

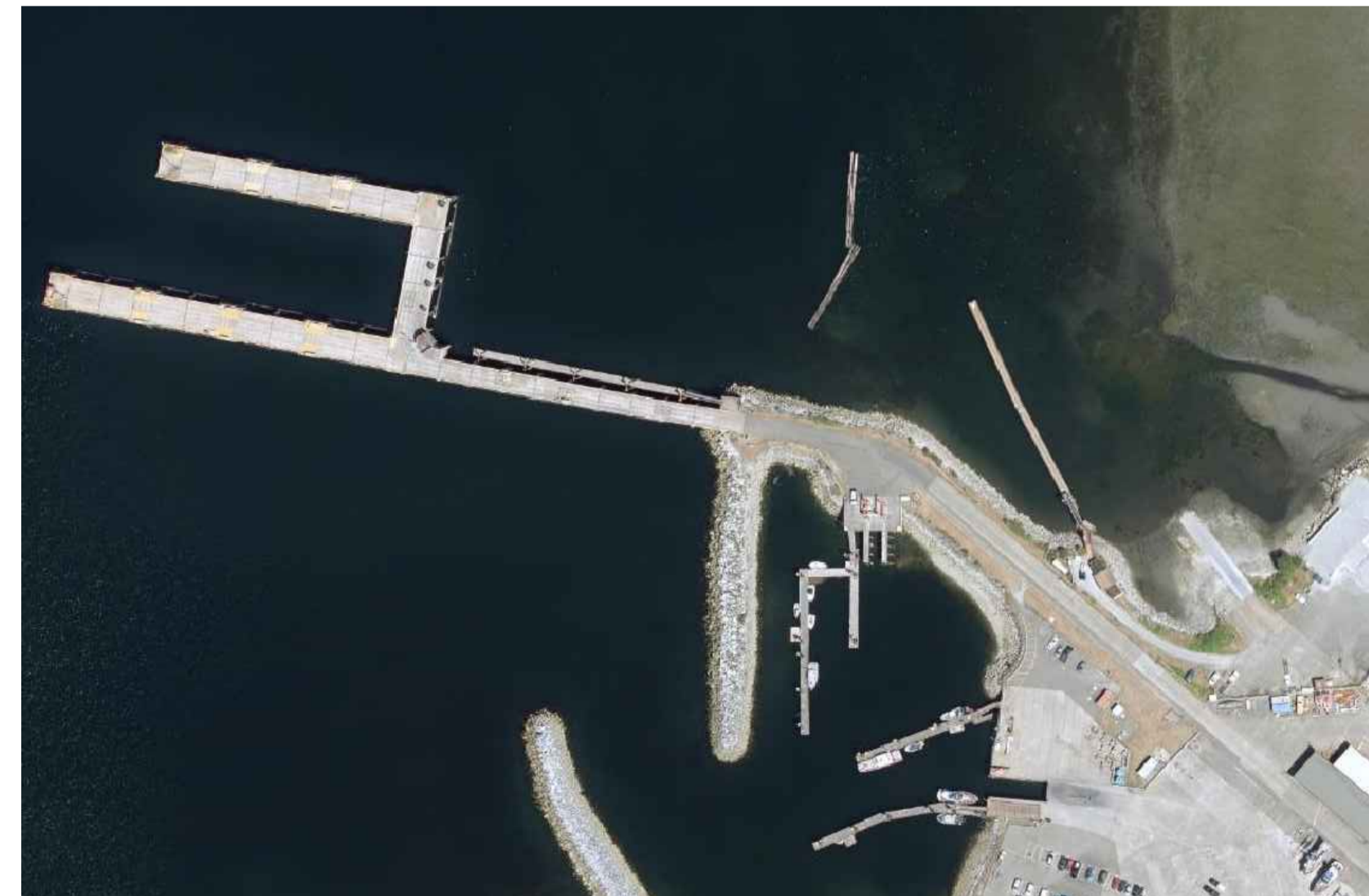
Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

REAL PROPERTY SERVICES
Pacific Region

SERVICES IMMOBILIERS
Région de Pacifique

IOS TIMBER AND CONCRETE FLOATS
A, B, C & D



Stantec Consulting Ltd.
www.stantec.com
STANTEC PROJECT NO.: 115615284 TSK200

5		
4		
3		
2		
1		
0	ISSUED FOR TENDER	2016.06.05

Revision/	Description/Description	Date/Date
-----------	-------------------------	-----------

Client/client
DEPARTMENT OF FISHERIES AND OCEANS

INSTITUTE OF OCEAN SCIENCES
9860 W. SAANICH ROAD
SIDNEY, B.C.

Project title/Titre du projet

**IOS TIMBER AND CONCRETE FLOATS
A, B, C & D**

Consultant Signature Only

Designed by/Concept par
AD/MB

Drawn by/Dessiné par
AG

PWGSC Project Manager/Administrateur de Projets TPSGC

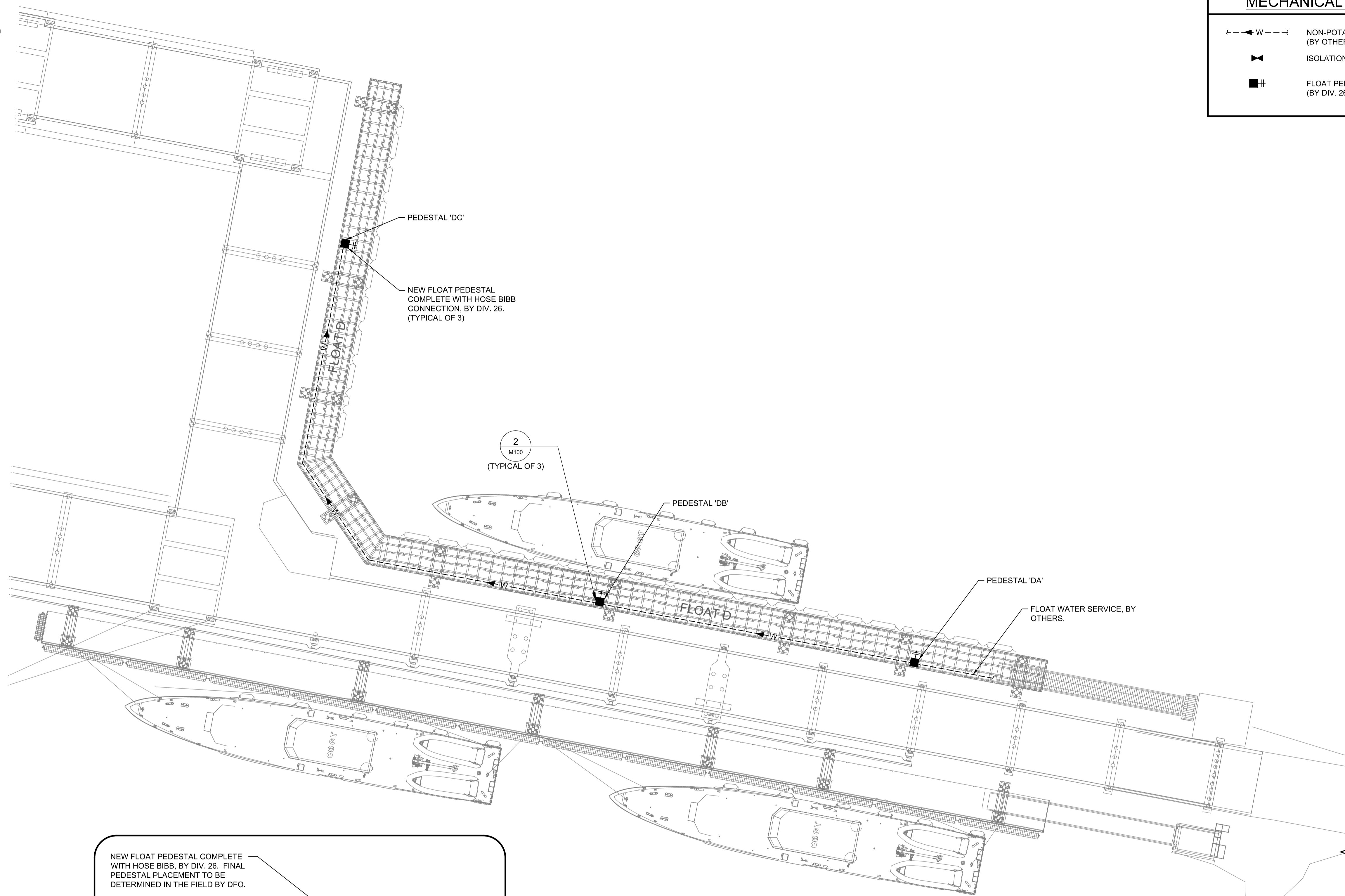
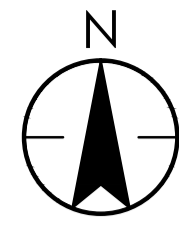
Regional Manager, Architectural and Engineering Services
Gestionnaire régionale, Services d'architectural et de génie, TPSGC

Drawing title/Titre du dessin

COVER SHEET & DRAWING LIST

Project No./No. du projet 9R306-2	Sheet/Fauille G000 1 OF 19	Revision no./La Révision no. 0
---	---	--

DRAWING LIST	
SHEET NO.	TITLE
G000	COVER SHEET & DRAWING LIST
M100	NEW FLOAT 'D' LAYOUT - MECHANICAL
M101	NEW FLOAT 'A' LAYOUT - MECHANICAL
M102	NEW FLOAT 'B1', 'B2' & 'C' LAYOUT - MECHANICAL
E001	KEY PLAN, SYMBOL LEGEND
E010	EXISTING FLOAT 'D' - DEMOLITION
E011	EXISTING FLOAT 'A' - DEMOLITION
E012	EXISTING FLOAT 'B1', 'B2' & 'C' - DEMOLITION
E100	NEW FLOAT 'D' LAYOUT - ELECTRICAL
E101	NEW FLOAT 'A' LAYOUT - ELECTRICAL
E102	NEW FLOAT 'B1', 'B2' & 'C' LAYOUT - ELECTRICAL
E103	EXISTING NORTH WHARF KIOSK 2 - ELECTRICAL
E500	ELECTRICAL DETAILS (1 OF 2)
E501	ELECTRICAL DETAILS (2 OF 2)
E502	NEW FLOAT TYPICAL INSTALLATION ELEVATION
E600	PROPOSED SINGLE LINE DIAGRAM (1 OF 3)
E601	PROPOSED SINGLE LINE DIAGRAM (2 OF 3)
E602	PROPOSED SINGLE LINE DIAGRAM (3 OF 3)
E700	SCHEDULES



MECHANICAL LEGEND	
	NON-POTABLE WATER SERVICE (BY OTHERS)
	ISOLATION VALVE
	FLOAT PEDESTAL (BY DIV. 26)

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



Stantec Consulting Ltd.
 www.stantec.com
 STANTEC PROJECT NO.: 115615284 TSK200

5		
4		
3		
2		
1		
0	ISSUED FOR TENDER	2016.08.05
Revision/	Description/Description	Date/Date
Revision/	Description/Description	Date/Date

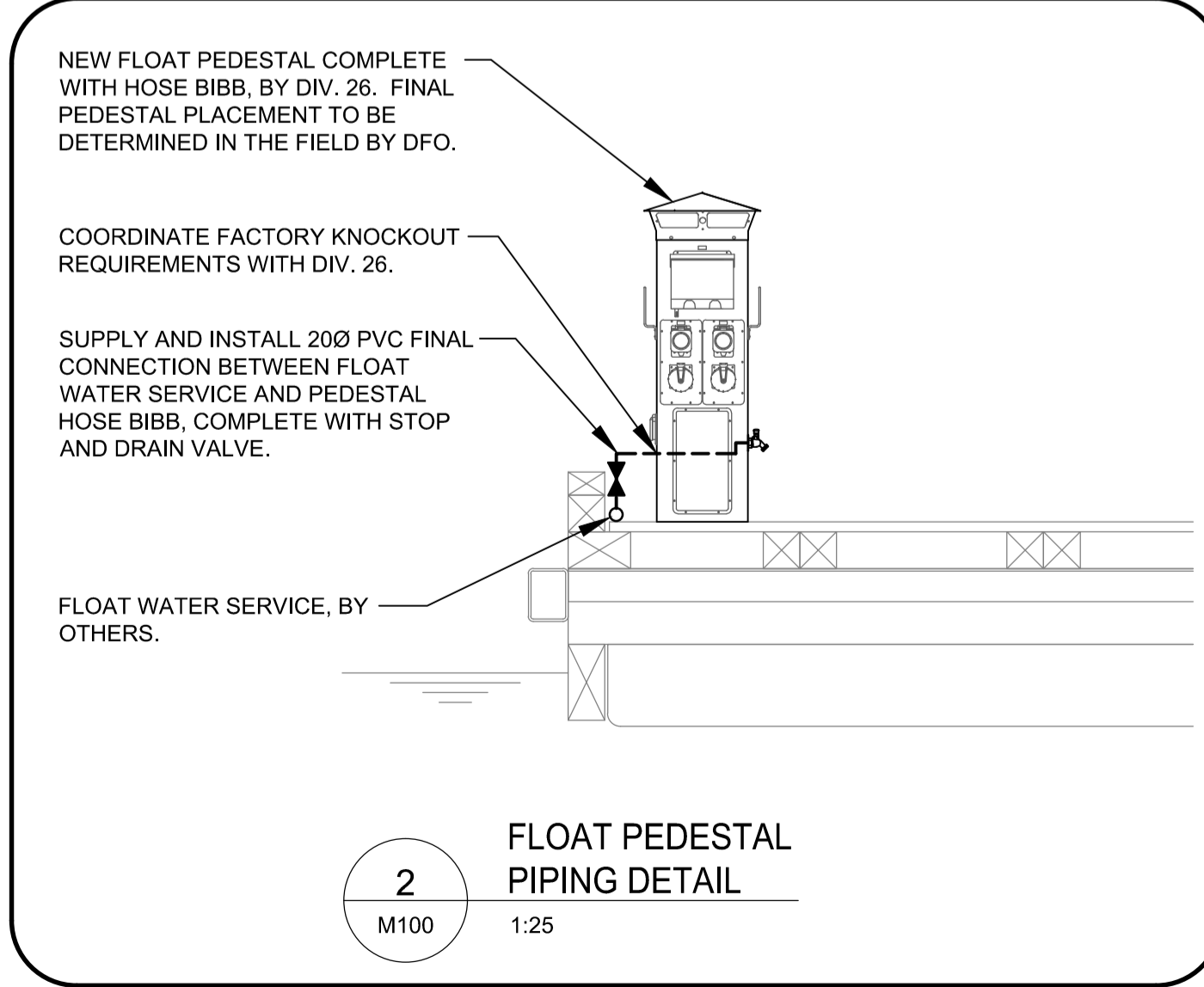
Client/client
DEPARTMENT OF FISHERIES AND OCEANS
 INSTITUTE OF OCEAN SCIENCES
 9860 W. SAANICH ROAD
 SIDNEY, B.C.

Project title/Titre du projet
IOS TIMBER AND CONCRETE FLOATS A, B, C & D

Consultant Signature Only
 Designed by/Concept par
 LI/TA
 Drawn by/Dessiné par
 LI
 PWGSC Project Manager/Administrateur de Projets TPSGC
 Regional Manager, Architectural and Engineering Services
 Gestionnaire régionale, Services d'architecture et de génie, TPSGC

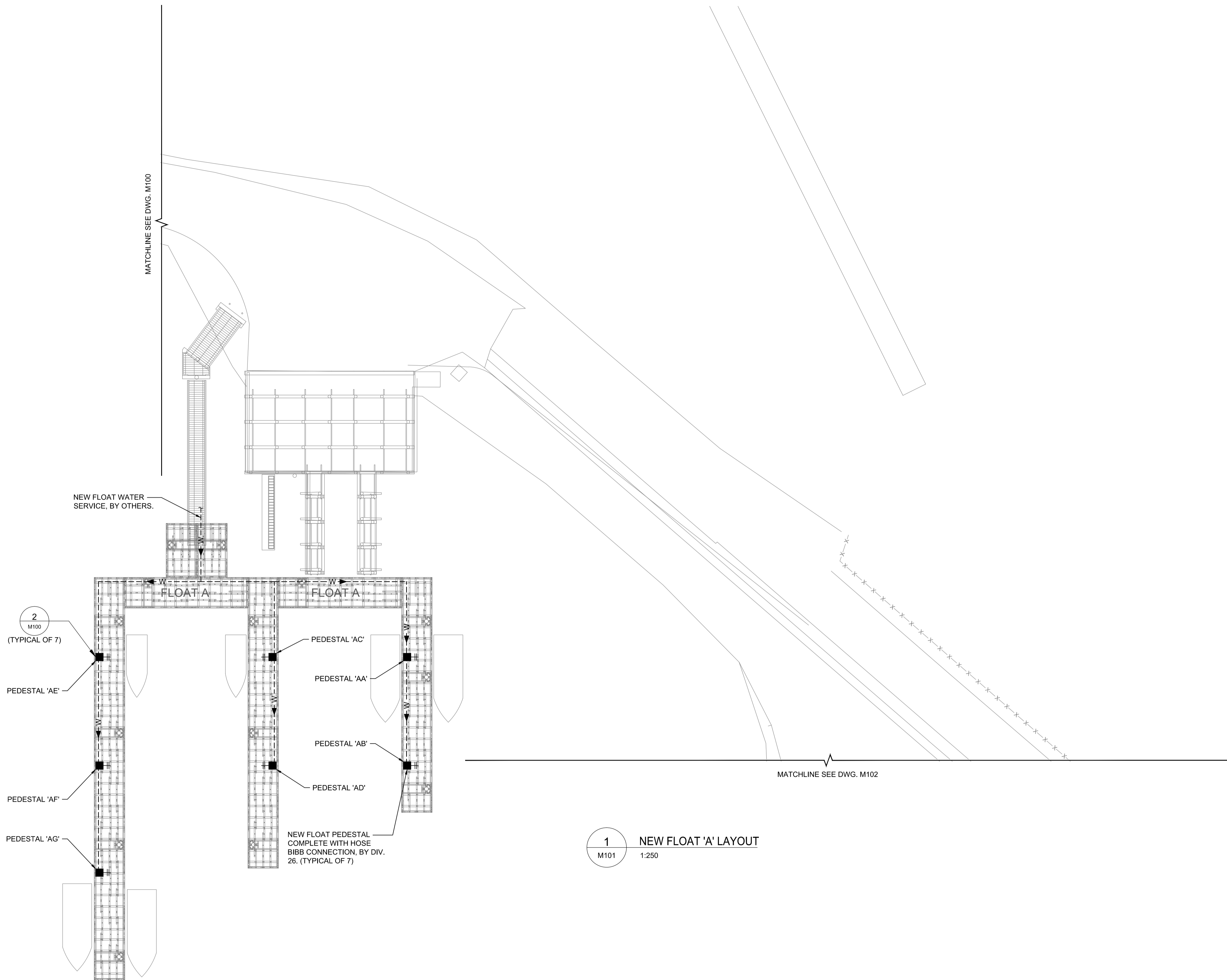
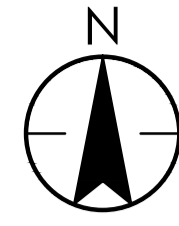
Drawing title/Titre du dessin
NEW FLOAT 'D' LAYOUT - MECHANICAL

Project No./No. du projet 9R306-2	Sheet/Fauille M100 2 OF 19	Revision no./Lo Révision no. 0
---	---	--



1 NEW FLOAT D LAYOUT
 M100 1:250





1 NEW FLOAT 'A' LAYOUT
M101 1:250



Stantec Consulting Ltd.
www.stantec.com
STANTEC PROJECT NO.: 115615284 TSK200

5		
4		
3		
2		
1		
0	ISSUED FOR TENDER	2016.08.05
Revision/ Révision	Description/ Description	Date/ Date

Client/client
DEPARTMENT OF FISHERIES AND OCEANS
INSTITUTE OF OCEAN SCIENCES
9860 W. SAANICH ROAD
SIDNEY, B.C.

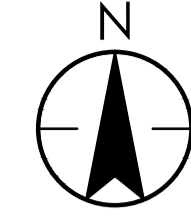
Project title/Titre du projet
IOS TIMBER AND CONCRETE FLOATS A, B, C & D

Consultant Signature Only
Designed by/Concept par
LI/TA
Drawn by/Dessiné par
LI
PWGSC Project Manager/Administrateur de Projets TPSGC
Regional Manager, Architectural and Engineering Services
Gestionnaire régionale, Services d'architecture et de génie, TPSGC

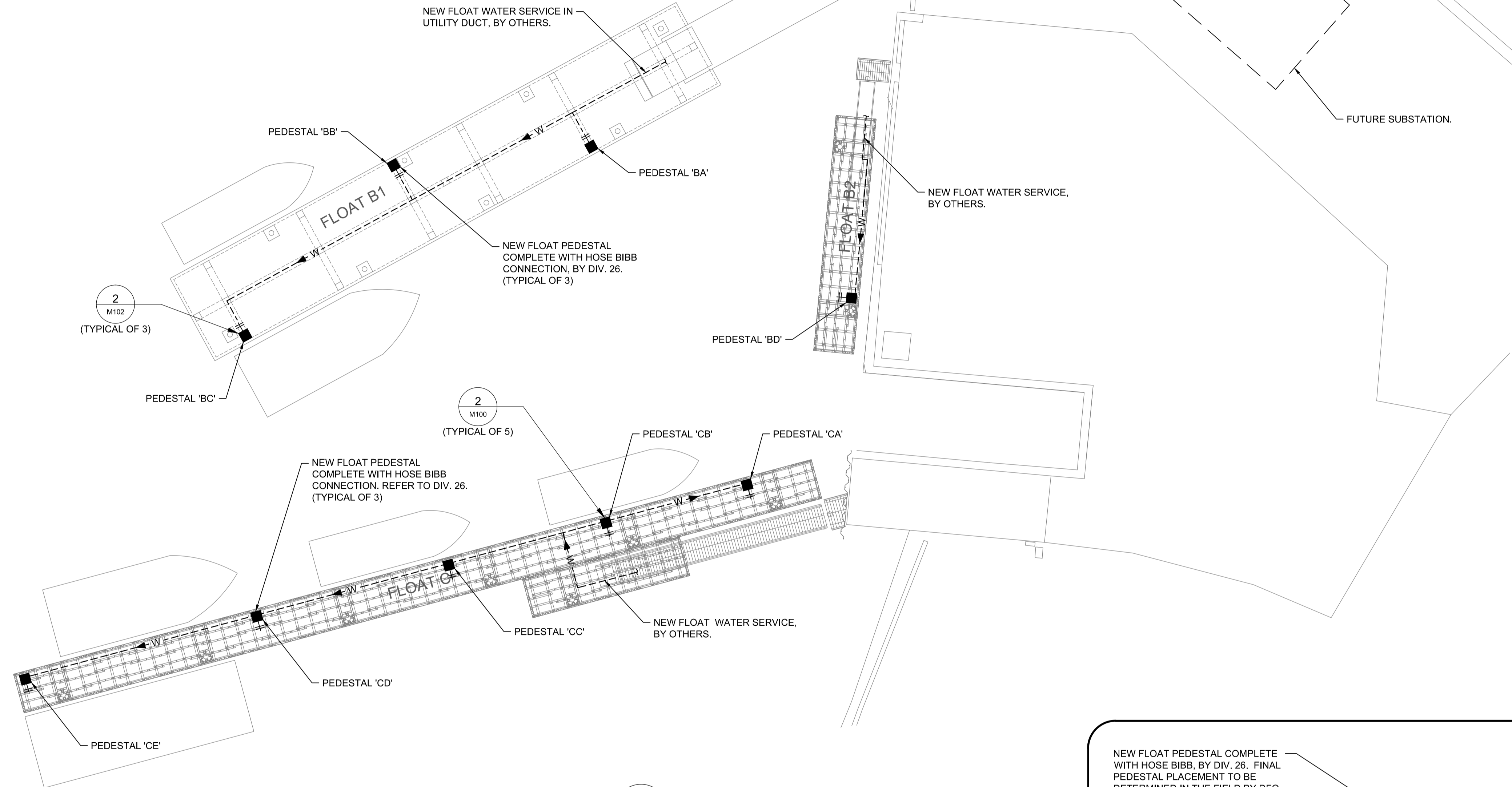
Drawing title/Titre du dessin
NEW FLOAT 'A' LAYOUT - MECHANICAL

Project No./No. du projet 9R306-2	Sheet/Feuille M101 3 OF 19	Revision no./ La Révision no. 0
---	---	--

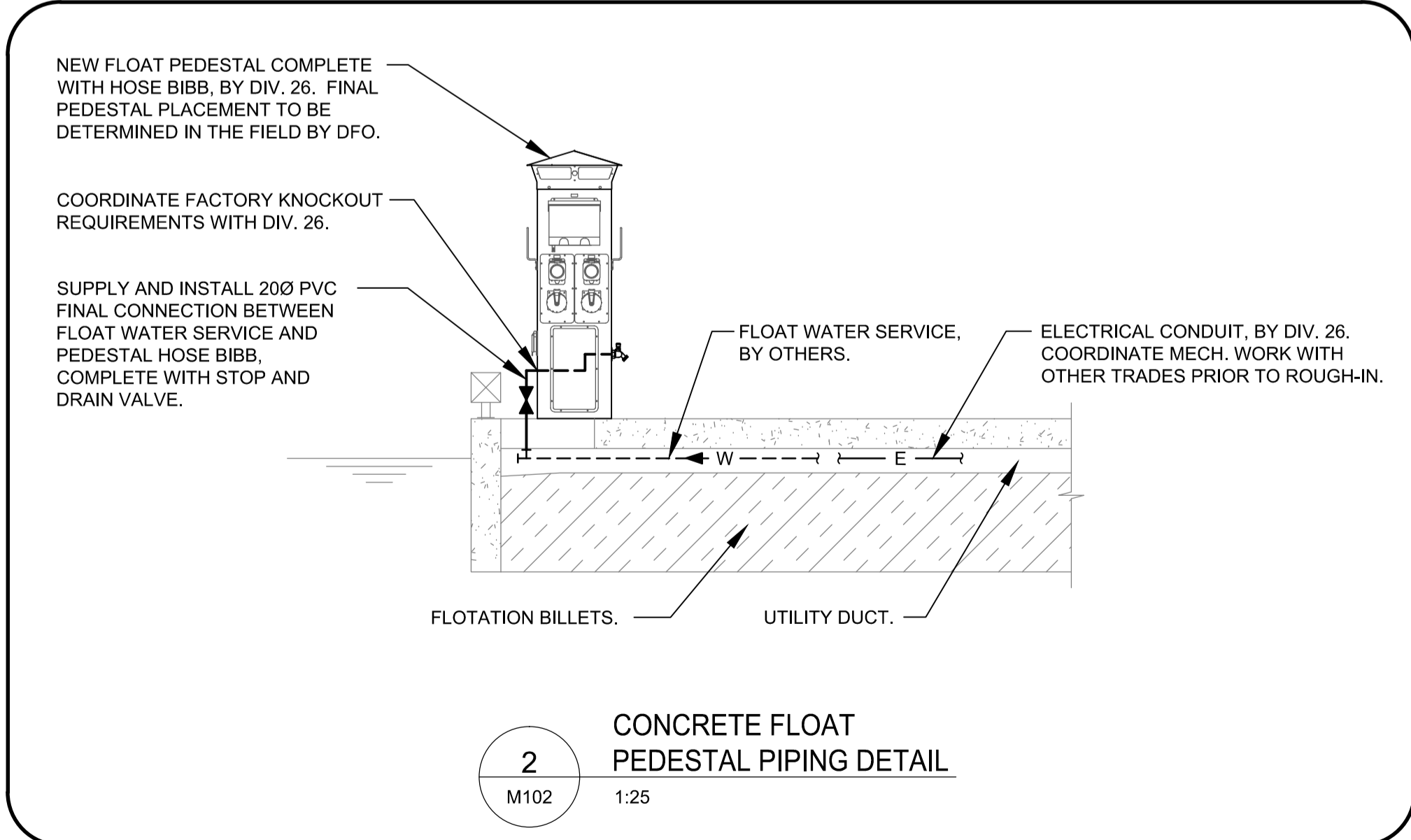
MATCHLINE SEE DWG. M101



Stantec Consulting Ltd.
www.stantec.com
STANTEC PROJECT NO.: 115615284 TSK200



1 NEW FLOATS 'B1', 'B2' & 'C' LAYOUT
M102 1:250



2 CONCRETE FLOAT PEDESTAL PIPING DETAIL
M102 1:25

5		
4		
3		
2		
1		
0	ISSUED FOR TENDER	2016.08.05

Revision/Description/Date

Client/client
DEPARTMENT OF FISHERIES AND OCEANS
INSTITUTE OF OCEAN SCIENCES
9860 W. SAANICH ROAD
SIDNEY, B.C.

Project title/Titre du projet

IOS TIMBER AND CONCRETE FLOATS A, B, C & D

Consultant Signature Only

Designed by/Concept par
LI/TA

Drawn by/Dessiné par
LI

PWGSC Project Manager/Administrateur de Projets TPSPG

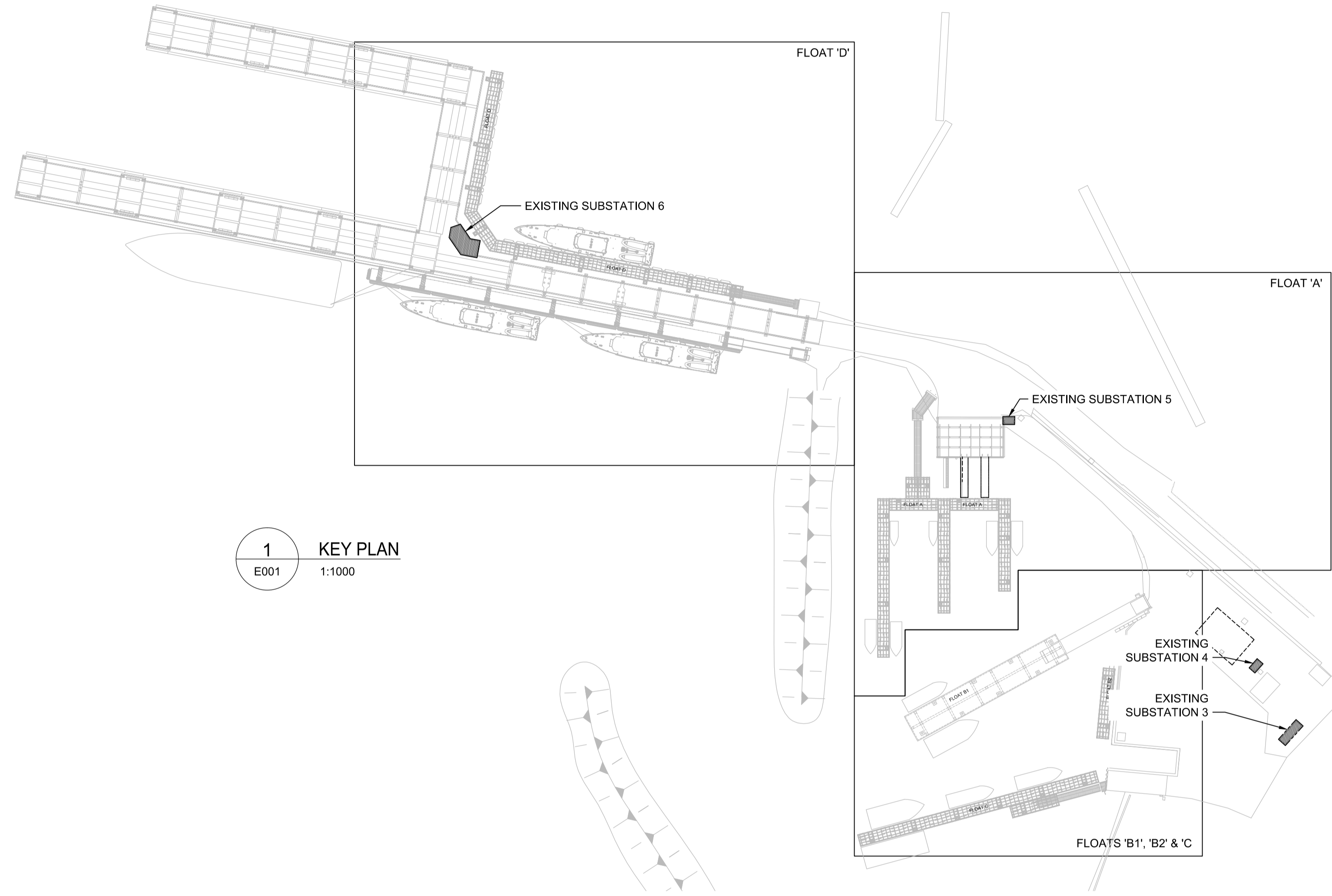
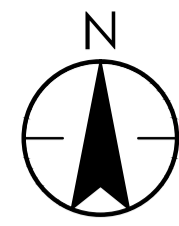
Regional Manager, Architectural and Engineering Services
Gestionnaire régionale, Services d'architecture et de génie, TPSPG

Drawing title/Titre du dessin

NEW FLOAT 'B1', 'B2' & 'C' LAYOUT - MECHANICAL

Project No./No. du projet 9R306-2	Sheet/Feuille M102 4 OF 19	Revision no./La Révision no. 0
---	---	--





1 KEY PLAN
E001 1:1000

SCHEMATIC SYMBOLS	
	DISCONNECT SWITCH
	FUSE
	BREAKER
	TRANSFORMER
	AUTOTRANSFORMER
	CURRENT TRANSFORMERS (# INDICATES NUMBER OF CTs IN GROUP)
	POTENTIAL TRANSFORMERS (# INDICATES NUMBER OF PTs IN GROUP)
	NORMALLY OPEN CONTACT
	NORMALLY CLOSED CONTACT
	KEY INTERLOCK
	VOLTMETER
	DIGITAL METER SYSTEM
	UNINTERRUPTED POWER SOURCE
	DELTA CONNECTION
	WYE CONNECTION
	GROUND CONNECTION
	CAPACITOR
	LIGHTNING ARRESTOR
	PANELBOARD
	PUSH PULL SWITCH
	GROUND BUS
	CONCRETE MANHOLE/PULLBOX
	STAINLESS STEEL PULLBOX
	CONNECTION
	SPACE HEATER
	LIGHT
	PUSHBUTTON SWITCH, NORMALLY CLOSED
	PUSHBUTTON SWITCH, NORMALLY OPEN
	SELECTOR SWITCH
	HAND-OFF-AUTO SWITCH
	MAGNETIC MOTOR STARTER
	MANUAL MOTOR STARTER
	MOTOR OVERLOAD
	BREAK LINE
	CONTINUATION BREAK

ELECTRICAL SYMBOLS	
	POLE MOUNTED LUMINAIRE (SINGLE HEAD)
	DUPLEX 5-15R RECEPTACLE
	DUPLEX 5-15R RECEPTACLE C/W INTEGRAL GFCI PROTECTION
	DUPLEX 5-20R RECEPTACLE, T-SLOT
	SINGLE 5-15R RECEPTACLE
	TWISTLOCK SINGLE 15A/125V RECEPTACLE
	SPLIT CIRCUIT DUPLEX 5-15R RECEPTACLE
	TWO DUPLEX 5-15R RECEPTACLES
	SPECIAL RECEPTACLE (TYPE AS INDICATED)
	REEL CORD RECEPTACLE (TYPE AS INDICATED)
	FLOOR MOUNTED DUPLEX 5-15R RECEPTACLE
	TWO FLOOR MOUNTED DUPLEX 5-15R RECEPTACLES
	UTILITY POLE (TYPE AS INDICATED)
	CEILING MOUNTED JUNCTION BOX
	WALL MOUNTED JUNCTION BOX
	FLOOR MOUNTED JUNCTION BOX
	POWER PANELBOARD
	PANEL (TYPE AS INDICATED - SECURITY, LIGHTING RELAY, ETC.)
	SURFACE RACEWAY (TYPE AS INDICATED)
	PUSHBUTTON (TYPE AND WIRING AS INDICATED)
	GROUND BUS BAR
	ROOM REFERENCE GROUND BUS
	MOTOR
	MOTOR c/w DISCONNECT SWITCH
	COMBINATION DISCONNECT AND MAGNETIC MOTOR STARTER
	DISCONNECT SWITCH
	FUSED DISCONNECT SWITCH
	MAGNETIC MOTOR STARTER
	THERMOSTAT
	MANUAL MOTOR STARTER c/w PILOT LIGHT
	EMERGENCY STOP PUSHBUTTON (RED MUSHROOM STYLE BUTTON)
	START/STOP PUSHBUTTONS - (DC - SAWDUST COLLECTOR CONTROL) UP/DOWN/START PUSHBUTTONS - (OH - OVERHEAD DOOR CONTROL)
	CEILING FAN VARIABLE SPEED CONTROL SWITCH
	POWER PULLPIT
	POWER PULLBOX
	COMMUNICATION PULLPIT
	COMMUNICATION PULLBOX
	TRANSFORMER
	PEDESTAL
	CONDUIT STUB
	CONDUIT UP
	CONDUIT DOWN
	DEVICE MOUNTED ABOVE MILLWORK COUNTERTOP
	FIRE ALARM MANUAL PULLSTATION
	FIRE ALARM HORN STROBE

LINETYPES	
	UNDERGROUND COMMUNICATION CONDUIT
	UNDERGROUND POWER CONDUIT
	ABOVE GROUND CONDUIT

ABBREVIATIONS	
EX	EXISTING DEVICE TO REMAIN
RE	REMOVE EXISTING DEVICE
RP	REPLACE EXISTING DEVICE WITH NEW DEVICE
RL	RELOCATE EXISTING DEVICE
ER	EXISTING DEVICE IN RELOCATED POSITION
NW	NEW DEVICE
AF	ABOVE FINISHED FLOOR
AG	ABOVE FINISHED GRADE
GF	GROUND FAULT
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
JB	JUNCTION BOX
LTFS	LIQUID-TIGHT FLEXIBLE STEEL CONDUIT
RPVC	RIGID POLYVINYL CHLORIDE CONDUIT
SS	STAINLESS STEEL
TBD	TO BE DETERMINED
TYP	TYPICAL
U/G	UNDERGROUND
WP	WEATHERPROOF



Stantec Consulting Ltd.
 www.stantec.com
 STANTEC PROJECT NO.: 115615284 TSK200

Revision/	Description/Description	Date/Date
5		
4		
3		
2		
1		
0	ISSUED FOR TENDER	2016.08.05

Client/client
DEPARTMENT OF FISHERIES AND OCEANS
 INSTITUTE OF OCEAN SCIENCES
 9860 W. SAANICH ROAD
 SIDNEY, B.C.

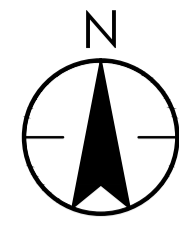
Project title/Titre du projet
IOS TIMBER AND CONCRETE FLOATS A, B, C & D

Consultant Signature Only
 Designed by/Concept par
 AD/MB
 Drawn by/Dessiné par
 AG
 PWGSC Project Manager/Administrateur de Projets TPSGC

Regional Manager, Architectural and Engineering Services
 Gestionnaire régional, Services d'architectural et de génie, TPSGC

Drawing title/Titre du dessin
KEY PLAN, SYMBOL LEGEND

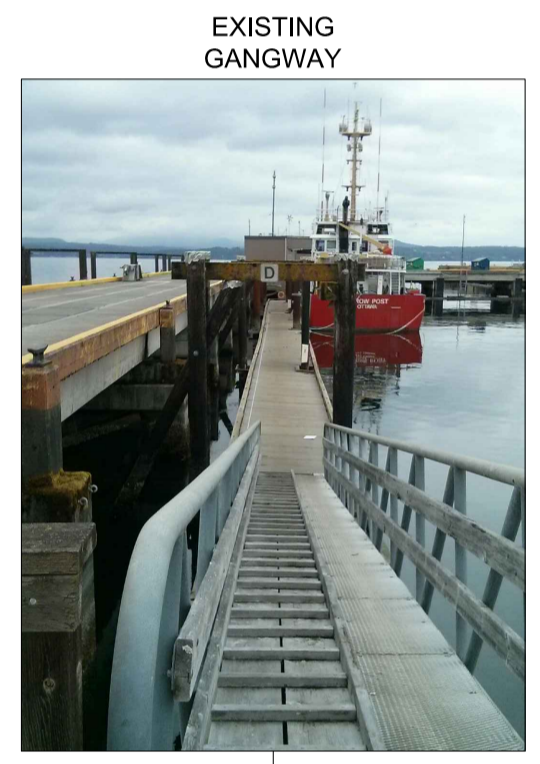
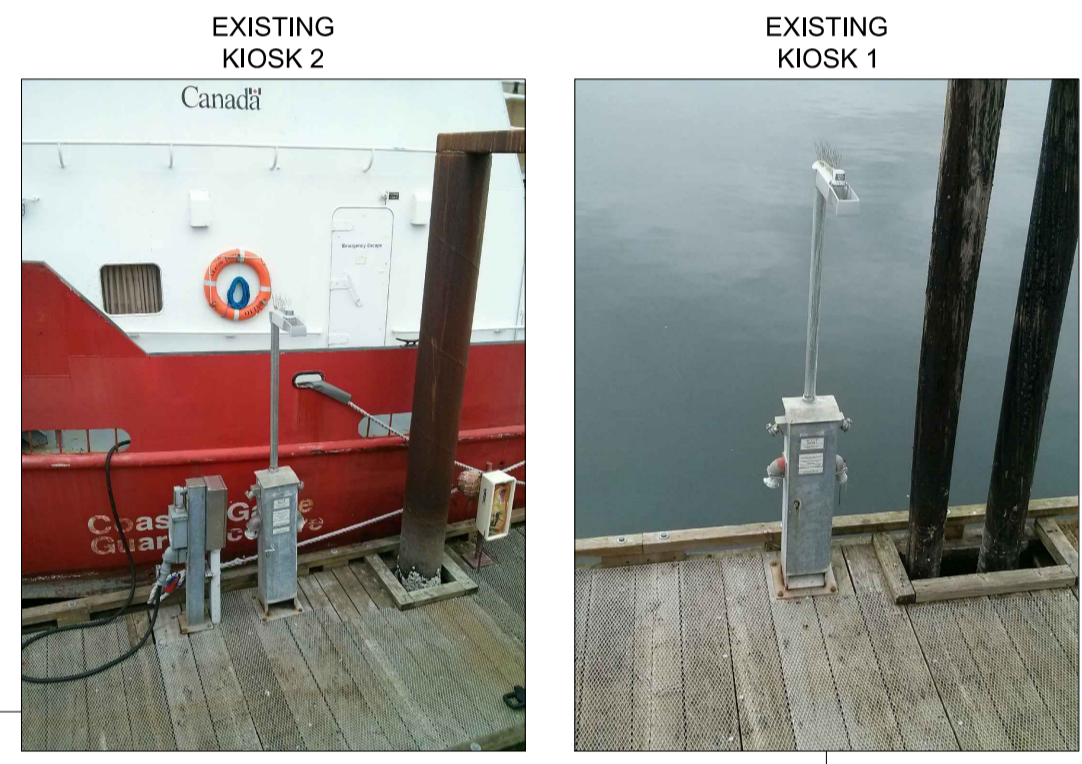
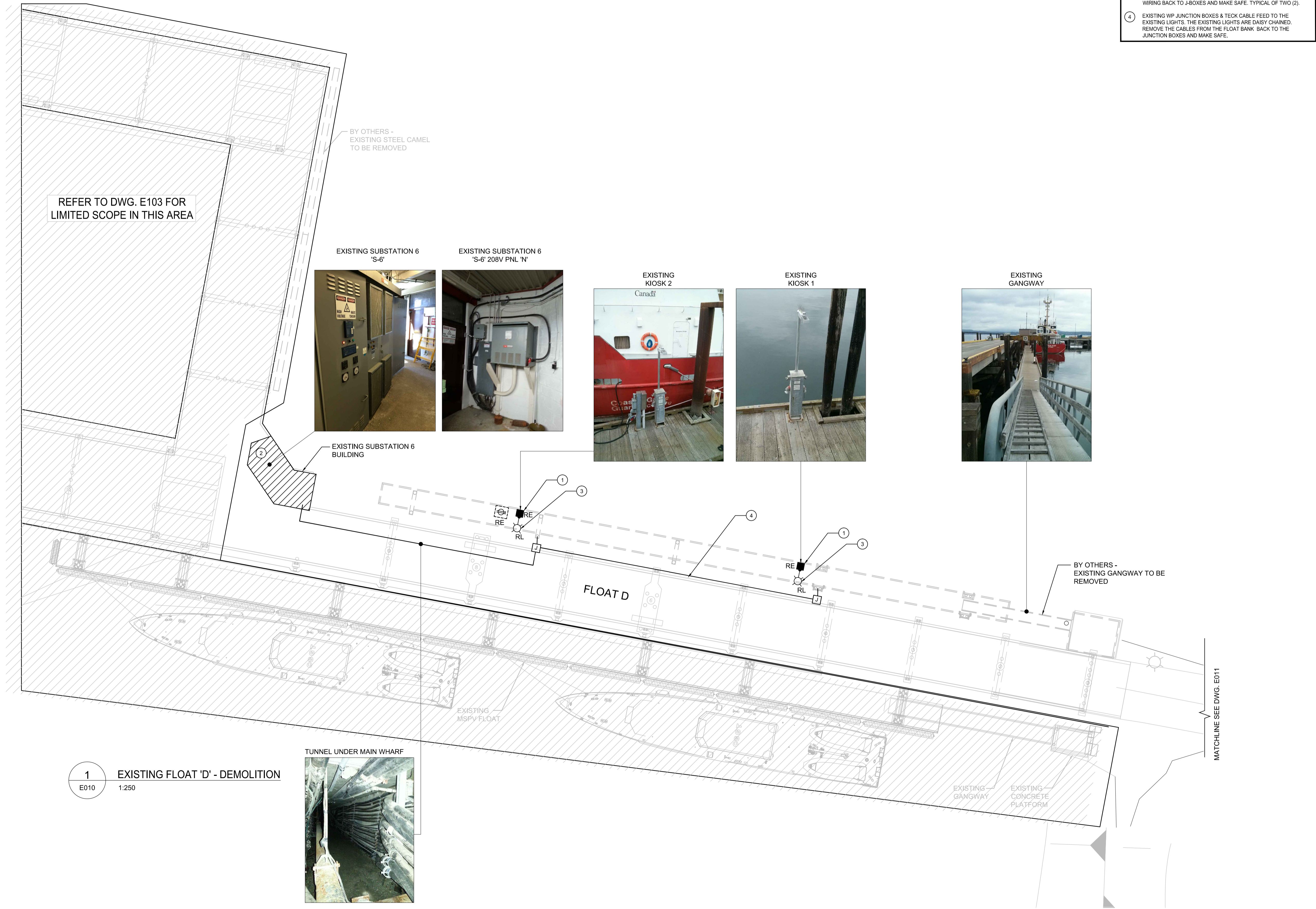
Project No./No. du projet 9R306-2	Sheet/Feuille E001 5 OF 19	Revision no./La Révision no. 0
---	---	--



- GENERAL NOTES:**
- 1 REFER TO PROPOSED SINGLE LINE DIAGRAM E602 FOR DEMOLITION DETAILS.
- DRAWING NOTES:**
- 1 EXISTING FLOAT PEDESTAL TO BE DEMOLISHED, REMOVE FEEDER CABLE BACK TO SOURCE. TYPICAL OF TWO (2) PEDESTALS.
 - 2 EXISTING SUBSTATION 6 BUILDING. LOCATION OF EXISTING 600V, 480V AND 208V PANELBOARDS.
 - 3 EXISTING LUMINAIRE HEADS TO BE REMOVED. DISCONNECT AND REMOVE LUMINAIRE HEAD AND HAND OVER TO OWNER. REMOVE WIRING BACK TO J-BOXES AND MAKE SAFE. TYPICAL OF TWO (2).
 - 4 EXISTING WP JUNCTION BOXES & TECK CABLE FEED TO THE EXISTING LIGHTS. THE EXISTING LIGHTS ARE DAISY CHAINED. REMOVE THE CABLES FROM THE FLOAT BANK BACK TO THE JUNCTION BOXES AND MAKE SAFE.



Stantec Consulting Ltd.
www.stantec.com
STANTEC PROJECT NO.: 115615284 TSK200



1 EXISTING FLOAT 'D' - DEMOLITION
E010 1:250



5		
4		
3		
2		
1		
0	ISSUED FOR TENDER	2016.08.05
Revision/	Description/Description	Date/Date

Client/client
DEPARTMENT OF FISHERIES AND OCEANS
INSTITUTE OF OCEAN SCIENCES
9860 W. SAANICH ROAD
SIDNEY, B.C.

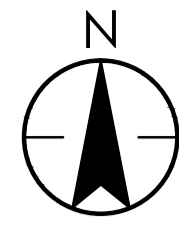
Project title/Titre du projet
IOS TIMBER AND CONCRETE FLOATS A, B, C & D

Consultant Signature Only
Designed by/Concept par
AD/MB
Drawn by/Dessiné par
AG
PWGSC Project Manager/Administrateur de Projets TPSGC

Regional Manager, Architectural and Engineering Services
Gestionnaire régionale, Services d'architecture et de génie, TPSGC

Drawing title/Titre du dessin
EXISTING FLOAT 'D' - DEMOLITION

Project No./No. du projet 9R306-2	Sheet/Feuille E010 6 OF 19	Revision no./Lo Révision no. 0
---	---	--



- GENERAL NOTES:**
- 1 REFER TO PROPOSED SINGLE LINE DIAGRAM E01 FOR DEMOLITION DETAILS.
- DRAWING NOTES:**
- 1 EXISTING FLOAT PEDESTAL TO BE DEMOLISHED, REMOVE FEEDER CABLE BACK TO SOURCE. TYPICAL OF SIX (6) PEDESTALS.
 - 2 EXISTING SUBSTATION 5 BUILDING AND DISTRIBUTION PANEL.
 - 3 EXISTING LUMINAIRE HEADS TO BE RELOCATED TO NEW FLOAT. DISCONNECT AND REMOVE LUMINAIRE HEAD AND STORE IN A SAFE PLACE UNTIL NEW INSTALLATION. REMOVE WIRING BACK TO SOURCE AND MAKE SAFE. TYPICAL OF SIX (6).
 - 4 EXISTING PULLBOXES LOCATED BELOW DOCK TO BE DEMOLISHED. TAKE CABLES BACK TO SOURCE AND REMOVE ALL ABANDONED EQUIPMENT. TYPICAL FOR ALL DEMOLISHED EQUIPMENT.



Stantec Consulting Ltd.
www.stantec.com
STANTEC PROJECT NO.: 115615284 TSK200

5		
4		
3		
2		
1		
0	ISSUED FOR TENDER	2016.08.05
Revision/	Description/Description	Date/Date
Revision		

Client/client
DEPARTMENT OF FISHERIES AND OCEANS

INSTITUTE OF OCEAN SCIENCES
9860 W. SAANICH ROAD
SIDNEY, B.C.

Project title/Titre du projet

IOS TIMBER AND CONCRETE FLOATS A, B, C & D

Consultant Signature Only

Designed by/Concept par
AD/MB

Drawn by/Dessiné par
AG

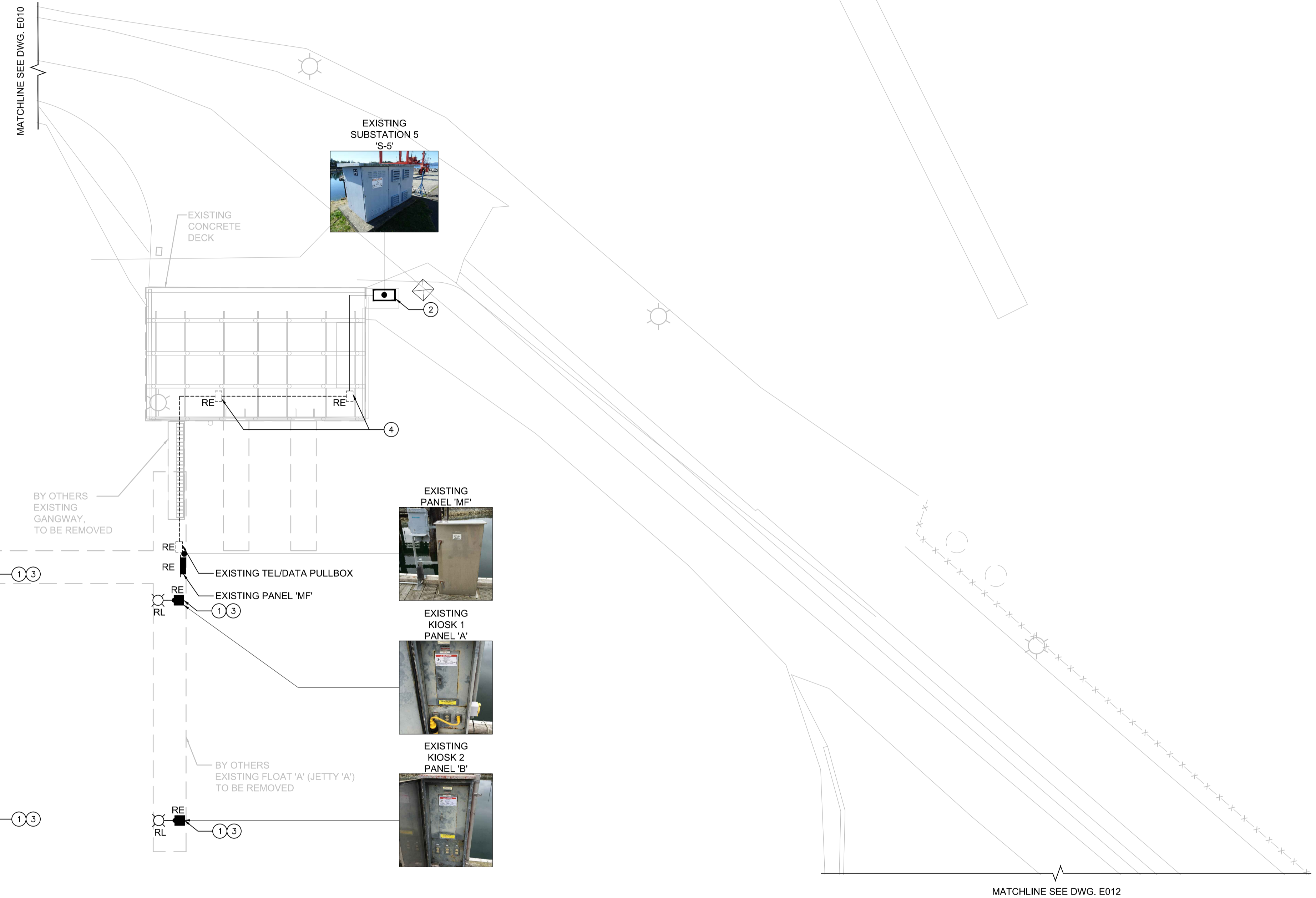
PWGSC Project Manager/Administrateur de Projets TPSGC

Regional Manager, Architectural and Engineering Services
Gestionnaire régionale, Services d'architecture et de génie, TPSGC

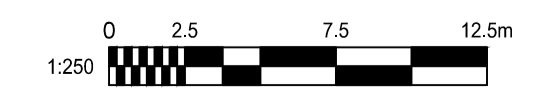
Drawing title/Titre du dessin

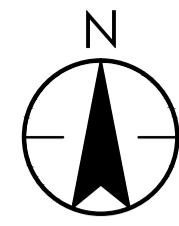
EXISTING FLOAT 'A' - DEMOLITION

Project No./No. du projet 9R306-2	Sheet/Feuille E011 7 OF 19	Revision no./La Révision no. 0
---	---	--



1 EXISTING FLOAT 'A' - DEMOLITION
E011 1:250



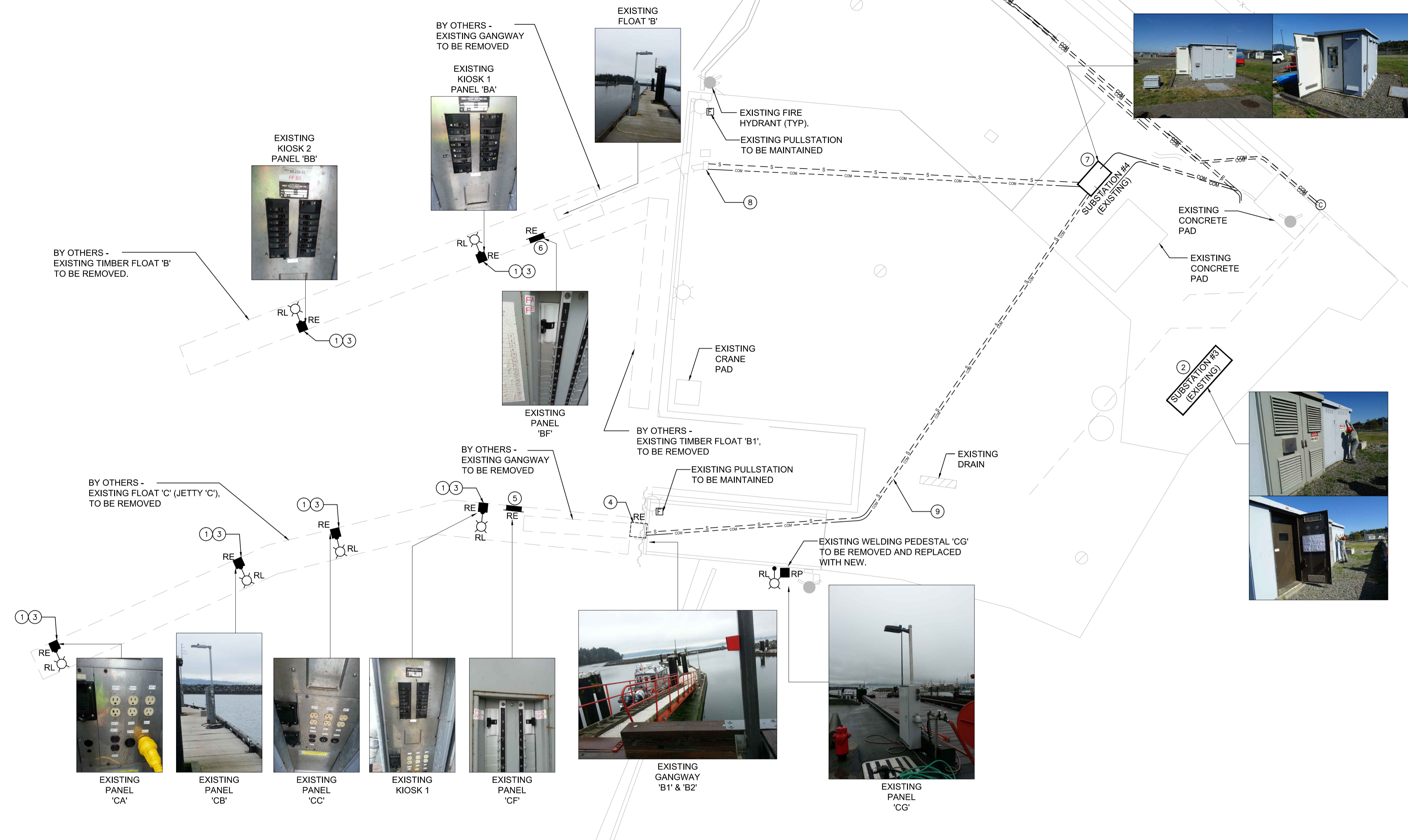


MATCHLINE SEE DWG. E011

- GENERAL NOTES:**
- REFER TO PROPOSED SINGLE LINE DIAGRAM E600 FOR DEMOLITION DETAILS.
- DRAWING NOTES:**
- EXISTING FLOAT PEDESTAL TO BE DEMOLISHED. REMOVE FEEDER CABLE BACK TO SOURCE. TYPICAL OF SIX (6) PEDESTALS.
 - EXISTING SUBSTATION 3 BUILDING AND DISTRIBUTION PANEL.
 - EXISTING LUMINAIRE HEADS TO BE RELOCATED TO NEW FLOAT. DISCONNECT AND REMOVE LUMINAIRE HEAD AND STORE IN A SAFE PLACE UNTIL NEW INSTALLATION. REMOVE WIRING BACK TO SOURCE AND MAKE SAFE. TYPICAL OF SIX (6).
 - EXISTING PULLBOXES LOCATED BELOW DOCK TO BE DEMOLISHED. TAKE CABLES BACK TO SOURCE AND REMOVE ALL ABANDONED EQUIPMENT. TYPICAL.
 - EXISTING JETTY 'C' MAIN PANEL 'CF' (FEDERAL PIONEER, 120/208V, 3Ø/4W, 42CCT) TO BE DEMOLISHED. REMOVE WIRING BACK TO SOURCE AND MAKE SAFE.
 - EXISTING JETTY 'B' MAIN PANEL 'BF' (FEDERAL PIONEER, 120/208V, 3Ø/4W, 42CCT) TO BE DEMOLISHED. REMOVE WIRING BACK TO SOURCE AND MAKE SAFE.
 - EXISTING SUBSTATION 4 BUILDING AND DISTRIBUTION PANEL.
 - EXISTING PULLBOX TO BE DEMOLISHED. PULL ALL THE CABLES FROM THIS PULLBOX AND DEMOLISH. ALLOW FOR SLAB CUTTING & REPAIR IN THE BID PRICE. PULL ALL THE CABLES BACK TO THE SOURCE. PULL NEW #6 PULLSTRING AND MARK CONDUIT AS SPARE.
 - EXISTING CONDUITS FROM SUB 4 TO WELDING PEDESTAL AND FLOAT C. CUT THE CONDUITS AT THE FEED POINT WHERE EXPOSED. PULL ALL THE CABLES BACK TO THE SOURCE AND DEMOLISH. RUN NEW #6 PULLSTRING IN THE ABANDONED CONDUITS AND PROVIDE CAPS & MARK AS SPARE.



Stantec Consulting Ltd.
www.stantec.com
STANTEC PROJECT NO.: 115615284 TSK200



1 EXISTING FLOAT 'B1', 'B2' & 'C' - DEMOLITION
E012 1:250

5		
4		
3		
2		
1		
0	ISSUED FOR TENDER	2016.08.05

Revision/	Description/Description	Date/Date
Client/client		

DEPARTMENT OF FISHERIES AND OCEANS

INSTITUTE OF OCEAN SCIENCES
9860 W. SAANICH ROAD
SIDNEY, B.C.

Project title/Titre du projet

IOS TIMBER AND CONCRETE FLOATS A, B, C & D

Consultant Signature Only

Designed by/Concept par
AD/MB

Drawn by/Dessiné par
AG

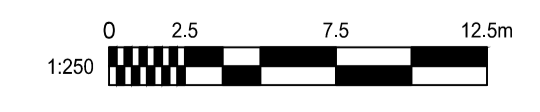
PWGSC Project Manager/Administrateur de Projets TPSGC

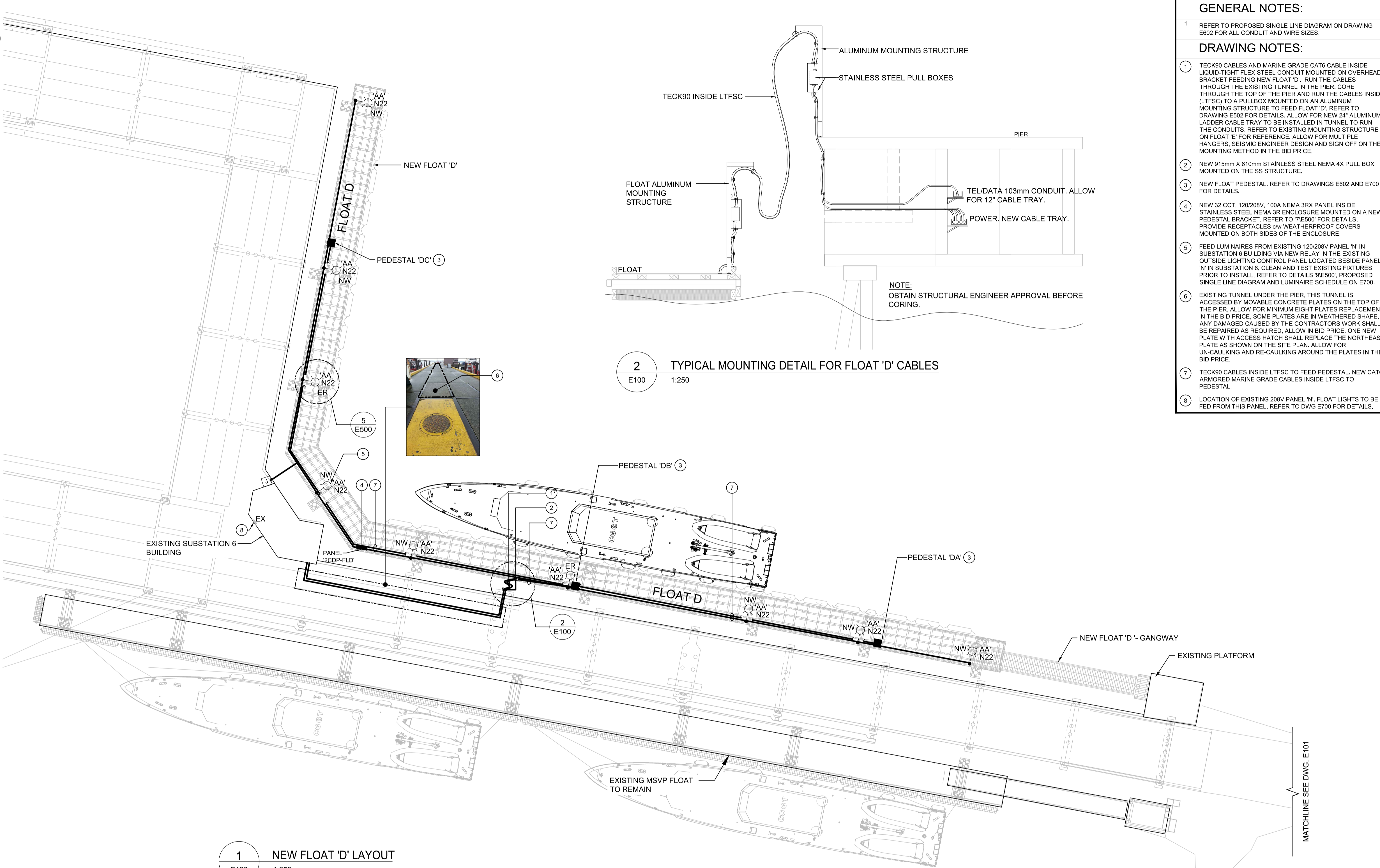
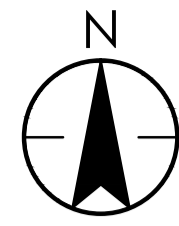
Regional Manager, Architectural and Engineering Services
Gestionnaire régionale, Services d'architecture et de génie, TPSGC

Drawing title/Titre du dessin

EXISTING FLOAT 'B1', 'B2' & 'C' - DEMOLITION

Project No./No. du projet 9R306-2	Sheet/Feuille E012	Revision no./Lo Révision no. 0
	8 OF 19	





1 NEW FLOAT 'D' LAYOUT
E100 1:250

2 TYPICAL MOUNTING DETAIL FOR FLOAT 'D' CABLES
E100 1:250

GENERAL NOTES:

1 REFER TO PROPOSED SINGLE LINE DIAGRAM ON DRAWING E602 FOR ALL CONDUIT AND WIRE SIZES.

DRAWING NOTES:

- 1 TECK90 CABLES AND MARINE GRADE CAT6 CABLE INSIDE LIQUID-TIGHT FLEX STEEL CONDUIT MOUNTED ON OVERHEAD BRACKET FEEDING NEW FLOAT 'D'. RUN THE CABLES THROUGH THE EXISTING TUNNEL IN THE PIER. CORE THROUGH THE TOP OF THE PIER AND RUN THE CABLES INSIDE (LTFSC) TO A PULLBOX MOUNTED ON AN ALUMINUM MOUNTING STRUCTURE TO FEED FLOAT 'D'. REFER TO DRAWING E502 FOR DETAILS. ALLOW FOR NEW 24\"/>
- 2 NEW 915mm X 610mm STAINLESS STEEL NEMA 4X PULL BOX MOUNTED ON THE SS STRUCTURE.
- 3 NEW FLOAT PEDESTAL. REFER TO DRAWINGS E602 AND E700 FOR DETAILS.
- 4 NEW 32 CCT, 120/208V, 100A NEMA 3RX PANEL INSIDE STAINLESS STEEL NEMA 3R ENCLOSURE MOUNTED ON A NEW PEDESTAL BRACKET. REFER TO 'E500' FOR DETAILS. PROVIDE RECEPTACLES c/w WEATHERPROOF COVERS MOUNTED ON BOTH SIDES OF THE ENCLOSURE.
- 5 FEED LUMINAIRES FROM EXISTING 120/208V PANEL 'N' IN SUBSTATION 6 BUILDING VIA NEW RELAY IN THE EXISTING OUTSIDE LIGHTING CONTROL PANEL LOCATED BESIDE PANEL 'N' IN SUBSTATION 6. CLEAN AND TEST EXISTING FIXTURES PRIOR TO INSTALL. REFER TO DETAILS 'E500', PROPOSED SINGLE LINE DIAGRAM AND LUMINAIRE SCHEDULE ON E700.
- 6 EXISTING TUNNEL UNDER THE PIER. THIS TUNNEL IS ACCESSED BY MOVABLE CONCRETE PLATES ON THE TOP OF THE PIER. ALLOW FOR MINIMUM EIGHT PLATES REPLACEMENT IN THE BID PRICE. SOME PLATES ARE IN WEATHERED SHAPE. ANY DAMAGED CAUSED BY THE CONTRACTORS WORK SHALL BE REPAIRED AS REQUIRED. ALLOW IN BID PRICE. ONE NEW PLATE WITH ACCESS HATCH SHALL REPLACE THE NORTHEAST PLATE AS SHOWN ON THE SITE PLAN. ALLOW FOR UN-Caulking AND RE-caulking AROUND THE PLATES IN THE BID PRICE.
- 7 TECK90 CABLES INSIDE LTFSC TO FEED PEDESTAL. NEW CAT6 ARMORED MARINE GRADE CABLES INSIDE LTFSC TO PEDESTAL.
- 8 LOCATION OF EXISTING 208V PANEL 'N'. FLOAT LIGHTS TO BE FED FROM THIS PANEL. REFER TO DWG E700 FOR DETAILS.



Stantec Consulting Ltd.
www.stantec.com
STANTEC PROJECT NO.: 115615284 TSK200

5		
4		
3		
2		
1		
0	ISSUED FOR TENDER	2016.08.05

Revision/	Description/Description	Date/Date
-----------	-------------------------	-----------

Client/client
DEPARTMENT OF FISHERIES AND OCEANS
INSTITUTE OF OCEAN SCIENCES
9860 W. SAANICH ROAD
SIDNEY, B.C.

Project title/Titre du projet
IOS TIMBER AND CONCRETE FLOATS A, B, C & D

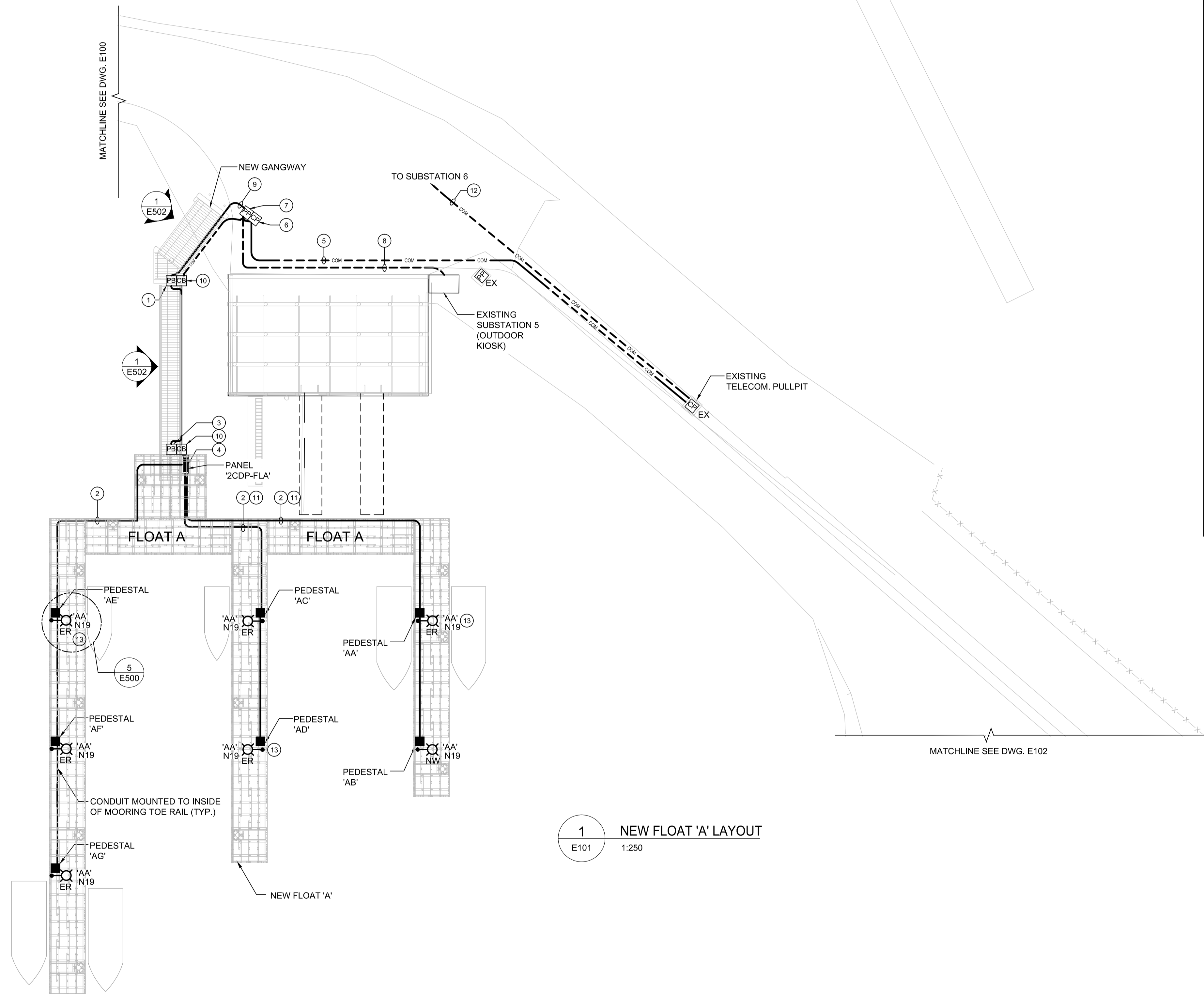
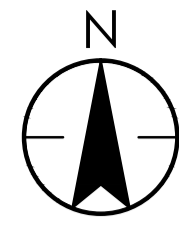
Consultant Signature Only
Designed by/Concept par
AD/MB
Drawn by/Dessiné par
AG
PWGSC Project Manager/Administrateur de Projets TPSGC

Regional Manager, Architectural and Engineering Services
Gestionnaire régionale, Services d'architecture et de génie, TPSGC

Drawing title/Titre du dessin
NEW FLOAT 'D' LAYOUT - ELECTRICAL

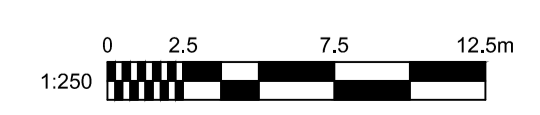
Project No./No. du projet 9R306-2	Sheet/Feuille E100 9 OF 19	Revision no./La Révision no. 0
--------------------------------------	---	--





1 NEW FLOAT 'A' LAYOUT
E101 1:250

- GENERAL NOTES:**
- REFER TO PROPOSED SINGLE LINE DIAGRAM ON DRAWING E601 FOR ALL CONDUIT AND WIRE SIZES.
- DRAWING NOTES:**
- PROVIDE A NEW 915mm X 610mm SS NEMA 4X PULLBOX AND INSTALL UNDER THE FLOAT GANGWAY. RUN NEW ALUMINUM CONDUITS C/W WIRING TO NEW ALUMINUM MOUNTING STRUCTURE/BRACKETS. MOUNT NEW 915mm X 610mm SS PULLBOX ON THE MOUNTING STRUCTURE AND TERMINATE THE ALUMINUM CONDUIT TO THIS PULLBOX. FROM THIS PULLBOX, RUN NEW TECK90 CABLE INSIDE THE LTFSC TO THE FLOAT PANEL. STRAP THE LTFSC UNDER THE WALL BOARD USING SS UNI-STRUT AND HEAVY DUTY SS P-STRAPS. ALLOW FOR MAXIMUM OF 1m SPACING BETWEEN THE STRAPS IN THE BID PRICE. CARRY THE COST OF ALL MATERIAL, LABOUR, STRUCTURAL ENGINEERING AND SEISMIC SIGNOFF FOR A COMPLETE AND OPERATIONAL SYSTEM. REFER TO DETAIL '1E-502' AND DRAWING NOTES FOR DETAILS.
 - PEDESTAL FEEDS: INSTALL INDIVIDUAL FEEDS FOR EACH PEDESTAL. RUN NEW TECK90 CABLE INSIDE LTFSC FROM THE FLOAT PANEL TO EACH PEDESTAL. RUN THE LTFSC UNDER THE FLOAT FLOOR PANELS. REFER TO '8E-500' FOR DETAILS.
 - PROVIDE A NEW 915mm X 610mm SS NEMA 4X PULLBOX MOUNTED ON AN ALUMINUM STRUCTURE LOCATED ON THE NEW FLOAT AND FEED FROM THE GANGWAY PULLBOX AND STRUCTURE. TERMINATE THE TECK90 CABLES TO THE FLOAT PANEL AS SHOWN ON DETAIL '1E-502'.
 - NEW 1525mm X 915mm LOCKABLE STAINLESS STEEL NEMA 3R ENCLOSURE c/w 600A, 120/208V, 60 CTT NEMA 3RX MARINE GRADE PRE-MANUFACTURED DISTRIBUTION PANEL INSTALLED INSIDE THE SS ENCLOSURE c/w BRACKETS TO MOUNT ON THE FLOAT TO FEED THE PEDESTALS.
 - PROVIDE ONE (1) NEW 103mm RPVC FROM THE EXISTING TELECOM PULLBOX TO A NEW PULLBOX.
 - PROVIDE A NEW TELECOM PULLPIT. REFER TO NOTE 7.
 - NEW 2 X (915mm X 610mm) PULLPIT C/W HEAVY DUTY SPRING LOAD COVER. ONE (1) FOR POWER AND ONE (1) FOR DATA.
 - NEW 4 X 103mm RPVC UIG CONDUITS & CABLES ENCASED IN A CONCRETE DUCT BANK AS SHOWN ON '4E-501'.
 - PROVIDE NEW 3 X 103mm RPVC CONDUITS TO FEED PULLBOX UNDER THE GANGWAY. TERMINATE THE RPVC TO THE ALUMINUM CONDUITS WHERE THE CONDUITS ARE EXPOSED USING RAIN-TIGHT COUPLINGS. (RPVC UNDERGROUND ALUMINUM UNDER THE GANGWAY TO THE MOUNTING STRUCTURE). REFER TO '1E-502' FOR DETAILS.
 - PROVIDE A NEW 615mm X 407mm SS NEMA 4X PULLBOX INSTALLED UNDER THE FLOAT GANGWAY. RUN NEW ARMORED MARINE GRADE CAT6 CABLES FROM THE EXISTING COM. BOX TO THE FLOATS. CONTINUOUS RUNS WITHOUT SPLICES. USE RPVC FOR ALL UIG RUNS. ALUMINUM CONDUIT UNDER THE GANGWAY AND LTFSC UNDER THE BOARDWALK AND ON THE FLOAT. REFER TO '1E-502' FOR DETAILS.
 - PEDESTAL TELECOM/DATA FEEDS FROM TELECOM BOX: INSTALL 1 X 103mm LTFSC TO USE AS A SLEEVE FOR THE CAT6 WIRING. DAISY CHAIN THE CONDUIT BY INSTALLING A WEATHERPROOF JB BEHIND EACH PEDESTAL TO FEED THAT SPECIFIC PEDESTAL. ALLOW FOR 1 X 103mm LTFSC ON EACH FINGER OF THE FLOAT BACK TO THE MAIN PULLBOX. REFER TO '8E500' FOR DETAILS.
 - PROVIDE A NEW 1 X 103mm RPVC TO SUBSTATION 6.
 - FEED NEW AND RELOCATED LUMINAIRES FROM EXISTING 120/208V PANEL 'N' IN SUBSTATION 6 BUILDING VIA NEW RELAY IN THE EXISTING OUTSIDE LIGHTING CONTROL PANEL LOCATED BESIDE PANEL 'N' IN SUBSTATION 6. CLEAN AND TEST EXISTING FIXTURES PRIOR TO INSTALL. TYPICAL FOR SIX (6) LUMINAIRES. PROVIDE ONE (1) NEW LUMINAIRE AND MOUNT ON TOP OF POLE ON NEW PEDESTAL. REFER TO E700 LUMINAIRE SCHEDULE. DETAIL '9E500' AND PROPOSED SINGLE LINE DIAGRAM.



Stantec Consulting Ltd.
 www.stantec.com
 STANTEC PROJECT NO.: 115615284 TSK200

5		
4		
3		
2		
1		
0	ISSUED FOR TENDER	2016.08.05
Revision/	Description/Description	Date/Date

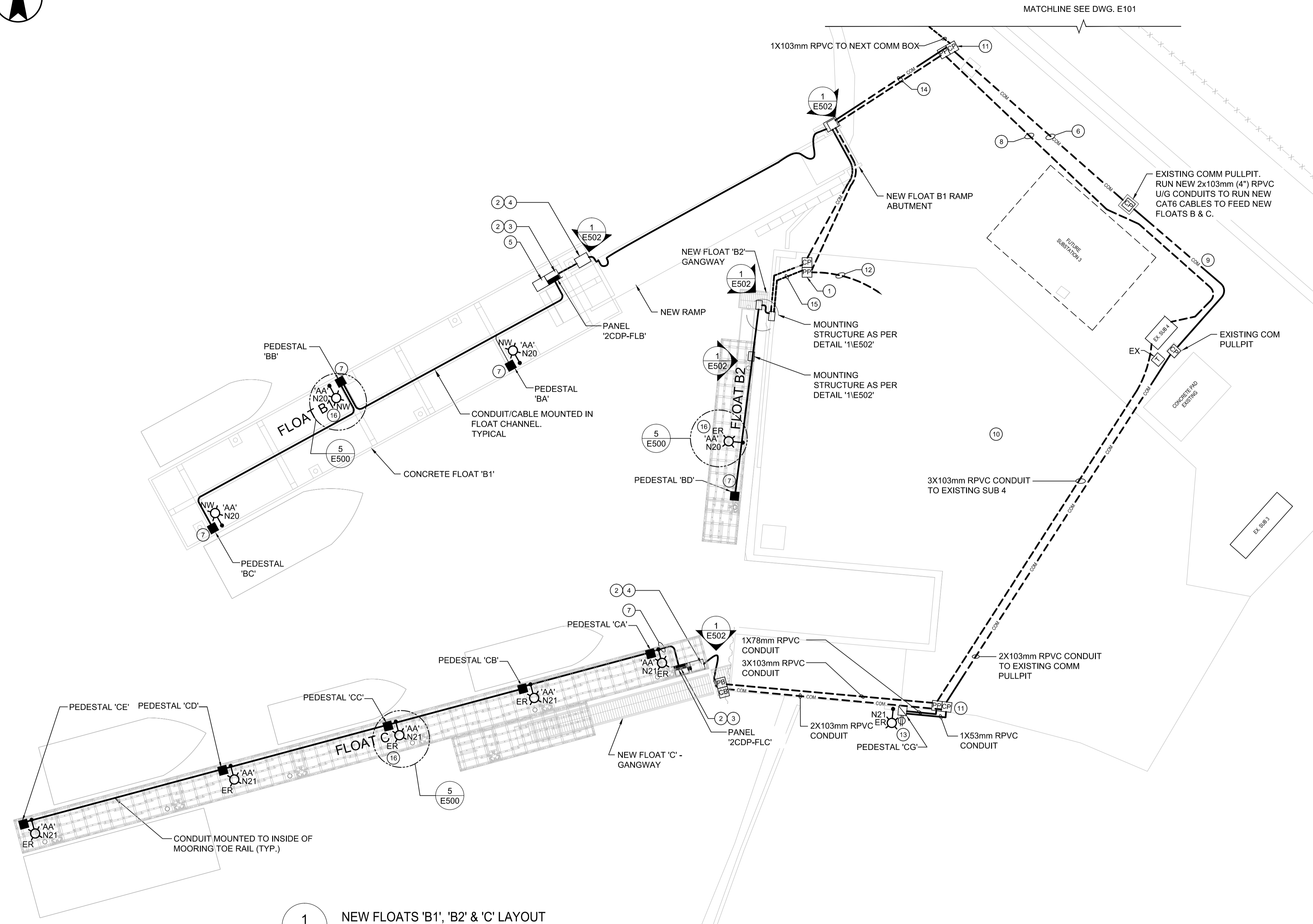
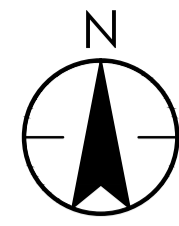
Client/client
DEPARTMENT OF FISHERIES AND OCEANS
 INSTITUTE OF OCEAN SCIENCES
 9860 W. SAANICH ROAD
 SIDNEY, B.C.

Project title/Titre du projet
IOS TIMBER AND CONCRETE FLOATS A, B, C & D

Consultant Signature Only
 Designed by/Concept par
 AD/MB
 Drawn by/Dessiné par
 AG
 PWGSC Project Manager/Administrateur de Projets TPSGC
 Regional Manager, Architectural and Engineering Services
 Gestionnaire régionale, Services d'architecture et de génie, TPSGC

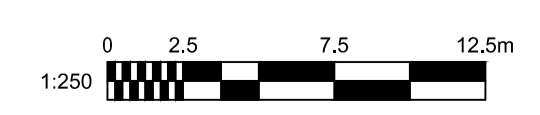
Drawing title/Titre du dessin
NEW FLOAT 'A' LAYOUT - ELECTRICAL

Project No./No. du projet 9R306-2	Sheet/Feuille E101 10 OF 19	Revision no./La Révision no. 0
---	--	--



1 NEW FLOATS 'B1', 'B2' & 'C' LAYOUT
E102 1:250

- GENERAL NOTES:**
- REFER TO PROPOSED SINGLE LINE DIAGRAM ON DRAWING E600 FOR ALL CONDUIT AND WIRE SIZES.
- DRAWING NOTES:**
- EXISTING PULLPIT TO BE REPLACED WITH NEW 2-305mmX305mmX610mm TIER 15 PULLPITS, ONE FOR POWER AND ONE FOR DATA TO FEED FLOAT 'B2'.
 - NEW 915mm X 610mm STAINLESS STEEL NEMA 4X PULLBOX c/w NEW STAND ALUMINUM MOUNTING STRUCTURE COMPLETE WITH BRACKETS TO MOUNT NEW PEDESTAL CABLES & CONDUITS.
 - NEW 1525mm X 915mm LOCKABLE STAINLESS STEEL NEMA 3R ENCLOSURE c/w 400A, 120/208V, 42 CCT NEMA 3RX MARINE GRADE, PRE-MANUFACTURED DISTRIBUTION PANEL INSTALLED ON A NEW STAND ALONE STAINLESS STEEL STAND COMPLETE WITH BRACKETS. REFER TO '7'E500' FOR DETAILS.
 - NEW 915mm X 610mm STAINLESS STEEL NEMA 4X PULLBOX INSTALLED UNDER THE FLOAT GANGWAY, RUN NEW ALUMINUM CONDUITS c/w WIRING TO NEW ALUMINUM MOUNTING STRUCTURE. MOUNT NEW 915mm X 610mm SS PULLBOX ON THE STRUCTURE & TERMINATE THE ALUMINUM CONDUITS TO THIS BOX. FROM THIS BOX RUN NEW TECK90 CABLES INSIDE LTSC TO THE FLOAT CONTROL PANEL. STRAP THE CABLES/CONDUITS UNDER THE WALKBOARD USING SS UNISTRUT & SS P-STRAPS & ALL SS MOUNTING ACCESSORIES. STRAP/SUPPORT AT MAXIMUM 1m INTERVALS. REFER TO '1'E502' FOR DETAILS. ALL FOR ALL MATERIAL, LABOR, ENGINEERING & SEISMIC IN THE BID PRICE.
 - NEW 1525mm X 915mm LOCKABLE STAINLESS STEEL NEMA 3R ENCLOSURE c/w 400A, 120/208V, 42 CCT NEMA 3RX MARINE GRADE, PRE-MANUFACTURED DISTRIBUTION PANEL INSTALLED INSIDE THE SS ENCLOSURE c/w BRACKETS TO MOUNT PEDESTAL FEEDERS.
 - NEW 2 X 103mm RPVC INSTALLED INSIDE CONCRETE ENCASED DUCT BANKS AS PER DETAILS '4'E501' & '5'E501'.
 - PEDESTAL FEEDS, INSTALL INDIVIDUAL FEEDS FOR EACH PEDESTAL. RUN NEW TECK90 CABLE INSIDE LTSC FROM THE FLOAT PANEL TO EACH PEDESTAL AND MOUNT ON SS UNISTRUT USING SS P-STRAPS UNDER THE FLOAT FLOOR BOARDS/PANELS. REFER TO DETAIL '8'E500'.
 - NEW 3 X 103mm RPVC INSTALLED INSIDE CONCRETE ENCASED DUCT BANKS AS PER DETAILS '4'E501'.
 - LOCATE ALL SITE SERVICES BEFORE DIGGING. ALL LOCATIONS SHOWN ARE APPROXIMATE, CARRY THE COST OF A DETAILED SCAN IN THE BID PRICE.
 - EXISTING 24" CONCRETE SLAB, ALLOW FOR STRUCTURAL ENGINEER REVIEW AND APPROVAL BEFORE CUTTING, SCAN, CUT AND REPAIR TO THE ENGINEERS APPROVAL. CARRY ALL THE COST IN THE BID PRICE.
 - NEW 2 - 600mm X 600mm X 600mm TIER 15 PULLPITS, ONE FOR POWER, ONE FOR DATA.
 - EXISTING U/G CONDUITS/CABLES, PULL THE CABLES BACK TO THE SOURCE AND DISPOSE. LEAVE CONDUITS IN PLACE AND PULL NEW #6 PULL STRING FOR FUTURE USE, TERMINATE THE CONDUITS TO THE NEW PULLBOXES.
 - EXISTING PANEL 'CG' WELDER OR HIGH PRESSURE WASHER PEDESTAL TO BE REPLACED WITH NEW STAINLESS STEEL ENCLOSURE c/w NEMA 3RX PANEL AND RECEPTACLES. RUN NEW WIRES c/w TERMINATIONS AND WEATHERPROOF EQUIPMENT AS SHOWN ON THE PROPOSED SINGLE LINE DIAGRAM E600. REFER TO '5'E500' FOR RELOCATION OF LUMINAIRE DETAILS.
 - NEW 5 X 103mm RPVC CONDUITS (3 POWER, 2 DATA) TO SERVICE THE NEW PEDESTALS.
 - NEW 2 X 103mm RPVC STUBBED UP TO A NEW 615mm X 407mm SS PULLBOX EACH. MOUNT THE SS PULLBOXES ON THE ALUMINUM STRUCTURE TO FEED FLOAT B2 AS PER DETAIL '1'E502'. TERMINATE RPVC TO ALUMINUM CONDUITS TO FEED THE BOX ON THE GANGWAY. USE TECK90 INSIDE LTSC FROM THE BOXES ON THE GANGBOARD TO THE PEDESTALS.
 - FEED NEW AND RELOCATED LUMINAIRES FROM EXISTING 120/208V PANEL 'N' IN SUBSTATION 6 BUILDING VIA NEW RELAY IN THE EXISTING OUTSIDE LIGHTING CONTROL PANEL LOCATED BESIDE PANEL 'N' IN SUBSTATION 6. CLEAN AND TEST EXISTING FIXTURES PRIOR TO INSTALL, TYPICAL FOR SIX (6) LUMINAIRES. PROVIDE THREE (3) NEW LUMINAIRES AND MOUNT ON TOP OF POLE ON NEW PEDESTALS. REFER TO E-700 LUMINAIRE SCHEDULE AND '5'E500' FOR DETAILS.



Stantec Consulting Ltd.
 www.stantec.com
 STANTEC PROJECT NO.: 115615284 TSK200

Revision/	Description/Description	Date/Date
5		
4		
3		
2		
1		
0	ISSUED FOR TENDER	2016.09.05

DEPARTMENT OF FISHERIES AND OCEANS
 INSTITUTE OF OCEAN SCIENCES
 9860 W. SAANICH ROAD
 SIDNEY, B.C.

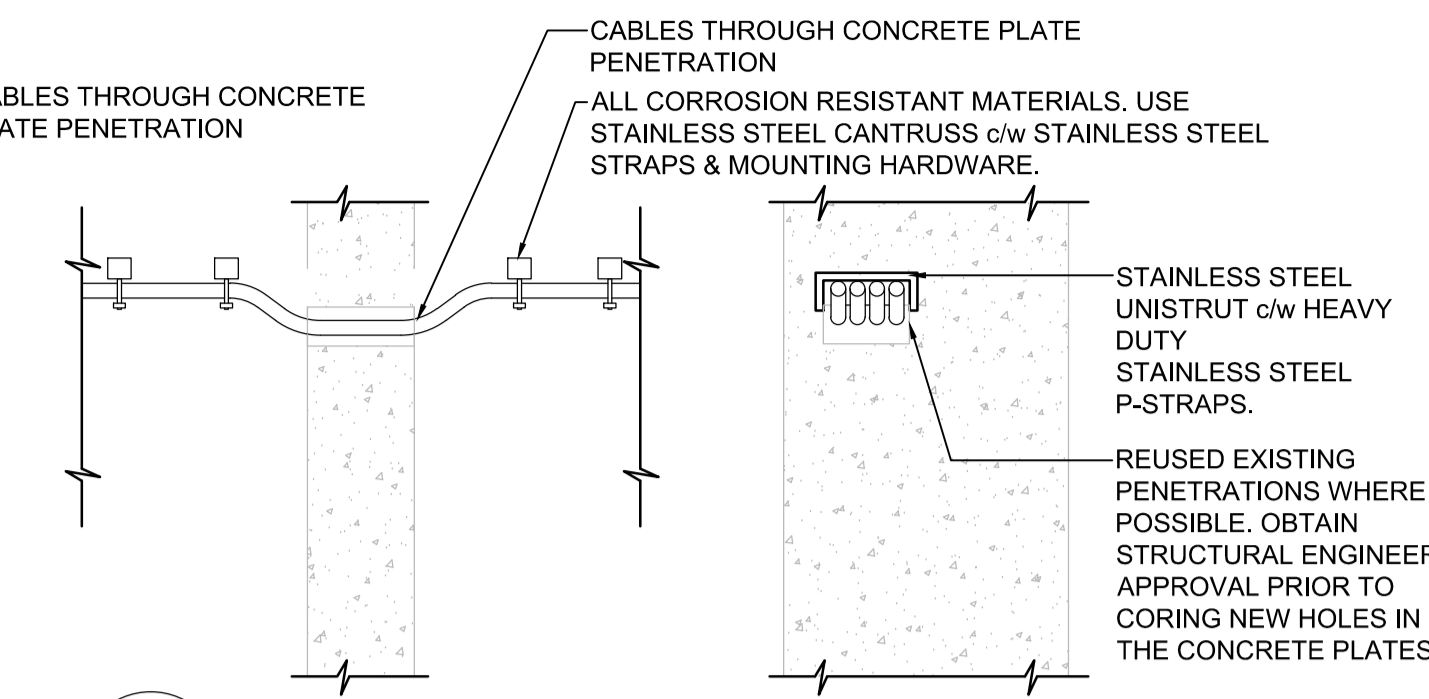
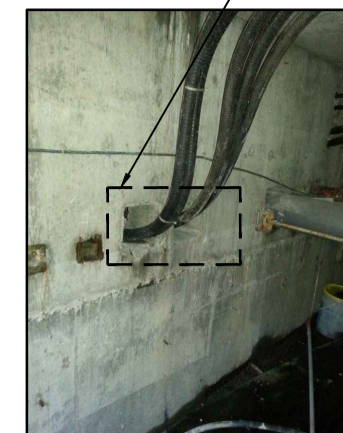
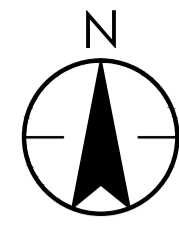
Client/client
IOS TIMBER AND CONCRETE FLOATS A, B, C & D

Consultant Signature Only
 Designed by/Concept par AD/MB
 Drawn by/Designe par AG
 PWGSC Project Manager/Administrateur de Projets TPSGC

Regional Manager, Architectural and Engineering Services
 Gestionnaire régionale, Services d'architecture et de génie, TPSGC

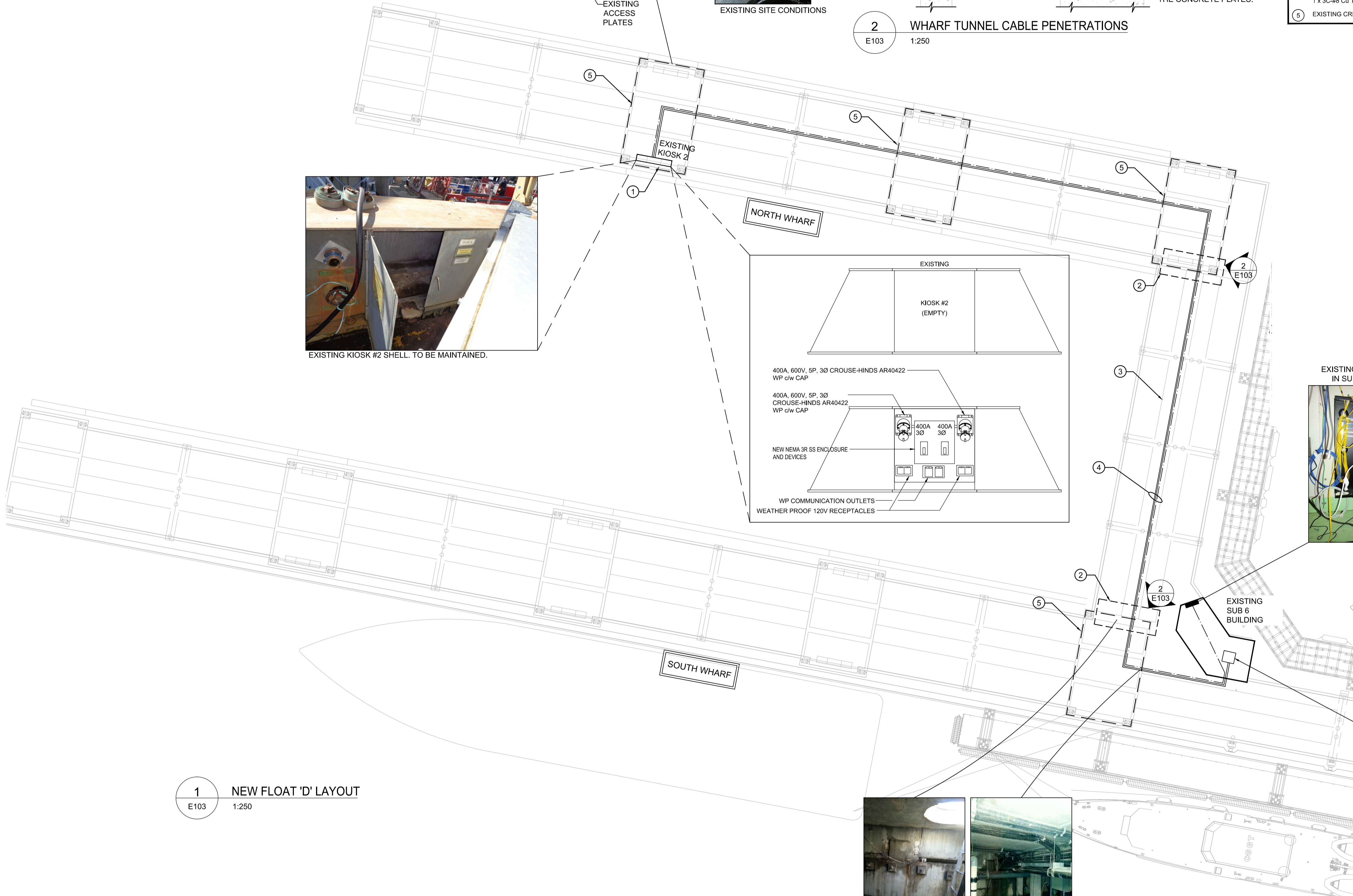
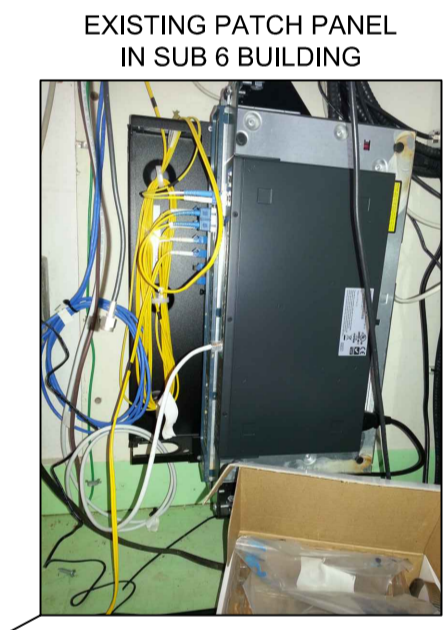
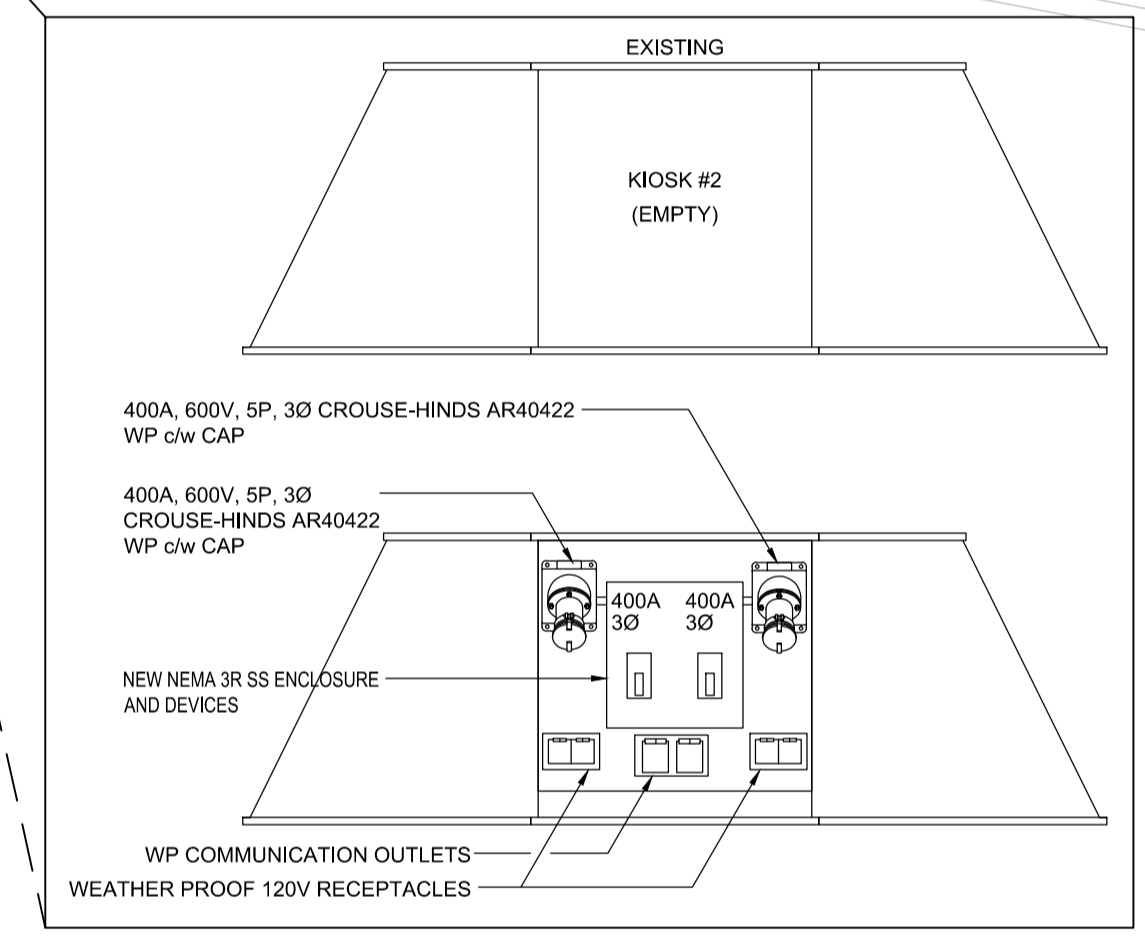
Drawing title/Titre du dessin
NEW FLOAT 'B1', 'B2' & 'C' LAYOUT - ELECTRICAL

Project No./No. du projet 9R306-2	Sheet/Fauille E102 11 OF 19	Revision no./La Révision no. 0
---	--	--

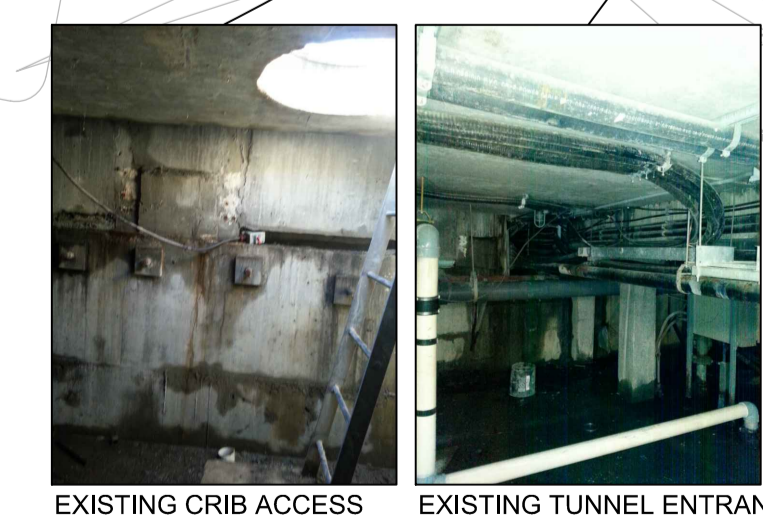


2 WHARF TUNNEL CABLE PENETRATIONS
E103 1:250

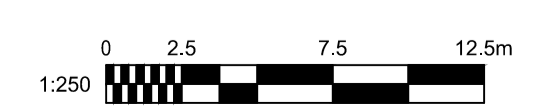
- DRAWING NOTES:**
- EXISTING KIOSK SHELL TO BE RE-USED. INSTALL NEW: 2 x 3P, 400A, 600V FUSED DISCONNECT SWITCH c/w SP, 600V, 3Ø, 400A CROUSE-HINDS RECEPTACLES "AR4042". 2 x 3W (GROUNDED) 3-PRONG MARINE GRADE SS SCREW-ON TELEPHONE PLUG c/w MARINE GRADE SS SPRING TYPE GASKETED WATER-TIGHT BOOT COVER (2x CAT6 R445 LAN OUTLET)
 - EXISTING TRANSITION BETWEEN VERTICAL AND HORIZONTAL CONCRETE PIER. USE EXISTING HOLES WHERE POSSIBLE. CORE NEW HOLES WHERE NEEDED. OBTAIN STRUCTURAL ENGINEERS APPROVAL BEFORE CORING. REFER TO DETAIL 2/E103 FOR MORE DETAILS.
 - EXISTING TUNNEL WITH ACCESS PLATES ON THE WHARF. REMOVE ACCESS PLATES TO RUN NEW CABLES IN THIS TUNNEL. ACCESS PLATES ARE IN WEATHERED SHAPE. CONTRACTOR TO REPLACE ANY DAMAGE CAUSED BY THE CONTRACTORS WORK AT NO ADDITIONAL COST. INFORM THE ENGINEER FOR ROUGH-IN INSPECTION BEFORE RE-INSTALLING THE PLATES.
 - NEW: 2 x MARINE GRADE ARMORED CAT6 CABLES INSIDE 3" LTFSC 4 x 4C-4/0 Cu TECK 90 CABLES 1 x 3C-#8 Cu TECK 90 CABLES
 - EXISTING CRIB ACCESS BELOW WITH APPROX. 2m (H).



1 NEW FLOAT 'D' LAYOUT
E103 1:250



REFER TO DRAWING E602 FOR CDP AND DISTRIBUTION DETAILS.



Stantec Consulting Ltd.
www.stantec.com
STANTEC PROJECT NO.: 115615284 TSK200

5		
4		
3		
2		
1		
0	ISSUED FOR TENDER	2016.08.05
Revision/	Description/Description	Date/Date
Client/client		

DEPARTMENT OF FISHERIES AND OCEANS
INSTITUTE OF OCEAN SCIENCES
9860 W. SAANICH ROAD
SIDNEY, B.C.

Project title/Titre du projet
IOS TIMBER AND CONCRETE FLOATS A, B, C & D

Consultant Signature Only
Designed by/Concept par
AD/MB
Drawn by/Dessiné par
AG
PWGSC Project Manager/Administrateur de Projets TPSGC

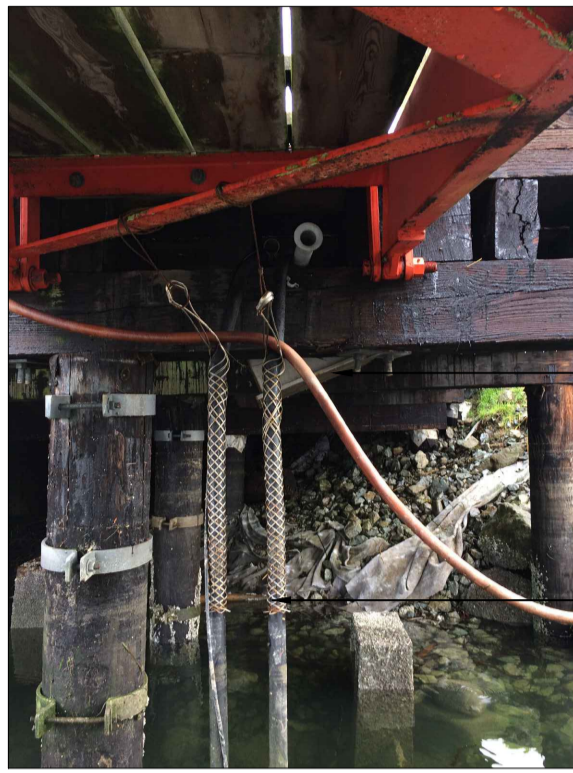
Regional Manager, Architectural and Engineering Services
Gestionnaire régionale, Services d'architecture et de génie, TPSGC

Drawing title/Titre du dessin
EXISTING NORTH WHARF KIOSK 2 - ELECTRICAL

Project No./No. du projet 9R306-2	Sheet/Feuille E103 12 OF 19	Revision no./Loi Révision no. 0
---	--	---



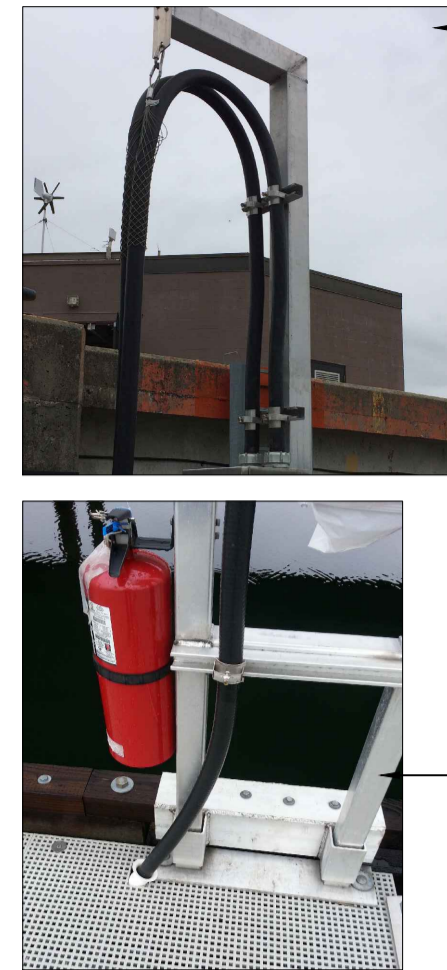
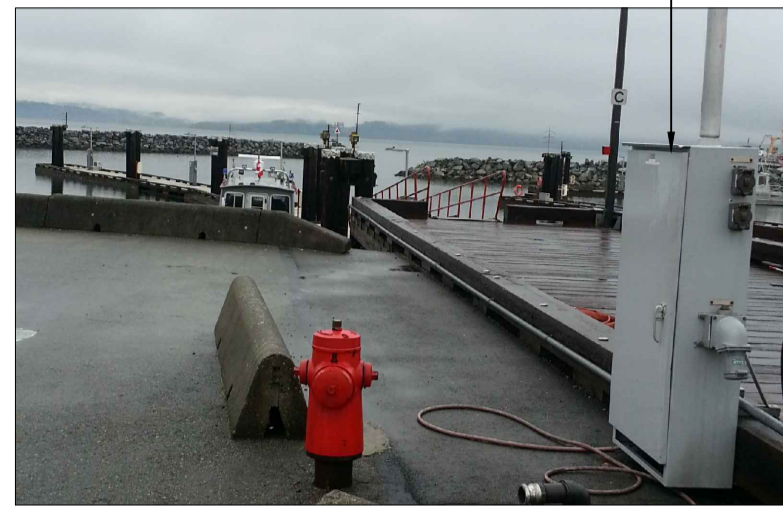
Stantec Consulting Ltd.
www.stantec.com
STANTEC PROJECT NO.: 115615284 TSK200



EXISTING PULL BOX UNDER FLOAT 'A' DOCK TO BE REMOVED. INSTALL ALL NEW MATERIALS AS PER DRAWINGS AND SPECS. DE-COMMISSION EXISTING EQUIPMENT AND PULL NEW PULL STRING INSIDE THE U/G CONDUITS FOR AND CAP FOR FUTURE USE.

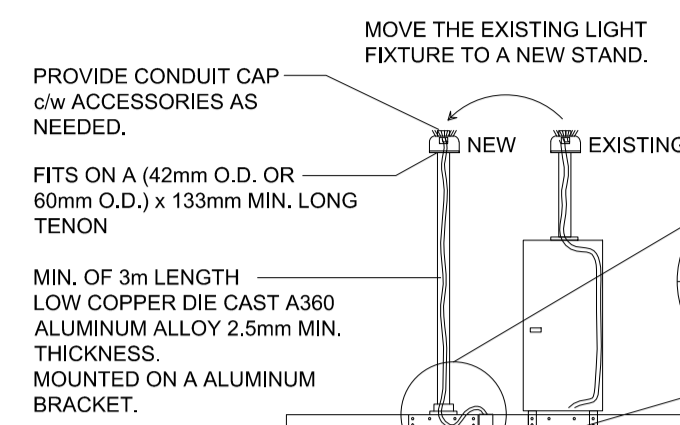
EXISTING FEEDER TO THE FLOAT. DISCONNECT AND PULL BACK TO THE SOURCE. DISCONNECT ALL THE FEEDERS TO THE PEDESTALS AND DISPOSE ALL THE REMOVED EQUIPMENT.

EXISTING WELDER PEDESTAL. REPLACE THE PEDESTAL WITH NEW 60" X 36" STAINLESS STEEL ENCLOSURE C/W 120/208V, 200A, 3Ø CCT PANEL AND RECEPTALS AS PER SINGLE LINE DIAGRAM.



PHOTO'S SHOWING TYPICAL ALUMINUM STANDHANGER, CANTRUSS, P-STRAP, HOOKS, TECK90 CABLE AND PVC SLEEVE FOR A PULL BOX ON FLOAT 'E'.

NEW FLOAT 'D' FEED SHALL BE PULLED THROUGH THE EXISTING HATCH UNDER KIOSK 15. ALLOW FOR MULTIPLE HANGERS/STRUCTURES TO CARRY THE CABLE STRUCTURE PER PEDESTAL. SUBMIT MOUNTING STRUCTURE DESIGN FOR APPROVAL. ALL WORK PERFORMED BY DIV 26 SHALL BE REVIEWED AND APPROVED BY THE CONTRACTORS SEISMIC ENGINEER PRIOR TO SUBSTANTIAL COMPLETION.



- NOTES:
- RUN NEW #8 TECK90 CABLE TO FEED THE LIGHTS ON THE NEW FLOATS. DAISY CHAIN FEED IS ACCEPTABLE ON THE FLOAT.
 - MAINTAIN PROTECTION FOR THE LUMINAIRE UNTIL ALL NEW FLOATS ARE INSTALLED. RE-INSTALL ON NEW APPARATUS AS SHOWN.



TYPICAL NEW LED LIGHTING INSTALLED ON TOP OF THE EXISTING PEDESTAL TO BE RE-USED. INSTALL NEW MOUNTING BRACKETS AND RE-MOUNT AS SHOWN ON '9E-S01'. RUN NEW TECK90 CABLE DAISY CHAINED TO FEED NEW LIGHTS.

1 EXISTING PULLBOX AND FEEDER
SCALE: N.T.S.

2 EXISTING PEDESTAL AND NEW PULLBOX LOCATION
SCALE: N.T.S.

3 HANGER AND CABLE DETAILS
SCALE: N.T.S.

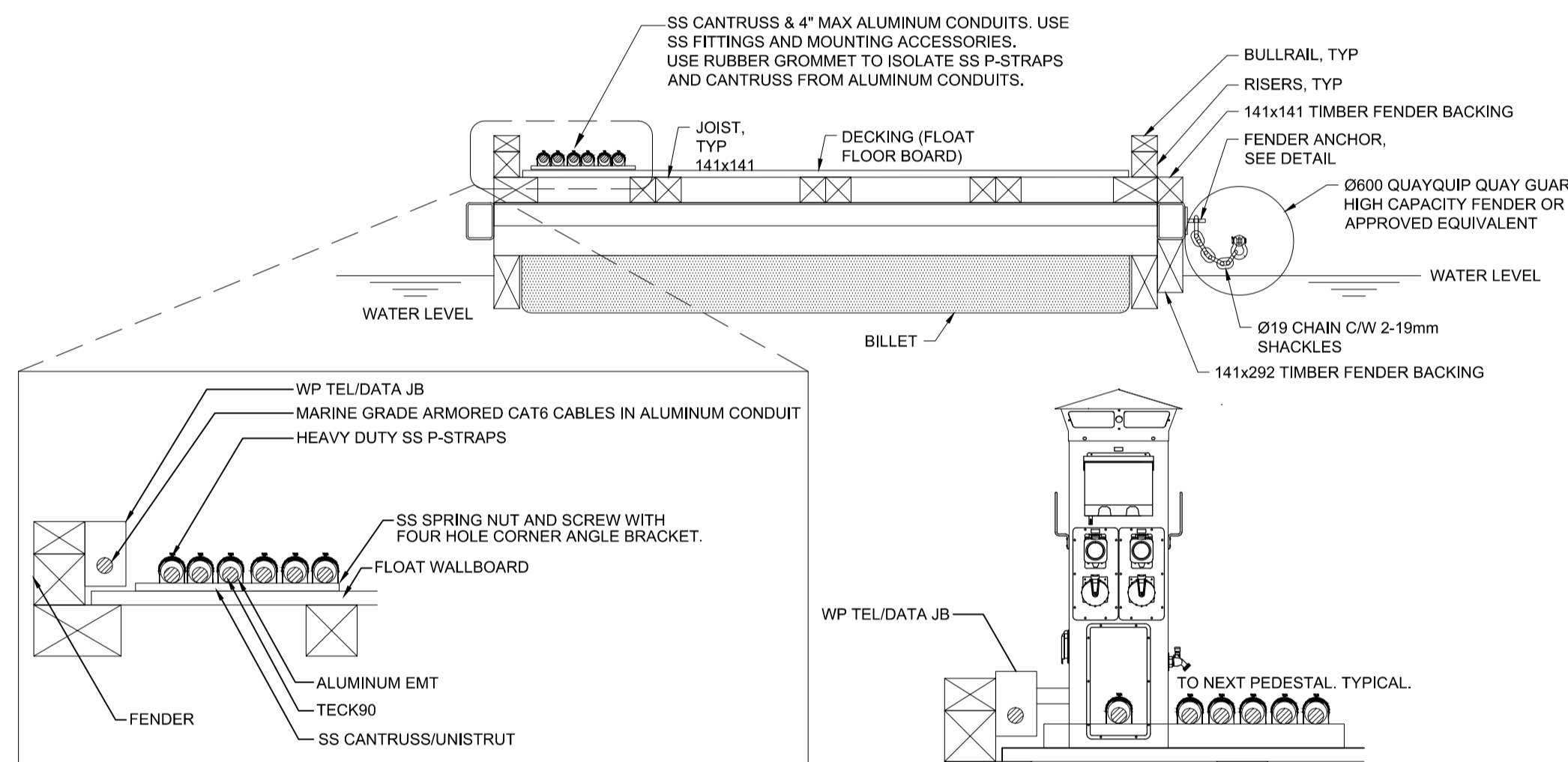
5 FLOAT PEDESTAL LIGHTING DETAILS
SCALE: N.T.S.

6 LED LIGHTING MOUNTING DETAIL
SCALE: N.T.S.

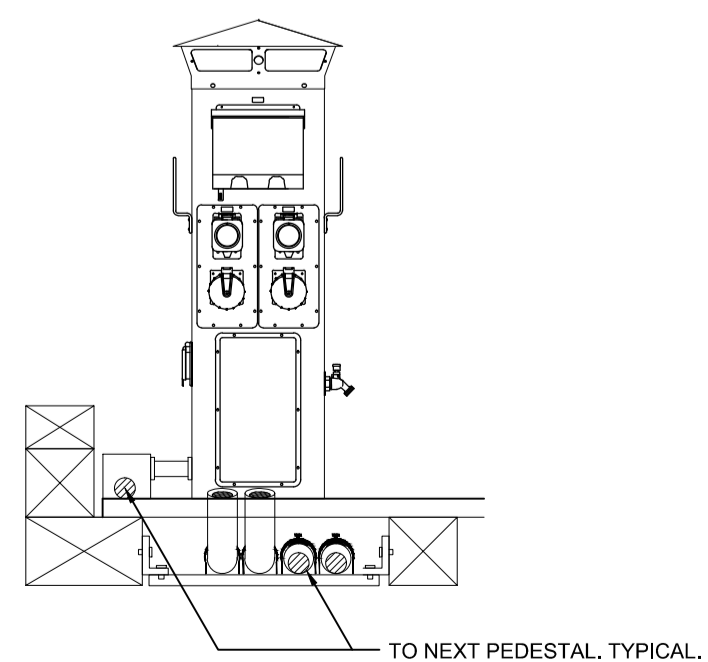
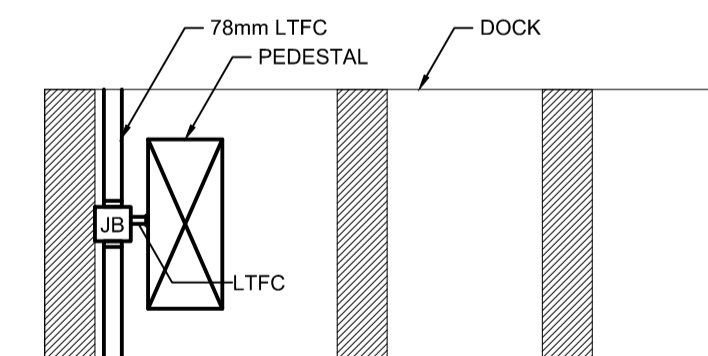


EXISTING PULLPIT FEEDING FLOAT 'B' TO BE REPLACED WITH TWO (2) NEW 305mm X 305mm X 615mm HEAVY DUTY PULLPITS TO FEED NEW FLOAT 'B2'. INSTALL ALL NEW. ALLOW FOR SURFACE CUT AND REPAIR TO INSTALL THE NEW CONDUITS AND PULLPIT.

4 FLOAT 'B' PULLPIT DETAILS
SCALE: N.T.S.



8 FLOAT A, C & D SECTION DETAIL - ALTERNATE
SCALE: N.T.S.



FLOAT POWER PEDESTAL.
LEGEND:
PREMANUFACTURED PEDESTAL c/w WATER SERVICE. REFER TO SPECIFICATIONS.



DISTRIBUTION POWER PANEL.
LEGEND:
NEW PREMANUFACTURED FLOAT DISTRIBUTION PANEL, MOUNTED INSIDE STAND-ALONE NEMA 3R c/w STAINLESS STEEL NEMA 3R ENCLOSURE AND MAIN BREAKER, CIRCUITS AS SHOWN ON SLD. REFER TO SPECIFICATIONS.
TYPICAL:
2CDP-FLA
2CDP-FLB
2CDP-FLC
2CDP-FLD

7 PEDESTAL AND PANEL DETAILS
SCALE: N.T.S.

9 FLOAT A, C & D SECTION DETAIL
SCALE: N.T.S.

5		
4		
3		
2		
1		
0	ISSUED FOR TENDER	2016.08.05

Revision/Revision	Description/Description	Date/Date
-------------------	-------------------------	-----------

Client/client
DEPARTMENT OF FISHERIES AND OCEANS
INSTITUTE OF OCEAN SCIENCES
9860 W. SAANICH ROAD
SIDNEY, B.C.

Project title/Titre du projet

IOS TIMBER AND CONCRETE FLOATS A, B, C & D

Consultant Signature Only

Designed by/Concept par
AD/MB

Drawn by/Dessiné par
AG

PWGSC Project Manager/Administrateur de Projets TPSGC

Regional Manager, Architectural and Engineering Services
Gestionnaire régionale, Services d'architectural et de génie, TPSGC

Drawing title/Titre du dessin

ELECTRICAL DETAILS (1 OF 2)

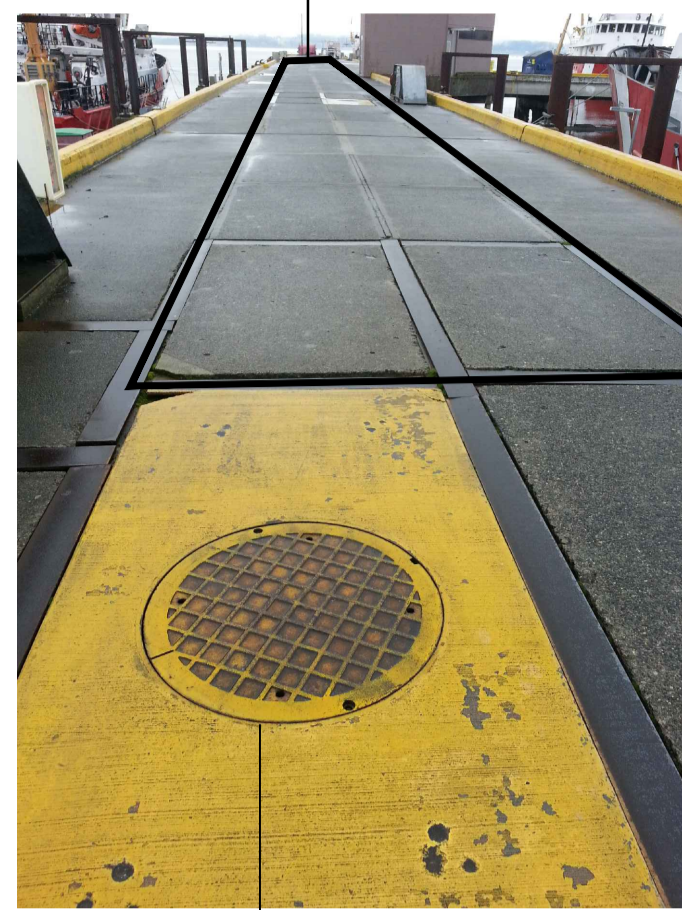
Project No./No. du projet 9R306-2	Sheet/Feuille E500 13 OF 19	Revision no./ La Révision no. 0
--------------------------------------	-----------------------------------	---------------------------------------



Stantec Consulting Ltd.
www.stantec.com
STANTEC PROJECT NO.: 115615284 TSK200

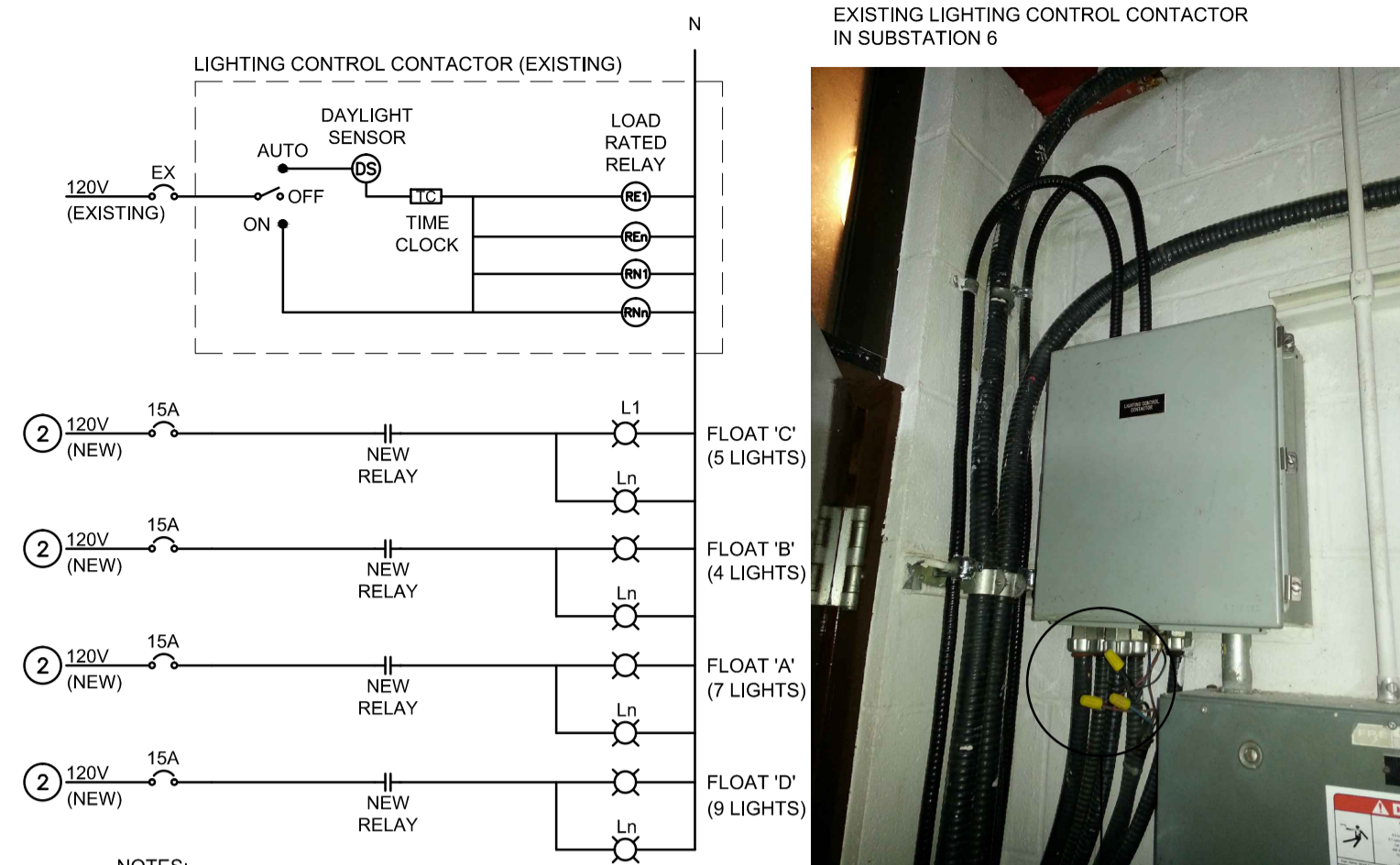


EXISTING TUNNEL UNDER THE PIER, THIS TUNNEL IS ACCESSED BY MOVABLE CONCRETE PLATES ON THE TOP OF THE PIER, SOME PLATES ARE IN WEATHERED SHAPE. ANY DAMAGED CAUSED BY THE CONTRACTORS WORK SHALL BE REPAIRED AS REQUIRED, WITH ADDITIONAL COST. ALLOW FOR UN-CAULKING AND RE-CAULKING AROUND THE PLATES IN THE BID PRICE.



EXISTING ACCESS PLATE WITH ACCESS HATCH IN DIFFERENT LOCATIONS.

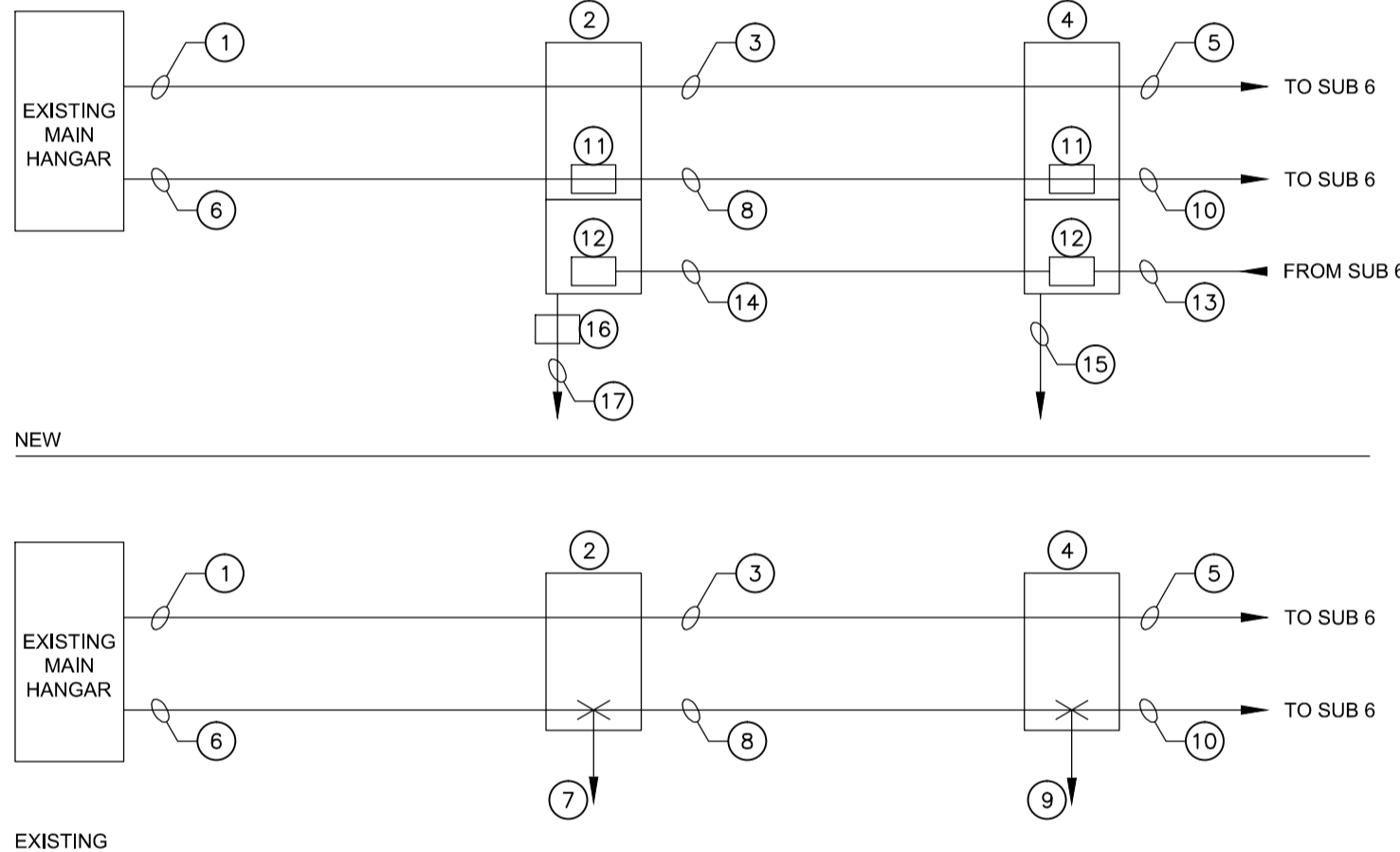
1 EXISTING PIER TUNNEL
SCALE: N.T.S.



- NOTES:
- ALLOW FOR NEW JUNCTION BOX c/w #8AWG Cu WIRING TO REPAIR EXISTING NON-COMPLIANT SPLICE OUTSIDE OF EXISTING LIGHTING CONTROL ENCLOSURE.
 - SUPPLIED FROM PANEL 'N' TO NEW RELAYS MOUNTED INSIDE STEEL ENCLOSURE LOCATED IN SUBSTATION 6 BUILDING. REFER TO SINGLE LINE DIAGRAM FOR CABLE SIZES.
- 2 EXTERIOR LIGHTING CONTROL DETAIL
SCALE: N.T.S.

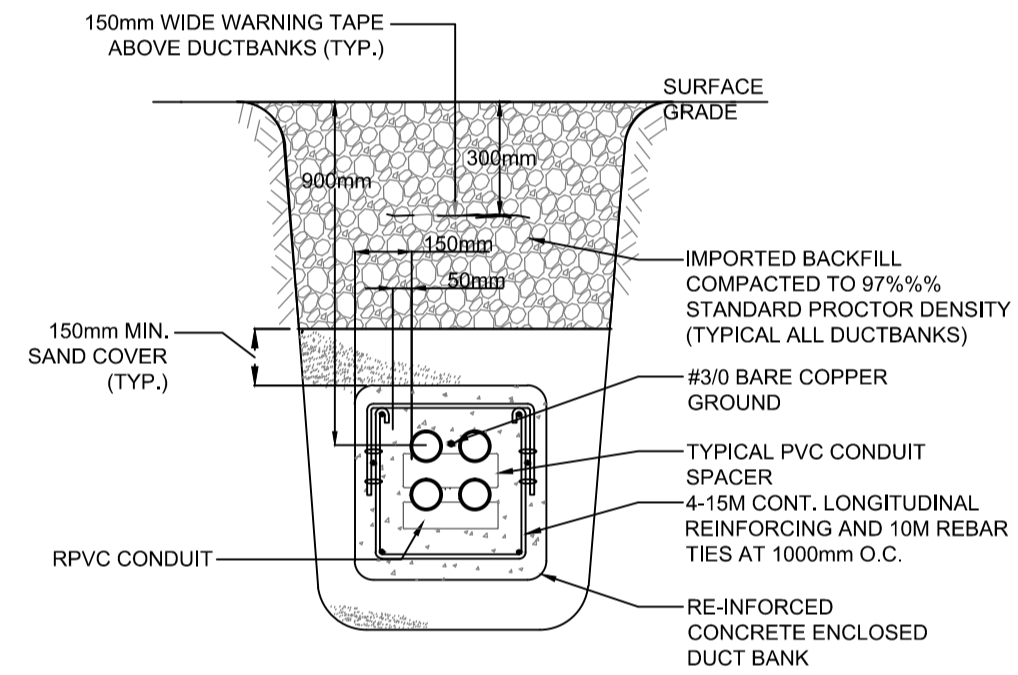


NOTE: ALLOW FOR ALL FINAL TERMINATIONS AND TESTING TO BE COMPLETED BY SHARED SERVICES CANADA (SSC), CARRY THE COST OF AN APPROVED SSC CONTRACTOR TO PERFORM THE TESTING & TERMINATIONS IN THE BID PRICE.



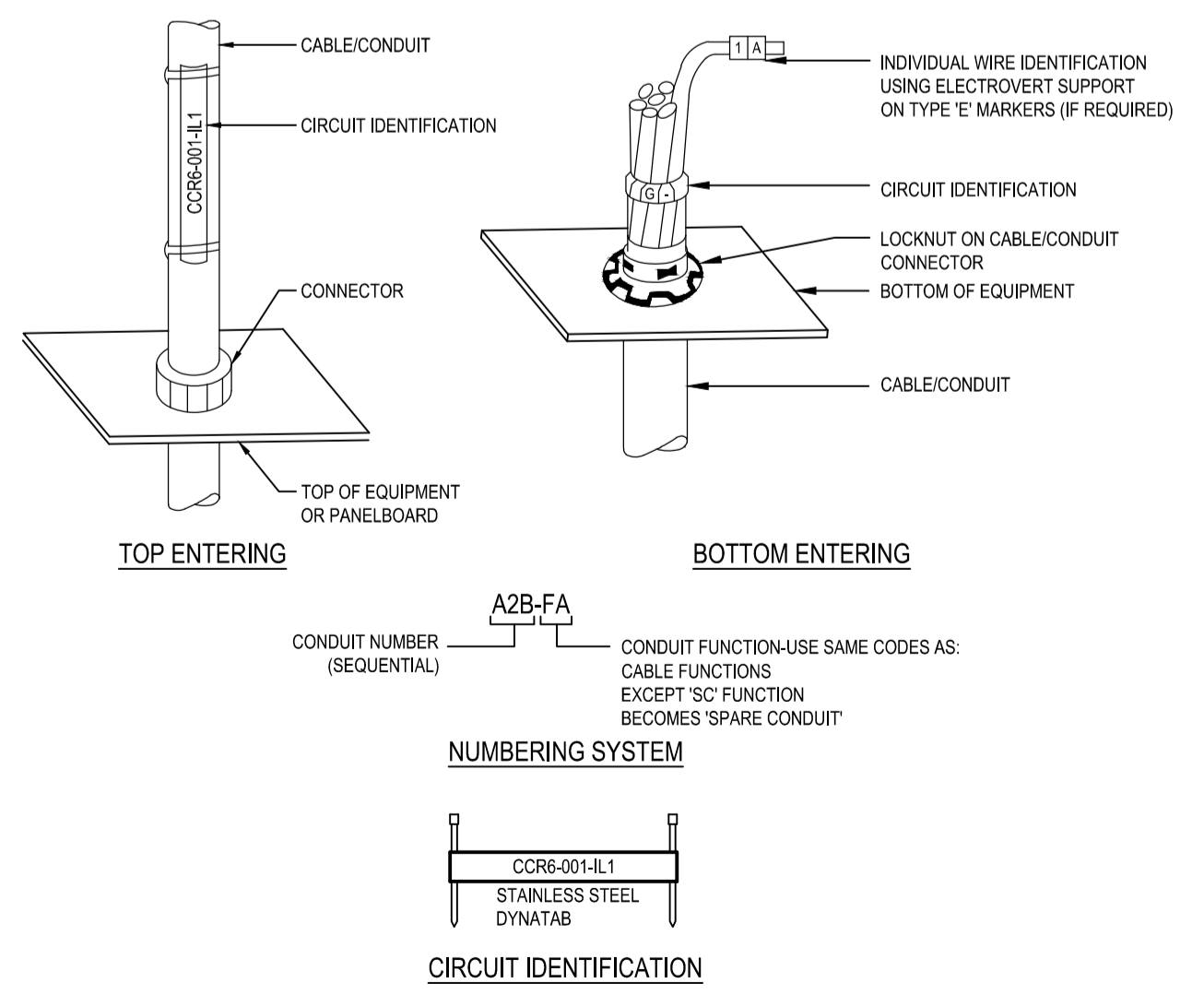
- EXISTING 6-STRAND FIBER CABLE
- COMM. PULLBOX "C3"
- EXISTING 6-STRAND FIBER CABLE
- COMM. PULLBOX "C4"
- EXISTING 6-STRAND FIBER CABLE
- EXISTING 2-100 CAT.3
- SPLICE TO FEED FLOAT B & C
- EXISTING 2-100 CAT.3
- SPLICE TO FEED FLOAT A
- EXISTING 2-100 CAT.3
- SPLICE KIT "REPAIR"
- NEW WEATHER PROOF NEMA 4X ENCLOSURE c/w 4 x 8PIN HARSH ENVIRONMENT PATCH PANELS.
- NEW 103mm RPVC c/w 4x25 PAIRS OF CAT6 CABLES.
- NEW 103mm RPVC c/w 3x25 PAIRS OF CAT6 CABLES.
- 1 X 103mm RPVC c/w 14 X ARMORED MARINE GRADE CAT6 CABLES. 2 RUNS PER PEDESTAL.
- NEW PULLBOX 600mm X 600mm X 600mm.
- 2 X 103mm RPVC c/w 18 X ARMORED MARINE GRADE CAT6 CABLES. 2 RUNS PER PEDESTAL.

3 COMMUNICATION PULLBOXES AND CABLE SPLICE DETAIL
SCALE: N.T.S.

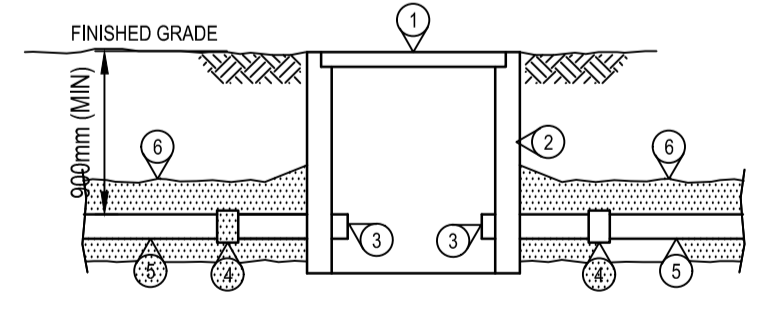


- NOTES:
- GENERAL/ELECTRICAL CONTRACTOR TO COORDINATE INSTALLATION & CONDUIT ROUTING ON SITE, PRIOR TO EXCAVATION AND BACKFILL.
 - REFER TO PLAN DRAWINGS FOR CONDUIT SIZES.
 - FOR TRENCHES WITH COMMUNICATION & FIRE ALARM CONDUITS, PROVIDE MINIMUM 610mm SEPARATION FROM H.V. CONDUITS WITHIN THE SAME DUCTBANK.

4 TYPICAL CONCRETE ENCASED TRENCH DETAIL
SCALE: N.T.S.

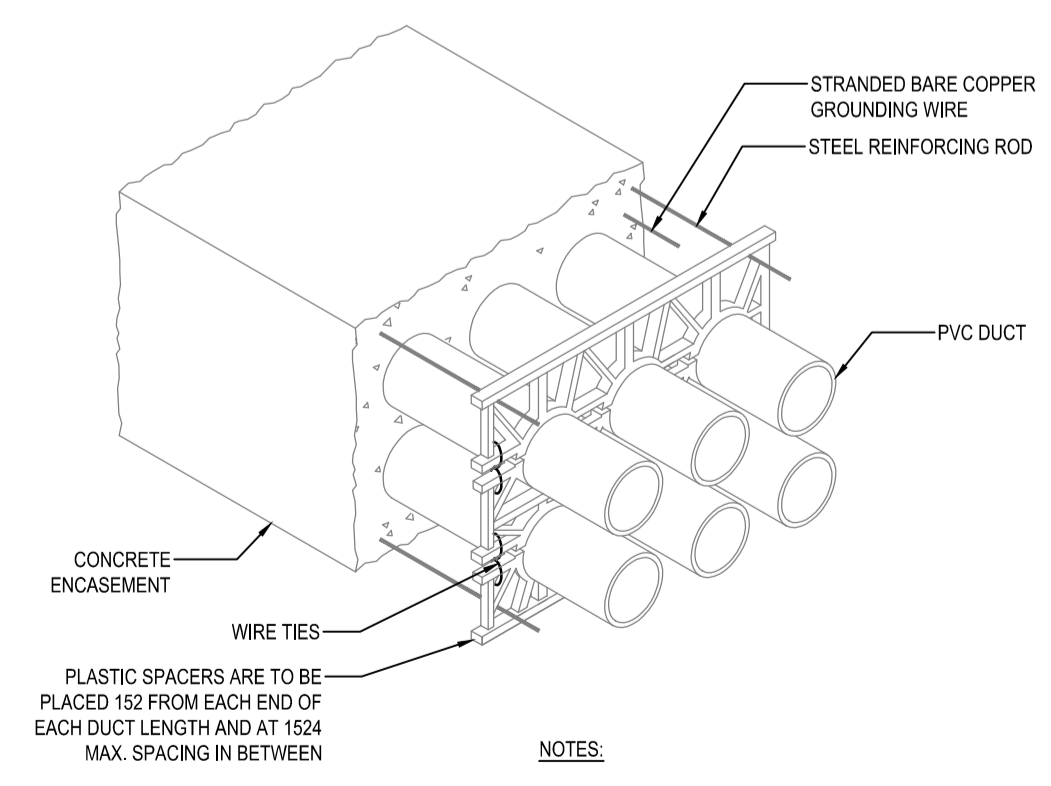


6 CABLE/CONDUIT LABELING AT EQUIPMENT AND PANELBOARD
SCALE: N.T.S.



- NOTES:
- PULLBOX SIZE SHALL BE MINIMUM 600mm x 600mm x 600mm UNLESS INDICATED OTHERWISE.
 - AT PEDESTRIAN OR LANDSCAPE AREA COVER TO BE HINGED 6.25mm THICK GALVANIZED CHECKER PLATE C/W ANGLE FRAME, LOCATED AT VEHICLE PATH/ROAD, COVER TO BE CAST IRON.
 - PROVIDE PULLBOX LABEL AND PERMANENTLY ATTACH ON THE COVER AS SPECIFIED BY WELDING OR RIVETING.
 - ALL CONDUITS AND CABLES TO BE LABELLED AS SPECIFIED BY PERMANENT TAG.
- KEY NOTES:
- HEAVY DUTY COVER C/W FRAME.
 - PRECAST CONCRETE PULLBOX.
 - RIGID PVC CONDUIT.
 - COUPLING OR CABLE ADAPTER.
 - RIGID PVC CONDUIT OR TECK CABLE AS INDICATED ON DRAWINGS.
 - SAND BEDDING 150mm ABOVE AND 75mm BELOW CONDUITS.

7 LV DISTRIBUTION PRECAST CONCRETE PULLBOX DETAIL
SCALE: N.T.S.



- NOTES:
- REFER TO PLAN DRAWINGS FOR NUMBER, SIZE AND TYPE OF DUCTS.
 - GROUNDING WIRE TO BE #10 UNLESS OTHERWISE INDICATED.

5 TYPICAL DUCT BANK DETAIL
SCALE: N.T.S.

5		
4		
3		
2		
1		
0	ISSUED FOR TENDER	2016.08.05

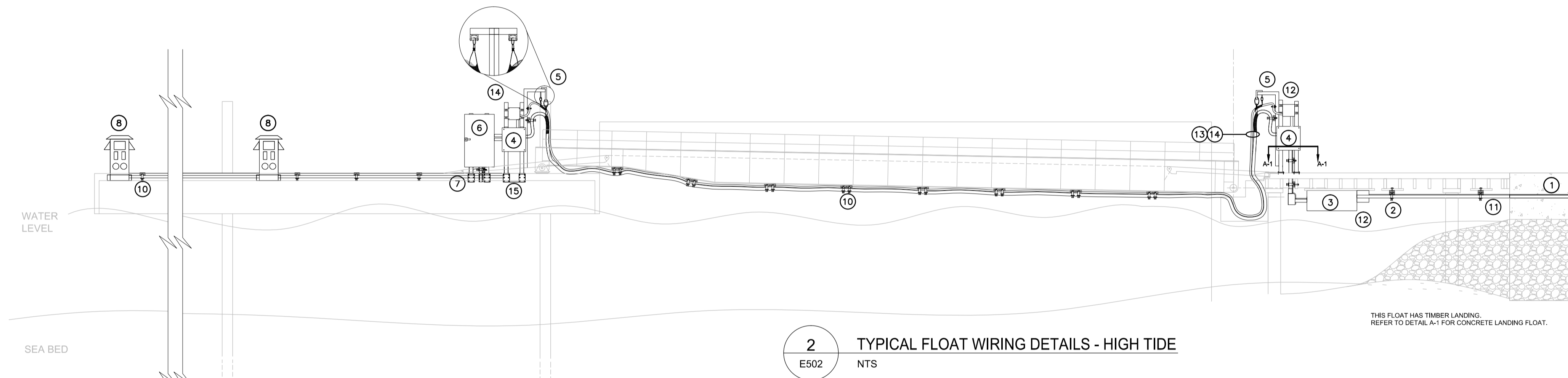
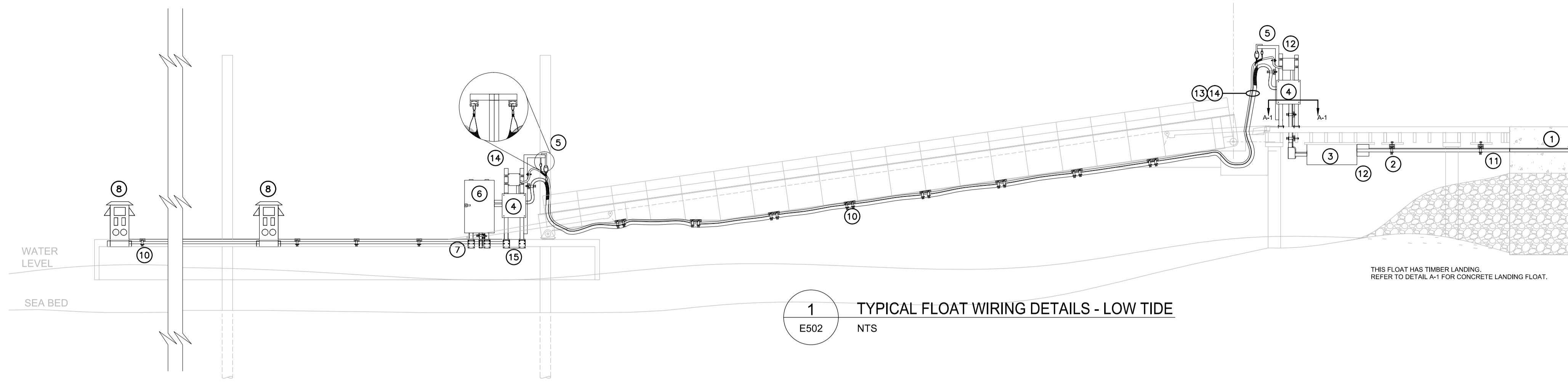
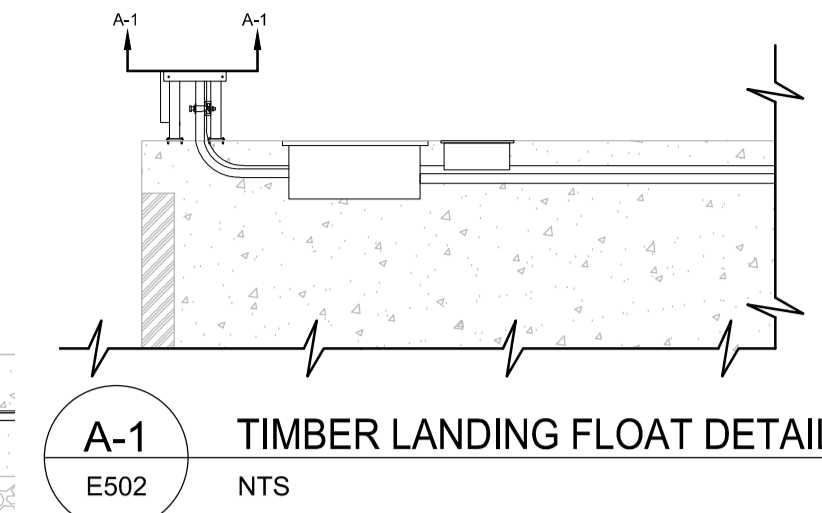
DEPARTMENT OF FISHERIES AND OCEANS
INSTITUTE OF OCEAN SCIENCES
9860 W. SAANICH ROAD
SIDNEY, B.C.

Project title/Titre du projet
IOS TIMBER AND CONCRETE FLOATS A, B, C & D

Consultant Signature Only
Designed by/Concept par AD/MB
Drawn by/Dessiné par AG
PWGSC Project Manager/Administrateur de Projets TPSGC
Regional Manager, Architectural and Engineering Services / Gestionnaire régionale, Services d'architectural et de génie, TPSGC

Drawing title/Titre du dessin
ELECTRICAL DETAILS (2 OF 2)

Project No./No. du projet 9R306-2	Sheet/Feuille E501 14 OF 19	Revision no./Lo Révision no. 0
--------------------------------------	-----------------------------------	-----------------------------------



5		
4		
3		
2		
1		
0	ISSUED FOR TENDER	2016.08.05

Revision/	Description/Description	Date/Date
-----------	-------------------------	-----------

Client/client
DEPARTMENT OF FISHERIES AND OCEANS
INSTITUTE OF OCEAN SCIENCES
9860 W. SAANICH ROAD
SIDNEY, B.C.

Project title/Titre du projet
IOS TIMBER AND CONCRETE FLOATS A, B, C & D

Consultant Signature Only

Designed by/Concept par
MB/AD

Drawn by/Designé par
AG

PWGC Project Manager/Administrateur de Projets TPSCG

Regional Manager, Architectural and Engineering Services / Gestionnaire régionale, Services d'architectural et de génie, TPSCG

Drawing title/Titre du dessin

NEW FLOAT TYPICAL INSTALLATION ELEVATION

Project No./No. du projet 9R306-2	Sheet/Fauille E502 14 OF 19	Revision no./Lo Révision no. 0
---	--	--

DRAWING NOTES:

- 1 EXISTING UNDERSLAB CONDUIT TO BE DE-COMMISSIONED, RUN NEW CONDUITS AND PULL NEW CABLES AS SHOWN ON SLD AND SITE PLAN USE RPVC IN THE SLAB/UG, ALUMINUM UNDER THE GANGWAY (LANDING) & TECK90 INSIDE LTFSO ON THE FLOATS.
- 2 NEW ALUMINUM CONDUITS WITH SWEEP BEND INSTALLED FROM THE NEW SS PULLBOX UNDER THE PLATFORM TO A NEW SS PULLBOX MOUNTED ON ALUMINUM STRUCTURE/MOUNTING BRACKETS.
- 3 NEW 915mm X 610mm (36" X 24") SS PULLBOX LOCATED UNDER THE FLOAT FOR POWER AND ONE 615mm X 407mm SS PULLBOX FOR COMM.
- 4 NEW 915mm X 610mm (36" X 24") STAINLESS STEEL HINGED LOCKABLE PULLBOX COMPLETE WITH ALUMINUM MOUNTING STRUCTURE AND BRACKETS, PROVIDE HEAVY DUTY STAINLESS HANGERS FOR CABLE MOUNTING, ALL WELDING AND HINGES MUST BE CORROSION RESISTANT TYPE.
- 5 EXTENDED ALUMINUM BRACKET/ARM SECURED TO THE MOUNTING STRUCTURE COMPLETE WITH STAINLESS CABLE BASKET, TYPICAL FOR ALL MOUNTING BRACKETS, ALL WELDING AND HINGES MUST BE CORROSION RESISTANT TYPE, HANGERS AND BRACKETS SHALL BE RATED FOR MINIMUM 2200Lbs, PROVIDE DETAILED DESIGN OF THE MOUNTING STRUCTURE FOR REVIEW & APPROVAL AS A PART OF THE SHOP DRAWING SUBMITTAL, CARRY THE COST OF ALL TRADES INCLUDING SEISMIC ENGINEERING IN THE BID PRICE.
- 6 NEW 1525mm X 915mm (60" X 36") STAINLESS STEEL NEMA 3R HINGED LOCKABLE ENCLOSURE COMPLETE WITH ALUMINUM MOUNTING STRUCTURE AND BRACKETS, ALL WELDING AND HINGES MUST BE CORROSION RESISTANT TYPE, MOUNT NEW 120/208V, 400A, 42CCT NEMA 3RX PANEL (FOR FLOAT 'A' PROVIDE 600A, 60CCT PNL) INSIDE THIS ENCLOSURE AND FEED ALL PEDESTALS ON THE FLOAT FROM THIS CENTRAL PANEL, SEPARATE TECK90 FEEDER INSIDE LTFSO CONDUIT FOR EACH PEDESTAL, DAISY CHAIN IS NOT ACCEPTABLE.
- 7 TECK90 Cu FEED INSTALLED INSIDE LTFSO CONDUIT TO EACH PEDESTAL, USE WP STAINLESS STEEL MOUNTING ACCESSORIES AND CONNECTORS, USE PVC SLEEVE WHEN PASSING THROUGH THE FLOAT DECKING TO AVOID ANY DAMAGE CAUSED BY FLOAT MOVEMENT, LEAVE SUFFICIENT SLACK IN THE CABLE TO ALLOW FOR ANY MOVEMENT AND FOR EXPANSION ALLOWANCE, INSTALL UNDER THE FLOAT REMOVABLE PANELS/DECKING AS PER DETAIL 8/E500, USE LIQUID-TIGHT FLEXIBLE STEEL CONDUIT (LTFSO) FOR ALL TECK90 CABLES AND ARMORED MARINE GRADE CAT6 CABLES ON THE FLOAT.
- 8 NEW STAINLESS STEEL, PREMANUFACTURED PEDESTAL, REFER TO SLD FOR MORE DETAILS ON EACH INDIVIDUAL PEDESTAL REQUIREMENTS.
- 9 N/A
- 10 NEW STAINLESS STEEL CANTRUSS, HEAVY DUTY STAINLESS STEEL P-CLAMPS WITH ACCESSORIES, AND TECK90 Cu INSTALLED INSIDE LIQUID-TIGHT FLEXIBLE STEEL CONDUIT (LTFSO) MOUNTED UNDER THE FLOAT WALK BOARD/DECKING, LEAVE SUFFICIENT CABLE/CONDUIT SLACK ON BOTH ENDS AS SHOWN, PROVIDE LIQUID-TIGHT FLEXIBLE STEEL CONDUIT (LTFSO) FOR TEL/DATA CABLING, ALLOW FOR MAXIMUM 1M SPACING BETWEEN P-CLAMPS FOR ALL CONDUITS & WIRING ON THE FLOATS, REFER TO 8/E500 FOR MORE DETAILS.
- 11 NEW 407mm X 615mm (16" X 24") HEAVY DUTY PULLBOX FOR TEL/DATA WIRING, CUT AND PATCH THE EXISTING SLAB TO SUIT WHERE NEEDED, INSTALL NEW RPVC c/w SWEEP BEND TO THE NEW SS PULLBOX (NOTE 12), TERMINATE RPVC TO ALUMINUM CONDUIT ABOVE GROUND/ CONCRETE SLAB.
- 12 NEW 407mm X 615mm (16" X 24") STAINLESS STEEL HINGED LOCKABLE PULLBOX COMPLETE WITH ALUMINUM MOUNTING STRUCTURE AND BRACKETS, PROVIDE LIQUID-TIGHT FLEXIBLE STEEL CONDUIT (LTFSO) (AS A SLEEVE) c/w HEAVY DUTY STAINLESS HANGERS FOR TEL/DATA WIRING FROM THE PULLBOX ON THE GANGWAY TO THE FLOAT PULLBOX, RUN ALL NEW HEAVY DUTY ARMORED MARINE GRADE CAT6 WIRING FROM THE EXISTING COMM PULLBOX ON SITE TO EACH PEDESTAL CONTINUOUS RUN WITHOUT SPLICES, REFER TO 3/E501 FOR DETAILS.
- 13 NEW TECK90 CABLES RUN INSIDE LIQUID-TIGHT FLEXIBLE STEEL CONDUIT (LTFSO) TO THE PULLBOX ON THE FLOAT.
- 14 NEW LIQUID-TIGHT FLEXIBLE STEEL CONDUIT (LTFSO) FROM THE TEL/DATA PULLBOX ON THE FLOAT, DAISY CHAINED TO EACH PEDESTAL, RUN ALL TEL/DATA WIRING THROUGH THIS SLEEVE, INSTALL TO THE INSIDE OF THE FLOAT FENDER, TERMINATE TO A JUNCTION BOX BEHIND THE PEDESTAL TO FEED EACH PEDESTAL, LEAVE SUFFICIENT SLACK AT BOTH ENDS TO ALLOW FOR FLOAT MOVEMENT, REFER TO 1/E500 FOR DETAILS.

LIQUID-TIGHT FLEXIBLE STEEL CONDUIT (LTFSO) STANDARD OF ACCEPTANCE:

ALL EXPOSED TECK90 CABLE & ARMORED CAT6 CABLES SHALL BE INSTALLED INSIDE LTFSO THROUGHOUT THE PROJECT

THE TYPE LIQUID-TIGHT FLEXIBLE STEEL CONDUIT SHALL BE FORMED FROM A ZINC COATED GALVANIZED LOW CARBON STEEL STRIP HAVING A UNIFORM WIDTH AND THICKNESS, THE CONSTRUCTION SHALL BE IN ACCORDANCE WITH UL 360 AND CSA C22.2 NUMBER 56 REQUIREMENTS, THE FINISHED TYPE LTFSO DIMENSIONS SHALL BE IN ACCORDANCE WITH TABLE 2 OF CSA C22.2 NO. 56.

A RUGGED MOISTURE, OIL AND SUNLIGHT RESISTANT POLYVINYL CHLORIDE (PVC) JACKET SHALL BE APPLIED DIRECTLY OVER THE FLEXIBLE METAL CONDUIT WITH A WALL THICKNESS IN ACCORDANCE WITH TABLE 4 OF CSA C22.2 NO.56, JACKET COLORS: BLACK FOR POWER AND BLUE FOR TEL/DATA.

PROVIDE A GROUNDING CONDUCTOR FOR ALL TRADE SIZES OF LIQUID-TIGHT FLEXIBLE METAL CONDUIT, INSTALL BUSHING AND GROUND AS PER CSA 22.1 SECTION 10.

IN ACCORDANCE WITH CSA C22.2 NO. 56, THE COMPLETED LIQUID-TIGHT FLEXIBLE STEEL CONDUIT SHALL MEET ALL OF THE CSA PERFORMANCE REQUIREMENTS OUTLINED BELOW:

- RESISTANCE AND HIGH CURRENT
- FAULT CURRENT
- IMPACT TEST
- DEFORMATION TEST PIPE
- FLEXIBILITY
- ZINC COATING
- VERTICAL FLAME
- PINHOLE TEST
- MECHANICAL WATER ABSORPTION
- MOISTURE PENETRATION
- SUNLIGHT RESISTANCE
- TEST FOR SECURENESS OF FITTINGS
- TEST FOR DURABILITY OF INK PRINTING
- PHYSICAL PROPERTIES
- ORIGINAL TENSILE AND ELONGATION
- AIR OVEN AGING TEST
- OIL IMMERSION TEST
- DEFORMATION TEST
- TENSION
- LOW TEMPERATURE FLEXIBILITY
- VERTICAL FLAME
- COLD IMPACT
- COMPATIBILITY WITH CONNECTORS
- MIN. RATING -30C TO +60D
- CANADIAN ELECTRICAL CODE (CEC) PART I CLAUSE 12-1300
- FLAME RETARDANT PVC JACKET FT-4 MIN.
- HOT DIPPED ZINC GALVANIZED LOW CARBON STEEL CORE
- HAZARDOUS LOCATION LISTED/APPROVED
- BONDED ENDS OF THE CONDUITS



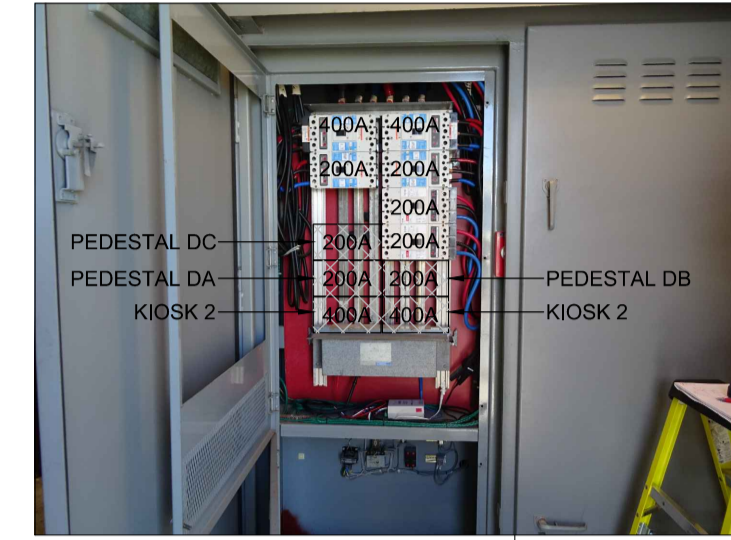
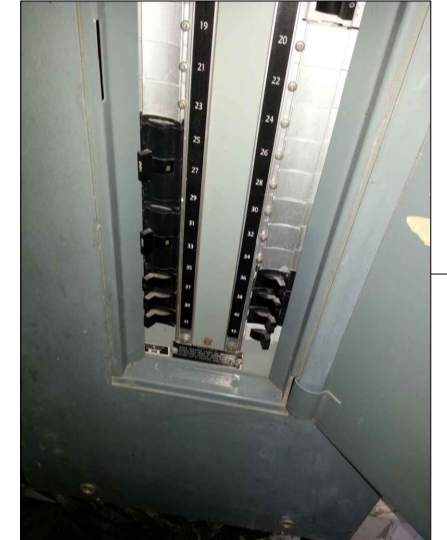
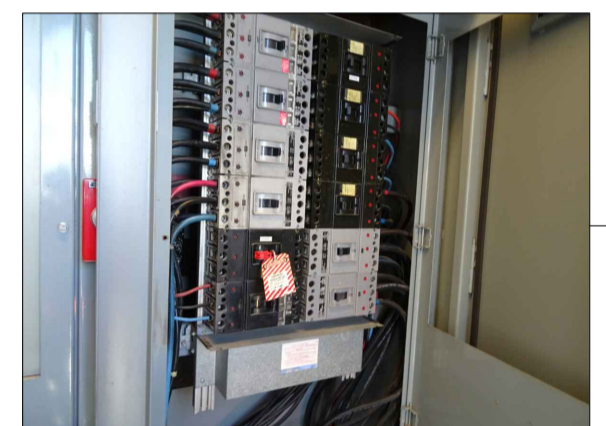
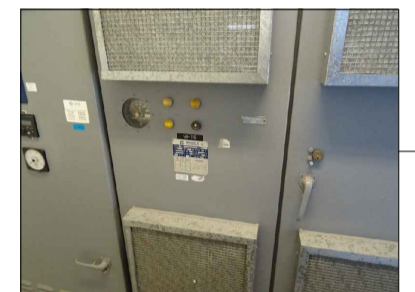
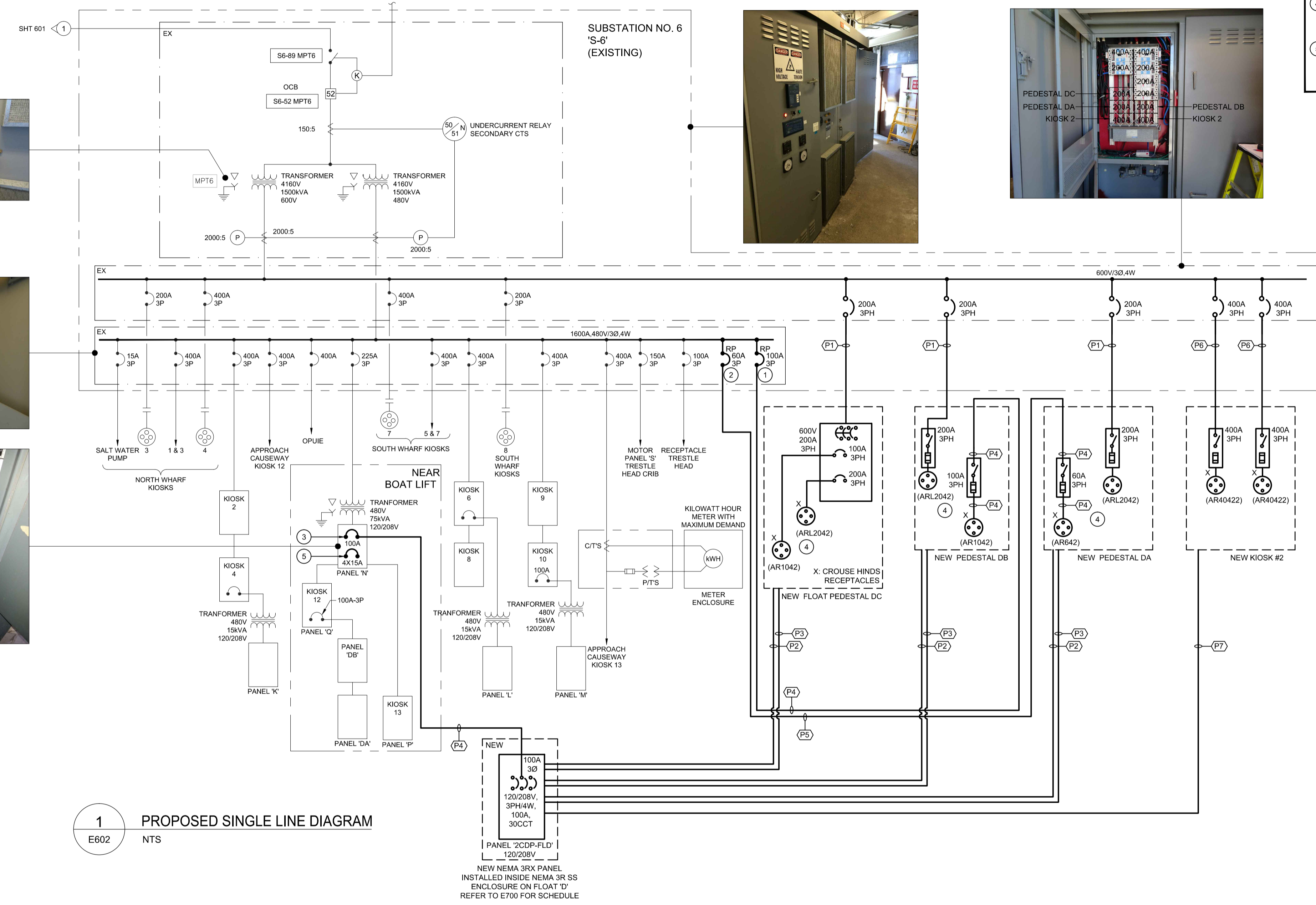
Stantec Consulting Ltd.
www.stantec.com
STANTEC PROJECT NO.: 115615284 TSK200

GENERAL NOTES:

- 1 LINETYPE LEGEND:
DENOLISHED EQUIPMENT: HATCHED AREA
EXISTING EQUIPMENT: THIN/LIGHT LINTYPE
NEW WORK: HEAVY/BOLD LINTYPE
- 2 EXISTING UNDERGROUND CONDUIT ONLY TO BE REUSED. RUN NEW WIRE IN W/ TERMINATIONS AND ACCESSORIES FOR OPERATIONAL SYSTEM.
- 3 EXISTING CDP SHALL NOT BE USED AS A RACEWAY WHERE CABLE TO BE RE-ROUTED. PULL BACK TO THE CEILING/WALL. SPLICE INSIDE THE J-BOX AND RE-FEED.

DRAWING NOTES:

- 1 NEW 100A 3P BREAKER FOR 100A RECEPTACLE IN PEDESTAL 'DB'. BREAKER TO REPLACE EXISTING SPARE IN CDP.
- 2 NEW 60A 3P BREAKER FOR 60A RECEPTACLE IN PEDESTAL 'DC'. BREAKER TO REPLACE EXISTING SPARE IN CDP.
- 3 NEW 100A 3P BREAKER FOR FLOAT 'D' PANEL.
- 4 ALL PINSLEEVE RECEPTACLE TYPES ARE TO BE CONFIRMED WITH DFO-JOS FACILITY OPERATING PERSONNEL PRIOR TO ROUGH-IN. ALL RECEPTACLES SHALL BE PROVIDED WITH SPRING-TYPE COVERS (NOT SCREW-CAPS).
- 5 PROVIDE FOUR (4) X 15A 1P BREAKERS IN EXISTING PANEL 'N'. PROVIDE WIRING TO FLOATS AS FOLLOWS:
#6 AWG TO FLOAT 'B' & 'C'.
#8 AWG TO FLOAT 'A'.
#10 AWG TO FLOAT 'D'.



1 PROPOSED SINGLE LINE DIAGRAM
E602 NTS

NEW NEMA 3RX PANEL
INSTALLED INSIDE NEMA 3R SS
ENCLOSURE ON FLOAT 'D'
REFER TO E700 FOR SCHEDULE

FEEDER SCHEDULE							
CABLE NO.	QTY.	CONDUCTOR			CONDUIT		NOTES
		#	SIZE	BOND	SIZE	TYPE	
(P1)	1	4C	#4/0 AWG Cu TECK90	#3	103mm	LTFS	
(P2)	1	3C	#8 AWG Cu TECK90	#10	35mm	LTFS	
(P3)	1	3C	#10 AWG Cu TECK90	#12	27mm	LTFS	
(P4)	1	4C	#1 AWG Cu TECK90	#6	78mm	LTFS	
(P5)	1	4C	#3 AWG Cu TECK90	#6	53mm	LTFS	
(P6)	2	4C	#4/0 AWG Cu TECK90	#3			
(P7)	1	3C	#8 AWG Cu TECK90	#10			

LEGEND:
LTFS: LIQUID-TIGHT FLEXIBLE STEEL CONDUIT
RPVC: RIGID POLYVINYL CHLORIDE CONDUIT
AL: ALUMINUM CONDUIT

Revision/	Description/Description	Date/Date
5		
4		
3		
2		
1		
0	ISSUED FOR TENDER	2016.08.05

Client/client
DEPARTMENT OF FISHERIES AND OCEANS
INSTITUTE OF OCEAN SCIENCES
9860 W. SAANICH ROAD
SIDNEY, B.C.

Project title/Titre du projet
IOS TIMBER AND CONCRETE FLOATS A, B, C & D

Consultant Signature Only
Designed by/Concept par
AD/MB
Drawn by/Dessiné par
AG
PWGSC Project Manager/Administrateur de Projets TFSGC
Regional Manager, Architectural and Engineering Services
Gestionnaire régionale, Services d'architecture et de génie, TFSGC

Drawing title/Titre du dessin
PROPOSED SINGLE LINE DIAGRAM (3 OF 3)

Project No./No. du projet
9R306-2
Sheet/Fauille
E602
Revision no./La Révision no.
0
18 OF 19



Stantec Consulting Ltd.
www.stantec.com
STANTEC PROJECT NO.: 115615284 TSK200

PEDESTAL RECEPTACLE & DATA/TELECOM.Outlet SCHEDULE					
PEDESTAL #	QTY.	AMPS	VOLTS	PHASE	WP
AA	2	30	120	1	x
	3	15	120	1	x
	1	-	-	-	-
	1	-	-	-	-
AB	2	30	120	1	x
	3	15	120	1	x
	1	-	-	-	-
	1	-	-	-	-
AC	2	30	120	1	x
	3	15	120	1	x
	1	-	-	-	-
	1	-	-	-	-
AD	2	30	120	1	x
	3	15	120	1	x
	1	-	-	-	-
	1	-	-	-	-
AE	2	30	120	1	x
	3	15	120	1	x
	1	-	-	-	-
	1	-	-	-	-
AF	2	30	120	1	x
	3	15	120	1	x
	1	-	-	-	-
	1	-	-	-	-
AG	1	60	208	1	x
	2	30	120	1	x
	3	15	120	1	x
	1	-	-	-	-
BA	1	100	208	1	x
	1	60	208	1	x
	2	30	120	1	x
	3	15	120	1	x
BB	1	100	208	1	x
	1	60	208	1	x
	2	30	120	1	x
	3	15	120	1	x
BC	1	100	208	1	x
	1	60	208	1	x
	2	30	120	1	x
	3	15	120	1	x
BD	1	60	208	1	x
	2	30	120	1	x
	3	15	120	1	x
	1	-	-	-	-
CA	1	100	208	1	x
	1	60	208	1	x
	2	30	120	1	x
	3	15	120	1	x
CB	1	100	208	1	x
	1	60	208	1	x
	2	30	120	1	x
	3	15	120	1	x
CC	1	60	208	1	x
	2	30	120	1	x
	3	15	120	1	x
	1	-	-	-	-
CD	1	100	208	1	x
	1	60	208	1	x
	2	30	120	1	x
	3	15	120	1	x
CE	1	200	208	3	x
	1	100	208	1	x
	1	60	208	1	x
	2	30	120	1	x

PEDESTAL RECEPTACLE & DATA/TELECOM.Outlet SCHEDULE					
CG	DA	DB	DC	KIOSK 2	NOTES:
1	1	1	1	1	1. ALL PIN/SLEEVE RECEPTACLE TYPES ARE TO BE CONFIRMED WITH DFO-OS FACILITY OPERATING PERSONNEL PRIOR TO ROUGH-IN. ALL RECEPTACLES SHALL BE PROVIDED WITH SPRING-TYPE COVERS (NOT SCREW-CAPS). 2. CONTRACTOR TO CONFIRM ALL CROUSE-HINDS RECEPTACLES WITH THE OWNER PRIOR TO ORDER.
1	1	1	1	1	
2	3	3	3	3	
3	15	15	15	15	

PANEL: 2CDP-FLD										LOCATION: FLOAT 'D'		
NOTE	LOAD	TYPE	DESCRIPTION	BRKR	CCT	PHASE	CCT	BRKR	DESCRIPTION	TYPE	LOAD	NOTE
			RECEPTACLE	20A1P	1	A	2	20A1P	PEDESTAL 'DB'			
			RECEPTACLE	20A1P	3	B	4	20A1P	PEDESTAL 'DB'			
			SPARE	30A2P	5	C	6	30A1P	PEDESTAL 'DC'			
			SPARE	30A2P	7	A	8	30A1P	PEDESTAL 'DC'			
			SPARE	30A2P	9	B	10	20A1P	PEDESTAL 'DB'			
			SPARE	30A2P	11	C	12	30A1P	PEDESTAL 'DB'			
			SPARE	30A2P	13	A	14	20A1P	PEDESTAL 'DA'			
			RECEPTACLE	20A1P	15	B	16	30A1P	PEDESTAL 'DA'			
			RECEPTACLE	20A1P	17	C	18	15A1P	PEDESTAL 'DA'			
			RECEPTACLE	20A1P	19	A	20	15A1P	PEDESTAL 'DA'			
			PEDESTAL 'DC'	15A1P	21	B	22	15A1P	PEDESTAL 'DB'			
			PEDESTAL 'DC'	15A1P	23	C	24	15A1P	PEDESTAL 'DB'			
			KIOSK #2	15A1P	25	A	26		SPACE			
			KIOSK #2	15A1P	27	B	28		SPACE			
			SPARE	15A1P	29	C	30		SPACE			
LOAD BREAKDOWN				CONNECTED	DERATED		PANEL DESCRIPTION					
L LIGHTING:				0	100%	0	VOLTAGE : 208 V					
C COOLING:				0	80%	0	PHASE : 3					
H HEATING:				0	80%	0	AMPERAGE : 0 A					
M MECHANICAL:				0	80%	0	PANEL AMPACITY : 225 A					
R GENERAL RECEPTACLES:				0	60%	0	MAIN BREAKER : N/A A					
E OWNER EQUIPMENT:				0	80%	0	# OF TUBS : 1					
TOTAL:				0	W	0						
NOTE DESCRIPTION												
1												
2												
3												

LUMINAIRE SCHEDULE						
TYPE	DESCRIPTION	MODEL NO.	LAMPS	VOLTS	MOUNTING	REMARKS
AA	OUTDOOR ROADWAY LED LUMINAIRE PHILIPS LUMEC MINVIEW SERIES OR APPROVED EQUAL	SVS-35W16LED4K-T-LE3 UNIV-DMS-RC-WC10-GY3 ACC-SVS-UNIV-FH8	36W LED/ HEAD	120	REFER TO DETAIL 'S1E500' FOR MOUNTING DETAILS	CSA/ICUL APPROVED, IP66 RATED C/W PHOTOELECTRIC CELL.

5		
4		
3		
2		
1		
0	ISSUED FOR TENDER	2016.09.05

Revision/	Description/Description	Date/Date
Client/client		

DEPARTMENT OF FISHERIES AND OCEANS
INSTITUTE OF OCEAN SCIENCES
9860 W. SAANICH ROAD
SIDNEY, B.C.

Project title/Titre du projet

IOS TIMBER AND CONCRETE FLOATS A, B, C & D

Consultant Signature Only

Designed by/Concept par
AD/MB

Drawn by/Dessiné par
AG

PWGSC Project Manager/Administrateur de Projets TPSGC

Regional Manager, Architectural and Engineering Services
Gestionnaire régional, Services d'architecture et de génie, TPSGC

Drawing title/Titre du dessin

SCHEDULES

Project No./No. du projet 9R306-2	Sheet/Feuille E700 19 OF 19	Revision no./La Révision no. 0
--------------------------------------	-----------------------------------	-----------------------------------