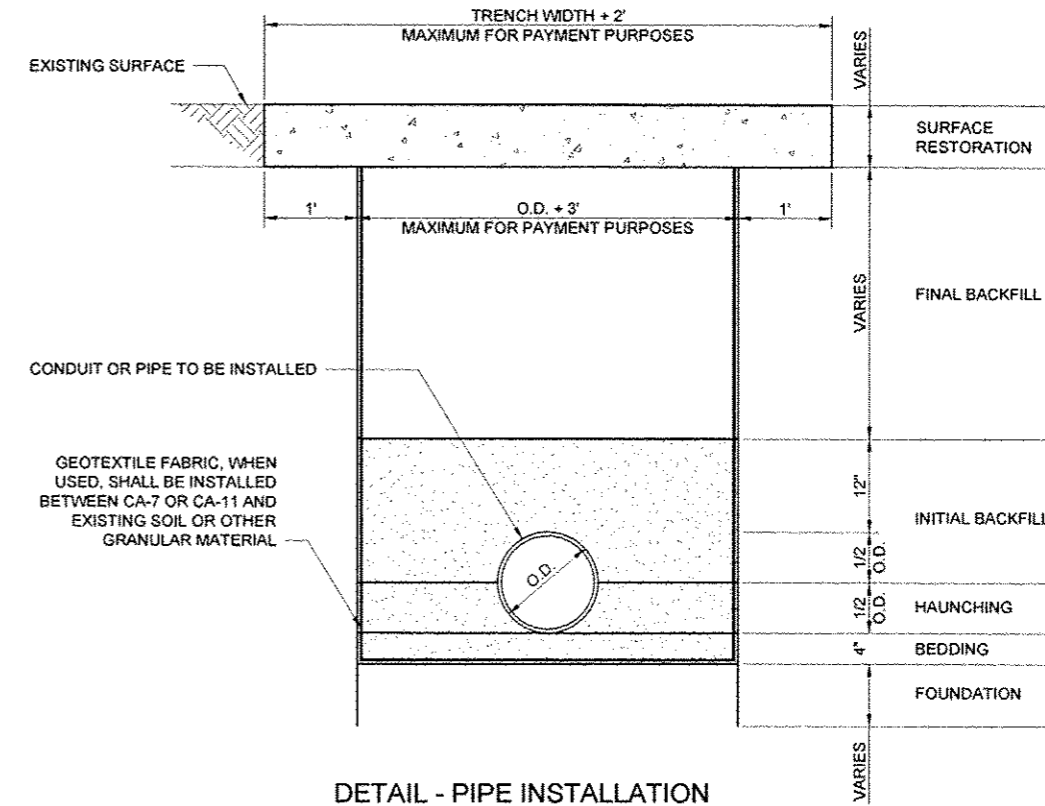


PIPE INSTALLATION - THERMOPLASTIC PIPE AND CMP						
BACKFILL METHOD	DESCRIPTION	FOUNDATION	BEDDING & HAUNCHING	INITIAL BACKFILL	FINAL BACKFILL	SURFACE RESTORATION
1	YARDS AND UNIMPROVED AREAS	ONLY WHEN SPECIFIED	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	SELECT EXCAVATED MATERIAL	6" TOPSOIL ROUNDED TO COMPENSATE FOR SETTLEMENT
2	AGGREGATE SURFACES	ONLY WHEN SPECIFIED	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	AGGREGATE BASE COURSE, TY B, 8" MIN.
3	UNDER EXISTING UTILITIES OR STRUCTURES	ONLY WHEN SPECIFIED	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	12" TOPSOIL ROUNDED TO COMPENSATE FOR SETTLEMENT
4	CONCRETE PAVEMENT	ONLY WHEN SPECIFIED	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	PCC PAVEMENT, 8" MIN. ON AGGREGATE BASE COURSE, TY B, 4" MIN.
5	BITUMINOUS PAVEMENT (INCL. OIL & CHIP)	ONLY WHEN SPECIFIED	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	3" BINDER COURSE (1ST LIFT), 3" BINDER COURSE (2ND LIFT), AND 1 1/2" SURFACE COURSE (3RD LIFT) ON AGGREGATE BASE COURSE, TY B, 8" MIN.
6	CULTIVATED FIELD	ONLY WHEN SPECIFIED	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	SELECT EXCAVATED MATERIAL	12" TOPSOIL ROUNDED TO COMPENSATE FOR SETTLEMENT
7	WITHIN 2-FEET OF PAVED AREA INCLUDING STREETS, SIDEWALKS, CURBS, GUTTERS, SHOULDERS, AND SIDEWALKS	ONLY WHEN SPECIFIED	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	AGGREGATE BASE COURSE, TY B, 8" MIN.
8	CONCRETE DRIVEWAY OR SIDEWALK	ONLY WHEN SPECIFIED	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	PCC PAVEMENT (4" MIN. SIDEWALK OR 6" MIN. DRIVEWAY) ON AGGREGATE BASE COURSE, TY B, 6" MIN.
9	BITUMINOUS DRIVEWAY (INCL. OIL & CHIP) OR SIDEWALK	ONLY WHEN SPECIFIED	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	3" BINDER COURSE (1ST LIFT), AND 1 1/2" SURFACE COURSE (2ND LIFT) ON AGGREGATE BASE COURSE, TY B, 6" MIN.
FLOWABLE FILL	WHEN SPECIFIED OR SUBSTITUTED	ONLY WHEN SPECIFIED	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	CLSM IDOT MIX #1	APPLICABLE METHOD 2, 4, 5, 7, 8, OR 9



DETAIL - PIPE INSTALLATION

PIPE INSTALLATION - RIGID PIPE						
BACKFILL METHOD	DESCRIPTION	FOUNDATION	BEDDING & HAUNCHING	INITIAL BACKFILL	FINAL BACKFILL	SURFACE RESTORATION
1	YARDS AND UNIMPROVED AREAS	ONLY WHEN SPECIFIED	SELECT GRANULAR MATERIAL	SELECT EXCAVATED MATERIAL	SELECT EXCAVATED MATERIAL	12" TOPSOIL ROUNDED TO COMPENSATE FOR SETTLEMENT
2	AGGREGATE SURFACES	ONLY WHEN SPECIFIED	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	AGGREGATE BASE COURSE, TY B, 8" MIN.
3	UNDER EXISTING UTILITIES OR STRUCTURES	ONLY WHEN SPECIFIED	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	12" TOPSOIL ROUNDED TO COMPENSATE FOR SETTLEMENT
4	CONCRETE PAVEMENT	ONLY WHEN SPECIFIED	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	PCC PAVEMENT, 8" MIN. ON AGGREGATE BASE COURSE, TY B, 4" MIN.
5	BITUMINOUS PAVEMENT (INCL. OIL & CHIP)	ONLY WHEN SPECIFIED	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	3" BINDER COURSE (1ST LIFT), 3" BINDER COURSE (2ND LIFT), AND 1 1/2" SURFACE COURSE (3RD LIFT) ON AGGREGATE BASE COURSE, TY B, 8" MIN.
6	CULTIVATED FIELD	ONLY WHEN SPECIFIED	SELECT GRANULAR MATERIAL	SELECT EXCAVATED MATERIAL	SELECT EXCAVATED MATERIAL	12" TOPSOIL ROUNDED TO COMPENSATE FOR SETTLEMENT
7	WITHIN 2-FEET OF PAVED AREA INCLUDING STREETS, SIDEWALKS, CURBS, GUTTERS, SHOULDERS, AND SIDEWALKS	ONLY WHEN SPECIFIED	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	AGGREGATE BASE COURSE, TY B, 8" MIN.
8	CONCRETE DRIVEWAY OR SIDEWALK	ONLY WHEN SPECIFIED	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	PCC PAVEMENT (4" MIN. SIDEWALK OR 6" MIN. DRIVEWAY) ON AGGREGATE BASE COURSE, TY B, 6" MIN.
9	BITUMINOUS DRIVEWAY OR SIDEWALK	ONLY WHEN SPECIFIED	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	SELECT GRANULAR MATERIAL	3" BINDER COURSE (1ST LIFT), AND 1 1/2" SURFACE COURSE (2ND LIFT) ON AGGREGATE BASE COURSE, TY B, 6" MIN.
FLOWABLE FILL	WHEN SPECIFIED OR SUBSTITUTED	ONLY WHEN SPECIFIED	SELECT GRANULAR MATERIAL	CLSM IDOT MIX #1	CLSM IDOT MIX #1	APPLICABLE METHOD 2, 4, 5, 7, 8, OR 9

GENERAL NOTES:

- UNLESS OTHERWISE SPECIFIED ELSEWHERE ON THE PLANS, WATER MAINS, SANITARY SEWERS, STORM SEWERS, AND FORCE MAINS SHALL BE INSTALLED AS SHOWN ON THIS SHEET.
- SELECT GRANULAR MATERIAL SHALL BE IDOT GRADATION CA-6, CA-9, CA-10, CA-18, FA-1, FA-2, FA-5, FA-6, FA-10, AND/OR FA-21.
- IDOT GRADATION CA-7 AND/OR CA-11 MAY BE USED AS SELECT GRANULAR MATERIAL WITH THE ENGINEER'S PRIOR WRITTEN APPROVAL. GRADATION CA-7 AND/OR CA-11 SHALL BE WRAPPED IN NON-WOVEN GEOTEXTILE FABRIC FOR GROUND STABILIZATION MEETING ARTICLE 1080.02 OF IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- FOUNDATION, BEDDING, HAUNCHING, INITIAL BACKFILL, AND FINAL BACKFILL MATERIALS SHALL BE PLACED IN LIFTS NOT EXCEEDING 8-INCHES LOOSE MEASURE AND COMPACTED. COMPACTION REQUIREMENTS SHALL BE 95% STANDARD PROCTOR DENSITY FOR ALL BACKFILL MATERIALS AND METHODS EXCEPT METHOD 1 AND 6. COMPACTION REQUIREMENTS FOR BACKFILL METHOD 1 AND 6 SHALL BE 85% STANDARD PROCTOR DENSITY.
- UNLESS OTHERWISE SPECIFIED ELSEWHERE ON THE PLANS, CONTRACTOR SHALL ENGAGE AN INDEPENDENT TESTING LABORATORY TO PERFORM COMPACTION TESTS FOR ALL BACKFILL METHODS EXCEPT METHOD 1 AND 6. TESTING FREQUENCY SHALL BE ONE TEST PER LIFT PER 100-FEET UNLESS OTHERWISE SPECIFIED ELSEWHERE ON THE PLANS. COMPACTION TESTS FOR CA-7 AND CA-11 SELECT GRANULAR MATERIAL WILL NOT BE REQUIRED.
- SELECT EXCAVATED MATERIAL MAY BE USED IN LIEU OF SELECT GRANULAR MATERIAL FOR BEDDING, HAUNCHING, INITIAL BACKFILL, AND/OR FINAL BACKFILL WITH THE ENGINEER'S PRIOR WRITTEN APPROVAL. ENGINEER WILL REQUIRE FIELD COMPACTION TESTING AT AN INTERVAL HE WILL DETERMINE SUITABLE FOR EXPECTED FIELD CONDITIONS AT NO ADDITIONAL COMPENSATION.
- SELECT GRANULAR MATERIAL FOR BEDDING AND HAUNCHING IS NOT REQUIRED FOR WATER MAIN AND FORCE MAIN WHEN RIGID PIPE MATERIALS ARE USED.
- DRAIN TILES ENCOUNTERED WITHIN THE PIPE TRENCH SHALL BE TEMPORARILY SUPPORTED AND PROTECTED OR REMOVED AND REPLACED. IF REMOVED AND REPLACED, THE DRAIN TILE SHALL BE REPLACED WITH PVC SDR 35 PIPE OF EQUIVALENT INSIDE DIAMETER. NO ADDITIONAL COMPENSATION WILL BE RECOMMENDED BY THE ENGINEER FOR ENCOUNTERED DRAIN TILES LESS THAN 12-INCHES IN DIAMETER.
- INFORM THE ENGINEER IF GREATER THAN 20 LINEAL FEET OF REMOVAL AND REPLACEMENT OF AN INDIVIDUAL DRAIN TILE IS NECESSARY AS THE RESULT OF THAT DRAIN TILE ENCOUNTERED AT AN ABNORMALLY ACUTE CROSSING ANGLE OR PARALLEL ALIGNMENT TO THE PIPE BEING INSTALLED.

**Foth**  
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ROUTE 150 WATERMAIN RELOCATION  
 BETWEEN URBANA AND ST. JOSEPH  
 ILLINOIS AMERICAN WATER COMPANY  
 IDOT CONTRACT NO. 70863

CHAMPAIGN COUNTY URBANA, ILLINOIS

NO.	DATE	DESCRIPTION	BY

RECORD DRAWING OF COMPLETED CONSTRUCTION BY  
 RECORD DRAWINGS OF COMPLETED CONSTRUCTION CONFORMING TO CONTRACTOR AND/OR OWNERS RECORDS.  
 DATE

Date of Preparation: July 17, 2013

	BY	DATE
SURVEYED	FOTH	07-13-2013
DRAWN	WKH	07-17-2013
DESIGNED	MAJ	07-17-2013
CHECKED	MAJ	07-17-2013

BACKFILL DETAILS

PROJECT ID: 11013  
**C5.02**  
 SHEET 28 OF 29