MAROTTA/MAIN
ARCHITECTS

ADDENDUM

07

Lancaster Township Police Department
Renovations & Addition
Lancaster, PA

Date of Addendum: 23 September, 2024

Marotta/Main Architects Project No.: 24-LT-01

The original Project Manuals and Drawings dated 28 August, 2024 for the project noted above, are amended as noted in this Addendum No. 07.

Receipt of this Addendum shall be acknowledged by inserting its number and date in the space provided on the Bid Form.

This Addendum consists of 1 Page and all attachments listed.

DRAWINGS

07.01 Refer to Civil Drawing Sheet 1 – Demolition of rolled curb and pavement sawcut line added.

07.02 Refer to Civil Drawing Sheet 2 – pads labeled as described below.
- a. Wall changed from Versa-Lok to Diamond Pro System of Approved equivalent.
- b. Curb extended from existing inlet in alley with taper.

07.03 Refer to Civil Drawing Sheet 3 - Revised Infiltration bed dimensions and location, eliminated yard inlet, downspouts tie into bed, grading changes.

07.04 Refer to Civil Drawing Sheet 5 – Curb and curb end taper details added, inlet detail removed, retaining wall detail modified.

07.05 Refer to Civil Drawing Sheet 6 – Downspout connection detail added, infiltration bed detail modified.

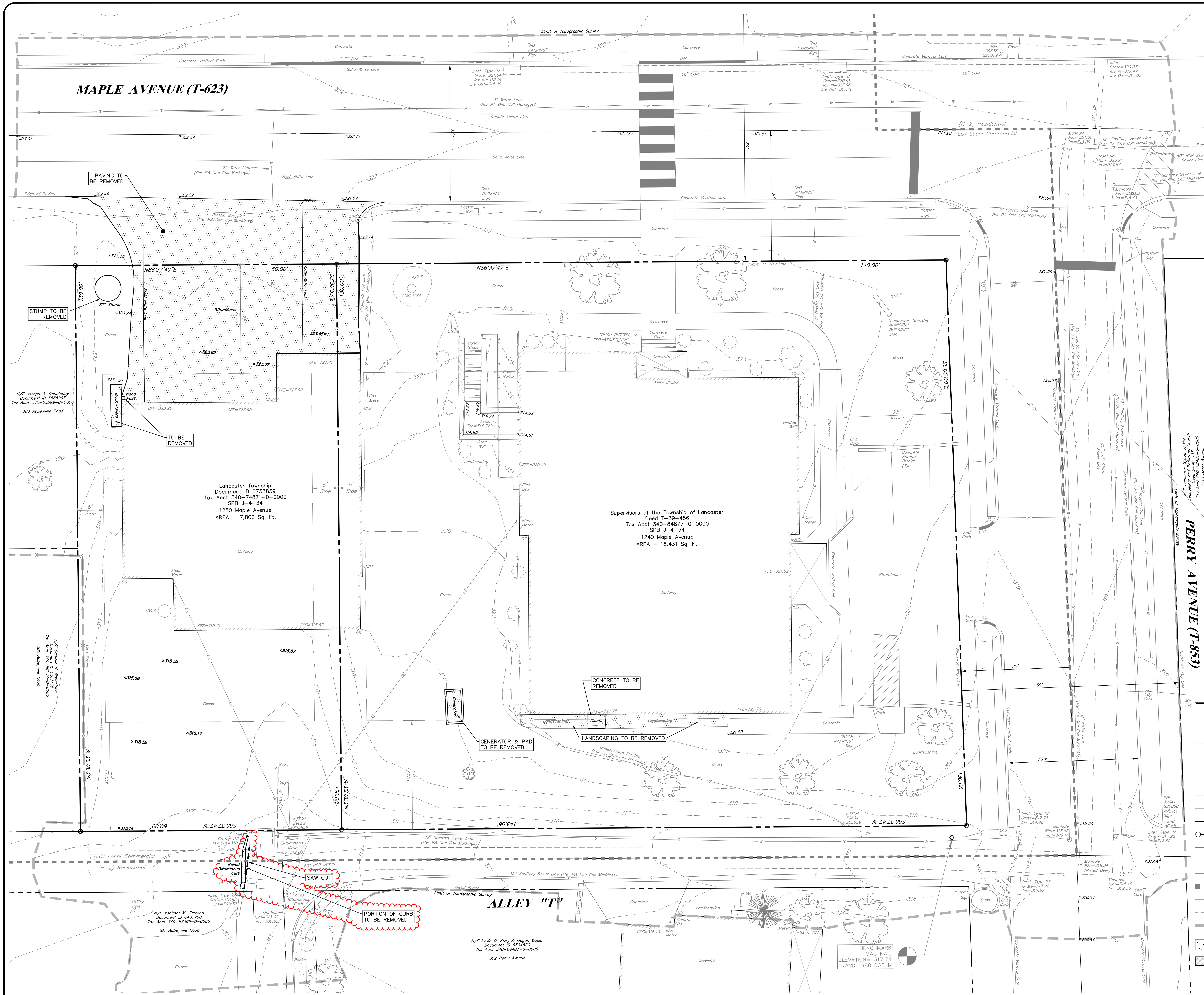
END OF ADDENDUM 07

Respectfully Submitted,

Connie King, AIA, ALEP, GGB
Principal Architect
Marotta/Main Architects, Inc.

Attachments:

Sheet 1 of 6
Sheet 2 of 6
Sheet 3 of 6
Sheet 5 of 6
Sheet 6 of 6



LEGEND

EXISTING FEATURES

- WATER MAIN, HYDRANT & VALVE
- GAS MAIN & VALVE
- SEWER MAIN & MANHOLE
- STORM SEWER & INLET/ENDWALL
- UTILITY POLE
- OVERHEAD WIRE
- EDGE OF PAVEMENT/DRIVEWAY
- RIGHT-OF-WAY LINE
- BOUNDARY & CORNER
- FENCE
- SIGN
- BUILDING SETBACK LINE
- ZONING BOUNDARY
- MAJOR CONTOUR
- MINOR CONTOUR
- LIMIT OF SURVEY
- EXISTING FEATURES TO BE REMOVED/RELOCATED UNLESS OTHERWISE NOTED.
- MILL AND OVERLAY

HARBOR ENGINEERING

HARBOR ENGINEERING, INC.
41 SOUTH MAIN STREET
MANHEIM, PA 17545
PHONE: (717) 665-9000
FAX: (717) 665-9001
CIVIL ENGINEERING - LANDSCAPE ARCHITECTURE

NO	BY	DATE	REVISION
1	BRK	09/19/2024	PER STORMWATER MANAGEMENT REVISIONS

OWNER

LANCASTER TOWNSHIP
1240 MAPLE AVENUE
LANCASTER, PA 17603
(717) 291-1213

PROJECT TITLE

SITE PLAN FOR LANCASTER TOWNSHIP POLICE STATION

LANCASTER TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA

SHEET TITLE

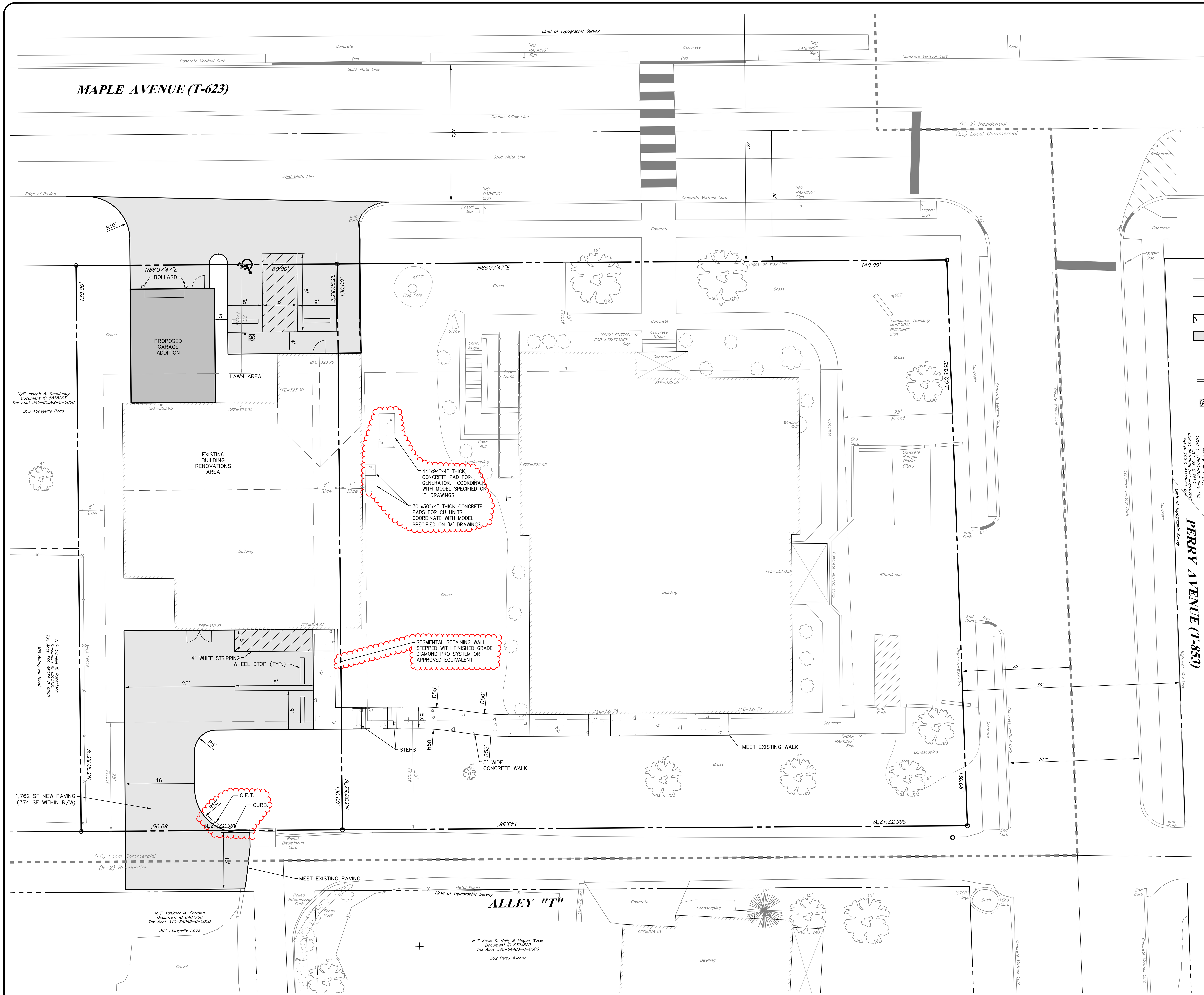
EXISTING CONDITIONS AND DEMOLITION PLAN

0' 10' 20' 30'
1" = 10'

SEAL

DRAWN BY: BRK
CHECKED BY: SPG
DATE: AUGUST 27, 2024
PROJECT NO.: 24426-036

SHEET: 1 OF 6



Limit of Topographic Survey
MAPLE AVENUE (T-623)
Concrete Vertical Curb
Solid White Line
Double Yellow Line
"NO PARKING" Sign
Edge of Paving
(R-2) Residential
(LC) Local Commercial
N86°37'47"E
BOLLARD
60.00'
130.00'
S3°30'53"E
PROPOSED GARAGE ADDITION
LAWN AREA
140.00'
EXISTING BUILDING RENOVATIONS AREA
44"x94"x4" THICK CONCRETE PAD FOR GENERATOR. COORDINATE WITH MODEL SPECIFIED ON 'E' DRAWINGS
30"x30"x4" THICK CONCRETE PADS FOR CU UNITS. COORDINATE WITH MODEL SPECIFIED ON 'M' DRAWINGS
"PUSH BUTTON FOR ASSISTANCE" Sign
"Lancaster Township MUNICIPAL BUILDING" Sign
Building
SEGMENTAL RETAINING WALL STEPPED WITH FINISHED GRADE DIAMOND PRO SYSTEM OR APPROVED EQUIVALENT
4" WHITE STRIPPING
WHEEL STOP (TYP.)
STEPS
5' WIDE CONCRETE WALK
MEET EXISTING WALK
"HCAP PARKING" Sign
1,762 SF NEW PAVING (374 SF WITHIN R/W)
C.E.T.
CURB
S86°37'47"W
143.56'
N3°30'53"W
MEET EXISTING PAVING
ALLEY "T"
PERRY AVENUE (T-853)
N/F Joseph A. Doubleday Document ID 5888263 Tax Acct 340-65599-0-0000 303 Abbeyville Road
N/F Yanimer M. Serrano Document ID 6407768 Tax Acct 340-68369-0-0000 307 Abbeyville Road
N/F Kevin D. Kelly & Megan Woser Document ID 6394820 Tax Acct 340-84483-0-0000 302 Perry Avenue
NORTH

LEGEND

PROPOSED FEATURES

- EDGE OF PAVEMENT/DRIVEWAY
- SIGN
- CONCRETE
- FULL DEPTH ON-SITE PAVING

SIGNAGE LEGEND

	DESCRIPTION	SIZE	PoDOT DESIG.
A	HANDICAP SIGN–VAN ACCESSIBLE	12"x18" 12"x18" 6"x12"	R7–8 R7–8F R7–8B

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CIVIL ENGINEERING • LANDSCAPE ARCHITECTURE

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OWNER
LANCASTER TOWNSHIP
1240 MAPLE AVENUE
LANCASTER, PA 17603
(717) 291-1213

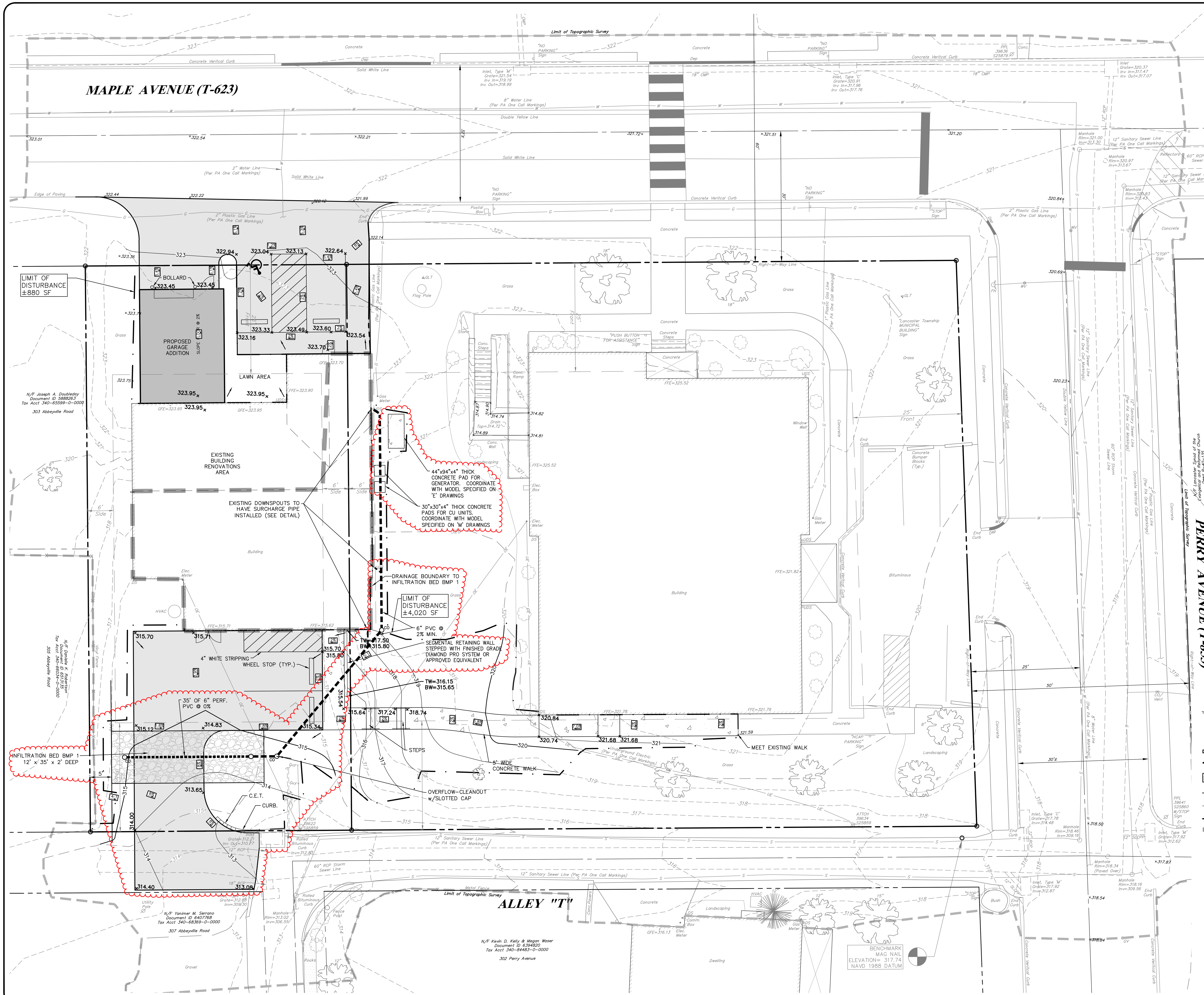
PROJECT TITLE
SITE PLAN FOR LANCASTER TOWNSHIP POLICE STATION
LANCASTER TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA

SHEET TITLE
LAYOUT PLAN

1" = 10'

SEAL

DRAWN BY: BRK
CHECKED BY: SPG
DATE: AUGUST 27, 2024
PROJECT NO.: 24426-036
SHEET: 2 OF 6



LEGEND

PROPOSED FEATURES

- SOLID STORM PIPE & INLET
- SOLID STORM PIPE, DOWNSPOUT & CLEANOUT
- PERFORATED STORM PIPE
- INFILTRATION BED
- MAJOR CONTOUR (425)
- MINOR CONTOUR (424)
- LIMIT OF DISTURBANCE
- DRAINAGE BOUNDARY

SCALE: 1" = 10'

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CIVIL ENGINEERING - LANDSCAPE ARCHITECTURE

NO	BY	DATE	REVISION
1	BRK	09/19/2024	PER STORMWATER MANAGEMENT REVISIONS

OWNER: LANCASTER TOWNSHIP
1240 MAPLE AVENUE
LANCASTER, PA 17603
(717) 291-1213

PROJECT TITLE:

SITE PLAN FOR LANCASTER TOWNSHIP POLICE STATION

LANCASTER TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA

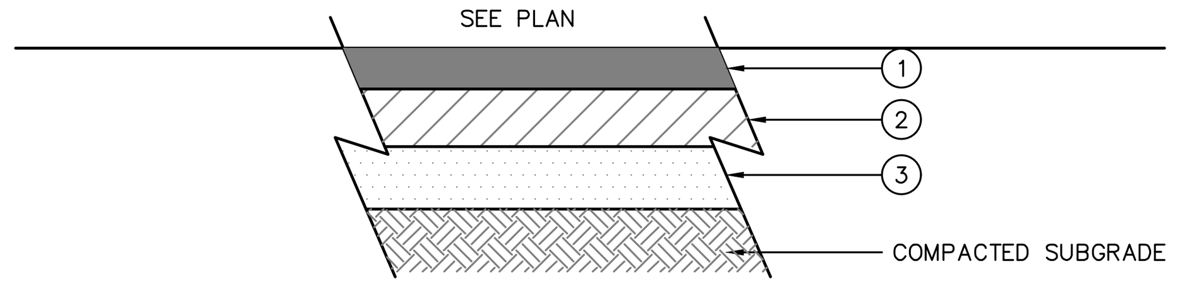
SHEET TITLE:

PCSM PLAN

SEAL

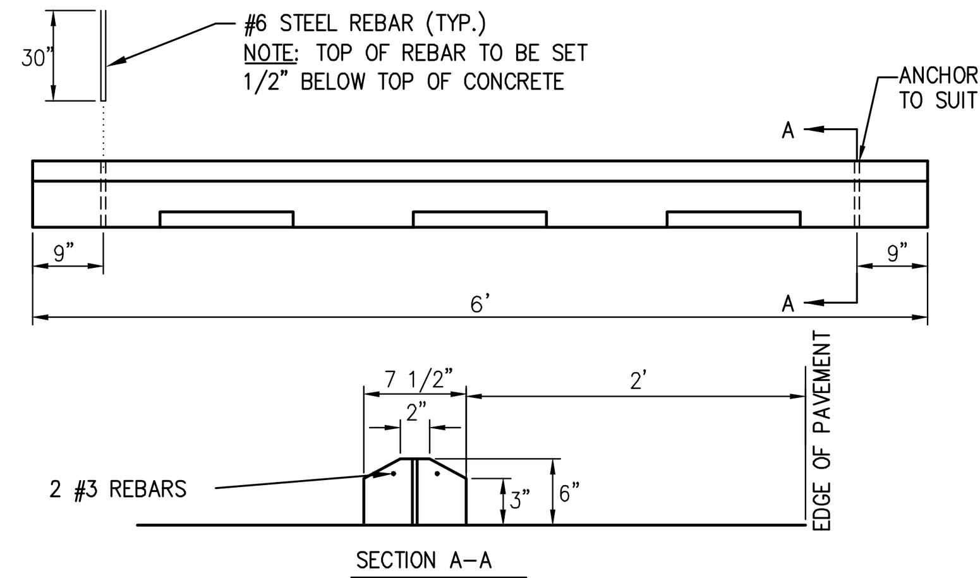
DRAWN BY: BRK
CHECKED BY: SPG
DATE: AUGUST 27, 2024
PROJECT NO.: 24426-036

	ACCESS DRIVES & PARKING AREAS
1	1.5" SUPERPAVE WEARING COURSE, PG 64S–22, 0.3 TO <3.0 MILLION ESALS. 9.5 MM MIX, SRL–H
2	4" SUPERPAVE BINDER COURSE, PG 64S–22, 0.3 TO <3.0 MILLION ESALS. 25 MM MIX, SRL–H
3	8" 2A MODIFIED STONE SUBBASE
NOTE: ALL DEPTHS ARE FINAL COMPACTED DEPTHS	



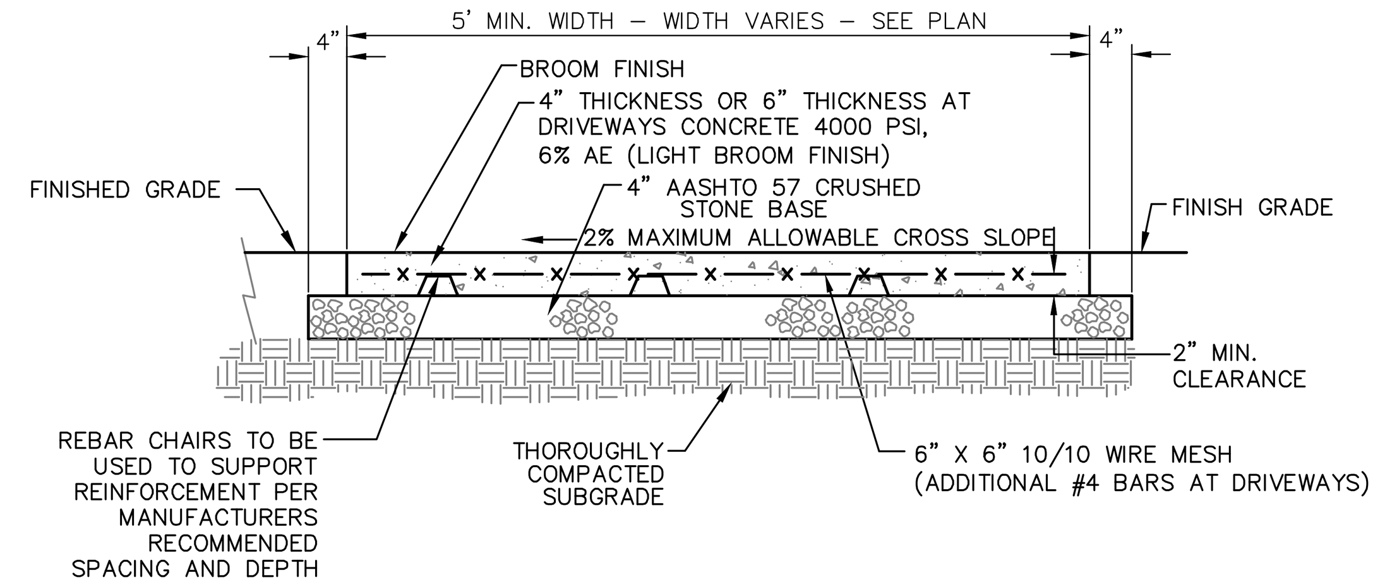
1/5 PAVING CROSS SECTION

NOT TO SCALE



2/5 CONCRETE WHEEL STOP

NOT TO SCALE

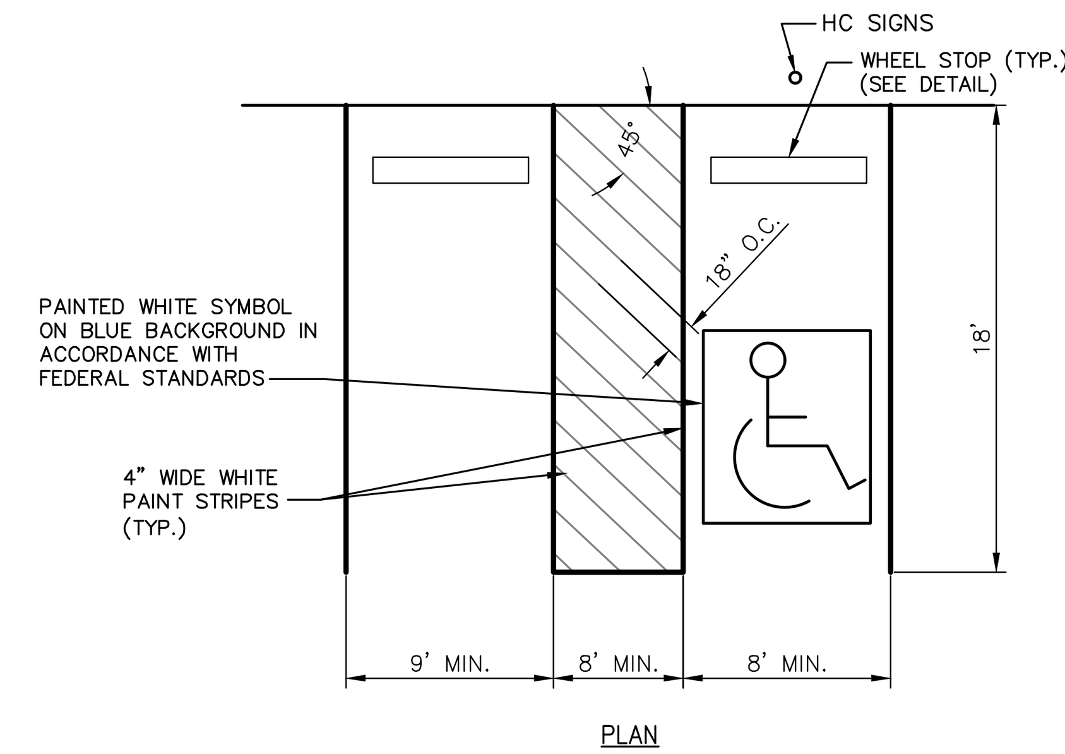


NOTES:

1. ALL SIDEWALKS WITHIN THE STREET RIGHT–OF–WAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH LANCASTER TOWNSHIP OR LANCASTER CITY SPECIFICATIONS AND CURRENT PENNDOT RC & PUB. 408 STANDARDS.
2. THERE SHALL BE ONE–HALF (1/2) INCH PRE–MOLDED EXPANSION JOINTS BETWEEN EVERY FIFTH SECTION AND BETWEEN ALL POINTS WHERE CONCRETE SIDEWALK ABUTS CONCRETE CURB OR BOLLARDS.
3. TOOLED, CUT OR SCORED JOINTS LOCATED AT 5' O.C.
4. SIDEWALK IS TO BE LIGHT BROOM FINISHED IN DIRECTION SIDEWALK WIDTH.
5. ALL SIDEWALKS TO HAVE A 2% MAXIMUM ALLOWABLE CROSS SLOPE TOWARD CURB LINE.
6. COMPACT BASE MATERIAL USING A MECHANICAL TAMPER.
7. SIDEWALK WIDTH IS 5 FT. MINIMUM UNOBSTRUCTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT, AS AMENDED. GREATER WIDTHS ARE PROPOSED IN AREAS NOTED ON THE LAYOUT SHEETS.
8. CONTRACTOR TO GUARANTEE SIDEWALK FROM FAILURE FOR 3 YEARS FROM DATE OF COMPLETION.

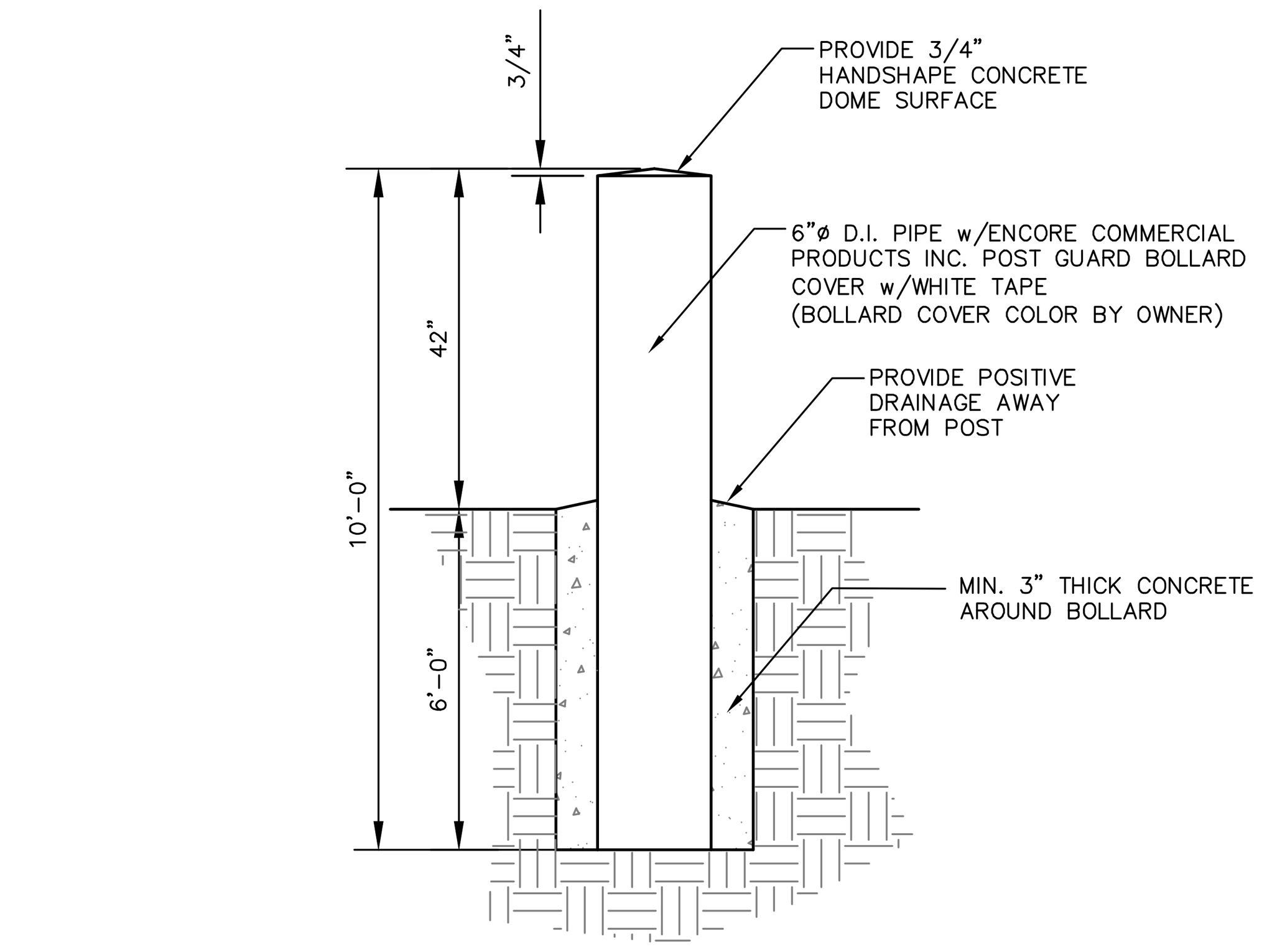
3/5 TYPICAL CONCRETE SIDEWALK SECTION

NOT TO SCALE



4/5 HANDICAPPED PARKING AND SIDEWALK SECTION

NOT TO SCALE

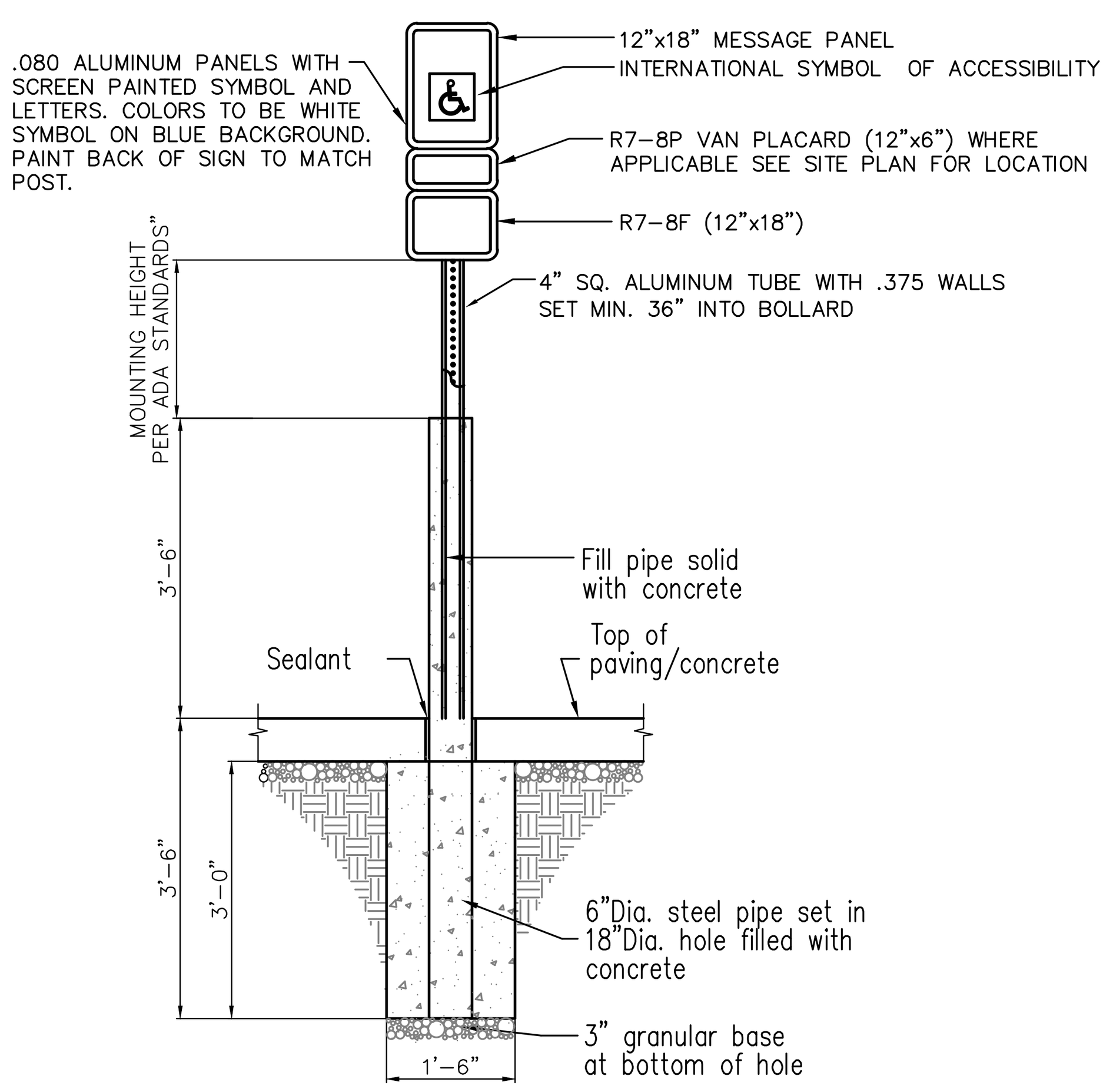


NOTE:

1. UPON COMPLETION OF INSTALLATION, BOLLARD SHALL BE PAINTED USING MATERIAL APPROPRIATE PAINT.
2. PAINT GRADE AND COLOR TO BE SELECTED BY OWNER.

5/5 CONCRETE BOLLARD

NOT TO SCALE



6/5 HANDICAPPED POST PLACARD SIGN WITH BOLLARD

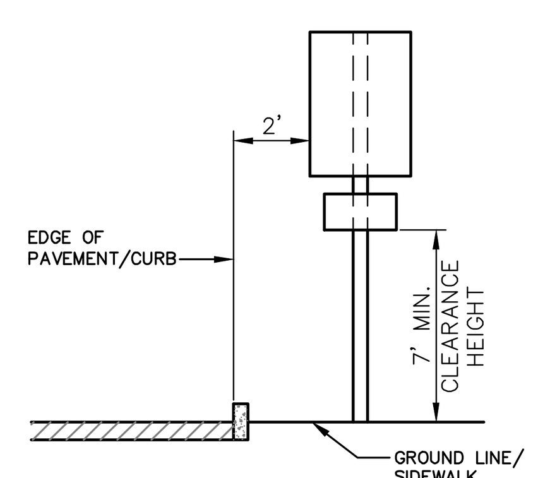
NOT TO SCALE

PaDOT DESIG.	DESCRIPTION	SIZE
R1–1	STOP SIGN	30"x30"
R7–8B R7–8F R7–8P	HANDICAP SIGN–VAN ACCESSIBLE	12"x18" 12"x18" 6"x12"

POST SCHEDULE

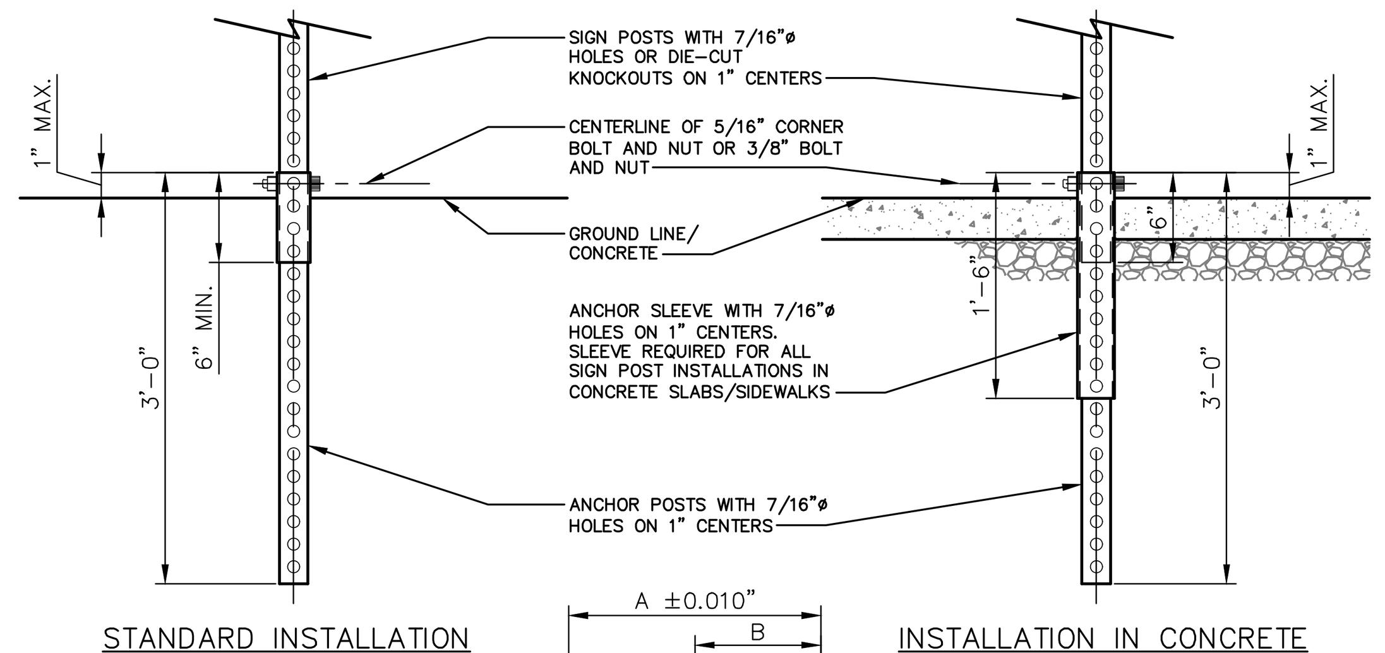
#14 GAUGE POST, 10' MAX. HEIGHT FROM GROUND TO CENTER OF SIGN PLATE

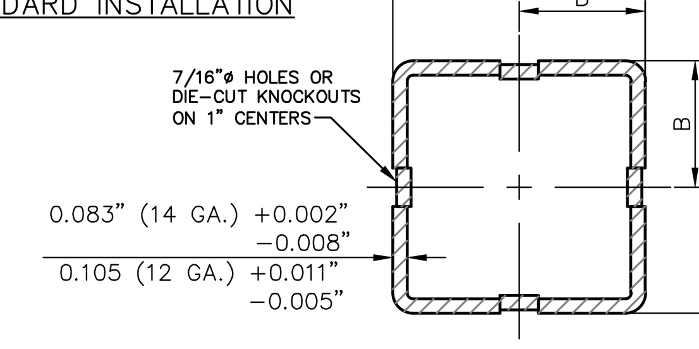
SIGN SIZE	POST SIZE
8"x48"	1.75
12"x18"	1.75
12"x24"	1.75
12"x30"	1.75
12"x36"	1.75
12"x48"	1.75
18"x15"	1.75
18"x18"	1.75
18"x24"	1.75
18"x36"	1.75
18"x48"	2.00
21"x15"	1.75
24"x24"	1.75
24"x36"	2.00
24"x48"	2.00
30"x15"	1.75
30"x24"	1.75
30"x30"	2.00



INSTALLATION NOTES:

1. MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH PUBLICATION 408.
2. SIGN POSTS AND SPLICE SLEEVES SHALL HAVE 7/16" DIAMETER HOLES OR DIE–CUT KNOCKOUTS ON 1" CENTERS ON ALL FOUR SIDES. ANCHOR POSTS AND ANCHOR SLEEVES SHALL HAVE 7/16" DIAMETER HOLES ON 1" CENTERS ON ALL FOUR SIDES.
3. BOLTS AND NUTS SHALL BE ASTM–307, GRADE 2.
4. DRIVE RIVETS MAY BE USED TO FASTEN SIGN BLANKS TO THE SIGN POST.
5. FOR HANDICAP ACCESSIBLE SIGNS, HEIGHTS SHALL BE IN ACCORDANCE WITH A.D.A. STANDARDS AND LOCATIONS AS SHOWN ON THE PLAN.





SIGN POST				ANCHOR POST				ANCHOR SLEEVE *				SPLICE SLEEVE			
SIZE	DIMENSION A	DIMENSION B	GAUGE	SIZE	DIMENSION A	DIMENSION B	GAUGE	SIZE	DIMENSION A	DIMENSION B	GAUGE	SIZE	DIMENSION A	DIMENSION B	GAUGE
1.75"	1 3/4"	7/8"	14	2.00"	2"	1"	12	2.25"	2 1/4"	1 1/8"	12	1.50"	1 1/2"	3/4"	14
2.00"	2"	1"	14	2.25"	2 1/4"	1 1/8"	12	2.50"	2 1/2"	1 1/4"	12	1.75"	1 3/4"	7/8"	14
2.25"	2 1/4"	1 1/8"	14	2.50"	2 1/2"	1 1/4"	12	3.00"	3"	1 1/2"	12	2.00"	2"	1"	14

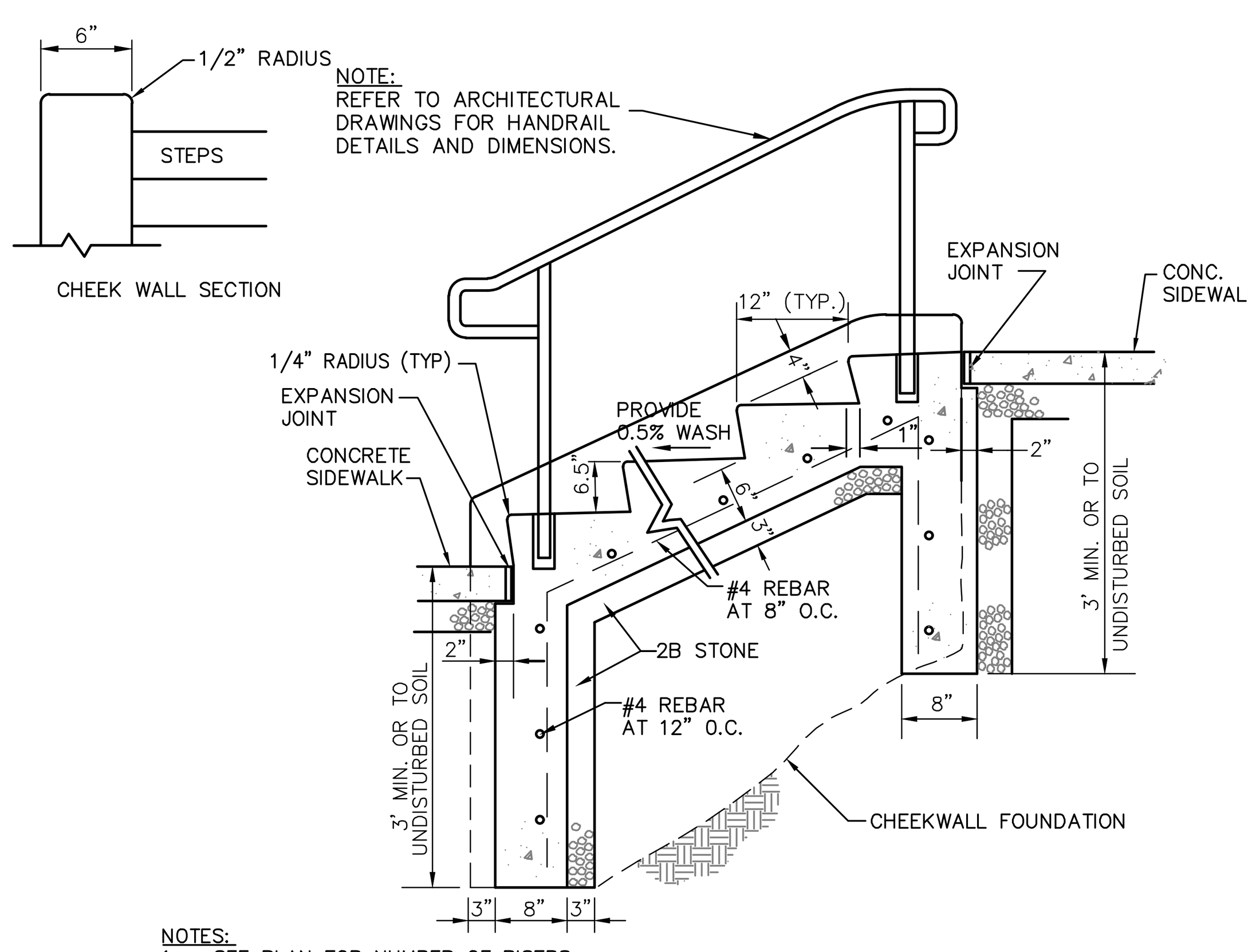
* ONLY REQUIRED FOR INSTALLATION IN CONCRETE.

SQUARE STEEL POSTS

12 & 14 GAUGE – 60 KSI

7/5 SITE INFORMATION SIGNAGE

NOT TO SCALE

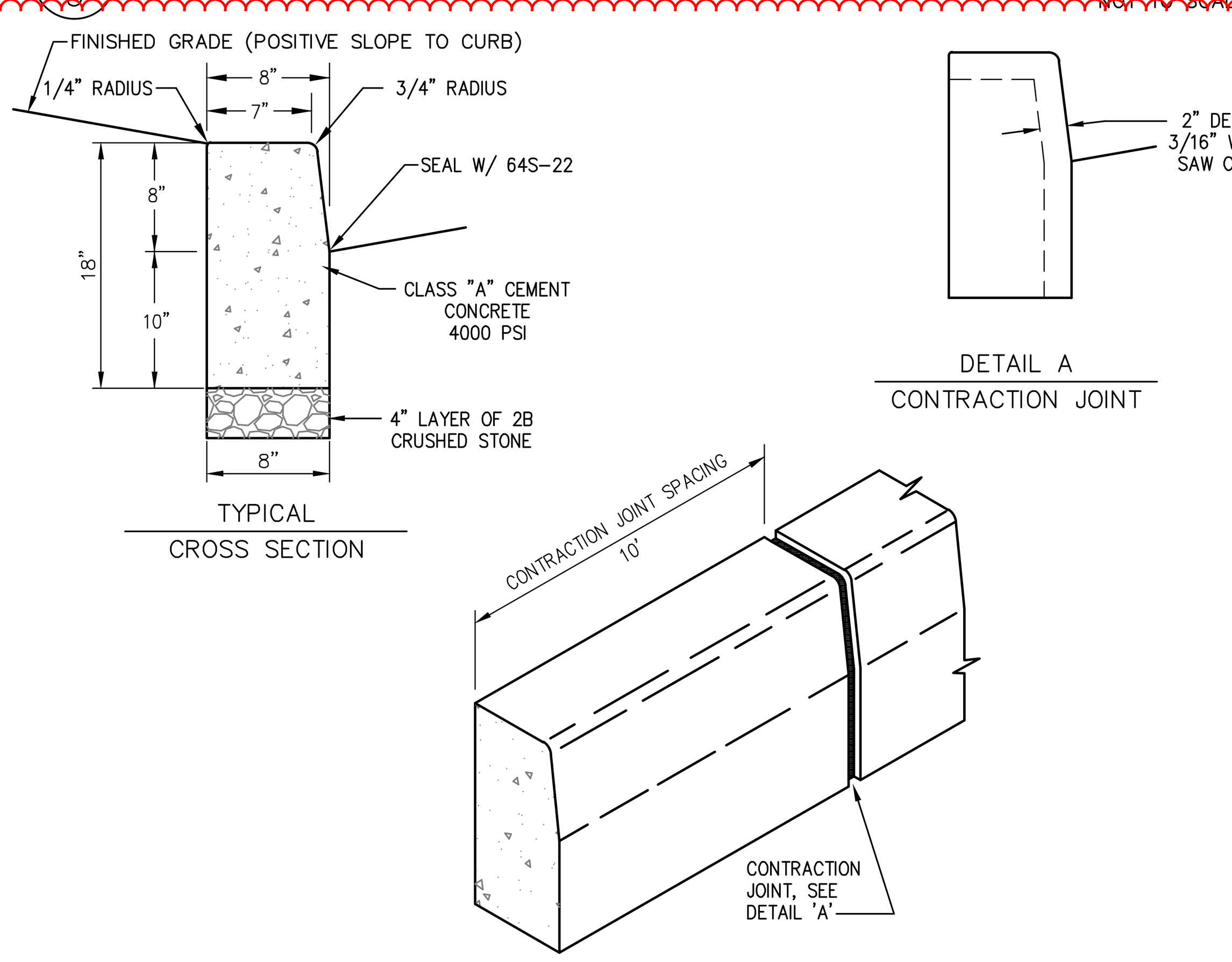


NOTES:

1. SEE PLAN FOR NUMBER OF RISERS.
2. PROVIDE BROOM FINISH ON STEPS
3. OWNER AND CONTRACTOR SHALL COORDINATE HANDRAIL BOTH SIDES OF ALL STEPS.
4. ALL EXPOSED EDGES SHALL BE CHAMFERED ¾".

8/5 CONCRETE STEPS

NOT TO SCALE

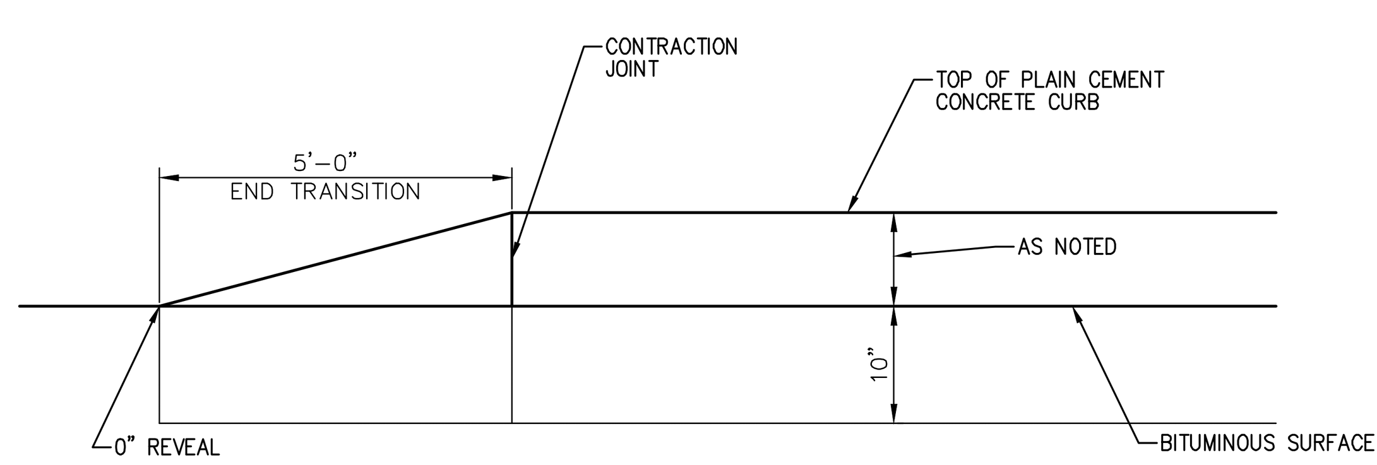


NOTES:

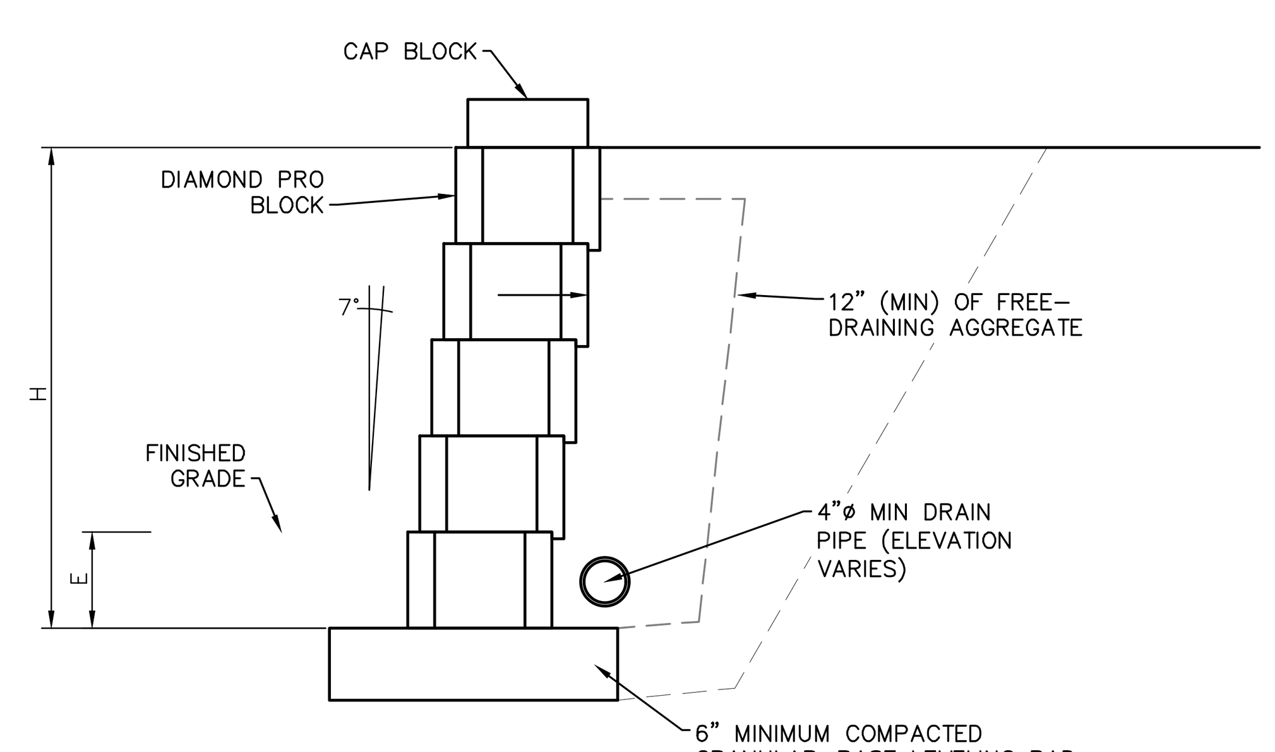
1. EXPANSION JOINTS SHALL CONSIST OF 1/4" THICK PREMOLDED EXPANSION JOINT FILLER MATERIAL. EXPANSION CONSTRUCTION) JOINTS SHALL BE LOCATED AT ALL STRUCTURES AT THE END OF THE WORK DAY AND AT INTERVALS OF 40 FEET. CUT MATERIAL TO CONFORM WITH CROSS SECTIONAL AREA OF CURB.
2. CONTRACTION JOINTS SHALL CONSIST OF A 2" DEEP, 3/16" WIDE SAW CUT AND BE PLACED AT UNIFORM LENGTHS OF 10 FOOT INTERVALS.

9/5 STANDARD 8" VERTICAL CURB (WHERE NOTED)

NOT TO SCALE



10/5 CURB END TAPER



11/5 DIAMOND PRO WALL SYSTEM TYPICAL GRAVITY SECTION

NOT TO SCALE

HARBOR ENGINEERING

HARBOR ENGINEERING, INC. — CIVIL ENGINEERING • LANDSCAPE ARCHITECTURE

NO	BY	DATE	REVISION
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OWNER: LANCASTER TOWNSHIP, 1240 MAPLE AVENUE, LANCASTER, PA 17603, (717) 291-1213

PROJECT TITLE: SITE PLAN FOR LANCASTER TOWNSHIP POLICE STATION — LANCASTER TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA

SHEET TITLE: SITE DETAILS — AS NOTED

SEAL

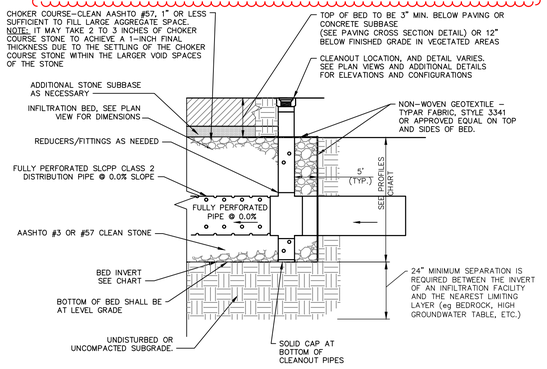
DRAWN BY: BRK | CHECKED BY: SPG

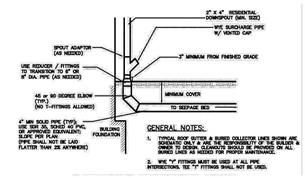
DATE: AUGUST 27, 2024

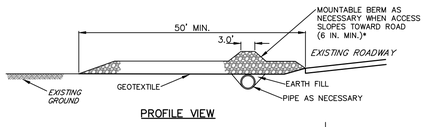
PROJECT NO.: 24426-036

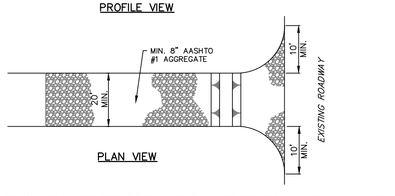
SHEET: 5 OF 6

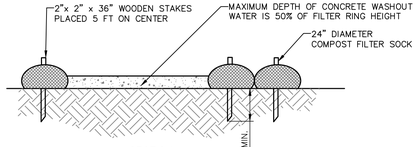
\\HARBOR-FS1\Shared\Projects\24426-037\CADD\DETAILS.dwg, 05-DETAILS, 9/20/2024 8:26:17 AM

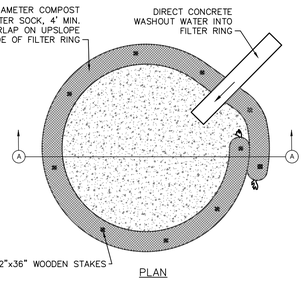


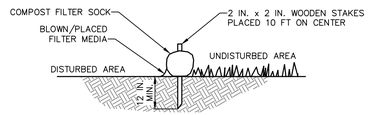


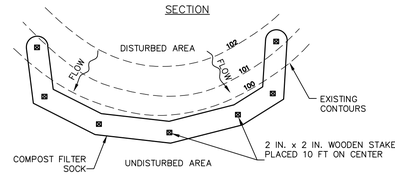


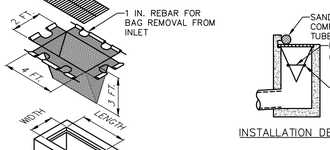


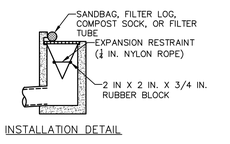


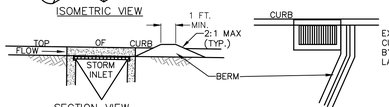


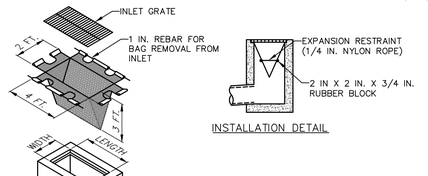


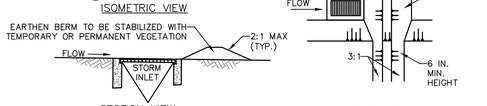


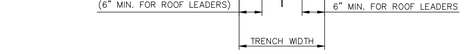


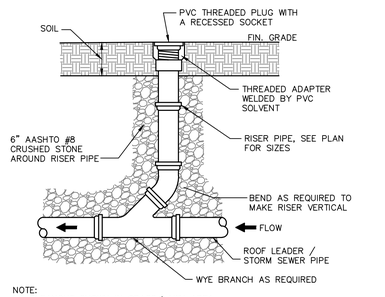












FACILITY I.D.	STONE DEPTH	BED INVERT	PIPE INVERTS	MIN. BED AREA	MIN. BED VOID VOLUME
INFILTRATION BED BMP 1	24"	310.18	311.18	420 SF	840 CF

MINIMUM SEPARATION BETWEEN INFILTRATION FACILITY INVERT AND NEAREST LIMITING ZONE NOTES:

1. 24" MINIMUM SEPARATION IS REQUIRED BETWEEN THE INVERT OF AN INFILTRATION FACILITY AND THE NEAREST LIMITING ZONE LAYER (eg BEDROCK, HIGH GROUNDWATER TABLE, ETC.)
2. TO VERIFY THE 24" SEPARATION, PROBE WITH A METAL ROD UPON EXPOSURE TO SUBGRADE. IF BEDROCK IS ENCOUNTERED, IT SHALL BE REMOVED TO WITHIN 24" OF THE BOTTOM OF THE FACILITY AND REPLACED WITH ENGINEERED SOIL PER THE "SUBGRADE REPAIR UNDER INFILTRATION BED" DETAIL.

CONSTRUCTION SEQUENCE FOR INFILTRATION BED:

TIMING OF THE BED INSTALLATION WITHIN THE OVERALL SITE CONSTRUCTION:

1. THE INFILTRATION BED MAY BE INSTALLED PRIOR TO THE INSTALLATION OF THE OTHER IMPROVEMENTS.
2. FOLLOWING THE INSTALLATION OF THE INFILTRATION BED, THE CLEAN STORMWATER FROM THE ROOF MAY BE DISCHARGED INTO THE BED. TEMPORARY EXTENSION OF THE DOWNSPOUT DISCHARGES MAY BE INSTALLED. MAINTAIN FILTERS OVER SURFACE INLETS UNTIL THE SITE IS STABILIZED.

NOTE: PROTECT INFILTRATION FACILITY FROM SEDIMENT AT ALL TIMES DURING CONSTRUCTION.

EXECUTION:

a. SUB-GRADE PREPARATION CONSTRUCTION SEQUENCING
1. EXISTING SUB-GRADE IN INFILTRATION AREAS SHALL NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC.
2. WHERE EROSION OF SUB-GRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING IN THE GRADED BOTTOM, THIS MATERIAL SHALL BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE OR EQUIVALENT BY LIGHT TRACTOR.
3. THE SUBGRADE IS TO BE INSPECTED TO CONFIRM ALL OBSERVATIONS WITHIN THE GEOLOGY REPORT. PRIOR TO PLACEMENT OF THE CLEAN STONE, INFILTRATION TESTING SHOULD BE PERFORMED.
4. THE BOTTOM OF THE CLEAN STONE SHALL BE PLACED ON UNDISTURBED OR UNCOMPACTED SUBGRADE WITH A MINIMUM SEPARATION OF 2 FEET TO A LIMITING LAYER. A SINGLE TEST PIT IS TO BE EXCAVATED TO CONFIRM THE ABSENCE OF SATURATED CONDITIONS, REDOXIMORPHIC FEATURES, OR GROUNDWATER. IF FOUND FOLLOW RECOMMENDATIONS WITHIN GEOLOGY CONSTRUCTION NOTES WITHIN THIS PLAN. TO VERIFY THE 2 FEET SEPARATION TO ROCK, THE FOOTPRINT OF EACH FACILITY MUST BE PROBED WITH A METAL ROD IN A GRID PATTERN UPON EXPOSURE TO SUBGRADE. ROD SHALL BE USED AT A MAXIMUM DISTANCE OF 15 FEET APART. IF ANY ROCK IS ENCOUNTERED, FOLLOW RECOMMENDATIONS WITH THE "SUBGRADE REPAIR UNDER INFILTRATION BED" DETAIL.
5. **THE INFILTRATION TESTING IS TO BE PERFORMED AT THE TOP OF THE SUBGRADE WITHIN THE FACILITY FOOTPRINT AT A MINIMUM OF TWO TESTS PER BOTTOM AREA IN EACH FACILITY AT THE TIME OF CONSTRUCTION, USING DOUBLE RING INFILTROMETERS AS SPECIFIED IN THE PA BMP DESIGN MANUAL.** ACCEPTABLE RATES MUST FALL WITHIN THE RANGE OF 0.5 TO 10.0 INCHES PER HOUR. IF INFILTRATION RATE OF THE SUBGRADE DOES NOT FALL WITHIN THE ACCEPTABLE RANGE, THE SUBGRADE IS TO BE REPAIRED PER THE DETAIL FOR "SUBGRADE REPAIR UNDER INFILTRATION FACILITY (IF ROCK OR LIMITING MATERIAL IS ENCOUNTERED)." THE MUNICIPALITY SHALL BE SENT RESULTS FOR THEIR RECORDS. IF INFILTRATION RATES OF THE INSTALLED SILT LOAM DO NOT FALL WITHIN THIS RANGE, A GEOLOGIST OR GEOTECHNICAL ENGINEER SHALL BE CONSULTED TO DETERMINE APPROPRIATE MEASURES FOR AMENDING OR MODIFYING THE SILT LOAM SOILS TO ACHIEVE THE DESIRED RATE. INFILTRATION TESTING MUST BE PERFORMED AGAIN AFTER ANY MODIFICATIONS TO VERIFY THAT THE RATES FALL WITHIN THE ACCEPTABLE RANGE.
6. BRING SUB-GRADE OF INFILTRATION AREA TO LINE, GRADE, AND ELEVATIONS INDICATED. FILL AND LIGHTLY REGRADE ANY AREAS DAMAGED BY EROSION, PONDING, OR TRAFFIC COMPACTION. ALL INFILTRATION AREAS SHALL BE LEVEL GRADE ON THE BOTTOM.
7. THE SUBSURFACE AREA SHALL BE PREPARED FOR INFILTRATION BY SCARIFYING THE UNDERLYING SOILS A MINIMUM DEPTH OF SIX INCHES (6") WITH A YORK RAKE AND LIGHT TRACTOR TO FACILITATE SOIL INFILTRATION.
8. **THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF CONSTRUCTION OBSERVATION OF SUBGRADE PRIOR TO INSTALLATION OF CLEAN STONE, INFILTRATION TESTING RESULTS AT SUB-GRADE, DOCUMENTATION OF THE TESTING RESULTS, AND DEPTH TO LIMITING ZONE. DOCUMENTATION OF THE SUB-GRADE TESTING AND INVESTIGATION RESULTS BE PROVIDED TO THE MUNICIPAL ENGINEER.**

SUBGRADE PREPARATION NOTES:

- THE PROPOSED FACILITY RELIES ON PERMEABLE SOIL CONDITIONS TO DEWATER AND FUNCTION PROPERLY. EVERY PRECAUTION MUST BE MAINTAINED BY THE CONTRACTOR DURING THE CONSTRUCTION TO ASSURE THAT COMPACTION DOES NOT OCCUR WHICH WOULD COMPROMISE THE PERMEABILITY OF THE FLOOR OF THE FACILITY.
- IF ROCK IS ENCOUNTERED DURING EXCAVATION, A GEOLOGIST OR GEOTECHNICAL ENGINEER MUST INSPECT THE ROCK PRIOR TO BACKFILL FOR EVIDENCE OF SHALLOW ROCK PINNACLES AND WEATHERED ROCK STRATA. REFER TO GEOLOGY CONSTRUCTION NOTES WITHIN THIS PLAN SET, AND "SUBGRADE REPAIR UNDER INFILTRATION BED DETAIL".
- HALT EXCAVATION AND NOTIFY MUNICIPAL ENGINEER, AND HARBOR ENGINEERING IMMEDIATELY IF ANY CARBONATE FEATURES SUCH AS SINKHOLES, PINNACLES, DISAPPEARING STREAMS, LOOSE OR RAVELED SOILS, OR OTHER DELETERIOUS CONDITIONS ARE OBSERVED DURING CONSTRUCTION OF STORMWATER MANAGEMENT FACILITIES.

b. CLEAN STONE BED INSTALLATION – CONSTRUCTION SEQUENCE
1. FOLLOWING THE FIELD VERIFICATION OF THE SUBGRADE CONDITIONS, AND THE COMPLETION OF THE INFILTRATION TESTING BY THE PROJECT GEOLOGIST REPRESENTATIVE DURING CONSTRUCTION, AND THE SUBMISSION OF THE RATE RESULTS TO THE MUNICIPAL ENGINEER, THE INSTALLATION OF THE NON-WOVEN GEOTEXTILE FABRIC AND CLEAN STONE MAY BEGIN.
2. ANY ACCUMULATION OF DEBRIS OR SEDIMENT THAT TAKES PLACE AFTER APPROVAL OF SUB-GRADE SHALL BE REMOVED PRIOR TO INSTALLATION OF CLEAN STONE.
3. THE NON-WOVEN GEOTEXTILE IS TO BE INSTALLED ALONG THE OUTSIDE OF THE CLEAN STONE AS NOTED IN THE INFILTRATION BED DETAILS.
4. CLEAN STONE SHALL BE COMPACTED/VIBRATED WITH LIGHT EQUIPMENT IN MAXIMUM OF 18" LIFTS TO SET STONE AND ELIMINATE POST-CONSTRUCTION SETTLEMENT.
5. KEEP EQUIPMENT MOVEMENT OVER SILT LOAM TO A MINIMUM – DO NOT OVER COMPACT
6. FOLLOWING THE PLACEMENT OF THE STONE, THE NON-WOVEN GEOTEXTILE IS TO BE OVERLAPPED ON TOP OF THE BED.
7. INSTALL ALL PIPING, CLEANOUTS, AND INLETS PER THE PLAN, PROFILES AND DETAILS.
8. BACKFILL MATERIAL SHALL BE FREE OF LARGE (NOT EXCEEDING 6 INCHES IN ANY DIMENSION) STONE, ROCK, OR OTHER OBJECTIONABLE OR DETRITUS MATERIAL. SELECT NON-AGGREGATE BACKFILL MATERIAL SHOULD BE INDIGENOUS TO THE SURROUNDING SOIL MATERIAL FOR NON-VEHICULAR AREAS.

BED INSTALLATION NOTES:

- DURING CONSTRUCTION, THE INFILTRATION FACILITY SHALL BE PROTECTED FROM SEDIMENTATION ENTERING THE FACILITIES UNTIL THE CONTRIBUTORY DRAINAGE AREA HAS ACHIEVED FULL STABILIZATION, WHICH IS A MINIMUM UNIFORM 90% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
- INFILTRATION FACILITY FILTER FABRIC AND STONE SHOULD BE KEPT CLEAN OF SOIL/SEDIMENT DURING THE INSTALLATION PROCESS. IF INSPECTION INDICATES THAT SOIL SEDIMENT HAS ENTERED ANY OF THE INFILTRATION FACILITY, APPROPRIATE MEASURES (I.E. CLEANING THE SOIL/SEDIMENT FROM THE FABRIC, STONE, BED ETC. AND/OR REPLACEMENT OF THE FABRIC AND STONE) SHOULD BE ADDRESSED.
- PROTECT INFILTRATION FACILITY FROM SEDIMENT AT ALL TIMES DURING CONSTRUCTION. HAY BALES, DIVERSION BERMS AND/OR OTHER APPROPRIATE MEASURES SHALL BE USED AT THE TOE OF SLOPES THAT ARE ADJACENT TO INFILTRATION FACILITY TO PREVENT SEDIMENT FROM WASHING INTO THESE AREAS DURING SITE DEVELOPMENT.

CONTRACTOR NOTES:

1. FACILITY SHALL BE LOCATED IN THE AREA IDENTIFIED ON THE APPROVED PLAN.
2. CARE SHALL BE TAKEN TO ENSURE THAT NO COMPACTION EQUIPMENT, SEDIMENT, OR STONE DUST ENTERS THE PROPOSED INFILTRATION FACILITIES AS THIS COULD POTENTIALLY "SEAL" THE FACILITIES.
3. REFER TO GEOLOGY CONSTRUCTION NOTES WITHIN THIS PLAN SET FOR ADDITIONAL INFORMATION CONCERNING THE SITE GEOLOGY AND CONDITIONS THAT REQUIRE ADDITIONAL OVERSIGHT BY A PROFESSIONAL GEOLOGIST, OR CONSTRUCTION MODIFICATIONS.
4. THE CONSTRUCTION OF THE INFILTRATION BED SHALL BE DOCUMENTED AND APPROVED BY A DESIGN PROFESSIONAL.

MAINTENANCE:

1. SEE OPERATION AND MAINTENANCE NOTES FOR PCSM BMPS.

MATERIALS/SPECIFICATION NOTES:

1. TOP 12" OF STONE MAY BE REPLACED WITH A CLEAN 3/4" STONE TO AID IN PIPE INSTALLATION.
2. ALL STONE FOR THE CONSTRUCTION OF THE FACILITY SHOULD BE UNIFORMLY GRADED AND CLEAN AGGREGATE.
3. THE OUTSIDE OF THE CLEAN STONE BACKFILL SHALL BE LINED AS NOTED ON THE DETAIL FACILITY WITH A PADOT CLASS 1 NON-WOVEN GEOTEXTILE MATERIAL PER PUBLICATION 408, SECTION 212.3B. A MINIMUM 1' OVERLAP SHALL BE PROVIDED AT ALL MATERIAL EDGES. NON-WOVEN FABRIC SHALL HAVE 5 OUNCES PER SQUARE YARD (SY) WEIGHT, OR GREATER, AND BE CAPABLE OF DRAINING 120 GALLONS PER MINUTE (GPM) OF WATER PER SQUARE FOOT (SF).
4. CONTRACTOR SHALL USE TEE'S, BENDS, CROSSES, AND REDUCERS AS REQUIRED TO MAKE NECESSARY CONNECTIONS.
5. ALL ROOF LEADER PIPING SHALL BE SDR-35 PVC, OR CORRUGATED HDPEP WITH WATERTIGHT JOINTS (OR APPROVED EQUAL), AND HAVE A MIN. DIAMETER AS NOTED ON THE PLANS, PROFILES AND/OR DETAILS.
6. ALL PERFORATED PIPE WITHIN THE FACILITY SHALL HAVE A MINIMUM DIAMETER AS NOTED ON THE PLANS AND/OR DETAILS.
7. ALL PERFORATED PIPE SHALL BE CLASS 2 FULLY PERFORATED PIPE PER AASHTO M252 FOR 3"–10" PIPE. PERFORATIONS MAY BE CIRCULAR OR SLOTTED AND ARE TO BE UNIFORMLY SPACED ALONG THE LENGTH AND CIRCUMFERENCE OF THE PIPE, OR HAVE APPROVED EQUIVALENT PERFORATIONS.

INFILTRATION BED 1 WITH DISTRIBUTION PIPING (BELOW PAVING)

1/5

NOT TO SCALE

GENERAL NOTES:

1. TYPICAL ROOF GUTTER & BURIED COLLECTOR LINES SHOWN ARE SCHEMATIC ONLY & ARE THE RESPONSIBILITY OF THE BUILDER & OWNER TO DESIGN. CLEANOUTS SHOULD BE PROVIDED ON ALL BURIED LINES AS NEEDED FOR PROPER MAINTENANCE.
2. WYE "Y" FITTINGS MUST BE USED AT ALL PIPE INTERSECTIONS. TEE "T" FITTINGS SHALL NOT BE USED.

DOWNSPOUT CONNECTION DETAIL

2/3

NOT TO SCALE

NOTES:

1. REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.
2. RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.
3. MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.
4. MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

ABACT NOTES WHEN IN SPECIAL PROTECTION WATERSHED & CHESAPEAKE BAY WATERSHED:

CONTINUAL MAINTENANCE IS NEEDED FOR THE RCE TO QUALIFY AS AN APPROVED ALTERNATIVE BMP, WHICH MAY BE USED AS A SUBSTITUTE FOR WASH RACKS IN SPECIAL PROTECTION WATERSHEDS. THE FOLLOWING CONTINUAL MAINTENANCE IS REQUIRED TO PROVIDE THE ADDITIONAL ABACT BMP SEDIMENT CONTROL.

1. USE VACUUM SWEEPER TO REMOVE ACCUMULATED SEDIMENT FROM STREETS DAILY BEFORE IT IS WASHED INTO SURFACE WATERS.
2. TIRES CAN BE CLEANED OFF MANUALLY WITH A BROOM PRIOR TO EXITING.
3. LARGE LUMPS OF DIRT/SOIL CAN BE REMOVED BY HAND.
4. ROLLING OF DIRT ROAD CAN STABILIZE AREAS AFFECTED BY TRACKED MUD.

ROCK CONSTRUCTION ENTRANCE (ABACT REQUIRED)

3/5

NOT TO SCALE

NOTES:

1. SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL. SEE COMPOST FILTER SOCK SPECIFICATIONS.
2. COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.
3. TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.
4. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
5. COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
6. BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
7. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

STANDARD CONSTRUCTION DETAIL #4–1
COMPOST FILTER SOCK

4/5

NOT TO SCALE

COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS (TABLE 4.1)					
MATERIAL TYPE	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi–Filament Polypropylene (MFPP)	Heavy Duty Multi–Filament Polypropylene (HDMFPP)
Material Characteristics	Photo–degradable	Photo–degradable	Bio–degradable	Photo–degradable	Photo–degradable
Sock Diameter	12", 18"	12", 18", 24", 32"	12", 18", 24", 32"	12", 18", 24", 32"	12", 18", 24", 32"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength	–	26 psi	26 psi	44 psi	202 psi
Ultraviolet Stability % Original Strength (ASTM G–155)	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
Minimum Functional Longevity	6 months	9 months	6 months	1 year	2 years
Two–ply systems					
Inner Containment Netting			HDPE biaxial net Continuously wound Fusion–welded junctures 3/4" x 3/4" Max. aperture size		
Outer Filtration Mesh			Composite Polypropylene Fabric (Woven layer and non–woven fleece mechanically fused via needle punch) 3/16" Max. aperture size		
Sock Fabrics composed of burlap may be used on projects lasting 6 months or less.					

COMPOST STANDARDS (TABLE 4.2)	
Organic Matter Content	25% – 100% (dry weight basis)
Organic Portion	Fibrous and elongated
pH	5.5 – 8.5
Moisture Content	30% – 60%
Particle Size	30%–50% pass through 3/8" sieve
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Maximum

COMPOST FILTER SOCK SPECIFICATIONS

5/5

NOT TO SCALE

NOTE: WHEN PIPES ARE TO BE INSTALLED IN FILL CONDITION, THE PLACEMENT OF FILL MATERIAL SHALL BE AS FOLLOWS:

A. THE SOIL SHALL BE PLACED IN LOOSE LAYERS NO GREATER THAN 8 INCHES THICK AND THEN COMPACTED WITH APPROPRIATE COMPACTION EQUIPMENT.
B. NO FILL PLACEMENT SHALL TAKE PLACE DURING WET WEATHER AND NO FILL SHALL BE PLACED ON A FROZEN SUBGRADE.

STORM PIPE / ROOF LEADER TRENCH

6/5

NOT TO SCALE

NOTES:

1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
2. 18" DIAMETER FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.
3. A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS.

MAINTENANCE: ALL CONCRETE WASHOUT FACILITIES SHALL BE INSPECTED DAILY. DAMAGED OR LEAKING WASHOUTS SHOULD BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY.
ACCUMULATED MATERIALS SHOULD BE REMOVED WHEN THEY REACH 75% CAPACITY.
PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.

FIGURE 3.16
TYPICAL COMPOST SOCK WASHOUT DETAIL

7/5

NOT TO SCALE

NOTES:

1. MAXIMUM DRAINAGE AREA = 1/2 ACRE.
2. INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.
3. ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.
4. AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.
5. INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.
6. DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

STANDARD CONSTRUCTION DETAIL #4–15
FILTER BAG INLET PROTECTION – TYPE C INLET

8/5

NOT TO SCALE

NOTES:

1. MAXIMUM DRAINAGE AREA = 1/2 ACRE.
2. INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.
3. ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.
4. AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.
5. INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.
6. DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

STANDARD CONSTRUCTION DETAIL #4–16
FILTER BAG INLET PROTECTION – TYPE M INLET

9/5

NOT TO SCALE

NOTE:

1. CLEANOUT SHOWN IN GRASS/LAWN AREA.
2. CLEANOUTS IN SIDEWALKS OR PAVED AREAS SHALL BE SET AT FINISHED GRADE WITH A 12"x12"x6" THICK CONCRETE PAD AT THE SURFACE.

STORM SEWER CLEANOUT
(PVC ROOFLEADERS)

10/5

NOT TO SCALE

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CIVIL ENGINEERING - LANDSCAPE ARCHITECTURE

NO	BY	DATE	REVISION
1	BRK	09/19/2024	PER STORMWATER MANAGEMENT REVISIONS

OWNER

LANCASTER TOWNSHIP
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PROJECT TITLE

SITE PLAN
FOR
LANCASTER TOWNSHIP
POLICE STATION
LANCASTER TOWNSHIP, LANCASTER COUNTY, PENNSYLVANIA

SHEET TITLE

PCSM
DETAILS

AS NOTED

SEAL

DRAWN BY: BRK
CHECKED BY: SPG
DATE: AUGUST 27, 2024
PROJECT NO.: **24426-036**
SHEET: **6** OF **6**