CARTA DE TRAMITE

Para: Departamento de Educación
Dr. Eligio Hernández Pérez
Secretario de Educación

De: Nombre de la Compañía Consultora:
Dirección Postal:
Teléfono:
Nombre del Representante Autorizado:

Firma:

Escuela: Santiago Rivera Garcia

Código: 55241

Municipio: Yauco

Fecha de Inspección: 1/18/2020

Escuela:

Nombre del Ingeniero que emite la recomendación: Rafael Pozo

Anejos:

1. Recomendación al Secretario
2. Estampilla Digital Especial emitida por el CIAPR
3. Informe de inspección Ocular

OCULAR INSPECTION CHECKLIST

p

A. GENERAL INFORMATION

1. Street Address of the School: Carr. 368, KM. 0.2, Bo Susua.

   City: Yauco State: Puerto Rico Zip: 00698

2. School Name: Santiago Rivera Garcia

3. Date of inspection: January 18, 2020_

4. Inspector's Name: Eng. Rafael Pozo Montás

B. BUILDING SITE INSPECTION

5. **Utility Service Safety:**

IMPORTANT–Immediately following an earthquake, check the entire property, especially near appliances, for the smell of gas. If gas odor is detected, turn off the gas at the meter where it enters the house. Locate and repair leaks before turning gas back on. If the gas odor persists after the gas has been shut off, vacate the building and contact the gas utility company immediately.

IMPORTANT–Before entering a damaged, vacant building verify that gas is off. Check the gas meter for damage and position of main gas valve, either a manual valve or a seismically-activated gas shut-off valve. Do not enter the building if gas odor is detected.

a. Odor of natural gas leakage? ☐ YES ☒ NO b. Downed powerlines? ☐ YES ☒ NO

6. **Surrounding topography:** (check one)

- ☒ Flat
- ☐ Gently sloping (easily walkable)
- ☐ Steeply sloping (difficult or impossible to walk in some areas)

7. **Building pad:** (check one)

- ☐ Flat
- ☒ Terraced or multilevel
- ☐ Gently sloping (less than 4-foot ground surface elevation difference across house)
- ☐ Steeply sloping (greater than 4-foot ground surface elevation difference across house)

8. **Geotechnical Issues:** (if yes, provide description and photos)	YES	NO
a. New cracks in the ground?	☐	☒
b. Signs of fresh cracking in or movement of hardscape?	☐	☒
c. Signs of fresh cracking in or movement of retaining walls?	☐	☒
d. Patterns of cracking that extend through the ground surface, hardscape, and improvements?	☐	☒
e. Evidence of sand boils or other fresh-appearing deposits of sand or mud?	☐	☒
f. Unusual slumping, rising, or bulging of the ground surface?	☐	☒
g. Evidence of rock falls or slope instability above site?	☐	☒
h. Ground movement or wet areas indicating possible broken underground utility lines?	☐	☒
i. Other phenomena (e.g., septic tanks surfacing, differential settlement, ground consolidation)?	☐	☒

OCULAR INSPECTION CHECKLIST

B. BUILDING SITE INSPECTION (continued)

		YES	NO
9.	Evidence of earthquake-induced permanent ground deformation in the immediate vicinity of the property?	☐	☒

C. GENERAL BUILDING INFORMATION

10. Safety Assessment Tag: (check one) ☐ None ☐ Green ☒ Yellow ☐ Red

(others): ☐ Yellow ☐ Red

11. a) Year of original construction (best estimate): 5 yrs. Santiago Rivera
45 yrs escuela Luis Muñoz Marín aquí hay dos escuelas juntas

b) Total square footage (best estimate): 52,300 SQ. FT. Santiago Rivera
31,900 Sq. Ft. escuela Luis Muñoz Marín

		YES	NO
12.	Have any repairs, modifications, or demolition been performed since the earthquake?	☐	☒

If yes, describe _____

13. Building configuration:
- ☐ a. Single story
- ☒ b. Combination one and two story
- ☐ c. Full two story
- ☐ d. Three story
- ☐ e. Split level
- ☐ f. Typical
- ☐ g. Other, describe _____

14. Exterior wall finish:
- ☐ a. Stucco
- ☐ b. Panel siding
- ☐ c. Metal siding
- ☐ d. Masonry veneer
- ☒ e. Other, describe Cement plaster

15. Foundation configuration:
- ☒ a. Slab-on-grade
- ☐ b. Crawlspace without cripple walls
- ☐ c. Crawlspace with cripple walls
- ☐ d. Exposed piers or posts
- ☐ e. Typical
- ☐ f. Metal
- ☐ g. Other, describe _____

16. Sill bolting:
- ☐ a. Structure bolted to foundation
- ☒ b. Structure not bolted to foundation
- ☐ c. Don't know

17. Roof configuration:
- ☐ a. Gable
- ☐ b. Hip
- ☒ c. Flat or very low slope
- ☐ d. Shed
- ☐ e. Other, describe _____

18. Roof covering:
- ☐ a. Asphaltic membrane
- ☐ b. Wood shingle or shake
- ☐ c. Concrete
- ☐ d. Metal
- ☒ e. Elastomeric
- ☐ f. Other, describe _____

OCULAR INSPECTION CHECKLIST

Where description is indicated, attach additional pages of notes and photographs keyed to appropriate checklist item.

D. EXTERIOR BUILDING INSPECTION

	YES	NO	N/A
19. General: (if yes, provide description and photos)			
a. Collapse, partial collapse, or building off foundation?	☐	☒	
b. Obvious lean in any story?	☐	☒	
20. Exterior walls: (if yes, provide description and photos)			
a. Fresh cracking at corners of door and window openings?	☐	☒	☐
b. Fresh cracking at building corners?	☐	☒	☐
c. Door or window openings racked out of square?	☐	☒	☐
d. Broken glass in windows or doors?	☐	☒	☐
e. Wall leaning?	☐	☒	☐
f. Bulging or delamination of stucco?	☐	☒	
g. Pattern of cracking that extends from the ground surface, through foundation, and wall?	☐	☒	
h. Evidence of recent relative movement at mudsill line?	☐	☒	
i. . At locations where the exterior stucco is continuous from the framing down over the foundation, is there cracking of stucco along the mudsill level accompanied by indications of permanent displacement (sliding) of the building relative to the foundation?	☐	☒	☐
j. Collapse, partial collapse, or separation of masonry veneer?	☐	☒	☐
k. Severe cracking, separations, or offsets at building irregularities?	☐	☒	☐
21. Foundation: (if yes, provide description and photos)			
a. Fresh cracking of exposed perimeter foundation?	☐	☒	
b. Relative movement between slab and footing in "two-pour" slab-on-grade foundations?	☐	☒	☐
c. Ask homeowner if any earthquake retrofits have been done to the home?	☐	☒	☐
If Y describe:_____			
d. If the answer to c is Y, were bolts added to connect the home to the foundation?	☐	☐	☒
e. If the answer to c is Y, were plywood or sheathing added to any cripple walls under the home?	☐	☐	☒

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D. EXTERIOR BUILDING INSPECTION (continued)

22. Kitchen Hook (if yes, provide description and photos)	YES	NO	N/A
a. Present on external wall?	☐	☒	☐
b. Present at internal location?	☐	☒	☐
c. Collapse or partial collapse?	☐	☒	☐
d. Visible damage or cracking?	☐	☒	
e. Visible tilting or separation from building?	☐	☒	☐
f. Shifted or loose and displaced	☐	☒	☐
g. Deterioration or deformation	☐	☒	☐
	☐	☐	☐

23. Roof: (if yes, provide description and photos)			
a. Shifted or dislodged or concrete damage?	☐	☒	☐
b. Impact damage to roof from falling object?	☐	☒	☐
c. Displaced rooftop HVAC units?	☐	☒	☐
d. Significantly sagging roofridgelines?	☐	☒	☐
e. Signs of movement between rafter tails and wall finishes at eaves?	☐	☒	☐
f. . Buckled/dislodged flashing or tearing of roof membrane, roof/wall intersections in split level buildings, additions, or other building irregularities?	☐	☒	☐
g. Tearing of roof membrane or deck waterproofing at re-entrant corners?	☐	☒	☐
h. Toppling, shifting, or damage/leakage at refrigerant and electrical lines of rooftop mechanical equipment?	☐	☐	☒
i. Shifting of or damage to solar panels?	☐	☐	☒

OCULAR INSPECTION CHECKLIST

Where description is indicated, attach additional pages of notes and photographs keyed to appropriate checklist item.

D. EXTERIOR BUILDING INSPECTION (continued)

	YES	NO	N/A
24. Attached or abutting improvements: (if yes, provide description and photos)			
a. Collapse, partial collapse, or separation of attached porches, carports, Gazebos, or awnings?	☐	☐	☒
b. Evidence of recent settlement or displacement of exterior steps, patios, or walkways relative to the building?	☐	☒	
c. Signs of movement between building floor and/ or exterior hardscape or retaining wall along the uphill side of hon steeply sloping sites?	☐	☒	☐
d. Toppling, shifting, or damage/leakage at refrigerant and electrical lines of air conditioning condenser unit(s)?	☐	☐	☒
25. Independent exterior improvements: (if yes, provide description and photos)			
a. Damaged detached gazebo?	☐	☒	☐
b. Damage to fences / privacy walls?	☐	☒	☐
c. Damage to retaining walls?	☐	☒	☐
d. Damage to walkway?	☐	☒	☐
e. Evidence of leakage from water supply lines?	☐	☒	☐
f. Toppling, shifting, or damage/leakage at fuel connection of propane tanks?	☐	☒	☐
g. Others damage	☐	☐	☒

E. INTERIOR INSPECTION

26. General information

a. If interior access not possible, identify reason

- ☐ i. Red tag
- ☐ ii. Hazardous materials
- ☐ iii. Other hazardous condition, describe _____
- ☐ iv. Other, describe _____

b. Typical wall and ceiling finish

- ☐ i. Drywall
- ☐ ii. Plaster on gypsum lath
- ☐ iii. Plaster on wood lath
- ☒ iv. Other, describe **Cement plaster**

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Where description is indicated, attach additional pages of notes and photographs keyed to appropriate checklist item.

E. INTERIOR INSPECTION (continued)

27. Walls: (if yes, provide description and photos)	YES	NO	N/A
a. Fresh cracking, buckling, spalling, or detachment of interior wall finish at corners of door and window openings?	X		
b. Fresh cracking of wall finishes at wall corners or wall/ceiling intersections?	X		
c. Door or window openings racked out of square?		X	
d. Wall leaning?		X	
e. Pattern of cracking that extends from the floor slab through the wall?		X	
f. Movement or sliding of walls relative to the floor?		X	
g. Severe cracking, separations, or offsets at building irregularities?		X	
h. Doors damaged, difficult to operate, or inoperable?		X	
i. Windows damaged, difficult to operate, or inoperable?		X	
28. Ceilings: (if yes, provide description and photos)			
a. Collapse of ceiling finish?		X	
b. Fresh cracking of ceiling finishes, especially at re-entrant corners; cracks along corner bead at stairwell openings; cracking or tearing of finishes at ceiling/wall juncture; or multiple "nail pops"?		X	
c. Damage to ceiling finishes in vicinity of corridors or commons places?		X	
d. Separations or cracks in ceiling finishes at split-levels, re-entrant corners, additions, appendages, or other building discontinuities?		X	
e. Water damage or evidence of recent leakage from plumbing lines or roofing?		X	

OCULAR INSPECTION CHECKLIST

Where description is indicated, attach additional pages of notes and photographs keyed to appropriate checklist item.

E. INTERIOR INSPECTION (continued)

29. Floors: (if yes, provide description and photos)	YES	NO	N/A
a. Evidence of recent sloping, sagging, settlement or displacement of floors?	☐	☒	☐
b. In slab-on-grade locations, fresh cracking of floor slab or floor finishes?	☐	☒	☐
c. Significant sagging or unusual bounciness of floors frames?	☐	☒	☐
d. Separations or cracks in floor finishes at split-levels, re-entrant corners, additions, appendages, or other building discontinuities?	☐	☒	☐
e. Signs of movement between floor and exterior hardscape or retaining wall along the uphill side of homes on steeply sloping sites?	☐	☒	☐
f. A pattern of fresh cracks, gaps, or joint separations in floor finishes?	☐	☒	☐
g. Impact damage to floor finishes from falling contents?	☐	☒	☐

30. Mechanical systems: (if yes, provide description and photos)	YES	NO	N/A
a. Displaced connection of appliance flues connected to chimneys?	☐	☐	☒
b. Toppling, shifting, leakage from tank, leakage from water connections displaced flue connection or damage/leakage at gas line or electrical connection of water heater?	☐	☐	☒
c. Shifting, damage/leakage at gas line, flue connection, electrical connection, refrigerant line, and condensate drain connection of furnace or air conditioning fan-coil unit?	☐	☒	☐
d. Damage to gas line of gas stoves or gas fueled clothes dryers?	☐	☒	☐
e. Damage to toilets?	☐	☒	☐
f. Decreased or restricted water pressure at appliances, faucets, or toilets?	☐	☒	☐
g. Toppling or shifting of free-standing wood stove and/or flue?	☐	☒	☐
h. Toppling, shifting, damage/leakage at fuel connection of fuel oil tank?	☐	☐	☒
i. Other Damage in the dining room	☐	☐	☒
j. Damage near the gas tank	☐	☒	☐

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Where description is indicated, attach additional pages of notes and photographs keyed to appropriate checklist item.

E. INTERIOR INSPECTION (continued)

		YES	NO	N/A
31.	**Architectural woodwork and special finishes: (if yes, provide description and photos)**			
	a. Shifting of or damage to kitchen or bathroom cabinetry?	☐	☒	☐
	b. Impact damage to countertops from falling objects?	☐	☒	☐
	c. Cracking of ceramic tile in showers or tub/shower enclosures consistent with	☐	☒	☐

F. CONTINGENT INSPECTIONS

		YES	NO	N/A
32.	**Retaining Tank Wall damage?**	☐	☐	☒
33.	Water tank or other field subterranean structure	☐	☐	☒

OCULAR INSPECTION CHECKLIST

G. RECOMENDACIÓN AL SECRETARIO

Departamento de Educación
Dr. Eligio Hernández Pérez
Secretario de Educación

Hora de Entrada a Inspección: 3:30 pm

Hora de Salida de Inspección: 5:00 pm

Escuela: Santiago Rivera Garcia

Código: 55244

Municipio: Yauco

Fecha de Inspección: 1/16/2020

Abrir Escuela (Verde)	☐
Abrir Parcialmente la Escuela (Amarillo)	X
No Abrir la Escuela (Rojo)	☐

Comentarios: No abrir edificio Luis Muñoz Marín por columnas muy agrietadas.
Salones Taller de soldadura no se pueden usar, tiene pared de bloque muy agrieta (Santiago Rivera)

En visita realizada se inspeccionaron varios edificios de dos niveles y la cacha (techada) de la escuela en referencia. La inspección responde a los eventos ocurridos de movimientos sísmicos durante las pasadas semanas.

Se verificaron los elementos estructurales del primer, segundo y tercer nivel. En este momento no exhiben daños estructurales visibles que pueden comprometer la integridad de la estructura.

Disclaimer:

It should be noted that, as requested, this report is based solely on a visual inspection of the as-is facility for the purpose of assessing the presence of significant structural damage resulting from the seismic event of January 07, 2020 which may affect its structural condition compared to that prior to the seismic event.

The determination of the structural adequacy of the existing facility to meet the applicable design and construction building codes requirements as well as developing recommendations for the rehabilitation of the facility will require a more extensive investigation than that one requested to be conducted and reported herein.

Rafael Pozo Montás
Nombre (Letra de Molde)

Firma

10028
Licencia

Rafael A. Pozo Montas
Ingeniero Licenciado
Lic. 10028 PE RPA
Puerto Rico

Fecha de Expiración 2024-09-30

COLEGIO DE INGENIEROS Y AGRIMENSORES
DE PUERTO RICO

PO Box 363845 * San Juan, Puerto Rico * 00936-3845
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ESTAMPILLA DIGITAL ESPECIAL (EDE)

Ing. Rafael A. Pozo Montás, PE

Práctica de:	Ingeniería
Licencia:	10028 RPA
Renglón:	Servicio Profesional
Descripción del Trabajo:	Informes Periciales
Fecha de Emisión:	2020-01-20
Monto Emitido:	$5
Número de Serie:	5431-3338-8036-0606
Número de Caso:	55244
Proyecto / Unidad:	Santiago Rivera Garcia
Rol del Profesional:	Evaluador

SELLO PROFESIONAL

Certificación:

El profesional certifica con la emisión de la estampilla digital especial del Colegio de Ingenieros y Agrimensores de Puerto Rico el haber cumplido con las disposiciones de la Sección 11 de la Ley 319 del 15 de mayo de 1938, según enmendada.

La colocación del sello profesional constituye la cancelación de la estampilla digital especial