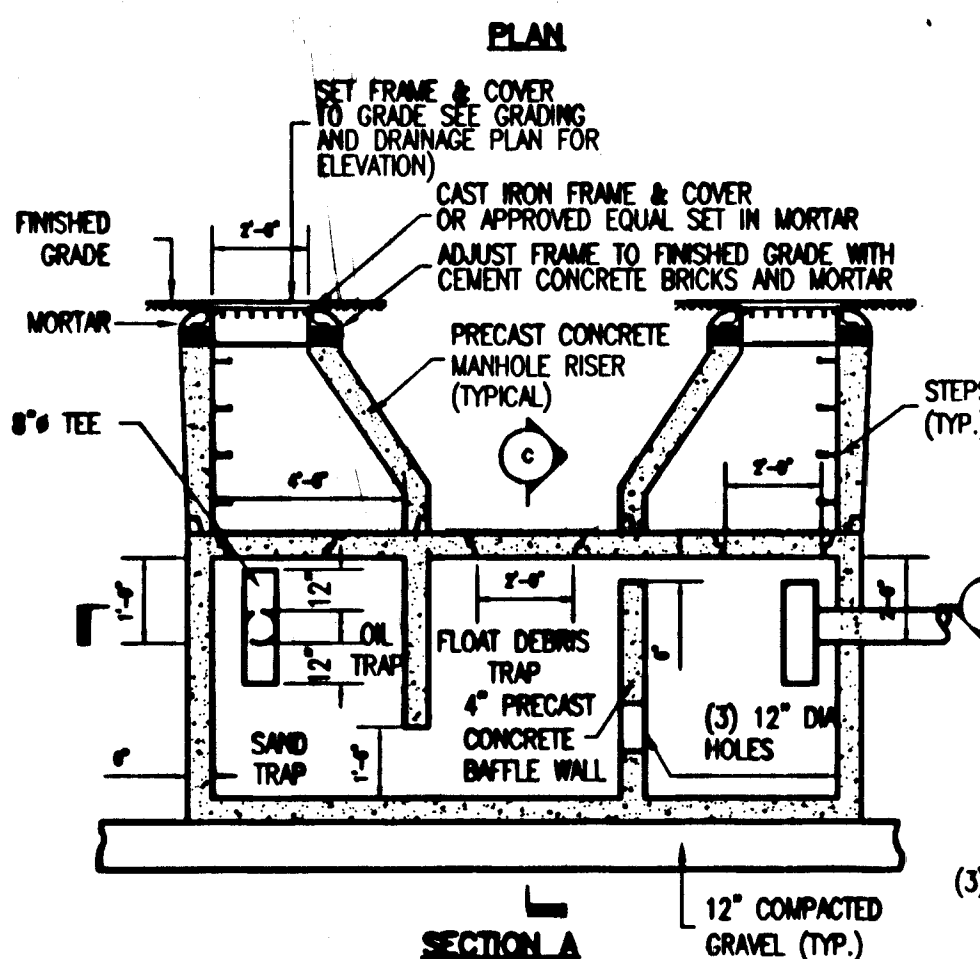
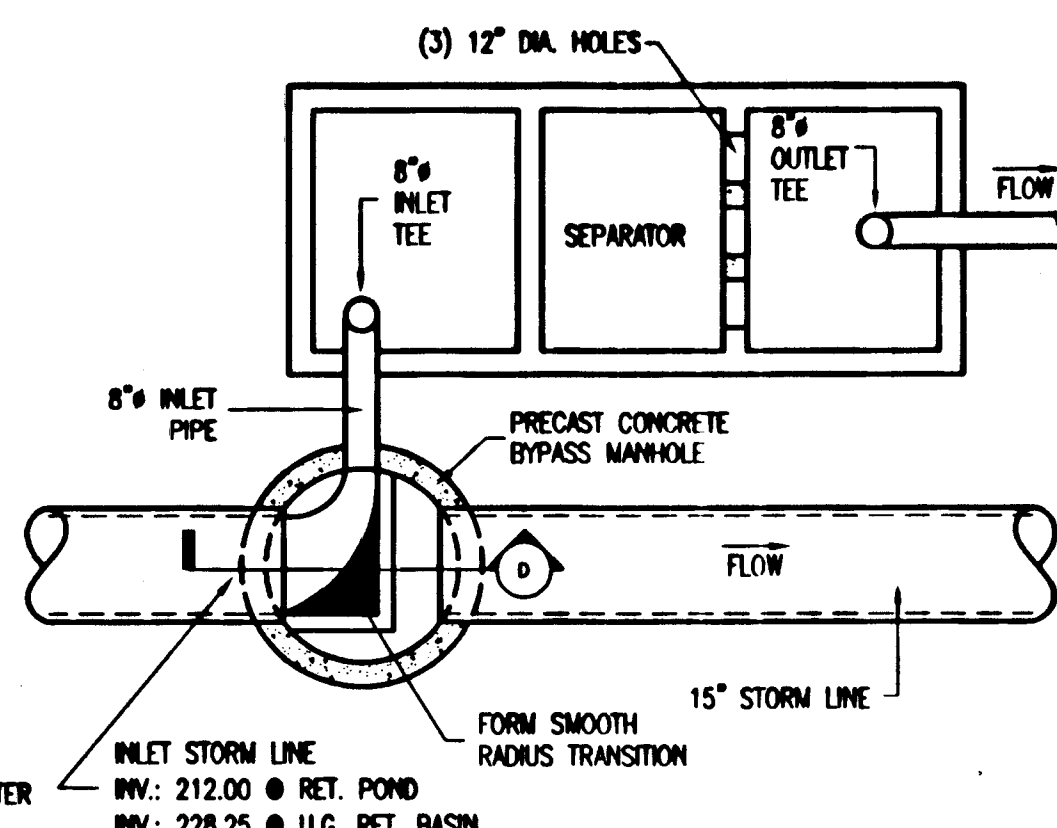


- GENERAL NOTES:**
1. REINFORCED STEEL CONFORMS TO ASTM A108 & A615
 2. CONCRETE COMPRESSIVE STRENGTH SHALL BE 4000 PSI AT 28 DAYS.
 3. PRECAST CONCRETE SECTIONS SHALL CONFORM TO ASTM C478.
 4. STEPS SHALL BE STEEL REINFORCED CONCRETE POLYPROPYLENE PLASTIC CONFORMING TO ASTM C478, PARA. 11.
 5. PIPE OPENINGS SHALL BE PIPE DIAMETER + 2" TYPICAL.
 6. JOINT SEALANT SHALL BE PREFORMED BUTYL RUBBER SEALANT.
 7. BASE SECTION SHALL BE ONE POUR MONOLITHIC.
 8. EXTERIOR OF PRECAST SECTIONS SHALL BE COATED WITH BITUMINOUS DAMP PROOFING.
 9. ALL FRAMES, GRATES, COVERS AND PRECAST SECTIONS SHALL BE DESIGN AND FABRICATED IN ACCORDANCE WITH A HS20 VEHICLE LOADING.

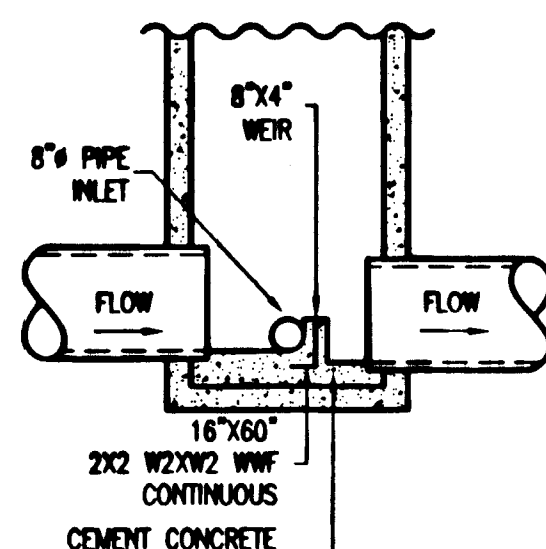


PRECAST CONCRETE WATER QUALITY STRUCTURE

SCALE: 1/4"=1'-0"



SECTION B (INCLUDING CONNECTIONS TO MANHOLES)

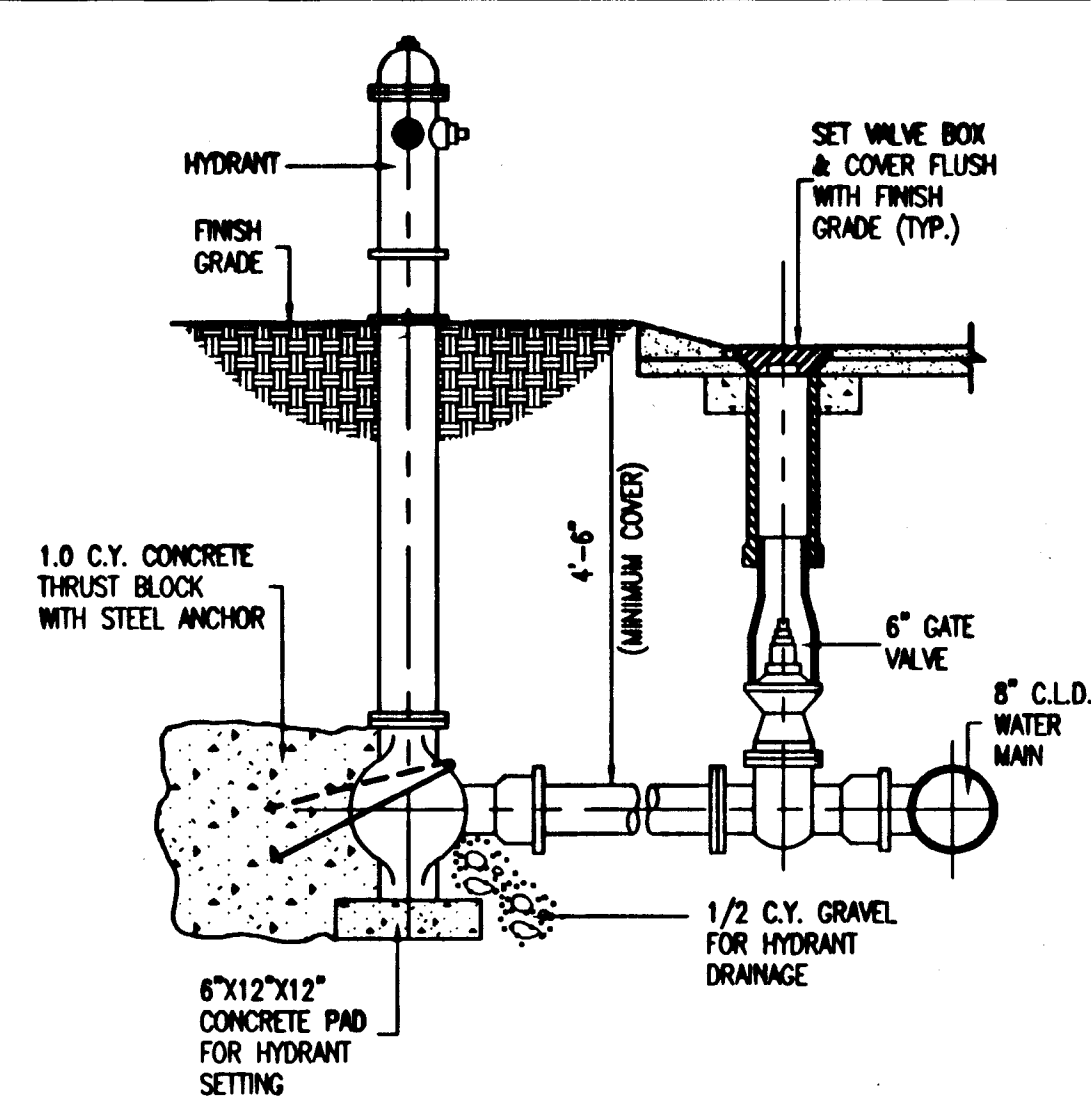
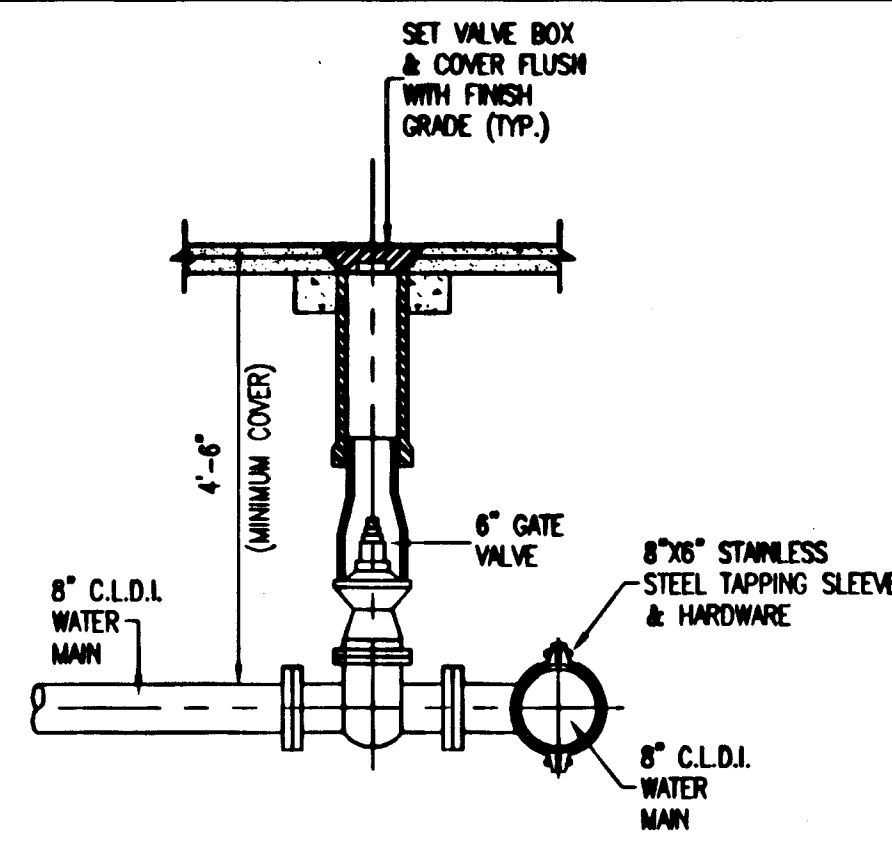


SECTION C (DETAIL OF DIVERSION WEIR)

ALL TAPPING SLEEVE & VALVES SHALL MEET THE REQUIREMENTS OF THE LOCAL DEPARTMENT OF PUBLIC WORKS STANDARDS

TAPPING SLEEVE & VALVE DETAILS

SCALE: 1/8"=1'-0"

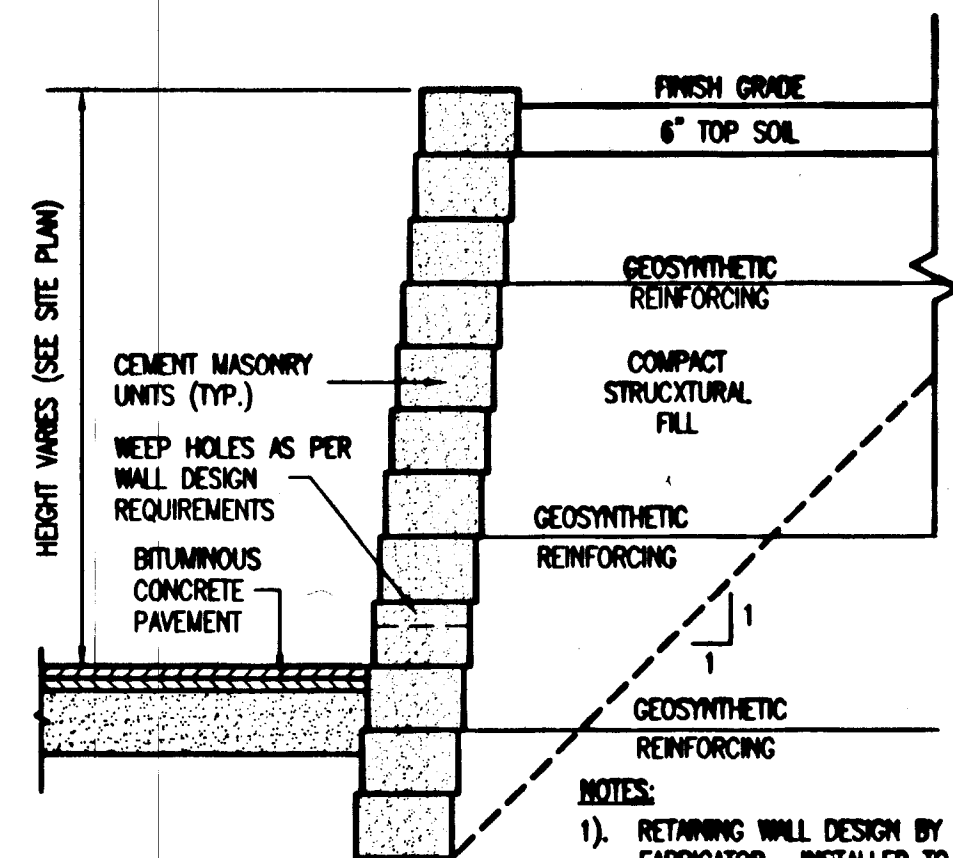


HYDRANT & GATE VALVE DETAILS

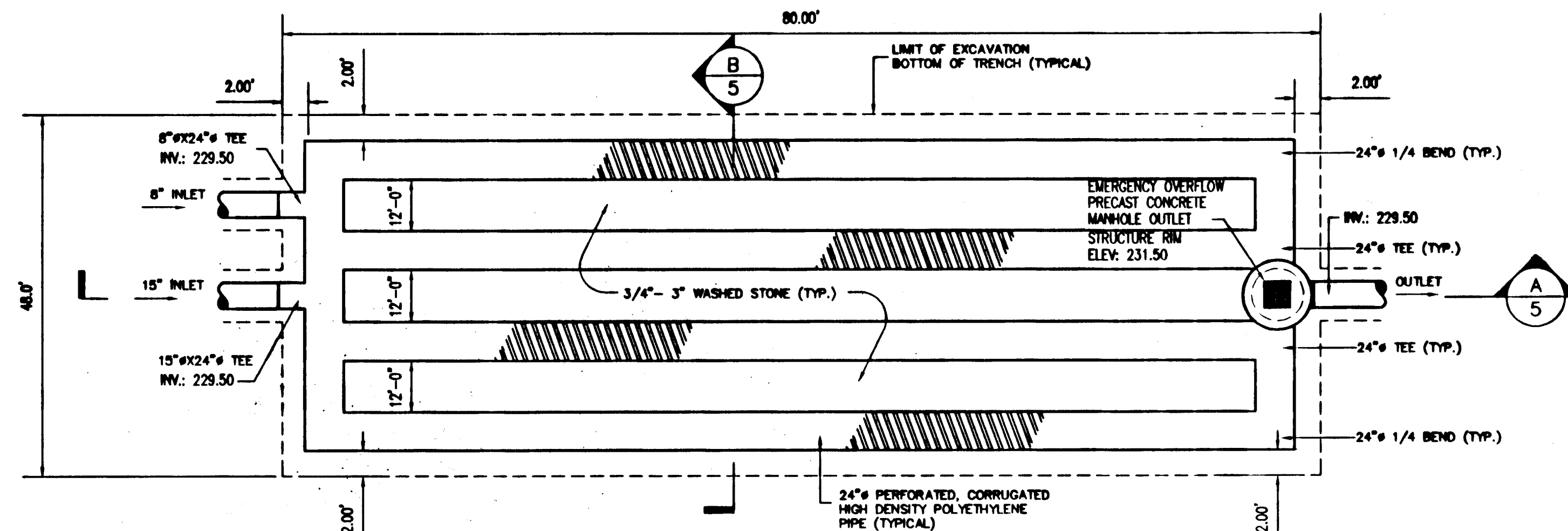
SCALE: 1/8"=1'-0"

REINFORCED EARTH TIED BACK RETAINING WALL TYPICAL SECTION

NOT TO SCALE

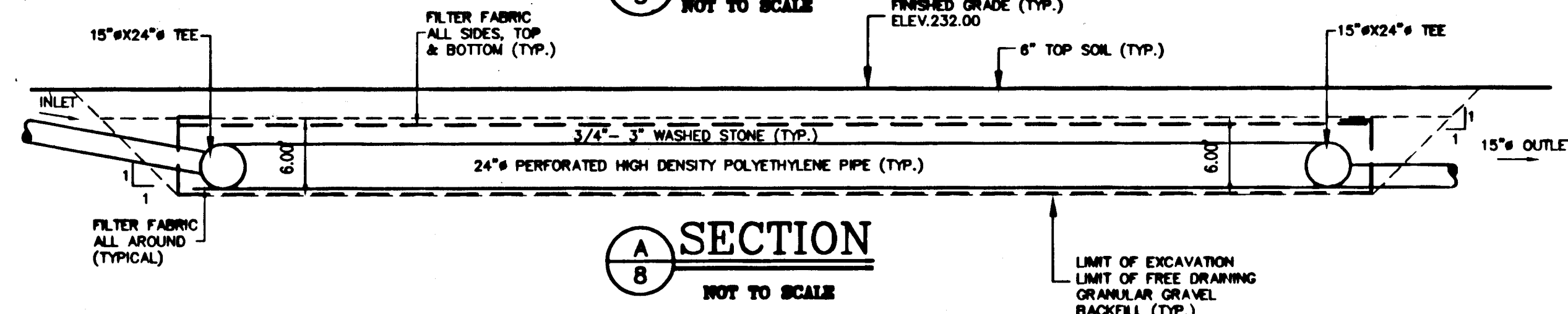


- NOTES:**
1. RETAINING WALL DESIGN BY WALL SYSTEM FABRICATOR. INSTALLER TO SUBMIT STRUCTURAL CALCULATIONS TO THE ENGINEER, FOR APPROVAL, PRIOR TO ERECTION.



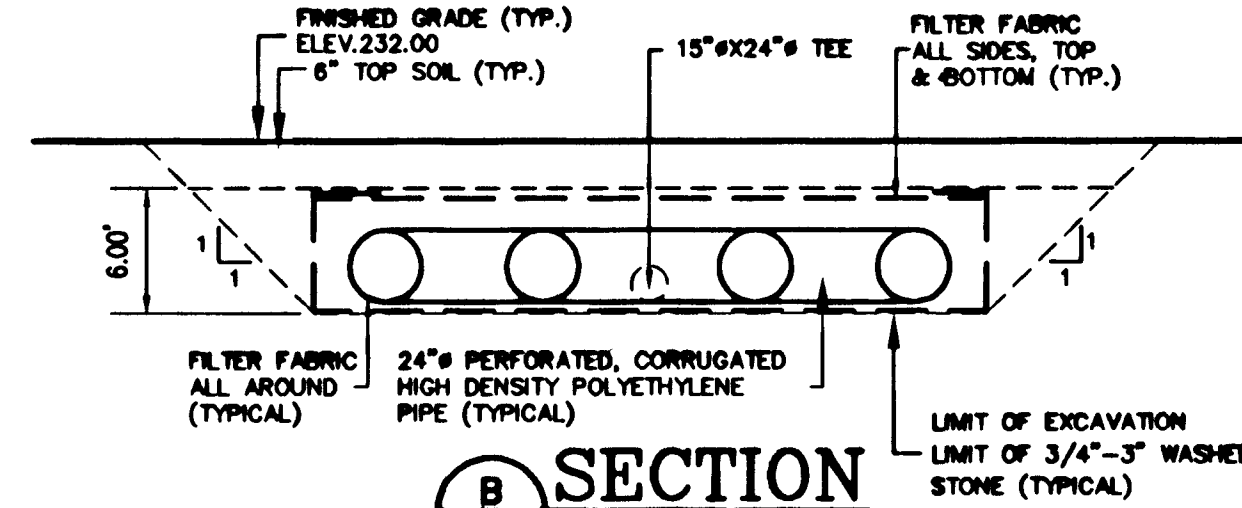
5A PLAN

NOT TO SCALE



A SECTION

NOT TO SCALE



B SECTION

NOT TO SCALE

8 STORM WATER DETENTION SYSTEM DETAILS

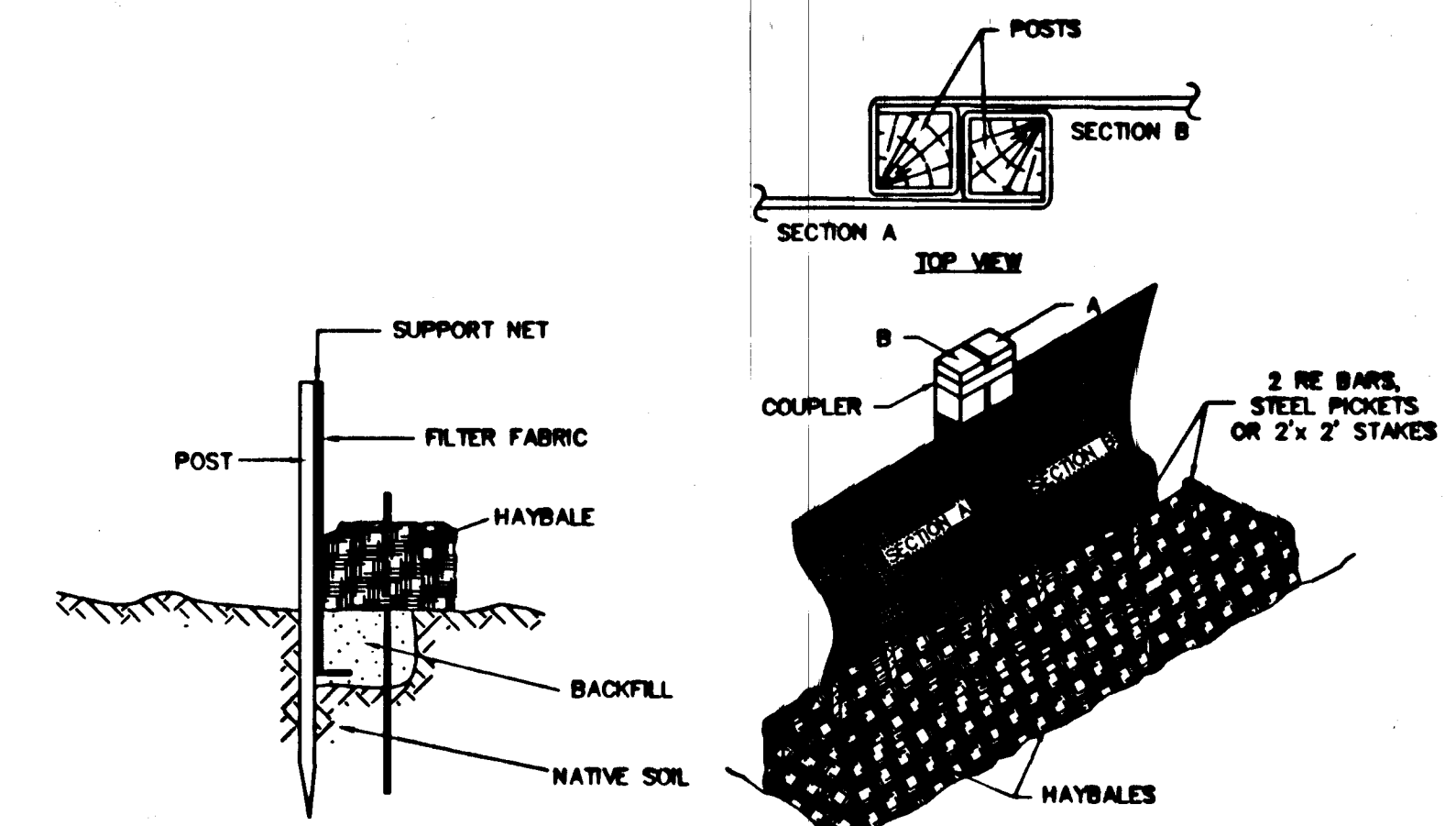
NOT TO SCALE

CONSTRUCTION SEQUENCE

1. LIMIT OF WORK AND ROADWAY TO BE STAKED OUT BY PROFESSIONAL LAND SURVEYOR.
2. SEDIMENTATION & EROSION CONTROL SYSTEM TO BE INSTALLED AS PER CONSTRUCTION DOCUMENTS.
3. EARTHWORK CONTRACTOR TO NOTIFY LOCAL CONSERVATION COMMISSION FOR FIELD REVIEW OF SEDIMENTATION & EROSION CONTROL SYSTEM.
4. RETENTION POND #1 OFF SHAKER ROAD TO BE EXCAVATED AND UTILIZED AS A TEMPORARY SEDIMENT BASIN.
5. EXCAVATION FOR UNDERGROUND RETENTION BASIN CONDUCTED AND UTILIZED AS A TEMPORARY SEDIMENT BASIN.
6. NEW CLOSED DRAINAGE SYSTEM AT STATION 0+00 TO ABOVE GROUND RETENTION BASIN TO BE INSTALLED.
7. INSTALL TEMPORARY BITUMINOUS CONCRETE ROADWAY APRON FROM STA. 0+00 TO STA. 0+50.
8. INSTALL TEMPORARY CAP COD BERM AT STATION 0+00 ALONG EDGE OF SHAKER ROAD TO DIRECT ALL RUNOFF FROM NEW BITUMINOUS CONCRETE APRON INTO NEWLY INSTALLED CATCH BASIN.
9. TEMPORARY CAP COD BERM AND APRON SHALL BE UTILIZED AT A HAUL TRUCK SHAKE DOWN & DUST OFF APRON.
10. INSTALL REMAINING CATCH BASINS MAN HOLES & DRAINAGE PIPING, EXCLUDING UNDERGROUND RETENTION SYSTEM.
11. INSTALL UNDERGROUND UTILITIES, SEWER, WATER, GAS ELECTRIC ETC.
12. INSTALL BITUMINOUS CONCRETE BINDER COURSE & CAP COD BERM.
13. STABILIZE, LOAM & SEED ALL DISTURBED AREA, & APPLY EROSION CONTROL BLANKETS TO SLOPES STEEPER THAN 6:1.
14. INSTALL BITUMINOUS CONCRETE WEARING SURFACE AND WALKWAY.
15. REMOVE ALL ACCUMULATED SEDIMENT FROM CLOSED DRAINAGE SYSTEMS AND TEMPORARY SEDIMENT BASINS.
16. INSTALL UNDERGROUND RETENTION BASIN SYSTEM AND COMPLETE GRADING OD ABOVE GROUND RETENTION BASIN.
17. LOAM & SEED ABOVE GROUND RETENTION BASIN.
18. ALL SEDIMENTATION & EROSION CONTROL SYSTEMS SHALL REMAIN IN PLACE UNTIL APPROVAL FOR REMOVAL OF THE SYSTEMS ARE GRANTED BY THE LOCAL CONSERVATION COMMISSION.
19. THE CONTRACTOR SHALL FURNISH & INSTALL SILTATION FABRIC AND HAY BAILES AT ALL CATCH BASIN INLETS.
20. THE CONTRACTOR SHALL CLEAN & MAINTAIN ALL SEDIMENTATION & EROSION CONTROL SYSTEMS THROUGHOUT CONSTRUCTION, REMOVING ACCUMULATED SILT AND DEBRIS AS IT ACCUMULATES.
21. THE CONTRACTOR SHALL HAVE THE NEWLY INSTALLED PAVEMENTS SWEEPED OF ALL DUST AND ACCUMULATED DEBRIS THROUGHOUT CONSTRUCTION ON A REGULAR BASIS.
22. THE CONTRACTOR SHALL UTILIZES WATER AND CALCIUM CHLORIDE AS REQUIRED TO MINIMIZE WIND BLOWN DUST THROUGHOUT CONSTRUCTION.

SEDIMENTATION & EROSION CONTROL DETAILS

NOT TO SCALE

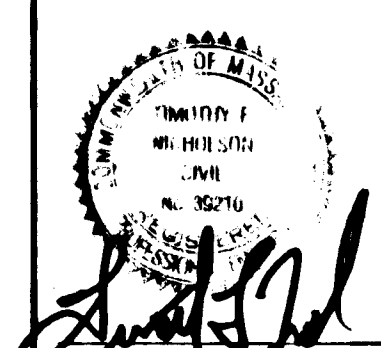


DRAWN BY: T.F.N.
DATE: 1/15/04
FILE: E:\PROJECTS\2003.01\DETAILS2
JOB NO.: 2003.01
CONTACT: MR. PETER SARES

SYMBOL	DATE	REVISIONS	DESCRIPTION
Δ	3/30/04	FINALIZED INVERTS OF UNDERGROUND RETENTION SYSTEM	

PREPARED FOR:
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TEL: (413) 783-0123

PREPARED BY:
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100 FEDERAL STREET
BELCHERTOWN, MA 01007
TEL: (413) 323-0316
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E-MAIL: NEENGINEERS@AOL.COM



CONSTRUCTION DETAILS
DEFINITIVE SUBDIVISION PLAN
HALON ESTATES
EAST LONGMEADOW, MASSACHUSETTS

AS SHOWN

DATE: 1/15/04

SHEET 8 OF 8