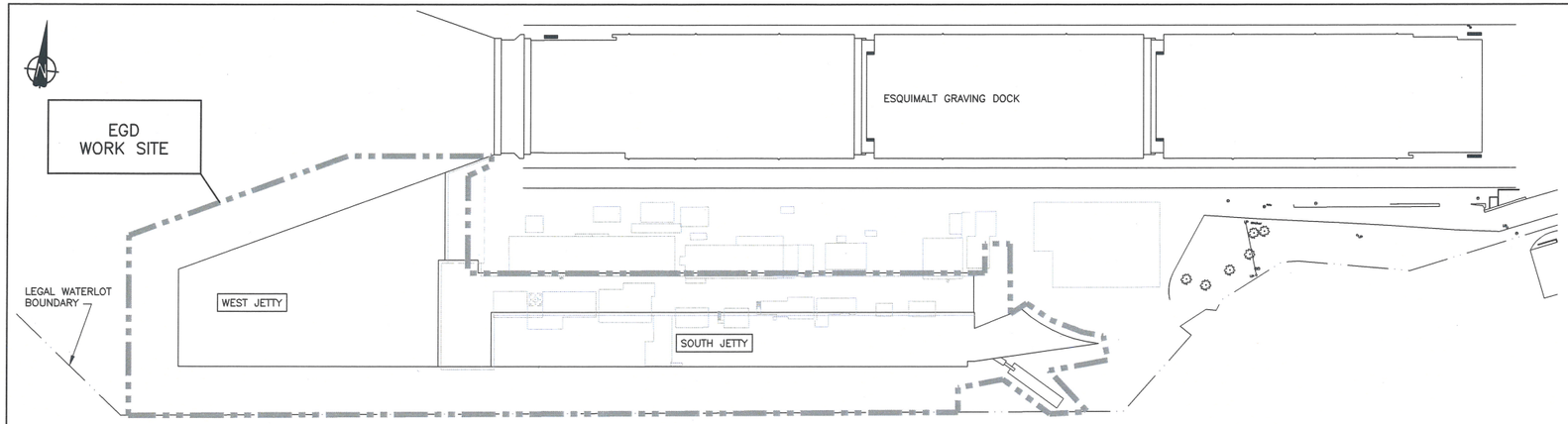

SITE PLAN
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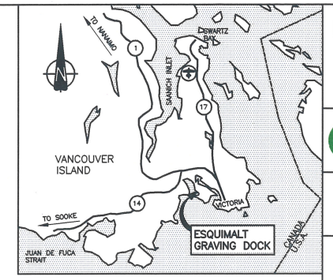
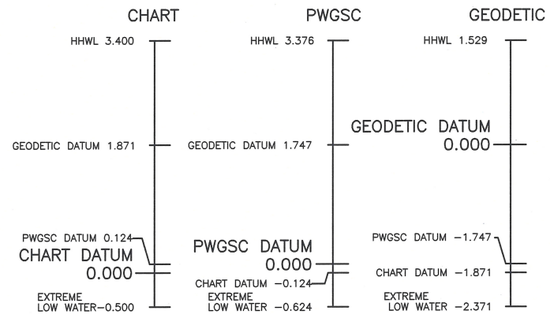


KEY PLAN
N.T.S.

DRAWING LIST

DRAWING NUMBER	TITLE
C 1	SITE PLAN AND DRAWING LIST
C 2	NOTES AND ABBREVIATIONS
C 3	EXISTING BATHYMETRY AND SURVEY INFORMATION
C 4	EXISTING CONDITIONS AND GEOTECHNICAL INFORMATION
C 5	WEST JETTY – GENERAL ARRANGEMENT – PLAN
C 6	SOUTH JETTY – GENERAL ARRANGEMENT – PLAN
C 7	WEST AND SOUTH JETTY – GENERAL ARRANGEMENT – SECTIONS
C 8	CONTRACTOR'S WORK AREA AND SITE ACCESS
C 9	NOT USED
C 10	SOUTH JETTY EXISTING AND MODIFIED PLANS
C 11 TO C 13	NOT USED
C 14	PHOTOGRAPHS OF EXISTING CONDITIONS – SHEET 1
C 15	PHOTOGRAPHS OF EXISTING CONDITIONS – SHEET 2
C 16	PHOTOGRAPHS OF EXISTING CONDITIONS – SHEET 3
C 17	PHOTOGRAPHS OF EXISTING CONDITIONS – SHEET 4
C 18 TO C 20	NOT USED
C 21	REQUIRED DREDGE PLAN
C 22	DREDGE CROSS SECTIONS – SHEET 1
C 23	DREDGE CROSS SECTIONS – SHEET 2
C 24	NOT USED
C 25	DREDGE DETAILS – SHEET 1
C 26	DREDGE DETAILS – SHEET 2
C 27	MATERIAL OFFLOADING, HANDLING, STORAGE, AND TURBIDITY CONTROL DETAILS
C 28	ENGINEERED CAPPING PLAN
C 29	ENGINEERED CAPPING CROSS SECTIONS – SHEET 1
C 30	ENGINEERED CAPPING CROSS SECTIONS – SHEET 2
C 31	NOT USED
C 32	ENGINEERED CAPPING DETAILS – SHEET 1
C 33	ENGINEERED CAPPING DETAILS – SHEET 2
C 34 TO C45	NOT USED
C46	SERVICES TERMINATION PITS
CSM 1	WEST AND SOUTH JETTY – EXISTING CONDITIONS – FENDER REMOVAL – SHEET 1
CSM 2	WEST AND SOUTH JETTY – EXISTING CONDITIONS – FENDER REMOVAL – SHEET 2
CSM 3	WEST AND SOUTH JETTY – SHEET PILE WALL – EXISTING CONDITIONS
CSM 4	SHEET PILE WALL MODIFICATIONS – PLAN AND ELEVATIONS
CSM 5	SHEET PILE WALL MODIFICATIONS – NOTES AND SECTIONS
CSM 6	SHEET PILE WALL MODIFICATIONS – CONSTRUCTION SEQUENCE
CSM 7	SHEET PILE WALL MODIFICATIONS – DETAILS – SHEET 1
CSM 8	SHEET PILE WALL MODIFICATIONS – DETAILS – SHEET 2
CSM 9	SHEET PILE WALL MODIFICATIONS – DETAILS – SHEET 3
D 1	WEST JETTY – EXISTING DECK STRUCTURE AND DEMOLITION – PLAN
D 2	SOUTH JETTY – EXISTING DECK STRUCTURE AND DEMOLITION – PLAN
D 3	SOUTH JETTY – EXISTING DECK STRUCTURE AND DEMOLITION – SECTIONS
D 4	WEST JETTY – DEMOLITION ITEM DESCRIPTION AND ACTION TABLE
D 5	WEST AND SOUTH JETTY – DEMOLITION ITEM DESCRIPTION AND ACTION TABLE
D 6	SOUTH JETTY – EXISTING UNDER-DECK CONDITIONS AND DEMOLITION – PLAN
D 7	EXISTING HIGH MAST LIGHT AREA AND DEMOLITION – SHEET 1
D 8	EXISTING HIGH MAST LIGHT AREA AND DEMOLITION – SHEET 2
E 1	EXISTING SERVICES – CABLE TRAY LAYOUT – PLAN, SECTIONS AND DETAILS
E 2	EXISTING SERVICES – ELECTRICAL CABLES AND KIOSKS – PLAN AND PHOTOS
E 3	EXISTING SERVICES – SUBSTATION CABLE TRAY AND DUCTS – PLAN, SECTIONS AND DETAILS
E 4	SERVICES – CABLE TRAY AND CABLES LAYOUT – PLAN
E 5 TO E 8	NOT USED
E 9	EXISTING SERVICES – ELECTRICAL CABLE SCHEDULE
E 10	MODIFICATIONS TO SERVICES – ELECTRICAL CABLE SCHEDULE
E 11	SOUTH JETTY – MODIFICATIONS TO CATHODIC PROTECTION SYSTEM
E 12	SERVICES – ELECTRICAL – TERMINATION DETAILS
M 1	EXISTING SERVICES – FIRE WATER MAIN AND KIOSKS – PLAN, SECTIONS AND DETAIL
M 2	EXISTING SERVICES – SANITARY SEWER – PLAN
M 3	EXISTING SERVICES – COMPRESSED AIR – PLAN
M 4	SERVICES – FIRE WATER MAIN – PLAN AND DETAILS
M 5	SERVICES – SANITARY SEWER – PLAN AND SECTION
M 6	SERVICES – COMPRESSED AIR – PLAN
M 7	NOT USED
M 8	SERVICES FIRE WATER MAIN, SANITARY SEWER AND COMPRESSED AIR – DETAILS
M 9	NOT USED
M 10	NOT USED

DRAWING NUMBER	TITLE
S 1 TO S 109	NOT USED
S 110	CONSTRUCTION AT HIGH MAST LIGHT AREA
S 111 TO S 121	NOT USED
S 122	WEST AND SOUTH JETTY DECK – CHAIN LADDER AND ACCESS LADDERS MODIFICATIONS
S 123 TO S 127	NOT USED
S 128	FENDERING – SHEET 1
S 129	FENDERING – SHEET 2
S 130	HAND RAIL
S 131 TO S 150	NOT USED
S 151	TUG BOAT WHARF – DETAILS



DATUM CONVERSION
N.T.S.

DRAWING ANNOTATIONS:

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

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada
REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

Klohn Crippen Berger

ANCHOR QEA

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G. B. A. COOPER
Dec 18/14

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/Dessine par
ARNIE RIST

PWGSC Project Manager/Administrateur de Projets TPSGC
ANDREW MYLLY

Regional Manager, Environmental Services
COLLIN KINGMAN

Drawing title/Titre du dessin
SITE PLAN AND DRAWING LIST

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	C1	0

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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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:

PROPWASH 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	INV	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	℄	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			T.O.C	TOP OF CONCRETE	Z	ELEVATION IN METRES
C/W	COMPLETE WITH	GALV	GALVANIZED	mm	MILLIMETRE	RAD.,R	RADIUS	T.O.R.	TOP OF RAIL		
CJ	CONSTRUCTION JOINT	H	HORIZONTAL	MPa	MEGAPASCAL	REF.	REFERENCE	TRB	TEMPORARY RESUSPENSION BARRIER		
ø	DIAMETER	HA	HECTARES	MWL	MEAN WATER LEVEL	REINF	REINFORCING	TRBCA	TEMPORARY RESUSPENSION BARRIER CONTAINMENT AREA		
DU	DREDGE UNIT	HHWL	HIGHER HIGH WATER LEVEL	N	NORTHING	REQ/REQ'D	REQUIRED				
℄	CENTERLINE	GALV	GALVANIZED								

2. TEMPORARY RE–SUSPENSION BARRIERS:

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

3. CONCRETE:

3.3. 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.

3.4. 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.

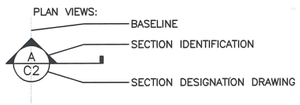
6.9. BOLTS IN TIMBERS AND PILES SHALL CONFORM TO ASTM A307 GRADE A WHEREVER STANDARD BOLT LENGTHS ARE SUITABLE. BOLTS SHALL BE TIGHTENED FROM THE NUT END.

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, OGEE, 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:

PLAN VIEWS:



△ CONTROL MONUMENT

+ NORTHING AND EASTING COORDINATE (UTM ZONE 10 GRID, NAD 83)

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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

REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

Klohn Crippen Berger

ANCHOR QEA

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G. B. A. COOPER
Dec 18/14

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/Dessine par
ARNIE RIST

PWGSC Project Manager/Administrateur de Projets TPSGC
ANDREW MYLLY

Regional Manager, Environmental Services
COLLIN KINGMAN

Drawing title/Titre du dessin
NOTES AND ABBREVIATIONS

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	**C2**	**0**

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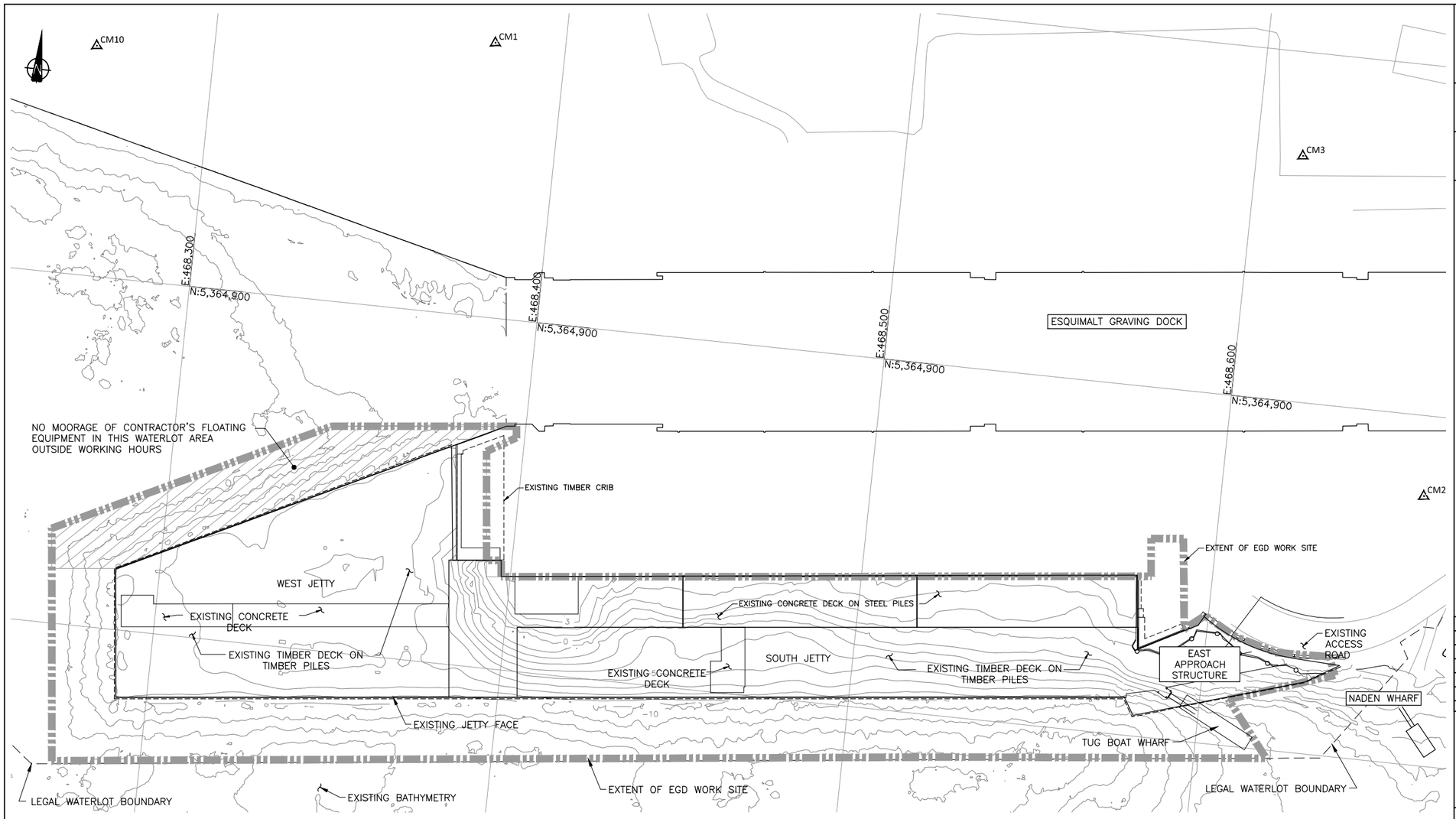

PLAN
1:600

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:

1. BASE MAP FROM GOLDER, JANUARY 2012.
2. EGD WORK SITE ALSO INCLUDES UPLAND AREAS OF THE EGD FACILITY AS SHOWN ON THE DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS.
3. 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.
4. 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.
5. CONTRACTOR TO VERIFY THE COORDINATES AND ELEVATION OF ALL CONTROL MONUMENTS USED PRIOR TO START OF WORK.
6. 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.
7. 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

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada
REAL PROPERTY SERVICES
Pacific Region
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REGISTERED PROFESSIONAL ENGINEER
12/19/14

Revision/ Revision	Description/Description	Date/Date
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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

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

PWGSC Project Manager/Administrateur de Projets TPSGC
ANDREW MYLLY

Regional Manager, Environmental Services
COLLIN KINGMAN

Drawing title/Titre du dessin
EXISTING BATHYMETRY AND SURVEY INFORMATION

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	C3	0

PWGSC – A1 – 841X594

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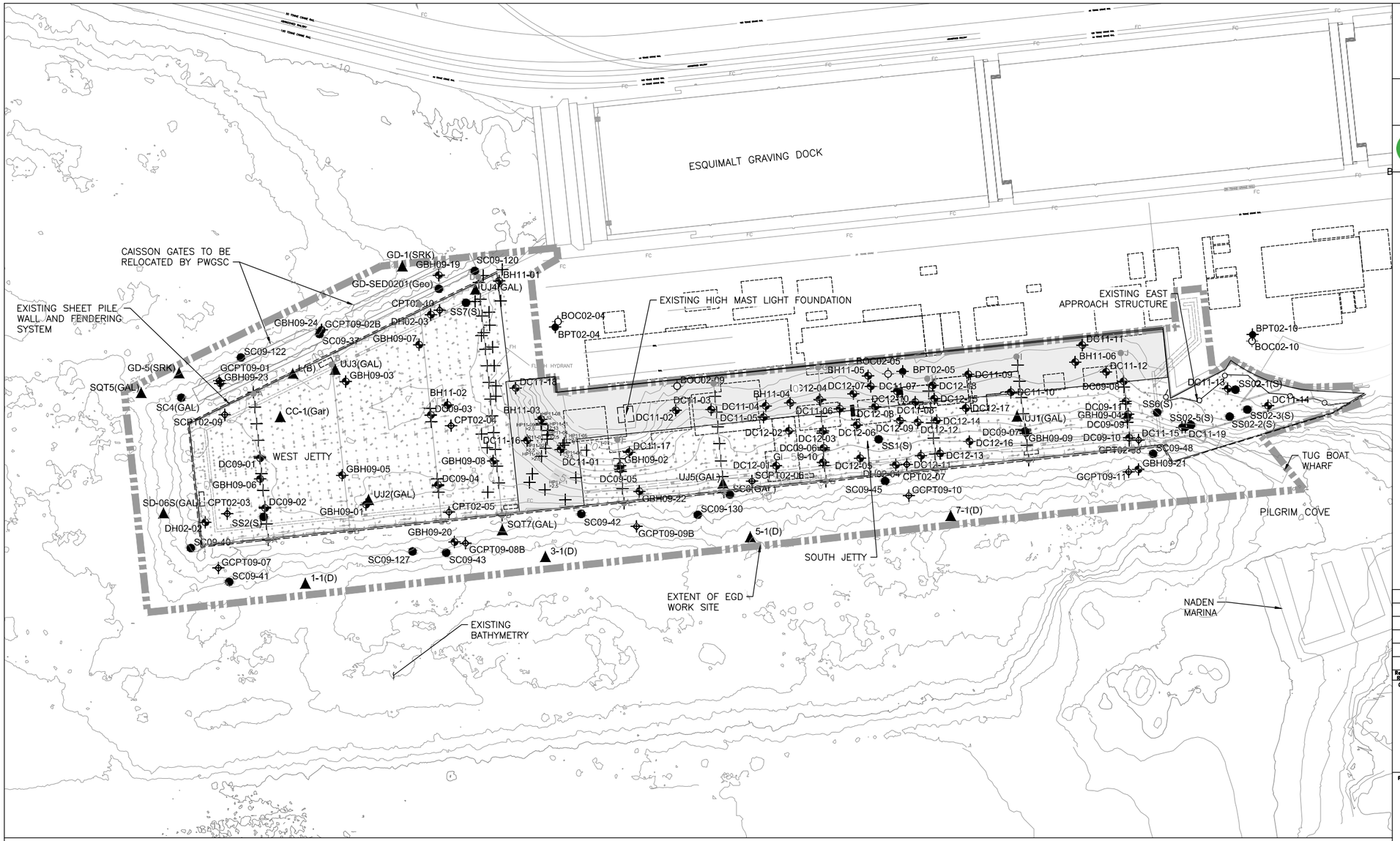

HORIZONTAL DATUM: UTM ZONE 10 GRID, NAD83.
VERTICAL DATUM: CHART DATUM (C.D.)

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. BASE MAP FROM GOLDER, JANUARY 2012.
3. REFERENCE DWG C1 FOR DATUM INFORMATION.
4. STRUCTURE DETAILS FROM KLOHN CRIPPEN BERGER DECEMBER 2010 CONDITION INSPECTION REPORT FOR SOUTH JETTY PERIMETER.
5. SHEETPILE EXTENDS AROUND THE PERIMETER OF THE SOUTH JETTY (SEE SHEET PILE CONTRACT DRAWINGS ATTACHMENT IN THE APPENDIX).
6. CONTRACTOR TO CONFIRM LOCATIONS OF FIRE SPRINKLER OPENINGS AND CATWALK ACCESS HATCHES (SHOWN ON DWG S1) AND MAINTAIN ACCESS AT ALL TIMES.
7. EGD WORK SITE ALSO INCLUDES UPLAND AREAS OF THE EGD FACILITY AS SHOWN ON THE DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS.
8. 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.
9. 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

SCALE : 1:600

0m 10 20 30 40 50m

EXPLORATION LOCATIONS

- DC12-xx — DIVER CORE (GOLDER)
- BH11-xx — BOREHOLE (GOLDER)
- SC09-xx — SEDIMENT CORE (GOLDER)
- GBH09-xx — SONIC BOREHOLE (GOLDER)
- JET PROBE (GOLDER)
- SC-x (xxx) — HISTORICAL SEDIMENT CORE
- R(xxx) — HISTORICAL SEDIMENT GRAB SAMPLE
- ADDITIONAL SAMPLING (KLOHN CRIPPEN BERGER)

LEGEND:

- —14.0— BATHYMETRY IN METRES
- TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA
- EXTENT OF EGD WORK SITE
- A—A' DIVER TRANSECTS
- GOLDER 2009/2010 PUSH PROBE
- GBH09-01 / SC09-11 — 2009/2010/2011/2012 GOLDER AND HISTORICAL SEDIMENT CORE LOCATIONS AND DESIGNATIONS
- 1-1(D) — HISTORICAL SEDIMENT GRAB SAMPLE LOCATIONS
- TIMBER PILED JETTY
- CONCRETE DECK WITH STEEL PILING
- ORDINARY HIGH WATER LINE
- EXISTING STRUCTURE

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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Pacific Region
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ANCHOR QEA

Klohn Crippen Berger

MATTHEW W WOLTMAN — STATE OF WASHINGTON — 42344 — REGISTERED PROFESSIONAL ENGINEER — 12/19/14

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
PWGSC Project Manager/Administrateur de Projets TPSGC: 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./
R.018400.002	C4	0

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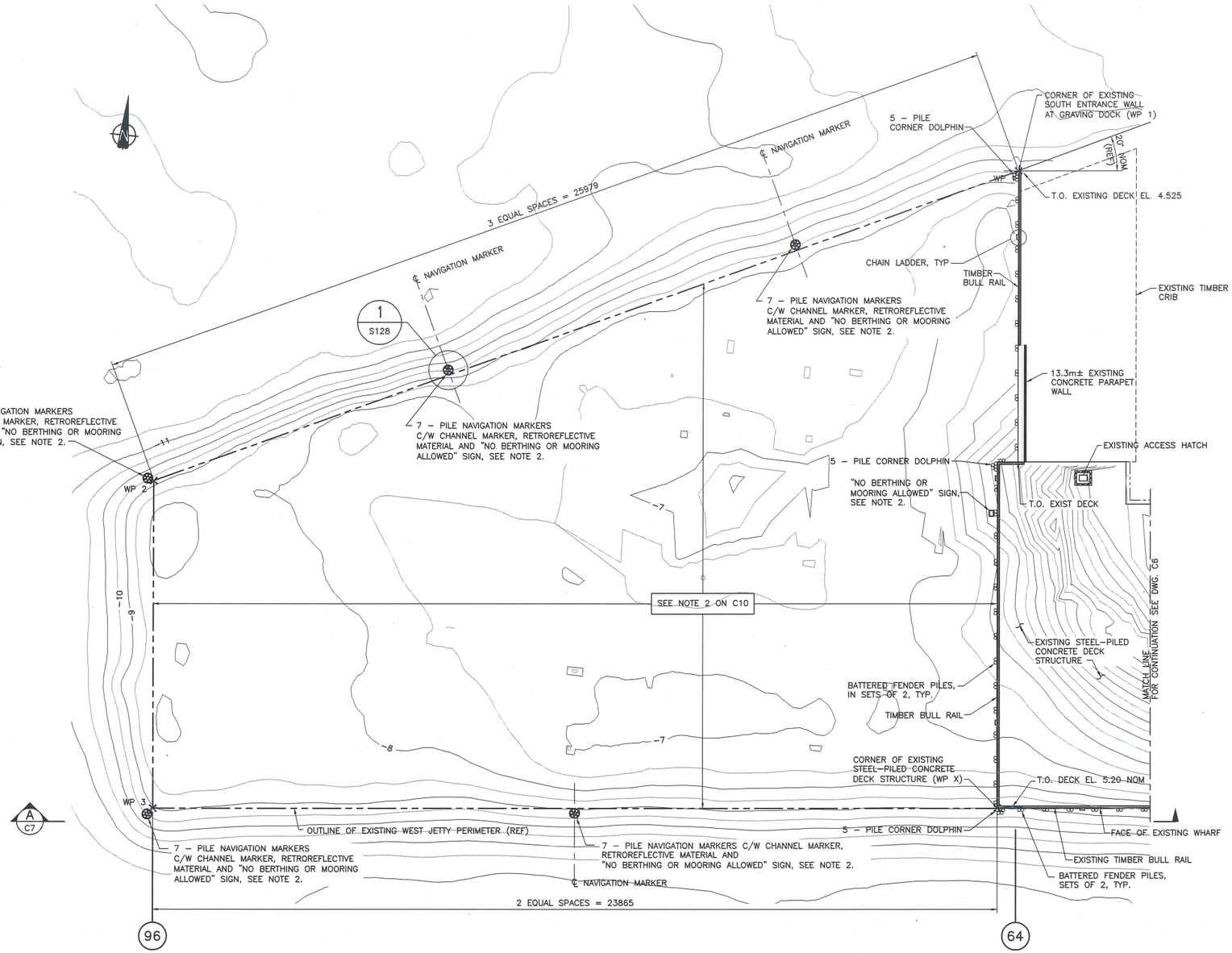

PLAN – WEST JETTY
1:250

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:

1. FOR EXISTING CONDITIONS SEE DRAWINGS D1 AND D2.
2. 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.

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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ANCHOR QEA

Klohn Crippen Berger

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G. B. A. COOPER
Dec 18/14

Revision/ 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

Drawn by/Dessine 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	Sheet/	Revision no./
R.018400.002	C5	0

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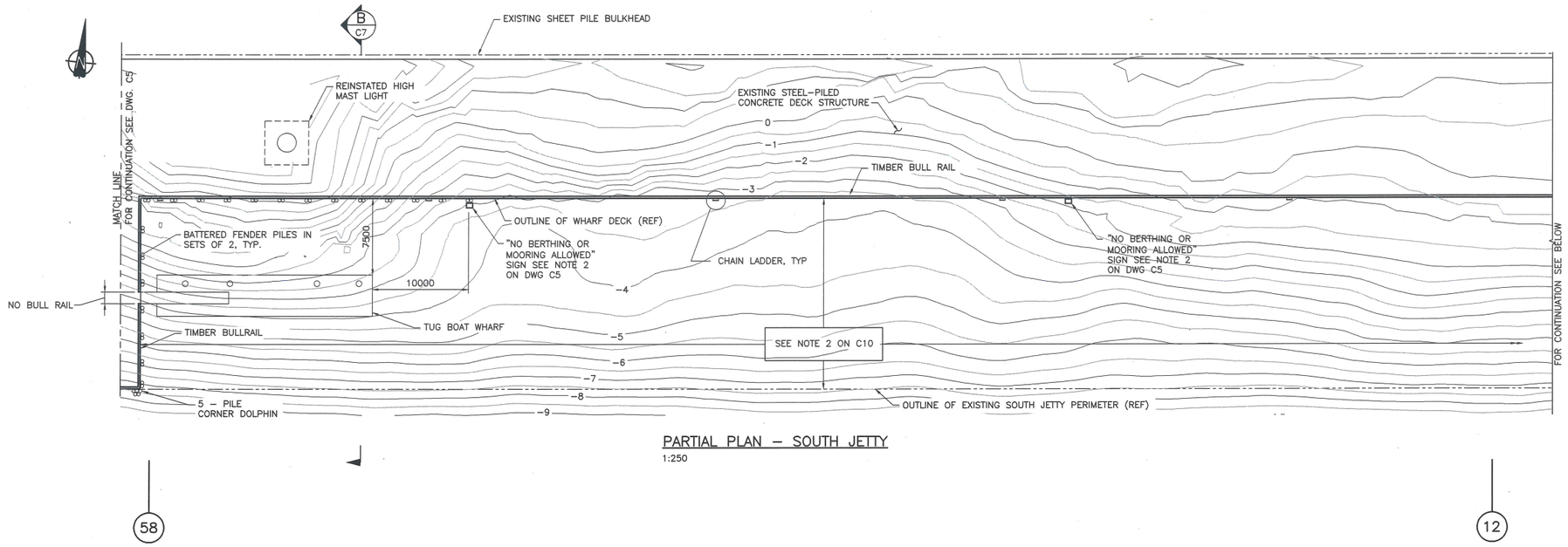
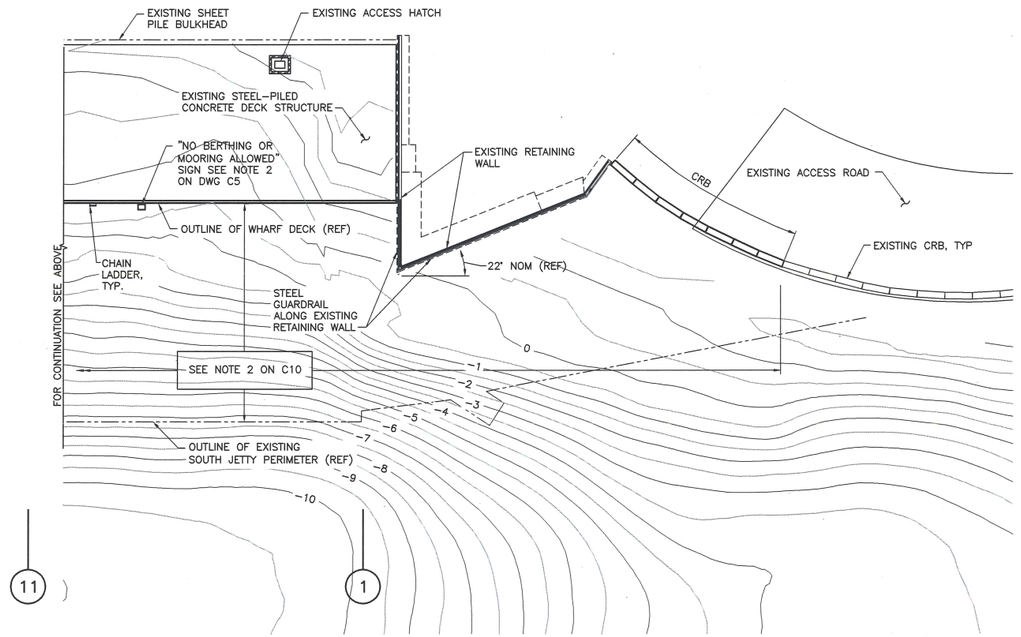


PARTIAL PLAN – SOUTH JETTY
1:250



PARTIAL PLAN – SOUTH JETTY
1:250

NOTES:

1. FOR EXISTING CONDITIONS SEE DRAWINGS D1 AND D2.

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Klohn Crippen Berger

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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/Dessine par
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PWGSC Project Manager/Administrateur de Projets TPSGC
ANDREW MYLLY

Regional Manager, Environmental Services
COLLIN KINGMAN

Drawing title/Titre du dessin
SOUTH JETTY GENERAL ARRANGEMENT PLAN

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	C6	0

PWGSC – A1 – 841X594

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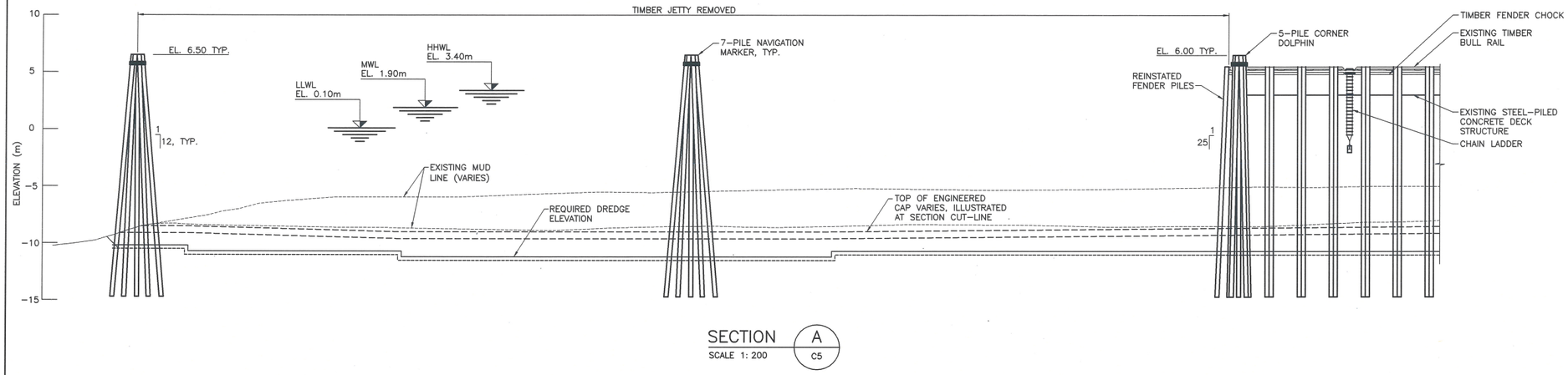
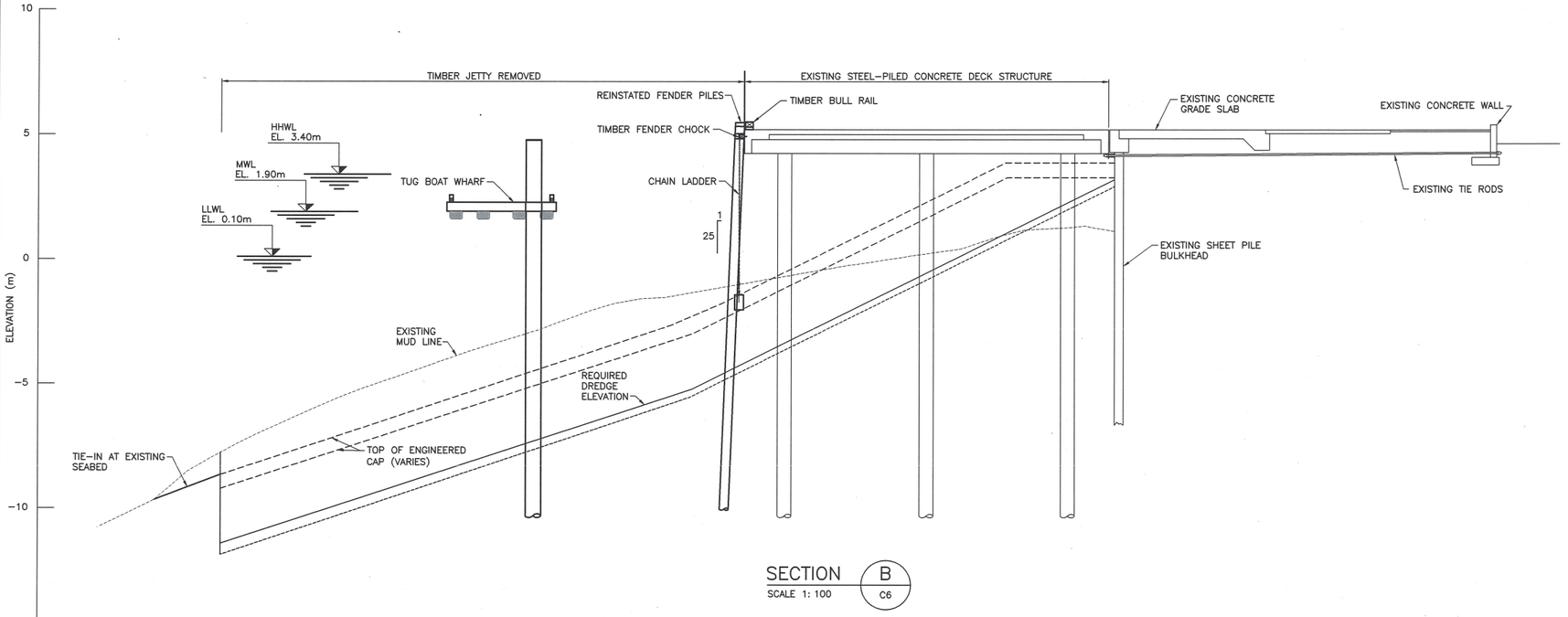


SECTION A
SCALE 1: 200
C5



SECTION B
SCALE 1: 100
C6

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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ANCHOR QEA

Klohn Crippen Berger

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G. B. A. COOPER
Dec 18/14.

Revision/ Revision/ Client/client	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/Dessine par
ARNIE RIST

PWGSC Project Manager/Administrateur de Projets TPSGC
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	Sheet/	Revision no./
R.018400.002	C7	0

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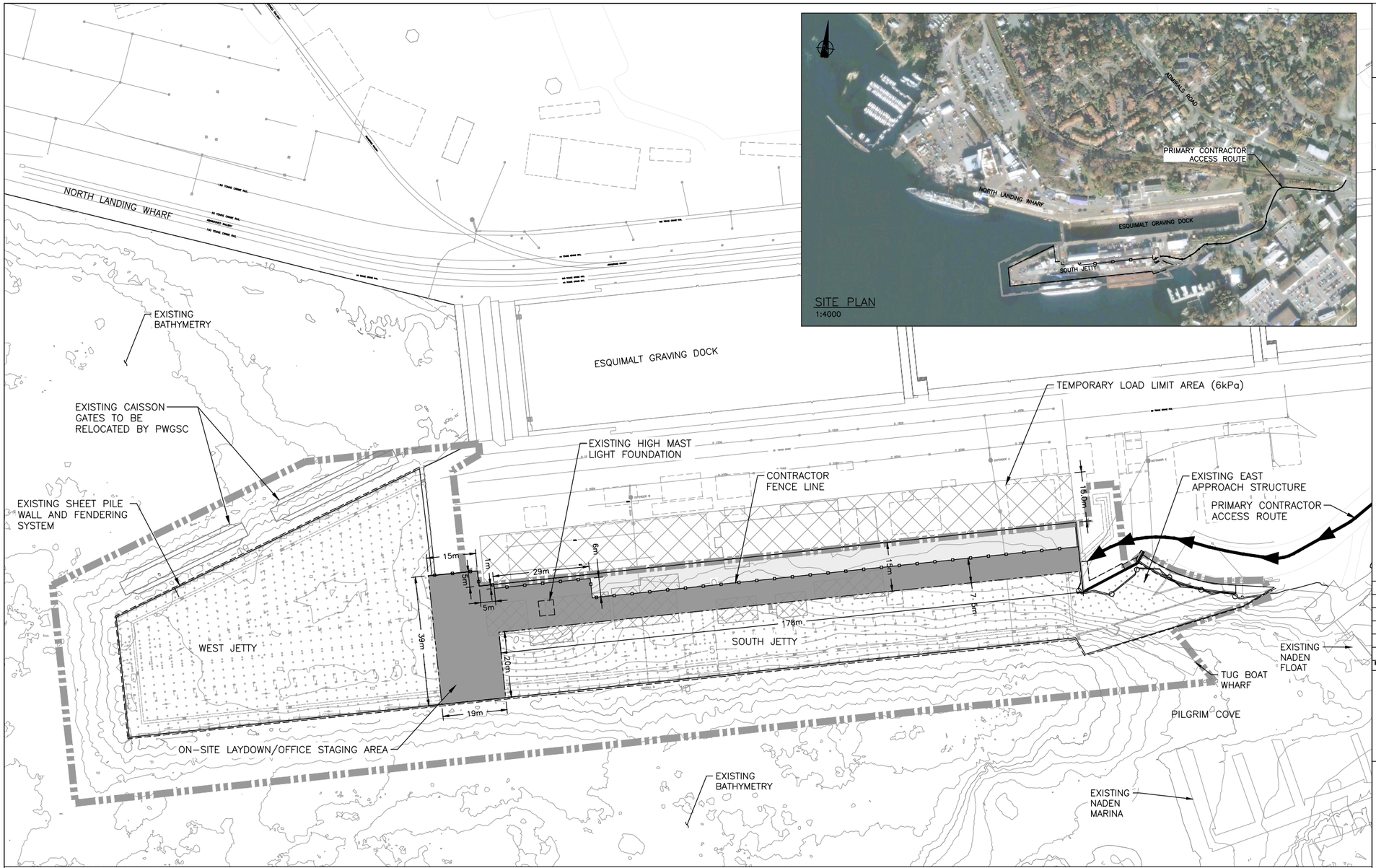

SITE PLAN
1:4000

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. BASE MAP FROM GOLDER, JANUARY 2012.
3. REFERENCE DWG C1 FOR DATUM INFORMATION.
4. STRUCTURE DETAILS FROM KLOHN CRIPPEN BERGER DECEMBER 2010 CONDITION INSPECTION REPORT FOR SOUTH JETTY PERIMETER.
5. SHEET PILE EXTENDS AROUND THE PERIMETER OF SOUTH JETTY. SEE SHEET PILE CONTRACT DRAWINGS ATTACHMENT IN THE APPENDICES.
6. CONTRACTOR TO CONFIRM LOCATIONS OF FIRE SPRINKLER OPENINGS AND CATWALK ACCESS HATCHES AND MAINTAIN ACCESS AT ALL TIMES.
7. EGD WORK SITE ALSO INCLUDES UPLAND AREAS OF THE EGD FACILITY AS SHOWN ON THE DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS.
8. 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.
9. ACCESS FROM WATER AS APPROVED BY QUEEN'S HARBOUR MASTER.
10. CONTRACTOR SHALL PROVIDE A 12.2–METRE BY 6.1–METRE (APPROXIMATELY 74m^2) AREA WITHIN THE CONTRACTOR STAGING AREA FOR THE DEPARTMENTAL REPRESENTATIVE'S CONSULTANT TEAM TRAILER AT THE REQUEST OF THE DEPARTMENTAL REPRESENTATIVE.
11. CONTRACTOR SHALL NOT OBSTRUCT BUILDING ACCESS ADJACENT TO THE CONTRACTOR ON–SITE STAGING AREA.

PLAN
SCALE 1: 600

SCALE : 1:600
0m 10 20 30 40 50m

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

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

ANCHOR QEA

Klohn Crippen Berger

MATTHEW W WOLTMAN
STATE OF WASHINGTON
42944
REGISTERED PROFESSIONAL ENGINEER
12/19/14

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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Drawn by/Dessine par
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Regional Manager, Environmental Services
COLLIN KINGMAN

Drawing title/Titre du dessin
CONTRACTOR'S WORK AREA AND SITE ACCESS

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

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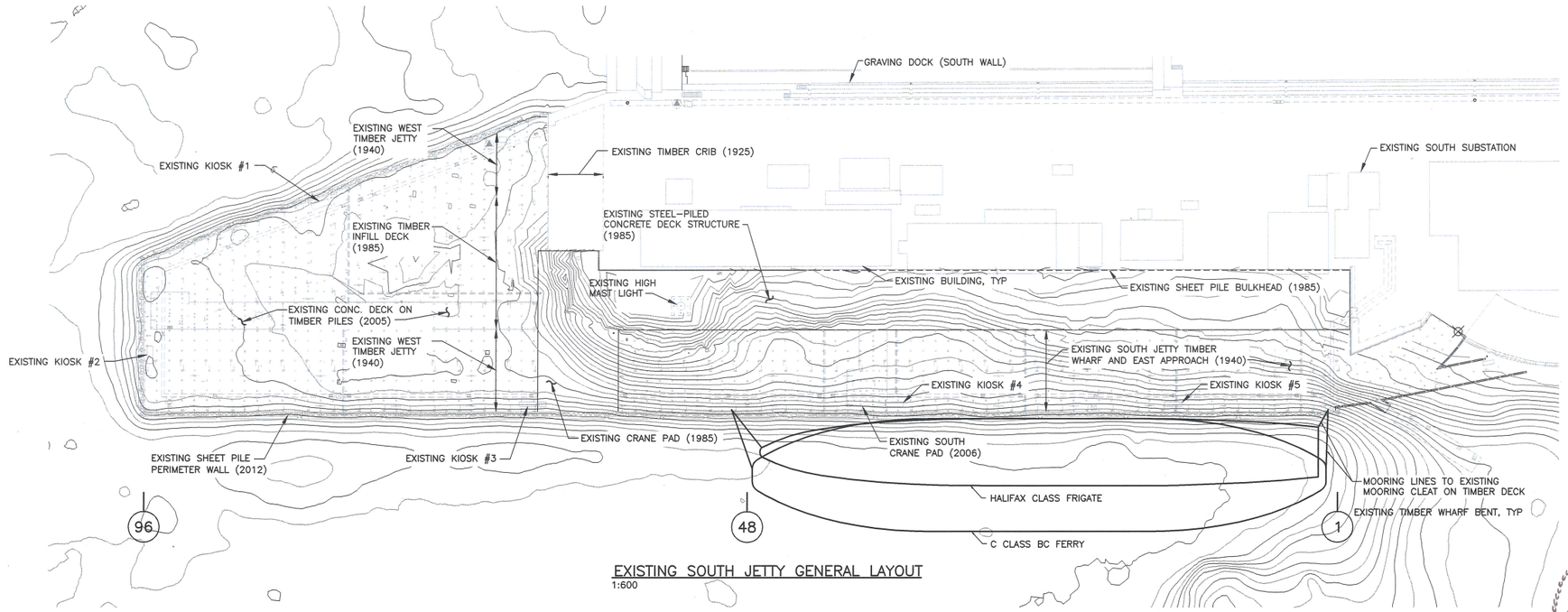
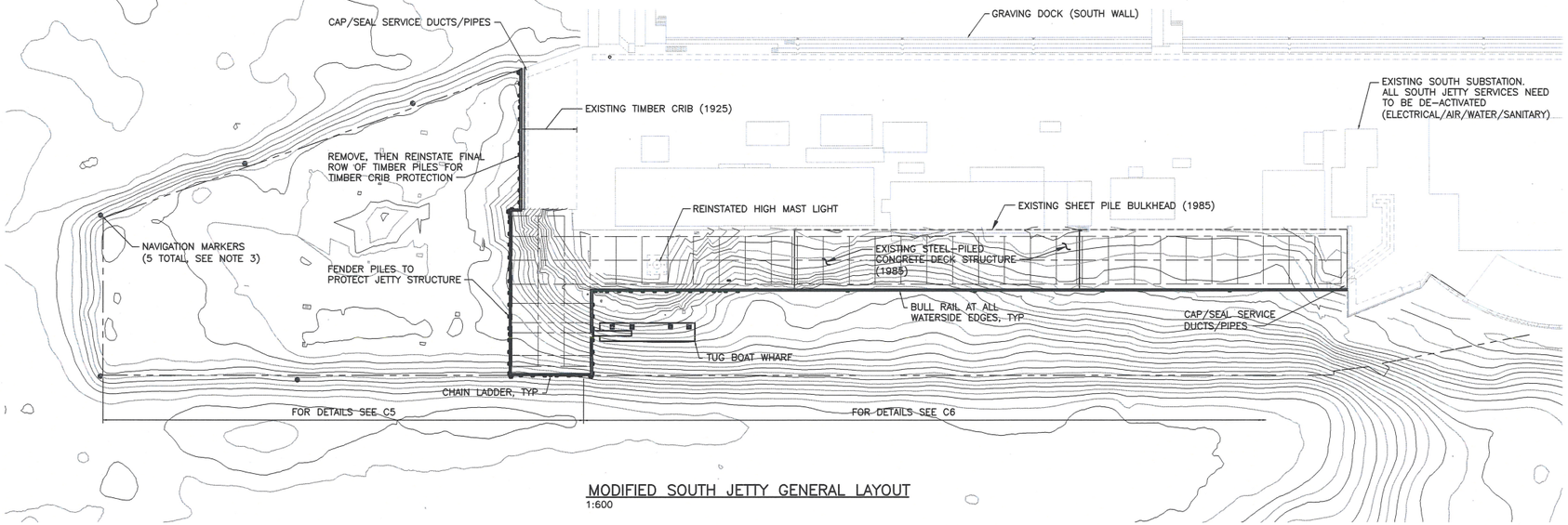


EXISTING SOUTH JETTY GENERAL LAYOUT
1:600



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.

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0 10 20 30 40 50 60 70 80 90 100mm

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Klohn Crippen Berger

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Revision/ Revision	Description/Description	Date/Date
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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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PWGSC 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

DM5XXXXXX

PHOTO C14–01 SOUTH JETTY SHEET PILE WALL – NOTE SMALL BOAT ACCESS OPENING

PHOTO C14–02 STEEL PILED CONCRETE DECK LOOKING EAST – NOTE TIMBER PILE REMNANTS AND LOWER SHEET PILING

PHOTO C14–03 STEEL PILED CONCRETE DECK LOOKING EAST – NOTE BATTER PILES AND TIMBER PILE REMNANTS

PHOTO C14–04 STEEL PILED CONCRETE DECK LOOKING WEST – NOTE CATHODIC PROTECTION CABLES AT SLAB SOFFIT

PHOTO C14–05 STEEL PILED CONCRETE DECK NEXT TO TIMBER PILED WEST JETTY – NOTE TIMBER FIRE STOP WALL AND CROSS–BRACING

PHOTO C14–06 PAINTED SHEET PILE BULKHEAD – NOTE CATHODIC PROTECTION AND REMNANTS OF LOWER SHEET PILING (TIDE APPROX. EL+1.0M)

PHOTO C14–07 REMNANTS OF LOWER SHEET PILING – NOTE SHEET PILED BULKHEAD IN BACKGROUND

PHOTO C14–08 STORMWATER OUTFALL AT SHEET PILE BULKHEAD

PHOTO C14–09 OPEN STEEL PIPE PILE UNDER STEEL PILED CONCRETE DECK – NOTE SAFETY RISK

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PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G. B. A. COOPER
Dec 18/14

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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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MIKE BRIDDEN

PWGSC Project Manager/Administrateur de Projets TPSGC
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COLLIN KINGMAN

Drawing title/Titre du dessin

PHOTOGRAPHS OF EXISTING CONDITIONS SHEET 1

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	C14	0

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

DM5XXXXXX

PHOTO C15–01 TIMBER PILED JETTY AT EAST APPROACH – NOTE RIPRAP FORESHORE SLOPE

PHOTO C15–02 TIMBER PILED JETTY – TYPICAL VIEW AT EAST APPROACH JETTY LOOKING WEST

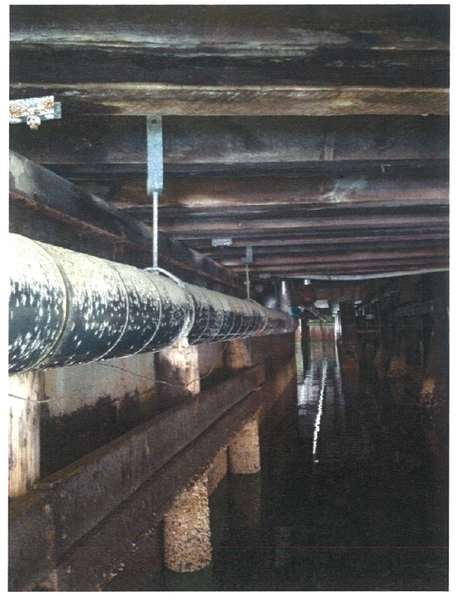

PHOTO C15–03 TIMBER PILED JETTY AT TIMBER CRIB LOOKING SOUTH – NOTE FENDERING AT FACE OF TIMBER CRIB

PHOTO C15–04 TIMBER PILED JETTY – TYPICAL VIEW LOOKING EAST (BEFORE SHEET PILE PERIMETER WALL WAS INSTALLED)

PHOTO C15–05 TIMBER PILED JETTY – VIEW AT EAST END FIRE STOP WALL AND CATWALK (BEFORE SHEET PILE PERIMETER WALL WAS INSTALLED)

PHOTO C15–06 TIMBER PILED JETTY AT INTERFACE WITH STEEL PILED DECK– NOTE RIPRAP ON FORESHORE AND MISCELLANEOUS CONCRETE FOOTINGS

PHOTO C15–07 TIMBER PILED JETTY – TYPICAL VIEW UNDER WEST CRANE PAD

PHOTO C15–08 TIMBER INFILL DECK CONSTRUCTION – NOTE CONDITION OF TIMBER AT THIS STRUCTURE

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PROFESSIONAL ENGINEER – PROVINCE OF BRITISH COLUMBIA – G. B. A. COOPER – Dec 18/14

Revision/ 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

Drawn by/Dessine par: MIKE BRIDDEN

PWGSC Project Manager/Administrateur de Projets TPSGC: ANDREW MYLLY

Regional Manager, Environmental Services: COLLIN KINGMAN

Drawing title/Titre du dessin

PHOTOGRAPHS OF EXISTING CONDITIONS SHEET 2

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	C15	0

PWGSC – A1 – 841X594

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DM5XXXXXX

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

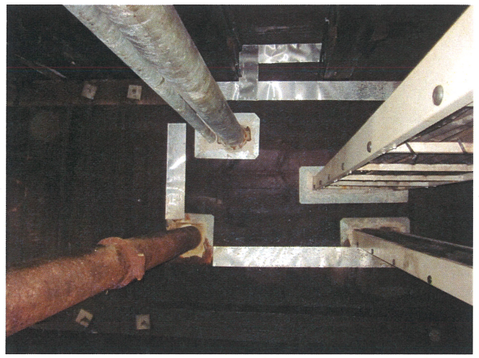

PHOTO C16–04 UNDER–PIER MECHANICAL AND ELECTRCIAL SERVICES AT TIMBER FIRE STOP WALL

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

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

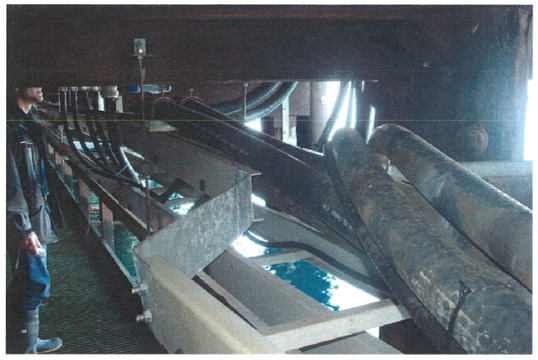

PHOTO C16–07 UNDER–PIER CATWALK AT KIOSK LOCATION – LOOKING EAST

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

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Klohn Crippen Berger

ANCHOR QEA

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G. B. A. COOPER
Dec 18/14.

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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/Dessine par
MIKE BRIDDEN

PWGSC Project Manager/Administrateur de Projets TPSGC
ANDREW MYLLY

Regional Manager, Environmental Services
COLLIN KINGMAN

Drawing title/Titre du dessin
PHOTOGRAPHS OF EXISTING CONDITIONS SHEET 3

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	C16	0

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

DM5XXXXXX

PHOTO C17–01 CABLE TRAY UNDER CONCRETE DECK LOOKING EAST FROM WEST TIMBER PILED JETTY (BEFORE SHEET PILE PERIMETER WALL WAS INSTALLED

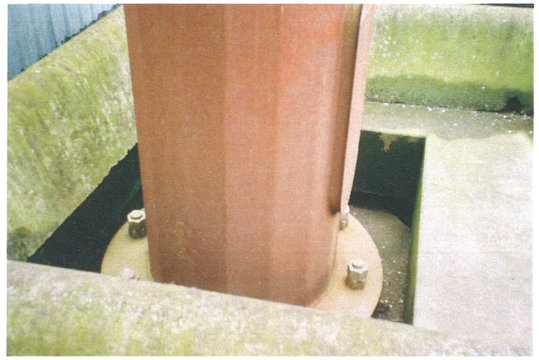

PHOTO C17–02 HIGH MAST LIGHT ABOVE STEEL PILED CONCRETE DECK – NOTE LIMITED SIZE OF DECK OPENING

PHOTO C17–03 HIGH MAST LIGHT FOUNDATION UNDER STEEL PILED CONCRETE DECK – NOTE TIMBER FORMS LEFT IN PLACE

PHOTO C17–04 FORESHORE FILL MOUND UNDER STEEL PILED CRANE PAD – LOOKING WEST

PHOTO C17–05 FORESHORE FILL MOUND UNDER STEEL PILED CRANE PAD – LOOKING NORTHWEST TOWARDS TIMBER CRIB

PHOTO C17–06 SOUTH FACE OF TIMBER CRIB AND RIPRAP FORESHORE SLOPE

PHOTO C17–07 FORESHORE RIPRAP DIRECTLY UNDER STEEL PILED CONCRETE DECK

PHOTO C17–08 FORESHORE FILL MOUND UNDER STEEL PILED CONCRETE DECK – NOTE STEEL WALER AT RIGHT AND SEVERELY LIMITED HEADROOM

PHOTO C17–09 DETAIL VIEW OF STEEL WALER AND ANCHOR AT PAINTED SHEET PILED BULKHEAD WALL

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

REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

Klohn Crippen Berger

ANCHOR QEA

PROFESSIONAL ENGINEER – PROVINCE OF BRITISH COLUMBIA – G. B. A. COOPER – Dec 18/14

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
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Drawing title/Titre du dessin

PHOTOGRAPHS OF EXISTING CONDITIONS SHEET 4

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	C17	0

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

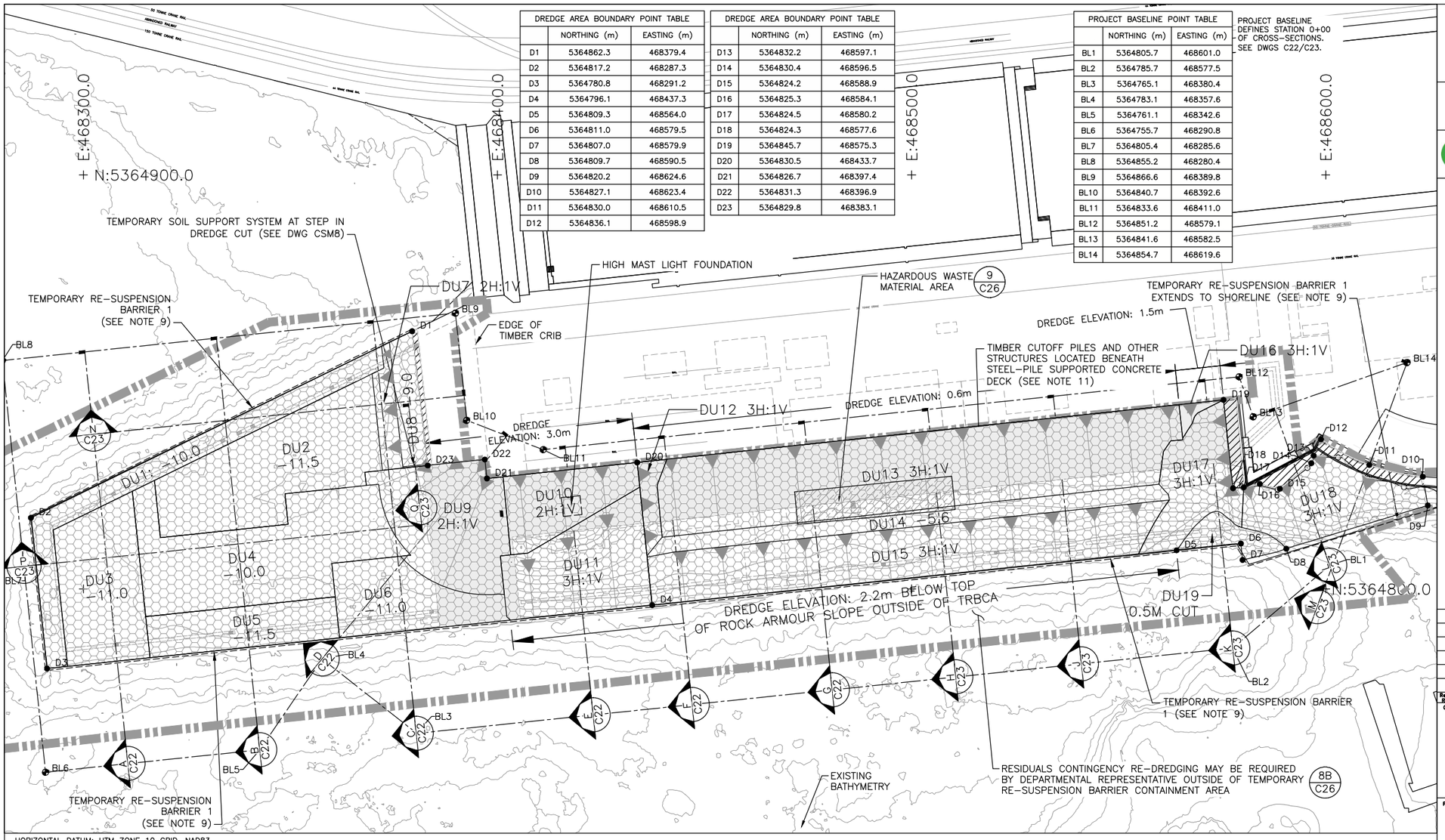
DM5XXXXXX

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		
	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 C22/C23.



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. CONTRACTOR SHALL ALSO COMPLETE PRE-CONSTRUCTION SURVEY TO MEET BATHYMETRY DATA COLLECTION REQUIREMENTS AS DESCRIBED IN SECTION 02 21 13 – SURVEYING AND POSITIONING CONTROL.
2. BASE MAP FROM GOLDER, JANUARY 2012.
3. DEBRIS AND STRUCTURE DETAILS FROM KLOHN CRIPPEN BERGER DECEMBER 2010 CONDITION INSPECTION REPORT FOR SOUTH JETTY PERIMETER, NADEN FLOATS, AND CFSA FLOATS.
4. REFERENCE DWG C1 FOR DATUM INFORMATION.
5. EGD WORK SITE ALSO INCLUDES UPLAND AREAS OF THE EGD FACILITY AS SHOWN ON THE DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS.
6. CONTRACTOR SHALL COMPLETE DREDGING ACTIVITIES ACCORDING TO SEQUENCING REQUIREMENTS SHOWN ON DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS.
7. 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.
8. DREDGE SURFACE 0.5m WITHIN HAZARDOUS WASTE AREA (DU13) AND DISPOSE OF MATERIAL AS HAZARDOUS WASTE. PWGSC 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.
9. 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.
10. 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.
11. 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.
12. 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.

DREDGE PLAN

SCALE 1: 500

SCALE : 1:500
0m 10 20 30 40 50m

LEGEND:

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

PWGSC – A1 – B41X594

0 10 20 30 40 50 60 70 80 90 100mm

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

REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

ANCHOR QEA

Klohn Crippen Berger

MATTHEW W WOLTMAN
STATE OF WASHINGTON
42344
REGISTERED PROFESSIONAL ENGINEER
12/9/14

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

PWGSC Project Manager/Administrateur de Projets TPSGC: ANDREW MYLLY

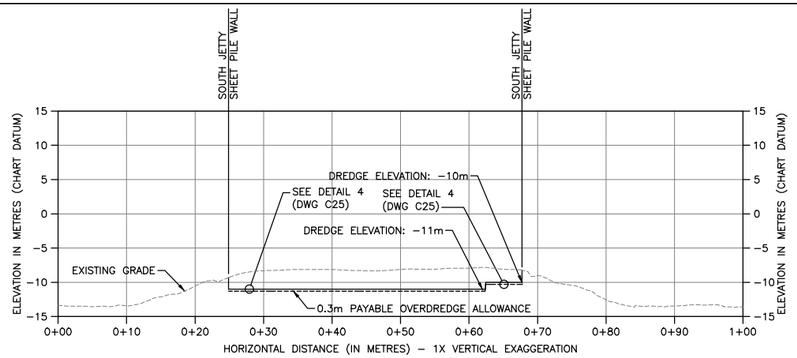
Regional Manager, Environmental Services: COLLIN KINGMAN

Drawing title/Titre du dessin

REQUIRED DREDGE PLAN

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	C21	0

DMSXXXXXX



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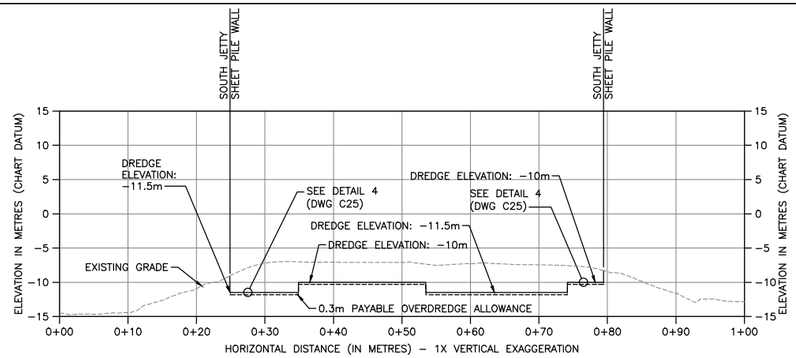

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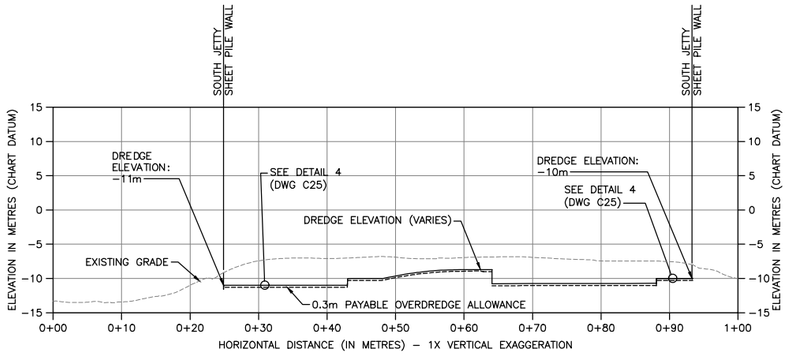

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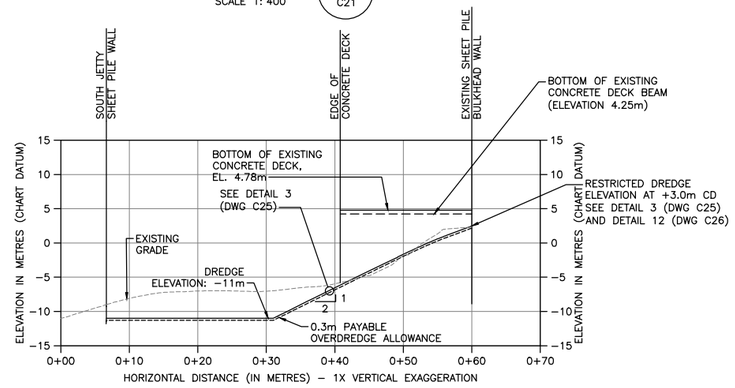

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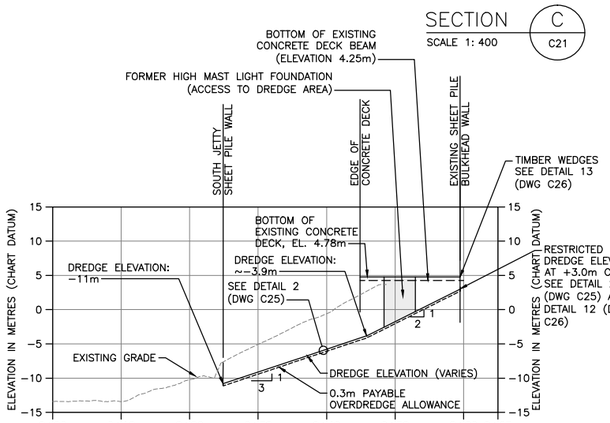

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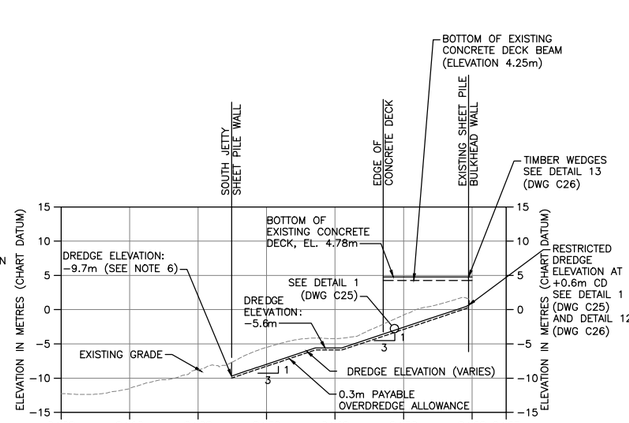

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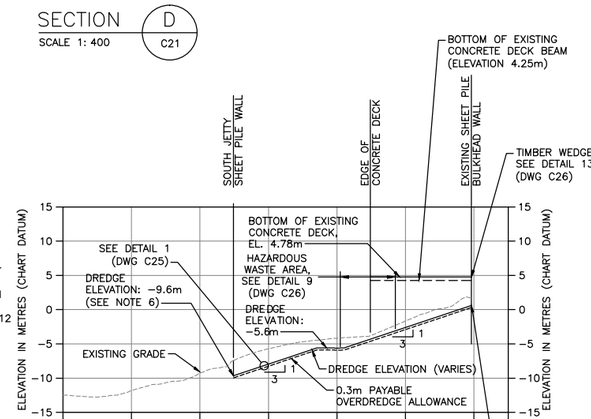
SCALE 1: 400 C21



SECTION G
SCALE 1: 400 C21

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

NOTES:

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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

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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

REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

ANCHOR QEA

Klohn Crippen Berger

MATTHEW W WOLTMAN — STATE OF WASHINGTON — 42344 — REGISTERED PROFESSIONAL ENGINEER — 12/19/14

Revision/ Revision	Description/Description	Date/Date
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ESQUIMALT GRAVING DOCK WATERLOT PHASE 2 SOUTH JETTY UNDER-PIER SEDIMENT REMEDIATION

Consultant Signature Only

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Drawn by/Dessine 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 1

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	C22	0

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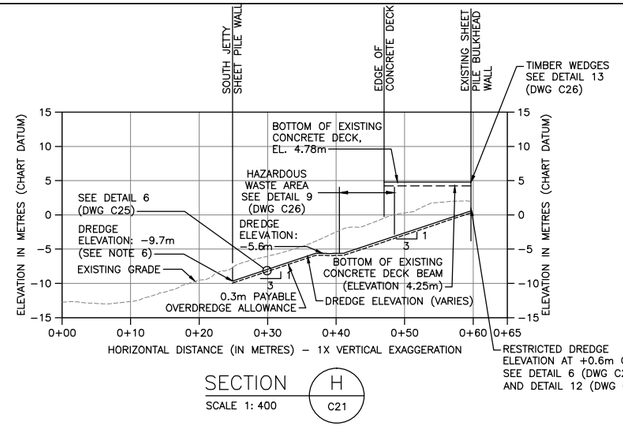

SECTION H
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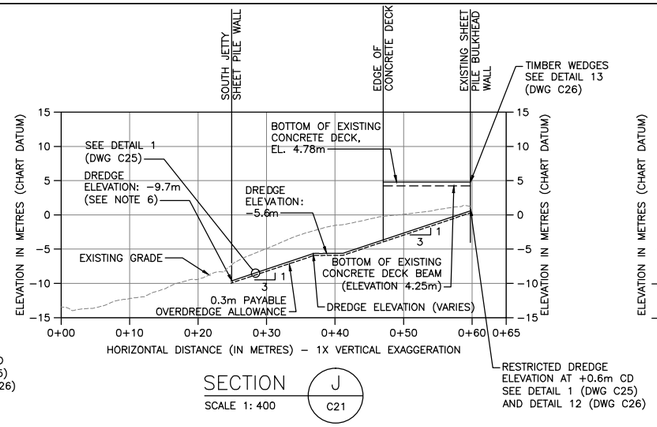

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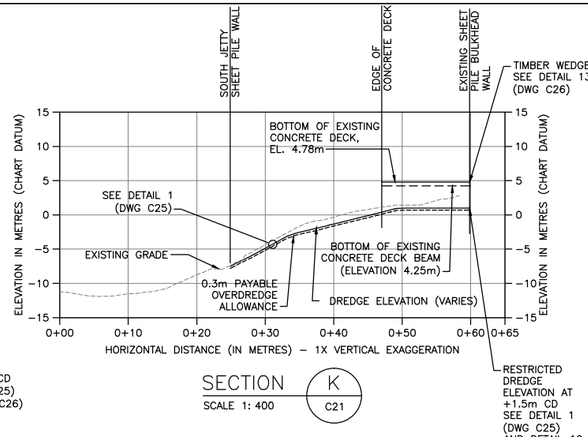

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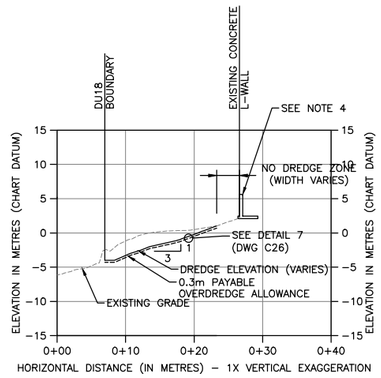

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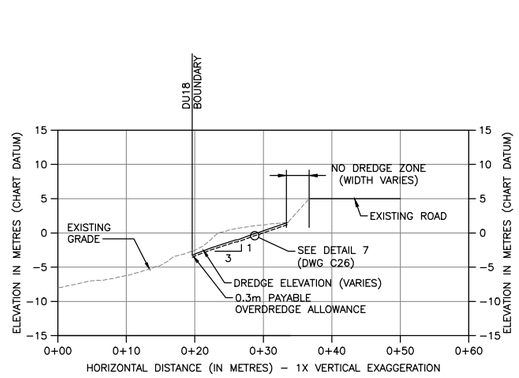

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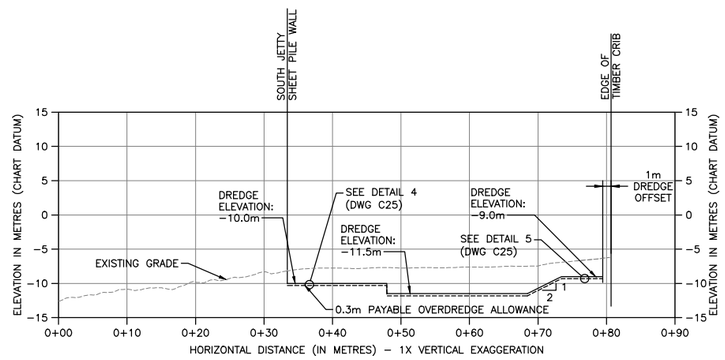

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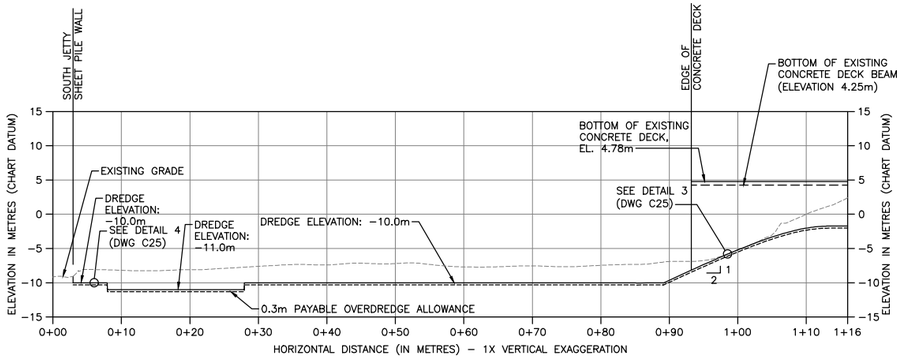

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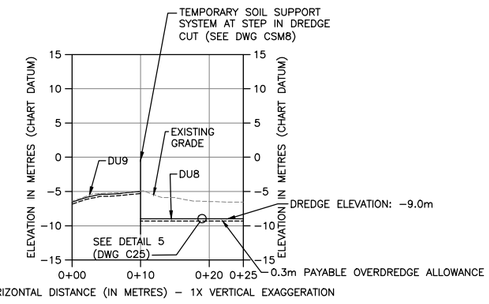

SECTION Q
SCALE 1: 400
C21

CROSS SECTIONS
SCALE 1: 400

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

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PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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ANCHOR QEA

Klohn Crippen Berger

MATTHEW W WOLTMAN
STATE OF WASHINGTON
42344
REGISTERED PROFESSIONAL ENGINEER
12/19/14

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Drawn by/Dessine par
CHRIS HEWETT

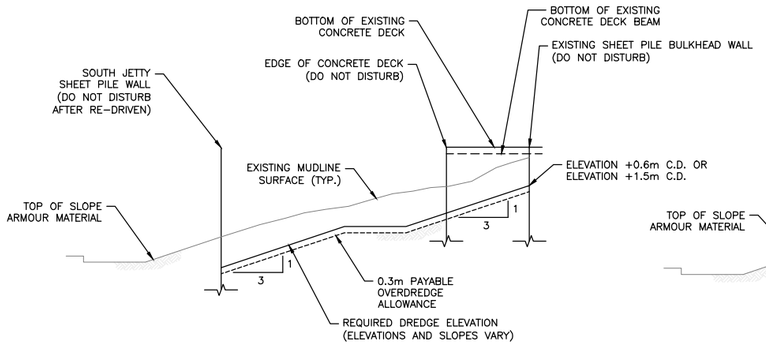
PWGSC Project Manager/Administrateur de Projets TPSGC
ANDREW MYLLY

Regional Manager, Environmental Services
COLLIN KINGMAN

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

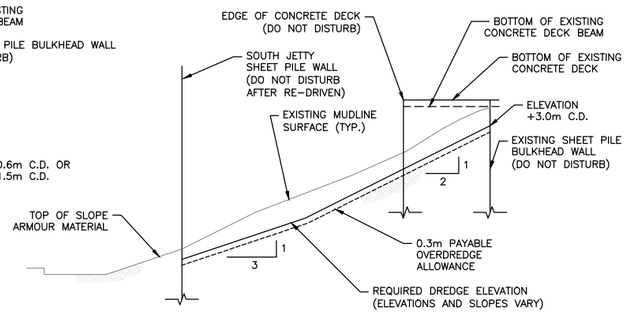
Project No./No. du projet	Sheet/	Revision no./
R.018400.002	C23	0

DMSXXXXXX



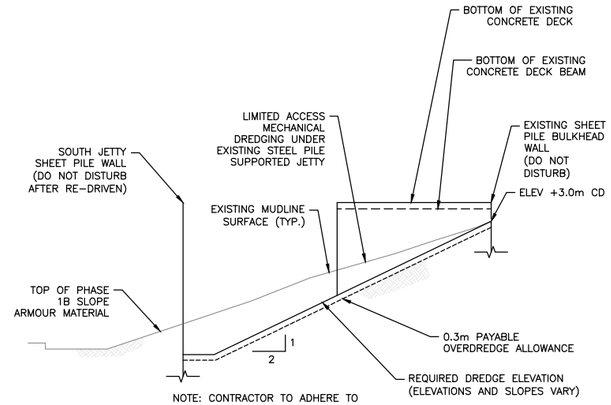
NOTE: CONTRACTOR TO ADHERE TO RESTRICTED ELEVATION REQUIREMENTS WHEN COMPLETING DREDGE ACTIVITIES ADJACENT TO BULKHEADS

DETAIL 1 — NOT TO SCALE — C22/C23



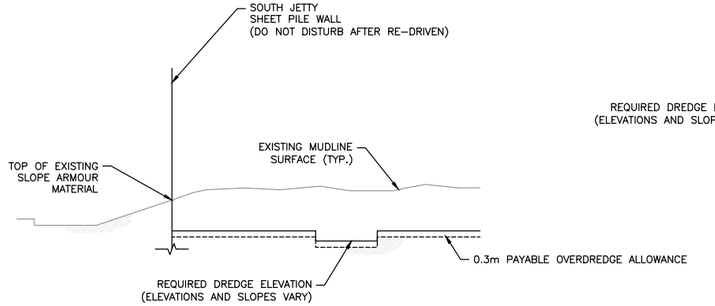
NOTE: CONTRACTOR TO ADHERE TO RESTRICTED ELEVATION REQUIREMENTS WHEN COMPLETING DREDGE ACTIVITIES ADJACENT TO BULKHEADS

DETAIL 2 — NOT TO SCALE — C22

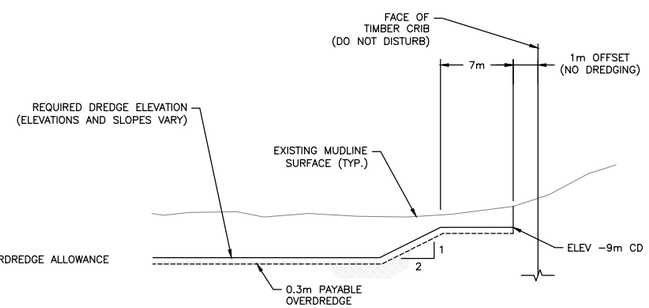


NOTE: CONTRACTOR TO ADHERE TO RESTRICTED ELEVATION REQUIREMENTS WHEN COMPLETING DREDGE ACTIVITIES ADJACENT TO BULKHEADS

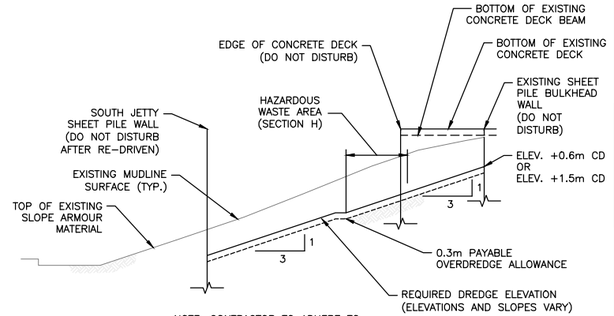
DETAIL 3 — NOT TO SCALE — C22/C23



DETAIL 4 — NOT TO SCALE — C22/C23



DETAIL 5 — NOT TO SCALE — C23



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

DETAIL 6 — NOT TO SCALE — C23

NOTES:

1. EXISTING TIMBER-PILED STRUCTURE NOT SHOWN FOR CLARITY.
2. 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.

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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Pacific Region
SERVICES IMMOBILIERS

ANCHOR QEA

Klohn Crippen Berger

MATTHEW W WOLTMAN — STATE OF WASHINGTON — 42344 — REGISTERED PROFESSIONAL ENGINEER — 12/19/14

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

PWGSC Project Manager/Administrateur de Projets TPSGC
ANDREW MYLLY

Regional Manager, Environmental Services
COLLIN KINGMAN

Drawing title/Titre du dessin
DREDGE DETAILS - SHEET 1

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

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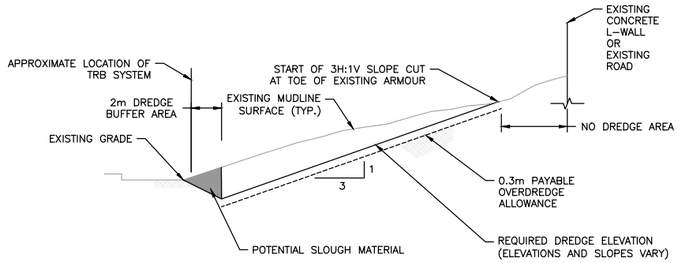

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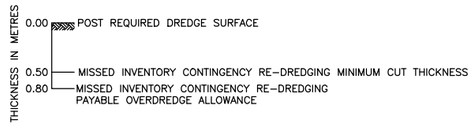
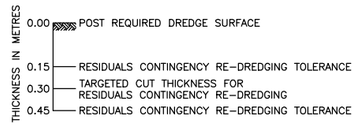


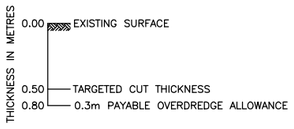
CONTINGENCY RE-DREDGE – MISSED INVENTORY

DETAIL 8A — NOT TO SCALE — C21



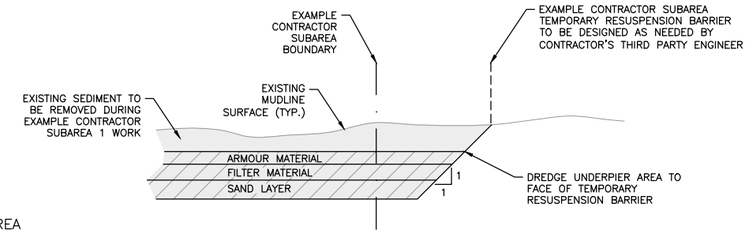
CONTINGENCY RE-DREDGE – RESIDUALS

DETAIL 8B — NOT TO SCALE — C21



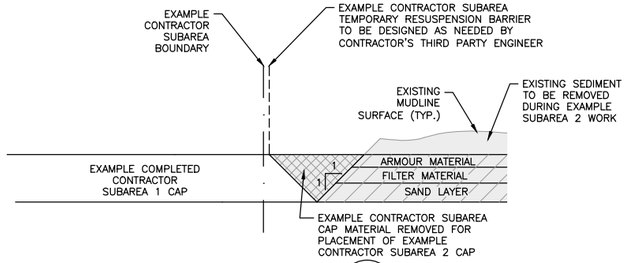
TARGETED CUT THICKNESS FOR HAZARDOUS WASTE AREA

DETAIL 9 — NOT TO SCALE — C21/C22/C23



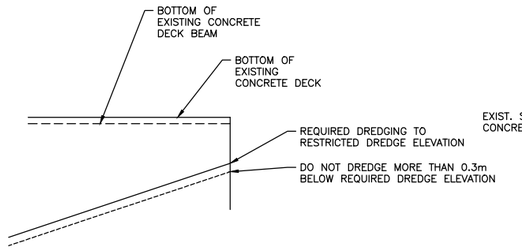
DETAIL (EXAMPLE) 10 — NOT TO SCALE

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

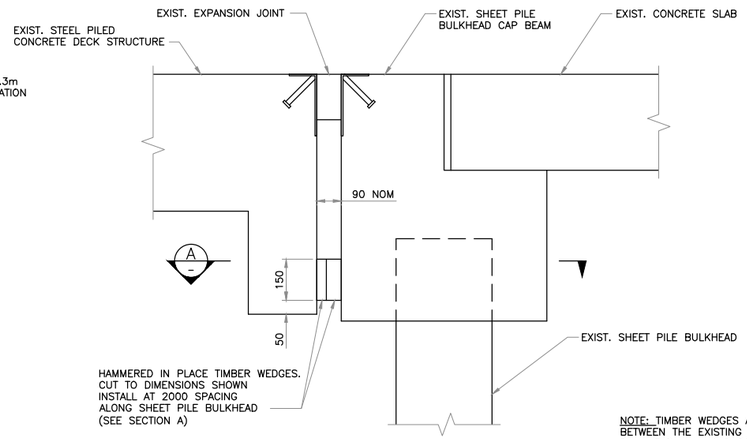


DETAIL (EXAMPLE) 11 — NOT TO SCALE

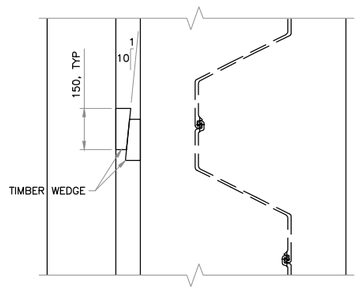
NOTE: DETAIL 10 AND 11 SHOW EXAMPLE CONTRACTOR SUBAREA TRANSITION AREA.



DETAIL 12 — NOT TO SCALE — C22/C23



DETAIL 13 — SCALE 1: 10 — C22/C23



SECTION A — SCALE 1: 10

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.

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.
3. CONTRACTOR SUBAREAS 1 AND 2 ARE FOR EXAMPLE PURPOSES ONLY AND ARE NOT DEFINED LOCATIONS.

0 10 20 30 40 50 60 70 80 90 100mm

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Klohn Crippen Berger

MATTHEW W WOLTMAN
STATE OF WASHINGTON
42344
REGISTERED PROFESSIONAL ENGINEER
12/19/14

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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/Dessine par: CHRIS HEWETT

PWGSC Project Manager/Administrateur de Projets TPSGC: ANDREW MYLLY

Regional Manager, Environmental Services: COLLIN KINGMAN

Drawing title/Titre du dessin

DREDGE DETAILS - SHEET 2

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	C26	0

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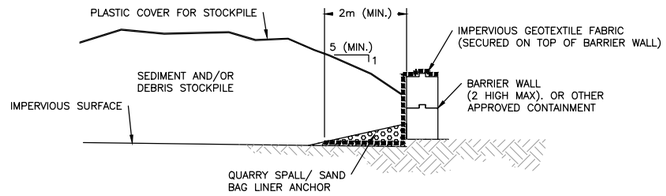
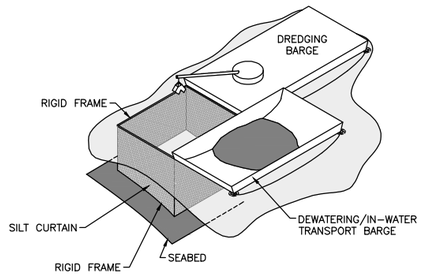
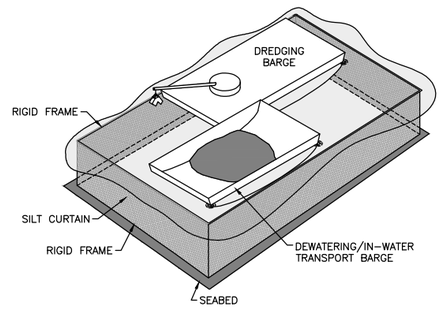


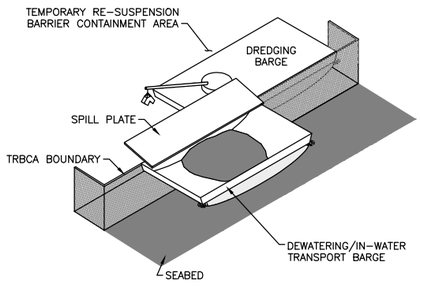
EXAMPLE STOCKPILE CONTAINMENT (NOT TO SCALE)



EXAMPLE ADDITIONAL TRB ARRANGEMENT #1 FOR MATERIAL TRANSFER (DREDGE BARGE TO MATERIAL BARGE): TRB AFFIXED TO DREDGE BARGE; DREDGE BARGE AND MATERIAL BARGE LOCATED WITHIN THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA
(NOT TO SCALE)



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)



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)

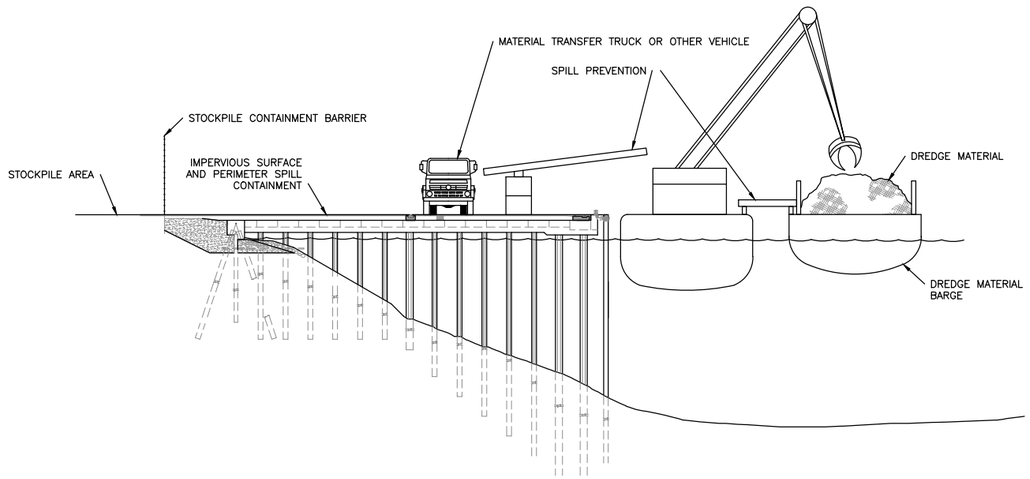


DIAGRAM 1: EXAMPLE OF OFFLOADING OPERATIONAL CONTROLS

PHOTO 1: EXAMPLE OF OFFLOADING OPERATIONAL CONTROLS

PHOTO 2: EXAMPLE OF OFFLOADING OPERATIONAL CONTROLS

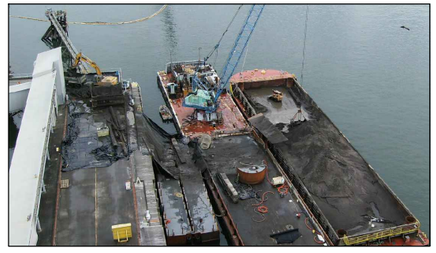


PHOTO 3: EXAMPLE OF OFFLOADING TO TRUCKS OPERATIONAL CONTROLS

EXAMPLE OFFLOAD FACILITY CONTROLS

NOTES:

1. 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.
2. 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.
3. PLACEMENT OF SEDIMENT NO MORE THAN 1.5 METRE HIGH IMMEDIATELY AGAINST BARRIER WALL IS A TYPICAL STANDARD OF PRACTICE IN STOCKPILE CONTAINMENT.
4. MAINTAINING A SLOPE NO STEEPER THAN 5H:1V ADJACENT TO A BARRIER WALL IS A TYPICAL STANDARD OF PRACTICE IN STOCKPILE CONTAINMENT.
5. 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.
6. CONTRACTOR SHALL CLEAN OFFLOAD FACILITY DAILY.
7. 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.
8. CONTRACTOR SHALL SUBMIT STOCKPILE CONTAINMENT DESIGN DETAILS TO THE DEPARTMENTAL REPRESENTATIVE FOR REVIEW.
9. BUCKET SWING RADIUS SHOULD NOT EXTEND PAST SPILL PREVENTION FEATURES.

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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
MATT WOLTMAN

Drawn by/Dessine par
CHRIS HEWETT

PWGSC 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

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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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.

E:468300.0
E:468400.0
E:468500.0
E:468600
N:5364900.0
N:5364800.0

TEMPORARY RE-SUSPENSION BARRIER 1 (SEE NOTE 6)

FOR CAP TRANSITION SEE DETAIL 28 (DWG C33)

TEMPORARY RE-SUSPENSION BARRIER 1 EXTENDS TO SHORELINE (SEE NOTE 6)

TEMPORARY RE-SUSPENSION BARRIER 1 (SEE NOTE 6)

EXISTING BATHYMETRY

TEMPORARY RE-SUSPENSION BARRIER 1 (SEE NOTE 6)

POTENTIAL RESIDUALS MANAGEMENT COVER MATERIAL WITHIN EGD WORK SITE AND OUTSIDE OF THE TEMPORARY RE-SUSPENSION BARRIER CONTAINMENT AREA (27 C33)

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. FOLLOWING COMPLETION OF PHASE 1B WORK.
2. BASE MAP FROM GOLDER, JANUARY 2012.
3. STRUCTURE DETAILS FROM KLOHN CRIPPEN BERGER DECEMBER 2010 CONDITION INSPECTION REPORT FOR SOUTH JETTY PERIMETER, NADEN FLOATS, AND CFSA FLOATS.
4. REFERENCE DWG C1 FOR DATUM INFORMATION.
5. REFER TO TECHNICAL SPECIFICATIONS REGARDING WORK SEQUENCING AND REMEDIATION ZONES.
6. 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
SCALE 1: 500
SCALE : 1:500
0m 10 20 30 40 50m

- BASE LINE CONTROL POINT
- CAPPING AREA CONTROL POINT
- IMPERMEABLE GEOSYNTHETIC MATERIAL

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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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: MATT WOLTMAN

Drawn by/Dessine 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	Sheet/	Revision no./
R.018400.002	C28	0

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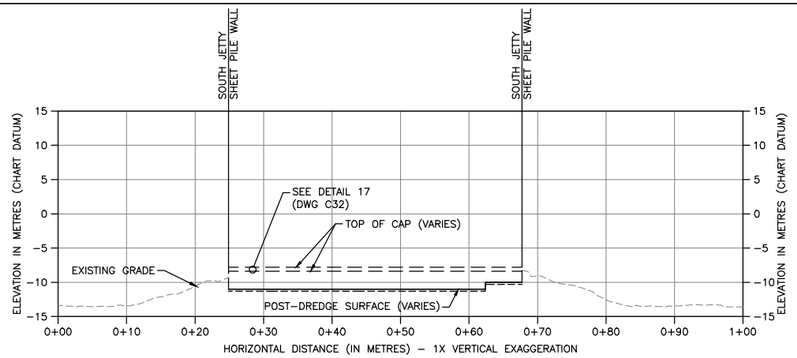
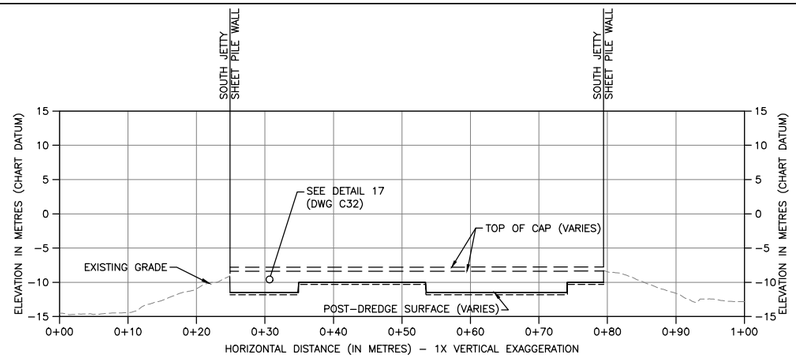
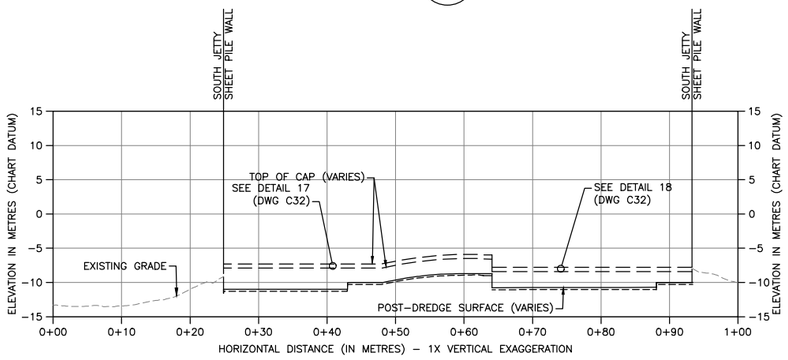


SECTION A
SCALE 1: 400 C28



SECTION B
SCALE 1: 400 C28



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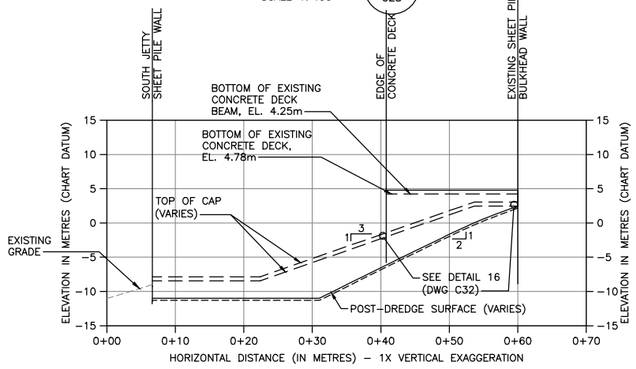

SECTION D
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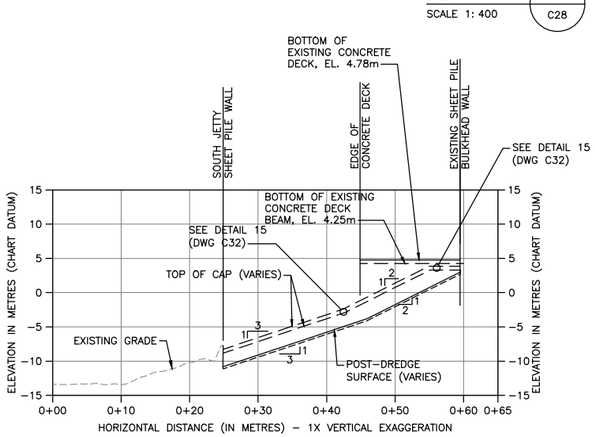

SECTION E
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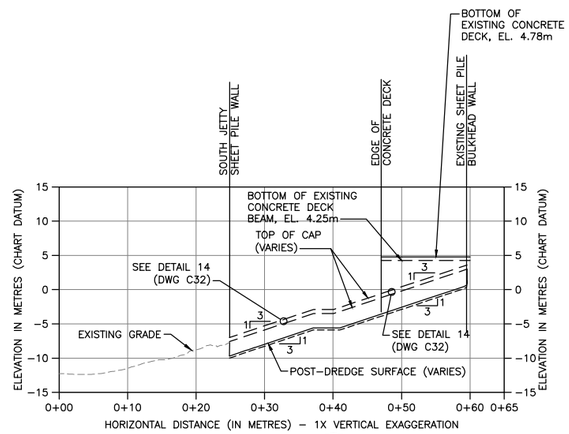
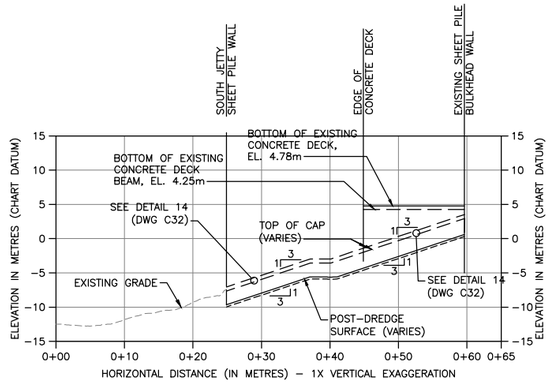


SECTION F
SCALE 1: 400 C28



SECTION G
SCALE 1: 400 C28

CROSS SECTIONS

SCALE 1: 400

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.

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada
REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

ANCHOR QEA

Klohn Crippen Berger

MATTHEW W WOLTMAN
STATE OF WASHINGTON
42344
REGISTERED PROFESSIONAL ENGINEER
12/19/14

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

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	Sheet/	Revision no./
R.018400.002	C29	0

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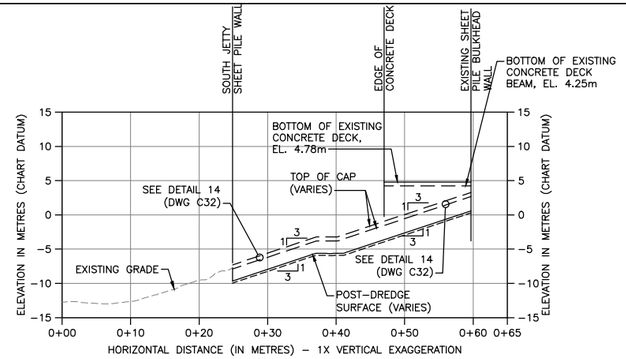

SECTION H
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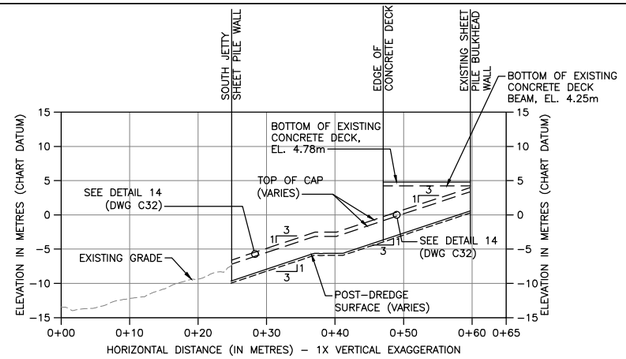
C28



SECTION J
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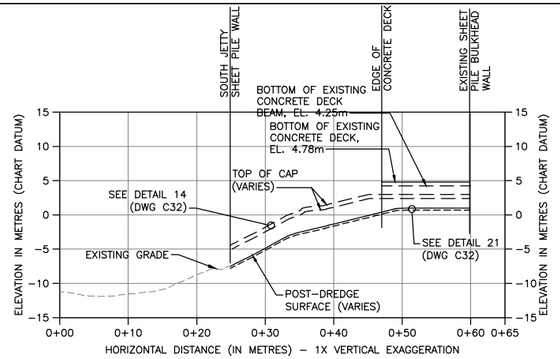
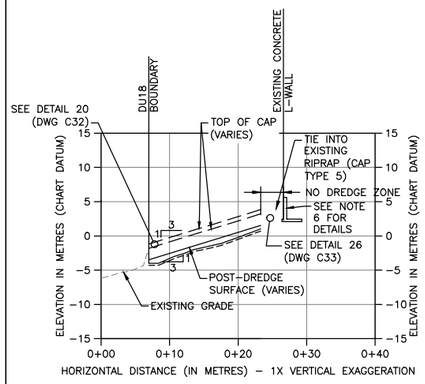
C28



SECTION K
SCALE 1: 400
C28



SECTION L
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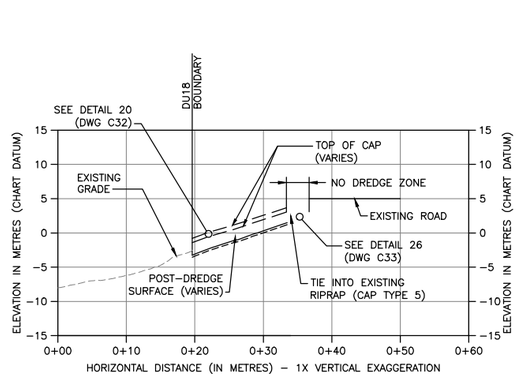

SECTION M
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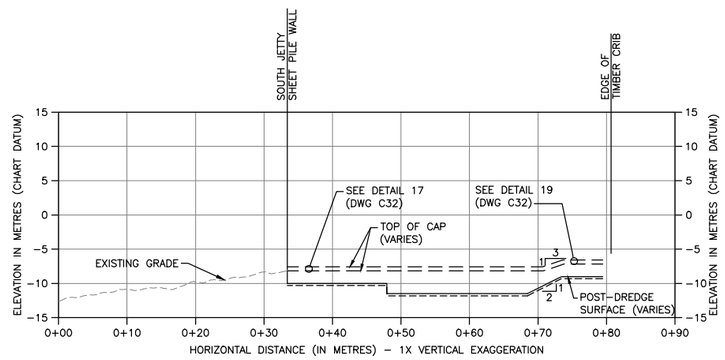

SECTION N
SCALE 1: 400
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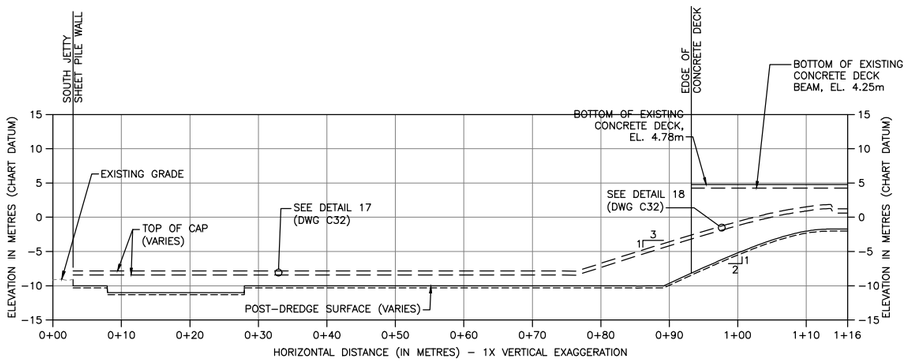

SECTION P
SCALE 1: 400
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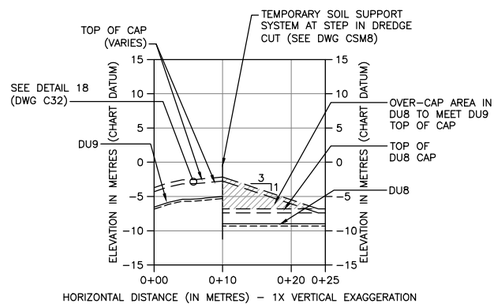

SECTION Q
SCALE 1: 400
C28

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 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.

CROSS SECTIONS
SCALE 1: 400

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada
REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

ANCHOR QEA

Klohn Crippen Berger

MATTHEW W WOLTMAN
STATE OF WASHINGTON
42344
REGISTERED PROFESSIONAL ENGINEER
12/19/14

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

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 2

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	C30	0

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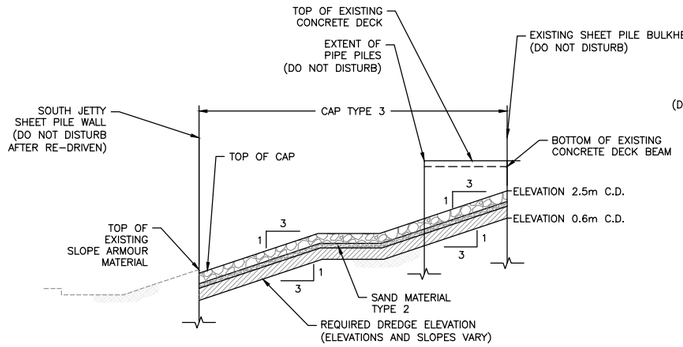
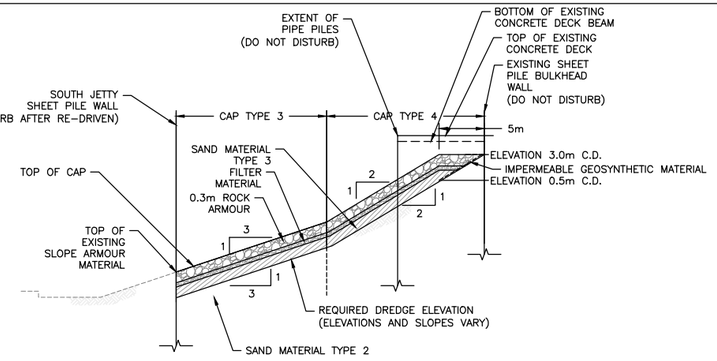


DETAIL 14 — NOT TO SCALE — C29/C30

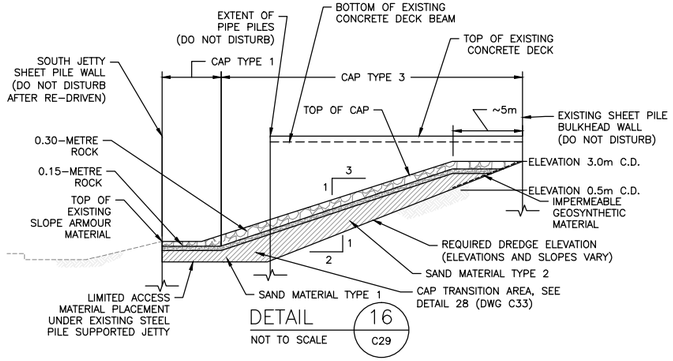
TYPE 3 ENGINEERED CAP



DETAIL 15 — NOT TO SCALE — C29

TYPE 3 AND TYPE 4 ENGINEERED CAP AND IMPERMEABLE GEOSYNTHETIC MATERIAL

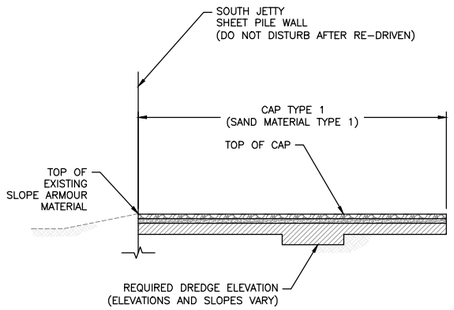
NOTE: IMPERMEABLE GEOSYNTHETIC MATERIAL REQUIRED FOR CAP TYPE 4 WHERE SAND MATERIAL TYPE 3 HAS A THICKNESS OF LESS THAN 1.0m NEAR EXISTING SHEET PILE BULKHEAD WALL.



DETAIL 16 — NOT TO SCALE — C29

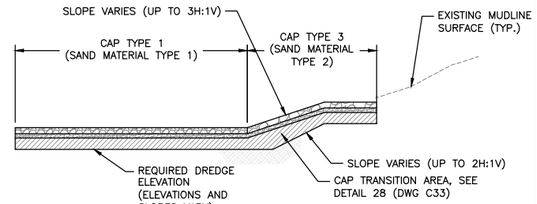
TYPE 1 AND TYPE 3 ENGINEERED CAP

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.



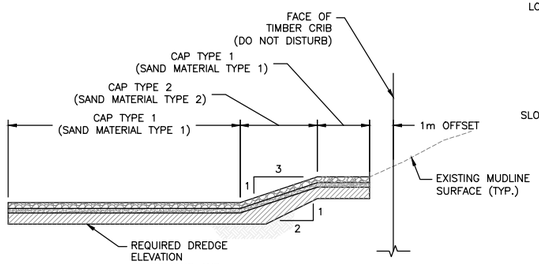
DETAIL 17 — NOT TO SCALE — C29/C30

TYPE 1 ENGINEERED CAP



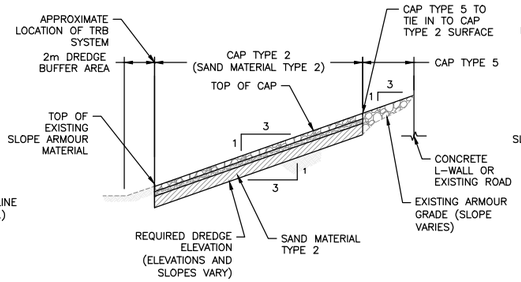
DETAIL 18 — NOT TO SCALE — C29/C30

TYPE 1 AND TYPE 3 ENGINEERED CAP



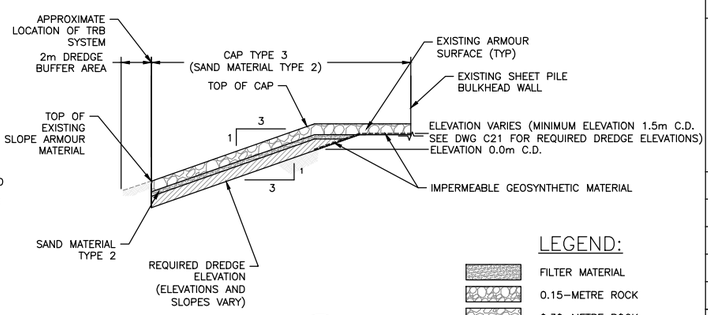
DETAIL 19 — NOT TO SCALE — C30

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.

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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

REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

ANCHOR QEA

Klohn Crippen Berger

MATTHEW W WOLTMAN — STATE OF WASHINGTON — 42344 — REGISTERED PROFESSIONAL ENGINEER — 12/19/14

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

PWGSC Project Manager/Administrateur de Projets TPSGC: ANDREW MYLLY

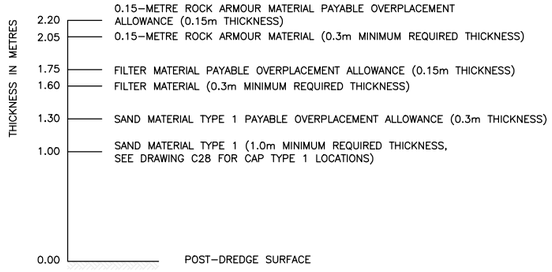
Regional Manager, Environmental Services: COLLIN KINGMAN

Drawing title/Titre du dessin

ENGINEERED CAPPING DETAILS - SHEET 1

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

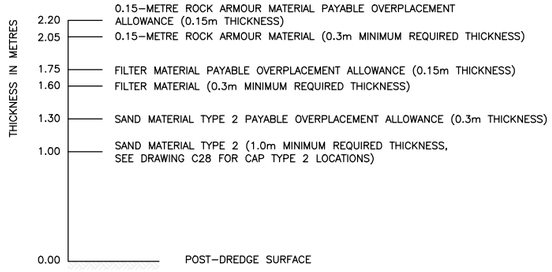
DMSXXXXXX



TYPE 1 ENGINEERED CAP: 0.15–METRE ROCK ARMOUR LAYER OVER FILTER MATERIAL OVER SAND LAYER

DETAIL 22 / C28 — NOT TO SCALE

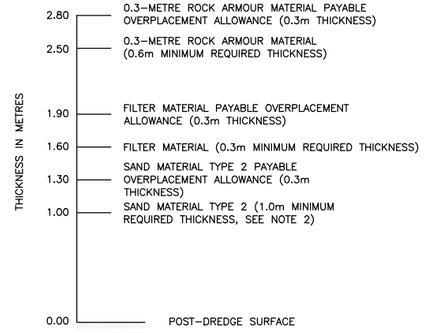
NOTE: TOTAL ENGINEERED CAP PLACEMENT THICKNESS CAN VARY BETWEEN A MINIMUM TOTAL THICKNESS OF 1.6m AND UP TO 2.2m THICKNESS AND WILL BE PAYABLE. ADDITIONAL PLACEMENT ABOVE 2.2m WILL BE CONSIDERED EXCESSIVE OVERPLACEMENT AND WILL NOT BE PAID. THE DEPARTMENTAL REPRESENTATIVE MAY DIRECT THE CONTRACTOR TO 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 / C28 — NOT TO SCALE

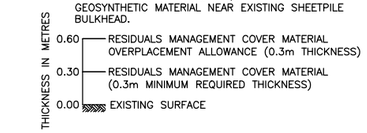
NOTE: TOTAL ENGINEERED CAP PLACEMENT THICKNESS CAN VARY BETWEEN A MINIMUM TOTAL THICKNESS OF 1.6m AND UP TO 2.2m THICKNESS AND WILL BE PAYABLE. ADDITIONAL PLACEMENT ABOVE 2.2m WILL BE CONSIDERED EXCESSIVE OVERPLACEMENT AND WILL NOT BE PAID. THE DEPARTMENTAL REPRESENTATIVE MAY DIRECT THE CONTRACTOR TO 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

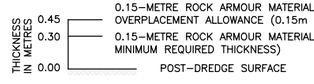
DETAIL 24 / C28 — NOT TO SCALE

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.



RESIDUALS MANAGEMENT COVER PLACEMENT

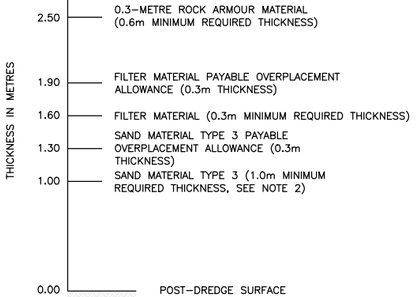
DETAIL 27 / C28 — NOT TO SCALE



TYPE 5 ENGINEERED CAP: 0.15–METRE ROCK ARMOUR

DETAIL 26 / C28/C30 — NOT TO SCALE

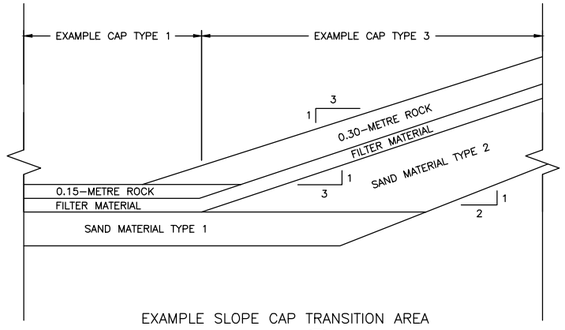
NOTE: TOTAL ENGINEERED CAP PLACEMENT THICKNESS CAN VARY BETWEEN A MINIMUM TOTAL THICKNESS OF 0.0m AND UP TO 0.45m THICKNESS AND WILL BE PAYABLE. ADDITIONAL PLACEMENT ABOVE 0.45m WILL BE CONSIDERED EXCESSIVE OVERPLACEMENT AND WILL NOT BE PAID. THE DEPARTMENTAL REPRESENTATIVE MAY DIRECT THE CONTRACTOR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



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

DETAIL 25 / C28 — NOT TO SCALE

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.



EXAMPLE SLOPE CAP TRANSITION AREA

DETAIL 28 / C32 — NOT TO SCALE

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.

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

REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

ANCHOR QEA

Klohn Crippen Berger

MATTHEW W WOLTMAN — STATE OF WASHINGTON — 42344 — REGISTERED PROFESSIONAL ENGINEER — 12/19/14

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

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	Sheet/	Revision no./
R.018400.002	C33	0

PWGSC – A1 – 841X594

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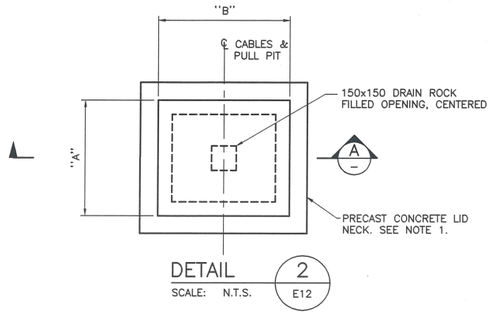

DETAIL 2 / E12
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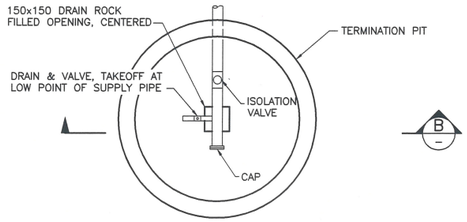

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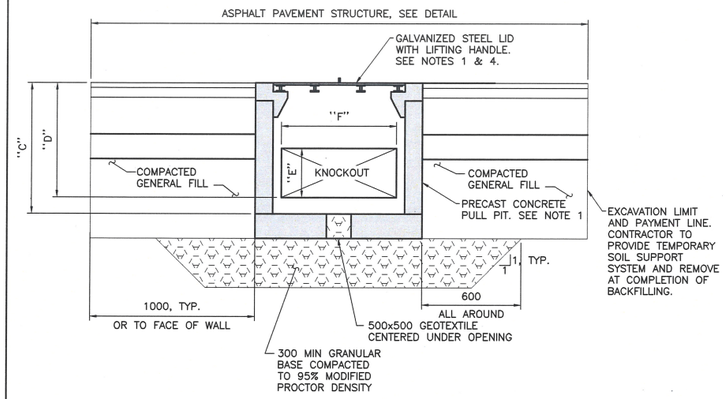

SECTION A
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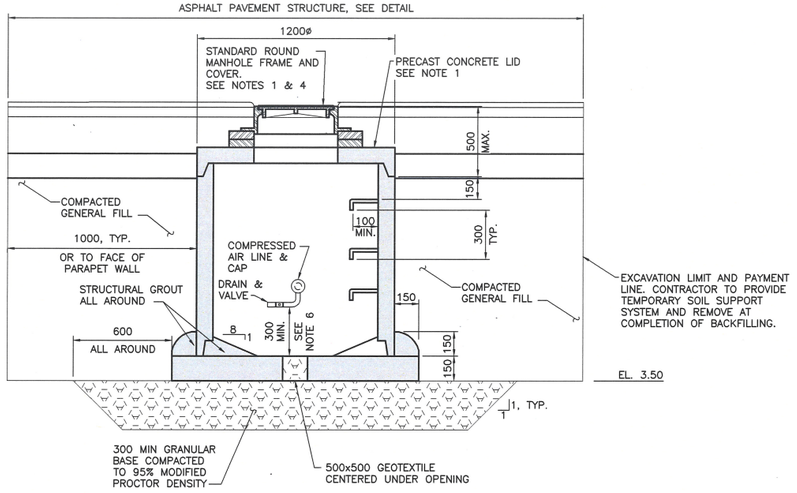
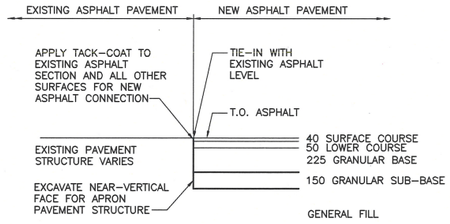


SECTION B
SCALE: N.T.S.

TYPICAL PRECAST CONCRETE PULL PIT

PULL PIT DIMENSIONS						
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

TYPICAL 1200ø PRECAST CONCRETE TERMINATION PIT T6 & T7



ASPHALT PAVEMENT STRUCTURE TIE-IN

N.T.S.

NOTES:

1. 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):
   1.1. UNIFORMLY DISTRIBUTED LOAD (UDL): 28.7kPa (600psf)
   1.2. UDL NEED NOT BE CONSIDERED COINCIDENT WITH VEHICLE WHEEL LOADS
   1.3. 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.
2. SEAL ALL CONDUIT ENDS IN TERMINATION PIT WITH SUITABLE COMPOUND TO PREVENT ENTRANCE OF SALT WATER, MOISTURE OR GASES.
3. 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.
4. TERMINATION PIT COVERS AND PUL 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.
5. CONTRACTOR TO LOCATE AND PROTECT ADJACENT ELECTRICAL CONDUITS DURING EXCAVATION WORK.
6. 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.

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada
REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS
Région de Pacifique

Klohn Crippen Berger

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA
D. C. SHARPE
38614
Dec 18, 2014

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA
K. L. GREINACHER
39177
Dec. 18/14

Revision/ Revision/ Client/client	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
DHILEEP ABEYGODA

Drawn by/Dessine par
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PWGSC Project Manager/Administrateur de Projets TPSGC
ANDREW MYLLY

Regional Manager, Environmental Services
COLLIN KINGMAN

Drawing title/Titre du dessin
SERVICES - TERMINATION PITS

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

PWGSC – A1 – 841X594

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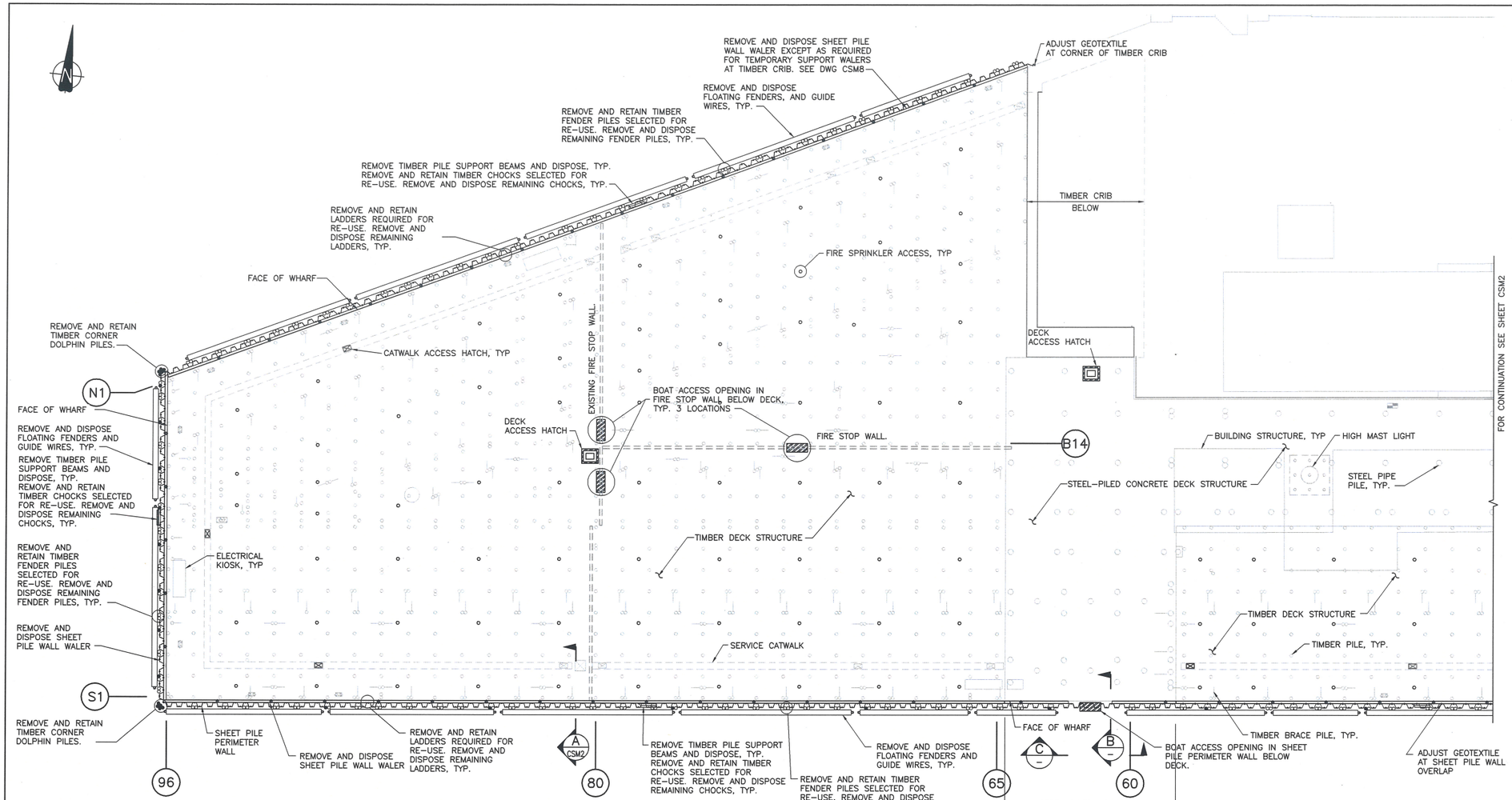
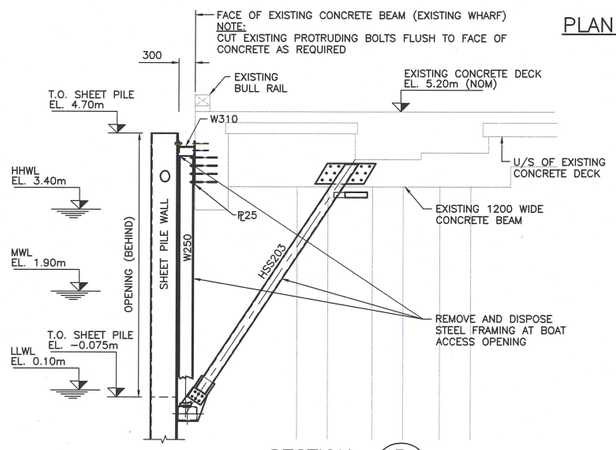
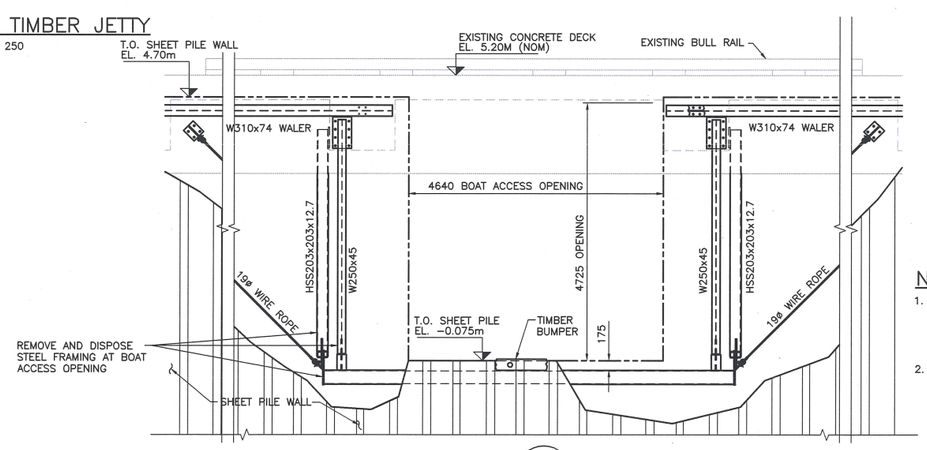




SECTION B
SCALE 1: 50

PLAN WEST TIMBER JETTY
SCALE 1: 250



VIEW C
SCALE 1: 50

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 WEST AND SOUTH JETTY.
2. FOR SHEET PILE WALL AND BOAT ACCESS FRAME DETAILS SEE REFERENCE DRAWINGS.

0 10 20 30 40 50 60 70 80 90 100mm

PWGSC – A1 – 841X594

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada
REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

ANCHOR QEA

Klohn Crippen Berger

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — G. B. A. COOPER — Dec 10/14

Revision/ Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/10

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/Dessine par
ARNIE RIST

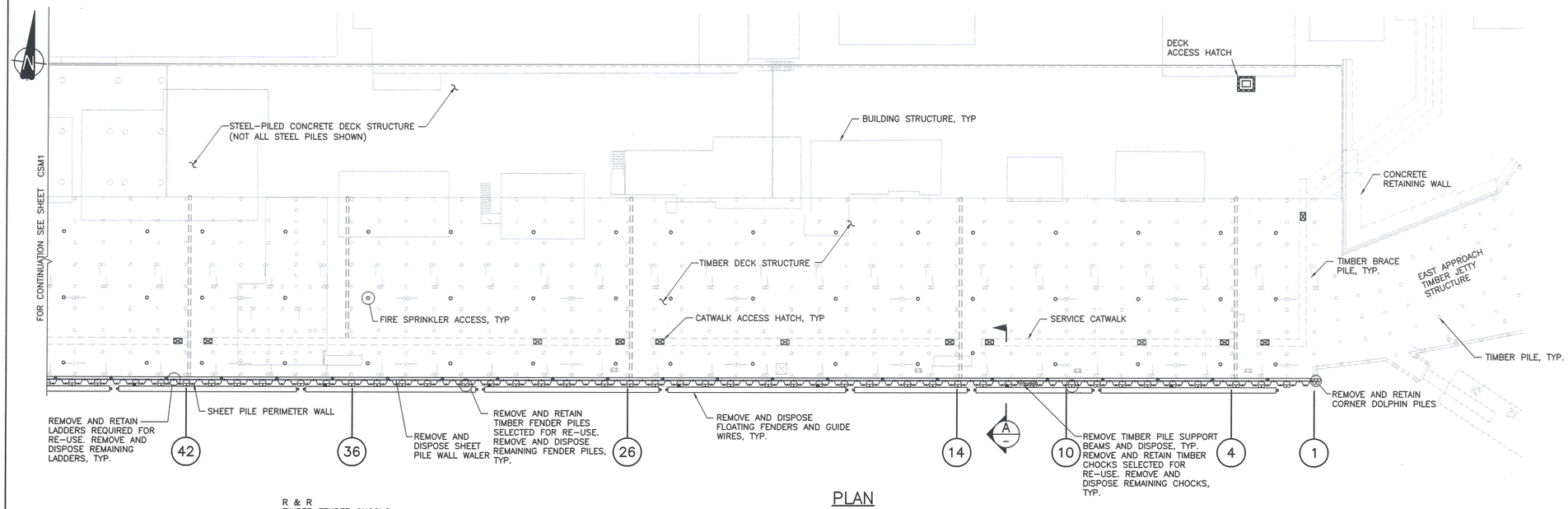
PWGSC Project Manager/Administrateur de Projets TPSGC
ANDREW MYLLY

Regional Manager, Environmental Services
COLLIN KINGMAN

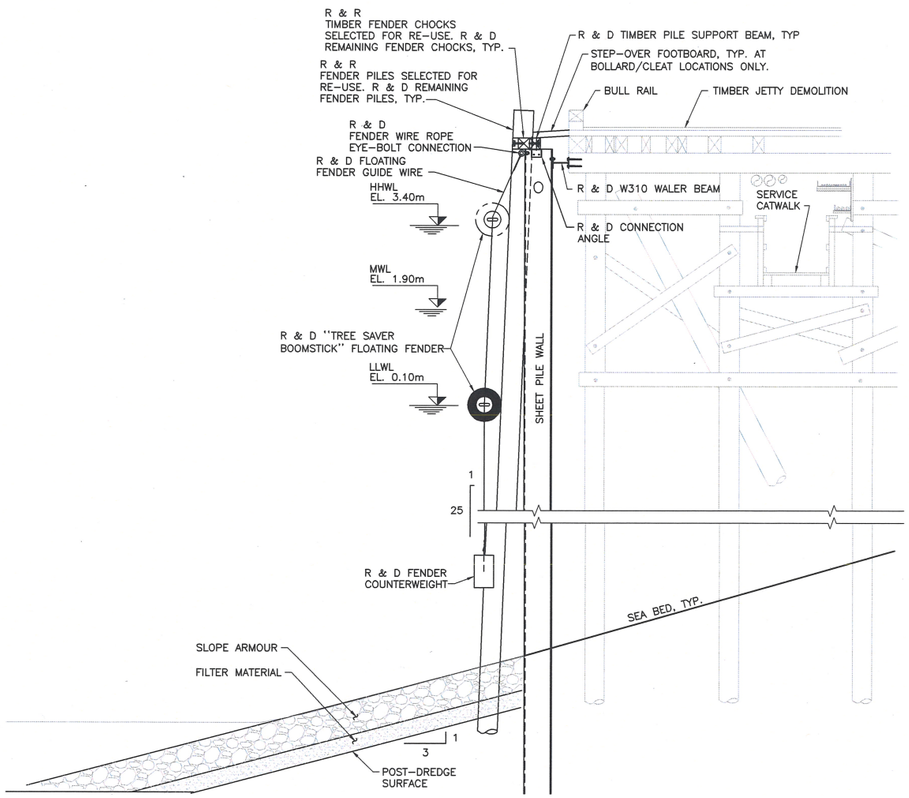
Drawing title/Titre du dessin
WEST AND SOUTH JETTY
EXISTING CONDITIONS
FENDER REMOVAL
SHEET 1

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	CSM1	0

DM5XXXXXX

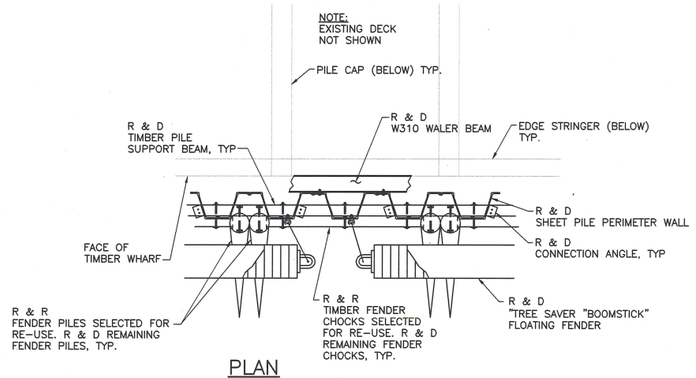


PLAN
SOUTH TIMBER JETTY
SCALE 1: 250



SECTION A – A
SCALE 1: 50
CSM1

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.

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada
REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

ANCHOR QEA

Klohn Crippen Berger

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G. B. A. COOPER
Dec 18/14

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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Drawn by/Dessine par
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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 AND SOUTH JETTY
EXISTING CONDITIONS
FENDER REMOVAL
SHEET 2

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

PWGSC – A1 – 841X594

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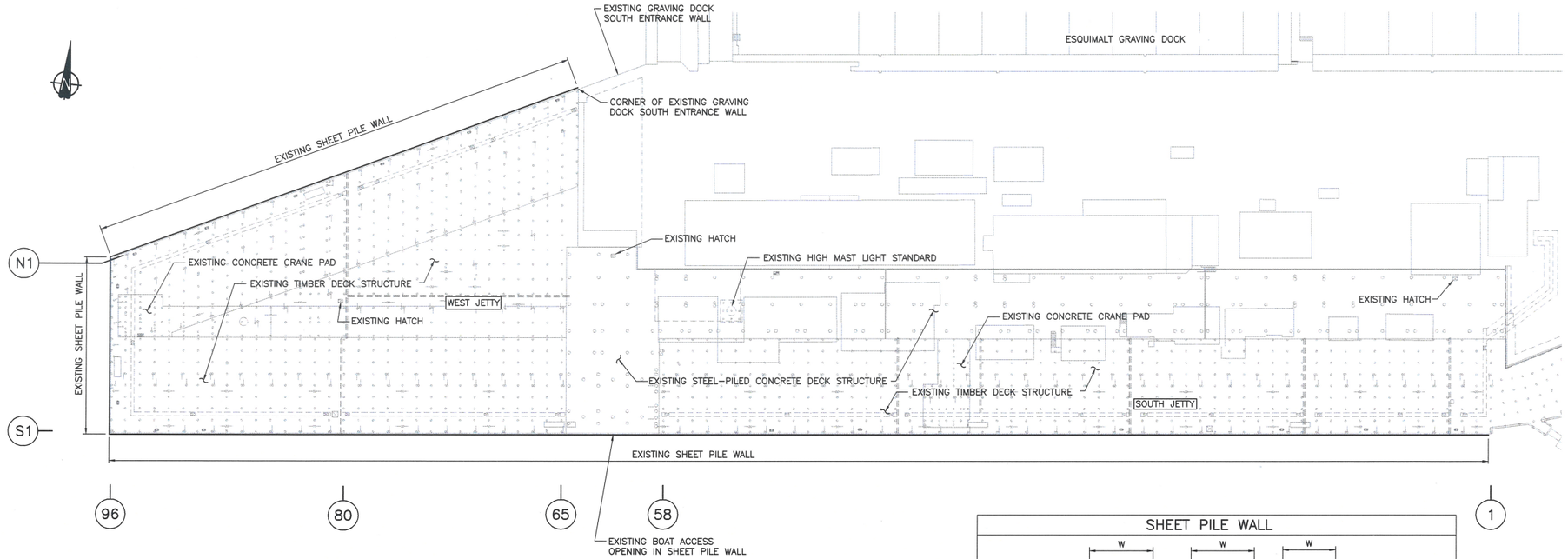


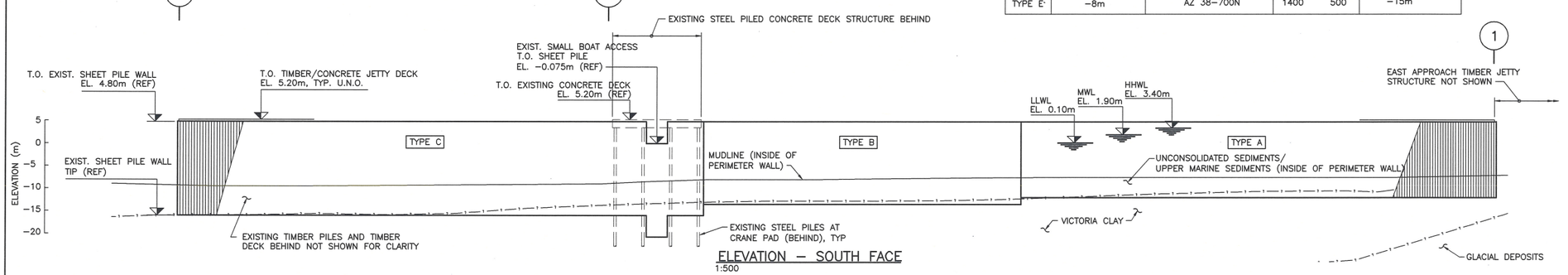
PLAN

1:500

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

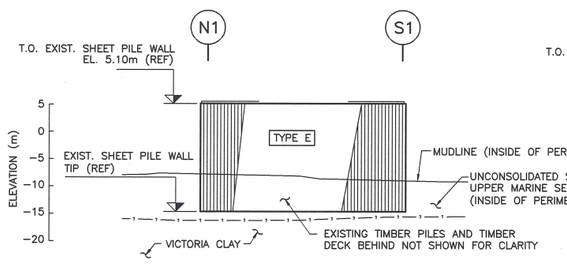
SHEET PILE WALL

	DESIGN MUDLINE ELEVATION	SHEET PILE WALL SECTION	DIMENSIONS W	DIMENSIONS H	PILE TIP ELEVATION
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



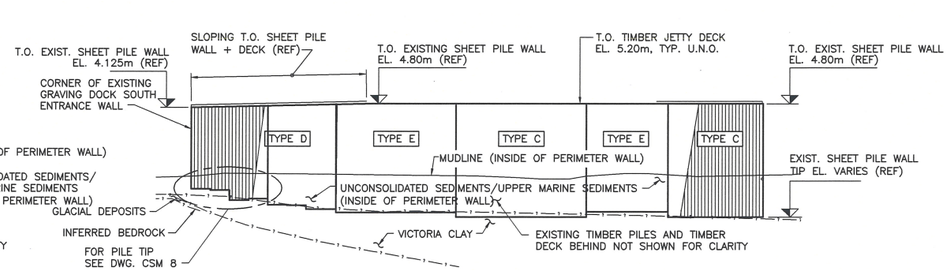
ELEVATION – SOUTH FACE

1:500



ELEVATION – WEST FACE

1:500



ELEVATION – NORTH FACE

1:500

NOTES:

1. FOR SHEET PILE WALL DETAILS SEE REFERENCE DRAWINGS.

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

ANCHOR QEA

Klohn Crippen Berger

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G. B. A. COOPER
Dec 16/14

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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Drawn by/Dessine par
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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 AND SOUTH JETTY
SHEET PILE WALL
EXISTING CONDITIONS

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

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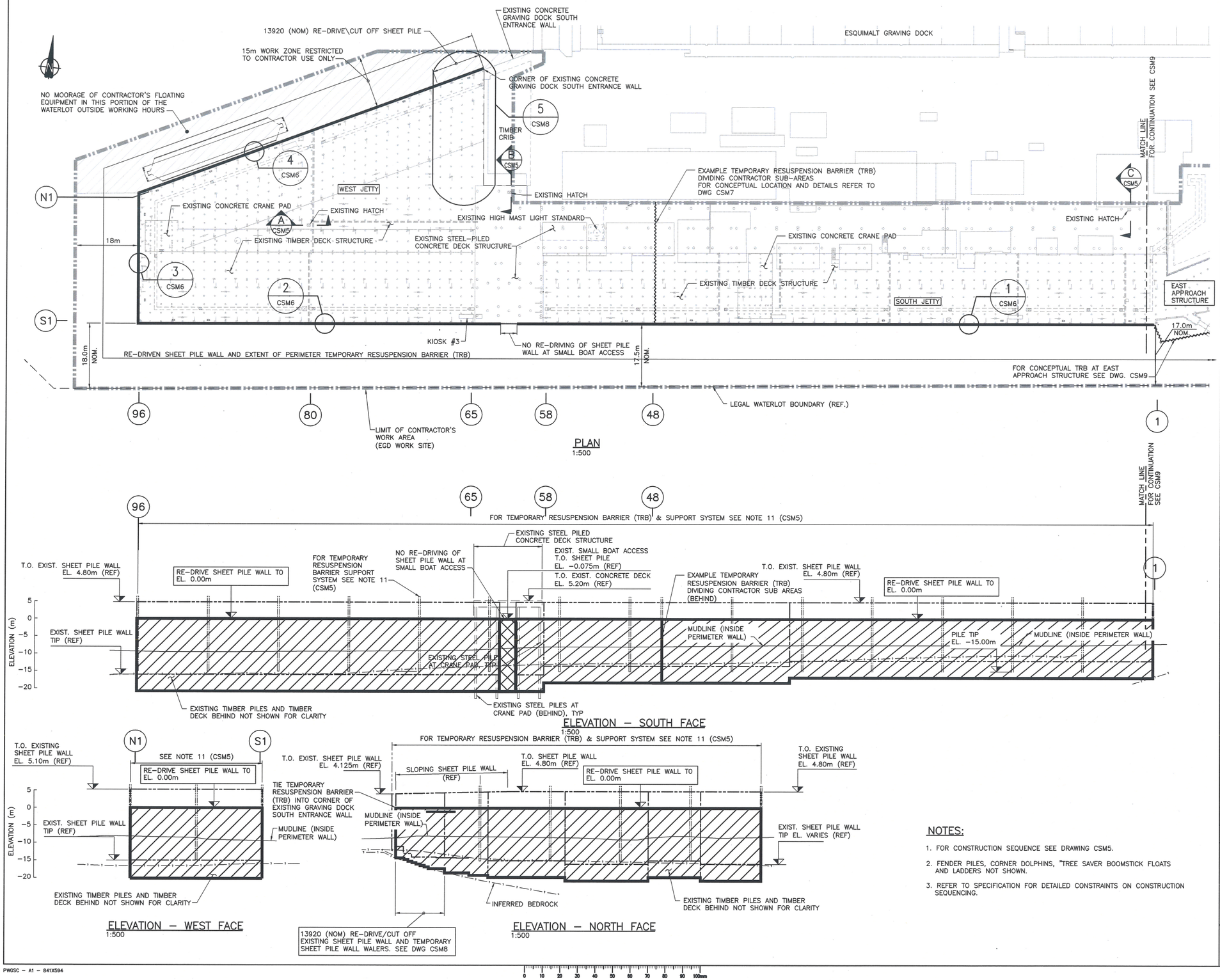

NOTES:

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.

PWGSC – A1 – 841X594

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REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

ANCHOR QEA

Klohn Crippen Berger

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G. B. A. COOPER
Dec 18/14.

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: JANET TONG

Drawn by/Dessine par: ARNIE RIST

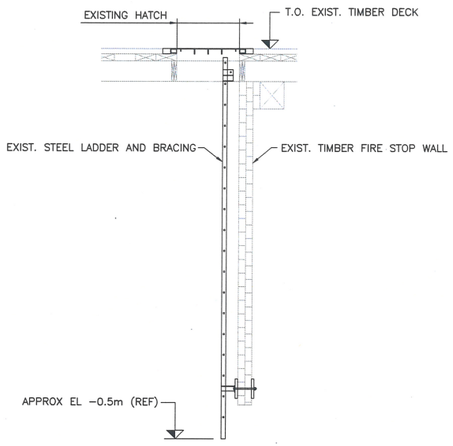
PWGSC Project Manager/Administrateur de Projets TPSGC: ANDREW MYLLY

Regional Manager, Environmental Services: COLLIN KINGMAN

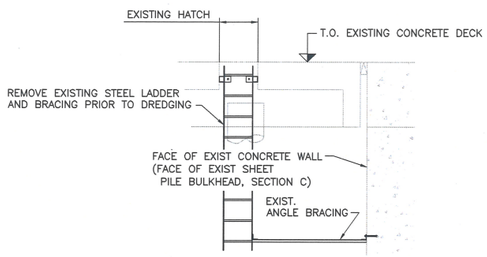
Drawing title/Titre du dessin
SHEET PILE WALL MODIFICATIONS PLAN AND ELEVATIONS

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	CSM4	0

DM5XXXXXX



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):

1. 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.
2. REMOVE "TREE SAVER BOOMSTICK" FENDER LOGS, GUIDE WIRES AND WEIGHTS AND DISPOSE OFF−SITE.
3. 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.
4. REMOVE LADDERS. STORE LADDERS REQUIRED FOR RE−USE, DISPOSE OF REMAINING LADDERS.
5. DISCONNECT SHEET PILE WALL FROM STEEL WALER, REMOVE STEEL WALER (EXCEPT AS SHOWN ON DRAWING CSM8) AND DISPOSE OFF−SITE.
6. INSTALL COVERS OVER VENT HOLES IN SHEET PILE WALL.
7. DISCONNECT AND REMOVE STEEL FRAMING AT BOAT ACCESS OPENING AND DISPOSE OFF−SITE.
8. RE−DRIVE EXISTING SHEET PILE WALL AS SHOWN.
9. 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.
10. CUT EXISTING SHEET PILE WALL DOWN TO EL. 0.0m WHERE INDICATED.
11. INSTALL TEMPORARY STEEL SUPPORT BRACING AT TIMBER CRIB.
12. INSTALL TEMPORARY RESUSPENSION BARRIER (TRB) SYSTEM AS DESIGNED BY CONTRACTOR'S THIRD PARTY ENGINEER.
13. REMOVE TIMBER PILED WEST JETTY AND SOUTH JETTY STRUCTURES AND EAST APPROACH STRUCTURE.
14. REMOVE CONTAMINATED SEDIMENT BY DREDGING, AND INSTALL ENGINEERED CAPPING MATERIALS.
15. INSTALL TIMBER FENDER PILES, CORNER DOLPHINS AND NAVIGATION MARKER DOLPHINS PRIOR TO PLACING ARMOUR ROCK.
16. REMOVE TEMPORARY RESUSPENSION BARRIER (TRB) SYSTEM.
17. EXTRACT RE−DRIVEN SHEET PILES AND DISPOSE OFF−SITE.

NOTE:

1. REFER TO SPECIFICATION FOR DETAILED CONSTRAINTS ON CONSTRUCTION SEQUENCING.

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

REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

ANCHOR QEA

Klohn Crippen Berger

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — G. B. A. COOPER — Dec 18/14

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/Dessine 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

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	CSM5	0

PWGSC – A1 – 841X594

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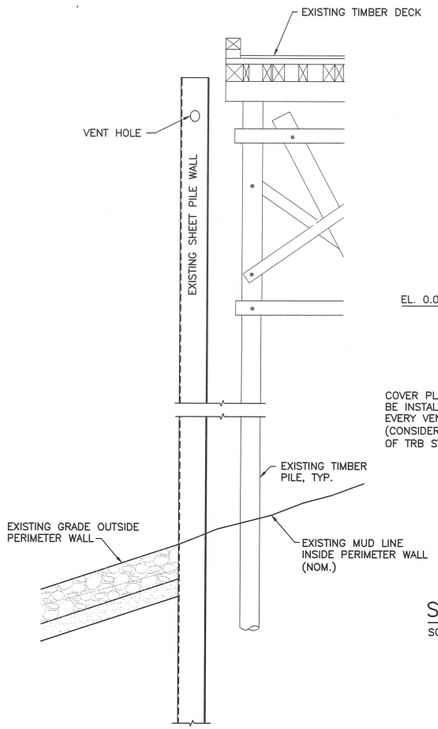
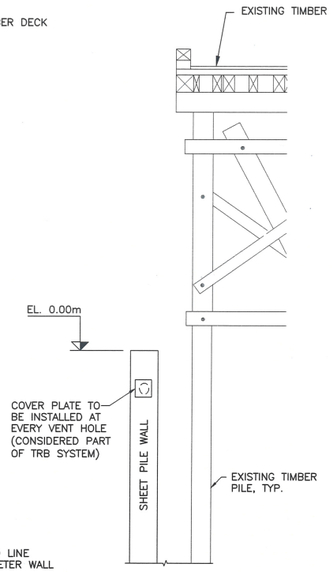
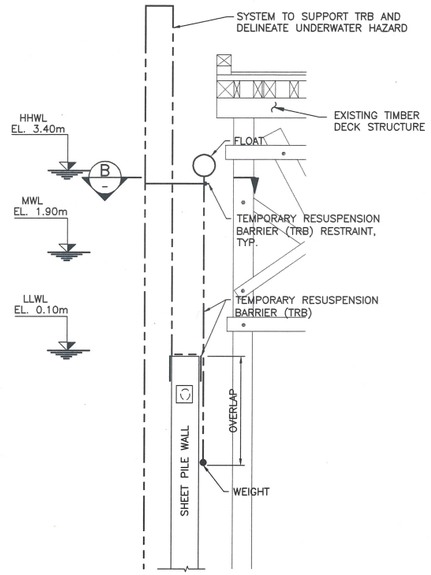
DM5XXXXXX





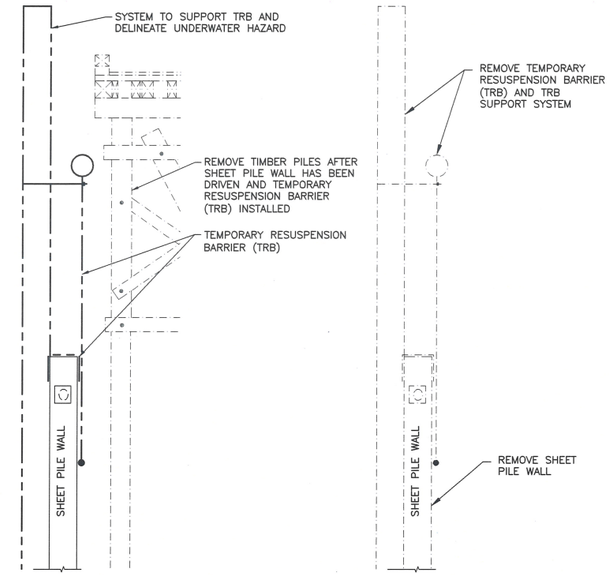
SECTION A – RE–DRIVE SHEET PILE WALL
SCALE 1: 50

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

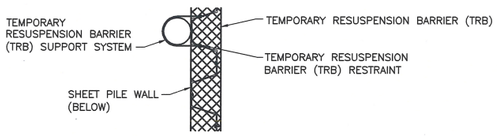
CONSTRUCTION STEP 4

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

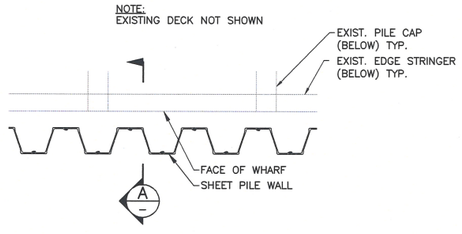
CONSTRUCTION STEP 5

SECTION A – BOOMSTICKS, GUIDE WIRES, COUNTERWEIGHTS, LADDERS, FENDER PILES, STEEL FABRICATIONS AND ALL CONNECTIONS REMOVED
SCALE 1: 50

CONSTRUCTION STEP 1



SECTION B
SCALE 1: 50



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

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.

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada
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Pacific Region
SERVICES IMMOBILIERS

ANCHOR QEA

Klohn Crippen Berger

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — G. B. A. COOPER — Dec 18/14

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/Dessine 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 CONSTRUCTION SEQUENCE

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	CSM6	0

PWGSC – A1 – 841X594

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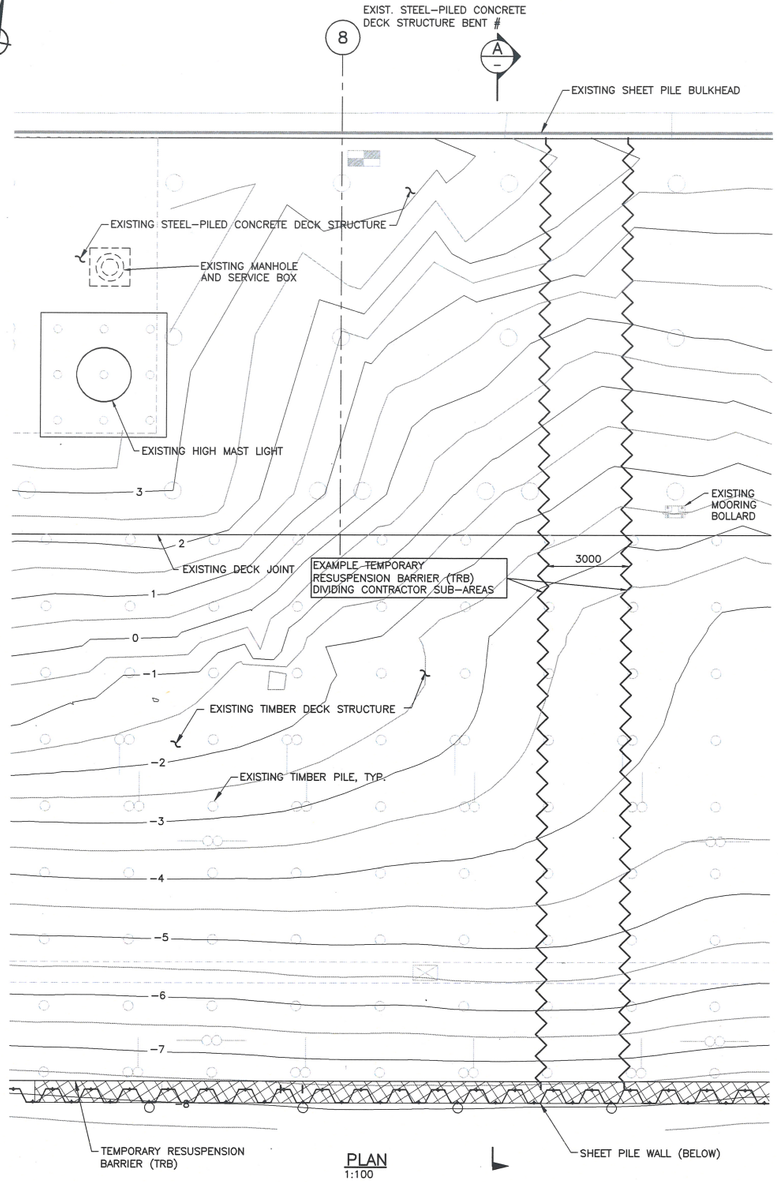
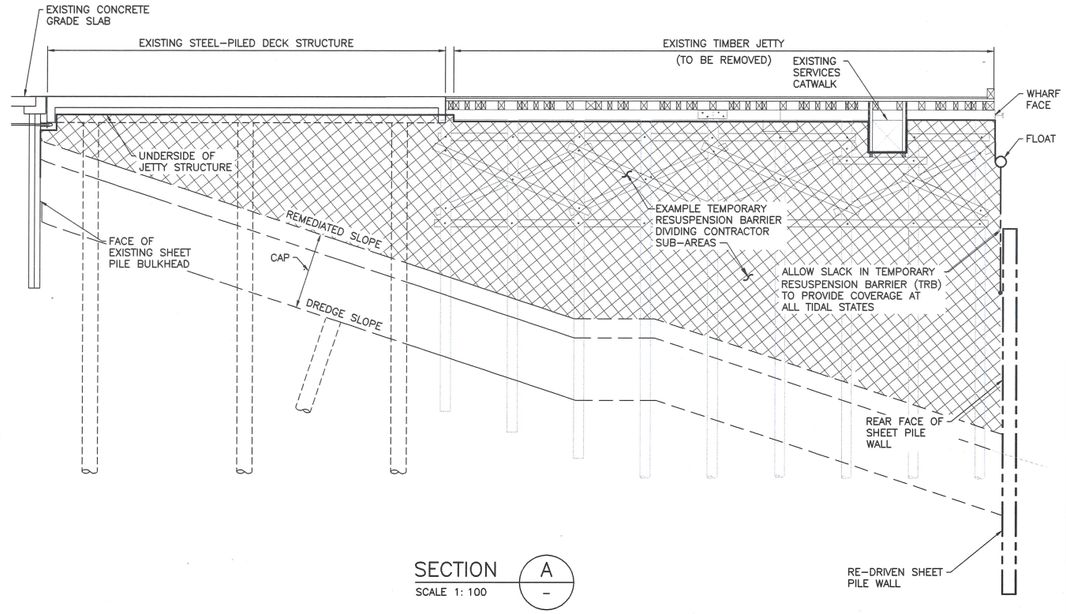


PLAN
1:100



SECTION A
SCALE 1: 100

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.

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

REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

ANCHOR QEA

Klohn Crippen Berger

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G. B. A. COOPER
Dec 18/14

Revision/ 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
BILL CHRISTENSEN

Drawn by/Dessine 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 DETAILS - SHEET 1

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	CSM7	0

PWGSC – A1 – 841X594

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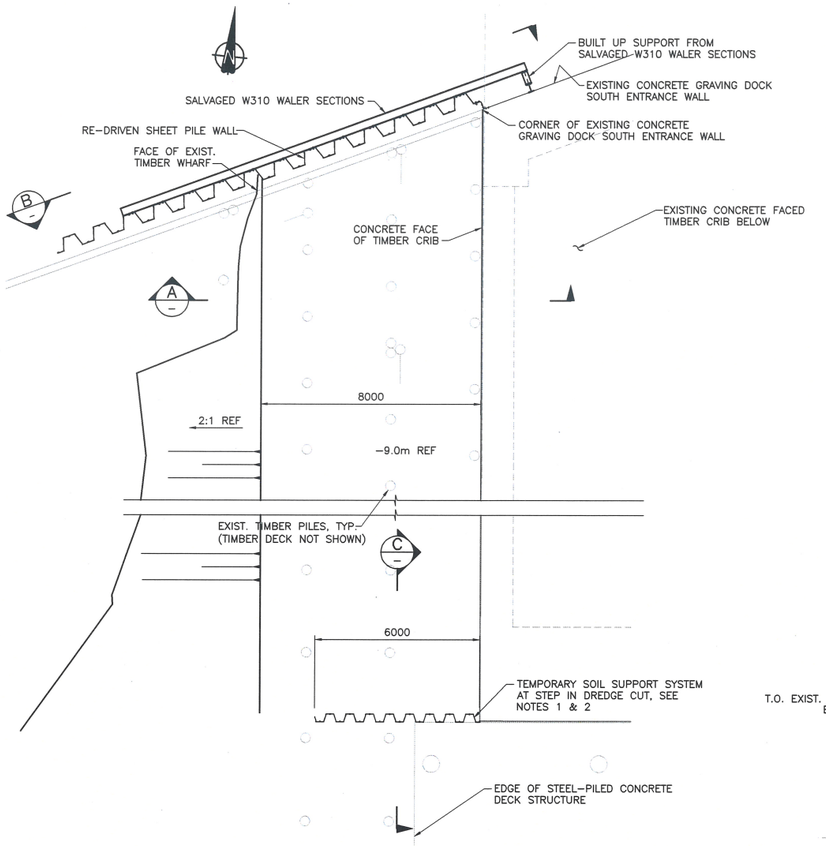
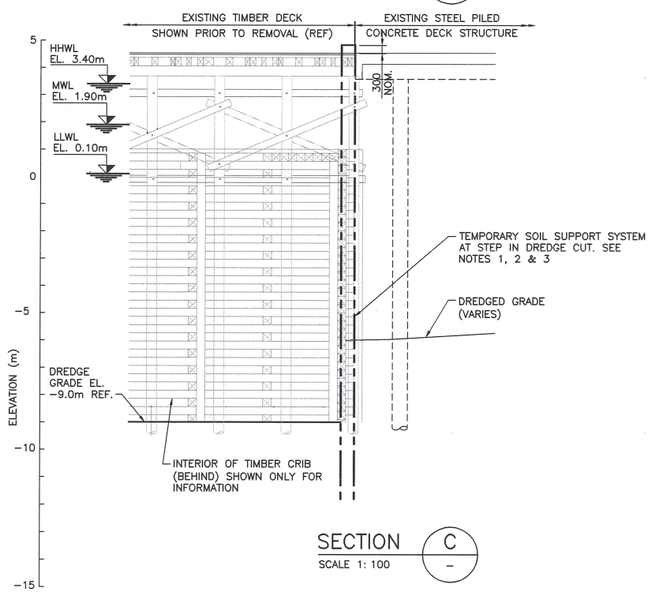
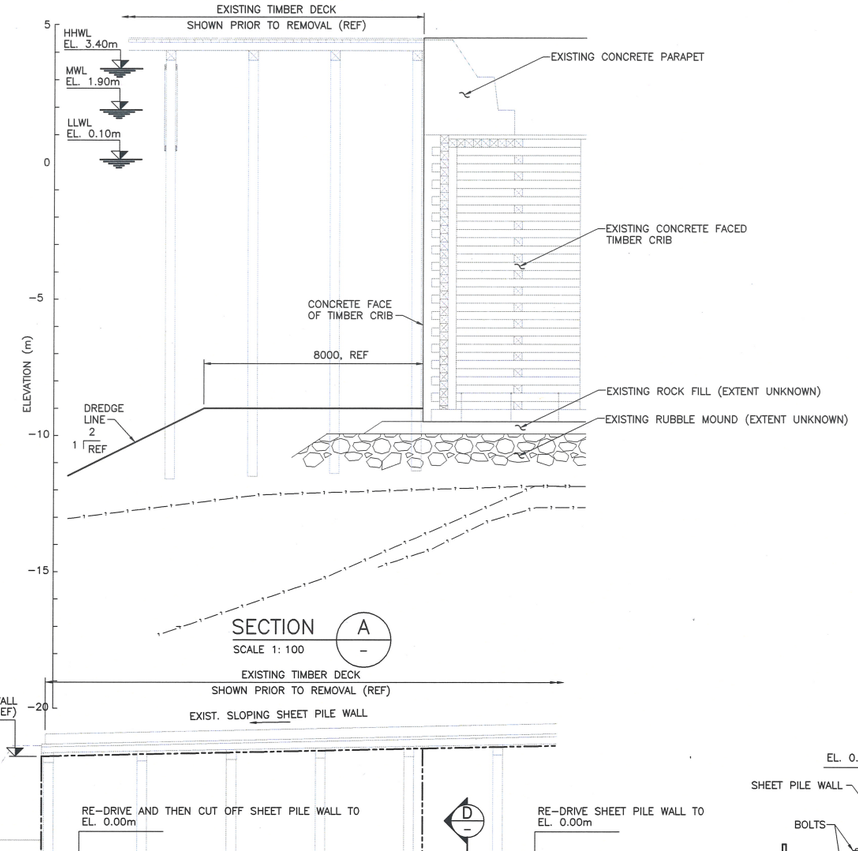


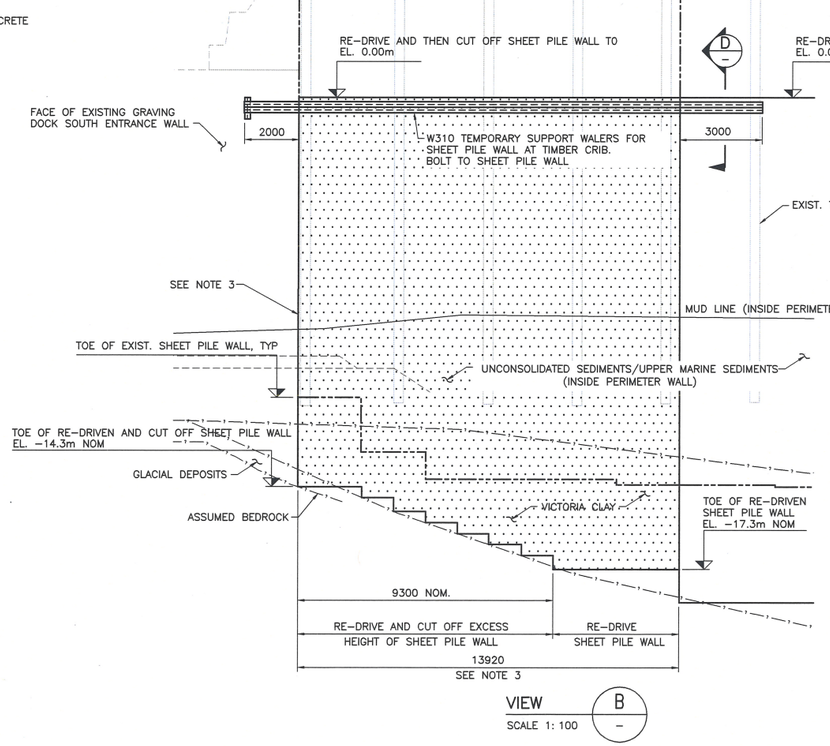
DETAIL 5 / SCALE 1: 100 / CSM4



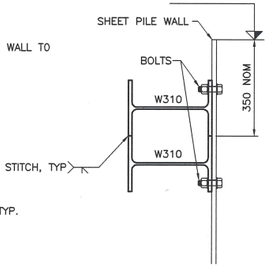
SECTION C / SCALE 1: 100



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.

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada
REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

ANCHOR QEA

Klohn Crippen Berger

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — G. B. A. COOPER — Dec 18/14

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/Dessine 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 DETAILS - SHEET 2

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

PWGSC – A1 – 841X594

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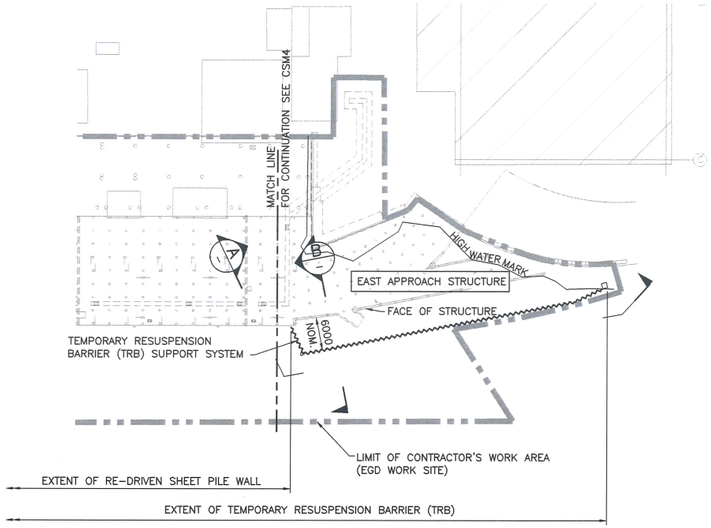
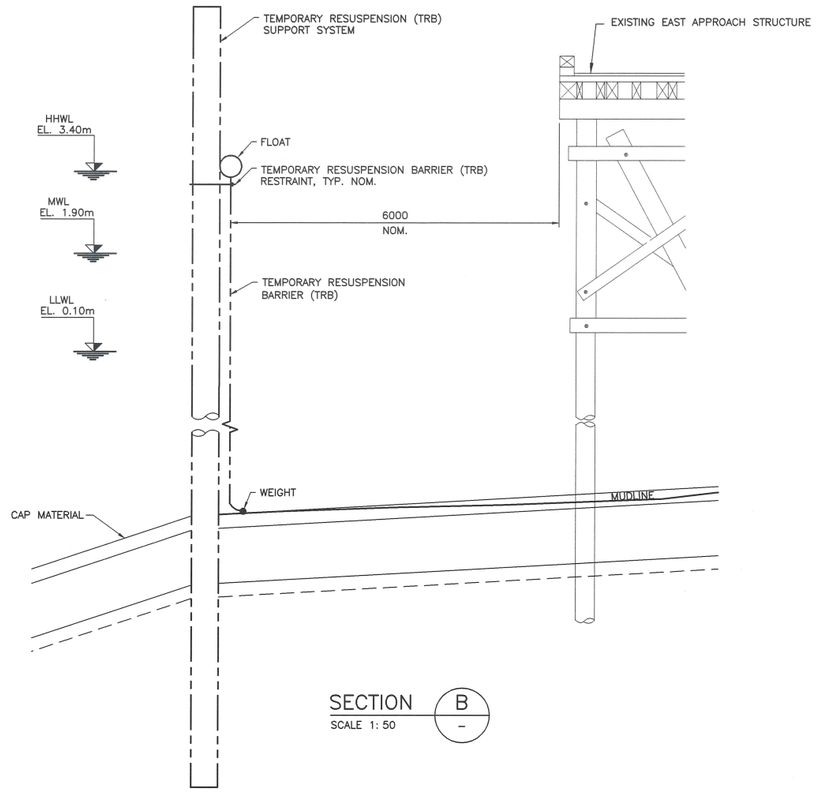
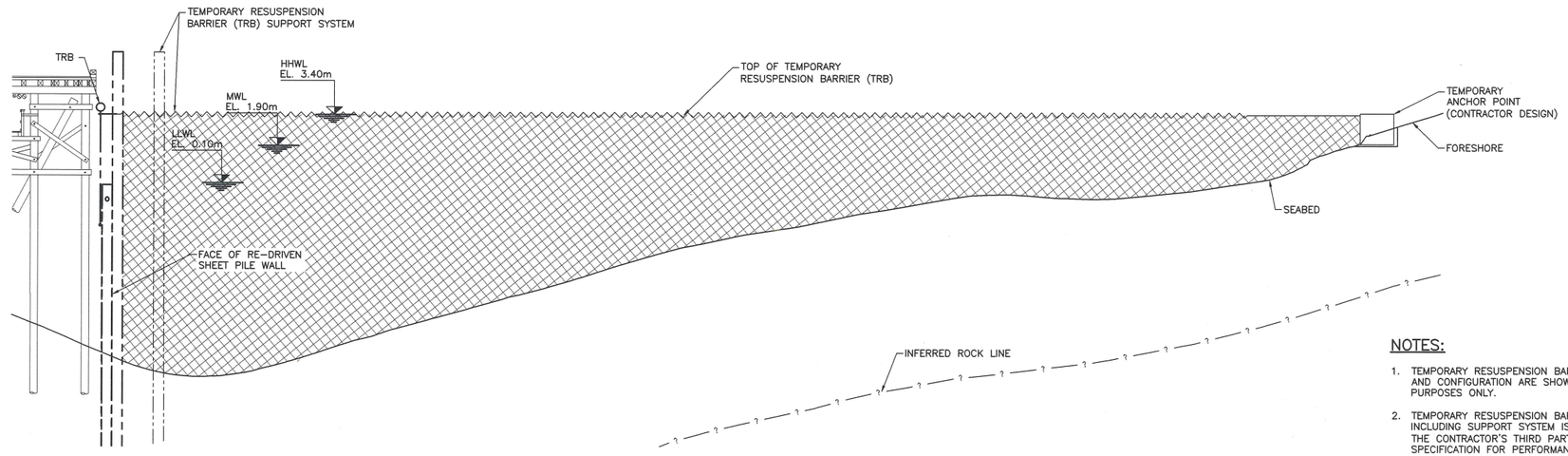
DM5XXXXXX



PLAN
1:250



SECTION B
SCALE 1: 50



ELEVATION – DEVELOPED A
SCALE 1:125

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.

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada
REAL PROPERTY SERVICES
Pacific Region
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ANCHOR QEA

Klohn Crippen Berger

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G. B. A. COOPER
12/8/14

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/Dessine 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 DETAILS - SHEET 3

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

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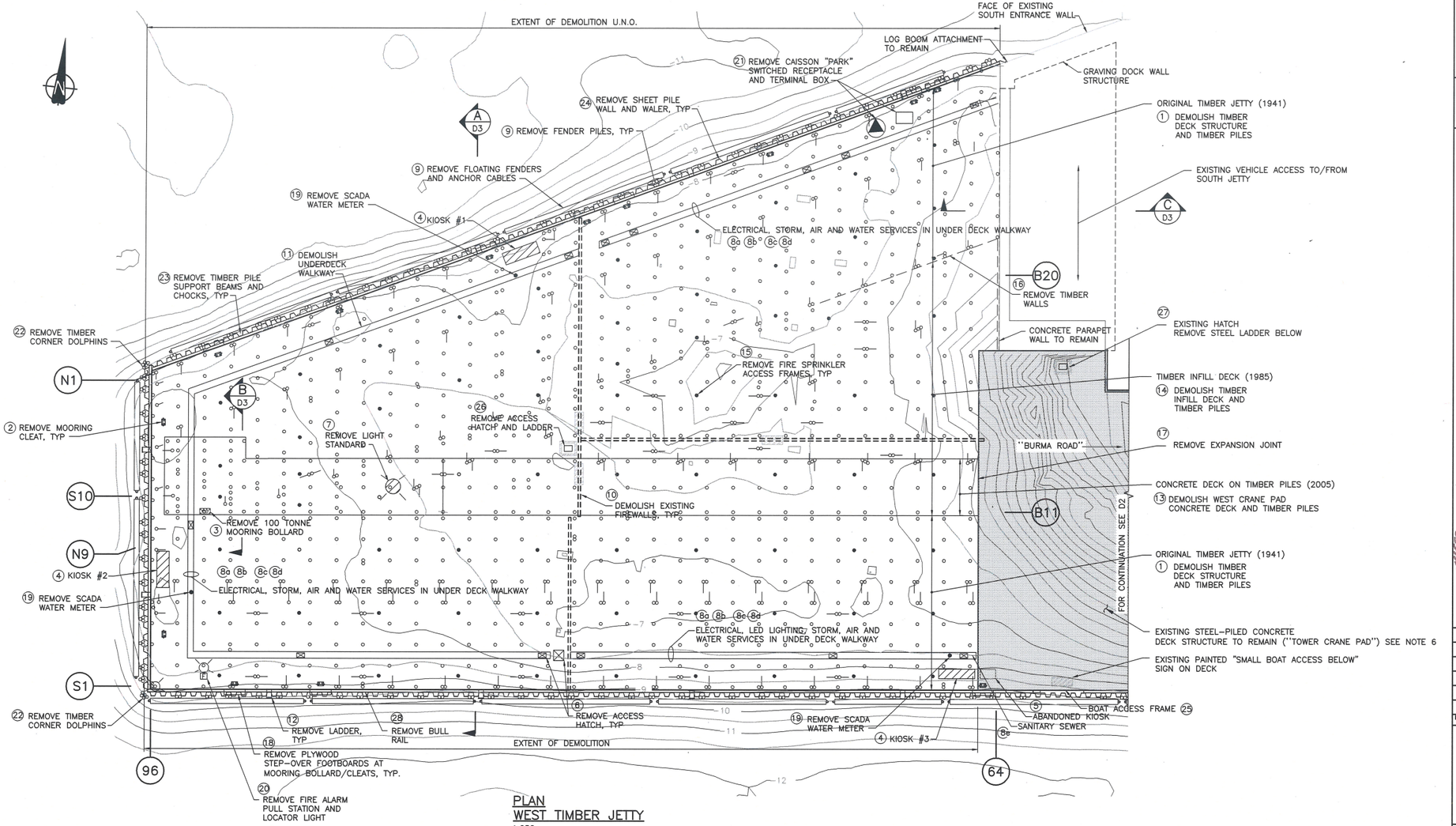

PLAN
WEST TIMBER JETTY
1:250

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

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

REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

Klohn Crippen Berger

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G. B. A. COOPER
Dec 18/14

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: JANET TONG

Drawn by/Dessine 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
EXISTING DECK STRUCTURE AND DEMOLITION
PLAN

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

PWGSC – A1 – 841X594

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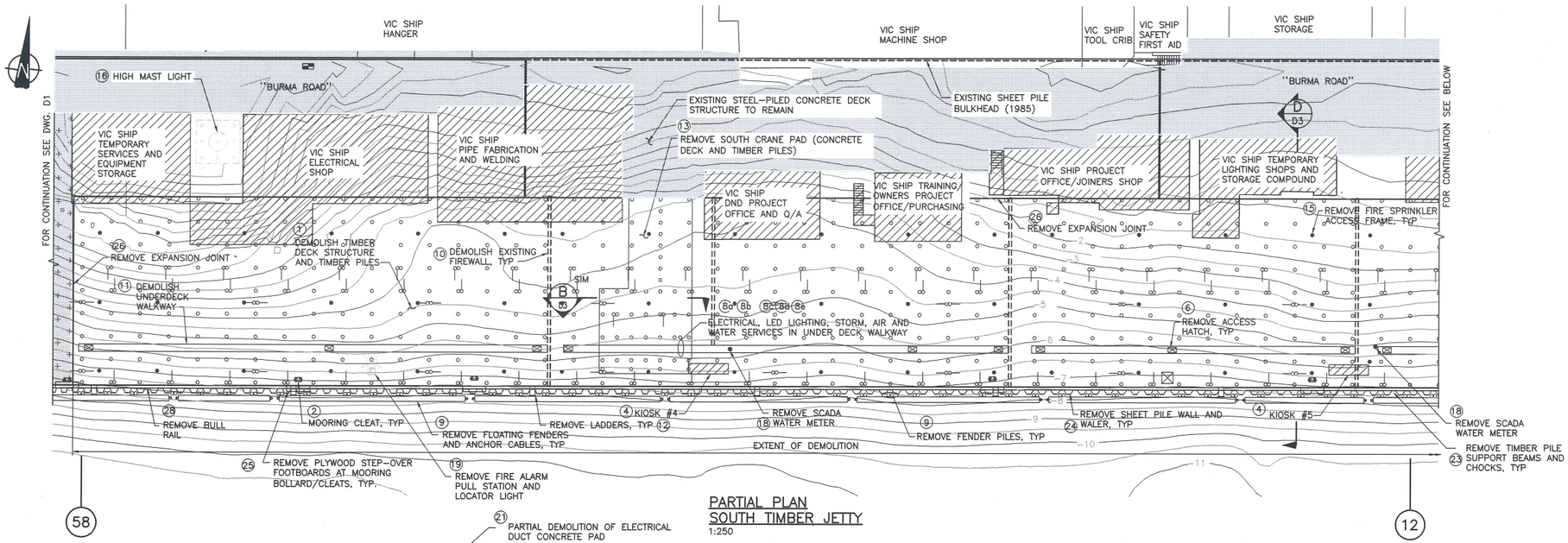
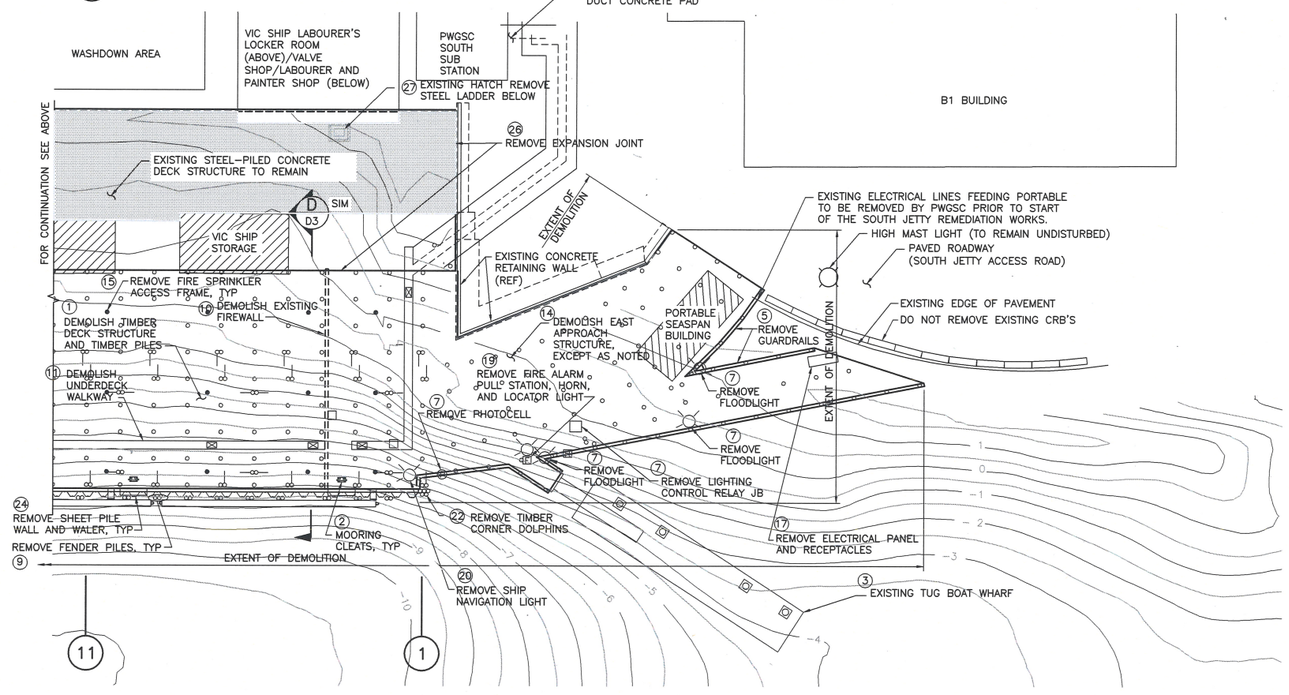


PARTIAL PLAN SOUTH TIMBER JETTY
1:250



PARTIAL PLAN SOUTH TIMBER JETTY
1:250

NOTES:

1. TIMBER DECK STRUCTURE TYPICALLY CONSISTS OF:
   ASPHALT TOPPING
   102 DECK PLANKING
   305 DECK PLANKING
   305 STRINGERS
2. 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
3. EAST APPROACH STRUCTURE TYPICALLY CONSISTS OF:
   ASPHALT TOPPING
   90 DECKING
   290 STRINGERS
4. FOR NUMBERS DENOTED (X) REFER TO TABLE ON D5.
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. 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

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

Klohn Crippen Berger

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G. B. A. COOPER
Dec 18/14

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
JANET TONG

Drawn by/Dessine par
ARNIE RIST

PWGSC Project Manager/Administrateur de Projets TPSGC
ANDREW MYLLY

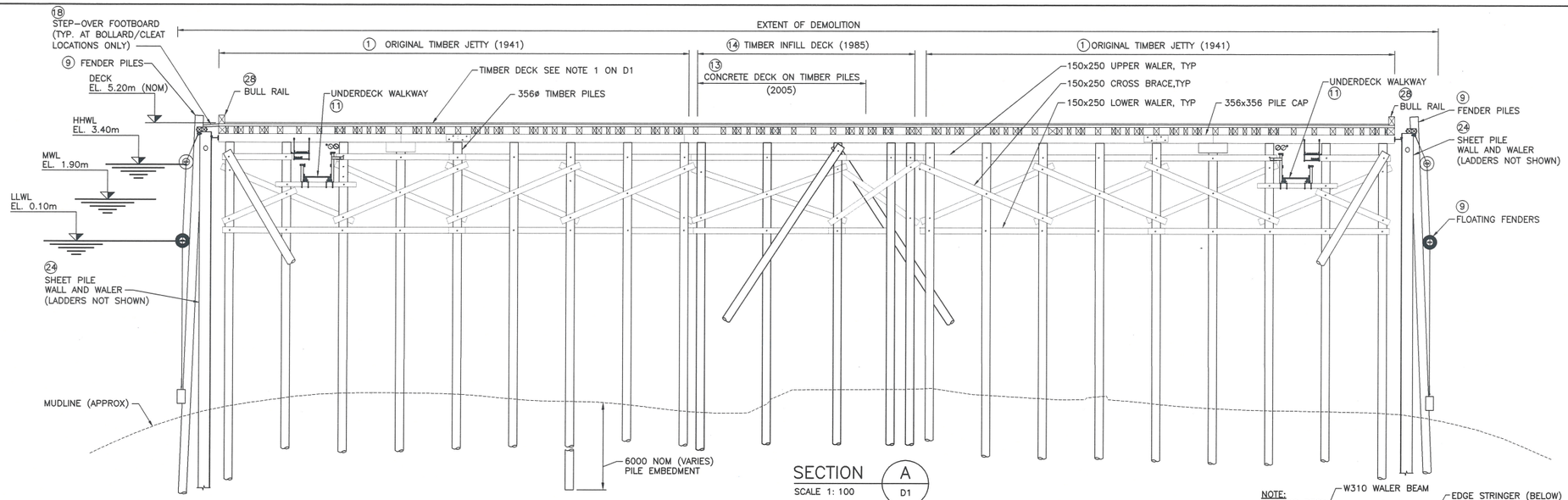
Regional Manager, Environmental Services
COLLIN KINGMAN

Drawing title/Titre du dessin

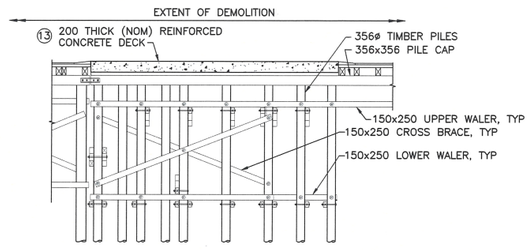
SOUTH JETTY
EXISTING DECK STRUCTURE AND DEMOLITION PLAN

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

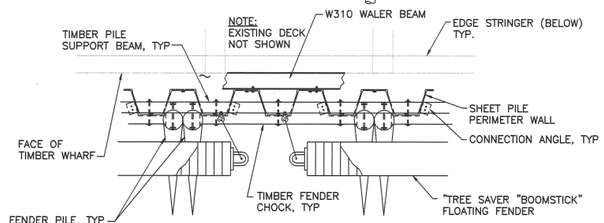
DM5XXXXXX



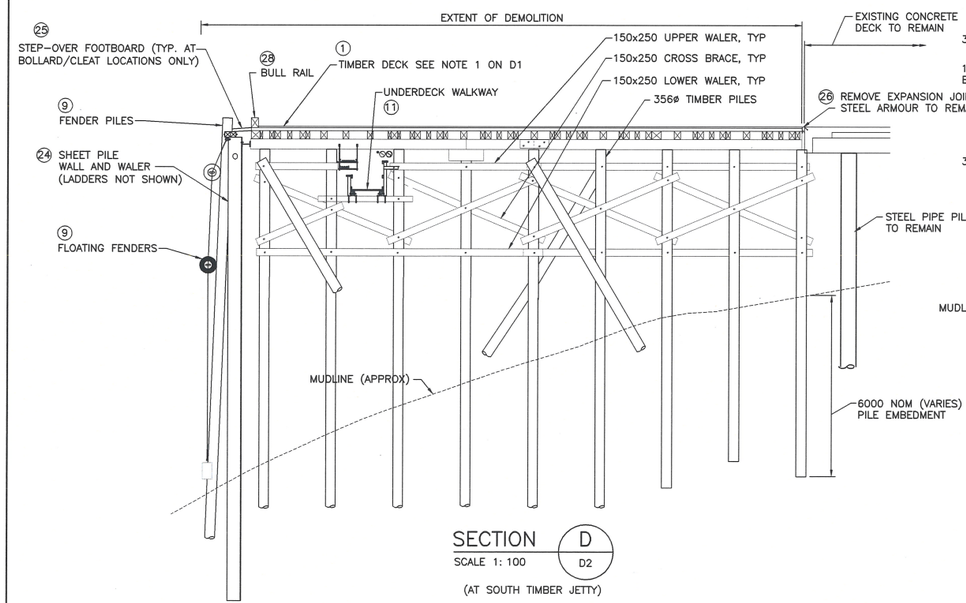
SECTION A / D1
SCALE 1: 100
(AT WEST TIMBER JETTY)



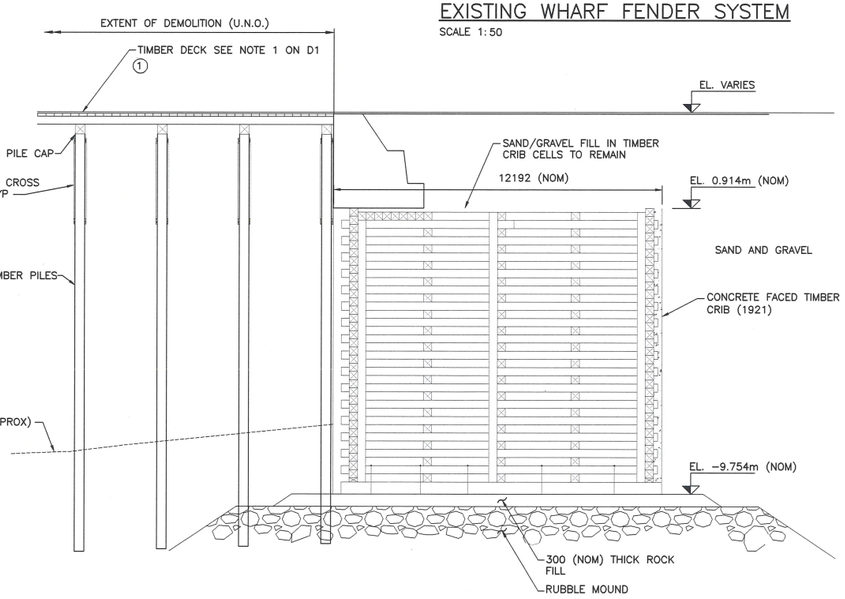
SECTION B / D1 — B / D2
SCALE 1: 100



PLAN
EXISTING WHARF FENDER SYSTEM
SCALE 1: 50



SECTION D / D2
SCALE 1: 100
(AT SOUTH TIMBER JETTY)



SECTION C / D1
SCALE 1: 100
(AT WEST TIMBER JETTY)

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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Klohn Crippen Berger

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — G. B. A. COOPER — Dec 18/14

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

PWGSC Project Manager/Administrateur de Projets TPSGC
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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/	Revision no./
R.018400.002	D3	0

DM5XXXXXX

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.

NOTES:

1. 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.

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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Klohn Crippen Berger

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G. B. A. COOPER
2014/12/19

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
GEOFF COOPER

Drawn by/Dessine 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
DEMOLITION ITEM DESCRIPTION AND ACTION TABLE

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	D4	0

DM5XXXXXX

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, PHOTOCELL 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.

NOTES:

1. 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.

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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Klohn Crippen Berger

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — G. B. A. COOPER — 2014/12/19

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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

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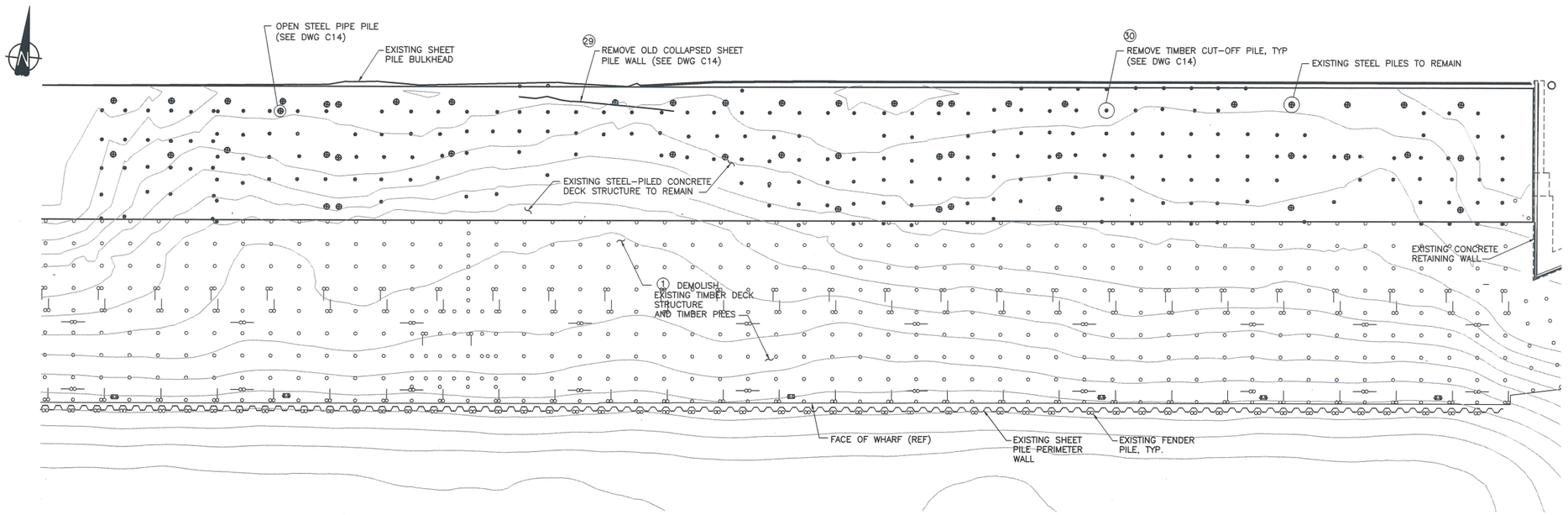
Regional Manager, Environmental Services
COLLIN KINGMAN

Drawing title/Titre du dessin

SOUTH JETTY
DEMOLITION ITEM DESCRIPTION AND ACTION TABLE

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	D5	0

DM5XXXXXX



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.

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825 ADMIRALS ROAD, VICTORIA, BC

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Consultant Signature Only

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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

PWGSC – A1 – 841X594

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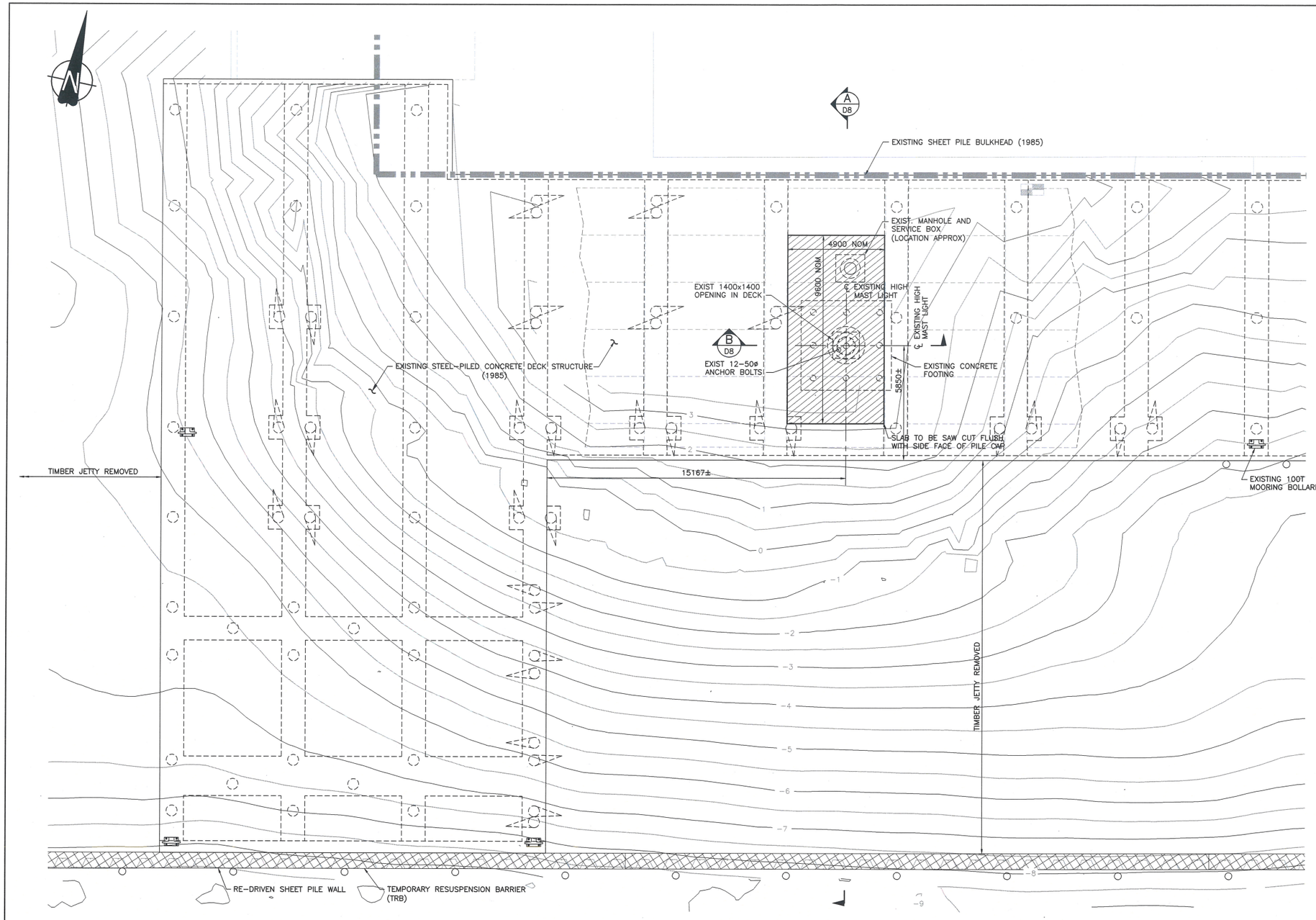

PLAN
1:100

LEGEND

SLAB DEMOLITION AND REBUILD AREA

PWGSC – A1 – 841X594

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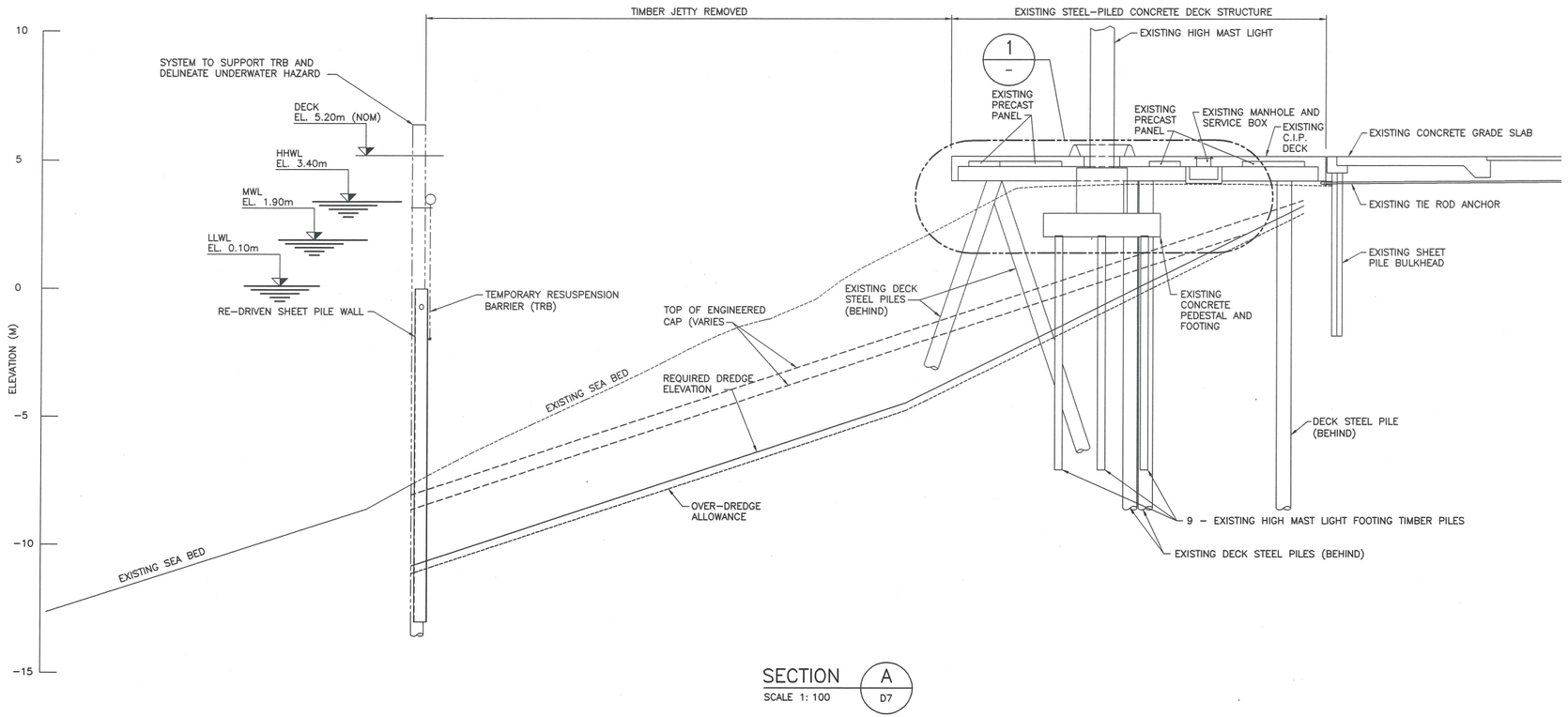
COLLIN KINGMAN

Drawing title/Titre du dessin

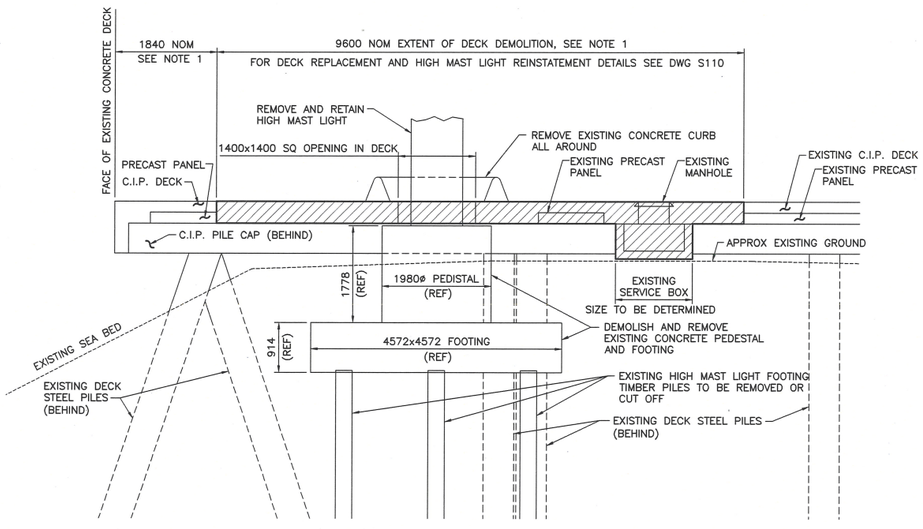
EXISTING HIGH MAST LIGHT AREA AND DEMOLITION SHEET 1

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

DM5XXXXXX



SECTION A
SCALE 1: 100
D7



DETAIL 1 EXISTING/DEMOLITION
SCALE 1: 50
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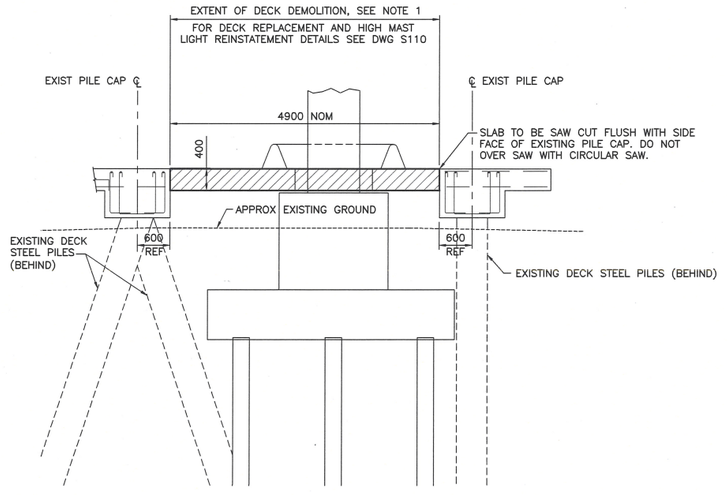

SECTION B EXISTING/DEMOLITION
SCALE 1: 50
D7

NOTES:

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

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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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: **GEOFF COOPER**

Drawn by/Dessine par: **ARNIE RIST**

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

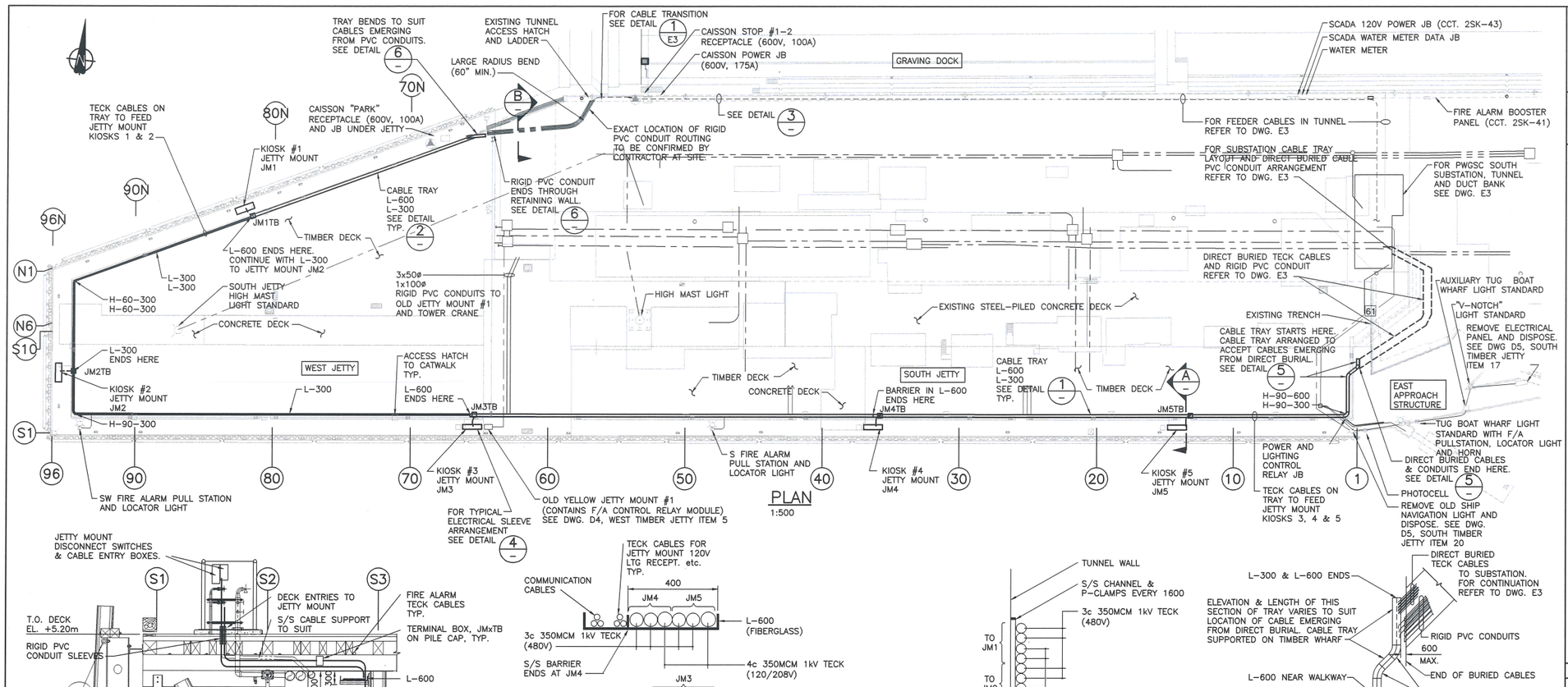
Regional Manager, Environmental Services: **COLLIN KINGMAN**

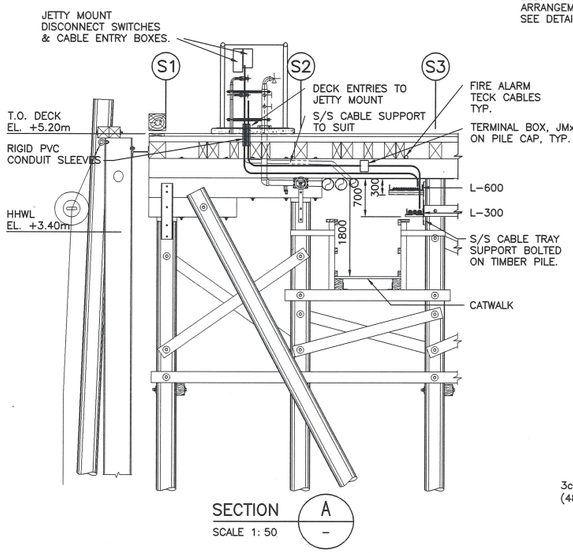
Drawing title/Titre du dessin

EXISTING HIGH MAST LIGHT LIGHT AREA AND DEMOLITION SHEET 2

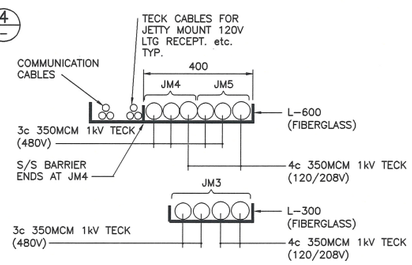
Project No./No. du projet	Sheet/	Revision no./
R.018400.002	D8	0

DM5XXXXXX

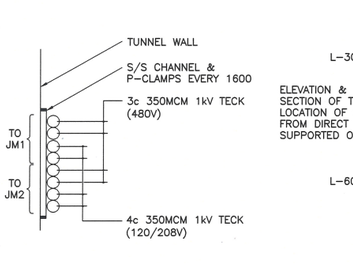




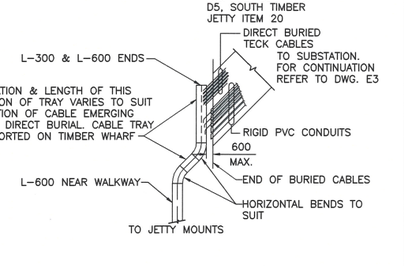
TYPICAL CABLE ROUTING TO JETTY MOUNT FROM TRAYS & TERMINAL BOX



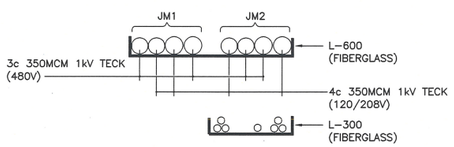
TYPICAL CABLE TRAY ARRANGEMENT ALONG CATWALK



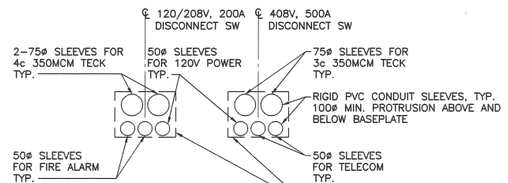
TYPICAL CABLE ARRANGEMENT IN EXISTING NORTH SIDE TUNNEL



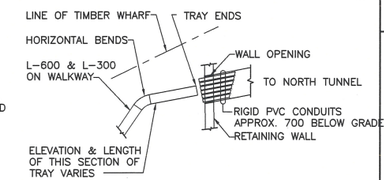
TYPICAL CABLE TRANSITION DIRECT BURIED CABLES TO TRAY



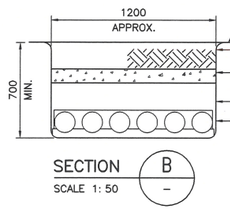
TYPICAL CABLE TRAY ARRANGEMENT



TYPICAL JETTY MOUNT SLEEVE ARRANGEMENT



TYPICAL CABLE TRANSITION BELOWGRADE CONDUIT TO TRAY



TYPICAL CABLE TRAY ARRANGEMENT

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. LOCATION OF JETTY MOUNT KIOSKS ILLUSTRATED ON THIS DRAWING ARE APPROXIMATE.
4. RETAIN JETTY MOUNT KIOSKS AND OTHER EQUIPMENT FOR RE-USE AS LISTED ON DWGS. D4 & D5 (i.e. ITEMS 4, 8a AND ALL OTHERS).

TYPICAL JETTY MOUNT SLEEVE ARRANGEMENT

TYPICAL CABLE TRANSITION BELOWGRADE CONDUIT TO TRAY

LEGEND

- E — XX — ELECTRICAL CABLE / PULL BOX
- DUPLEX RECEPTACLE
- SPECIAL PURPOSE RECEPTACLE
- F — FIRE ALARM PULL STATION / LOCATOR LIGHT
- H — FIRE ALARM HORN
- P — PHOTOCELL
- LIGHT STANDARD

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Pacific Region
SERVICES IMMOBILIERS

Klohn Crippen Berger

PROFESSIONAL ENGINEER
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L. DUONG
39514
2014-12-18

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/Dessine 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
CABLE TRAY LAYOUT
PLAN, SECTIONS AND DETAILS

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	E1	0

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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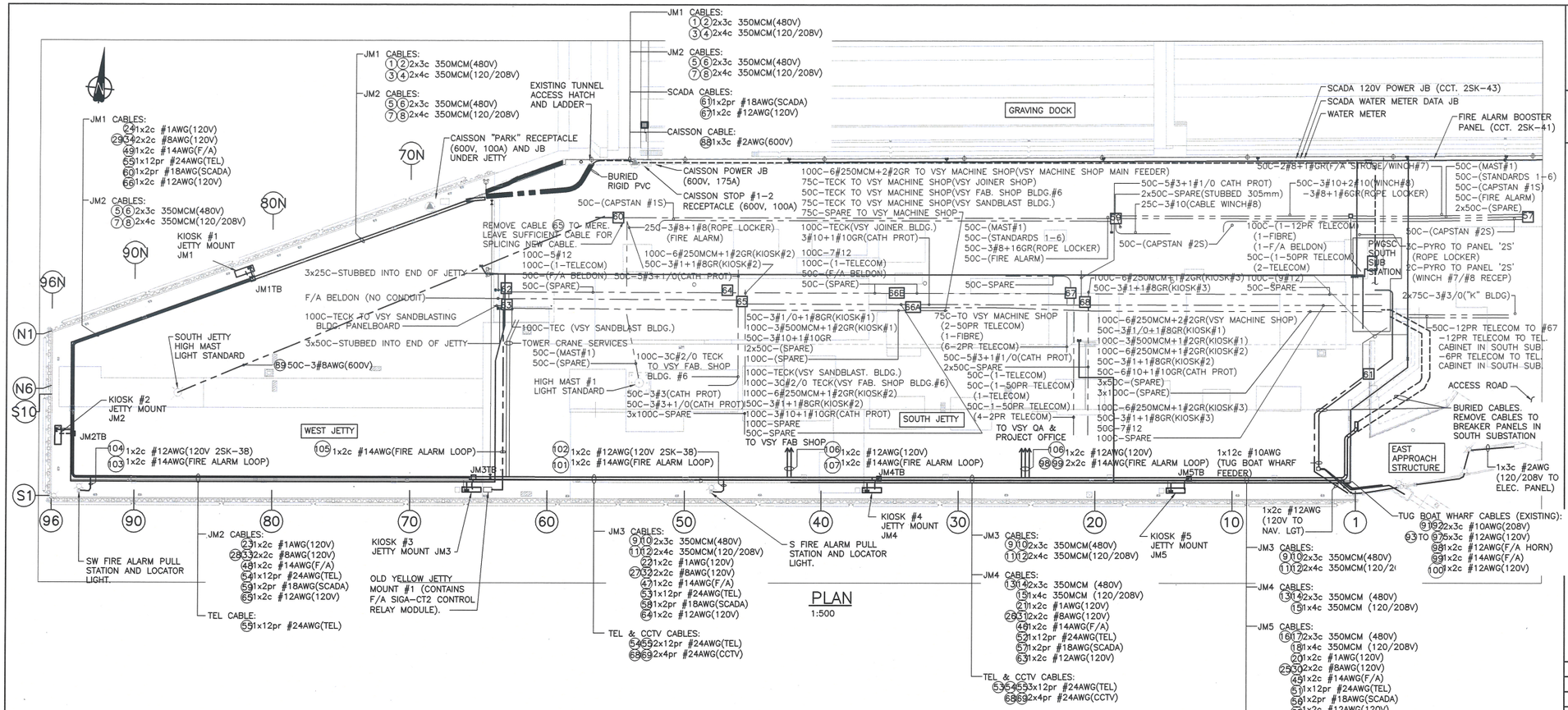

TYPICAL JETTY MOUNT KIOSK – OVERALL VIEW

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

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.
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3. FOR EXISTING CABLE I.D. TAG NUMBER, REFER TO CABLE SCHEDULE ON DRAWING E9.
4. FOR LEGEND SEE DWG. E1.

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REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

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PROFESSIONAL ENGINEER
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2014-12-18

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 JETY UNDER-PIER SEDIMENT REMEDIATION

Consultant Signature Only

Designed by/Concept par: ALISON MANSFIELD / ROB JONES
Drawn by/Dessine 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	Sheet/	Revision no./
R.018400.002	E2	0

PWGSC – A1 – 841X594

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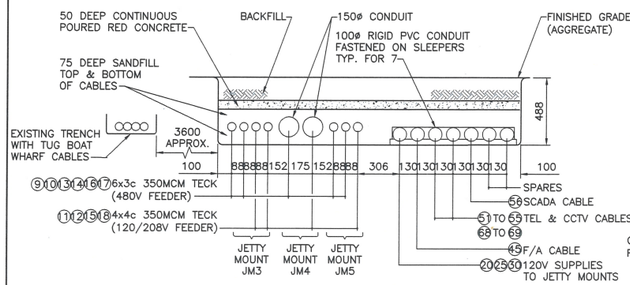
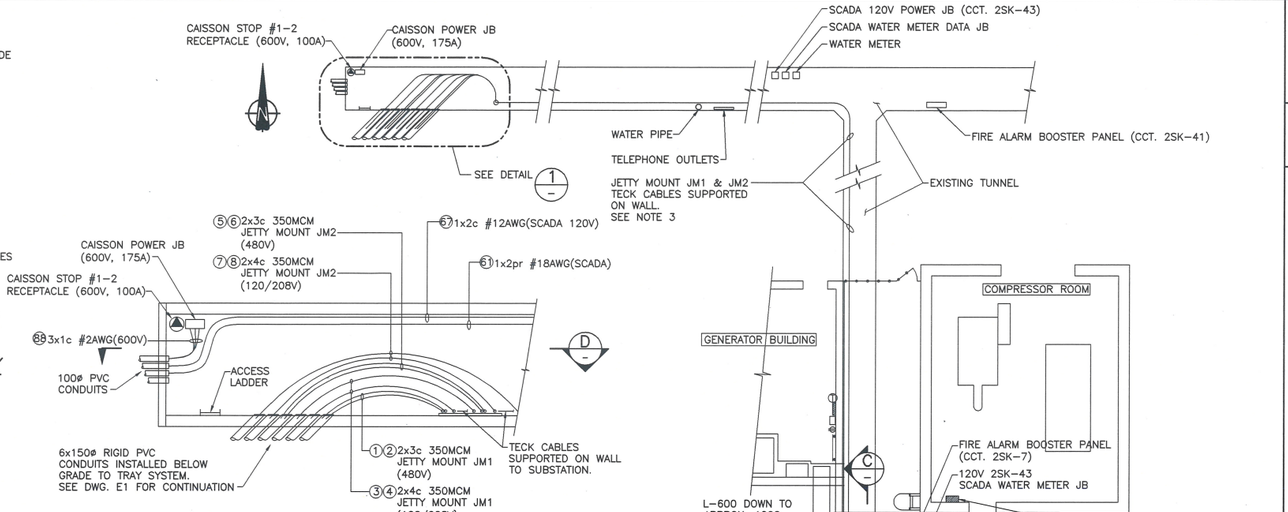


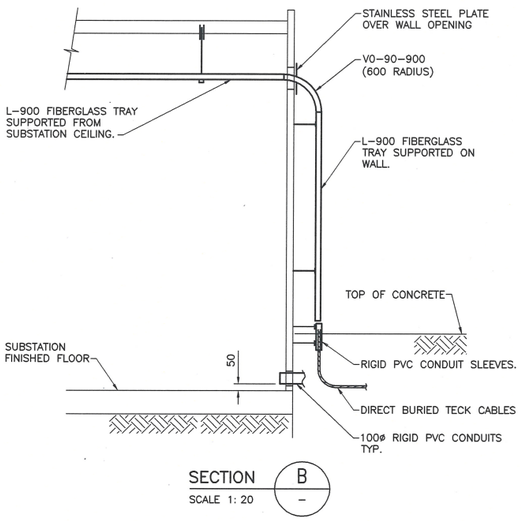
SECTION A – EXISTING CABLE TRENCH TO SOUTH JETTY LOOKING NORTH

SCALE 1: 20

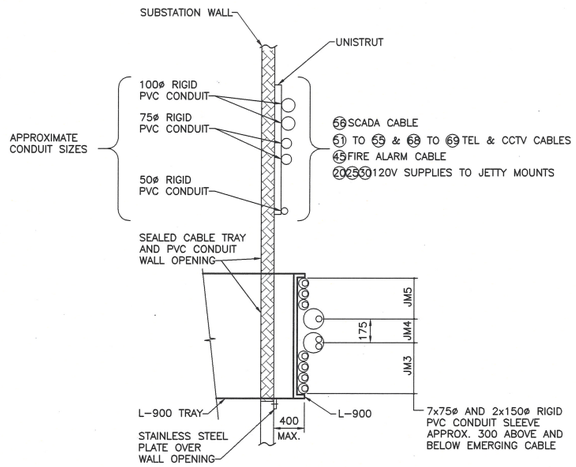


DETAIL 1 1 – E1 – NORTH TUNNEL CABLE TRANSITION

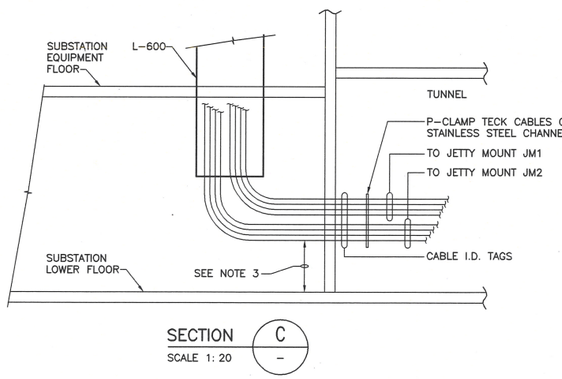
SCALE 1: 50



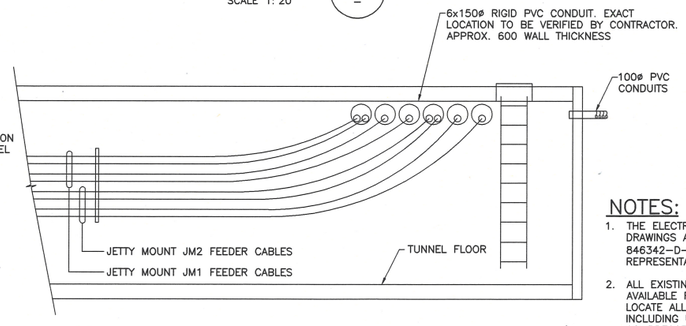
SECTION B – SCALE 1: 20



DETAIL 2 – SCALE 1: 20



SECTION C – SCALE 1: 20



SECTION D – SCALE 1: 20

PLAN – PWGSC SOUTH SUBSTATION, TUNNEL AND DUCT BANK

1:100

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.
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3. CABLES MOUNTED ON TUNNEL WALL VARY IN ELEVATION TO SUIT EXISTING DEVICES AND CABLES IN THE VICINITY.
4. LOCATION OF UNDERGROUND CABLE ROUTING SHOWN ON DRAWINGS ARE APPROXIMATE.
5. DETAILS OF CONDUITS AND CABLES ARE APPROXIMATELY BASED ON WESTMAR DRAWING NO. 8463462–D–E4. AS–BUILT DETAILS MAY VARY. CONDUITS NEAR SOUTH SUBSTATION DO NOT MATCH THE NUMBER OF CONDUITS EXISTING NEAR EAST APPROACH STRUCTURE.
6. FOR EXISTING CABLE I.D. TAG NUMBER, REFER TO CABLE SCHEDULE ON DRAWING E9.
7. FOR LEGEND SEE DWG. E1.

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

Klohn Crippen Berger

PROFESSIONAL ENGINEER – PROVINCE OF BRITISH COLUMBIA – L. DUONG # 39514

2014-12-18

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/Dessine par: GABE MENDES

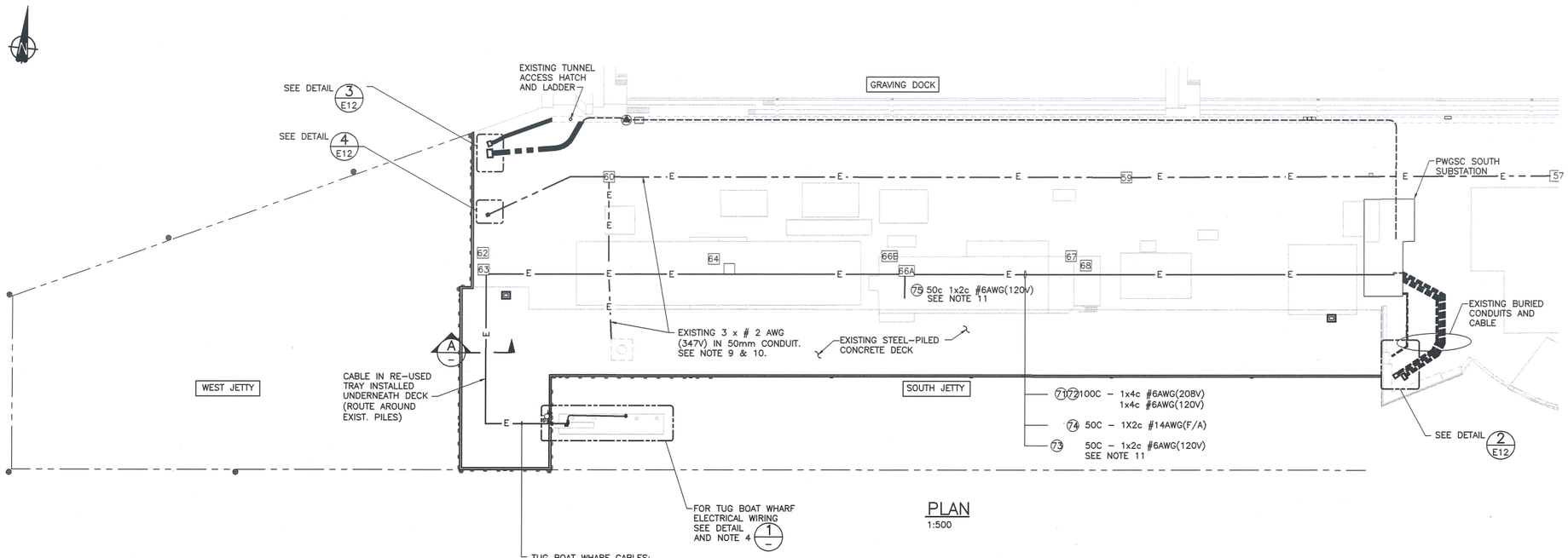
PWGSC Project Manager/Administrateur de Projets TPSGC: ANDREW MYLLY

Regional Manager, Environmental Services: COLLIN KINGMAN

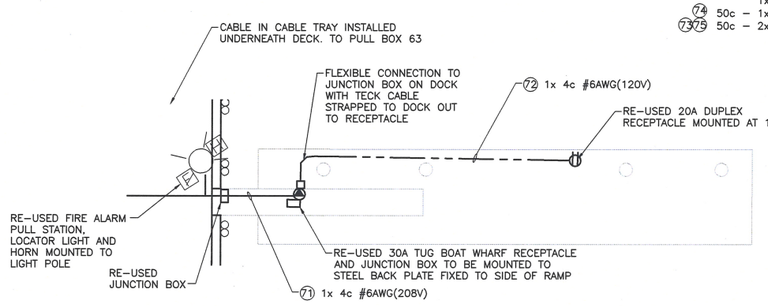
Drawing title/Titre du dessin

EXISTING SERVICES
SUBSTATION CABLE TRAY AND DUCTS
PLAN, SECTIONS AND DETAILS

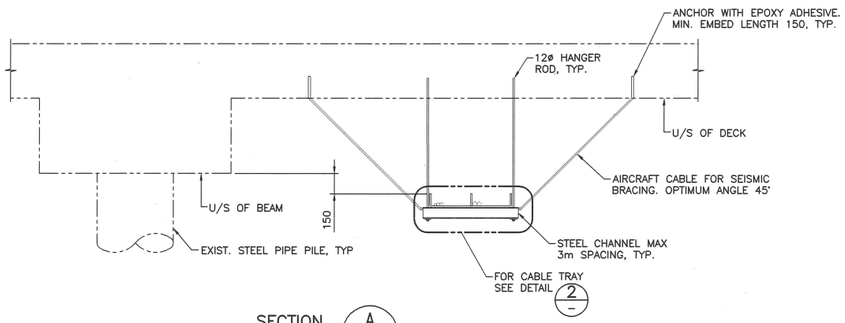
Project No./No. du projet	Sheet/	Revision no./
R.018400.002	E3	0



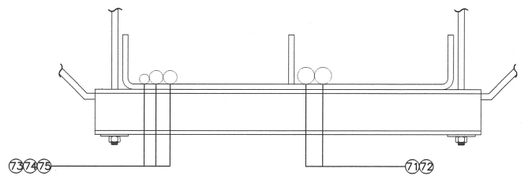
PLAN
1:500



DETAIL 1
SCALE 1: 125



SECTION A
SCALE 1: 20



DETAIL 2
SCALE 1: 5

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. ALL ELECTRICAL INSTALLATIONS SHALL BE PER THE LATEST EDITION OF THE CANADIAN ELECTRICAL CODE.
3. FOR MODIFIED CABLE I.D. TAG NUMBER, REFER TO CABLE SCHEDULE ON DWG. E10.
4. RE-USE EXISTING TUG BOAT WHARF RECEPTACLES, DISTRIBUTION, LIGHTING, FIRE ALARM STATION, HORN AND OTHER EQUIPMENT. RE-INSTALL TO MATCH EXISTING.
5. ALL ELECTRICAL EQUIPMENT TO BE NEMA 4X SUITABLE FOR A MARINE ENVIRONMENT.
6. ALL STEEL BRACKETS, SUPPORTS THREADED ROD, ETC. TO BE HOT DIPPED GALVANIZED AFTER FABRICATION UNLESS NOTED OTHERWISE.
7. 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

8. CABLE TRAY SUPPORT MAXIMUM 3 METRES APART.
9. 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.
10. 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-INSTATE THE 2 - 50mmø CONDUITS (1 - SPARE) AND RE-CONNECT THE WIRES AND MAKE HIGH MAST LIGHT FUNCTIONAL.
11. 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
- XX — PULL BOX
- DUPLEX RECEPTACLE
- SPECIAL PURPOSE RECEPTACLE
- FIRE ALARM PULL STATION AND LOCATOR LIGHT
- H — FIRE ALARM HORN

PWGSC - A1 - 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

Klohn Crippen Berger

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
L. DUONG
39514
2014-12-18

Revision/ Revision	Description/Description	Date/Date
0	ISSUED FOR TENDER	2014/12/16

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/Dessine par
GABE MENDES

PWGSC Project Manager/Administrateur de Projets TPSGC
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	Sheet/	Revision no./
R.018400.002	E4	0

DM5XXXXXX

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 FLOODLIGHT 1	TUG FLOODLIGHT 2	SOUTH JETTY
97	TUGPC–TUGLIGHT3	3C #12 AWG	TECK 90	120V	TUG FLOODLIGHT 2	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:

1. 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.
2. FOR CABLES 68 AND 69, EXACT ORIGIN AND DESTINATION IS UNKNOWN. FIELD VERIFY CABLE ROUTE WITH DEPARTMENTAL REPRESENTATIVE.
3. FOR CABLE SCHEDULE AFTER DEMOLITION SEE DWG. E10.

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

REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

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39514
2014-12-18

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: ALISON MANSFIELD / ROB JONES

Drawn by/Dessine 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 CABLE SCHEDULE

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

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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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:

1. 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.
2. 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.

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada
REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

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39514
2014-12-18

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/Dessine par: GABE MENDES
PWGSC Project Manager/Administrateur de Projets TPSGC: ANDREW MYLLY
Regional Manager, Environmental Services: COLLIN KINGMAN

Drawing title/Titre du dessin

MODIFICATIONS TO SERVICES ELECTRICAL CABLE SCHEDULE

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	E10	0

PWGSC – A1 – 841X594

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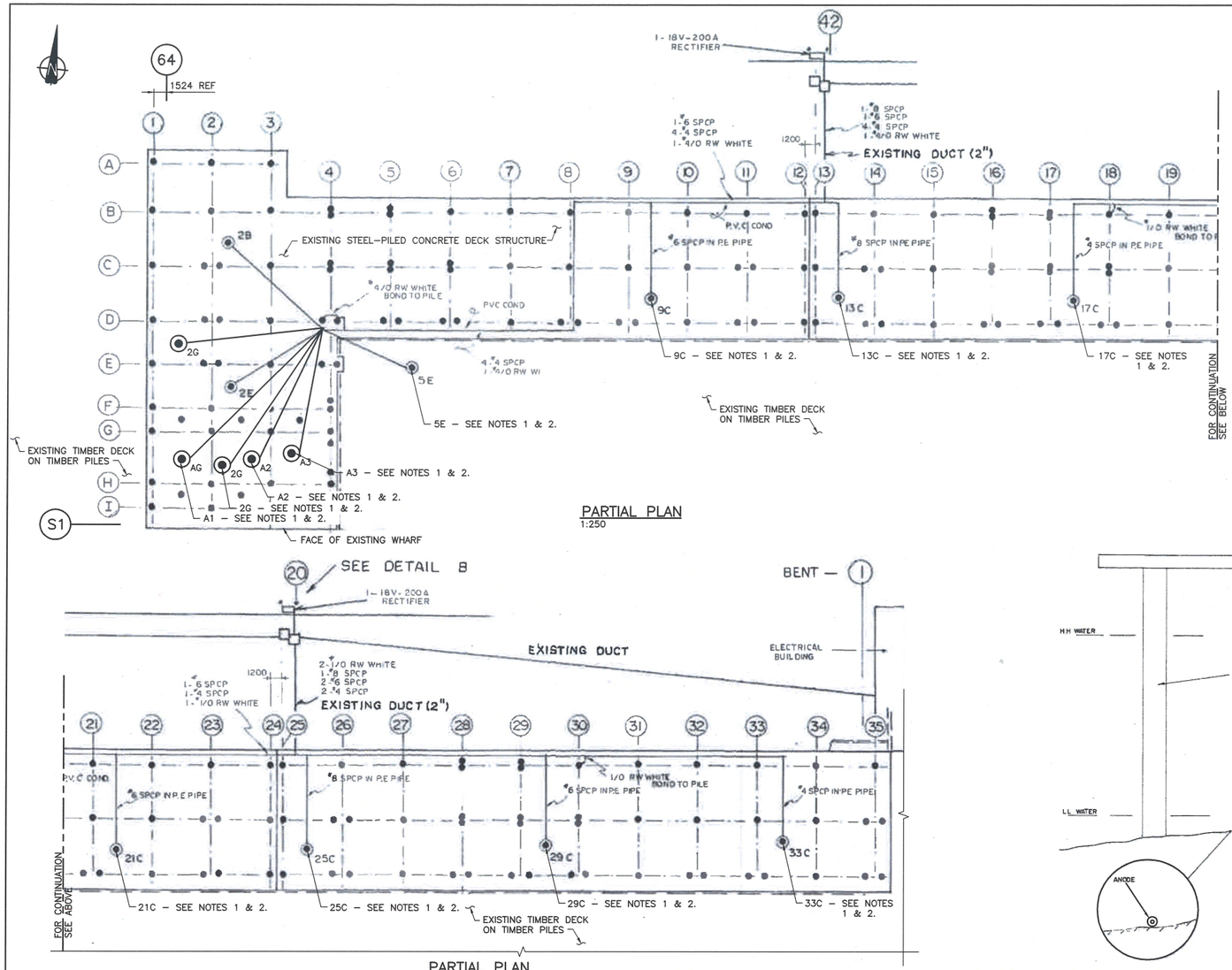
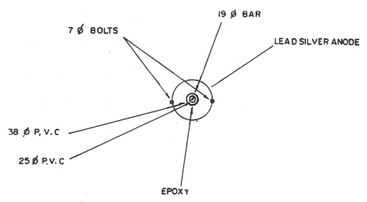
DM5XXXXXX



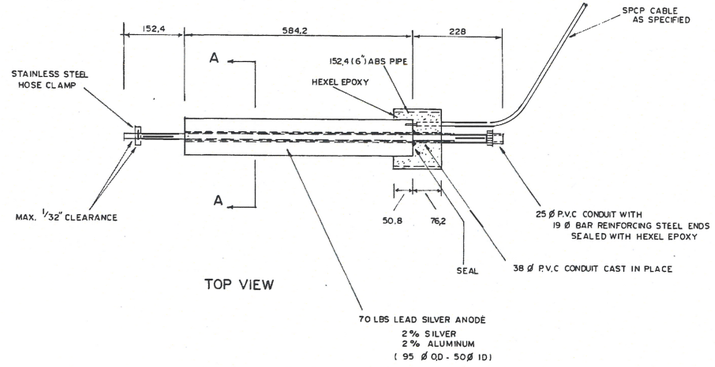
PARTIAL PLAN
1:250

PARTIAL PLAN
1:250

TYPICAL SECTION
N.T.S.



SECTION A-A



TOP VIEW

TYPICAL ANODE ASSEMBLY DETAILS
N.T.S.

LEGEND:

- 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.

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

REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

Klohn Crippen Berger

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
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39514
2014-12-18

Revision/ Revisions	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/Dessins 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/	Revision no./
R.018400.002	E11	0

PWGSC – A1 – 841X594

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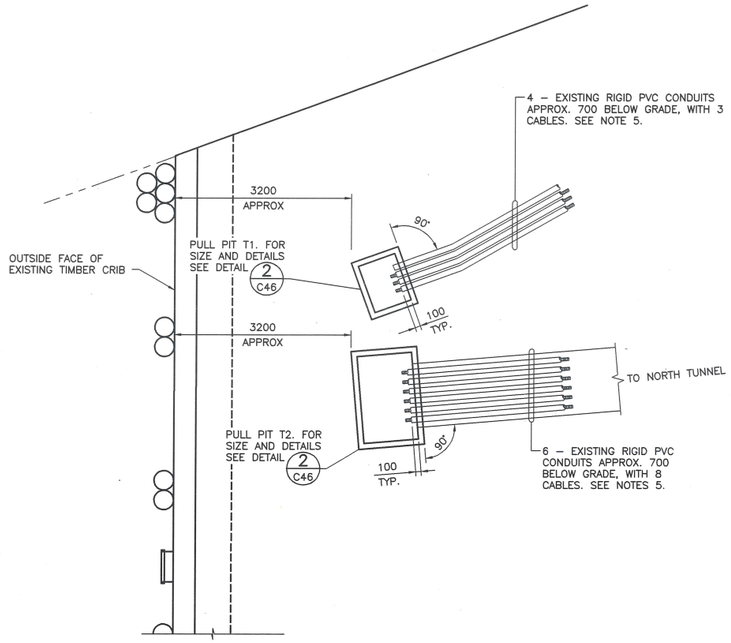
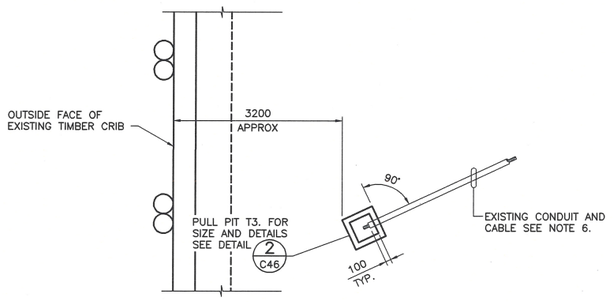


DETAIL 3 / E4
SCALE 1: 50



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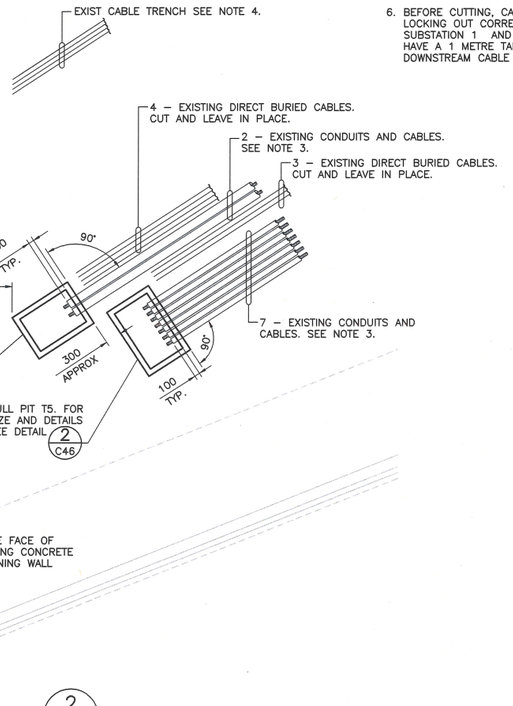

DETAIL 2 / E4
SCALE 1: 50

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. 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.
4. 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.
5. 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.
6. 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.

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

REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

Klohn Crippen Berger

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PROVINCE OF BRITISH COLUMBIA
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39514
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

Consultant Signature Only

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Regional Manager, Environmental Services
COLLIN KINGMAN

Drawing title/Titre du dessin
SERVICES
ELECTRICAL
TERMINATION DETAILS

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	E12	0

PWGSC – A1 – 841X594

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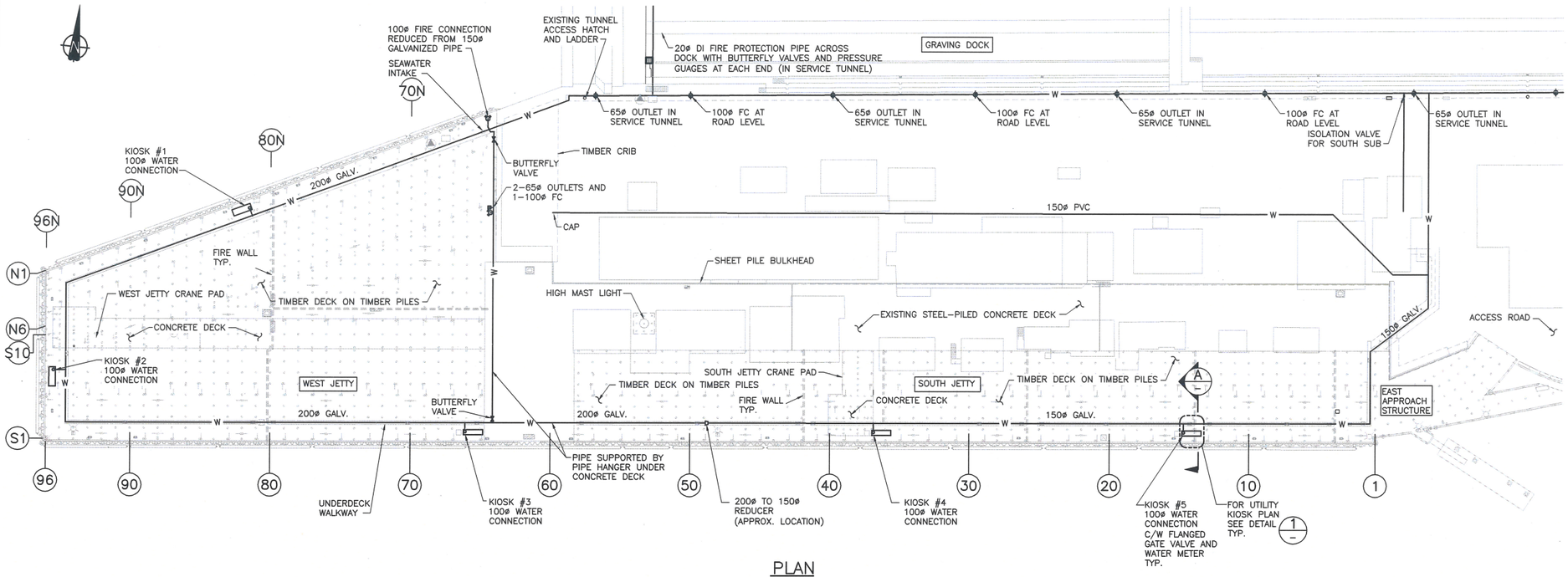

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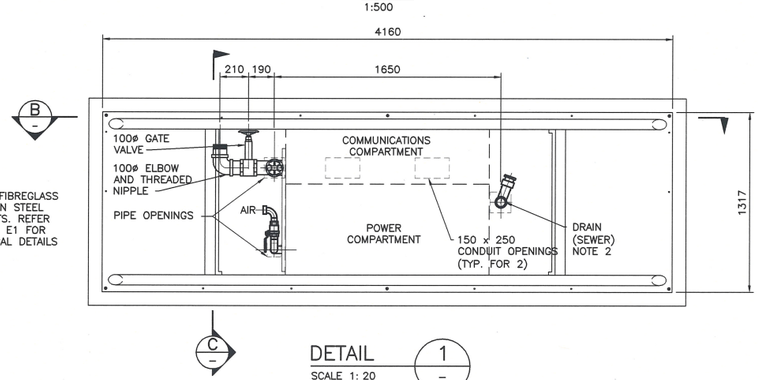

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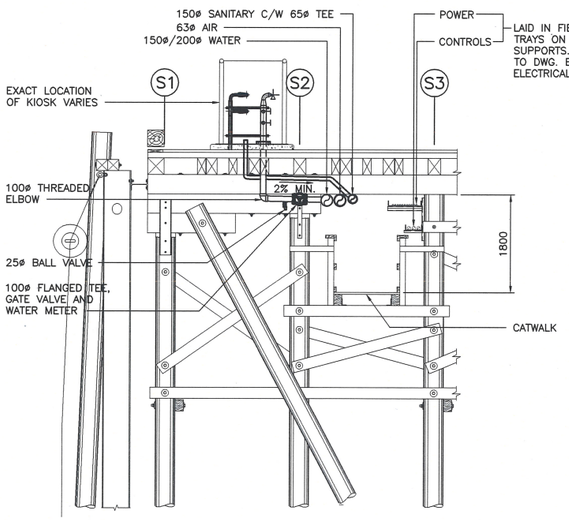
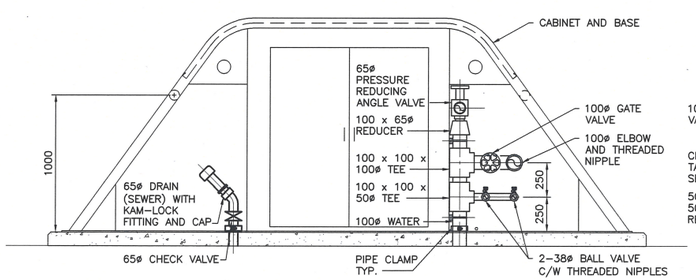
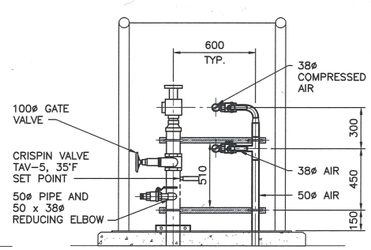


SECTION A – TYPICAL UTILITY ALIGNMENT IN WALKWAY
SCALE 1: 50



SECTION B
SCALE 1: 20



SECTION C
SCALE 1: 20

NOTES:

1. EXACT LAYOUT MAY VARY. CONTRACTOR TO FIELD VERIFY ALL DETAILS.
2. SEWER ON KIOSKS 3, 4 AND 5 ONLY.
3. ALL DIMENSIONS FOR REFERENCE ONLY. CONTRACTOR TO VERIFY.
4. DISCONNECT KIOSKS, REMOVE AND RETAIN FOR RE-USE.
5. REMOVE PIPE, MECHANICAL COUPLINGS, VALVES, FLOW METERS & FITTINGS. RETAIN, RE-USE OR DISPOSE AS DESCRIBED ON DWG. D4 AND D5.
6. 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

—W— EXISTING FIRE WATER MAIN / VALVE

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
D. C. SHARPE
38611
Dec 15, 2014

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada
REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

Klohn Crippen Berger

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/Dessine 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
FIRE WATER MAIN AND KIOSK
PLAN, SECTIONS AND DETAIL

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	M1	0

PWGSC – A1 – 841X594

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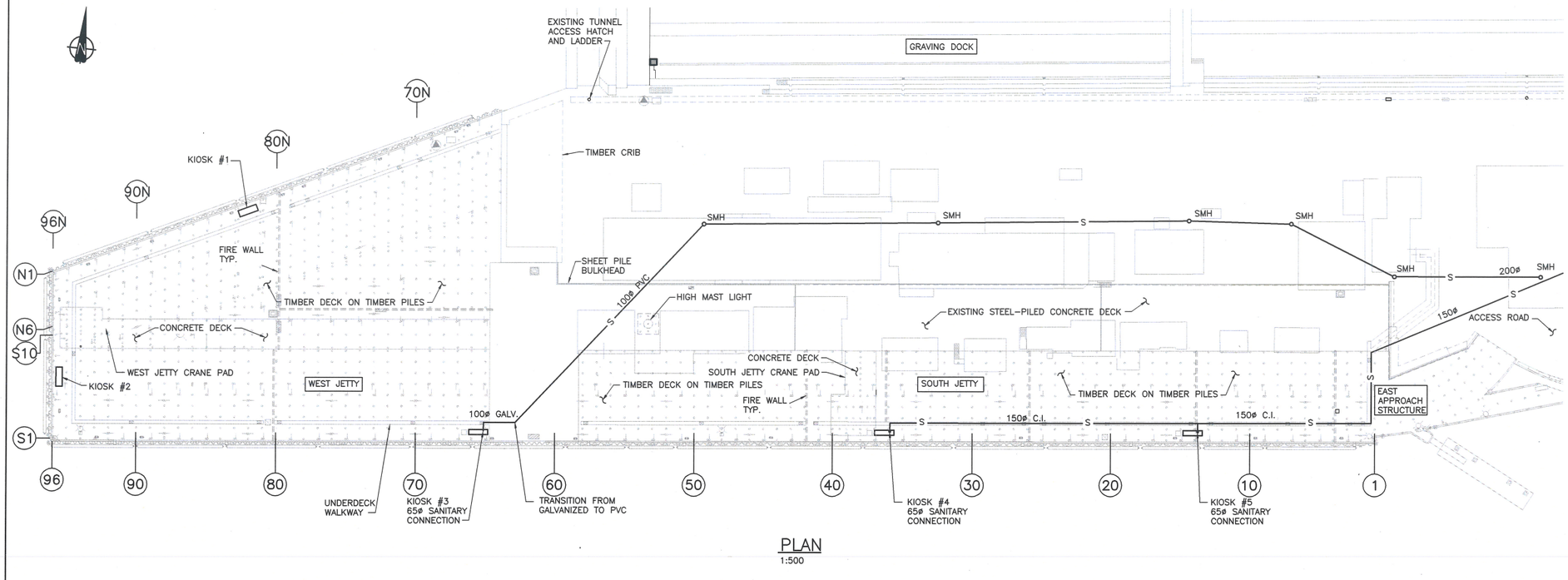

PLAN
1:500

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

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

REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

Klohn Crippen Berger

PROFESSIONAL ENGINEER
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38614
Dec 18/2014

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

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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

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Drawing title/Titre du dessin

EXISTING SERVICES
SANITARY SEWER
PLAN

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

PWGSC – A1 – 841X594

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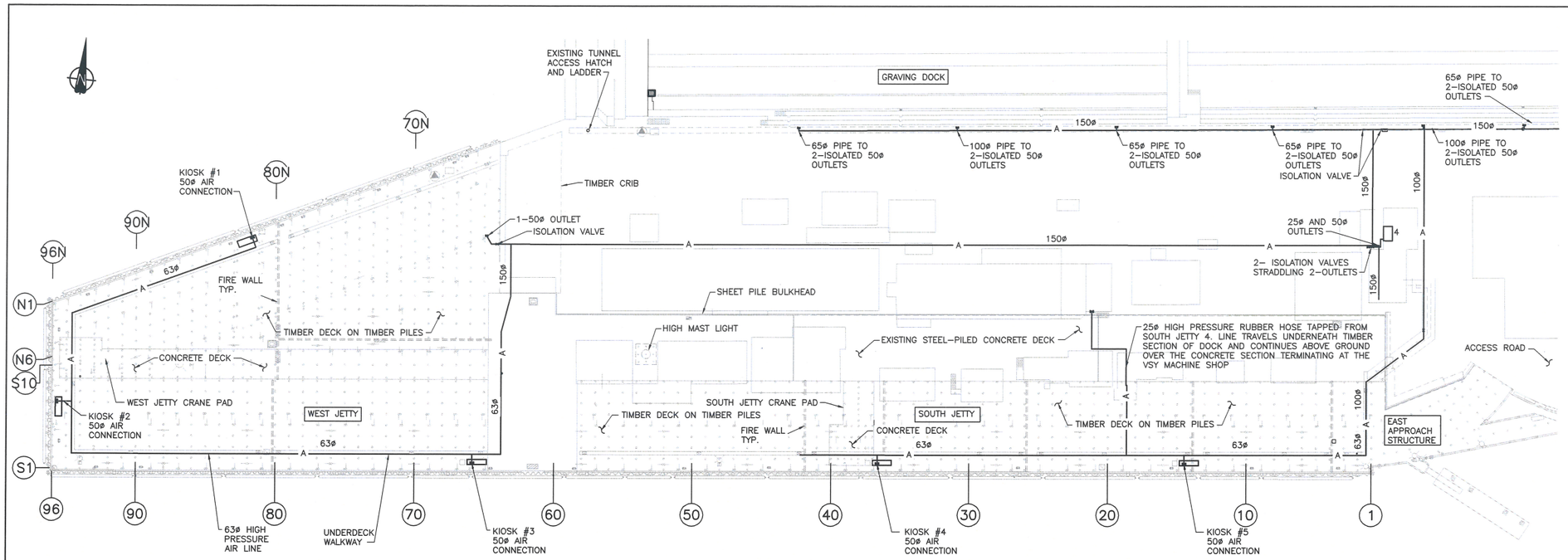

PLAN
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NOTES:

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

A — EXISTING AIR LINE / VALVE

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

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

REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

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PROFESSIONAL ENGINEER
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D. C. SHARPE
38614
Dec 18, 2014

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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
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ANDREW MYLLY

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COLLIN KINGMAN

Drawing title/Titre du dessin

EXISTING SERVICES
COMPRESSED AIR
PLAN

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

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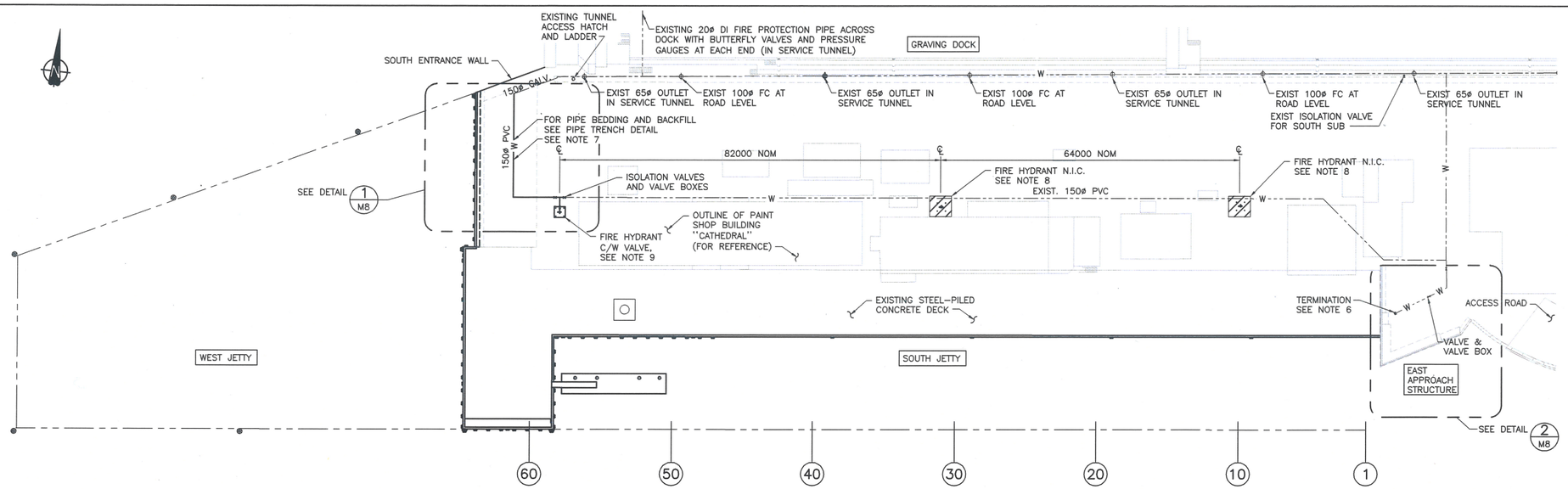

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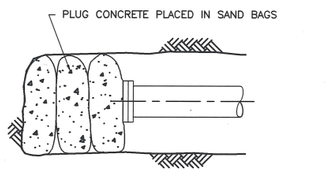

PLUG OR END CAP
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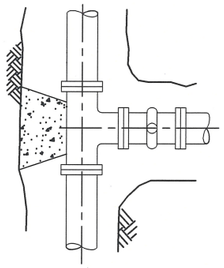

TEES
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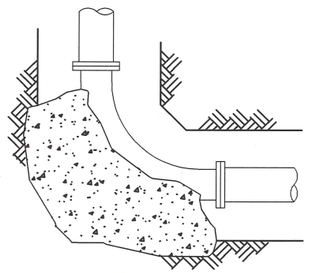

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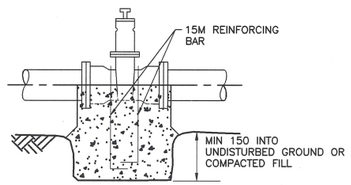

VALVES
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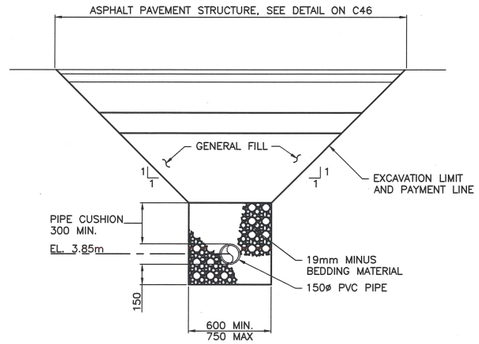

PIPE TRENCH DETAIL
N.T.S.

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^2)	AREA (m^2)	AREA (m^2)	AREA (m^2)
150	0.45	0.64	0.52	0.35
NOTE: AREAS ARE FOR 670 kPa TEST PRESSURE AND ALLOWABLE LATERAL BEARING STRESS OF 42kPa				

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

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D. C. SHARPE
38614
DECEMBER 18, 2014

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

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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
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Drawn by/Dessine par
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Regional Manager, Environmental Services
COLLIN KINGMAN

Drawing title/Titre du dessin
SERVICES
FIRE WATER MAIN
PLAN AND DETAILS

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	M4	0

PWGSC – A1 – 841X594

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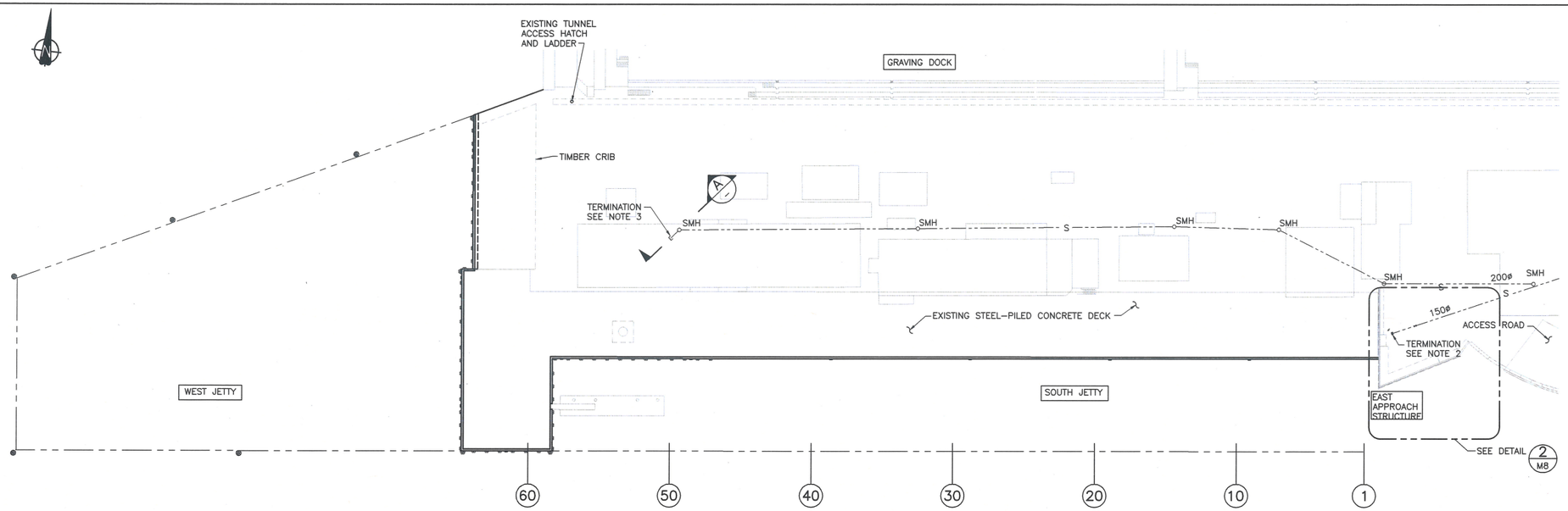
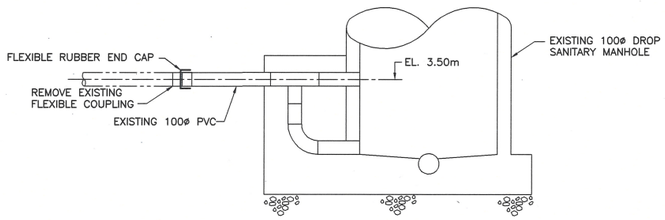


PLAN
1:500



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.

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada
REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

Klohn Crippen Berger

PROFESSIONAL ENGINEER – PROVINCE OF BRITISH COLUMBIA – D. C. SHARPE # 38614
Dec. 18, 2014

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
ANDREW MACK / DOUG SHARPE

Drawn by/Dessine par
GABE MENDES

PWGSC Project Manager/Administrateur de Projets TPSGC
ANDREW MYLLY

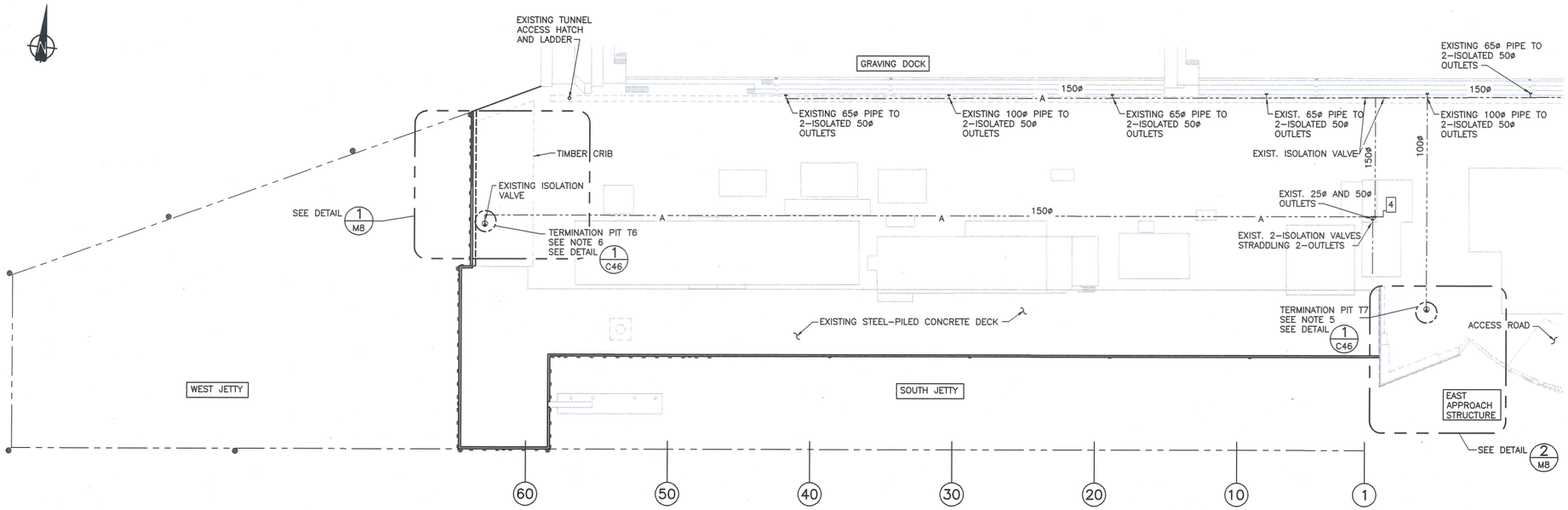
Regional Manager, Environmental Services
COLLIN KINGMAN

Drawing title/Titre du dessin

SERVICES
SANITARY SEWER
PLAN AND SECTION

Project No./No. du projet	Sheet/	Revision no./
R.018400.002	M5	0

DM5XXXXXX



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.

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada
REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

Klohn Crippen Berger

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
D. C. SHARPE
38614
2014/12/11

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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ANDREW MYLLY

Regional Manager, Environmental Services
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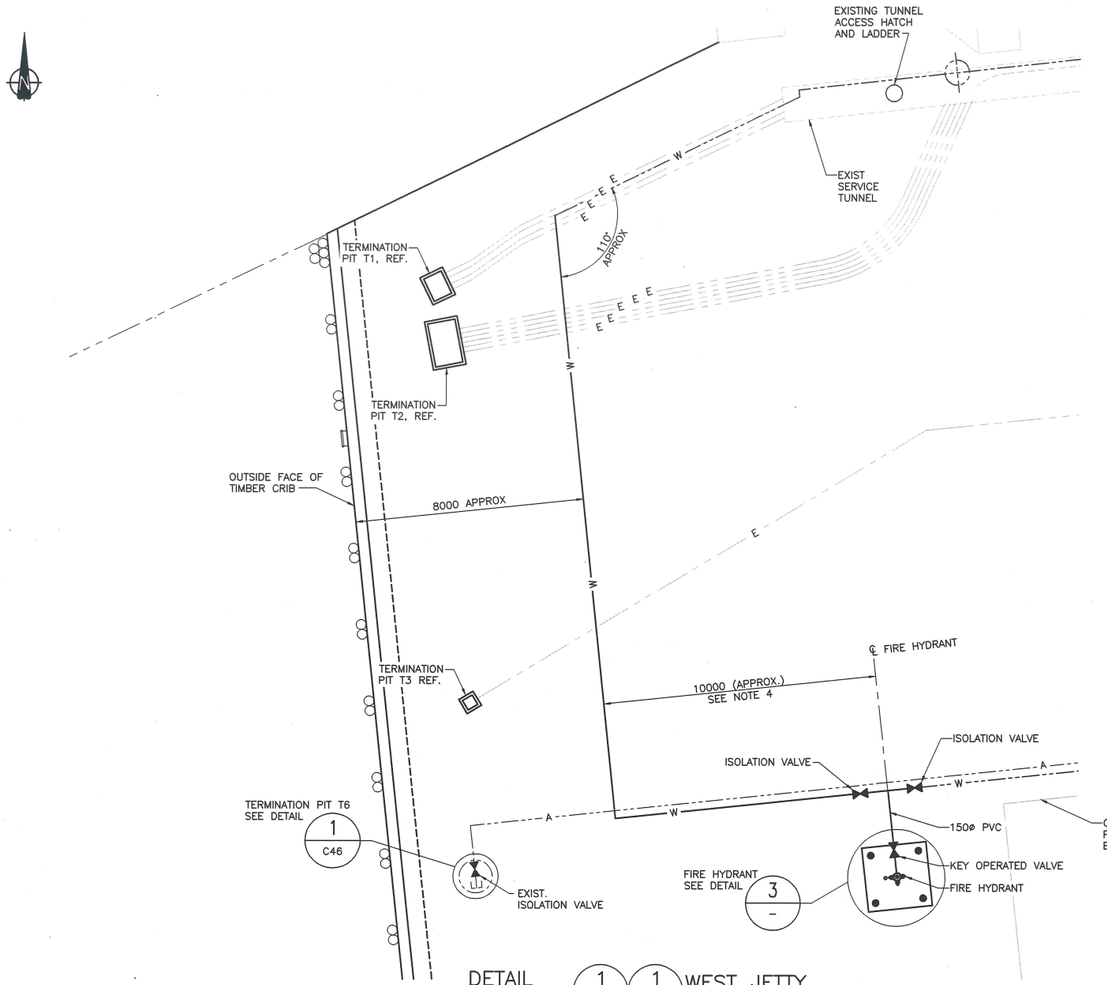
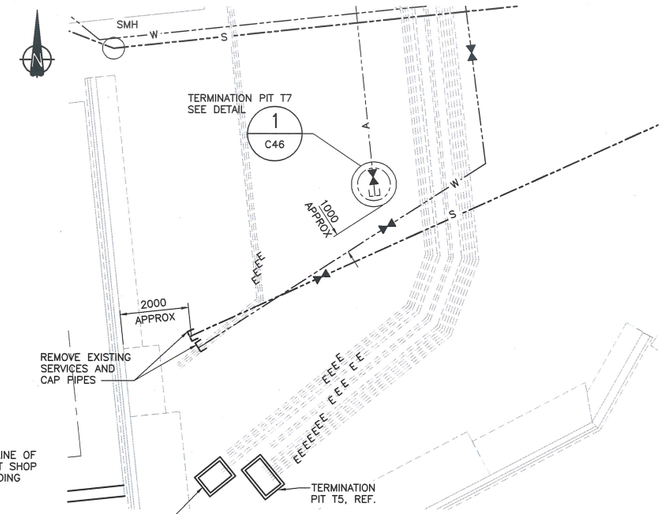
Drawing title/Titre du dessin
SERVICES
COMPRESSED AIR
PLAN

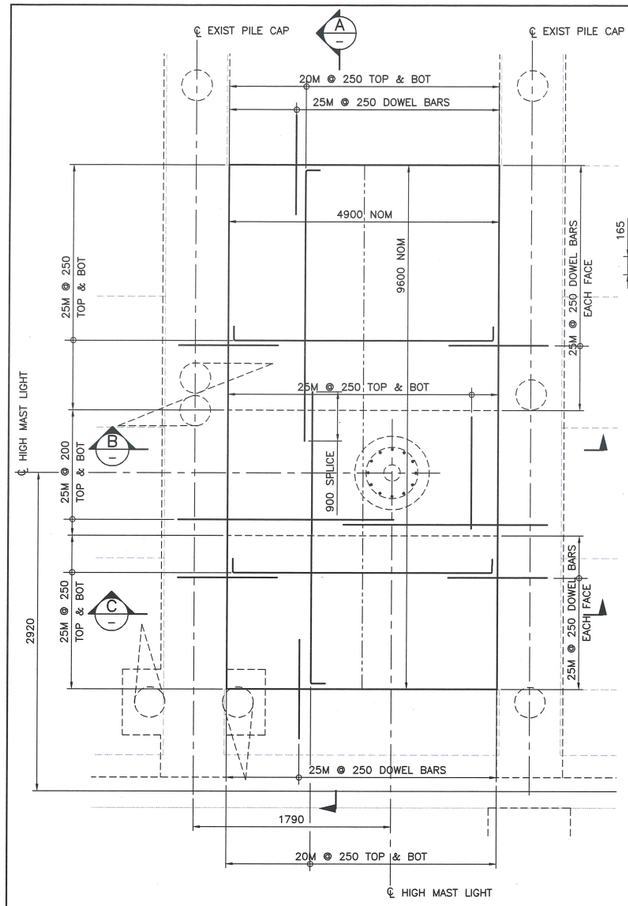
Project No./No. du projet	Sheet/	Revision no./
R.018400.002	M6	0

DM5XXXXXX

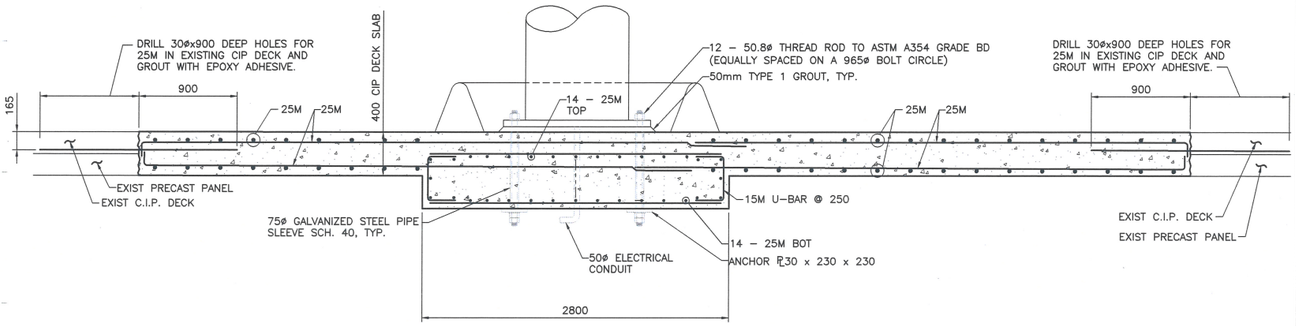


DETAIL 1 M4 1 M6 WEST JETTY
SCALE 1: 100

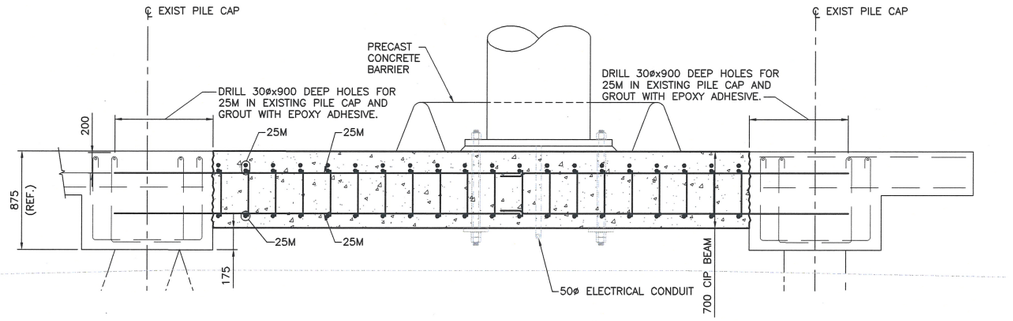

SMH
W
S
TERMINATION PIT T7 SEE DETAIL 1 C46
1000 APPROX
2000 APPROX
REMOVE EXISTING SERVICES AND CAP PIPES
TERMINATION PIT T4, REF.
TERMINATION PIT T5, REF.
E E E E



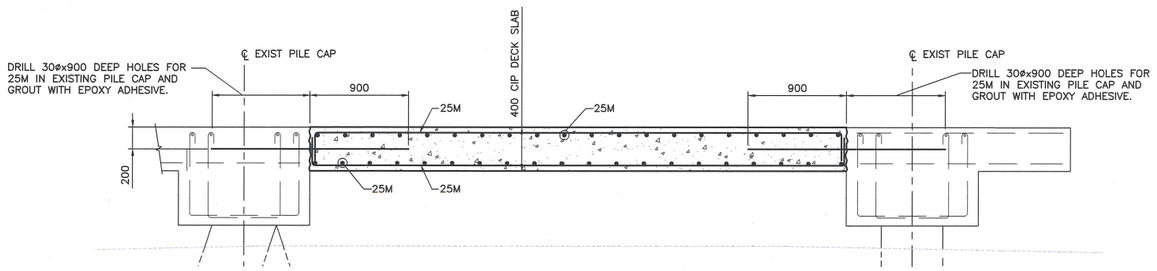
PLAN – REPLACEMENT CAST–IN–PLACE CONCRETE DECK SLAB
1:50



SECTION A
SCALE 1: 25



SECTION B
SCALE 1: 25



SECTION C
SCALE 1: 25

NOTES:

1. FOR NOTES SEE DWG. C2.
2. HIGH MAST LIGHT DECK SLAB DESIGNED FOR THE FOLLOWING LIVE LOADS (ALL LOADS ARE UNFACTORED):
   - 2.1. UNIFORMLY DISTRIBUTED LOAD (UDL) : 28.7 kPa (600 psf)
   - 2.2. 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)
   - 2.3. SAME LIVE LOADS AS ADJACENT EXISTING STEEL PILED CONCRETE DECK STRUCTURE.
3. 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.

Public Works and Government Services Canada
Travaux publics et Services gouvernementaux Canada
REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

Klohn Crippen Berger

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
G. B. A. COOPER
Dec 18/14

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
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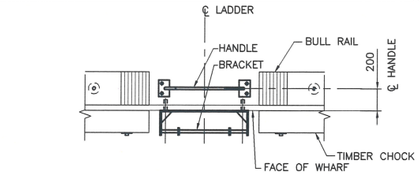
ANDREW MYLLY

Regional Manager, Environmental Services
COLLIN KINGMAN

Drawing title/Titre du dessin
CONSTRUCTION AT HIGH MAST LIGHT AREA

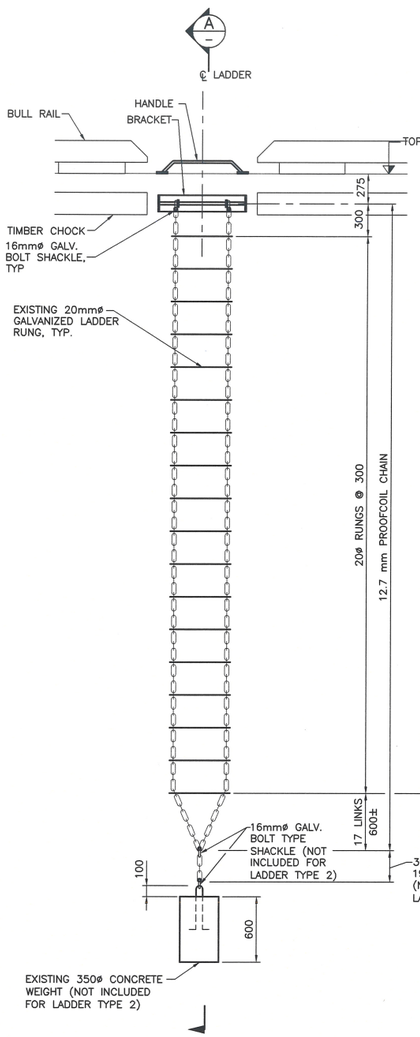
Project No./No. du projet	Sheet/	Revision no./
R.018400.002	S110	0

PWGSC – A1 – 841X594
0 10 20 30 40 50 60 70 80 90 100mm
DM5XXXXXX



DETAIL 1 / S128
SCALE 1: 25

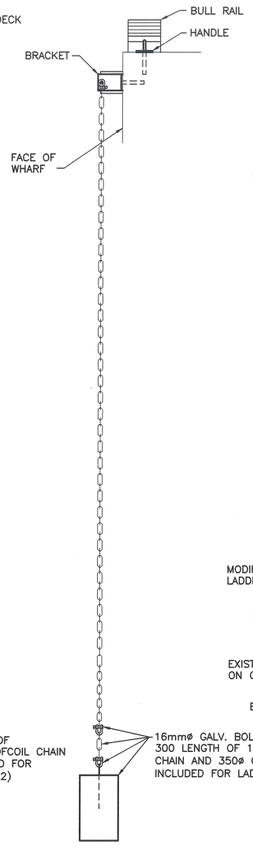
4 – TYPE 1 REQUIRED
6 – TYPE 2 REQUIRED



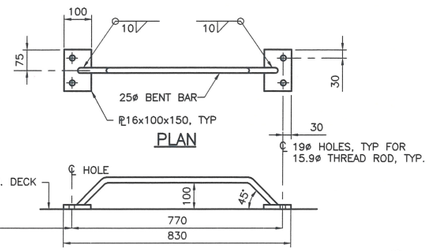
ELEVATION
1:25

CHAIN LADDERS – MODIFICATIONS

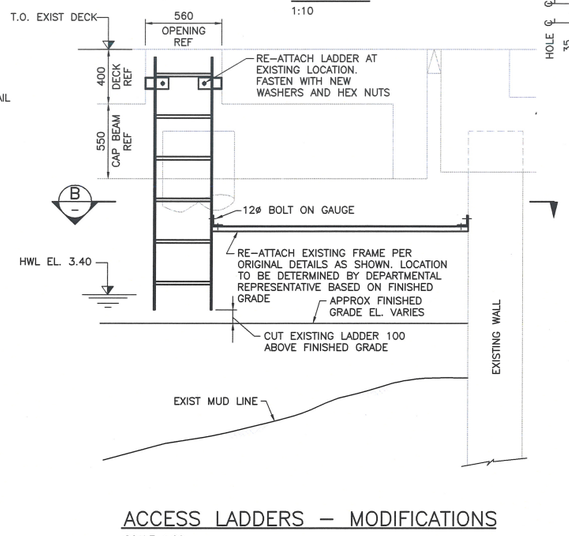
LADDER TYPE 1 SHOWN
LADDER TYPE 2 SIMILAR, EXCEPT AS NOTED



SECTION A / –
SCALE 1: 25

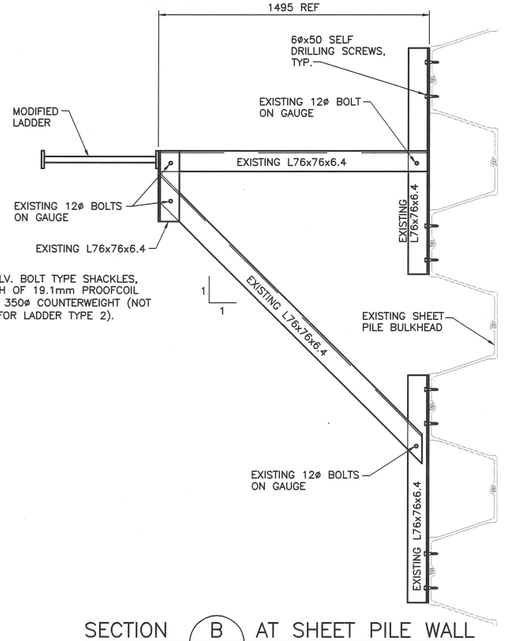


ELEVATION
HANDLE
1:10

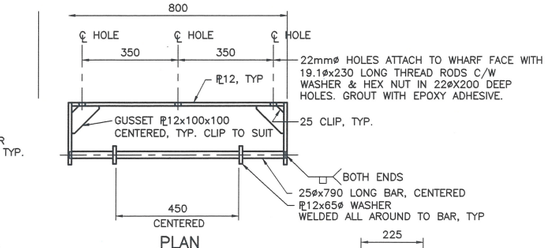


ACCESS LADDERS – MODIFICATIONS

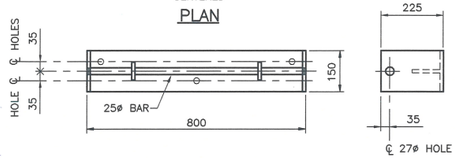
SCALE 1:20



SECTION B / – AT SHEET PILE WALL
SCALE 1: 10



PLAN



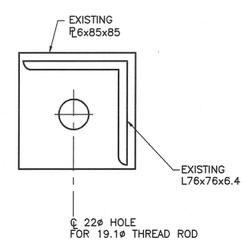
ELEVATION

END VIEW

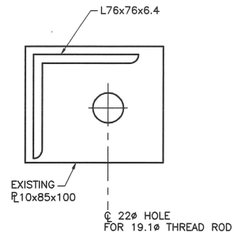
BRACKET

1:10

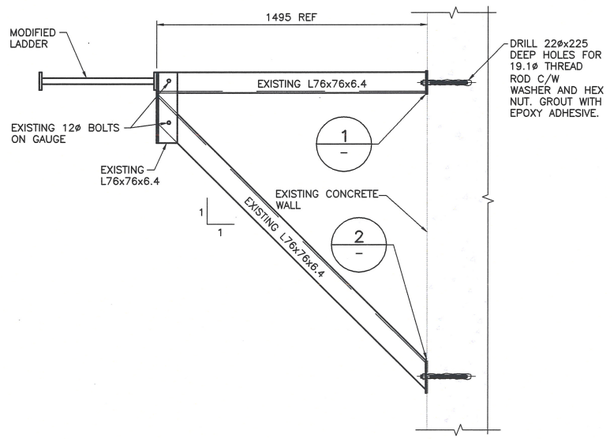
NOTE:
ALL WELDS SHALL BE 6mm CONTINUOUS FILLET ALL AROUND U.N.O.



DETAIL 1 / –
SCALE 1: 2



DETAIL 2 / –
SCALE 1: 2



SECTION B / – AT CONCRETE WALL
SCALE 1: 10

PWGSC – A1 – 841X594

0 10 20 30 40 50 60 70 80 90 100mm

DM5XXXXXX

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

REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

Klohn Crippen Berger

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
K. L. GREINACHER
39177
Dec. 18/14

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
JANET TONG

Drawn by/Dessine par
ARNIE RIST

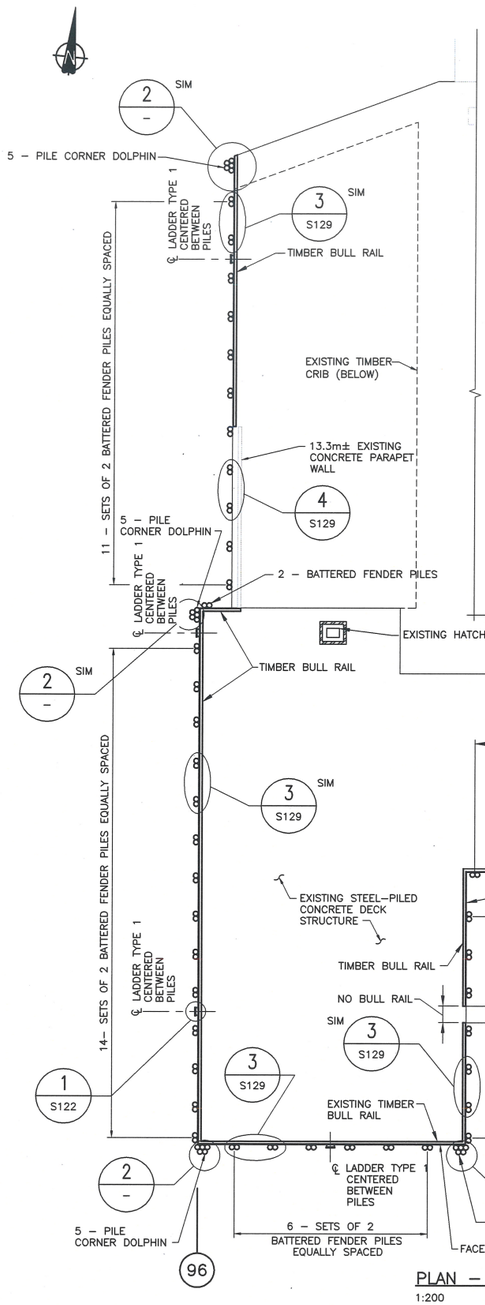
PWGSC Project Manager/Administrateur de Projets TPSGC
ANDREW MYLLY

Regional Manager, Environmental Services
COLLIN KINGMAN

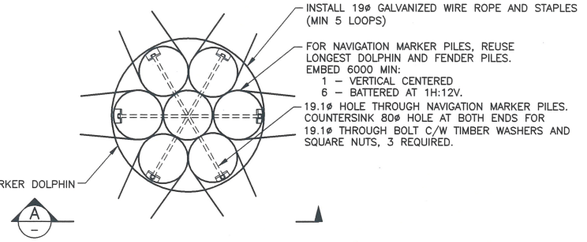
Drawing title/Titre du dessin

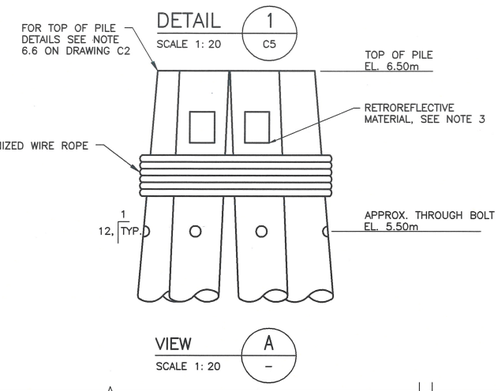
WEST AND SOUTH JETTY DECK CHAIN LADDER AND ACCESS LADDERS MODIFICATIONS

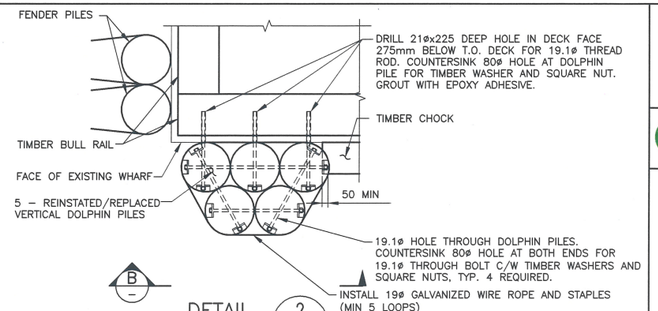
Project No./No. du projet	Sheet/	Revision no./
R.018400.002	S122	0

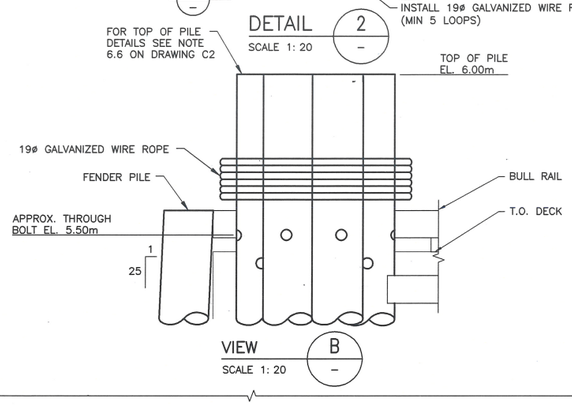


PLAN – WEST JETTY
1:200









NOTES:

1. EMBEDMENT FOR FENDER PILES: 3600 NOM. EMBEDMENT FOR CORNER DOLPHINS: 6000 NOM. EMBEDMENT FOR NAVIGATION MARKER PILES: 6000 NOM.
2. NAVIGATION MARKERS ARE INTENDED TO INDICATE THE NAVIGATION CHANNEL AND ARE NOT DESIGNED TO BE BERTHING OR TURNING DOLPHINS.
3. 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.

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada
REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

Klohn Crippen Berger

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
K. L. GREINACHER
39177
Dec. 18/14

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/Dessine par
ARNIE RIST

PWGSC 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	Sheet/	Revision no./
R.018400.002	S128	0

PWGSC – A1 – 841X594

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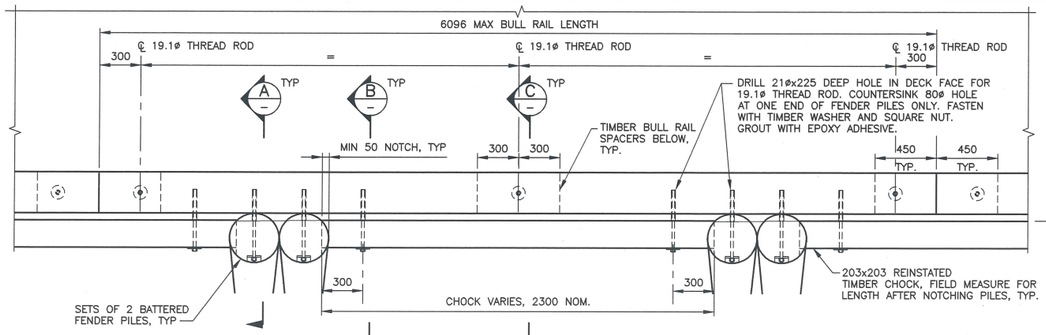
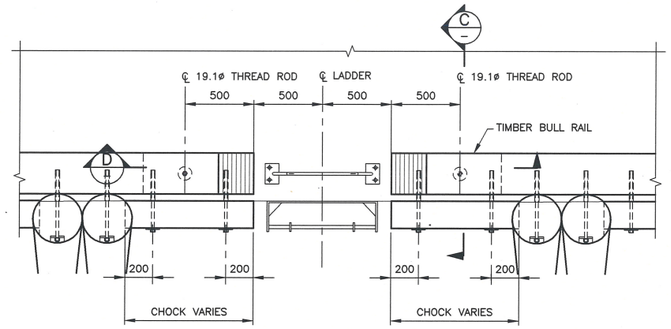
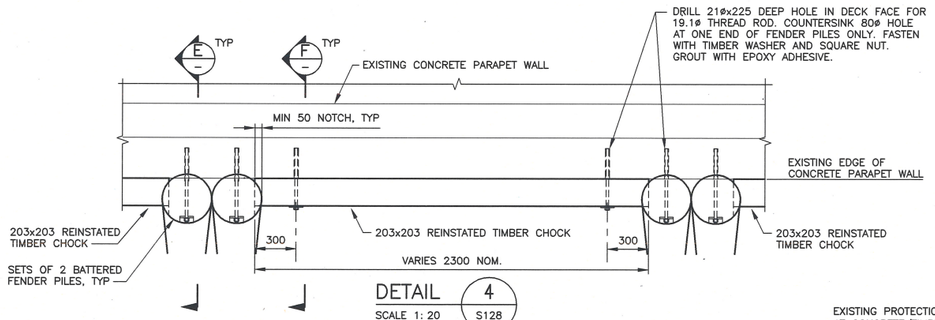


DETAIL 3 TYP BETWEEN LADDERS
SCALE 1: 20 S128

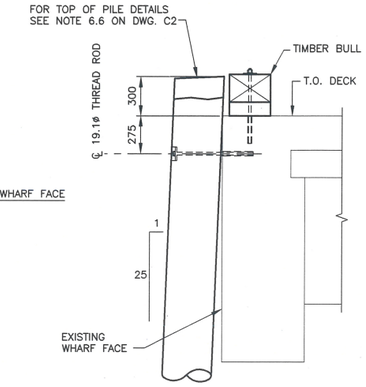


DETAIL 3 TYP AT LADDERS
SCALE 1: 20 S128

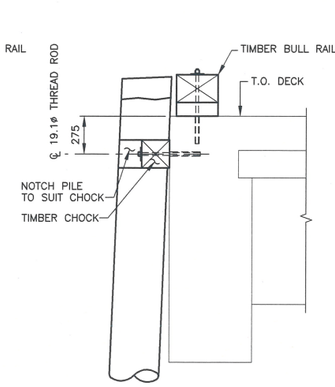
CONNECTIONS SIMILAR TO SECTION 'A' ABOVE EXCEPT AS SHOWN



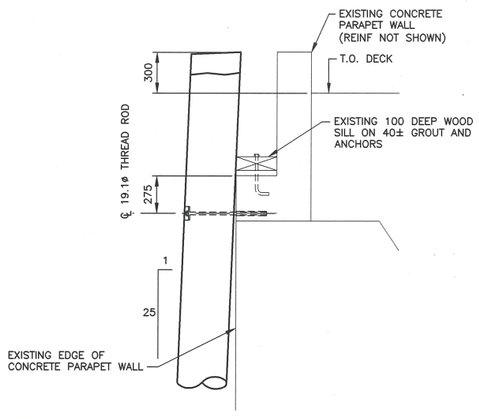
DETAIL 4
SCALE 1: 20 S128



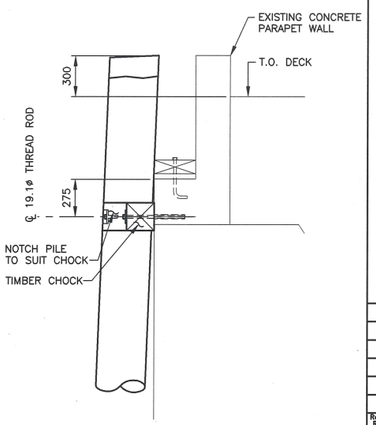
SECTION A
SCALE 1: 20



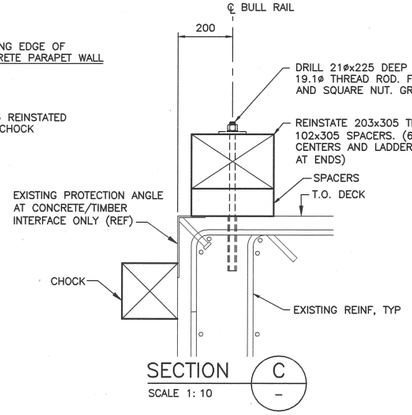
SECTION B
SCALE 1: 20



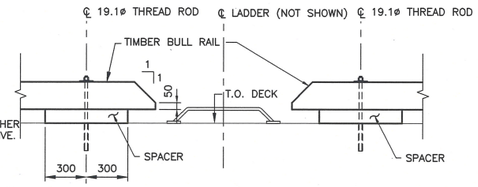
SECTION E
SCALE 1: 20



SECTION F
SCALE 1: 20



SECTION C
SCALE 1: 10



SECTION D
SCALE 1: 20

NOTES:

1. SEE DRAWING C2 FOR NOTES.

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

REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

Klohn Crippen Berger

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
K. L. GREINACHER
39177
Dec. 18/14

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/Dessine par
ARNIE RIST

PWGSC Project Manager/Administrateur de Projets TPSGC
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

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0 10 20 30 40 50 60 70 80 90 100mm

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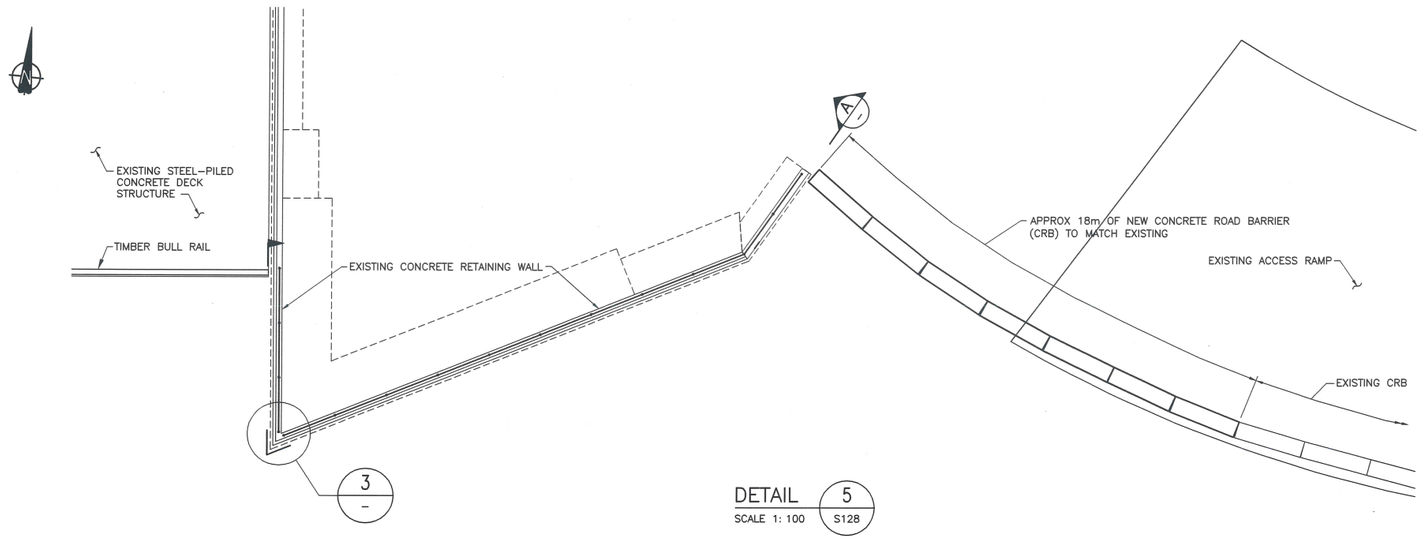
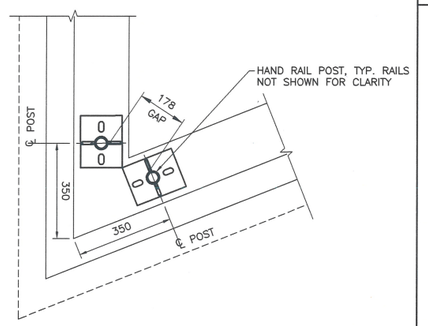
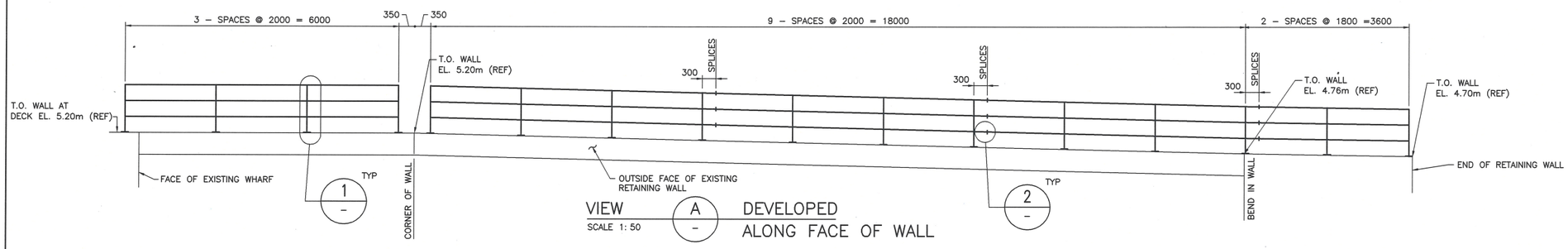


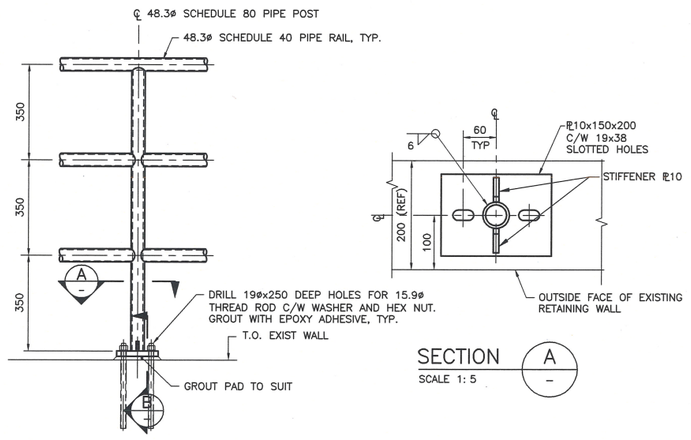
DETAIL 5 / SCALE 1: 100 / S128



DETAIL 3 / SCALE 1: 10

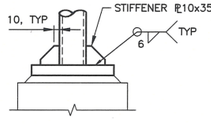


VIEW A / SCALE 1: 50 — DEVELOPED ALONG FACE OF WALL

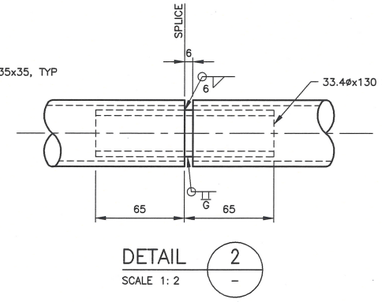


DETAIL 1 / SCALE 1: 10

SECTION A / SCALE 1: 5



SECTION B / SCALE 1: 5



DETAIL 2 / SCALE 1: 2

NOTES:

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

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0 10 20 30 40 50 60 70 80 90 100mm

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

REAL PROPERTY SERVICES
Pacific Region
SERVICES IMMOBILIERS

Klohn Crippen Berger

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — K. L. GREINACHER # 39177

Dec. 18/14

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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
KRISTIN GREINACHER

Drawn by/Dessine par
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PWGSC Project Manager/Administrateur de Projets TPSGC
ANDREW NYLLY

Regional Manager, Environmental Services
COLLIN KINGMAN

Drawing title/Titre du dessin
HAND RAIL

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

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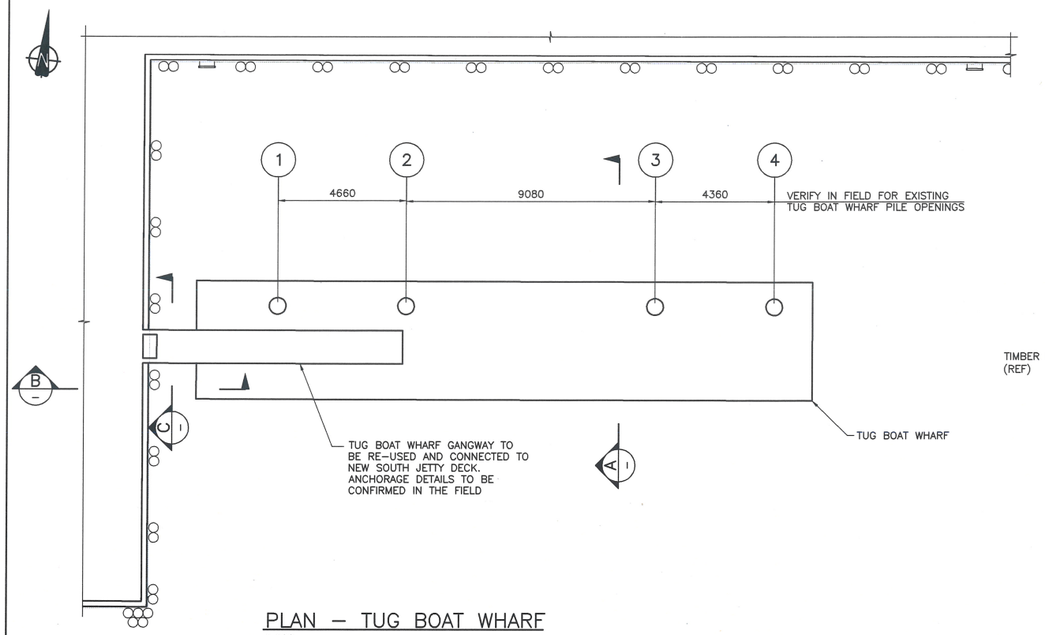
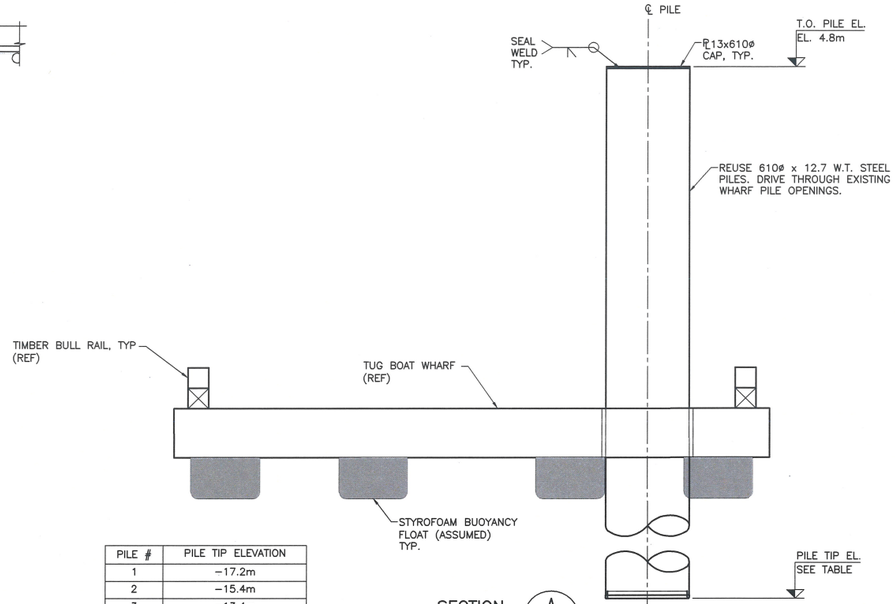
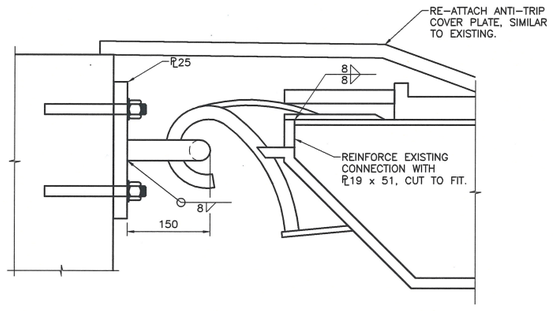


PLAN – TUG BOAT WHARF
1:100

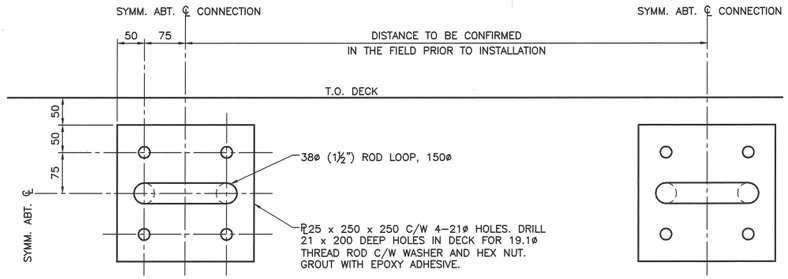


PILE #	PILE TIP ELEVATION
1	–17.2m
2	–15.4m
3	–13.4m
4	–14.3m

SECTION A
SCALE 1: 20



SECTION B
SCALE 1: 5



SECTION C
SCALE 1: 5

EXISTING GANGWAY HINGE DETAIL

EXISTING ANODE DETAIL

NOTES:

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

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G. B. A. COOPER
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Designed by/Concept par
GEOFF COOPER

Drawn by/Dessine par
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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
TUG BOAT WHARF DETAILS

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

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