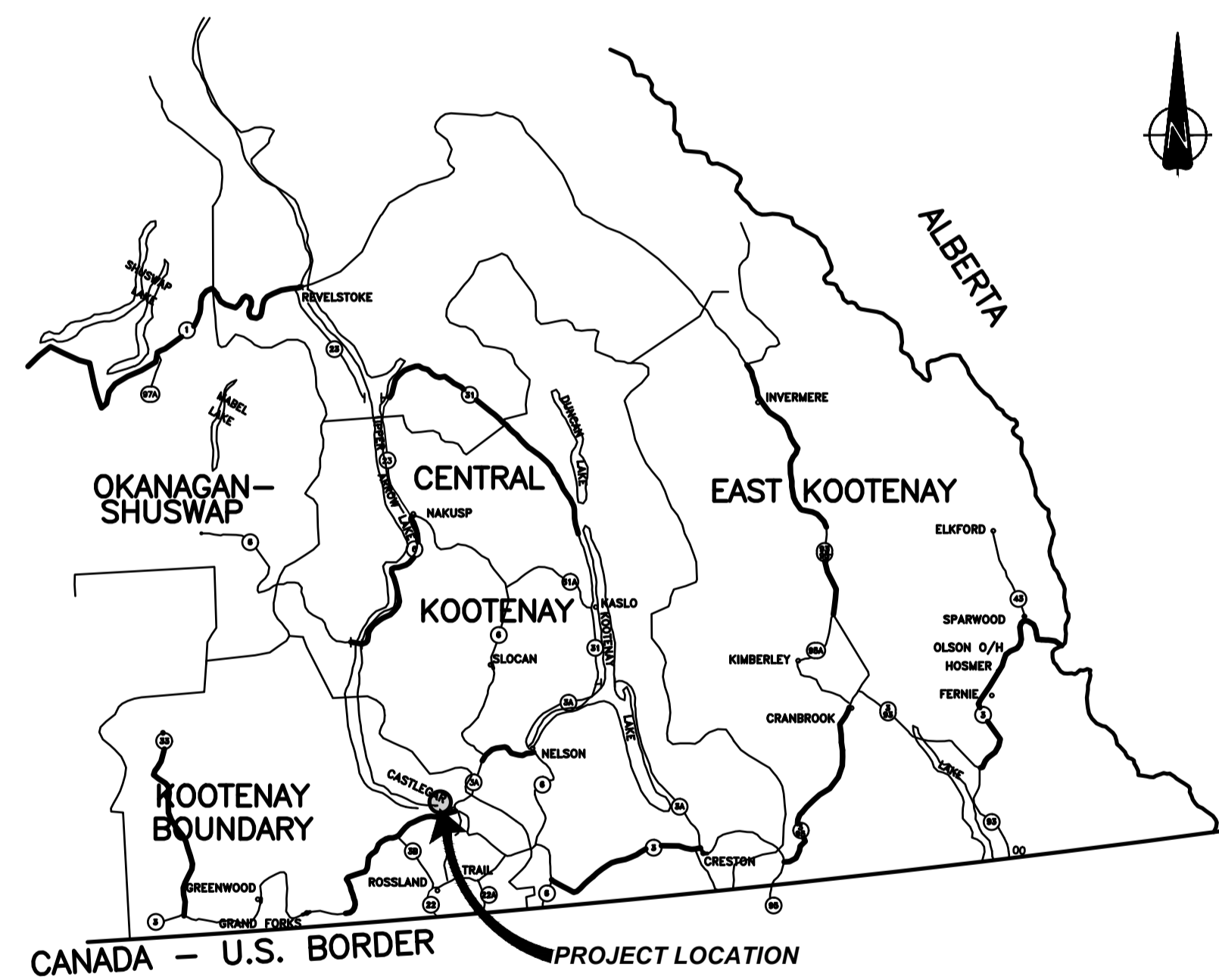
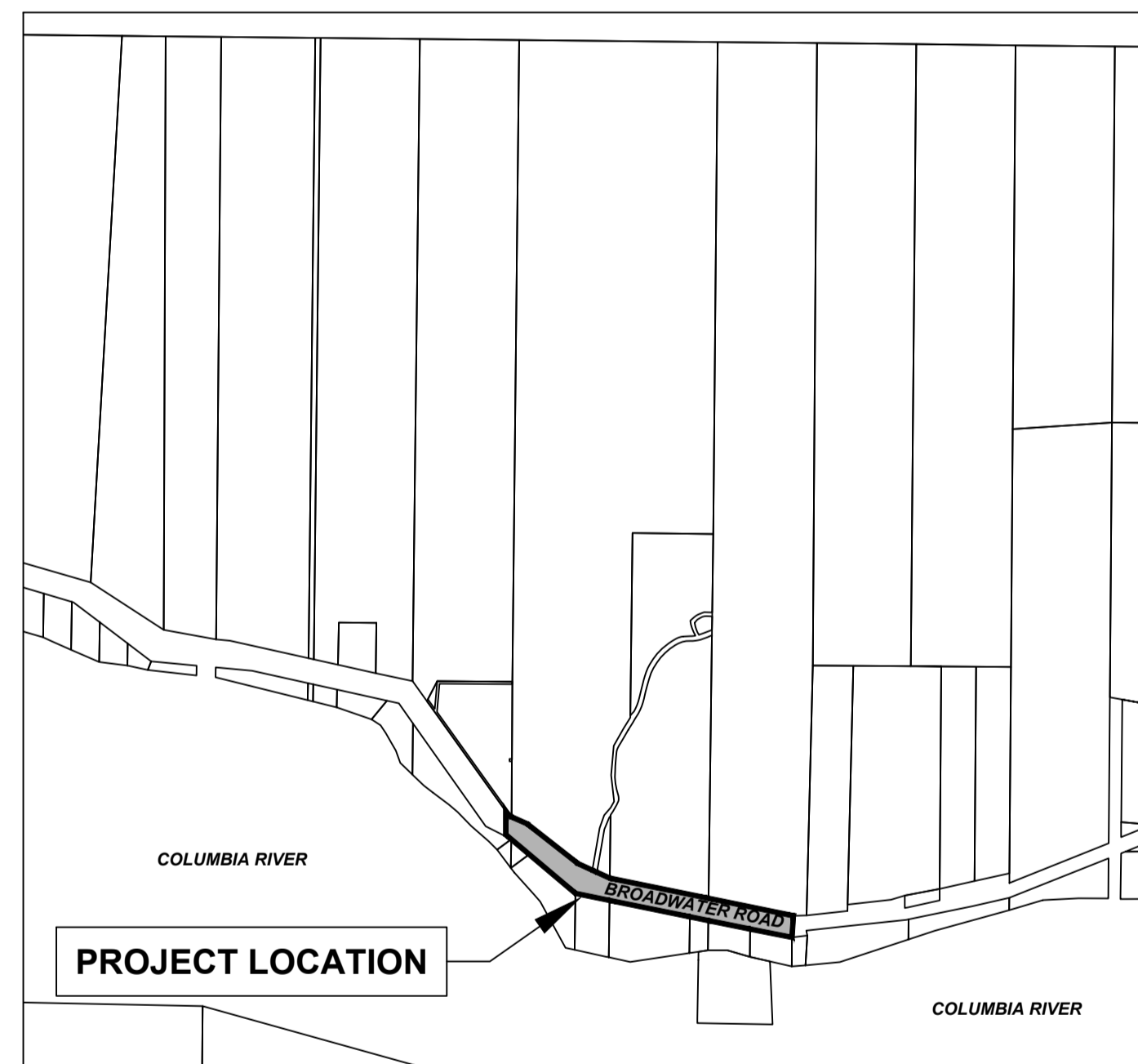


REGIONAL DISTRICT CENTRAL KOOTENAY BROADWATER ROAD - WATER SYSTEM UPGRADE



LOCATION MAP
NTS



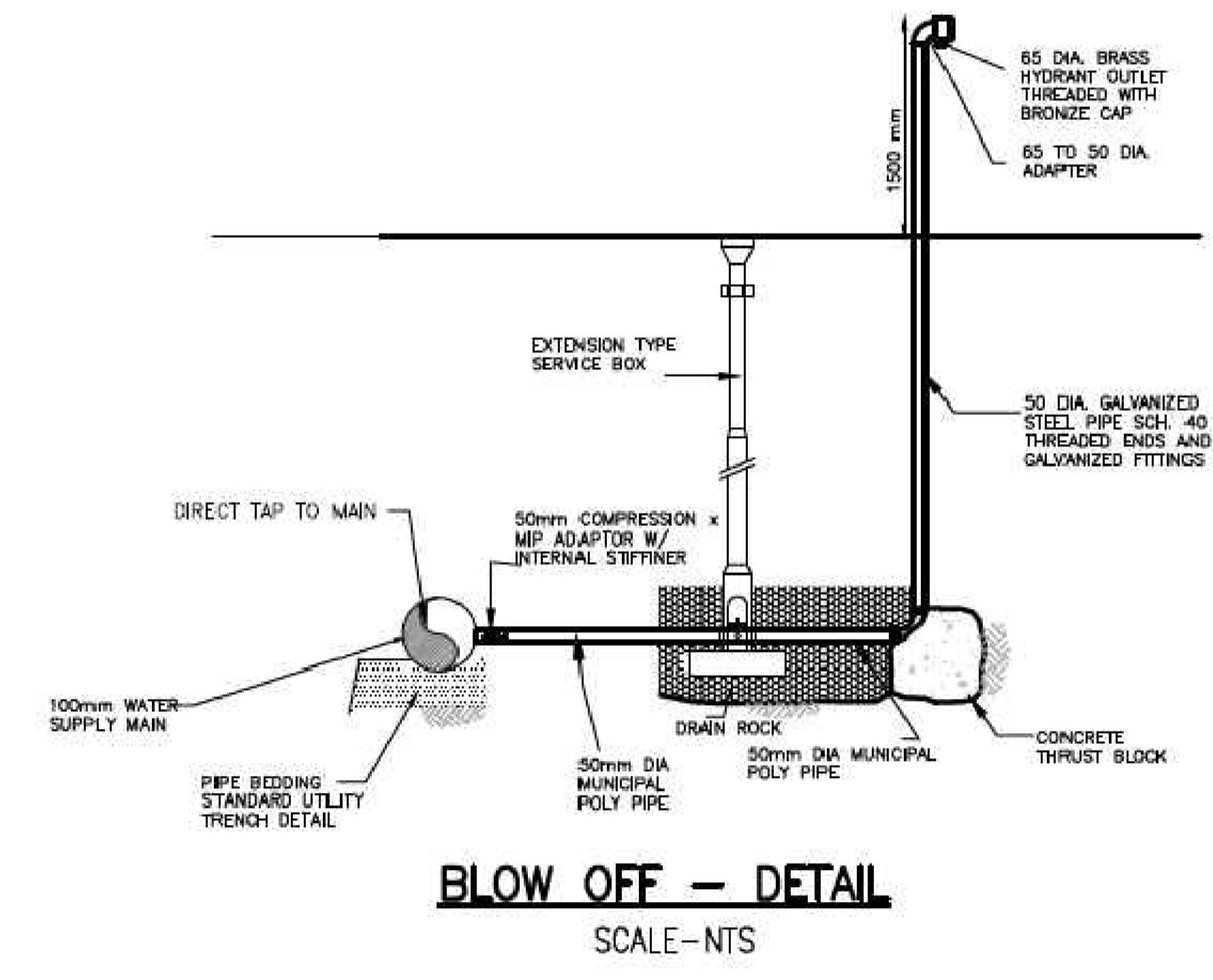
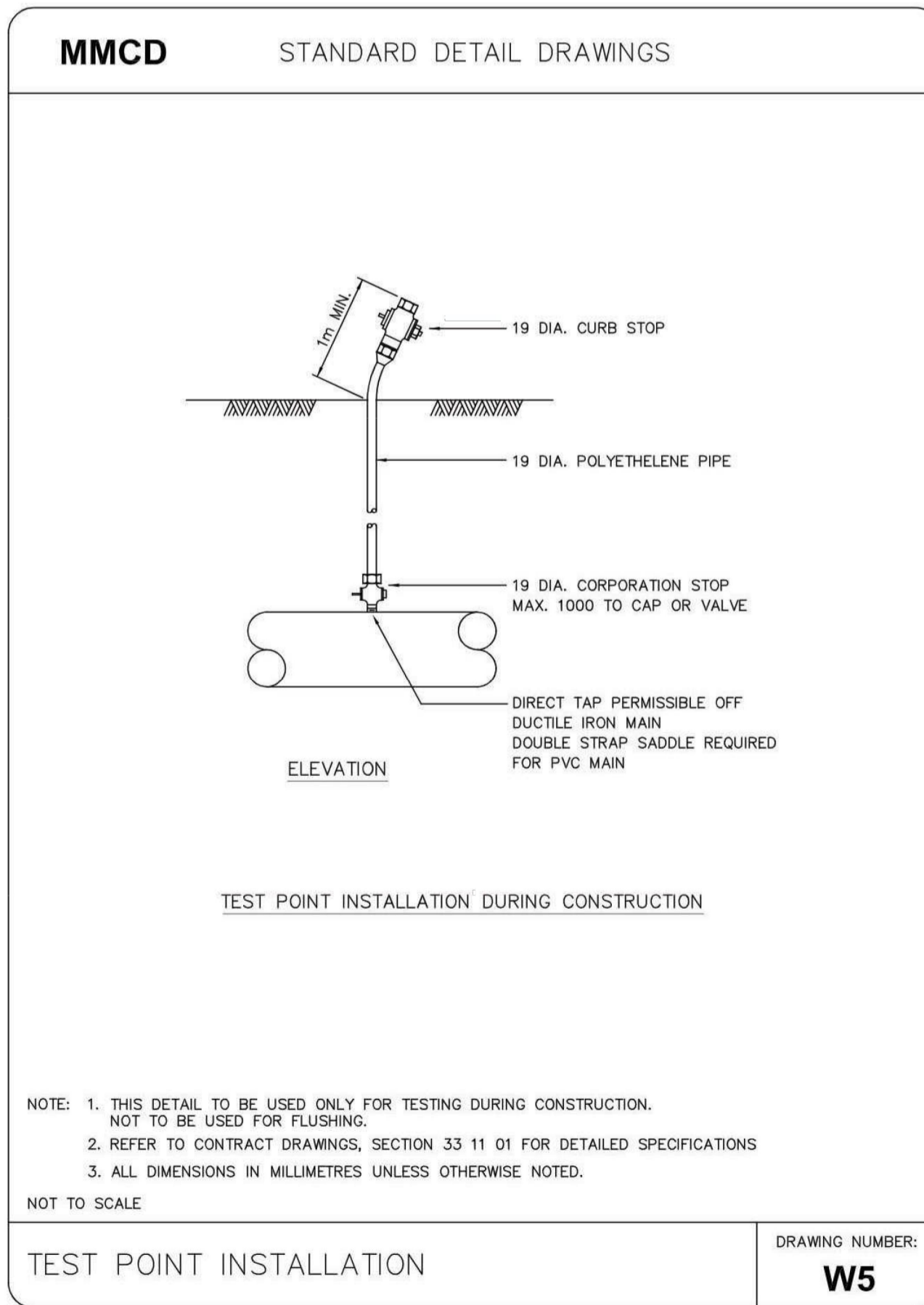
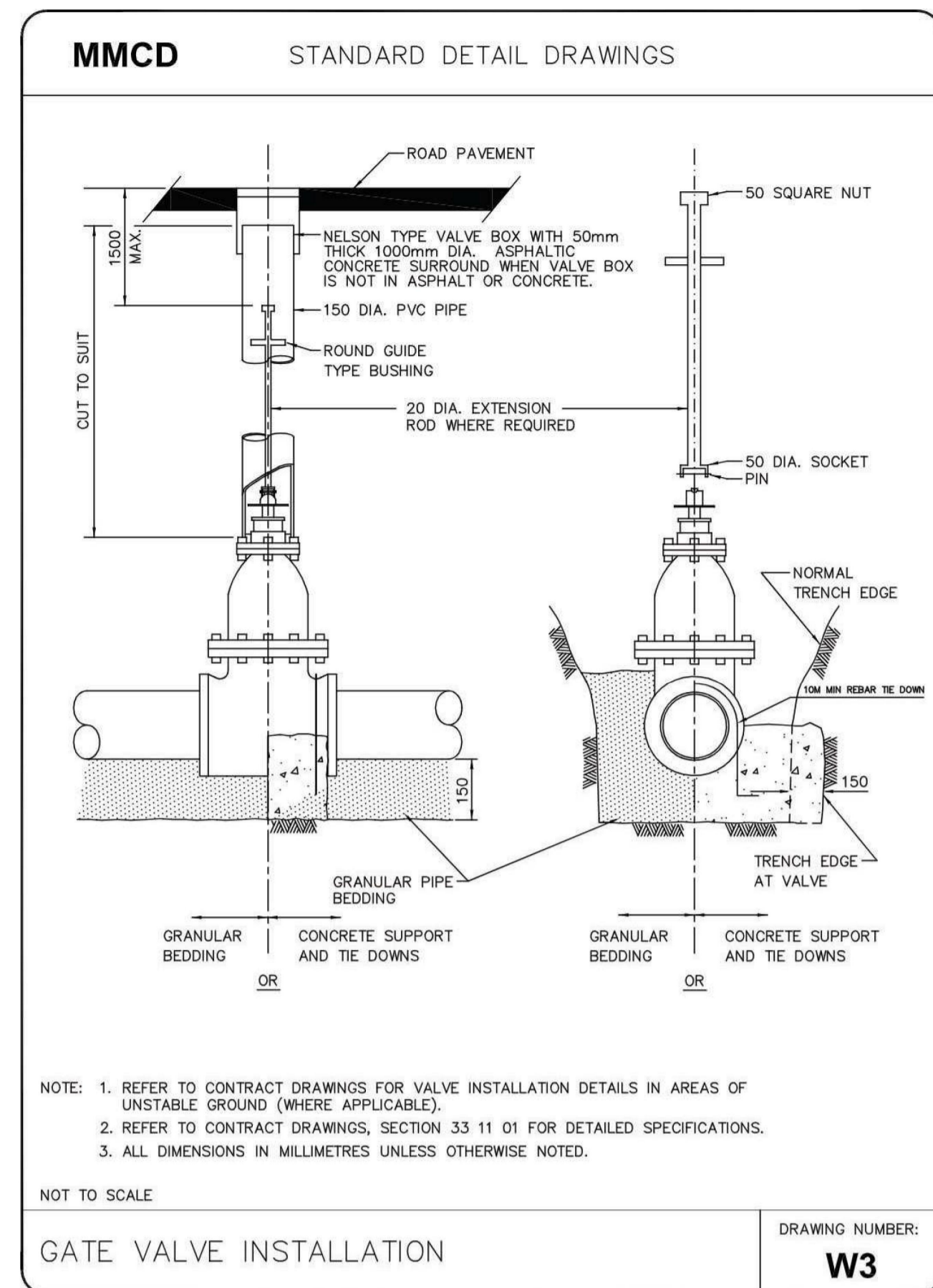
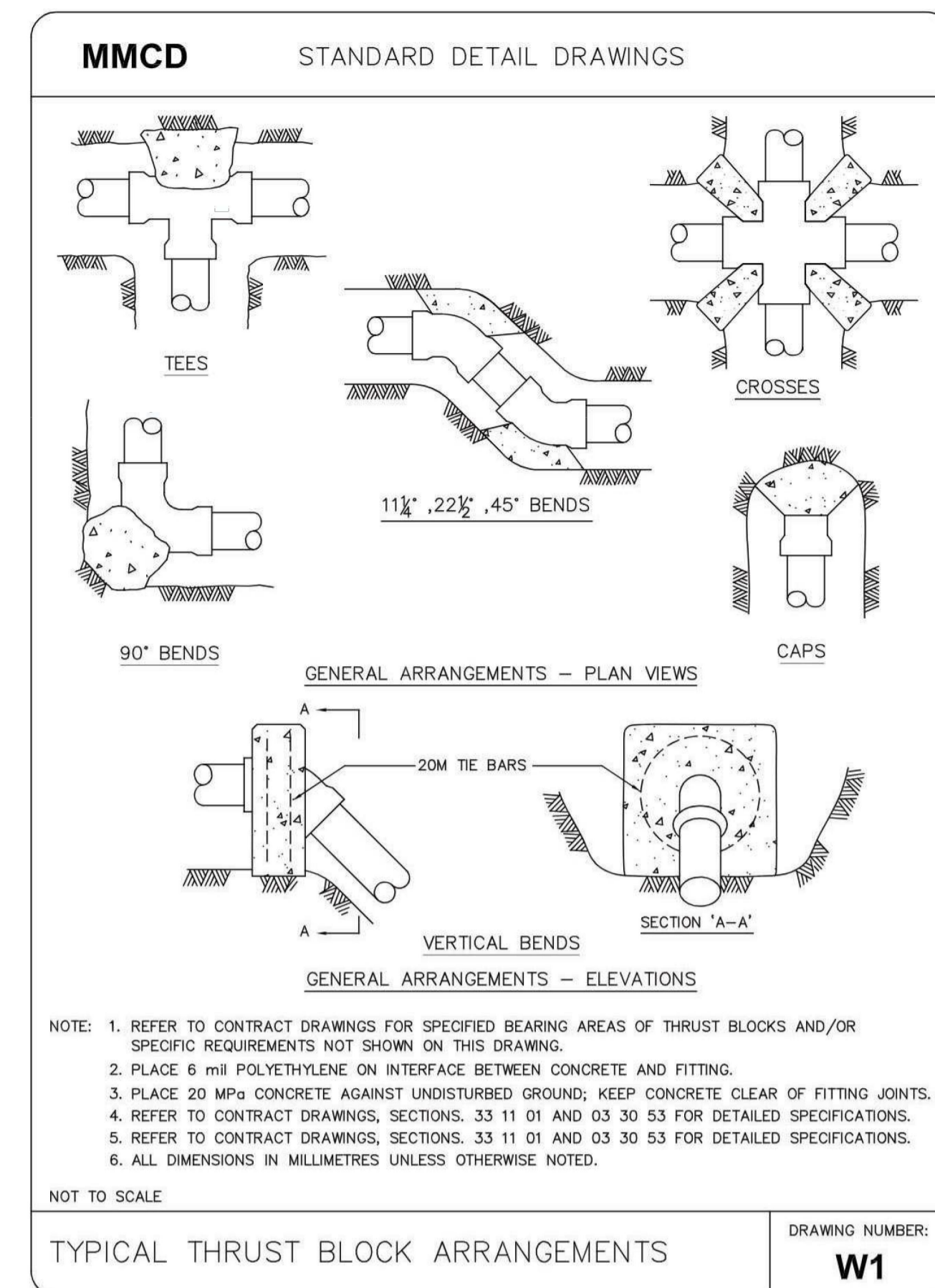
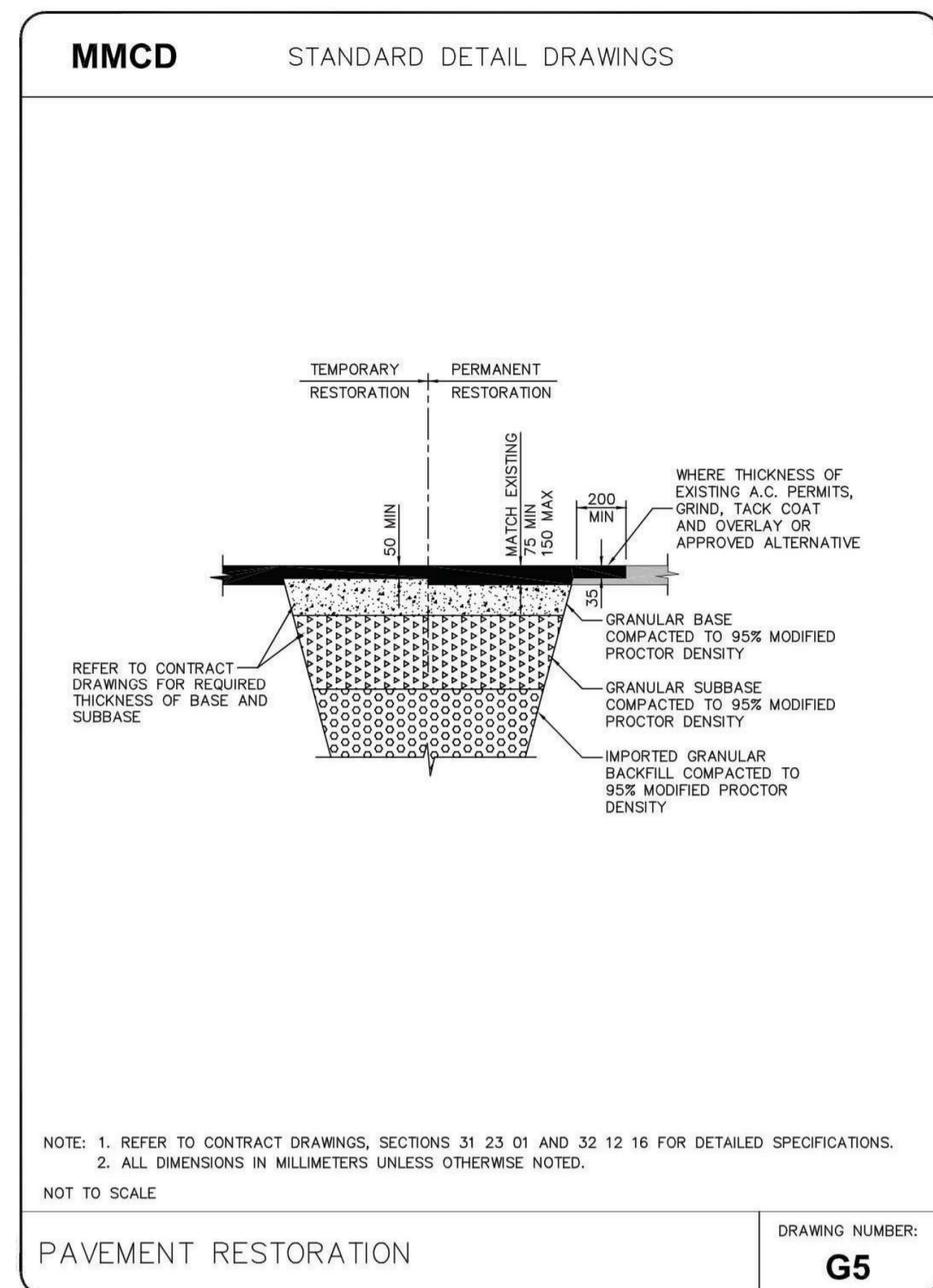
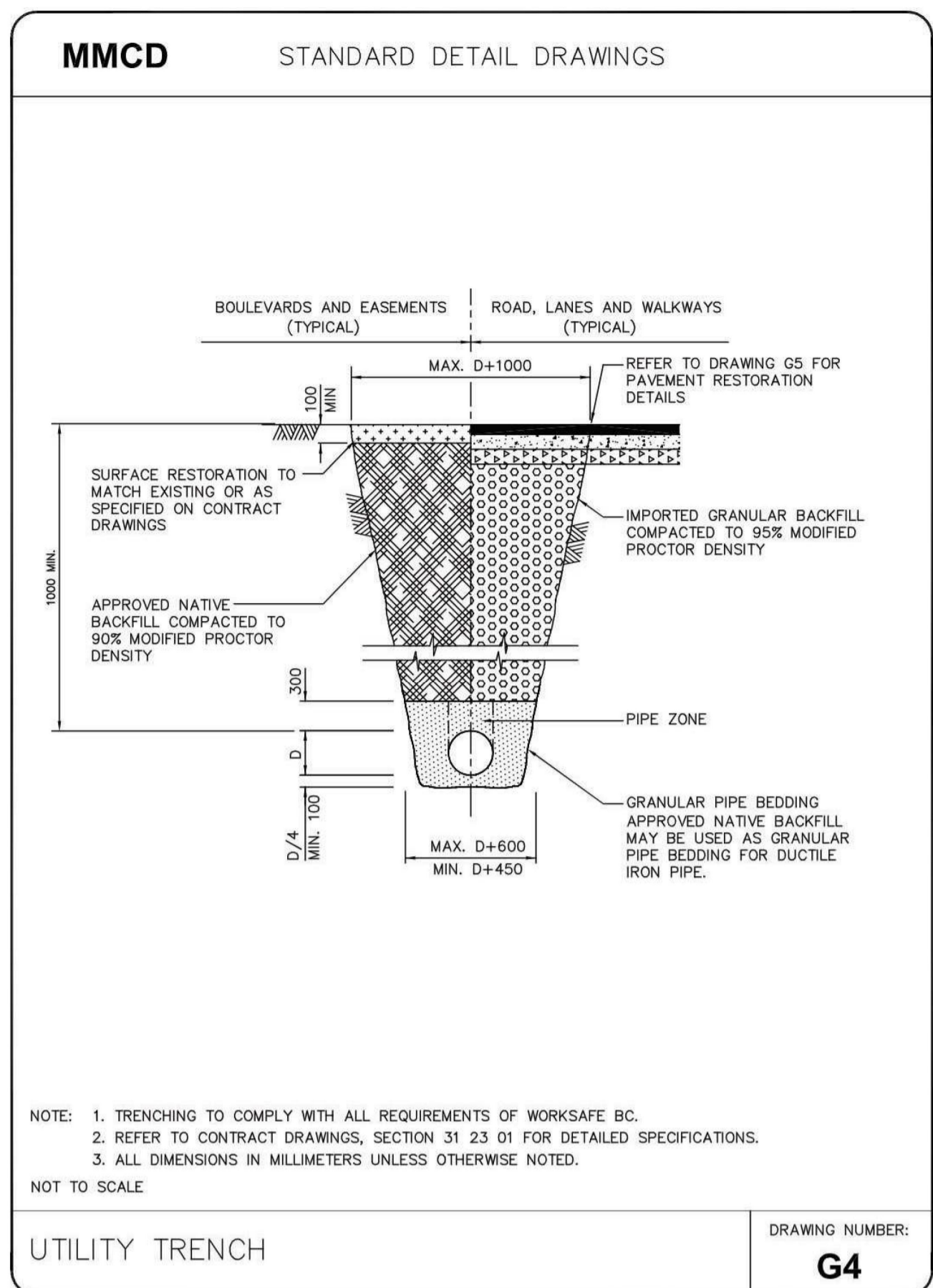
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Sheet List Table	
Sheet Number	Sheet Title
C-01	COVER
D-01	GENERAL DETAILS
N-01	GENERAL NOTES
W-01	BROADWATER ROAD - WATERWORKS



1952 Columbia Ave, Rossland, BC V0G 1Y0
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Permit to Practice
ISL Engineering and Land Services Ltd.
RR Signature: _____
RR EGBC ID: 189919
Date: 2024-11-18
Permit Number 1000419
Engineers & Geoscientists British Columbia

33566

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REV NO.	REVISION DESCRIPTION	DATE	DRAWN	APPRD
1	ISSUED FOR TENDER	2024/11/19	PW	SA
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BROADWATER ROAD - WATER SYSTEM UPGRADE
GENERAL - DETAILS



SCALE	NTS	CREATION DATE	2024/10/17	DWG. NO.
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GENERAL NOTES:

- ALL CONSTRUCTION AND MATERIALS IN ACCORDANCE WITH:
 - THE MASTER MUNICIPAL CONSTRUCTION DOCUMENT AND STANDARD DETAIL DRAWINGS (MMCD 2009) LATEST EDITION (PLATINUM EDITION) AND SUPPLEMENTARY SPECIFICATIONS AND DETAILED DRAWINGS UNLESS OTHERWISE NOTED;
 - APPLICABLE CONTRACT DOCUMENTS AND ALL SPECIFICATIONS REFERENCED THEREIN;
 - MINISTRY OF ENVIRONMENT AND/OR FEDERAL DEPARTMENT OF FISHERIES AND OCEANS;
 - MINISTRY OF TRANSPORTATION "BC TRAFFIC CONTROL MANUAL FOR WORK ON ROADWAYS", LATEST EDITION; AND
 - WORKSAFEBC, LATEST EDITION.

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 REPAIR OR REPLACE ANY ORIGINAL STREETS, SERVICES, SIGNS, LANDSCAPING, DRIVEWAY LETDOWNS, PRIVATE LANDSCAPING, OR PRIVATE IMPROVEMENTS THAT MAY BE DAMAGED AS A RESULT OF CONSTRUCTION. REPAIRS TO ORIGINAL CITY SERVICES SUCH AS WATER, SANITARY SEWER, STORM SEWER, AND STREET OR TRAFFIC LIGHTING SHALL BE MADE BY THE CONTRACTOR AT COST TO THE CONTRACTOR. REPAIRS TO ORIGINAL SURFACE WORKS MAY BE DONE BY THE CONTRACTOR AT THE DISCRETION OF THE CONTRACT ADMINISTRATOR.
- THE LOCATION OF ORIGINAL UTILITIES IS COMPILED FROM OWNER AND UTILITY SUPPLIED RECORD DRAWINGS AND ARE CONSIDERED APPROXIMATE ONLY. THE EXACT LOCATION AND EXTENT OF UTILITIES SHOULD BE DETERMINED BY CONSULTING THE LOCAL AUTHORITIES AND UTILITY COMPANIES CONCERNED. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND INVERT ELEVATION BY HAND OR HYDROVAC EXCAVATION BEFORE CONSTRUCTION OF UTILITY CROSSINGS AND SHALL BE RESPONSIBLE FOR RESTORATION OF ANY DAMAGE TO ORIGINAL UTILITIES. ANY COSTS ASSOCIATED WITH UTILITY CONFLICTS THAT WERE NOT PRELOCATED WILL BE THE CONTRACTOR'S RESPONSIBILITY.
- REPORT ANY DISCREPANCIES TO THE CONTRACT ADMINISTRATOR A MINIMUM 72 HOURS PRIOR TO CONSTRUCTION TO ENSURE THAT THE LINE AND GRADE OF THE WATER MAIN CAN BE ADJUSTED TO SUIT FIELD CONDITIONS AS REQUIRED.
- EVERY EFFORT IS TO BE MADE TO SAVE ORIGINAL 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 OWNER'S PROPERTY UPON THEIR REQUEST.
- ALL SURVEY MONUMENTS 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 RDCK AT LEAST 72 HOURS IN ADVANCE OF SCHEDULING WORK.
- SURVEY PINS DISTURBED DURING THE COURSE OF CONSTRUCTION SHALL BE REPLACED BY A B.C. LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- 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.
- 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 PERMANENT HOT MIX ASPHALT PATCHING TO MMCD REQUIREMENTS AT ALL NECESSARY LOCATIONS. PERMANENT PATCH SHALL BE COMPLETED FOLLOWING ALL TESTING, TIE-INS AND TRANSFERS. USE OF COLD MIX IS NOT ACCEPTABLE.

WATERMAIN NOTES:

- ALL NEW WATERMAINS SHALL BE C900 PVC AND INSTALLED WITH 1.2m MINIMUM COVER UNLESS OTHERWISE NOTED.
- NO CHANGES MADE TO PIPE, FITTINGS, OR ALIGNMENT WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE CONTRACT ADMINISTRATOR.
- THE CONTRACTOR IS TO EXPOSE ORIGINAL WATERMAINS AND WATER SERVICES 100mm DIAMETER AND LARGER AT TIE-IN LOCATION AND ALL ORIGINAL UTILITIES BETWEEN. UTILITY DEPTHS ARE TO BE RECORDED AND FORWARDED TO THE CONTRACT ADMINISTRATOR FOR REVIEW.
- ASSURANCE OF PROTECTION OF THE WATERMAIN AS PER INTERIOR HEALTH AUTHORITY:

PARALLEL LINES: WATERMAINS SHOULD BE LAID AT LEAST 3m HORIZONTALLY FROM ANY SANITARY OR STORM SEWER. WHERE THIS HORIZONTAL SEPARATION IS NOT POSSIBLE, THE BOTTOM OF THE WATERMAIN SHOULD BE AT LEAST 45cm ABOVE THE TOP OF THE SEWER AND SUFFICIENTLY TO ONE SIDE OF THE SEWER TO ALL FOR SEWER REPAIRS WITHOUT DISTURBING THE WATERMAIN. IF THIS VERTICAL SEPARATION IS NOT POSSIBLE, THE SEWER SHOULD BE OF THE SAME SERVICE CAPABILITY AS THE WATERMAIN, WITH PRESSURE CLASS JOINTS DESIGNED TO REMAIN WATERTIGHT IF THE GROUNDWATER TABLE PERIODICALLY RISES ABOVE THE SEWER, AND ARE PRESSURE TESTED BEFORE BACKFILLING. OTHER PRECAUTIONS, SUCH AS A WATERMAIN WITH IMPROVED JOINTS AND HIGHER STRENGTH MAY BE NEEDED.

CROSSINGS: WHERE A WATERMAIN CROSSES A SANITARY OR STORM SEWER, THE LINES SHOULD BE LAID WITH THE WATERMAIN CROSSING OVER THE SEWER AND WITH THE MIDDLE OF PIPE LENGTHS LOCATED AT THE CROSSING POINT, TO MAXIMIZE THE SEPARATION BETWEEN JOINTS. WHERE A MINIMUM 3m JOINT SEPARATION AND/OR A MINIMUM 45cm CLEAR VERTICAL SEPARATION IS NOT POSSIBLE AT THE CROSSING, PRECAUTIONS TO IMPROVE WATER TIGHTNESS OF THE SEWER JOINTS AND STRUCTURAL IMPROVEMENTS SUCH AS HIGHER STRENGTH WATERMAIN AND/OR SEWER AT THE CROSSING AREA MAY BE NEEDED. SLEEVING, PIPE BRIDGING OR OTHER SUITABLE MEASURES MAY BE CONSIDERED. ALL JOINTS WITHIN 3m OF THE CROSSING SHOULD BE:

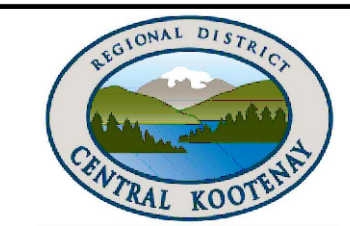
 - WRAPPED WITH HEAT SHRINK PLASTIC OR
 - PACKED WITH INERT PETROLATUM COMPOUND AND WRAPPED IN TAPE IN ACCORDANCE WITH ANSI/AWWA STANDARDS C209 AND C217-90.
- FOR SERVICE CONNECTIONS, WHEREVER POSSIBLE, THE ABOVE CONSTRUCTION PRACTICES SHOULD ALSO BE APPLIED.
- LOCATION OF WATER SERVICE CONNECTIONS HAVE BEEN DERIVED FROM RDCK SERVICE RECORDS AND ARE FOR GUIDANCE ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL WATER SERVICES IN THE FIELD DURING CONSTRUCTION. SERVICES WITH NO SIZE SHOWN IN TABLES HAVE NO RECORD OF SERVICE DIAMETER.
- THE CONTRACTOR IS TO EXTEND ALL NEW WATER SERVICES TO PROPERTY LINE, COMPLETE WITH NEW CURB STOP AS REQUIRED, AT THE SAME ELEVATION AS THE ORIGINAL CONNECTION AT THE FOLLOWING OFFSETS.
 - 19-50mm - 300mm O/S.
 - 100-300mm - 500 mm O/S.
- THRUST BLOCKS PROVIDED AT ALL FITTINGS & CHANGES IN DIRECTION. WHERE CONDITIONS DO NOT PERMIT USE OF THRUST BLOCKS, CONTRACTOR SHALL USE JOINT RESTRAINTS AND/OR FIELD LOK GASKETS AS SPECIFIED IN CITY SUPPLEMENTAL SPECIFICATIONS.
- MAXIMUM JOINT DEFLECTION SHOULD NOT EXCEED ONE-HALF OF THE MANUFACTURER'S RECOMMENDED SPECIFICATION.
- ALL VERTICAL BENDS TO BE MINIMUM 2-LUG AND TIE-RODDED TOGETHER AND USE JOINT RESTRAINTS FOR 2 PIPE LENGTHS BACK OF FITTING.
- FIGURED DIMENSION SHALL GOVERN OVER SCALED DIMENSIONS.
- LOT DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. REFER TO BCLS REGISTERED LEGAL PLAN FOR ACTUAL LOT DIMENSIONS. THE CONTRACTOR SHALL CONFIRM LOCATIONS OF LOT LINES PRIOR TO INSTALLATION OF SERVICE CONNECTIONS.
- ALL VALVES GREATER THAN 600mm DEEP FROM THE NUT REQUIRE AN EXTENSION.
- EVERY EFFORT SHOULD BE MADE FOR A MINIMUM DISTANCE OF 1.0m BETWEEN HYDRANT AND HYDRANT VALVE FOR MAINTENANCE PURPOSES. IF NOT POSSIBLE, A VALVE EXTENSION IS REQUIRED.
- ALL TIE-RODS, NUTS AND WASHERS ARE STAINLESS STEEL.
- ALL VALVES ARE INSTALLED AS PER MMCD DETAIL W3.

TRAFFIC MANAGEMENT, NOTIFICATION AND APPROVALS NOTES:

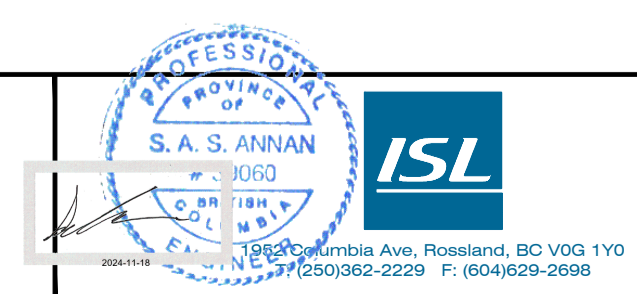
- THE CONTRACTOR SHALL PROVIDE CONSTRUCTION SIGNAGE, BARRIERS, FLASHING INDICATORS, ETC. AT ALL TIMES TO ENSURE THE SAFETY OF THE PUBLIC. TRAFFIC CONTROL WILL BE REQUIRED FOR ALL CONSTRUCTION WORKS WITHIN THE TRAVELED PORTION OF THE ROAD. NO ROAD SHALL BE CLOSED WITHOUT WRITTEN CONSENT.
- THE CONTRACTOR 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 ENSURE THAT ALL APPROVALS REQUIRED FOR THE WORKS HAVE BEEN OBTAINED FROM ALL AUTHORITIES AND AGENCIES PRIOR TO COMMENCING THE WORK. THE CONTRACTOR SHOULD PAY SPECIAL ATTENTION TO THE ORIGINAL GAS MAINS.
- THE CONTRACTOR SHALL ARRANGE FOR, AND COORDINATE THE WORKS DONE BY:
 - RDCK, 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.
- CONTRACTOR TO OBTAIN APPROVED LANE CLOSURE REQUEST FORM FOR ALL WORKS. APPROVED REQUESTS ARE CIRCULATED TO ALL EMERGENCY SERVICES.
- ALL TRAFFIC CONTROL TO CONFORM TO THE LATEST EDITION OF THE TRAFFIC CONTROL MANUAL FOR WORK ON ROADWAYS.
- APPROVAL OF NOISE VARIANCE FOR ALL WORK OUTSIDE OF NORMAL APPROVED WORK HOURS REQUIRED BY THE RDCK.
- NOTICE OF CONSTRUCTION SIGNS TO BE INSTALLED AT PROJECT LIMITS, AS PER BELOW. NOTIFY CONTRACT ADMINISTRATOR WITH CONSTRUCTION SCHEDULE AND LOCATIONS. SIGNS PROVIDED AND INSTALLED BY CONTRACTOR.

PLOT DATE: November 18, 2024

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1	ISSUED FOR TENDER	2024/11/19	PW	SA
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BROADWATER ROAD - WATER SYSTEM UPGRADE
GENERAL - NOTES



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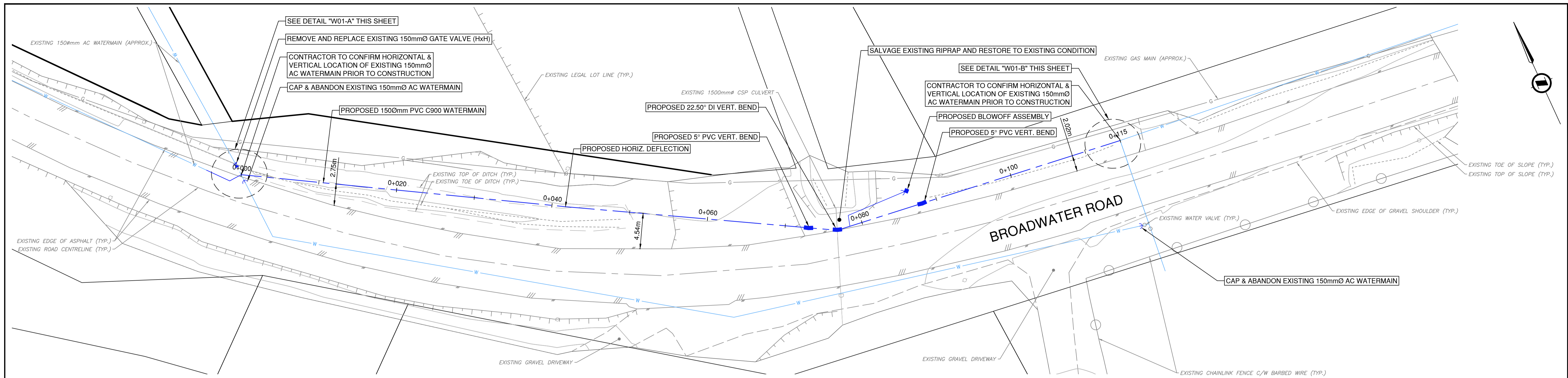
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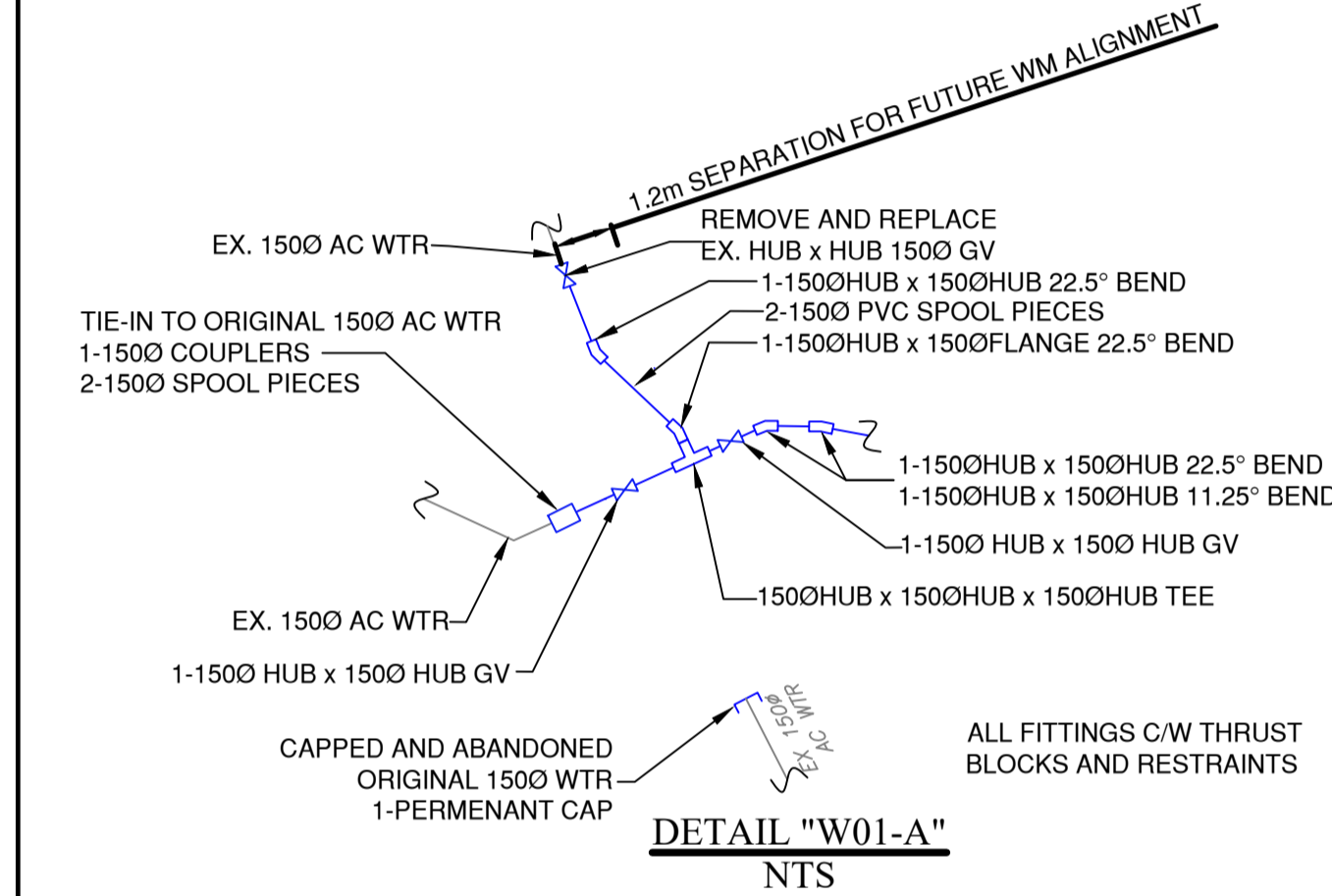
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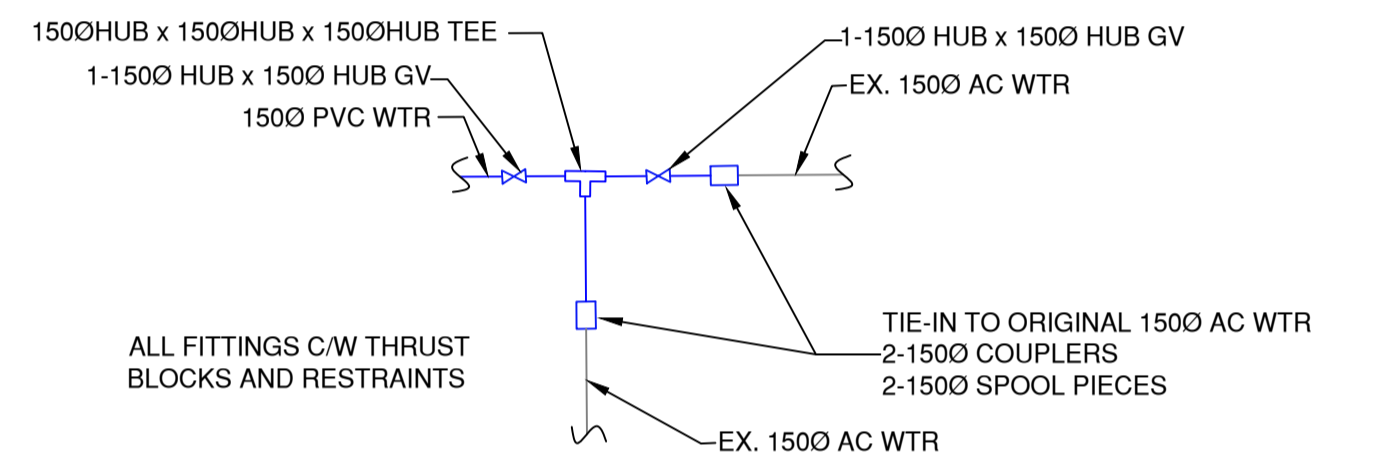
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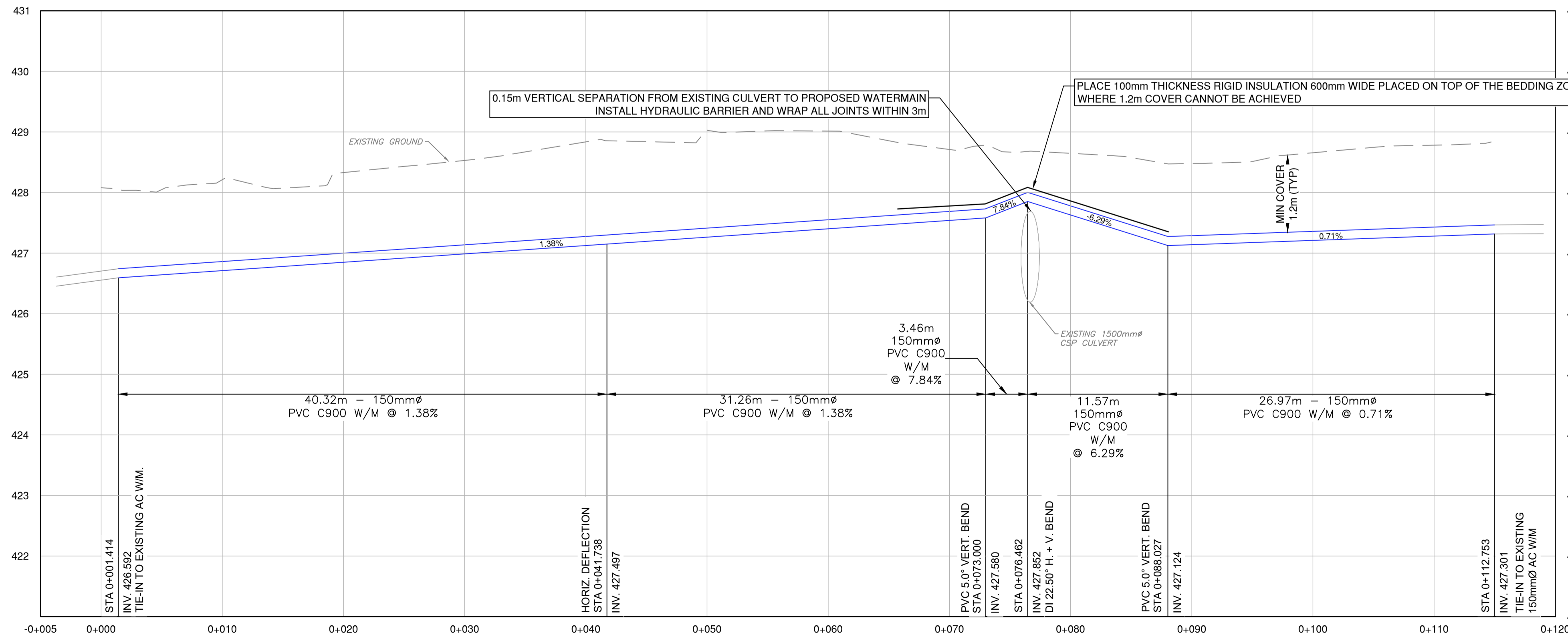
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DETAIL "W01-B"
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PROFILE
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- NOTES:**
1. THE LOCATION OF EXISTING UTILITIES IS COMPILED FROM OWNER AND UTILITY SUPPLIED RECORD DRAWINGS AND ARE CONSIDERED APPROXIMATE ONLY. THE EXACT LOCATION AND EXTENT OF UTILITIES SHOULD BE DETERMINED BY CONSULTING THE LOCAL AUTHORITIES AND UTILITY COMPANIES CONCERNED. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND INVERT ELEVATION BEFORE CONSTRUCTION OF UTILITY CROSSINGS OR TIE-INS AND SHALL BE RESPONSIBLE FOR RESTORATION OF ANY DAMAGE TO EXISTING UTILITIES.
 2. WHERE 3.0m HORIZONTAL SEPARATION OR 0.45m VERTICAL SEPARATION FROM WATERMAIN TO SANITARY OR STORM WORKS CAN NOT BE ACHIEVED, ALL JOINTS ON THE MAINS AS WELL AS ALL EXPOSED JOINTS ON ANY ORIGINAL MAINS WRAPPED WITH SHRINK WRAP, DENSO TAPE OR APPROVED EQUIVALENT.

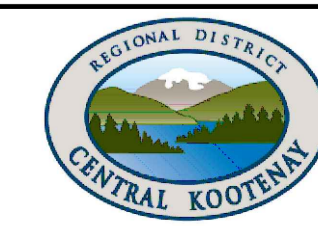
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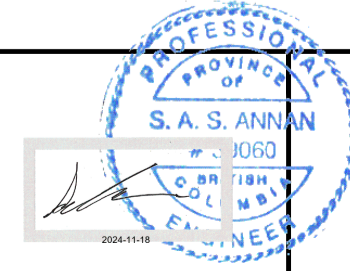
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BROADWATER ROAD - WATER SYSTEM UPGRADE
WATERWORKS



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DRAWN BY	PW	CREATION DATE	2024/10/17
CHECKED BY	SA	DESIGN BY	SA
PLOT DATE	November 18, 2024	APPROVED BY	SA

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