

LIFEGUARD TOWERS

CENTRO VACACIONAL Y BALNEARIO BOQUERON
AVE. PARQUE NACIONAL, CABO ROJO, PR 00623

ISSUED FOR BID - NOT FOR CONSTRUCTION

CATASTRO #380-000-002-08



LOCATION PLAN	FLOOD PLAN	CALIFICATION PLAN	CORRESPONDENCE	LIST OF DRAWINGS	CERTIFICATION
CATASTRO #380-000-002-08	12 MAYO 2018_#1545J	HOJA 380-000 / CABO ROJO			
			OWNER: DRNA SECTOR EL CINCO CARR. 8838 KM 6.3 RIO PIEDRAS, PR 00926 TEL: (787) 999.2200 DESIGNER: M2A GROUP, PSC ING. MANUEL BERMUDEZ PAGAN LICENCIA: 15.572 867 AVE. MUNOZ RIVERA COND. VICK CENTER, SUITE D-305 SAN JUAN, PR 00925 TEL: (939) 338.2121 STRUCTURAL CONSULTANT: RIVERA & FRANQUI, CSP ING. MANUEL A. RIVERA ALBELO PO BOX 140579 ARECIBO, PR 00614-0579 TEL: (787) 314.8281 EMAIL: RYF@RIVERAFRANQUI.COM	ARCHITECTURAL DRAWINGS: A.000 COVER SHEET A.001 SITE PLAN A.100 CONSTRUCTION PLANS A.101 CONSTRUCTION PLANS, ALT.01 A.200 EXTERIOR ELEVATIONS A.201 EXTERIOR ELEVATIONS, ALT.01 STRUCTURAL DRAWINGS: S.100 FOUNDATION PLAN, SECTION AND DETAILS S.101 FLOOR & ROOF FRAMING PLAN, AND SECTIONS S.102 SECTIONS & DETAILS S.103 DETAILS S.601 STRUCTURAL NOTES	YO, ING. MANUEL BERMUDEZ PAGAN, LICENCIA 15.572, CERTIFICO QUE SOY EL PROFESIONAL QUE CONFECCIONO, PREPARO Y /O DISENO ESOS PLANOS Y LAS ESPECIFICACIONES COMPLEMENTARIAS. TAMBIEN CERTIFICO QUE ENTENDIENDO QUE DICHOS PLANOS Y ESPECIFICACIONES CUMPLEN CON LAS DISPOSICIONES APPLICABLES DEL REGLAMENTO Y CODIGOS DE CONSTRUCCION VIGENTES DE LAS AGENCIAS, JUNTAS REGLAMENTADORAS O CORPORACIONES PUBLICAS CON JURISDICCION. CERTIFICO ADEMAS, QUE EN LA PREPARACION DE ESTOS PLANOS Y ESPECIFICACIONES SE HA CUMPLIDO CAVALMENTE CON LO DISPUESTO EN LA LEY NUM. 14 DEL 8 DE ENERO DEL 2004, SEGUN ENMENDADA, CONOCIDA COMO LA "LEY PARA LA INVERSION POR LA INDUSTRIA PUERTORRIQUENA" Y CON LA LEY NUM. 319 DEL 15 DE MAYO DEL 1938, SEGUN ENMENDADA., LEY NUM. 96 DEL 6 DE JULIO DEL 1978, SEGUN ENMENDADA., SEGUN APLIQUE. RECONOZCO QUE CUALQUIER DECLARACION FALSA O FALSIFICACION DE LOS HECHOS QUE SE HAYA PRODUCIDO POR DESCONOCIMIENTO O POR NEGLIGENCIA YA SEA POR MI, MIS AGENTES O EMPLEADOS, O POR OTRAS PERSONAS CON MI CONOCIMIENTO, ME HACEN RESPONSABLE DE CUALQUIER ACCION JUDICIAL Y DICIPLINARIA POR LA OGPe.

Professional Seal



M2A GROUP, PSC
Ing. Manuel Bermudez Pagan
Licencia: 15.572
867 Ave. Muñoz Rivera
Cond. Vick Center
Suite D-305
San Juan, PR 00925

LIFEGUARD TOWER
CENTRO VACACIONAL Y
BALNEARIO BOQUERON
CABO ROJO, PUERTO RICO

ISSUE
JUNE 5, 2023
RE-ISSUE
MM.DD.YY

PROJECT NO.
PROJECT
LIFEGUARD
TOWER

Cover Sheet

A.000



SITE PLAN

CONSTRUCTION NOTES:			SYMBOL LEGEND:		CERTIFICATION
1.REFER TO ENGINEERS DRAWINGS FOR ADDITIONAL NOTES AND SPECIFICATIONS. 2.G.C. SHALL PREPARE A DETAILED SCHEDULE SHOWING ALL PHASING, IF REQUIRED. 3.G.C. TO COORDINATE ALL PHASES OF CONSTRUCTION FOR PROJECT AND NOTIFY CLIENT REPRESENTATIVE AND ARCHITECT OF ANY DISCREPANCIES OR CONFLICTING CONDITIONS WHICH WOULD INTERFERE WITH THE SATISFACTORY COMPLETION OF WORK. 4.G.C. SHALL CONDUCT A THOROUGH SURVEY OF SPACE AND REPORT ANY DISCREPANCIES TO ARCHITECT PRIOR TO COMMENCEMENT OF CONSTRUCTION. 5.G.C. IS RESPONSIBLE TO COORDINATE WITH BLDG. ADMINISTRATION ALL REQUIRED BLDG. SHUTDOWNS (I.E. FIRE SAFETY, A/C, ELECTRICAL, ETC.) THROUGHOUT COURSE OF WORK.	6.G.C. TO INCLUDE ALL REQUIRED CONTROLLED INSPECTION/SELF -CERTIFIED INSPECTIONS. (NO EXCEPTIONS). 7.G.C. SHALL COMPLY WITH THE GUIDELINES OF THE AMERICANS WITH DISABILITIES ACT. 8.ALL ELECTRIC, PLUMBING & AC WORK SHALL COMPLY, AT LEAST WITH THE MINIMUM REQUIREMENT OF THE UBC CODE. 9. ALL CONSTRUCTION MEANS, METHODS AND MATERIALS SHALL COMPLY, AT LEAST, WITH MINIMUM REQUIREMENTS OF THE BUILDING DEPARTMENT/RULES AND REGULATIONS. 10.G.C. IS RESPONSIBLE FOR SETTING OUT ALL REQUIRED STATUTORY SIGNALING THAT MEET ALL REGULATORY GOVERNING BODIES. 11.ALL WORK TO BE COMPLETED IN STRICT COMPLIANCE WITH ALL LOCAL CODES IN CONFORMANCE TO UBC CODE RULES AND REGULATIONS.	12.G.C. TO ENSURE THE FLOORS MUST REMAIN IN A STATE OF SAFE CONDITION WITH REGARD TO FIRE SAFETY FOR PERSONNEL WORKING ON ALL THE FLOORS. ALL FIRE STAIRS, ALARMS. SPEAKERS, ETC., MUST REMAIN ACCESSIBLE AND OPERABLE AT ALL TIMES. 13. FINAL PLACEMENT OF ALL PARTITIONS SHALL BE CHECKED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORK. G.C. SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF ANY CONFLICT. 14.ALL PARTITION DIMENSIONS ARE FROM FINISHED SURFACE, U.O.N. 15.G.C. CONSTRUCTION SHALL BE OF NONCOMBUSTIBLE MATERIALS. TREATED, FIRE-RESISTANT MATERIALS SHALL BE PERMITTED WHERE APPROVED BY JURISDICTIONAL AUTHORITIES. G.C. SHALL VERIFY AND BE RESPONSIBLE FOR REQUIREMENTS OF ALL FIRE-RESISTIVE ASSEMBLIES AND SEPARATIONS.	⊗ INDICATES DOOR NUMBER ⊗ INDICATES WINDOW NUMBER ⊗ INDICATES FINISH → INDICATES ELEVATION NUMBER → INDICATES DWG. NUMBER ○ INDICATES DETAIL NUMBER ○ INDICATES DWG. NUMBER ○ INDICATES LIGHT FIXTURE		YO, ING. MANUEL BERMUDEZ PAGAN, LICENCIA 15.572, CERTIFICO QUE SOY EL PROFESIONAL QUE CONFECCIONO, PREPARO Y /O DISEÑO ESTOS PLANOS Y LAS ESPECIFICACIONES COMPLEMENTARIAS. TAMBIEN CERTIFICO QUE ENTIENDO QUE DICHOS PLANOS Y ESPECIFICACIONES CUMPLEN CON LAS DISPOSICIONES APLICABLES DEL REGLAMENTO Y CODIGOS DE CONSTRUCCION VIGENTES DE LAS AGENCIAS, JUNTAS REGLAMENTADORAS O CORPORACIONES PUBLICAS CON JURISDICCION. CERTIFICO ADEMAS, QUE EN LA PREPARACION DE ESTOS PLANOS Y ESPECIFICACIONES SE HA CUMPLIDO CAVALMENTE CON LO DISPUESTO EN LA LEY NUM. 14 DEL 8 DE ENERO DEL 2004, SEGUN ENMENDADA, CONOCIDA COMO LA "LEY PARA LA INVERSION POR LA INDUSTRIA PUERTORRIQUENA" Y CON LA LEY NUM. 319 DEL 15 DE MAYO DEL 1938, SEGUN ENMENDADA., LEY NUM. 96 DEL 6 DE JULIO DEL 1978, SEGUN ENMENDADA., SEGUN APLIQUE. RECONOZCO QUE CUALQUIER DECLARACION FALSA O FALSIFICACION DE LOS HECHOS QUE SE HAYA PRODUCIDO POR DESCONOCIMIENTO O POR NEGLIGENCIA YA SEA POR MI, MIS AGENTES O EMPLEADOS, O POR OTRAS PERSONAS CON MI CONOCIMIENTO, ME HACEN RESPONSABLE DE CUALQUIER ACCION JUDICIAL Y DICIPLINARIA POR LA OGPé.

Professional Seal



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Licencia: 15,572
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Suite D-305
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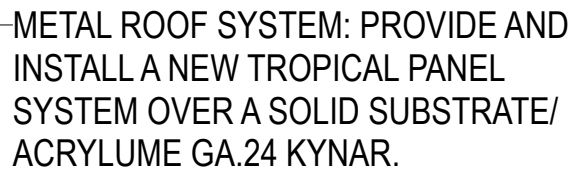
LIFEGUARD TOWER
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CABO ROJO, PUERTO RICO

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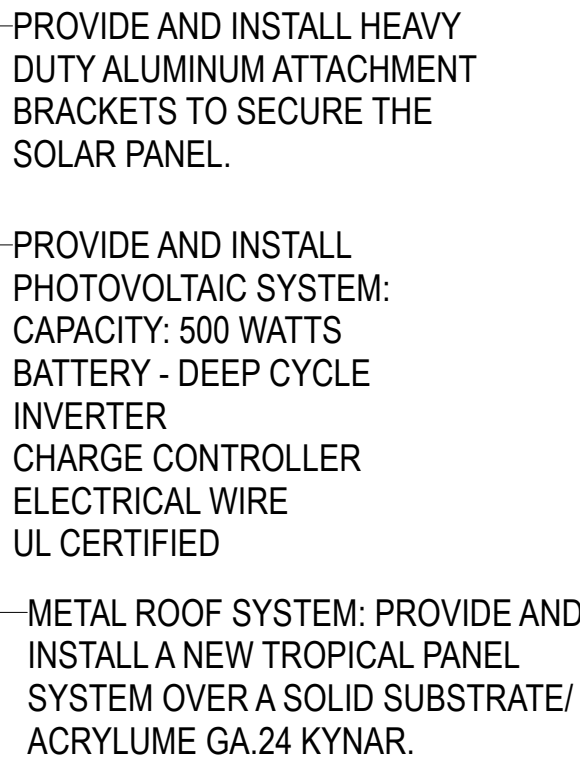
PROJECT
LIFEGUARD
TOWER

SITE PLAN

A.001



ROOF PLAN

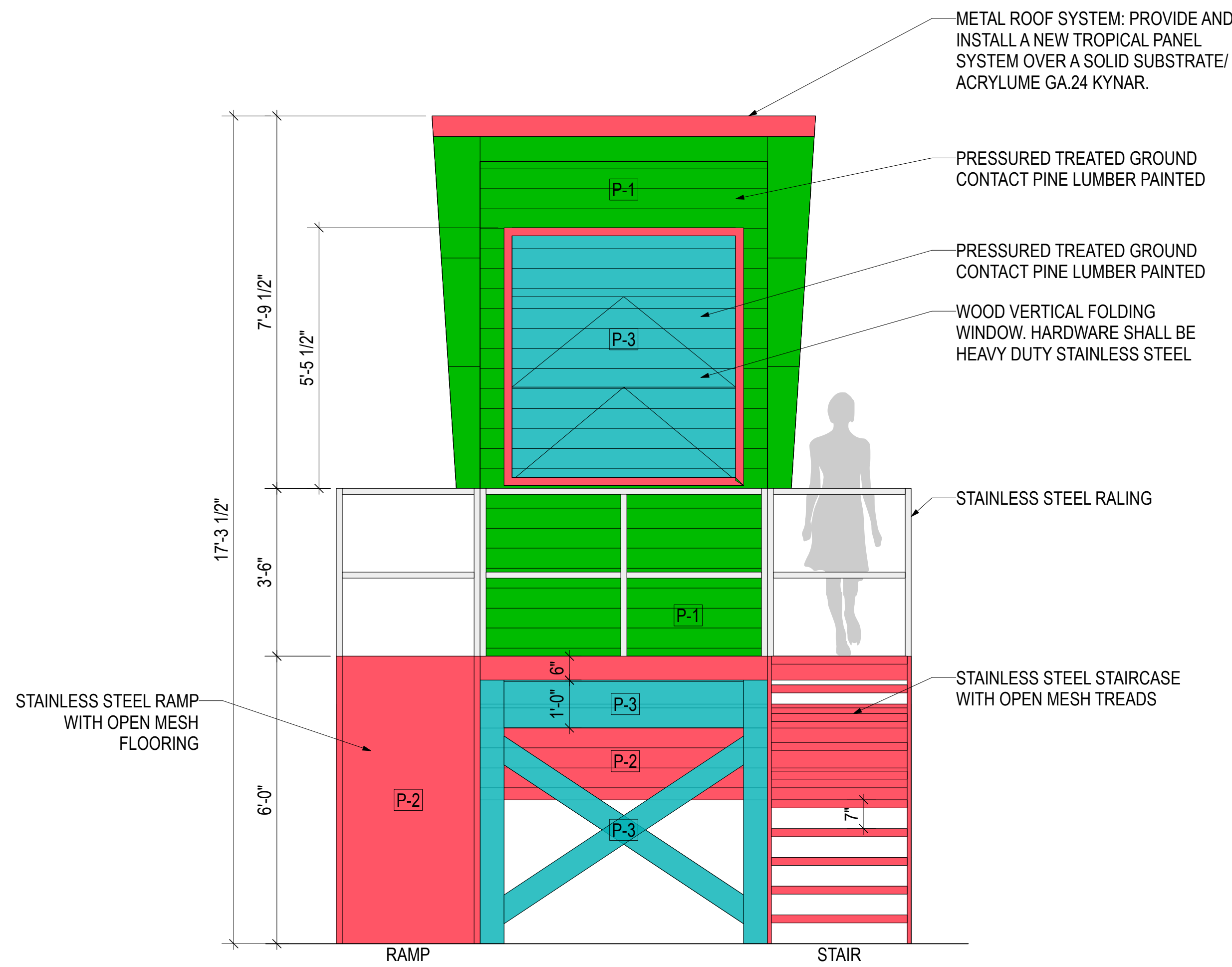


ROOF PLAN WITH PHOTOVOLTAIC SYSTEM

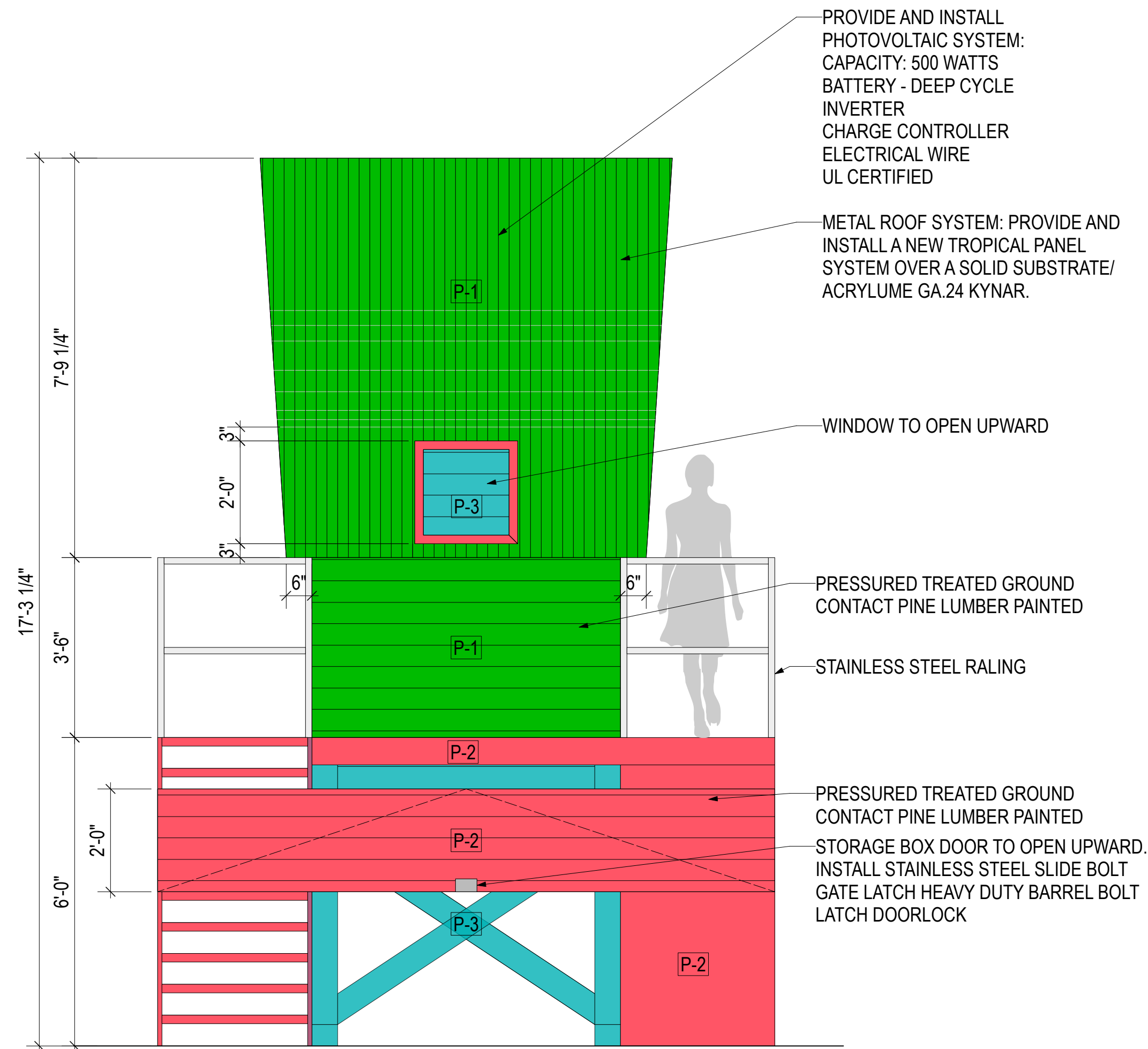
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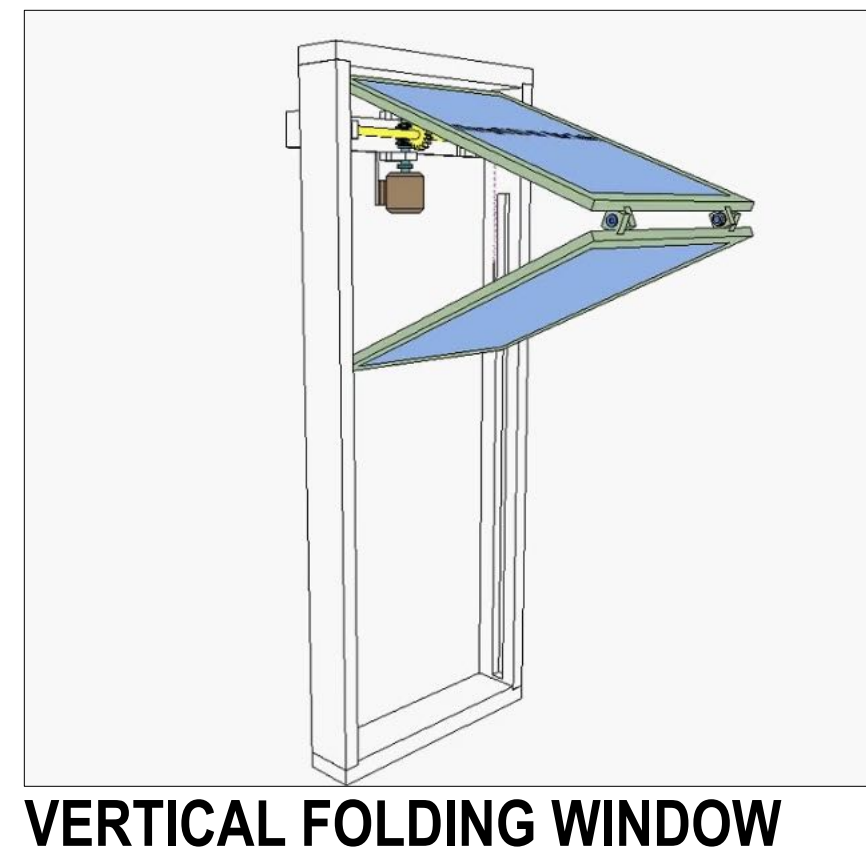
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1. FRONT ELEVATION

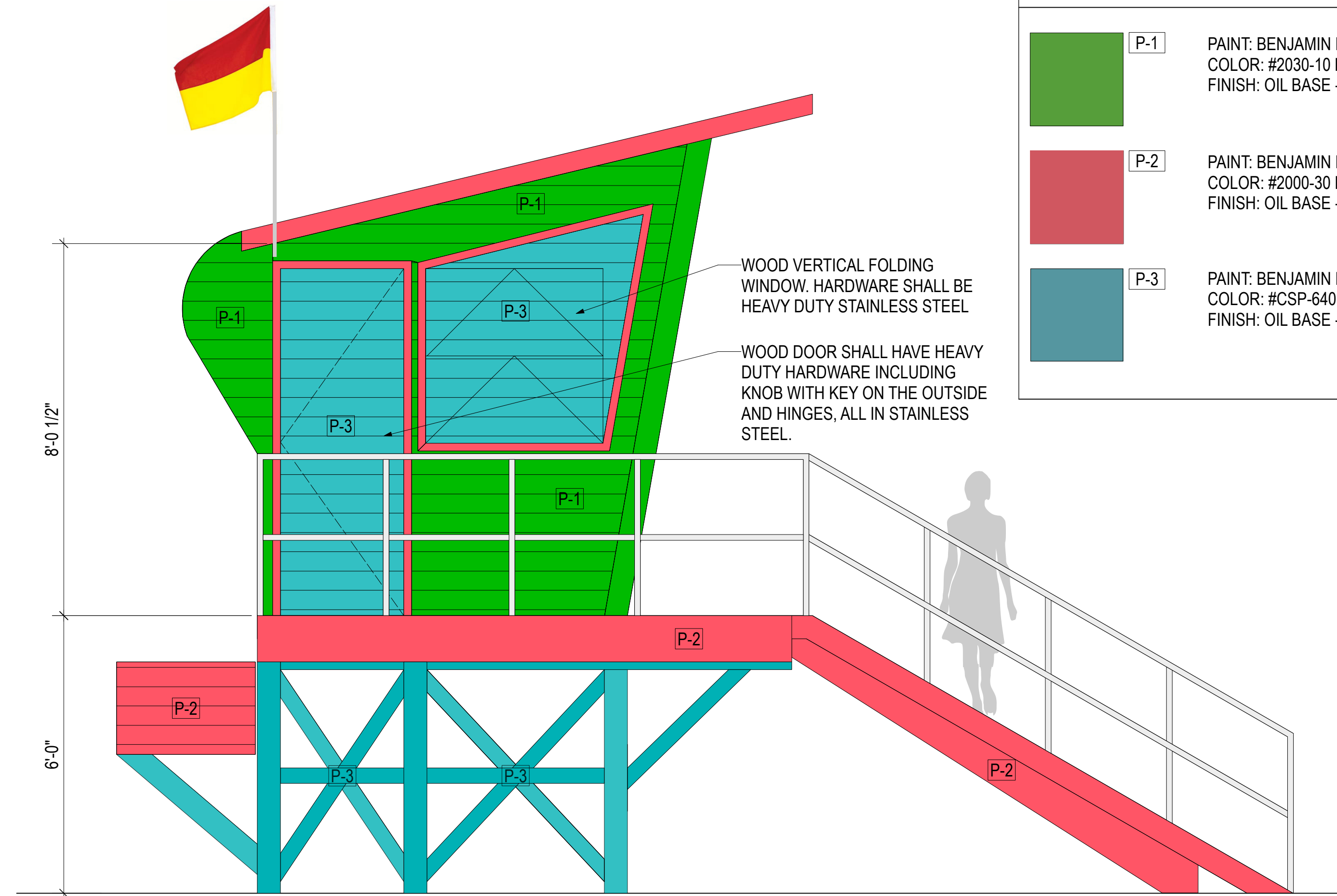


3. REAR ELEVATION

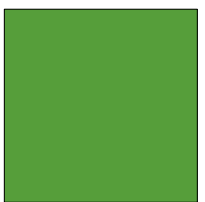
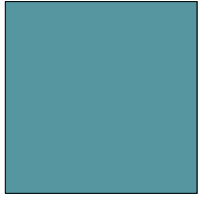


VERTICAL FOLDING WINDOW

2. SIDE ELEVATION



4. SIDE ELEVATION

FINISHES/ COLORS:	
	P-1 PAINT: BENJAMIN MOORE OR SIMILAR COLOR: #2030-10 LIZARD GREEN FINISH: OIL BASE - EXTERIOR
	P-2 PAINT: BENJAMIN MOORE OR SIMILAR COLOR: #2000-30 RED TULIP FINISH: OIL BASE - EXTERIOR
	P-3 PAINT: BENJAMIN MOORE OR SIMILAR COLOR: #CSP-640 IN THE TROPICS FINISH: OIL BASE - EXTERIOR

CERTIFICATION

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LIFEGUARD TOWER
CENTRO VACACIONAL Y
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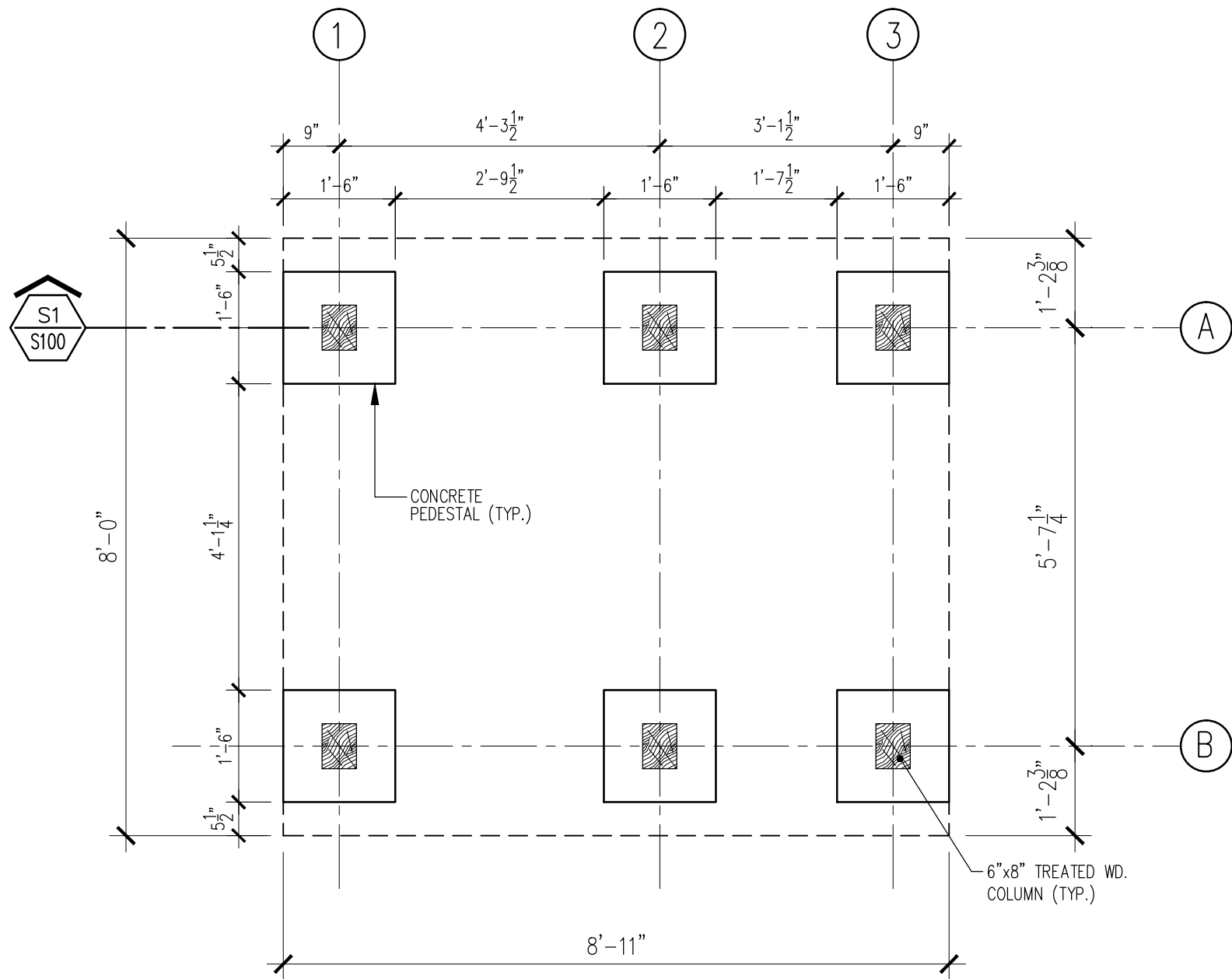
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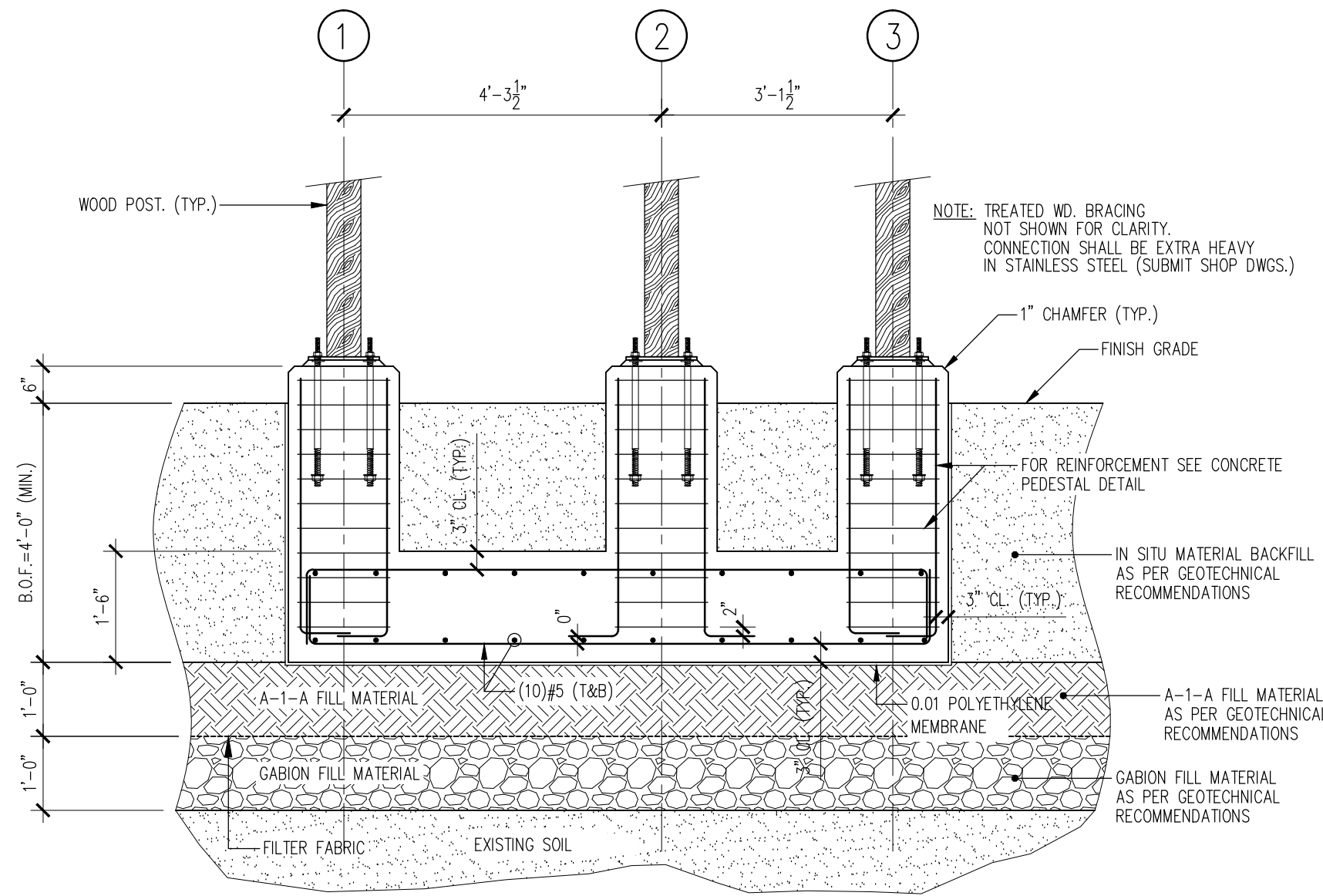
EXTERIOR
ELEVATIONS

A.200



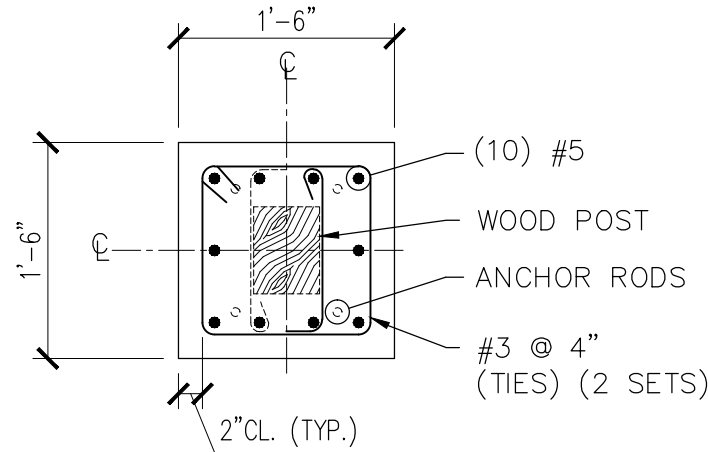
FOUNDATION PLAN

SCALE: 1/2"=1'-0"



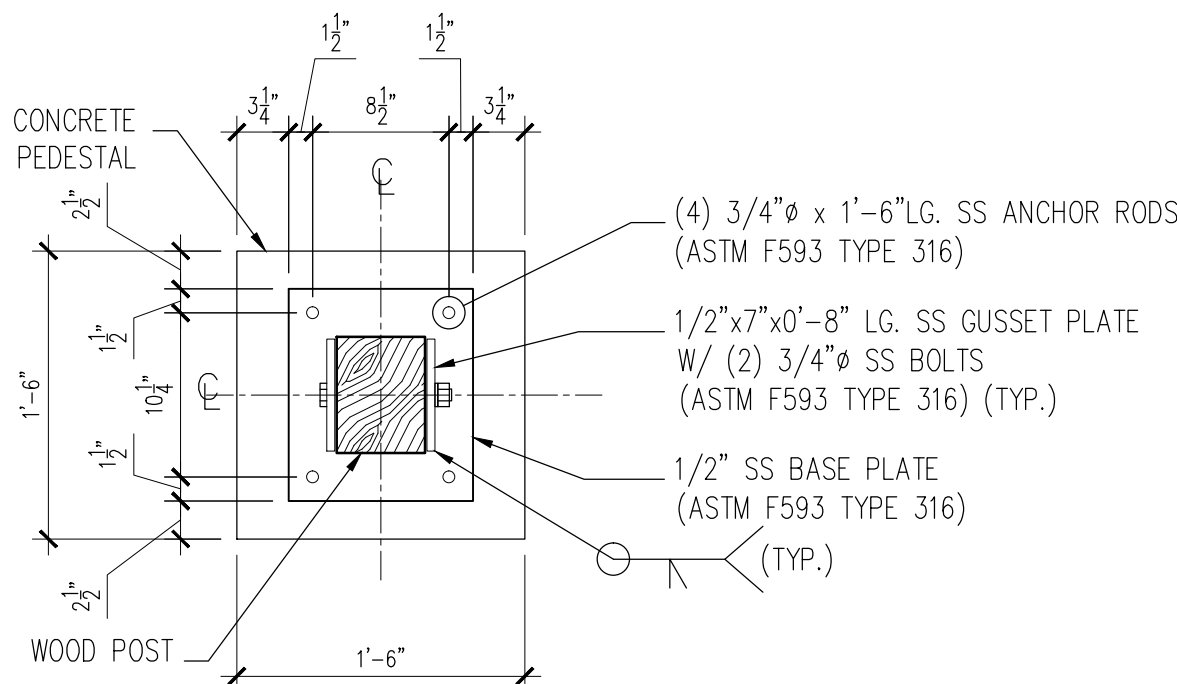
SECTION MK'D "S1"

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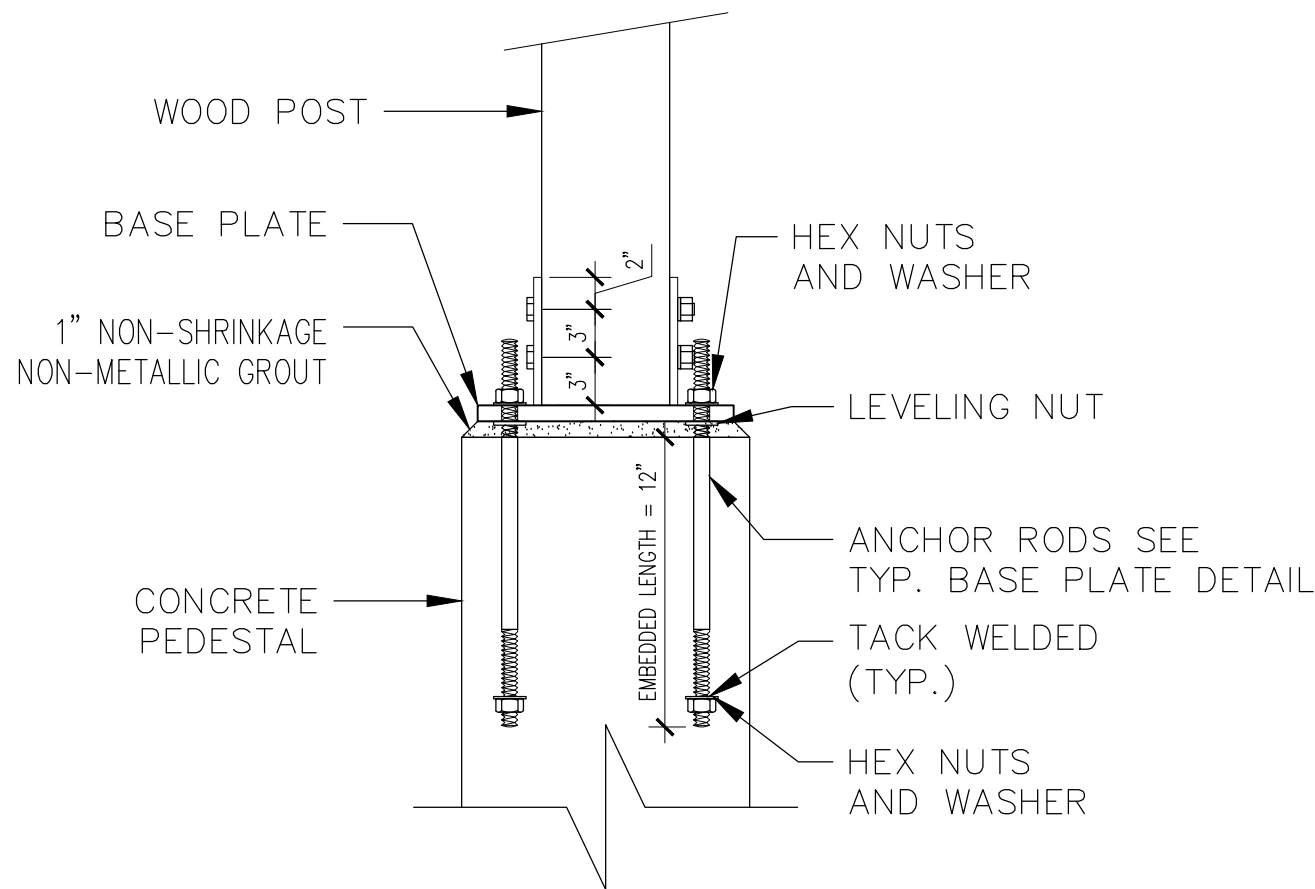
TYPICAL CONCRETE PEDESTAL DETAIL

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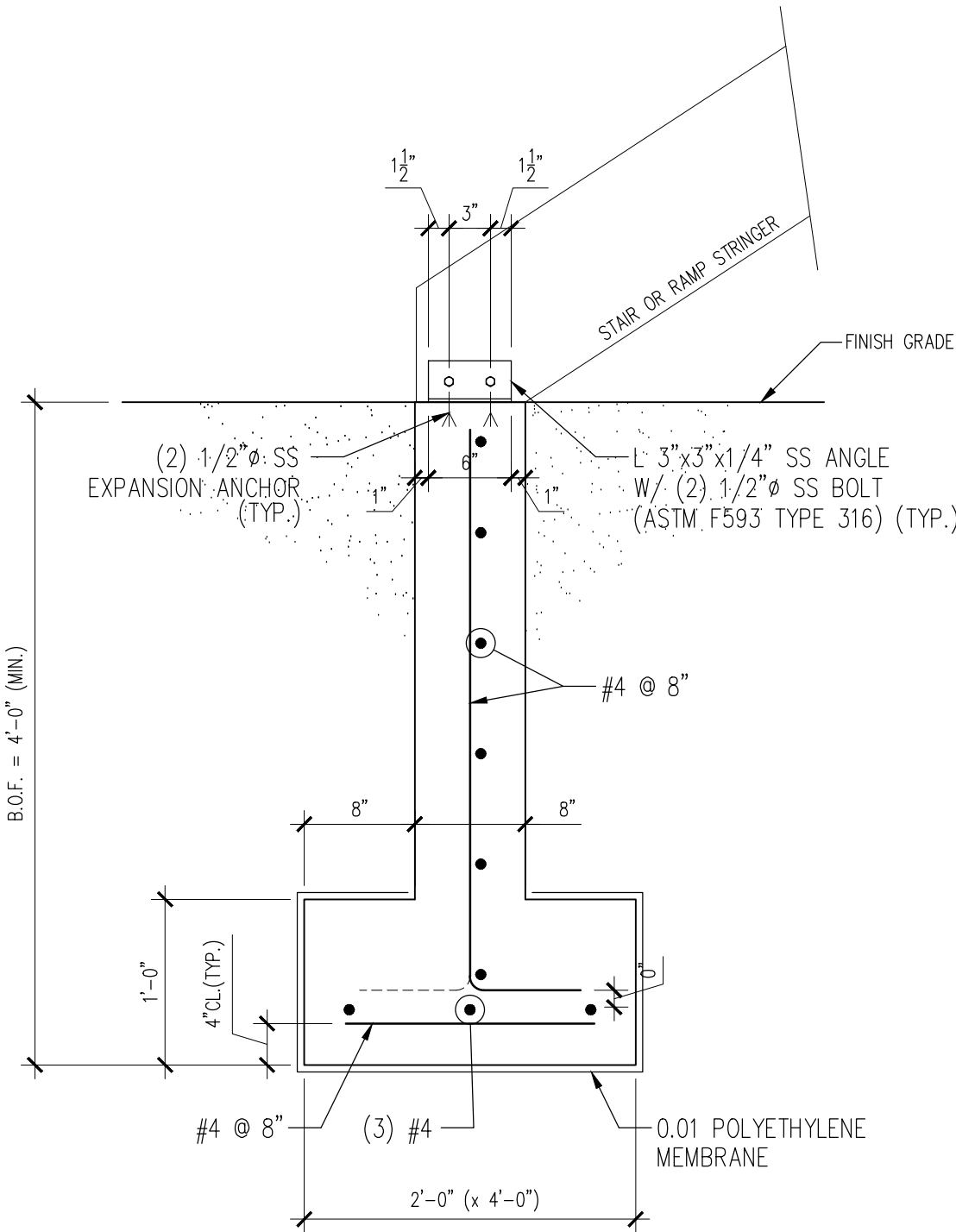
TYPICAL BASE PLATE DETAIL

SCALE: 1"=1'-0"



ANCHOR RODS DETAIL

SCALE: 1"=1'-0"



**TYPICAL STAIR / RAMP
FOUNDATION & WALL DETAIL**

SCALE: 1"=1'-0"

Yo, MANUEL A. RIVERA ALBELO, 18,696 PE, certifico que soy el profesional que preparé 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 Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 319 de 15 de mayo de 1938, según enmendada; Ley Núm. 96 de 6 de julio de 1978, según enmendada y según aplique. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.



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LIFEGUARD TOWERS
VARIOUS LOCATION
PUERTO RICO

PROJECT NO.
FEB 08, 2023

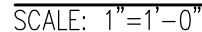
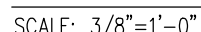
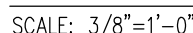
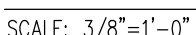
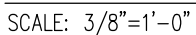
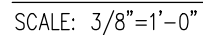
PROJECT
LIFEGUARD
TOWER

**FOUNDATION PLAN,
SECTION
AND DETAILS**

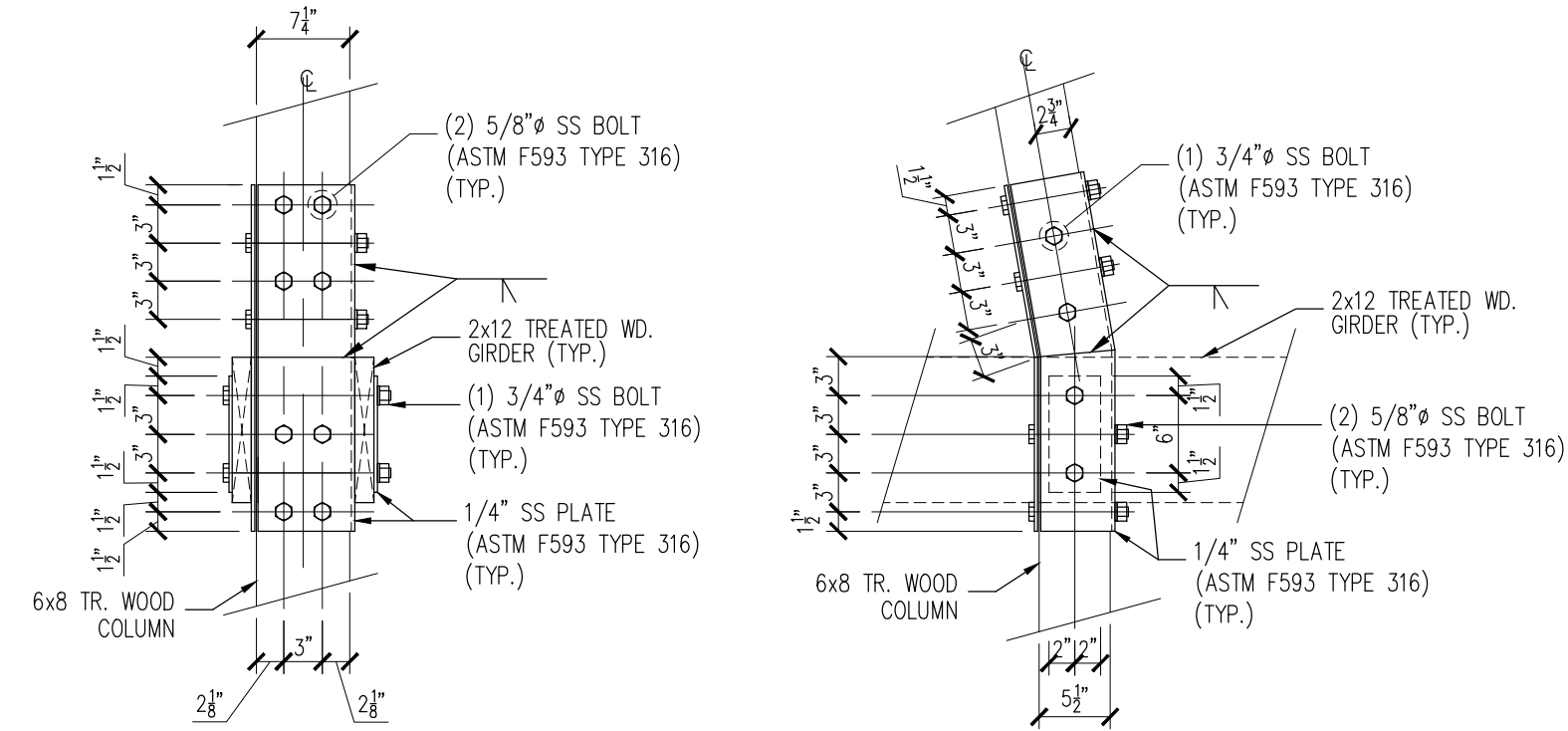
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S100

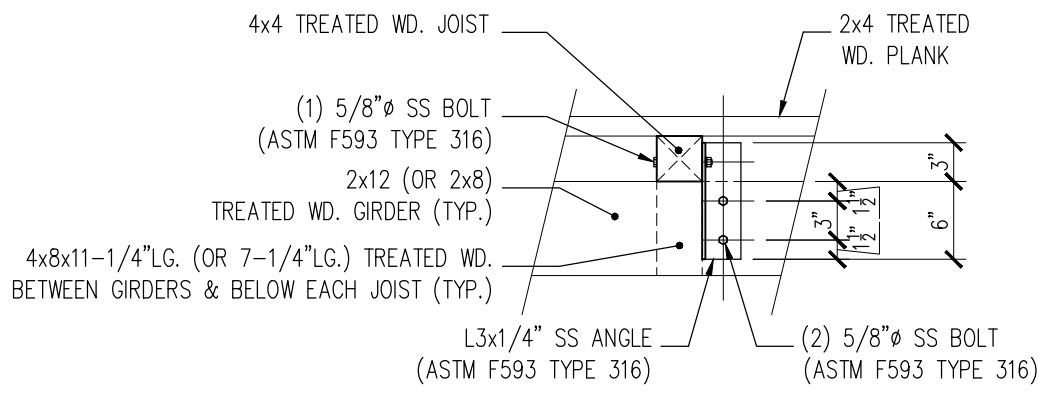
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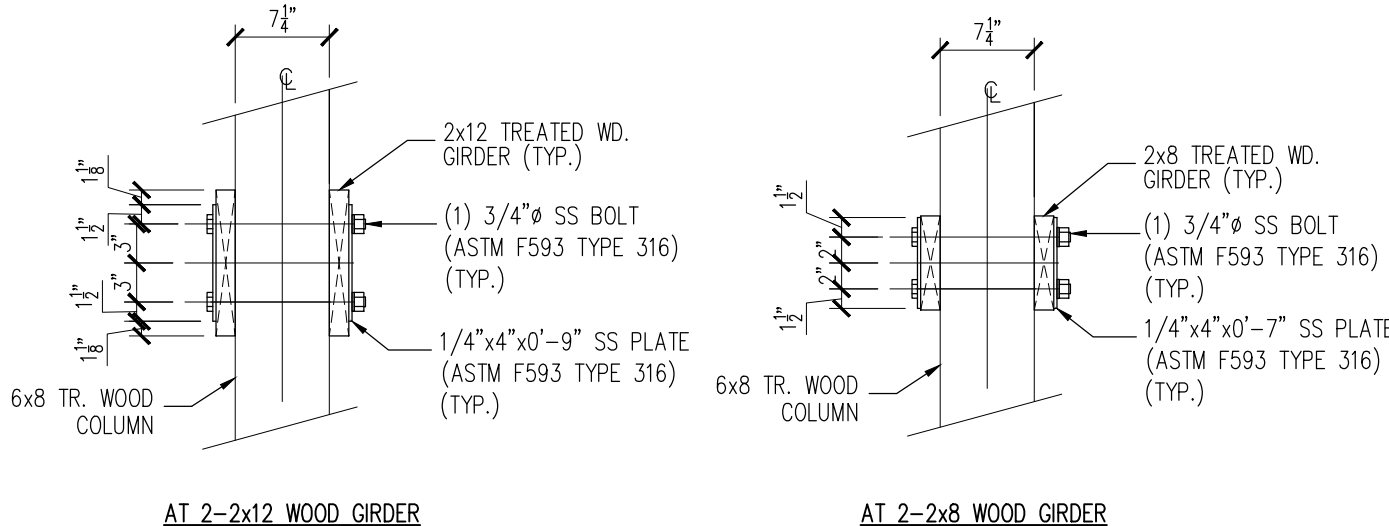
Yo, MANUEL A. RIVERA ALBELO, 18,936 PE, certifico que soy el profesional que preparé estos planes y las especificaciones complementarias. También, certifico que soy el profesional que elaboré los planos y especificaciones complementarias aplicables del Reglamento Conjunto de disposiciones aplicables de los Reglamentos y Códigos de Construcción Vignetas de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones complementarias he cumplido con lo establecido en la Ley 14-2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 319 de 15 de mayo de 1938, según enmendada, conocida como la "Ley de la Ingeniería Profesional". Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o mis representantes, me hará responsable de los daños que ocasionare por cualquier acción judicial disciplinaria por la OSPE.



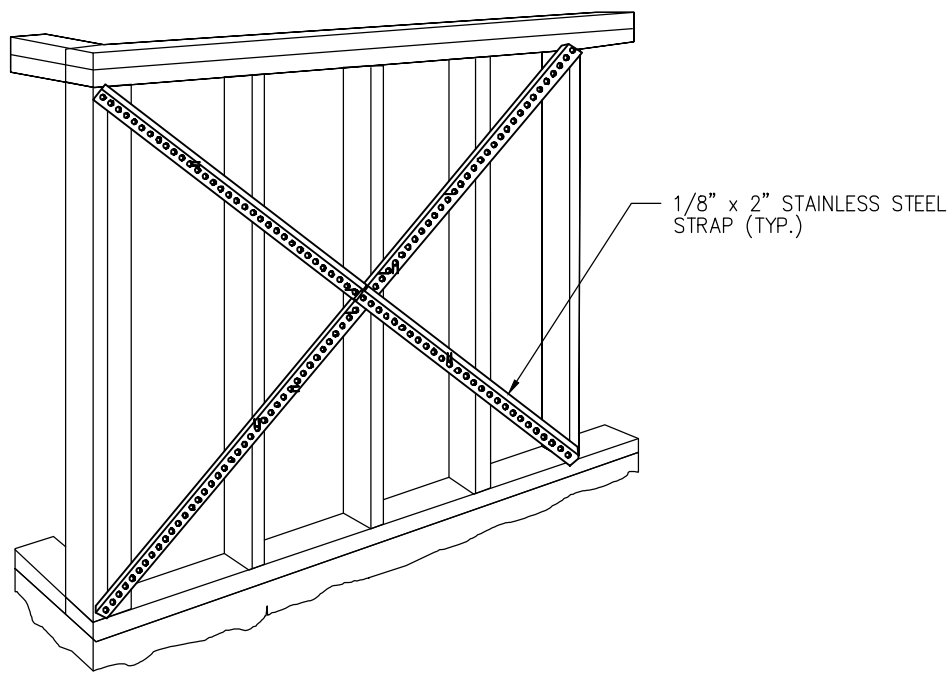
TYPICAL WOOD COLUMN SPLICE DETAILS
SCALE: 1"=1'-0"



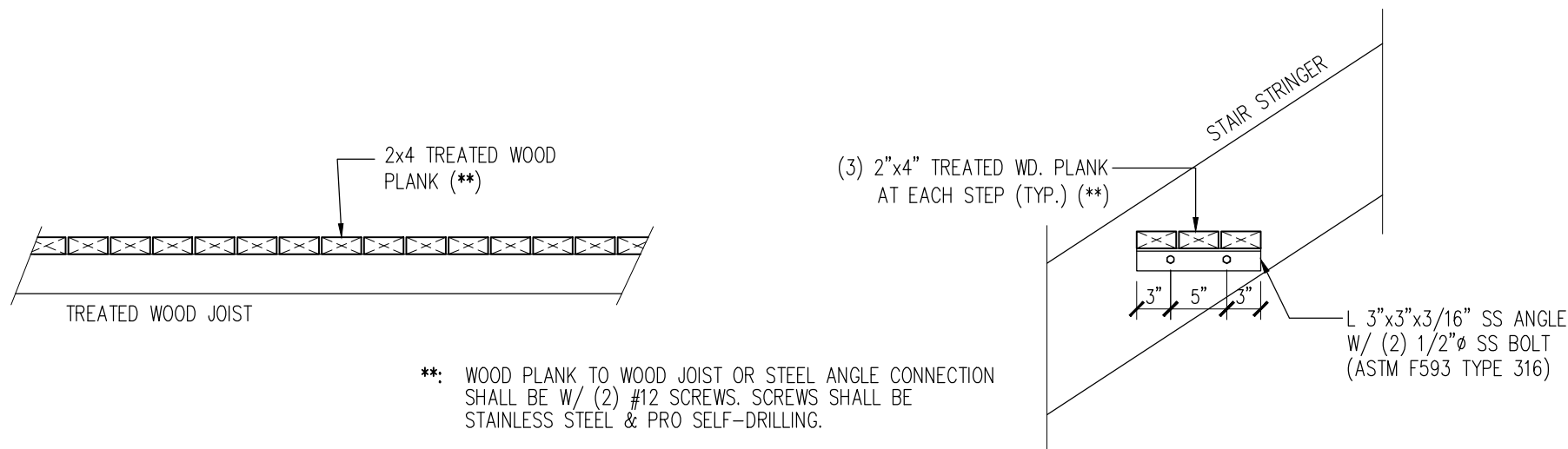
TYPICAL WOOD JOIST CONNECTION DETAIL
SCALE: 1"=1'-0"



TYPICAL WOOD GIRDER CONNECTION DETAIL
SCALE: 1"=1'-0"



TYPICAL WALL BRACING DETAIL
N.T.S.



** WOOD PLANK TO WOOD JOIST OR STEEL ANGLE CONNECTION SHALL BE W/ (2) #12 SCREWS. SCREWS SHALL BE STAINLESS STEEL & PRO SELF-DRILLING.

TYPICAL WOOD PLANK CONNECTION DETAIL
SCALE: N.T.S.



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DETAILS

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Yo, MANUEL A. RIVERA ALBELO, 18,696 PE, certifico que soy el profesional que preparó 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 Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como la "Ley para la Inversión por la Industria Puertorriqueña" y con la Ley Núm. 319 de 15 de mayo de 1938, según enmendada; Ley Núm. 96 de 6 de julio de 1978, según enmendada y según aplique. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPe.

GENERAL NOTES:

- THESE GENERAL NOTES SUPPLEMENT THE PROJECT SPECIFICATIONS. REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- SPECIFICATIONS NOTED ON THESE DRAWINGS SHALL BE OF THE LATEST REVISION.
- STRUCTURAL DRAWINGS ARE INTENDED TO BE USED WITH ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING SUCH REQUIREMENTS INTO THEIR SHOP DRAWINGS AND WORK.
- NO OPENINGS, OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS, SHALL BE MADE IN ANY STRUCTURAL MEMBER WITHOUT THE WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.
- NO CHANGE IN SIZE OR DIMENSION OF STRUCTURAL MEMBERSHIP SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT/ENGINEER.
- OPENINGS 1'-4" AND LESS ON A SIDE ARE GENERALLY NOT SHOWN ON THE STRUCTURAL DRAWINGS. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SUCH OPENINGS.
- THE CONTRACTOR IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPOSED UPON STRUCTURAL FRAMING. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN CAPACITY OF THE FRAMING AT THE TIME THE LOADS ARE IMPOSED.
- HORIZONTAL MOVEMENT OF ANY HEAVY EQUIPMENT OVER STRUCTURAL FLOORS OR ROOF AND ITS TEMPORARY AND/OR DEFINITE LOCATIONS MUST BE PREVIOUSLY APPROVED BY THE ENGINEER SO AS NOT TO OVERLOAD THE STRUCTURE OR IN ANY OTHER WAY IMPAIR THE STRUCTURE. SAME PRECAUTION SHALL BE TAKEN FOR THE PILING OF CONSTRUCTIONS MATERIALS.
- THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION. THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING ALL TEMPORARY BRACING AND/OR SUPPORT THAT MAY BE REQUIRED AS THE RESULT OF THE CONTRACTOR'S CONSTRUCTION METHODS AND/OR SEQUENCES. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
- ALL STRUCTURES HAVE BEEN DESIGNED ACCORDING TO FINAL BEHAVIOR AND CONDITIONS. HOWEVER, DURING ERECTION OF SAME, CERTAIN CONDITIONS CAN ARISE FOR WHICH THE BEHAVIOR OR THE STRUCTURE HAS NOT BEEN CONTEMPLATED. THEREFORE, THE CONTRACTOR SHOULD PROVIDE AT ALL TIME ADEQUATE SHORING AND RESTORING UNTIL THE DESIGN CONDITIONS HAVE BEEN MET. IF THERE IS ANY DOUBT DURING ANY PHASE OF THE CONSTRUCTION, PLEASE CONSULT AND/OR NOTIFY THE STRUCTURAL ENGINEER.
- DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALES SHOWN ON DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN ON STRUCTURAL DRAWINGS.
- NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.
- CONTRACTOR'S CONSTRUCTION AND/OR ERECTION SEQUENCES SHALL RECOGNIZE AND CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD.
- THE CONTRACTOR SHALL INFORM THE ARCHITECT/ENGINEER IN WRITING OF ANY DEVIATION FROM THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOT BE RELIEVED OF THE RESPONSIBILITY OF CORRECTION BY THE PROFESSIONAL OF RECORD REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC., UNLESS THE CONTRACTOR HAS SPECIFICALLY INFORMED THE PROFESSIONAL OF RECORD OF SUCH DEVIATION AT THE TIME OF SUBMISSION. AND THE PROFESSIONAL OF RECORD HAS GIVEN WRITTEN APPROVAL TO THE SPECIFIC DEVIATION.
- WHERE "OWNER" IS MENTIONED IN PLANS IT IS TO BE UNDERSTOOD EITHER OWNER OR HIS AUTHORIZED REPRESENTATIVE.
- CONTRACTOR SHALL SUBMIT FOR OWNERS APPROVAL LOCATION AND DETAILS OF CONSTRUCTION JOINTS IN SLABS AND BEAMS, AND IN ANY OTHER STRUCTURAL MEMBERS.
- CONTRACTOR MUST VERIFY ALL DIMENSIONS ON STRUCTURAL PLANS AGAINST THE DIMENSIONS ON ARCHITECTURAL PLANS BEFORE LAYING OUT THE WORK.
- CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING FIELD CONDITIONS PRIOR TO STARTING CONSTRUCTION. IF ANY DISCREPANCY ARISES IN THE STRUCTURAL AND ARCHITECTURAL PLANS, THE ARCHITECTS AND ENGINEERS SHALL BE NOTIFIED IMMEDIATELY.
- CONTRACTOR MUST PROVIDE, SET AND VERIFY DIMENSIONS AND LOCATION OF ALL ANCHORS, INSERTS BOLTS, SLEEVES, CONDUITS, ETC., SHOWN OR NOTED IN ARCHITECTURAL AND/OR MECHANICAL AND PLUMBING PLANS BEFORE THE CONCRETE IS PLACED.
- PROVISIONS FOR DETAILS NOT SPECIFICALLY DRAWN SHALL BE MADE BY THE CONTRACTOR IN ACCORDANCE WITH THE LATEST VERSION OF THE ACI BUILDING CODE AND/OR AISI SPECIFICATIONS AND CLARIFIED WITH THE STRUCTURAL ENGINEER.
- ALL DETAILS, SECTIONS AND NOTES SHOWN ON DRAWINGS AND INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE UNLESS NOTED OTHERWISE.
- IN CASE OF DOUBT IN THE INTERPRETATION OF ANY ASPECT OF THESE STRUCTURAL DRAWINGS AND/OR SPECIFICATIONS, THE STRUCTURAL ENGINEER SHALL BE CONSULTED.
- NOTIFY THE STRUCTURAL ENGINEER IN ADVANCE OF CONDITIONS NOT SHOWN OR OMITTED ON THE DRAWINGS.

REFERENCES:

- DESIGN, FABRICATION & CONSTRUCTION WORK SHALL COMPLY WITH THE REQUIREMENTS AND PROVISIONS OF THE FOLLOWING CODES AND SPECIFICATIONS THEIR COMMENTARIES AND THE STANDARDS REFERENCED THEREIN:
- AMERICAN CONCRETE INSTITUTE (ACI)
 - PUERTO RICO BUILDING CODE, 2018
 - AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)
 - CONCRETE REINFORCING STEEL INSTITUTE (CRSI)
 - AMERICAN WELDING SOCIETY (AWS)
 - AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)
 - STEEL DECK INSTITUTE (SDI)
 - STEEL JOIST INSTITUTE (SJI)

DESIGN LOADS:

- SEISMIC LOADS: (PRBC-2018)
- WIND LOADS: (PRBC-2018)
- LIVE LOADS:
 - FLOOR : 100 psf
 - ROOF : 20 psf

MATERIALS:

- ALL CONCRETE SHALL DEVELOP A MINIMUM 28 DAYS COMPRESSIVE STRENGHT AS FOLLOWS:
 - FOUNDATION, SLAB, WALL, COLUMN & BEAMS 4,000 PSI
- PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, TYPE I.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
- ALL REINFORCING BARS SHALL BE HIGH TENSILE DEFORMED MEETING ASTM A-615 GRADE 60, UNLESS NOTED OTHERWISE ON SPECS AND/OR DRAWINGS.
- CONCRETE MASONRY UNITS SHALL BE NORMAL WEIGHT BLOCK CONFORMING TO ASTM C-90, GRADE N, TYPE 1, AND SHALL HAVE COMPRESSIVE STRENGTH OF 1900 PSI.
- MORTAR SHALL CONFORM TO ASTM C-270.
- MASONRY GROUT SHALL CONFORM TO ASTM C-476.
- CONTINUOUS WIRE REINFORCING (JOINT REINFORCING) SHALL BE GALVANIZED TRUSS TYPE FABRICATED UNITS WITH A SINGLE PAIR OF 9 GAUGE SIDE RODS AND 9 GAUGE CONTINUOUS DIAGONAL CROSS RODS FABRICATED FROM COLD-DRAWN STEEL WIRE COMPLYING WITH ASTM A-82.

STEEL SHALL CONFORM TO THE FOLLOWING GRADES:

- ROLLED STEEL SHAPES (Fy=50 ksi) ASTM A-572
- STRUCTURAL TUBE (Fy=46 ksi) ASTM A-500
- STEEL PIPE (Fy=35 ksi) ASTM A-53
- ANCHOR RODS AND UNFINISHED BOLTS ASTM A-307
- BOLTS, NUTS AND WASHERS ASTM A-325
- WELDING ELECTRODES (E333, CLASS E7018XX) ASTM A-223
- OUTRIGGERS (Fy = 50 ksi) ASTM A-572
- PLATES AND BARS (UNS) ASTM A-36

FOUNDATIONS:

- THE FOUNDATION HAS BEEN DESIGNED WITH AN ASSUMED SOIL BEARING CAPACITY OF 1,000 PSF. THE ASSUMED BEARING CONDITION SHALL BE VERIFIED BY THE SOIL CONSULTANT BEFORE THE CONTRACTOR MAY START PLACING THE FOUNDATION. IN THE EVENT THAT UNUSUAL SOIL CONDITIONS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED, AND FOUNDATIONS SHALL NOT BE PLACED UNTIL DIRECTION IS RECEIVED FROM THE ENGINEER.
- FOOTINGS MAY BE POURED INTO AN EARTH-FORMED TRENCH IF SOIL CONDITIONS PERMIT.
- ALL BEARING MATERIAL SHALL BE INSPECTED BY THE ENGINEERING IN INSPECTION PRIOR TO CONCRETE PLACEMENT. THE INDEPENDENT INSPECTOR SHALL BE THE SOLE JUDGE AS TO THE SUITABILITY OF THE BEARING MATERIAL FOOTING ELEVATIONS SHALL BE ADJUSTED AS REQUIRED. THE INSPECTOR SHALL BE THE OWNER'S REPRESENTATIVE AT THE PROJECT SITE, AND AS SUCH WILL BE RESPONSIBLE TO HIM.
- WHERE FOUNDATION WALLS ARE TO HAVE EARTH PLACED ON EACH SIDE, PLACE FILL SIMULTANEOUSLY SO AS TO MAINTAIN A COMMON ELEVATION ON EACH SIDE OF THE WALL.
- ALL BACKFILL SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR DENSITY.

CAST IN PLACE REINFORCED CONCRETE:

- CONCRETE ITEMS AND REINFORCEMENT SHALL BE ERECTED IN STRICT ACCORDANCE WITH OWNER APPROVED SHOP AND ERECTION DRAWINGS FOLLOWING THE DETAILS SHOWN ON PLANS.
- THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PRODUCE CORRECTLY ALIGNED CONCRETE CONSIDERING AMONG OTHER THINGS, THE ELASTIC DEFORMATION OF THE STRUCTURAL MEMBERS.
- AT HORIZONTAL JOINTS IN WALLS AND COLUMNS, THE LOWER SURFACE SHALL BE THOROUGHLY CLEARED AND ALL WEAR OR LOOSE CONCRETE REMOVED FROM THERE BEFORE POURING THE UPPER CONCRETE(SEE SPECS. FOR ADDITIONAL REQUIREMENTS). NO JOINT SHALL BE COVERED WITH PLASTER OR OTHERWISE WITHOUT A VISUAL EXAMINATION AND APPROVAL BY THE INSPECTOR.
- NO DEFECTIVE CONCRETE SHALL BE CORRECTED OR COVERED WITH MORTAR, PLASTER ETC. WITHOUT THE INSPECTORS' APPROVAL.
- SUMP OF CONCRETE SHALL NOT EXCEED 4" UNLESS A HIGH-RANGE WATER-REDUCING ADMIXTURE IS USED. THE SUMP OF CONCRETE PRIOR TO ADDITION OF A HIGH RANGE WATER-REDUCING ADMIXTURE SHALL NOT EXCEED 4". THE SUMP OF CONCRETE CONTAINING A HIGH RANGE WATER-REDUCING ADMIXTURE SHALL NOT EXCEED 10".
- CONCRETE SHALL BE NON-AIR ENTRAINED. AIR CONTENT SHALL BE BETWEEN 0 AND 2 PERCENT.
- THE NOMINAL MAXIMUM AGGREGATE SIZE SHALL BE OF 3/4".
- MINIMUM CONCRETE COVER, UNLESS NOTED OTHERWISE: UNFORMED SURFACE IN CONTACT WITH THE GROUND 3 IN.

FORMED SURFACES EXPOSED TO EARTH OR WEATHER:
#6 BARS AND LARGER 2 IN.
#5 BARS AND SMALLER 1-1/2 IN.
- FORMED SURFACES NOT EXPOSED TO EARTH OR WEATHER: BEAMS, GIRDERS, AND COLUMNS 1-1/2 IN.
#11 BARS AND SMALLER 3/4 IN.
#14 AND #18 BARS 1-1/2 IN.
- ALL REINFORCING SHALL BE DETAILED, FABRICATED AND PLACED, IN ACCORDANCE WITH ACI DETAILING MANUAL (SP-66) AND "THE MANUAL OF STANDARD PRACTICE FOR REINFORCED CONCRETE CONSTRUCTION" BY THE CRSI.

- ALL REINFORCING SHALL BE SUPPORTED IN FORMS USING STEEL CHAIRS, SPACED WITH NECESSARY ACCESSORIES AND SHALL BE SECURELY WIRED TOGETHER, IN ACCORDANCE WITH CRSI "MANUAL OF STANDARD PRACTICE".
- CONCRETE WORK SHALL BE SUBJECT TO QUALITY ASSURANCE TESTING AND INSPECTION. SEE QUALITY ASSURANCE GENERAL NOTES AND PROJECT SPECIFICATIONS.
- ALL SLAB AND CORRESPONDING BEAMS, CURBS, OR APRONS SHALL BE POURED MONOLITHICALLY.
- ALL REINFORCING, SLEEVES, CONDUITS, INSERTS AND BOLTS SHALL BE WELL SECURED AND IN PLACE BEFORE CONCRETE IS POURED.
- ALL OPENINGS IN CONCRETE WALLS SHALL BE REINFORCED AROUND WITH 2 #6 BARS PLACED AT 2 INCHES FROM THE FACE AND EXTENDING 24 INCHES BEYOND CORNERS, UNLESS OTHERWISE SPECIFIED IN PLANS.
- TEMPERATURE REINFORCEMENT SHALL BE PROVIDED IN ALL ONE WAY SLAB NORMAL TO THE PRINCIPAL REINFORCEMENT IN ACCORDANCE WITH LATEST VERSION OF THE ACI BUILDING CODE.
- ALL ONE WAY SLAB TEMPERATURE REINFORCEMENT SHALL BE AS FOLLOWS: (NOTED OTHERWISE) 0.18% OF SECTIONAL AREA (INCLUDING INTEGRAL TOPPING).
- FOR CONSTRUCTION JOINTS IN STRUCTURAL MEMBERS A VERTICAL BULKHEAD AND KEY JOINT MUST BE PROVIDED.
- MINIMUM LAP OF WELDED WIRE FABRIC SHALL BE 6 INCHES OR ONE FULL MESH, WHICHEVER IS GREATER.
- SLAB ON GROUND, AS INDICATED ON DRAWINGS.
- FOR CONCRETE FORMWORK, SURFACE FINISHING, BEVELED CORNERS AND DRIPS, SEE ARCHITECTURAL PLANS.
- ALL SYMBOLS AND STRESSES AS WELL AS CONCRETE WORK SHALL CONFORM TO THE STANDARD OF THE LATEST VERSION OF THE ACI BUILDING CODE.
- PLACEMENT OF CONCRETE SHALL CONFORM TO ACI STANDARD 304 AND PROJECT SPECIFICATIONS.
- LAP SPICES SHALL BE IN ACCORDANCE WITH THE FOLLOWING UNLESS NOTED OTHERWISE, WHERE CLASSES ARE NOT CALLED OUT ON DRAWINGS, USE CLASS "B" SPLICE.

SCHEDULE "A"											
TENSION DEVELOPMENT LENGTH (in) Ld											
BAR SIZE	F _y = 3,000 P.S.I.			F _y = 4,000 P.S.I.			F _y = 5,000 P.S.I.				
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	
# 3	29	17	18	14	17	13					
# 4	29	22	25	19	22	17					
# 5	36	28	31	24	27	21					
# 6	43	33	38	29	34	26					
# 7	62	48	53	41	48	37					
# 8	72	55	61	47	55	42					
# 9	81	62	69	53	61	47					
# 10	91	70	78	60	69	53					
# 11	101	78	86	66	77	59					

SCHEDULE "B"											
TYPE "B" TENSION LAP SPLICE LENGTH (in)											
BAR SIZE	F _y = 3,000 P.S.I.			F _y = 4,000 P.S.I.			F _y = 5,000 P.S.I.				
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	
# 3	29	22	23	18	22	17					
# 4	38	29	33	25	29	22					
# 5	47	36	40	31	35	27					
# 6	56	43	49	38	44	34					
# 7	81	62	69	53	62	48					
# 8	94	72	79	61	72	55					
# 9	105	81	90	69	79	61					
# 10	118	91	101	78	90	69					
# 11	131	101	112	86	100	77					

- COMPRESSION DOWEL EMBEDMENT: 22 BAR DIAMETERS LAP WELDED WIRE FABRIC ONE SPACING OF CROSS WIRES PLUS 2". THE DEVELOPMENT LENGTH INDICATED ABOVE IS VALID WHEN ONE OF THE FOLLOWING CONDITIONS IS MET:
- CLEAR SPACING OF BARS BEING DEVELOPED OR SPLICED NOT LESS THAN d_b, CLEAR COVER NOT LESS THAN d_b, AND STIRRUPS OR TIES THROUGHOUT l_d NOT LESS THAN THE CODE MINIMUM.
 - CLEAR SPACING OF BARS BEING DEVELOPED OR SPLICED NOT LESS THAN 2d_b AND CLEAR COVER NOT LESS THAN d_b
- PROVIDE DOWELS IN PEDESTAL AND/OR WALL FOOTINGS EQUAL IN GRADE, SPACING, SIZE AND NUMBER TO VERTICAL REINFORCEMENT, EXTENDING A TENSION SPLICE LENGTH INTO THE PEDESTAL AND/OR WALL AND 40 BAR DIAMETER INTO FOOTING. (THE LATERAL EMBEDMENT SHALL BE EXTENDED AS NECESSARY TO PROVIDE A MINIMUM HORIZONTAL LEG RESTING ON FOOTING REINFORCEMENT EQUAL TO THE CORRESPONDING "G" LENGTH FOR THE BAR SIZE.)
 - CONCRETE SHALL NOT BE DROPPED THROUGH REINFORCING STEEL SO AS TO CAUSE SEGREGATION OF AGGREGATES IN SUCH CASES, HOOPERS OR VERTICAL CHUTES OR TRUNKS SHALL BE USED. THE FREE UNCONFINED FALL OF CONCRETE SHALL NOT EXCEED THE ABOVE REQUIREMENTS.
 - THE SIZE OF NAILS AND SIMILAR FASTENERS DRIVEN INTO CONCRETE SHALL BE SUCH, AS NOT TO CRACK OR IMPAIR IT. NEVERTHELESS, IF THE CONCRETE IS DAMAGED, IT SHALL BE PROPERLY REPAIRED AFTER REMOVING THE DAMAGED PORTION AND SUITABLE JOINT SURFACE ARE PROVIDED.
 - ALL CAST IN PLACE REINFORCED CONCRETE STRUCTURAL MEMBERS SHALL BE PROPERLY CURED IN ACCORDANCE WITH THE LATEST VERSION OF THE ACI CODE, CHAPTER V AND ACI 308.
 - ALL LAPPING, BENDING AND PLACING OR REINFORCEMENT SHALL BE DONE IN ACCORDANCE WITH THE LATEST VERSION OF THE ACI BUILDING CODE.
 - ALL REINFORCING BAR BENDS SHALL BE MADE COLD.
 - ALL NEGATIVE REINFORCEMENT (TOP REINF.) AND POSITIVE REINFORCEMENT (BOTTOM REINF.) IN SLABS AND BEAMS SHALL BE EXTENDED BEYOND THE CENTER LINE OF THE END SUPPORTS IN ACCORDANCE WITH THE LATEST VERSION OF THE ACI BUILDING CODE, UNLESS OTHERWISE SPECIFIED.

- WELDING OF REINFORCEMENT SHALL BE WITH LOW HYDROGEN ELECTRODES IN CONFORMANCE WITH "REINFORCING STEEL WELDING CODE" AND "RECOMMENDED PRACTICES FOR WELDING REINFORCING STEEL" BOTH BY THE AWS (AWS D12.1. & AWS D1.4 RESPECTIVELY).
- ALL FORMWORK FOR FLEXURAL MEMBERS SHALL BE BUILT WITH A CAMBER CORRESPONDING TO ITS WON DEFORMATION PLUS THE STRUCTURE DEAD LOAD DEFORMATIONS. IN DETERMINING THE AMOUNT OF CAMBER, THE CONTRACTOR SHALL HAVE THE ASSISTANCE OF THE DESIGNER WHERE SO REQUESTED.
- NO JOINT, OPENING, SLOT OR GROOVE OTHER THAN THAT SHOWN ON DRAWINGS SHALL BE PERMITTED WITHOUT PREVIOUS APPROVAL BY THE ENGINEER. ALL CONSTRUCTION JOINT SURFACES SHALL BE CLEANED AND ROUGHENED IMMEDIATELY BEFORE CONCRETING AND TREATED AS INSTRUCTED IN THE "ACI MANUAL OF CONCRETE PRACTICE".
- CONDUIT OF PIPE SIZE (O.D.) SHALL NOT EXCEED 30 PERCENT OF TOTAL SLAB THICKNESS AND SHALL BE PLACED BETWEEN THE TOP & BOTTOM REINFORCEMENT, UNLESS SPECIFICALLY DETAILED OTHERWISE. CONCENTRATIONS OF CONDUITS OR PIPES SHALL BE AVOIDED EXCEPT WHERE DETAILED OPENINGS ARE PROVIDED.
- WATER-CEMENT RATIO REQUIREMENTS FOR DIFFERENT COMPRESSIVE STRENGTHS OF CONCRETE.

COMPRESSIVE STRENGTH AT 28 DAYS, psi	WATER-CEMENT RATIO BY WEIGHT	NON-AIR ENTRAINED AIR ENTRAINED CONCRETE
4,000	0.55	0.45
3,500	0.58	0.50
3,000	0.62	0.56
2,500	0.72	0.66
- PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING. DO NOT CUT ANY REINFORCEMENT BAR WHICH MAY CONFLICT. CORING IN CONCRETE IS NOT PERMITTED U.N.O.
- REINFORCED MASONRY
 - REINFORCED CONCRETE MASONRY SHALL HAVE A MINIMUM DESIGN COMPRESSIVE STRENGTH, FM, OF 1500 PSI. VERIFICATION OF THE DESIGN STRENGTH SHALL BE BY THE UNIT TEST METHOD.
 - SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF VERTICAL CONTROL JOINTS. HORIZONTAL BOND BEAM AND LINTEL REINFORCING SHALL BE CONTINUOUS ACROSS VERTICAL CONTROL JOINTS. JOINT REINFORCING SHALL BE STOPPED EITHER SIDE OF VERTICAL CONTROL JOINTS.
 - ALL REINFORCED CELLS, ALL CELLS BELOW GRADE AND ALL CELLS BELOW FINISH FLOOR SHALL BE GROUTED SOLID.
 - WHEN A FOUNDATION DOWEL DOES NOT LINE UP WITH A VERTICAL BLOOD CORE, IT SHALL NOT BE SLOPED MORE THAN ONE (1) HORIZONTAL IN SIX (6) VERTICAL. DOWELS MAY BE GROUTED INTO A CELL IN VERTICAL ALIGNMENT, EVEN THOUGH IT IS IN AN ADJACENT CELL TO THE VERTICAL WALL REINFORCING.
 - REINFORCING STEEL SHALL BE SECURED IN PLACE BEFORE GROUTING STARTS.
 - SPLICED REINFORCING SHALL BE LAPPED 48 BAR DIAMETERS OR 24 INCHES, WHICHEVER IS GREATER. SPLICED BARS SHALL BE WIRED TOGETHER.
 - VERTICAL BARS SHALL BE HELD IN POSITION AT TOP AND BOTTOM AND AT INTERVALS NOT EXCEEDING 192 DIAMETERS OF THE REINFORCING BAR, NOR 10 FEET.
 - VERTICAL REINFORCING BARS SHALL HAVE A MINIMUM CLEARANCE OF 3/4" OF AN INCH FROM MASONRY AND NOT LESS THAN ONE BAR DIAMETER BETWEEN BARS.
 - VERTICAL CELLS THAT WILL BE GROUTED SHALL HAVE A VERTICAL ALIGNMENT TO MAINTAIN A CONTINUOUS OR UNOBSTRUCTED CELL AREA NOT LESS THAN 2-1/2 x 3".
 - GROUTING SHALL BE STOPPED 1-1/2" BELOW THE TOP OF A COURSE SO AS TO FORM A KEY AT THE POUR JOINT.
 - GROUTING OF MASONRY BEAMS OVER OPENINGS SHALL BE DONE IN ONE CONTINUOUS OPERATION.
 - ALL BOLTS, ANCHORS, ETC., INSERTED IN THE WALLS, SHALL BE GROUTED SOLID INTO POSITION.
 - REINFORCED MASONRY HAS BEEN DESIGNED USING VALUES FOR CONSTRUCTION WITH SPECIAL INSPECTION.
 - REINFORCED MASONRY WORK SHALL BE SUBJECT TO QUALITY ASSURANCE TESTING AND INSPECTIONS. SEE QUALITY ASSURANCE GENERAL NOTES AND PROJECT SPECIFICATIONS.
 - CONCRETE MASONRY UNITS SHALL BE LAID WITH FULL MORTAR BEDDING.
 - CONCRETE MASONRY UNITS SHALL BE LAID IN A RUNNING BOND PATTERN.
 - ALL BLOCK WALLS SHALL BE ANCHORED TO THE FLOOR GROUND SLAB BY MEANS OF #3 BARS HOOKED A MINIMUM OF 6 INCHES INTO THE SLAB AND SPACED A MINIMUM OF 16 INCHES OR #4 BARS HOOKED A MINIMUM OF 8 INCHES INTO THE SLAB AND SPACED A MINIMUM OF 32 INCHES.
 - HORIZONTAL JOINT REINFORCEMENT SHALL BE INSTALLED IN THE TWO JOINTS IMMEDIATELY BELOW AND ABOVE WINDOW AND DOOR OPENING AND EVERY OTHER COURSE SPLICED 1' WITH CORRESPONDING DOWELS INTO THE STRUCTURE.
 - FOR STRUCTURAL OR ARCHITECTURAL CONCRETE ELEMENTS WHICH DIMENSIONS OR REINFORCEMENT ARE NOT SHOWN ON STRUCTURAL DRAWINGS, THE CONTRACTOR SHALL ASSUME THE DIMENSIONS SHOWN ON ARCHITECTURAL DRAWINGS FOR THOSE, AND UTILIZE THE MINIMUM REINFORCEMENT REQUIRED BY ACI-318 BUILDING CODE FOR THE TYPE OF ELEMENT CONSIDERED FOR ESTIMATING PURPOSE.
 - GROUT SHALL BE PLACED BY THE LOW LIFT METHOD; MAXIMUM HEIGHT OF LIFT WITHOUT CLEANING OUT SHALL BE 4 FEET.
 - JOINT REINFORCING SHALL BE SPACED AT 16" O.C. VERTICALLY IN ALL MASONRY WALLS.
 - PROVIDE A MINIMUM OF 1/2 IN. GROUT BETWEEN MAIN REINFORCEMENT AND MASONRY UNITS.

GENERAL CONTRACTOR NOTICE:

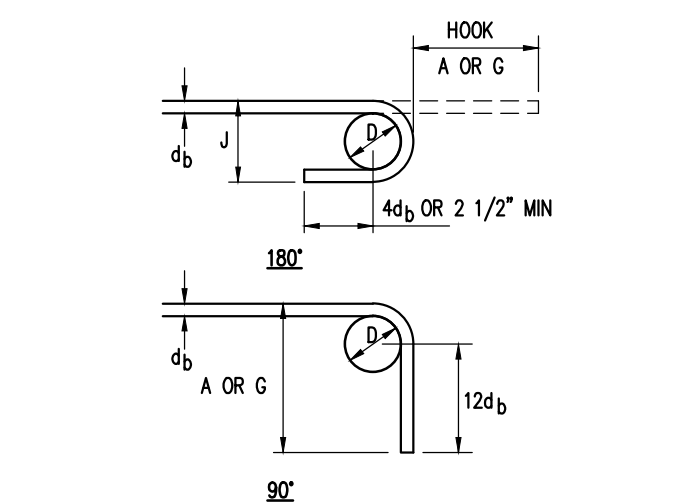
- THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS AND CONDITIONS AT THE SITE PRIOR TO COMMENCEMENT OF THE WORK. ANY DISCREPANCIES, ERRORS OR OMISSIONS IN DIMENSIONS, ASSEMBLIES, CONSTRUCTIVE METHODS, ELECTRICAL, MECHANICAL, PLUMBING, STRUCTURAL, SITE COORDINATION AND/OR BUILDING CODES IN THE PLANS, SHALL BE NOTIFIED TO THE ARCHITECT IN WRITTEN FORM PRIOR TO COMMENCEMENT OF THE WORK SO CORRECTIONS CAN BE MADE. IF FOR ANY REASON THESE SAID ERRORS, AND/OR OMISSIONS ARE NOT NOTIFIED TO THE ARCHITECT, THE GENERAL CONTRACTOR SHALL SOLELY ASSUME RESPONSIBILITY, FOR ANY CONSEQUENCES DERIVED FROM SUCH ERRORS AND/OR OMISSIONS.
- AT NO TIME SHALL CONTRACTOR UTILIZE FOR CONSTRUCTION ANY OTHER DRAWING ISSUED TO HIM/HER PRIOR TO CONSTRUCTION UNLESS SIGNED AND SEALED BY "OGPE" (PERMIT MANAGEMENT OFFICE) AND/OR THE ARCHITECT.

STRUCTURAL STEEL

- ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST VERSION OF THE AISC CODE OF STANDARD PRACTICE. EXCEPT AS MODIFIED IN THESE NOTES AND/TO THE PROJECT SPECIFICATIONS AND/OR DRAWINGS.
- THE STEEL STRUCTURE IS A PARTIAL-Self-SUPPORTING STEEL FRAME AND IS DEPENDENT UPON DIAPHRAGM ACTION OF THE METAL ROUGH DECK AND ATTACHMENT TO THE EXISTING MASONRY AND CONCRETE WALLS FOR STABILITY AND FOR RESISTANCE TO WIND AND SEISMIC FORCES. PROVIDE ALL TEMPORARY SUPPORTS REQUIRED FOR STABILITY AND FOR RESISTANCE TO WIND AND SEISMIC FORCES UNTIL THESE ELEMENTS ARE COMPLETED AND ARE CAPABLE OF PROVIDING THIS SUPPORT.
- THE FABRICATOR IS RESPONSIBLE FOR THE SHOP DRAWINGS OF ALL CONNECTIONS. CONNECTION DETAILS INDICATED ON THE DRAWINGS SHALL BE INCORPORATED INTO FABRICATOR'S CONNECTION SHOP DRAWING. ALL SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY THE FABRICATOR'S ENGINEER WITH THE ENGINEER'S SEAL.
- SPLICING OF STEEL MEMBERS, UNLESS SHOWN ON THE DRAWINGS PROHIBITED WITHOUT WRITTEN APPROVAL OF THE ARCHITECT/ENGINEER.
- UNLESS NOTED OTHERWISE, BEAMS SHALL BEAR 8" MINIMUM ON CONCRETE OR MASONRY, UNLESS NOTED OTHERWISE, ANCHOR BEAMS TO MASONRY WITH TWO (2) 3/4" DIAMETER ANCHOR BOLTS WITH 4" HOOK AND 1'-4" EMBEDMENT.
- STRUCTURAL STEEL WORK SHALL BE SUBJECT TO QUALITY ASSURANCE TESTING AND INSPECTIONS. SEE QUALITY ASSURANCE GENERAL NOTES AND PROJECT SPECIFICATIONS. AISC, ASTM & AWS SPECIFICATIONS WILL GOVERN ALL STRUCTURAL STEEL WORKS.
- DESIGN AND CONSTRUCTION SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION STANDARD PRACTICE.
- STRUCTURAL STEEL WELDING SHALL BE PERFORMED BY A CERTIFIED WELDER AND IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY, (AWS), REQUIREMENTS.
- ALL INSPECTION AND TESTING OF WELDING SHALL BE DONE IN ACCORDANCE TO SECTION 501 THRU 607 OF THE AWS CODE FOR WELDING IN BUILDING CONSTRUCTION.
- ALL CONNECTIONS SHALL BE BEARING TYPE UNLESS OTHERWISE SPECIFIED ON PLANS.
- SHOP DRAWINGS FOR ALL STRUCTURAL STEEL FABRICATION AND ERECTION SHALL BE SUBMITTED TO THE DESIGNER FOR APPROVAL WELL IN ADVANCE OF CONSTRUCTION.
- INCORRECTLY FABRICATED, DAMAGED OR OTHERWISE MISFITTING OR NON-CONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE ENGINEER FOR REVIEW AND APPROVAL OR REJECTION, PRIOR TO REMEDIAL OR CORRECTIVE ACTION TO BE IMPLEMENTED.
- UNLESS OTHERWISE NOTED, THE FOLLOWING MINIMUMS SHALL APPLY:

A)WELD SIZE	3/16"
B)BOLT DIAMETER	3/4"
C)PLATE THICKNESS	3/8"
D)CLIP ANGLE THICKNESS	5/16"
E)BOLTS/ANGLE LEG	2"
- ONE BOLT ASSEMBLY SHALL CONSIST OF:
 - A)A HEAVY HEX STRUCTURAL BOLT
 - B)A HEAVY HEX NUT
 - C)A HARDENED STEEL WASHER
- MOMENT CONNECTIONS SHALL BE DESIGNED TO DEVELOP THE PLASTIC MOMENT CAPACITY OF THE BEAM U.N.O.
- COLUMN STIFFENERS SHALL BE PROVIDED AS REQUIRED TO DEVELOP THE PLASTIC MOMENT CAPACITY OF THE CONNECTED BEAM U.N.O.
- FRAMED BEAM CONNECTIONS SHALL BE OF A TYPE SIMILAR TO AND OF EQUAL CAPACITY AS THOSE SHOWN IN TABLES II , III AND IV OF THE AISC MANUAL, AND SHALL DEVELOP THE SHEAR CAPACITY (W_c/2L) GIVEN IN THE UNIFORM LOAD CONSTANTS TABLE.
- CONNECTIONS SHALL BE DESIGNED AS SLIP CRITICAL, WITH BOLT LENGTH AS PER BEARING TYPE X.
- VERTICAL BRACING CONNECTIONS SHALL DEVELOP THE TENSION CAPACITY OF THE CONNECTED MEMBER.
- HORIZONTAL BRACING CONNECTIONS SHALL DEVELOP THE COMPRESSION CAPACITY OF THE CONNECTED MEMBER.

END HOOKS FOR ALL GRADES				
BAR SIZE	FINISHED BEND DIAMETER "D", IN.	180° HOOKS		90° HOOKS
		A OR G	J	A OR G
#3	3"	6"	4"	7"
#4	3"	7"	5"	9"
#5	4"	8"	7"	11"
#6	5"	9"	8"	13"
#7	6"	11"	9"	15"
#8	6"	12"	10"	17"
#9	10"	16"	12"	21"
#10	11"	18"	13"	23"
#11	12"	20"	15"	26"
#14	17"	28"	21"	33"
#18	23"	37"	28"	43"



METAL ROOF DECK:

- METAL ROOF DECK SHALL COMPLY WITH THE REQUIREMENT OF THE STEEL DECK INSTITUTE SPECIFICATIONS AND COMMENTARY FOR STEEL ROOF DECK LATEST EDITION.
- FOR ROOF METAL DECK CONFIGURATION AND SPECIFICATIONS SEE PLANS.
- DO NOT HANG OR SUPPORT ANY LOADS FROM METAL ROOF DECK.
- METAL ROOF DECK SHALL BE CONTINUOUS OVER A MINIMUM OF THREE SPANS.
- METAL ROOF DECK WORK SHALL BE SUBJECT TO QUALITY ASSURANCE TESTING AND SPECIFICATIONS.
- FOR USE AS DIAPHRAGM, CONNECTION SHALL BE #12 SCREWS ON 36/6 PATTERN, WITH #10 STITCH SCREWS IN SIDLAPS.
- UPLIFT CONNECTION SHALL BE CHECKED PER DESIGN LOADS ABOVE, AND SHALL PROVIDE A MINIMUM OF CLASS(1-90) ATTACHMENT, AS DEFINED BY FACTORY MUTUAL.

WOOD:

- ALL WOOD SHALL BE PRESSURED TREATED GROUND CONTACT PINE LUMBER PAINTED (SEE ARCH. DWGS.).
- SUBMIT MANUFACTURER'S PRODUCT DATA AND INSTALLATION INSTRUCTIONS FOR EACH MATERIAL AND PRODUCT USED.
- SUBMIT SHOP DRAWINGS INDICATING MATERIAL CHARACTERISTICS, DETAILS OF CONSTRUCTION & CONNECTIONS.
- SHOP DRAWINGS SHALL BE PREPARED AND STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN PUERTO RICO.
- FRAMED BEAM CONNECTIONS SHALL BE OF A TYPE SIMILAR TO AND OF EQUAL CAPACITY AS THOSE SHOWN IN TABLES II , III AND IV OF THE AISC MANUAL, AND SHALL DEVELOP THE SHEAR CAPACITY (W_c/2L) GIVEN IN THE UNIFORM LOAD CONSTANTS TABLE.
- CONNECTIONS SHALL BE DESIGNED AS SLIP CRITICAL, WITH BOLT LENGTH AS PER BEARING TYPE X.
- VERTICAL BRACING CONNECTIONS SHALL DEVELOP THE TENSION CAPACITY OF THE CONNECTED MEMBER.
- HORIZONTAL BRACING CONNECTIONS SHALL DEVELOP THE COMPRESSION CAPACITY OF THE CONNECTED MEMBER.

Yo, MANUEL A. RIVERA ALBELDO, 18,696 PE, certifico que soy el profesional que preparé 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 Construcción Vigentes de las Agencias, Juntas Reglamentadoras o Corporaciones Públicas con Jurisdicción. Certifico, además, que en la preparación de estos planos y especificaciones se ha cumplido cabalmente con lo dispuesto en la Ley 14-2004, según enmendada, conocida como la "Ley para la inversión por la Industria Puertorriqueña" y con la Ley Núm. 319 de 15 de mayo de 1938, según enmendada; Ley Núm. 96 de 6 de julio de 1978, según enmendada y según aplique. Reconozco que cualquier declaración falsa o falsificación de los hechos que se haya producido por desconocimiento o por negligencia ya sea por mí, mis agentes o empleados, o por otras personas con mi conocimiento, me hacen responsable de cualquier acción judicial y disciplinaria por la OGPE.

STRUCTURAL NOTES

S601

PROJECT NO.

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