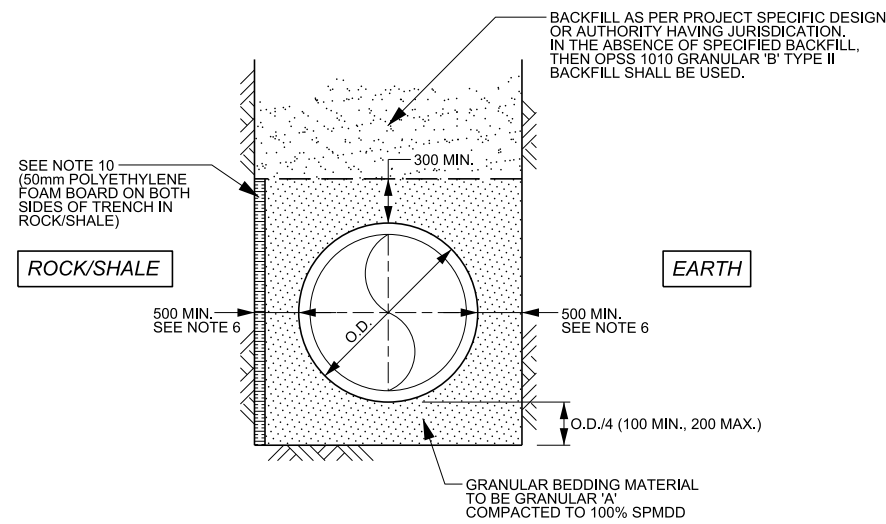
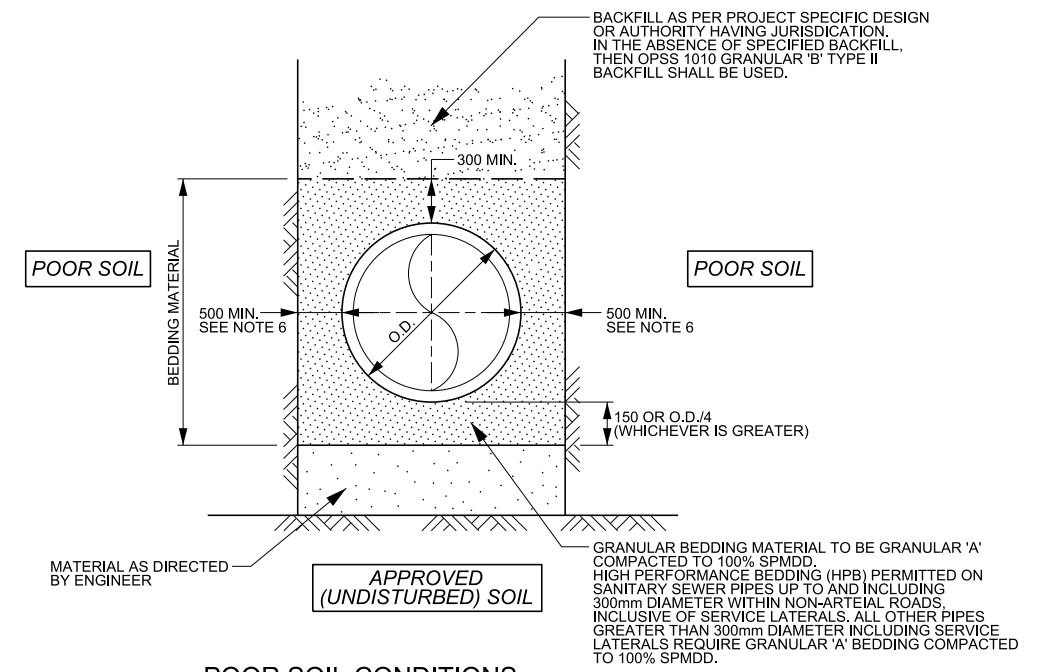


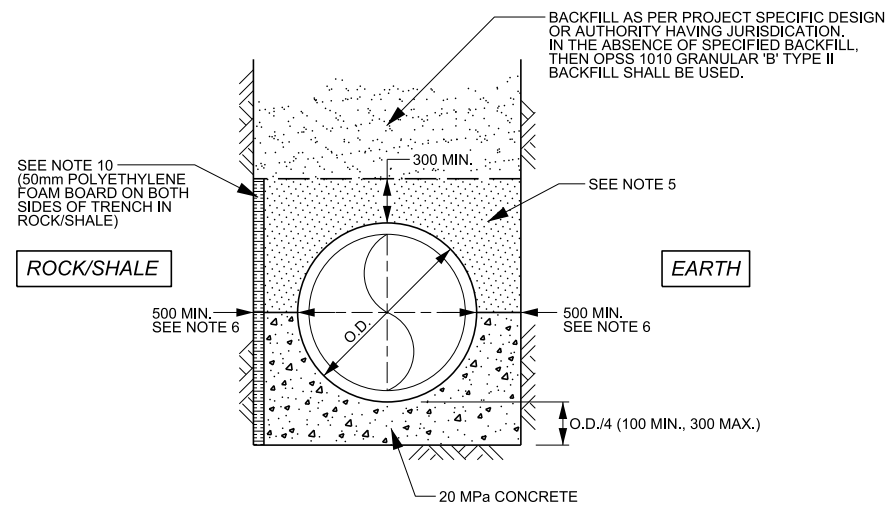
**GRANULAR BEDDING**



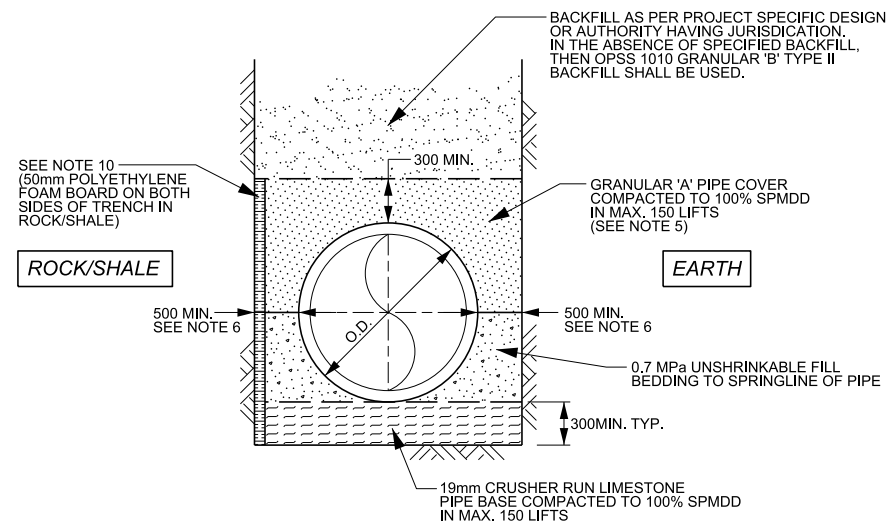
**GRANULAR BEDDING**



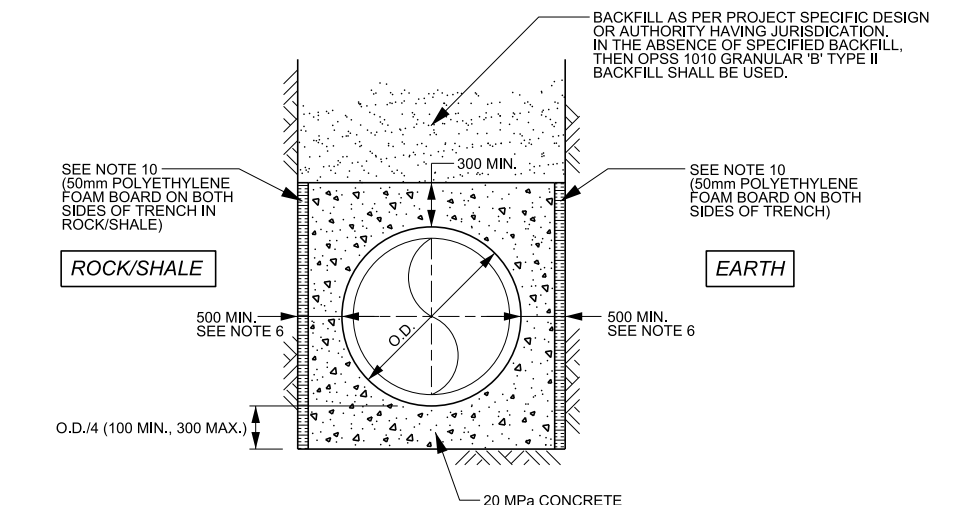
**POOR SOIL CONDITIONS**



**CONCRETE CRADLE**



**UNSHRINKABLE FILL FOR LARGE DIAMETER PIPES**  
(SEE NOTE 11b)



**CONCRETE ENCASEMENT**

**NOTE**

1. GRANULAR MATERIAL TO BE PLACED IN TRENCH IN 150mm LIFTS (MAX.) AND COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD).
2. IN CASE OF OVER-EXCAVATION TRENCH TO BE FILLED TO BOTTOM OF PIPE WITH APPROVED MATERIALS IN 150mm LAYERS AND COMPACTED TO 100% STANDARD PROCTOR DENSITY.
3. IN POOR SOILS PIPE FOUNDATION TO BE PROVIDED AS PER DESIGN. ADDITIONAL BEDDING MODIFICATIONS MAY BE REQUIRED AS PER DESIGN.
4. BACKFILL ABOVE BEDDING AS REQUIRED PER DESIGN. NATIVE BACKFILL NOT PERMITTED UNDER PAVED PORTIONS.
5. COVER MATERIAL TO BE AS PER OPSS 1010 GRANULAR 'A'.
6. MINIMUM TRENCH WIDTH TO BE O.D. PLUS 2 x 500mm, PLUS 2 x 50mm (FOR COMPRESSIBLE MATERIAL IN ROCK/SHALE), UNLESS PROJECT SPECIFIC BEDDING STATES OTHERWISE. PIPE TO BE LOCATED IN THE CENTER OF TRENCH.
7. TRENCH BACKFILL MATERIAL AS PER PROJECT SPECIFIC DESIGN, GEOTECHNICAL REPORT RECOMMENDATIONS AND AUTHORITY HAVING JURISDICTION STANDARDS/REQUIREMENTS.
8. THE CONSULTANT SHALL RECOMMEND THE APPROPRIATE BEDDING REQUIREMENTS BASED ON THE FINDINGS OF THE GEOTECHNICAL INVESTIGATION AND PROVIDE A CROSS-SECTION ILLUSTRATION ON THE FIRST PLAN & PROFILE DRAWING OR GENERAL DETAIL PAGE.
9. IN ROCK EXCAVATION, A MINIMUM OF 150mm GRANULAR MATERIAL BEDDING IS REQUIRED UNDERNEATH THE PIPE (FOR PVC), AND UP TO SPRING LINE FOR CONCRETE PIPE.
10. IN ROCK OR SHALE TRENCH CONDITIONS, INSTALL 50mm THICK POLYETHYLENE FOAM BOARDS, ON BOTH SIDES OF TRENCH, BETWEEN TRENCH WALL AND BACKFILL. REFER TO PROJECT SPECIFIC REQUIREMENTS. POLYETHYLENE FOAM TO BE EITHER DOW ETHAFOAMT 400 OR NORDIC VOID 400 OR APPROVED EQUAL.
11. a) HIGH PERFORMANCE BEDDING PERMITTED ON SANITARY PIPES LESS THAN AND EQUAL TO 300mm DIAMETER WITHIN NON-ARTERIAL ROADS, INCLUSIVE OF SERVICE LATERALS. ALL OTHER PIPES GREATER THAN 300mm DIAMETER, INCLUDING SERVICE LATERALS, SHALL USE GRANULAR 'A' AS PER OPSS 1010 COMPACTED TO 100% SPMD AS BEDDING AND COVER.  
b) FOR LARGE DIAMETER PIPE (GREATER THAN OR EQUAL TO 750mm) UNSHRINKABLE FILL MAY BE USED TO FILL TRENCH VOID TO THE SPRINGLINE OF THE PIPE DIAMETER. GRANULAR 'A' AS PER OPSS 1010 COMPACTED TO 100% SPMD TO BE USED TO 300mm OVER PIPE DIAMETER.
12. THE STANDARDS SHOWN ON THIS DRAWING SHALL APPLY TO MUNICIPAL SERVICES.

BEDDING DETAILS ARE INTENDED FOR GENERAL INFORMATION. REFER TO CONTRACT SPECIFICATIONS AND GEOTECHNICAL REPORT FOR PROJECT SPECIFIC REQUIREMENTS.



**PUBLIC WORKS  
STANDARD DRAWING**

**BEDDING AND COVER DETAILS  
FOR SEWERS**

REV. DATE: AUGUST 2020

REVISION NUMBER: 2 FOR REVISION TRACKING REFER TO STD. DWG. 2-0-2

APPROVED BY DRAWN BY

A.P. AINLEY GROUP

STD. DWG. NUMBER SCALE

2-3-1 N.T.S.