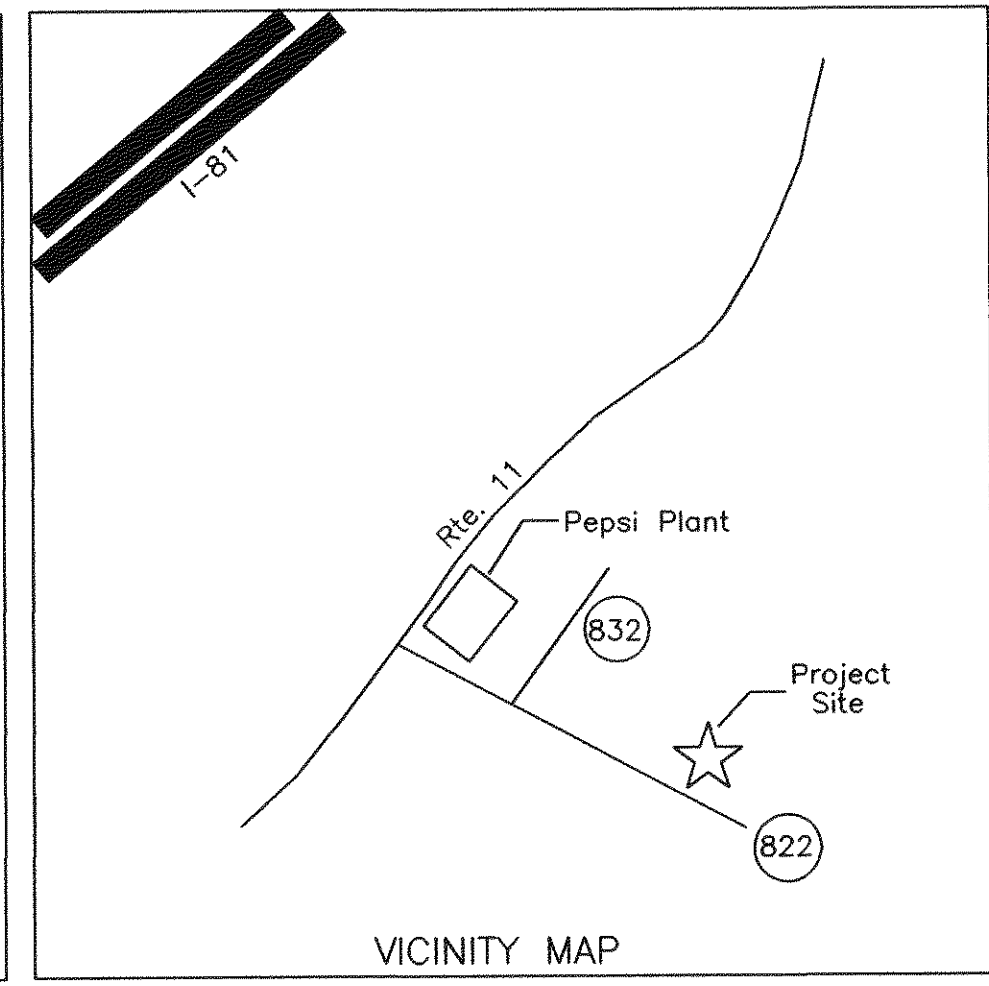
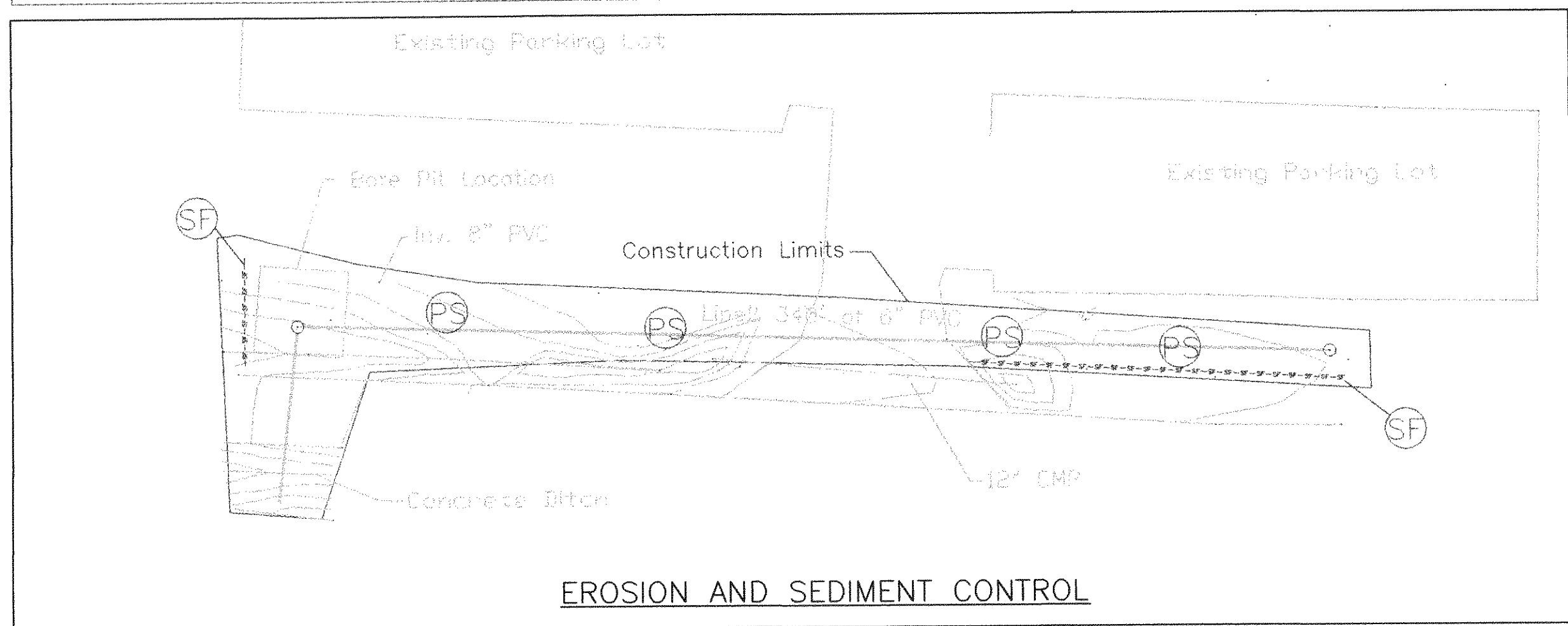
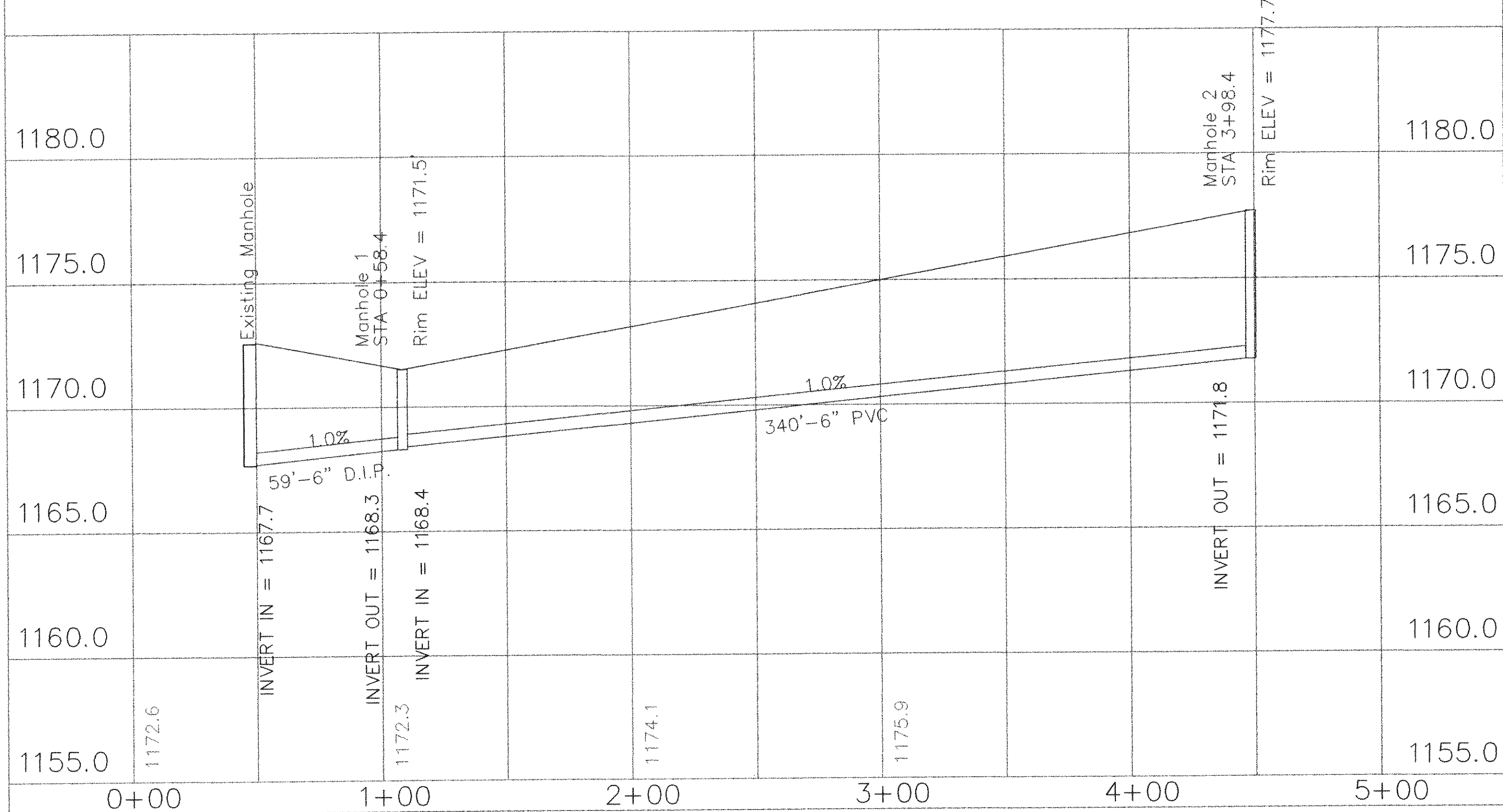
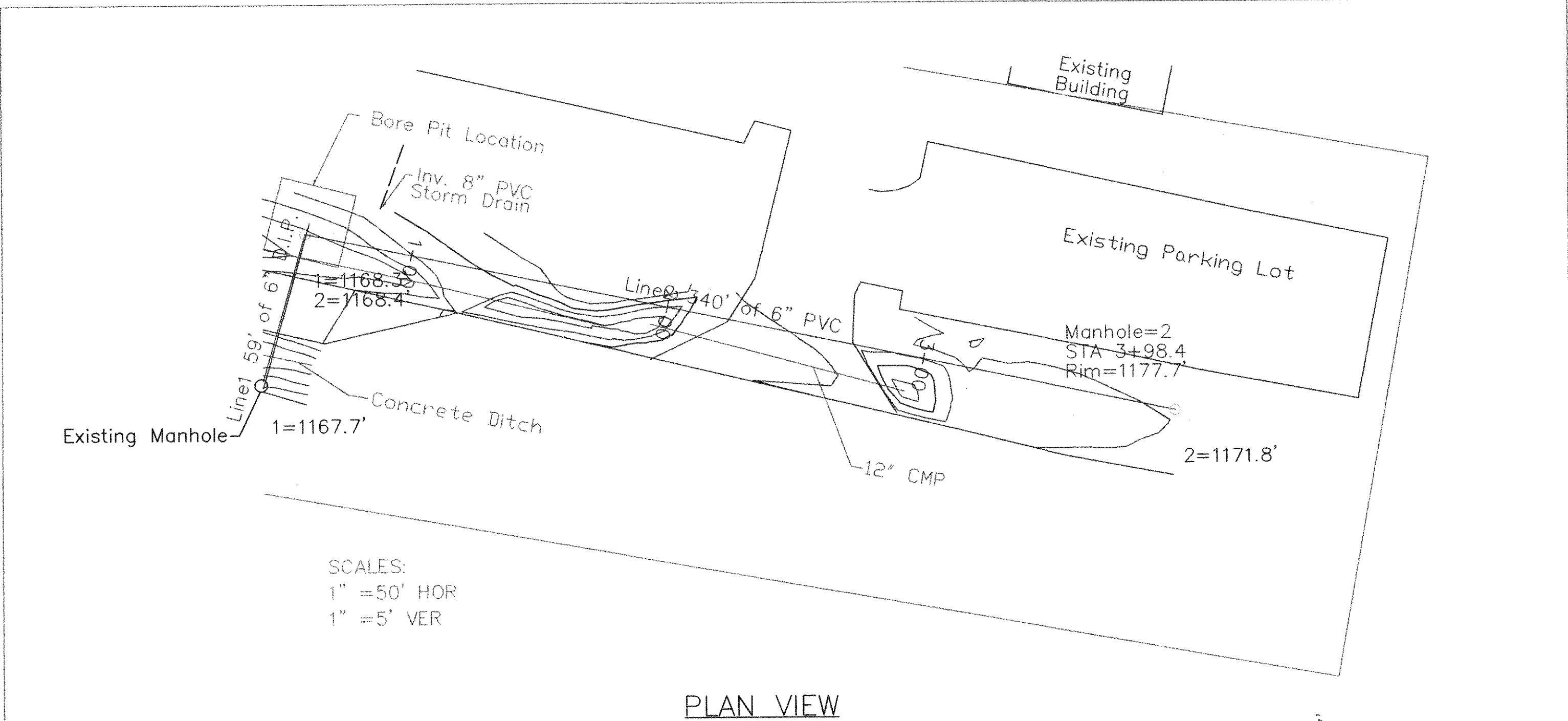


GENERAL NOTES

- 1) All elevations shown on these drawings are based upon field survey information and elevation data obtained from record drawings entitled "Proposed Sanitary Sewer Plan-Profile for Bova Distributing, Inc. by T.P. Parker & Son, dated 10-4-88.
- 2) Information on these drawings has been prepared from the most reliable information available. The engineer does not accept responsibility for utilities, structures or other facilities and obstructions not indicated on the drawings. Contractor must contact Miss Utility at 1-800-552-7001 48 hours before beginning construction.
- 3) The contractor shall exercise caution to eliminate damage or disturbance to public or privately owned utilities, structures, or other facilities resulting from his activities. Contractor shall at no additional cost to the owner, take all measures necessary to provide and shall be solely responsible for temporary support and shoring, protection, maintenance and continuous operation of underground/aboveground, water, sewer, gas, electrical and service lines. telephone, television, electrical cables, and poles, equipment cables and conduits, storm sewers, buildings, tanks, signs, fences and all other structures, whether or not indicated on these drawings. Contractor shall immediately repair, replace or compensate the owner for any damage to structures, utilities, signs, or other structures to the owners satisfaction.
- 4) The contractor shall bear sole responsibility for the character, locations and elevations of all existing utilities, structures or other facilities within the project area.
- 5) Site conditions may require slight deviations in alignment, grade and/or location of new facilities indicated on these drawings. The contractor shall construct the new facilities to satisfaction of engineer without increase to the contract price or fine.
- 6) The contractor shall maintain a clear flow path to and through all surface water and storm water drainage facilities at all times.
- 7) The contractor shall grade and seed the entire area disturbed by the construction activities.
- 8) Construction and start-up of all work shall not interfere with the operation of water and sewer facilities. The contractor shall coordinate all work with the owners as required.
- 9) Minimum cover on all pipes shall be 3 feet, unless otherwise specifically indicated on project drawings. All pipe shall be installed with warning/caution detector tape 18" from finished grade. Locator wire shall installed as shown on detail sheet, on all pipe installed.
- 10) Where it is necessary to deflect the pipe horizontally or vertically, pipe joint deflection shall not exceed manufacturers recommendation for deflection angle.
- 11) All piping shall be properly supported.
- 12) All construction shall be in compliance with the current BOCA and/or state building codes.
- 13) Contractor shall maintain the construction area in a manner acceptable to owner and shall be responsible for remediating any damages resulting from failure to do so.
- 14) Contractor shall maintain limits of construction within the boundaries of the property and easements as indicated.
- 15) Contractor is responsible for obtaining all necessary permits, including but not limited to, land disturbing permit, VDOT road crossing permit, and building permits.
- 16) All manholes shall be 48" diameter precast concrete unless otherwise noted.
- 17) All work will be performed within the 20 ft. construction easement along the alignment.



BOTETOURT COUNTY-PUBLIC FACILITIES & PROGRAMS
1 West Main St. Box 4
Fincastle, Va. 24017
Ph. (540) 473-8316
Fax: (540) 473-8360

**ONEAL STEEL-SEWER MAIN EXTENSION
CLOVERDALE, VA.**

REV #	DATE:	DESCRIPTION:	DRAWN: JWK	SCALE: AS SHOWN
			CHECKED: KRS	SHEET 1 OF 2
			DATE: 3-18-99	

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- NOTES:
1. SLOPE ENCASEMENT TO MATCH SLOPE OF ENCASED SEWER AS SHOWN ON PLANS.
 2. STEEL ENCASEMENT PIPE SHALL CONFORM TO THE REQUIREMENTS OF ASTM A399 FOR THE CLASS AND THICKNESS SPECIFIED AND SHALL HAVE REINFORCES SUITABLE FOR FIELD WELDING.
 3. PIPE SHALL BE 1/4" MIN. WALL THICKNESS.
 4. CARRIER PIPE SHALL BE FLANGED DUCTILE IRON.
 5. CARRIER PIPE SHALL BE LINED WITH TAR PAPER AT MANSION JOINT.
 6. MANSION JOINT SHALL BE OF WATERTIGHT CONNECTION WITH A VEE HOLE FOR DRAINAGE.
 7. FOR OPEN CUT INSTALLATION:
 - A. CONTRACTOR SHALL REPLACE CUT MATERIAL WITH APPROVED CRUSHED AGGREGATE AND SHALL ACHIEVE 90% COMPACTION PER VDOT REQUIREMENTS.
 - B. CONTRACTOR SHALL RESTORE PAVED SECTION AND SHALL REPLACE PAVEMENT AND SURFACE TO ORIGINAL CONDITION OR BETTER.
 7. FOR JACK AND BORE INSTALLATIONS:
 - A. CONTRACTOR SHALL PIPE LAYOUT VERIFY LOCATION OF BORE PIT AND CONFORM WITH ENGINEER'S PROCEEDING WITH THE PROPOSED INSTALLATION.

ENCASED ROAD CROSSING-SEWER
NOT TO SCALE



(PS) PERMANENT SEEDING MIXTURE

TYPE A

TYPE B (SLOPES 3:1 OR STEEPER)

15 OCTOBER TO 1 FEBRUARY
K-31 FESCUE @ 5 LB / 1000 SF
BORZY WINTER RYE @ 1/2 LB/1000 SF

1 FEBRUARY TO 1 JUNE
K-31 FESCUE @ 5 LB / 1000 SF
ANNUAL RYE @ 1/2 LB / 1000 SF

1 JUNE TO 1 SEPTEMBER
K-31 FESCUE @ 5 LB / 1000 SF
GERMAN MILLET @ 1/2 LB / 1000 SF

1 SEPTEMBER TO 15 OCTOBER
K-31 FESCUE @ 5 LB / 1000 SF
ANNUAL RYE @ 1/2 LB / 1000 SF

15 MARCH TO 1 MAY
CROWN VETCH @ 1/2 LB / 1000 SF
PERENNIAL RYEGRASS @ 1/2 LB/1000 SF

RED TOP @ 1/8 LB / 1000 SF
15 AUGUST TO 1 OCTOBER
CROWN VETCH @ 1/2 LB / 1000 SF

PERENNIAL RYEGRASS @ 1/2 LB/1000 SF
RED TOP @ 1/8 LB / 1000 SF

LIME: 140 LB / 1000 SF PULVERIZED AGRICULTURAL LIMESTONE

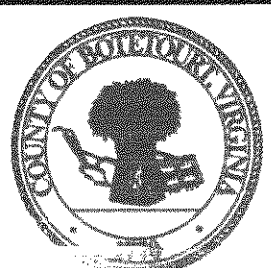
FERTILIZER: 5-20-10 @ 25 LB / 1000 SF
38-0-0 @ 7 LB / 1000 SF

MULCH: IF REQUIRED, SHALL BE USED OVER ALL SEEDED AREAS AND SHALL BE APPLIED IN ACCORDANCE WITH SECTION 1.75 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.

SOIL CONDITIONING:
INCORPORATION OF LIME AND FERTILIZER, SELECTION OF CERTIFIED SEED, MULCHING, MAINTENANCE OF NEW SEEDLINGS, AND RESEEDING SHALL BE IN ACCORDANCE WITH SPECIFICATIONS CONTAINED WITHIN THE VIRGINIA SOIL EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION. ADDITIONAL SEEDING TO BE PERFORMED AS REQUIRED BY THE INSPECTOR.

SEED APPLICATION: APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER ON A FIRM, FRIABLE, SEEDBED. MAXIMUM SEEDING DEPTH SHALL BE 1/4 INCH.

TOTAL DISTURBED AREA = .137 AC. = 6000 SQ. FT.



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ONEAL STEEL SEWER EXPANSION
STANDARD DETAILS AND SEEDING SCH.

REV #	DATE:	DESCRIPTION:	DRAWN: JWK	SCALE: NONE
			CHECKED: KRS	SHEET 2 OF 2
			DATE: 3-18-99	

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