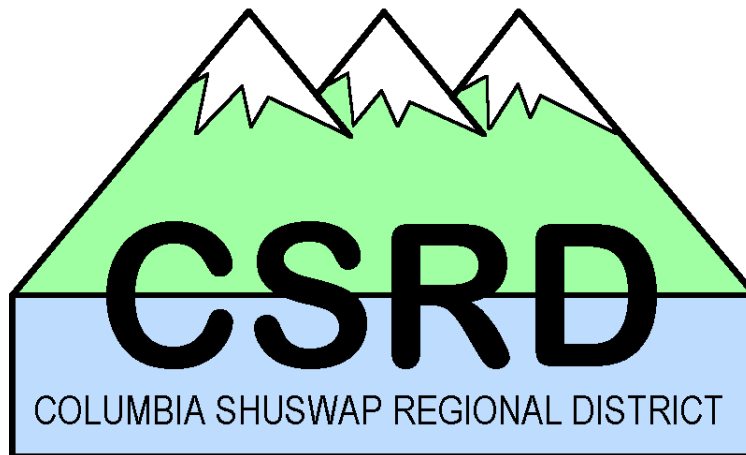


**APPROVED STANDARD
DRAWINGS**
as Referred to in The Subdivision Servicing Bylaw



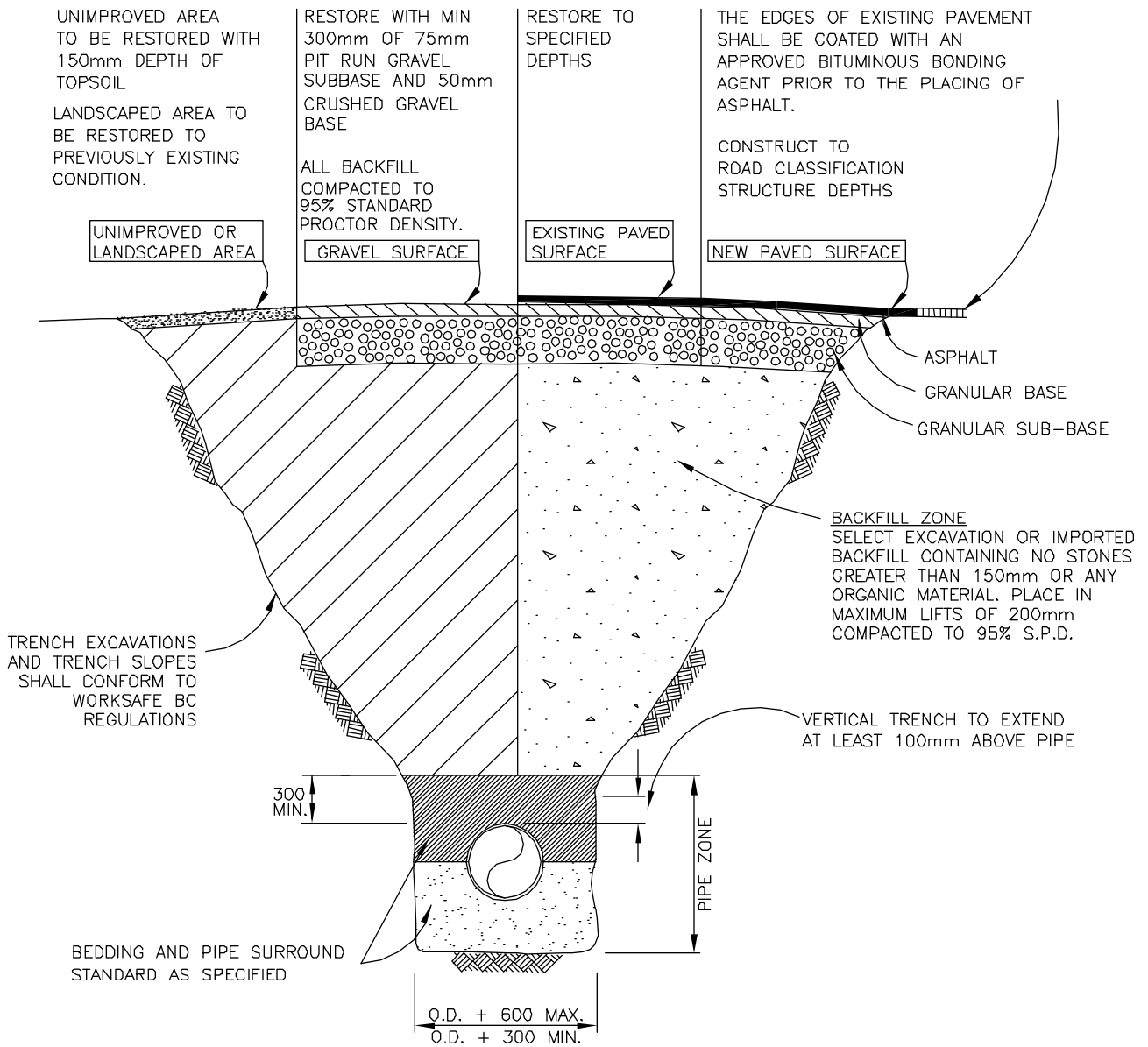
COLUMBIA SHUSWAP REGIONAL DISTRICT

MARCH 2011

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NOTES:

1. For roads controlled by MoTI, refer to B.C. Ministry of Transportation standard specifications for highway construction and/or the B.C. Supplement to TAC;
2. This specification must be read in conjunction with the latest version of the MMCD and the schedules in the Subdivision Servicing Bylaw. Where there are contradictions, this drawing shall prevail;
3. Refer to Geotechnical specifications for road structure and restoration, thickness for asphalt, base gravel, and sub-base gravel.



SCALE: NOT TO SCALE

DATE DRAWN: MAR. 2011
LATEST REVISION DATE:

APPROVED BY:

TITLE:

**TYPICAL UTILITY TRENCH
INSTALLATION ON ROADS NOT
CONTROLLED BY MoTI**

SECTION: UTILITIES

REVISION No.
0

DWG.No.
UT-1

BACKFILL_ZONE
 SELECT EXCAVATED OR IMPORTED
 BACKFILL CONTAINING NO STONES
 GREATER THAN 150mm OR ANY
 ORGANIC MATERIAL. PLACE IN
 MAXIMUM LIFTS OF 200mm
 COMPACTED TO 95% S.P.D.

TRENCH EXCAVATIONS AND
 TRENCH SLOPES SHALL
 CONFORM TO WORKSAFE BC
 REGULATIONS

VERTICAL TRENCH
 TO EXTEND 100mm
 ABOVE PIPE

BEDDING AS SPECIFIED
 AND REQUIRED BY THE
 ENGINEER COMPACTED
 TO 95% STANDARD PROCTOR
 DENSITY IN 100mm LIFTS.

HI 40 STYROFOAM
 PIPE COVER THICKNESS
 1.4 - 1.8m 50mm
 0.8 - 1.4m 100mm
 <0.8 NOT ALLOWED

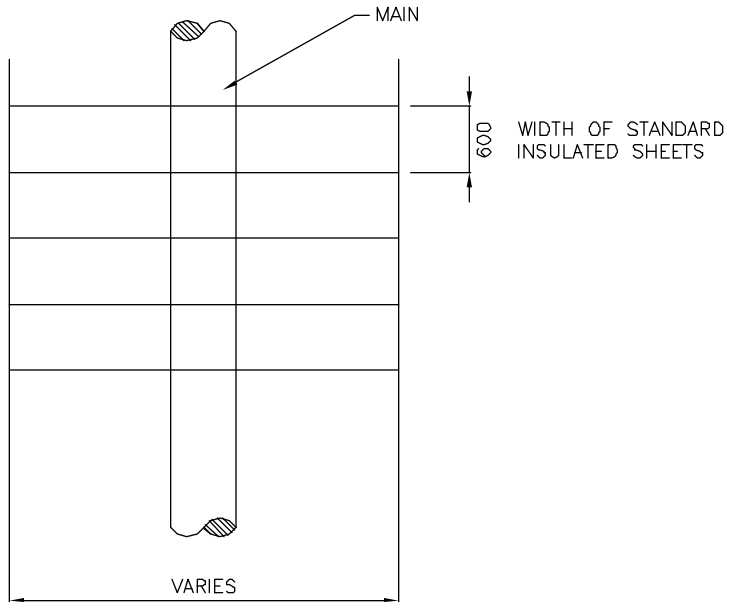
300
 MIN.
 100

100
 PIPE_ZONE

WIDTH BEYOND PIPE TO BE
 EQUAL TO OR GREATER
 THAN DEPTH OF REDUCED COVER

VARIES

SECTION



PLAN

NOTES:

1. This specification must be read in conjunction with the Subdivision Servicing Bylaw. Where there are contradictions, this drawing shall prevail;
2. HI-40 Styrofoam sheets stagger joints where more than one layer is required. All sheets to lay perpendicular to pipe alignment.



SCALE: NOT TO SCALE

DATE DRAWN: MAR. 2011
 LATEST REVISION DATE:

APPROVED BY:

TITLE: **PRESSURE MAIN INSULATION DETAIL**

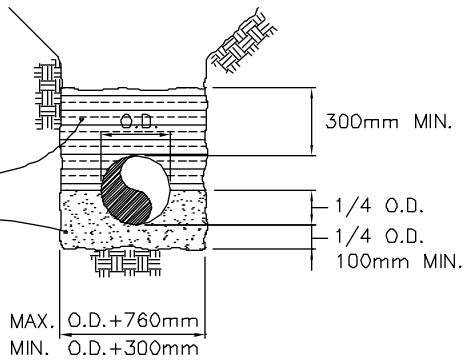
SECTION: UTILITIES

REVISION No. 0

DWG.No. **UT-2**

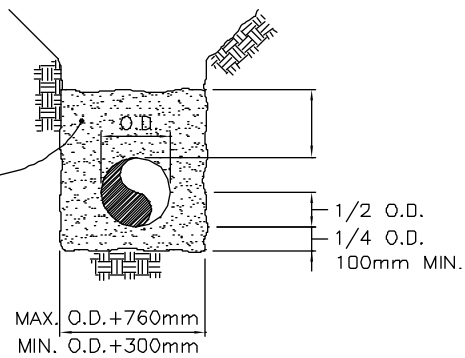
SELECT EXCAVATED OR IMPORTED GRANULAR MATERIAL, PLACED IN 100mm LIFTS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY

CONCRETE - 20MPa
IN ALKALI SOILS, SULFATE RESISTANT CEMENT SHALL BE USED.



CLASS "A" BEDDING

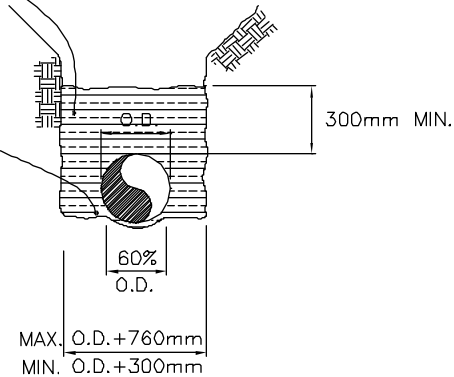
FINE GRANULAR MATERIAL PLACED IN 100mm (4") LIFTS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY



CLASS "B" BEDDING

SELECT EXCAVATED OR IMPORTED GRANULAR MATERIAL, PLACED IN MAXIMUM 100mm LIFTS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY

BOTTOM OF TRENCH SHAPED TO ACCEPT LOWER EXTERIOR OF PIPE



CLASS "C" BEDDING

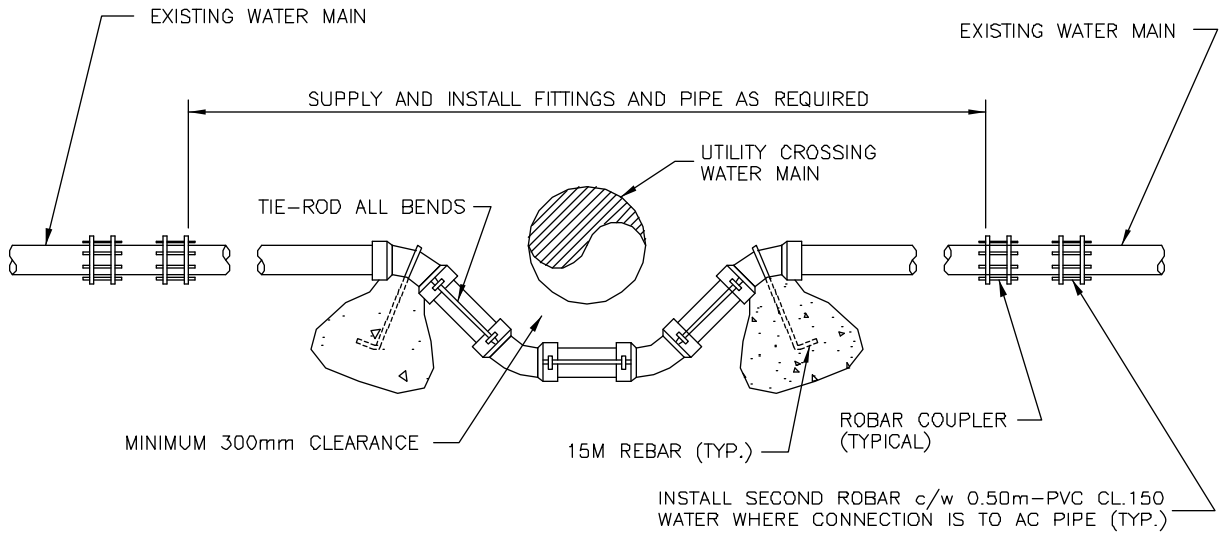
NOTES:

1. Class 'B' to be used unless otherwise specified;
2. All trenches within the roadway shall be backfilled with competent material compacted to 95% standard proctor density.

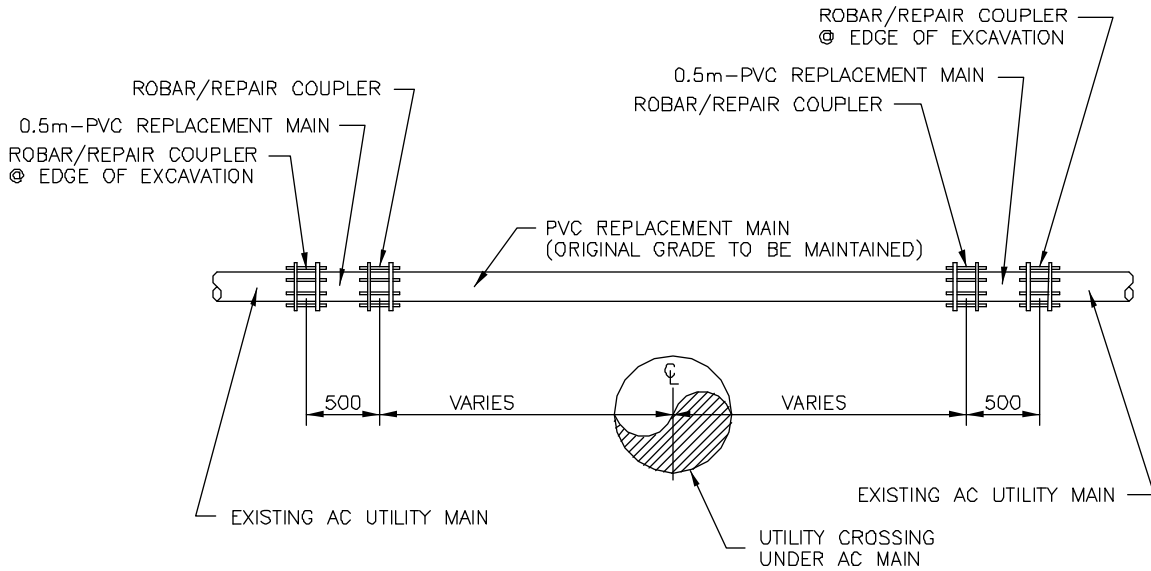


SCALE: NOT TO SCALE	
DATE DRAWN: MAR. 2011	LATEST REVISION DATE:
APPROVED BY:	

TITLE: CLASSES OF PIPE BEDDING		
SECTION: UTILITIES	REVISION No. 0	DWG.No. UT-3



TYPICAL UTILITY CROSSING WATER MAIN
SCALE N.T.S.



TYPICAL UTILITY CROSSING UNDER AC MAIN
SCALE N.T.S.

NOTES:

- 3 Robars may be used when approved by the CSRD.



SCALE: NOT TO SCALE

DATE DRAWN: MAR. 2011
LATEST REVISION DATE:

APPROVED BY:

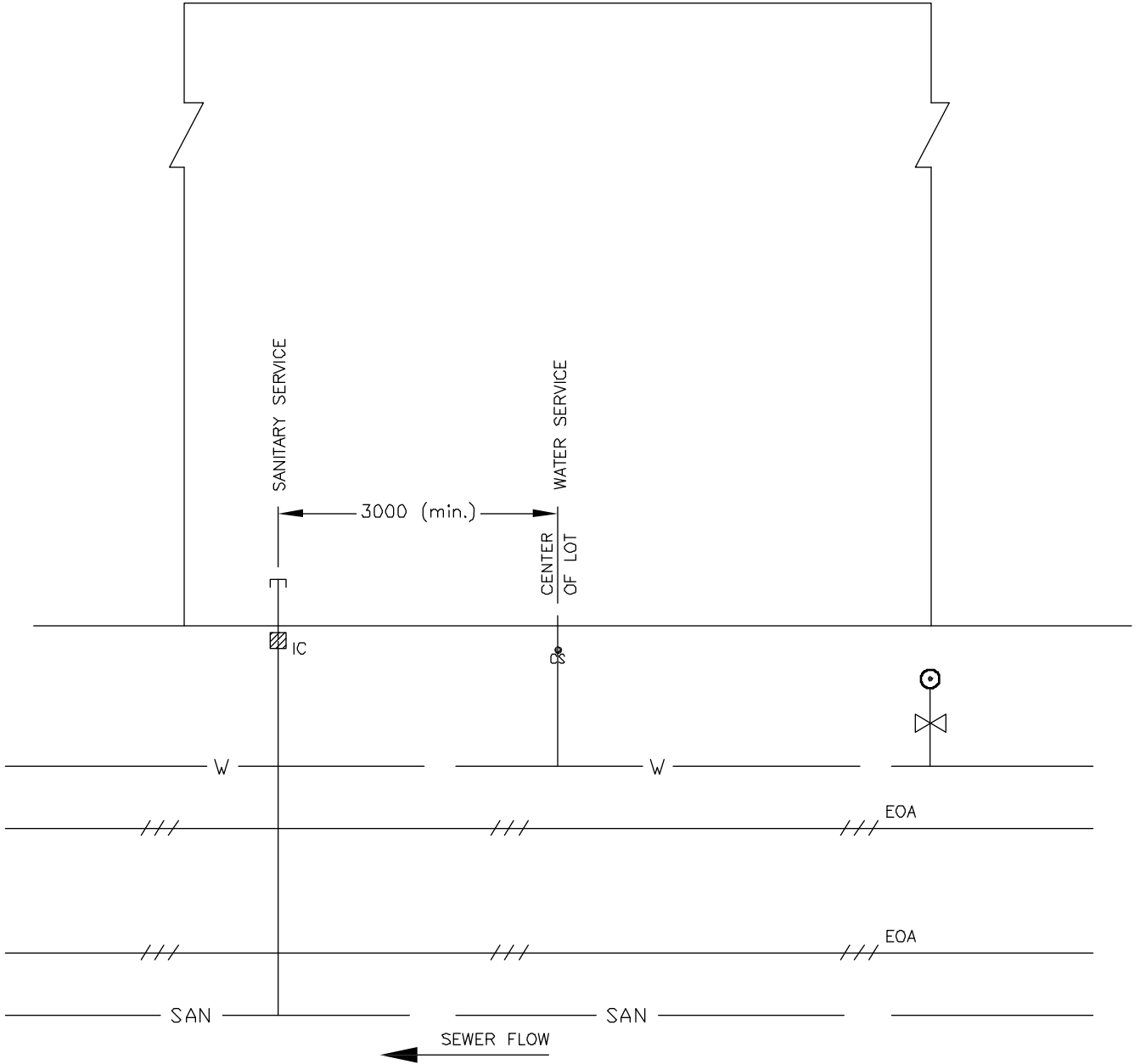
TITLE:

**UTILITY MAIN
RELOCATION DETAILS**

SECTION: UTILITIES

REVISION No.
0

DWG.No.
UT-4



NOTES:

1. Fire hydrants are to be located at property corners.



SCALE: NOT TO SCALE

DATE DRAWN: MAR. 2011
LATEST REVISION DATE:

APPROVED BY:

TITLE:

**TYPICAL LOT
SERVICING**

SECTION: UTILITIES

REVISION No.
0

DWG.No.
UT-5