



TENDER 19-08

HWY 19A PHASE III WATERMAIN & FORCEMAIN

ADDENDUM NO. 2

March 28th, 2018

This addendum forms part of the Tender Documents and shall be read, interpreted, and coordinated with all other parts. The costs of all elements contained herein shall be included in the submission. The following revisions, changes, corrections, additions, and or deletions supersede the information contained in the original Documents to the extent referenced and shall become part thereof.

Addendum Item 1 - Questions and Answers

1. Proponent Question:

Sanitary Manhole 'A' is called up as a 1050mm, but there are no quantities for the "Base, Lid, Slab, Cover and Frame" or "Manhole Riser Section". Please Clarify?

Response:

The attached Revised Schedule of Quantities and Prices has been corrected to include the 1050mm diameter manhole SMH-A.

2. Proponent Question:

Drain Manhole 1 1350mm: the north and south inverts of the 300mm diameter storm sewers have inverts at 2.65m. Are these both to be outside drops to a 1.65m invert?

Response:

The intent of the design of the storm system modifications is to create an inverted siphon below the forcemain that is to be installed. The lateral 300mm diameter storm sewers that discharge to DMH-1 do not require outside drops. They can be connected to the manhole directly as shown on the drawings.

3. Proponent Question:

Who is responsible for relocating anchor poles?

**CITY OF CAMPBELL RIVER
TENDER 19-08
HWY 19A PHASE III WATERMAIN & FORCEMAIN
ADDENDUM NO. 2**

Response:

In accordance with the General Construction Notes: - Note 5, the Contractor is responsible for the relocation of anchor poles, and the cost is to be considered incidental to the work. The Contractor is responsible for the coordination, execution and payment of the pole relocations required for the project.

4. Proponent Question:

SMH-AV2: Plan calls for 1050mm manhole, details call for 1200mm manhole. Please clarify?

Response:

The correct manhole size at SMH-AV2 is 1350mm. Drawings issued for Addendum No. 1 (attached) show the correct size.

5. Proponent Question:

Where are the 2 x 38mm water services as per Item #37 of the Schedule of Quantities and Prices?

Response:

The 38mm water services have been replaced with 50mm services and the Revised Schedule of Quantities and Prices has been corrected to reflect this change.

6. Proponent Question:

Item #25 of the Schedule of Quantities and Prices: "250 HxF Gate Valve". I count 7 not 6.

Response:

The correct quantity is 7 and the Revised Schedule of Quantities and Prices has been corrected to reflect this amount.

7. Proponent Question:

Item #33 of the Schedule of Quantities and Prices: "200 HxFxF Tee". I count 0 not 1.

Response:

The correct quantity is 0 and this item has been deleted from the Schedule of Quantities and Prices.

8. Proponent Question:

There is no line item for the two 50mm water irrigation sleeves.

**CITY OF CAMPBELL RIVER
TENDER 19-08
HWY 19A PHASE III WATERMAIN & FORCEMAIN
ADDENDUM NO. 2**

Response:

See Item #35 of the Schedule of Quantity and Prices. There are no “irrigation sleeves”, but rather two services.

9. Proponent Question:

For the irrigation, are we to price CR-I102?

Response:

The 50mm water services for irrigation are to be installed per Detail 2, Sheet C-7. They are to be used in future work scheduled for 2020.

10. Proponent Question:

There is no line item for the 2 – 250mm DI Caps. Station 100+720 and 101+320.

Response:

The Revised Schedule of Quantities and Prices has been corrected to reflect the pay item for the 250mm caps on the water system.

11. Proponent Question:

On drawing 2 of 7, sta 100-720, there is a note stating that the “existing 250mm AC sanitary is live at crossing”. Could you confirm this? The drawing also indicates that this AC sanitary main is already capped and abandoned upstream of the crossing point. I refer to the note behind the east curb line.

Response:

The 250AC sani main is abandoned westward of the cap and remaining stub connects to the 450mm dia forcemain that is in service. For this reason it is shown as live.

12. Proponent Question:

On drawing C-4, roughly sta 101+190, there is a 200mm DI San that we eventually tie into the gravity sanitary system. Does this 200mm DI line current connect to the 450mm FM? If so, is there a valve at the existing tee connect to the 450mm FM?

Response:

Record drawings and field survey do not show a valve at this location. It is assumed that there is no valve and that this line is under back pressure from the forcemain.

13. Proponent Question:

Regarding Bid Items 34 and 35: You may also require a Bid Item for 250mm caps.

**CITY OF CAMPBELL RIVER
TENDER 19-08
HWY 19A PHASE III WATERMAIN & FORCEMAIN
ADDENDUM NO. 2**

Response:

The revised Schedule of Quantities and Unit Prices has been updated to reflect a Pay Item for 250mm caps

14. Proponent Question:

Regarding Bid Item 37, which is for 38mm Service connection: There are no 38mm services identified on the drawings. In order to price the "2ea" quantity realistically, we need to know if any will be "long side" connections (i.e. across the traffic lanes from the main connection).

Response:

The 38mm water services have been replaced with 50mm services and the Revised Schedule of Quantities and Prices has been corrected to reflect this change.

15. Proponent Question:

Regarding Bid Items 51 through 54: These flanged valves will require stub ends and backup rings fused into the HDPE pipe. Currently, there are no bid items for these materials.

Response:

Stub ends and back up rings for flanged connections on HDPE piping is considered incidental to the supply and placement of the HDPE pipe of the same diameter.

16. Proponent Question:

Regarding Bid Items 59 and 60: What does the term "BW" reference in the tee description?

Response:

BW means Butt Weld End or Plain End.

17. Proponent Question:

Regarding Bid item 72: Could you identify the storm MH being rebenched? We find a sanitary MH, SMH13 that is identified as "re-bench". Item 72 is in the Storm Sewer section.

Response:

The existing manhole to be re-benched is a sanitary manhole, SMH-S13, approximate Sta 101+216.

CITY OF CAMPBELL RIVER
TENDER 19-08
HWY 19A PHASE III WATERMAIN & FORCEMAIN
ADDENDUM NO. 2

18. **Proponent Question:**

Is there a deadline to ask the City further questions?

Response:

All questions regarding this tender must be submitted to the City in writing at purchasing@campbellriver.ca **no later than 2:00pm (local time) on Wednesday April 3rd**. Any questions received after this date and time will not be responded to.

Addendum Item 2 – Options for Alternatives

Add to the Instructions to Tenderers Part I the following:

Options for Alternatives 4.13

Option 1 and **Option 2** in the *Optional Work* portion of the Schedule of Quantities and Prices are mutually exclusive. The *Work* will include one or the other but not both. Consequently, the *Owner* will include only the lower of the extended prices of the **Option 1** and **Option 2** items when calculating the Tender total cost for making price comparisons between Tenders. In all other respects IT 17.2 shall apply.

The Tenderer shall determine the lower cumulative total for either **Option 1** or **Option 2** and include this lower cumulative total in calculating the total tender value.

Addendum Item 3 – Updated Tender Documents

The tender documents have been updated as follows and are attached to this addendum:

1. The Schedule of Quantities and Prices have been revised, replace Appendix 1 with **Appendix 1A (issued 28Mar19)**, as attached. Updated items are highlighted in yellow.
2. Project drawings have been revised as attached.

End of Addendum

Acknowledgement of this Addendum in your Tender submission is required.

Clinton J. Crook, SCMP, CPSM
Purchasing & Risk Management Officer

Appendix 1A

(issued 28Mar19)

SCHEDULE OF QUANTITIES AND PRICES – GST EXCLUDED

(See paragraph 5.3.1 of the Instructions to Tender – Part II)

(All prices and Quotations including the Contract Price shall include all Taxes, but shall not include GST, GST shall be shown separately)

Item	MMCD Ref.	Description	Unit	Quantity	Unit Price	Amount
01 - GENERAL REQUIREMENTS						
<u>Supplementary Specifications 3.1</u>						
1	1.1.4	Mobilization & Demobilization, shall not exceed 10% of the Total Price, excluding GST	LS	1		
<u>01 53 01 Temporary Facilities</u>						
2	1.9.1	Sanitary Facilities, Site Storage, Loading and Hoardings	LS	1		
<u>01 55 00 Traffic Control, Vehicle Access and Parking</u>						
3	1.5.1	Traffic Control, Vehicle Access and Parking	LS	1		
<u>01 57 01 Environmental Protection</u>						
4	1.6	Temporary Erosion and Sediment Control	LS	1		
<u>01 62 00 Removals</u>						
5	1.2.1	Seawalk Asphalt Removal	SM	1745		
6	1.2.2	450mm Diam. HDPE Forcemain Removal	LM	190		
Sub-Total Page 9:						\$

Tenderer's Initial Owner's Initial

--	--

Item	MMCD Ref.	Description	Unit	Quantity	Unit Price	Amount
31 - EARTHWORKS						
<u>31 22 16 Reshaping Granular Roadbeds</u>						
7	1.4.1	Asphalt Restoration Preparation (3 Driveways)	SM	90		
8	1.4.5	Temporary Gravel Running Surface	SM	2235		
<u>31 23 01 Excavating, Trenching and Backfilling</u>						
9	1.10.3	Over-Excavation, including Backfilling (<i>Optional Work</i>)	CM	100		
10	1.10.9	Pre-Locates of Key Utilities prior to Start of Construction	EA	5		
11	1.10.9	Pre-Locate all Existing Water Services - prior to start of watermain construction	EA	34		
<u>31 23 17 Rock Removal</u>						
12	1.6.4/5	Boulders and Rock Fragments - Blasting not Permitted (<i>Optional Work</i>)	CM	50		
<u>31 23 23 Control Density Fill</u>						
13	1.4.1	1100m of 450mm Diameter Pipe	CM	177		
32 - ROADS AND SITE IMPROVEMENTS						
<u>32 11 16.1 Granular Subbase</u>						
14	1.4.2	Granular Subbase (<i>Optional Work</i>)	T	200		
<u>32 11 23 Granular Base</u>						
15	1.4.5	Granular Base (<i>Optional Work</i>)	SM	150		
<u>32 12 16 Hot-Mix Asphalt Concrete Paving</u>						
16	1.5.9	Coordination of Owner's Asphalt Contractor	LS	1		
Sub-Total Page 10:						\$

Tenderer's Initial Owner's Initial

--	--

CITY OF CAMPBELL RIVER
TENDER 19-08
HWY 19A PHASE III WATERMAIN & FORCEMAIN
FORM OF TENDER

Item	MMCD Ref.	Description	Unit	Quantity	Unit Price	Amount
33 - UTILITIES						
<u>33 01 30.1 CCTV Inspection of Pipelines</u>						
17	1.6.2	CCTV Pipeline Inspection - Post Installation	LM	55		
<u>33 11 01 Waterworks - Imported Backfill</u>						
18	1.8.2	Pipe - 200mm Diam. C900 DR18, All Depths	LM	70.85		
19	1.8.2	Pipe - 250mm Diam. C900 DR18, All Depths	LM	639.5		
<u>33 11 01 Waterworks - Imported Backfill</u>						
20	1.8.3	Bend - 45° - 200mm Diam. HxH	EA	2		
21		Reducer - 200x250mm Diam. HXF	EA	1		
22		Gate Valve - 150mm Diam. FxH	EA	8		
23		Gate Valve - 200mm Diam. FxH	EA	4		
24		Gate Valve - 250mm Diam. FxH	EA	6		
25		Tee - 200x200x200mm Diam. FxFxH	EA	1		
26		Tee - 250x250x150mm Diam. HxFxF	EA	3		
27		Tee - 250x250x150mm Diam. HxHxF	EA	5		
28		Tee - 250x250x200mm Diam. HxFxF	EA	1		
29		Tee - 250x250x200mm Diam. FxFxF	EA	1		
30		Tee - 250x250x250mm Diam. FxHxF	EA	1		
Sub-Total Page 11:						\$

Tenderer's Initial Owner's Initial

--	--

**CITY OF CAMPBELL RIVER
TENDER 19-08
HWY 19A PHASE III WATERMAIN & FORCEMAIN
FORM OF TENDER**

Item	MMCD Ref.	Description	Unit	Quantity	Unit Price	Amount
<u>33 11 01 Waterworks - Imported Backfill</u>						
31	1.8.3	Cap - 150mm Diam. (Complete with 0.5m of 150mm Diam PVC DR18 Spigot)	EA	8		
32		Cap - 200mm Diam. (Complete with 0.5m of 200mm Diam PVC DR18 Spigot)	EA	1		
33		Cap - 250mm Diam. (Complete with 0.5m of 200mm Diam PVC DR18 Spigot)	EA	2		
34	1.8.4	Service Connection - 19mm Diam.	EA	22		
35		Service Connection - 50mm Diam. Sta 100+785 per Detail 2 Sheet C-7	EA	2		
36	1.8.9	Localised concrete encasement, support, anchor or thrust blocks	CM	9.5		
37	1.8.13	Tie-In - 200mm Diam. - South End	EA	1		
38		Tie-In 200mm - North End (Valves and Tee Not Included)	EA	1		
<u>33 30 01 Sanitary Sewers - Imported Backfill</u>						
39	1.6.2	Pipe - 250mm Diam. PVC DR35, All Depths	LM	22		
40	1.6.7	Tie-In 250mm Diam. PVC to Existing Sanitary Sewer System	EA	2		
<u>33 34 01 Sewage Forcemains - Imported Backfill</u>						
41	1.8.2	Pipe - 150mm Diam. HDPE DR21, All Depths	LM	12		
42		Pipe - 450mm Diam. HDPE DR21, All Depths	LM	13		
43		Option 1 - Pipe - 750mm Diam. HDPE DR21, All Depths	LM	1300		
44		Option 2 - Pipe - 600mm Diam. PVC SDR32.5, PC125, All Depths	LM	1300		
45	1.8.3	Bends – 22.5° - 450mm Diameter HDPE DR21 F x BW	EA	1		
Sub-Total Page 12:						\$

Tenderer's Initial Owner's Initial

--	--

CITY OF CAMPBELL RIVER
TENDER 19-08
HWY 19A PHASE III WATERMAIN & FORCEMAIN
FORM OF TENDER

	MMCD Ref.	Description	Unit	Quantity	Unit Price	Amount	
		33 34 01 Sewage Forcemains - Imported Backfill					
46	1.8.3	Bends - 45° - 450mm Diameter HDPE DR21 BWxBW	EA	1			
47		Bends - 45° - 450mm Diameter HDPE DR21 BWxF	EA	1			
48		Option 1 - Bends - 45° - 750mm Diameter HDPE DR21 BWxBW	EA	4			
49		Option 2 - Bends - 45° - 600mm Diameter Epoxy Coated DI	EA	4			
50		Gate Valve - 150mm Diameter FxF	EA	1			
51		Gate Valve - 450mm Diameter FxF	EA	1			
52		Option 1 - Gate Valve - 750mm Diameter FxF	EA	1			
53		Option 2 - Gate Valve - 600mm Diameter FxF	EA	1			
54		Blind Flange - 150mm Diameter	EA	1			
55		Option 1 - Blind Flange - 750mm Diameter	EA	2			
56		Option 2 - Blind Flange - 600mm Diameter	EA	2			
57		Option 1 - Saddle - 750mmx150mm Diameter Flanged	EA	1			
58		Option 2 - Saddle - 600mmx150mm Diameter Flanged	EA	1			
59		Tees - 450x450x450mm Diameter BWxFxF	EA	1			
60		Option 1 - Tees - 750x750x450mm Diameter BWxBWxF	EA	1			
61		Option 2 - Tees - 600x750x450mm Diameter HxHxF Epoxy Coated DI	EA	1			
62		1.8.5	Option 1 - Air Valve Assembly per Detail 3, Sheet C-6	EA	2		
Sub-Total Page 13:						\$	

Tenderer's Initial Owner's Initial

--	--

Item	MMCD Ref.	Description	Unit	Quantity	Unit Price	Amount
<u>33 34 01 Sewage Forcemains - Imported Backfill</u>						
63	1.8.5	Option 2 Air Valve Assembly per Detail 3, Sheet C-6, substitute a 600x600x600mm Tee HxHxF Epoxy Coated DI, and associated 600mm SS Special Blind Flange	EA	2		
64		Option 1 - Low Point Drain #1 at Sta. 101+055 including 750x750x750mm BWxBWxF HDPE Tee, Piping, Specials, Valves & Manhole per Detail 4, Sht. C-6	EA	1		
65		Option 2 - Low Point Drain #1 at Sta. 101+055 including 600x600x60mm HxHxF Epoxy Coated DI Tee, Piping, Specials, Valves & Manhole per Detail 4, Sht. C-6	EA	1		
66		Low Point Drain #2 at Sta. 101+702 including Reducer; Piping, Valves & Manhole per Detail 5, Sht. C-6	EA	1		
67	1.8.10	Forcemain Tie-in - North End	LS	1		
68		Option 1 - Forcemain Tie-in - South End – per Detail 1, Sheet C-6	LS	1		
69		Option 2 - Forcemain Tie-in - South End – per Detail 1, Sheet C-6, substitute 600mm Epoxy Coated DI, Flanged Hub adapter for HDPE reducer shown	LS	1		
<u>33 40 01 Storm Sewers - Imported Backfill</u>						
70	1.6.2	Pipe - 300mm Diam. PVC DR35	LM	8		
71		Pipe - 750mm Diam. PVC DR35 Ribbed	LM	25		
72	1.6.9	Tie-In 750mm Diam. PVC to Existing Stormwater Manholes	EA	2		
<u>33 44 01 Manholes and Catchbasins</u>						
73	1.5.1.1	Manhole Base, Lid, Slab, Cover and Frame - 1050mm Diam.	EA	1		
74	1.5.1.1	Manhole Base, Lid, Slab, Cover and Frame - 1350mm Diam.	EA	2		
75	1.5.1.2	Manhole Riser Section - 1050mm Diam.	LM	0.3		
76	1.5.1.2	Manhole Riser Section - 1350mm Diam.	LM	3.5		
77	1.5.1.4	Rebench Existing Manhole - 1050mm Diameter	EA	1		
Sub-Total Page 14:						\$

Tenderer's Initial Owner's Initial

--	--

SUMMARY

Page 9:	\$
Page 10:	\$
Page 11:	\$
Page 12:	\$
Page 13:	\$
Page 14:	\$
Sub-Total	\$
GST (5%):	\$
TOTAL:	\$

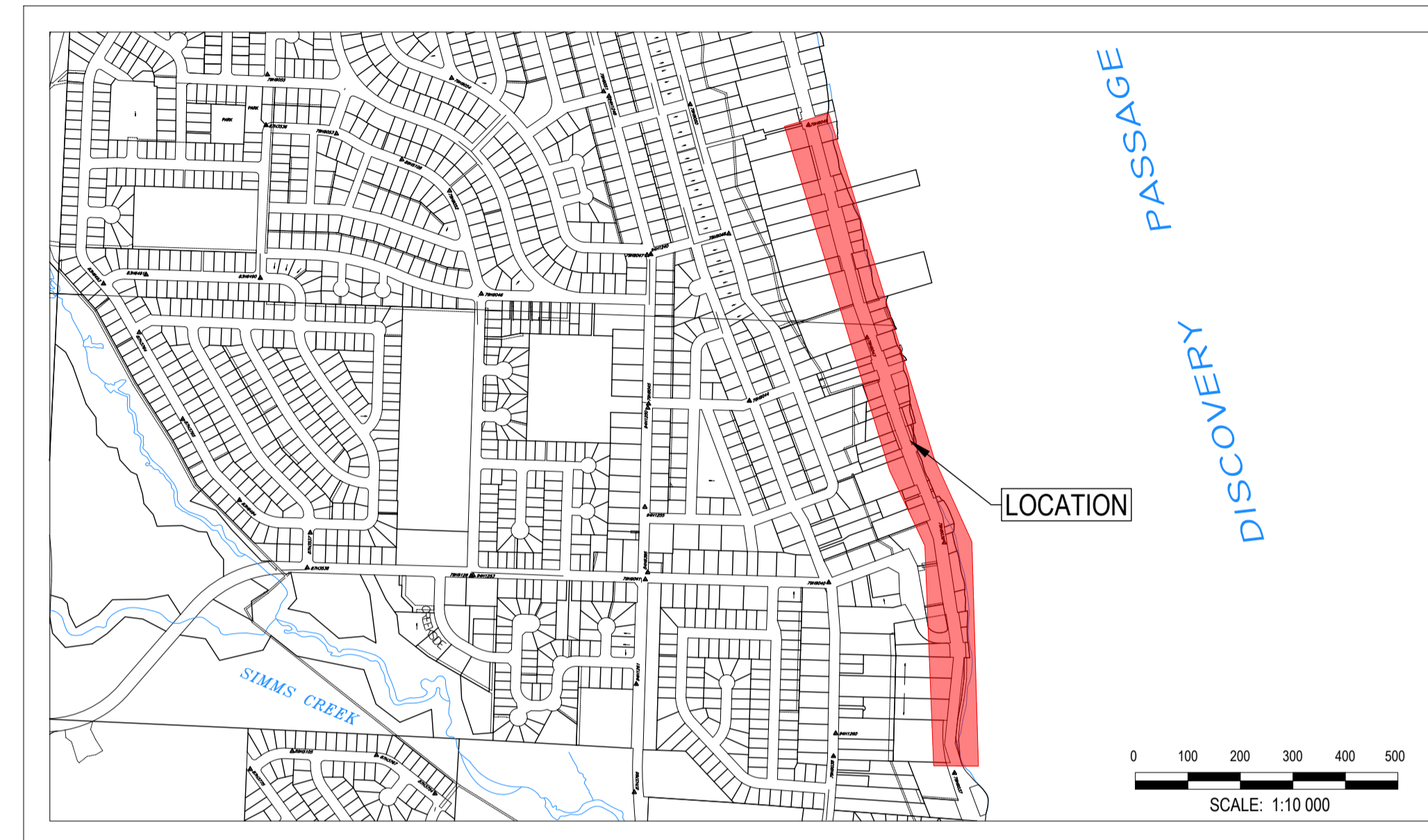
The Tenderer shall determine the lower cumulative total for either **Option 1** or **Option 2** and include this lower cumulative total in calculating the total tender value.

Tenderer's Initial Owner's Initial

--	--

CLIENT: **CITY OF CAMPBELL RIVER**
TENDER 19-08

DESCRIPTION: **HIGHWAY 19A - ROCKLAND ROAD TO L.S.#6**
WATERMAIN AND SANITARY FORCEMAIN
UPGRADE
CAMPBELL RIVER, BC



PROJECT LOCATION

MCSL Project No.: **2221-49145**

City Project No.: **CCR19-501**



City of
Campbell
River



McElhanney
McElhanney Consulting Services Ltd.

1196 DOGWOOD STREET
 CAMPBELL RIVER, BC. V9W 3A2

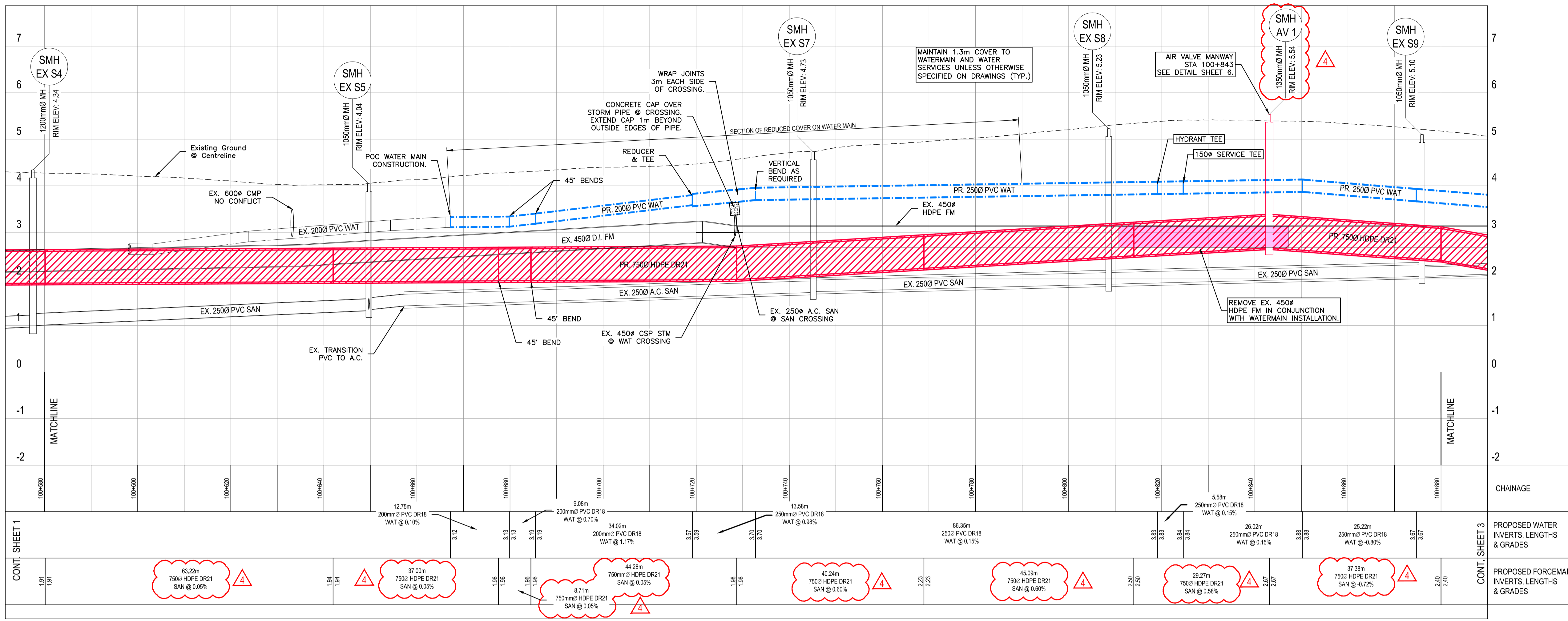
PH (250) 287-7799

ADDENDUM #2

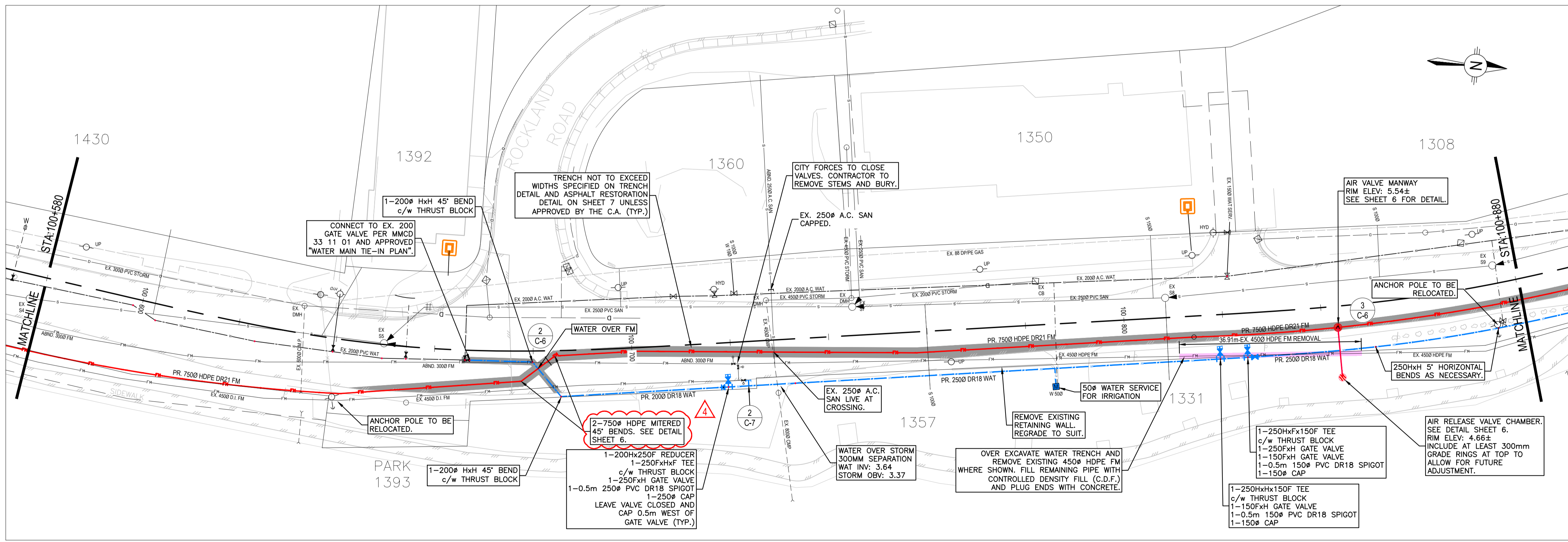
ISSUED FOR TENDER
MARCH 4, 2019

DRAWING INDEX		REVISION									
No.	LOCATION/DESCRIPTION	0	1	2	3	4	5	6	7	8	9
C-1	CIVIL UTILITIES - PLAN AND PROFILE STATIONS 100+360 - 100+580										
C-2	CIVIL UTILITIES - PLAN AND PROFILE STATIONS 100+580 - 100+880										
C-3	CIVIL UTILITIES - PLAN AND PROFILE STATIONS 100+880 - 101+180										
C-4	CIVIL UTILITIES - PLAN AND PROFILE STATIONS 101+180 - 101+440										
C-5	CIVIL UTILITIES - PLAN AND PROFILE STATIONS 101+440 - 101+705										
C-6	SANITARY FORCEMAIN DETAILS										
C-7	MISCELLANEOUS DETAILS										

PROJECT:
 MCSL 2221-49145
 City CCR19-501



PROFILE
SCALE 1:500H;1:50V



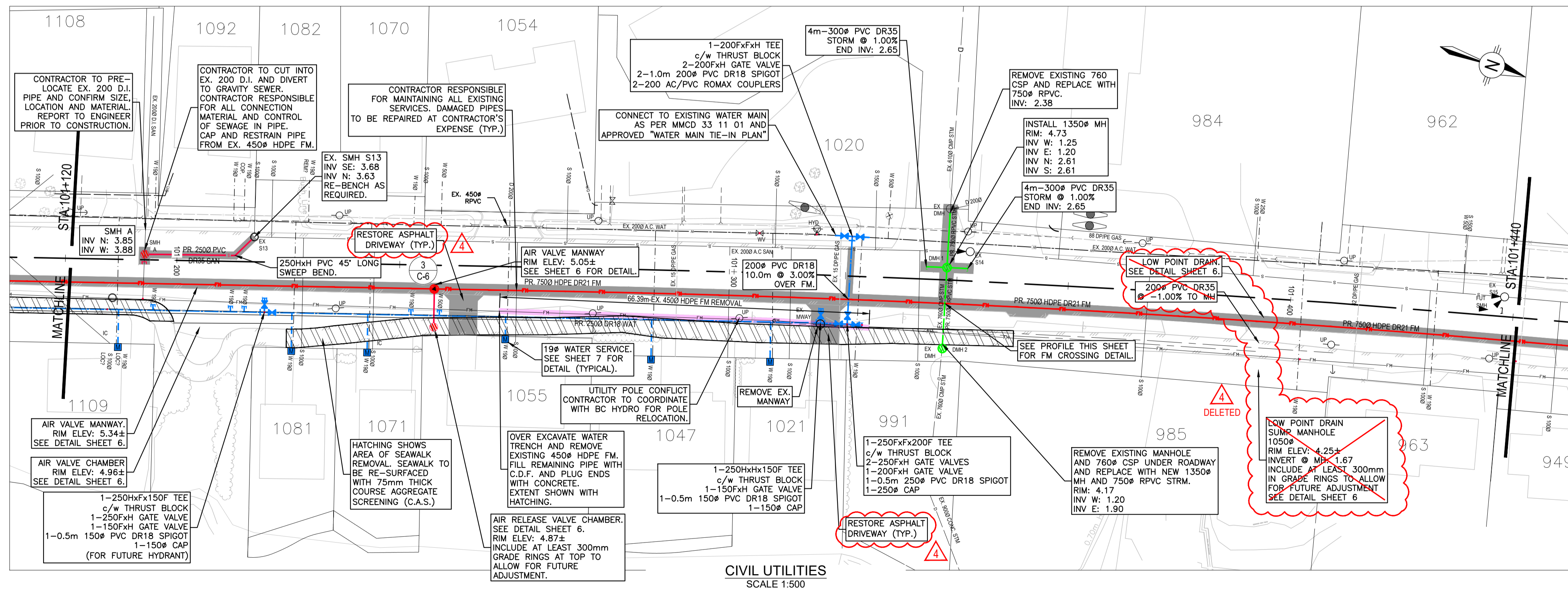
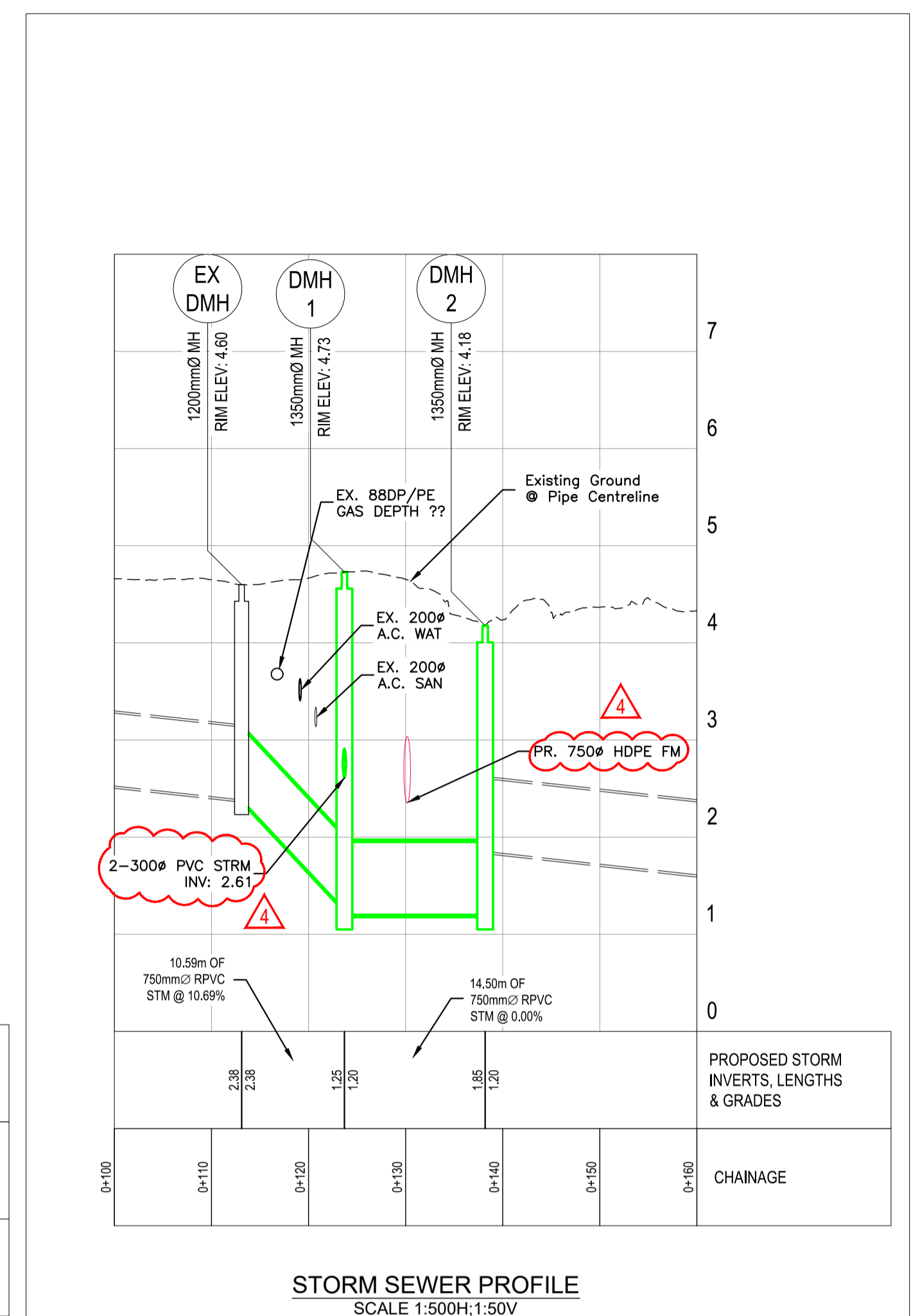
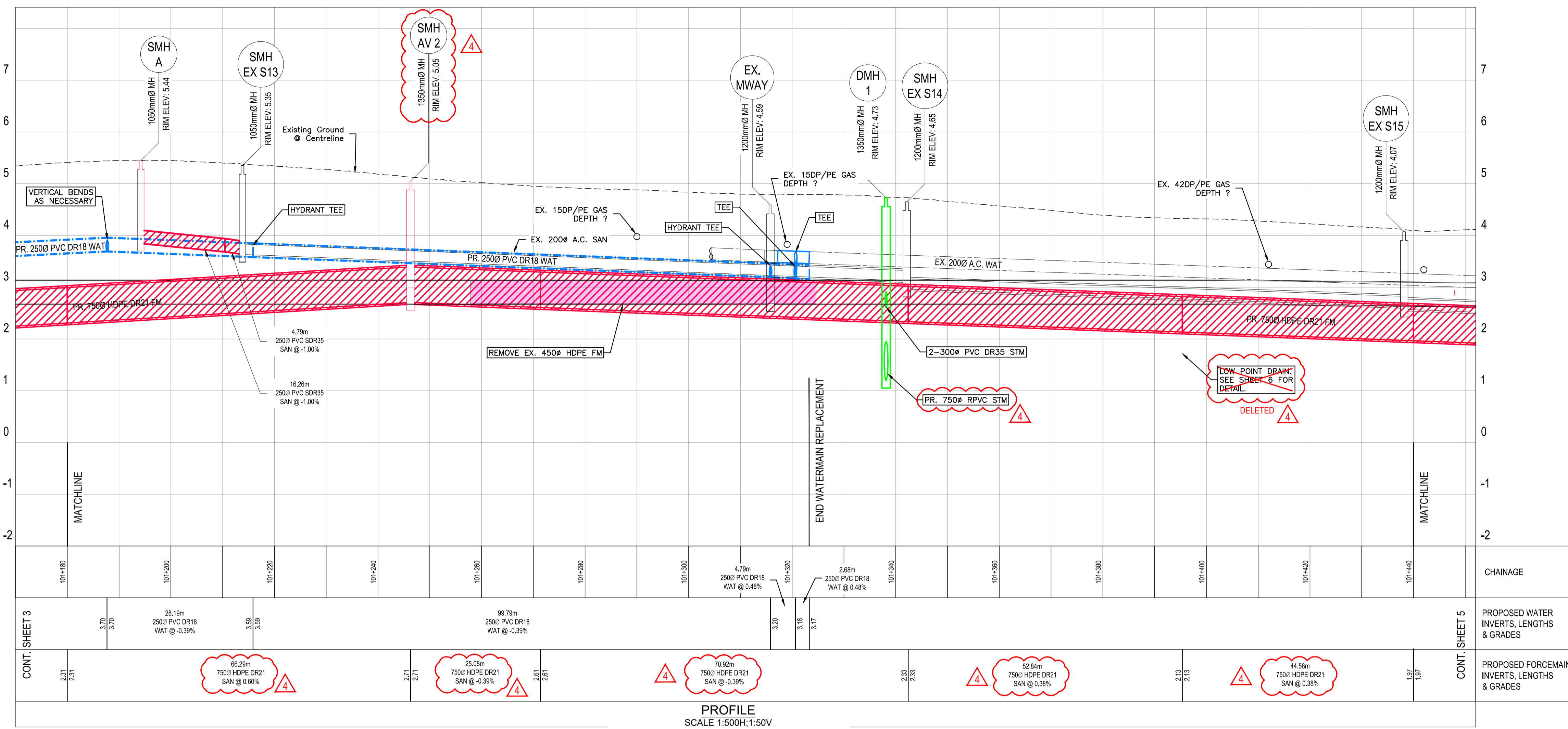
CIVIL UTILITIES
SCALE 1:500

ADDENDUM #2
ISSUED FOR TENDER

INFORMATION ON EXISTING UTILITIES MAY NOT BE COMPLETE OR ACCURATE. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING UTILITIES AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES. McELHANNY CONSULTING SERVICES LTD., ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS ACCEPT NO RESPONSIBILITY TO ANY OTHER PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, FOR LOSS OR LIABILITY INCURRED AS A RESULT OF THEIR USE OF THESE DRAWINGS.

NO.	REVISION	DRAWN	DATE	CHECKED	DATE	EXISTING	LEGEND	DESIGN	EXISTING	LEGEND	DESIGN	EXISTING	LEGEND	DESIGN	EXISTING	LEGEND	DESIGN	DESIGNED:	A1 SCALE:	DRAWN:	DATE:	CHECKED:	DATE:	APPROVED:	DATE:	CITY OF CAMPBELL RIVER	PROJECT:	SHEET	REV.
4	TENDER ADDENDUM #2	EGM	19/03/26	MD	19/03/26	TEL	U/G TELEPHONE	TEL	S	SANITARY SEWER	S	O.D.	OPEN DITCH	DESIGNED:	MD	1:500	EGM	19/03/04	MD	19/03/04	MD	19/03/04	MD	19/03/04	CITY OF CAMPBELL RIVER	CIVIL UTILITIES - PLAN AND PROFILE	2	OF	7
3	ISSUED FOR TENDER	EGM	19/03/04	MD	19/03/04	BCH	U/G HYDRO	BCH	FM	SANITARY FORCEMAIN	FM	SMH	MANHOLE	MD	19/03/04	1:500	EGM	19/03/04	MD	19/03/04	MD	19/03/04	MD	19/03/04	CITY OF CAMPBELL RIVER	CIVIL UTILITIES - PLAN AND PROFILE	2	OF	7
2	ISSUED FOR FINAL REVIEW	EGM	19/02/01	MD	19/02/01	GAS	NATURAL GAS	GAS	D	STORM DRAIN	D	SMH	MANHOLE	MD	19/03/04	1:500	EGM	19/03/04	MD	19/03/04	MD	19/03/04	MD	19/03/04	CITY OF CAMPBELL RIVER	CIVIL UTILITIES - PLAN AND PROFILE	2	OF	7
1	ISSUED FOR REVIEW - 80% DESIGN	EGM	18/11/30	MD	18/11/30	PL	PROPERTY LINE	PL	W	WATER MAIN	W	HYD	FIRE HYDRANT	MD	19/03/04	1:500	EGM	19/03/04	MD	19/03/04	MD	19/03/04	MD	19/03/04	CITY OF CAMPBELL RIVER	CIVIL UTILITIES - PLAN AND PROFILE	2	OF	7
0	ISSUED FOR REVIEW	EGM	18/08/22	MD	18/08/22				P	PAVEMENT	P	WV	WATER VALVE	MD	19/03/04	1:500	EGM	19/03/04	MD	19/03/04	MD	19/03/04	MD	19/03/04	CITY OF CAMPBELL RIVER	CIVIL UTILITIES - PLAN AND PROFILE	2	OF	7



STORM SEWER PROFILE
SCALE 1:500H;1:50V

ADDENDUM #2
ISSUED FOR TENDER

INFORMATION ON EXISTING UTILITIES MAY NOT BE COMPLETE OR ACCURATE. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING UTILITIES AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES. McELHANNY CONSULTING SERVICES LTD., ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS ACCEPT NO RESPONSIBILITY TO ANY OTHER PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, FOR LOSS OR LIABILITY INCURRED AS A RESULT OF THEIR USE OF THESE DRAWINGS.

NO.	REVISION	DRAWN	DATE	CHECKED	DATE	EXISTING	LEGEND	DESIGN	EXISTING	LEGEND	DESIGN	EXISTING	LEGEND	DESIGN	EXISTING	LEGEND	DESIGN	EXISTING	LEGEND	DESIGN
4	TENDER ADDENDUM #2	EGM	19/03/26	MD	19/03/26		TEL	U/G TELEPHONE		S	SANITARY SEWER		O.D.	O.P.	OPEN DITCH		S.M.H.	S.M.H.		SAN SEWER MANHOLE
3	ISSUED FOR TENDER	EGM	19/03/04	MD	19/03/04		BCH	U/G HYDRO		F.M.	SANITARY FORCEMAIN		S.M.H.	S.M.H.	STORM DRAIN MANHOLE		S.M.H.	S.M.H.		CATCH BASIN
2	ISSUED FOR FINAL REVIEW	EGM	19/02/01	MD	19/02/01		GAS	NATURAL GAS		D	STORM DRAIN		TOP INLET	TOP INLET	CATCH BASIN		S.M.H.	S.M.H.		TOP INLET
1	ISSUED FOR REVIEW - 80% DESIGN	EGM	19/11/30	MD	19/11/30					W	WATER MAIN		HYD.	HYD.	FIRE HYDRANT					
0	ISSUED FOR REVIEW	EGM	18/08/22	MD	18/08/22					P	PAVEMENT		W.V.	W.V.	WATER VALVE					

DESIGNED: MD
DATE: 19/03/04

CHECKED: JS
DATE: 19/03/04

APPROVED: MD
DATE: 19/03/04

McElhanny
McElhanny Consulting Services Ltd.
1160 UNIVERSITY STREET
CAMPBELL RIVER BC V9P 2G9-2X9

City of Campbell River

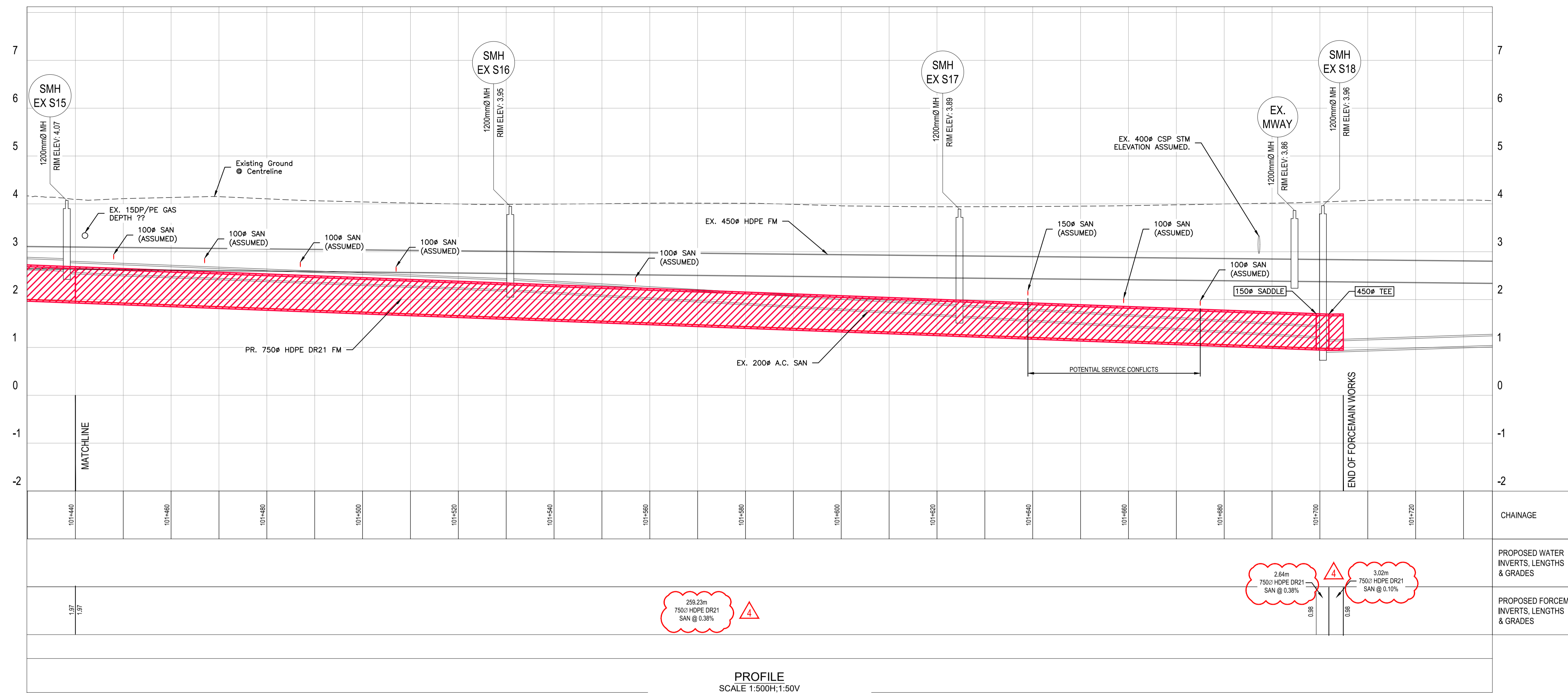
CITY OF CAMPBELL RIVER
CIVIL UTILITIES - PLAN AND PROFILE
STATIONS 101+180-101+440
HIGHWAY 19A - ROCKLAND ROAD TO L.S.#6
WATERMAIN AND SANITARY FORCEMAIN UPGRADE
CAMPBELL RIVER, BC

CCR DWG #
CCR19-501-C-4

PROJECT:
2221-49145

SHEET 4 OF 7

REV. 4

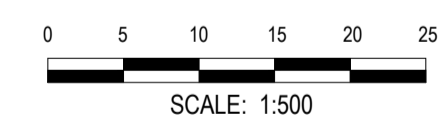


209.2m
7500 HDPE DR21
SAN @ 0.38%

2.84m
7500 HDPE DR21
SAN @ 0.38%

3.02m
7500 HDPE DR21
SAN @ 0.10%

PROFILE
SCALE 1:500H, 1:50V



ADDENDUM #2
ISSUED FOR TENDER

INFORMATION ON EXISTING UTILITIES MAY NOT BE COMPLETE OR ACCURATE.
PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL
EXISTING UTILITIES AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

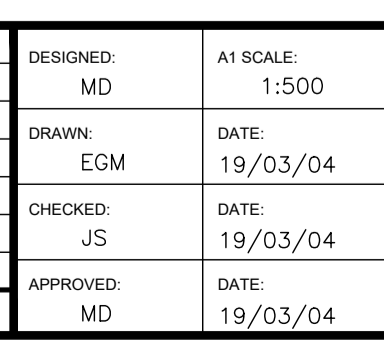
THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET
THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES.
MCELHANEY CONSULTING SERVICES LTD., ITS EMPLOYEES, SUBCONSULTANTS
AND AGENTS ACCEPT NO RESPONSIBILITY TO ANY OTHER PARTY, INCLUDING
CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR
EMPLOYEES OR AGENTS, FOR LOSS OR LIABILITY INCURRED AS A RESULT
OF THEIR USE OF THESE DRAWINGS.

NO.	REVISION	DRAWN	DATE	CHECKED	DATE
4	TENDER ADDENDUM #2	EGM	19/03/26	MD	19/03/26
3	ISSUED FOR TENDER	EGM	19/03/04	MD	19/03/04
2	ISSUED FOR FINAL REVIEW	EGM	19/02/01	MD	19/02/01
1	ISSUED FOR REVIEW - 80% DESIGN	EGM	18/11/20	MD	19/11/20
0	ISSUED FOR REVIEW	EGM	18/06/22	MD	18/06/22

EXISTING	LEGEND	DESIGN	EXISTING	LEGEND	DESIGN
TEL	U/G TELEPHONE	TEL	S	SANITARY SEWER	S
BCH	U/G HYDRO	BCH	FM	SANITARY FORCEMAIN	FM
GAS	NATURAL GAS	GAS	D	STORM DRAIN	D
			W	WATER MAIN	W
			P	PAVEMENT	P
			C	CURB & GUTTER	C
				SIDEWALK	

EXISTING	LEGEND	DESIGN	EXISTING	LEGEND	DESIGN
O.D.	OPEN DITCH	O.D.	S.M.H.	MANHOLE	S.M.H.
SIDE INLET	CATCH BASIN	SIDE INLET	TOP INLET	CATCH BASIN	TOP INLET
HYD.	FIRE HYDRANT	HYD.	W.V.	WATER VALVE	W.V.
U.P.	UTILITY POLE	U.P.			

DESIGNED:	A1 SCALE:	DRAWN:	DATE:	CHECKED:	DATE:	APPROVED:	DATE:
MD	1:500	EGM	19/03/04	JS	19/03/04	MD	19/03/04



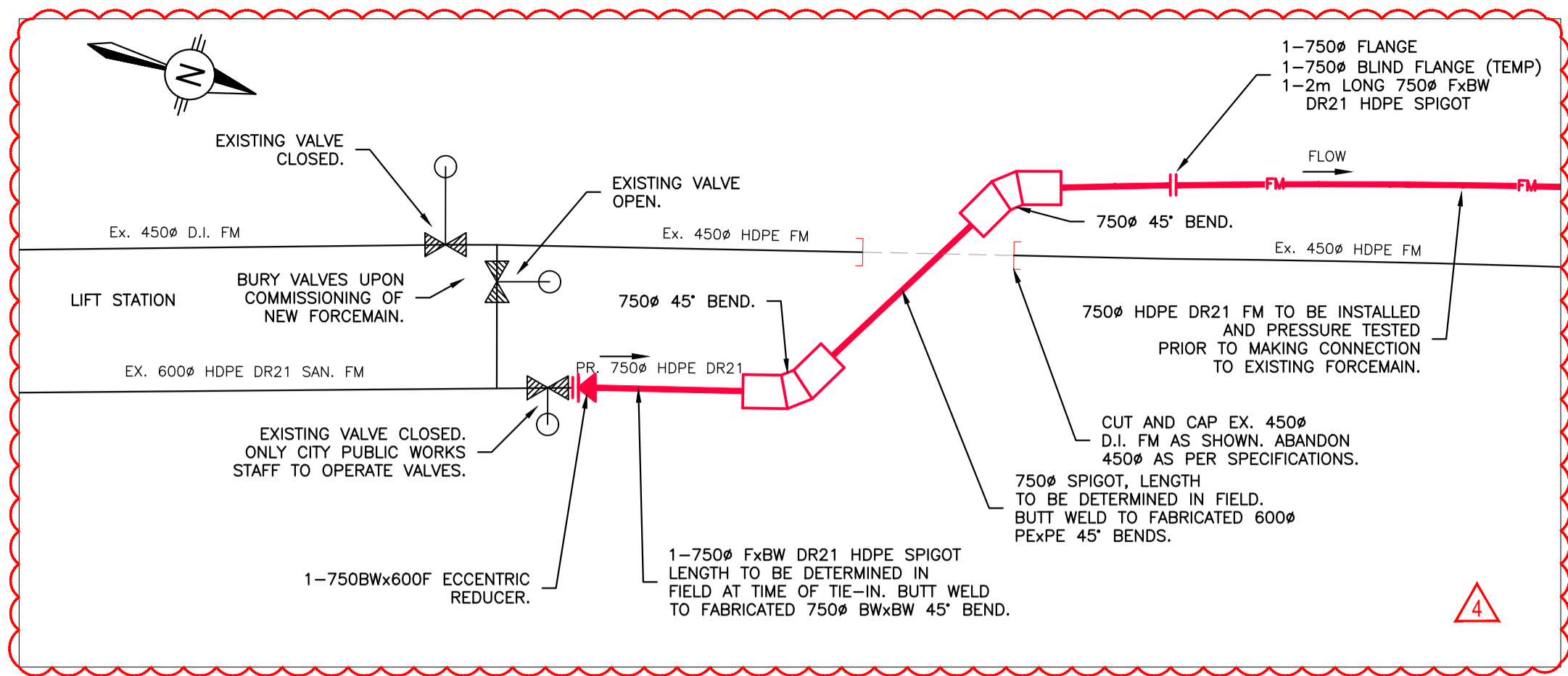
CITY OF CAMPBELL RIVER
CIVIL UTILITIES - PLAN AND PROFILE
STATIONS 101+440-101+705
HIGHWAY 19A - ROCKLAND ROAD TO L.S.#6
WATERMAIN AND SANITARY FORCEMAIN UPGRADE
CAMPBELL RIVER, BC

CCR DWG #
CCR19-501-C-5
PROJECT:
2221-49145
SHEET 5 OF 7
REV. **4**

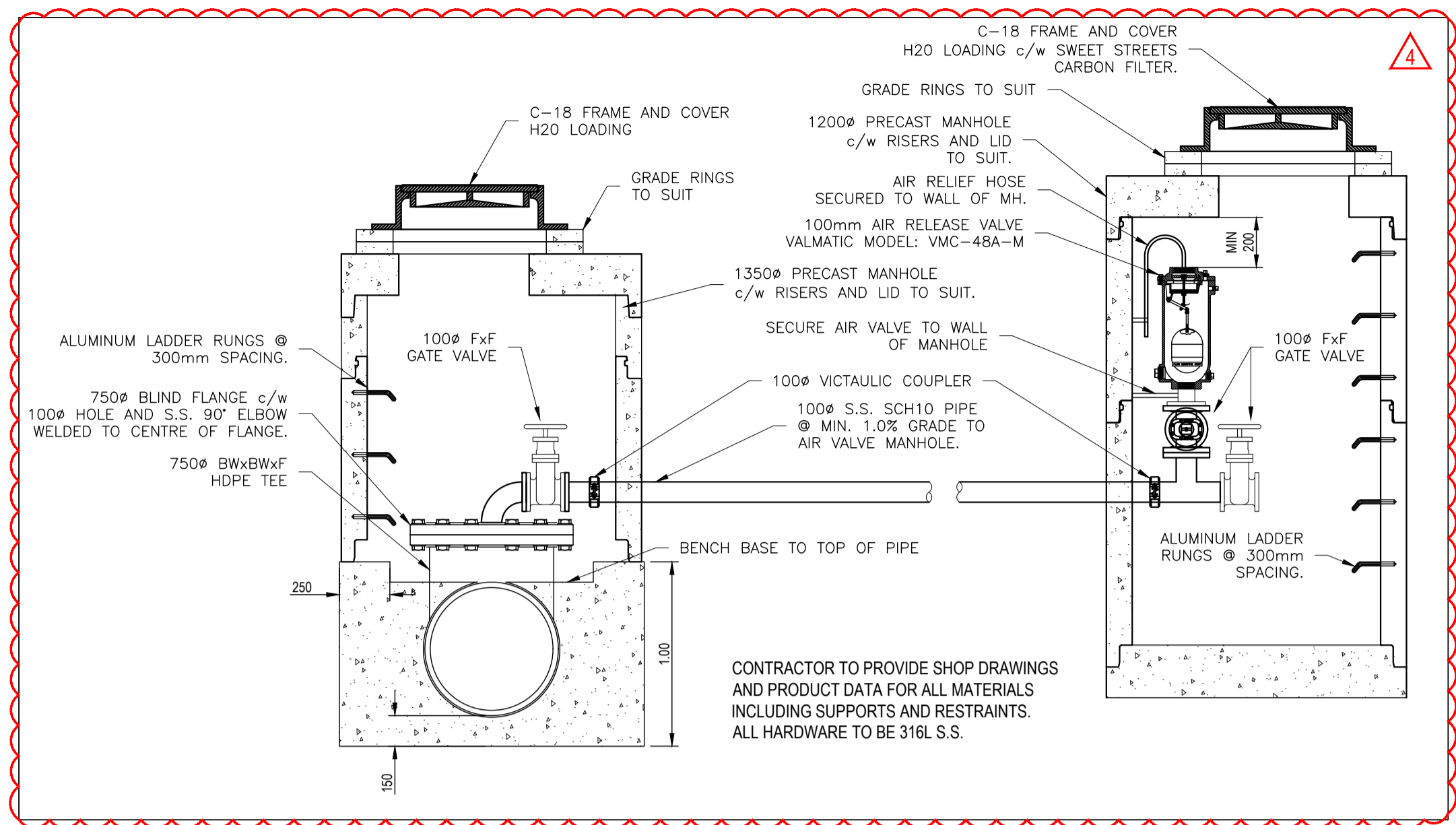
BC 1 CALL 1-800-474-6886

DRAWING PATH: C:\Users\McElhenny\appdata\local\temp\AcPublish_173842221-49145-0\PRELIM\CIVIL-C-5-2018-REV10.dwg Tab C-5-Mar-27, 2019 1:48:48pm

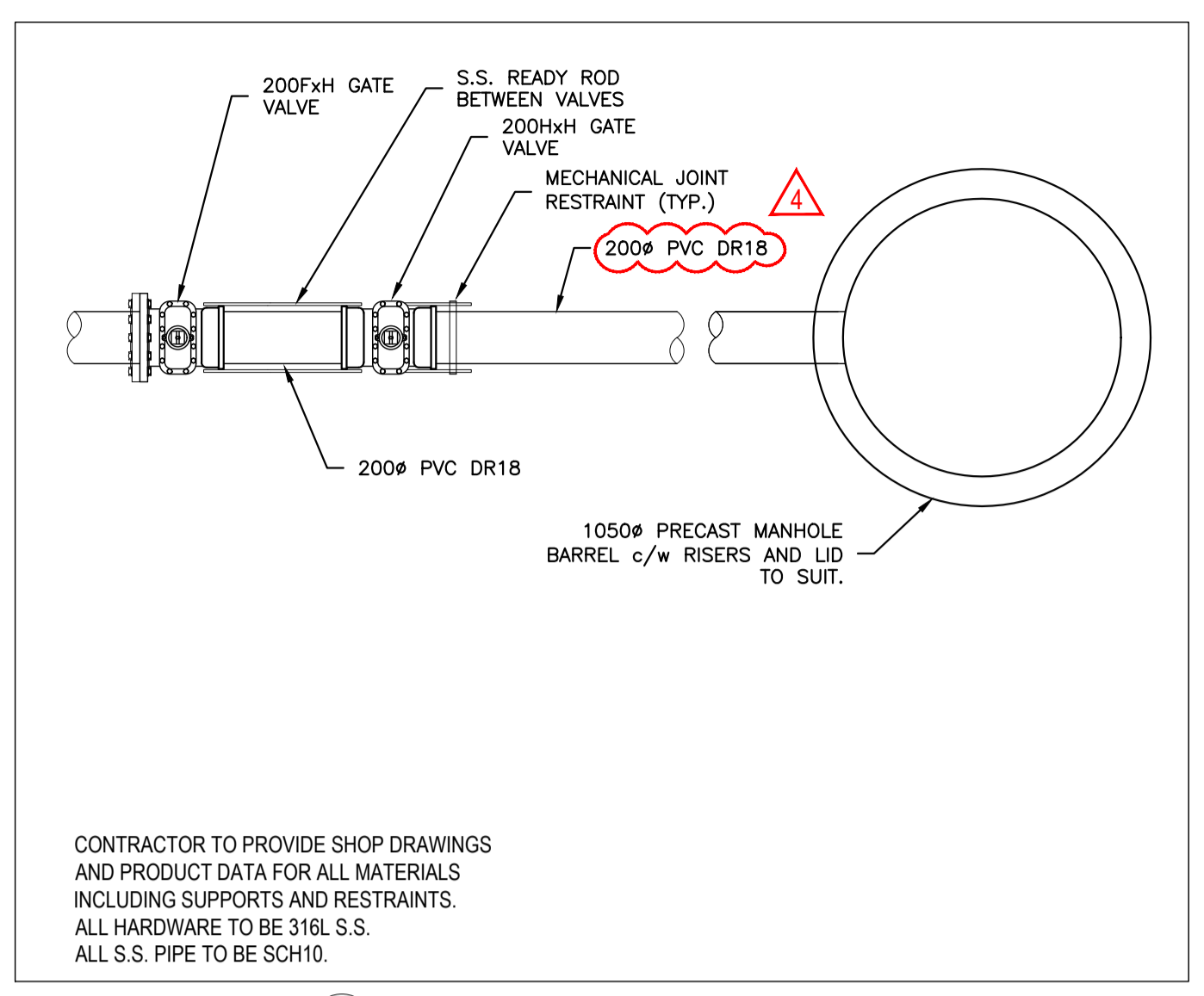
DESTROY PRINTS OF PREVIOUS REVISION



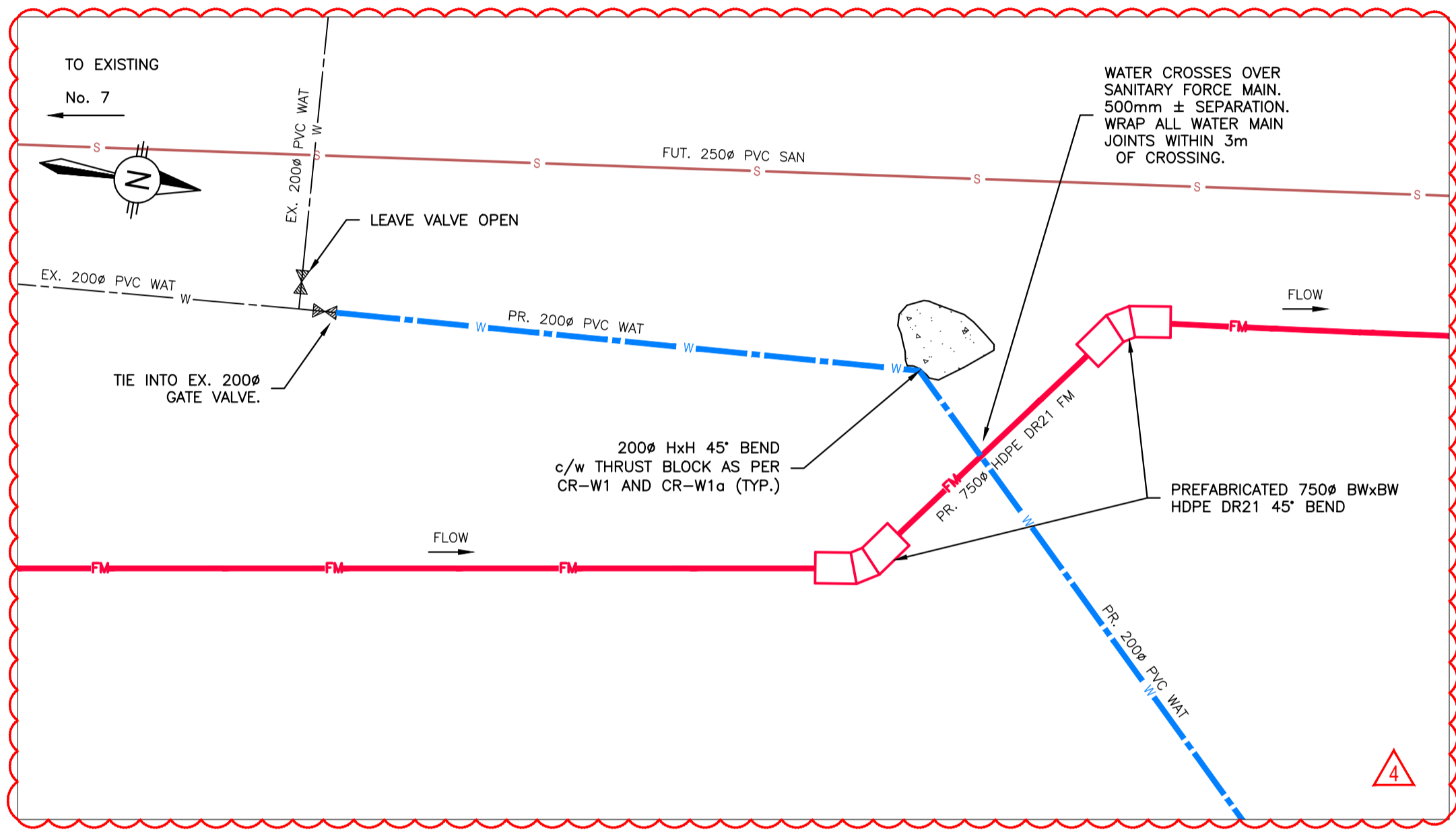
1 FORCEMAIN SOUTH TIE-IN DETAIL
SCALE: HNTS
VNTS



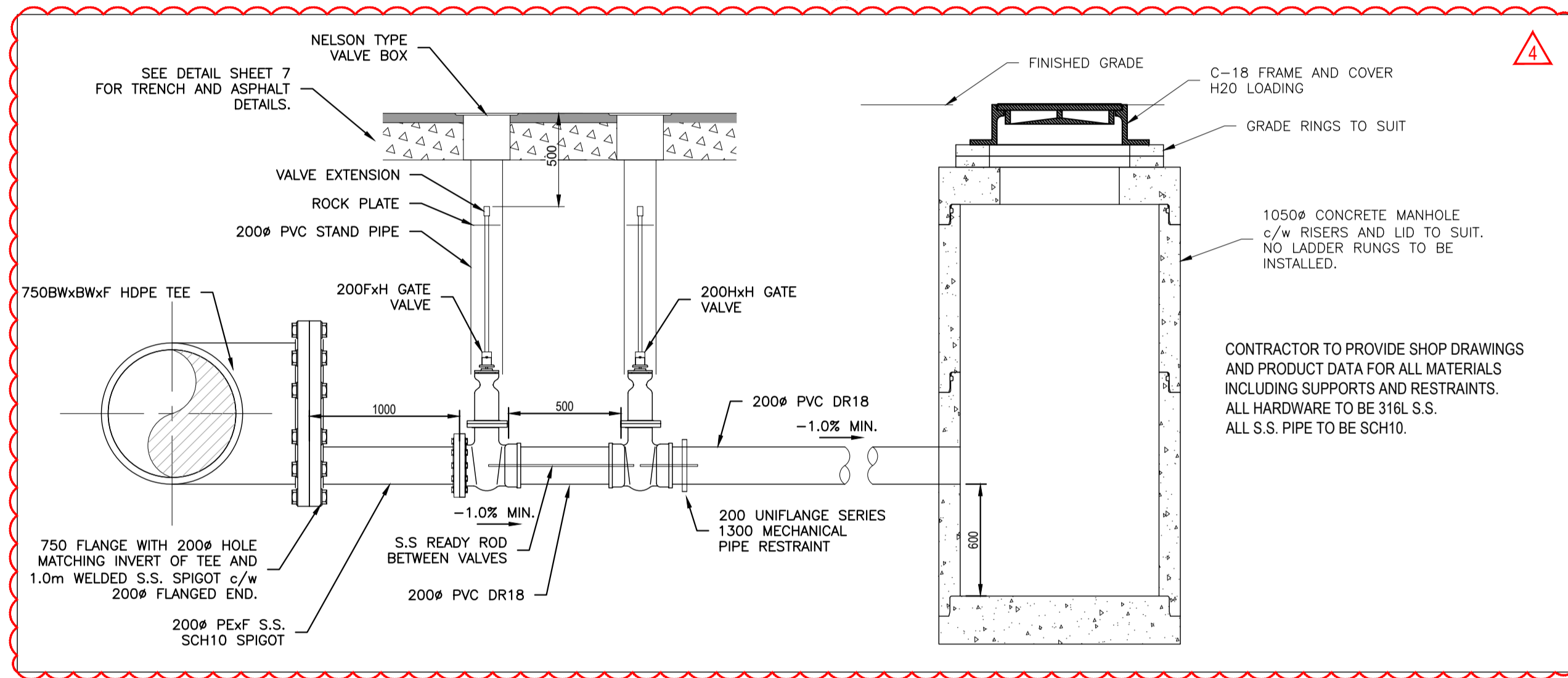
3 FORCEMAIN AIR VALVE DETAIL
SCALE: HNTS
VNTS



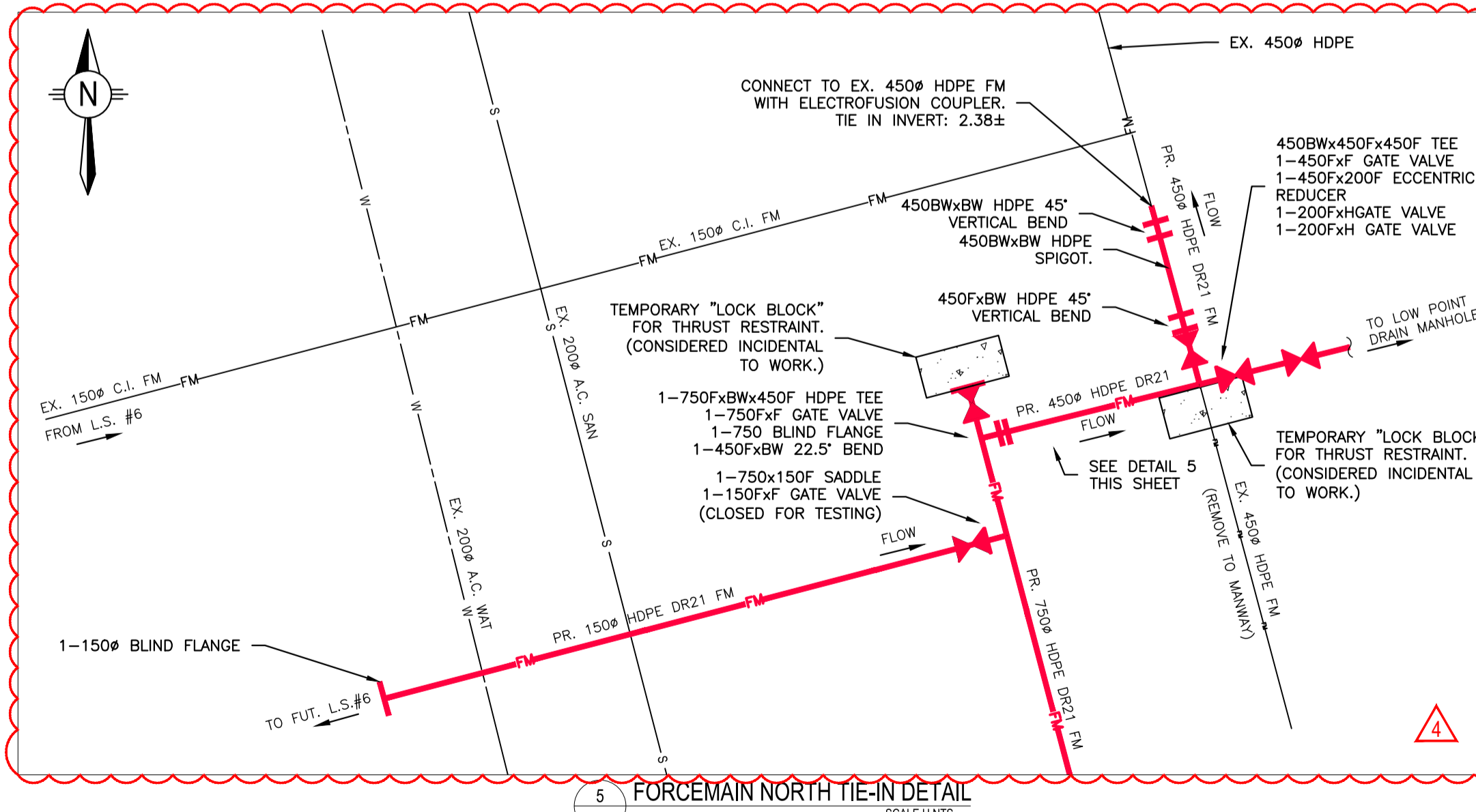
4A LOW POINT DRAIN SUMP MANHOLE DETAIL
SCALE: HNTS
VNTS



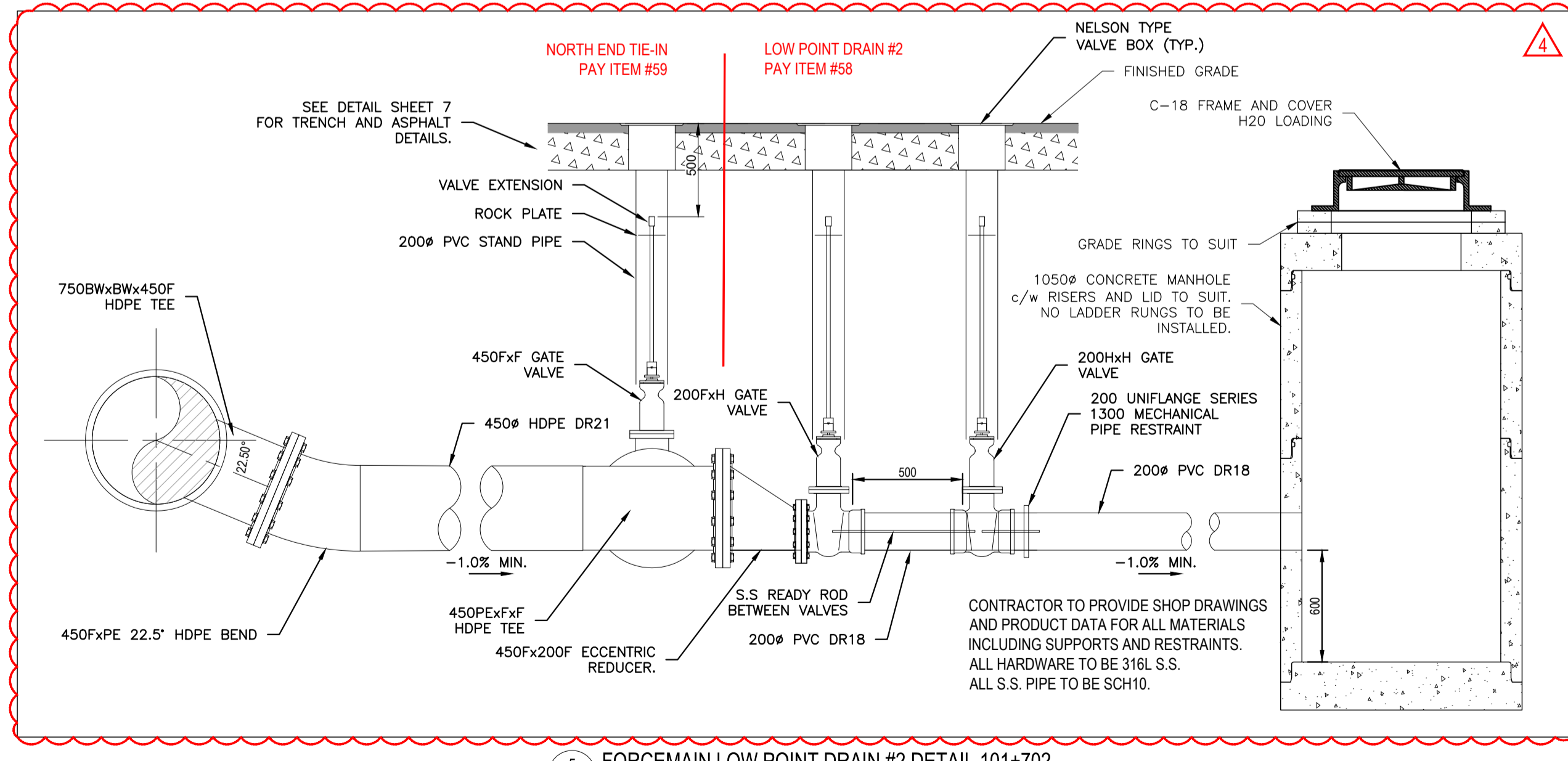
2 FORCEMAIN / WATER CROSSING @ ROCKLAND ROAD DETAIL
SCALE: HNTS
VNTS



4 FORCEMAIN LOW POINT DRAIN #1 DETAIL 101+055
SCALE: HNTS
VNTS



5 FORCEMAIN NORTH TIE-IN DETAIL
SCALE: HNTS
VNTS



5 FORCEMAIN LOW POINT DRAIN #2 DETAIL 101+702
SCALE: HNTS
VNTS

ADDENDUM #2
ISSUED FOR TENDER

INFORMATION ON EXISTING UTILITIES MAY NOT BE COMPLETE OR ACCURATE. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING UTILITIES AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES. MELIHANNEY CONSULTING SERVICES LTD., ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS ACCEPT NO RESPONSIBILITY TO ANY OTHER PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, FOR LOSS OR LIABILITY INCURRED AS A RESULT OF THEIR USE OF THESE DRAWINGS.

NO.	REVISION	DRAWN	DATE	CHECKED	DATE	EXISTING	LEGEND	DESIGN
4	TENDER ADDENDUM #2	EGM	19/03/26	MD	19/03/26	TEL	U/G TELEPHONE	
3	ISSUED FOR TENDER	EGM	19/03/04	MD	19/03/04	BCH	U/G HYDRO	
2	ISSUED FOR FINAL REVIEW	EGM	19/02/01	MD	19/02/01	GAS	NATURAL GAS	
1	ISSUED FOR REVIEW - 80% DESIGN	EGM	18/11/30	MD	18/11/30			
0	ISSUED FOR REVIEW	EGM	18/08/22	MD	18/08/22			

LEGEND	DESIGN	EXISTING	LEGEND	DESIGN	EXISTING	LEGEND	DESIGN	EXISTING
S	SANITARY SEWER	S	O.D.	OPEN DITCH	O.D.	S	SAN SEWER	S
FM	SANITARY FORCEMAIN	FM	S.M.H. D.M.H.	MANHOLE	S.M.H. D.M.H.	FM	STORM DRAIN	FM
SD	STORM DRAIN	SD	TOP INLET	CATCH BASIN	TOP INLET	SD	WATER MAIN	SD
W	WATER MAIN	W	HYD.	FIRE HYDRANT	HYD.	W	PAVEMENT	W
P	PAVEMENT	P	W.V.	WATER VALVE	W.V.	P	CURB & GUTTER	P
C	CURB & GUTTER	C	U.P.	UTILITY POLE	U.P.	C	SIDEWALK	C

DESIGNED: MD
DRAWN: EGM
CHECKED: JS
APPROVED: MD

A1 SCALE: 1:500
DATE: 19/03/04
DATE: 19/03/04
DATE: 19/03/04

McElhanney
McElhanney Consulting Services Ltd.
1180 HOWARD STREET
CAMPBELL RIVER BC
V9W 4V6

City of
Campbell
River

CITY OF CAMPBELL RIVER

FORCEMAIN DETAILS

HIGHWAY 19A - ROCKLAND ROAD TO L.S.#6
WATERMAIN AND SANITARY FORCEMAIN UPGRADE
CAMPBELL RIVER, BC

CCR DWG #
CCR19-501-C-6

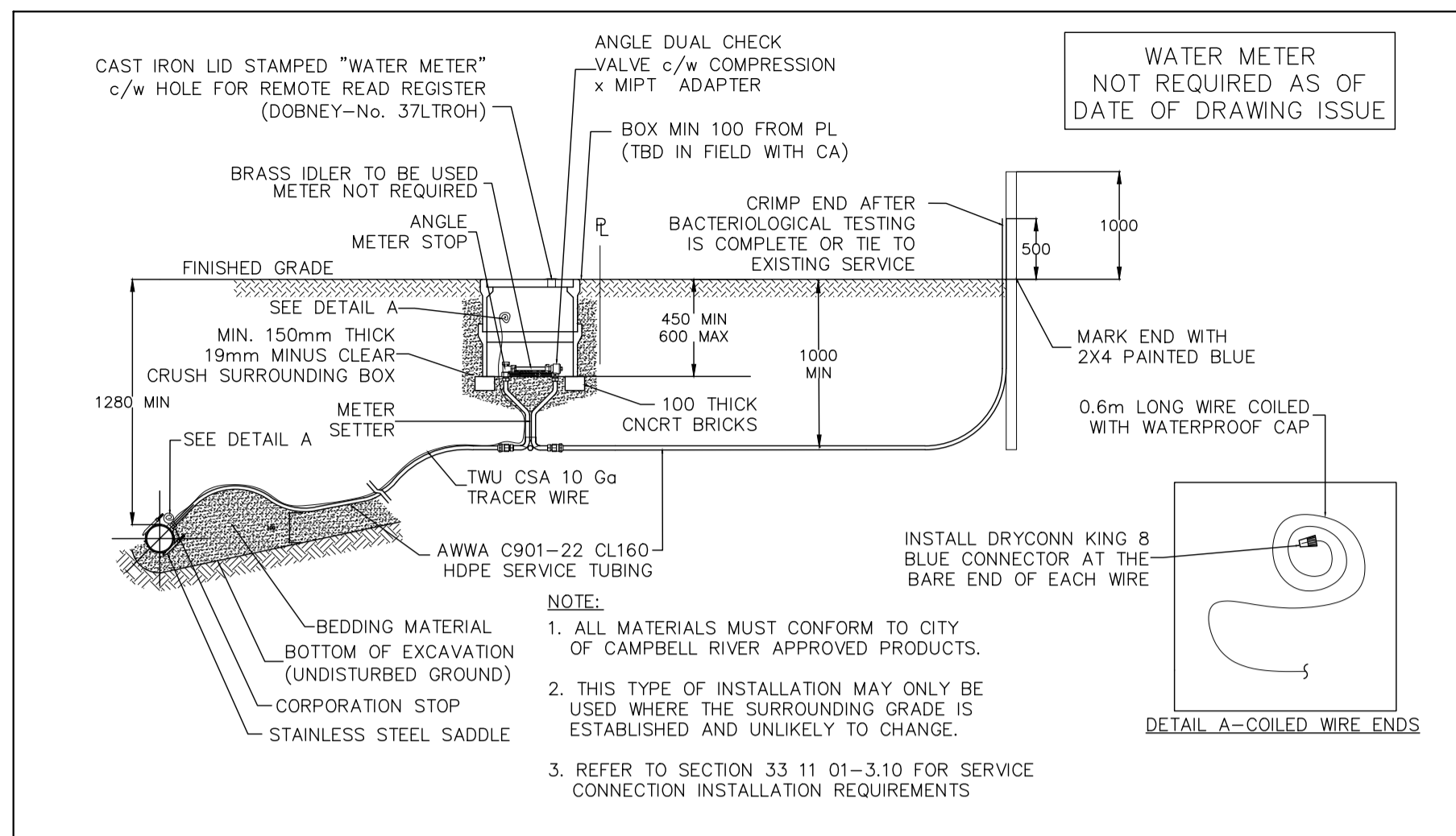
PROJECT:
2221-49145

SHEET 6 OF 7

REV. 4

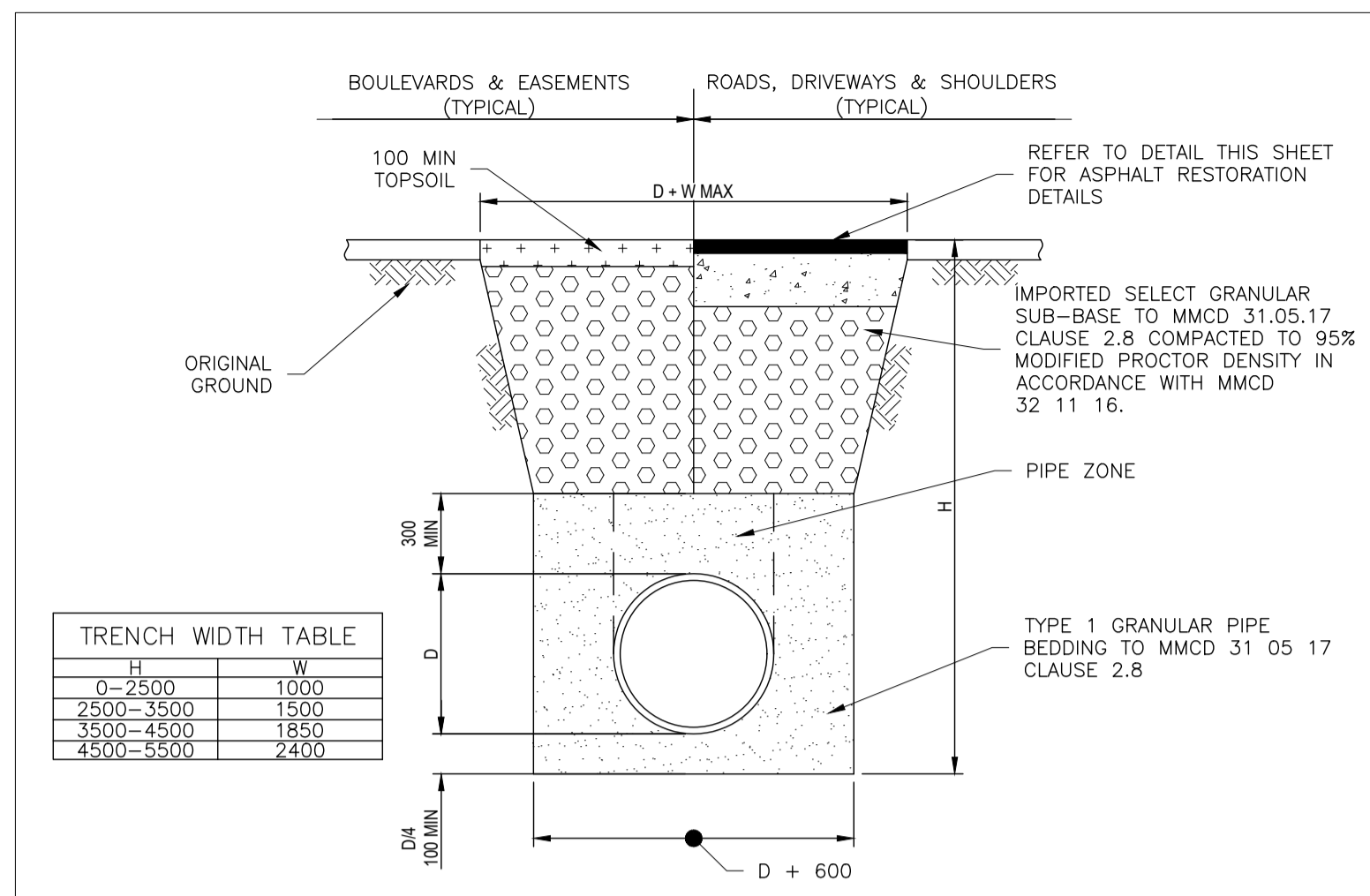
DRAWING PATH: C:\Users\Melhanney\OneDrive\Work\Projects\19A\19A-501-C-6\19A-501-C-6-2018-REVISED.dwg Tab C-6 Mar 27, 2019 1:51:00pm

DESTROY PRINTS OF PREVIOUS REVISION

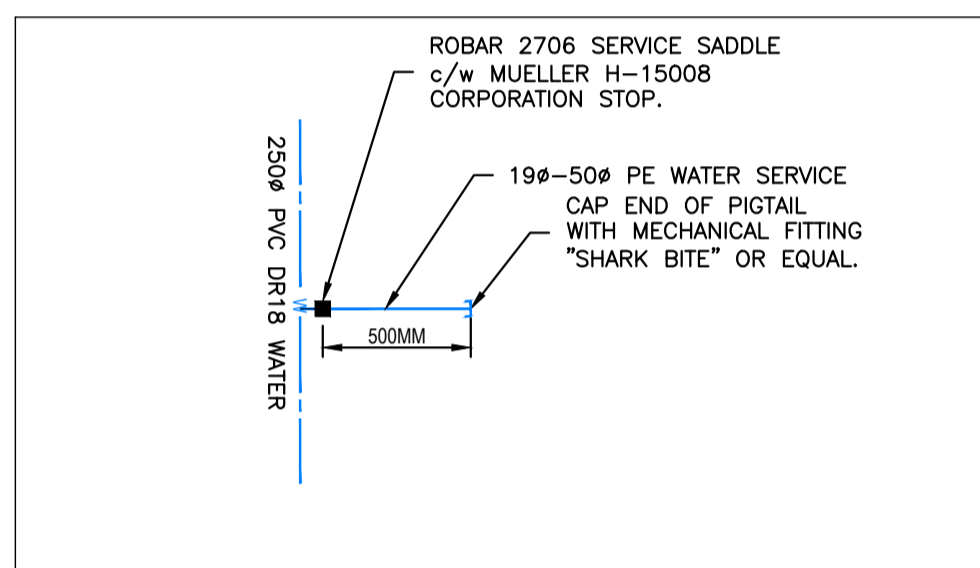


WATER METER NOT REQUIRED AS OF DATE OF DRAWING ISSUE

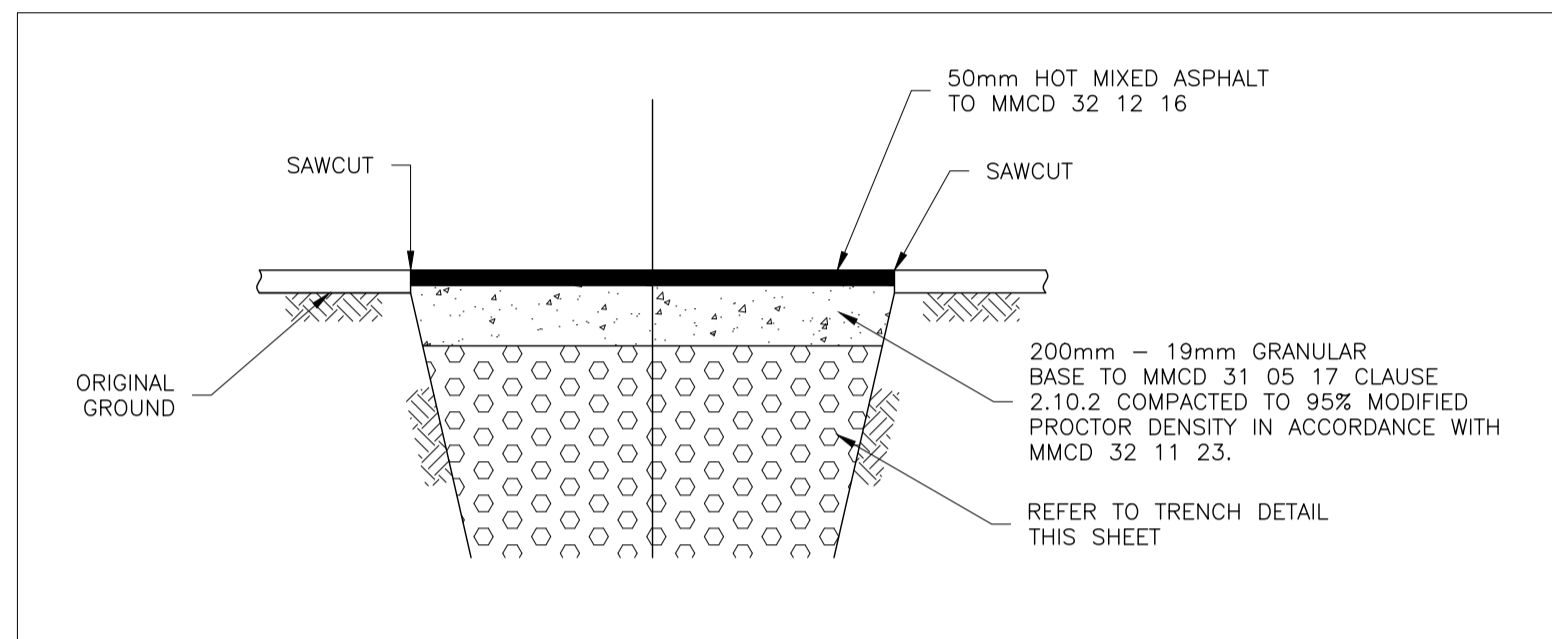
1 TYPICAL RESIDENTIAL WATER SERVICE DETAIL
SCALE: HNTS
VNTS



3 TYPICAL UTILITY TRENCH
SCALE: HNTS
VNTS



2 WEST SIDE WATER SERVICE (190-500) DETAIL
SCALE: HNTS
VNTS



4 TEMPORARY ASPHALT RESTORATION DETAIL
SCALE: HNTS
VNTS

ADDENDUM #2
ISSUED FOR TENDER

INFORMATION ON EXISTING UTILITIES MAY NOT BE COMPLETE OR ACCURATE. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING UTILITIES AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES. McELHANNNEY CONSULTING SERVICES LTD., ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS ACCEPT NO RESPONSIBILITY TO ANY OTHER PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, FOR LOSS OR LIABILITY INCURRED AS A RESULT OF THEIR USE OF THESE DRAWINGS.



NO.	REVISION	DRAWN	DATE	CHECKED	DATE
4	TENDER ADDENDUM #2	EGM	19/03/26	MD	19/03/26
3	ISSUED FOR TENDER	EGM	19/03/04	MD	19/03/04
2	ISSUED FOR FINAL REVIEW	EGM	19/02/01	MD	19/02/01
1	ISSUED FOR REVIEW - 80% DESIGN	EGM	18/11/30	MD	18/11/30
0	ISSUED FOR REVIEW	EGM	18/08/22	MD	18/08/22

TEL	U/G TELEPHONE	TEL
BCH	U/G HYDRO	BCH
GAS	NATURAL GAS	GAS

S	W	P	C
SANITARY SEWER	STORM DRAIN	WATER MAIN	PAVEMENT
STORM DRAIN	CURB & GUTTER	SIDEWALK	

S	D	W	P	C	U.P.
OPEN DITCH	SAN SEWER STORM DRAIN MANHOLE	CATCH BASIN	FIRE HYDRANT	WATER VALVE	UTILITY POLE

DESIGNED:	A1 SCALE:
MD	1:500
DRAWN:	DATE:
EGM	19/03/04
CHECKED:	DATE:
JS	19/03/04
APPROVED:	DATE:
MD	19/03/04



NO.	REVISION	DRAWN	DATE	CHECKED	DATE
4	TENDER ADDENDUM #2	EGM	19/03/26	MD	19/03/26
3	ISSUED FOR TENDER	EGM	19/03/04	MD	19/03/04
2	ISSUED FOR FINAL REVIEW	EGM	19/02/01	MD	19/02/01
1	ISSUED FOR REVIEW - 80% DESIGN	EGM	18/11/30	MD	18/11/30
0	ISSUED FOR REVIEW	EGM	18/08/22	MD	18/08/22

CITY OF CAMPBELL RIVER
MISCELLANEOUS DETAILS
HIGHWAY 19A - ROCKLAND ROAD TO L.S.#6
WATERMAIN AND SANITARY FORCEMAIN UPGRADE
CAMPBELL RIVER, BC

CCR DWG #
CCR19-501-C-7
PROJECT:
2221-49145
SHEET 7 OF 7
REV. 4