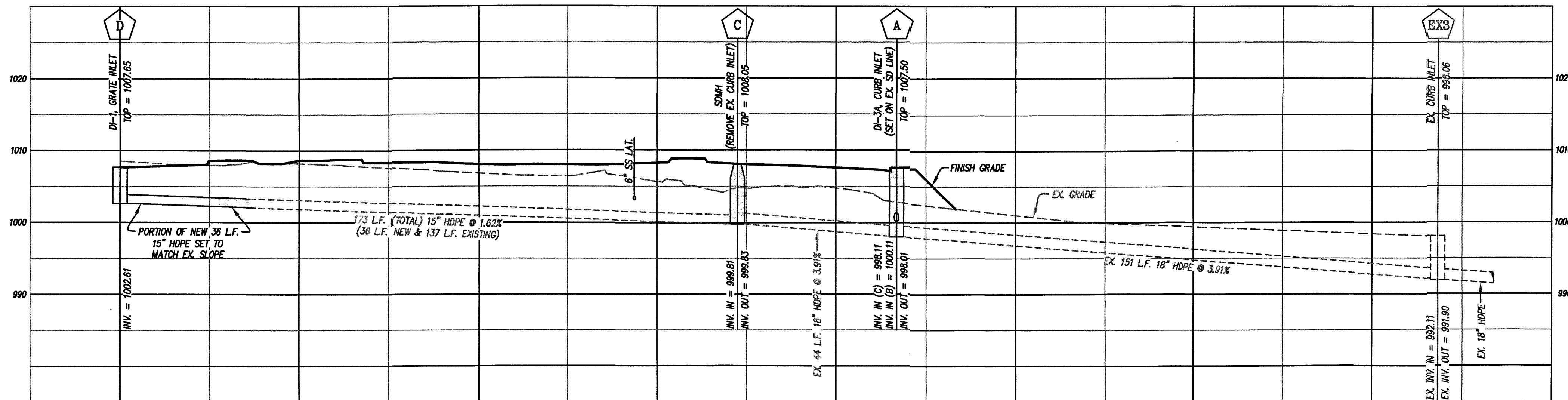
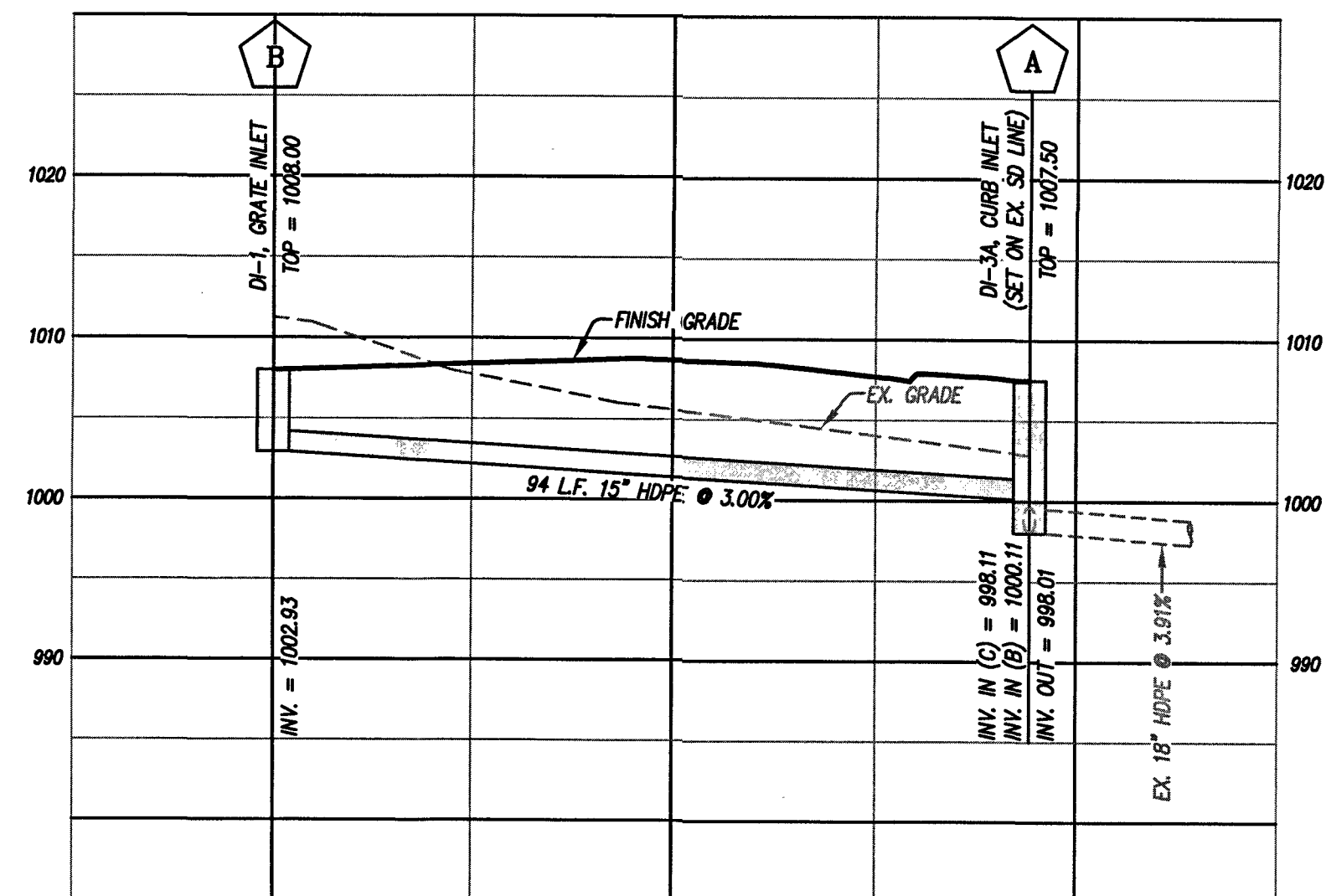


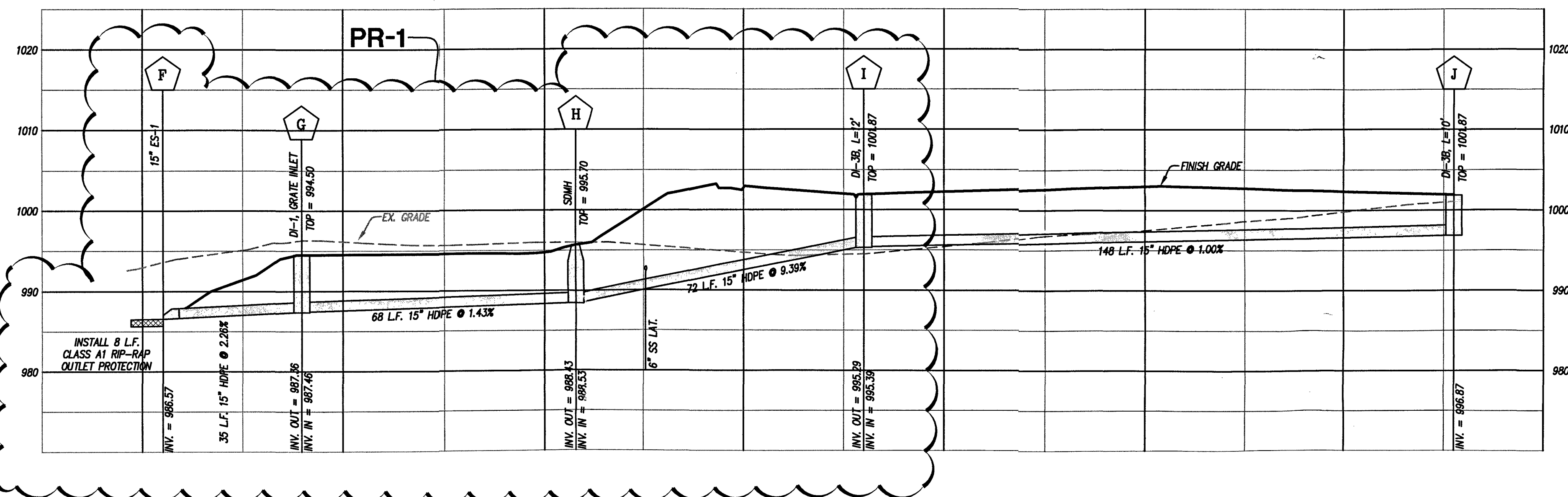
STORM DRAIN PROFILE: "D" - "EX3"



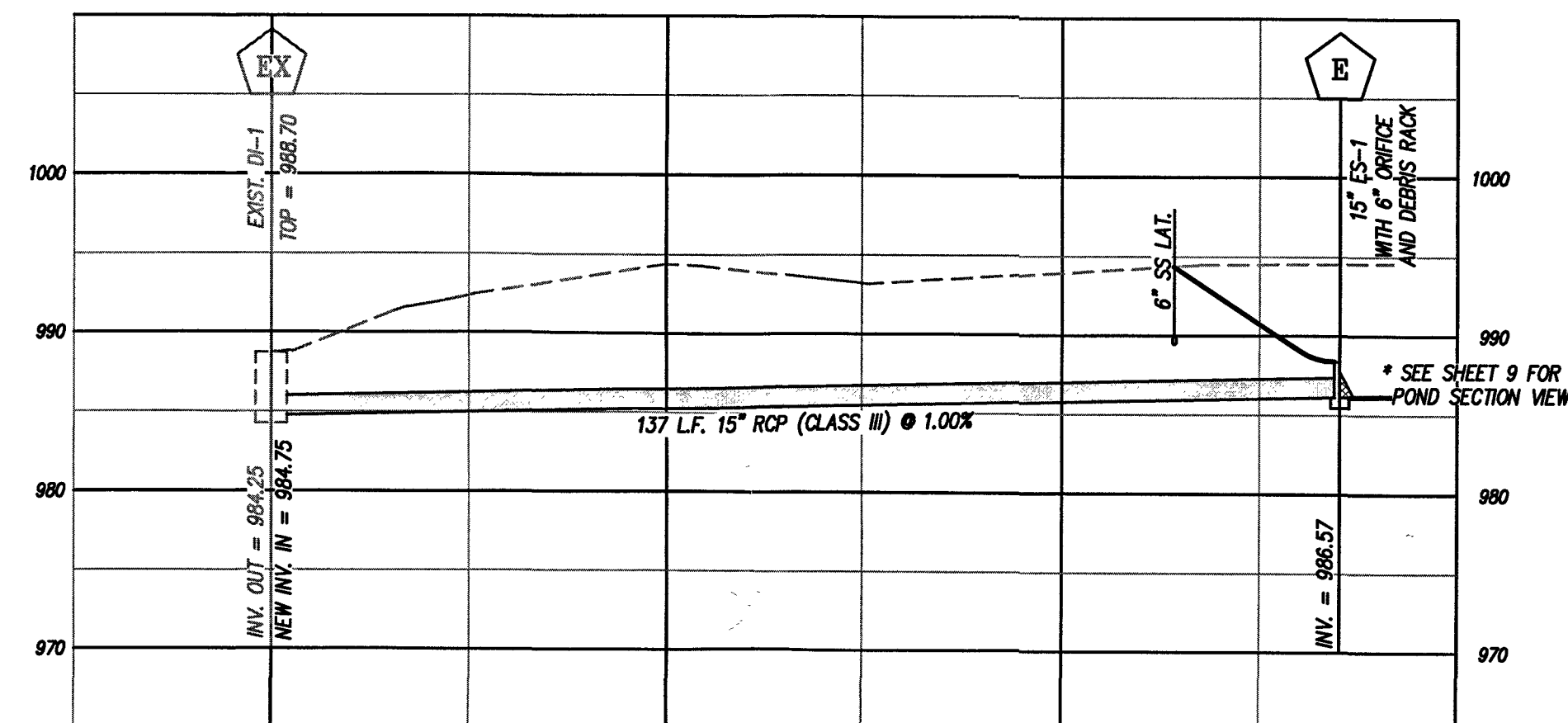
STORM DRAIN PROFILE: "B" - "A"



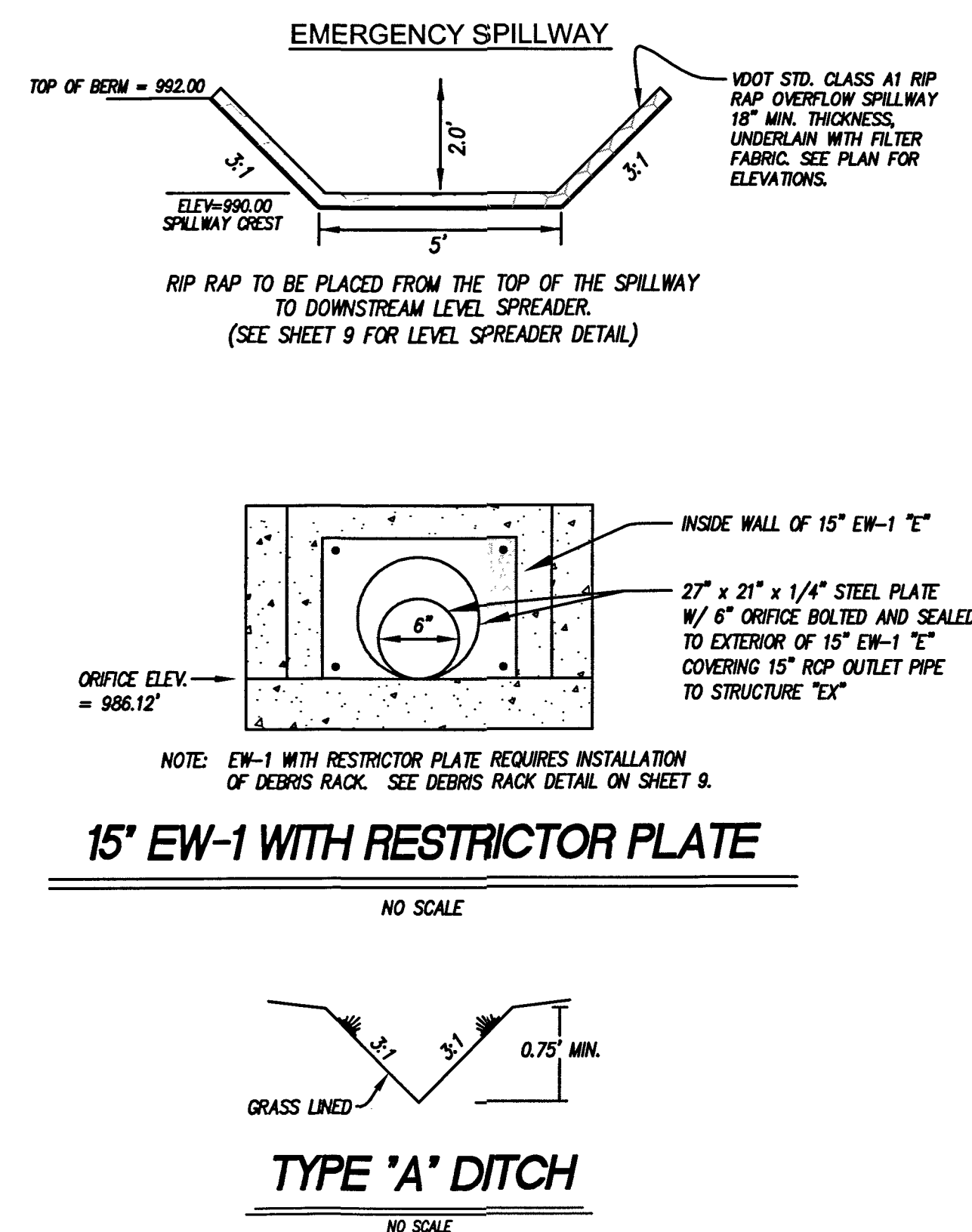
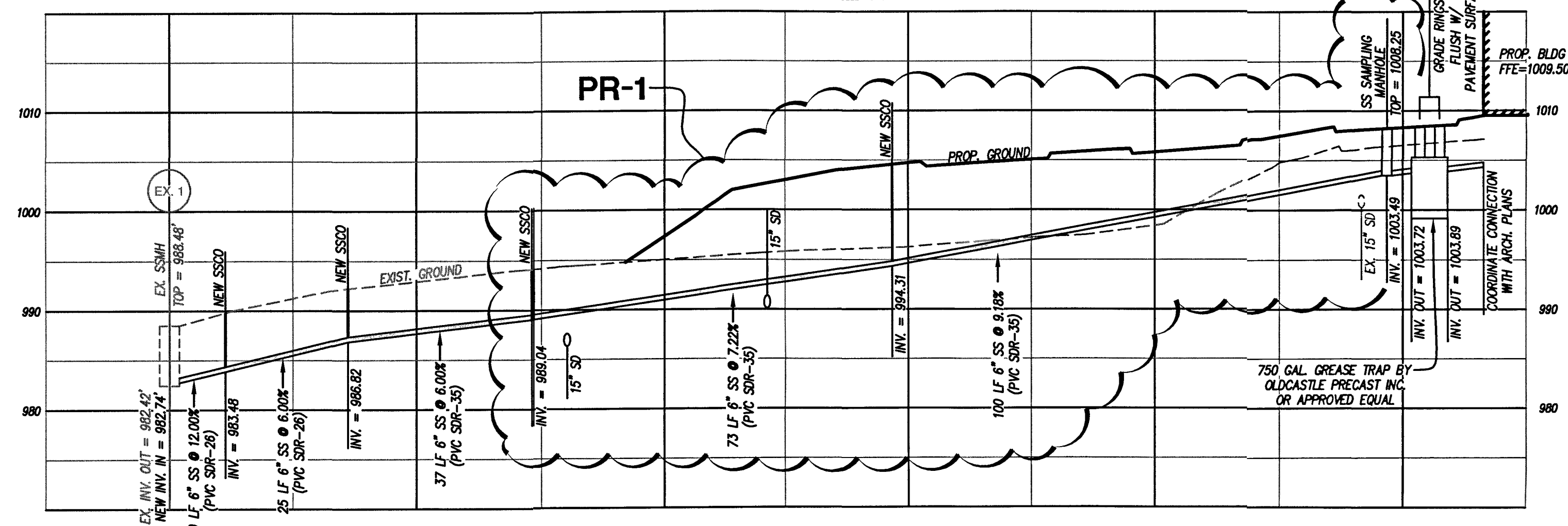
STORM DRAIN PROFILE: "J" - "F"



STORM DRAIN PROFILE: "E" - "EX"



SANITARY SEWER LATERAL PROFILE



## DETENTION POND CONSTRUCTION NOTES:

- BASIN SIDE SLOPES SHALL BE NO GREATER THAN 3 TO 1 (HORIZONTAL TO VERTICAL) WITH A MAXIMUM DEPTH OF 15' AS MEASURED FROM TOP OF THE EMBANKMENT TO THE LOWEST POINT IN THE BASIN.
- THE MINIMUM TOP WIDTH OF THE EMBANKMENT SHALL BE 8 FEET.
- EMBANKMENTS WITH AN EMERGENCY SPILLWAY SHALL HAVE ONE FOOT MINIMUM FREEBOARD FROM THE 100 YEAR WATER SURFACE ELEVATION. EMBANKMENTS WITH NO EMERGENCY SPILLWAY SHALL PROVIDE 2 FEET OF FREEBOARD.
- ALL OUTLET STRUCTURES SHALL BE EQUIPPED WITH APPROPRIATE TRASH AND/OR DEBRIS RACK.
- ON-SITE FILL MATERIAL OR BORROW FILL MATERIAL MAY BE UTILIZED IN ACCORDANCE WITH VIRGINIA STORMWATER MANAGEMENT HANDBOOK (VSMH) SEC 3.01. FILL MATERIAL SOILS, IN GENERAL:
  - \* SHALL BE COMPACTIBLE
  - \* SHALL BE WITHIN AN ACCEPTABLE RANGE OF
  - \* MOISTURE CONTENT WHICH IS READILY CONTROLLED
  - \* SHALL NOT BE HIGHLY SUSCEPTIBLE TO VOLUME CHANGE (SHRINKAGE OR SWELL) OR SETTLEMENT
- FILL MATERIALS CONTAINING ROCKS LARGER THAN SIX (6) INCHES (15.2 CM) SHALL NOT BE USED, THE UPPERMOST TWO (2) FEET (61 CM) SHALL NOT HAVE ANY ROCK LARGER THAN TWO (2) INCHES (5.1 CM) IN DIAMETER.
- THE APPROVED FILL SHALL BE PLACED IN EIGHT (8) INCH (20 CM) LOOSE LIFTS. EACH LIFT SHALL BE SPREAD IN UNIFORM LAYERS. FILL SOIL SHALL BE UTILIZED ONLY WITHIN A MOISTURE RANGE OF +/- 2% OF THE OPTIMUM MOISTURE CONTENT. COMPACTION OF THE FILL SHALL BE PERFORMED WITH APPROVED EQUIPMENT. COMPACTION OF THE LAYERS SHALL BE CONTINUOUS AND UNIFORM.
- EMBANKMENT MATERIAL IN FILL AREAS SHALL BE PLACED IN LIFTS NOT EXCEEDING EIGHT (8) INCHES AND SHALL BE COMPACTIONED TO A MINIMUM 95% DENSITY IN ACCORDANCE WITH SECTION 303 OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS. CUTOFF TRENCH AND CORE MATERIAL SHALL BE CONSTRUCTED IN ACCORDANCE WITH VSMH SEC 3.01.
- FIELD DENSITY TESTS ARE TO BE CONDUCTED BY AN INDEPENDENT SOILS TESTING LABORATORY UNDER THE DIRECTION OF A QUALIFIED GEOTECHNICAL ENGINEER. THE RESULTS OF THESE TESTS SHALL BE SUBMITTED TO THE COUNTY OF FRANKLIN WITH AS-BUILT PLANS AS A CONDITION OF ACCEPTANCE OF THE PROJECT BY THE COUNTY. FIELD DENSITY TESTS, AS DIRECTED BY THE ENGINEER SHALL BE PERFORMED PERIODICALLY TO DETERMINE THE DEGREE OF COMPACTION. ANY AREAS FAILING TO MEET THE ABOVE REQUIREMENTS SHALL BE REWORKED AND/OR RECOMPACTION UNTIL THE REQUIRED DEGREE OF COMPACTION IS ACHIEVED.
- ALL DISTURBED AREAS SHALL BE COVERED WITH FOUR (4) INCHES OF TOPSOIL AND SEED.
- THE PERMITTEE/OWNER SHALL CONTACT THE COUNTY OF FRANKLIN FOR INSPECTION AND APPROVAL PRIOR TO CONVERTING ANY SEDIMENT TRAP AND/OR BASIN INTO A PERMANENT STORMWATER MANAGEMENT FACILITY.
- PRIOR TO FINAL ACCEPTANCE AND BOND RELEASE OF THE PROJECT, THE PERMITTEE/OWNER SHALL SUBMIT TO THE COUNTY OF FRANKLIN AS-BUILT DOCUMENTATION CONFIRMING THAT THE STORM DRAINAGE SYSTEM AND STORMWATER MANAGEMENT FACILITIES AND PRACTICES ARE IN CONFORMANCE WITH THE APPROVED PLANS.
- SOILS CLASSIFIED AS "CH" OR "CL" SHALL BE USED TO CONSTRUCT THE EMBANKMENT FOR THE DETENTION POND. A CUTOFF TRENCH SHALL ALSO BE INCLUDED ALONG THE ENTIRE LENGTH OF THE EMBANKMENT. THE CUTOFF TRENCH SHALL BE EIGHT (8) FEET WIDE AND SHALL EXTEND A MINIMUM OF FOUR (4) FEET INTO NATURAL GROUND WITH 1:1 SIDE SLOPES. THE EMBANKMENT SHALL BE PLACED IN MAXIMUM EIGHT (8) INCH LOOSE LIFTS AND THEN COMPACTIONED USING HEAVY SHEEPSFOOT OR PADFOOT TYPE ROLLERS. THE EMBANKMENT MATERIAL SHALL BE COMPACTIONED TO AT LEAST 95 PERCENT OF MAXIMUM DRY DENSITY, STANDARD PROCTOR, AT A MOISTURE CONTENT OF TWO (2) TO FOUR (4) PERCENT ABOVE OPTIMUM. THE RESULTS OF THE COMPACTION AND MOISTURE TEST SHALL BE PROVIDED TO FRANKLIN COUNTY AND/OR THE OWNER.

## DEVELOPMENT PLAN FOR

## WESTLAKE WELLNESS CENTER BUILDING ADDITION

PREPARED FOR  
RUNK & PRATT OF SML, LLC  
SITUATED ALONG CAREFREE COURT  
FRANKLIN COUNTY, VIRGINIA

NO.	DATE	DESCRIPTION
1	4/13/17	CHANGES ASSOCIATED WITH THE LOWERING OF THE SURFACE ELEVATION OF THE PROPOSED COURT.
2		
3		
4		
5		

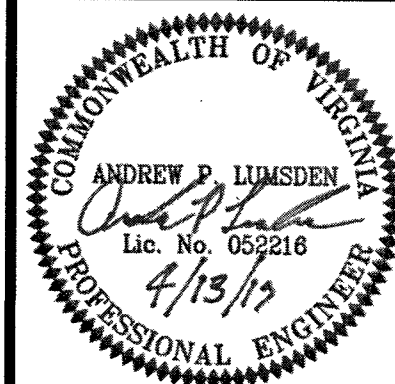
DATE: March 15, 2017

SCALE: 1"= 20' (H); 1"= 10' (V)

COMMISSION NO.: 16-121

SHEET 6 OF 10

LUMSDEN ASSOCIATES, P.C.  
ENGINEERS-SURVEYORS-PLANNERS  
ROANOKE, VIRGINIA



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