

# University Police Department Site Improvements

## Montclair State University

### Township of Montclair

### Essex County, New Jersey

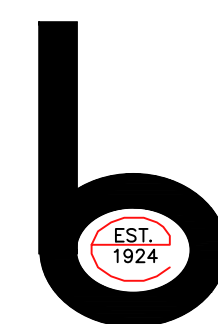
**PUBLIC UTILITIES**

GAS: PUBLIC SERVICE ELECTRIC AND GAS (GAS)  
 ELECTRIC: PUBLIC SERVICE ELECTRIC AND GAS (ELECTRIC)  
 CABLE: COMCAST  
 TELEPHONE: VERIZON  
 WATER: MONTCLAIR WATER DEPT.



PROJECT LOCATION MAP  
 N.T.S.  
 [MAP COURTESY OF OPEN STREET MAPS, 2023]

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	CONSTRUCTION PLAN
3	CONSTRUCTION DETAILS



Plans prepared by:

**BOSWELL ENGINEERING**  
 330 PHILLIPS AVENUE  
 SOUTH HACKENSACK, NEW JERSEY 07606  
 Tel (201) 641-0770 . Fax (201) 641-1831  
 NJ Certificate of Authorization No. 24GA27958000

STEPHEN T. BOSWELL  
 PROFESSIONAL ENGINEER N.J. LIC. 34680

JOSEPH A. POMANTE  
 PROFESSIONAL ENGINEER N.J. LIC. 43137

MSU Project No. PR23C067

Boswell Job No. 23-107

August 28, 2023

Note: This project is governed by 2019 New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction and Standard Roadway Construction/Traffic Control/Bridge Construction Details, as amended herein.

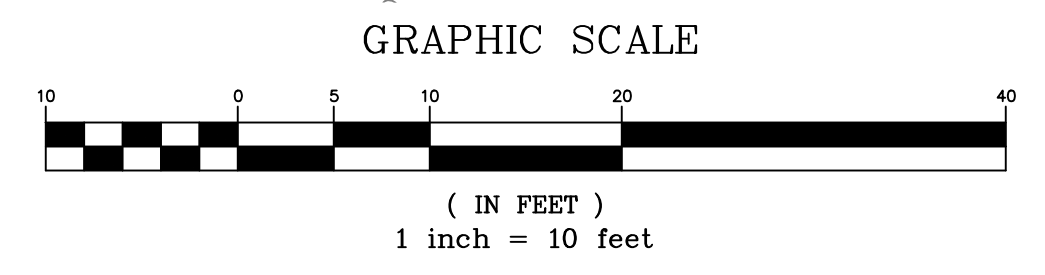
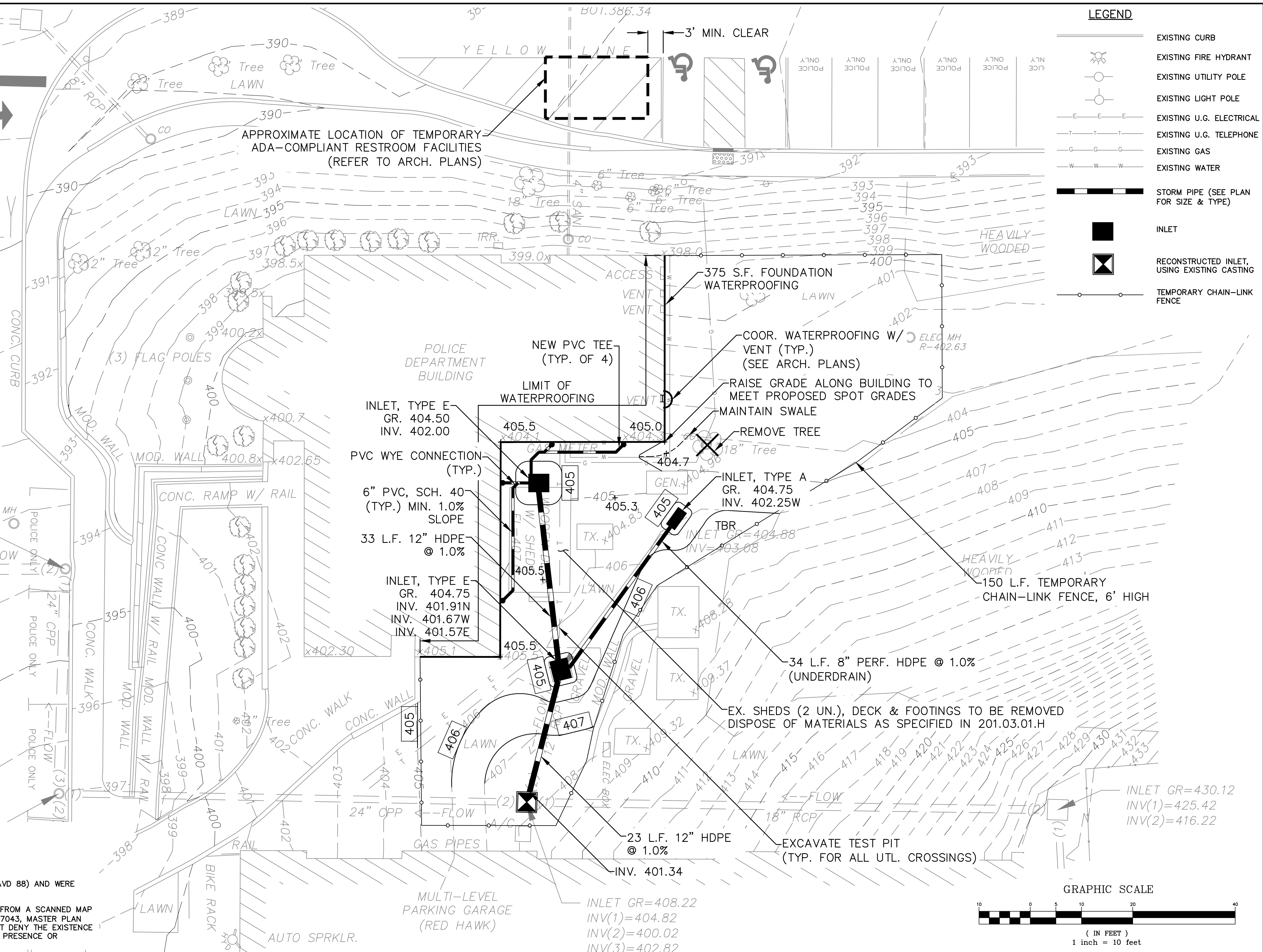


# COLLEGE AVENUE

LEGEND	
	EXISTING CURB
	EXISTING FIRE HYDRANT
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING U.G. ELECTRICAL
	EXISTING U.G. TELEPHONE
	EXISTING GAS
	EXISTING WATER
	STORM PIPE (SEE PLAN FOR SIZE & TYPE)
	INLET
	RECONSTRUCTED INLET, USING EXISTING CASTING
	TEMPORARY CHAIN-LINK FENCE

- GENERAL NOTES:**
- THESE PLANS ARE GOVERNED BY THE 2019 NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE MOST CURRENT REVISION OF THE NJDOT STANDARD ROADWAY CONSTRUCTION, TRAFFIC CONTROL, BRIDGE CONSTRUCTION, & ELECTRICAL DETAILS, AS AMENDED HEREIN.
  - NOT ALL EXISTING TOPOGRAPHIC FEATURES HAVE BEEN SHOWN ON PLAN. ASCERTAIN ALL LOCATIONS PRIOR TO CONSTRUCTION.
  - UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THEIR LOCATION AND COMPLETENESS. THE CONTRACTOR MUST HIRE AN INDEPENDENT 3RD PARTY TO MARK OUT ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A SKETCH OF THE MARKOUT PRIOR TO MOBILIZATION.
  - UTILITY LOCATIONS MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION TO AVOID DISRUPTION OF SERVICE. ALL DISCREPANCIES SHALL BE REPORTED IMMEDIATELY IN WRITING TO THE ENGINEER. CROSSINGS WITH EXISTING UNDERGROUND INSTALLATIONS SHALL BE FIELD VERIFIED BY TEST PITS PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE ENGINEER AND THE APPROPRIATE UTILITY COMPANY SHALL BE NOTIFIED OF ANY CONFLICTS FOUND IMMEDIATELY.
  - EQUIPMENT AND MATERIAL STORAGE AREAS MUST BE COORDINATED WITH THE OWNER AND APPROVED IN WRITING PRIOR TO MOBILIZATION.
  - MONITOR ALL GRADES INCLUDING PAVEMENT, DRIVEWAY, DRAINAGE, CURB AND SIDEWALK THROUGHOUT THE PROJECT SO THAT POSITIVE DRAINAGE IS MAINTAINED AND PONDING DOES NOT OCCUR. SEPARATE PAYMENT WILL NOT BE MADE FOR THE MONITORING OF GRADES BUT THE COST WILL BE INCLUDED IN VARIOUS PAY ITEMS IN THE PROJECT.
  - ALL MANHOLE CASTINGS, UTILITY BOXES, ETC. WITHIN THE LIMITS OF THE WORK SHALL BE RESET, AS REQUIRED.
  - PERFORM ALL CONSTRUCTION WORK IN ACCORDANCE WITH ALL APPLICABLE SAFETY CODES. APPLICABLE SAFETY CODES MEANS THE LATEST EDITION INCLUDING ANY AND ALL AMENDMENTS, REVISIONS AND ADDITIONS THERETO OF THE FEDERAL DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION'S "OCCUPATIONAL SAFETY AND HEALTH STANDARDS"(OSHA); "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION" OF THE STATE OF NEW JERSEY, DEPARTMENT OF LABOR AND INDUSTRY, BUREAU OF ENGINEERING AND SAFETY; "CONSTRUCTION SAFETY CODE," AND "MAINTENANCE, CONSTRUCTION AND DEMOLITION," AND "BUILDING CODE."
  - ALL EXISTING FEATURES DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO THE PRE-CONSTRUCTION CONDITION AT NO ADDITIONAL COST TO THE OWNER.
  - THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION STAKEOUT/LAYOUT. THE CONSTRUCTION STAKEOUT/LAYOUT SHALL BE PERFORMED BY A QUALIFIED NEW JERSEY LICENSED PROFESSIONAL LAND SURVEYOR. THE ENGINEER WILL SUPPLY THE CAD FILES FOR LAYOUT PURPOSES, UPON REQUEST.
  - THE CONTRACTOR SHALL PERFORM TEST PITS IN ORDER TO IDENTIFY POTENTIAL CONFLICTS WITH THE PROPOSED DRAINAGE ITEMS. LOCATIONS OF POTENTIAL CONFLICTS SHOULD BE PROVIDED TO THE ENGINEER FOR REVIEW AND REDESIGN, AS NEEDED.
  - THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING AND MAINTAINING THE TEMPORARY CHAIN-LINK FENCE DURING CONSTRUCTION.

- SURVEY NOTES:**
- FIELD SURVEY DATA COLLECTED ON FEBRUARY 3, 2023.
  - HORIZONTAL DATUM BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD 83).
  - ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND WERE OBTAINED VIA GNSS SURVEYING UTILIZING THE SMARTNET NORTH AMERICA NETWORK.
  - UNDERGROUND UTILITIES IF DEPICTED ARE BASED ON VISIBLE EVIDENCE & INFORMATION DIGITIZED FROM A SCANNED MAP PREPARED BY H2L2 ARCHITECTS/PLANNERS ENTITLED MONTCLAIR STATE, UPPER MONTCLAIR, NJ 07043, MASTER PLAN PROJECT 7.0, SECURITY FACILITY, DATED 01-22-92. THE LACK OF UTILITY INFORMATION DOES NOT DENY THE EXISTENCE OF SAME. REFERENCE TO THE APPROPRIATE UTILITY AUTHORITY SHOULD BE MADE TO VERIFY THE PRESENCE OR ABSENCE OF UTILITIES PRIOR TO ANY EXCAVATION.



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 EST. 1924  
 ENGINEERS - SURVEYORS - PLANNERS - SCIENTISTS  
 330 PHILLIPS AVENUE, SOUTH HACKENSACK, N.J. 07606  
 TEL: (201) 641-0770 • FAX: (201) 641-1831  
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**STEPHEN T. BOSWELL**  
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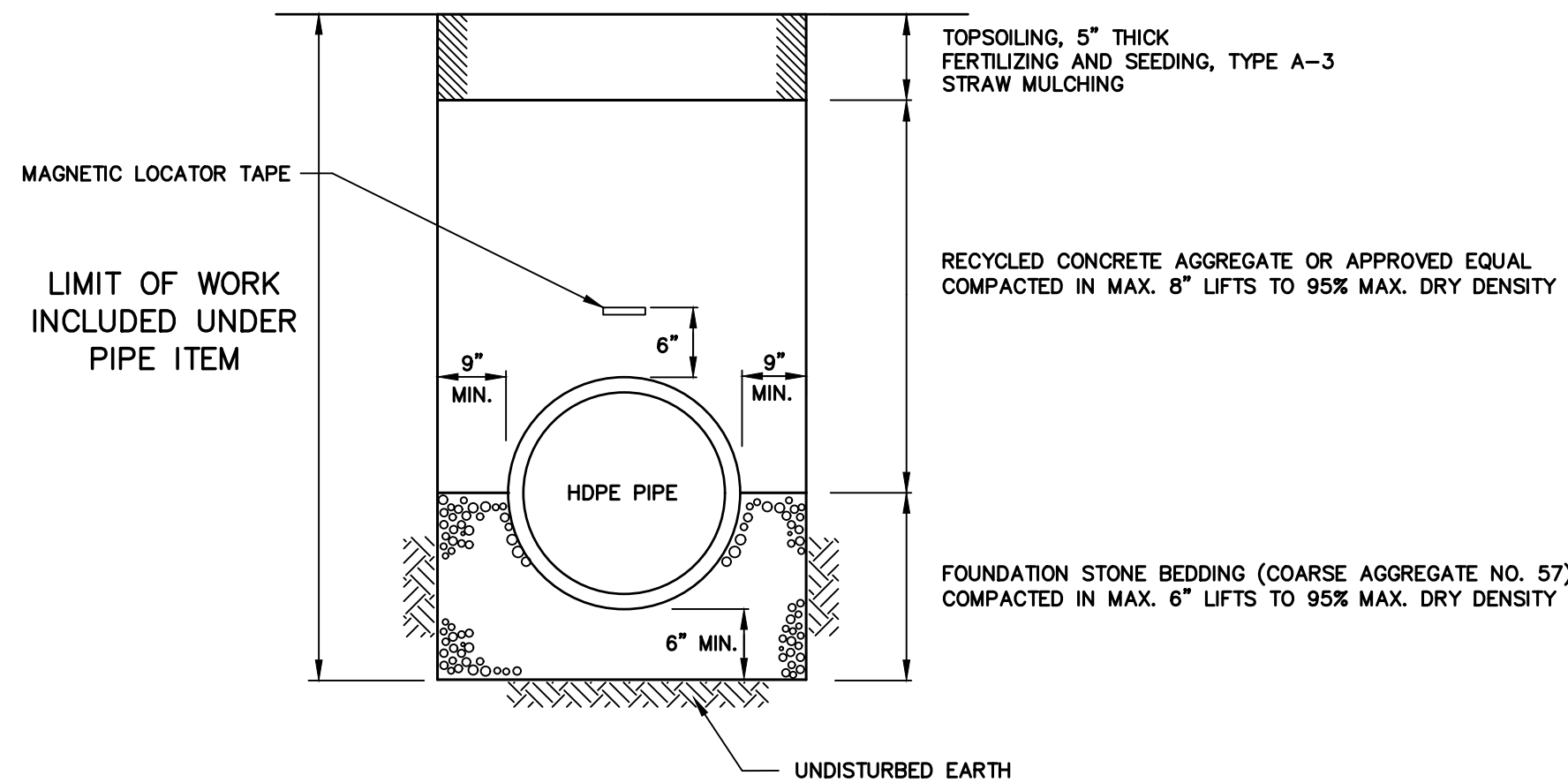
**JOSEPH A. POMANTE**  
 PROFESSIONAL ENGINEER N.J. LIC. 43137

UNIVERSITY POLICE DEPARTMENT SITE IMPROVEMENTS  
 MONTCLAIR STATE UNIVERSITY  
 CONSTRUCTION PLAN  
 TOWNSHIP OF MONTCLAIR

ESSEX COUNTY NEW JERSEY

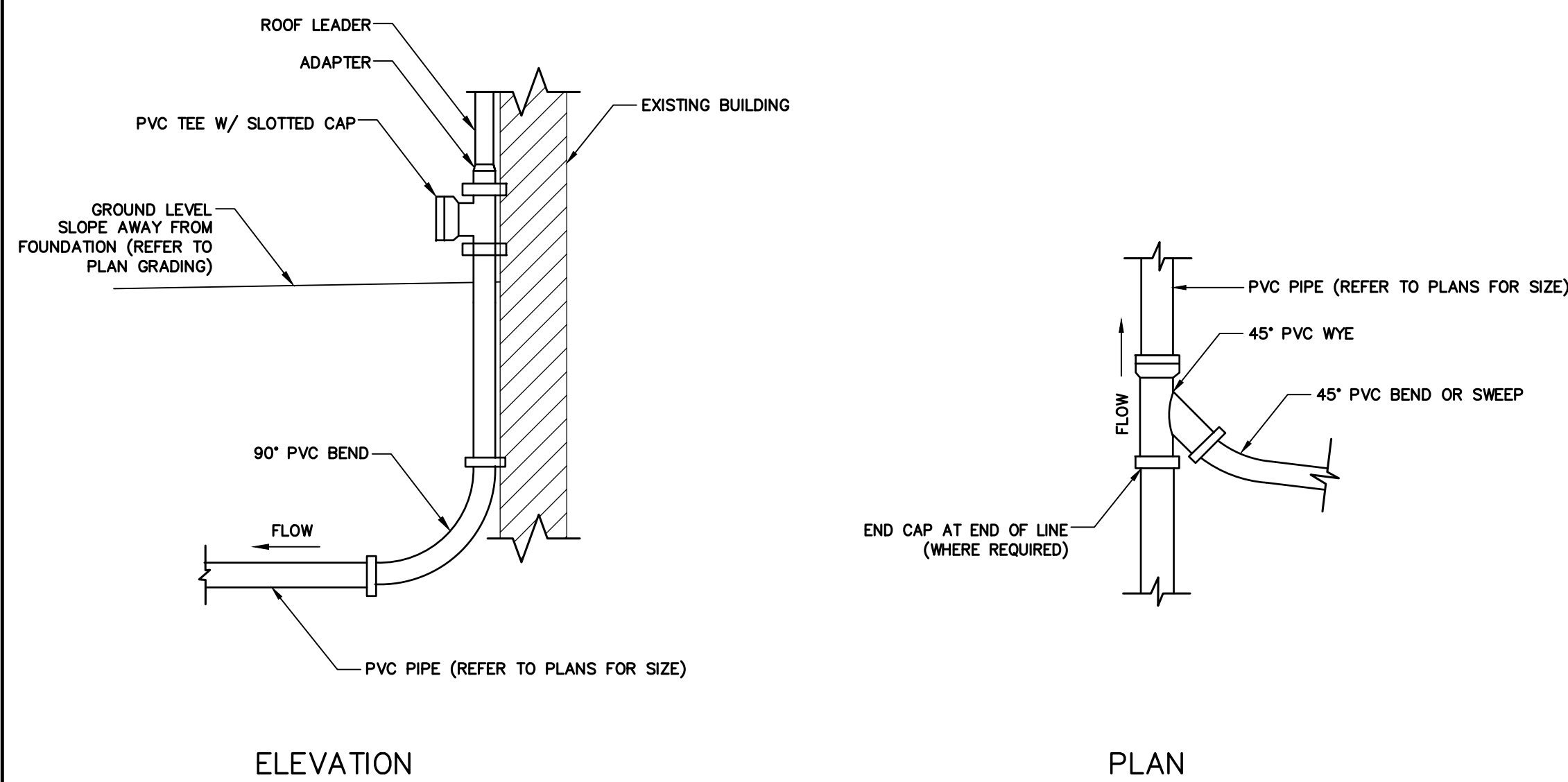
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CADD FILE: 23-107-CP SHEET 2 OF 4



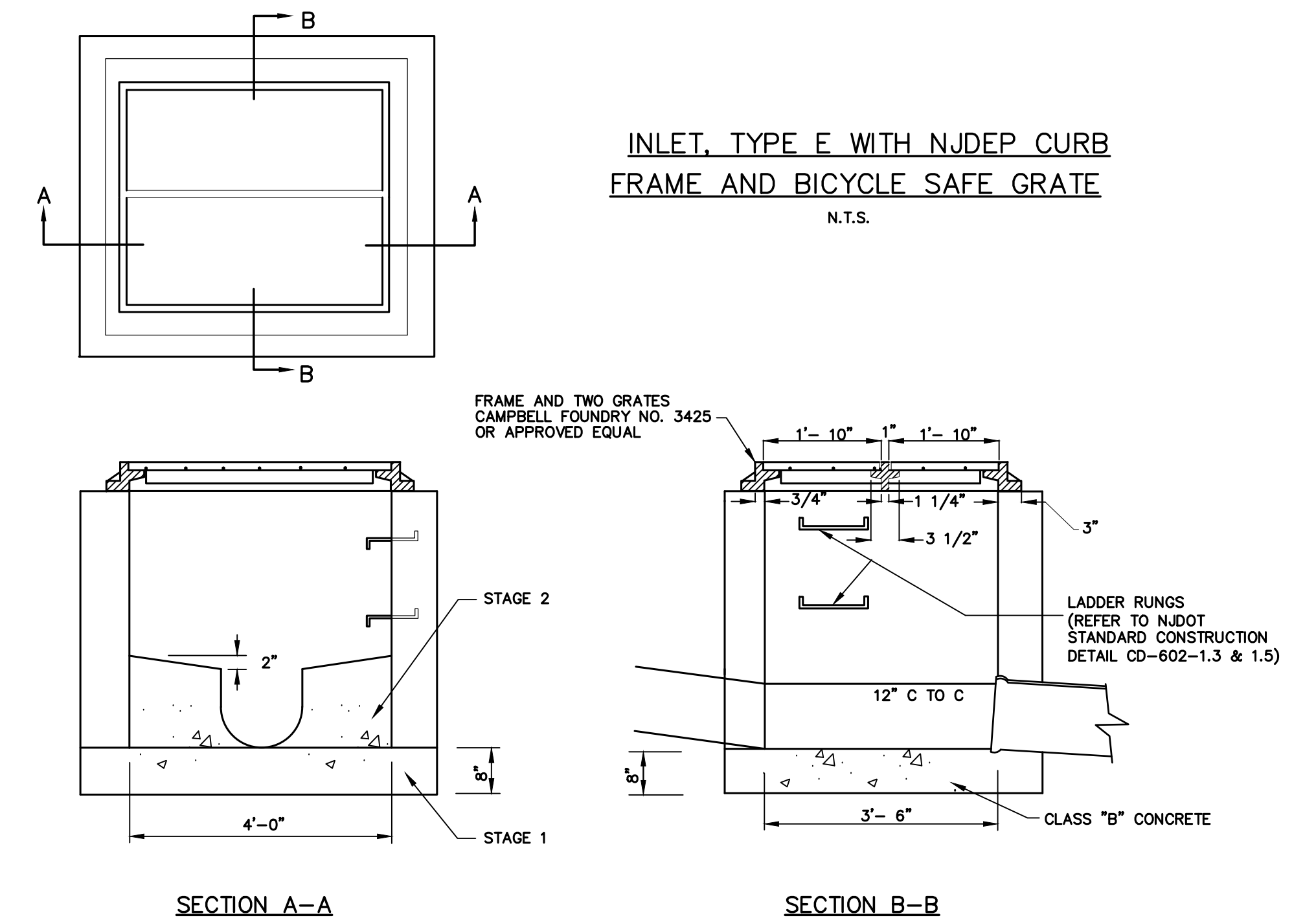
- THE FOLLOWING ITEMS OF WORK ARE INCLUDED UNDER THE PIPE ITEM UNLESS OTHERWISE NOTED:
- EXCAVATION, UNCLASSIFIED
  - RECYCLED CONCRETE AGGREGATE
  - FOUNDATION STONE BEDDING
  - BORROW TOPSOIL
  - FERTILIZING AND SEEDING
  - STRAW MULCHING
  - MAGNETIC LOCATOR TAPE
  - BYPASS PUMPING (IF REQUIRED)
  - DEWATERING (IF REQUIRED)
  - SHEETING (IF REQUIRED)

**PIPE TRENCH (HDPE PIPE)**  
N.T.S.



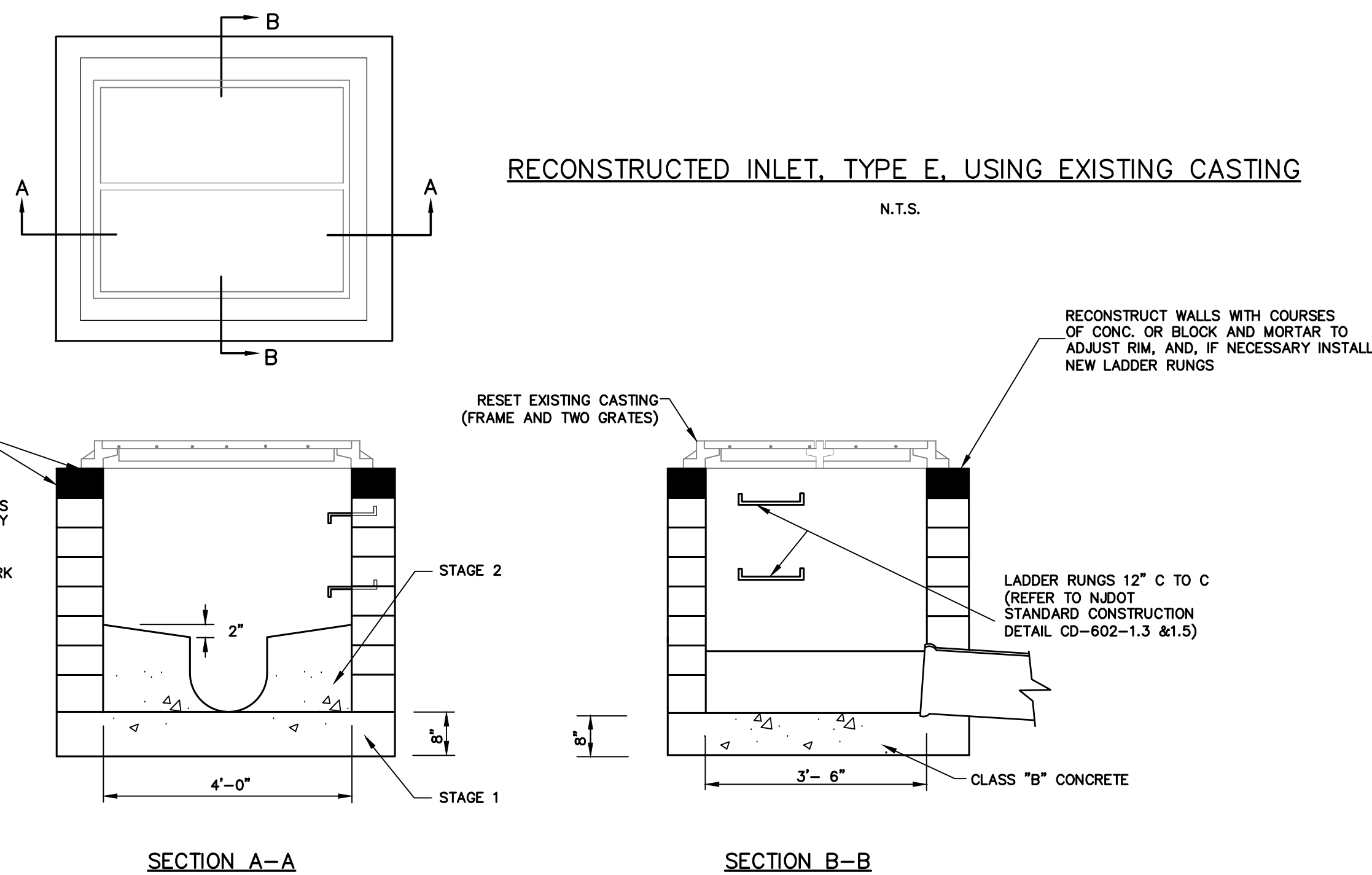
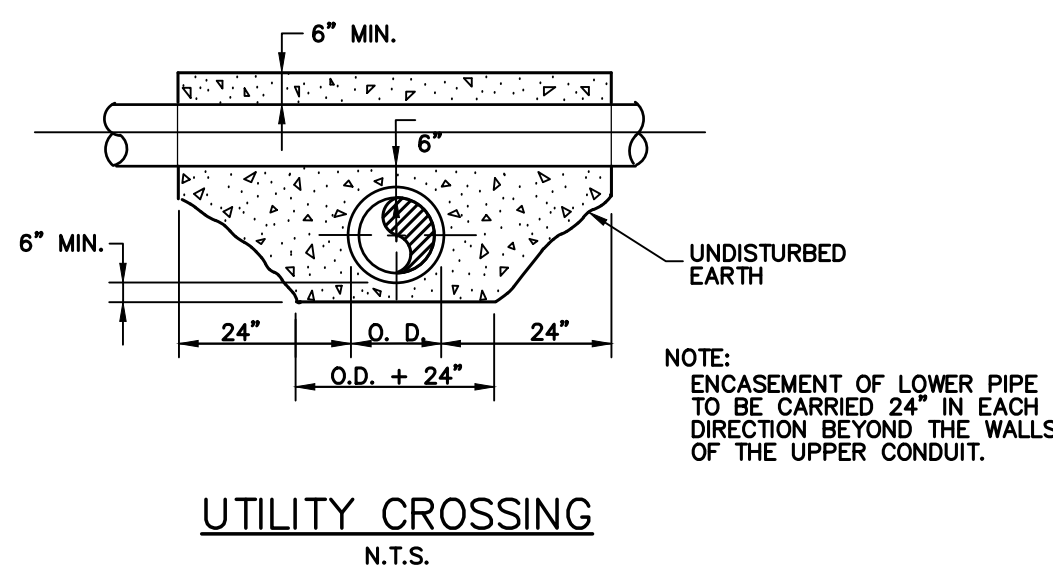
- NOTES:
1. ALL PVC PIPE & APPURTENANCES SHALL BE SCHEDULE 40.

**ROOF LEADER CONNECTION DETAILS**  
N.T.S.



**INLET NOTES**

1. INLETS MAY BE CONSTRUCTED OF BRICK, CONCRETE, CONCRETE BLOCK OR PRECAST CONCRETE. WALLS SHALL BE 8" THICK IF BRICK AND 6" THICK IF CONCRETE, CONCRETE BLOCK OR PRECAST CONCRETE. INLET FOUNDATIONS AND INVERTS SHALL BE CLASS B CONCRETE.
  2. CORBELLING OF INLET WALLS WILL BE PERMITTED AT THE RATE OF 1/2 INCH PER 8 INCHES OF HEIGHT; MAXIMUM CORBEL 6 INCHES PER WALL.
  3. EXCEPT FOR INLETS TYPE A AND C, FOUNDATIONS AND INVERTS SHALL BE CONSTRUCTED IN TWO STAGES, AND THE BOTTOM OF THE FOOTING SHALL BE 8" BELOW THE OUTER WALL OF THE LOWEST PIPE IN THE INLET.
  4. WHEN THE DEPTH OF AN INLET THAT IS NOT PRECAST EXCEEDS 10' AS MEASURED FROM TOP OF GRATE TO INVERT, WALLS BELOW A DEPTH OF 8' SHALL BE 12" THICK AND THE DEPTH OF FOUNDATION INCREASED TO 12". WHEN ROCK IS ENCOUNTERED THE DEPTH OF THE FOUNDATION SHALL NOT BE INCREASED.
  5. WHEN THE DEPTH OF A PRECAST INLET EXCEEDS 10' AS MEASURED FROM TOP OF GRATE TO INVERT, THE FOUNDATION SHALL BE INCREASED TO 12". WHEN ROCK IS ENCOUNTERED THE DEPTH OF THE FOUNDATION SHALL NOT BE INCREASED.
  6. INLET FOUNDATIONS SHALL BE PLACED ON A 6" THICK BED OF COARSE AGGREGATE SIZE NO. 57. THE COARSE AGGREGATE SHALL EXTEND 6" BEYOND THE HORIZONTAL LIMITS OF THE INLET FOUNDATION.
  7. CASTINGS FOR PRECAST INLETS SHALL BE ADJUSTED TO GRADE WITH COURSES OF BRICK, AS REQUIRED, 12" MAXIMUM.
  8. LADDER RUNGS SHALL BE CONSTRUCTED FACING TRAFFIC, 12" C TO C
  9. MINIMUM WALL REINFORCEMENT FOR PRECAST INLETS TYPES A, B, C, E, D-1, D-2, AND B MODIFIED:
- | DEPTH BELOW TOP OF GRATE | HORIZONTAL REINF. | VERTICAL REINF. | WALL THK. |
|--------------------------|-------------------|-----------------|-----------|
| 0' TO 10'-0"             | #13 @ 10" C.C.    | #13 @ 18" C.C.  | 6"        |
| 10'-1" TO 15'-0"         | #13 @ 8" C.C.     | #13 @ 18" C.C.  | 6"        |
| 15'-1" TO 20'-0"         | #13 @ 6" C.C.     | #13 @ 18" C.C.  | 6"        |
- REINFORCING SHOWN FOR PRECAST INLETS IS THE MINIMUM REQUIRED. ADDITIONAL REINFORCING FOR HANDLING IS THE RESPONSIBILITY OF THE CONTRACTOR.
- ALTERNATE REINFORCEMENT
- | DEPTH BELOW TOP OF GRATE | REINFORCEMENT  |
|--------------------------|--|
| 0' TO 10'-0"             | WWF 3 x 6 W6 WIRES SPACED AT 3" TO RUN HORIZONTAL IN ALL CASES.  |
| 10'-1" TO 15'-0"         | WWF 3 x 6 W6 ADD #10 REINFORCEMENT STEEL @ 18" HORIZONTAL.   |
| 15'-1" TO 20'-0"         | WWF 3 x 6 W6 ADD #10 REINFORCEMENT STEEL @ 9" HORIZONTAL OR ADD #13 REINFORCEMENT STEEL AT 15" HORIZONTAL. |
10. DIMENSIONS, WEIGHTS, AND OTHER CRITERIA SHOWN ON THESE DETAILS ARE FOR CLASS 35B CAST IRON.



- NOTES:
1. WHEN MODIFYING ONE FOOT (1') OR MORE OF AN INLET, THE INLET SHALL BE RECONSTRUCTED.
  2. ALL MORTAR TO BE 1 PART PORTLAND CEMENT TO 2 PARTS CLEAN SAND.
  3. IF RISER RINGS ARE USED INSTEAD OF PHYSICALLY RESETTING STRUCTURE BLOCKS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PURCHASING AND INSTALLING ALL ASSOCIATED ITEMS.
  4. ANY STRUCTURAL DEFICIENCIES SHALL BE RECONSTRUCTED (UP TO AND INCLUDING THE FULL DEPTH OF THE INLET) AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.

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PLOT BY: jmcginnis PLOT DATE: 8/28/2023 12:58 PM

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EST. 1924

ENGINEERS - SURVEYORS - PLANNERS - SCIENTISTS

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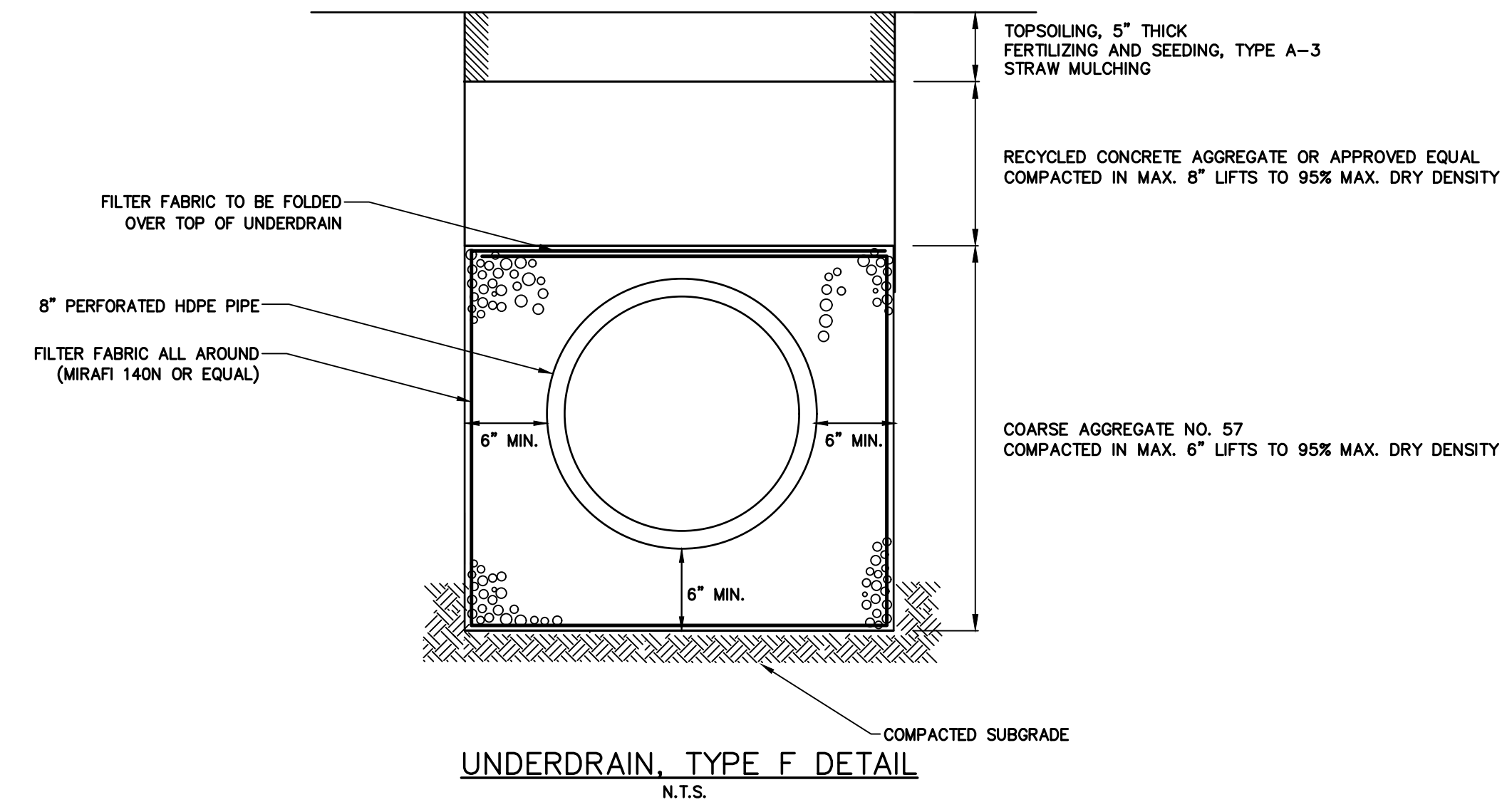
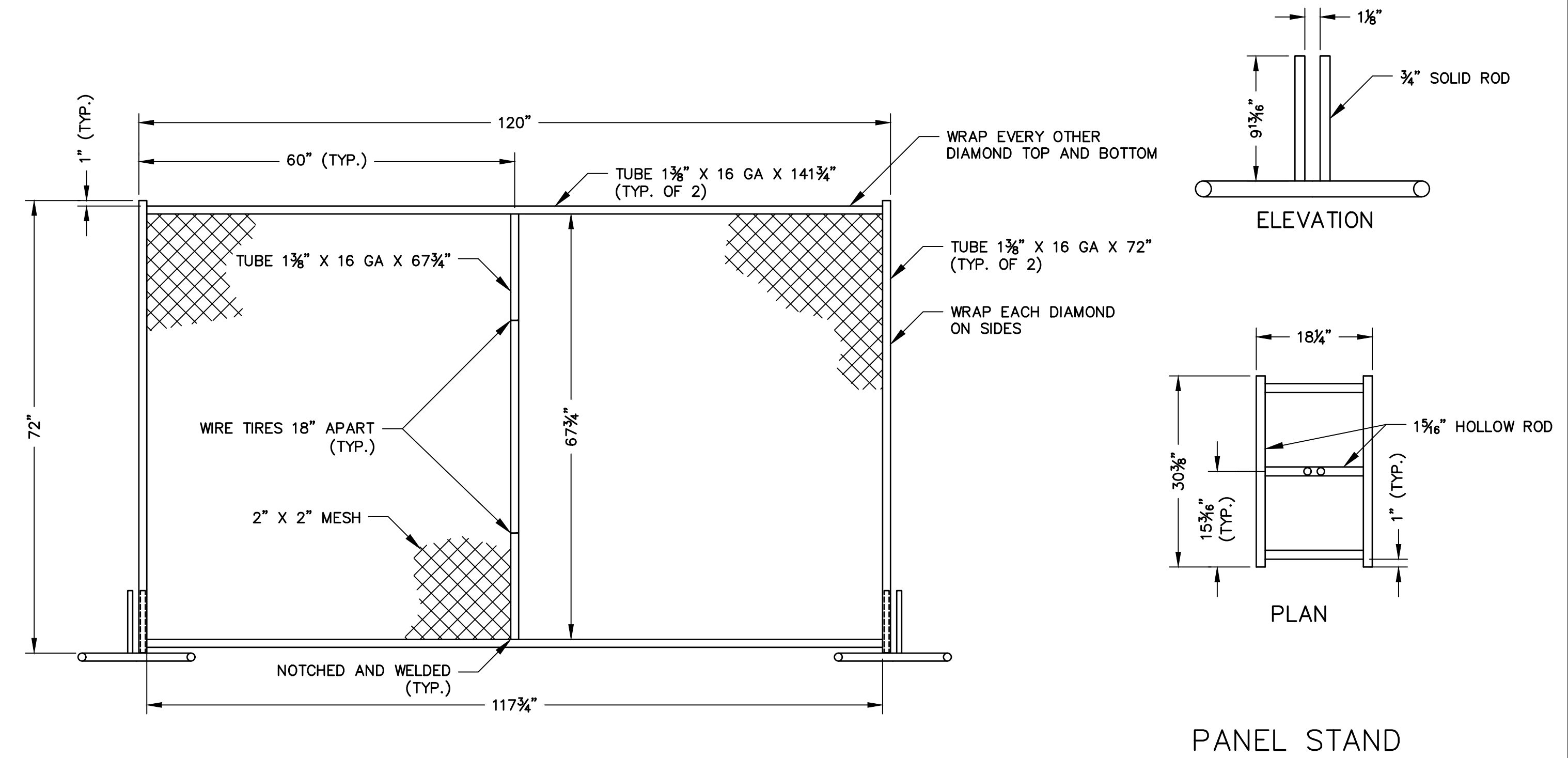
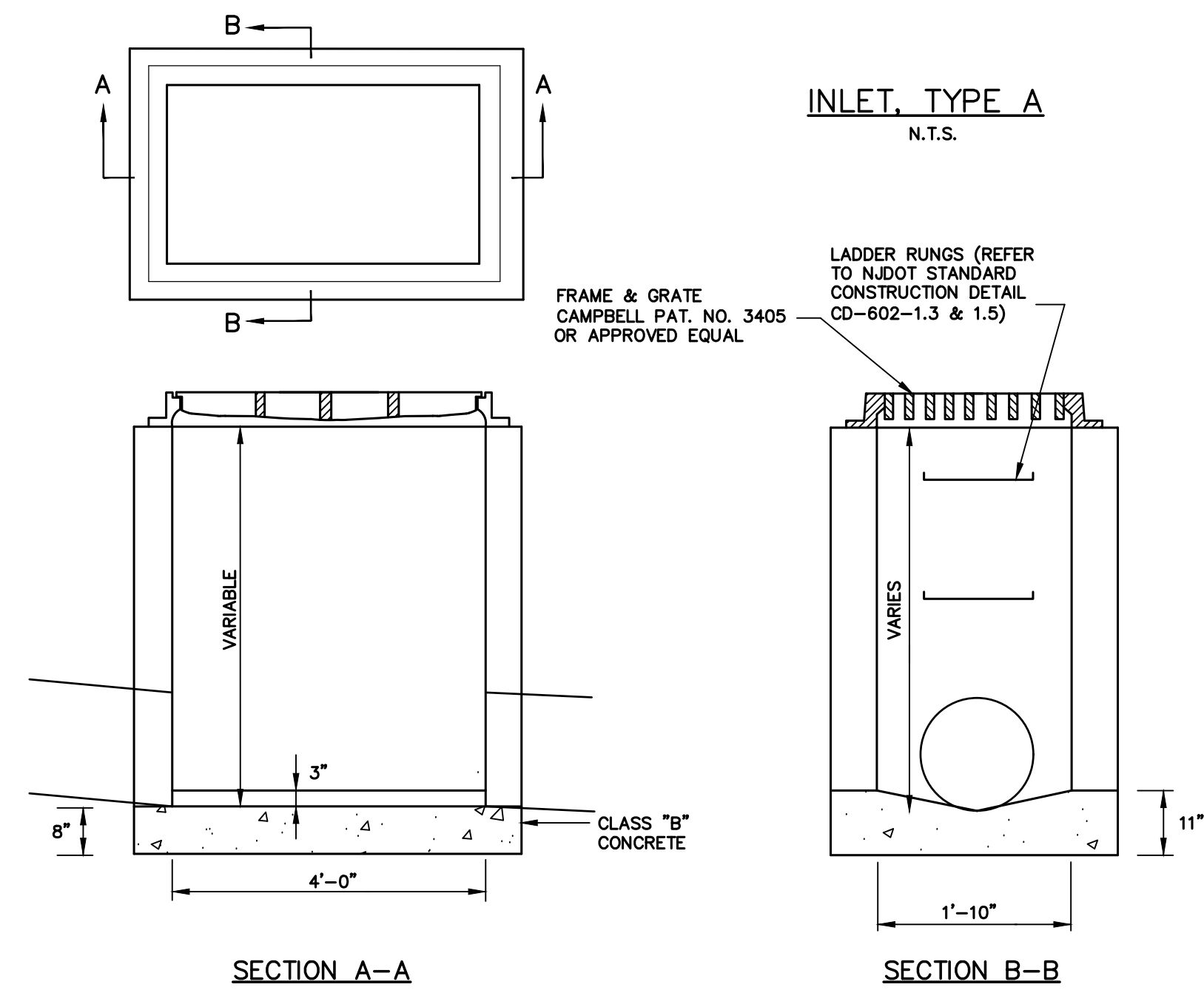
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UNIVERSITY POLICE DEPARTMENT SITE IMPROVEMENTS  
MONTCLAIR STATE UNIVERSITY  
CONSTRUCTION DETAILS -1-  
TOWNSHIP OF MONTCLAIR

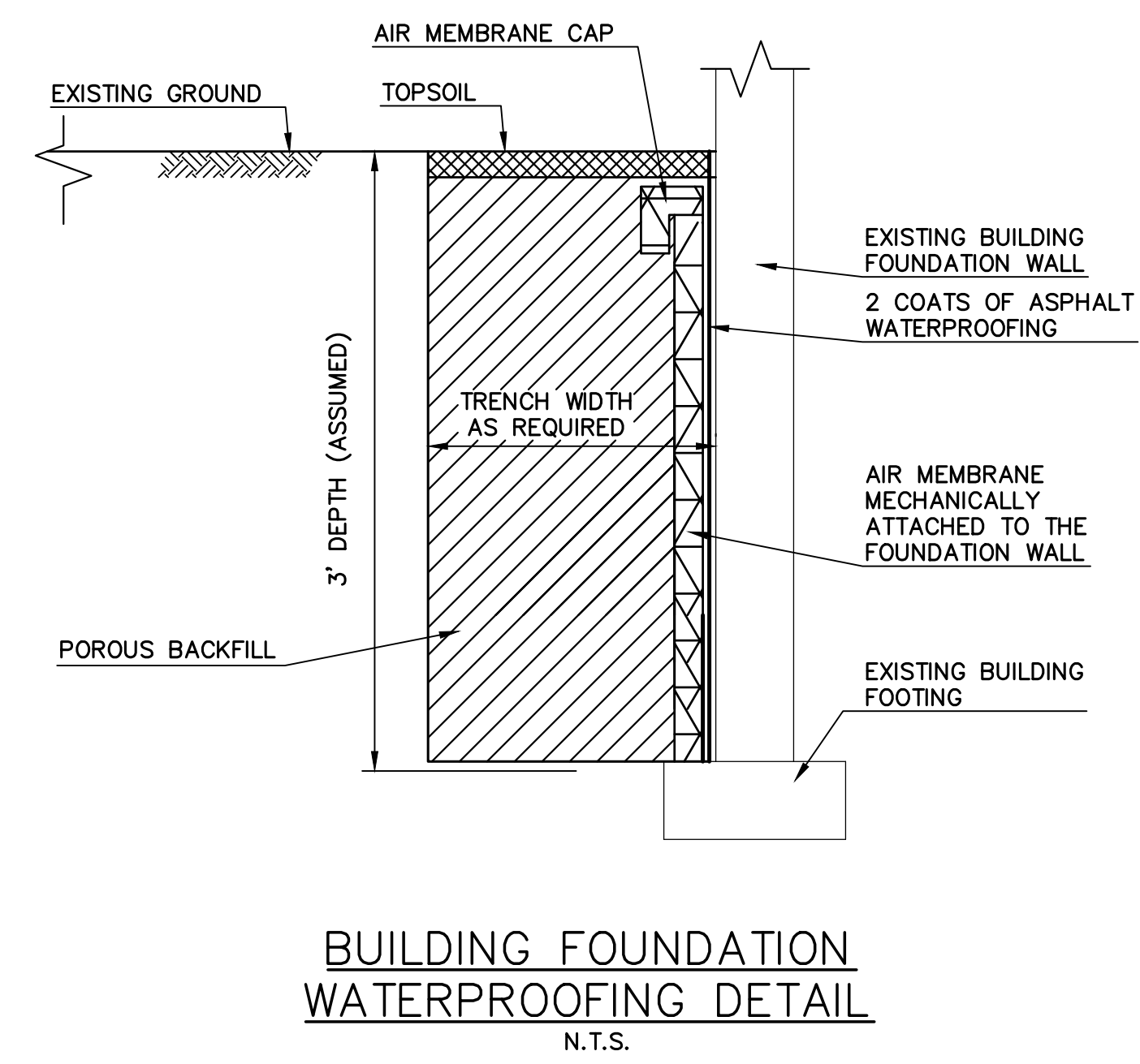
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CADD FILE: 23-107-DS SHEET 3 OF 4



TEMPORARY CHAIN-LINK FENCE, 6' HIGH  
N.T.S.



- NOTES:
1. UNDERDRAIN INVERT TO BE AS PER PLANS.
  2. THE FOLLOWING ITEMS WILL BE INCLUDED IN THE UNIT PRICE BID FOR UNDERDRAIN, TYPE F:
    - HOT MIX ASPHALT 12.5M64 SURFACE COURSE
    - HOT MIX ASPHALT 19M64 BASE COURSE
    - DENSE-GRADED AGGREGATE BASE COURSE, 4" THICK
    - SAWCUT
    - ROADWAY EXCAVATION, UNCLASSIFIED
    - COARSE AGGREGATE SIZE NO. 57
    - FILTER FABRIC
    - 6" PVC PERFORATED PIPE, SCHEDULE 40
    - CONNECTION INTO INLET

BUILDING FOUNDATION  
WATERPROOFING DETAIL  
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