

**KEY PLAN**  
N.T.S.

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada

**REAL PROPERTY SERVICES**  
Pacific Region  
SERVICES IMMOBILIERS

**Klohn Crippen Berger**

**ANCHOR QEA**

**DRAWING LIST** **SITE PLAN**  
1:1000

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C 2	NOTES AND ABBREVIATIONS	S 110	CONSTRUCTION AT HIGH MAST LIGHT AREA
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C 6	SOUTH JETTY - GENERAL ARRANGEMENT - PLAN	S 128	FENDERING - SHEET 1
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**CHART**                      **PWGSC**                      **GEODETIC**

**DATUM CONVERSION**  
N.T.S.

**DRAWING ANNOTATIONS:**

C = CIVIL  
 CSM = CIVIL & STRUCTURAL MODIFICATIONS  
 D = DEMOLITION  
 E = ELECTRICAL  
 M = MECHANICAL  
 S = STRUCTURAL

Revision/	Description/Description	Date/Date
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**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK**  
 825 ADMIRALS ROAD, VICTORIA, BC

**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
 GEOFF COOPER

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 COLLIN KINGMAN

Drawing title/Titre du dessin  
**SITE PLAN AND DRAWING LIST**

Project No./No. du projet	Sheet/	Revision no./
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**1. GENERAL NOTES:**

- 1.1. DETAILED REQUIREMENTS FOR MATERIALS AND FABRICATION ARE DESCRIBED IN THE SPECIFICATIONS. FOR CONVENIENCE, CERTAIN EXTRACTS ARE REPRODUCED BELOW. IN THE EVENT OF A CONFLICT BETWEEN THE DRAWINGS & THE SPECIFICATIONS, THE SPECIFICATIONS SHALL GOVERN.
- 1.2. DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. ELEVATIONS ARE IN METRES, CHART DATUM.
- 1.3. DIMENSIONS, LAYOUT AND DETAILS OF EXISTING STRUCTURES ARE BASED ON DRAWINGS OBTAINED FROM PUBLIC WORKS AND GOVERNMENT SERVICES CANADA AND MAY BE SUBJECT TO CONSTRUCTION VARIATIONS AND MODIFICATIONS. THE CONTRACTOR SHALL VERIFY DIMENSIONS AND CONFIGURATION PRIOR TO ANY DEMOLITION AND REMOVAL AND BRING ANY DISCREPANCIES OR POTENTIAL CONFLICTS TO THE ATTENTION OF THE DEPARTMENTAL REPRESENTATIVE. REFERENCE DRAWINGS ARE LISTED IN THE SPECIFICATIONS.
- 1.4. CONTRACTOR SHALL COMPLETE PRE-CONSTRUCTION SURVEY TO MEET BATHYMETRY DATA COLLECTION REQUIREMENTS A MINIMUM OF TEN (10) WORKING DAYS PRIOR TO DREDGING OR DEBRIS REMOVAL WORK, AS DESCRIBED IN SECTION 02 21 13 - SURVEYING AND POSITIONING CONTROL.
- 1.5. THE CONTRACTOR SHALL COORDINATE ALL ACTIVITIES WITH THE DEPARTMENTAL REPRESENTATIVE. LOCATION OF THE CONTRACTOR'S SITE OFFICE AND MATERIAL STORAGE SHALL BE APPROVED BY THE DEPARTMENTAL REPRESENTATIVE.
- 1.6. TIDE ELEVATIONS (CHART DATUM):
 

EXTREME HIGH WATER LEVEL (EHWL)	3.8m
HIGHER HIGH WATER LEVEL (HHWL)	3.4m
MEAN WATER LEVEL (MWL)	1.9m
LOWER LOW WATER LEVEL (LLWL)	0.1m
EXTREME LOW WATER LEVEL	-0.5m
- 1.7. PWGSC SITE BENCHMARK IS "BOLT". FROM PWGSC PLAN SK4593-1 DATED OCTOBER 1989, "BOLT" IS ELEVATION 4.725m TO PWGSC DATUM, BOLT IS 4.849m ABOVE LLWL; LLWL IS 0.124m BELOW PWGSC DATUM 0.0; LLWL IS 1.871m BELOW GEODETIC ELEVATION.  
 TO CONVERT FROM GEODETIC DATUM TO CHART DATUM, ADD 1.871m.  
 TO CONVERT FROM GEODETIC DATUM TO PWGSC DATUM, ADD 1.747m.  
 TO CONVERT FROM PWGSC DATUM TO CHART DATUM, ADD 0.124m.
- 1.8. FOR CONTROL MONUMENT INFORMATION SEE DRAWING C3.
- 1.9. THE SOUTH JETTY REMEDIATION WORKS HAVE BEEN DESIGNED FOR FORCES ASSOCIATED WITH USAGE, E.G. LIVE LOADS, CRANE LOADS AND THE ENVIRONMENTAL FORCES SET FORTH IN THE NATIONAL BUILDING CODE OF CANADA, 2010. DESIGN LIVE LOADS FOR SPECIFIC STRUCTURAL COMPONENTS ARE AS SPECIFIED ON THE RELEVANT DRAWINGS. THE DESIGN SERVICE LIFE FOR MAJOR STRUCTURAL COMPONENTS IS:
 

HIGH MAST LIGHT	75 YEARS
BULL RAIL	20 YEARS
SAFETY LADDERS	20 YEARS
FENDER PILES	20 YEARS
HAND RAIL	20 YEARS
- 1.10. UNDERPIER AREA LOWER INTERTIDAL AND SUBTIDAL BATHYMETRY WITHIN THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA IS FROM FEBRUARY 2009, JUNE 2010 AND JANUARY 2011 CRA CANADA SURVEYS LTD. MULTI BEAM SURVEY, UPPER INTERTIDAL ELEVATIONS FROM SEPTEMBER 2009 AND JULY 2011 SURVEY BY FOCUS CORPORATION. OPEN WATER AREAS OUTSIDE OF THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA WERE DREDGED AS PART OF THE PHASE 1B OPEN-WATER REMEDIATION PROJECT. OPEN WATER BATHYMETRY SURVEY WAS CONDUCTED BY CRA CANADA SURVEYS INC. ON 2014/03/05 FOLLOWING COMPLETION OF PHASE 1B WORK.
- 1.11. SCALES INDICATED ON DRAWINGS ARE FULL SIZE A1 DRAWINGS.
- 1.12. THE EXISTING SOUTH JETTY SHEET PILE PERIMETER WALL WAS DESIGNED AS A TEMPORARY STRUCTURE WITH A DESIGN SERVICE LIFE FOR MAJOR STRUCTURAL COMPONENTS OF 10 YEARS. FOR DETAILS AND CONFIGURATION OF EXISTING SHEET PILE PERIMETER WALL, REFER TO THE PROJECT REFERENCE DRAWINGS. SEISMIC LOADS WERE NOT CONSIDERED FOR THE SHEET PILE CONTAINMENT WALL AS IT IS CONSIDERED A TEMPORARY STRUCTURE.
- 1.13. DESIGN LOADS ON SHEET PILE PERIMETER WALL WHEN RE-DRIVEN TO ELEVATION SHOWN ON THE DRAWINGS, AND WHEN JETTY DECK SUPPORT CONDITION HAS BEEN REMOVED:
 

PROP WASH LOADS:

  - A.) CONTRACTOR TUG (500 HP)  
25% POWER  
1 THRUSTER - 5m FROM WALL
  - B.) SEASPAN HAWK  
10% POWER  
2 THRUSTERS - 15m FROM WALL
- 1.14. FOR ALLOWABLE DECK LOADS, SEE APPENDIX TO THE SPECIFICATIONS. EGD LOAD RATING LAYOUT, SKETCH 2 (KM ENGINEERING GROUP INC. 2005), SUPPLEMENTED BY MORE RECENT RECORD DRAWINGS FOR WEST/SOUTH CRANE PAD REHABILITATION WORKS.
- 1.15. TYPICAL ABBREVIATIONS:
 

APPROX/~	APPROXIMATE(LY)	DWG	DRAWING	H	HORIZONTAL	NAD	NORTH AMERICAN DATUM	REV	REVISION	TYP	TYPICAL
BC	BRITISH COLUMBIA	E	EASTING	HA	HECTARES	NF	NEAR FACE	SIM.	SIMILAR	U.N.O.	UNLESS NOTED OTHERWISE
BOT	BOTTOM	EF	EACH FACE	HHWL	HIGHER HIGH WATER LEVEL	NO.	NUMBER	SQ	SQUARE	U/S	UNDER SIDE
C/C	CENTRE TO CENTRE	EGD	ESQUIMALT GRAVING DOCK	ID	INNER DIAMETER	NOM	NOMINAL	STA	STATIONING	TYP.	TYPICAL
CCTV	CLOSED CIRCUIT TELEVISION	EHWL	EXTREME HIGH WATER LEVEL	INVT	INVERT	N.T.S.	NOT TO SCALE	STD.	STANDARD	UHMW	ULTRA HIGH MOLECULAR WEIGHT POLYETHYLENE
CD	CHART DATUM	EL	ELEVATION	LLWL	LOWER LOW WATER LEVEL	O.D.	OUTSIDE DIAMETER	SS	STAINLESS STEEL	UTM	UNIVERSAL TRANSVERSE MERCATOR
C.I.P.	CAST IN PLACE	EQ SP	EQUALLY SPACED	LTD.	LIMITED	R	PLATE	T	TOP	V	VERTICAL
CRB	CONCRETE ROAD BARRIER	EW	EACH WAY	m	METRE	PROJ	PROJECTION	TBD	TO BE DETERMINED	X	EASTING
CSRS	CANADIAN SPATIAL REFERENCE SYSTEM	EXP JT	EXPANSION JOINT	MAX	MAXIMUM	PWGSC	PUBLIC WORKS AND GOVERNMENT SERVICES CANADA	T.O.	TOP OF	Y	NORTHING
CL	CLEAR	FF	FAR FACE	MIN	MINIMUM	RAD,R	RADIUS	T.O.C	TOP OF CONCRETE	Z	ELEVATION IN METRES
C/W	COMPLETE WITH	GALV	GALVANIZED	mm	MILLIMETRE	REF.	REFERENCE	T.O.R	TOP OF RAIL		
CJ	CONSTRUCTION JOINT	H	HORIZONTAL	MPa	MEGAPASCAL	REINF	REINFORCING	TRB	TEMPORARY RESUSPENSION BARRIER		
Ø	DIAMETER	HA	HECTARES	MWL	MEAN WATER LEVEL	REQ/REQ'D	REQUIRED	TRBCA	TEMPORARY RESUSPENSION BARRIER CONTAINMENT AREA		
DU	DREDGE UNIT	HHWL	HIGHER HIGH WATER LEVEL	N	NORTHING						
℄	CENTERLINE	GALV	GALVANIZED								

**2. TEMPORARY RE-SUSPENSION BARRIERS:**

- 2.1. SEE SPECIFICATIONS FOR DESIGN REQUIREMENTS REGARDING TEMPORARY RE-SUSPENSION BARRIERS.

**3. CONCRETE:**

- 3.1. ALL DECK SLAB CONCRETE AT THE HIGH MAST LIGHT SHALL HAVE COMPRESSIVE STRENGTH OF 45 MPa @ 28 DAYS. ALL OTHER CONCRETE SHALL HAVE COMPRESSIVE STRENGTH OF 30 MPa @ 28 DAYS.
- 3.2. ALL EXPOSED EDGES SHALL HAVE 20mm CHAMFER, U.N.O.

**4. CONCRETE REINFORCEMENT:**

- 4.1. REINFORCING BARS SHALL BE UNCOATED BILLET STEEL BARS CONFORMING TO CAN/CSA G30.18-09, 400 MPa MIN. YIELD OR ASTM A615 GRADE 75 WHERE INDICATED.
- 4.2. DESIGNATION OF REINFORCING BARS:  
 3-10M0800 MEANS THREE 10M BARS 800 LONG. 2-C20M1500 MEANS TWO 20M BARS, EACH WITH A 90 DEGREE STANDARD HOOK ON EACH END AND A TOTAL LENGTH OF 1500 PER BAR.  
 --- --- --- DENOTES BOTTOM BARS.  
 - - - - - DENOTES TOP BARS.
- 4.3. DIMENSIONS TO REINFORCEMENT ARE TO CENTRE LINES OF BARS, EXCEPT WHERE CONCRETE COVER OR CLEARANCE BETWEEN BARS IS SHOWN.
- 4.4. CONCRETE COVER FOR REINFORCEMENT (CAST-IN-PLACE): mm  
 TOP SURFACES OF JETTY STRUCTURES 70  
 ALL OTHER CONCRETE FACES, U.N.O. 70

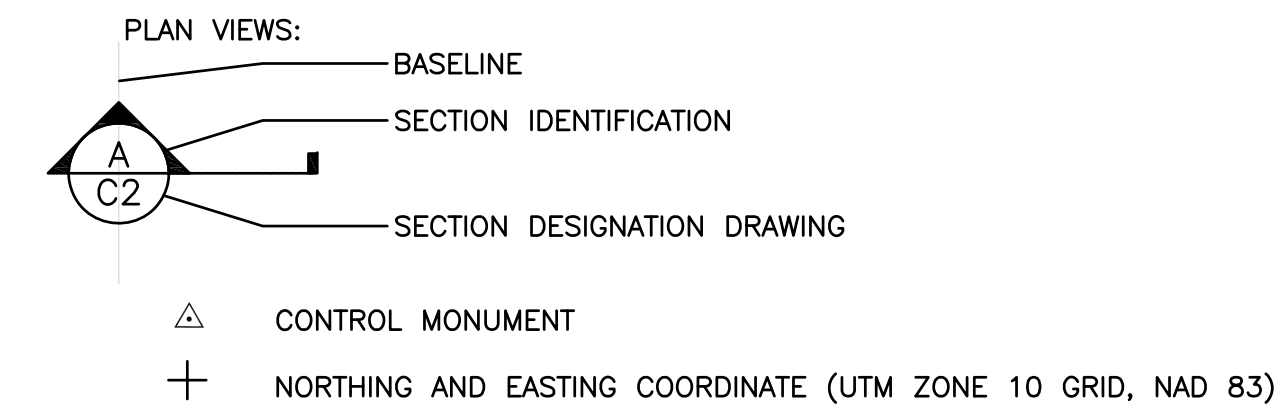
**5. STRUCTURAL STEEL AND STEEL FABRICATIONS:**

- 5.1. STRUCTURAL STEEL SHALL MEET CAN/CSA G40.20-04 FOR GENERAL REQUIREMENTS, AND CAN/CSA G40.21-04 FOR QUALITY.  
 GRADES OF MATERIAL, UNLESS NOTED OTHERWISE:  
 STRUCTURAL STEEL AND MISC. METAL 350W  
 BOLTS, NUTS AND WASHERS ASTM A325M  
 ANCHOR BOLTS ASTM A307  
 CONCRETE ANCHOR RODS ASTM A193 GRADE B7
- 5.2. ALL STEEL TO BE HOT DIPPED GALVANIZED, U.N.O.
- 5.3. EXPOSED METALWORK TO BE GROUNDED PER SPECIFICATION 26 05 27.

**6. TIMBER AND TIMBER PILES:**

- 6.1. THESE NOTES APPLY UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- 6.2. ALL TIMBER WORK SHALL CONFORM TO CSA 086.01, DFO TECHNICAL REPORT GUIDELINES TO PROTECT FISH AND FISH HABITAT FROM TREATED WOOD USED IN AQUATIC ENVIRONMENTS IN THE PACIFIC REGION AND GOOD MARINE TIMBER PRACTICE.
- 6.3. DIMENSIONS TO AND OF EXISTING TIMBER ARE BASED ON REFERENCE DRAWINGS AND REQUIRE SITE CONFIRMATION BY THE CONTRACTOR.
- 6.4. SAWN TIMBER SHALL BE NO. 1 COASTAL DOUGLAS FIR.
- 6.5. PRESSURE TREATMENT OF TIMBER SHALL BE IN ACCORDANCE WITH CSA-080 SERIES-08 (R2012).
- 6.6. THE TOPS OF THE REINSTATED FENDER PILES AND DOLPHINS SHALL BE CUT AT 1 VERTICAL TO 5 HORIZONTAL TOWARDS THE WATER PRIOR TO CAPPING. THE CUT FACE SHALL BE TREATED WITH 2 COATS OF COPPER NAPHTHENATE AND ONE COAT OF TROWEL MASTIC AT LEAST 6mm THICK. THE PILE TOP SHALL THEN BE COVERED WITH A SHEET OF 0.8mm (22 GAUGE) ANNEALED CORROSION RESISTANT ALUMINUM CUT 150mm WIDER THAN THE DIAMETER OF THE PILE TOP. THE OVERHANGING EDGES SHALL BE CRIMPED AND TURNED DOWN AND NAILED WITH 8 ALUMINUM ROOFING NAILS.
- 6.7. ALL BOLT HOLES THROUGH TIMBER PILES SHALL BE TREATED WITH 2 COATS OF NAPHTHENATE PRIOR TO BOLTING. THIS APPLIES TO NEW HOLES AND TO RE-USED HOLES.
- 6.8. HOLES AND UNUSED BOLT HOLES IN EXISTING PILES SHALL BE PLUGGED FULL LENGTH WITH TAPERED TIGHT FITTING TREATED HARDWOOD DOWELS. COPPER NAPHTHENATE SHALL BE POURED OR SWABBED INTO THE HOLE AND THE DOWEL SHALL BE TREATED PRIOR TO INSTALLATION.
- 6.9. BOLTS IN TIMBERS AND PILES SHALL CONFORM TO ASTM A307 GRADE A WHEREVER STANDARD BOLT LENGTHS ARE SUITABLE. BOLTS SHALL BE TIGHTENED FROM THE NUT END.
- 6.10. BOLTS IN TIMBERS AND PILES FOR NON STANDARD LENGTHS SHALL BE THREADED CONFORMING TO ASTM A307 GRADE C. WASHERS SHALL BE PROVIDED AT BOTH NUT AND BOLT HEAD. WASHERS SHALL BE MALLEABLE IRON, OQEE, OR ROUND PLATE WASHERS. FOR ROUND PLATE WASHERS, WASHER DIAMETER BY THICKNESS SHALL BE 70X6 FOR 16 DIAMETER; 85X8 FOR 19 DIAMETER; AND 100X10 FOR 25 DIAMETER BOLTS. POLYURETHANE MASTIC SHALL BE PLACED UNDER ALL WASHERS.
- 6.11. LAG BOLTS SHALL CONFORM TO CSA STANDARD B34.

**SYMBOLS:**



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**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK 825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
**GEOFF COOPER**

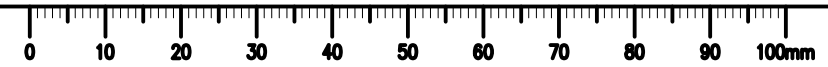
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Regional Manager, Environmental Services  
**COLLIN KINGMAN**

Drawing title/Titre du dessin  
**NOTES AND ABBREVIATIONS**

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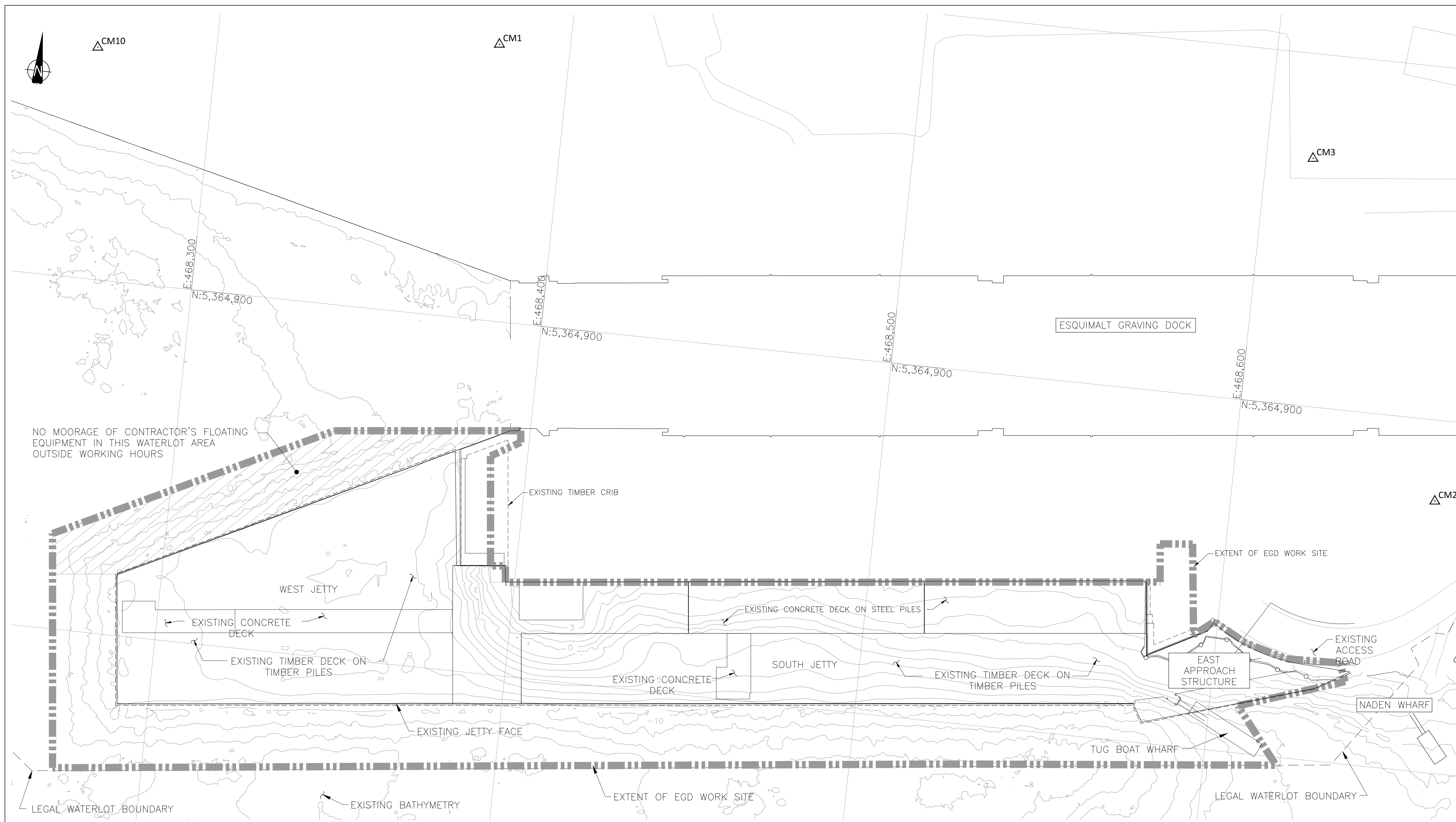
Project title/Titre du projet: ESQUIMALT GRAVING DOCK 825 ADMIRALS ROAD, VICTORIA, BC

**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION**

Consultant Signature Only  
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 Drawn by/Dessiné par: CHRIS HEWETT  
 PWGSC Project Manager/Administrateur de Projets TPSGC: ANDREW MYLLY  
 Regional Manager, Environmental Services: COLLIN KINGMAN

**EXISTING BATHYMETRY AND SURVEY INFORMATION**

Project No./No. du projet	Sheet/	Revision no./
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PLAN 1:600

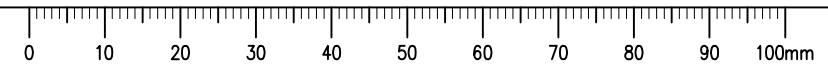
CONTROL MONUMENT ID	MONUMENT CONTROLLER	COORDINATES		
		NORTHING (Y)	EASTING (X)	ELEVATION IN METRES (Z)
CM 1	EGD	5364978.464	468379.840	17.846
CM 2	EGD	5364877.036	468657.811	7.562
CM 3	EGD	5364970.304	468613.214	7.787
CM 10	EGD	5364965.758	468266.364	2.256

NOTES:  
 UPLAND HORIZONTAL DATUM: UTM NAD83 (CSRS)  
 UPLAND VERTICAL DATUM: GEODETIC  
 EGD: ESQUIMALT GRAVING DOCK  
 MASCOT: MANAGEMENT OF SURVEY CONTROL OPERATIONS AND TASKS (MINISTRY OF AGRICULTURE AND LANDS)

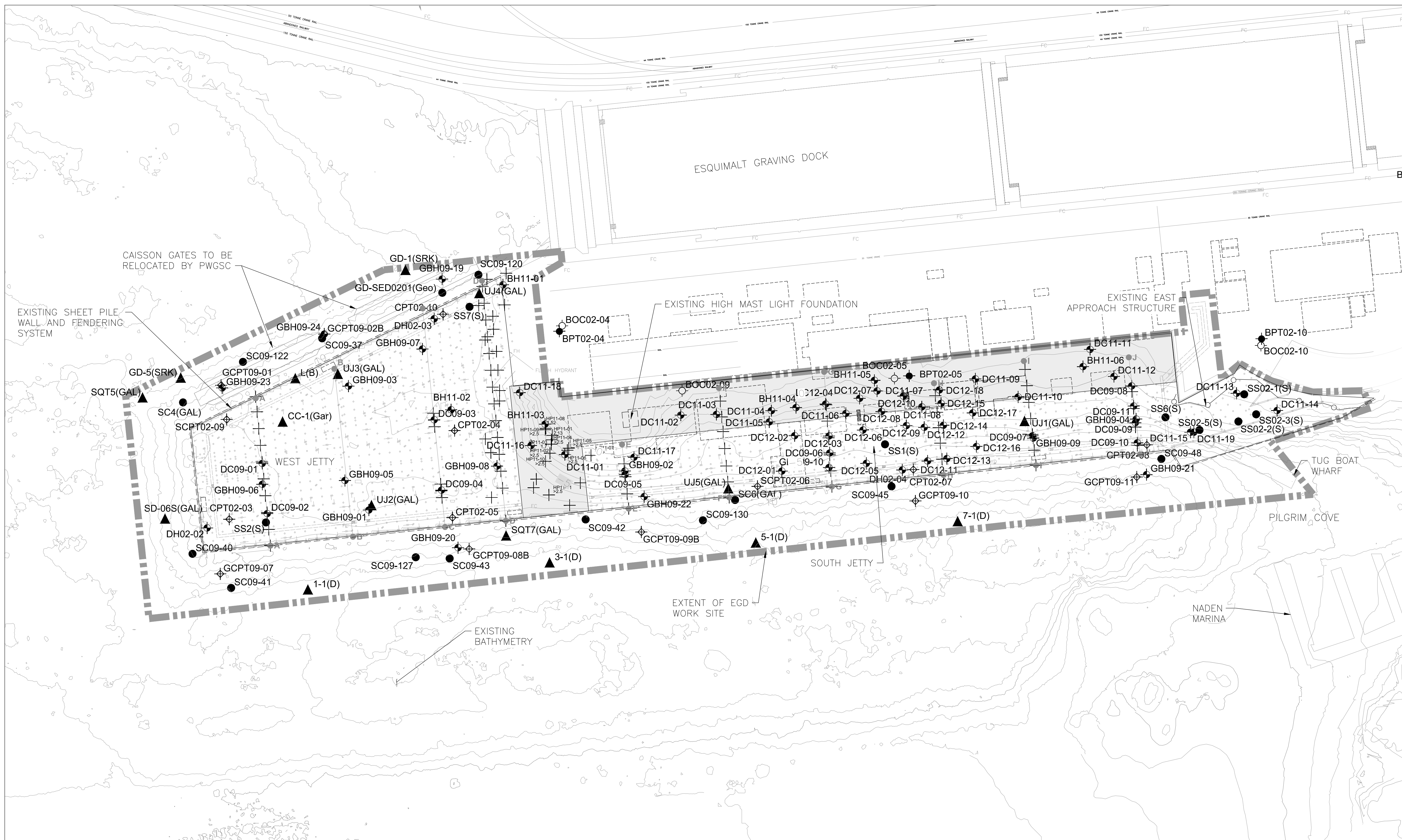
HORIZONTAL DATUM: UTM ZONE 10 GRID, NAD83.  
 VERTICAL DATUM: CHART DATUM (C.D.)

- NOTES:**
- BASE MAP FROM GOLDER, JANUARY 2012.
  - EGD WORK SITE ALSO INCLUDES UPLAND AREAS OF THE EGD FACILITY AS SHOWN ON THE DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS.
  - OPEN WATER AREAS OUTSIDE OF THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA WERE REMEDIATED AS PART OF THE PHASE 1B OPEN-WATER REMEDIATION PROJECT. SURVEY WAS CONDUCTED BY CRA CANADA SURVEYS INC. ON 2014/03/05.
  - CONTRACTOR TO COORDINATE WITH PWGSC REGARDING USE OF CONTROL MONUMENTS AS DESCRIBED ABOVE OR CAN-NET SURVEY DATUM CONTROL. SEE SECTION 02 21 13 SURVEY AND POSITIONING CONTROL.
  - CONTRACTOR TO VERIFY THE COORDINATES AND ELEVATION OF ALL CONTROL MONUMENTS USED PRIOR TO START OF WORK.
  - TUG BOAT WHARF LOCATION AND DIMENSIONS SURVEYED BY CRA CANADA SURVEYS INC. ON 2013/11/13. TUG BOAT WHARF TO BE RELOCATED ACCORDING TO THE SPECIFICATIONS.
  - THE GLOBAL TERM SOUTH JETTY, AS DEFINED IN THE SPECIFICATIONS, INCLUDES BOTH THE WEST JETTY AND SOUTH JETTY AREAS AS SHOWN ON THE DRAWINGS.

- LEGEND:**
- 14--- BATHYMETRY IN METRES
  - TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA
  - EXTENT OF EGD WORK SITE
  - △CM10 CONTROL MONUMENT LOCATION AND DESIGNATION
  - ORDINARY HIGH WATER LINE
  - JETTY SECTION DELINEATION







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 825 ADMIRALS ROAD, VICTORIA, BC

**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
**MATT WOLTMAN**

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**CHRIS HEWETT**

PWGSC Project Manager/Administrateur de Projets TPSCG  
**ANDREW MYLLY**

Regional Manager, Environmental Services  
**COLLIN KINGMAN**

Drawing title/Titre du dessin

**EXISTING CONDITIONS AND GEOTECHNICAL INFORMATION**

Project No./No. du projet	Sheet/	Revision no./
<b>R.018400.002</b>	<b>C4</b>	<b>0</b>

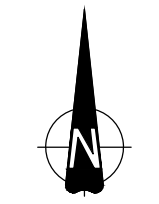
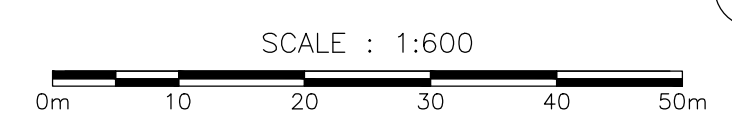
HORIZONTAL DATUM: UTM ZONE 10 GRID, NAD83.  
 VERTICAL DATUM: CHART DATUM (C.D.)

**NOTES:**

- UNDERPIER AREA LOWER INTERTIDAL AND SUBTIDAL BATHYMETRY WITHIN THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA IS FROM FEBRUARY 2009, JUNE 2010 AND JANUARY 2011 CRA CANADA SURVEYS LTD. MULTI BEAM SURVEY. UPPER INTERTIDAL ELEVATIONS FROM SEPTEMBER 2009 AND JULY 2011 SURVEY BY FOCUS CORPORATION. OPEN WATER AREAS OUTSIDE OF THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA WERE DREDGED AS PART OF THE PHASE 1B OPEN-WATER REMEDIATION PROJECT. OPEN WATER BATHYMETRY SURVEY WAS CONDUCTED BY CRA CANADA SURVEYS INC. ON 2014/03/05 FOLLOWING COMPLETION OF PHASE 1B WORK.
- BASE MAP FROM GOLDER, JANUARY 2012.
- REFERENCE DWG 01 FOR DATUM INFORMATION.
- STRUCTURE DETAILS FROM KLOHN CRIPPEN BERGER DECEMBER 2010 CONDITION INSPECTION REPORT FOR SOUTH JETTY PERIMETER.
- SHEETPILE EXTENDS AROUND THE PERIMETER OF THE SOUTH JETTY (SEE SHEET PILE CONTRACT DRAWINGS ATTACHMENT IN THE APPENDIX).
- CONTRACTOR TO CONFIRM LOCATIONS OF FIRE SPRINKLER OPENINGS AND CATWALK ACCESS HATCHES (SHOWN ON DWG S1) AND MAINTAIN ACCESS AT ALL TIMES.
- EGD WORK SITE ALSO INCLUDES UPLAND AREAS OF THE EGD FACILITY AS SHOWN ON THE DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS.
- SEDIMENT CORE DATA FROM THE DETAILED SITE INVESTIGATION (GOLDER, FEBRUARY 2012), DATA REPORT LOCATED IN THE APPENDICES TO THE SPECIFICATIONS. GEOTECHNICAL INFORMATION IS AVAILABLE IN THE APPENDICES TO THE SPECIFICATIONS.
- TUG BOAT WHARF LOCATION AND DIMENSIONS SURVEYED BY CRA CANADA SURVEYS INC. ON 2013/11/13. TUG BOAT WHARF TO BE RELOCATED ACCORDING TO THE SPECIFICATIONS.

**PLAN**

SCALE 1: 600

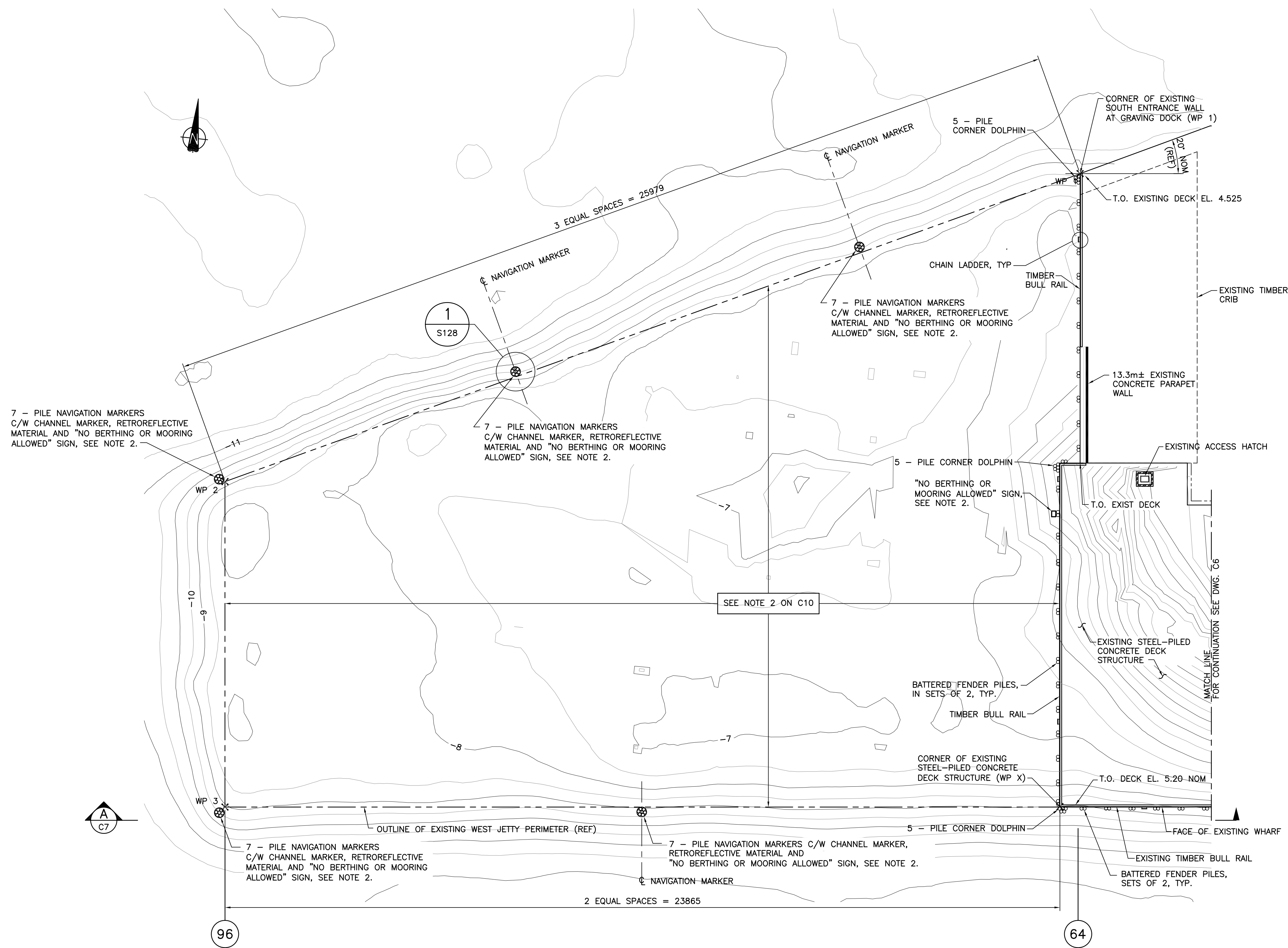


**LEGEND:**

- BATHYMETRY IN METRES
- - - - - TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA
- █ EXTENT OF EGD WORK SITE
- ▲-▲ DIVER TRANSECTS
- + GOLDER 2009/2010 PUSH PROBE
- 2009/2010/2011/2012 GOLDER AND HISTORICAL SEDIMENT CORE LOCATIONS AND DESIGNATIONS
- ▲ HISTORICAL SEDIMENT GRAB SAMPLE LOCATIONS
- ▨ TIMBER PILED JETTY
- ▭ CONCRETE DECK WITH STEEL PILING
- ORDINARY HIGH WATER LINE
- EXISTING STRUCTURE

- EXPLORATION LOCATIONS**
- ▲ DIVER CORE (GOLDER)
  - BOREHOLE (GOLDER)
  - SEDIMENT CORE (GOLDER)
  - SONIC BOREHOLE (GOLDER)
  - + JET PROBE (GOLDER)
  - HISTORICAL SEDIMENT CORE
  - HISTORICAL SEDIMENT GRAB SAMPLE
  - ▲ ADDITIONAL SAMPLING (KLOHN CRIPPEN BERGER)





Revision/Redaction	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
GEOFF COOPER

Drawn by/Dessiné par  
ARNIE RIST

PWGSC Project Manager/Administrateur de Projets TPSGC  
ANDREW MYLLY

Regional Manager, Environmental Services  
COLLIN KINGMAN

Drawing title/Titre du dessin  
**WEST JETTY  
GENERAL ARRANGEMENT  
PLAN**

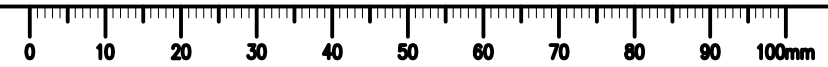
Project No./No. du projet <b>R.018400.002</b>	Sheet/ <b>C5</b>	Revision no./ <b>0</b>
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WORK POINTS		
WP 1	N 5364863.011	E 468380.921
WP 2	N 5364817.446	E 468287.389
WP 3	N 5364780.766	E 468291.229
WP X	N 5364792.470	E 468405.450

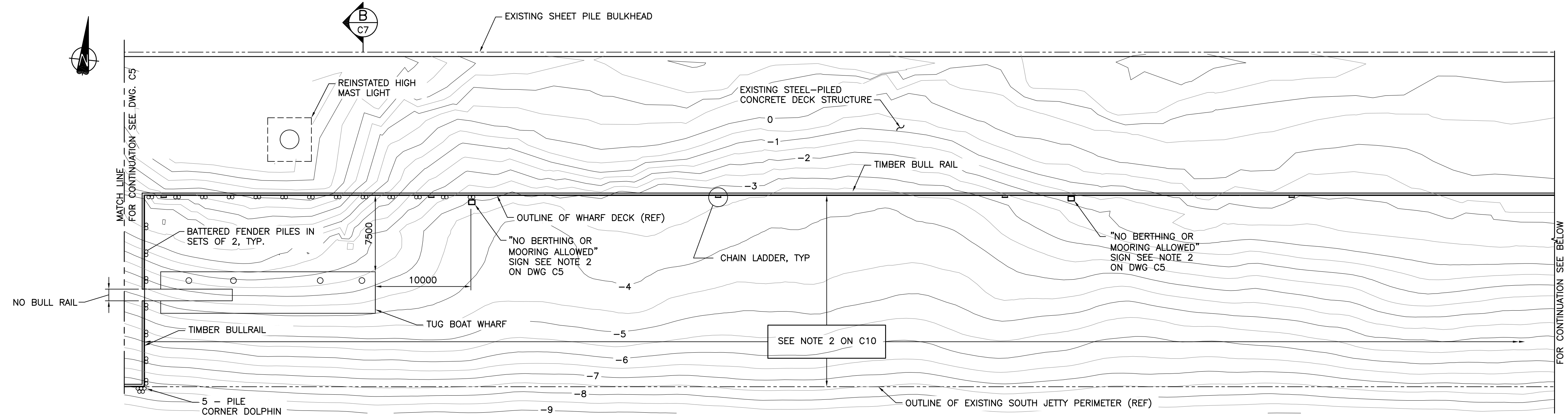
**NOTES:**

- FOR EXISTING CONDITIONS SEE DRAWINGS D1 AND D2.
- WARNING SIGN SHALL BE SECURED TO FENDER PILES, NAVIGATION MARKER PILES OR FACE OF WHARF FACE APPROXIMATELY 1.0m ABOVE HIGH TIDE ELEVATION. SIGN SHALL BE MIN. 900mm WIDE x 600mm HIGH DURABLE MATERIAL AND SHALL STATE THE FOLLOWING IN BLACK FONT ON WHITE BACKGROUND: "NO BERTHING OR MOORING ALLOWED" "L'USAGE DE CE POSTE D'AMARRAGE EST INTERDIT". FONT TYPE AND SIZE SHALL BE AS APPROVED BY DEPARTMENTAL REPRESENTATIVE.

**PLAN - WEST JETTY**  
1:250



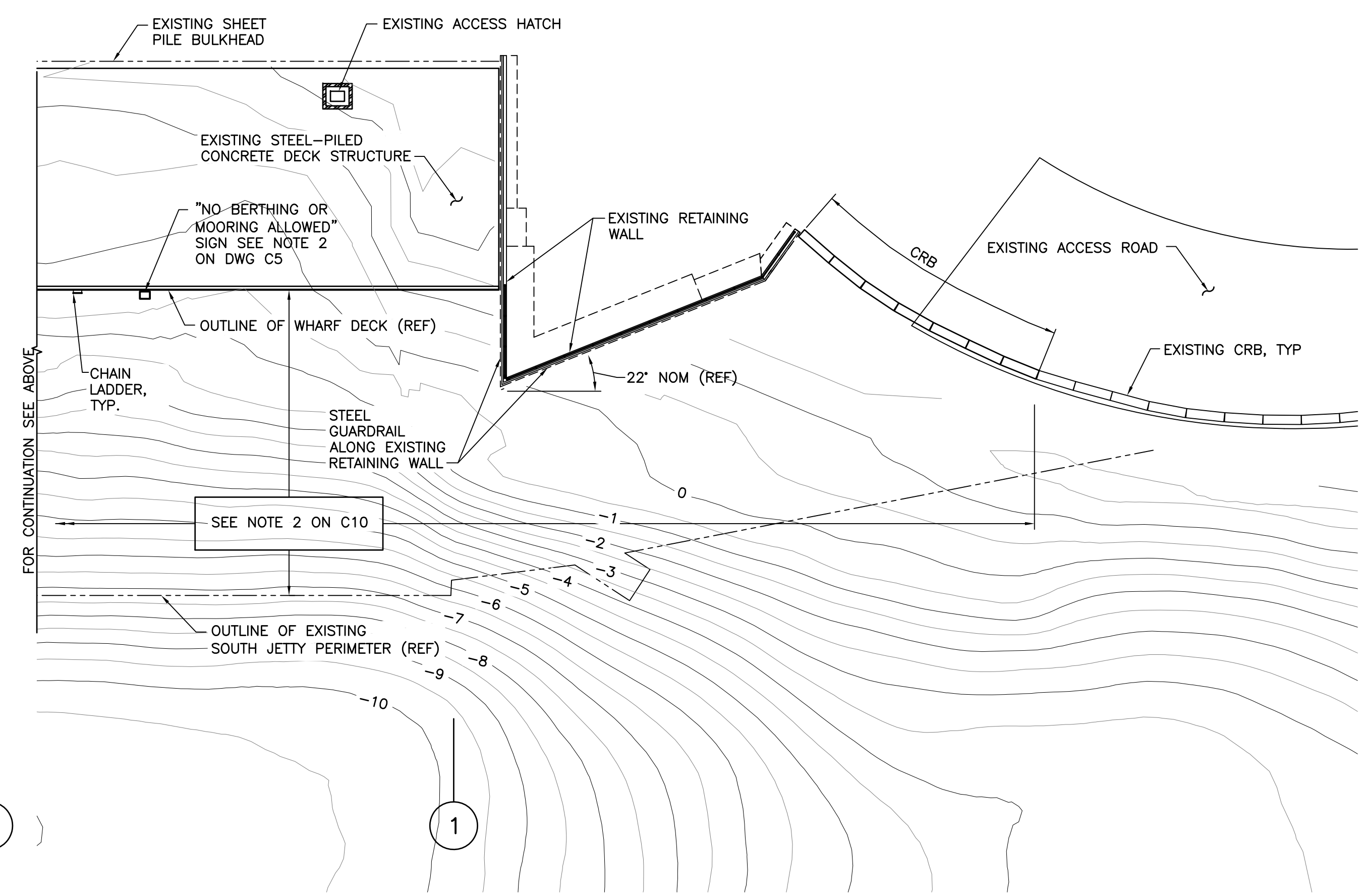




PARTIAL PLAN - SOUTH JETTY  
1:250

58

12



PARTIAL PLAN - SOUTH JETTY  
1:250

11

1

NOTES:

- FOR EXISTING CONDITIONS SEE DRAWINGS D1 AND D2.

0	ISSUED FOR TENDER	2014/12/19
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Revision/Redaction	Description/Description	Date/Date
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Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
GEOFF COOPER

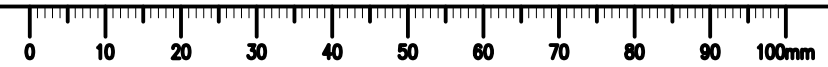
Drawn by/Dessiné par  
ARNIE RIST

PWSC Project Manager/Administrateur de Projets TPSCG  
ANDREW MYLLY

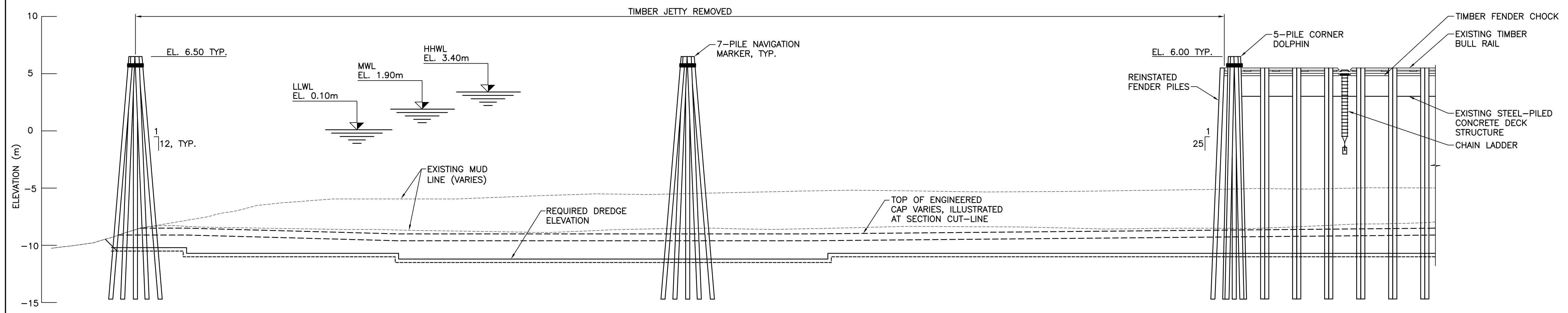
Regional Manager, Environmental Services  
COLLIN KINGMAN

Drawing title/Titre du dessin  
**SOUTH JETTY  
GENERAL ARRANGEMENT  
PLAN**

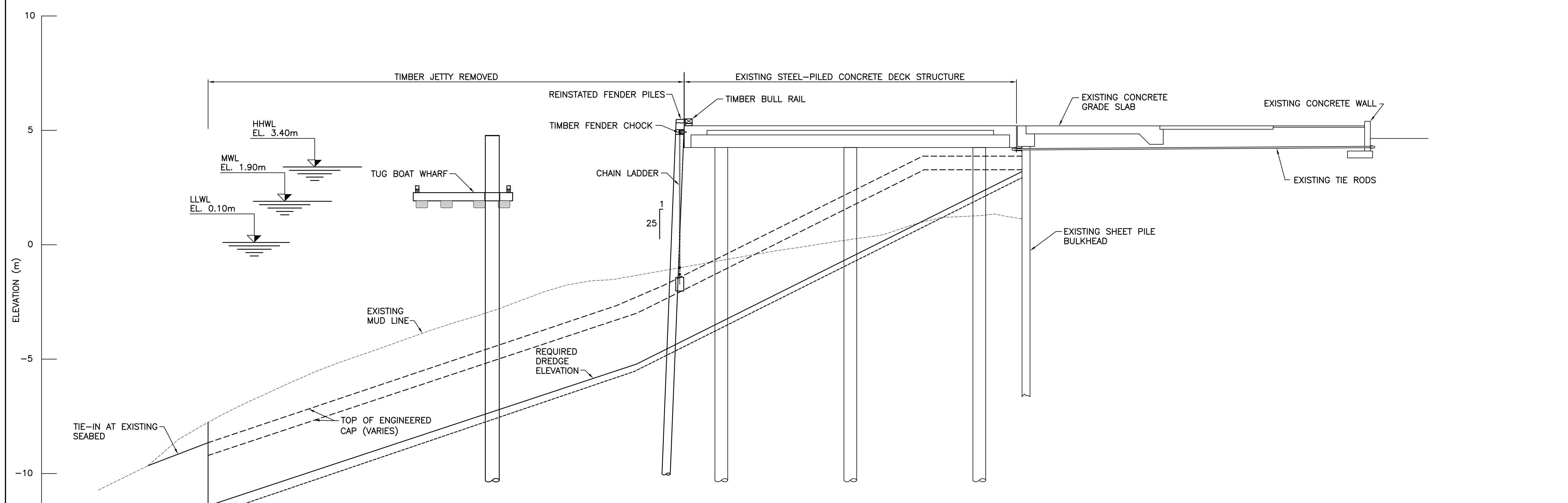
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SECTION A  
SCALE 1: 200  
C5



SECTION B  
SCALE 1: 100  
C6

Revision/Redaction	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

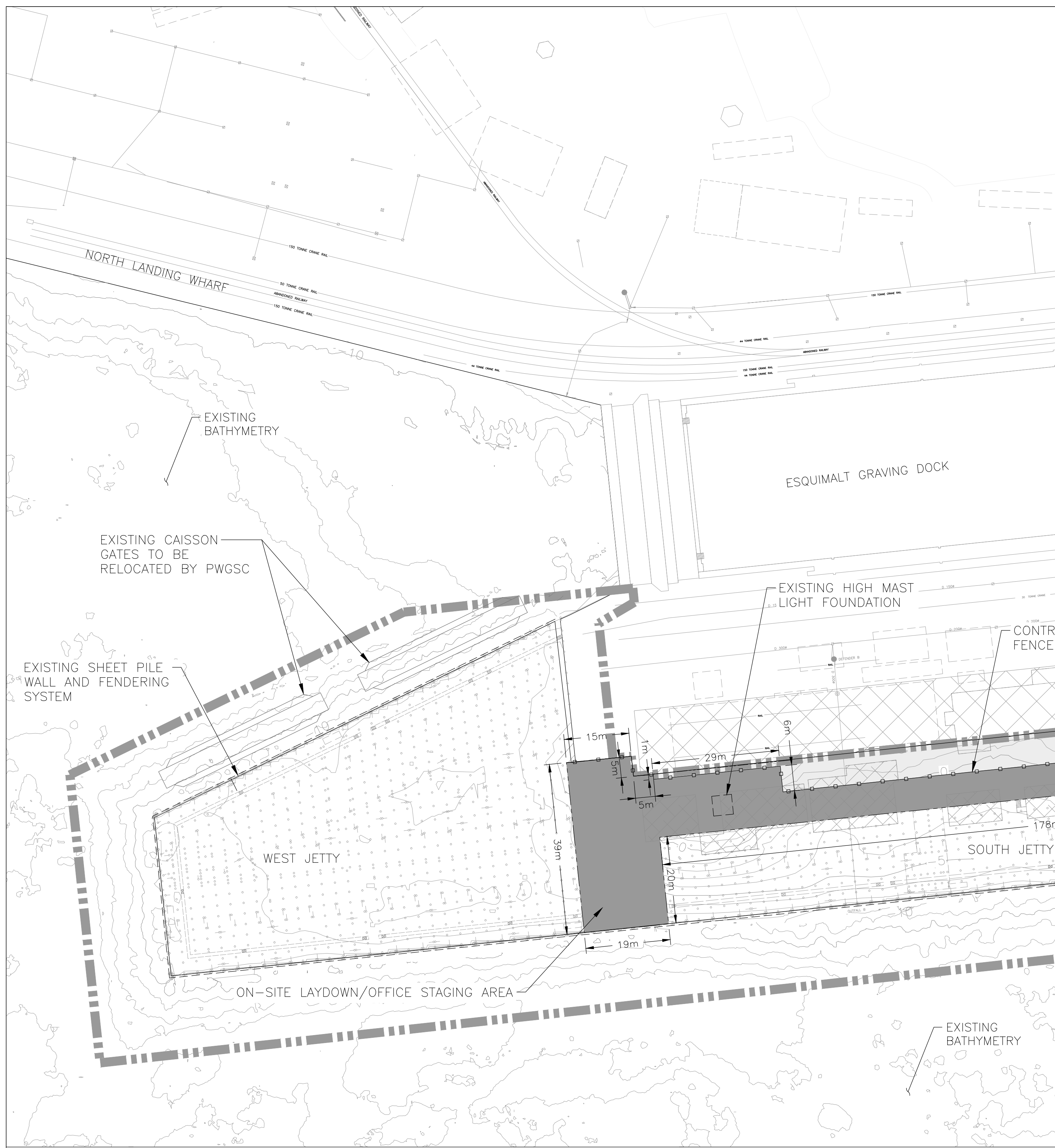
**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

Consultant Signature Only  
Designed by/Concept par GEOFF COOPER  
Drawn by/Dessiné par ARNIE RIST  
PWSC Project Manager/Administrateur de Projets TPSC ANDREW MYLLY  
Regional Manager, Environmental Services COLLIN KINGMAN

Drawing title/Titre du dessin  
**WEST AND SOUTH JETTY  
GENERAL ARRANGEMENT  
SECTIONS**

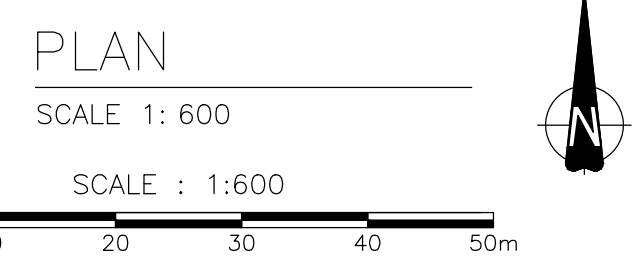
Project No./No. du projet <b>R.018400.002</b>	Sheet/ <b>C7</b>	Revision no./ <b>0</b>
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HORIZONTAL DATUM: UTM ZONE 10 GRID, NAD83.  
VERTICAL DATUM: CHART DATUM (C.D.)

- NOTES:**
- UNDERPIER AREA LOWER INTERTIDAL AND SUBTIDAL BATHYMETRY WITHIN THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA IS FROM FEBRUARY 2009, JUNE 2010 AND JANUARY 2011 CRA CANADA SURVEYS LTD. MULTI BEAM SURVEY. UPPER INTERTIDAL ELEVATIONS FROM SEPTEMBER 2009 AND JULY 2011 SURVEY BY FOCUS CORPORATION. OPEN WATER AREAS OUTSIDE OF THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA WERE DREDGED AS PART OF THE PHASE 1B OPEN-WATER REMEDIATION PROJECT. OPEN WATER BATHYMETRY SURVEY WAS CONDUCTED BY CRA CANADA SURVEYS INC. ON 2014/03/05 FOLLOWING COMPLETION OF PHASE 1B WORK.
  - BASE MAP FROM GOLDER, JANUARY 2012.
  - REFERENCE DWG C1 FOR DATUM INFORMATION.
  - STRUCTURE DETAILS FROM KLOHN CRIPPEN BERGER DECEMBER 2010 CONDITION INSPECTION REPORT FOR SOUTH JETTY PERIMETER.
  - SHEET PILE EXTENDS AROUND THE PERIMETER OF SOUTH JETTY. SEE SHEET PILE CONTRACT DRAWINGS ATTACHMENT IN THE APPENDICES.
  - CONTRACTOR TO CONFIRM LOCATIONS OF FIRE SPRINKLER OPENINGS AND CATWALK ACCESS HATCHES AND MAINTAIN ACCESS AT ALL TIMES.
  - EGD WORK SITE ALSO INCLUDES UPLAND AREAS OF THE EGD FACILITY AS SHOWN ON THE DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS.
  - TUG BOAT WHARF LOCATION AND DIMENSIONS SURVEYED BY CRA CANADA SURVEYS ON 2013/11/13. TUG BOAT WHARF TO BE RELOCATED ACCORDING TO THE SPECIFICATIONS.
  - ACCESS FROM WATER AS APPROVED BY QUEEN'S HARBOUR MASTER.
  - CONTRACTOR SHALL PROVIDE A 12.2-METRE BY 6.1-METRE (APPROXIMATELY 74m<sup>2</sup>) AREA WITHIN THE CONTRACTOR STAGING AREA FOR THE DEPARTMENTAL REPRESENTATIVE'S CONSULTANT TEAM TRAILER AT THE REQUEST OF THE DEPARTMENTAL REPRESENTATIVE.
  - CONTRACTOR SHALL NOT OBSTRUCT BUILDING ACCESS ADJACENT TO THE CONTRACTOR ON-SITE STAGING AREA.



- LEGEND:**
- 14.0— BATHYMETRY IN METRES
  - TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA
  - EXTENT OF EGD WORK SITE
  - ➔ PRIMARY CONTRACTOR ACCESS ROUTE
  - ON-SITE STAGING AREA (WITH CONCRETE DECK WITH STEEL PILING TO REMAIN, SEE NOTE 10)
  - STEEL-PILED CONCRETE
  - ▨ TIMBER PILING PRE-SOUTH JETTY DEMOLITION
  - ▨ EXISTING STRUCTURE (PARTIALLY LOCATED WITHIN STAGING AREA FOOTPRINT)
  - ▨ TEMPORARY LOAD LIMIT AREA
  - ORDINARY HIGH WATER LINE
  - CONTRACTOR FENCE LINE



Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
**MATT WOLTMAN**

Drawn by/Dessiné par  
**CHRIS HEWETT**

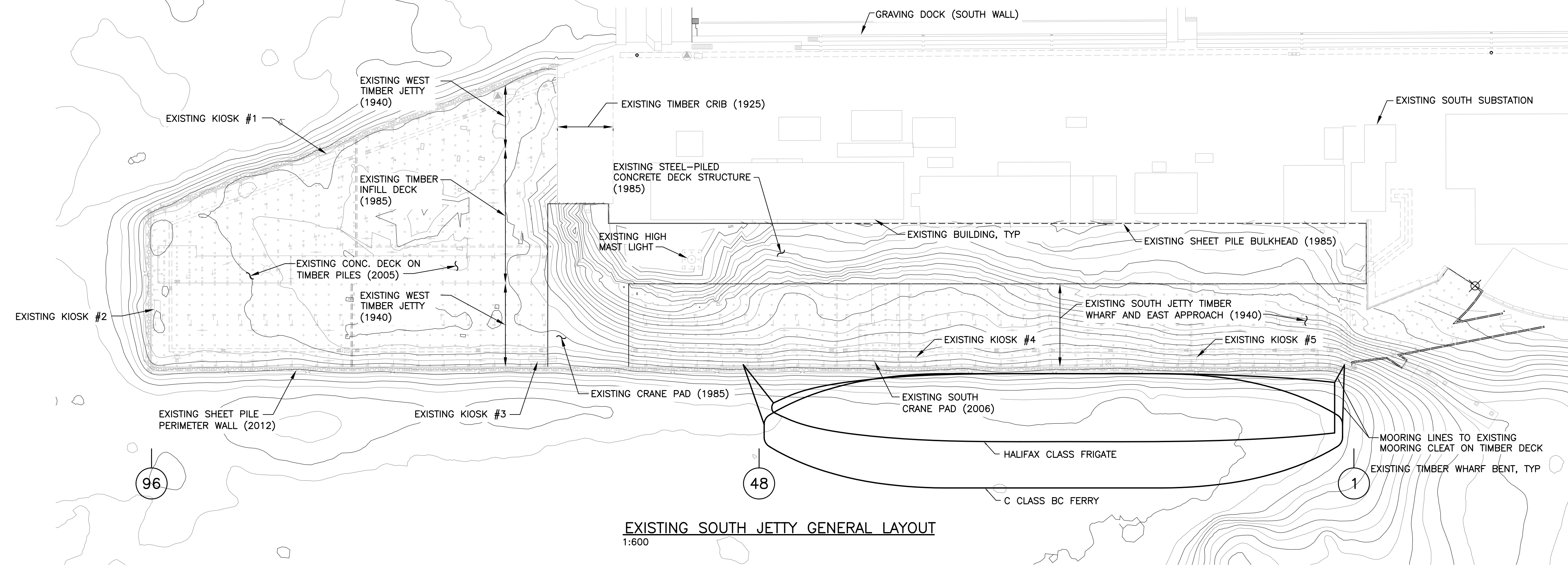
PWGSC Project Manager/Administrateur de Projets TPSCG  
**ANDREW MYLLY**

Regional Manager, Environmental Services  
**COLLIN KINGMAN**

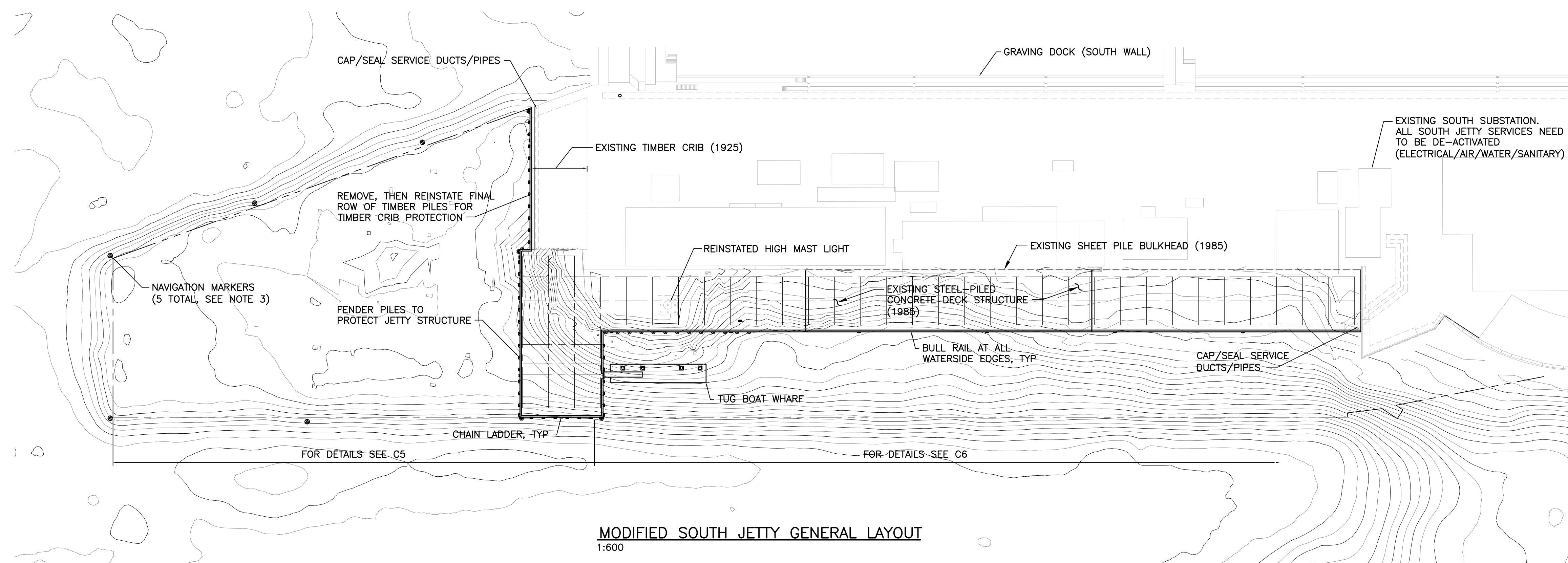
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**CONTRACTOR'S WORK AREA  
AND SITE ACCESS**

Project No./No. du projet	Sheet/	Revision no./
<b>R.018400.002</b>	<b>C8</b>	<b>0</b>





**EXISTING SOUTH JETTY GENERAL LAYOUT**  
1:600



**MODIFIED SOUTH JETTY GENERAL LAYOUT**  
1:600

**NOTES:**

1. VERTICAL DATUM: CHART DATUM.
2. THE BATHYMETRY SHOWN IS BASED ON EXISTING CONDITIONS. THE MODIFIED BATHYMETRY WITHIN THE EXISTING SOUTH JETTY FOOTPRINT FOLLOWING DREDGING AND CAPPING WILL GENERALLY BE AT OR BELOW THE BATHYMETRY ELEVATIONS SHOWN.
3. NAVIGATION MARKERS ARE INTENDED TO INDICATE THE NAVIGATION CHANNEL AND ARE NOT DESIGNED TO BE BERTHING OR TURNING DOLPHINS.



Revision/Redaction	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
GEOFF COOPER  
Drawn by/Dessiné par  
ARNIE RIST  
PWSC Project Manager/Administrateur de Projets TPSGC  
ANDREW MYLLY  
Regional Manager, Environmental Services  
COLLIN KINGMAN

Drawing title/Titre du dessin  
**SOUTH JETTY EXISTING AND MODIFIED PLANS**

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	C10	0

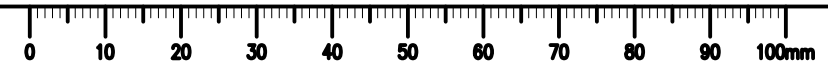














PHOTO C16-01 SOUTH JETTY CATWALK LADDER ACCESS AND CABLING LAYOUT



PHOTO C16-02 SOUTH JETTY CATWALK WITH MECHANICAL AND ELECTRICAL SERVICES

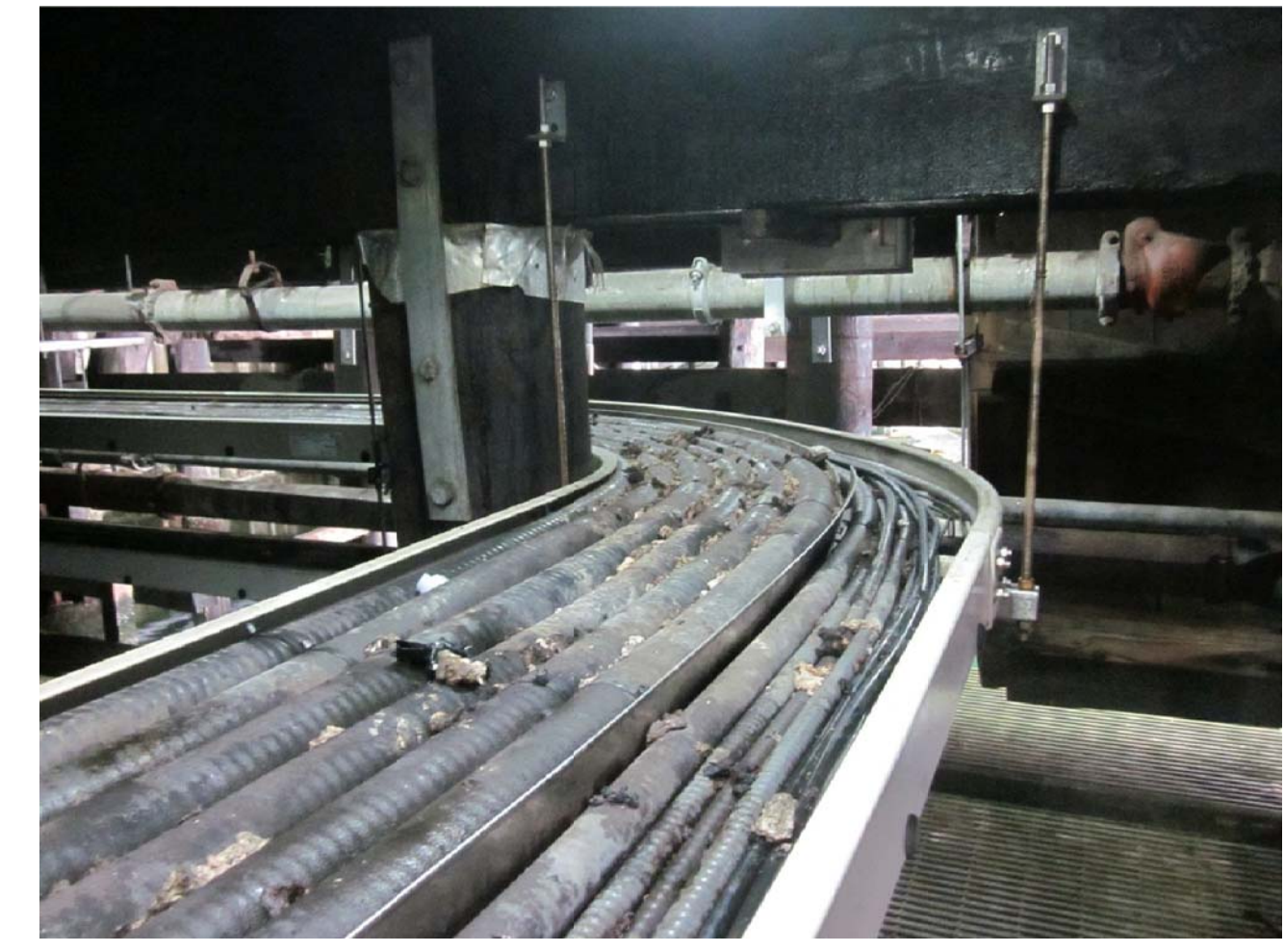


PHOTO C16-03 UNDER-PIER CATWALK - TYPICAL CABLE TRAY



PHOTO C16-06 CONCRETE-FACED TIMBER CRIB NEXT TO TIMBER JETTY PILINGS



PHOTO C16-04 UNDER-PIER MECHANICAL AND ELECTRICAL SERVICES AT TIMBER FIRE STOP WALL



PHOTO C16-05 UNDER-PIER CATWALK AT KIOSK LOCATION - LOOKING WEST



PHOTO C16-07 UNDER-PIER CATWALK AT KIOSK LOCATION - LOOKING EAST

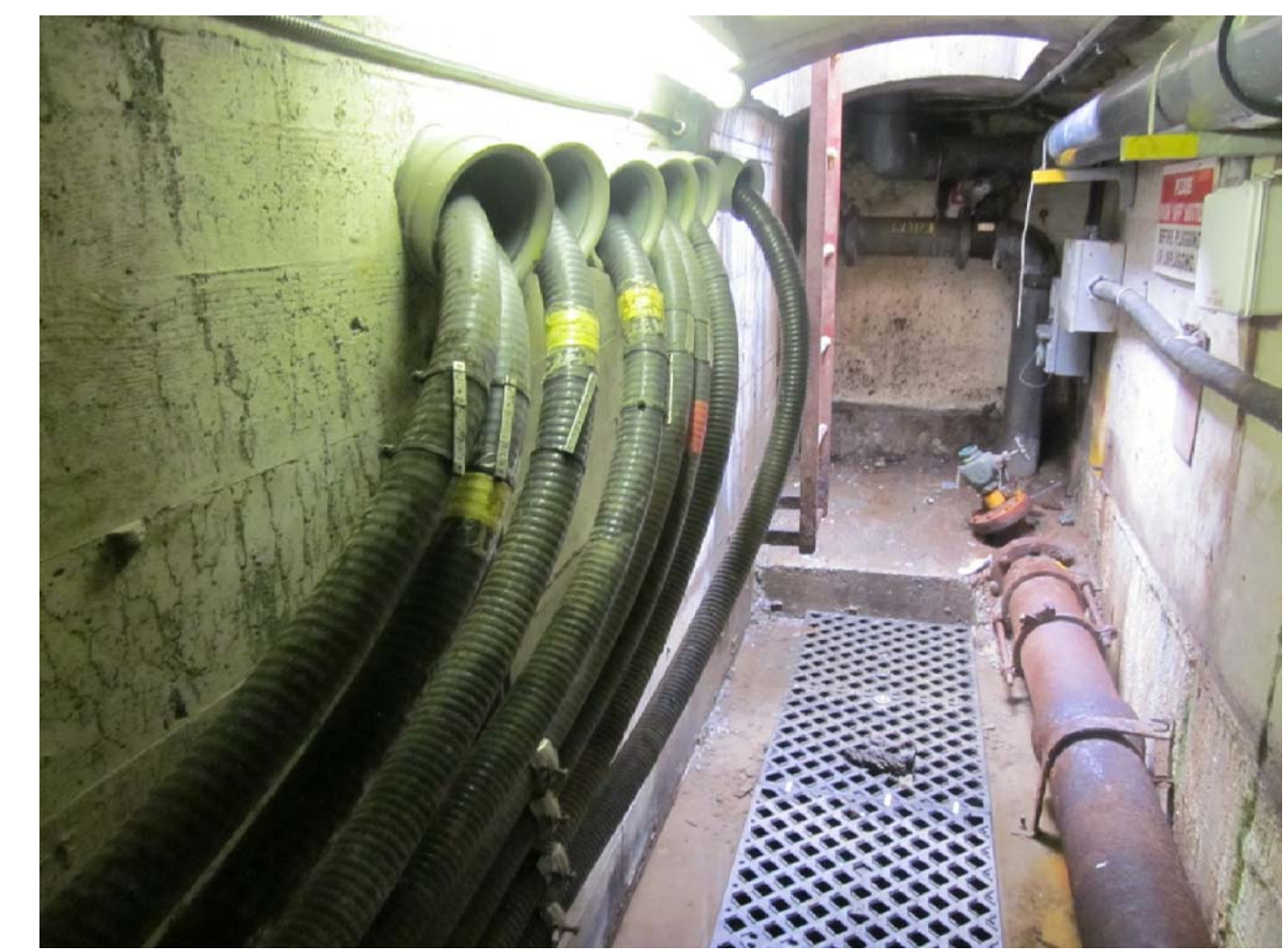


PHOTO C16-08 ELECTRICAL CABLING IN DOCK SERVICE TUNNEL (AT TUNNEL END, JUST EAST OF TIMBER CRIB)

0	ISSUED FOR TENDER	2014/12/19
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Revision/Revisions	Description/Description	Date/Date
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Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER**

Consultant Signature Only

Designed by/Concept par  
GEOFF COOPER

Drawn by/Dessiné par  
MIKE BRIDDEN

PWGC Project Manager/Administrateur de Projets TPSC  
ANDREW MYLLY

Regional Manager, Environmental Services  
COLLIN KINGMAN

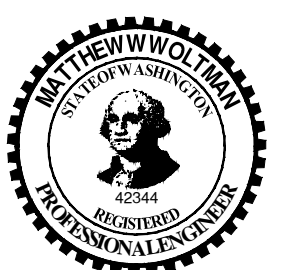
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**PHOTOGRAPHS OF  
EXISTING CONDITIONS  
SHEET 3**

Project No./No. du projet R.018400.002	Sheet/ <b>C16</b>	Revision no./ <b>0</b>
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0	ISSUED FOR TENDER	2014/12/19
Revision/	Description/Description	Date/Date
Client/client		

**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK**  
**825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2**  
**SOUTH JETTY UNDER-PIER**  
**SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
**MATT WOLTMAN**

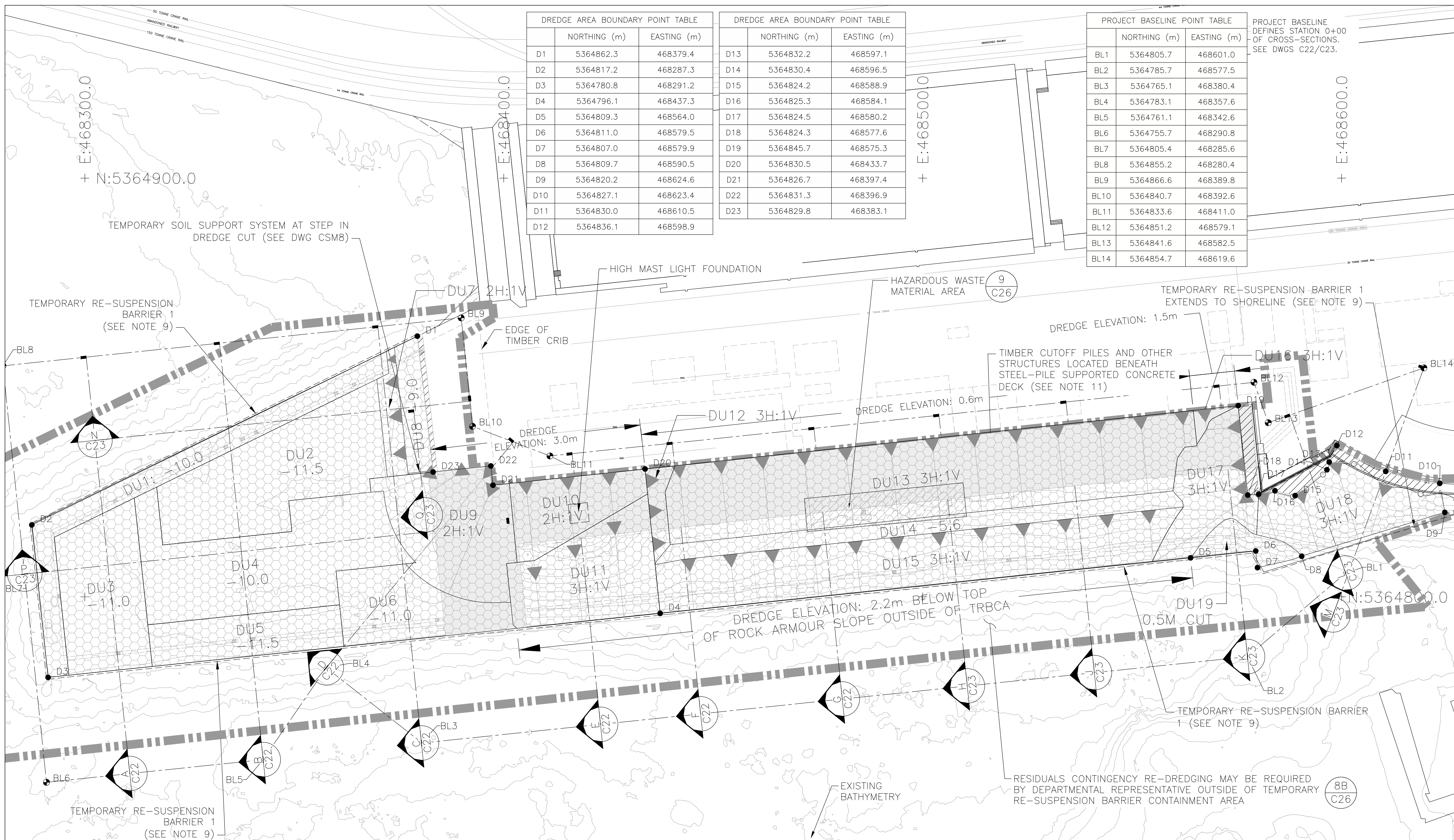
Drawn by/Dessiné par  
**CHRIS HEWETT**

PWSC Project Manager/Administrateur de Projets TPSCG  
**ANDREW MYLLY**

Regional Manager, Environmental Services  
**COLLIN KINGMAN**

Drawing title/Titre du dessin  
**REQUIRED DREDGE PLAN**

Project No./No. du projet <b>R.018400.002</b>	Sheet/ <b>C21</b>	Revision no./ <b>0</b>
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DREDGE AREA BOUNDARY POINT TABLE		
	NORTHING (m)	EASTING (m)
D1	5364862.3	468379.4
D2	5364817.2	468287.3
D3	5364780.8	468291.2
D4	5364796.1	468437.3
D5	5364809.3	468564.0
D6	5364811.0	468579.5
D7	5364807.0	468579.9
D8	5364809.7	468590.5
D9	5364820.2	468624.6
D10	5364827.1	468623.4
D11	5364830.0	468610.5
D12	5364836.1	468598.9

DREDGE AREA BOUNDARY POINT TABLE		
	NORTHING (m)	EASTING (m)
D13	5364832.2	468597.1
D14	5364830.4	468596.5
D15	5364824.2	468588.9
D16	5364825.3	468584.1
D17	5364824.5	468580.2
D18	5364824.3	468577.6
D19	5364845.7	468575.3
D20	5364830.5	468433.7
D21	5364826.7	468397.4
D22	5364831.3	468396.9
D23	5364829.8	468383.1

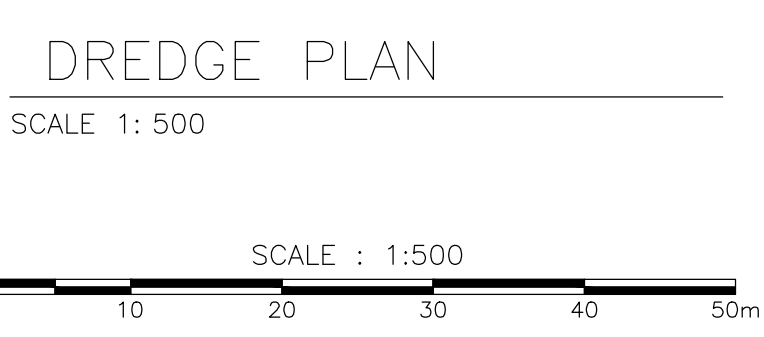
PROJECT BASELINE POINT TABLE		
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BL1	5364805.7	468601.0
BL2	5364785.7	468577.5
BL3	5364765.1	468380.4
BL4	5364783.1	468357.6
BL5	5364761.1	468342.6
BL6	5364755.7	468290.8
BL7	5364805.4	468285.6
BL8	5364855.2	468280.4
BL9	5364866.6	468389.8
BL10	5364840.7	468392.6
BL11	5364833.6	468411.0
BL12	5364851.2	468579.1
BL13	5364841.6	468582.5
BL14	5364854.7	468619.6

PROJECT BASELINE DEFINES STATION 0+00 OF CROSS-SECTIONS. SEE DWGS C22/C23.

HORIZONTAL DATUM: UTM ZONE 10 GRID, NAD83.  
 VERTICAL DATUM: CHART DATUM (C.D.)

**NOTES:**

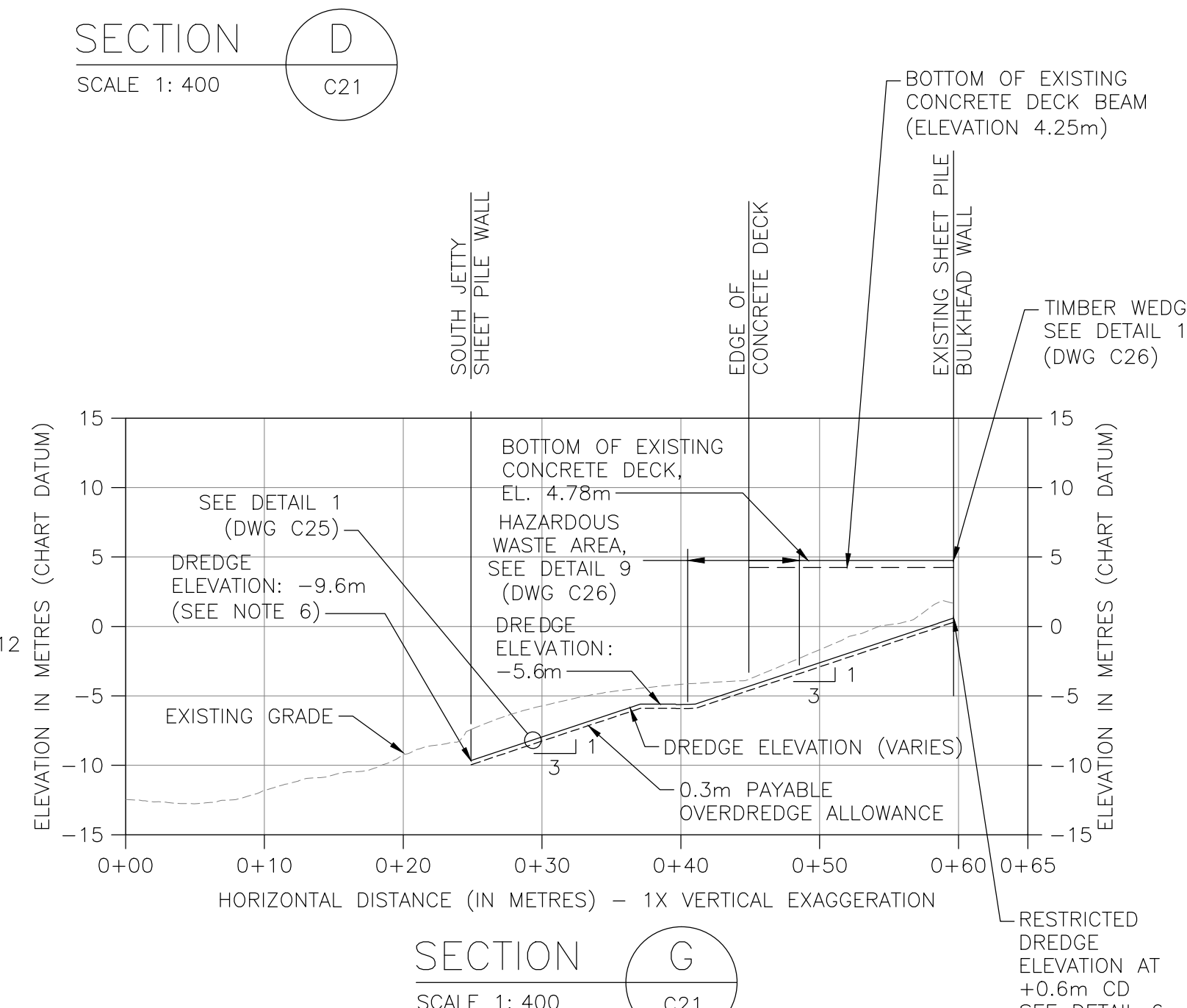
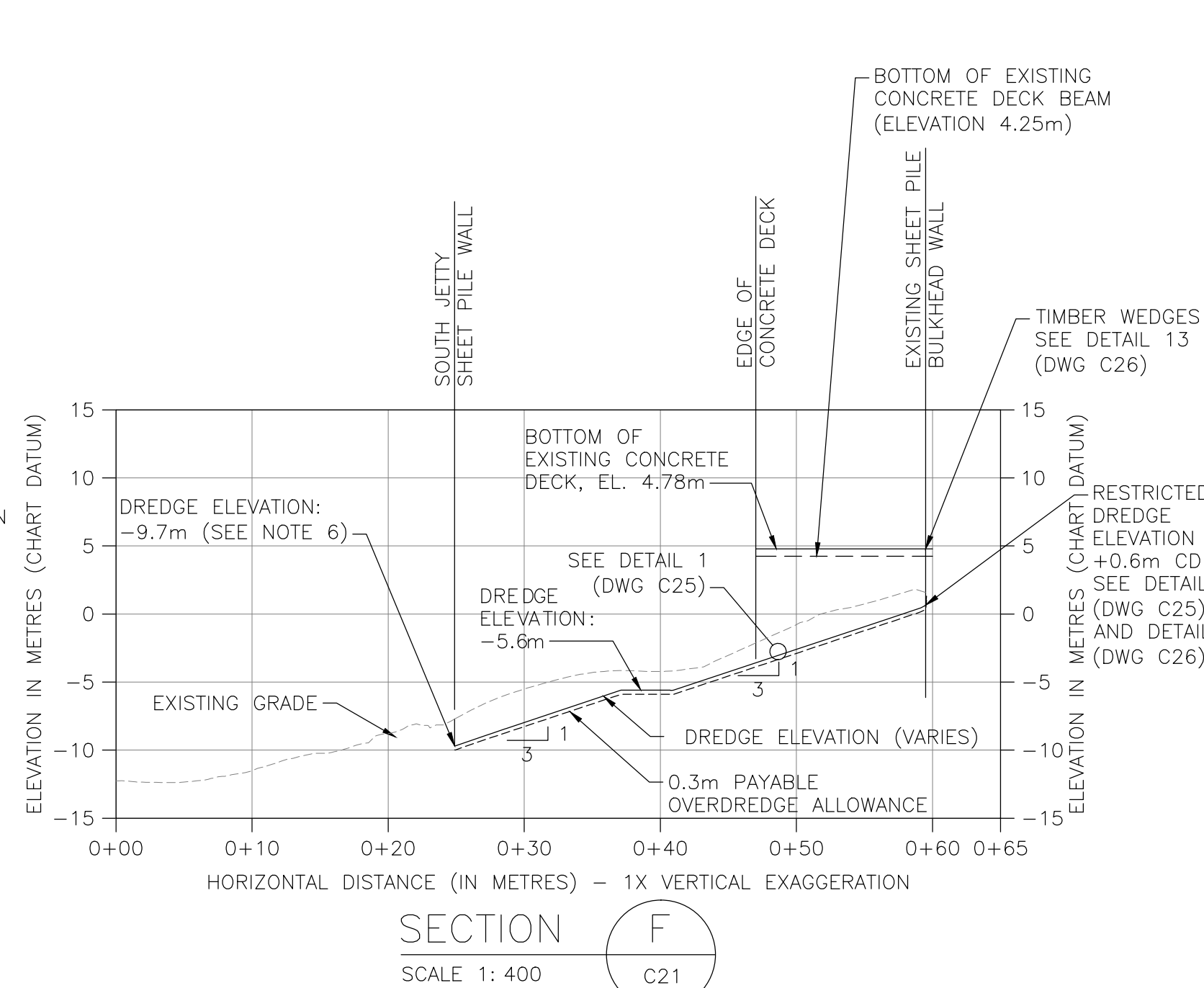
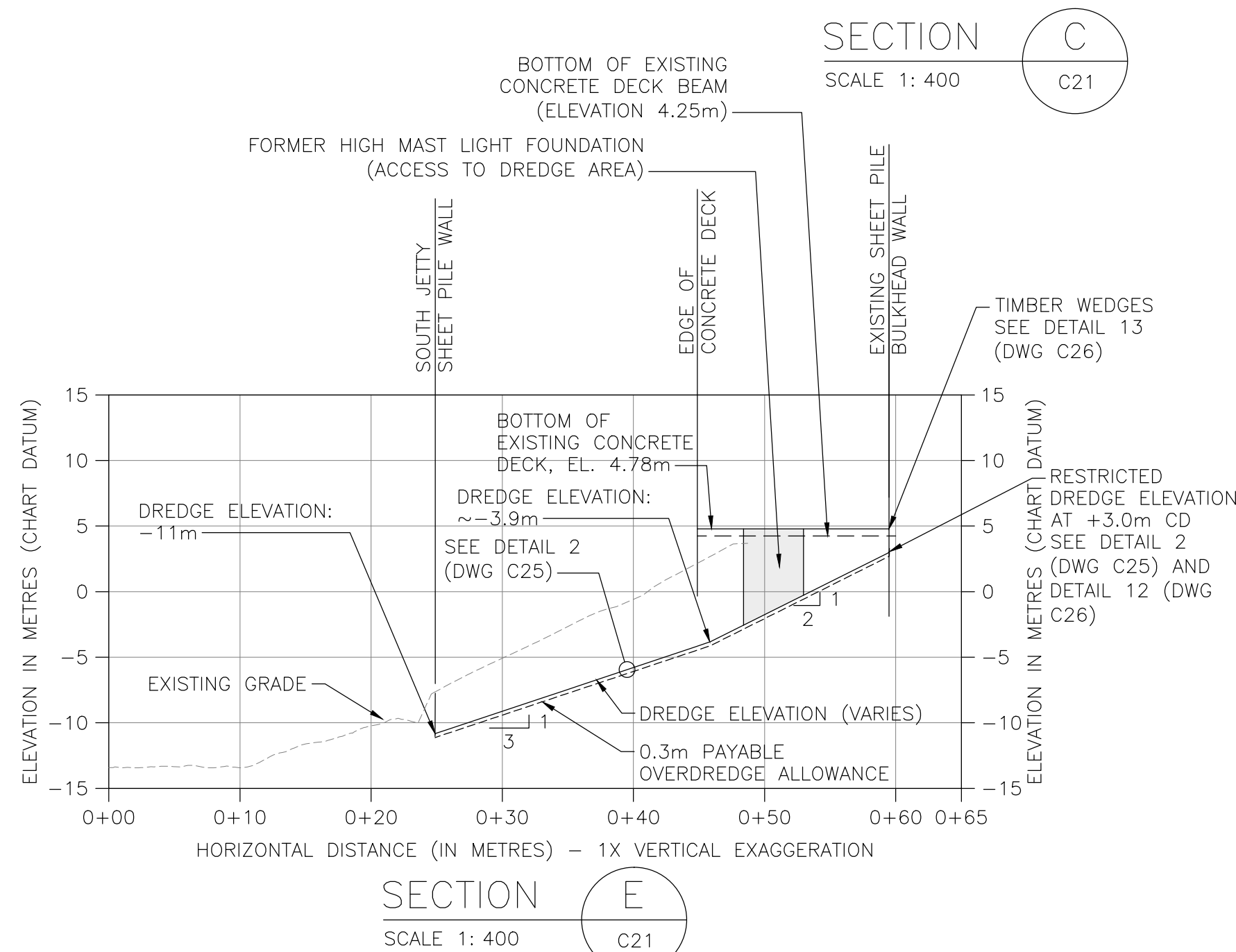
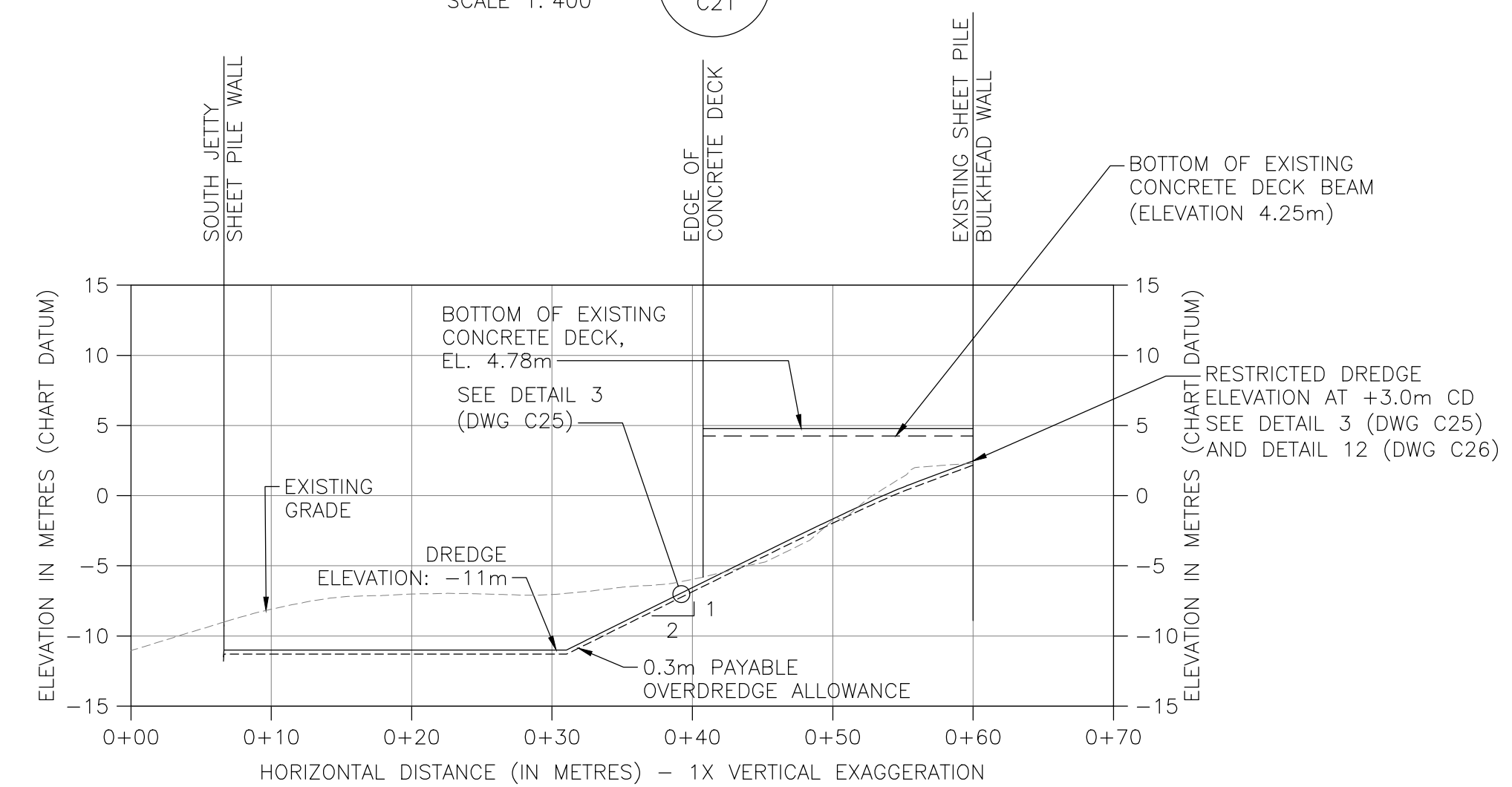
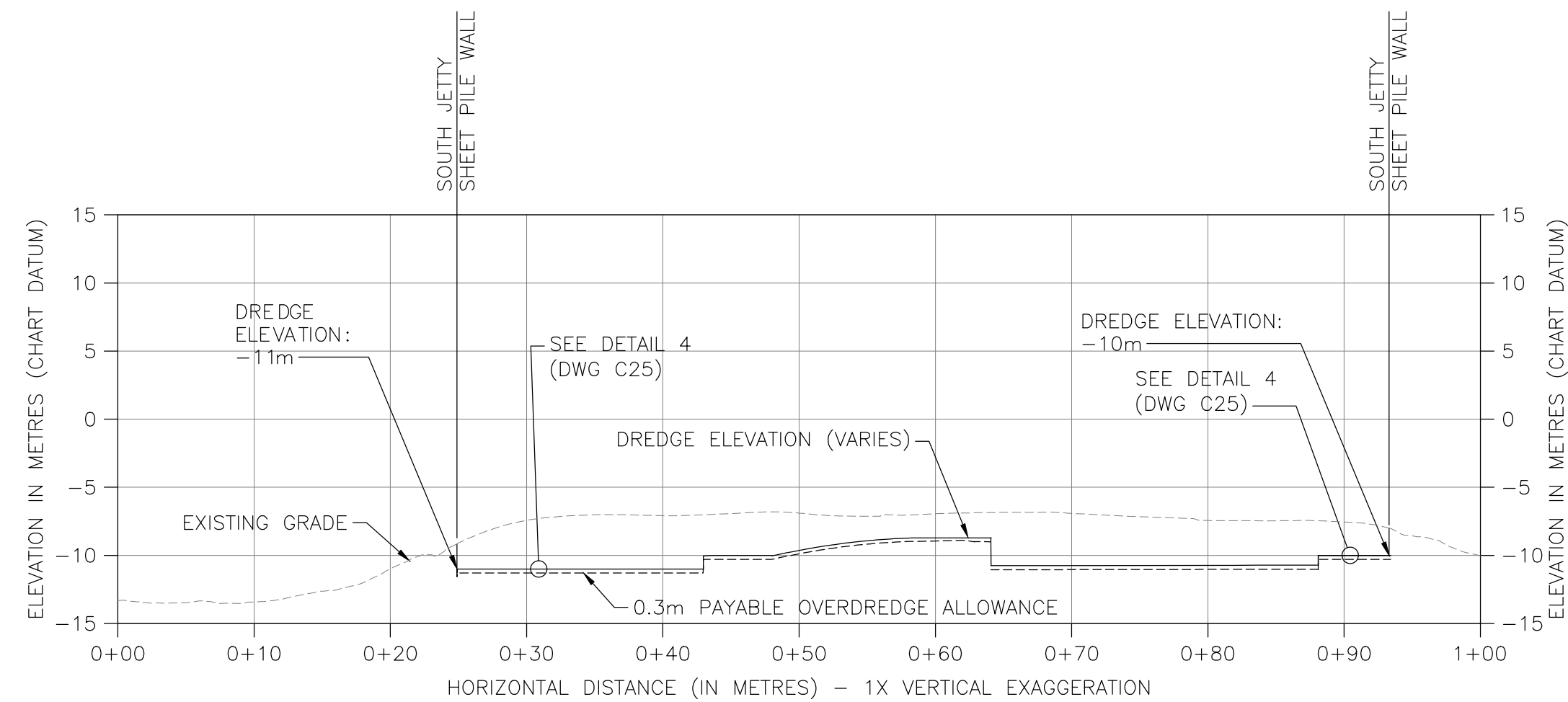
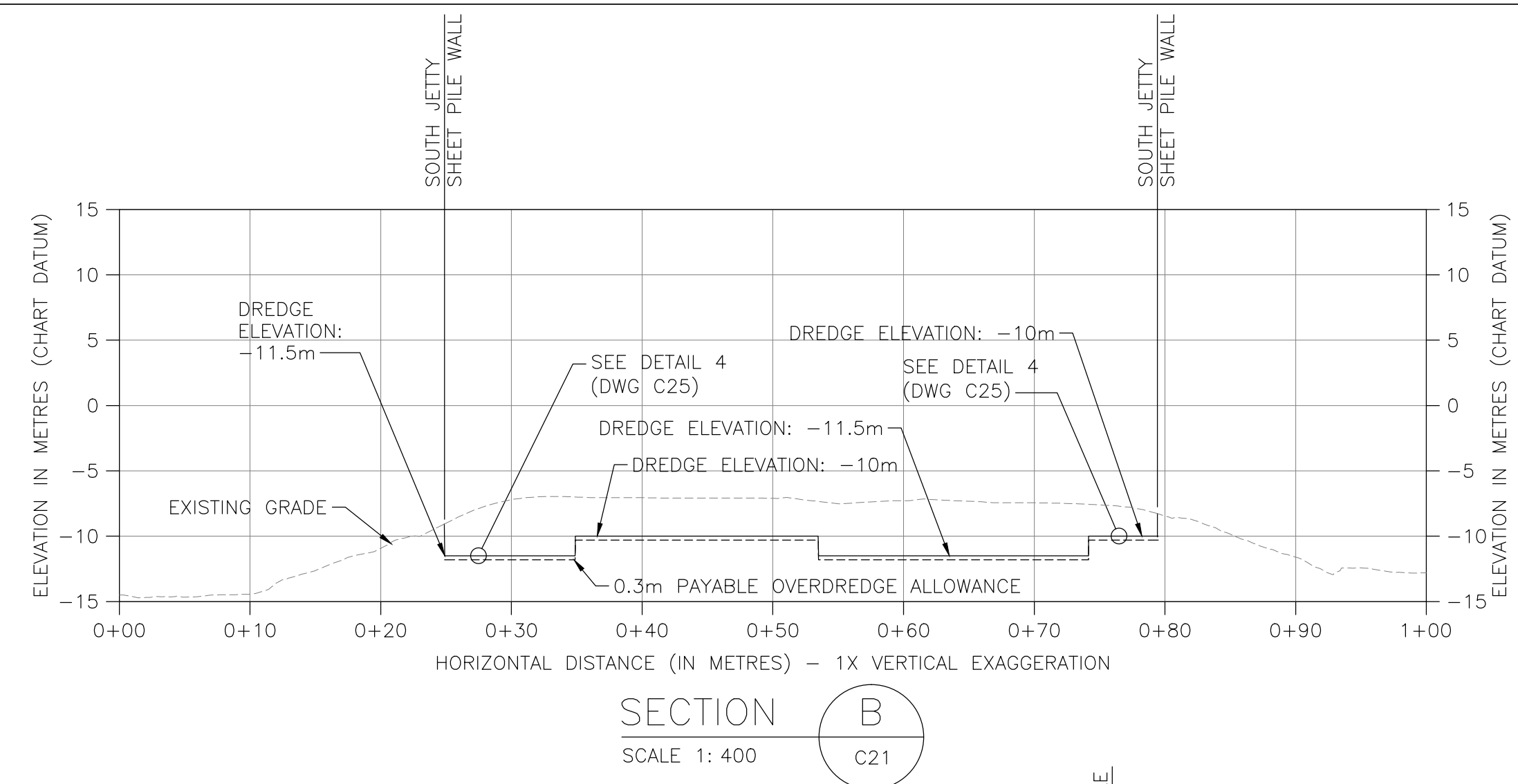
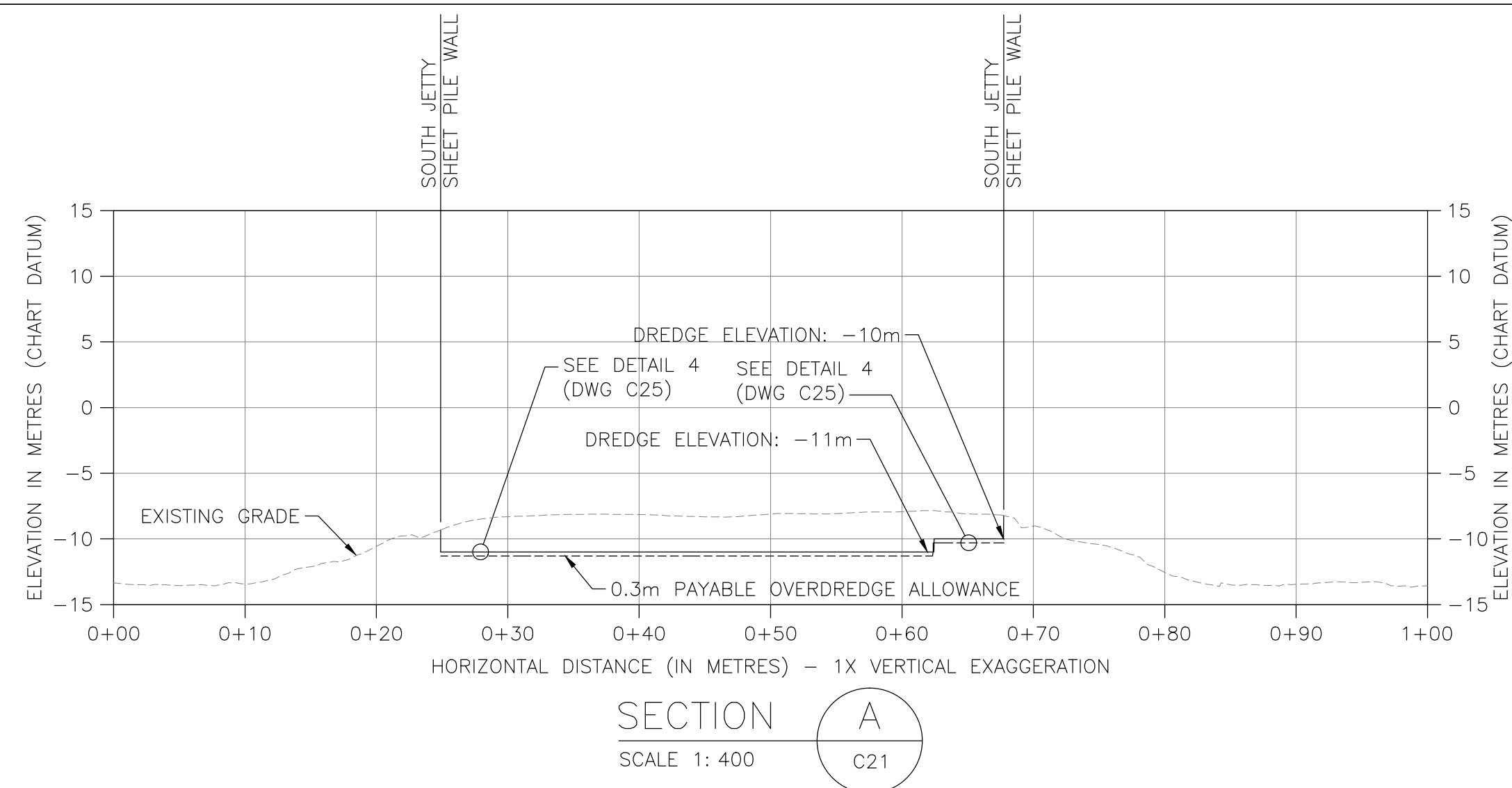
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- BASE MAP FROM GOLDER, JANUARY 2012.
- DEBRIS AND STRUCTURE DETAILS FROM KLOHN CRIPPEN BERGER DECEMBER 2010 CONDITION INSPECTION REPORT FOR SOUTH JETTY PERIMETER, NADEN FLOATS, AND CFSA FLOATS.
- REFERENCE DWG C1 FOR DATUM INFORMATION.
- EGD WORK SITE ALSO INCLUDES UPLAND AREAS OF THE EGD FACILITY AS SHOWN ON THE DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS.
- CONTRACTOR SHALL COMPLETE DREDGING ACTIVITIES ACCORDING TO SEQUENCING REQUIREMENTS SHOWN ON DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS.
- SEE APPENDIX D REFERENCE DRAWINGS FOR A COMPLETE LIST OF CONTROL POINTS USED TO DEFINE EXTENTS OF DREDGING FOR DREDGE UNITS. CONTRACTOR SHALL TRANSITION DREDGE CUTS FROM THESE EXTENTS TO THE EGD WORK SITE BOUNDARY AS SHOWN ON THE DRAWINGS.
- DREDGE SURFACE 0.5m WITHIN HAZARDOUS WASTE AREA (DU13) AND DISPOSE OF MATERIAL AS HAZARDOUS WASTE. PWSC TO SAMPLE TO DETERMINE WHETHER UNDERLYING MATERIAL IS HAZARDOUS WASTE. COMPLETE DREDGING TO ELEVATIONS AND GRADES. UNIT PRICE TABLE ASSUMES OTHER MATERIAL REMOVED TO ACHIEVE THE ELEVATIONS WILL BE DISPOSED AS IL+ MATERIAL.
- TRB LOCATIONS SHOWN AS EXAMPLE ONLY. CONTRACTOR (AND 3RD PARTY VENDOR) SHALL DESIGN, INSTALL AND MAINTAIN TRBS IN ACCORDANCE WITH THE SPECIFICATIONS. CONTRACTOR TO PROVIDE TRB LAYOUT AND DESIGN DETAILS IN THE ENVIRONMENTAL PROTECTION PLAN.
- OPEN PILES ARE PRESENT BENEATH SOUTH JETTY DECK POSE HEALTH AND SAFETY RISK. CONTRACTOR TO IDENTIFY IN HEALTH AND SAFETY PLAN APPROPRIATE RISK MITIGATION MEASURES THAT WILL BE IMPLEMENTED AT THESE LOCATIONS.
- SEE DWGS C14, C15, AND D6, TIMBER PILES AND/OR OLD NON-FUNCTIONAL VERTICAL STRUCTURES INCLUDING BROKEN TIMBER PILES OR BROKEN STRUCTURAL ELEMENTS ARE PRESENT BENEATH THE STEEL-PILE SUPPORTED CONCRETE DECK IN DREDGE UNITS 6, 9, 10, 11, 12, 13, 16, AND 17. REMOVE TIMBER CUTOFF PILES AND OTHER STRUCTURES ENCOUNTERED DURING DREDGING IN ACCORDANCE WITH THE SPECIFICATIONS.
- CONTINGENCY RE-DREDGING MAY BE REQUIRED FOR MISSED INVENTORY OR RESIDUALS MATERIAL REMOVAL WITHIN THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA OF WORK AND FOR POTENTIAL RESIDUALS REMOVAL OUTSIDE OF THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA IF RESULTS OF CONFIRMATIONAL SAMPLING INDICATE DREDGE RESIDUALS ARE PRESENT AT THE SEABED SURFACE OUTSIDE OF THE SHEETPILE WALL, SEE DETAIL 8A AND 8B, DWG C26.



**LEGEND:**

---14.0---	BATHYMETRY IN METRES		DREDGE AREA
	EGD WORK SITE BOUNDARY		DREDGE AREA UNDER STEEL-PILE SUPPORTED CONCRETE DECK
----	TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA		HAZARDOUS WASTE MATERIAL AREA
—○—	ORDINARY HIGH WATER LINE		NO DREDGE AREA
DU4 -11.0	DREDGE UNIT BOUNDARY AND DREDGE ELEVATION		BASE LINE CONTROL POINT
DU10 2H:1V	SLOPE DREDGING DREDGE UNIT (DU) BOUNDARY AND GRADE		DREDGE AREA CONTROL POINT
▶	SLOPE DESIGNATION		





HORIZONTAL DATUM: UTM ZONE 10 GRID, NAD83.  
VERTICAL DATUM: CHART DATUM (C.D.)

**NOTES:**

1. UNDERPIER AREA LOWER INTERTIDAL AND SUBTIDAL BATHYMETRY WITHIN THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA IS FROM FEBRUARY 2009, JUNE 2010 AND JANUARY 2011 CRA CANADA SURVEYS LTD. MULTI BEAM SURVEY. UPPER INTERTIDAL ELEVATIONS FROM SEPTEMBER 2009 AND JULY 2011 SURVEY BY FOCUS CORPORATION. OPEN WATER AREAS OUTSIDE OF THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA WERE DREDGED AS PART OF THE PHASE 1B OPEN-WATER REMEDIATION PROJECT. OPEN WATER BATHYMETRY SURVEY WAS CONDUCTED BY CRA CANADA SURVEYS, INC. ON 2014/03/05 FOLLOWING COMPLETION OF PHASE 1B WORK.
2. REFERENCE DWG C1 FOR DATUM INFORMATION.
3. EXISTING TIMBER-PILED STRUCTURE NOT SHOWN FOR CLARITY.
4. CONTRACTOR SHALL REFERENCE THE 1985 STEEL-PILED DECK AS-BUILT DRAWINGS FOR DETAILS REGARDING CROSS SECTIONS THROUGH THE STEEL-PILED JETTY STRUCTURE, SHEETPILE BULKHEAD WALL, AND CONCRETE L-WALL.
5. EXISTING GRADE IS APPROXIMATE. CONTRACTOR SHALL VERIFY EXISTING GRADES WITH PRE-CONSTRUCTION SURVEY. DREDGE ELEVATION IS APPROXIMATELY 2.2m BELOW EXISTING GRADE AT SOUTH JETTY SHEET PILE WALL FOR SECTIONS E, F, G, H, AND J.
6. SLOUGHING OF EXISTING MATERIAL IS ANTICIPATED TO OCCUR AT THE DREDGE UNIT BOUNDARIES FOR ELEVATION DREDGING. SLOUGH VOLUMES ARE INCLUDED IN THE DREDGE PAY VOLUME PROVIDED IN THE SPECIFICATIONS.

**CROSS SECTIONS**  
SCALE 1: 400



Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK**  
825 ADMIRALS ROAD, VICTORIA, BC  
**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION**

Consultant Signature Only

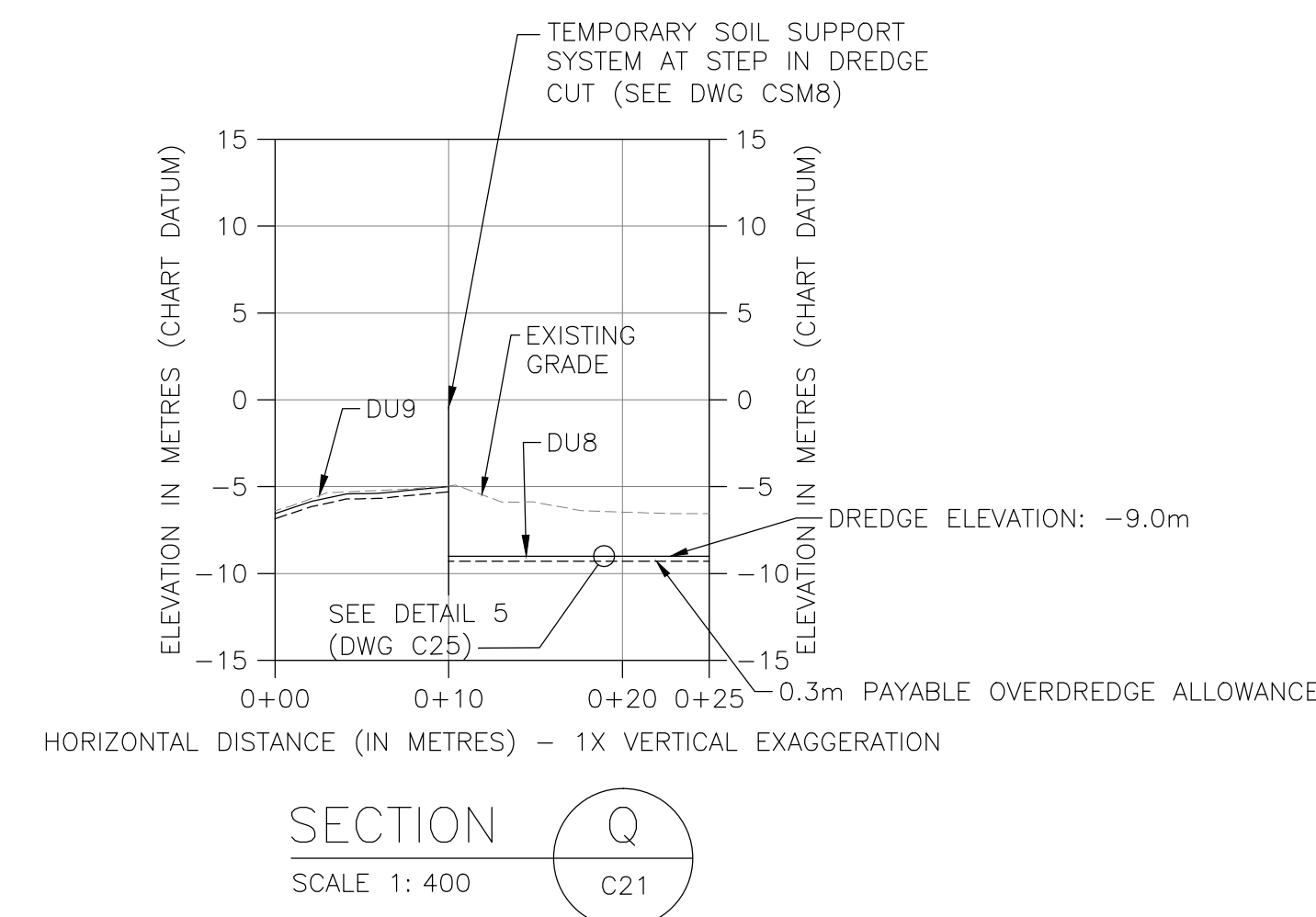
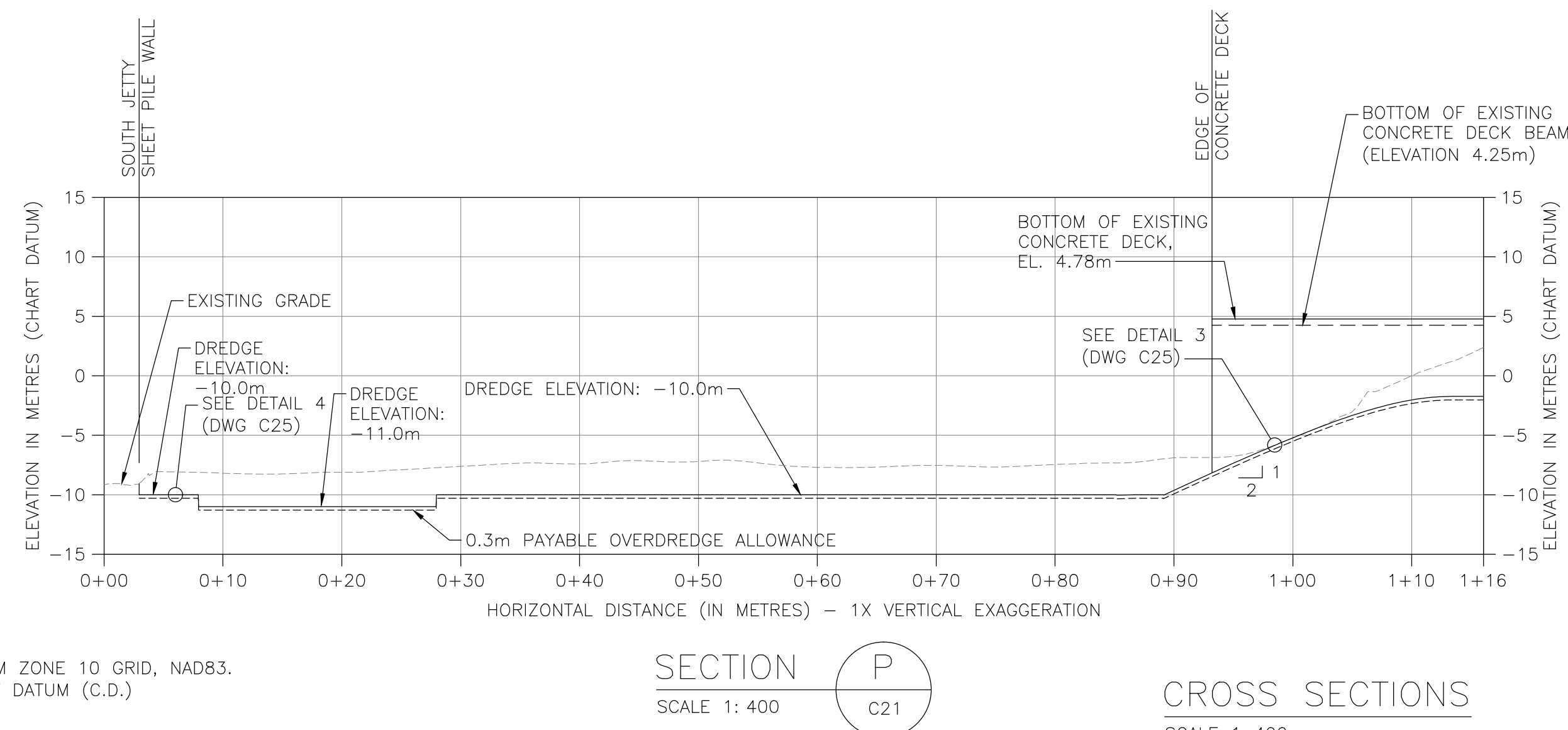
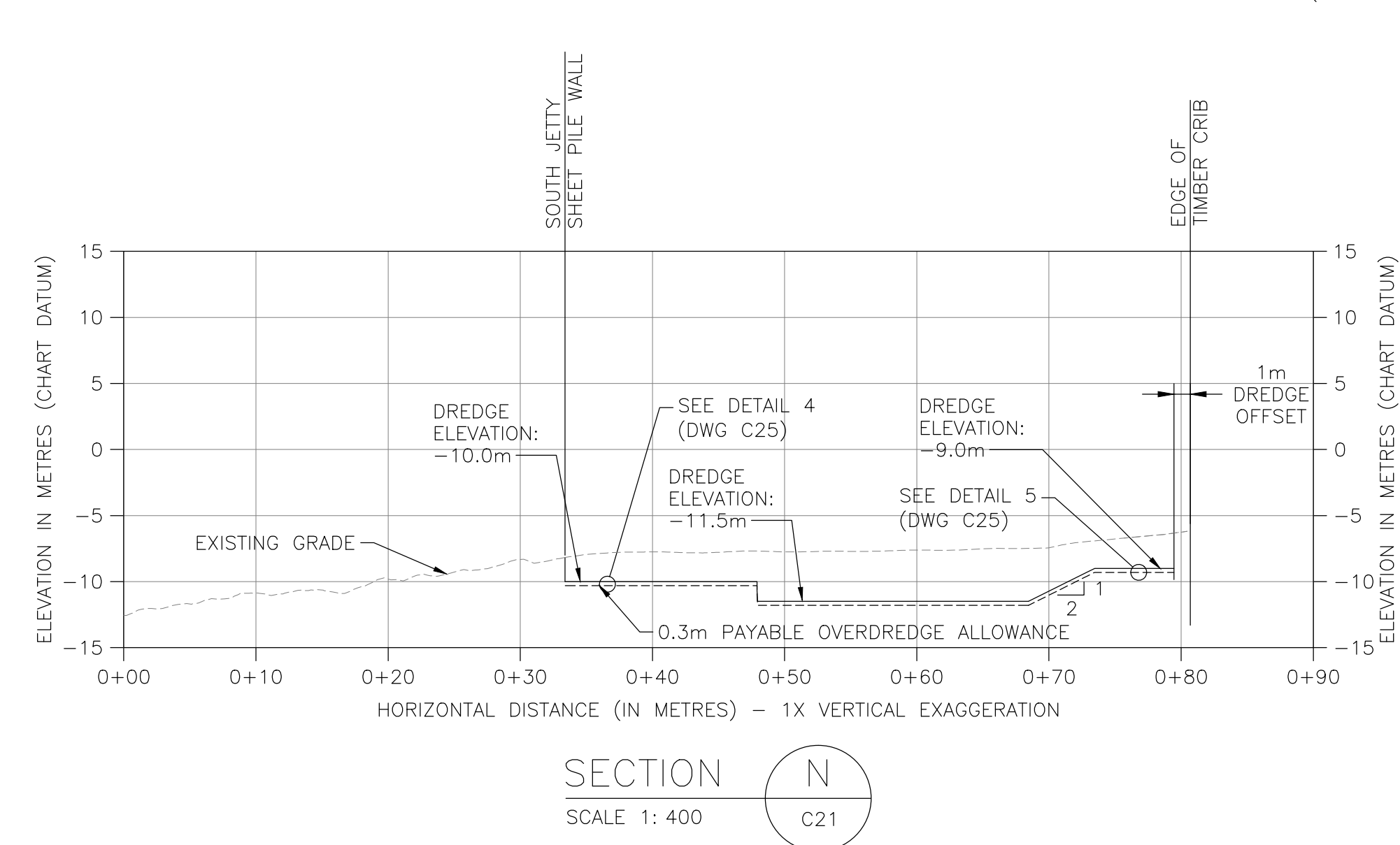
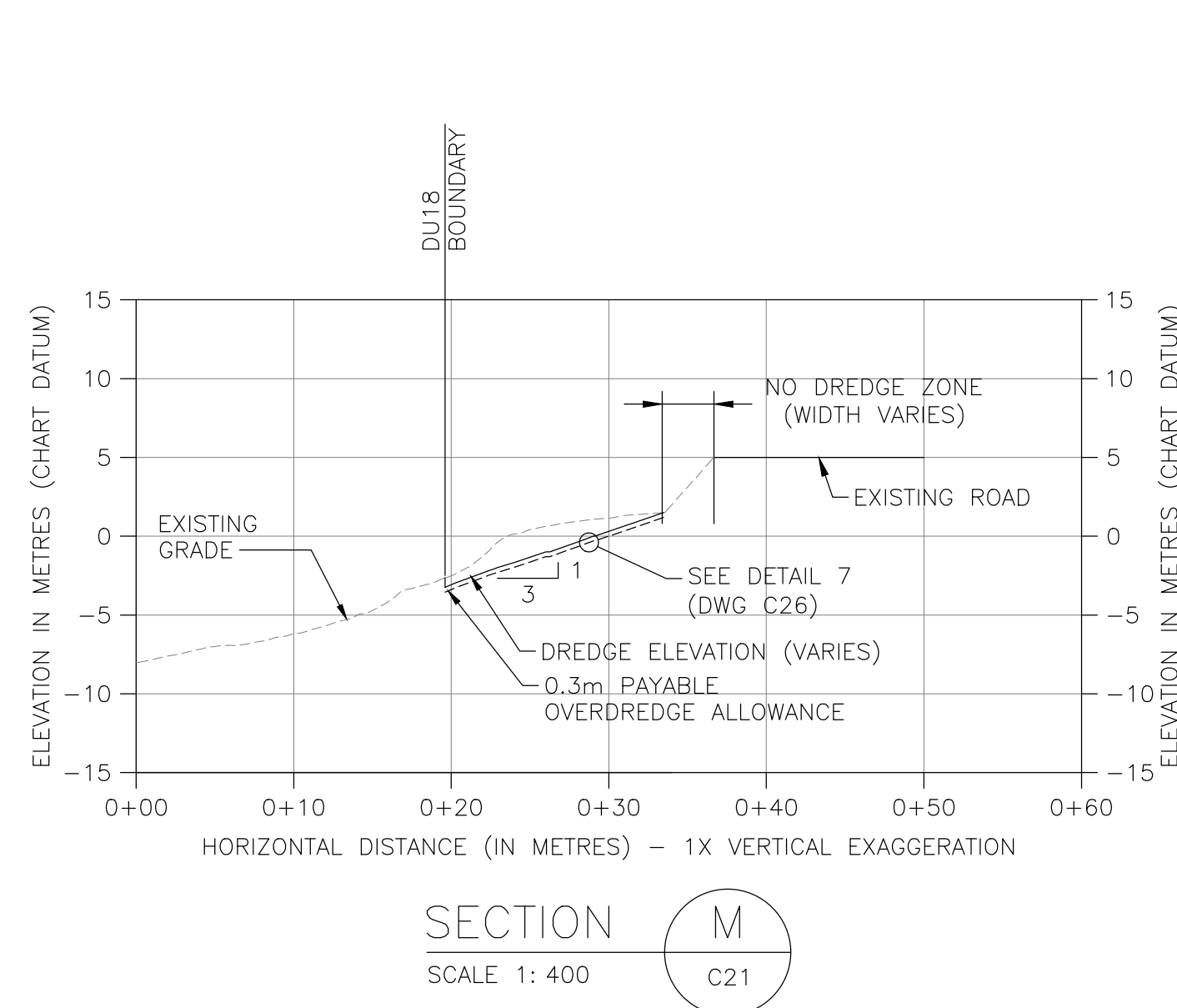
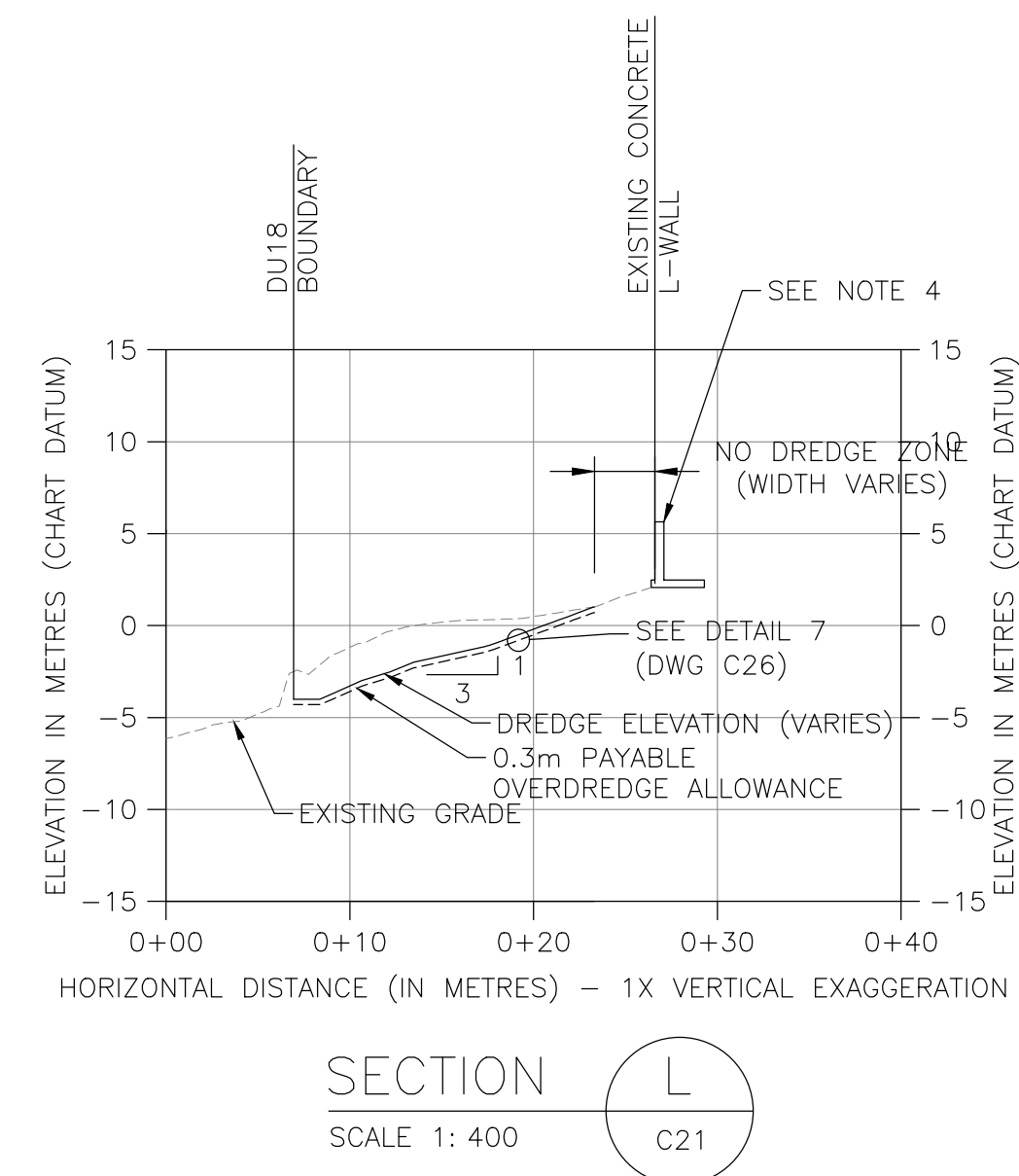
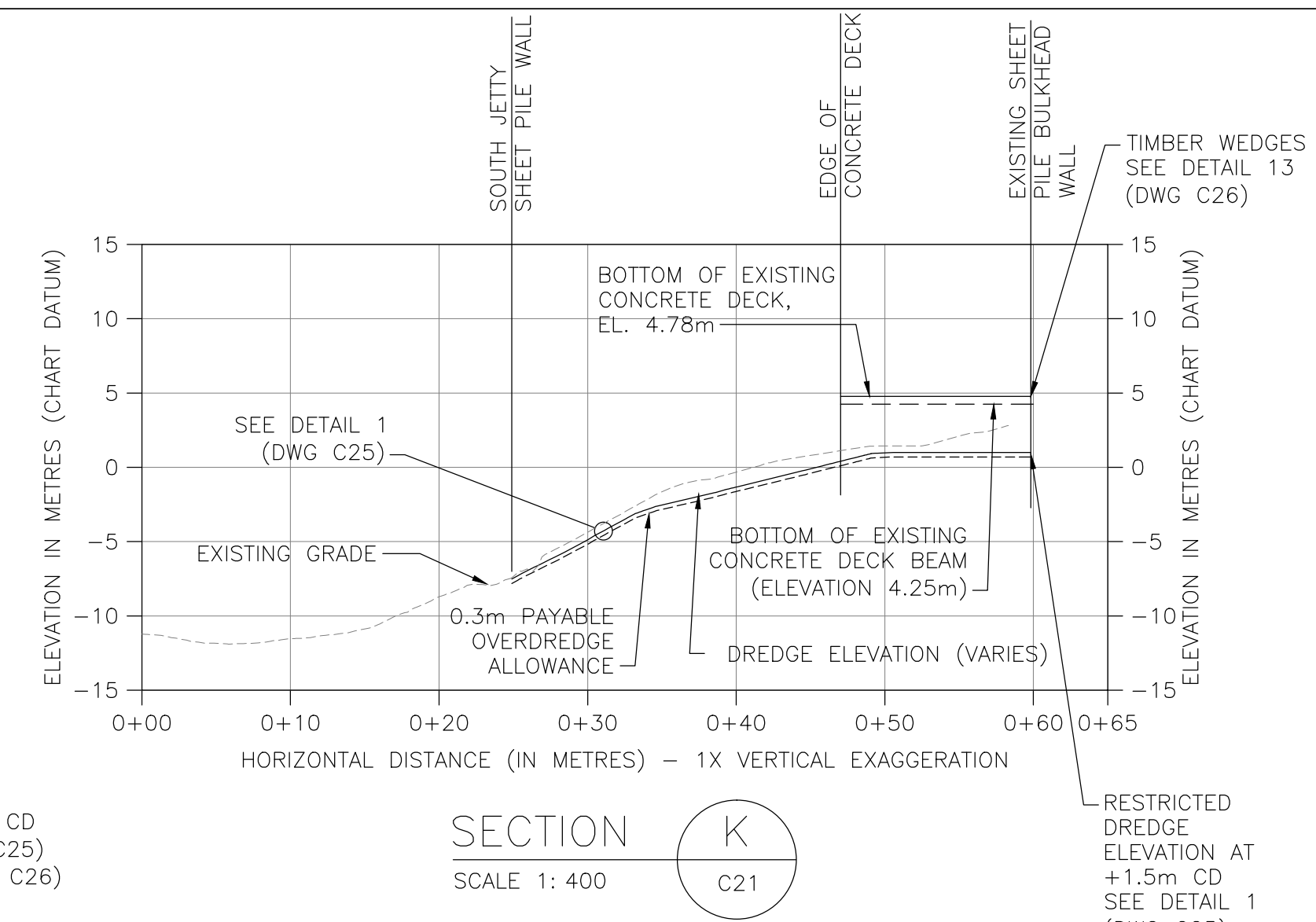
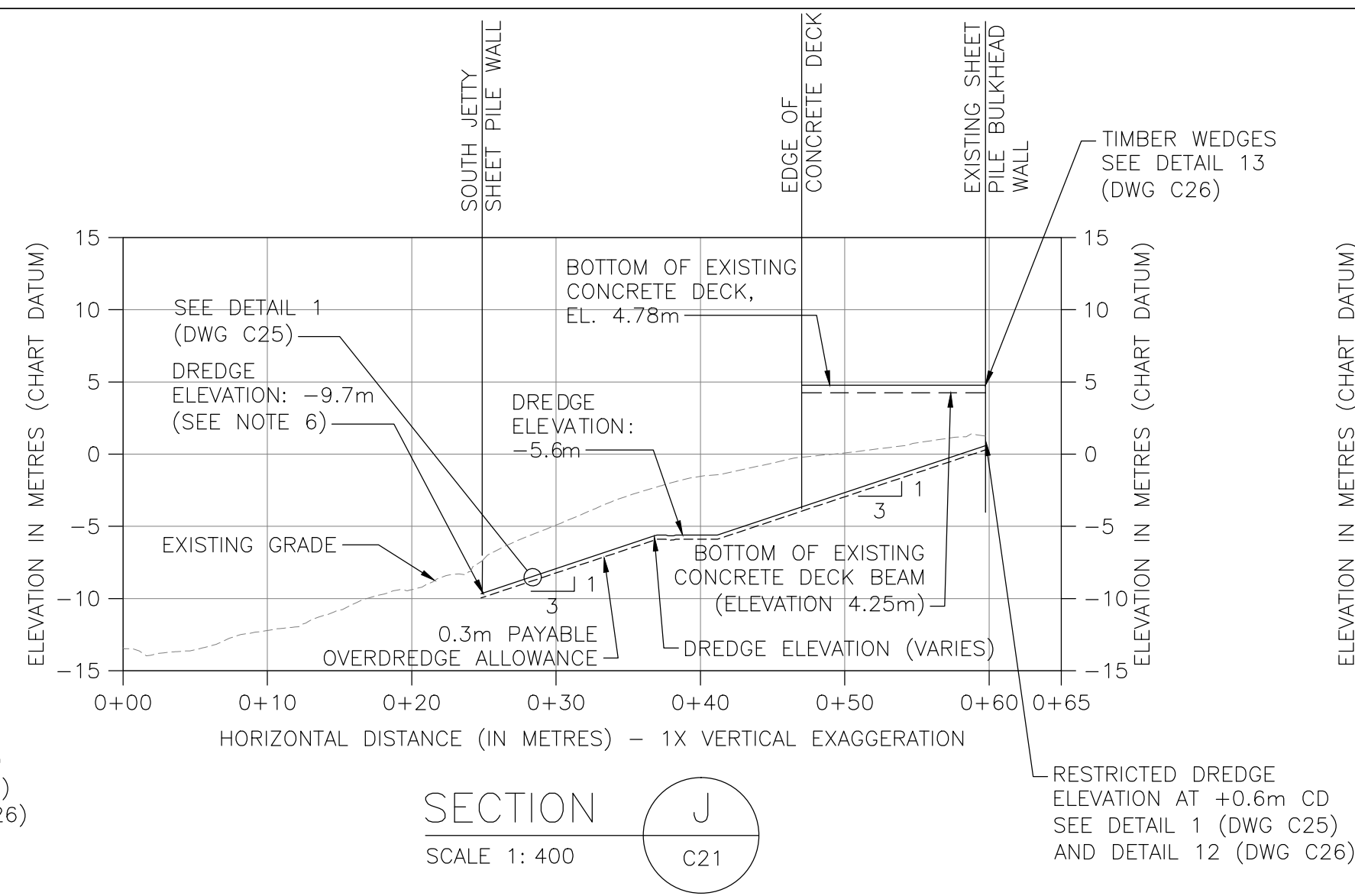
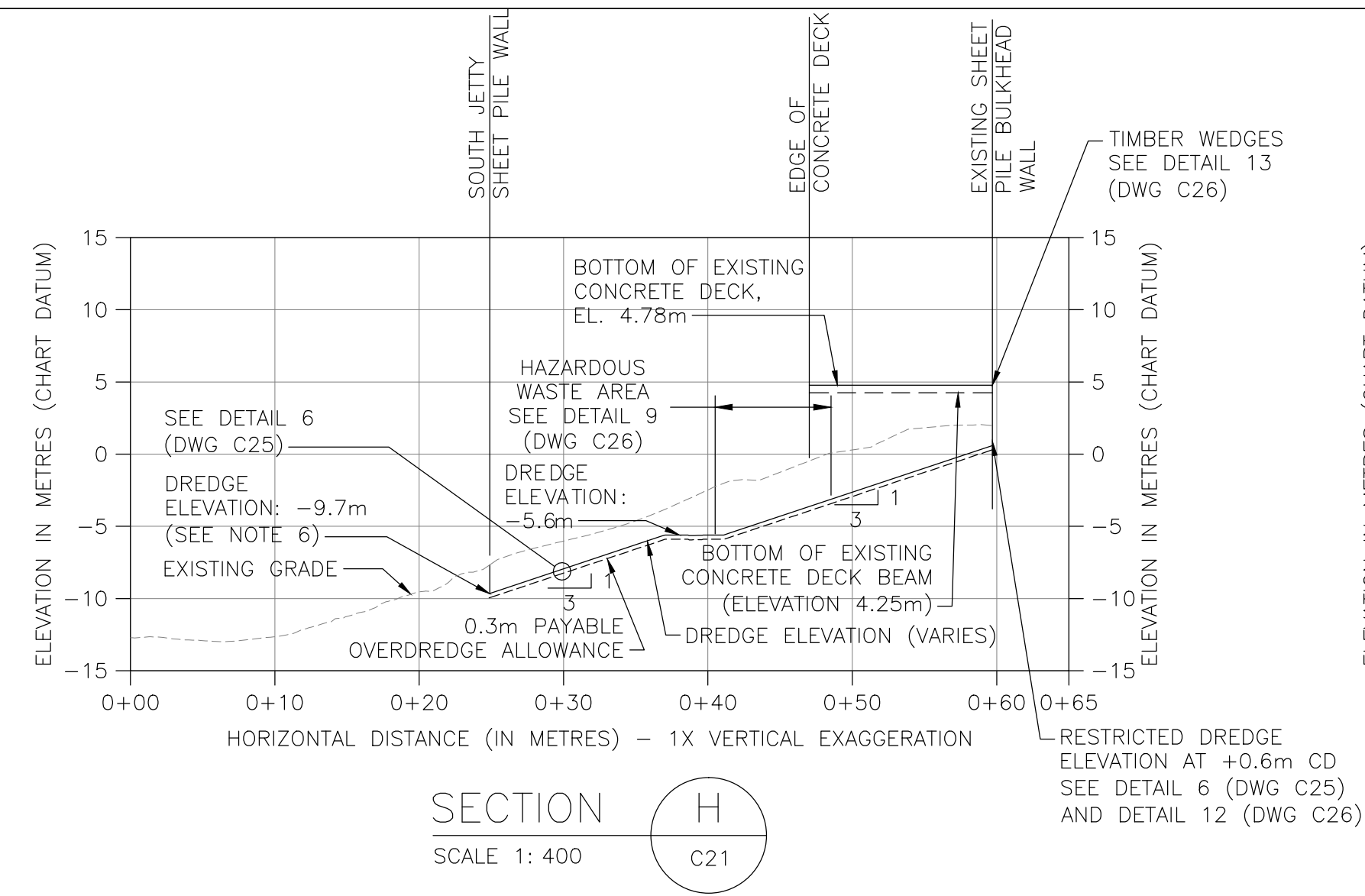
Designed by/Concept par  
**MATT WOLTMAN**  
Drawn by/Dessiné par  
**CHRIS HEWETT**  
PWGSC Project Manager/Administrateur de Projets TPSCG  
**ANDREW MYLLY**  
Regional Manager, Environmental Services  
**COLLIN KINGMAN**

Drawing title/Titre du dessin

**DREDGE CROSS SECTIONS - SHEET 1**

Project No./No. du projet	Sheet/Feuille	Revision no./Révision
<b>R.018400.002</b>	<b>C22</b>	<b>0</b>





HORIZONTAL DATUM: UTM ZONE 10 GRID, NAD83.  
VERTICAL DATUM: CHART DATUM (C.D.)

**NOTES:**

1. UNDERPIER AREA LOWER INTERTIDAL AND SUBTIDAL BATHYMETRY WITHIN THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA IS FROM FEBRUARY 2009, JUNE 2010 AND JANUARY 2011 CRA CANADA SURVEYS LTD. MULTI BEAM SURVEY. UPPER INTERTIDAL ELEVATIONS FROM SEPTEMBER 2009 AND JULY 2011 SURVEY BY FOCUS CORPORATION. OPEN WATER AREAS OUTSIDE OF THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA WERE DREDGED AS PART OF THE PHASE 1B OPEN-WATER REMEDIATION PROJECT. OPEN WATER BATHYMETRY SURVEY WAS CONDUCTED BY CRA CANADA SURVEYS INC. ON 2014/03/05 FOLLOWING COMPLETION OF PHASE 1B WORK.
2. REFERENCE DWG C1 FOR DATUM INFORMATION.
3. EXISTING TIMBER-PILED STRUCTURE NOT SHOWN FOR CLARITY.
4. CONTRACTOR SHALL REFERENCE THE 1985 STEEL-PILED DECK AS-BUILT DRAWINGS FOR DETAILS REGARDING CROSS SECTIONS THROUGH THE STEEL-PILED JETTY STRUCTURE, SHEETPILE BULKHEAD WALL, AND CONCRETE L-WALL.
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6. SLOUGHING OF EXISTING MATERIAL IS ANTICIPATED TO OCCUR AT THE DREDGE UNIT BOUNDARIES FOR ELEVATION DREDGING. SLOUGH VOLUMES ARE INCLUDED IN THE DREDGE PAY VOLUME PROVIDED IN THE SPECIFICATIONS.



Revision/Revision	Description/Description	Date/Date
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Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

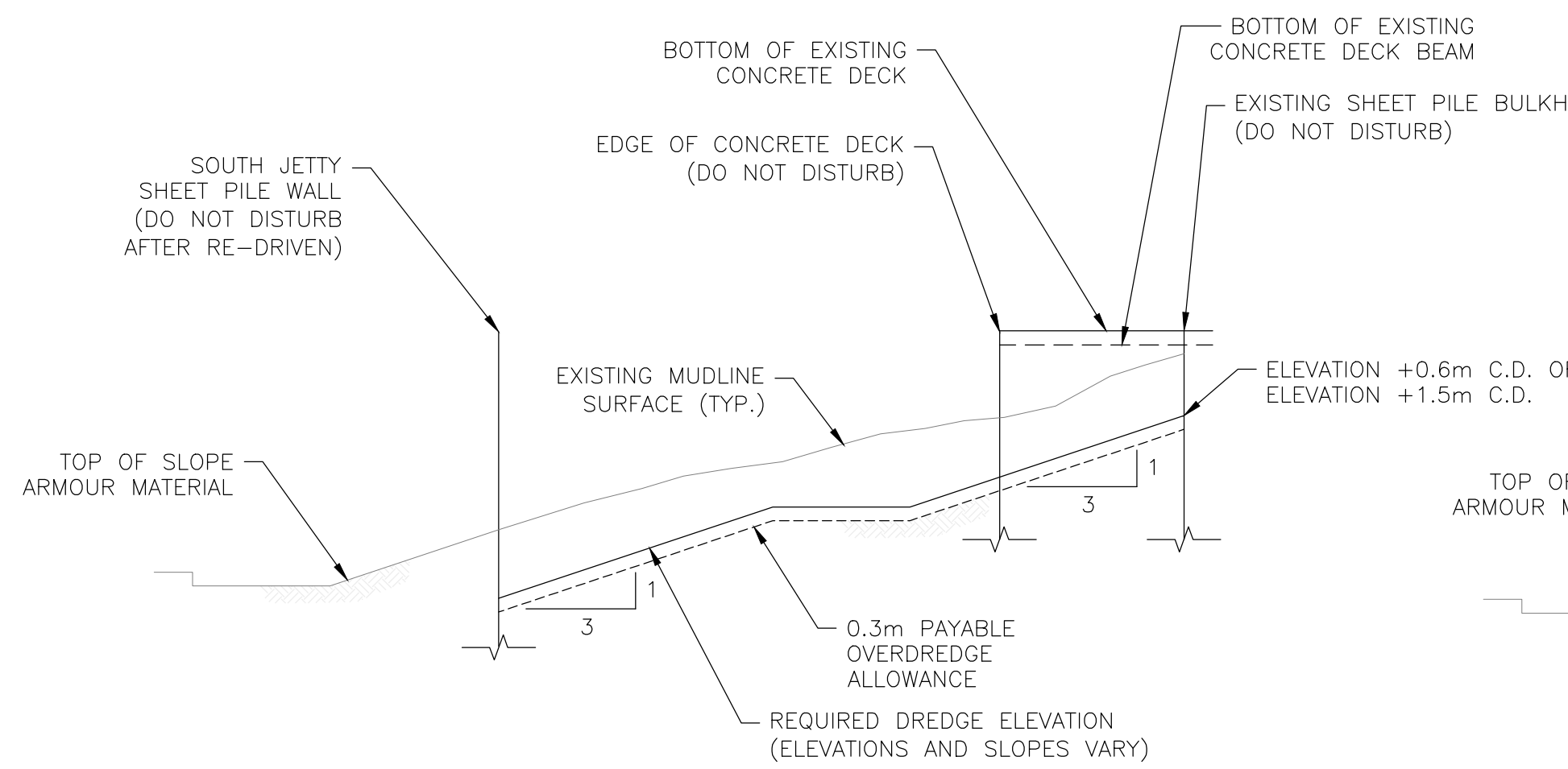
**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

Consultant Signature Only  
Designed by/Concept par  
**MATT WOLTMAN**  
Drawn by/Dessiné par  
**CHRIS HEWETT**  
PWGSC Project Manager/Administrateur de Projets TPSGC  
**ANDREW MYLLY**  
Regional Manager, Environmental Services  
**COLLIN KINGMAN**

Drawing title/Titre du dessin  
**DREDGE CROSS SECTIONS - SHEET 2**

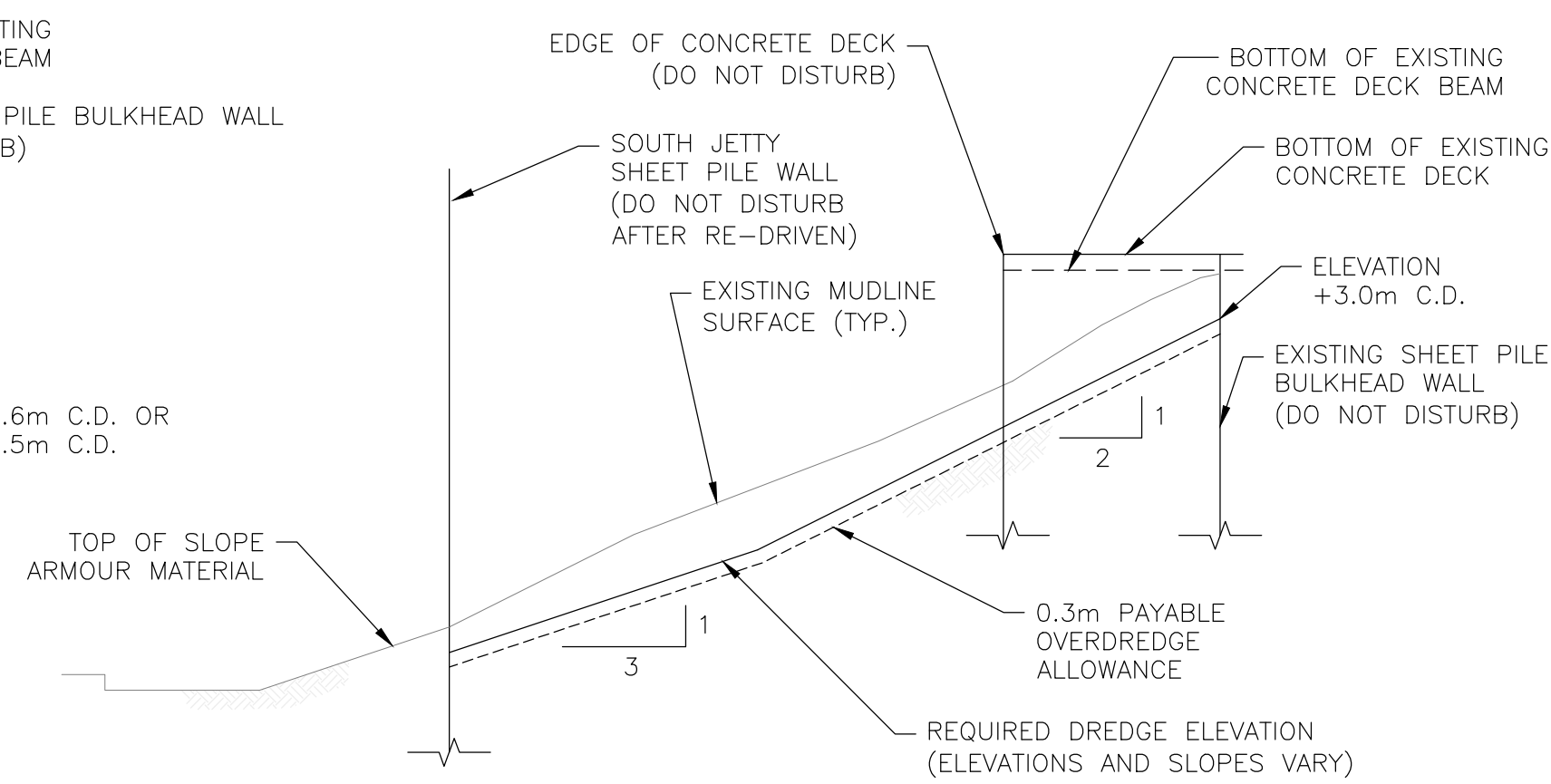
Project No./No. du projet	Sheet/	Revision no./
<b>R.018400.002</b>	<b>C23</b>	<b>0</b>





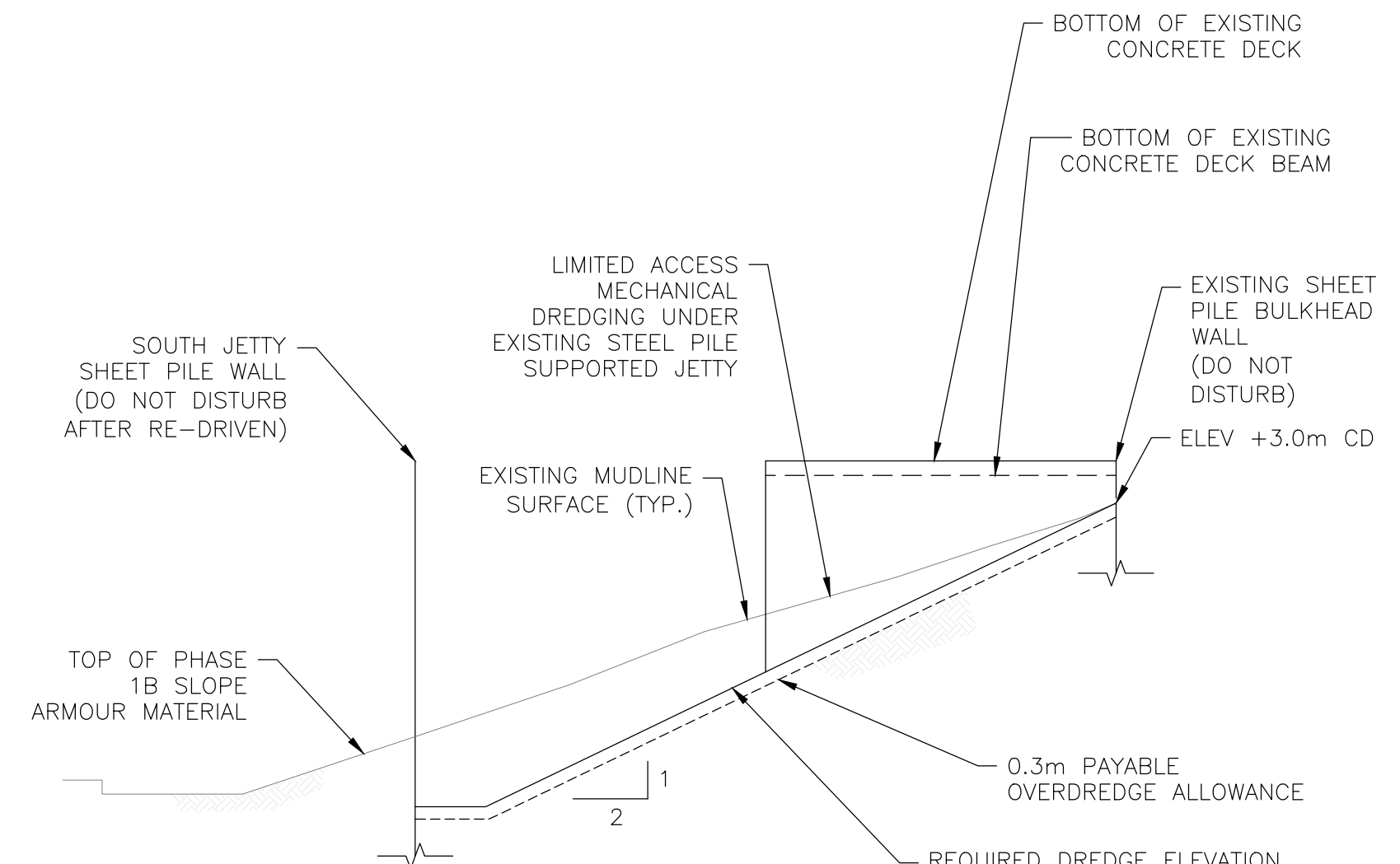
DETAIL 1 NOT TO SCALE C22/C23

NOTE: CONTRACTOR TO ADHERE TO RESTRICTED ELEVATION REQUIREMENTS WHEN COMPLETING DREDGE ACTIVITIES ADJACENT TO BULKHEADS



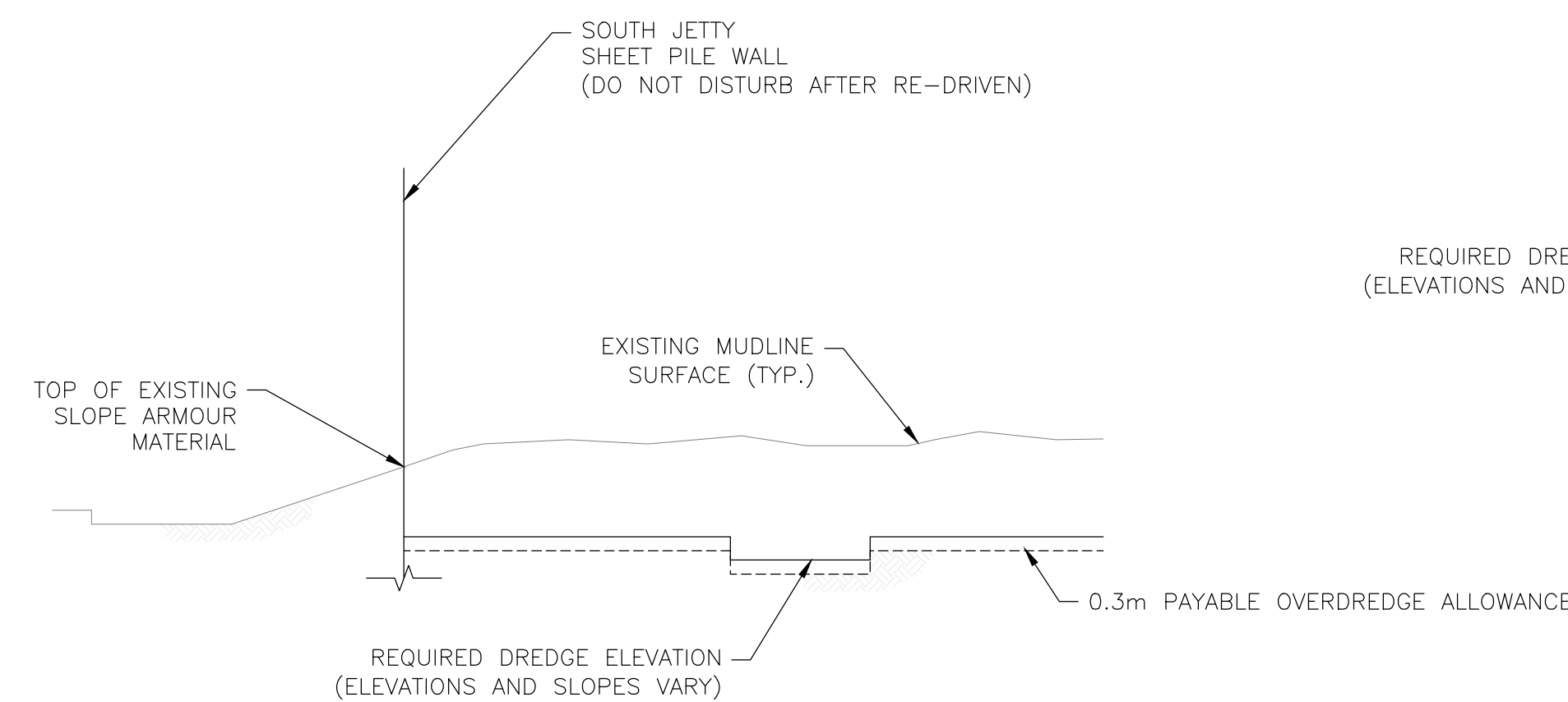
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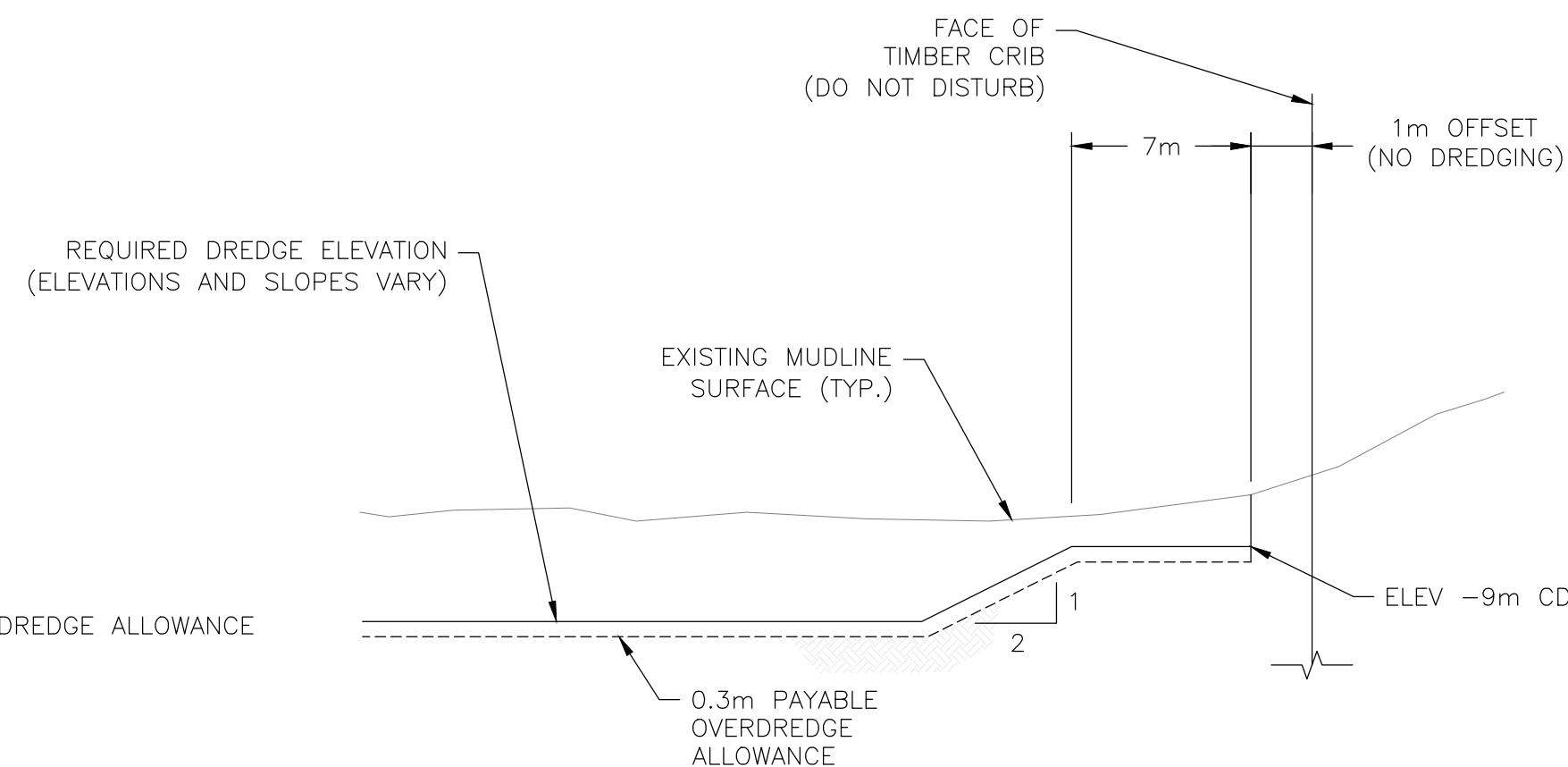


DETAIL 3 NOT TO SCALE C22/C23

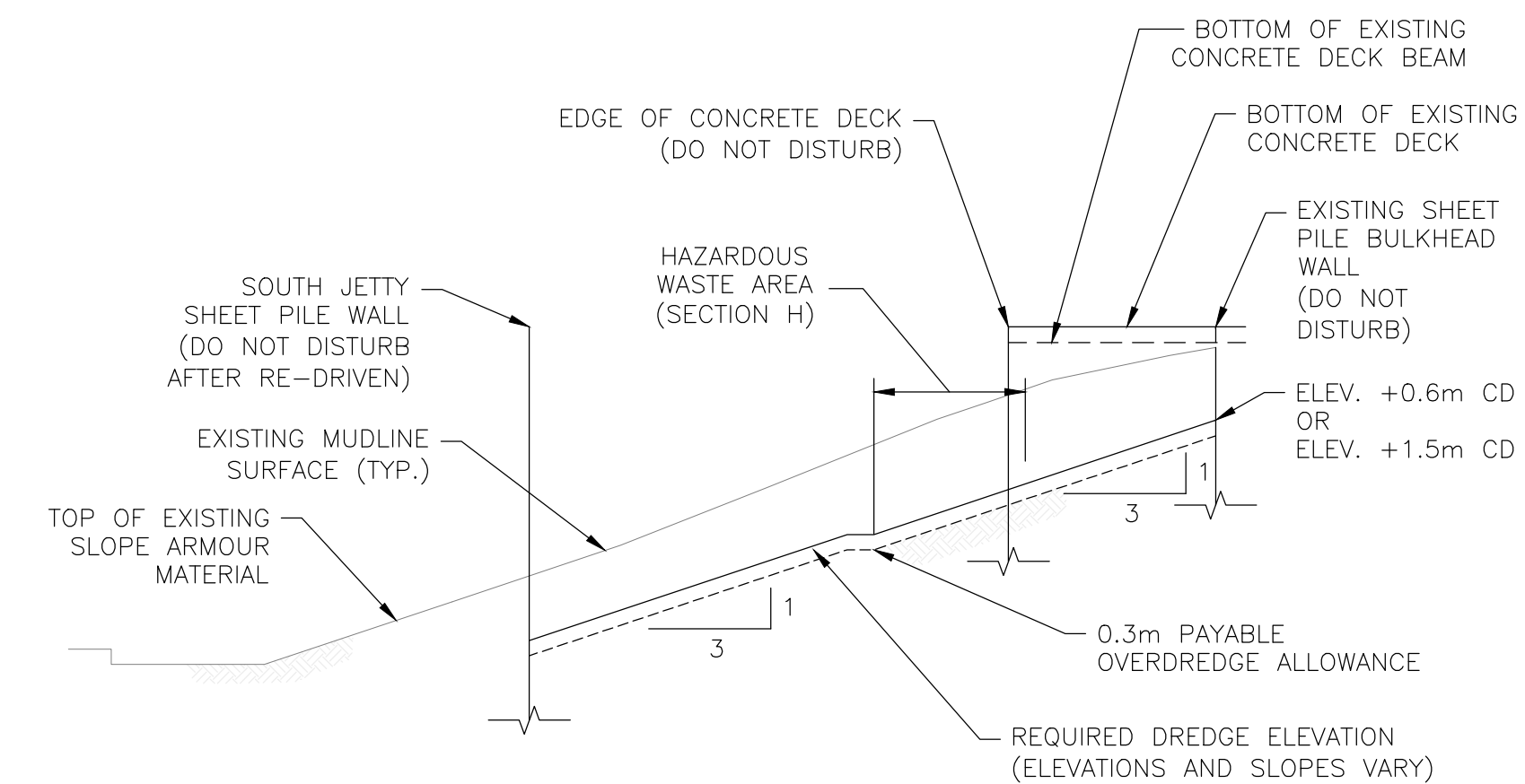
NOTE: CONTRACTOR TO ADHERE TO RESTRICTED ELEVATION REQUIREMENTS WHEN COMPLETING DREDGE ACTIVITIES ADJACENT TO BULKHEADS



DETAIL 4 NOT TO SCALE C22/C23



DETAIL 5 NOT TO SCALE C23



DETAIL 6 NOT TO SCALE C23

NOTE: CONTRACTOR TO ADHERE TO RESTRICTED ELEVATION REQUIREMENTS WHEN COMPLETING DREDGE ACTIVITIES ADJACENT TO BULKHEADS



Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

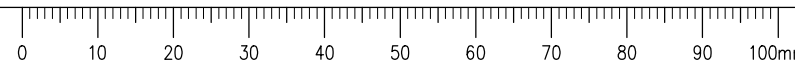
**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

Consultant Signature Only  
Designed by/Concept par  
**MATT WOLTMAN**  
Drawn by/Dessine par  
**CHRIS HEWETT**  
PWSC Project Manager/Administrateur de Projets TPSCG  
**ANDREW MYLLY**  
Regional Manager, Environmental Services  
**COLLIN KINGMAN**

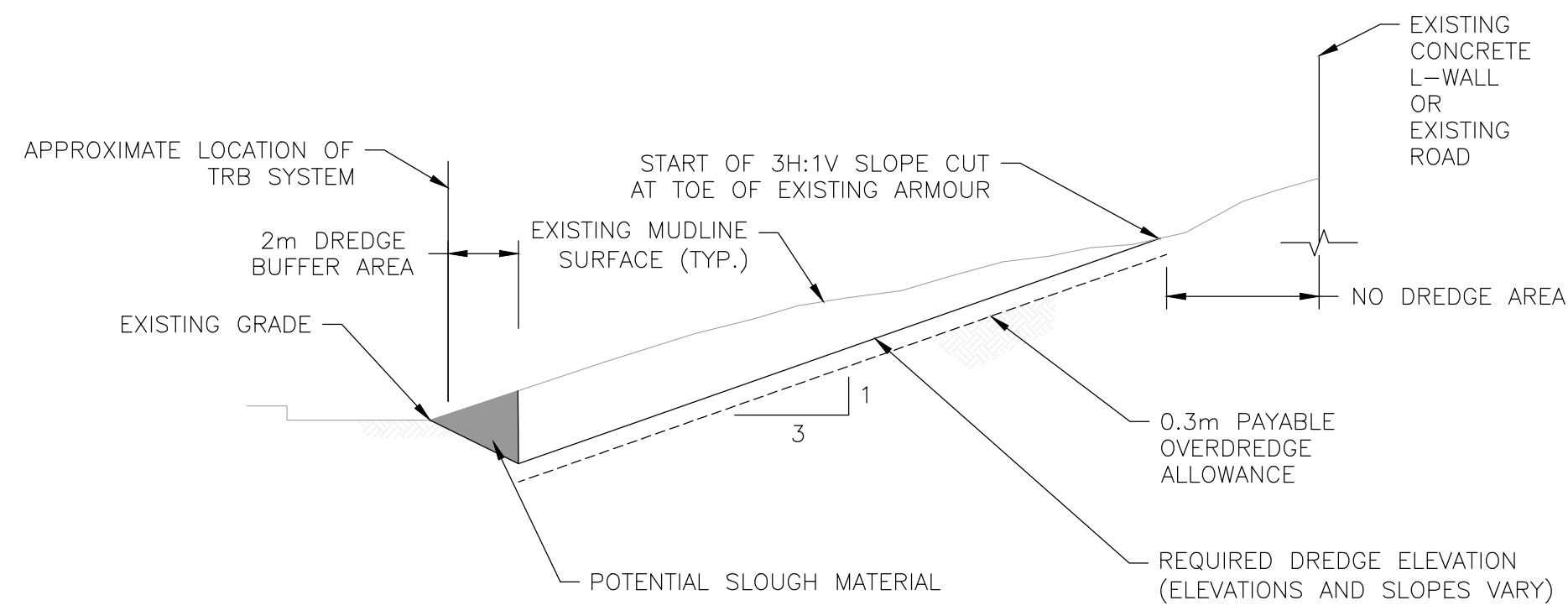
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**DREDGE DETAILS - SHEET 1**

Project No./No. du projet	Sheet/	Revision no./
<b>R.018400.002</b>	<b>C25</b>	<b>0</b>

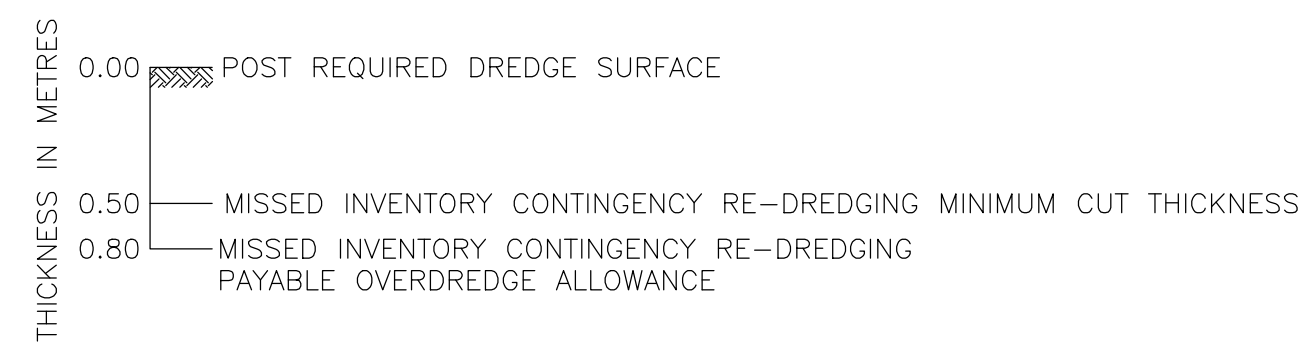
- NOTES:
- EXISTING TIMBER-PILED STRUCTURE NOT SHOWN FOR CLARITY.
  - CONTRACTOR SHALL REFERENCE THE 1985 STEEL-PILE DECK AS-BUILT DRAWINGS FOR DETAILS REGARDING CROSS SECTIONS THROUGH THE STEEL-PILED JETTY STRUCTURE, SHEETPILE BULKHEAD WALL, AND CONCRETE L-WALL.





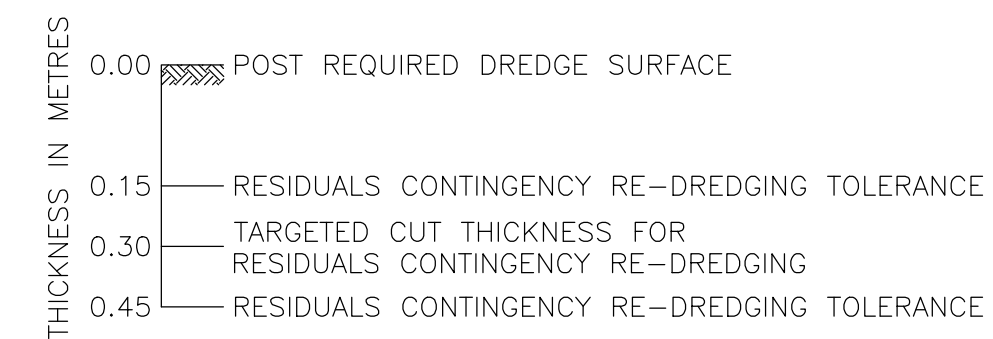


DETAIL 7  
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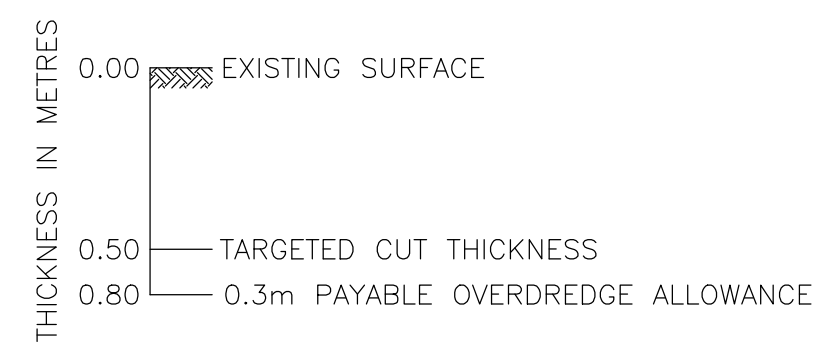
CONTINGENCY RE-DREDGE - MISSED INVENTORY

DETAIL 8A  
NOT TO SCALE C21



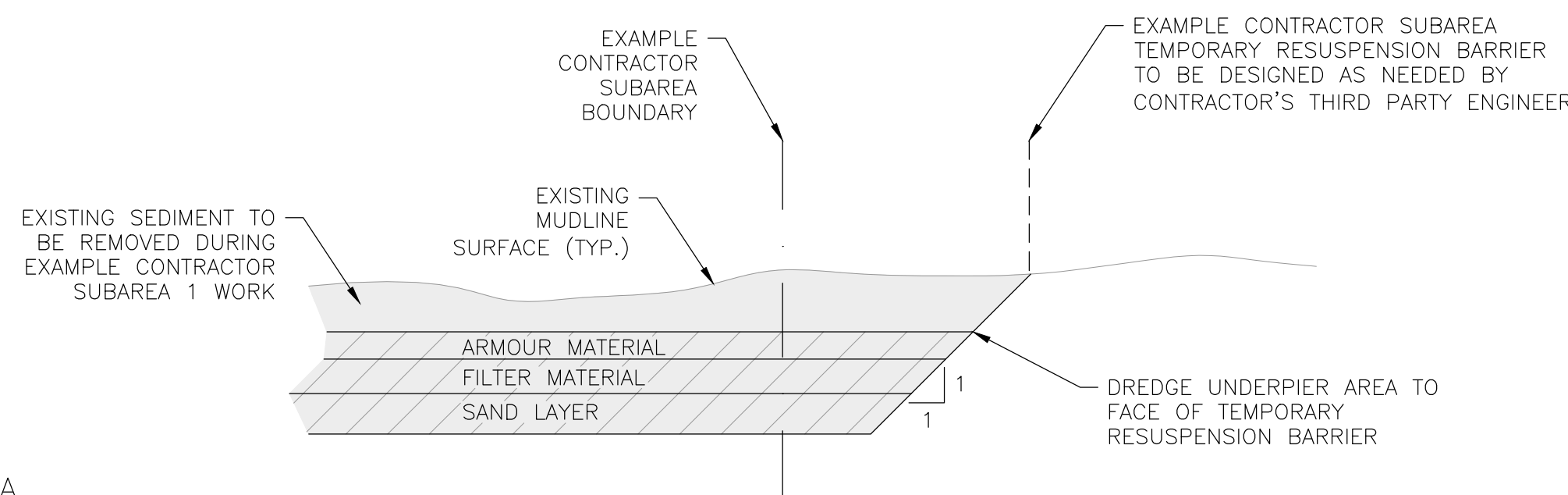
CONTINGENCY RE-DREDGE - RESIDUALS

DETAIL 8B  
NOT TO SCALE C21



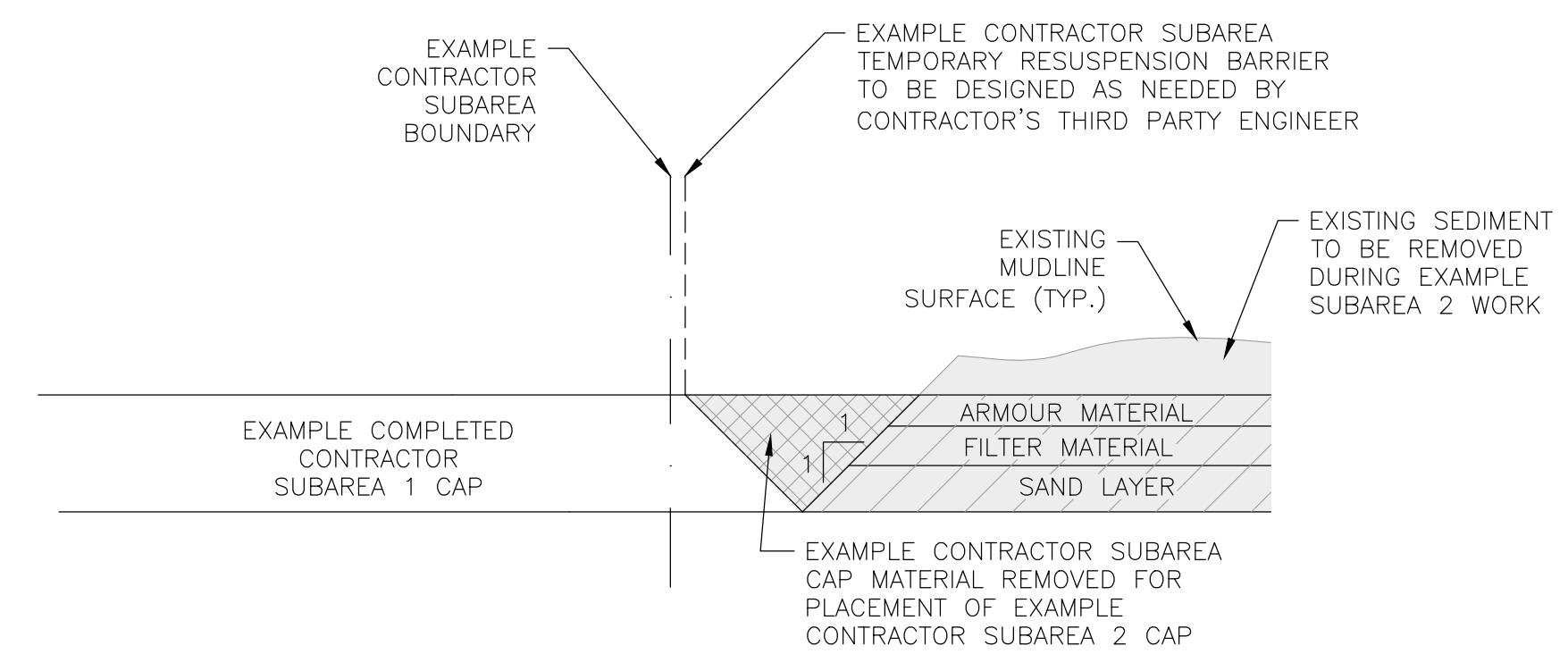
TARGETED CUT THICKNESS FOR HAZARDOUS WASTE AREA

DETAIL 9  
NOT TO SCALE C21/C22/C23



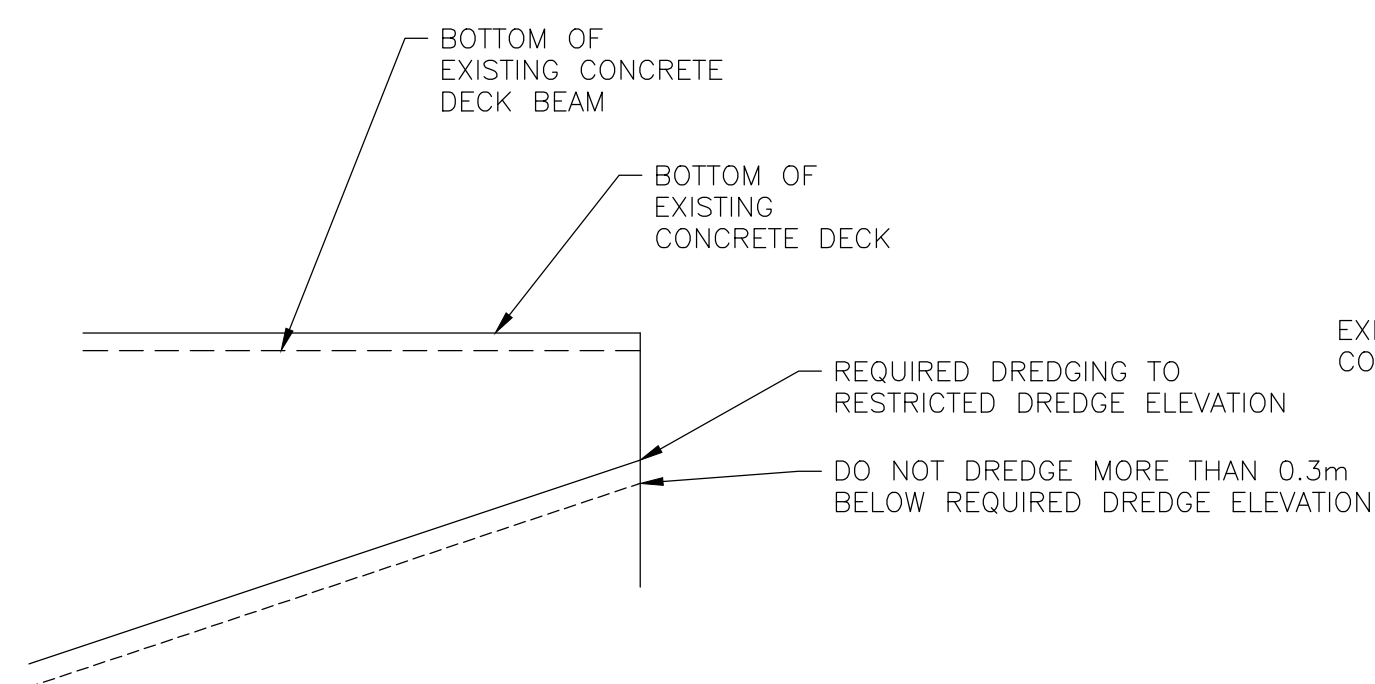
DETAIL (EXAMPLE) 10  
NOT TO SCALE

NOTE: DETAIL 10 AND 11 SHOW EXAMPLE CONTRACTOR SUBAREA TRANSITION AREA.

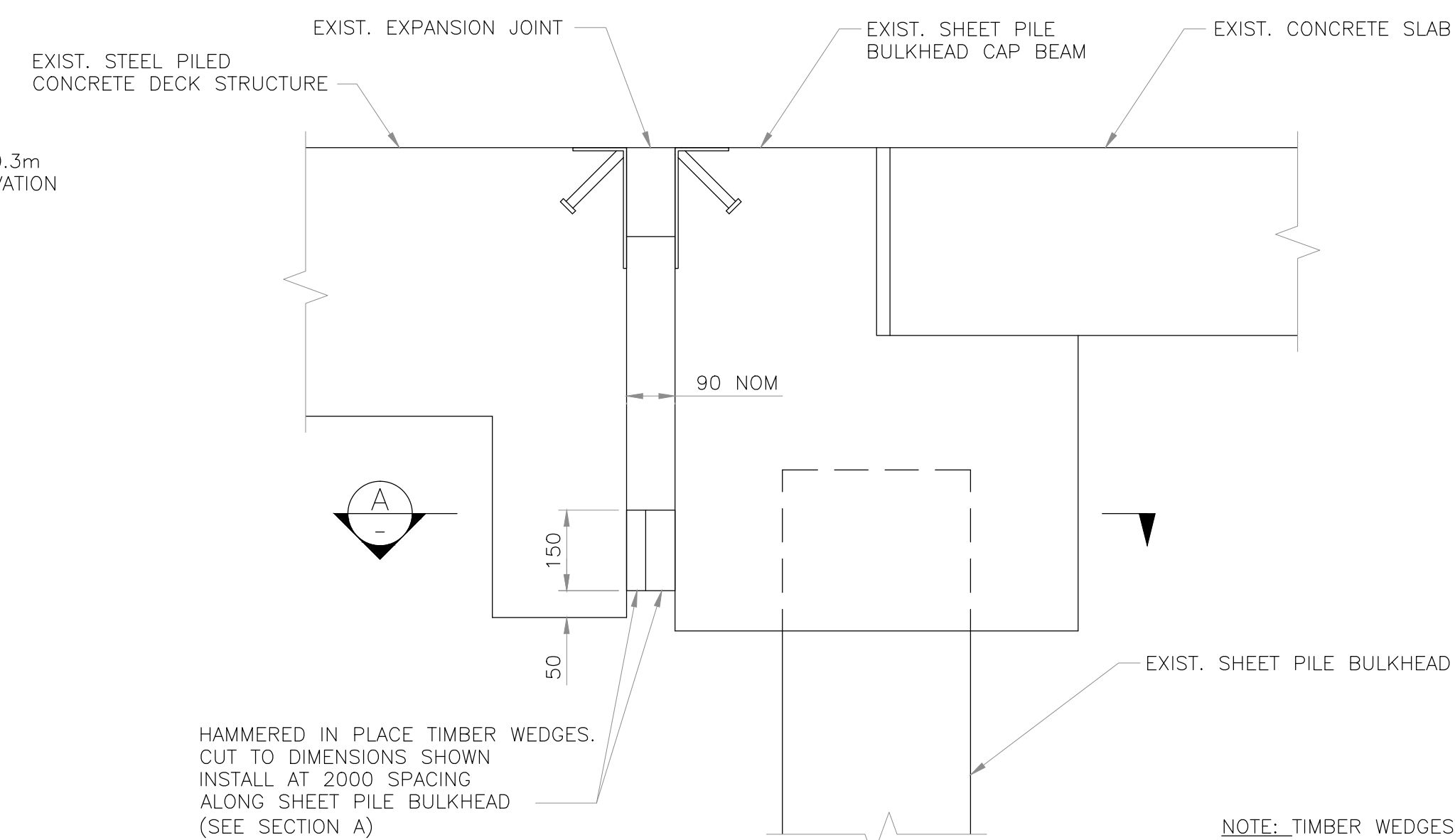


DETAIL (EXAMPLE) 11  
NOT TO SCALE

NOTE: DETAIL 10 AND 11 SHOW EXAMPLE CONTRACTOR SUBAREA TRANSITION AREA.

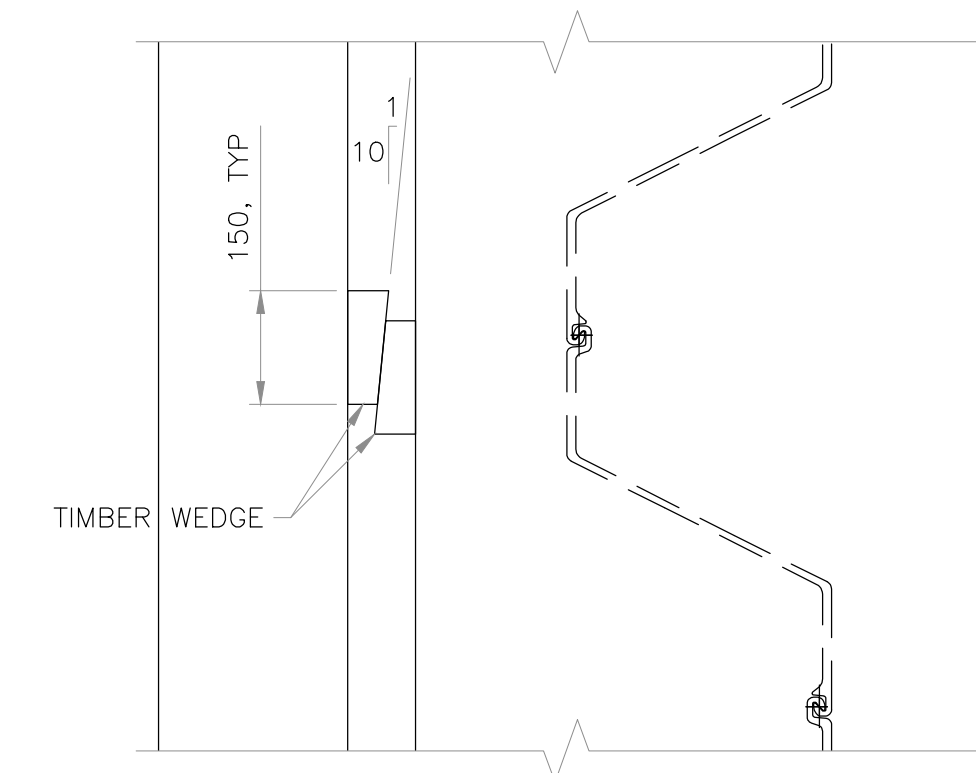


DETAIL 12  
NOT TO SCALE C22/C23



DETAIL 13  
SCALE 1:10 C22/C23

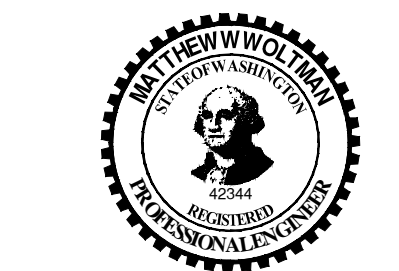
NOTE: TIMBER WEDGES ARE TO BE INSTALLED IN THE MOVEMENT JOINT GAP BETWEEN THE EXISTING STEEL-PILED CONCRETE DECK AND THE ANCHORED BULKHEAD WALL CAP BEAM PRIOR TO START OF DREDGING. TIMBER WEDGES TO BE REMOVED AFTER PLACEMENT OF FILTER MATERIAL IN THE IMMEDIATE ADJACENT AREA.



SECTION A  
SCALE 1:10

NOTES:

- EXISTING TIMBER-PILED STRUCTURE NOT SHOWN FOR CLARITY.
- CONTRACTOR SHALL REFERENCE THE 1985 STEEL-PILES DECK AS-BUILT DRAWINGS FOR DETAILS REGARDING CROSS SECTIONS THROUGH THE STEEL-PILED JETTY STRUCTURE, SHEETPILE BULKHEAD WALL, AND CONCRETE L-WALL.
- CONTRACTOR SUBAREAS 1 AND 2 ARE FOR EXAMPLE PURPOSES ONLY AND ARE NOT DEFINED LOCATIONS.



Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**  
**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

Consultant Signature Only  
Designed by/Concept par  
**MATT WOLTMAN**  
Drawn by/Dessine par  
**CHRIS HEWETT**  
PWSC Project Manager/Administrateur de Projets TPSCG  
**ANDREW MYLLY**  
Regional Manager, Environmental Services  
**COLLIN KINGMAN**

Drawing title/Titre du dessin  
**DREDGE DETAILS - SHEET 2**

Project No./No. du projet	Sheet/feuille	Revision no./révision
<b>R.018400.002</b>	<b>C26</b>	<b>0</b>



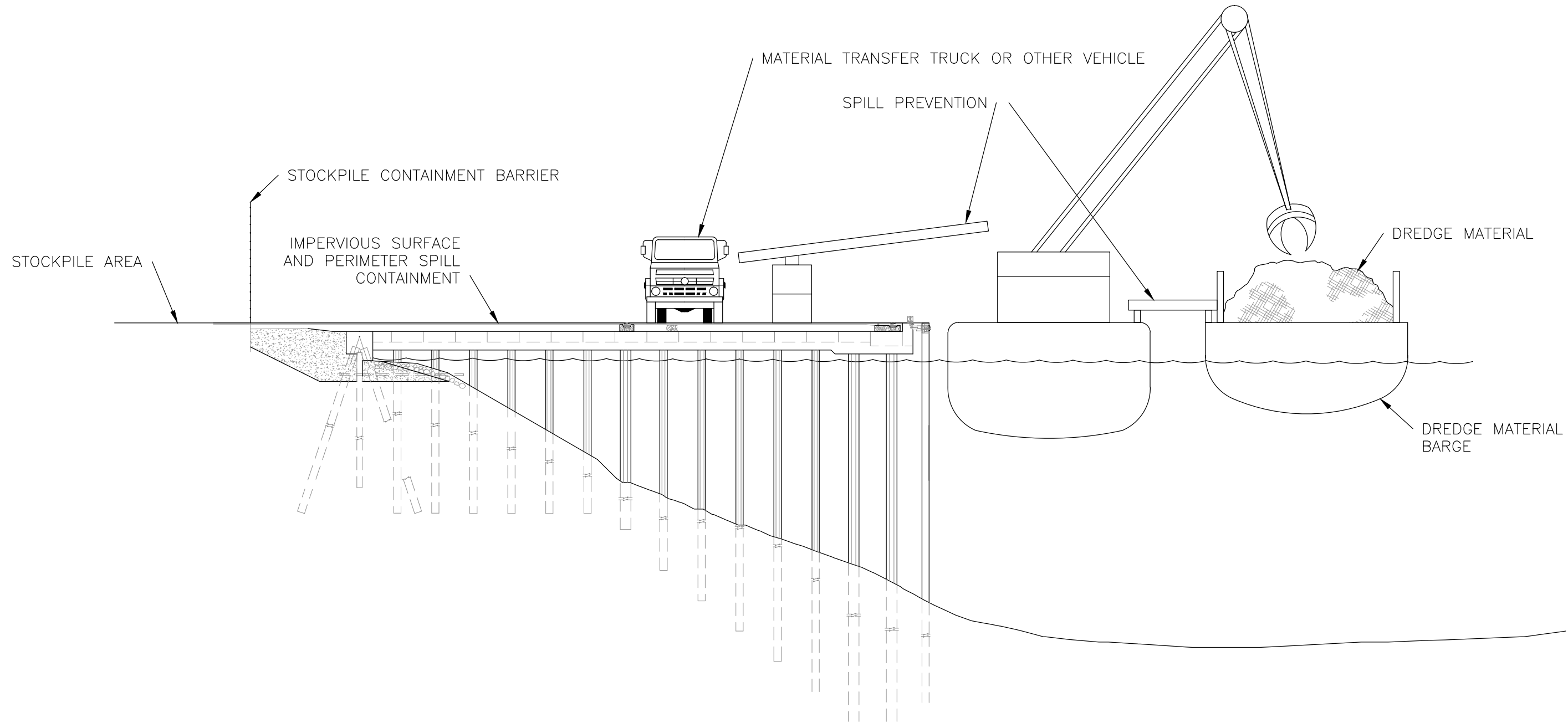
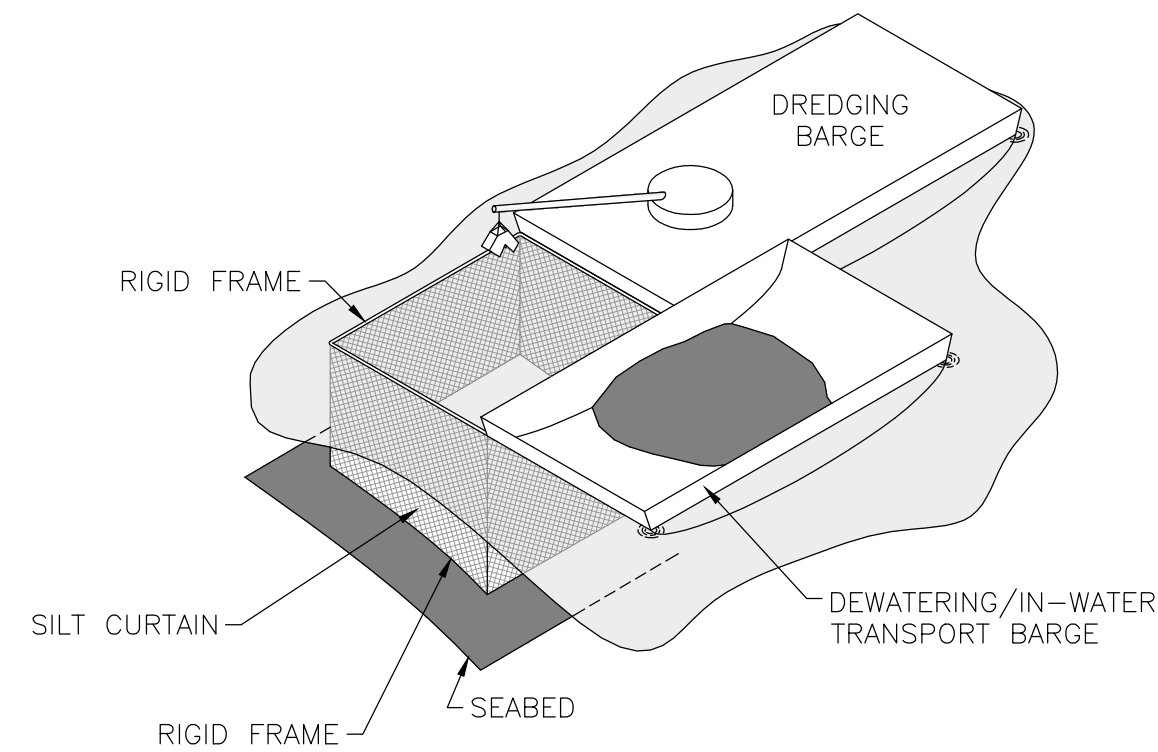
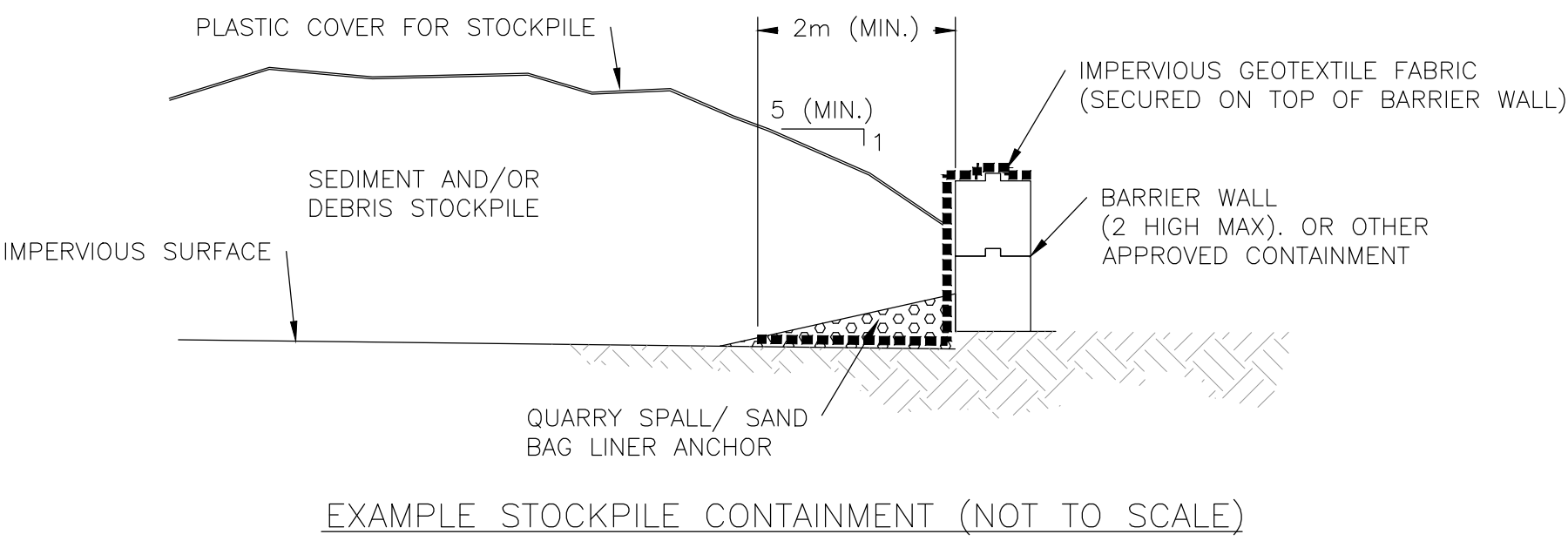
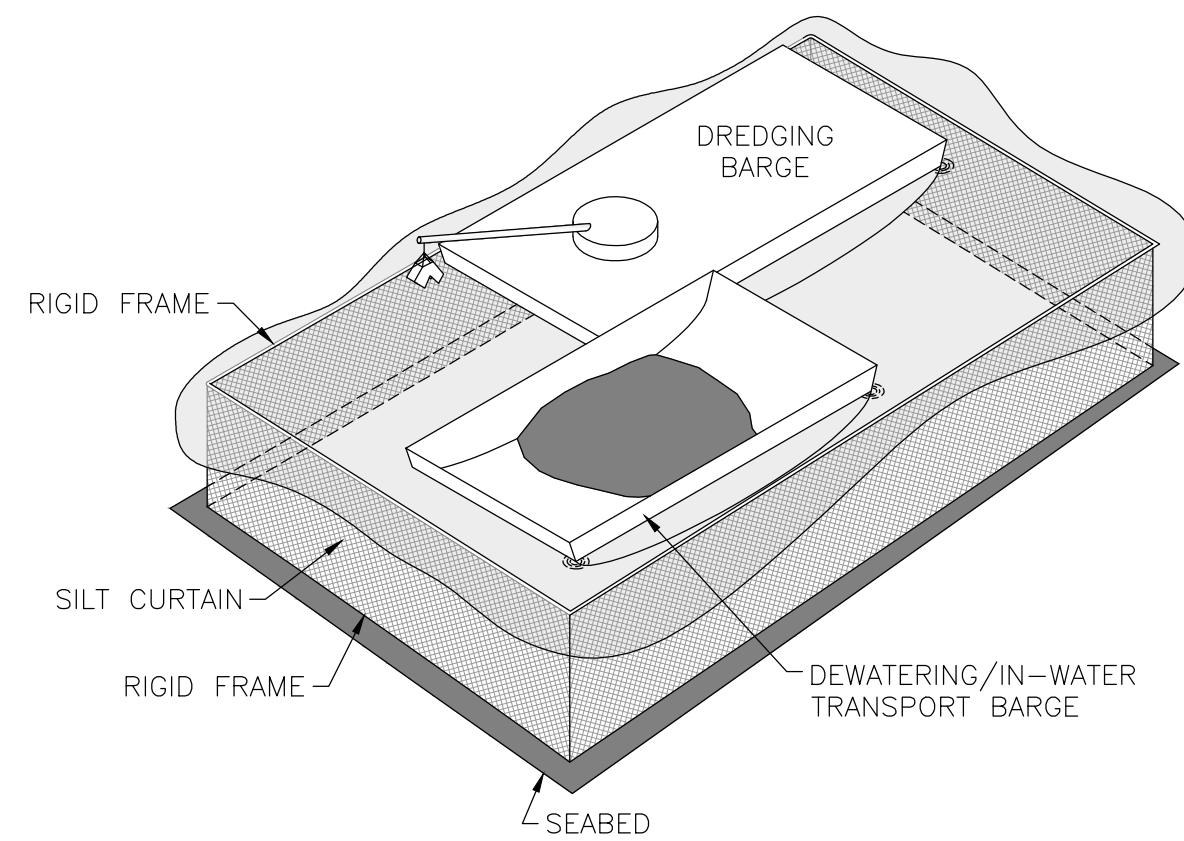


PHOTO 1: EXAMPLE OF OFFLOADING OPERATIONAL CONTROLS



PHOTO 2: EXAMPLE OF OFFLOADING OPERATIONAL CONTROLS



EXAMPLE ADDITIONAL TRB ARRANGEMENT #2 FOR MATERIAL TRANSFER (DREDGE BARGE TO MATERIAL BARGE): TRB SURROUNDING DREDGE BARGE AND MATERIAL BARGE; DREDGE BARGE AND MATERIAL BARGE LOCATED WITHIN THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA (NOT TO SCALE)

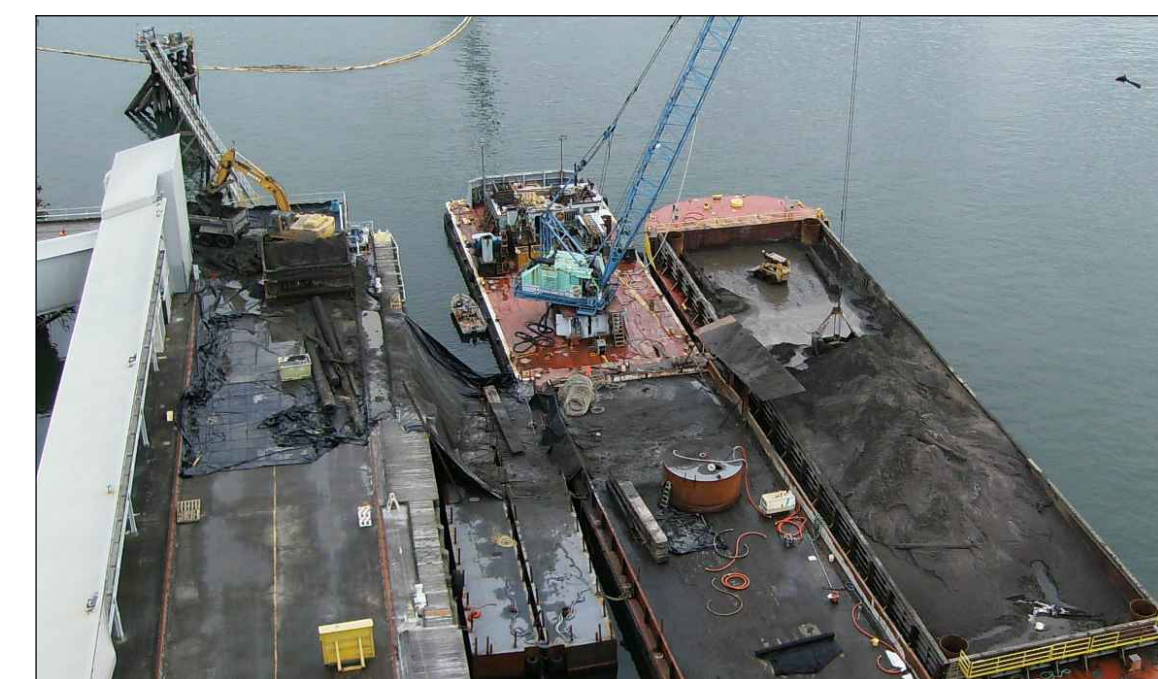
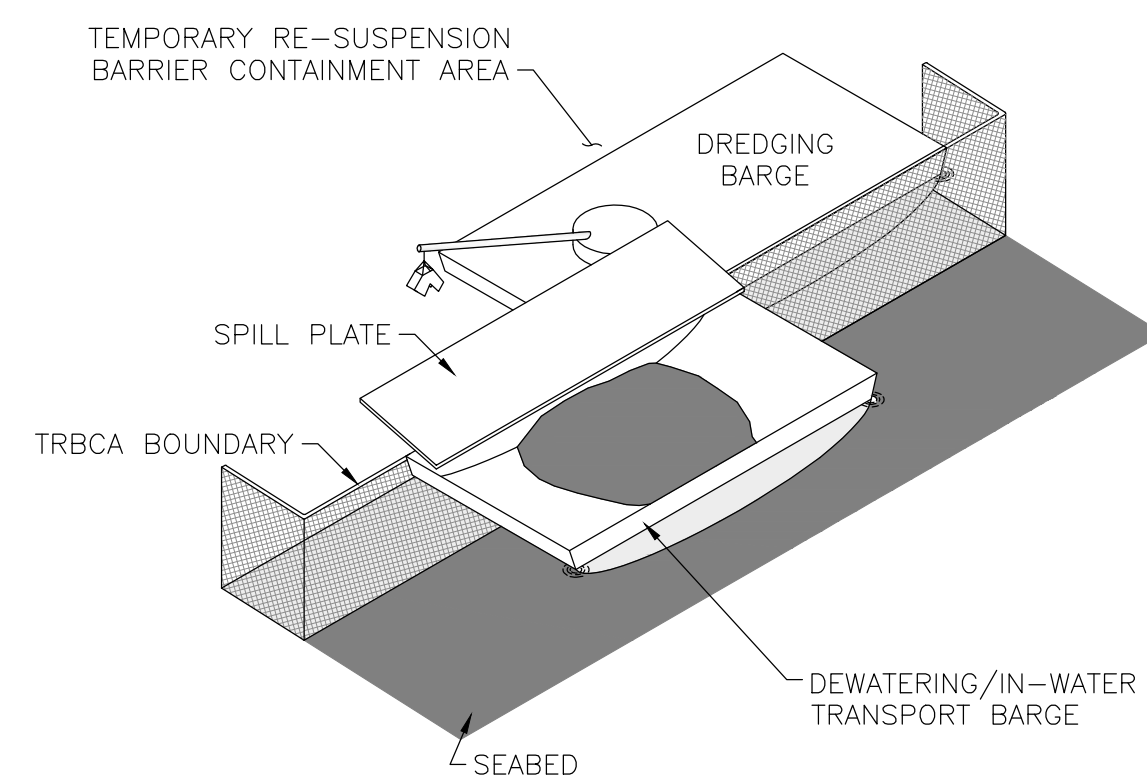


PHOTO 3: EXAMPLE OF OFFLOADING TO TRUCKS OPERATIONAL CONTROLS

EXAMPLE OFFLOAD FACILITY CONTROLS



EXAMPLE MATERIAL BARGE MOORAGE OUTSIDE OF TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA; USE OF SPILL PLATE ON MATERIAL BARGE TO PREVENT SPILLAGE OUTSIDE THE TRBCA; DREDGE BARGE LOCATED WITHIN THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA (NOT TO SCALE)

NOTES:

- EXAMPLE SILT CURTAIN ARRANGEMENTS ARE SHOWN AS CONCEPTUAL EXAMPLES OF TRB SYSTEMS ONLY. CONTRACTOR MAY ELECT TO USE ADDITIONAL TRB SYSTEMS AROUND THE DREDGE AND/OR DEWATERING BARGES TO ENSURE COMPLIANCE WITH WATER QUALITY CRITERIA.
- EXAMPLES SHOWN ARE FOR CONTRACTOR INFORMATION ONLY AND INTENDED TO SHOW EXAMPLE BEST MANAGEMENT PRACTICES. DESIGN AND OPERATIONS OF STOCKPILE MANAGEMENT AND OFFLOADING OPERATIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR. COMPLY WITH ALL CONTRACT DOCUMENTS, ENVIRONMENTAL MANAGEMENT PLAN, AND THE FEDERAL, PROVINCIAL, AND MUNICIPAL PERMIT REQUIREMENTS FOR OFFLOAD FACILITY AND STOCKPILING.
- PLACEMENT OF SEDIMENT NO MORE THAN 1.5 METRE HIGH IMMEDIATELY AGAINST BARRIER WALL IS A TYPICAL STANDARD OF PRACTICE IN STOCKPILE CONTAINMENT.
- MAINTAINING A SLOPE NO STEEPER THAN 5H:1V ADJACENT TO A BARRIER WALL IS A TYPICAL STANDARD OF PRACTICE IN STOCKPILE CONTAINMENT.
- SPILLS THAT OCCUR DURING OFFLOADING AND TRANSFER SHALL DRAIN ONTO BARGE OR WITHIN A CONTAINED UPLAND AREA. SPILL PROTECTION SHALL BE CONSTRUCTED FROM IMPERVIOUS MATERIAL.
- CONTRACTOR SHALL CLEAN OFFLOAD FACILITY DAILY.
- STOCKPILE CONTAINMENT DETAIL SHOWS SEDIMENT STACKED GREATER THAN 1.5 METRE HIGH FOR ILLUSTRATIVE PURPOSES ONLY. DEPICTION OF STACKED SEDIMENT DOES NOT INDICATE POTENTIAL WORKABILITY AND FLOW BEHAVIOR OF DREDGED MATERIAL, AND SHALL NOT BE USED BY THE CONTRACTOR AS BASIS FOR ANTICIPATING DREDGE MATERIAL CONDITIONS DURING THE WORK.
- CONTRACTOR SHALL SUBMIT STOCKPILE CONTAINMENT DESIGN DETAILS TO THE DEPARTMENTAL REPRESENTATIVE FOR REVIEW.
- BUCKET SWING RADIUS SHOULD NOT EXTEND PAST SPILL PREVENTION FEATURES.



Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

PUBLIC WORKS AND GOVERNMENT SERVICES CANADA

Project title/Titre du projet  
ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC

ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION

Consultant Signature Only

Designed by/Concept par  
MATT WOLTMAN  
Drawn by/Dessine par  
CHRIS HEWETT

PWSC Project Manager/Administrateur de Projets TPSGC  
ANDREW MYLLY

Regional Manager, Environmental Services  
COLLIN KINGMAN

Drawing title/Titre du dessin

MATERIAL OFFLOADING, HANDLING,  
STORAGE, AND TURBIDITY CONTROL  
DETAILS

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	C27	0





0	ISSUED FOR TENDER	2014/12/19
Revision/Revision	Description/Description	Date/Date
Client/client		

**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
 825 ADMIRALS ROAD, VICTORIA, BC**

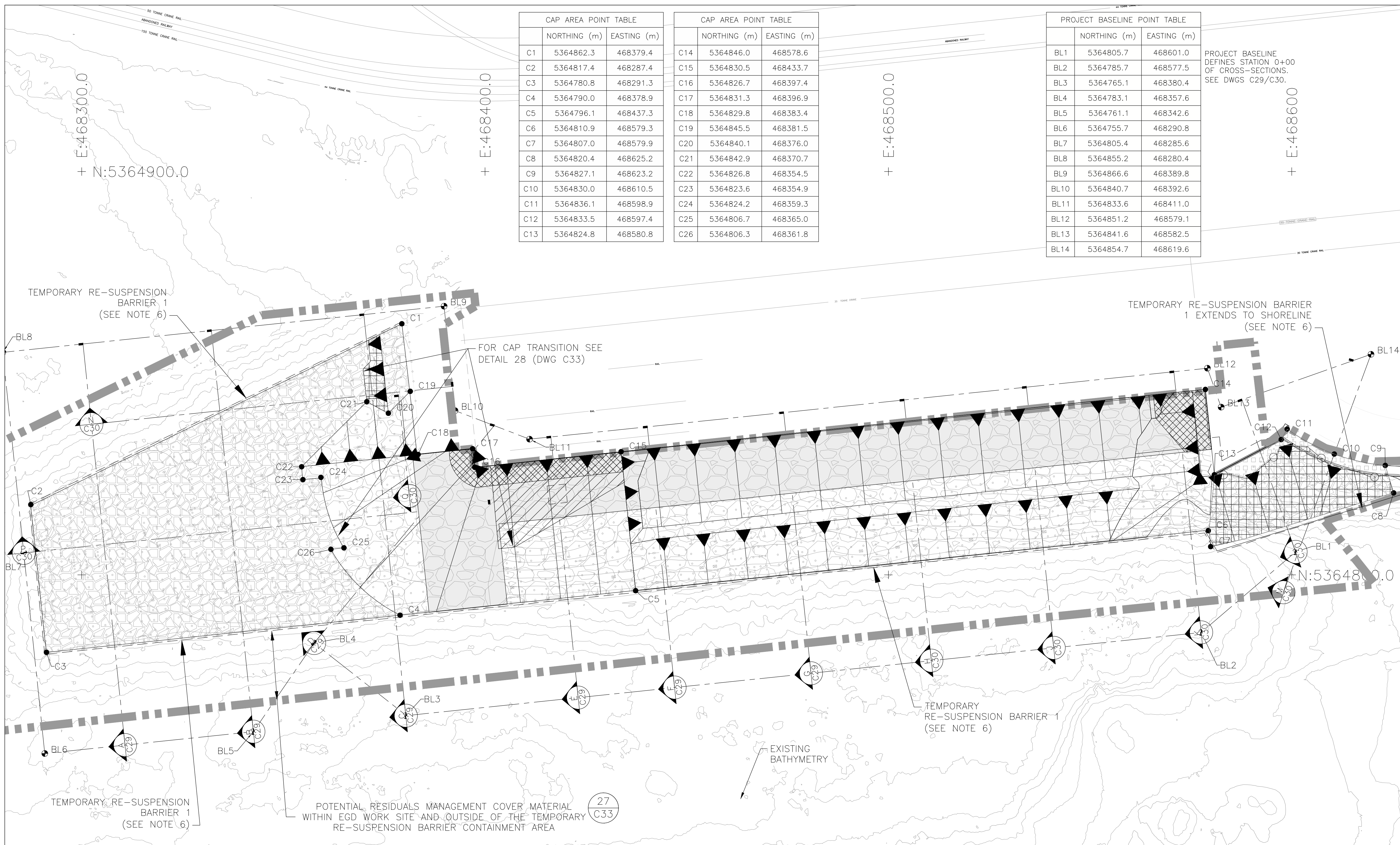
**ESQUIMALT GRAVING DOCK  
 WATERLOT PHASE 2  
 SOUTH JETTY UNDER-PIER  
 SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
**MATT WOLTMAN**  
 Drawn by/Dessiné par  
**CHRIS HEWETT**  
 PWGSC Project Manager/Administrateur de Projets TPSGC  
**ANDREW MYLLY**  
 Regional Manager, Environmental Services  
**COLLIN KINGMAN**

Drawing title/Titre du dessin  
**ENGINEERED CAPPING PLAN**

Project No./No. du projet <b>R.018400.002</b>	Sheet/ <b>C28</b>	Revision no./ <b>0</b>
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CAP AREA POINT TABLE		
	NORTHING (m)	EASTING (m)
C1	5364862.3	468379.4
C2	5364817.4	468287.4
C3	5364780.8	468291.3
C4	5364790.0	468378.9
C5	5364796.1	468437.3
C6	5364810.9	468579.3
C7	5364807.0	468579.9
C8	5364820.4	468625.2
C9	5364827.1	468623.2
C10	5364830.0	468610.5
C11	5364836.1	468598.9
C12	5364833.5	468597.4
C13	5364824.8	468580.8

CAP AREA POINT TABLE		
	NORTHING (m)	EASTING (m)
C14	5364846.0	468578.6
C15	5364830.5	468433.7
C16	5364826.7	468397.4
C17	5364831.3	468396.9
C18	5364829.8	468383.4
C19	5364845.5	468381.5
C20	5364840.1	468376.0
C21	5364842.9	468370.7
C22	5364826.8	468354.5
C23	5364823.6	468354.9
C24	5364824.2	468359.3
C25	5364806.7	468365.0
C26	5364806.3	468361.8

PROJECT BASELINE POINT TABLE		
	NORTHING (m)	EASTING (m)
BL1	5364805.7	468601.0
BL2	5364785.7	468577.5
BL3	5364765.1	468380.4
BL4	5364783.1	468357.6
BL5	5364761.1	468342.6
BL6	5364755.7	468290.8
BL7	5364805.4	468285.6
BL8	5364855.2	468280.4
BL9	5364866.6	468389.8
BL10	5364840.7	468392.6
BL11	5364833.6	468411.0
BL12	5364851.2	468579.1
BL13	5364841.6	468582.5
BL14	5364854.7	468619.6

PROJECT BASELINE DEFINES STATION 0+00 OF CROSS-SECTIONS. SEE DWGS C29/C30.

- NOTES:**
- UNDERPIER AREA LOWER INTERTIDAL AND SUBTIDAL BATHYMETRY WITHIN THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA IS FROM FEBRUARY 2009, JUNE 2010 AND JANUARY 2011 CRA CANADA SURVEYS LTD. MULTI BEAM SURVEY. UPPER INTERTIDAL ELEVATIONS FROM SEPTEMBER 2009 AND JULY 2011 SURVEY BY FOCUS CORPORATION. OPEN WATER AREAS OUTSIDE OF THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA WERE DREDGED AS PART OF THE PHASE 1B OPEN-WATER REMEDIATION PROJECT. OPEN WATER BATHYMETRY SURVEY WAS CONDUCTED BY CRA CANADA SURVEYS, INC. FOLLOWING COMPLETION OF PHASE 1B WORK.
  - BASE MAP FROM GOLDER, JANUARY 2012.
  - STRUCTURE DETAILS FROM KLOHN CRIPPEN BERGER DECEMBER 2010 CONDITION INSPECTION REPORT FOR SOUTH JETTY PERIMETER, NADEN FLOATS, AND CFSA FLOATS.
  - REFERENCE DWG C1 FOR DATUM INFORMATION.
  - REFER TO TECHNICAL SPECIFICATIONS REGARDING WORK SEQUENCING AND REMEDIATION ZONES.
  - CONTRACTOR (AND 3RD PARTY VENDOR) SHALL DESIGN, INSTALL AND MAINTAIN TRBS IN ACCORDANCE WITH THE SPECIFICATIONS. CONTRACTOR TO PROVIDE TRB LAYOUT AND DESIGN DETAILS IN THE ENVIRONMENTAL PROTECTION PLAN.

- LEGEND:**
- 14.0--- BATHYMETRY IN METRES
  - TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA (SEE DWG C32 FOR CONTROL POINTS)
  - EGD WORK SITE BOUNDARY
  - ▲ CAP SLOPE DESIGNATION
  - ORDINARY HIGH WATER LINE
  - TYPE 1 ENGINEERED CAP: 0.15-METRE ROCK ARMOUR LAYER OVER FILTER LAYER OVER SAND (TYPE 1) LAYER. SEE DETAIL 22 (DWG C33)
  - TYPE 2 ENGINEERED CAP: 0.15-METRE ROCK ARMOUR LAYER OVER FILTER LAYER OVER SAND (TYPE 2) LAYER. SEE DETAIL 23 (DWG C33)
  - TYPE 3 ENGINEERED CAP: 0.30-METRE ROCK ARMOUR LAYER OVER FILTER LAYER OVER SAND (TYPE 2) LAYER. SEE DETAIL 24 (DWG C33)
  - TYPE 4 ENGINEERED CAP: 0.30-METRE ROCK ARMOUR LAYER OVER FILTER LAYER OVER SAND (TYPE 3) LAYER. SEE DETAIL 25 (DWG C33)
  - TYPE 5 ENGINEERED CAP: 0.15-METRE ROCK ARMOUR. SEE DETAIL 26 (DWG C33)

**CAPPING PLAN**  
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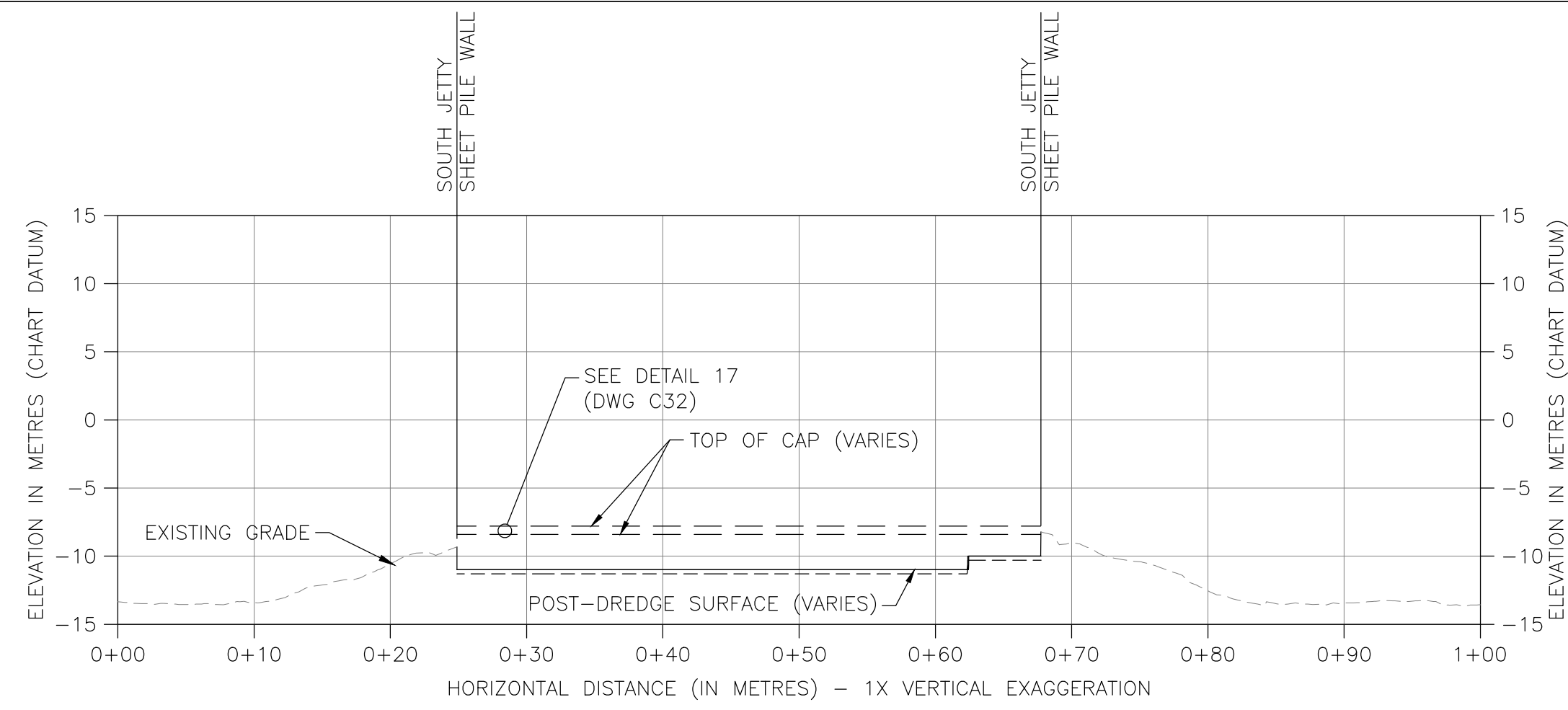
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0m 10 20 30 40 50m

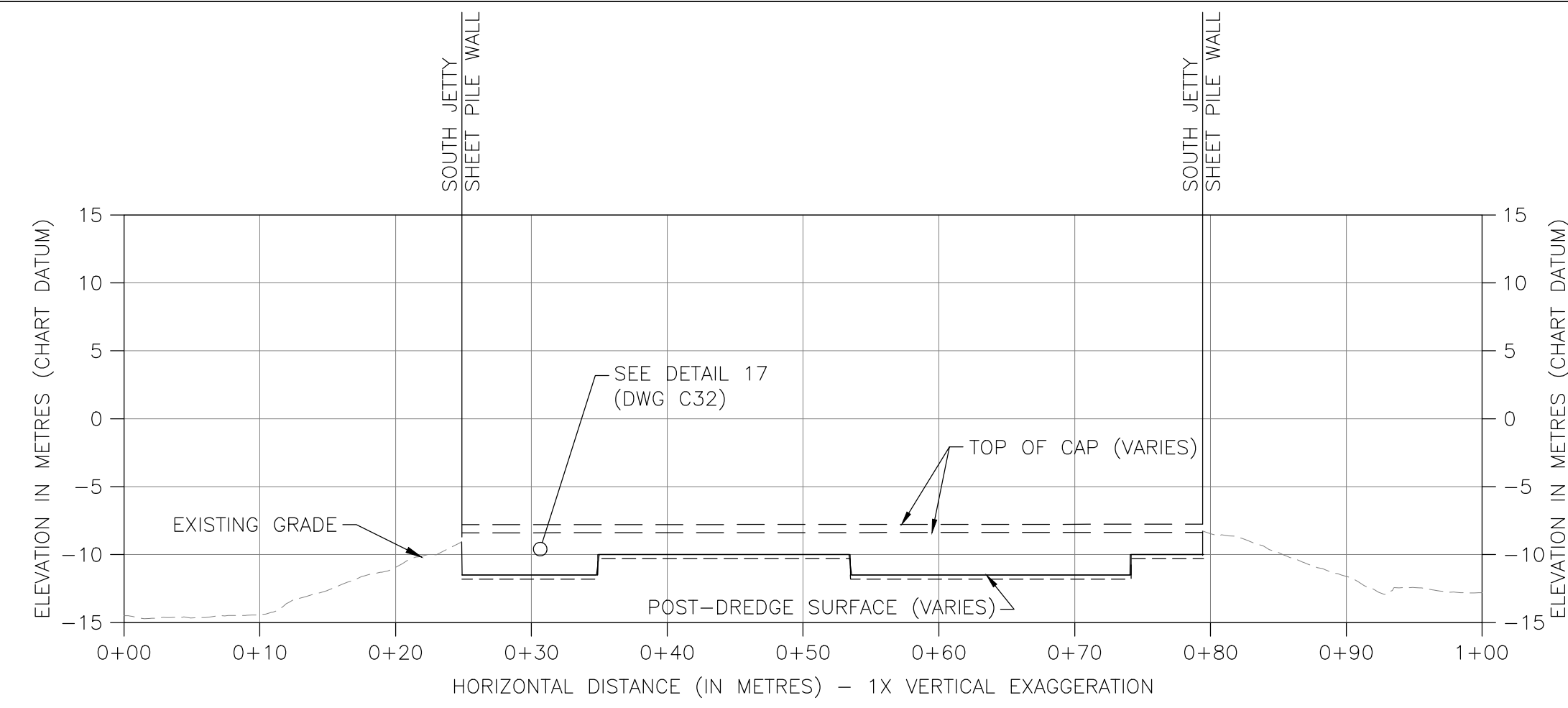
BASE LINE CONTROL POINT  
 CAPPING AREA CONTROL POINT

IMPERMEABLE GEOSYNTHETIC MATERIAL

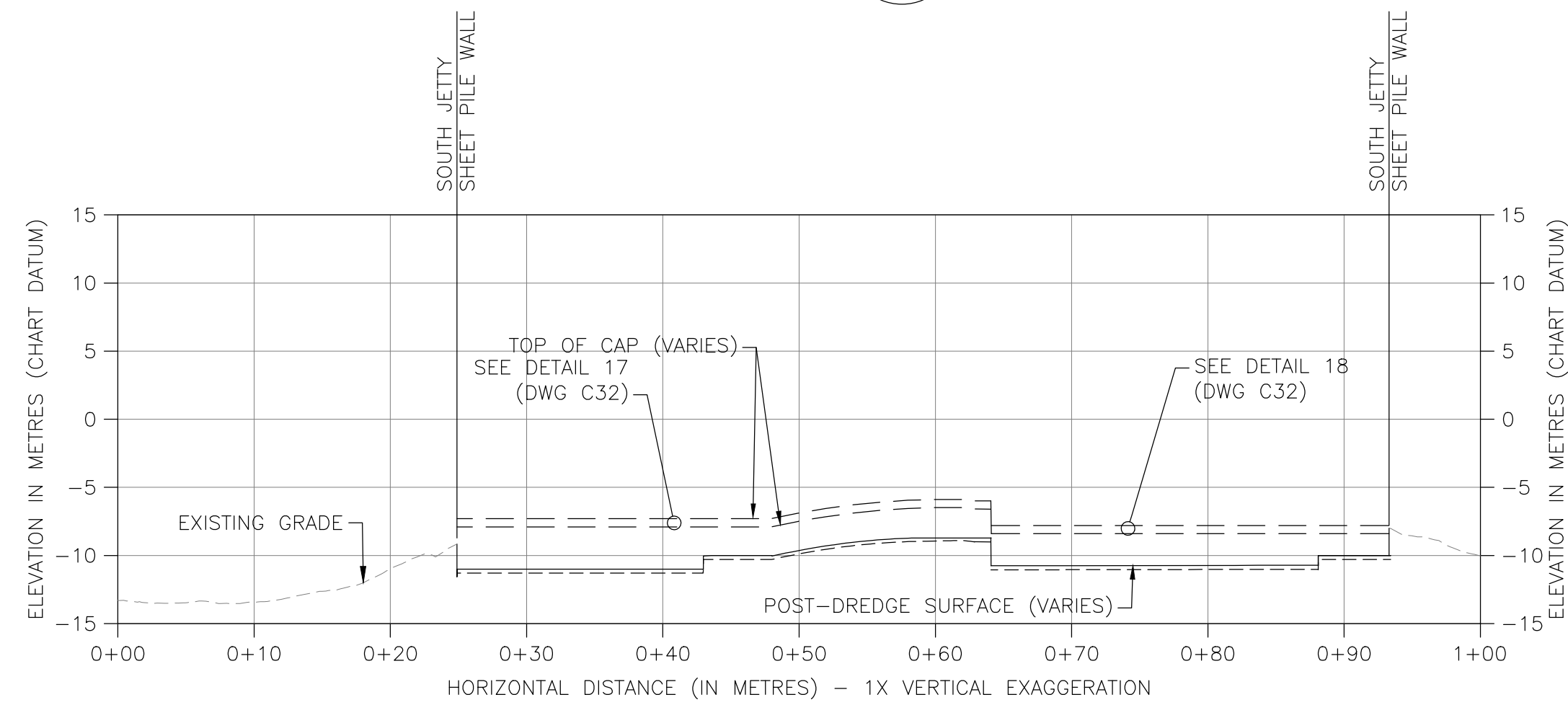




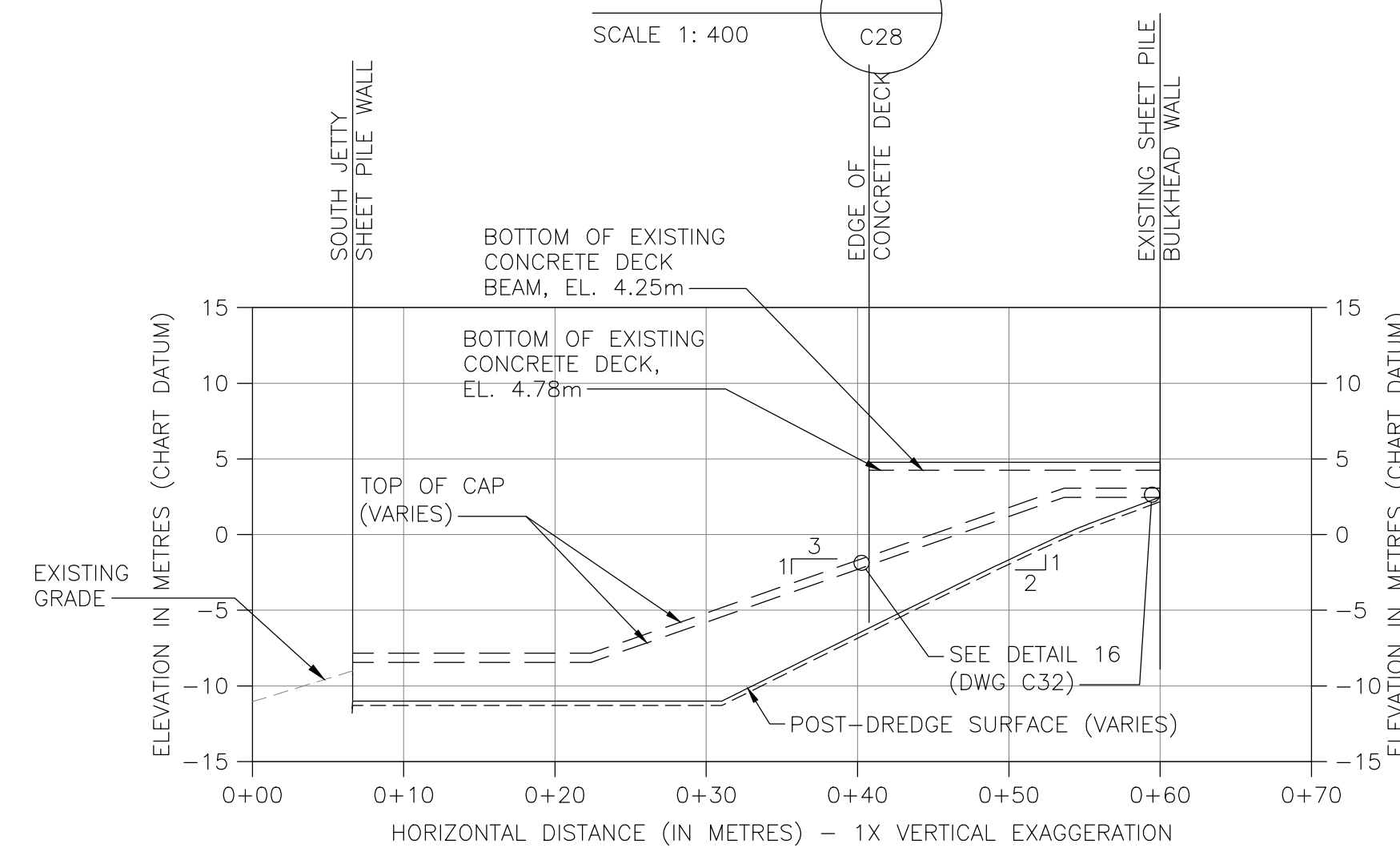
SECTION A  
SCALE 1: 400  
C28



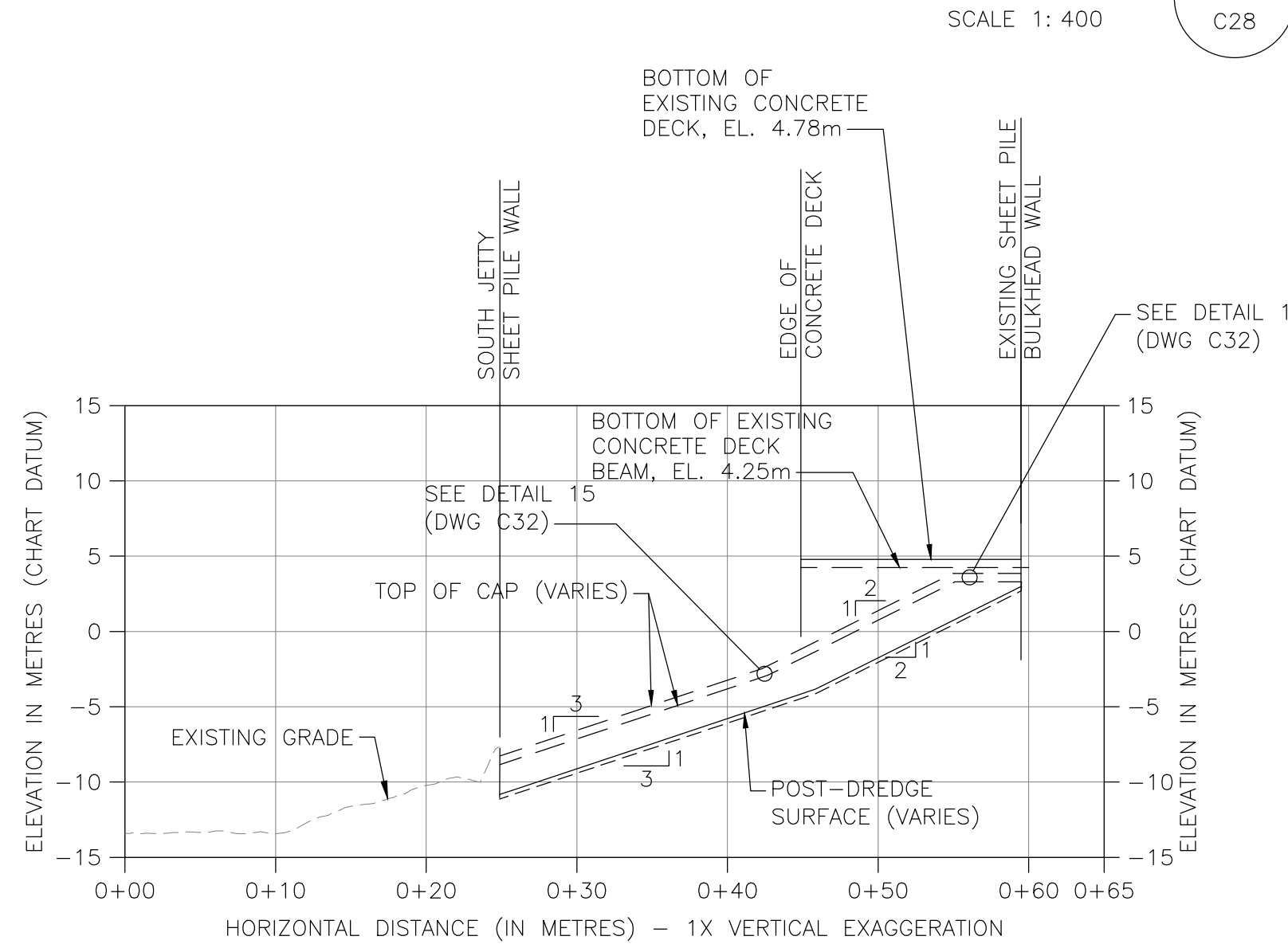
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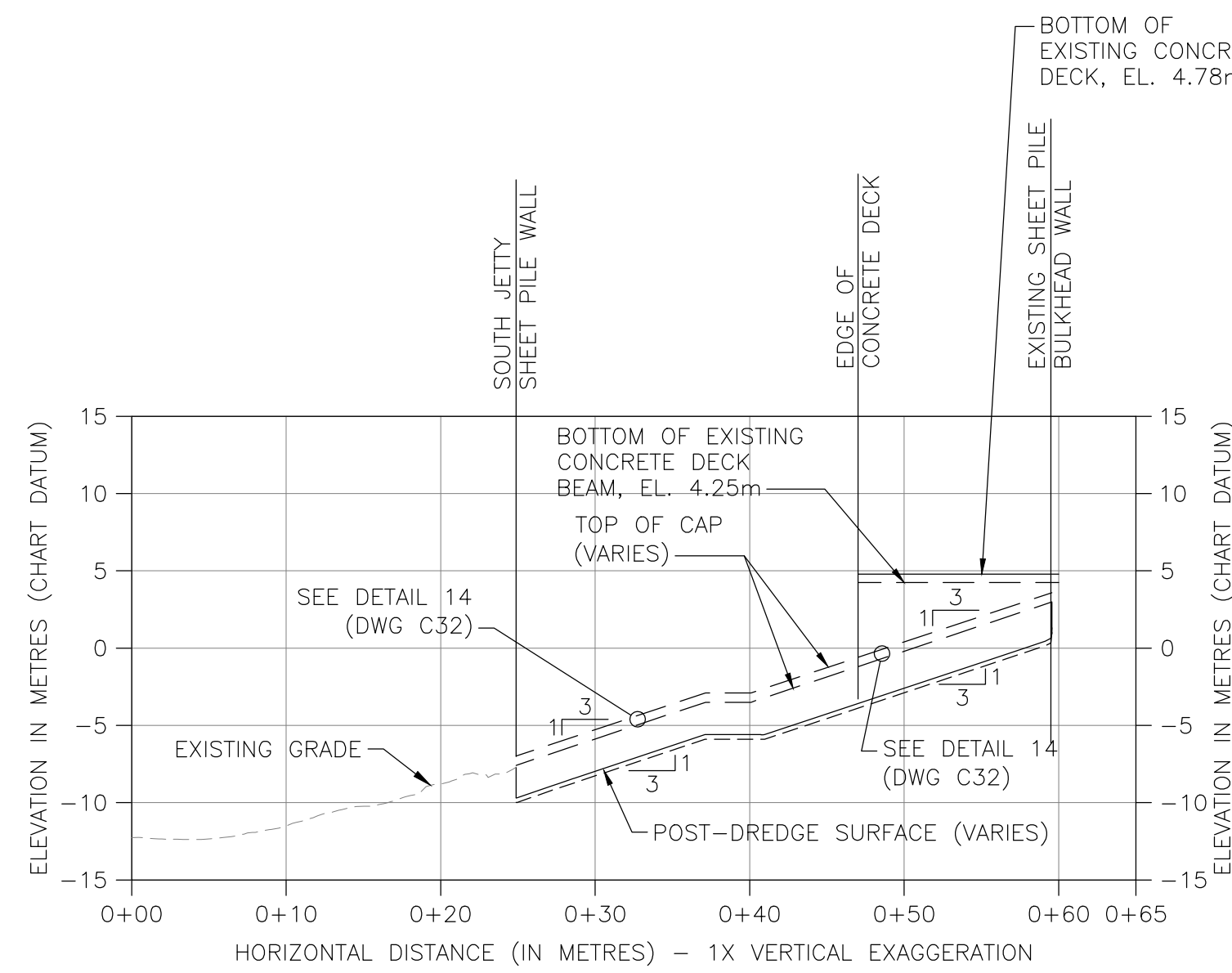
SECTION C  
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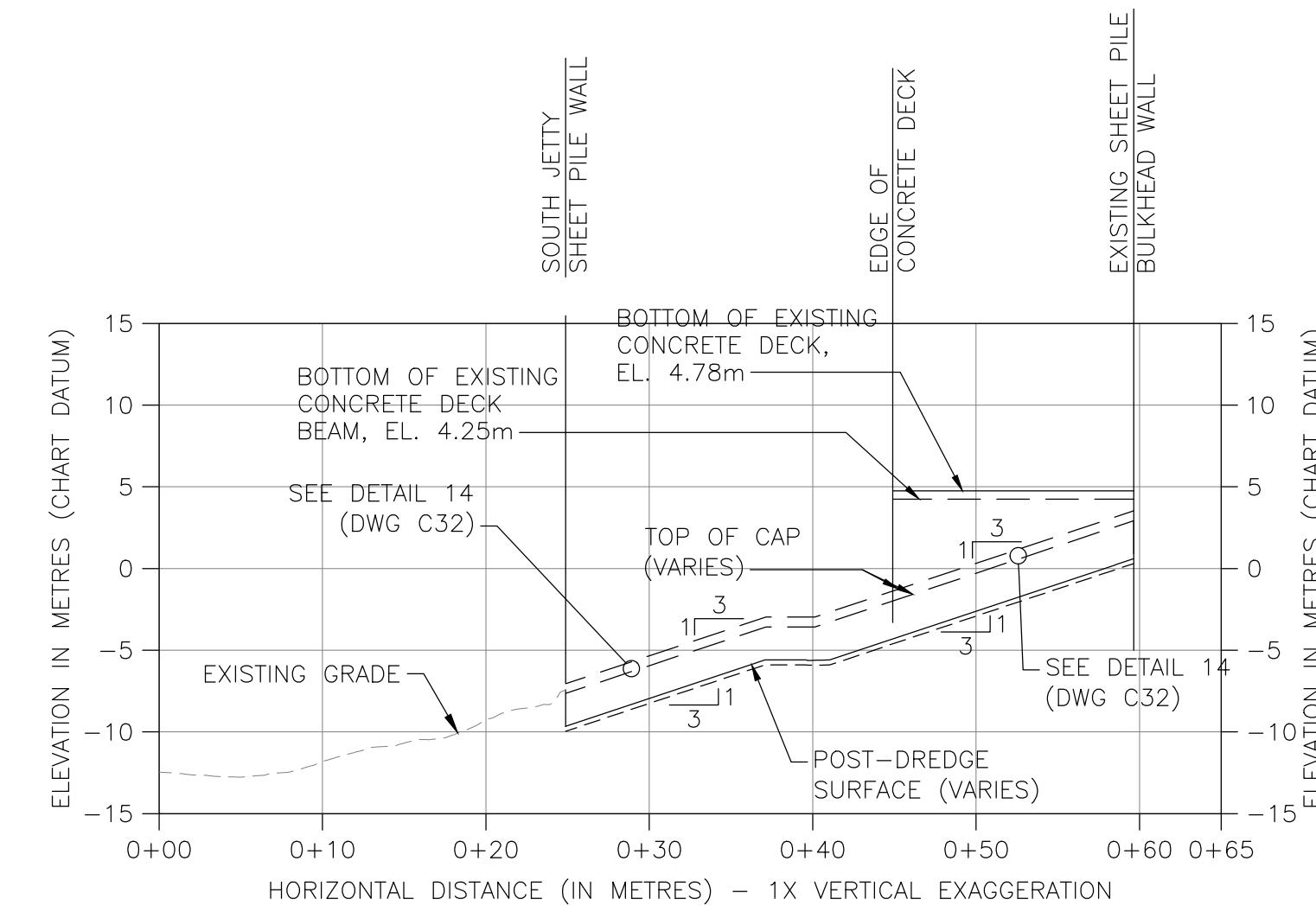
SECTION D  
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C28



SECTION E  
SCALE 1: 400  
C28



SECTION F  
SCALE 1: 400  
C28



SECTION G  
SCALE 1: 400  
C28

HORIZONTAL DATUM: UTM ZONE 10 GRID, NAD83.  
VERTICAL DATUM: CHART DATUM (C.D.)

NOTES:

1. UNDERPIER AREA LOWER INTERTIDAL AND SUBTIDAL BATHYMETRY WITHIN THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA IS FROM FEBRUARY 2009, JUNE 2010 AND JANUARY 2011 CRA CANADA SURVEYS LTD. MULTI BEAM SURVEY. UPPER INTERTIDAL ELEVATIONS FROM SEPTEMBER 2009 AND JULY 2011 SURVEY BY FOCUS CORPORATION. OPEN WATER AREAS OUTSIDE OF THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA WERE DREDGED AS PART OF THE PHASE 1B OPEN-WATER REMEDIATION PROJECT. OPEN WATER BATHYMETRY SURVEY WAS CONDUCTED BY CRA CANADA SURVEYS, INC. ON 2014/03/05 FOLLOWING COMPLETION OF PHASE 1B WORK.
2. REFERENCE DWG C1 FOR DATUM INFORMATION.
3. TOP OF ENGINEERED CAP SURFACES REPRESENT MINIMUM PLACEMENT THICKNESS AND MAXIMUM OVERPLACEMENT ALLOWANCES.
4. TOP OF ENGINEERED CAP SHOWN ON CROSS SECTIONS IN 2H:1V DREDGE SLOPE AREAS OF THE AREAS OF WORK NEAR EXISTING SHEET PILE BULKHEAD WALL HAVE VARIABLE THICKNESS REQUIREMENTS THAT ARE NEEDED TO CONSTRUCT THE TYPE 3 SEDIMENT CAP TO A STABLE 3H:1V GRADE.
5. EXISTING TIMBER-PILED STRUCTURE NOT SHOWN FOR CLARITY.
6. CONTRACTOR SHALL REFERENCE THE 1985 STEEL-PILED DECK AS-BUILT DRAWINGS FOR DETAILS REGARDING CROSS SECTIONS THROUGH THE STEEL-PILED JETTY STRUCTURE, SHEETPILE BULKHEAD WALL, AND CONCRETE L-WALL.



0	ISSUED FOR TENDER	2014/12/19
Revision/	Description/Description	Date/Date

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**  
**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

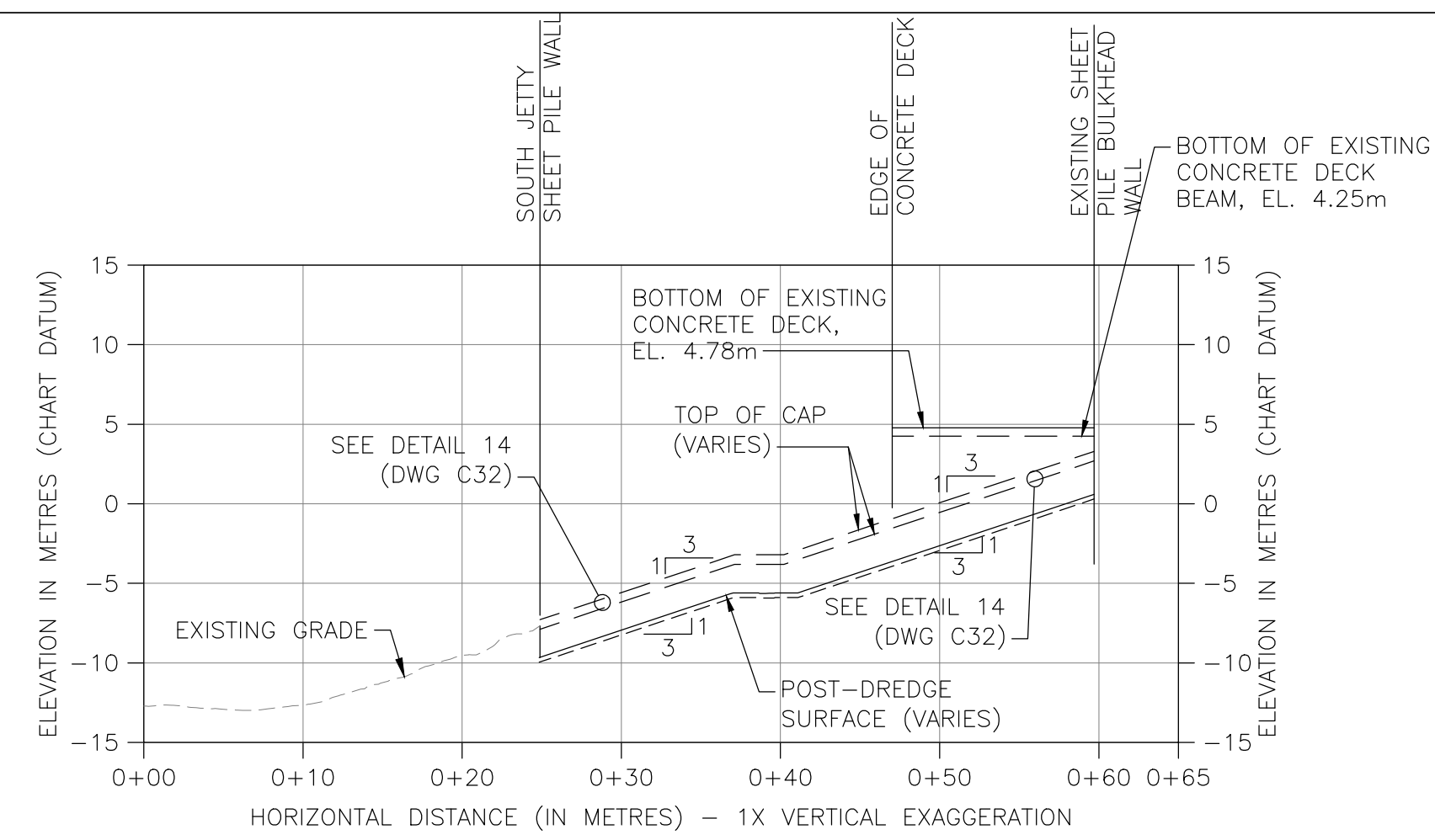
Consultant Signature Only

Designed by/Concept par  
**MATT WOLTMAN**  
Drawn by/Dessiné par  
**CHRIS HEWETT**  
PWGSC Project Manager/Administrateur de Projets TPSGC  
**ANDREW MYLLY**  
Regional Manager, Environmental Services  
**COLLIN KINGMAN**  
Drawing title/Titre du dessin

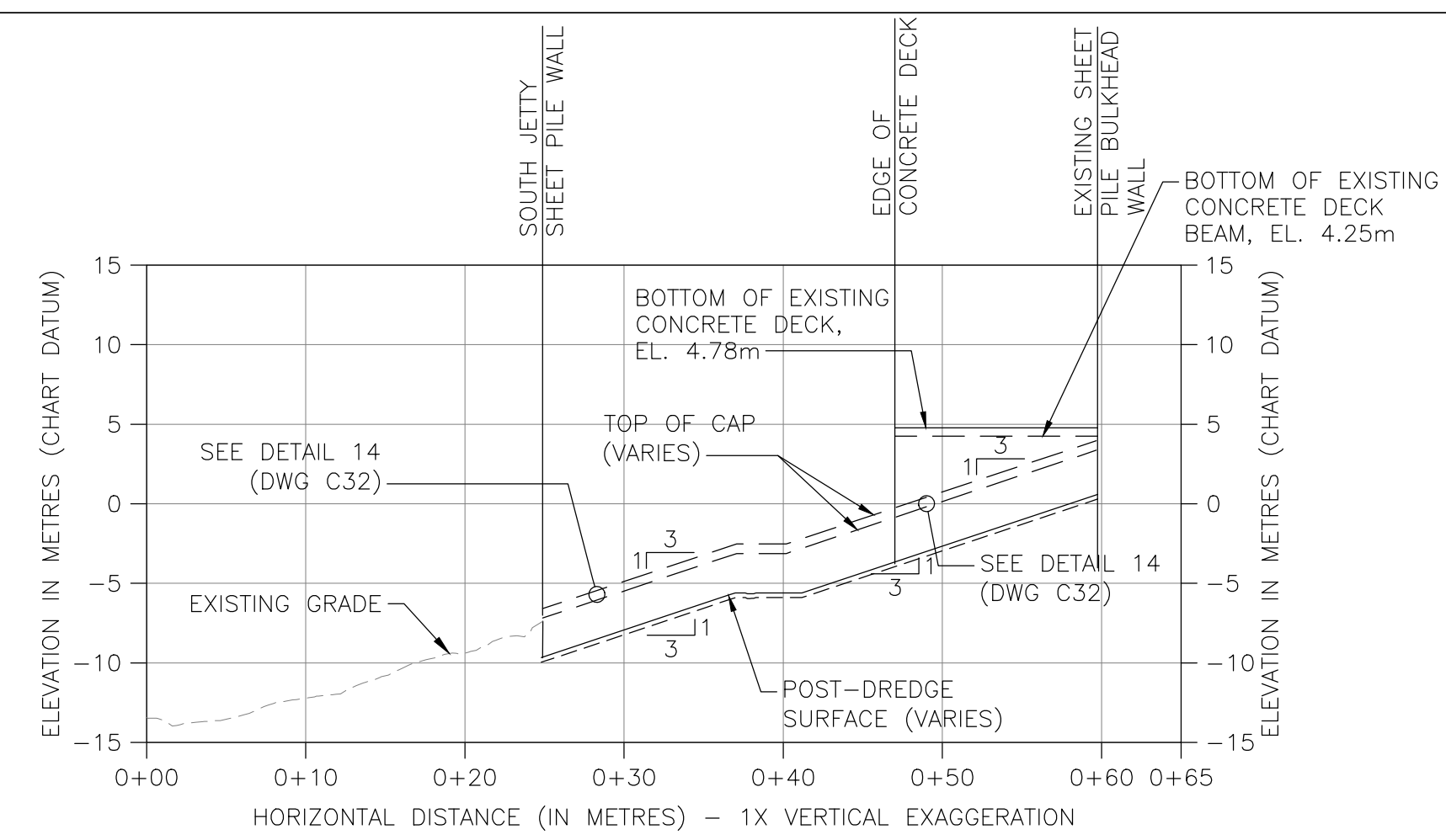
**ENGINEERED CAPPING  
CROSS SECTIONS - SHEET 1**

Project No./No. du projet <b>R.018400.002</b>	Sheet/ <b>C29</b>	Revision no./ <b>0</b>
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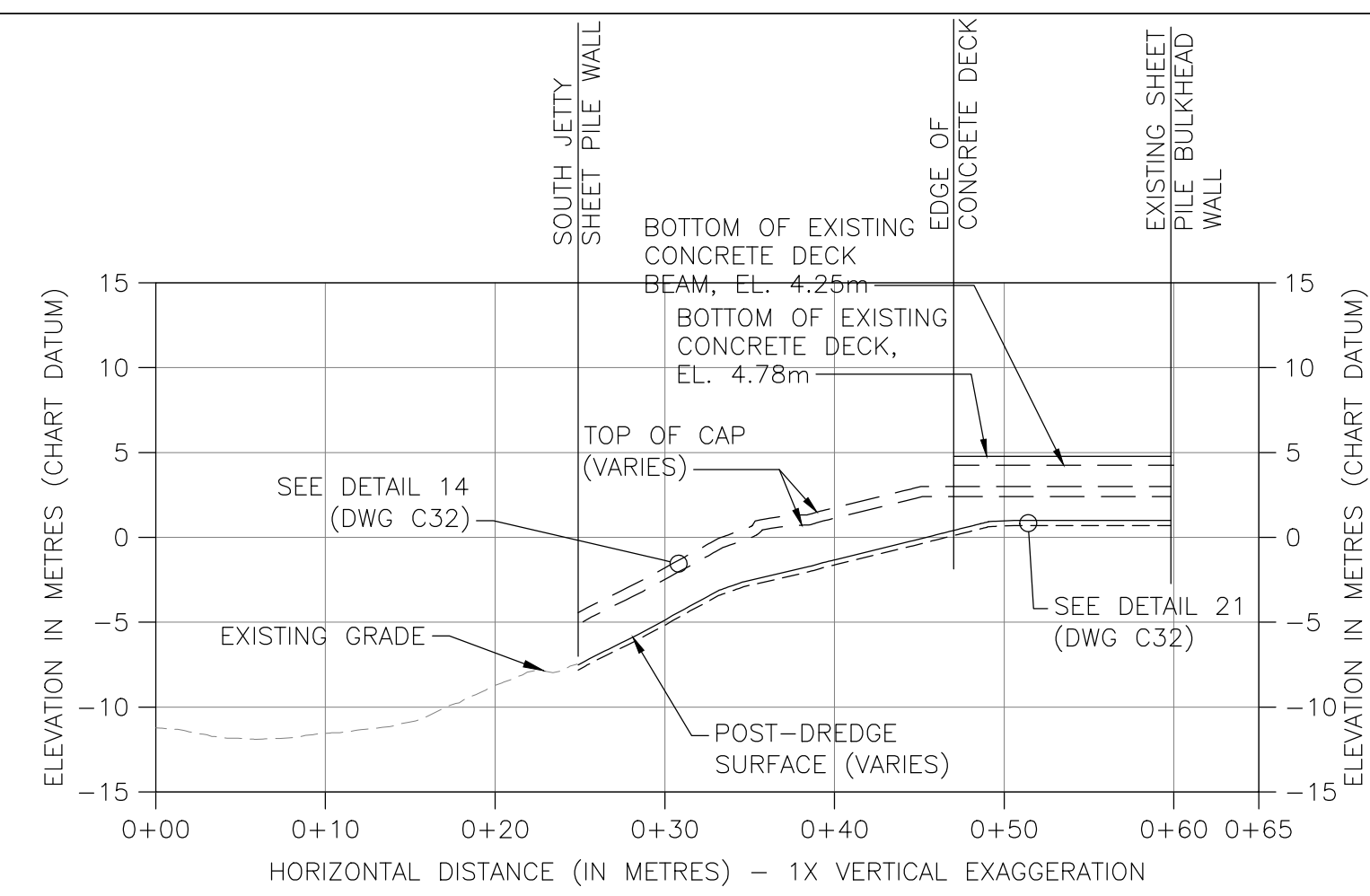




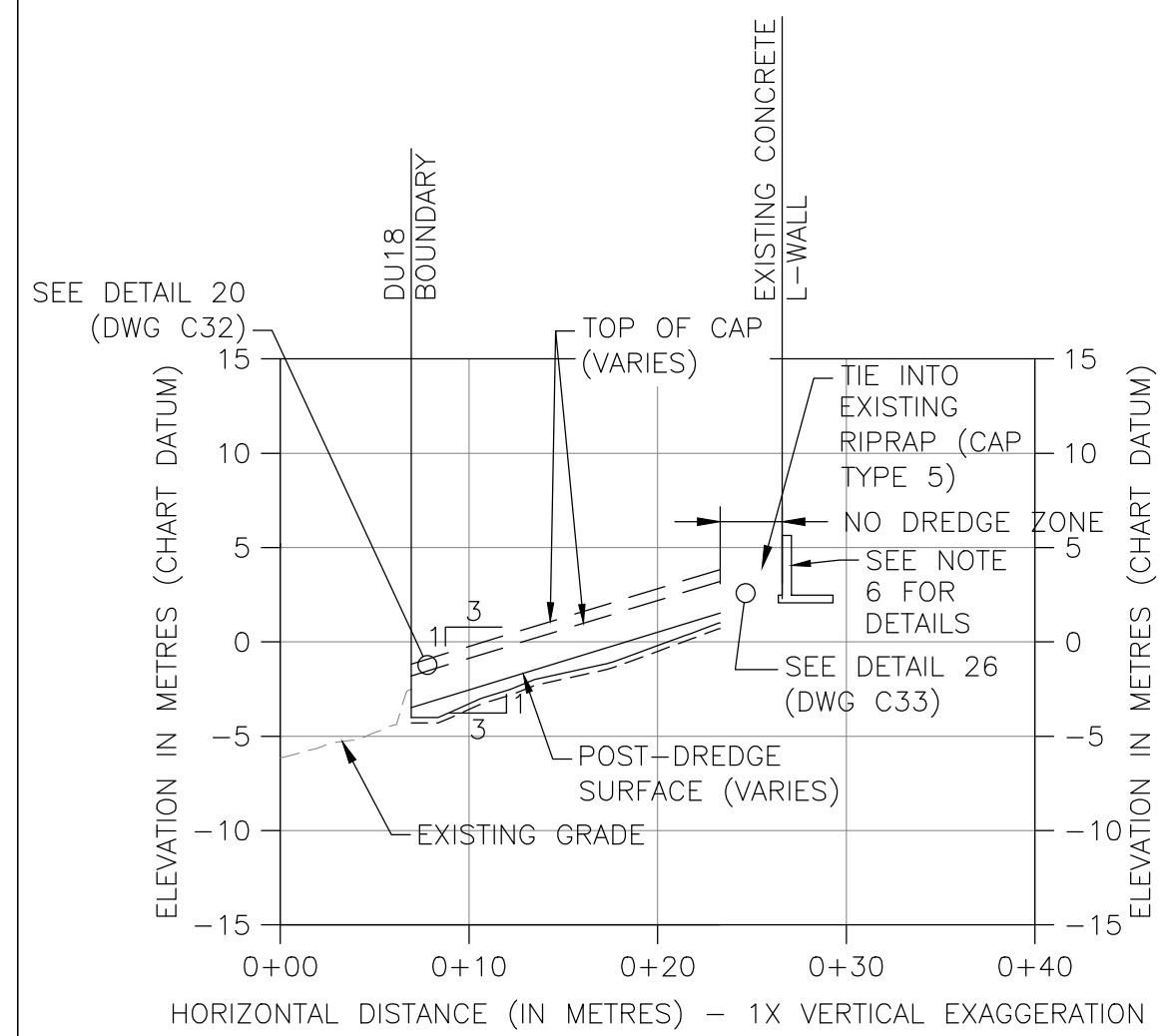
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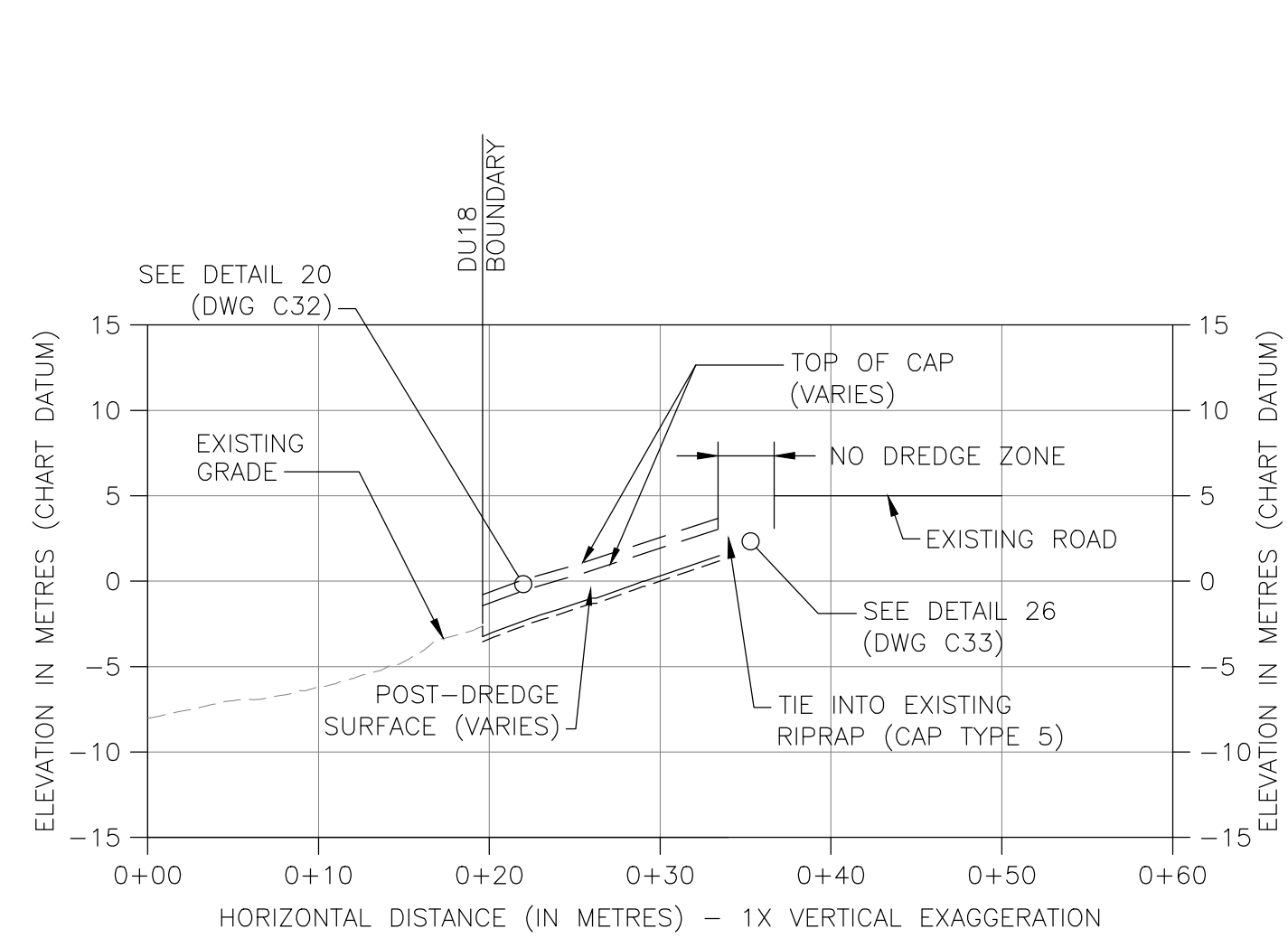
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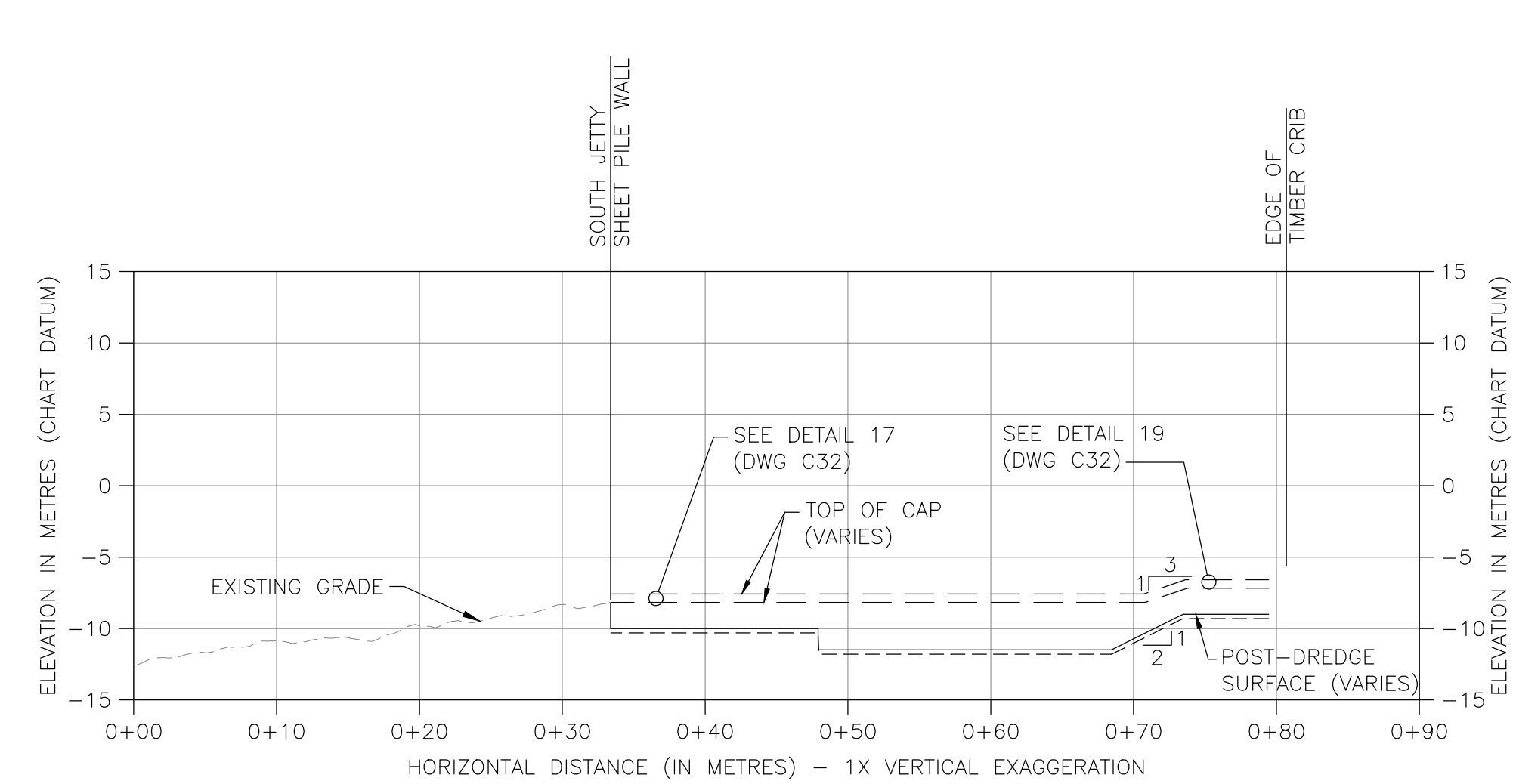
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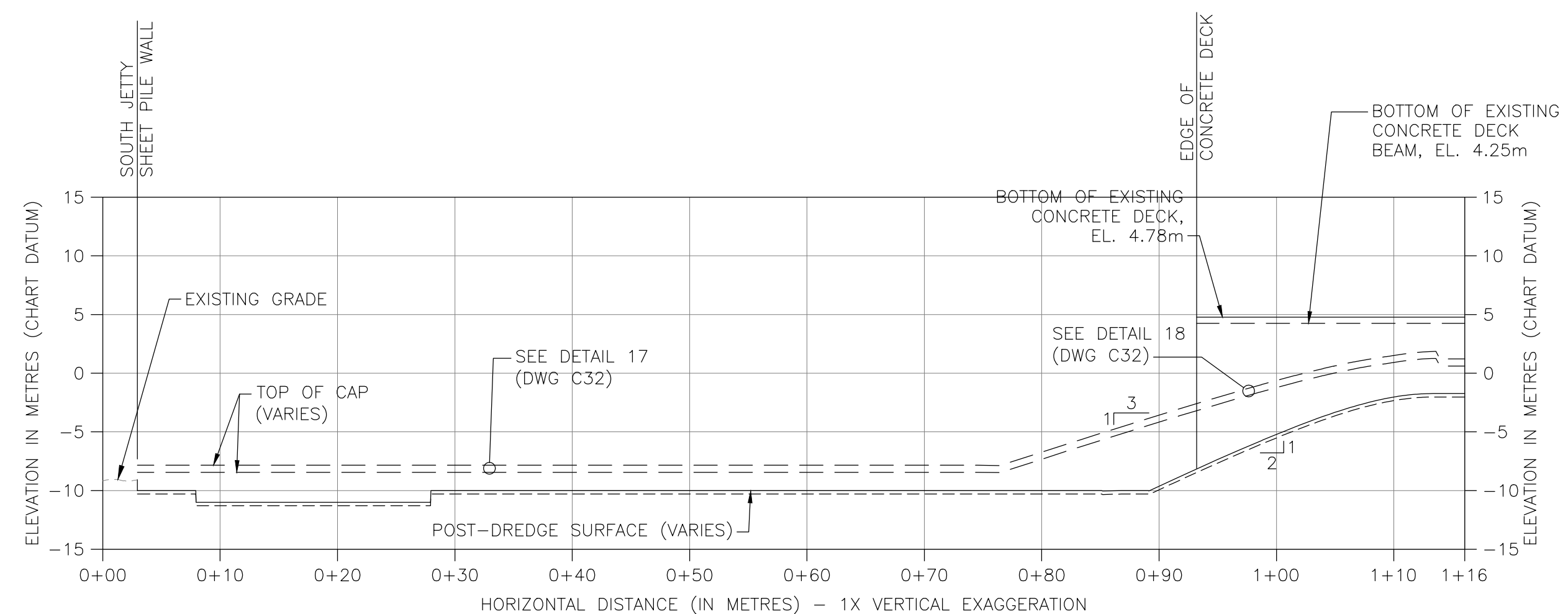
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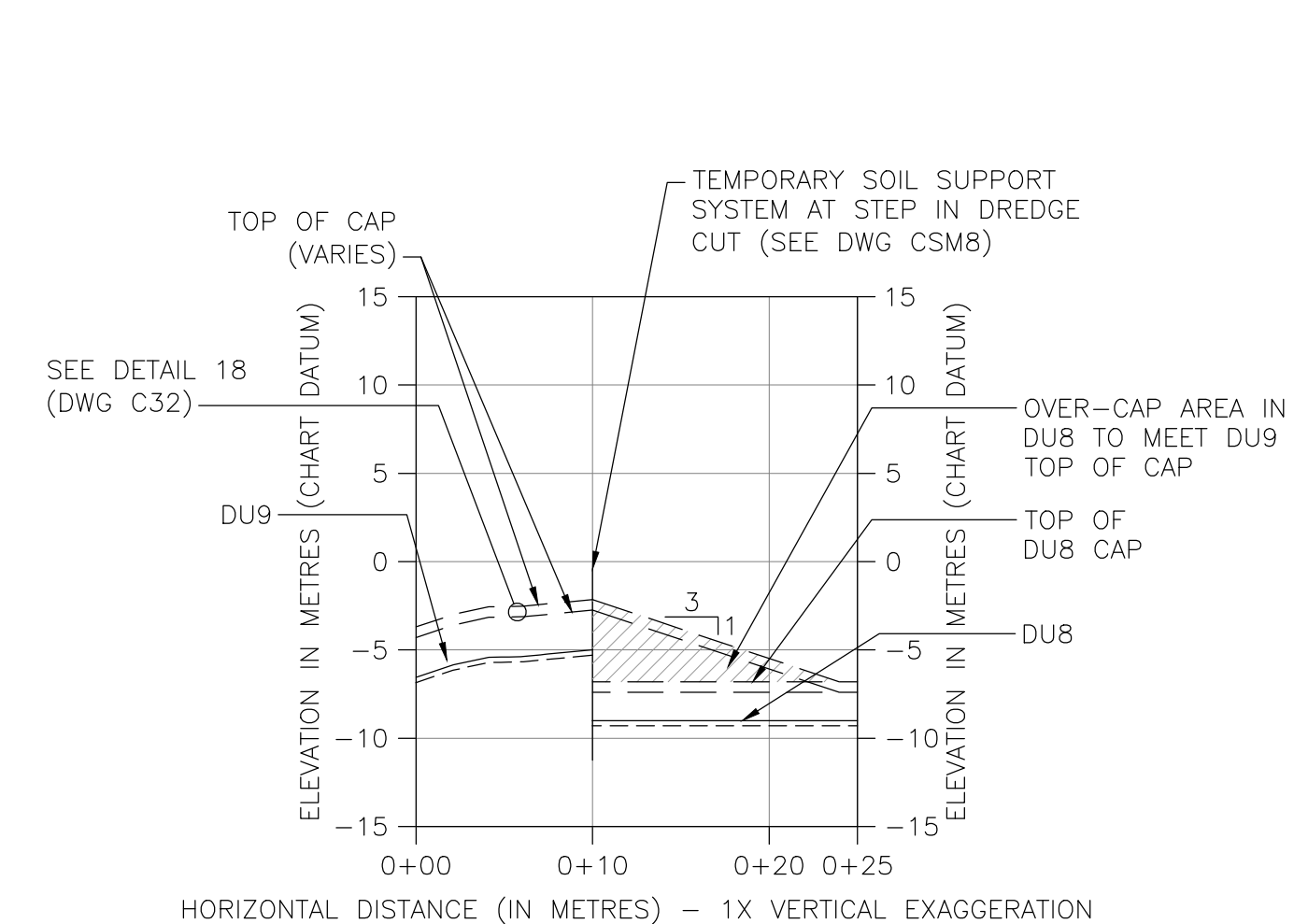
SECTION M SCALE 1: 400 C28



SECTION N SCALE 1: 400 C28



SECTION P SCALE 1: 400 C28



SECTION Q SCALE 1: 400 C28

HORIZONTAL DATUM: UTM ZONE 10 GRID, NAD83.  
VERTICAL DATUM: CHART DATUM (C.D.)

- NOTES:**
- UNDERPIER AREA LOWER INTERTIDAL AND SUBTIDAL BATHYMETRY WITHIN THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA IS FROM FEBRUARY 2009, JUNE 2010 AND JANUARY 2011 CRA CANADA SURVEYS LTD. MULTI BEAM SURVEY. UPPER INTERTIDAL ELEVATIONS FROM SEPTEMBER 2009 AND JULY 2011 SURVEY BY FOCUS CORPORATION. OPEN WATER AREAS OUTSIDE OF THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA WERE DREDGED AS PART OF THE PHASE 1B OPEN-WATER REMEDIATION PROJECT. OPEN WATER BATHYMETRY SURVEY WAS CONDUCTED BY CRA CANADA SURVEYS, INC. ON 2014/03/05 FOLLOWING COMPLETION OF PHASE 1B WORK.
  - REFERENCE DWG C1 FOR DATUM INFORMATION.
  - TOP OF ENGINEERED CAP SURFACES REPRESENT MINIMUM PLACEMENT THICKNESS AND MAXIMUM OVERPLACEMENT ALLOWANCES.
  - TOP OF ENGINEERED CAP SHOWN ON CROSS SECTIONS IN 2H:1V DREDGE SLOPE AREAS NEAR EXISTING SHEET PILE BULKHEAD WALL HAVE VARIABLE THICKNESS REQUIREMENTS THAT ARE NEEDED TO CONSTRUCT THE TYPE 3 SEDIMENT CAP TO A STABLE 3H:1V GRADE.
  - EXISTING TIMBER-PILED STRUCTURE NOT SHOWN FOR CLARITY.
  - CONTRACTOR SHALL REFERENCE THE 1985 STEEL-PILED DECK AS-BUILT DRAWINGS FOR DETAILS REGARDING CROSS SECTIONS THROUGH THE STEEL-PILED JETTY STRUCTURE, SHEETPILE BULKHEAD WALL, AND CONCRETE L-WALL.

CROSS SECTIONS SCALE 1: 400



Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

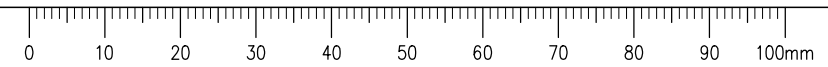
Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK 825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION**

Consultant Signature Only  
Designed by/Concept par **MATT WOLTMAN**  
Drawn by/Dessiné par **CHRIS HEWETT**  
PWSC Project Manager/Administrateur de Projets TPSGC **ANDREW MYLLY**  
Regional Manager, Environmental Services **COLLIN KINGMAN**  
Drawing title/Titre du dessin

**ENGINEERED CAPPING CROSS SECTIONS - SHEET 2**

Project No./No. du projet <b>R.018400.002</b>	Sheet/ <b>C30</b>	Revision no./ <b>0</b>
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Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK 825 ADMIRALS ROAD, VICTORIA, BC**

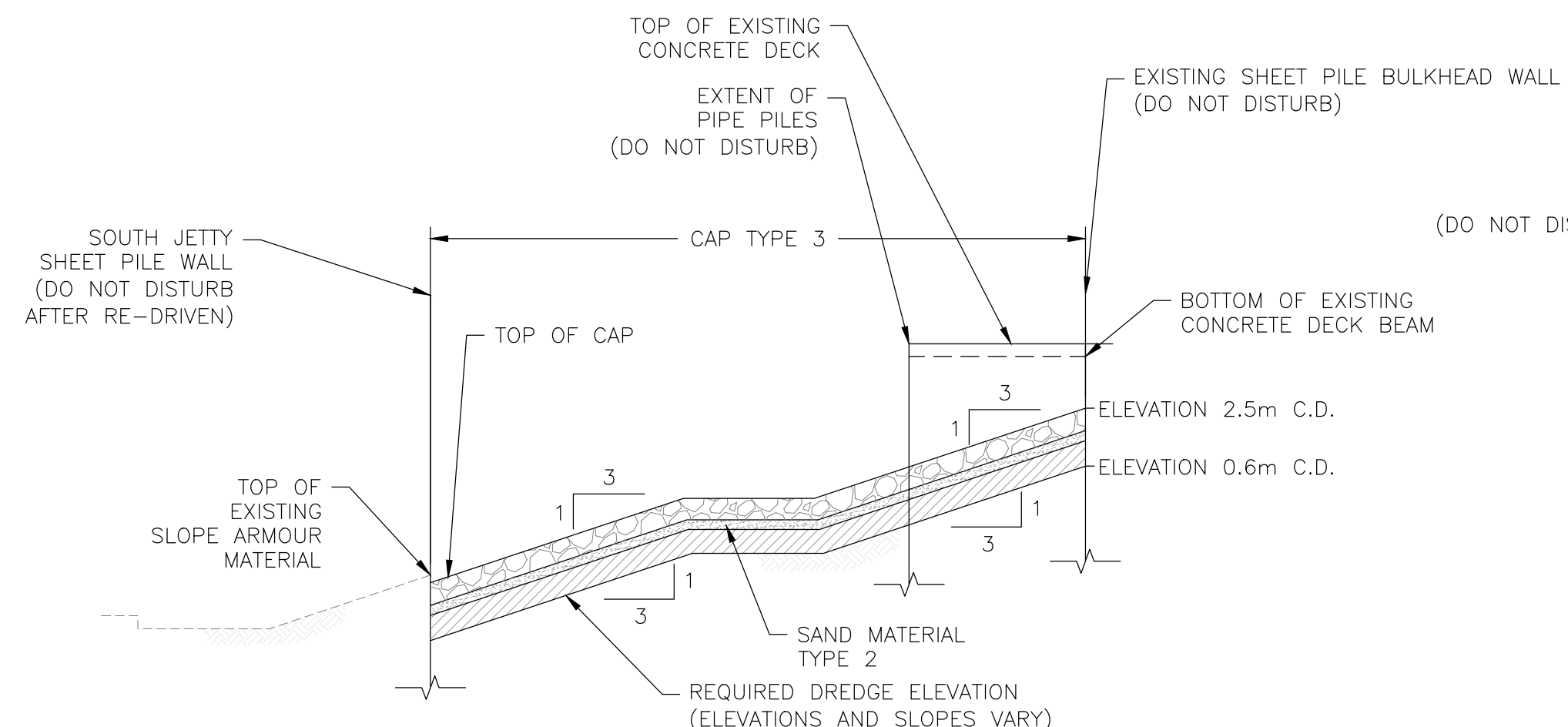
**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
**MATT WOLTMAN**  
Drawn by/Dessiné par  
**CHRIS HEWETT**  
PWSC Project Manager/Administrateur de Projets TPSGC  
**ANDREW MYLLY**  
Regional Manager, Environmental Services  
**COLLIN KINGMAN**

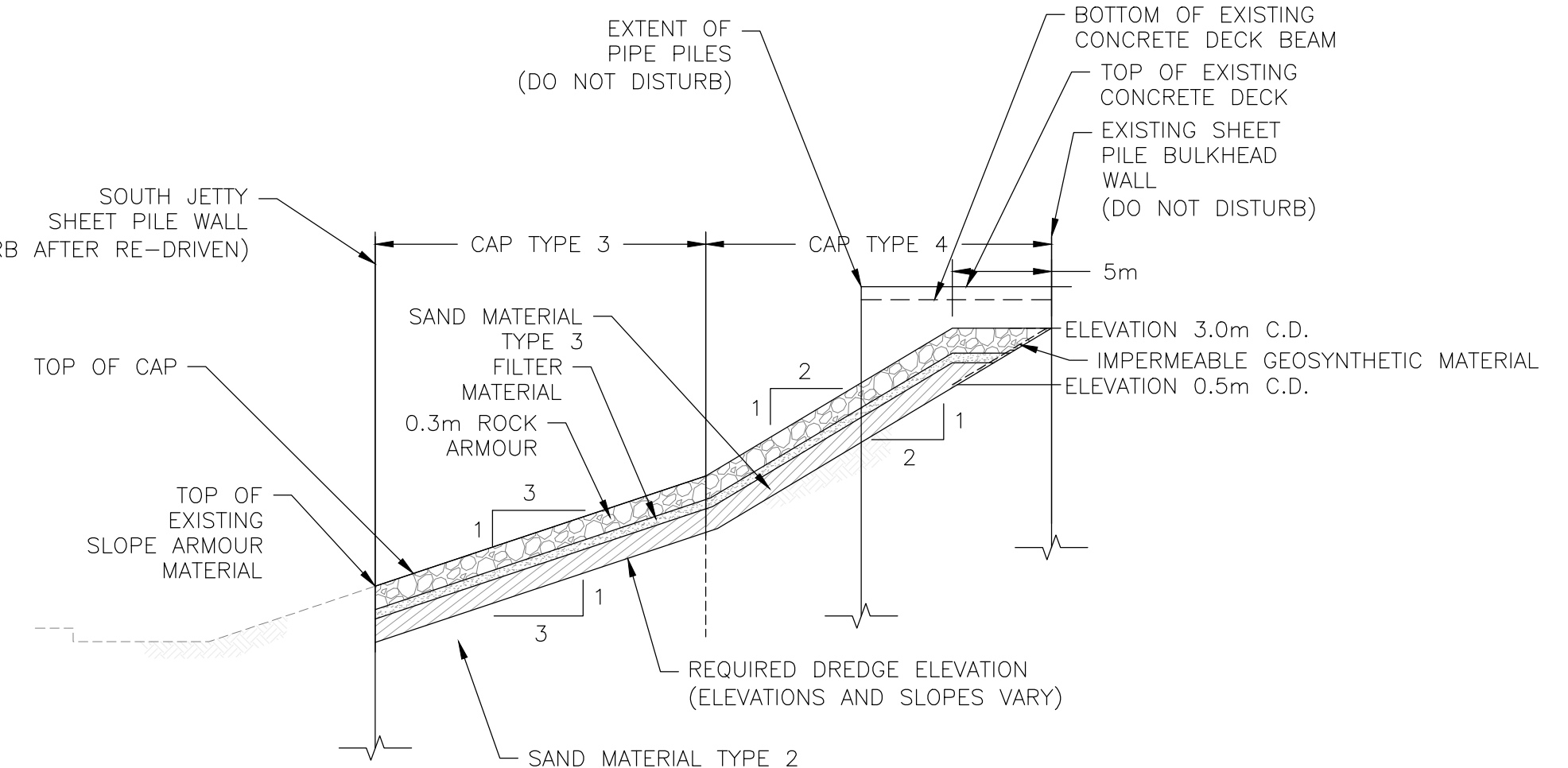
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**ENGINEERED CAPPING DETAILS - SHEET 1**

Project No./No. du projet	Sheet/	Revision no./
<b>R.018400.002</b>	<b>C32</b>	<b>0</b>



DETAIL 14  
NOT TO SCALE C29/C30

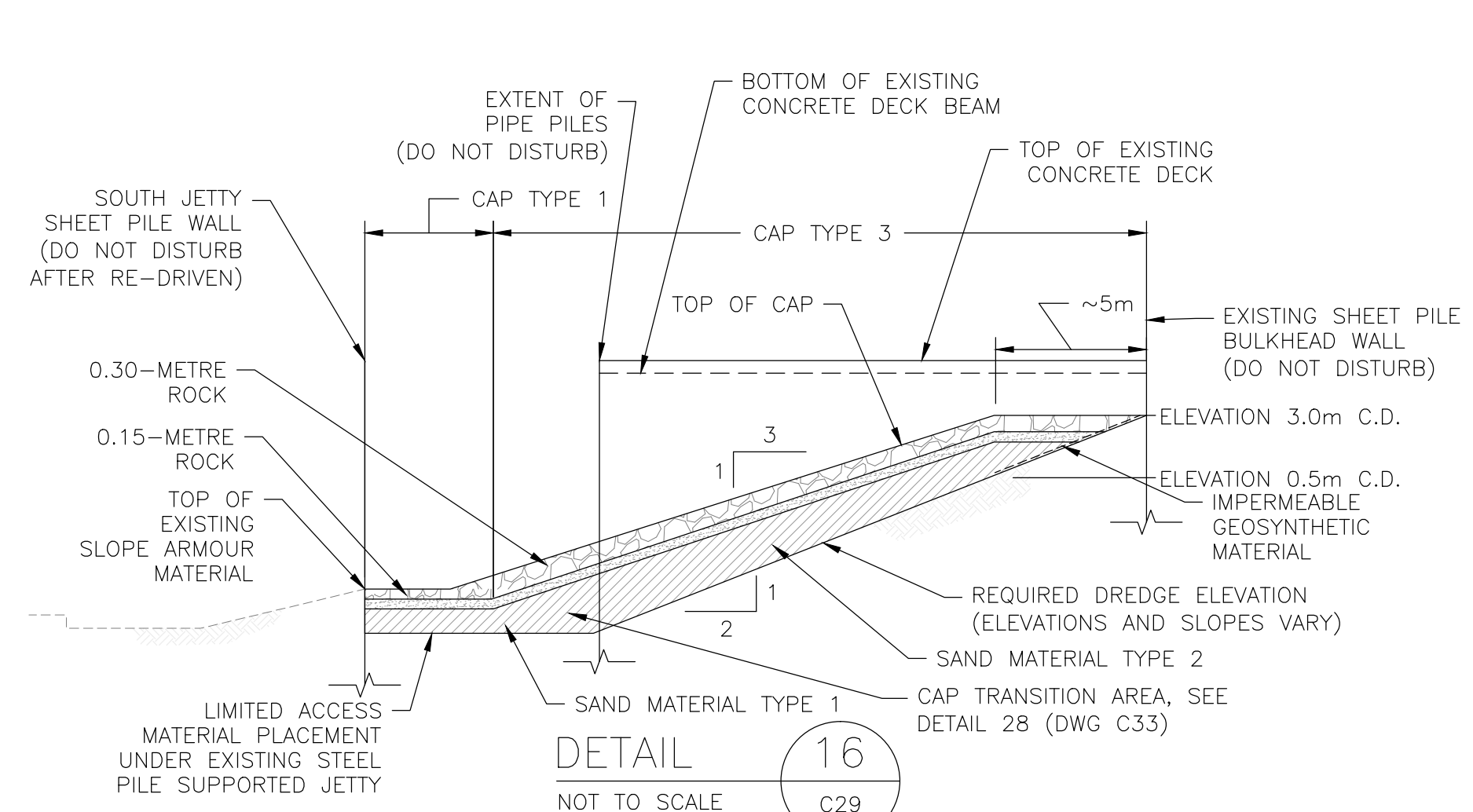
TYPE 3 ENGINEERED CAP



DETAIL 15  
NOT TO SCALE C29

TYPE 3 AND TYPE 4 ENGINEERED CAP AND IMPERMEABLE GEOSYNTHETIC MATERIAL

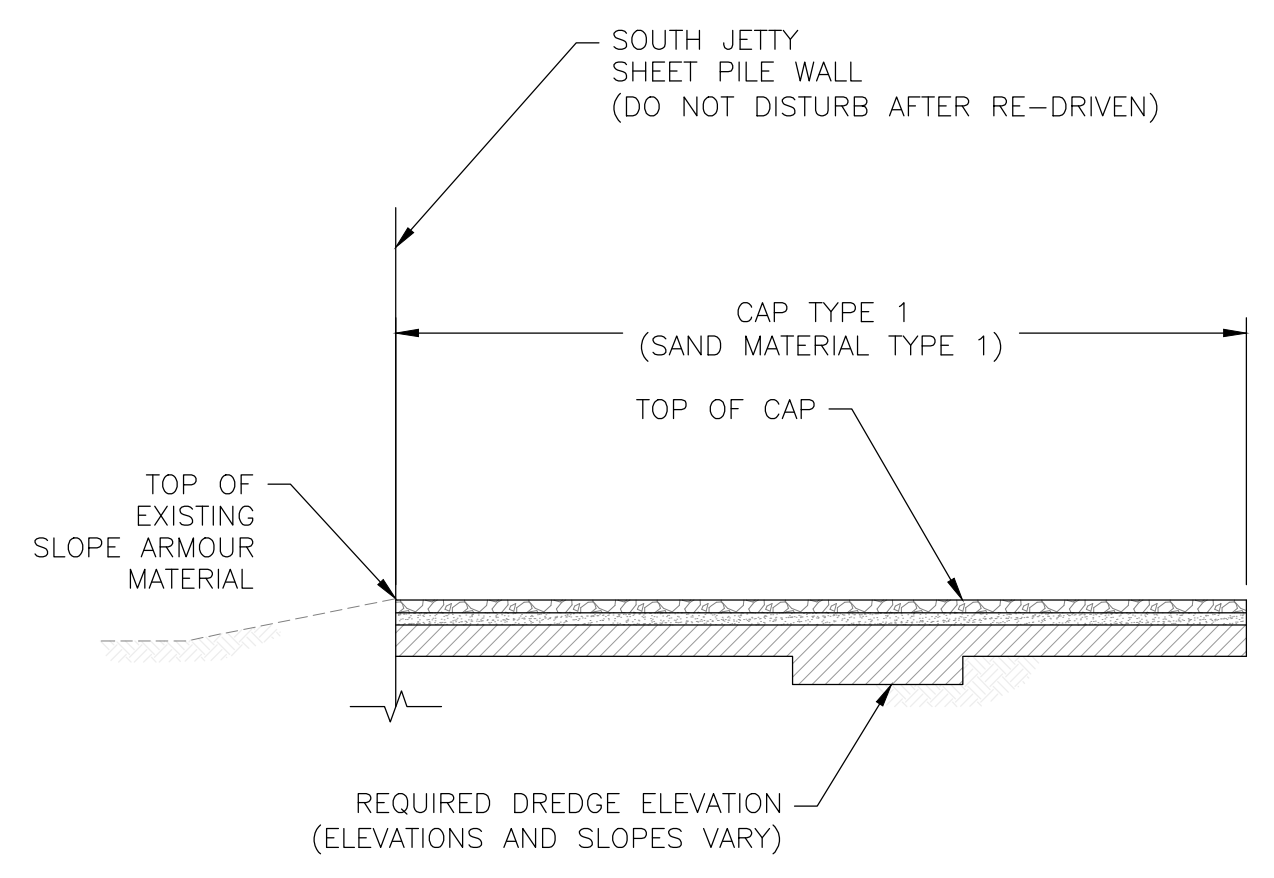
NOTE: IMPERMEABLE GEOSYNTHETIC MATERIAL REQUIRED FOR CAP TYPE 4 WHERE SAND MATERIAL TYPE 3 HAS A THICKNESS OF LESS THAN 1.0m NEAR EXISTING SHEET PILE BULKHEAD WALL.



DETAIL 16  
NOT TO SCALE C29

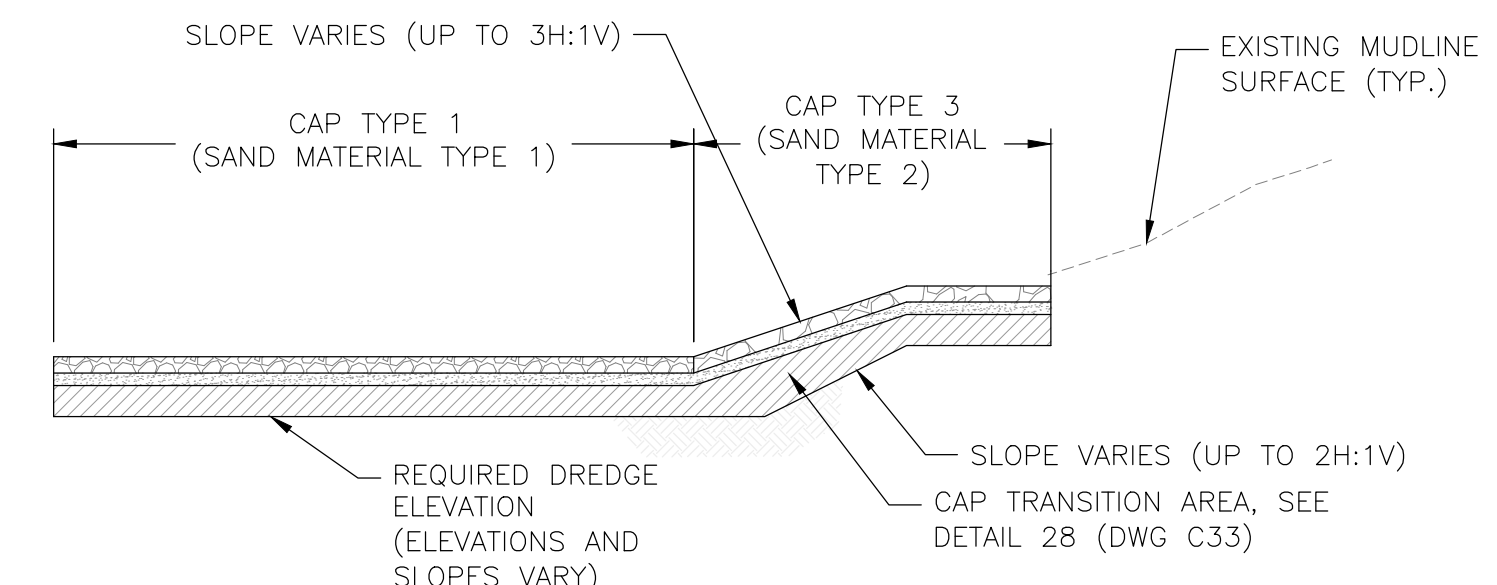
TYPE 1 AND TYPE 3 ENGINEERED CAP

NOTES:  
1. IMPERMEABLE GEOSYNTHETIC MATERIAL REQUIRED FOR CAP TYPE 3 WHERE SAND MATERIAL TYPE 2 HAS A THICKNESS OF LESS THAN 1.0m NEAR EXISTING SHEET PILE BULKHEAD WALL.  
2. CONTRACTOR SHALL PLACE A MINIMUM OF 1m OF SAND MATERIAL OVER ALL DREDGE AREAS EXCLUDING AREA REQUIRING IMPERMEABLE GEOSYNTHETIC MATERIAL.



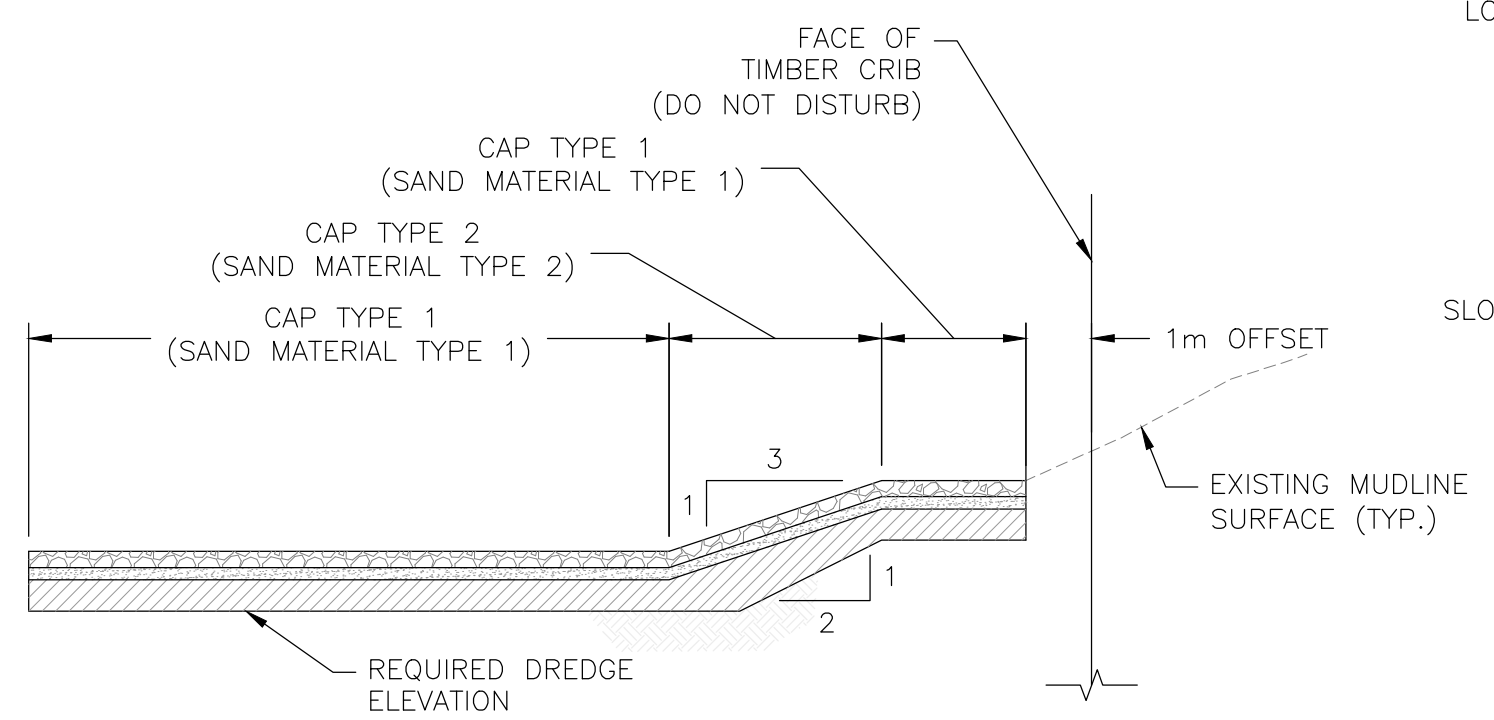
DETAIL 17  
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TYPE 1 ENGINEERED CAP



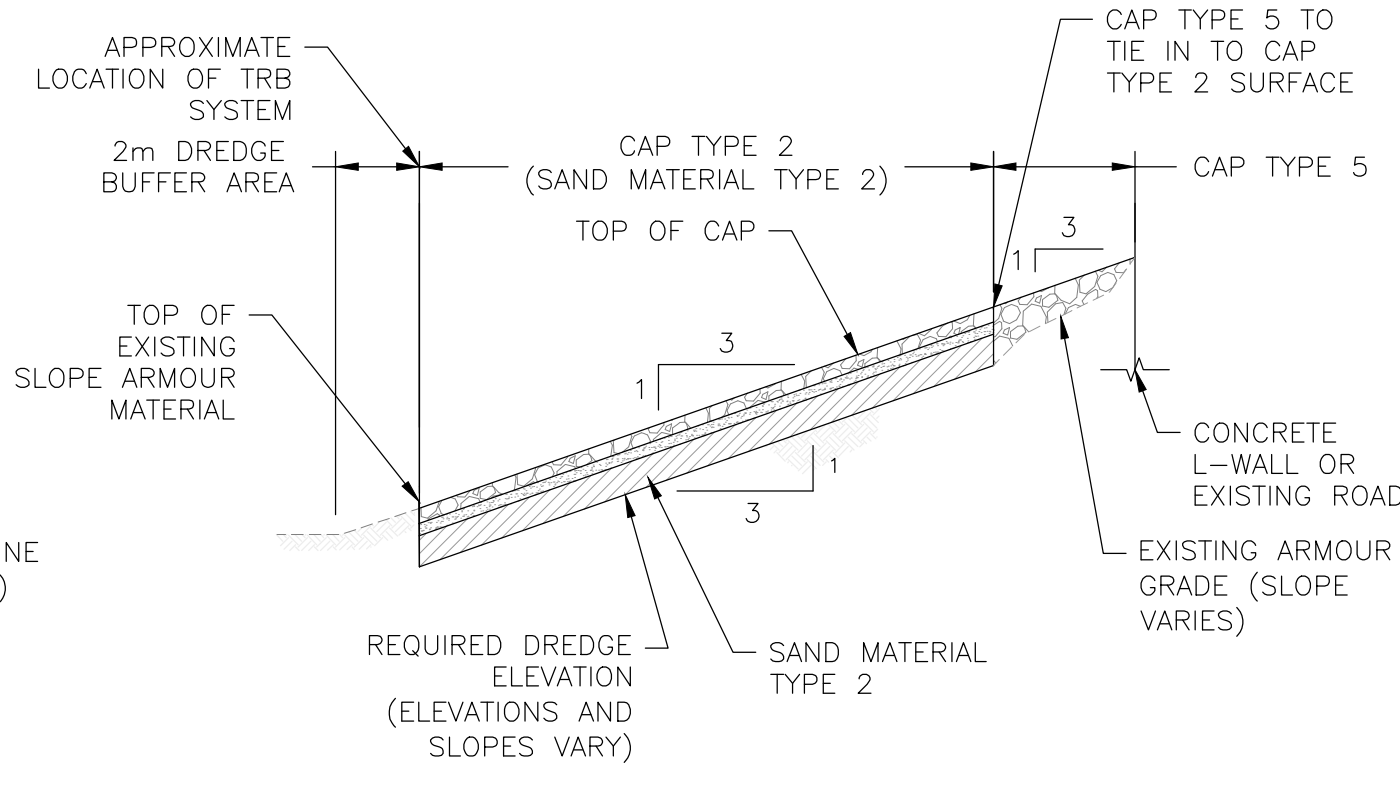
DETAIL 18  
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TYPE 1 AND TYPE 3 ENGINEERED CAP



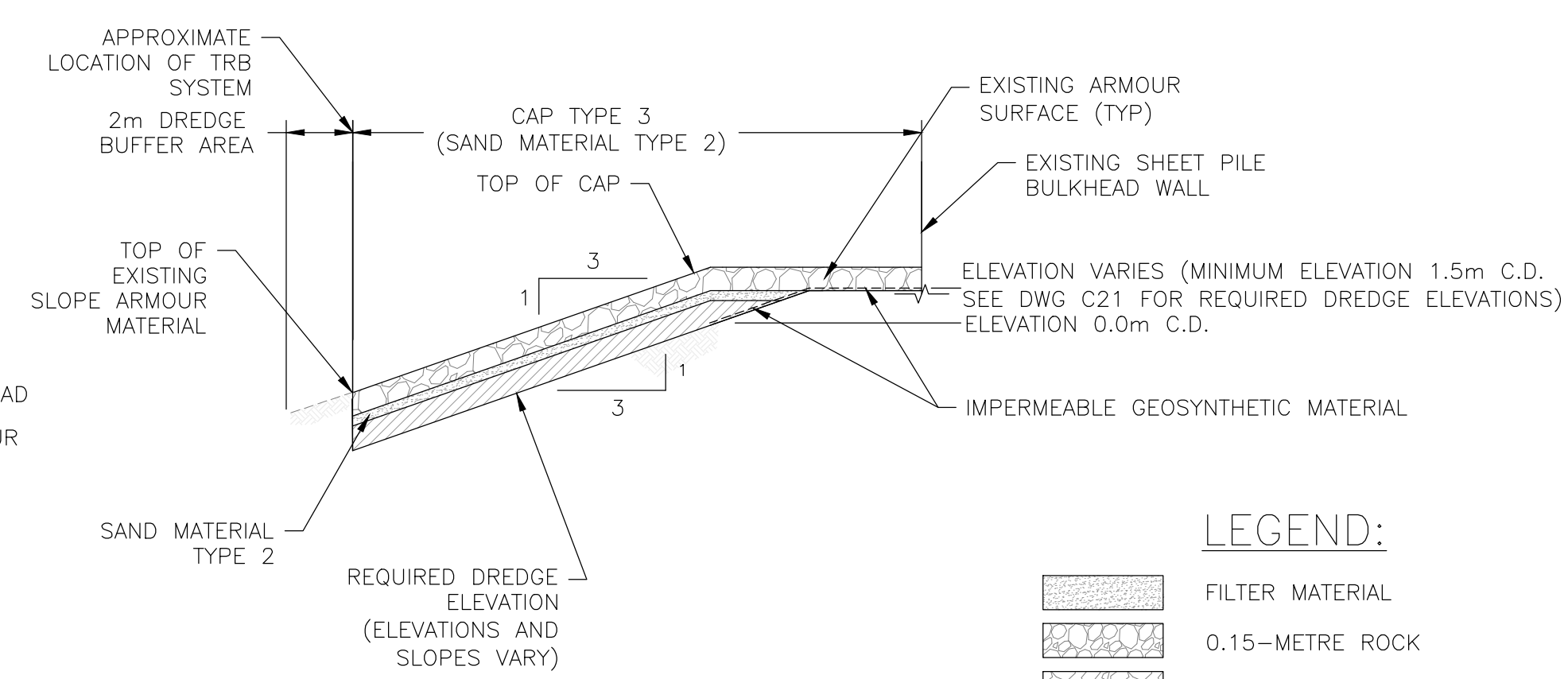
DETAIL 19  
NOT TO SCALE C30

TYPE 1 ENGINEERED CAP



DETAIL 20  
NOT TO SCALE C30

TYPE 2 AND TYPE 5 ENGINEERED CAP



DETAIL 21  
NOT TO SCALE C30

TYPE 3 ENGINEERED CAP

**LEGEND:**

	FILTER MATERIAL
	0.15-METRE ROCK
	0.30-METRE ROCK
	SAND LAYER

NOTES:  
1. EXISTING TIMBER-PILED STRUCTURE NOT SHOWN FOR CLARITY.  
2. CONTRACTOR SHALL REFERENCE THE 1985 STEEL-PILES DECK AS-BUILT DRAWINGS FOR DETAILS REGARDING CROSS SECTIONS THROUGH THE STEEL-PILED JETTY STRUCTURE, SHEETPILE BULKHEAD WALL, AND CONCRETE L-WALL.





Revision/	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK 825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
**MATT WOLTMAN**

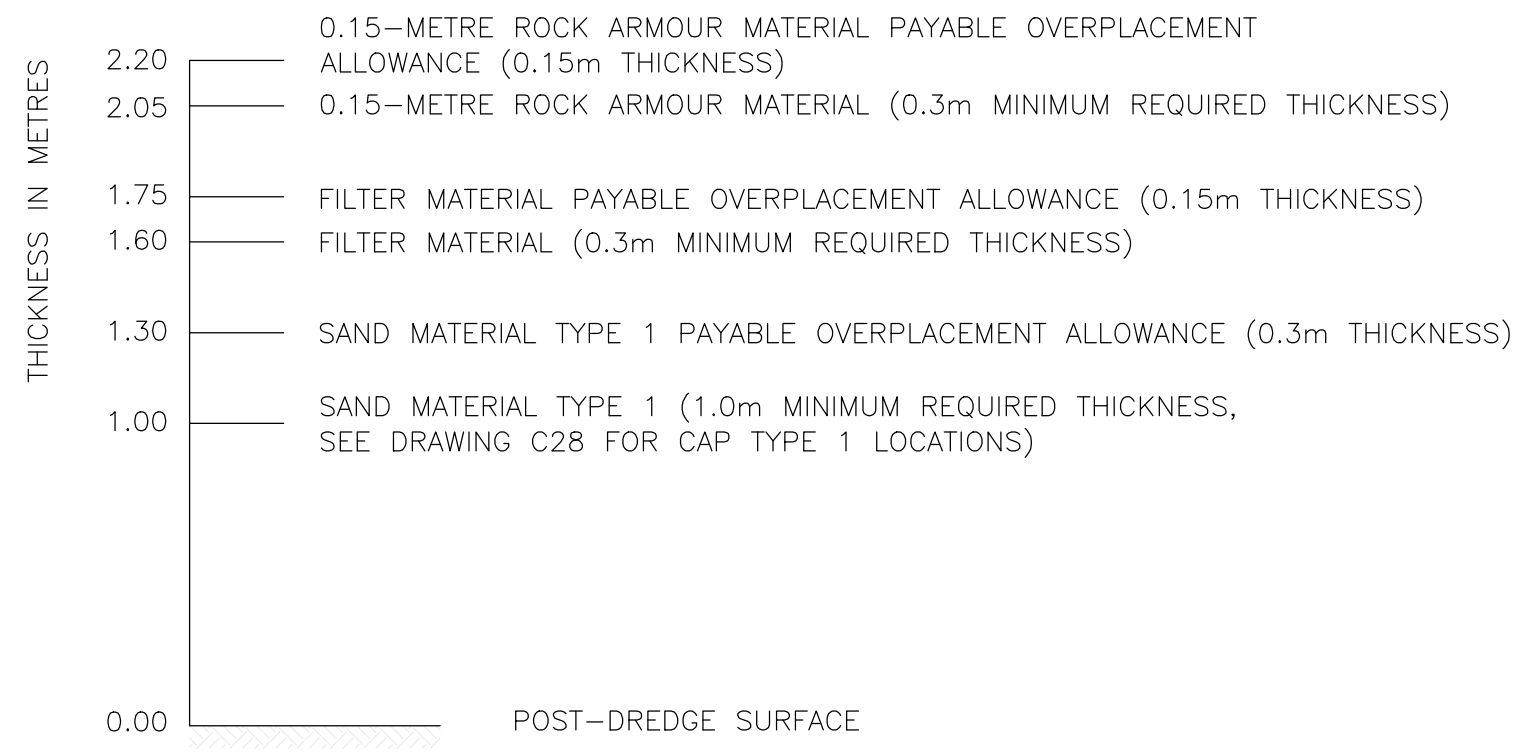
Drawn by/Dessiné par  
**CHRIS HEWETT**

PWGSC Project Manager/Administrateur de Projets TPSGC  
**ANDREW MYLLY**

Regional Manager, Environmental Services  
**COLLIN KINGMAN**

Drawing title/Titre du dessin  
**ENGINEERED CAPPING DETAILS - SHEET 2**

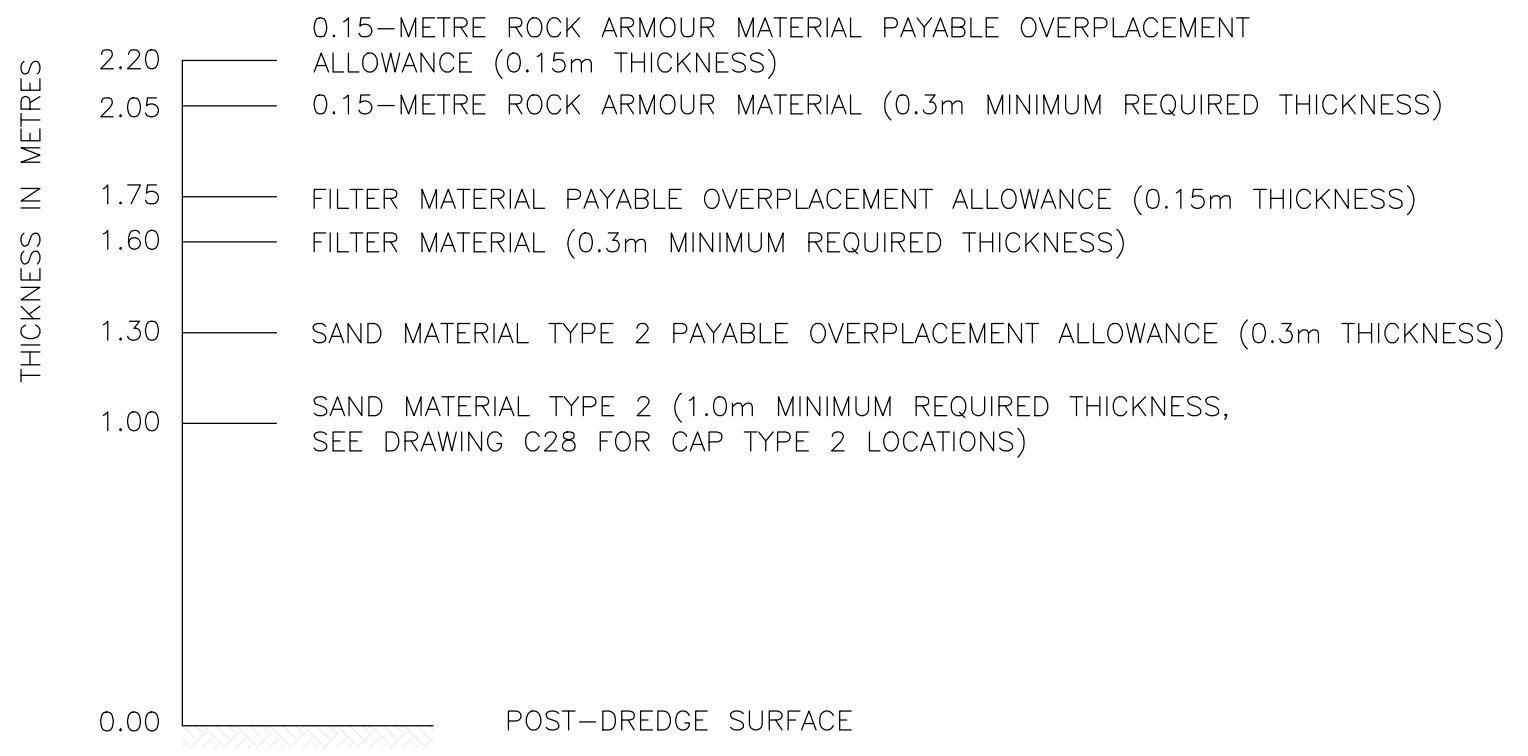
Project No./No. du projet <b>R.018400.002</b>	Sheet/ <b>C33</b>	Revision no./ <b>0</b>
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TYPE 1 ENGINEERED CAP: 0.15-METRE ROCK ARMOUR LAYER OVER FILTER MATERIAL OVER SAND LAYER

DETAIL 22 NOT TO SCALE C28

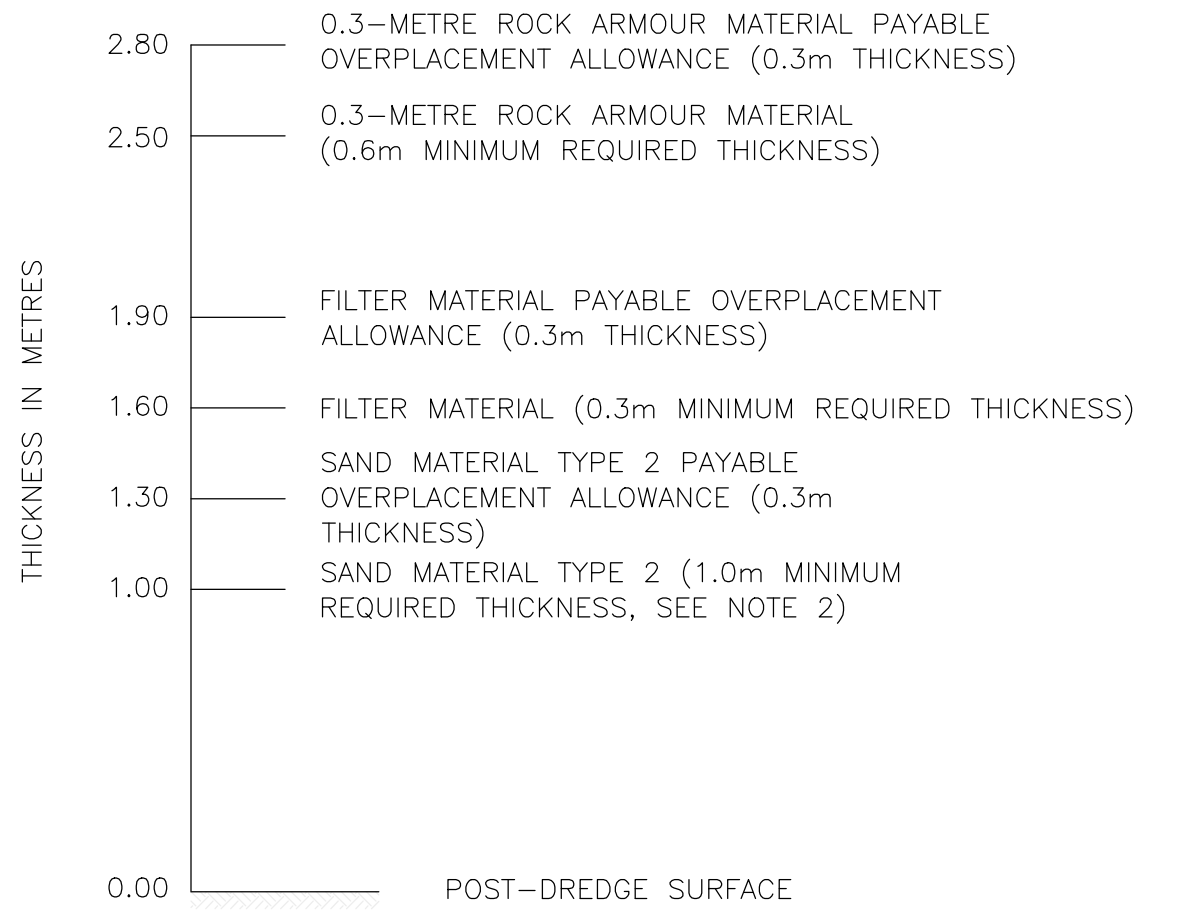
NOTE: TOTAL ENGINEERED CAP PLACEMENT THICKNESS CAN VARY BETWEEN A MINIMUM TOTAL THICKNESS OF 1.6m AND UP TO 2.2m THICKNESS AND WILL BE PAYABLE. ADDITIONAL PLACEMENT ABOVE 2.2m WILL BE CONSIDERED EXCESSIVE OVERPLACEMENT AND WILL NOT BE PAID. THE DEPARTMENTAL REPRESENTATIVE MAY DIRECT THE CONTRACTOR TO REMOVE EXCESSIVE OVERPLACEMENT AT NO ADDITIONAL COST TO PWGSC.



TYPE 2 ENGINEERED CAP: 0.15-METRE ROCK ARMOUR LAYER OVER FILTER MATERIAL OVER SAND LAYER

DETAIL 23 NOT TO SCALE C28

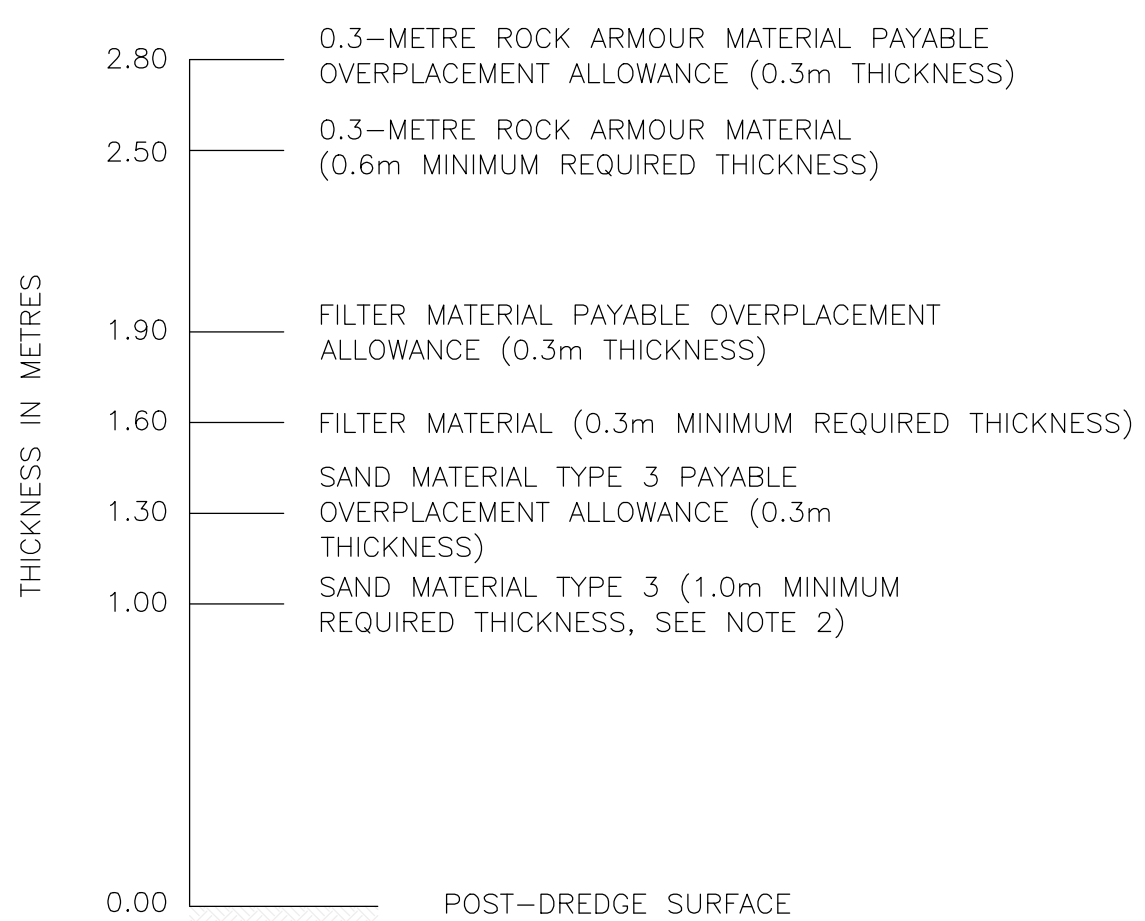
NOTE: TOTAL ENGINEERED CAP PLACEMENT THICKNESS CAN VARY BETWEEN A MINIMUM TOTAL THICKNESS OF 1.6m AND UP TO 2.2m THICKNESS AND WILL BE PAYABLE. ADDITIONAL PLACEMENT ABOVE 2.2m WILL BE CONSIDERED EXCESSIVE OVERPLACEMENT AND WILL NOT BE PAID. THE DEPARTMENTAL REPRESENTATIVE MAY DIRECT THE CONTRACTOR TO REMOVE EXCESSIVE OVERPLACEMENT AT NO ADDITIONAL COST TO PWGSC.



TYPE 3 ENGINEERED CAP: 0.30-METRE ROCK ARMOUR LAYER OVER FILTER MATERIAL OVER SAND MATERIAL TYPE 2 LAYER

DETAIL 24 NOT TO SCALE C28

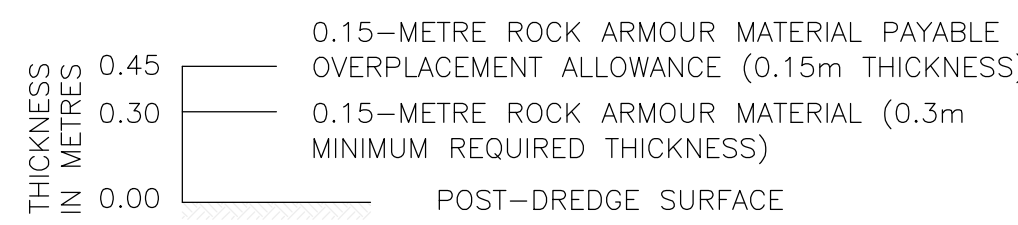
NOTES:  
1. TOTAL ENGINEERED CAP PLACEMENT THICKNESS CAN VARY BETWEEN A MINIMUM TOTAL THICKNESS OF 1.9m (EXCLUDING AREAS REQUIRING IMPERMEABLE GEOSYNTHETIC MATERIAL) AND UP TO 2.8m THICKNESS AND WILL BE PAYABLE. ADDITIONAL PLACEMENT ABOVE 2.8m WILL BE CONSIDERED EXCESSIVE OVERPLACEMENT AND WILL NOT BE PAID. THE DEPARTMENTAL REPRESENTATIVE MAY DIRECT THE CONTRACTOR TO REMOVE EXCESSIVE OVERPLACEMENT AT NO ADDITIONAL COST TO PWGSC.  
2. REQUIRED THICKNESS OF SAND MATERIAL TYPE 3 VARIES BETWEEN 0.0 AND 1.0m IN AREAS REQUIRING IMPERMEABLE GEOSYNTHETIC MATERIAL NEAR EXISTING SHEET PILE BULKHEAD WALL.  
3. REQUIRED THICKNESS OF FILTER MATERIAL VARIES BETWEEN 0.0 AND 0.3m IN AREAS REQUIRING IMPERMEABLE GEOSYNTHETIC MATERIAL NEAR EXISTING SHEETPILE BULKHEAD.



TYPE 4 ENGINEERED CAP: 0.30-METRE ROCK ARMOUR LAYER OVER FILTER MATERIAL OVER SAND MATERIAL TYPE 3 LAYER

DETAIL 25 NOT TO SCALE C28

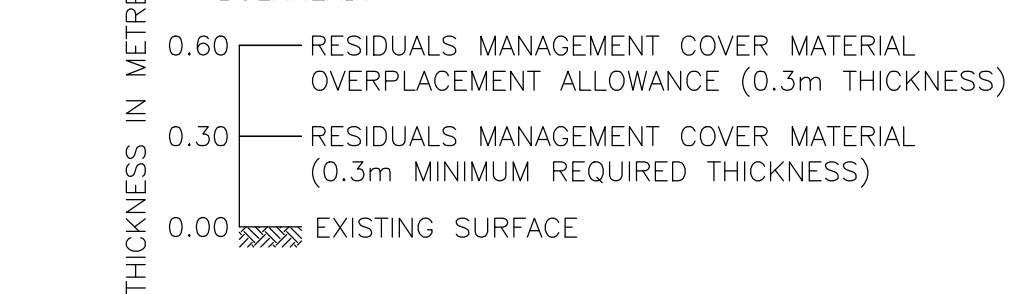
NOTES:  
1. TOTAL ENGINEERED CAP PLACEMENT THICKNESS CAN VARY BETWEEN A MINIMUM TOTAL THICKNESS OF 1.9m (EXCLUDING AREAS REQUIRING IMPERMEABLE GEOSYNTHETIC MATERIAL) AND UP TO 2.8m THICKNESS AND WILL BE PAYABLE. ADDITIONAL PLACEMENT ABOVE 2.8m WILL BE CONSIDERED EXCESSIVE OVERPLACEMENT AND WILL NOT BE PAID. THE DEPARTMENTAL REPRESENTATIVE MAY DIRECT THE CONTRACTOR TO REMOVE EXCESSIVE OVERPLACEMENT AT NO ADDITIONAL COST TO PWGSC.  
2. REQUIRED THICKNESS OF SAND MATERIAL TYPE 2 VARIES BETWEEN 0.0 AND 1.0m IN AREAS REQUIRING IMPERMEABLE GEOSYNTHETIC MATERIAL NEAR EXISTING SHEET PILE BULKHEAD WALL.  
3. REQUIRED THICKNESS OF FILTER MATERIAL VARIES BETWEEN 0.0 AND 0.3m IN AREAS REQUIRING IMPERMEABLE GEOSYNTHETIC MATERIAL NEAR EXISTING SHEETPILE BULKHEAD.



TYPE 5 ENGINEERED CAP: 0.15-METRE ROCK ARMOUR

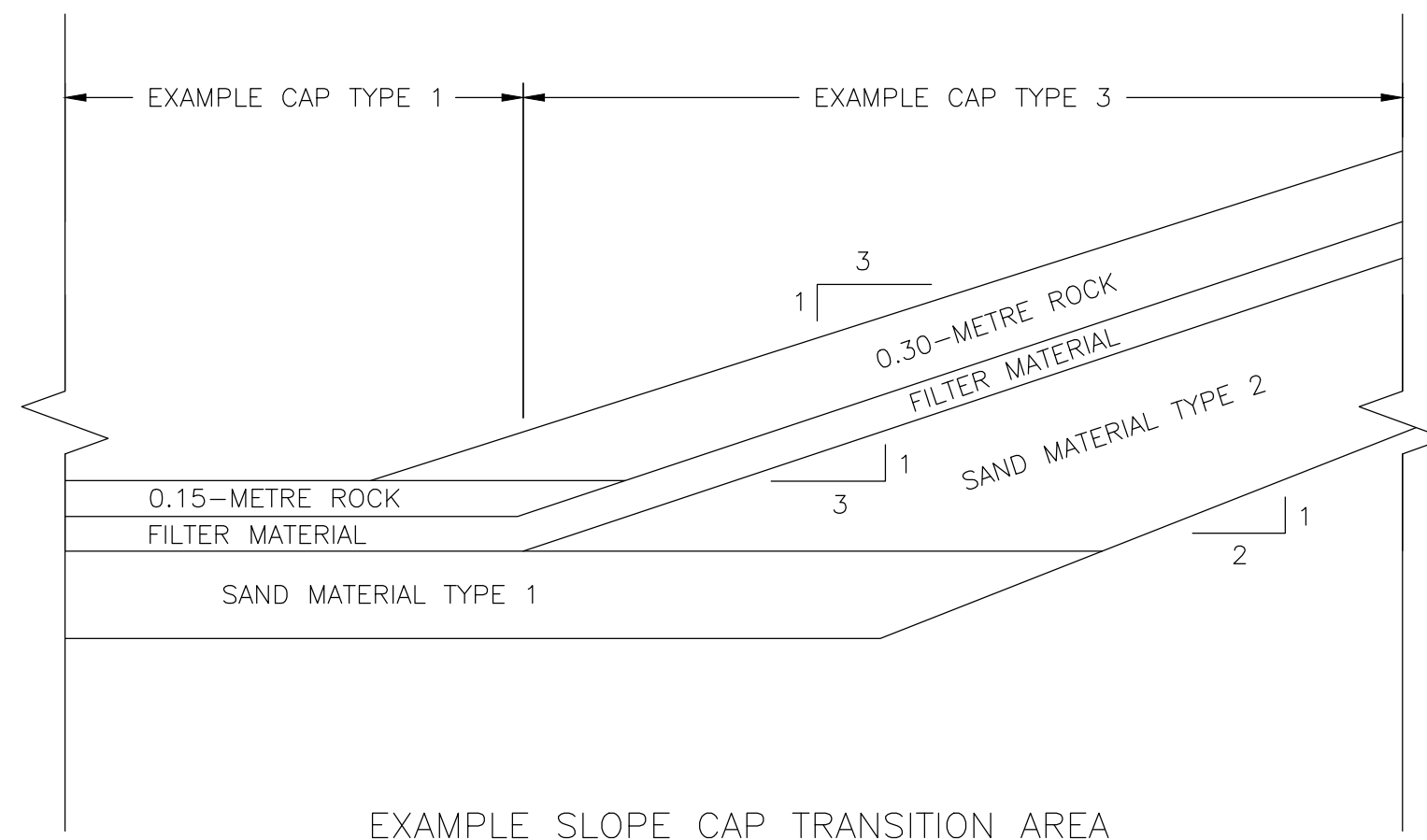
DETAIL 26 NOT TO SCALE C28/C30

NOTE: TOTAL ENGINEERED CAP PLACEMENT THICKNESS CAN VARY BETWEEN A MINIMUM TOTAL THICKNESS OF 0.0m AND UP TO 0.45m THICKNESS AND WILL BE PAYABLE. ADDITIONAL PLACEMENT ABOVE 0.45m WILL BE CONSIDERED EXCESSIVE OVERPLACEMENT AND WILL NOT BE PAID. THE DEPARTMENTAL REPRESENTATIVE MAY DIRECT THE CONTRACTOR TO REMOVE EXCESSIVE OVERPLACEMENT AT NO ADDITIONAL COST TO PWGSC.



RESIDUALS MANAGEMENT COVER PLACEMENT

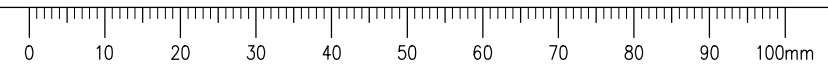
DETAIL 27 NOT TO SCALE C28



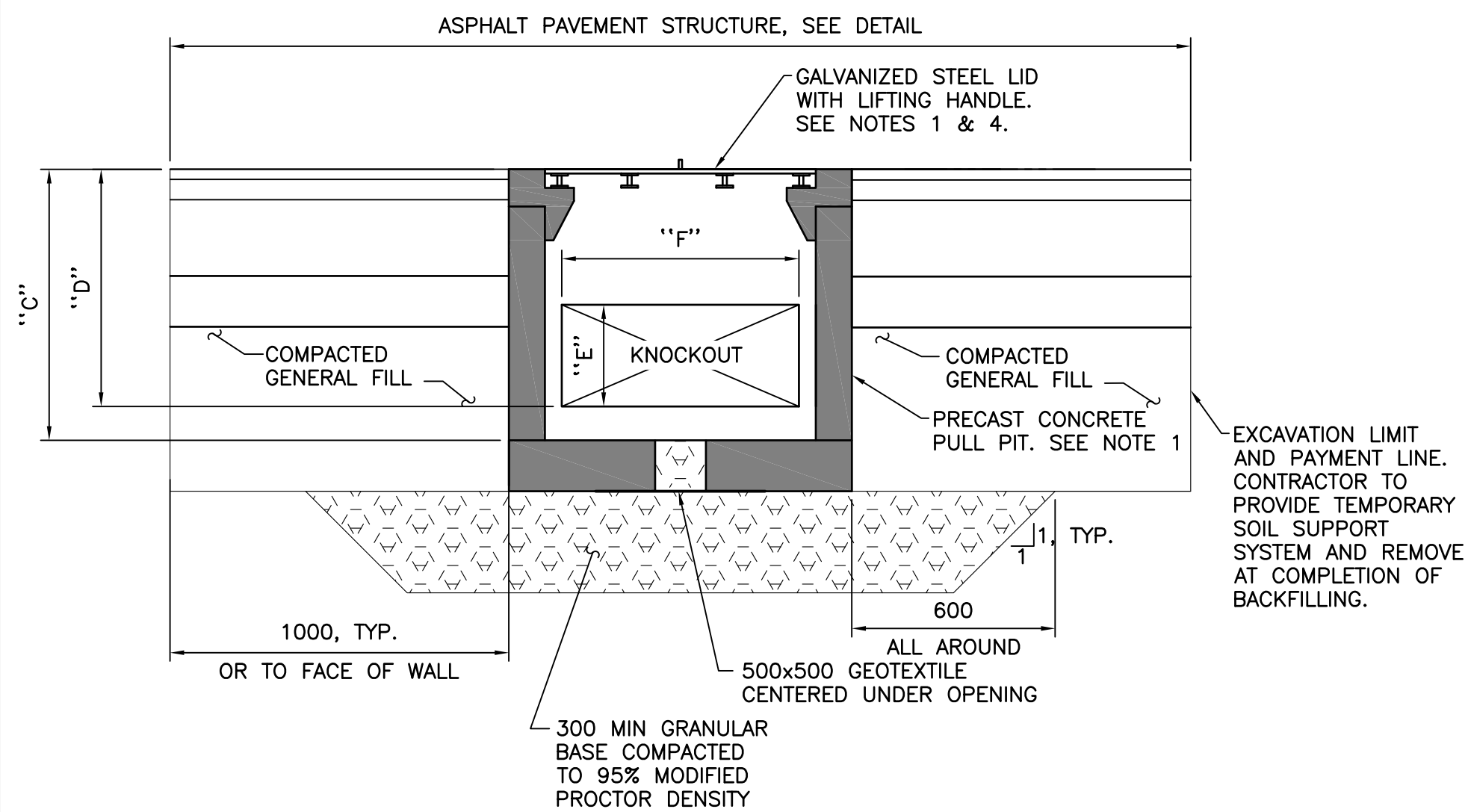
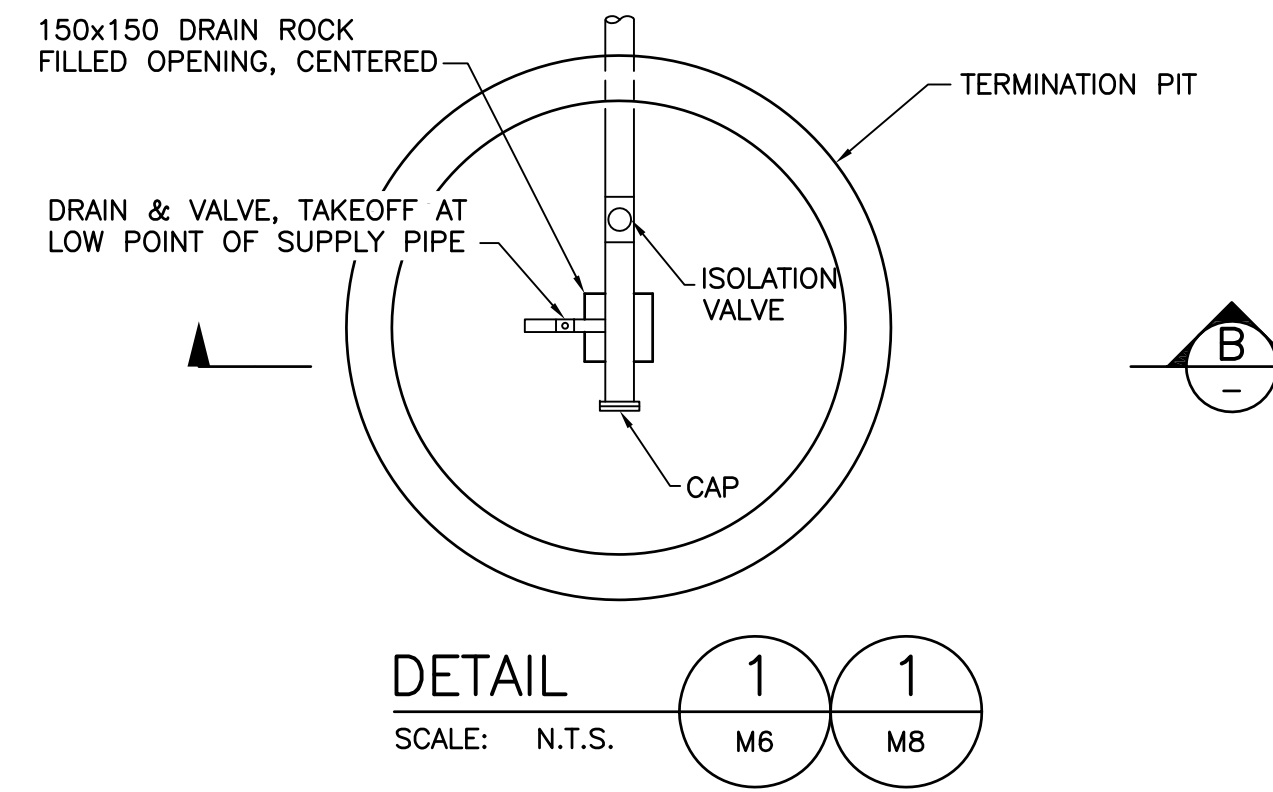
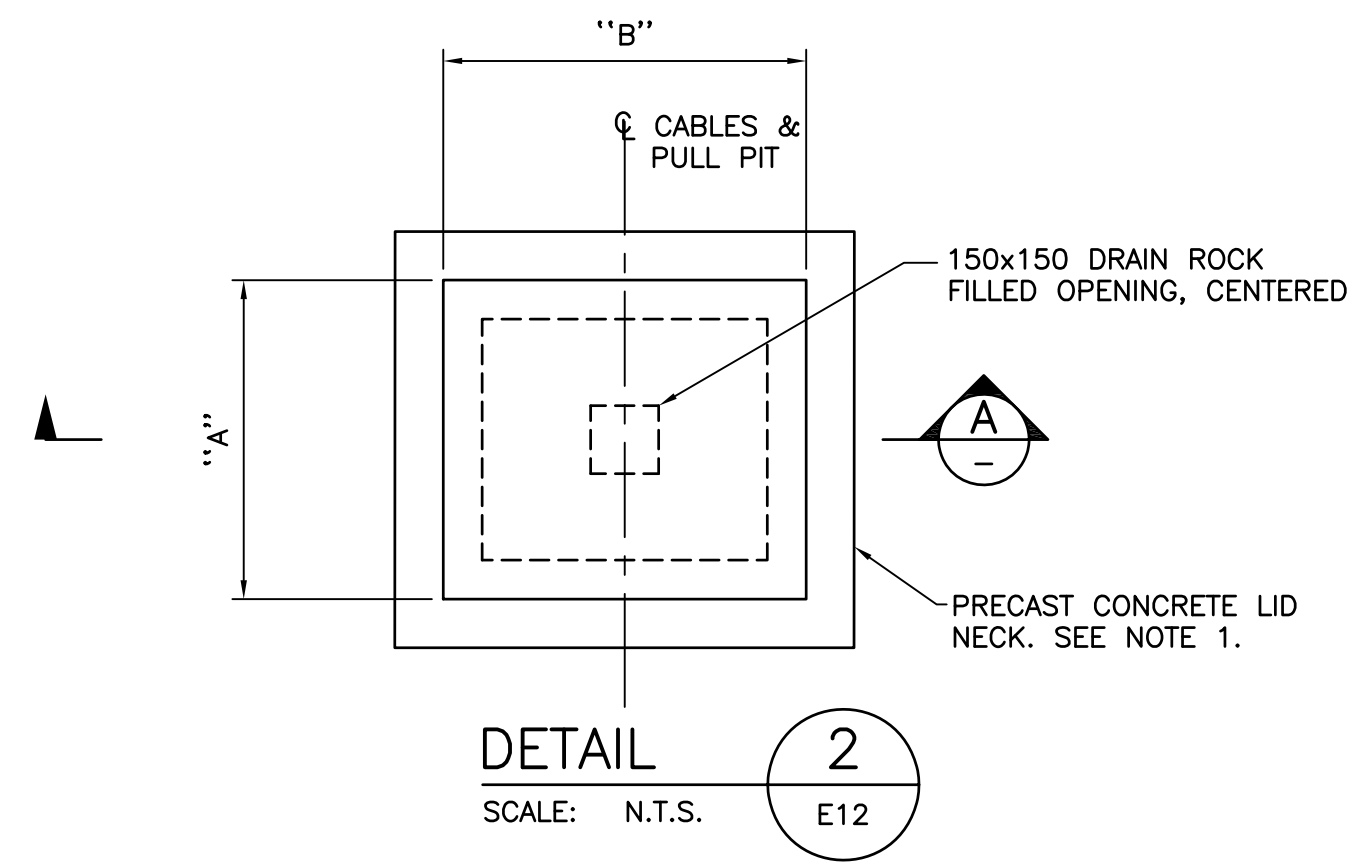
EXAMPLE SLOPE CAP TRANSITION AREA

DETAIL 28 NOT TO SCALE C32

NOTES:  
1. CONTRACTOR SHALL DESCRIBE SEQUENCING OF CAP LAYER PLACEMENT AS PART OF THE CONSTRUCTION WORK PLAN.  
2. CONTRACTOR SHALL PLACE A MINIMUM OF 1m OF SAND MATERIAL OVER ALL DREDGE AREAS EXCLUDING AREAS REQUIRING IMPERMEABLE GEOSYNTHETIC MATERIAL.



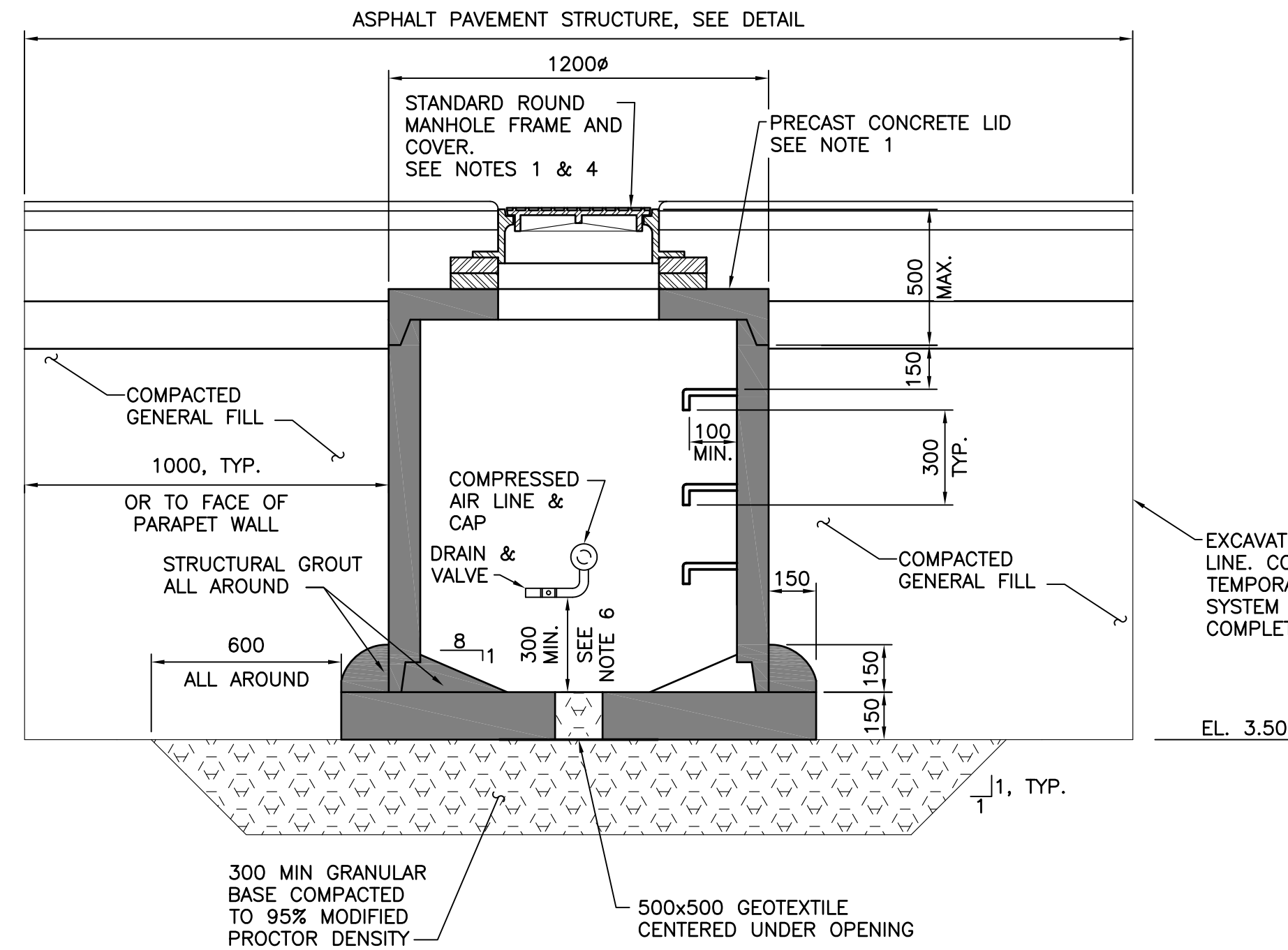




SECTION A  
SCALE: N.T.S.

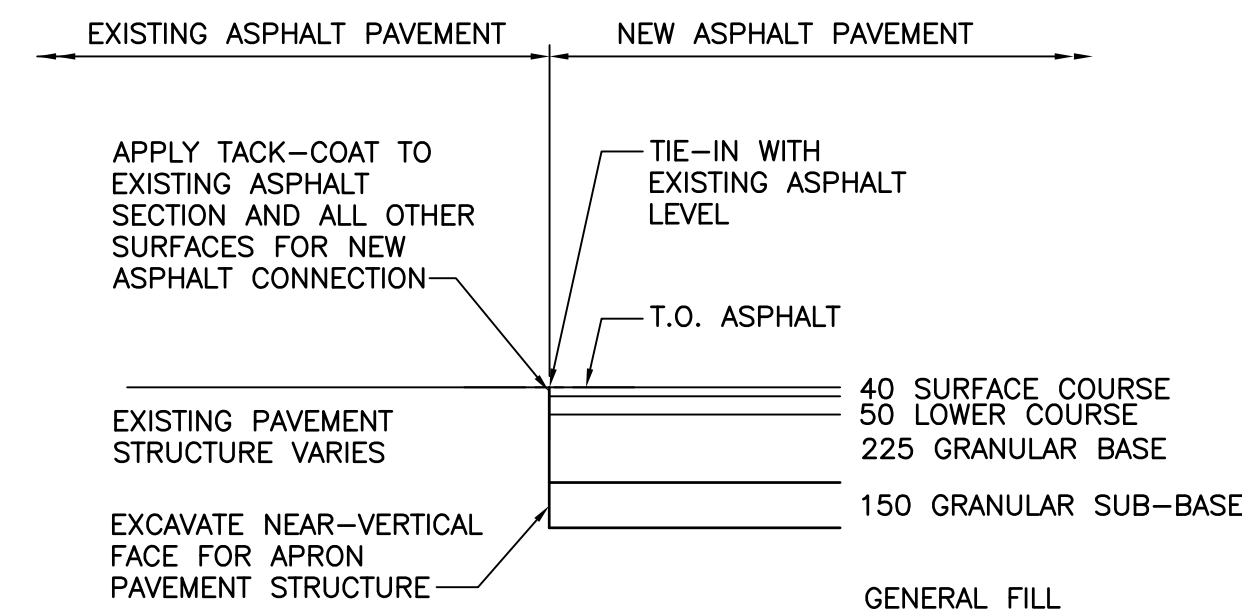
TYPICAL PRECAST CONCRETE PULL PIT

TERMINATION LOCATION	"A"	"B"	"C"	"D"	"E"	"F"
T1	700	900	800	700	300	800
T2	1000	1600	800	700	300	1500
T3	400	400	800	700	200	300
T4	1000	700	600	500	300	600
T5	700	1200	600	500	300	1100



SECTION B  
SCALE: N.T.S.

TYPICAL 1200Ø PRECAST CONCRETE TERMINATION PIT T6 & T7



ASPHALT PAVEMENT STRUCTURE TIE-IN  
N.T.S.

NOTES:

- ALL TERMINATION PIT AND PULL PIT COMPONENTS, INCLUDING LIDS, MANHOLE FRAME AND COVER, AND PRECAST CONCRETE COMPONENTS SHALL BE DESIGNED FOR THE FOLLOWING SITE-SPECIFIC LIVE LOADS (ALL LOADS ARE UNFACTORED):
  - UNIFORMLY DISTRIBUTED LOAD (UDL): 28.7kPa (600psf)
  - UDL NEED NOT BE CONSIDERED COINCIDENT WITH VEHICLE WHEEL LOADS
  - AXLE LOADING:
    - TRUCK LOADING (CL-625 PER S6-06):
      - FRONT AXLE 50kN (DISTRIBUTED TO 2 WHEELS)
      - REAR AXLE 175kN (DISTRIBUTED TO 2 PAIRS OF WHEELS)
    - ESQUIMALT FIRE TRUCK (TYPE 1), 1993 THIBAULT ENGINE:
      - FRONT AXLE 75kN (DISTRIBUTED TO 2 WHEELS)
      - REAR AXLES 100kN (DISTRIBUTED TO 2 PAIRS OF WHEELS)
    - ESQUIMALT FIRE TRUCK (TYPE 2), 1999 E ONE LADDER TRUCK:
      - FRONT AXLE 85kN (DISTRIBUTED TO 2 WHEELS)
      - REAR AXLES 210kN (DISTRIBUTED TO 2 PAIRS OF WHEELS)
    - ESQUIMALT FIRE TRUCK (TYPE 3), 2008 FORT GARY RESCUE TRUCK:
      - FRONT AXLE 55kN (DISTRIBUTED TO 2 WHEELS)
      - REAR AXLES 105kN (DISTRIBUTED TO 2 PAIRS OF WHEELS)
 DYNAMIC LOAD ALLOWANCE (DLA) SHOULD BE ADDED TO ALL AXLE/WHEEL LOADS.
- SEAL ALL CONDUIT ENDS IN TERMINATION PIT WITH SUITABLE COMPOUND TO PREVENT ENTRANCE OF SALT WATER, MOISTURE OR GASES.
- LOCATIONS FOR TERMINATION PITS AND PULL PITS SHOWN ON DRAWINGS ARE APPROXIMATE. CONTRACTOR SHALL LOCATE BASED ON SITE CONDITIONS AND COORDINATE WITH DEPARTMENTAL REPRESENTATIVE PRIOR TO COMMENCEMENT OF THIS WORK.
- TERMINATION PIT COVERS AND PULL PIT COVERS SHALL BEAR A CLEAR MARKING NOT LESS THAN 100mm IN SIZE INDICATING THE SERVICE CONTAINED USING THE FOLLOWING LEGEND: "AIR" COMPRESSED AIR, "ELEC" ELECTRICAL.
- CONTRACTOR TO LOCATE AND PROTECT ADJACENT ELECTRICAL CONDUITS DURING EXCAVATION WORK.
- COMPRESSED AIR SHALL BE A MINIMUM OF 300mm ABOVE THE BOTTOM OF THE TERMINATION PIT. LOCAL ADJUSTMENT TO ELEVATION OF COMPRESSED AIR SHALL BE MADE IF NECESSARY.

Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client: PUBLIC WORKS AND GOVERNMENT SERVICES CANADA

Project title/Titre du projet: ESQUIMALT GRAVING DOCK 825 ADMIRALS ROAD, VICTORIA, BC

ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION

Designed by/Concept par: DHILEEP ABEYGODA  
 Drawn by/Dessiné par: MIKE BRIDDEN  
 PWGSC Project Manager/Administrateur de Projets TPSGC: ANDREW MYLLY  
 Regional Manager, Environmental Services: COLIN KINGMAN

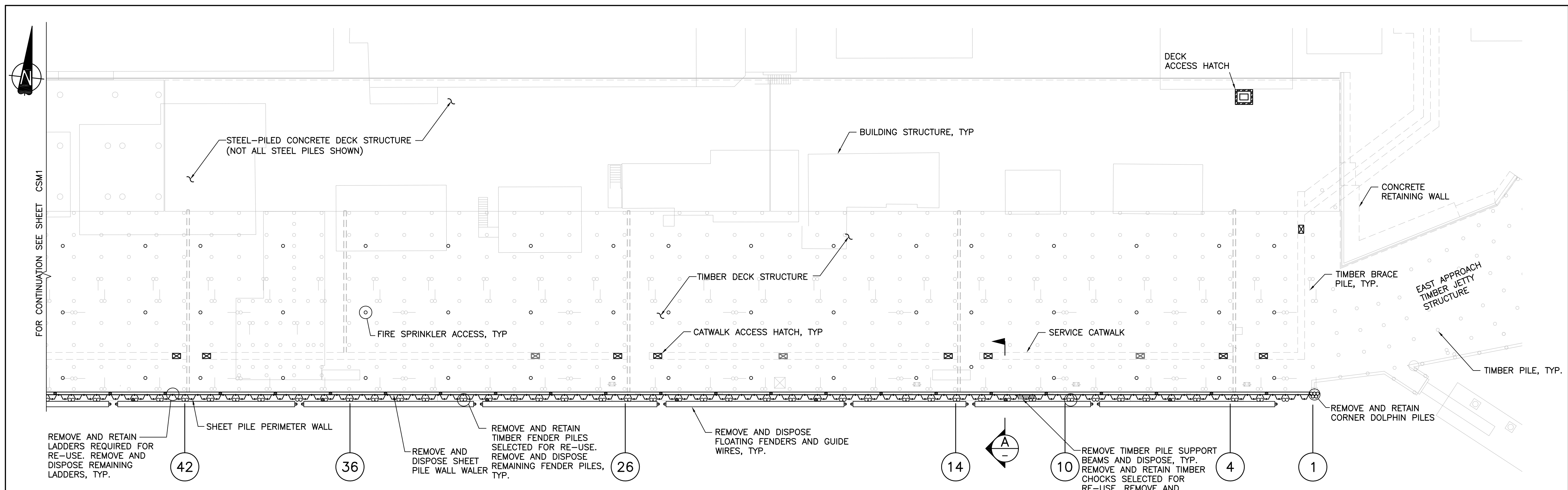
Drawing title/Titre du dessin: SERVICES - TERMINATION PITS

Project No./No. du projet: R.018400.002	Sheet/Feuille: C46	Revision no./Révision no.: 0
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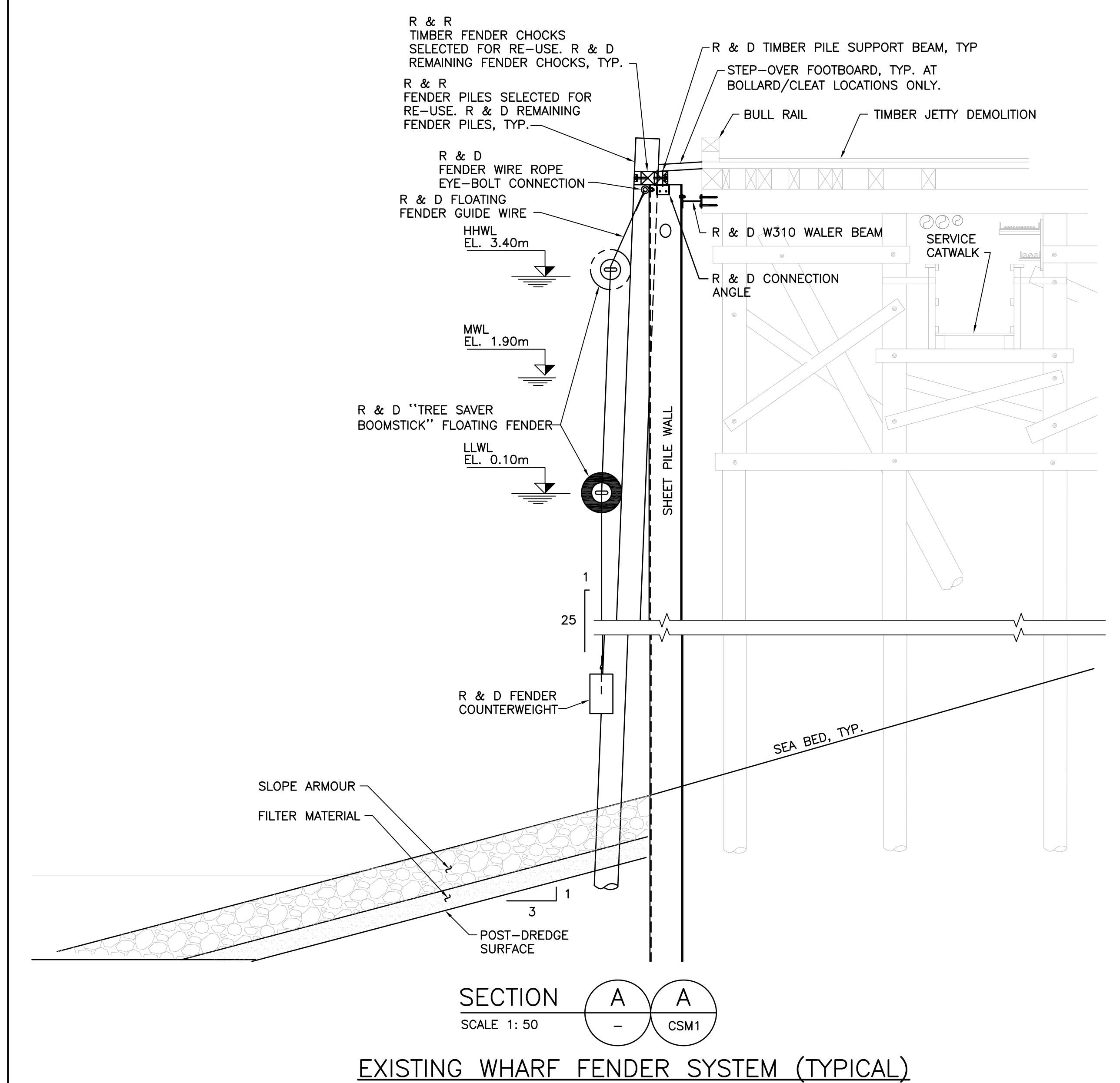




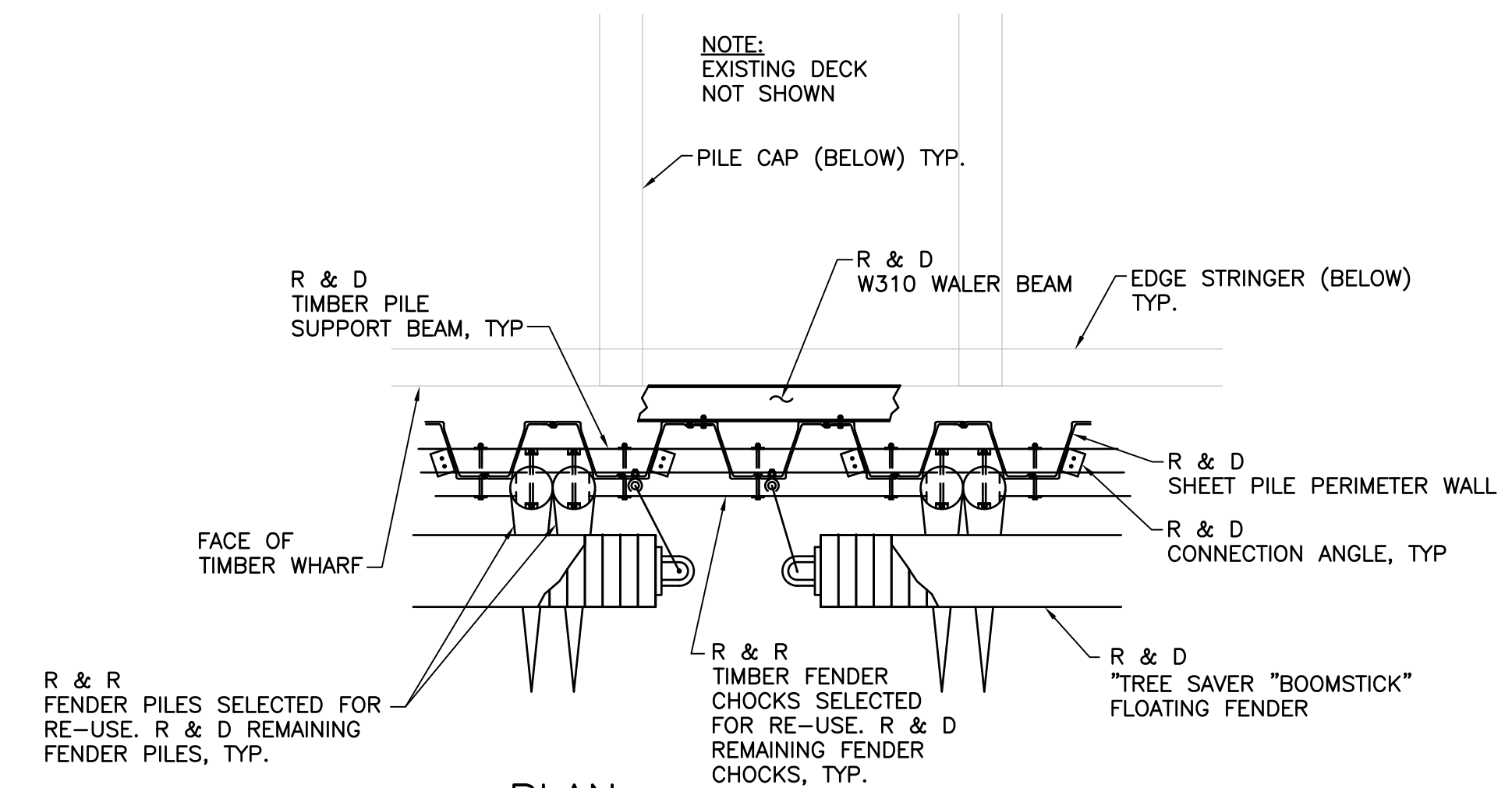




**PLAN SOUTH TIMBER JETTY**  
SCALE 1:250



**SECTION A-A**  
SCALE 1:50  
**EXISTING WHARF FENDER SYSTEM (TYPICAL)**



**PLAN EXISTING WHARF FENDER SYSTEM**  
SCALE 1:50

**LEGEND:**  
R & D DENOTES REMOVE AND DISPOSE  
R & R DENOTES REMOVE AND RETAIN

**NOTES:**  
1. THIS DRAWING SHOWS EXISTING ITEMS TO BE REMOVED, DISPOSED AND RETAINED TO FACILITATE RE-DRIVING OF THE EXISTING SHEET PILE PERIMETER WALL AT THE SOUTH JETTY.  
2. FOR SHEET PILE WALL DETAILS SEE REFERENCE DRAWINGS.

Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2024/12/19

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK 825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION**

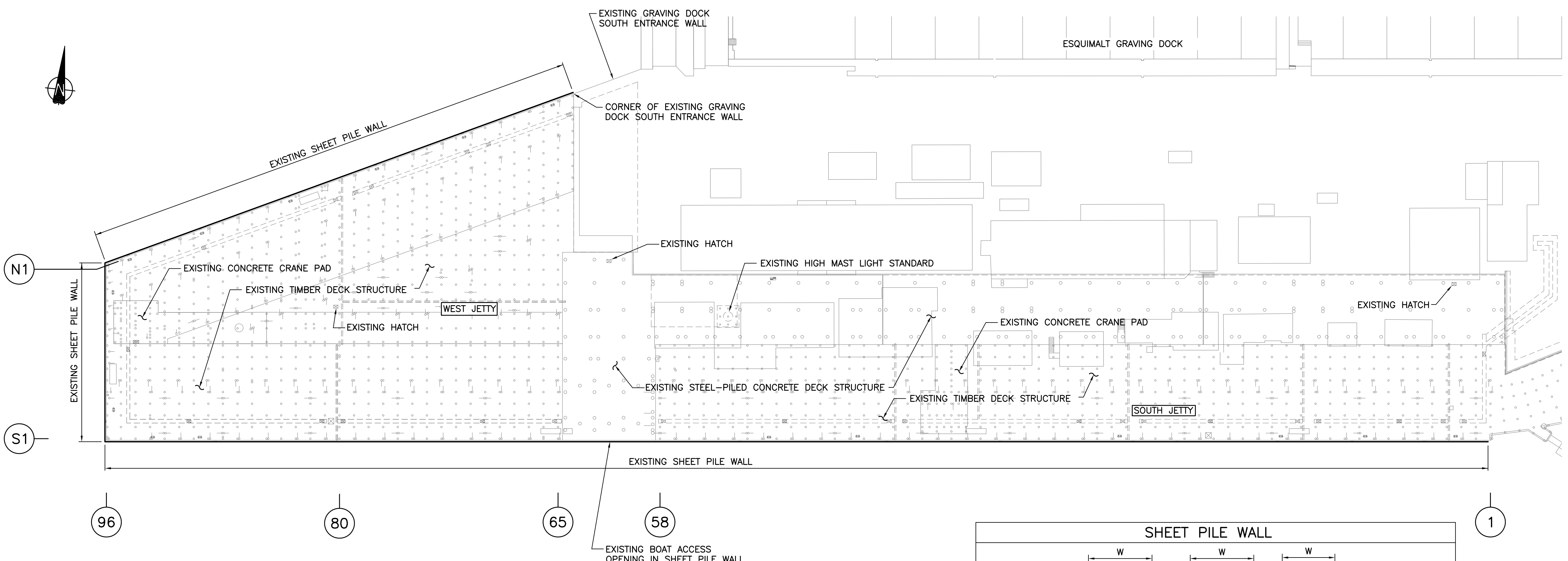
Consultant Signature Only

Designed by/Concept par  
JANET TONG  
Drawn by/Dessiné par  
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ANDREW MYLLY  
Regional Manager, Environmental Services  
COLLIN KINGMAN

Drawing title/Titre du dessin  
**WEST AND SOUTH JETTY EXISTING CONDITIONS FENDER REMOVAL SHEET 2**

Project No./No. du projet	Sheet/Feuille	Revision no./No. de révision
R.018400.002	CSM2	0

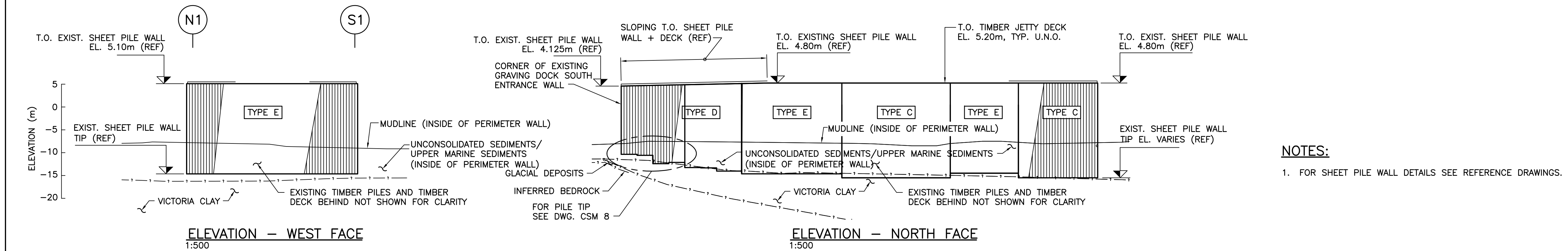
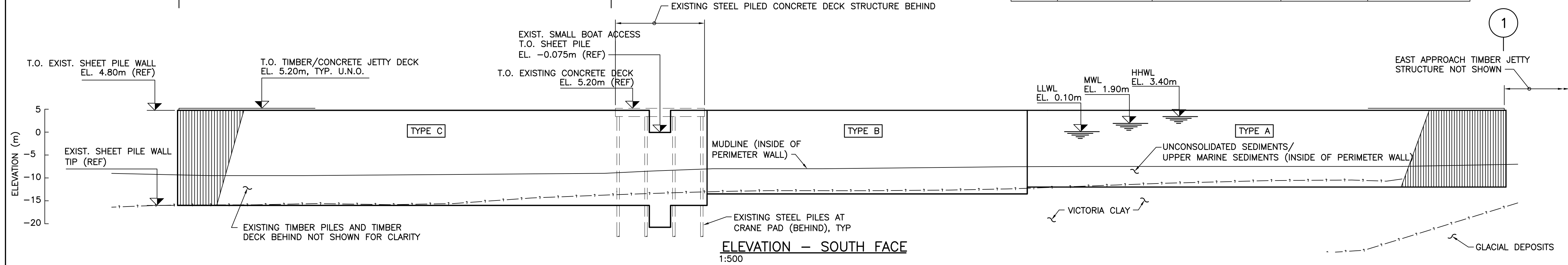




**SHEET PILE WALL**

	DESIGN	SHEET PILE WALL SECTION	DIMENSIONS		PILE TIP ELEVATION
	MUDLINE ELEVATION		W	H	
TYPE A	-7m	AZ 26-700	1400	460	-12m
TYPE B	-8m	AZ 38-700N	1400	500	-13.5m
TYPE C	-9m	AZ 50	1160	483	-16m U.N.O.
TYPE D	-8m	AZ 50	1160	483	AS NOTED
TYPE E	-8m	AZ 38-700N	1400	500	-15m

**PLAN**  
1:500  
**NOTE:**  
FENDER PILES, CORNER DOLPHINS, "TREE SAVER BOOMSTICK" FLOATS, AND LADDERS NOT SHOWN



**NOTES:**  
1. FOR SHEET PILE WALL DETAILS SEE REFERENCE DRAWINGS.

Revision/	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION**

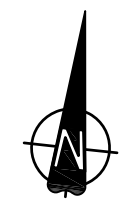
Consultant Signature Only

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Regional Manager, Environmental Services  
COLLIN KINGMAN

Drawing title/Titre du dessin  
**WEST AND SOUTH JETTY SHEET PILE WALL EXISTING CONDITIONS**

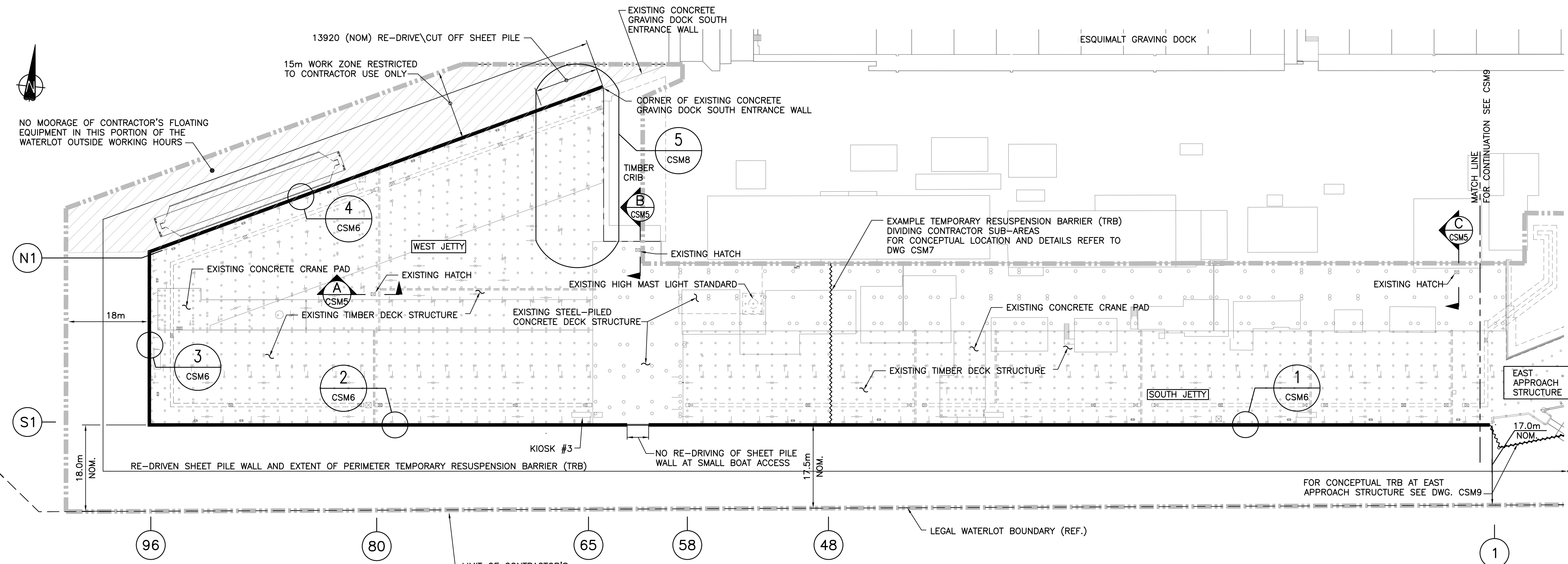
Project No./No. du projet	Sheet/	Revision no./
R.018400.002	CSM3	0



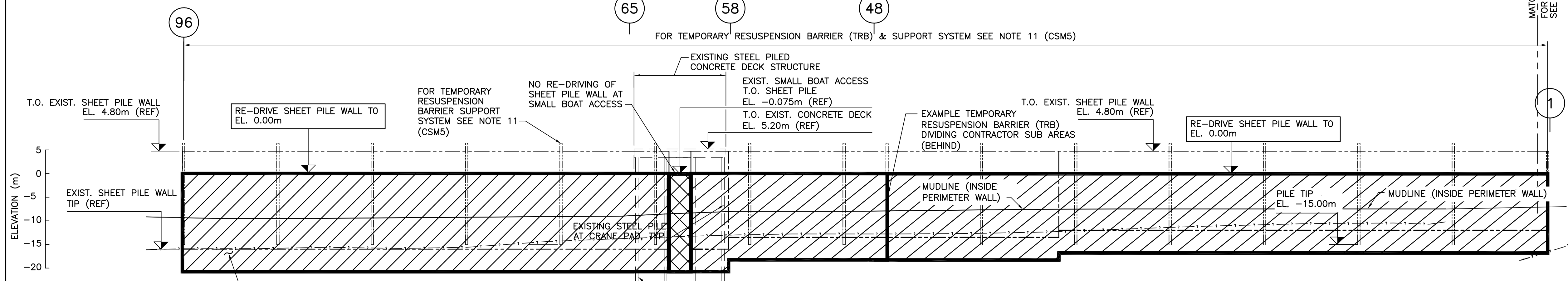


NO MOORAGE OF CONTRACTOR'S FLOATING EQUIPMENT IN THIS PORTION OF THE WATERLOT OUTSIDE WORKING HOURS

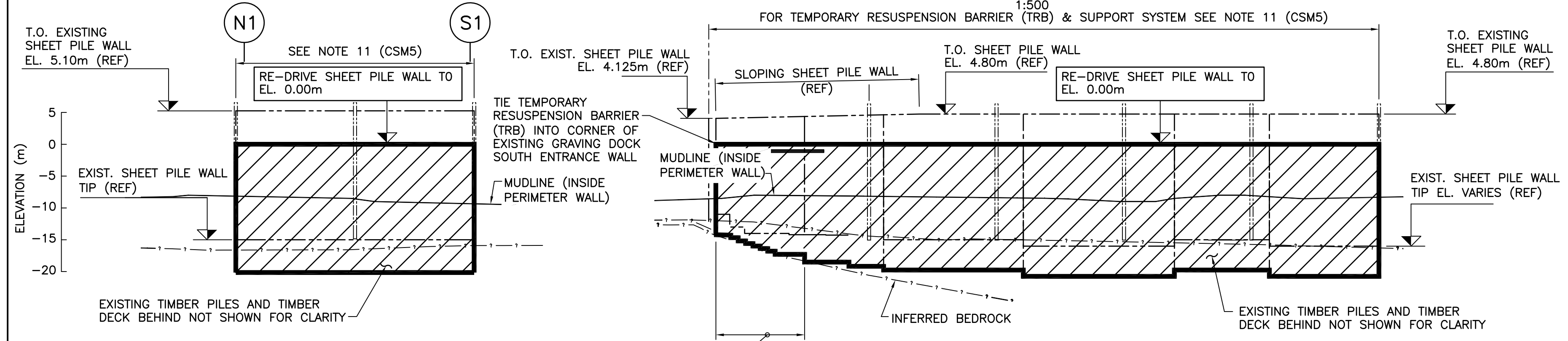
13920 (NOM) RE-DRIVE/CUT OFF SHEET PILE  
15m WORK ZONE RESTRICTED TO CONTRACTOR USE ONLY



PLAN 1:500



ELEVATION - SOUTH FACE 1:500



ELEVATION - WEST FACE 1:500

ELEVATION - NORTH FACE 1:500

**NOTES:**

1. FOR CONSTRUCTION SEQUENCE SEE DRAWING CSM5.
2. FENDER PILES, CORNER DOLPHINS, "TREE SAVER BOOMSTICK FLOATS AND LADDERS" NOT SHOWN.
3. REFER TO SPECIFICATION FOR DETAILED CONSTRAINTS ON CONSTRUCTION SEQUENCING.

Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION**

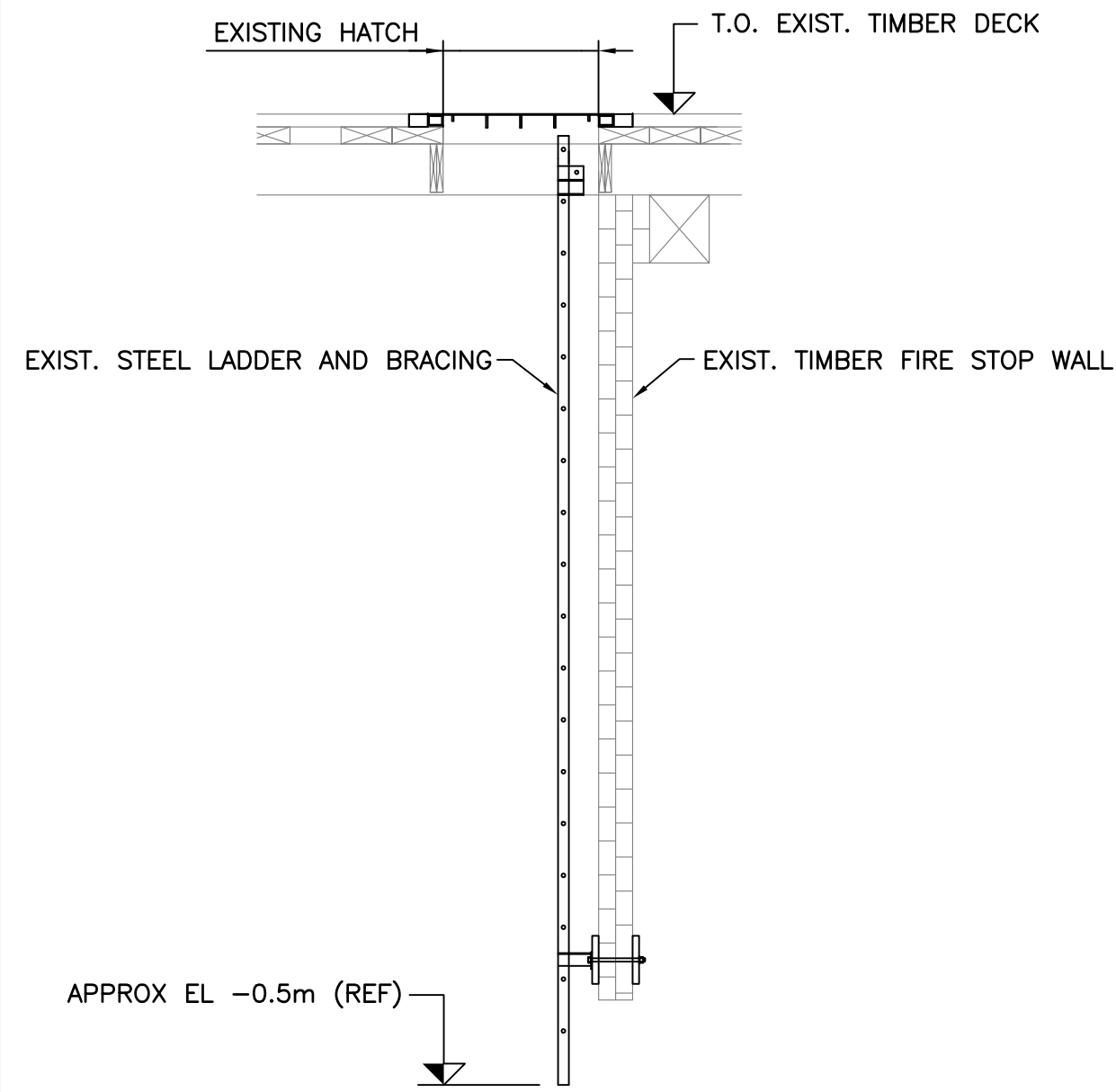
Consultant Signature Only

Designed by/Concept par  
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Drawn by/Dessiné par  
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PWGSC Project Manager/Administrateur de Projets TPSCG  
ANDREW MYLLY  
Regional Manager, Environmental Services  
COLLIN KINGMAN

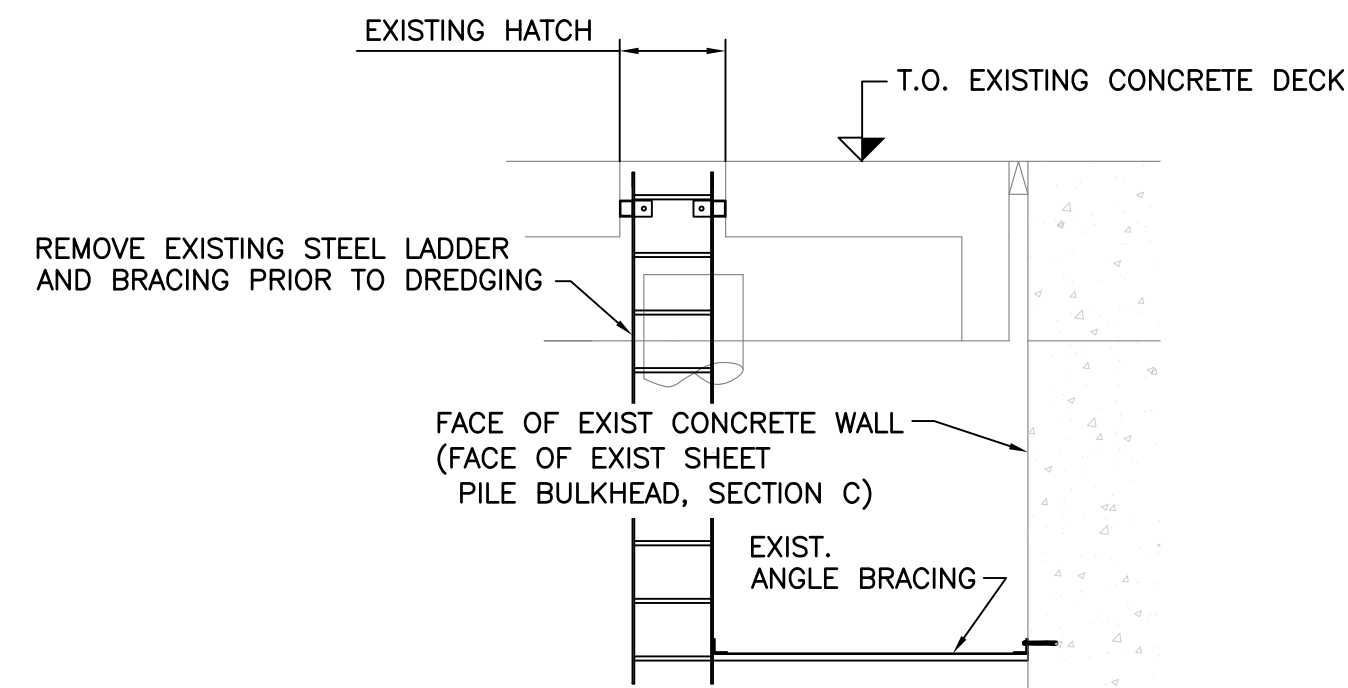
Drawing title/Titre du dessin  
**SHEET PILE WALL MODIFICATIONS PLAN AND ELEVATIONS**

Project No./No. du projet <b>R.018400.002</b>	Sheet/ <b>CSM4</b>	Revision no./ <b>0</b>
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SECTION A  
SCALE 1: 25  
CSM4



SECTION B  
SCALE 1: 25  
CSM4

SECTION C SIMILAR  
SCALE 1: 25  
CSM4

**INDICATIVE CONSTRUCTION SEQUENCE (SEE DWG CSM4):**

- TEMPORARY RESUSPENSION BARRIER (TRB) ELEMENTS AND CONFIGURATIONS ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. CONTRACTOR'S THIRD PARTY ENGINEER SHALL VERIFY SPECIFIC DESIGN APPROACH FOR TEMPORARY RESUSPENSION BARRIER (TRB) SYSTEM.
- REMOVE "TREE SAVER BOOMSTICK" FENDER LOGS, GUIDE WIRES AND WEIGHTS AND DISPOSE OFF-SITE.
- REMOVE FENDER PILES, CORNER DOLPHINS AND CHOCKS AND STORE SELECTED FENDER PILES, CORNER DOLPHINS AND CHOCKS FOR RE-USE; DISPOSE OF REMAINING FENDER PILES AND CHOCKS. REMOVE TIMBER PILE SUPPORT BEAMS AND DISPOSE OFF-SITE.
- REMOVE LADDERS. STORE LADDERS REQUIRED FOR RE-USE, DISPOSE OF REMAINING LADDERS.
- DISCONNECT SHEET PILE WALL FROM STEEL WALER, REMOVE STEEL WALER (EXCEPT AS SHOWN ON DRAWING CSM8) AND DISPOSE OFF-SITE.
- INSTALL COVERS OVER VENT HOLES IN SHEET PILE WALL.
- DISCONNECT AND REMOVE STEEL FRAMING AT BOAT ACCESS OPENING AND DISPOSE OFF-SITE.
- RE-DRIVE EXISTING SHEET PILE WALL AS SHOWN.
- DURING RE-DRIVING OF SHEET PILES, MAINTAIN AND ADJUST THE EXISTING GEOTEXTILE AT OVERLAP JOINTS IN THE EXISTING STEEL SHEET PILE WALL AND AT THE NORTH WEST CORNER OF THE TIMBER CRIB, TO PROVIDE A CONTINUOUS AND UNBROKEN BARRIER FOR THE FULL HEIGHT OF THE RE-DRIVEN SHEET PILE WALL ABOVE MUD LINE.
- CUT EXISTING SHEET PILE WALL DOWN TO EL. 0.0m WHERE INDICATED.
- INSTALL TEMPORARY STEEL SUPPORT BRACING AT TIMBER CRIB.
- INSTALL TEMPORARY RESUSPENSION BARRIER (TRB) SYSTEM AS DESIGNED BY CONTRACTOR'S THIRD PARTY ENGINEER.
- REMOVE TIMBER PILED WEST JETTY AND SOUTH JETTY STRUCTURES AND EAST APPROACH STRUCTURE.
- REMOVE CONTAMINATED SEDIMENT BY DREDGING, AND INSTALL ENGINEERED CAPPING MATERIALS.
- INSTALL TIMBER FENDER PILES, CORNER DOLPHINS AND NAVIGATION MARKER DOLPHINS PRIOR TO PLACING ARMOUR ROCK.
- REMOVE TEMPORARY RESUSPENSION BARRIER (TRB) SYSTEM.
- EXTRACT RE-DRIVEN SHEET PILES AND DISPOSE OFF-SITE.

**NOTE:**

- REFER TO SPECIFICATION FOR DETAILED CONSTRAINTS ON CONSTRUCTION SEQUENCING.

Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client

**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
GEOFF COOPER

Drawn by/Dessiné par  
ARNIE RIST

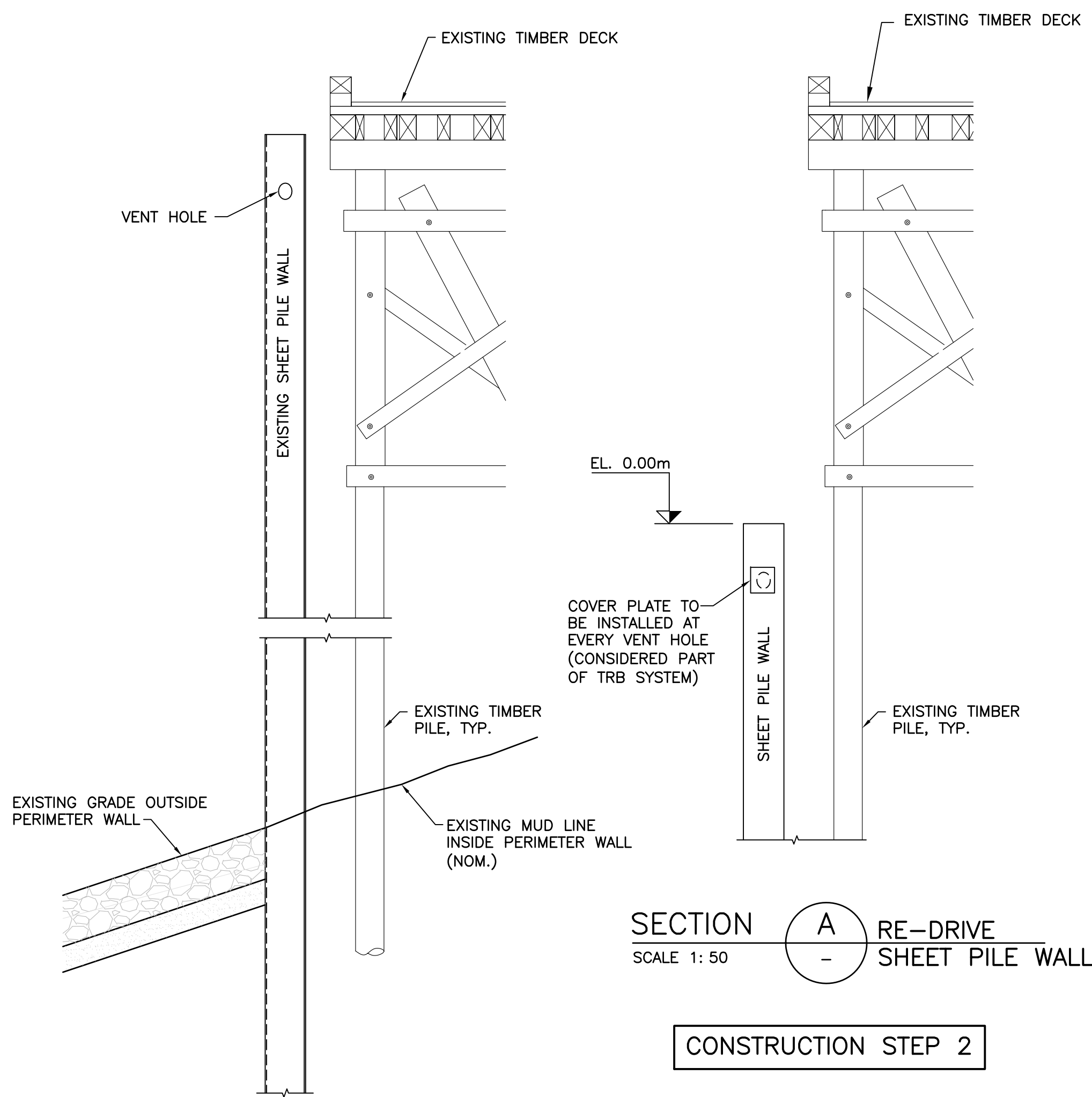
PWGSC Project Manager/Administrateur de Projets TPSGC  
ANDREW MYLLY

Regional Manager, Environmental Services  
COLLIN KINGMAN

Drawing title/Titre du dessin  
**SHEET PILE WALL MODIFICATIONS  
NOTES AND SECTIONS**

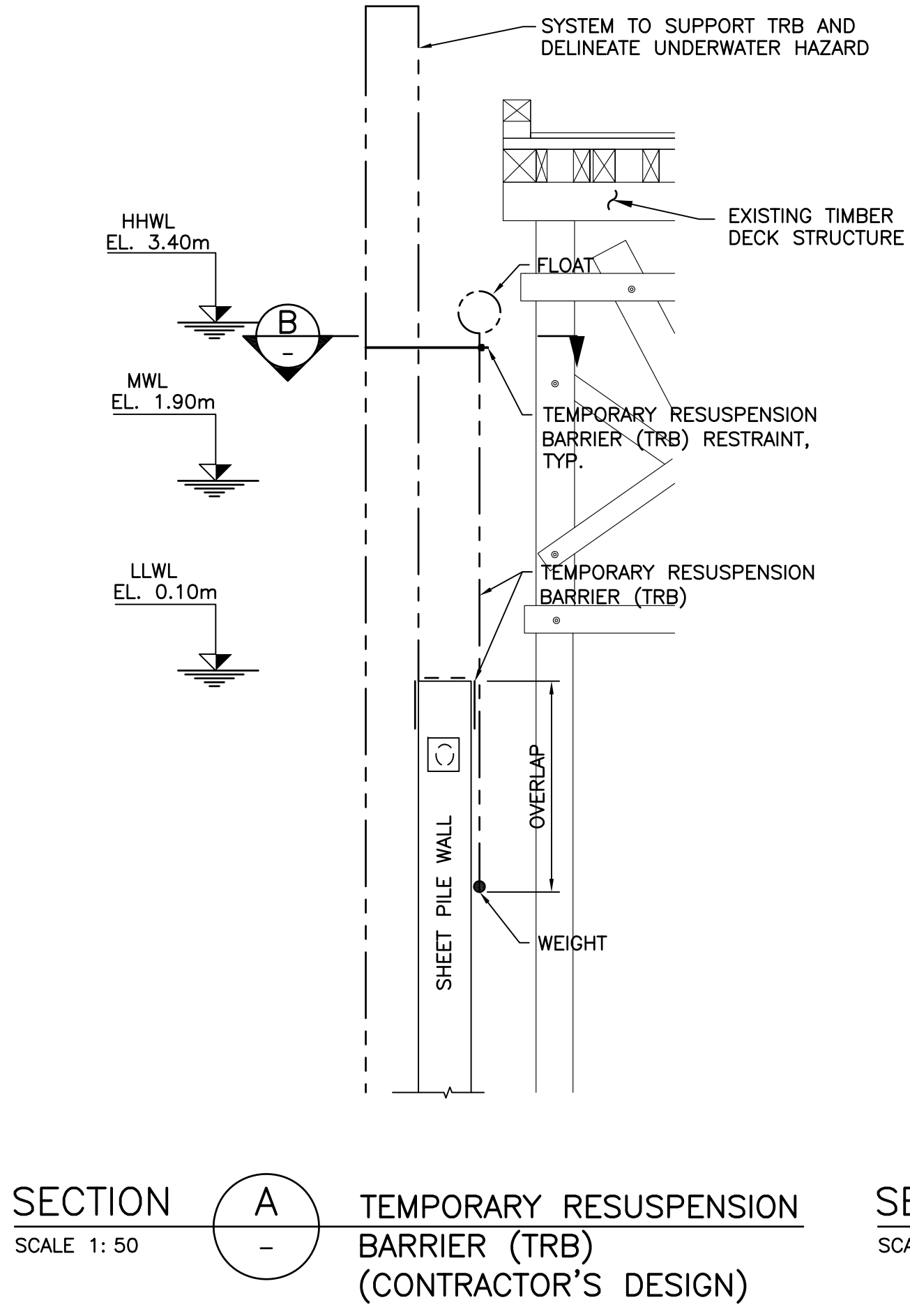
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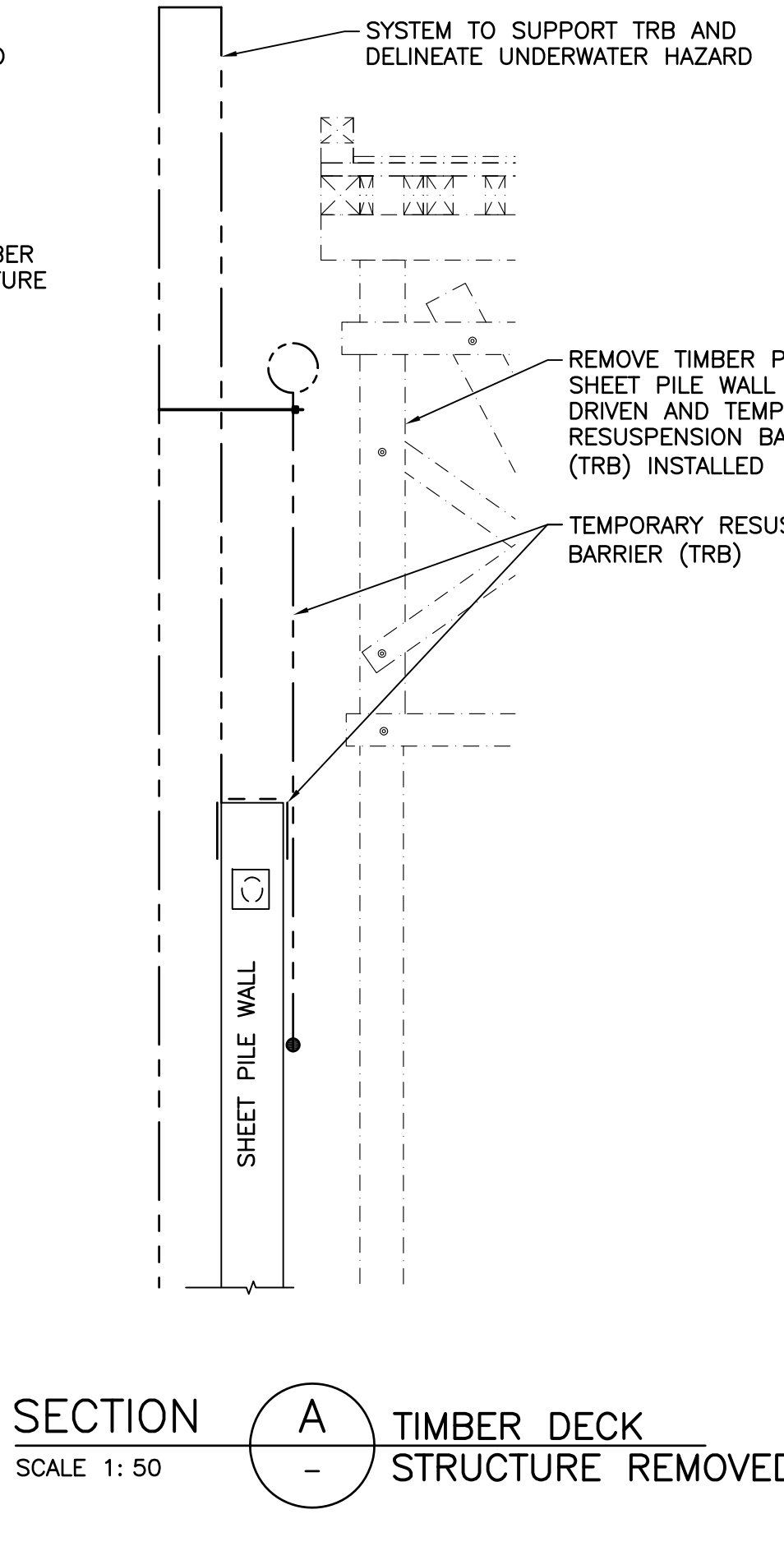
SECTION A RE-DRIVE SHEET PILE WALL SCALE 1: 50

CONSTRUCTION STEP 2



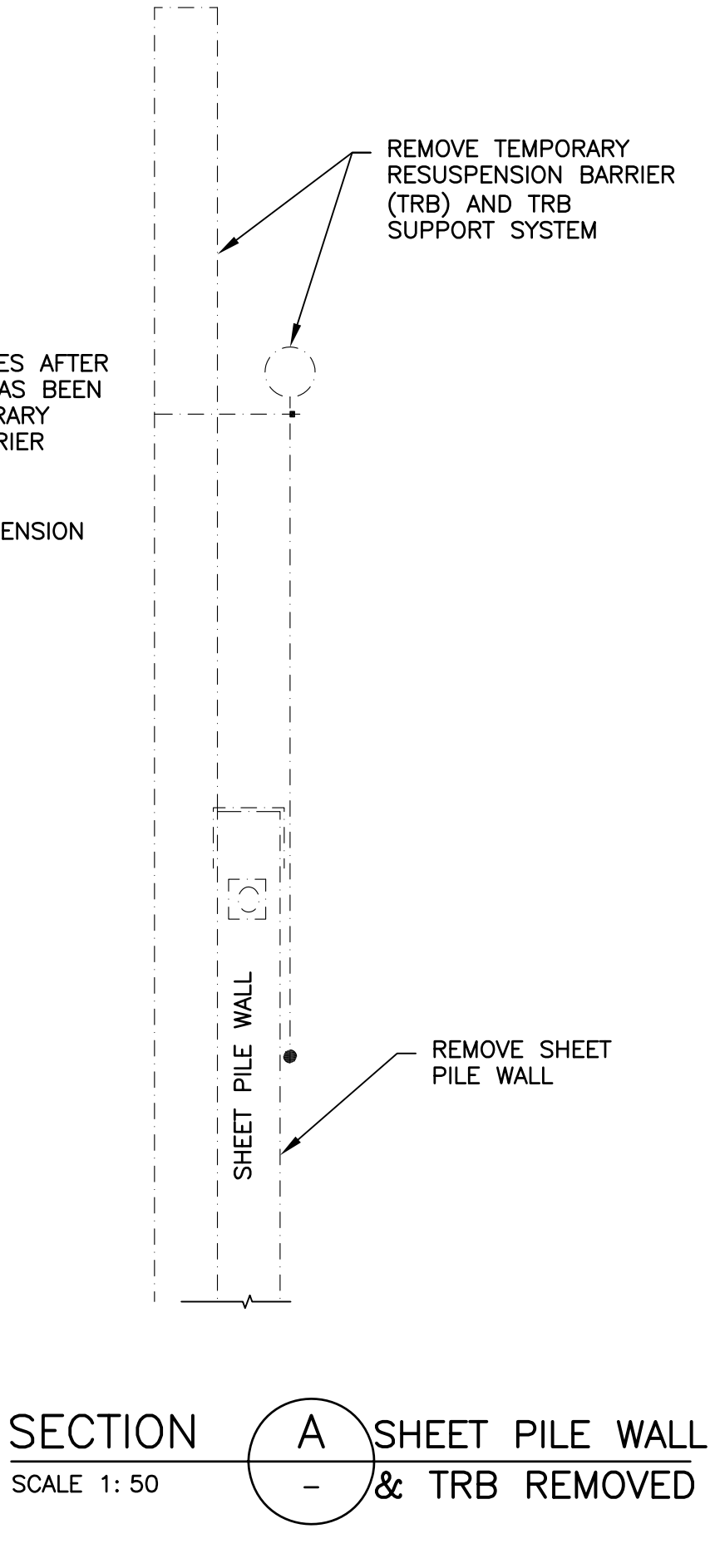
SECTION A TEMPORARY RESUSPENSION BARRIER (TRB) (CONTRACTOR'S DESIGN) SCALE 1: 50

CONSTRUCTION STEP 3



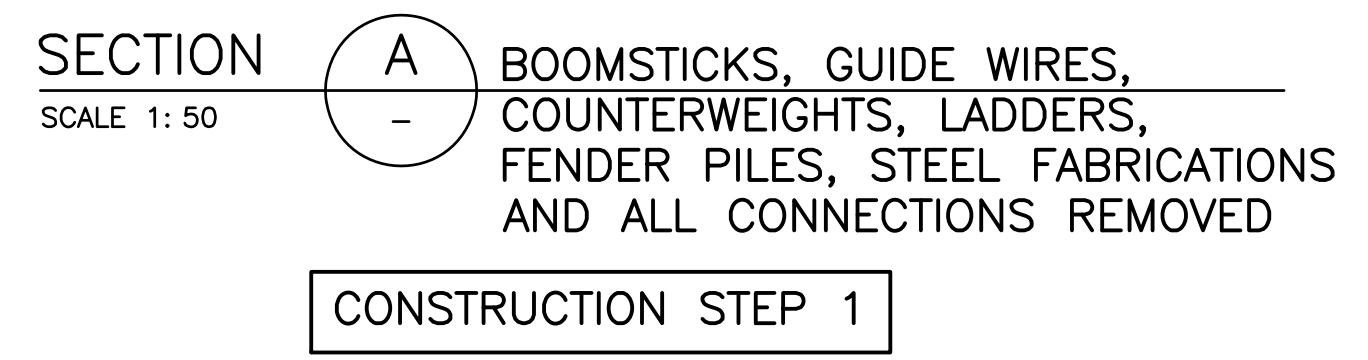
SECTION A TIMBER DECK STRUCTURE REMOVED SCALE 1: 50

CONSTRUCTION STEP 4

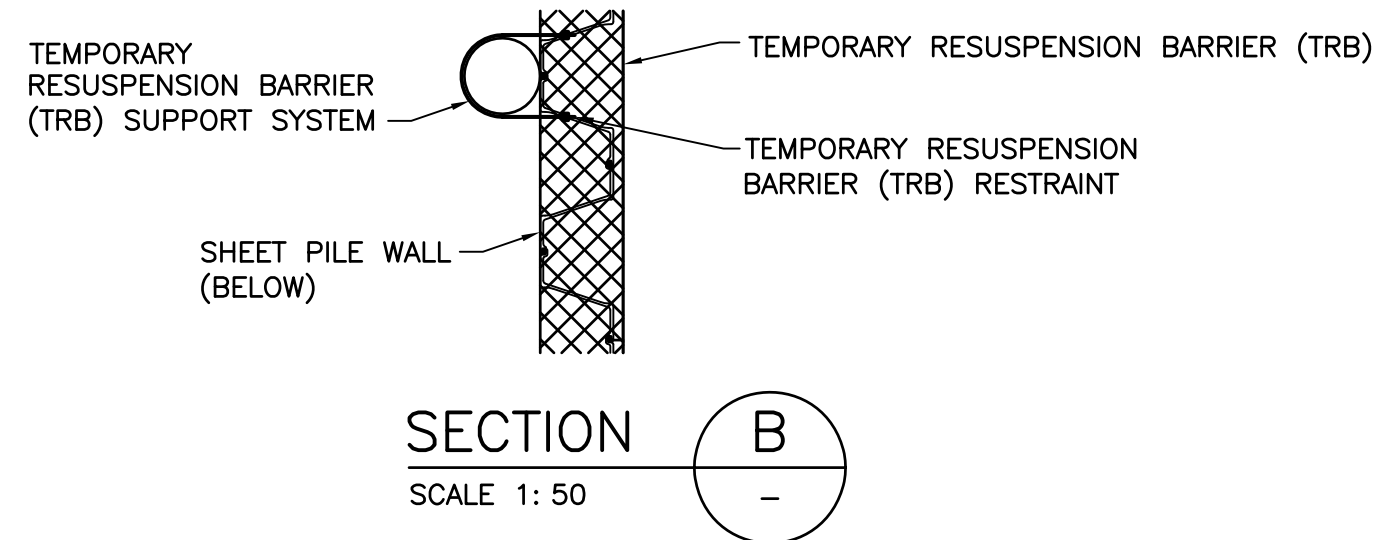


SECTION A SHEET PILE WALL & TRB REMOVED SCALE 1: 50

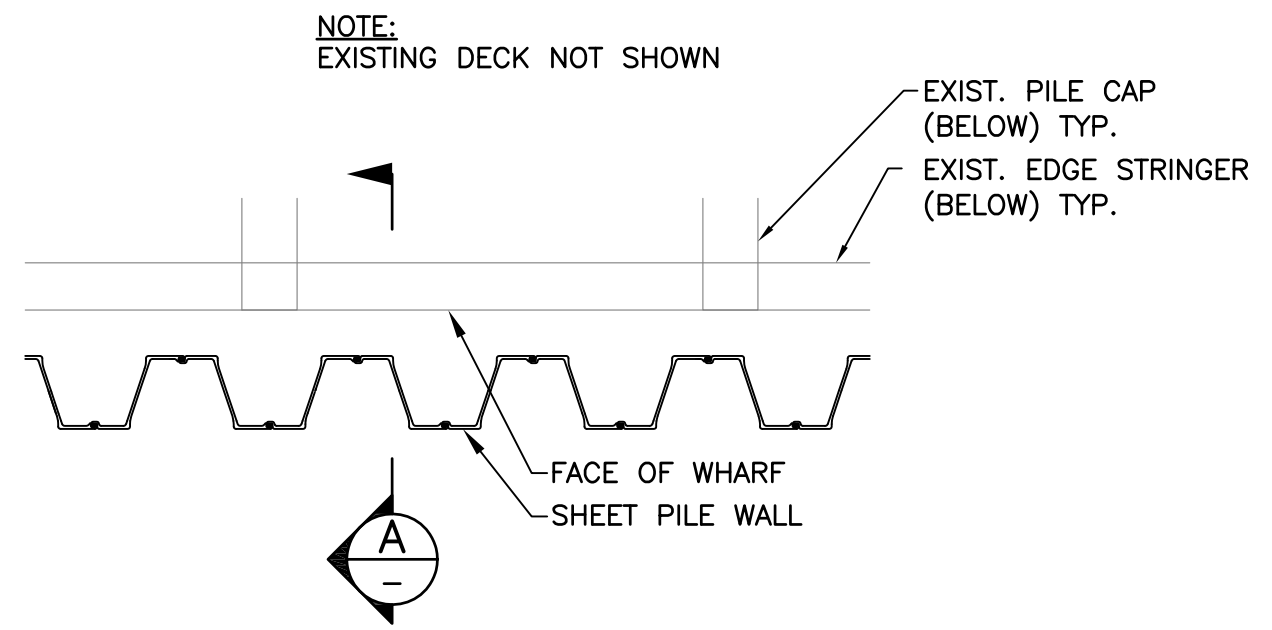
CONSTRUCTION STEP 5



CONSTRUCTION STEP 1



SECTION B SCALE 1: 50



DETAIL 1 2 3 4 SCALE 1: 50 CSM4 CSM4 CSM4 CSM4

- NOTES:**
1. CONTRACTOR TO ENSURE THAT THE SHEET PILE WALL ELEVATION AT THE SMALL BOAT ACCESS DOES NOT CHANGE DURING RE-DRIVING OF ADJACENT SHEET PILES.
  2. TEMPORARY RESUSPENSION BARRIER (TRB) ELEMENTS AND CONFIGURATION ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY.
  3. TEMPORARY RESUSPENSION BARRIER (TRB) SYSTEM INCLUDING SUPPORTING SYSTEM IS TO BE DESIGNED BY THE CONTRACTOR'S THIRD PART ENGINEER. SEE SPECIFICATION FOR PERFORMANCE CRITERIA.
  4. CONTRACTOR TO COVER VENT HOLES PRIOR TO RE-DRIVING SHEET PILES.
  5. THE RE-DRIVEN SHEET PILE WALL IS DESIGNED TO RESIST ENVIRONMENTAL FORCES (BUT NOT VESSEL IMPACT) EXERTED AS PRESSURE DISTRIBUTIONS AGAINST ITS FACE. CONTRACTOR'S DESIGN FOR TEMPORARY RESUSPENSION BARRIER (TRB) SHALL NOT CAUSE ANY ADDITIONAL LATERAL LOADING ON RE-DRIVEN SHEET PILE WALL.
  6. THE ELEVATION OF THE CONTRACTOR'S VESSEL PROPELLER MAY BE POSITIONED AT OR ABOVE THE SHEET PILE WALL ELEVATION DEPENDING ON WATER LEVEL. THE CONTRACTOR SHALL USE CAUTION WHEN OPERATING VESSELS DURING HIGH TIDE TO PREVENT PROPWASH FROM DISTURBING THE TRB IN ACCORDANCE WITH THE SPECIFICATIONS.

Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK 825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
BILL CHRISTENSEN

Drawn by/Dessiné par  
ARNIE RIST

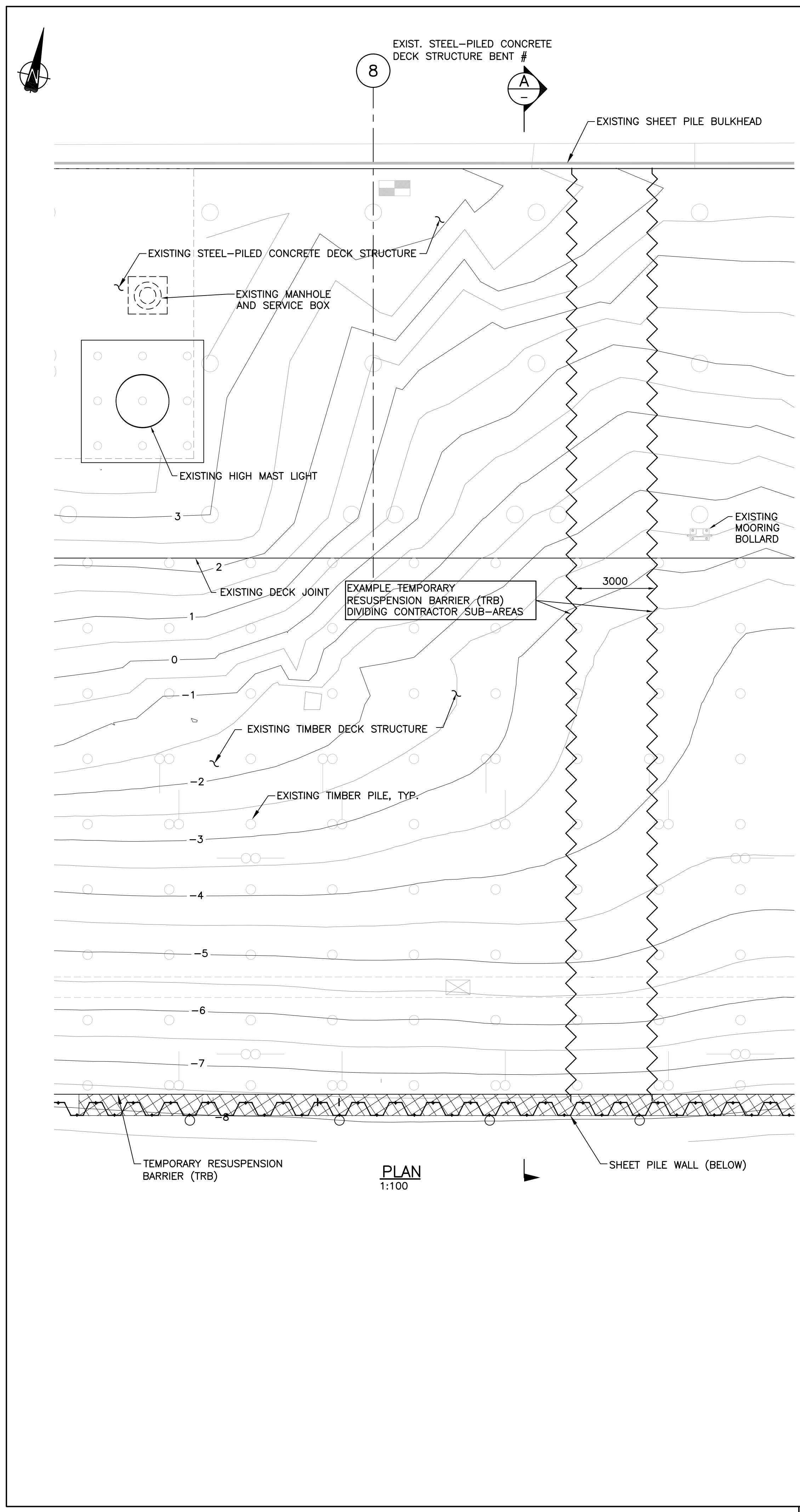
PWGC Project Manager/Administrateur de Projets TPSC  
ANDREW MYLLY

Regional Manager, Environmental Services  
COLLIN KINGMAN

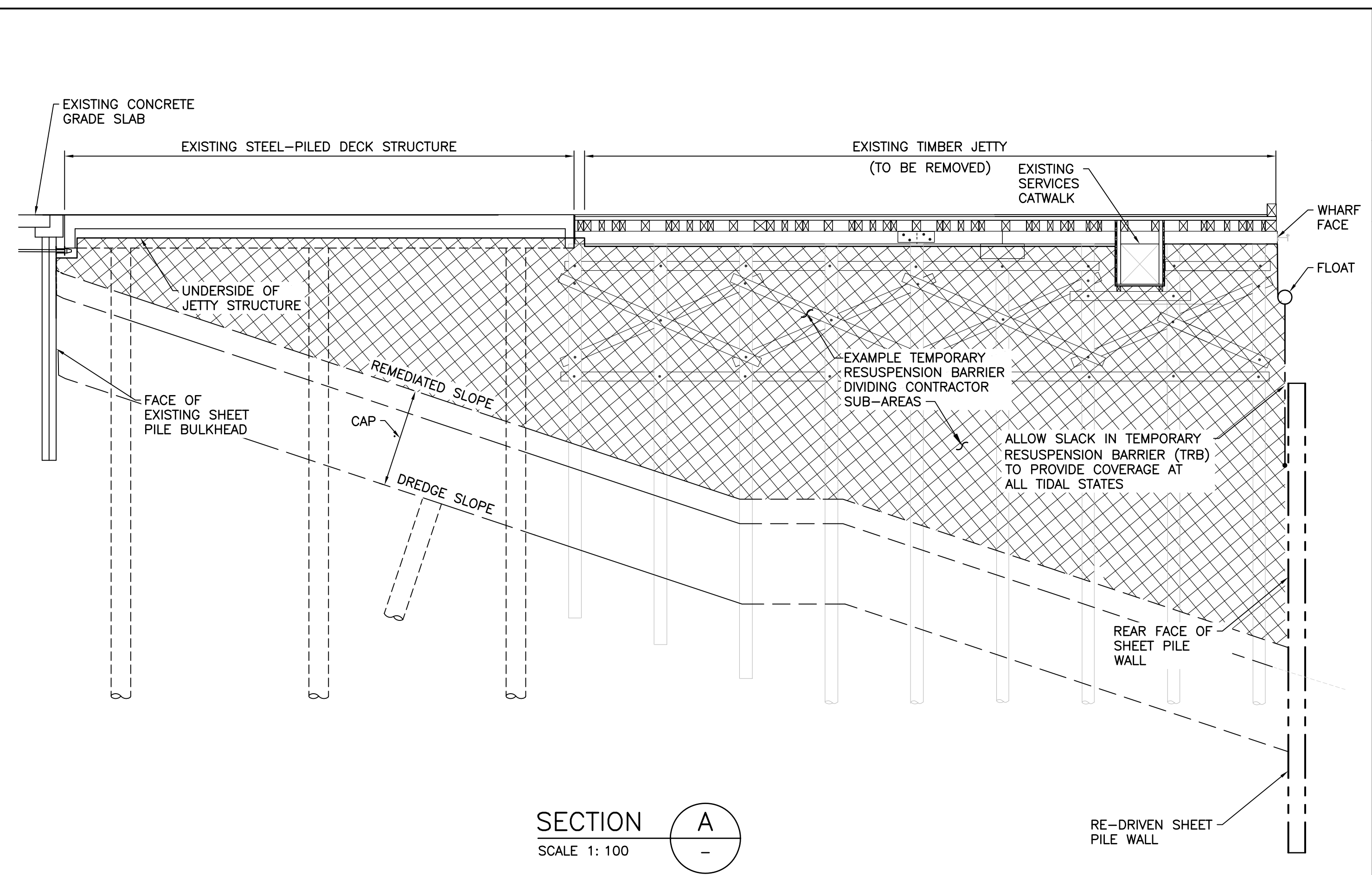
Drawing title/Titre du dessin  
**SHEET PILE WALL MODIFICATIONS CONSTRUCTION SEQUENCE**

Project No./No. du projet <b>R.018400.002</b>	Sheet/ <b>CSM6</b>	Revision no./ <b>0</b>
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PLAN  
1:100



SECTION A  
SCALE 1: 100

Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
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Drawn by/Dessine par  
**ARNIE RIST**

PWOSC Project Manager/Administrateur de Projets TPSCG  
**ANDREW MYLLY**

Regional Manager, Environmental Services  
**COLLIN KINGMAN**

Drawing title/Titre du dessin  
**SHEET PILE WALL MODIFICATIONS  
DETAILS - SHEET 1**

Project No./No. du projet  
**R.018400.002**

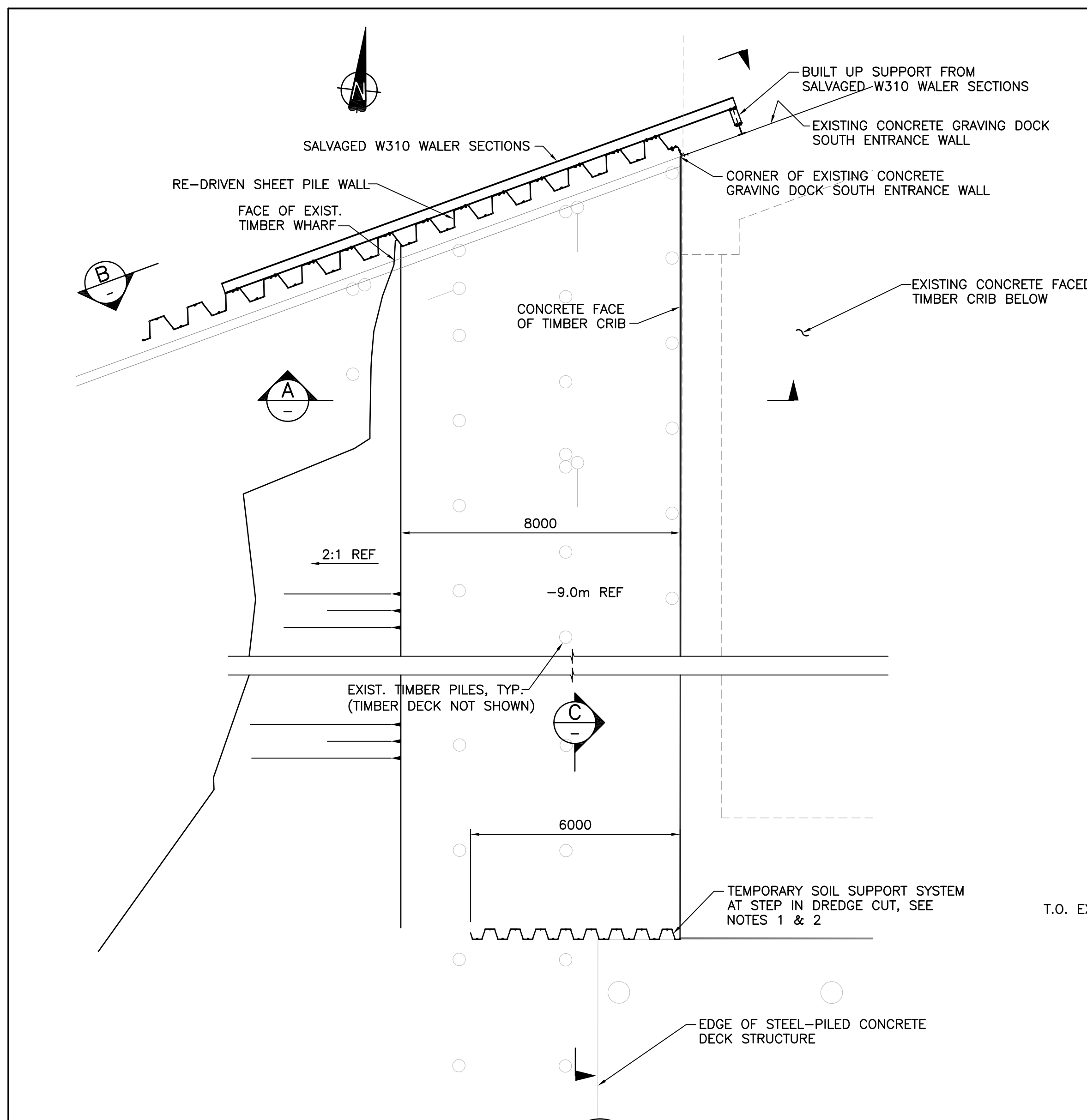
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**CSM7**

Revision no./  
**0**

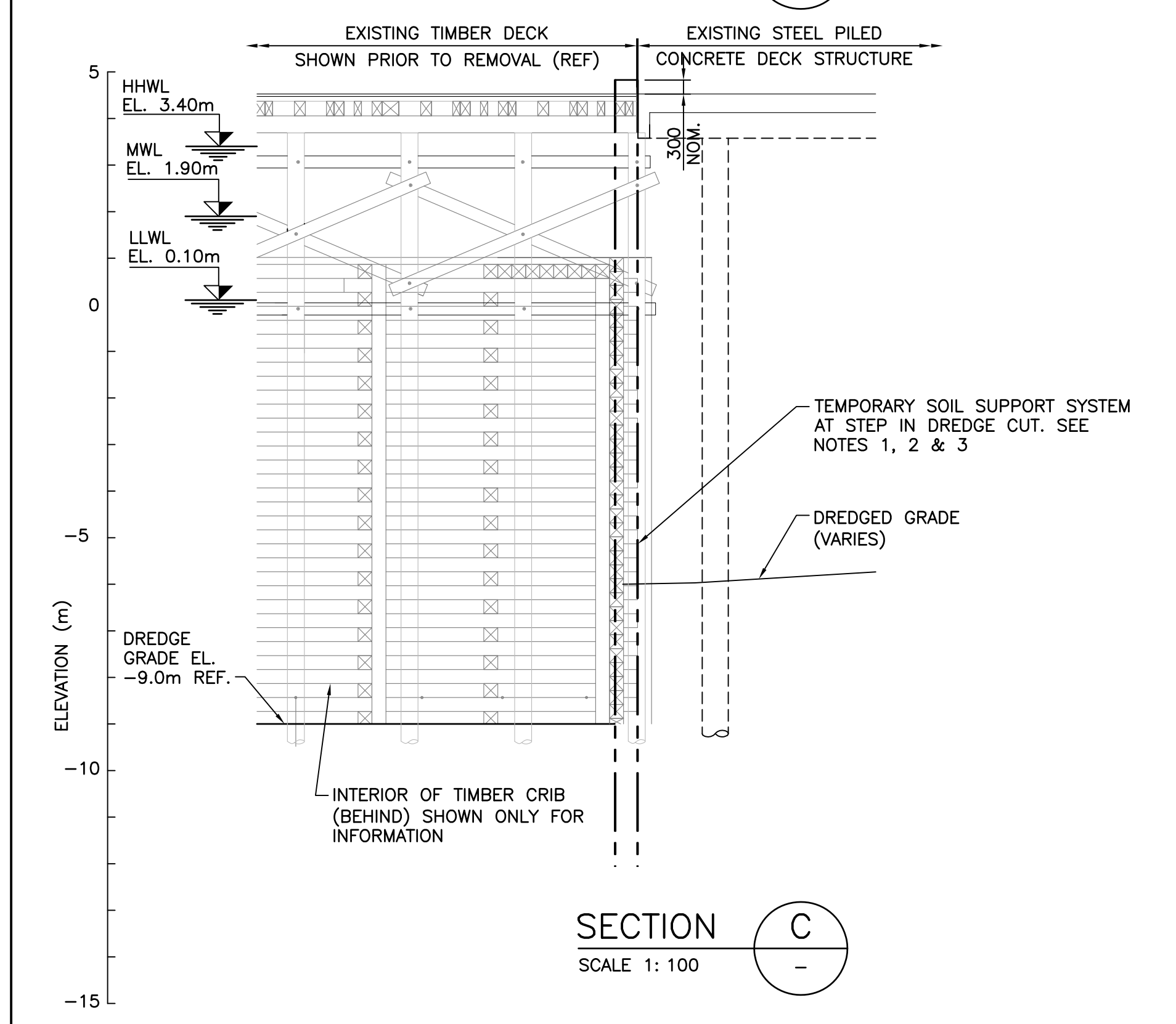
**NOTES:**

1. TEMPORARY RESUSPENSION BARRIER (TRB) ELEMENTS AND CONFIGURATION ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY.
2. TEMPORARY RESUSPENSION BARRIER (TRB) SYSTEM INCLUDING SUPPORTING SYSTEM IS TO BE DESIGNED BY THE CONTRACTOR'S THIRD PARTY ENGINEER. SEE SPECIFICATION FOR PERFORMANCE CRITERIA.

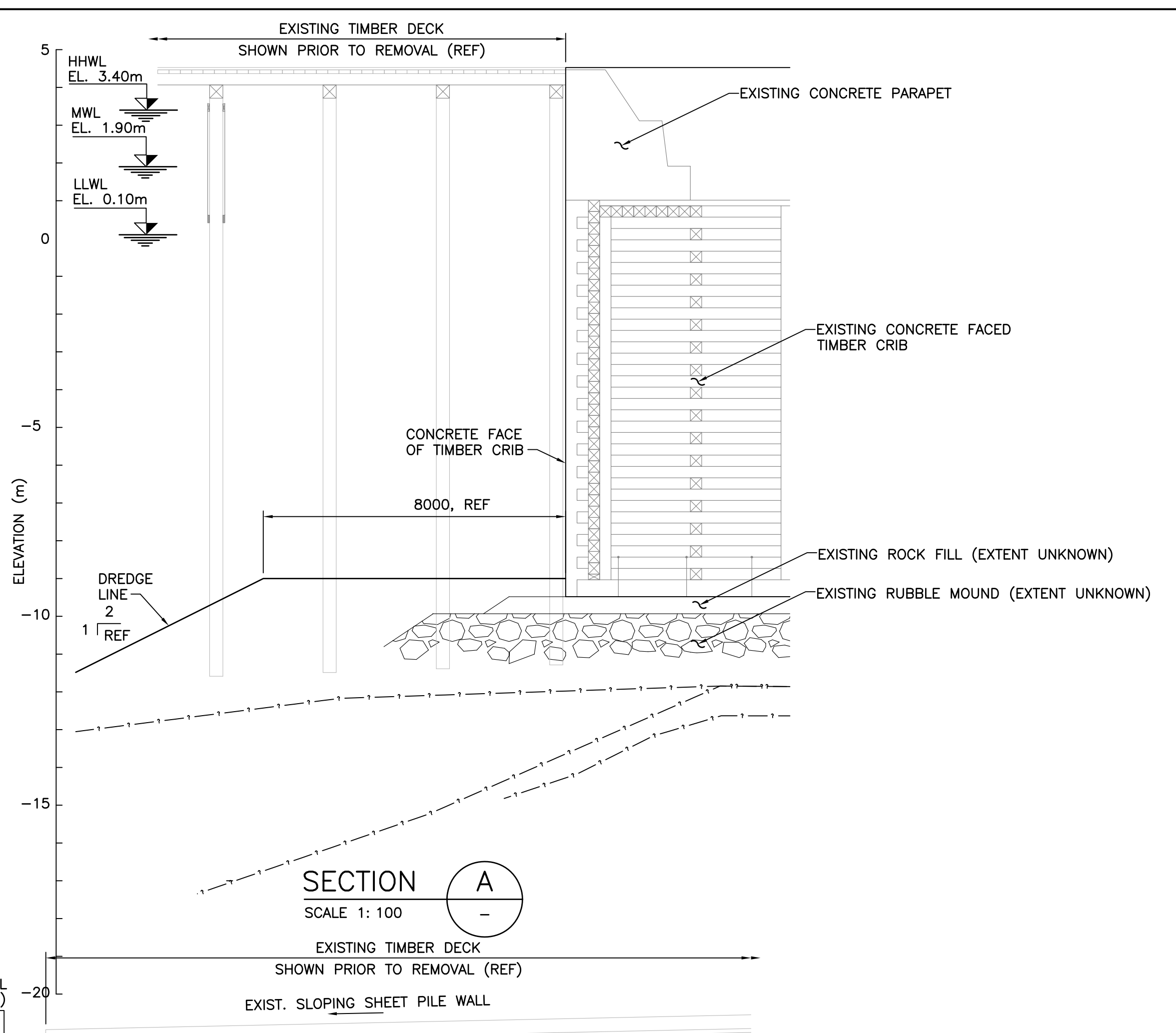




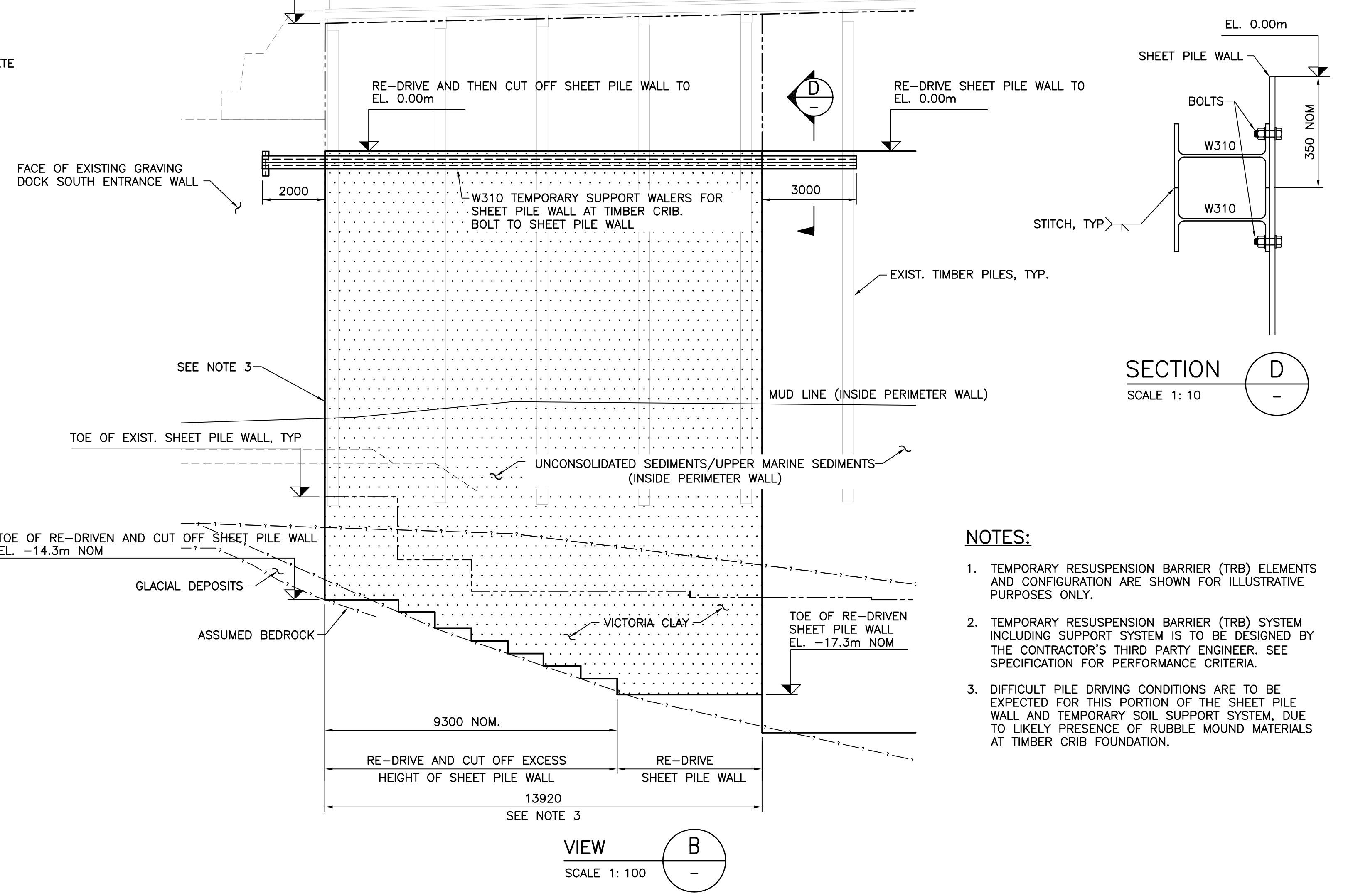
**DETAIL 5**  
SCALE 1: 100 CSM4



**SECTION C**  
SCALE 1: 100



**SECTION A**  
SCALE 1: 100



**VIEW B**  
SCALE 1: 100

**SECTION D**  
SCALE 1: 10

**NOTES:**

1. TEMPORARY RESUSPENSION BARRIER (TRB) ELEMENTS AND CONFIGURATION ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY.
2. TEMPORARY RESUSPENSION BARRIER (TRB) SYSTEM INCLUDING SUPPORT SYSTEM IS TO BE DESIGNED BY THE CONTRACTOR'S THIRD PARTY ENGINEER. SEE SPECIFICATION FOR PERFORMANCE CRITERIA.
3. DIFFICULT PILE DRIVING CONDITIONS ARE TO BE EXPECTED FOR THIS PORTION OF THE SHEET PILE WALL AND TEMPORARY SOIL SUPPORT SYSTEM, DUE TO LIKELY PRESENCE OF RUBBLE MOUND MATERIALS AT TIMBER CRIB FOUNDATION.

Revision/Redaction	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

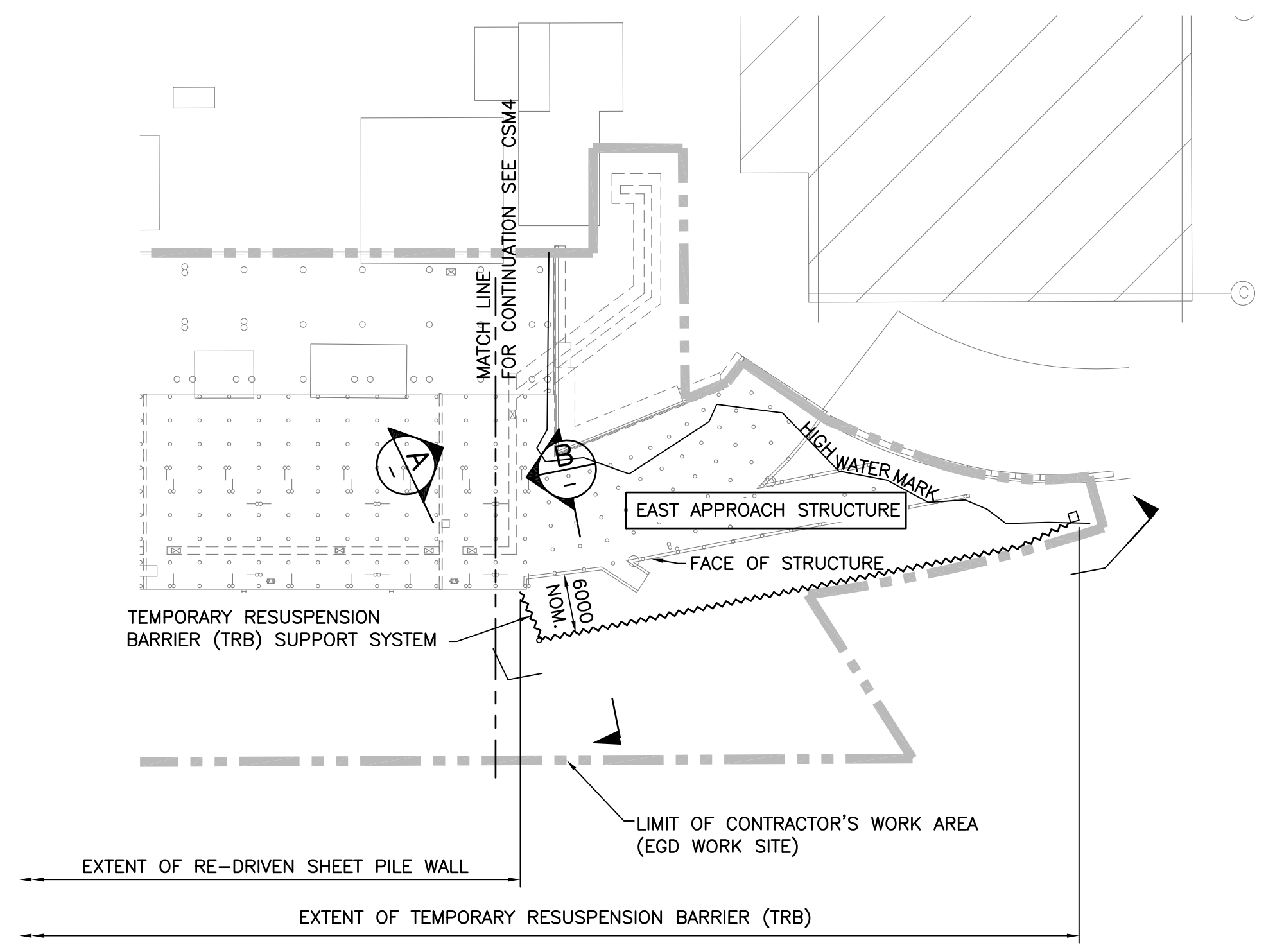
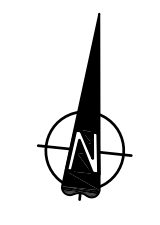
Consultant Signature Only

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ANDREW MYLLY  
Regional Manager, Environmental Services  
COLLIN KINGMAN

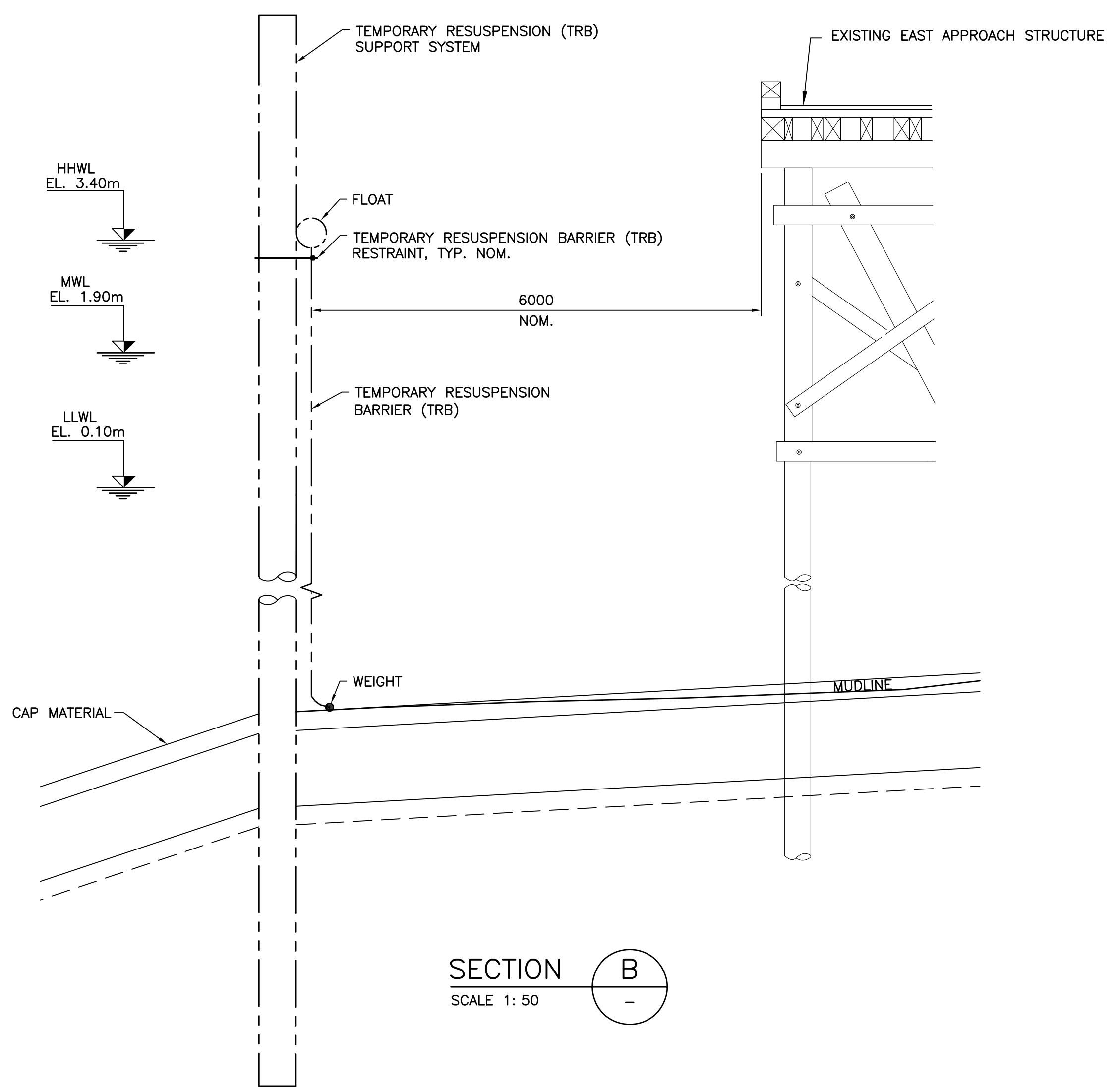
Drawing title/Titre du dessin  
**SHEET PILE WALL MODIFICATIONS  
DETAILS - SHEET 2**

Project No./No. du projet <b>R.018400.002</b>	Sheet/ <b>CSM8</b>	Revision no./ <b>0</b>
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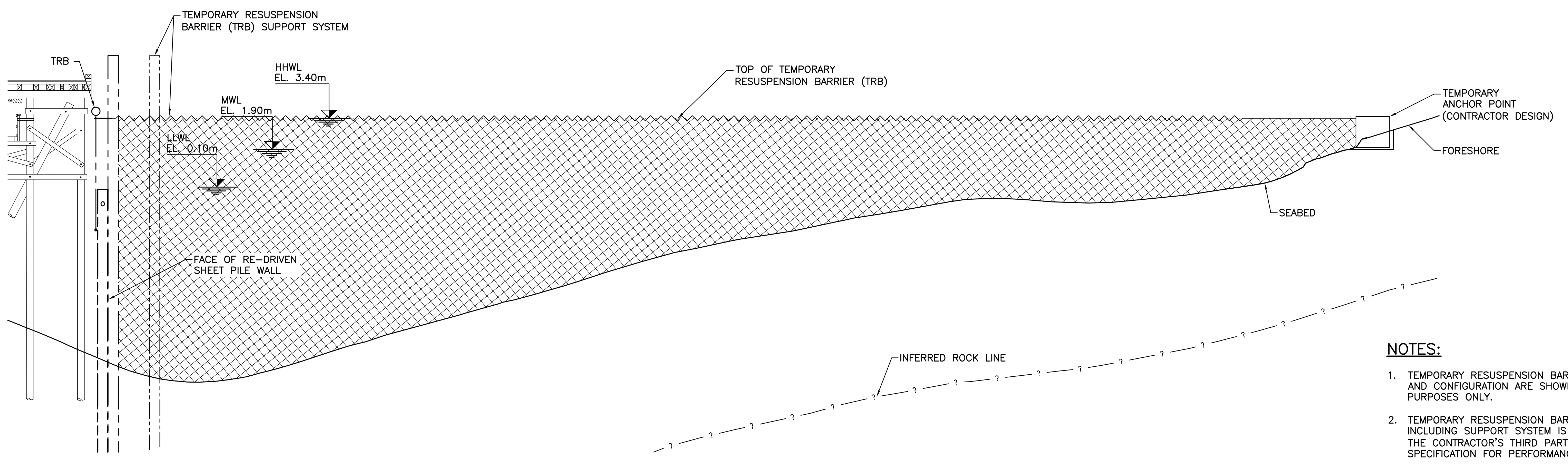




PLAN  
SCALE 1:250



SECTION B  
SCALE 1:50



ELEVATION - DEVELOPED A  
SCALE 1:125

- NOTES:**
- TEMPORARY RESUSPENSION BARRIER (TRB) ELEMENTS AND CONFIGURATION ARE SHOWN FOR ILLUSTRATIVE PURPOSES ONLY.
  - TEMPORARY RESUSPENSION BARRIER (TRB) SYSTEM INCLUDING SUPPORT SYSTEM IS TO BE DESIGNED BY THE CONTRACTOR'S THIRD PARTY ENGINEER. SEE SPECIFICATION FOR PERFORMANCE CRITERIA.

Revision/Redaction	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

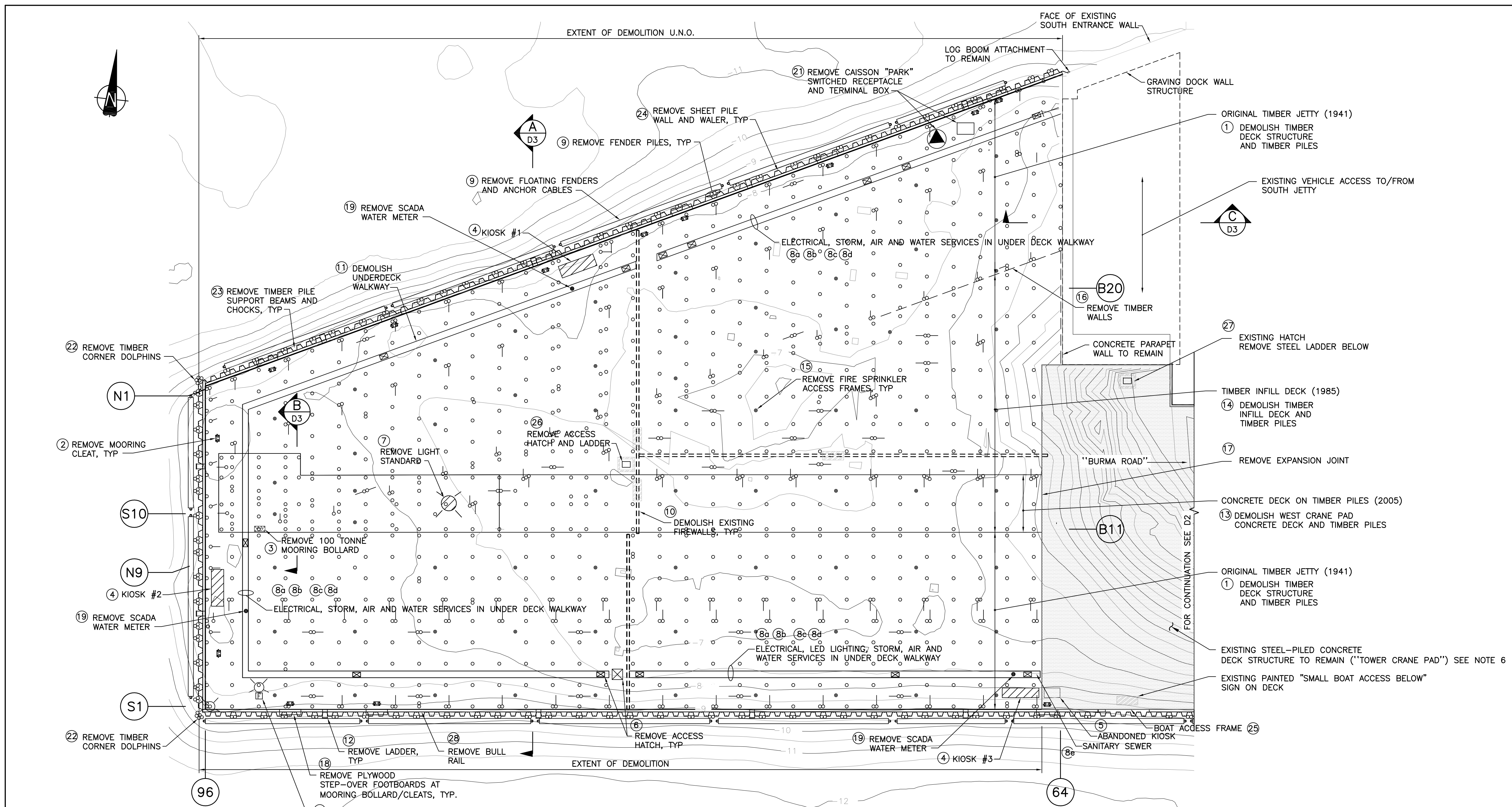
Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**  
**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

Consultant Signature Only  
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Drawing title/Titre du dessin  
**SHEET PILE WALL MODIFICATIONS  
DETAILS - SHEET 3**

Project No./No. du projet	Sheet/Feuille	Revision no./No. de révision
R.018400.002	CSM9	0





**PLAN WEST TIMBER JETTY**  
1:250

**REFERENCE DRAWINGS:**

1. KM ENGINEERING GROUP – AS–BUILTS, JANUARY 06, 2009. PROJECT #861231
  - 1.1. DRAWINGS;
    - 1.1.1. S2
    - 1.1.2. S3
    - 1.1.3. S4
    - 1.1.4. S5
    - 1.1.5. S7
2. PETERSON GALLOWAY LTD. – AS–BUILTS, AUGUST 23, 2005. PROJECT #846342
  - 2.1. DRAWINGS;
    - 2.1.1. S03
    - 2.1.2. S04
    - 2.1.3. S05
    - 2.1.4. S06
3. WESTMAR – RECORD DRAWINGS, MARCH 31, 2004. PROJECT #846342
  - 3.1. DRAWINGS;
    - 3.1.1. D–S2
    - 3.1.2. D–S3
    - 3.1.3. D–S5
    - 3.1.4. D–S6
    - 3.1.5. D–S7
    - 3.1.6. D–S8
    - 3.1.7. D–S9
4. KER PRIESTMAN & ASSOCIATES LTD. – AS–BUILTS, JULY 26, 1985 PROJECT #PR100772
  - 4.1. DRAWINGS;
    - 4.1.1. 35
    - 4.1.2. 38
    - 4.1.3. 39
    - 4.1.4. 40
    - 4.1.5. 41
5. ORIGINAL TIMBER JETTY DRAWINGS, 1941
  - 5.1. FULL DRAWING SET (NOT LABELED)

ADDITIONAL RECORD/AS–BUILTS ALSO AVAILABLE

**NOTES:**

1. TIMBER DECK STRUCTURE TYPICALLY CONSISTS OF: ASPHALT TOPPING, 102 DECK PLANKING, 305 DECK PLANKING, 305 STRINGERS
2. WEST CRANE PAD TYPICALLY CONSISTS OF: 400 THICK REINFORCED CONCRETE SLAB, 12.7 PRESERVED PLYWOOD DECK FORMWORK, 102 STRINGERS. WEST CRANE PAD APPROACH TYPICALLY CONSISTS OF: 200 THICK REINFORCED CONCRETE SLAB, 20 PRESERVED PLYWOOD DECK FORMWORK, 305 STRINGERS
3. TIMBER INFILL DECK TYPICALLY CONSISTS OF: ASPHALT TOPPING, 100 DECKING, 300 STRINGERS
4. FOR NUMBERS DENOTED (X) REFER TO TABLE ON D4.
5. ALL EXISTING UTILITIES ARE SHOWN ACCORDING TO AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION, INCLUDING UNDERGROUND FIRE WATER, SANITARY SEWER, COMPRESSED AIR, POWER AND TELEPHONE SERVICE DUCTS AND SHALL NOTIFY THE DEPARTMENTAL REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION. ANY ADDITIONAL WORK REQUIRED AS A RESULT OF FAILING TO PRE-LOCATE KNOWN OR POTENTIAL CONFLICTS WILL BE COMPLETED AT THE CONTRACTOR'S EXPENSE.
6. EXISTING "TOWER CRANE PAD" SOUTH FACE MISALIGNED BY APPROXIMATE 150 MM.
7. CONTRACTOR TO PERFORM FIELD SURVEY OF EXISTING CONDITIONS AND NOTIFY DEPARTMENTAL REPRESENTATIVE IF DISCREPANCIES ARE FOUND.
8. CONTRACTOR TO INSPECT AND DOCUMENT THE CONDITION OF THE FOLLOWING STRUCTURAL ITEMS PRIOR TO COMMENCING DEMOLITION WORK (REFER TO SPECIFICATIONS):
  - 8.1. STEEL PILED CONCRETE JETTY
  - 8.2. WEST AND SOUTH FACES OF TIMBER CRIB
  - 8.3. SHEET PILE PERIMETER WALL
  - 8.4. CONCRETE RETAINING WALL AT EAST APPROACH
  - 8.5. SHEET PILE BULKHEAD WALL
9. FOR MODIFIED CONDITIONS SEE DRAWINGS C5 AND C6.

**LEGEND**

- APPROXIMATE EXTENT OF "BURMA ROAD" & TOWER CRANE PAD
- TIMBER PILE
- TIMBER BRACE PILE
- FIRE SPRINKLER ACCESS FRAMES

Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project Title/Titre du projet  
ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC

**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION**

Consultant Signature Only

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Drawn by/Dessiné par  
ARNIE RIST

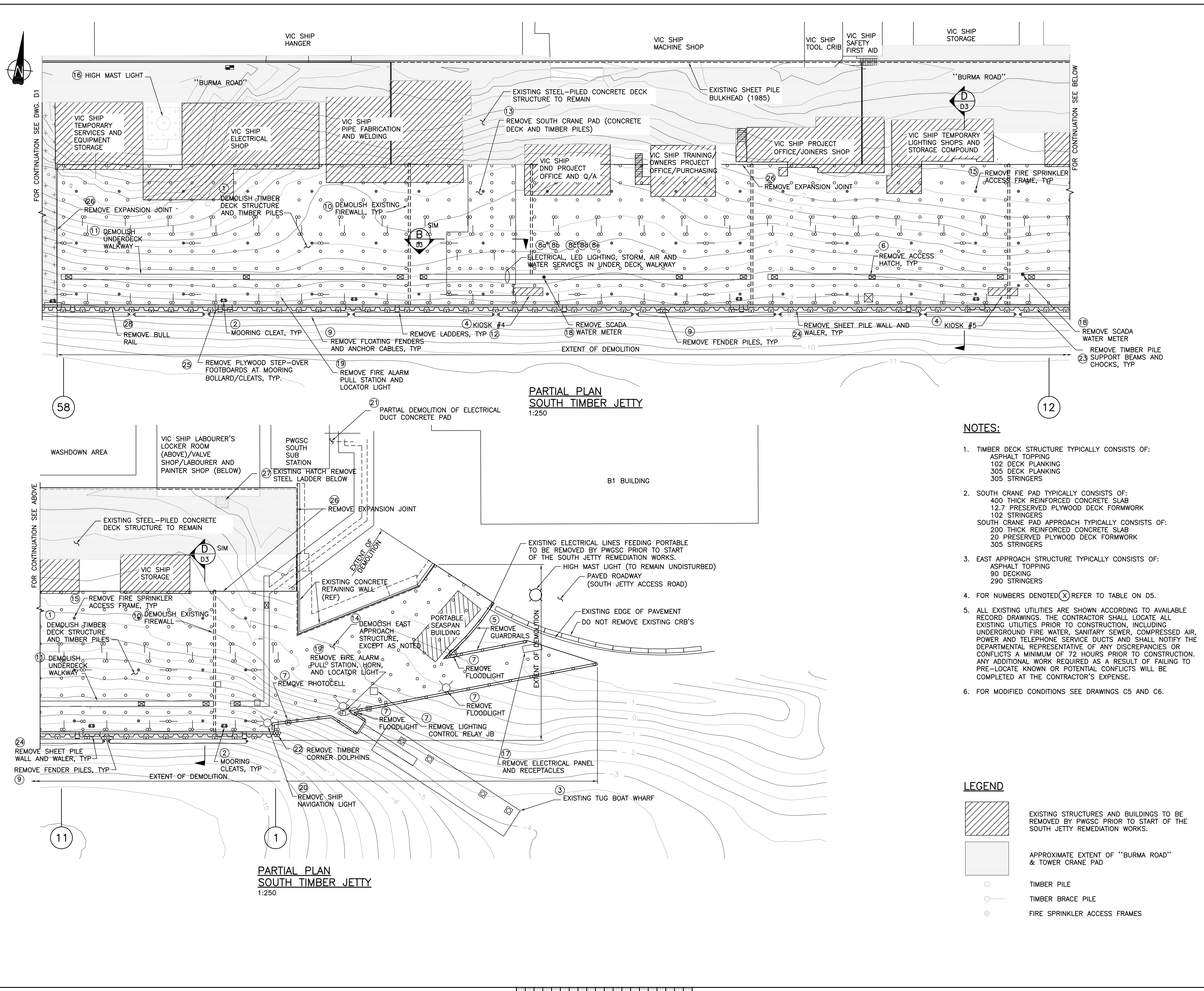
PWGC Project Manager/Administrateur de Projets TPSC  
ANDREW MYLLY

Regional Manager, Environmental Services  
COLLIN KINGMAN

Drawing Title/Titre du dessin  
**WEST JETTY EXISTING DECK STRUCTURE AND DEMOLITION PLAN**

Project No./No. du projet	Sheet/Feuille	Revision no./Révision no.
R.018400.002	D1	0





- NOTES:**
- TIMBER DECK STRUCTURE TYPICALLY CONSISTS OF:  
ASPHALT TOPPING  
102 DECK PLANKING  
305 DECK PLANKING  
305 STRINGERS
  - SOUTH CRANE PAD TYPICALLY CONSISTS OF:  
400 THICK REINFORCED CONCRETE SLAB  
12.7 PRESERVED PLYWOOD DECK FORMWORK  
102 STRINGERS  
SOUTH CRANE PAD APPROACH TYPICALLY CONSISTS OF:  
200 THICK REINFORCED CONCRETE SLAB  
20 PRESERVED PLYWOOD DECK FORMWORK  
305 STRINGERS
  - EAST APPROACH STRUCTURE TYPICALLY CONSISTS OF:  
ASPHALT TOPPING  
90 DECKING  
290 STRINGERS
  - FOR NUMBERS DENOTED (X) REFER TO TABLE ON D5.
  - ALL EXISTING UTILITIES ARE SHOWN ACCORDING TO AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION, INCLUDING UNDERGROUND FIRE WATER, SANITARY SEWER, COMPRESSED AIR, POWER AND TELEPHONE SERVICE DUCTS AND SHALL NOTIFY THE DEPARTMENTAL REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION. ANY ADDITIONAL WORK REQUIRED AS A RESULT OF FAILING TO PRE-LOCATE KNOWN OR POTENTIAL CONFLICTS WILL BE COMPLETED AT THE CONTRACTOR'S EXPENSE.
  - FOR MODIFIED CONDITIONS SEE DRAWINGS C5 AND C6.

**LEGEND**

	EXISTING STRUCTURES AND BUILDINGS TO BE REMOVED BY PWGSC PRIOR TO START OF THE SOUTH JETTY REMEDIATION WORKS.
	APPROXIMATE EXTENT OF "BURMA ROAD" & TOWER CRANE PAD
	TIMBER PILE
	TIMBER BRACE PILE
	FIRE SPRINKLER ACCESS FRAMES

Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

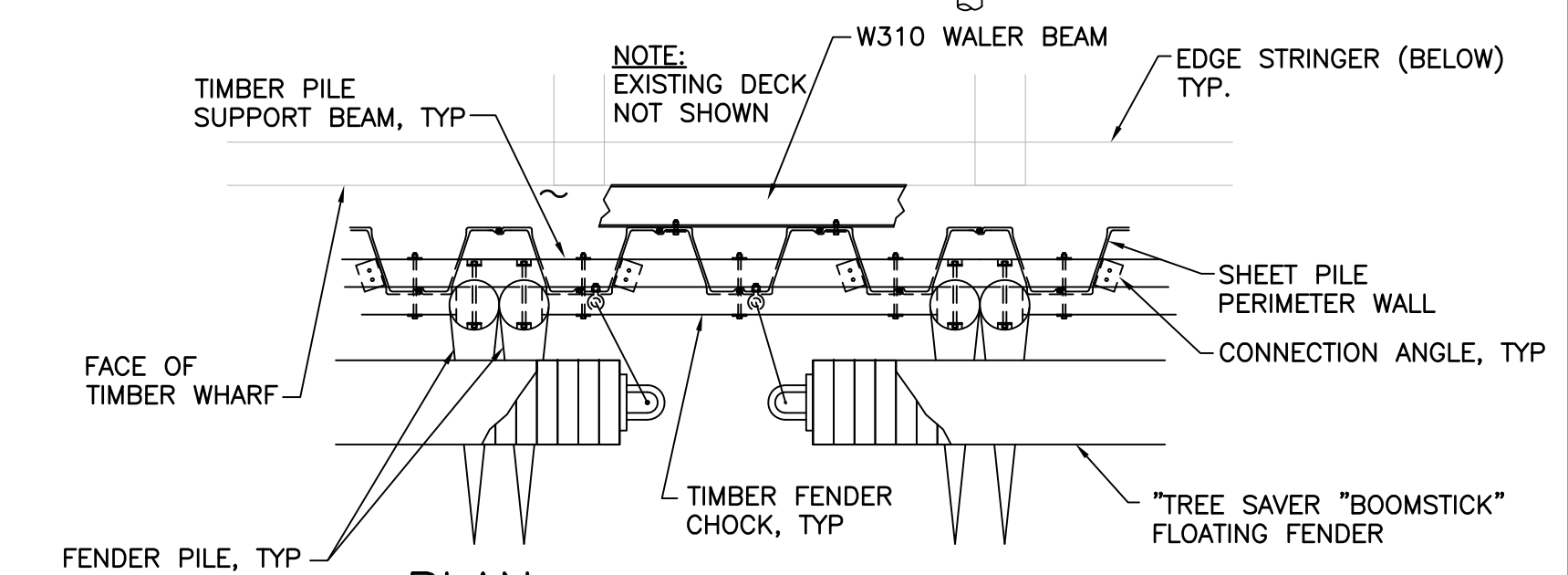
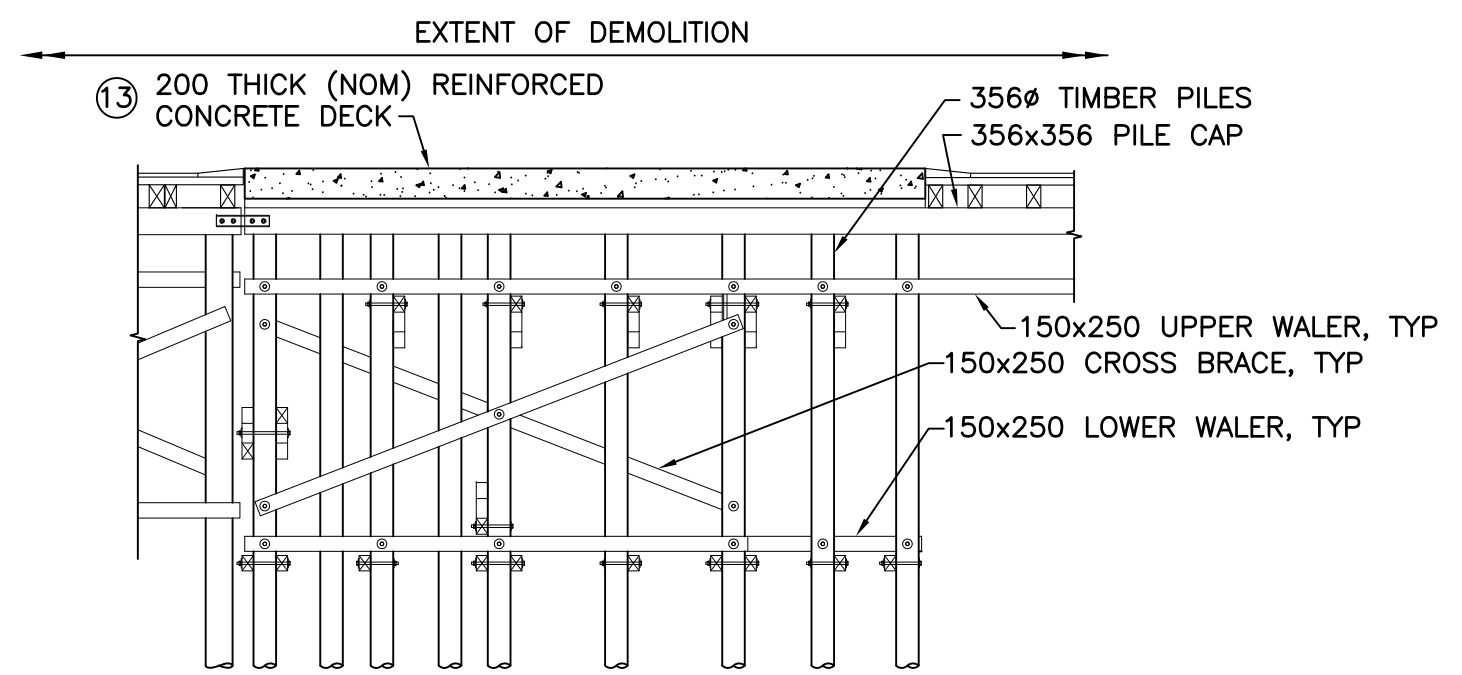
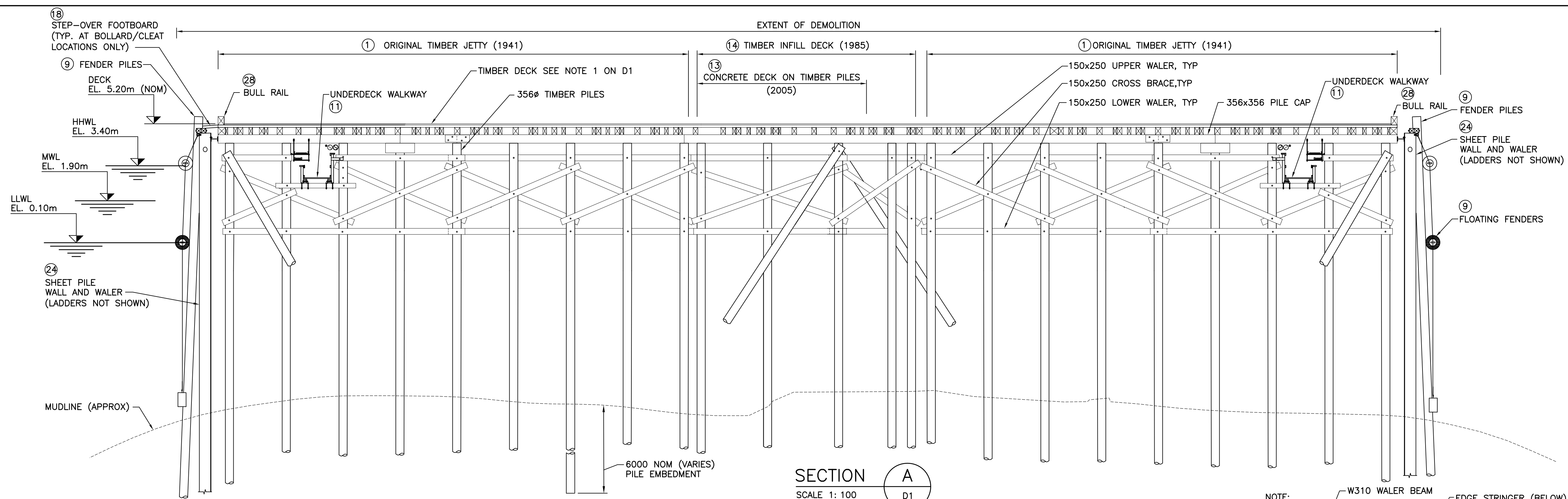
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PWGSC Project Manager/Administrateur de Projets TPSGC  
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Regional Manager, Environmental Services  
COLLIN KINGMAN

Drawing title/Titre du dessin  
**SOUTH JETTY  
EXISTING DECK STRUCTURE AND  
DEMOLITION  
PLAN**

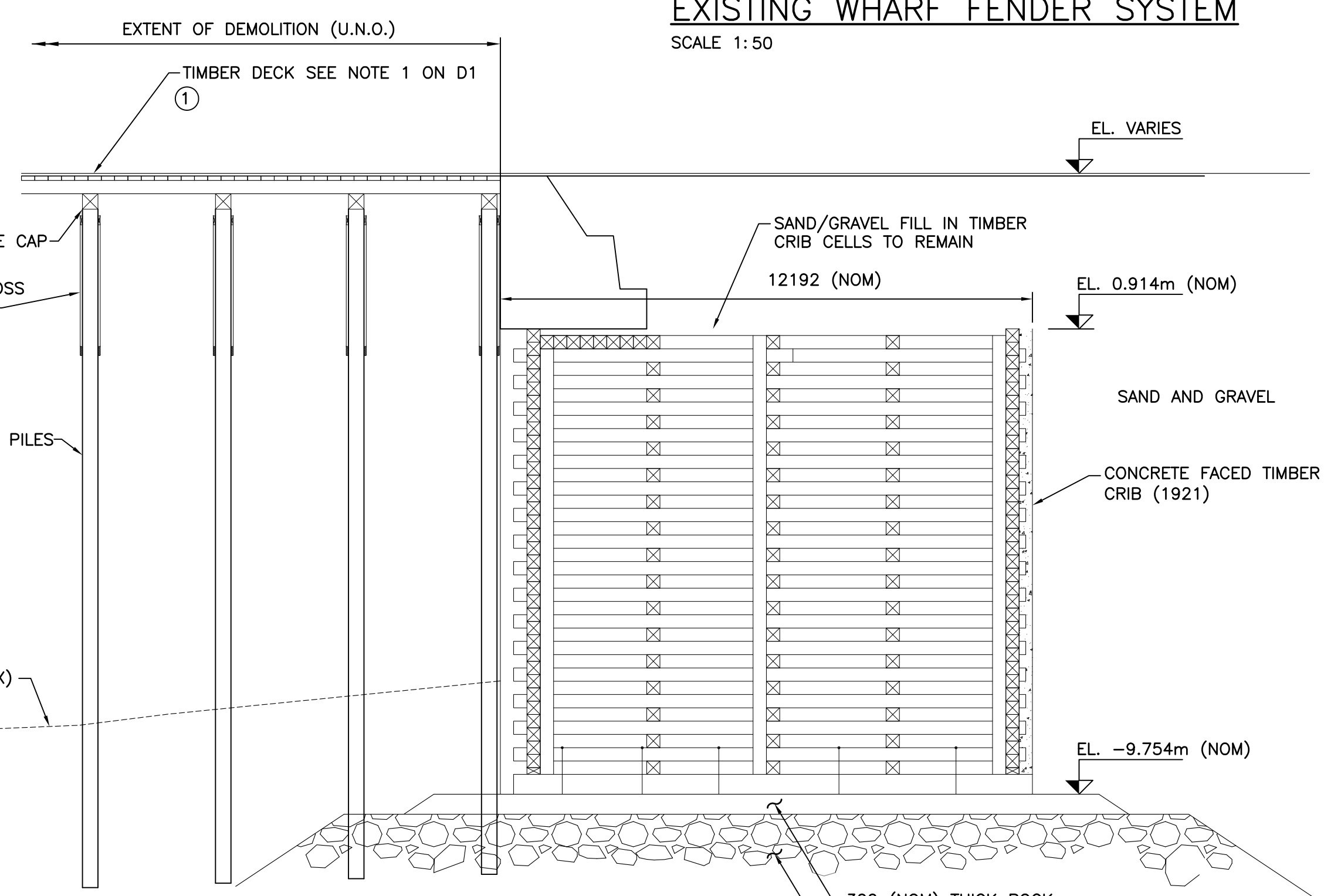
Project No./No. du projet <b>R.018400.002</b>	Sheet/ <b>D2</b>	Revision no./ <b>0</b>
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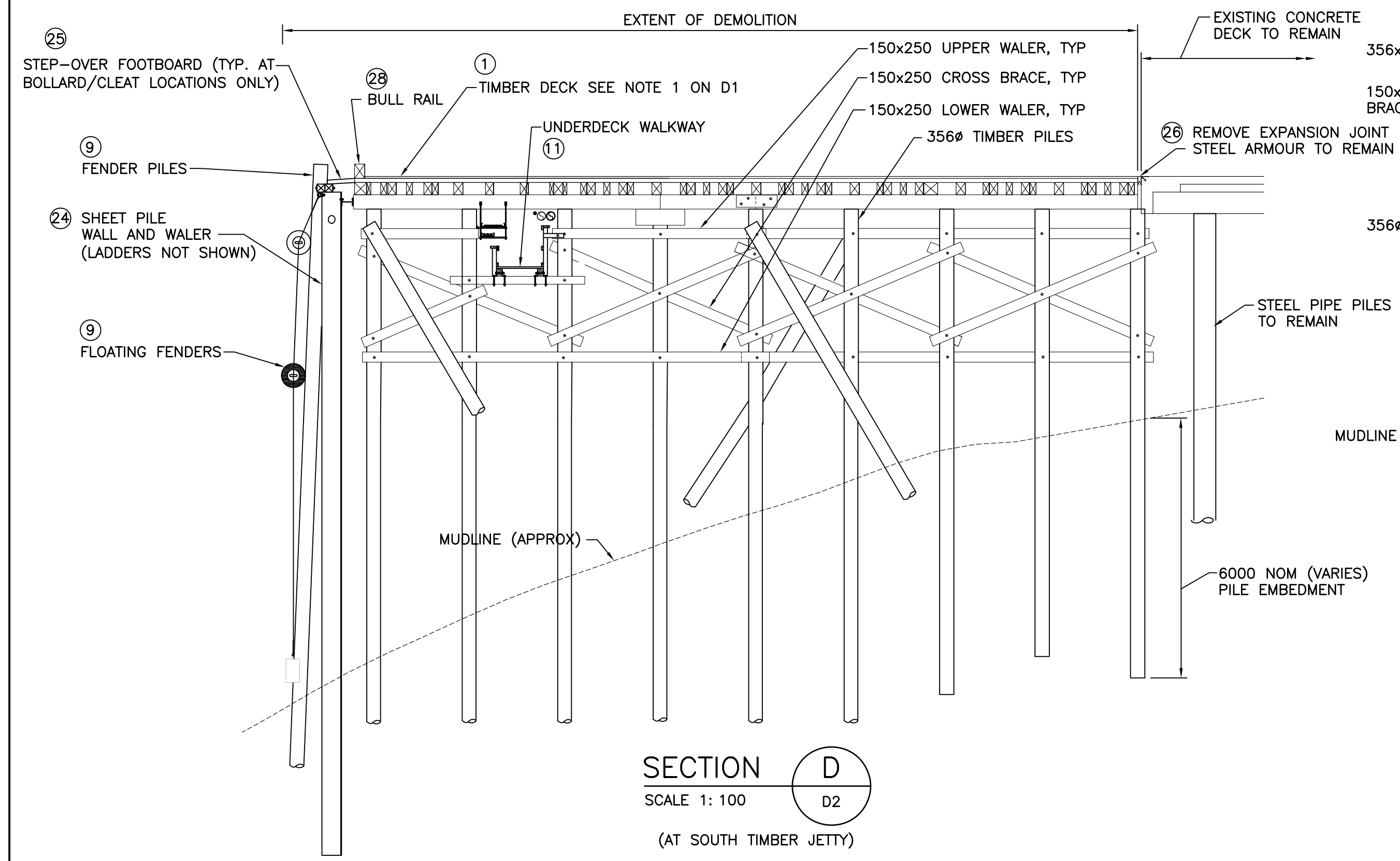


SECTION B B  
SCALE 1: 100  
D1 D2

PLAN  
EXISTING WHARF FENDER SYSTEM  
SCALE 1: 50



SECTION C  
SCALE 1: 100  
D1



SECTION D  
SCALE 1: 100  
D2

Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
 825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK  
 WATERLOT PHASE 2  
 SOUTH JETTY UNDER-PIER  
 SEDIMENT REMEDIATION**

Consultant Signature Only  
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 PWGSC Project Manager/Administrateur de Projets TPSGC: ANDREW MYLLY  
 Regional Manager, Environmental Services: COLLIN KINGMAN

Drawing title/Titre du dessin  
**WEST JETTY AND SOUTH JETTY  
 EXISTING DECK STRUCTURE AND  
 DEMOLITION  
 SECTIONS**

Project No./No. du projet	Sheet/Feuille	Revision no./No. de révision
R.018400.002	D3	0





WEST TIMBER JETTY			ITEMS DEMOLISHED, REMOVED, RELOCATED, OR RETAINED
ITEM NUMBER	BRIEF DESCRIPTION OF ITEMS	ACTION	
①	TIMBER DECK STRUCTURE AND TIMBER PILES	REMOVE TO DEMOLITION EXTENTS SHOWN AND DISPOSE. SEE NOTE 1 ON D1.	
②	12 MOORING CLEATS	REMOVE AND RETURN TO PWGSC. STORE IN LOCATION DESIGNATED BY THE DEPARTMENTAL REPRESENTATIVE.	
③	1 100 TONNE BOLLARD	REMOVE AND RETURN TO PWGSC. STORE IN LOCATION DESIGNATED BY THE DEPARTMENTAL REPRESENTATIVE.	
④	3 KIOSKS AND JETTY MOUNT TERMINAL BOXES	REMOVE, PREPARE FOR STORAGE AND STORE IN LOCATION DESIGNATED BY DEPARTMENTAL REPRESENTATIVE. PREPARATION FOR STORAGE INCLUDES TIGHTLY PLUGGING ALL EXTERNAL OPENINGS. (e.g. PIPES AND SWITCHGEAR)	
⑤	1 ABANDONED KIOSK WITH FIRE ALARM SIGA-CT2 CONTROL RELAY MODULE	REMOVE AND RETURN TO PWGSC. STORE IN LOCATION DESIGNATED BY THE DEPARTMENTAL REPRESENTATIVE.	
⑥	14 ACCESS HATCHES INCLUDING FRAMES	REMOVE AND DISPOSE.	
⑦	1 LIGHT STANDARD	REMOVE AND DISPOSE. SEE DWG E4 FOR POWER CABLE REMOVAL.	
⑧a	ELECTRICAL SERVICES	REMOVE AND DISPOSE CABLES TO THE EXTENTS SHOWN ON DWG E1, E2 & E4. REMOVE AND RETAIN UNDER-DECK CABLE TRAY FOR RE-USE AS SHOWN ON DWG E4. REMOVE AND DISPOSE LED LIGHTING.	
⑧b	STORM SERVICES	REMOVE AND DISPOSE.	
⑧c	FIRE WATER MAIN	REMOVE TO THE EXTENTS SHOWN ON DWG M4. RETAIN FOR RE-USE ALL PVC PIPE MECHANICAL COUPLINGS, VALVES AND FITTINGS THAT CAN BE USED IN THE WORK. RETURN TO PWGSC ALL FLOW METERS WITH A TAG INDICATING THE ASSOCIATED KIOSK NUMBER. DISPOSE OF ALL OTHER FIRE WATER ITEMS.	
⑧d	COMPRESSED AIR LINE	REMOVE AND DISPOSE TO EXTENTS SHOWN ON DWG M6.	
⑧e	SANITARY SEWER	REMOVE AND DISPOSE TO EXTENTS SHOWN ON M5.	
⑨	FLOATING FENDERS AND FENDER PILES	REMOVE AND DISPOSE FLOATING FENDERS INCLUDING ANCHOR CABLES. REMOVE AND RETAIN FENDER PILES SELECTED FOR RE-USE. REMOVE AND DISPOSE REMAINING FENDER PILES.	
⑩	FIREWALLS	REMOVE AND DISPOSE.	
⑪	UNDERDECK WALKWAY	REMOVE AND DISPOSE.	
⑫	10 LADDERS	REMOVE AND MODIFY LADDERS REQUIRED FOR RE-USE AS SHOWN ON DWG S122. REMOVE AND DISPOSE REMAINING LADDERS.	
⑬	WEST CRANE PAD CONCRETE DECK AND TIMBER PILES	REMOVE AND DISPOSE. SEE NOTE 2 ON DWG D1.	
⑭	TIMBER INFILL DECK AND TIMBER PILES	REMOVE AND DISPOSE. SEE NOTE 3 ON DWG D1.	
⑮	73 FIRE SPRINKLER ACCESS (LIDS AND FRAMES)	REMOVE AND DISPOSE.	
⑯	TIMBER WALLS	REMOVE AND DISPOSE.	
⑰	EXPANSION JOINT	REMOVE AND DISPOSE. STEEL ARMORING EMBEDDED IN CONCRETE DECK TO REMAIN.	
⑱	PLYWOOD STEP-OVER FOOTBOARDS	REMOVE AND DISPOSE.	
⑲	KIOSK SCADA WATER METERS	REMOVE AND RETURN TO PWGSC. CORRESPONDING LABELS TO BE REMOVED AND RETURNED TO PWGSC.	
⑳	FIRE ALARM PULL STATION AND LOCATOR LIGHT	REMOVE AND RETURN TO PWGSC. STORE IN LOCATION DESIGNATED BY THE DEPARTMENTAL REPRESENTATIVE.	
㉑	CAISSON "PARK" SWITCHED RECEPTACLE AND TERMINAL BOX	REMOVE AND DISPOSE.	
㉒	CORNER TIMBER DOLPHINS	REMOVE AND RETAIN FOR RE-USE.	
㉓	TIMBER SUPPORT BEAMS AND CHOCKS	REMOVE AND DISPOSE TIMBER SUPPORT BEAMS. REMOVE AND RETAIN CHOCKS SELECTED FOR RE-USE. REMOVE AND DISPOSE REMAINING FENDER CHOCKS.	
㉔	SHEET PILE WALL AND WALER	REMOVE AND DISPOSE, EXCEPT FOR WALER REQUIRED FOR TEMPORARY SUPPORT AT TIMBER CRIB. SEE DWG CSM8.	
㉕	BOAT ACCESS FRAME	REMOVE AND DISPOSE.	
㉖	DECK ACCESS HATCH AND LADDER	REMOVE AND DISPOSE.	
㉗	STEEL ACCESS LADDER	REMOVE, RETAIN AND MODIFY FOR RE-USE. (SEE DWG S122)	
㉘	BULL RAIL	REMOVE AND RETAIN BULL RAIL SELECTED FOR RE-USE. REMOVE AND DISPOSE REMAINING BULL RAIL.	

Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC  
**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION**

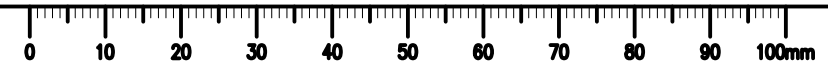
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ANDREW MYLLY  
Regional Manager, Environmental Services  
COLLIN KINGMAN

Drawing title/Titre du dessin  
**WEST JETTY DEMOLITION ITEM DESCRIPTION AND ACTION TABLE**

Project No./No. du projet <b>R.018400.002</b>	Sheet/ <b>D4</b>	Revision no./ <b>0</b>
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**NOTES:**

- THIS TABLE INDICATES THE PRIMARY ITEMS FOR DEMOLITION AND GIVES GUIDANCE FOR ITEMS TO BE DEMOLISHED, REMOVED, RELOCATED OR RETAINED. ALL ITEMS WITHIN THE EXTENTS OF DEMOLITION, AS SHOWN ON DRAWING D1, ARE TO BE REMOVED.







SOUTH TIMBER JETTY		ITEMS DEMOLISHED, REMOVED, RELOCATED, OR RETAINED
ITEM NUMBER	BRIEF DESCRIPTION OF ITEMS	ACTION
①	TIMBER DECK STRUCTURE AND TIMBER PILES	REMOVE TO DEMOLITION EXTENTS SHOWN AND DISPOSE. SEE NOTE 1 ON D2.
②	6 MOORING CLEATS	REMOVE AND RETURN TO PWGSC. STORE IN LOCATION DESIGNATED BY THE DEPARTMENTAL REPRESENTATIVE.
③	TUG BOAT WHARF, INCLUDING FLOATS, PILES AND GANGWAY	REMOVE, STORE AND RETAIN FOR RE-USE AT LOCATION SHOWN ON DRAWINGS.
④	2 KIOSKS AND JETTY MOUNT TERMINAL BOXES	REMOVE, PREPARE FOR STORAGE AND STORE IN LOCATION DESIGNATED BY DEPARTMENTAL REPRESENTATIVE. PREPARATION FOR STORAGE INCLUDES TIGHTLY PLUGGING ALL EXTERNAL OPENINGS. (e.g. PIPES AND SWITCHGEAR)
⑤	GUARDRAILS	REMOVE AND DISPOSE.
⑥	15 ACCESS HATCHES INCLUDING FRAMES	REMOVE AND DISPOSE.
⑦	3 FLOODLIGHTS, PHOTOCCELL AND POWER CONTROL RELAY JB	REMOVE AND DISPOSE.
⑧a	ELECTRICAL SERVICES	REMOVE AND DISPOSE CABLES TO EXTENTS SHOWN ON DWG E1, E2 AND E4. REMOVE BURIED CONDUIT AND DUCT BANKS AS SHOWN ON DWG E1 AND E4. REMOVE AND RETAIN FOR RE-USE ALL ELECTRICAL SERVICES ON TUG WHARF FACILITY. REMOVE AND DISPOSE LED LIGHTING.
⑧b	STORM SERVICES	REMOVE AND DISPOSE.
⑧c	FIRE WATER MAIN	REMOVE TO THE EXTENTS SHOWN ON DWG M4. RETAIN FOR RE-USE ALL PVC PIPE MECHANICAL COUPLINGS, VALVES AND FITTINGS THAT CAN BE USED IN THE WORK. RETURN TO PWGSC ALL FLOW METERS WITH A TAG INDICATING THE ASSOCIATED KIOSK NUMBER. DISPOSE OF ALL OTHER FIRE WATER ITEMS.
⑧d	COMPRESSED AIR LINE	REMOVE AND DISPOSE TO EXTENTS SHOWN ON M6.
⑧e	SANITARY SEWER	REMOVE AND DISPOSE TO EXTENTS SHOWN ON M5.
⑨	FLOATING FENDERS AND FENDER PILES	REMOVE AND DISPOSE FLOATING FENDERS INCLUDING INCLUDING ANCHOR CABLES. REMOVE AND RETAIN FENDER PILES SELECTED FOR RE-USE. REMOVE AND DISPOSE REMAINING FENDER PILES.
⑩	FIREWALLS	REMOVE AND DISPOSE.
⑪	UNDERDECK WALKWAY	REMOVE AND DISPOSE.
⑫	8 LADDERS	REMOVE AND MODIFY LADDERS REQUIRED FOR RE-USE AS SHOWN ON DWG S122. REMOVE AND DISPOSE REMAINING LADDERS.
⑬	SOUTH CRANE PAD AND TIMBER PILES	REMOVE AND DISPOSE. SEE NOTE 2 ON DWG D2.
⑭	EAST APPROACH STRUCTURE AND TIMBER PILES	REMOVE TO DEMOLITION EXTENTS SHOWN AND DISPOSE. SEE NOTE 3 ON DWG D2.
⑮	63 FIRE SPRINKLER ACCESS (LIDS AND FRAMES)	REMOVE AND DISPOSE.
⑯	HIGH MAST LIGHT	REMOVE AND RETAIN FOR RE-USE. CCTV SYSTEM, INCLUDING CCTV CAMERA, TRANSFORMER AND ANTENNA, TO BE REMOVED PRIOR TO REMOVING THE HIGH MAST LIGHT POLE AND RETURNED TO DEPARTMENTAL REPRESENTATIVE. CCTV SYSTEM TO BE RE-INSTALLED AFTER HIGH MAST LIGHT POLE IS RE-ERECTED. . SEE DRAWINGS D7, D8 AND S110.
⑰	ELECTRICAL PANEL AND RECEPTACLES	REMOVE AND DISPOSE.
⑱	KIOSK SCADA WATER METERS	REMOVE AND RETURN TO PWGSC. CORRESPONDING LABELS TO BE REMOVED AND RETURNED TO PWGSC.
⑲	FIRE ALARM PULL STATIONS, HORN AND LOCATOR LIGHTS	REMOVE AND RETAIN FOR RE-USE AT SOUTH JETTY.
⑳	SHIP NAVIGATION LIGHT	REMOVE AND DISPOSE.
㉑	PARTIAL DEMOLITION OF EXISTING ELECTRICAL DUCT CONCRETE PAD	REMOVE AND DISPOSE.
㉒	CORNER TIMBER DOLPHINS	REMOVE AND RETAIN FOR RE-USE.
㉓	TIMBER SUPPORT BEAMS AND CHOCKS	REMOVE AND DISPOSE TIMBER SUPPORT BEAMS. REMOVE AND RETAIN CHOCKS SELECTED FOR RE-USE. REMOVE AND DISPOSE REMAINING CHOCKS.
㉔	SHEET PILE WALL AND WALER	REMOVE AND DISPOSE.
㉕	PLYWOOD STEP-OVER FOOTBOARDS	REMOVE AND DISPOSE.
㉖	EXPANSION JOINT	REMOVE AND DISPOSE. STEEL ARMORING EMBEDDED IN CONCRETE DECK TO REMAIN.
㉗	STEEL ACCESS LADDER	REMOVE, RETAIN AND MODIFY FOR RE-USE. (SEE DWG S122)
㉘	BULL RAIL	REMOVE AND RETAIN BULL RAIL SELECTED FOR RE-USE. REMOVE AND DISPOSE REMAINING BULL RAIL.
㉙	OLD COLLAPSED SHEET PILE WALL	REMOVE AND DISPOSE.
㉚	TIMBER CUT-OFF PILES	REMOVE AND DISPOSE.

Revision/Redaction	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client

**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC

**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION**

Consultant Signature Only

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Regional Manager, Environmental Services  
COLLIN KINGMAN

Drawing title/Titre du dessin  
**SOUTH JETTY DEMOLITION ITEM DESCRIPTION AND ACTION TABLE**

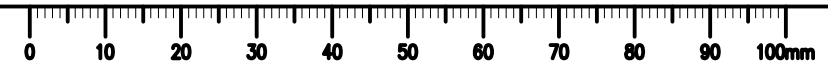
Project No./No. du projet  
R.018400.002

Sheet/  
D5

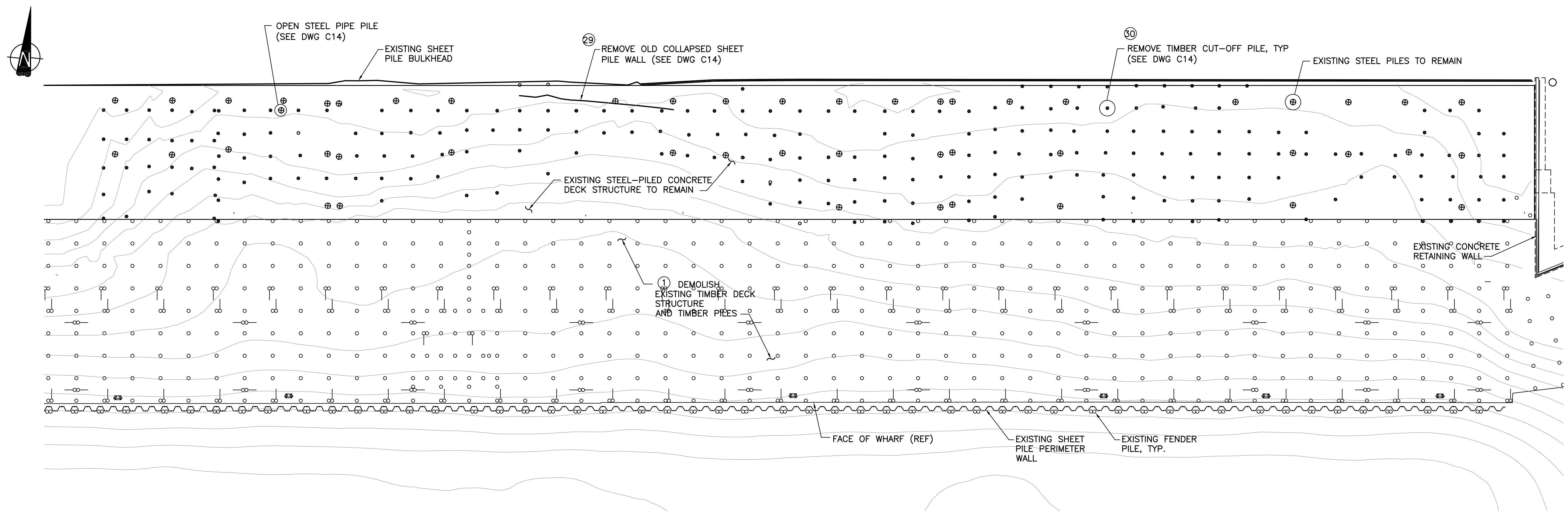
Revision no./  
0

**NOTES:**

- THIS TABLE INDICATES THE PRIMARY ITEMS FOR DEMOLITION AND GIVES GUIDANCE FOR ITEMS TO BE DEMOLISHED, REMOVED, RELOCATED OR RETAINED. ALL ITEMS WITHIN THE EXTENTS OF DEMOLITION, AS SHOWN ON DRAWING D2, ARE TO BE REMOVED.







**PLAN**  
**SOUTH TIMBER JETTY UNDER-DECK**  
1:250

**LEGEND**

- ⊕ EXISTING STEEL PILE
- EXISTING CUT-OFF TIMBER PILE
- TIMBER PILE
- TIMBER BRACE PILE

**NOTES:**

1. EXISTING STEEL PILE, CUT-OFF TIMBER PILE AND OLD COLLAPSED SHEET PILE WALL PILE LOCATIONS BASED ON FOCUS SURVEYS ON NOVEMBER 30, 2009 AND JANUARY 21, 2010. ONLY STEEL PILES SURVEYED BY FOCUS ARE SHOWN, i.e. NOT ALL STEEL PILES ARE SHOWN.
2. TOP OF TIMBER CUT-OFF PILE ELEVATION IS TYPICALLY BETWEEN EL. 2.9m AND EL. 3.1m.
3. FOR NUMBERS DENOTED (X) REFER TO TABLE ON D5.

Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client

**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
GEOFF COOPER

Drawn by/Dessiné par  
ARNIE RIST

PWGC Project Manager/Administrateur de Projets TPSGC  
ANDREW MYLLY

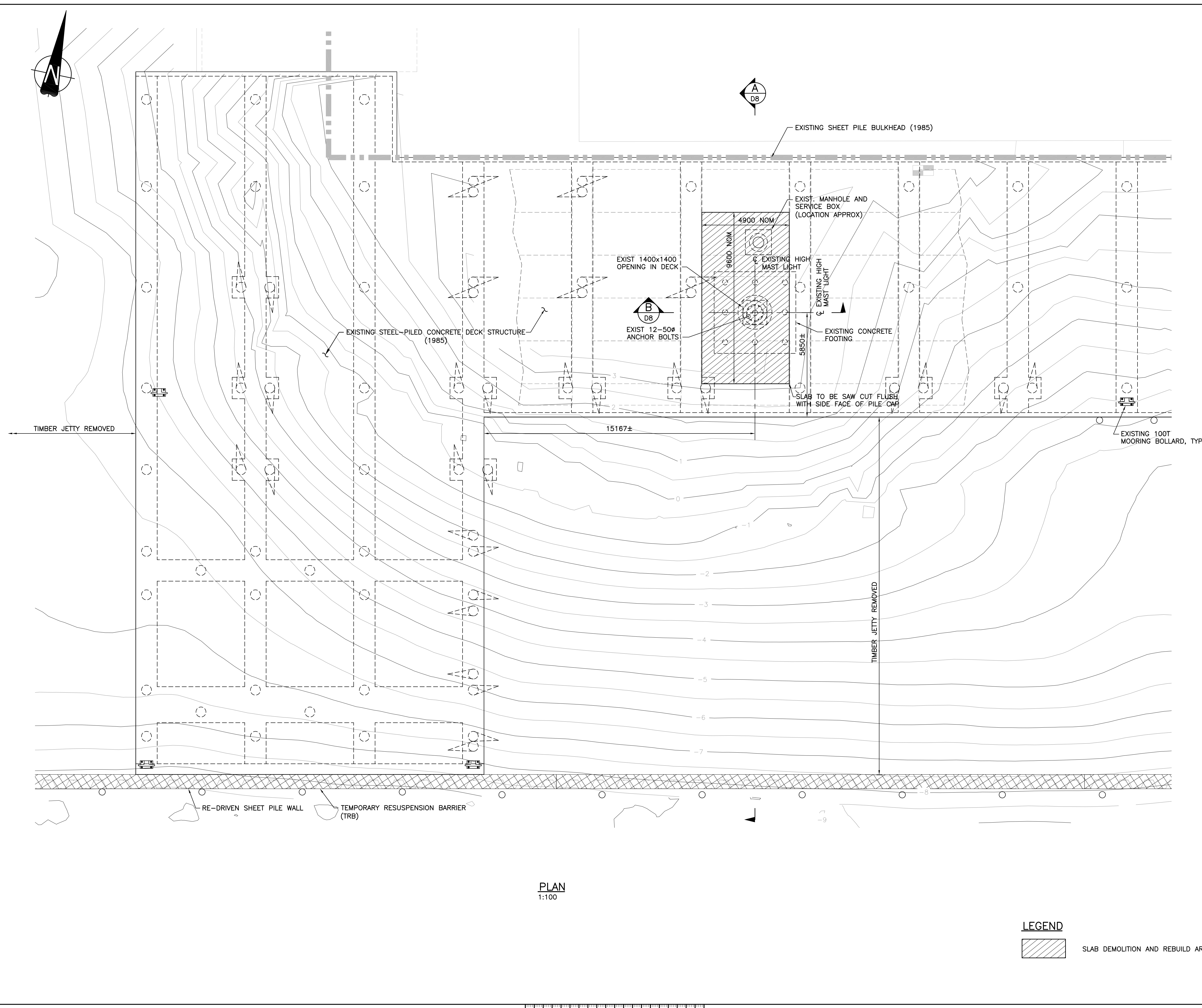
Regional Manager, Environmental Services  
COLLIN KINGMAN

Drawing title/Titre du dessin

**SOUTH JETTY  
EXISTING UNDER-DECK CONDITIONS  
AND DEMOLITION - PLAN**

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	D6	0





**PLAN**  
1:100

**LEGEND**

 SLAB DEMOLITION AND REBUILD AREA

Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
 825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK  
 WATERLOT PHASE 2  
 SOUTH JETTY UNDER-PIER  
 SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
**GEOFF COOPER**

Drawn by/Dessiné par  
**ARNIE RIST**

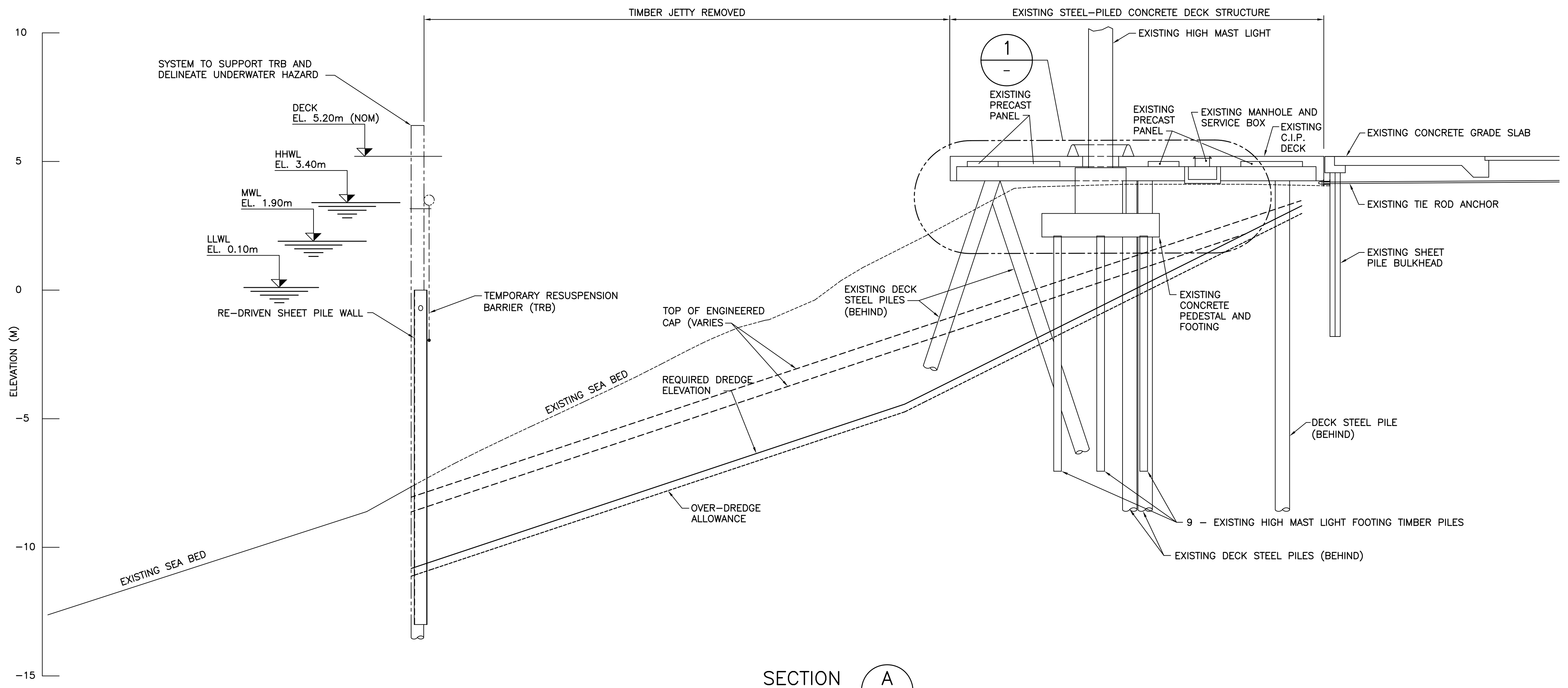
PWGSC Project Manager/Administrateur de Projets TPSCG  
**ANDREW MYLLY**

Regional Manager, Environmental Services  
**COLLIN KINGMAN**

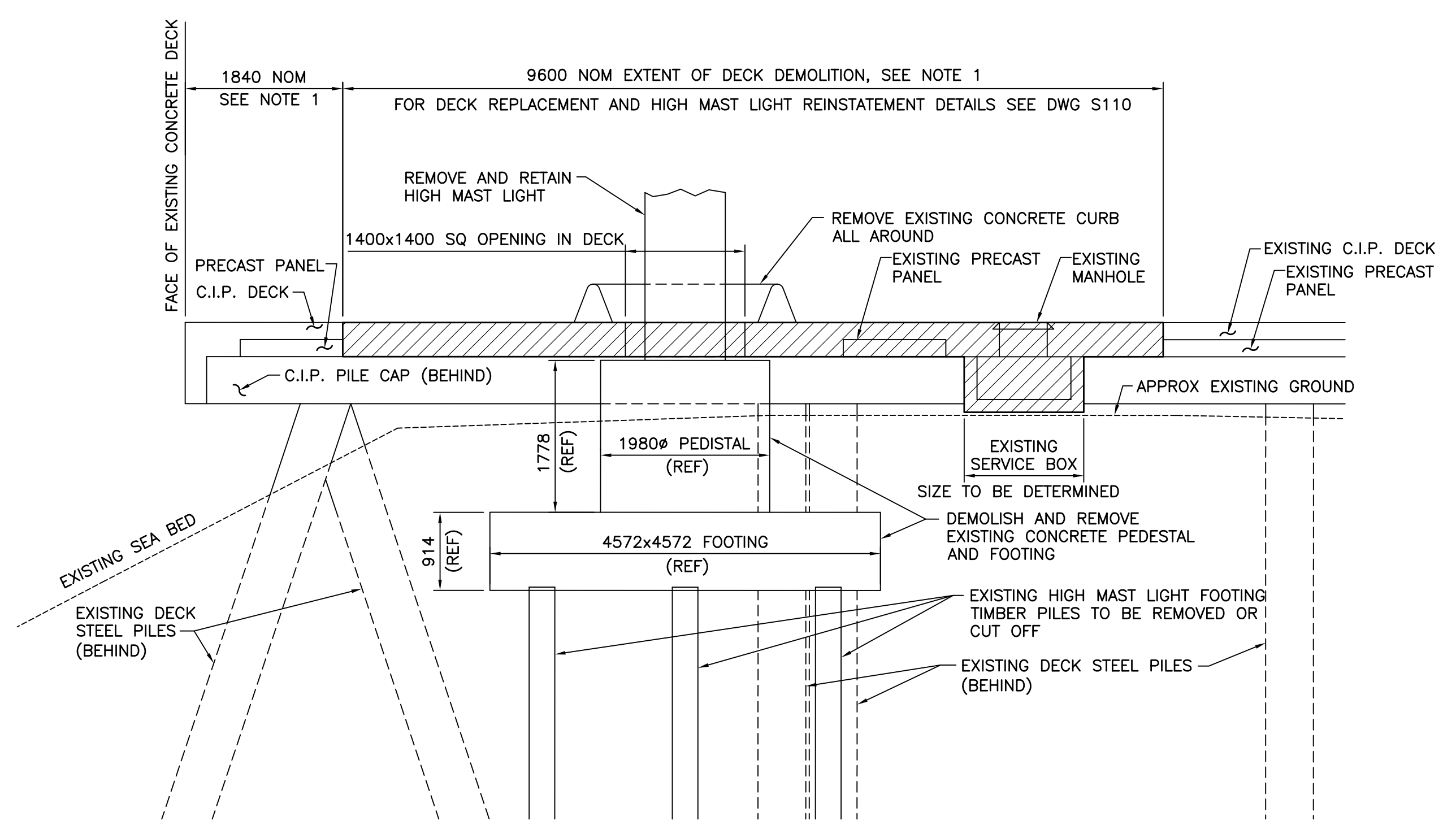
Drawing title/Titre du dessin  
**EXISTING HIGH MAST LIGHT  
 AREA AND DEMOLITION  
 SHEET 1**

Project No./No. du projet <b>R.018400.002</b>	Sheet/ <b>D7</b>	Revision no./ <b>0</b>
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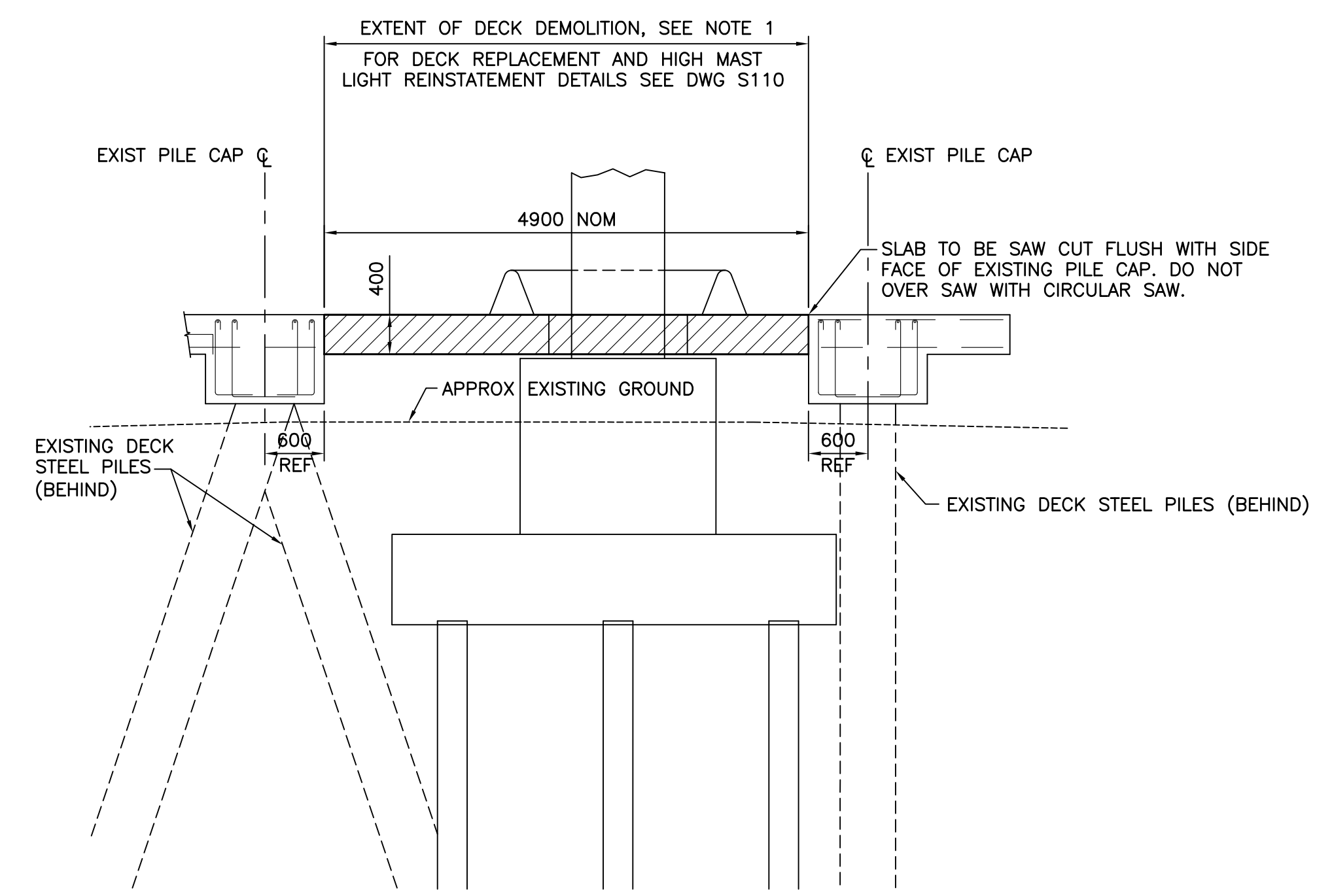




SECTION A  
SCALE 1: 100



DETAIL 1  
SCALE 1: 50



SECTION B  
SCALE 1: 50

NOTES:  
1. EXTENTS OF DEMOLITION AND REPLACEMENT DECK TO BE DETERMINED PRIOR TO CONSTRUCTION.

Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
**GEOFF COOPER**  
Drawn by/Dessiné par  
**ARNIE RIST**  
PWGSC Project Manager/Administrateur de Projets TPSCG  
**ANDREW MYLLY**  
Regional Manager, Environmental Services  
**COLLIN KINGMAN**

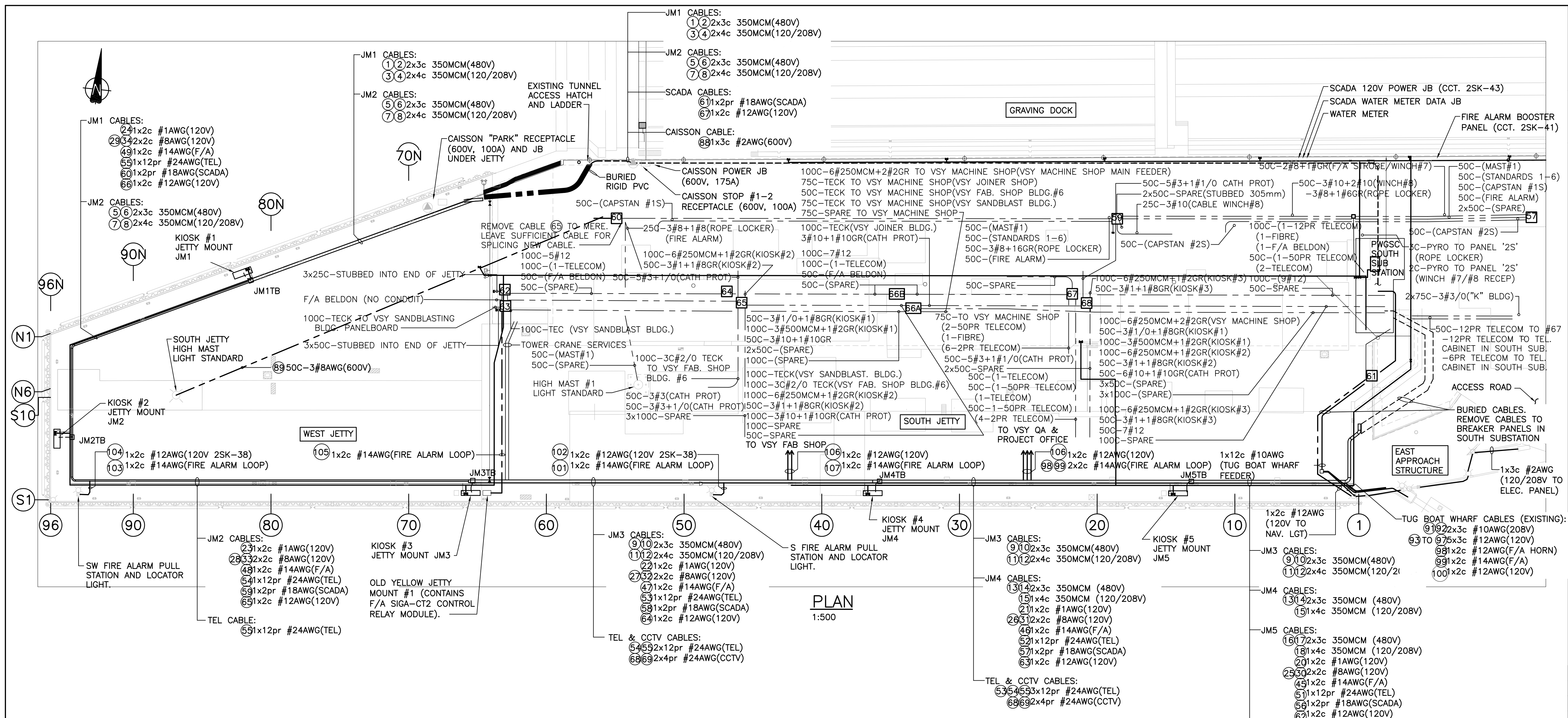
Drawing title/Titre du dessin  
**EXISTING HIGH MAST LIGHT  
LIGHT AREA AND DEMOLITION  
SHEET 2**

Project No./No. du projet	Sheet/	Revision no./
<b>R.018400.002</b>	<b>D8</b>	<b>0</b>









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Revision/	Description/Description	Date/Date

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
 825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK  
 WATER JETTY PHASE 2  
 SOUTH JETTY UNDER-PIER  
 SEDIMENT REMEDIATION**

Consultant Signature Only  
 Designed by/Concept par  
 ALISON MANSFIELD / ROB JONES  
 Drawn by/Dessiné par  
 GABE MENDES  
 PWGSC Project Manager/Administrateur de Projets TPSGC  
 ANDREW MYLLY  
 Regional Manager, Environmental Services  
 COLLIN KINGMAN

Drawing title/Titre du dessin  
**EXISTING SERVICES  
 ELECTRICAL CABLES AND KIOSKS  
 PLAN AND PHOTOS**

Project No./No. du projet <b>R.018400.002</b>	Sheet/ <b>E2</b>	Revision no./ <b>0</b>
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**NOTES:**

1. THE ELECTRICAL CABLES/SERVICES SHOWN ON THIS DRAWINGS ARE BASED ON WESTMAR DRAWING NO. 846342-D-E2 CIRCA 2002/3 AND MAY NOT BE REPRESENTATIVE OF EXISTING AS-BUILT CONDITIONS.
2. ALL EXISTING UTILITIES ARE SHOWN ACCORDING TO AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION, INCLUDING UNDERGROUND FIRE WATER, SANITARY SEWER, COMPRESSED AIR, POWER AND TELEPHONE SERVICE DUCTS AND SHALL NOTIFY THE DEPARTMENTAL REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION. ANY ADDITIONAL WORK REQUIRED AS A RESULT OF FAILING TO PRE-LOCATE KNOWN OR POTENTIAL CONFLICTS WILL BE COMPLETED AT THE CONTRACTOR'S EXPENSE.
3. FOR EXISTING CABLE I.D. TAG NUMBER, REFER TO CABLE SCHEDULE ON DRAWING E9.
4. FOR LEGEND SEE DWG. E1.



TYPICAL JETTY MOUNT KIOSK - OVERALL VIEW



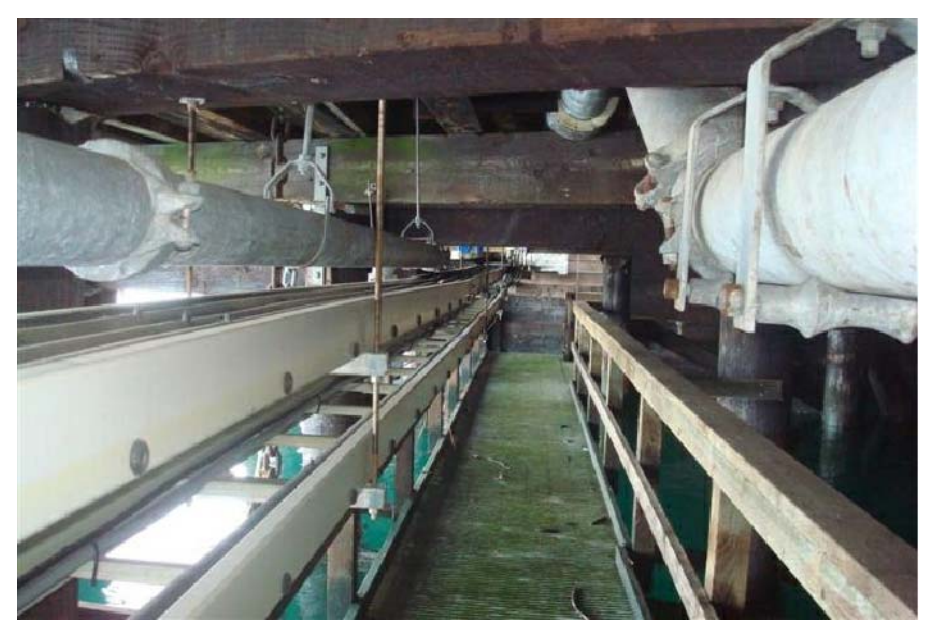
TYPICAL JETTY MOUNT KIOSK - POWER COMPARTMENT



CABLES & CONDUITS AT SOUTH SUBSTATION



TYPICAL JETTY MOUNT KIOSK - COMM COMPARTMENT



TYPICAL EXISTING SERVICES UNDER SOUTH JETTY

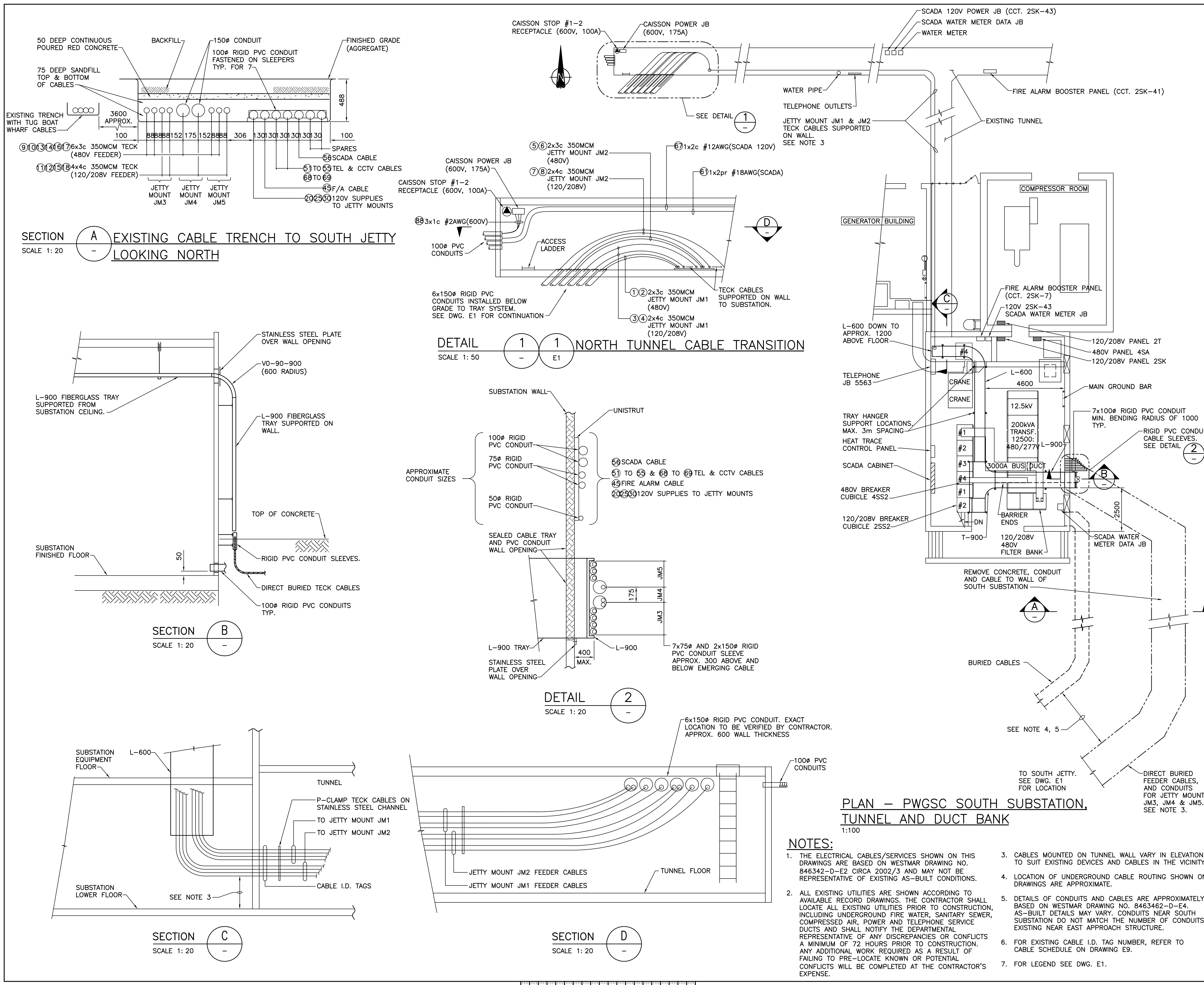


CABLES TRANSITIONING FROM SLEEVES/CONDUITS TO TRAY UNDER JETTY



HIGH MAST LIGHT (HML) ASSEMBLY & CCTV CAMERA SYSTEM





Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/18

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
 825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK  
 WATERLOT PHASE 2  
 SOUTH JETTY UNDER-PIER  
 SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
 ALISON MANSFIELD / ROB JONES

Drawn by/Dessiné par  
 GABE MENDES

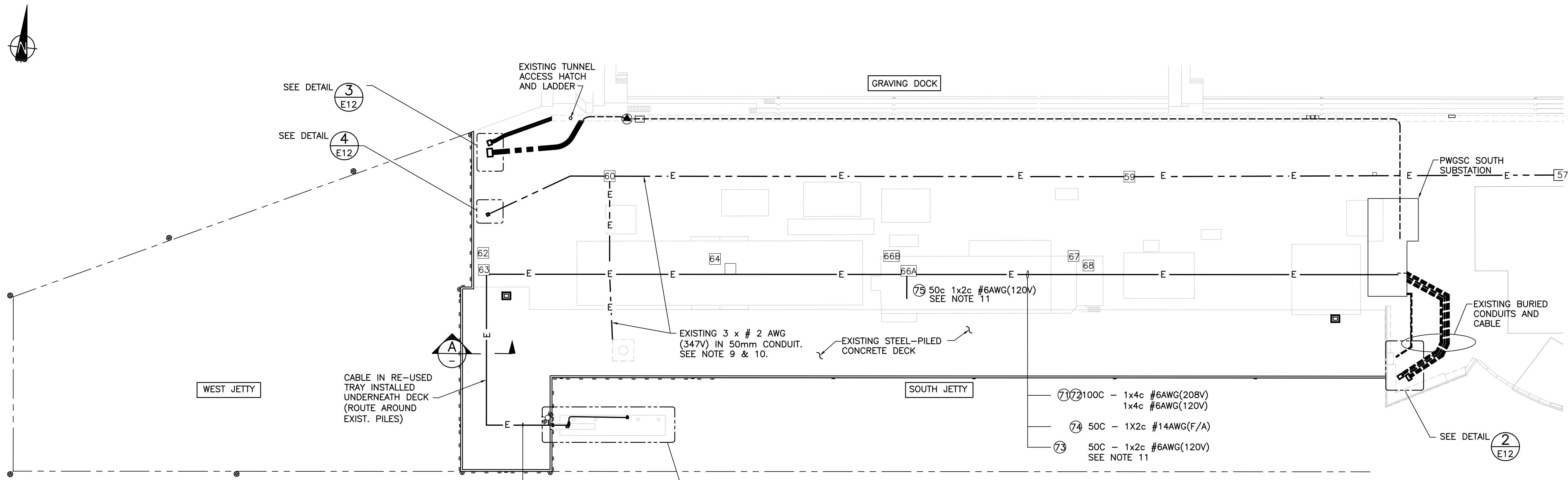
PWGSC Project Manager/Administrateur de Projets TPSGC  
 ANDREW MYLLY

Regional Manager, Environmental Services  
 COLLIN KINGMAN

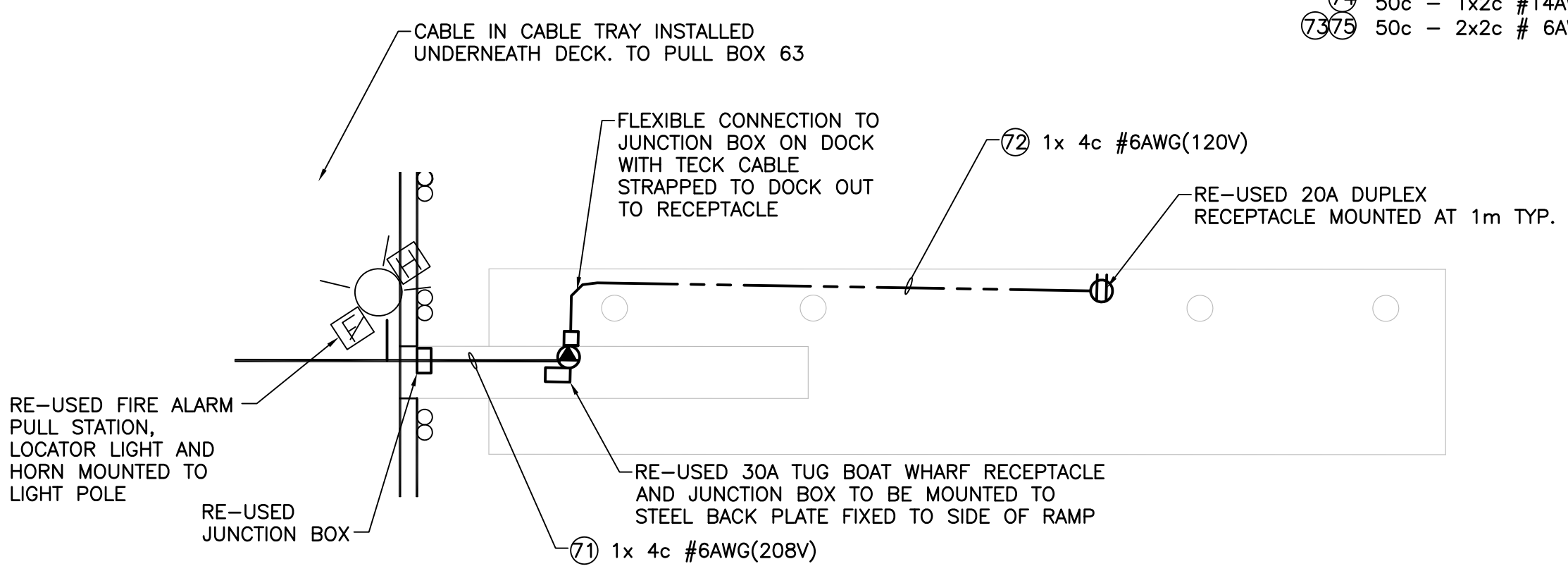
Drawing title/Titre du dessin  
**EXISTING SERVICES  
 SUBSTATION CABLE TRAY  
 AND DUCTS  
 PLAN, SECTIONS AND DETAILS**

Project No./No. du projet <b>R.018400.002</b>	Sheet/ <b>E3</b>	Revision no./ <b>0</b>
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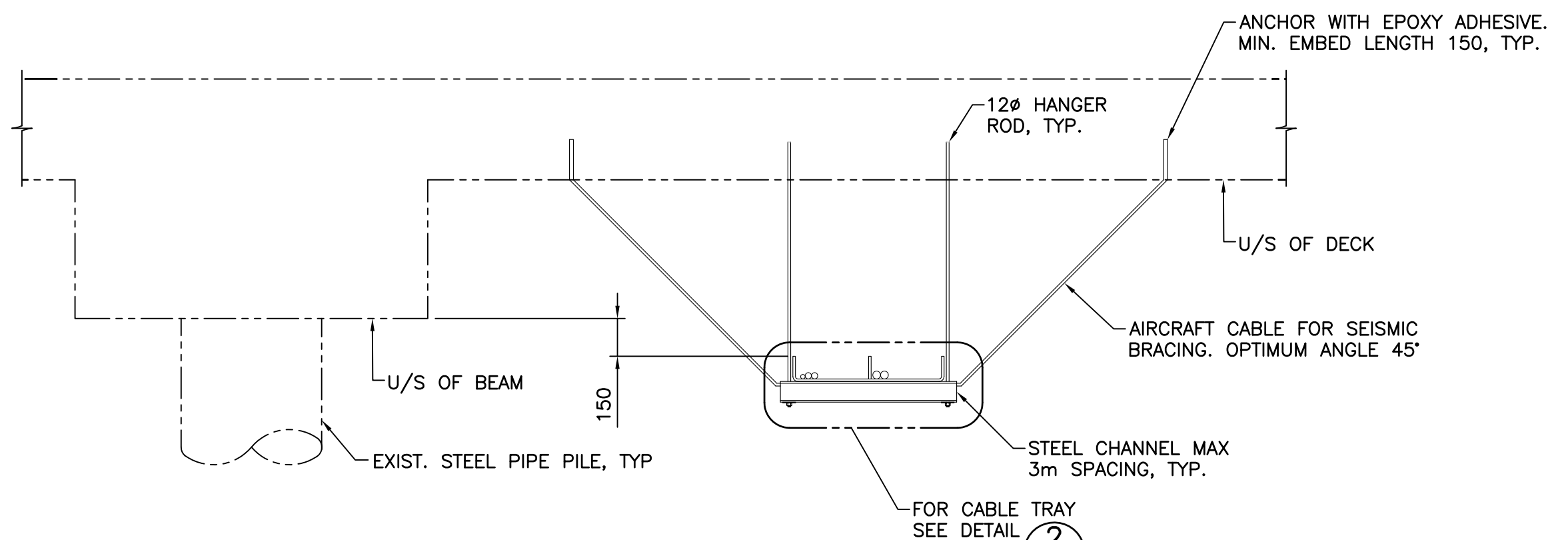




PLAN 1:500



DETAIL 1 SCALE 1:125



SECTION A SCALE 1:20

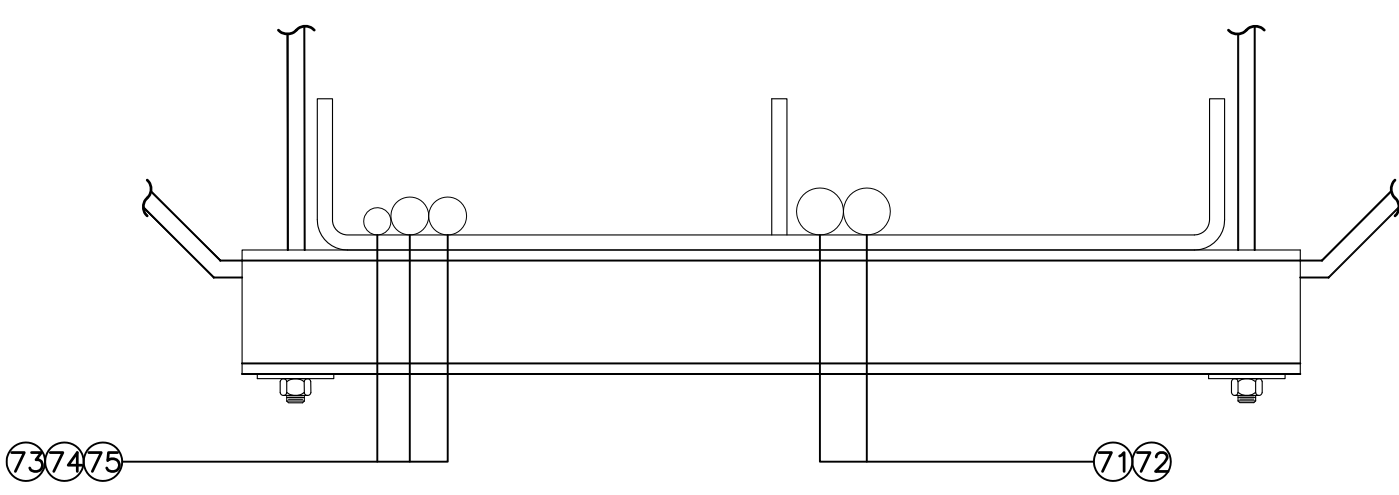
NOTES:

- ALL EXISTING UTILITIES ARE SHOWN ACCORDING TO AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION, INCLUDING UNDERGROUND FIRE WATER, SANITARY SEWER, COMPRESSED AIR, POWER AND TELEPHONE SERVICE DUCTS AND SHALL NOTIFY THE DEPARTMENTAL REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION. ANY ADDITIONAL WORK REQUIRED AS A RESULT OF FAILING TO PRE-LOCATE KNOWN OR POTENTIAL CONFLICTS WILL BE COMPLETED AT THE CONTRACTOR'S EXPENSE.
- ALL ELECTRICAL INSTALLATIONS SHALL BE PER THE LATEST EDITION OF THE CANADIAN ELECTRICAL CODE.
- FOR MODIFIED CABLE I.D. TAG NUMBER, REFER TO CABLE SCHEDULE ON DWG. E10.
- RE-USE EXISTING TUG BOAT WHARF RECEPTACLES, DISTRIBUTION, LIGHTING, FIRE ALARM STATION, HORN AND OTHER EQUIPMENT. RE-INSTALL TO MATCH EXISTING.
- ALL ELECTRICAL EQUIPMENT TO BE NEMA 4X SUITABLE FOR A MARINE ENVIRONMENT.
- ALL STEEL BRACKETS, SUPPORTS THREADED ROD, ETC. TO BE HOT DIPPED GALVANIZED AFTER FABRICATION UNLESS NOTED OTHERWISE.
- ELECTRICAL EQUIPMENT TO BE SECURED WITH STAINLESS STEEL THREADED ROD ANCHOR BOLTS IN EPOXY ADHESIVE, QUANTITY AND SIZE AS FOLLOWS:
 

ELECTRICAL EQUIPMENT	No. x DIA.	HOLE DIA.	MIN. DEPTH
CABLE TRAY & SUPPORTS	4 x 12	14	150
WALL CABINETS & EQUIPMENT	4 x 12	14	150
- CABLE TRAY SUPPORT MAXIMUM 3 METRES APART.
- METALLIC PARTS ON TUG BOAT WHARF, IN LAMP STANDARDS, AND OTHER AREAS NOT INDICATED SHALL BE GROUNDED PER THE LATEST EDITION OF THE CANADIAN ELECTRICAL CODE.
- CONTRACTOR TO DE-ENERGIZE WIRES BY OPENING AND LOCKING OUT CORRESPONDING HIGH MAST LIGHT BREAKER AT SUBSTATION 1 PRIOR TO DISCONNECTING WIRES FROM HIGH MAST. CONTRACTOR TO PULL BACK WIRE TO PULL BOX 60 AND PROPERLY STORE UNTIL THE CABLE IS RE-INSTALLED. THE 2 - 50mmØ CONDUITS TO BE CUT BACK SO NEW HIGH MAST LIGHT FOOTING CAN BE CONSTRUCTED (SEE DRAWING D7). AFTER FOOTING CONSTRUCTED, RE-INSTALL THE 2 - 50mmØ CONDUITS (1 - SPARE) AND RE-CONNECT THE WIRES AND MAKE HIGH MAST LIGHT FUNCTIONAL.
- CONTRACTOR TO CONFIRM SPARE CONDUIT FOR TUG BOAT WHARF CABLES. CONTRACTOR SHALL CONSULT DEPARTMENTAL REPRESENTATIVE BEFORE PULLING INACTIVE CABLE IN ORDER TO MEET CONDUIT REQUIREMENT.

LEGEND

- E --- EXISTING ELECTRICAL CABLE
- E — ELECTRICAL CABLE
- PULL BOX
- ⊖ DUPLEX RECEPTACLE
- ⊙ SPECIAL PURPOSE RECEPTACLE
- ⊗ FIRE ALARM PULL STATION AND LOCATOR LIGHT
- ⊠ FIRE ALARM HORN



DETAIL 2 SCALE 1:5

Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/18

Client/client: PUBLIC WORKS AND GOVERNMENT SERVICES CANADA

Project title/Titre du projet: ESQUIMALT GRAVING DOCK 825 ADMIRALS ROAD, VICTORIA, BC

ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION

Consultant Signature Only

Designed by/Concept par: ALISON MANSFIELD / ROB JONES  
 Drawn by/Dessiné par: GABE MENDES  
 PWGSC Project Manager/Administrateur de Projets TPSCG: ANDREW MYLLY  
 Regional Manager, Environmental Services: COLLIN KINGMAN

Drawing title/Titre du dessin: SERVICES CABLE TRAY AND CABLES LAYOUT PLAN

Project No./No. du projet: R.018400.002	Sheet/Feuille: E4	Revision no./Révision: 0
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EXISTING CABLE SCHEDULE

I.D. TAG	CABLE I.D. NUMBER	CABLE SIZE	CABLE TYPE	SERVICE DESCRIPTION	ORIGIN	DESTINATION	ROUTING
1	4SS271-JM1/1	3c 350 MCM	TECK 90	480V, FEEDER	SOUTH SUB BREAKER 4SS2-71	JETTY MOUNT JM1 - 500A DS	NORTH TUNNEL
2	4SS271-JM1/2	3c 350 MCM	TECK 90	480V, FEEDER	SOUTH SUB BREAKER 4SS2-71	JETTY MOUNT JM1 - 500A DS	NORTH TUNNEL
3	2SS261-JM1/1	4c 350 MCM	TECK 90	120/208V, FEEDER	SOUTH SUB BREAKER 2SS2-61	JETTY MOUNT JM1 - 200A DS	NORTH TUNNEL
4	2SS261-JM1/2	4c 350 MCM	TECK 90	120/208V, FEEDER	SOUTH SUB BREAKER 2SS2-61	JETTY MOUNT JM1 - 200A DS	NORTH TUNNEL
5	4SS272-JM2/1	3c 350 MCM	TECK 90	480V, FEEDER	SOUTH SUB BREAKER 4SS2-72	JETTY MOUNT JM2 - 500A DS	NORTH TUNNEL
6	4SS272-JM2/2	3c 350 MCM	TECK 90	480V, FEEDER	SOUTH SUB BREAKER 4SS2-72	JETTY MOUNT JM2 - 500A DS	NORTH TUNNEL
7	2SS262-JM2/1	4c 350 MCM	TECK 90	120/208V, FEEDER	SOUTH SUB BREAKER 2SS2-62	JETTY MOUNT JM2 - 200A DS	NORTH TUNNEL
8	2SS262-JM2/2	4c 350 MCM	TECK 90	120/208V, FEEDER	SOUTH SUB BREAKER 2SS2-62	JETTY MOUNT JM2 - 200A DS	NORTH TUNNEL
9	4SS273-JM3/1	3c 350 MCM	TECK 90	480V, FEEDER	SOUTH SUB BREAKER 4SS2-73	JETTY MOUNT JM3 - 500A DS	SOUTH JETTY
10	4SS273-JM3/2	3c 350 MCM	TECK 90	480V, FEEDER	SOUTH SUB BREAKER 4SS2-73	JETTY MOUNT JM3 - 500A DS	SOUTH JETTY
11	2SS263-JM3/1	4c 350 MCM	TECK 90	120/208V, FEEDER	SOUTH SUB BREAKER 2SS2-63	JETTY MOUNT JM3 - 200A DS	SOUTH JETTY
12	2SS263-JM3/2	4c 350 MCM	TECK 90	120/208V, FEEDER	SOUTH SUB BREAKER 2SS2-63	JETTY MOUNT JM3 - 200A DS	SOUTH JETTY
13	4SS274-JM4/1	3c 350 MCM	TECK 90	480V, FEEDER	SOUTH SUB BREAKER 4SS2-74	JETTY MOUNT JM4 - 500A DS	SOUTH JETTY
14	4SS274-JM4/2	3c 350 MCM	TECK 90	480V, FEEDER	SOUTH SUB BREAKER 4SS2-74	JETTY MOUNT JM4 - 500A DS	SOUTH JETTY
15	2SS264-JM4	4c 350 MCM	TECK 90	120/208V, FEEDER	SOUTH SUB BREAKER 2SS2-64	JETTY MOUNT JM4 - 200A DS	SOUTH JETTY
16	4SS275-JM5/1	3c 350 MCM	TECK 90	480V, FEEDER	SOUTH SUB BREAKER 4SS2-75	JETTY MOUNT JM5 - 500A DS	SOUTH JETTY
17	4SS275-JM5/2	3c 350 MCM	TECK 90	480V, FEEDER	SOUTH SUB BREAKER 4SS2-75	JETTY MOUNT JM5 - 500A DS	SOUTH JETTY
18	2SS265-JM5	4c 350 MCM	TECK 90	120/208V, FEEDER	SOUTH SUB BREAKER 2SS2-65	JETTY MOUNT JM5 - 200A DS	SOUTH JETTY
19	NOT USED						
20	2SS2JB-JM5TB/1	2c #1 AWG	TECK 90	120V, 15A FEEDER	SOUTH SUB BREAKER 2SS2JB	TERMINAL BOX #JM5TB	SOUTH JETTY
21	JM5TB-JM4TB/1	2c #1 AWG	TECK 90	120V	TERMINAL BOX #JM5TB	TERMINAL BOX #JM4TB	SOUTH JETTY
22	JM4TB-JM3TB/1	2c #1 AWG	TECK 90	120V	TERMINAL BOX #JM4TB	TERMINAL BOX #JM3TB	SOUTH JETTY
23	JM3TB-JM2TB/1	2c #1 AWG	TECK 90	120V	TERMINAL BOX #JM3TB	TERMINAL BOX #JM2TB	SOUTH JETTY
24	JM2TB-JM1TB/1	2c #1 AWG	TECK 90	120V	TERMINAL BOX #JM2TB	TERMINAL BOX #JM1TB	SOUTH JETTY
25	2SS2-JM5TB/2	2c #8 AWG	TECK 90	120V, 15A FEEDER	SOUTH SUB BREAKER 2SS2	TERMINAL BOX #JM5TB	SOUTH JETTY
26	JM5TB-JM4TB/2	2c #8 AWG	TECK 90	120V	TERMINAL BOX #JM5TB	TERMINAL BOX #JM4TB	SOUTH JETTY
27	JM4TB-JM3TB/2	2c #8 AWG	TECK 90	120V	TERMINAL BOX #JM4TB	TERMINAL BOX #JM3TB	SOUTH JETTY
28	JM3TB-JM2TB/2	2c #8 AWG	TECK 90	120V	TERMINAL BOX #JM3TB	TERMINAL BOX #JM2TB	SOUTH JETTY
29	JM2TB-JM1TB/2	2c #8 AWG	TECK 90	120V	TERMINAL BOX #JM2TB	TERMINAL BOX #JM1TB	SOUTH JETTY
30	2SKCCT42-JM5TB	2c #8 AWG	TECK 90	120V, 15A FEEDER	SOUTH SUB PANEL 2SK, CCT.42	TERMINAL BOX #JM5TB	SOUTH JETTY
31	JM5TB-JM4TB/3	2c #8 AWG	TECK 90	120V	TERMINAL BOX #JM5TB	TERMINAL BOX #JM4TB	SOUTH JETTY
32	JM4TB-JM3TB/3	2c #8 AWG	TECK 90	120V	TERMINAL BOX #JM4TB	TERMINAL BOX #JM3TB	SOUTH JETTY
33	JM3TB-JM2TB/3	2c #8 AWG	TECK 90	120V	TERMINAL BOX #JM3TB	TERMINAL BOX #JM2TB	SOUTH JETTY
34	JM2TB-JM1TB/3	2c #8 AWG	TECK 90	120V	TERMINAL BOX #JM2TB	TERMINAL BOX #JM1TB	SOUTH JETTY
35	JM5TB-JM5/1	4c #12 AWG	TECK 90	120V	TERMINAL BOX #JM5TB	JB FOR LIGHT & RECEP. IN JM5	SOUTH JETTY
36	JM5TB-JM5/2	2c #12 AWG	TECK 90	120V	TERMINAL BOX #JM5TB	F/A 120V TERMINALS IN JM5	SOUTH JETTY
37	JM4TB-JM4/1	4c #12 AWG	TECK 90	120V	TERMINAL BOX #JM4TB	JB FOR LIGHT & RECEP. IN JM4	SOUTH JETTY
38	JM4TB-JM4/2	2c #12 AWG	TECK 90	120V	TERMINAL BOX #JM4TB	F/A 120V TERMINALS IN JM4	SOUTH JETTY
39	JM3TB-JM3/1	4c #12 AWG	TECK 90	120V	TERMINAL BOX #JM3TB	JB FOR LIGHT & RECEP. IN JM3	SOUTH JETTY
40	JM3TB-JM3/2	2c #12 AWG	TECK 90	120V	TERMINAL BOX #JM3TB	F/A 120V TERMINALS IN JM3	SOUTH JETTY
41	JM2TB-JM2/1	4c #12 AWG	TECK 90	120V	TERMINAL BOX #JM2TB	JB FOR LIGHT & RECEP. IN JM2	SOUTH JETTY
42	JM2TB-JM2/2	2c #12 AWG	TECK 90	120V	TERMINAL BOX #JM2TB	F/A 120V TERMINALS IN JM2	SOUTH JETTY
43	JM1TB-JM1/1	4c #12 AWG	TECK 90	120V	TERMINAL BOX #JM1TB	JB FOR LIGHT & RECEP. IN JM1	SOUTH JETTY
44	JM1TB-JM1/2	2c #12 AWG	TECK 90	120V	TERMINAL BOX #JM1TB	F/A 120V TERMINALS IN JM1	SOUTH JETTY
45	F/A BOX-JM5	2c #14 AWG	TECK 90	FIRE ALARM	SIGA-IM F/A BOX @ SOUTH SUB	JETTY MOUNT 5 FIRE ALARM SYSTEM	SOUTH JETTY
46	JM5-JM4/FA	2c #14 AWG	TECK 90	FIRE ALARM	JETTY MOUNT 5 FIRE ALARM SYSTEM	JETTY MOUNT 4 FIRE ALARM SYSTEM	SOUTH JETTY
47	JM4-JM3/FA	2c #14 AWG	TECK 90	FIRE ALARM	JETTY MOUNT 4 FIRE ALARM SYSTEM	JETTY MOUNT 3 FIRE ALARM SYSTEM	SOUTH JETTY
48	JM3-JM2/FA	2c #14 AWG	TECK 90	FIRE ALARM	JETTY MOUNT 3 FIRE ALARM SYSTEM	JETTY MOUNT 2 FIRE ALARM SYSTEM	SOUTH JETTY
49	JM2-JM1/FA	2c #14 AWG	TECK 90	FIRE ALARM	JETTY MOUNT 2 FIRE ALARM SYSTEM	JETTY MOUNT 1 FIRE ALARM SYSTEM	SOUTH JETTY
50	NOT USED						
51	TEL BOX-JM5	12pr #24 AWG	TEL	TELEPHONE	TELEPHONE BOX @ SOUTH SUB	JETTY MOUNT 5 TELEPHONE TB	SOUTH JETTY
52	TEL BOX-JM4	12pr #24 AWG	TEL	TELEPHONE	TELEPHONE BOX @ SOUTH SUB	JETTY MOUNT 4 TELEPHONE TB	SOUTH JETTY
53	TEL BOX-JM3	12pr #24 AWG	TEL	TELEPHONE	TELEPHONE BOX @ SOUTH SUB	JETTY MOUNT 3 TELEPHONE TB	SOUTH JETTY
54	TEL BOX-JM2	12pr #24 AWG	TEL	TELEPHONE	TELEPHONE BOX @ SOUTH SUB	JETTY MOUNT 2 TELEPHONE TB	SOUTH JETTY
55	TEL BOX-JM1	12pr #24 AWG	TEL	TELEPHONE	TELEPHONE BOX @ SOUTH SUB	JETTY MOUNT 1 TELEPHONE TB	SOUTH JETTY
56	SCADA BOX-JM5-0400E1	2pr #18 AWG	STP RS485 AIA JKT	SCADA	SCADA PANEL @ SOUTH WATER METER JB	JETTY MOUNT 5 SCADA WATER METER JB	SOUTH JETTY
57	JM5-JM4/SCADA-0400E2	2pr #18 AWG	STP RS485 AIA JKT	SCADA	JETTY MOUNT 5 SCADA WATER METER JB	JETTY MOUNT 4 SCADA WATER METER JB	SOUTH JETTY
58	JM4-JM3/SCADA-0400E3	2pr #18 AWG	STP RS485 AIA JKT	SCADA	JETTY MOUNT 4 SCADA WATER METER JB	JETTY MOUNT 3 SCADA WATER METER JB	SOUTH JETTY
59	JM3-JM2/SCADA-0400E4	2pr #18 AWG	STP RS485 AIA JKT	SCADA	JETTY MOUNT 3 SCADA WATER METER JB	JETTY MOUNT 2 SCADA WATER METER JB	SOUTH JETTY
60	JM2-JM1/SCADA-0400E5	2pr #18 AWG	STP RS485 AIA JKT	SCADA	JETTY MOUNT 2 SCADA WATER METER JB	JETTY MOUNT 1 SCADA WATER METER JB	SOUTH JETTY
61	JM1-DRYDOCK SPARE	2pr #18 AWG	STP RS485 AIA JKT	SCADA	JETTY MOUNT 1 SCADA WATER METER JB	SERVICE TUNNEL SCADA WATER METER JB	NORTH TUNNEL
62	2SKCCT43-JM5 120V	2c #12 AWG	TECK 90	120V	SOUTH SUB PANEL 2SK, CCT. 43	JM5 120V 2SK-43 JB	SOUTH JETTY
63	JM5-JM4 120V 2SK-43	2c #12 AWG	TECK 90	120V	JM5 120V 2SK-43 JB	JM4 120V 2SK-43 JB	SOUTH JETTY
64	JM4-JM3 120V 2SK-43	2c #12 AWG	TECK 90	120V	JM4 120V 2SK-43 JB	JM3 120V 2SK-43 JB	SOUTH JETTY
65	JM3-JM2 120V 2SK-43	2c #12 AWG	TECK 90	120V	JM3 120V 2SK-43 JB	JM2 120V 2SK-43 JB	SOUTH JETTY
66	JM2-JM1 120V 2SK-43	2c #12 AWG	TECK 90	120V	JM2 120V 2SK-43 JB	JM1 120V 2SK-43 JB	SOUTH JETTY
67	JM1-TUNNEL 120V 2SK-43	2c #12 AWG	TECK 90	120V	JM1 120V 2SK-43 JB	SERVICE TUNNEL 2SK-43 JB	NORTH TUNNEL
68	TOWER CRANE CAMERA	4pr #24 AWG	UTP CAT5e	CCTV	SOUTH SUBSTATION (UNKNOWN)	SOUTH JETTY TOWER CRANE	SOUTH JETTY
69	TOWER CRANE CAMERA	4pr #24 AWG	UTP CAT5e	CCTV	SOUTH SUBSTATION (UNKNOWN)	SOUTH JETTY TOWER CRANE	SOUTH JETTY
70	NOT USED						
71	NOT USED						
72	NOT USED						
73	NOT USED						
74	NOT USED						
75	NOT USED						
76	NOT USED						
77	NOT USED						
78	NOT USED						
79	NOT USED						
80	NOT USED						
81	NOT USED						
82	NOT USED						
83	NOT USED						
84	NOT USED						
85	NOT USED						
86	NOT USED						
87	NOT USED						
88	CAISSON 1/2JB-PARKJM1	3c #2 AWG	TECK 90	600V	CAISSON 1/2 JB IN SERVICE TUNNEL	CAISSON PARK JETTY MOUNT 1	NORTH TUNNEL
89	6SHCCT26-SJ HIGH MAST	3c #1 AWG	RW90/TECK 90	347V	MAIN SUB PANEL 6SH CCT. 26	SOUTH JETTY HIGH MAST LIGHT	EXISTING DUCT BANK
90	NOT USED						
91	2SKCCT18/20-TUG1	4c #8 AWG	TECK 90	208V	SOUTH SUB PANEL 2SK, CCT. 18/20	TUG WHARF RECEPTACLE 30A	SOUTH JETTY
92	2SKCCT22/24-TUG2	4c #8 AWG	TECK 90	208V	SOUTH SUB PANEL 2SK, CCT. 22/24	TUG WHARF RECEPTACLE 30A	SOUTH JETTY
93	2SKCCT23-TUG3	4c #10 AWG	TECK 90	120V	SOUTH SUB PANEL 2SK, CCT. 23	TUG WHARF RECEPTACLE 20A	SOUTH JETTY
94	2SKCCT16-TUGPC	3c #12 AWG	TECK 90	120V	SOUTH SUB PANEL 2SK, CCT. 16	TUG WHARF PHOTOCELL & CONTROL RELAY	SOUTH JETTY
95	TUGPC-TUGLIGHT1	3c #12 AWG	TECK 90	120V	TUG WHARF PHOTOCELL	TUG FLOODLIGHT 1	SOUTH JETTY
96	TUGPC-TUGLIGHT2	3c #12 AWG	TECK 90	120V	TUG WHARF PHOTOCELL	TUG FLOODLIGHT 2	SOUTH JETTY
97	TUGPC-TUGLIGHT3	3c #12 AWG	TECK 90	120V	TUG WHARF PHOTOCELL	TUG FLOODLIGHT 3	SOUTH JETTY
98	F/A BOX - TUG F/A	2c #12 AWG	TECK 90	120V	VSY QA OFFICE 120V PANEL	TUG WHARF F/A HORN	SOUTH JETTY
99	F/A BOX TUG F/A HORN	2c #14 AWG	TECK 90	FIRE ALARM	VSY QA OFFICE F/A BOOSTER PANEL	TUG WHARF FIRE ALARM	SOUTH JETTY
100	2SKCCT38-F/A LOC LGT TUG	2c #12 AWG	TECK 90	120V	SOUTH SUB PANEL 2SK, CCT. 38	TUG WHARF LOCATOR LIGHT	SOUTH JETTY
101	SIGA-CT2 - JETTY F/A S	2c #14 AWG	TECK 90	FIRE ALARM	SIGA-CT2 F/A CONTROL RELAY KIOSK #3	JETTY FIRE ALARM S	SOUTH JETTY
102	F/A LOC LGT TUG - LOC LGT S	2c #12 AWG	TECK 90	120V	TUG WHARF LOCATOR LIGHT	JETTY LOCATOR LIGHT S	SOUTH JETTY
103	SIGA-CT2 - JETTY F/A SW	2c #14 AWG	TECK 90	FIRE ALARM	SIGA-CT2 F/A CONTROL RELAY KIOSK #3	JETTY FIRE ALARM SW	SOUTH JETTY
104	F/A LOC LGT S - LOC LGT SW	2c #12 AWG	TECK 90	120V	JETTY LOCATOR LIGHT S	JETTY LOCATOR LIGHT SW	SOUTH JETTY
105	SIGA-CT2 - F/A PULL PIT 63	2c #14 AWG	TECK 90	FIRE ALARM	SIGA-CT2 F/A CONTROL RELAY KIOSK #3	PULL PIT 63 F/A LOOP	SOUTH JETTY
106	F/A VSY FAB - QA OFFICE 120V	2c #12 AWG	TECK 90	120V	VSY FAB SHOP 120V PANEL	VSY QA OFFICE 120V PANEL	SOUTH JETTY
107	F/A VSY FAB - QA OFFICE F/A	2c #14 AWG	TECK 90	FIRE ALARM	VSY FAB SHOP F/A BOOSTER PANEL	VSY QA OFFICE F/A BOOSTER PANEL	SOUTH JETTY

NOTES:

- CONTRACTOR TO FIELD VERIFY ALL DETAILS PRIOR TO ORDERING NEW CABLES. OBTAIN INSTRUCTION FROM DEPARTMENTAL REPRESENTATIVE BEFORE ORDERING MATERIAL IF THERE IS ANY DISCREPANCY OR IF ADDITIONAL CABLES NOT SHOWN ARE FOUND.
- FOR CABLES 68 AND 69, EXACT ORIGIN AND DESTINATION IS UNKNOWN. FIELD VERIFY CABLE ROUTE WITH DEPARTMENTAL REPRESENTATIVE.
- FOR CABLE SCHEDULE AFTER DEMOLITION SEE DWG. E10.



0	ISSUED FOR TENDER	2014/12/18
Revision/Redaction	Description/Description	Date/Date

Client/client

**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK**  
 825 ADMIRALS ROAD, VICTORIA, BC

**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
 ALISON MANSFIELD / ROB JONES

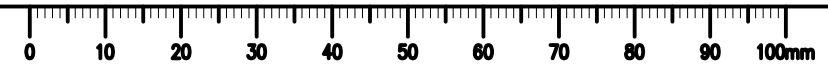
Drawn by/Dessiné par  
 GABE MENDES

PWGC Project Manager/Administrateur de Projets TPSCG  
 ANDREW MYLLY

Regional Manager, Environmental Services  
 COLLIN KINGMAN

Drawing title/Titre du dessin  
**EXISTING SERVICES ELECTRICAL CABLE SCHEDULE**

Project No./No. du projet R.018400.002	Sheet/ E9	Revision no./ 0
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MODIFIED CABLE SCHEDULE

I.D. TAG	CABLE I.D. NUMBER	CABLE SIZE	CABLE TYPE	SERVICE DESCRIPTION	ORIGIN (SEE NOTE 2)	DESTINATION	ROUTING
1	4SS271-JM1/1	3c 350 MCM	TECK 90	480V, FEEDER	SOUTH SUB LOWER FLOOR	PULL PIT T2	NORTH TUNNEL
2	4SS271-JM1/2	3c 350 MCM	TECK 90	480V, FEEDER	SOUTH SUB LOWER FLOOR	PULL PIT T2	NORTH TUNNEL
3	2SS261-JM1/1	4c 350 MCM	TECK 90	120/208V, FEEDER	SOUTH SUB LOWER FLOOR	PULL PIT T2	NORTH TUNNEL
4	2SS261-JM1/2	4c 350 MCM	TECK 90	120/208V, FEEDER	SOUTH SUB LOWER FLOOR	PULL PIT T2	NORTH TUNNEL
5	4SS272-JM2/1	3c 350 MCM	TECK 90	480V, FEEDER	SOUTH SUB LOWER FLOOR	PULL PIT T2	NORTH TUNNEL
6	4SS272-JM2/2	3c 350 MCM	TECK 90	480V, FEEDER	SOUTH SUB LOWER FLOOR	PULL PIT T2	NORTH TUNNEL
7	2SS262-JM2/1	4c 350 MCM	TECK 90	120/208V, FEEDER	SOUTH SUB LOWER FLOOR	PULL PIT T2	NORTH TUNNEL
8	2SS262-JM2/2	4c 350 MCM	TECK 90	120/208V, FEEDER	SOUTH SUB LOWER FLOOR	PULL PIT T2	NORTH TUNNEL
9	4SS273-JM3/1	3c 350 MCM	TECK 90	480V, FEEDER	SOUTH SUB CABLE TRAY	OUTSIDE T4	SOUTH JETTY
10	4SS273-JM3/2	3c 350 MCM	TECK 90	480V, FEEDER	SOUTH SUB CABLE TRAY	OUTSIDE T4	SOUTH JETTY
11	2SS263-JM3/1	4c 350 MCM	TECK 90	120/208V, FEEDER	SOUTH SUB CABLE TRAY	OUTSIDE T4	SOUTH JETTY
12	2SS263-JM3/2	4c 350 MCM	TECK 90	120/208V, FEEDER	SOUTH SUB CABLE TRAY	OUTSIDE T4	SOUTH JETTY
13	4SS274-JM4/1	3c 350 MCM	TECK 90	480V, FEEDER	SOUTH SUB CABLE TRAY	PULL PIT T4	SOUTH JETTY
14	4SS274-JM4/2	3c 350 MCM	TECK 90	480V, FEEDER	SOUTH SUB CABLE TRAY	PULL PIT T4	SOUTH JETTY
15	2SS264-JM4	4c 350 MCM	TECK 90	120/208V, FEEDER	SOUTH SUB CABLE TRAY	OUTSIDE T4	SOUTH JETTY
16	4SS275-JM5/1	3c 350 MCM	TECK 90	480V, FEEDER	SOUTH SUB CABLE TRAY	OUTSIDE T4	SOUTH JETTY
17	4SS275-JM5/2	3c 350 MCM	TECK 90	480V, FEEDER	SOUTH SUB CABLE TRAY	OUTSIDE T4	SOUTH JETTY
18	2SS265-JM5	4c 350 MCM	TECK 90	120/208V, FEEDER	SOUTH SUB CABLE TRAY	OUTSIDE T4	SOUTH JETTY
19	NOT USED						
20	2SS2JB-JM5TB/1	2c #1 AWG	TECK 90	120V, 15A FEEDER	SOUTH SUB CABLE TRAY	PULL PIT T5	SOUTH JETTY
21	NOT USED						
22	NOT USED						
23	NOT USED						
24	NOT USED						
25	2SS2-JM5TB/2	2c #8 AWG	TECK 90	120V, 15A FEEDER	SOUTH SUB CABLE TRAY	PULL PIT T5	SOUTH JETTY
26	NOT USED						
27	NOT USED						
28	NOT USED						
29	NOT USED						
30	2SKCCT42-JM5TB	2c #8 AWG	TECK 90	120V, 15A FEEDER	SOUTH SUB CABLE TRAY	PULL PIT T5	SOUTH JETTY
31	NOT USED						
32	NOT USED						
33	NOT USED						
34	NOT USED						
35	NOT USED						
36	NOT USED						
37	NOT USED						
38	NOT USED						
39	NOT USED						
40	NOT USED						
41	NOT USED						
42	NOT USED						
43	NOT USED						
44	NOT USED						
45	F/A BOX-JM5	2c #14 AWG	TECK 90	FIRE ALARM	SOUTH SUB CABLE TRAY	PULL PIT T5	SOUTH JETTY
46	NOT USED						
47	NOT USED						
48	NOT USED						
49	NOT USED						
50	NOT USED						
51	TEL BOX-JM5	12pr #24 AWG	TEL	TELEPHONE	SOUTH SUB CABLE TRAY	PULL PIT T5	SOUTH JETTY
52	TEL BOX-JM4	12pr #24 AWG	TEL	TELEPHONE	SOUTH SUB CABLE TRAY	PULL PIT T5	SOUTH JETTY
53	TEL BOX-JM3	12pr #24 AWG	TEL	TELEPHONE	SOUTH SUB CABLE TRAY	PULL PIT T5	SOUTH JETTY
54	TEL BOX-JM2	12pr #24 AWG	TEL	TELEPHONE	SOUTH SUB CABLE TRAY	PULL PIT T5	SOUTH JETTY
55	TEL BOX-JM1	12pr #24 AWG	TEL	TELEPHONE	SOUTH SUB CABLE TRAY	PULL PIT T5	SOUTH JETTY
56	SCADA BOX-JM5-0400E1	2pr #18 AWG	STP RS485 AIA JKT	SCADA	SOUTH SUB CABLE TRAY	PULL PIT T5	SOUTH JETTY
57	NOT USED						
58	NOT USED						
59	NOT USED						
60	NOT USED						
61	JM1-DRYDOCK SPARE	2pr #18 AWG	STP RS485 AIA JKT	SCADA	PULL PIT T1	SERVICE TUNNEL SCADA WATER METER JB (SEE NOTE 2)	NORTH TUNNEL
62	2SKCCT43-JM5 120V	2c #12 AWG	TECK 90	120V	SOUTH SUB CABLE TRAY	PULL PIT T5	SOUTH JETTY
63	NOT USED						
64	NOT USED						
65	NOT USED						
66	NOT USED						
67	JM1-TUNNEL 120V 2SK-43	2c #12 AWG	TECK 90	120V	PULL PIT T1	SERVICE TUNNEL 2SK-43 JB (SEE NOTE 2)	NORTH TUNNEL
68	TOWER CRANE CAMERA	4pr #24 AWG	UTP CAT5e	CCTV	SOUTH SUB CABLE TRAY	PULL PIT T5	SOUTH JETTY
69	TOWER CRANE CAMERA	4pr #24 AWG	UTP CAT5e	CCTV	SOUTH SUB CABLE TRAY	PULL PIT T5	SOUTH JETTY
70	NOT USED						
71	2SKCCT22/24-TUG2	4c #6 AWG	TECK 90	208V	SOUTH SUB PANEL 2SK, CCT. 22/24	TUG WHARF RECEPTACLE 30A	EXISTING BURIED CONDUIT
72	2SKCCT23-TUG3	4c #6 AWG	TECK 90	120V	SOUTH SUB PANEL 2SK, CCT. 23	TUG WHARF RECEPTACLE 20A	EXISTING BURIED CONDUIT
73	F/A BOX - TUG F/A	2c #6 AWG	TECK 90	120V	SOUTH SUB PANEL 2SK, CCT. 16	TUG WHARF F/A HORN	EXISTING BURIED CONDUIT
74	F/A BOX TUG F/A HORN	2c #14 AWG	TECK 90	FIRE ALARM	SIGMA-IM BOX @ SOUTH SUB	TUG WHARF FIRE ALARM	EXISTING BURIED CONDUIT
75	VSY MAC-F/A LOC LGT TUG	2c #6 AWG	TECK 90	120V	VSY MACHINE SHOP PANEL 28M	TUG WHARF LOCATOR LIGHT	EXISTING BURIED CONDUIT
76	NOT USED						
77	NOT USED						
78	NOT USED						
79	NOT USED						
80	NOT USED						
81	NOT USED						
82	NOT USED						
83	NOT USED						
84	NOT USED						
85	NOT USED						
86	NOT USED						
87	NOT USED						
88	CAISSON 1/2JB-PARKJM1	3c #2 AWG	TECK 90	600V	CAISSON 1/2 JB IN SERVICE TUNNEL	PULL PIT T1	NORTH TUNNEL
89	6SHCCT26-SJ HIGH MAST	3c #1 AWG	RW90/TECK 90	347V	MAIN SUB PANEL 6SH CCT. 26	PULL PIT T3	EXISTING DUCT BANK
90	NOT USED						
91	2SKCCT18/20-TUG1	4c #8 AWG	TECK 90	208V	SOUTH SUB CABLE TRAY	NEAR PULL PIT T4	SOUTH JETTY
92	2SKCCT22/24-TUG2	4c #8 AWG	TECK 90	208V	SOUTH SUB CABLE TRAY	NEAR PULL PIT T4	SOUTH JETTY
93	2SKCCT23-TUG3	4c #10 AWG	TECK 90	120V	SOUTH SUB CABLE TRAY	NEAR PULL PIT T4	SOUTH JETTY
94	2SKCCT16-TUGPC	3c #12 AWG	TECK 90	120V	SOUTH SUB CABLE TRAY	NEAR PULL PIT T4	SOUTH JETTY
95	NOT USED						
96	NOT USED						
97	NOT USED						
98	NOT USED						
99	NOT USED						
100	2SKCCT38-F/A LOC LGT TUG	2c #12 AWG	TECK 90	120V	SOUTH SUB CABLE TRAY	NEAR PULL PIT T4	SOUTH JETTY
101	NOT USED						
102	NOT USED						
103	NOT USED						
104	NOT USED						
105	NOT USED						
106	NOT USED						
107	NOT USED						

NOTES:

- CONTRACTOR TO FIELD VERIFY ALL DETAILS PRIOR TO ORDERING NEW CABLES. OBTAIN INSTRUCTION FROM DEPARTMENTAL REPRESENTATIVE BEFORE ORDERING MATERIAL IF THERE IS ANY DISCREPANCY OR IF ADDITIONAL CABLES NOT SHOWN ARE FOUND.
- CABLES SHALL BE DISCONNECTED FROM EQUIPMENT, CAPPED AND SEALED. CABLES WITH A NORTH TUNNEL ROUTING SHALL BE MADE SAFE AND PULLED BACK ONTO THE SUBSTATION LOWER FLOOR. CABLES WITH A SOUTH JETTY ROUTING SHALL BE MADE SAFE AND PULLED BACK ONTO THE EXISTING CABLE TRAY IN THE SOUTH SUB. TAGGING SHALL REMAIN ON CABLES.



0	ISSUED FOR TENDER	2014/12/14
Revision/Redaction	Description/Description	Date/Date

Client/client

PUBLIC WORKS AND GOVERNMENT SERVICES CANADA

Project title/Titre du projet  
ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC

ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION

Consultant Signature Only

Designed by/Concept par  
ALISON MANSFIELD / ROB JONES

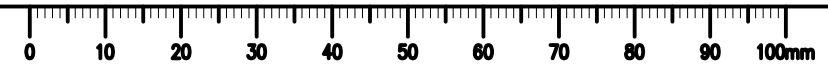
Drawn by/Dessiné par  
GABE MENDES

PWSC Project Manager/Administrateur de Projets TPSCG  
ANDREW MYLLY

Regional Manager, Environmental Services  
COLLIN KINGMAN

Drawing title/Titre du dessin  
MODIFICATIONS TO SERVICES ELECTRICAL CABLE SCHEDULE

Project No./No. du projet R.018400.002	Sheet/ E10	Revision no./ 0
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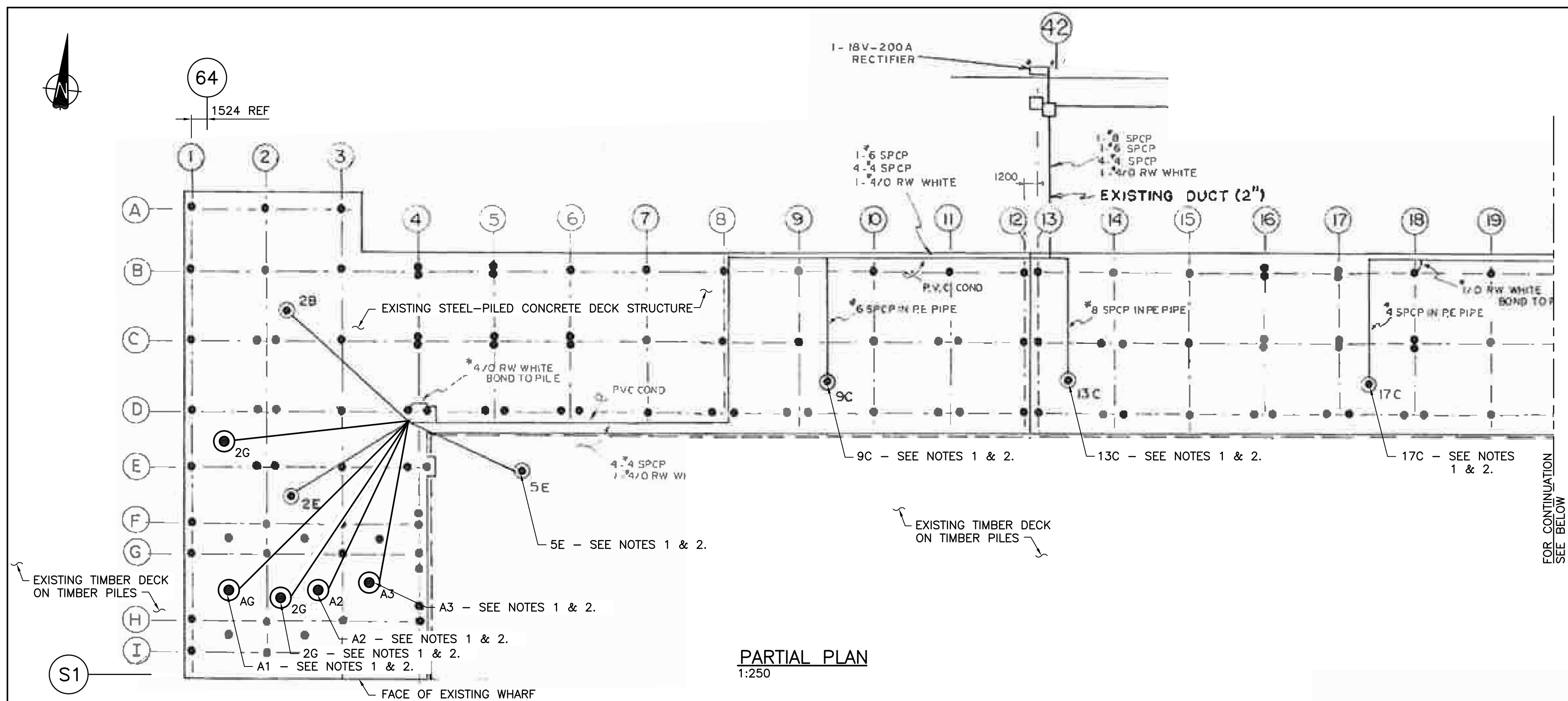
- LEAD SILVER ANODE
- EXISTING STEEL PIPE PILE

**NOTES:**

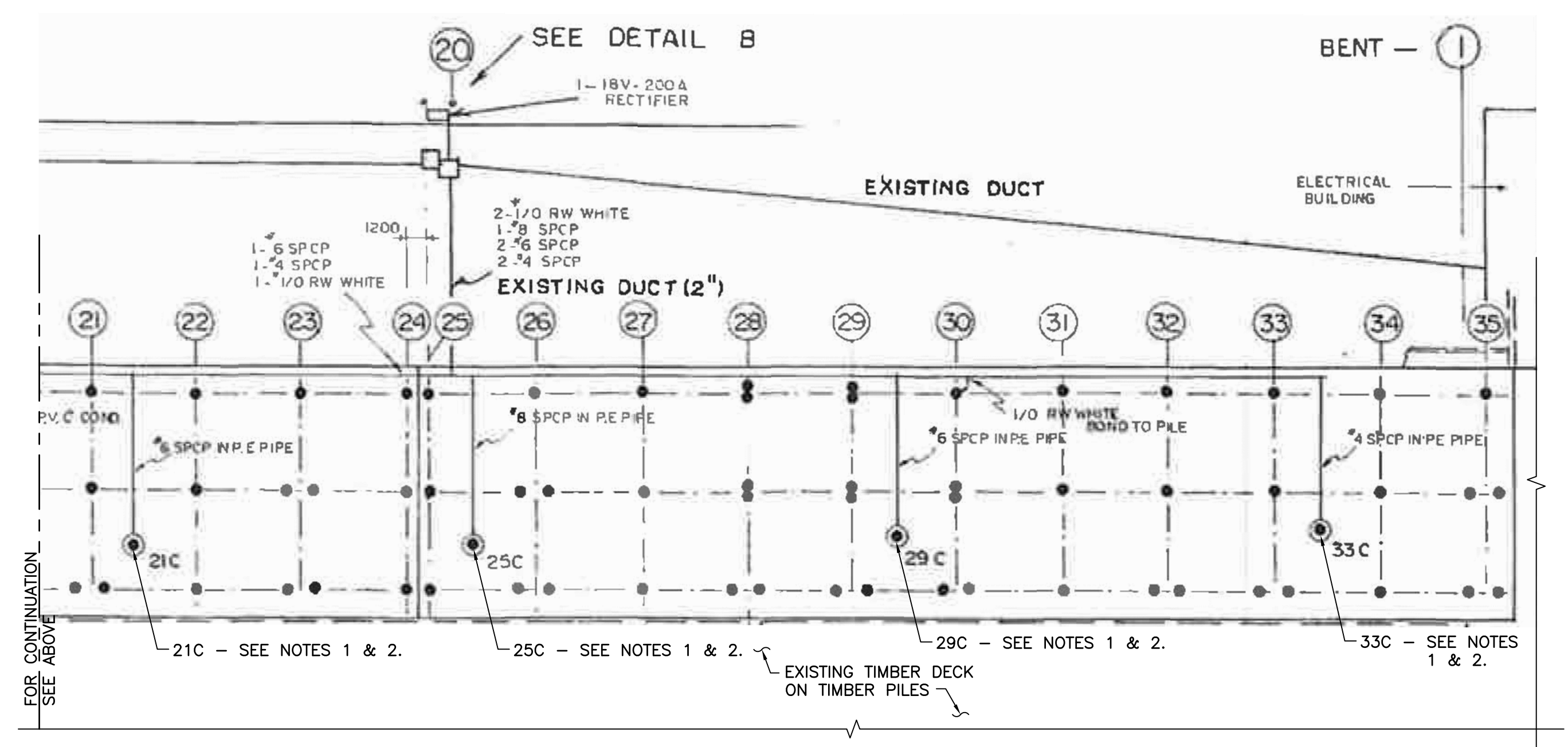
1. TEMPORARILY REMOVE, STORE AND REINSTATE ANODES TO ORIGINAL LOCATION AFTER DREDGING AND ENGINEERED CAPPING WORK ARE COMPLETED.
2. DO NOT DAMAGE THE INSULATION ON THE ANODE CABLE DURING REMOVAL AND REINSTATING.
3. DETAILS TAKEN FROM ESQUIMALT GRAVING DOCK IMPROVEMENTS, PROJECT NUMBER PR.100772 DRAWINGS 15 AND 16 OF 75, SUPPLEMENTED BY FIELD INFORMATION FROM EGD SEDIMENT REMEDIATION SOUTH JETTY UNDER-PIER EROSION PROTECTION RECORD DRAWINGS S15 (REFERENCE DRAWINGS).
4. REFER TO SPECIFICATION SECTION 02 41 13 FOR ICCP SYSTEM REQUIREMENTS.

**CORROSION TESTING REQUIREMENTS:**

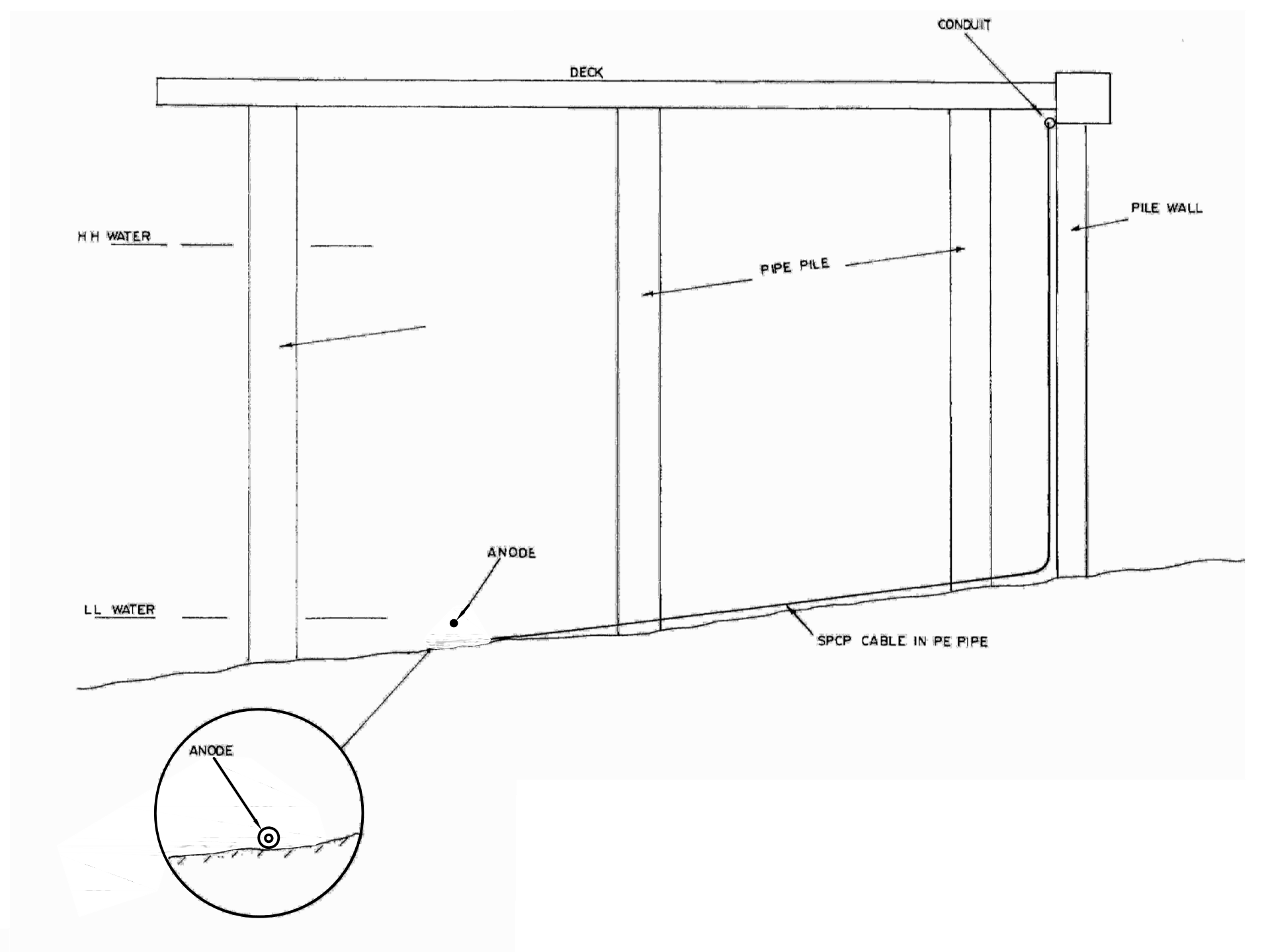
1. INSPECT AND TEST THE ICCP SYSTEM BEFORE DISCONNECTING AND AFTER REINSTATEMENT TO CONFIRM THAT THE REINSTATED ICCP SYSTEM PROVIDES THE SAME OPERATIONAL PERFORMANCE LEVEL AS PREVIOUSLY EXISTED.



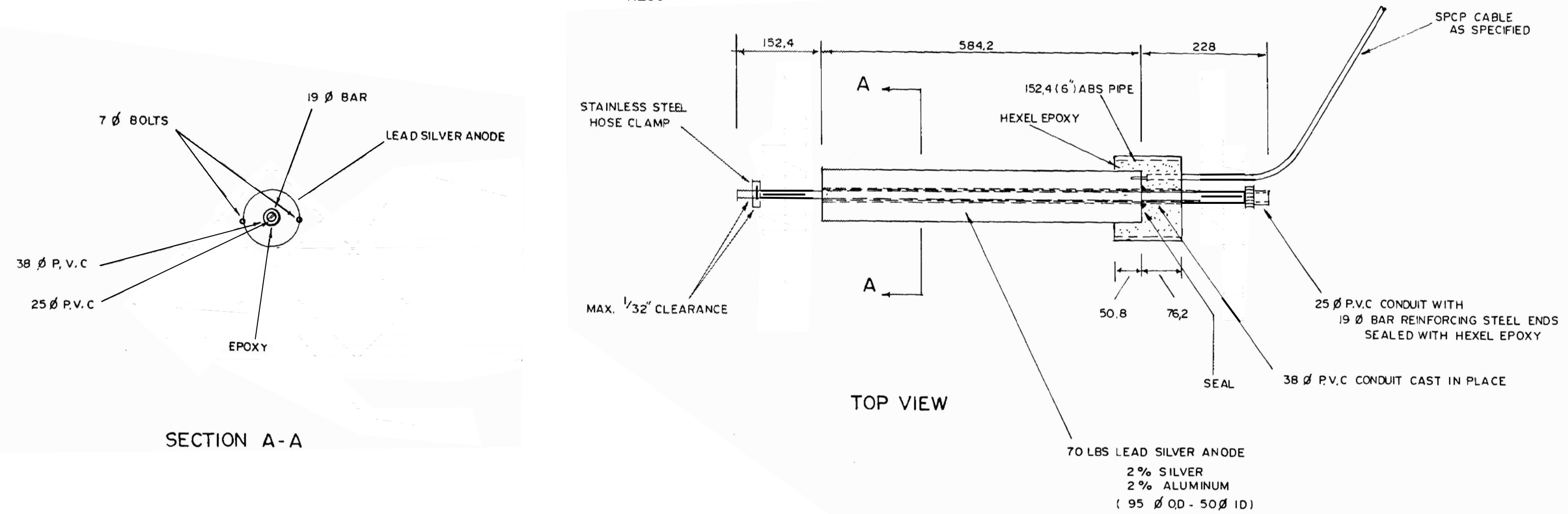
**PARTIAL PLAN**  
1:250



**PARTIAL PLAN**  
1:250



**TYPICAL SECTION**  
N.T.S.



**TYPICAL ANODE ASSEMBLY DETAILS**  
N.T.S.

Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC

**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
GEOFF COOPER

Drawn by/Dessiné par  
ARNIE RIST

PWGSC Project Manager/Administrateur de Projets TPSGC  
ANDREW MYLLY

Regional Manager, Environmental Services  
COLLIN KINGMAN

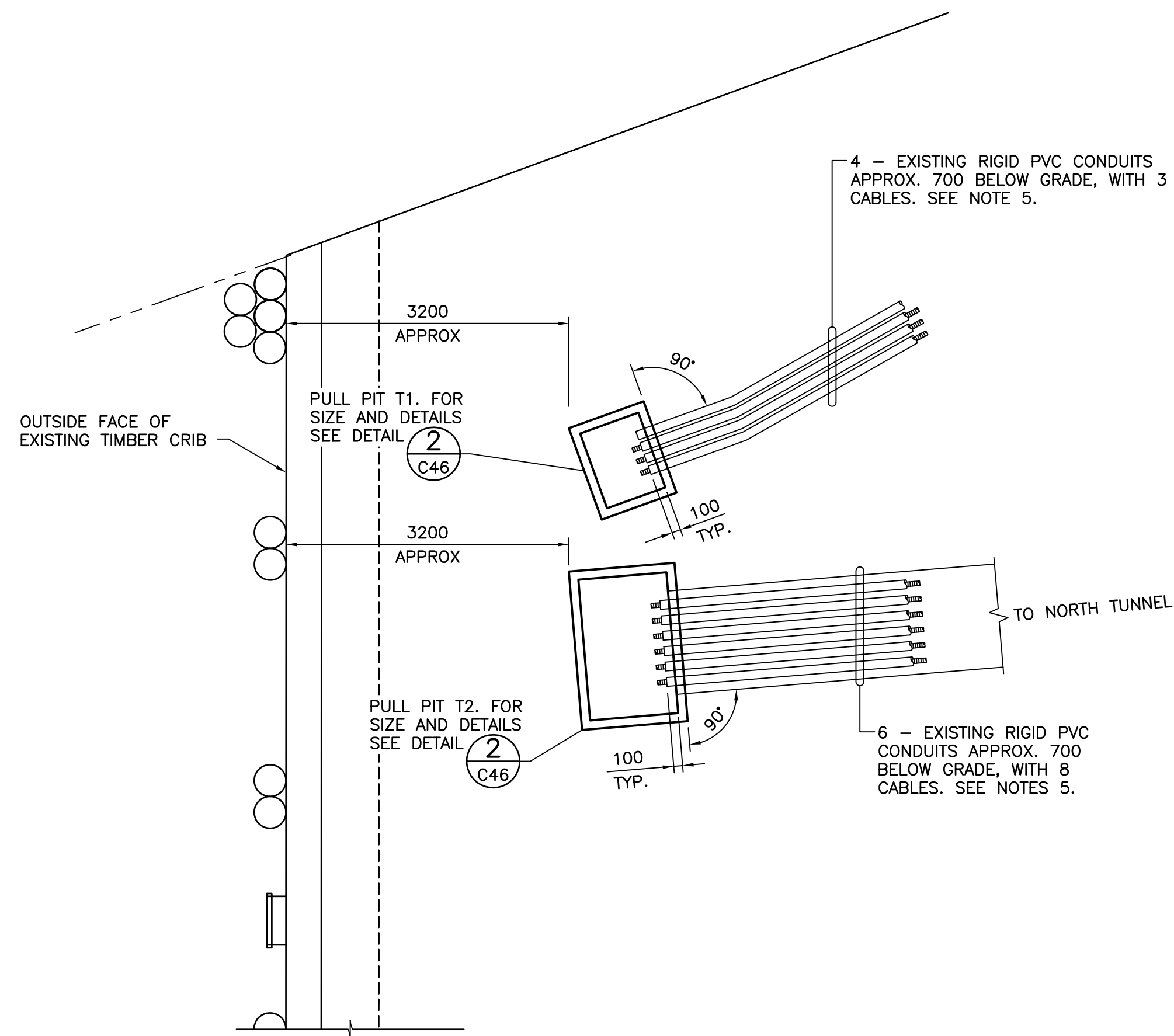
Drawing title/Titre du dessin  
**SOUTH JETTY MODIFICATIONS TO CATHODIC PROTECTION SYSTEM**

Project No./No. du projet	Sheet/Feuille	Revision no./No. de révision
R.018400.002	E11	0

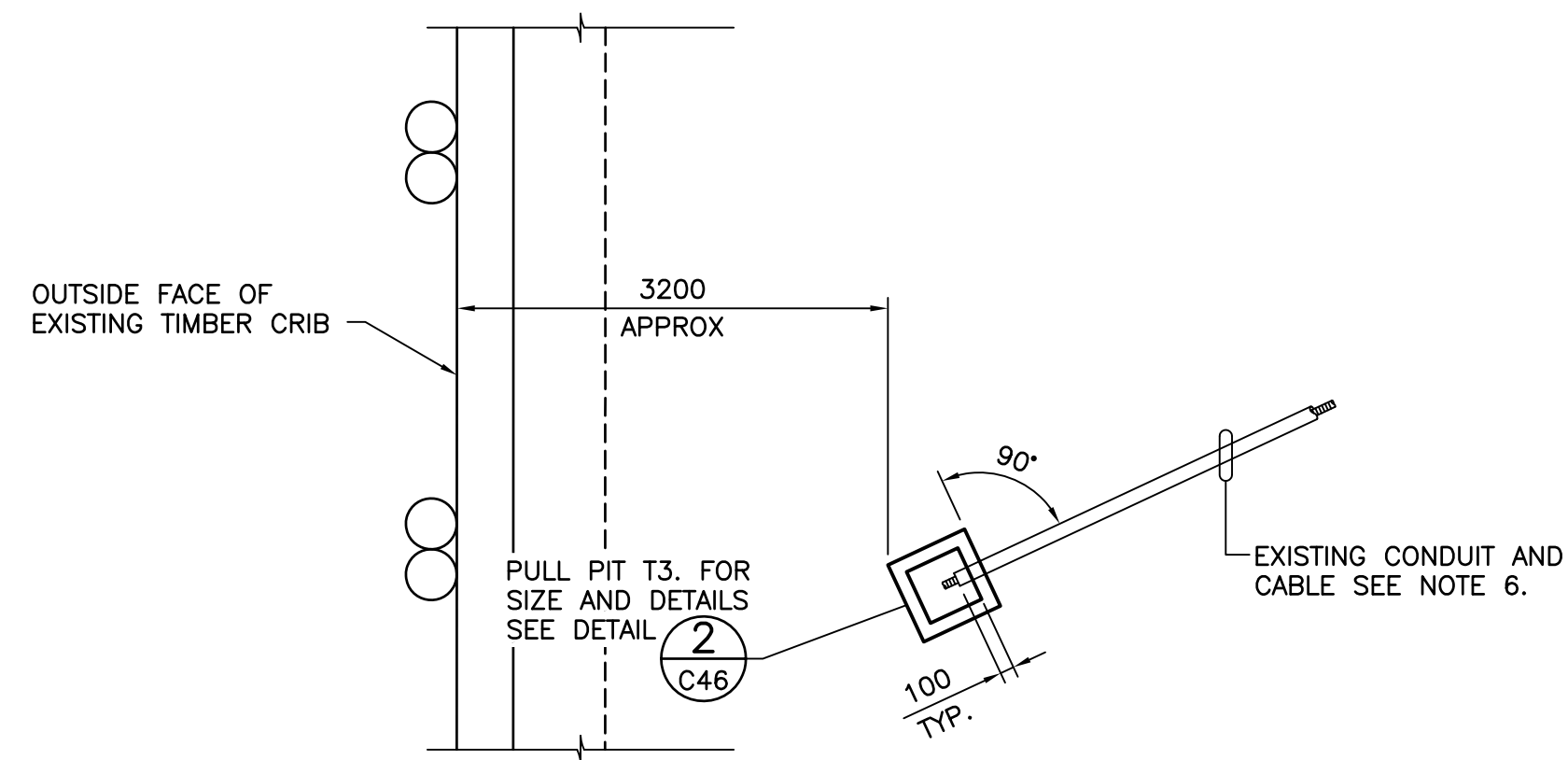


**NOTES:**

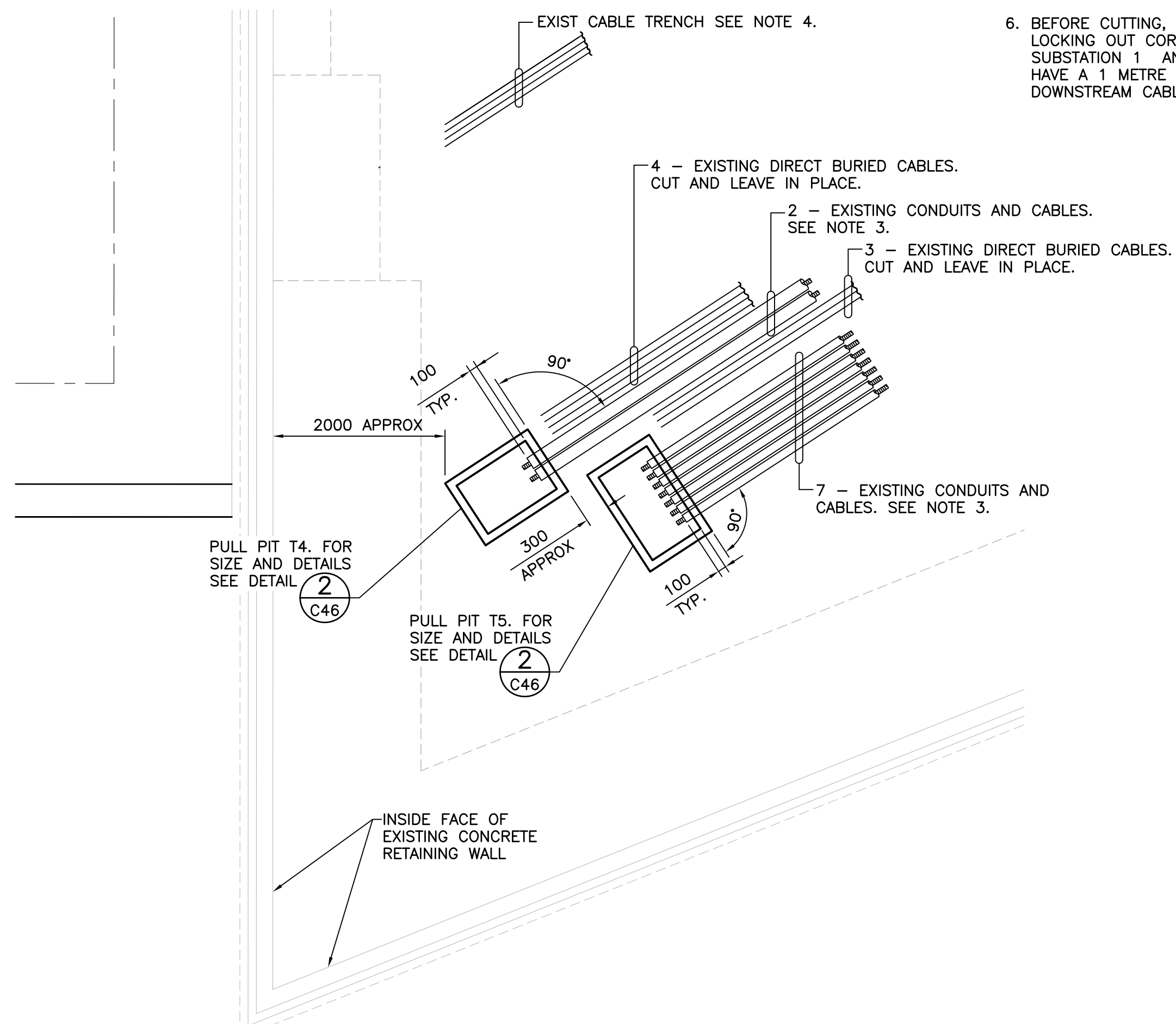
- THE ELECTRICAL CABLES/SERVICES SHOWN ON THIS DRAWINGS ARE BASED ON WESTMAR DRAWING NO. 846342-D-E2 CIRCA 2002/3 AND MAY NOT BE REPRESENTATIVE OF EXISTING AS-BUILT CONDITIONS.
- ALL EXISTING UTILITIES ARE SHOWN ACCORDING TO AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION, INCLUDING UNDERGROUND FIRE WATER, SANITARY SEWER, COMPRESSED AIR, POWER AND TELEPHONE SERVICE DUCTS AND SHALL NOTIFY THE DEPARTMENTAL REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION. ANY ADDITIONAL WORK REQUIRED AS A RESULT OF FAILING TO PRE-LOCATE KNOWN OR POTENTIAL CONFLICTS WILL BE COMPLETED AT THE CONTRACTOR'S EXPENSE.
- BEFORE CUTTING, CABLES SHALL BE DE-ENERGIZED BY OPENING AND LOCKING OUT THE FOLLOWING CIRCUIT BREAKERS AND ENSURED DEAD:
  - a. 4SS2-73
  - b. 2SS2-63
  - c. 4SS2-74
  - d. 2SS2-64
  - e. 4SS2-75
  - f. 2SS2-65
  - g. 2SS2JB
  - h. 2SS2
  - i. SOUTH SUB PANEL 2SK, CCT. 42
 CABLE TERMINATING IN THE PULL PITS SHALL BE CUT SO AS TO HAVE A 1 METRE TAIL, CAPPED AND SEALED. CABLE SHALL BE PULLED BACK TO SUBSTATION WHERE POSSIBLE. DIRECT BURIED CABLE SHALL BE CUT NEAR PULL PIT, CAPPED, SEALED AND LEFT IN PLACE. DOWNSTREAM CABLE SHALL BE REMOVED AND DISPOSED.
- BEFORE CUTTING, CABLES SHALL BE DE-ENERGIZED BY OPENING AND LOCKING OUT THE FOLLOWING CIRCUIT BREAKERS AND ENSURED DEAD:
  - a. SOUTH SUB PANEL 2SK, CC18/20
  - b. SOUTH SUB PANEL 2SK, CC22/24
  - c. SOUTH SUB PANEL 2SK, CC23
  - d. SOUTH SUB PANEL 2SK, CC16
  - e. SOUTH SUB PANEL 2SK, CC38
  - f. VSY QA OFFICE 120 V PANEL
  - g. VSY QA OFFICE F/A BOOSTER PANEL
 DIRECT BURIED CABLE SHALL BE CUT NEAR PULL PIT, CAPPED, SEALED AND LEFT IN PLACE. DOWNSTREAM CABLE SHALL BE REMOVED AND DISPOSED.
- BEFORE CUTTING, CABLES SHALL BE DE-ENERGIZED BY OPENING AND LOCKING OUT THE FOLLOWING CIRCUIT BREAKERS AND ENSURED DEAD:
  - a. 4SS2-71
  - b. 2SS2-61
  - c. 4SS2-72
  - d. 2SS2-72
 CABLE TERMINATING IN THE PULL PITS SHALL BE CUT SO AS TO HAVE A 1 METRE TAIL, CAPPED AND SEALED. DOWNSTREAM CABLE SHALL BE REMOVED AND DISPOSED.
- BEFORE CUTTING, CABLE SHALL BE DE-ENERGIZED BY OPENING AND LOCKING OUT CORRESPONDING HIGH MAST LIGHT CIRCUIT BREAKER AT SUBSTATION 1 AND ENSURED DEAD. CABLE SHALL BE CUT SO AS TO HAVE A 1 METRE TAIL, CAPPED, SEALED AND PLACED IN PULL PIT. DOWNSTREAM CABLE SHALL BE REMOVED AND DISPOSED.



DETAIL 3 SCALE 1: 50 E4



DETAIL 4 SCALE 1: 50 E4



DETAIL 2 SCALE 1: 50 E4

Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/15

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK 825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
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Drawn by/Dessiné par  
MIKE BRIDDEN

PWGSC Project Manager/Administrateur de Projets TPSGC  
ANDREW MYLLY

Regional Manager, Environmental Services  
COLLIN KINGMAN

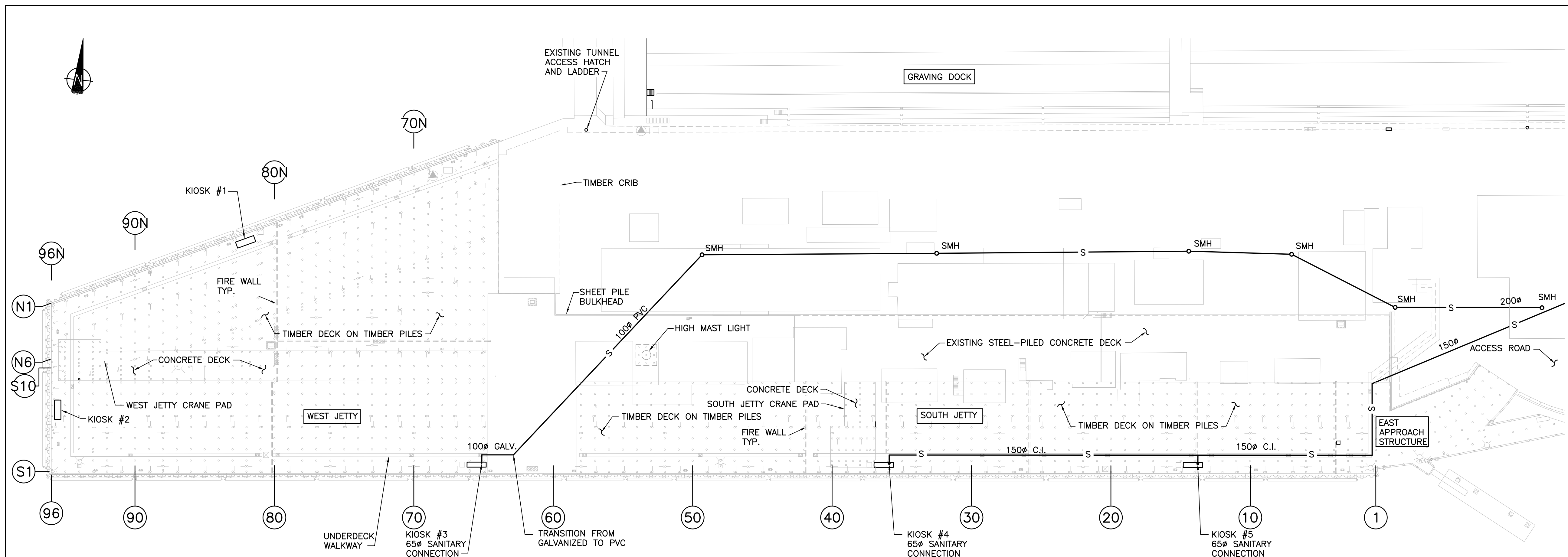
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**SERVICES ELECTRICAL TERMINATION DETAILS**

Project No./No. du projet <b>R.018400.002</b>	Sheet/ <b>E12</b>	Revision no./ <b>0</b>
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PLAN  
1:500

**NOTES:**

1. EXACT LAYOUT MAY VARY. CONTRACTOR TO FIELD VERIFY ALL DETAILS.
2. FOR KIOSK CONNECTION DETAILS, SEE DWG. M1.
3. REFER TO DWGS. D4 & D5 FOR DEMOLITION.
4. ALL EXISTING UTILITIES ARE SHOWN ACCORDING TO AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION, INCLUDING UNDERGROUND FIRE WATER, SANITARY SEWER, COMPRESSED AIR, POWER AND TELEPHONE SERVICE DUCTS AND SHALL NOTIFY THE DEPARTMENTAL REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION. ANY ADDITIONAL WORK REQUIRED AS A RESULT OF FAILING TO PRE-LOCATE KNOWN OR POTENTIAL CONFLICTS WILL BE COMPLETED AT THE CONTRACTOR'S EXPENSE.

**LEGEND**

—S—○—SMH EXISTING SANITARY SEWER / MANHOLE

Revision/Redaction	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/18

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

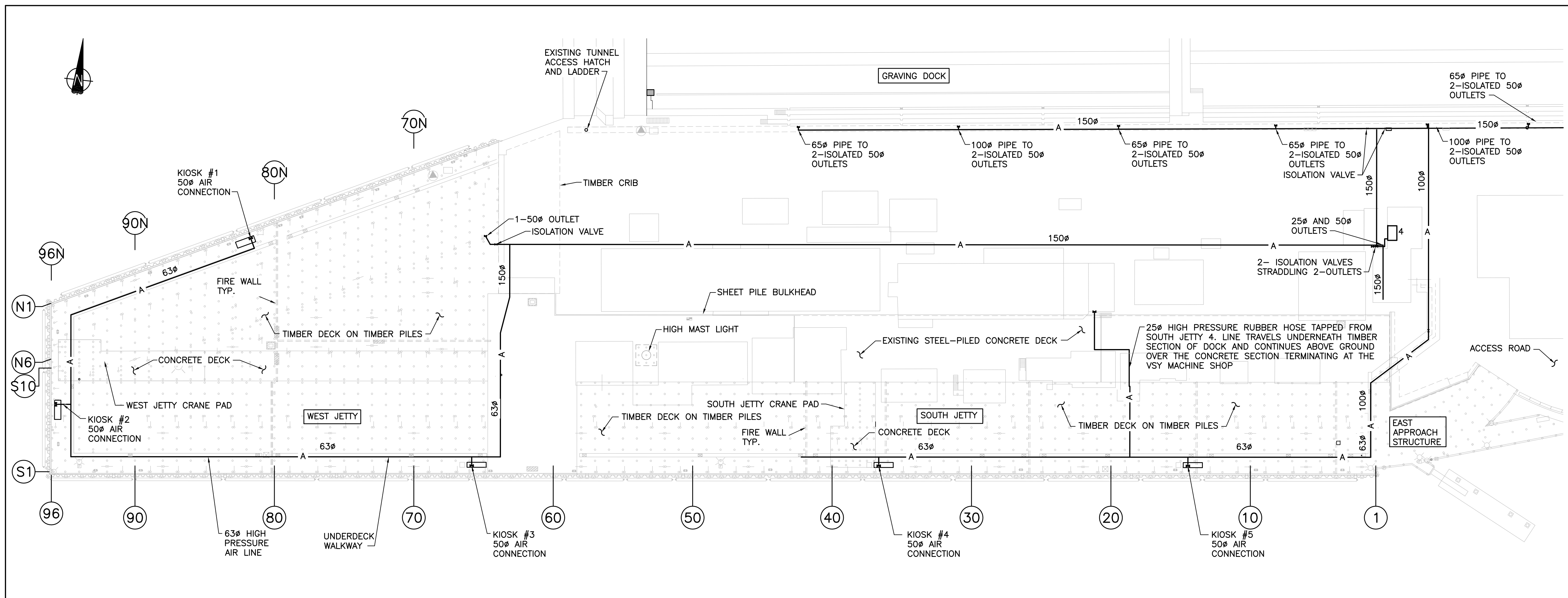
**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

Consultant Signature Only  
Designed by/Concept par  
ANDREW MACK / DOUG SHARPE  
Drawn by/Dessiné par  
GABE MENDES  
PWGSC Project Manager/Administrateur de Projets TPSGC  
ANDREW MYLLY  
Regional Manager, Environmental Services  
COLLIN KINGMAN

Drawing title/Titre du dessin  
**EXISTING SERVICES  
SANITARY SEWER  
PLAN**

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	M2	0





PLAN  
1:500

**NOTES:**

1. EXACT LAYOUT MAY VARY. CONTRACTOR TO FIELD VERIFY ALL DETAILS.
2. FOR KIOSK CONNECTION DETAILS, SEE DWG. M1.
3. REFER TO DWGS. D4 & D5 FOR DEMOLITION.
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**LEGEND**



Revision/	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/18

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
ANDREW MACK / DOUG SHARPE

Drawn by/Dessiné par  
GABE MENDES

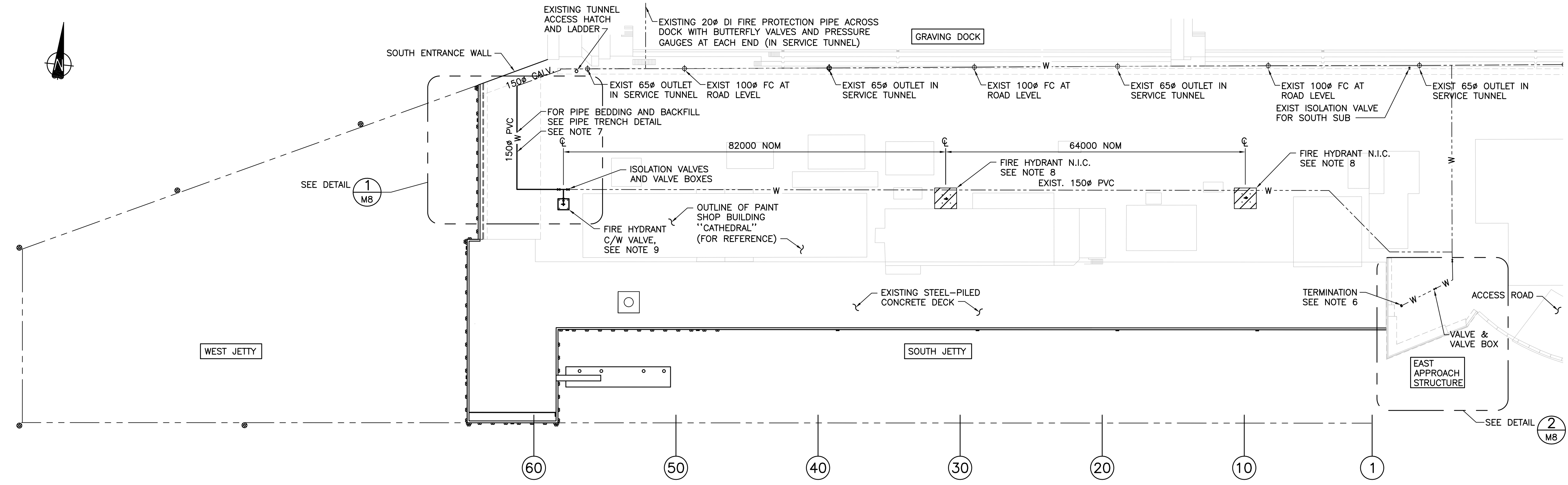
PWGSC Project Manager/Administrateur de Projets TPSGC  
ANDREW MYLLY

Regional Manager, Environmental Services  
COLLIN KINGMAN

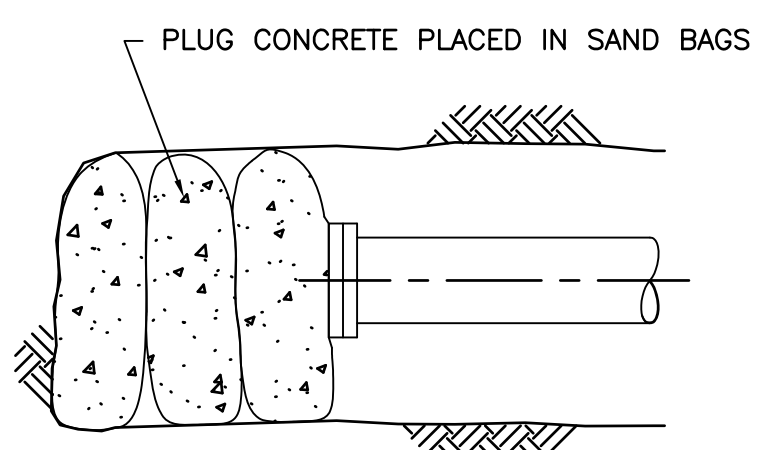
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**EXISTING SERVICES  
COMPRESSED AIR  
PLAN**

Project No./No. du projet <b>R.018400.002</b>	Sheet/ <b>M3</b>	Revision no./ <b>0</b>
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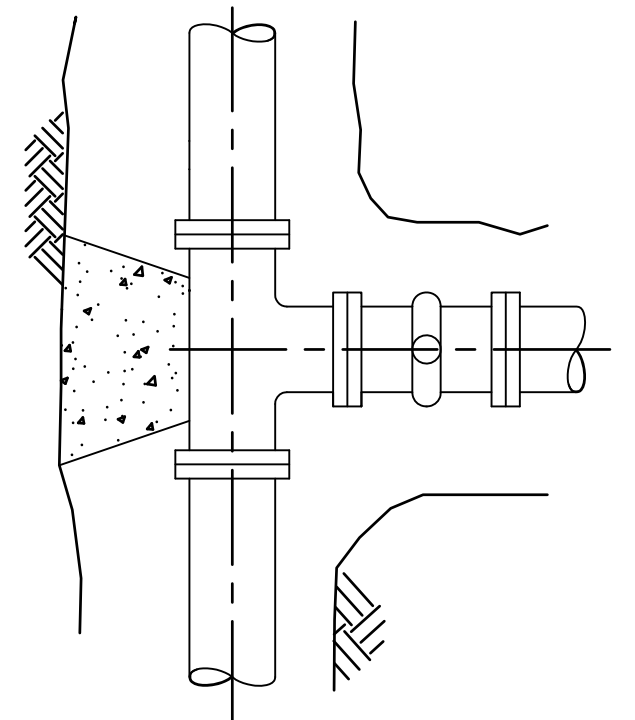




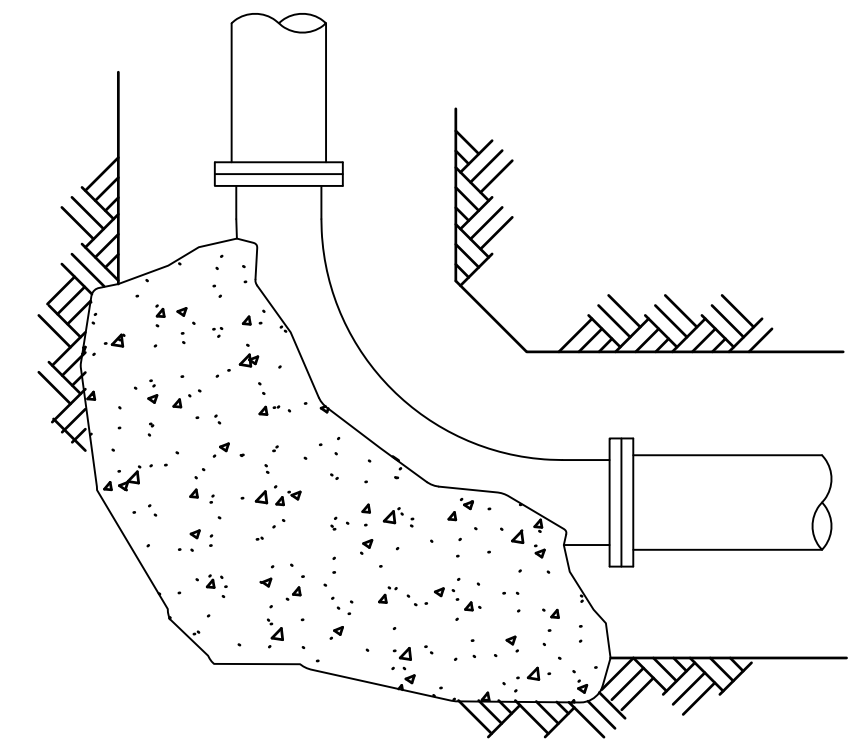
**PLAN**  
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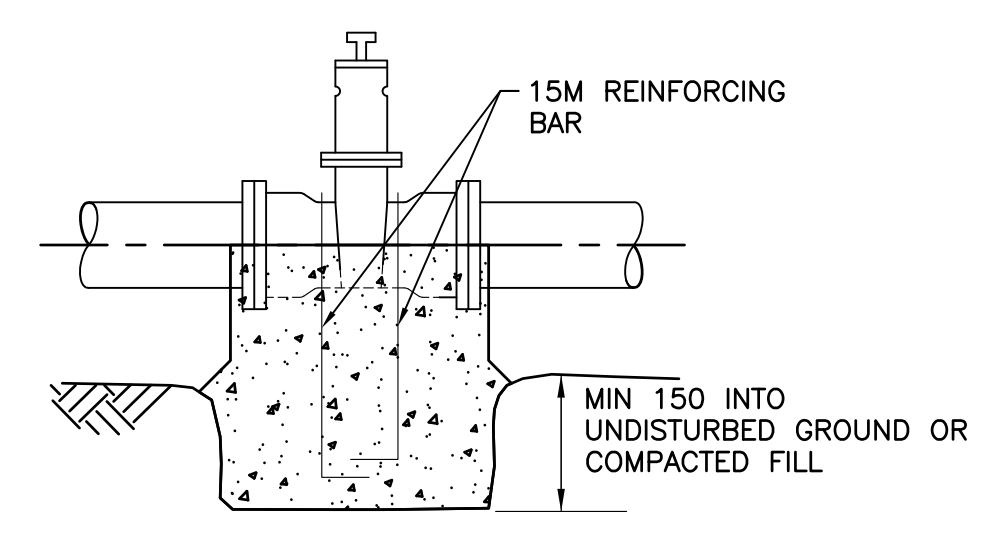
**PLUG OR END CAP**  
N.T.S.



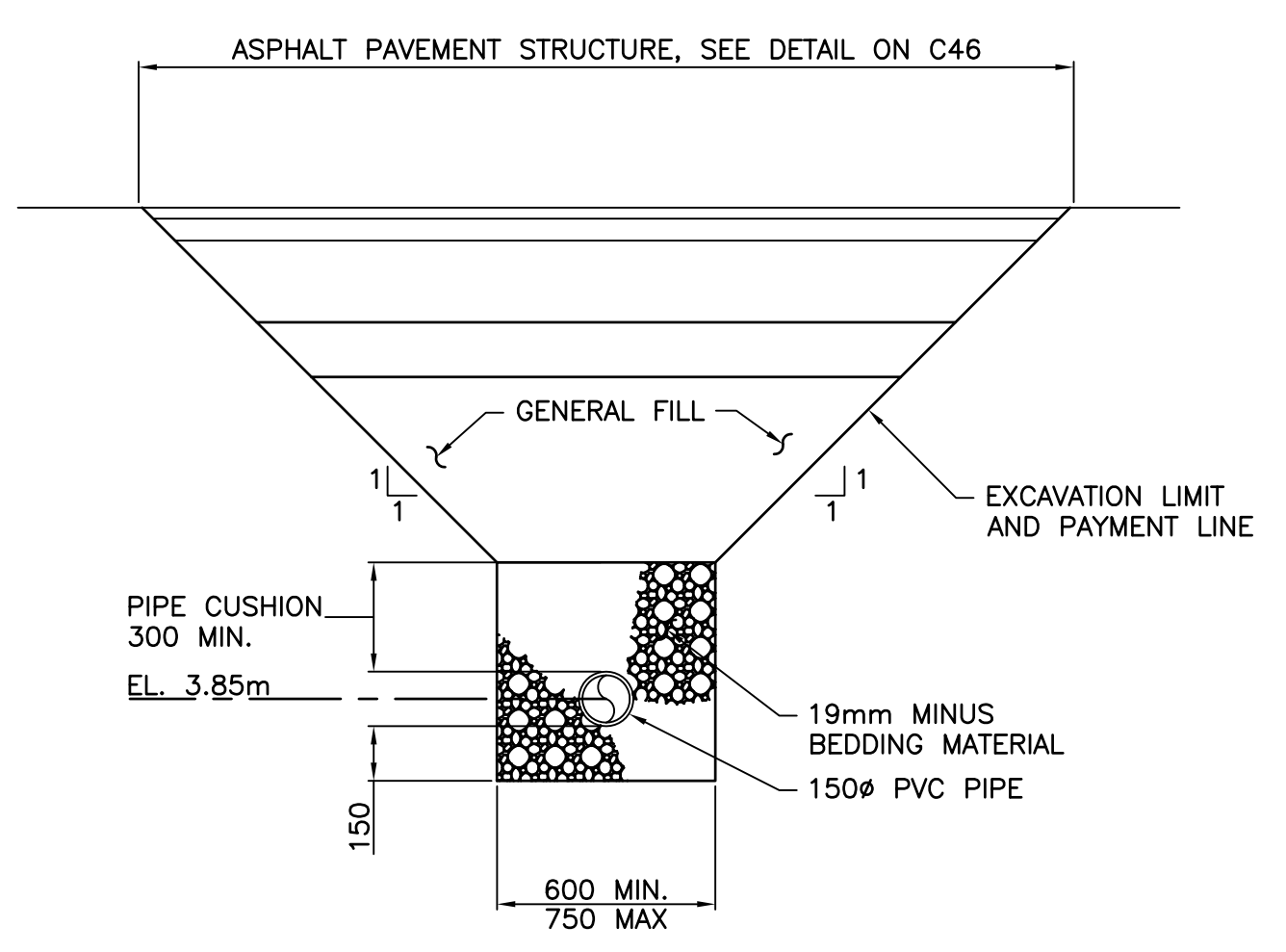
**TEES**  
N.T.S.



**ELBOWS**  
N.T.S.



**VALVES**  
N.T.S.



**PIPE TRENCH DETAIL**  
N.T.S.

**LEGEND**

- W — FIRE WATER MAIN / VALVE
- - - W - - - EXISTING FIRE WATER MAIN
- ▨ NOT IN CONTRACT (N.I.C.)

**NOTES:**

1. ALL PIPEWORK AND FITTINGS TO BE RE-USED WHERE POSSIBLE.
2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENTAL REPRESENTATIVE IN WRITING IF ANY PIPEWORK OR FITTING CANNOT BE REUSED. DAMAGE TO PIPEWORK OR FITTINGS CAUSED BY CONTRACTOR SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO PWGSC.
3. ALL STEEL PIPE, HANGERS, PIPE CLAMPS AND MISCELLANEOUS STEEL ITEMS TO BE HOT DIPPED GALVANIZED AFTER FABRICATION UNLESS NOTED OTHERWISE.
4. ALL EXISTING UTILITIES ARE SHOWN ACCORDING TO AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION, INCLUDING UNDERGROUND FIRE WATER, SANITARY SEWER, COMPRESSED AIR, POWER AND TELEPHONE SERVICE DUCTS AND SHALL NOTIFY THE DEPARTMENTAL REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION. ANY ADDITIONAL WORK REQUIRED AS A RESULT OF FAILING TO PRE-LOCATE KNOWN OR POTENTIAL CONFLICTS WILL BE COMPLETED AT THE CONTRACTOR'S EXPENSE.
5. METALLIC PIPE, SUPPORTS AND OTHER MISCELLANEOUS METAL SHALL BE GROUNDED PER THE CANADIAN ELECTRICAL CODE.
6. 150mm FIRE WATER LINE TO BE TERMINATED AND CAPPED APPROXIMATELY 2.0m BEHIND THE CONCRETE L-WALL. PROVIDE WELDED END CAP AND LABEL "DCW".
7. WATERLINE BEHIND SOUTH ENTRANCE WALL TO BE RE-DIRECTED TO JOIN THE EXISTING 150mm FIRE WATER LINE ACROSS THE CENTRE OF THE JETTY TO FORM A LOOP SYSTEM.
8. FIRE PROTECTION DESIGN BASIS: AFTER DEMOLITION OF THE TIMBER JETTIES, PWGSC WILL PUT IN PLACE MITIGATIVE MEASURES FOR FIRE PROTECTION OF THE SOUTH JETTY AREAS NOT COVERED BY THE FIRE CODE REQUIREMENT OF 45m RADIUS AROUND REMAINING HYDRANTS AND FIRE CONNECTIONS. ALTERNATELY, ADDITIONAL HYDRANTS LABELED AS N.I.C. (NOT IN CONTRACT) COULD BE INSTALLED.
9. LOCATION OF FIRE HYDRANT IS APPROXIMATE. ACTUAL LOCATION TO BE DETERMINED IN THE FIELD TO AVOID CONFLICTS WITH ADJACENT SHEET PILE BULKHEAD TIE-RODS, EXISTING UNDER GROUND SERVICES AND EXISTING STRUCTURES. FINAL LOCATION TO BE APPROVED BY DEPARTMENTAL REPRESENTATIVE PRIOR TO INSTALLATION.
10. EXCAVATION LIMIT AND PAYMENT LINE FOR FIRE WATER LINE TERMINATION SHALL EXTEND 1000mm RADIUS AROUND CAP IN PLAN.

**THRUST BLOCK NOTES:**

1. CONCRETE THRUST BLOCK TO BE SET IN TRENCH BOTTOM, MIN. DEPTH 400.
2. MINIMUM SIZE OF THRUST BLOCKS TO BE AS NOTED IN THE TABLE.
3. ALL THRUST BLOCK BEARING SURFACES TO BE ON UNDISTURBED GROUND, COMPACTED FILL, OR ANCHORED WITH RODS AS SHOWN.
4. ALL THRUST BLOCKS SHALL HAVE CONCRETE PLACED TO CENTER LINE OF PIPE.

GUIDE TO THRUST BLOCK SIZING				
PIPE SIZE	TEES, ENDS, PLUGS, CROSSES & VALVES	90° BEND	70° BEND	45° BEND
(mm)	AREA (m <sup>2</sup> )	AREA (m <sup>2</sup> )	AREA (m <sup>2</sup> )	AREA (m <sup>2</sup> )
150	0.45	0.64	0.52	0.35

NOTE: AREAS ARE FOR 670 kPa TEST PRESSURE AND ALLOWABLE LATERAL BEARING STRESS OF 42kPa

0	ISSUED FOR TENDER	2014/12/14
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Revision/Redaction	Description/Description	Date/Date
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**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK**  
 825 ADMIRALS ROAD, VICTORIA, BC

**ESQUIMALT GRAVING DOCK WATER LOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
 ANDREW MACK / DOUG SHARPE

Drawn by/Dessiné par  
 GABE MENDES

PWGSC Project Manager/Administrateur de Projets TPSGC  
 ANDREW MYLLY

Regional Manager, Environmental Services  
 COLLIN KINGMAN

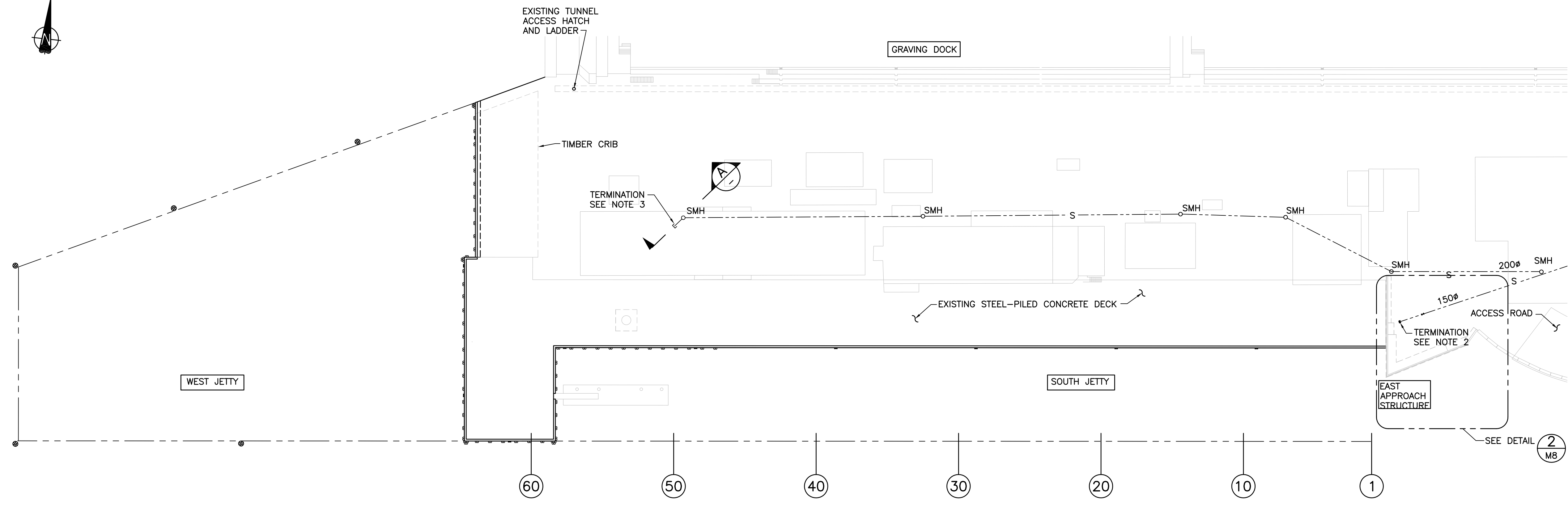
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**SERVICES FIRE WATER MAIN PLAN AND DETAILS**

Project No./No. du projet  
**R.018400.002**

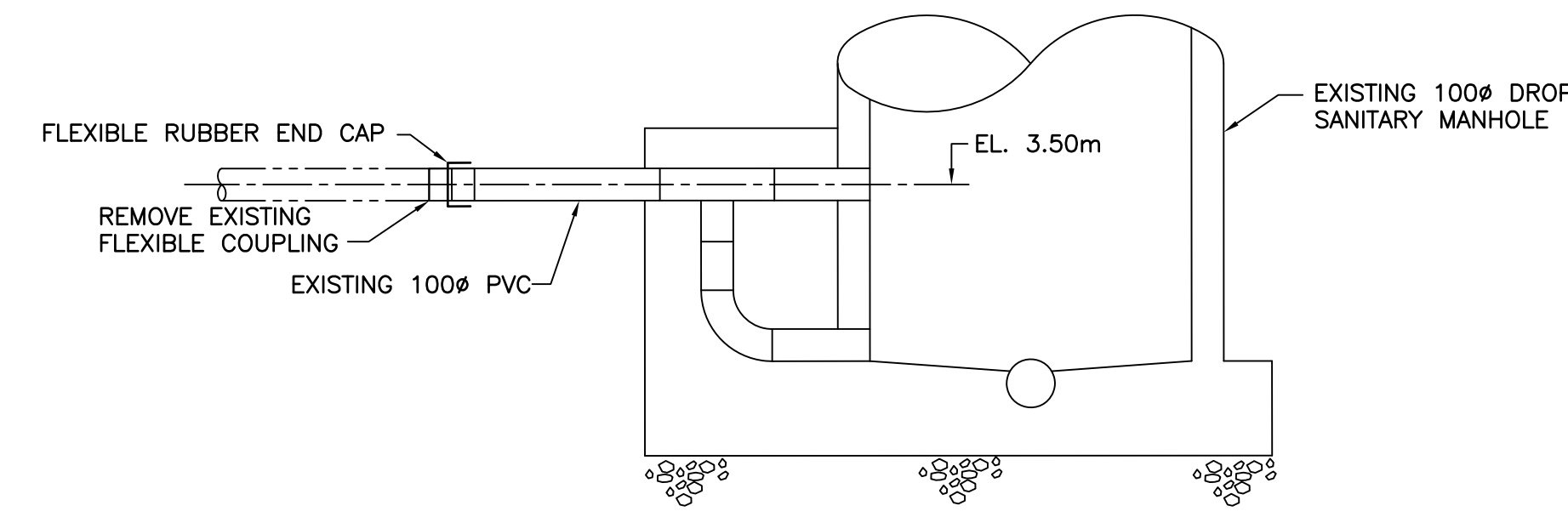
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Revision no./  
**0**





**PLAN**  
1:500



**SECTION A**  
SCALE 1: 20

**LEGEND**

— s — SMH EXISTING SANITARY SEWER / MANHOLE

**NOTES:**

1. ALL EXISTING UTILITIES ARE SHOWN ACCORDING TO AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION, INCLUDING UNDERGROUND FIRE WATER, SANITARY SEWER, COMPRESSED AIR, POWER AND TELEPHONE SERVICE DUCTS AND SHALL NOTIFY THE DEPARTMENTAL REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION. ANY ADDITIONAL WORK REQUIRED AS A RESULT OF FAILING TO PRE-LOCATE KNOWN OR POTENTIAL CONFLICTS WILL BE COMPLETED AT THE CONTRACTOR'S EXPENSE.
2. 150mmØ SANITARY WATER LINE TO BE TERMINATED AND CAPPED WITH FLEXIBLE RUBBER END CAP APPROXIMATELY 2.0m BEHIND THE CONCRETE L-WALL.
3. 100mmØ SANITARY WATER LINE RUNNING DIAGONALLY UNDER THE STEEL-PILED DECK FORMERLY SERVICING KIOSK #3 TO BE TERMINATED AND CAPPED WITH FLEXIBLE RUBBER END CAP AFTER TRANSITION FROM EXISTING DIAGONAL RUN, AT LOCATION OF EXISTING FLEXIBLE COUPLING UPSTREAM OF MANHOLE.
4. EXCAVATION LIMIT AND PAYMENT LINE FOR SANITARY SEWER TERMINATIONS SHALL EXTEND 1000mm RADIUS AROUND CAP IN PLAN.



Revision/	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/18

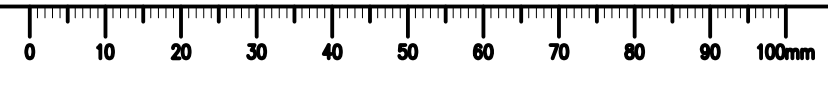
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**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK**  
**825 ADMIRALS ROAD, VICTORIA, BC**  
**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2**  
**SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION**

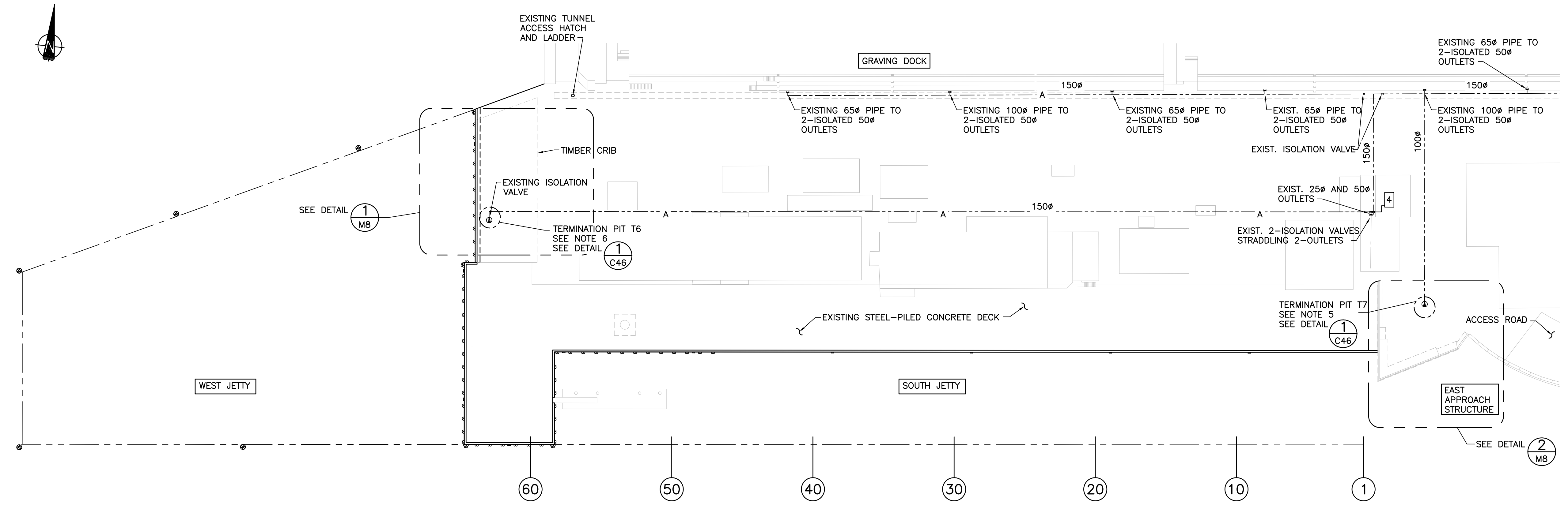
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 Designed by/Concept par  
 ANDREW MACK / DOUG SHARPE  
 Drawn by/Dessiné par  
 GABE MENDES  
 PWGSC Project Manager/Administrateur de Projets TPSGC  
 ANDREW MYLLY  
 Regional Manager, Environmental Services  
 COLLIN KINGMAN

Drawing title/Titre du dessin  
**SERVICES**  
**SANITARY SEWER**  
**PLAN AND SECTION**

Project No./No. du projet <b>R.018400.002</b>	Sheet/ <b>M5</b>	Revision no./ <b>0</b>
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**PLAN**  
1:500

**LEGEND**

---A--- EXISTING AIR LINE / VALVE

**NOTES:**

1. SURFACE RUN PIPE TO BE SCH 40 GALVANIZED STEEL WITH GROOVED END MECHANICAL CONNECTIONS.
2. BURIED PIPE TO BE SCH 10 316 SS WITH GROOVED END MECHANICAL CONNECTIONS.
3. ALL EXISTING UTILITIES ARE SHOWN ACCORDING TO AVAILABLE RECORD DRAWINGS. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION, INCLUDING UNDERGROUND FIRE WATER, SANITARY SEWER, COMPRESSED AIR, POWER AND TELEPHONE SERVICE DUCTS AND SHALL NOTIFY THE DEPARTMENTAL REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION. ANY ADDITIONAL WORK REQUIRED AS A RESULT OF FAILING TO PRE-LOCATE KNOWN OR POTENTIAL CONFLICTS WILL BE COMPLETED AT THE CONTRACTOR'S EXPENSE.
4. METALLIC PIPE, SUPPORTS AND OTHER MISCELLANEOUS METAL SHALL BE GROUNDED PER THE CANADIAN ELECTRICAL CODE.
5. AIR LINE TO BE TERMINATED AND CAPPED BEHIND THE CONCRETE L-WALL IN A TERMINATION PIT. INSTALL 13mm DOWNWARD FACING PIPE WITH ISOLATION VALVE AND OPEN END FOR CLEARING LINE OF CONDENSATE.
6. AIR LINE THAT CROSSES UNDER STEEL PILED DECK TO BE REMOVED AND CAPPED DOWNSTREAM OF EXISTING ISOLATION VALVE IN A TERMINATION PIT. INSTALL 13mm DOWNWARD FACING PIPE WITH ISOLATION VALVE AND OPEN END OF CLEARING LINE OF CONDENSATE.

Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/18

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

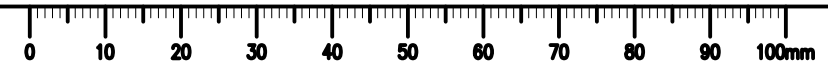
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**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

Consultant Signature Only  
Designed by/Concept par  
ANDREW MACK / DOUG SHARPE  
Drawn by/Dessiné par  
GABE MENDES  
PWGSC Project Manager/Administrateur de Projets TPSGC  
ANDREW MYLLY  
Regional Manager, Environmental Services  
COLLIN KINGMAN

Drawing title/Titre du dessin  
**SERVICES  
COMPRESSED AIR  
PLAN**

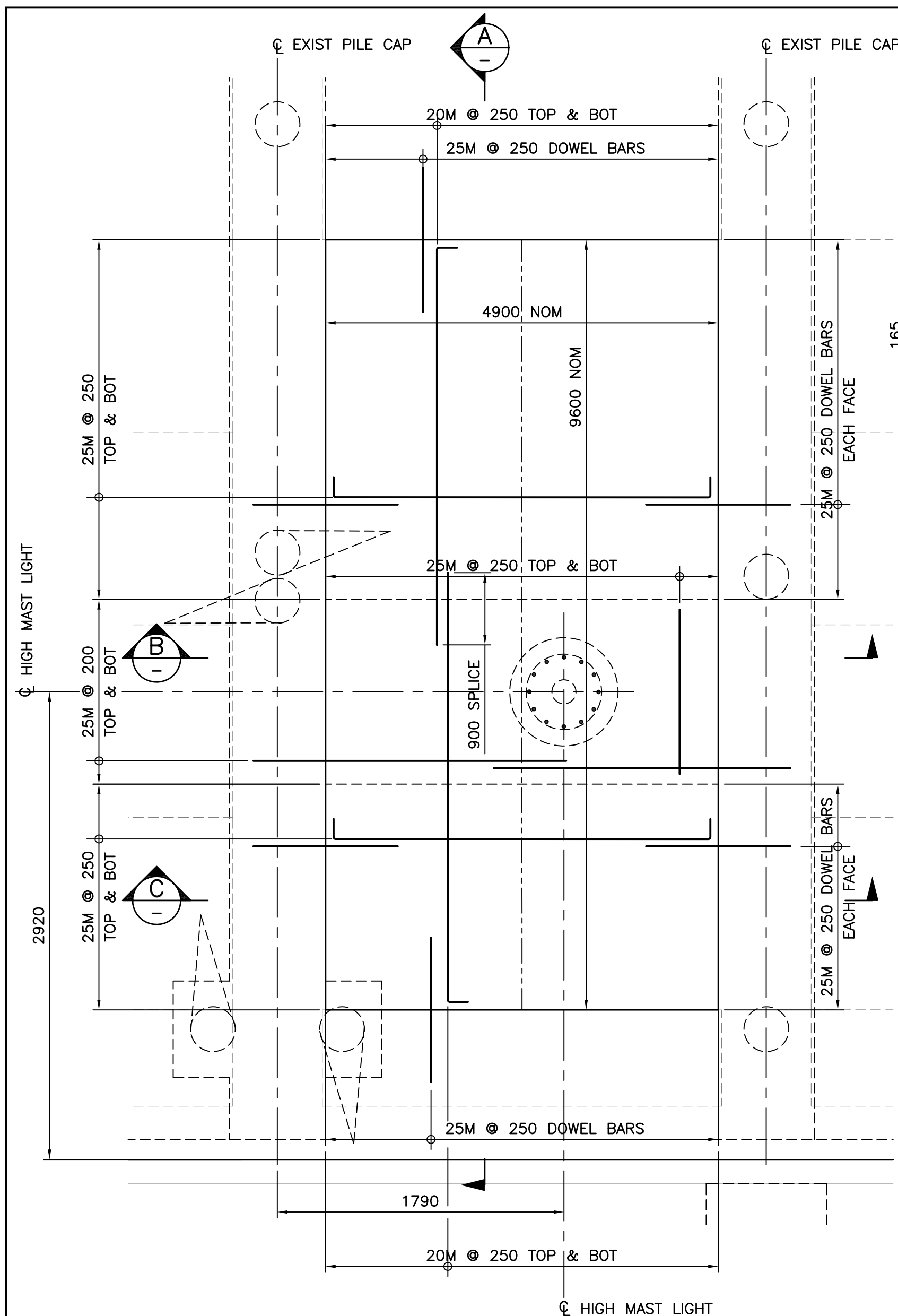
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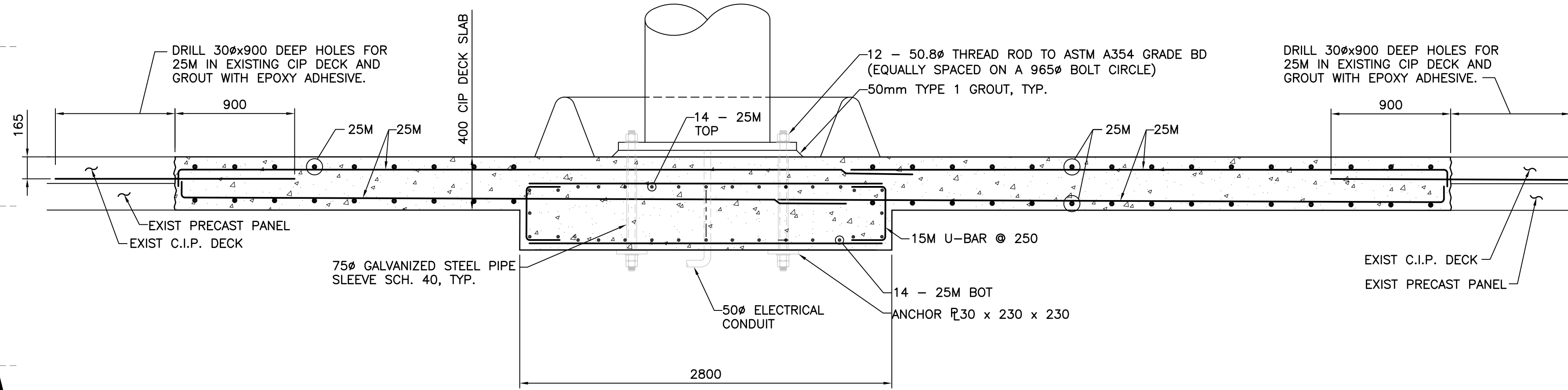




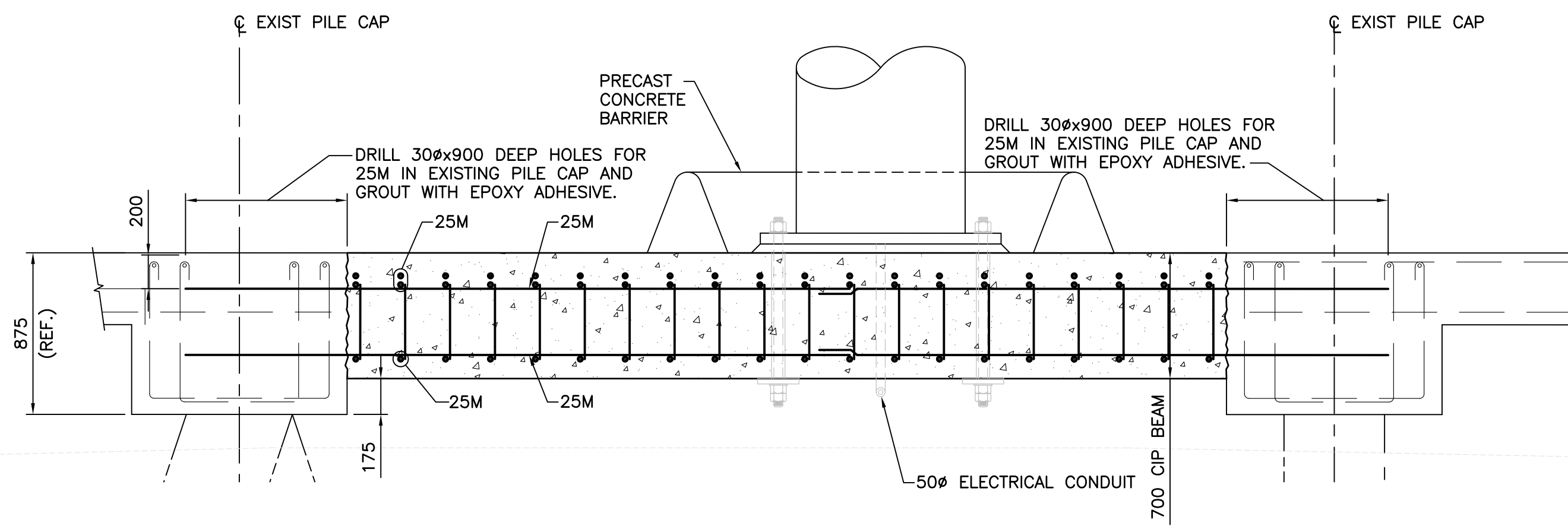




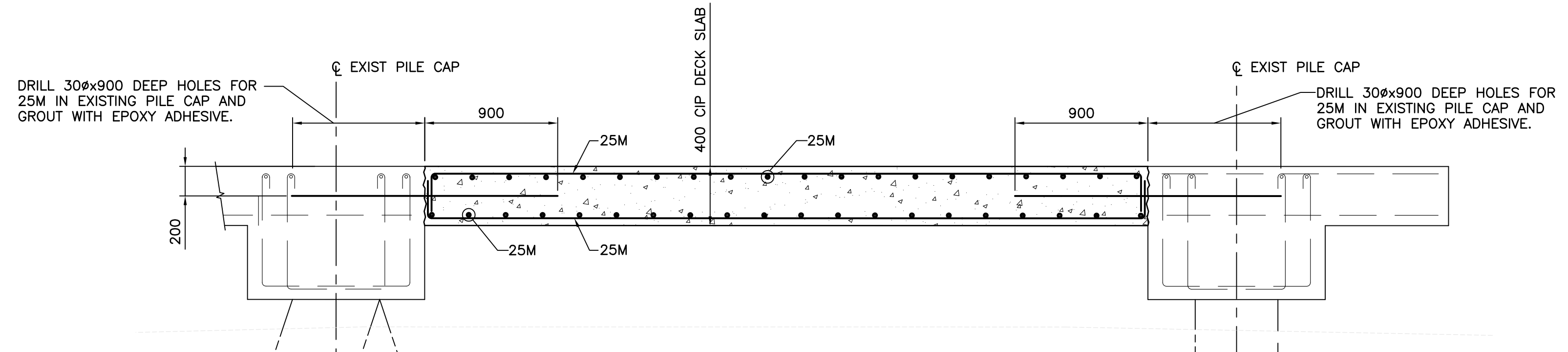
PLAN - REPLACEMENT CAST-IN-PLACE CONCRETE DECK SLAB  
1:50



SECTION A  
SCALE 1: 25



SECTION B  
SCALE 1: 25



SECTION C  
SCALE 1: 25

**NOTES:**

- FOR NOTES SEE DWG. C2.
- HIGH MAST LIGHT DECK SLAB DESIGNED FOR THE FOLLOWING LIVE LOADS (ALL LOADS ARE UNFACTORED):
  - UNIFORMLY DISTRIBUTED LOAD (UDL) : 28.7 kPa (600 psf)
  - TRUCK LOADING (CL-625 PER S6-06)
    - FRONT AXLE 50 kN (DISTRIBUTED TO 2 WHEELS)
    - REAR AXLE 175 kN (DISTRIBUTED TO 2 PAIRS OF WHEELS)
  - SAME LIVE LOADS AS ADJACENT EXISTING STEEL PILED CONCRETE DECK STRUCTURE.
- CONSTRUCTION JOINTS SHALL BE ROUGHENED BY MECHANICAL MEANS TO FULL AMPLITUDE OF 5mm TO CAN/CSA-A23.1-09 (R2014) CLAUSE 7.2.2 TO EXPOSE CLEAN AND SOUND AGGREGATE PRIOR TO CASTING THE SUBSEQUENT PART OF THE STRUCTURE. ROUGHEN CONCRETE SURFACE BY SUITABLE METHODS AUTHORIZED BY DEPARTMENTAL REPRESENTATIVE.

Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client

**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
**DHILEEP ABEYGODA**

Drawn by/Dessine par  
**ARNIE RIST**

PWSCC Project Manager/Administrateur de Projets TPSCC  
**ANDREW MYLLY**

Regional Manager, Environmental Services  
**COLLIN KINGMAN**

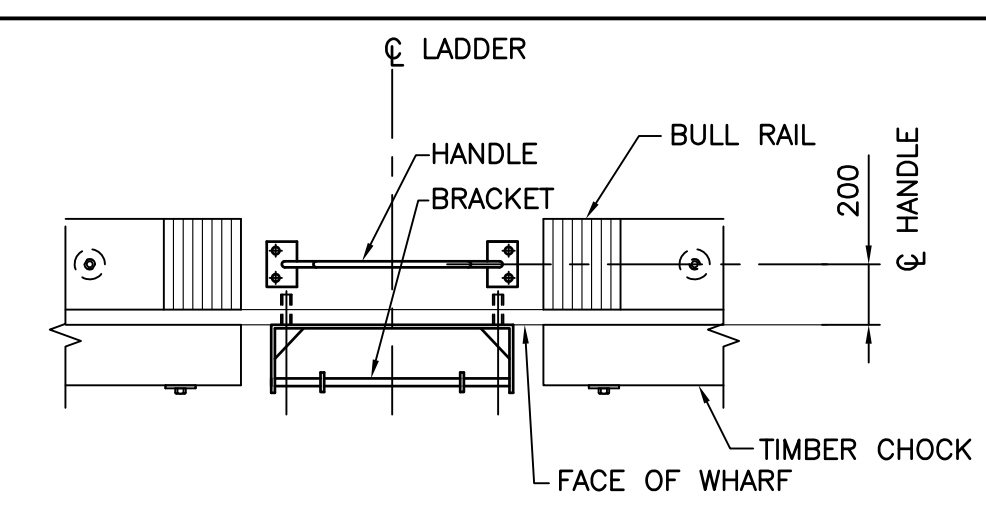
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**CONSTRUCTION  
AT HIGH MAST LIGHT AREA**

Project No./No. du projet  
**R.018400.002**

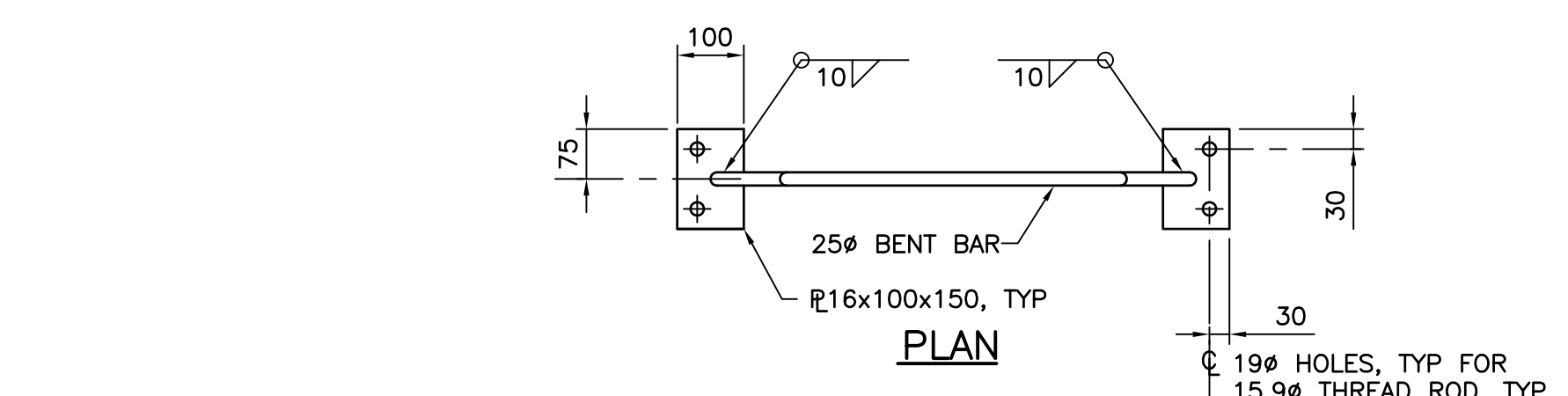
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Revision no./  
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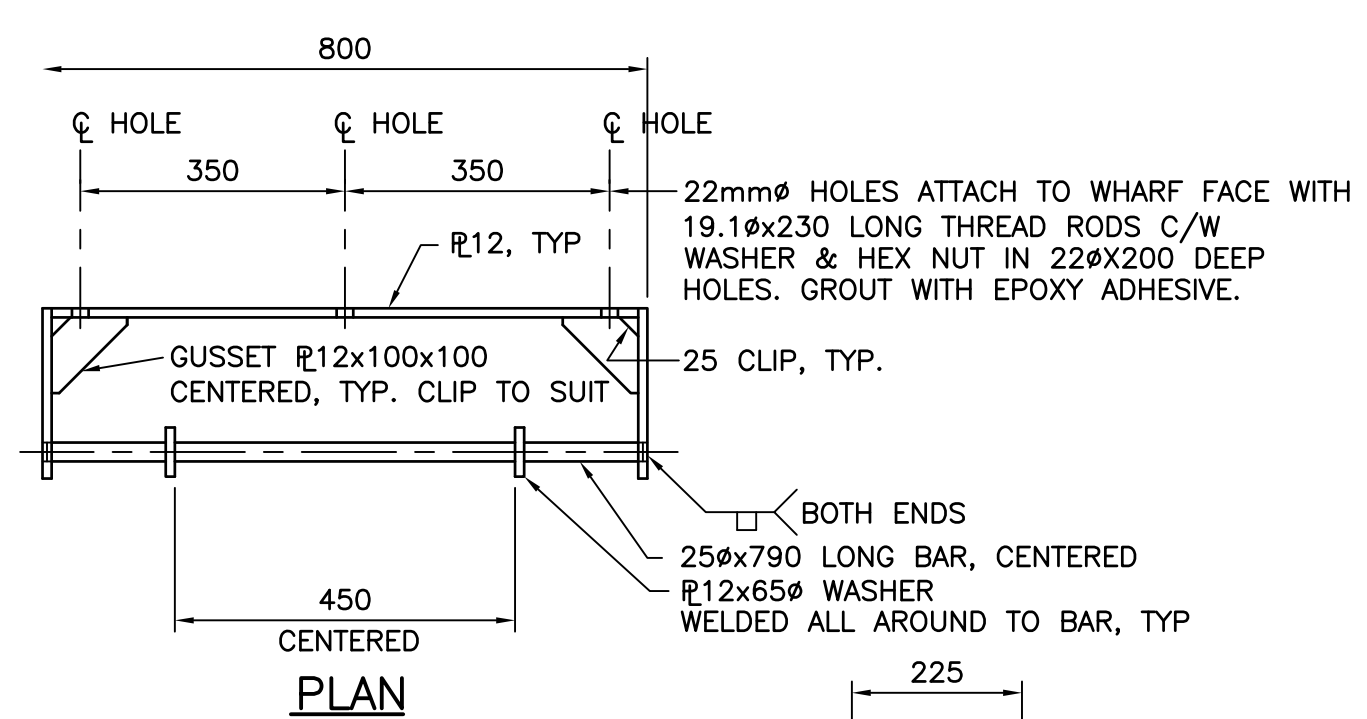


**DETAIL 1**  
SCALE 1: 25  
S128  
4 - TYPE 1 REQUIRED  
6 - TYPE 2 REQUIRED



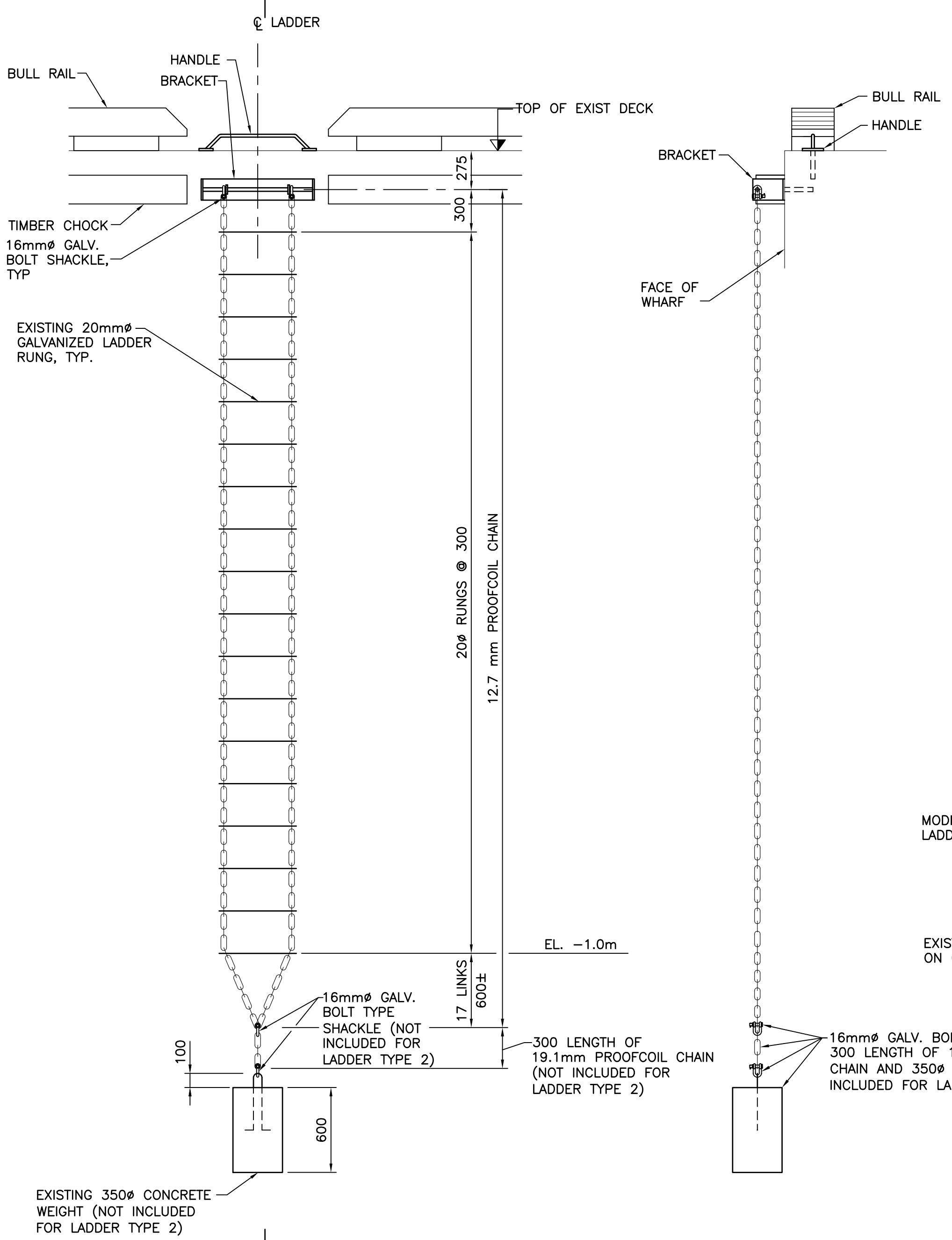
**PLAN**  
19mm Holes attach to T.O. DECK WITH 15.9x230 LONG THREAD RODS C/W WASHER & HEX NUT IN 19x200 DEEP HOLES. GROUT WITH EPOXY ADHESIVE.

**ELEVATION HANDLE**  
1:10

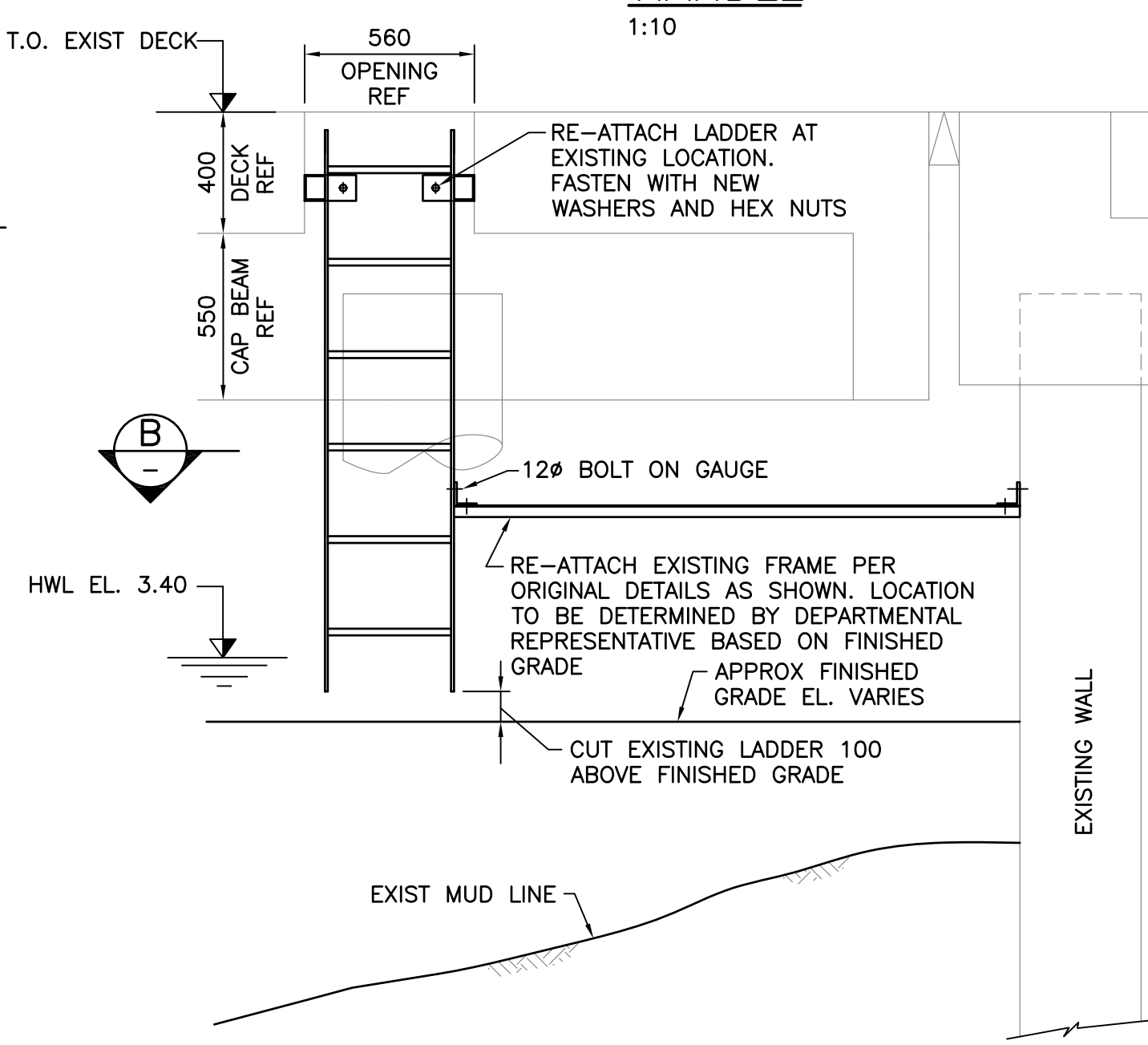


**PLAN**  
22mm Holes ATTACH TO WHARF FACE WITH 19.1x230 LONG THREAD RODS C/W WASHER & HEX NUT IN 22x200 DEEP HOLES. GROUT WITH EPOXY ADHESIVE.

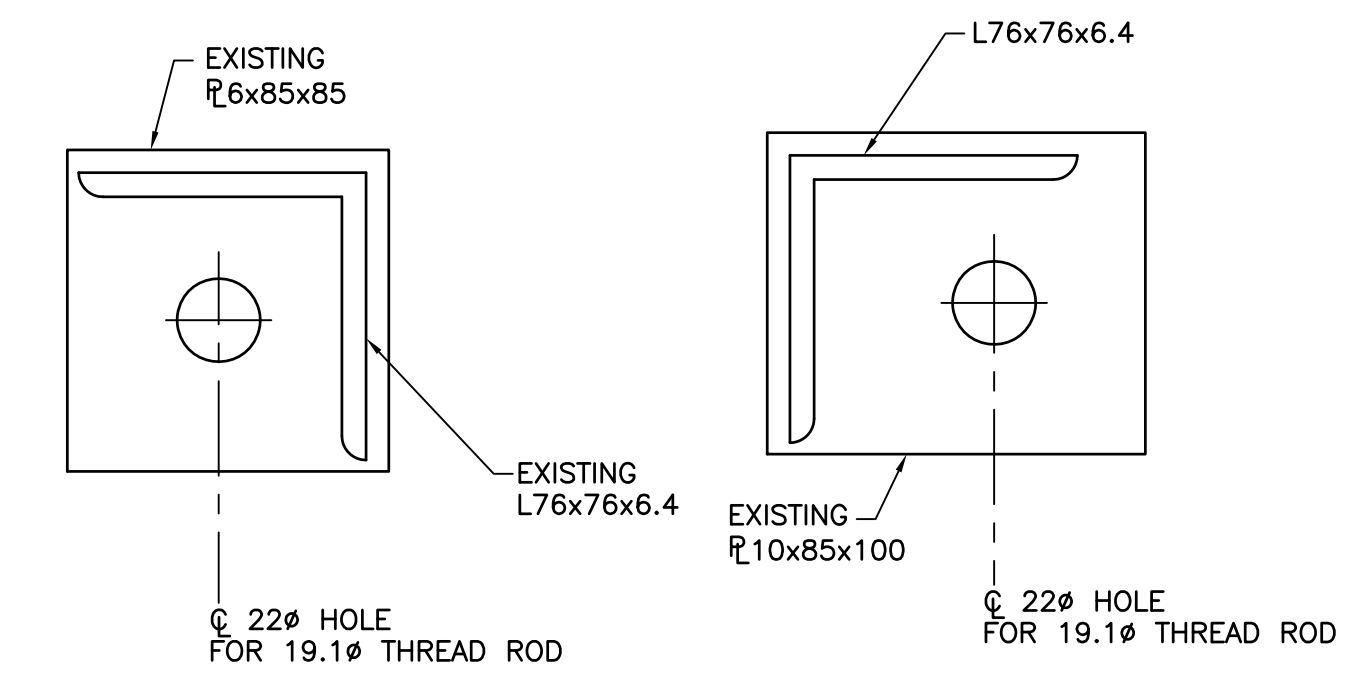
**ELEVATION BRACKET**  
1:10  
NOTE: ALL WELDS SHALL BE 6mm CONTINUOUS FILLET ALL AROUND U.N.O.



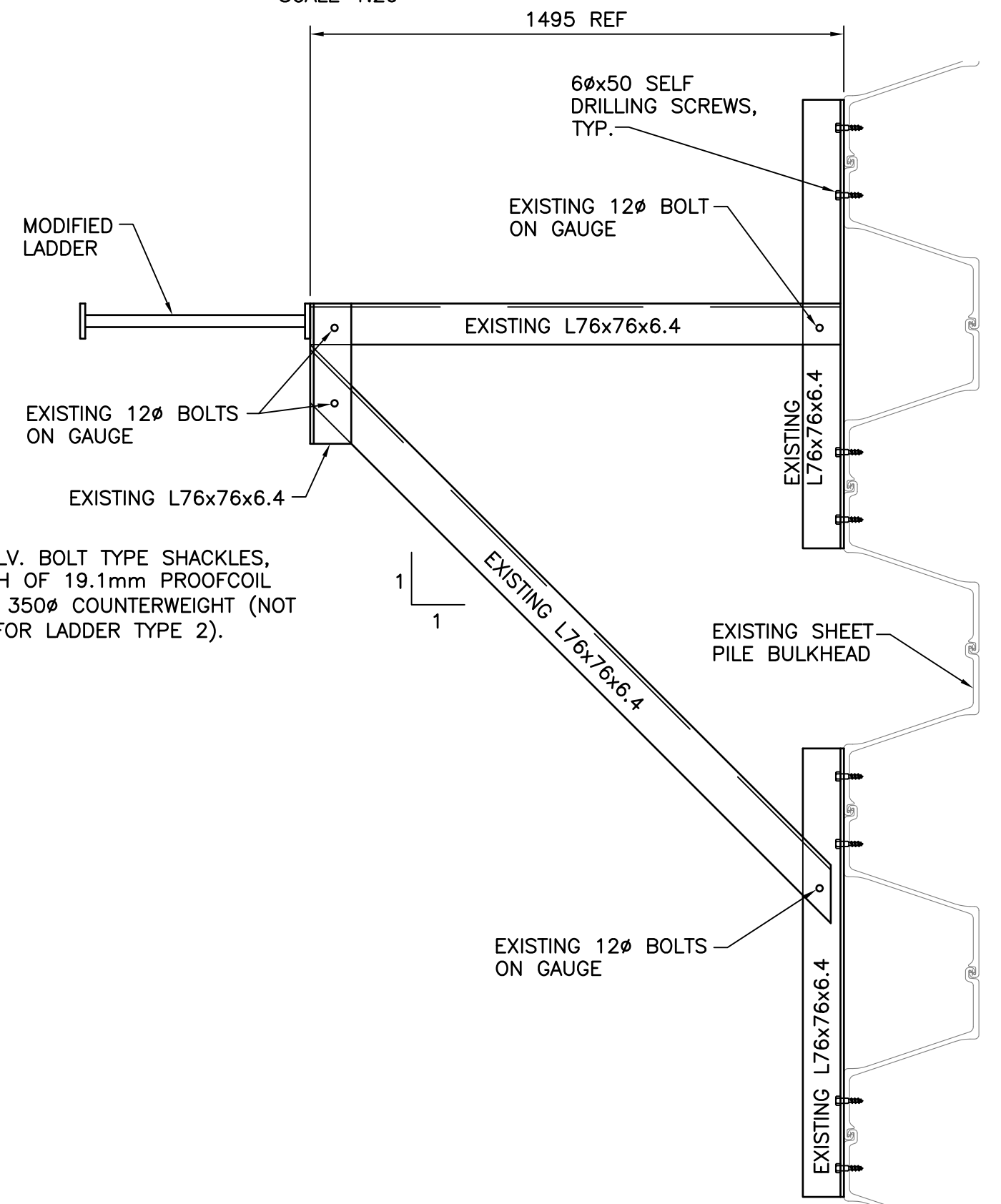
**ELEVATION**  
1:25  
**CHAIN LADDERS - MODIFICATIONS**  
LADDER TYPE 1 SHOWN  
LADDER TYPE 2 SIMILAR, EXCEPT AS NOTED



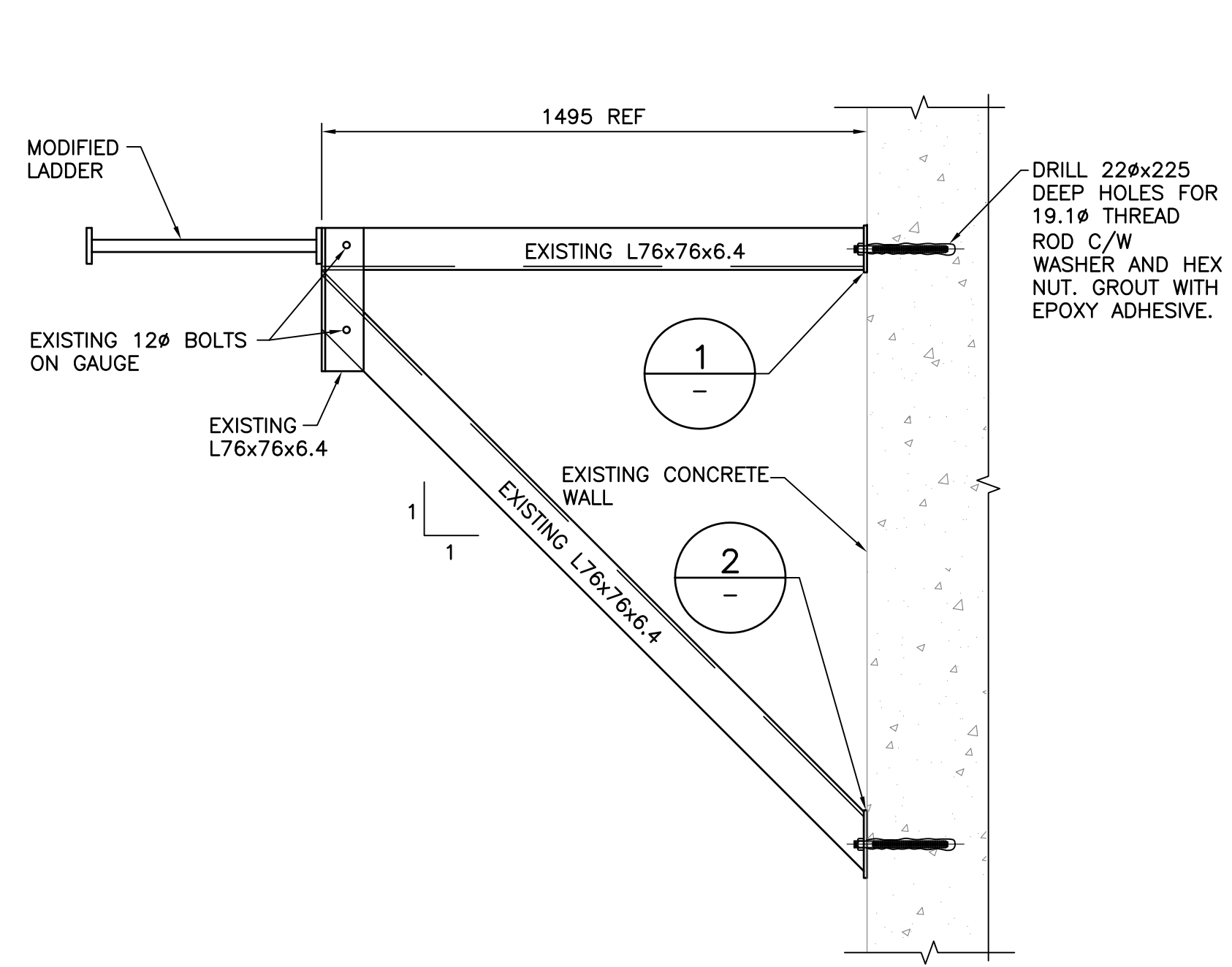
**ACCESS LADDERS - MODIFICATIONS**  
SCALE 1:20



**DETAIL 2**  
SCALE 1: 2



**SECTION B AT SHEET PILE WALL**  
SCALE 1: 10



**SECTION B AT CONCRETE WALL**  
SCALE 1: 10

Revision/Redaction	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
JANET TONG

Drawn by/Dessiné par  
ARNIE RIST

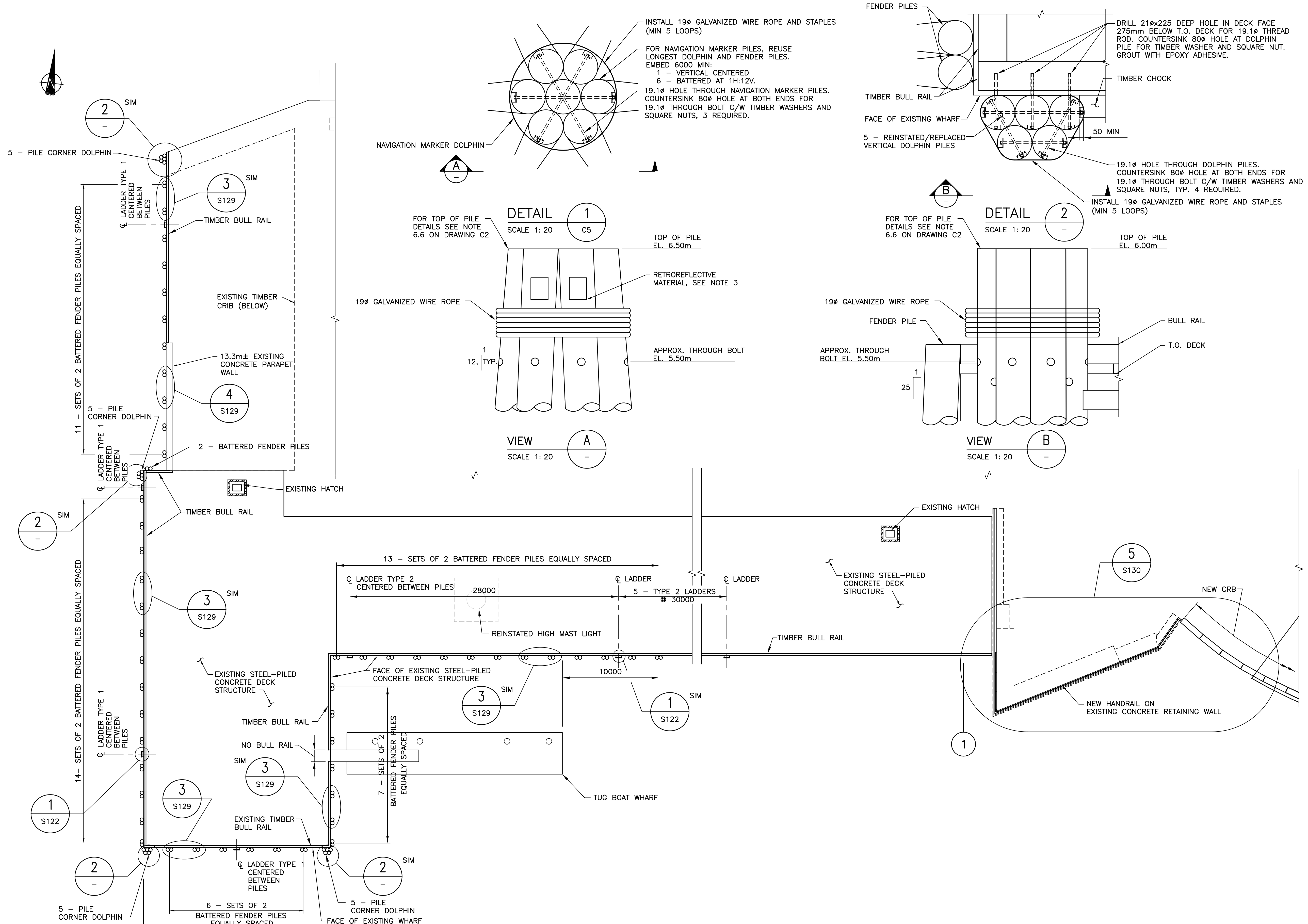
PWSC Project Manager/Administrateur de Projets TPSGC  
ANDREW MYLLY

Regional Manager, Environmental Services  
COLLIN KINGMAN

Drawing title/Titre du dessin  
**WEST AND SOUTH JETTY DECK  
CHAIN LADDER AND  
ACCESS LADDERS MODIFICATIONS**

Project No./No. du projet	Sheet/Feuille	Revision no./Révision no.
R.018400.002	S122	0





- NOTES:**
- EMBEDMENT FOR FENDER PILES: 3600 NOM. EMBEDMENT FOR CORNER DOLPHINS: 6000 NOM. EMBEDMENT FOR NAVIGATION MARKER PILES: 6000 NOM.
  - NAVIGATION MARKERS ARE INTENDED TO INDICATE THE NAVIGATION CHANNEL AND ARE NOT DESIGNED TO BE BERTHING OR TURNING DOLPHINS.
  - RETROREFLECTIVE MATERIAL TO BE SECURELY FASTENED TO NAVIGATION MARKER PILES AT LEAST 1.0m ABOVE HIGH TIDE ELEVATION. SIZE AND COLOUR TO BE APPROVED BY DEPARTMENTAL REPRESENTATIVE.

Revision/Redaction	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK**  
 825 ADMIRALS ROAD, VICTORIA, BC

**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
 KRISTIN GREINACHER

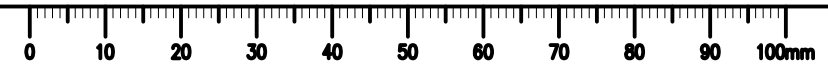
Drawn by/Dessiné par  
 ARNIE RIST

PWSC Project Manager/Administrateur de Projets TPSGC  
 ANDREW MYLLY

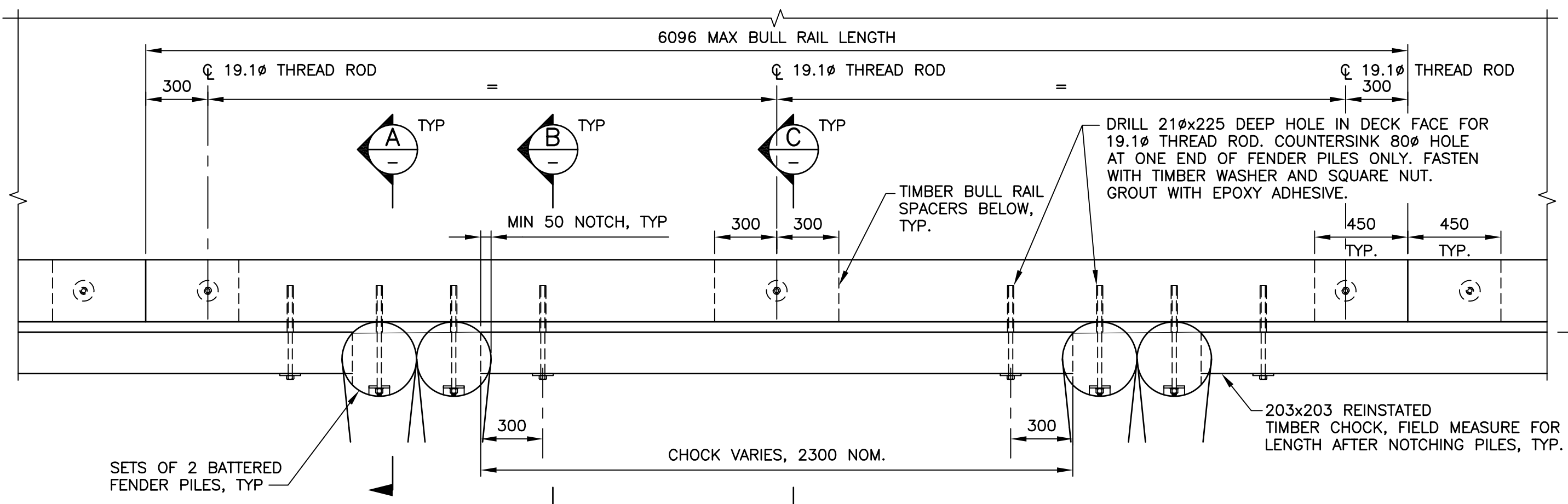
Regional Manager, Environmental Services  
 COLLIN KINGMAN

Drawing title/Titre du dessin  
**FENDERING SHEET 1**

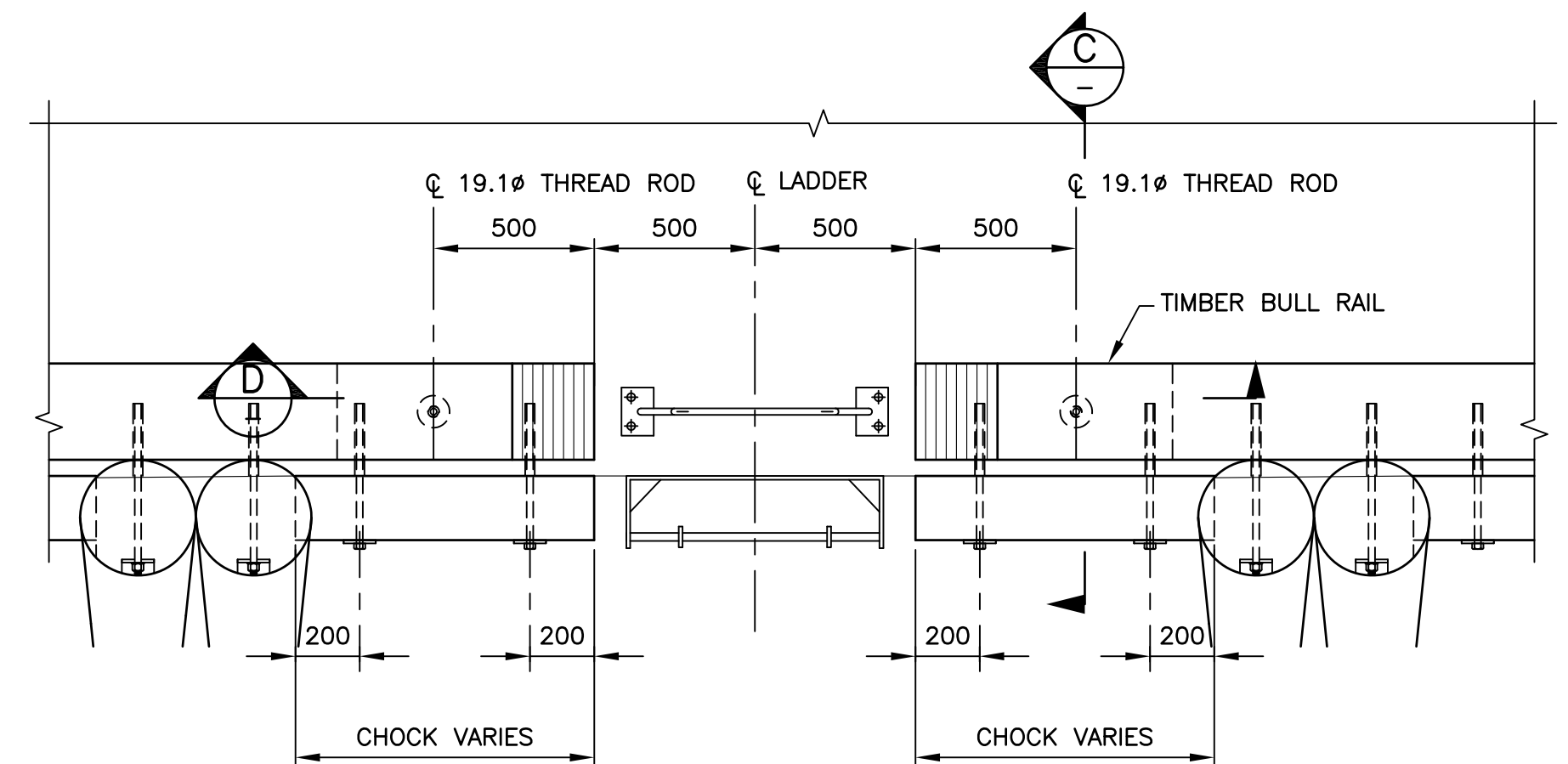
Project No./No. du projet <b>R.018400.002</b>	Sheet/ <b>S128</b>	Revision no./ <b>0</b>
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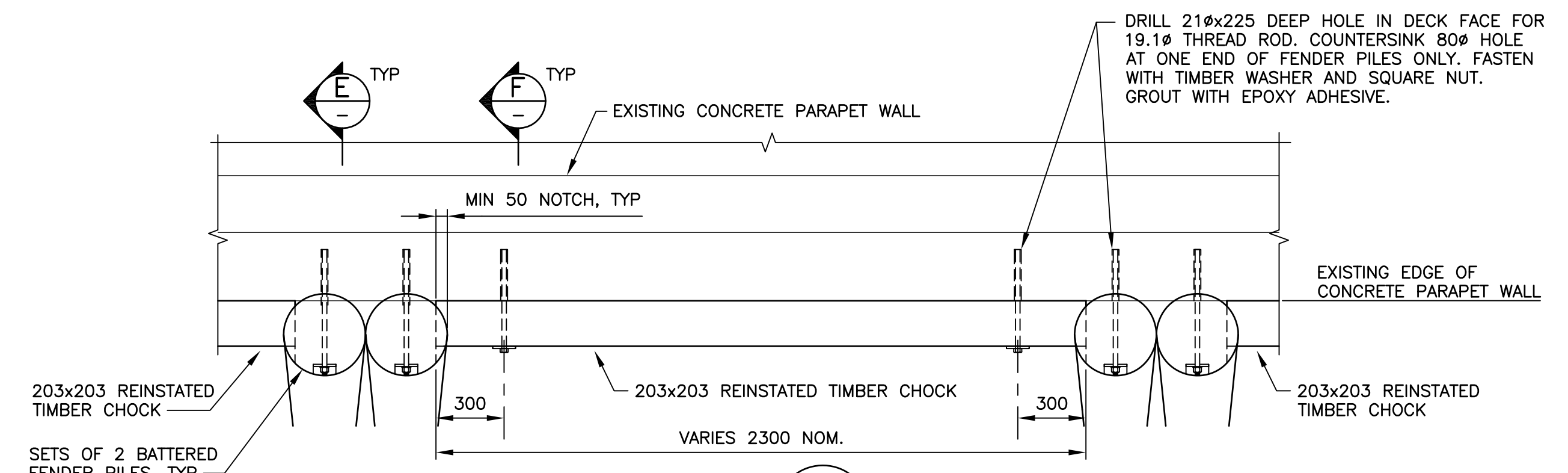




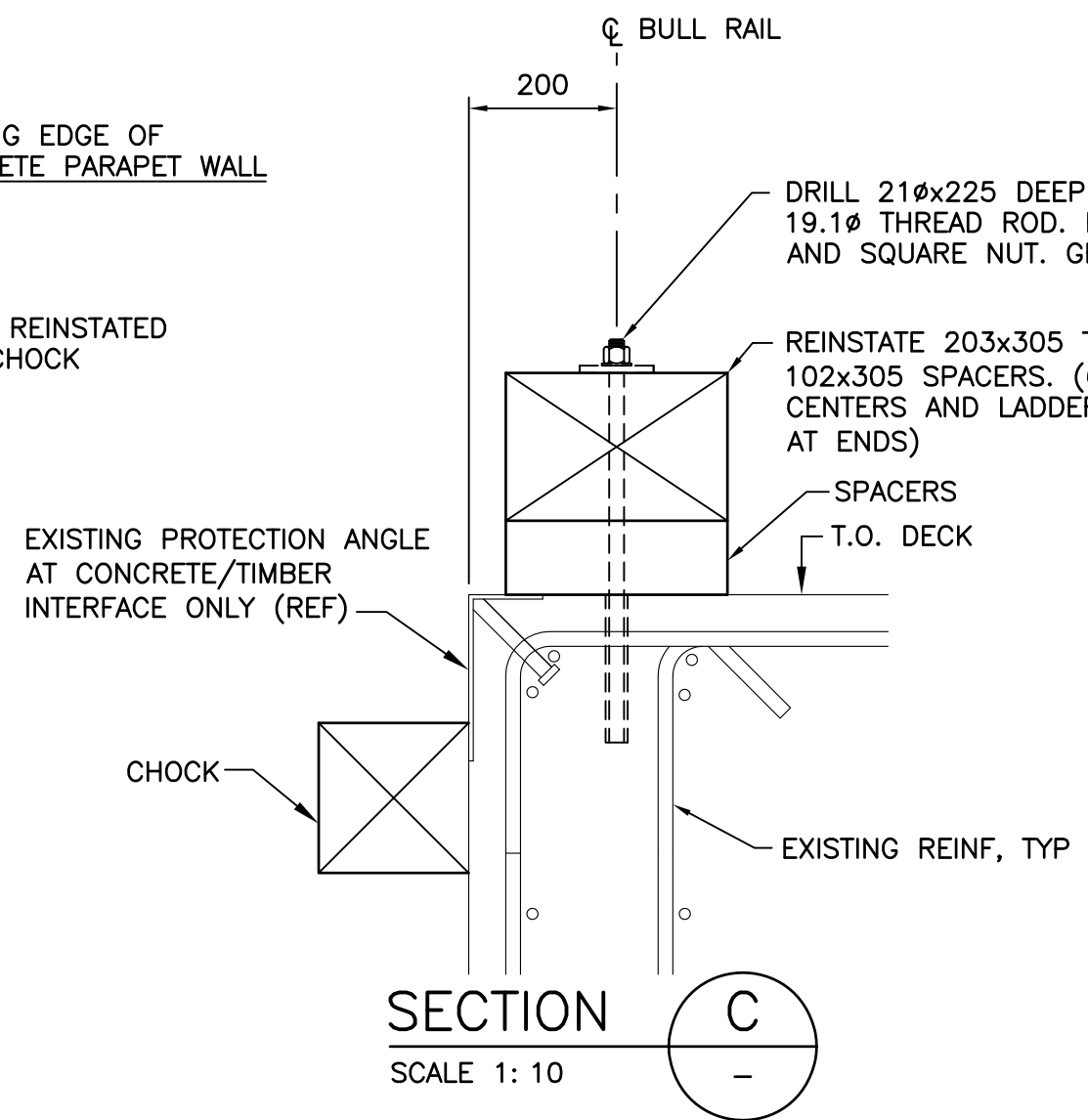
**DETAIL 3 TYP BETWEEN LADDERS**  
SCALE 1: 20 S128



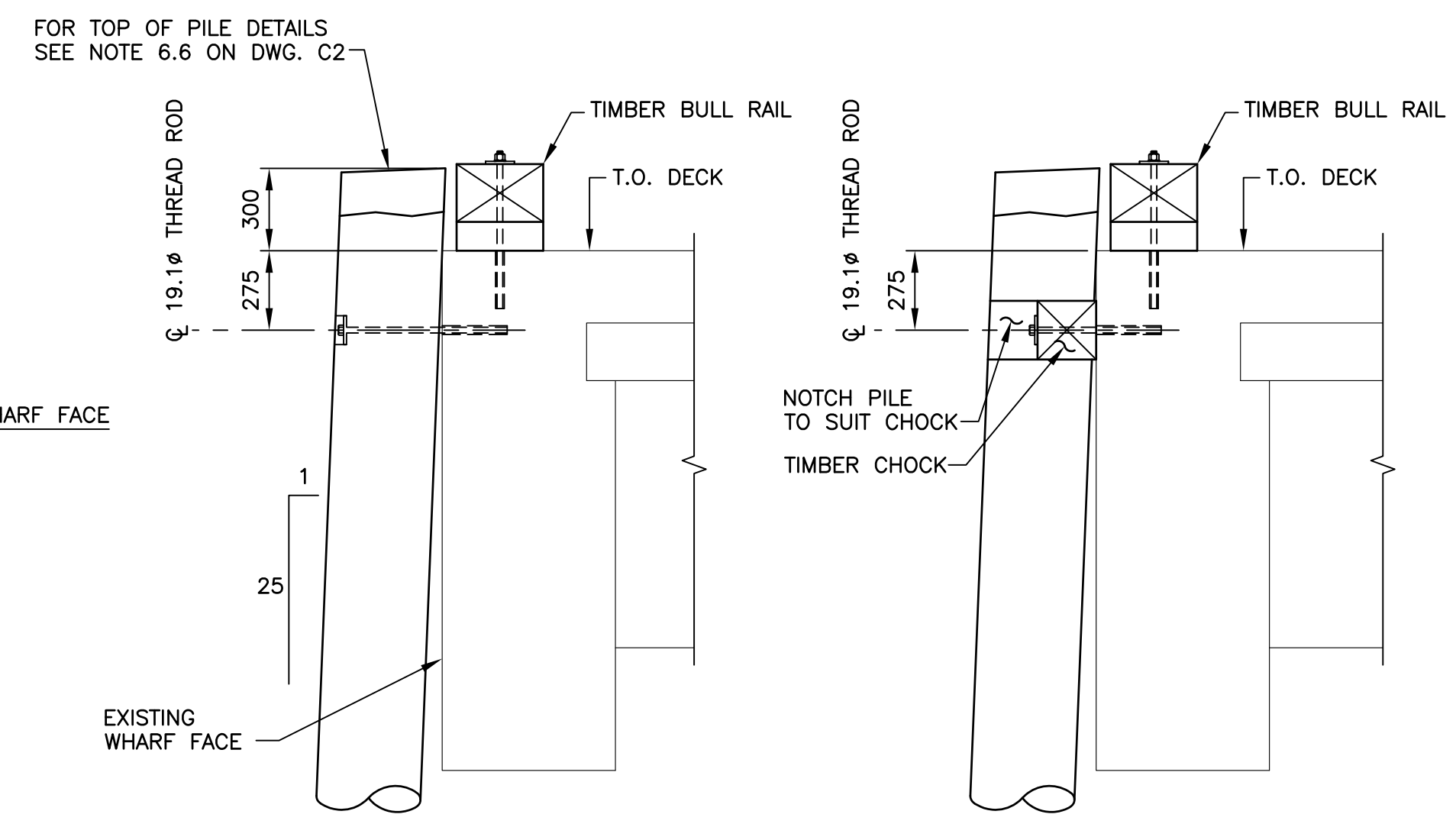
**DETAIL 3 TYP AT LADDERS**  
SCALE 1: 20 S128  
CONNECTIONS SIMILAR TO SECTION 'A' ABOVE EXCEPT AS SHOWN



**DETAIL 4**  
SCALE 1: 20 S128

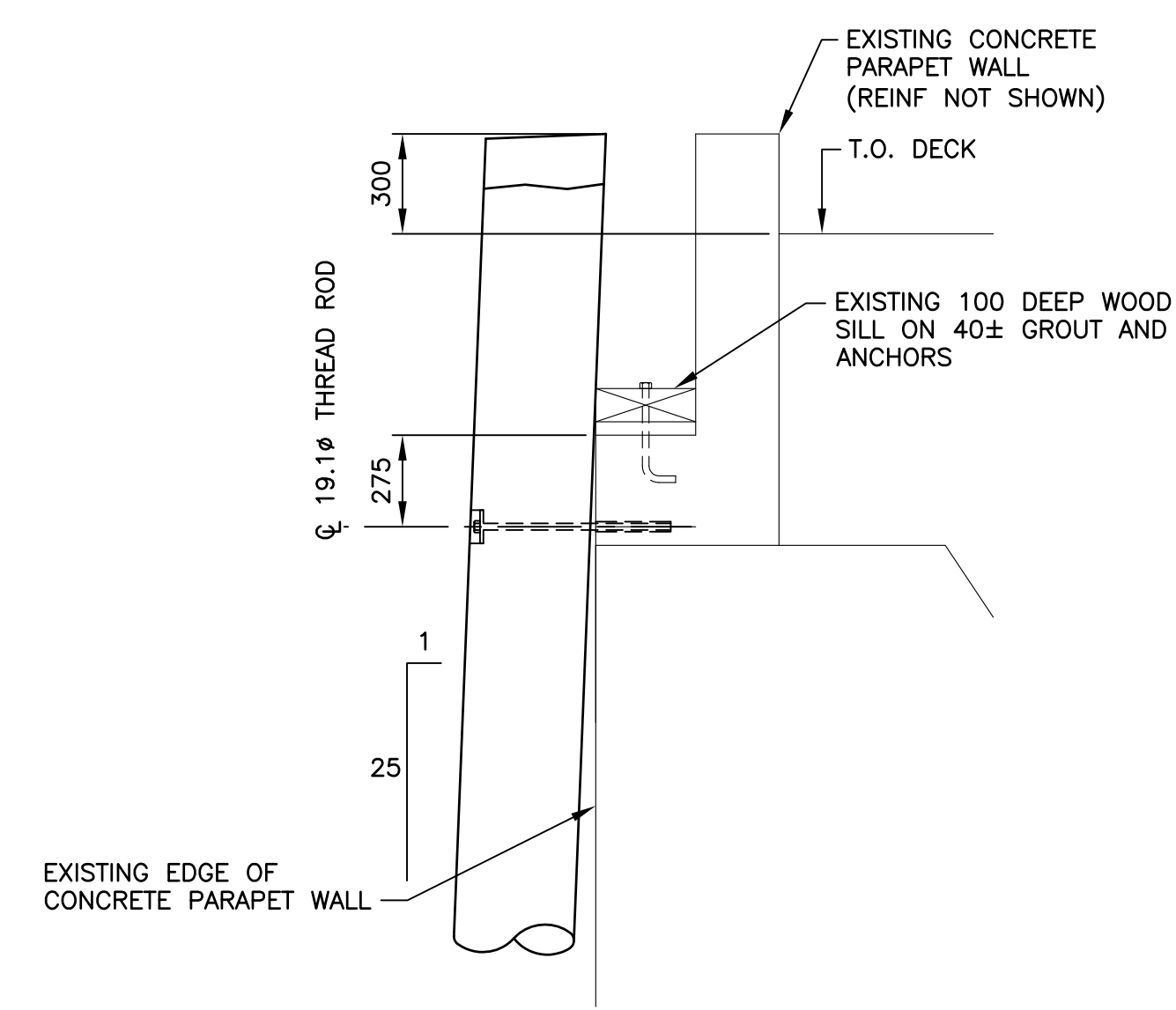


**SECTION C**  
SCALE 1: 10

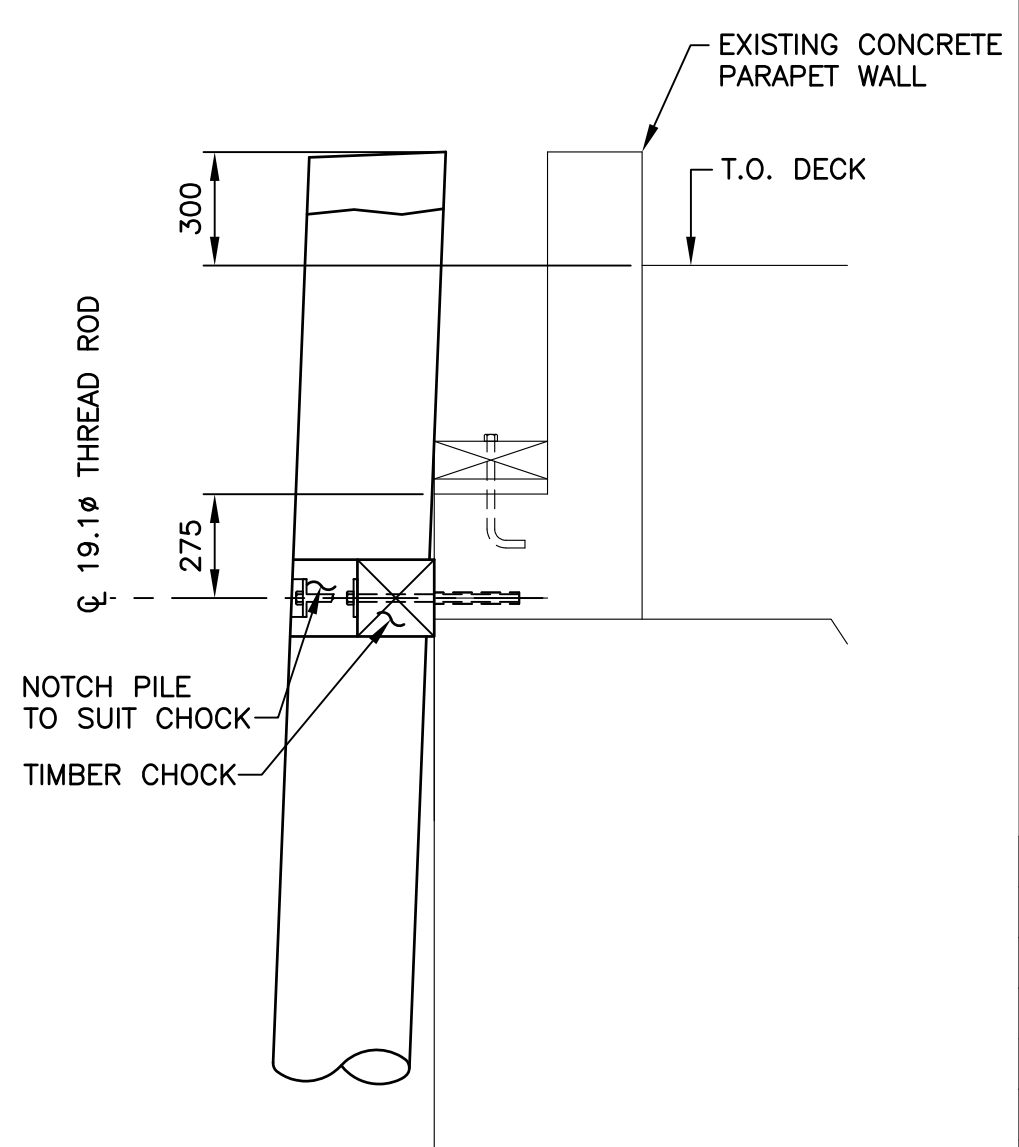


**SECTION A**  
SCALE 1: 20

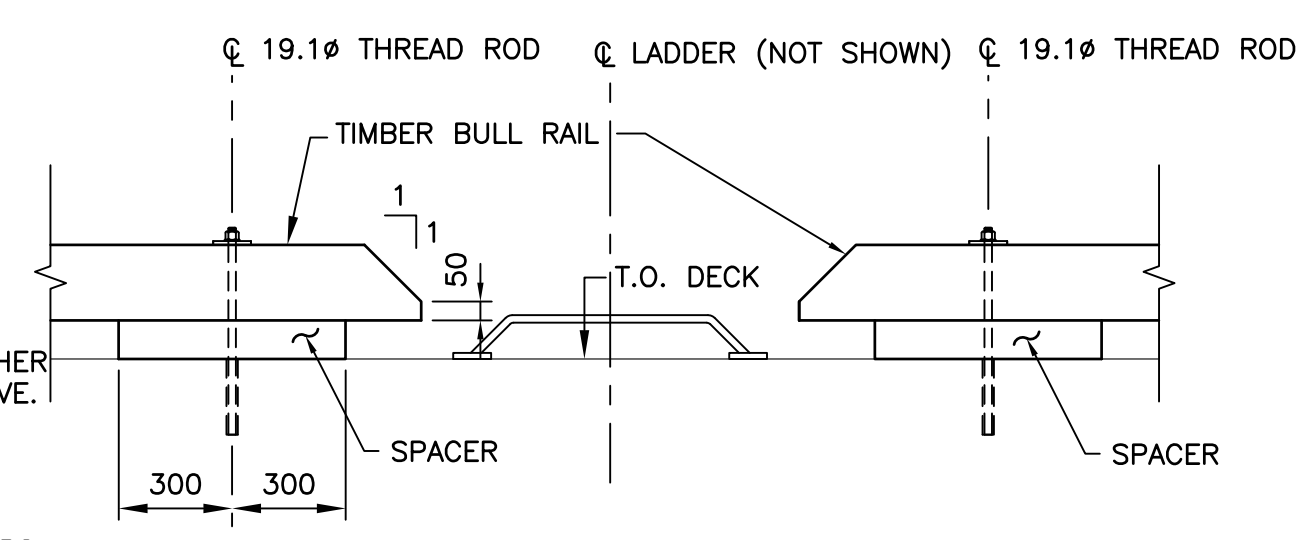
**SECTION B**  
SCALE 1: 20



**SECTION E**  
SCALE 1: 20



**SECTION F**  
SCALE 1: 20



**SECTION D**  
SCALE 1: 20

**NOTES:**  
1. SEE DRAWING C2 FOR NOTES.

Revision/	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK 825 ADMIRALS ROAD, VICTORIA, BC**

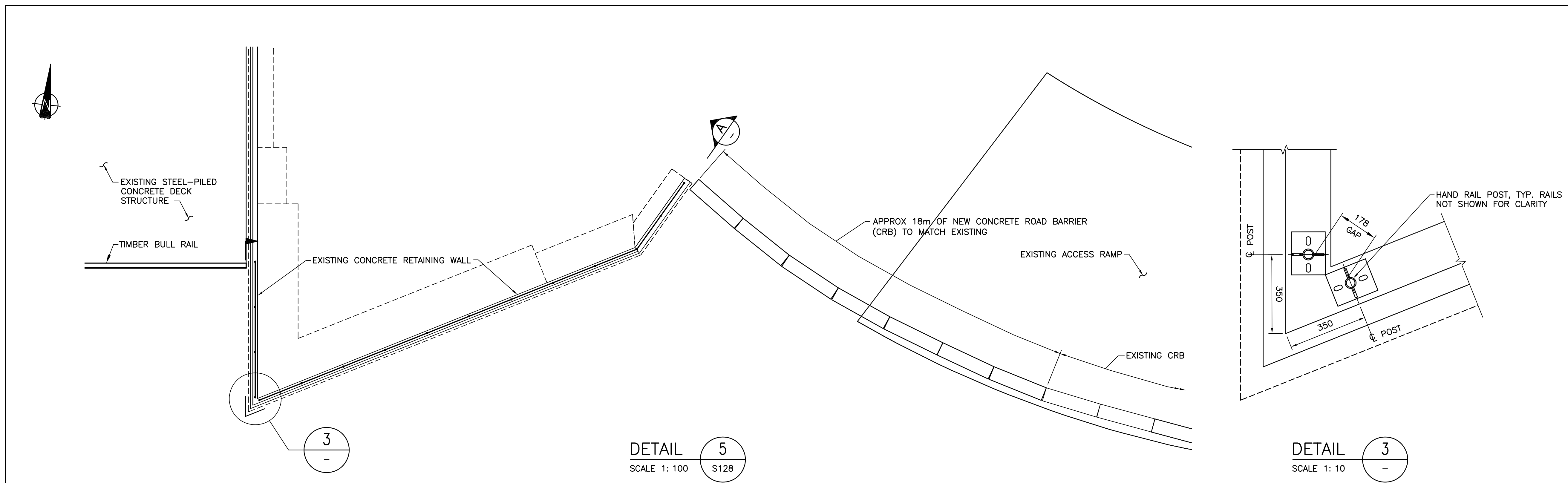
**ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION**

Consultant Signature Only  
Designed by/Concept par KRISTIN GREINACHER  
Drawn by/Dessiné par ARNIE RIST  
PWSC Project Manager/Administrateur de Projets TPSC ANDREW MYLLY  
Regional Manager, Environmental Services COLLIN KINGMAN

Drawing title/Titre du dessin  
**FENDERING SHEET 2**

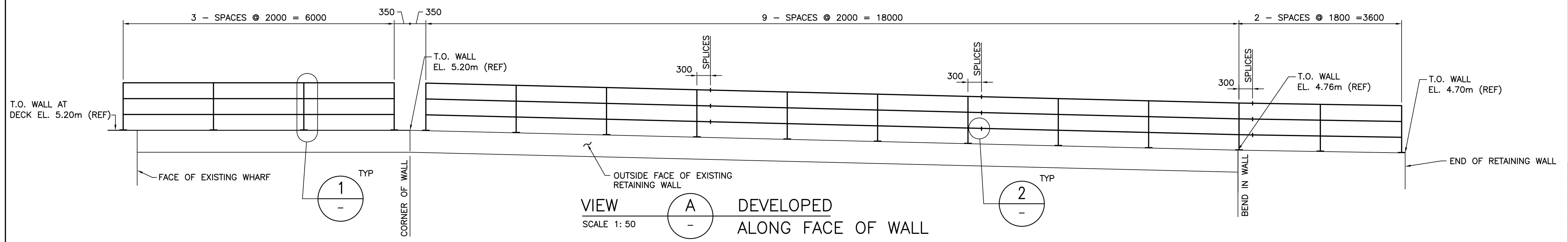
Project No./No. du projet	Sheet/	Revision no./
R.018400.002	S129	0



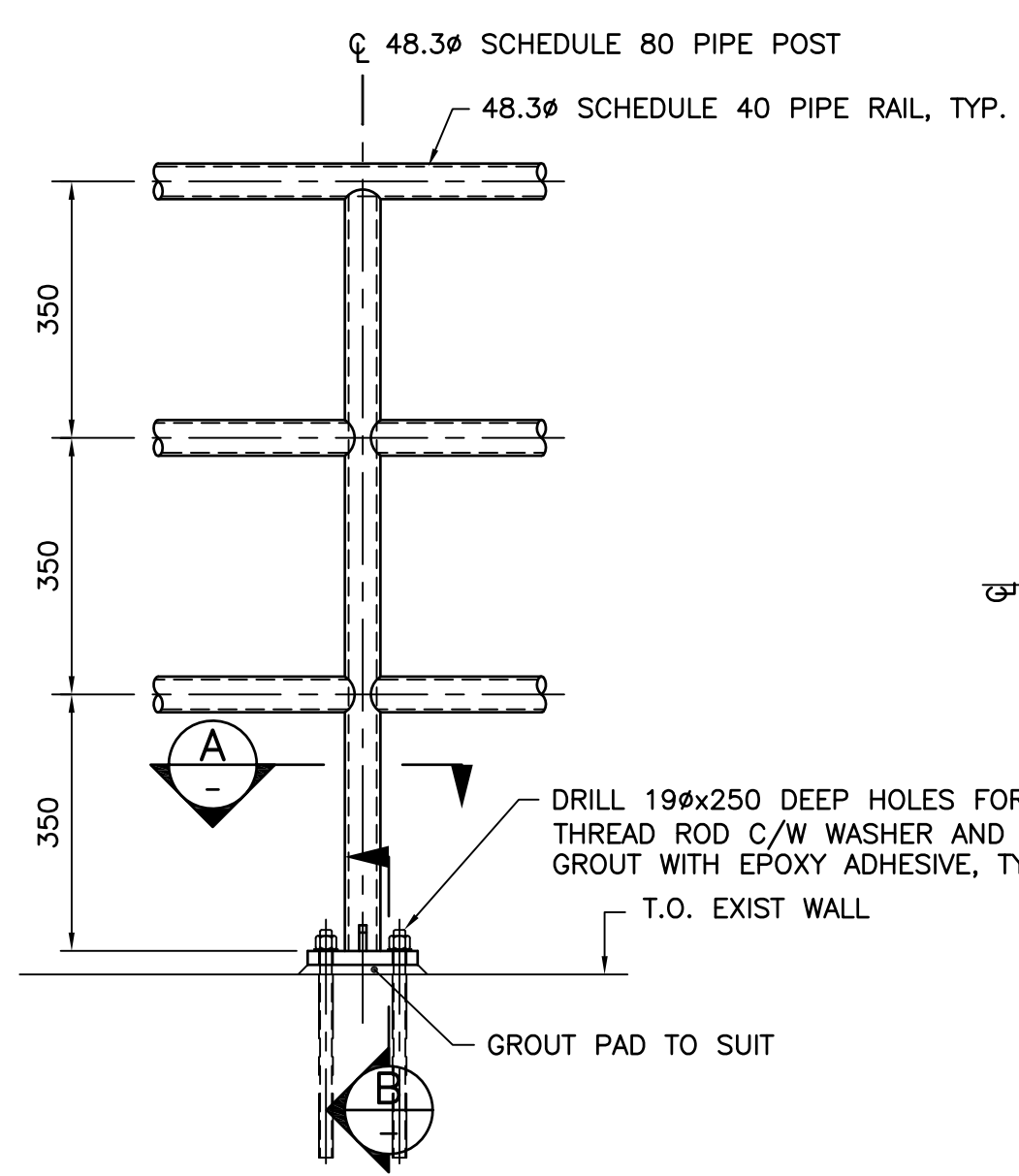


DETAIL 5  
SCALE 1: 100  
S128

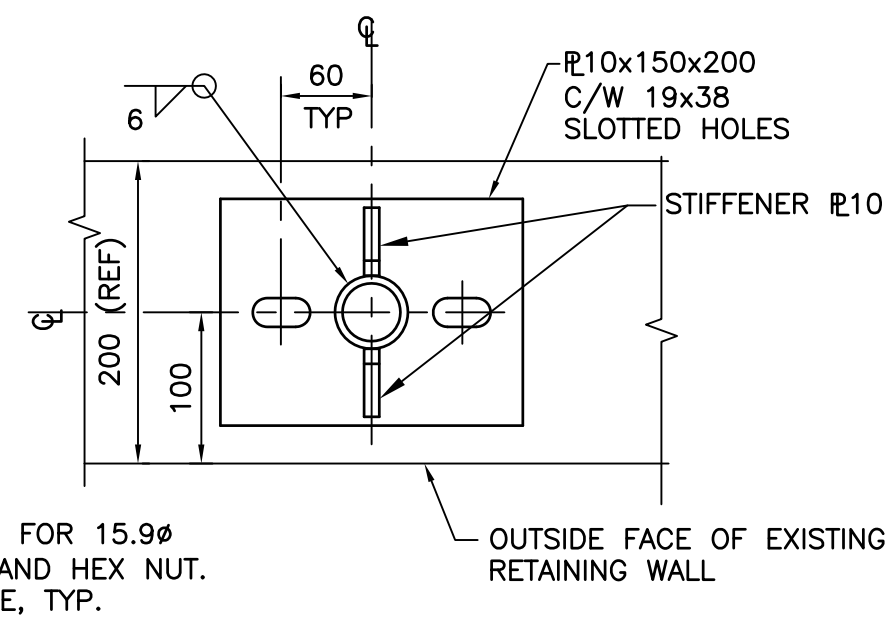
DETAIL 3  
SCALE 1: 10



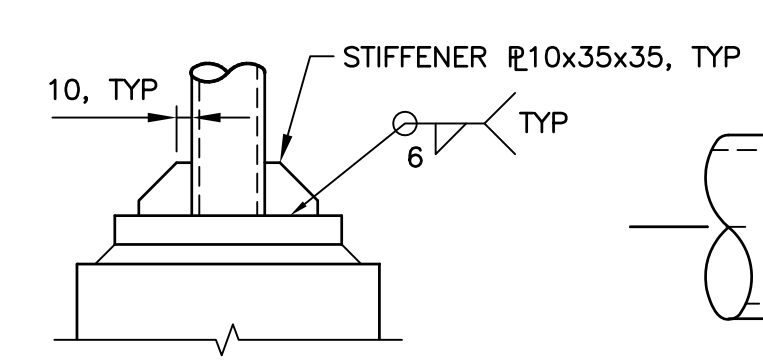
VIEW A DEVELOPED ALONG FACE OF WALL  
SCALE 1: 50



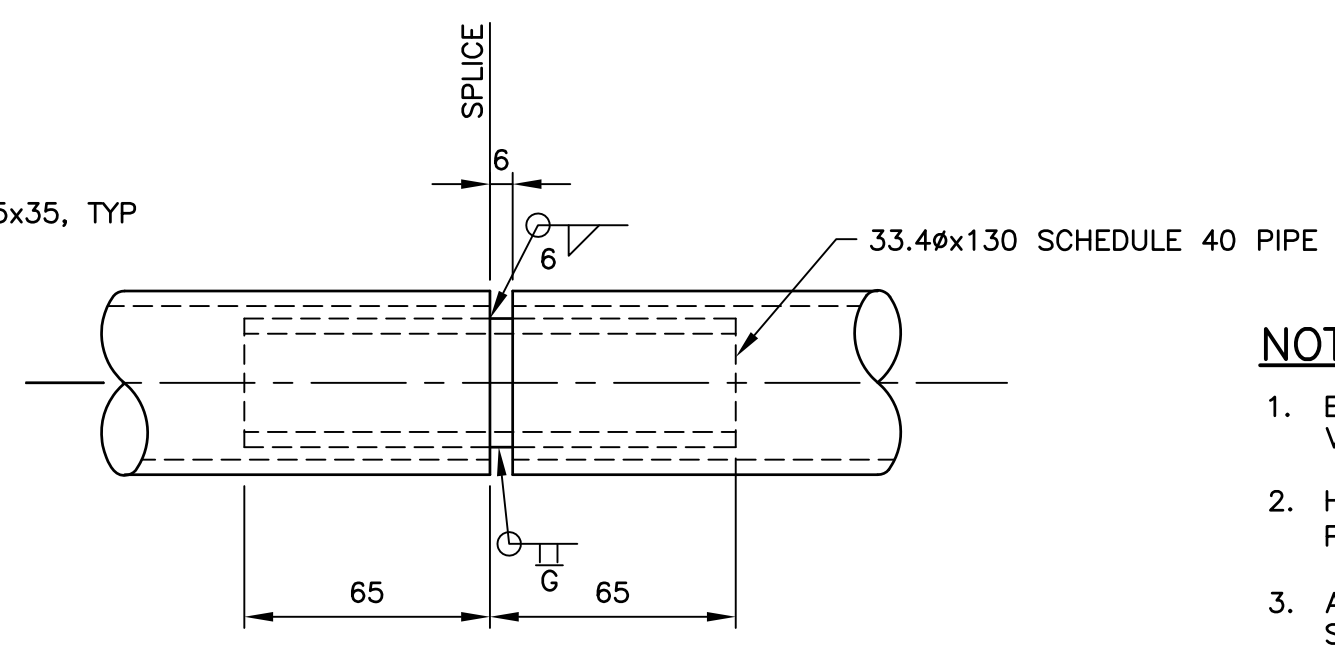
DETAIL 1  
SCALE 1: 10



SECTION A  
SCALE 1: 5



SECTION B  
SCALE 1: 5



DETAIL 2  
SCALE 1: 2

NOTES:

- EXISTING WALL DIMENSIONS AND ELEVATIONS SHALL BE FIELD VERIFIED PRIOR TO FABRICATION OF HAND RAIL.
- HAND RAIL SHALL BE HOT DIP GALVANIZED. FABRICATOR SHALL PROVIDE DRAIN/VENT HOLES IN PIPE SECTIONS AS REQUIRED.
- AFTER INSTALLATION GRIND/CLEAN FIELD WELDED EDGES SMOOTH AND DAMAGED AREAS. TOUCH UP WITH 2 COATS OF GALVICON PAINT OR APPROVED EQUAL.

Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
KRISTIN GREINACHER

Drawn by/Dessiné par  
ARNIE RIST

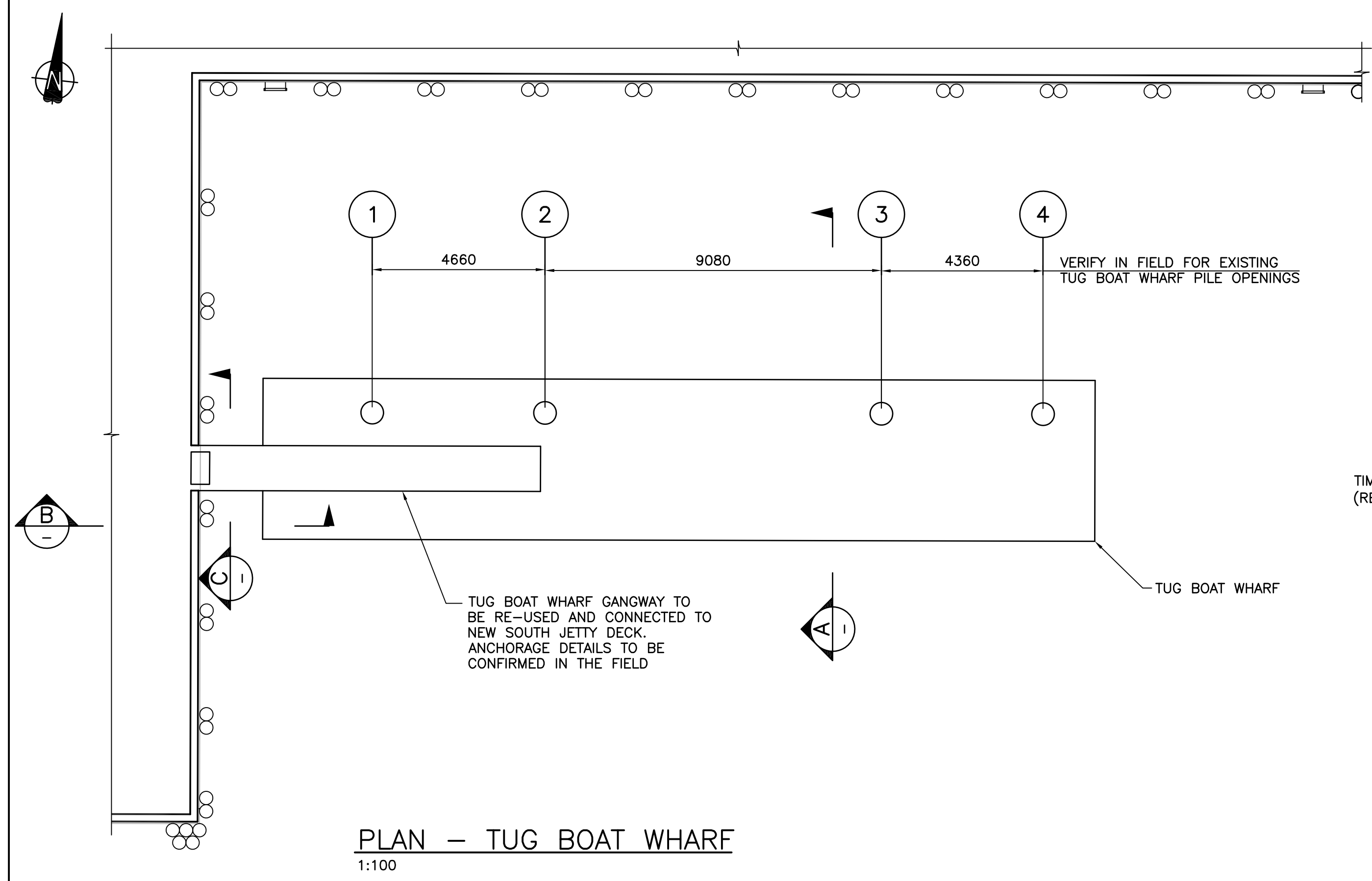
PWGC Project Manager/Administrateur de Projets TPSGC  
ANDREW MYLLY

Regional Manager, Environmental Services  
COLLIN KINGMAN

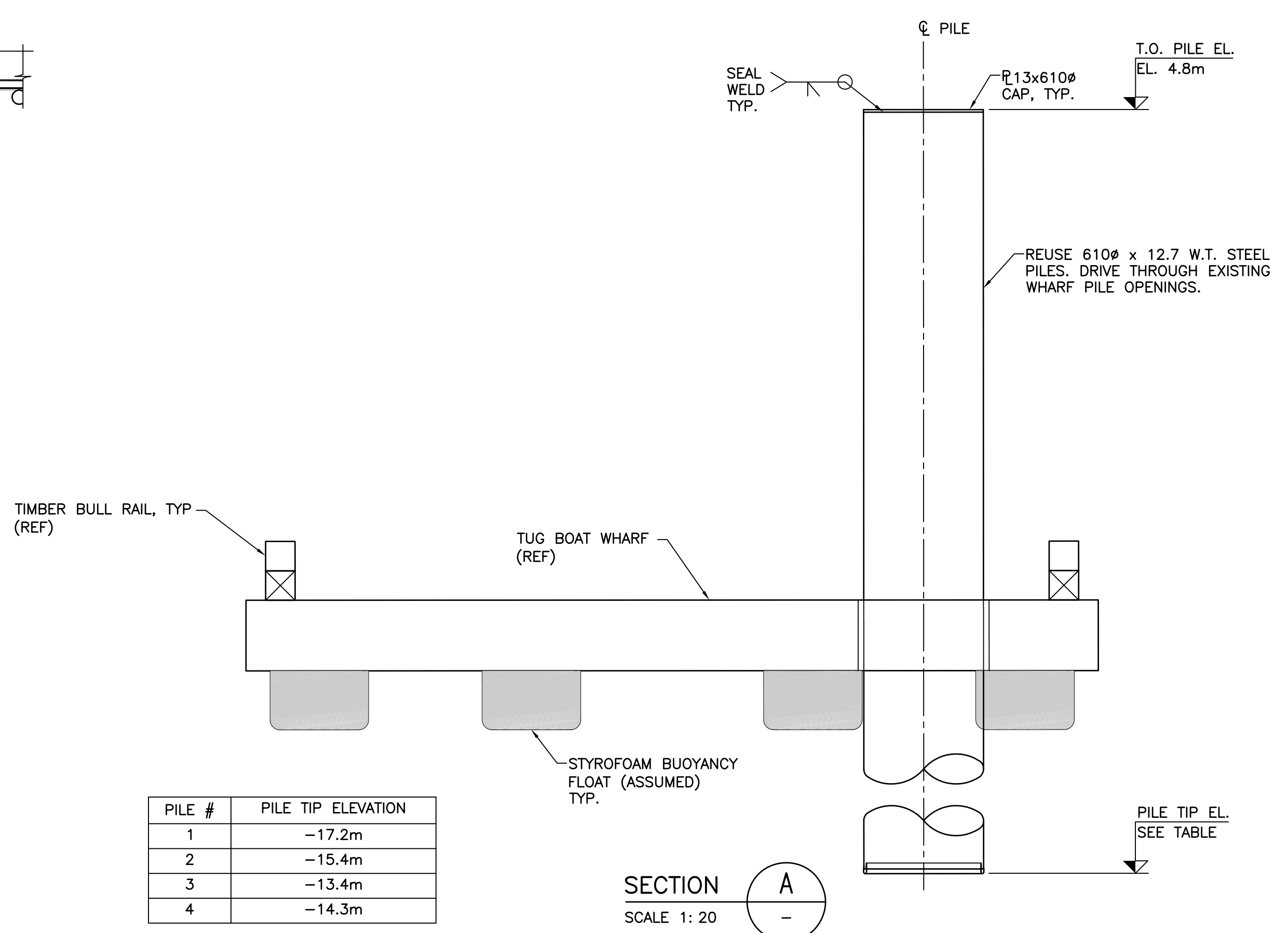
Drawing title/Titre du dessin  
**HAND RAIL**

Project No./No. du projet	Sheet/Feuille	Revision no./No. de révision
R.018400.002	S130	0

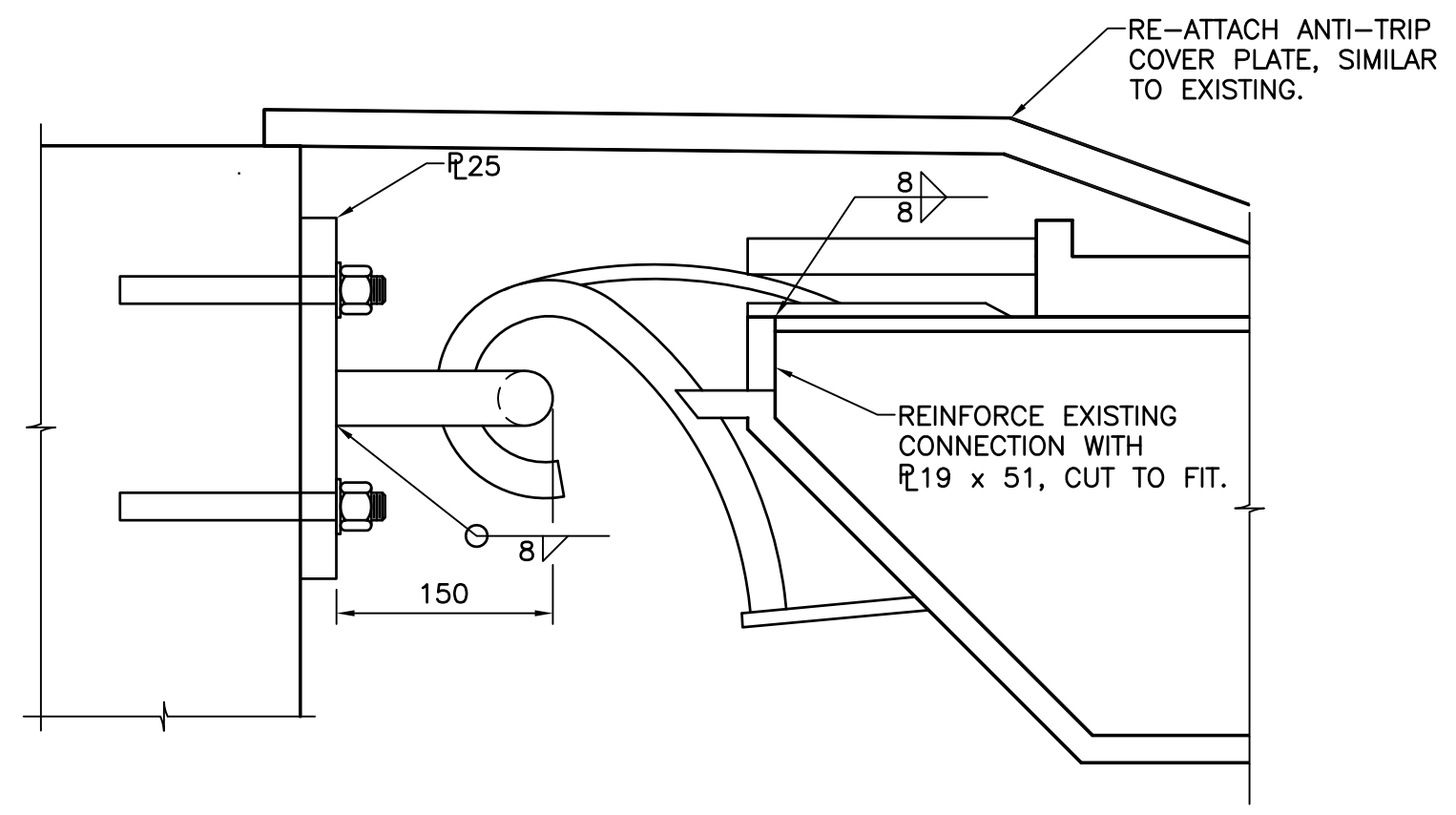




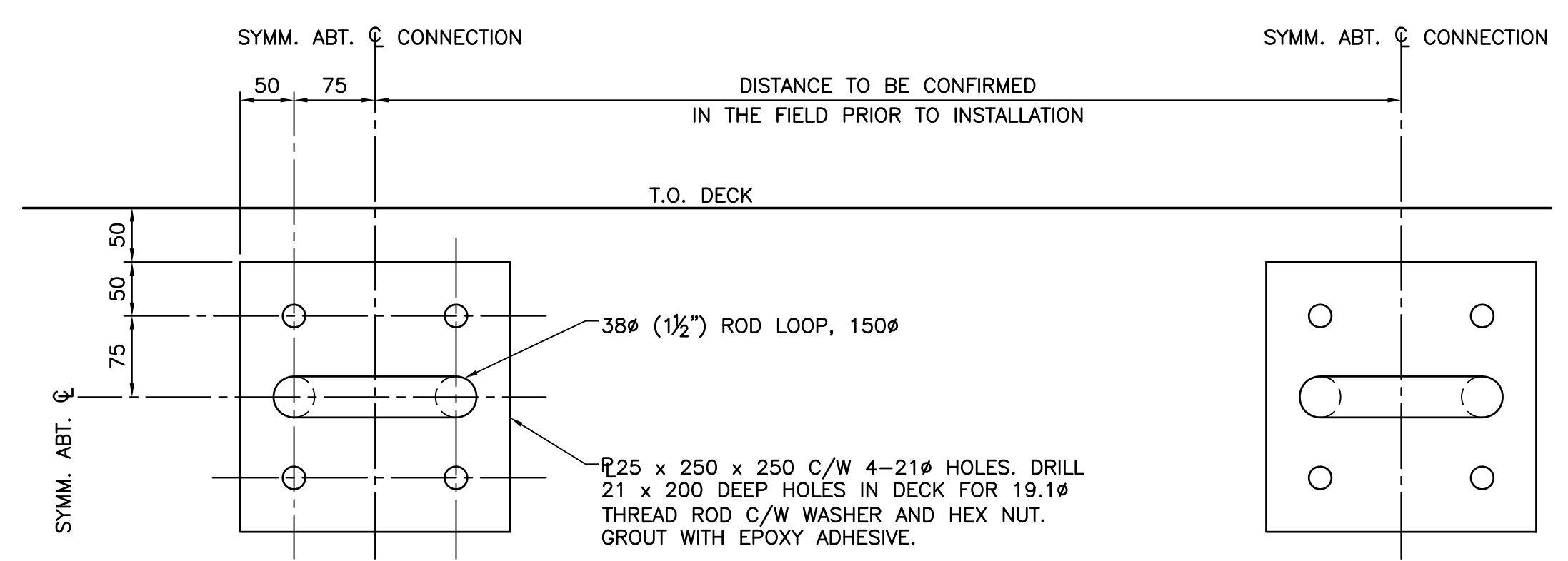
PLAN - TUG BOAT WHARF  
1:100



SECTION A  
SCALE 1: 20



SECTION B  
SCALE 1: 5



SECTION C  
SCALE 1: 5



EXISTING GANGWAY HINGE DETAIL



EXISTING ANODE DETAIL



**NOTES:**

- FOR NOTES SEE DWG. C2.
- CONTRACTOR SHALL CONFIRM ALL CRITICAL MEASUREMENTS OF EXISTING TUG BOAT WHARF PRIOR TO RELOCATION.
- CONNECTION FOR GANGWAY DESIGNED TO CARRY A UNIFORM LIVE LOAD OF 4.8 kPa.
- REMOVE AND STORE ANODES PRIOR TO EXTRACTING PILES. REINSTALL ONE ANODE PER PILE APPROXIMATELY 0.5 - 1.5m ABOVE SEA BED.

Revision/Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/19

Client/client  
**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA**

Project title/Titre du projet  
**ESQUIMALT GRAVING DOCK  
825 ADMIRALS ROAD, VICTORIA, BC**

**ESQUIMALT GRAVING DOCK  
WATERLOT PHASE 2  
SOUTH JETTY UNDER-PIER  
SEDIMENT REMEDIATION**

Consultant Signature Only

Designed by/Concept par  
GEOFF COOPER

Drawn by/Dessiné par  
GABE MENDES

PWGC Project Manager/Administrateur de Projets TPSC  
ANDREW MYLLY

Regional Manager, Environmental Services  
COLLIN KINGMAN

Drawing title/Titre du dessin  
**TUG BOAT WHARF  
DETAILS**

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	S151	0