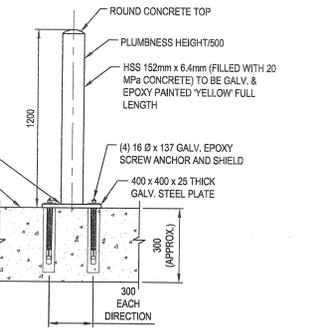
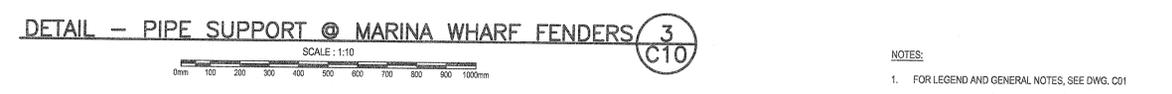
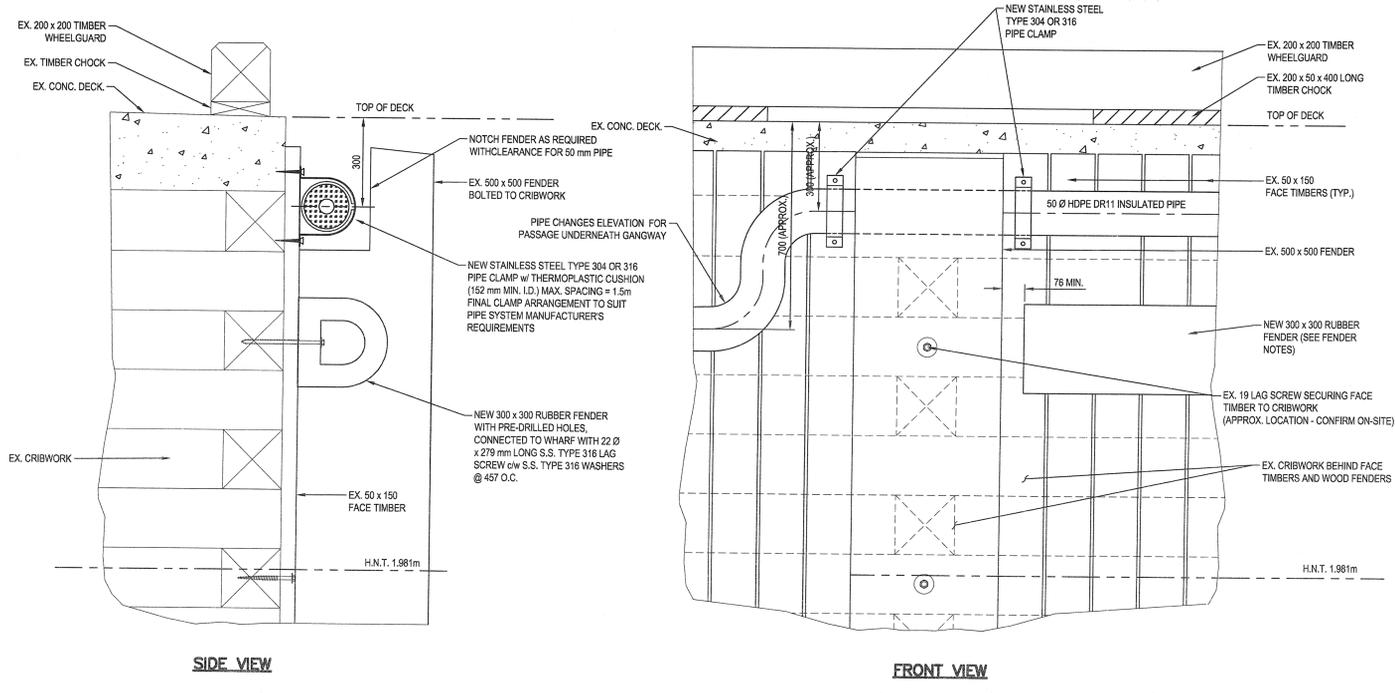
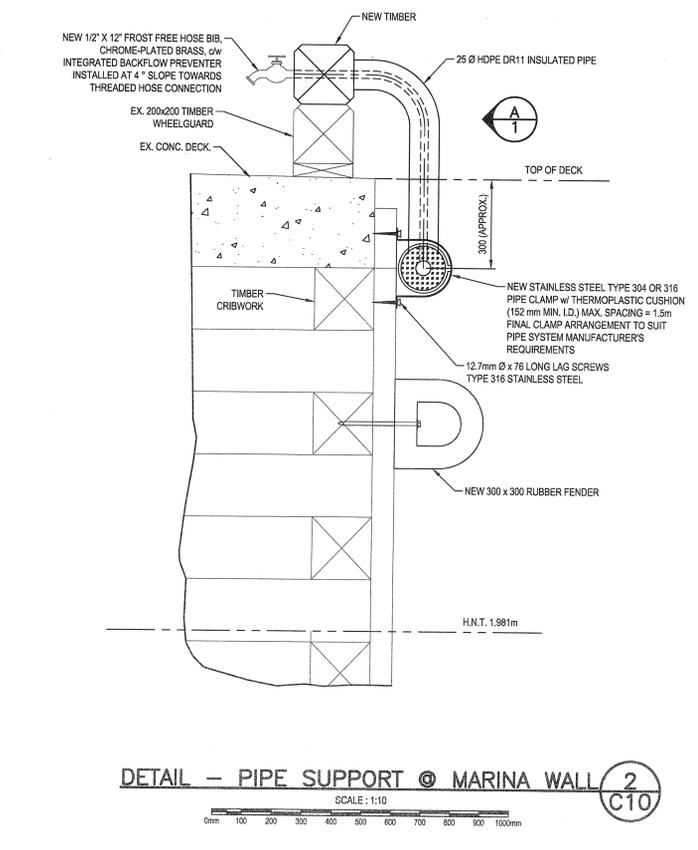
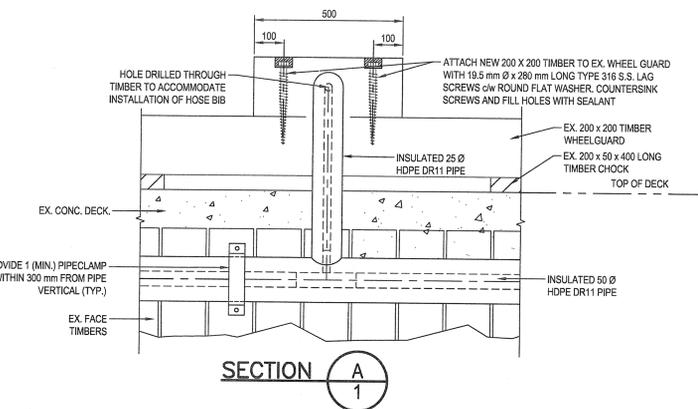


PIPE PROFILE	DEPTH BELOW TOP OF CONC. DECK (PIPE 4, mm)	FITTING
PT 1	300	90° UPWARD VERT. TO HORIZ. BEND
PT 2	300	---
PT 3	300	90° HORIZ. BEND
PT 4	300	90° HORIZ. TO DOWNWARD VERT. BEND
PT 5	1300	90° DOWNWARD VERT. TO HORIZ. BEND
PT 6	300	90° HORIZ. TO DOWNWARD VERT. BEND
PT 7	700	90° DOWNWARD VERT. TO HORIZ. BEND
PT 8	700	90° HORIZ. TO UPWARD VERT. BEND
PT 9	300	90° UPWARD VERT. TO HORIZ. BEND
PT 10	300	90° HORIZ. TO DOWNWARD VERT. BEND
PT 11	700	90° DOWNWARD VERT. TO HORIZ. BEND
PT 12	700	90° HORIZ. TO UPWARD VERT. BEND
PT 13	300	90° UPWARD VERT. TO HORIZ. BEND



- PIPE SUPPORT NOTES:**
- SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL OF DEPARTMENT REPRESENTATIVE. INCLUDE PIPE LAYOUT DRAWING THAT INDICATES PIPE LOCATION AND ATTACHMENT DETAILS. SUBMIT PRODUCT INFORMATION, INCLUDING DATA SHEETS, INSTALLATION INSTRUCTIONS, CHARACTERISTICS, FINISHES AND LIMITATIONS.
 - SUBMIT SAMPLES INCLUDING TWO (2) PIPE CLAMPS WITH THERMOPLASTIC CUSHIONS, AND TWO FASTENERS OF EACH TYPE OF ANCHORAGE. ALSO INCLUDE TWO (2) 300MM LONG SAMPLES OF INSULATED HDPE DR11 PIPE. UPON APPROVAL FROM DEPARTMENTAL REPRESENTATIVE, APPROVED SAMPLES MAY BE INCLUDED WITH THE WORK.
 - FOR PRICING PURPOSES, ALLOW FOR 100 PIPE CLAMPS W/ CUSHIONS, 100 LAG SCREWS AND 40 EPOXY ADHESIVE ANCHORS. CONTRACTOR TO COORDINATE PIPE ROUTING AND SUPPORT REQUIREMENTS WITH EX. CONDITIONS.
 - EDGE DISTANCES FOR LAG SCREWS TO BE 52MM MIN. EDGE DISTANCES FOR EPOXY ADHESIVE ANCHORS TO BE 305MM MIN.
 - HOLES MUST BE CLEAN AND DRY DURING EPOXY ANCHOR INSTALLATION. ANCHORS TO BE FREE OF OIL AND OTHER CONTAMINANTS AND HAVE COMPATIBLE NUTS AND WASHERS. EPOXY ADHESIVE SYSTEM TO BE RESISTANT TO SALT-WATER MARINE ENVIRONMENTS AND INCLUDE RESISTANCE TO HIGH EXPOSURES OF CHLORIDES, SEA WATER AND POTENTIAL EXPOSURES AND RESISTANCE TO MOTOR FUELS, OILS, DIESEL, GASOLINE AND SEWAGE.
 - PRIOR TO DRILLING HOLES FOR EPOXY ANCHORS, PERFORM NON-DESTRUCTIVE SURVEY TO LOCATE EX. REBAR. EPOXY ANCHORS TO BE INSTALLED 52MM MIN. FROM NEAREST REBAR.
 - EX. CONDITIONS SHOWN, INCLUDING DIMENSIONS AND ELEVATIONS, ARE APPROXIMATE. ACTUAL CONDITIONS MAY VARY.

- RUBBER FENDER NOTES:**
- SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL OF DEPARTMENTAL REPRESENTATIVE. INCLUDE FENDER LAYOUT DRAWING THAT INDICATES FENDER LOCATION AND ANCHORAGE DETAILS. SUBMIT PRODUCT INFORMATION, INCLUDING DATA SHEETS, CHARACTERISTICS, MATERIALS, FINISHES AND LIMITATIONS.
 - SUBMIT SAMPLES INCLUDING TWO (2) 800MM LONG SECTIONS OF RUBBER FENDER WITH PRE-DRILLED HOLES FOR ANCHORAGE. ALSO INCLUDE ONE (1) SAMPLE OF EACH TYPE OF ANCHORAGE, INCLUDING ONE (1) THREADED ROD WITH NUT, ONE (1) LAG SCREW AND WASHER. UPON APPROVAL FROM DEPARTMENTAL REPRESENTATIVE, APPROVED SAMPLES OF ANCHORAGE MAY BE INCLUDED WITH THE WORK. SAMPLES OF THE RUBBER FENDER ARE NOT PERMITTED TO BE INCLUDED WITH THE WORK.
 - FOR PRICING PURPOSES, ALLOW FOR 44.5M (146FT) TOTAL LENGTH OF RUBBER FENDER. BREAKDOWN OF FENDER SECTIONS ARE AS FOLLOWS: 5 X 6.1M (20FT), 1 X 4.3M (14FT), 2 X 3.4M (11FT), 2 X 1.5M (5FT). FENDER MANUFACTURER TO PROVIDE PRE-DRILLED HOLES SUITABLE FOR ANCHORING DIRECTLY THROUGH THE FENDER AND INTO THE JETTY WHARF VERTICAL FACE. MAXIMUM DISTANCE FROM EDGE OF FENDER TO ANCHORAGE TO BE 300MM (12"). COLOUR TO BE BLACK.
 - FOR PRICING PURPOSES, ALLOW FOR 40 EPOXY ADHESIVE ANCHORS AND 75 LAG SCREWS, THREADED ROD ANCHORS, LAG SCREWS, NUTS AND WASHERS TO ALL BE STAINLESS STEEL TYPE 316.
 - CONTRACTOR TO COORDINATE RUBBER FENDER ROUTING AND ANCHORAGE WITH DRAWINGS AND EX. CONDITIONS.
 - REFER TO NOTES 4, 5, 6 AND 7 IN 'PIPE SUPPORT NOTES' ABOVE FOR FURTHER REQUIREMENTS.



CO1	ISSUED FOR TENDER	DATE	JUL 24 2017
revisions		date	
project		project	

BEDFORD INSTITUTE OF OCEANOGRAPHY WATER UPGRADE DARTMOUTH, NOVA SCOTIA

MARINA WHARF - PLAN AND DETAILS

designed	STAFF	conqu
date		
drawn	STAFF	desing
date		
approved		approve
date		
Tender		Submission
PWOSC Project Manager	Administrateur de projets TPSC	
project number	no. du projet	
	R.0812155.001	
drawing no.	no. du dessin	
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NOTES:
1. FOR LEGEND AND GENERAL NOTES, SEE DWG. C01