement the Proposed Action

The municipality of Salinas will ensure that this plan, as described above, is executed, and that the necessary language will be included in all agreements with participating parties. The city will also take an active role in monitoring the construction process to ensure no unnecessary impacts to the floodplain occur, nor unnecessary risks are taken. The flood insurance requirement for the life of the property will be monitored by the municipality of Salinas by listing the agency as an interested party on the 2<sup>nd</sup> mortgagee/other box of the flood insurance application and by placing a covenant on the property that lasts for the useful life of the structure.



#### Multidisciplinary Citizen Service Center Escuela Guillermo Godreau, Salinas, Puerto Rico

#### Memorial

The municipality of Salinas has proposed to remodel the existing Guillermo Godreau school complex. This three building school complex is located in the Miguel Ten Street near the urban center of Salinas. The property is relatively flat and occupies 3,329.06 square meters. Its coordinates are NAD83 x:214256.0662 y:215754.6029. The three buildings located in the property include:

- Original school building (A). This two-story building was constructed in reinforced concrete and has a metal roof structure. Its floor area is 8,255.6 square feet per floor for a total of 16,511.2 square feet.
- 2. New classroom building (B). This two-story, reinforced concrete classroom building has 2,477 square feet at ground level and 718 square feet on the second floor of classroom space. It is located behind the original school building on the northern side of the lot.
- 3. Small service building (C). This one-story, 1,648.3 square feet reinforced concrete structure is located on the western side of the lot, next to the original school building.

Initially, the original classroom building (A) was to be remodeled and have its infrastructure updated to serve as the main Service Center. Structural studies were performed which revealed major material and structural deficiencies which do not allow for this building's use without extensive and costly structural retrofitting. This intervention was deemed beyond the scope for the current project.

This project will focus on the interior remodeling of the newer classroom buildings (B) & (C) as well as the paving and repairing of the grounds for these buildings which include the creation of new parking areas within the property. The original school building is to be closed. Its façade will be painted, and minor reparations are to be performed on various windows to prevent pigeons and rodents from entering the building.

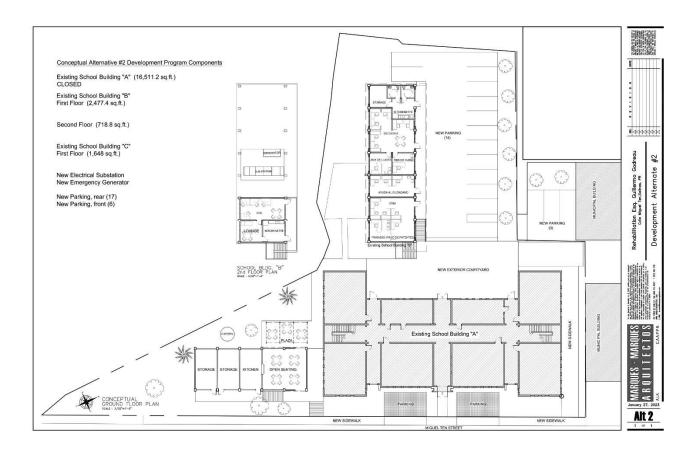
Classroom building (B) will have its electrical, plumbing, and mechanical infrastructure updated. This will include the installation of the properties' electrical substation and new diesel generator on the roof as a safeguard against flooding. Its interior floor level is to be raised approximately 8" to provide further resiliency. This new floor level is above past flood high-water marks.

The first floor of building (B) will house municipal services which include the offices of "Ayuda al Ciudadano", "CRIM", "Patente Municipal" as well as service/storage spaces. New ADA compliant restrooms will also be included in this renovation. The second floor will house additional services including "Capellanía Municipal" and "Programa: Tu Vales" with support areas (conference room and kitchenette). The second-floor spaces are to be made available in the event of a natural disaster for the municipalities' "Centro de Operaciones de Emergencias".

## MARQUES + MARQUES A R Q U I T E C T C T O S

Building (C) is also to have its interior floor level raised in order to provide better flood protection and resiliency. It will house a new kitchen/food prep area which aims to serve the municipalities employees that will work on the property as well as adjacent municipal buildings. This new kitchen will also work for municipal programs that prepare meals. The building will have storage spaces and open dinning/lounge areas. A new outdoor seating area is to be provided next to the indoor seating area for additional capacity.

The open courtyard at the rear of the property is to be finished with a mix of asphalt and permeable surfaces to provide absorption of storm water. It is to hold fourteen (14) new parking spaces, two of these designated for handicapped use. This area is approximately 667.7 square meters. New trees and vegetation will be planted and the sidewalks fronting the property are to be reconstructed and repaired. This project dose not add any space to the existing structures.



### MARQUES + MARQUES A R Q U I T E C T C T O S

#### Recommendation

A recent field study determined that classroom building "A" contained lead in its exterior paint. As part of the mothballing of this building, an encapsulant shall be applied to its exterior painted surfaces (Fiberlock Technologies LBC Professional Lead/Sealant Type III).

Most windows shall be removed and selected openings shall have protected ventilation according to the Preservation Briefs for Mothballing Historic Buildings by the U.S. Department of the Interior. (See Attachment #3)

#### **Flood mitigation**

Buildings "B" and "C" shall be structurally reinforced and will have their interior floor levels raised by 8" which was above the high-water mark left by previous flooding incidents. The new interior floor elevation shall be achieved by installing a concrete reinforced EPS system. (See Attachment #1)

Removable flood barriers have been incorporated into the design to protect door openings. These "flood barricades" can easily be installed prior to a potential weather event and subsequently removed. (See Attachment #2)

Buildings "B" and "C" will also be finished with waterproof exterior finishes which will help protect all interior areas (2 coats, Loxon XP Masonry Coating, distributed by Sherwin Williams).

Building "C" is meant to be used primarily for storage and as a food preparation kitchen with integrated open spaces for dining. As this structure will be mostly open to the exterior, no flood barriers have been integrated into its remodeling. All new electrical infrastructure in this building will be raised to BFE levels to minimize any damage in the event of heavy flooding.

#### PLAN LEGEND

+8" FINISH FLOOR ELEVATION



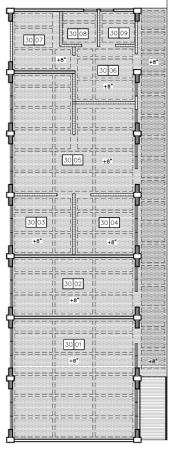
NEW EPS & CEM. FLOORING

#### NOTES:

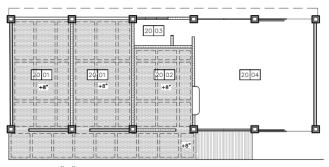
- 1. 4'x8'x6" THICK EXPANDED POLYSTYRENE (EPS) FOAM BOARDS SHALL BE PLACED OVER INTERIOR FLOOR AREAS AND WALKWAYS AS ILLUSTRATED.
  2. 6" WIDE SPACE SHALL BE LEFT BETWEEN ALL EPS BOARDS AND WALLS FOR CEMENT.
- 3. ALL COVERED AREAS SHALL HAVE W.W.F. 4"x4" REINF. WIRE (wi.9 x wi.9) OVER EPS BOARDS TO WALLS.
- OVER EPS BUARDS 10 WALLS.

  4. ALL COVERED AREAS SHALL BE TOPED WITH A 1½" THK. CEMENT TOPPING OVER EPS AND REINFORCING WIRE. TOTAL THICKNESS 8 INCHES.

  5. CONTRACTOR SHALL COORDINATE WITH PLUMBING AND ELECTRICAL RUNS TO PROVIDE PROPER PASS—THROUGH OR PENETRATIONS FOR ANY SPECIFIC WIRING OR PLUMBING.

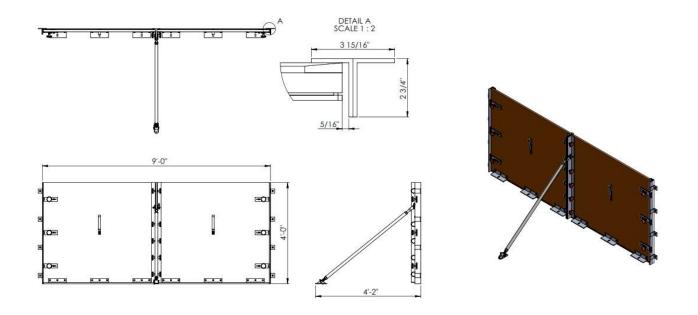


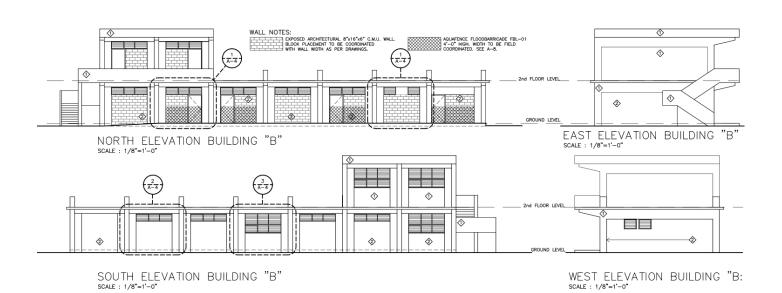
BUILDING "B" GROUND FLOOR PLAN SCALE : 1/8"=1'-0"



BUILDING "C" GROUND FLOOR PLAN SCALE : 1/8"=1'-0"

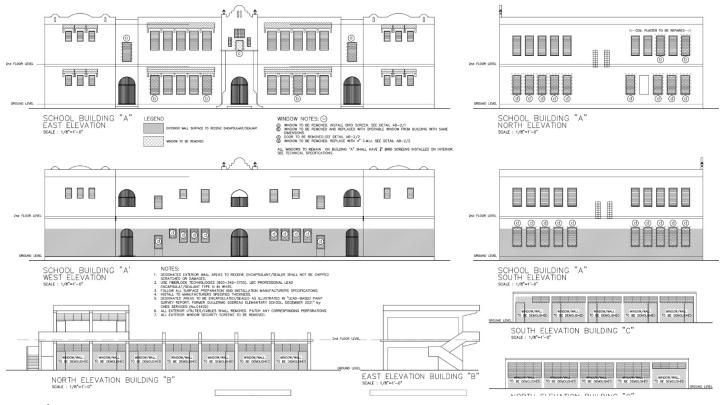
#### Attachment #1





Attachment #2

# MARQUES + MARQUES A R Q U I T E C T C T O S



#### Attachment #3

Attachment 2 – Step 2 Public Notice and "no comment" confirmation from PRDOH

# aviso público

Aviso Preliminar y Revisión Pública de una Actividad Propuesta en un valle inundable de 100 años

# Centro Multidisciplinario de Servicios a la Comunidad PR-CRP-000135

Para: Todas las partes interesadas, grupos e individuos

Este aviso notifica que el Departamento de la Vivienda de Puerto Rico (Vivienda, en adelante) ha determinado que la siguiente acción propuesta bajo el Programa de Revitalización de la Ciudad, Subvención en Bloque para el Desarrollo Comunitario - Recuperación ante Desastres (CDBG-DR), número de subvención B-17-DM-72-0001 y B-18-DP-72-0001, está ubicado en un valle inundable de 100 años. Vivienda estará evaluando e identificando alternativas viables para realizar la acción propuesta y el impacto potencial en la llanura de inundación debido a la acción propuesta, según establecido por la Orden Ejecutiva 11988, de acuerdo con las regulaciones de HUD en 24 CFR 55.20 Subparte C -Procedimientos para tomar determinaciones sobre el manejo de llanuras aluviales y la protección de humedales. El proyecto propuesto, PR-CRP-000135, se encuentra dentro de un municipio que sufrió daños debido a los huracanes Irma y María, y está localizado en bo. Pueblo calle Miguel Ten Salinas PR, 00751. La actividad propuesta está situada en zona de inundación AE con cabida de 0.82 acres. El área del proyecto se encuentra en el Flood Insurance Rate Map (FIRM) 72000C2085J, revisado el 18 de noviembre de 2009, como se indica en el Centro de Servicio de Mapas de Inundaciones de FEMA en https://msc.fema.gov/portal/home.

El objetivo consiste en la rehabilitación del predio que ocupa la escuela Guillermo Godreau, ubicada en el municipio de Salinas, para que pueda ser utilizado como un centro multidisciplinario de atención al ciudadano. El predio que se verá afectado incluye el edificio principal de dos pisos, otro edificio de dos pisos en el lote de atrás y un edificio de un piso al oeste del predio. El edificio principal sufrirá un cierre planificado, mientras que los otros dos edificios serán restaurados. No habrá demolición o ampliación de edificios. El predio donde se desarrollará la actividad propuesta cubre una superficie total de 3.329,06 metros cuadrados (0.82 acres), de los cuales aproximadamente 1.550 pies cuadrados (0.38 acres) son impermeables. La actividad incluirá una nueva impermeabilización de áreas usadas para estacionamiento, así como el aumento de la huella de un patio exterior y aceras circundantes que aumentarán las superficies impermeables de 0.2 acres a 0.58 acres. Dado que el sitio ha sido desarrollado para uso social en un área urbana, no posee ninguna función natural o beneficiosa para el valle inundable. Este beneficiará el valor histórico de la propiedad dando un nuevo uso a la misma.

Este aviso tiene tres propósitos principales. En primer lugar, las personas que puedan verse afectadas por las actividades en las llanuras aluviales y aquellos que tengan interés en la protección del ambiente natural deben tener la oportunidad de expresar sus inquietudes y proveer información sobre estas áreas. Se exhorta a la comunidad a ofrecer ubicaciones alternas fuera de la llanura aluvial, métodos alternos para cumplir el mismo propósito del proyecto y métodos para minimizar y mitigar los impactos. Segundo, un programa adecuado de avisos públicos puede ser una herramienta importante para la educación pública. La divulgación de información sobre las llanuras aluviales puede facilitar y mejorar los esfuerzos federales por reducir los riesgos e impactos asociados con la ocupación y alteración de estas zonas especiales. Tercero, como materia de justicia, cuando el gobierno federal determine participar en acciones ubicadas en las llanuras aluviales, debe informárselo a quienes puedan ser expuestos a un riesgo mayor o similar al presente.

Vivienda considerará todos los comentarios recibidos en o antes del 27 de septiembre 2023. Pueden enviar los comentarios de forma impresa a la siguiente dirección: Departamento de la Vivienda de Puerto Rico, edificio Juan C. Cordero Dávila, 606 avenida Barbosa, Río Piedras, PR 00918-8461, Atención: Santa D. Ramírez-Lebrón, Especialista en Permisos y Cumplimiento Ambiental. Una descripción completa del proyecto está disponible al público para revisión de 8:30 a.m. a 4:00 p.m. en el Departamento de la Vivienda de Puerto Rico, edificio Juan C. Cordero Dávila, 606 avenida Barbosa, Río Piedras, PR 00918. El número para obtener información es (787)274-2527 ext. 4320. Como alternativa, también pueden enviar los comentarios a Vivienda por medio electrónico a environmentcdbg@vivienda.pr.gov.

Fecha: 11 de septiembre de 2023







# public notice

**Early Notice and Public Review of a Proposed** Activity in the 100-Year Floodplain

# **Multidisciplinary Center for Community Services** PR-CRP-000135

To: All Interested Parties, Groups & Individuals

This is to give notice that the Puerto Rico Department of Housing (PRDOH) has determined that the following proposed action under the Community Development Block Grant - Disaster Recovery (CDBG-DR), City Revitalization Program, Grant number B-17-DM-72-0001& B-18-DP-72-0001, is located in the 100-year floodplain. PRDOH will be identifying and evaluating practicable alternatives to locate the action in the floodplain and the potential impacts on the floodplain from the proposed action, as required by Executive Order 11988, in accordance with HUD regulations at 24 CFR 55.20 Subpart C -Procedures for Making Determinations on Floodplain Management and Protection of Wetlands. The proposed project, PR-CRP-000135, is within a municipality that suffered damages due to Hurricanes Irma and María and is located in the Miguel Ten Street near the Traditional Urban Center of Salinas PR, 00751. The proposed activity is situated in a flood zone AE with dimensions of 0.82 acres. The floodplains in the project area can be found at the Flood Insurance Rate Map (FIRM) Panel 72000C2085J, revised on November 18, 2009, as shown in the FEMA Flood Map Service Center at https://msc.fema.gov/portal/

The objective of the project consists in the rehabilitation of the site of the Guillermo Godreau school, located in the municipality of Salinas, so it can be used as a multidisciplinary citizen service center. The site to be impacted includes the main two-story building, another two-story building in the back lot, and a one-story building to the west of the site. The main building will undergo a planned closure, while the other two buildings will be restored. There will be no building demolition or expansion. The site where the proposed activity will take place covers a total area of 3,329.06 square meters (0.82 acres), of which approximately 1,550 square meters (0.38 acres) are impermeable. The activity will include new impermeabilization of the parking area and increase footprint of an exterior courtyard and sidewalks which will result increase of impermeable surfaces of 0.2 acres to 0.58 acres. Since the site has been developed for social use in the urban area, it does not possess any natural or beneficial functions to the floodplain.

There are three primary purposes for this notice. First, people who may be affected by activities in floodplains and those who have an interest in the protection of the natural environment should be given an opportunity to express their concerns and provide information about these areas. Commenters are also concerns and provide information about these areas. The second concerns are also concerns and provide information about these areas. The second concerns are also concerns and provide information about these areas. The second concerns are also concerns and provide information about these areas. The second concerns are also concerns and provide information about these areas. The second concerns are also concerns are also concerns are also concerns and provide information about the second concerns are also concerns are also concerns are also concerns and concerns are also concerns are also concerns are also concerns are also concerns and concerns are also concerns areare encouraged to offer alternative sites outside of the floodplains, alternative methods to serve the same project purpose, and methods to minimize and mitigate impacts. Second, an adequate public notice program can be an important public education tool. The dissemination of information and request for public comment about floodplains can facilitate and enhance federal efforts to reduce the risks and impacts associated with the occupancy and modification of these special areas. Third, as a matter of fairness, when the Federal government determines it will participate in actions taking place in floodplains, it must inform those who may be put at greater or continued risk.

PRDOH will consider all comments received on or before September 27, 2023. Written comments can be sent to the following address: Puerto Rico Department of Housing, 606 Barbosa Avenue, Juan C. Cordero Dávila Building, Río Piedras, PR 00918-8461, Attention: Santa D. Ramírez-Lebrón, Permits and Environmental Compliance Specialist. A complete description of the project is available to the public for review from 8:30 am to 4:00 pm at the Puerto Rico Department of Housing, 606 Barbosa Avenue, Juan C. Cordero Dávila Building, Río Piedras, PR 00918. The number to get information is (787)274-2527 ext. 4320. In the alternative, comments may also be sent to PRDOH by email at environmentcdbg@ vivienda.pr.gov.

Date: September 11, 2023









September 27, 2023

To whom it may concern,

This letter is to validate that no comments were received in the Permits and Environmental Compliance Division e-mail: <a href="mailto:environmentcdbg@vivienda.pr.gov">environmentcdbg@vivienda.pr.gov</a>, for the project Centro Multaiciplinario de Servicios a la Comunidad (PR-CRP-000135), as part of the CDBG-DR City Revitalization Program. The Early Notice and Public Review of a Proposed Activity in the 100-Year Floodplain was published in the Primera Hora newspaper of Puerto Rico on September 11, 2023, with a comment period that concluded on September 27, 2023.

Cordially,

Permits and Environmental Compliance Division CDBG-DR/MIT Program environmentcdbg@vivienda.pr.gov | 787.274.2527 ext. 4320

# **Andrea Curbelo-Marty**

From: Kenneth M. Garcia-De Leon

Sent: Monday, October 2, 2023 8:12 AM

**To:** environmentcdbg

**Subject:** RE: Comentarios PR-CRP-000135

# Buenos días

Por correo postal no llegaron comentarios para mencionado proyecto.

## **Atentamente**

### Kenneth M. García De León

Oficial de Radicación de Informes de Operaciones Oficina Recuperación de Desastres kgarcia@vivienda.pr.gov|787.274.2527 Ext. 4013

Visit us: <u>www.cdbg-dr.pr.gov</u>

Write us: infocdbg@vivienda.pr.gov



NOTA DE CONFIDENCIALIDAD: Esta transmisión electrónica contiene información perteneciente al Departamento de Vivienda de Puerto Rico, la cual es confidencial y / o privilegiada legalmente. Si usted no es el destinatario previsto, informe inmediatamente al remitente por correo electrónico de respuesta o por teléfono que este mensaje se le ha transmitido inadvertidamente y elimine este correo electrónico de su sistema. Si ha recibido esta transmisión por error, por la presente se le notifica que cualquier divulgación, copia, distribución o cualquier acción basada en el contenido de la información está estrictamente prohibida. El uso, difusión, distribución o reproducción no autorizados de este mensaje por personas que no sean el destinatario previsto está estrictamente prohibido y puede ser ilegal.

CONFIDENTIALITY NOTE: This electronic transmission contains information belonging to the Puerto Rico Housing Department, which is confidential and/or legally privileged. If you are not the intended recipient, please immediately advise the sender by reply e-mail or telephone that this message has been inadvertently transmitted to you and delete this e-mail from your system. If you have received this transmission in error, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of the information is strictly prohibited. Unauthorized use, dissemination, distribution or reproduction of this message by other than the intended recipient is strictly prohibited and may be unlawful.

From: environmentcdbg <environmentcdbg@vivienda.pr.gov>

Sent: Wednesday, September 27, 2023 2:43 PM

To: Kenneth M. Garcia-De Leon <kgarcia@vivienda.pr.gov>

Subject: Comentarios PR-CRP-000135

Saludos Kenneth,

Con respecto a la publicación del Aviso Preliminar y Revisión Pública de una Actividad Propuesta en una Llanura Aluvial de 100 años (Paso 2) para el proyecto **Centro Multidisciplinario de Servicios a la Comunidad – Salinas (PR-CRP-000135)** ¿habrá llegado algún comentario a través del correo postal? De ser así, por favor nos lo hace llegar.

### Cordialmente,

# Permits and Environmental Compliance Division

Office of Disaster Recovery

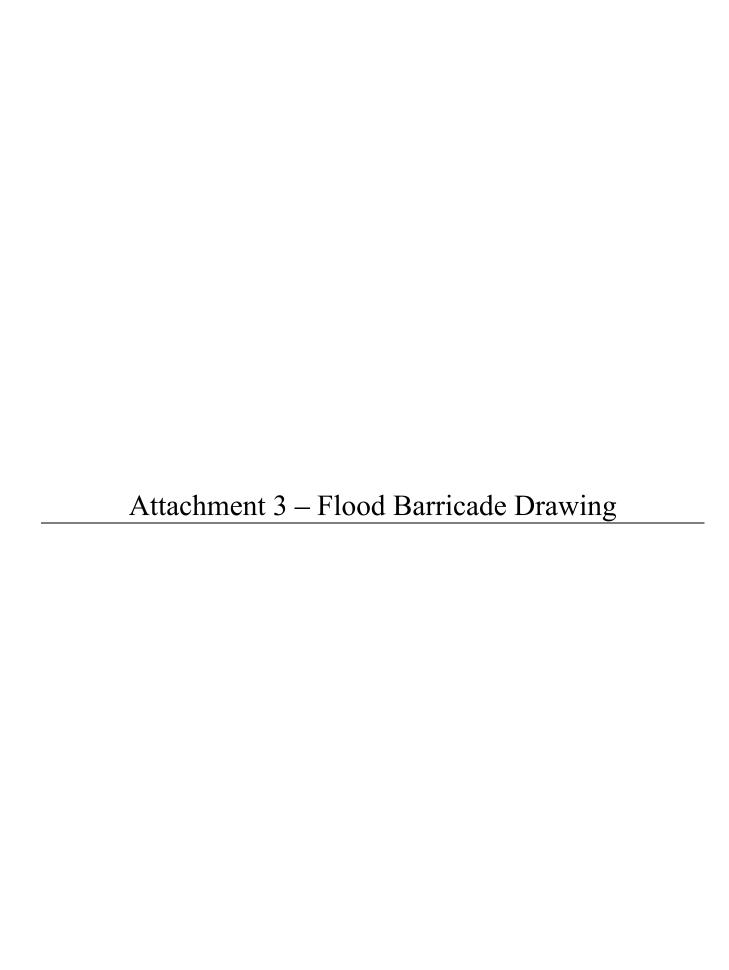
environmentcdbg@vivienda.pr.gov | 787.274.2527

Visit us: www.cdbg-dr.pr.gov



NOTA DE CONFIDENCIALIDAD: Esta transmisión electrónica contiene información perteneciente al Departamento de Vivienda de Puerto Rico, la cual es confidencial y / o privilegiada legalmente. Si usted no es el destinatario previsto, informe inmediatamente al remitente por correo electrónico de respuesta o por teléfono que este mensaje se le ha transmitido inadvertidamente y elimine este correo electrónico de su sistema. Si ha recibido esta transmisión por error, por la presente se le notifica que cualquier divulgación, copia, distribución o cualquier acción basada en el contenido de la información está estrictamente prohibida. El uso, difusión, distribución o reproducción no autorizados de este mensaje por personas que no sean el destinatario previsto está estrictamente prohibido y puede ser ilegal.

CONFIDENTIALITY NOTE: This electronic transmission contains information belonging to the Puerto Rico Housing Department, which is confidential and/or legally privileged. If you are not the intended recipient, please immediately advise the sender by reply e-mail or telephone that this message has been inadvertently transmitted to you and delete this e-mail from your system. If you have received this transmission in error, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of the information is strictly prohibited. Unauthorized use, dissemination, distribution or reproduction of this message by other than the intended recipient is strictly prohibited and may be unlawful. 2



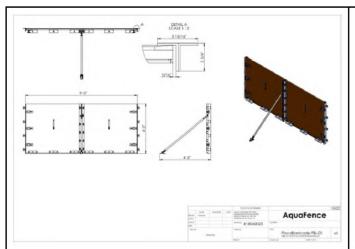
Additional details may be found here: https://www.aguafence.com/

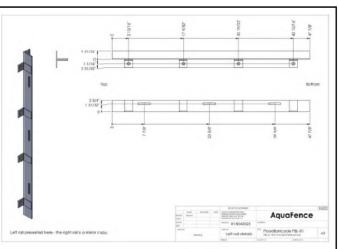
5	S C H	E D	U L	Ε		C	) F			F	-	Ι	Ν	١	S	Н	Ε	S							
MK'D	AREA			F	LOC	R	BAS	ŝΕ	W	ALL	.	CE	LIN	3			R	EFERE	NCE	NC	OTES				
					EPOXY RESIN FLOORING W/ SEALER LARGE FORMAT FLOOR TILE	CEMENT TOPING (STEEL TROWELED)		LARGE FORMAT FLOOR TILE QUARRY FLOOR TILE	2 COATS SEALER 2 COATS INTERIOR SATIN PAINT	WALL TILE		1/2" HIGH STRENGTH CLG. BD.	PRIMER & PAINT (2 COATS)												
00 00				H	<del>" -</del>	- 0	+++	-10	2 2	3 3	+	+-	0.	+											_
				+	Ш	$\top$	+++	$\top$	т	$\vdash$	$\top$	$\top$	$\top$	$\top$											_
20 01	STORAGE			$\top$	П	0	тп	$\top$		П	П	$\top$		т	FLOORIN	IG FO	R S	TORAG	E TO	BE	REP	AIRED	AS N	ECCES/	ARY
20 02	KITCHEN					$\top$	Ш				,	П													
20 03					П	Т	ПП		П		П	П		Т											
20 04	DINNING AREA					П	Ш			П	П	П		Т											
					П	П	ПП			П	П	П	П												
30 01	OMME OFFICE					П				П	П		П												
30 02	DESSAROLLO L	ABORAL OFF	ICE			П					П		П												
30 03	SECTION 8 OF	TCE									Ш		Ш												
30 04	OFFICE			П		Т	ПП			П	П		П	Т											
30 05	ADMINISTRATION	OFFICE		т		$\top$	ПП			П	П		$\top$	Т											
30 06	KITCHENETTE			т		$\top$	ПП			П	П		П	Т											
30 07	STORAGE			т		$\top$	ПП			П	П		П	Т											
30 08	TOILET ROOM				П	$\top$	ПП	Т	П		П	T		Т											
30 09	TOILET ROOM				П	$\top$	ПП	Т	П		П	T		Т											
31 01	COE OFFICE					$\top$	$\Box$			$\vdash$	$\top$		11	$\top$											_
31 02						$\top$	$\Box$			$\sqcap$	$\top$		$\top$	$\top$											_
	BREAK ROOM					$\top$	$\Box$	•		$\sqcap$	$\top$		$\top$	$\top$											_
					П	$\neg \vdash$	$\Box$	$\neg$	ΗŤ	$\vdash$	$\top$	11	$\top$	$\top$											_





- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL DIMENSIONS REPRESENTED IN THESE DRAWNICS, ANY DISCREPANCIES BETWEEN DIMENSIONS ILLUSTRATED HERE AND EXISTING SHALL BE BROUGHT TO THE ARCHITECTS ATTENTION.
- 2) USE ONLY FIRE RATED MOLDTOUGH GYPSUM BOARD (OF APPROPRIATE THICKENS) FOR WALL CONSTRUCTION AND USE ONLY H-STRENGTH  $\frac{1}{2}^n$  MOLDTOUGH CEILING GYPSUM BOARD FOR CEILING CONSTRUCTION.
- 3) ALL STUDS FOR GYP. BD. CONSTRUCTION SHALL BE GALVANIZED.
- 4) FRP PANELS TO BE SIMLAR TO MARLITE STANDARD CLASS III FIRE RATED 4'x10' IN PEBBLE TEXTURE, WHITE (P100).
- 5) EXISTING FLOORING FOR STORAGE (2001) SHALL BE CLEANED AND PATCHED AS NECESSARY. FINISH WITH FLOOR SEALER.
- 6) BIRD NETTING TO BE 3/4" BLACK MESH WITH A MINIMUM 10 YEAR WARRANTY, CONTRACTOR TO PRESENT INSTALLATION DIAZRAMS TO BE APPROVED BY ARCHITECT, INSTALLATION APPLIES TO ALL WINDOWS TO REMAIN OR BULDING "A".
- 7) LARGE FORMAT TILE SHALL BE DALTILE UNITY (24"X24") WITH  $\frac{2}{8}$ " GROUT JOINT IN UNPOUSHED FINISH, COLOR TO BE SELECTED BY ARCHITECT. USE CORRESPONDING S-3609TA 6" BASE ON ROOMS WHERE SPECIFIED.
- 8) WALL TILE FOR TOILET ROOMS TO BE 12"x24" MATTE WHITE.
- 9) QUARRY TILE SHALL BE 6"x6" FAWN GRAY (Q06) BY AMERICAN OLEAN. USE CORRESPONDING Q1665 BASE TILE FOR BASE ON ROOMS WHERE SPECIFIED EXCEPT FOR TOILET ROOMS.
- 10) USE SANDED GROUT ONLY FOR ALL FLOORING APPLICATIONS.
- 11) EPONY RESIN FLOGRING SHALL BE KEY RESIN CO. "KEY YERSAFLAKE RESIN FLOGRING" IN COLOR TO BE SELECTED BY ARCHTECT PROM MANUFACTURES FULL LINE, FLOGRING SHALL BE INSTALLED OWER TO FROM PRIMER AS RECOMMENDED BY MANUFACTURER AND SEALED WITH KEY 514 OR 515 EPONY TOP COAT.
- 12) FLOOR SEALER SHALL BE APPLIED TO EXISTING FLOORING SURFACES AFTER THOROUGH CLEANING AND PATCHING ON DESIGNATED SPACES. USE LOW VOC, CLEAR SEALER.
- ALL CEILINGS & WALLS IN HALLWAYS IN BUILDING "B" & "C" TO BE CLEANED AND PANTED IF NOT BEING PATCHED OR REDONE AS SPECIFIED.
- 14) THE GENERAL CONTRACTOR SHALL REVIEW ALL INFORMATION PRESENTED IN THESE CONSTRUCTION DRAWNOS AND REFER TO THE TECHNICAL CONSTRUCTION SPECIFICATIONS OF ADDITIONAL INFORMATION, ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT ARCHITECT IMMEDIATELY.
- 15) DESIGNATED DOORWAYS SHALL HAVE AQUAFENCE FLOOR BARRICADE FBL-01 SYSTEM INSTALLED AS PER MANUFACTURERS SPECIFICATIONS/DETAILS. SEE MATERIAL QUOTE IN TECHNICAL SPECIFICATIONS.







DATE	Γ		Г		Г			Г
П	Г	Г	Г	Г	Г		П	Г
z								
0		П		П			П	
-1	ı	П		П			П	
97		П		П			П	
-1	ı	П		П			П	
>		П		П			П	
ы		П		П			П	
ac		П		П			П	
		П		П			П	
$\rightarrow$	⊢	H	H	Н	H	Н	Н	⊢
8	k	k	d	k	d	◁	k	◁
	_	_	_	Н	_	Ш	ш	_

Esq. Guillermo Godredu odreau, C. Miguel Ten, Salnas, PR

Schedule

Finish

Rehabilitation Esq. G Escuela Gullemo Godreau, C.

MARQUES - MARQUES - MARQUES OF INTEGRAL OF THE COLOR

A-8

Attachment 4 – Step 7 Public Notice and "no comment" confirmation from PRDOH



# aviso público

Aviso Final y Explicación Pública de una Actividad Propuesta en un Valle Inundable de 100 Años

Centro Multidisciplinario de Servicios a la Comunidad PR-CRP-000135

Para: Todas las partes interesadas, grupos e individuos

Este aviso notifica que el Departamento de la Vivienda de Puerto Rico (Vivienda completó una evaluación según establece la Orden Ejecutiva 11988, de acuerdo con los reglamentos de HUD en 24 CFR 55.20 Subparte C - Procedimientos para hacer determinaciones sobre el manejo del valle inundable y la protección de humedales. La actividad está subvencionada con fondos del Programa Revitalización de la Ciudad (CRP, por sus siglas en inglés), Subvención en Bloque para el Desarrollo Comunitario – Recuperación ante Desastres (CDBG-DR), números de subvención B-17-DM-72-0001 y B-18-DP-72-0001. El proyecto propuesto, PR-CRP-000135, está localizado en 23-73 calle Miguel Ten, dentro del Centro Urbano Tradicional del municipio de Salinas, PR 00751. La actividad propuesta consiste en la rehabilitación del predio que ocupa la escuela Guillermo Godreau para que pueda ser utilizado como un centro mu**l**tidisciplinario de atención al ciudadano. El predio que se verá afectado incluye el edificio principal de dos pisos, otro edificio de dos pisos en el lote trasero y un edificio de un piso al oeste del predio. El edificio principal sufrirá un cierre planificado, mientras que los otros dos edificios serán restaurados. No habrá demolición o ampliación de edificios. El predio donde se desarrollará la actividad propuesta cubre una superficie total de 3,329.06 metros cuadrados (0.82 acres), de los cuales aproximadamente 1,550 metros cuadrados (0.38 acres) son impermeables. La actividad incluirá una nueva impermeabilización de áreas usadas para estacionamiento, así como un aumento de huella de un patio exterior y aceras circundantes que aumentará las superficies impermeables de 0.2 acres a 0.58 acres Dado que el sitio ha sido desarrollado para uso social en un área urbana, no pose ninguna función natural o beneficiosa para el valle inundable. Se beneficiará el valor histórico de la propiedad dándole un nuevo uso. La actividad propuesta está situada en zona de inundación AE con cabida de 0.82 acres. El área del proyecto se encuentra en el mapa de tarifas de seguro contra inundaciones (FIRM, por sus siglas en inglés) (panel 72000C2085), efectivo 18/11/2009) como se indica en el Centro de Servicios de Mapas de Inundaciones de FEMA en https://msc.fema.gov/portal/home

Vivienda ha considerado las siguientes a<mark>l</mark>ternativas y medidas de mitigación para minimizar los impactos adversos y restaurar y preservar los valores naturales y beneficiosos: (a) ubicar el proyecto dentro de la llanura aluvial, (b) ubicaciones fuera de y que no afecten la llanura aluvial de 100 años y (c) no tomar ninguna acción. La mayor parte del área urbana de Salinas está ubicada dentro de un valle inundable, y no hay otros lugares que satisfagan el propósito y la necesidad del proyecto que estén ubicados fuera del valle inundable. Se consideró el antiguo hospital como ubicación alternativa para el proyecto, pero las evaluaciones preliminares de la estructura determinaron que se necesitarían reparaciones y rehabilitación extensas, por lo que el proyecto ya no sería costo-efectivo; además, el predio también está ubicado en el valle inundable. Se les informará a los usuarios permanentes de las instalaciones del proyecto y se les informará sobre la ubicación del sitio dentro del valle inundable, se desarrollarán planes para gestionar los recursos humanos durante posibles inundaciones, se elevarán los pisos más bajos de cada edificio y se colocarán barricadas contra inundaciones para hacer la propiedad más resiliente. Además, se instalarán superficies permeables en el sitio del proyecto y se agregarán franjas de plantación para aumentar la filtración del agua y limitar la escorrentía durante las tormentas. El proyecto cumpliría con todos los procedimientos de protección de llanuras aluviales estatales y locales

Vivienda reevaluó las alternativas para construir en el valle inundable y determinó que no cuenta con alternativas prácticas. La documentación ambiental que evidencia el cumplimiento de los pasos 3 a 6 de la Orden Ejecutiva 11988 está disponible para inspección, revisión y reproducción de parte del público, de ser solicitado, en el horario y lugar indicado en el último párrafo sobre recibo de

Este aviso tiene tres propósitos principales. Primero, las personas que pueden verse afectadas por actividades en el valle inundable y aquellos que tengan interés en la protección del ambiente natural deben recibir la oportunidad de expresar sus inquietudes y proveer información sobre estas áreas. Segundo, un programa adecuado de avisos públicos puede ser una importante herramienta de educación pública. La divulgación de información y solicitud de comentarios sobre valle inundable puede facilitar y mejorar los esfuerzos federales para reducir los riesgos e mpactos asociados con la ocupación y alteración de estas áreas especiales. Tercero, como materia de justicia, cuando el gobierno federal determine participar en acciones ubicadas en valle inundable, debe informárselo a quienes puedan ser expuestos a un riesgo mayor o similar al presente.

Vivienda considerará todos los comentarios recibidos en o antes del 18 de noviembre de 2023. Pueden enviar los comentarios de forma impresa a la siguiente dirección: Departamento de la Vivienda de Puerto Rico, edificio Juan C. Cordero Dávila, 606 avenida Barbosa, Río Piedras, PR 00918-8461, Atención: Santa D. Ramírez-Lebrón, Especialista en Permisos y Cumplimiento Ambiental. descripción completa del proyecto está disponible al público para revisión de 8:30 a. m. a 4:00 p. m. en el Departamento de la Vivienda de Puerto Rico, edificio Juan C Cordero Dávila, 606 avenida Barbosa, Río Piedras, PR 00918, El número para obtener información es (787) 274-2527, ext. 4320. Como alternativa, también pueden enviar comentarios Vivienda por med**i**o environmentcdba@vivienda.pr.gov.

Fecha: 10 de noviembre de 2023

Malon Lodo William O. Rodríguez Rodríguez Secretario del Departamento de la Vivienda







# public notice

Final Notice and Public Explanation of a Proposed Activity in a 100-year Floodplain

Multidisciplinary Center for Community Services PR-CRP-000135

To: All Interested Parties, Groups, and Individuals

This is to give notice that the Puerto Rico Department of Housing (PRDOH) has conducted an evaluation as required by the Executive Order 11988, in accordance with HUD regulations at 24 CFR 55.20 Subpart C - Procedures for Making Determinations on Floodplain Management and Wetlands Protection The activity is funded under the Community Development Block Grant – Disaster Recovery (CDBG-DR), City Revitalization Program (CRP), grant numbers B-17-DM-72-0001 and B-18-DP-72-0001. The proposed project, PR-CRP-000135, is located on 23-73 Miguel Ten Street, within the Traditional Urban Center of the municipality of Salinas, PR 00751. The proposed activity involves the rehabilities of the site of the Guillermo Godreau School so it can be used as a publisher with the proposed activity involves the rehabilities of the site of the Guillermo Godreau School so it can Involves the renabilitation of the site of the Guillermo Godreau School so it can be used as a multidisciplinary citizen service center. The site to be impacted includes the main two-story building, another two-story building in the back lot, and a one-story building to the west of the site. The main building will undergo a planned closure, while the other two buildings will be restored. There will be no building demolition or expansion. The site where the proposed activity will take place covers a total area of 3,329.06 sq. m. (0.82 acres), of which approximately 1,550 sq. m. (0.38 acres) are impermeable. The activity will include new impermeabilization of the parking area and increase footprint of an exterior courtyard and sidewalks which will result in an increase of impermeable surfaces from 0.2 acres to 0.58 acres. Since the site has been developed for social use in the urban area, it does not possess any natural or beneficial functions to the floodplain. The proposed activity is situated in a flood zone AE with dimensions of 0.82 acres. The floodplain in the proiect area can be found in the Flood Insurance Rate Map (FIRM) (panel 72000C2085), effective 11/18/2009), as indicated on the FEMA Flood Map Service Center at https://msc.fema.gov/portal/home.

PRDOH has considered the following alternatives and mitigation measures to be taken to minimize adverse impacts and to restore and preserve natural and beneficial values: (a) locating the project within the floodplain, (b) locations outside of and not affecting the 100-year floodplain, and (c) taking no action. Most of Salinas's urban area is located within a floodplain, and there are no other locations that would meet the purpose and need of the project that are located outside of the floodplain. A former hospital site was considered as an alternative location for the project, but preliminary evaluations of the structure determined that extensive repairs and rehabilitation would be required, making the project no longer cost-effective; furthermore, the site is also located in the floodplain. Permanent users of the project's facility will be briefed and made aware of the site's location within a floodplain, plans will be developed to manage human resources during possible flood events, the lowest floors of each building would be elevated, and flood barricades would be installed to make the property more resilient. In addition, permeable surfaces will be installed on the project site and planting strips will be added to increase water percolation and limit water runoff during storm events. The project would comply with all state and local floodplain protection procedures.

PRDOH has reevaluated the alternatives to building in the floodplain and has determined that it has no practicable alternative. Environmental files that document compliance with steps 3 through 6 of Executive Order 11988 are available for public inspection, review, and copying upon request at the times and location stated in the last paragraph, on receipt of comments, of this notice

There are three primary purposes for this notice. First, people who may be affected by activities in the floodplain and those who have an interest in the protection of the natural environment should be given an opportunity to express their concerns and provide information about these areas. Second, an adequate public notice program can be an important public education tool. The dissemination of information and request for public comment about floodplains can facilitate and enhance Federal efforts to reduce the risks and impacts associated with the occupancy and modification of these special areas Third, as a matter of fairness, when the federal government determines it will participate in actions taking place in floodplain, it must inform those who may be put at greater or continued risk.

PRDOH will consider all comments received on or before November 18, 2023. Written comments can be sent to the following address: Puerto Rico Department of Housing, 606 Barbosa Avenue, Juan C. Cordero Dávila Building, Río Piedras, PR 00918-8461, Attention: Santa D. Ramírez-Lebrón, Permits and Environmental Compliance Specialist. A complete description of the project is available to the public for review from 8:30 a.m. to 4:00 p.m. at the Puerto Rico Department of Housing, 606 Barbosa Avenue, Juan C. Cordero Dávila Building, Río Piedras, PR 00918. The number to get information is (787) 274-2527, ext. 4320. In the alternative, comments may also be sent to PRDOH by email to environmentcdbg@vivienda.pr.gov.

Date: November 10, 2023

Malm William O. Rodríguez Rodríguez, Esq. Secretary of the Department of Housing

HOUSING



# Aniversario

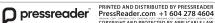


# MMM STRIPLE-S MES **3Y3 CENTER** Boutique

Florida: Sawgrass Mall (754-779-7261), Florida Mall (321-352-7347)

1 101 1dd 101dii (52 1 552 7547)											
•Mall of San Juan	<ul> <li>Plaza Carolina (al lado C</li></ul>	apri)	• Plaza del Sol								
(787) 507-5377	(787)768-6666		(787) 780-4444								
• Plaza las Américas (787) 759-4444	• Plaza Fajardo (787) 801-5896	<ul> <li>Plaza Caribe Mall Ponce (787) 812-4444</li> </ul>									
• Las Catalinas	• Plaza del Norte	<ul> <li>Centro Gran Caribe</li></ul>									
(787) 703-4411	(787) 880-3860	(787) 883-4646									
• Doramar Plaza	• Montehiedra Mall	• Río Hondo									
(787) 980-8008	(787) 287-6700	(787) 261-0981									
• Mayagüez Mall (787) 831-8811	• Palma Real Humacao (787) 850-5222	• Plaza Guayama (787) 866-2196									
• Plaza Cayey	• Plaza Isabela		o Grande Town Center								
(787) 924-4700	(787) 589-8334		87) 988-7061								

Ciertas restricciones aplican · Valido hasta el 16 de noviembre de 2023.





November 21, 2023

To whom it may concern,

This letter is to validate that no comments were received in the Permits and Environmental Compliance Division e-mail: <a href="mailto:environmentcdbg@vivienda.pr.gov">environmentcdbg@vivienda.pr.gov</a>, for the project Centro Multidisciplinario de Servicios a la Comunidad (PR-CRP-000135), as part of the CDBG-DR City Revitalization Program. The Aviso Final y Explicación Pública de una Actividad Propuesta en un valle inundable de 100 años was published in the Primera Hora newspaper of Puerto Rico on November 10, 2023, with a comment period that concluded on November 18, 2023.

Cordially,

Permits and Environmental Compliance Division
Disaster Recovery Office
<a href="mailto:environmentcdbg@vivienda.pr.gov">environmentcdbg@vivienda.pr.gov</a> | 787.274.2527 ext. 4320

# **Andrea Curbelo-Marty**

From: Kenneth M. Garcia-De Leon

Sent: Tuesday, November 21, 2023 4:27 PM

**To:** environmentcdbg

**Subject:** RE: Comentarios PR-CRP-000135

## Saludos

Por correo postal no llegaron comentarios para mencionado proyecto.

#### Atentamente

### Kenneth M. García De León

Oficial de Radicación de Informes de Operaciones Oficina Recuperación de Desastres kgarcia@vivienda.pr.gov|787.274.2527 Ext. 4013

Visit us: www.cdbg-dr.pr.gov

Write us: infocdbg@vivienda.pr.gov



NOTA DE CONFIDENCIALIDAD: Esta transmisión electrónica contiene información perteneciente al Departamento de Vivienda de Puerto Rico, la cual es confidencial y / o privilegiada legalmente. Si usted no es el destinatario previsto, informe inmediatamente al remitente por correo electrónico de respuesta o por teléfono que este mensaje se le ha transmitido inadvertidamente y elimine este correo electrónico de su sistema. Si ha reccibido esta transmisión por error, por la presente se le notifica que cualquier divulgación, copia, distribución o cualquier acción basada en el contenido de la información está estrictamente prohibida. El uso, difusión, distribución o reproducción no autorizados de este mensaje por personas que no sean el destinatario previsto está estrictamente prohibido y puede ser ilegal.

CONFIDENTIALITY NOTE: This electronic transmission contains information belonging to the Puerto Rico Housing Deparment, which is confidential and/or legally privileged. If you are not the intended recipient, please immediately advise the sender by reply e-mail or telephone that this message has been inadvertently transmitted to you and delete this e-mail from your system. If you have received this transmission in error, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of the information is strictly prohibited. Unauthorized use, dissemination, distribution or reproduction of this message by other than the intended recipient is strictly prohibited and may be unlawful.

From: environmentcdbg <environmentcdbg@vivienda.pr.gov>

Sent: Tuesday, November 21, 2023 4:21 PM

To: Kenneth M. Garcia-De Leon <kgarcia@vivienda.pr.gov>

Subject: Comentarios PR-CRP-000135

Saludos Kenneth,

Con respecto a la publicación del Aviso Final y Explicación Pública de una Actividad Propuesta en un valle inundable de 100 años (Paso 7) para el proyecto **Centro Multidisciplinario de Servicios a la Comunidad (PR-CRP-000135)** ¿habrá llegado algún comentario a través del correo postal? De ser así, por favor nos lo hace llegar.

### Cordialmente,

# Permits and Environmental Compliance Division

Office of Disaster Recovery <a href="mailto:environmentcdbg@vivienda.pr.gov">environmentcdbg@vivienda.pr.gov</a> | 787.274,2527

Visit us: www.cdbg-dr.pr.gov



NOTA DE CONFIDENCIALIDAD: Esta transmisión electrónica contiene información perteneciente al Departamento de Vivienda de Puerto Rico, la cual es confidencial y / o privilegiada legalmente. Si usted no es el destinatario previsto, informe inmediatamente al remitente por correo electrónico de respuesta o por teléfono que este mensaje se le ha transmitido inadvertidamente y elimine este correo electrónico de su sistema. Si ha recibido esta transmisión por error, por la presente se le notifica que cualquier divulgación, copia, distribución o cualquier acción basada en el contenido de la información está estrictamente prohibida. El uso, difusión, distribución o reproducción no autorizados de este mensaje por personas que no sean el destinatario previsto está estrictamente prohibido y puede ser ilegal.

CONFIDENTIALITY NOTE: This electronic transmission contains information belonging to the Puerto Rico Housing Department, which is confidential and/or legally privileged. If you are not the intended recipient, please immediately advise the sender by reply e-mail or telephone that this message has been inadvertently transmitted to you and delete this e-mail from your system. If you have received this transmission in error, you are hereby notified that any disclosure, copying, distribution or the taking of any action in reliance on the contents of the information is strictly prohibited. Unauthorized use, dissemination, distribution or reproduction of this message by other than the intended recipient is strictly prohibited and may be unlawful. 2

# **Attachment 13 – Historic Preservation**

 Conditioned Determination of "No Adverse Effect" with Attachments (Structural Studies) and EDF



# GOVERNMENT OF PUERTO RICO

STATE HISTORIC PRESERVATION OFFICE

Executive Director I Carlos A. Rubio-Cancela I carubio@prshpo.pr.gov

Friday, August 25, 2023

## Lauren Bair Poche

HORNE- Architectural Historian Manager 10000 Perkins Rowe, Suite 610 Bldg. G Baton Rouge, LA 70810

SHPO: 05-30-23-05 PR-CRP-000135 CENTRO MULTIDISCIPLINARIO DE SERVICIOS A LA COMUNIDAD PROJECT, BO. PUEBLO CALLE MIGUEL TEN, SALINAS, PUERTO RICO

Dear Ms. Poche.

Our Office has received and reviewed the information submitted for the above referenced project in accordance with 54 USC 306108 (commonly known as Section 106 of the *National Historic Preservation Act, as amended*) and 36 CFR Part 800: *Protection of Historic Properties* from the Advisory Council on Historic Preservation.

We believe that the Guillermo Godreau Manatau School is eligible for inclusion in the National Register of Historic Places, under criteria A and C, for its contribution in the areas of Community Planning and Development, Education, Social History and Architecture. After a review of all the documentation, the SHPO concurs with your finding that the proposed project will have no adverse effect within the area of potential effects. However, this no adverse effect is conditioned to the elaboration and implementation of a maintenance plan with protective measures that should include periodical monitoring and maintenance to preserve this historic property. To guide you on this effort, refer to the Maintenance Chart, Figure 23 on the National Park Service Preservation Briefs 31: Mothballing Historic Buildings.



SHPO: 05-30-23-05 PR-CRP-000135 CENTRO MULTIDISCIPLINARIO DE SERVICIOS A LA COMUNIDAD PROJECT, BO. PUEBLO CALLE MIGUEL TEN, SALINAS, PUERTO RICO

Page 2

If you have questions regarding this matter or require further assistance, please contact our Office at (787) 721-3737 or email, ediaz@prshpo.pr.gov.

Sincerely,

Carlos A. Rubio-Cancela

Barly affulir

State Historic Preservation Officer

CARC/GMO/MDT



June 24, 2023

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

SHPO: 05-30-23-05, Additional Information Request Submittal for PR-CRP-000135, Centro Multidisciplinario de Servicios a la Comunidad Project, Salinas, Puerto Rico

Dear Architect Rubio Cancela,

On behalf of the Puerto Rico Department of Housing, we thank you for your letter dated June 30<sup>th</sup>, 2023. In that letter it was requested that the following documentation be provided to allow your office to fulfill its legal responsibilities, which is outlined in 36 CFR 800.11:

Project information – Copy of the structural studies that revealed as mentioned, "major material and structural deficiencies which do not allow for this building's use without extensive and costly structural retrofitting."

As requested, we are providing the following documents, provided by the Municipality of Salinas:

- Attachment 01\_Concrelab Compressive Strength Test Report Escuela Guillermo Godreau Salinas 20220226:
- Attachment 02\_Evaluacion Estructural Resumen Ejecutivo Miguel A. Zapata P.E. Consulting Stru 20220622;
- Attachment 03\_Evaluacion Estructural Diseñador MARQUES\_MARQUES ARQUITECTOS\_20220622;
- Attachment 04 Evaluacion Estructural Escuela Guillermo Godreau Manatau 1 2022.07.13;
- Attachment 05\_Evaluacion Estructural 2\_ACTUAL CONDITIONS ASSESMENT AT ESC GUILLERMO GODREAU\_2022.10.06;
- Attachment 06\_Escuela Guillermo Godreau Manatau Memo sobre Evaluacion Estructural
   2 2022.12.02; and
- Attachment 07 Determinacion Escuela Godreau Marques Args 20221206.

Please contact me with any questions or concerns by email at <a href="mailto:lauren.poche@horne.com">lauren.poche@horne.com</a> or phone at 225-405-7676.

Kindest regards,



# **Lauren Bair Poche. M.A.**Architectural Historian, Historic Preservation Senior Manager Attachments



### **COMPRESSIVE STRENGTH TEST REPORT**

(Principal Applicable Standards: ASTM C39, C42, C174, C617, and C1231)

# **DRILLED CORES REPORT**

Report Date: March 18, 2022

**Project:** Escuela Guillermo Godreau, Salinas. **Client:** Marques & Marques Arquitectos

Concrete Producer: Not Provided Required Strength ( $f_c$ '): Not Provided

**Test Locations:** Roof Slab, Walls and Floor Slab.

**Date Poured:** Not Provided **Extraction Date:** February 26, 2022

Date Tested:

Extracted by:

Tested By:

Pebruary 26, 2022

March 10, 2022

ConcreLab, LLC.

R. Rodríguez

**Notes:** Attached, Core Location Plan and Pictures

## **First Level**

Core ID	Test Location	Density Ibs/ft <sup>3</sup>	Length (in.)	Diam. (in.)	Area (in.)	LD Ratio	H/D Correction	Breaking Load (Ibs.)	Compressive Strength (psi)
1FW1	Wall (No Recovery)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1FW2	Column	141.85	3.97	2.17	3.70	1.83	1.000	14,730	3,980
1FW3	Wall (Some Segregation)	148.26	4.87	2.68	5.64	1.81	1.000	10,170	1,800
1FW4	Wall (Some Segregation)	139.80	5.06	2.68	5.64	1.89	1.000	5,930	1,050
1FW5	Wall (Some Segregation)	137.23	5.08	2.68	5.64	1.89	1.000	5,540	980
1FW6	Wall	144.41	5.19	2.71	5.77	1.92	1.000	9,710	1,680
1FW7	Wall (Some Segregation)	146.47	5.33	2.70	5.75	1.97	1.000	8,740	1,520
1FW8	Wall (Some Segregation)	143.56	5.01	2.69	5.71	1.86	1.000	9,930	1,740
1FW9	Wall (Some Segregation)	142.48	4.63	2.69	5.69	1.72	0.980	6,080	1,050
1LFS	Floor Slab	140.30	2.80	2.68	5.63	1.05	0.880	28,780	4,500

**Note 1** – ACI 318 5.6.5.4 "Concrete in an area represented by core tests shall be considered structurally adequate if the average of three cores is equal to at least 85 percent of  $f_c$ ' and if no single core is less than 75 percent of  $f_c$ '."



# **Second Level**

Core	Test	Density	Length	Diam.	Area	LD	H/D	Breaking	Compressive
ID	Location	lbs/ft <sup>3</sup>	(in.)	(in.)	(in.)	Ratio	Correction	Load	Strength
								(lbs.)	(psi)
2LRS1	2 <sup>nd</sup> Level Roof Slab	134.20	3.39	2.17	3.70	1.56	0.960	8,770	2,290
2LS1	Floor Slab	140.30	4.32	2.68	5.65	1.51	0.970	8,700	1,490
2LS2	Floor Slab	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	(No Recovery, Topping only)								
2LS3	Floor Slab	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	(No Recovery, Topping only)								
2LS4	Floor Slab	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	(No Recovery, Topping only)								
2LW1	Wall	142.67	4.65	3.00	7.07	1.55	0.960	8,940	1,210
	(Some Segregation)								
2LW2	Wall	131.03	4.26	2.71	5.75	1.57	0.970	5,100	860
	(Significant Segregation)								
2LW3	Wall	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	(Masonry Wall)								
2LW4	Wall	142.05	5.22	2.71	5.77	1.93	1.000	15,910	2,760
	(Some Segregation)								
2LW5	Wall	140.94	5.68	3.01	7.11	1.89	1.000	9,190	1,290
	(Some Segregation)								
2LW6	Wall	139.62	4.62	2.99	7.04	1.54	0.960	8,380	1,150
	(Some Segregation)								
2LW7	Wall	134.89	5.10	2.99	7.04	1.70	0.980	5,370	740
	(Significant Segregation)								
2LW8	Wall	145.36	5.22	2.70	5.43	1.93	1.000	6,990	1,220
	(Some Segregation)								

**Note 1** – ACI 318 5.6.5.4 "Concrete in an area represented by core tests shall be considered structurally adequate if the average of three cores is equal to at least 85 percent of  $f_c$ ' and if no single core is less than 75 percent of  $f_c$ '."

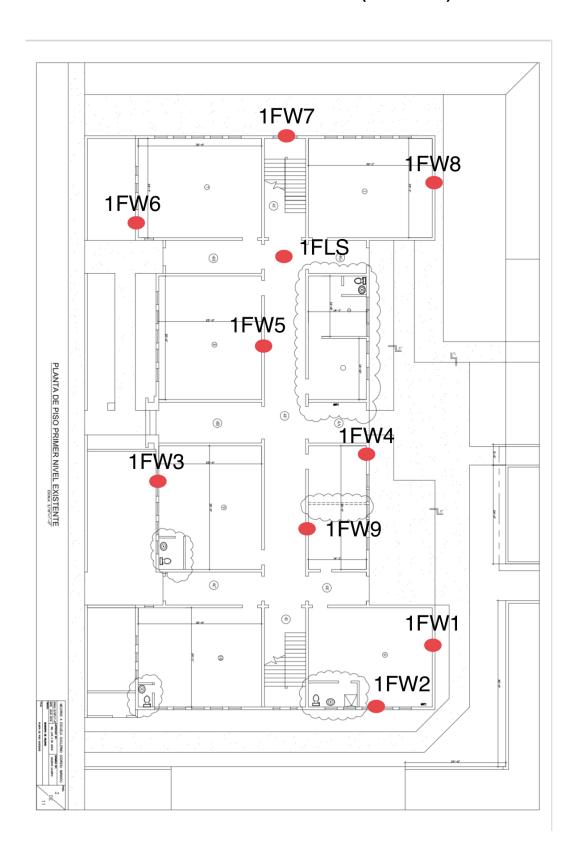
If you have any question regarding this report, please feel free to contact us.

Respectfully Submitted;

Reynaldo Rodríguez Laboratory Manager



# First Level Core Location Plan and Pictures of Extracted Cores (First Level)











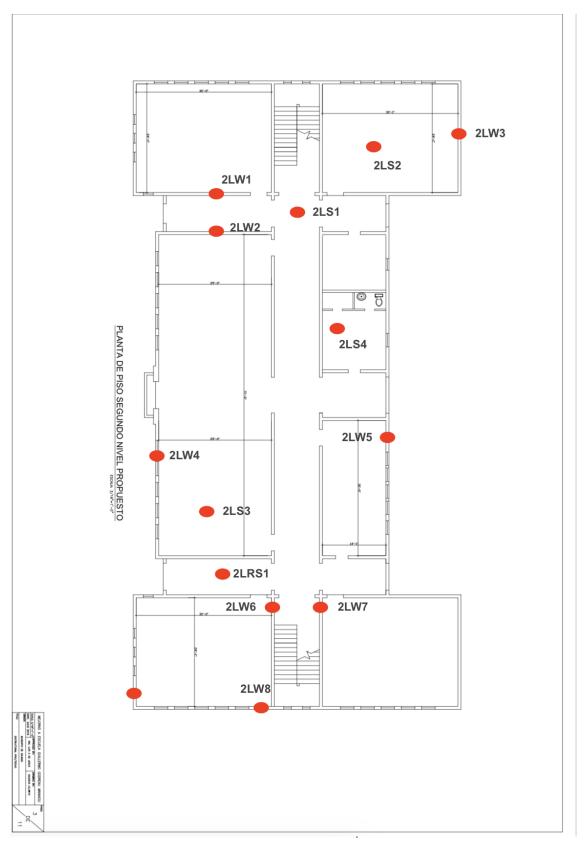








# Second Level Core Location Plan and Pictures of Extracted Cores (Second Level)



























2 de junio de 2022

**Arq. Bernardo Marques** 701 Ponce de León Ave. Suite 201 San Juan PR 00907

Re: Escuela Guillermo Godreau Manatau Evaluación Estructura Resumen Ejecutivo

Estimado arquitecto Marques:

La estructura que alberga la escuela Guillermo Godreau Manatau data de la década del 1930. Esta es una estructura de dos niveles con un área bruta de piso de 8,500 pies cuadrado por nivel. Su estructura está compuesta por muros de hormigón reforzado que soportan las losas de hormigón de los pasillos y las tijerillas de acero con mallas de acero en los salones de clase.

En visitas realizadas a la Escuela no se observó deficiencia estructural alguna que me diera entender que la estructura no es una segura. La estructura presenta problemas de delaminación del hormigón en algunos lugares, pero los mismos son reparables.

Comparando la copia obtenida de los planos de construcción originales, los mismo coinciden con la estructura y planos as-built realizados. La única diferencia observada es la adición del techo de la terraza posterior, la cual se construyó en hormigón reforzado. También se observó que la malla metálica en el techo, que soporta la losa de hormigón entre las viguetas, fue remplazada por una cubierta de metal galvanizada y se asume se colocó hormigón sobre la misma.

A la estructura se le tomaron una serie de núcleos, pruebas al hormigón, con el propósito de determinar la composición de estos y su resistencia. De dichos resultados podemos concluir que los muros de hormigón tienen un espesor de 8" a 9", incluyendo la terminación y que su resistencia a compresión, en promedio, es de 1,335 PSI si eliminamos el valor más alto y el más bajo. La apariencia del hormigón es de un hormigón de pobre calidad y la pasta del hormigón presenta vanos en exceso y separación de los agregados. La losa de hormigón sobre tierra y la losa en el pasillo superior demuestran igual calidad de materiales, pero con una resistencia a compresión



Parque Torremolinos A4 Calle I, Guaynabo, PR 00969-3625 / Tel. (787) 567-4083, Email: <a href="mailto:zapata@ingzapatapr.com">zapata@ingzapatapr.com</a>

Fecha: 2 de junio de 2022

#### Re: Escuela Guillermo Godreau Manatau

mayor. En relación con la losa del segundo nivel, la cual se soporta sobre las tijerillas de acero ésta muestra diferentes condiciones, desde tener solo mortero de hormigón hasta una losa de 3" sobre una malla de acero la cual esta corroída.

La estructura fue analizada utilizando el programa de análisis estructural ETABS donde se analiza la estructura bajo cargas gravitacionales y cargas de terremotos. Los resultados demuestran que la estructura tiene la capacidad para soportar las cargas gravitacionales, pero no las cargas laterales debido a terremotos. Esta estructura por su origen y tipo de construcción no cuenta con las características que le den la ductilidad para disipar las cargas de terremotos y por lo tanto no se le puede aplicar una reducción a la respuesta sísmica.

El código de edificación vigente es el "Internacional Existing Building Code 2018" el cual toma en consideración este tipo de estructura. Para la misma establece una serie de criterios para su evaluación y desempeño ante un sismo. Siendo esta una estructura de la década del 1930 y no habiendo sido construida por los códigos normativos, es mi experiencia que se tenga que reforzar para aumentar su capacidad estructural y cumplir con los requisitos de los códigos modernos. El Código establece que este tipo de mejoramiento es uno voluntario siempre y cuando no se cambie su uso original y el oficial de permiso lo apruebe. También el código provee para hacer mejoras estructurales con el propósito de reducir la probabilidad de un colapso ante un evento sísmico.

Recomiendo que ante esta situación se verifique con el dueño si desea rehabilitar la estructura y si la inversión requerida es costo efectivo. Para tomar esta decisión es importante que el dueño tome en consideración los siguientes datos:

- A) Es necesario realizar las siguientes pruebas:
  - 1. Estudio de suelo con el propósito de evaluar la respuesta sísmica.
  - 2. Estudio de PH y contenido de cloruro en el hormigón, análisis petrográfico.
  - 3. Pruebas de carga en la losa del segundo nivel para verificar la capacidad de la losa sobre la malla de acero entre viguetas.
  - 4. Determinar composición de la losa de techo reconstruida y verificar su anclaje a las tijerillas de techo.
  - 5. Verificar el anclaje de las viguetas a la estructura de hormigón.
- B) Remover los plafones del primer nivel para realizar levantamiento de datos y verificar condición de las tijerillas de acero.



Parque Torremolinos A4 Calle I, Guaynabo, PR 00969-3625 / Tel. (787) 567-4083, Email: zapata@ingzapatapr.com

#### Re: Escuela Guillermo Godreau Manatau

C) Análisis estructural no lineal con el propósito de determinar el modo de fallo de la estructura y el refuerzo requerido en los elementos estructurales.

Fecha: 2 de junio de 2022

D) Preparar diseño de refuerzo de la estructura según los resultados del análisis estructural y el desempeño esperado de la estructura.

El dueño debe de estar consciente de que esta estructura tiene aproximadamente 90 años y que su vida útil está comprometida. No todas las estructuras tienen un comportamiento similar ante un sismo, el mismo depende de la dirección de las fuerzas principales y su periodo. Es importante señalar que las mejoras a la estructura no garantizan el 100 por ciento su desempeño ante un sismo y que la misma puede sufrir daños a un nivel que no sean reparables. Es de suma importancia establecer el uso que se le vaya a dar a la estructura y el desempeño que se espera de la misma.

Por lo tanto, recomiendo que el dueño establezca las intenciones del uso futuro de esta estructura y la vida útil esperada. El uso de estas facilidades para un uso que deba de estar en condiciones operacionales luego de un evento sísmico de envergadura estaría comprometido y su desempeño no permitiría su uso luego de un evento catastrófico.

Atentamente,

Ing. Miguel A. Zapata

# Architecture and Engineering Services for City Revitalization Program For Guillermo Godreau Disaster Preparedness Center Municipality of Salinas, Puerto Rico CDBG-DR-RFP-AE-SAL-2021-001

Asunto: Evaluación Estructura, Resumen Ejecutivo junio 27, 2022

Señores:

Según solicitado por el ámbito de trabajo establecido para el proyecto de referencia, nuestro equipo de diseño ha estado realizando tareas de investigación, levantando datos de la estructura existente en sitio y por medio del estudio de los planos de construcción originales.

Los estudios estructurales iniciales revelaron unas deficiencias en los materiales originales utilizados en la construcción de la escuela. Estas deficiencias surgen a raíz del tiempo transcurrido desde la edificación de la escuela, cambio de métodos de construcción y principalmente, por el cambio de los códigos de construcción. Mas detalles son proveídos en el Resumen Ejecutivo incluido con esta comunicación.

Se entiende que estas deficiencias se pueden atender mediante intervenciones estructurales en la remodelación de la estructura. No obstante, es de suma importancia entender que el código contempla estas intervenciones, pero tiene distintas exigencias dependiendo del uso final que se le asigne a la estructura. Por ejemplo, no es lo mismo preparar una estructura para uso temporal y no crítico para operaciones/funciones versus prepara una estructura para usos críticos luego de un evento atmosférico o sísmico.

Una de las tres propuestas Conceptuales de desarrollo que nuestro equipo ha preparado establece los usos del edificio original de manera que el mismo no contenga espacios operacionales críticos. Resumimos esta alterna de la siguiente manera:

La propiedad cuenta con tres estructuras existentes.

- a) La escuela original, un edificio de dos plantas hecho en hormigón, bloque de cemento y estructura de techo en metal con un área de ocupación de 8,255.6p.c. El edificio es de dos plantas de 8,255.6p.c. cada una para un área bruta total de 16,511.2p.c. El edificio cuenta con dos escaleras interiores en hormigón.
- b) Edificio accesorio moderno de 1,648.3p.c. en una sola planta de hormigón y bloque de cemento.
- c) Edificio moderno de salones de clase de dos plantas con un área de ocupación de 2,931.2p.c. hecho en hormigón y bloque de cemento. El edificio cuenta con una escalera exterior en hormigón.

# MARQUES + MARQUES A R Q U I T E C T C T O S

La Alterna se enfoca en el edificio original de la escuela al cual se le va a modernizar su infraestructura eléctrica, facilidades sanitarias, ventanas, accesos internos y construir un nuevo elevador de pasajeros para proveer acceso a ambos pisos a personas con incapacidades físicas.

Los espacios existentes del segundo nivel se van a restaurar con el propósito de utilizarlos como salones de clases para adiestramiento de personal municipal u ofrecer clases multidisciplinarias a la ciudadanía de Salinas. Otros espacios se convertirán en almacén y oficinas para servicios al ciudadano con un salón de conferencias/reuniones. Los espacios no se pretenden subdividir. Las particiones para utilizarse son bajas para mantener la escala de los espacios existentes.

Debido a los resultados de varios estudios y documentación preparada sobre las condiciones actuales del edificio original escolar, esta alterna tiene que contemplar varias medidas de refuerzo y reconstrucción estructural del edificio.

El edificio moderno de salones de dos plantas se le pretende modificar una de las puertas de entrada con la instalación de una puerta corrediza. Este edificio mantendrá su uso como salones de adiestramiento y se ubicará una oficina de personal de manejo de emergencias. La segunda planta no se pretende utilizar.

A el área exterior detrás de la escuela se añadirán doce (12) estacionamientos de los cuales dos (2) serán para uso de impedidos. Actualmente esta área (667.7m.c.) no está pavimentada.

Incluimos una planta arquitectónica mostrando este concepto para su referencia. Los componentes programáticos de esta alterna incluyen:

# Existing School Building "A" (16,511.2 sq.ft.)

First Floor (8,255.6 sq.ft.)

Ayuda al Ciudadano Office (6) Red Cuido (2), Sección 8, Fed. Adm. (3)

Development Fed. Programs (2)

Desarrollo Laboral (4)

Financias (8)

**Asuntos Ciudadanos** 

Patente, IVU, CRIM (2), Service windows (3)

Kitchenette Restrooms

Storage

Elevator

Existing School Building "B" (3,196.2sq.ft.)

First Floor (2,477.4sq.ft.)

Conference Room, COE office

Radio Operations, Kitchenette, Storage

New Parking: 12 (rear), 2 (front) TOTAL 14

Second Floor (8,255.6 sq.ft.)

Conference Room Classrooms (3)

Municipal Properties Office (3)

Restrooms Storage Elevator

Second Floor (718.8sq.ft.)

Classrooms (2)

# MARQUES + MARQUES A R Q U I T E C T C T O S

El Resumen Ejecutivo sobre la estructura se realiza sin la determinación final del programa a ser aplicado al edificio original. Por esta razón el mismo contiene unas recomendaciones generales y solicita estudios realizados y por ejecutar. La determinación de los usos programáticos del edificio afecta en grandes proporciones la intervención estructural. Reconociendo que el incorporar oficinas de uso crítico para el municipio durante o después de un evento natural (huracanes, terremotos, etc.) aumentaría la magnitud de la intervención estructural y por ende el presupuesto de construcción, solicitamos el aval del programa espacial presentado en esta comunicación.

Esta entrega adelanta datos, referencias y recomendaciones que serán parte de la entrega final de la Evaluación Estructural. Esperamos entregar la misma a principios del mes de Julio.

Como costumbre, permanecemos a sus órdenes para contestarles cualquier duda que tengan referente a esta entrega.

Atentamente,

**MARQUES + MARQUES ARQUITECTOS** 

Arq. Bernardo A. Marqués



2 de junio de 2022

**Arq. Bernardo Marques** 701 Ponce de León Ave. Suite 201 San Juan PR 00907

Re: Escuela Guillermo Godreau Manatau Evaluación Estructura Resumen Ejecutivo

Estimado arquitecto Marques:

La estructura que alberga la escuela Guillermo Godreau Manatau data de la década del 1930. Esta es una estructura de dos niveles con un área bruta de piso de 8,500 pies cuadrado por nivel. Su estructura está compuesta por muros de hormigón reforzado que soportan las losas de hormigón de los pasillos y las tijerillas de acero con mallas de acero en los salones de clase.

En visitas realizadas a la Escuela no se observó deficiencia estructural alguna que me diera entender que la estructura no es una segura. La estructura presenta problemas de delaminación del hormigón en algunos lugares, pero los mismos son reparables.

Comparando la copia obtenida de los planos de construcción originales, los mismo coinciden con la estructura y planos as-built realizados. La única diferencia observada es la adición del techo de la terraza posterior, la cual se construyó en hormigón reforzado. También se observó que la malla metálica en el techo, que soporta la losa de hormigón entre las viguetas, fue remplazada por una cubierta de metal galvanizada y se asume se colocó hormigón sobre la misma.

A la estructura se le tomaron una serie de núcleos, pruebas al hormigón, con el propósito de determinar la composición de estos y su resistencia. De dichos resultados podemos concluir que los muros de hormigón tienen un espesor de 8" a 9", incluyendo la terminación y que su resistencia a compresión, en promedio, es de 1,335 PSI si eliminamos el valor más alto y el más bajo. La apariencia del hormigón es de un hormigón de pobre calidad y la pasta del hormigón presenta vanos en exceso y separación de los agregados. La losa de hormigón sobre tierra y la losa en el pasillo superior demuestran igual calidad de materiales, pero con una resistencia a compresión



Parque Torremolinos A4 Calle I, Guaynabo, PR 00969-3625 / Tel. (787) 567-4083, Email: <a href="mailto:zapata@ingzapatapr.com">zapata@ingzapatapr.com</a>

Fecha: 2 de junio de 2022

#### Re: Escuela Guillermo Godreau Manatau

mayor. En relación con la losa del segundo nivel, la cual se soporta sobre las tijerillas de acero ésta muestra diferentes condiciones, desde tener solo mortero de hormigón hasta una losa de 3" sobre una malla de acero la cual esta corroída.

La estructura fue analizada utilizando el programa de análisis estructural ETABS donde se analiza la estructura bajo cargas gravitacionales y cargas de terremotos. Los resultados demuestran que la estructura tiene la capacidad para soportar las cargas gravitacionales, pero no las cargas laterales debido a terremotos. Esta estructura por su origen y tipo de construcción no cuenta con las características que le den la ductilidad para disipar las cargas de terremotos y por lo tanto no se le puede aplicar una reducción a la respuesta sísmica.

El código de edificación vigente es el "Internacional Existing Building Code 2018" el cual toma en consideración este tipo de estructura. Para la misma establece una serie de criterios para su evaluación y desempeño ante un sismo. Siendo esta una estructura de la década del 1930 y no habiendo sido construida por los códigos normativos, es mi experiencia que se tenga que reforzar para aumentar su capacidad estructural y cumplir con los requisitos de los códigos modernos. El Código establece que este tipo de mejoramiento es uno voluntario siempre y cuando no se cambie su uso original y el oficial de permiso lo apruebe. También el código provee para hacer mejoras estructurales con el propósito de reducir la probabilidad de un colapso ante un evento sísmico.

Recomiendo que ante esta situación se verifique con el dueño si desea rehabilitar la estructura y si la inversión requerida es costo efectivo. Para tomar esta decisión es importante que el dueño tome en consideración los siguientes datos:

- A) Es necesario realizar las siguientes pruebas:
  - 1. Estudio de suelo con el propósito de evaluar la respuesta sísmica.
  - 2. Estudio de PH y contenido de cloruro en el hormigón, análisis petrográfico.
  - 3. Pruebas de carga en la losa del segundo nivel para verificar la capacidad de la losa sobre la malla de acero entre viguetas.
  - 4. Determinar composición de la losa de techo reconstruida y verificar su anclaje a las tijerillas de techo.
  - 5. Verificar el anclaje de las viguetas a la estructura de hormigón.
- B) Remover los plafones del primer nivel para realizar levantamiento de datos y verificar condición de las tijerillas de acero.



Parque Torremolinos A4 Calle I, Guaynabo, PR 00969-3625 / Tel. (787) 567-4083, Email: zapata@ingzapatapr.com

#### Re: Escuela Guillermo Godreau Manatau

C) Análisis estructural no lineal con el propósito de determinar el modo de fallo de la estructura y el refuerzo requerido en los elementos estructurales.

Fecha: 2 de junio de 2022

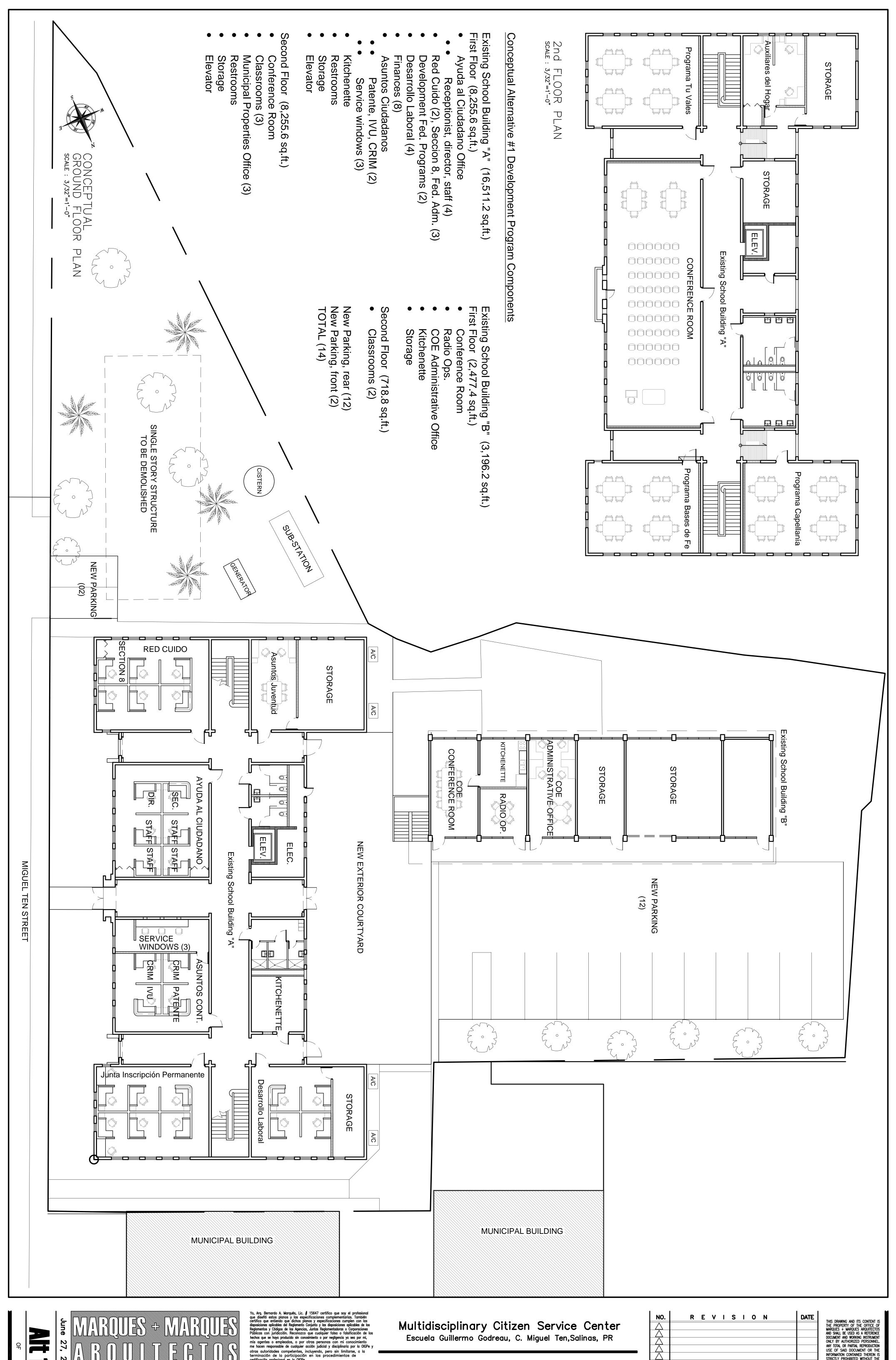
D) Preparar diseño de refuerzo de la estructura según los resultados del análisis estructural y el desempeño esperado de la estructura.

El dueño debe de estar consciente de que esta estructura tiene aproximadamente 90 años y que su vida útil está comprometida. No todas las estructuras tienen un comportamiento similar ante un sismo, el mismo depende de la dirección de las fuerzas principales y su periodo. Es importante señalar que las mejoras a la estructura no garantizan el 100 por ciento su desempeño ante un sismo y que la misma puede sufrir daños a un nivel que no sean reparables. Es de suma importancia establecer el uso que se le vaya a dar a la estructura y el desempeño que se espera de la misma.

Por lo tanto, recomiendo que el dueño establezca las intenciones del uso futuro de esta estructura y la vida útil esperada. El uso de estas facilidades para un uso que deba de estar en condiciones operacionales luego de un evento sísmico de envergadura estaría comprometido y su desempeño no permitiría su uso luego de un evento catastrófico.

Atentamente,

Ing. Miguel A. Zapata

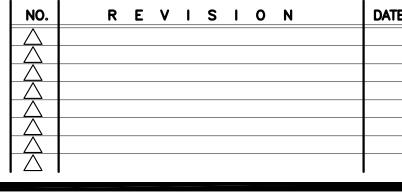


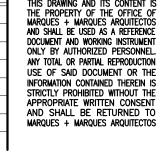
C.A.A.P.P.R.

otras autoridades competentes, incluyendo, pero sin limitarse, a la terminación de la participación en los procedimientos de certificación profecional en la OIGPe. 701 PONCE DE LEON 201, SAN JUAN, P.R. 00907 T (787) 936-1700 WWW. MARQUESARQUITECTOS. COM

E-MAIL: bernardo@marquesarquitectos.com

Development Alternate #1





**EVALUACIÓN ESTRUCTURAL**PROYECTO: Escuela Guillermo Godreau Manatau Salinas, PR

#### Tabla de Contenido

- I. Resumen Ejecutivo
- II. Introducción
- III. Descripción y Documentos Originales
- IV. Visita al Sitio
- V. Pruebas de Materiales
- VI. ASCE-11-99 Guías para la Evaluación de la Condición Estructural de Edificios Existentes
- VII. ACI-201.1R-2 Guía para Conducir una Inspección Visual del Concreto en Servicio
- VIII. ASCE-31-03 Evaluación Sísmica a Edificios Existentes
- IX. Conclusiones y Recomendaciones

#### Anejos:

- A. Planos Originales de Construcción
- B. Planos "As-built" Arquitectónicos
- C. Planos "As-built" Estructurales
- D. Reporte de Laboratorio de Materiales
- E. Estudio de Suelo
- F. Listado de Cotejo ASCE 31-03

5 de julio de 2022

#### Escuela Guillermo Godreau Manatau

#### I. Resumen Ejecutivo

La estructura que alberga la escuela Guillermo Godreau Manatau data de la década del 1930. Esta es una estructura de dos niveles con un área bruta de piso de 8,500 pies cuadrado por nivel. Su estructura está compuesta por muros de hormigón reforzado que soportan las losas de hormigón de los pasillos y las tijerillas de acero con mallas de acero y hormigon en los salones de clase.

En visitas realizadas a la Escuela no se observó deficiencia estructural alguna que nos diera entender que la estructura no es una segura. La estructura presenta problemas de delaminación del hormigón en algunos lugares, pero los mismos son reparables.

Comparando la copia obtenida de los planos de construcción originales, los mismo coinciden con la estructura y planos as-built realizados. Entre las diferencias observada es la adición del techo de la terraza posterior, la cual se construyó en hormigón reforzado. También se observó que la malla metálica en el techo, que soporta la losa de hormigón entre las viguetas, fue remplazada por una cubierta de metal galvanizada y se asume se colocó hormigón sobre la misma.

A la estructura se le tomaron una serie de núcleos, pruebas al hormigón, con el propósito de determinar la composición de estos y su resistencia a compresión.



Re: Escuela Guillermo Godreau Manatau

Fecha:5 de julio de 2022

De dichos resultados podemos concluir que los muros de hormigón tienen un espesor de 8" a 9", incluyendo la terminación y que su resistencia a compresión, en promedio, es de 1,335 PSI, eliminando el valor más alto y el más bajo. La apariencia del hormigón es de un hormigón de pobre calidad y la pasta del hormigón presenta vanos en exceso y separación de la pasta a los agregados. La losa de hormigón sobre tierra y la losa en el pasillo superior demuestran igual calidad de materiales, pero con una resistencia a compresión mayor. En relación con la losa del segundo nivel, la cual se soporta sobre las tijerillas de acero ésta muestra diferentes condiciones, desde tener solo mortero de hormigón hasta una losa de 3" sobre una malla de acero la cual esta corroída.

La estructura fue analizada utilizando el programa de análisis estructural ETABS donde se analiza la estructura bajo cargas gravitacionales y cargas de terremotos. Los resultados demuestran que la estructura tiene la capacidad para soportar las cargas gravitacionales, pero no las cargas laterales debido a terremotos. Esta estructura por su origen y tipo de construcción no cuenta con las características que le den la ductilidad para disipar las cargas de terremotos y por lo tanto no se le puede aplicar una reducción a la respuesta sísmica.

El código de edificación vigente es el "Internacional Existing Building Code 2018" el cual toma en consideración este tipo de estructura. Para la misma establece una serie de criterios para su evaluación y desempeño ante un sismo. Siendo esta una estructura de la década del 1930 y no habiendo sido construida por los códigos normativos, es mi experiencia que se tenga que reforzar para aumentar su capacidad estructural y cumplir con los requisitos de los códigos modernos. El Código establece que este tipo de mejoramiento es uno voluntario siempre y cuando no se cambie su uso original y el oficial de permiso lo apruebe. También el código provee para hacer.



Re: Escuela Guillermo Godreau Manatau

Fecha:5 de julio de 2022

mejoras estructurales con el propósito de reducir la probabilidad de un colapso ante un evento sísmico.

Recomiendo que ante esta situación se verifique con el dueño si desea rehabilitar la estructura y si la inversión requerida es costo efectivo. Para tomar esta decisión es importante que el dueño tome en consideración los siguientes datos:

- A) Es necesario realizar las siguientes pruebas:
  - 1. Estudio de suelo con el propósito de evaluar la respuesta sísmica.
  - Estudio de PH y contenido de cloruro en el hormigón más un análisis detallado de la permeabilidad del hormigón con el propósito de evaluar la durabilidad del hormigón y el potencial de corrosión en el refuerzo de acero.
  - Pruebas de carga en la losa del segundo nivel para verificar la capacidad de la losa sobre la malla de acero entre viguetas.
  - 4. Determinar composición de la losa de techo reconstruida y verificar su anclaje a las tijerillas de techo.
  - 5. Verificar el anclaje de las viguetas a la estructura de hormigón.
- B) Remover los plafones del primer nivel para realizar levantamiento de datos y verificar condición de las tijerillas de acero.
- C) Análisis estructural no lineal con el propósito de determinar el modo de fallo de la estructura y el refuerzo requerido en los elementos estructurales.
- D) Preparar diseño de refuerzo de la estructura según los resultados del análisis estructural y el desempeño esperado de la estructura.



Re: Escuela Guillermo Godreau Manatau

Fecha:5 de julio de 2022

El dueño debe de estar consciente de que esta estructura tiene aproximadamente 90 años y que su vida útil está comprometida. No todas las estructuras tienen un comportamiento similar ante un sismo, el mismo depende de la dirección de las fuerzas principales y su periodo. Es importante señalar que las mejoras a la estructura no garantizan el 100 por ciento de su desempeño ante un sismo y que la misma puede sufrir daños a un nivel que no sean reparables. Es de suma importancia establecer el uso que se le vaya a dar a la estructura y el desempeño que se espera de la misma.

Por lo tanto, recomiendo que el dueño establezca las intenciones del uso futuro de esta estructura y la vida útil esperada. El uso de estas facilidades para un uso que deba de estar en condiciones operacionales luego de un evento sísmico de envergadura estaría comprometido y su desempeño no permitiría su uso luego de un evento catastrófico.

Miguel A. Zapata P.E. Consulting Structural Engineers

Parque Torremolinos A4 Calle I, Guaynabo, PR 00969-3625 / Tel. (787) 567-4083, Email: zapata@ingzapatapr.com

Re: Escuela Guillermo Godreau Manatau

Fecha:5 de julio de 2022

II. <u>Introducción</u>

El propósito fundamental de este estudio es determinar de una forma razonable y según

los estándares de la industria de la construcción si la estructura que alberga el proyecto

en la referencia es segura para continuar con su categoría de ocupación según los

códigos de edificación modernos.

La estructura en la referencia está localizada en el pueblo de Salinas, en la calle Miguel

Ten, con condenadas 17.975649 - 66.298961, a una distancia de 0.89 millas de la costa

Sur de Puerto Rico.

Dicha estructura construida en la década del 1930 está construida mayormente en

concreto reforzado y tijerillas de acero. La estructura, la cual es simétrica en su eje Norte-

Sur, tiene un área bruta de piso de 8,500 pies cuadrados.

III. Descripción y Documentos Originales

La estructura, la cual desde sus inicios fue construida con el propósito de ser utilizada

como una escuela, consta con un sistema de construcción en muros de hormigón

reforzado que les da soporte a las losas de hormigón y a las tijerillas de acero localizadas

mayormente en los salones de clases.

Los dibujos de construcción obtenidos, por el arquitecto Bernardo Marques en el Archivo

General, coinciden mayormente con el sistema estructural observado durante las visitas

al proyecto.

Dichos documentos que se incluyen en el anejo A, consta tanto de dibujos

arquitectónicos como dibujos estructurales.

7



Re: Escuela Guillermo Godreau Manatau

Fecha:5 de julio de 2022

Documentos de Planos Originales:

En los dibujos estructurales se detallan los cimientos, muros de hormigón, losas sobre terreno, losas al aire y detalles de escaleras. Los siguientes son los datos más destacados de los dibujos estructurales.

- 1. Las zapatas son continuas y alineadas con los muros de cargas y tienen un ancho de 2'-0" o 2'-6" a una profundidad de 2'-4" por debajo del nivel del terreno. El espesor de los cimientos se indica de 8" en ambos casos.
- 2. Los muros de carga sobre los cimientos se ilustran de 8" de espesor con doble refuerzo, el cual no se detalla.
- 3. La losa sobre terreno en el primer nivel se detalla como una losa de 4" sobre relleno reforzados con barras de ¼" a 18" CC.
- 4. Las losas de los pasillos del segundo nivel y de las escaleras se detallan como losas de hormigón reforzado de 4 ½" y 5 ½" de espesor reforzados con varillas de ½" y 3/8".
- 5. Las losas estructurales en los salones de clases están compuestas por tijerillas de acero colocadas a 20" centro a centro según planos y a 24" según observado, las que soportan una malla de acero con 2 ½" de hormigón y un mortero y terminación de piso sobre la misma.
- 6. La estructura de techo es similar a la del segundo nivel excepto que las viguetas son de menor peralto y la losa sobre los pasillos es de 4 ½" de espesor, inclinada en una sola dirección.

Cuando comparamos estos dibujos de construcción con los dibujos As-built arquitectónicos y estructurales, anejos B y C, encontramos los siguientes datos:

1. La estructura fue ampliada en el segundo nivel en lo que pudo ser un espacio al aire libre con un techo de hormigón sobre el mismo.



Re: Escuela Guillermo Godreau Manatau

Fecha:5 de julio de 2022

2. Los huecos de ventana tienen dimensiones distintas en las diferentes paredes, dando indicio de que fueron variados para colocar las ventanas de celosías de aluminio

3. Opuesto a la terraza exterior mencionada en el inciso 1, lo que pudo haber sido una terraza abierta, pero techada, se observa la construcción de columnas, mullones en hormigón, entre las ventanas de la fachada Norte del espacio. Estos demuestran un hormigón con agregados distintos.

De los datos que se indican en los documentos de construcción no se desprende información de las especificaciones de los materiales utilizados para construir la estructura ni se indican los datos del suelo utilizados para diseñar los cimientos. Sin embargo, en los planos estructurales, señalan las cargas gravitacionales que se utilizaron para el diseño de las losas:

Cargas en los Salones

Carga en el Techo

A. 50# LL – 105# total

A. 30# LL – 94# Total

B. 75# LL – 128# total

C. 75# LL - 128# total

#### IV. Visita al sitio

Realicé una visita al proyecto con el arquitecto Bernardo Marques con la idea de relacionarme con el proyecto y observar las condiciones generales de la estructura. En base a esta visita se determinó el tipo de prueba y la localización de las mismas en adición a la información adicional que sería necesaria para comenzar una evaluación estructural del edificio.

En una segunda visita se corroboró los datos de campo obtenidos en el As-built y se compararon las condiciones existentes con los documentos obtenidos.



Re: Escuela Guillermo Godreau Manatau

Fecha:5 de julio de 2022

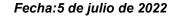
De las observaciones realizadas podemos señalar que la estructura corresponde a los planos obtenidos en tamaño, forma y materiales.

Se puede observar que a la estructura se le han hecho trabajos de reparación, especialmente en el techo donde la losa entre las viguetas fue sustituida por una losa de hormigón sobre una formaleta de metal y las losas de hormigón fueron reemplazadas. También se pudo observar que en una de las terrazas del segundo nivel, localizada en la parte posterior de la misma, se llevaron a cabo trabajo de construcción a un tiempo posterior donde se observan materiales de construcción distintos a los originales. Estas terrazas posteriores se encuentran a desnivel con el resto del nivel del segundo piso dando la impresión de que en su inicio eran espacios abiertos.

De esta visita se desprenden los siguientes datos:

- No se observa asentamiento alguno de la estructura principal ni grietas diagonales que indiquen el asentamiento diferencial en la estructura.
- La losa de piso, del primer nivel, la cual está construida sobre el suelo no demuestra asentamiento ni grietas que indiquen alguna falla en la sustentación de la misma.
- 3. Los muros de hormigón reforzado no demuestran grietas ni delaminaciones que demuestren una pérdida de capacidad o problema de corrosión en el acero de refuerzo. Solo en el segundo nivel en la fachada Norte, entre las ventanas se puede observar una delaminación del hormigón y acero expuesto.
- 4. La losa del segundo piso no demuestra deflexiones ni grietas que indiquen falla estructural alguna.

#### Re: Escuela Guillermo Godreau Manatau





Fachada Norte donde se ilustra las grietas alrededor de las ventanas del segundo nivel



Detalle de grieta debido a la delaminación del hormigón en la fachada Norte, segundo nivel.



Se observa asentamiento en las losas sobre tierra en el perímetro del edificio.

#### Re: Escuela Guillermo Godreau Manatau



Delaminación del empañetado en detalles arquitectónicos.



Espacio de terraza cubierta a desnivel con el pasillo del segundo

#### Fecha:5 de julio de 2022

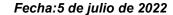


Elevación Sur Oeste donde se ilustra la ampliación en el segundo nivel.



Detalle de corrosión del refuerzo en las columnas del segundo nivel.

Re: Escuela Guillermo Godreau Manatau





Cubierta de techo reemplazada con formaleta de acero y losa de concreto.



Detalle de tijerilla de acero y malla de refuerzo de la losa del segundo nivel.



Remplazo de losa de techo con losa de hormigón y cubierta de metal.

#### Re: Escuela Guillermo Godreau Manatau

Fecha:5 de julio de 2022



Detalle de cubierta de metal sobre tijerillas de techo.



Detalle de núcleo de losa del segundo nivel en los salones.



Detalle de núcleo de pared en el primer nivel.



Re: Escuela Guillermo Godreau Manatau

Fecha:5 de julio de 2022

5. En el segundo nivel, el área que está compuesta por las tijerillas de metal, se pudo observar un grado severo de corrosión en las mallas de acero, que están entre viguetas y un nivel de corrosión menor en las viguetas.

6. El plafón del primer nivel, que consta de una malla metálica con empañetado no muestra deflexiones o grietas, pero la malla de acero está corroída.

En general se observa que la estructura no muestra daños o deficiencias estructurales alguna que comprometan su capacidad para soportar las cargas de diseño.

#### V. Pruebas de Materiales

Como parte del estudio de los materiales que componen la estructura se tomaron una serie de núcleos con el propósito de determinar la composición de los elementos estructurales, su resistencia a compresión, apariencia y evidencia de corrosión en el refuerzo. Copia de dicho estudio se incluyen el anejo C de donde se pueden concluir los siguientes datos.

- 1. Los muros de cargas tienen un espesor promedio de 9", incluyendo la terminación.
- La resistencia mínima a compresión de los núcleos en los muros fue de 740PSI
  y la máxima de 2,760PSI. El promedio, sacando el valor más alto y el más
  bajo es de 1,335 PSI.
- 3. La apariencia del hormigón es de baja calidad y presenta segregación y separación entre los agregados y la pasta del cemento. La variación en tamaño de agregado grueso es significativa y la pasta presenta una porosidad típica de hormigones bajos en cemento.
- 4. Una varilla fue observada en los núcleos de pared y la misma es de sección cuadrada y de aproximadamente de ½".



#### Re: Escuela Guillermo Godreau Manatau

Fecha:5 de julio de 2022

5.Los núcleos extraídos de las losas de piso no se pudieron extraer completamente lo que solo permitió obtener 2 resultados, uno en la losa de techo (2,290 psi) y otro en el segundo nivel (1,490psi). Entendemos que el número de muestra es muy pequeña para ser representativa.

6.En los núcleos obtenidos en la losa del segundo piso entre las viguetas de acero en una condición solo sucedía un mortero y en la otra una losa de 3" de hormigón con 1" de terminación.



Núcleo de pared del primer nivel. Porosidad en la pasta y separación entre la pasta y el agregado



Núcleo de pared del segundo nivel. Porosidad en la pasta y separación entre pasta y agregado.



Re: Escuela Guillermo Godreau Manatau

Fecha:5 de julio de 2022



Losa del segundo nivel donde se muestra el nivel de corrosión de acero



Núcleo de la losa de piso del segundo nivel sobre las tijerillas. Capa superior terminación intermedia mortero y en la parte inferior losa de hormigón.

## VI. <u>ASCE 11-99 – Guías Para Evaluar La Condición Estructural de Edificio</u> <u>Existentes</u>

La evaluación de la condición de una estructura se puede llevar a cabo por diferentes razones. La misma puede ser para determinar el desempeño, cumplimiento con códigos de construcción, durabilidad, preservación histórica o el uso propuesto para la misma entre otras razones.

La evaluación de una estructura se divide entre los componentes estructurales y no estructurales. Los componentes estructurales son aquellos como las vigas,



Re: Escuela Guillermo Godreau Manatau

Fecha:5 de julio de 2022

columnas, zapatas, paredes y losas que principalmente componen la estructura del edificio.

En el caso de la escuela Guillermo Godreau Manatau de Salinas, se pudo conseguir los documentos originales. Se levantó un "As-built" tanto estructural como arquitectónico, se realizaron pruebas de resistencia al hormigón mediante la extracción de núcleo y se visitaron las facilidades.

A) Visita de Campo

Se realizaron dos visitas de campo y durante la misma se hicieron las siguientes observaciones.

- La estructura esta conforme en su geometría y configuración con los planos originales excepto con una adición en el segundo nivel en la parte posterior, derecha.
- 2. La estructura no presenta asentamiento alguno que se pueda determinar visualmente y no se observaron grietas en la estructura por estos motivos.
- La malla de acero sobre las viguetas del techo fue reemplazada por una cubierta galvanizada sobre la cual se debió haber depositado una losa de hormigón, dato que deberá de ser investigado mediante la extracción de núcleos.
- 4. Se observo una delaminación parcial del hormigón en los mullones entre las ventanas laterales del segundo nivel.
- La malla de acero entre las viguetas del segundo nivel presenta un alto grado de corrosión.

Como dato general no se observó mayor número de deficiencias en la superficie del hormigón.



Re: Escuela Guillermo Godreau Manatau

Fecha:5 de julio de 2022

## VII. <u>ACI-201.1R-2. Guía Para Conducir Una Inspección Visual del Concreto en Servicio</u>

El propósito de esta inspección es el corroborar de forma visual la condición del hormigón en los distintos elementos. Las observaciones aquí realizadas son en base a visitas al proyecto y a la evaluación visual de los núcleos que se obtuvieron. Siendo esta una estructura de más de 80 años de haberse construido y una distancia aproximada de 0.88 millas de la costa Sur de Puerto Rico, la misma ha estado expuesta a los ataques de cloruro mediante el salitre del mar. Durante nuestra visita no se observó delaminación del hormigón en los muros de hormigón ni en las losas de piso. En los siguientes lugares se observan las siguientes deficiencias.

- 1. Delaminación del empañetado en cornisas decorativas.
- 2. Delaminación en el hormigón en columna del segundo nivel, del lateral derecho en la parte posterior de la estructura.

En relación con los núcleos extraídos, de los mismos se hicieron las siguientes observaciones.

- 1. El agregado grueso muestra una separación de la pasta del concreto. Durante la rotura de los núcleos la misma nunca ocurrió a través del agregado grueso.
- Los núcleos muestran un nivel de segregación y la pasta del hormigón muestra una porosidad la cual se puede relacionar a la falta de cemento.

Se incluyen una serie de fotografías de los núcleos extraídos.



Re: Escuela Guillermo Godreau Manatau

Fecha:5 de julio de 2022

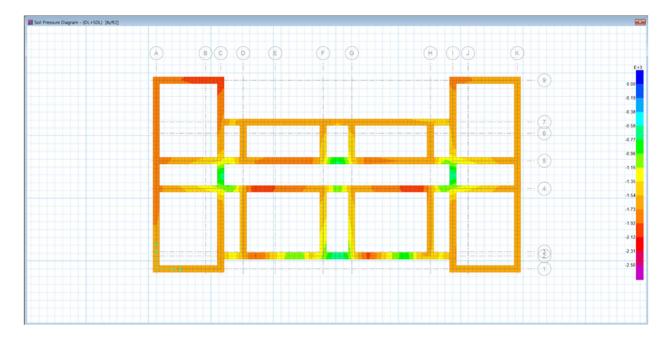
#### VIII. ASCE 31-03 – Evaluación Sísmica a Edificios Existentes

La siguiente es nuestra evaluación de la respuesta sísmica de la estructura según el estándar del ASCE 31-03. En este documento se pretende determinar por medio de análisis y observaciones cuál sería el comportamiento de la estructura ante un evento sísmico según descrito por el código. En el mismo se define el nivel de sismicidad y se determina el desempeño esperado de la estructura. Esta evaluación es una voluntaria y no requiere llevar a cabo los trabajos de restauración o reparación a menos que sean requeridos por las agencias de gobierno concernidas. La evaluación está dividida en tres etapas "tiers" de las cuales no se requiere proceder a la etapa siguiente si la estructura no cumple con los requisitos de la primera etapa. Este estudio se preparó a base de la primera etapa y el mismo consistió en visitas al proyecto, examinar documentos de construcción, tomar muestras de materiales y completar los formularios que incluye el documento. Este formulario se encuentra en el anejo F.

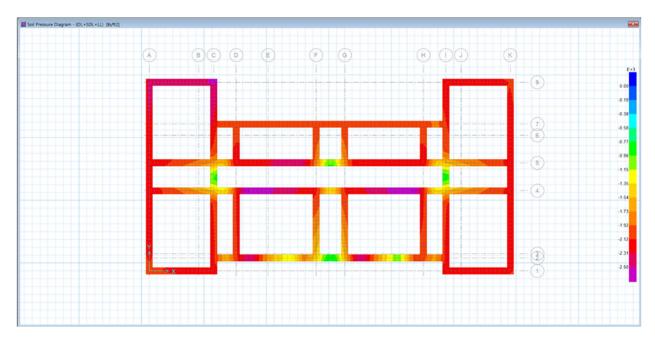
- A) Resultados de los Análisis Estructurales
  - Se realizaron varios análisis estructurales al edificio y los siguientes son los datos más sobresalientes.
  - 1. La estructura tiene la capacidad para soportar las cargas gravitacionales indicadas en los planos originales.
  - 2. Las reacciones en los cimientos están en el orden de 2,000 libras por pie cuadrado para cargas muertas, DL, y 2,500 libras por pie cuadrado para cargas de servicio, DL + LL. Ver graficas a continuación.

Re: Escuela Guillermo Godreau Manatau

Fecha:5 de julio de 2022



Presiones de Suelo Bajo Cargas DL + SDL



Presiones de Suelo Bajo Cargas DL + SDL + LLL



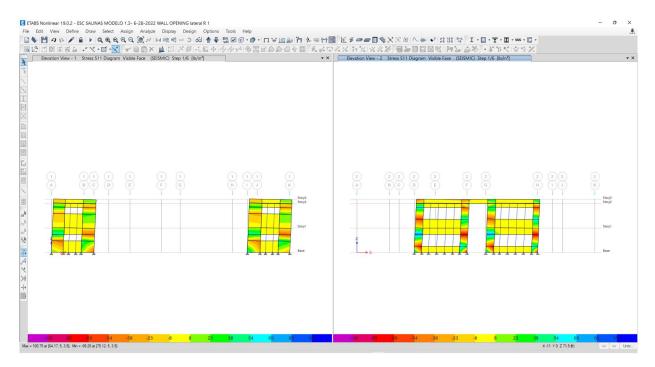
#### Re: Escuela Guillermo Godreau Manatau

Fecha:5 de julio de 2022

- 3. Los esfuerzos en cortante en la mayoría de los muros están por debajo de los esfuerzos permitidos ante fuerzas laterales establecidas por el código para este tipo de análisis. Ver gráficas en las páginas 23 a la 26.
- Según listado de cotejo, ASCE-31-03, para el sistema de edificios en el "tier 1", el mismo está en cumplimiento con los requisitos para el sistema principal de la estructura.
- 5. El listado de cotejo, ASCE-31-03, "tier 1" para el sistema de resistencia a cargas laterales, no se puede determinar si el mismo está conforme con la cantidad de refuerzo que se requiere en los muros y tampoco está conforme con los parámetros de refuerzo en los bordes de los elementos de pared dado que los mismos corresponden a requisitos de códigos modernos.
- 6. En relación al cumplimiento de elementos tales como diafragmas, conexiones estructurales y fundaciones, los mismos están en cumplimiento. Es necesario realizar investigaciones adicionales para determinar la conexión entre el diafragma de techo y las tijerillas de acero. También se tendrán que realizar excavaciones en el perímetro de la estructura para verificar el tamaño, condición y materiales de los cimientos.
- Con relación a los componentes no estructurales la misma no fue completada dado que los mismos serán removidos en una futura remodelación si así fuese el caso.

#### Re: Escuela Guillermo Godreau Manatau

Fecha:5 de julio de 2022



#### Diagrama de Esfuerzos a Cortante Ejes 1 y 2

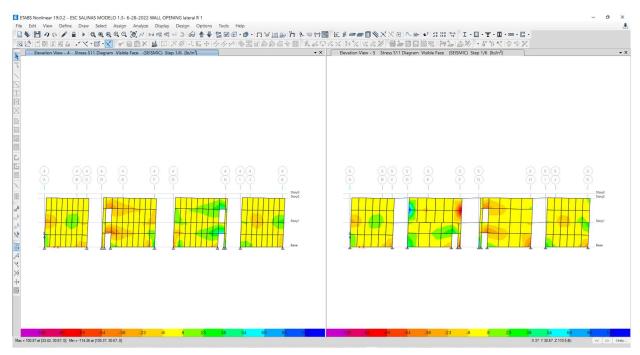
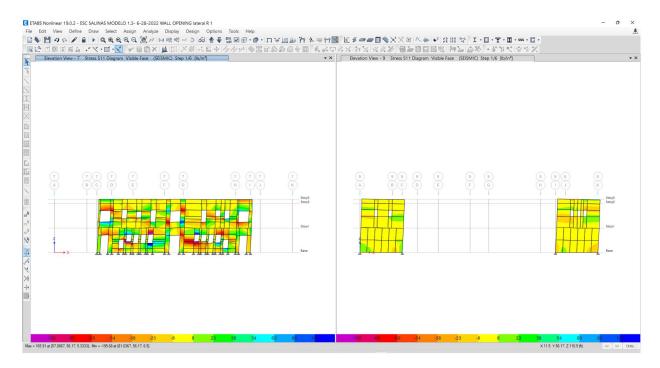


Diagrama de Esfuerzos en Cortante Ejes 4 y 5

#### Re: Escuela Guillermo Godreau Manatau

Fecha:5 de julio de 2022



#### Diagrama de Esfuerzo de Cortante Ejes 7 y 9

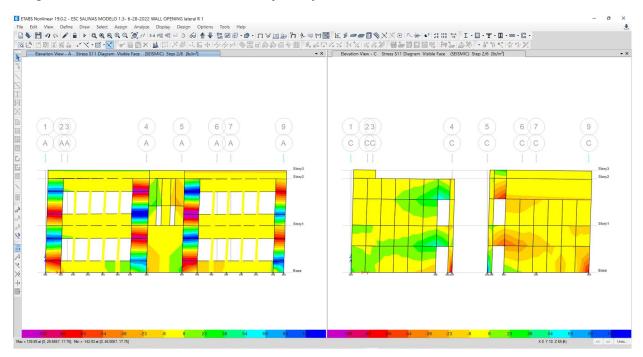
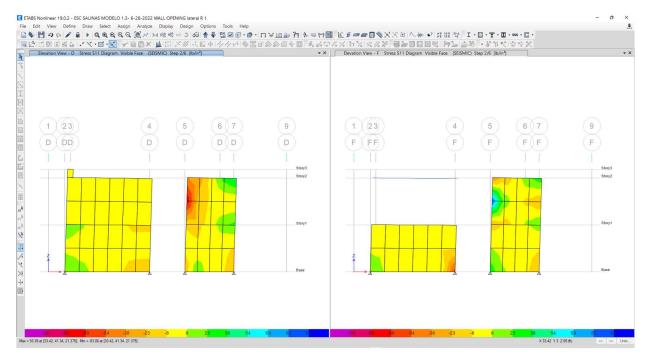


Diagrama de esfuerzo de Cortante Ejes A & C

Re: Escuela Guillermo Godreau Manatau

Fecha:5 de julio de 2022



#### Diagrama de Esfuerzo de Cortante Ejes D & F

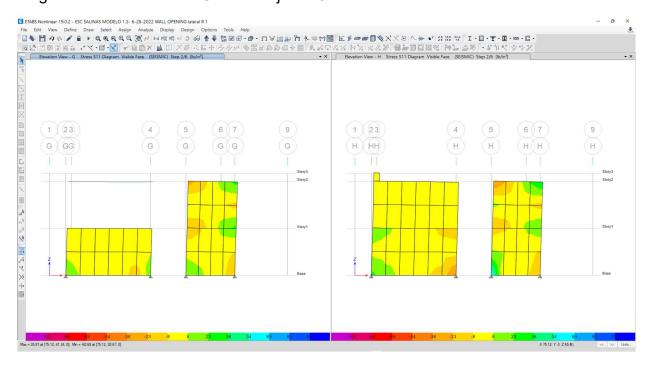
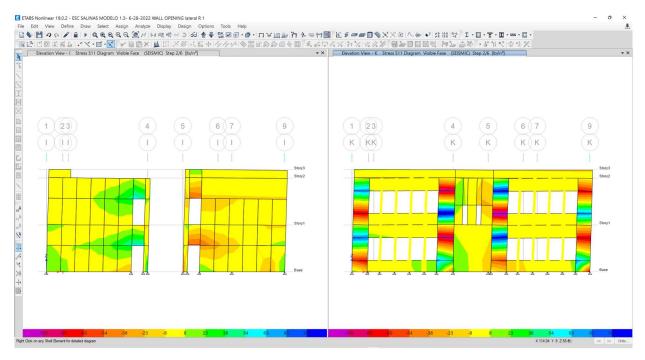


Diagrama de Esfuerzo de Cortante Ejes G & H

Re: Escuela Guillermo Godreau Manatau

Fecha:5 de julio de 2022



#### Diagrama de Esfuerzo de Cortante Ejes I & K

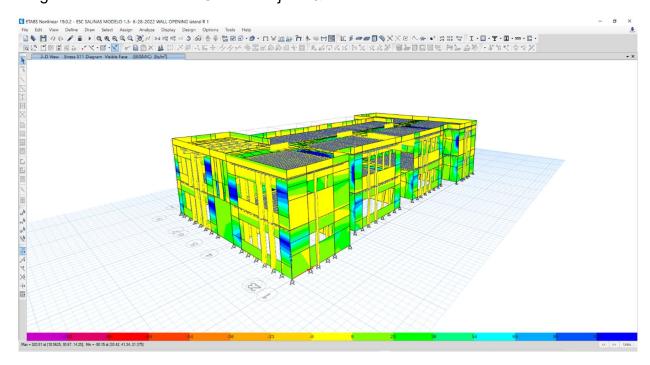


Diagrama de Esfuerzo de Cortante Modelo 3D



Re: Escuela Guillermo Godreau Manatau

Fecha:5 de julio de 2022

#### IX. Conclusiones y Recomendaciones

La estructura que alberga la escuela Guillermo Godreau Manatau podrá seguir siendo utilizada siempre y cuando se realicen ciertos trabajos de reparación y mantenimiento. Su uso se deberá limitar a una ocupación de bajo riesgo y una intensidad de carga viva menor o igual para la cual fue diseñada. Entendemos que el rehabilitar la estructura para tener una ocupación de facilidades esenciales o una categoría de riesgo mayor que II no es justificable dado a la magnitud de los trabajos de refuerzos que se requerirían. Sin embargo, a la estructura se le pueden realizar mejoras de tal forma que se reduzca el potencial de daños durante el evento de un terremoto.

Es nuestra recomendación que se defina un uso apropiado para la estructura y se determine si los costos de rehabilitación y reparaciones están entre los medios del Municipio. Será necesario realizar pruebas y trabajos de investigación adicionales con el propósito de poder preparar los documentos de construcción necesarios para poder llevar a cabo la rehabilitación.

Esta rehabilitación consta de reparar aquellas deficiencias que se señalaron en este reporte y el mejoramiento del desempeño de la estructura. La estructura, como hemos señalado anteriormente, es una construida en hormigón reforzado con varillas de acero y tijerillas de metal que a través del tiempo se deterioraron. Es por lo tanto que siendo esta estructura de mas de 80 años de haberse construido su vida útil está comprometida y a menos que no se lleven a cabo trabajos de reparación y rehabilitación mayores la vida útil de la misma está comprometida.



Re: Escuela Guillermo Godreau Manatau

Fecha:5 de julio de 2022

El firmante garantiza que sus servicios profesionales están de acuerdo con los principios de la práctica de la ingeniería y la práctica profesional de la profesión en el campo de la ingeniería estructural. Esta es la única garantía expresada o implícita.

Respetuosamente

Ing. Miguel A. Zapata

Lic. 9480







# ACTUAL CONDITIONS & CONCRETE QUALITY ASSESSMENT

ESCUELA GUILLERMO GODREAU MANATAU STRUCTURE SALINAS, PUERTO RICO



## Prepared for: MARQUES + MARQUES ARQUITECTOS

ARCH. BERNARDO MARQUES - AIA



701 Ave. Ponce de León 201 San Juan P.R. 00907

October 6, 2022

Prepared by:

SPEC GROUP, LLC.

URB SAN FRANCISCO #141 DE DIEGO AVE San Juan, Puerto Rico 00927

Tel. 787.979.9440 / 787.722.2338 / 787.502.6639 e-mail: pfebo@specengpr.com; rmarte@specengpr.com











#### **TECHNICAL SERVICES REPORT LR-2022-74**

October 6, 2022

#### ARCH. BERNANRDO MARQUES, AIA

MARQUES + MARQUES A R Q U I T E C T O S

701 Ave. Ponce de León 201 San Juan P.R. 00907

Via Email: bernardo@marquesarquitectos.com

**Re: ACTUAL CONDITIONS and CONCRETE QUALITY ASSESSMENT at** 

**ESCUELA GUILLERMO GODREAU MANATAU STRUCTURE in** 

**SALINAS, PUERTO RICO** 

SPEC GROUP PROJECT No.: SG2022-863

Dear Sir:

This report presents the results of the **Actual Conditions Assessment and Concrete Quality Assessment** at the **Ground, Second and Roof Level of the Structure of Escuela Guillermo Godreau Manatau** located in Salinas, Puerto Rico.

The work was performed as stated on Spec Group **Proposal PL-2022-76**, on September 8 and 13, 2022, to obtain and provide factual information on the actual conditions of the structure for evaluation. For details of the areas investigated, please refer to **Figures and Photos**, enclosed.

To accomplish the above, SPEC GROUP performed the following work:

- 1. Reinforcing Steel Location & Determination using of Non- Destructive Testing (NDT) techniques.
- 2. **Concrete Strength** determined by hardened concrete cores extraction.
- 3. **Concrete Quality Chemical Test** Determination by the use of Phenolphthalein Solution at 0", 1", 2", 4" & 6".
- 4. **Steel Framing As-Built** performed at least on (4) four locations at each from 0ft to 8ft in length.
- 5. <u>Unit Weight of Concrete and Simple Description</u> by the extraction of hardened core samples.

GUILLERMO GODREAU SCHOOL STRUCTURE Laboratory Report LR-2022-74 October 6, 2022 Page 2 of 83

- 6. <u>Tension Test on Horizontal Reinforcement at Wall</u> a 30" of length sample was extracted from (1) wall on ground level.
- 7. <u>Foundation Exploration</u> excavations were performed by others; our team only take measurements and core extraction on footings.

The results of the testing program performed are presented below:

#### 1. Reinforcing Steel Location and Determination

The rebar scan data was gathered without damaging the existing concrete (Non-Destructive Testing). A few rebar scans were performed in different areas staggered along the structure, specifically at concrete walls and second level slab to determine the existing reinforcement location, size, spacing, and clear cover. The scans were done using a combination of two NDT-type equipment: a ferromagnetic device capable of obtaining rebar depth, location, and rebar diameter (*Hilti Ferroscan PS300*) and a Ground Penetration Radar (*Hilti PS1000 GPR*) capable of obtaining a precise image of almost any object and material, or voids inside the concrete.

- ✓ The **Hilti Ferroscan PS 300** is an NDT investigation tool capable of determining the position, cover, and diameter of the existing rebars. The maximum depth of the rebar that the scan is capable of detecting is 8.0″ with an accuracy of ±0.118″. The maximum depth for determining rebar diameter is 2.4″ with an accuracy of ±0.04″. It should be noted that measurements of both systems may be significantly affected by site and ambient conditions, such as moisture, radio systems, proximity to magnetic or electromagnetic fields, dampness, construction materials containing metals, aluminum foil backed insulation, multiple layers and materials with cavities or electrically conductive wall covering or tiles. The area covered at each scan is 2′ x 2′ or also 4′ by 4′. Larger continuous areas can be scanned if it is required. The typical quick scan and 2′ x 2′ full scans on various coverage area were used for this project to get information of the concrete elements. The quick scan mode does not save any data in the memory of the scan, however, shows the reinforcement live in-situ.
- ✓ The **Hilti Ground-Penetrating Radar (GPR) PS1000**, in this case the Hilti X-Scan Unit, also called impulse radar, uses electromagnetic waves to measure discontinuities below a concrete surface. The technique has been used to locate, voids, reinforcing steel, and to measure thickness. Although this device was not designed to determine the concrete thickness of the element, it will give an image of the section of the concrete. In the case of a surface less than 10″, it would show a rebound image of the end of the signal, where the thickness of slab could be estimated. The area covered at each scan is 2′ x 2′ or also 4′ by 4′. Larger continuous areas can be scanned if it is required. The typical quick scan and 2′ x 2′ full scans on various coverage area were used for this project to



#### GUILLERMO GODREAU SCHOOL STRUCTURE Laboratory Report LR-2022-74 October 6, 2022 Page 3 of 83

get information of the concrete elements. The quick scan mode does not save any data in the memory of the scan, however, shows the reinforcement live in-situ.

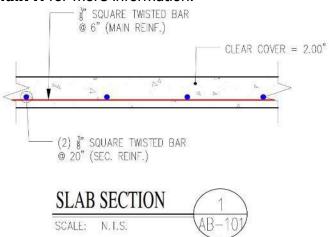
The focus of this study is to estimate the existing reinforcement location, spacing, size and clear cover of the existing concrete walls and second level slab, measured it from the top surface at locations needed of the concrete elements of the structure.

A total of (13) thirteen scan locations (twenty-six scans in total) were performed along mentioned structure on ground and second level. We present a few general pictures during the work performed which could be found at **Appendix A**. Some example of scans images are included. Drawings with the locations of the test performed and more details of the sections are also included in the appendix located at the end of the document with name **Appendix H**. It is important to note that the data gathered, was taken in specific areas. Also, some dimensions of the structural elements difficult the scanning in some locations. Our team also perform several quick scans to identifying the reinforcement in the structural elements. We do not scan any other location further that the mentioned areas. **In general**, the typical layout of the reinforcement resulting from the NDT, is as follows:

#### Section #1: (Concrete Slab):

Main Reinforcement: 3/8" square twisted bar with spacing of 6.0" Secondary Reinforcement: (2) 3/8" square twisted bar with spacing of 20.0" The clear cover of the reinforcement is 2.00"

**Comments:** The detail corresponds to the **second level slab** of the structure, specifically on the east room. The scan performed at this slab is **Scan #13**. Please, refer to *Appendix H* for more information.



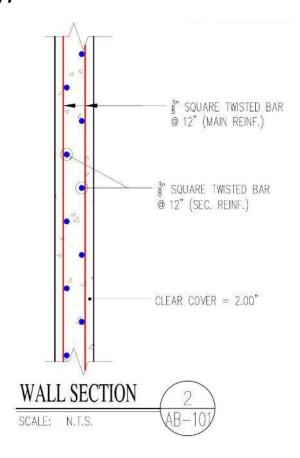


GUILLERMO GODREAU SCHOOL STRUCTURE Laboratory Report LR-2022-74 October 6, 2022 Page 4 of 83

#### **Section 2: (Concrete Wall)**

Main Reinf.: (2) TWO LAYERS of 3/8" square twisted bar with spacing of 12.0" Secondary Reinf.: (2) TWO LAYERS 3/8" square twisted bar with spacing of 12.0" The clear cover of the reinforcement is 2.00".

**Comments:** The detail corresponds to all walls scanned on ground and second level of the structure. The scans performed at these walls are from **Scan #1 to #12**. Please, refer to **Appendix C & H** for more information.





#### 2. <u>Hardened Concrete Compressive Strength</u>

Ten (10) hardened concrete samples (cores) were obtained from walls and footings of the mentioned structure, to determine the compressive strength of the concrete. Core drilling and testing were performed following the requirements of **ASTM C 42**, "**Standard Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete."**. The moisture conditioning of the cores was as specified in **Section 7.3** of **ASTM C 42**. The results are presented in the <u>Table 1</u>. To see photos of core specimen before and after testing, refer to <u>Appendix B</u> and to see the locations on where the samples were taken during the field visits, refer to <u>Appendix H</u> at the end of this document.

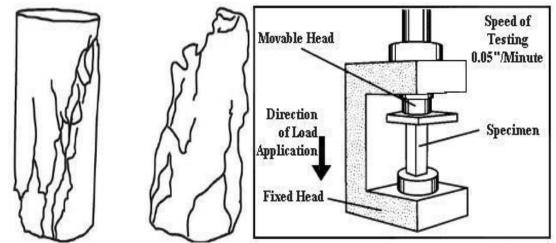


Figure 1: Typical Compressive Strength Test on Hardened Concrete Cores

Table 1: Compressive Strength of Hardened Extracted concrete Cores

Table 1. Compressive Strength of Hardened Extracted Concrete Cores								
Core ID	<b>Structure</b> 's <b>Element</b>	Location	L/D	Correction Factor	Uncorrected Strength (psi)	Corrected Strength (psi)		
C-1	Wall	Second	1.790	1.000	748	750		
C-2	Wall	Second	1.499	0.960	1,362	1,310		
C-3A	Wall	Second	1.939	1.000	729	730		
C-3B	Wall	Second	2.026	1.000	999	1,000		
C-4	Wall	Second	1.906	1.000	1,546	1,550		
C-5	Wall	Second	1.859	1.000	1,256	1,260		
F-1A	Footing	Ground	1.829	1.000	2,414	2,410		
F-2	Footing	Ground	1.962	1.000	1,624	1,620		
F-3	Footing	Ground	2.002	1.000	1,266	1,270		
F-4	Footing	Ground	1.956	1.000	2,361	2,360		

Samples were cured in moisture conditions by sealed plastic bags prior testing, as stated in ASTM C42 section 7.3.



- ✓ ACI 318-14 states the following:
- ✓ 5.6.5.4 Concrete in an area represented by core tests shall be considered structurally adequate if the average of three cores is equal to at least <u>85 percent</u> of *f'c* and if no single core is less than <u>75 percent</u> of *f'c*. Additional testing of cores extracted from locations represented by erratic core strength results shall be permitted.

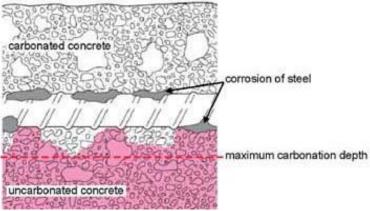
```
✓ 85 percent criteria - f'c = 4,000 \text{ psi} = 3,400 \text{ psi}
```

- $\checkmark$  75 percent criteria f'c = 4,000 psi = 3,000 psi
- √ 85 percent criteria f'c = 3,000 psi = 2,550 psi
- √ 75 percent criteria f'c = 3,000 psi = 2,250 psi

### 3. <u>Determination of carbonation extent</u> of concrete at selected locations by application of a phenolphthalein

<u>Penetration of carbonation</u> was determined by use of a phenolphthalein solution on (2) two selective areas of the **SECOND LEVEL WALLS** of the structure.

When the clear phenolphthalein indicator solution comes in contact with uncarbonated cement paste, it turns pink. If the paste is carbonated, the solution will remain clear. In general, the test results disclosed that the structure shows evidence of carbonation extent on the mentioned areas at the time of our tests. The test results disclosed that the core specimen extracted were FULLY CARBONATED. To see photos of core specimen tested refer to <u>Appendix E</u> and to see the locations on where the samples were taken during the field visits, refer to <u>Appendix H</u> at the end of this document.



Typical Concrete Carbonation Test



#### GUILLERMO GODREAU SCHOOL STRUCTURE Laboratory Report LR-2022-74 October 6, 2022 Page 7 of 83

The results are presented in *Table 2* below:

Table 2: Carbonation Extent and pH content at different depths of walls.

Sample <i>ID</i>	Building	Level	Element	Depth Tested	Carbonation Results			
	Guillermo Godreau School	Second	Wall	0.0"	Carbonated			
Core				1.0"	Carbonated			
Sample #1				2.0"	Carbonated			
(CA-1)				4.0"	Carbonated			
				6.0"	Carbonated			
RESULT = Fully Carbonate								
			RI	ESULT =	Fully Carbonated			
			RI	0.0"	Fully Carbonated Carbonated			
Core	Guillermo		RI		-			
Core Sample #2	Guillermo Godreau	Second	RI Wall	0.0"	Carbonated			
		Second		0.0" 1.0"	Carbonated Carbonated			
Sample #2	Godreau	Second		0.0" 1.0" 2.0"	Carbonated Carbonated Carbonated			

#### **NOTE**:

- Core Sample #1 (CA-1) were performed on north wall of room located at northeast side of the structure.
- Core Sample #2 (CA-2) were performed on north wall of room located at northwest side of the structure. This specimen was extracted near of a concrete spalling with rebar corroded and exposed.
- On Core Sample #2 (CA-2) specimen, some areas were observed with concrete spalling and reinforcement corroded.





#### 4. <u>Determination of Water-Soluble Chloride Ion (Cl<sup>-</sup>) Content and pH</u>

Two (2) samples were secured from different locations, for laboratory determination of water-soluble chloride ion (Cl<sup>-</sup>) content and pH.

The results are presented in *Table 3* below:

Table 3: Water-Soluble Ion and pH Content

Sample <i>ID</i>	Building	Level	Element	Depth Tested	рН	% of Cl - / lb of cement
	Guillermo Godreau School	Second	Wall	0.0"	9.4	0.02%
Core				1.0"	<i>10.8</i>	0.11%
Sample #1				2.0"	11.1	0.27%
(CA-1)				4.0"	<i>10.6</i>	0.26%
				6.0"	<i>10.7</i>	0.00%
		RAGE =	<i>10.52</i>	<i>0.13 %</i>		
	Guillermo Godreau School	Second	Wall	0.0"	9.7	0.60%
Core				1.0"	8.6	0.13%
Sample #2				2.0"	8.9	0.07%
(CA-2)				4.0"	10.8	0.04%
				6.0"	10.9	0.06%
		<i>9.78</i>	<i>0.18 %</i>			

<u>The water-soluble chloride ion</u> (Cl<sup>-</sup>) content tests performed on **Core Sample #1** secured disclosed a water-soluble chloride ion content by weight of cement ranging from <u>0.02% to 0.27%</u>, an average of 0.13%. <u>The pH</u> tests performed on **Core Sample #1** disclosed values ranging from <u>9.4 to 11.1</u>, an average of 10.52.

<u>The water-soluble chloride ion</u> (Cl<sup>-</sup>) content tests performed on **Core Sample #2** secured disclosed a water-soluble chloride ion content by weight of cement ranging from <u>0.04% to 0.60%</u>, an average of 0.18%. <u>The pH</u> tests performed on **Core Sample #2** disclosed values ranging from **8.6 to 10.9**, an average of **9.78**.

#### **NOTE:**

- Core Sample #1 (CA-1) were performed on north wall of room located at northeast side of the structure.
- Core Sample #2 (CA-2) were performed on north wall of room located at northwest side of the structure. This specimen was extracted near of a concrete spalling with rebar corroded and exposed.
- On Core Sample #2 (CA-2) specimen, some areas were observed with concrete spalling and reinforcement corroded.



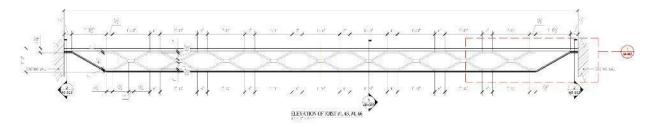
GUILLERMO GODREAU SCHOOL STRUCTURE Laboratory Report LR-2022-74 October 6, 2022 Page 9 of 83

## 5. Steel Framing As Built

As part of our scope of work, our team was requested to take several measurements (as built) to some of the second and roof level joist, previously selected by Structural Consultant. The joist as built performed by our team, goes as follow:

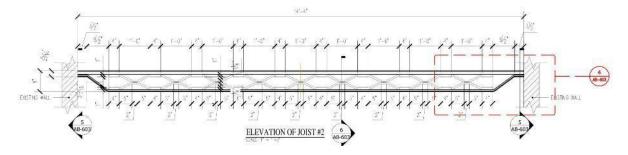
#### As Built #1:

- Joist approximate length: 25' 3"
- Joist Height: 1′ − 2″
- Joist top chord element: Single tee with 2-1/8" flange and 1-1/2" web
- Joist bottom chord element: Single tee with 2-1/8" flange and 1-1/2" web
- Webs (diagonals): plates of 7/8" width and 1/4" thickness
- Bearing flange (end connections): top and bottom chord welded between each other and embedded into the concrete walls.
- **Commentaries:** This elevation applies to those joists identified on as Joist #1, #3 #4 & #6 located on roof slab at northeast, east and southeast rooms on the second level and on second level slab at southwest room on the ground level.



### As Built #2:

- Joist approximate length: 14' 4"
- Joist Height: 0' 8"
- Joist top chord element: Single tee with 1-5/8" flange and 1-1/8" web
- Joist bottom chord element: Single tee with 1-5/8" flange and 7/16" web
- Webs (diagonals): plates of 5/8" width and 1/4" thickness
- Bearing flange (end connections): top and bottom chord welded between each other and embedded into the concrete walls.
- **Commentaries:** This elevation applies to those joists identified on as Joist #2 located on roof slab at west rooms on the second level.

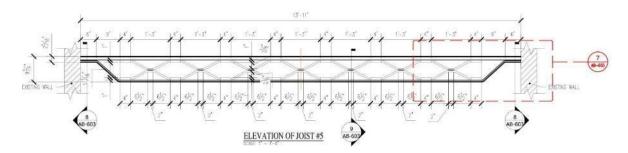




GUILLERMO GODREAU SCHOOL STRUCTURE Laboratory Report LR-2022-74 October 6, 2022 Page 10 of 83

## <u> As Built</u> #3:

- Joist approximate length: 13' 11"
- Joist Height: 0′ 9-3/4″
- Joist top chord element: Single tee with 1-5/8" flange and 1-1/8" web
- Joist bottom chord element: Single tee with 1-5/8" flange and 7/16" web
- Webs (diagonals): plates of 5/8" width and 1/4" thickness
- Bearing flange (end connections): top and bottom chord welded between each other and embedded into the concrete walls.
- **Commentaries:** This elevation applies to those joists identified on as Joist #5 located on second level slab at west rooms on the ground level.



To see the locations on where measurements for the as built were taken during the field visits, refer to **Appendix H** at the end of this document. In the **Appendix H** we also present section details for each as built.

## 6. Unit Weight of Concrete and Simple Description

Nine (9) hardened concrete samples (cores) were obtained, from the reference structure, at different locations to determine the unit weight and description. After the extraction of the samples, a combination of methods were used to determine the unit weight/bulk density of the samples extracted, that includes but not limited to, **ASTM C29**, "Standard Test Method for Bulk Density ("Unit Weight") and Voids in Aggregate" and ASTM C138, "Standard Test Method for Density ("Unit Weight") Yield, and Air Content (Gravimetric) of Concrete", ASTM C127 "Relative Density (Specific Gravity) and Absorption of Coarse Aggregate".

For this particular project, the results will be used as part of the Structural Analysis for the retrofitting of the structure. Our team presented photos of cores specimen extracted and tested below. Also, we present drawing with locations on where these specimens were extracted that could be found on **Appendix H**. The results of this test method are presented in **Table 4** below:



Table 4: Unit weight test results.

Specimen ID#	Length (in)	Diameter (in)	Bulk SG	Unit Weight (lb/ft³)
CF-1	2.375	2.992	2.141	133.35
CF-2	8.500	2.991	2.157	134.30
CF-3	2.750	2.989	2.275	141.66
CF-4	3.500	2.993	2.085	129.82
			AVERAGE =	134.78
CR-1	5.599	4.912	21.28	132.42
CR-2	5.458	4.894	2.191	136.39
CR-3A	4.755	4.915	2.196	136.67
CR-3B	4.841	4.915	2.166	134.81
CR-4	4.846	4.846	2.156	134.20
			AVERAGE =	134.90

#### NOTE:

- Core with ID # "CF" refers to specimens extracted on second level floor slab.
- Core with ID # "CR" refers to specimens extracted on roof level slab.
- During the exploration at the roof level, our team could not identify any connection between the metal deck and steel joist below. We also inspect the top area of the steel joist between the joist and metal deck, and also, connection could not be observed.











## 7. Tension Test on Horizontal Reinforcement at Wall

One (1) square twisted bar was extracted from north wall of the southeast room on at the ground level of Guillermo Godreau School. The steel specimen extracted and tested was performed following requirements by a combination of **ASTM A 370**, "Standard Test Method for Mechanical Testing of Steel Products" and ASTM A 615, "Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement".

The test method used following **ASTM A 370**, "Standard Test Method for Mechanical Testing of Steel Products", is a mechanical testing of steel to determining mechanical properties of steel products subjects (full-section specimen) of material which are under examination to a measured load sufficient to cause rupture. The **ASTM A 615**, "Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement" was used to determine the specification that covers deformed and plain carbon steel bars in cut length and coils for concrete reinforcement. Our team presented photos of the specimen extracted and tested on **Appendix A** at the end of this report. Also, we present drawing with locations on where this steel specimen was extracted that could be found on **Appendix H**. The results of this test method are presented in <u>Table 5 & 6</u> below:

Table 5: Mechanical properties

Sample ID		Area (in²)		Yield Strength (psi)	Tensile Strength (psi)	Actual Elongation
RTT-1	3	0.110	16.992	32,727	100,000	17.19%

Table 6: ASTM A615 Requirements for Grade 40 Steel Reinforcing Bar, Type N or S

Size	% Var. Unit Weight	Min. Yield Points	Min Tensile Strength	Min. Elong. In 8"
Desig.	(max.)	(psi)	(psi)	(%)
3	N/A	40,000	60,000	

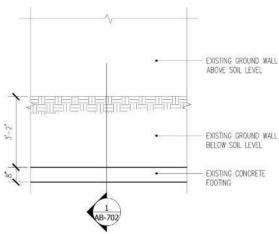


## 8. Foundation Exploration

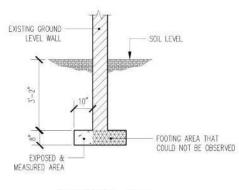
As part of our scope of work, our team was requested to take several measurements (as built) to some of the concrete foundations at the bottom of the walls, previously selected by Structural Consultant. The foundations as built performed by our team, goes as follow:

### Footing As Built #1:

- Soil height to the top of the footing: 3' 2''
- Soil height to the bottom of the footing: 3' 10"
- Footing height: 0′ − 8″
- Footing width from the wall's face: 0' 10"
- <u>Commentaries:</u> This elevation applies to the excavation performed at the west side of the structure. This footing exploration is identified with **Elevation Bubble #1** at AB-701 sheet of the drawing sketch presented on <u>Appendix H</u> at the end of this report.



FOOTING ELEVATION #1



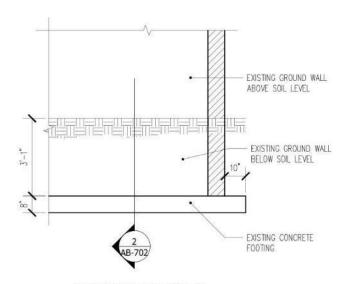




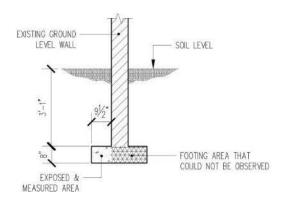
### GUILLERMO GODREAU SCHOOL STRUCTURE Laboratory Report LR-2022-74 October 6, 2022 Page 14 of 83

### Footing As Built #2:

- Soil height to the top of the footing: 3' 1"
- Soil height to the bottom of the footing: 3' 9"
- Footing height: 0' 8"
- Footing width from the wall's face: 0' 9-1/2''
- <u>Commentaries:</u> This elevation applies to the excavation performed at the northwest side of the structure. This footing exploration is identified with **Elevation Bubble #2** at **AB-701** sheet of the drawing sketch presented on <u>Appendix H</u> at the end of this report.



# FOOTING ELEVATION #2



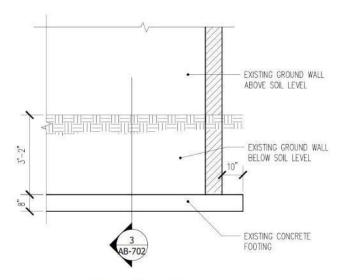




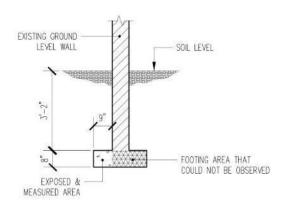
### GUILLERMO GODREAU SCHOOL STRUCTURE Laboratory Report LR-2022-74 October 6, 2022 Page 15 of 83

### Footing As Built #3:

- Soil height to the top of the footing: 3' 2"
- Soil height to the bottom of the footing: 3' 10"
- Footing height: 0' 8"
- Footing width from the wall's face: 0' 9''
- <u>Commentaries:</u> This elevation applies to the excavation performed at the northeast side of the structure. This footing exploration is identified with **Elevation Bubble #3** at **AB-701** sheet of the drawing sketch presented on <u>Appendix H</u> at the end of this report.



## FOOTING ELEVATION #3



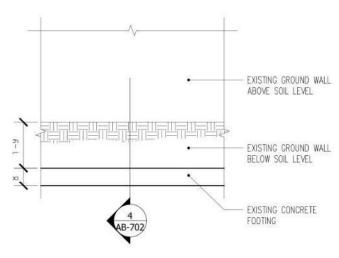




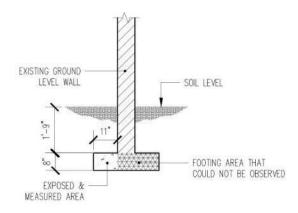
### GUILLERMO GODREAU SCHOOL STRUCTURE Laboratory Report LR-2022-74 October 6, 2022 Page 16 of 83

### Footing As Built #4:

- Soil height to the top of the footing: 1' 9"
- Soil height to the bottom of the footing: 2' 5"
- Footing height: 0' 8"
- Footing width from the wall's face: 0' 11"
- <u>Commentaries:</u> This elevation applies to the excavation performed at the east side of the structure. This footing exploration is identified with **Elevation Bubble #4** at AB-701 sheet of the drawing sketch presented on <u>Appendix H</u> at the end of this report.



FOOTING ELEVATION #4



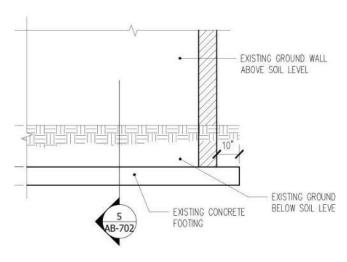




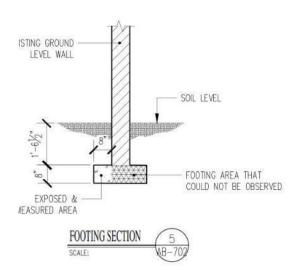
### GUILLERMO GODREAU SCHOOL STRUCTURE Laboratory Report LR-2022-74 October 6, 2022 Page 17 of 83

### Footing As Built #5:

- Soil height to the top of the footing: 1' 6-1/2''
- Soil height to the bottom of the footing: 2' 2-1/2"
- Footing height: 0' 8"
- Footing width from the wall's face: 0' 8"
- <u>Commentaries:</u> This elevation applies to the excavation performed at the southeast side of the structure. This footing exploration is identified with **Elevation Bubble #5** at **AB-701** sheet of the drawing sketch presented on <u>Appendix H</u> at the end of this report.



# FOOTING ELEVATION #5





GUILLERMO GODREAU SCHOOL STRUCTURE Laboratory Report LR-2022-74 October 6, 2022 Page 18 of 83

#### FINAL COMMENTS

The undersigned warrant that the technical services performed in this **Actual Conditions** and **Concrete Assessment of Guillermo Godreau Manatau School** are in accordance with generally accepted principles in the Engineering Practice. This is the only warranty, either express or implied.

THE EVALUATION OF THE INTEGRITY OF THE REINFORCED CONCRETE STRUCTURE OR THEIR STRUCTURAL ELEMENTS ARE BEYOND THE SCOPE OF THIS WORK.

The laboratory test results contained in this report are from selected and representative number of samples from the concrete structures as obtained at the time of our fieldwork.

Should any local condition found during the repair/rehabilitation work differ from those presented in this report, this firm should be immediately notified, since alternate measures may be necessary.

This report was prepared specifically for **Guillermo Godreau Manatau School Structure**, for the **Actual Conditions and Concrete Assessment** in Salinas, Puerto Rico. It must not be used for any other project, even at this site, without the express written consent of this firm.

If there are any questions, contact the undersigned at your convenience.

Respectfully submitted,

PEDRO FEBO BORIA, BSCE, AE

Engineer/Vice-President



GUILLERMO GODREAU SCHOOL STRUCTURE Laboratory Report LR-2022-74 October 6, 2022 Page 19 of 83

1. APPENDIX A – GENERAL & FIELD WORKS PHOTOS





Photo 1: Performing scanning on walls to determine reinforcement layout.



Photo 2: Rebar were located using scanning equipment for extraction.





Photo 3: Rebar was exposed on at least 36 inches to be extracted for laboratory testing.



Photo 4: Core specimen were extracted from walls selected by Structural Consultant.





Photo 5: Core specimen were extracted from footings selected by Structural Consultant.



Photo 6: Core drills were performed on roof slab selected by Structural Consultant.





Photo 7: Core drills were performed on second level slab selected by Structural Consultant.



Photo 8: Core performed on roof slab for connection verification.





Photo 9: Roof slab was not connected with exiting metal deck or steel joist below.



Photo 10: Approximately 6 inches of thickness measured on roof slab.





Photo 11: Connection between roof slab and metal deck or steel joist could not be found.



Photo 12: Connection between roof slab and metal deck or steel joist could not be found.





Photo 13: Connection between roof slab and metal deck or steel joist could not be found.



Photo 14: Connection between roof slab and metal deck or steel joist could not be found.





Photo 15: Footing dimensions were taken on excavation areas.



Photo 16: Core specimen extracted from footing were backfilled with high strength mortar.





Photo 17: Core specimen extracted from footing were backfilled with high strength mortar.



Photo 18: Steel joist were measured on selected areas by Structural Consultant.





Photo 19: Steel joist were measured on selected areas by Structural Consultant.



Photo 20: Steel joist were noticed in good conditions.



GUILLERMO GODREAU SCHOOL STRUCTURE Laboratory Report LR-2022-74 October 6, 2022 Page 30 of 83



Photo 21: Steel joist are embedded in the concrete wall/



Photo 22: Connection between steel joist or metal deck with slab were not found.





Photo 23: Connection between steel joist or metal deck with slab were not found.



Photo 24: Second level steel joist could not be completely measured due to limited access.



GUILLERMO GODREAU SCHOOL STRUCTURE Laboratory Report LR-2022-74 October 6, 2022 Page 32 of 83

2. APPENDIX B - HARDENED COMPRESSIVE STRENGTH (CORES)





Photo 25: Core sample #1 before compression test.



Photo 26: Core sample #1 after compression test.





Photo 27: Core sample #2 before compression test.



Photo 28: Core sample #2 after compression test.





Photo 29: Core sample #3A before compression test.



Photo 30: Core sample #3A after compression test.





Photo 31: Core sample #3B before compression test.



Photo 32: Core sample #3B after compression test.





Photo 33: Core sample #4 before compression test.



Photo 34: Core sample #4 after compression test.





Photo 35: Core sample #5 before compression test.



Photo 36: Core sample #5 after compression test.





Photo 37: Core sample F-1A before compression test.



Photo 38: Core sample F-1A after compression test.





Photo 39: Core sample F-2 before compression test.



Photo 40: Core sample F-2 after compression test.





Photo 41: Core sample F-3 before compression test.



Photo 42: Core sample F-3 after compression test.





Photo 43: Core sample F-4 before compression test.



Photo 44: Core sample F-4 after compression test.



GUILLERMO GODREAU SCHOOL STRUCTURE Laboratory Report LR-2022-74 October 6, 2022 Page 43 of 83

3. APPENDIX C – GPR & FERROSCAN SCANNING OUTPUT IMAGES



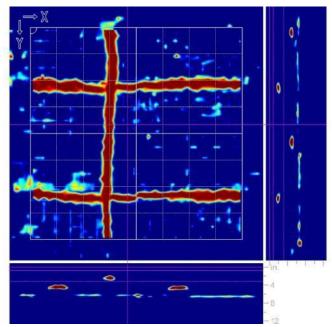


Photo 45: GPR at Scan #1

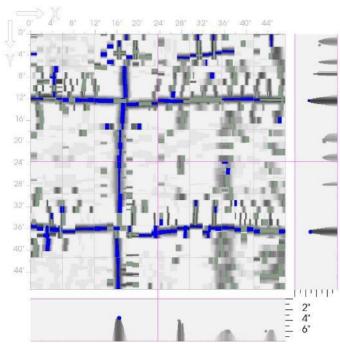


Photo 46: Ferroscan at Scan #1



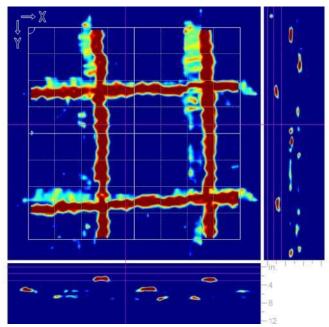


Photo 47: GPR at Scan #3

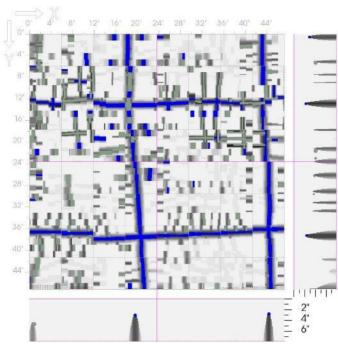


Photo 48: Ferroscan at Scan #3



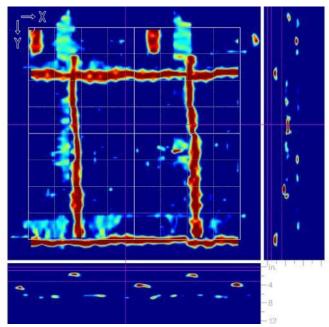


Photo 49: GPR at Scan #6

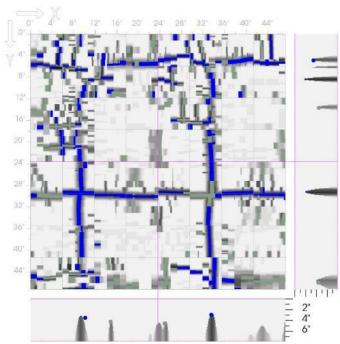


Photo 50: Ferroscan at Scan #6



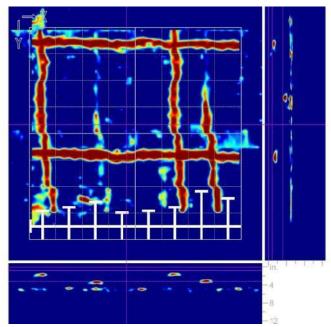


Photo 51: GPR at Scan #7

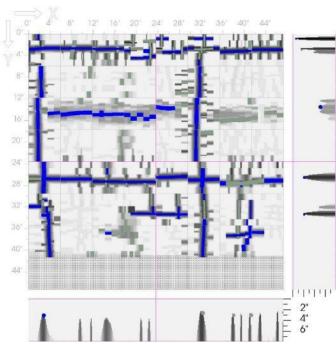


Photo 52: Ferroscan at Scan #7



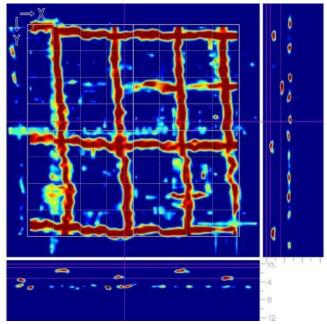


Photo 53: GPR at Scan #9

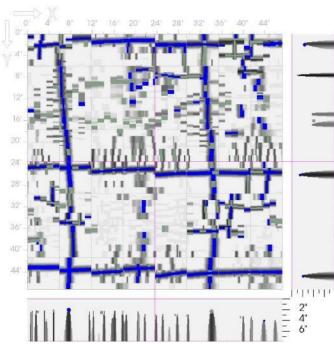


Photo 54: Ferroscan at Scan #9



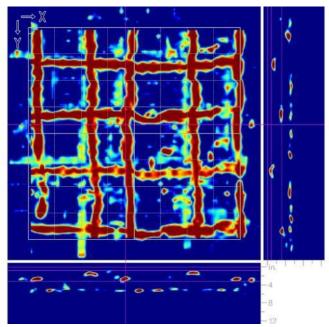


Photo 55: GPR at Scan #11

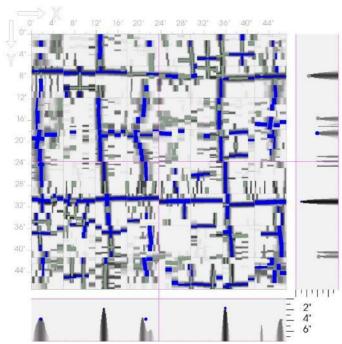


Photo 56: Ferroscan at Scan #11



GUILLERMO GODREAU SCHOOL STRUCTURE Laboratory Report LR-2022-74 October 6, 2022 Page 50 of 83

4. APPENDIX D - FOOTING EXPLORATION PHOTOS



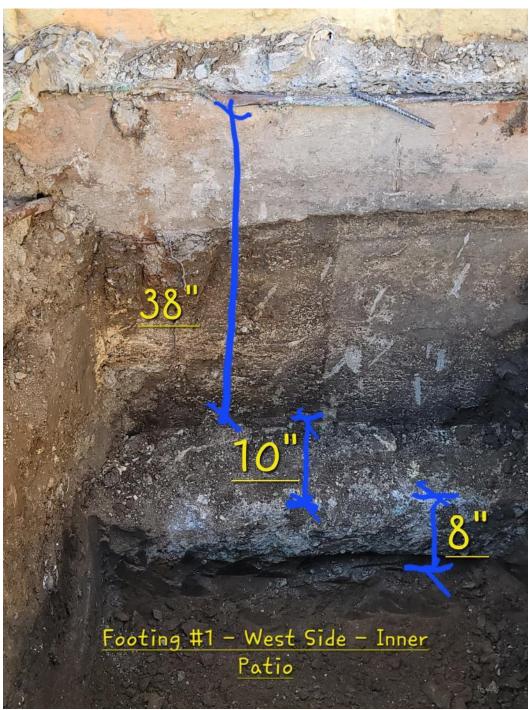


Photo 57: Footing #1 measurements on west side excavation.



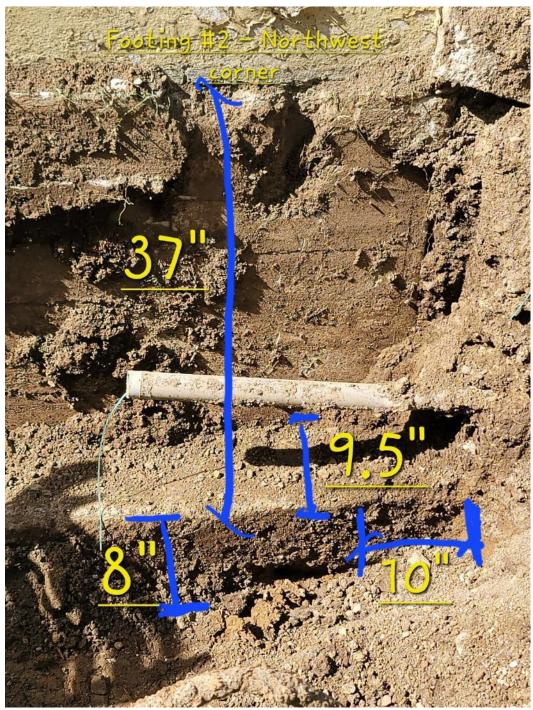


Photo 58: Footing #2 measurements on northwest side excavation.





Photo 59: Footing #3 measurements on norhteast side excavation.



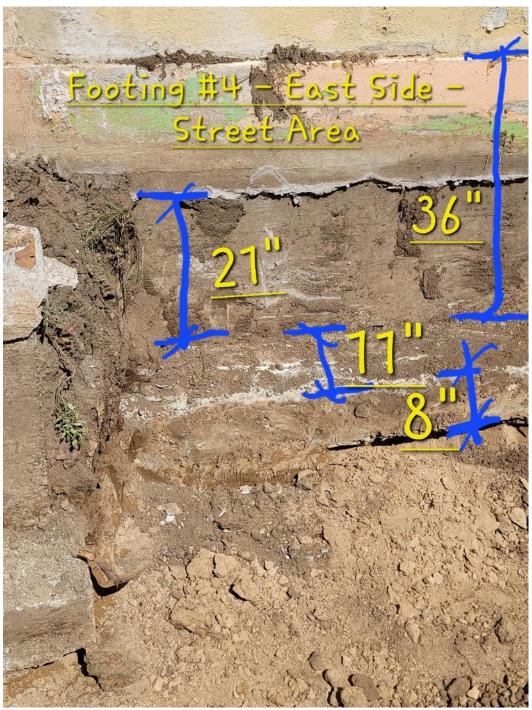


Photo 60: Footing #4 measurements on east side excavation.



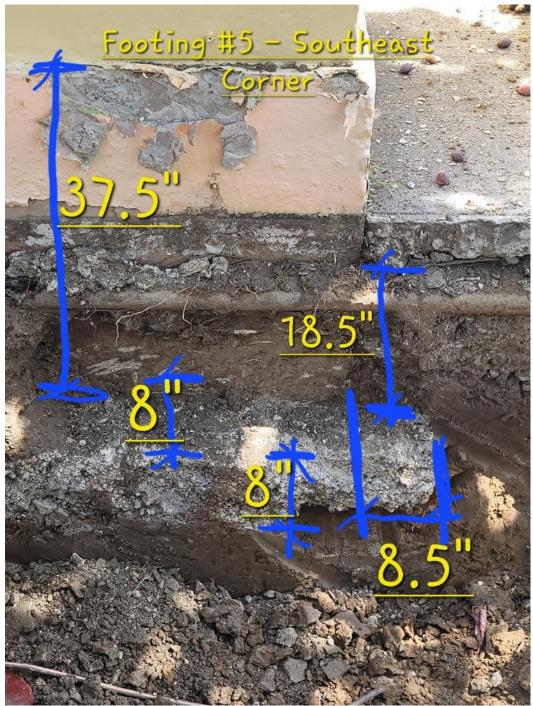


Photo 61: Footing #5 measurements on southeast side excavation.



GUILLERMO GODREAU SCHOOL STRUCTURE Laboratory Report LR-2022-74 October 6, 2022 Page 56 of 83

5. APPENDIX E – CARBONATION EXTENT & pH CONTENT





pH Test Result at 0" = 9.4

pH Test Result at 1" = 10.8

pH Test Result at 2" = 11.1

pH Test Result at 4" = 10.6

pH Test Result at 6"= 10.7

GUILLERMO GODREAU SCHOOL – HARDENED CONCRETE CORE SPECIMEN 2<sup>ND</sup> LEVEL COLUMN BETWEEN WINDOWS AT NORTH SIDE OF THE BUILDING





pH Test Result at 0" = 9.7 pH Test Result at 1" = 8.6

pH Test Result at 2" = 8.9

pH Test Result at 4" = 10.8

pH Test Result at 6"= 10.9

Area observed with concrete spalling and reinforcement corroded

GUILLERMO GODREAU SCHOOL – HARDENED CONCRETE CORE SPECIMEN

LEVEL COLUMN BETWEEN WINDOWS AT NORTHWEST SIDE OF THE BUILD.



GUILLERMO GODREAU SCHOOL STRUCTURI Laboratory Report LR-2022-74 October 6, 2022 Page 57 of 83	E	

6. APPENDIX F – EXTRACTED CORES SPECIMEN PROFILE (Walls and Slabs)





Very porous specimen Bluish gray coarse aggregate 1/16" Plaster

# GUILLERMO GODREAU SCHOOL – HARDENED CONCRETE CORE SPECIMEN $2^{\rm ND}$ LEVEL WALL AT NORTH SIDE OF THE BUILDING

SPEC GROUP LLC



Solid specimen
Bluish gray coarse aggregate
Poor adherence between
aggregate and concrete paste

### GUILLERMO GODREAU SCHOOL – HARDENED CONCRETE CORE SPECIMEN 2<sup>ND</sup> LEVEL WALL AT NORTHWEST SIDE OF THE BUILDING

SPEC GROUP LLC

		0
Scale: NTS	Dwa by: PFR	SALINAS, PUERTO RICO



Scale: NTS

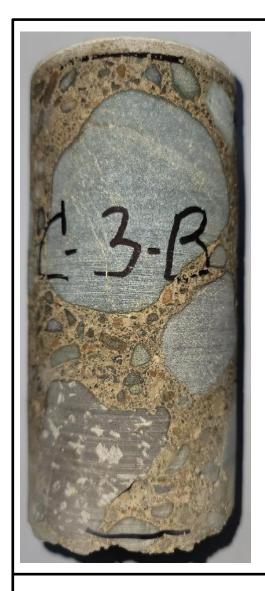
Very porous specimen Bluish gray coarse aggregate 1/2" Plaster

# GUILLERMO GODREAU SCHOOL – HARDENED CONCRETE CORE SPECIMEN $2^{\rm ND}$ LEVEL WALL AT EAST SIDE OF THE BUILDING

Dwg. by: PFB

SALINAS, PUERTO RICO





Slightly porous specimen Bluish gray coarse aggregate 3/16" Plaster

# GUILLERMO GODREAU SCHOOL – HARDENED CONCRETE CORE SPECIMEN $2^{\rm ND}$ LEVEL WALL AT EAST SIDE OF THE BUILDING





Slightly porous specimen Bluish gray coarse aggregate

### GUILLERMO GODREAU SCHOOL – HARDENED CONCRETE CORE SPECIMEN $2^{\rm ND}$ LEVEL WALL AT SOUTHEAST SIDE OF THE BUILDING





Moderate porous specimen Limestone coarse aggregate ½" plaster

GUILLERMO GODREAU SCHOOL – HARDENED CONCRETE CORE SPECIMEN  $2^{\text{ND}}$  LEVEL PERIMETER WALL AT SOUTHWEST SIDE OF THE BUILDING



		0
Scale: NTS	Dwa by: PFR	SALINAS, PUERTO RICO



3/4" Topping 1-5/8" Concrete Slab

GUILLERMO GODREAU SCHOOL – HARDENED CONCRETE CORE SPECIMEN  $2^{\rm ND}$  LEVEL FLOOR SLAB AT NORTHEAST ROOM OF THE BUILDING





2" Topping and Tile 3-1/2" Concrete Slab 3" Concrete Slab

GUILLERMO GODREAU SCHOOL – HARDENED CONCRETE CORE SPECIMEN  $2^{\rm ND}$  LEVEL FLOOR SLAB AT NORTHWEST ROOM OF THE BUILDING





1/2" Topping 2-1/4" Concrete Slab

GUILLERMO GODREAU SCHOOL – HARDENED CONCRETE CORE SPECIMEN  $2^{\rm ND}$  LEVEL FLOOR SLAB AT EAST ROOM OF THE BUILDING





1-1/2" Topping and Tile
2" Concrete Slab
The 2<sup>nd</sup> concrete slab was not
able to extracted, it was crushed

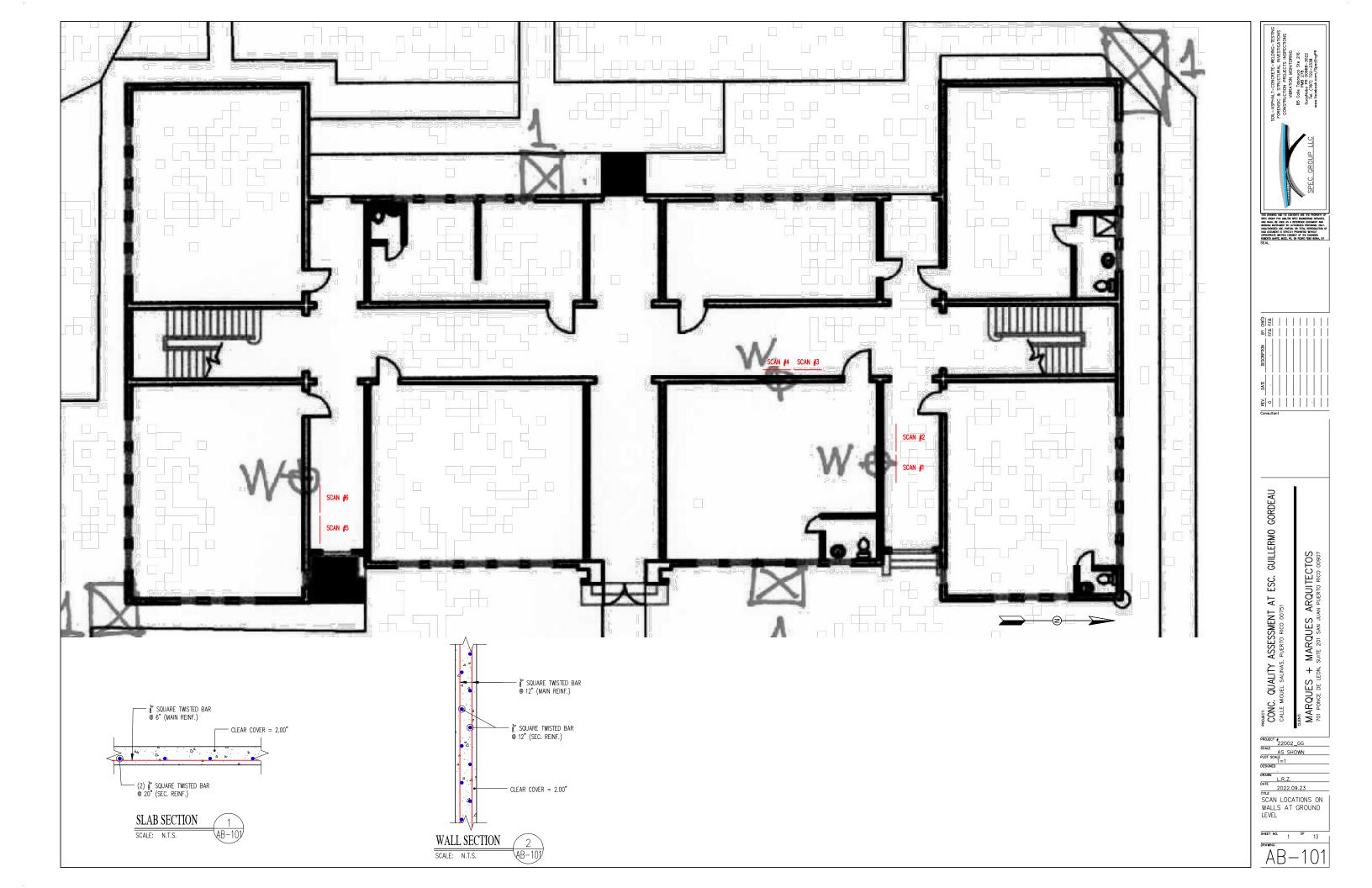
GUILLERMO GODREAU SCHOOL – HARDENED CONCRETE CORE SPECIMEN  $2^{\rm ND}$  LEVEL FLOOR SLAB AT SOUTHWEST ROOM OF THE BUILDING

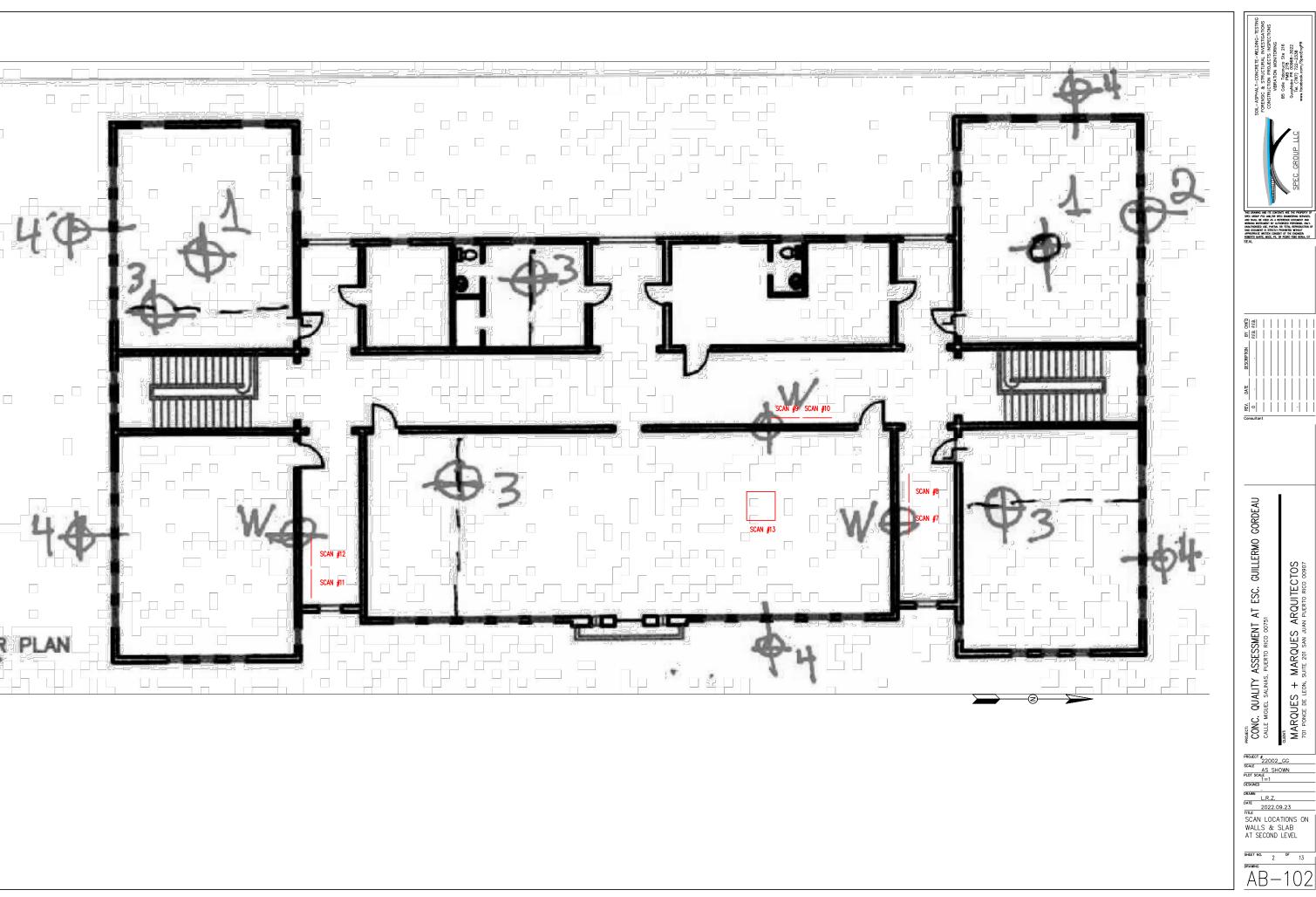


GUILLERMO GODREAU SCHOOL STRUCTURE Laboratory Report LR-2022-74 October 6, 2022 Page 58 of 83

7. APPENDIX H - DRAWINGS SKETCHES AND TEST LOCATIONS





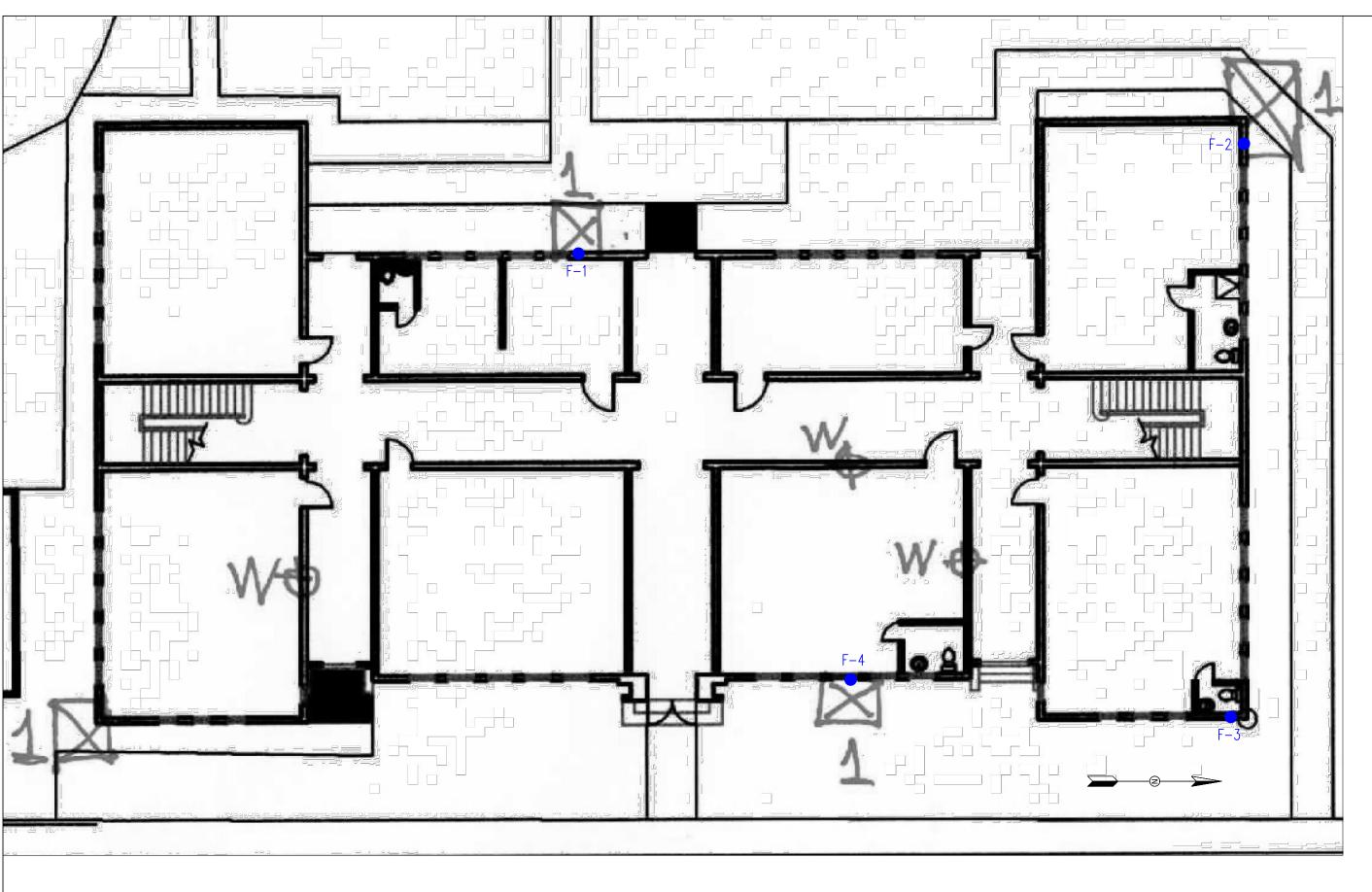


MARQUES + MARQUES ARQUITECTOS
701 PONCE DE LEON, SUITE 201 SAN JUAN PLERTO RICO 00907

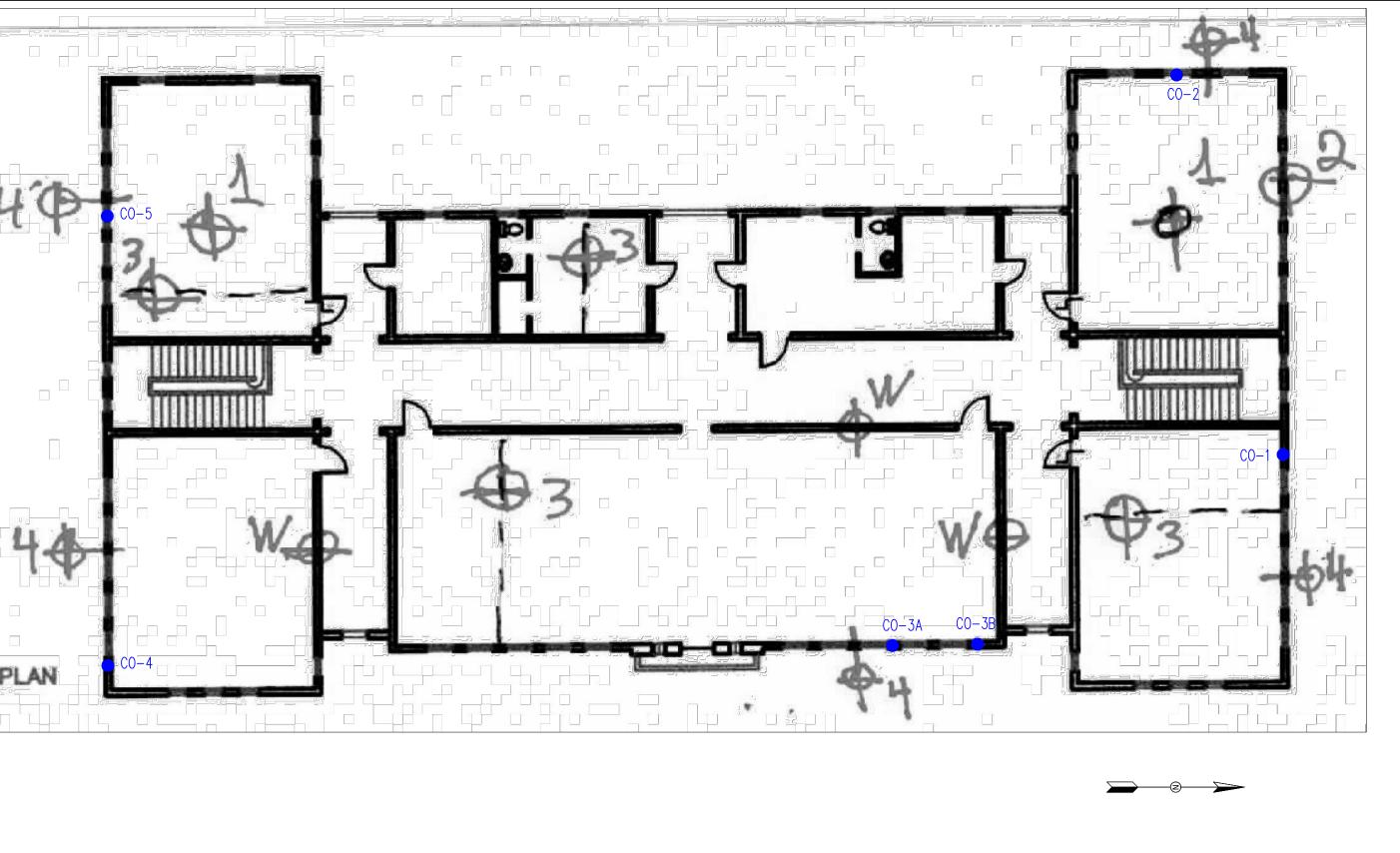
SHEET NO. 2 OF 13

DRAWING

AB-102



PROBACTIC QUALITY ASSESSMENT AT ESC. GUILLERMO GORDEAU CALLE MIGUEL SALINAS, PUERTO RICO 00751 MARQUES + MARQUES ARQUITECTOS
701 PONCE DE LEON, SUITE 201 SAN JUAN PUERTO RICO 00907

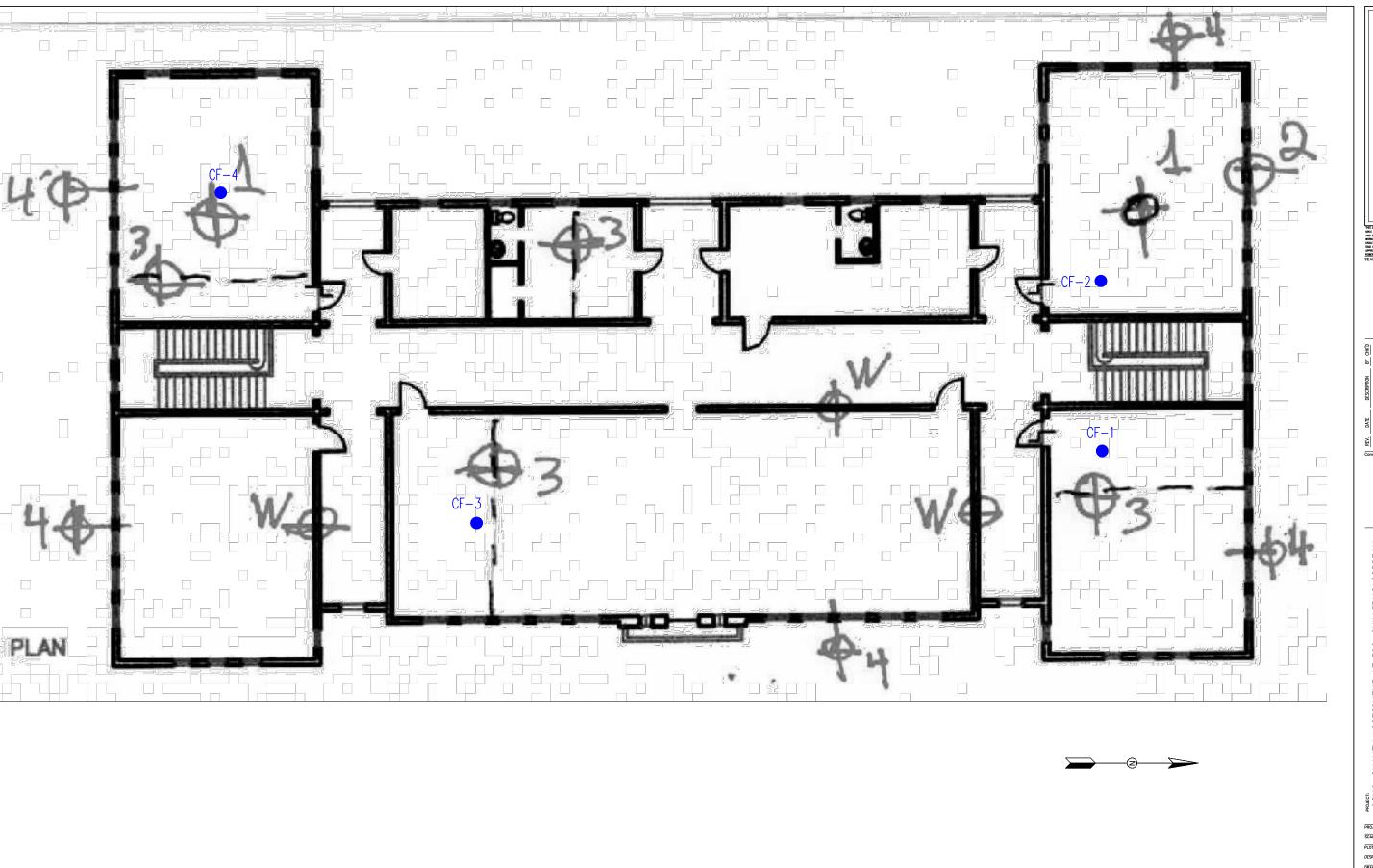


FOONC. QUALITY ASSESSMENT AT ESC. GUILLERMO GORDEAU CALLE MIGUEL SALINAS, PUERTO RICO 00751

MARQUES + MARQUES ARQUITECTOS
701 PONCE DE LEON, SUITE 201 SAN JUAN PUERTO RICO 00907

PROJECT # 22002\_GG

SCALE AS SHOWN
PLOT SCALE | 1
DESIGNED | 1
DESIGNED | 2
DOZE | 2022.09.23
THE CORE LOCATIONS ON WALLS AT SECOND LEVEL FOR COMPRESSIVE STRENGTH
SWEET NO. OF ...



MONC. QUALITY ASSESSMENT AT ESC. GUILLERMO GORDEAU CALLE MIGUEL SALINAS, PUERTO RICO 00751

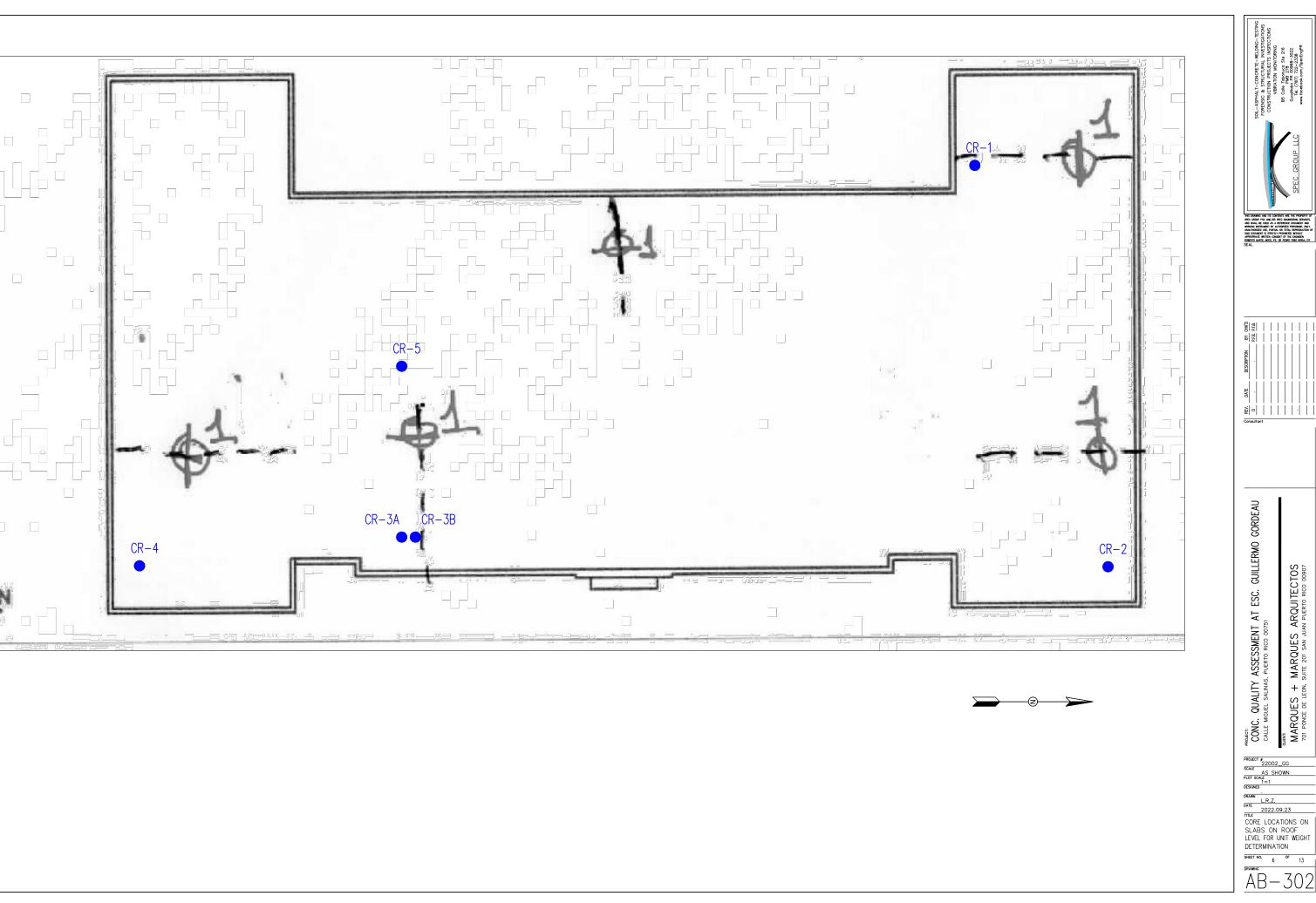
MARQUES + MARQUES ARQUITECTOS
701 PONCE DE LEON, SUITE 201 SAN JUAN PUERTO RICO 00907

PROJECT #22002\_GG
SCALE AS SHOWN
PLOT SOLE\_=

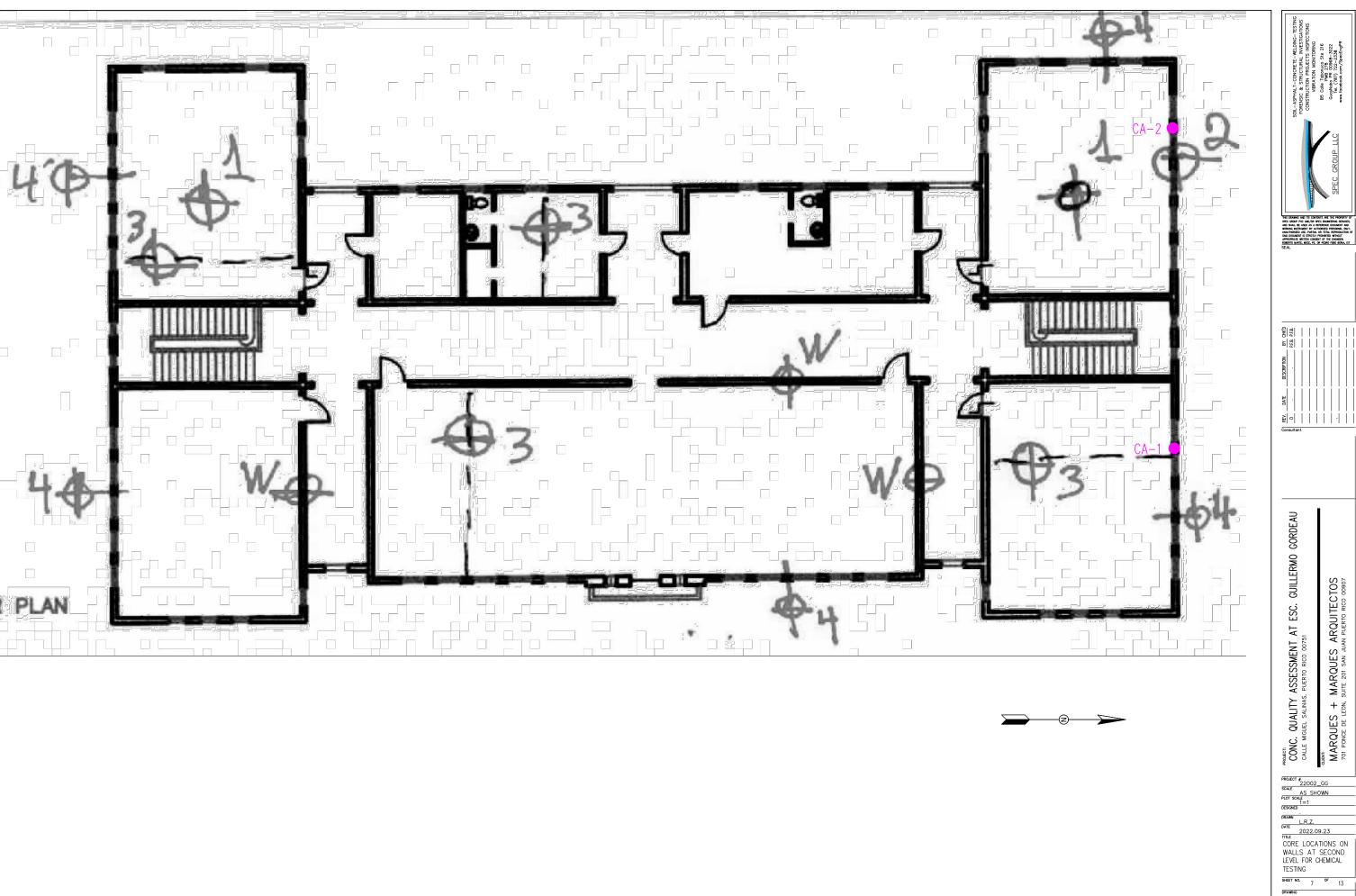
DESCRED

DRAWN
L.R.Z.
DATE 2022\_09.23
TILE
CORE LOCATIONS ON
SLAB AT SECOND
LEVEL FOR UNIT
WEIGHT DETERMINATION
SHEET NO. \_ OF ...

SHEET NO. 5 OF 13

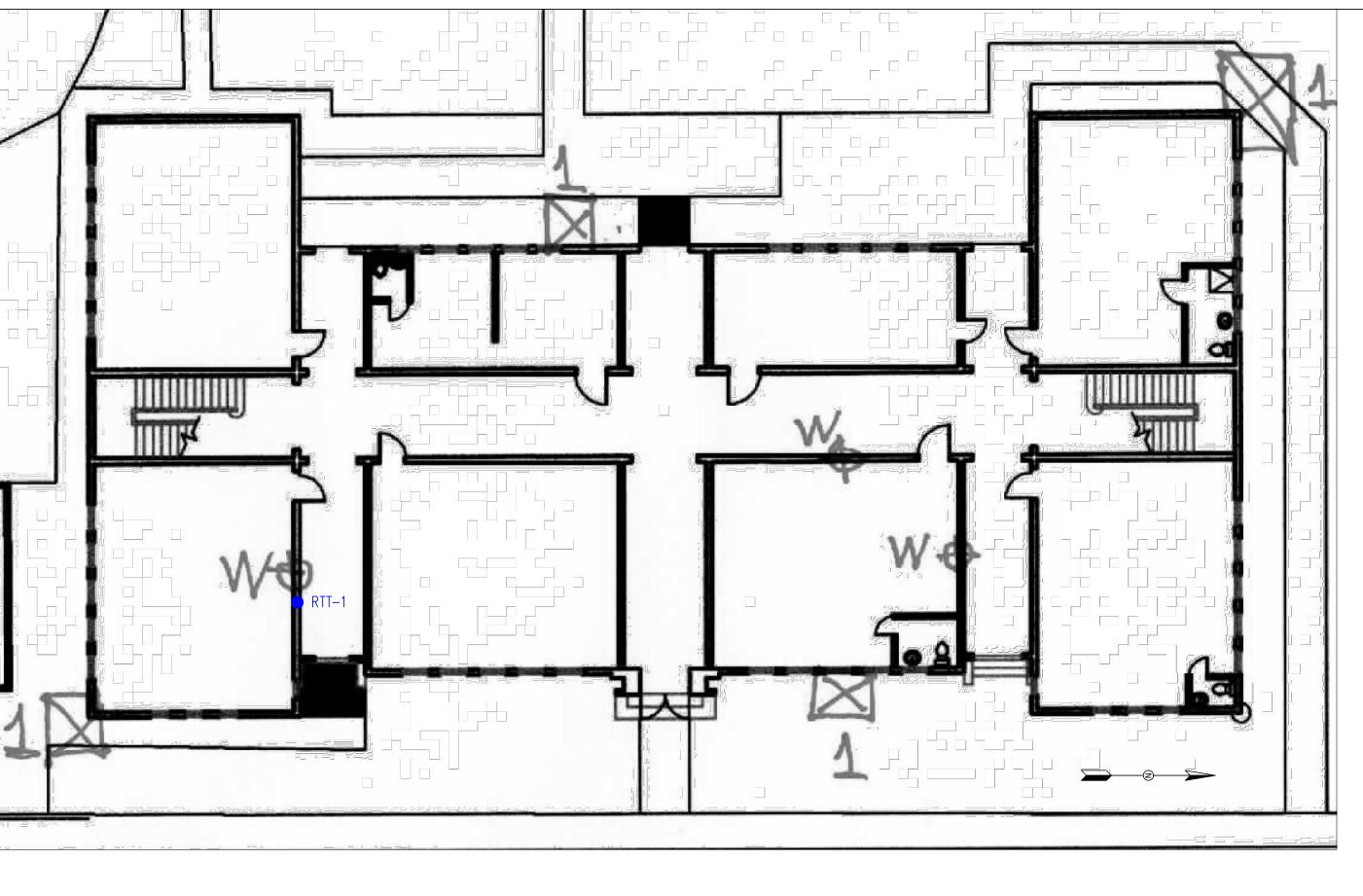


SHEET NO. 6 OF 13



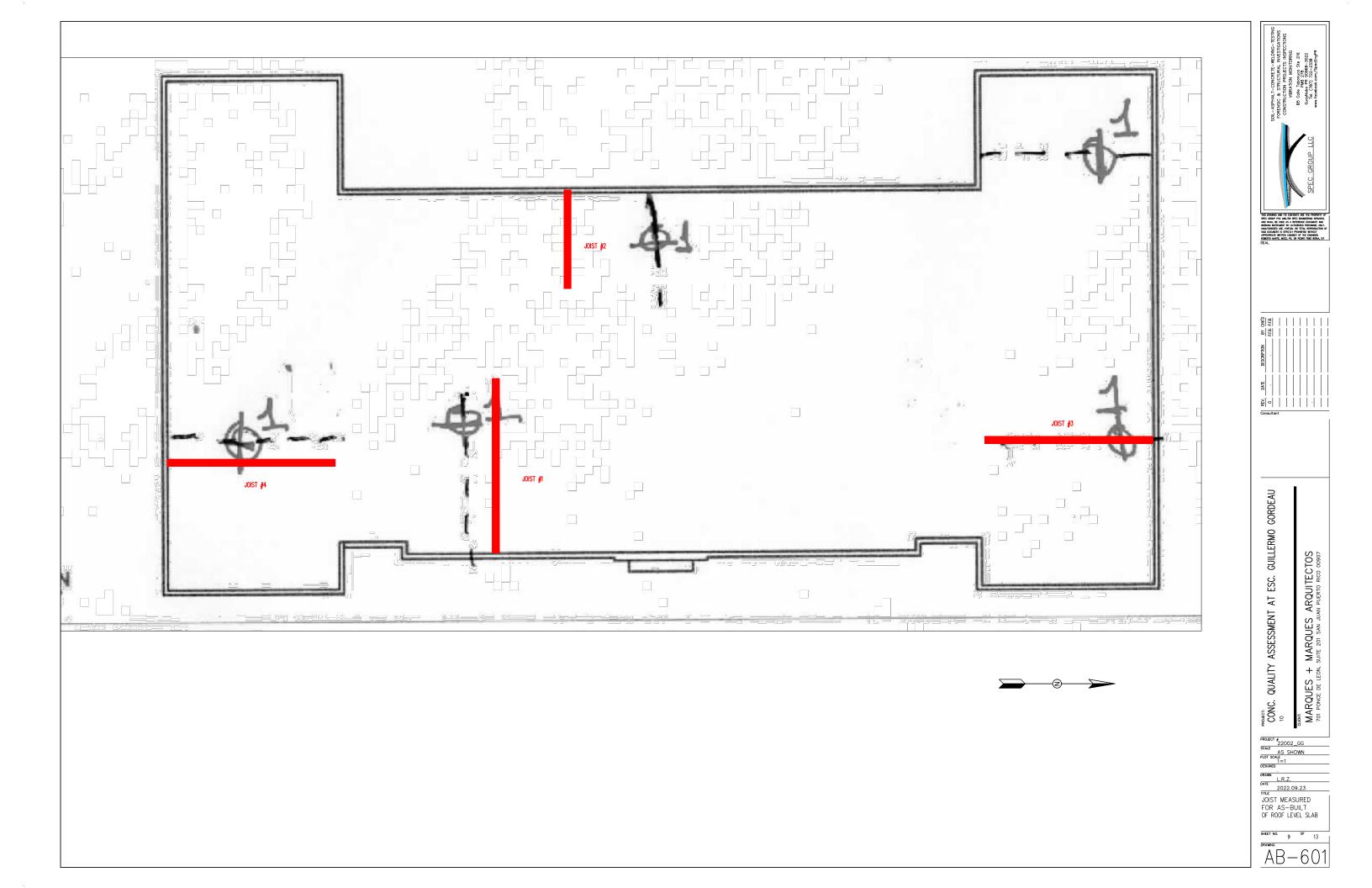
PFB PFB PFB |

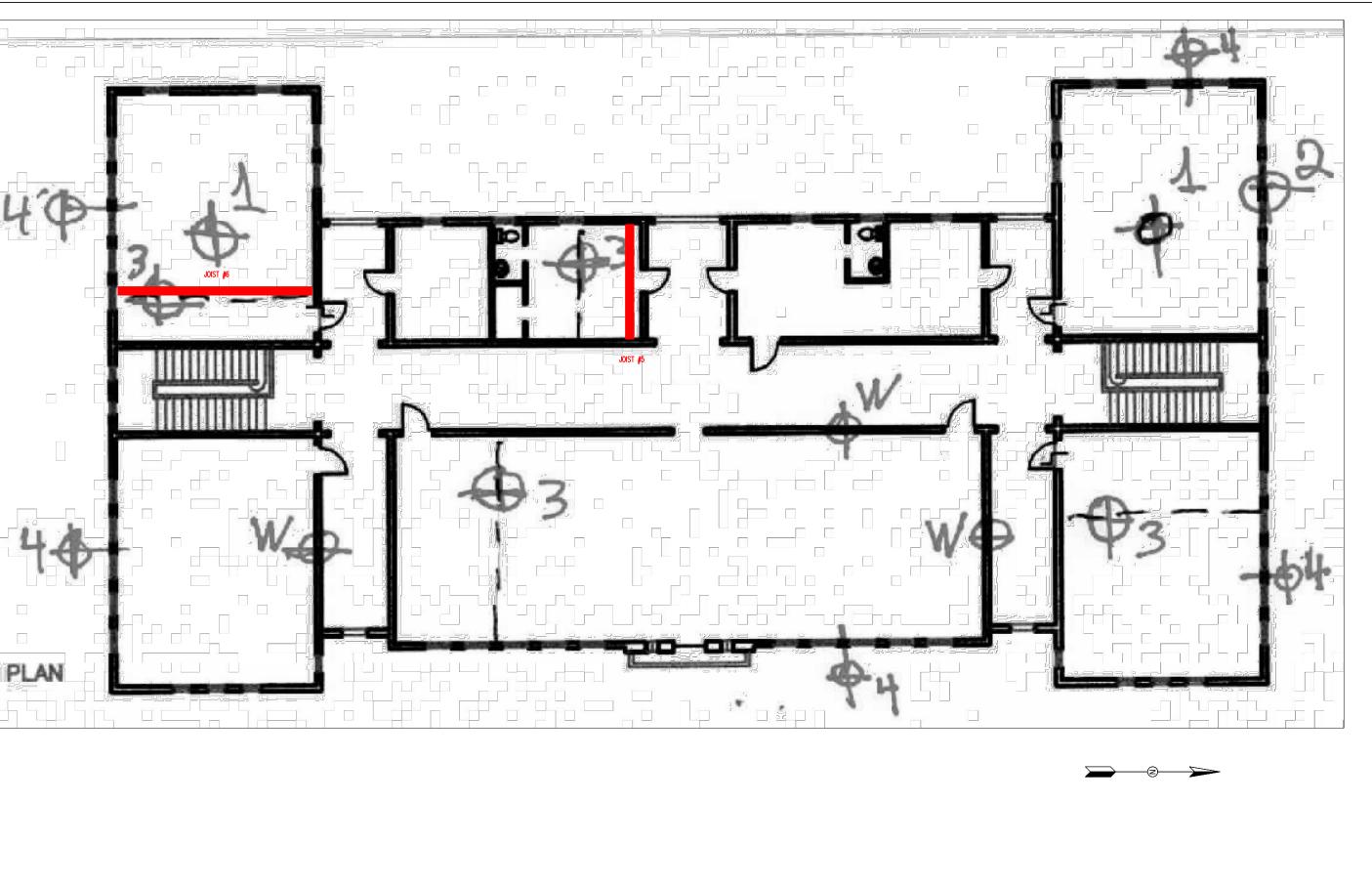
MARQUES + MARQUES ARQUITECTOS 701 PONCE DE LEON, SUITE 201 SAN JUAN PUENTO RICO 00907

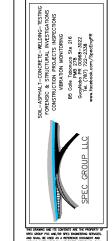


PFB PFB PFB |

PROBACTIC QUALITY ASSESSMENT AT ESC. GUILLERMO GORDEAU CALLE MIGUEL SALINAS, PUERTO RICO 00751 MARQUES + MARQUES ARQUITECTOS
701 PONCE DE LEON, SUITE 201 SAN JUAN PUERTO RICO 00907







PFB PFB PFB |

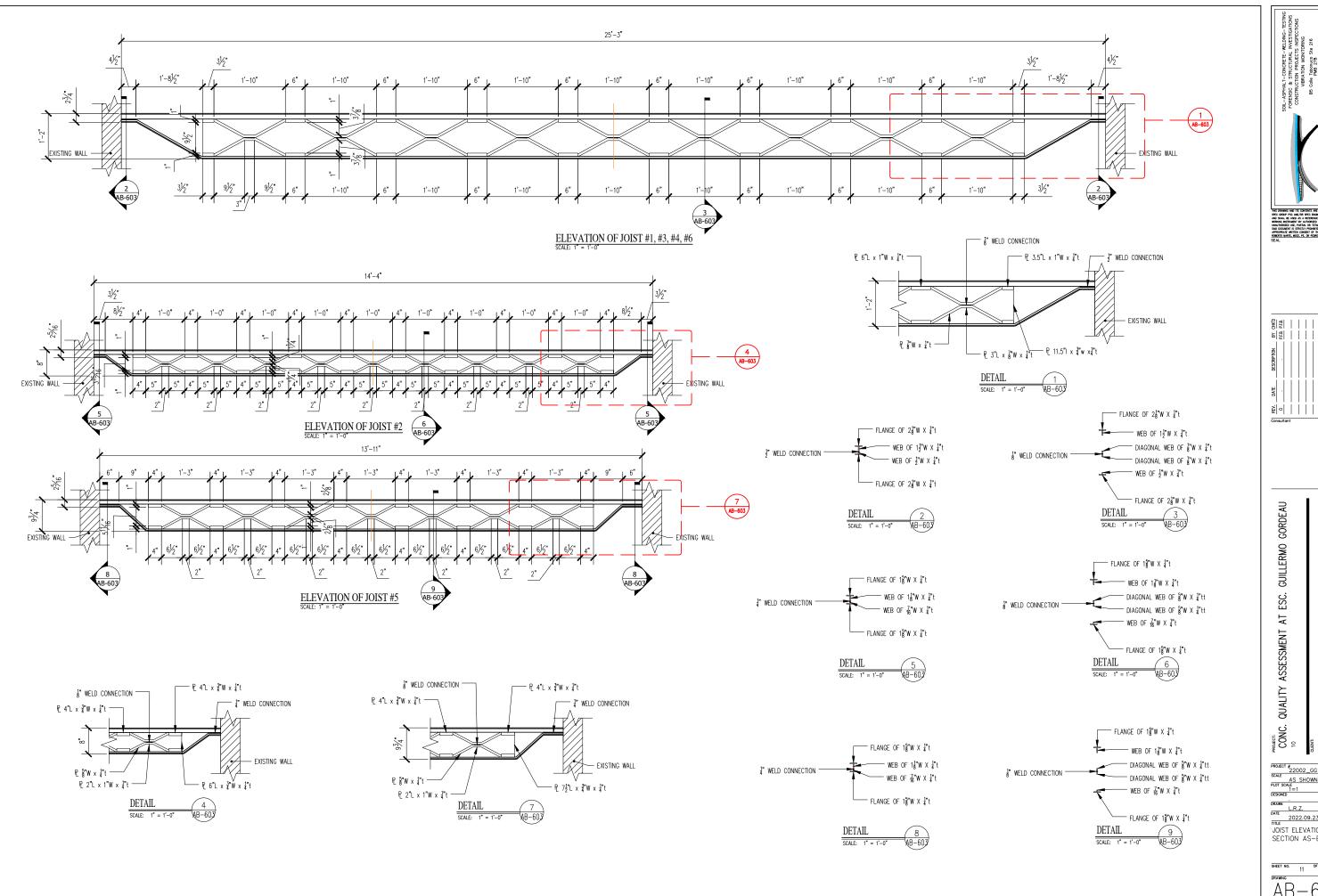
CONC. QUALITY ASSESSMENT AT ESC. GUILLERMO GORDEAU

PROJECT #22002\_GG
SCALE AS SHOWN
FLOT SCALE
DESIGNED
DRAWN
LR.Z.
DATE 2022:09.23
THE
JOIST MEASURED
FOR AS—BUILT
OF SECOND LEVEL SLAB

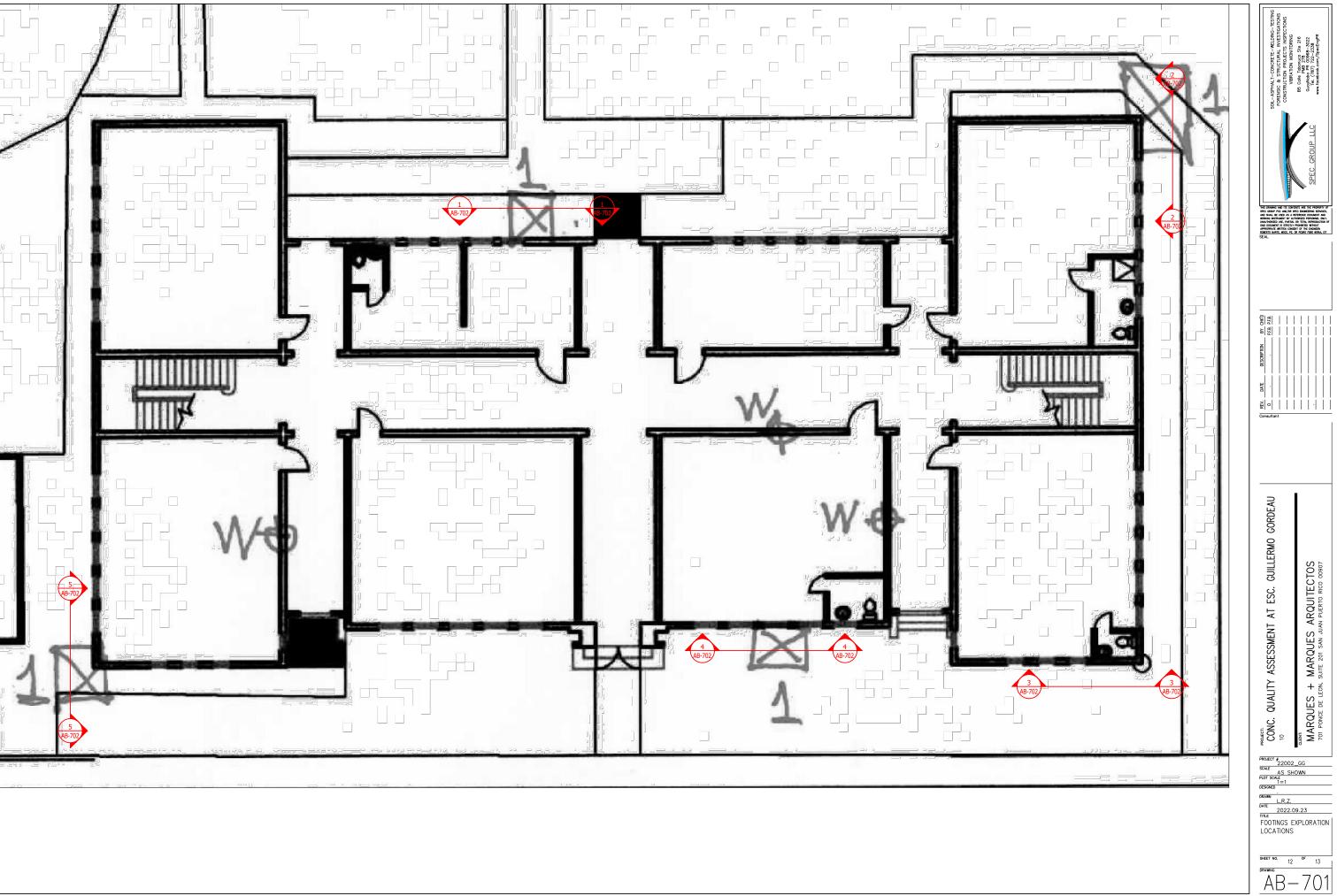
SHEET NO. 10 OF 13

DRAWNG

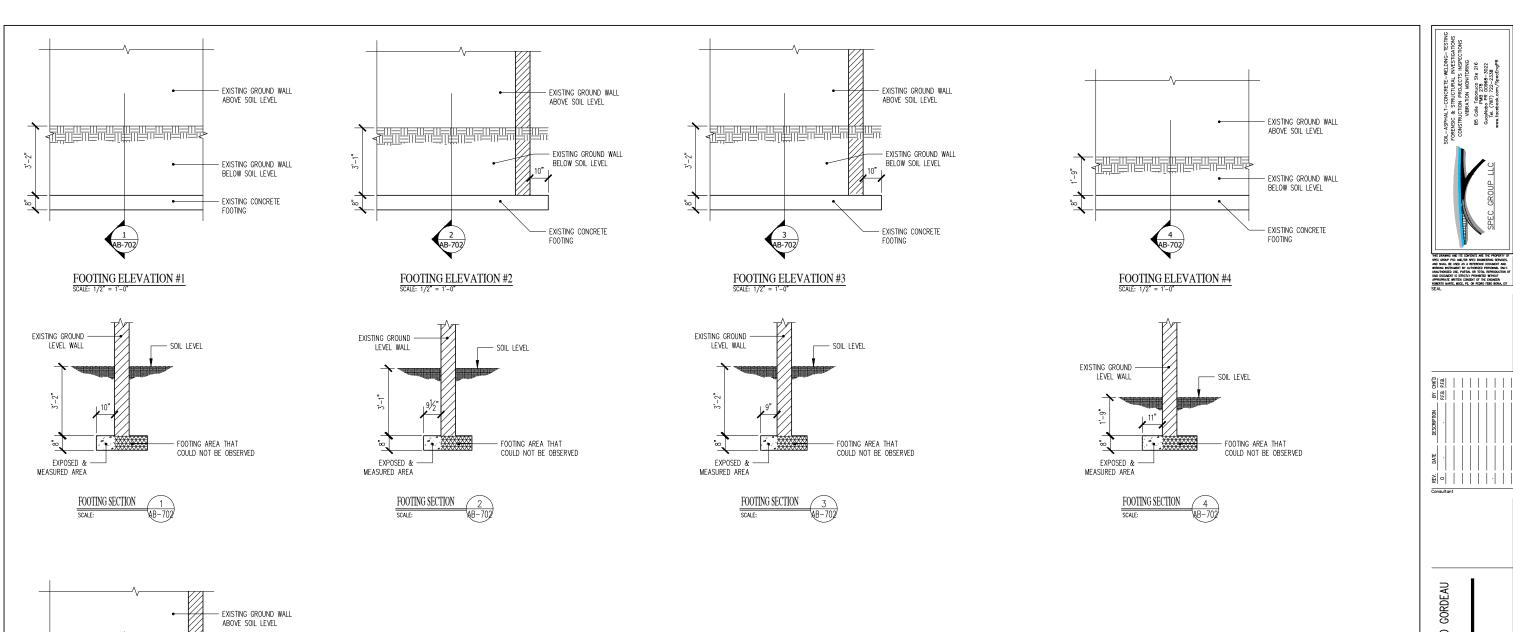
AB-602







PFB PFB PFB PFB PFB



EXISTING GROUND WALL

BELOW SOIL LEVEL

- EXISTING CONCRETE FOOTING

SOIL LEVEL

FOOTING AREA THAT COULD NOT BE OBSERVED

5 AB-702

FOOTING ELEVATION #5

EXISTING GROUND LEVEL WALL

EXPOSED & MEASURED AREA

FOOTING SECTION



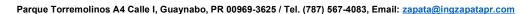
PROJECT # 22002\_GG

SCALE AS SHOWN
PLOT SCALE 1=1
DESIGNED

DRAWN L.R.Z.
DATE 2022.09.23

FOOTINGS ELEVATIONS & SECTIONS AS-BUILT

SHEET NO.





# **MEMO**

A : Arq. Bernardo Marques

De : Ing. Miguel A. Zapata

Fecha: 29 de noviembre de 2022

Re : Escuela Guillermo Godreau Manatau, Salinas, PR

Asunto: Evaluación Estructural

Hacemos referencia a los resultados obtenidos de los trabajos de investigación y pruebas realizadas por Spec Group LLC. Los mismos confirman los datos obtenidos de los planos originales y las remodelaciones que se le hicieron a la escuela en el pasado.

Las observaciones se harán según los componentes estructurales y el nivel correspondiente.

## 1. Nivel de Techo

El nivel de techo en su origen contaba de una losa de hormigón de 2 ½" sobre una malla de metal en el área donde suceden las viguetas. Sobre los pasillos ocurrían losas de hormigón de 4-½". Esta losa de techo fue removida y sustituida con una cubierta de metal sobre la cual se coloco una losa de hormigón de 5 ½" de espesor. Las losas de hormigón sobre los pasillos fueron sustituidas.

Al aumentar el grueso de la losa de hormigón se aumento la carga en la estructura causando una deficiencia en la capacidad de las viguetas de acero y aumentando las cargas laterales sobre la estructura.



Parque Torremolinos A4 Calle I, Guaynabo, PR 00969-3625 / Tel. (787) 567-4083, Email: <a href="mailto:zapata@ingzapatapr.com">zapata@ingzapatapr.com</a>

Re: Evaluación Estructural

Esta losa, según observaciones realizadas por el personal del laboratorio, no consta de ninguna conexión mecánica con las viguetas lo cual causa una deficiencia mayor en el diafragma de la estructura y la trasferencia de carga lateral a los muros. Para poder corregir estas situaciones se tendría que desgastar la losa de techo a no mas de 3" de espesor y anclar mecánicamente la losa de concreto a las viguetas de acero.

Fecha: 29 de noviembre de 2022

Ampliación de dudosa Calidad

En la parte posterior de la estructura se puedo observar una ampliación que se compone de una losa de hormigón sobre lo que se supone fuese una terraza al exterior. Esta ampliación no esta documentada y de lo que se puede observar la misma se realizó de una forma informal. La conexión entre la estructura nueva y la original debe ser investigada.

Segundo Nivel

El segundo nivel, de igual arreglo que la estructura de techo consta de una malla metálica con 2" de hormigón sobre las viguetas. Dicha malla de acero esta corroída a un nivel que no es capaz de soportar las cargas a la cual será sometida la losa y en algunos lugares observe como la losa a fallado en cortante. La losa del segundo nivel esta tapada por un plafón compuesto por una malla de metal y empañetado el cual deberá de ser removido en su totalidad. Este plafón fue removido en algunos lugares para poder observar la estructura de piso, dado esta situación la estructura no pudo ser observada en su totalidad, pero nuestra impresión es que la condición puede ser similar a la observada. En adición se verificó que la losa sobre las terrazas posteriores, que están a desnivel con el resto del segundo nivel, tiene una losa de 8 ½" de la cual va por encima de la capacidad de carga de las viguetas en esta área.



Parque Torremolinos A4 Calle I, Guaynabo, PR 00969-3625 / Tel. (787) 567-4083, Email: <a href="mailto:zapata@ingzapatapr.com">zapata@ingzapatapr.com</a>

Re: Evaluación Estructural

El segundo nivel requiere que se remueva el plafón en toda su extensión, demoler la losa de piso sobre las viguetas y rehabilitar y reparar las viguetas de acero. La losa de piso tendrá que ser reconstruida con una formaleta de acero y una losa de hormigón con un peso similar a la existente.

Fecha: 29 de noviembre de 2022

## 3. Nivel de Losa Sobre Terreno

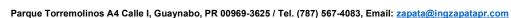
En esta losa no se observó deficiencia alguna.

#### 4. Nivel de Cimentación

Los datos de los planos estructurales se confirman, teniendo la estructura unos cimientos entre 28" y 30" de ancho y un espesor de 8". Este tamaño de cimiento es insuficiente para soportar la estructura. A esto hay que añadirle que la capacidad en compresión, obtenida a través de las pruebas que se realizaron, demuestran una baja calidad en el control de calidad del hormigón. En base a los análisis estructurales realizados y los datos obtenidos por el laboratorio, los cimientos de la estructura necesitarían ser reforzados para poder soportar de forma segura las cargas laterales y gravitacionales que le impone la estructura.

## 5. Refuerzo de Paredes, Muros de Cortante

La información obtenida completa la información en los planos originales y refleja un refuerzo en dos caras de varilla trenzada de 3/8" en la dirección horizontal y 3/8" en la dirección vertical, ambas a 12" de separación. La varilla extraída para ser probada en tensión tiene un esfuerzo en cedencia Fy = 32,727psi y un esfuerzo ultimo de Fu = 100,000 psi. La capacidad en compresión de las muestras de hormigón en la estructura muestra valores desde 730 psi a 1,550 psi siendo estos valores muy bajos para una estructura de hormigón, pero más significativo en la variación de los resultados que demuestra un bajo control de calidad.



Fecha: 29 de noviembre de 2022

MAZ Miguel A. Zapata P.E. Consulting Structural Engineers

#### Re: Evaluación Estructural

6. Usualmente la corrosión en el refuerzo de acero del concreto sucede por medio de la carbonatación del hormigón o por el contenido de cloruro. Un hormigón carbonatado va a tener un pH por debajo de 13 que sería el valor típico en el concreto. Las pruebas realizadas en las paredes del segundo nivel se observan que ambas demuestran que el hormigón esta totalmente carbonatado y que el contenido de cloruro a nivel de profundidad de la varilla excede los valores aceptados. El pH a nivel de la profundidad del refuerzo esta en valores tan bajos como 8.6 lo que demuestra el grado de corrosión que esta ocurriendo en el refuerzo de acero.

## Conclusión:

Tomando en consideración los datos aquí expuestos, la estructura tendría que ser reparada y reforzada de tal forma que la misma se tendría que llevar a cumplir con los requisitos de estructuras nuevas. La estructura consta con una serie de deficiencias que no permite ser utilizada de forma segura a menos que se repare. El realizar solo una remodelación para reducir el riesgo sísmico, tal y como se pretendía en informes preliminares, no sería suficiente para garantizar la estabilidad de la estructura ante las fuerzas laterales del sismo de diseño. El determinar cuál sería el desempeño de la estructura ante las fuerzas del sismo especificado por el código seria posible calcular a través de un análisis por desempeño. Los análisis por desempeño son sumamente costosos y entiendo que los resultados no serán distintos a los aquí expresados, más requieren una serie de estudios e investigaciones adicionales estructurales y de suelo que son costosos.

El Municipio deberá de evaluar y considerar si la rehabilitación estructural de este edificio se justifica ente los posibles costos de construcción e investigación. Estos trabajos de rehabilitación son altamente complejos, requiriendo una supervisión especializada en adición a contratistas especializados en este tipo de trabajo. Los



Parque Torremolinos A4 Calle I, Guaynabo, PR 00969-3625 / Tel. (787) 567-4083, Email: zapata@ingzapatapr.com

Fecha: 29 de noviembre de 2022

Re: Evaluación Estructural

trabajos de rehabilitación toman mucho mas tiempo en su ejecución y muchas veces exceden el tiempo y el costo estimado de construcción. Una rehabilitación a una estructura nunca tendría el desempeño de una estructura nueva dado que las mejoras serian principalmente para que en un evento catastrófico la vida humana está protegida. Por último, no queremos dejar sin traer a la atención del lector que las condiciones de suelo en el lugar no han sido estudiadas tomando en consideración la sismología del lugar lo cual pudiese complicar todavía más la rehabilitación de la estructura.

# Architecture and Engineering Services for City Revitalization Program For Guillermo Godreau Disaster Preparedness Center Municipality of Salinas, Puerto Rico

#### CDBG-DR-RFP-AE-SAL-2021-001

# Memorial y Determinación, Condición Estructural

2 de diciembre de 2022

El municipio de Salinas propuso remodelar la antigua escuela Guillermo Godreau localizada en la calle Miguel Ten, Salinas Puerto Rico. El lote donde se ubica la escuela tiene un área de 3,329.06 metros cuadrados con coordenadas NAD83 x:214256.0662 y:215754.6029. La propiedad cuenta con tres estructuras existentes.

- a) La escuela original, un edificio de dos plantas hecho en hormigón, bloque de cemento y estructura de techo en metal con un área de ocupación de 8,255.6p.c. El edificio es de dos plantas de 8,255.6p.c. cada una para un área bruta total de 16,511.2p.c. El edificio cuenta con dos escaleras interiores en hormigón.
- b) Edificio accesorio moderno de 1,648.3p.c. en una sola planta de hormigón y bloque de cemento.
- c) Edificio moderno de salones de clase de dos plantas con un área de ocupación de 2,931.2p.c. hecho en hormigón y bloque de cemento. El edificio cuenta con una escalera exterior en hormigón.

La remodelación se enfocaba en el edificio original de la escuela al cual se le requería modernizar su infraestructura eléctrica, facilidades sanitarias, ventanas, accesos internos y construir un nuevo elevador de pasajeros para proveer acceso a ambos pisos a personas con incapacidades físicas.

Los espacios existentes se iban a restaurar con el propósito de utilizarlos como salones de clases para adiestramiento de personal municipal o ofrecer clases multidisciplinarias a la ciudadanía de Salinas. Otros espacios se convertirán en almacén y oficinas para servicios al ciudadano con un salón de conferencias/reuniones.

Como parte del "Scope of Work" designado para este proyecto, se realizó un estudio general y documentaron observaciones preliminares del estado estructural de la escuela original. Estas observaciones incluyeron:

Plan of Existing Conditions for Roof Structure-min
Concrelab Compressive Strength Test Report Escuela Guillermo Godreau Salinas 2-26-22
Escuela Guillermo Godreau Manatau Evaluación Estructural Resumen Ejecutivo

Estos estudios se realizaron entre febrero y marzo del 2022. Nuestro consultor estructural, emitió un Resumen Ejecutivo sobre la información recolectada hasta la fecha (2 de junio de 2022). El mismo

# MARQUES + MARQUES A R Q U I T E C T C T O S

comenta sobre las deficiencias observadas durante las visitas al la escuela y los resultados recibidos de las extracciones. El estado actual de las muestras tomadas, revelaron que los componentes estructurales son de pobre calidad y que la escuela ha recibido alteraciones que pudiesen afectar su rendimiento.

Ante estas observaciones, nuestra oficina preparó un estudio "Multidisciplinary Citizen Service Center, Escuela Guillermo Godreau, Salinas, PR" (abril 2022) que exploraba tres alternas de desarrollo.

- Conceptual Alternative #1. Remodelación de la escuela existente, manteniendo los espacios en su configuración actual, añadiendo un elevador exterior, remodelando el edificio moderno secundario y creando un estacionamiento nuevo en el patio trasero de los edificios.
- 2. Conceptual Alternative #2. Remodelación extensa del edificio moderno escolar y su patio para estacionamiento. Esta alterna no interviene en el edificio original.
- 3. Conceptual Alternative #3. Construcción de un nuevo edificio multiusos gubernamental en la localización de la escuela original con estacionamiento en el patio trasero de los edificios.

El municipio optó por la alterna conceptual #1 con el propósito de salvar el edificio original y proporcionarle nueva vida como un centro de servicios y adiestramiento.

A causa de las observaciones presentadas en el Resumen Ejecutivo estructural, nuestra oficina solicitó una enmienda a los trabajos a realizarse para incluir un estudio estructural más abarcador. El mismo, en conjunto con el desarrollo más avanzado del programa arquitectónico de usos interiores iba a proporcionar los datos necesarios para desarrollar los planos y especificaciones finales.

Se preparó un informe más detallado "Evaluación Estructural Escuela Guillermo Godreau Manatau Salinas, PR (julio 2022)" recopilando la información recibida hasta la fecha y presentando los retos que se iban a tener que contender para la remodelación del edificio original.

El segundo estudio estructural "Actual Conditions Assessment at ESC GUILLERMO GODREAU" fue realizado y su información fue evaluada en conjunto a los datos adicionales levantados hasta la fecha. Esta información se estudió en conjunto al desarrollo de los planos Preliminares (septiembre 30, 2022) y los usos determinados para los espacios interiores de la escuela original. El uso a recibir los espacios es un factor determinante para los requisitos estructurales que se le deben aplicar a estructuras existentes o para el diseño de estructuras nuevas.

Esta evaluación se resume en la comunicación "Escuela Guillermo Godreau Manatau – Evaluación Estructural 2022.12.02" donde se presentan las deficiencias reveladas en el ultimo estudio estructural. Les resumimos la comunicación de la siguiente manera:

- 1. Nivel de Techo. Se descubre que la estructura del techo ha sido altamente modificada y que la misma actualmente sobrecarga los componentes estructurales existentes.
- 2. Segundo Nivel. Los componentes existentes muestran un alto nivel de deterioro al nivel de poder fallar con uso. Esto es evidente por las fallas que actualmente se pueden observar.
- 3. Nivel sobre Losa de Terreno. Ninguna deficiencia fue observada.

- 4. Nivel de Cimentación. El último estudio de campo reveló que los cimientos son insuficientes para soportar la estructura y adecuadamente estabilizarla según los códigos vigentes. Este punto lo consideramos de los más importantes. El intentar reforzar los cimientos de un edificio en su totalidad y atender otras condiciones de suelos sin la demolición de la estructura existente superior comprende una serie de trabajos altamente especializados y fuera del ámbito establecido para el proyecto.
- 5. Refuerzo de Paredes, Muros de Cortante. Las capacidades del refuerzo estructural de las paredes demostraron un alto nivel de fluctuación y bajo control de calidad. Esta inconsistencia indica que la estructura existente completa puede tener deficiencias y que las mismas no tienen que ser limitadas a áreas específicas.
- 6. Carbonatación y Contenido de Cloruro en la Estructura. Se descubre que existe un alto nivel de corrosión en las varillas estructurales. Esta situación empeora el pobre rendimiento estructural observado mediante la baja calidad e inconsistencia de los hormigones de las paredes estructurales.

Lamentamos resumir que los esfuerzos necesarios para realizar los refuerzos estructurales necesarios para la escuela original sobrepasan el ámbito establecido para el proyecto. Los códigos vigentes de construcción más la consideración a futuros eventos naturales del área implican que cualquier intervención necesitaría ser extremadamente especializada en su naturaleza y amplia en su ámbito.

La propiedad cuenta con un edificio mas moderno que no padece de las fallas enumeradas en estos informes y que el mismo en conjunto a los espacios abiertos puede servir al municipio en usos identificados para este proyecto. Recomendamos que se reconsidere una intervención similar a Conceptual Alternative #2 presentada anteriormente.

Permanecemos a la entera disposición del municipio para contestar cualquier duda que esta entrega genere y discutir opciones para el desarrollo de este proyecto.

Atentamente,

# **MARQUES + MARQUES ARQUITECTOS**

Arq. Bernardo A. Marqués, AIA, CAAPPR, NCARB

## ANEJOS:

Escuela Guillermo Godreau Manatau Evaluación Estructural Resumen Ejecutivo
Concrelab Compressive Strength Test Report Escuela Guillermo Godreau Salinas 2-26-22
Plan of Existing Conditions for Roof Structure-min
Multidisciplinary Citizen Service Center, Escuela Guillermo Godreau, Salinas, PR
Evaluación Estructural Escuela Guillermo Godreau Manatau Salinas, PR (julio 2022)
Actual Conditions Assessment at ESC GUILLERMO GODREAU
Escuela Guillermo Godreau Manatau – Evaluación Estructural 2022.12.02



October 20, 2022

# Arch. Carlos A. Rubio Cancela

Executive Director State Historic Preservation Officer Cuartel de Ballajá Bldg. San Juan, Puerto Rico

Re: Authorization to Submit Documents

Dear Arch. Rubio Cancela:

The U.S. Department of Housing (HUD) approved the allocations of Community Development Block Grant (CDBG-DR) funds on February 9, 2018. It also approved the allocation of Community Development Block Grant Mitigation (CDBG-MIT) funds on January 27, 2020. The purpose of these allocations is to address unsatisfied needs as a result of Hurricanes Irma and Maria in September 2017; and to carry out strategic and high-impact activities to mitigate disaster risks and reduce future losses.

To comply with the environmental requirements established by HUD, the Department of Housing of Puerto Rico (PRDOH) contracted Horne Federal LLC to provide environmental registry review services, among others, that will support the objectives of the agenda for both CDBG-DR and CDBG -MIT Programs.

In line to expedite the processes, Horne Federal LLC, is authorized to submit to the State Historic Preservation Officer, documentation of projects related to both the CDBG-DR and CDBG-MIT on behalf of PRDOH.

Cordially,

Juan C. Pérez Bofill, P.E. M.Eng Director of Disaster Recovery

CDBG DR-MIT



# GOVERNMENT OF PUERTO RICO

STATE HISTORIC PRESERVATION OFFICE

Executive Director I Carlos A. Rubio-Cancela I carubio@prshpo.pr.gov

Friday, June 30, 2023

# Lauren Bair Poche

HORNE- Architectural Historian Manager 10000 Perkins Rowe, Suite 610 Bldg. G Baton Rouge, LA 70810

SHPO: 05-30-23-05 CENTRO MULTIDISCIPLINARIO DE SERVICIOS A LA COMUNIDAD PROJECT, BO. PUEBLO CALLE MIGUEL TEN, SALINAS PUERTO RICO/ PR-CRP-000135

Dear Ms. Poche,

Our Office has received and reviewed the information submitted for the above referenced project in accordance with 54 USC 306108 (commonly known as Section 106 of the *National Historic Preservation Act, as amended)* and 36 CFR Part 800: *Protection of Historic Properties* from the Advisory Council on Historic Preservation.

In order for the SHPO to fulfill its legal responsibilities, it is necessary that the applicant provides us with the following documentation, which is outlined in the 36 CFR Section 800.11:

# Project information:

a) Copy of the of the structural studies that revealed as mentioned, "major material and structural deficiencies which do not allow for this building's use without extensive and costly structural retrofitting".

Please include the SHPO project number in any future correspondence. If the requested documentation is not available, the agency official must explain why it has not been submitted and when it can reasonably be expected to be provided to the SHPO.

The SHPO will have 30 days to respond after receiving an adequately documented finding or determination made by the Federal agency or



Page 2

legal responsible entity, as per 36 CFR § 800.3(c)(4), § 800.4(d), § 800.5(c), and § 800.11. However, additional information may be required after initiating the Section 106 process.

If you have any questions regarding this matter or require any further assistance, please contact our Office.

Sincerely,

Carlos A. Rubio-Cancela

Carly offerty

State Historic Preservation Officer

CARC/GMO/MDT

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM CITY REVITALIZATION PROGRAM (CRP)

GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING

Subrecipient: Municipal Government of Salinas

**Section 106 NHPA Effect Determination** 

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135

Project Location: Bo. Pueblo Calle Miguel Ten Salinas PR 00751

**Project Coordinates:** 17.9756291, -066.2987405 (Principal School Building) / 17.975649, -66.298961 (Secondary Classroom Building) / 17.975290, -66.298735 (Accessory Storage & Utility Building) /

17.975739, -66.298824 (School Courtyard)

TPID (Número de Catastro): 417-073-049-10

Type of Undertaking:

☐ Substantial Repair
☐ New Construction

Construction Date (AH est.): ca. 1935-1937 | Property Size (acres): 0.47

**SOI-Qualified Architect/Architectural Historian**: Jorge Lizardi Pollock, Ph.D.

Date Reviewed: February 25, 2022

**SOI-Qualified Archaeologist**: Jesus E. Vega, Ph.D.

Date Reviewed: February 20, 2022 (REVISED March 13, 2023)

In compliance with Section 106 of the National Historic Preservation Act (NHPA), the Program is responsible for identifying historic properties listed in the NRHP and any properties not listed that would be considered eligible for listing that are located within the geographic area of potential effects (APE) of the proposed project and assessing the potential effects of its undertakings on these historic properties.

# **Project Description (Undertaking)**

The municipality of Salinas has proposed to remodel the existing Guillermo Godreau Manatau School Complex. This three-building school complex is located in the Miguel Ten Street near the Traditional Urban Center of Salinas. The property is relatively flat and occupies 3,329.06 square meters. Its coordinates are NAD83 x: 214256.0662, y: 215754.6029. The three buildings located in the property are:

- 1. Original school building (A). This historic, two-story building was constructed in reinforced concrete and has a metal roof. Its floor area is 8,255.6 square feet per floor for a total of 16,511.2 square feet (Photos 1-6, 12-18). The building has two internal open stairs (Photo 17) and no access to its roof (Photo 12). Built circa 1934-1936, as the 1930 (Figure 10) and 1937 (Figure 11) aerial photographs reveal, the structure is present in 1937 and absent in 1930.
- 2. New classroom building (B). This two-story, reinforced concrete classroom building has 2,477 square feet at ground level and 718 square feet on the second floor of classroom space. It is located behind the original school building on the northern side of the lot (Photos 7-10, 19-21). The first-floor classrooms open directly to the exterior

CITY REVITALIZATION PROGRAM (CRP)

**Section 106 NHPA Effect Determination** 

Subrecipient: Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135

(Photo 19-21), and it has one open air stairway constructed of reinforced concrete (Photo 10) which gives access to the partial second floor where two more classrooms are located. Built between 1967 and 1977 according to USGS 1967 (Figure 12) and 1985 (Figure 13) aerial imagery.

GOVERNMENT OF PUERTO RICO

3. Small service building (C). This accessory, one-story, reinforced-concrete structure is located on the western side of the lot, next to the original school building, and measures 1,648.3 square feet (Photos 11, 22-25). Built between 1967 and 1977 for storage and utility services, according to USGS 1967 (Figure 12) and 1985 (Figure 13) aerial photographs. Extensive water damage to walls, floors, and ceilings, such as partial flooding (Photo 22), several patches of painting flaking off (Photo 23), and cracks and ruptures near windows (Photo 24), has significantly deteriorated the interior of the building (Photo 25).

Initially, the original classroom building (A) was to be remodeled and have its infrastructure updated to serve as the main Service Center. However, structural studies revealed major material and structural deficiencies which do not allow for this building's use without extensive and costly structural retrofitting. A recent field study also determined that the building contained lead in its exterior paint. Therefore, the school building will be subjected to a mothballing process according to the standards of the Preservation Briefs for Mothballing Historic Buildings by the U.S. Department of the Interior. An encapsulant will be applied to its exterior painted surfaces, most windows will be removed, and selected openings will have protected ventilation. Before closing down, its façade will be painted and minor reparations will be performed on various entry points to prevent pigeons and rodents from entering the building.

The project will instead focus on remodeling the interior of the newer two-story classroom building (B) and small service building (C), as well as repairing the adjacent schoolgrounds, which include the creation of new parking areas. The secondary classroom building (B) will have its electrical, plumbing, and mechanical infrastructure updated. This will include the installation of the properties' electrical substation and new diesel generator on the roof as a safeguard against flooding. Its interior floor level will be raised approximately 8" (above past flood high-water marks) in order to provide further resiliency. Waterproof finishes will be applied to its exterior, and flood barriers for all non-storage usable spaces will be commissioned. The first floor will house municipal services such as the offices of "Ayuda al Ciudadano", "CRIM", "Patente Municipal", as well as service and storage spaces. New ADA compliant restrooms will also be included in this renovation. The second floor will house additional services including "Capellanía Municipal" and "Programa: Tú Vales" with support areas such as a conference room and kitchenette. The second floor will also be available 606 Barbosa Avenue, Building Juan C. Cordero Dávila, Río Piedras, PR 09918 I P.O. Box 21365 San Juan, PR 00928-1365

CITY REVITALIZATION PROGRAM (CRP)

**Section 106 NHPA Effect Determination** 

**Subrecipient:** Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135

in the event of a natural disaster, serving as the municipalities' "Centro de Operaciones de Emergencias".

GOVERNMENT OF PUERTO RICO

The small service building (C) will also have its interior floor level raised 8", waterproof exterior finishes applied, and flood barriers commissioned. It will house a new kitchen and food prep area which aims to serve the municipalities' employees that will work on the property as well as adjacent municipal buildings. This new kitchen will also work for municipal programs that prepare meals. The building will have storage spaces and open dinning and lounge areas. A new outdoor seating area will be provided next to the indoor seating area for additional capacity.

The open courtyard at the rear of the property will be finished with a mix of asphalt and permeable surfaces to provide absorption of storm water. It will provide a total of fourteen new parking spaces, two of these designated for handicapped use. This area will approximately measure 667.7 square meters. New trees and vegetation will be planted and the sidewalks fronting the property will be reconstructed. This project dose not add any space to the existing structures.

#### **Area of Potential Effects**

As defined in 36 CFR §800.16(d), the area of potential effects (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 for this project is limited to the footprint of the three existing buildings (principal school building, secondary classroom building, and accessory storage and utility building), including the courtyard, and the visual APE is the viewshed of the proposed project. The APE will be extended to the road/public right-of-way to the front of the building to allow for connection to existing utilities and the construction driveways and walkways.

# 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 Archaeologist Specialist meeting the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61), shows that the project area is within a quarter-mile distance of approximately 110 recorded

CITY REVITALIZATION PROGRAM (CRP)

**Section 106 NHPA Effect Determination** 

Subrecipient: Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135

archaeological sites and/or NRHP listed/eligible historic properties (Figure 14). Of these, twenty significant historical properties are described below and highlighted in the aerial and topographic maps included. "No data" denotes no corresponding Institute of Puerto Rican Culture (IPRC), State Historic Preservation Office (SHPO), or National Register of Historic Places (NRHP) identification was found.

GOVERNMENT OF PUERTO RICO

Table 1. Archaeological Sites and/or NRHP Listed/Eligible Historic Properties Within Quarter-Mile Radius of Project Area

Name	SHPO ID	IPRC ID	Location	Description	NRHP
Alcaldía Municipal	No data	No data	0.01 mi NE	Historic, Beaux Arts-style, municipal town hall concrete building located on the south side of the public plaza; remodeled in 1916 and 1919.	No data
Residencia Histórica Calle Dr. Santos P. Amadeo	No data	No data	0.02 mi NW	Historic, early 20th century criollo box gable house, built in concrete with a wood and corrugated metal panels roof.	No data
Plaza Las Delicias	No data	No data	0.03 mi NE	Historic, mid 19th century public plaza remodeled in 1924 and several other times during the 20th century.	No data
Parroquia Nuestra Señora de Ia Monserrate	SX0200001	No data	0.07 mi NE	Historic, Catholic parish located on the east side of the public plaza; originally built in 1854 and later remodeled in 1913, the current façade was completed in 2009.	No data
Edificio Histórico Calle Dr. Santos P. Amadeo	No data	No data	0.07 mi NW	Historic, early 20th century Neoclassic one-story building built in masonry and chamfered corners; currently in use by the Iglesia Bautista Bethel.	No data
Residencia Díaz	No data	No data	0.09 mi NE	Historic, early 20th century Bungalow-style house, topped with wood and metal pyramid hip roof; located on the northeast side of the public plaza.	No data

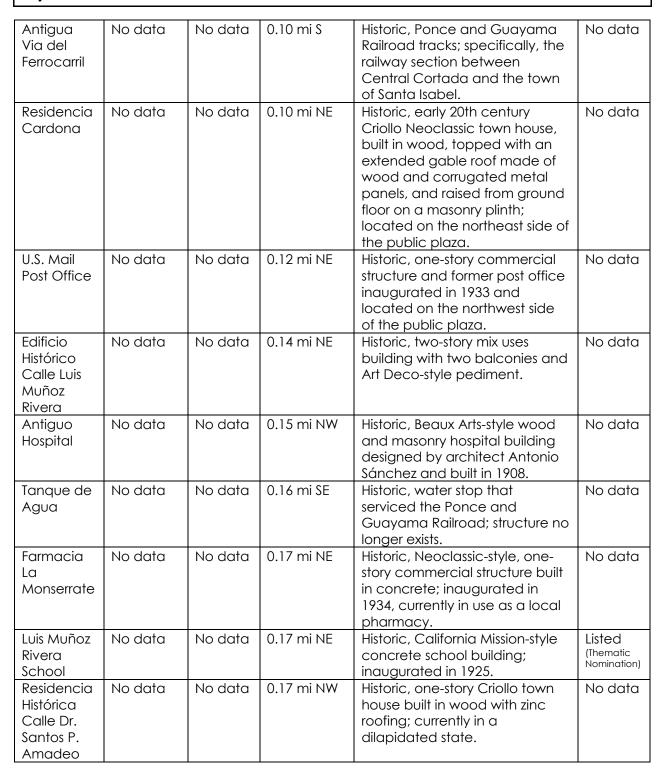
CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

Subrecipient: Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135



GOVERNMENT OF PUERTO RICO

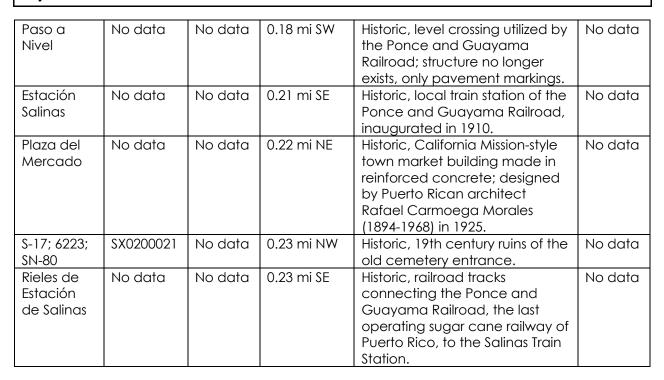
CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

Subrecipient: Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135



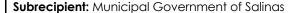
GOVERNMENT OF PUERTO RICO

Table 2. Cultural Resource Studies Conducted Within Quarter-Mile Radius of Project Area

Author	Title	Year	SHPO/IPRC ID	Results	Location
Sharon Meléndez Ortiz	Reconocimiento General de Sitios Arqueológicos en el Llano Costero de Salinas, Informe Final	2013	No data	Positive	0.23 mi NW
Luis F. Pumarada O'Neill	Inventario del Ferrocarril de Circunvalación	1988	No data	Positive	0.10 mi S
Jorge Rigau	Early 20th Century Schools in Puerto Rico (#64501149)	1987	No data	Positive	0.17 mi NE
Ethel Schlafer Román	Phase 1A, Acueducto del Sur (Arroyo, Guayama, Salinas, Santa Isabel, Juana Díaz, Ponce)	2012	CAT-AY-12-08-01	Positive	0.05 mi NE
Adalberto Maurás Casillas	Phase 1A-1B, Escuela Superior de Salinas	2002	CAT-SN-02-08-03	Negative	0.17 mi SE
Michael A. Cinquino	Phase 1A-1B, Cultural Resource Survey of the	2007	CAT-SN-94-10-07	Positive	0.24 mi NW

CITY REVITALIZATION PROGRAM (CRP)

**Section 106 NHPA Effect Determination** 



Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135

	Río Nigua Flood Control Study (USACE)				
Iván F. Méndez	Phase 1A-1B, Terminal de	1989	CAT-SN-89-02-02	Negative	0.10 mi NW
Bonilla	Carros Públicos de				
	Salinas a Desarrollarse en				
	la Calle Unión, Carr.				
	Estatal 1, Km 90, Hm 7				
Eduardo	Phase 1A-1B, Porto Fino	2006	CAT-SN-06-11-05	Negative	0.25 mi SE
Questell	Valley y Porto Fino Plaza,				
Rodríguez	Bo. Pueblo				

GOVERNMENT OF PUERTO RICO

The possibility of undocumented prehistoric and/or historic material deposits near or within the APE of this undertaking was evaluated. Evidently, the property is surrounded by NRHP-eligible historic and cultural properties pertaining to the Salinas Traditional Urban Center to the north, west, and east, and historic infrastructure pertaining to the Ponce and Guayama Railroad to the south. However, surrounding terrain has been significantly impacted by urbanization. The probability of finding undocumented material deposits near or within the APE is considered low. Additionally, Cultural Resource Survey of the Río Nigua Flood Control Study (USACE) (M. Cinquino 2007), a Phase 1A-1B cultural resource study, yielded positive results near the Nigua River to the northwest of the proposed project location. However, no archaeological sites and/or NRHP listed/eligible historic properties were reported within the direct Area of Potential Effects (APE) itself.

## Identification of Historic Properties - Architecture

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 Architectural Historian meeting the Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61), shows that the project area is within the boundaries of the National Register of Historic Places (NRHP)-eligible Salinas Traditional Urban Center.

The 18th century chronicle written by Fray Íñigo Abad y Lasierra is one of the earliest historic records that addresses the Salinas neighborhood, which at the time belonged to the municipality of Coamo. In 1851, the creation of a separate municipality was granted by Fernando de Norzagaray, the Spanish governor at the time, recognizing that the population and neighborhoods of the area, linked to livestock activities, agricultural ranches, and salt production, were already established for several years before the official decree. The name itself, Salinas, stems from the local salt production industry. The urban grid of Salinas initially

606 Barbosa Avenue, Building Juan C. Cordero Dávila, Río Piedras, PR 00918 I P.O. Box 21365 San Juan, PR 00928-1365 Tel: (787)274-2527 I www.vivienda.pr.gov

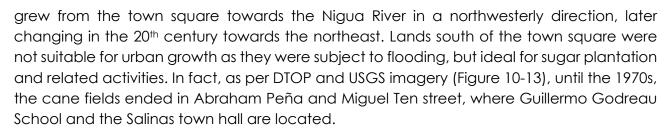
CITY REVITALIZATION PROGRAM (CRP)

**Section 106 NHPA Effect Determination** 

Subrecipient: Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135



GOVERNMENT OF PUERTO RICO

In mid-19<sup>th</sup> century, the urban grid of Salinas had three public buildings: the Casa del Rey or Spanish military quarters, the town hall, and a first version of the Nuestra Señora de la Monserrate Catholic parish. A handful of wooden houses or *bohíos* made up the rest of the town. During the last decade of the 19<sup>th</sup> century and early 20<sup>th</sup> century, the rapid and intensive development of the agricultural activities linked to sugar production promoted the growth of the urban fabric, the consolidation of streets, and the construction of new residences in wood, masonry, and concrete. Despite the creation of the Company Town of the Central Aguirre Syndicate, which attracted inhabitants and drained town resources, the Salinas Traditional Urban Center completed the construction of a hospital, a modern market space, new warehouses, shops, and schools such as the Guillermo Godreau and Luis Muñoz Rivera. The urban life of Salinas was also fed by the traffic generated by roads PR-1 and PR-3 that run along its very center. Until the 1960s, they were the most important routes used to travel from the north or east of the island to the southwestern town of Ponce.

After 1970, several events slowed down the development of Salinas. First, activities linked to sugar mills and sugar cane colonos gradually ceased and ultimately halted by the 1980s. Second, the completion of the Luis A. Ferré expressway in 1970 diverted traffic flow away from its urban center. Although some industrial facilities were built on the immediate periphery of the urban grid, the aforementioned changes lead to housing and commercial sprawl on the outskirts of Salinas. Population density, services, and commercial activities decreased, and many of the properties within the urban center were abandoned or did not receive proper maintenance to avoid dilapidation.

Despite this recent transformation, marked by abandonment or neglect, the urban landscape of Salinas is still conditioned by historic buildings and vernacular houses built between the late 19th century and first half of the 20th century. Some of them have received adequate maintenance, and dozens of others, even if they have lost historical integrity, still have the possibility of being restored, adding to the historical character of the place.

The only property in the municipality of Salinas listed in the National Register of Historic Places is the Central Aguirre Historic District (and its 317 contributing properties) nominated in 2002, which is located approximately five miles southeast from the Guillermo Godreau School.

606 Barbosa Avenue, Building Juan C. Cordero Dávila, Río Piedras, PR 00918 I P.O. Box 21365 San Juan, PR 00928-1365 Tel: (787)274-2527 I www.vivienda.pr.gov

CITY REVITALIZATION PROGRAM (CRP)

**Section 106 NHPA Effect Determination** 

Subrecipient: Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135

Nevertheless, there are several NRHP-eligible properties within the quarter-mile radius of the Guillermo Godreau School and other properties that convey a sense of place and contribute to the historical landscape of the Salinas Traditional Urban Center.

GOVERNMENT OF PUERTO RICO

The former Spanish Revival-style Guillermo Godreau School (Building A) was built circa 1935-37. Its footprint is present in the 1937 aerial photograph (Figure 11) and marked in a 1945 USGS historical topographical map. However, it is absent in the 1930 aerial photograph (Figure 10)—the earliest image available. The original two-story building was designed with an H-like floor plan that comprised 8,255 ft², divided in one central long hall and two symmetrical but shorter perpendicular halls with two classrooms for each floor. Spaces for bathrooms and offices can be found in each floor to the back of the central hall. The school is built entirely in reinforced concrete on a flat concrete slab, topped with a metal structure and sheeted with corrugated metal panels.

All school elevations exhibit typical Spanish Revival-style architectural traits. The main entrance is in the center of the long central hall, granted by a round arch gate opened into a projected portico. A balcony and a wooden door, mosaics, a school emblem and two rectangular openings with glass blocks can be seen over this arch and portico. On top of them, at the roof level, the façade design exhibits a decorative triangular bell gable and two concrete ciboria-like pinnacles. There are five rectangular windows at each side of the main entrance, and five more at both sides of the second-floor balcony and door, all symmetrically distributed and topped with a short diagonal eave with clay Spanish shingles. Between the center and lateral pavilions, the building walls show a short setback that signals internal corridors that can be accessed through two secondary arched gate entrances. There are smaller windows symmetrically distributed in both lateral pavilion stories, with shorter diagonal eaves topped with shingles as well, and the roof level is embellished with a curved parapet.

The rear elevation of the building exhibits a short straight roof overhang beyond exterior walls, arched entrances in first floor, one pointed arch in center of the second story, and two rounded arched windows at each end of the second-story center hall. The rest of the elevation exhibits smaller rectangular windows with no decorative eaves, asymmetrically distributed and flush with walls. Miami horizontal metal jalousies-type windows have replaced the original ones in all structural openings.

The school has an ample courtyard, partially paved with concrete, in which a second rectangular floor plan and two-story modern building with austere aesthetics is to be found (Building B). This secondary structure's footprint is about 2,931 ft<sup>2</sup> and was built recently, circa 1977, per USGS 1967 (Figure 12) and 1985 (Figure 13) aerial imagery. The purpose of this 606 Barbosa Avenue, Building Juan C. Cordero Dávila, Río Piedras, PR 00918 I P.O. Box 21365 San Juan, PR 00928-1365

Tel: (787)274-2527 I www.vivienda.pr.gov

CITY REVITALIZATION PROGRAM (CRP)

**Section 106 NHPA Effect Determination** 

Subrecipient: Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135

structure was to add eight more classrooms to the school. It is built on a flat concrete slab, with concrete cladding, and wide reinforced concrete columns and beams that facilitate the roof overhang for protecting the exterior classroom corridors. This secondary classroom building is considered eligible for the NRHP under Criterion A and C, as it is based on a functionalist-style architectural prototype developed during the 1960s and 70s and reflects educational reforms implemented at the time by the Department of Education of Puerto Rico.

GOVERNMENT OF PUERTO RICO

A third, rectangular floor plan structure and one-story building comprising 1,648 ft² (Building C) is located at the south side of the original school building and was built circa 1967 per USGS imagery (Figure 12). At present, it is used as a storage and utility space, and possibly as additional classroom space. Its exterior aesthetics can be characterized as purely functional; it is built on a poured concrete ground slab, with concrete cladding, four wooden doors, and Miami metal-type windows distributed asymmetrically in its front elevation, topped with a flat concrete slab with a short overhang beyond the exterior walls. This accessory building is not considered eligible for the NRHP under any criteria as it lacks a distinctive architectural style and doesn't yield any important information regarding local or national history. It is also a singular construction not based on an architectural prototype.

CITY REVITALIZATION PROGRAM (CRP)

**Section 106 NHPA Effect Determination** 

Subrecipient: Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135

# **Determination**

• Direct Effect: The project does not intend to rehabilitate the Guillermo Godreau Manatau School (Building A), a Spanish Revival-style school built circa 1935-37, which retains most of its historical style traits and spatial distribution and complies with the NRHP preservation criterion for being listed. Instead, it will subject it to a mothballing process complying with the Preservation Briefs for Mothballing Historic Buildings by the U.S. Department of the Interior, which will preserve the structure without fundamental changes to the school building's appearance, such as the floor plan design, ornaments, or elevations. The project does propose to rehabilitate the secondary classroom building (Building B), built between 1967 and 1977 and considered eligible for the NRHP, but the scope of work will not significantly alter any of its historical characteristics.

GOVERNMENT OF PUERTO RICO

• Indirect Effect: Salinas has only one site listed in the National Register of Historic Places (Central Aguirre Historic District and its 317 contributing properties, five miles southeast of Salinas Plaza). Despite this fact, the project area is located within the boundaries of the Salinas Traditional Urban Center and a quarter mile or less from approximately 110 recorded archaeological sites (Figure 14). This project is not intended to add square footage to any of the existing structures or change any of the school complex's aesthetical features. In that sense, the undertaking will not have a significant impact on the viewshed.

The Guillermo Godreau Manatau School (Building A) still retains most of its historical integrity: the original form, massing, and scale has been preserved. The Spanish Revival key design elements of the 1930s has also been maintained: original pattern of fenestration, clay shingles, the irregular lines of the façade parapet, mosaics, arched entrances, and other ornaments are still present. In this sense, the school building conveys a sense of association and has historic significance within the history of the Salinas Traditional Urban Center, contributing to the district identity, and represents educational endeavors in the distressing social context of the Great Depression during the 1930s. At first glance, the material damage and removal of features is insignificant. Overall, the property complies with NRHP preservation criteria and should be further evaluated for its listing. The secondary, newer classroom building (Building B), although modern and austere in architectural style, is also considered to be eligible for the NRHP under Criterion A and C. The contrary can be said about the small service building (Building C), recently added later to the Guillermo Godreau School complex, which doesn't contribute any important information for the understanding of local or national history.

606 Barbosa Avenue, Building Juan C. Cordero Dávila, Río Piedras, PR 00918 I P.O. Box 21365 San Juan, PR 00928-1365 Tel: (787)274-2527 I www.vivienda.pr.gov

PUERTO RICO 2017 DISASTER RECOVERY, CDBG-DR PROGRAM				
CITY REVITALIZATION PROGRAM (CRP)	GOVERNMENT OF PUERTO RICO DEPARTMENT OF HOUSING			
Section 106 NHPA Effect Determination				
Subrecipient: Municipal Government of Salinas				
Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project				
Project Number: PR-CRP-000135				

## Recommendation

The Puerto Rico Department of Housing requests that the Puerto Rico SHPO concur that the
following determination is appropriate for the undertaking (Choose One):

□ No Historic Properties Affected
⊠ No Adverse Effect
□ Adverse Effect

Proposed Resolution: Escuela Guillermo Godreau Manatau is a school compound located within the Salinas Traditional Urban Center, a quarter mile or less from approximately 110 recorded historic properties (Figure 14). No archaeological sites and/or NRHP listed/eligible historic properties were reported within the direct APE, and the probability of finding undocumented material deposits near or within the direct APE is considered low, as the surrounding terrain has been significantly impacted by urbanization. As part of the mothballing of Building A, an encapsulant shall be applied to its exterior painted surfaces. Most windows shall be removed and selected openings shall have protected ventilation according to the Preservation Briefs for Mothballing Historic Buildings by the U.S. Department of the Interior. Buildings B and C shall be structurally reinforced and will have their interior floor levels raised by 8" which was above the high-water mark left by previous flooding incidents. These buildings will also be finished with waterproof exterior finishes and include the commissioning of flood barriers for all non-storage usable spaces. Therefore, no adverse effect to cultural properties is anticipated for this revitalization project. No further archaeological studies are recommended.

## This Section is to be Completed by SHPO Staff Only

The Puerto Rico State Historic Preservation Office has reviewed and:	d the above information
□ <b>Concurs</b> with the information provided.	
$\square$ <b>Does not concur</b> with the information provided.	
Comments:	
Carlos Rubio-Cancela State Historic Preservation Officer	Date:

606 Barbosa Avenue, Building Juan C. Cordero Dávila, Río Piedras, PR 00918 I P.O. Box 21365 San Juan, PR 00928-1365 Tel: (787)274-2527 I www.vivienda.pr.gov



Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135

Figure 1. Project (Parcel Location) with Area of Potential Effect – Aerial Map





Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135

Figure 2. Project (Parcel Location) with Area of Potential Effect – Topographic Map





Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135

Figure 3. Project (Parcel Location) – Aerial Map





Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

**Project Number:** PR-CRP-000135

School Backyard

Secondary Classroom Building

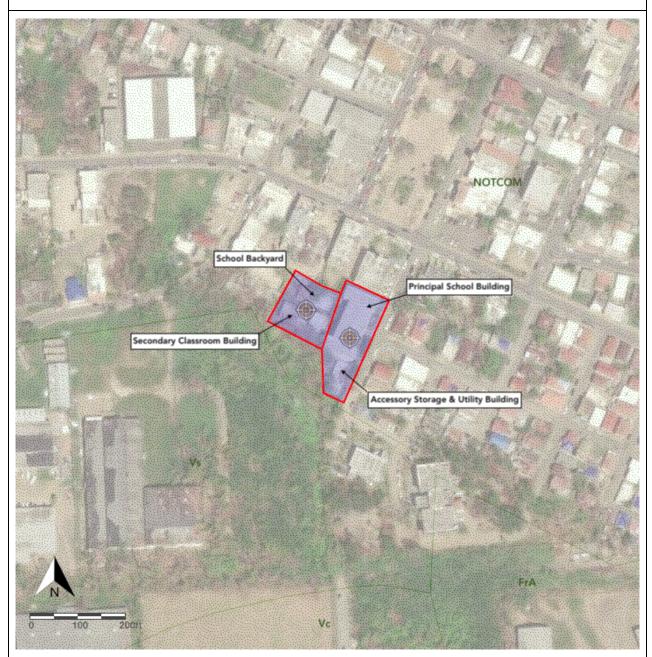
Accessory Storage & Utility Building



Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135

Figure 5. Project (Parcel) Location – Soils Map



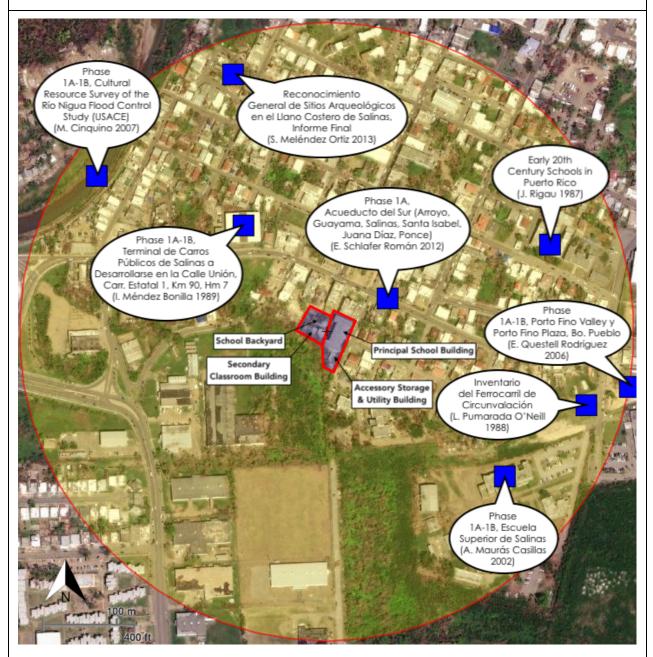
Source: Interactive Map of Planning Board, MIPR (http://gis.jp.pr.gov/mipr/). 2016.



Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135

Figure 6. Project (Parcel) Location with Previous Investigations – Aerial Map

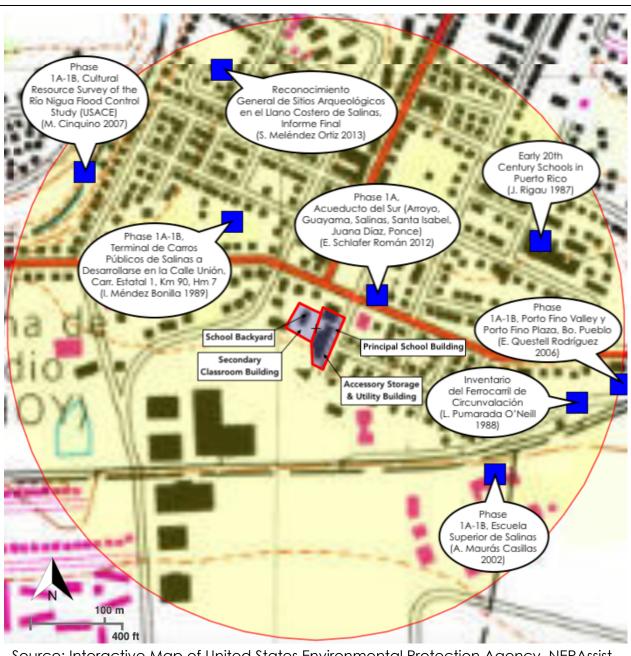




Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135

Figure 7. Project (Parcel) Location with Previous Investigations – Topographic Map



CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

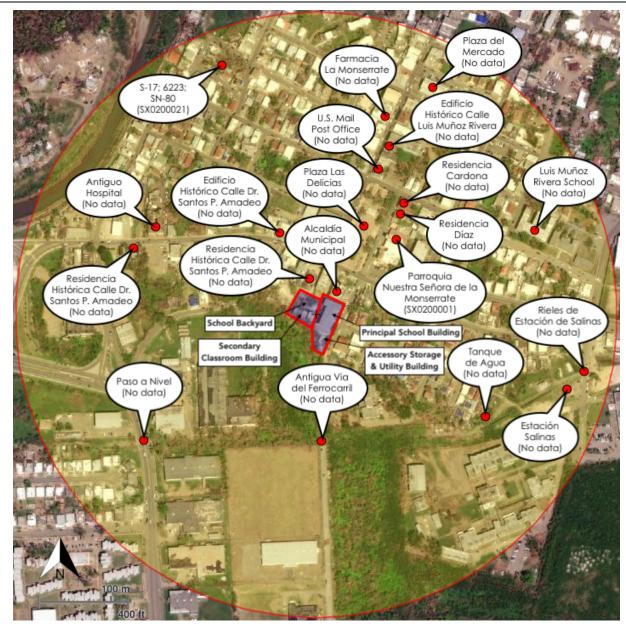
Subrecipient: Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135

Figure 8. Project (Parcel) Location with Previously Recorded Cultural Resources – Aerial Map

GOVERNMENT OF PUERTO RICO



Source: Interactive Map of United States Environmental Protection Agency, NEPAssist (https://nepassisttool.epa.gov/nepassist/nepamap.aspx). 2017.

CITY REVITALIZATION PROGRAM (CRP)

**Section 106 NHPA Effect Determination** 

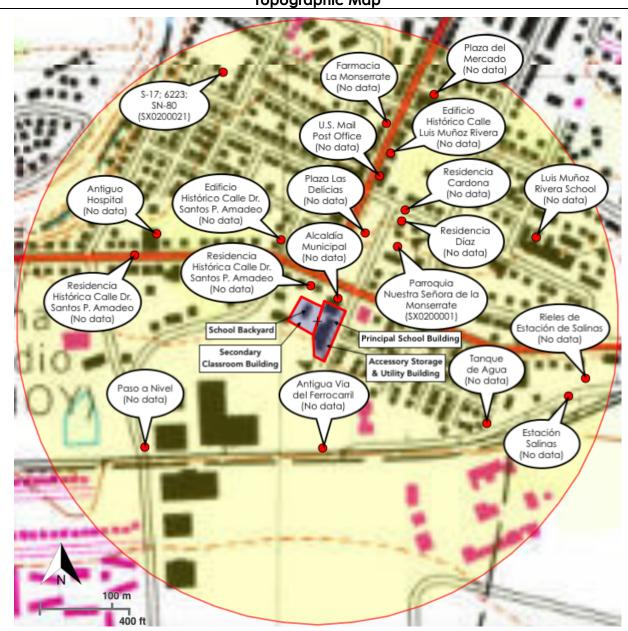
Subrecipient: Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135

Figure 9. Project (Parcel) Location with Previously Recorded Cultural Resources – Topographic Map

GOVERNMENT OF PUERTO RICO





Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135

Figure 10. Project (Parcel) Location – Aerial Photography (1930)



Source: Costa Vista Puerto Rico, COSTAVISPR (https://costavispr.org). 1930.



Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135

Figure 11. Project (Parcel) Location – Aerial Photography (1937)



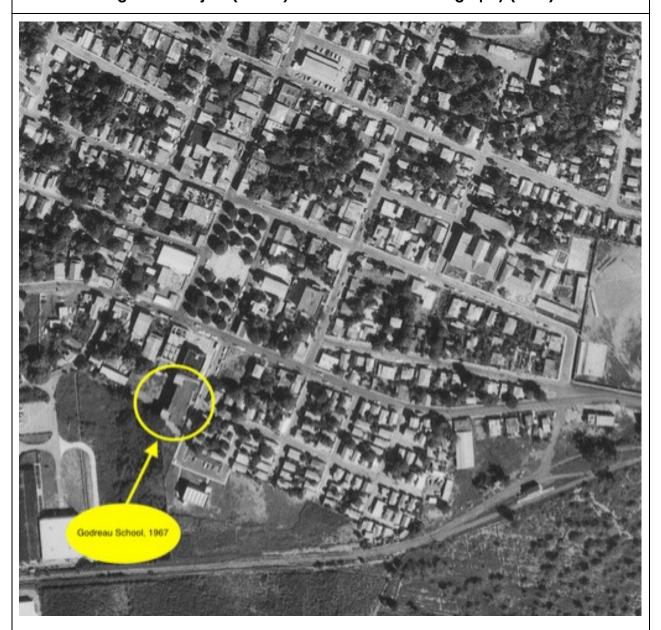
Source: Departamento de Transportación y Obras Públicas (https://www.dtop.pr.gov). 1937.



Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135

Figure 12. Project (Parcel) Location – Aerial Photography (1967)



Source: United States Geological Survey, USGS Aerial Imagery (https://www.usgs.gov). 1967.



Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135

Figure 13. Project (Parcel) Location – Aerial Photography (1985)



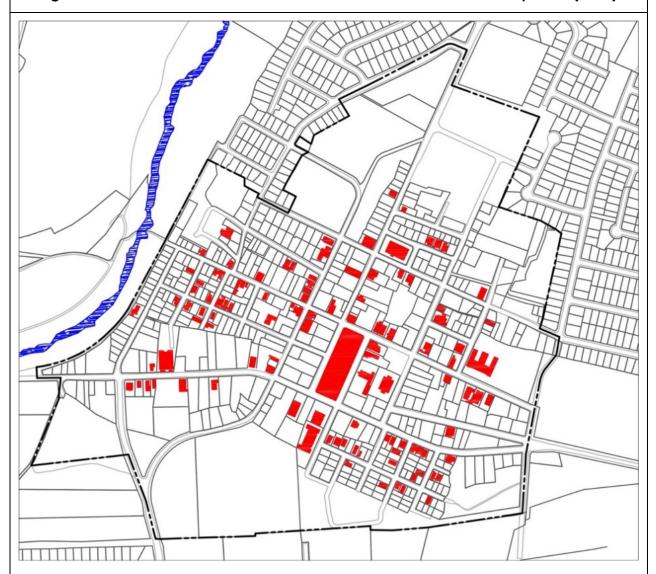
Source: Departamento de Transportación y Obras Públicas (https://www.dtop.pr.gov). 1985.



Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135

Figure 14. Salinas Traditional Urban Center with Identified Historic Properties (2008)



Source: Plan de Revitalización Centro Urbano de Salinas, Tomo 3-A, p. 55. Departamento de Transportación y Obras Públicas (https://www.dtop.pr.gov). 2008.

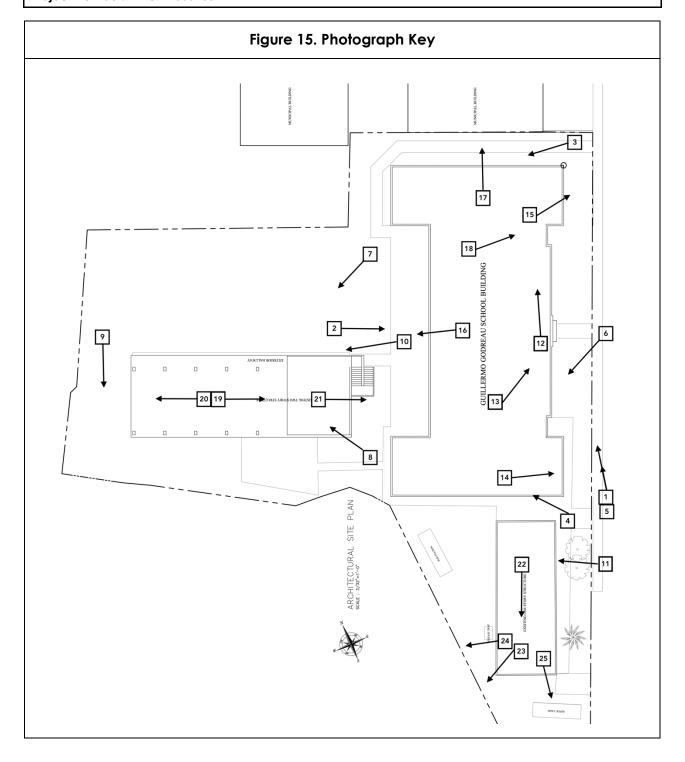
CITY REVITALIZATION PROGRAM (CRP)

**Section 106 NHPA Effect Determination** 

**Subrecipient:** Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135



GOVERNMENT OF PUERTO RICO

CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

**Subrecipient:** Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

**Project Number:** PR-CRP-000135



GOVERNMENT OF PUERTO RICO

Photo #: 1

**Description:** Full front elevation of principal school building.

**Date:** 11/30/21

**Direction:** Northwest



**Photo #:** 2

**Description:** Rear of structure of principal school building.

**Date:** 11/30/21

**Direction:** Southeast

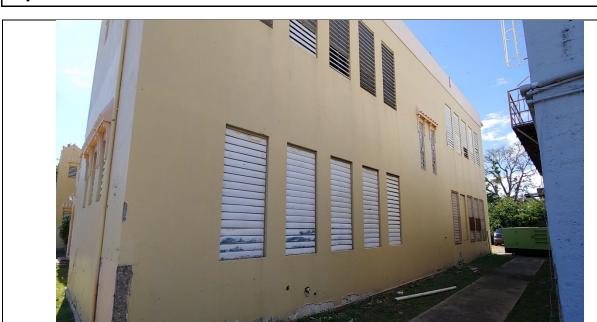
CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

**Subrecipient:** Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

**Project Number:** PR-CRP-000135



GOVERNMENT OF PUERTO RICO

**Photo #:** 3

**Description:** Right side of structure of principal school building.

**Date:** 11/30/21

**Direction:** Southwest



**Photo #: 4** 

**Description:** Left side of structure of principal school building.

**Date:** 11/30/21

**Direction:** Northwest

CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

**Subrecipient:** Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135



GOVERNMENT OF PUERTO RICO

**Photo #:** 5

**Description:** Streetscape.

**Date:** 11/30/21

**Direction:** Northwest



**Photo #:** 6

**Description:** Streetscape.

**Date:** 11/30/21

**Direction:** Southwest

CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

**Subrecipient:** Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135



**Photo #:** 7

**Description:** Full front elevation of secondary school building.

**Date:** 11/30/21

**Direction:** Southwest



**Photo #:** 8

**Description:** Rear of structure of secondary school building.

**Date:** 11/30/21

**Direction:** Northwest

CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

**Subrecipient:** Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

**Project Number:** PR-CRP-000135



GOVERNMENT OF PUERTO RICO

**Photo #:** 9

**Description:** Right side of structure of secondary school building.

**Date:** 11/30/21

**Direction:** Southwest



**Photo #:** 10

**Description:** Left side of structure of secondary school building.

**Date:** 11/30/21

**Direction:** Southwest

CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

**Subrecipient:** Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135



Photo #: 11

**Description:** Full front elevation of accessory storage & utility building.

**Date:** 2/17/22

**Direction:** Northwest



**Photo #:** 12

**Description:** Rooftop, full front elevation of principal school building.

**Date:** 2/17/22

**Direction:** Northeast

CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

**Subrecipient:** Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135



**Photo #:** 13

**Description:** Conference room, front of principal school building. 2<sup>nd</sup> floor.

GOVERNMENT OF PUERTO RICO

**Date:** 2/17/22

**Direction:** Northeast



**Photo #:** 14

**Description:** Conference room corner, front of principal school building. 2<sup>nd</sup> floor.

**Date:** 2/17/22

**Direction:** Northeast

CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

**Subrecipient:** Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135



GOVERNMENT OF PUERTO RICO

**Photo #:** 15

**Description:** Classroom, right side of principal school building. 2<sup>nd</sup> floor.

**Date:** 2/17/22

**Direction:** Northeast



**Photo #:** 16

**Description:** Central hallway, rear of principal school building. 1st floor.

**Date:** 2/17/22

**Direction:** Northwest

CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

**Subrecipient:** Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135



GOVERNMENT OF PUERTO RICO

Photo #: 17 Description

**Description:** Staircase, right side of principal school building. 1st floor.

**Direction:** Northeast



**Photo #:** 18

**Description:** Lateral hallway, right side of principal school building. 1st floor.

**Date:** 2/17/22

**Direction:** Southeast

CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

**Subrecipient:** Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

Project Number: PR-CRP-000135



**Photo #:** 19

**Description:** Third classroom, left side of secondary school building. 1st floor.

GOVERNMENT OF PUERTO RICO

**Date:** 8/26/22

**Direction:** Southeast



**Photo #:** 20

**Description:** Third classroom, right side of secondary school building. 1st floor.

**Date:** 8/26/22

**Direction:** Northwest

CITY REVITALIZATION PROGRAM (CRP)

**Section 106 NHPA Effect Determination** 

**Subrecipient:** Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

**Project Number:** PR-CRP-000135



**Photo #:** 21

**Description:** First classroom, left side of secondary school building. 1st floor.

GOVERNMENT OF PUERTO RICO

**Date:** 8/26/22

**Direction:** Southeast



**Photo #: 22** 

**Description:** Interior, left side of accessory storage & utility building. Ground floor.

**Date:** 8/26/22

**Direction:** Southwest

CITY REVITALIZATION PROGRAM (CRP)

**Section 106 NHPA Effect Determination** 

**Subrecipient:** Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

**Project Number:** PR-CRP-000135



**Photo #:** 23

**Description:** Corner, accessory storage & utility building. Ground floor.

**Date:** 8/26/22

**Direction:** Southwest



Photo #: 24

**Description:** Wall detail, accessory storage & utility building. Ground floor.

**Date:** 8/26/22

**Direction:** Southwest

CITY REVITALIZATION PROGRAM (CRP)

Section 106 NHPA Effect Determination

**Subrecipient:** Municipal Government of Salinas

Project Name: Centro Multidisciplinario de Servicios a la Comunidad Project

**Project Number:** PR-CRP-000135



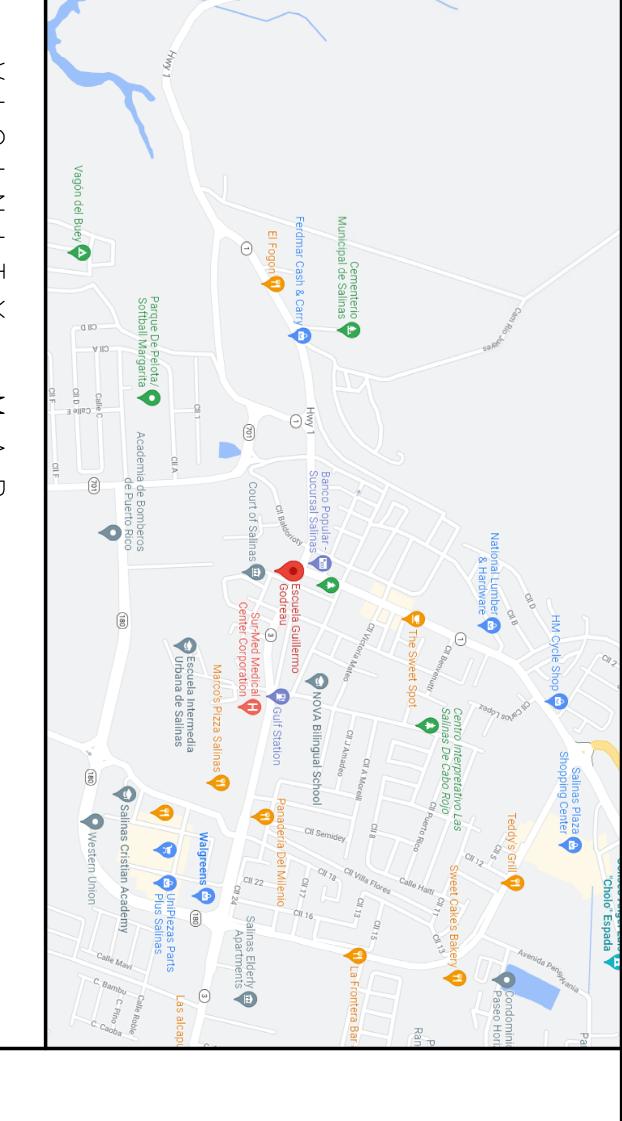
GOVERNMENT OF PUERTO RICO

Photo #: 25

**Description:** Corner, accessory storage & utility building. Ground floor.

**Date:** 8/26/22

**Direction:** Southeast



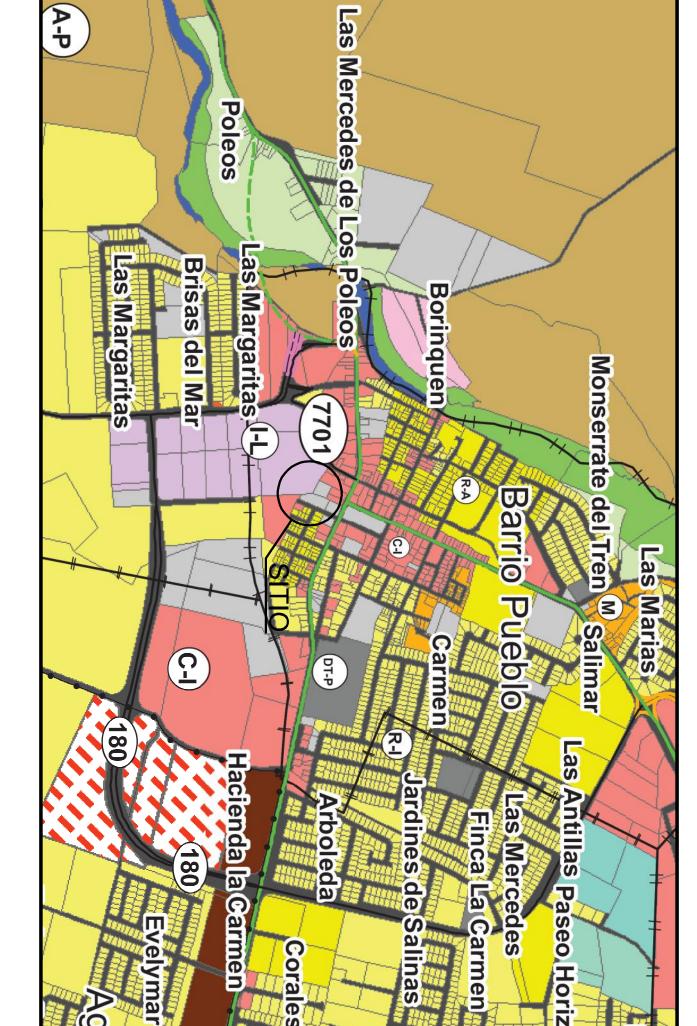
## $\bigcirc$ $\angle$ $\leq$



# $\leq$

 $\bigcirc$ 

 $\bigcirc$ 



### 0 Z S 70 0 Z 70 $\gg$ G S (60%)

THIS DRAWING AND ITS CONTENT IS THE PROPERTY OF THE OFFICE OF MARQUES + MARQUES ARQUITECTOS AND SHALL BE USED AS A REFERENCE DOCUMENT AND WORKING INSTRUMENT ONLY BY AUTHORIZED PERSONNEL. ANY TOTAL OR PARTIAL REPRODUCTION USE OF SAID DOCUMENT OR THE INFORMATION CONTAINED THEREIN IS STRICTLY PROHIBITED WITHOUT THE APPROPRIATE WRITTEN CONSENT AND SHALL BE RETURNED TO MARQUES + MARQUES ARQUITECTOS

Escuela Guillermo Godreau, C. Miguel Ten, Salinas, Puerto Rico

# LIST OF DRAWINGS

- T-01 TITLE SHEET
- C-200 C-100 0 SITE PLAN AS BUILT 0 GRADING PLAN 1 CIVIL DETAILS
- C-501

4

- A-00
- NOTES
  S-1 TOPOGRAPHIC SITE AS-BUILT PLAN
  1 AS BUILT & DEMOLITION PLAN
  2 AS BUILT & DEMOLITION PLAN
  1 ARCHITECTURAL SITE PLAN
  2 ARCHITECTURAL SITE DETAILS
  3 ARCHITECTURAL SITE DETAILS
  4 ARCHITECTURAL PLAN
  ELEVATIONS
  5 FLOORING & REFLECTED CEILING PLANS
  FLOORING & REFLECTED CEILING PLANS
- ABS-7 AB-1 AB-2 AS-1 AS-2 AS-3 A-1 A-3 A-4 A-6 A-6 A-7
- 5) 5) 5) 5) 10) 15) 14) 17)

  - TOILET ELEVATIONS & DETAILS DOORS & WINDOWS SCHEDULE
- SCHEDULE OF FINISHES
- 20) 21) 22)

- 23) 24) 25) 25) 26) 27) 28) 29) 31) 32) 33) ES-2 ES-3 п п п - 0 0 4 ELECTRICAL SITE PLAN
  ELECTRICAL PLATFORM DETAIL
  NOTES & DETAILS
  TELECOMMUNICATIONS SITE PLAN
  TELECOM RISER, DETAILS, NOTES
- LIGHTING PLAN
  GROUND FLOOR POWER PLAN
  TELECOMMUNICATIONS PLAN
  FIRE ALARMS PLAN
  ROOF ELECTRICAL PLAN SCHEDULES
  LEGEND AND NOTES
- PL-101 PL-100 SITE PLAN PLUMBING LAY-OUT
  BUILDING AND PLUMBING LAYOUT
  SITE PLAN-PLUMBING LAYOUT
  SITE PLAN-PLUMBING LAYOUT
  BUILDING B & C VAC LAYOUT
  VAC NOTES & SCHEDULES
  VAC DETAILS
- PL-102 PL-200 VAC-100 VAC-200 VAC-300

ARQ. ANTONIO MARQUES CARRION

ARQ. BERNARDO A. MARQUES

701 PONCE DE LEON 201, SAN JUAN, P.R. 00907 P.O. BOX 191385, SAN JUAN, PUERTO RICO 00919

E-MAIL : BERNARDO@MARQUESARQUITECTOS.COM

LIC. 3436

35) 36) 37) 37) 38) 40) 41)

DISTRITOS DE CALIFICACIÓN

AD: A-G: B-Q: CR: CR: CT-L: Área Desarrollada
Agrícola General
Agrícola Productivo
Bosque
Comercial Intermedio
Conservación de Recursos
Conservación de Recursos Históricos
Comercial Turístico Intermedio
Comercial Turístico Liviano

 $\bigcirc$ 

 $\supset$ 

 $\bigcirc$ 

Z

 $\leq$ 

 $\triangleright$ 

 $\Box$ 

 $\cap$ 

 $\sim$ 0

0 0

RED PRIMARIA URBANA EN DISEÑO

RED PRIMARIA EN DISEÑO

RED SECUNDARIA EN DISEÑO

== RED EN CONSTRUCCION =

RED TERCIARIA

RED PROPUES

RED SECUNDARIA

RED PRIMARIA URBANA

RED PRIMARIA

DS: Desarrollo Selectivo
DT-G: Dotacional General
DT-P: Dotacional Parque
DTS: Desarrollo Turístico Selectivo
I-L: Industrial Liviano
I-P: Industrial Pesado
M: A Mejorarse
PF: Propiedad Federal
PR: Preservación de Recursos

R-A: RC-M: R-G: R-G: R-I: RT-A: SH: UR:

Residencial de Alta Densidad
Residencial Comercial Mixto
Recreación Comercial Extensa
Rural General
Residencial Intermedio
Residencial Turístico de Alta Densidad
Sitios Históricos
Terrenos Urbanizables

B-Q <u>ဂ</u> Ð

CR-H A-P CT-I DTS DT-P CT-L DT-G DS 무 로 두 RC-E RT-A Elemento Geográfico

Zona de Interás Turístico

Calificación

RED PROPUESTA EN EVALUACION CONECTOR INTERMODAL RAMPAS DE ACCESO CARRIL REVERSIBLE CAMINO MUNICIPAL ROTULADO

> Rehabilitation Esq. Guillermo Godreau Calle Miguel Ten, Salinas, P.R.

> > 60% DRAWINGS SET

otras autoridades competentes, incluyendo, pero sin limitarse, a la terminación de la participación en los procedimientos de certificación profecional en la OIGPe.

Yo, Arq. Bernardo A. Marqués, Lic. # 15647 certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias. También certifico que entiendo que dichos planos y especificaciones cumplen con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Códigos de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con juridicción. Reconozco que cualquier falsa o falsificación de los hechos que se haya producido sin conosimiento o por negligencia ya sea por mi, mis gaentes o empleados o por etras personas con mi conocimiento. mis agentes o empleados, o por otras personas con mi conocimiento me hacen responsable de cualquier acción judicial y disciplinaria por la OIGPe y

WRQUES + WRQUES C.A.A.P.P.R. A.I.A.

## GENERAL NOTES:

- 1. THE GENERAL CONTRACTOR SHALL PROVIDE A SUPERINTENDENT ON—SITE DURING ALL PHASES OF CONSTRUCTION.

  2. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL DIMENSIONS REPRESENTED IN THESE DRAWINGS. ANY DISCREPANCIES BETWEEN DIMENSIONS ILLUSTRATED HERE AND EXISTING SHALL BE BROUGHT TO THE ARCHITECTS ATTENTION.

  3. THE CONTRACT DOCUMENTS CONSIST OF THIS SET OF DRAWINGS, CONSTRUCTION TECHNICAL SPECIFICATIONS, ADDENDA, CONSTRUCTION CHANGE DIRECTIVES, CHANGE ORDERS, THE CONTRACT BETWEEN THE OWNER AND CONTRACTOR, CONDITIONS OF THE CONTRACT AND ANY OTHER INFORMATION WRITTEN AND MUTUALLY AGREED UPON BETWEEN THE OWNER AND CONTRACTOR.

  4. THESE DRAWINGS ARE COMPLIMENTARY AND INTERRELATED. THE WORK OF ANY INDIVIDUAL TRADE IS NOT NECESSARILY CONFINED TO SPECIFIC DOCUMENTS, CHAPTERS OR LOCATIONS.

  5. GC TO NOTIFY THE ARCHITECT IMMEDIATELY USING THE DESIGNATED "REQUEST FOR INFORMATION" PROCEDURE IF DISCREPANCIES OR INCONSISTENCIES IN THE DOCUMENTS ARE DISCOVERED.
  - 5
- 6.
- DISCOVERED.

  6. CONSTRUCTION TECHNIQUES, METHODS, PROCEDURES, SEQUENCING AND SCHEDULING ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.

  7. IT IS THE INTENT OF THE CONTRACT DOCUMENTS TO COMPLY WITH ALL CODES AND ORDINANCES IN EFFECT AT THE TIME THE PERMIT IS ISSUED. NOTIFY THE ARCHITECT IMMEDIATELY UPON DISCOVERY OF SUSPECTED DEVIATION.

  8. ALL PENETRATIONS IN RATED CONSTRUCTION ARE TO BE SEALED WITH APPROPRIATE MATERIALS AS INDICATED BY THE DOCUMENTS OR OTHERWISE REQUIRED BY INSPECTORS OR APPLICABLE CODES AND ORDINANCES.

  9. DO NOT SCALE DRAWINGS. USE DIMENSIONS ONLY. NOTIFY ARCHITECT OF ALL SIGNIFICANT DISCREPANCIES IMMEDIATELY UPON DISCOVERY.

  10. GC TO COORDINATE ALL PENETRATIONS WITH EXISTING STRUCTURE AND NOTIFY ARCHITECT OF RECORD OF ANY CONFLICTS PRIOR TO COMMENCING THE WORK.

  11. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING FACILITY DIRECTOR FOR SPECIFIC INSURANCE REQUIREMENTS.

  12. THE LANDLORD SHALL RESERVE THE RIGHT TO STOP ANY CONSTRUCTION AT ANY TIME FOR SAFETY OR AESTHETIC REASONS OR IF CONTRACTORS AND SUB CONTRACTORS VIOLATE ANY OF THE RULES OR POLICIES OF THE MUNICIPLAITY.

  13. VERIFY BARRIER FREE (ADA) REQUIREMENTS.

  14. ONE SET OF LANDLORD APPROVED CONSTRUCTION DRAWINGS MUST REMAIN AT THE CONSTRUCTION SITE AT ALL TIMES.

  15. THE GC SHALL SUBMIT IN WRITING A CONSTRUCTION SCHEDULE FOR THE PROJECT.

9.

- 10.
- 12.
- 13. 14.

# DEMOLITION

- COORDINATE ALL DEMOLITION AND DEBRIS REMOVAL WITH FACILITIES MANAGEMENT <u>PRIOR TO START.</u>
  ALL PREVIOUS IMPROVEMENTS, FIXTURES AND SYSTEMS NOT TO BE REUSED SHALL BE REMOVED. REMOVE ALL EXISTING UTILITIES, NOT BEING REUSED, BACK TO LANDLORD'S POINT—OF—CONNECTION AND CAPPED AS REQUIRED. LEAVE ALL REMAINING CONSTRUCTION IN SAFE STATE. <u>DO NOT ABANDON SYSTEMS OR PREVIOUS IMPROVEMENTS.</u>
  THE GENERAL CONTRACTOR SHALL PROVIDE PROTECTION FOR ALL LANDLORD'S SYSTEMS AND FINISHES DURING DEMOLITION AND THROUGHOUT ALL PHASES OF CONSTRUCTION.
  ALL EXPOSED AND ABANDONED INFRASTRUCTURE (PIPE RUNS, METERS, ETC) SHALL BE REMOVED FROM SITE.

- REFERENCE ARCHITECTURAL SITE PLAN FOR NEW EXTERIOR AREAS AND PARKING GRADING AND SLOPE. NOTIFY ARCHITECT OF ANY DISCREPANCIES BETWEEN MARKED ELEVATIONS AND EXISTING CONDITIONS IF APPLICABLE.

  ALL EXTERIOR AREAS NOT DESIGNATED AS SIDEWALKS, PARKING AND CIRCULATION ZONES MUST BE FINISHED WITH HYDROSEED (GRASS). RESTORE ANY DAMAGED PLANTING AREAS.

## **INTERIOR**

- COORDINATE WITH MUNICIPALITY DEMOLITION SCHEDULE AND SITE ACCESS <u>PRIOR TO START.</u> COMPLETELY CLEAN ALL INTERIORS FOR BUILDING "A". CLEAR OUT ANY PESTS/BIRDS. ALL INTERIOR/EXTERIOR SURFACES AFFECTED BY PARTIAL DEMOLITIONS SHALL BE RESTORED AND REFINISHED AS PER FINISH SCHEDULE.

## SCHOOL BUILDING

- ALL EXTERIOR AND INTERIOR CEILINGS/PARAPETS WITH DAMAGED PLASTER/FINISH SHALL BE REPAIRED. SCRAPE, TREAT AND REFINISH ANY EXPOSED STEEL REINFORCEMENTS AS NEEDED PRIOR TO RE—PAINTING SURFACES.
  VERIFY THAT ALL ROOF DRAINS, DOWNSPOUTS ARE IN WORKING CONDITIONS. REPAIR ANY OBSTRUCTED OR DAMAGED DRAINS.
  THOROUGHLY CLEAN BUILDING ROOF.

## CONSTRI **JCTION**

- ALL TRANSITIONS BETWEEN DISSIMILAR FLOOR MATERIALS MUST BE FLUSH AND LEVEL. NO REDUCTION STRIPS SHALL BE PERMITTED.
  ALL FINISHES SHALL BE PER THOSE IN THE ARCHITECTURAL SCHEDULE OR APPROVED BY LANDLORD. NO SUBSTITUTIONS WILL BE PERMITTED WITHOUT PRIOR CONSENT FROM THE LANDLORD.

## CEILING

- GYPSUM BOARD CEILING SYSTEMS SHALL USE ½" HI STRENGTH CEILING BOARD WITH GALVANIZED STEEL STUDS OR HAT—CHANNELS (16"O.C.)
  PROVIDE SERVICE ACCESS PANELS IN ALL HARD—SURFACE CEILING AND IN AREAS WHERE ACCESS IS REQUIRED FOR MECHANICAL EQUIPMENT, SIGNS, ETC. PANELS SHOULD BE FLUSH—MOUNTED AND EMPLOY ONLY CONCEALED—TYPE HARDWARE.

- 9

- MECH, ELEC, LIFE—SAFETY

  1. SUBMIT MECHANICAL AND ELECTRICAL SYSTEMS RUNS. COORDINATE FOR LEAST IMPACT ON EXISTING CEILINGS.

  2. PROVIDE INSULATION ON ALL COLD WATER AND CONDENSATE/DRAIN LINES. DO NOT OUTFALL ROOF OR ANY MALL SURFACE.

  3. ALL WRING TO BE IN RIGID CONDUIT OR EMT.

  4. ALL AERIAL TELEPHONE/CTV CONNECTIONS ARE TO BE REMOVED. PROVIDE NEW CONNECTION POINT FOR TENANTS FROM NEW TELECOMMUNICATIONS CLOSET.

| NO.         |   | R | E | ٧ | ı | S | ı | 0 | N |  | ( |
|-------------|---|---|---|---|---|---|---|---|---|--|---|
|             |   |   |   |   |   |   |   |   |   |  |   |
| $\triangle$ |   |   |   |   |   |   |   |   |   |  |   |
| $\triangle$ |   |   |   |   |   |   |   |   |   |  |   |
| $\triangle$ |   |   |   |   |   |   |   |   |   |  |   |
| $\triangle$ |   |   |   |   |   |   |   |   |   |  |   |
| $\triangle$ |   |   |   |   |   |   |   |   |   |  |   |
|             |   |   |   |   |   |   |   |   |   |  |   |
|             |   |   |   |   |   |   |   |   |   |  |   |
|             | • |   |   |   |   |   |   |   |   |  | • |

THIS DRAWING AND ITS CONTENT IS THE PROPERTY OF THE OFFICE OF MARQUES + MARQUES ARQUITECTOS

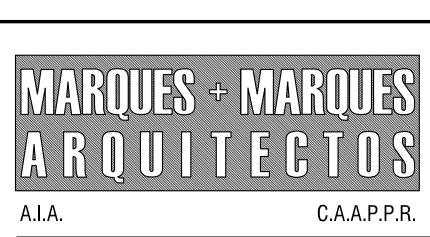
AND SHALL BE USED AS A REFERENCE
DOCUMENT AND WORKING INSTRUMENT

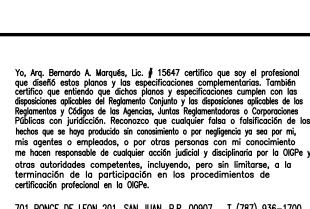
ONLY BY AUTHORIZED PERSONNEL ANY TOTAL OR PARTIAL REPRODUCTION

INFORMATION CONTAINED THEREIN IS

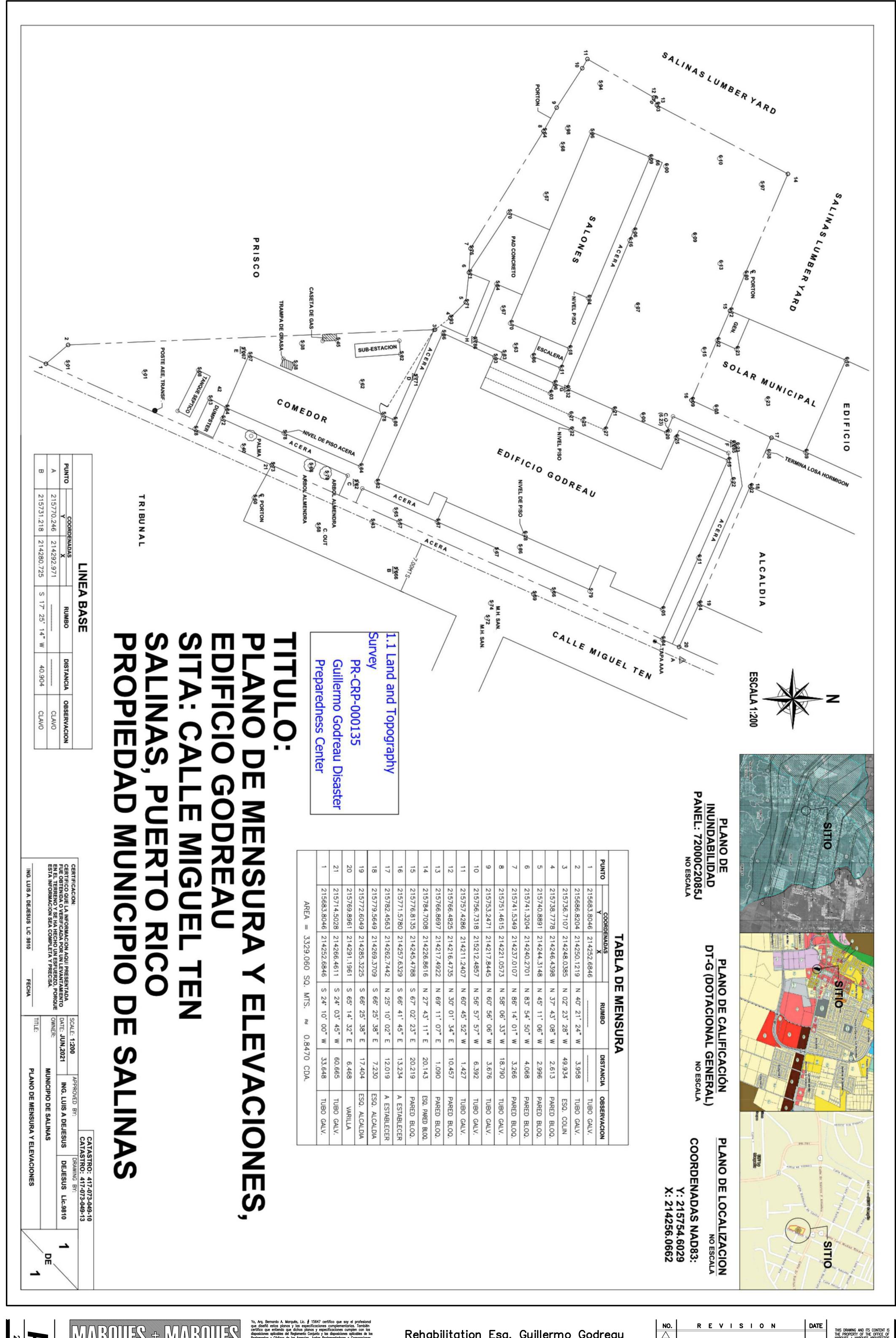
APPROPRIATE WRITTEN CONSENT

MARQUES + MARQUES ARQUITECTOS

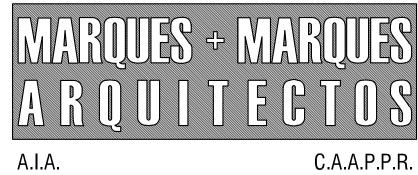


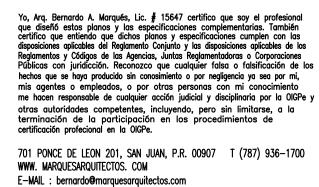


Rehabilitation Esq. Guillermo Godreau Escuela Guillermo Godreau, C. Miguel Ten, Salinas, PR



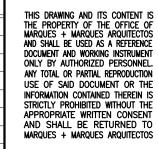


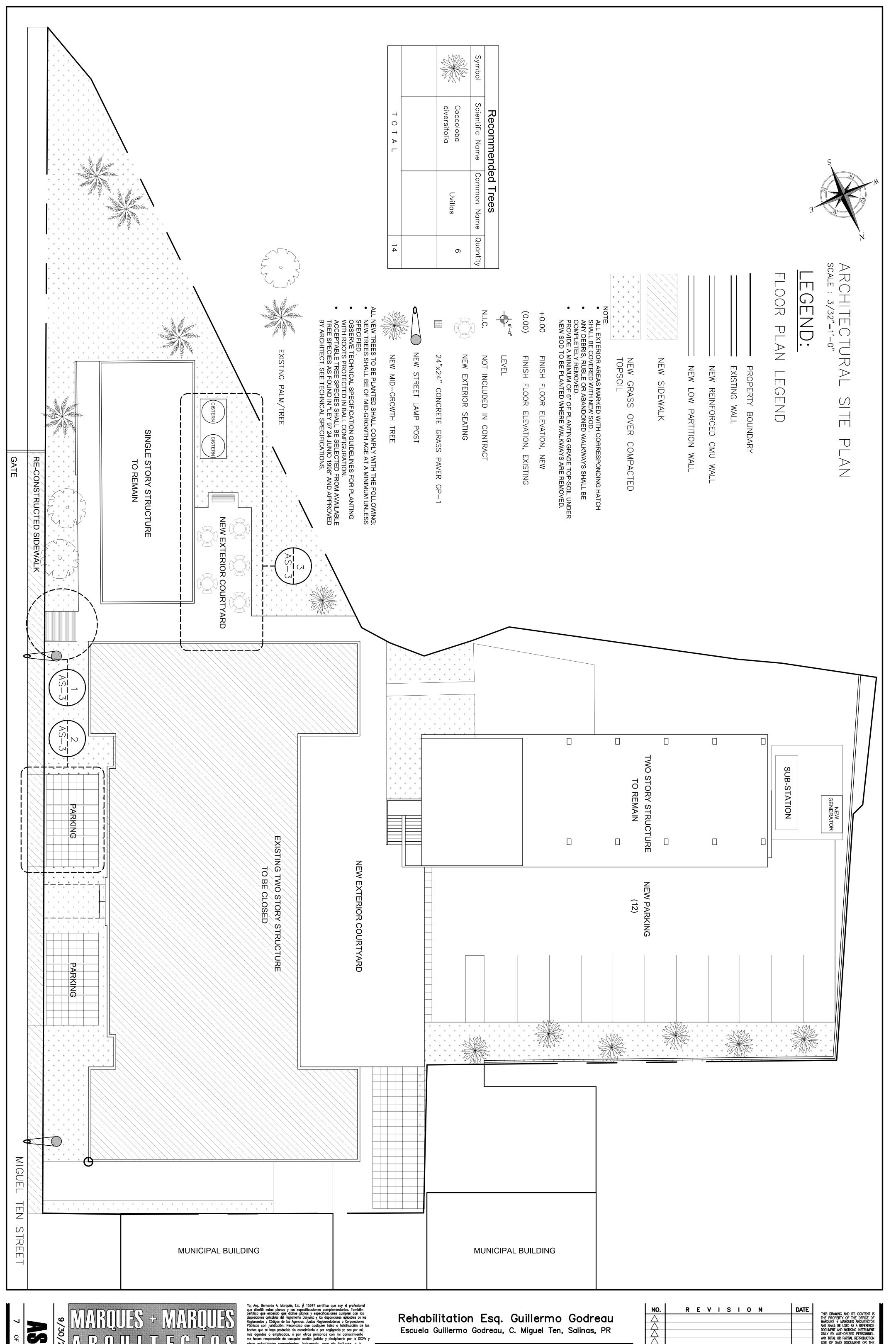






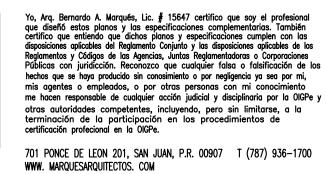
| NO.         |   | R | E | V | ı | S | ı | 0 | N | DAT |
|-------------|---|---|---|---|---|---|---|---|---|-----|
| $\triangle$ |   |   |   |   |   |   |   |   |   |     |
| $\triangle$ |   |   |   |   |   |   |   |   |   |     |
| $\triangle$ |   |   |   |   |   |   |   |   |   |     |
| $\triangle$ |   |   |   |   |   |   |   |   |   |     |
| $\triangle$ |   |   |   |   |   |   |   |   |   |     |
| $\triangle$ |   |   |   |   |   |   |   |   |   |     |
| $\triangle$ |   |   |   |   |   |   |   |   |   |     |
| $\triangle$ |   |   |   |   |   |   |   |   |   |     |
|             | • |   |   |   |   |   |   |   |   | •   |



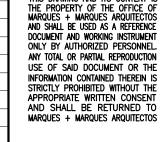


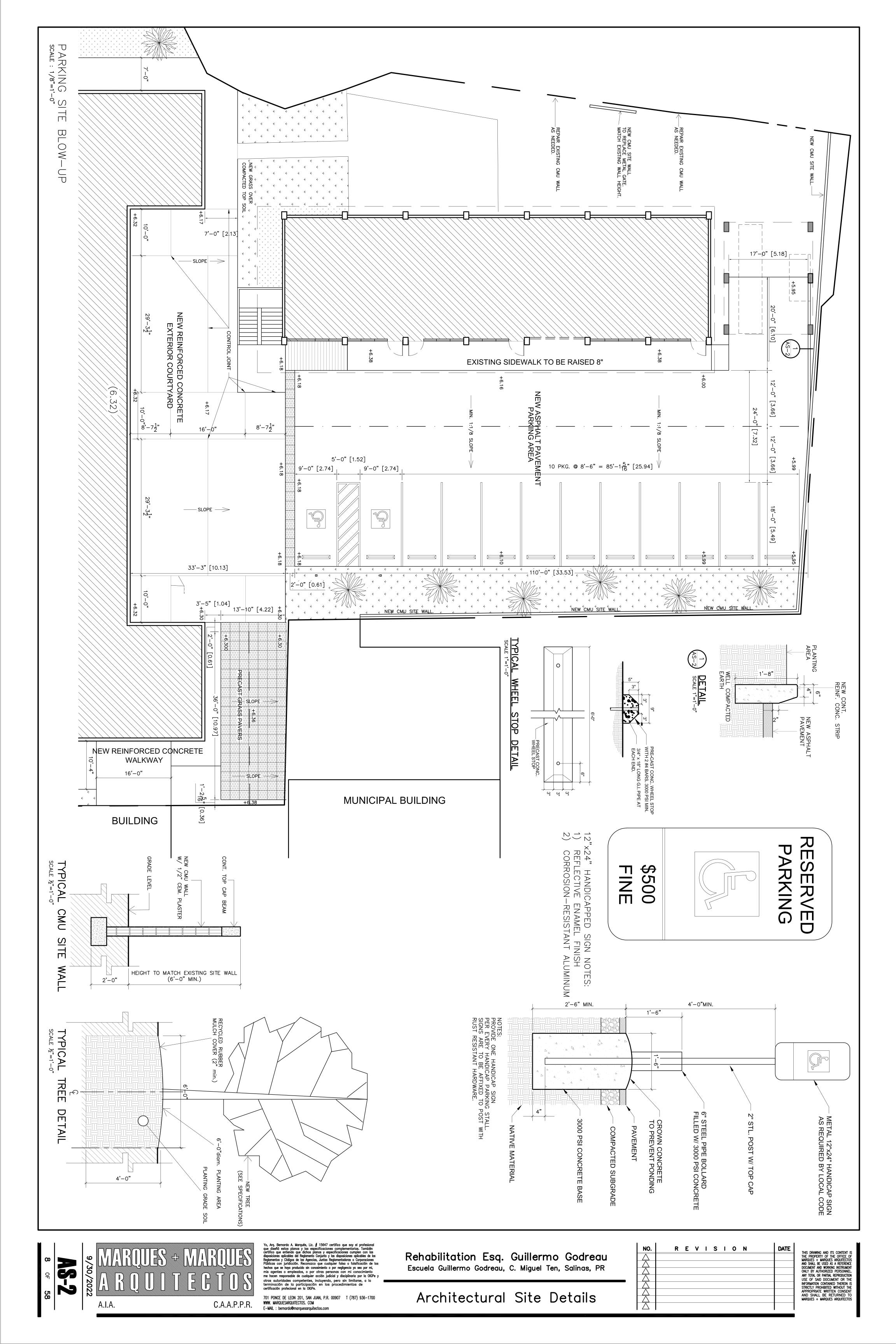


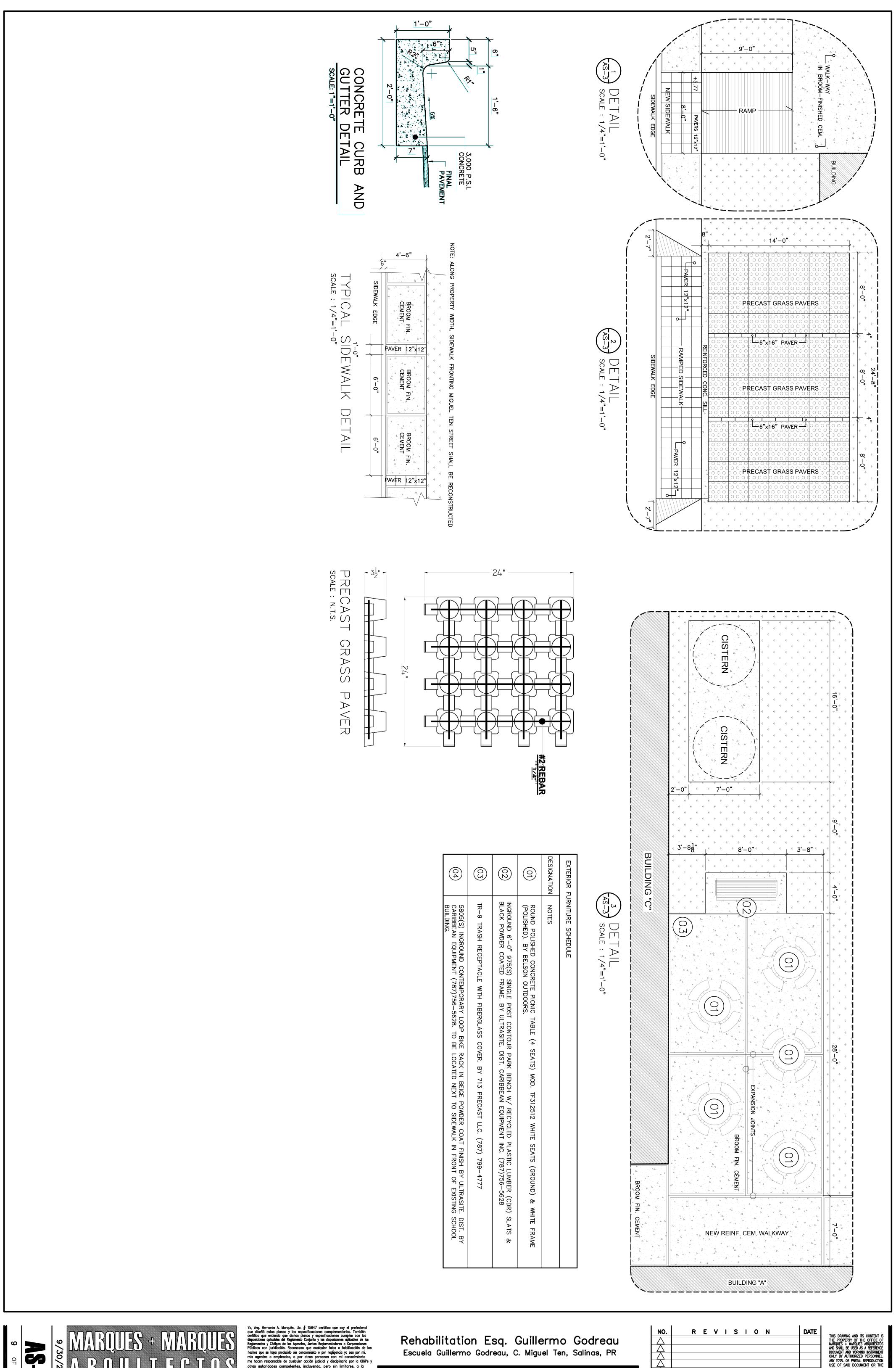




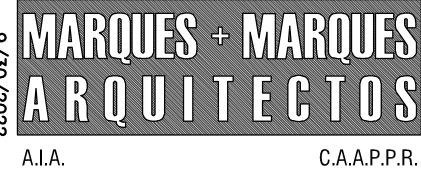
| NO.         |    | K | Ł | V | ı | S | ı | O | N |  | DAII |
|-------------|----|---|---|---|---|---|---|---|---|--|------|
| $\triangle$ |    |   |   |   |   |   |   |   |   |  |      |
| $\triangle$ |    |   |   |   |   |   |   |   |   |  |      |
|             |    |   |   |   |   |   |   |   |   |  |      |
| $\triangle$ |    |   |   |   |   |   |   |   |   |  |      |
|             |    |   |   |   |   |   |   |   |   |  |      |
|             |    |   |   |   |   |   |   |   |   |  |      |
|             |    |   |   |   |   |   |   |   |   |  |      |
|             |    |   |   |   |   |   |   |   |   |  |      |
|             | 21 |   |   |   |   |   |   |   |   |  |      |

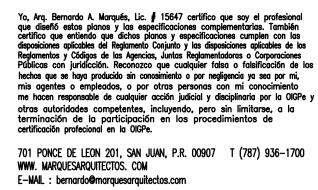




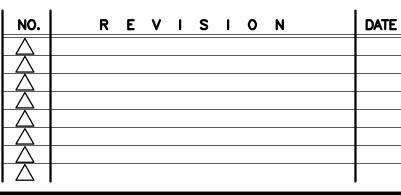


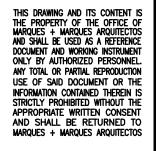


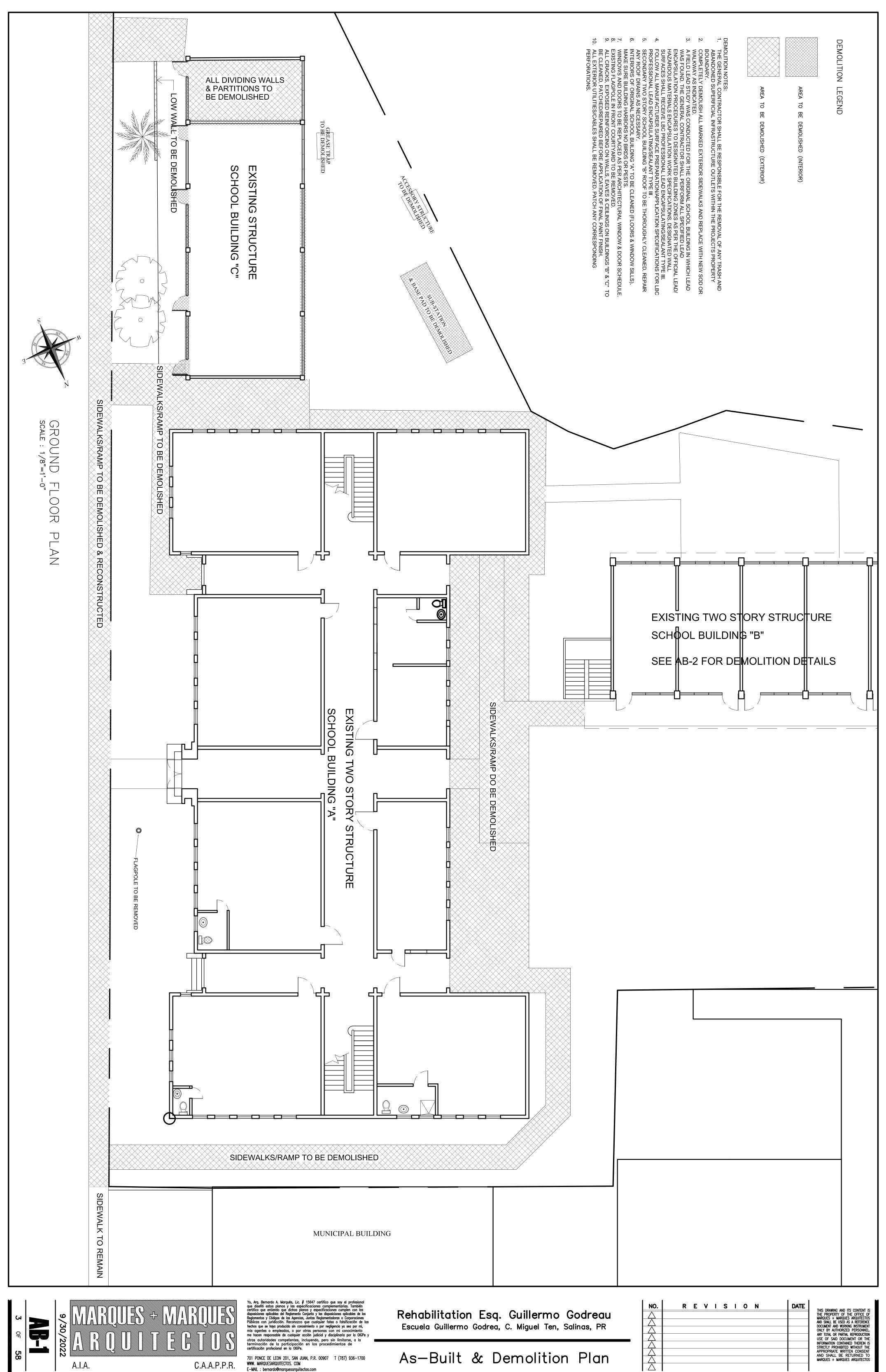


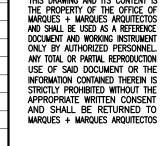


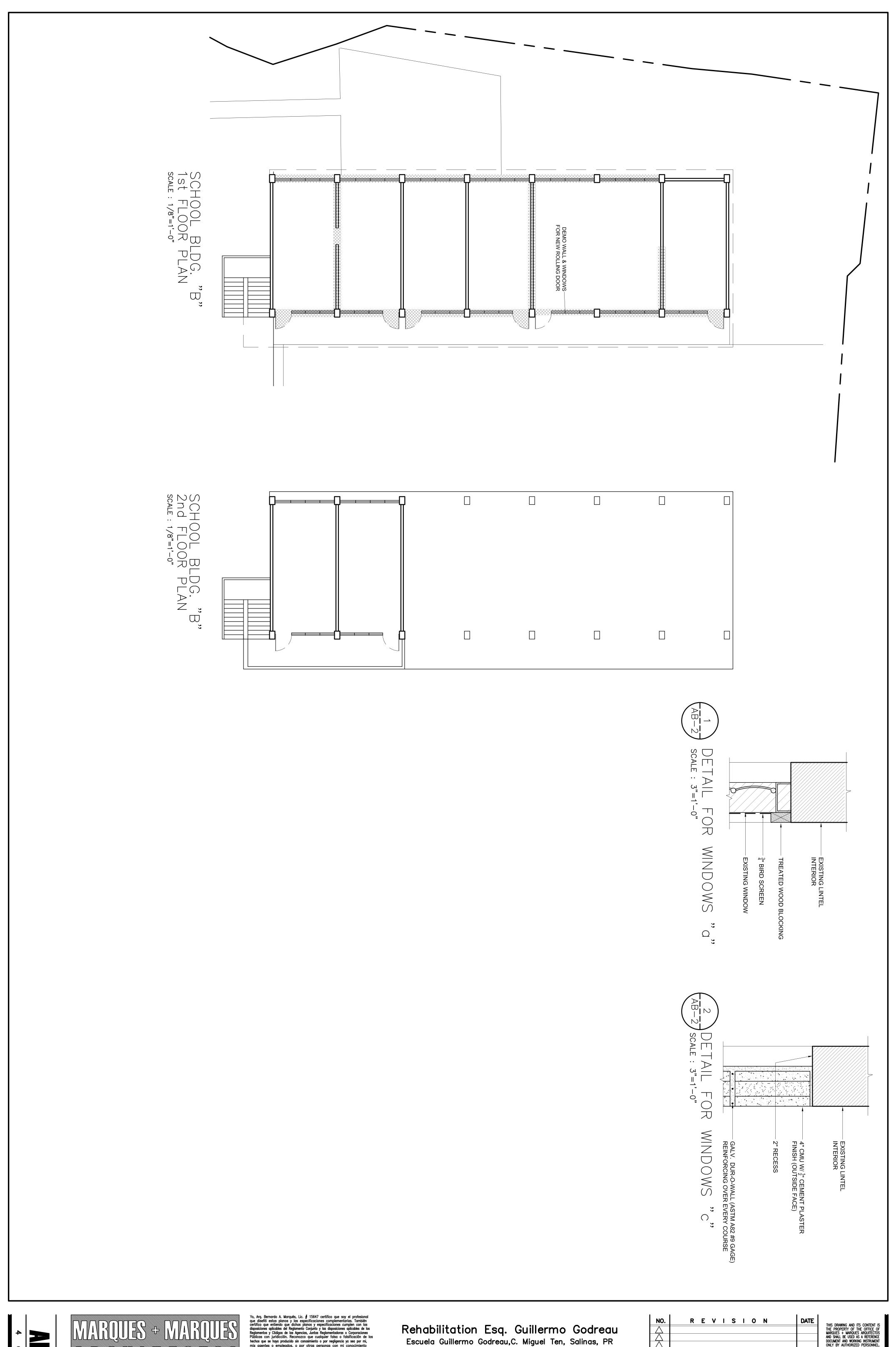




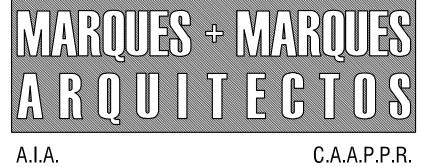








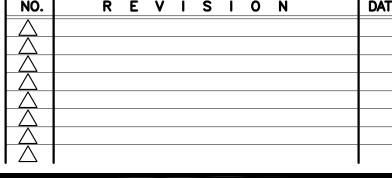


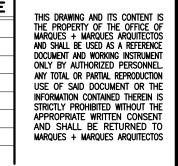


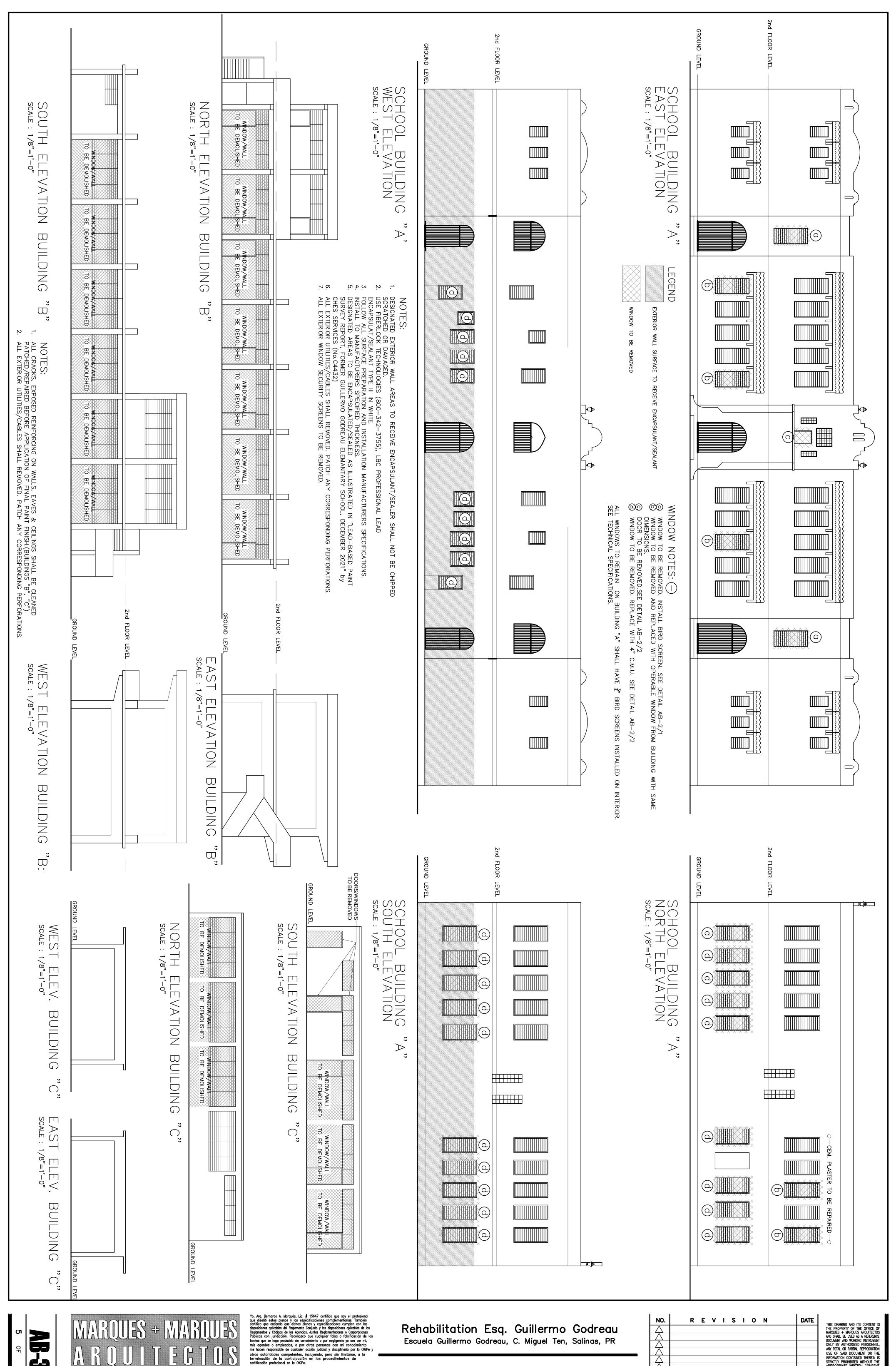




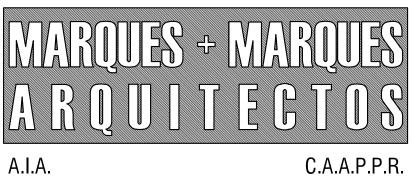
|                            | $\triangle$ |  |
|----------------------------|-------------|--|
| As-Built & Demolition Plan |             |  |

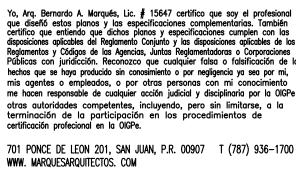






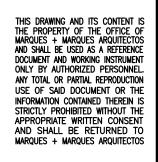


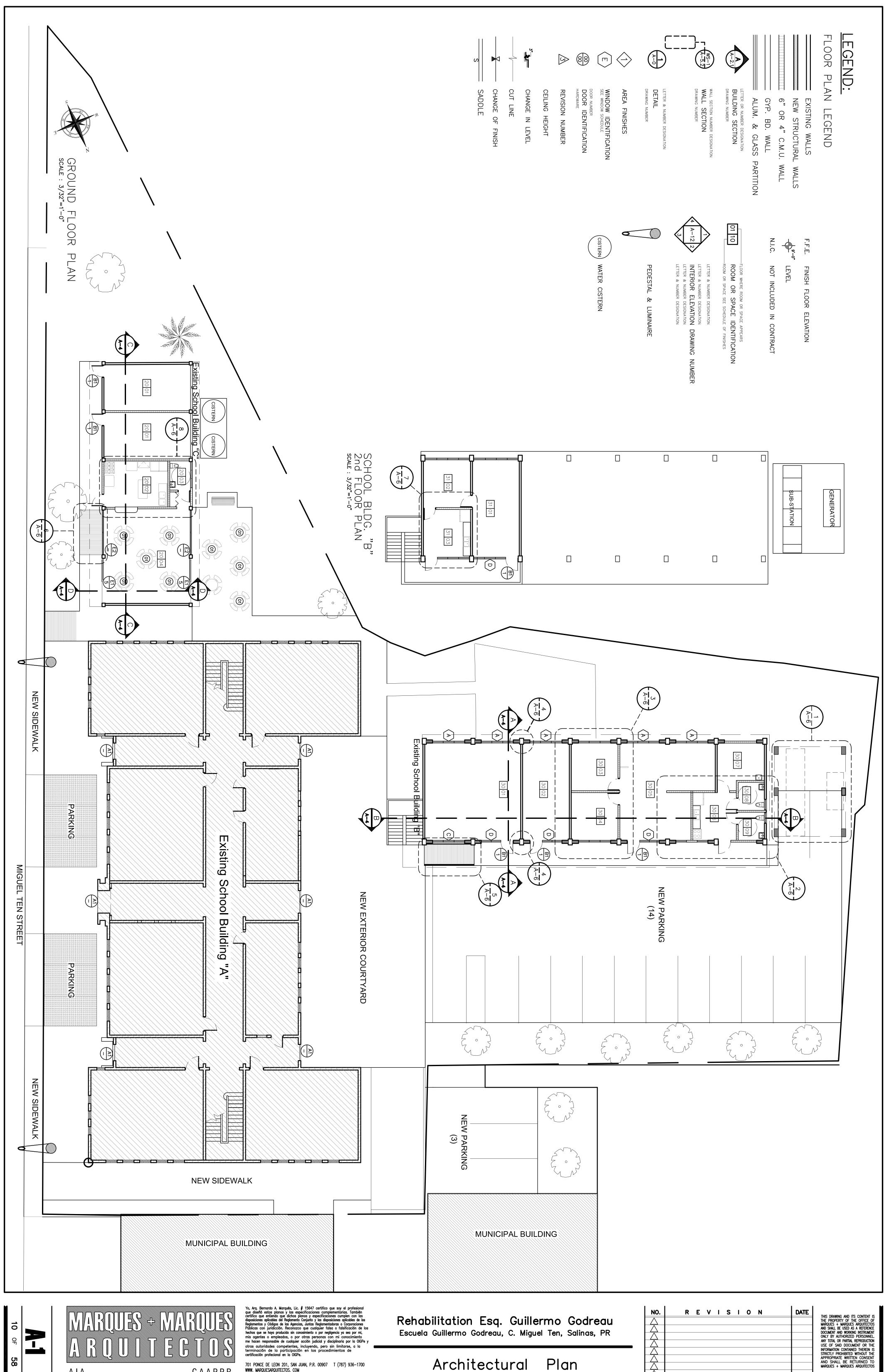


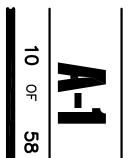


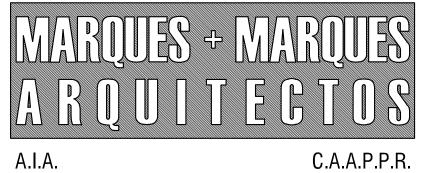
| As-Built | Elevations |
|----------|------------|
|          |            |

|    | _ |   |   |   |   |   |   |   |   |   |      |
|----|---|---|---|---|---|---|---|---|---|---|------|
| Ю. |   | R | Ε | ٧ | ı | S | ı | 0 | N |   | DATE |
| 7  |   |   |   |   |   |   |   |   |   |   |      |
| 7  |   |   |   |   |   |   |   |   |   |   |      |
| 7  |   |   |   |   |   |   |   |   |   |   |      |
| /  |   |   |   |   |   |   |   |   |   |   |      |
| 7  |   |   |   |   |   |   |   |   |   |   |      |
| /  |   |   |   |   |   |   |   |   |   |   |      |
| 7  |   |   |   |   |   |   |   |   |   |   |      |
| /  |   |   |   |   |   |   |   |   |   |   |      |
|    | • |   |   |   |   |   |   |   |   | • |      |
|    |   |   |   |   |   |   |   |   |   |   |      |



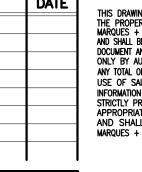


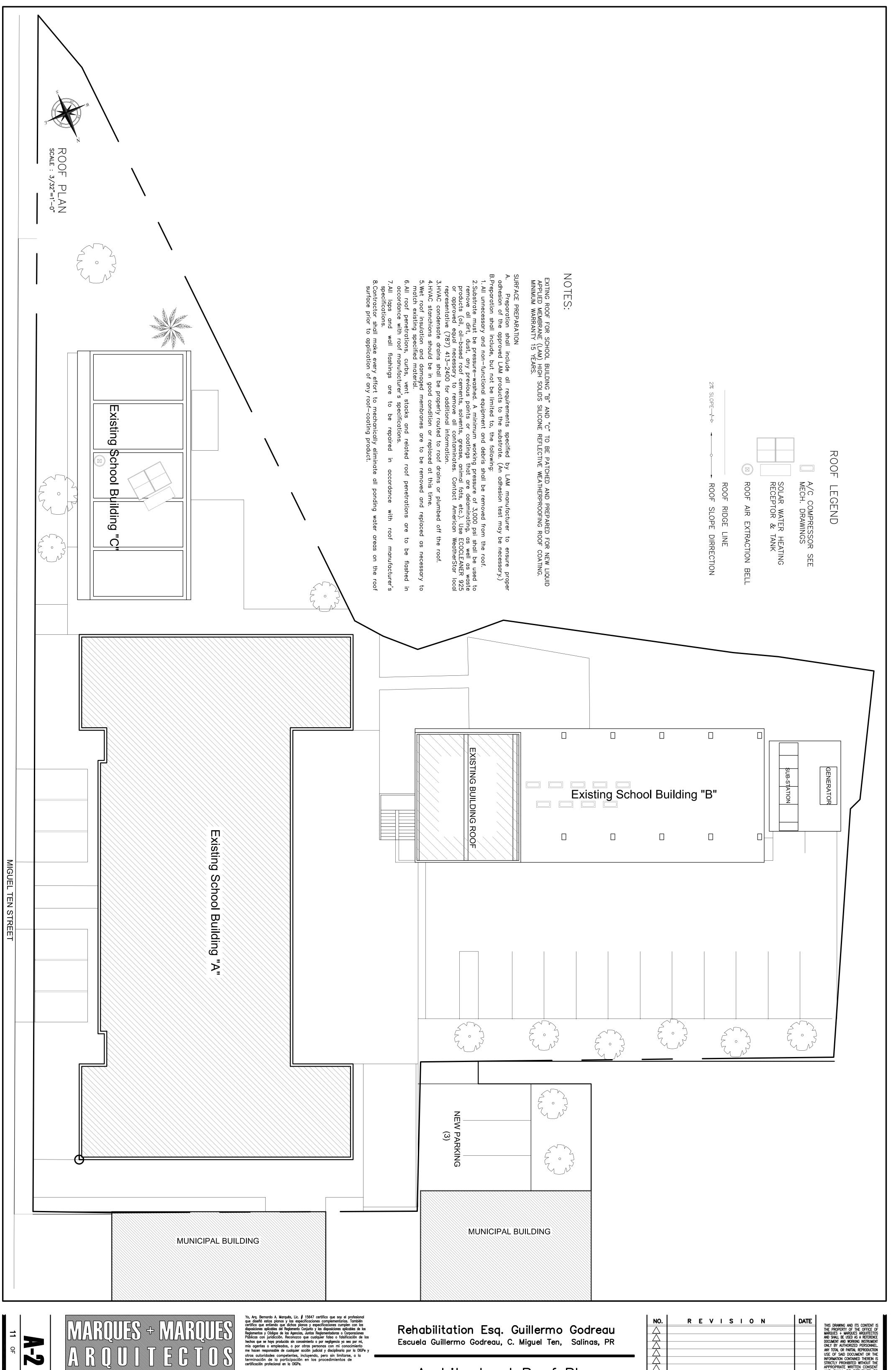




| Yo, Arq. Bernardo A. Marqués, Lic. # 15647 certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias. También certifico que entiendo que dichos planos y especificaciones cumplen con las   |
|---|
| disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los<br>Reglamentos y Códigos de las Agencias, Juntas Reglamentadoras o Corporaciones<br>Públicas con juridicción. Reconozco que cualquier falsa o falsificación de l<br>hechos que se haya producido sin conosimiento o por negligencia ya sea por mi, |
| mis agentes o empleados, o por otras personas con mi conocimiento me hacen responsable de cualquier acción judicial y disciplinaria por la OIGPe otras autoridades competentes, incluyendo, pero sin limitarse, a la terminación de la participación en los procedimientos de certificación profecional en la OIGPe.                      |
| 701 PONCE DE LEON 201, SAN JUAN, P.R. 00907 T (787) 936-1700 WWW. MARQUESARQUITECTOS. COM E-MAIL: bernardo@marquesarquitectos.com   |

| merrio Godreda, C. Wilga | er ren, Sumus, rik |             |
|--------------------------|--------------------|-------------|
|                          | _                  |             |
|                          |                    |             |
|                          | DI                 |             |
| rchitectural             | Plan               |             |
|                          |                    | $\triangle$ |
|                          |                    | · — ·       |





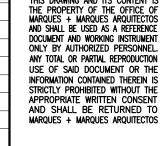
Architectural Roof Plan

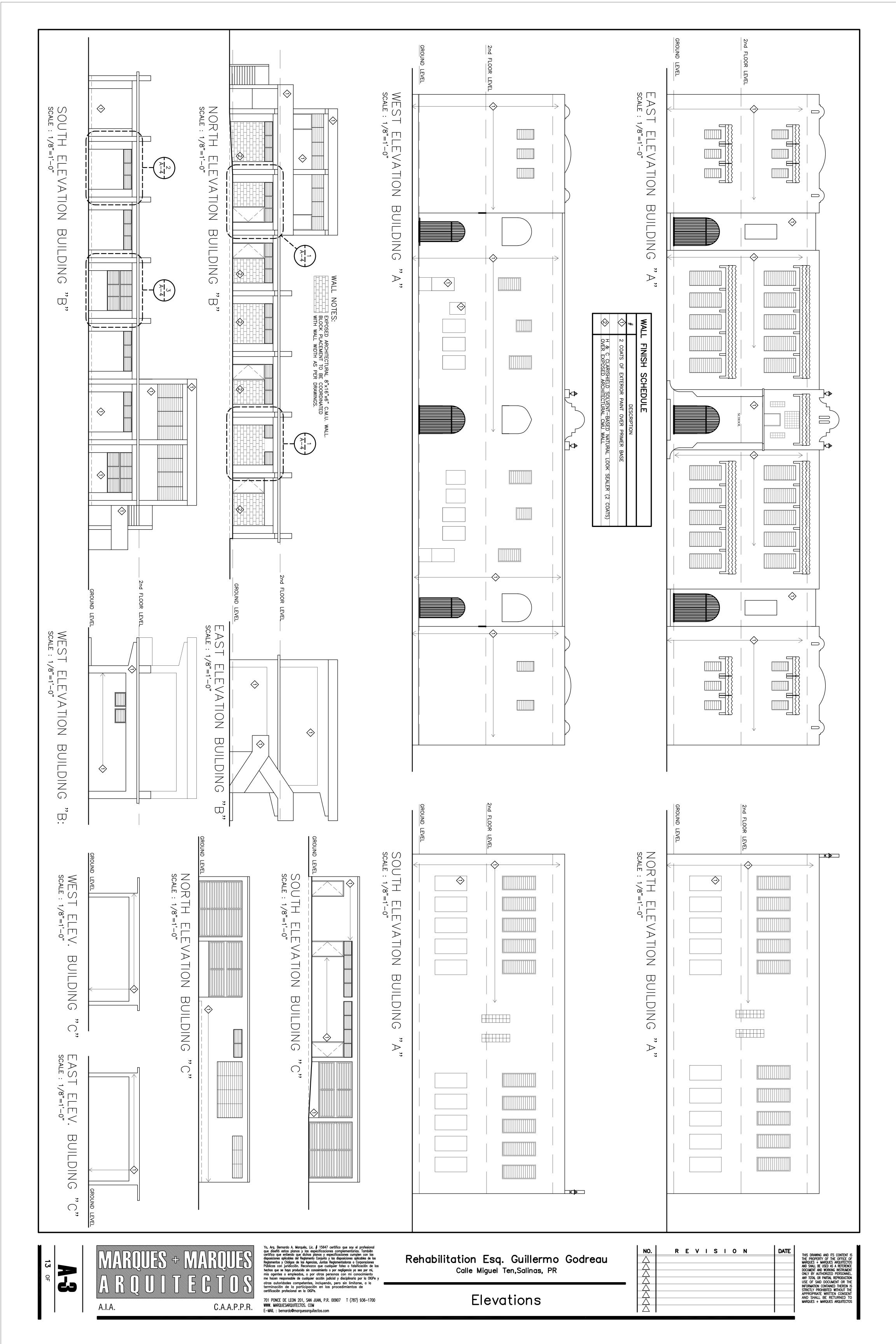


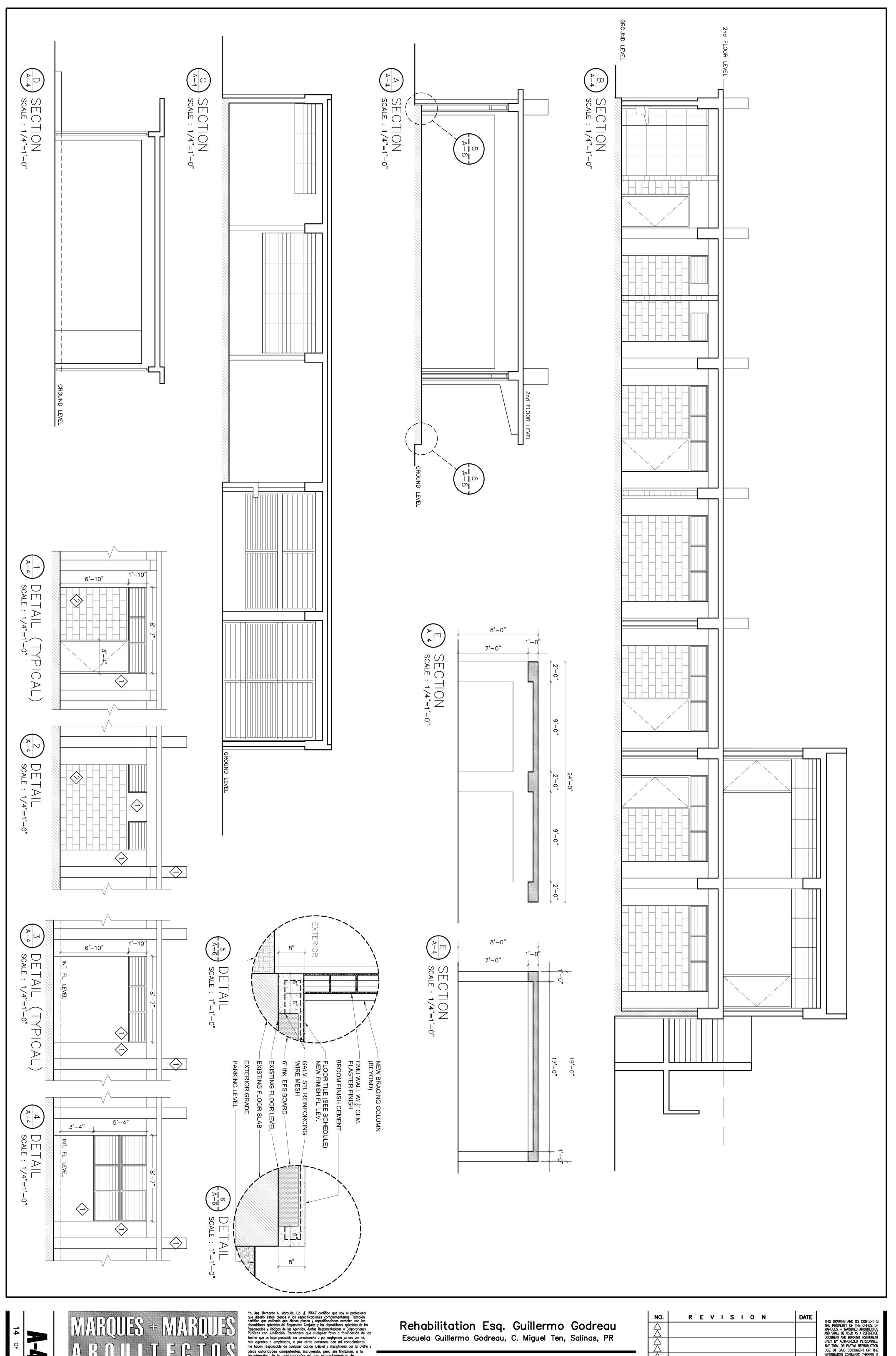


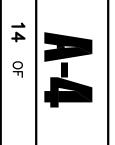


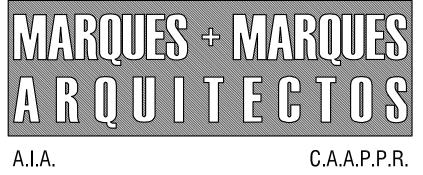
| 110.        | N | L | V | ı | 3 | ı | U | 14 |  | DAIL |
|-------------|---|---|---|---|---|---|---|----|--|------|
| $\triangle$ |   |   |   |   |   |   |   |    |  |      |
|             |   |   |   |   |   |   |   |    |  |      |
|             |   |   |   |   |   |   |   |    |  |      |
|             |   |   |   |   |   |   |   |    |  |      |
|             |   |   |   |   |   |   |   |    |  |      |
|             |   |   |   |   |   |   |   |    |  |      |
|             |   |   |   |   |   |   |   |    |  |      |
|             |   |   |   |   |   |   |   |    |  |      |
|             |   |   |   |   |   |   |   |    |  | •    |

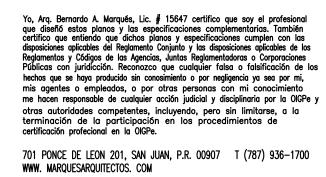




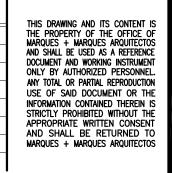


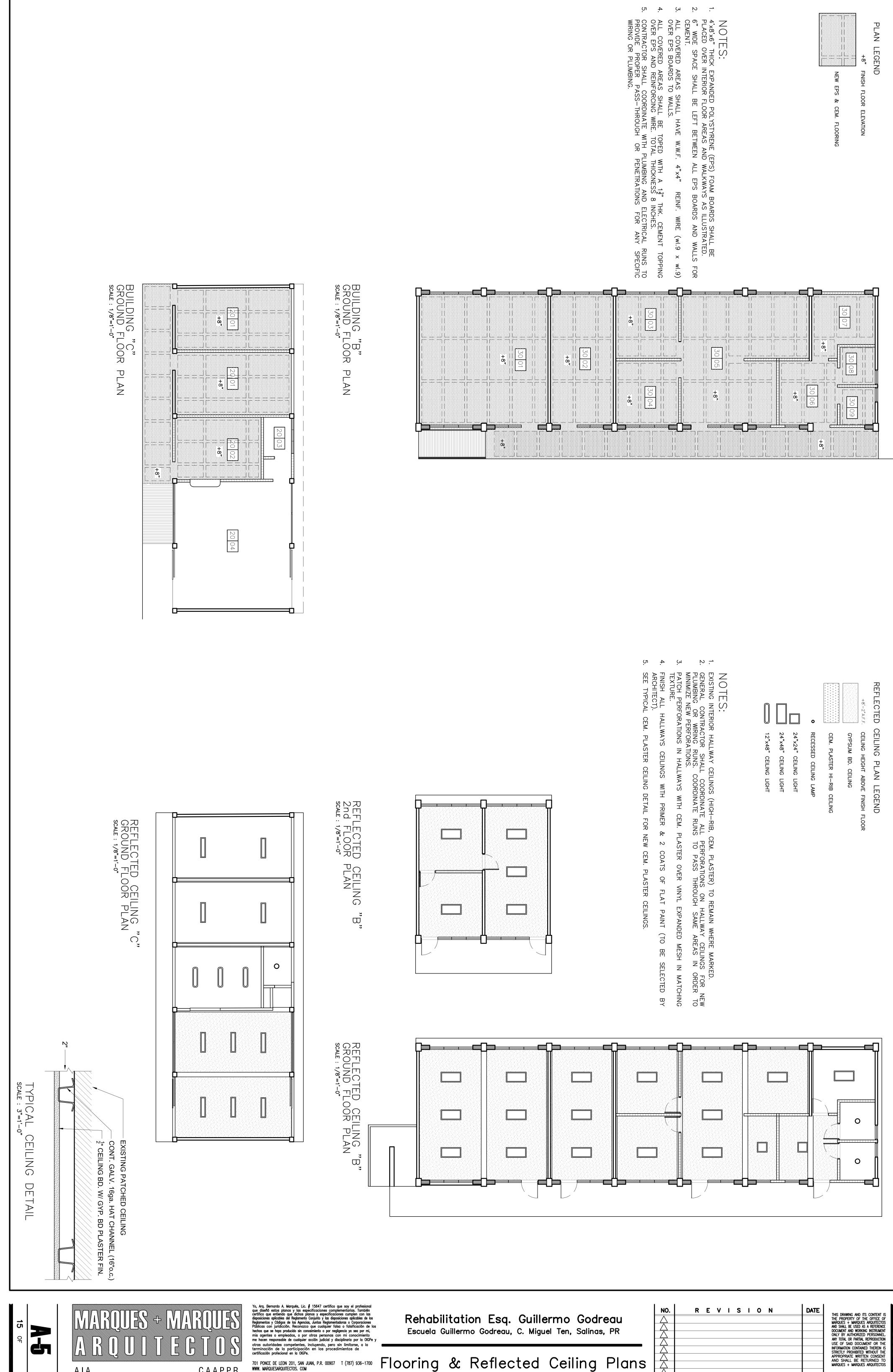




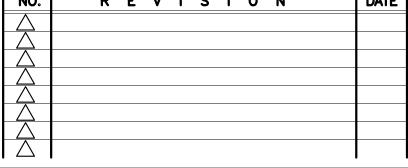


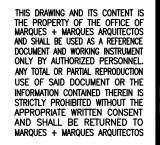
| n Esq. Guillermo Godreau<br>Godreau, C. Miguel Ten, Salinas, PR | $\triangle$             |  |
|---|-------------------------|--|
| Sections  | $\triangle$ $\triangle$ |  |

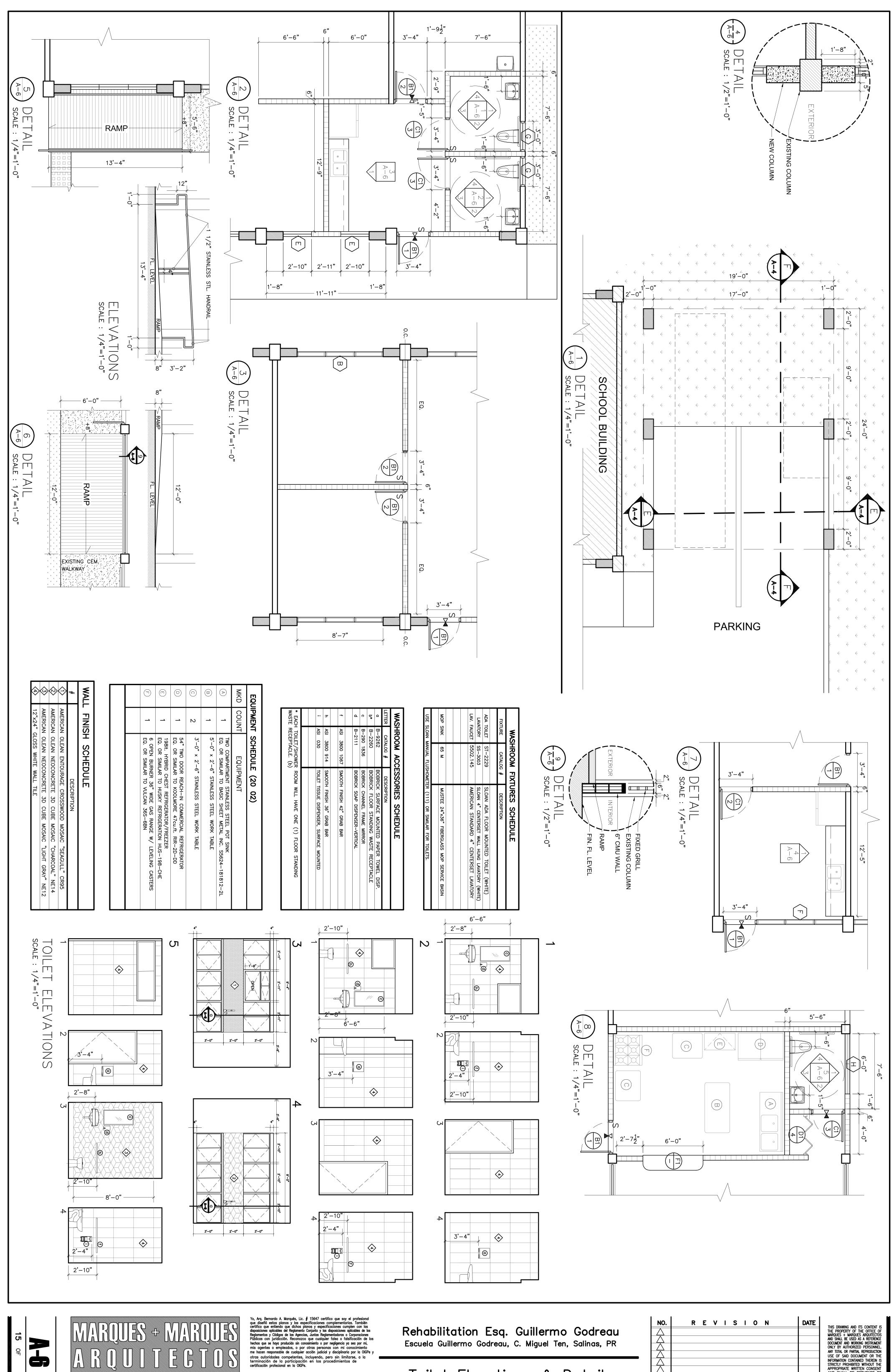


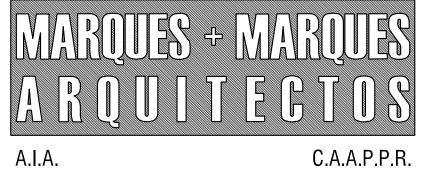


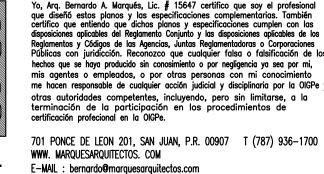




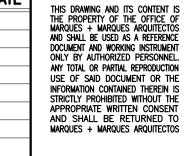


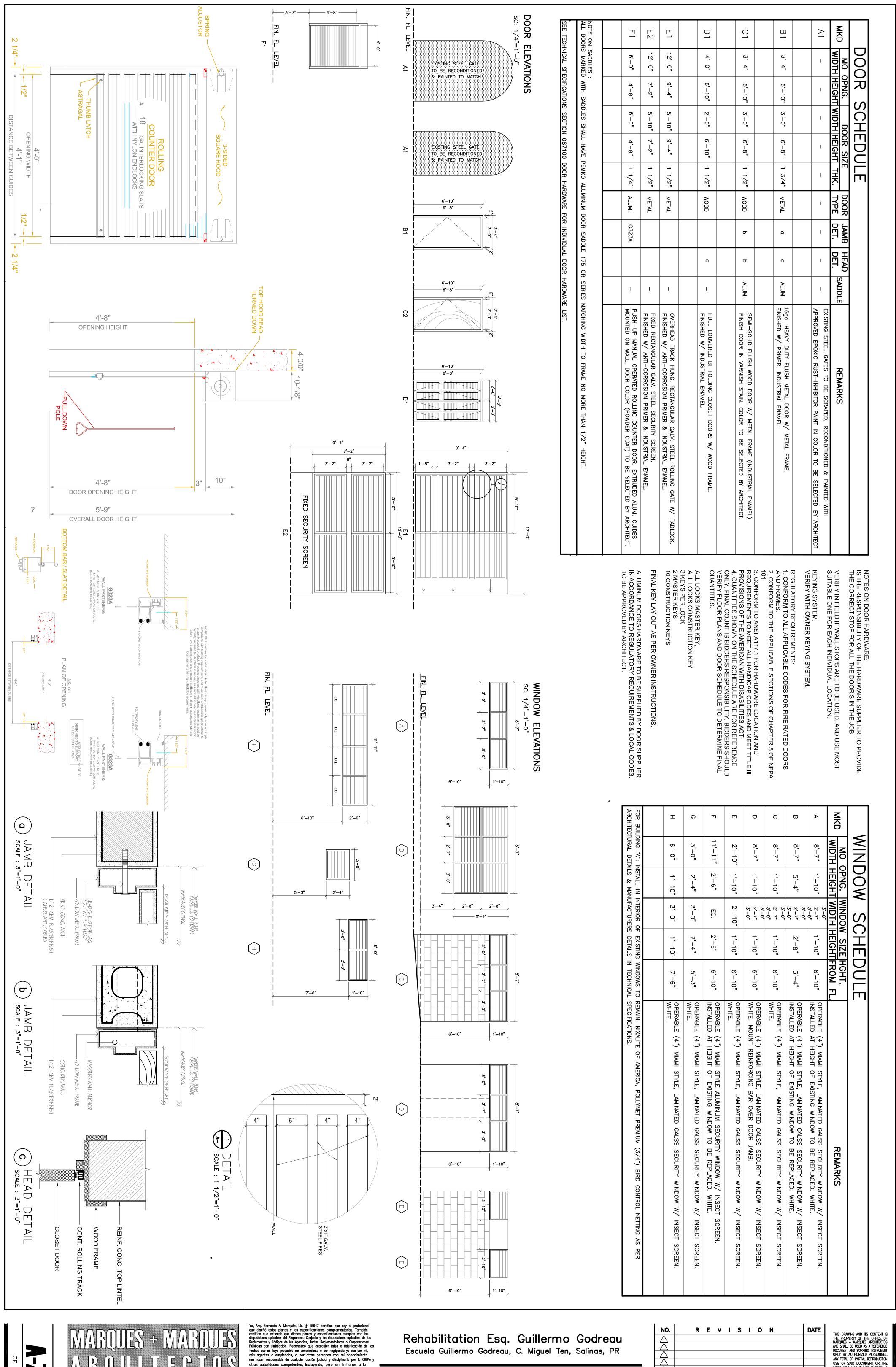












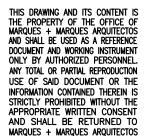


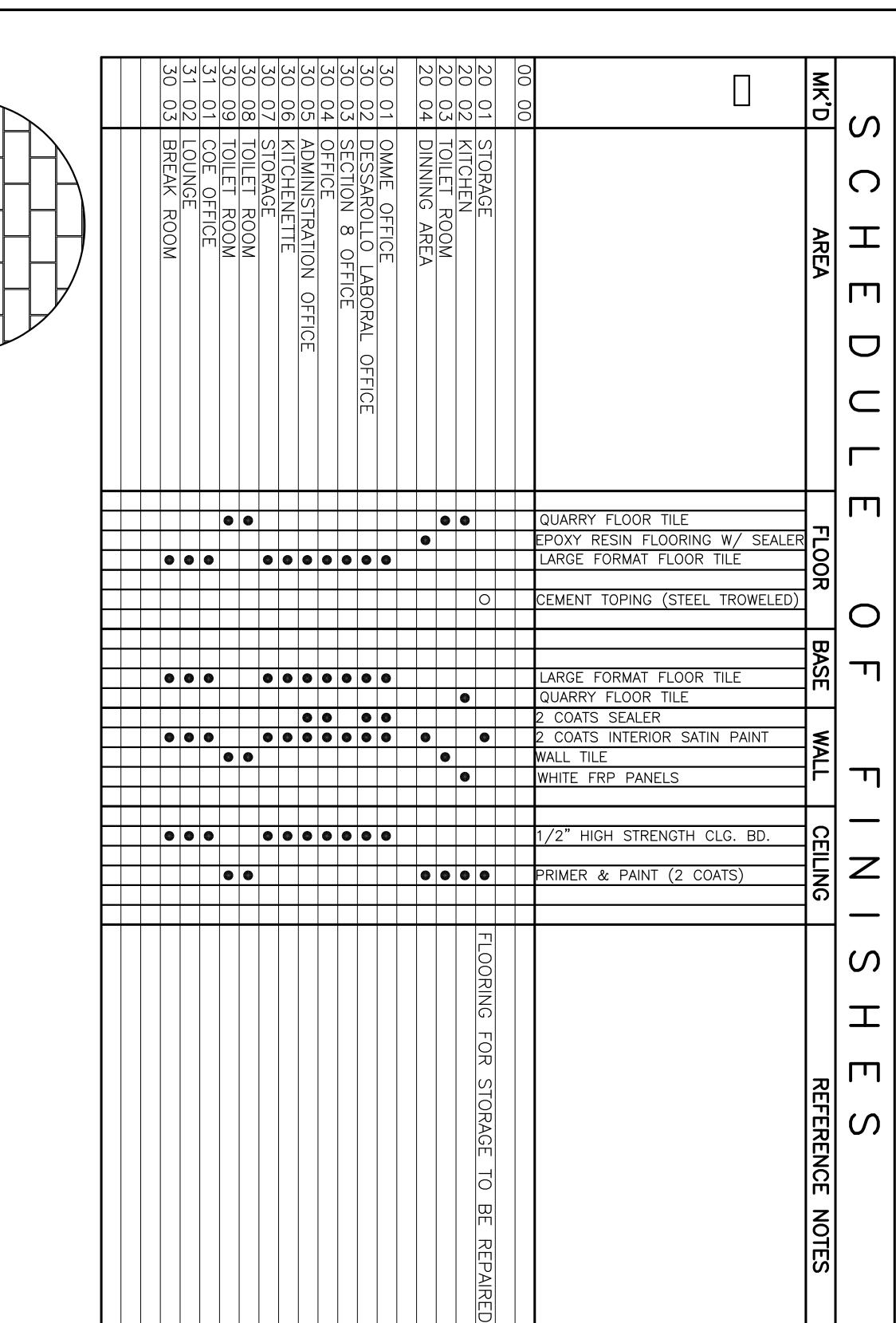




| Doors | &            | Windows  | Schedule  |
|-------|--------------|----------|-----------|
| 00013 | $\mathbf{C}$ | WIIIGOWS | Scriedule |

| NO.         |   | R | Ε | ٧ | ı | S | 1 | 0 | N |  | DATE |
|-------------|---|---|---|---|---|---|---|---|---|--|------|
| $\triangle$ |   |   |   |   |   |   |   |   |   |  |      |
| $\triangle$ |   |   |   |   |   |   |   |   |   |  |      |
| $\triangle$ |   |   |   |   |   |   |   |   |   |  |      |
| $\triangle$ |   |   |   |   |   |   |   |   |   |  |      |
| $\triangle$ |   |   |   |   |   |   |   |   |   |  |      |
| $\triangle$ |   |   |   |   |   |   |   |   |   |  |      |
| $\triangle$ |   |   |   |   |   |   |   |   |   |  |      |
| $\triangle$ |   |   |   |   |   |   |   |   |   |  |      |
|             | • |   |   |   |   |   |   |   |   |  | •    |





# GENERAL

1) THE GENERAL CONTRACTOR SHALL BE REPRESENTED IN THESE DRAWINGS. ANY EXISTING SHALL BE BROUGHT TO THE AR BE RESPONSIBLE FOR FIELD ARCHITECTS ATTENTION. VERIFICATION OF ALL DIMENSIONS DIMENSIONS ILLUSTRATED HERE AND

2) USE ONLY FIRE RATED MOLDTOUGH CONSTRUCTION AND USE ONLY HI—STR CONSTRUCTION. RENGTH GYPSUM BOARD (OF / ENGTH ½" MOLDTOUGH (OF APPROPRIATE THICKENS)

1 CEILING GYPSUM BOARD FOR FOR WALL

3) ALL STUDS FOR GYP. BD. CONSTR CTION SHALL ВE GALVANIZED

4) FRP PANELS TO BE SIMILAR TO M. WHITE (P100). STANDARD CLASS  $\equiv$ FIRE RATED 4'x10' Z PEBBLE TEXTURE,

5) EXISTING FLOORING FOR STORAGE WITH FLOOR SEALER. (2001)SHALL B F CLEANED AND PATCHED AS NECESSARY. FINISH

6) BIRD NETTING TO BE 3/4" BLACK PRESENT INSTALLATION DIAGRAMS TO WINDOWS TO REMAIN ON BUILDING "A ESH WITH A NE APPROVED MINIMUM 10 YEA BY ARCHITECT. EAR WARRANTY. T. INSTALLATION CONTRACTOR APPLIES TO A

7) LARGE FORMAT TILE SHALL BE DALTILE UNITY (24"X24") WITH COLOR TO BE SELECTED BY ARCHITECT. USE CORRESPONDING S-SPECIFIED. 1" GROUT -36C9TA 6" JOINT BASE o z UNPOLISHED FINISH ROOMS WHERE

NECCESARY

8) WALL TILE FOR TOILET ROOMS TO BΕ 12"×24" MATTE WHITE.

9) QUARRY TILE SHALL BE 6"x6" FAWN BASE TILE FOR BASE ON ROOMS WHERE GRAY (QO6) BY AMERICAN OLE SPECIFIED EXCEPT FOR TOILET ROOMS. CORRESPONDING Q1665

10) USE SANDED GROUT ONLY FOR ALL FLOORING APPLICATIONS.

11) EPOXY RESIN FLOORING SHALL BE KEY RESIN CO. "KE BE SELECTED BY ARCHITECT FROM MANUFACTURERS FULL 502—PRO PRIMER AS RECOMMENDED BY MANUFACTURER , COAT. "KEY VERSAFLAKE RESIN FLOORING" IN ULL LINE. FLOORING SHALL BE INSTALLE R AND SEALED WITH KEY 514 OR 515 I COLOR -ED OVER EPOXY T 지 지 지 지 지 지

12) FLOOR SEALER SHALL BE APPLIED PATCHING ON DESIGNATED SPACES. US D TO EXISTING () CLEAR SEA SURF,

ACES

**AFTER** 

THOROUGH

CLEANING AND

13) ALL CEILINGS & WALLS IN HALLWAYS I BEING PATCHED OR REDONE AS SPECIFIED. BUILDING שָּׁ" & ВE CLEANED AND ℧ ANTED  $\equiv$ 

14) THE GENERAL CONTRACTOR SHALL REVIEW DRAWINGS AND REFER TO THE TECHNICAL CON ANY DISCREPANCIES SHALL BE BROUGHT TO THE TECHNICAL CONTRACTOR SHALL BE BROUGHT TO THE PROPERTY OF THE PROPERT

EVIEW ALL I

L INFORMATION RUCTION SPECIFIC ATTENTION OF 1

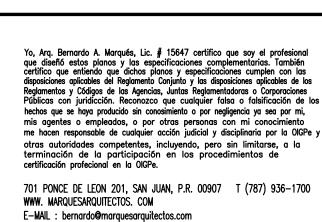
I PRESENTED IN FICATIONS FOR THE PROJECT

ADDITIONAL INFORMATIC ARCHITECT IMMEDIATELY

Z

"C" NOT

C.A.A.P.P.R. A.I.A.



TYPICAL INTALLA SCALE: N.T.S.

T 12

7X VV

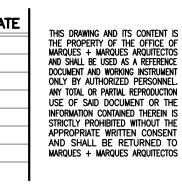
4 FL(

 $\equiv$ 

 $\Box$ 



| NO.         | R | Ε | ٧ | ı | s | ı | 0 | N |  |
|-------------|---|---|---|---|---|---|---|---|--|
|             |   |   |   |   |   |   |   |   |  |
| $\triangle$ |   |   |   |   |   |   |   |   |  |
|             |   |   |   |   |   |   |   |   |  |
| $\triangle$ |   |   |   |   |   |   |   |   |  |
| $\triangle$ |   |   |   |   |   |   |   |   |  |
|             |   |   |   |   |   |   |   |   |  |
| $\triangle$ |   |   |   |   |   |   |   |   |  |
|             |   |   |   |   |   |   |   |   |  |





October 20, 2022

### Arch. Carlos A. Rubio Cancela

Executive Director State Historic Preservation Officer Cuartel de Ballajá Bldg. San Juan, Puerto Rico

Re: Authorization to Submit Documents

Dear Arch. Rubio Cancela:

The U.S. Department of Housing (HUD) approved the allocations of Community Development Block Grant (CDBG-DR) funds on February 9, 2018. It also approved the allocation of Community Development Block Grant Mitigation (CDBG-MIT) funds on January 27, 2020. The purpose of these allocations is to address unsatisfied needs as a result of Hurricanes Irma and Maria in September 2017; and to carry out strategic and high-impact activities to mitigate disaster risks and reduce future losses.

To comply with the environmental requirements established by HUD, the Department of Housing of Puerto Rico (PRDOH) contracted Horne Federal LLC to provide environmental registry review services, among others, that will support the objectives of the agenda for both CDBG-DR and CDBG -MIT Programs.

In line to expedite the processes, Horne Federal LLC, is authorized to submit to the State Historic Preservation Officer, documentation of projects related to both the CDBG-DR and CDBG-MIT on behalf of PRDOH.

Cordially,

Juan C. Pérez Bofill, P.E. M.Eng Director of Disaster Recovery

CDBG DR-MIT

# **Attachment 13 – Historic Preservation (continued)**

• Maintenance Plan and SHPO Submittal Evidence

Fw: PRDOH CDBG-DR City Revitalization Program\_20231211 Submission - SHPO 05-30-23-05/PR-CRP-000135 - Salinas - Acceptance and Implementation Letter

PRSHPO Submissions <submissions@prshpo.pr.gov>

Tue 12/12/2023 11:19 AM

To:Lauren Poche <Lauren.Poche@horne.com>

2 attachments (2 MB)

PRDOH CDBG-DR and MIT\_SHPO Authorization Letter\_English.pdf; PRDOH\_City Revitalization Program\_SHPO 05-30-23-05\_PR-CRP-000135\_Salinas\_Acceptance and Implementation Letter 20231211.pdf:

CAUTION: This email is from an external sender. Do not click links or open attachments unless you recognize the sender and know the content is safe.



Saludos!

Acusamos el recibo de su correo electrónico, próximamente uno de nuestros especialistas evaluará su proyecto.

Cordialmente,

Solimar Resto Feliciano Adm. Sistemas de Oficina III P.O. BOX 00902-3935 San Juan, P.R. 00902-3935 T. (787) 721-3737 x.2025 F.(787) 721-3773

### AVISO:

La Oficina Estatal de Conservación Histórica (OECH) desea informar a las agencias, municipios y público en general, que ya digitalizó sus operaciones y servicios. Compartimos fecha e información necesaria para que comiencen a enviar documentación en la nueva página web SHPO Online: submissions.oech.pr.gov .



La Oficina Estatal de Conservación Histórica (OECH) informa a las agencias, municipios y público en general, que a partir de este 4 de diciembre de 20 comenzaremos a recibir documentos correspondientes a proyectos bajo la Sección 106, créditos contributivos federales para conservación histórica y búsquedas, entre otros, a través de SHPO Online al enlace en nuestra página web: submissions.oech.pr.gov. Aclaramos que el 1 de enero de 2024, e último día que se acusará recibo de documentos en submissions@prshpo.pr.gov. A partir de ese día no se aceptará entrega de proyectos, que no sea través de la plataforma indicada.

Esperamos con este nuevo servicio, lograr una mayor eficiencia en el proceso de evaluación de proyectos y asistencia al público.



AVISO DE CONFIDENCIALIDAD: Este correo electrónico contiene información confidencial de la Oficina Estatal de Conservación Histórica (OECH), del Gobierno de Puerto Rico. Está destinado únicamente a la persona o entidad a la que se dirige. Si no es el destinatario designado, se le prohíbe divulgar, distribuir o copiar este correo. Notifique al remitente inmediatamente por correo electrónico si ha recibido esta comunicación por error y elimine el mismo de su sistema.

CONFIDENTIALITY NOTE: This electronic mail contains confidential information from State Historic Preservation Office (SHPO), of the Government of Puerto Rico. It is intended only for the individual or entity to which it is addressed. If you are not the designated recipient, you are prohibited from disclosing, distribute, or copying this mailing. Please notify the sender immediately by e-mail if you have received this communication in error and delete the one from your system.

From: Lauren Poche <Lauren.Poche@horne.com>

Sent: Monday, December 11, 2023 3:47 PM

To: PRSHPO Submissions <submissions@prshpo.pr.gov>

Cc: Gloria Ortiz <pmortiz@prshpo.pr.gov>; Marel Del Toro Cabrera <mdtoro@prshpo.pr.gov>; Jennifer Evans <Jennifer.Evans@horne.com>; Hargedis Roman Delgado <Hargedis.Roman-Delgado@hornepr.com>

Subject: PRDOH CDBG-DR City Revitalization Program\_20231211 Submission - SHPO 05-30-23-05/PR-CRP-000135 - Salinas - Acceptance and Implementation Letter

Good afternoon,

On behalf of the Puerto Rico Department of Housing and the subrecipient, the municipality of Salinas, we are submitting the requested Acknowledgement and implementation letter for your records regarding the approved Maintenance and Preservation Plan prepared for the Guillermo Godreau Manatau School.

Attached to this email is the PRDOH authorization letter, and acceptance letter with a letter from the municipality included. These documents can also be downloaded at the following Sharefile link in the subfolder "20231211\_Acceptance and Implementation Letter". <a href="https://hornellppoc.sharefile.com/f/fof1bf00-116f-4fdd-ba68-a89da9473a79">https://hornellppoc.sharefile.com/f/fof1bf00-116f-4fdd-ba68-a89da9473a79</a>. The three additional subfolders at the folder link contain the previous documents submitted for this project.

If you have any questions, please contact me at 225-405-7676 or by email at <a href="mailto:lauren.poche@horne.com">lauren.poche@horne.com</a>.

As always, thank you for all of your assistance. We look forward to your response.

Kindest regards,

Lauren Bair Poche, M.A.

EHP Senior Manager - Architectural Historian, Government Services | HORNE

D: 225.341.6171

horne.com LinkedIn Twitter Insights



October 20, 2022

### Arch. Carlos A. Rubio Cancela

Executive Director State Historic Preservation Officer Cuartel de Ballajá Bldg. San Juan, Puerto Rico

Re: Authorization to Submit Documents

Dear Arch. Rubio Cancela:

The U.S. Department of Housing (HUD) approved the allocations of Community Development Block Grant (CDBG-DR) funds on February 9, 2018. It also approved the allocation of Community Development Block Grant Mitigation (CDBG-MIT) funds on January 27, 2020. The purpose of these allocations is to address unsatisfied needs as a result of Hurricanes Irma and Maria in September 2017; and to carry out strategic and high-impact activities to mitigate disaster risks and reduce future losses.

To comply with the environmental requirements established by HUD, the Department of Housing of Puerto Rico (PRDOH) contracted Horne Federal LLC to provide environmental registry review services, among others, that will support the objectives of the agenda for both CDBG-DR and CDBG -MIT Programs.

In line to expedite the processes, Horne Federal LLC, is authorized to submit to the State Historic Preservation Officer, documentation of projects related to both the CDBG-DR and CDBG-MIT on behalf of PRDOH.

Cordially,

Juan C. Pérez Bofill, P.E. M.Eng Director of Disaster Recovery

CDBG DR-MIT



December 11, 2023

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 05-30-23-05, Municipality Acknowledgement and Implementation Letter for PR-CRP-000135, Centro Multidisciplinario de Servicios a la Comunidad Project, Salinas, Puerto Rico

Dear Architect Rubio Cancela,

We thank you for your letter response dated Friday, October 20, 2023. In that response, your office stated that the Maintenance & Preservation Plan developed by Marques + Marques Arquitectos for Guillermo Godreau School was deemed acceptable and met the Standards of the U.S. National Park Service for Mothballing Historic Structures. It was also requested that a letter of acknowledgement and implementation of the proposed plan on behalf of the Municipality of Salinas be submitted for your records.

On behalf of PRDOH and the municipality of Salimas, we accept this condition and are presenting your office with a letter from the municipality emphasizing their acceptance and commitment. This document is attached to this letter, along with the maintenance plan for your records.

Please contact me with any questions or concerns by email at <a href="mailto:lauren.poche@horne.com">lauren.poche@horne.com</a> or phone at 225-405-7676.

Kindest regards,

Lauren Bair Poche. M.A.

Architectural Historian, EHP Senior Manager

Attachments







### Municipio de Salinas

Karilyn Bonilla Colón Alcaldesa

22 de noviembre de 2023

Departamento de la Vivienda Proyecto de Revitalización de Centros Urbanos

RE: CDBG-DR PR-CRP-000135 Centro Multidisciplinario de Servicios a la Comunidad, Salinas, PR

Saludos cordiales:

Bajo el programa CDBG-DR City Revitalization, el Municipio de Salinas presentó el proyecto PR-CRP-000135 Centro Multidisciplinario de Servicios a la Comunidad, en Salinas, PR, que consiste en la rehabilitación del antiguo plantel escolar Guillermo Godreau. Como parte de los requisitos ambientales y de preservación histórica, el Municipio radicó al Departamento de la Vivienda (DV) la consulta según requerido bajo el proceso de la Sección 106 del Acta Nacional de Preservación Histórica (NHPA). El proyecto fue presentado a la Oficina Estatal de Conservación Histórica (OECH o SHPO, en inglés) y como resultado se nos requirió presentar un plan de mantenimiento y conservación para el edificio histórico de la Guillermo Godreau (año de construcción 1935-1937).

El Municipio de Salinas ha recibido el plan de mantenimiento y conservación de parte del Diseñador, Arq. Bernardo A. Marqués, para el proyecto en referencia. Conforme a las recomendaciones del este plan, el Municipio desarrollará un itinerario regular de vigilancia, mantenimiento y monitoreo para el edificio "A" (edificio escolar histórico), basado en la Tabla de Mantenimiento y Lista de Verificación para edificios que estarán cerrados temporeramente (Mothballing Checklist), y consistente con las recomendaciones del Servicio Nacional de Parques.

Para este proyecto, el Municipio de Salinas destacará un (1) empleado a realizar los trabajos de mantenimiento de la facilidad antes mencionada, siguiendo el plan de mantenimiento y conservación desarrollado. El empleado trabajará en el lugar ocho (8) horas al mes. El presupuesto para el empleado será de \$ 10.00 la hora, para un total anual de 96 horas, \$ 960.00. El Municipio asumirá los costos de cualquier trabajo adicional que haya que realizar como parte del plan.

El Municipio de Salinas tiene el compromiso de mantener sus facilidades en óptimas condiciones. El Departamento de Obras Publicas tiene la responsabilidad de los trabajos de mantenimiento de las instalaciones municipales, tales como reparaciones menores, carpintería y plomería liviana, pintura de edificios, mantenimientos de áreas verdes, desinfección y otras acciones correctivas menores.







### Municipio de Salinas

Karilyn Bonilla Colón Alcaldesa

Si necesita información adicional puede contactarme llamando al teléfono (787) 824-3050 Ext. 2698.

Atentamente,

José C. Collazo Machado

ose CCOLL

Gerente

Municipio de Salinas

Anejos: "MAINTENANCE & PRESERVATION PLAN, Programa Revitalización de Ciudades, Multidisciplinary Citizen Service Center, Escuela Guillermo Godreau, Calle Miguel Ten, Salinas, Puerto Rico"

### MAINTENANCE & PRESERVATION PLAN

# Programa Revitalización de Ciudades Multidisciplinary Citizen Service Center

Escuela Guillermo Godreau Calle Miguel Ten, Salinas, Puerto Rico

Architect: MARQUES + MARQUES ARQUITECTOS

Structural Engineer: Ing. Miguel A. Zapata Electrical Engineer: Requena & Associados

Mechanical, Sanitary Engineer: JLMS Consulting Engineers, P.S.C.

### **INDEX**

### **DOCUMENTATION**

- 1. Memorial
- 2. Building Assessment

### **STABILIZATION**

- 3. Professional condition assessment
- 4. Pest control
- 5. Moisture penetration evaluation

### **MOTHBALLING**

- 6. Building security
- 7. Building ventilation
- 8. Existing infrastructure/systems
- 9. Maintenance & Monitoring Plan for Protection

### Attachments:

- #1 Evaluación Estructural, Proyecto Escuela Guillermo Godreau Manatau, Salinas, PR
- #2 **Construction Drawings** Programa Revitalizacion de Ciudades, Rehabilitation Esq. Guillermo Godrea, Escuela Guillermo Godreau, C. Miguel Ten, Salinas, Puerto Rico
- #3 Mothballing Checklist

### Memorial

The municipality of Salinas has proposed to remodel the existing Guillermo Godreau school complex. This three building school complex is located in Miguel Ten Street near the urban center of Salinas. The property is relatively flat and occupies 3,329.06 square meters. Its coordinates are NAD83 x:214256.0662 y:215754.6029. The three buildings located in the property include:

- 1. Original school building (A). This two-story building was constructed in reinforced concrete and has a metal roof structure. Its floor area is 8,255.6 square feet per floor for a total of 16,511.2 square feet.
- 2. New classroom building (B). This two-story, reinforced concrete classroom building has 2,477 square feet at ground level and 718 square feet on the second floor of classroom space. It is located behind the original school building on the northern side of the lot.
- 3. Small service building (C). This one-story, 1,648.3 square feet reinforced concrete structure is located on the western side of the lot, next to the original school building.

Initially, the original classroom building (A) was to be remodeled and have its infrastructure updated to serve as the main Service Center. Structural studies were performed which revealed major material and structural deficiencies which do not allow for this building's use without extensive and costly structural retrofitting. This intervention was deemed beyond the scope for the current project. The structural analysis is presented as part of the Professional Conditions Assessment.

This project will focus on the interior remodeling of the newer classroom buildings (B) & (C) as well as the paving and repairing of the grounds for these buildings which include the creation of new parking areas within the property. The original school building is to be closed. Its façade will be painted, and minor reparations are to be performed on various windows to prevent pigeons and rodents from entering the building.

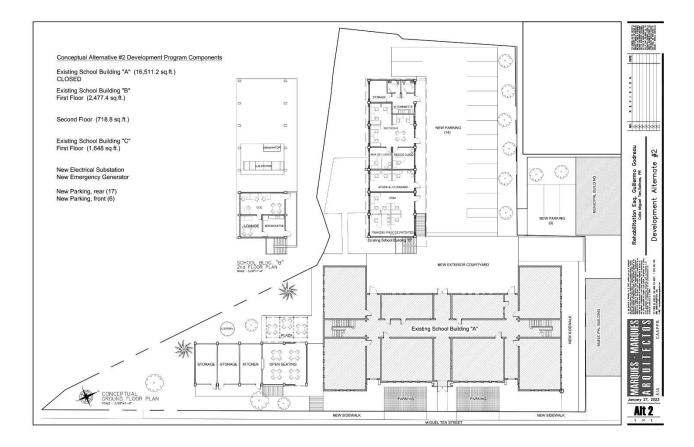
Classroom building (B) will have its electrical, plumbing, and mechanical infrastructure updated. This will include the installation of the properties' electrical substation and new diesel generator on the roof as a safeguard against flooding. Its interior floor level is to be raised approximately 8" to provide further resiliency. This new floor level is above past flood high-water marks.

The first floor of building (B) will house municipal services which include the offices of "Ayuda al Ciudadano", "CRIM", "Patente Municipal" as well as service/storage spaces. New ADA compliant restrooms will also be included in this renovation. The second floor will house additional services including "Capellanía Municipal" and "Programa: Tu Vales" with support areas (conference room and kitchenette). The second-floor spaces are to be made available in the event of a natural disaster for the municipalities' "Centro de Operaciones de Emergencias".

### MARQUES + MARQUES A R Q U I T E C T C T O S

Building (C) is also to have its interior floor level raised in order to provide better flood protection and resiliency. It will house a new kitchen/food prep area which aims to serve the municipalities employees that will work on the property as well as adjacent municipal buildings. This new kitchen will also work for municipal programs that prepare meals. The building will have storage spaces and open dinning/lounge areas. A new outdoor seating area is to be provided next to the indoor seating area for additional capacity.

The open courtyard at the rear of the property is to be finished with a mix of asphalt and permeable surfaces to provide absorption of storm water. It is to hold fourteen (14) new parking spaces, two of these designated for handicapped use. This area is approximately 667.7 square meters. New trees and vegetation will be planted and the sidewalks fronting the property are to be reconstructed and repaired. This project does not add any space to the existing structures.



### **Building Assessment**

A recent field study determined that classroom building "A" contained lead in its exterior paint. As part of the mothballing of this building, an encapsulant shall be applied to its exterior painted surfaces (Fiberlock Technologies LBC Professional Lead/Sealant Type III).

Most windows shall be removed and selected openings shall have protected ventilation according to the Preservation Briefs for Mothballing Historic Buildings by the U.S. Department of the Interior.

Buildings "B" and "C" shall be structurally reinforced and will have their interior floor levels raised by 8" which was above the high-water mark left by previous flooding incidents. The new interior floor elevation shall be achieved by installing a concrete reinforced EPS system.

Removable flood barriers have been incorporated into the design to protect door openings. These "flood barricades" can easily be installed prior to a potential weather event and subsequently removed.

Buildings "B" and "C" will also be finished with waterproof exterior finishes which will help protect all interior areas (2 coats, Loxon XP Masonry Coating, distributed by Sherwin Williams).

For details on interventions to be implemented to all three buildings, including as-built drawings for all three buildings see "Construction Drawings – Programa Revitalizacion de Ciudades, Rehabilitation Esq. Guillermo Godrea, Escuela Guillermo Godreau, C. Miguel Ten, Salinas, Puerto Rico".

### **Professional Condition Assessment**

A full structural analysis of the original school building (building "A") is presented in attachment #1 "Evaluación Estructural, Proyecto Escuela Guillermo Godreau Manatau, Salinas, PR"

### **Pest Control**

As part of the remodeling and infrastructure upgrades to the school complex the original school building "A" is to be cleared and cleaned as per attachment #2, "Construction Drawings — Programa Revitalizacion de Ciudades, Rehabilitation Esq. Guillermo Godrea, Escuela Guillermo Godreau, C. Miguel Ten, Salinas, Puerto Rico". Window and door penetrations are to be sealed and/or retrofitted as per construction drawing details, notes and technical specifications set.

### **Moisture Penetration Evaluation**

Site visits to the original school building "A" reveal that the structure recently received a new roofing treatment which seals the existing roofing system from the exterior elements and

### MARQUES + MARQUES A R Q U I T E C T C T O S

provides adequate protection from the elements. No interior water penetration from the roof was evident at the time of the building's assessment.

As the building's enclosure has remained open through various windows and doors, there is considerable dust and debris accumulation in the building's interiors. This condition will be cleared as referenced in the Pest Control section which points to details and notes in attachment #2 "Construction Drawings – Programa Revitalizacion de Ciudades, Rehabilitation Esq. Guillermo Godrea, Escuela Guillermo Godreau, C. Miguel Ten, Salinas, Puerto Rico". Details for new Windows and doors to provide building ventilation are also presented in the Construction Drawings.



Roof picture Escuela Guillermo Godreau, facing East.



Roof picture Escuela Guillermo Godreau, facing West.

### **Building Security**

School building "A" currently has functional security gates and windows which prevent unauthorized entrance. As a building designed for a tropical climate with natural cross ventilation and no mechanical ventilation systems, the building will incorporate louvered windows and add netted bird screens over existing openings to prevent the entrance of rodents and pests while providing continued interior ventilation to prevent the propagation of mold and mildew. See attachment #2, "Construction Drawings – Programa Revitalizacion de Ciudades, Rehabilitation Esq. Guillermo Godrea, Escuela Guillermo Godreau, C. Miguel Ten, Salinas, Puerto Rico".



Front façade Escuela Guillermo Godreau, showing existing gates and windows.



Rear façade Escuela Guillermo Godreau, showing existing gates and windows.

### **Building Ventilation**

School building "A" currently has functional security gates and windows which prevent unauthorized entrance. As a building designed for a tropical climate with natural cross ventilation and no mechanical ventilation systems, the building will incorporate louvered windows and add netted bird screens over existing openings to prevent the entrance of rodents and pests while providing continued interior ventilation to prevent the propagation of mold and mildew. See attachment #2, "Construction Drawings — Programa Revitalizacion de Ciudades, Rehabilitation Esq. Guillermo Godrea, Escuela Guillermo Godreau, C. Miguel Ten, Salinas, Puerto Rico" for window, door and gate details.

### **Existing Infrastructure / Systems**

School building "A" currently has sparce electrical connections which are the result of gradual upgrades. Mechanical/ventilation systems are limited to window air conditioning units which have been previously installed. These will be removed as part of the mothballing scope of work included in attachment #2, "Construction Drawings – Programa Revitalizacion de Ciudades, Rehabilitation Esq. Guillermo Godrea, Escuela Guillermo Godreau, C. Miguel Ten, Salinas, Puerto Rico"

### **Maintenance & Monitoring Plan for Protection**

A regular schedule for surveillance, maintenance, and monitoring should be established by the municipality as part of their maintenance and monitoring for building "A". A Maintenance Chart is included below for reference and for it to be included in the properties' continued maintenance plan. See attached Mothballing Checklist for further maintenance recordkeeping information.

| peri            | odic   |  |  |  |
|-----------------|--|--|--|--|
| 6               | regular drive by surveillance  |  |  |  |
|                 | check attic during storms if possible  |  |  |  |
| mor             | nthly walk arounds   |  |  |  |
| check entrances |  |  |  |  |
| 0000            | check window panes for breakage  |  |  |  |
| u               | mowing as required   |  |  |  |
| u               | check for graffiti or vandalism  |  |  |  |
| ente            | er every 3 months to air out   |  |  |  |
| Н               | check for musty air  |  |  |  |
|                 | check for moisture damage  |  |  |  |
| ч               | check battery packs and monitoring   |  |  |  |
| -               | equipment  |  |  |  |
|                 | check light bulbs  |  |  |  |
| ч               | check for evidence of pest intrusion   |  |  |  |
| eve             | ry 6 months; spring and fall   |  |  |  |
| Ж               | site clean-up; pruning and trimming  |  |  |  |
| Н               | gutter and downspout check   |  |  |  |
| 0000            | check crawlspace for pests   |  |  |  |
| ч               | clean out storm drains   |  |  |  |
| eve             | ry 12 months maintenance contract inspections  |  |  |  |
| ш               | The state of the s |  |  |  |
| 1000            | for equipment/utilities  |  |  |  |
| 000             | check roof for loose or missing shingles   |  |  |  |
|                 | termite and pest inspection/treatment  |  |  |  |
|                 | exterior materials spot repair and touch up<br>painting  |  |  |  |
|                 | remove bird droppings or other stains from   |  |  |  |
| _               | exterior   |  |  |  |
|                 | check and update building file   |  |  |  |

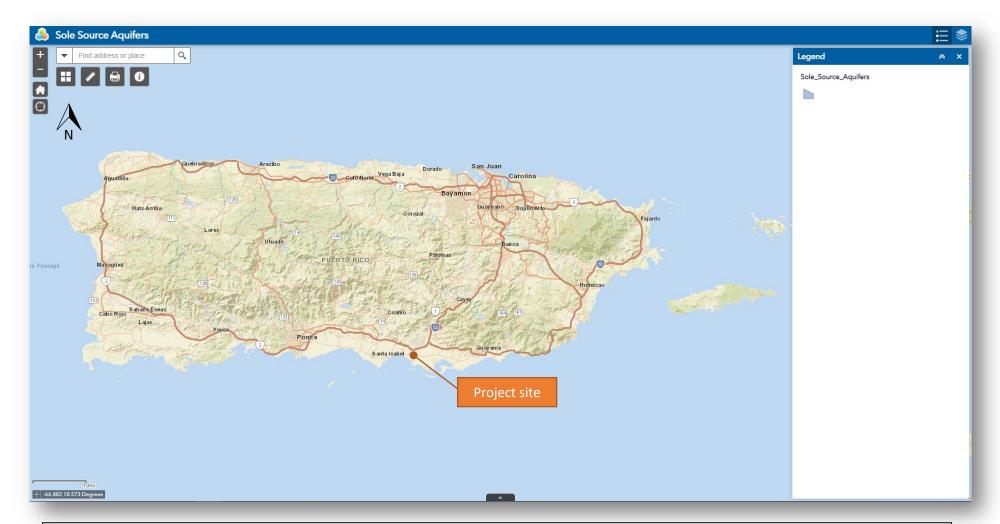
### MOTHBALLING CHECKLIST Mothballing Checklist In reviewing mothballing plans, the following checklist may help to ensure that work items are not inadvertently omitted. Date of action or comment. Yes No Moisture • Is the roof watertight? • Do the gutters retain their proper pitch and are they clean? • Are downspout joints intact? · Are drains unobstructed? • Are windows and doors and their frames in good condition? • Are masonry walls in good condition to seal out moisture? · Is wood siding in good condition? • Is site properly graded for water run-off? • Is vegetation cleared from around the building foundation to avoid trapping moisture? Pests · Have nests/pests been removed from the building's interior and • Are adequate screens in place to guard against pests? • Has the building been inspected and treated for termites, carpenter ants, and rodents? • If toxic droppings from bats and pigeons are present, has a special company been brought in for its disposal? Housekeeping • Have the following been removed from the interior trash, hazardous materials such as inflammable liquids, poisons, and paints and canned goods that could freeze and burst? • Is the interior broom-clean? • Have furnishings been removed to a safe location? • If furnishings are remaining in the building, are they properly protected from dust, pests, ultraviolet light, and other potentially harmful problems? • Have significant architectural elements that have become detached from the building been labeled and stored in a safe place? • Is there a building file? Security · Have fire and police departments been notified that the building will be mothballed? • Are smoke and fire detectors in working order? • Are the exterior doors and windows securely fastened? • Are plans in place to monitor the building on a regular basis? • Are the keys to the building in a secure but accessible location? • Are the grounds being kept from becoming overgrown? • Have utility companies disconnected/shut off or fully inspected water, gas, and electric lines? • If the building will not remain heated, have water pipes been drained and glycol added? • If the electricity is to be left on, is the wiring in safe condition? • Have steps been taken to ensure proper ventilation of the building? • Have interior doors been left open for ventilation purposes? • Has the secured building been checked within the last 3 months for interior dampness or excessive humidity?

## **Attachment 14 – Sole Source Aquifers**

Sole Souce Aquifers - Map

PR-CRP-000135 -Multidisciplinary Citizen Service Center, Salinas

Coord: 17.975548°, -66.298631° 23-73 Miguel Ten Street, Salinas, Puerto Rico



US Environmental Protection Website, accessed March 1, 2023: <a href="https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b">https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b</a>

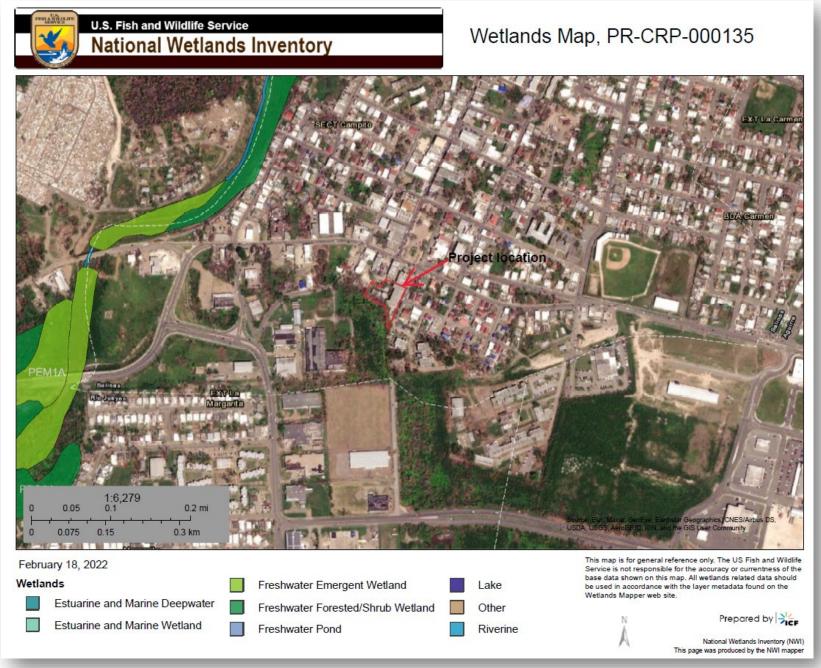
### Attachment 15 - Wetlands Protection

### **National Wetlands Inventory (map)**

PR-CRP-000135 - Multidisciplinary Citizen Service Center, Salinas

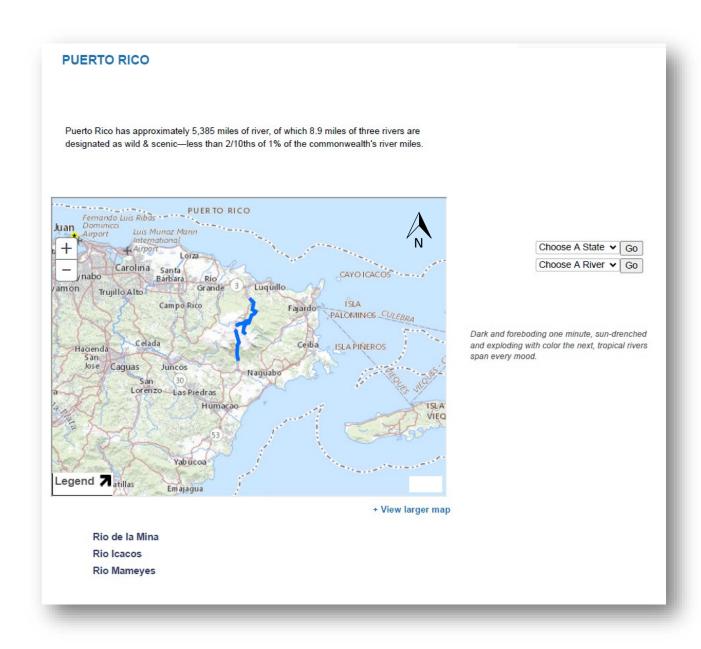
Coord: 17.975548°, -66.298631°

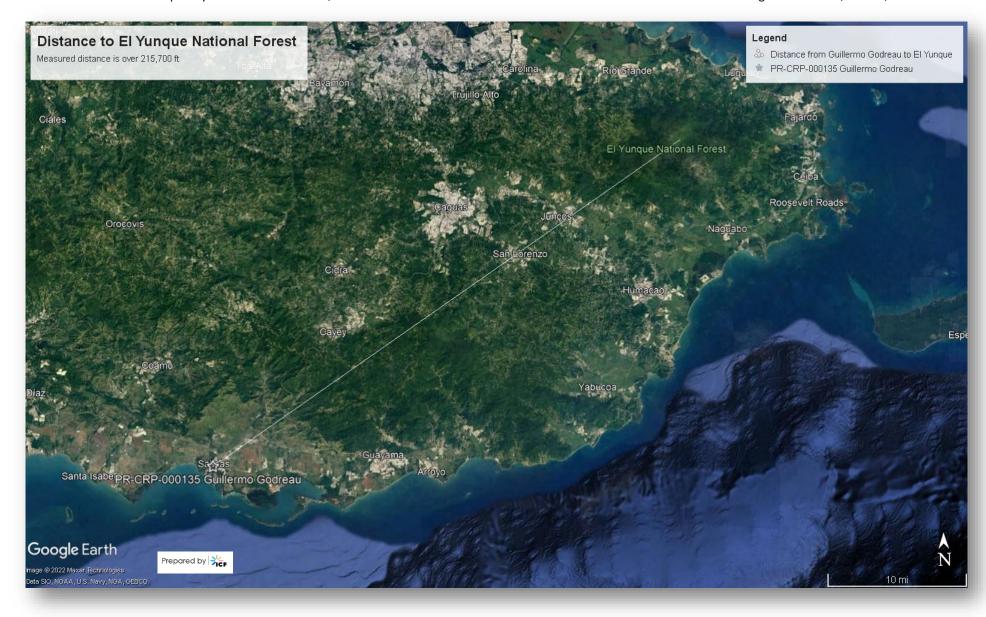
23-73 Miguel Ten Street, Salinas, Puerto Rico



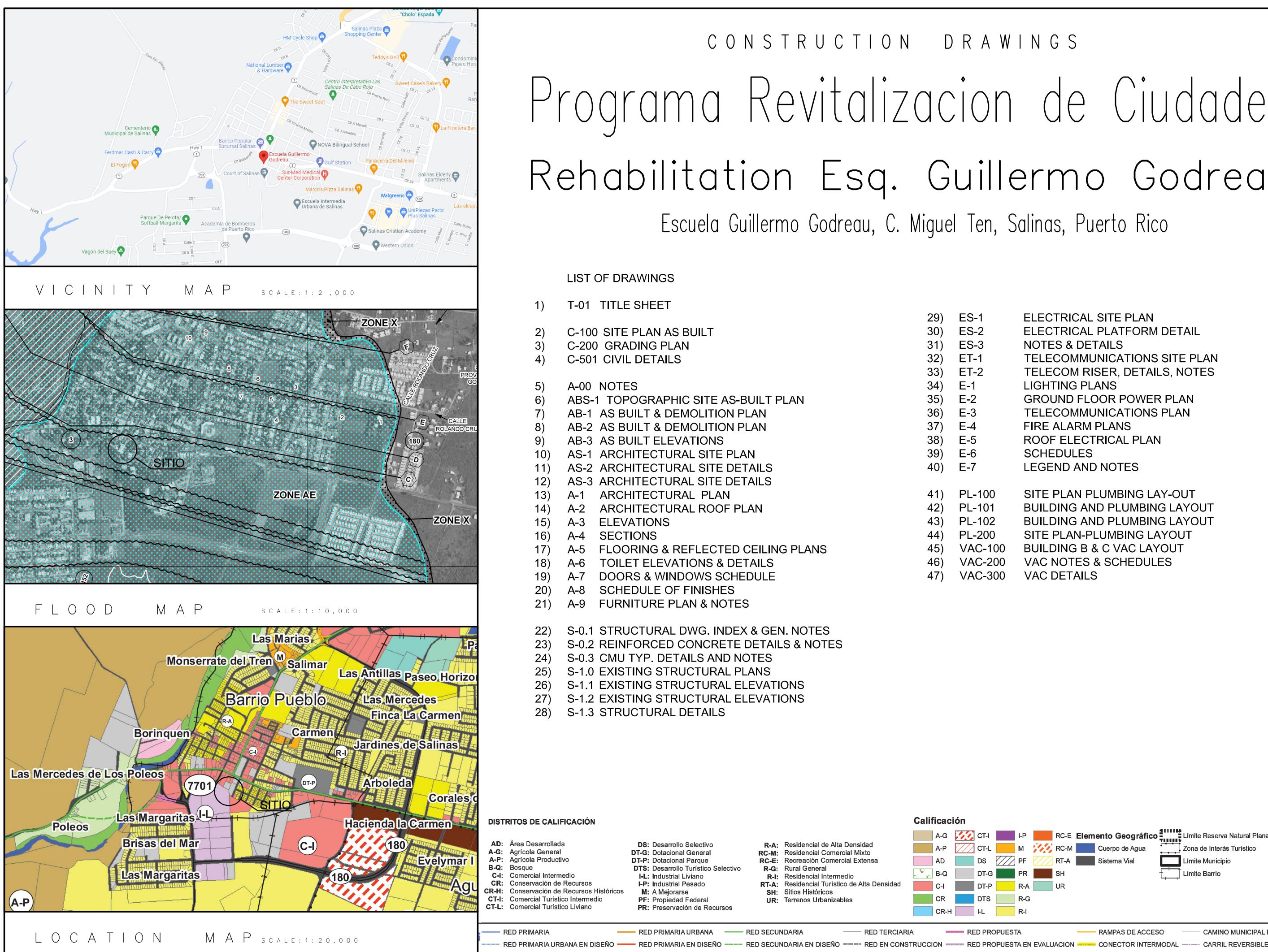
### Attachment 16 - Wild and Scenic Rivers (maps and information)

Location and list of Wild and Scenic Rivers in Puerto Rico, from: <a href="https://rivers.gov/puerto-rico.php">https://rivers.gov/puerto-rico.php</a>





**Attachment 17 – Project Plans** 



# CONSTRUCTION DRAWINGS

# Programa Revitalizacion de Ciudades Rehabilitation Esq. Guillermo Godreau

Escuela Guillermo Godreau, C. Miguel Ten, Salinas, Puerto Rico

# LIST OF DRAWINGS

S-0.1 STRUCTURAL DWG. INDEX & GEN. NOTES

S-0.3 CMU TYP. DETAILS AND NOTES

S-1.0 EXISTING STRUCTURAL PLANS

RED PRIMARIA URBANA

RED SECUNDARIA

S-1.3 STRUCTURAL DETAILS

S-1.1 EXISTING STRUCTURAL ELEVATIONS

S-1.2 EXISTING STRUCTURAL ELEVATIONS

S-0.2 REINFORCED CONCRETE DETAILS & NOTES

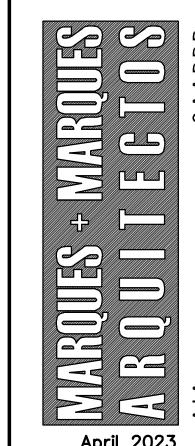
| `        |  |     |         |                          |
|----------|--|-----|---------|--------------------------|
| )        | T-01 TITLE SHEET                       | 29) | ES-1    | ELECTRICAL SITE PLAN     |
| <b>'</b> | C-100 SITE PLAN AS BUILT               | 30) |         | ELECTRICAL PLATFORM DE   |
| )        | C-200 GRADING PLAN                     | 31) | ES-3    | NOTES & DETAILS          |
| .)       | C-501 CIVIL DETAILS                    | 32) |         | TELECOMMUNICATIONS SIT   |
| ,        |  | 33) |         | TELECOM RISER, DETAILS,  |
| )        | A-00 NOTES                             | •   | E-1     | LIGHTING PLANS           |
| )<br>)   | ABS-1 TOPOGRAPHIC SITE AS-BUILT PLAN   | ,   | E-2     | GROUND FLOOR POWER PL    |
| <u> </u> | AB-1 AS BUILT & DEMOLITION PLAN        | 36) | E-3     | TELECOMMUNICATIONS PLA   |
| <u>,</u> | AB-2 AS BUILT & DEMOLITION PLAN        | 37) | E-4     | FIRE ALARM PLANS         |
| <b>)</b> | AB-3 AS BUILT ELEVATIONS               | 38) | E-5     | ROOF ELECTRICAL PLAN     |
| ,<br>0)  | AS-1 ARCHITECTURAL SITE PLAN           | 39) | E-6     | SCHEDULES                |
| 1)       | AS-2 ARCHITECTURAL SITE DETAILS        | 40) | E-7     | LEGEND AND NOTES         |
| 2)       | AS-3 ARCHITECTURAL SITE DETAILS        |     |         |                          |
| 3)       | A-1 ARCHITECTURAL PLAN                 | 41) | PL-100  | SITE PLAN PLUMBING LAY-C |
| 4)       | A-2 ARCHITECTURAL ROOF PLAN            | 42) | PL-101  | BUILDING AND PLUMBING L  |
| 5)       | A-3 ELEVATIONS                         | 43) | PL-102  | BUILDING AND PLUMBING L  |
| 6)       | A-4 SECTIONS                           | 44) | PL-200  | SITE PLAN-PLUMBING LAYO  |
| 7)       | A-5 FLOORING & REFLECTED CEILING PLANS | 45) | VAC-100 | BUILDING B & C VAC LAYOU |
| 8)       | A-6 TOILET ELEVATIONS & DETAILS        | 46) | VAC-200 | VAC NOTES & SCHEDULES    |
| 9)       | A-7 DOORS & WINDOWS SCHEDULE           | 47) | VAC-300 | VAC DETAILS              |
| (0)      | A-8 SCHEDULE OF FINISHES               |     |         |                          |
| (1)      | A-9 FURNITURE PLAN & NOTES             |     |         |                          |
|          |  |     |         |                          |

| 32)<br>33)<br>34)<br>35)<br>36)<br>37)<br>38) | ES-1<br>ES-2<br>ES-3<br>ET-1<br>ET-2<br>E-1<br>E-2<br>E-3<br>E-4<br>E-5<br>E-6<br>E-7 | NOTES & DETAILS TELECOMMUNICATIONS SITE PLAN TELECOM RISER, DETAILS, NOTES LIGHTING PLANS GROUND FLOOR POWER PLAN TELECOMMUNICATIONS PLAN FIRE ALARM PLANS |
|---|---|--|
| 43)<br>44)<br>45)                             |   | BUILDING AND PLUMBING LAYOUT<br>BUILDING AND PLUMBING LAYOUT<br>SITE PLAN-PLUMBING LAYOUT  |

RAMPAS DE ACCESO

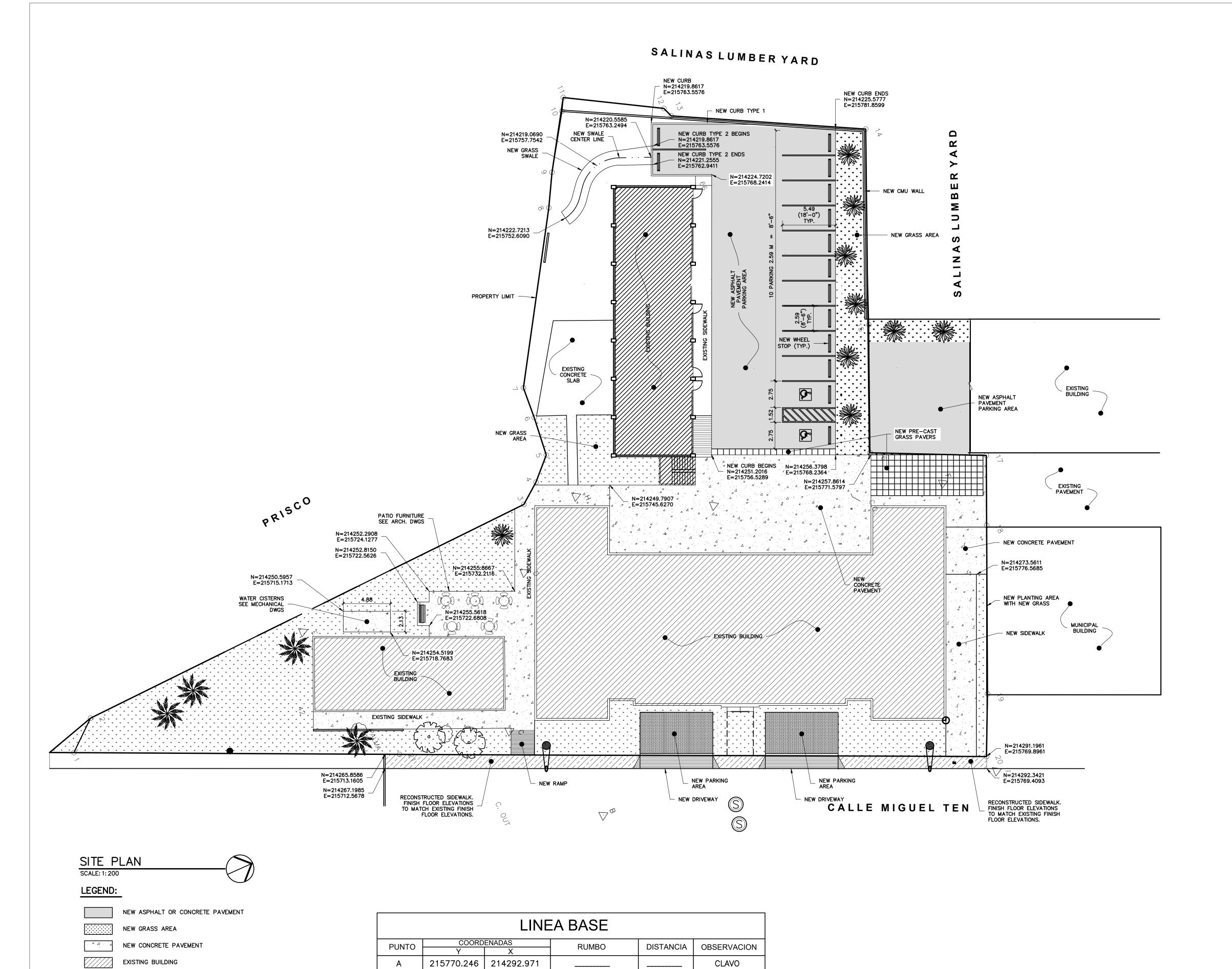
--- CAMINO MUNICIPAL ROTULADO





April 2023 1 OF **47** 

Calificación DISTRITOS DE CALIFICACIÓN A-G CT-I III II-P RC-E Elemento Geográfico Límite Reserva Natural Planadas - Yeyesa AD: Área Desarrollada R-A: Residencial de Alta Densidad **DS:** Desarrollo Selectivo Zona de Interás Turístico A-G: Agrícola General **DT-G**: Dotacional General RC-M: Residencial Comercial Mixto Límite Municipio A-P: Agrícola Productivo RC-E: Recreación Comercial Extensa **DT-P:** Dotacional Parque B-Q: Bosque DTS: Desarrollo Turístico Selectivo R-G: Rural General Límite Barrio C-I: Comercial Intermedio R-I: Residencial Intermedio I-L: Industrial Liviano CR: Conservación de Recursos RT-A: Residencial Turístico de Alta Densidad I-P: Industrial Pesado CR-H: Conservación de Recursos Históricos M: A Mejorarse SH: Sitios Históricos CT-I: Comercial Turístico Intermedio **PF:** Propiedad Federal **UR:** Terrenos Urbanizables CT-L: Comercial Turístico Liviano PR: Preservación de Recursos



S 17° 25' 14" W

215731.218 214280.725

NEW PRE-CAST GRASS PAVERS

EXISTING SANITARY MANHOLE

PROPOSED SANITARY MANHOLE

40.904

CLAVO

SITE NOTES:

- 1. DIMESIONS AND/OR ELEVATIONS AREA SHOWN ON METRIC SYSTEM UNLESS OTHERWISE SPECIFIED.
- 2. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING FINISH GRADE ELEVATIONS AT THE PROJECT SITE AND SITE ACCESS PRIOR TO STARTING ANY SITE ACTIVITIES. IF CHANGES ARE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND SHALL NOT PROCEED WITH THE EARTH MOVEMENT
- 3. UNLESS OTHERWISE SPECIFIED ON THE GEOTHECNICAL ENGINEERING REPORT OR BY THE GEOTHECNICAL ENGINEER OF THE PROJECT ALL MATERIAL USED FOR FILL PURPOSES SHALL BE CLASSIFIED A-2-4 OR BETTER.
- 4. THE CONTRACTOR SHALL FOLLOW THE RECOMMENDATIONS PROVIDED BY THE PROJECT GEOTHECNICAL REPORT. THIS REPORT WAS PREPARED BY MANUEL ENRIQUE OCHOA LAVERGNE, GMTS PROJECT NO. G211518.

Godr Salinas,

abilitation

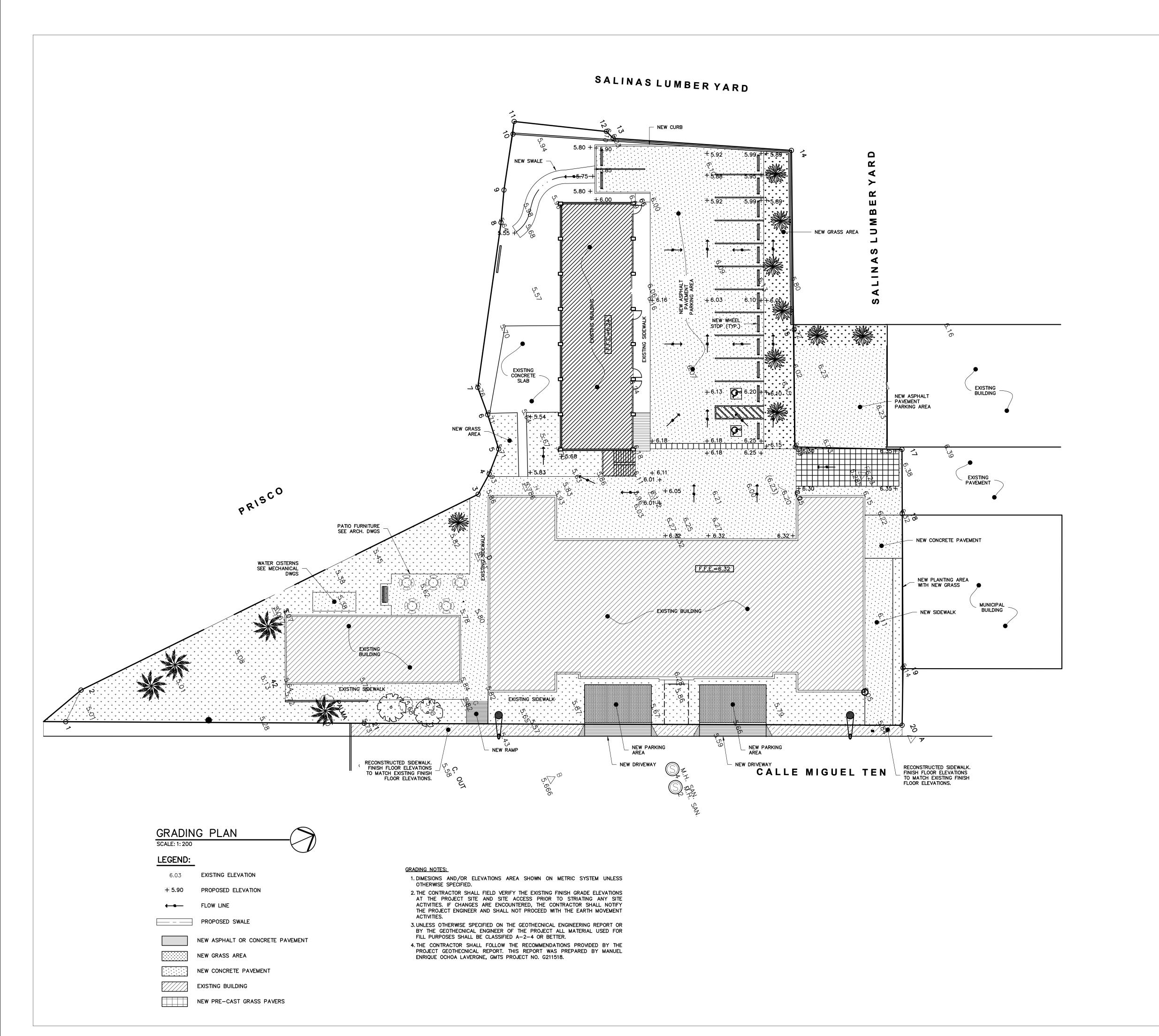
Rehal Escuel

4/14/2023

2 OF 48

04-14-2023

100 % Progress Set **Not For Construction** 



THE PROPERTY OF THE MARQUES + MARQUES A AND SHALL BE USED AS A DOCUMENT AND WORKING ONLY BY AUTHORIZED FANY TOTAL OR PARTIAL RE USE OF SAID DOCUMENT PROHIBITED WAPPROPRIATE WRITTEN AND SHALL BE RETLY MARQUES + MARQUES A

NO. RE C. S. L. S.

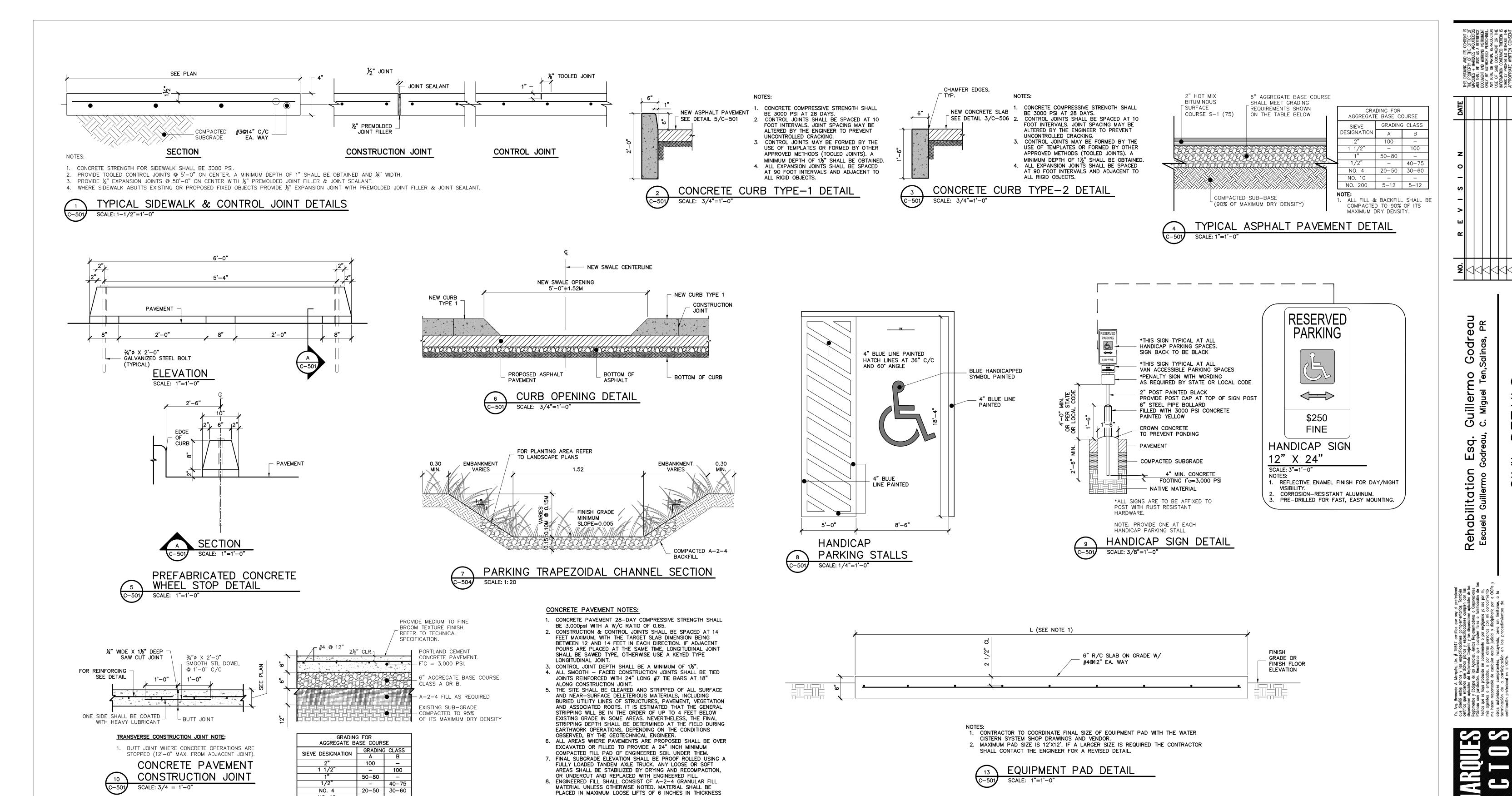
Rehabilitation Esq. Guillermo Godreau Escuela Guillermo Godreau, C. Miguel Ten,Salinas, PR

fo, Arq. Bernardo A. Marqués, Lic. # 15647 certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias. También estráfico que entiendo que dichos planos y específicaciones cumplen con las isposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de Reglamento Conjunto y las disposiciones aplicables de los edgamentos y Códigos de las Agencias, Juntas Reglamentadoras o Corporaciones Váblicas con juridicción. Reconazco que cualquier falsa o falsificación de los neclos que se haya producido sin conosimiento on neglegencia ya sea por mi, nis agentes o empleados, o por otras personas con mi conocimiento ne hacen responsable de cualquier acción judicial y disciplinaria por la OIGPe y stras autoridades competentes, incluyendo, pero sin limitarse, a la errininación de la portripipación en los procedimientos de sertificación de la portripipación en los procedimientos de sertificación pero sin limitarse.

MARQUES + MARQUES A R Q U I T E C T O S

100 % Progress Set 04-14-2023 Not For Construction

4/14/2023 **C-101**3 OF 48



AND COMPACTED TO 95% OF ITS MAXIMUM DRY DENSITY AS

COMPLETELY GRANULAR SOILS WITH LESS THAN FIVE PERCENT

FINES, 75 PERCENT RELATIVE DENSITY AS DETERMINED BY THE

JOINT RESERVOIR SHALL BE SAWED TO MINIMUM WIDTH AND

10. CONTROL JOINTS SHALL BE SAWED AS SOON AS THE CONCRETE

RAVELLING, USUALLY 4 TO 8 HOURS. ALL JOINTS SHALL BE SAWED BEFORE UNCONTROLLED SHRINKAGE TAKES PLACE. THE

SAWING OPERATIONS SHALL BE CARRIED ON BOTH DURING THE

CRACK OCCURS AT OR NEAR THE JOINT LOCATION PRIOR TO THE TIME OF SAWING. SAWING SHALL BE DISCONTINUED WHEN A

DAY AND NIGHT, AND REGARDLESS OF WEATHER CONDITIONS,

LAPSE. THE SAWING OF ANY JOINT SHALL BE OMITTED IF A

UNTIL SAWING IS COMPLETED WITH THE PRESCRIBED TIME

CRACK DEVELOPS AHEAD OF THE SAW.

11. WITHIN THREE HOURS OF SAWING, JOINTS MUST BE CLEANED

TO REMOVE INCOMPRESSIBLE RESIDUE LIKE SAW-CUT SWARF,

12. REFER TO PCC PAVEMENT JOINT LAYOUT PLANS FOR SPECIFIED

JOINT PATTERN. VARIATIONS TO THE JOINT PATTERN MAY BE

WEEKS PRIOR TO STARTING PCC PAVEMENT CONSTRUCTION.

13. PROVIDE ISOLATION JOINTS OF PREFORMED JOINT FILLER STRIPS AT ALL ABUTTING CONCRETE ½" CURBS, CATCH BASINS,

PROPOSED BY THE CONTRACTOR, IN SUCH CASE CONTRACTOR

SHALL SUBMIT REVISED JOINT LAYOUT PLANS TO THE ENGINEER FOR APPROVAL. PLANS SHALL BE SUBMITTED AT LEAST THREE

HAS HARDENED SUFFICIENTLY TO PERMIT SAWING WITHOUT

DETERMINED FROM THE MODIFIED PROCTOR TEST OF FOR

9. INITIAL JOINT WIDTH SHALL BE 1/8". SECOND SAW CUT FOR

INSPECTING GEOTECHNICAL ENGINEER.

SOIL, SAND, OR GRAVEL.

MANHOLES OF OTHER FIXED OBJECTS.

¼" WIDE X 1½" DEEP SAW CUT JOINT

FOR REINFORCING

SEE DETAIL

ONE SIDE SHALL BE COATED

WITH HEAVY LUBRICANT

 $\frac{3}{4}$ "ø X 2'-0"

- BUTT JOINT

TRANSVERSE CONTRACTION JOINT NOTE:

1. JOINT SPACING SHALL BE 12'-0" MAX.

CONTRACTION JOINT

SCALE: 3/4 = 1'-0"

CONCRETE PAVEMENT

- SMOOTH STL DOWEL

ALL FILL & BACKFILL SHALL BE COMPACTED TO 95% OF ITS MAXIMUM

AGGREGATE BASE COURSE SHALL BE

VOLUME DENSITY. THE SOLID VOLUME

GRAVITY AS DETERMINED BY AASHTO

T84 & T85, AND THE DRY WEIGHT OF

DETERMINED BY THE USE OF AASHTO

CONCRETE PAVEMENT DETAIL

THE AGGREGATE. THE IN-PLACE

DENSITY OF THE COMPACTED

AGGREGATE BASE SHALL BE

2. PROVIDE 2 # 4 X 4'-0" LNG. T&B

ADD. AT REENTRANT CORNERS.

T191, T205 OR T238.

DENSITY SHALL BE DETERMINED ON THE BASIS OF ITS BUCK SPECIFIC

COMPACTED TO 83% OF ITS SOLID

DRY DENSITY.

100 % Progress Set 04-14-2023 Not For Construction # ROUES + LOUING + LO

**C-501**4 OF 48

# GENERAL NOTES:

- 1. THE GENERAL CONTRACTOR SHALL PROVIDE A SUPERINTENDENT ON-SITE DURING ALL PHASES OF CONSTRUCTION.
- 2. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL DIMENSIONS REPRESENTED IN THESE DRAWINGS. ANY DISCREPANCIES BETWEEN DIMENSIONS
- ILLUSTRATED HERE AND EXISTING SHALL BE BROUGHT TO THE ARCHITECTS ATTENTION. 3. THE CONTRACT DOCUMENTS CONSIST OF THIS SET OF DRAWINGS, CONSTRUCTION TECHNICAL SPECIFICATIONS, ADDENDA, CONSTRUCTION CHANGE DIRECTIVES, CHANGE ORDERS, THE CONTRACT BETWEEN THE OWNER AND CONTRACTOR, CONDITIONS OF THE CONTRACT AND ANY OTHER INFORMATION WRITTEN AND MUTUALLY AGREED UPON BETWEEN THE OWNER AND CONTRACTOR.
- 4. THESE DRAWINGS ARE COMPLIMENTARY AND INTERRELATED. THE WORK OF ANY INDIVIDUAL TRADE IS NOT NECESSARILY CONFINED TO SPECIFIC DOCUMENTS, CHAPTERS OR LOCATIONS.
- 5. GC TO NOTIFY THE ARCHITECT IMMEDIATELY USING THE DESIGNATED "REQUEST FOR INFORMATION" PROCEDURE IF DISCREPANCIES OR INCONSISTENCIES IN THE DOCUMENTS ARE DISCOVERED.
- 6. CONSTRUCTION TECHNIQUES, METHODS, PROCEDURES, SEQUENCING AND SCHEDULING ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
- 7. IT IS THE INTENT OF THE CONTRACT DOCUMENTS TO COMPLY WITH ALL CODES AND ORDINANCES IN EFFECT AT THE TIME THE PERMIT IS ISSUED. NOTIFY THE ARCHITECT
- IMMEDIATELY UPON DISCOVERY OF SUSPECTED DEVIATION. 8. ALL PENETRATIONS IN RATED CONSTRUCTION ARE TO BE SEALED WITH APPROPRIATE MATERIALS AS INDICATED BY THE DOCUMENTS OR OTHERWISE REQUIRED BY INSPECTORS OR APPLICABLE CODES AND ORDINANCES.
- 9. DO NOT SCALE DRAWINGS. USE DIMENSIONS ONLY. NOTIFY ARCHITECT OF ALL SIGNIFICANT DISCREPANCIES IMMEDIATELY UPON DISCOVERY.
- 10. GC TO COORDINATE ALL PENETRATIONS WITH EXISTING STRUCTURE AND NOTIFY ARCHITECT OF RECORD OF ANY CONFLICTS PRIOR TO COMMENCING THE WORK.
- 11. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING FACILITY DIRECTOR FOR SPECIFIC INSURANCE REQUIREMENTS.
- 12. THE LANDLORD SHALL RESERVE THE RIGHT TO STOP ANY CONSTRUCTION AT ANY TIME FOR SAFETY OR AESTHETIC REASONS OR IF CONTRACTORS AND SUB CONTRACTORS VIOLATE ANY OF THE RULES OR POLICIES OF THE MUNICIPLAITY.
- 13. VERIFY BARRIER FREE (ADA) REQUIREMENTS.
- 14. ONE SET OF LANDLORD APPROVED CONSTRUCTION DRAWINGS MUST REMAIN AT THE
- CONSTRUCTION SITE AT ALL TIMES. 15. THE GC SHALL SUBMIT IN WRITING A CONSTRUCTION SCHEDULE FOR THE PROJECT.

# DEMOLITION

- 1. COORDINATE ALL DEMOLITION AND DEBRIS REMOVAL WITH FACILITIES MANAGEMENT PRIOR TO
- 2. ALL PREVIOUS IMPROVEMENTS, FIXTURES AND SYSTEMS NOT TO BE REUSED SHALL BE REMOVED. REMOVE ALL EXISTING UTILITIES, NOT BEING REUSED, BACK TO LANDLORD'S POINT-OF-CONNECTION AND CAPPED AS REQUIRED. LEAVE ALL REMAINING CONSTRUCTION IN SAFE STATE. DO NOT ABANDON SYSTEMS OR PREVIOUS IMPROVEMENTS.
- 3. THE GENERAL CONTRACTOR SHALL PROVIDE PROTECTION FOR ALL LANDLORD'S SYSTEMS AND FINISHES DURING DEMOLITION AND THROUGHOUT ALL PHASES OF CONSTRUCTION.
- 4. ALL EXPOSED AND ABANDONED INFRASTRUCTURE (PIPE RUNS, METERS, ETC) SHALL BE REMOVED FROM SITE.

- 1. REFERENCE ARCHITECTURAL SITE PLAN FOR NEW EXTERIOR AREAS AND PARKING GRADING AND SLOPE. NOTIFY ARCHITECT OF ANY DISCREPANCIES BETWEEN MARKED ELEVATIONS AND EXISTING CONDITIONS IF APPLICABLE.
- 2. ALL EXTERIOR AREAS NOT DESIGNATED AS SIDEWALKS, PARKING AND CIRCULATION ZONES MUST BE FINISHED WITH HYDROSEED (GRASS). RESTORE ANY DAMAGED PLANTING AREAS.

# **INTERIOR**

- 1. COORDINATE WITH MUNICIPALITY DEMOLITION SCHEDULE AND SITE ACCESS PRIOR TO START.
- 2. COMPLETELY CLEAN ALL INTERIORS FOR BUILDING "A". CLEAR OUT ANY PESTS/BIRDS.
- 3. ALL INTERIOR/EXTERIOR SURFACES AFFECTED BY PARTIAL DEMOLITIONS SHALL BE RESTORED AND REFINISHED AS PER FINISH SCHEDULE.

# SCHOOL BUILDING "B" & "C"

- 1. ALL EXTERIOR AND INTERIOR CEILINGS/PARAPETS WITH DAMAGED PLASTER/FINISH SHALL BE REPAIRED. SCRAPE, TREAT AND REFINISH ANY EXPOSED STEEL REINFORCEMENTS AS NEEDED PRIOR TO RE-PAINTING SURFACES.
- 2. VERIFY THAT ALL ROOF DRAINS, DOWNSPOUTS ARE IN WORKING CONDITIONS. REPAIR ANY
- OBSTRUCTED OR DAMAGED DRAINS. 3. THOROUGHLY CLEAN BUILDING ROOF.

# CONSTRUCTION

- 1. ALL TRANSITIONS BETWEEN DISSIMILAR FLOOR MATERIALS MUST BE FLUSH AND LEVEL. NO
- REDUCTION STRIPS SHALL BE PERMITTED.

  2. ALL FINISHES SHALL BE PER THOSE IN THE ARCHITECTURAL SCHEDULE OR APPROVED BY LANDLORD. NO SUBSTITUTIONS WILL BE PERMITTED WITHOUT PRIOR CONSENT FROM THE

# CEILING

- 1. GYPSUM BOARD CEILING SYSTEMS SHALL USE  $\frac{1}{2}$ " HI STRENGTH CEILING BOARD WITH GALVANIZED STEEL STUDS OR HAT-CHANNELS (16"O.C.)
- 2. PROVIDE SERVICE ACCESS PANELS IN ALL HARD-SURFACE CEILING AND IN AREAS WHERE ACCESS IS REQUIRED FOR MECHANICAL EQUIPMENT, SIGNS, ETC. PANELS SHOULD BE FLUSH-MOUNTED AND EMPLOY ONLY CONCEALED-TYPE HARDWARE.

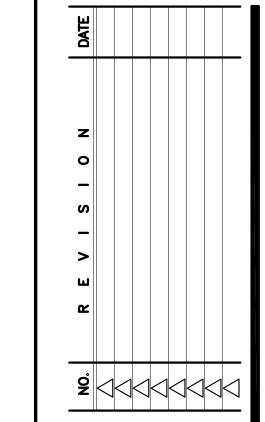
# MECH, ELEC, LIFE-SAFETY

- 1. SUBMIT MECHANICAL AND ELECTRICAL SYSTEMS RUNS. COORDINATE FOR LEAST IMPACT ON
- 2. PROVIDE INSULATION ON ALL COLD WATER AND CONDENSATE/DRAIN LINES. DO NOT OUTFALL ON ROOF OR ANY MALL SURFACE.
- 3. ALL WIRING TO BE IN RIGID CONDUIT OR EMT.
- 4. ALL AERIAL TELEPHONE/CTV CONNECTIONS ARE TO BE REMOVED. PROVIDE NEW CONNECTION POINT FOR TENANTS FROM NEW TELECOMMUNICATIONS CLOSET.

# FLOOD MITIGATION

- 1. DESIGNATED DOORWAYS SHALL HAVE AQUAFENCE FLOOR BARRICADE FBL-01 SYSTEM INSTALLED AS PER MANUFACTURERS SPECIFICATIONS/DETAILS. SEE MATERIAL QUOTE IN TECHNICAL SPECIFICATIONS. SEE ARCHITECTURAL ELEVATIONS FOR LOCATIONS ON BUILDING "B".
- 2. GENERAL CONTRACTOR SHALL COORDINATE FINAL FLOOD BARRICADE DIMENSIONS ON SITE WITH STRUCTURE. FLOOD BARRICADE HEIGHT TO BE 4'-0". SEE TECHNICAL SPECIFICATIONS FOR MATERIAL QUOTE AND FURTHER INFORMATION.
- 3. USE LOXON XP WATERPROOFING MASONRY COATING (2 COATS) IN COLOR TO BE SELECTED BY ARCHITECT OVER EXPOSED ARCHITECTURAL CMU & OTHER WALL COMPONENTS ON EXTERIOR WALLS FOR BUILDING "B" AS SPECIFIED IN BUILDING ELEVATIONS.





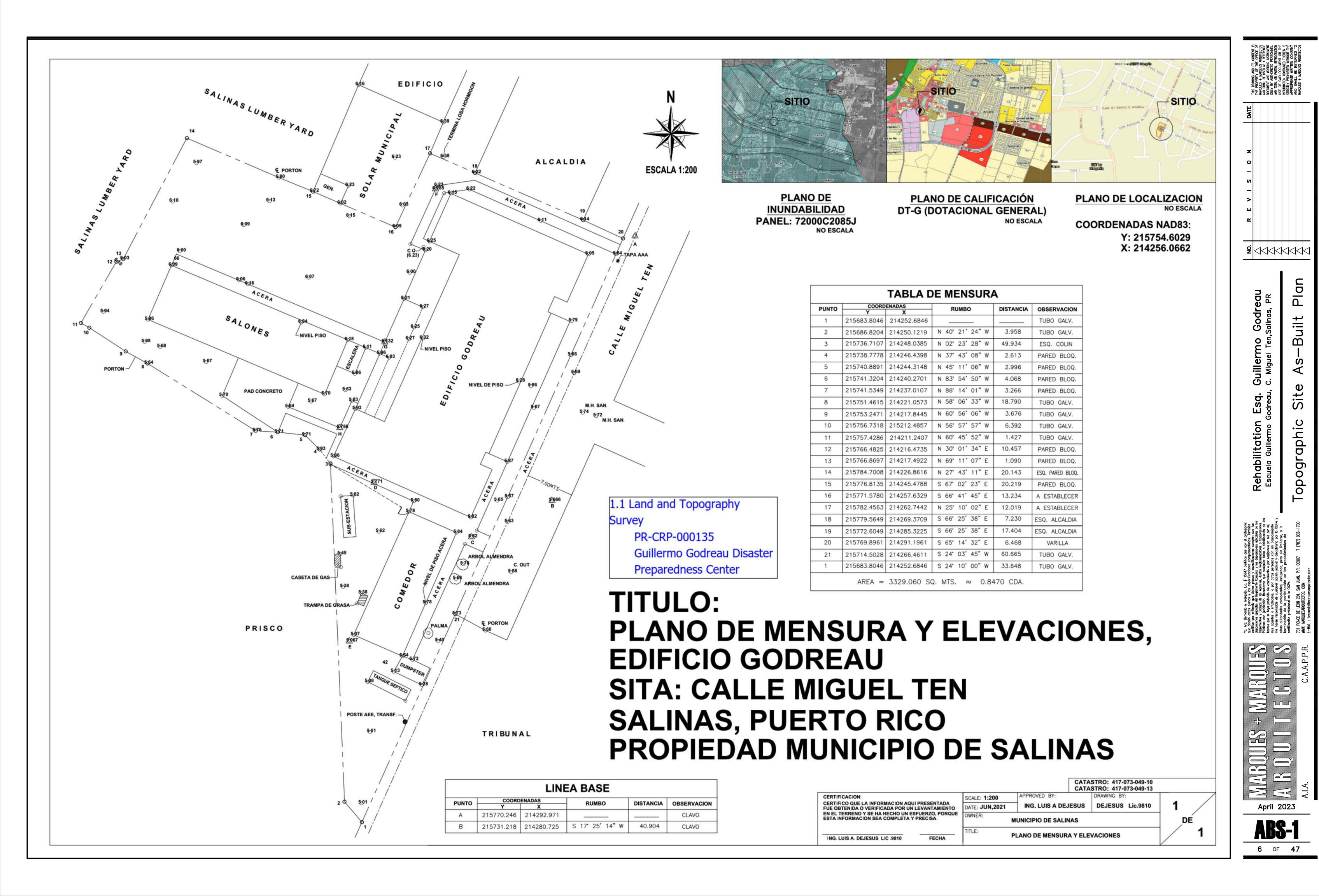
Sall Guille Migu

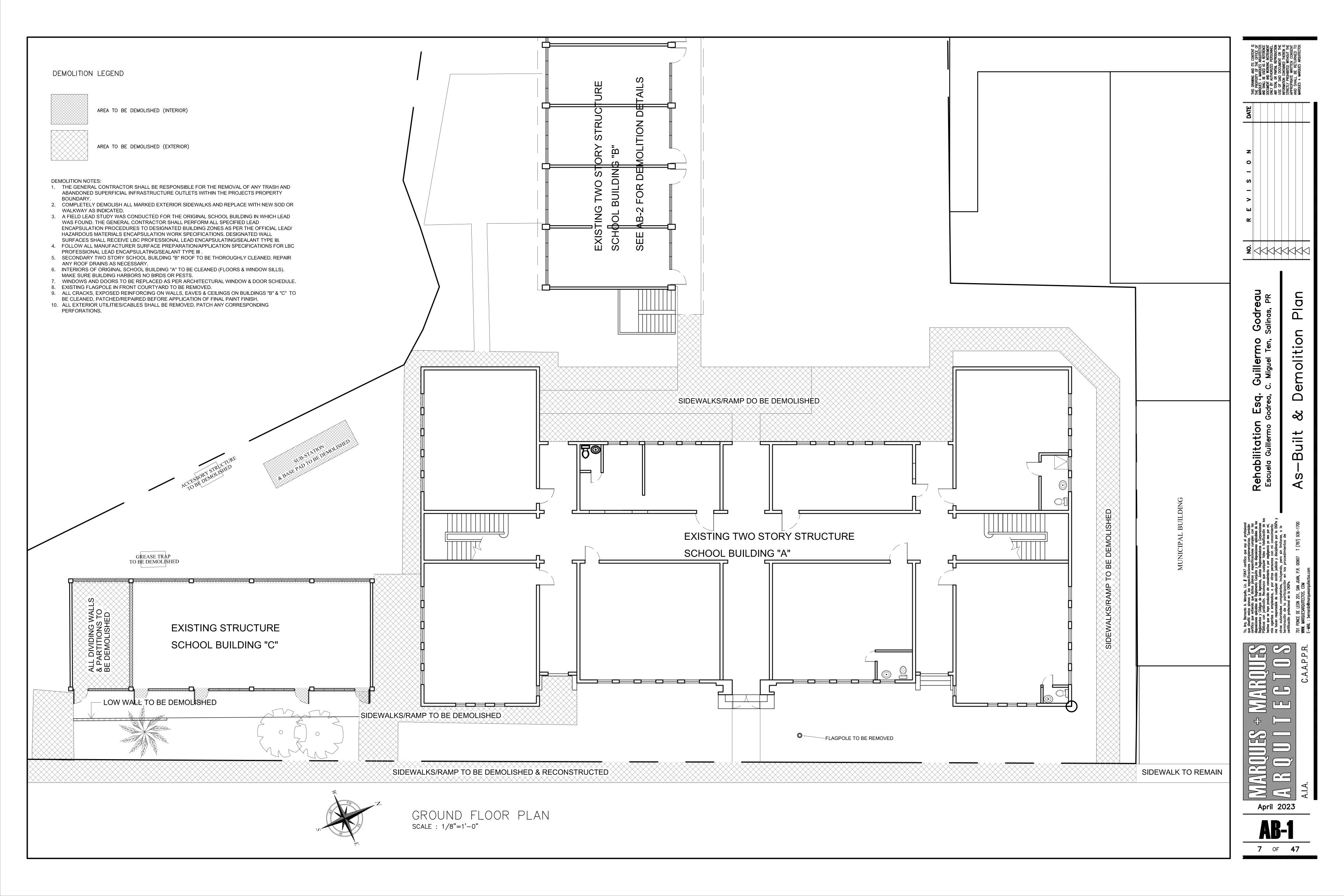
Φ 0

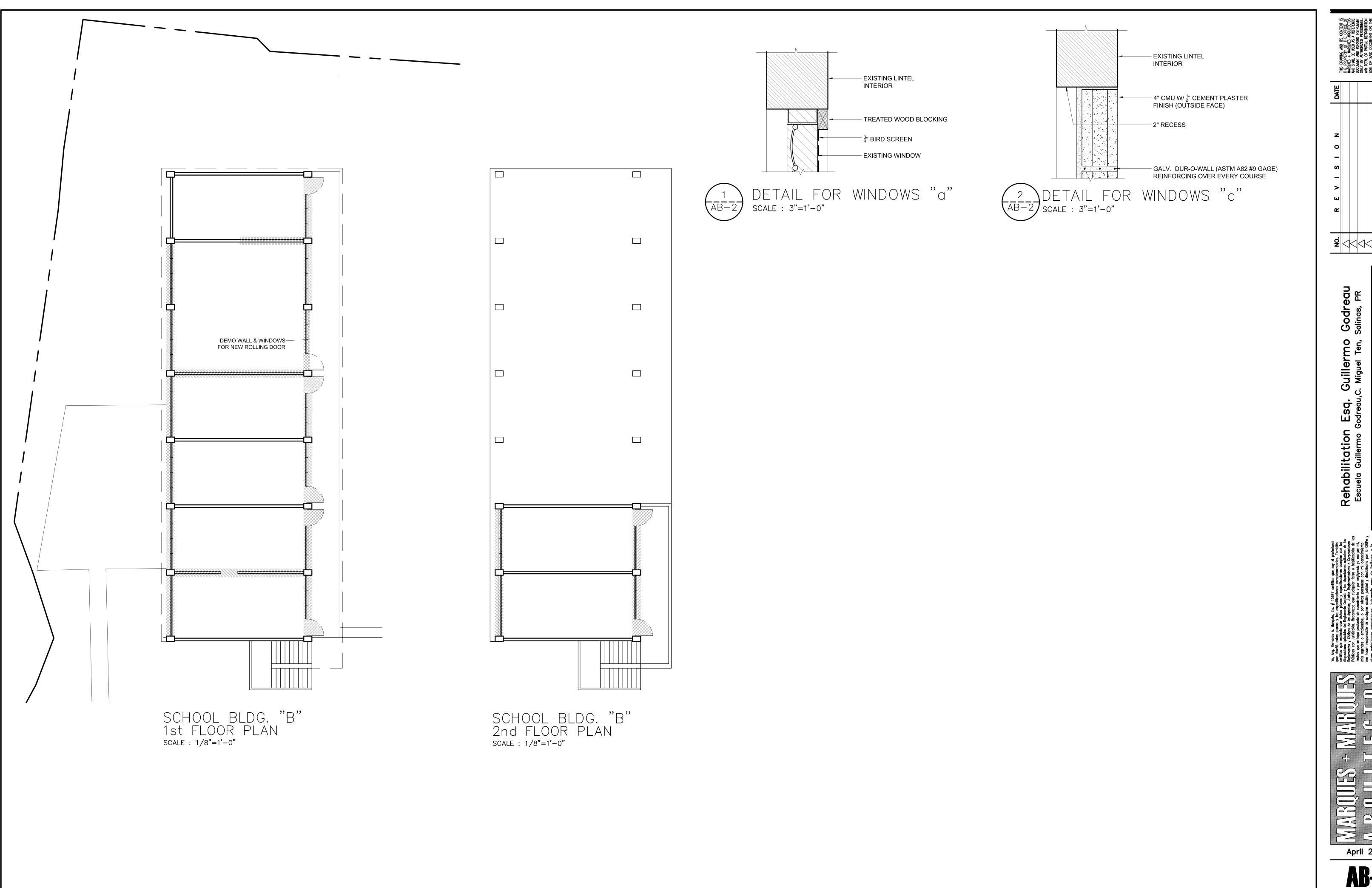
0

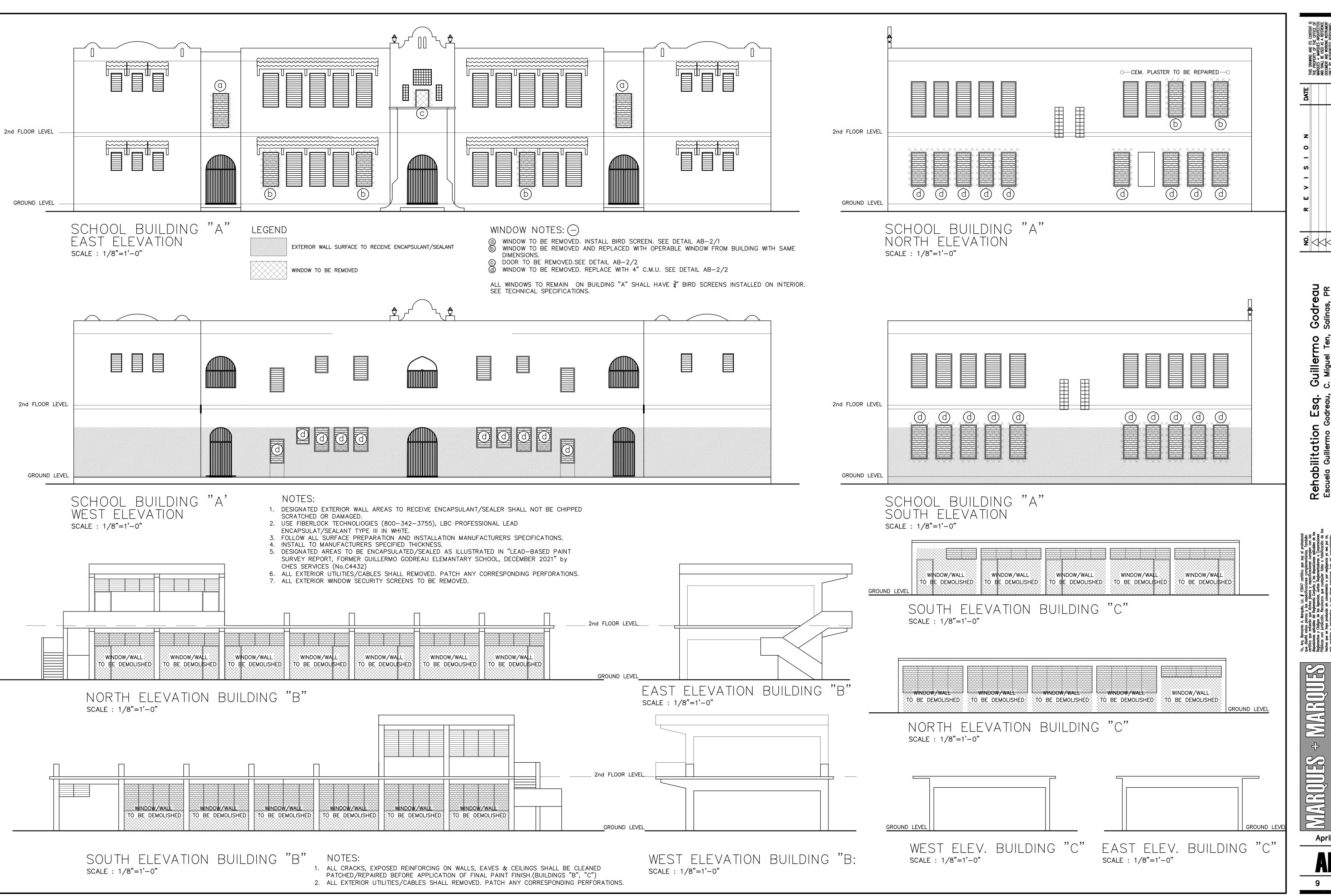
eh Scu

April 2023









9 4444

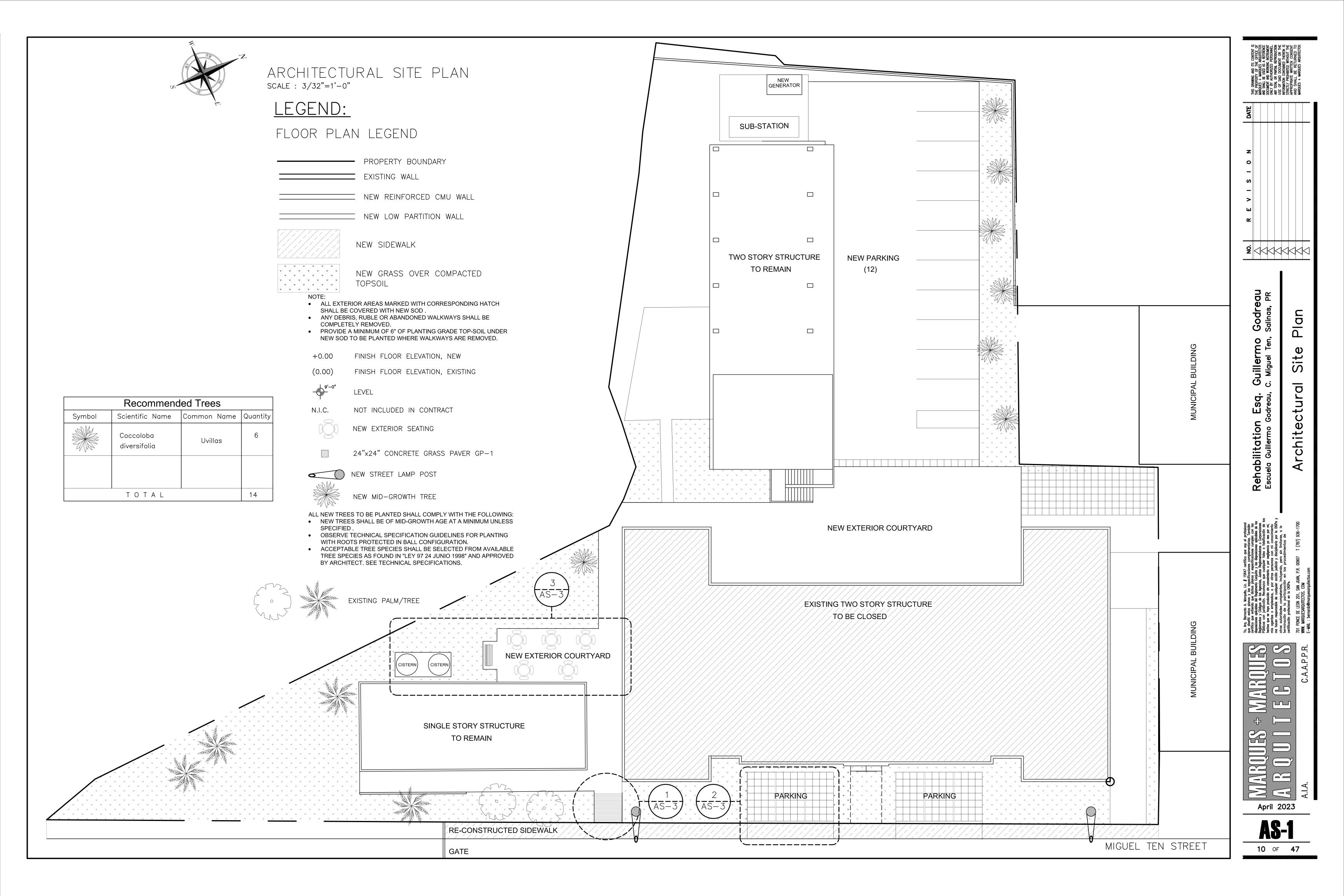
Godreau Salinas, PR Guillermo C. Miguel Ten, Esq. abilitation la Guillermo Go

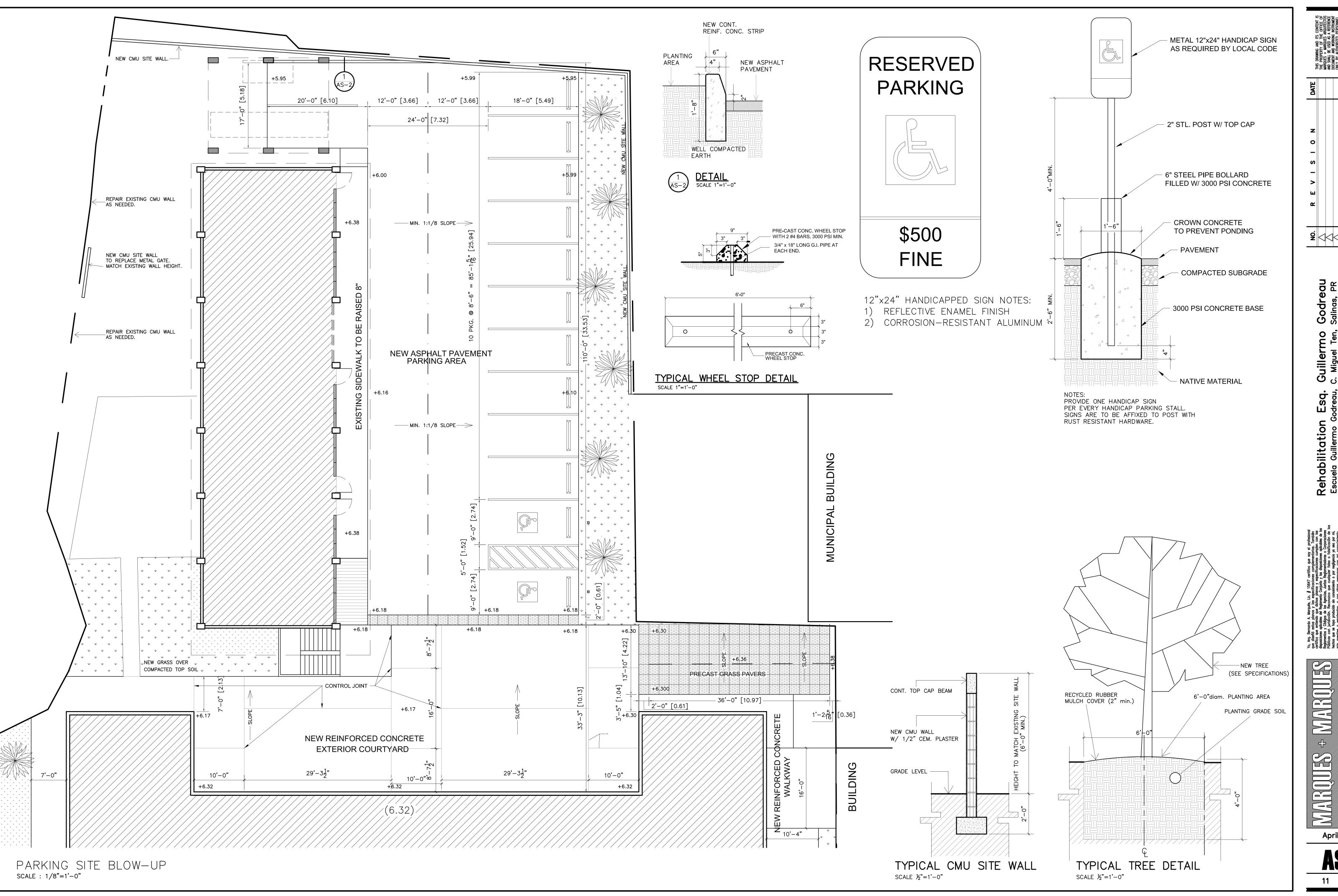
levations

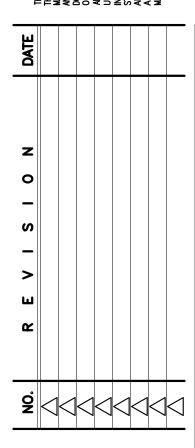
Built

April 2023

9 OF 47







Godreau Salinas, PR Guillermo C. Miguel Ten, sq. abilitation la Guillermo Go

etails

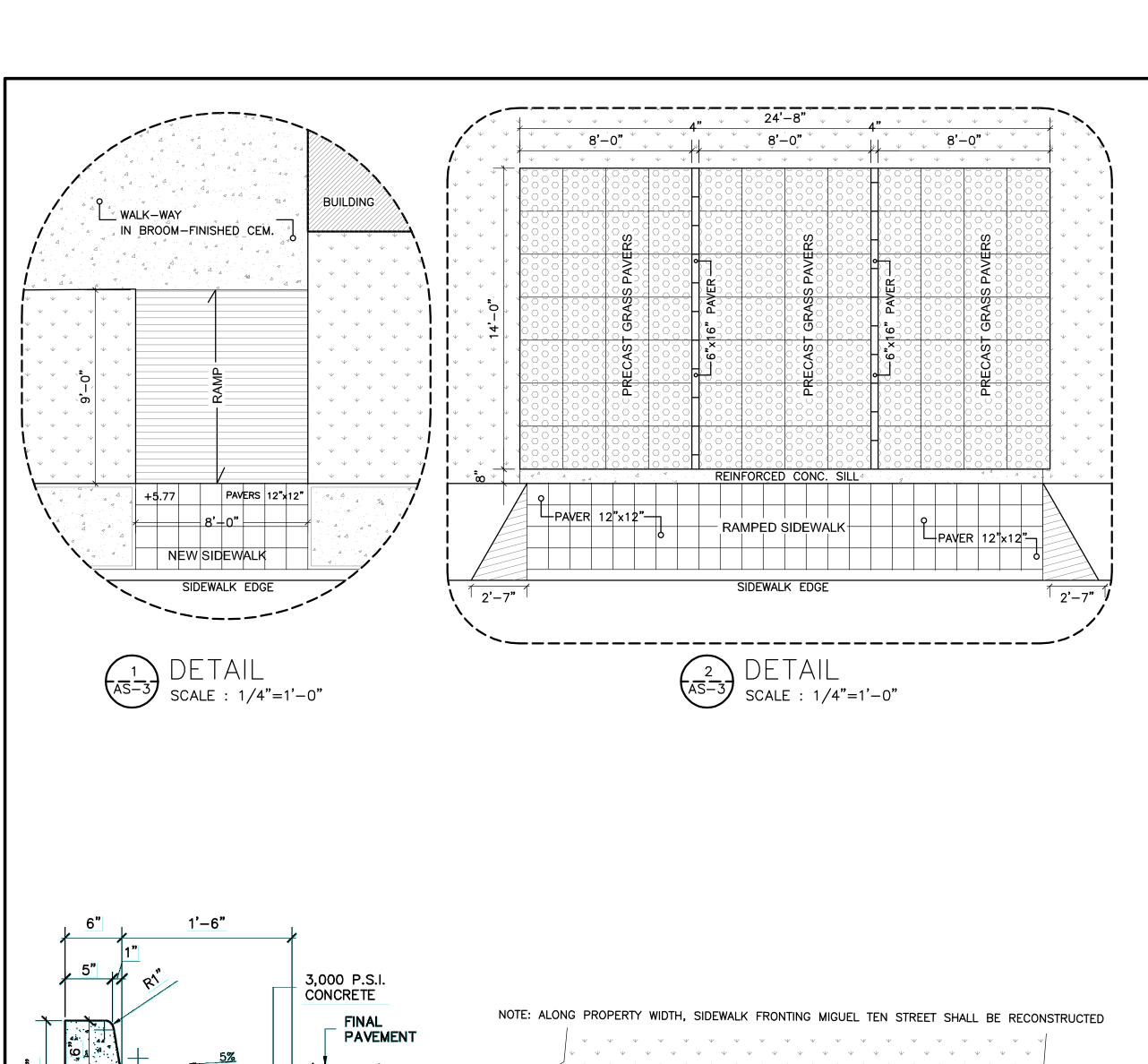
Site

tural

ec

April 2023

**11** OF **47** 

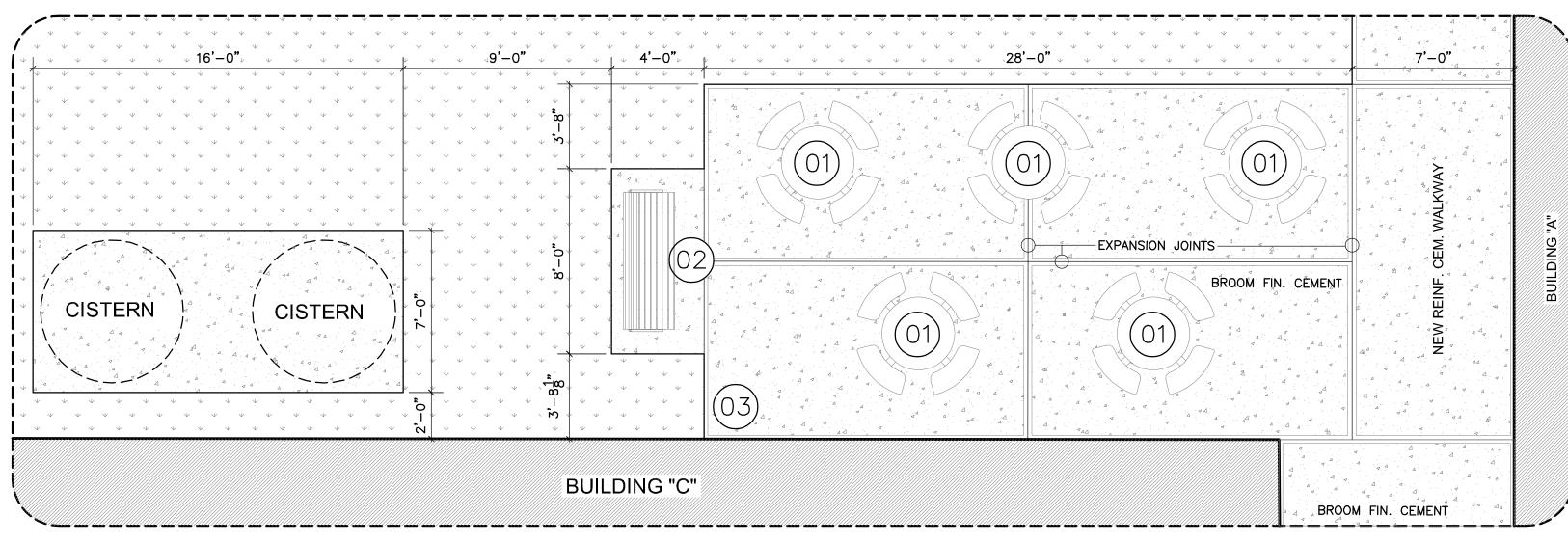


2'-0"

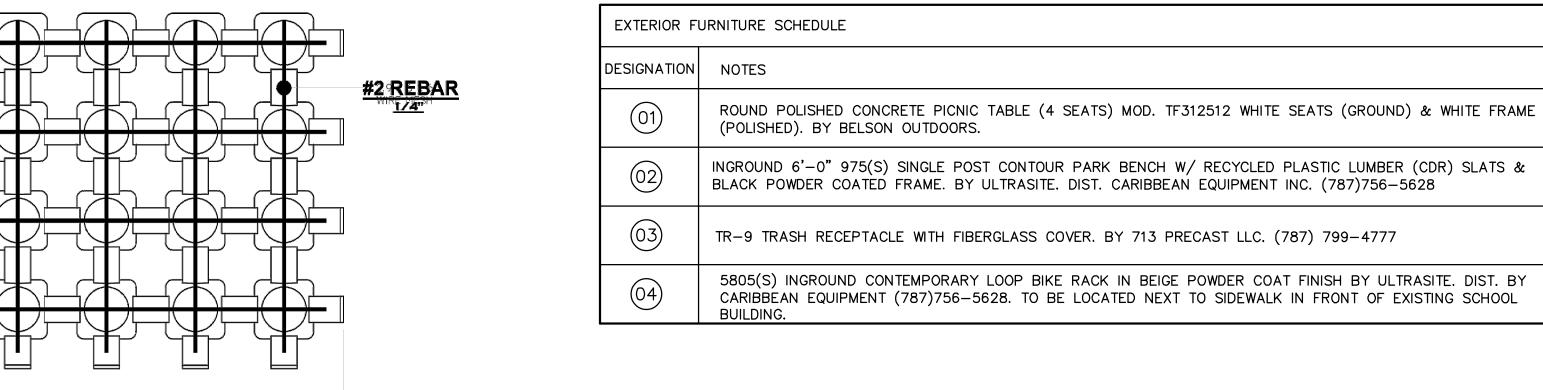
CONCRETE CURB AND

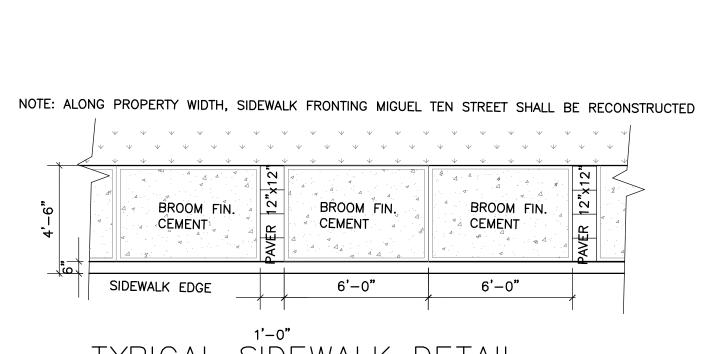
GUTTER DETAIL

SCALE: 1"=1'-0"

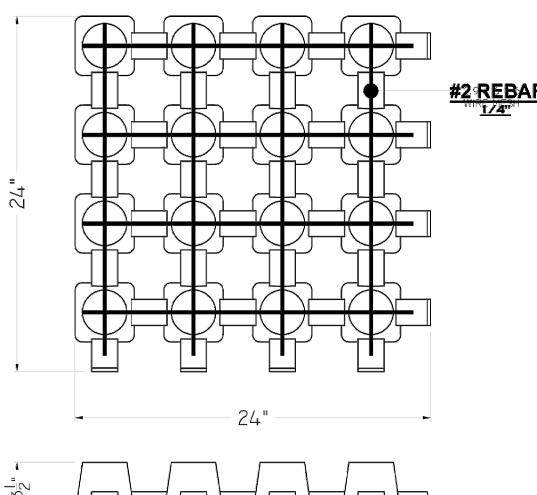




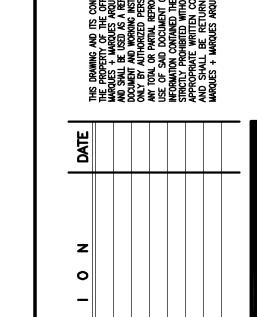








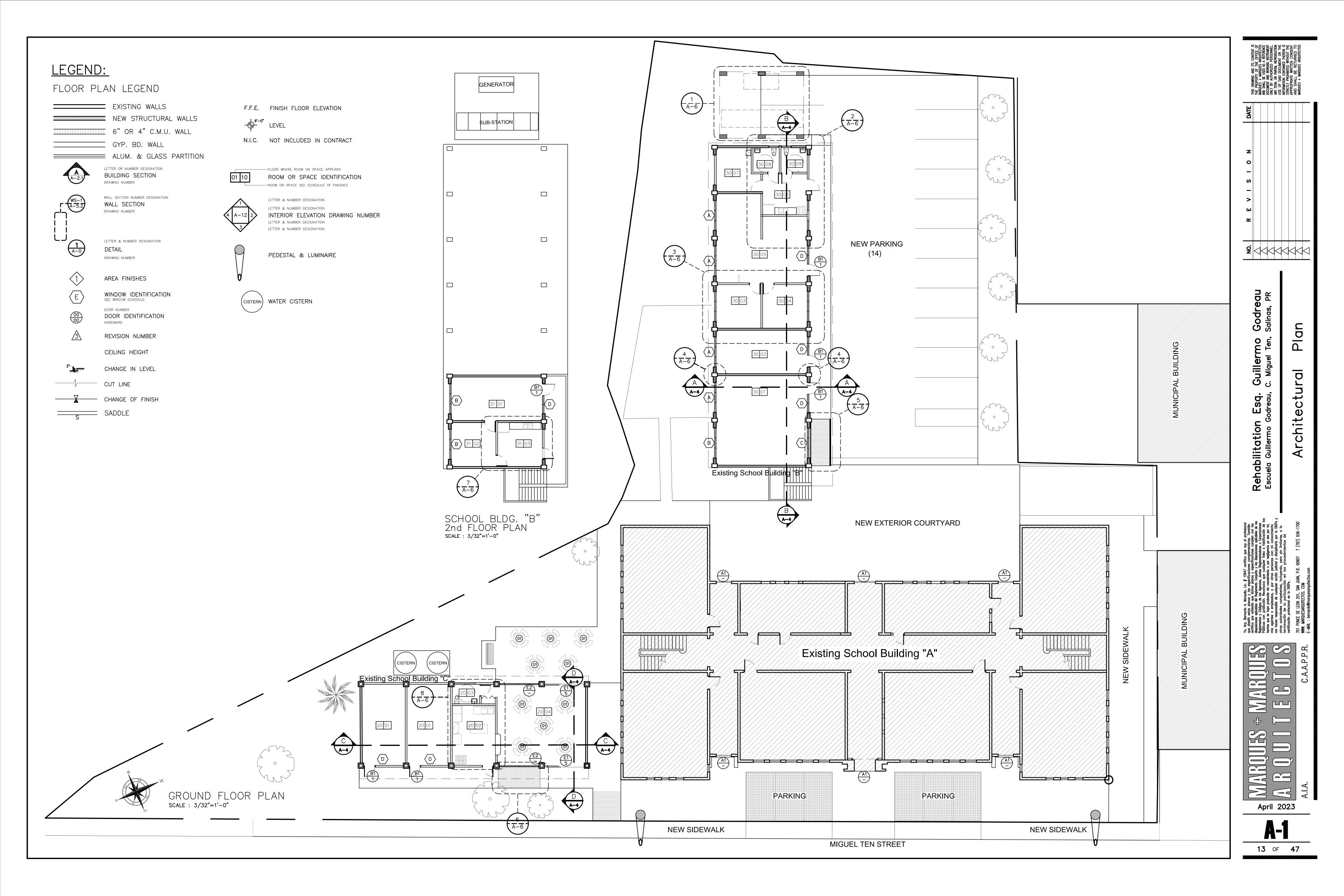
PRECAST GRASS PAVER SCALE : N.T.S.

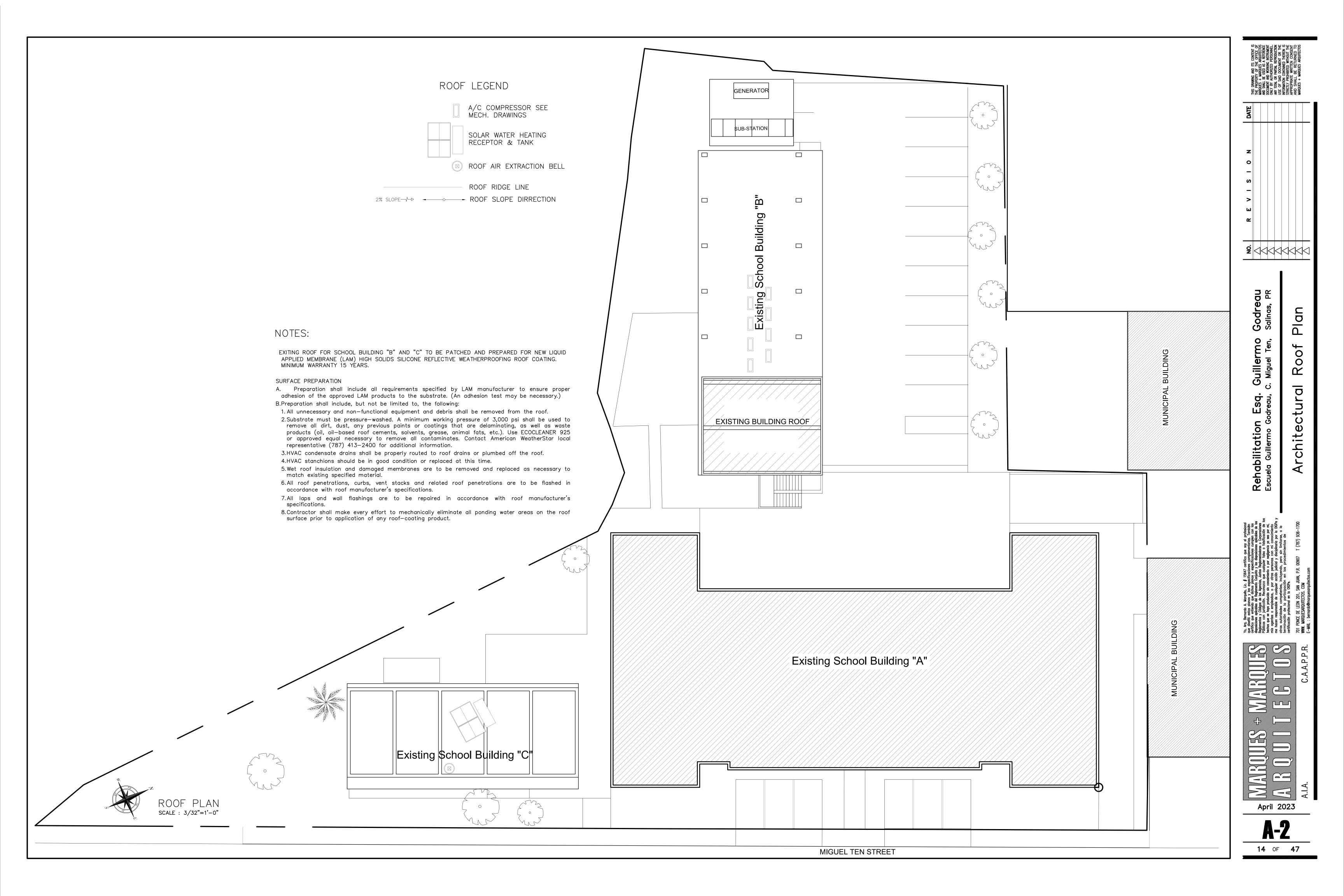


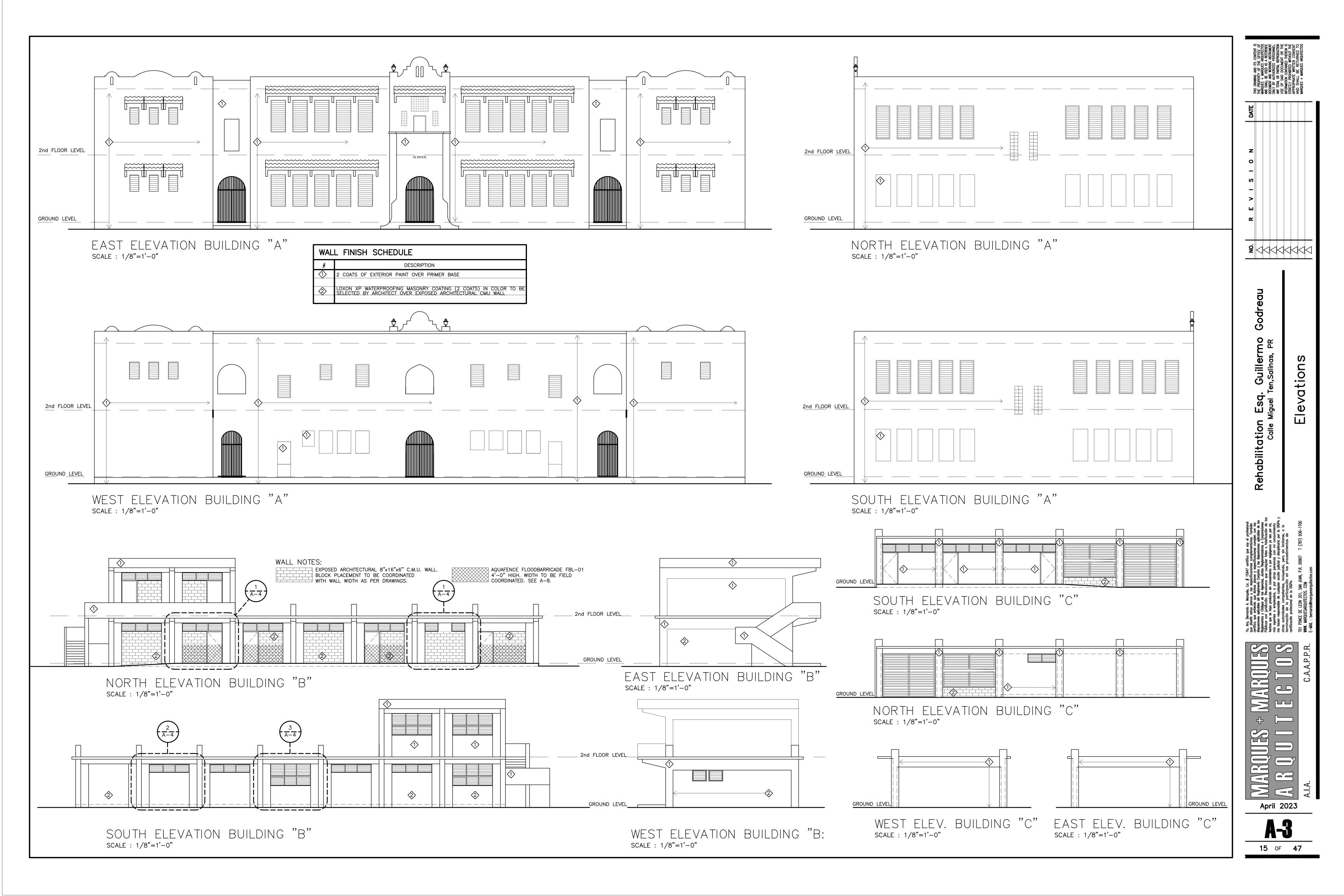
Guillermo C. Miguel Ten, ibilitation a Guillermo G Rehal Escuelo

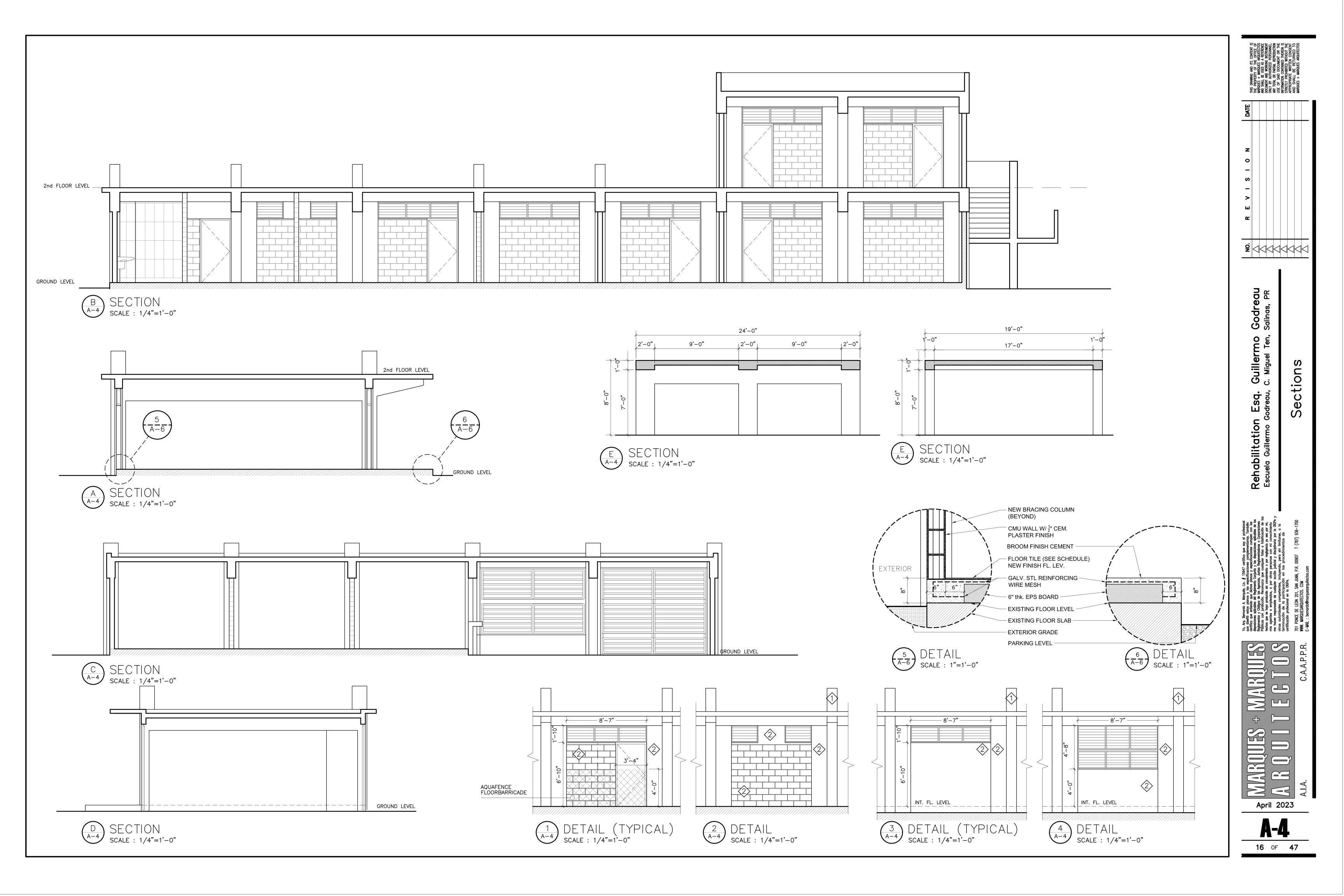
April 2023

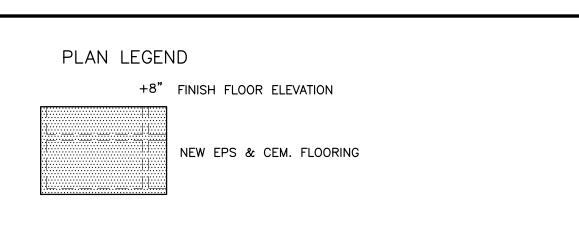
**12** OF **47** 





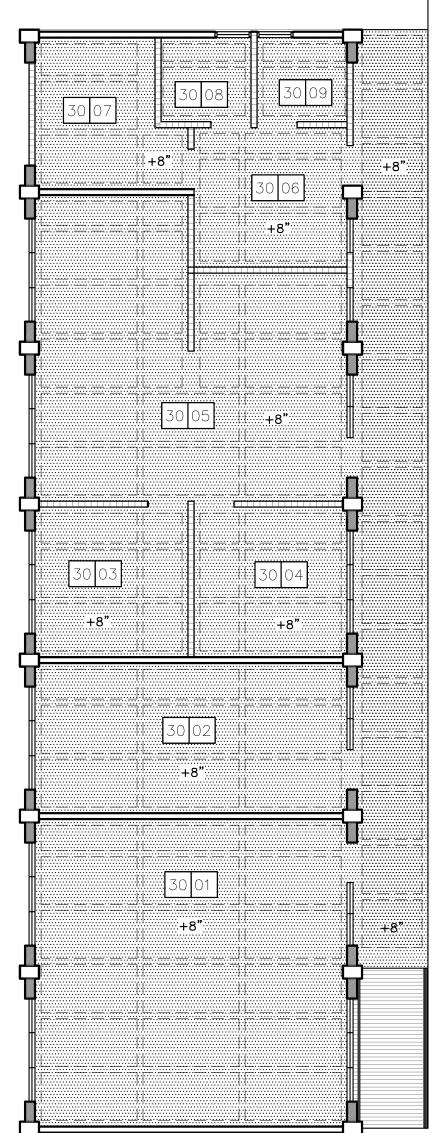




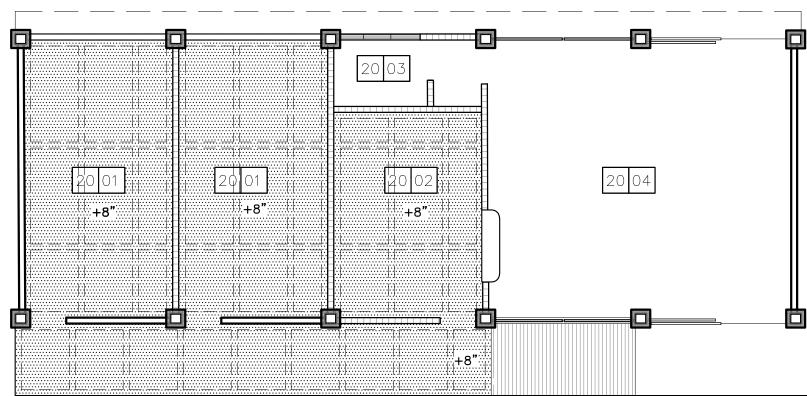


## NOTES:

- 1. 4'x8'x6" THICK EXPANDED POLYSTYRENE (EPS) FOAM BOARDS SHALL BE PLACED OVER INTERIOR FLOOR AREAS AND WALKWAYS AS ILLUSTRATED.
- 2. 6" WIDE SPACE SHALL BE LEFT BETWEEN ALL EPS BOARDS AND WALLS FOR CEMENT.
- 3. ALL COVERED AREAS SHALL HAVE W.W.F. 4"x4" REINF. WIRE (wl.9 x wl.9) OVER EPS BOARDS TO WALLS.
- 4. ALL COVERED AREAS SHALL BE TOPED WITH A  $1\frac{1}{2}$ " THK. CEMENT TOPPING OVER EPS AND REINFORCING WIRE. TOTAL THICKNESS 8 INCHES.
- 5. CONTRACTOR SHALL COORDINATE WITH PLUMBING AND ELECTRICAL RUNS TO PROVIDE PROPER PASS-THROUGH OR PENETRATIONS FOR ANY SPECIFIC WIRING OR PLUMBING.



BUILDING "B"
GROUND FLOOR PLAN
SCALE: 1/8"=1'-0"



BUILDING "C"
GROUND FLOOR PLAN
SCALE: 1/8"=1'-0"

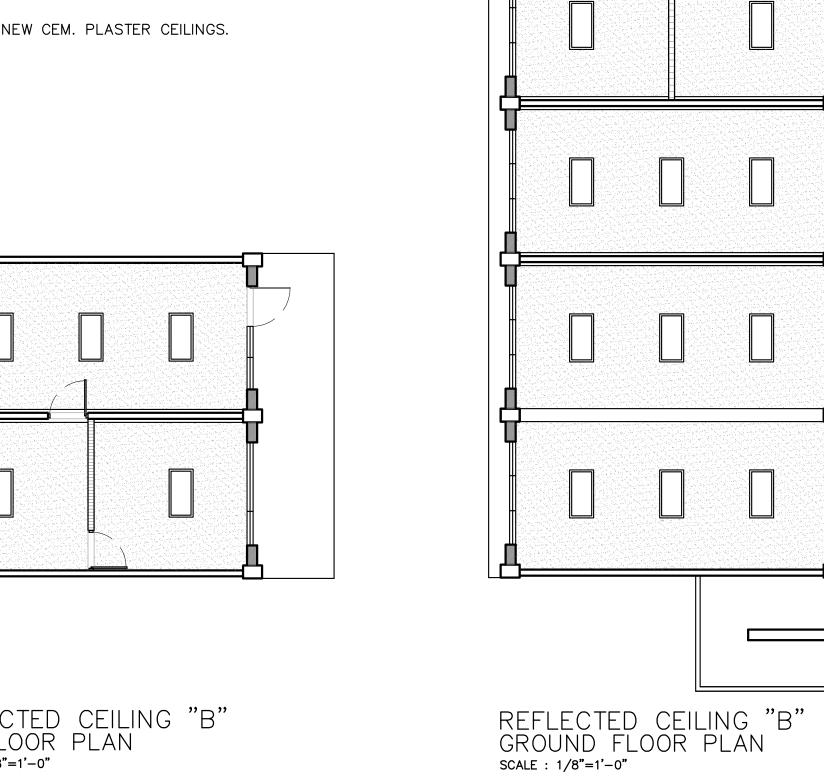
# REFLECTED CEILING PLAN LEGEND +8'-2"A.F.F. CEILING HEIGHT ABOVE FINISH FLOOR GYPSUM BD. CEILING CEM. PLASTER HI-RIB CEILING

• RECESSED CEILING LAMP 24"x24" CEILING LIGHT

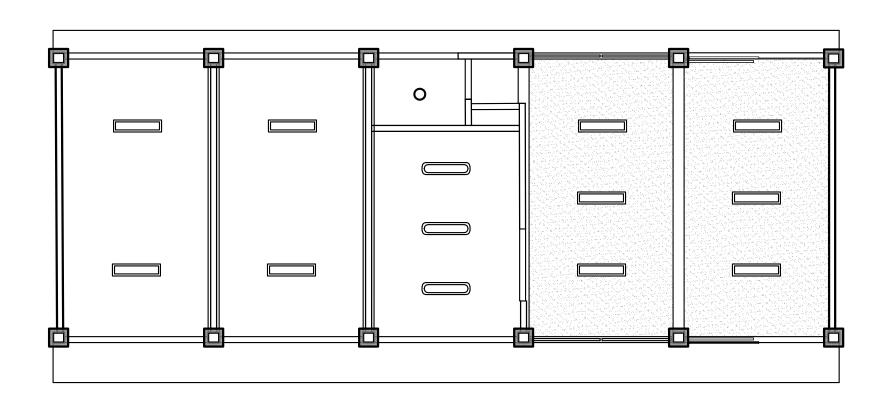
24"x48" CEILING LIGHT 12"x48" CEILING LIGHT

### NOTES:

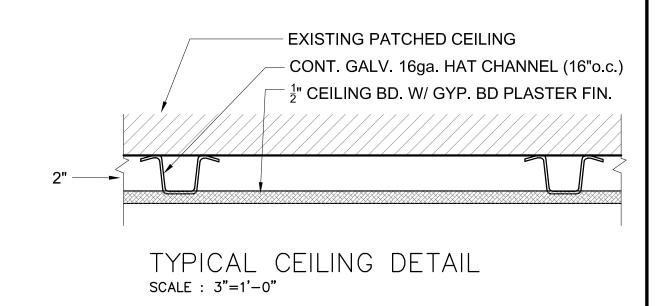
- 1. EXISTING INTERIOR HALLWAY CEILINGS (HIGH-RIB, CEM. PLASTER) TO REMAIN WHERE MARKED.
- 2. GENERAL CONTRACTOR SHALL COORDINATE ALL PERFORATIONS ON HALLWAY CEILINGS FOR NEW PLUMBING OR WIRING RUNS. COORDINATE RUNS TO PASS THROUGH SAME AREAS IN ORDER TO MINIMIZE NEW PERFORATIONS.
- 3. PATCH PERFORATIONS IN HALLWAYS WITH CEM. PLASTER OVER VINYL EXPANDED MESH IN MATCHING
- 4. FINISH ALL HALLWAYS CEILINGS WITH PRIMER & 2 COATS OF FLAT PAINT (TO BE SELECTED BY
- 5. SEE TYPICAL CEM. PLASTER CEILING DETAIL FOR NEW CEM. PLASTER CEILINGS.

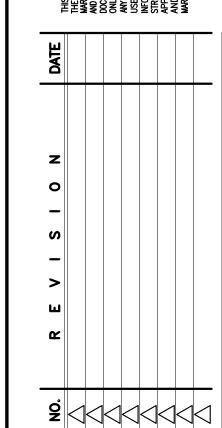


REFLECTED CEILING "B" 2nd FLOOR PLAN scale: 1/8"=1'-0"



REFLECTED CEILING "C" GROUND FLOOR PLAN SCALE: 1/8"=1'-0"





Q

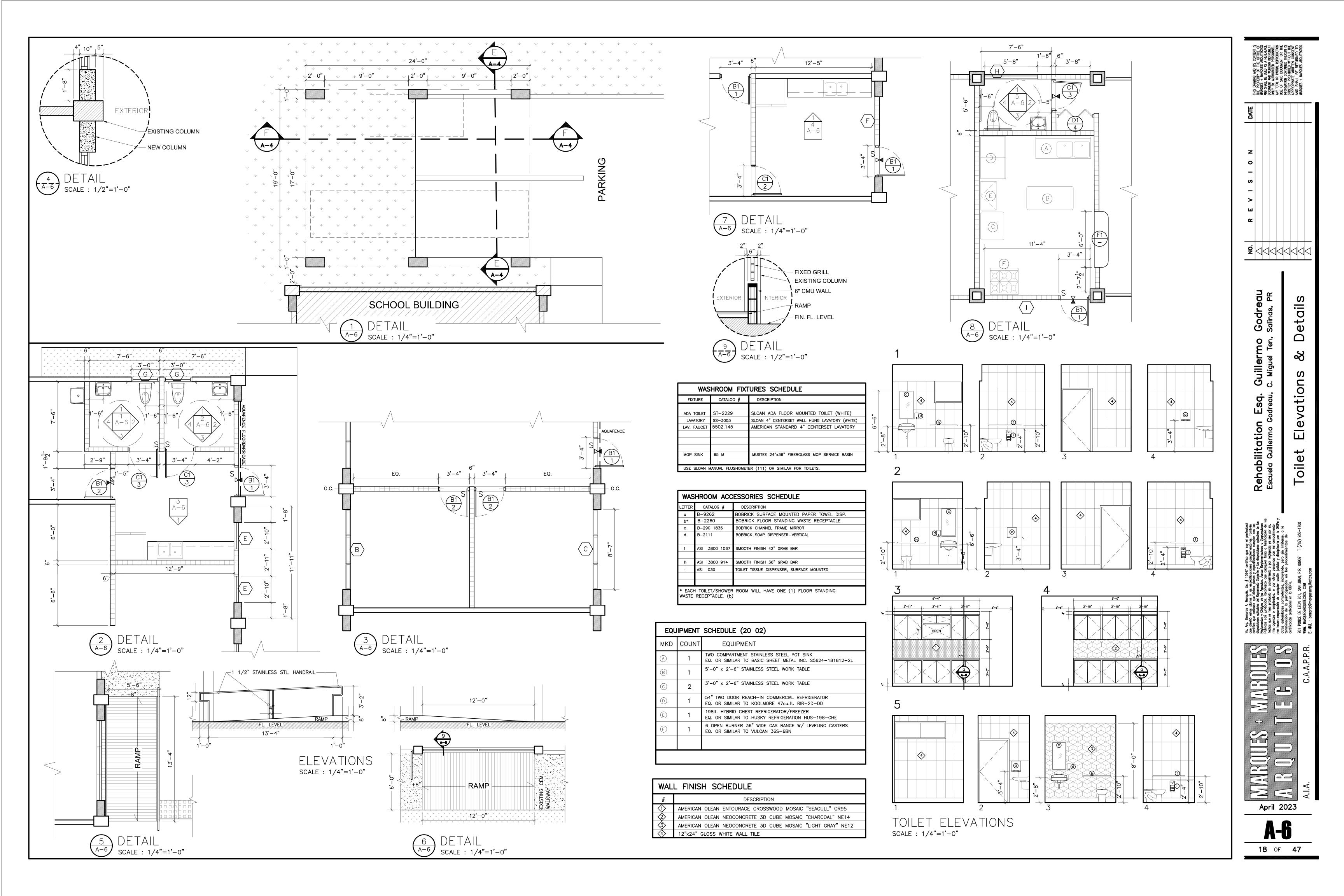
D

g

Floorin

Godreau Salinas, PR Guillermon C. Miguel Ter Esq. Rehabilitation Escuela Guillermo G

**17** OF **47** 



| ИKD |        | OPNG.    |          | OOR SIZ  |           | DOOR<br>TYPE | JAMB<br>DET. | HEAD<br>DET. | SADDLE | REMARKS   |
|-----|--------|----------|----------|----------|-----------|--------------|--------------|--------------|--------|---|
| A1  | WIDIH  | <u>-</u> | <u>-</u> | <u>-</u> | <u> -</u> | -            | -<br>-       | –<br>–       | _      | EXISTING STEEL GATES TO BE SCRAPED, RECONDITIONED & PAINTED WITH  APPROVED EPOXIC RUST—INHIBITOR PAINT IN COLOR TO BE SELECTED BY ARCHITECT |
|     |        |          |          |          |           |              |              |              |        |   |
| B1  | 3'-4"  | 6'-10"   | 3'-0"    | 6'-8"    | 1 3/4"    | METAL        | а            | а            | ALUM.  | 16ga. HEAVY DUTY FLUSH METAL DOOR W/ METAL FRAME. FINISHED W/ PRIMER, INDUSTRIAL ENAMEL.  |
| C1  | 3'-4"  | 6'-10"   | 3'-0"    | 6'-8"    | 1 1/2"    | WOOD         | b            | b            | ALUM.  | SEMI-SOLID FLUSH WOOD DOOR W/ METAL FRAME (INDUSTRIAL ENAMEL). FINISH DOOR IN VARNISH STAIN. COLOR TO BE SELECTED BY ARCHITECT.             |
| D1  | 4'-0"  | 6'-10"   | 2'-0"    | 6'-10"   | 1 1/2"    | WOOD         |              | С            | -      | FULL LOUVERED BI-FOLDING CLOSET DOORS W/ WOOD FRAME. FINISHED W/ INDUSTRIAL ENAMEL.   |
| E1  | 11'-4" | 9'-4"    | 5'-4"    | 9'-4"    | 1 1/2"    | METAL        |              |              | _      | OVERHEAD TRACK HUNG, RECTANGULAR GALV. STEEL ROLLING GATE W/ PADLOCK. FINISHED W/ ANTI—CORROSION PRIMER & INDUSTRIAL ENAMEL.                |
| E2  | 11'-4" | 7'-2"    | 5'-6"    | 7'-2"    | 1 1/2"    | METAL        |              |              | _      | FIXED RECTANGULAR GALV. STEEL SECURITY SCREEN. FINISHED W/ ANTI-CORROSION PRIMER & INDUSTRIAL ENAMEL.                                       |
| F1  | 6'-0"  | 4'-8"    | 6'-0"    | 4'-8"    | 1 1/4"    | ALUM.        | G323A        |              | _      | PUSH-UP MANUAL OPERATED ROLLING COUNTER DOOR. EXTRUDED ALUM. GUIDES MOUNTED ON WALL. DOOR COLOR (POWDER COAT) TO BE SELECTED BY ARCHITECT.  |
|     |        |          |          |          |           |              |              |              |        |   |

NOTES ON DOOR HARDWARE: IS THE RESPONSIBILITY OF THE HARDWARE SUPPLIER TO PROVIDE THE CORRECT STOP FOR ALL THE DOOR'S IN THE JOB.

VERIFY IN FIELD IF WALL STOPS ARE TO BE USED, AND USE MOST SUITABLE ONE FOR EACH INDIVIDUAL LOCATION.

KEYING SYSTEM. VERIFY WITH OWNER KEYING SYSTEM.

REGULATORY REQUIREMENTS:

1. CONFORM TO ALL APPLICABLE CODES FOR FIRE RATED DOORS
AND FRAMES.

2. CONFORM TO THE APPLICABLE SECTIONS OF CHAPTER 5 OF NFPA

3. CONFORM TO ANSI A117.1 FOR HARDWARE LOCATION AND REQUIREMENTS TO MEET ALL HANDICAP CODES AND MEET TITLE III PROVISIONS OF THE AMERICAN WITH DISABILITIES ACT.

4. QUANTITIES SHOWN ON THE SCHEDULE ARE FOR REFERENCE ONLY. FINAL COUNT IS BIDDERS RESPONSIBILITY. BIDDERS SHOULD VERIFY FLOOR PLANS AND DOOR SCHEDULE TO DETERMINE FINAL

ALL LOCKS MASTER KEY,
ALL LOCKS CONSTRUCTION KEY
3 KEYS PER LOCK
2 MASTER KEYS
10 CONSTRUCTION KEYS

QUANTITIES.

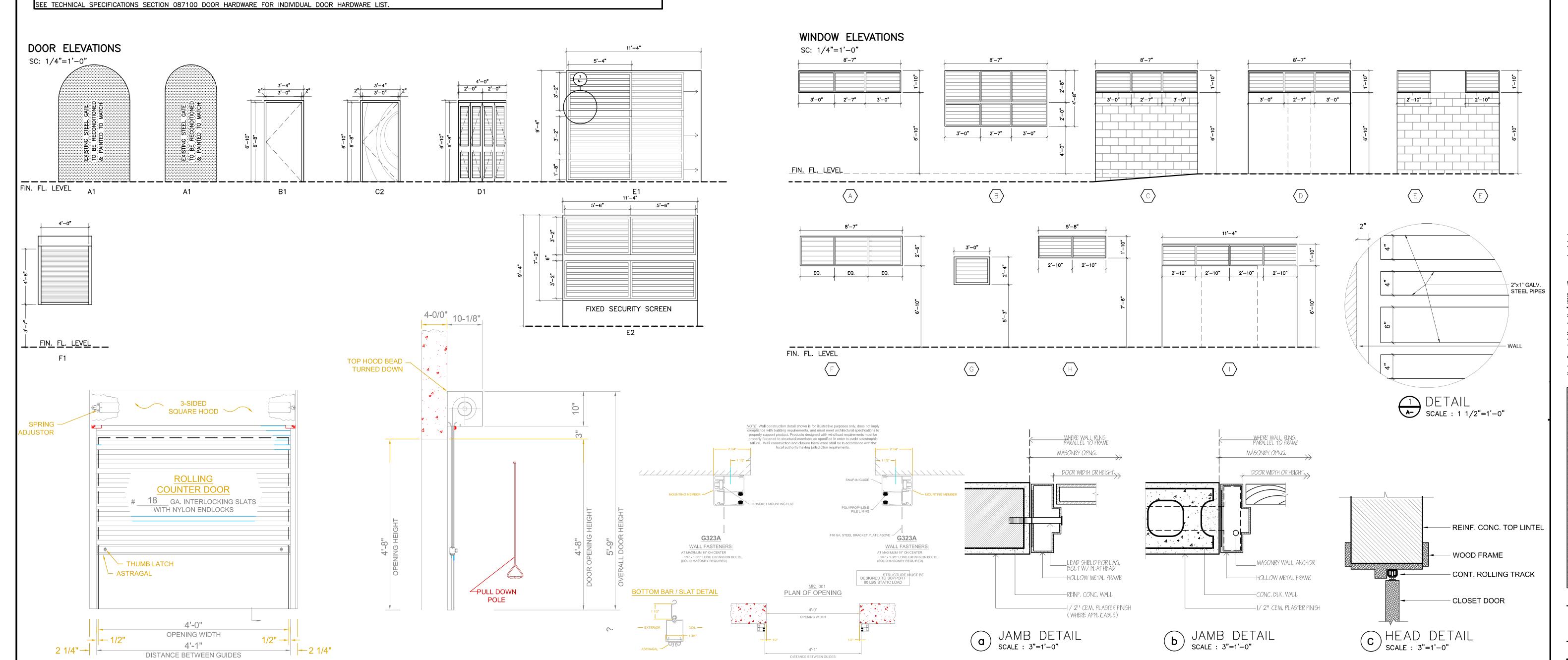
FINAL KEY LAY OUT AS PER OWNER INSTRUCTIONS.

ALUMINUM DOORS HARDWARE TO BE SUPPLIED BY DOOR SUPPLIER IN ACCORDANCE TO REGULATORY REQUIREMENTS & LOCAL CODES. TO BE APPROVED BY ARCHITECT.

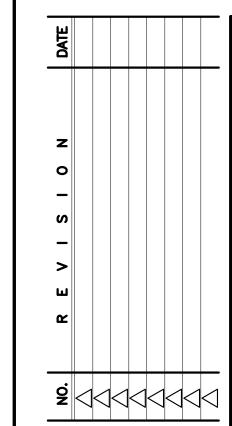
|     | WINI   | DOW    | / S(                    | CHE            | DULE              |  |
|-----|--------|--------|-------------------------|----------------|-------------------|--|
| MKD |        |        | WINDO\<br>WIDTH         |                | HGHT.<br>FROM FL. | REMARKS  |
| А   | 8'-7"  | 1'-10" | 3'-0"<br>2'-7"<br>3'-0" | 1'-10"         | 6'-10"            | OPERABLE (4") MIAMI STYLE, LAMINATED GALSS SECURITY WINDOW W/ INSECT SCREEN. INSTALLED AT HEIGHT OF EXISTING WINDOW TO BE REPLACED. WHITE. |
| В   | 8'-7"  | 4'-6"  | 3'-0"<br>2'-7"<br>3'-0" | 2'-8"<br>2'-0" | 4'-0"             | OPERABLE (4") MIAMI STYLE, LAMINATED GALSS SECURITY WINDOW W/ INSECT SCREEN. INSTALLED AT HEIGHT OF EXISTING WINDOW TO BE REPLACED. WHITE. |
| С   | 8'-7"  | 1'-10" | 3'-0"<br>2'-7"<br>3'-0" | 1'-10"         | 6'-10"            | OPERABLE (4") MIAMI STYLE, LAMINATED GALSS SECURITY WINDOW W/ INSECT SCREEN. WHITE.  |
| D   | 8'-7"  | 1'-10" | 3'-0"<br>2'-7"<br>3'-0" | 1'-10"         | 6'-10"            | OPERABLE (4") MIAMI STYLE, LAMINATED GALSS SECURITY WINDOW W/ INSECT SCREEN. WHITE. MOUNT REINFORCING BAR OVER DOOR JAMB.                  |
| E   | 2'-10" | 1'-10" | 2'-10"                  | 1'-10"         | 6'-10"            | OPERABLE (4") MIAMI STYLE, LAMINATED GALSS SECURITY WINDOW W/ INSECT SCREEN. WHITE.  |
| F   | 8'-7"  | 2'-6"  | EQ.                     | 2'-6"          | 6'-10"            | OPERABLE (4") MIAMI STYLE ALUMINUM SECURITY WINDOW W/ INSECT SCREEN. INSTALLED AT HEIGHT OF EXISTING WINDOW TO BE REPLACED. WHITE.         |
| G   | 3'-0"  | 2'-4"  | 3'-0"                   | 2'-4"          | 5'-3"             | OPERABLE (4") MIAMI STYLE, LAMINATED GALSS SECURITY WINDOW W/ INSECT SCREEN. WHITE.  |
| Н   | 5'-8"  | 1'-10" | 2'-10"                  | 1'-10"         | 7'-6"             | OPERABLE (4") MIAMI STYLE, LAMINATED GALSS SECURITY WINDOW W/ INSECT SCREEN. WHITE.  |
| 1   | 11'-4" | 1'-10" | 2'-10"                  | 1'-10"         | 6'-10"            | OPERABLE (4") MIAMI STYLE, LAMINATED GALSS SECURITY WINDOW W/ INSECT SCREEN. WHITE. MOUNT REINFORCING BAR OVER DOOR JAMB.                  |

FOR BUILDING "A": INSTALL IN INTERIOR OF EXISTING WINDOWS TO REMAIN, NIXALITE OF AMERICA, POLLYNET PREMIUM (3/4") BIRD CONTROL NETTING AS PER

ARCHITECTURAL DETAILS & MANUFACTURERS DETAILS IN TECHNICAL SPECIFICATIONS.







Rehabilitation Esq. Guillermo Godreau Escuela Guillermo Godreau, C. Miguel Ten, Salinas, PR

qnp

 $\mathbb{D}_{0}$ 

refusion que entiendo que dichos planos y especimicanos compenentamen entirios que entiendo que dichos planos y especimicaciones cumplen cisposiciones aplicables del Regiamento Conjunto y las disposiciones aplicables egiamentos y Códigos de las Agencias, Juntas Regiamentadoras o Corpora Obblicas con juridicción. Reconozco que cualquier falsa o fasificació echos que se haya producido sin conosimiento o por negligencia ya sea por sis agentes o empleados, o por otras personas con mi conocim ne hacen responsable de cualquier acción judicial y disciplinaria por latras autoridades competentes, incluyendo, pero sin limitarse, cerminación de participación en los procedimientos de ertificación profecional en la OIGPe.

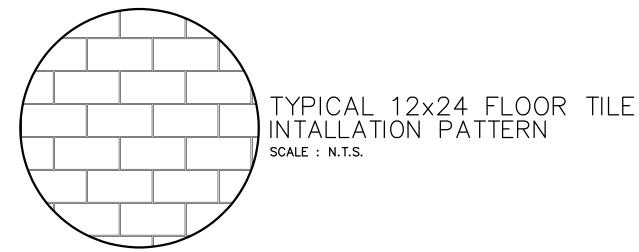
April 2023

April 2023

A-7

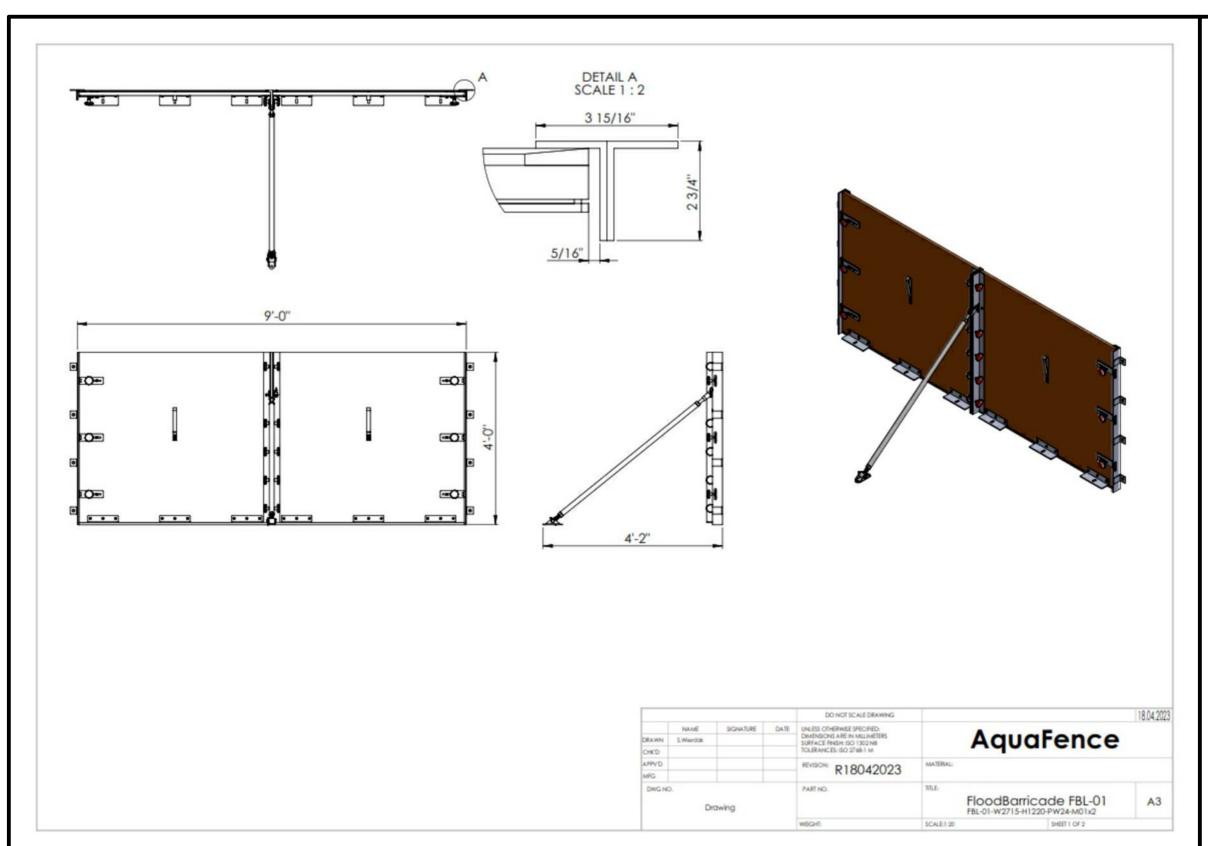
19 OF 47

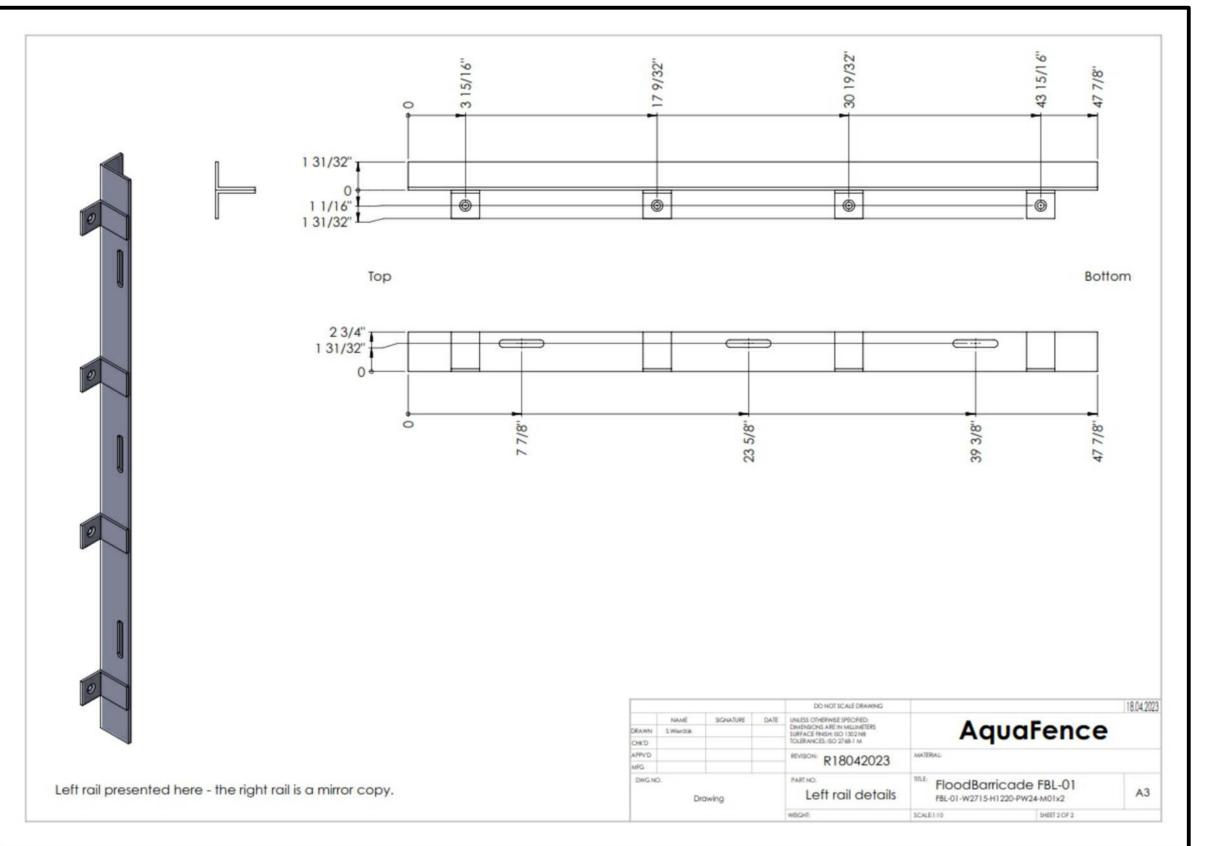
| 5              | S C H E                  | D U L     | E                 |  | C  | ) F               |                           | F                                  | <b>-</b>    |                            | N                        |                   | SHES   |
|----------------|--------------------------|-----------|-------------------|--|--|-------------------|---------------------------|------------------------------------|-------------|----------------------------|--------------------------|-------------------|--|
| MK'D           | AREA                     |           |                   | FLO  | OR   | BASE              | :                         | WALL                               |             | CEI                        | LING                     | ;                 | REFERENCE NOTES                                  |
|                |                          |           |                   | RESIN FLOORING W/ SEALER FORMAT FLOOR TILE | T TOPING (STEEL TROWELED)                        | FORMAT FLOOR TILE | Y FLOOR TILE<br>TS SEALER | COATS INTERIOR SATIN PAINT  L TILE | FRP PANELS  | '2" HIGH STRENGTH CLG. BD. | PRIMER & PAINT (2 COATS) |                   |  |
| 00 00          |                          |           | <u> </u>          |  | 빙  |                   | 2 0                       | WAL 2                              | <u> </u>    | 1-                         | H. H.                    | H                 |  |
| 00 00          |                          |           |                   |  |  |                   |                           |                                    |             |                            |                          | +                 |  |
| 20 01          | STORAGE                  |           |                   |  | 0  |                   |                           |                                    |             |                            |                          |                   | FLOORING FOR STORAGE TO BE REPAIRED AS NECCESARY |
| 20 02          | KITCHEN                  |           | 0                 |  |  |                   |                           |                                    |             |                            |                          |                   |  |
| 20 03<br>20 04 | TOILET ROOM DINNING AREA |           |                   |  | +++  |                   |                           |                                    |             |                            |                          | H                 |  |
| 20 04          | DINNING AREA             |           |                   |  |  |                   |                           |                                    | +           | ++                         |                          | H                 |  |
| 30 01          | OMME OFFICE              |           | ++                |  | <del>                                     </del> |                   |                           |                                    | ++          |                            | ++                       | ╁┤                |  |
|                | DESSAROLLO LABORA        | AL OFFICE |                   |  |  |                   |                           |                                    | 11          |                            | ++                       | $\dagger \dagger$ |  |
| 30 03          | SECTION 8 OFFICE         |           |                   | 0  |  |                   |                           |                                    |             |                            |                          |                   |  |
| 30 04          | OFFICE                   |           |                   | 0  |  | •                 | •                         |                                    |             |                            |                          |                   |  |
| 30 05          | ADMINISTRATION OFF       | ICE       |                   |  |  |                   | •                         |                                    | $\bot \bot$ |                            | $\bot \bot$              | $\coprod$         |  |
|                | KITCHENETTE              |           |                   |  |  |                   |                           |                                    | $\bot \bot$ |                            | $\bot \bot$              | $\sqcup $         |  |
|                | STORAGE                  |           |                   |  | +++  |                   |                           |                                    | ++          |                            | +                        | +                 |  |
|                | TOILET ROOM              |           |                   |  | +++  | 1                 |                           |                                    | ++          | ++                         |                          | +                 |  |
| 30 09          | TOILET ROOM COE OFFICE   |           |                   |  | +  |                   |                           |                                    | ++          |                            |                          | ++                |  |
|                | LOUNGE                   |           | ++                |  | +++  |                   |                           |                                    | ++          |                            | ++                       | ╁┤                |  |
|                | BREAK ROOM               |           | ++                |  |  |                   |                           |                                    | ++          |                            | ++                       | +                 |  |
|                | 2.12/11/11/00/14/        |           | $\dagger \dagger$ |  | <del>                                     </del> | 1                 |                           | <del>-</del>                       | 11          | 11                         | ++                       | $\dagger \dagger$ |  |

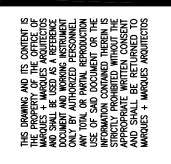


# GENERAL NOTES:

- 1) THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL DIMENSIONS REPRESENTED IN THESE DRAWINGS. ANY DISCREPANCIES BETWEEN DIMENSIONS ILLUSTRATED HERE AND EXISTING SHALL BE BROUGHT TO THE ARCHITECTS ATTENTION.
- 2) USE ONLY FIRE RATED MOLDTOUGH GYPSUM BOARD (OF APPROPRIATE THICKENS) FOR WALL CONSTRUCTION AND USE ONLY HI-STRENGTH  $\frac{1}{2}$ " MOLDTOUGH CEILING GYPSUM BOARD FOR CEILING CONSTRUCTION.
- 3) ALL STUDS FOR GYP. BD. CONSTRUCTION SHALL BE GALVANIZED.
- 4) FRP PANELS TO BE SIMILAR TO MARLITE STANDARD CLASS III FIRE RATED 4'x10' IN PEBBLE TEXTURE, WHITE (P100).
- 5) EXISTING FLOORING FOR STORAGE (2001) SHALL BE CLEANED AND PATCHED AS NECESSARY. FINISH WITH FLOOR SEALER.
- 6) BIRD NETTING TO BE 3/4" BLACK MESH WITH A MINIMUM 10 YEAR WARRANTY. CONTRACTOR TO PRESENT INSTALLATION DIAGRAMS TO BE APPROVED BY ARCHITECT. INSTALLATION APPLIES TO ALL WINDOWS TO REMAIN ON BUILDING "A".
- 7) LARGE FORMAT TILE SHALL BE DALTILE UNITY (24"X24") WITH & GROUT JOINT IN UNPOLISHED FINISH. COLOR TO BE SELECTED BY ARCHITECT. USE CORRESPONDING S-36C9TA 6" BASE ON ROOMS WHERE SPECIFIED.
- 8) WALL TILE FOR TOILET ROOMS TO BE 12"x24" MATTE WHITE.
- 9) QUARRY TILE SHALL BE 6"x6" FAWN GRAY (Q06) BY AMERICAN OLEAN. USE CORRESPONDING Q1665 BASE TILE FOR BASE ON ROOMS WHERE SPECIFIED EXCEPT FOR TOILET ROOMS.
- 10) USE SANDED GROUT ONLY FOR ALL FLOORING APPLICATIONS.
- 11) EPOXY RESIN FLOORING SHALL BE KEY RESIN CO. "KEY VERSAFLAKE RESIN FLOORING" IN COLOR TO BE SELECTED BY ARCHITECT FROM MANUFACTURERS FULL LINE. FLOORING SHALL BE INSTALLED OVER KEY 502-PRO PRIMER AS RECOMMENDED BY MANUFACTURER AND SEALED WITH KEY 514 OR 515 EPOXY TOP COAT.
- 12) FLOOR SEALER SHALL BE APPLIED TO EXISTING FLOORING SURFACES AFTER THOROUGH CLEANING AND PATCHING ON DESIGNATED SPACES. USE LOW VOC, CLEAR SEALER.
- 13) ALL CEILINGS & WALLS IN HALLWAYS IN BUILDING "B" & "C" TO BE CLEANED AND PANTED IF NOT BEING PATCHED OR REDONE AS SPECIFIED.
- 14) THE GENERAL CONTRACTOR SHALL REVIEW ALL INFORMATION PRESENTED IN THESE CONSTRUCTION DRAWINGS AND REFER TO THE TECHNICAL CONSTRUCTION SPECIFICATIONS FOR ADDITIONAL INFORMATION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT ARCHITECT IMMEDIATELY.
- 15) DESIGNATED DOORWAYS SHALL HAVE AQUAFENCE FLOOR BARRICADE FBL-01 SYSTEM INSTALLED AS PER MANUFACTURERS SPECIFICATIONS/DETAILS. SEE MATERIAL QUOTE IN TECHNICAL SPECIFICATIONS.







R E V I S I O N

9

ermo Godreau el Ten, Salinas, PR

Finish Schedule

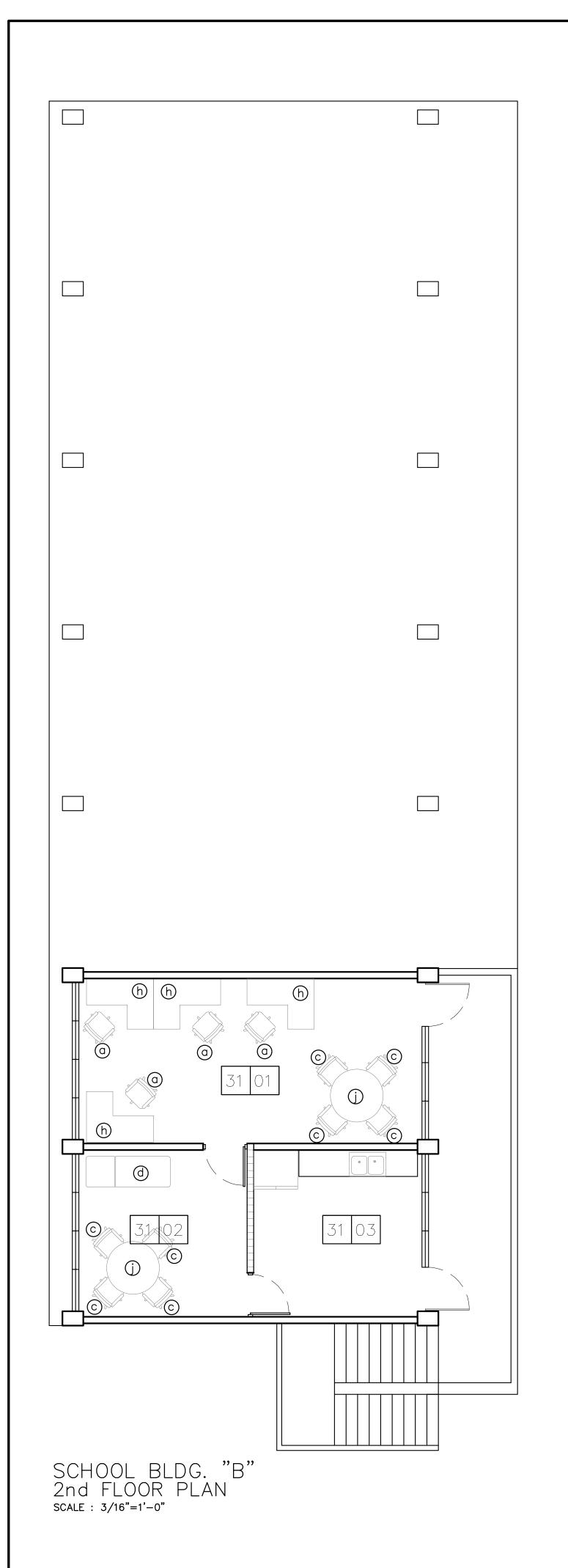
nardo A. Marqués, Lic. # 15647 certifico que soy el profesional estos planos y los especificaciones complementarias. También entriendo que dichos planos y especificaciones cumplem con las applicables del Regiamento Conjunto y las disposiciones aplicables de las Agencias, Juntas Reglamentadoras o Corporaciones y Códigos de las Agencias, Juntas Reglamentadoras o Corporaciones y Junidición. Reconozzo que cualquier fatas o falsificación de los hardos producido an conosimiento o por negligencia ya sea por mi, so empleados, o por otras personas con mi conocimiento asponsable de cualquier acción judicial y disciplinaria por la OIGPe y diades competentes, incluyendo, pero sin limitarse, a la ne de participación en los procedimientos de profecional en la OIGPe.

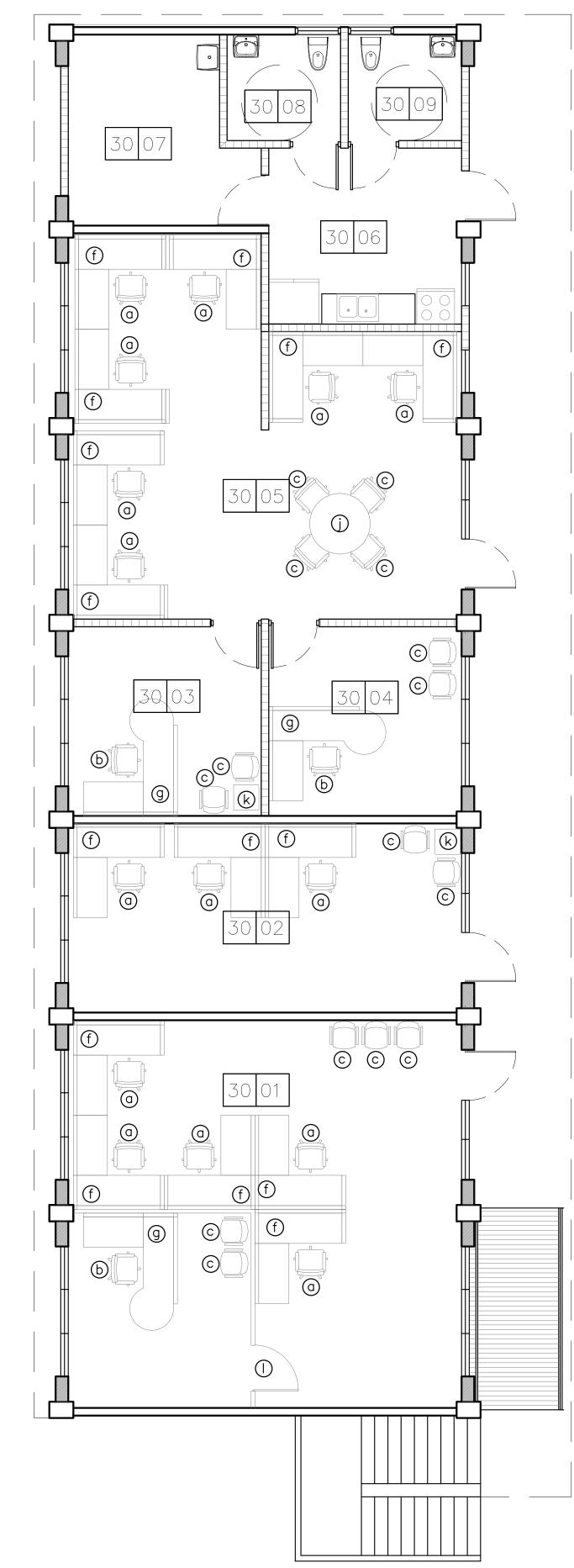
ilitatior Guillermo (

Rehal

April 2023

**A-8**20 OF 47





| LETTER     | CATALOG # | DESCRIPTION                                    |
|------------|-----------|--|
| 0          | CAMVL2804 | LOW-BACK OFFICE TASK CHAIR W/ ADJUSTABLE ARMS  |
| <b>b</b>   | MVL3191   | HIGH-BACK OFFICE TASK CHAIR W/ ADJUSTABLE ARMS |
| 0          | 6514MB    | UPHOLSTERED SEAT W/ ARMS VISITOR CHAIR         |
| <b>a</b>   | WB60637   | ADJUSTABLE HEIGHT TREATMENT TABLE              |
| f          | _         | STANDARD MODULAR WORK SPACE W/ DIVIDER         |
| g          | _         | PENINSULA MODULAR WORK SPACE W/ DIVIDER        |
| h          | _         | STANDARD MODULAR WORK TABLE                    |
| (j)        | WB60637   | 42" LAMINATED ROUND TABLE                      |
| k          | SWP565    | 20" LAMINATED ROUND TABLE                      |
| $\bigcirc$ | _         | 72" MODULAR DIVIDER W/ LAMINATED DOOR          |

SPECIFIED FURNITURE MUST COMPLY W/ "BUY AMERICA" ACT.

COMPONENTS QUANTITY MUST COMPLY W/ ARCHITECTURAL DRAWINGS.
FINAL COLOR & MATERIAL SELECTION TO BE APPROVED BY ARCHITECT.

redu s. PR

Rehabilitation Esq. Guillermo God Escuela Guillermo Godreau, C. Miguel Ten, Salina

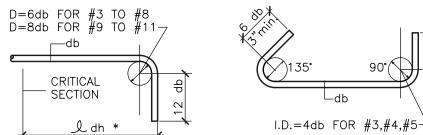
e, Arq. Bernardo A. Marqués, Lic. # 15647 certifico que soy el profesional discos planos y las especificaciones complementarias. También tifico que entiendo que dichos planos y especificaciones cumplen con las sosiciones aplicables de Reglamento Conjunto y las disposiciones aplicables de los planentos y Cádigos de las Agencias, Juntas Reglamentadoras o Corporaciones blicas con juridicción. Reconozco que cualquier faisa o falsificación de los hose que se haya produció sin conosimiento o por megligencia y as en par produción sin conosimiento por megonsable de cualquier acción judicial y disciplinaria por la OIGPe y as autoridades competentes, incluyendo, pero sin limitarse, a la minación de la participación en los procedimientos de tificación profecional en la OIGPe.

April 2023

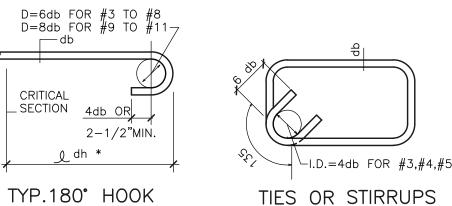
**A-9**21 OF 47

SCHOOL BLDG. "B" 1st FLOOR PLAN scale: 3/16"=1'-0"

| ደ dh(in.) |          |          |                 |
|-----------|----------|----------|-----------------|
| BARS SIZE | CONCRETE | STRENGTH | P.S.I. (ldh)in. |
| NO.       | 3,000    | 4,000    | 5,000           |
| #3        | 7        | 6        | 6               |
| #4        | 9        | 8        | 7               |
| #5        | 11       | 10       | 9               |
| #6        | 13       | 11       | 10              |
| #7        | 15       | 13       | 12              |
| #8        | 17       | 15       | 14              |
| #9        | 20       | 17       | 15              |
| #10       | 22       | 19       | 17              |
| #11       | 24       | 21       | 19              |



TYP.90° HOOK CROSSTIES



### REINFORCEMENT SPLICE SCHEDULE

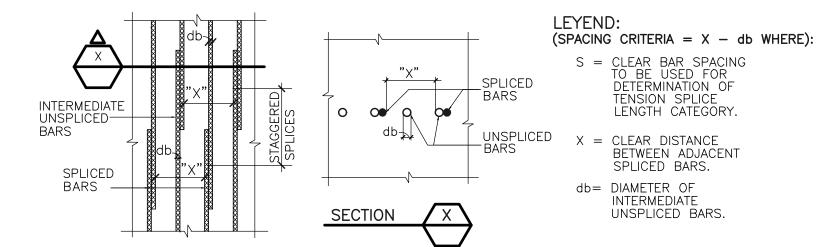
| BARS                 | S SIZE                     | #3  | #4    | #5  | #6   | #7 | #8 | #9  | #10 | #11 |
|----------------------|----------------------------|-----|-------|-----|------|----|----|-----|-----|-----|
| TEI                  | NSION LAF                  | SPL | ICES. | TOP | BARS | 3  |    |     |     |     |
| CONCRETE<br>STRENGTH | 3,000 P.S.I.               | 21  | 28    | 35  | 46   | 63 | 82 | 104 | 132 | 162 |
| NCR<br>REN           | 4,000 P.S.I.               | 18  | 24    | 30  | 40   | 54 | 71 | 90  | 114 | 140 |
| STF                  | 5,000 P.S.I.               | 16  | 22    | 27  | 36   | 48 | 64 | 81  | 102 | 126 |
| TEI                  | NSION LAF                  | SPL | ICES. |     |      |    |    |     |     |     |
| CONCRETE<br>STRENGTH | 3,000 P.S.I.               | 16  | 22    | 27  | 35   | 48 | 63 | 80  | 102 | 125 |
| ONCRET               | 4,000 P.S.I.               | 16  | 19    | 23  | 31   | 42 | 55 | 69  | 88  | 108 |
| CO<br>STF            | 5,000 P.S.I.               | 16  | 17    | 21  | 27   | 37 | 49 | 62  | 79  | 97  |
| СО                   | MPRESION                   | LAP | SPLI  | CES |      |    |    |     |     |     |
| 3,000<br>4,000       | ) P.S.I. UP TO<br>) P.S.I. | 12  | 15    | 19  | 23   | 26 | 30 | 34  | 38  | 42  |

\*NOTE: FOR CLASS B TENSION SPLICE ONLY. (CATEGORY 3 AS PER CRSI) TOP BARS IS HORIZONTAL REINF. WITH MORE THAN 12" CONCRETE BELOW BAR

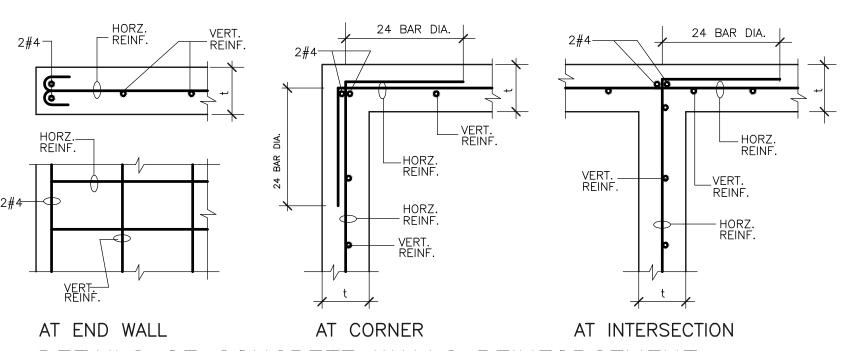
TERMINATE ALL REQUIRED TOP AND BOTTOM BARS AT

THE FAR FACE OF THE COLUMN CORE. PROVIDING MIN.

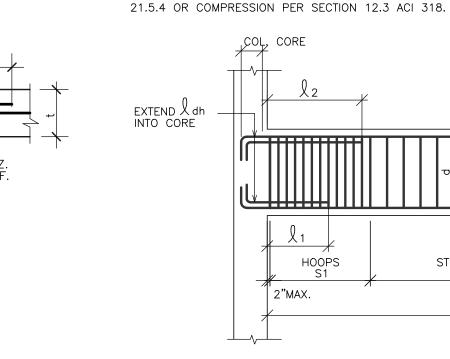
DISTANCES & dh OR & d FOR TENSION PER SECTION

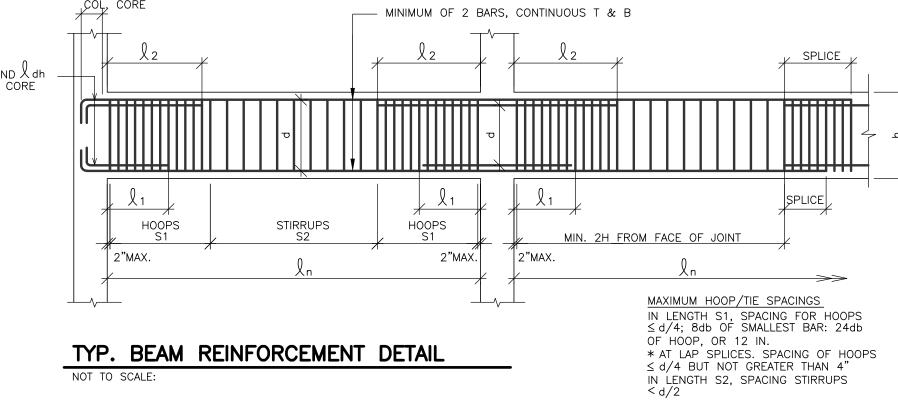


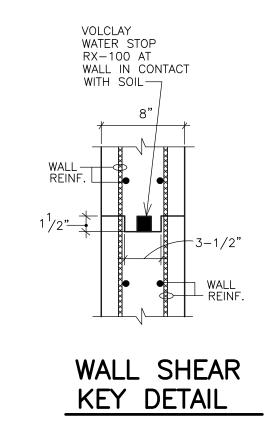
CLEAR SPACING CRITERIA OF LAP SPLICED BARS STAGGERED SPLICES DETAIL

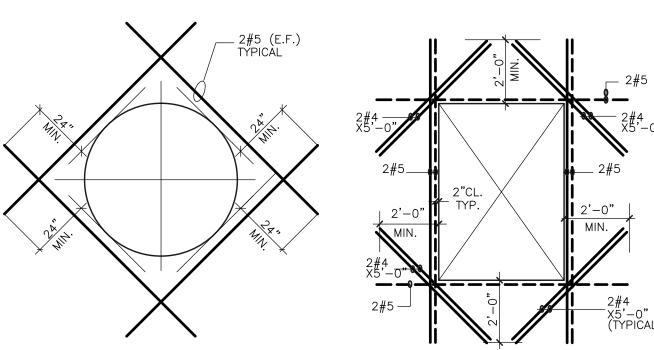


DETAILS OF CONCRETE WALLS REINFORCEMENT

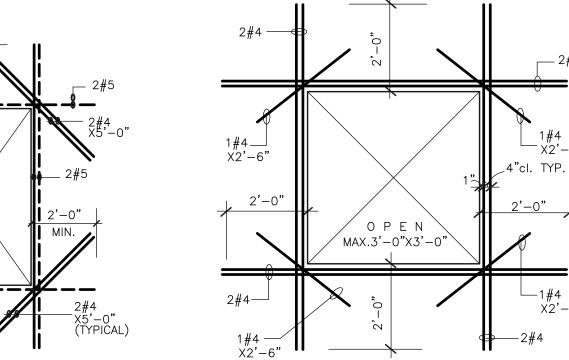




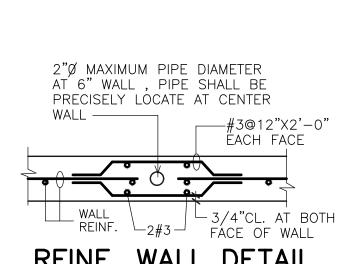


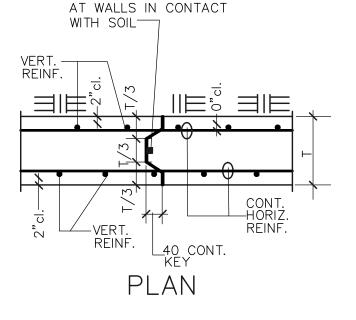


WALL OPENING REINFORCEMENT DETAILS



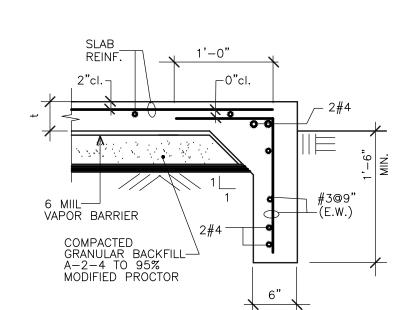
TYP. SLAB OPENING REINF. DETAIL



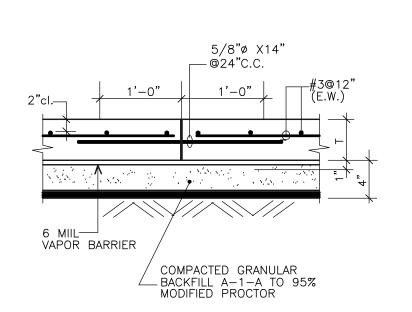


BENTONITE-WATERSTOP

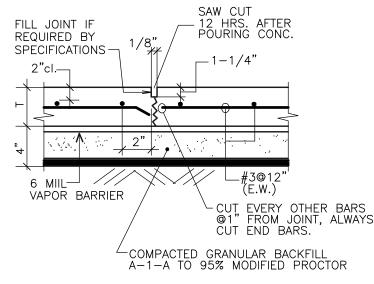
TYPICAL WALL CONSTRUCTION JOINT



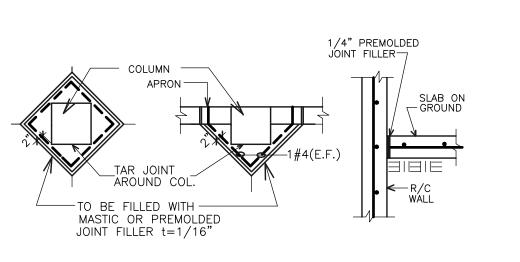
TYP. SLAB ON GROUND APRON DETAIL



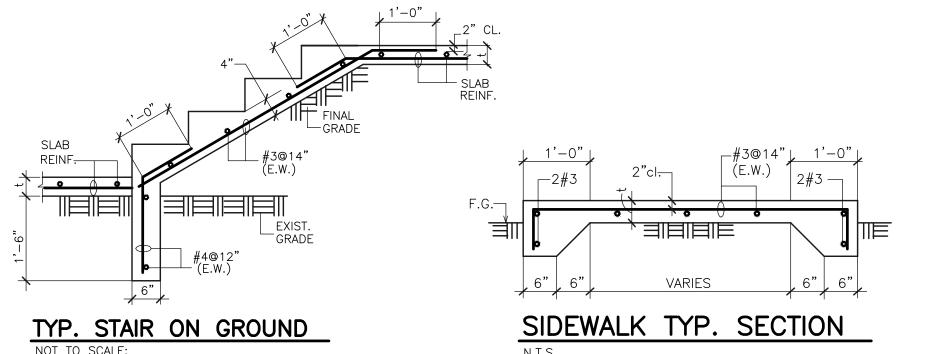
CONSTRUCTION JOINT (C.J.



FLOOR SLAB SAW CUT CONTROL JOINT DET. (S.C.J.)



ISOLATION JOINT DETAIL



#### REINFORCED CONCRETE NOTES

1- ALL CONCRETE WORK SHALL CONFORM TO THE ACI BUILDING CODE FOR REINFORCED CONCRETE ACI-318-14 LATEST EDITION. 2- ALL CONCRETE SHALL DEVELOPED A MINIMUM 28-DAYS CYLINDER COMPRESSIVE STRENGTH AND SHALL CONTAIN A MAXIMUM WATER CEMENT RATIO AS SHOWN BELOW:

| LUC | ATION                    | PSI   | W/C |
|-----|--------------------------|-------|-----|
|     | SLAB ON GROUND           | -,    |     |
| B-  | FOOTINGS                 | 3,000 | 65  |
| C-  | FOUNDATION WALLS         | 3,000 | 65  |
| D-  | STRUCTURAL SLABS & BEAMS | 4,000 | 60  |
| E-  | COLUMNS & WALLS          | 4,000 | 55  |
| F-  | MISCELLANEOUS            | 4.000 | 60  |

3- ALL CONCRETE SHALL BE TESTED AS PER ACI 318-14 FOLLOWING THE PROCEDURES IN THE ASTM C-172 AND C-39, LATEST EDITION. IF APPROVED CURING METHOD ARE NOT FOLLOWED, FIELD CURE CYLINDER ARE REQUIRED, FOLLOWING ASTM STANDARDS. ALL TESTING SHALL BE PERFORMED UNDER THE SUPERVISION OF A CERTIFIED TESTING LABORATORY TO BE APPROVED BY THE ENGINEER. 4- CONCRETE DESIGN MIX SHALL NOT HAVE SLUMPS OVER 4 INCHES UNLESS A HRWR ADMIXTURE (SUPER PLASTICIZER) IS USED.

5- ALL CONCRETE SHALL BE CURED AS SPECIFY IN THE STANDARD PRACTICE FOR CURING CONC. ACI 308-92.

6- CONCRETE SHALL NOT BE POURED UNTIL ALL STEEL REINFORCEMENT AND EMBEDDED ITEM HAS BEEN PROPERLY INSTALL AND INSPECTED BY THE INSPECTOR OFFICIAL. WHEN METAL CHAIRS ARE USED, THEIR SHALL BE PLASTIC TIPPED.

7- ALL REINFORCING BARS FOR SHEAR WALLS, BEAMS AND COLUMNS SHALL BE NEW BILLET STEEL CONFORMING TO THE STANDARDS OF ASTM A706, GRADE 60, OR ASTM A615, GRADE 60, AND THE SPECIAL DUCTILITY REQUIREMENTS DESCRIBED IN SECTION 21.1.5.2.a AND 21.1.5.2.b OF ACI-318-08. ALL REINFORCING BAR FOR ALL OTHER CONCRETE ELEMENTS SHALL BE NEW BILLET STEEL CONFORMING TO THE STANDARS OF ASTM A615, GRADE 60.

8- WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A-185 MIN FY=70,000 PSI.. 9- CONCRETE COVER FOR STEEL REINFORCEMENT SHALL BE AS FOLLOW UNLESS OTHERWISE

| A— FOUNDATION                      | B) WALLS & SLABS          |
|------------------------------------|---------------------------|
| CONCRETE CAST AGAINST EARTH3       | INTERIOR 3/4'             |
| CONCRETE EXPOSED TO EARTH OR WATER | EXTERIOR 1"               |
| AFTER REMOVAL OF FORMS 2"          | C) BEAMS & COLUMNS 1 1/2' |

10- SLABS AND BEAMS SHALL BE POURED MONOLITHICALLY UNLESS OTHERWISE SHOWN ON

11- NO CONDUITS OR PIPE GREATER THAN 1 1/2" IN DIAMETER WILL BE ALLOWED TO BE CAST INTO THE WALL OR SLABS WITHOUT WRITTEN APPROVAL OF THE ENGINEER.

12- FOR CHAMFERS, SURFACE FINISH, DRIP, GROOVE AND CONCRETE FORMWORKS SEE ARCHITECTURAL DRAWING.

13- CONTRACTOR SHALL COORDINATE THE PLACEMENT OF THE ANCHORS, SLEEVES, OPENINGS, CONDUITS, ETC., OF VARIOUS TRADES THAT ARE EMBEDDED IN THE STRUCTURE IN THE EVENT OF ANY INTERFERENCE BETWEEN ANY OF THESE ITEMS WITH THE STRUCTURAL ELEMENTS IT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE POURING ANY

14- MAIN OPENING ARE SHOWN IN THE STRUCTURAL DRAWINGS, FOR SIZE AND EXACT LOCATION REFER TO THE VARIOUS TRADES DRAWINGS AND SPECIFICATIONS. NO OPENING, SLOT OR GROOVE NOT SHOWN ON DRAWINGS SHALL BE MADE IN ANY STRUCTURAL ELEMENT WITHOUT THE APPROVAL OF THE ENGINEER. OPENING NOT SHOWN ON DRAWINGS THAT INTERRUPT REINFORCEMENT SHALL BROUGHT TO THE ATTENTION OF THE ENGINEER.

15- DIMENSIONS AND CONFIGURATION OF ALL STRUCTURAL ELEMENT SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWING BY THE CONTRACTOR AND IN THE EVENT OF ANY DISCREPANCIES IT SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE PROCEEDING WITH THE WORK.

16- THE CONSTRUCTION PROCEDURES, FORMWORKS REMOVAL AND THE LOCATIONS OF THE CONSTRUCTION JOINTS SHALL BE SUCH AS NOT TO IMPOSE ANY DETRIMENTAL EFFECT TO THE STRUCTURE OR TO REDUCE THE DESIGN STRENGTH.

17- ALL ONE WAY SLAB SHALL HAVE TEMPERATURE REINFORCEMENT AS FOLLOWS BUT NOT LESS THAN A STEEL AREA OF .002 X GROSS AREA OF CONCRETE

A)-4-1/2"SLAB--#3@12" B)-6"SLAB--#3@9" C)-7"SLAB--#4@14" D)-8"SLAB --#4@12" 18- DOWELS SHALL BE SAME SIZE AND NUMBER AS WALL OR COLUMN VERTICAL REINFORCEMENT. EMBEDDED MINIMUM 24 BAR DIAMETER INTO THE FOOTING, FOR #6 BAR OR GREATER, EXTENDED REINFORCEMENT TO REST ABOVE BOTTOM OF FOOTING REINFORCEMENT PROVIDING A STANDARD 90 DEGREE HOOK AT THE END. EXTEND REINFORCEMENT A SPLICE LENGTH ,MIN. 30 BAR DIAMETER, INTO THE WALL OR COLUMN.

19— PROVISION FOR DETAILS NOT SPECIFICALLY DRAWN SHALL BE MADE BY THE CONTRACTOR IN ACCORDANCE WITH THE ACI 318—08 AND THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES 315R-94.

20- ALL BEAM REINFORCEMENT SHALL BE END IN STANDARD HOOKS AS PER ACI 318-14 UNLESS OTHERWISE SHOWN ON DRAWINGS. 21- ALL SLAB ON GROUND UNLESS SHOWN ON DRAWINGS SHALL BE 5" THICK REINFORCED WITH

WIRE MESH. 6X6 -W4.0XW4.0 IN SHEETS ONLY. PROVIDE CONSTRUCTION JOINTS AT A MAXIMUM SPACING OF 20 FT. IN BOTH DIRECTION ,AND A CONTROL JOINTS BETWEEN THEM. 22- ALL OPENING IN CONCRETE WALLS SHALL BE REINFORCED IN THE PERIMETER WITH 2#4 BARS

PLACED 2" FROM THE FACE OF THE WALL AND EXTENDING 2'-0" BEYOND CORNERS. 23- ALL LAPPING, BENDING AND PLACING OF REINFORCEMENT SHALL BE DONE IN ACCORDANCE WITH THE ACI 318-08 BUILDING CODE. DO NOT LAP SPLICES AT POINT OF MAXIMUM STRESS. 24- UNLESS SHOWN ON DRAWINGS ALL STEEL REINFORCEMENT ARE MKD. CONTINUOS AND SHALL

BE SPLICED AT LAP POINTS. LAP POINT FOR TOP REINFORCEMENT OF BEAM SHOULD OCCUR IN THE MID-THIRD OF THE SPAN. LAP POINT FOR BOTTOM REINFORCEMENT SHOULD OCCUR AT A DISTANCE LESS THAN 1/4 OF THE SPAN BUT NOT GREATER THAN 1/6 OF THE SPAN FROM THE ADJACENT JOINTS. ALL REINFORCING STEEL SPLICES SHALL BE CLASS "B" FULL TENSION. 25- UNLESS OTHERWISE SHOWN ON DRAWINGS ALL 6" THICK CONCRETE WALL SHALL BE REINF. WITH #4@12" IN EACH DIRECTION, 2#4 SHALL BE PLACED AT 2" FROM THE END OF THE WALL

MINIMUM REINFORCEMENT FOR WALLS SHALL BE .0025 OF THE GROSS CROSS SECTIONAL AREA. 26- FORMWORK FOR FLEXURAL ELEMENTS SHALL INCLUDE THE CAMBER SHOWN ON DRAWINGS IN ADDITION TO THE REQUIRED BY THE FORMWORK DEFLECTION DUE THE STRUCTURE SELF WEIGHT. ALL FORMWORK SHORING AND RESHORING SHALL BE THE SOLE RESPOSABILITY OF THE CONNTRACTOR AND SHALL BE DESIGN BY A LICENCE STRUCTURAL ENGINEER.

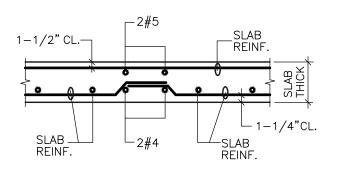
27- CONTRACTOR SHALL SUBMIT A SHOP DRAWING SHOWING LOCATION AND DETAIL FOR CONSTRUCTION

JOINTS IN SLAB AND BEAMS. SLAB AND BEAM CONSTRUCTION JOINTS SHALL BE LOCATED WITHIN THE MIDDLE THIRD OF ANY SPAN. 28- CONTRACTOR SHALL SUBMIT SHOP DRAWING SHOWING STEEL REINFORCEMENT AS REQUIRED IN THE

TECHNICAL SPECIFICATIONS. PREPARED SHOP DRAWINGS IN ACCORDANCE WITH PART B, CHAPTER 3, 29- NO DEFECTIVE CONCRETE SHALL BE CORRECTED USING MORTAR OR PLASTER. SUCH DEFECT SHALL BE INSPECTED BY THE STRUCTURAL ENGINEER FOR APPROPRIATED REPAIR PROCEDURES

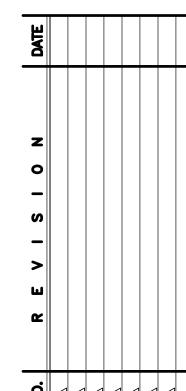
30- WELDING OF REINFORCEMENT IS NOT PERMITTED. MECHANICAL SPLICES SHALL DEVELOP 125% OF THE YIELD STRENGTH OF THE BARS BEING SPLICED AND THEIR USE IS SUBJECT TO THE APPROVAL IN

WRITING OF THE STRUCTURAL ENGINEER OF RECORD. 31- WHEN INSTALLING EXPANSION BOLTS OR ADHESIVE ANCHORS, THE CONTRACTOR SHALL TAKE MEASURES TO AVOID DRILLING OR CUTTING ANY OF THE EXISTING REINFORCEMENT.



SLAB BAND DETAIL





 $\overline{\triangleleft}$ 

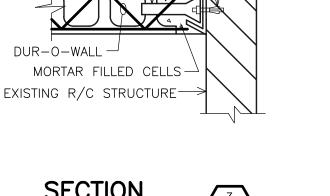
Φ

þ

uill( Salir ilitatior Calle 0 REIN

9

Reh



NOT TO SCALE

— #3@8" ∖ TIES

# NOT TO SCALE

---CONC. BLOCK

---DUR-O-WALL

### MASONRY WALL CONSTRUCTION

1. ALL STRUCTURAL MASONRY MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE "NATIONAL CONCRETE MASONRY ASSOCIATION" AND WITH THE "BUILDING CODE REQUIREMENTS AND SPECIFICATION FOR MASONRY STRUCTURES ACI 530-08 & ACI 530.1-08".

2. HOLLOW CONCRETE MASONRY UNIT SHALL CONFORM TO ASTM C90, GRADE N, TYPE 1, WITH A MINIMUM COMPRESSIVE STRENGTH F'M= 1,500 PSI. SOLID CONCRETE MASONRY SHALL CONFORM WITH THE ASTM

3. MORTAR SHALL BE TYPE "M" WITH AN AVERAGE COMPRESSIVE STRENGTH FC= 2,500 PSI AT 28 DAYS, CONFORMING TO ASTM C270.

4. COARSE GROUT SHALL CONFORM TO ASTM C476 WITH A MAXIMUM AGGREGATE SIZE OF 3/8" AND A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.

5. VERTICAL REINFORCEMENT SHALL BE AS NOTED ON THE DRAWING AND CONFORM TO ASTM A615 GRADE 60, ALL REINFORCED CELLS SHALL BE FILLED WITH COARSE GROUT.

6. ALL BLOCK WALLS VERTICAL REINFORCEMENT SHALL BE ANCHORED TO THE STRUCTURE, TOP AND BOTTOM, AT A MAXIMUM SPACING OF 48" FOR RUNNING BOND LAYOUT AND 16" FOR NOT RUNNING BOND. REINFORCEMENT SHALL BE PLACED AT THE CENTER OF THE MASONRY CELL UNLESS OTHERWISE NOTED.

7. SPECIAL REINFORCED MASONRY SHEAR WALLS SHALL CONFORM WITH THE REQUIREMENT FOR PARTICIPATING WALLS IN THE ACI 530-08 FOR SEISMIC DESIGN CATEGORY D.

8. REINFORCING STEEL SHALL BE LAPPED A MINIMUM 48 BAR DIAMETERS. EXTEND ALL VERTICAL REINFORCEMENT TO WITHIN 16" OF THE END OF WALLS AND WALLS OPENING.

9. HORIZONTAL WALL REINFORCEMENT SHALL BE GALVANIZED STANDARD TRUSS-MESH OR LADDER TYPE, DUR-O-WALL (ASTM A82 #9 GAGE WIRE) AT 16" O.C., UNLESS SHOWN OTHERWISE ON THE DRAWINGS.

10. SPLICED WIRE REINFORCEMENT SHALL BE LAPPED AT LEAST 6" AND CONTAIN AT LEAST ONE CROSS WIRE OF EACH PIECE OF REINFORCEMENT WITHIN THE 6". LAP WITH STANDARD 'T' AND 'L' SHAPED PIECES AT INTERSECTIONS AND CORNERS.

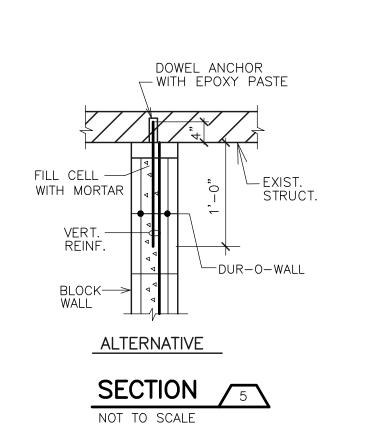
11. PROVIDE CONCRETE LINTELS OVER ALL OPENINGS UNLESS NOTED OTHERWISE ON DRAWINGS. LINTELS SHALL BE OF SUFFICIENT SIZE AND REINFORCEMENT FOR THE GIVEN SPANS AND LOADING CONDITIONS.

12. PROVIDE A FULLY GROUTED KNOCK OUT BLOCK OR U-BLOCK REINFORCED WITH (1) #5 OR (2) #4 CONTINUOUS AT THE SILL OF ALL WINDOW OPENINGS. EXTEND 8" BEYOND EACH SIDE OF THE OPENING TYPICALLY.

13. MORTAR PLACEMENT, USE BED JOINT BETWEEN 1/4" AND 3/4" THICK AT FOUNDATIONS AND 3/8" THICK JOINTS BETWEEN UNITS. FILL THE BED AND HEAD JOINTS OF HOLLOW UNITS WITH MORTAR, SPREAD ACROSS THE WIDTH OF THE FACE SHELL.

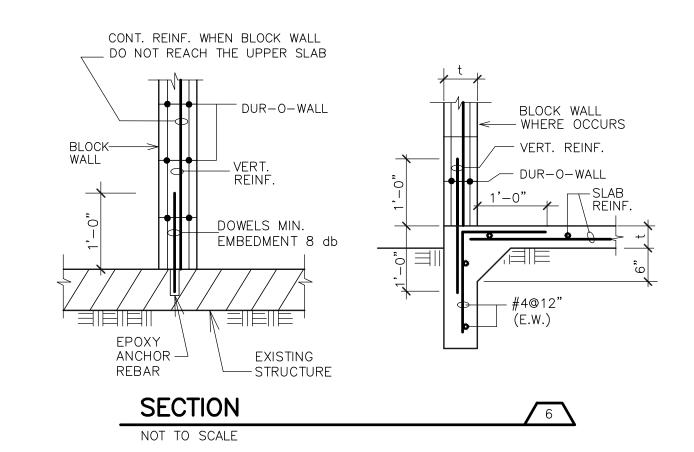
14. ALL BLOCK WALLS SHALL BE PLACED IN ONE HALF RUNNING BOND WITH VERTICAL JOINT CENTERED. BLOCK WALL SHALL BE PLACED HORIZONTALLY, NO INCLINE UNIT IS PERMITTED.

15. PROVIDE ADEQUATE BRACING AND SUPPORT OF MASONRY UNTIL PERMANENT CONSTRUCTION IS IN PLACE.



**├──#**4@**॑**16'

BLOCK WALL REINFORCEMENT DETAILS



、WINDOW∕

-#3@16" MIN. FOR WALL HEIGHT

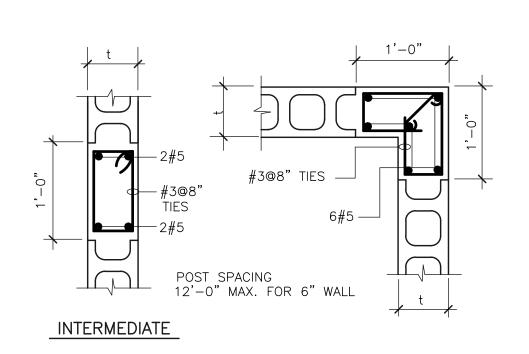
-#4@16" MIN. FOR WALL HEIGHT 8'-0" TO 12'-0"

8'-0" OR LESS

<del>---</del>2#4

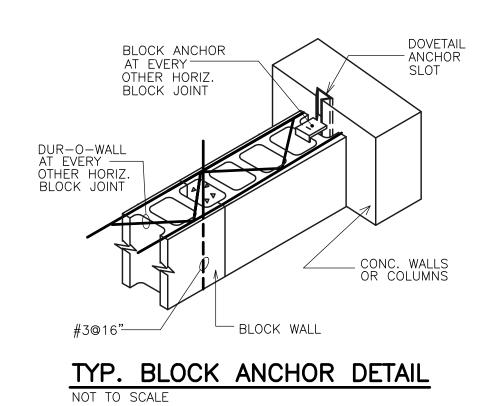
+

**ÓPENING** 



MAX. 12'-6" FOR 6 MAX. 16'-0" FOR 8

TIE COLUMN FOR BLOCK WALLS



\_ 0.145" X 1" POWDER ACTIVATED FASTENER X-DN1 BY HILTI @ 12"C.C. — 1/4"X1'-3"X3-1/2" TIE BAR EVERY OTHER COURSE— - 1/4"X1'-3"X3-1/2"

TIE BAR EVERY OTHER COURSE— ALT. MORTAR FILLED CELLS R/C WALL OR COLUMN BLOCK TO BLOCK JOINT CONCRETE , BLOCK JOINT

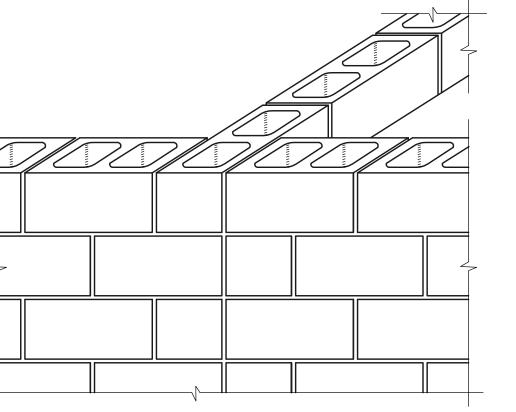
DOOR

OPENING

1/4 MINIMUM FOR

\* RUNNING BOND BLOCK





BLOCK WALL RUNNING BOND LAP AT INTERSECTION DETAIL NOT TO SCALE

au

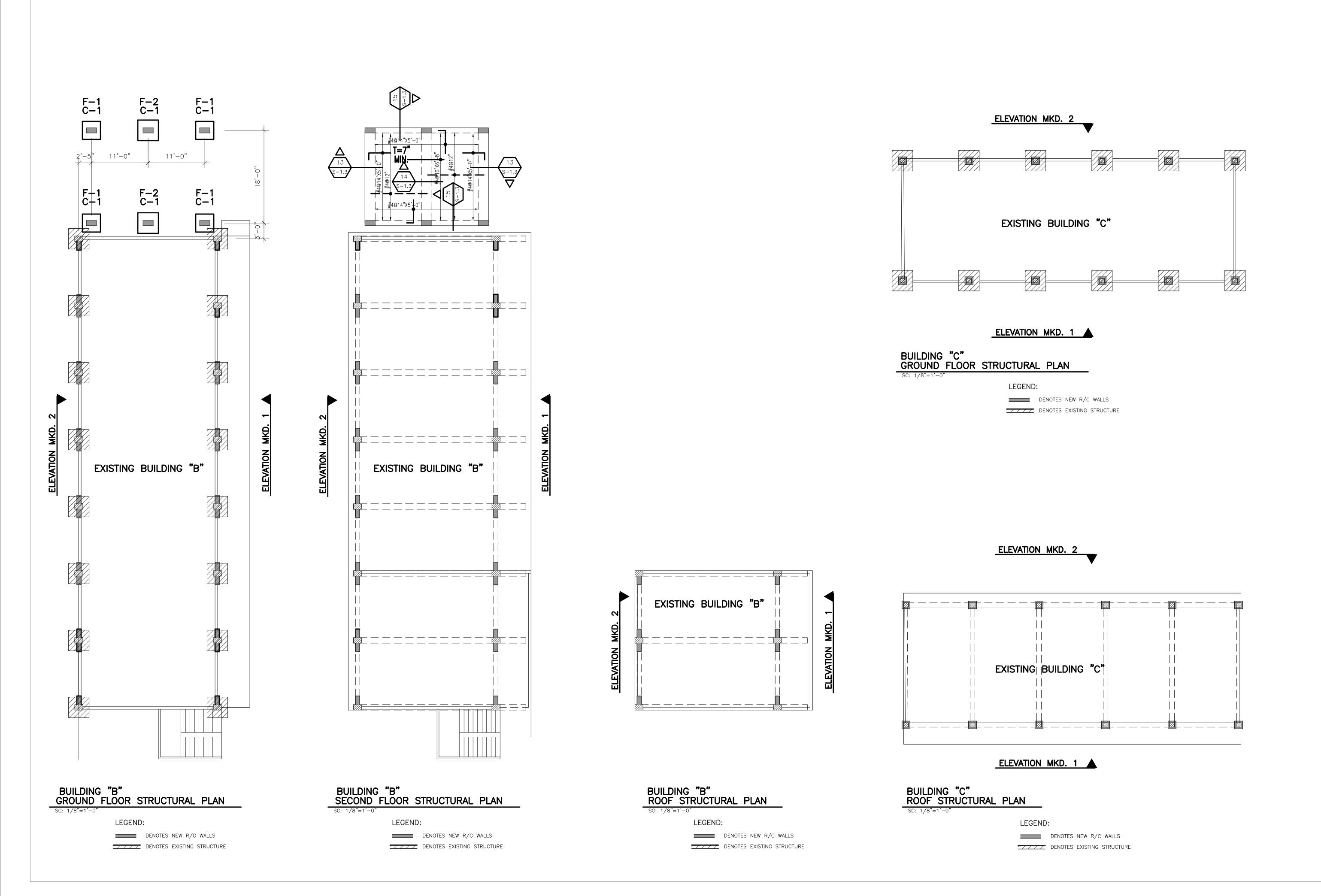
Ū

dr

0

CMC

Reha



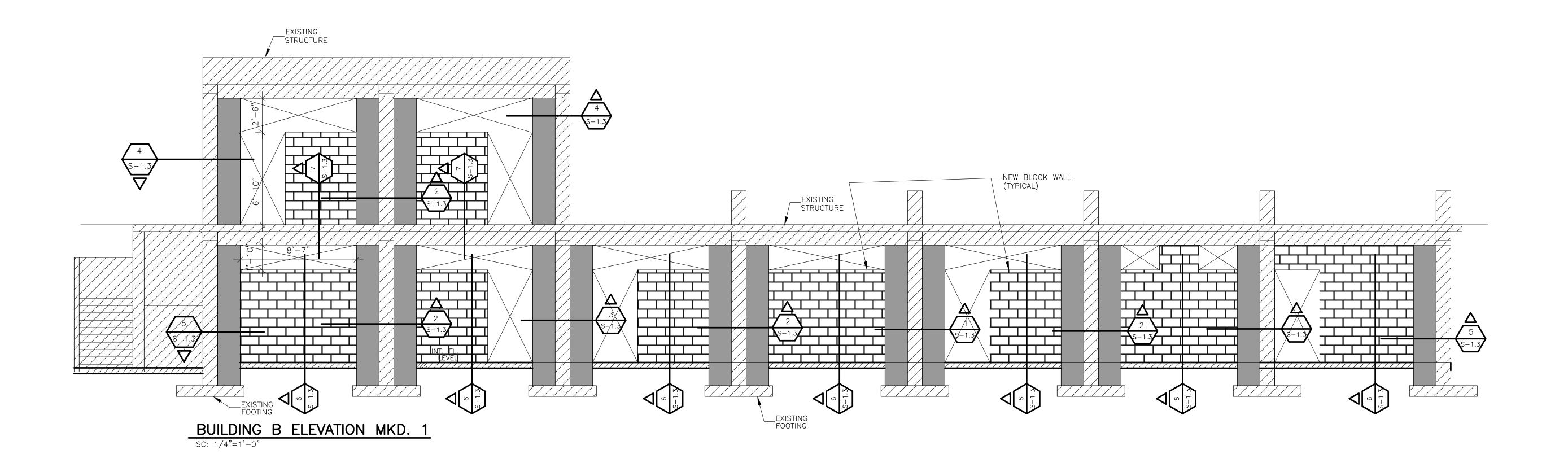


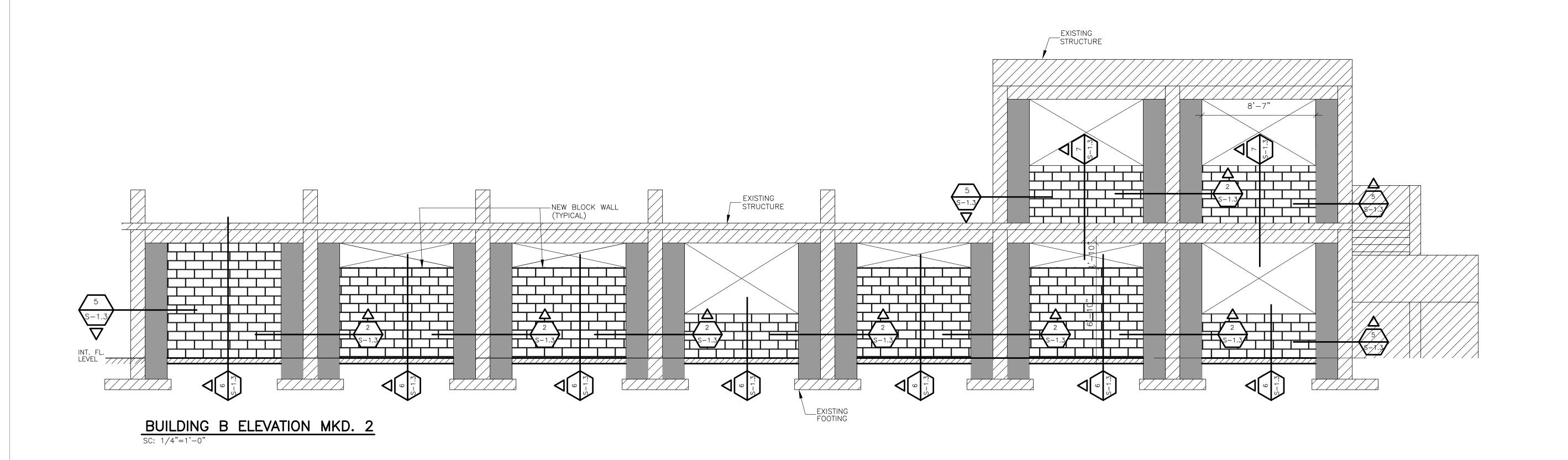
Rehabilitation Escuela Guillermo God

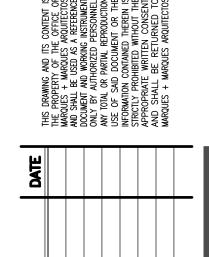
TRUCTURAL

S

DELED







NO. A PASSING SAME AND A PASSING SAME A PASSI

NOIL

X

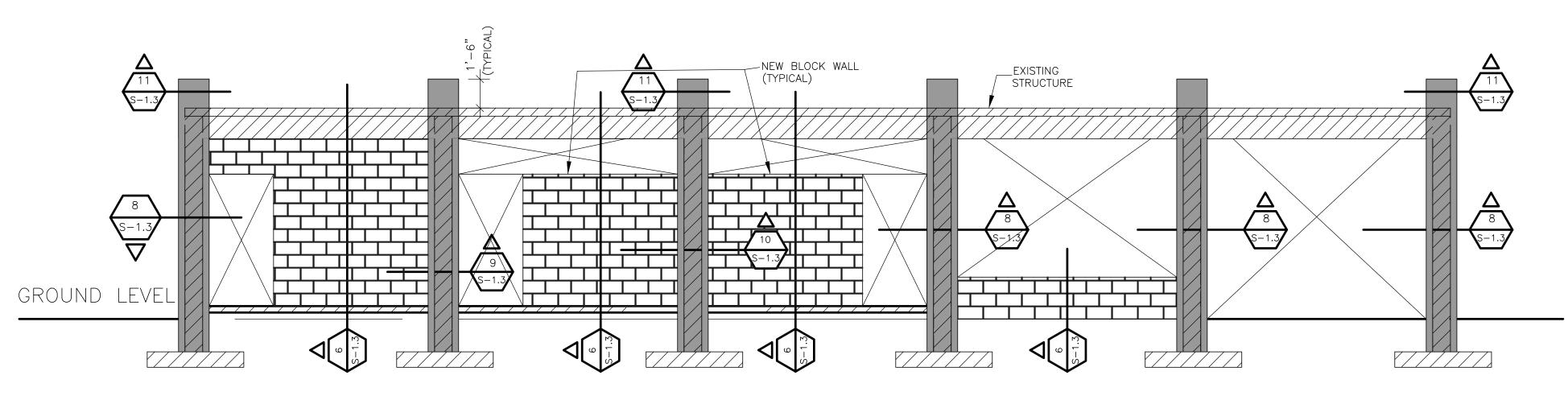
S

Rehabilitation Esq. Guillermo Godrea Escuela Guillermo Godreau, C. Miguel Ten, Salinas, PF

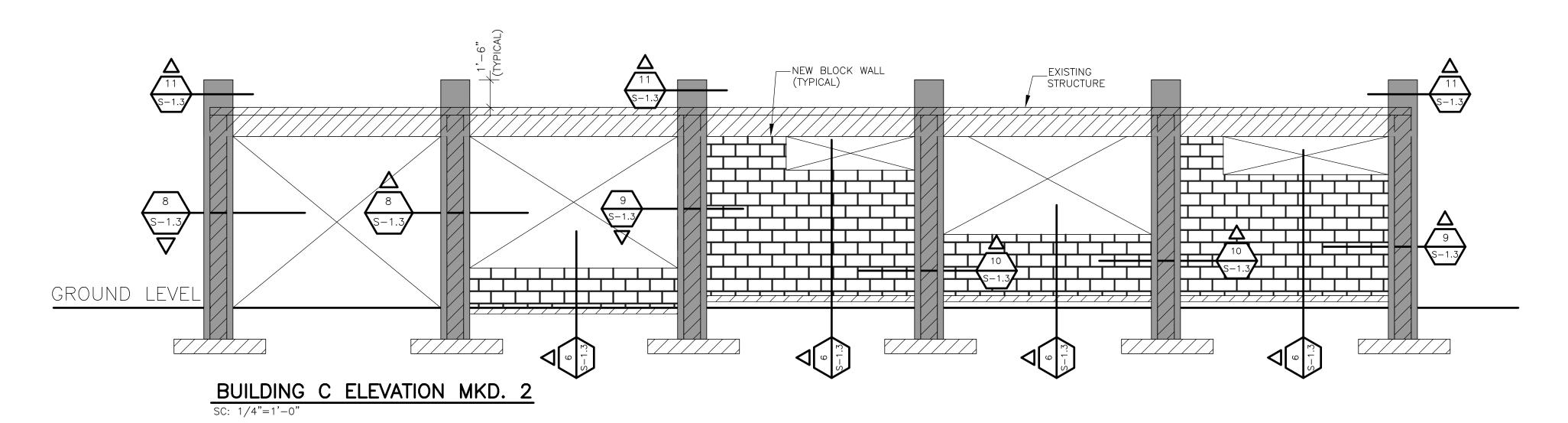
Yo, Arq. Bernardo A. Marqués, Lic. # 15647 certifico que soy el profesional que diseño estos planos y las especificaciones complementarias. También certifico que entiendo que dichos planos y especificaciones complementarios. También certifico que entiendo que dichos planos y especificaciones complemento de planos y las especificaciones complemento de planos y Códigos de las Agencias, Juntas Reglamentadoras o Corporaciones Reglamentos y Códigos de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con juridición. Reconacco que cualquier falsa o falsificación de los hechos que se haya producido sin conosimiento por negligencia y asea por mi, mis agentes o empleados, o por otras personas con mi conocimiento me hacen responsable de cualquier acción judicial y disciplinaria por la 016Pe y ortas autoridades competentes, incluyendo, pero sin limitarse, a la terminación de la participación en los procedimientos de certificación profecional en la 016Pe.

701 PONCE DE LEON 201, SAN JUAN, P.R. 00907 T (787) 936–1700 WWW. MARQUESARQUITECTOS. COM E–MAIL: bernardo@marquesarquitectos.com

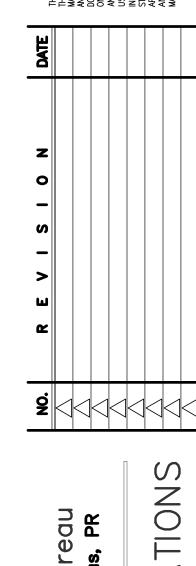
A. C.A.P.P.R.



# BUILDING C ELEVATION MKD. 1 SC: 1/4"=1'-0"







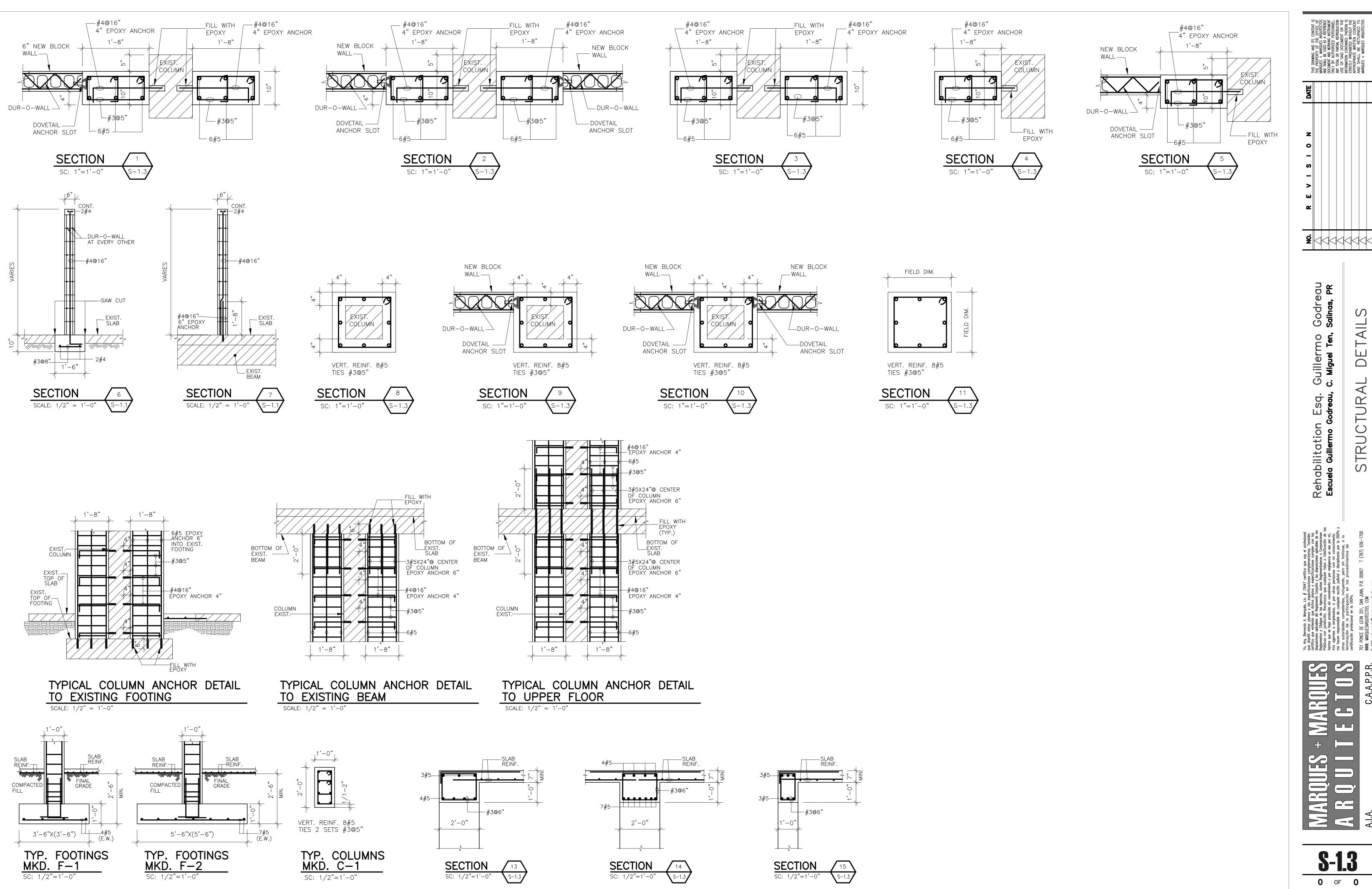
Rehabilitation Esq. Guillermo Godreau Escuela Guillermo Godreau, C. Miguel Ten, Salinas, PR

ELEVA-

Yo, Arq. Bernardo A. Marqués, Lic. # 15647 certifico que soy el profesional que diseñe estos planos y las especificaciones complementarias. También certifico que entiendo que dichos planos y las especificaciones complementarios. También certifico que entiendo que dichos planos y las especificaciones conjunto y especificaciones conjunto y especificaciones opicables de los Agencias, Juntas Reglamentadoras o Corporaciones públicas con judición. Reconoraco que cualquier falsa o fusificación de los hebros que se haya producido sin conosimiento o por negigencio ya sea por mi, mis agentes o empleados, o por otras personas con mi conocimiento me hacen responsable de cualquier acción judicial y disciplinaria por la 01GPe y otras autoridades competentes, incluyendo, pero sin limitares, a la terminación de la participación en los procedimientos de certificación profecional en la 01GPe.

701 PONCE DE LEON 201, SAN JUAN, P.R. 00907 I (787) 936–1700 WWW. MARQUESARQUITECTOS. COM

C.A.A.P.P.R.



AIL

Ш 

AL

TUR,

TRUC.

# STRUCTURAL DRAWING SHEET INDEX

| S-0.1 | STRUCTURAL DRAWING INDEX & GENERAL NOTES |
|-------|--|
| S-0.2 | REINFORCED CONCRETE DETAILS & NOTES      |
| S-0.3 | CMU WALL TYPICAL DETAILS & NOTES         |
| S-1.0 | REMODELED STRUCTURAL PLANS               |
| S-1.1 | REMODELED STRUCTURAL ELEVATIONS          |
| S-1.2 | REMODELED STRUCTURAL ELEVATIONS          |
| S-1.3 | STRUCTURAL DETAILS                       |
|       |  |
|       |  |

#### STANDARD DRAWING ABBREVIATIONS

|                | STANDARD DRAWING                                | ARRKE             | VIATIONS                               |
|----------------|---|-------------------|--|
| \DL            | Additional Dead Load                            | LLH               | Long Leg Horizontal                    |
| AB             | Anchor Bolt                                     | LOCT              | Location                               |
| \/C            | Air Conditioner                                 | LONGIT            | Longitudinal                           |
| DD'L           | Additional                                      | LWT               | Lightweight                            |
| KFF<br>KL      | Above Finish Floor<br>Aluminum                  | LL<br>MAX         | Live Load<br>Maximum                   |
| LT             | Alternate                                       | MECH              | Mechanical                             |
| NPP            | Approximate                                     | MEZZ              | Mezzanine                              |
| RCH            | Architect, Architectural                        | MFG               | Manufacturer                           |
| BCX            | Bottom Chard Extension                          | MID               | Middle                                 |
| BF             | Both Faces                                      | MIN               | Minimum                                |
| BLDG           | Building  | MISC              | Miscellaneous                          |
| BLKG           | Blockage  | MKD               | Marked                                 |
| BM (s)         | Beams (s)                                       | MTL<br>N          | Material, Metal                        |
| 30             | By Others, Blockout,<br>Bottom of opening       | NIC               | North<br>Not in Contract               |
| ₹              | Bottom  | NF                | Near Face                              |
| ,<br>3P        | Base Plate                                      | NO of #           | Number                                 |
| BRDG           | Bridging  | NOM "             | Nominal                                |
| RG             | Bearing   | NTS               | Not to Scale                           |
| ВОМ            | Bottom of Beam                                  | NS                | Near Side                              |
| C−1            | Column Number                                   | OC                | On Center                              |
| ANT            | Cantilever                                      | OD                | Outside Diameter                       |
| CG<br>CID      | Center of Gravity                               | OPNG              | Opening                                |
| CIP<br>CGS     | Cast — in — Place Concrete  Center of Gravity   | OPP HAND          | Opposite                               |
| ,63            | of Strands (steel)                              | OPP HAND<br>O. O. | Opposite Hand<br>Out to Out            |
| :J             | Control or Construction Joint                   | 0. 0.<br>PL       | Plate                                  |
| CL             | Centerline                                      | P/C               | Pre — Cast                             |
| CLG            | Ceiling   | PCF               | Pounds per Cubic Foot                  |
| CLKG           | Caulking  | PERIM             | Perimeter                              |
| CLR            | Clear, Clearance                                | PERP              | Perpendicular                          |
| MU             | Concrete Masonry Unit                           | PLF               | Pounds per Linear Foot                 |
| OL             | Column  | PROJ              | Projection                             |
| CONC           | Concrete  | PSF               | Pounds per Square Foot                 |
| ONN            | Connection                                      | PSI               | Pounds per Square Inch                 |
| ONST<br>ONT    | Construction Continuous                         | RECT              | Rectangular                            |
| ORR            | Corrugated                                      | RE                | Refer (ence)                           |
| TR             | CTR   | REINF             | Reinforcement/Reinforce                |
| c.C.           | Center to Center                                | REV<br>REQ'D      | Revision<br>Required                   |
| BA             | Deformed Bar Anchor                             | S                 | South                                  |
| BL             | Double  | SC                | Scale                                  |
| MIM            | Dimension                                       | SCHD              | Schedule                               |
| KG             | Decking   | SECT              | Section                                |
| )N             | Down  | SER               | Structural Engineer of                 |
| )O             | Ditto   | CLIT              | Record                                 |
| OTL<br>OWG (s) | Detail<br>Drawing (s)                           | SHT<br>SIM        | Sheet<br>Similar                       |
| )WL            | Dowel Dowel                                     | SL                | Slab                                   |
| )L             | Dead Load                                       | SLV               | Sleeve                                 |
| -              | East  | SPCS              | Spaces                                 |
| Ā              | Each  | SPCG              | Spacing                                |
| MB             | Embedment                                       | SPL               | Splice                                 |
| ΞE             | Each End  | SPEC              | Specification                          |
| .F             | Each Face                                       | SQ                | Square                                 |
| īG             | Existing Grade                                  | STD               | Standard                               |
| .J             | Expansion Joint                                 | STFF<br>SOG       | Stiffener                              |
| IL<br>ILEV     | Elevation<br>Elevation, Elevator                | S.O.F             | Slab on Grape<br>Step Of Footing       |
| INGR           | Structural Engineer of Record                   | STIRR             | Stirr up                               |
| .Q             | Equal   | STL               | Steel                                  |
| XIST           | Existing  | STR               | Structure                              |
| XP BOLT        | Expansion Bolt                                  | SYM               | Symmetrical                            |
| XT             | Exterior  | TEMP              | Temperature                            |
| :W             | Each Way  | THK or T<br>THRD  | Thickness<br>Threaded                  |
| TC             | Etcetera  | TOPG              | Topping                                |
| -1             | Flooring Number                                 | TYP               | Typical                                |
| ·B<br>·F       | Floor Beam For Face Finished Floor              | T.O.B.            | Top of Beam                            |
| r<br>FE        | Far Face, Finished Floor Finish Floor Elevation | T.O.C.            | Top of Concrete                        |
| G              | Final Grade                                     | T.O.COL           | Top of Column                          |
| IN             | Finish  | T.O.F.            | Top of Footing                         |
| ·L             | Floor   | T.O.J.            | Top of Joist                           |
| LG             | Flange  | T.O.OP.<br>T.O.P. | Top of Opening                         |
| ND             | Foundation                                      | T.O.P.<br>T.O.S.  | Top of Parapet<br>Top of Slab or Steel |
| RMG            | Framing   | T.O.S.            | ·                                      |
| T              | Foot, Feet                                      | т.о.w.<br>Т & В   | Top of Wall<br>Top and B ottom         |
| TG<br>S        | Footing<br>Far Side                             | U                 | Units                                  |
| S<br>SA        | Far Side<br>Gage or Gauge                       | UNO               | Unless Noted Otherwise                 |
| SALV           | Galvanized                                      | VB                | Vapor Barrier                          |
| GC             | General Contractor                              | VERT              | Vertical                               |
| SR .           | Grade   | VRS               | Varies                                 |
| IBF            | Horizontal Both Faces                           | W                 | West, Wire Size                        |
| IORIZ          | Horizontal                                      | 1-                | Designation                            |
| ΙН             | Horizontal Hook                                 | W/C               | Water Cement Ratio                     |
| IDAS           | Headed Anchor Stud                              | WD                | Wood                                   |
| ISB            | High Strength Bolt                              | WP                | Work Point                             |
| <del>I</del> T | Height  | WT<br>WWF         | Weight<br>Welded Wire Fabric           |
| )              | Inside Diameter                                 | WWF<br>W/         | With                                   |
| NFO            | Information                                     | w/<br>W/O         | Without                                |
| NT<br>ST       | Interior<br>Joist                               | W/S               | Waterstop                              |
| S <br> T       | Joint   | WWM               | Welded Wire Mesh                       |
| ( )            | Kips  | &                 | And                                    |
| `<br>(LF       | Kips per linear foot                            |                   |  |

KLF

KSF

LAM

LBS

LEV

Kips per square foot Kips per square inch

Left, Length

Long Leg Vertical

Laminated

Pounds

Level

#### GENERAL NOTES

1- THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTIONS WITH THE SPECIFICATIONS AND THE ARCHITECTURAL, ELECTRICAL, MECHANICAL AND ANY OTHER TRADE DRAWINGS. IF THERE IS A DISCRERPANCY BETWEEN DRAWINGS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ARCHITECT AND THE ENGINEER PRIOR TO PERFORMING ANY WORK.

2- CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON STRUCTURAL DRAWINGS WITH THE ARCHITECTURAL DRAWING BEFORE LAYING OUT ANY WORK, IF ANY DISCREPANCY ARISES THE ARCHITECTS AND ENGINEER SHALL BE NOTIFIED.

3- DETAILS, NOTES AND SECTIONS SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE WITH THE APPROVAL OF THE ENGINEER.

4- THE FOLLOWING CODE, STANDARD AND SPECIFICATION APPLY TO ALL THE CONSTRUCTION WORKS:

- 1- 2018 P.R. BUILDING CODE 2- INTERNATIONAL BUILDING CODE IBC 2018
- 3- ASCE STANDARD 7-16
- 4- AMERICAN CONCRETE INSTITUTE 318-14 LATEST EDITION 5- AMERICAN INSTITUTE OF STEEL CONSTRUCTION, 9 EDITION
- 6- AMERICAN WELDING SOCIETY LATEST EDITION
- 7- CONCRETE REINFORCING STEEL INSTITUTE LATEST EDITION 8- AMERICAN SOCIETY FOR TESTING AND MATERIAL
- 9- STEEL DECK INSTITUTE LATEST EDITION 10- ACI, MANUAL OF CONCRETE PRACTICE, LATEST EDITION

### 5- DESIGN LOADS:

A)-LIVE LOADS 1) MEZZANINE ---- 50 PSF

#### 2) ROOF ----- 40 PSF

B)-WIND LOADS: WIND LOAD SHALL BE COMPUTE AS PER ASCE-7-16

1)-BASIC WIND SPEED -----160 MPH 2)-IMPORTANCE FACTOR -----1.0 3)-EXPOSURE CATEGORY-----B

4)-TOPOGRAPHIC FACTOR-----1.0 5)-INTERNAL PRESSURE COEFFICIENT Gcpi ----- ±0.18

#### C)-SEISMIC LOADS:

SEISMIC LOAD SHALL BE COMPUTE AS PER ASCE-7-16

1)-SEISMIC IMPORTANCE FACTOR ----- I=1.0

2)-SPECTRAL RESPONCE ACCEL ----- Ss = 0.90g ----- S<sub>1</sub> = 0.30g 3)-SPECTRAL RESPONCE COEFFICIENTS----SDS = 0.624g -----SD1 = 0.30g

4)-SEISMIC DESIGN CATEGORY ---- D 5)-BASIC SEISMIC-FORCE RESISTING SYSTEM

N-S DIRECTION--SRSWS

E-W DIRECTION--SRSWS

6)-RESPONCE MODIFICATION FACTOR ---- R=8

7)-STRUCTURAL ANALYSIS USED ---- STATIC

AND SHALL NOT CREATE ANY OVERLOAD SITUATION OVER IT DUE THE HORIZONTAL MOVEMENT OF ANY HEAVY EQUIPMENT OR THE STORAGE OF THE CONSTRUCTION MATERIALS. 7- IN CASE OF DOUBT IN THE INTERPRETATION OF ANY ASPECT OF THESE STRUCTURAL DRAWINGS

6- CONTRACTOR SHALL PROVIDE ADEQUATE SHORING TO THE STRUCTURE DURING CONSTRUCTION

AND OR THE SPECIFICATIONS, THE DESIGNER SHALL BE CONSULTED. BEFORE COMMENCING ANY WORK. 8- IMPLEMENTING JOB SITE SAFETY AND CONSTRUCTION PROCEDURES (MEAMS AND METHODS).

TEMPORARY SHORING AND BRACING OF EXISTING CONSTRUCTION ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR, CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT ANY DAMAGE TO ADJACENT STRUCTURES AND UTILITIES.

9- ALL STRUCTURAL WORKS RALATED TO MEANS AND METHODS OF CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR, INCLUDING FORMWORK, SHORING, RESHORING, SUPPORT OF EXCAVATION, UNDERPINNING AND SUPPORT OF ALL CONSTRUCTION EQUIPMENT INCLUDING CRANES AND HOISTS.

10- SCALE ON THE DRAWINGS ARE FOR INFORMATION ONLY, NO DIMENSIONAL INFORMATION SHALL BE OBTAINED BY SCALING FROM THE DRAWINGS.

11- THE USE OF ELECTRONIC FILES OR REPRODUCTIONS OF THESE DOCUMENTS BY ANY PERSON, CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR, OR MATERIAL SUPPLIER IN LIEU OF PREPARATION OF SHOP DRAWINGS, SIGNIFIES THEIR ACCEPTANCE OF ALL INFORMATION SHOWN HEREON AS CORRECT, AND OBLIGATE THEMSELVES TO ANY JOB EXPENSE, REAL OR IMPLIED, ARISING DUE TO ANY ERRORS THAT MAY OCURR HEREON.

2- SUBMIT SHOP DRAWINGS AT LEAST 15 BUSINESS DAYS PRIOR TO THE DATE WHICH REVIEWED SUBMITTALS WILL BE REQUIRED, SHOP DRAWINGS SHALL BEAR THE CONTRACTOR'S STAMP OF APROVAL WHICH SHALL CONSTITUTE CERTIFICATION THAT HE HAS VERIFIED ALL FIELD MEASUREMENTS, CONSTRUCTION CRITERIA, MATERIALS AND SIMILAR DATA, AND HAS CHECKED EACH DRAWING FOR COMPLETENESS, COORDINATION, AND COMPLIANCE WITH THE CONTRACT DOCUMENTS.

13- CONTRACTOR SHALL FURNISH DIMENSIONED COORDINATED SHOP DRAWINGS AT ALL LEVELS LOCATING SLAB EDGES AND ALL SLEEVES AND OPENINGS REQUIRED BY ALL TRADES FOR REVIEW BY THE ARCHITECT AND SER. 14- THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN THE FIELD PRIOR TO COMMENCING WORK, AND SHALL REPORT ANY DISCREPANCIES BETWEEN CONTRACT DOCUMENTS AND FIELD CONDITIONS TO THE SER. 15- NO CONSTRUCTION SHALL COMMENCE PRIOR TO THE APPROVAL OF SHOP DRAWINGS BY THE ARCHITECT. SEE SPECIFICATIONS FOR REQUIRED SUBMITTALS.

16- SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR DETAILED INFORMATION REGARDING FINISHES, PAINT, FIREPROOFING, FLOOR PITCHING, DRAIN LOCATIONS, WATERPROOFING AND DAMPPROOFING DETAILS. 17- SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF MASONRY AND ALL OTHER NON-LOAD BEARING PARTITIONS. PROVIDE SLIP CONNECTIONS THAT ALLOW VERTICAL MOVEMENT AT THE HEADS OF ALL SUCH PARTITIONS. CONNECTIONS SHALL BE DESIGNED TO SUPPORT THE TOP OF WALLS LATERALLY FOR THE CODE-REQUIRED LATERAL LOAD. PROVIDE COMPRESSIBLE FIRESAFING AT THE TOP OF WALLS AS REQUIRED BY THE ARCHITECTURAL DRAWINGS,

18- ALL COSTS OF INVESTICATIONS AND/OR REDESIGN, DUE TO CONTRACTOR'S MISLOCATION OF STRUCTURAL ELEMENTS OR OTHER LACK OF CONFORMANCE WITH THE PROJECT DOCUMENTS, SHALL BE AT THE CONTRACTOR'S EXPENSES.

#### SPECIAL INSPECTION

1- ANY CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A MAIN WIND-OR SEISMIC-FORCE-RESISTING SYSTEM, DESIGNATED SEISMIC SYSTEM OR A WIND-OR SEISMIC-RESISTING COMPONENT LISTED IN THE STATEMENT OF SPECIAL INSPECTIONS SHALL SUBMIT A WRITTEN STATEMENT TO THE DESIGNATED INSPECTOR. OR DESIGN PROFESSIONAL IN CHARGE, OR THE OWNER, PRIOR TO THE COMMENCEMENT OF WORK ON THE SYSTEM, OR THE COMPONENT, THAT HE ACKNOWLEDGES THAT THE SYSTEM WILL BE SUBJECT TO THE LISTED SPECIAL INSPECTION, WHICH WILL BE PERFORMED BY THE REGISTERED DESIGN PROFESSIONAL AS PER SECTIONS 1705, 1706, 1707, AND 1708.

2- THE OWNER WILL PROVIDE THE SERVICES OF A SPECIAL INSPECTOR WSITH THE RESPONSIBITIES DESCRIBE BELOW. SEE IBC 2009 CHAPTER 17 FOR ADDITIONAL INFORMATION.

- STRUCTURAL TESTS AS SHOWN IN SPECIFICATION SECTION 033000 FOR THE FOLLOWING COMPONENTS
- 1.1 PERIODIC INSPECTION OF REINFORCING STEEL 1.2 CONTINUOUS INSPECTION OF EMBEDS, INSERTS, AND BOLTS INSTALLED PRIOR TO CONCRETE
- PLACEMENT

A. CAST-IN-PLACE CONCRETE - PROVIDE CONTINUOUS AND PERIODIC SPECIAL INSPECTION AND

- 1.3 PERIODIC INSPECTION TO VERIFY USE OF REQUIRED DESIGN MIX 1.4 CONTINUOUS INSPECTION AT THE TIME FRESH CONCRETE IS SAMPLED FOR STRENGTH TEST TO VERIFY SLUMP, AIR CONTENT, AND CONCRETE TEMPERATURE
- 1.5 CONTINUOUS INSPECTION OF CONCRETE FOR PROPER APPLICATION AND PLACEMENT TECHNIQUES
- 1.6 PERIODIC INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES 1.7 PERIODIC INSPECTION OF IN-SITU CONCRETE STRENGTH PRIOR TO THE REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS
- 1.8 PERIODIC INSPECTION OF CONCRETE FORMWORK, SHORING, AND RESHORING
- B. POST-TENSIONED CONCRETE PROVIDE CONTINUOUS AND PERIODIC SPECIAL INSPECTION AND STRUCTURAL TESTS AS SHOWN IN SPECIFICATION SECTION 033816 FOR THE FOLLOWING COMPONENTS OF THE WORK:
- 3.1 PERIODIC INSPECTION OF PRESTRESSING TENDONS CONTINUOUS INSPECTION OF APPLICATION OF PRESTRESSING FORCES
- 3.3 PERIODIC INSPECTION OF IN-SITU CONCRETE STRENGTH PRIOR TO STRESSING OF TENDONS

#### FOUNDATIONS NOTES

1 - BACKFILLING AGAINST FOUNDATION WALLS SHALL BE DONE WITH SMALL COMPACTING EQUIPMENT IN LAYERS NOT EXCEEDING 6". BACKFILLING MATERIAL SHALL BE GRANULAR AASHTO CLASSIFICATION A-2-4 OR BETTER, REFER TO GEOTHECHNICAL REPORT.

2- NO BACKFILLING SHALL BE PERMITTED AGAINST BASEMENT WALLS UNTIL UPPER SLAB ARE IN PLACE AND CONCRETE HAS DEVELOPED ITS REQUIRED STRENGTH.

3- ALL INTERIOR SLAB ON GROUND SHALL BE CAST OVER A POROUS MATERIAL WITH A 6 MIL MIN. POLYHETYLENE VAPOR BARRIER UNDER IT.

4- FOUNDATIONS HAS BEEN DESIGN FOR A SOIL BEARING PRESSURE OF Fb= 2,000 PSF.

5)- CONTRACTOR IS RESPONSIBLE OF VERIFYING THE FOUNDATION DESIGN PARAMETER WITH A GEOTHECNICAL INVESTIGATION PREPARE BY A CERTIFIED PR ENGINEER. ANY DISCREPANCY BETWEEN THE DESIGN PARAMETER AND THE SUBSOIL REPORT SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER. NO CONSTRUCTION WORK SHALL BE PERFORM PRIOR THE REALIZATION OF THE GEOTHECNICAL INVESTIGATION.

6- CONTRACTOR SHALL VERIFY ALL EXISTING FIELD CONDITIONS THAT MAY AFFECT THE INSTALLATION OF THE FOUNDATION SYSTEM AS SHOWN PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL REVIEW ALL EXISTING SITE CONDITIONS AND THE GEOTECHNICAL REPORT, AND ESTABLISH A SPECIFIC CONSTRUCTION PROGRAM, AND SUBMIT FOR REVIEW BY THE OWNER'S GEOTHECNICAL ENGINEER. 7- SEE SPECIFICATIONS AND REFERENCED GEOTECHNICAL REPORT FOR REQUIREMENTS FOR EXCAVATIONS AND

PREPARATION OF THE FOUNDATION AND SLAB-ON-GRADE SUBGRADES, INCLUDING COMPACTION PROCEDURES. REQUIREMENTS CONTAINED IN THE GEOTECHNICAL REPORT ARE PART OF THIS WORK 8- PROTECT ADJACENT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE

CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT, AND OTHER HAZARDS CREATED BY EARTHWORK OPERATIONS OR CONSTRUCTION PROCEDURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, INSTALLATION, MONITORING, AND FINAL REMOVAL OF ANY REQUIRED NEEDLING, UNDERPINNING, SHORING, OR BRACING OF EXISTING OR NEW CONSTRUCTION. 9- OTHER CONSTRUCTION, OF WHICH NO RECORDS ARE AVAILABLE, MAY BE ENCOUNTERED. THE CONTRACTOR

SHALL FORMULATE HIS OWN CONCLUSIONS AS TO THE EXTENT OF SUCH CONSTRUCTION AND SHALL REMOVE ALL 10- UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOUNDATIONS WITHOUT THE STRUCTURAL ENGINEER'S WRITTEN APPROVAL.

11- PROVIDE CONTINUOUS BENTONITE STRIP WATERSTOPS AT ALL VERTICAL AND HORIZONTAL CONSTRUCTION JOINTS IN ALL BELOW GRADE CONCRETE INCLUDING ELEVATOR PITS AND PIT WALLS. 12- ALL SHORING, SHEETING, AND DEWATERING SHALL BE THE TOTAL RESPONSIBILITY OF THE CONTRACTOR. SHEETING AND SHORING SHALL BE DESIGNED BY THE CONTRACTOR'S LICENSED PROFESSIONAL ENGINEER. 13- ANY BACKFILL SHOULD BE PLACED AND COMPACTED IN EQUAL LAYERS TO EQUAL DEPTHS ON BOTH SIDES OF STRUCTURAL ELEMENTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE GEOTECHNICAL REPORT. 14- ALL ORGANIC AND/OR UNSUITABLE MATERIALS SHALL BE REMOVED FORM FOOTING, SLAB, AND GRADE BEAM SUBGRADES AND BACKFILLED WITH ACCEPTABLE GRANULAR AND/OR COMPACTED FILL IN CONFORMANCE WITH THE

# LEGEND & SYMBOLS

SPECIFICATIONS.

DENOTES TOP BARS REINFORCEMENT DENOTES BOTTOM BARS REINFORCEMENT DENOTES SLAB THICKNESS T=0DENOTES R/C WALLS OR COLUMNS ABOVE & BELOW SLAB DENOTES R/C WALLS OR COLUMNS ABOVE SLAB DENOTES EXISTING WALLS & COLUMNS

DENOTES TIE COLUMNS DENOTES BLOCK WALLS DENOTES R/C BLOCK WALLS

DENOTES BRACING DENOTES MOMENT CONNECTION

DENOTES TENDON FORCE IN K/FT DENOTES C. G. OF TENDONS IN.

DENOTES TEMP REINFORCEMNT AS SHOWN ON DRAWINGS DENOTES P.T. CABLES

DISTANCE TO C.G. FROM BOTTOM OF SLAB OR BEAM VERTICAL STEP

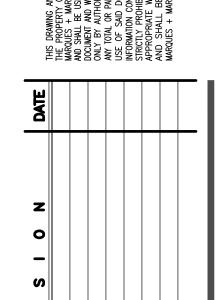
( A ) COLUMNS OR WALL LINE **MATCH LINES** 

A INDICATES DETAIL NUMBER

S-0 INDICATES NUMBER WHERE DRAWN - INDICATES SECTION NUMBER

- INDICATES NUMBER

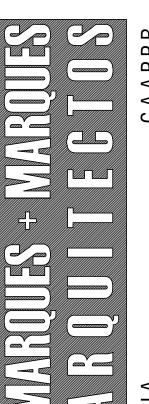
WHERE DRAWN -0 INDICATES FOOTING TYPE .0) INDICATES TOP OR BOTTOM OF FOOTING ELEVATION INDICATES CONCRETE -PILASTER WHERE SHOWN ON PLAN

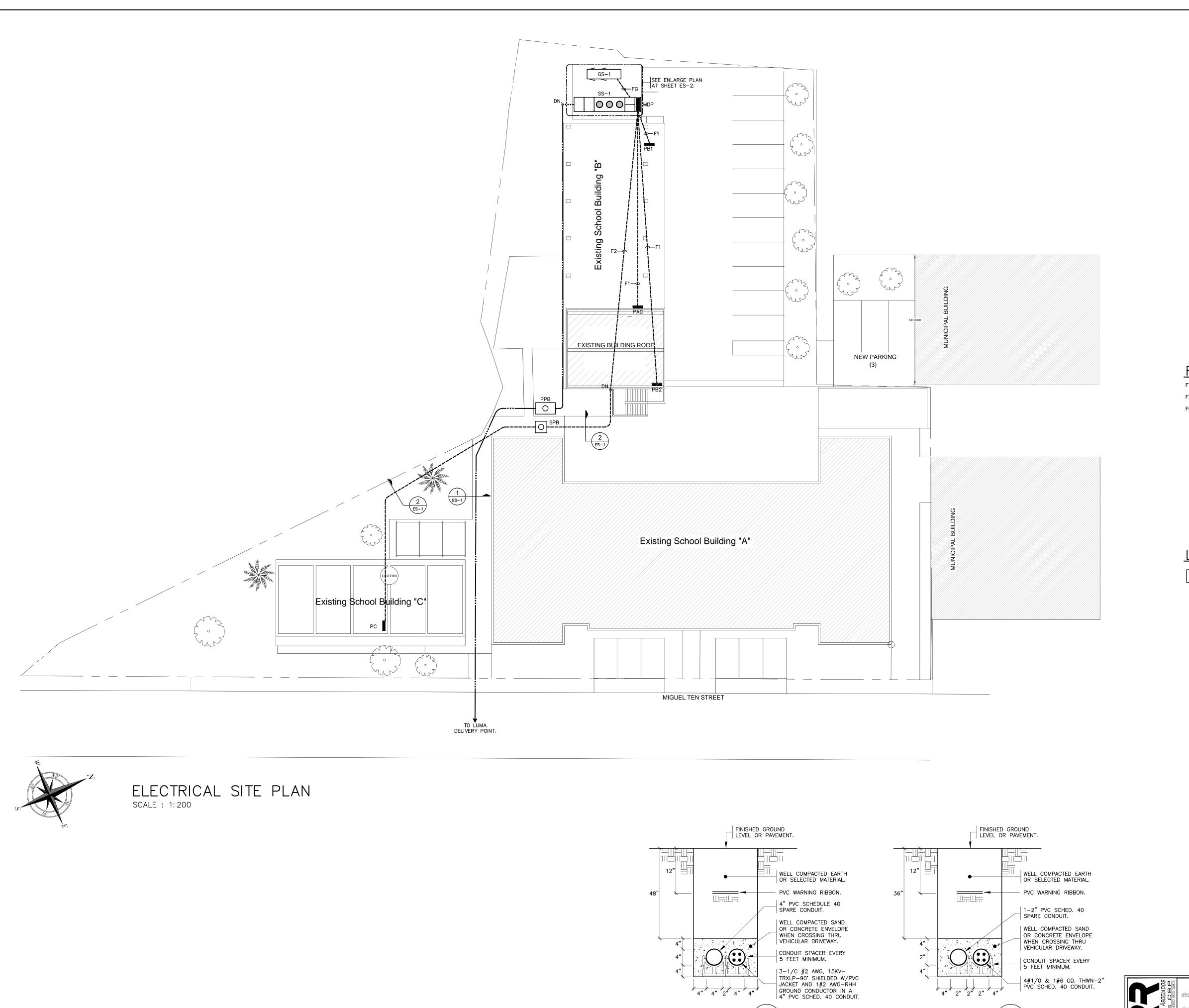


 $\mathbf{\Phi}$ þ

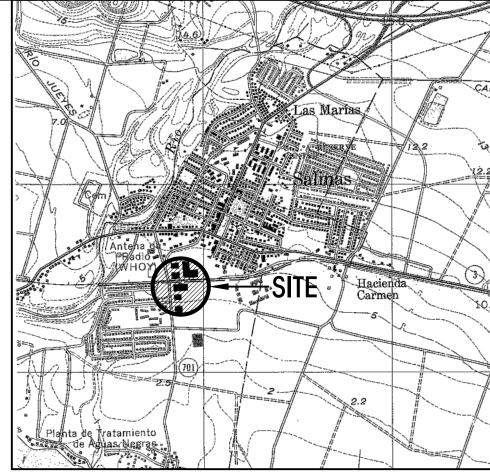
 $\mathcal{L}$ 

eh





N.T.S.



# LOCATION PLAN

SCALE: 1:20,000

LAMBERT COORDINATES:

X = 214,247.408 Y = 215,754.449

# FEEDER SCHEDULE:

F1 - 4#3/0 & 1#6 GD.-2½°C.

F2 - 4#1/0 & 1#6 GD.-2"C.

FG - 2 SETS OF (4#500 MCM & 1#1/0 GD.-4"C.) & 1-1" CONDUIT FOR CONTROL WIRING.

# LEGEND:

NEW 225KVA TRANSCLOSURE TYPE SUBSTATION. SEE DETAIL AT SHEET ES-2.

NEW 175KW/218KVA DIESEL DRIVEN EMERGENCY GENERATOR. SEE DETAIL AT SHEET ES-2.

PRIMARY UNDERGROUND FEEDER. SEE SECTION 1/ES-1 FOR DETAILS. ---- SECONDARY FEEDER. SEE SECTIONS FOR DETAILS.

РРВ  $7'-0" \times 4'-6" \times 5'-0"$  PRIMARY PULL BOX. LUMA STD. URD-30B.

4'-0" x 4'-0" x 4'-0" SECONDARY PULL BOX.

. I certify that I am a licensed and registered engineer, surveyor, or architect (in compliance with Act 173 of 1988, as amended) and authorized by the project or land owner to submit these construction plans to LUMA Energy as operator and administrator of the Transmission and Distribution System of the Puerto Rico Electric

Certification Act", I certify that I prepared the electric design for this project in accordance with the codes. Standards, rules, and regulations approved by LUMA, Puerto Rico Planning Board and Permits Managemen Office and the CIAPR Professional Practice Manual.

LUX **ENDORSEMENT** ESCUELA GUILLERMO GODREAU PROJECT NAME: PROJECT NUMBER: LOAD(KVA): \_ REVISION: \_ **ENDORSED BY** 

LUMA Endorses the electric design shown in these construction plans based on the certification presented by the designer in compliance with Act 135 of July 15, 1967, as amended.

. LUMA does no assume responsibility over the certified design. LUMA's endorsement does not relieve the designer from professional responsibility assumed with certification of these project's plans. This endorsement relieves neither the builder nor private inspector from compliance with standing dispositions form: National Electric Safety Code; constructions standards, norms, and regulations from LUMA and other government agencies as well as federal and state laws ruling by the time construction begins.

or contract until fully approved by Architect, 3. This endorsement is valid for one (1) year. If electrical works have begun during this year, with prior notification to LUMA, the endorsement will still be valid until work's completion. In case there is no certified electrical work during this period, this endorsement will lose its validity. This endorsement is not to constitute and easement or to complete the Assignment, Transfer and Guarantee process of the equipment. For this, it is necessary to comply with all provisions of the Easements Regulation for the Electric Power Authority (7282 of 2007).

THIS DRAWING AND THE PROPERTY OF MARQUES + MARQUE AND SHALL BE USED DOCUMENT AND WOR ONLY BY AUTHORIZ ONLY PROPINGIT APPROPRIATE WELL BE MARQUES + M

Godreau Guillermo Miguel Ten Escuela

oilitation sla Guiller ehabi Escuel

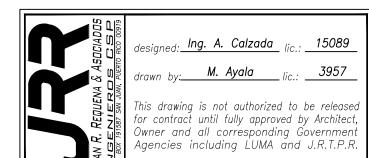
Annado Calzada Paler, Lic. #15089 certifico que soy el profesional eñó estos planos y las especificaciones complementarias. También que entiendo que dichos planos y especificaciones cumplen con las nes aplicables del Reglamento Conjunto y las disposiciones aplicables de los nos y Códigos de las Agencias, Juntas Reglamentadoras o Corporaciones si con jurdicición. Reconazco que cualquier falsa o falsificación de los que se haya producido sin conosimiento o por negligencia ya sea por mi, entes o empleados, o por otras personas con mi conocimiento en responsable de cualquier acción judicial y disciplinaria por la OIGPe y uutoridades competentes, incluyendo, pero sin limitarse, a la acción profecional en la OIGPe.

29 OF 47

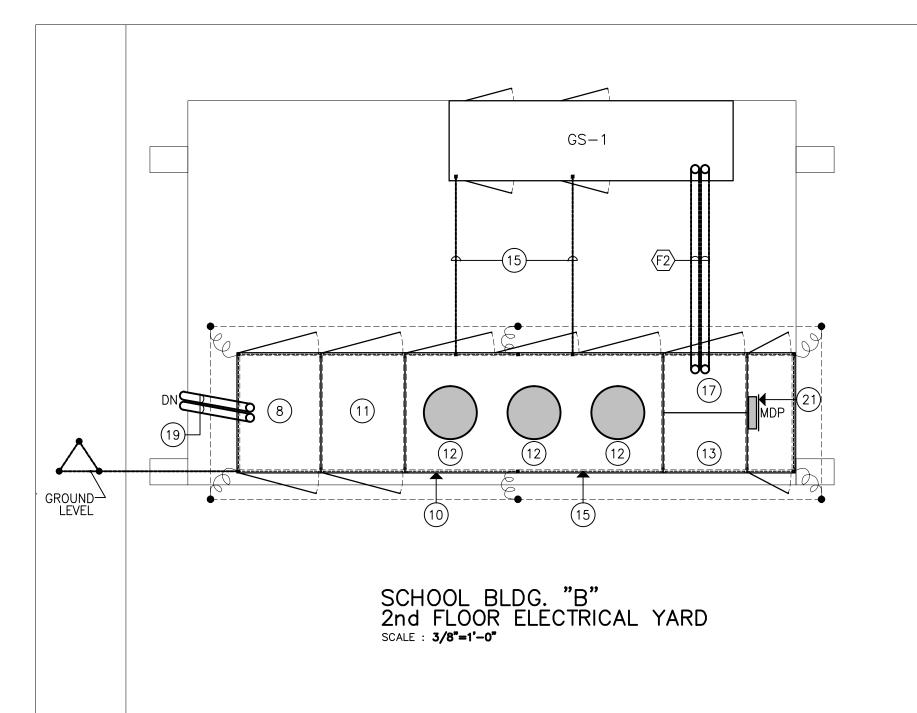
DESIGNER'S CERTIFICATION

2. In compliance with Act No. 135 of July 15, 1967, as amended known as the "Construction Plans of Projects"

DESIGNER'S SIGNATURE



Ing. A. Calzada lic.: \_ nis drawing is not authorized to be released



#### FEEDER SCHEDULE:

| NO. | DESCRIPTION                         | CONDUIT<br>TYPE  | AMPS |
|-----|-------------------------------------|------------------|------|
| F1  | 3 SETS OF(4#300 & 1#1/0 GND, 3" C.) | 3" R.G.          | 800  |
| F2  | 2 SETS OF(4#500 & 1#1/0 GND, 4" C.) | 4" EMT           | 700  |
| F3  | 4#3/0 & 1#6 GND, 2½" C.             | 2½" EMT          | 200  |
| F4  | 4#3/0 & 1#6 GND, 2½" C.             | 2" EMT           | 150  |
| F5  | 4#2 & 1#8 GND, 2" C.                | 2" EMT           | 100  |
| F6  | CONTROL WIRING                      | 1" PVC SCHED. 40 |      |
|     |                                     |                  |      |

#### **GENERATOR NOTES:**

1-DIESEL DRIVEN EMERGENCY GENERATOR 175KW/218KVA AT 0.8 POWER FACTOR - 1,800 RPM 120/208 VOLTS - 3PH - 4W - S/N WITH CRITICAL TYPE MUFFLER, LEAD ACID BATTERIES, BATTERY CHARGER, BATTERY CABLES, VIBRATION ISOLATORS, DAYTANK & FUEL TANK FOR 72 HOURS OF OPERATION, FUEL LINES, FUEL PUMP, ENGINE MOUNTED INSTRUMENT'S PANEL W/ VOLTMETER, AMMETER, FREQUENCY METER & ALL ENGINE RELATED INSTRUMENTS. LOW OIL PRESSURE, HIGH TEMPERATURE AND OVER SPEED ALARMS AND SHUT DOWN, BATTERY CHARGER AND 3P-700AMPS. OUTPUT BREAKER, EQUAL OR SIMILAR TO ONAN W/LEVEL 2 SOUND ATTENUATED WEATHER PROOF HOUSING. HOUSING TO COMPLY WITH IBC 2018 SEISMIC & WIND REQUIREMENTS. UNDER BASE DOUBLE WALL FUEL DIESEL FUEL TANK FOR 72 HOURS OF OPERATION AT 75% LOAD, WITH TANK RUPTURE BASIN AUDIBLE SPILL ALARM TO BE ANNUNCIATED AT REMOTE ANNUNCIATOR PANEL LOCATION. GENERATOR CUMMINS POWER.

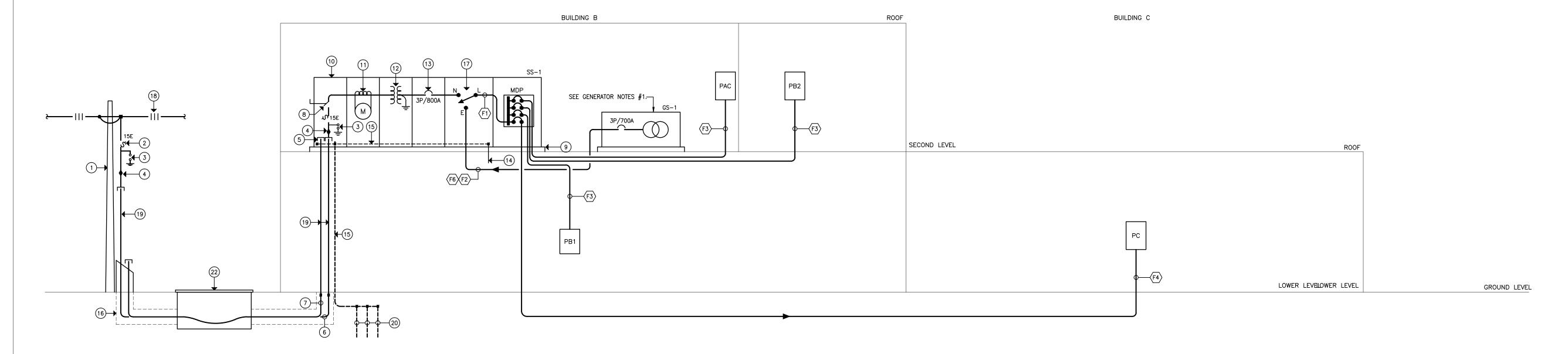
2-U.L. LISTED AUTOMATIC TRANSFER SWITCH 800AMPS.-3P-120/208V-3PH-4W-S/N WITH EXCERSIZER CIRCUIT, TIME DELAY AND UNDER VOLTAGE RELAYS W/EXCERSIZER & COOL DOWN TIMER, NEMA 4X ENCLOSURE, EQUAL OR SIMILAR TO ONAN SERIES O.T.

#### ONE-LINE LEGEND:

- 1 EXISTING LUMA CONCRETE POLE TO SERVE AS CONNECTION POINT.
- 2) → 200A, 15KV OPEN FUSE CUTOUT WITH 15E FUSES.
- 3 10KV OUTDOOR TYPE M.O.V. LIGHTNING ARRESTER.
- 4 15KV OUTDOOR TYPE PREFABRICATED STRESS CONE.
- 5 SEALING FITTINGS. TYPE & SIZE AS REQUIRED.
- 6 3-1/C #2 AWG, 15KV TRXLP, SHIELDED, PVC JACKET & 1/C #2 AWG RHH 600V IN 4" PVC SCHED. 40 C.
- 7 1-4" PVC SCHED. 40 SPARE CONDUIT CAPPED AT BOTH ENDS.
- (8) GANG OPERATED LOAD BREAK FUSIBLE SWITCH 15KV,

600A, 95KVBIL, 40KA CLOSING W/15E FUSES.

- (9)→ 6" CONCRETE PAD.
- 10 225KVA STAINLESS STEEL TRANSCLOSURE TYPE SUBSTATION LUMA APPROVED.
- METERING CUBICLE FOR LUMA'S CT'S & PT'S. AS PER LUMA STD. URD-48 REV 1 & URD-49 REV 1. REFER TO DETAIL DWG ES-3 AS PER LUMA LETTER DATED FEB-14-2022 METERING WILL BE AS DESCRIBED BELOW: METER TYPE 5S (8PUNTOS) (2) VOLTAGE TRANSFORMERS VT, \_\_:1 (2) CURRENT TRANSFORMERS, CT, \_\_:5
- 3-75KVA, 1PH, O.I.S.C., NON PCB, DISTRIBUTION
  TRANSFORMER 13.2 KV△ PRIMARY TO 120/208V SECONDARY
  W/2-2½% TAPS ABOVE AND BELOW NOMINAL VOLTAGE. PRIMARY
  TO BE CONNECTED IN DELTA & SECONDARY TO BE
  CONNECTED TO OBTAIN A 3Ø-4W-208Y/120KV WYE SERVICE.
  TRANSFORMERS MUST BE DESIGNED & CONSTRUCTED
  WITH LOW LOSSES CHARACTERISTICS.
- 13 SECONDARY DISTRIBUTION SECTION WITH:
  1-800AF/800AT-3P GFCI MAIN BREAKER SERVING ATS.
- 14→ NOT USED.
- 1#4/0 AWG BARE COPPER CONDUCTOR FOR GROUNDING PURPOSE.
- (16)→ 4" CONCRETE ENVELOPE.
- 17→ 800 AMPS ATS, SEE GENERATOR NOTE #2.
- 18 EXISTING P.R.E.P.A. AERIAL LINE- 13.2KV TO REMAIN.
- 19 3-1/C#2 AWG, 15KV TRXLP, SHIELDED, PVC JACKET & 1/C#2 AWG RHH 600V IN 4" RIGID GALVANIZED CONDUIT AT PER P.R.E.P.A. STD URD-4.
- 3-3/4" X 10'-0" COPPER WELD GROUND ROD IN TRIANGULAR CONFIGURATION SEPARATED AT 10-0" INTERCONNECTED WITH 4/0AWG BARE CONDUCTOR. PROVIDE GROUND CLAMP EQUAL OR APPROVED TO "HY GROUND" COMPRESSION CONNECTORS AND OR "CADWELD JOINTS".
- 21) 3ø-4W-S/N-120/208V-800A DISTRIBUTION PANEL. SEE SCHEDULES.
- PRIMARY UNDERGROUND PULL BOX 7'-0" X 4'-6" X 5'-0" AS PER LUMA STD. URD-30B.



ONE-LINE DIAGRAM

#### DESIGNER'S CERTIFICATION

1. I certify that I am a licensed and registered engineer, surveyor, or architect (in compliance with Act 173 of 1988, as amended) and authorized by the project or land owner to submit these construction plans to LUMA Energy as operator and administrator of the Transmission and Distribution System of the Puerto Rico Electric Power Authority

2. In compliance with Act No. 135 of July 15, 1967, as amended known as the "Construction Plans of Projects Certification Act", I certify that I prepared the electric design for this project in accordance with the codes. Standards, rules, and regulations approved by LUMA, Puerto Rico Planning Board and Permits Management Office and the CIAPR Professional Practice Manual.

DESIGNER'S SIGNATURE

| LUMA            | ENDORSE | EMENT             |
|-----------------|---------|-------------------|
| PROJECT NAME:   |         | GUILLERMO GODREAU |
| PROJECT NUMBER: |         | REVISION:         |
|                 | ENDORSE | ED BY             |

1. LUMA Endorses the electric design shown in these construction plans based on the certification presented by the designer in compliance with Act 135 of July 15, 1967, as amended.

2. LUMA does no assume responsibility over the certified design. LUMA's endorsement does not relieve the

is drawing is not authorized to be released r contract until fully approved by Architect,

Owner and all corresponding Governmen

2. LUMA does no assume responsibility over the certified design. LUMA's endorsement does not relieve the designer from professional responsibility assumed with certification of these project's plans. This endorsement relieves neither the builder nor private inspector from compliance with standing dispositions form: National Electric Safety Code; constructions standards, norms, and regulations from LUMA and other government agencies as well as federal and state laws ruling by the time construction begins.

3. This endorsement is valid for one (1) year. If electrical works have begun during this year, with prior notification to LUMA, the endorsement will still be valid until work's completion. In case there is no certified electrical work during this period, this endorsement will lose its validity. This endorsement is not to constitute and easement or to complete the Assignment, Transfer and Guarantee process of the equipment. For this, it is necessary to comply with all provisions of the Easements Regulation for the Electric Power Authority (7282 of 2007).

THIS DRAWING AND ITS CONTENT IS THE PROPERTY OF THE OFFICE OF MARQUES + MARQUES ARQUITECTOS AND SHALL BE USED AS A REFERENCE DOCUMENT AND WORKING INSTRUMENT ONLY BY AUTHORIZED PERSONNEL.

ANY TOTAL OR PARTIAL REPRODUCTION USE OF SAND DOCUMENT OR THE INFORMATION CONTAINED THEREIN IS STRICTLY PROHIBITED WITHOUT THE APPROPRIATE WRITTEN CONSENT AND SHALL BE RETURNED TO MARQUES + MARQUES ARQUITECTOS

NO. R E V I S I O N

atform Detail

Godr

0

Guiller

<u>—</u>

S

Sehabilitation

Electrical Platform

estos planos y las especificaciones complementarias. También entiendo que dichos planos y especificaciones cumplen con las aplicables del Regiamento Conjunto y las disposiciones aplicables de las violentes de las Agencias, Juntas Regiamentadoras o Corporaciones y Jaridicción. Reconazco que cualquier falsa o falsificación de los se hay aproducido sin conosimiento o por negligencia y ase por mi, so empleados, o por otras personas con mi conocimiento esponsable de cualquier acción judicial y disciplinaria por la OIGPe y idades competentes, incluyendo, pero sin limitarse, a la n de la participación en los procedimientos de profecional en la OIGPe.

**ES-2** 

.30 OF 47

### ELECTRICAL CONSTRUCTION PLAN NOTES

#### **GENERAL NOTES:**

1-THESE PLANS COINCIDE WITH THE PLANS SUBMITTED AT "O.G.P.E."

- 2-OWNER IS RESPONSIBLE OF OBTAINING ALL FEDERAL, STATE, MUNICIPAL & PRIVATE REQUIRED PERMIT & RIGHT OF WAYS CONCERNING THIS TYPE OF PROJECT.
- 3-OWNER MUST CONTRACT A LICENSED ENGINEER SERVICE THE INSPECT THE ELECTRICAL WORK IN ACCORDANCE WITH NUMBER 7 CERTIFICATION LAW JULY 19, 1985, AS AMMENDED, AND WILL ENFORCE P.R.E.P.A.'S ELECTRICAL CONSTRUCTION PROJECT PLANS CERTIFICATION REGULATION.
- OWNER MUST NOTIFY P.R.E.P.A., THE PRIVATE INSPECTOR DESIGNATION BEFORE PROJECT BEGINS. 4-ELECTRICAL CONTRACTOR SHALL PERFORM THIS WORK, AS DESIGN ON THIS DRAWINGS. CONTRACTOR HE MUST OBSERVE THE BEST ELECTRICAL CONSTRUCTION INDUSTRY PRACTICES, INSTALLATION SHALL BE ACCORDANCE WITH P.R.E.P.A.'S & CONCERNING AGENCIES ADOPTED RULES & REGULATIONS, NEC, NESC CODES, IEEE, NFPA, NEMA & ANSI ADOPTED STANDARDS.
- 5-CONTRACTOR IS NOT AUTHORIZED TO MAKE CHANGES TO THIS DESIGN. CONTRACTOR IS RESPONSIBLE OF CONSULTING THE DESIGNER OR PROJECT DESIGNATED INSPECTOR REGARDING ANY DOUBT IN PLANS, INTERPRETATION, WORK EXECUTION, TECHNICAL SPECIFICATION, EXISTING FIELD CONDITION, DESIGN CRITERIA OR DISCREPANCES THAT MAY APPEAR
- 6-ELECTRICAL CONTRACTOR SHALL NOTIFY PREPA THE START OF CONSTRUCTION AT LEAST 15 DAYS BEFORE PROJECT START, CONTRACTOR SHALL DO SO BY FILLING PREPA'S CONSTRUCTIONS START DOCUMENT.
- 7-ELECTRICAL CONTRACTOR AND PRIVATE INSPECTOR ARE RESPONSIBLE TO ASSIST & COORDINATE WITH
- 8-ALL WORK ON ENERGIZED LINES, INCLUDING THE PROJECT FINAL CONNECTION, MUST BE DONE BY P.R.E.P.A. AND THE PROPONENT MUST ASSUME ALL THE EQUIPMENT, MATERIAL & LABOR COST. PROPONENT MUST REQUEST TO P.R.E.P.A. A JOB QUOTE. THE QUOTE IS VALID FOR 3 MONTHS.

P.R.E.P.A.'S CORRESPONDING REGION DISTRIBUTION ENGINEERING DEPARTMENT A PRE-CONSTRUCTION MEETING.

- 9-PERFORMING ANY KIND OF WORK ON ELECTRICAL RIGHT OF WAY WITHOUT P.R.E.P.A.'S WRITTEN AUTHORIZATION IT IS STRICTLY PROHIBITED.
- 10-P.R.E.P.A. WILL NOT APPROVE ANY CONNECTION OF PROJECTS THAT ARE INVADING RIGHT OF WAY OR THAT DOES NOT COMPLY WITH THE REQUIRED SECURITY SET BACKS.

### SYSTEMS:

- 1-IT IS OWNER/CONTRACTOR RESPONSIBILITY TO PERFORM CABLE TESTS TO ALL PRIMARY AND SECONDARY FEEDERS AND STRESS CONES. TESTS RESULTS MUST BE IN ACCORDANCE WITH P.R.E.P.A.'S ESTABLISHED PARAMETERS FOR EACH TEST. TEST MUST BE PERFORM IN COORDINATION WITH P.R.E.P.A.'S ENGINEERING DEPARTMENT'S INSPECTIONS OFFICE REPRESENTATIVE
- 2-DURING CABLE INSTALLATION, CABLE MUST BE PROTECTED FROM HUMIDITY AND DAMAGES. CONTRACTOR IS RESPONSIBLE OF INSTALLING CABLES USING RECOMMENDED PULLING TECHNICS IN ORDER NOT TO EXCEED SPECIFIED CABLE MAXIMUM PULLING TENSION.
- 3-MANHOLE COVERS TO BE INSTALLED AT GREEN PLATING AREAS MUST BE PROTECTED USING A REINFORCE CONCRETE SLAB AS PER P.R.E.P.A.'S STANDARD URD-52.
- 4-WHEN PROJECT LOCATION IS LESS THAN A MILE FROM SALTWATER BODIES, POLE RISER CONDUITS MUST BE EITHER, PVC SCHEDULE 80 OR FIBERGLASS CONSTRUCTION AS APPROVED BY P.R.E.P.A.
- 5-UNDERGROUND CONDUIT DUCT BANK MUST BE INSPECTED BY P.R.E.P.A. BEFORE IT IS COVERED AND COMPACTED WITH EARTH.
- 6-ALL DUCT BANK EXPOSED TO VEHICULAR TRAFFIC MUST BE PROTECTED WITH A CONCRETE ENVELOPE. THOSE THAT ARE NEAR OTHER UTILITIES INSTALLATIONS MUST BE 18" MINIMUM SPACING FROM THEM.
- 7-SPARE FUSES QUANTITY THAT CONTRACTOR MUST SUPPLY IS THE SAME QUANTITY AS FUSES INSTALLED AT EACH SUBSTATION.
- 8-GROUNDING CONNECTORS TO BE USED FOR SUBSTATIONS MUST BE THERMO-WELD OR COMPRESSION TYPE.
- 9-CONTRACTOR MUST PROVIDE PULLING WIRE (FISHWIRE) AT EACH SPARE CONDUIT.
- 10-MAXIMUM GROUND RESISTANCE AT ALL DISTRIBUTION SYSTEM MUST BE 10 OHMS. A GROUNDING ROD FOR NEUTRAL CONNECTION MUST BE INSTALLED EVERY FOUR POLES OR EVERY 1,000 FEET AND IN
- 11-TWO SPARE CONDUITS FOR FUTURE USE MUST BE INSTALLED AT EACH POLE CONCRETE BASE AS REQUIRED BY P.R.E.P.A.
- 12-POLE CONCRETE BASES MUST BE INSPECTED BY P.R.E.P.A. AT THE CONSTRUCTION PHASE.

### **MATERIALS**:

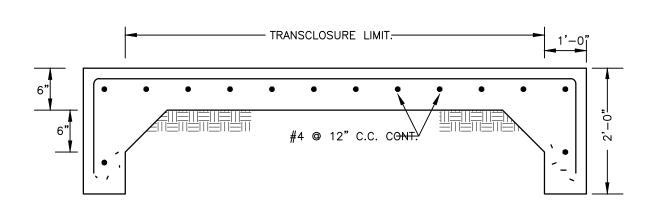
- 1-ALL EQUIPMENT TO BE USED IN THE CONSTRUCTION HAS TO COMPLY WITH IEEE, ANSI, NEMA & ASTM STANDARDS.
- 2-CONTRACTOR IS RESPONSIBLE TO VERIFY WITH P.R.E.P.A., PRIOR TO INSTALLATION THAT ALL MATERIAL OR EQUIPMENT TO BE USED IS P.R.E.P.A. APPROVED. P.R.E.P.A. RESERVES THE RIGHT OF ACCEPTING ANY EQUIPMENT TO BE TRANSFER TO THEM.
- 3-ALL MATERIAL & EQUIPMENT (INCLUDING TRANSFORMERS & SUBSTATION ENCLOSURES) TO BE INSTALLED WITHIN ONE(1) MILE OR LESS OF SALTWATER BODIES MUST BE CONSTRUCTED IN STAINLESS STEEL.
- 4-UNDERGROUND SYSTEMS, USE PRIMARY CABLES WITH 15KV STRESS CONE FOR DISTRIBUTION VOLTAGES AND 46KV STRESS CONE FOR 38KV VOLTAGE.
- 5-OVERHEAD SYSTEMS, USE 15KV POLYMER INSULATORS FOR DISTRIBUTION VOLTAGES AND 46KV POLYMER INSULATORS FOR 38KV VOLTAGE.
- 6-CONTRACTOR IS RESPONSIBLE OF PROPERLY MARKING ALL TRANSFORMERS TO BE TRANSFERRED TO P.R.E.P.A.

SPECIAL NOTES:

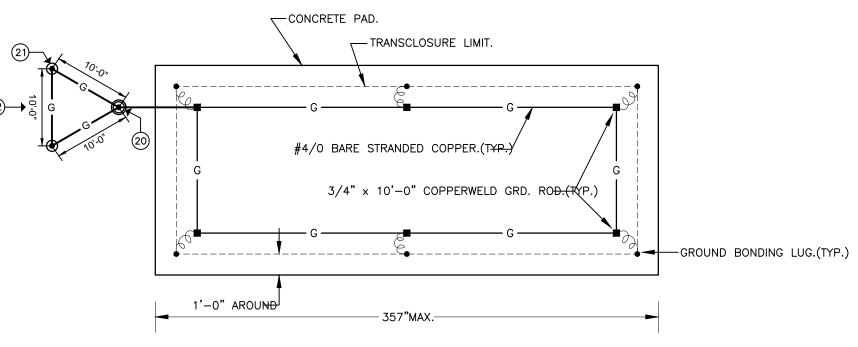
1-PROJECT OWNER SHALL PAY P.R.E.P.A. THE AMOUNT OF \$2,475.00 FOR THE EXISTING ELECTRICAL SYSTEM IMPROVEMENTS.

WITH A PROPERTY NUMBER PROVIDED BY THE CORRESPONDING DISTRIBUTION ENGINEERING DEPARTMENT.

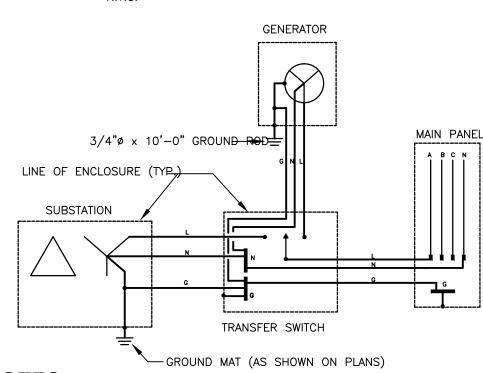
- 2-P.R.E.P.A. WILL NOT ENERGIZE THE PROJECT UNTIL THE OWNER HAS ESTABLISHED THE REQUIRED RIGHT OF WAYS IN ACCORDANCE WITH "REGLAMENTO DE SERVIDUMBRES PARA LA AUTORIDAD DE ENERGIA ELECTRICA". THIS NOTE APPLIES TO ALL REQUIRED RIGHT OF WAY, INSIDE & OUTSIDE THE PROPERTY LIMITS.
- 3-THE INSTALLATION OF THE METERING SYSTEMS HAD TO BE COORDINATED WITH THE REGIONAL METERING OFFICE. DESIGNER OR ELECTRICAL CONTRACTOR HAS TO CONSULT WITH THIS OFFICE ABOUT MATERIALS & EQUIPMENTS TO BE USED AND EQUIPMENT LOCATION.
- 4-THE INSTALLATION OF ELECTRICAL SUBSTATION, TRANSFORMERS OR ANY OTHER ELECTRICAL EQUIPMENT OVER SEWER SYSTEM, WATER LINES OR ANY OTHER UTILITIES IS PROHIBITED.
- 5-PRIOR PURCHASING ANY METERING EQUIPMENT, ELECTRICAL CONTRACTOR SHALL COORDINATE WITH PREPA'S METERING SECTION THE AVAILABILITY OF EQUIPMENTS TO BE SUPPLIED BY PREPA.
- 6-ELECTRICAL CERTIFICATION FOR THE INSTALLATION OF THE ELECTRICAL GENERATOR MUST SPECIFY TYPE OF DOUBLE THROW TRANSFER SWITCH (MANUAL OR AUTOMATIC). CERTIFICATION MUST INCLUDED WITH "FORMULARIO DE REGISTRO DE PLANTA DE EMERGENCIA" WHICH MUST BE SUBMITTED DURING THE INSPECTION PROCESS.



# TRANSCLOSURE CONCRETE PAD STRUCTURAL DETAIL

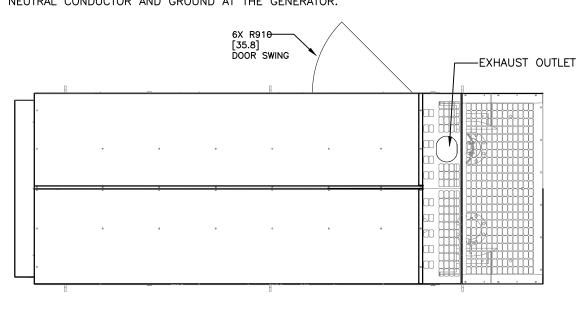


TRANSCLOSURE GRD. DETAIL

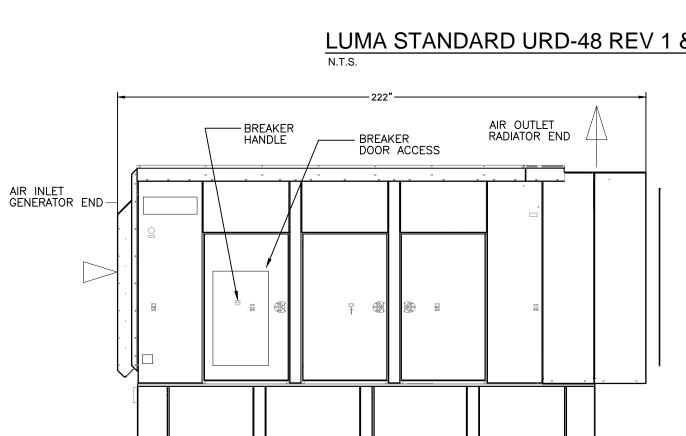


NOTES:

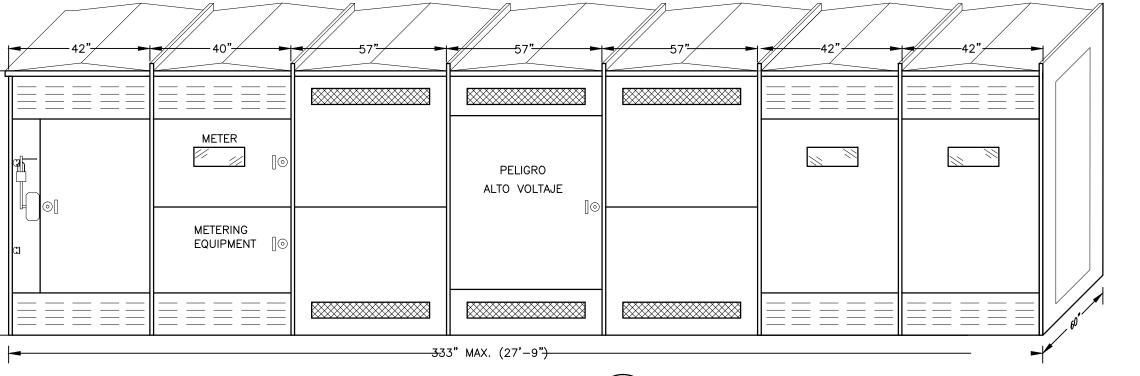
1-WHEN INSTALLING A THREE POLE TRANSFER SWITCH, THE GENERATOR IS NOT CONSIDERED A SEPARATELY DERIVED SYSTEM, THUS THERE SHALL BE NO CONNECTION BETWEEN THE NEUTRAL CONDUCTOR AND GROUND AT THE GENERATOR.



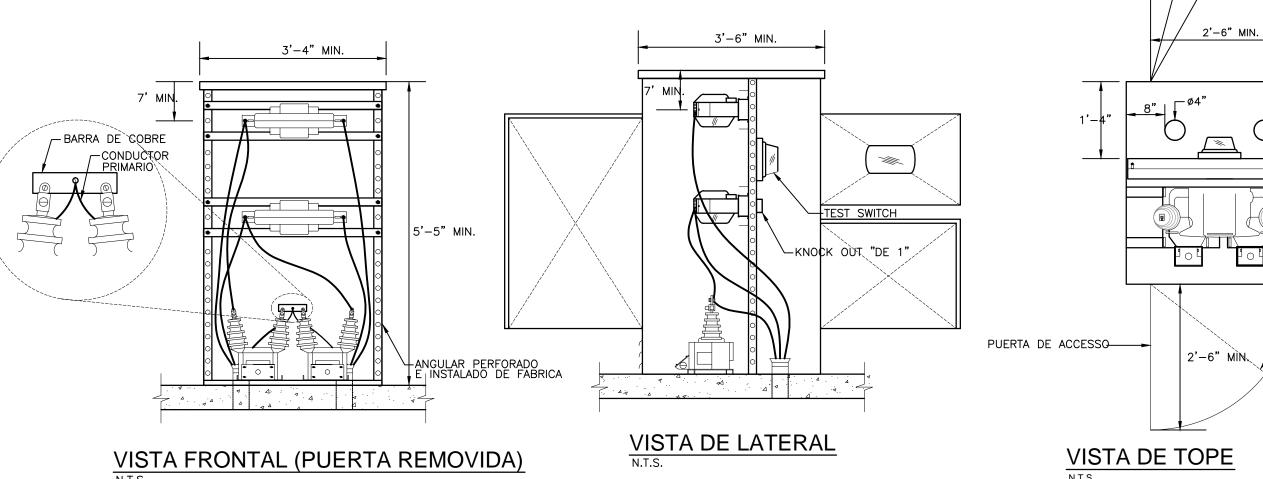




VISTA FRONTAL

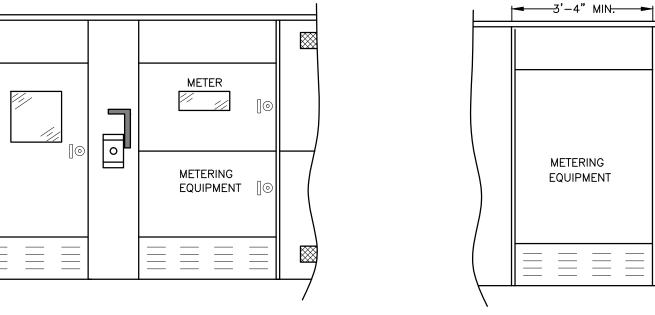


SUBSTATION ELEVATION DETAIL



DETALLE INTERIOR EQUIPO DE MEDICION EN SUBESTACIONES EN GABINETE (TRANSCLOSURE)

LUMA STANDARD URD-49, REV-1



VISTA POSTERIOR

VISTA LATERAL

DETALLE DE CUBICULO DE MEDICION EN SUBESTACIONES EN GABINETE (TRANSCLOSURE)

LUMA STANDARD URD-48, REV-1

LUMA STANDARD URD-48 REV 1 & URD-49, REV-1

**ELEVATION DETAIL** 



## **NOTAS:**

− VER COMUNICADO 04−<del>02</del>

1-LAS PUERTAS DEBEN TENER PROVISION PARA INSTALAR CANDADOS. 2-EL MATERIAL A UTILIZARSE PARA LA CONSTRUCCION DE ESTE EQUIPO DEBE SER ACERO GALVANIZADO CALIBRE 12 O ACERO INOXIDABLE 304 CALIBRE 14.

3-SI ESTE EQUIPO SE VA A INSTALAR A UNA DISTANCIA DE UNA MILLA O MENOS DE CUALQUIER CUERPO DE AGUA SALADA SE DEBERA UTILIZAR ACERO INOXIDABLE 304 CALIBRE 14.

4-EL AISLAMIENTO DE ESTE EQUIPO SERA 15KV. 5-LA APLICACION DE ESTE EQUIPO DEBE SER APROBADA POR

LUMA PREVIO A LA COMPRA E INSTALACION DEL MISMO. 6-LA CONSTRUCCION DE ESTE EQUIPO SE HARA DE ACUERDO A LOS ESTANDARES DE NEMA, EL CODIGO ELECTRICO NACIONAL

7-LAS DIMENSIONES DEL EQUIPO SON MINIMAS LAS VARIACIONES EN MEDIDAS DEBEN CUMPLIR CON LAS NORMAS Y REGLAMENTOS DE

## **DESIGNER'S CERTIFICATION**

- PUERTA INFERIOR

PUERTA SUPERIOR—

PUERTA DE SEGURIDAD

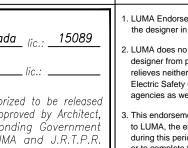
PUERTA DE SEGURIDAD

I certify that I am a licensed and registered engineer, surveyor, or architect (in compliance with Act 173 of 1988, as amended) and authorized by the project or land owner to submit these construction plans to LUMA Energy as operator and administrator of the Transmission and Distribution System of the Puerto Rico Electric

2. In compliance with Act No. 135 of July 15, 1967, as amended known as the "Construction Plans of Projects Certification Act", I certify that I prepared the electric design for this project in accordance with the codes. Standards, rules, and regulations approved by LUMA, Puerto Rico Planning Board and Permits Managemer

DESIGNER'S SIGNATURE

|               | ENDORS | EMENT               |
|---------------|--------|---------------------|
| PROJECT NAME: |        | A GUILLERMO GODREAU |
|               |        |                     |
|               | ENDORS | SED BY              |



LUMA Endorses the electric design shown in these construction plans based on the certification presented by the designer in compliance with Act 135 of July 15, 1967, as amended.

LUMA does no assume responsibility over the certified design. LUMA's endorsement does not relieve the designer from professional responsibility assumed with certification of these project's plans. This endorsement relieves neither the builder nor private inspector from compliance with standing dispositions form: National Electric Safety Code; constructions standards, norms, and regulations from LUMA and other government agencies as well as federal and state laws ruling by the time construction begins.

3. This endorsement is valid for one (1) year. If electrical works have begun during this year, with prior notification to LUMA, the endorsement will still be valid until work's completion. In case there is no certified electrical work during this period, this endorsement will lose its validity. This endorsement is not to constitute and easement or to complete the Assignment, Transfer and Guarantee process of the equipment. For this, it is necessary to omply with all provisions of the Easements Regulation for the Electric Power Authority (7282 of 2007).

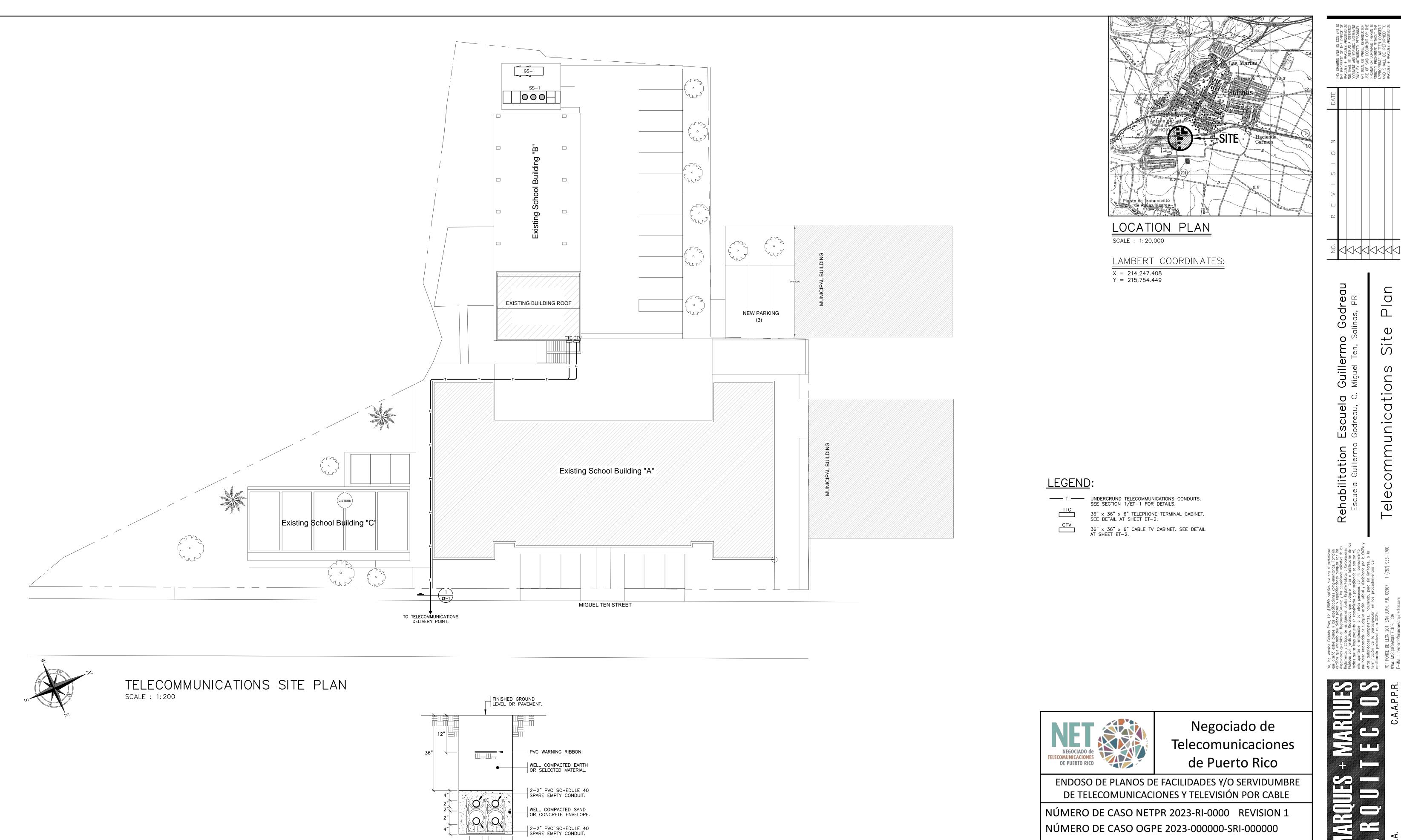
þ Guille  $\overline{\Phi}$ 

S

ation

ap

31 OF 47



THIS DRAWING AND THE PROPERTY OF MARQUES + MARQU AND SHALL BE USED DOCUMENT AND WOR ONLY BY AUTHORIZ ANY TOTAL OR PARTICILY PROPIBITE APPROPRIATE WITH AMBROUES + MARQUES + MARQUES

Yo, Ing. Arnaldo Calzada Paler, Lic. #15089 certifico que soy el profesional que diseña estos planos y las especificaciones complementarios. También certifico que entiendo que dichos planos y especificaciones cumplem con las disposiciones aplicables del Reglamento Conjunto y las disposiciones aplicables de los Reglamento Conjunto y las disposiciones aplicables de los Reglamentos va Corporaciones Públicas con juridicción. Reconozco que cualquier falsa o flasificación de los hechos que se hay producido sin conosimiento o por negigencia ya sea por mi, mis agentes o empleados, o por otras personas con mi conocimiento me hacen responsable de cualquier acción judicial y disciplinaria por la OIGPe y otras autoridades competentes, incluyendo, pero sin limitarse, a la terminación de la participación en los procedimientos de certificación profecional en la OIGPe.

701 PONCE DE LEON 201, SAN JUAN, P.R. 00907 T (787) 936–1700 WWW. MARQUESARQUITECTOS. COM E-MAIL: bernardo@marquesarquitectos.com

32 OF 47

| Revisado por: | <br>  |
|---------------|-------|
| ·             | Fecha |
| Aprobado por: |       |
|               | Fecha |

ESTE ENDOSO NO EXIME AL CONSTRUCTOR Y AL DESARROLLADOR DE CUMPLIR CON Owner and all corresponding Government
Agencies including LUMA and J.R.T.P.R. LOS REQUERIMIENTOS DE CONSTRUCCIÓN CONFORME A TODAS LAS DISPOSICIONES DE LOS REGLAMENTOS APLICABLES.

his drawing is not authorized to be released or contract until fully approved by Architect,

#### **GENERAL NOTES**

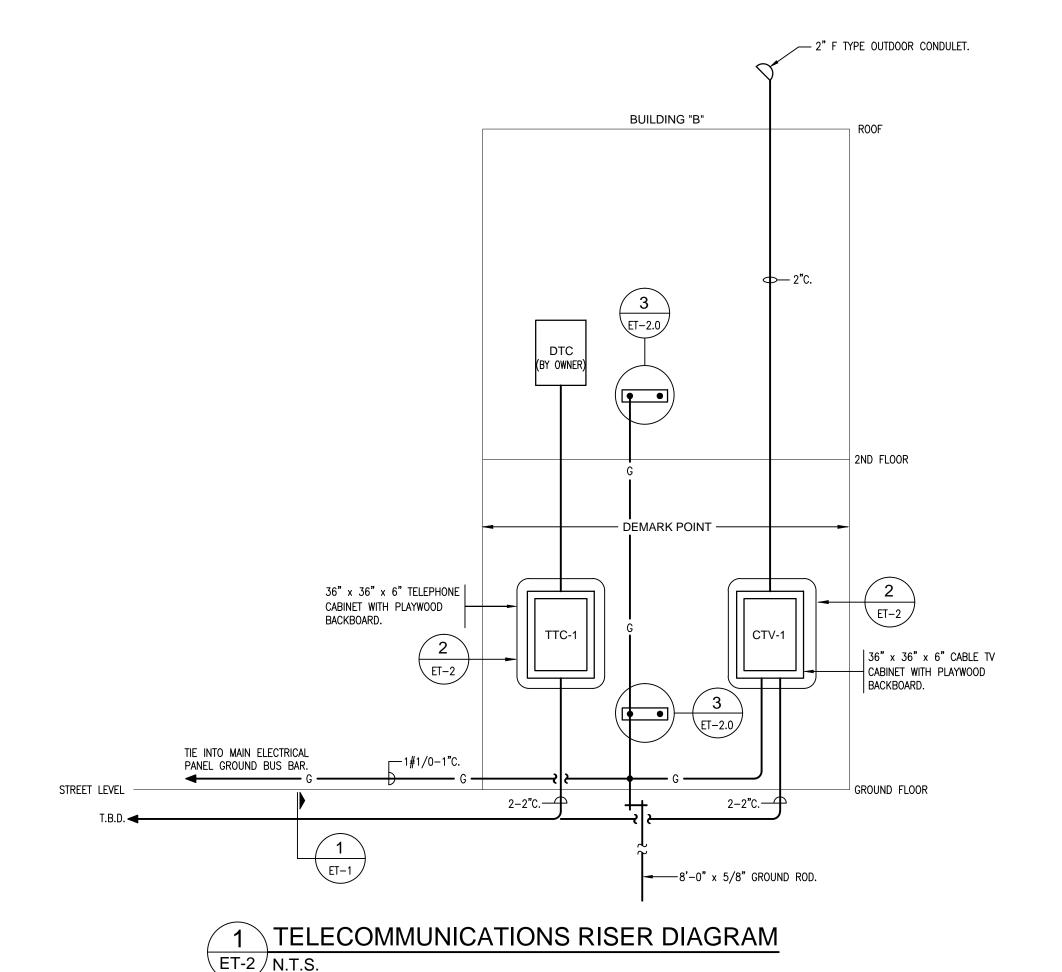
- 1—The Developer or its representatives shall supply and install all materials required for the telecommunications infrastructure, including but not limited to 1", 2" and 4" diameter conduits shown on the prints.
- 2—The 1"Ø conduits shall be PVC SCH 40 rodded with 1/8"Ø nylon rope with a minimum pulling strength of 300 lb.
- 3-The 2"Ø PVC conduit (for CATV distribution facilities) and the 4"Ø (for telephone distribution facilities) shall be installed in the telecommunications easement. The 2"0 conduits shall be installed on the sidewalk side of the trench and the 4"Ø on the farthermost side of the trench from the sidewalk (see easement conduit installation detail).
- 4—The 2"Ø and 4"Ø conduits shall be SCH 40 (minimum) rodded with  $\frac{1}{4}$ "Ø nylon rope with a minimum breaking strength of 500 lbs. and shall be tested with 1-5/8" and 3-5/8" mandrels, respectively.
- 5-All conduit ends shall be capped with PVC end caps. 6—The minimum depth of the conduits placed along the easement and service conduits to each residence shall be: 1"Ø Conduits 14" below ground level.
- 2"Ø Conduits 24" below ground level.
- 4"Ø Conduits 24" below ground level. 7-When conduits are installed on concrete encase plastic spacers shall be installed every six feet (6') or as specified by the manufacturer in order to maintain the proper conduit run formation and separation.
- 8-When exposed to vehicular traffic (highway, street, carport crossings and parking areas) conduits shall be installed at a depth between 30" and 36" measured from the surface of the pavement and shall be encased in concrete with a minimum resistance of 3000 lbs per square inch (3000 psi).
- 9-Trench backfilling shall be performed with selected materials free of large stones and other contaminants such as scraps of wood, asphalt, concrete pavement, etc. Backfill shall be compacted to 95% in six—inch (6") layers by means of a tamper, with the first twelve inches (12") tamped using lightweight equipment.
- 10-A six inch (6") wide orange warning ribbon (equal or similar to Terra Tape 42-0007) shall be installed at a depth of twelve inches (12") below ground level above the conduits and along the whole conduit run.
- 11-The Developer or its representatives shall clearly identify all conduit ends (including but not limited to distribution points, service conduits) when splicing or distribution boxes have not been specified or recommended. See Wood Stake Detail.
- 12-The 2?0 and 4?0 conduit bends shall not be less than 90° and shall have a minimum radius of 36". All conduits shall be limited to two (2) 90° sweeping bends in a conduit section.
- 13-Generally distribution boxes will be 3'x3'x3', 4'x4'x4' as well as 6'x4'x4' and/or 7'x4'- 6'x4' splice boxes will be installed for telecommunications services as indicated on prints. These boxes will not be located in areas not exposed to vehicular traffic and should be designed to resist incidental traffic. If boxes will be exposed to vehicular traffic a manhole or special box designed for that application should be installed with the capacity to avoid any deformation or collapse of its entrance cover, similar or equal to Power Poles MH 6'x6'x7'.
- 14-The distribution points or boxes shall be placed in easement located two feet from the property line between lots without interfering with any entrance (carport or sidewalk).
- 15-Distribution boxes and splice boxes shall be:
- a. Prefabricated with steel reinforced concrete (equal or similar to Power Poles Inc.)
- b. Cast in place with steel reinforced concrete.
- c. Prefabricated Polymer Concrete Box equal or similar to Quazite 17"x30"x18" (maximum size allowed) only will
- be accepted for Cable TV application in areas with space problem. Note: Any change in the type of boxes to be used will require the approval of NET before their installation.
- 16-All conduits, whether or not in use, shall be sealed in Distribution Boxes, Splice Boxes, and Buildings Telecommunication Cabinet using a duct sealer (equal or similar to 3M 4414 Duct Sealing Kit).
- 17—2" Ø conduits for cable television (CATV) distribution facilities in residential projects, of single family unit homes, row houses, patio houses, etc., shall not be terminated at telecommunications distribution boxes. These conduits, as well as the 1"0 conduits for CATV service drops, shall be end capped and left at CATV distribution points located in the planting strip (generally next to light posts) as indicated on prints.
- 18—The exterior metallic boxes 4"x4"x2-1/8" (minimum), for telecommunications service drops (Telephone and CATV), shall be installed on one of the living units walls conveniently located so as to provide easy unobstructed access.
- 19-The conduit, through which the ground wire for the exterior service drop metallic boxes shall be installed, shall come out from the living unit wall at a depth of six inches below ground level.
- 20—The telecommunications service drops electrical grounding will be achieved with the necessary 8'x5/8" copper welded ground rods installed by the telecommunications service provider and must comply with the current National Electric Code.
- 21-All telecommunications systems (telephone and CATV) shall be bonded and grounded at all points and must comply with the current National Electric Code.
- 22-No more than two 90° bends shall be allowed in the conduits connecting the exterior metallic boxes for service drop and the interior service boxes.
- 23—The interior residential telecommunications service distribution conduits shall have a minimum 3/4" inside diameter and each living unit shall be provided with telecommunications services (telephone and CATV) outlets in the kitchen, living room and each of the bedrooms.
- 24-At Walk-Ups and multi-story residential buildings the minimum size for Telecommunications cabinets shall be 36"x24"x6" for (Telephone) and 36"x36"x8" for (CATV) and shall serve no more than 16 units. The cabinets shall de equipped with a 3/4" thick treated plywood backboard, a hinged door with latch and key, and shall have complete frontal access. The cabinets shall also provide for the proper bonding and grounding of the telecommunications facilities and must comply with the current National Electric Code.
- 25-Walk-up projects shall have independent telecommunications cabinets for Telephone and CATV services. The Telephone cabinet will be connected to the nearest splicing box by means of 2-2"0 PVC conduits. The CATV Cabinet will be connected to the nearest splicing box or the nearest CATV cabinet (in the next building) depending on the loop design specified on the drawings by means of  $2-2^{\circ}0$  PVC conduits. The minimum size of the splice box shall be 7'x4'-6'x4'and may be jointly used for telephone and CATV services.
- 26-Residential Buildings (multi-story apartment buildings other than Walk Ups, high-rise condominiums, etc.) shall have independent main distribution cabinets for telephone and CATV services. The main distribution cabinets, generally consisting of an 8'x4'x3/4" fire-retardant plywood panel or an 8'x4'x3/4" treated plywood panel painted with two coats of fire retardant paint, will be placed in a telecommunications? closet or room. The main distribution panels for telephone and CATV services shall be connected vertically to others distribution cabinets (each serving a maximum of 16 units) by means of 2-4"Ø and 2-2"Ø PVC conduits respectively. Each cabinet or panel shall also provide for the proper bonding and grounding of the telecommunications facilities with a Ground Bar, Ground wire and connected to a 8'x5/6" copper weld Ground Rod System and must comply with the current National Electric Code. This will be a Developer Responsibility. All apartments shall be connected to each of their corresponding distribution cabinets (telephone and CATV) by means of 1-1"0 conduit. Entrance facilities for residential buildings shall consist of a minimum of 2-4"0 for telephone service and 2-2"Ø PVC conduits for CATV service. The conduits shall connect the main distribution cabinets and the designated building telecommunications point of connection. When a building?s telecommunications point of connection is a splice box it shall have a minimum size of 7'x4'-6'x4' and may be jointly used for telephone and CATV services.

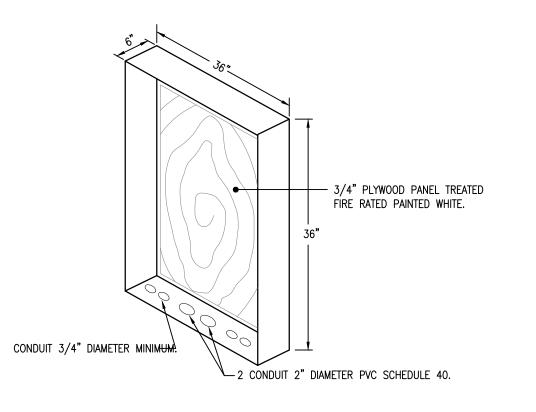
#### SPECIAL NOTES

- 30-The developer in compliance with the Puerto Rico Planning Board's "Reglamento Conjunto para la Evaluación y Expedición de Permisos Relacionados al Desarrollo y Uso de Terrenos, Revisado" shall transfer to the Telecommunications Bureau of Puerto Rico (NET) the right of way depicted on these drawings required to provide telecommunications services (Telephone and CATV) to this project by means of a public deed.
- 31-The NET may issue partial endorsements for single family residential projects (single family homes, row houses, townhouses, patio houses, etc.) so that the developer can deliver portions of the project as they are completed. Once the project is completed, the developer shall comply with the procedure specified in Section 5.02.6 of the NET's "Reglamento Para Endosos De Servidumbres e Infraestructura" related to obtain the final endorsements.
- 32—The developer shall allow telecommunications service providers (Telephone and CATV) authorized by the NET to provide said services, to install their distribution facilities in a coordinated and orderly manner in those portions of the project for which a partial endorsement has been issued.
- 33-The developer shall coordinate with telecommunications service providers (Telephone and CATV) and the Puerto Rico Electrical Power Authority (PREPA) the installation or connection of risers, conduits or any action to access to their facilities.
- public or private organization whose facilities are affect by the construction of the project, the removals, relocation and/or modifications of any existing infrastructure. 35-The developer shall assign an engineer or architect to Inspect and Certify that the construction jobs were performed and

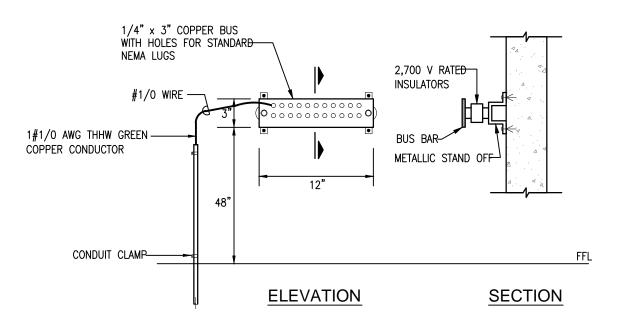
34-The developer shall coordinate with the telecommunications service providers (Telephone and CATV) and with any other

- completed as the endorsed drawings by the NET. For that process will used form NETPR F-102 and summit to NET and obtain their approval before apply for the Permit of Use at "Oficina de Gerencia de Permisos (OGPe)".
- 36-Commercial Buildings will require two (2) Main Distribution Cabinets or Panels for Telephone and CATV Services, respectively. A Telecommunication room or area will be designated to place them, and they must comply with one of the specification described below:
- a. Treated Wood Panel 4'x8'x3/4" (double coated with white fire—retardant paint)
- b. Telephone Metal Cabinet 36"x24"x6"(min) and CATV 36"x30"x6". Both cabinet shall be equipped with a 3/4" thick treated plywood backboard, a hinged door with latch and key, and shall have complete frontal access.





2 TELEPHONE & CABLE TV TERMINAL CABINET



√3 \ TEL. TEL. & DATA ROOMS GROUND BAR DETAIL ET-2 N.T.S.

ncies including LUMA and J.R.T.P.R.



# Negociado de **Telecomunicaciones** de Puerto Rico

ENDOSO DE PLANOS DE FACILIDADES Y/O SERVIDUMBRE DE TELECOMUNICACIONES Y TELEVISIÓN POR CABLE

NÚMERO DE CASO NETPR 2023-RI-0000 REVISION 1 NÚMERO DE CASO OGPE 2023-000000-SRI-000000

|  | Revisado por: | <br>  |
|--|---------------|-------|
| signed: Ing. A. Calzada lic.: 15089          | ·             | Fecha |
| awn by: M. Ayala lic.: 3957                  | Aprobado por: |       |
| s drawing is not authorized to be released   |               | Fecha |
| o araming to their datherized to be heledeed |               |       |

contract until fully approved by Architect, STE ENDOSO NO EXIME AL CONSTRUCTOR Y AL DESARROLLADOR DE CUMPLIR CON LOS REQUERIMIENTOS DE CONSTRUCCIÓN CONFORME A TODAS LAS DISPOSICIONES DE LOS REGLAMENTOS APLICABLES.

| l . |             |          |      |          |      |      |      |  |
|-----|-------------|----------|------|----------|------|------|------|--|
|     | DATE        |          |      |          |      |      |      |  |
|     |             |          |      |          |      |      |      |  |
|     | z           |          |      |          |      |      |      |  |
|     | N O - S     |          |      |          |      |      |      |  |
|     | -           |          |      |          |      |      |      |  |
|     | S           |          |      |          |      |      |      |  |
|     | -           |          |      |          |      |      |      |  |
|     | >           |          |      |          |      |      |      |  |
|     | Ж<br>><br>- |          |      |          |      |      |      |  |
|     | <u>~</u>    |          |      |          |      |      |      |  |
|     |             |          |      |          |      |      |      |  |
|     | ON          | $oxed{}$ | oxed | $oxed{}$ | oxed | oxed | oxed |  |

 $\mathbf{\Phi}$ dr 0 Ğ 0 Guiller Miguel Te  $\circ$ <del>o</del>  $\overline{\mathcal{O}}$ ഗ atio

0

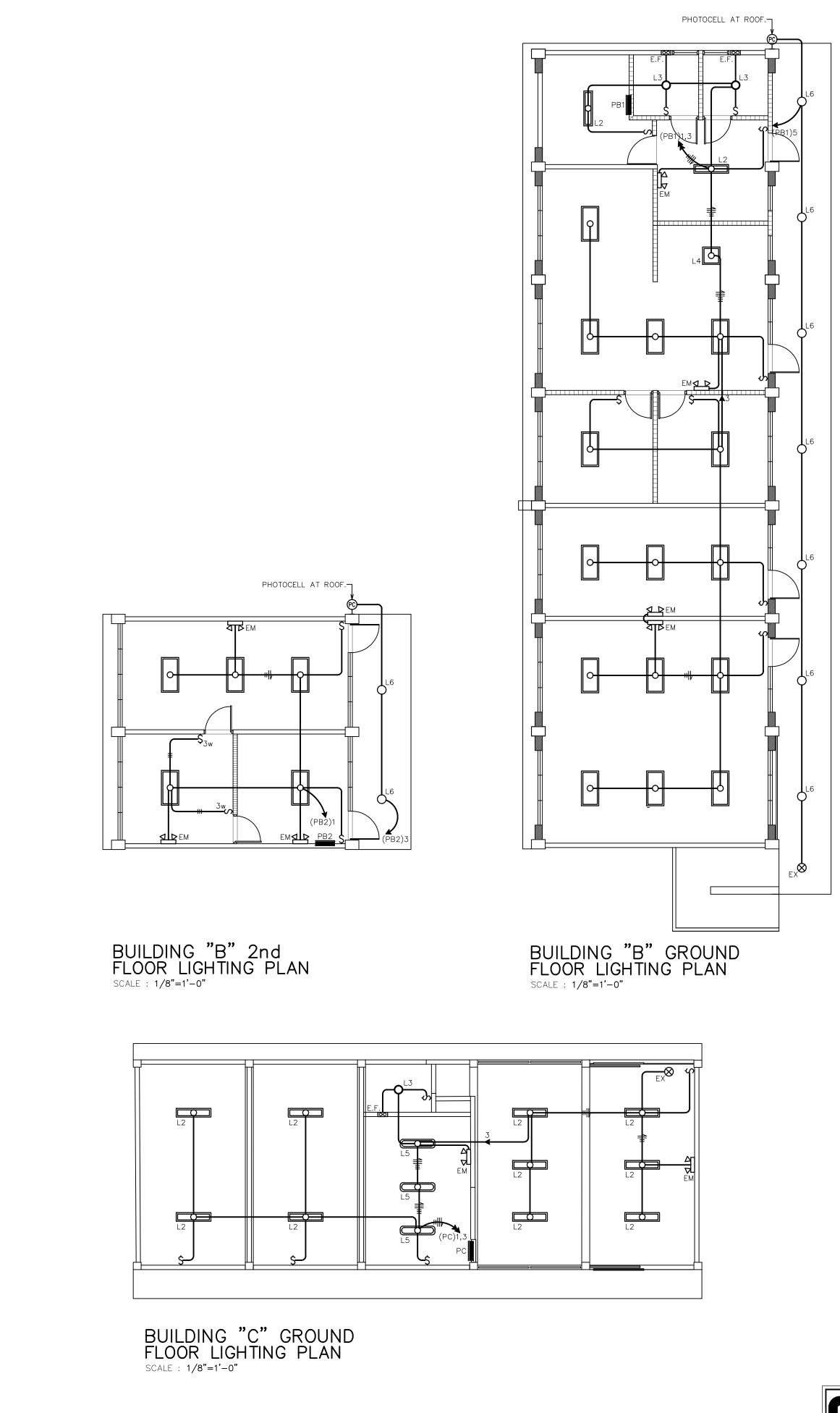
 $\Box$ 

 $\mathbb{O}$ 

 $\overline{\Phi}$ 

Rehab

33 OF 47



Rehabilitation Escuela Guillermo Godreau
Escuela Guillermo Godreau, C. Miguel Ten, Salinas, PR
Lighting Plans

Yo, Ing. Amaldo Calzada Paler, Lic. #15089 certifico que soy el profesional que diseñó estos planos y las especificaciones complementarias. También certífico que entiendo que dichos planos y especificaciones cumplen con los disposiciones aplicables de la Reglamento Conjunto y las disposiciones aplicables de los Reglamentos y Cádigos de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurídicción. Reconozco que cualquier falsa o falsificación de los hechos que se haya producido sin conosimiento o por negligencia ya sea por mi, mis agentes o empleados, o por otras personas con mi conocimiento me hacan responsable de cualquier acción judicial y disciplinaria por la OIGPe y otras autoridades competentes, incluyendo, pero sin limitarse, a la terminación de la participación en los procedimientos de certificación profecional en la OIGPe.

C.A.A.P.P.R.

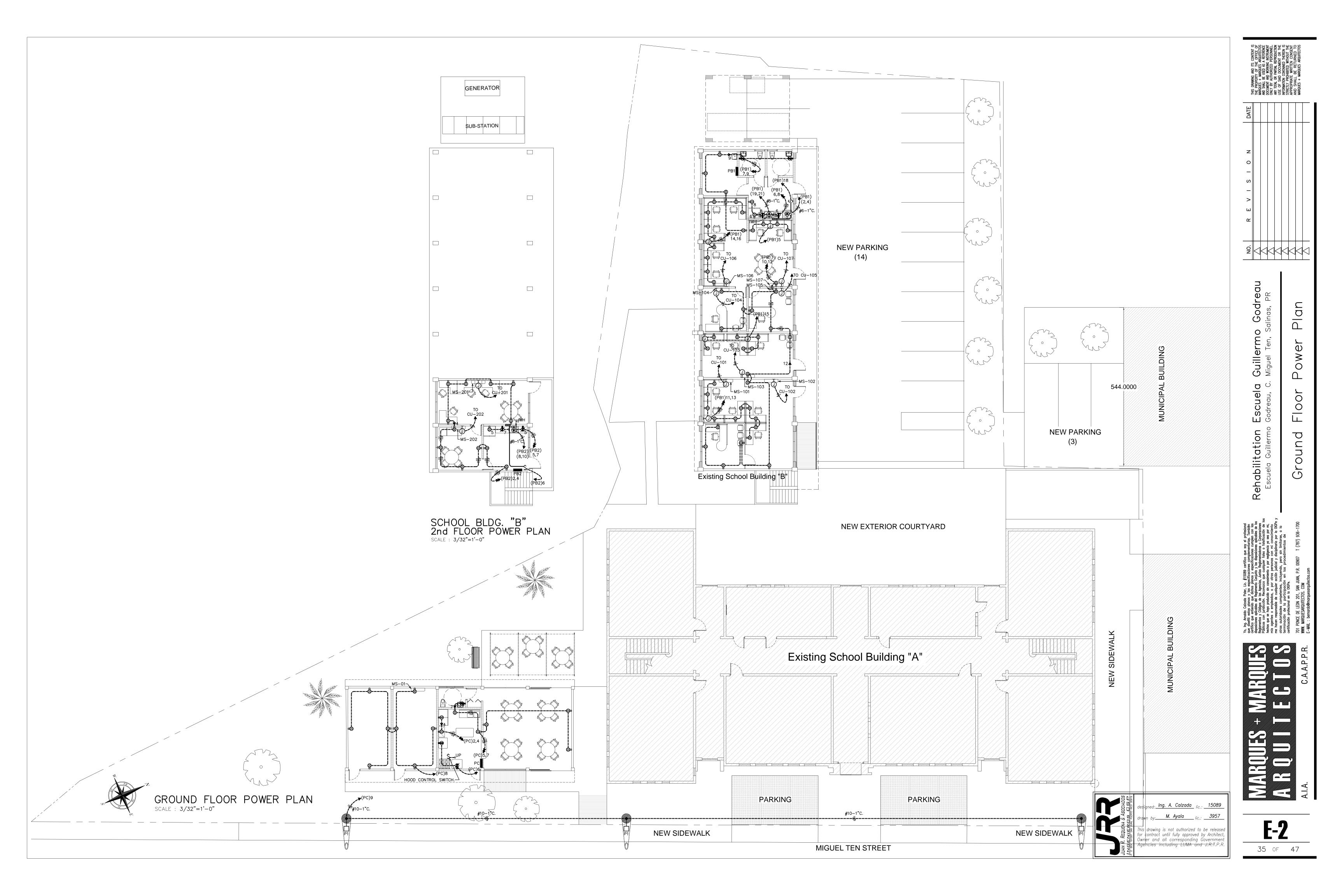
F\_1

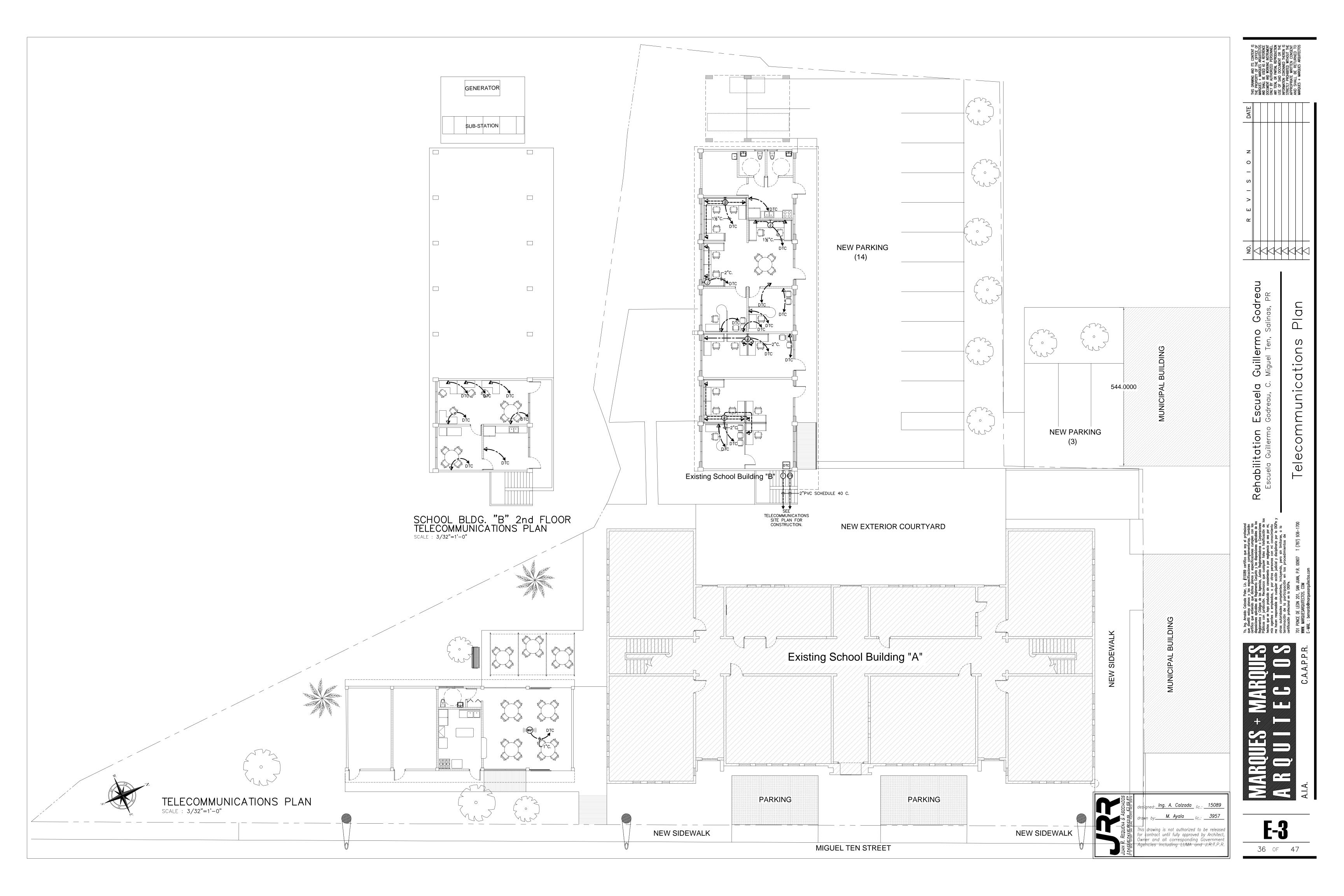
34 of 47

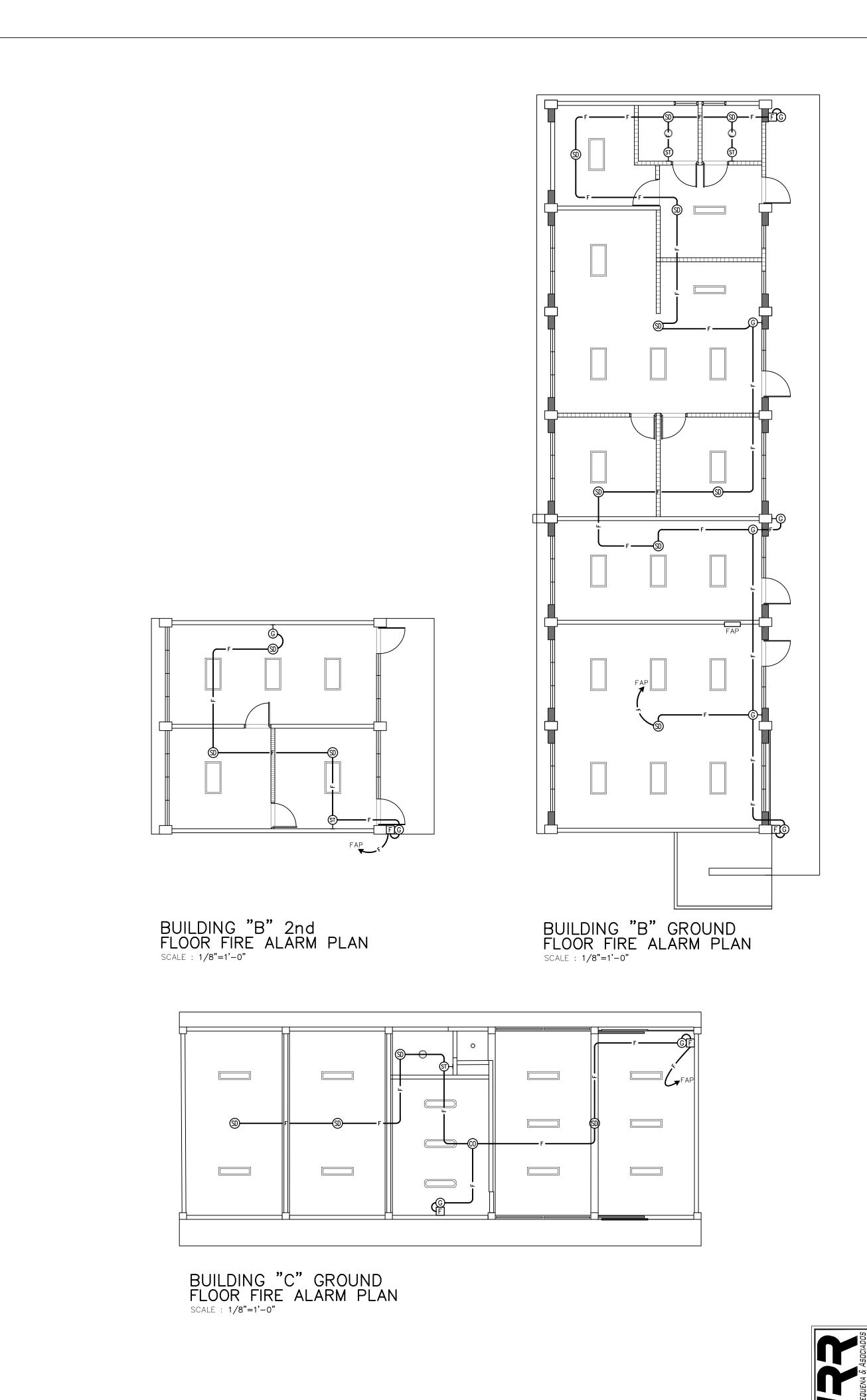
ned: Ing. A. Calzada lic.: 15089

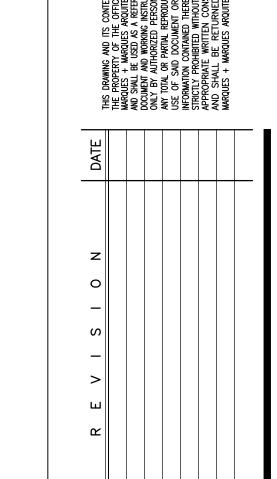
This drawing is not authorized to be released for contract until fully approved by Architect, Owner and all corresponding Government Agencies including LUMA and J.R.T.P.R.

NOTE: ALL FIXTURES ARE L1 UNLESS OTHERWISE NOTED.





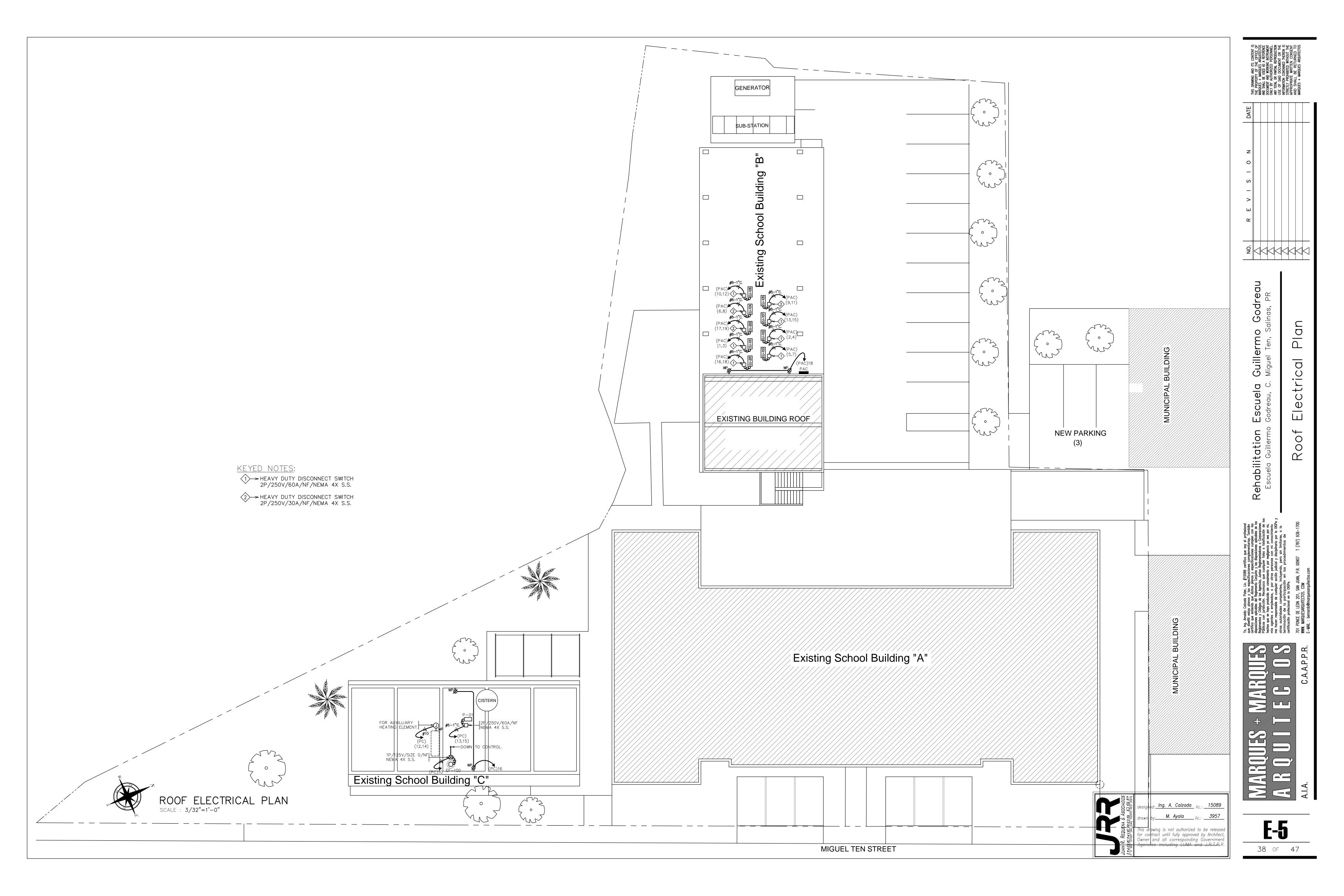




Godreau alinas, PR Guillermo Miguel Ten, Sc Plans Escuela Godreau, C.

Rehabilitation Escuela Guillermo

gned: Ing. A. Calzada lic.: 15089 This drawing is not authorized to be released for contract until fully approved by Architect, Owner and all corresponding Government Agencies including LUMA and J.R.T.P.R. 37 OF 47



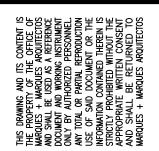
| PANEL DESCRIPTION: PB1   | -<br>-   |          |          |                                      | 19T   E\/E' | . BUILDING | "R"                  |
|--|----------|----------|----------|--------------------------------------|-------------|------------|----------------------|
| VOLTS: 30-4W-S/N-120/208V  |          |          |          | AMPS: 22                             |             | . BUILDING | В                    |
| MOUNTING: FLUSH  |          |          |          | I.C.: <b>10,00</b>                   |             |            |                      |
| PANEL TYPE: NQOD   |          |          |          | REMARKS:                             |             |            |                      |
| LOAD DESCRIPTION   | FRAME    | TRIP     | CKT. NO. | CKT. NO.                             | TRIP        | FRAME      | LOAD DESCRIPTION     |
| LIGHTING   | QO       | 20       | 1        | 2                                    | 50          |            | RANGE                |
| LIGHTING   | QO       | 20       | 3        | 4                                    |             |            | /                    |
| CORRIDOR LIGHTING  | QO       | 20       | 5        | 6                                    | 20          | QO         | KITCHEN RECEPTACLES  |
| RESTROOM RECEPTACLES   | QO       | 20       | 7        | 8                                    | 20          | QO         | KITCHEN RECEPTACLES  |
| RECEPTACLES  | QO       | 20       | 9        | 10                                   | 20          | QO         | RECEPTACLES          |
| MODULAR FURNITURE  | QO       | 20       | 11       | 12                                   | 20          | QO         | RECEPTACLES          |
| MODULAR FURNITURE  | QO       | 20       | 13       | 14                                   | 20          | QO         | MODULAR FURNITURE    |
| MODULAR FURNITURE  | Q0<br>Q0 | 20       | 15       | 16                                   | 20          | QO<br>QO   | MODULAR FURNITURE    |
| MODULAR FURNITURE  |          | 20       | 17<br>19 | 18<br>20                             | 20          | QO         | EXHAUST FAN<br>SPARE |
| IN-LINE WATER HEATER   | QO       | 40       | 21       | 22                                   | 20          | QO<br>QO   | SPARE                |
| SPARE  | Q0       | 20       | 23       | 24                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 25       | 26                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 27       | 28                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 29       | 30                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 31       | 32                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 33       | 34                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 35       | 36                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 37       | 38                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 39       | 40                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 41       | 42                                   | 20          | QO         | SPARE                |
| PANEL DESCRIPTION: PB2<br>VOLTS: 30-4W-S/N-120/208V<br>MOUNTING: FLUSH |          |          |          | LOCATION: AMPS: 225                  | 5A M.L.O.   | EVEL BUILD | ING "B"              |
| PANEL TYPE: NQOD   | 1        | <u> </u> |          | REMARKS:                             |             | <u> </u>   | <u> </u>             |
| LOAD DESCRIPTION   | FRAME    | TRIP     | CKT. NO. | CKT. NO.                             | TRIP        | FRAME      | LOAD DESCRIPTION     |
| LIGHTING   | QO       | 20       | 1        | 2                                    | 20          | QO         | RECEPTACLES          |
| CORRIDOR LIGHTING  | QO       | 20       | 3        | 4                                    | 20          | QO         | RECEPTACLES          |
| LOUNGE RECEPTACLES   | QO       | 20       | 5        | 6                                    | 20          | QO         | EXHAUST FAN          |
| LOUNGE RECEPTACLES   | QO       | 20       | 7        | 8                                    | 40          | Q0         | IN-LINE WATER HEATER |
| SPARE  | QO       | 20       | 9        | 10                                   |             |            |                      |
| SPARE  | QO       | 20       | 11       | 12                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 13       | 14                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 15       | 16                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 17       | 18                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 19       | 20                                   | 20          | QO<br>OO   | SPARE                |
| SPARE  | QO       | 20       | 21       | 22                                   | 20          | QO<br>OO   | SPARE                |
| SPARE<br>SPARE   | QO<br>QO | 20<br>20 | 23<br>25 | 24<br>26                             | 20          | QO<br>QO   | SPARE<br>SPARE       |
| SPARE  | QO       | 20       | 27       | 28                                   | 20          | QO<br>QO   | SPARE                |
| SPARE  | QO       | 20       | 29       | 30                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 31       | 32                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 33       | 34                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 35       | 36                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 37       | 38                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 39       | 40                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 41       | 42                                   | 20          | QO         | SPARE                |
| PANEL DESCRIPTION: PC  | •        |          |          | LOCATION:                            | BUILDING    | "C"        | •                    |
| VOLTS: 30-4W-S/N-120/208V<br>Mounting: Flush<br>Panel type: NQOD       |          |          |          | AMPS: 225<br>I.C.: 10,00<br>REMARKS: | 0 A.I.C.    |            |                      |
| LOAD DESCRIPTION   | FRAME    | TRIP     | CKT. NO. | CKT. NO.                             | TRIP        | FRAME      | LOAD DESCRIPTION     |
| LIGHTING   | QO       | 20       | 1        | 2                                    | 20          | QO         | FREEZER              |
| LIGHTING   | QO       | 20       | 3        | 4                                    | 20          | QO         | REFRIGERATOR         |
| RECEPTACLES  | QO       | 20       | 5        | 6                                    | 20          | QO         | KITCHEN RECEPTACLES  |
| RECEPTACLES  | QO       | 20       | 7        | 8                                    | 20          | QO         | RECEPTACLES          |
| SITE POLES   | QO       | 20       | 9        | 10                                   | 20          | QO         | EF-100 (HOOD)        |
| SPARE  P-01 (5HP PUMP)   | Q0<br>Q0 | 20       | 11       | 12                                   | 30          | Q0<br>     | WATER HEATER         |
| CDADE  |          | 20       | 15       | 16                                   | 20          | QO<br>OO   | ROOF RECEPTACLES     |
| SPARE  | QO<br>QO | 20       | 17       | 18                                   | 20          | QO<br>OO   | SPARE<br>SPARE       |
| SPARE<br>SPARE   | QO<br>QO | 20<br>20 | 19<br>21 | 20<br>22                             | 20<br>20    | QO<br>QO   | SPARE<br>SPARE       |
| SPARE<br>SPARE   | QO       | 20       | 23       | 24                                   | 20          | QO<br>QO   | SPARE<br>SPARE       |
| SPARE  | QO       | 20       | 25       | 26                                   | 20          | QO<br>QO   | SPARE                |
| SPARE  | QO       | 20       | 27       | 28                                   | 20          | QO<br>QO   | SPARE                |
| SPARE  | QO       | 20       | 29       | 30                                   | 20          | QO<br>QO   | SPARE                |
| SPARE  | QO       | 20       | 31       | 32                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 33       | 34                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 35       | 36                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 37       | 38                                   | 20          | QO         | SPARE                |
| SPARE  | QO       | 20       | 39       | 40                                   | 20          | QO         | SPARE                |
|  |          |          | _        |                                      |             |            | 1                    |

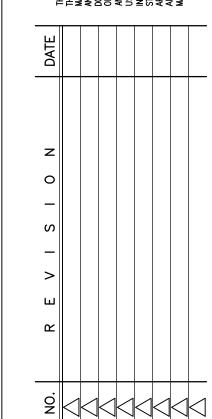
| PANEL DESCRIPTION: PAC                                 |  |                   |          | LOCATION:                      | 2ND LEVE | L BUILDING                   | "B"                                    |  |  |  |
|--|--|-------------------|----------|--------------------------------|----------|------------------------------|--|--|--|--|
| VOLTS: 30-4W-S/N-120/208V                              |  | AMPS: 225A M.L.O. |          |                                |          |                              |  |  |  |  |
| MOUNTING: SURFACE                                      |  |                   |          |                                | 0 A.I.C. |                              |  |  |  |  |
| PANEL TYPE: NQOD                                       | JOD TO THE TOTAL |                   |          |                                |          | REMARKS: <b>NEMA 4X S.S.</b> |  |  |  |  |
| LOAD DESCRIPTION                                       | FRAME  | TRIP              | CKT. NO. | CKT. NO.                       | TRIP     | FRAME                        | LOAD DESCRIPTION                       |  |  |  |
| CU-101   | QO   | 40                | 3        | 2                              | 40       | Q0<br>                       | CU-102                                 |  |  |  |
| <u> </u>   |  |                   | 5        | 6                              |          |                              |  |  |  |  |
| CU-103   | QO   | 40                | 7        | 8                              | 20       | QO                           | CU-104                                 |  |  |  |
|  |  |                   | 9        | 10                             |          |                              | CU-104<br>                             |  |  |  |
| CU-105<br>   | Q0<br>   | 20<br>            | 11       | 12                             | 40<br>   | Q0<br>                       | CU-106                                 |  |  |  |
| <br>CU-107   | QO   | 40                | 13       | 14                             | 40       | QO                           | <br>                                   |  |  |  |
|  |  |                   | 15       | 16                             |          |                              |  |  |  |  |
| <br>CU-202   | QO   | 20                | 17       | 18                             | 20       | QO                           | ROOF RECEPTACLES                       |  |  |  |
|  |  |                   | 19       | 20                             | 20       | QO                           | SPARE                                  |  |  |  |
| SPARE  | QO   | 20                | 21       | 22                             | 20       | QO                           | SPARE                                  |  |  |  |
| SPARE  | QO   | 20                | 23       | 24                             | 20       | QO                           | SPARE                                  |  |  |  |
| SPARE  | QO   | 20                | 25       | 26                             | 20       | QO                           | SPARE                                  |  |  |  |
| SPARE  | QO   | 20                | 27       | 28                             | 20       | QO                           | SPARE                                  |  |  |  |
| SPARE  | QO   | 20                | 29       | 30                             | 20       | QO                           | SPARE                                  |  |  |  |
| SPARE  | QO   | 20                | 31       | 32                             | 20       | QO                           | SPARE                                  |  |  |  |
| SPARE  | QO   | 20                | 33       | 34                             | 20       | QO                           | SPARE                                  |  |  |  |
| SPARE  | QO   | 20                | 35       | 36                             | 20       | QO                           | SPARE                                  |  |  |  |
| SPARE  | QO   | 20                | 37       | 38                             | 20       | QO                           | SPARE                                  |  |  |  |
| SPARE  | QO   | 20                | 39       | 40                             | 20       | QO                           | SPARE                                  |  |  |  |
| SPARE  | QO   | 20                | 41       | 42                             | 20       | QO                           | SPARE                                  |  |  |  |
| PANEL DESCRIPTION: MDP                                 |  |                   |          |                                |          | ON SECONDA                   | ARY SECTION                            |  |  |  |
| VOLTS: 3Ø-4W-S/N-120/208V                              |  |                   |          | AMPS: <b>80</b> 0              |          |                              |  |  |  |  |
| MOUNTING: <b>SURFACE</b><br>PANEL TYPE: I— <b>LINE</b> |  |                   |          | I.C.: <b>30,00</b><br>REMARKS: |          |                              |  |  |  |  |
| LOAD DESCRIPTION                                       | FRAME  | TRIP              | CKT. NO. | CKT. NO.                       | TRIP     | FRAME                        | LOAD DESCRIPTION                       |  |  |  |
| ——————————————————————————————————————                 |  |                   | 1        | 2                              |          |                              | —————————————————————————————————————— |  |  |  |
| PB1 PANEL  | KA   | 200               | 3        | 4                              | 200      | KA                           | PB2 PANEL                              |  |  |  |
|  |  |                   | 5        | 6                              |          |                              |  |  |  |  |
| 7  |  |                   | 7        | 8                              |          |                              |  |  |  |  |
| PC PANEL   | KA   | 150               | 9        | 10                             | 200      | KA                           | PAC PANEL                              |  |  |  |
|  |  |                   | 11       | 12                             |          |                              |  |  |  |  |
|  |  |                   | 13       | 14                             |          |                              |  |  |  |  |
| SPACE  | KA   |                   | 15       | 16                             |          | FA                           | SPACE                                  |  |  |  |
|  |  |                   | 17       | 18                             |          |                              |  |  |  |  |
|  |  |                   | 19       | 20                             |          |                              |  |  |  |  |
| SPACE  | KA   |                   | 21       | 22                             |          | FA                           | SPACE                                  |  |  |  |
|  |  |                   | 23       | 24                             |          |                              |  |  |  |  |
| <del></del> 7  |  |                   | 25       | 26                             |          |                              |  |  |  |  |
| SPACE  | KA   |                   | 27       | 28                             |          | FA                           | SPACE                                  |  |  |  |
|  |  |                   | 29       | 30                             |          |                              |  |  |  |  |
|  |  |                   | 31       | 32                             |          |                              | <del></del>                            |  |  |  |
| SPACE  | KA   |                   | 33       | 34                             |          | FA                           | SPACE                                  |  |  |  |
| /  | 1 /  | l /               |          |                                |          | I /                          |  |  |  |  |
|  |  |                   | 35       | 36                             |          |                              |  |  |  |  |

SPACE

# LUMINAIRE SCHEDULE:

| DESIG. | DESCRIPTION   | LAMPS                            | MANUFACTURER   |
|--------|---|----------------------------------|--|
| L1     | 2' x 4' RECESSED LED FLAT PANEL, 120V.  | 4,600 LUMENS<br>39W 4,000K LED   | LITHONIA<br>CPX2X4-4000LM-40K-M2                             |
| L2     | 4'-0" RECESSED LED WRAPAROUND, 120V.  | 2,900 LUMENS<br>41W 4,000K LED   | LITHONIA<br>FMLWL-48-840                                     |
| L3     | SURFACE MOUNTED LED, 120V.  | 700 LUMENS<br>13W 4,000K LED     | LITHONIA<br>FMMLS7-SWW2-M6                                   |
| L4     | 2' x 2' RECESSED LED FLAT PANEL, 120V.  | 3,500 LUMENS<br>32W 4,000K LED   | LITHONIA<br>CPX2X2-3200LM-40K-M4                             |
| L5     | 4'-0" SURFACE MOUNTED VAPORTIGHT STRIP, 120V.                                     | 5,000 LUMENS<br>42W 4,000K LED   | LITHONIA<br>CSVT-L48-5000LM-MVOLT-40K-80CRI                  |
| L6     | SURFACE MOUNTED DECORATIVE OUTDOOR LED, 120V.                                     | 1,000 LUMENS<br>17W 4,000K LED   | LITHONIA<br>OLCFM-15-4000K-120-DDB                           |
| P1     | POLE MOUNTED LED FIXTURE ON A 25'-0" ROUND ALUMINUM POLE, 120V WITH PHOTOCONTROL. | 15,000 LUMENS<br>124W 5,000K LED | LITHONIA<br>DSX1LED-P4-50K-70CRI-T4LG-120V-RPA-<br>PER-DWHXD |

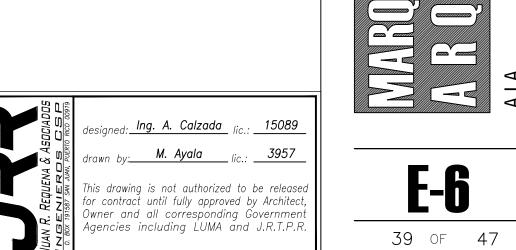




**Godreau** alinas, PR **Guillermo (** Miguel Ten, Sa Escuela Godreau, C.

Schedules

Rehabilitation Escuela Guillermo



This drawing is not authorized to be released for contract until fully approved by Architect, Owner and all corresponding Government Agencies including LUMA and J.R.T.P.R.

#### (ALL SYMBOLS SHOWN ARE NOT NECESSARILY USED ON THE DRAWINGS) MOTOR AND CONTROLS

- O SINGLE OR THREE PHASE MOTOR. (NUMBER INSIDE SYMBOL CAN INDICATE HORSEPOWER)
- DISCONNECT (SAFETY) SWITCH "200/3" DENOTES AMPERES/POLES.
- FUSED DISCONNECT (SAFETY) SWITCH "200/3/150" DENOTES AMPERES/POLES/FUSE WHEN FUSE SIZE IS OMITTED, CONTRACTOR SHALL COORDINATE FUSE SIZE AT FIELD FOLLOWING EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.
- MOTOR STARTER, VOLTS, ENCLOSURE & NEMA SIZE AS NOTED, H-O-A SWITCH & PILOT LIGHT ON COVER, PROVIDE CONTROL TRANSFORMER AS REQUIRED FOR 120V COIL VOLTAGE.
- COMBINATION DISCONNECT (SAFETY) SWITCH AND MOTOR STARTER, "30/15/3/1" DENOTES AMPERES/FUSE(OR BREAKER)/ POLES/NEMA STARTER SIZE. "NF" DENOTES NON-FUSED. H-O-A SWITCH & PILOT LIGHT ON COVER. PROVIDE CONTROL TRANSFORMER AS REQUIRED FOR 120V COIL VOLTAGE.
- MANUAL MOTOR STARTER WITH THERMAL OVERLOAD.
- C LIGHTING CONTACTOR, VOLTS. & AMPS. AS SHOWN, NEMA TYPE ENCLOSURE AS INDICATED.
- PC PHOTOCELL.
- HOO PUSH BUTTON STATION.
- TC TIME CLOCK.

#### ONE LINE AND RISER DIAGRAMS

- TRANSFORMER, DESIGNATION AND RATINGS AS NOTED
- -> SWITCH, RATINGS AS SHOWN, 3 POLE UNLESS OTHERWISE NOTED.
- \_\_\_ CIRCUIT BREAKER, TRIP RATING AS SHOWN, 3 POLE UNLESS OTHERWISE NOTED.
- CAND DRAWOUT CIRCUIT BREAKER, TRIP RATING AS SHOWN, 3 POLE UNLESS OTHERWISE NOTED.
- (ST) SHUNT TRIP.
- (GFR) GROUND FAULT RELAY.
- WATT-HOUR METER, "D" DENOTES DEMAND REGISTER "15" DENOTES MINUTES OF DEMAND INTERVAL.
- (CT) CURRENT TRANSFORMER(CT), RATED AS SHOWN
- → III LIGHTNING ARRESTOR.
- AUTOMATIC TRANSFER SWITCH

#### AUDIO/VIDEO

- (S) CEILING MOUNTED PUBLIC ADDRESS SPEAKER.
- HS WALL MOUNTED PUBLIC ADDRESS SPEAKER.
- VOLUME CONTROL, FLUSH IN WALL WITH SPEAKER.

#### **MISCELLANEOUS**

- 1 DRAWING NOTE REFERENCE.(NOTES BY SYMBOL)
- (T) THERMOSTAT.

# **SECURITY**

- K KEY PAD.
- M MAGNETIC DOOR CONTACTS.(OD-OVERHEAD DOOR)
- (MD) CEILING MOUNTED MOTION DETECTOR.
- HMD WALL MOUNTED MOTION DETECTOR.
- ☐☐ CCTV CAMERA.
- S ACCESS SECURE SWITCH.
- KH KITCHEN HOOD.
- B DOOR BELL.

ELECTRICAL EQUIPMENT

INDICATED ON PANEL SCHEDULE.

INDICATED ON PANEL SCHEDULE.

SWITCHBOARD OR MOTOR CONTROL CENTER ON HOUSEKEEPING PAD.

120/208V, 3PH, 4W PANELBOARD (FLUSH OR SURFACE MOUNT) AS

277/480V, 3PH, 4W PANELBOARD (FLUSH OR SURFACE MOUNT) AS

PLYWOOD TERMINAL BOARD, TYPE AS NOTED, 4' x 8' x 3/4"

(1219 x 2438 x 19) UNLESS OTHERWISE NOTED.

TERMINAL CABINET, TYPE AS NOTED 24" x 48" x 31/2"

(609 x 1219 x 89) UNLESS OTHERWISE NOTED.

DISTRIBUTION PANEL.

T DRY-TYPE TRANSFORMER.

ATS AUTOMATIC TRANSFER SWITCH.

B DOOR BELL/BUZZER.

#### MOUNTING HEIGHTS (UNLESS OTHERWISE NOTED)

- 1-WALL SWITCHES 48"(1219) A.F.F. TO CENTER OF SWITCH.
- 2-WALL RECEPTACLES 18"(457) AF.F. TO CENTER OF RECEPTACLE. 3-WALL TELEPHONE/DATA OUTLETS - 18"(457) A.F.F. TO CENTER OF RECEPTACLE.
- 4-PUBLIC TELEPHONE 54"(1371) A.F.F. TO CENTER OF OUTLET.
- 5-CLOCK OUTLET 84"(2133) A.F.F. TO CENTER OF OUTLET.
- 6-FIRE ALARM PULL STATION 48"(1219) A.F.F. TO CENTER OF STATION.
- 7-FIRE ALARM HORN OR BELL 80"(2032) A.F.F. TO CENTER OF HORN OR BELL.

#### SPECIAL NOTES: (for projects with 1 mile from seashore)

- 1-ALL ELECTRICAL EQUIPMENT ENCLOSURES(NOT LUMA RELATED) LOCATED OUTDOORS SHALL BE STAINLESS STEEL OR APPROVED NON METALLIC.
- 2-UNIT STRUT CHANNELS SHALL BE ALUMINUM OR FIBERGLASS.
- 3-CONDUIT STRAPS SHALL BE ALUMINUM OR NON METALLIC.
- 4-ALL EQUIPMENT OR HANGER HARDWARE SHALL BE STAINLESS STEEL OR ALUMINUM.
- 5-DISSIMILAR METALS SHALL BE SEPARATED BY DIELECTRIC GASKET.
- 6-EXPOSED CONDUITS SHALL BE PVC SCHEDULE 40 OR RIGID STEEL GALVANIZED
- 7-POLE RISERS SHALL BE PVC SCHEDULE 80.
- 8-SUBSTATION TRANSCLOSURE, TRANSFORMER TANKS & LUMA EQUIPMENT CABINETS SHALL BE STAINLESS STEEL AS PER LUMA'S SPECIFICATIONS.
- 9-METER BANKS SHALL BE OF ALUMINUM OR STAINLESS STEEL CONSTRUCTION.
- 10-OUTDOOR H.V. CABLE TERMINATIONS SHALL BE 25KV RATED.
- 11-SUBSTATION LOUVER WINDOWS SHALL BE STAINLESS STEEL.

### FIRE ALARM LEGEND

- (SD) IONIZATION TYPE CEILING MOUNTED SMOKE DETECTOR
- HSD IONIZATION TYPE WALL MOUNTED SMOKE DETECTOR. INSTALL SO THAT TOP OF DETECTOR IS NOT MORE THAN 12"(304) AND NOT LESS THAN 4"(101) FROM CEILING.
- HSD. SAME AS ABOVE, BUT 120V.
- (HD) HEAT DETECTOR CEILING MOUNTED, FIXED TYPE.
- F PULL STATION, WALL MOUNTED, 4'-0"(1219) A.F.F. PROVIDE AT LEAST ONE PULL STATION PER FLOOR, ADD PULL STATIONS AS REQUIRED SO THAT MAXIMUM TRAVEL DISTANCE TO NEAREST STATION DOES NOT EXCEED 200 FT.(60.96m.)
- HG COMBINATION FIRE ALARM HORN AND STROBE LIGHT, WALL MOUNTED. MOUNT HEIGHT SHALL BE NOT LESS THAN 80"(2032) AND NO GREATER THAN 96"(2438).
- © CEILING MOUNTED COMBINATION FIRE ALARM HORN AND STROBE LIGHT. CEILING MOUNTED UNITS SHALL BE INSTALLED AS PER NFPA 72 TABLE 6-4.4.1(b)
- WALL MOUNTED STROBE LIGHT, MOUNT AT NO LESS THAN 80"(2032) AND NO GREATER THAN 96"(2438) ABOVE FINISHED FLOOR.
- (ST) CEILING MOUNTED STROBE. INSTALL AS PER NFPA 72 TABLE 6-4.4.1(b)
- FAP FIRE ALARM STAND ALONE CONTROL PANEL SEMI-FLUSH MOUNTED ADDRESSABLE TYPE, MODULAR DESIGN WITH ENOUGH CAPACITY TO SUPPORT DEVICES INDICATED, UNIT SHALL BE MICROPROCESSOR BASED, PRE-CONFIGURED, MODULAR DESIGN WITH INTELLIGENT INITIATING CIRCUITS TO SUPPORT SHOWN DEVICES. PROVIDE CABINET ROOM FOR SYSTEMS BATTERIES, BATTERIES AND BATTERY CHARGER.

### FIRE\_ALARM\_NOTES:

- 1-WIRING SHALL BE AS RECOMMENDED BY SYSTEM'S MANUFACTURER.
- 2-COORDINATE FINAL CONDUIT SIZES WITH SYSTEM MANUFACTURER.
- 3-FINAL LOCATIONS OF DEVICES SHALL BE COORDINATED WITH ARCHITECTURAL FINISHES AND NFPA-72 REQUIREMENTS, THE LATTER TO PREVAIL IN CASE OF DISCREPANCIES.
- 4-LOUDSPEAKERS AND THEIR ENCLOSURES SHALL BE LISTED FOR VOICE/ALARM SIGNALING SERVICES.
- 5-EACH ELEVATOR CAR SHALL BE EQUIPPED WITH A SINGLE LOUDSPEAKER. PROVIDE AN ELEVATOR PAGING ZONE TO SERVE THE ELEVATOR GROUP.
- 6-PROVIDE SEPARATE ZONES TO SERVE STAIRWAY SPEAKERS. PROVIDE SPEAKERS IN ALL ENCLOSED STAIRWAYS EXCEEDING TWO STORES IN HEIGHT.
- 7-PROVIDE SEPARATE ZONES TO SERVE ELEVATOR LOBBY SMOKE DETECTORS. CONNECT THESE SMOKE DETECTORS TO FAP AND ELEVATOR RECALL PANEL.
- 8-VISIBLE APPLIANCES SHALL BE LOCATED NO MORE THAN 15 FT.(4572) FROM THE END OF THE CORRIDOR WITH A SEPARATION NO GREATER THAN 100 FEET(30.48m.) BETWEEN APPLIANCES.
- 9-FIRE ALARM SYSTEM SHALL COMPLY WITH NFPA 101, NFPA 72 AND DEPT. DE BOMBEROS DE P.R. REQUIREMENTS. IN CASE OF DISCREPANCY THE STRINGEST CODE WILL APPLY.

#### **GENERAL NOTES:**

- 1-EMT CONDUIT SHALL BE USED EXCEPT WHERE NOT ALLOWED BY N.E.C. OR UNLESS OTHERWISE INDICATED, 3/4"(19) IPS MINIMUM SIZE
- 2-EMT FITTINGS SHALL BE CONCRETE TIGHT.
- 3-ALL CONDUCTORS SHALL BE COPPER, STRANDED, THHN INSULATED #12 AWG MINIMUM SIZE, UNLESS OTHERWISE NOTED.
- 4-WIRING DEVICES AND PLATES SHALL BE IVORY COLORED, SPECIFICATION GRADE.
- 5-ELECTRICAL INSTALLATION SHALL BE DONE IN STRICT ACCORDANCE WITH N.E.C. AND LUMA REGULATIONS, LATEST EDITION.
- 6-INSTALLATION DETAILS ARE ILLUSTRATIVE AND SHOULD NOT BE USED WITHOUT VERIFYING JOB SITE CONDITIONS, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS SHOWING ANY DEVIATION THEREFROM.
- 7-DIMENSIONS OF JUNCTION OR PULL BOXES SHALL BE REVISED BY ELECTRICAL CONTRACTOR ACCORDING TO ACTUAL FIELD CONDITIONS TO SECURE AT LEAST
- PERMISSIBLE MINIMUM CABLE BENDING RADIUS. 8-ALL CONVENIENCE RECEPTACLES SHALL HAVE A #12 GREEN JUMPER BETWEEN
- RECEPTACLE GROUNDING SCREW AND THE OUTLET BOX GROUNDING SCREW. 9-CONNECTIONS IN WIREWAYS SHALL BE MADE BY USE OF CABLE CONNECTION
- BLOCKS EQUAL OR SIMILAR TO "KEYTAP" AS MANUFACTURED BY KEYSTONE 10-RACEWAY SHALL BE PROVIDED WITH APPROVED EXPANSION FITTINGS WHERE
- CROSSINGS BUILDING EXPANSION JOINT. 11-ELECTRICAL CONTRACTOR SHALL PROVIDE POWER & CONNECT ALL EQUIPMENT
- FURNISHED UNDER OTHER SECTION OF THE SPECIFICATIONS. FINAL CONNECTION SHALL BE DONE UNDER THE SUPERVISION OF THE RESPECTIVE CONTRACTORS.
- HUNG CEILING SUPPORT. 13-ANY UNDERGROUND CONDUIT FOR SECONDARY FEEDER SHALL BE BURIED AT A MINIMUM DEPTH OF 36"(914) BELOW FINISHED GRADE, UNLESS COVERED BY

12-CONTRACTOR MUST SUPPORT ALL RECESSED FIXTURES INDEPENDENTLY FROM

18"(457) BELOW FINISHED GRADE. 14-IN CASE OF SUBSTATION WITH PRIMARY METERING, A 3/4"(19) PVC SCHEDULE 40 EMPTY CONDUIT SHALL BE INSTALLED BETWEEN PRIMARY METER COMPARMENT

AND MAIN TELEPHONE CABINET.

4"(101) CONCRETE ENVELOPE IN WHICH CASE MINIMUM DEPTH SHALL BE

15-LAUNDRY RECEPTACLES SHALL BE INSTALLED 6"(152) ABOVE WATER FAUCETS SERVING WASHER.



15089 Ing. A. Calzada M. Ayala

is drawing is not authorized to be released - contract until fully approved by Architect iner and all corresponding Governmen encies including LUMA and J.R.T.P.R

WING AND ITS

+ MARQUES A

+ MARQUES A

- L BE USED AS A

T AND WORKING

T AND WORKING

T AND WORKING

TO RE ASTIAL RE

SAID DOCUMEI

PROHIBITED W

RARIE WRITIELD

ALL BE RETIL DRAV DPROP QUES SHALL SHALL UMENT Y BY Y BY OF S 

ወ ፳

þ

0

Ó

0

e

Guille Miguel

 $\sigma$ 

<del>o</del>

ഗ

0

D

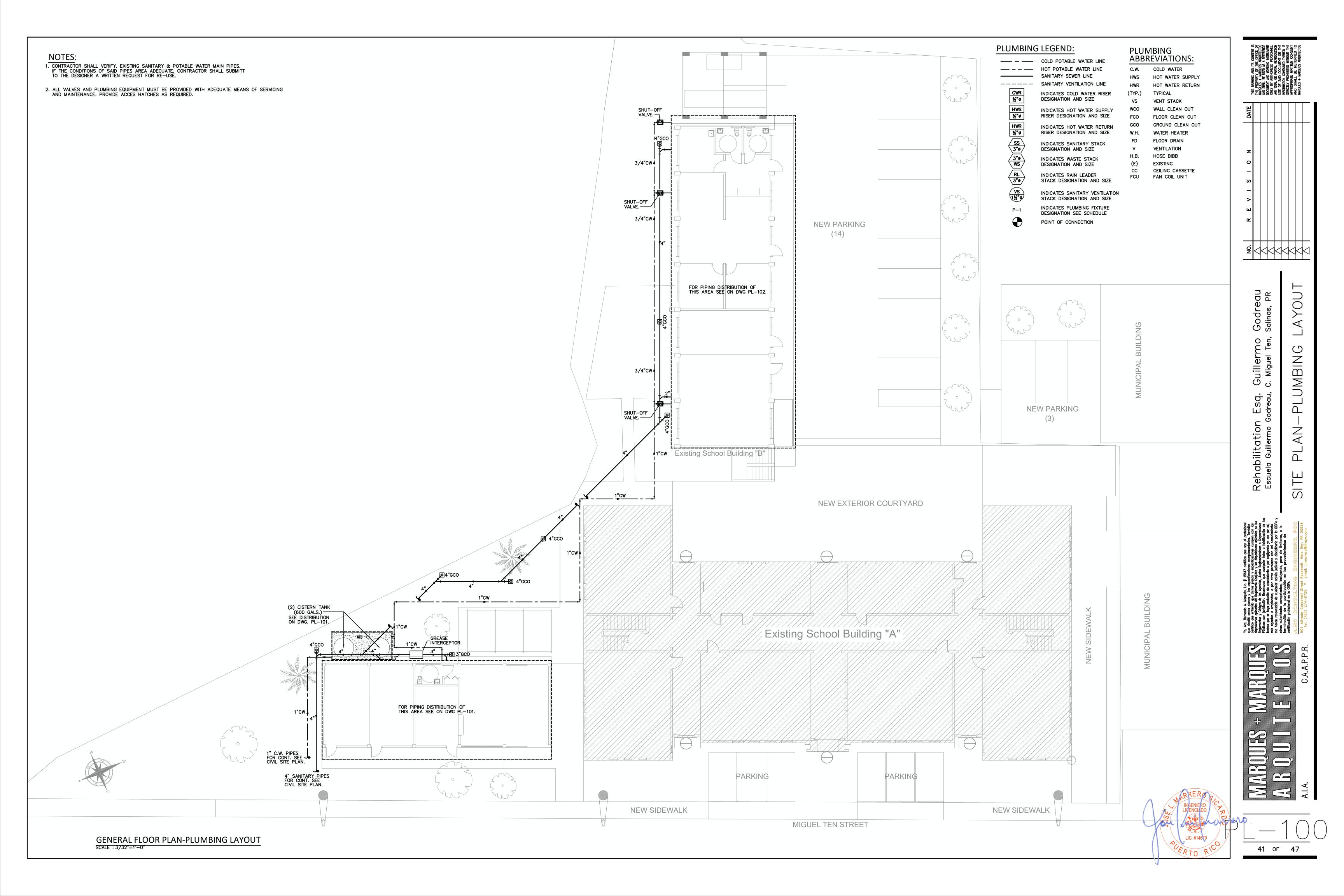
ap

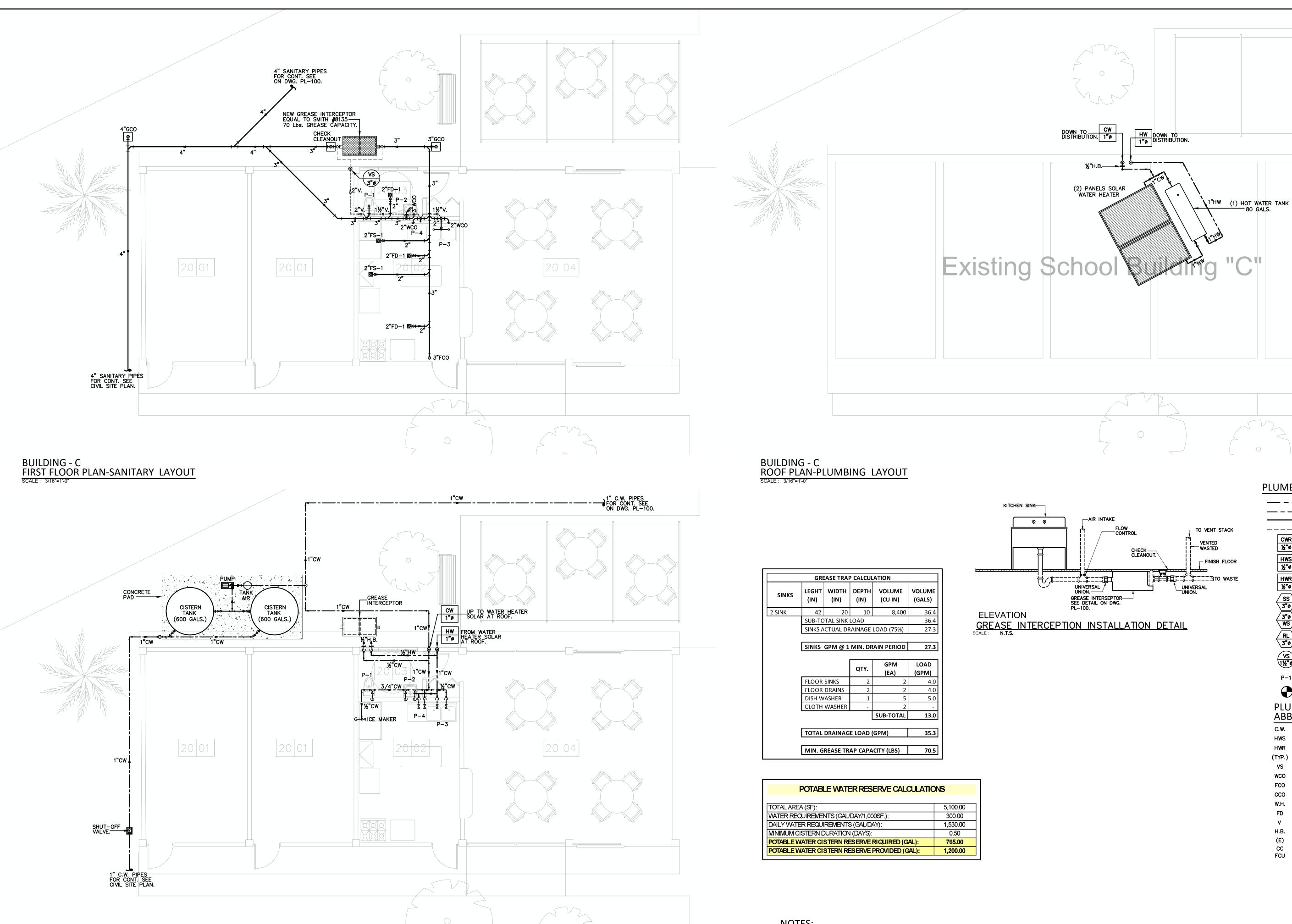
 $\simeq$ 

 $\circ$ Z  $\nabla$  $\bigcirc$ 

a Poler, Lic. #15089 certifico que so sa y las especificaciones complement ue dichos planos y especificaciones complemento de propositiones of teginnento Conjunto y las disposiciones e las Agencias, Juntas Regiomentadoras o. Reconozco que cualquier falsa o tucido sin conosimiento o por negligencia dos, o por otras personas con milidados, o por outras personas con milidade cualquier acción judicial y disciplini apetentes, incluyendo, pero sin lirranticipación en los procedimien articipación en los procedimien rada f nos o que del R ión. F roducic eados o de c ompe parti

40 OF 47





BUILDING - C

FIRST FLOOR PLAN-POTABLE WATER LAYOUT

Guillermo c. Miguel Ten, abilitation la Guillermo G

9 4444

PLUMBING

**UILDING** 

 $\Box$ 

Godreau Salinas, PR

Reh (

PLUMBING LEGEND: ———— SANITARY SEWER LINE

---- SANITARY VENTILATION LINE CWR INDICATES COLD WATER RISER DESIGNATION AND SIZE INDICATES HOT WATER SUPPLY RISER DESIGNATION AND SIZE

INDICATES HOT WATER RETURN RISER DESIGNATION AND SIZE

HWS ½"ø

HWR ½"ø

SS 3"ø

WS

RL 3"ø INDICATES SANITARY STACK DESIGNATION AND SIZE INDICATES WASTE STACK DESIGNATION AND SIZE

INDICATES RAIN LEADER STACK DESIGNATION AND SIZE

INDICATES SANITARY VENTILATION STACK DESIGNATION AND SIZE INDICATES PLUMBING FIXTURE DESIGNATION SEE SCHEDULE P-1 POINT OF CONNECTION

# PLUMBING ABBREVIATIONS:

COLD WATER HOT WATER SUPPLY HOT WATER RETURN **TYPICAL** 

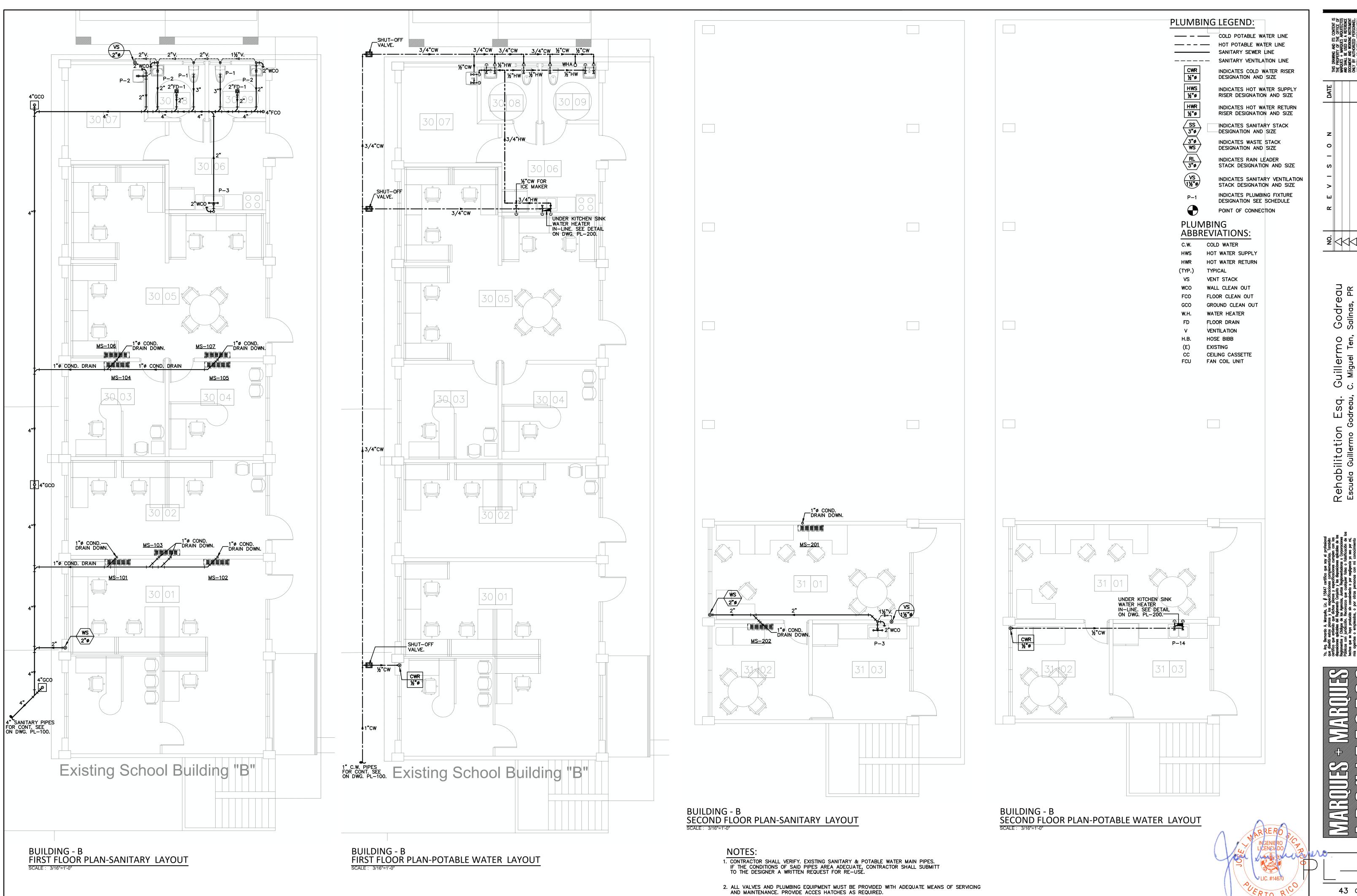
VENT STACK WALL CLEAN OUT FLOOR CLEAN OUT GROUND CLEAN OUT

WATER HEATER FLOOR DRAIN VENTILATION

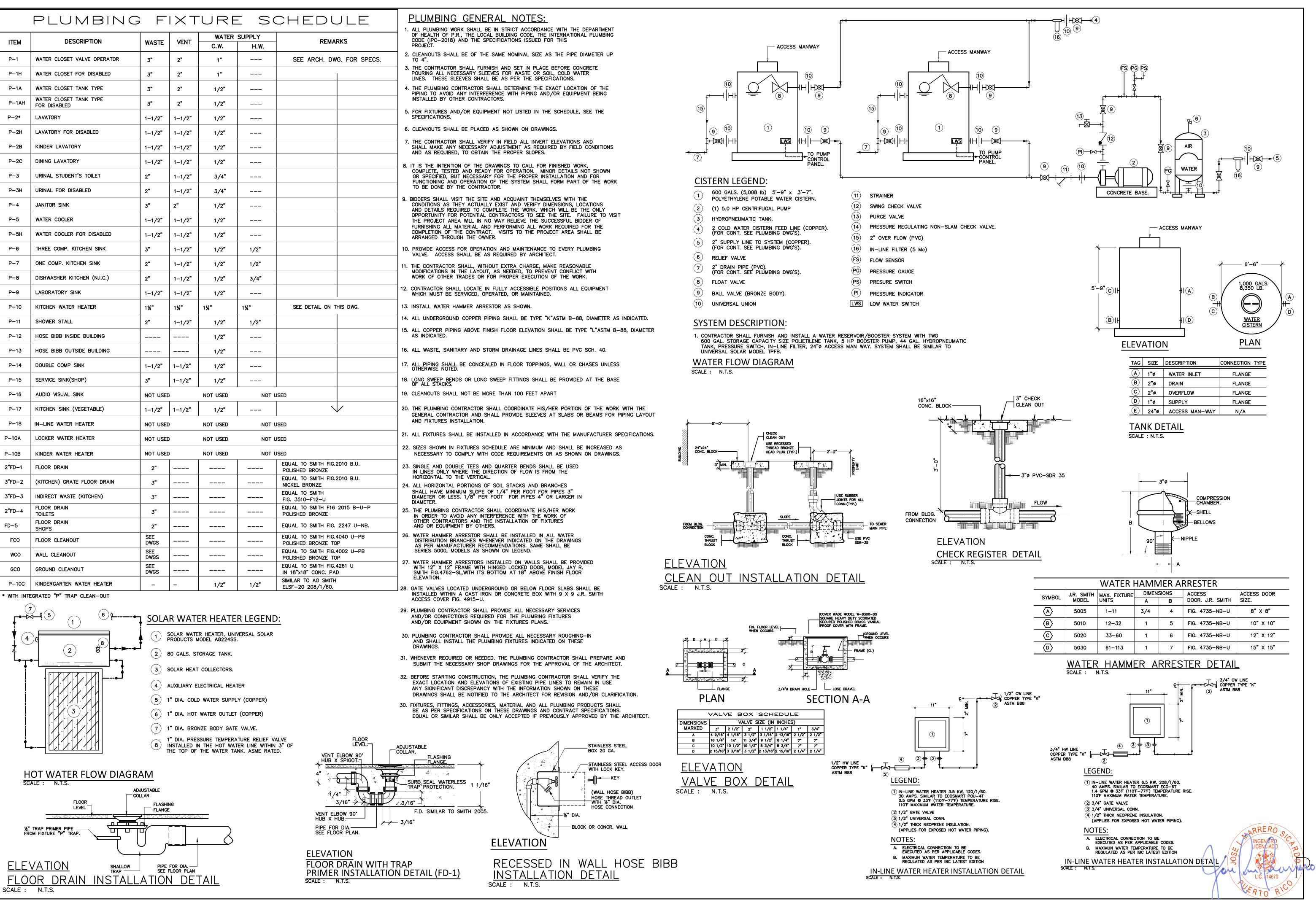
HOSE BIBB **EXISTING** 

CEILING CASSETTE FCU FAN COIL UNIT

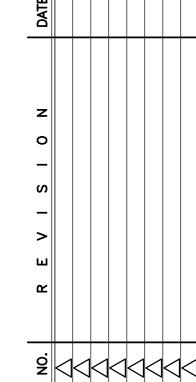
1. CONTRACTOR SHALL VERIFY. EXISTING SANITARY & POTABLE WATER MAIN PIPES. IF THE CONDITIONS OF SAID PIPES AREA ADECUATE, CONTRACTOR SHALL SUBMITT TO THE DESIGNER A WRITTEN REQUEST FOR RE-USE. 2. ALL VALVES AND PLUMBING EQUIPMENT MUST BE PROVIDED WITH ADEQUATE MEANS OF SERVICING AND MAINTENANCE. PROVIDE ACCES HATCHES AS REQUIRED.



Godreau Salinas, PR abilitation a Guillermo G



THIS DRAWING AND ITS CONTENT IS THE PROPERTY OF THE OFFICE OF MARQUES + MARQUES ARQUITECTOS AND SYALL BE USED AS A REFRENCE DOCUMENT AND WORKING INSTRUMENT ONLY BY AUTHORIZED PERSONNEL. ANY TOTAL OR PARTIAL REPRODUCTION USE OF SAID DOCUMENT OR THE INFORMATION CONTAINED THEREIN IS STRUCTLY PROHIBITED WITHOUT THE APPROPRIATE WRITTEN CONSENT AND SHALL BE RETURNED TO MARQUES + MARQUES ARQUITECTOS



litation Esq. Guillermo Godreau Buillermo Godreau, C. Miguel Ten, Salinas, PR

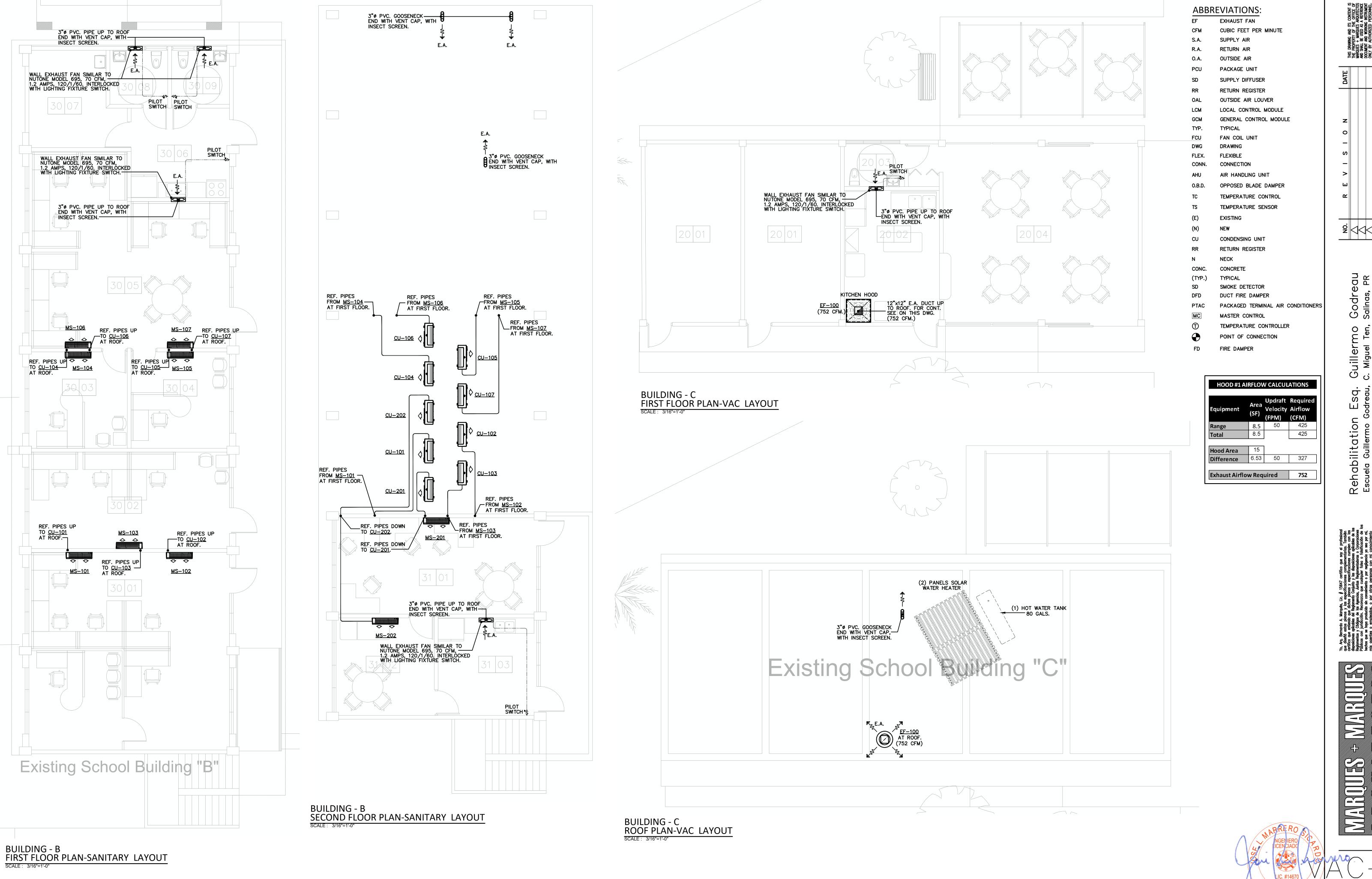
 $\triangleleft$ 

 $\Box$ 

 $\overline{\mathcal{S}}$ 

ficaciones cumples con las ficaciones cumples con las ficaciones cumples de los mentadoras o Corporaciones operaciones o fosposiciones operaciones o fosposiciones fospo

Públicas con jurídición. Recon producido si mis agentes o empleados, o mis agentes o empleados, o me hocen responsable de cualquis curis autoridades competent terminación de la participa certificación profecional en la C



9 4444

Godreau Salinas, PR 0 Guillerma C. Miguel Te abilitation la Guillermo G

700

DING

### VAC NOTES:

#### **GENERAL**

- BIDDERS SHALL VISIT THE BUILDING AND ACQUAINT THEMSELVES WITH THE CONDITIONS AS THEY ACTUALLY EXIST AND VERIFY DIMENSIONS, LOCATIONS AND DETAILS REQUIRED TO COMPLETE THE WORK. FAILURE TO VISIT THE PROJECT AREA WILL IN NO WAY RELIEVE THE SUCCESSFUL BIDDER OF FURNISHING ALL MATERIAL AND PERFORMING ALL WORK REQUIRED FOR THE COMPLETION OF THE CONTRACT. VISIT TO THE PROJECT AREA SHALL BE ARRANGED THROUGH THE BUILDING MANAGER.
- CONTRACTOR SHALL PROVIDE SUITABLE VIBRATION ISOLATION FOR THE SYSTEM AS RECOMMENDED BY MANUFACTURER OF EQUIPMENT SPECIFIED OR PROVIDED.
- CONTRACTOR SHALL FURNISH AND INSTALL PIPING VALVES, SENSORS, CONTROL SYSTEMS AND ANY OTHER ITEM REQUIRED FOR THE FUNCTIONING AND OPERATION OF THE SYSTEM SHALL FORM PART OF THE WORK TO BE DONE BY THE CONTRACTOR.
- IT IS THE INTENTION OF THE DRAWINGS TO CALL FOR FINISHED WORK, COMPLETE, TESTED AND READY FOR OPERATION. MINOR DETAILS NOT SHOWN OR SPECIFIED, BUT NÉCESSARY FOR THE PROPER INSTALLATION AND FOR FUNCTIONING AND OPERATION OF THE SYSTEM SHALL FORM PART OF THE WORK TO BE DONE BY THE CONTRACTOR.
- CONTRACTOR SHALL PAINT ALL PIPING, PIPE INSULATION, FITTINGS, VALVES AND ALL EQUIPMENT TO BE INSTALLED.
- 6. THE CONTRACTOR SHALL, WITHOUT EXTRA CHARGE, MAKE REASONABLE MODIFICATIONS IN THE DUCT AND PIPING ARRANGEMENTS AS NEEDED TO PREVENT CONFLICT WITH WORK OF OTHER TRADES OR FOR PROPER EXECUTION OF THE WORK.
- ALL EQUIPMENT AND MATERIAL SHALL BE INSTALLED WITH THE APPROVAL OF THE OWNER IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER AND THE SPECIFICATIONS ISSUED FOR THIS PROJECT.
- CONTRACTOR SHALL LOCATE IN FULLY ACCESSIBLE POSITIONS ALL EQUIPMENT WHICH MUST BE SERVICED, OPERATED, OR MAINTAINED. CONTRACTOR IS RESPONSIBLE OF COMPLY WITH EACH EQUIPMENT MANUFACTURER RECOMMENDED CLEARANCE.
- IN CASE OF DISCREPANCY BETWEEN THE EQUIPMENT SPECIFIED AND THE EQUIPMENT SUPPLIED BY THE OWNER, THE CONTRACTOR SHALL ARRANGE FOR THE PROPER
- INSTALLATION OF THE EQUIPMENT. 10. CONTRACTOR SHALL FURNISH AND INSTALL AIR CONDITIONING EQUIPMENT, DUCTS, INSULATION, PIPING VALVES, SENSORS, CONTROL SYSTEMS AND ANY OTHER ITEM
- REQUIRED FOR THE PROPER FUNCTIONING AND OPERATION OF THE SYSTEM. MECHANICAL WORK SHALL BE COORDINATED WITH ALL OTHER TRADES.
- THE MECHANICAL CONTRACTOR SHALL THOROUGHLY EXAMINE ALL AREAS WHERE EQUIPMENT, DUCTWORK, AND PIPING WILL BE INSTALLED AND WILL REPORT ANY CONDITION THAT, IN HIS OPINION, PREVENTS THE PROPER INSTALLATION OF THE
- 13. COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER CONNECTION TO ALL MECHANICAL EQUIPMENT.
- ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES AND ORDINANCES. IN CASE OF CONFLICT BETWEEN THE DRAWINGS/SPECIFICATIONS AND THE CODES AND ORDINANCES, THE HIGHEST STANDARD SHALL APPLY. THE MECHANICAL CONTRACTOR SHALL SATISFY CODE REQUIREMENTS AS A MINIMUM STANDARD WITHOUT ANY EXTRA COST.
- 15. THE MECHANICAL CONTRACTOR SHALL PROCURE AND PAY FOR ALL PERMITS, FEES AND INSPECTIONS NECESSARY TO COMPLETE THE MECHANICAL WORK. 16. THE MECHANICAL CONTRACTOR SHALL UNCONDITIONALLY WARRANT ALL WORK TO BE FREE OF DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY OWNER AND WILL REPAIR

OR REPLACE ANY DEFECTIVE WORK PROMPTLY AND WITHOUT CHARGE AND

RESTORE ANY OTHER EXISTING WORK DAMAGED IN THE COURSE OF REPAIRING

- DEFECTIVE MATERIALS AND WORKMANSHIP. 17. THE MECHANICAL CONTRACTOR SHALL COORDINATE CONCRETE SLABS PENETRATION WORKS WITH OWNER, STRUCTURAL ENGINEER AND ARCHITECTURAL DRAWINGS. SEAL PENETRATIONS AND PROVIDE FIRE DAMPERS AS REQUIRED.
- 18. ALL MATERIAL AND SPECIALTIES REQUIRED FOR THIS WORK SHALL BE NEW (UNLESS OTHERWISE INDICATED), OF FIRST-CLASS QUALITY AND SHALL BE FURNISHED, DELIVERED, ERECTED, CONNECTED AND FINISHED IN EVERY DETAIL, AND SHALL BE SO SELECTED AND ARRANGED AS TO FIT PROPERLY INTO THE BUILDING SPACES. DURING STORAGE ON THE JOB SITE OF CONSTRUCTION, THE CONTRACTOR SHALL KEEP PIPE ENDS PLUGGED OR CAPPED TO PREVENT DIRT OR MOISTURE ENTERING THE PIPE.
- 19. ROOF "R" VALUE SHALL BE A MINIMUM OF 15.0 HR-SF-F/BTU.

### <u>INSULATION:</u>

**BALANCING:** 

FOR FINAL CONTRACT PAYMENT.

5. THE AIR SIDE BALANCING SHALL INCLUDE:

- ALL INSULATION REQUIRED FOR THE WORK SHALL BE NEW, OF THE FIRST CLASS QUALITY AND SHALL BE FINISHED, DELIVERY, ERECTED AND FINISHED IN EVERY DETAIL. ALL INSULATION SHALL HAVE A COMPOSITE FIRE HAZARD RATING AS TESTED BY ASTM E-84, NFPA 255, OR UL 723, NOT TO EXCEED 25 FLAME SPREAD AN 50 SMOKE DEVELOPED. ACCESSORIES SHALL HAVE THE SAME COMPONENT RATINGS. ALL INSULATING MATERIAL SHALL HAVE A LABEL INDICATING COMPLIANCE WITH THE ABOVE RATING.
- 2. EXPOSED AIR DUCT INSULATION SHALL BE 2" THICK JOHNS—MANVILLE NO. 817 (6  $\mathsf{lbs/ft}^\mathsf{S}$ RIGID FIBERGLASS DUCT INSULATION WITH A FACTORY APPLIED FOIL-SCRIM-KRAFT (FŚK) VAPOR BARRIER FACING. COVER ALL INSULATION WITH GLASS FABRIC MESH USING FOSTER SEALFAS MASTIC. INSULATION SHALL HAVE A "K" FACTOR=0.22 Btu-in/hr.-ft2 - F @ 75F
- CONCEALED ARI DUCT INSULATION SHALL BE 1 1/2" THICK JOHNS-MANVILLE R-SERIES MICROLITE FIBER GLASS BLANKET WITH A FACTORY APPLIED FOIL-SCRIM-FRAFT (FSK) VAPOR BARRIER FACING. INSULATION SHALL HAVE A "K" FACTOR= 0.31 Btu−in/hr−ft<sup>2</sup> @ 75°F.
- 4. CHILLED WATER PIPING INSULATION MATERIAL SHALL BE PRE-FORM PHENOLIC FOAM PIPE INSULATION USE AN ALUMINUM JACKET SECURELY ATTACHED IN ALL WEATHER EXPOSED PIPE RUNS AND FITTINGS.
- 5. AFTER THE INSTALLATION OF PIPING AND BEFORE APPLYING THE INSULATION, THE CONTRACTOR MUST CLEAN ALL PIPING THOROUGHLY AND APPLY TWO COATS OF ANTI CORROSIVE PAINT AS MANUFACTURED BY PORTER #7100.
- 6. INDOOR DUCTS HANDLING OUTDOOR AIR INSULATION MATERIAL: SAME AS EXPOSED AIR DUCTS INSULATION SHALL NOT BE APPLIED UNTIL ALL SURFACES ARE CLEAN AND DRY.
- 7. ALL MATERIAL USED FOR DUCTWORK INSULATION SHALL HAVE A FLAME SPREAD INDEX NOT EXCEEDING 25 SMOKE DEVELOPED AND FUEL CONTRIBUTED NOT TO EXCEED 50 WHEN MEASURED AS DETERMINE BY ASTM E-162.

THE A/C CONTRACTOR SHALL PROVIDE AIR AND HYDRONIC SYSTEM BALANCING.

2. PERFORM AIR & HYDRONIC BALANCING BY A INDEPENDENT NEBB OR AABE CERTIFIED AIR BALANCE CONTRACTOR SHALL ACCURATELY BALANCE THE AIR SYSTEMS TO PROVIDE AIR QUALITIES INDICATED ON THE DRAWINGS AND IN THIS SPECIFICATION. OPERATE AUTOMATIC

CONTROLS SYSTEM AND VERIFY SET POINTS DURING BALANCING. THE FINAL READING AND

SUBMIT FIVE (5) COPIES OF THE BALANCE REPORT TO THE ENGINEER FOR APPROVAL.

PRESSURIZATION LEAKAGE AND INFILTRATION TEST SHALL BE PERFORMED PER

ALL AIR QUANTITIES SHALL BE SET TO WITHIN 10% OF THE LISTED QUANTITIES

1. RECORD MOTOR FULL LOAD AMPS AND ACTUAL OPERATING AMPERAGE.

2. RECORD SUPPLY, RETURN AND OUTSIDE AIR TEMPERATURES.

4. RECORD SYSTEM STATIC PRESSURES, RETURN AND DISCHARGE.

6. BALANCING WORK SHALL FULLY COMPLY WITH A.A.B.C. OR N.E.B.B.

ADJUSTMENT SHALL BE PERFORMED WITH THE PRESENCE OF THE OWNER'S REPRESENTATIVE.

THE AIR DISTRIBUTION SYSTEM AND DEVICES SHALL BE BALANCED FOR PROPER AIR FLOW.

DEFLECTION VANES SHALL BE SET TO ELIMINATE ANY EXCESSIVE AIR MOVEMENT IN THE AREA.

INCLUDE A COPY OF THE BALANCE REPORT AS APPROVED BY THE ENGINEER WITH APPLICATION

TEST DATA OF THE BALANCING OF THE SYSTEMS SHALL BE SUBMIT TO THE ARCHITECT FOR REVIEW.

3. MAKE PITOT TUBE TRAVERSE OF MAIN SUPPLY DUCT AND OBTAIN DESIGN CFM AT FAN AND FAN RPM.

5. FIVE (5) COPIES OF BALANCING REPORTS CONTAINING THE DATA MENTIONED ABOVE AND SHALL BE

- 8. INSULATION SHALL BE FURNISHED WITH A FACTORY APPLIED FSK VAPOR BARRIER FACING AND SHALL HAVE AN AVERAGE THERMAL CONDUCTIVITY NOT TO EXCEED 0.25 BTU-IN/SQ.FT.- F.
- 9. PROVIDE INTERNAL ACOUSTICAL LINING TO ALL FCU'S FASCIAS.

SMACNA STANDARDS AND TECHNICAL SPECIFICATIONS.

GIVEN TO THE OWNER'S REPRESENTATIVE.

#### REFRIGERANT PIPING:

- REFRIGERANT PIPING MATERIAL: SHALL BE TYPE "K" COPPER TUBING, HARD DRAWN WITH WROUGHT COPPER SOLDER TYPE FITTINGS SUITABLE FOR CONNECTION WITH SILVER SOLDER.
- ALL PIPE SIZES. K=0.25 @ 75°F. PROTECT INSULATION FROM SOLAR UV RADIATION.
- 3. GLOBE VALVE: SHALL BE CONSTRUCTED OF FORGED BRASS AND SHALL BE OF THE BACKSEATING TYPE SUITABLE FOR 500 PSI.
- 4. CHECK VALVES: SHALL BE CONSTRUCTED OF FORGED BRASS SUITABLE FOR 500 PSI.
- 5. SOLENOID VALVES: SHALL BE CONSTRUCTED OF FORGED BRASS SUITABLE FOR 400 PSI.
- PROVIDE 100 MESH STRAINER.
- SUITABLE FOR 500 PSI.
- 8. FILTER DRAINS: SHALL BE CONSTRUCTED OF STEEL WITH STEEL COVER REPLACEABLE FILTER DRIER COVER.
- 9. ALL ELBOWS SHALL BE OF THE LONG RADIUS TYPE.
- 10. CONTRACTOR SHALL BE RESPONSIBLE OF SUBMIT REFRIGERANT LINE SHOP DWG. FOR APPROVAL. NO CHANGE ORDER WILL BE ALLOWED FOR A/C SYSTEMS MODIFICATIONS RESULTING FROM NON-COORDINATED SHOP DRAWINGS.

#### <u> AIR DISTRIBUTION:</u>

- 1. DUCTWORK SHELL BE AS FOLLOWS:
  - DUCT MATERIAL SHALL BE GALVANIZED SHEET METAL, AND MANUFACTURED AND INSTALLED IN ACCORDANCE WITH LATEST EDITION OF THE DUCT CONSTRUCTION STANDARDS OF SMACNA FOR THE APPLICABLE PRESSURE CLASS.
  - DUCT WORKMANSHIP ALL DUCTWORK SHALL BE CONSTRUCTED AND ERECTED IN A WORKMANLIKE MANNER. DUCTS SHALL BE STRAIGHT AND SMOOTH ON THE INSIDE WITH NEATLY FINISHED JOINTS, AIRTIGHT, AND SHALL BE FREE FROM VIBRATION UNDER ALL CONDITIONS OF OPERATION. THE INTERNAL ENDS OF SLIP JOINTS SHALL BE MADE IN THE DIRECTION OF AIR FLOW. CHANGES IN DIMENSIONS AND SHAPE OF DUCTS SHALL BE GRADUAL. ALL DUCT SIZES SHALL FALL WITHIN THE LIMITING DIMENSIONS INDICATED ON THE DRAWINGS UNLESS OTHERWISE APPROVED. CURVED ELBOWS, UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS SHALL HAVE A CENTER LINE RADIUS EQUAL TO 1 1/2 TIMES THE WIDTH OF THE AIR TURNS SHALL BE INSTALLED IN ALL ABRUPT ELBOWS AND SHALL CONSIST OF CURVED METAL BLADES OR VANES, ARRANGED TO PERMIT THE AIR TO MAKE THE TURNS WITHOUT APPRECIABLE TURBULENCE. THEY SHALL BE THE MANUFACTURER'S STANDARD PRODUCT AND SHALL BE QUIET WHEN THE SYSTEM IS IN OPERATION. CONFIGURATION OF DUCTS SHALL BE AS INDICATED ON DRAWINGS. DUCT HANGER SHALL BE AS INDICATED ON DRAWINGS.
- 2. INSTALLATION OF DUCTS SHALL BE BY MEANS OF ANGULAR TRAPEZE AND ROD ACCORDING TO "SMACNA" RECOMMENDATIONS. IF STRAP ARE USED WITH DUCTWORK LESS THAN 24" WIDE, IT SHALL BE ATTACHED TO THE DUCT BY TWO SELF-TAPPING SCREWS. HANGERS AND STRAPS SHALL BE ATTACHED TO THE BEAM BY EXPANSION SHIELDS OR BY GUN NAILS. SCREWS.
- HANGERS AND STRAPS SHALL BE ATTACHED TO THE BEAM BY EXPANSION SHIELDS OR BY GUN NAILS.
- 3. ALL CONCEALED DUCTWORK AND PLENUMS ABOVE THE SECOND FLOOR CEILINGS SHALL BE INSULATED. 4. ALL DUCT WORK EQUIPMENT AND PIPING SHALL BE PROVIDED WITH SEISMIC RESTRAINTS IN
- ACCORDANCE WITH U.B.C.-1997 & N.F.P.A. STANDARDS. 5. ALL SHEETMETAL DUCTWORK SEAMS & JOINTS MUST BE SEALED WITH HIGH PRESSURE DUCT SEALER AS MANUFACTURED BY MINNESOTA MINING & MANUFACTURING CO. MODEL EC-800 OR APPROVED EQUAL. AIR LEAKS MUST BE 5% OR LESS. TEST DUCTWORK BEFORE FINAL CONNECTION TO AHU'S & AIR DISTRIBUTION.
- 6. FOR EXACT LOCATION OF CEILING DIFFUSERS REFER TO ARCHITECTURAL REFLECTED CEILING PLAN.
- 7. THE CONTRACTOR MUST FURNISHED & INSTALL U.L. APPROVED FIRE DAMPER WITH 10 GAUGE METAL SLEEVE AND DUCT ACCESS DOOR WHERE SHOWN ON DRAWINGS, AS REQUIRED BY LOCAL BUILDING CODES, OR AS REQUIRED BY N.F.P.A. FIRE DAMPERS SHALL BE CURTAIN TYPE AS MANUFACTURED BY RUSKIN MODEL 1002 STYLE C OR APPROVED EQUAL.
- 8. PROVIDE SMOKE DETECTORS AS PER N.F.P.A. 90A.
- 9. EXPOSED SUPPLY & RETURN DUCTS SERVING SOUND SENSITIVE AREAS SHALL BE DOUBLE WALL, PAINTED AND INTERNALLY INSULATED.
- 10. ALL EXPOSED DUCTWORK SHALL BE PAINTED AS PER ARCHITECT'S COLOR CODING.
- 11. CONTRACTOR SHALL BE RESPONSIBLE OF SUBMIT DUCTWORK SHOP DWG. FOR APPROVAL. NO CHANGE ORDER WILL BE ALLOWED FOR DUCTS MODIFICATIONS RESULTING FROM NON-COORDINATED SHOP DRAWINGS.
- 12. CONNECTION FROM DUCT TO A/C UNIT SHALL BE MADE WITH A CANVAS CONNECTION CANVAS CONNECTION SHALL BÉ NEOPRENE—COATED GLASS FABRIC AS MANUFACTURED BY VENT FABRIC (VEN GLASS), DURO DYNECORP. OF EQUAL. MOUNTED ON ANGLE FRAMES SECURELY FASTENED TO DUCTS AND EQUIPMENT WITH ACCESSORIES TO PREVENT COLLAPSING AT 10 IWG OF NEGATIVE PRESSURE. CANVAS CONNECTION SHALL BE AIR TIGHT (NO LEAKAGE OR INFILTRATION) AT INDICATED PRESSURE GLASS.
- 13. PLENUM SUPPLY AND RETURN AREA SHALL COMPLY WITH NFPA-90A.
- 14. CONTRACTOR SHALL BE RESPONSIBLE OF RETURN AIR PLENUM SEGREGATION AND PROVIDE REQUIRED AIR PASSAGES FOR PROPER A/C SYSTEM FUNCTIONING.
- 15. ALL OUTSIDE AIR INTAKES SHALL BE PROVIDED WITH A 35% EFF. DISPOSABLE FILTERS.
- 16. PROVIDE 1" THICK INTERNAL ACOUSTICAL LINING TO FIRST 10'-0" OF SUPPLY & RETURN DUCTWORK. SIMILAR TO SCHULLER PERMACOUSTICS.
- 17. COORDINATE DUCT ROUTE WITH SPRINKLERS AND ALL OTHER TRADES. RE—ROUTE AS REQUIRED AT NO EXTRA COST TO THE OWNER.
- 18. GRILLES AND DIFFUSERS SHALL BE AS MANUFACTURE BY "METAL\*AIRE", "BARBER COLMAN" 'TUTTLE & BAILEY", "ANEMOSTAT" OR "TITUS". EACH IS TO BE FITTED BY AN AIR STREIGHTENER AND VOLUME DAMPER.
- 19. ALL DUCT DIMENSIONS SHOWN ARE NET INTERNAL.

#### **HVAC EQUIPMENT:**

- . ALL AIR CONDITIONING EQUIPMENT SHALL BE INSTALLED IN A WORKMANLIKE MANNER MEETING THE ACCEPTED STANDARDS OF THE AIR CONDITIONING INDUSTRY. THE WORK SHALL BE DONE BY SKILLED A/C CRAFTSMEN.
- 2. MAINTENANCE AND SERVICE CLEARANCES SHALL BE MAINTAIN TO EACH MECHANICAL EQUIPMENT AS PER MANUFACTURERS RECOMMENDATIONS. MECHANICAL EQUIPMENT AT ROOF SHALL BE ANCHORED TO WITHSTAND HURRICANE FORCE WINDS
- AS PER APPLICABLE CODES.
- PROVIDE CORROSION PROTECTION TO ALL WEATHER EXPOSED MECH. EQUIPMENT BY MEANS OF FIELD APPLIED PRODUCT. SUBMITT FOR APPROVAL
- 5. EQUIPMENT START-UP SHALL BE PERFORMED BY EQUIPMENT MANUFACTURER.
- 6. ALL EQUIPMENT OFFERED UNDER THESE SPECIFICATIONS SHALL BE LIMITED TO PRODUCTS REGULARLY PRODUCED AND RECOMMENDED FOR SERVICE, IN ACCORDANCE WITH ENGINEERING DATA, RATINGS, OR OTHER COMPREHENSIVE LITERATURE MADE AVAILABLE TO THE PUBLIC AND IN EFFECT AT THE TIME OF OPENING OF BIDS.
- EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE OF MANUFACTURE'S INSTRUCTIONS FOR TYPE AND CAPACITY OF EACH PIECE OF EQUIPMENT USE. COORDINATE MECHANICAL EQUIPMENT CONCRETE PADS WITH FINAL EQUIPMENT ARRAGEMENT.
- 8. CONTRACTOR SHALL BE RESPONSIBLE OF VERIFY ELECTRICAL CONNECTION AT FIELD PRIOR TO EQUIPMENT PURCHASE.

- . REFRIGERANT PIPING INSULATION MATERIAL: SHALL BE CLOSED CELL ELASROMETRIC 1/2" THICK

- 6. REFRIGERANT STRAINERS: SHALL BE CONSTRUCTED OF FORGED BRASS SUITABLE FOR 350 PSI.
- . MOISTURE INDICATOR: SHALL BE CONSTRUCTED OF FORGED BRASS WITH OPTICAL GLASS

- 11. REFRIGERANT LINE SIZING SHALL BE DONE BY EQUIPMENT MANUFACTURER.

#### <u>AUTOMATIC CONTROL SYSTEM:</u>

- 1. ALL CONTROLLERS SHALL BE FLUSH MOUNTED. ELECTRICAL CONDUITS SHALL RUN INSIDE WALLS.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE CONDUITS AND WIRING FOR THE
- POWER OF THE LCM FROM THE NEAREST POWER SOURCE.
- CONTROL IN THE PLENUM BETWEEN REFLECTED CEILING AND BOTTOM OF STRUCTURAL SLAB.

- 6. PLASTIC PIPING IS NOT ALLOWED IN RETURN PLENUM AREAS.
- CONNECTION OF THE EQUIPMENT. COORDINATE WITH ELECTRICAL CONSULTANT.

### <u>CONDENSATE DRAIN:</u>

- 2. COOLING COIL CONDENSATE DRIP PIPING MATERIAL RUNNING IN RETURN AIR PLENUMS SHALL BE TYPE "M" COPPER.
- 3. CONDENSATE DRAIN PIPING INSULATION MATERIAL: SHALL BE CLOSED CELL ELASTOMERIC 3/4" THICK ALL PIPE SIZES. K=0.25 @ 75°F.
- COORDINATE WITH PLUMBING DRAWINGS. 5. PROVIDE CONDENSATE DRAIN PUMP FOR A/C EQUIPMENT IF REQUIRED PIPE SLOPE IS NOT ATTAINED.
- 6. CONTRACTOR SHALL BE RESPONSIBLE OF CONNECT 1" INSULATED PVC PIPE FOR EQUIPMENT CONDENSATE DRAIN AND CONNECT TO SANITARY SEWER SYSTEM.

4. CONTRACTOR SHALL PROVIDE INDIRECTLY CONNECTED CONDENSATE DRAIN TO A/C UNITS.

- 3. ALL VERTICAL CONTROL CONDUITS MUST RUN CONCEALED INSIDE WALLS AND HORIZONTAL
- 4. ROOM CONDITIONS ARE: 74.0 ± 2 Fdb @ 55 ± 5% RH FOR ALL AREAS. COORDINATE LOCATION OF TEMPERATURE CONTROLLERS AT FIELD WITH OWNER.
- 5. PROVIDE VANDAL PROOF COVER FOR ALL TEMPERATURE CONTROLLERS.
- ALL MOTORS SHALL BE PROVIDED WITH ITS REQUIRED STARTERS FOR THE PROPER ELECTRICAL

- 1. COOLING COIL CONDENSATE DRIP PIPING MATERIAL: SHALL BE EXTERIOR INSULATED SCH.40PVC.

MS's

TYPICAL A/C CONTROL DIAGRAM

CUBIC FEET PER MINUTE S.A. SUPPLY AIR R.A. RETURN AIR

EXHAUST FAN

OUTSIDE AIR PACKAGE UNIT

**ABBREVIATIONS:** 

SUPPLY DIFFUSER RETURN REGISTER

OAL OUTSIDE AIR LOUVER LOCAL CONTROL MODULE GCM GENERAL CONTROL MODULE

TYP. **TYPICAL FCU** FAN COIL UNIT

> DWG DRAWING FLEX. **FLEXIBLE**

AIR HANDLING UNIT OPPOSED BLADE DAMPER 0.B.D.

CONNECTION

TEMPERATURE CONTROL TEMPERATURE SENSOR

NEW

**EXISTING** 

CONDENSING UNIT RETURN REGISTER **NECK** 

CONC. CONCRETE TYPICAL SMOKE DETECTOR

DFD DUCT FIRE DAMPER PACKAGED TERMINAL AIR CONDITIONERS

MASTER CONTROL TEMPERATURE CONTROLLER POINT OF CONNECTION

FIRE DAMPER

#### MINI SPLIT UNIT SCHEDULE - INVERTER WEIGHT INDOOR OUTDOOR UNIT Input WEIGHT CAPACITY ELECTRICAL REF. MANUFA. MS MODEL CU MODEL SEER UNIT TAG UNIT TAG MCA MFA WATTS | MS (lb) | CU (lb) MS11M-36HRFN1-MN10W CU-100 | 36,000 | 220-1-60 | 18.50 | 35.0 | 144 R-410A MIDEA MOD30-36HFN1-MP0W 144 R-410A MS11M-36HRFN1-MN10W MOD30-36HFN1-MP0W CU-101 | 36,000 | 220-1-60 | 18.50 | 35.0 | 4,235 44 MIDEA 44 144 R-410A MIDEA MS11M-36HRFN1-MN10W 36,000 220-1-60 MOD30-36HFN1-MP0W CU-103 17,000 220-1-60 6.7 11 1,533 25 65 R-410A MIDEA MSABD-18CRFN1-MQ0W MOBA30-18CFN1-MQ0W 20 MS-104 CU-104 17,000 | 220-1-60 | 6.7 11 1,533 25 65 R-410A MIDEA MSABD-18CRFN1-MQ0W MOBA30-18CFN1-MQ0W CU-105 36,000 | 220-1-60 | 18.50 | 35.0 | 4,235 44 144 R-410A MIDEA MS11M-36HRFN1-MN10W MOD30-36HFN1-MP0W 44 144 R-410A MIDEA MS11M-36HRFN1-MN10W **MS-200** | CU-200 | 36,000 | 220-1-60 | 18.50 | 35.0 | 4,235 MOD30-36HFN1-MP0W **MS-201** | CU-201 | 17,000 | 220-1-60 | 6.7 | 11 25 R-410A 1,533 65 MIDEA MSABD-18CRFN1-MQ0W MOBA30-18CFN1-MQ0W 20

- 5. HIDE-AWAY LED DIGITAL DISPLAY/ FULL LCD DISPLAY
- 6. OPTIONAL WI-FI CONNECTIVITY VIA USB SMART KIT
- 7. LOW NOISE OPERATION

#### EXHAUST & MAKEUP FAN SCHEDULE ELECTRICALLY ROOF/WALL REMARKS LOCATION CFM MANUFACTURER TAG. NO. MODEL NO. IN W.G. INTERLOCKED WITH OPENING 13½" × 13½" B, S EF-100 **ROOF** CENT. BELT 752 .2 .167 115/1/60 100 ACRUB COOK

REMARKS:

. ANTIBACTERIAL AIR FILTER

4. HI-DENSITY DUST FILTER

2. LESS THAN 1 WATT OF POWER CONSUMPTION IN 'STAND BY' MODE

1) VERIFY ELECTRICAL CONNECTION AND VOLTAGE AT FIELD PRIOR TO EQUIPMENT PURCHASE

3) REFRIGERANT LINE SIZING SHALL BE DONE BY EQUIPMENT MANUFACTURER.

2) CONTRACTOR SHALL BE RESPONSIBLE OF SUBMIT REFRIGERANT LINE SHOP DWG. FOR APPROVAL

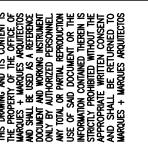
3. AIR DISPERSION BLADE WITH LAST POSITION MEMORY

(B). GRAVITY BACKDRAFT DAMPER. (E). EPOXY PAINT PROTECTION. (SP). SPEED CONTROL. (G). GREASE TROUGH. (V). VENTED EXTENSION. (S). STARTER (T). 24/7 PROGREMMABLE TIME CLOCK LOCATED NEXT TO ELECTRICAL PANEL. (PL). PILOT LIGHT SWITCH LOCATED INSIDE ROOM. (F). FIBER GLASS CONSTRUCTION.

NOTE: 1) CONTRACTOR SHALL BE RESPONSIBLE OF VERIFY ELECTRICAL CONNECTION AT FIELD PRIOR TO EQUIPMENT PURCHASE. PROVIDE START/STOP SWITCH FOR FAN OPERATION. COORDINATE LOCATION AT FIELD.

NO CHANGE ORDER WILL BE ALLOWED FOR A/C SYSTEMS MODIFICATIONS RESULTING FROM NON-COORDINATED SHOP DRAWINGS.





2 4444444

Φ dr 0 Ģ  $\mathsf{D}$ . En 9 eh

 $\supset$ 

0

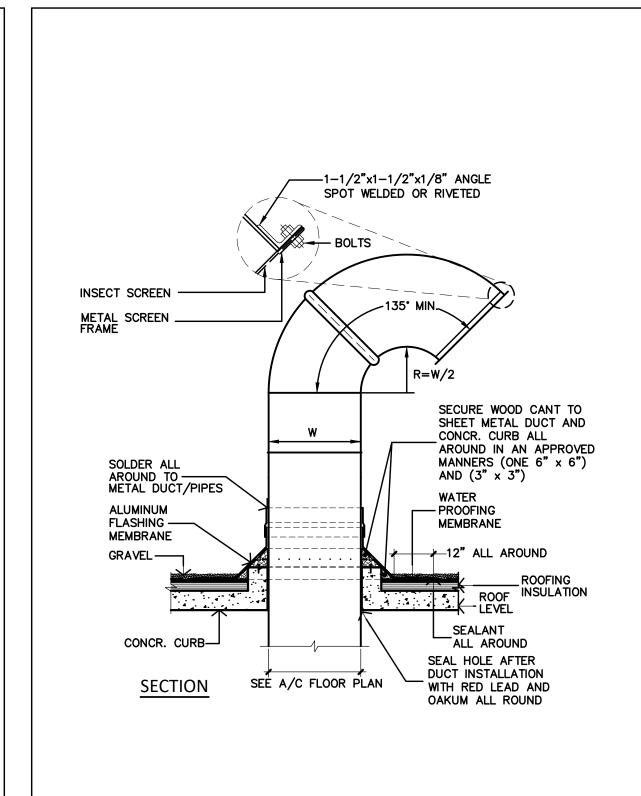
#### **GENERAL KITCHEN FIRE PROTECTION NOTES:**

- CONTRACTOR SHALL FURNISHED AND INSTALL A PRE-ENGINEERED AUTOMATIC FIRE SUPPRESION SYSTEM FOR THE KITCHEN HOOD, PLENUM, DUCTWORK AND COOKING APPLIANCES AS REQUIRING BY CODES. SYSTEM SHALL INCLUDE A MANUAL PULL STATION.
- 2. EACH NOZZLE SHAL COVERED ONE HEAT GENERATED APPLIANCE (RANGE, FRYER, ETC.) OTHER NOZZLE SHALL BE UPRIGHT TO COVER THE EXHAUST DUCT AND TWO NOZZLES TO COVER THE UPPER PORTION OF THE KITCHEN HOOD.
- 5. THE LOCATION OF THE CABINET BOTTLE SHALL BE COORDINATED WITH OWNER.
- 4. CONTRACTOR SHALL PROVIDE ONE FIRE PROTECTION SYSTEM FOR EACH KITCHEN HOOD.
- CONTRACTOR SHALL PROVIDE AN APPROVAL KITCHEN HOOD FIRE PROTECTION SYSTEM ACCORDING TO NFPA-96 AND UNDERWRITERS LABORATORIES RECOMMENDATIONS.
- 5. CONTRACTOR SHALL PROVIDE AN AUTOMATIC GAS SHUT-OFF VALVE FOR THE KITCHEN HOOD FIRE PROTECTION SYSTEM AS PER NFPA 58 IN THE EVENT OF A FIRE THE KITCHEN HOOD FIRE PROTECTION SYSTEM WILL SEND A SIGNAL TO CLOSED THE AUTOMATIC GAS SHUT-OFF VALVE.

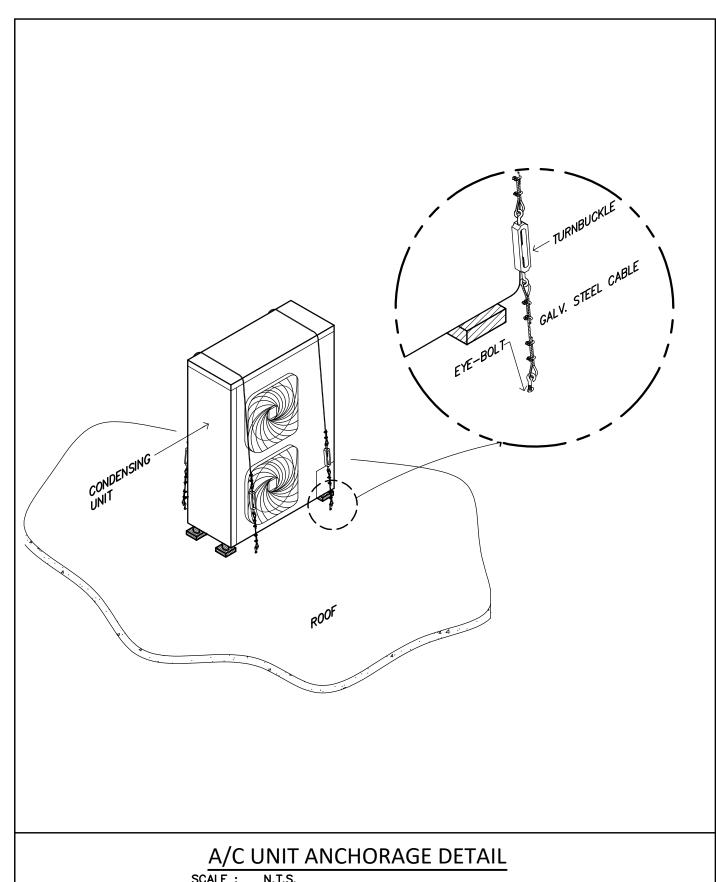
KITCHEN HOOD FIRE PROTECTION SYSTEM

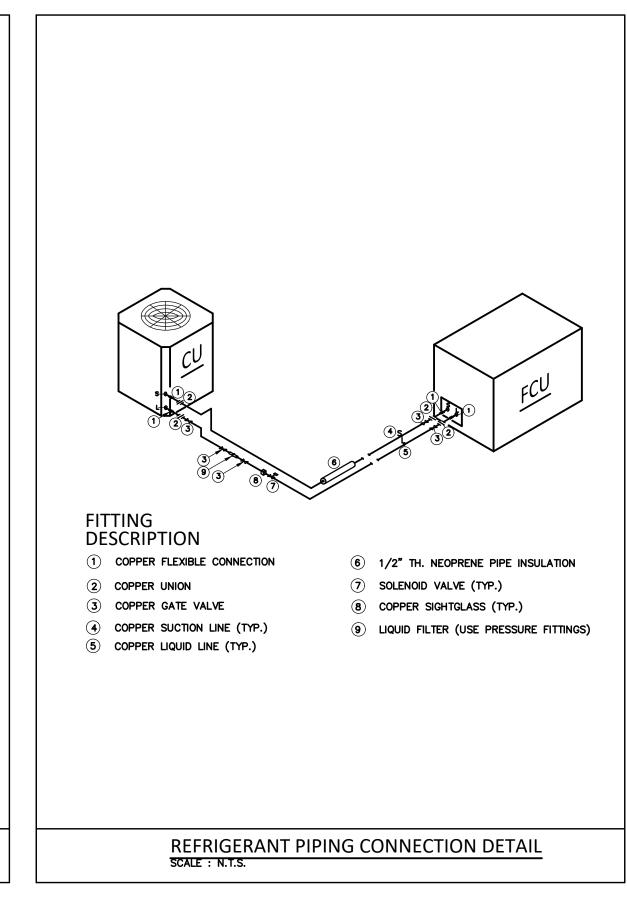
KITCHEN HOOD LEGEND:

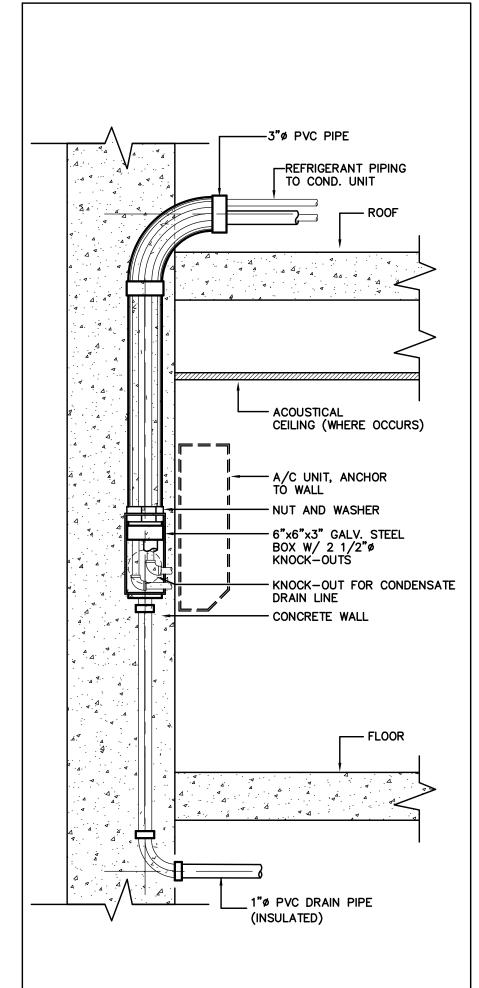
- 1. PROVIDE A UL LISTED FIRE DAMPER AND A BACKDRAFT DAMPERAT DISCHARGE DUCTWORK.
- KITCHEN HOOD SHALL BE SINGLE SHELL TYPE STAINLESS STEEL 18 GAUGE KITCHEN FUME HOOD. JOINTS AND SEAMS SHALL BE LIQUIDTIGHT.
  HOOD SHALL INCLUDE THE FOLLOWING FACTORY FURNISHED OPTIONS:
  a) STAINLESS STEEL NON-CLOGGING GREASE FILTERS. FILTER HOUSING SHALL TERMINATE INTO AN INTERNALLY PITCHED FULL—LENGHT GREASE THOUGH WICH SHALL DRAIN INTO A REMOVABLE RECESSED GREASE CONTAINER.
- b) FULL LENGHT GREASE TROUGH PITCHED TO GREASE CONTAINER. c) U.L. LISTED LIGHT FIXTURES PREWIRED TO A JUNCTION BOX FOR FIELD POWER CONNECTION.
- d) ON/OFF SWITCHES FOR LIGHTS AND FAN CONTROL. ENTIRE HOOD CONSTRUCTION SHALL BE IN STRUCT ACCORDANCE WITH N.F.P.A. 96
- AND NEC. EXHAUST DUCTWORK SHALL BE STAINLESS STEEL DUCT 18 GA. AS PER NFPA 96.
- 4. PROVIDE A PRE-ENGINEERED FIRE PROTECTION SYSTEM CABINET. LOCATION SHALL BE COORDINATED AT FIELD WITH OWNER.



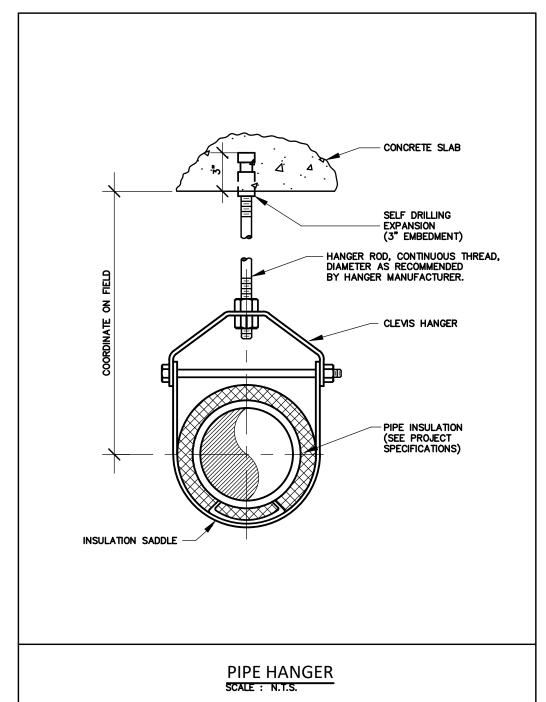


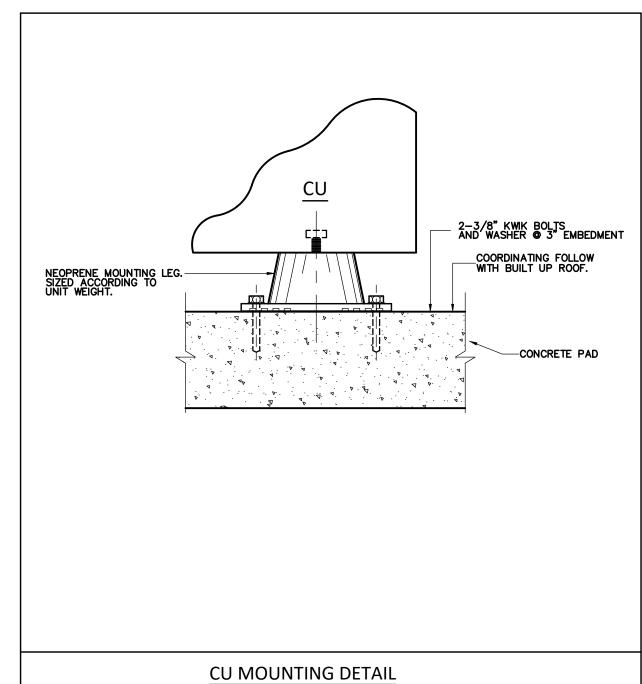


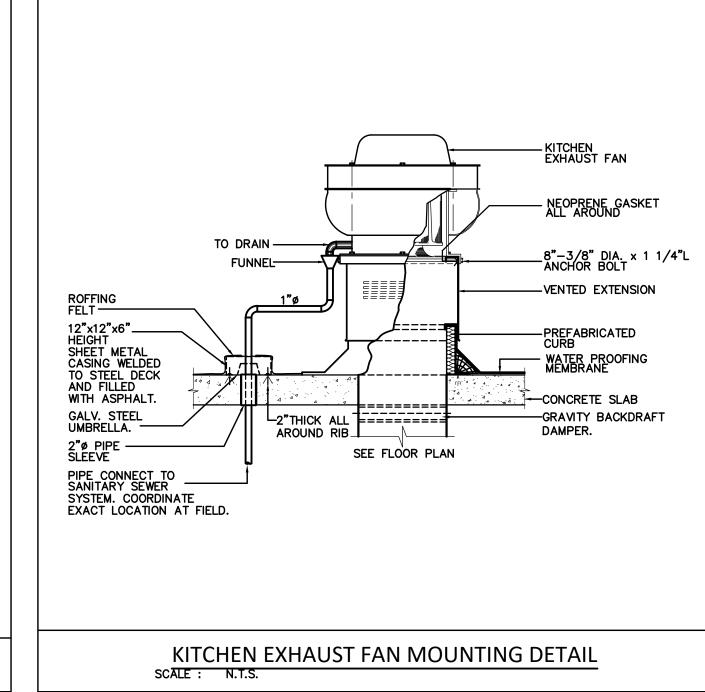


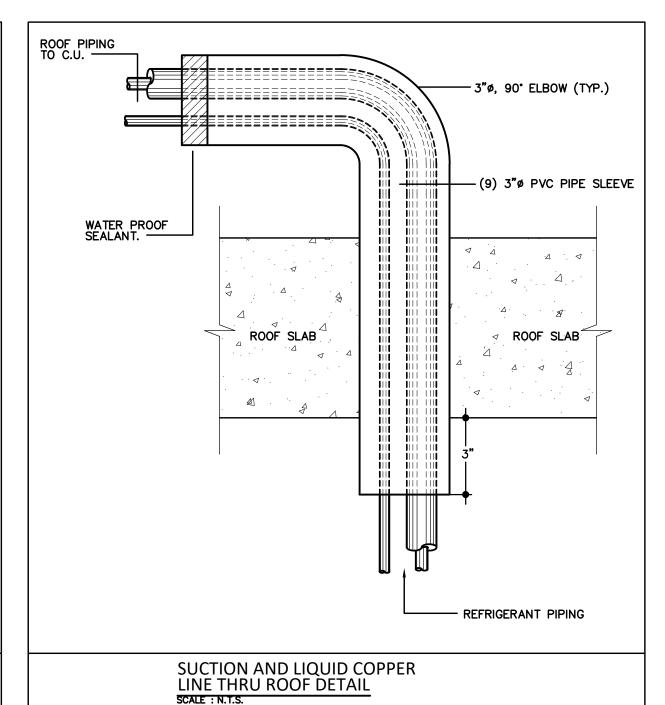


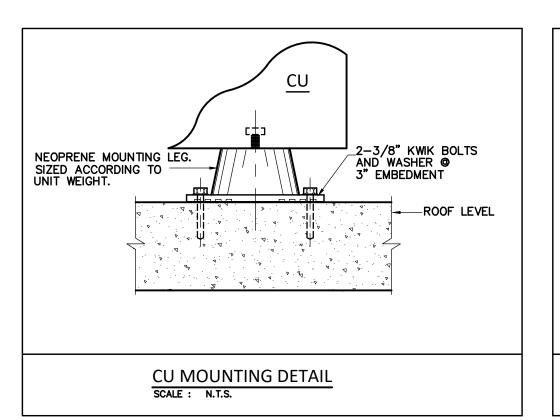
SPLIT UNIT INSTALLATION DETAIL

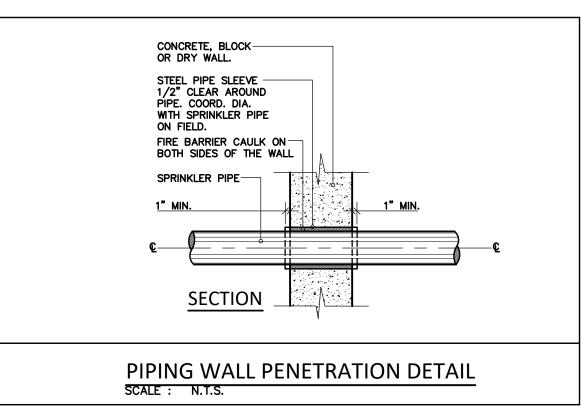


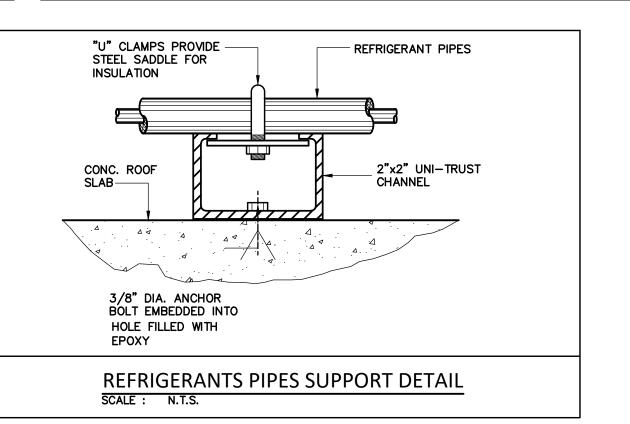




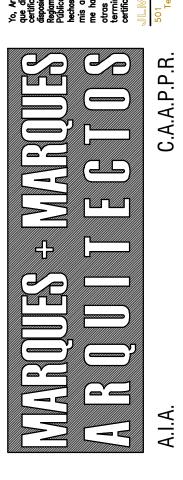












9 44444

eau , PR

Godre Salinas,

en,

Guillerma C. Miguel Te

o o

ilitation Guillermo (

о О

Rehal

A