

**Fisheries and Oceans  
Canada**

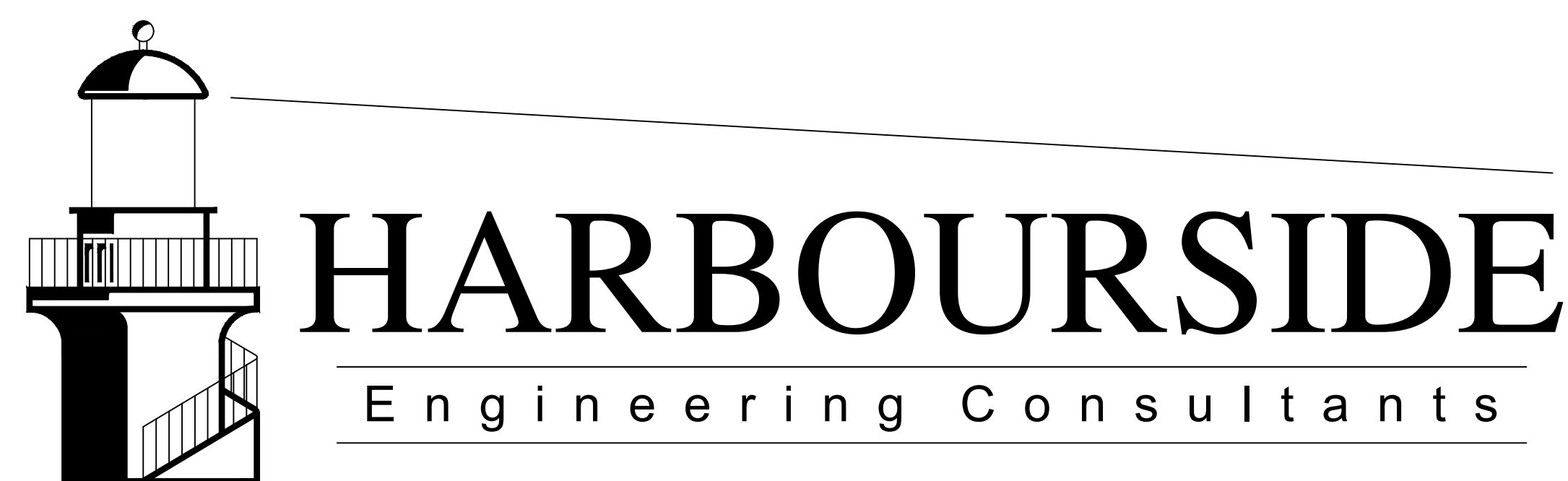
**Small Craft Harbours  
Maritimes / Gulf Region**

**Pêches et Océans  
Canada**

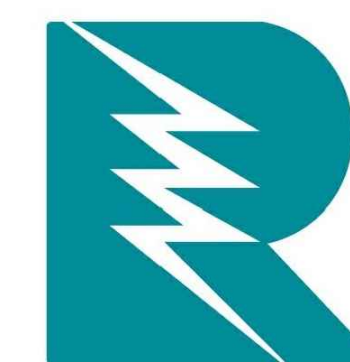
**Ports pour Petits Bateaux  
Région des Maritimes / Golfe**

# Structure #402 and #403 Reconstruction Georgetown Kings County, PE

PROJECT NO. C2-00003



**RICHARDSON ASSOCIATES**  
(1993) Limited  
Engineering Consultants

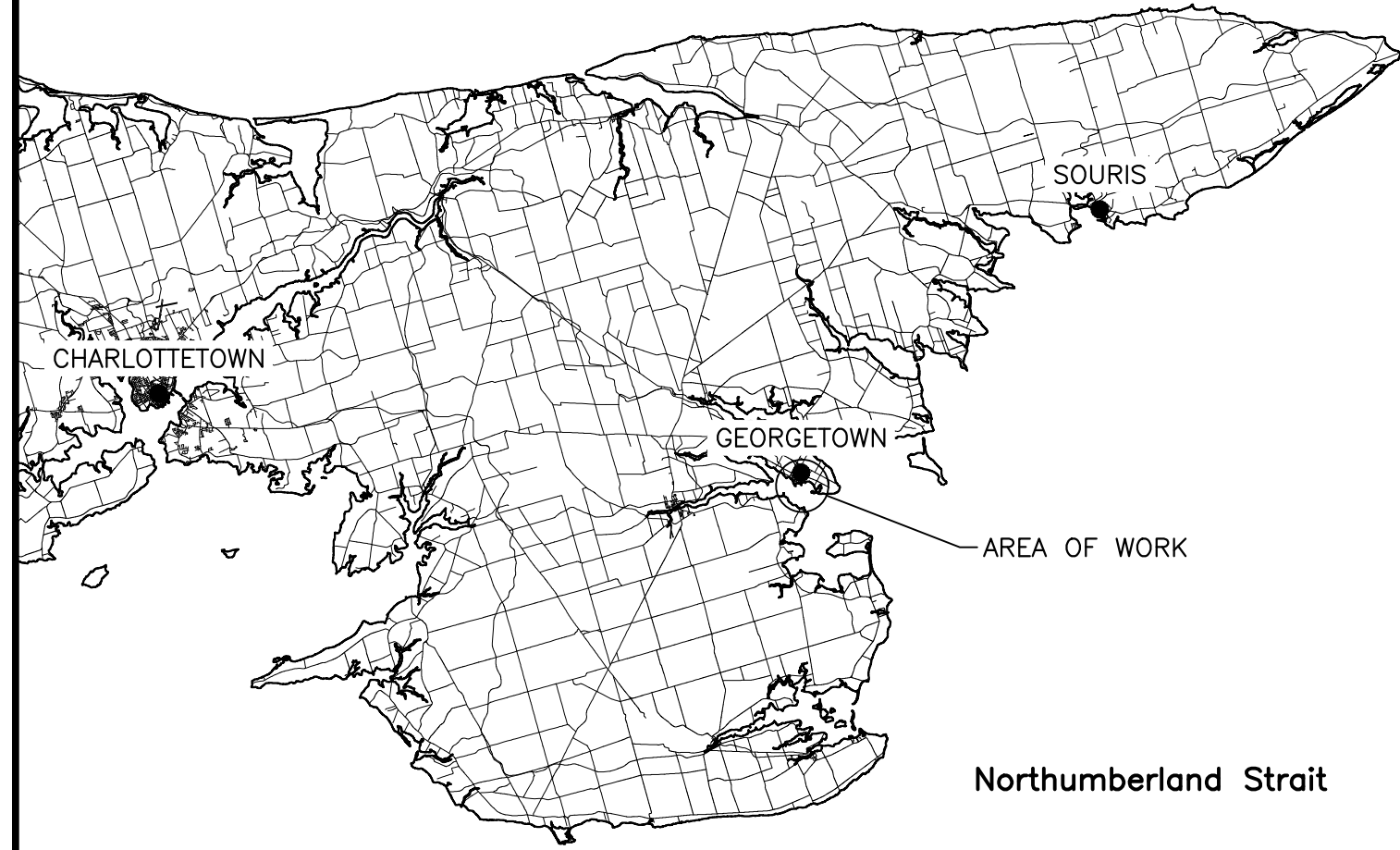
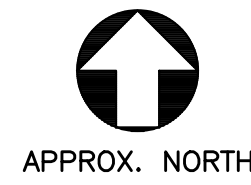


**Canada**

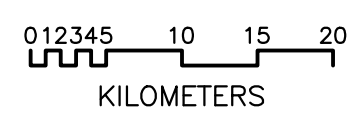
## DRAWING LIST

M1 of 15	Key Plan and Existing Site Plan
M2 of 15	Plan Detail and West Elevation of Existing Conditions
M3 of 15	Cross Sections of Existing Conditions
M4 of 15	Plan Details of Removals and New Construction
M5 of 15	Sections
M6 of 15	Wall Elevations
M7 of 15	Details
M8 of 15	Details and Sections
M9 of 15	Details and Sections
M10 of 15	Details and Sections
M11 of 15	Details and Section
M12 of 15	Details and Sections
M13 of 15	Plan View of New Containment Area, Section and Details
M14 of 15	Borehole Reports
M15 of 15	Dynamic Cone Penetration Test Reports
A1 of 1	Plan, Sections and Details of Electrical Building
E1 of 6	Plan Details of Removals and Demolition
E2 of 6	Plan Details of Removals and New Construction
E3 of 6	Enlarged Plan of New Construction and Details
E4 of 6	Electrical Service Schematic and Details
E5 of 6	New Construction Cross Sections and Details
E6 of 6	Panel Schedules

Gulf of St. Lawrence



KEY PLAN



CONCRETE NOTES:

- ALL CONCRETE WORK TO BE IN ACCORDANCE WITH CAN/CSA A23.1, CAN/CSA A23.2 AND CAN/CSA A23.3 LATEST EDITIONS.
- CONCRETE SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:
  - CEMENT = PORTLAND TYPE GU.
  - CLASS OF EXPOSURE = C1
  - MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS = 35 MPa
  - 20mm MAX AGGREGATE SIZE
  - MAX WATER CEMENT RATIO = 0.40
  - AIR ENTRAINMENT = 5% - 8%
  - SLUMP AT THE POINT OF DISCHARGE = 20-80mm. A REQUIRED INCREASE IN SLUMP MAY ONLY BE ACHIEVED BY THE USE OF ADMIXTURES, NOT WATER. USE OF ADMIXTURES MUST BE APPROVED BY THE DEPARTMENTAL REPRESENTATIVE.
- COVER TO REINFORCING = 75mm UNLESS OTHERWISE NOTED.
- REINFORCING STEEL TO CSA G30.18-09 (2014) Gr. 400W BLACK STEEL.
- PROVIDE SELF PENETRATING SILANE SEALER FOR ALL CONCRETE SURFACES.
- CAST IN PLACE CONCRETE SLAB TO HAVE CONTROL JOINTS AND CONSTRUCTION JOINTS AS INDICATED ON THE DRAWINGS.
- REINFORCING LAP SPLICES TO BE CLASS B.
- CONCRETE MIX DESIGN MAY BE MODIFIED TO ACCOMMODATE PUMPING BUT ONLY UPON REVIEW BY THE DEPARTMENTAL REPRESENTATIVE.

GENERAL NOTES:

- EXISTING CONDITIONS BASED ON DRAWINGS PROVIDED BY PWGSC AND BY SURVEY CONDUCTED BY DEREK A. FRENCH PROFESSIONAL SERVICES INC., DATED OCT 26, 2015.
- COORDINATES ARE REFERENCED TO P.E.I. CONTROL MONUMENTS 5666 AND 5514. P.E.I. DOUBLE STEREOGRAPHIC PROJECTION COORDINATES, NAD83 (CSRS) DATUM, ZONE 20, EPOCH 1997 WITH PUBLISHED GRID COORDINATES N:681857.737, E:437256.156, DERIVED CHART DATUM ELEVATION 14.821 METRES AND N:681632.329, E:435367.093, DERIVED ELEVATION 8.150 METRES, RESPECTIVELY.
- ELEVATIONS ARE REFERENCED TO CHART DATUM AND ARE BASED ON GEODETIC MONUMENT No. 89-P-9152, LOCATED IN A CONCRETE STEP AT THE FRONT ENTRANCE OF THE GEORGETOWN POST OFFICE, WITH A CHART ELEVATION OF 9.218 METRES.
- ALL ELEVATIONS SHOWN REFERENCED TO CHART DATUM. CHART DATUM IS, BY INTERNATIONAL AGREEMENT, A PLANE BELOW WHICH THE TIDE WILL SELDOM FALL. THE CANADIAN HYDROGRAPHIC SERVICE HAS ADOPTED THE PLANE OF LOWEST NORMAL TIDE (L.N.T.) AS CHART DATUM. AS THE RISE AND FALL OF TIDES VARIES DAILY, THE CANADIAN TIDE AND CURRENT TABLES, AS ISSUED BY THE CANADIAN HYDROGRAPHIC SERVICE, SHOULD BE CONSULTED FOR TIDAL PREDICTIONS AND OTHER TIDAL INFORMATION RELATING TO THE WORK.
- DO NOT SCALE FROM THE DRAWINGS.
- ALL DIMENSIONS ARE IN MILLIMETERS, ALL ELEVATIONS ARE IN METERS, UNLESS OTHERWISE NOTED.
- GEOTECHNICAL INFORMATION AS PER JOOSE ENVIRONMENTAL, PROJECT No. JEO295, DATED MAY 17, 2018, FOR OTHER PERTINENT INFORMATION REGARDING THE BOREHOLES THE CONTRACTOR MUST REVIEW THE COMPLETE GEOTECHNICAL REPORT, AVAILABLE UPON REQUEST.
- ANY INFORMATION PERTAINING TO SOILS AND ALL BOREHOLE DATA IS FURNISHED BY THE DEPARTMENTAL REPRESENTATIVE AS A MATTER OF INFORMATION ONLY, AND BOREHOLE DATA IS NOT TO BE INTERPRETED AS DESCRIPTIVE OF CONDITIONS AT LOCATIONS OTHER THAN THOSE DESCRIBED BY THE BOREHOLES THEMSELVES.
- ANY STOCKPILING OF MATERIAL ON SITE WILL BE AT A LOCATION COORDINATED WITH THE DEPARTMENTAL REPRESENTATIVE AND THE LOCAL HARBOUR AUTHORITY.
- THE CONTRACTOR SHALL BE HELD TO HAVE VISITED THE SITE AND TO HAVE BECOME FAMILIAR WITH THE EXISTING CONDITIONS PRIOR TO COMMENCING THE WORK. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM THE DEPARTMENTAL REPRESENTATIVE IN WRITING OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE PLAN BEFORE STARTING THE WORK.
- CONTRACTOR TO COORDINATE ALL WORK WITH THE DEPARTMENTAL REPRESENTATIVE AND THE LOCAL HARBOUR AUTHORITY. NO WORK SHALL BE COMPLETED IN SUCH A MANNER AS TO INTERFERE WITH HARBOUR OPERATIONS IN ANY WAY.
- SPECIFIED DESIGN LIVE LOAD:
  - FOR NEW STRUCTURE 402/403, UNIFORM LOAD EQUAL TO 15 Kpa;
  - FOR NEW STRUCTURE 402/403, TRUCK LOADING:
 

MS200 TRUCK LOADING
  - RAMP STRUCTURES FROM (STRUCTURE) 402 TO 405 AND 402 TO 404 SHALL BE LIMITED TO A MAXIMUM AXLE LOAD OF 16 kN AND A TOTAL VEHICLE WEIGHT OF 32 kN.
- THE WORK OF THIS CONTRACT IS TO BE SUBSTANTIALLY COMPLETED BEFORE JUNE 30, 2023.
- TIE-RODS SHALL BE INSTALLED AND STRAIN COMPATIBLE PRIOR TO BACKFILLING THE STRUCTURE.
- PROVIDE TEMPORARY SUPPORT FOR THE TIE-RODS AT THREE APPROXIMATELY EVENLY SPACED INCREMENTS ALONG THE LENGTH OF THE TIE-RODS. TEMPORARY SUPPORTS (OR SUPPORT BLOCKING) SHALL BE REMOVABLE (PROVIDING A MINIMUM OF 150mm CLEAR BELOW THE TIE-ROD) ONCE THE TIE-RODS ARE FULLY SUPPORTED BY THE FILLS. THE EXISTING STRUCTURE MAY BE USED AS TEMPORARY SUPPORT. DESIGN OF THE TEMPORARY SUPPORT SYSTEM IS BY THE CONTRACTOR.
- ALL EXISTING WATER LINE ON 402, 403, 404 AND 409 TO BE REMOVED FOR CONSTRUCTION AND REINSTATED UPON COMPLETION.

TIMBER NOTES:

- ALL TIMBER TO BE TREATED TO CAN/CSA-080 SERIES M-15 FOR MARINE CONSTRUCTION COASTAL WATER, UNLESS OTHERWISE NOTED.
- TIMBER MATERIALS SHALL BE SPECIES HEMLOCK, GRADE No. 1/2 OR BETTER.

METAL FABRICATION NOTES:

- STEEL MATERIALS SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:
  - ROLLED SECTION OR PLATE TO CAN/CSA G40.21M Gr. 350W.
  - TIE-RODS TO ASTM A615, GRADE 517 MPa, CONTINUOUSLY THREADED BAR. HEAVY HEX NUTS AND COUPLERS SHALL HAVE THE FULL CAPACITY OF THE BAR. BAR AND ALL COMPONENTS TO BE BLACK STEEL. THERE SHALL ONLY BE ONE COUPLER PER TIE-ROD. PROVIDE BEVELLED WASHER AS REQUIRED FOR ANGLED TIE-RODS.
  - BOLTS TO BE GRADE A307 (U.N.O.).
- ALL STEEL WORK SHALL BE CONDUCTED IN ACCORDANCE WITH CAN/CSA S16.1, LATEST EDITION.
- ALL WELDING SHALL BE DONE IN ACCORDANCE WITH CSA W59, LATEST EDITION.
- HOP DIP GALVANIZE ITEMS INDICATED TO CAN/CSA G164-18, MINIMUM ZINC COATING OF 610g/m<sup>2</sup>.
- WALER SPLICE LOCATIONS AND QUANTITIES SHALL BE LOCATED BY THE CONTRACTOR. SPLICES SHALL BE LOCATED AT A TIE ROD AND SPACED A MINIMUM OF THREE TIE ROD SPACINGS.

PILE NOTES:

- STEEL SHEET PILE, MINIMUM FLANGE THICKNESS - 15.5mm, MINIMUM WEB THICKNESS - 12.0mm, MINIMUM CROSS SECTIONAL AREA 225cm<sup>2</sup>/m, MINIMUM ELASTIC SECTION MODULUS (S<sub>x</sub>) - 3700cm<sup>3</sup>/m, Gr. 350W. SHEET PILING SHALL BE BLACK STEEL.
- PILES SHALL BE DRIVEN TO ELEVATIONS INDICATED ON THE DRAWINGS.
- LAYOUT GEOMETRY IS BASED ON A238-700 S.S.P. AND IS SUBJECT TO CHANGE DEPENDING ON THE ACTUAL S.S.P. SHEET CHOSEN.
- PROVIDE A RATED HAMMER ENERGY THAT IS A MINIMUM OF 450J/cm<sup>2</sup> OF STEEL CROSS-SECTIONAL AREA OF STEEL SHEET PILE.

LOAD RESTRICTIONS ON EXISTING STRUCTURES:

- BIDDERS ARE CAUTIONED THAT EXISTING STRUCTURES, IN CURRENT CONDITION, ARE OF UNKNOWN CAPACITY.



LEGEND

- STRUCTURE IDENTIFICATION NUMBER
- UTILITY POLE
- LIGHT POLE
- EXISTING OVERHEAD UTILITY WIRE OR GUY WIRE
- 2018 BOREHOLE
- 2018 BOREHOLE
- EXISTING SOUNDING

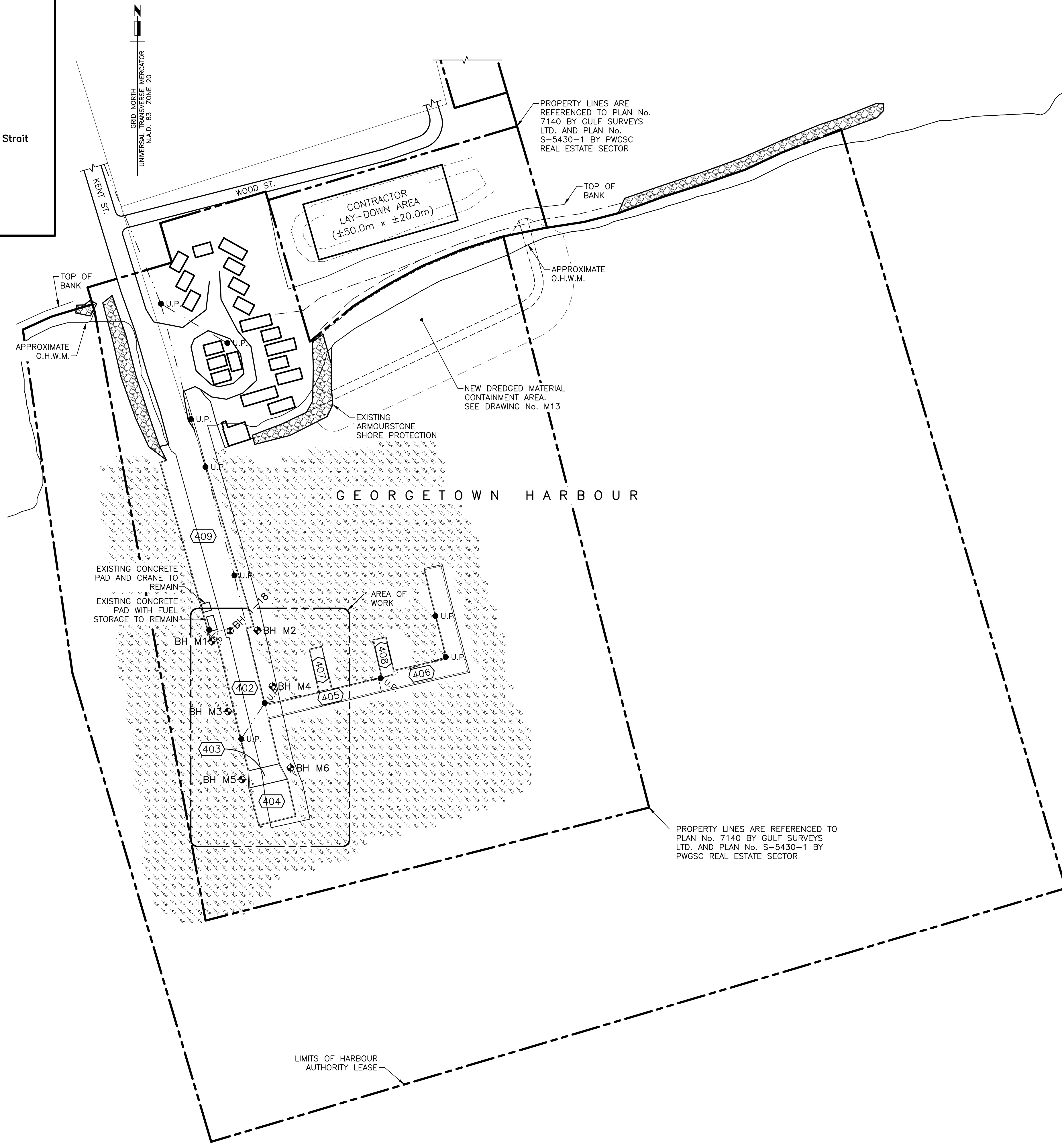


0	ISSUED FOR TENDER	SEPT. 15 2021
revisions		date

**STRUCTURE #402 AND #403 RECONSTRUCTION GEORGETOWN KINGS COUNTY, PE**

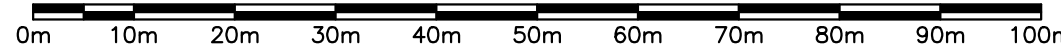
**KEY PLAN AND EXISTING SITE PLAN**

designed R.KEEFE	conçu
date FEBRUARY 2018	
drawn J.BENNETT	dessiné
date FEBRUARY 2018	
approved	approuvé
date	
Tender	Soumission
PWGSC Project Manager	Administrateur de projets TPSCG
project number	no. du projet
<b>C2-00003</b>	
drawing no.	no. du dessin
<b>M1 of 15</b>	



EXISTING SITE PLAN

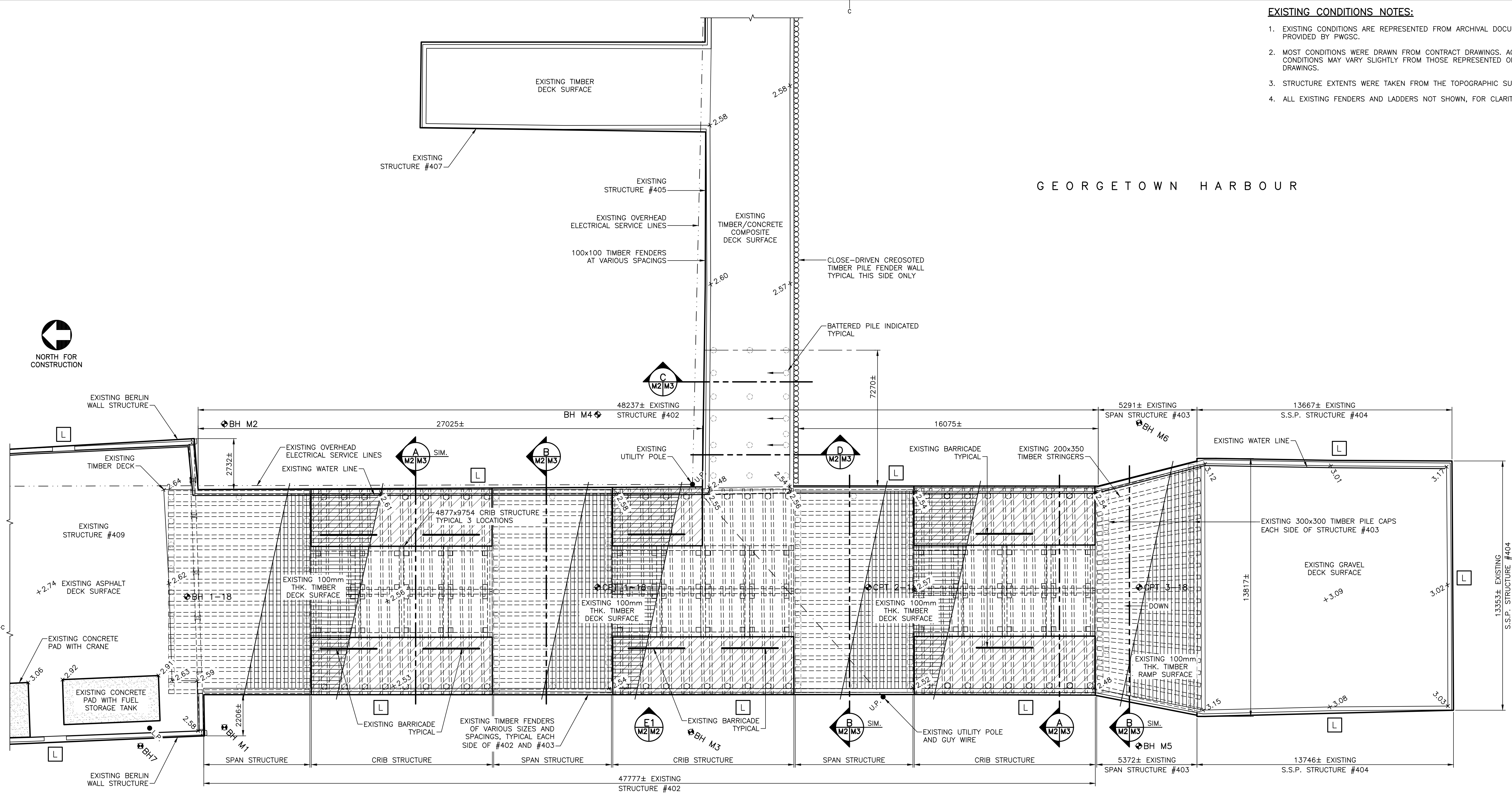
SCALE : 1:750



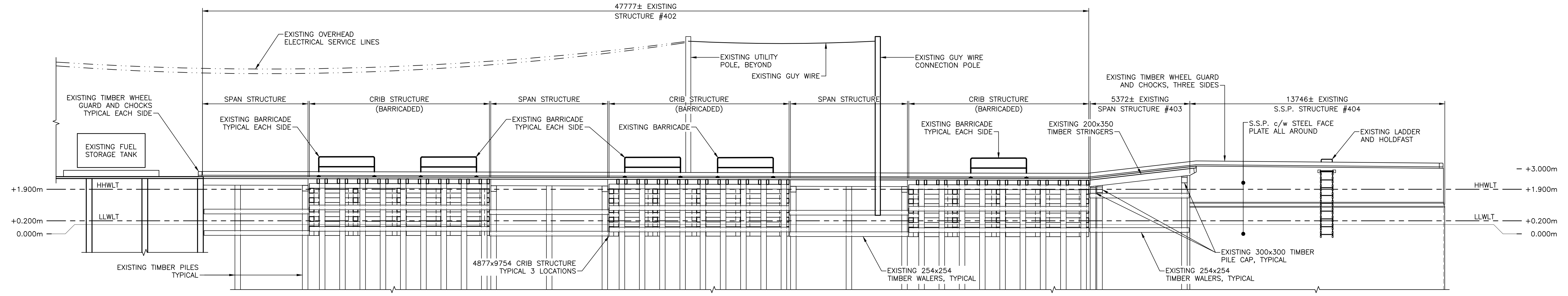
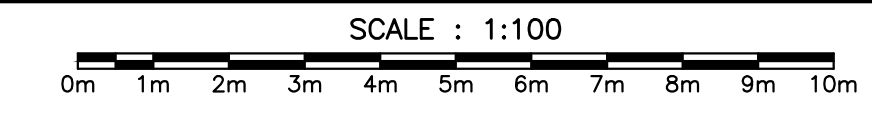
**EXISTING CONDITIONS NOTES:**

- EXISTING CONDITIONS ARE REPRESENTED FROM ARCHIVAL DOCUMENTS PROVIDED BY PWGSC.
- MOST CONDITIONS WERE DRAWN FROM CONTRACT DRAWINGS. ACTUAL EXISTING CONDITIONS MAY VARY SLIGHTLY FROM THOSE REPRESENTED ON THESE DRAWINGS.
- STRUCTURE EXTENTS WERE TAKEN FROM THE TOPOGRAPHIC SURVEY.
- ALL EXISTING FENDERS AND LADDERS NOT SHOWN, FOR CLARITY.

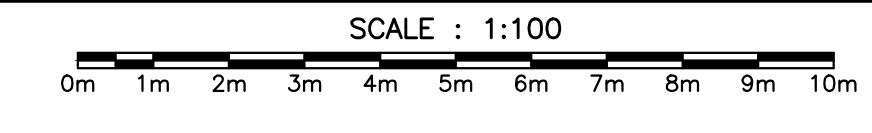
GEORGETOWN HARBOUR



**PLAN DETAIL OF EXISTING CONDITIONS** 1  
 M2/M2



**EXISTING WEST ELEVATION** E1  
 M2/M2



- NOTES:**
- ALL EXISTING FENDERS AND LADDERS NOT SHOWN, FOR CLARITY.
  - EXISTING LINE OF HARBOUR BOTTOM AT SPAN STRUCTURE IS UNCONFIRMED AND NOT SHOWN IN THIS ELEVATION.

**LEGEND**

- EXISTING LADDER
- EXISTING SPOT ELEVATION
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- 2018 BOREHOLE
- EXISTING OVERHEAD UTILITY WIRE OR GUY WIRE
- BARRICADED ZONES



0	ISSUED FOR TENDER	SEPT. 15 2021
revisions		date

project project  
**STRUCTURE #402 AND #403 RECONSTRUCTION GEORGETOWN KINGS COUNTY, PE**

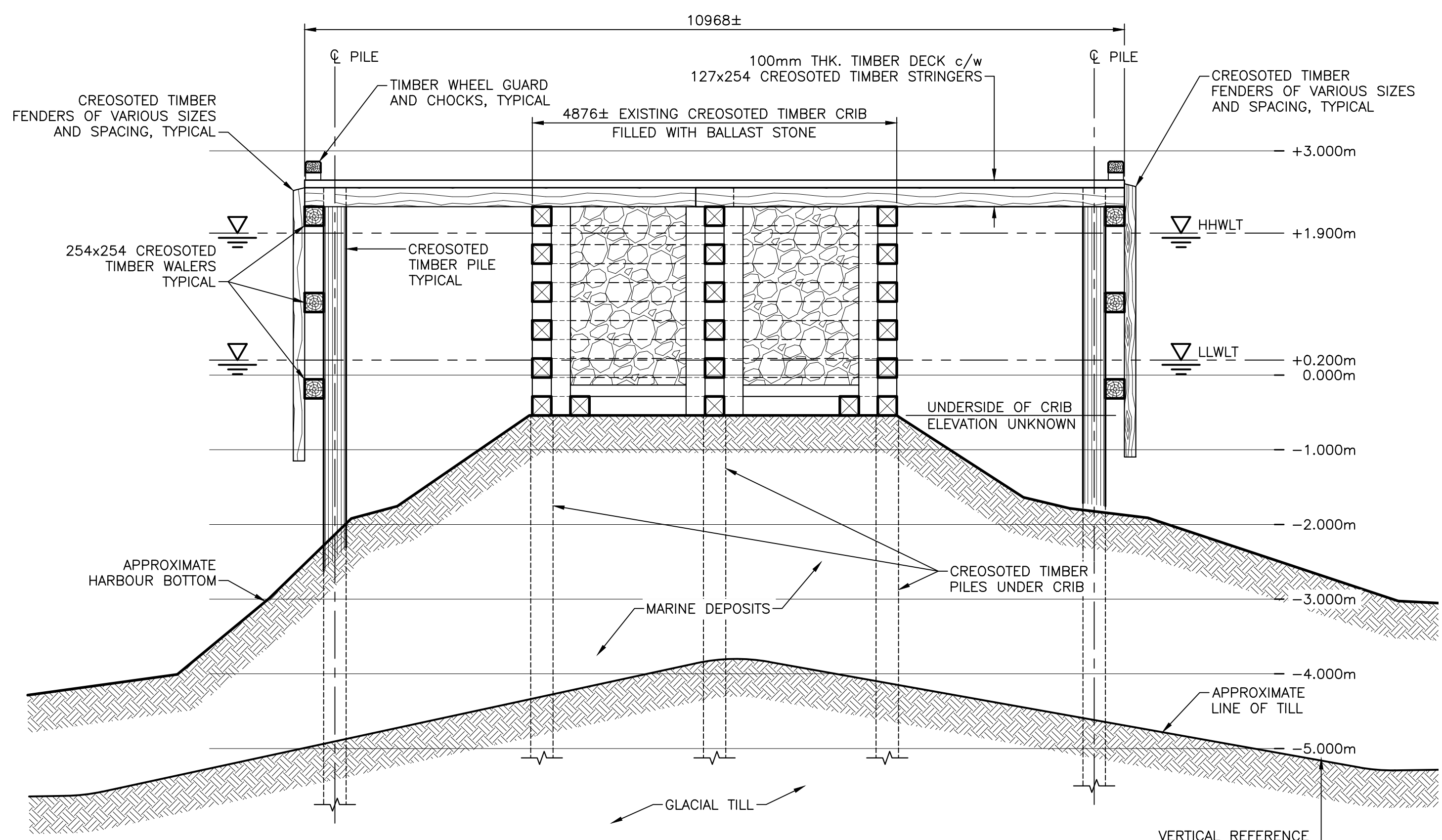
**PLAN DETAIL AND WEST ELEVATION OF EXISTING CONDITIONS**

designed R.KEEFE	conçu
date FEBRUARY 2018	date
drawn J.BENNETT	dessiné
date FEBRUARY 2018	date
approved	approuvé
date	date
Tender	Soumission

PWGSC Project Manager / Administrateur de projets TPSC  
 project number no. du projet

**C2-00003**

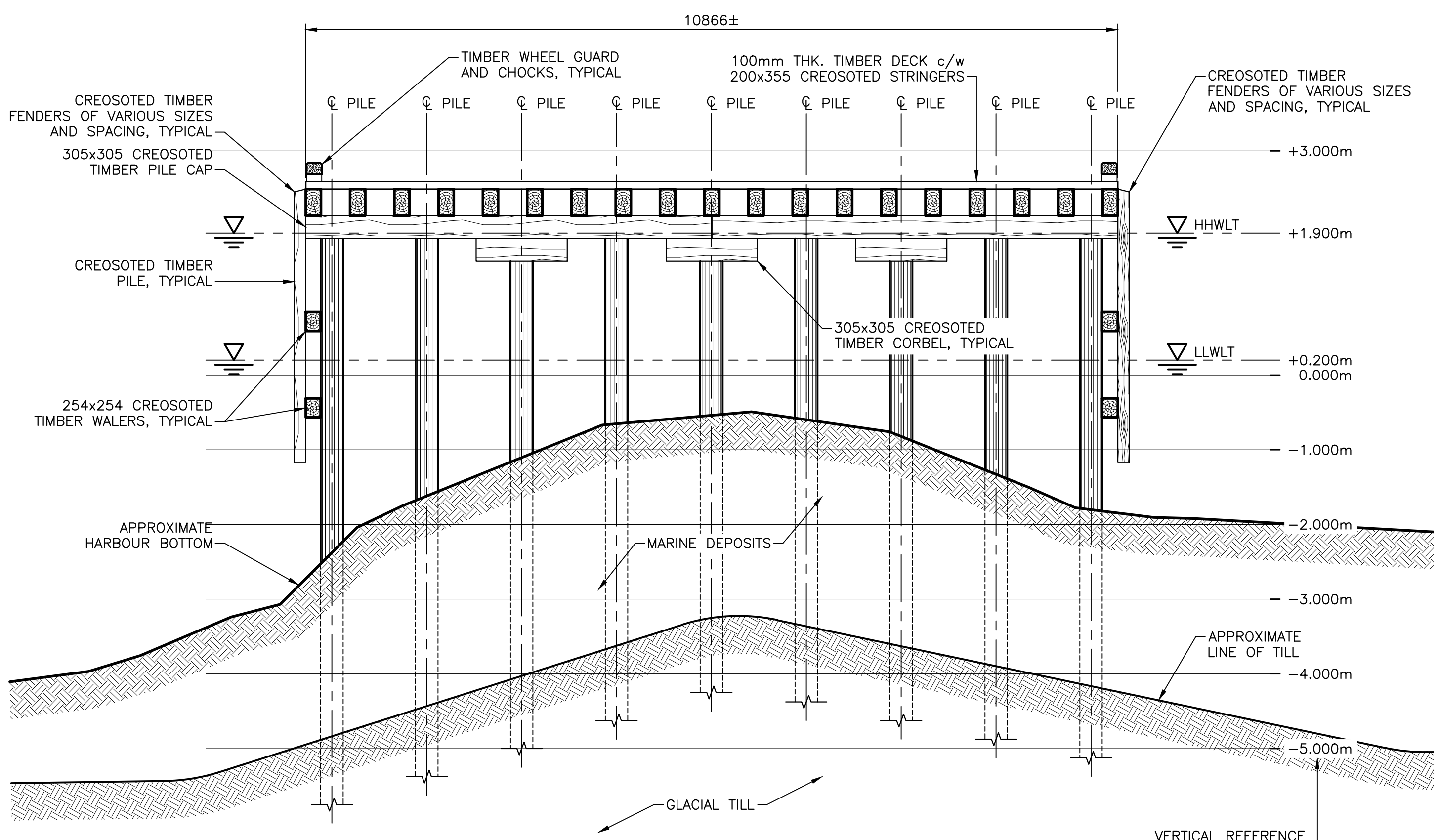
drawing no. no. du dessin  
**M2 of 15**



EXISTING SECTION THROUGH CRIB (A)

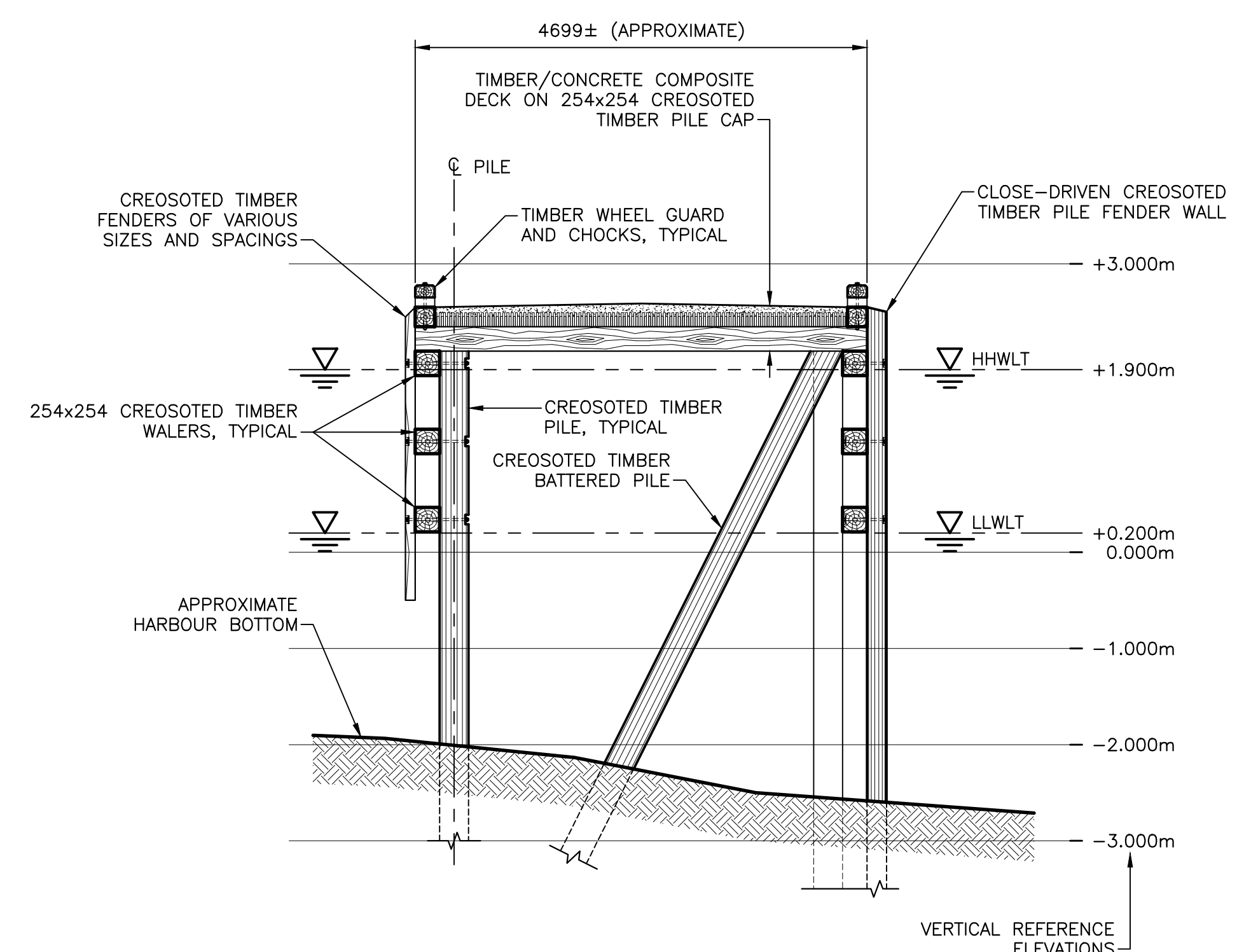
SCALE: 1:50

NOTE: PILES SHOWN UNDER TIMBER CRIB ARE UNDER SOUTHERN-MOST CRIB STRUCTURE ONLY.



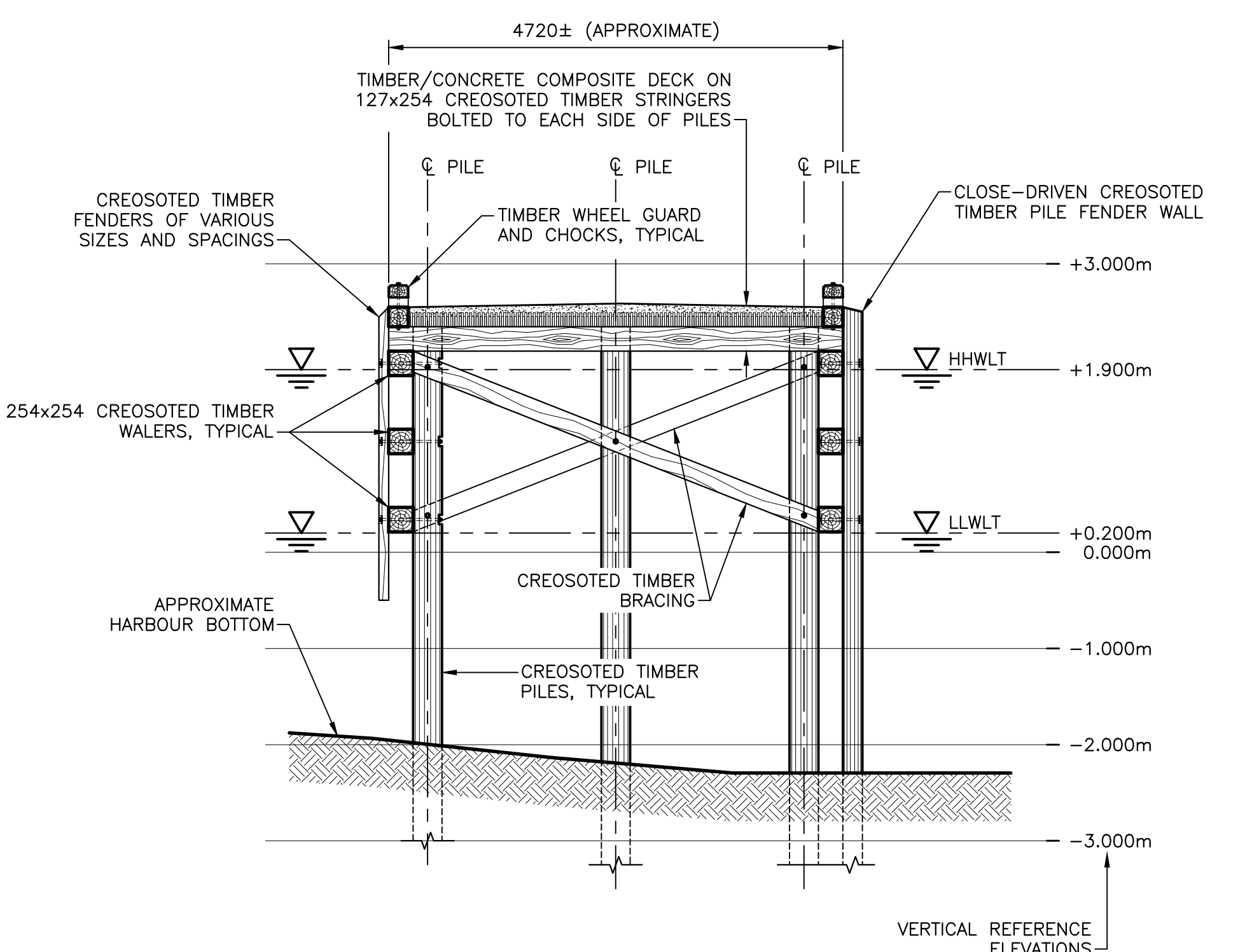
EXISTING SECTION THROUGH SPAN (B)

SCALE: 1:50



EXISTING STRUCTURE #405 SECTION (C)

SCALE: 1:50



EXISTING STRUCTURE #405 SECTION (D)

SCALE: 1:50

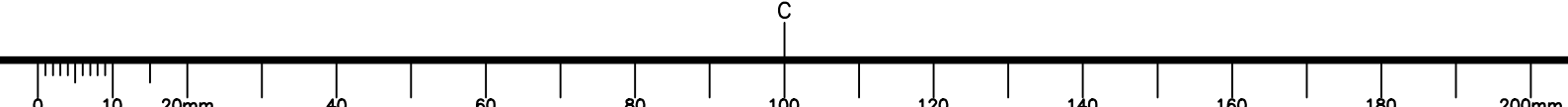


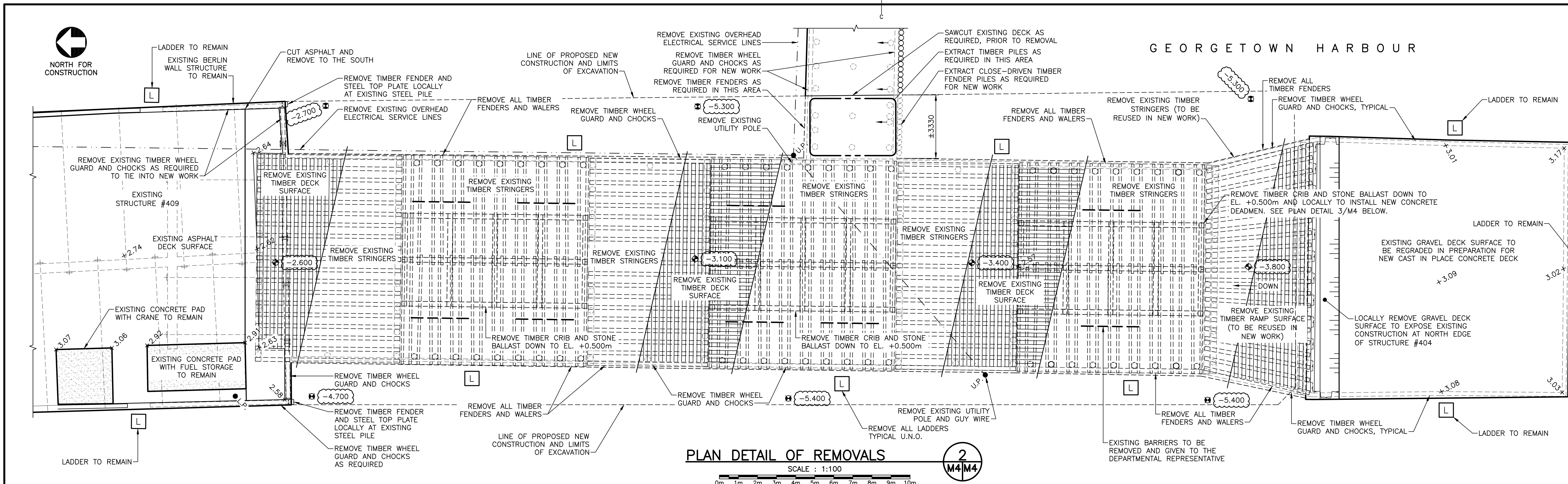
0	ISSUED FOR TENDER	SEPT. 15 2021
revisions		date
project		project

**STRUCTURE #402 AND #403 RECONSTRUCTION GEORGETOWN KINGS COUNTY, PE**

**CROSS SECTIONS OF EXISTING CONDITIONS**

designed	R.KEEFE	conçu
date	FEBRUARY 2019	
drawn	J.BENNETT	dessiné
date	FEBRUARY 2018	
approved		approuvé
date		
Tender		Soumission
PWSC Project Manager	Administrateur de projets TPSC	
project number		no. du projet
	<b>C2-00003</b>	
drawing no.		no. du dessin
	<b>M3 of 15</b>	

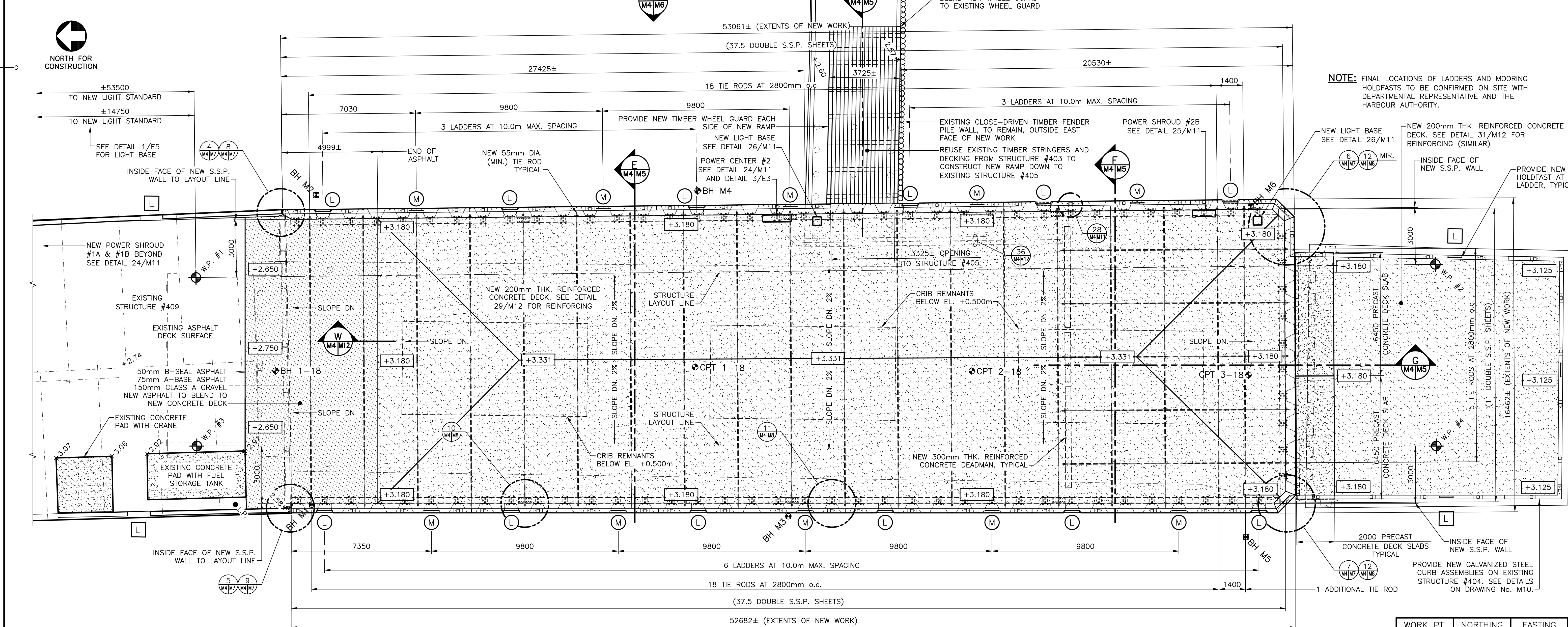




**PLAN DETAIL OF REMOVALS**  
SCALE : 1:100

**EXCAVATION NOTES:**

1. CONTRACTOR SHALL EXCAVATE EXISTING MARINE DEPOSITS TO A PLANAR SURFACE IDENTIFIED BY THE EXCAVATION SPOT ELEVATIONS SHOWN.
2. REFER TO SPECIFICATION SECTION 31 23 33.01 FOR EXCAVATION ADJACENT TO STRUCTURES AND FOR REQUIREMENTS AROUND THE EXISTING TIMBER CRIBWORK.



**PLAN DETAIL OF NEW CONSTRUCTION**  
SCALE : 1:100

GEORGETOWN HARBOUR

GEORGETOWN HARBOUR

- LEGEND**
- [L] EXISTING LADDER
  - +2.75 EXISTING SPOT ELEVATION
  - U.P. UTILITY POLE
  - L.P. LIGHT POLE
  - ⊙ BH M4 2018 BOREHOLE
  - ⊙ W.P. #1 NEW WORK POINT
  - ⊙ NEW MOORING HOLDFAST
  - ⊙ NEW LADDER
  - [+3.180] FINISHED ELEVATION
  - ⊙ -5.400 EXCAVATION SPOT ELEVATION



0	ISSUED FOR TENDER	SEPT. 15 2021
revisions	date	date

**STRUCTURE #402 AND #403 RECONSTRUCTION  
GEORGETOWN  
KINGS COUNTY, PE**

**PLAN DETAILS OF  
REMOVALS AND  
NEW CONSTRUCTION**

designed R.KEEFE	conçu
date FEBRUARY 2018	
drawn J.BENNETT	dessiné
date FEBRUARY 2018	
approved	approuvé
date	
Tender	Soumission

WORK PT.	NORTHING	EASTING
W.P. #1	681052.437	436182.391
W.P. #2	680989.609	436199.055
W.P. #3	681050.217	436173.837
W.P. #4	680987.217	436189.835

project number **C2-00003**  
drawing no. **M4** of **15**

**LEGEND**  
 +3.180 FINISHED ELEVATION

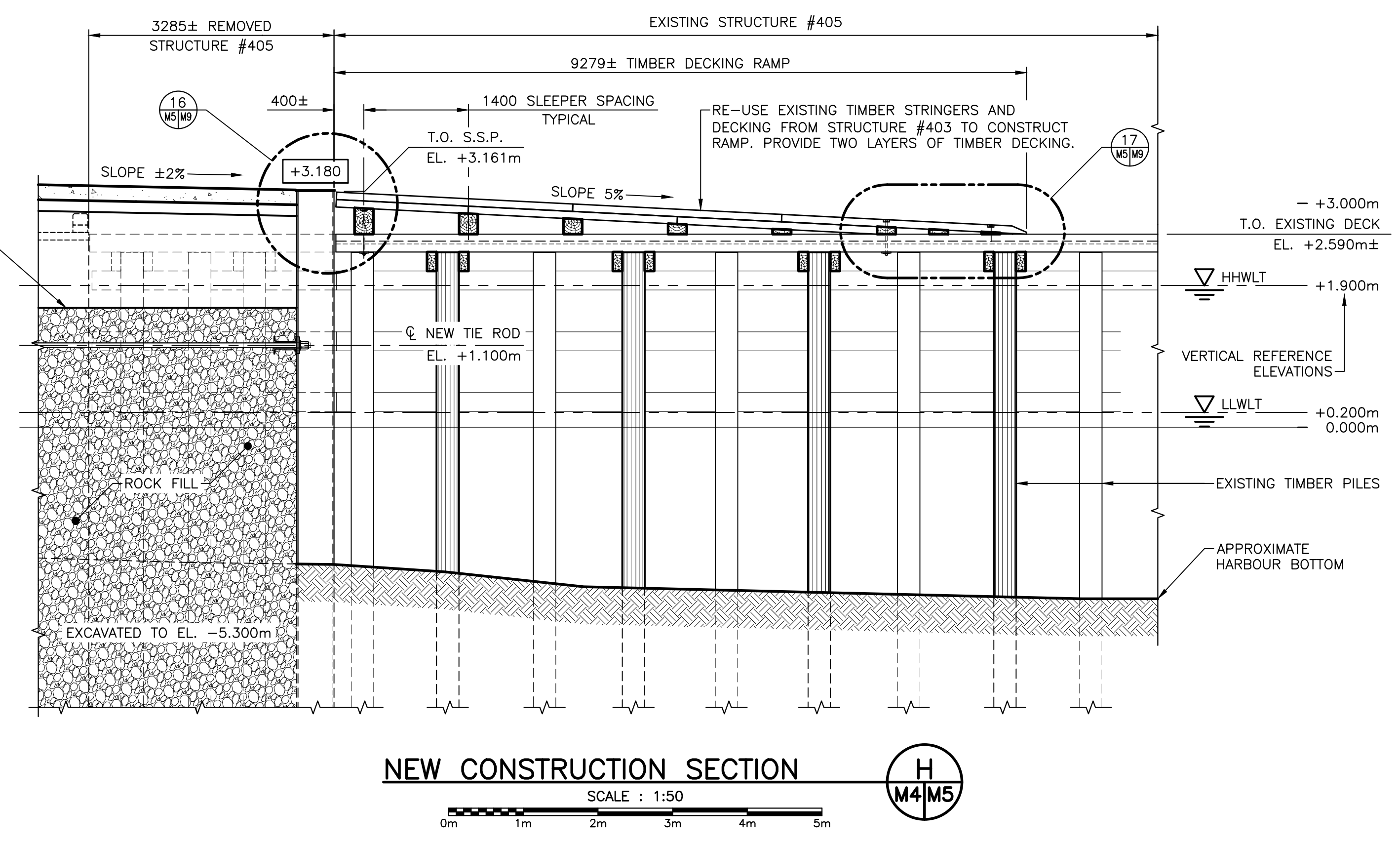
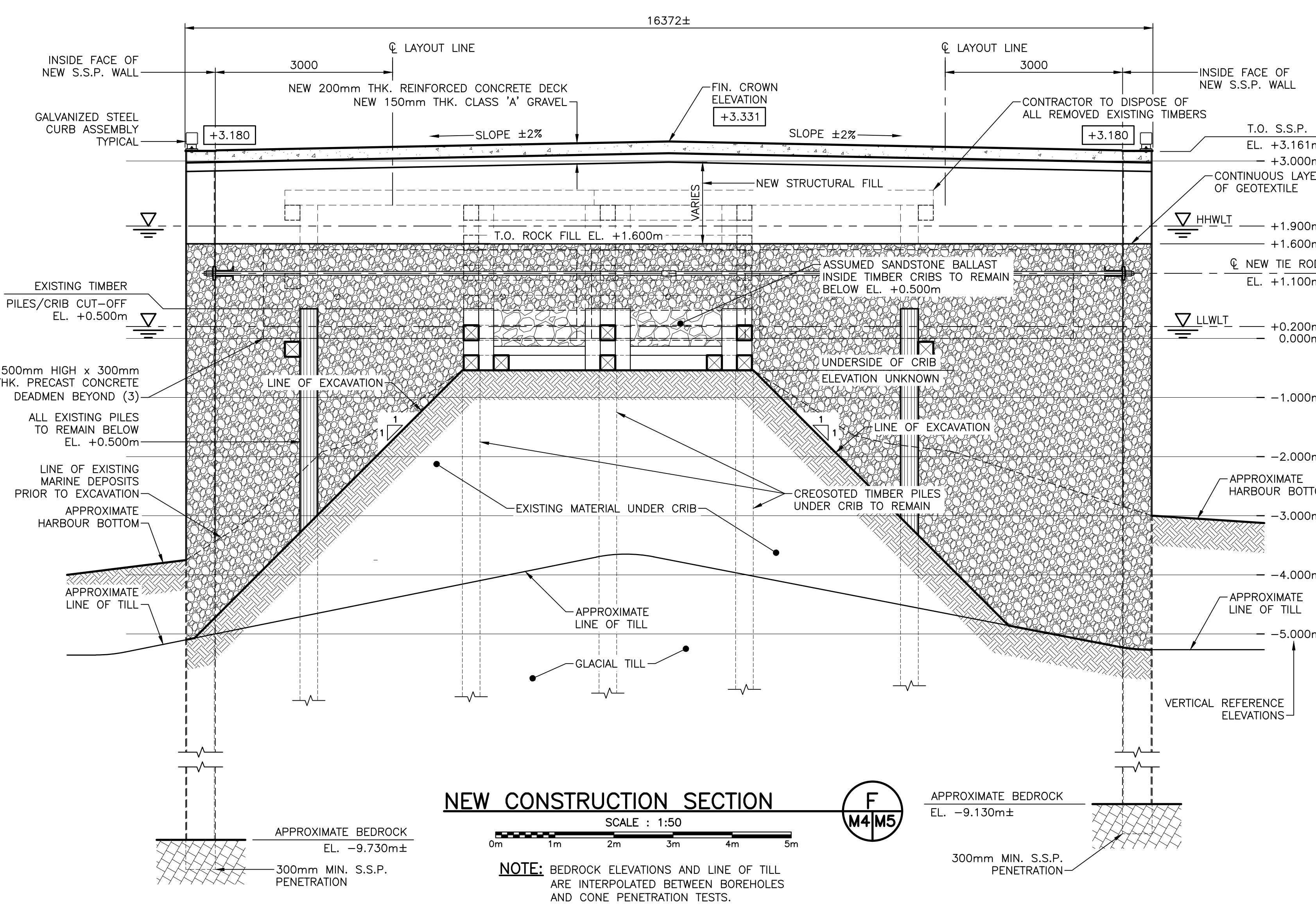
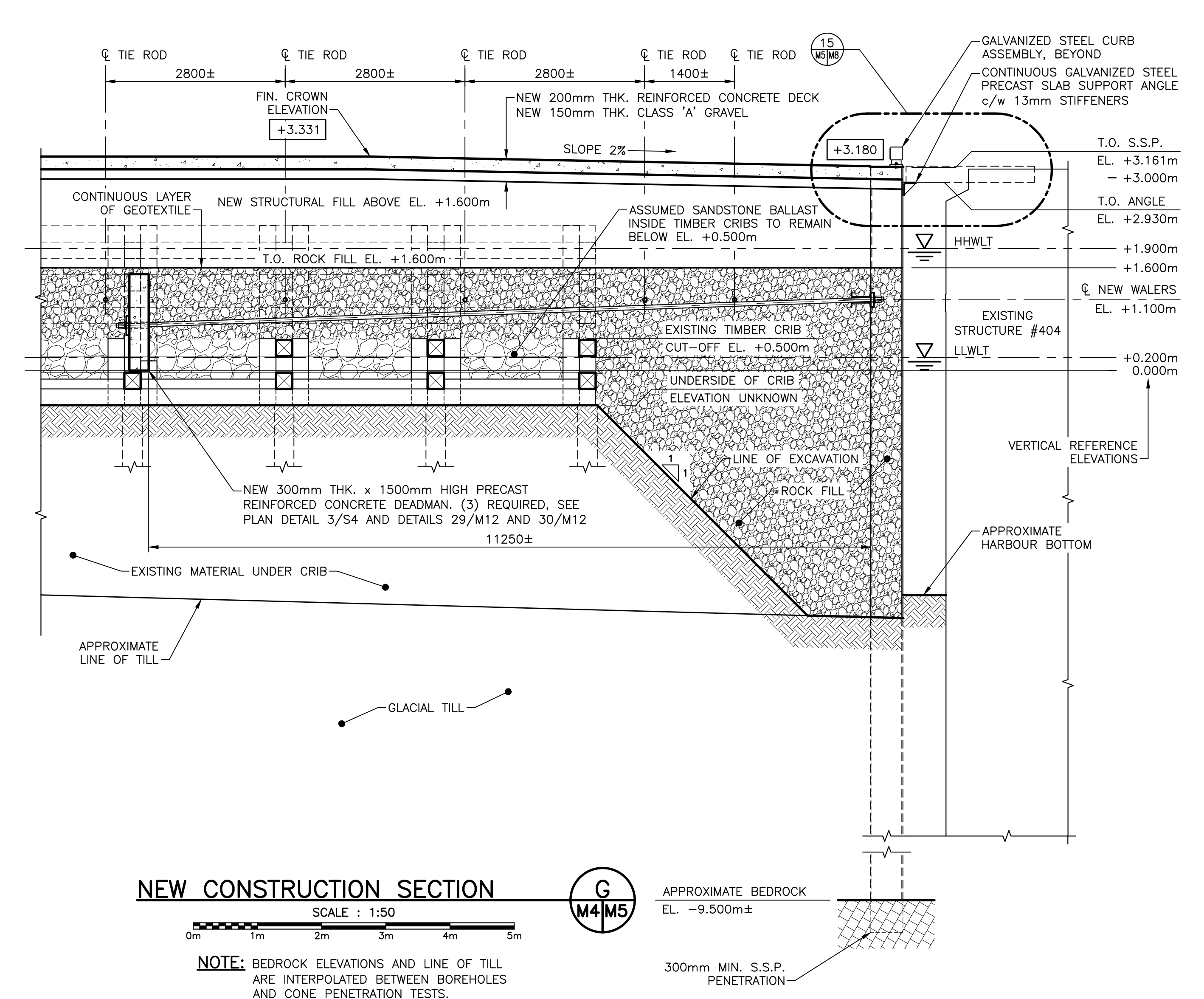
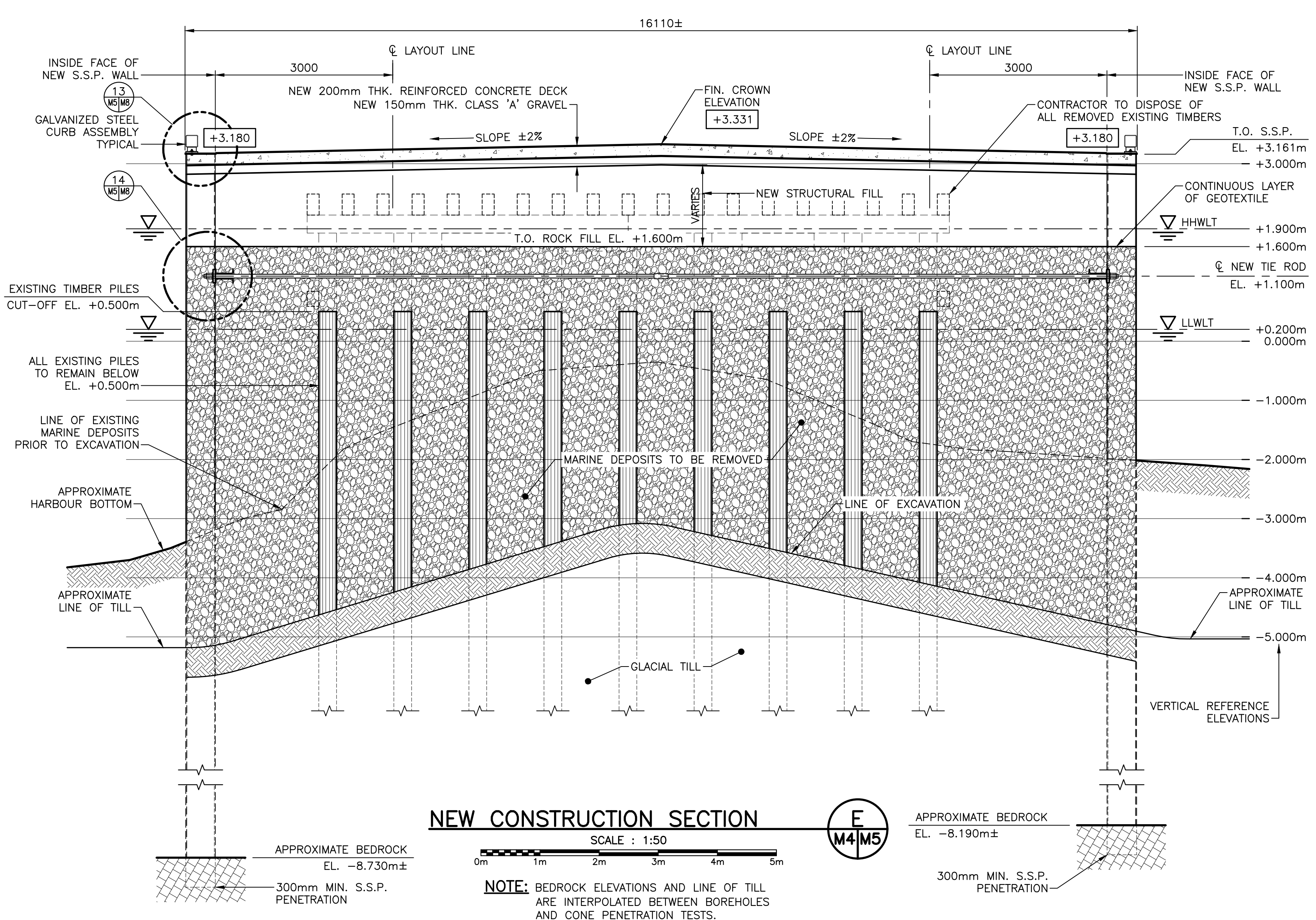


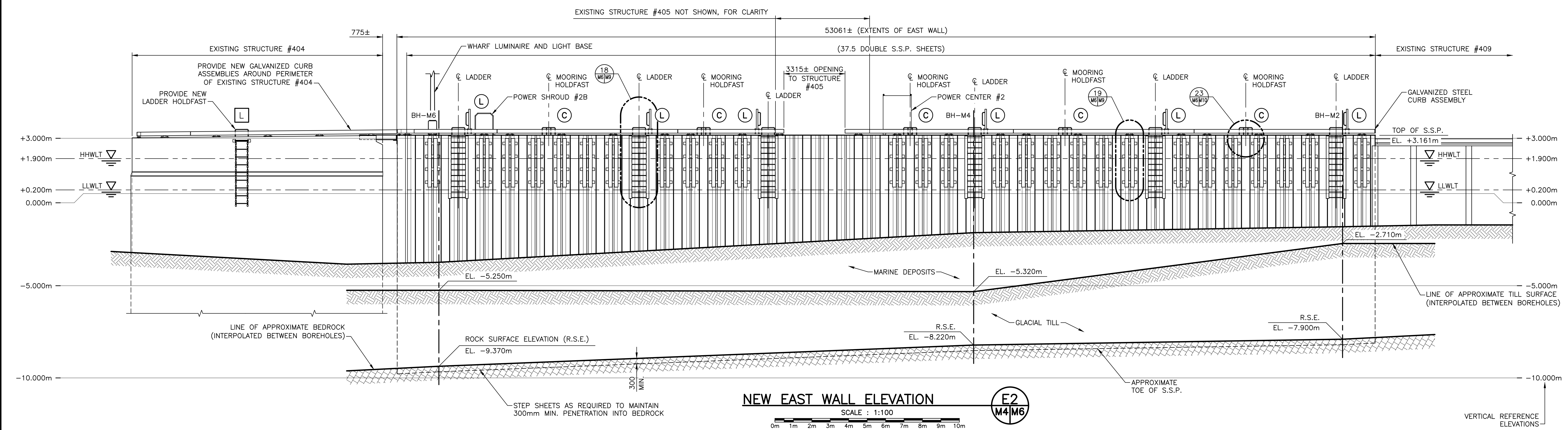
0	ISSUED FOR TENDER	SEPT. 15 2021
revisions		date

project project  
**STRUCTURE #402 AND #403 RECONSTRUCTION GEORGETOWN KINGS COUNTY, PE**

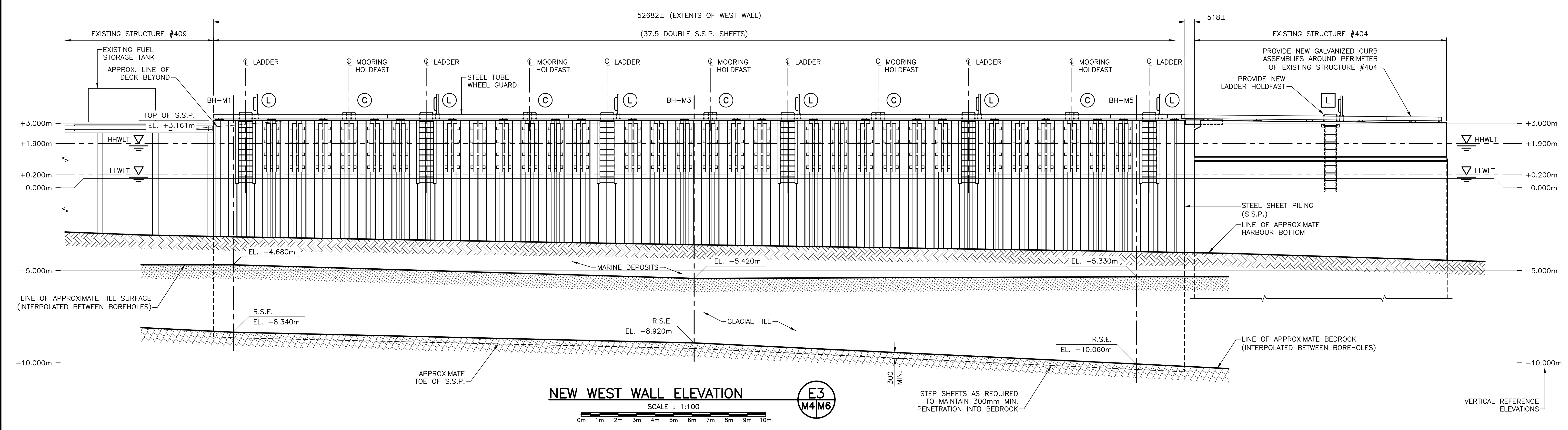
drawing design  
**SECTIONS**

designed R.KEEFE	conçu
date FEBRUARY 2018	
drawn J.BENNETT	dessiné
date FEBRUARY 2018	
approved	approuvé
date	
Tender	Soumission
PWSC Project Manager Administrateur de projets TPSC	
project number C2-00003	no. du projet
drawing no. M5 of 15	no. du dessin





**NOTE:** MARINE AND GLACIAL DEPOSITS SHOWN ON THIS PAGE REPRESENT MATERIALS REMAINING IN-SITU OUTSIDE OF NEW S.S.P. WALLS. FOR MARINE DEPOSIT REMOVALS REFER TO SECTIONS SHOWN ON DRAWING No. M5. ALL EXTENTS ARE APPROXIMATE DUE TO INTERPOLATION BETWEEN BOREHOLE LOCATIONS.



- LEGEND**
- [L] EXISTING LADDER
  - [C] NEW MOORING HOLDFAST
  - [L] NEW LADDER
  - [+3.180] FINISHED ELEVATION

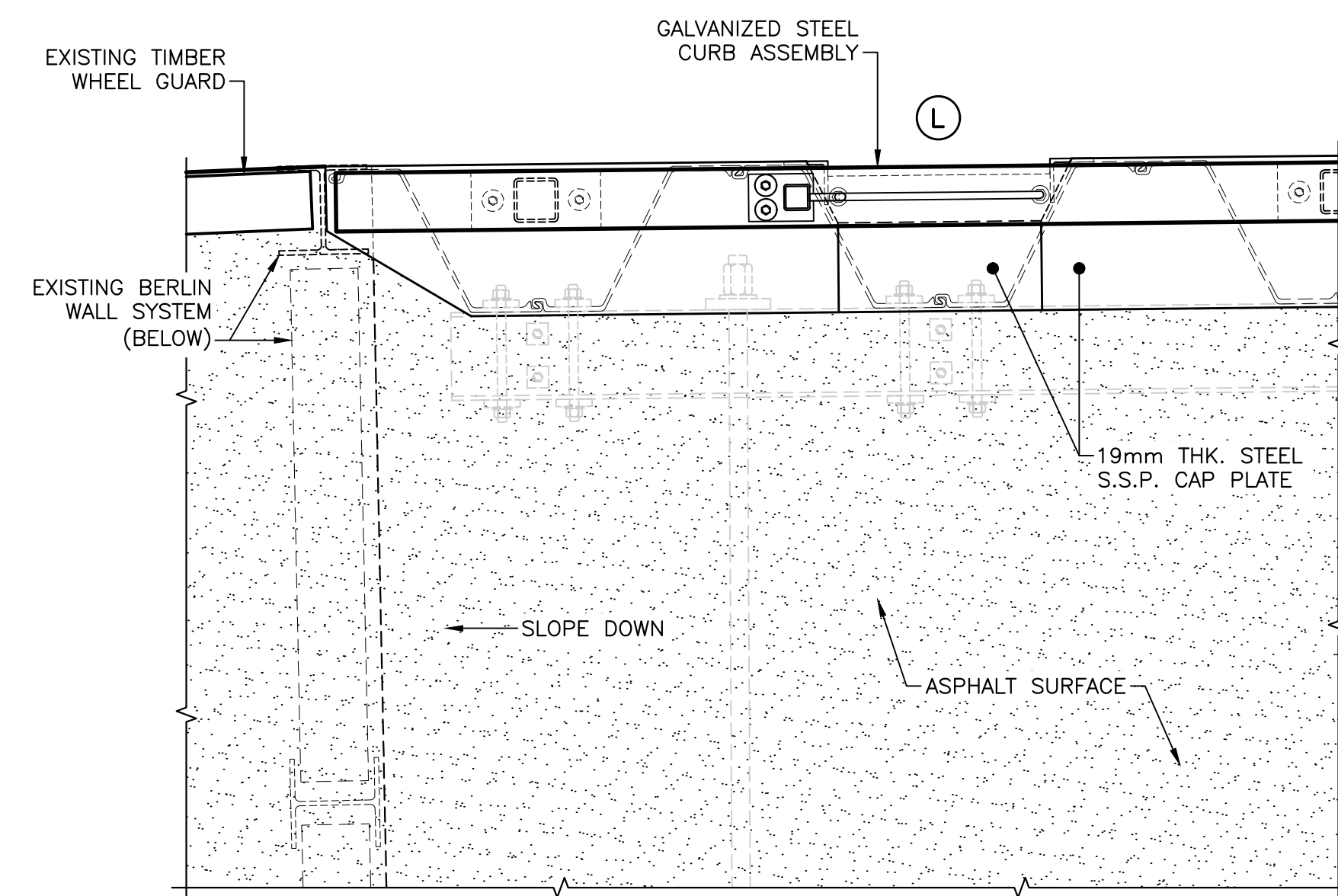


0	ISSUED FOR TENDER	SEPT. 15 2021
revisions		date

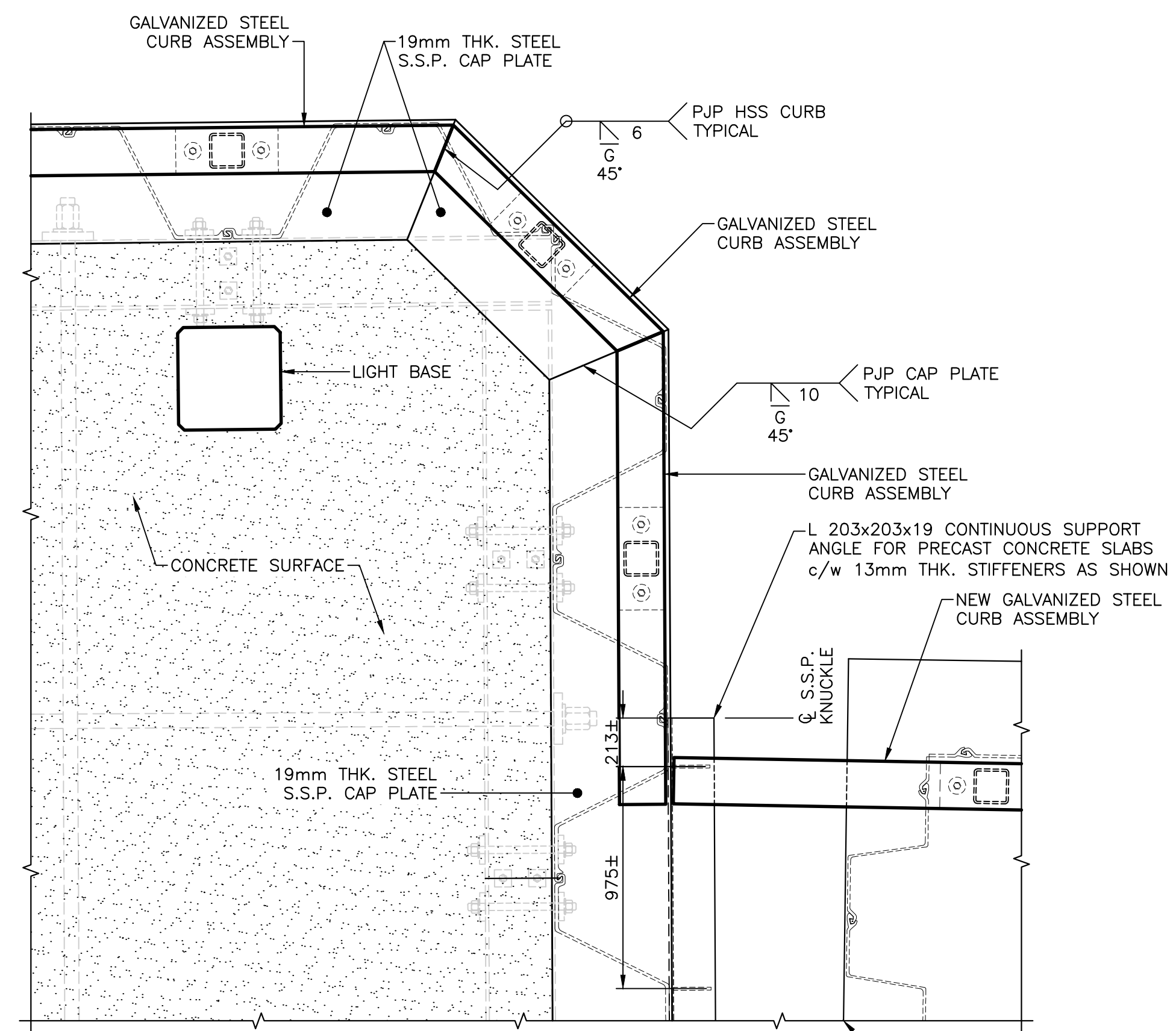
STRUCTURE #402 AND #403 RECONSTRUCTION  
 GEORGETOWN  
 KINGS COUNTY, PE

WALL ELEVATIONS

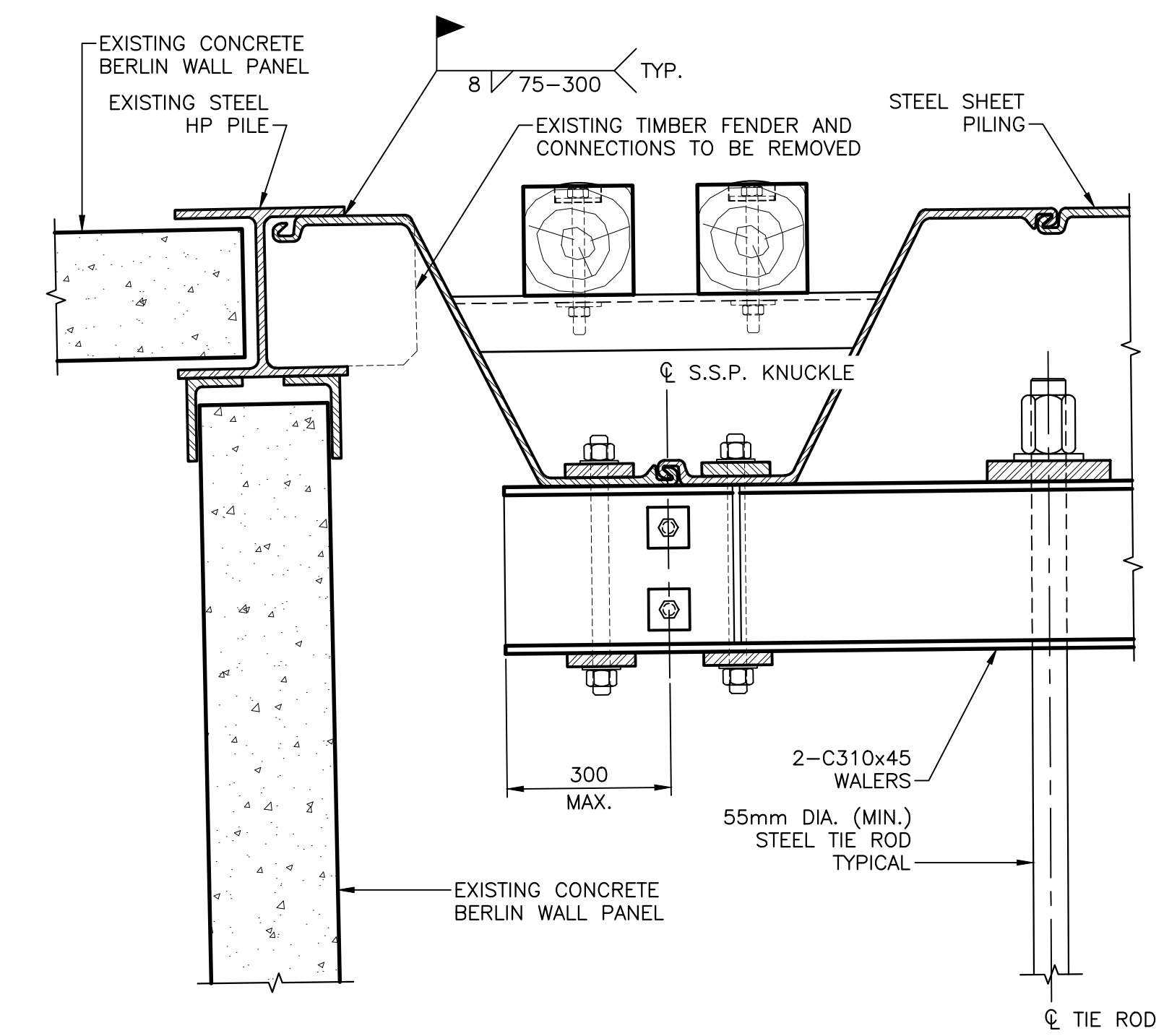
designed	R.KEEFE	conçu
date	FEBRUARY 2018	
drawn	J.BENNETT	dessiné
date	FEBRUARY 2018	
approved		approuvé
date		
Tender		Submission
PWSC Project Manager	Administrateur de projets TPSGC	
project number		no. du projet
	C2-00003	
drawing no.		no. du dessin
	M6 of 15	



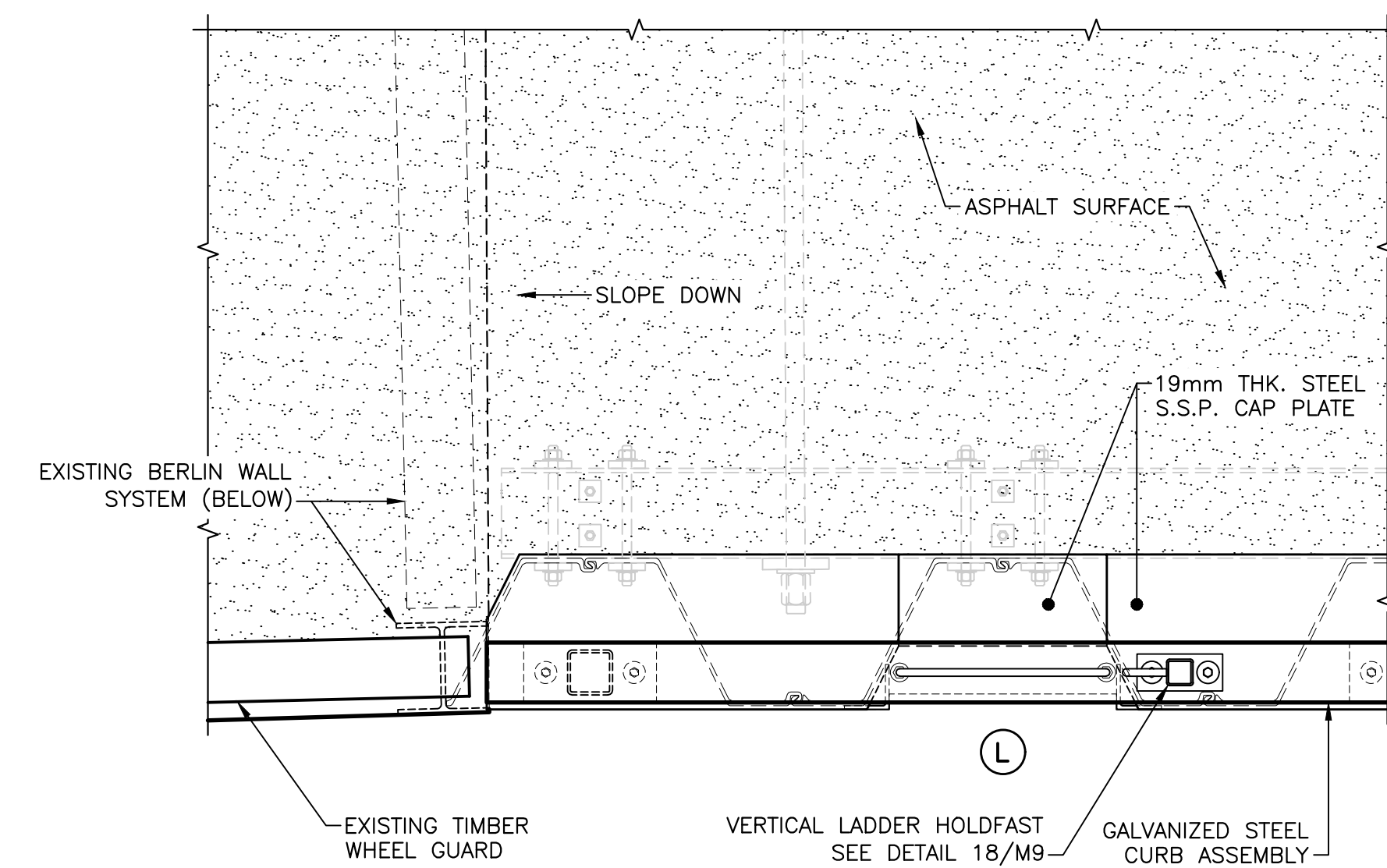
**NORTH EAST CORNER DETAIL**  
 SCALE : 1:20  
 0mm 500mm 1000mm 1500mm 2000mm 2500mm



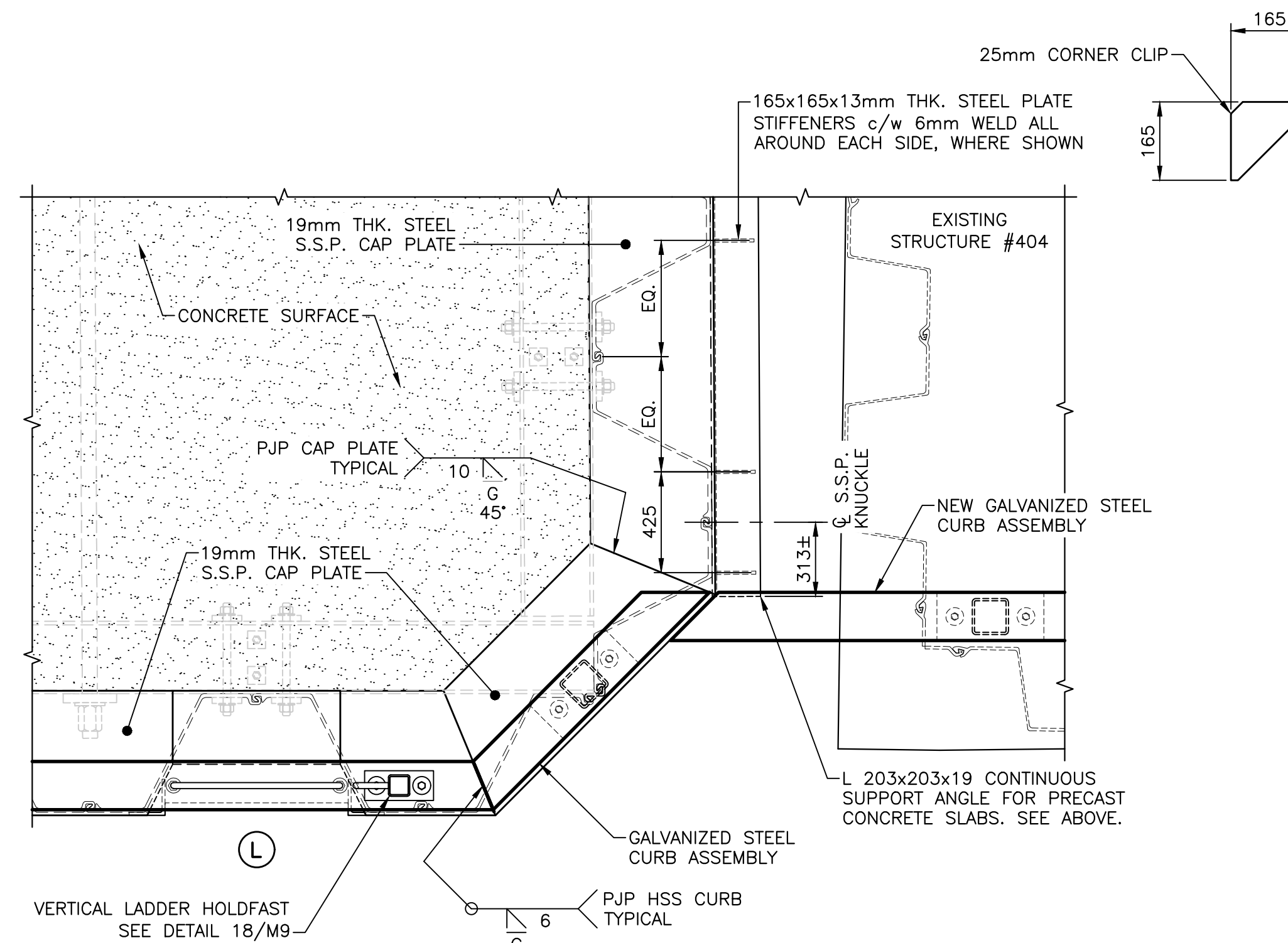
**SOUTH EAST CORNER DETAIL**  
 SCALE : 1:20  
 0mm 500mm 1000mm 1500mm 2000mm 2500mm



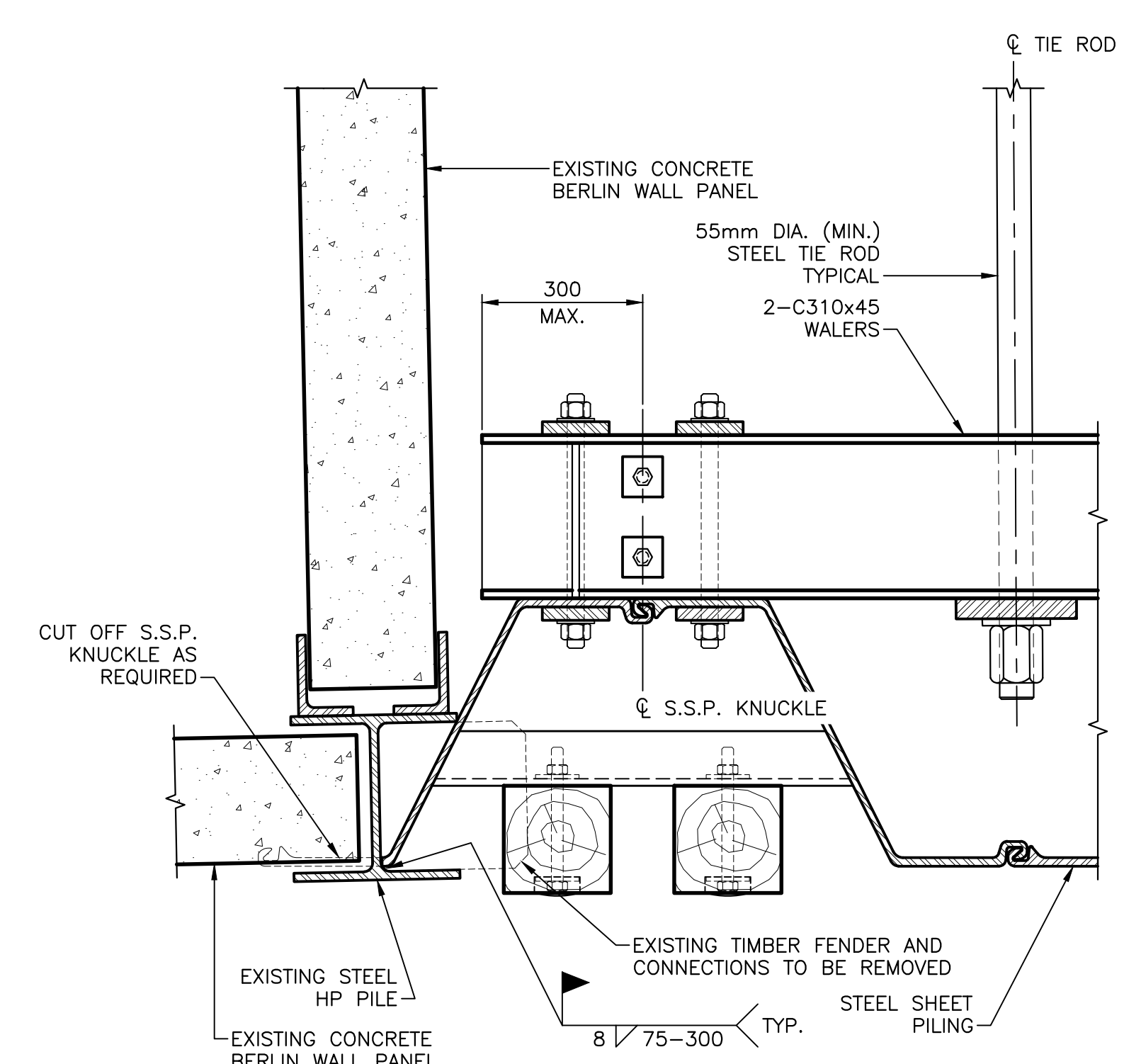
**NORTH-EAST CORNER DETAIL**  
 SCALE : 1:10  
 0mm 100 200 300 400 500 600 700 800 900 1000mm



**NORTH WEST CORNER DETAIL**  
 SCALE : 1:20  
 0mm 500mm 1000mm 1500mm 2000mm 2500mm



**SOUTH WEST CORNER DETAIL**  
 SCALE : 1:20  
 0mm 500mm 1000mm 1500mm 2000mm 2500mm



**NORTH-WEST CORNER DETAIL**  
 SCALE : 1:10  
 0mm 100 200 300 400 500 600 700 800 900 1000mm



0	ISSUED FOR TENDER	SEPT 15 2021
revisions		date

project \_\_\_\_\_ project \_\_\_\_\_

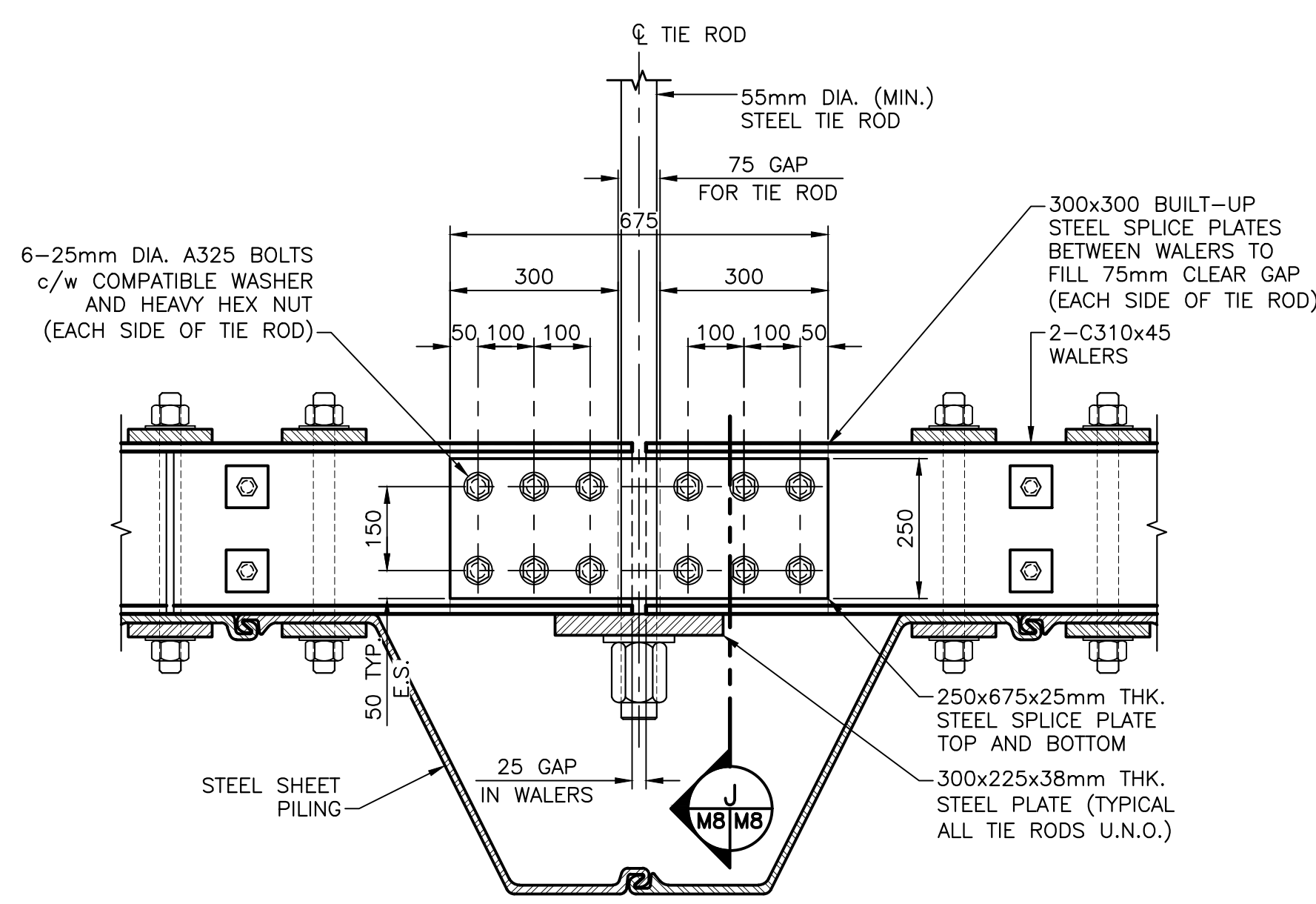
**STRUCTURE #402 AND #403 RECONSTRUCTION GEORGETOWN KINGS COUNTY, PE**

drawing \_\_\_\_\_ dessin \_\_\_\_\_

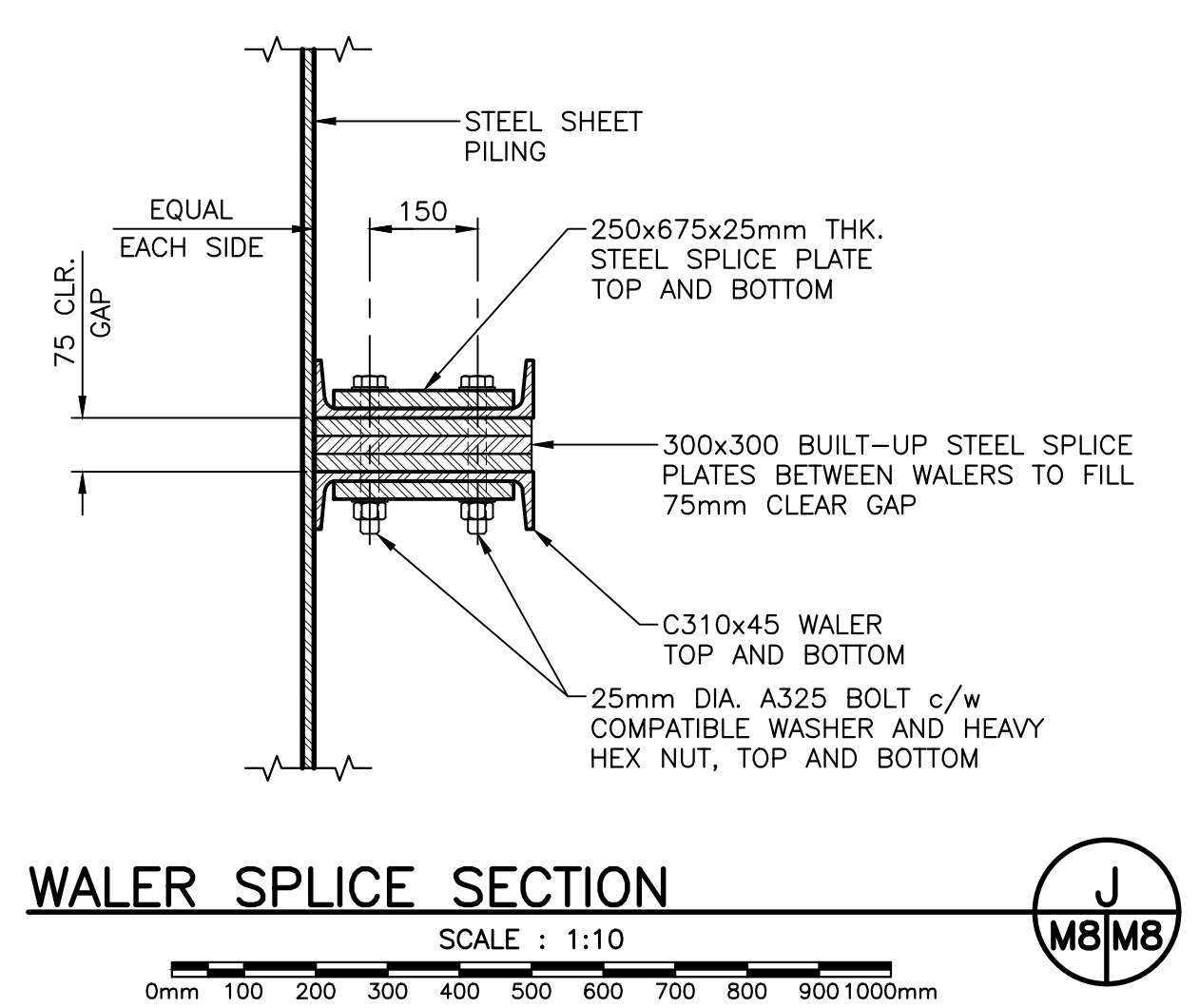
**DETAILS**

designed R.KEEFE	conçu
date FEBRUARY 2018	dessiné
drawn J.BENNETT	dessiné
date FEBRUARY 2018	approuvé
approved _____	approuvé
date _____	date
Tender _____	Soumission
PWSC Project Manager Administrateur de projets TPSC	no. du projet
<b>C2-00003</b>	
drawing no. _____	no. du dessin
<b>M7 of 15</b>	

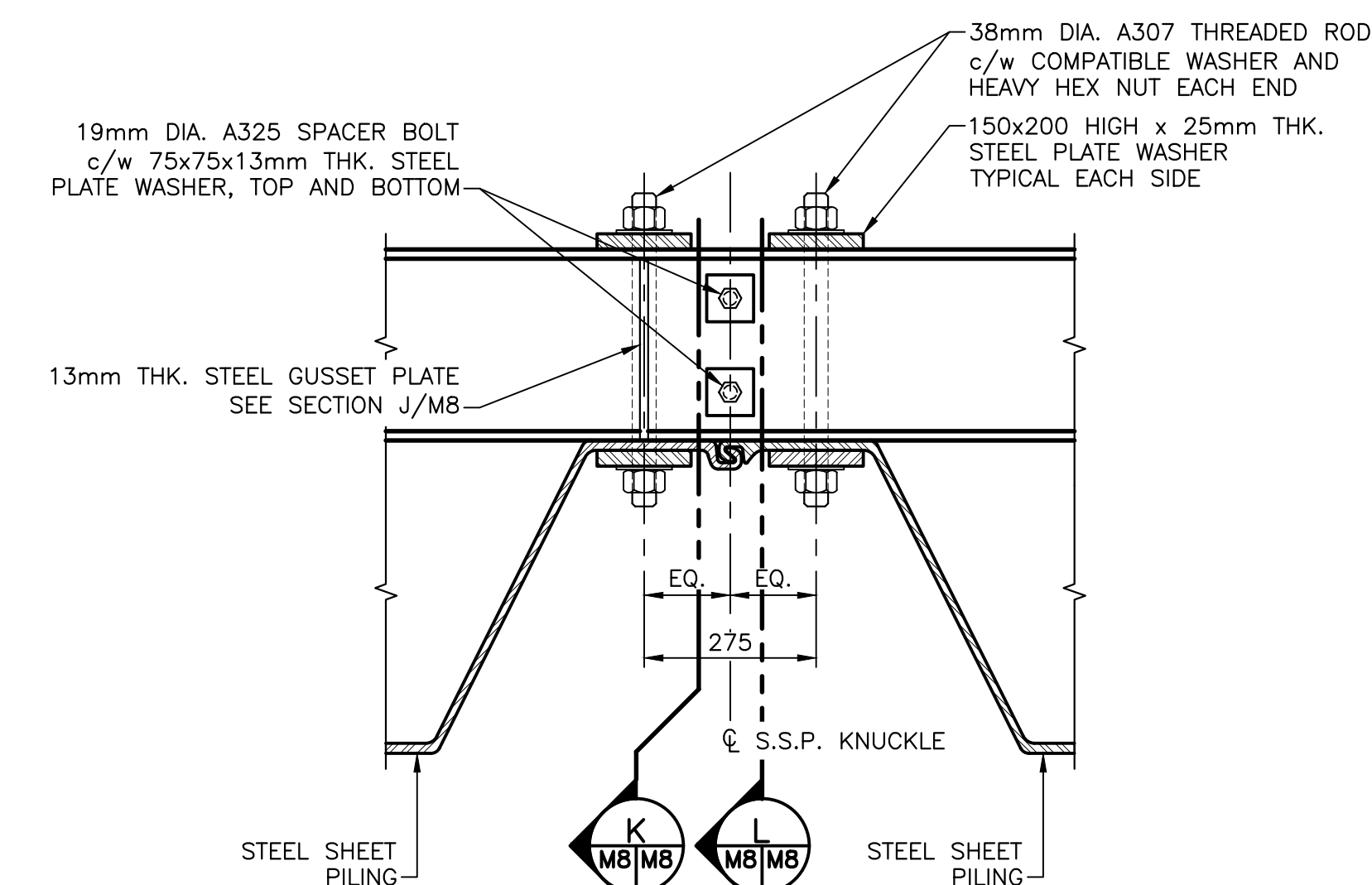




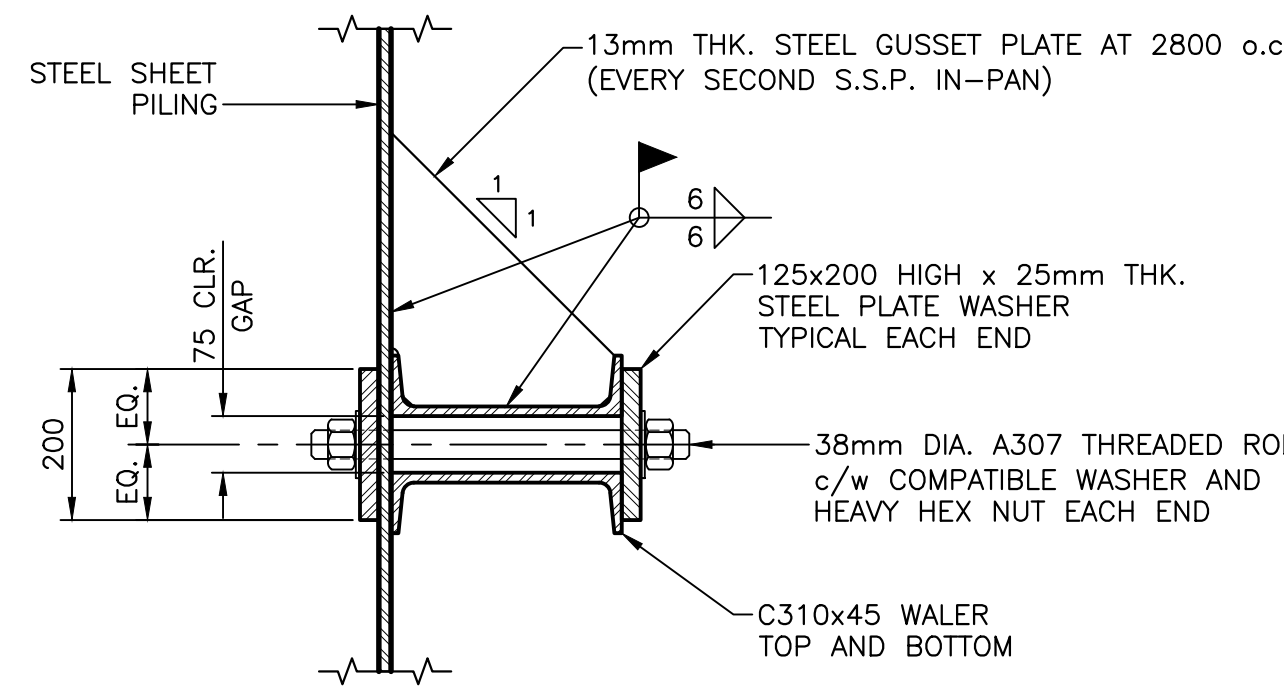
**WALER SPlice DETAIL**  
SCALE: 1:10  
M4/M8



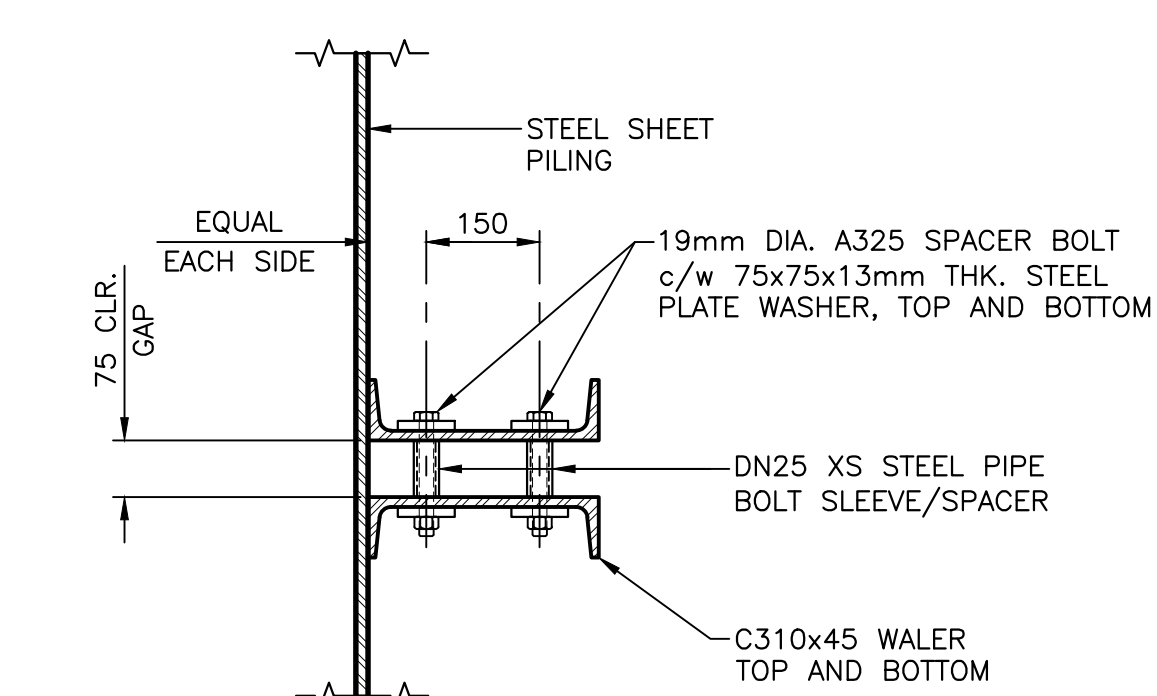
**WALER SPlice SECTION**  
SCALE: 1:10  
M8/M8



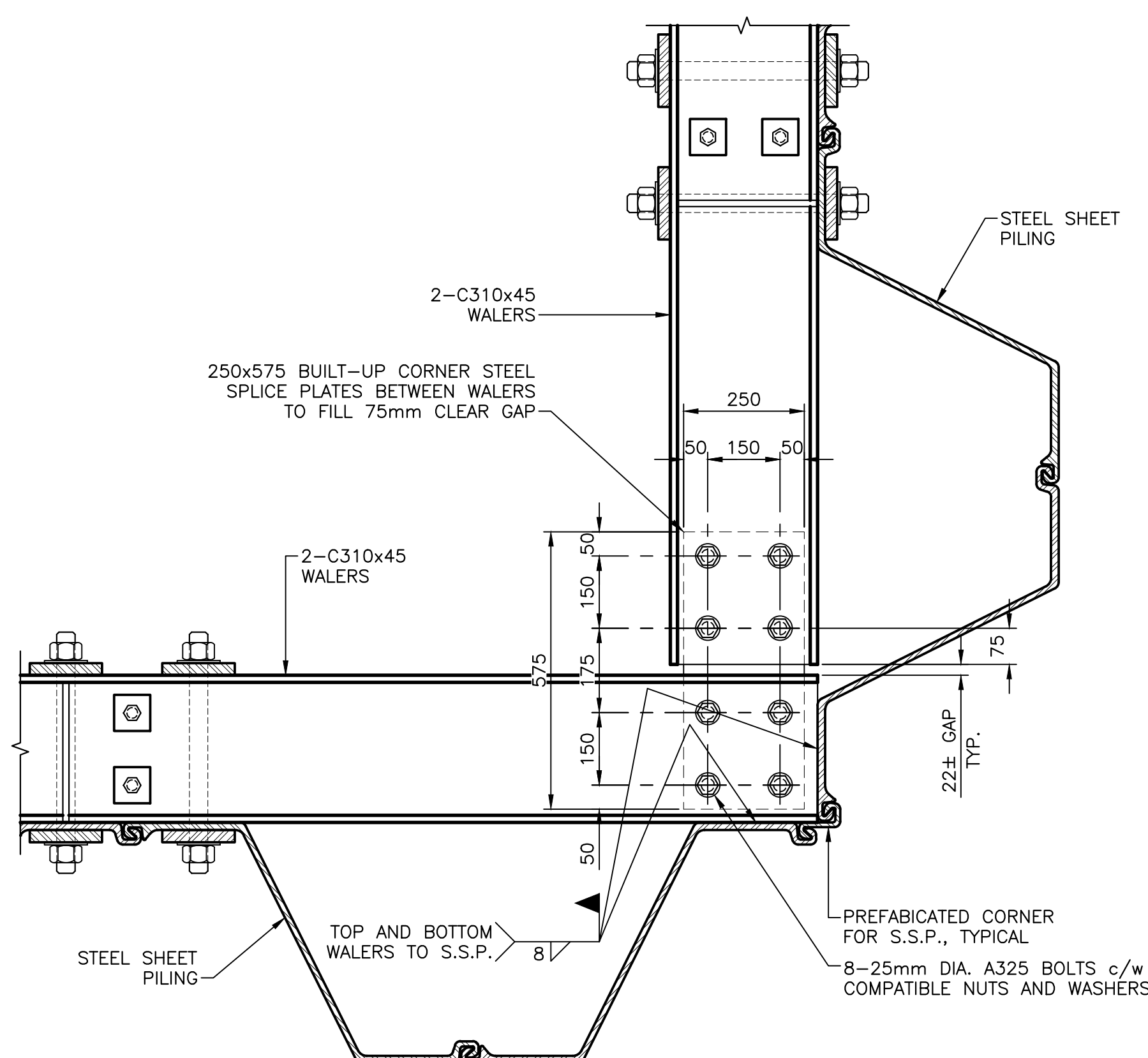
**WALER DISTRIBUTING BOLTS DETAIL**  
SCALE: 1:10  
M4/M8



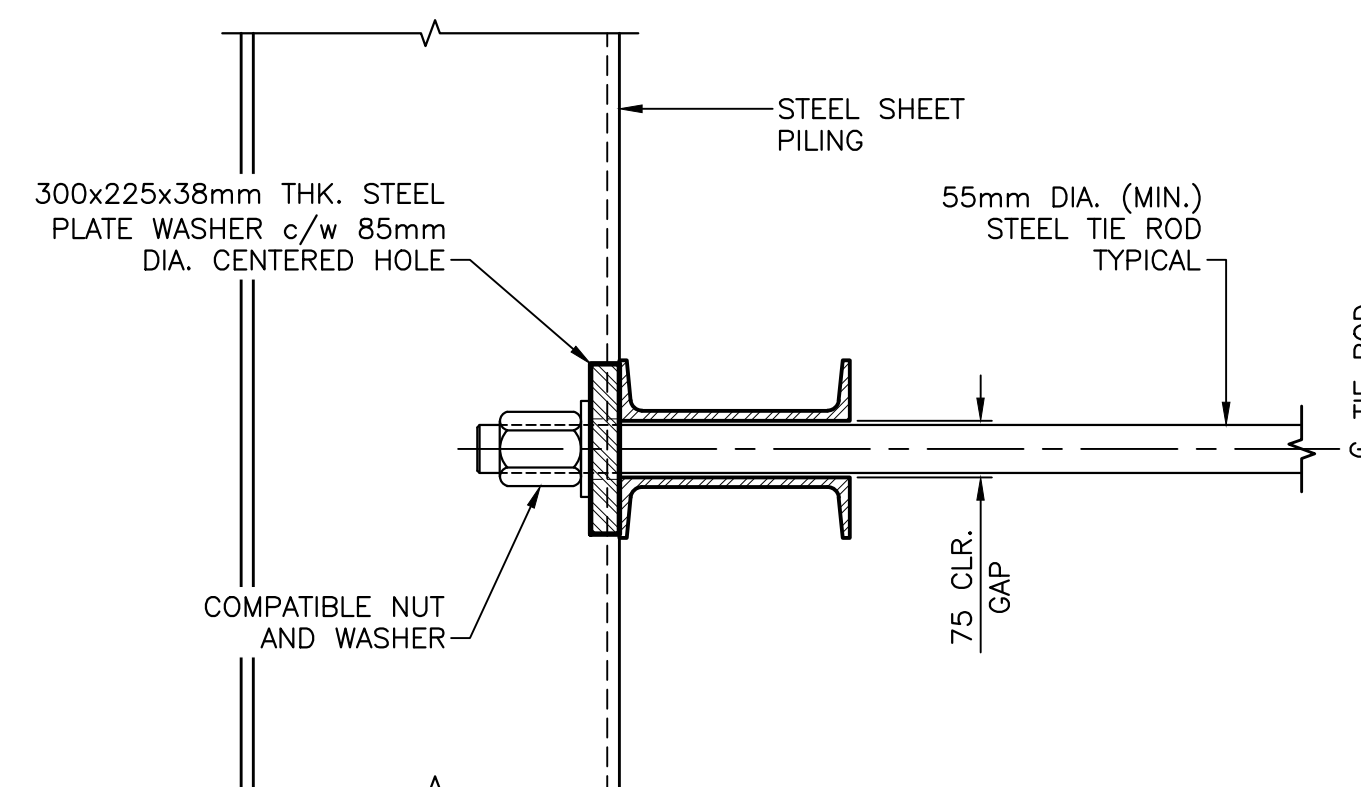
**WALER/S.S.P. CONNECTION SECTION**  
SCALE: 1:10  
M8/M8



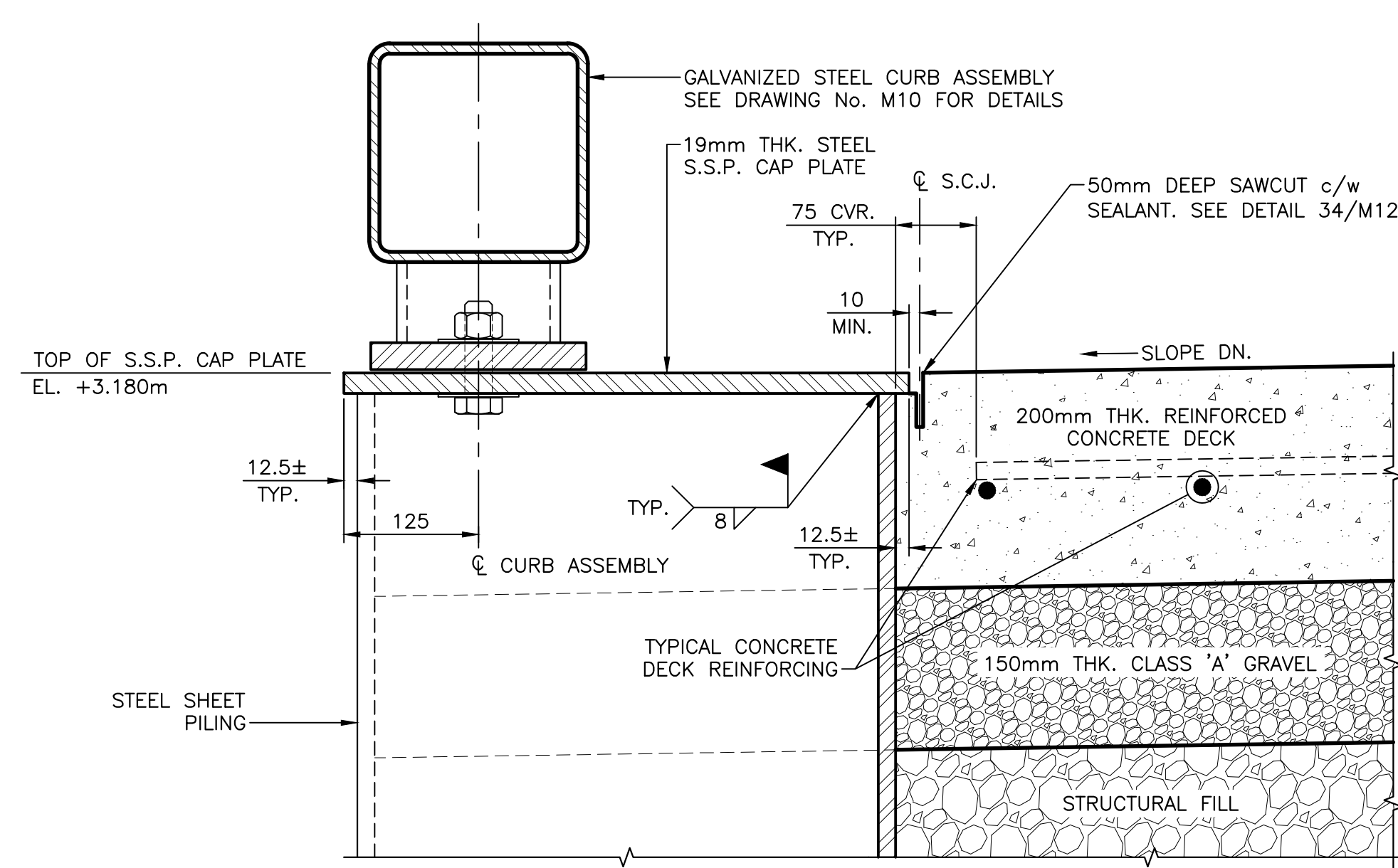
**WALER DISTRIBUTING BOLTS SECTION**  
SCALE: 1:10  
M8/M8



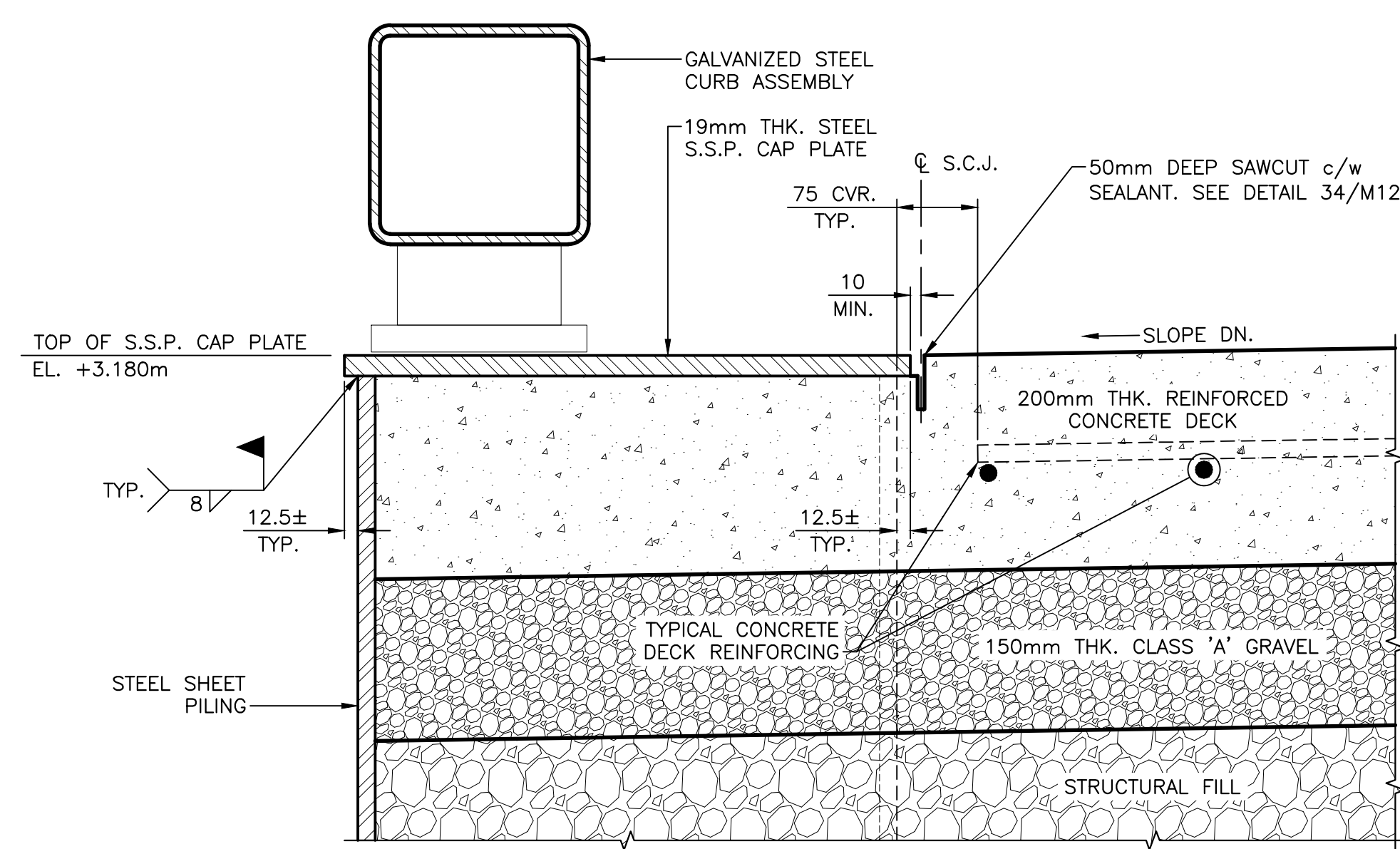
**WALER CORNER SPlice DETAIL**  
SCALE: 1:10  
M4/M8



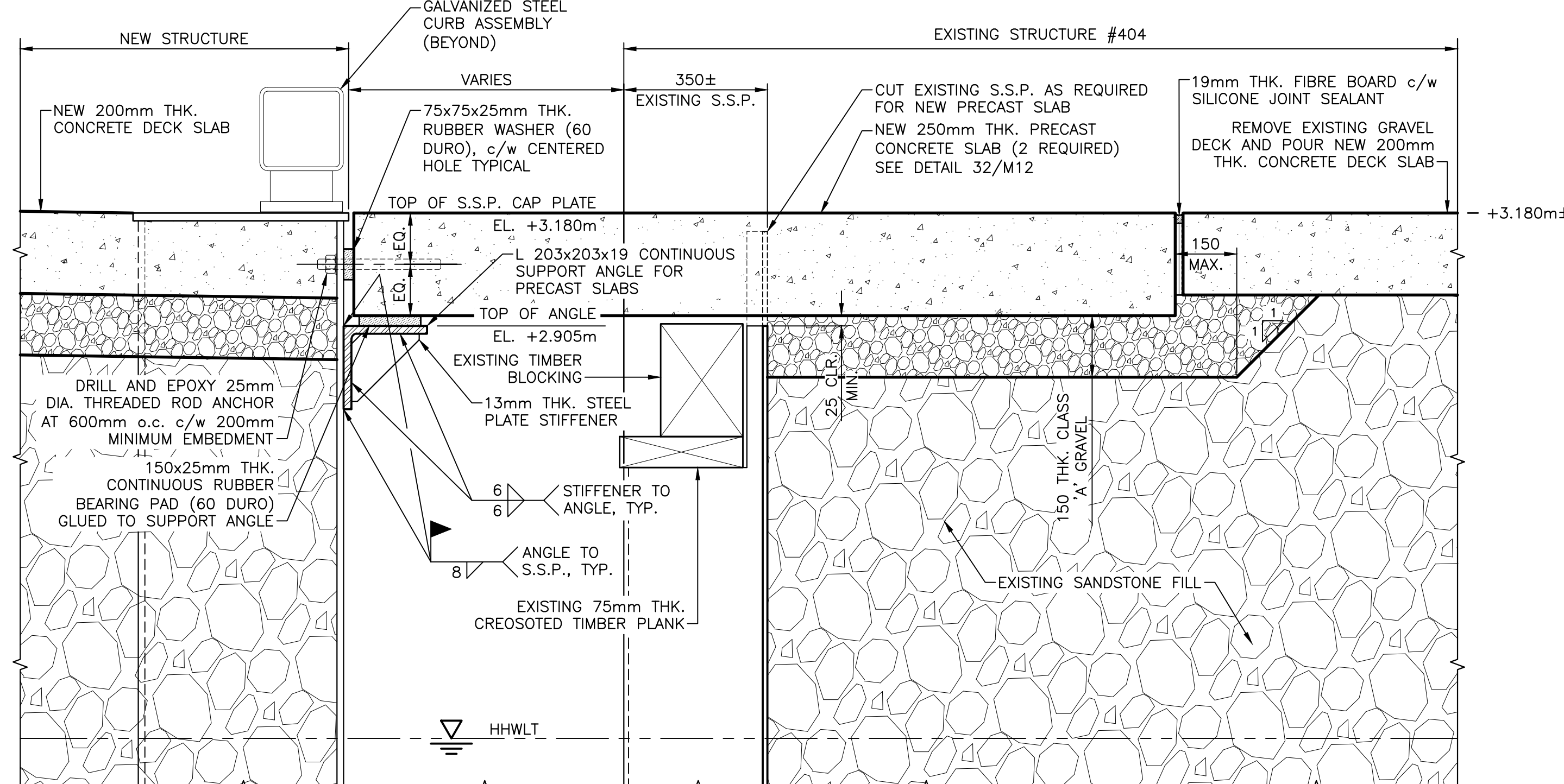
**TYPICAL TIE ROD/WALER DETAIL**  
SCALE: 1:10  
M5/M8



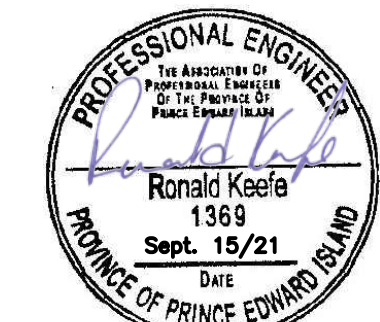
**TYPICAL TOP OF WALL DETAIL**  
SCALE: 1:5  
M5/M8



**TYPICAL TOP OF WALL DETAIL**  
SCALE: 1:5  
M5/M8



**NEW PRECAST SLAB SUPPORT DETAIL**  
SCALE: 1:10  
M5/M8



0	ISSUED FOR TENDER	SEPT. 15 2021
revisions		date

project: **STRUCTURE #402 AND #403 RECONSTRUCTION GEORGETOWN KINGS COUNTY, PE**

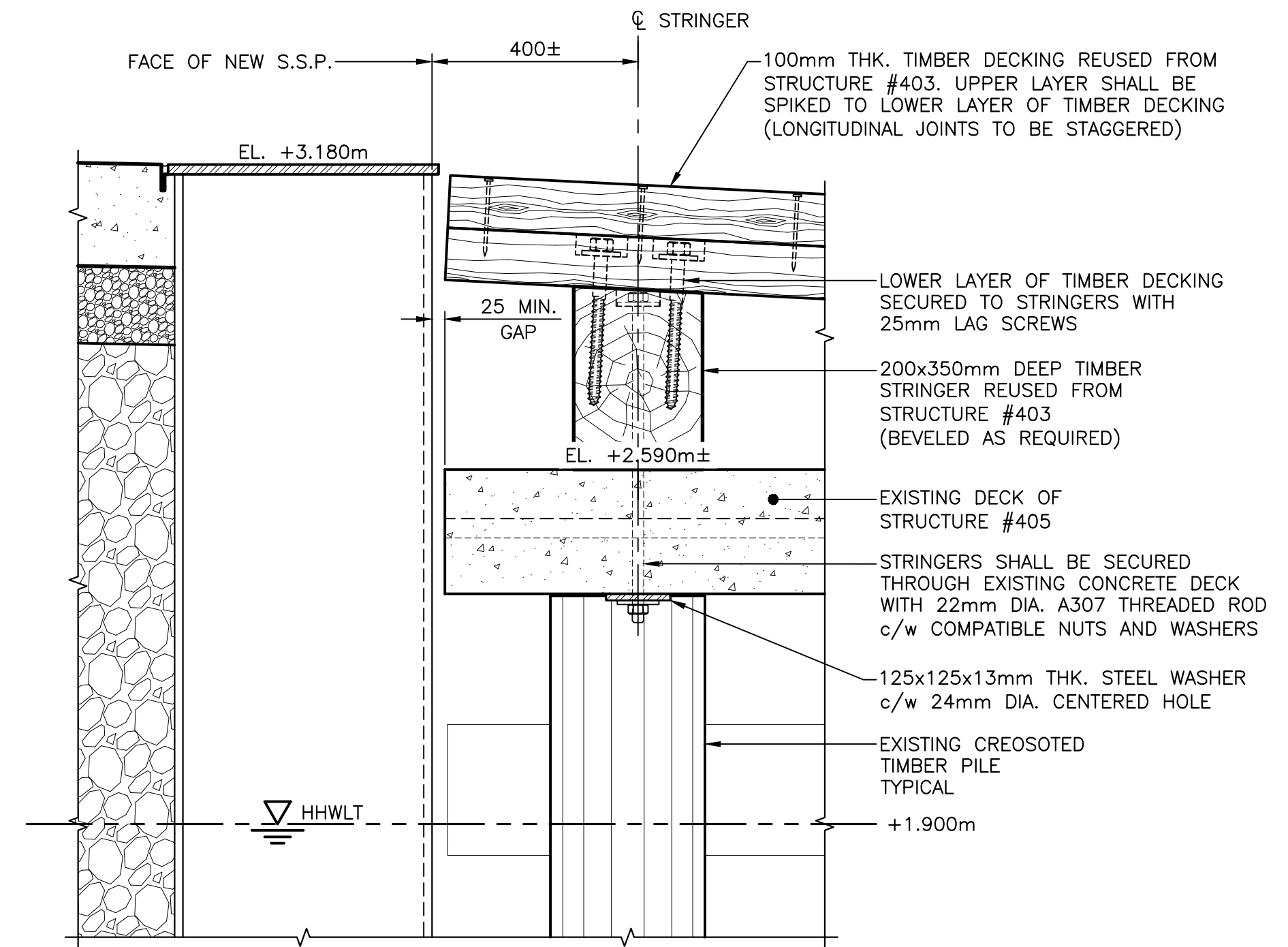
drawing: **DETAILS AND SECTIONS**

designed	R.KEEFE	conçu
date	FEBRUARY 2018	
drawn	J.BENNETT	dessiné
date	FEBRUARY 2018	
approved		approuvé
date		
Tender		Soumission

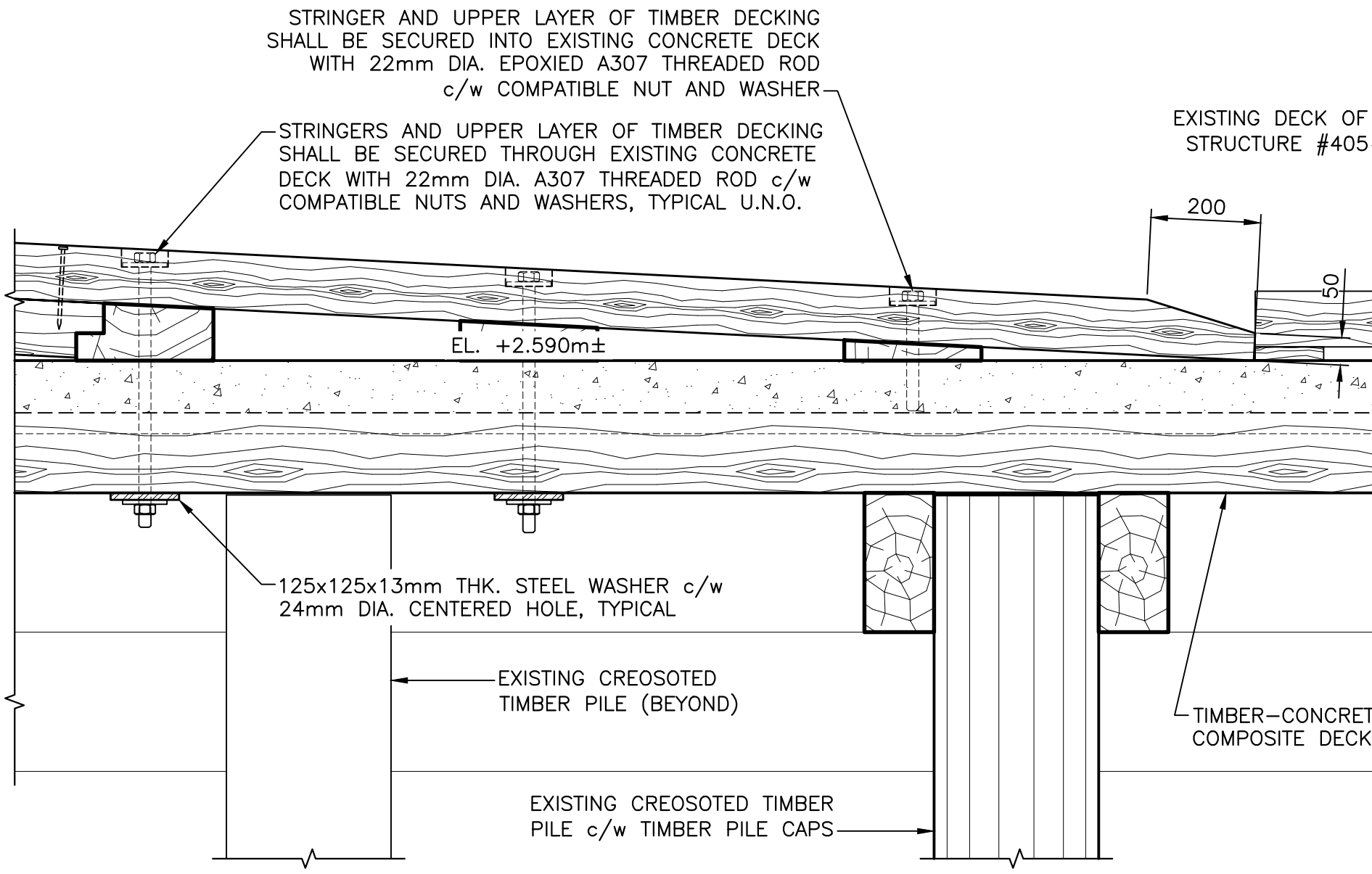
PWSC Project Manager / Administrateur de projets TPSC

project number: **C2-00003**

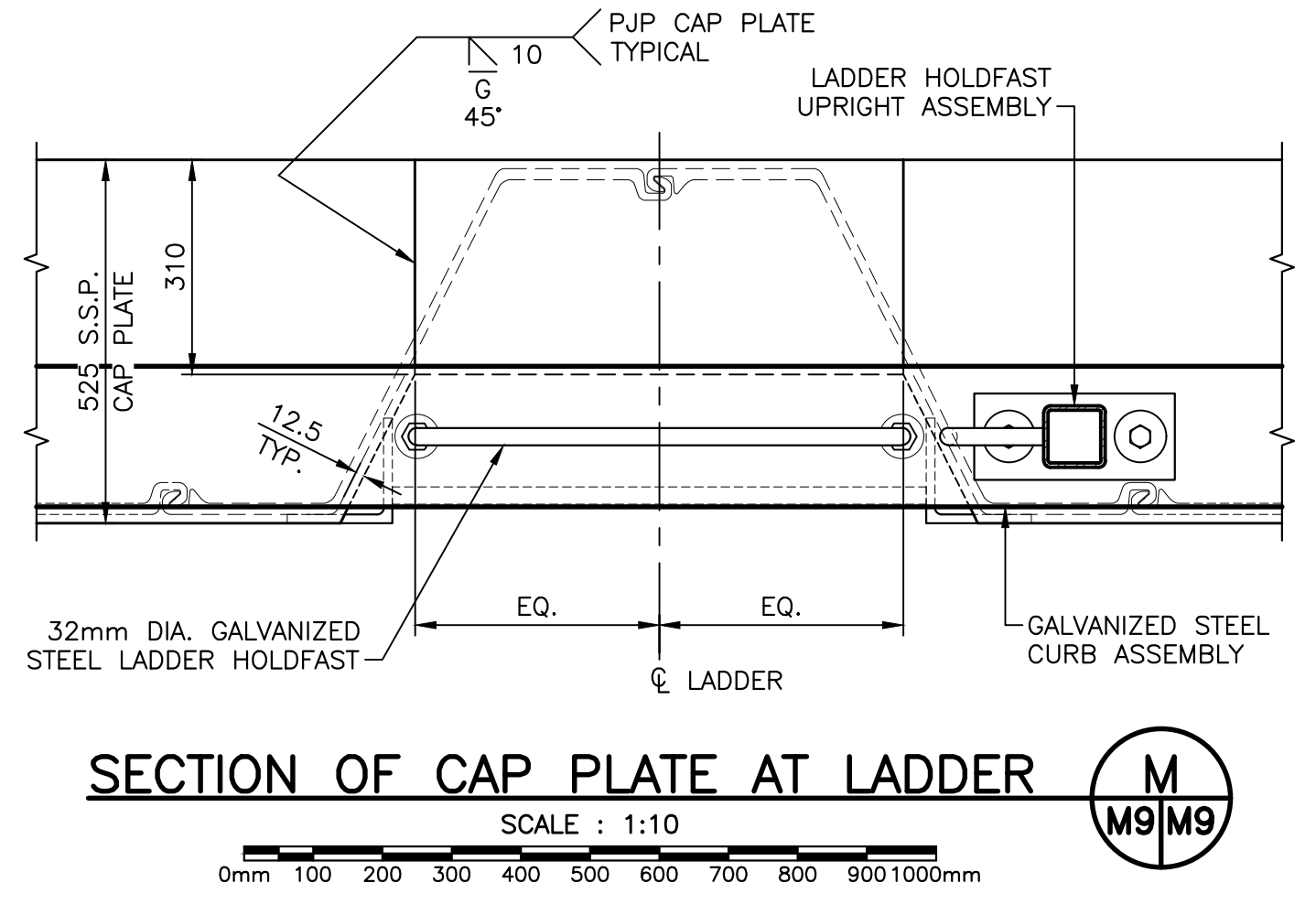
drawing no.: **M8 of 15**



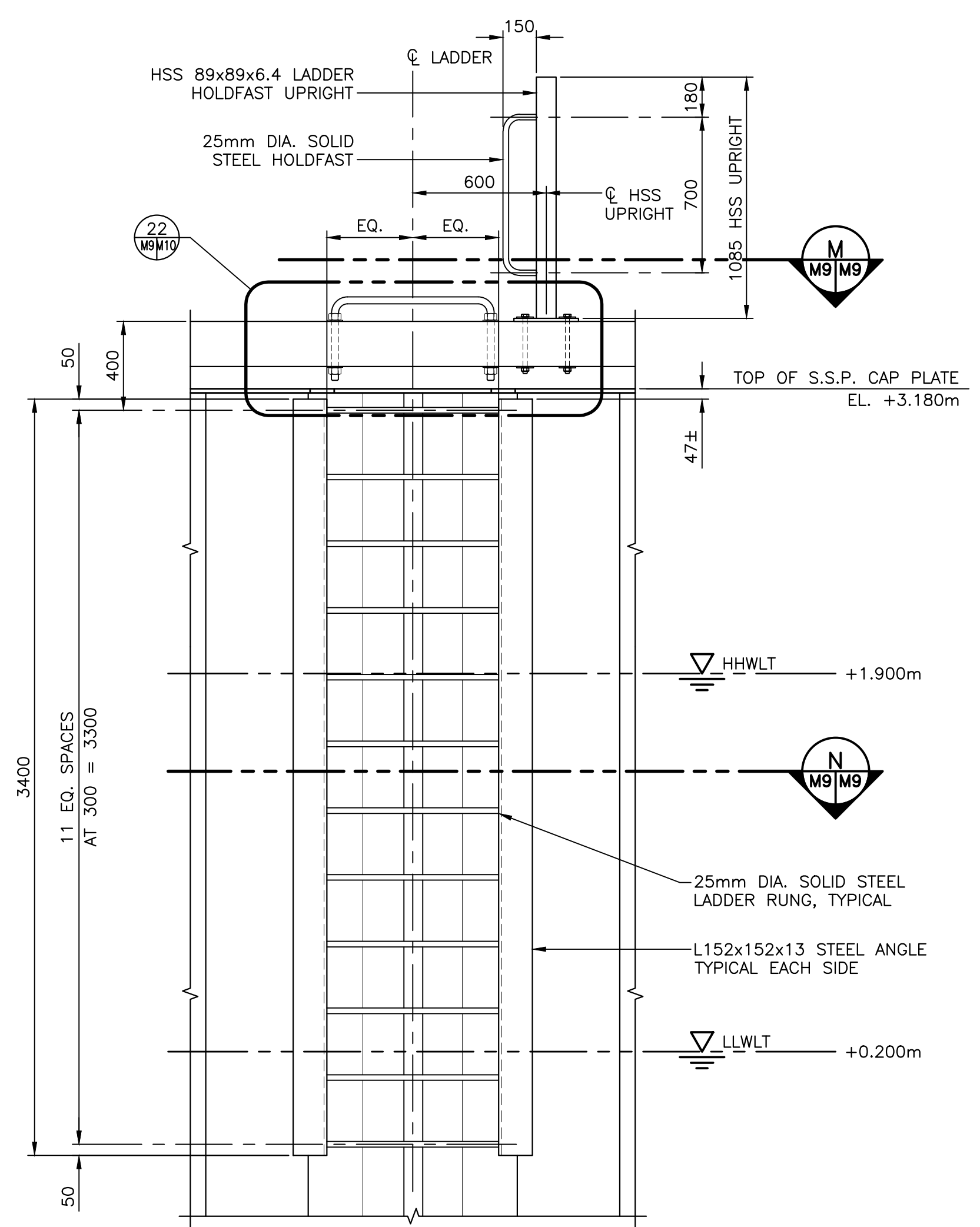
**DETAIL OF RAMP CONNECTION 16**  
 SCALE : 1:10  
 0mm 100 200 300 400 500 600 700 800 900 1000mm



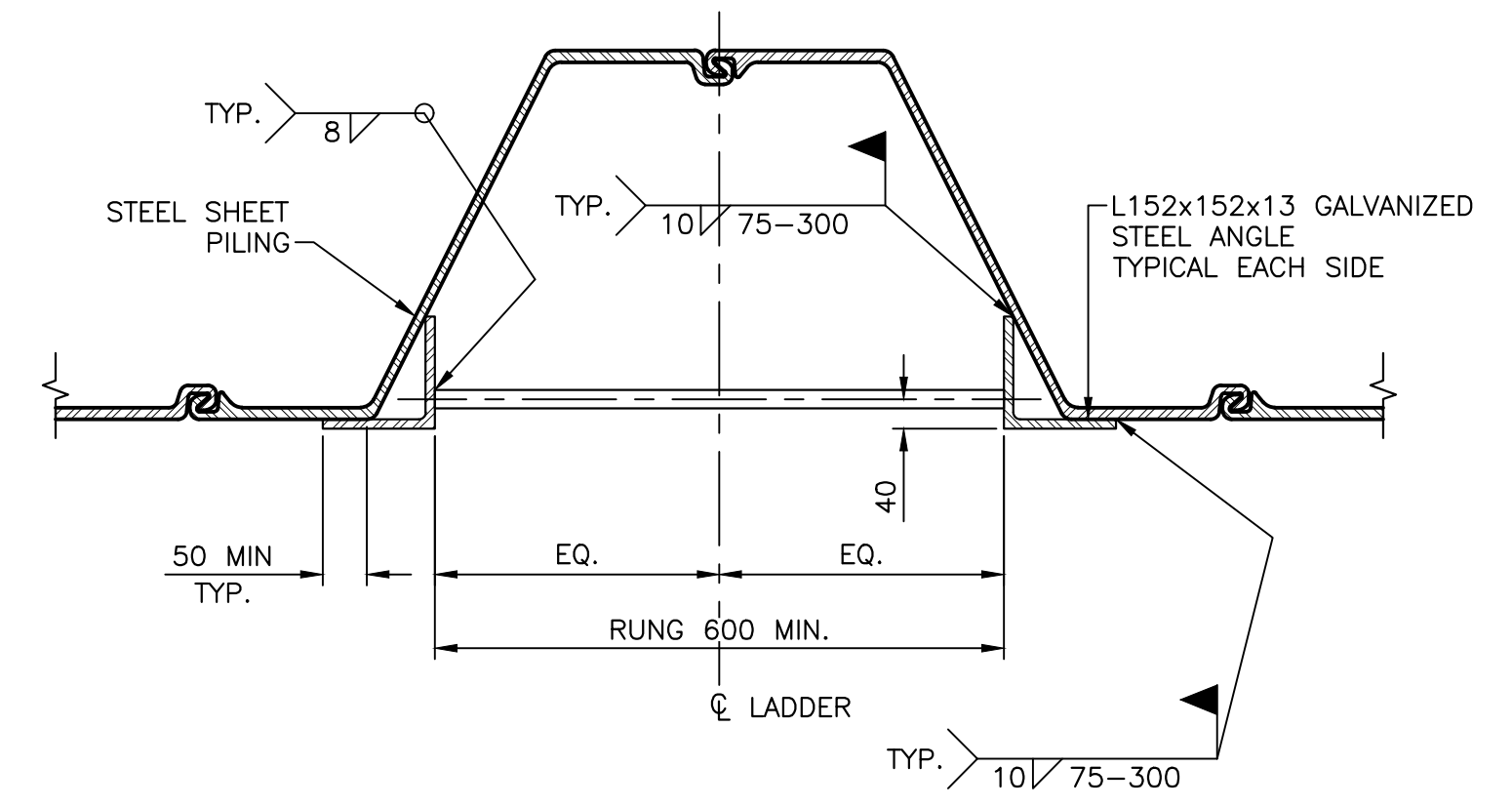
**DETAIL OF RAMP CONNECTION 17**  
 SCALE : 1:10  
 0mm 100 200 300 400 500 600 700 800 900 1000mm



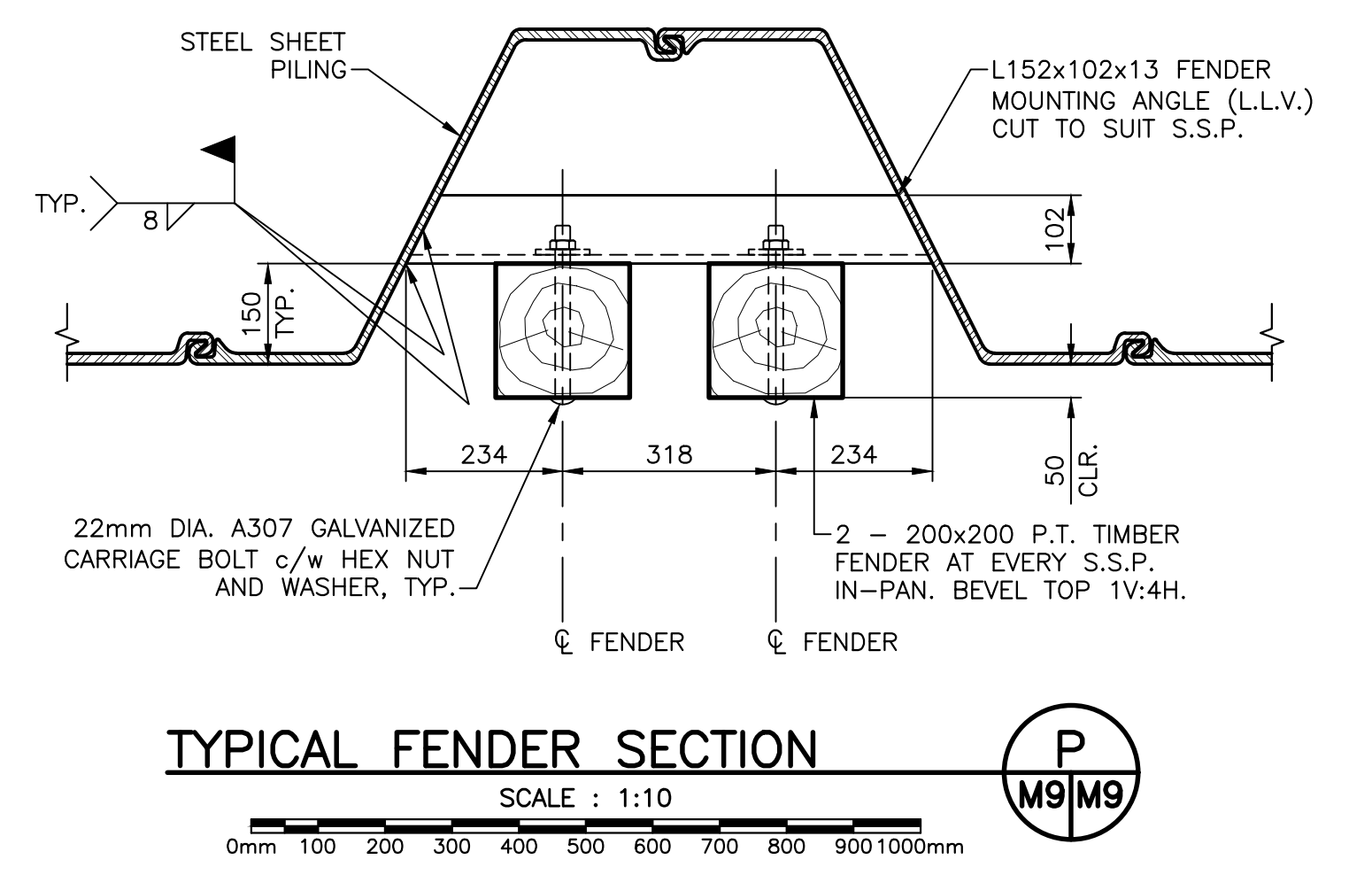
**SECTION OF CAP PLATE AT LADDER M**  
 SCALE : 1:10  
 0mm 100 200 300 400 500 600 700 800 900 1000mm



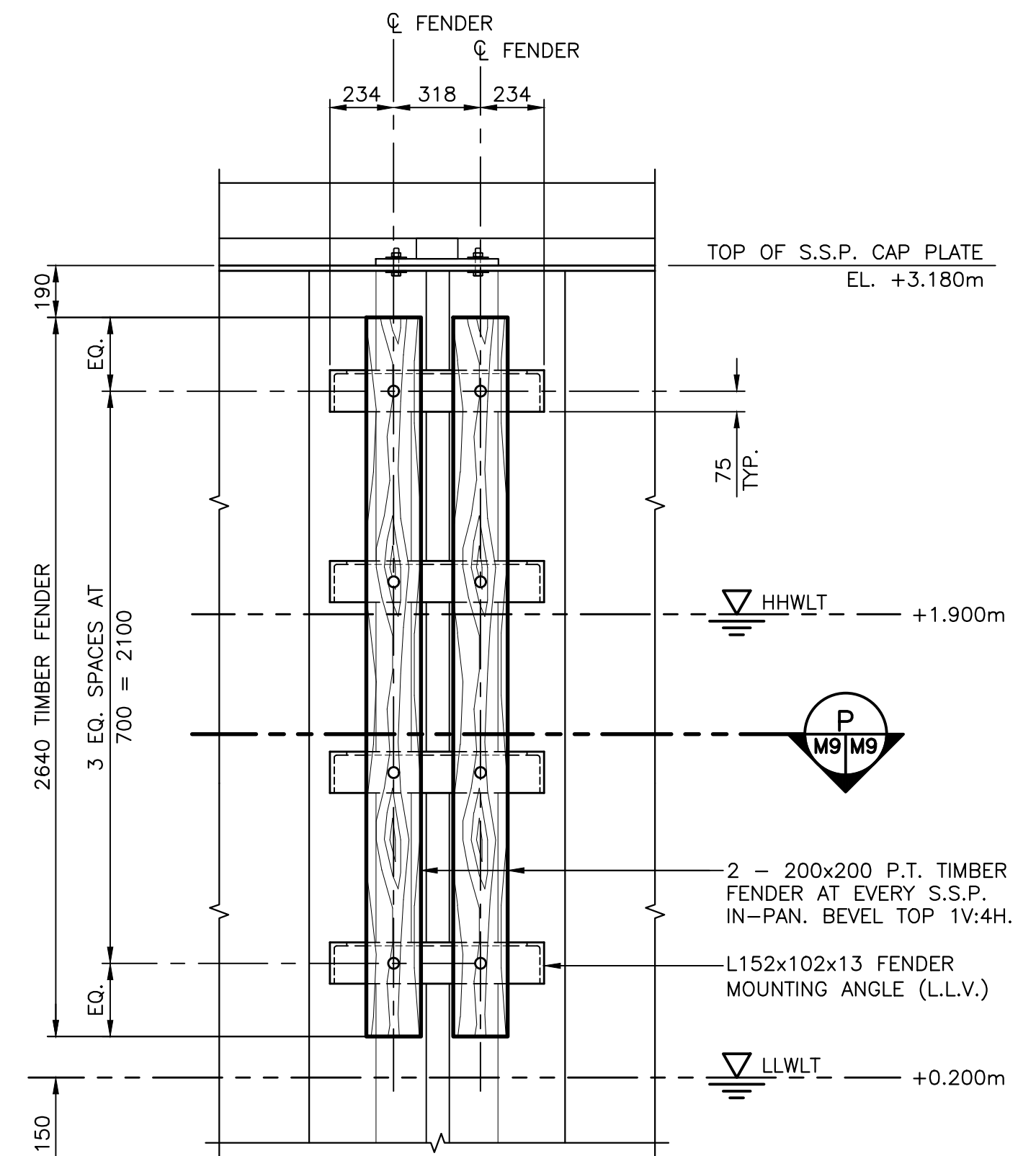
**TYPICAL LADDER DETAIL 18**  
 SCALE : 1:20  
 0mm 500mm 1000mm 1500mm 2000mm 2500mm



**TYPICAL LADDER SECTION N**  
 SCALE : 1:10  
 0mm 100 200 300 400 500 600 700 800 900 1000mm



**TYPICAL FENDER SECTION P**  
 SCALE : 1:10  
 0mm 100 200 300 400 500 600 700 800 900 1000mm



**TYPICAL FENDER DETAIL 19**  
 SCALE : 1:20  
 0mm 500mm 1000mm 1500mm 2000mm 2500mm

NOTE: THIS DETAIL REQUIRED AT EVERY S.S.P. IN-PAN (U.N.O.)

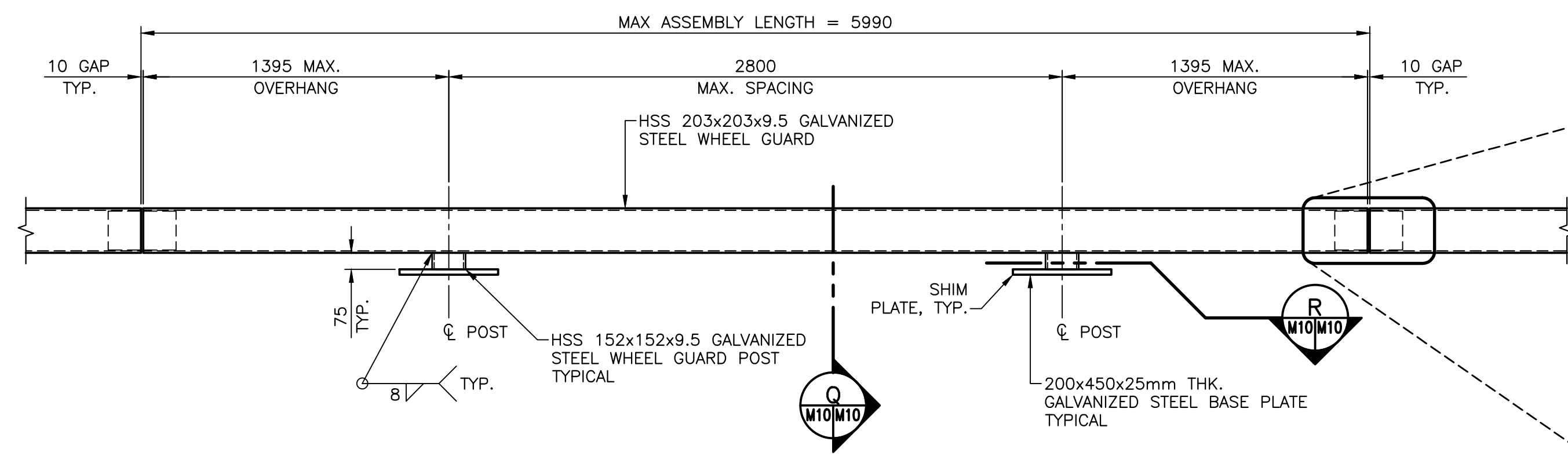


0	ISSUED FOR TENDER	SEPT. 15 2021
revisions		date
project		project

**STRUCTURE #402 AND #403 RECONSTRUCTION GEORGETOWN KINGS COUNTY, PE**

drawing design  
**DETAILS AND SECTIONS**

designed R.KEEFE	conçu
date FEBRUARY 2018	
drawn J.BENNETT	dessiné
date FEBRUARY 2018	
approved	approuvé
date	
Tender	Soumission
PWSC Project Manager Administrateur de projets TPSC	
project number C2-00003	no. du projet
drawing no. M9 of 15	no. du dessin

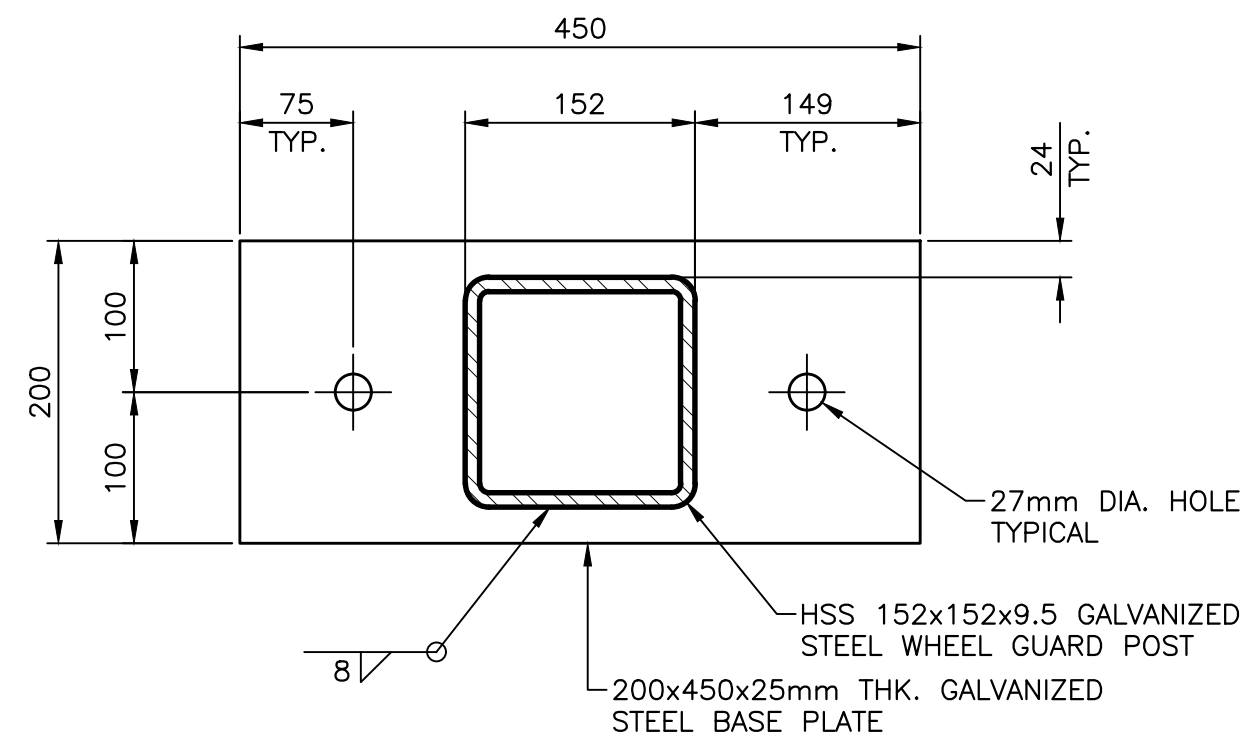


**DETAIL OF STEEL CURB AND JOINT ASSEMBLY** 20

SCALE : 1:20

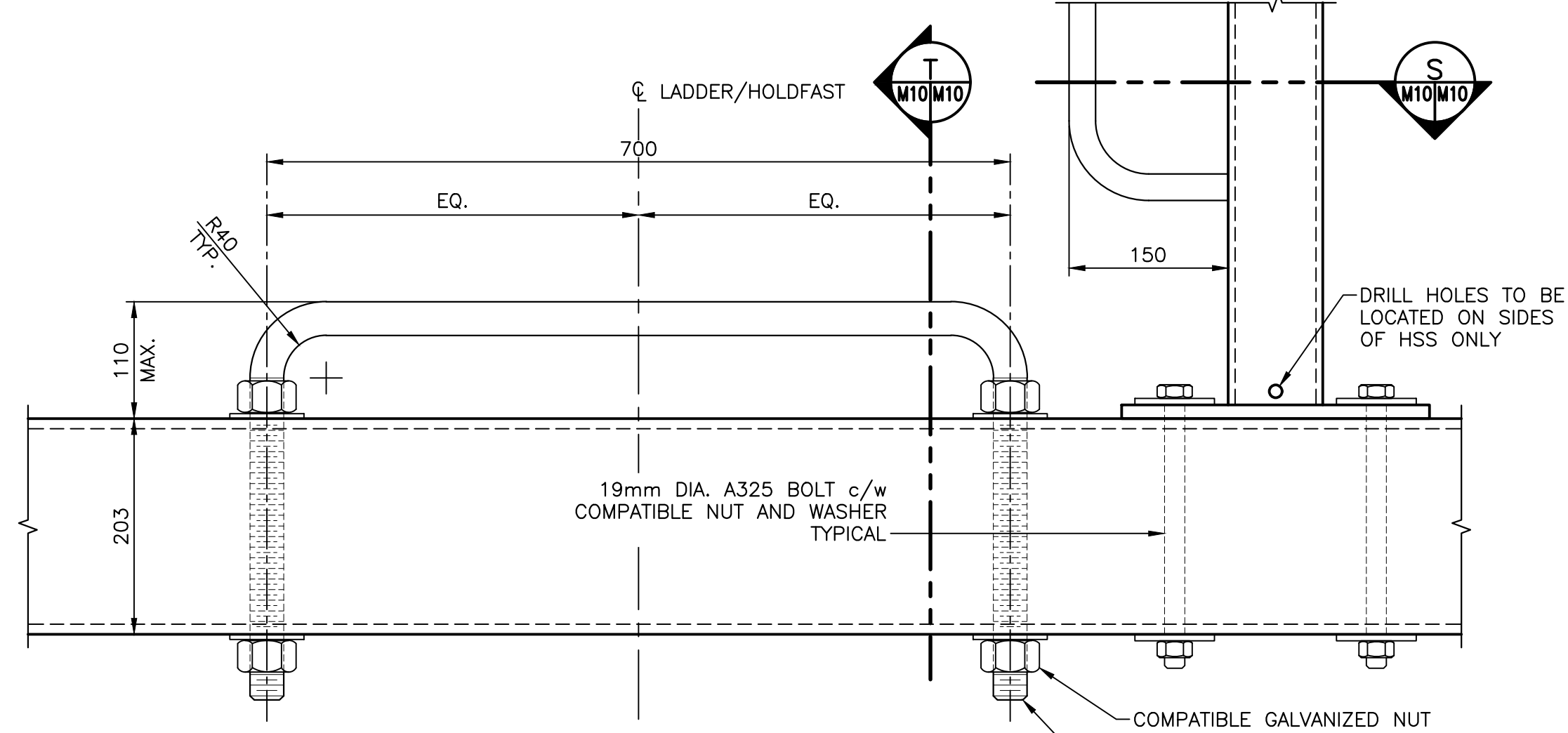


- NOTE:**
1. MAXIMUM ASSEMBLY LENGTH = 5.990m.
  2. ALL SHIMS REQUIRED TO LEVEL CURB ARE TO BE 200x400 GALVANIZED, THICKNESS TO BE DETERMINED ON SITE.



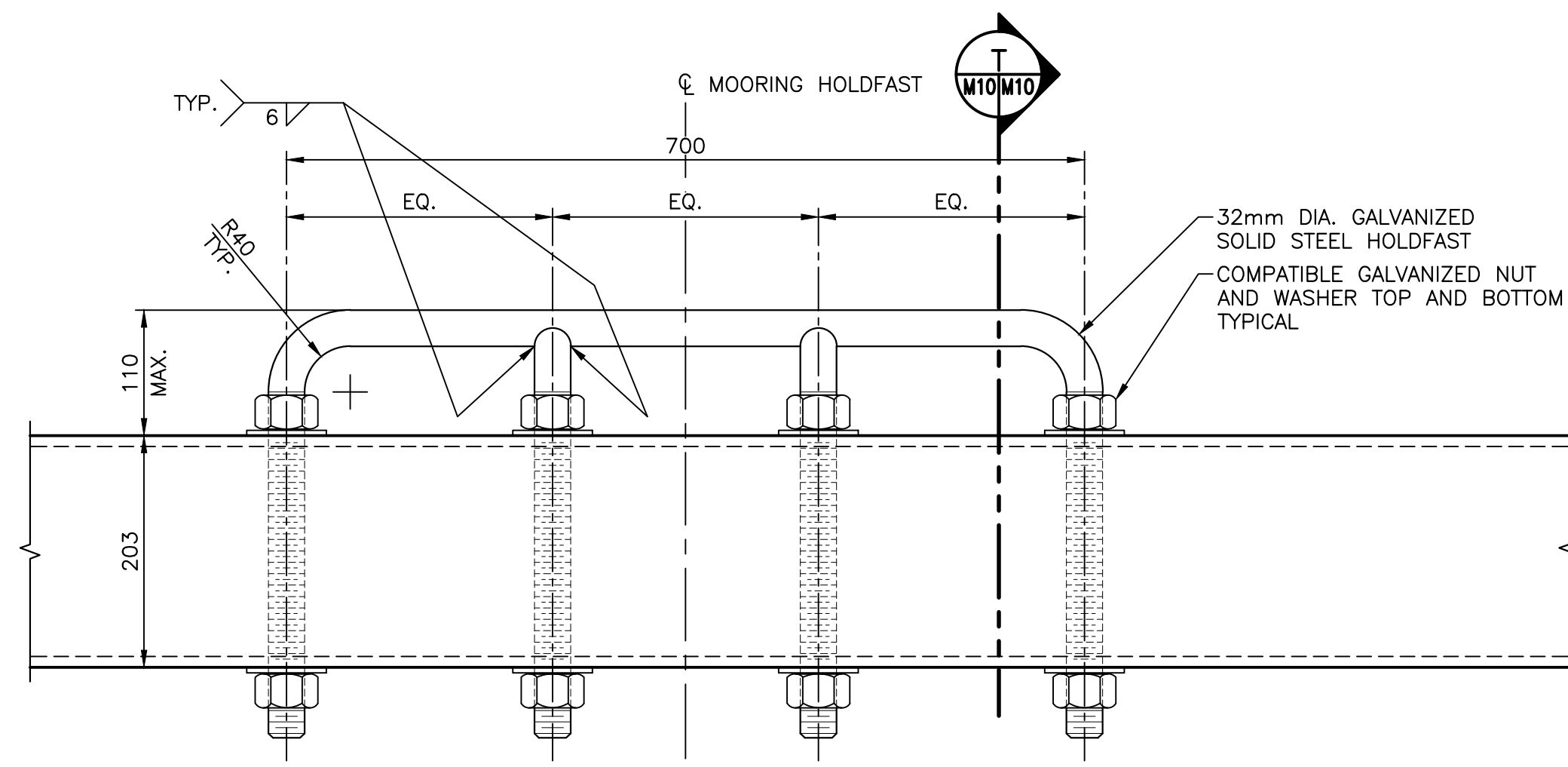
**SECTION OF CURB BASE PLATE** R

SCALE : 1:5



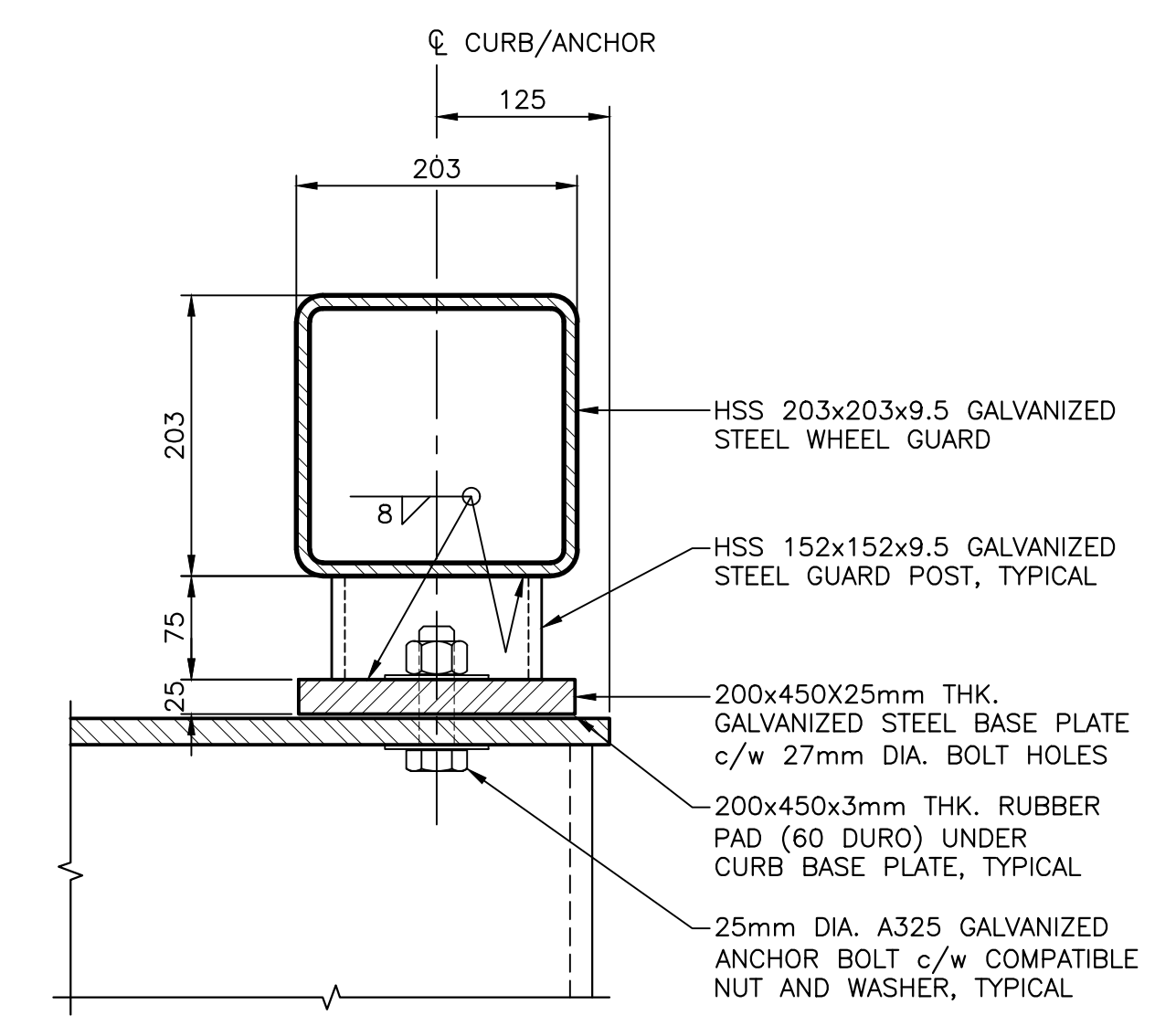
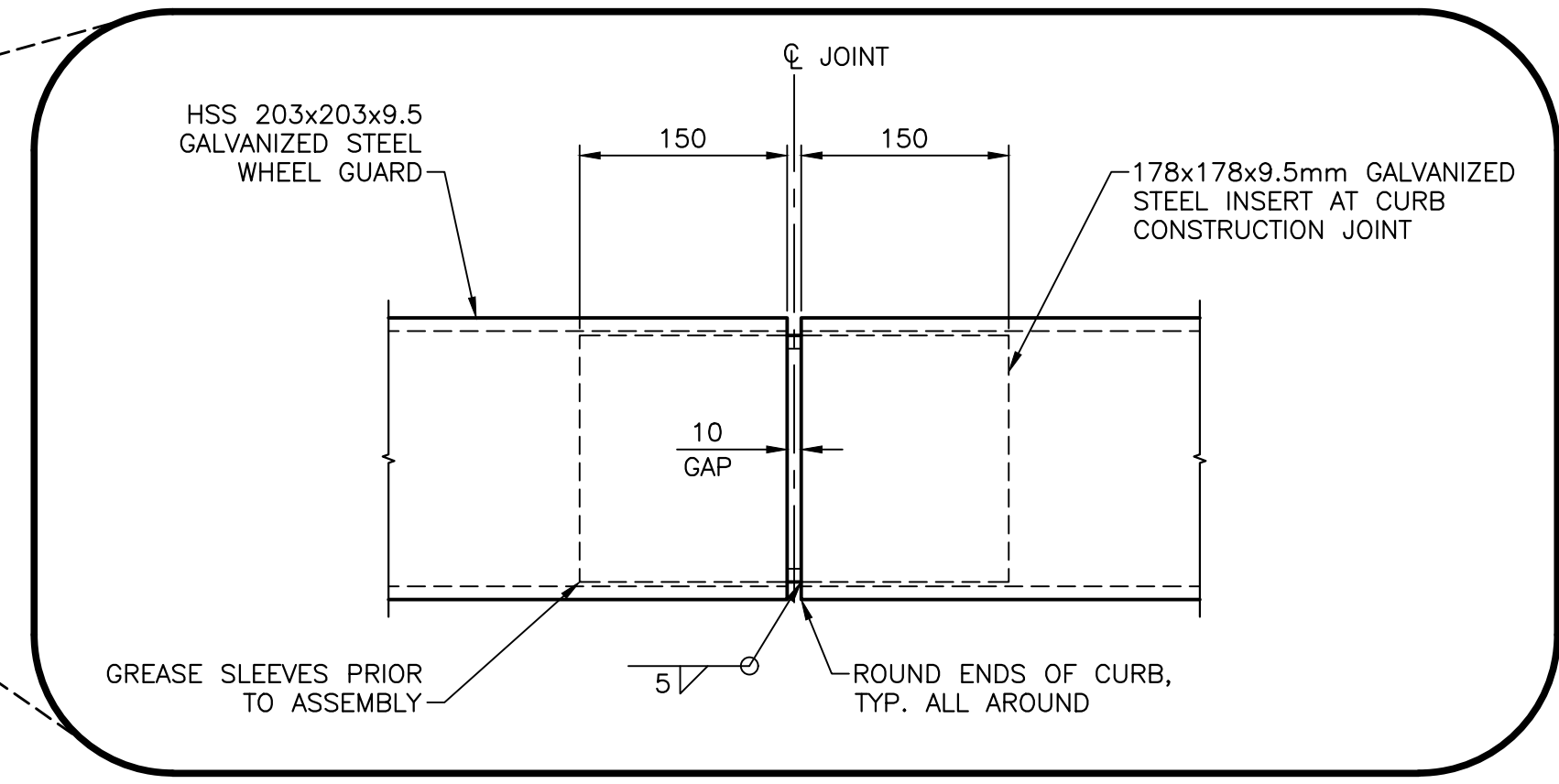
**LADDER HOLDFAST DETAIL** 22

SCALE : 1:5



**MOORING HOLDFAST DETAIL** 23

SCALE : 1:5

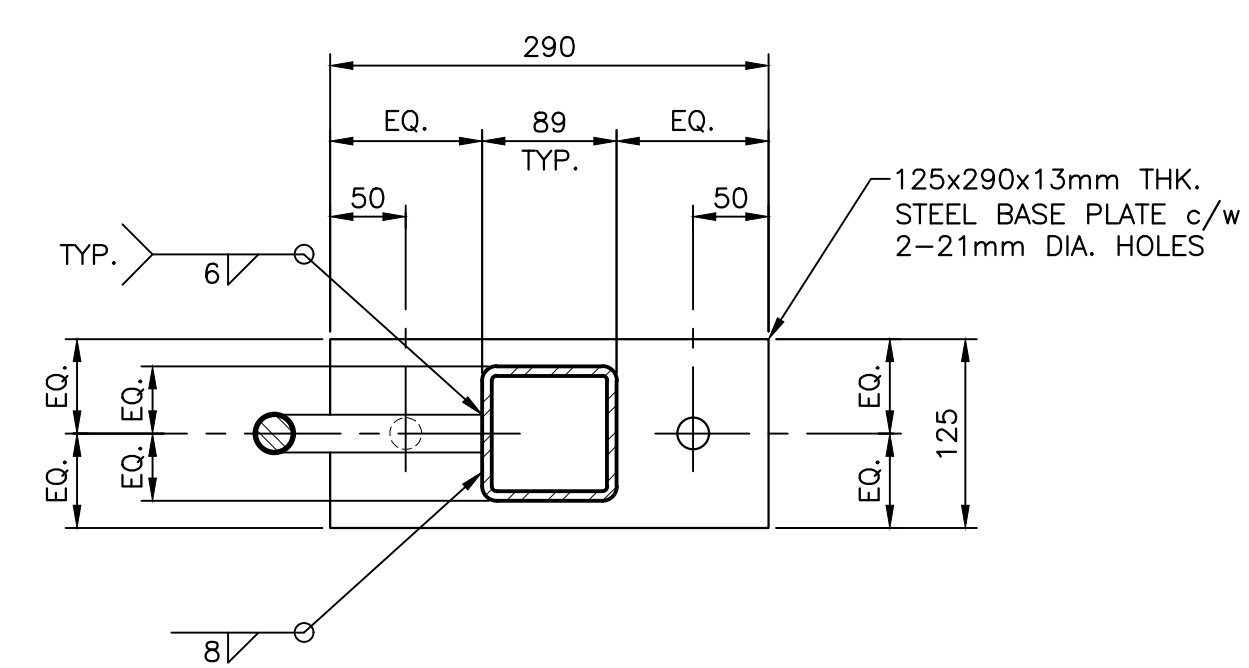


**TYPICAL CURB SECTION** Q

SCALE : 1:5

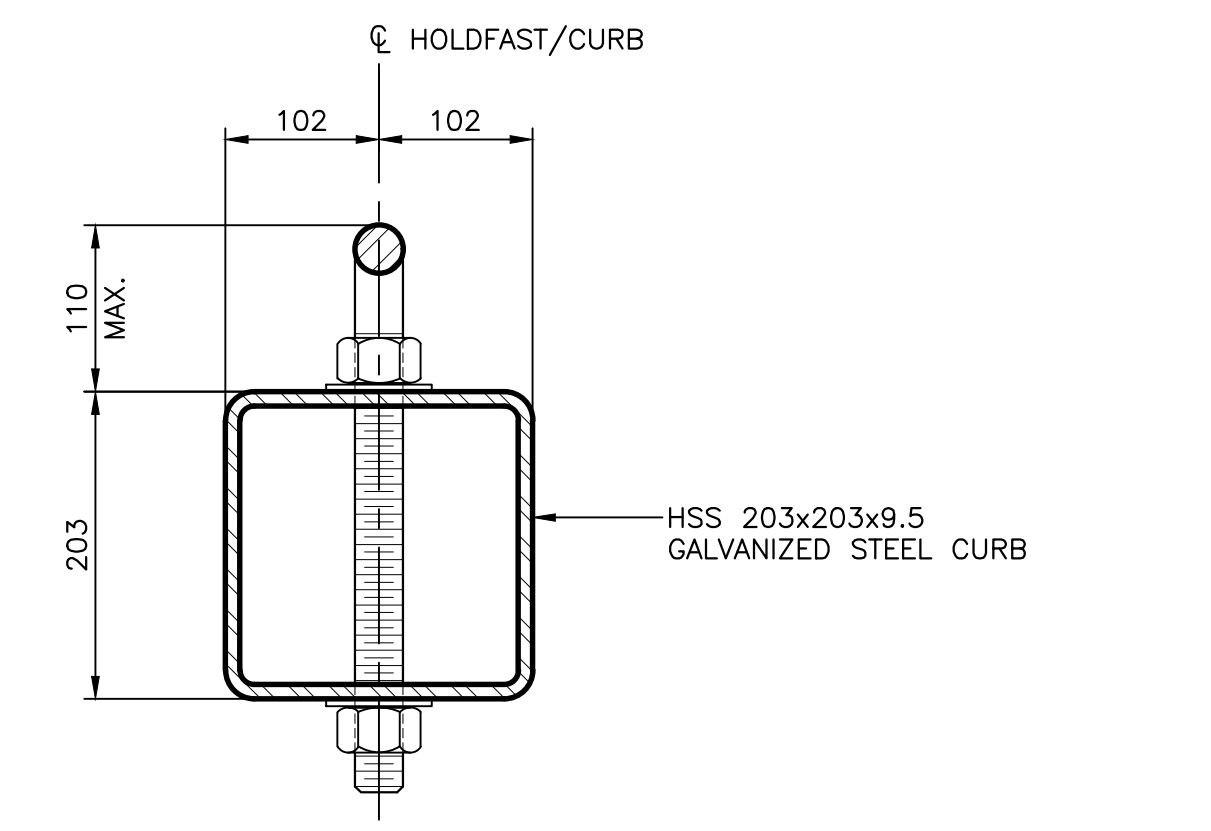
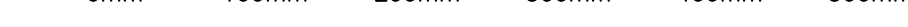


- NOTE:**
- ALL SHIMS REQUIRED TO LEVEL CURB ARE TO BE 200x450 GALVANIZED, THICKNESS TO BE DETERMINED ON SITE.



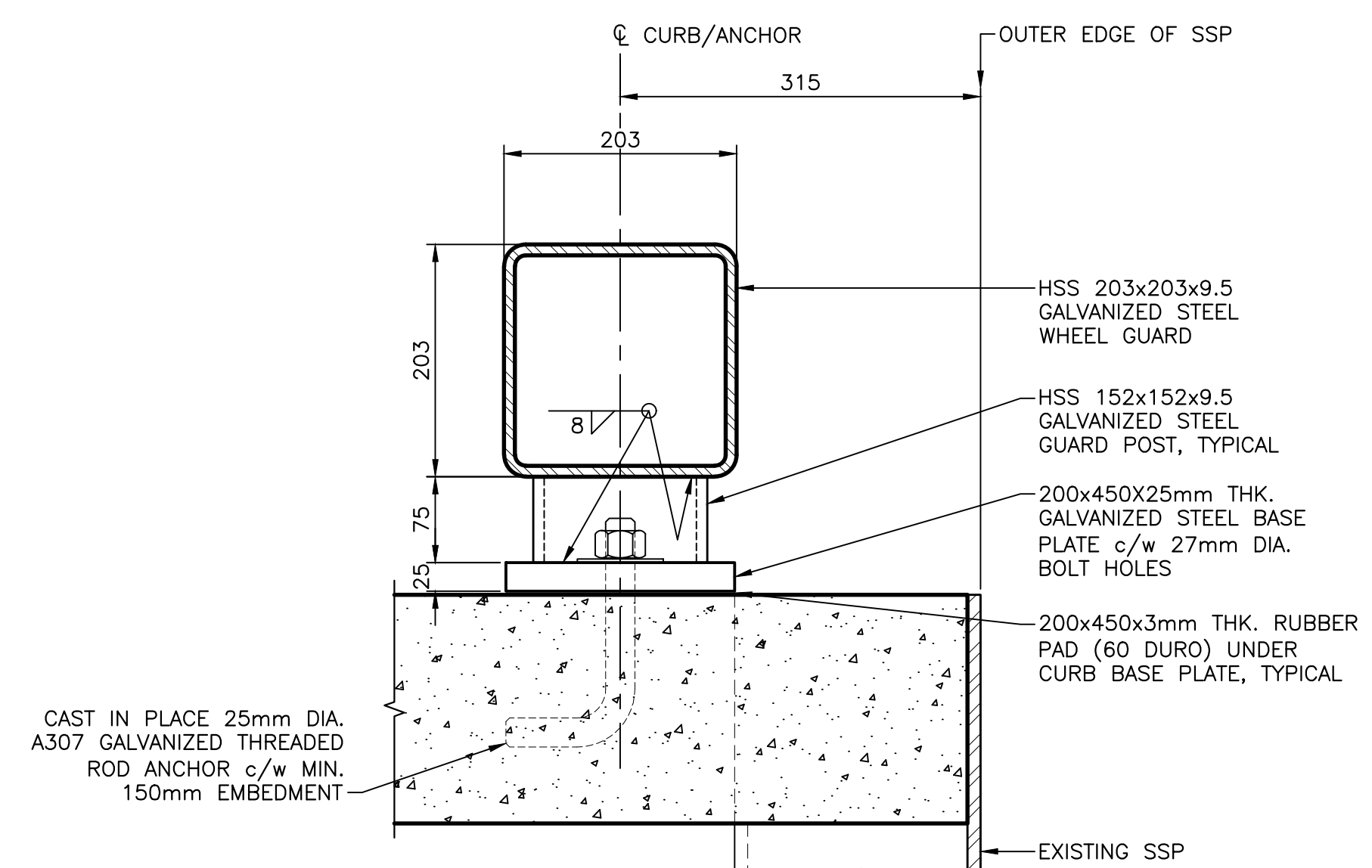
**UPRIGHT BASE PLATE SECTION** S

SCALE : 1:5



**LADDER/MOORING HOLDFAST SECTION** T

SCALE : 1:5



**DETAIL OF CURB AT STRUCTURE #404** 21

SCALE : 1:5



0	ISSUED FOR TENDER	SEPT. 15 2021
revisions		date
project		project

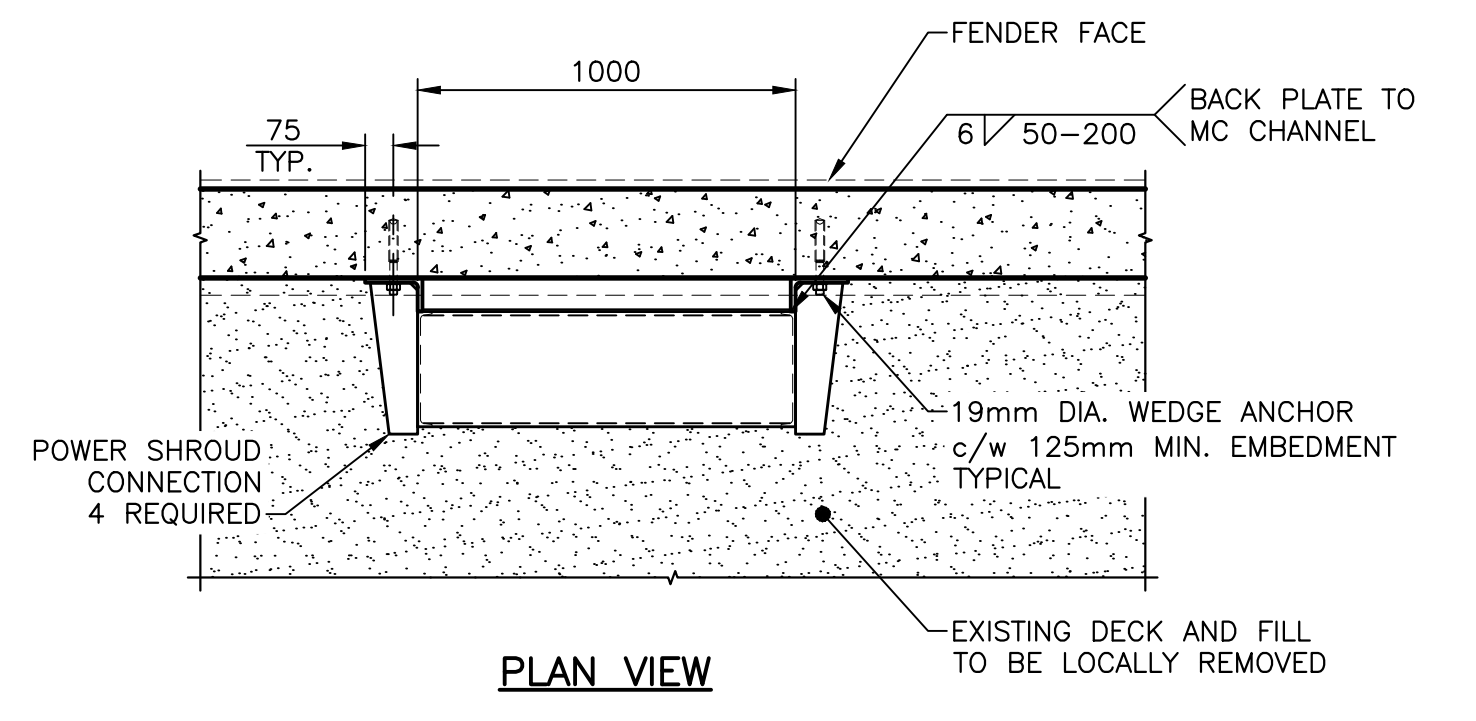
**STRUCTURE #402 AND #403 RECONSTRUCTION GEORGETOWN KINGS COUNTY, PE**

drawing no. **DETAILS AND SECTIONS**

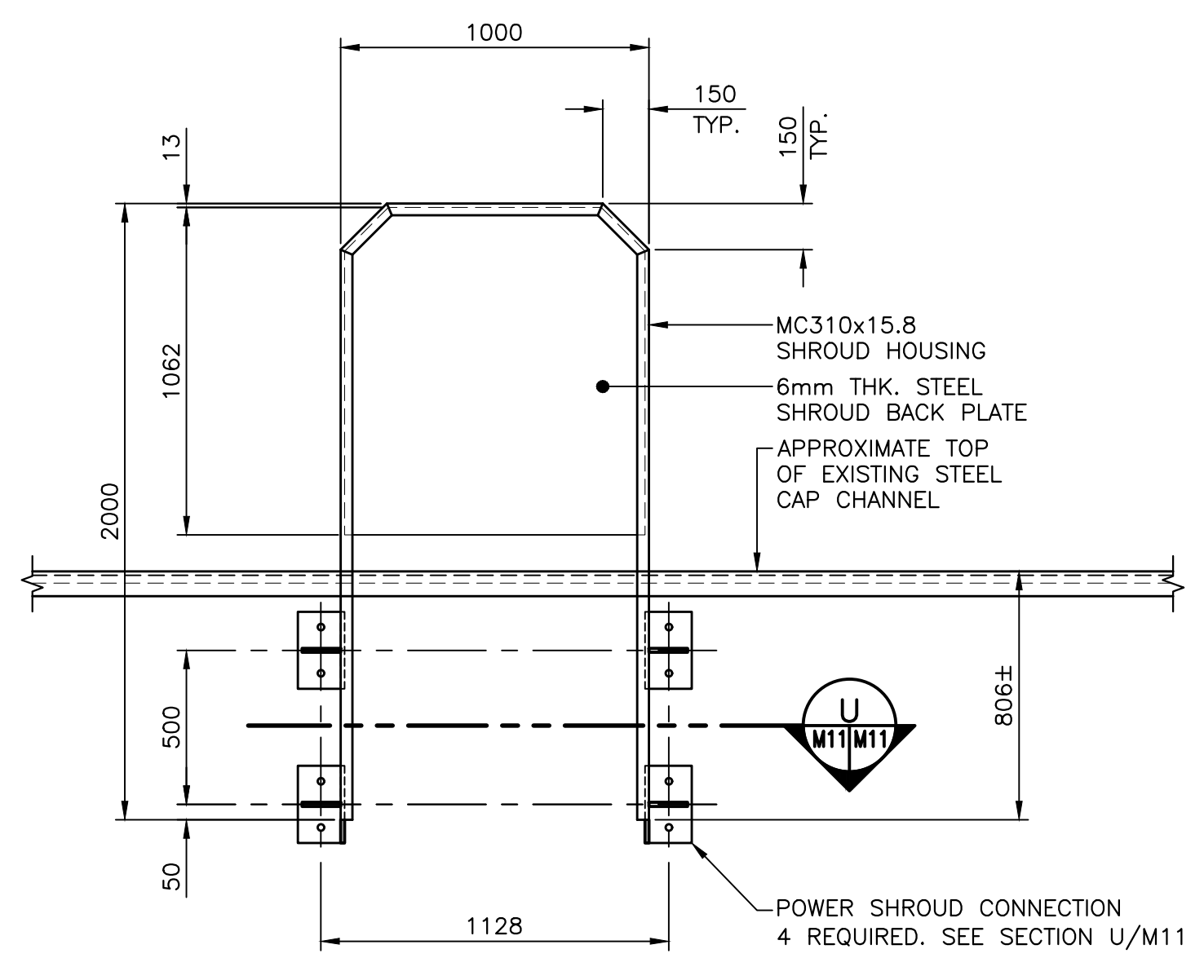
designed	R.KEEFE	conçu
date	FEBRUARY 2018	
drawn	J.BENNETT	dessiné
date	FEBRUARY 2018	
approved		approuvé
date		
Tender		Soumission

PWSC Project Manager / Administrateur de projets TPSC  
project number / no. du projet  
**C2-00003**

drawing no. / no. du dessin  
**M10 of 15**

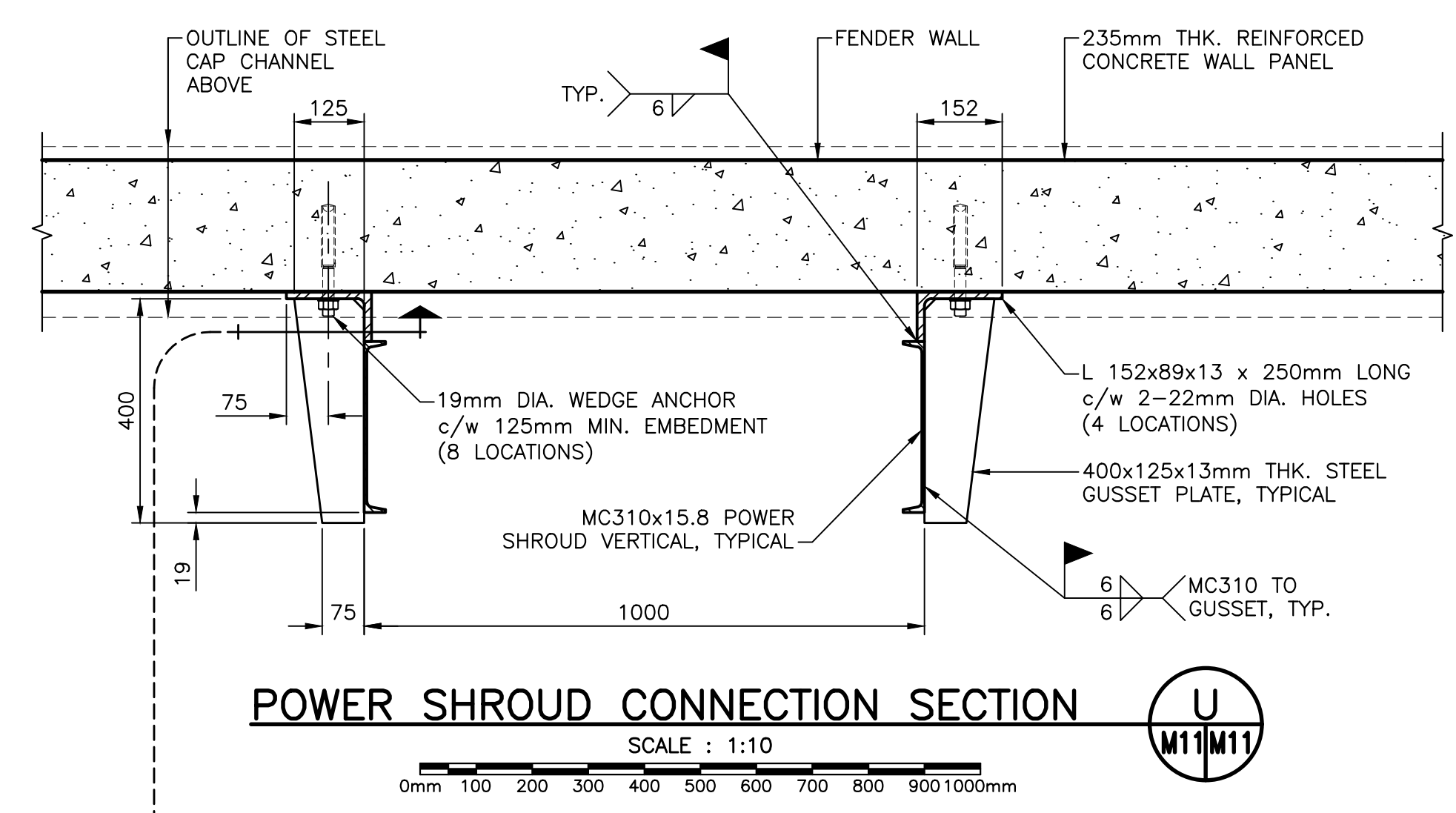


PLAN VIEW

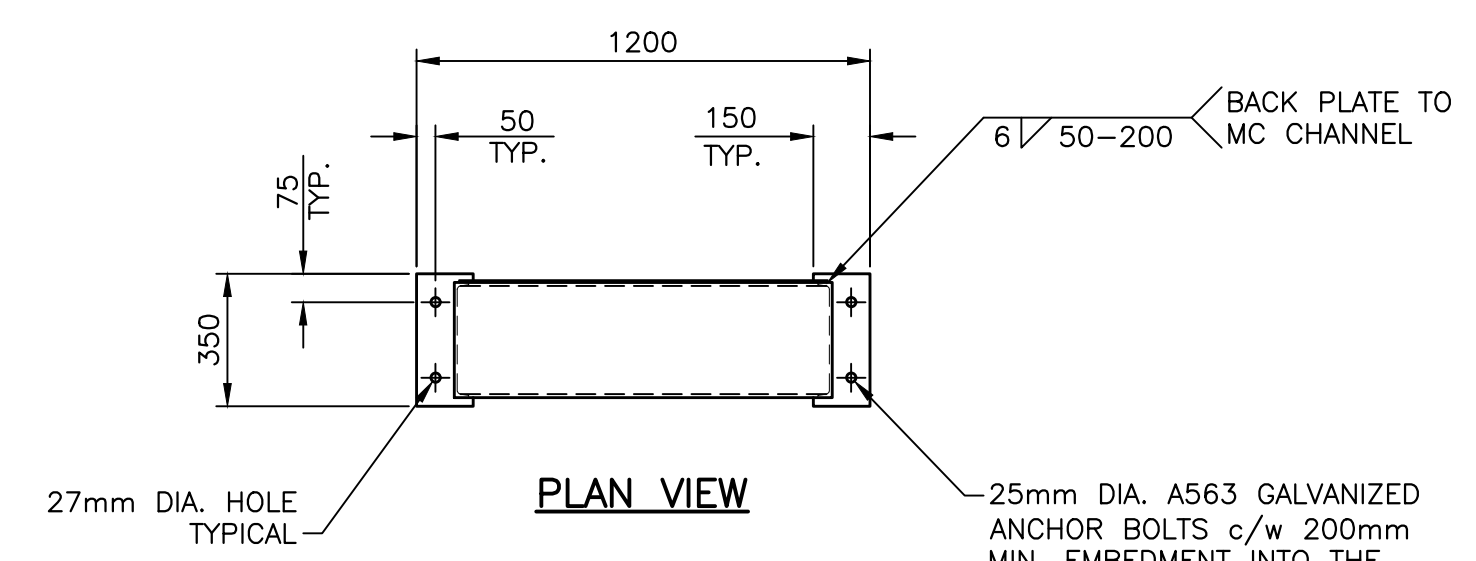
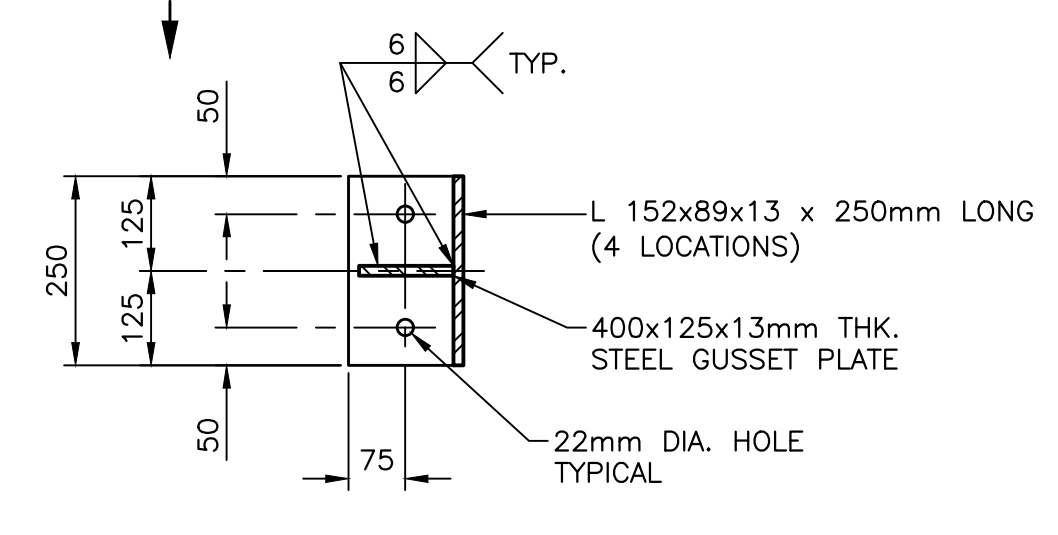


DETAIL OF POWER SHROUD #1A & #1B **24**  
 SCALE : 1:20

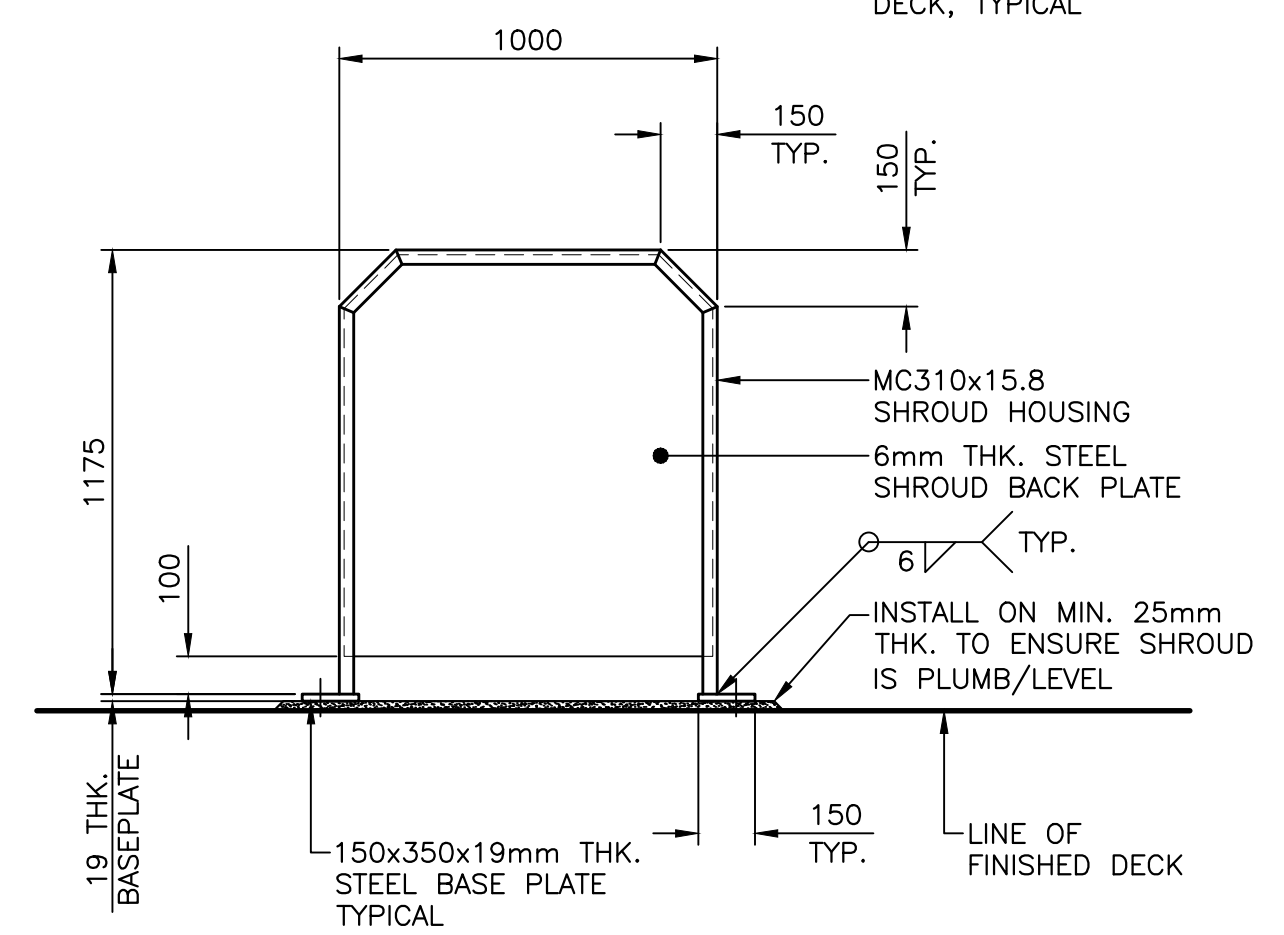
- NOTES:**
1. GALVANIZE ASSEMBLY AFTER FABRICATION. POWER SHROUDS TO BE INCLUDED IN "ELECTRICAL WORK" ITEM OF UNIT PRICE TABLE.
  2. DETAIL SHOWN IS TO BE USED ON EXISTING STRUCTURE #409.
  3. SEE ELECTRICAL DRAWINGS FOR APPROXIMATE LOCATION.



POWER SHROUD CONNECTION SECTION **U**  
 SCALE : 1:10

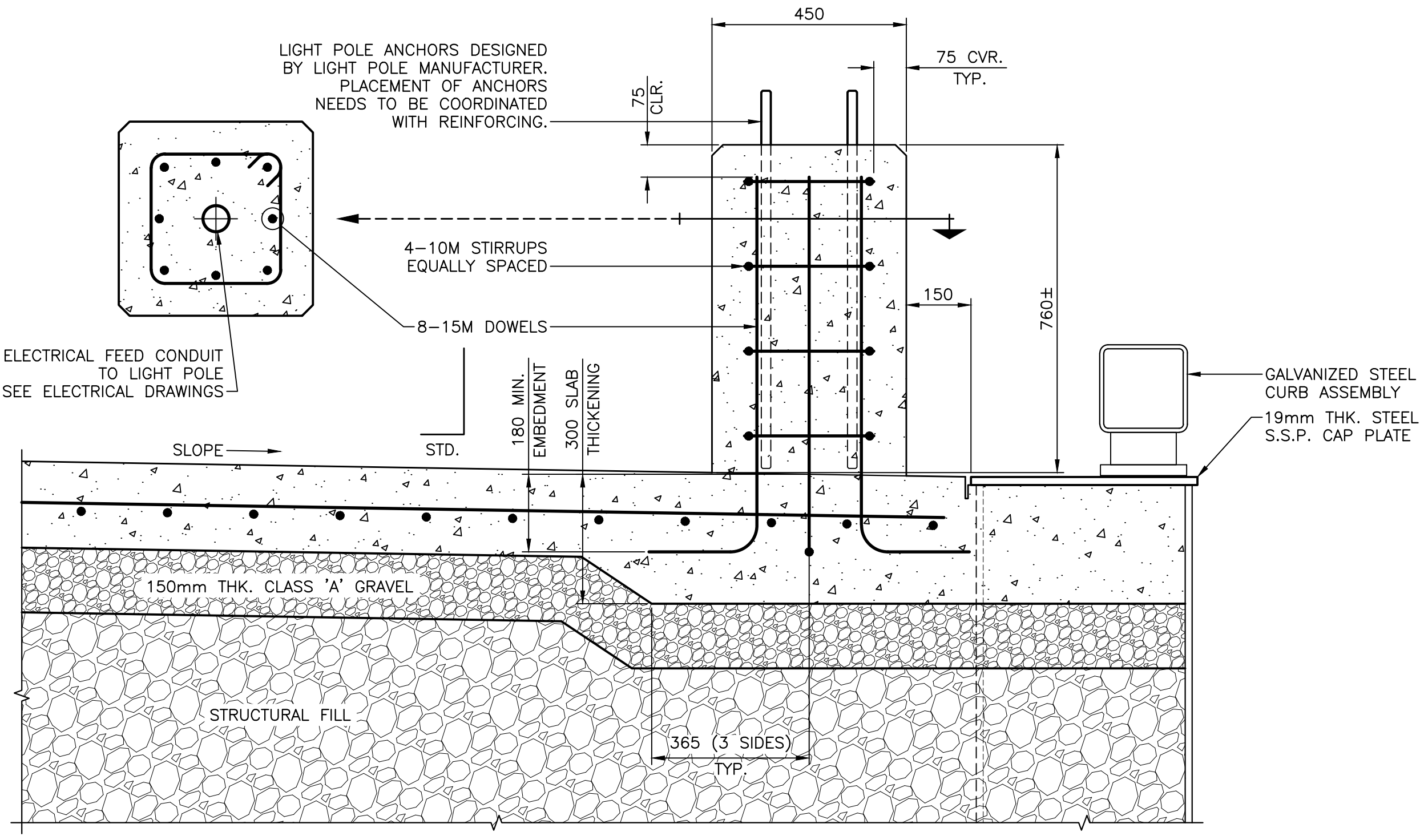


PLAN VIEW

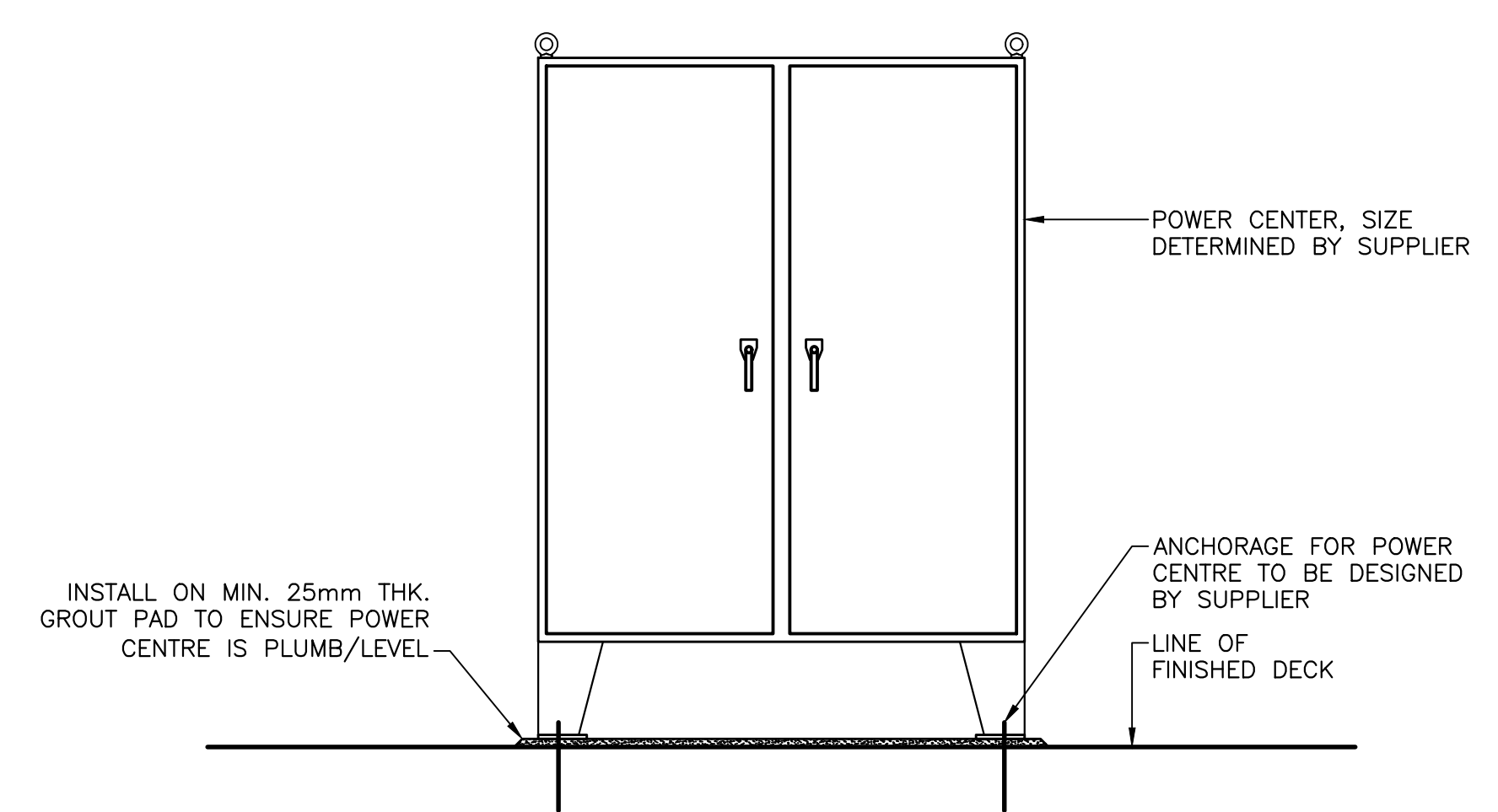


DETAIL OF POWER SHROUD #2B **25**  
 SCALE : 1:20

- NOTES:**
1. GALVANIZE ASSEMBLY AFTER FABRICATION. POWER SHROUDS TO BE INCLUDED IN "ELECTRICAL WORK" ITEM OF UNIT PRICE TABLE.
  2. DETAIL SHOWN IS TO BE USED IN THE NEW CONSTRUCTION.
  3. GROUT TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 40MPa.

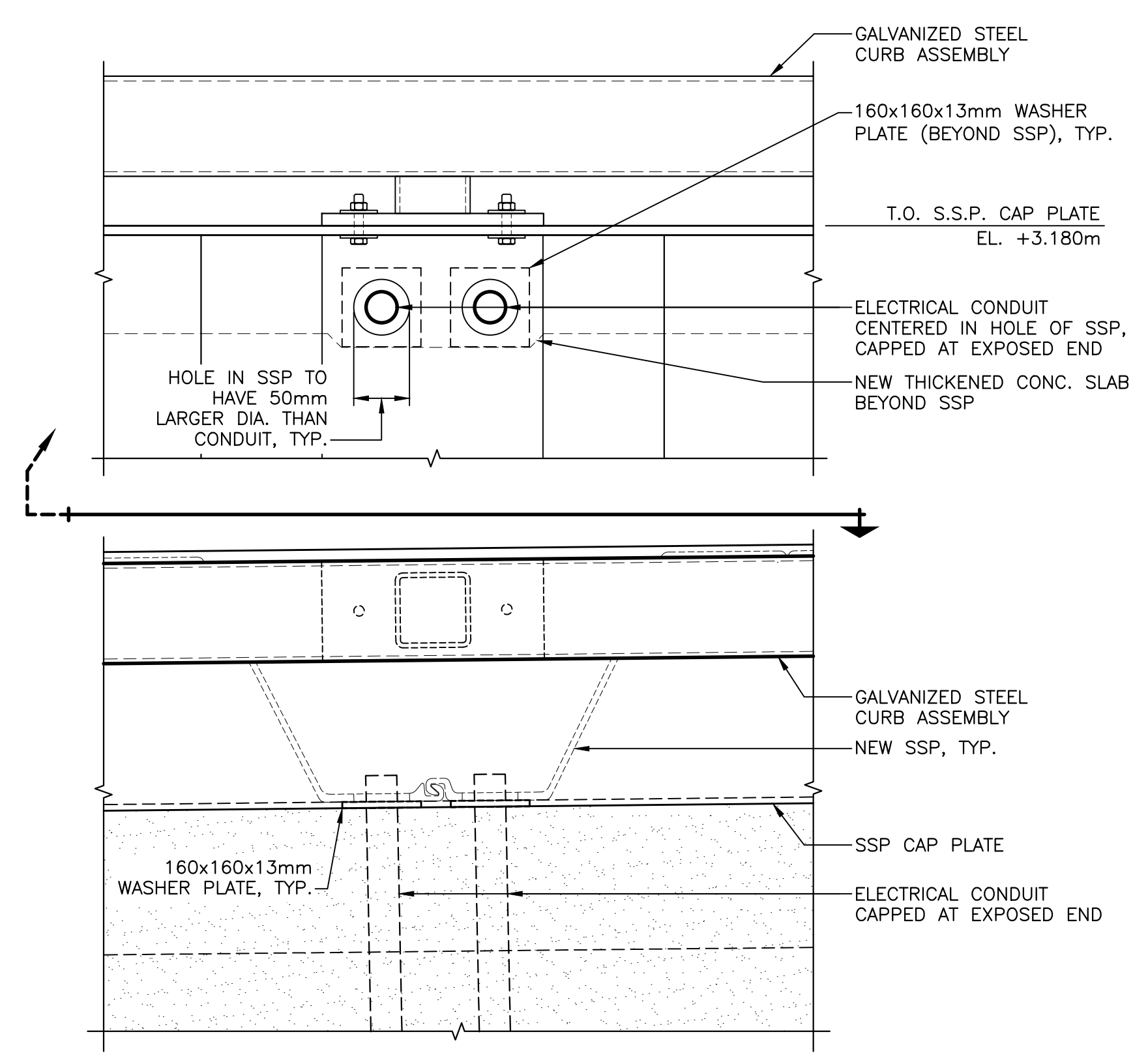


TYPICAL LIGHT BASE REINFORCING DETAIL **26**  
 SCALE : 1:10



DETAIL OF POWER CENTER #2 **27**  
 SCALE : 1:20

- NOTES:**
1. POWER CENTER TO BE INCLUDED IN "ELECTRICAL WORK" OF UNIT PRICE TABLE.
  2. SEE ELECTRICAL DRAWINGS FOR APPROXIMATE LOCATION.
  3. GROUT TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 40MPa.
  4. SUPPLIER TO COORDINATE WITH CONTRACTOR IF DECK REQUIRES LOCAL THICKENING, TO ACHIEVE ANCHORAGE REQUIREMENTS.



ELEC. CONDUIT THROUGH SSP DETAIL **28**  
 SCALE : 1:10

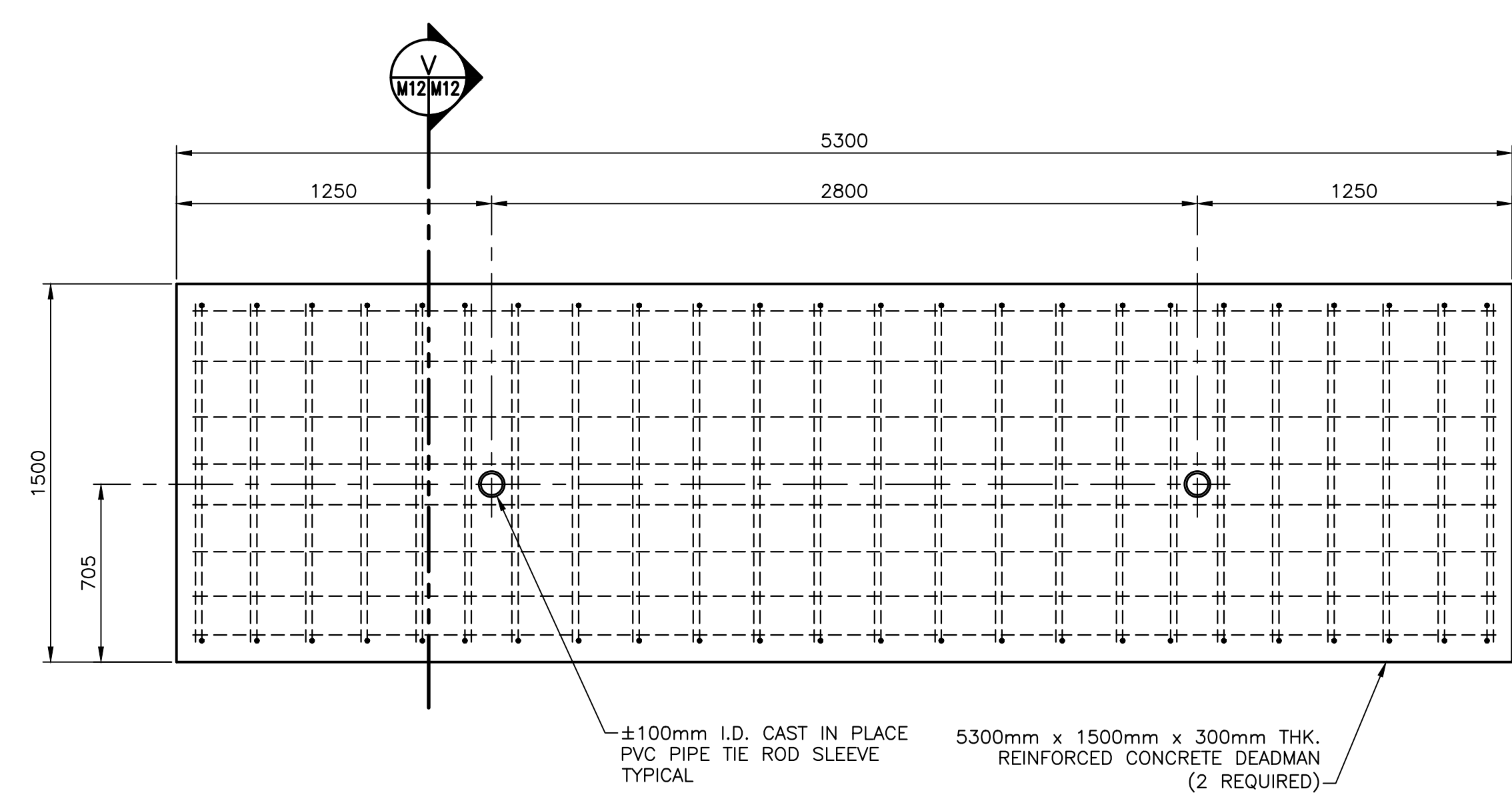


0	ISSUED FOR TENDER	SEPT. 15 2021
revisions		date

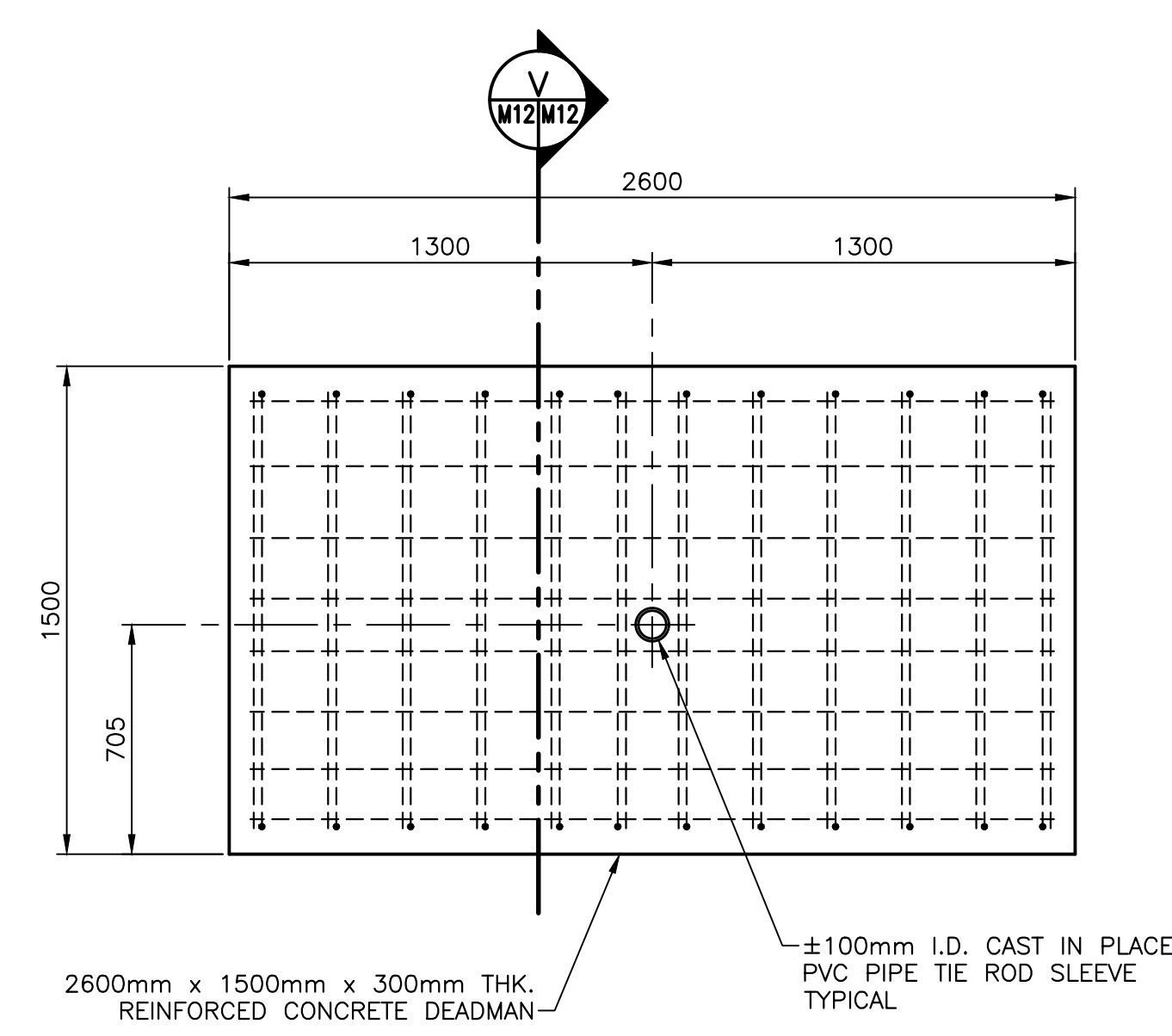
project project  
**STRUCTURE #402 AND #403 RECONSTRUCTION GEORGETOWN KINGS COUNTY, PE**

drawing design  
**DETAILS AND SECTION**

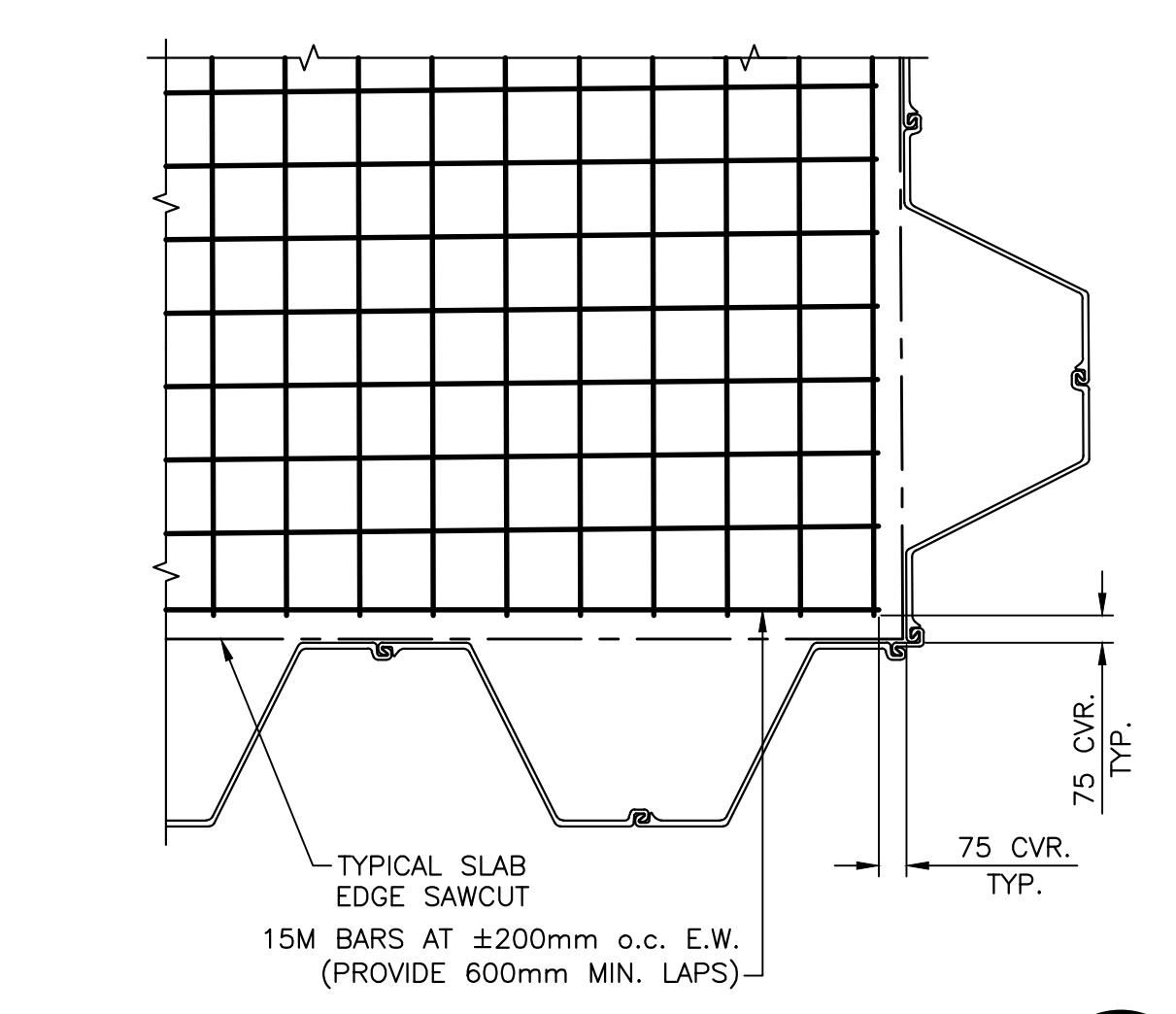
designed R.KEEFE	conçu
date FEBRUARY 2018	
drawn J.BENNETT	dessiné
date FEBRUARY 2018	
approved	approuvé
date	
Tender	Soumission
PWSC Project Manager Administrateur de projets TPSC	no. du projet
<b>C2-00003</b>	
drawing no.	no. du dessin
<b>M11 of 15</b>	



**CONCRETE DEADMAN DETAIL 29**  
 SCALE : 1:20  
 M5 M12

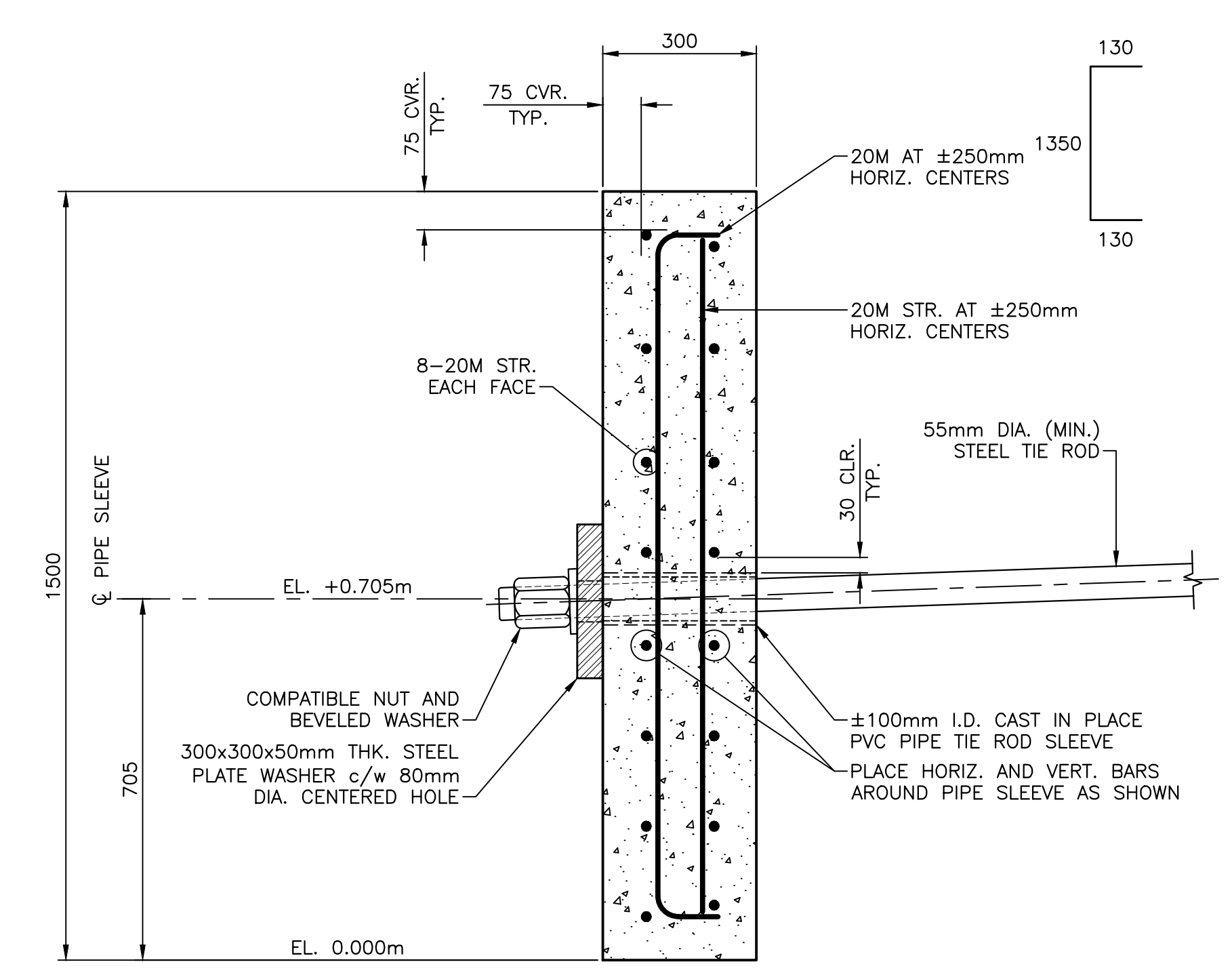


**CONCRETE DEADMAN DETAIL 30**  
 SCALE : 1:20  
 M5 M12

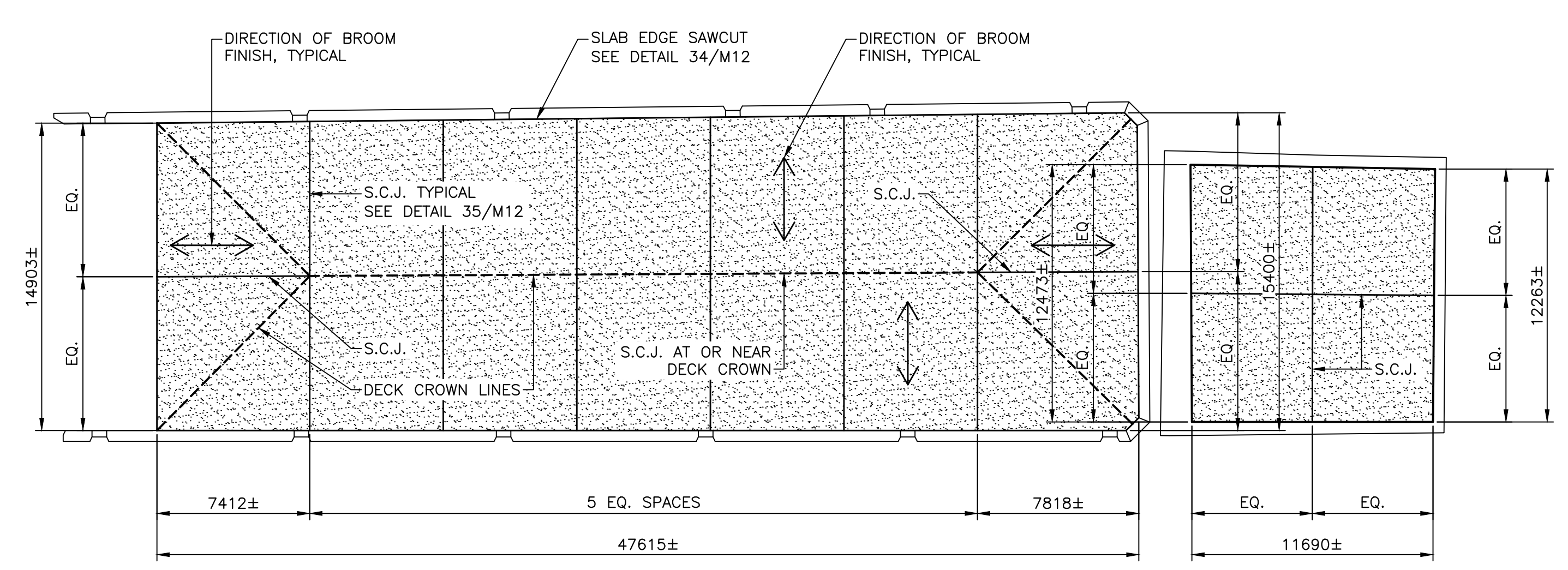


**SLAB REINFORCING PLAN DETAIL 31**  
 SCALE : 1:20  
 M4 M12

- NOTE:**
1. REINFORCING BAR SIZE AND SPACING IN NEW CONCRETE SLAB ON EXISTING STRUCTURE #404 SHALL BE SIMILAR TO THAT SHOWN ABOVE.
  2. REINFORCING SHALL BE CENTERED IN THE SLAB.

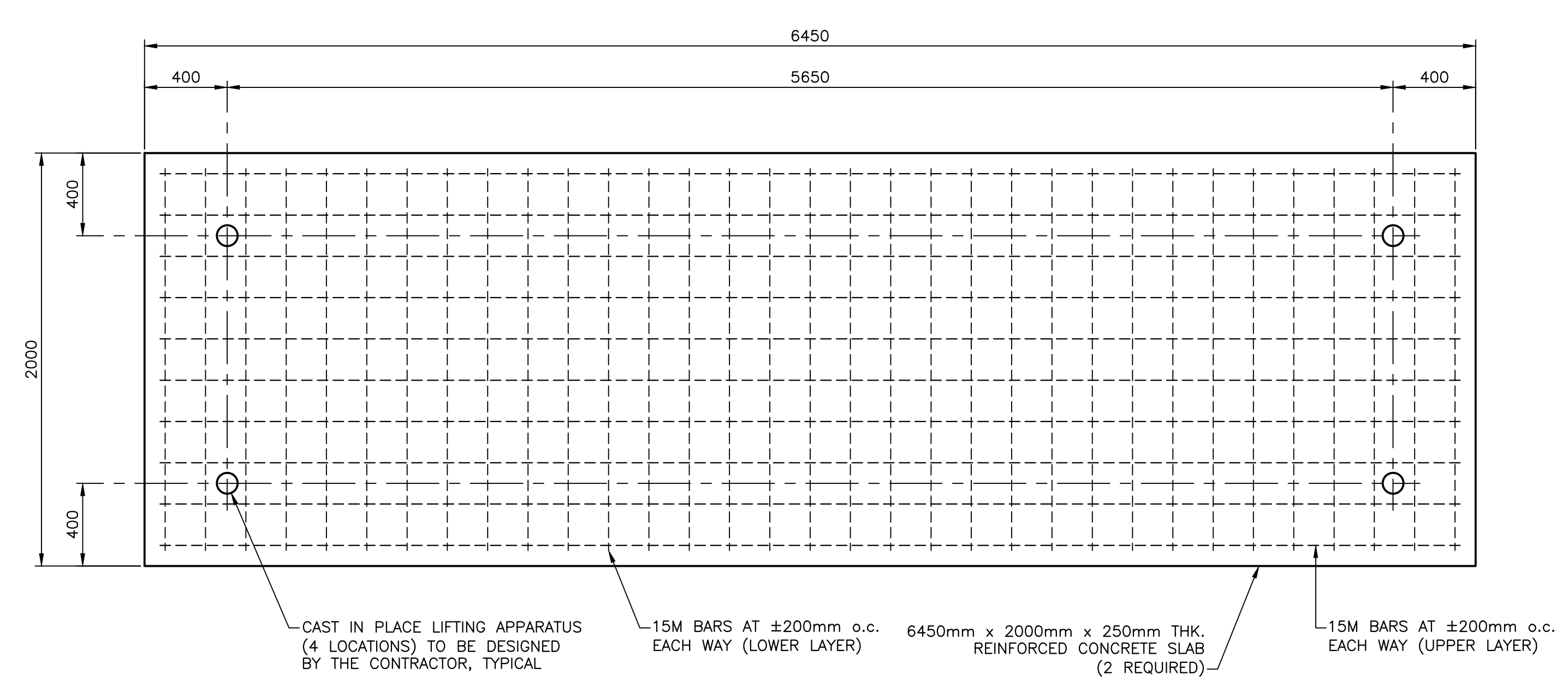


**TYPICAL DEADMAN SECTION V**  
 SCALE : 1:10  
 M12 M12



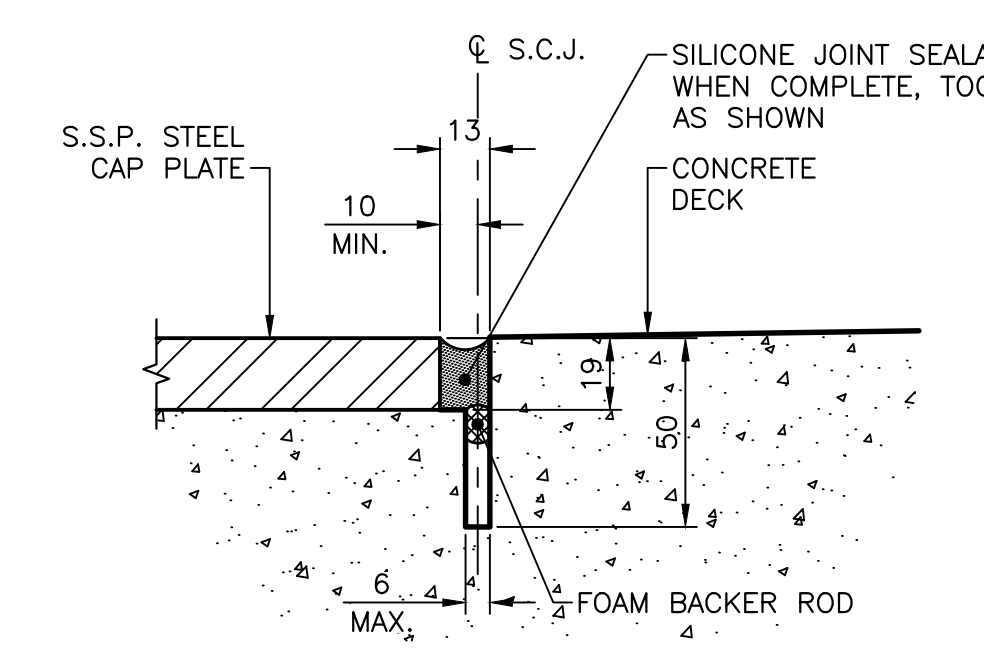
**PLAN DETAIL OF DECK SLABS 33**  
 SCALE : 1:200  
 M12 M12

- NOTES:**
1. S.C.J. DENOTES SLAB CONTROL JOINT.
  2. FINISH DECK TO A BROOM FINISH. SEE ABOVE FOR BROOM FINISH DIRECTIONS.

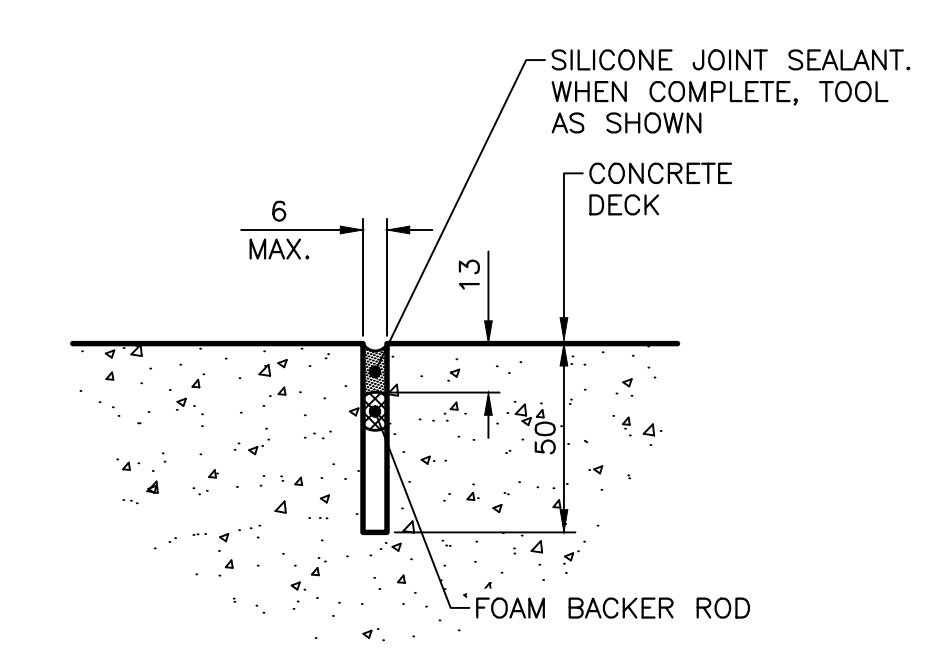


**DETAIL OF PRECAST CONCRETE SLAB 32**  
 SCALE : 1:20  
 M8 M12

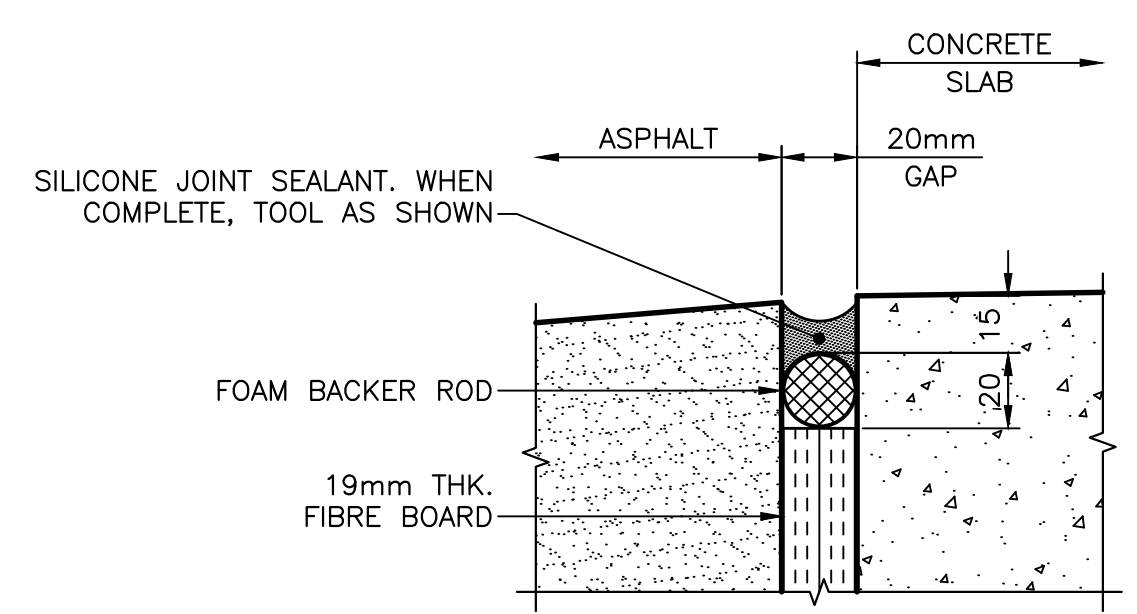
NOTE: (2) REQUIRED TO BRIDGE TO STRUCTURE #404.



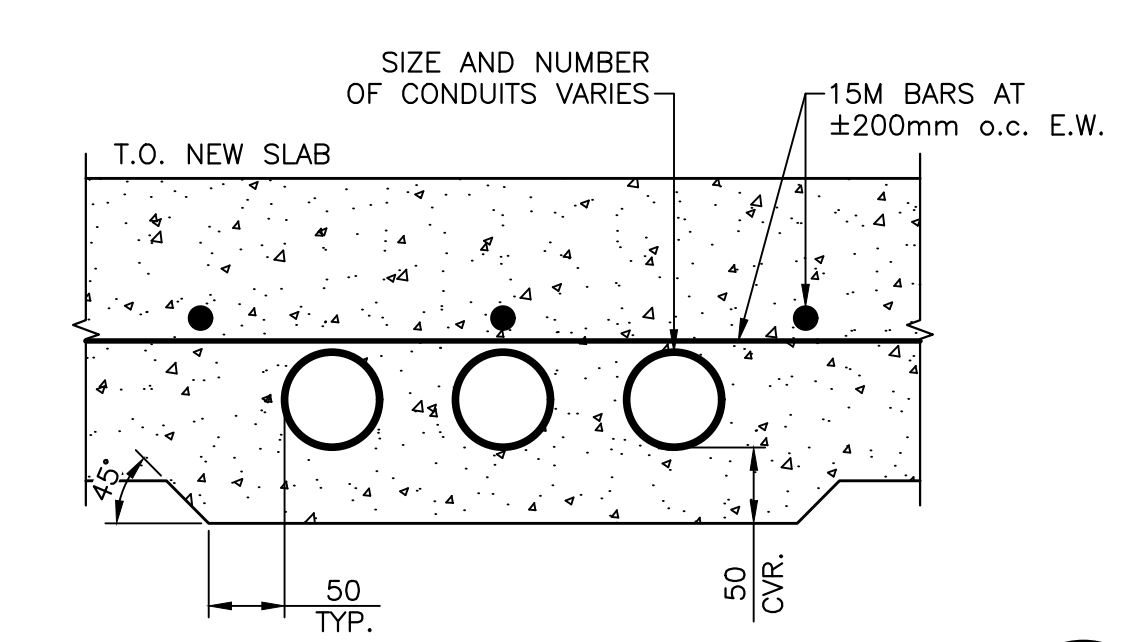
**CONCRETE SLAB EDGE SAWCUT DETAIL 34**  
 SCALE : 1:2  
 M8 M12



**CONCRETE SLAB CONTROL JOINT DETAIL 35**  
 SCALE : 1:2  
 M12 M12



**ASPHALT/CONCRETE SLAB JOINT SECTION W**  
 SCALE : 1:2  
 M4 M12



**THICKENED SLAB AT CONDUIT DETAIL 36**  
 SCALE : 1:5  
 M4 M12

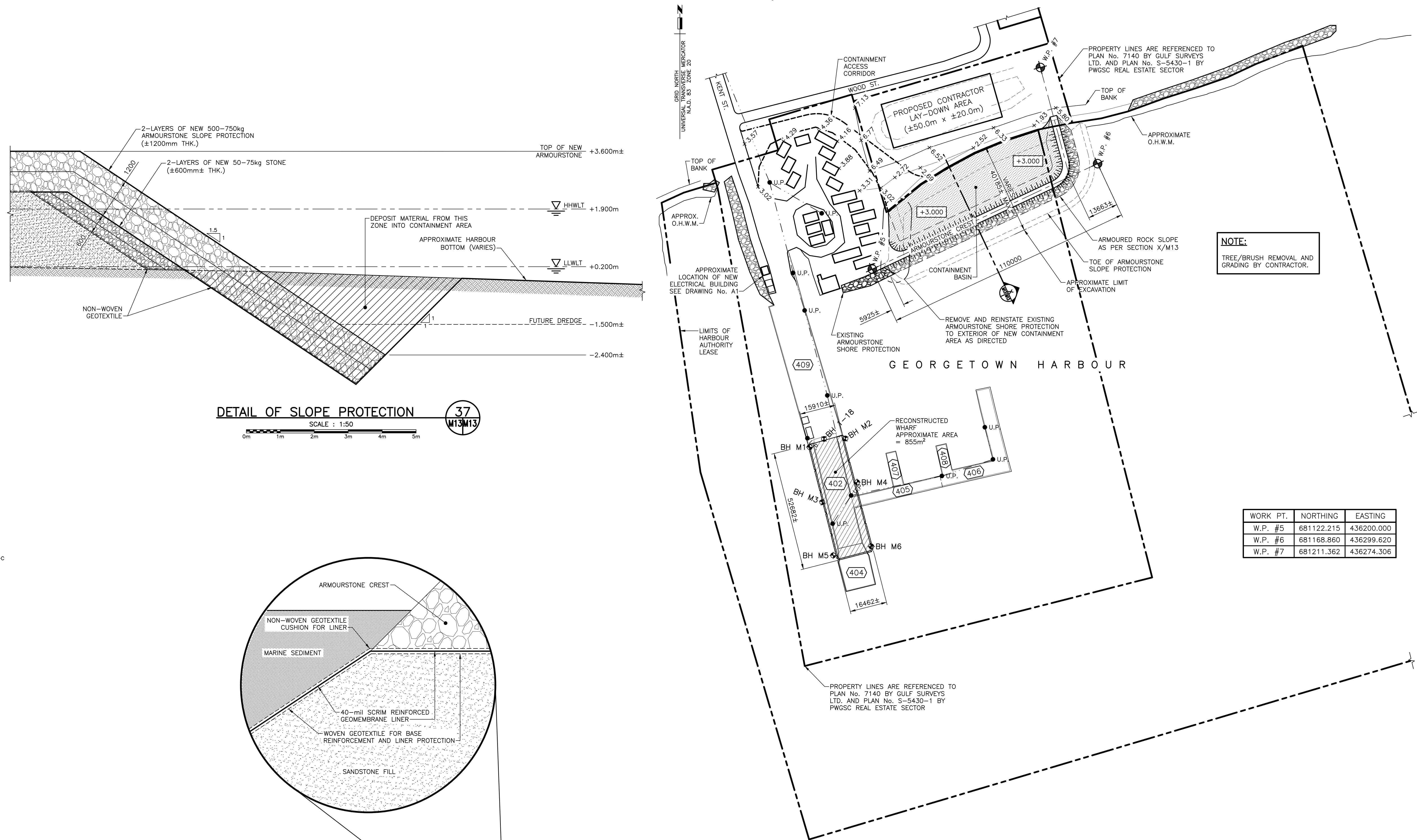


0	ISSUED FOR TENDER	SEPT. 15 2021
revisions		date
project		project

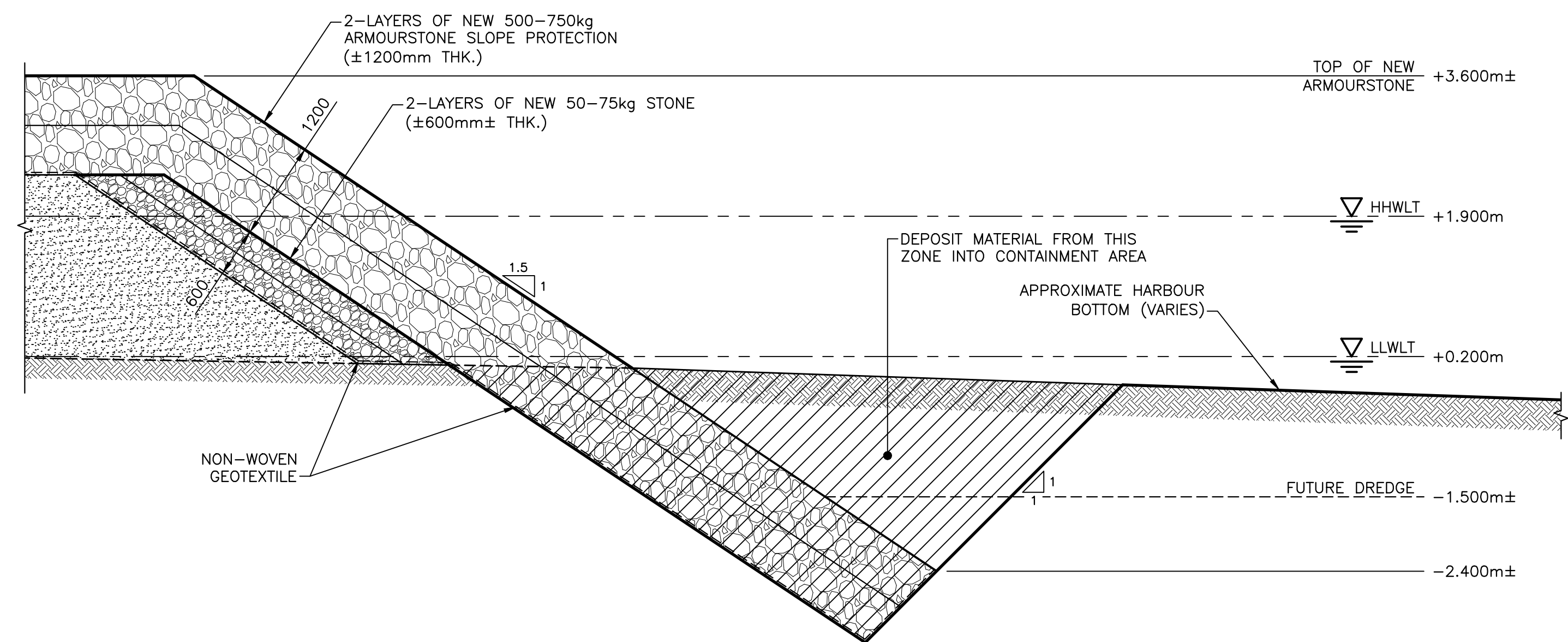
**STRUCTURE #402 AND #403 RECONSTRUCTION GEORGETOWN KINGS COUNTY, PE**

**DETAILS AND SECTIONS**

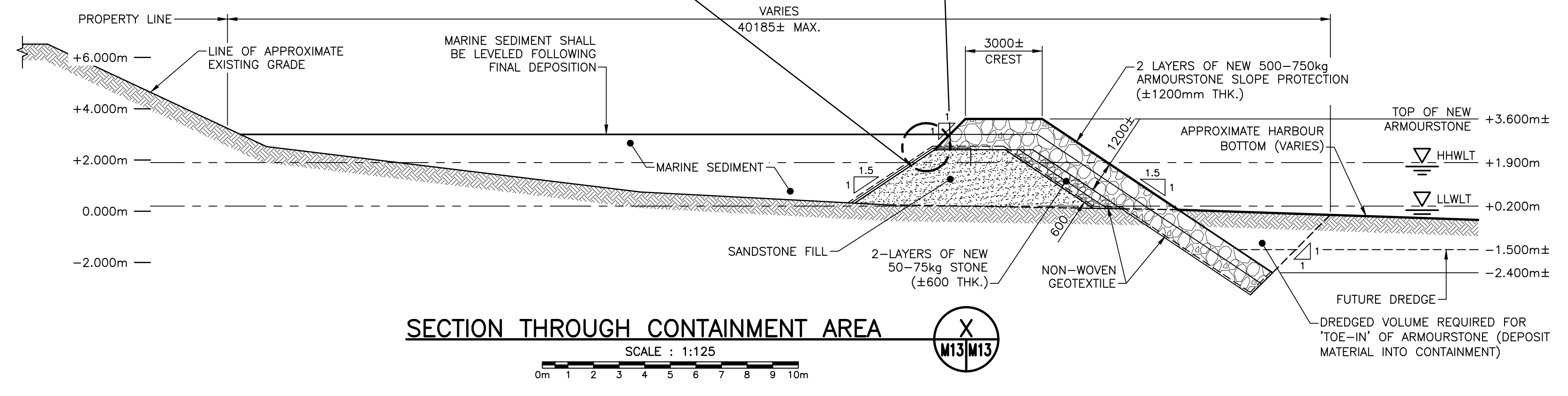
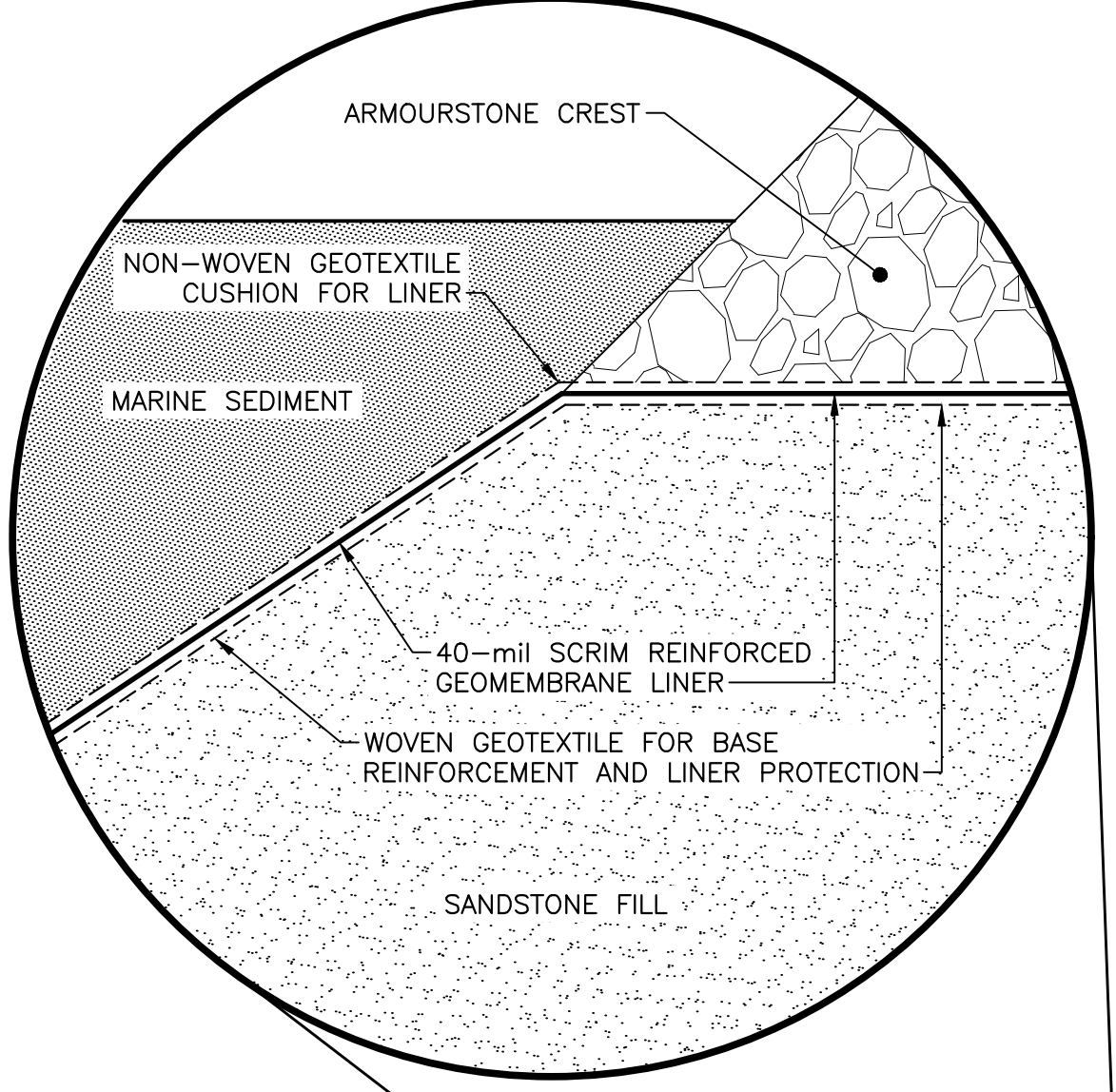
designed	R.KEEFE	conçu
date	FEBRUARY 2018	
drawn	J.BENNETT	dessiné
date	FEBRUARY 2018	
approved		approuvé
date		
Tender		Soumission
IPWGC Project Manager	Administrateur de projets IPWGC	
project number	no. du projet	
	<b>C2-00003</b>	
drawing no.	no. du dessin	
	<b>M12 of 15</b>	



**NOTE:**  
 TREE/BRUSH REMOVAL AND GRADING BY CONTRACTOR.



**DETAIL OF SLOPE PROTECTION**  
 SCALE : 1:50  
 M13/M13



**SECTION THROUGH CONTAINMENT AREA**  
 SCALE : 1:125  
 X  
 M13/M13

**PLAN VIEW OF NEW CONTAINMENT AREA**  
 SCALE : 1:750

- LEGEND**
- (403) STRUCTURE IDENTIFICATION NUMBER
  - x2.75 EXISTING SPOT ELEVATION
  - U.P. UTILITY POLE
  - L.P. LIGHT POLE
  - EXISTING OVERHEAD UTILITY WIRE OR GUY WIRE
  - BH 1-18 2018 BOREHOLE
  - BH M4 2018 BOREHOLE
  - W.P. #5 NEW WORK POINT
  - +3.000 FINISHED ELEVATION



revisions	ISSUED FOR TENDER	SEPT. 15 2021
0		

**STRUCTURE #402 AND #403 RECONSTRUCTION GEORGETOWN KINGS COUNTY, PE**

**PLAN VIEW OF NEW CONTAINMENT AREA SECTION AND DETAILS**

designed G.MacPHEE	conçu
date JANUARY 2019	
drawn J.BENNETT	dessiné
date JANUARY 2019	
approved	approuvé
date	
Tender	Soumission
PWGSC Project Manager Administrateur de projets TPSC	no. du projet
<b>C2-00003</b>	
drawing no.	no. du dessin
<b>M13 of 15</b>	