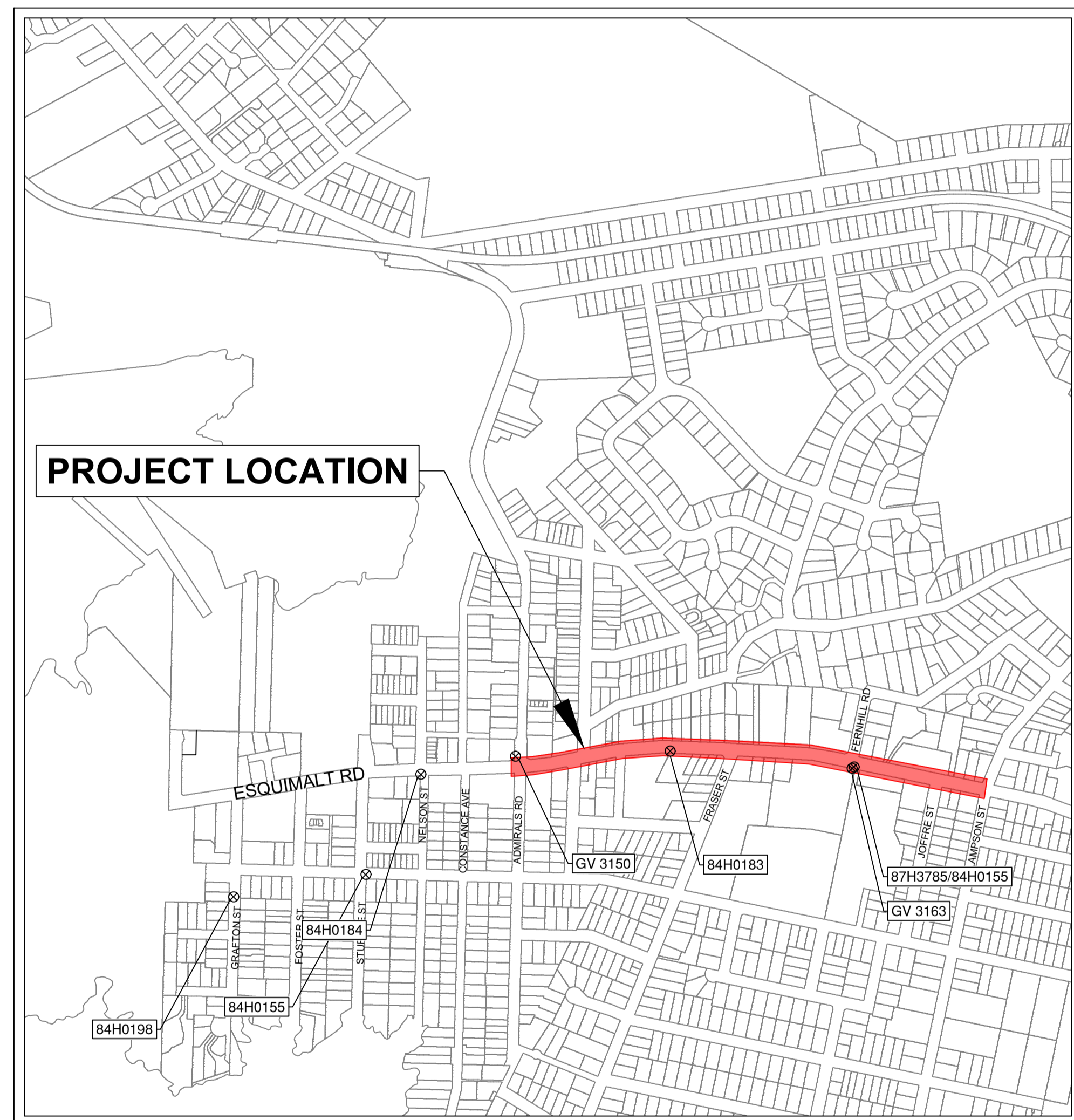


TOWNSHIP OF ESQUIMALT WATERMAIN ABANDONMENT AND SERVICE RELOCATES

IFT



LOCATION PLAN

DRAWING SCHEDULE		
00	COVER	
01	GENERAL NOTES	
02	WATERWORKS	STA 10+000 TO 10+320
03	WATERWORKS	STA 10+320 TO 10+630
04	WATERWORKS	STA 10+630 TO 10+800

PROJECT SURVEY CONTROL				
NAME	TYPE	NORTHING	EASTING	ELEVATION
84H0198	MONUMENT	366,202.796	468,878.414	16.186
84H0151	MONUMENT	366,238.375	469,090.139	24.025
84H0184	MONUMENT	366,242.974	469,178.393	24.779
GV 3150	CONTROL NAIL	366,271.956	469,329.898	23.906
84H0183	MONUMENT	366,280.305	469,577.603	24.535
GV 3163	CONTROL NAIL	366,252.691	469,869.041	22.123
87H3785	MONUMENT	366,255.062	469,871.991	22.080
84H0155	MONUMENT	366,255.056	469,872.028	22.082



GENERAL NOTES:

- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH:
 - THE MASTER MUNICIPAL CONSTRUCTION DOCUMENT AND STANDARD DETAIL DRAWINGS (MMCD 2019 "PLATINUM EDITION"), EXCEPT AS OTHERWISE NOTED IN THESE DRAWINGS OR THE CONTRACT DOCUMENTS;
 - APPLICABLE CONTRACT DOCUMENTS AND ALL SPECIFICATIONS REFERENCED THEREIN;
 - MINISTRY OF TRANSPORTATION "BC TRAFFIC CONTROL MANUAL FOR WORK ON ROADWAYS", LATEST EDITION;
 - WORKSAFEBC, LATEST EDITION;
 - TOWNSHIP OF ESQUIMALT SUBDIVISION AND DEVELOPMENT SERVICING BYLAW; AND
 - ALL WATERMAIN WORKS, MATERIALS, TESTING, COMMISSIONING, AND TURNOVER TO BE IN ACCORDANCE WITH CITY OF VICTORIA STANDARDS AND SUPPLEMENTARY SPECIFICATIONS. ALL SURFACE RESTORATION, ROADWORKS, TRAFFIC MANAGEMENT, AND ROW OCCUPANCY TO BE IN ACCORDANCE WITH TOWNSHIP OF ESQUIMALT STANDARDS AND THE TOWNSHIP OF ESQUIMALT SUBDIVISION AND DEVELOPMENT SERVICING BYLAW.
- THE CONTRACTOR SHALL MAINTAIN ON SITE COPIES OF THE ABOVE DOCUMENTS AND SHALL ENSURE THAT ALL SUB CONTRACTORS ARE THOROUGHLY FAMILIAR WITH THE APPLICABLE SECTIONS OF THE DOCUMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL EXCAVATED MATERIAL UNSUITABLE FOR REUSE AT A SUITABLE OFF-SITE DISPOSAL AREA, IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.
- THE CONTRACTOR SHALL REPAIR OR REPLACE ANY EXISTING ROAD SURFACES, SERVICES, SIGNS, LANDSCAPING, DRIVEWAY LETDOWNS, PRIVATE LANDSCAPING, OR PRIVATE IMPROVEMENTS THAT MAY BE DAMAGED AS A RESULT OF CONSTRUCTION. REPAIRS TO EXISTING TOWN SERVICES SUCH AS WATER, SANITARY SEWER, STORM SEWER, AND STREET OR TRAFFIC LIGHTING MAY BE MADE BY THE OWNER AT COST TO THE CONTRACTOR. REPAIRS TO EXISTING SURFACE WORKS MAY BE DONE BY THE CONTRACTOR AT THE DISCRETION OF THE CONTRACT ADMINISTRATOR.
- REPORT ANY DISCREPANCIES TO THE CONTRACT ADMINISTRATOR A MIN 72 HOURS PRIOR TO CONSTRUCTION TO ENSURE THAT THE LINE AND GRADE OF THE PROPOSED WORK CAN BE ADJUSTED TO SUIT FIELD CONDITIONS AS REQUIRED.
- RESTORATION OF EXISTING DRIVEWAYS, CURBS, STAIRS AND WALKWAYS TO CONFORM TO TOWN SPECIFICATIONS AND TO BE INCIDENTAL TO THE UNIT PRICES IN THE CONTRACT.
- EVERY EFFORT IS TO BE MADE TO SAVE EXISTING LANDSCAPING WITHIN THE ROAD R.O.W. LANDSCAPING IS TO BE RESTORED TO ITS ORIGINAL OR BETTER CONDITION. IN THE EVENT OF LANDSCAPING REMOVAL THE PROPERTY OWNER SHALL BE ADVISED OF THE REMOVAL AND THE LANDSCAPING PLACED IN OWNERS PROPERTY UPON THEIR REQUEST.
- ALL SURVEY MONUMENTS, SURVEY PINS, OR LEAD PLUGS WITHIN THE PROJECT BOUNDARIES SHALL BE PROTECTED DURING THE COURSE OF THE WORK. SHOULD ANY SURVEY MONUMENT REQUIRE RAISING OR RELOCATION, THE CONTRACTOR SHALL NOTIFY THE OWNER'S ENGINEERING AND OPERATIONS DEPARTMENT AT LEAST 5 BUSINESS DAYS IN ADVANCE OF SCHEDULING WORK.
- ALL ELEVATIONS ARE GEODETIC AND REFERENCED TO INTEGRATED SURVEY MONUMENT ELEVATIONS LOCATED ON ROAD RIGHT-OF-WAYS.
- ALL PUBLIC ROADWAYS AFFECTED BY THE WORKS SHALL BE KEPT IN A CLEAN STATE AT ALL TIMES AND FREE OF EQUIPMENT AND MATERIALS AT ALL TIMES WHEN CONSTRUCTION ACTIVITY IS NOT UNDERWAY. DUST CONTROL MEASURES SHALL ALSO BE EMPLOYED AS DIRECTED BY THE CONTRACT ADMINISTRATOR.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES, AND FOR COORDINATING THE VARIOUS PARTS OF THE WORK. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT THERE IS NO DISRUPTION TO SERVICE, AND IF DISRUPTION IS ANTICIPATED, TO NOTIFY THE CONTRACT ADMINISTRATOR A MINIMUM OF 72 HOURS PRIOR, AND OBTAIN APPROVAL FOR THE DISRUPTION.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY WARM MIX ASPHALT PATCHING TO MMCD REQUIREMENTS AT LOCATIONS SPECIFIED IN THE CONTRACT DOCUMENTS. TEMPORARY ASPHALT PATCHING THICKNESS SHALL MATCH THE EXISTING ASPHALT THICKNESS WITH A MINIMUM OF 75mm AND SHALL MEET THE EXISTING ASPHALT SURFACE. USE OF COLD MIX IS NOT ACCEPTABLE. TEMPORARY PATCHING OF SIDEWALKS AND CURBS AND GUTTERS IS ALSO TO BE MADE WITH WARM MIX AND MEET THE EXISTING SURFACE.
- ALL CONCRETE AND ASPHALT IDENTIFIED FOR REMOVAL IS TO BE DISPOSED OFFSITE UNLESS OTHERWISE NOTED.
- CONTRACTOR TO PROVIDE LAYOUT AND GRADE SHEETS ONE WEEK PRIOR TO CONCRETE WORK. LAYOUT NAILS ARE TO BE INSTALLED ON THE ROADSIDE EDGE OF NEW CURB AND GUTTER. UNLESS OTHERWISE APPROVED BY THE CONTRACT ADMINISTRATOR.
- CONTRACTOR TO CONFIRM UNDERGROUND LOCATIONS WITH UTILITY COMPANIES. THE LOCATION AND ELEVATION OF THE EXISTING UNDERGROUND INFRASTRUCTURE SHOWN ON THESE DRAWINGS MAY NOT BE ACCURATE OR COMPLETE. THE ACTUAL HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES AND INFRASTRUCTURE MUST BE CONFIRMED BY THE CONTRACTOR PRIOR TO THE START OF ANY EXCAVATION.
- THE LOCATIONS OF EXISTING GAS SERVICES ARE SHOWN APPROXIMATELY BASED ON AVAILABLE RECORDS. EXISTING GAS SERVICE CONNECTIONS BEYOND THOSE INDICATED MAY BE PRESENT WITHIN THE PROJECT EXTENTS. IT IS THE CONTRACTORS RESPONSIBILITY TO CONFIRM UNDERGROUND LOCATIONS WITH UTILITY COMPANIES PRIOR TO THE START OF ANY EXCAVATION.

CONCRETE NOTES:

- NO CONCRETE WORKS SHALL BE ALLOWED IF THE CURRENT TEMPERATURE ON SITE IS BELOW 5°C OR ABOVE 32°C.
- IF TEMPERATURES ARE EXPECTED TO DROP BELOW FREEZING WITHIN THE 5 DAY WINDOW FOLLOWING A CONCRETE POUR A THERMO BLANKET WILL BE REQUIRED TO MAINTAIN CONCRETE TEMPERATURES.
- IF CONCRETE IS POURED AT TEMPERATURES ABOVE 25°C IT SHALL BE SPRAYED WITH WATER 5 TIMES PER DAY AT REASONABLE INCREMENTS BETWEEN THE HOURS OF 10am AND 3pm.
- CONCRETE WORKS TO BE COMPLETED DURING RAIN EVENTS MAY BE ALLOWED AT THE DISCRETION OF THE CONTRACT ADMINISTRATOR. IN THE EVENT THAT CONCRETE IS POURED DURING A RAIN EVENT THE CONTRACTOR SHALL PROVIDE A PLASTIC COVERING THAT IS MAINTAINED TO PROTECT THE CONCRETE FOR A MINIMUM OF 24 HOURS.
- THE CONTRACTOR IS RESPONSIBLE FOR THE MONITORING OF FRESHLY POURED CONCRETE TO ENSURE NO DAMAGE IS CAUSED. ANY DAMAGE OR DEFACEMENT OF FRESHLY POURED CONCRETE SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

ENVIRONMENTAL NOTES:

- ALL INLET STRUCTURES IN PROXIMITY TO TRENCH WORK OR EXPOSED ROAD BASE WILL BE FITTED WITH MANUFACTURED INLET CONTROL DEVICES AND OR 'FILTER SACK' TYPE CATCHBASIN CONTROL (OR APPROVED ALTERNATIVE). CONTROL DEVICES TO BE MAINTAINED IN A FULLY FUNCTIONAL STATE AT ALL TIMES.
- INLET CONTROL DEVICES (I.E. FILTER SACKS) MUST HAVE A MINIMUM 8" DROP FROM SURFACE OF THE CATCHBASIN.
- UNDER NO CIRCUMSTANCES ARE CATCHBASINS TO BE FITTED WITH GEOTEXTILE SHEATHS CUT FROM STOCKPILE ROLLS.
- AVOID EARTH DISTURBING ACTIVITIES DURING SUBSTANTIAL RAIN EVENTS.
- AVOID STOCKPILING SOILS, SANDS AND OTHER ERODIBLE MATERIALS ONSITE. IT IS PREFERABLE TO "HOT-LOAD" SOIL DIRECTLY INTO TRUCKS FOR OFFSITE DISPOSAL. IF TEMPORARY WASTE OR SOIL STOCKPILES ARE NECESSARY, MAKE SURE THEY ARE FULLY COVERED WITH TARPS AND WEIGHTED WITH SANDBAGS.
- TRACKING OF SEDIMENT, SOIL AND/OR ROADBASE FROM WORKSITE TO VEHICLE TRAVEL LANES MUST BE PREVENTED.
- ROADS MUST BE SWEEPED CLEAN OF SOIL, LOOSE ROAD BASE, EARTH AND SEDIMENT. MECHANICAL SWEEPING IS PREFERRED TO MANUAL SWEEPING. HOWEVER, FREQUENT HAND SWEEPING IS PREFERABLE TO ONCE DAILY MECHANICAL SWEEPING.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT NO SEDIMENT OR SEDIMENT LADEN WATER IS DISCHARGED FROM THE WORKS TO THE OWNER'S DRAINAGE SYSTEM.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO DEVELOP AND PROVIDE TO THE OWNER THE FOLLOWING ENVIRONMENTAL SUBMITTALS WITHIN 15 DAYS AFTER NOTICE OF AWARD:
 - SPILL RESPONSE PLAN THAT PROVIDES WRITTEN SAFE WORK PROCEDURES IN THE EVENT OF A SPILL
 - AN EMERGENCY SPILL KIT WILL BE KEPT ONSITE AT ALL TIMES THE CONTRACTOR IS OPERATING. SPILL KITS MUST INCLUDE BOOMS, SPILL PADS, GLOVES, AND CATCHBASIN BARRIERS. A SPILL KIT WITH AT LEAST 125 LITRES ABSORBENCY IS RECOMMENDED. SANDBAGS AND A SUPPLY OF SAND MUST BE KEPT ONSITE.
 - AN EROSION AND SEDIMENT CONTROL PLAN (ESC).
- THE CONTRACTOR IS TO HAVE ONSITE SODIUM THIOSULPHATE TO TREAT CHLORINATED WATER IN THE EVENT OF A WATER MAIN BREAK.

TRAFFIC MANAGEMENT, NOTIFICATION AND APPROVALS NOTES:

- THE CONTRACTOR SHALL PROVIDE CONSTRUCTION SIGNAGE, BARRIERS, FLASHING INDICATORS ACCORDING TO MOTI, BC TRAFFIC MANAGEMENT MANUAL FOR WORK ON ROADWAYS (LATEST EDITION) & WORKSAFE BC REGULATIONS AT ALL TIMES TO ENSURE THE SAFETY OF THE PUBLIC. TRAFFIC CONTROL WILL BE REQUIRED FOR ALL CONSTRUCTION WORKS WITHIN THE TRAVELED PORTION OF THE ROAD. NO ROAD SHALL BE CLOSED WITHOUT WRITTEN CONSENT FROM THE TOWNSHIP OF ESQUIMALT.
- THE CONTRACTOR SHALL ENSURE THAT ALL APPROVALS REQUIRED FOR THE PROPOSED WORKS HAVE BEEN OBTAINED FROM ALL AUTHORITIES AND AGENCIES PRIOR TO COMMENCING THE WORK.
- THE CONTRACTOR SHALL ARRANGE FOR, AND COORDINATE THE WORKS DONE BY:
 - OWNER; AND
 - FRANCHISE UTILITIES.
- THE CONTRACTOR SHALL MAKE CONTACT WITH THE APPROPRIATE PERSONNEL AT LEAST 72 HOURS PRIOR TO THE WORK. SCHEDULING AND OTHER CONSTRUCTION CONSTRAINTS IMPOSED BY THESE WORKS SHALL BE TAKEN INTO ACCOUNT.
- RESIDENTS DIRECTLY AFFECTED BY CONSTRUCTION OF THESE WORKS SHALL BE GIVEN MINIMUM 5 DAYS WRITTEN NOTICE OF THE PROPOSED START OF CONSTRUCTION. THE CONTRACTOR IS TO DISTRIBUTE A NOTICE OF CONSTRUCTION LETTER TO ALL AFFECTED RESIDENTS AND BUSINESSES. LETTER TO DIRECT INQUIRIES TO CONTRACT ADMINISTRATOR. FOLLOWING CONSTRUCTION ACTIVITY ON ANY PRIVATE PROPERTY, A WRITTEN RELEASE MAY BE REQUIRED FROM THE PROPERTY OWNER AT THE DISCRETION OF THE OWNER.
- ACCESS TO ALL PRIVATE PROPERTIES AND BUSINESSES MUST BE MAINTAINED FOR VEHICULAR AND PEDESTRIAN TRAFFIC. WHERE ACCESS IS AFFECTED, THE CONTRACTOR SHALL PROVIDE A MINIMUM 24 HOUR NOTICE TO ANY RESIDENT OR BUSINESS BEFORE STARTING WORK
- A TRAFFIC AND PEDESTRIAN SAFETY CONTROL PLAN SHALL BE SUBMITTED BY THE CONTRACTOR PRIOR TO THE PRECONSTRUCTION MEETING AND APPROVED PRIOR TO ISSUE OF NOTICE TO PROCEED.
- CONTRACTOR TO SUBMIT A TRAFFIC MANAGEMENT PLAN (TMP), WHICH ENSURES SINGLE LANE ALTERNATING TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. NO PROVISIONS FOR TRAFFIC DELAYS SHALL BE MADE OTHER THAN THOSE REQUIRED TO ALLOW TRAFFIC TO FLOW IN THE ALTERNATE DIRECTION.
- NOTICE OF CONSTRUCTION SIGNS TO BE INSTALLED AT ALL PROJECT LIMITS AND PREFERRED DETOUR ROUTE. NOTIFY CONTRACT ADMINISTRATOR WITH CONSTRUCTION SCHEDULE AND LOCATIONS. SIGNS PROVIDED AND INSTALLED BY CONTRACTOR.
- APPROVAL OF NOISE VARIANCE FOR ALL WORK OUTSIDE OF NORMAL APPROVED WORK HOURS REQUIRED BY THE OWNER.
- LAP JOINTS ARE TO BE INSTALLED AT ALL LIMITS OF CONSTRUCTION.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR COMPLETION OF ALL PERMANENT PAINT AND THERMOPLASTIC PAVEMENT MARKINGS IN THE PLACE OF THE WORK. PERMANENT LANE MARKINGS ARE TO BE PLACED WITHIN 72 HOURS OF FINAL PAVING AND PERMANENT THERMOPLASTIC PAVEMENT MARKINGS ARE TO BE PLACED WITHIN 5 DAYS OF FINAL PAVING.
- ALL TEMPORARY MARKINGS ARE TO BE REMOVED IMMEDIATELY FOLLOWING INSTALLATION OF THE PERMANENT MARKINGS.
- APPROVALS FOR REQUIRED TREE CUTTING OR TRIMMING NOT INDICATED IN CONTRACT DRAWINGS SHALL BE OBTAINED BY THE CONTRACTOR FROM THE OWNER PRIOR TO WORK BEING PERFORMED.

SIGNAGE AND PAVEMENT MARKING NOTES:

- ALL PAVEMENT MARKINGS AND SIGNS PER THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION UNLESS STATED OTHERWISE. ALL RAIL SIGNS PER TRANSPORT CANADA GRADE CROSSING STANDARDS (JANUARY, 2019), ALL REGULATORY AND SAFETY SIGNAGE PER TRANSPORTATION ASSOCIATION OF CANADA'S BIKEWAY TRAFFIC CONTROL GUIDELINES FOR CANADA, LATEST EDITION UNLESS STATED OTHERWISE. ALL PAVEMENT MARKINGS TO BE THERMOPLASTIC UNLESS OTHERWISE SPECIFIED.
- ALL SIGNS TO BE DIAMOND GRADE.
- ALL PAVEMENT MARKINGS ARE NOT TO SCALE.
- CONFLICT PAINT METHYL-METHACRYLATE (MMA):
 - ULTRA-VIOLET ("UV") STABLE;
 - ISO CERTIFIED DURABLE ROAD MARKING MATERIAL;
 - HAVE MINIMUM SKID RESISTANCE OF 49 BPN;
 - COLOUR MUST MATCH THE TOWNSHIP'S CURRENT GREEN TINT (PANTONE #368) WHICH CONFORMS TO THE NEW FHWA FLUORESCENT GREEN STANDARDS; AND
 - GLASS BEADS MUST CONFORM TO AASHTO M247 TYPE 1 (STANDARD GRADATION) SPECIFICATIONS.
- WHITE AND YELLOW PAVEMENT MARKINGS WITHIN MMA CONFLICT PAINT TO BE MMA.
- ALL BIKE STENCILS INCLUDING BIKE SYMBOLS, SHARROWS, DIRECTIONAL CHEVRONS, RESERVED SYMBOL DIAMONDS AND ARROWS, ETC. SHALL BE PERFORMED TORCH ON THERMOPLASTIC STENCILS THAT WILL REQUIRE SURFACE CLEANING/HEATING AND APPLICABLE SEALER APPLIED BEFORE APPLICATIONS. SEALER SHALL ONLY BE OMITTED WHEN NEW ASPHALT IS HIGHLIGHTED WITHIN OUR CIVIL SCOPE FOR THE STENCIL LOCATION.
- ALL SIGN/POST HARDWARE TO BE STAINLESS STEEL C/W 2 WASHERS PER BOLT AND A VINYL LOCKING NUT. NUTS SHALL BE REPLACED IF REMOVED.
- ALL NEW SIGN INSTALLATIONS IN BOULEVARD LOCATIONS SHALL INCLUDE A PROPER BASE AND SITE PREPARATION TO PREVENT MOVEMENT.
- ALL SIGN POSTS SHALL HAVE A SLEEVE INSTALLED C/W SUITABLE BOLT (TO PREVENT SIGN ROTATION) WITH SUFFICIENT THREADS TO ALLOW VINYL LOCKING NUT TO BE FULLY THREADED.

COORDINATION NOTES:

- CONTRACTOR SHALL COORDINATE WORKS WITH: (A) CITY OF VICTORIA ENGINEERING AND OPERATIONS FOR ALL WATER-RELATED ACTIVITIES, INCLUDING VALVE OPERATIONS, TIE-INS, PRESSURE TESTING, DISINFECTION, SAMPLING, AND TURNOVER; (B) TOWNSHIP OF ESQUIMALT ENGINEERING AND PUBLIC WORKS FOR ROW OCCUPANCY, TRAFFIC MANAGEMENT, SURFACE RESTORATION, AND BYLAW COMPLIANCE; (C) THE BROADER ESQUIMALT PROJECT CONTRACT ADMINISTRATOR FOR SEQUENCING AND INTERFACE; (D) FRANCHISE UTILITIES (BC HYDRO, FORTISBC, TELUS, ROGERS, SHAW) FOR LOCATES AND CONFLICTS.

WATERWORKS NOTES:

- PRIOR TO ORDERING TIE-IN MATERIALS, CONTRACTOR SHALL OBTAIN UTILITY LOCATES AND POTHOLE ALL TIE-IN LOCATIONS, UTILITY CROSSINGS, AND ANY ANTICIPATED CONFLICT POINTS TO CONFIRM HORIZONTAL POSITION, ELEVATION, PIPE SIZE, AND PIPE MATERIAL OF EXISTING UTILITIES. POTHOLING RESULTS TO BE SUBMITTED TO THE CONTRACT ADMINISTRATOR A MINIMUM OF TWO (2) WEEKS PRIOR TO ORDERING FITTINGS. DISCREPANCIES BETWEEN FIELD CONDITIONS AND CONTRACT DRAWINGS SHALL BE REPORTED IMMEDIATELY FOR DIRECTION. NO CLAIMS FOR FITTINGS ORDERED PRIOR TO POTHOLE CONFIRMATION WILL BE CONSIDERED.
- NEW MAINLINE PIPE (200 MM AND 250 MM) SHALL BE PVC PRESSURE PIPE CONFORMING TO AWWA C900, DR18, PRESSURE CLASS 235 PSI (1620 KPA)
- PROPOSED WATER MAIN IS TO HAVE A MINIMUM 1.0m COVER UNLESS SHOWN OTHERWISE ON CONTRACT DRAWINGS.
- RESTRAIN ALL PIPES AND FITTINGS.
- A MINIMUM OF 3m HORIZONTAL CLEAR SEPARATION AND 450mm CLEAR VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER MAINS AND ALL SANITARY SEWER/SERVICES AND DRAIN SEWER/SERVICES EXCEPT WHERE NOTED. SANITARY SEWER MAINS SHALL NOT CROSS OVER WATER MAINS. FOR A SANITARY FORCE MAIN, WHERE THE ABOVE-NOTED SEPARATIONS CANNOT BE ACHIEVED, A MINIMUM OF 1.5m HORIZONTAL CLEAR SEPARATION AND 150mm CLEAR VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER SERVICES AND ALL SANITARY SEWER AND STORM DRAIN SERVICES. WHERE A SANITARY SEWER OR STORM DRAIN SERVICE IS LOWER THAN A WATER SERVICE BY MORE THAN 450mm IN ELEVATION, THE HORIZONTAL OFFSET MAY BE REDUCED TO NO LESS THAN 1.5m EXCEPT WHERE NOTED.
- FOR CROSSING OF EXISTING SEWERS, WHERE THE WATER MAIN DOES NOT HAVE THE REQUIRED 450mm VERTICAL SEPARATION, WRAP THE WATER JOINTS WITH PETROLATUM TAPE 3.0m EITHER SIDE OF THE CROSSING MAIN. ENSURE CENTRE OF WATER MAIN PIPE LENGTH IS AT SEWER MAIN CROSSING. WHERE A VERTICAL SEPARATION OF 150mm CANNOT BE ACHIEVED, SPECIAL MITIGATIVE MEASURES SHALL BE APPROVED BY THE ENGINEER.
- A MINIMUM OF 1.5m HORIZONTAL CENTRE TO CENTRE AND 150mm CLEAR VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER MAINS AND WATER SERVICES BETWEEN ELECTRICAL CONDUITS, GAS MAINS AND TELEPHONE CONDUITS EXCEPT WHERE NOTED.
- CONDUCT PRESSURE TESTS IN ACCORDANCE WITH MMCD SPECIFICATIONS.
- FLUSH AND DISINFECT WATER MAINS AND ALL FITTINGS IN ACCORDANCE WITH MMCD SPECIFICATIONS. WATER SAMPLES FOR HEALTH TESTS TO BE COLLECTED AND PROCESSED BY CITY PERSONNEL.
- CHLORINE SOLUTIONS SHALL BE NEUTRALIZED IN ACCORDANCE WITH MINISTRY OF ENVIRONMENT AND DEPARTMENT OF FISHERIES AND OCEANS STANDARDS PRIOR TO DISCHARGE TO STORM DRAIN.
- ALL AFFECTED RESIDENCES, TOWNSHIP OF ESQUIMALT AND CITY OF VICTORIA TO BE NOTIFIED IN WRITING ONE WEEK BEFORE AND THEN AGAIN A MINIMUM OF TWO BUSINESS DAYS PRIOR TO ANY SCHEDULED ACCESS OR SERVICE DISRUPTIONS. FOR WATER SERVICE DISRUPTIONS, MAXIMUM SHUTDOWN TO BE 4 HOURS. CONTRACTOR TO CONSULT BUSINESSES THAT REQUIRE WATER TO OPERATE FOR AN APPROPRIATE SHUT DOWN TIME. TIE-INS AND SHUT DOWN TIMES MAY BE REQUIRED AT NIGHT.
- ANY UNSCHEDULED UTILITY SERVICE DISRUPTIONS TO BE RECTIFIED IN A TIMELY MANNER. CONTRACTOR TO KEEP STANDARD REPAIR COMPONENTS ON SITE AT ALL TIMES. CONTRACTOR TO NOTIFY CITY REPRESENTATIVE IMMEDIATELY OF ANY UNSCHEDULED UTILITY SERVICE DISRUPTIONS.
- REINSTATE ALL EXISTING WATER SERVICES AS PER CITY OF VICTORIA MMCD SUPPLEMENTAL DRAWINGS. ONLY AFTER NEW WATER MAIN HAS BEEN APPROVED FOR USE, REMOVE ALL REDUNDANT CASTINGS, SERVICES ONCE TURNOVER IS COMPLETE.
- SET ALL CASTINGS, COVERS AND VALVE BOXES IN ROADWAY TO FINAL ROAD GRADE.
- CITY OF VICTORIA TO OPERATE ALL EXISTING SYSTEM VALVES. CITY OF VICTORIA VALVES OPEN CLOCKWISE
- 14 GAUGE SINGLE STRAND COPPER TRACER WIRE IS TO BE ATTACHED TO ALL NON-METALLIC MAINS. WHERE PEX PIPING IS USED FOR SERVICES, THE TRACER WIRE IS TO BE SPLICED AT MAIN AND ATTACHED TO THE FULL LENGTH OF NON-METALLIC SERVICE PIPING. WHEN TYING INTO AN EXISTING COPPER SERVICE, THE TRACER WIRE IS ALSO CONNECTED TO THE COPPER PORTION OF THE SERVICE FOR CONNECTIVITY.
- ALL EXISTING FIRE HYDRANTS TO BE REMOVED CAREFULLY AND TAKEN TO CITY OF VICTORIA PUBLIC WORKS YARD.
- CONTRACTOR TO PROVIDE TIE-IN PLAN FOR APPROVAL ONE WEEK PRIOR TO TIE-IN. CITY STAFF TO WITNESS TIE-INS.
- WATER SYSTEM VALVES TO HAVE 32mm (1 1/4") OPERATING NUT.
- WHERE WATERMAIN FITTINGS ARE NOTED AS "MJ", PUSH-ON OR MJ ARE ACCEPTABLE FOR FITTINGS 200mm DIAMETER AND SMALLER.
- FITTINGS ON THE DRAWINGS CAN BE SUBSTITUTED TO ALLOW FxMJ WHERE MxMJ IS NOTED; MxMJxF TEES WHERE MxMxMJ IS NOTED, AND MxXF CROSSES

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REV NO	REVISIONS	DATE	DRAWN	APPRD
0	IFT	26/05/22	EH	BJO
1				
2				
3				
4				



GENERAL NOTES



1051 Vancouver St, Victoria, BC V8V 3K3
T: (250)981-3030 F: (250)981-3755

SCALE		IFT DESIGN NO.		DWG. NO.
DRAWN BY	ECH	CREATION DATE	2026/05/11	01 OF 04
CHECKED BY	BJO	DESIGN BY	ECH	
		APPROVED BY	BJO	
				REV. 0

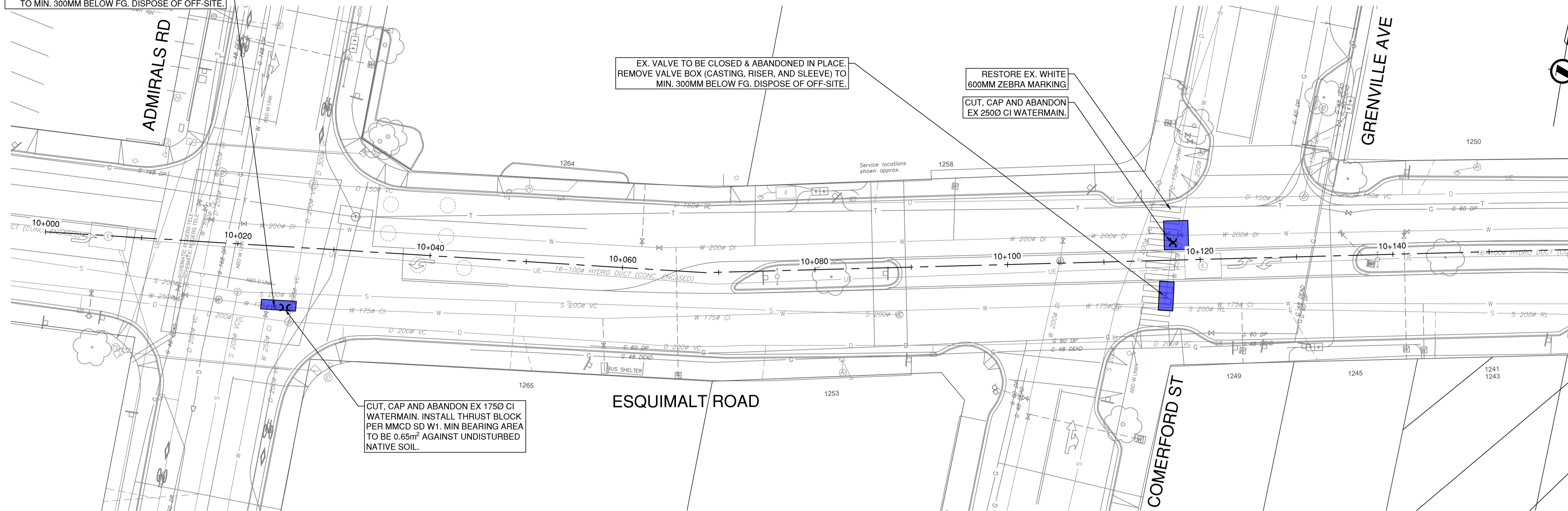
34603

EX. 1750 GV TO BE CLOSED & ABANDONED IN PLACE. REMOVE VALVE BOX (CASTING, RISER, AND SLEEVE) TO MIN. 300MM BELOW FG. DISPOSE OF OFF-SITE.

EX. VALVE TO BE CLOSED & ABANDONED IN PLACE. REMOVE VALVE BOX (CASTING, RISER, AND SLEEVE) TO MIN. 300MM BELOW FG. DISPOSE OF OFF-SITE.

RESTORE EX. WHITE 600MM ZEBRA MARKING
CUT, CAP AND ABANDON EX 2500 CI WATERMAIN

CUT, CAP AND ABANDON EX 1750 CI WATERMAIN. INSTALL THRUST BLOCK PER MMCD SD W1. MIN BEARING AREA TO BE 0.65m² AGAINST UNDISTURBED NATIVE SOIL.



PLAN
SCALE: 1:250

CONSTRUCTION NOTES:

1. LOCATE AND POTHOLE ALL TIE-INS AND CRITICAL CROSSINGS MIN. 2 WEEKS PRIOR TO CONSTRUCTION AND PRIOR TO ORDERING FITTINGS. SUBMIT RESULTS TO CONTRACT ADMINISTRATOR. NO CLAIMS FOR FITTINGS ORDERED PRIOR TO POTHOLING.
2. SUBMIT TIE-IN PLAN TO CONTRACT ADMINISTRATOR 1 WEEK PRIOR TO TIE-IN. CITY OF VICTORIA OPERATIONS PRESENCE REQUIRED. PROVIDE 72 HRS NOTICE.
3. RESTORE ALL DISTURBED PAVEMENT MARKINGS TO PRE-CONSTRUCTION CONDITION OR BETTER. INSTALL TEMPORARY MARKINGS WITHIN 24 HRS; PERMANENT MARKINGS WITHIN 5 BUSINESS DAYS OF FINAL PAVING.
4. SIDEWALK AND CURB RESTORATION TO BE MIN. 1 FULL PANEL. SAW CUT AT NEAREST CONTROL JOINT. PARTIAL PANELS NOT PERMITTED.
5. RESTORE ALL DISTURBED LANDSCAPING WITHIN THE ROW TO PRE-CONSTRUCTION CONDITION OR BETTER PER TOE STANDARDS.

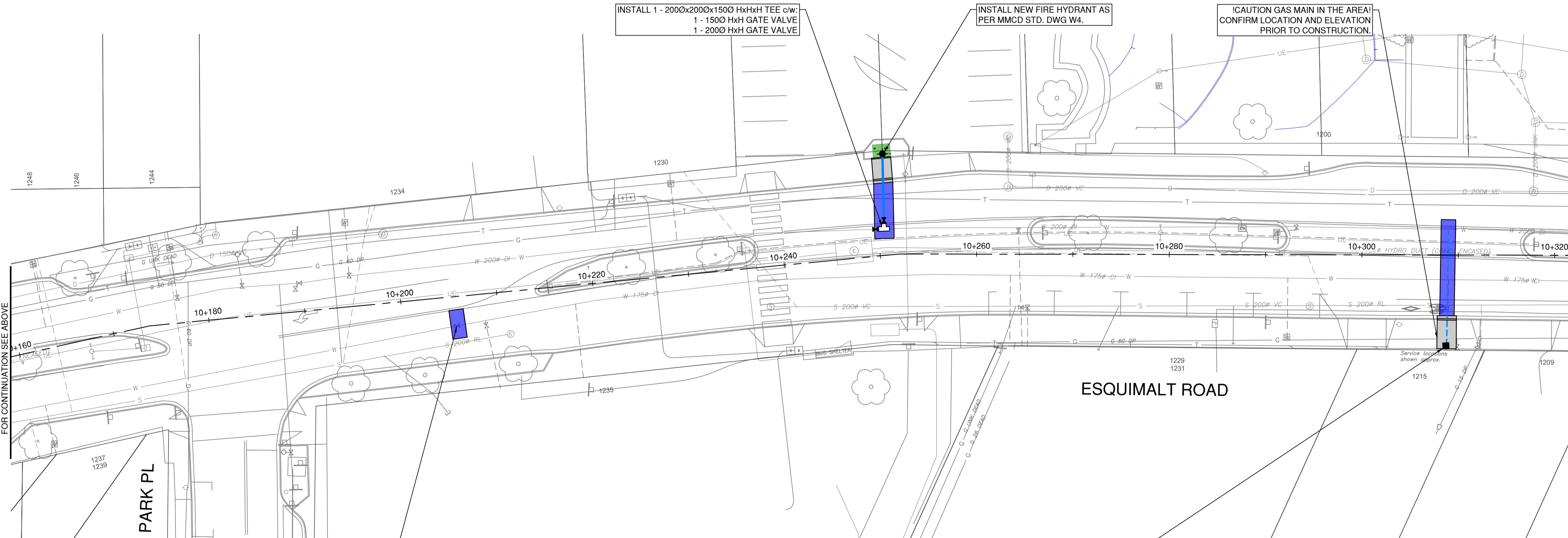
INSTALL 1 - 2000x2000x1500 HxHxH TEE c/w:
1 - 1500 HxH GATE VALVE
1 - 2000 HxH GATE VALVE

INSTALL NEW FIRE HYDRANT AS PER MMCD STD. DWG W4.

CAUTION GAS MAIN IN THE AREA! CONFIRM LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.





EX. VALVE TO BE CLOSED & ABANDONED IN PLACE. REMOVE VALVE BOX (CASTING, RISER, AND SLEEVE) TO MIN. 300MM BELOW FG. DISPOSE OF OFF-SITE.

INSTALL NEW 25 mm WATER SERVICE AS PER COV SD W2a C/W NEW METER AND METER BOX AS PER COV SD W2c



PLAN
SCALE: 1:250

CIVIL LEGEND

-  CONCRETE INSTALLATION REFER TO TOE-SD-C2.1-C9.4 FOR DETAILS
-  FULL DEPTH RESTORATION - 100mm OF ASPHALT (TWO LIFTS) ON TOP OF 100mm OF GRANULAR BASE AND 250mm OF GRANULAR SUB BASE
-  150mm THICK CONCRETE DRIVEWAY CROSSING
-  150mm THICK TOP SOIL AND SEED

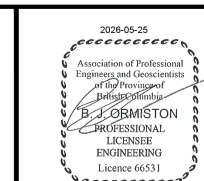


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REV NO.	REVISION DESCRIPTION	DATE	DRAWN	APPRD
0	IFT	26/05/22	ECH	BJO
1				
2				
3				
4				



WATERWORKS
STA 10+000 TO 10+320

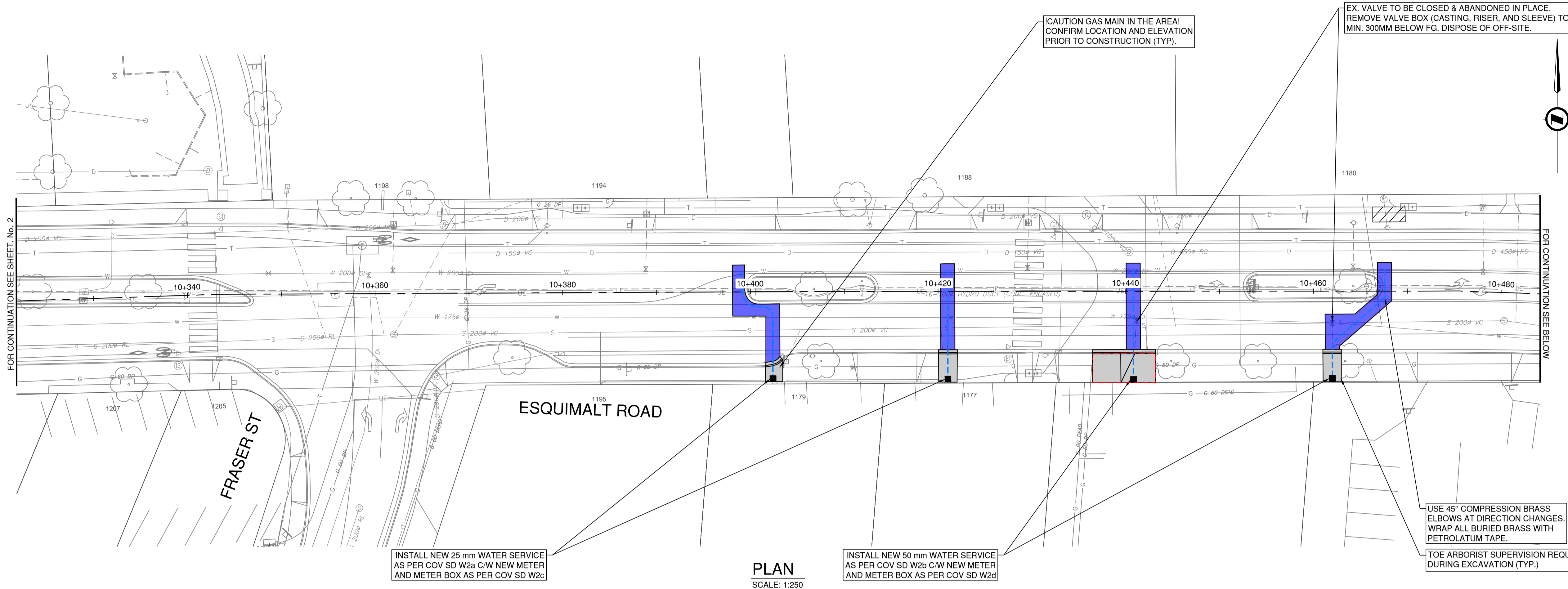


1051 Vancouver St, Victoria, BC V8V 3K3
T: (250) 561-3230 F: (604) 929-5756

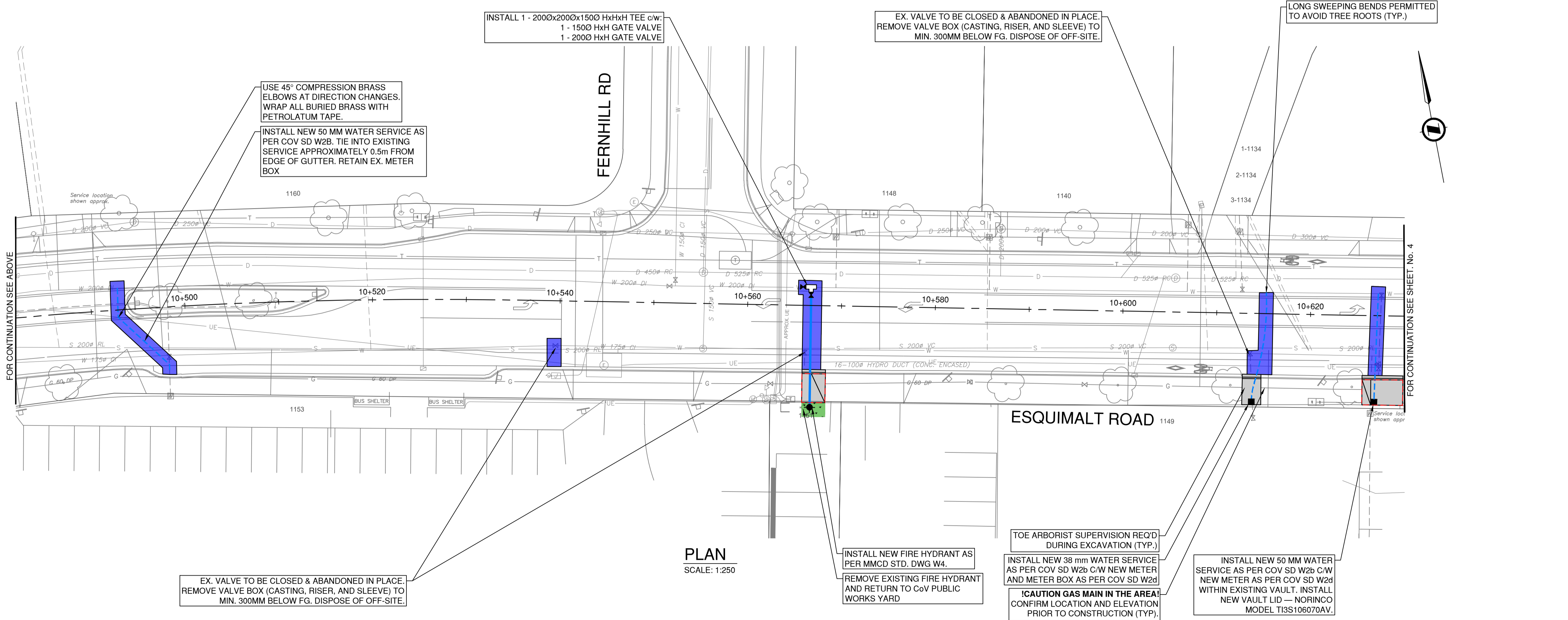
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DRAWN BY	ECH	DESIGN BY	ECH		
CHECKED BY	BJO	APPROVED BY	BJO		
PLOT DATE	May 22, 2026			REV.	0

CONSTRUCTION NOTES:

1. LOCATE AND POTHOLE ALL TIE-INS AND CRITICAL CROSSINGS MIN. 2 WEEKS PRIOR TO CONSTRUCTION AND PRIOR TO ORDERING FITTINGS. SUBMIT RESULTS TO CONTRACT ADMINISTRATOR. NO CLAIMS FOR FITTINGS ORDERED PRIOR TO POTHOLING.
2. SUBMIT TIE-IN PLAN TO CONTRACT ADMINISTRATOR 1 WEEK PRIOR TO TIE-IN. CITY OF VICTORIA OPERATIONS PRESENCE REQUIRED. PROVIDE 72 HRS NOTICE.
3. RESTORE ALL DISTURBED PAVEMENT MARKINGS TO PRE-CONSTRUCTION CONDITION OR BETTER. INSTALL TEMPORARY MARKINGS WITHIN 24 HRS; PERMANENT MARKINGS WITHIN 5 BUSINESS DAYS OF FINAL PAVING.
4. SIDEWALK AND CURB RESTORATION TO BE MIN. 1 FULL PANEL. SAW CUT AT NEAREST CONTROL JOINT. PARTIAL PANELS NOT PERMITTED.
5. RESTORE ALL DISTURBED LANDSCAPING WITHIN THE ROW TO PRE-CONSTRUCTION CONDITION OR BETTER PER TOE STANDARDS.



PLAN
SCALE: 1:250



PLAN
SCALE: 1:250

CIVIL LEGEND

	CONCRETE INSTALLATION REFER TO TOE-SD-C2.1-C9.4 FOR DETAILS
	FULL DEPTH RESTORATION - 100mm OF ASPHALT (TWO LIFTS) ON TOP OF 100mm OF GRANULAR BASE AND 250mm OF GRANULAR SUB BASE
	150mm THICK CONCRETE DRIVEWAY CROSSING
	150mm THICK TOP SOIL AND SEED

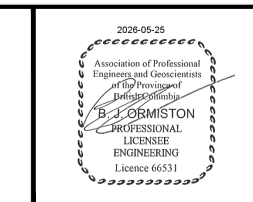


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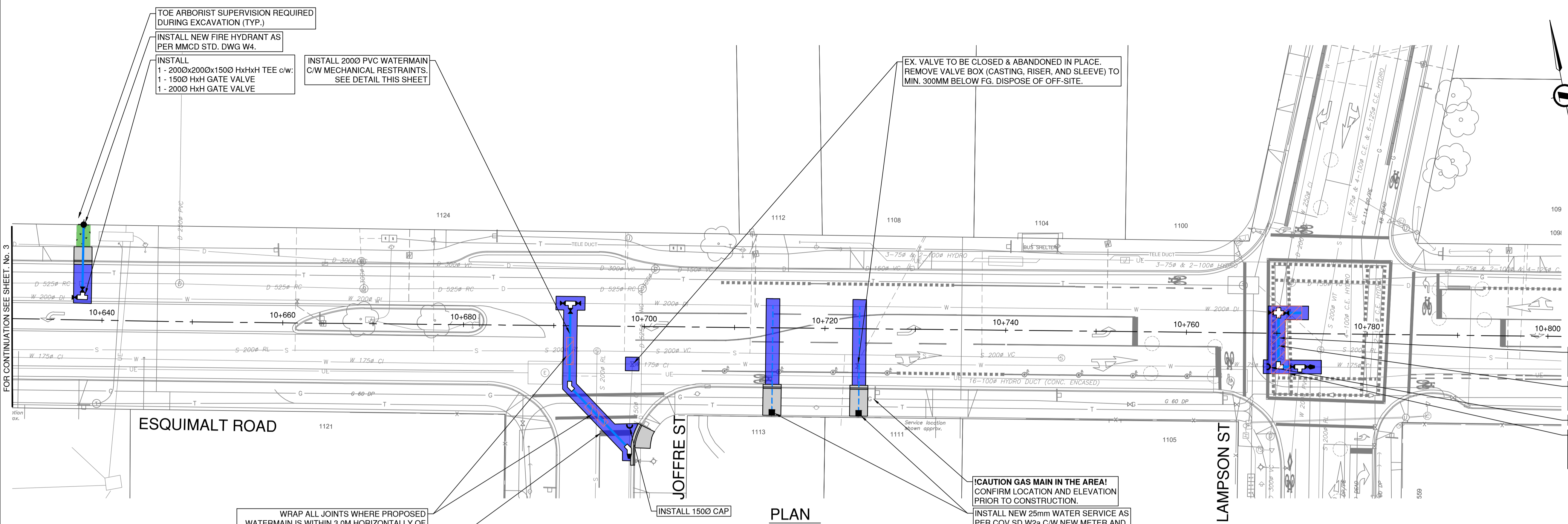
WATERWORKS
STA 10+320 TO 10+630



IFT DESIGN NO. 34603	
SCALE: 1:250	CREATION DATE: 2026/05/11
DRAWN BY: ECH	DESIGN BY: ECH
CHECKED BY: BJO	APPROVED BY: BJO
PLOT DATE: May 22, 2026	
DWG. NO. 03	REV. 0

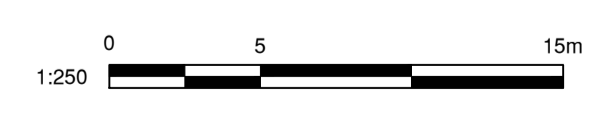
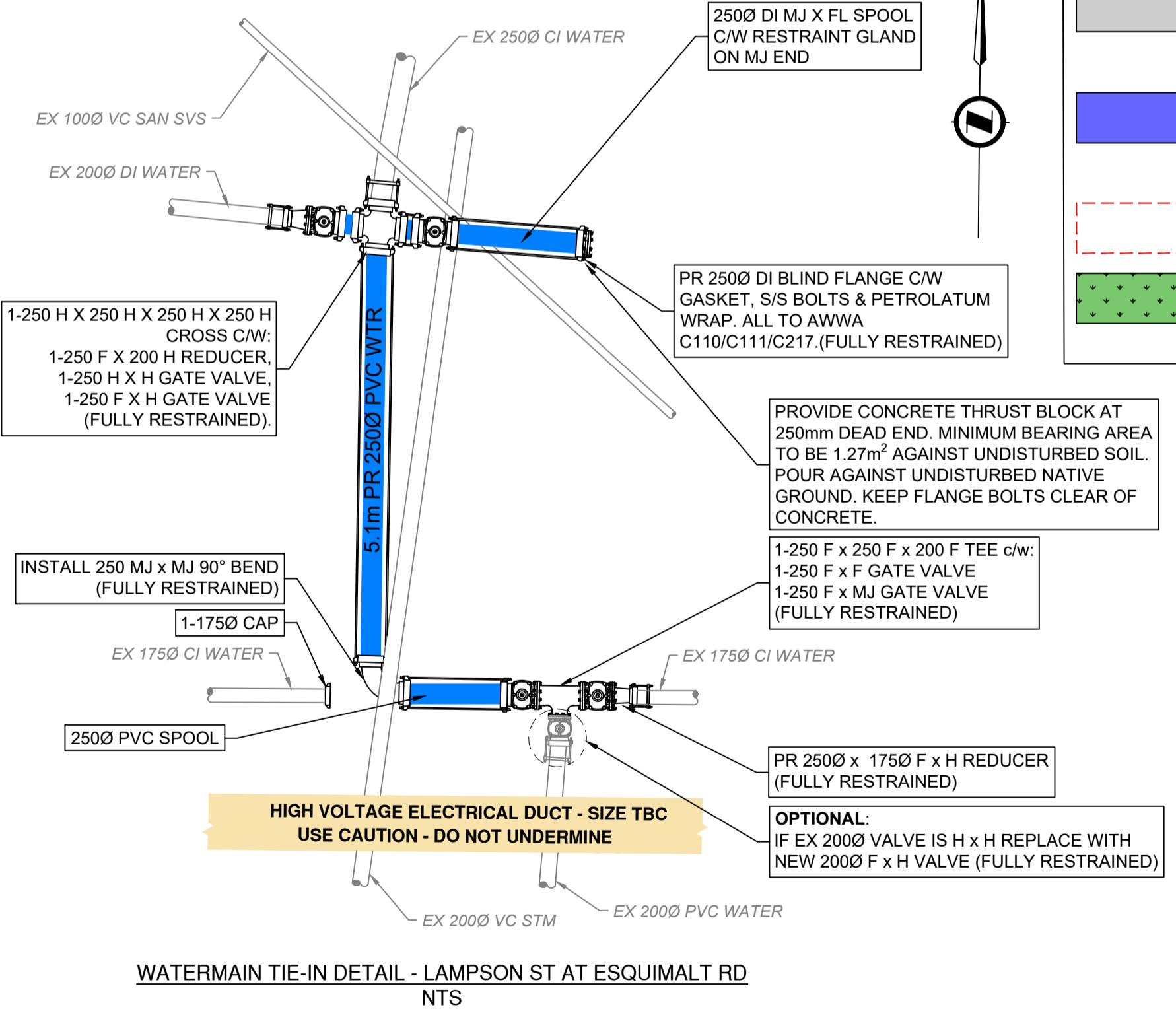
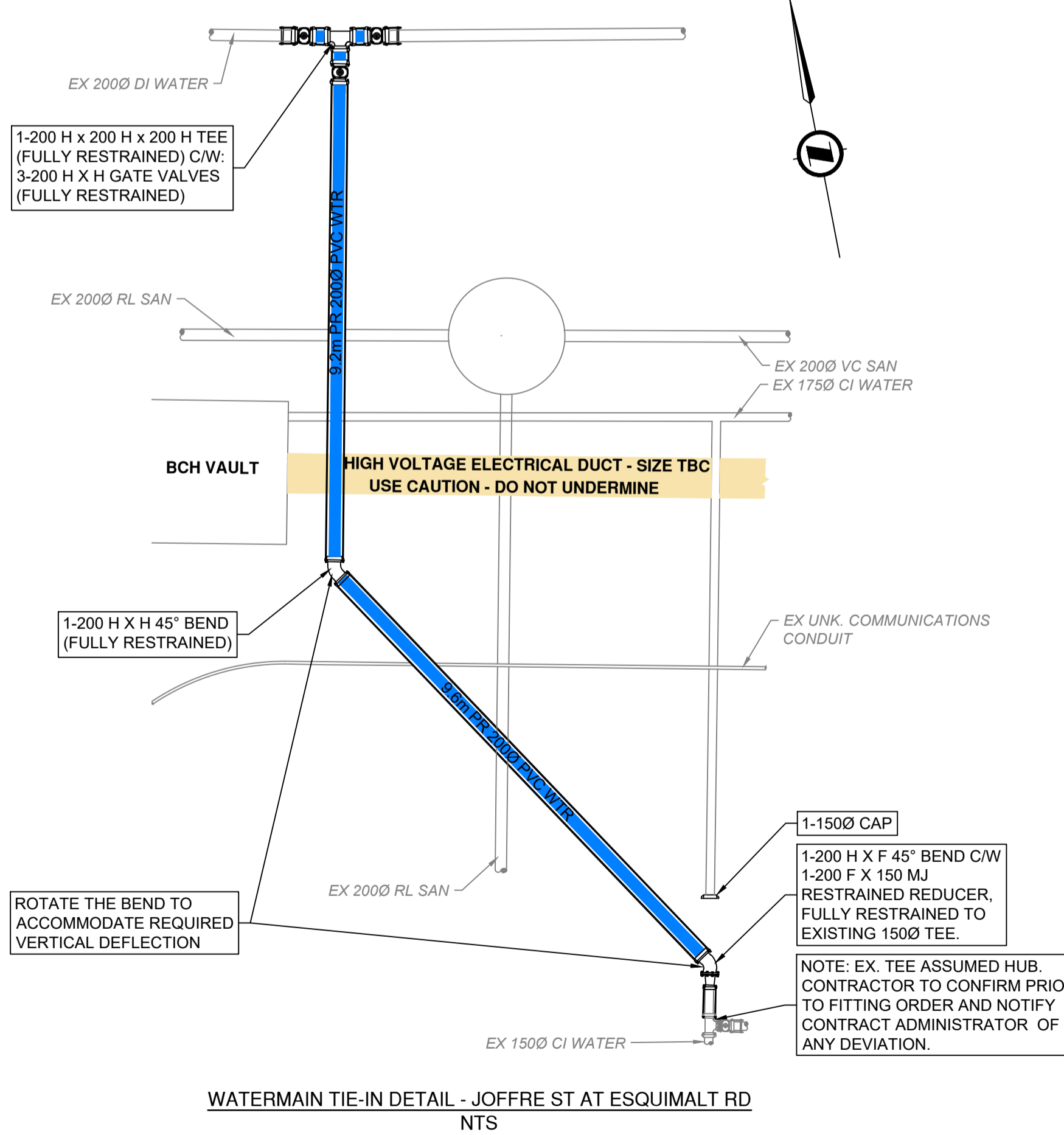
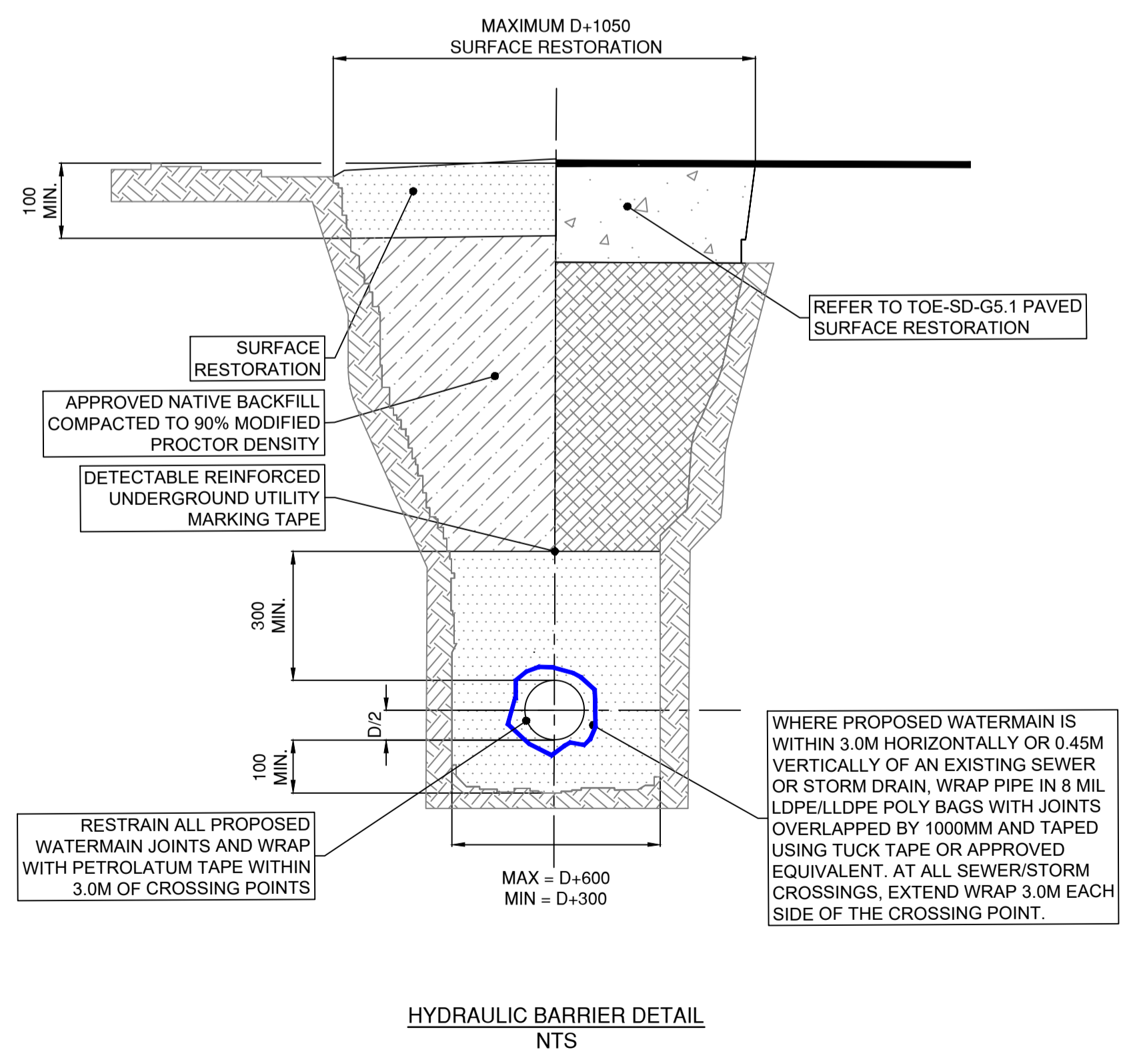
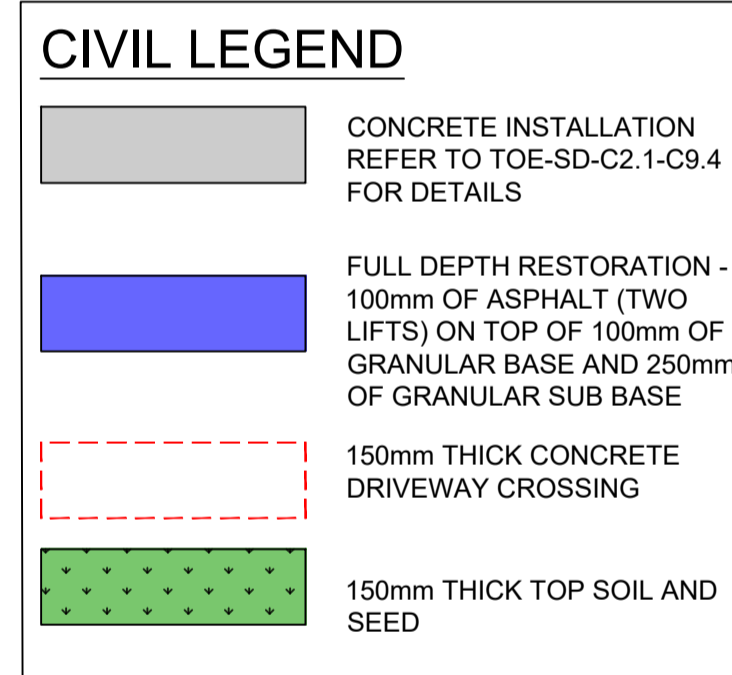
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WATERMAIN JOINT RESTRAINT TABLE (IN METERS)

PIPE DIAMETER	BENDS				TEE (BRANCH SIZE)			REDUCER		DEAD END
	11.25°	22.5°	45°	90°	150Ø	200Ø	250Ø	100Ø	150Ø	
150Ø	1,000	2,000	3,500	8,500	4,000	-	-	13,000	-	24,500
200Ø	1,500	2,500	4,500	10,500	3,000	4,000	-	23,500	13,500	32,000
250Ø	1,500	3,000	5,500	12,500	2,000	3,000	4,500	-	24,000	38,500

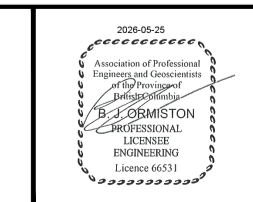


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WATERMAIN
STA 10+630 TO 10+800



IFT DESIGN NO. **34603**

SCALE	1:250	CREATION DATE	2026/05/11	DWG. NO.
DRAWN BY	ECH	DESIGN BY	ECH	04 OF 04
CHECKED BY	BJO	APPROVED BY	BJO	04
PLOT DATE	May 22, 2026			REV. 0