# *PRELIMINARY LAND DEVELOPMENT PLAN*

*FOR*

## *661 PENN STREET, LLC*

# *661 PENN STREET REDEVELOPMENT*

## *NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA*

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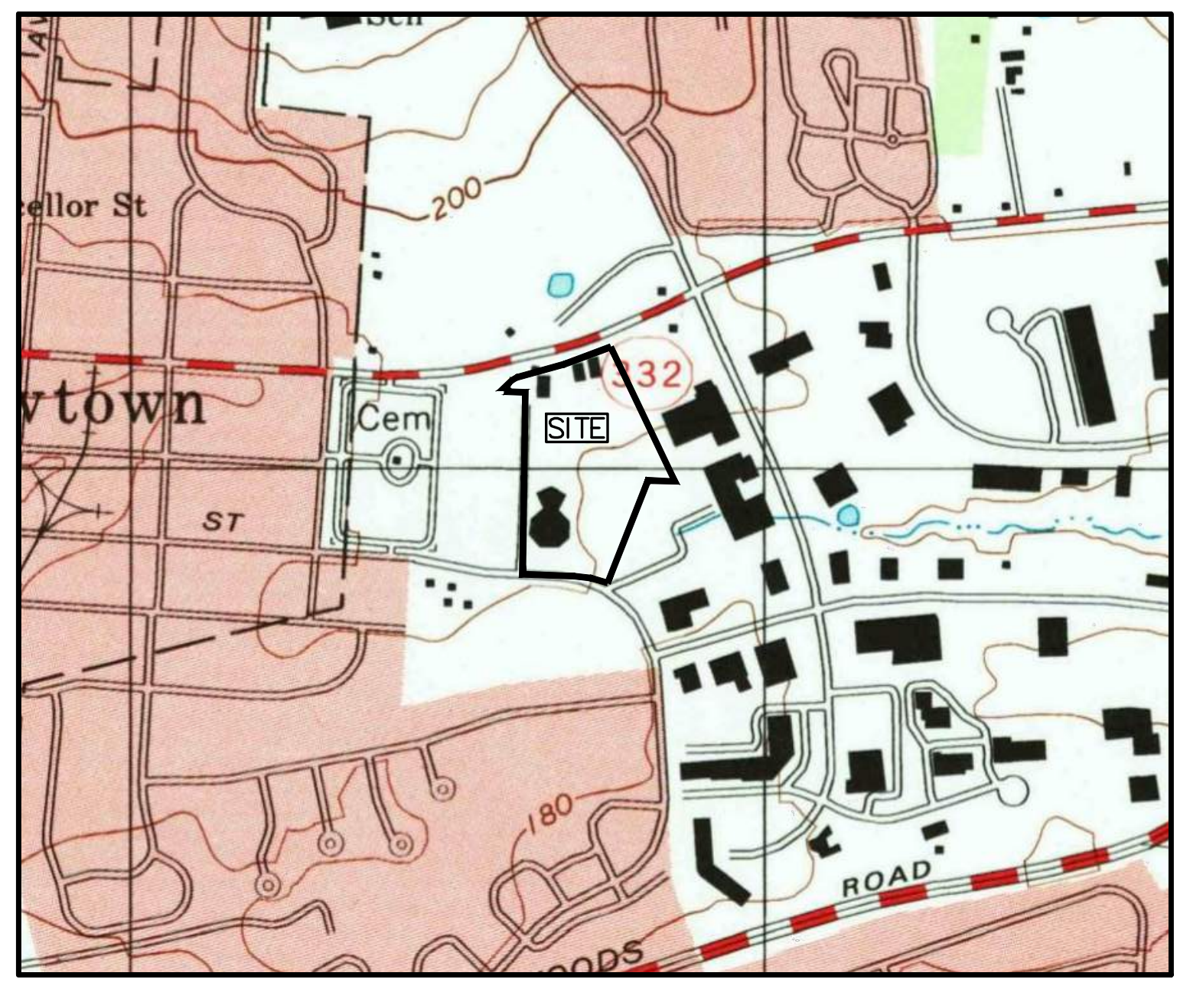
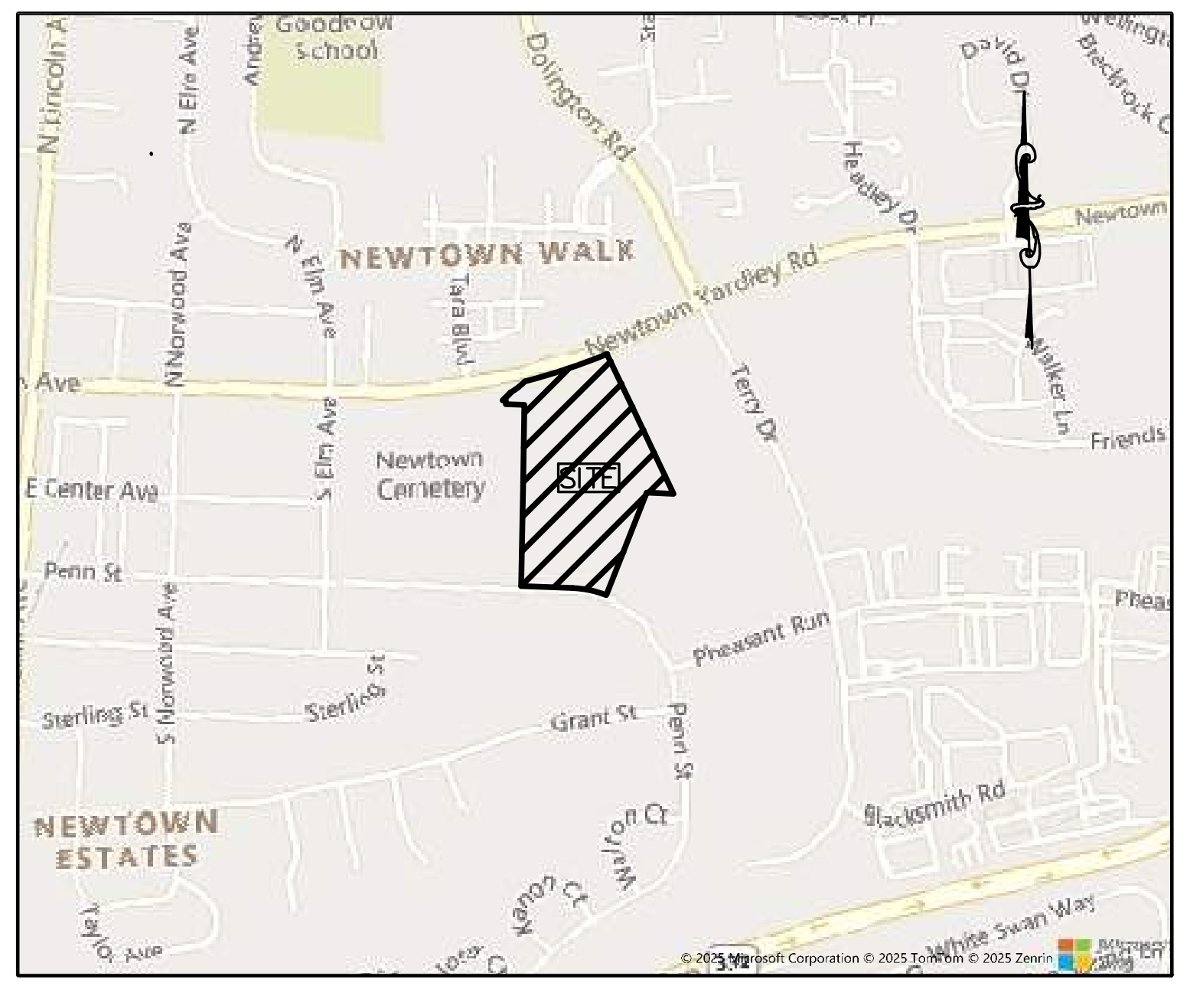


USGS MAP

1000 00 1000 2000
SCALE IN FEET

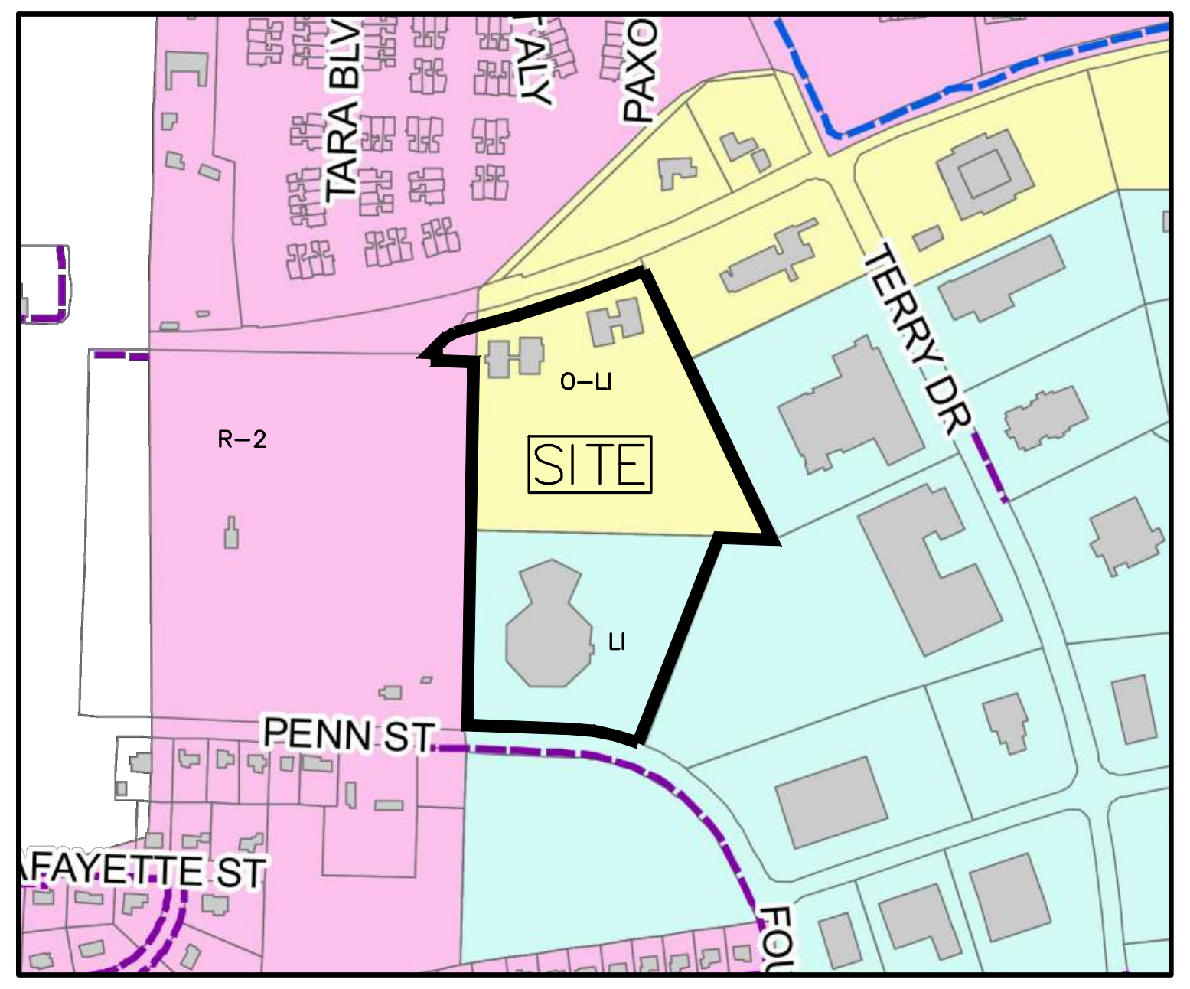
SCALE: 1"=1000'



LOCATION MAP

1000 00 1000 2000
SCALE IN FEET

SCALE: 1"=1000'



ZONING MAP

500 00 500 1000
SCALE IN FEET

SCALE: 1"=500'

**ZONING DISTRICTS:**

O-LI – OFFICE-LIGHT INDUSTRIAL
R-2 – HIGH DENSITY RESIDENTIAL
LI – LIGHT INDUSTRIAL

GENERAL NOTES:

1. PROPERTY KNOWN AS TAX PARCEL 29–010–119–001 AS SHOWN ON THE TAX MAP OF THE TOWNSHIP OF NEWTOWN, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA. CONTAINING 403,757 SQ FT OR 9.269 ACRES, MORE OR LESS.
2. PROPERTY KNOWN AS TAX PARCEL 29–010–037 AS SHOWN ON THE TAX MAP OF THE TOWNSHIP OF NEWTOWN, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA. CONTAINING 282,268 SQ FT OR 6.481 ACRES, MORE OR LESS.
3. PLAN IS BASED ON A FIELD SURVEY PERFORMED BY GILMORE & ASSOCIATES, INC. ON AUGUST & SEPTEMBER OF 2025.
4. VERTICAL DATUM IS NAVD88 AND WAS ESTABLISHED BY GLOBAL POSITIONING SYSTEM (GPS) WITH OBSERVATIONS REFERENCED TO THE KEYNET–GPS VIRTUAL REFERENCE STATION SYSTEM.
5. HORIZONTAL DATUM IS BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (NAD 83) ESTABLISHED BY GLOBAL POSITIONING SYSTEM (GPS) WITH OBSERVATIONS REFERENCED TO THE KEYNET–GPS VIRTUAL REFERENCE STATION SYSTEM.
6. SITE FEATURES AND TOPOGRAPHY WERE GENERATED BY PHOTOGRAMMETRIC METHODS BY COOPER AERIAL SURVEYS CO., USING DRONE AERIAL PHOTOGRAPHY TAKEN ON AUGUST 27, 2025. AERIAL CONTROL WAS PROVIDED BY GILMORE & ASSOCIATES, INC.
7. PROPERTY IS LOCATED IN FLOOD ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN AS DEPICTED ON THE FEDERAL EMERGENCY AGENCY FLOOD INSURANCE MAP, MAP NUMBER 42017C0431K, EFFECTIVE 3/21/2017.
8. NO REVIEW OF THE PROPERTY REGARDING THE PRESENCE OF WETLANDS WAS ACCOMPLISHED AS A PART OF THIS SURVEY.
9. ALL PROPOSED UTILITIES ARE TO BE INSTALLED UNDERGROUND.
10. ■ DENOTES CONCRETE MONUMENT TO BE SET.
11. ● DENOTES R.R. SPIKE OR IRON PIN TO BE SET.
12. THE BURYING OF TREES AND OTHER CONSTRUCTION DEBRIS ON THE SITE IS PROHIBITED.
13. THE PROPOSED SANITARY SERVICE WILL BE SUBJECT TO APPROVAL BY THE NEWTOWN, BUCKS COUNTY JOINT MUNICIPAL AUTHORITY.
14. THE PROPOSED WATER SERVICE AND ACCOMPANIED FIRE HYDRANTS, MATERIALS AND LOCATIONS ARE SUBJECT TO APPROVAL BY THE NEWTOWN TOWNSHIP FIRE MARSHAL AND NEWTOWN ARTESIAN WATER COMPANY.
15. BLANKET EASEMENT OVER ENTIRE SITE TO BE OFFERED FOR DEDICATION TO NEWTOWN ARTESIAN WATER COMPANY FOR ACCESS, OWNERSHIP AND MAINTENANCE OF WATER FACILITIES, AND TO NEWTOWN TOWNSHIP FOR ACCESS TO ALL STORMWATER MANAGEMENT FACILITIES FOR INGRESS AND EGRESS TO SAME
16. THE DEVELOPER OF THIS TRACT HOLDS NEWTOWN TOWNSHIP HARMLESS FOR ANY STORMWATER RUN–OFF DIRECTED OFF–SITE.
17. ALL CONTRACTORS WORKING ON THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS OF THE UNDERGROUND UTILITY LINE PROTECTION LAW, PA. ACT 187 OF 1996. CONTRACTORS SHALL OBTAIN A PA ONE CALL NUMBER FOR CONSTRUCTION PURPOSES.
18. ALL CONTRACTORS WORKING ON THIS PROJECT SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES RELATED TO THIS PROJECT ARE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION) STANDARDS
19. SHEETS 1 THROUGH 33 INCLUSIVE, ON RECORD AT NEWTOWN TOWNSHIP, SHALL BE CONSIDERED A PART OF THE APPROVED FINAL PLAN AS IF RECORDED WITH SAME.
20. ACCESS TO YARDLEY–NEWTOWN ROAD AND PENN STREET SHALL BE AS AUTHORIZED BY NEWTOWN TOWNSHIP.
21. THE MUNICIPALITY HAS THE RIGHT TO ENTER PRIVATE PROPERTY TO INSPECT AND REPAIR, IF NECESSARY, ANY STORMWATER MANAGEMENT FACILITY. THESE STORMWATER FACILITIES ARE A PERMANENT PART OF THE DEVELOPMENT AND SHALL NOT BE REMOVED, ALTERED OR MODIFIED.
22. THE PROPOSED DEVELOPMENT WILL GENERALLY BE COMPOSED OF THREE MAIN COMPONENTS:
    - RESIDENTIAL: TO INCLUDE MULTIFAMILY RESIDENTIAL BUILDING WITH INTERNAL GARAGE PARKING.
    - NON–RESIDENTIAL: TO INCLUDE EXISTING OFFICE SPACE WITH SOME EXISTING MEDICAL OFFICE USE.
    - PARKING STRUCTURE: TO BE CENTRALLY LOCATED WITHIN THE PROPOSED RESIDENTIAL BUILDING AND SERVE THE PARKING NEEDS OF THE EXISTING OFFICE USES.
23. THE DEVELOPMENT WILL INCLUDE SHARED/COMMON OPEN SPACE, WALKWAYS, ETC. AND WILL BE CONSTRUCTED IN CHARACTER WITH THE EXISTING SURROUNDING AREA.
24. MAILBOXES FOR THE RESIDENTIAL UNITS ARE TO BE LOCATED WITHIN THE ENTRY VESTIBULE TO THE RESIDENTIAL PORTION OF BUILDINGS.
25. THE PARKING GARAGE AREAS SHALL HAVE SURVEILLANCE BY VIDEO CAMERA WHICH IS TO BE ACCESSIBLE TO THE POLICE DEPARTMENT.
26. TRASH AND RECYCLING STATIONS ARE TO BE LOCATED WITHIN THE BUILDING, AND ACCESSED VIA GARAGE 1 WITH APPROPRIATELY SIZED PICK–UP VEHICLES.
27. A RIGHT OF ACCESS AND TRANSIT IS HEREBY GRANTED TO, AND FOR THE BENEFIT OF, THE GENERAL PUBLIC UPON AND OVER DRIVE"B" AND ALL ADJACENT WALKWAYS, AS WELL AS ALL PARKING DRIVES, ALLEYS AND WAYS LAID OUT UPON THE PLAN, AS THE SAME MAY HEREAFTER BE AMENDED AND MODIFIED, SO AS TO PROVIDE ACCESS, INGRESS AND EGRESS TO, FROM AND OVER THE SITE TO ALL PUBLIC ROADWAYS.
28. PUBLIC SPACE #1 AND #2 ARE TO BE HELD PRIVATELY BY 661 PENN STREET, LLC. AND NOT OFFERED FOR DEDICATION TO NEWTOWN TOWNSHIP.
29. ALL ROOFTOP MECHANICAL EQUIPMENT SHALL BE SET BACK A MINIMUM OF 10 FEET FROM THE EDGE OF EACH BUILDING, WHERE SUCH EQUIPMENT IS PROPOSED.

APPLICANTS INFO:

661 PENN STREET, LLC
209 PENN'S TRAIL
NEWTOWN, PA 18940
215–968–0600

PROJECT LOCATION:

661 PENN STREET
NEWTOWN, PA, 18940
NEWTOWN TOWNSHIP, BUCKS, PENNSYLVANIA

TAX PARCEL:

29–010–119–001 & 29–010–037

MUNICIPAL FILE No.:

REGISTERED PROFESSIONAL
RONALD G. MONKRES II
ENGINEER
603164–E

CHRISTOPHER E. GREEN
REGISTRATION NUMBER
LA002522
REGISTERED LANDSCAPE ARCHITECT

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES
CORPORATE HEADQUARTERS
65 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901 ● (215) 345-4330 ● www.gilmore-assoc.com

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES
2500866 661 PENN STREET REDEVELOPMENT – JULY 27, 2026

**PLAN DATE: JANUARY 21, 2026**
**LAST REVISED: JULY 27, 2026**

SHEET NO.:
1 OF 33

**NOT APPROVED FOR CONSTRUCTION**

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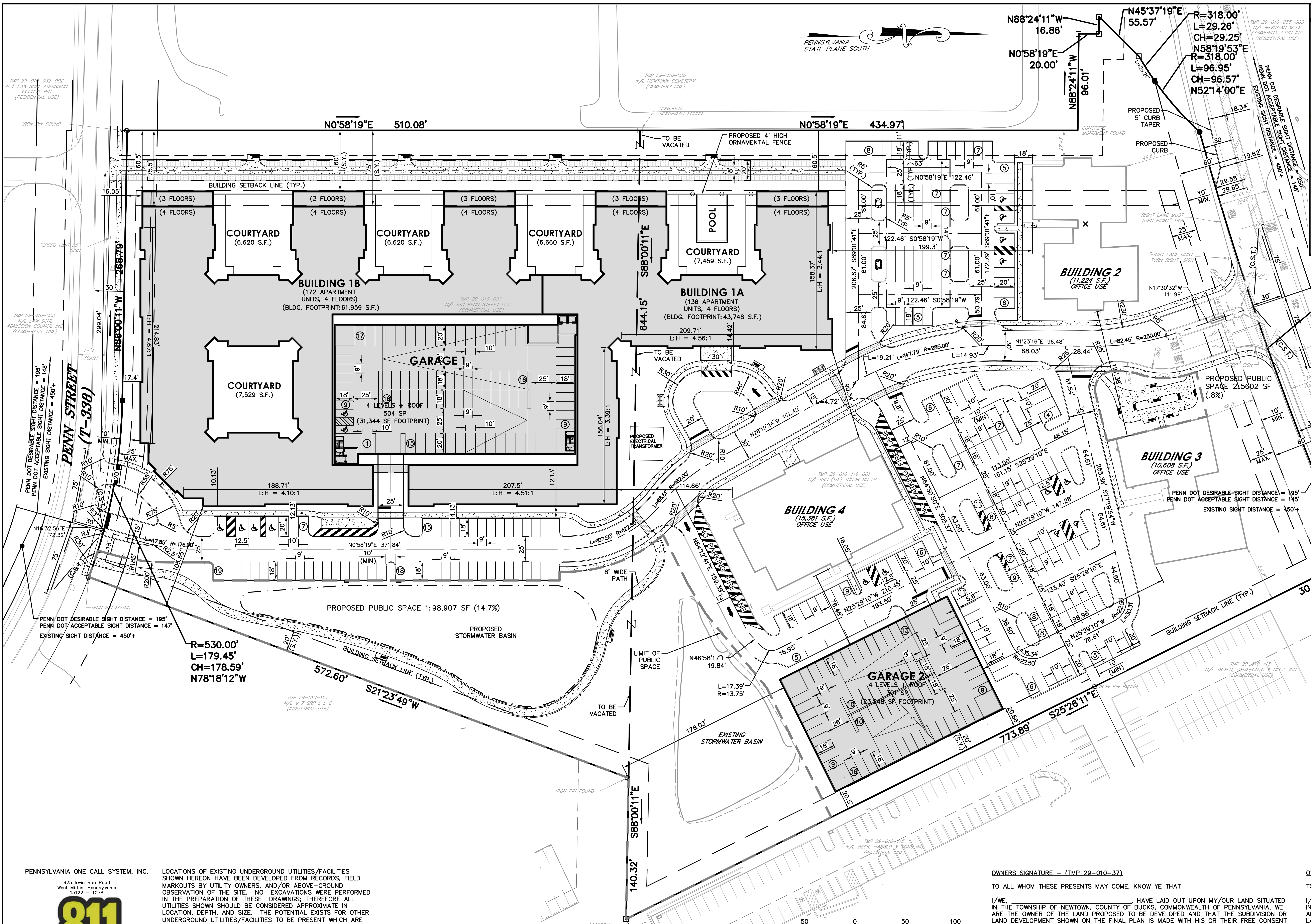
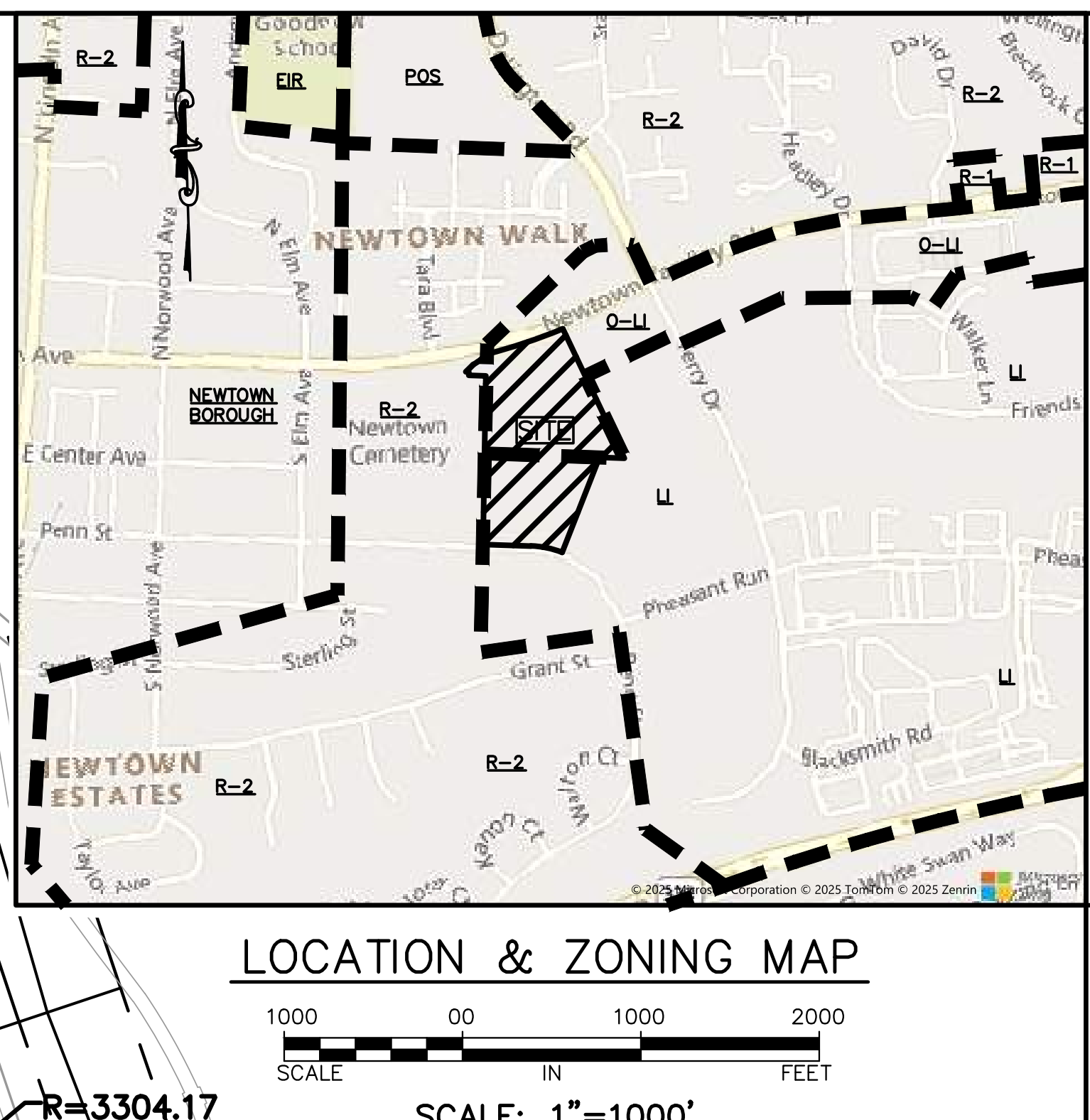

PENNSYLVANIA STATE PLANE SOUTH
PENN STREET (T-338)
NEWTOWN YARDLEY ROAD (T-563)
N0°58'19"E 510.08'
N0°58'19"E 434.97'
N88°24'11"W 16.86'
N0°58'19"E 20.00'
N88°24'11"W 96.01'
N45°37'19"E 55.57'
R=318.00' L=29.26' CH=29.25' N58°19'53"E
R=318.00' L=96.95' CH=96.57' N52°14'00"E
R=3304.17 L=451.24' CH=450.89' N71°33'46"E
S25°26'11"E 30.04'
S25°26'11"E 773.89'
S21°23'49"W 572.60'
R=530.00' L=179.45' CH=178.59' N78°18'12"W
N88°00'11"W 268.79'
S88°00'11"E 644.15'
S88°00'11"E 140.32'
TO BE VACATED
PROPOSED 4' HIGH ORNAMENTAL FENCE
BUILDING SETBACK LINE (TYP.)
BUILDING 1B (172 APARTMENT UNITS, 4 FLOORS) (BLDG. FOOTPRINT: 61,959 S.F.)
BUILDING 1A (136 APARTMENT UNITS, 4 FLOORS) (BLDG. FOOTPRINT: 43,748 S.F.)
COURTYARD (6,620 S.F.)
COURTYARD (6,620 S.F.)
COURTYARD (6,660 S.F.)
COURTYARD (7,459 S.F.)
COURTYARD (7,529 S.F.)
POOL
(3 FLOORS)
(4 FLOORS)
GARAGE 1 4 LEVELS + ROOF 504 SP (31,344 SF FOOTPRINT)
GARAGE 2 4 LEVELS + ROOF 391 SP (23,248 SF FOOTPRINT)
BUILDING 2 (11,224 S.F.) OFFICE USE
BUILDING 3 (10,608 S.F.) OFFICE USE
BUILDING 4 (15,381 S.F.) OFFICE USE
PROPOSED PUBLIC SPACE 1: 98,907 SF (14.7%)
PROPOSED PUBLIC SPACE 2: 5602 SF (.8%)
PROPOSED STORMWATER BASIN
EXISTING STORMWATER BASIN
PROPOSED ELECTRICAL TRANSFORMER
8' WIDE PATH
LIMIT OF PUBLIC SPACE
PROPOSED 5' CURB TAPER
PROPOSED CURB
PENN DOT DESIRABLE SIGHT DISTANCE = 195'
PENN DOT ACCEPTABLE SIGHT DISTANCE = 147'
EXISTING SIGHT DISTANCE = 450'+
PENN DOT DESIRABLE SIGHT DISTANCE = 195'
PENN DOT ACCEPTABLE SIGHT DISTANCE = 145'
EXISTING SIGHT DISTANCE = 450'+
TMP 29-010-036 N/L NEWTOWN CEMETERY (CEMETERY USE)
TMP 29-010-119-001 N/L 660 (SIX) TUDOR 32 LP (COMMERCIAL USE)
TMP 29-010-037-001 N/L CERBAR LLC (COMMERCIAL USE)
TMP 29-010-115 N/L K F GRP L L C (INDUSTRIAL USE)
CONCRETE MONUMENT FOUND
IRON PIN FOUND
SCALE IN FEET 1"=50'



## LOCATION & ZONING MAP

SCALE: 1"=1000'

**ZONING DISTRICTS:**

EIR – EDUCATION, INSTITUTIONAL, AND RECREATIONAL
O-LI – OFFICE-LIGHT INDUSTRIAL
POS – PARK & OPEN SPACE
R-1 – MEDIUM DENSITY RESIDENTIAL
R-2 – HIGH DENSITY RESIDENTIAL
LI – LIGHT INDUSTRIAL

PENNSYLVANIA ONE CALL SYSTEM, INC.

925 Irwin Run Road
West Mifflin, Pennsylvania
15122 – 1078

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1-800-242-1776

NON-MEMBERS MUST BE CONTACTED DIRECTLY

PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

SERIAL NO. 20252790540

LOCATIONS OF EXISTING UNDERGROUND UTILITIES/FACILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM RECORDS, FIELD MARKOUTS BY UTILITY OWNERS, AND/OR ABOVE-GROUND OBSERVATION OF THE SITE. NO EXCAVATIONS WERE PERFORMED IN THE PREPARATION OF THESE DRAWINGS; THEREFORE ALL UTILITIES SHOWN SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH, AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES/FACILITIES TO BE PRESENT WHICH ARE NOT SHOWN ON THE DRAWINGS. ONLY THE VISIBLE LOCATIONS OF UNDERGROUND UTILITIES/FACILITIES AT THE TIME OF FIELD SURVEY SHALL BE CONSIDERED TRUE AND ACCURATE. COMPLETENESS OR ACCURACY OF UNDERGROUND UTILITIES/FACILITIES ARE NOT GUARANTEED BY GILMORE & ASSOCIATES INC.

ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES/FACILITIES PRIOR TO START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF P.L. 852, NO. 287 DECEMBER 10, 1974 AS LAST AMENDED ON OCT. 29, 2024 PENNSYLVANIA ACT 127.

GILMORE & ASSOCIATES INC. HAS OBTAINED A PA-ONE CALL SERIAL NUMBER AS NOTED HEREON FOR DESIGN PURPOSES ONLY.

BCPC No. ________________

PROCESSED AND REVIEWED: REPORT PREPARED BY THE BUCKS COUNTY PLANNING COMMISSION IN ACCORDANCE WITH THE MUNICIPALITIES PLANNING CODE. CERTIFIED THIS ________ DATE OF _______________, 20___.

_____________________________
EXECUTIVE DIRECTOR, BUCKS COUNTY PLANNING COMMISSION

RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS, IN AND FOR THE COUNTY OF BUCKS AT DOYLESTOWN, PENNA. IN PLAN BOOK ______ PAGE __________, ON ________________, ______.

_____________________
RECORDER OF DEEDS

APPROVED BY THE NEWTOWN TOWNSHIP BOARD OF SUPERVISORS ON THIS ___ DAY OF _________, 20___.

SECRETARY ______________________

CHAIRMAN ______________________

REVIEWED BY THE NEWTOWN TOWNSHIP PLANNING COMMISSION ON THIS ___ DAY OF _________, 20___.

SECRETARY ______________________

CHAIRMAN ______________________

REVIEWED BY THE NEWTOWN TOWNSHIP ENGINEER ON THIS _______ DAY OF _____________, 20___.

______________________________
TOWNSHIP ENGINEER

I, RUSSELL T. CROSS, HEREBY CERTIFY THAT I AM A REGISTERED PROFESSIONAL SURVEYOR, LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF PENNSYLVANIA; THAT THIS PLAN CORRECTLY REPRESENTS A SURVEY OF __________________ COMPLETED UNDER MY SUPERVISION IN ___________________________; THAT ALL THE MARKERS SHOWN HEREON ACTUALLY EXIST: THAT THEIR LOCATION, SIZE, TYPE AND MATERIAL ARE ACCURATELY SHOWN.

______________________________
SIGNATURE

OWNERS SIGNATURE – (TMP 29-010-37)

TO ALL WHOM THESE PRESENTS MAY COME, KNOW YE THAT

I/WE, ________________________________, HAVE LAID OUT UPON MY/OUR LAND SITUATED IN THE TOWNSHIP OF NEWTOWN, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA, WE ARE THE OWNER OF THE LAND PROPOSED TO BE DEVELOPED AND THAT THE SUBDIVISION OR LAND DEVELOPMENT SHOWN ON THE FINAL PLAN IS MADE WITH HIS OR THEIR FREE CONSENT AND THAT IT IS DESIRED TO RECORD THE SAME.

WITNESS OUR HAND THIS _____ DAY OF ______, 20__.

______________________________________
(SIGN) – PRESIDENT

______________________________________
(SIGN) – SECRETARY

NOTARY ACKNOWLEDGEMENT OF OWNER'S STATEMENT OF INTENT

ON THE ______ DAY OF ______________, 202_ BEFORE ME, THE SUBSCRIBER, A NOTARY PUBLIC IN AND FOR THE STATE AND COUNTY AFORESAID, PERSONALLY APPEARED ______________________________, WHO ACKNOWLEDGED HIMSELF TO BE THE ________________ OF___________________________, A PENNSYLVANIA LIMITED LIABILITY CORPORATION, THE GENERAL PARTNER OF______________________________A PENNSYLVANIA LIMITED PARTNERSHIP, AND THAT HE/SHE AS SUCH OFFICER, BEING DULY AUTHORIZED TO DO SO, EXECUTED THE FOREGOING INSTRUMENT FOR THE PURPOSES THEREIN CONTAINED BY SIGNING THE NAME OF THE COMPANY BY HIMSELF AS SUCH OFFICER.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND OFFICIAL SEAL.

NOTARY PUBLIC ______________________________________
MY COMMISSION EXPIRES:

OWNERS SIGNATURE – (TMP 29-010-119-001)

TO ALL WHOM THESE PRESENTS MAY COME, KNOW YE THAT

I/WE, ________________________________, HAVE LAID OUT UPON MY/OUR LAND SITUATED IN THE TOWNSHIP OF NEWTOWN, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA, WE ARE THE OWNER OF THE LAND PROPOSED TO BE DEVELOPED AND THAT THE SUBDIVISION OR LAND DEVELOPMENT SHOWN ON THE FINAL PLAN IS MADE WITH HIS OR THEIR FREE CONSENT AND THAT IT IS DESIRED TO RECORD THE SAME.

WITNESS OUR HAND THIS _____ DAY OF ______, 20__.

______________________________________
(SIGN) – PRESIDENT

______________________________________
(SIGN) – SECRETARY

NOTARY ACKNOWLEDGEMENT OF OWNER'S STATEMENT OF INTENT

ON THE ______ DAY OF ______________, 202_ BEFORE ME, THE SUBSCRIBER, A NOTARY PUBLIC IN AND FOR THE STATE AND COUNTY AFORESAID, PERSONALLY APPEARED ______________________________, WHO ACKNOWLEDGED HIMSELF TO BE THE ________________ OF___________________________, A PENNSYLVANIA LIMITED LIABILITY CORPORATION, THE GENERAL PARTNER OF______________________________A PENNSYLVANIA LIMITED PARTNERSHIP, AND THAT HE/SHE AS SUCH OFFICER, BEING DULY AUTHORIZED TO DO SO, EXECUTED THE FOREGOING INSTRUMENT FOR THE PURPOSES THEREIN CONTAINED BY SIGNING THE NAME OF THE COMPANY BY HIMSELF AS SUCH OFFICER.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND OFFICIAL SEAL.

NOTARY PUBLIC ______________________________________
MY COMMISSION EXPIRES:

**GILMORE & ASSOCIATES, INC.**
**ENGINEERING & CONSULTING SERVICES**
CORPORATE HEADQUARTERS
65 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901 • (215) 345-4330 • www.gilmore-assoc.com

ONLY THOSE PLANS INCORPORATING THE PROFESSIONAL SEAL SHOULD BE CONSIDERED OFFICIAL AND RELIED UPON BY USER. THIS PLAN IS PREPARED SPECIFICALLY FOR THE CLIENT AND PROJECT DESIGNATED HEREON. MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT THE CONSENT OF GILMORE & ASSOCIATES, INC. IS PROHIBITED.

**NOT APPROVED FOR CONSTRUCTION**

RONALD G. MONKRES II
ENGINEER 603164-E

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# *661 PENN STREET REDEVELOPMENT*

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## RECORD PLAN

**GILMORE & ASSOCIATES, INC.**
**ENGINEERING & CONSULTING SERVICES**

PROJECT No.: 2500866

APPLICANTS INFO:
661 PENN STREET, LLC
209 PENN'S TRAIL
NEWTOWN, PA 18940
215-968-0600

MUNICIPAL FILE No.:

TAX MAP PARCEL No.: 29-010-119-001 & 29-010-037

| | |
|---|---|
| TOTAL AREA: 15.75 AC. | TOTAL LOTS: 2 |
| DATE: 01/21/26 | SCALE: 1"=50' |
| DRAWN BY: GY/BH | CHECKED BY: RGM |

SHEET NO.: 2 OF 33

## LOT AREA SUMMARY

| | | GROSS SITE AREA | | RIGHT-OF-WAY | | NET SITE AREA | | IMPERVIOUS | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | **PRE-DEVELOPMENT** | | | | | | | | |
| | | SF | AC | SF | AC | SF | AC | SF | AC | % |
| 1 | TMP: 29-010-119-001 | 403,748.98 | 9.269 | 14468.01 | 0.332 | 389,280.97 | 8.937 | 241,525 | 5.545 | 62.0% |
| 2 | TMP: 29-010-037 | 282,295.70 | 6.481 | 0.000 | 0.000 | 282,295.70 | 6.481 | 152,366 | 3.498 | 54.0% |
| | | **POST-DEVELOPMENT** | | | | | | | | |
| 1 | TMP: 29-010-119-001 | 686,044.68 | 15.749 | 14468.01 | 0.332 | 671,576.67 | 15.417 | 424,934 | 9.755 | 63.3% |

## IMPERVIOUS SURFACE SUMMARY

PRE-DEVELOPMENT

| TMP: 29-010-119-001 | | | TMP: 29-010-037 | | |
|---|---|---|---|---|---|
| BUILDINGS | 37,213 | SF | BUILDINGS | 52,824 | SF |
| PARKING/DRIVES | 196,174 | SF | PARKING/DRIVES | 95,338 | SF |
| SIDEWALK | 7,972 | SF | SIDEWALK | 4,109 | SF |
| MISC. | 166 | SF | MISC. | 95 | SF |
| TOTAL | 241,525 | SF | TOTAL | 152,366 | SF |
| | 5.54 | AC | | 3.50 | AC |

POST-DEVELOPMENT

| TMP: 29-010-119-001 & 29-010-037 | | |
|---|---|---|
| BUILDINGS | 203,518 | SF |
| COURTYARDS | 34,888 | SF |
| PARKING/DRIVES | 143,644 | SF |
| SIDEWALK | 31,935 | SF |
| MISC.(TRAIL & Curbs) | 10,950 | SF |
| TOTAL | 424,934 | SF |

## EXISTING BUILDING AREA SUMMARY

| | FOOTPRINT | GROSS FLOOR | NO. FLOORS |
|---|---|---|---|
| BLDG 1 (T.B.R.) | 52,824 SF | 52,824 SF | 1 FLOOR |
| BUILDING 2 | 11,224 SF | 19,200 SF | 2 FLOORS |
| BUILDING 3 | 10,608 SF | 19,320 SF | 2 FLOORS |
| BUILDING 4 | 15,381 SF | 45,456 SF | 3 FLOORS |

NOTE: GROSS FLOOR AREAS FOR EXISTING USES TAKEN FROM PLAN ENTITLED 'RECORD PLAN, TUDOR SQUARE – PHASE 3' AS PREPARED BY RITTLER ENGINEERING, INC., BEARING A DATE OF 06/15/2001, LAST REVISED 01/19/2007, AND RECORDED ON 07/27/2007.

## TABLE OF NATURAL RESOURCE CALCULATIONS

| DATA MAPS | NATURAL RESOURCES | MINIMUM REQUIRED RESOURCE PROTECTION RATIO I | ACRES OF LAND IN NATURAL RESOURCES II | RESOURCE PROTECTION LAND (COLUMN I X COLUMN II) |
|---|---|---|---|---|
| HYDROLOGIC SURFACE FEATURES | FLOODPLAINS | 1.00 | 0.00 | 0.00 |
| | FLOODPLAN SOILS | 1.00 | 0.00 | 0.00 |
| | LAKES OR PONDS | 1.00 | 0.00 | 0.00 |
| | WETLANDS | 1.00 | 0.00 | 0.00 |
| | WETLANDS TRANSITION AREA* | 0.80** | 0.00 | 0.00 |
| SLOPES | STEEP SLOPES (15% – 25%) | 0.75 | 0.00 | 0.00 |
| | STEEP SLOPES (GREATER THAN 25%) | 0.85 | 0.00 | 0.00 |
| WOODLAND ASSOCIATIONS | JM. CM AND CR1 | 0.85 | 0.00 | 0.00 |
| | ALL OTHERS | 0.50 | 0.00 | 0.00 |
| AGRICULTURAL SOILS IN CM DISTRICT ALL RESIDENTIAL USES | AGRICULTURE SOILS AS DEFINED IN JMZO § 205 | 0.75 | 0.00 | 0.00 |

NOTES:

* THE WETLANDS TRANSITION AREA REQUIREMENTS SHALL ONLY APPLY IN THE JM, CM, CR–1 CR–2, AND VC1 ZONING DISTRICTS.

** PROVIDED THERE SHALL BE NO DISTURBANCE IN ANY PORTION OF THE WETLANDS TRANSITION AREA LOCATED WITHIN 25 FEET OF THE DELINEATED WETLANDS SOILS. WHERE THE WETLANDS TRANSITION AREA IS REQUIRED TO BE 100 FEET, THERE SHALL BE NO DISTURBANCE WITHIN 50 FEET OF THE DELINEATED WETLANDS.

| | |
|---|---|
| TOTAL LAND WITHIN NATURAL RESOURCE PROTECTION RESTRICTIONS | 0.00 AC. |
| TOTAL NATURAL RESOURCE PROTECTION LAND | 0.00 AC. |

PENNSYLVANIA ONE CALL SYSTEM, INC.

925 Irwin Run Road
West Mifflin, Pennsylvania
15122 – 1078

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1–800–242–1776

NON–MEMBERS MUST BE CONTACTED DIRECTLY

PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

SERIAL NO. 20252790540

LOCATIONS OF EXISTING UNDERGROUND UTILITIES/FACILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM RECORDS, FIELD MARKOUTS BY UTILITY OWNERS, AND/OR ABOVE–GROUND OBSERVATION OF THE SITE. NO EXCAVATIONS WERE PERFORMED IN THE PREPARATION OF THESE DRAWINGS; THEREFORE ALL UTILITIES SHOWN SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH, AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES/FACILITIES TO BE PRESENT WHICH ARE NOT SHOWN ON THE DRAWINGS. ONLY THE VISIBLE LOCATIONS OF UNDERGROUND UTILITIES/FACILITIES AT THE TIME OF FIELD SURVEY SHALL BE CONSIDERED TRUE AND ACCURATE. COMPLETENESS OR ACCURACY OF UNDERGROUND UTILITIES/FACILITIES ARE NOT GUARANTEED BY GILMORE & ASSOCIATES INC.

ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES/FACILITIES PRIOR TO START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF P.L. 852, NO. 287 DECEMBER 10, 1974 AS LAST AMENDED ON OCT. 29, 2024 PENNSYLVANIA ACT 127.

GILMORE & ASSOCIATES INC. HAS OBTAINED A PA–ONE CALL SERIAL NUMBER AS NOTED HEREON FOR DESIGN PURPOSES ONLY.

APPROVED BY THE NEWTOWN TOWNSHIP BOARD OF SUPERVISORS ON THIS ___ DAY OF _________, 20___.

SECRETARY ______________________

CHAIRMAN ______________________

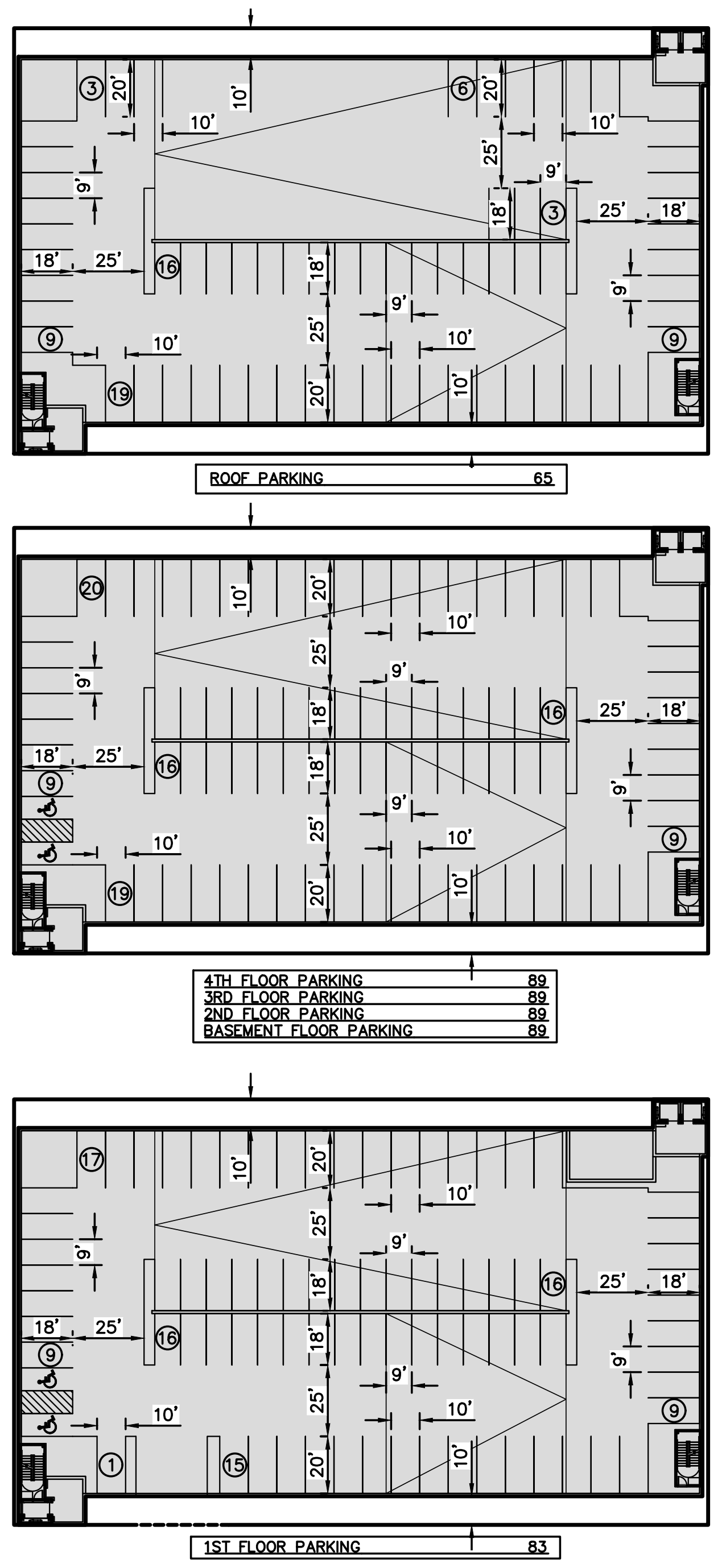
REVIEWED BY THE NEWTOWN TOWNSHIP PLANNING COMMISSION ON THIS ___ DAY OF _________, 20___.

SECRETARY ______________________

CHAIRMAN ______________________

## GENERAL NOTES:

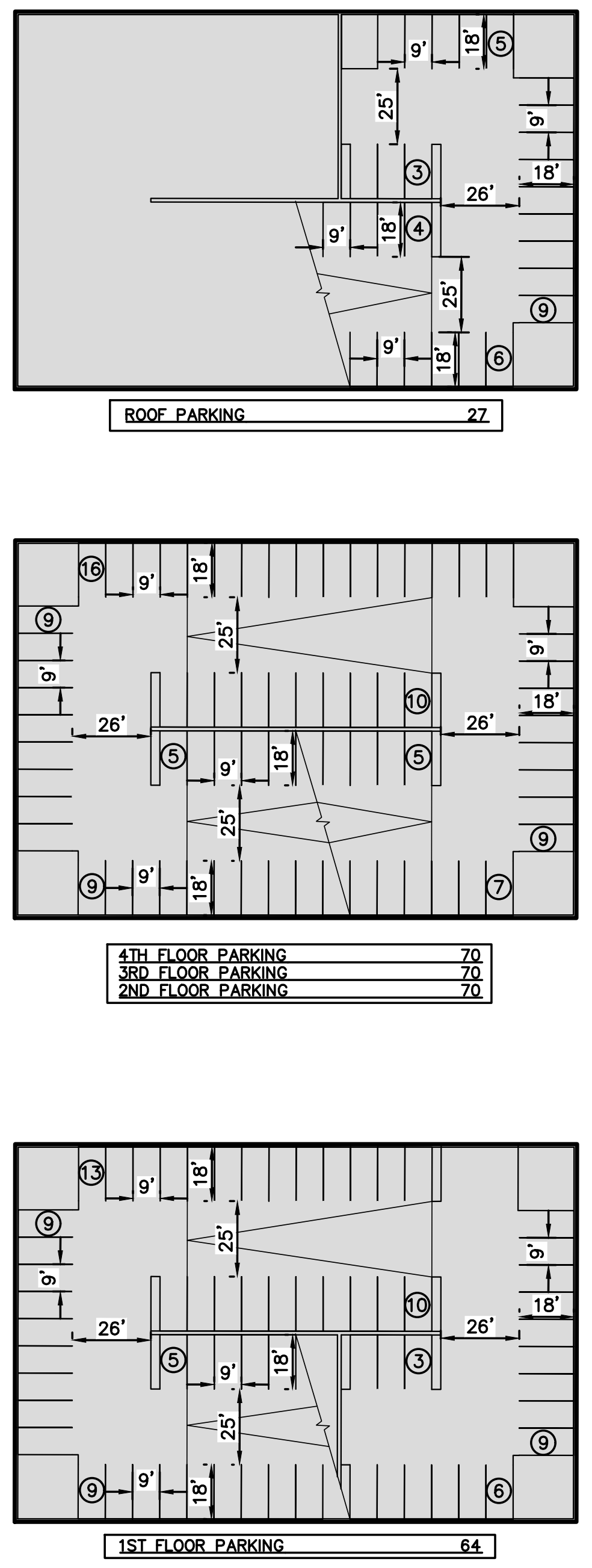
1. PROPERTY KNOWN AS TAX PARCEL 29–010–119–001 AS SHOWN ON THE TAX MAP OF THE TOWNSHIP OF NEWTOWN, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA. CONTAINING 403,757 SQ FT OR 9.269 ACRES, MORE OR LESS.
2. PROPERTY KNOWN AS TAX PARCEL 29–010–037 AS SHOWN ON THE TAX MAP OF THE TOWNSHIP OF NEWTOWN, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA. CONTAINING 282,268 SQ FT OR 6.481 ACRES, MORE OR LESS.
3. PLAN IS BASED ON A FIELD SURVEY PERFORMED BY GILMORE & ASSOCIATES, INC. ON AUGUST & SEPTEMBER OF 2025.
4. VERTICAL DATUM IS NAVD88 AND WAS ESTABLISHED BY GLOBAL POSITIONING SYSTEM (GPS) WITH OBSERVATIONS REFERENCED TO THE KEYNET–GPS VIRTUAL REFERENCE STATION SYSTEM.
5. HORIZONTAL DATUM IS BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (NAD 83) ESTABLISHED BY GLOBAL POSITIONING SYSTEM (GPS) WITH OBSERVATIONS REFERENCED TO THE KEYNET–GPS VIRTUAL REFERENCE STATION SYSTEM.
6. SITE FEATURES AND TOPOGRAPHY WERE GENERATED BY PHOTOGRAMMETRIC METHODS BY COOPER AERIAL SURVEYS CO., USING DRONE AERIAL PHOTOGRAPHY TAKEN ON AUGUST 27, 2025. AERIAL CONTROL WAS PROVIDED BY GILMORE & ASSOCIATES, INC.
7. PROPERTY IS LOCATED IN FLOOD ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN AS DEPICTED ON THE FEDERAL EMERGENCY AGENCY FLOOD INSURANCE MAP, MAP NUMBER 42017C0431K, EFFECTIVE 3/21/2017.
8. NO REVIEW OF THE PROPERTY REGARDING THE PRESENCE OF WETLANDS WAS ACCOMPLISHED AS A PART OF THIS SURVEY.
9. ALL PROPOSED UTILITIES ARE TO BE INSTALLED UNDERGROUND.
10. ■ DENOTES CONCRETE MONUMENT TO BE SET.
11. ● DENOTES R.R. SPIKE OR IRON PIN TO BE SET.
12. THE BURYING OF TREES AND OTHER CONSTRUCTION DEBRIS ON THE SITE IS PROHIBITED.
13. THE PROPOSED SANITARY SERVICE WILL BE SUBJECT TO APPROVAL BY THE NEWTOWN, BUCKS COUNTY JOINT MUNICIPAL AUTHORITY.
14. THE PROPOSED WATER SERVICE AND ACCOMPANIED FIRE HYDRANTS, MATERIALS AND LOCATIONS ARE SUBJECT TO APPROVAL BY THE NEWTOWN TOWNSHIP FIRE MARSHAL AND NEWTOWN ARTESIAN WATER COMPANY.
15. BLANKET EASEMENT OVER ENTIRE SITE TO BE OFFERED FOR DEDICATION TO NEWTOWN ARTESIAN WATER COMPANY FOR ACCESS, OWNERSHIP AND MAINTENANCE OF WATER FACILITIES, AND TO NEWTOWN TOWNSHIP FOR ACCESS TO ALL STORMWATER MANAGEMENT FACILITIES FOR INGRESS AND EGRESS TO SAME
16. THE DEVELOPER OF THIS TRACT HOLDS NEWTOWN TOWNSHIP HARMLESS FOR ANY STORMWATER RUN–OFF DIRECTED OFF–SITE.
17. ALL CONTRACTORS WORKING ON THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS OF THE UNDERGROUND UTILITY LINE PROTECTION LAW, PA. ACT 187 OF 1996. CONTRACTORS SHALL OBTAIN A PA ONE CALL NUMBER FOR CONSTRUCTION PURPOSES.
18. ALL CONTRACTORS WORKING ON THIS PROJECT SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES RELATED TO THIS PROJECT ARE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION) STANDARDS
19. SHEETS 1 THROUGH 33 INCLUSIVE, ON RECORD AT NEWTOWN TOWNSHIP, SHALL BE CONSIDERED A PART OF THE APPROVED FINAL PLAN AS IF RECORDED WITH SAME.
20. ACCESS TO YARDLEY–NEWTOWN ROAD AND PENN STREET SHALL BE AS AUTHORIZED BY NEWTOWN TOWNSHIP.
21. THE MUNICIPALITY HAS THE RIGHT TO ENTER PRIVATE PROPERTY TO INSPECT AND REPAIR, IF NECESSARY, ANY STORMWATER MANAGEMENT FACILITY. THESE STORMWATER FACILITIES ARE A PERMANENT PART OF THE DEVELOPMENT AND SHALL NOT BE REMOVED, ALTERED OR MODIFIED.
22. THE PROPOSED DEVELOPMENT WILL GENERALLY BE COMPOSED OF THREE MAIN COMPONENTS:
    - RESIDENTIAL: TO INCLUDE MULTIFAMILY RESIDENTIAL BUILDING WITH INTERNAL GARAGE PARKING.
    - NON–RESIDENTIAL: TO INCLUDE EXISTING OFFICE SPACE WITH SOME EXISTING MEDICAL OFFICE USE.
    - PARKING STRUCTURE: TO BE CENTRALLY LOCATED WITHIN THE PROPOSED RESIDENTIAL BUILDING AND SERVE THE PARKING NEEDS OF THE EXISTING OFFICE USES.
23. THE DEVELOPMENT WILL INCLUDE SHARED/COMMON OPEN SPACE, WALKWAYS, ETC. AND WILL BE CONSTRUCTED IN CHARACTER WITH THE EXISTING SURROUNDING AREA.
24. MAILBOXES FOR THE RESIDENTIAL UNITS ARE TO BE LOCATED WITHIN THE ENTRY VESTIBULE TO THE RESIDENTIAL PORTION OF BUILDINGS.
25. THE PARKING GARAGE AREAS SHALL HAVE SURVEILLANCE BY VIDEO CAMERA WHICH IS TO BE ACCESSIBLE TO THE POLICE DEPARTMENT.
26. TRASH AND RECYCLING STATIONS ARE TO BE LOCATED WITHIN THE BUILDING, AND ACCESSED VIA GARAGE 1 WITH APPROPRIATELY SIZED PICK–UP VEHICLES.
27. A RIGHT OF ACCESS AND TRANSIT IS HEREBY GRANTED TO, AND FOR THE BENEFIT OF, THE GENERAL PUBLIC UPON AND OVER DRIVE"B" AND ALL ADJACENT WALKWAYS, AS WELL AS ALL PARKING DRIVES, ALLEYS AND WAYS LAID OUT UPON THE PLAN, AS THE SAME MAY HEREAFTER BE AMENDED AND MODIFIED, SO AS TO PROVIDE ACCESS, INGRESS AND EGRESS TO, FROM AND OVER THE SITE TO ALL PUBLIC ROADWAYS.
28. PUBLIC SPACE #1 AND #2 ARE TO BE HELD PRIVATELY BY 661 PENN STREET, LLC. AND NOT OFFERED FOR DEDICATION TO NEWTOWN TOWNSHIP.
29. ALL ROOFTOP MECHANICAL EQUIPMENT SHALL BE SET BACK A MINIMUM OF 10 FEET FROM THE EDGE OF EACH BUILDING, WHERE SUCH EQUIPMENT IS PROPOSED.



## GARAGE 1 DETAIL

SCALE: 1" = 50'

| GARAGE PARKING SUMMARY | |
|---|---|
| ROOF PARKING | 65 |
| 4TH FLOOR PARKING | 89 |
| 3RD FLOOR PARKING | 89 |
| 2ND FLOOR PARKING | 89 |
| 1ST FLOOR PARKING | 83 |
| BASEMENT FLOOR PARKING | 89 |
| TOTAL GARAGE PARKING | 504 |



## GARAGE 2 DETAIL

SCALE: 1" = 50'

| GARAGE PARKING SUMMARY | |
|---|---|
| ROOF PARKING | 27 |
| 4TH FLOOR PARKING | 70 |
| 3RD FLOOR PARKING | 70 |
| 2ND FLOOR PARKING | 70 |
| 1ST FLOOR PARKING | 64 |
| TOTAL GARAGE PARKING | 301 |

## ZONING INFORMATION

1. ZONING DISTRICT
   LI/O–LI NEWTOWN COMMONS OVERLAY DISTRICT ("COMMONS OVERLAY DISTRICT")
   LI – LIGHT INDUSTRIAL (TMP 29–010–037)
   O–LI – OFFICE – LIGHT INDUSTRIAL (TMP 29–010–0–119–001)
   R–2 – HIGH DENSITY RESIDENTIAL (TMP 29–010–0–119–001)
2. PROPOSED USE: J–1 MIXED USE DEVELOPMENT (USE PERMITTED BY CONDITIONAL USE)
3. AREA, DIMENSIONAL. OPEN SPACE, AND IMPERVIOUS SURFACE REQUIREMENTS (SECTION 700–A.8.D)

| | | REQUIRED | PROPOSED |
|---|---|---|---|
| A. | MINIMUM LOT AREA: | 80,000 SF | 686,045 SF (GROSS)<br>671,577 SF (NET) |
| B. | MINIMUM LOT WIDTH AT BSBL: | 200 FT | 457.15 FT |
| C. | MAXIMUM IMPERVIOUS SURFACE RATIO | 0.65 | 0.63 |
| D. | MAXIMUM BUILDING HEIGHT: | 50 FT | 35 FT (3 FLOORS)<br>*60.5 OFF PROPERTY LINE<br>46 FT (4 FLOORS)<br>*75.5 OFF PROPERTY LINE |
| E. | YARDS: | | |
| | FRONT (MIN/MAX) | 10/25 FT | 49.6 FT (BLDG 2) *<br>16.0 (BLDG 1) |
| | REAR | 20 FT | N/A |
| | SIDE (EACH) | 20 FT | 20.5 FT |
| F. | MINIMUM PUBLIC SPACE: | 33,579 SF (5%) | 104,509 SF (15.6%) |

* EXISTING NON–CONFORMITIES

4. R–2 AREA, DIMENSIONAL AND IMPERVIOUS SURFACE REQUIREMENTS (SECTION 405–C) (GARDEN APARTMENT)

| | | REQUIRED | PROPOSED |
|---|---|---|---|
| A. | MINIMUM LOT AREA: | 2,000 SF | 0 SF (GROSS)<br>0 SF (NET) |
| B. | MINIMUM LOT WIDTH AT BSBL: | 500 FT | 0 FT |
| C. | MAXIMUM BUILDING HEIGHT: | 35 FT | 0 FT |
| D. | YARDS: | | |
| | FRONT | 100 FT | 0 FT |
| | REAR | 50 FT | 0 FT |
| | SIDE (EACH) | 50 FT | 0 FT |
| E. | MINIMUM DISTANCE BETWEEN BUILDINGS: | 50 FT | 0 FT |
| F. | MAXIMUM IMPERVIOUS SURFACE RATIO | 0.35 | 0.0 |

## PARKING CALCULATION:

PER ZONING ORDINANCE §803.D & 803.J:

1. PARKING REQUIREMENTS:
   A. TOWN CENTER APARTMENTS (BLDG 1): 308 TOTAL UNITS:
   (120 1–BEDROOM X 1.5 SP/UNIT) + (188 2–BEDROOM X 2 SP/UNIT) = 556 SPACES
   B. EX. MEDICAL OFFICE USE (BLDGS 3 & 4):
   BLDG 2: 12,000 SF* X 1 SPACE/150 SF = 80 SP
   BLDG 3: 2,407 SF* X 1 SP/150 SF = 17 SP
   TOTAL: 97 SP
   C. EX. OFFICE USE (BLDGS 3, 4 & 5)
   BLDG 2: 7,200 SF* X 1 SPACE/200 SF = 36 SP
   BLDG 3: 16,913 SF* X 1 SP/200 SF = 85 SP
   BLDG 4: 45,456 SF* X 1 SP/200 SF = 228 SP
   TOTAL 349 SP
   TOTAL REQUIRED PARKING (A + B + C) = 1,002 SPACES
2. PROVIDED PARKING:
   59 BUILDING 1
   59 BUILDING 2
   117 BUILDING 3 & 4
   504 GARAGE 1 STALLS
   301 GARAGE 2 STALLS
   1,040 PARKING STALLS

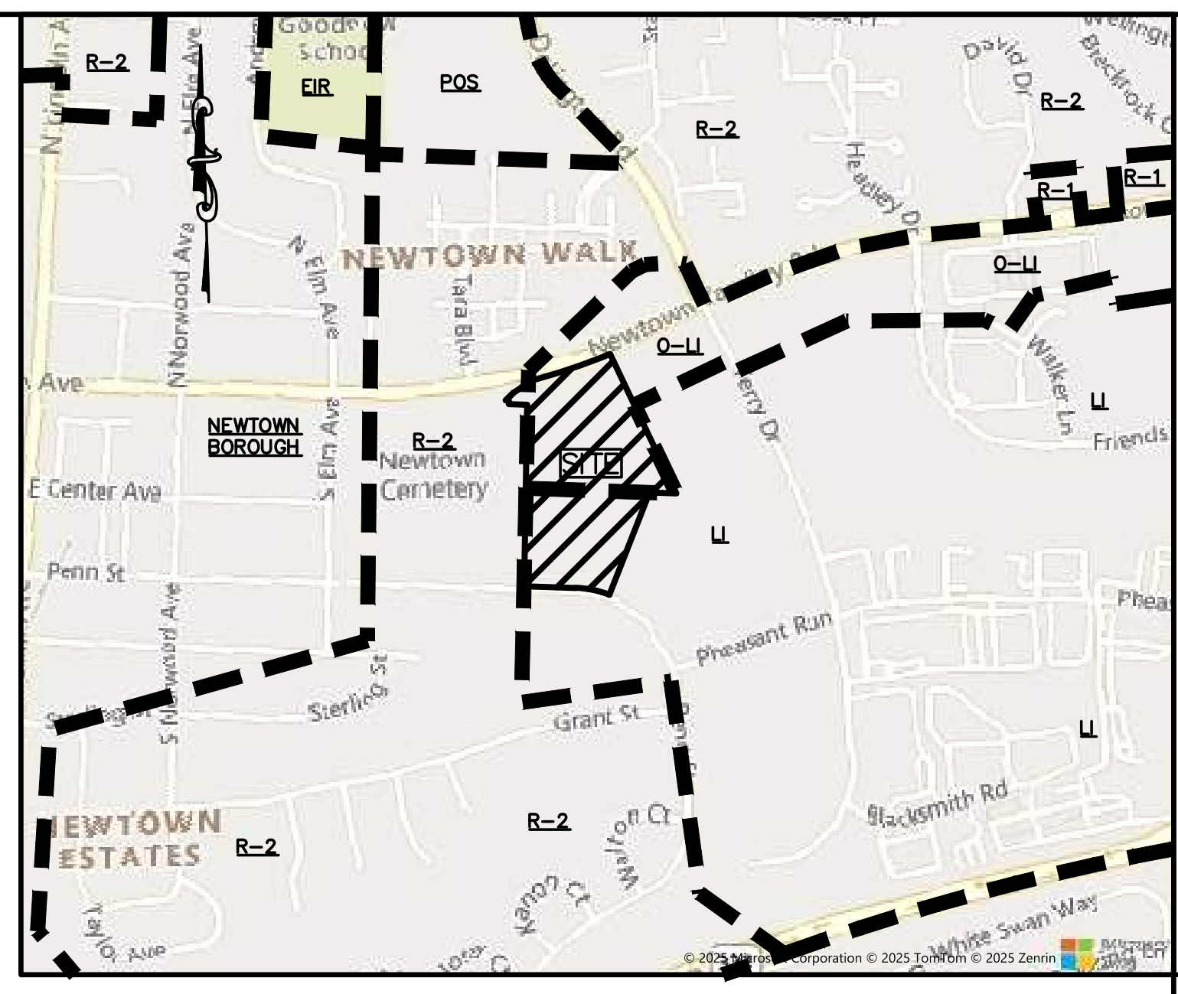
   PER ZO §27–700–a.8.e.9.F, 25% OF STALLS ARE TO BE 10' X 20' MIN DIMENSION
   -- 25% X 1,040 = 260 STALLS (to be 10' x 20')

   PROVIDED 10' X 20' STALLS:
   217 GARAGE 1
   46 SURFACE STALLS
   263 TOTAL > 260 REQUIRED

*GROSS FLOOR AREA FOR EXISTING USES TAKEN FROM PLAN ENTITLED 'RECORD PLAN, TUDOR SQUARE – PHASE 3' AS PREPARED BY RITTLER ENGINEERING, INC., BEARING A DATE OF 06/15/2001, LAST REVISED 01/19/2007, AND RECORDED ON 07/27/2007.

3. COMMONS OVERLAY DISTRICT DEVELOPMENT STANDARDS (SECTION 700–A.8.E)

| | REQUIRED | PROPOSED |
|---|---|---|
| MAX RESIDENTIAL DENSITY:<br>(20 UNITS PER ACRE OF BASE SITE AREA CLEAR ULT ROW PER 700–A.8) | 308 UNITS | 308 UNITS |
| MIN. NONRESIDENTIAL USE:<br>(MIN 500 SF OF NON RESIDENTIAL USE PER 10 RESIDENTIAL UNITS) | 15,400 SF | 83,976 SF |
| MIN. BUFFER FROM RESIDENTIAL LOT LINES THAT ARE ADJACENT TO COMMONS OVERLAY DISTRICT (FT): | 25 FT | N/A |
| MIN. BUILDING SETBACK FROM RESIDENTIAL LOT LINES THAT ARE ADJACENT TO COMMONS OVERLAY DISTRICT (FT):<br>(1.5 X BUILDING HEIGHT) | 75 FT | N/A |



## LOCATION & ZONING MAP

1000 00 1000 2000
SCALE IN FEET

SCALE: 1"=1000'

### ZONING DISTRICTS:

EIR – EDUCATION, INSTITUTIONAL, AND RECREATIONAL
O–LI – OFFICE–LIGHT INDUSTRIAL
POS – PARK & OPEN SPACE
R–1 – MEDIUM DENSITY RESIDENTIAL
R–2 – HIGH DENSITY RESIDENTIAL
LI – LIGHT INDUSTRIAL

## SITE CAPACITY CALCULATIONS

(1) BASE SITE AREA CALCULATIONS

| CATEGORY | AREA (SQUARE FEET) | AREA (ACRES) |
|---|---|---|
| GROSS SITE AREA | 686,045 | 15.749 |
| PUBLIC OR PRIVATE STREET | 0 | 0.000 |
| LAND WITHIN ULTIMATE ROW | 14,468 | 0.332 |
| UTILITY EASEMENTS (EXISTING UTILITY EASEMENT TO BE VACATED) | 0 | 0.000 |
| STORMWATER EASEMENT | 0 | 0.000 |
| COVENANTS AND CONSERVATION EASEMENTS | 0 | 0.000 |
| BASE AREA | 671,577 | 15.417 |

(2) LANDS WITH RESOURCE RESTRICTIONS AND PROTECTIONS CALCULATIONS

| CATEGORY | AREA (SQUARE FEET) | AREA (ACRES) |
|---|---|---|
| LAND IN NATURAL RESOURCE RESOURCE | 0 | 0.000 |
| LAND WITH NATURAL RESOURCE PROTECTION RESTRICTIONS | 0 | 0.000 |
| NATURAL RESOURCE PROTECTION LAND | 0 | 0.000 |

(3) MINIMUM ACTIVE RECREATION LAND CALCULATION

| CATEGORY | AREA (SQUARE FEET) | AREA (ACRES) |
|---|---|---|
| BASE SITE AREA | 671,577 | 15.417 |
| PUBLIC OPEN SPACE REQUIRED | 33,579 | 0.771 |
| TOTAL UNRESTRICTED LAND | 637,998 | 14.646 |

(5) MAXIMUM IMPERVIOUS SURFACES FOR ALL USES CALCULATION

| CATEGORY | AREA (SQUARE FEET) | AREA (ACRES) |
|---|---|---|
| NET BUILDING SITE AREA | 671,577 | 15.417 |
| MAXIMUM IMPERVIOUS SURFACE (OF BSA) | 436,525 (.65) | 10.021 |
| PROPOSED IMPERVIOUS SURFACE WITHIN BASE AREA | 424,934 | 9.755 |

BCPC No. ______________

PROCESSED AND REVIEWED: REPORT PREPARED BY THE BUCKS COUNTY PLANNING COMMISSION IN ACCORDANCE WITH THE MUNICIPALITIES PLANNING CODE. CERTIFIED THIS ________ DATE OF ______________, 20___.

______________________
EXECUTIVE DIRECTOR, BUCKS COUNTY PLANNING COMMISSION

REVIEWED BY THE NEWTOWN TOWNSHIP ENGINEER ON THIS _______ DAY OF ____________, 20___.

______________________
TOWNSHIP ENGINEER

RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS, IN AND FOR THE COUNTY OF BUCKS AT DOYLESTOWN, PENNA. IN PLAN BOOK ______ PAGE _________, ON _______________, ______.

______________________
RECORDER OF DEEDS

I, RUSSELL T. CROSS, HEREBY CERTIFY THAT I AM A REGISTERED PROFESSIONAL SURVEYOR, LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF PENNSYLVANIA; THAT THIS PLAN CORRECTLY REPRESENTS A SURVEY OF _________________ COMPLETED UNDER MY SUPERVISION IN _________________________; THAT ALL THE MARKERS SHOWN HEREON ACTUALLY EXIST: THAT THEIR LOCATION, SIZE, TYPE AND MATERIAL ARE ACCURATELY SHOWN.

______________________
SIGNATURE

### OWNERS SIGNATURE – (TMP 29–010–37)

TO ALL WHOM THESE PRESENTS MAY COME, KNOW YE THAT

I/WE, ________________________________, HAVE LAID OUT UPON MY/OUR LAND SITUATED IN THE TOWNSHIP OF NEWTOWN, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA, WE ARE THE OWNER OF THE LAND PROPOSED TO BE DEVELOPED AND THAT THE SUBDIVISION OR LAND DEVELOPMENT SHOWN ON THE FINAL PLAN IS MADE WITH HIS OR THEIR FREE CONSENT AND THAT IT IS DESIRED TO RECORD THE SAME.

WITNESS OUR HAND THIS ____ DAY OF _____, 20__.

______________________
(SIGN) – PRESIDENT

______________________
(SIGN) – SECRETARY

### NOTARY ACKNOWLEDGEMENT OF OWNER'S STATEMENT OF INTENT

ON THE ______ DAY OF ______________, 202_ BEFORE ME, THE SUBSCRIBER, A NOTARY PUBLIC IN AND FOR THE STATE AND COUNTY AFORESAID, PERSONALLY APPEARED ______________________________, WHO ACKNOWLEDGED HIMSELF TO BE THE ________________ OF__________________________, A PENNSYLVANIA LIMITED LIABILITY CORPORATION, THE GENERAL PARTNER OF______________________________A PENNSYLVANIA LIMITED PARTNERSHIP, AND THAT HE/SHE AS SUCH OFFICER, BEING DULY AUTHORIZED TO DO SO, EXECUTED THE FOREGOING INSTRUMENT FOR THE PURPOSES THEREIN CONTAINED BY SIGNING THE NAME OF THE COMPANY BY HIMSELF AS SUCH OFFICER.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND OFFICIAL SEAL.

NOTARY PUBLIC ______________________

MY COMMISSION EXPIRES:

### OWNERS SIGNATURE – (TMP 29–010–119–001)

TO ALL WHOM THESE PRESENTS MAY COME, KNOW YE THAT

I/WE, ________________________________, HAVE LAID OUT UPON MY/OUR LAND SITUATED IN THE TOWNSHIP OF NEWTOWN, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA, WE ARE THE OWNER OF THE LAND PROPOSED TO BE DEVELOPED AND THAT THE SUBDIVISION OR LAND DEVELOPMENT SHOWN ON THE FINAL PLAN IS MADE WITH HIS OR THEIR FREE CONSENT AND THAT IT IS DESIRED TO RECORD THE SAME.

WITNESS OUR HAND THIS ____ DAY OF _____, 20__.

______________________
(SIGN) – PRESIDENT

______________________
(SIGN) – SECRETARY

### NOTARY ACKNOWLEDGEMENT OF OWNER'S STATEMENT OF INTENT

ON THE ______ DAY OF ______________, 202_ BEFORE ME, THE SUBSCRIBER, A NOTARY PUBLIC IN AND FOR THE STATE AND COUNTY AFORESAID, PERSONALLY APPEARED ______________________________, WHO ACKNOWLEDGED HIMSELF TO BE THE ________________ OF__________________________, A PENNSYLVANIA LIMITED LIABILITY CORPORATION, THE GENERAL PARTNER OF______________________________A PENNSYLVANIA LIMITED PARTNERSHIP, AND THAT HE/SHE AS SUCH OFFICER, BEING DULY AUTHORIZED TO DO SO, EXECUTED THE FOREGOING INSTRUMENT FOR THE PURPOSES THEREIN CONTAINED BY SIGNING THE NAME OF THE COMPANY BY HIMSELF AS SUCH OFFICER.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND OFFICIAL SEAL.

NOTARY PUBLIC ______________________

MY COMMISSION EXPIRES:

**NOT APPROVED FOR CONSTRUCTION**

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES
CORPORATE HEADQUARTERS
65 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901 • (215) 345-4330 • www.gilmore-assoc.com

ONLY THOSE PLANS INCORPORATING THE PROFESSIONAL SEAL SHOULD BE CONSIDERED OFFICIAL AND RELIED UPON BY USER. THIS PLAN IS PREPARED SPECIFICALLY FOR THE CLIENT AND PROJECT DESIGNATED HEREON. MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT THE CONSENT OF GILMORE & ASSOCIATES, INC. IS PROHIBITED.
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RONALD G. MONKRES II
ENGINEER 603164–E

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

**661 PENN STREET REDEVELOPMENT**

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

RECORD PLAN NOTES

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

| | |
|---|---|
| PROJECT No.: 2500866 | |
| APPLICANTS INFO:<br>661 PENN STREET, LLC<br>209 PENN'S TRAIL<br>NEWTOWN, PA 18940<br>215–968–0600 | |
| MUNICIPAL FILE No.: | |
| TAX MAP PARCEL No.: 29–010–119–001 & 29–010–037 | |
| TOTAL AREA: 15.75 AC. | TOTAL LOTS: 2 |
| DATE: 01/21/26 | SCALE: N.T.S. |
| DRAWN BY: GY/BH | CHECKED BY: RGM |
| SHEET NO.: 3 OF 33 | |

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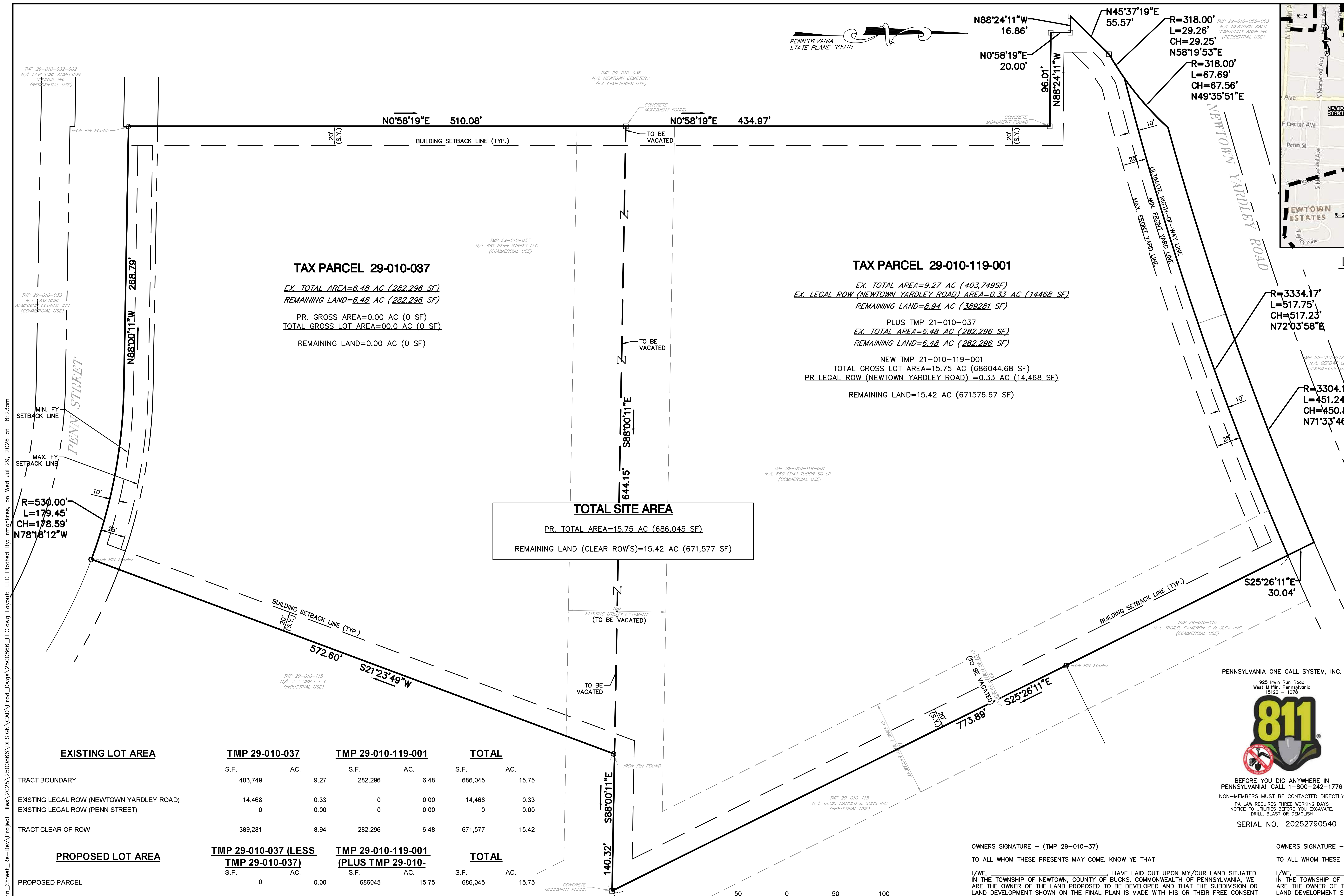


**TAX PARCEL 29-010-037**

*EX. TOTAL AREA=6.48 AC (282,296 SF)*
*REMAINING LAND=6.48 AC (282,296 SF)*

PR. GROSS AREA=0.00 AC (0 SF)
TOTAL GROSS LOT AREA=00.0 AC (0 SF)

REMAINING LAND=0.00 AC (0 SF)

**TAX PARCEL 29-010-119-001**

*EX. TOTAL AREA=9.27 AC (403,749SF)*
*EX. LEGAL ROW (NEWTOWN YARDLEY ROAD) AREA=0.33 AC (14468 SF)*
*REMAINING LAND=8.94 AC (389281 SF)*

PLUS TMP 21-010-037
*EX. TOTAL AREA=6.48 AC (282,296 SF)*
*REMAINING LAND=6.48 AC (282,296 SF)*

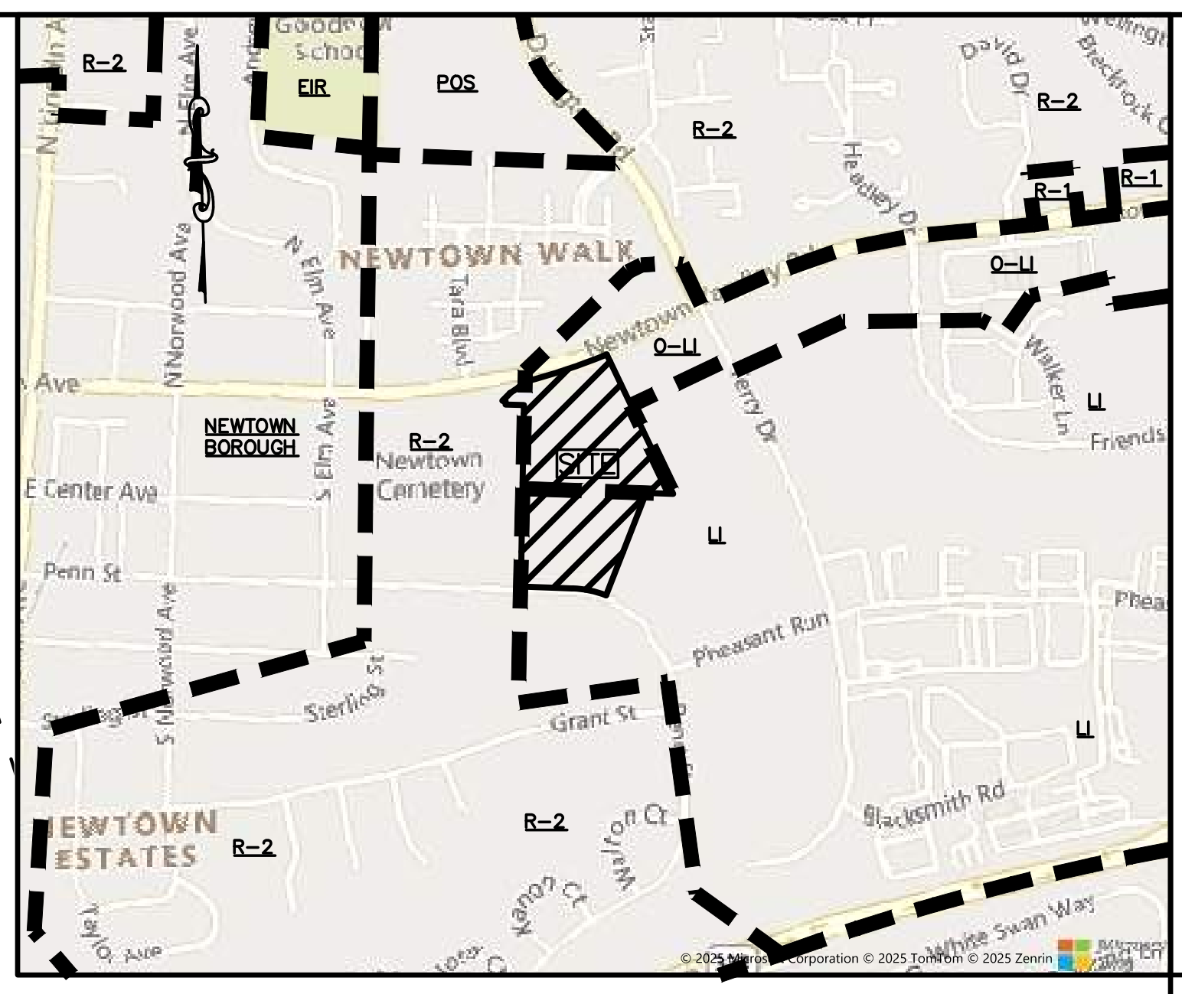
NEW TMP 21-010-119-001
TOTAL GROSS LOT AREA=15.75 AC (686044.68 SF)
PR LEGAL ROW (NEWTOWN YARDLEY ROAD) =0.33 AC (14,468 SF)

REMAINING LAND=15.42 AC (671576.67 SF)

**TOTAL SITE AREA**

PR. TOTAL AREA=15.75 AC (686,045 SF)

REMAINING LAND (CLEAR ROW'S)=15.42 AC (671,577 SF)



## LOCATION & ZONING MAP

1000 00 1000 2000
SCALE IN FEET
SCALE: 1"=1000'

**ZONING DISTRICTS:**

EIR – EDUCATION, INSTITUTIONAL, AND RECREATIONAL
O-LI – OFFICE-LIGHT INDUSTRIAL
POS – PARK & OPEN SPACE
R-1 – MEDIUM DENSITY RESIDENTIAL
R-2 – HIGH DENSITY RESIDENTIAL
LI – LIGHT INDUSTRIAL

| **EXISTING LOT AREA** | **TMP 29-010-037** | | **TMP 29-010-119-001** | | **TOTAL** | |
|---|---|---|---|---|---|---|
| | S.F. | AC. | S.F. | AC. | S.F. | AC. |
| TRACT BOUNDARY | 403,749 | 9.27 | 282,296 | 6.48 | 686,045 | 15.75 |
| EXISTING LEGAL ROW (NEWTOWN YARDLEY ROAD) | 14,468 | 0.33 | 0 | 0.00 | 14,468 | 0.33 |
| EXISTING LEGAL ROW (PENN STREET) | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| TRACT CLEAR OF ROW | 389,281 | 8.94 | 282,296 | 6.48 | 671,577 | 15.42 |

| **PROPOSED LOT AREA** | **TMP 29-010-037 (LESS TMP 29-010-037)** | | **TMP 29-010-119-001 (PLUS TMP 29-010-** | | **TOTAL** | |
|---|---|---|---|---|---|---|
| | S.F. | AC. | S.F. | AC. | S.F. | AC. |
| PROPOSED PARCEL | 0 | 0.00 | 686045 | 15.75 | 686,045 | 15.75 |
| PR AREA CL. LEGAL ROW (NEWTOWN YARDLEY ROAD) | 0 | 0.00 | 14,468 | 0.33 | 14,468 | 0.33 |
| PR AREA CL. LEGAL ROW (PENN STREET) | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| REMAINING LAND (SITE AREA) | 0 | 0.00 | 671,577 | 15.42 | 671,577 | 15.42 |

50 0 50 100
SCALE IN FEET
1"=50'

BCPC No. _______________

PROCESSED AND REVIEWED: REPORT PREPARED BY THE BUCKS COUNTY PLANNING COMMISSION IN ACCORDANCE WITH THE MUNICIPALITIES PLANNING CODE. CERTIFIED THIS ________ DATE OF ______________, 20___.

_____________________________
EXECUTIVE DIRECTOR, BUCKS COUNTY PLANNING COMMISSION

RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS, IN AND FOR THE COUNTY OF BUCKS AT DOYLESTOWN, PENNA. IN PLAN BOOK ______ PAGE _________, ON ________________, ______.

____________________
RECORDER OF DEEDS

APPROVED BY THE NEWTOWN TOWNSHIP BOARD OF SUPERVISORS ON THIS ___ DAY OF _________, 20___.

SECRETARY ______________________

CHAIRMAN ______________________

REVIEWED BY THE NEWTOWN TOWNSHIP PLANNING COMMISSION ON THIS ___ DAY OF _________, 20___.

SECRETARY ______________________

CHAIRMAN ______________________

REVIEWED BY THE NEWTOWN TOWNSHIP ENGINEER ON THIS _______ DAY OF ____________, 20___.

_________________________________
TOWNSHIP ENGINEER

I, RUSSELL T. CROSS, HEREBY CERTIFY THAT I AM A REGISTERED PROFESSIONAL SURVEYOR, LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF PENNSYLVANIA; THAT THIS PLAN CORRECTLY REPRESENTS A SURVEY OF __________________ COMPLETED UNDER MY SUPERVISION IN __________________________; THAT ALL THE MARKERS SHOWN HEREON ACTUALLY EXIST: THAT THEIR LOCATION, SIZE, TYPE AND MATERIAL ARE ACCURATELY SHOWN.

____________________________
SIGNATURE

RUSSELL T. CROSS
LAND SURVEYOR
075552
DATE: 07/27/2026

PENNSYLVANIA ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania
15122 – 1078

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1-800-242-1776

NON-MEMBERS MUST BE CONTACTED DIRECTLY

PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

SERIAL NO. 20252790540

LOCATIONS OF EXISTING UNDERGROUND UTILITIES/FACILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM RECORDS, FIELD MARKOUTS BY UTILITY OWNERS, AND/OR ABOVE-GROUND OBSERVATION OF THE SITE. NO EXCAVATIONS WERE PERFORMED IN THE PREPARATION OF THESE DRAWINGS; THEREFORE ALL UTILITIES SHOWN SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH, AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES/FACILITIES TO BE PRESENT WHICH ARE NOT SHOWN ON THE DRAWINGS. ONLY THE VISIBLE LOCATIONS OF UNDERGROUND UTILITIES/FACILITIES AT THE TIME OF FIELD SURVEY SHALL BE CONSIDERED TRUE AND ACCURATE. COMPLETENESS OR ACCURACY OF UNDERGROUND UTILITIES/FACILITIES ARE NOT GUARANTEED BY GILMORE & ASSOCIATES INC.

ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES/FACILITIES PRIOR TO START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF P.L. 852, NO. 287 DECEMBER 10, 1974 AS LAST AMENDED ON OCT. 29, 2024 PENNSYLVANIA ACT 127.

GILMORE & ASSOCIATES INC. HAS OBTAINED A PA-ONE CALL SERIAL NUMBER AS NOTED HEREON FOR DESIGN PURPOSES ONLY.

OWNERS SIGNATURE – (TMP 29-010-37)

TO ALL WHOM THESE PRESENTS MAY COME, KNOW YE THAT

I/WE, ______________________________, HAVE LAID OUT UPON MY/OUR LAND SITUATED IN THE TOWNSHIP OF NEWTOWN, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA, WE ARE THE OWNER OF THE LAND PROPOSED TO BE DEVELOPED AND THAT THE SUBDIVISION OR LAND DEVELOPMENT SHOWN ON THE FINAL PLAN IS MADE WITH HIS OR THEIR FREE CONSENT AND THAT IT IS DESIRED TO RECORD THE SAME.

WITNESS OUR HAND THIS ____ DAY OF _____, 20__.

__________________________________________
(SIGN) – PRESIDENT

__________________________________________
(SIGN) – SECRETARY

NOTARY ACKNOWLEDGEMENT OF OWNER'S STATEMENT OF INTENT

ON THE ______ DAY OF ______________, 202_ BEFORE ME, THE SUBSCRIBER, A NOTARY PUBLIC IN AND FOR THE STATE AND COUNTY AFORESAID, PERSONALLY APPEARED ______________________________, WHO ACKNOWLEDGED HIMSELF TO BE THE ________________ OF__________________________, A PENNSYLVANIA LIMITED LIABILITY CORPORATION, THE GENERAL PARTNER OF______________________________A PENNSYLVANIA LIMITED PARTNERSHIP, AND THAT HE/SHE AS SUCH OFFICER, BEING DULY AUTHORIZED TO DO SO, EXECUTED THE FOREGOING INSTRUMENT FOR THE PURPOSES THEREIN CONTAINED BY SIGNING THE NAME OF THE COMPANY BY HIMSELF AS SUCH OFFICER.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND OFFICIAL SEAL.

NOTARY PUBLIC ________________________________________

MY COMMISSION EXPIRES:

OWNERS SIGNATURE – (TMP 29-010-119-001)

TO ALL WHOM THESE PRESENTS MAY COME, KNOW YE THAT

I/WE, ______________________________, HAVE LAID OUT UPON MY/OUR LAND SITUATED IN THE TOWNSHIP OF NEWTOWN, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA, WE ARE THE OWNER OF THE LAND PROPOSED TO BE DEVELOPED AND THAT THE SUBDIVISION OR LAND DEVELOPMENT SHOWN ON THE FINAL PLAN IS MADE WITH HIS OR THEIR FREE CONSENT AND THAT IT IS DESIRED TO RECORD THE SAME.

WITNESS OUR HAND THIS ____ DAY OF _____, 20__.

__________________________________________
(SIGN) – PRESIDENT

__________________________________________
(SIGN) – SECRETARY

NOTARY ACKNOWLEDGEMENT OF OWNER'S STATEMENT OF INTENT

ON THE ______ DAY OF ______________, 202_ BEFORE ME, THE SUBSCRIBER, A NOTARY PUBLIC IN AND FOR THE STATE AND COUNTY AFORESAID, PERSONALLY APPEARED ______________________________, WHO ACKNOWLEDGED HIMSELF TO BE THE ________________ OF__________________________, A PENNSYLVANIA LIMITED LIABILITY CORPORATION, THE GENERAL PARTNER OF______________________________A PENNSYLVANIA LIMITED PARTNERSHIP, AND THAT HE/SHE AS SUCH OFFICER, BEING DULY AUTHORIZED TO DO SO, EXECUTED THE FOREGOING INSTRUMENT FOR THE PURPOSES THEREIN CONTAINED BY SIGNING THE NAME OF THE COMPANY BY HIMSELF AS SUCH OFFICER.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND OFFICIAL SEAL.

NOTARY PUBLIC ________________________________________

MY COMMISSION EXPIRES:

**GILMORE & ASSOCIATES, INC.**
ENGINEERING & CONSULTING SERVICES
CORPORATE HEADQUARTERS
65 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901 • (215) 345-4330 • www.gilmore-assoc.com

ONLY THOSE PLANS INCORPORATING THE PROFESSIONAL SEAL SHOULD BE CONSIDERED OFFICIAL AND RELIED UPON BY USER. THIS PLAN IS PREPARED SPECIFICALLY FOR THE CLIENT AND PROJECT DESIGNATED HEREON. MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT THE CONSENT OF GILMORE & ASSOCIATES, INC. IS PROHIBITED.

**NOT APPROVED FOR CONSTRUCTION**

RONALD G. MONKRES II
ENGINEER
603164-E
DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# *661 PENN STREET REDEVELOPMENT*

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## LOT CONSOLIDATION PLAN

**GILMORE & ASSOCIATES, INC.**
ENGINEERING & CONSULTING SERVICES

| | |
|---|---|
| PROJECT No.:<br>2500866 | |
| APPLICANTS INFO:<br>661 PENN STREET, LLC<br>209 PENN'S TRAIL<br>NEWTOWN, PA 18940<br>215-968-0600 | |
| MUNICIPAL FILE No.: | |
| TAX MAP PARCEL No.:<br>29-010-119-001 & 29-010-037 | |
| TOTAL AREA:<br>15.75 AC. | TOTAL LOTS:<br>2 |
| DATE:<br>01/21/26 | SCALE:<br>1"=50' |
| DRAWN BY:<br>GY/BH | CHECKED BY:<br>RGM |
| SHEET NO.:<br>4 OF 33 | |

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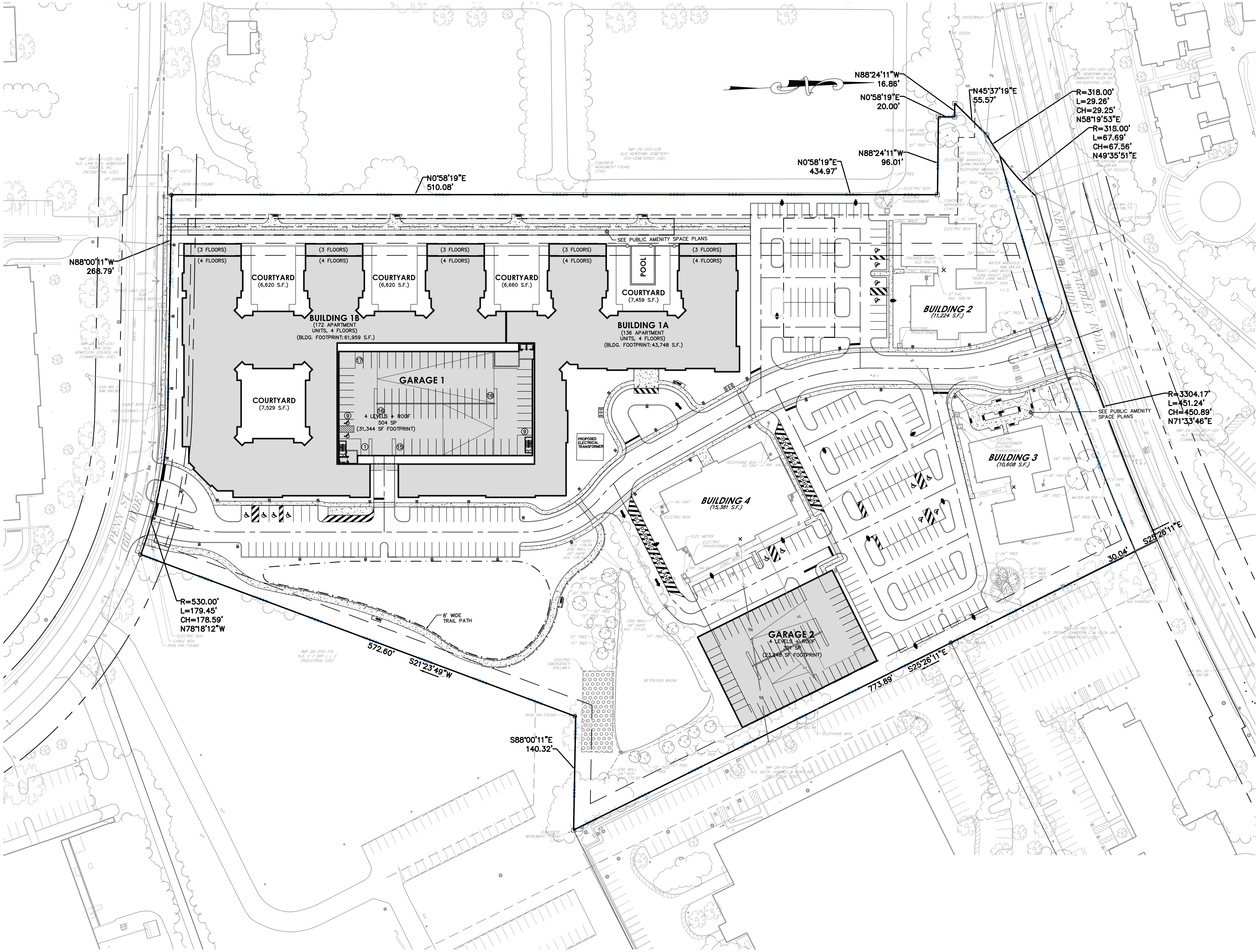

## LEGEND:

| | |
|---|---|
| ▬ | BOUNDARY |
| — — — | LEGAL RIGHT-OF-WAY |
| □ | EXISTING CONCRETE MONUMENT |
| ○ | EXISTING IRON PIN |
| —— —— | PROPOSED EASEMENT |
| ● | PROPOSED IRON PIN |
| ■ | PROPOSED CONCRETE MONUMENT |
| ▨ | PROPOSED BUILDING |
| ▬ ▬ ▬ | PHASE 1 LIMITS |
| – – – – | RIPARIAN BUFFER |
| ⇨ | PROPOSED DIRECTIONAL ARROW (PAINTED) |
| ▪▪▪▪ | OPEN SPACE LIMITS |
| —▫—▫— | PROPOSED HANDRAIL |
| —○—○— | PROPOSED GUARDRAIL |
| ② | PROPOSED BUILDING ID LABELS |
| —···—···— | 100 YR FLOODPLAIN |
| —x—x— | PROPOSED FENCE |
| ⬡ | EXISTING EMERGENCY SPILLWAY |

**PENNSYLVANIA ONE CALL SYSTEM, INC.**

925 Irwin Run Road
West Mifflin, Pennsylvania
15122 – 1078

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PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

LOCATIONS OF EXISTING UNDERGROUND UTILITIES/FACILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM RECORDS, FIELD MARKOUTS BY UTILITY OWNERS, AND/OR ABOVE-GROUND OBSERVATION OF THE SITE. NO EXCAVATIONS WERE PERFORMED IN THE PREPARATION OF THESE DRAWINGS; THEREFORE ALL UTILITIES SHOWN SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH, AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES/FACILITIES TO BE PRESENT WHICH ARE NOT SHOWN ON THE DRAWINGS. ONLY THE VISIBLE LOCATIONS OF UNDERGROUND UTILITIES/FACILITIES AT THE TIME OF FIELD SURVEY SHALL BE CONSIDERED TRUE AND ACCURATE. COMPLETENESS OR ACCURACY OF UNDERGROUND UTILITIES/FACILITIES ARE NOT GUARANTEED BY GILMORE & ASSOCIATES INC.

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GILMORE & ASSOCIATES INC. HAS NOT OBTAINED A PA-ONE CALL SERIAL NUMBER FOR DESIGN PURPOSES.

50 0 50 100
SCALE IN FEET
1"=50'

C:\Autodesk Docs\ACCDocs\Gilmore and Associates\2500866_661_Penn_Street_Re-Dev\Project Files\2025\2500866\DESIGN\CAD\Prod_Dwgs\2500866_SITE-BASE.dwg Layout: OVERALL SITE PLAN Plotted By: rmonkres, on Wed Jul 29, 2026 at 8:23am

**GILMORE & ASSOCIATES, INC.**
**ENGINEERING & CONSULTING SERVICES**
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**NOT APPROVED FOR CONSTRUCTION**

RONALD G. MONKRES II
ENGINEER 603164-E

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# *661 PENN STREET REDEVELOPMENT*

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## OVERALL SITE PLAN

**GILMORE & ASSOCIATES, INC.**
**ENGINEERING & CONSULTING SERVICES**

PROJECT No.:
2500866

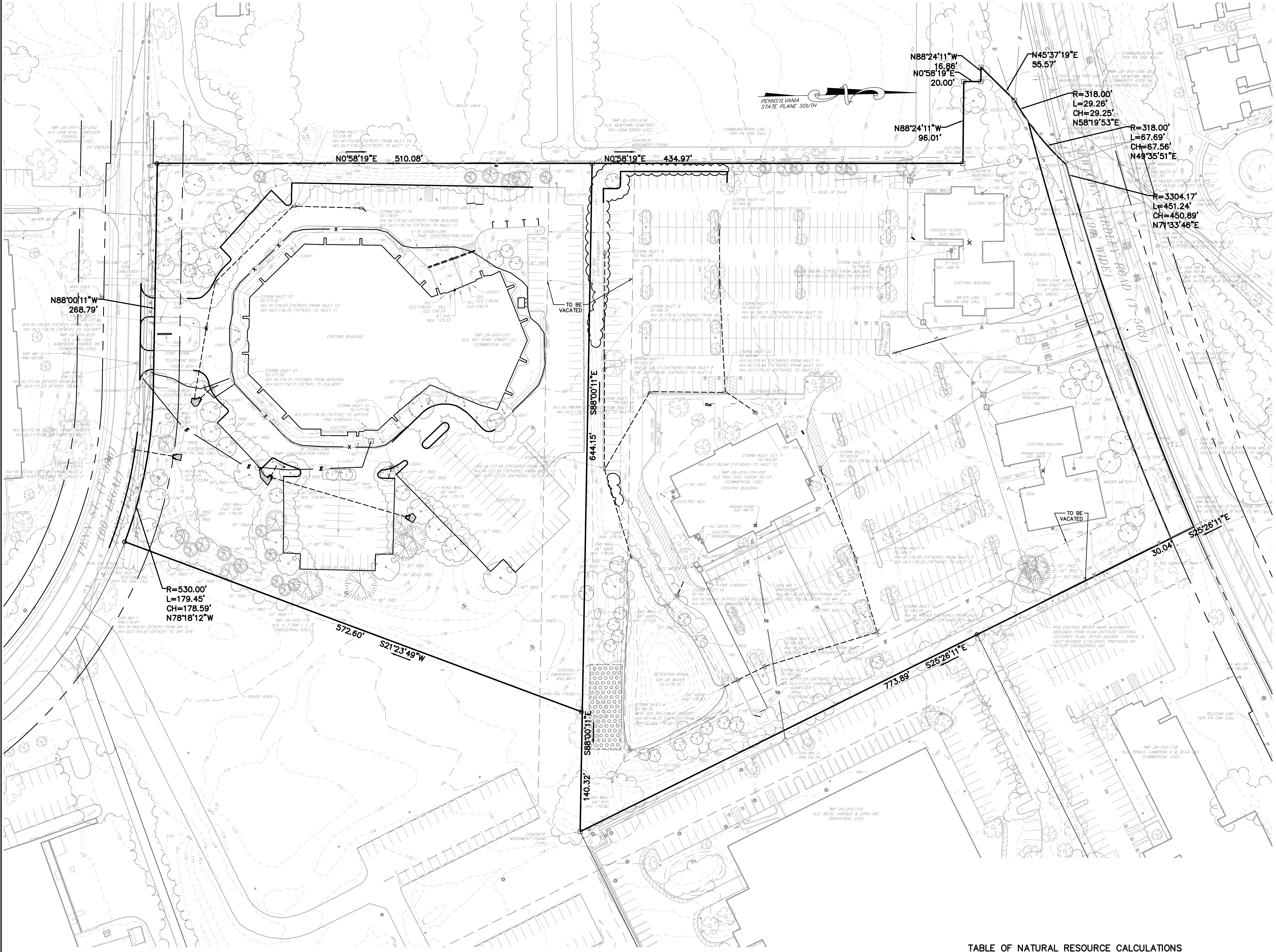
APPLICANTS INFO:
661 PENN STREET, LLC
209 PENN'S TRAIL
NEWTOWN, PA 18940
215-968-0600

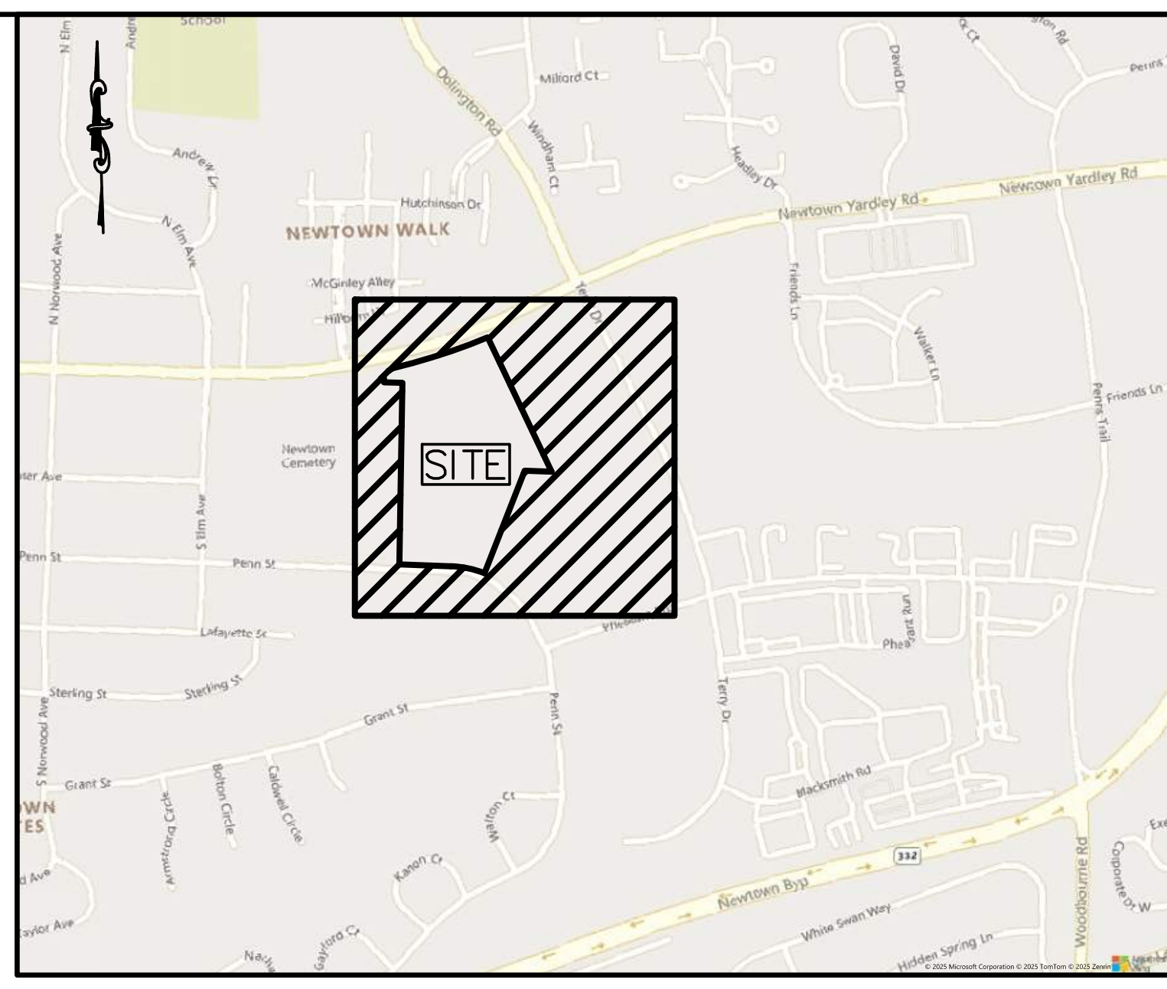
MUNICIPAL FILE No.:

TAX MAP PARCEL No.:
29-010-119-001 & 29-010-037

| | |
|---|---|
| TOTAL AREA:<br>15.75 AC. | TOTAL LOTS:<br>2 |
| DATE:<br>01/21/26 | SCALE:<br>1"=50' |
| DRAWN BY:<br>GY/BH | CHECKED BY:<br>RGM |

SHEET NO.:
5 OF 33





## LOCATION MAP

1000 00 1000 2000
SCALE IN FEET
SCALE: 1"=1000'

## GENERAL SURVEY NOTES:

1. PROPERTY KNOWN AS TAX PARCEL 29–010–119–001 AS SHOWN ON THE TAX MAP OF THE TOWNSHIP OF NEWTOWN, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA. CONTAINING 403,757 SQ FT OR 9.269 ACRES, MORE OR LESS.
2. PROPERTY KNOWN AS TAX PARCEL 29–010–037 AS SHOWN ON THE TAX MAP OF THE TOWNSHIP OF NEWTOWN, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA. CONTAINING 282,268 SQ FT OR 6.48 ACRES, MORE OR LESS.
3. THIS SURVEY IS BASED ON A FIELD SURVEY PERFORMED BY GILMORE & ASSOCIATES, INC. ON AUGUST & SEPTEMBER OF 2025 AND THE REFERENCED INFORMATION LISTED HEREON.
4. VERTICAL DATUM IS NAVD88 AND WAS ESTABLISHED BY GLOBAL POSITIONING SYSTEM (GPS) WITH OBSERVATIONS REFERENCED TO THE KEYNET–GPS VIRTUAL REFERENCE STATION SYSTEM.
5. HORIZONTAL DATUM IS BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (NAD 83) ESTABLISHED BY GLOBAL POSITIONING SYSTEM (GPS) WITH OBSERVATIONS REFERENCED TO THE KEYNET–GPS VIRTUAL REFERENCE STATION SYSTEM.
6. SITE FEATURES AND TOPOGRAPHY WERE GENERATED BY PHOTOGRAMMETRIC METHODS BY COOPER AERIAL SURVEYS CO., USING DRONE AERIAL PHOTOGRAPHY TAKEN ON AUGUST 27, 2025. AERIAL CONTROL WAS PROVIDED BY GILMORE & ASSOCIATES, INC.
7. PROPERTY IS LOCATED IN FLOOD ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN AS DEPICTED ON THE FEDERAL EMERGENCY AGENCY FLOOD INSURANCE MAP, MAP NUMBER 42017C0431K, EFFECTIVE 3/21/2017.
8. NO REVIEW OF THE PROPERTY REGARDING THE PRESENCE OF WETLANDS WAS ACCOMPLISHED AS A PART OF THIS SURVEY.
9. THIS SURVEY WAS PREPARED WITH REFERENCE TO A TITLE REPORT PREPARED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, FILE NO. TSS–OA–7199, WITH AN EFFECTIVE DATE 8/23/2022 WITH THE FOLLOWING SURVEY EXCEPTIONS LISTED IN SCHEDULE B, SECTION II.
    6. RIGHTS GRANTED TO PHILADELPHIA SUBURBAN GAS AND ELECTRIC CO. IN DEED BOOK 516 PAGE 275. (BLANKET EASEMENT)
    7. RIGHTS GRANTED TO PHILADELPHIA ELECTRIC COMPANY IN DEED BOOK 1853 PAGE 898. (NOT PLOTTABLE)
    8. RIGHTS GRANTED TO BELL TELEPHONE COMPANY IN DEED BOOK 1831 PAGE 1037. (BLANKET EASEMENT)
    9. PLANNING STANDARDS AND DEED RESTRICTIONS APPLICABLE TO NEWTOWN INDUSTRIAL COMMONS AS IN DEED BOOK 1840 PAGE 612 AS AMENDED IN DEED BOOK 2666 PAGE 572. (SETBACKS: FY=75', SY=30', RY=75')
    10. DECLARATION OF TERMS OF EASEMENT AS IN DEED BOOK 1875 PAGE 366. (100' EASEMENT, SHOWN)
    11. NOTES, CONDITIONS, SETBACK LINES, EASEMENTS, RESERVATIONS, COVENANTS AND RESTRICTIONS AS SHOWN AND SET FORTH IN PLAN BOOK 75 PAGE 16, BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATUS OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW. (100' EASEMENT SHOWN) (FRONT YARD SETBACK=75')
    12. BUILDING ENTRANCE FACILITY GRANT WITH BELL ATLANTIC–PENNSYLVANIA INC. AS IN LAND RECORD BOOK 1084 PAGE 474. (NOT PLOTTABLE)
10. AMERICAN LAND TITLE ASSOCIATION, FILE NO. CL–13966, WITH AN EFFECTIVE DATE 7/22/2025 WITH THE FOLLOWING SURVEY EXCEPTIONS LISTED IN SCHEDULE B, SECTION II.
    14. RESTRICTIONS AND OTHER MATTERS, IF ANY, APPEARING OF RECORD IN PLANNING STANDARD AND DEED RESTRICTIONS AS SET FORTH IN DEED BOOK 1840, PAGE 612. BUT DELETING ANY COVENANT, CONDITION, OR RESTRICTION INDICATING A PREFERENCE, LIMITATION OR DISCRIMINATION BASED ON RACE,COLOR, RELIGION, SEX, HANDICAP, FAMILIAL STATUS, OR NATIONAL ORIGIN TO THE EXTENT SUCH COVENANTS, CONDITIONS OR RESTRICTIONS VIOLATE 42 USC 3604(C). (SETBACKS: FY=75', SY=30', RY=75')
    15. RIGHTS GRANTED TO PHILADELPHIA SUBURBAN GAS AND ELECTRIC COMPANY AS SET FORTH IN DEED BOOK 511, PAGE 22 AND DEED BOOK 516, PAGE 275. (BLANKET EASEMENT)
    16. RIGHTS GRANTED TO THE NEWTOWN ARTESIAN WATER COMPANY AS SET FORTH IN THE DEED BOOK 1895, PAGE 51. (OFFSITE – EASEMENT IN ROADWAY)
    17. RIGHTS GRANTED TO THE BELL TELEPHONE COMPANY OF PENNSYLVANIA AS SET FORTH IN DEED BOOK 1831, PAGE 1037. (BLANKET EASEMENT)
    18. DEED OF DEDICATION AS SET FORTH IN DEED BOOK 1895, PAGE 1079; DEED BOOK 1920, PAGE 931. (OFFSITE)
    19. RIGHTS GRANTED TO PHILADELPHIA ELECTRIC COMPANY AS SET FORTH IN DEED BOOK 1853, PAGE 898 AND DEED BOOK 2216, PAGE 1091. (BLANKET EASEMENT)
    20. RIGHTS GRANTED TO PHILADELPHIA ELECTRIC COMPANY AS SET FORTH IN DEED BOOK 2474, PAGE 866. (BLANKET EASEMENT)
    21. RIGHTS GRANTED TO BELL ATLANTIC–PENNSYLVANIA INC. AS SET FORTH IN LAND RECORD BOOK 1304, PAGE 281. (NOT SURVEY RELATED)
    22. SUBJECT TO ALL MATTERS SHOWN ON THE PLAN AS RECORDED IN THE RECORDER'S OFFICE OF BUCKS COUNTY, PENNSYLVANIA IN PLAN BOOK 36, PAGE 28. (100' EASEMENT – SHOWN) (FRONT YARD SETBACK=75')
    23. SUBJECT TO ALL MATTERS SHOWN ON THE PLAN AS RECORDED IN THE RECORDER'S OFFICE OF BUCKS COUNTY, PENNSYLVANIA IN PLAN BOOK 212, PAGE 41. (OFFSITE)
    24. SUBJECT TO ALL MATTERS SHOWN ON THE PLAN AS RECORDED IN THE RECORDER'S OFFICE OF BUCKS COUNTY, PENNSYLVANIA IN PLAN BOOK 354, PAGE 23. (SHOWN)
    25. SUBJECT TO DECLARATION OF TERMS OF EASEMENT AS SET FORTH IN DEED BOOK 1875, PAGE 366. (100'EASEMENT – SHOWN)
    26. SUBJECT TO DECLARATION OF EASEMENT AS SET FORTH IN DEED BOOK 2440, PAGE 533. (ACCESS EASEMENT – NOT APPLICABLE DUE TO LOT CONSOLATION)
    27. RESTRICTIONS AND OTHER MATTERS, IF ANY, APPEARING OF RECORD IN LAND RECORD BOOK 5503, PAGE 2223, BUT DELETING ANY COVENANT, CONDITION, OR RESTORATION INDICATING A PREFERENCE, LIMITATION OR DISCRIMINATION BASED ON RACE, COLOR, RELIGION, SEX, HANDICAP, FAMILIAL STATUS, OR NATIONAL ORIGIN TO THE EXTENT SUCH COVENANTS, CONDITIONS OR RESTRICTIONS VIOLATE 42 USC 3604(C). (DECLARATION – NOT PLOTTABLE)
    28. RIGHTS GRANTED TO VERIZON PENNSYLVANIA INC. AS SET FORTH IN LAND RECORD BOOK 6131, PAGE 1515. (BLANKET)
    29. DEED OF DEDICATION AS SET FORTH IN INSTRUMENT NO. 2017022902.(ULTIMATE RIGHT–OF–WAY SHOWN) (EASEMENT)
    30. SUBJECT TO POST CONSTRUCTION STORM WATER MANAGEMENT AS SET FORTH I INSTRUMENT NO. 2017056726. (NOT SURVEY RELATED)
    31. SUBJECT TO ALL MATTERS SHOWN ON THE PLAN AS RECORDED IN THE RECORDER'S OFFICE OF BUCKS COUNTY PENNSYLVANIA IN PLAN BOOK 2017056727. (SHOWN)
    32. SUBJECT TO THE AGREEMENT BETWEEN NEWTOWN INDUSTRIAL COMMONS INC., AND NEWTOWN BUCKS COUNTY MUNICIPAL AUTHORITY AS SET FORTH IN DEED BOOK 1941, PAGE 912. (OFFSITE)
    33. SUBJECT TO AGREEMENT OF EXTINGUISHMENTS OF ACCESS EASEMENT BETWEEN NEWTOWN BUCKS COUNTY JOINT MUNICIPAL AUTHORITY AND NEWTOWN INDUSTRIAL COMMONS INC, AS SET FORTH IN DEED BOOK 2550, PAGE 141. (OFFSITE)
    34. DEED OF DEDICATION AS SET FORTH IN DEED BOOK 1920, PAGE 931. (OFFSITE)

## REFERENCES:

1. TAX MAP FOR THE TOWNSHIP OF NEWTOWN, COUNTY OF BUCKS, COMMONWEALTH OF PENNSYLVANIA.
2. PLAN ENTITLED "RECORD PLAN 15 TERRY DRIVE. NEWTOWN TOWNSHIP, BUCKS COUNTY, PA FOR TELETRONICS TECHNOLOGY CORPORATION", SHEET 1 OF 10, PREPARED BY DUMACK ENGINEERING, DATED 07–28–04, LAST REVISED 04–25–05, RECORDED IN PLAN BOOK 336, PAGE 24.
3. PLAN ENTITLED "RECORD PLAN SITE GRADING, DRAINAGE, UTILITIES", SHEET 1 OF 11, PREPARED BY BENCHMARK ENGINEERING CORPORATION, DATED DECEMBER 1988, LAST REVISED 11/22/89, RECORDED IN PLAN BOOK 256, PAGE 93.
4. PLAN ENTITLED "HAROLD BECK & SONS, INC FINAL LAND DEVELOPMENT PLAN PROPOSED BUILDING EXPANSION", SHEET 1,2 & 19 OF 20, PREPARED BY BOHLER ENGINEERING, LAST REVISED 02/04/11, RECORDED IN PLAN BOOK 382, PAGE 62.
5. PLAN ENTITLED "FINAL PLAN OF SECTION 3 NEWTOWN INDUSTRIAL COMMONS", SHEET 1, PREPARED BY TRI–STATE ENGINEERS & LAND SURVEYORS, INC., DATED JANUARY 13, 1969, RECORDED IN PLAN BOOK 64, PAGE 34.
6. PLAN ENTITLED "SIMOFF ENGINEERING ASSOCIATES", SHEET 1 & 2 OF 6, PREPARED BY BVI INDUSTRIES, LAST REVISED 3/21/96, RECORDED IN PLAN BOOK 282, PAGE 63.
7. PLAN ENTITLED "FINAL PLAN OF SECTION I "NEWTOWN INDUSTRIAL COMMONS", SHEET 2 OF 20, PREPARED BY TRI–STATE ENGINEERS & LAND SURVEYORS, INC., DATED 12–20–66, RECORDED IN PLAN BOOK 36, PAGE 28.
8. PLAN ENTITLED "FINAL PLAN OF SECTION 4 NEWTOWN INDUSTRIAL COMMONS", SHEET 1, PREPARED BY TRI–STATE ENGINEERS & LAND SURVEYORS, INC., DATED MARCH 16, 1970, RECORDED IN PLAN BOOK 75, PAGE 16.
9. PLAN ENTITLED "RECORD PLAN TUDOR SQUARE – PHASE 3", SHEET 1 OF 13, PREPARED BY REI STRUCTURAL & CIVIL ENGINEERING, LAST REVISED 1/18/07, RECORDED IN PLAN BOOK 354, PAGE 24.
10. PLAN ENTITLED "MINOR SUBDIVISION OF LOT #2 NEWTOWN INDUSTRIAL COMMONS", SHEET 1 OF 1, PREPARED BY TRI–STATE ENGINEERS & LAND SURVEYORS, INC., DATED 3–25–76,RECORDED IN PLAN BOOK 212, PAGE 41.
11. PLAN ENTITLED "AS–BUILT PLAN TUDOR SQUARE 368–660 NEWTOWN–YARDLEY RD", SHEET 1 OF 1, PREPARED BY DUMACK ENGINEERING, DATED JULY 24, 2017, LAST REVISED SEPTEMBER 8, 2017.
12. PLAN ENTITLED "RECORD PLAN TUDOR SQUARE – PHASE 3", SHEET 1 OF 13, PREPARED BY REI STRUCTURAL & CIVIL ENGINEERING, LAST REVISED 1/19/07, RECORDED IN PLAN BOOK 354, PAGE 23.

## LEGEND

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| — — — | EXISTING MAJOR CONTOURS | ▩ | DETECTABLE WARNING SURFACE | —— S —— | SANITARY LINE | Ⓔ | ELECTRIC MANHOLE |
| - - - - - | EXISTING MINOR CONTOURS | Ⓢ | SANITARY MANHOLE | —SL–SL–SL–SL— | SANITARY LATERAL | Ⓣ | TELEPHONE MANHOLE |
| +225.0 | EXISTING SPOT ELEVATION | ○ | CLEAN OUT | - - - - - - | STORM LINE | -○- | UTILITY POLE |
| ⌒⌒⌒ | TREE LINE | ▨ | STORM INLET | —— T —— | TELEPHONE LINE | • | GUY |
| —— - - - —— | LEGAL RIGHT–OF–WAY | ST | STORM MANHOLE | —— W —— | WATER LINE | ▭ | MAILBOX |
| —— - - —— | ULTIMATE RIGHT–OF–WAY | Ⓖ | GAS MANHOLE | —WL–WL–WL–WL— | WATER LATERAL | ✳ | LIGHT STANDARD |
| —— - - —— | FEMA LINE | ⋈ | GAS VALVE | —— · · · —— | STREAM CENTERLINE | ✻ | CONIFER TREE |
| ○—○—○ | GUIDE RAIL | Ⓦ | WATER MANHOLE | —— —— | WETLANDS | ✿ | DECIDUOUS TREE |
| —— E —— | ELECTRIC LINE | ⋈ | WATER VALVE | — — — — — | EXISTING EASEMENT | ✺ | TREE STUMP |
| —— G —— | GAS LINE | ● | FIRE HYDRANT | ▨ | MULCH AREA | ● | PIERS |
| —— OE —— | OVERHEAD ELECTRIC LINE | MW | MONITORING WELL | ▨ | WOODCHIPS AREA | □ | CONCRETE MONUMENT FOUND |
| —— OT —— | OVERHEAD TELEPHONE LINE | ⊕ | ELECTRIC METER | | | ◎ | IRON PIN FOUND |
| ▨ | EXISTING EMERGENCY SPILLWAY | | | | | | |

## TABLE OF NATURAL RESOURCE CALCULATIONS

| DATA MAPS | NATURAL RESOURCES | MINIMUM REQUIRED RESOURCE PROTECTION RATIO I | ACRES OF LAND IN NATURAL RESOURCES II | RESOURCE PROTECTION LAND (COLUMN I X COLUMN II) |
|---|---|---|---|---|
| HYDROLOGIC SURFACE FEATURES | FLOODPLAINS | 1.00 | 0.00 | 0.00 |
| | FLOODPLAN SOILS | 1.00 | 0.00 | 0.00 |
| | LAKES OR PONDS | 1.00 | 0.00 | 0.00 |
| | WETLANDS | 1.00 | 0.00 | 0.00 |
| | WETLANDS TRANSITION AREA* | 0.80** | 0.00 | 0.00 |
| SLOPES | STEEP SLOPES (15% – 25%) | 0.75 | 0.00 | 0.00 |
| | STEEP SLOPES (GREATER THAN 25%) | 0.85 | 0.00 | 0.00 |
| WOODLAND ASSOCIATIONS | JM. CM AND CR1 | 0.85 | 0.00 | 0.00 |
| | ALL OTHERS | 0.50 | 0.00 | 0.00 |
| AGRICULTURAL SOILS IN CM DISTRICT ALL RESIDENTIAL USES | AGRICULTURE SOILS AS DEFINED IN JMZO § 205 | 0.75 | 0.00 | 0.00 |

NOTES:

* THE WETLANDS TRANSITION AREA REQUIREMENTS SHALL ONLY APPLY IN THE JM, CM, CR–1 CR–2, AND VC1 ZONING DISTRICTS.

** PROVIDED THERE SHALL BE NO DISTURBANCE IN ANY PORTION OF THE WETLANDS TRANSITION AREA LOCATED WITHIN 25 FEET OF THE DELINEATED WETLANDS SOILS. WHERE THE WETLANDS TRANSITION AREA IS REQUIRED TO BE 100 FEET, THERE SHALL BE NO DISTURBANCE WITHIN 50 FEET OF THE DELINEATED WETLANDS.

TOTAL LAND WITHIN NATURAL RESOURCE PROTECTION RESTRICTIONS 0.00 AC.

TOTAL NATURAL RESOURCE PROTECTION LAND 0.00 AC.

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SERIAL NO. 20252790540

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50 0 50 100
SCALE IN FEET
1"=50'

C:\Autodesk Docs\ACCDocs\Gilmore and Associates\2500866_661_Penn_Street_Re-Dev\Project Files\2025\2500866\DESIGN\CAD\Prod_Dwgs\2500866_EXF.dwg Layout: EXISTING CONDITIONS PLAN Plotted By: rmonkres on Wed Jul 29, 2026 at 8:24am

**GILMORE & ASSOCIATES, INC.**
**ENGINEERING & CONSULTING SERVICES**
CORPORATE HEADQUARTERS
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**NOT APPROVED FOR CONSTRUCTION**

RONALD G. MONKRES II
ENGINEER
603164–E

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# *661 PENN STREET REDEVELOPMENT*

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

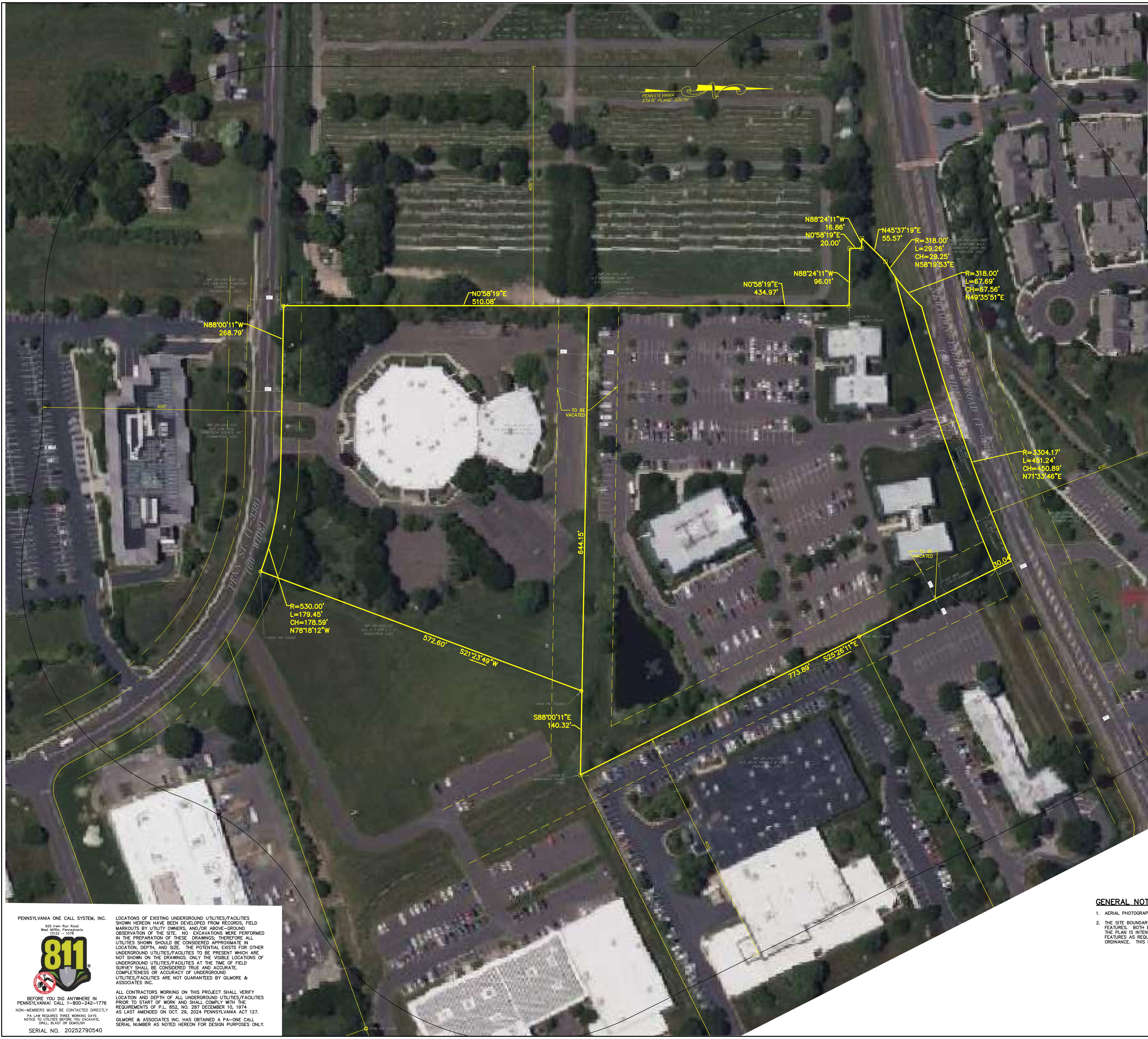
## EXISTING CONDITIONS PLAN

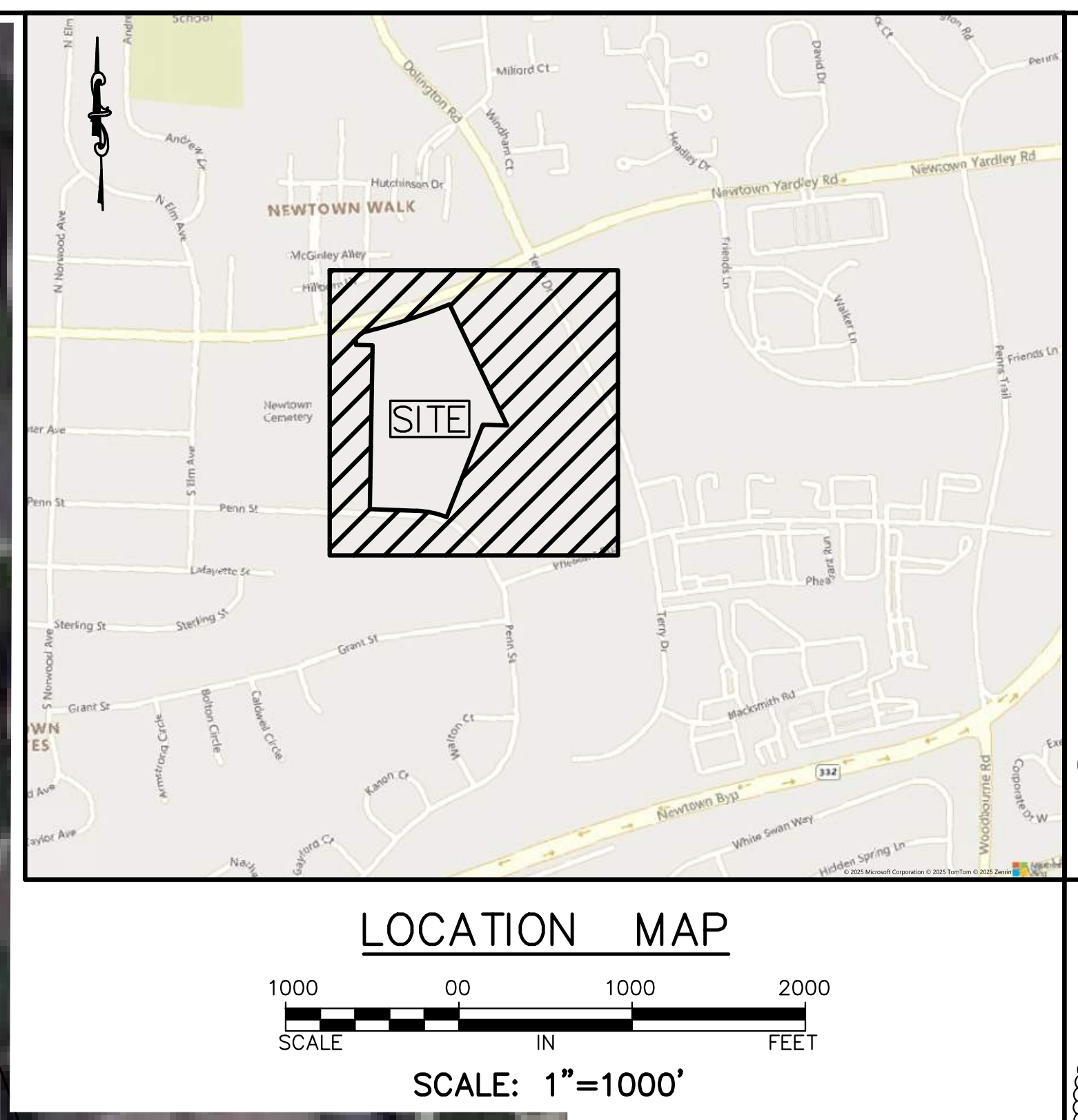
**GILMORE & ASSOCIATES, INC.**
ENGINEERING & CONSULTING SERVICES

| | |
|---|---|
| PROJECT No.: 2500866 | |
| APPLICANTS INFO:<br>661 PENN STREET, LLC<br>209 PENN'S TRAIL<br>NEWTOWN, PA 18940<br>215–968–0600 | |
| MUNICIPAL FILE No.: | |
| TAX MAP PARCEL No.: 29–010–119–001 & 29–010–037 | |
| TOTAL AREA: 15.75 AC. | TOTAL LOTS: 2 |
| DATE: 01/21/26 | SCALE: 1"=50' |
| DRAWN BY: GY/BH | CHECKED BY: RGM |

SHEET NO.: 6 OF 33

C:\Autodesk Docs\ACCDocs\Gilmore and Associates\2500866_661_Penn_Street_Re-Dev\Project Files\2025\2500866\DESIGN\CAD\Prod_Dwgs\2500866_SFA Plan.dwg Layout: Surrounding Features Aerial Plan Plotted By: rmonkres, on Wed Jul 29, 2026 at 8:24am


PENNSYLVANIA STATE PLANE SOUTH
N88°24'11"W 16.86'
N0°58'19"E 20.00'
N45°37'19"E 55.57'
R=318.00' L=29.26' CH=29.25' N58°19'53"E
N88°24'11"W 96.01'
R=318.00' L=67.69' CH=67.56' N49°35'51"E
N0°58'19"E 434.97'
N0°58'19"E 510.08'
N88°00'11"W 268.79'
NEWTOWN-YARDLEY ROAD (T-560) (60' WIDE)
PENN ST. (T-338) (60' WIDE)
TO BE VACATED
400'
644.15'
R=3304.17' L=451.24' CH=450.89' N71°33'46"E
30.04'
TO BE VACATED
100' WIDE UTILITY EASEMENT
50'
50'
90'
IRON PIN FOUND
CONCRETE MONUMENT FOUND
R=530.00' L=179.45' CH=178.59' N78°18'12"W
572.60'
S21°23'49"W
773.89'
S25°26'11"E
S88°00'11"E 140.32'



## LOCATION MAP

1000 0 1000 2000
SCALE IN FEET

SCALE: 1"=1000'

## GENERAL NOTES:

1. AERIAL PHOTOGRAPHY SHOWN IS FROM AUTODESK GEOMAP
2. THE SITE BOUNDARY IS VISUALLY ALIGNED TO THE AERIAL PHOTO BASED ON EXISTING FEATURES. BOTH BOUNDARY AND PHOTO ARE PLOTTED TO SCALE AS NOTED BELOW. THE PLAN IS INTENDED TO PROVIDE A GENERAL REPRESENTATION OF SURROUNDING FEATURES AS REQUIRED BY THE MUNICIPAL SUBDIVISION AND LAND DEVELOPMENT ORDINANCE. THIS PLAN SHOULD NOT BE USED FOR SURVEY PURPOSES.

60 0 60 120
SCALE IN FEET
1"=60'

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SERIAL NO. 20252790540

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RONALD G. MONKRES II
ENGINEER 603164–E

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# *661 PENN STREET REDEVELOPMENT*

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## SURROUNDING FEATURES AERIAL PLAN

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.: 2500866

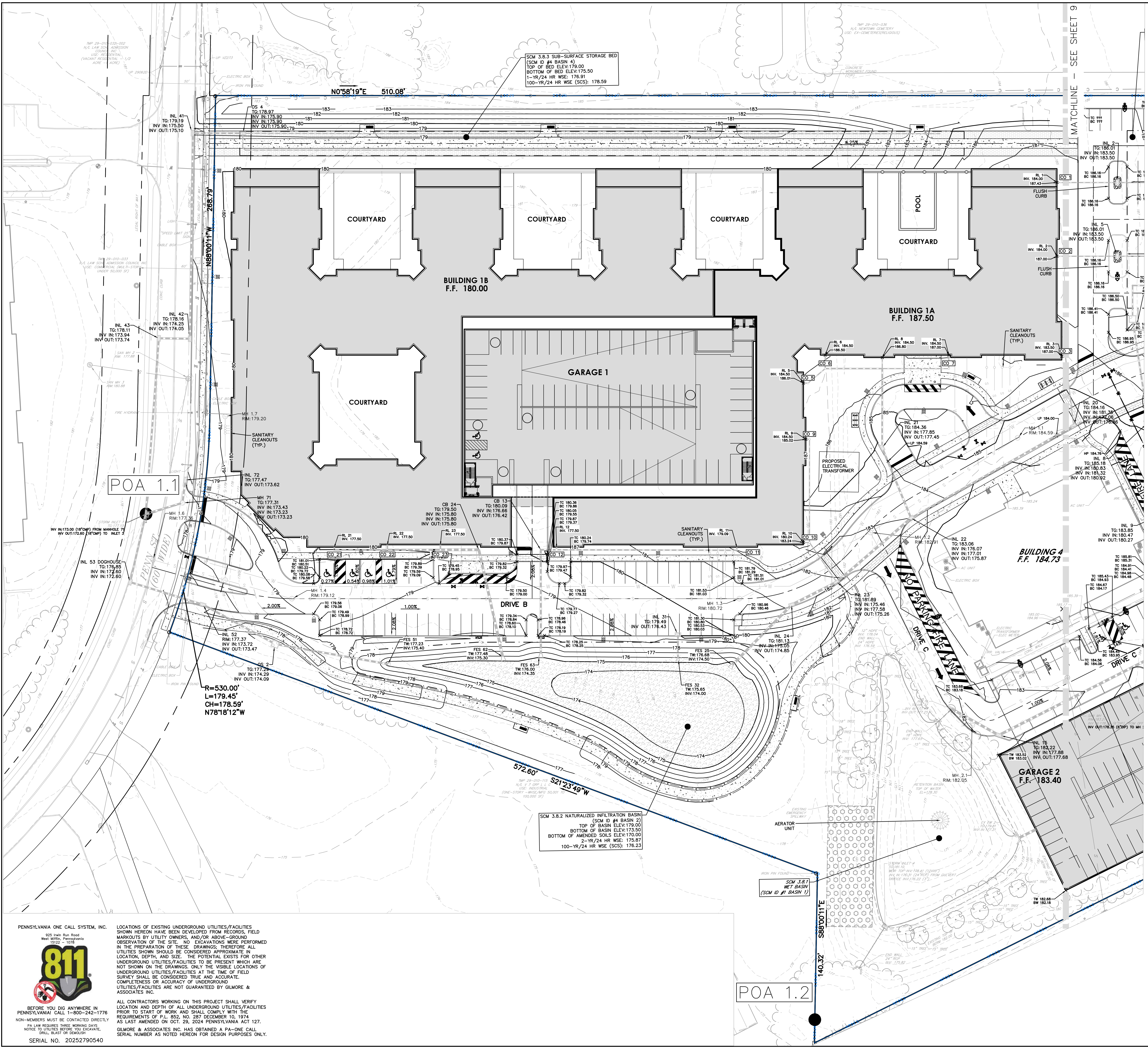
APPLICANTS INFO:
661 PENN STREET, LLC
209 PENN'S TRAIL
NEWTOWN, PA 18940
215–968–0600

MUNICIPAL FILE No.:

TAX MAP PARCEL No.:
29–010–119–001 & 29–010–037

| | |
|---|---|
| TOTAL AREA: 15.75 AC. | TOTAL LOTS: 2 |
| DATE: 01/21/26 | SCALE: 1"=60' |
| DRAWN BY: GY/BH | CHECKED BY: RGM |

SHEET NO.: 7 OF 33


SCM 3.8.3 SUB-SURFACE STORAGE BED
(SCM ID #4 BASIN 4)
TOP OF BED ELEV:179.00
BOTTOM OF BED ELEV:175.50
1-YR/24 HR WSE: 176.91
100-YR/24 HR WSE (SCS): 178.59
N0°58'19"E 510.08'
MATCHLINE - SEE SHEET 9
PENNSYLVANIA STATE PLANE SOUTH
COURTYARD
COURTYARD
COURTYARD
COURTYARD
COURTYARD
POOL
BUILDING 1B F.F. 180.00
BUILDING 1A F.F. 187.50
GARAGE 1
BUILDING 4 F.F. 184.73
GARAGE 2 F.F. 183.40
N88°00'11"W 288.79'
POA 1.1
POA 1.2
PENN ST (60' WIDE)
R=530.00'
L=179.45'
CH=178.59'
N78°18'12"W
DRIVE B
DRIVE C
SANITARY CLEANOUTS (TYP.)
FLUSH CURB
PROPOSED ELECTRICAL TRANSFORMER
AERATOR UNIT
572.60' S21°23'49"W
S88°00'11"E 140.32'
SCM 3.8.1 WET BASIN (SCM ID #1 BASIN 1)
TMP 29-010-115 N/L V 7 GRP L L C USE: INDUSTRIAL (ONE-STORY -WHSE/MFG 50,001 TO 100,000 SF)
SCM 3.8.2 NATURALIZED INFILTRATION BASIN
(SCM ID #4 BASIN 2)
TOP OF BASIN ELEV:179.00
BOTTOM OF BASIN ELEV:173.50
BOTTOM OF AMENDED SOILS ELEV:170.00
2-YR/24 HR WSE: 175.87
100-YR/24 HR WSE (SCS): 176.23
INL 41 TG:179.19 INV IN:175.50 INV OUT:175.10
OS 4 TG:178.97 INV IN:175.90 INV IN:175.90 INV OUT:175.90
INL 42 TG:178.16 INV IN:174.25 INV OUT:174.05
INL 43 TG:178.11 INV IN:173.94 INV OUT:173.74
MH 1.7 RIM:179.20
INL 72 TG:177.47 INV OUT:173.62
MH 71 TG:177.31 INV IN:173.43 INV IN:173.23 INV OUT:173.23
MH 1.6 RIM:177.56
INV IN:173.00 (18"DIP) FROM MANHOLE 71 INV OUT:172.60 (18"DIP) TO INLET 3
INL 53 DOGHOUSE TC:176.85 INV IN:172.60 INV IN:172.60
INL 52 RIM:177.37 INV IN:173.72 INV OUT:173.47
OS 2 TG:177.29 INV IN:174.29 INV OUT:174.09
MH 1.4 RIM:179.12
CB 24 TG:179.50 INV IN:175.80 INV IN:175.80 INV OUT:175.80
CB 13 TG:180.09 INV IN:176.66 INV OUT:176.42
FES 51 TW:177.23 INV:175.40
FES 62 TW:177.48 INV:175.30
FES 63 TW:176.00 INV:174.35
FES 25 TW:176.68 INV:174.50
FES 32 TW:175.65 INV:174.00
MH 1.3 RIM:180.72
INL 31 TG:179.49 INV OUT:176.43
INL 24 TG:181.13 INV IN:175.05 INV OUT:174.85
INL 23 TG:181.89 INV IN:175.46 INV IN:177.58 INV OUT:175.26
MH 1.2 RIM:182.91
INL 22 TG:183.06 INV IN:176.07 INV IN:177.01 INV OUT:175.87
INL 21 TG:184.36 INV IN:177.85 INV OUT:177.45
MH 1.1 RIM:184.59
INL 20 TG:184.16 INV IN:181.38 INV IN:177.06 INV OUT:176.86
INL 8 TG:185.18 INV IN:180.83 INV IN:181.32 INV OUT:180.92
INL 9 TG:183.85 INV IN:180.47 INV OUT:180.27
INL 2 TG:186.01 INV IN:183.50 INV OUT:183.50
INL 5 TG:186.01 INV IN:183.50 INV OUT:183.50
INL 10 TG:182.22 INV IN:177.88 INV OUT:177.68
MH 2.1 RIM:182.05
2.00%
1.00%
0.27%
0.54%
0.98%
1.01%
2.08%
1.00%

## LEGEND

| | |
|---|---|
| ▬▬▬ | PROPERTY LINE |
| | PROPOSED CONTOUR |
| —NPDES—NPDES— | PROJECT SITE BOUNDARY |
| —LOD—LOD—LOD— | LIMIT OF DISTURBANCE |
| — — — — | EXISTING SANITARY EASEMENT |
| — — — — | EXISTING MAJOR CONTOUR |
| - - - - - | EXISTING MINOR CONTOUR |
| — PS-X — PS-X — PS-X — | PROPOSED PERMANENT SWALE |
| ——— W ——— | EXISTING WATER MAIN |
| — W — W — W — W — | PROPOSED WATER MAIN |
| - - - - - | EXISTING STORM SEWER |
| ═══ | PROPOSED STORM SEWER |
| ——— S ——— | EXISTING SANITARY SEWER |
| — S — S — S — S — | PROPOSED SANITARY SEWER |
| TP | PROPOSED TEST PIT |
| —— —— —— | EXISTING SOIL BOUNDARIES |
| | PROPOSED RIP-RAP APRON |
| | PROPOSED BASIN LANDSCAPING |
| ▨ | PROPOSED STORM INLET |
| ▬ ▬ ▬ ▬ | POST-DEV DRAINAGE AREA BOUNDARY |
| ▬ PS-1 ▬ PS-1 ▬ | PERMANENT SWALE PATH WITH LABELS |
| | BMP FOOTPRINT |
| ● POA #2 | PROPOSED POA |
| | EXISTING EMERGENCY SPILLWAY |

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30 0 30 60
SCALE IN FEET
1"=30'

C:\Autodesk Docs\ACCDocs\Gilmore and Associates\2500866_661_Penn_Street_Re-Dev\Project Files\2025\2500866\DESIGN\CAD\Prod_Dwgs\2500866_Grading Plan Details.dwg Layout: GRADING PLAN 1 Plotted By: rmonkres, on Wed Jul 29, 2026 at 8:24am

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RONALD G. MONKRES II
ENGINEER 603164-E

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# *661 PENN STREET REDEVELOPMENT*

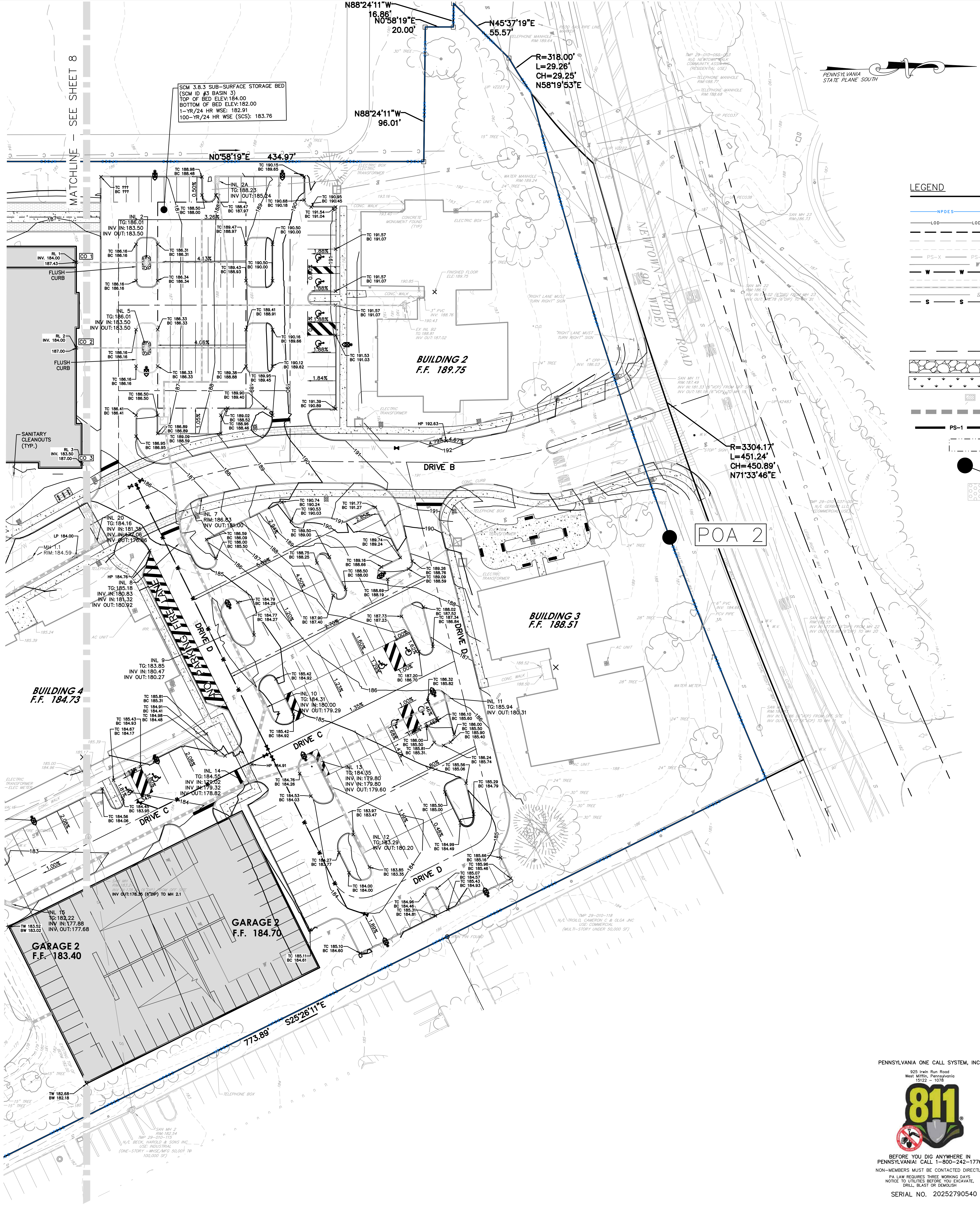
NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## GRADING PLAN 1

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

| | |
|---|---|
| PROJECT No.: 2500866 | |
| APPLICANTS INFO:<br>661 PENN STREET, LLC<br>209 PENN'S TRAIL<br>NEWTOWN, PA 18940<br>215-968-0600 | |
| MUNICIPAL FILE No.: | |
| TAX MAP PARCEL No.: 29-010-119-001 & 29-010-037 | |
| TOTAL AREA: 15.75 AC. | TOTAL LOTS: 2 |
| DATE: 01/21/26 | SCALE: 1"=30' |
| DRAWN BY: GY/BH | CHECKED BY: RGM |

SHEET NO.: 8 OF 33



LEGEND

- PROPERTY LINE
- PROPOSED CONTOUR
- PROJECT SITE BOUNDARY
- LIMIT OF DISTURBANCE
- EXISTING SANITARY EASEMENT
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED PERMANENT SWALE
- EXISTING WATER MAIN
- PROPOSED WATER MAIN
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- PROPOSED TEST PIT
- EXISTING SOIL BOUNDARIES
- PROPOSED RIP-RAP APRON
- PROPOSED BASIN LANDSCAPING
- PROPOSED STORM INLET
- POST-DEV DRAINAGE AREA BOUNDARY
- PS-1 PERMANENT SWALE PATH WITH LABELS
- BMP FOOTPRINT
- ● POA #2 PROPOSED POA
- EXISTING EMERGENCY SPILLWAY

30 0 30 60
SCALE IN FEET
1"=30'

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GILMORE & ASSOCIATES INC. HAS OBTAINED A PA-ONE CALL SERIAL NUMBER AS NOTED HEREON FOR DESIGN PURPOSES ONLY.

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES
CORPORATE HEADQUARTERS
65 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901 • (215) 345-4330 • www.gilmore-assoc.com

ONLY THOSE PLANS INCORPORATING THE PROFESSIONAL SEAL SHOULD BE CONSIDERED OFFICIAL AND RELIED UPON BY USER. THIS PLAN IS PREPARED SPECIFICALLY FOR THE CLIENT AND PROJECT DESIGNATED HEREON. MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT THE CONSENT OF GILMORE & ASSOCIATES, INC. IS PROHIBITED.
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**NOT APPROVED FOR CONSTRUCTION**

RONALD G. MONKRES II
ENGINEER 603164-E
DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# *661 PENN STREET REDEVELOPMENT*

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## GRADING PLAN 2

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.: 2500866

APPLICANTS INFO:
661 PENN STREET, LLC
209 PENN'S TRAIL
NEWTOWN, PA 18940
215-968-0600

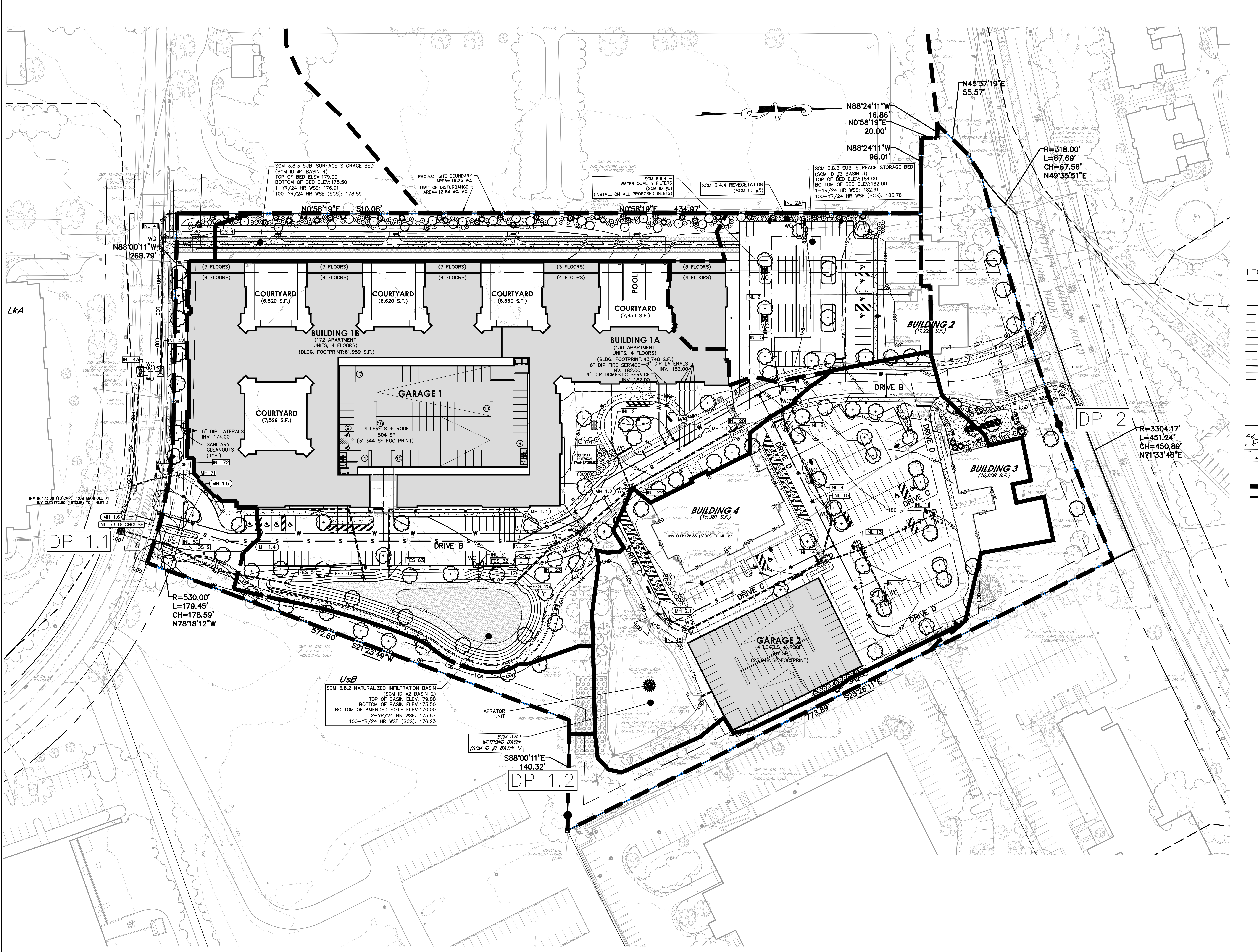
MUNICIPAL FILE No.:

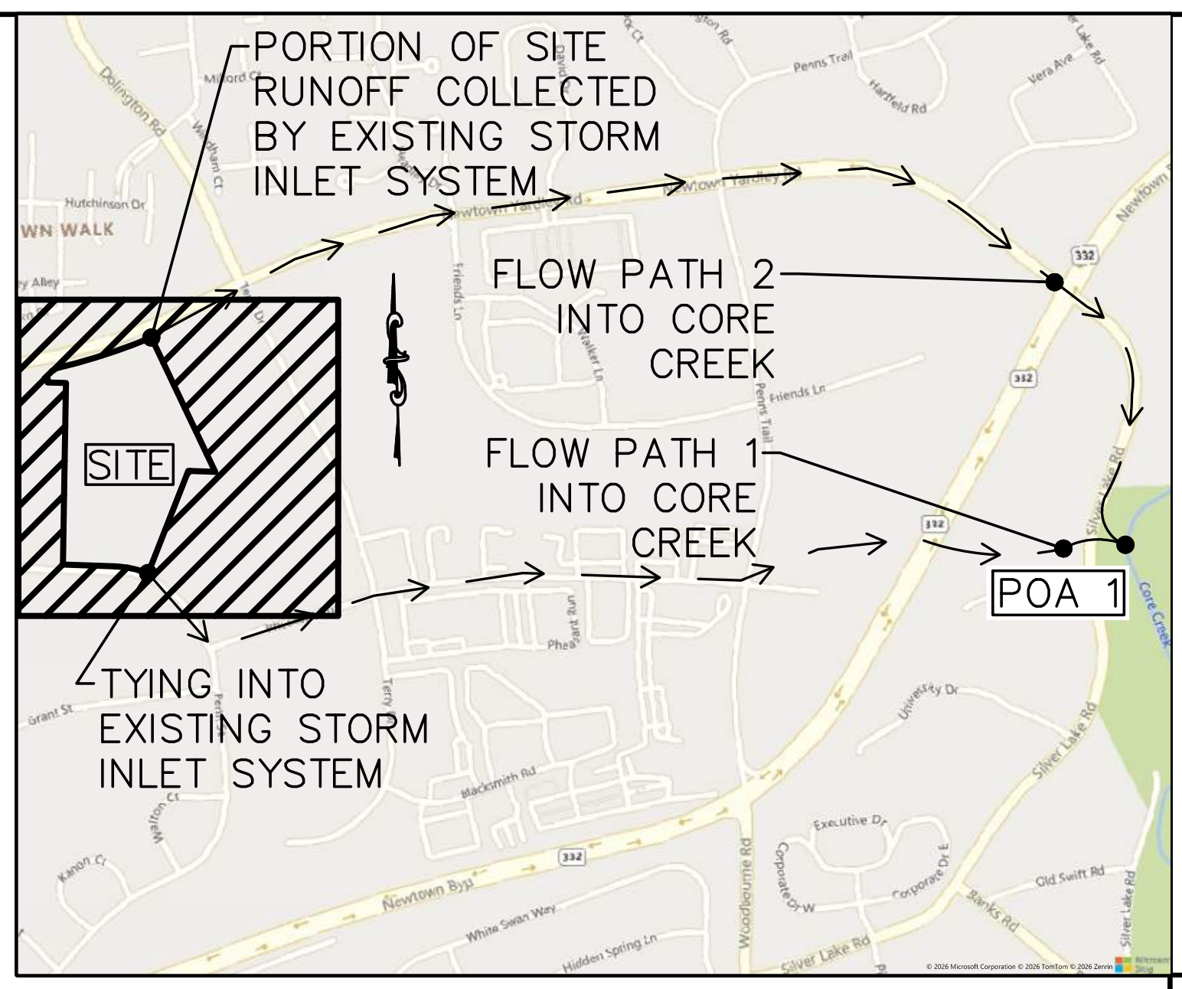
TAX MAP PARCEL No.: 29-010-119-001 & 29-010-037

| | |
|---|---|
| TOTAL AREA: 15.75 AC. | TOTAL LOTS: 2 |
| DATE: 01/21/26 | SCALE: 1"=30' |
| DRAWN BY: GY/BH | CHECKED BY: RGM |

SHEET NO.: 9 OF 33

C:\Autodesk Docs\ACCDocs\Gilmore and Associates\2500866_661_Penn_Street_Re-Dev\Project Files\2025\2500866\DESIGN\CAD\Prod_Dwgs\2500866_Grading Plan Details.dwg Layout: GRADING PLAN 2 Plotted By: rmonkres, on Wed Jul 29, 2026 at 8:25am


N0°58'19"E 510.08'
N0°58'19"E 434.97'
N88°24'11"W 16.86'
N0°58'19"E 20.00'
N88°24'11"W 96.01'
N45°37'19"E 55.57'
N88°00'11"W 268.79'
R=318.00' L=67.69' CH=67.56' N49°35'51"E
R=3304.17' L=451.24' CH=450.89' N71°33'46"E
R=530.00' L=179.45' CH=178.59' N78°18'12"W
572.60' S21°23'49"W
773.89' S25°26'11"E
S88°00'11"E 140.32'
SCM 3.8.3 SUB-SURFACE STORAGE BED (SCM ID #4 BASIN 4) TOP OF BED ELEV:179.00 BOTTOM OF BED ELEV:175.50 1-YR/24 HR WSE: 176.91 100-YR/24 HR WSE (SCS): 178.59
PROJECT SITE BOUNDARY AREA=15.75 AC.
LIMIT OF DISTURBANCE AREA=12.64 AC. AC.
SCM 6.6.4 – WATER QUALITY FILTERS (SCM ID #6) (INSTALL ON ALL PROPOSED INLETS)
SCM 3.4.4 REVEGETATION (SCM ID #5)
SCM 3.8.3 SUB-SURFACE STORAGE BED (SCM ID #3 BASIN 3) TOP OF BED ELEV:184.00 BOTTOM OF BED ELEV:182.00 1-YR/24 HR WSE: 182.91 100-YR/24 HR WSE (SCS): 183.76
TMP 29-010-036 N/L NEWTOWN CEMETERY (EX-CEMETERIES USE)
COURTYARD (6,620 S.F.)
COURTYARD (6,620 S.F.)
COURTYARD (6,660 S.F.)
COURTYARD (7,459 S.F.)
COURTYARD (7,529 S.F.)
POOL
(3 FLOORS)
(4 FLOORS)
BUILDING 1B (172 APARTMENT UNITS, 4 FLOORS) (BLDG. FOOTPRINT:61,959 S.F.)
BUILDING 1A (136 APARTMENT UNITS, 4 FLOORS) (BLDG. FOOTPRINT:43,748 S.F.)
6" DIP FIRE SERVICE INV. 182.00
4" DIP DOMESTIC SERVICE INV. 182.00
6" DIP LATERALS INV. 182.00
GARAGE 1 4 LEVELS + ROOF 504 SP (31,344 SF FOOTPRINT)
6" DIP LATERALS INV. 174.00
SANITARY CLEANOUTS (TYP.)
BUILDING 2 (11,22_ S.F.)
BUILDING 3 (10,608 S.F.)
BUILDING 4 (15,381 S.F.)
GARAGE 2 4 LEVELS + ROOF 301 SP (23,248 SF FOOTPRINT)
DRIVE B
DRIVE C
DRIVE D
DP 1.1
DP 1.2
DP 2
LkA
UsB
SCM 3.8.2 NATURALIZED INFILTRATION BASIN (SCM ID #2 BASIN 2) TOP OF BASIN ELEV:179.00 BOTTOM OF BASIN ELEV:173.50 BOTTOM OF AMENDED SOILS ELEV:170.00 2-YR/24 HR WSE: 175.87 100-YR/24 HR WSE (SCS): 176.23
AERATOR UNIT
SCM 3.8.1 WETPOND BASIN (SCM ID #1 BASIN 1)
TMP 29-010-115 N/L V 7 GRP L L C (INDUSTRIAL USE)
EXISTING EMERGENCY SPILLWAY
INV IN:173.00 (18"CMP) FROM MANHOLE 71
INV OUT:172.60 (18"CMP) TO INLET 3
MH 1.6
INL 53 DOGHOUSE
INL 41
INL 42
INL 43
INL 72
MH 7.1
MH 1.5
MH 1.4
MH 1.3
MH 1.2
MH 1.1
MH 2.1
INL 2A
INL 2
INL 3
INL 7
INL 8
INL 9
INL 10
INL 12
INL 13
INL 14
INL 15
INL 20
INL 21
INL 22
INL 24
INL 31
FES 51
FES 62
FES 63
FES 25
WQ
PROPOSED ELECTRICAL TRANSFORMER


PORTION OF SITE RUNOFF COLLECTED BY EXISTING STORM INLET SYSTEM
FLOW PATH 2 INTO CORE CREEK
FLOW PATH 1 INTO CORE CREEK
SITE
TYING INTO EXISTING STORM INLET SYSTEM
POA 1
Core Creek
Silver Lake Rd
Newtown
332
Vera Ave
Old Swift Rd

## FLOW PATH MAP

1000 00 1000 2000
SCALE IN FEET

SCALE: 1"=1000'

## LEGEND

- PROPERTY LINE
- 489 PROPOSED CONTOUR
- NPDES PROJECT SITE BOUNDARY
- LOD LIMIT OF DISTURBANCE
- EXISTING SANITARY EASEMENT
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PS–X PROPOSED PERMANENT SWALE
- W EXISTING WATER MAIN
- W PROPOSED WATER MAIN
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- S EXISTING SANITARY SEWER
- S PROPOSED SANITARY SEWER
- PROPOSED LANDSCAPING
- TP–XX PROPOSED TEST PIT
- EXISTING SOIL BOUNDARIES
- PROPOSED RIP–RAP APRON
- PROPOSED BASIN LANDSCAPING
- PROPOSED STORM INLET
- POST–DEV DRAINAGE AREA BOUNDARY
- PS–1 PERMANENT SWALE PATH WITH LABELS
- BMP FOOTPRINT
- DP #1.1 PROPOSED DP
- EXISTING EMERGENCY SPILLWAY

LIMIT OF DISTURBANCE: 12.64 AC.
PROJECT SITE BOUNDARY: 15.75 AC.

PENNSYLVANIA ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania
15122 – 1078

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1–800–242–1776

NON–MEMBERS MUST BE CONTACTED DIRECTLY

PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

SERIAL NO. 20252790540

LOCATIONS OF EXISTING UNDERGROUND UTILITIES/FACILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM RECORDS, FIELD MARKOUTS BY UTILITY OWNERS, AND/OR ABOVE–GROUND OBSERVATION OF THE SITE. NO EXCAVATIONS WERE PERFORMED IN THE PREPARATION OF THESE DRAWINGS; THEREFORE ALL UTILITIES SHOWN SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH, AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES/FACILITIES TO BE PRESENT WHICH ARE NOT SHOWN ON THE DRAWINGS. ONLY THE VISIBLE LOCATIONS OF UNDERGROUND UTILITIES/FACILITIES AT THE TIME OF FIELD SURVEY SHALL BE CONSIDERED TRUE AND ACCURATE. COMPLETENESS OR ACCURACY OF UNDERGROUND UTILITIES/FACILITIES ARE NOT GUARANTEED BY GILMORE & ASSOCIATES INC.

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OWNER'S CERTIFICATION:

WE, ____________________, OWNERS OF THE PROPERTIES DEPICTED ON THESE PLANS, ACKNOWLEDGE THAT THE PROPOSED STORMWATER MANAGEMENT FACILITIES SHOWN ON THIS PLAN ARE A BASIC AND PERPETUAL PART OF THE STORM DRAINAGE SYSTEM OF THE TOWNSHIP OF NEWTOWN. AS SUCH, ANY REVISIONS TO THESE FACILITIES SHALL BE APPROVED BY NEWTOWN TOWNSHIP, AND REVISIONS TO THE EROSION CONTROL PLAN SHALL BE APPROVED BY THE BUCKS COUNTY CONSERVATION DISTRICT, PRIOR TO IMPLEMENTATION OF SAID REVISIONS.

________________________________________

I, RONALD G. MONKRES II, PE, ON THIS DATE HEREBY CERTIFY THAT THE DRAINAGE PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE NEWTOWN TOWNSHIP STORMWATER MANAGEMENT ORDINANCE.

________________________________________.

50 0 50 100
SCALE IN FEET
1"=50'

**GILMORE & ASSOCIATES, INC.**
**ENGINEERING & CONSULTING SERVICES**
CORPORATE HEADQUARTERS
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**NOT APPROVED FOR CONSTRUCTION**

RONALD G. MONKRES II
ENGINEER
603164–E

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# *661 PENN STREET REDEVELOPMENT*

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## PCSM PLAN

**GILMORE & ASSOCIATES, INC.**
**ENGINEERING & CONSULTING SERVICES**

PROJECT No.: 2500866

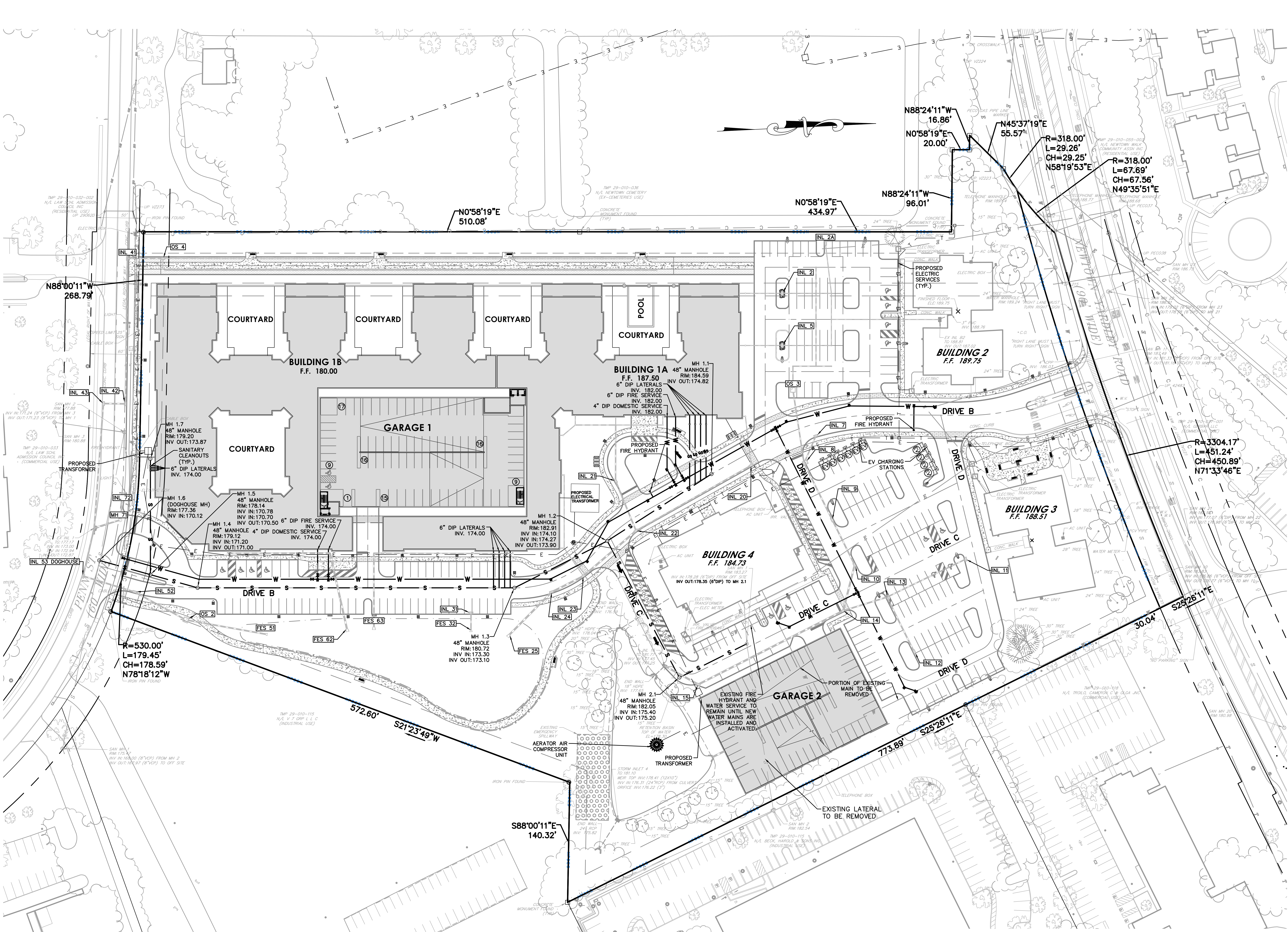
APPLICANTS INFO:
661 PENN STREET, LLC
209 PENN'S TRAIL
NEWTOWN, PA 18940
215–968–0600

MUNICIPAL FILE No.:

TAX MAP PARCEL No.: 29–010–119–001 & 29–010–037

| | |
|---|---|
| TOTAL AREA: 15.75 AC. | TOTAL LOTS: 2 |
| DATE: 01/21/26 | SCALE: 1"=50' |
| DRAWN BY: GY/BH | CHECKED BY: RGM |

SHEET NO.: 10 OF 33


N0°58'19"E
510.08'
N88°00'11"W
268.79'
N0°58'19"E
434.97'
N88°24'11"W
96.01'
N88°24'11"W
16.86'
N0°58'19"E
20.00'
N45°37'19"E
55.57'
R=318.00'
L=29.26'
CH=29.25'
N58°19'53"E
R=318.00'
L=67.69'
CH=67.56'
N49°35'51"E
R=3304.17'
L=451.24'
CH=450.89'
N71°33'46"E
S25°26'11"E
30.04'
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773.89'
S21°23'49"W
572.60'
S88°00'11"E
140.32'
R=530.00'
L=179.45'
CH=178.59'
N78°18'12"W
COURTYARD
COURTYARD
COURTYARD
COURTYARD
COURTYARD
POOL
BUILDING 1B
F.F. 180.00
BUILDING 1A
F.F. 187.50
GARAGE 1
BUILDING 2
F.F. 189.75
BUILDING 3
F.F. 188.51
BUILDING 4
F.F. 184.73
GARAGE 2
DRIVE B
DRIVE B
DRIVE C
DRIVE C
DRIVE C
DRIVE D
DRIVE D
DRIVE D
EV CHARGING STATIONS
PROPOSED FIRE HYDRANT
PROPOSED FIRE HYDRANT
PROPOSED ELECTRIC SERVICES (TYP.)
PROPOSED TRANSFORMER
PROPOSED ELECTRICAL TRANSFORMER
PROPOSED TRANSFORMER
AERATOR AIR COMPRESSOR UNIT
EXISTING FIRE HYDRANT AND WATER SERVICE TO REMAIN UNTIL NEW WATER MAINS ARE INSTALLED AND ACTIVATED
PORTION OF EXISTING MAIN TO BE REMOVED
EXISTING LATERAL TO BE REMOVED
SANITARY CLEANOUTS (TYP.)
6" DIP LATERALS INV. 174.00
MH 1.1 48" MANHOLE RIM:184.59 INV OUT:174.82
6" DIP LATERALS INV. 182.00
6" DIP FIRE SERVICE INV. 182.00
4" DIP DOMESTIC SERVICE INV. 182.00
MH 1.7 48" MANHOLE RIM:179.20 INV OUT:173.87
MH 1.6 (DOGHOUSE MH) RIM:177.36 INV:170.12
MH 1.5 48" MANHOLE RIM:178.14 INV IN:170.78 INV IN:170.70 INV OUT:170.50
MH 1.4 48" MANHOLE RIM:179.12 INV IN:171.20 INV OUT:171.00
6" DIP FIRE SERVICE INV. 174.00
4" DIP DOMESTIC SERVICE INV. 174.00
6" DIP LATERALS INV. 174.00
MH 1.2 48" MANHOLE RIM:182.91 INV IN:174.10 INV IN:174.27 INV OUT:173.90
MH 1.3 48" MANHOLE RIM:180.72 INV IN:173.30 INV OUT:173.10
MH 2.1 48" MANHOLE RIM:182.05 INV IN:175.40 INV OUT:175.20
INV OUT:178.35 (6"DIP) TO MH 2.1
INL 2A
INL 2
INL 5
INL 7
INL 8
INL 9
INL 10
INL 11
INL 12
INL 13
INL 14
INL 15
INL 20
INL 21
INL 22
INL 23
INL 24
INL 31
INL 41
INL 42
INL 43
INL 52
INL 53 DOGHOUSE
INL 71
INL 72
OS 2
OS 3
OS 4
FES 25
FES 32
FES 51
FES 62
FES 63

## UTILITY NOTES

1. HORIZONTAL SEPARATION– WHENEVER POSSIBLE, SEWERS SHOULD BE LAID AT LEAST 10 FEET, HORIZONTALLY, FROM ANY EXISTING OR PROPOSED WATER MAIN. SHOULD LOCAL CONDITIONS PREVENT A HORIZONTAL SEPARATION OF 10 FEET, A SEWER MAY BE LAID CLOSER THAN 10 FEET TO A WATER MAIN IF:
   a. IT IS LAID IN A SEPARATE TRENCH; OR IF
   b. IT IS LAID IN THE SAME TRENCH, WITH THE WATER MAIN LOCATED AT ONE SIDE OF A BENCH OF UNDISTURBED EARTH; AND IF
   c. IN EITHER CASE THE ELEVATION OF THE TOP (CROWN) OF THE SEWER IS AT LEAST 18 INCHES BELOW THE BOTTOM (INVERT) OF THE WATER MAIN.
2. VERTICAL SEPARATION– WHENEVER SEWERS MUST CROSS UNDER WATER MAINS, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE TOP OF THE SEWER IS AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. WHEN THE ELEVATION OF THE SEWER CANNOT BE VARIED TO MEET THE ABOVE REQUIREMENTS, THE WATER MAIN SHALL BE RELOCATED TO PROVIDE THIS SEPARATION, FOR A DISTANCE OF 10 FEET EXTENDING ON EACH SIDE OF THE SEWER. IF POSSIBLE, ONE LENGTH OF WATER MAIN SHOULD BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. THE WATER MAIN SHOULD BE CONSTRUCTED OF SLIP–ON OR MECHANICAL JOINT DUCTILE IRON PIPE OR PVC PIPE. BOTH SERVICES SHALL BE PRESSURE TESTED TO ASSURE WATERTIGHTNESS PRIOR TO BACKFILLING. WHERE LESS THAN 18 INCH VERTICAL SEPARATION EXISTS BETWEEN THE WATER AND SEWER LINE, THE SEWER LINE MAY BE CONCRETE ENCASED 10 FEET, MEASURED PERPENDICULARLY FROM THE WATER MAIN, ON EITHER SIDE OF THE WATER MAIN.
3. ALL MATERIALS USED AND ALL CONSTRUCTION METHODS EMPLOYED SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE STANDARD CONSTRUCTION AND MATERIAL SPECIFICATIONS FOR SANITARY SEWER EXTENSIONS FOR THE NEWTOWN, BUCKS COUNTY, JOINT MUNICIPAL AUTHORITY.
4. ALL WATER SYSTEM MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH NEWTOWN ARTESIAN WATER COMPANY STANDARD SPECIFICATIONS, LATEST REVISIONS. PIPE TO BE CL52 DUCTILE IRON, CEMENT LINED. ALL FITTINGS TO BE D.I.P. PER AWWA STANDARDS.
5. MAXIMUM ALLOWABLE DEFLECTION FOR 8" AND 6" PIPE SHALL NOT EXCEED 5° AND 7° RESPECTIVELY. IN SITUATIONS WHERE THIS LIMIT IS EXCEEDED, FITTINGS SHALL BE USED.
6. ALL TRENCHES SHALL BE SHORED IN ACCORDANCE WITH OSHA STANDARDS.
7. ALL WATER MAINS SHALL BE CLASS 52, DUCTILE IRON PIPE UNLESS NOTED OTHERWISE. A MINIMUM COVER OF 4 FEET SHALL BE MAINTAINED OVER WATER MAINS.
8. METALLIC DETECTOR TAPE SHALL BE PROVIDED OVER ALL PVC PIPE.
9. WATER AND SANITARY LATERAL DEPTH SHALL BE 5 FEET AT ALL CROSSINGS OF UTILITY TRENCHES (ELECTRIC, GAS, ETC.).
10. MEGA–LUG JOINT RESTRAINTS SHALL BE INSTALLED ON VALVES, FIRE HYDRANTS, BENDS, AND JOINTS WITHIN 30 FEET OF CHANGES IN ALIGNMENT. FITTINGS AND PIPE TO BE RESTRAINED WITH MEGA–LUGS REQUIRE MECHANICAL JOINTS.
11. SERVICE LINE TO THE PROPOSED BUILDING SHALL BE OF SIZE TO SUPPORT FIRE SERVICE DEMAND UNTIL DOMESTIC SERVICE LINE IS SPLIT OFF.
12. FIRE FLOW REQUIREMENTS SHALL MEET THE INTENT OF TABLE B105.1 OF THE I.F.C., 2006 EDITION.
13. A 3–FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS EXCEPT AS OTHERWISE REQUIRED OR APPROVED.
14. NEW BUILDINGS SHALL HAVE A SUPERVISED, MONITORED FIRE SPRINKLER AND WATERING SYSTEM.
15. GAS SERVICE AND LOCATION TO BE PROVIDED & INSTALLED BY PECO.
16. ELECTRIC SERVICE & LOCATION OF LINES TO BE PROVIDED BY PECO.
17. ALL ELECTRIC WORK SHALL BE DONE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, PECO, VERIZON, AND COMCAST REQUIREMENTS AND SPECIFICATIONS.
18. THE CONTRACTOR SHALL CONTACT THE NEWTOWN, BUCKS COUNTY, JOINT MUNICIPAL AUTHORITY ONE WEEK PRIOR TO SANITARY SEWER CONSTRUCTION, AND 72 HOURS PRIOR TO EXCAVATING NEAR AND CONNECTING INTO THE EXISTING SANITARY SEWER.
19. TESTABLE DOUBLE CHECK VALVES SHALL BE PROVIDED ON ALL DOMESTIC WATER AND FIRE SERVICE LINES IN ACCORDANCE WITH NEWTOWN ARTESIAN WATER COMPANY (NAWC) STANDARDS.
20. CONNECTION TO EXISTING MANHOLES SHOULD BE MADE BY CUTTING REQUIRED OPENING BY SUCH METHODS SO AS TO PREVENT CRACKING AND SPALLING CONCRETE. MAKE OPENINGS OF SUFFICIENT SIZE TO ACCOMMODATE PIPE WITH PVC WATERSTOP INSTALLED AND ONE–INCH ANNULAR GROUT SPACE. GROUT ANNULAR SPACE USING NON–SHRINK, NON–METALLIC GROUT.
21. IN ACCORDANCE WITH THE STANDARD CONSTRUCTION AND MATERIAL SPECIFICATIONS FOR SANITARY SEWER EXTENSIONS FOR THE NEWTOWN, BUCKS COUNTY JOINT MUNICIPAL AUTHORITY, SHOP DRAWINGS OF ALL MATERIALS TO BE USED IN THE CONSTRUCTION OF THE SANITARY SEWER SYSTEM MUST BE SUBMITTED.
22. PRIOR TO COMMENCING CONSTRUCTION, ALL MATERIALS TO BE USED ON THE JOB MUST BE INSPECTED BY A REPRESENTATIVE OF THE NEWTOWN, BUCKS COUNTY JOINT MUNICIPAL AUTHORITY. THIS INSPECTION IS TO ENSURE CONFORMANCE WITH THE APPROVED SHOP DRAWINGS.
23. ALL PROPOSED UTILITIES ARE TO BE INSTALLED UNDERGROUND.
24. PROPOSED RESIDENTIAL BUILDING SHALL BE PROVIDED WITH WATER METERS. PROJECT ARCHITECT/MEP ENGINEER TO PROVIDE DESIGN DETAIL IN THIS REGARD WITH BUILDING PERMIT DOCUMENTATION.
25. ELECTRIC AND POWER SERVICE TO BE COORDINATED WITH PECO BY MEP ENGINEER PRIOR TO FINAL PLAN APPROVAL.
26. PROPOSED GAS MAIN AND TIE–IN LOCATIONS TO EXISTING GAS MAIN FOR SCHEMATIC PURPOSES ONLY. EXACT LOCATION AND SPECIFICATION FOR GAS MAIN TO BE COORDINATED BY MEP ENGINEER.
27. ALL PROPOSED BUILDINGS SHALL HAVE 4" DOMESTIC WATER SERVICE AND FIRE PROTECTION SERVICE.
28. ALL MANHOLES NOT LOCATED IN PAVED AREAS MUST BE EQUIPPED WITH WATERTIGHT FRAMES AND COVERS.
29. SANITARY MANHOLES IN NON–IMPROVED AREAS MUST BE EXTENDED 18 INCHES ABOVE GRADE.
30. UPON COMPLETION OF PROPOSED DEVELOPMENT, THE SANITARY SEWER SYSTEM SHALL BE DEDICATED TO THE NEWTOWN, BUCKS COUNTY JOINT MUNICIPAL AUTHORITY. NEWTOWN, BUCKS COUNTY JOINT MUNICIPAL AUTHORITY SHALL BE THE OWNER AND RESPONSIBLE PARTY FOR OPERATION AND MAINTENANCE OF THE SANITARY SEWER SYSTEM.
31. ELECTRICAL TRANSFORMERS, WATER AND GAS METERING EQUIPMENT, COMMUNICATIONS AND SECURITY EQUIPMENT, AND OTHER UTILITY OR SERVICE EQUIPMENT SHALL BE INSTALLED IN UNDERGROUND VAULTS OR BOXES OR WITHIN A COMPLETELY ENCLOSED BUILDING.
32. BEFORE ANY WATER MAIN WORK IS STARTED, THE DEVELOPER MUST SIGN A MAIN EXTENSION AGREEMENT WITH THE NEWTOWN ARTESIAN WATER COMPANY (NAWC). THE CONTRACTOR SHALL COORDINATE ALL THE WATER WORK WITH THE NAWC. ALL PROPOSED CONSTRUCTION SHALL BE IN ACCORDANCE WITH NAWC SPECIFICATIONS. THE CONTRACTOR MUST CONTACT THE NAWC TWO WEEKS PRIOR TO WATER MAIN CONSTRUCTION, AND 72 HOURS PRIOR TO EXCAVATION NEAR THE WATER MAIN.
33. ALL WATER MAIN AND ALL RESIDENTIAL SERVICES TO BE DUCTILE IRON.
34. THE WATER MAIN SHALL BE CONSTRUCTED A MINUMUM FOUR FEET FROM FINAL GRADE. A MINIMUM OF 3 FEET CLEARANCE BETWEEN OTHER UTILITIES. A MINIMUM OF EIGHTEEN INCHES OF VERTICAL CLEARANCE MUST BE MAINTAINED BETWEEN WATER MAIN AND OTHER UTILITY CROSSINGS. WHERE CLEARANCE CANNOT BE MAINTAINED, THE WATER MAIN SHALL BE ENCASED IN CONCRETE 10 FEET ON EACH SIDE OF THE CROSSING. IN CASES WHERE, THE UTILITY IS A SANITARY OR STORM SEWER LATERAL AND THE CLEARANCE CANNOT BE MAINTAINED, THEN THE SEWER SHALL ALSO BE ENCASED. WATER MAIN TO BE INSTALLED IN ROADWAY TO MINIMIZE CONFLICT WITH OTHER UTILITIES WHEN APPLICABLE.
35. THE WATER MAIN SHALL BE LAID IN A FOUR INCH BED OF STONE, AND EIGHTEEN INCHES OF STONE BACKFILL ABOVE THE PIPE. FULL STONE BACKFILL FOR ALL EXISTING ROADWAY TRENCHES.
36. TRACE TAPE SHALL BE PLACED OVER THE WATER MAIN AND SERVICE CONNECTIONS.
37. THE WATER SERVICES SHALL HAVE A MINIMUM OF EIGHTEEN INCHES OF SCREENINGS AROUND AND OVER THE SERVICES.
38. THE RESIDENTIAL METERS ARE TO BE IN A METER PIT WITH A CURB STOP BEFORE THE METER PIT.
39. CURB BOXES AND PITS FOR WATER SERVICES SHALL NOT BE INSTALLED IN A SIDEWALK OR DRIVEWAY.
40. ALL DOMESTIC AND FIRE WATER SERVICES MUST HAVE A BACKFLOW DEVICE INSTALLED AFTER THE WATER METER AND BEFORE ANY WATER CONNECTIONS.
41. NO WATER SHALL BE OBTAINED FROM FIRE HYDRANTS. IF PURCHASING BULK WATER, IT CAN BE PURCHASED AT THE WATER COMPANY'S OFFICE.
42. BEFORE NAWC SIGNS OFF, APPROVES, OR TURNS ON WATER, THE FOLLOWING REQUIREMENTS NEED TO BE MET:
   a. NEGATIVE BACTERIOLOGICAL SAMPLE RESULTS
   b. PASSED PRESSURE TEST WITNESSED BY NAWC
   c. APPROVED FIRE SPRINKLER HEAD COUNT
   d. COMPLETION OF ANY PUNCH LIST
   e. ANY OTHER REQUIREMENTS MADE BY NAWC
43. WATER MAIN IS TO BE OWNED AND MAINTAINED BY 661 PENN STREET, LLC., AND IS NOT TO BE DEDICATED TO THE NEWTOWN ARTESIAN WATER COMPANY.
44. MEP ENGINEER FOR PROJECT IS :

    HOLSTEIN WHITE INC.
    3800 HORIZON BLVD. SUITE 503
    TREVOSE, PA 19053
    WWW.HOLSTEINWHITE.COM

## LEGEND

| | |
|---|---|
| ——— | PROPERTY / DEED LINE |
| — G — G — | EXISTING GAS MAIN |
| — W — W — | EXISTING WATER MAIN |
| — S — | EXISTING SANITARY SEWER |
| — C — C — | EXISTING ELECTRIC TRANSMISSION |
| — T — | EXISTING TELEPHONE LINE |
| — E — E — | EXISTING ELECTRIC TRANSMISSION |
| ═ ═ ═ | EXISTING STORM SEWER |
| ▬ | EXISTING STORM INLET |
| — E — E — | PROPOSED ELECTRIC MAIN |
| — W — W — | PROPOSED WATER MAIN |
| — S — S — | PROPOSED D.I.P. SANITARY SEWER |
| Ⓢ | PROPOSED SANITARY MANHOLE |
| ○ C.O. | PROPOSED SANITARY CLEANOUT |
| ▬ ▭ ▬ | PROPOSED STORM SEWER |
| ▨ | PROPOSED STORM INLET |
| (ST) | PROPOSED STORM MANHOLE |
| Ⓔ | PROPOSED ELECTRIC MANHOLE |
| ● | PROPOSED FIRE HYDRANT |
| ⬡ | EXISTING EMERGENCY SPILLWAY |

## UTILITIES

THE FOLLOWING COMPANIES WERE NOTIFIED BY THE PENNSYLVANIA ONE CALL SYSTEM (1–800–242–1776) AND REQUESTED TO MARK OUT UNDERGROUND FACILITIES AFFECTING AND SERVICING THIS SITE. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE UTILITY COMPANIES RESPONSE TO THIS REQUEST.

| | |
|---|---|
| NEWTOWN ARTESIAN WATER CO. | 215–968–6781 |
| NEWTOWN JOINT MUA | 215–968–4109 |
| NEWTOWN TOWNSHIP | 215–968–2800 |
| BUCKS COUNTY WATER & SEWER | 215–343–2536 |
| COMCAST CABLE | 215–345–9300 |
| PECO | 800–494–4000 |
| VERIZON | 215–968–0025 |

PENNSYLVANIA ONE CALL SYSTEM, INC.

925 Irwin Run Road
West Mifflin, Pennsylvania
15122 – 1078

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1–800–242–1776

NON–MEMBERS MUST BE CONTACTED DIRECTLY

PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

SERIAL NO. 20252790540

LOCATIONS OF EXISTING UNDERGROUND UTILITIES/FACILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM RECORDS, FIELD MARKOUTS BY UTILITY OWNERS, AND/OR ABOVE–GROUND OBSERVATION OF THE SITE. NO EXCAVATIONS WERE PERFORMED IN THE PREPARATION OF THESE DRAWINGS; THEREFORE ALL UTILITIES SHOWN SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH, AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES/FACILITIES TO BE PRESENT WHICH ARE NOT SHOWN ON THE DRAWINGS. ONLY THE VISIBLE LOCATIONS OF UNDERGROUND UTILITIES/FACILITIES AT THE TIME OF FIELD SURVEY SHALL BE CONSIDERED TRUE AND ACCURATE. COMPLETENESS OR ACCURACY OF UNDERGROUND UTILITIES/FACILITIES ARE NOT GUARANTEED BY GILMORE & ASSOCIATES INC.

ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES/FACILITIES PRIOR TO START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF P.L. 852, NO. 287 DECEMBER 10, 1974 AS LAST AMENDED ON OCT. 29, 2024 PENNSYLVANIA ACT 127.

GILMORE & ASSOCIATES INC. HAS OBTAINED A PA–ONE CALL SERIAL NUMBER AS NOTED HEREON FOR DESIGN PURPOSES ONLY.

50 0 50 100
SCALE IN FEET
1"=50'

C:\Autodesk Docs\ACCDocs\Gilmore and Associates\2500866_661_Penn_Street_Re–Dev\Project Files\2025\2500866\DESIGN\CAD\Prod_Dwgs\2500866_Utility Plan.dwg Layout: UTILITY PLAN Plotted By: rmonkres, on Wed Jul 29, 2026 at 8:25am

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES
CORPORATE HEADQUARTERS
65 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901 • (215) 345-4330 • www.gilmore-assoc.com

ONLY THOSE PLANS INCORPORATING THE PROFESSIONAL SEAL SHOULD BE CONSIDERED OFFICIAL AND RELIED UPON BY USER. THIS PLAN IS PREPARED SPECIFICALLY FOR THE CLIENT AND PROJECT DESIGNATED HEREON. MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT THE CONSENT OF GILMORE & ASSOCIATES, INC. IS PROHIBITED.

**NOT APPROVED FOR CONSTRUCTION**

RONALD G. MONKRES II
ENGINEER
603164–E
DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# *661 PENN STREET REDEVELOPMENT*

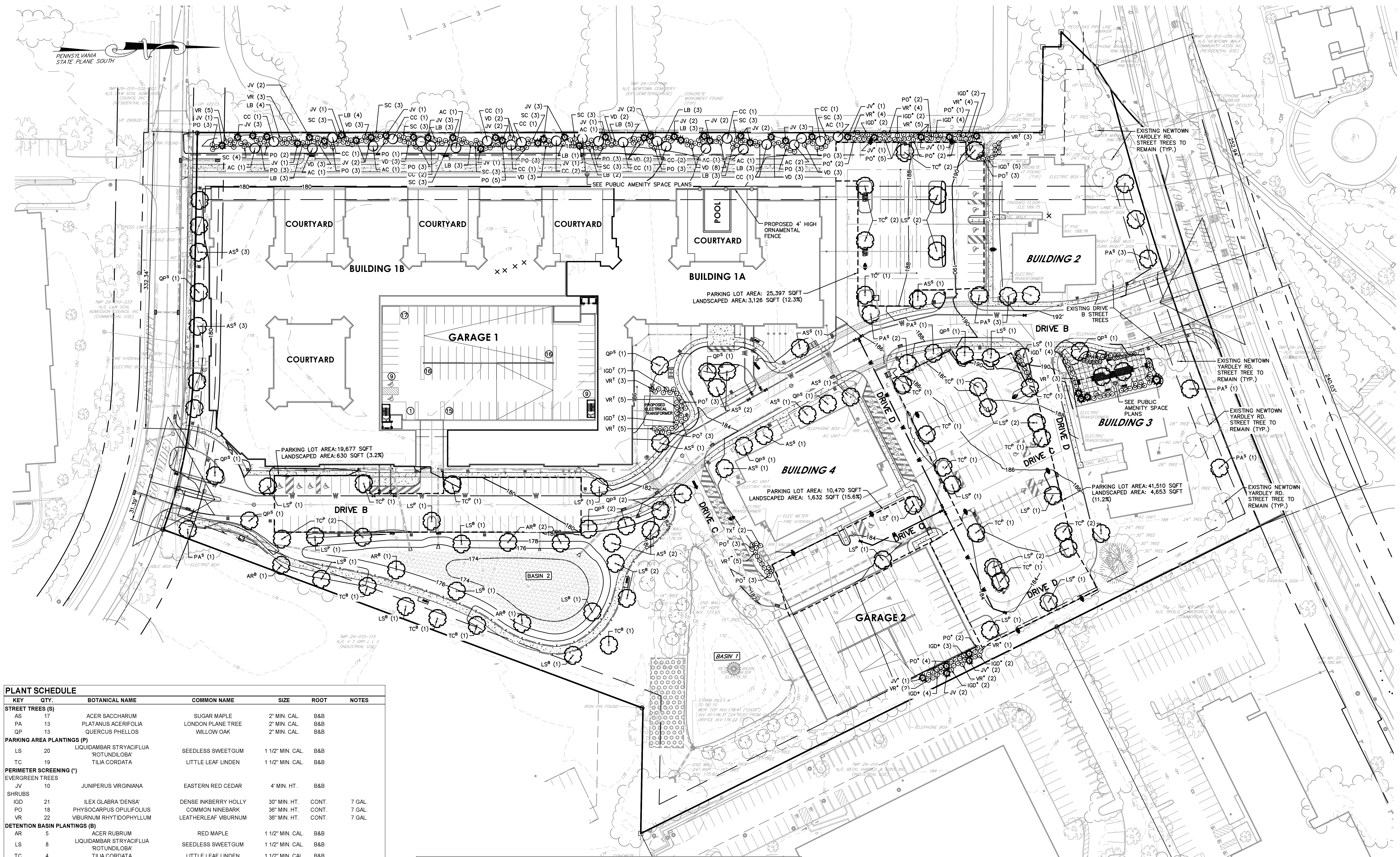
NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## UTILITY PLAN

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

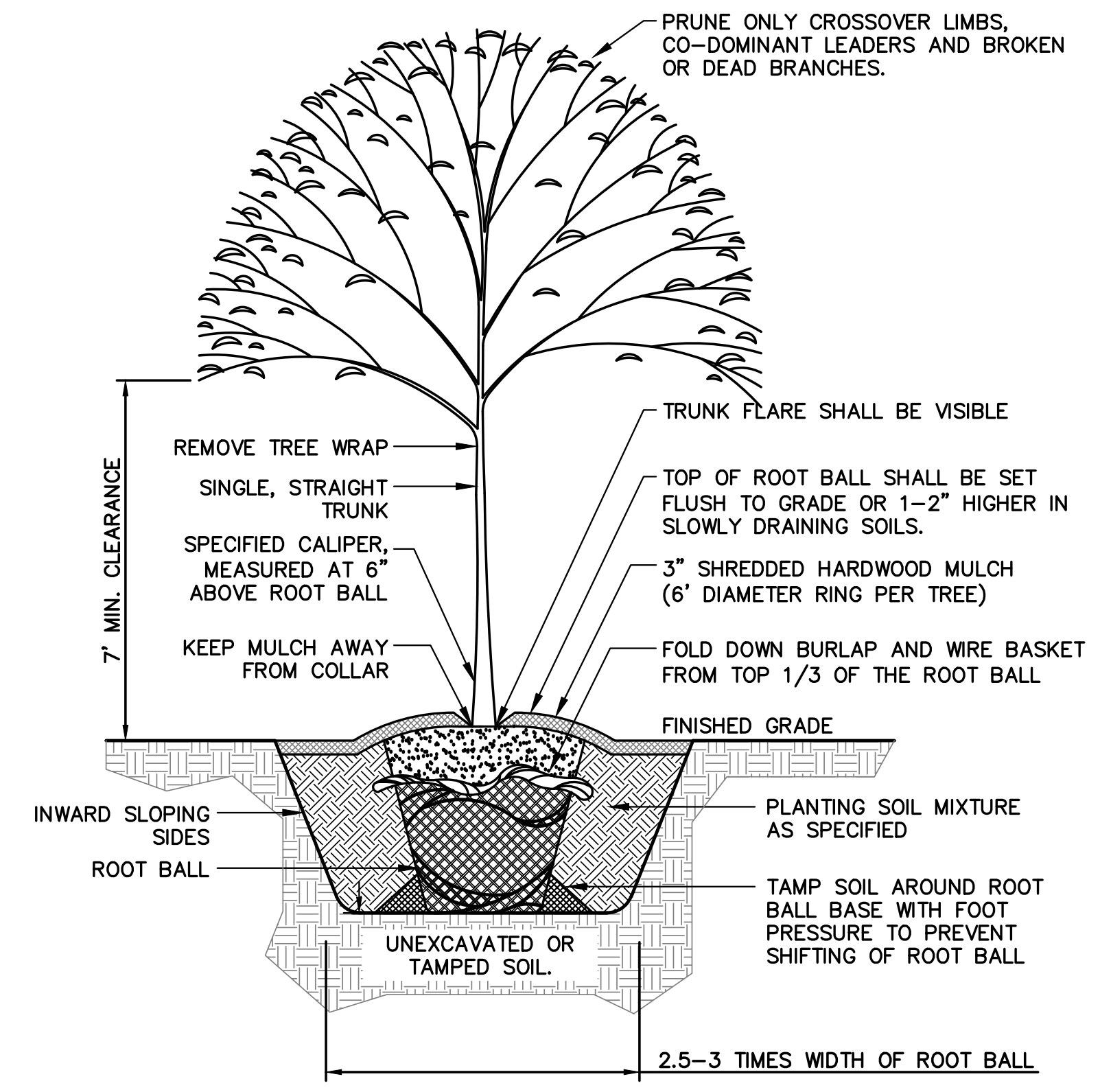
| | |
|---|---|
| PROJECT No.:<br>2500866 | |
| APPLICANTS INFO:<br>661 PENN STREET, LLC<br>209 PENN'S TRAIL<br>NEWTOWN, PA 18940<br>215–968–0600 | |
| MUNICIPAL FILE No.: | |
| TAX MAP PARCEL No.:<br>29–010–119–001 & 29–010–037 | |
| TOTAL AREA:<br>15.75 AC. | TOTAL LOTS:<br>2 |
| DATE:<br>01/21/26 | SCALE:<br>1"=50' |
| DRAWN BY:<br>GY/BH | CHECKED BY:<br>RGM |
| SHEET NO.:<br>11 OF 33 | |

C:\Autodesk Docs\ACCDocs\Gilmore and Associates\2500866_661_Penn_Street_Re-Dev\Project Files\2025\2500866\DESIGN\CAD\Prod_Dwgs\2500866_Landscape.dwg Layout: LANDSCAPING PLAN Plotted By: rmonkres, on Wed Jul 29, 2026 at 8:26am


PENNSYLVANIA STATE PLANE SOUTH
COURTYARD
COURTYARD
COURTYARD
COURTYARD
COURTYARD
POOL
BUILDING 1B
BUILDING 1A
PARKING LOT AREA: 25,397 SQFT
LANDSCAPED AREA: 3,126 SQFT (12.3%)
PROPOSED 4' HIGH ORNAMENTAL FENCE
SEE PUBLIC AMENITY SPACE PLANS
GARAGE 1
BUILDING 2
BUILDING 3
BUILDING 4
GARAGE 2
DRIVE B
DRIVE B
DRIVE C
DRIVE C
DRIVE D
DRIVE D
DRIVE D
PARKING LOT AREA: 19,677 SQFT
LANDSCAPED AREA: 630 SQFT (3.2%)
PARKING LOT AREA: 10,470 SQFT
LANDSCAPED AREA: 1,632 SQFT (15.6%)
PARKING LOT AREA: 41,510 SQFT
LANDSCAPED AREA: 4,653 SQFT (11.2%)
SEE PUBLIC AMENITY SPACE PLANS
PROPOSED ELECTRICAL TRANSFORMER
EXISTING DRIVE B STREET TREES
EXISTING NEWTOWN YARDLEY RD. STREET TREES TO REMAIN (TYP.)
EXISTING NEWTOWN YARDLEY RD. STREET TREE TO REMAIN (TYP.)
EXISTING NEWTOWN YARDLEY RD. STREET TREE TO REMAIN (TYP.)
EXISTING NEWTOWN YARDLEY RD. STREET TREE TO REMAIN (TYP.)
BASIN 1
BASIN 2
TMP 29-010-115 N/L V 7 GRP L L C (INDUSTRIAL USE)

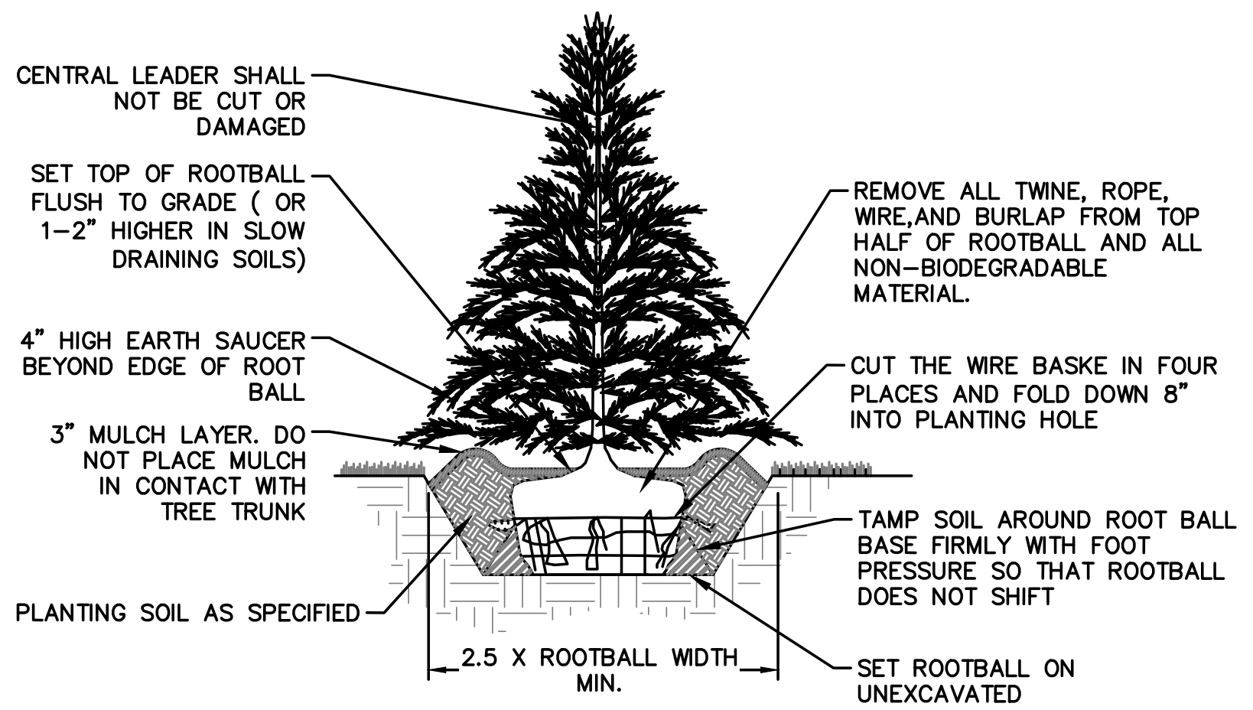
## LEGEND

- PROPERTY LINE
- PROPOSED CONTOUR
- PROJECT SITE BOUNDARY
- LIMIT OF DISTURBANCE
- EXISTING SANITARY EASEMENT
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED PERMANENT SWALE
- EXISTING WATER MAIN
- PROPOSED WATER MAIN
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- PROPOSED LANDSCAPING
- PROPOSED TEST PIT
- EXISTING SOIL BOUNDARIES
- PROPOSED RIP-RAP APRON
- PROPOSED BASIN LANDSCAPING
- PROPOSED STORM INLET
- POST-DEV DRAINAGE AREA BOUNDARY
- PERMANENT SWALE PATH WITH LABELS
- BMP FOOTPRINT
- PARKING LOT AREA
- EXISTING EMERGENCY SPILLWAY


PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS AND BROKEN OR DEAD BRANCHES.
7' MIN. CLEARANCE
REMOVE TREE WRAP
SINGLE, STRAIGHT TRUNK
SPECIFIED CALIPER, MEASURED AT 6" ABOVE ROOT BALL
KEEP MULCH AWAY FROM COLLAR
TRUNK FLARE SHALL BE VISIBLE
TOP OF ROOT BALL SHALL BE SET FLUSH TO GRADE OR 1-2" HIGHER IN SLOWLY DRAINING SOILS.
3" SHREDDED HARDWOOD MULCH (6' DIAMETER RING PER TREE)
FOLD DOWN BURLAP AND WIRE BASKET FROM TOP 1/3 OF THE ROOT BALL
FINISHED GRADE
INWARD SLOPING SIDES
ROOT BALL
PLANTING SOIL MIXTURE AS SPECIFIED
TAMP SOIL AROUND ROOT BALL BASE WITH FOOT PRESSURE TO PREVENT SHIFTING OF ROOT BALL
UNEXCAVATED OR TAMPED SOIL.
2.5-3 TIMES WIDTH OF ROOT BALL

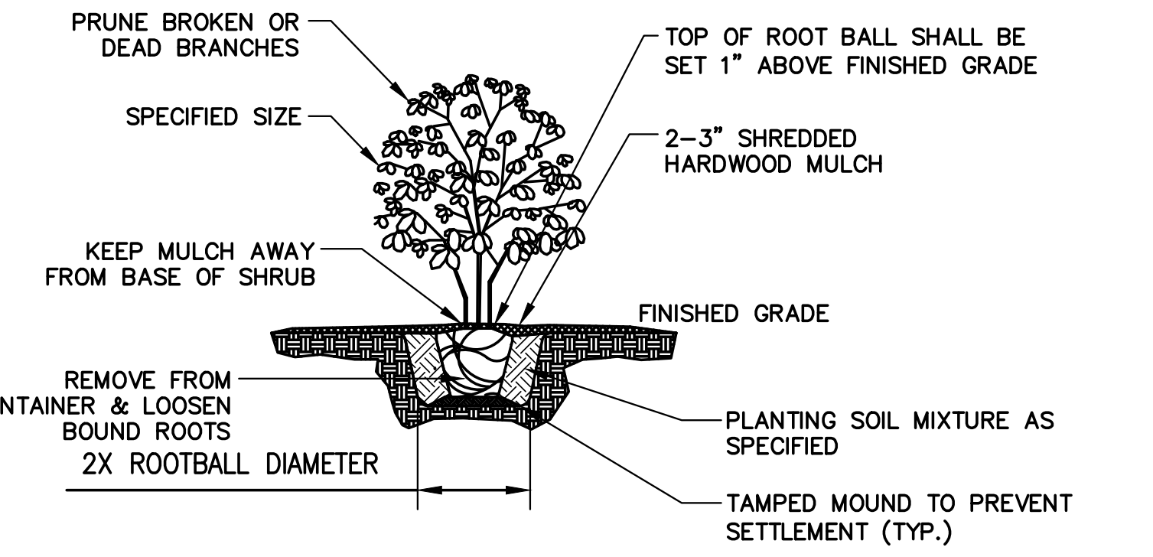
## 1 TREE PLANTING DETAIL

NOT TO SCALE


CENTRAL LEADER SHALL NOT BE CUT OR DAMAGED
SET TOP OF ROOTBALL FLUSH TO GRADE ( OR 1-2" HIGHER IN SLOW DRAINING SOILS)
4" HIGH EARTH SAUCER BEYOND EDGE OF ROOT BALL
3" MULCH LAYER. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK
PLANTING SOIL AS SPECIFIED
REMOVE ALL TWINE, ROPE, WIRE,AND BURLAP FROM TOP HALF OF ROOTBALL AND ALL NON-BIODEGRADABLE MATERIAL.
CUT THE WIRE BASKE IN FOUR PLACES AND FOLD DOWN 8" INTO PLANTING HOLE
TAMP SOIL AROUND ROOT BALL BASE FIRMLY WITH FOOT PRESSURE SO THAT ROOTBALL DOES NOT SHIFT
2.5 X ROOTBALL WIDTH MIN.
SET ROOTBALL ON UNEXCAVATED OR TAMPED SOIL

## 2 EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE


PRUNE BROKEN OR DEAD BRANCHES
SPECIFIED SIZE
KEEP MULCH AWAY FROM BASE OF SHRUB
REMOVE FROM CONTAINER & LOOSEN BOUND ROOTS
2X ROOTBALL DIAMETER
TOP OF ROOT BALL SHALL BE SET 1" ABOVE FINISHED GRADE
2-3" SHREDDED HARDWOOD MULCH
FINISHED GRADE
PLANTING SOIL MIXTURE AS SPECIFIED
TAMPED MOUND TO PREVENT SETTLEMENT (TYP.)

## 3 SHRUB PLANTING AND SHRUB BED PREPARATION

NOT TO SCALE

## PLANT SCHEDULE

| KEY | QTY. | BOTANICAL NAME | COMMON NAME | SIZE | ROOT | NOTES |
|---|---|---|---|---|---|---|
| **STREET TREES (S)** | | | | | | |
| AS | 17 | ACER SACCHARUM | SUGAR MAPLE | 2" MIN. CAL. | B&B | |
| PA | 13 | PLATANUS ACERIFOLIA | LONDON PLANE TREE | 2" MIN. CAL. | B&B | |
| QP | 13 | QUERCUS PHELLOS | WILLOW OAK | 2" MIN. CAL. | B&B | |
| **PARKING AREA PLANTINGS (P)** | | | | | | |
| LS | 20 | LIQUIDAMBAR STRYACIFLUA 'ROTUNDILOBA' | SEEDLESS SWEETGUM | 1 1/2" MIN. CAL. | B&B | |
| TC | 19 | TILIA CORDATA | LITTLE LEAF LINDEN | 1 1/2" MIN. CAL. | B&B | |
| **PERIMETER SCREENING (*)** | | | | | | |
| EVERGREEN TREES | | | | | | |
| JV | 10 | JUNIPERUS VIRGINIANA | EASTERN RED CEDAR | 4' MIN. HT. | B&B | |
| SHRUBS | | | | | | |
| IGD | 21 | ILEX GLABRA 'DENSA' | DENSE INKBERRY HOLLY | 30" MIN. HT. | CONT. | 7 GAL. |
| PO | 18 | PHYSOCARPUS OPULIFOLIUS | COMMON NINEBARK | 36" MIN. HT. | CONT. | 7 GAL. |
| VR | 22 | VIBURNUM RHYTIDOPHYLLUM | LEATHERLEAF VIBURNUM | 36" MIN. HT. | CONT. | 7 GAL. |
| **DETENTION BASIN PLANTINGS (B)** | | | | | | |
| AR | 5 | ACER RUBRUM | RED MAPLE | 1 1/2" MIN. CAL. | B&B | |
| LS | 8 | LIQUIDAMBAR STRYACIFLUA 'ROTUNDILOBA' | SEEDLESS SWEETGUM | 1 1/2" MIN. CAL. | B&B | |
| TC | 4 | TILIA CORDATA | LITTLE LEAF LINDEN | 1 1/2" MIN. CAL. | B&B | |
| **ELECTRICAL TRANSFORMER SCREENING (T)** | | | | | | |
| IGD | 16 | ILEX GLABRA 'DENSA' | DENSE INKBERRY HOLLY | 30" MIN. HT. | CONT. | 7 GAL. |
| PO | 12 | PHYSOCARPUS OPULIFOLIUS | COMMON NINEBARK | 36" MIN. HT. | CONT. | 7 GAL. |
| VR | 21 | VIBURNUM RHYTIDOPHYLLUM | LEATHERLEAF VIBURNUM | 36" MIN. HT. | CONT. | 7 GAL. |
| **SCREENING BUFFER** | | | | | | |
| ORNAMENTAL TREES | | | | | | |
| AC | 10 | AMELANCHIER CANADENSIS | SERVICEBERRY | 1 1/2" MIN. CAL. | B&B | SINGLE STEM |
| CC | 16 | CERCIS CANANDENSIS | EASTERN REDBUD | 1 1/2" MIN. CAL. | B&B | SINGLE STEM |
| EVERGREEN TREES | | | | | | |
| JV | 33 | JUNIPERUS VIRGINIANA | EASTERN RED CEDAR | 4' MIN. HT. | B&B | |
| SHRUBS | | | | | | |
| LB | 37 | LINDERA BENZOIN | SPICEBUSH | 36" MIN. HT. | CONT. | 7 GAL. |
| PO | 33 | PHYSOCARPUS OPULIFOLIUS | COMMON NINEBARK | 36" MIN. HT. | CONT. | 7 GAL. |
| SC | 33 | SAMBUCUS CANADENSIS | ELDERBERRY | 36" MIN. HT. | CONT. | 7 GAL. |
| VD | 32 | VIBURNUM DENTATUM | ARROWWOOD VIBURNUM | 36" MIN. HT. | CONT. | 7 GAL. |
| VR | 8 | VIBURNUM RHYTIDOPHYLLUM | LEATHERLEAF VIBURNUM | 36" MIN. HT. | CONT. | 7 GAL. |
| **SUPPLEMENTAL PLAZA PLANTINGS** | | | | | | |
| SHADE TREES | | | | | | |
| QP | 2 | QUERCUS PHELLOS | WILLOW OAK | 1 1/2" MIN. CAL. | B&B | |
| FLOWERING TREES | | | | | | |
| AC | 1 | AMALANCHIER CANADENSIS | SERVICEBERRY | 1 1/2" MIN. CAL. | B&B | |
| EVERGREEN TREES | | | | | | |
| JV | 3 | JUNIPERUS VIRGINIANA | EASTERN RED CEDAR | 4' MIN. HT. | B&B | |
| PoM | 1 | PICEA OMORIKA | SERBIAN SPRUCE | 8' MIN. HT | B&B | |
| SHRUBS | | | | | | |
| IGC | 16 | ILEX GLABRA 'COMPACTA' | COMPACT INKBERRY HOLLY | 24" MIN. HT. | CONT. | 5 GAL. |
| IGD | 6 | ILEX GLABRA 'DENSA' | DENSE INKBERRY HOLLY | 30" MIN. HT. | CONT. | 7 GAL. |
| PO | 8 | PHYSOCARPUS OPULIFOLIUS | COMMON NINEBARK | 36" MIN. HT. | CONT. | 7 GAL. |
| VR | 23 | VIBURNUM RHYTIDOPHYLLUM | LEATHERLEAF VIBURNUM | 36" MIN. HT. | CONT. | 7 GAL. |
| GROUNDCOVER | | | | | | |
| CP | 130 | CAREX PENNSYLVANICA | PENNSYLVANIA SEDGE | | LP50 | |

PENNSYLVANIA ONE CALL SYSTEM, INC.

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15122 – 1078

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SERIAL NO. 20252790540

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## COMPLIANCE CHART

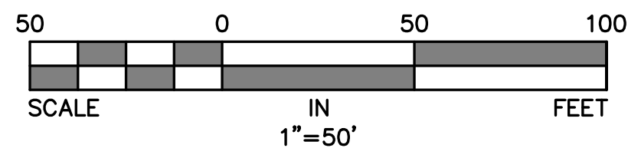
THE FOLLOWING CHART REPRESENTS THE MINIMUM QUANTITIES OF REQUIRED PLANT MATERIAL ACCORDING TO THE NEWTOWN TOWNSHIP ZONING AND SUBDIVISION AND LAND DEVELOPMENT ORDINANCES, AND TO DEMONSTRATE COMPLIANCE WITH THE SAME.

| **§22-529.3 - DETENTION BASIN LANDSCAPING** | REQUIRED | EXISTING | PROPOSED | TOTAL |
|---|---|---|---|---|
| REQUIREMENT:<br>1 1 1/2" CALIPER TREE PER 45' OF BASIN PERIMETER.<br>BASIN PERIMETER 741 LF = 17 TREES | 17 | 0 | 17 | 17 |
| PLANTED WITH TOWNSHIP APPROVED BASIN SEED MIXTURE. | | | | |
| **§22-529.4 - PARKING FACILITIES LANDSCAPING** | | | | |
| REQUIREMENT:<br>1 1 1/2" CALIPER TREE PER 5 PARKING SPACES IN SINGLE BAYS.<br>142 SINGLE BAY PARKING SPACES = 29 TREES | 29 | 0 | 29 | 29 |
| 1 1 1/2" CALIPER TREE PER 10 SPACES IN DOUBLE BAYS.<br>93 DOUBLE BAY PARKING SPACES = 10 TREES | 10 | 0 | 10 | 10 |
| 10% OF PARKING AREA LANDSCAPED.<br>TOTAL PARKING AREA : 97,056 SQFT<br>TOTAL LANDSCAPED AREA : 10,041 SQFT (10.3%) | 10% | 0% | 10.3% | 10.3% |
| PLANTED SCREEN PROVIDED ALONG PARKING AREA PERIMETER. | | | | |
| **§22-529.5 - MULTIPLE-FAMILY DEVELOPMENT PLANTING *FEE IN LIEU REQUESTED*** | | | | |
| REQUIREMENT:<br>2" CALIPER SHADE TREE -OR- 4-5' EVERGREEN - OR- 2 FLOWERING TREES -<br>OR- 8 2-3' SHRUBS | 308 TREES OR EQUAL PLANTINGS | 0 | PLAZA PLANTINGS | 3 SHADE<br>4 EVERGREEN<br>1 FLOWERING<br>44 SHRUBS |
| **§22-530 - STREET TREES** | | | | |
| REQUIREMENT:<br>ONE 2" CALIPER TREE PER 25' ALTERNATING SIDES OF STREET.<br>50' MAXIMUM SPACING ON ANY ONE SIDE.<br>DRIVE B (NON PARKING SECTIONS): 800 LF = 32 TREES<br>NEWTOWN-YARDLEY RD. (NOT INCLUDING DRIVE WIDTH): 493 LF = 10 TREES<br>PENN ST.(NOT INCLUDING DRIVE WIDTH): 364 LF = 8 TREES | 32<br>10<br>8<br>TOTAL: 50 | 2*<br>5*<br>0<br>TOTAL: 7 | 30<br>5<br>8<br>TOTAL: 43 | 50* |
| **§27-1003.C(3) - SCREENING BUFFER** | | | | |
| REQUIREMENT:<br>CONTINUOUS PLANTED VISUAL BARRIER BETWEEN COMMERCIAL AND RESIDENTIAL DISTRICT. | YES | NO | YES | COMPLIES |
| **§27-1003.C(3) - ELECTRICAL TRANFORMER SCREENING** | | | | |
| REQUIREMENT:<br>SCREENING FOR OUTDOOR MECHANICAL EQUIPMENT | YES | NO | YES | COMPLIES |

* WAIVER REQUESTED TO ALLOW FOR EXISTING TREES ALONG NEWTOWN YARDLEY ROAD TO BE UTILIZED TO CONTRIBUTE TOWARDS STREET TREE REQUIREMENTS, AS THE EXISTING TREES DUPLICATE THE REQUIREMENTS FOR STREET TREES.

## PLANTING NOTES:

1. PLANT MATERIAL SHALL BE FURNISHED AND INSTALLED AS INDICATED INCLUDING ALL LABOR, MATERIALS, PLANTS, EQUIPMENT, INCIDENTALS AND CLEAN UP.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTING AT CORRECT GRADES AND ALIGNMENT.
3. PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY, HAVE NORMAL GROWTH HABITS, WELL DEVELOPED BRANCHES, BE DENSELY FOLIATED, HAVE VIGOROUS ROOT SYSTEMS AND BE FREE FROM DEFECTS AND INJURIES.
4. CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF THE PLANT MATERIAL.
5. ALL PLANT MATERIAL SHALL BE GUARANTEED BY THE CONTRACTOR TO BE IN VIGOROUS GROWING CONDITION. PROVISIONS SHALL BE MADE FOR A GUARANTEE OF AT LEAST EIGHTEEN (18) MONTHS FOR TREES AND SHRUBS. REPLACEMENT SHALL BE MADE AT THE BEGINNING OF THE FIRST SUCCEEDING PLANTING SEASON. ALL REPLACEMENTS SHALL HAVE A GUARANTEE EQUAL TO THAT STATED ABOVE.
6. INSOFAR AS IT IS PRACTICABLE, PLANT MATERIALS SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL PROTECT STOCK NOT PLANTED. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE (3) DAY PERIOD AFTER DELIVERY.
7. QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS, AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH THE 1990 "AMERICAN STANDARD FOR NURSERY STOCK" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMAN INC., LATEST EDITION.
8. ALL PLANTS SHALL BE PLANTED IN TOPSOIL THAT IS THOUROUGHLY WATERED AND TAMPED AS BACKFILLING PROGRESSES. NOTHING BUT SUITABLE TOPSOIL, FREE OF DRY SOD, STIFF CLAY, LITTER, ETC., SHALL BE USED FOR PLANTING.
9. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE.
10. SET ALL PLANTS PLUMB AND STRAIGHT. SET AT SUCH A LEVEL THAT AFTER SETTLEMENT, A NORMAL OR NATURAL RELATIONSHIP TO THE CROWN OF THE PLANT WITH THE GROUND SURFACE WILL BE ESTABLISHED. LOCATE PLANT IN THE CENTER OF THE PLANTING PIT.
11. EACH TREE AND SHRUB SHALL BE PRUNED IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICE TO PRESERVE NATURAL CHARACTER OF THE PLANT. PRUNING SHALL BE DONE WITH CLEAN, SHARP TOOLS.
12. LANDSCAPING CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES PRIOR TO PLACEMENT OF LANDSCAPE MATERIAL. CONTRACTOR SHALL NOT PLACE LANDSCAPING MATERIAL ON TOP OF UTILITY PIPING.
13. CLEARANCE HEIGHT OF BRANCHING ON ALL SHADE TREES SHALL BE 6'-8".
14. PLAN QUANTITIES SHALL SUPERCEDE PLANT LIST.



**GILMORE & ASSOCIATES, INC.**
ENGINEERING & CONSULTING SERVICES
CORPORATE HEADQUARTERS
65 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901 • (215) 345-4330 • www.gilmore-assoc.com

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**NOT APPROVED FOR CONSTRUCTION**

CHRISTOPHER E. GREEN
REGISTRATION NUMBER LA002522

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

***661 PENN STREET REDEVELOPMENT***

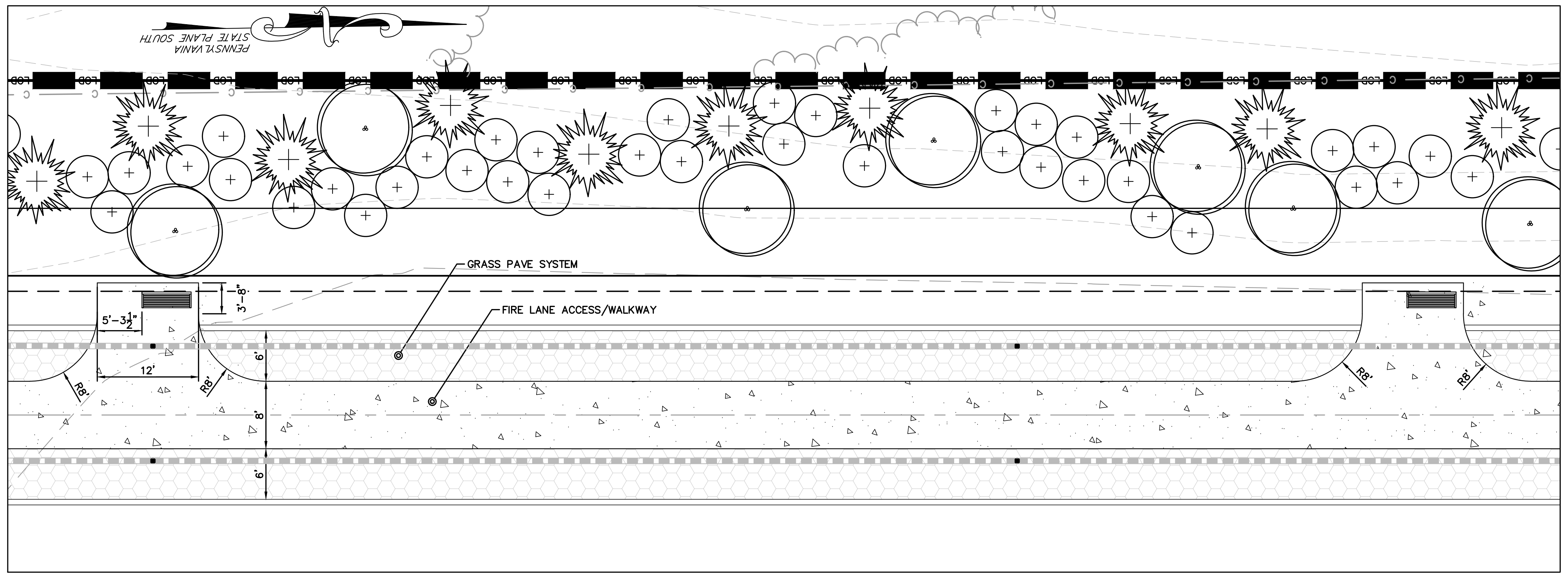
NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

LANDSCAPING PLAN

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

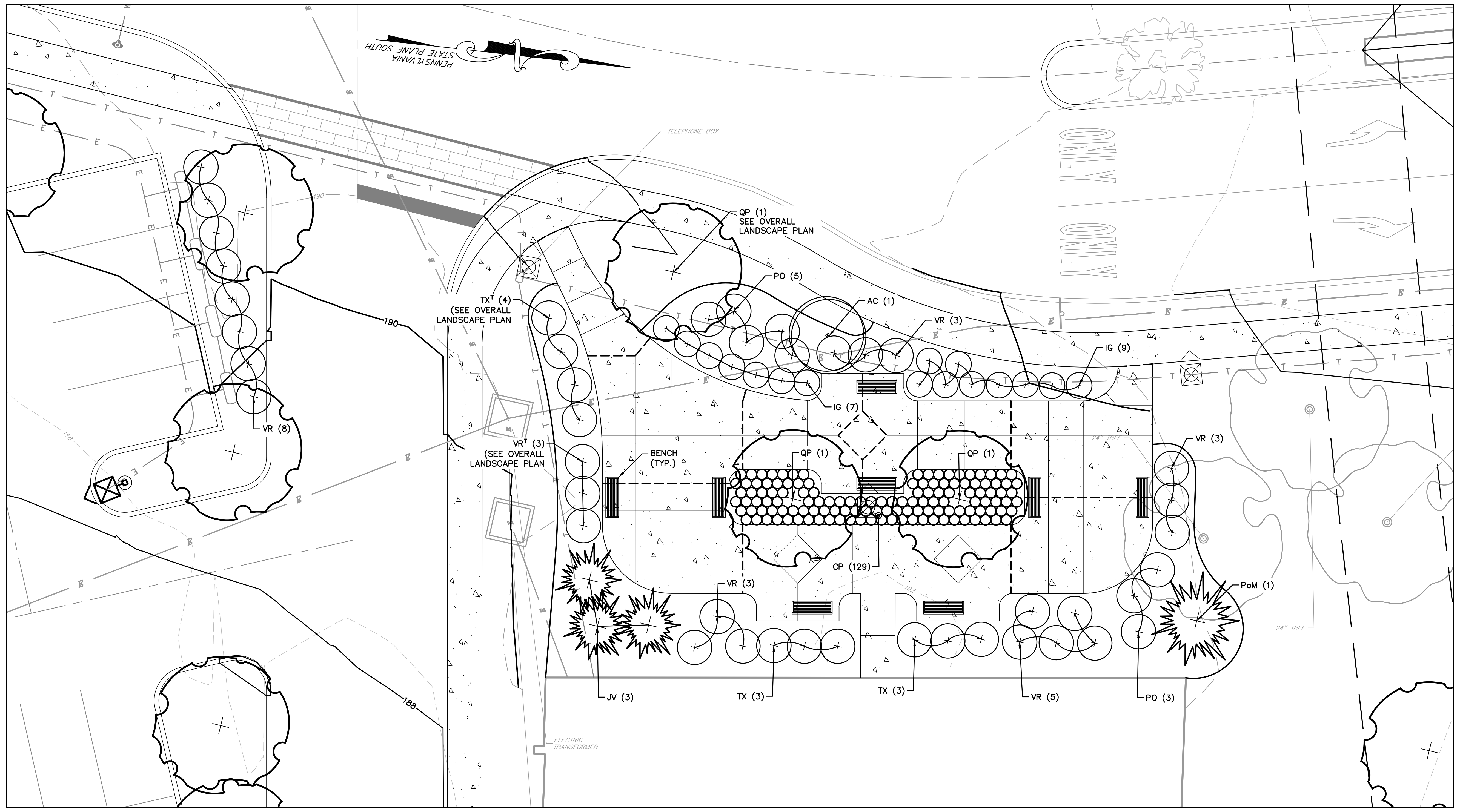
| | |
|---|---|
| PROJECT No.:<br>2500866 | |
| APPLICANTS INFO:<br>661 PENN STREET, LLC<br>209 PENN'S TRAIL<br>NEWTOWN, PA 18940<br>215-968-0600 | |
| MUNICIPAL FILE No.: | |
| TAX MAP PARCEL No.:<br>29-010-119-001 & 29-010-037 | |
| TOTAL AREA:<br>15.75 AC. | TOTAL LOTS:<br>2 |
| DATE:<br>01/21/26 | SCALE:<br>1"=50' |
| DRAWN BY:<br>GY/BH | CHECKED BY:<br>RGM |

SHEET NO.:
12 OF 33



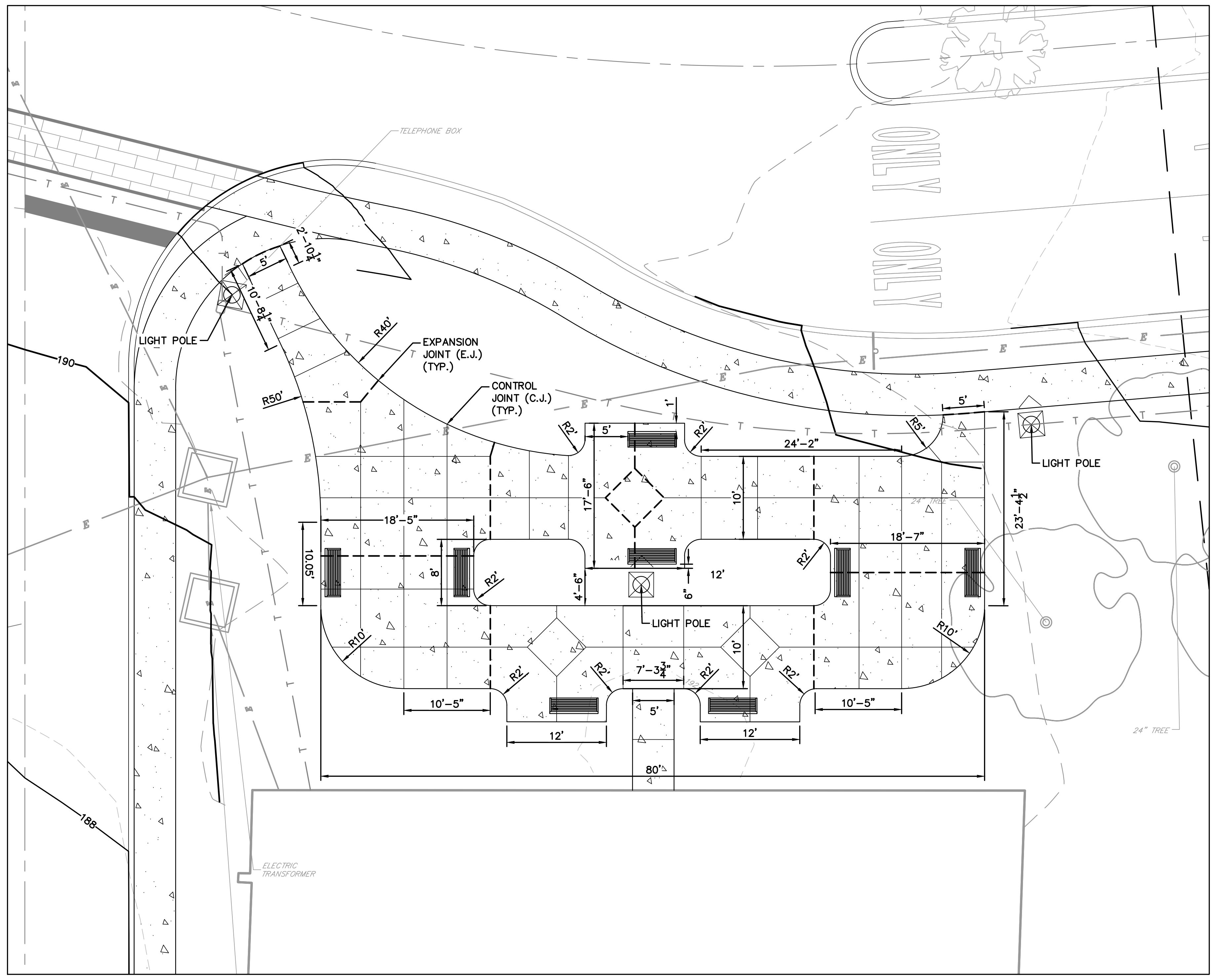
## FIRE LANE ACCESS/WALKWAY

SCALE: 1"=10'-0"



## NORTH ENTRANCE PLAZA LAYOUT AND MATERIALS PLAN

SCALE: 1"=10'-0"

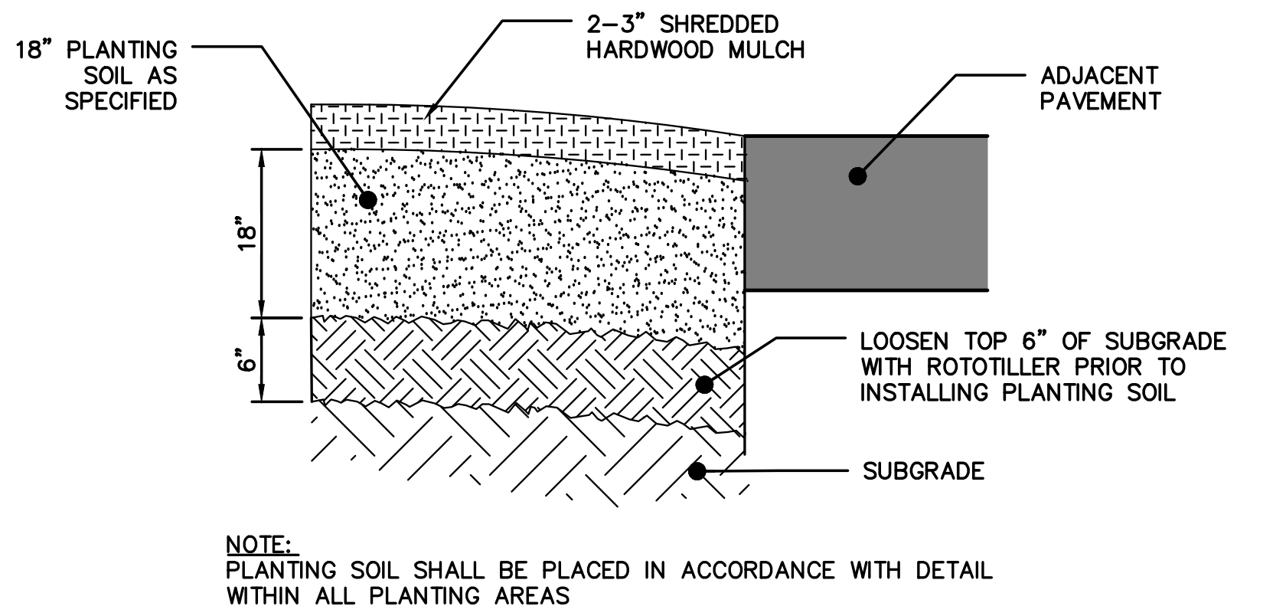


## NORTH ENTRANCE PLAZA DIMENSIONS PLAN

SCALE: 1"=10'-0"

**SUPPLEMENTAL PLAZA PLANTINGS**

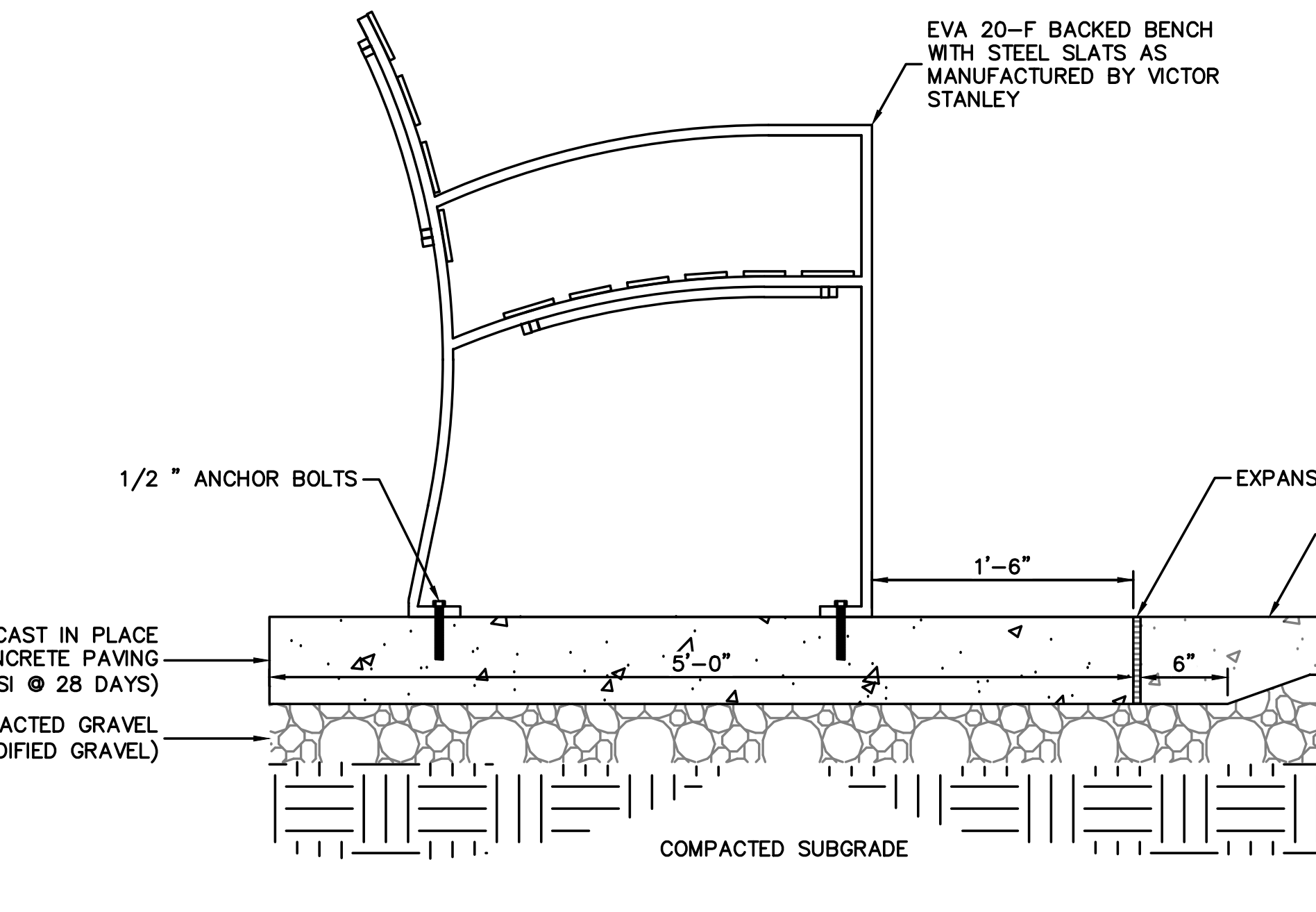
| | | | | | | |
|---|---|---|---|---|---|---|
| SHADE TREES | | | | | | |
| RP | 2 | ROBINA PSUEDOACACIA INERMIS | THORNLESS BLACK LOCUST | 1 1/2" MIN. CAL. | B&B | |
| FLOWERING TREES | | | | | | |
| AC | 1 | AMALANCHIER CANADENSIS | SERVICEBERRY | 1 1/2" MIN. CAL. | B&B | |
| EVERGREEN TREES | | | | | | |
| JV | 3 | JUNIPERUS VIRGINIANA | EASTERN RED CEDAR | 4' MIN. HT. | B&B | |
| PoM | 1 | PICEA OMORIKA | SERBIAN SPRUCE | 8' MIN. HT | B&B | |
| SHRUBS | | | | | | |
| IG | 16 | ILEX GRABRA 'COMPACTA' | COMPACT INKBERRY HOLLY | 24" MIN. HT. | CONT. | 5 GAL. |
| PO | 8 | PHYSOCARPUS OPULIFOLIUS | COMMON NINEBARK | 36" MIN. HT. | CONT. | 7 GAL. |
| TX | 6 | TAXUS X HICKSII | HICKS YEW | 36" MIN. HT. | CONT. | 7 GAL. |
| VR | 23 | VIBURNUM RHYTIDOPHYLLUM | LEATHERLEAF VIBURNUM | 36" MIN. HT. | CONT. | 7 GAL. |


18" PLANTING SOIL AS SPECIFIED
2-3" SHREDDED HARDWOOD MULCH
ADJACENT PAVEMENT
18"
6"
LOOSEN TOP 6" OF SUBGRADE WITH ROTOTILLER PRIOR TO INSTALLING PLANTING SOIL
SUBGRADE

NOTE:
PLANTING SOIL SHALL BE PLACED IN ACCORDANCE WITH DETAIL WITHIN ALL PLANTING AREAS

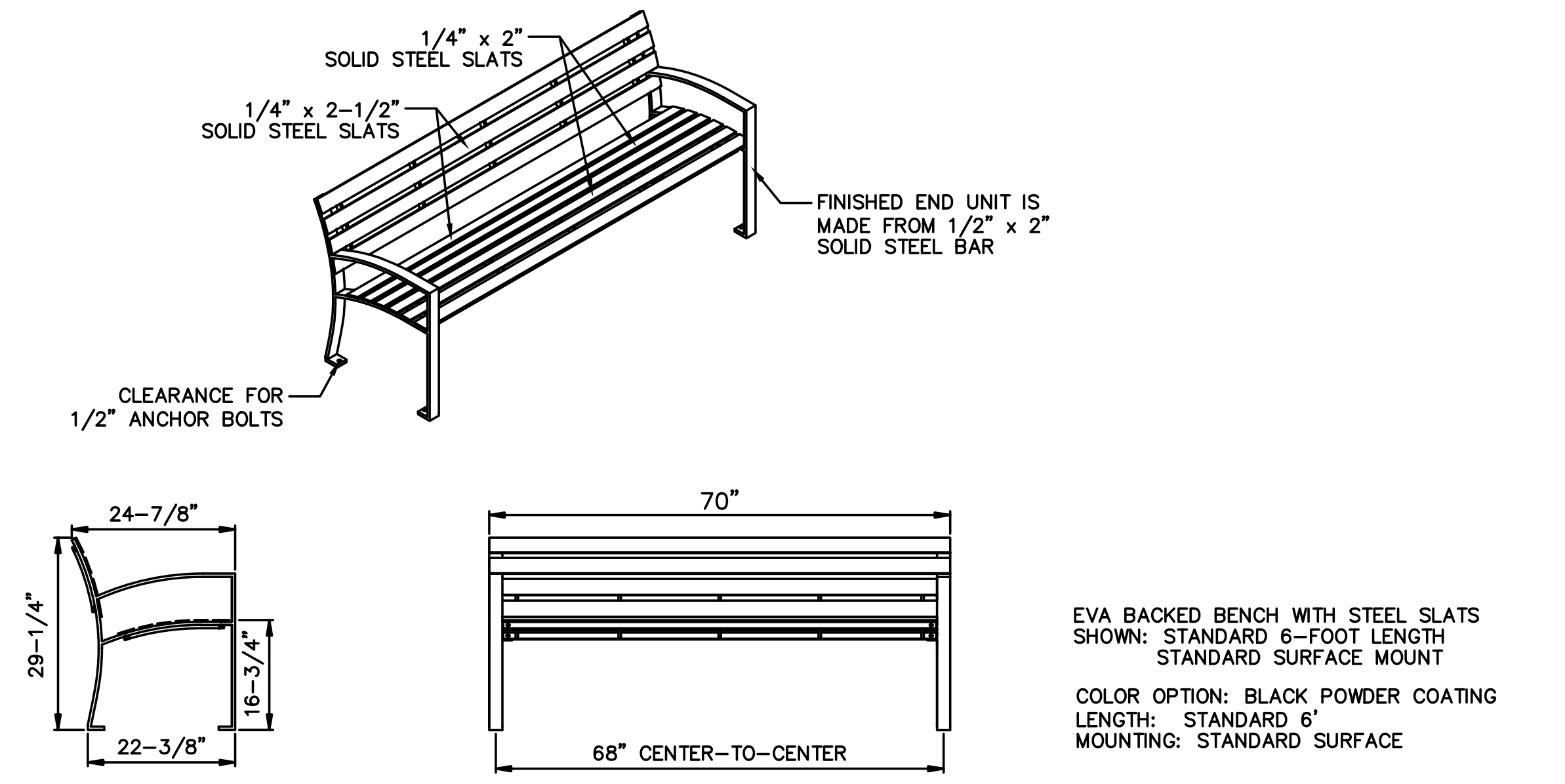
## PLANTING BED PREPARATION DETAIL

NOT TO SCALE


EVA 20-F BACKED BENCH WITH STEEL SLATS AS MANUFACTURED BY VICTOR STANLEY
1/2 " ANCHOR BOLTS
EXPANSION JOINT
STANDARD CONCRETE PAVING
1'-6"
6" CAST IN PLACE CONCRETE PAVING (3,600 PSI @ 28 DAYS)
5'-0"
6"
4" COMPACTED GRAVEL (2A MODIFIED GRAVEL)
COMPACTED SUBGRADE

## CONCRETE PAD AND BENCH SURFACE MOUNTING

NOT TO SCALE


1/4" x 2" SOLID STEEL SLATS
1/4" x 2-1/2" SOLID STEEL SLATS
FINISHED END UNIT IS MADE FROM 1/2" x 2" SOLID STEEL BAR
CLEARANCE FOR 1/2" ANCHOR BOLTS
24-7/8"
29-1/4"
16-3/4"
22-3/8"
70"
68" CENTER-TO-CENTER

EVA BACKED BENCH WITH STEEL SLATS
SHOWN: STANDARD 6-FOOT LENGTH
STANDARD SURFACE MOUNT

COLOR OPTION: BLACK POWDER COATING
LENGTH: STANDARD 6'
MOUNTING: STANDARD SURFACE

NOTES:
1. DRAWINGS NOT TO SCALE. DO NOT SCALE DRAWINGS.
2. ALL FABRICATED METAL COMPONENTS ARE STEEL SHOTBLASTED, ETCHED, PHOSPHATIZED, PREHEATED, AND ELECTROSTATICALLY POWDER-COATED WITH T.G.I.C. POLYESTER POWDER COATINGS. PRODUCTS ARE FULLY CLEANED AND PRETREATED, PREHEATED AND COATED WHILE HOT TO FILL CREVICES AND BUILD COATING FILM. COATED PARTS ARE THEN FULLY CURED TO COATING MANUFACTURER'S SPECIFICATIONS. THE THICKNESS OF THE RESULTING FINISH AVERAGES 8-10 MILS (200-250 MICRONS).
3. IT IS NOT RECOMMENDED TO LOCATE ANCHOR BOLTS UNTIL BENCH IS IN PLACE. THIS VICTOR STANLEY, INC. PRODUCT MUST BE PERMANENTLY AFFIXED TO THE GROUND. CONSULT YOUR LOCAL CODES FOR REGULATIONS.
4. ANCHOR BOLTS NOT PROVIDED BY VICTOR STANLEY, INC.
5. FOR HIGH SALT ABUSIVE CLIMATES, HOT-DIP GALVANIZING BEFORE POWDER COATING IS AVAILABLE. HOT-DIP GALVANIZING IS PERFORMED FOR VICTOR STANLEY, INC. BY AN EXPERIENCED QUALIFIED FIRM TO WHICH PRODUCTS ARE SHIPPED FOR GALVANIZING. HOT-DIP GALVANIZING INCLUDES AN AGGRESSIVE PRE-TREATMENT AND IMMERSION IN A TANK OF CHARGED LIQUID ZINC AT OR AROUND 860°F (460°C). THE RESULTING SURFACE IS RESISTANT TO RUST BUT HAS SOME UNEVENNESS RESULTING FROM THE BONDING OF THE ZINC TO THE STEEL SURFACE. AS A RESULT, THE POWDER-COATING SURFACE FINISH OVER THAT GALVANIZED SURFACE MAY EXHIBIT BUMPS, UNEVENNESS, AND MAY NOT BE AS SMOOTH AS THE STANDARD FINISH; THIS UNEVEN AND INCONSISTENT FINISH IS NORMAL FOR GALVANIZING. CONTACT MANUFACTURER FOR DETAILS.
6. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE. CONTACT MANUFACTURER FOR DETAILS.
7. THIS PRODUCT IS SHIPPED PARTIALLY UNASSEMBLED.

## EVA-20-F REVERIE

C:\Autodesk Docs\ACCDocs\Gilmore and Associates\2500866_661_Penn_Street_Re-Dev\Project Files\2025\2500866\DESIGN\CAD\Prod_Dwgs\2500866_Landscape.dwg Layout: Public Amenity Plans Plotted By: rmonkres, on Wed Jul 29, 2026 at 8:26am

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES
CORPORATE HEADQUARTERS
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| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# *661 PENN STREET REDEVELOPMENT*

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## PUBLIC AMENITY PLANS

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.: 2500866

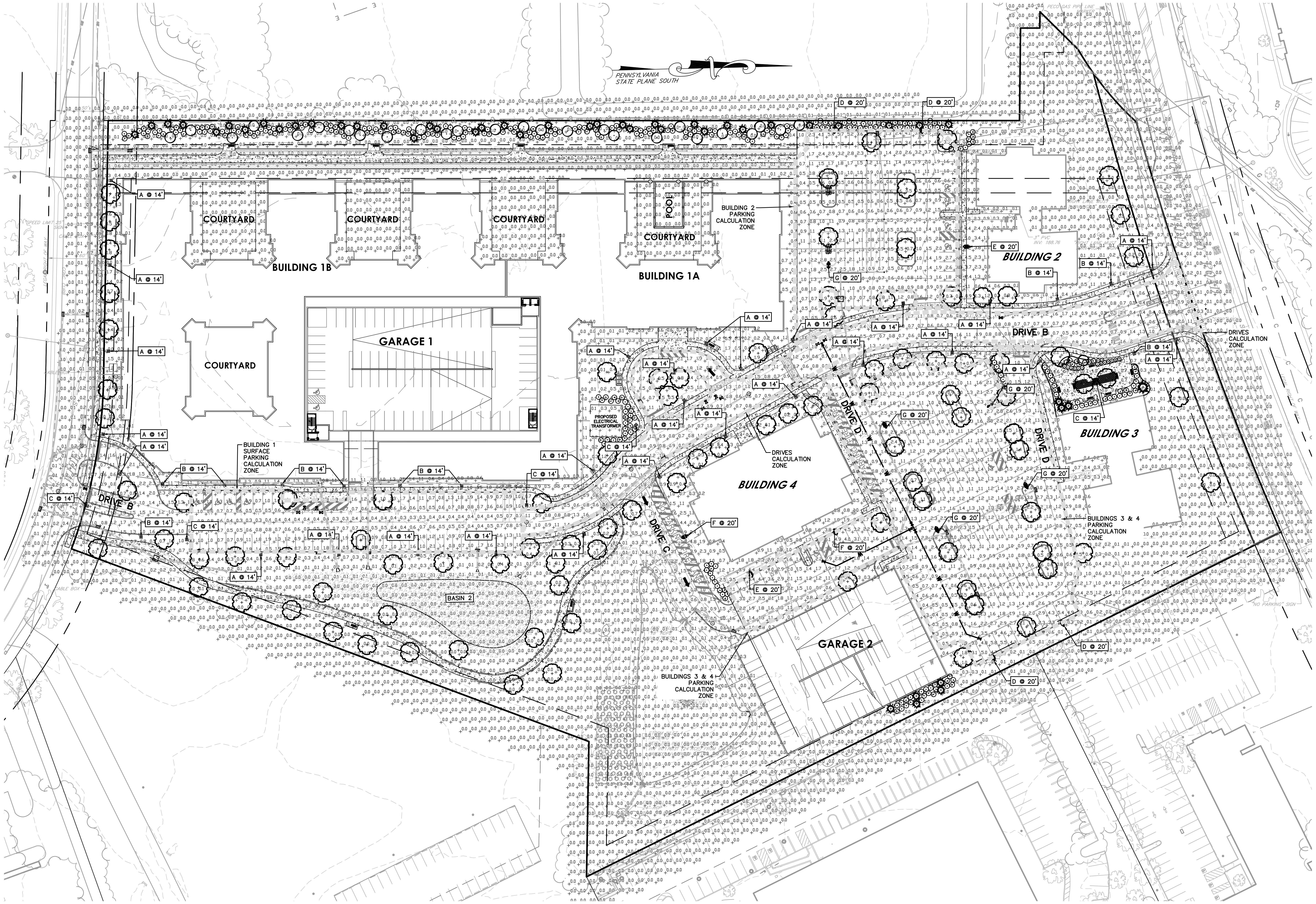
OWNERS INFO:
OWNER NAME
OWNER ADDRESS
CITY, STATE, ZIP
OWNER PHONE

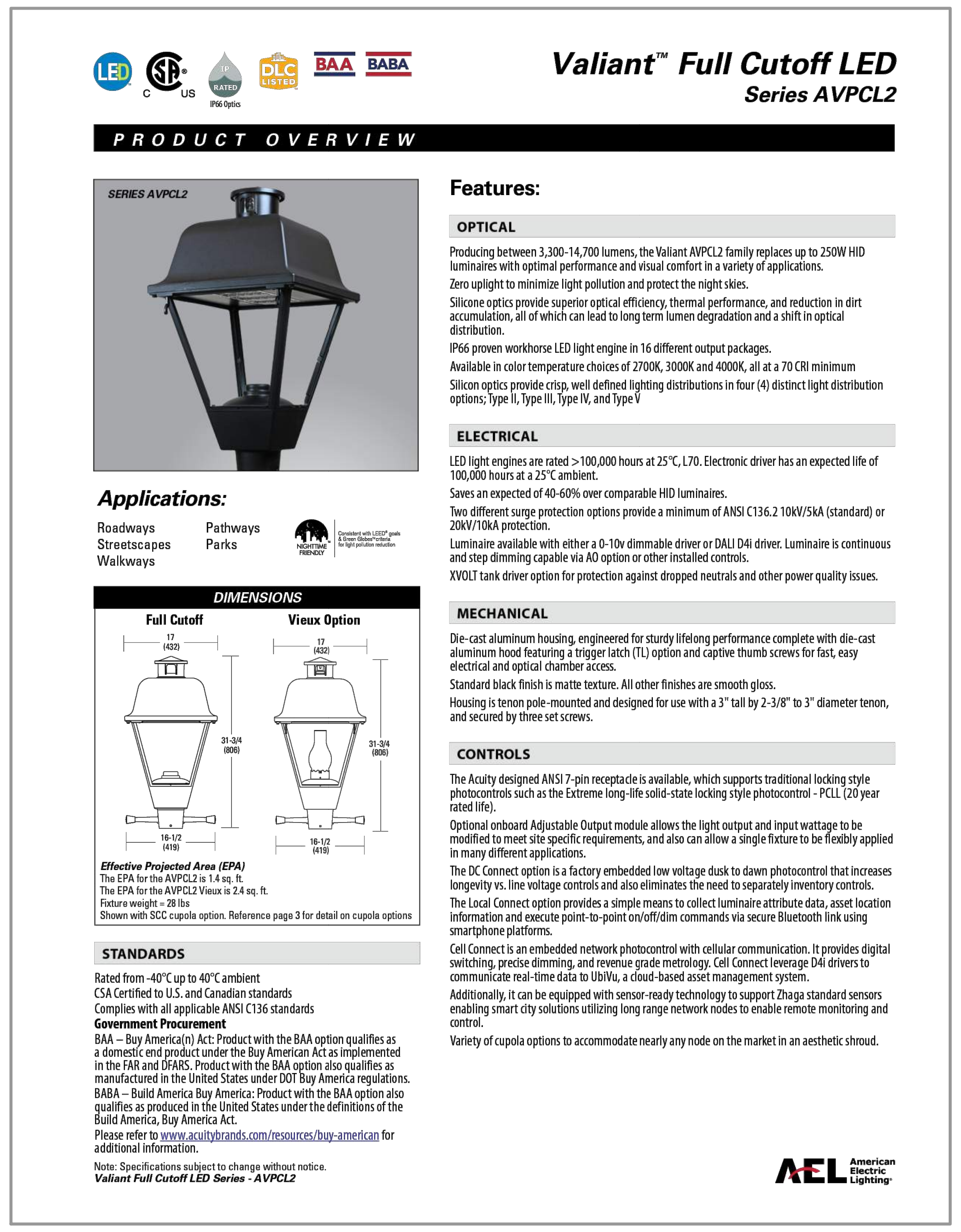
MUNICIPAL FILE No.:

TAX MAP PARCEL No.: 29-010-119-001 & 29-010-037

| | |
|---|---|
| TOTAL AREA: 15.75 AC. | TOTAL LOTS: 2 |
| DATE: 01/21/26 | SCALE: AS NOTED |
| DRAWN BY: GY/BH | CHECKED BY: RGM |

SHEET NO.: 13 OF 33





# Valiant™ Full Cutoff LED
## Series AVPCL2

PRODUCT OVERVIEW

SERIES AVPCL2

**Features:**

**OPTICAL**

Producing between 3,300-14,700 lumens, the Valiant AVPCL2 family replaces up to 250W HID luminaires with optimal performance and visual comfort in a variety of applications.

Zero uplight to minimize light pollution and protect the night skies.

Silicone optics provide superior optical efficiency, thermal performance, and reduction in dirt accumulation, all of which can lead to long term lumen degradation and a shift in optical distribution.

IP66 proven workhorse LED light engine in 16 different output packages.

Available in color temperature choices of 2700K, 3000K and 4000K, all at a 70 CRI minimum

Silicon optics provide crisp, well defined lighting distributions in four (4) distinct light distribution options; Type II, Type III, Type IV, and Type V

**ELECTRICAL**

LED light engines are rated >100,000 hours at 25°C, L70. Electronic driver has an expected life of 100,000 hours at a 25°C ambient.

Saves an expected of 40-60% over comparable HID luminaires.

Two different surge protection options provide a minimum of ANSI C136.2 10kV/5kA (standard) or 20kV/10kA protection.

Luminaire available with either a 0-10v dimmable driver or DALI D4i driver. Luminaire is continuous and step dimming capable via AO option or other installed controls.

XVOLT tank driver option for protection against dropped neutrals and other power quality issues.

**MECHANICAL**

Die-cast aluminum housing, engineered for sturdy lifelong performance complete with die-cast aluminum hood featuring a trigger latch (TL) option and captive thumb screws for fast, easy electrical and optical chamber access.

Standard black finish is matte texture. All other finishes are smooth gloss.

Housing is tenon pole-mounted and designed for use with a 3" tall by 2-3/8" to 3" diameter tenon, and secured by three set screws.

**CONTROLS**

The Acuity designed ANSI 7-pin receptacle is available, which supports traditional locking style photocontrols such as the Extreme long-life solid-state locking style photocontrol - PCLL (20 year rated life).

Optional onboard Adjustable Output module allows the light output and input wattage to be modified to meet site specific requirements, and also can allow a single fixture to be flexibly applied in many different applications.

The DC Connect option is a factory embedded low voltage dusk to dawn photocontrol that increases longevity vs. line voltage controls and also eliminates the need to separately inventory controls.

The Local Connect option provides a simple means to collect luminaire attribute data, asset location information and execute point-to-point on/off/dim commands via secure Bluetooth link using smartphone platforms.

Cell Connect is an embedded network photocontrol with cellular communication. It provides digital switching, precise dimming, and revenue grade metrology. Cell Connect leverage D4i drivers to communicate real-time data to UbiVu, a cloud-based asset management system.

Additionally, it can be equipped with sensor-ready technology to support Zhaga standard sensors enabling smart city solutions utilizing long range network nodes to enable remote monitoring and control.

Variety of cupola options to accommodate nearly any node on the market in an aesthetic shroud.

**Applications:**

Roadways
Streetscapes
Walkways
Pathways
Parks

NIGHTTIME FRIENDLY — Consistent with LEED® goals & Green Globes™ criteria for light pollution reduction

**DIMENSIONS**

Full Cutoff — 17 (432); 31-3/4 (806); 16-1/2 (419)
Vieux Option — 17 (432); 31-3/4 (806); 16-1/2 (419)

***Effective Projected Area (EPA)***
The EPA for the AVPCL2 is 1.4 sq. ft.
The EPA for the AVPCL2 Vieux is 2.4 sq. ft.
Fixture weight = 28 lbs
Shown with SCC cupola option. Reference page 3 for detail on cupola options

**STANDARDS**

Rated from -40°C up to 40°C ambient
CSA Certified to U.S. and Canadian standards
Complies with all applicable ANSI C136 standards

**Government Procurement**

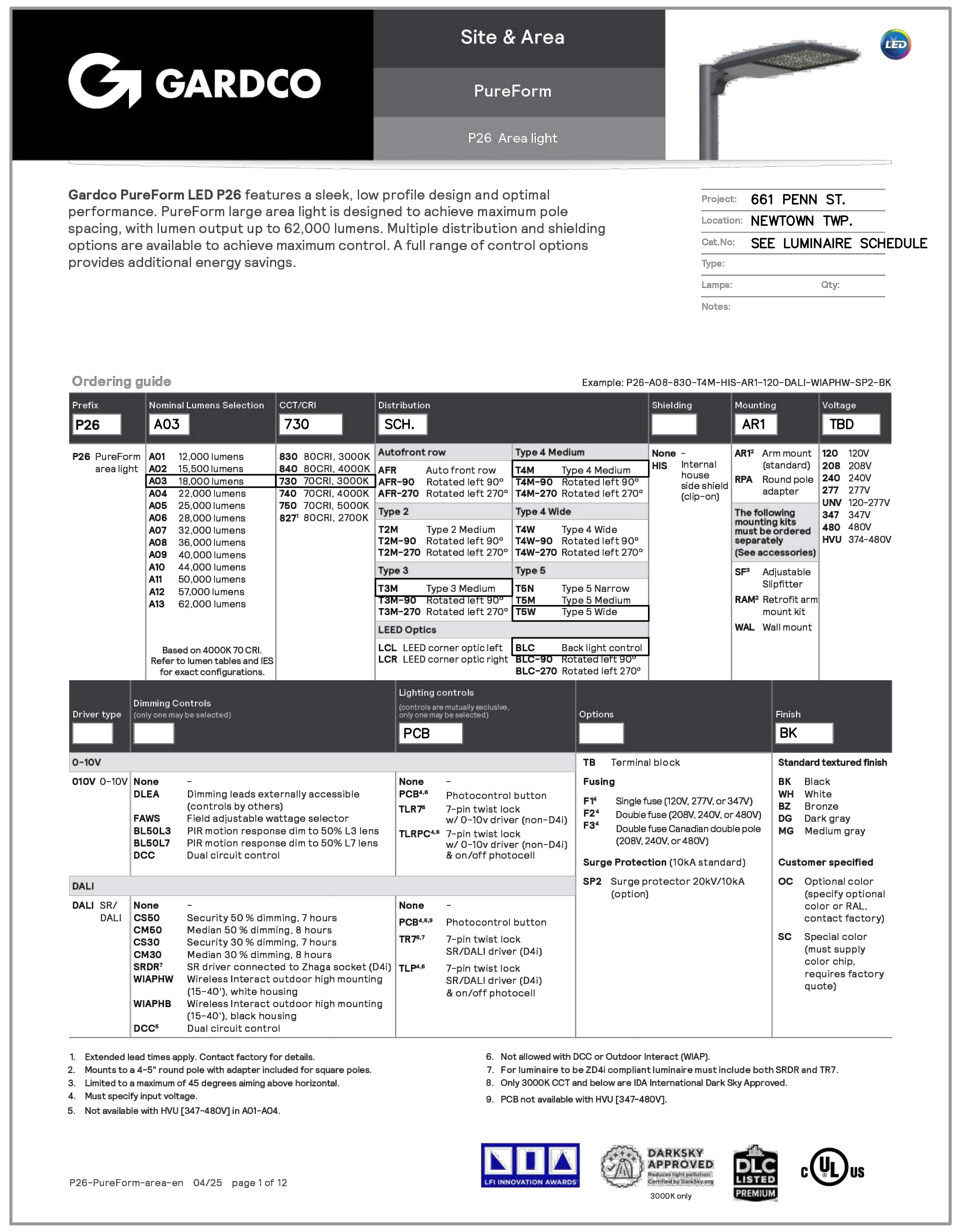
BAA – Buy America(n) Act: Product with the BAA option qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product with the BAA option also qualifies as manufactured in the United States under DOT Buy America regulations.

BABA – Build America Buy America: Product with the BAA option also qualifies as produced in the United States under the definitions of the Build America, Buy America Act.

Please refer to www.acuitybrands.com/resources/buy-american for additional information.

Note: Specifications subject to change without notice.
*Valiant Full Cutoff LED Series - AVPCL2*

AEL American Electric Lighting®



GARDCO

Site & Area
PureForm
P26 Area light

**Gardco PureForm LED P26** features a sleek, low profile design and optimal performance. PureForm large area light is designed to achieve maximum pole spacing, with lumen output up to 62,000 lumens. Multiple distribution and shielding options are available to achieve maximum control. A full range of control options provides additional energy savings.

Project: 661 PENN ST.
Location: NEWTOWN TWP.
Cat.No: SEE LUMINAIRE SCHEDULE
Type:
Lamps:
Qty:
Notes:

**Ordering guide**

Example: P26-A08-830-T4M-HIS-AR1-120-DALI-WIAPHW-SP2-BK

| Prefix | Nominal Lumens Selection | CCT/CRI | Distribution | Shielding | Mounting | Voltage |
|---|---|---|---|---|---|---|
| P26 | A03 | 730 | SCH. | | AR1 | TBD |
| **P26** PureForm area light | **A01** 12,000 lumens<br>**A02** 15,500 lumens<br>**A03** 18,000 lumens<br>**A04** 22,000 lumens<br>**A05** 25,000 lumens<br>**A06** 28,000 lumens<br>**A07** 32,000 lumens<br>**A08** 36,000 lumens<br>**A09** 40,000 lumens<br>**A10** 44,000 lumens<br>**A11** 50,000 lumens<br>**A12** 57,000 lumens<br>**A13** 62,000 lumens<br>Based on 4000K 70 CRI. Refer to lumen tables and IES for exact configurations. | **830** 80CRI, 3000K<br>**840** 80CRI, 4000K<br>**730** 70CRI, 3000K<br>**740** 70CRI, 4000K<br>**750** 70CRI, 5000K<br>**827**[1] 80CRI, 2700K | **Autofront row**<br>**AFR** Auto front row<br>**AFR-90** Rotated left 90°<br>**AFR-270** Rotated left 270°<br>**Type 2**<br>**T2M** Type 2 Medium<br>**T2M-90** Rotated left 90°<br>**T2M-270** Rotated left 270°<br>**Type 3**<br>**T3M** Type 3 Medium<br>**T3M-90** Rotated left 90°<br>**T3M-270** Rotated left 270°<br>**LEED Optics**<br>**LCL** LEED corner optic left<br>**LCR** LEED corner optic right<br>**Type 4 Medium**<br>**T4M** Type 4 Medium<br>**T4M-90** Rotated left 90°<br>**T4M-270** Rotated left 270°<br>**Type 4 Wide**<br>**T4W** Type 4 Wide<br>**T4W-90** Rotated left 90°<br>**T4W-270** Rotated left 270°<br>**Type 5**<br>**T5N** Type 5 Narrow<br>**T5M** Type 5 Medium<br>**T5W** Type 5 Wide<br>**BLC** Back light control<br>**BLC-90** Rotated left 90°<br>**BLC-270** Rotated left 270° | **None** –<br>**HIS** Internal house side shield (clip-on) | **AR1**[2] Arm mount (standard)<br>**RPA** Round pole adapter<br>The following mounting kits must be ordered separately (See accessories)<br>**SF**[3] Adjustable Slipfitter<br>**RAM**[2] Retrofit arm mount kit<br>**WAL** Wall mount | **120** 120V<br>**208** 208V<br>**240** 240V<br>**277** 277V<br>**UNV** 120-277V<br>**347** 347V<br>**480** 480V<br>**HVU** 374-480V |

| Driver type | Dimming Controls (only one may be selected) | Lighting controls (controls are mutually exclusive, only one may be selected) | Options | Finish |
|---|---|---|---|---|
| | | PCB | | BK |
| **0-10V**<br>**010V** 0-10V | **None** –<br>**DLEA** Dimming leads externally accessible (controls by others)<br>**FAWS** Field adjustable wattage selector<br>**BL50L3** PIR motion response dim to 50% L3 lens<br>**BL50L7** PIR motion response dim to 50% L7 lens<br>**DCC** Dual circuit control | **None** –<br>**PCB**[4,6] Photocontrol button<br>**TLR7**[6] 7-pin twist lock w/ 0-10v driver (non-D4i)<br>**TLRPC**[4,6] 7-pin twist lock w/ 0-10v driver (non-D4i) & on/off photocell | **TB** Terminal block<br>**Fusing**<br>**F1**[4] Single fuse (120V, 277V, or 347V)<br>**F2**[4] Double fuse (208V, 240V, or 480V)<br>**F3**[4] Double fuse Canadian double pole (208V, 240V, or 480V)<br>**Surge Protection** (10kA standard)<br>**SP2** Surge protector 20kV/10kA (option) | **Standard textured finish**<br>**BK** Black<br>**WH** White<br>**BZ** Bronze<br>**DG** Dark gray<br>**MG** Medium gray<br>**Customer specified**<br>**OC** Optional color (specify optional color or RAL, contact factory)<br>**SC** Special color (must supply color chip, requires factory quote) |
| **DALI**<br>**DALI** SR/DALI | **None** –<br>**CS50** Security 50 % dimming, 7 hours<br>**CM50** Median 50 % dimming, 8 hours<br>**CS30** Security 30 % dimming, 7 hours<br>**CM30** Median 30 % dimming, 8 hours<br>**SRDR**[7] SR driver connected to Zhaga socket (D4i)<br>**WIAPHW** Wireless Interact outdoor high mounting (15-40'), white housing<br>**WIAPHB** Wireless Interact outdoor high mounting (15-40'), black housing<br>**DCC**[5] Dual circuit control | **None** –<br>**PCB**[4,6,9] Photocontrol button<br>**TR7**[6,7] 7-pin twist lock SR/DALI driver (D4i)<br>**TLP**[4,6] 7-pin twist lock SR/DALI driver (D4i) & on/off photocell | | |

1. Extended lead times apply. Contact factory for details.
2. Mounts to a 4-5" round pole with adapter included for square poles.
3. Limited to a maximum of 45 degrees aiming above horizontal.
4. Must specify input voltage.
5. Not available with HVU [347-480V] in A01-A04.
6. Not allowed with DCC or Outdoor Interact (WIAP).
7. For luminaire to be ZD4i compliant luminaire must include both SRDR and TR7.
8. Only 3000K CCT and below are IDA International Dark Sky Approved.
9. PCB not available with HVU [347-480V].

P26-PureForm-area-en 04/25 page 1 of 12

LFI INNOVATION AWARDS — DARKSKY APPROVED Reduces light pollution. Certified by DarkSky.org 3000K only — DLC LISTED PREMIUM — c UL us

## GENERAL LIGHTING NOTES

1. THIS PLAN IS TO BE UTILIZED FOR SITE LIGHTING PURPOSES ONLY. ELECTRICAL ENGINEERING, INCLUDING, BUT NOT LIMITED TO , CIRCUITRY, CONDUIT, WIRING, AND ASSOCIATED SPECIFICATIONS, IS NOT WITHIN THE SCOPE OF THIS DOCUMENT.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE SUBMITTALS TO THE PROJECT ENGINEER FOR REVIEW AND APPROVAL.
3. SUBSTITUTION REQUESTS MUST BE APPROVED BY THE TOWNSHIP.
4. THIS LIGHTING PLAN DEPICTS PROPOSED SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER(S). ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY VARY DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES AND OTHER RELATED VARIABLE FIELD CONDITIONS.
5. THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ALL ANALYZED ON A HORIZONTAL GEOMETRIC PLAN AT ELEVATION ZERO (GROUND LEVEL) UNLESS OTHERWISE NOTED. THE VALUES DEPICTED ON THIS PLAN ARE IN FOOTCANDLES.
6. LIGHTING VALUES DEPICTED ON THIS PLAN WERE GENERATED USING VISUAL 2020 SOFTWARE.
7. THIS LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPES OF FIXTURES ONLY. POWER SYSTEM, CONDUITS, WIRING, VOLTAGES AND OTHER ELECTRICAL COMPONENTS ARE THE RESPONSIBILITY OF THE ARCHITECT, MEP AND/OR LIGHTING CONTRACTOR. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY STATE AND LOCAL REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR INSTALLING LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ELECTRICAL CODES AND ALL OTHER APPLICABLE RULES, LAWS AND STATUTES.
8. CONTRACTOR SHALL BRING TO THE DESIGNER'S ATTENTION, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES OR OTHER STRUCTURES.

PENNSYLVANIA ONE CALL SYSTEM, INC.

925 Irwin Run Road
West Mifflin, Pennsylvania
15122 – 1078

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1-800-242-1776

NON-MEMBERS MUST BE CONTACTED DIRECTLY

PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

SERIAL NO. 20252790540

LOCATIONS OF EXISTING UNDERGROUND UTILITIES/FACILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM RECORDS, FIELD MARKOUTS BY UTILITY OWNERS, AND/OR ABOVE-GROUND OBSERVATION OF THE SITE. NO EXCAVATIONS WERE PERFORMED IN THE PREPARATION OF THESE DRAWINGS; THEREFORE ALL UTILITIES SHOWN SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH, AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES/FACILITIES TO BE PRESENT WHICH ARE NOT SHOWN ON THE DRAWINGS. ONLY THE VISIBLE LOCATIONS OF UNDERGROUND UTILITIES/FACILITIES AT THE TIME OF FIELD SURVEY SHALL BE CONSIDERED TRUE AND ACCURATE. COMPLETENESS OR ACCURACY OF UNDERGROUND UTILITIES/FACILITIES ARE NOT GUARANTEED BY GILMORE & ASSOCIATES INC.

ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES/FACILITIES PRIOR TO START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF P.L. 852, NO. 287 DECEMBER 10, 1974 AS LAST AMENDED ON OCT. 29, 2024 PENNSYLVANIA ACT 127.

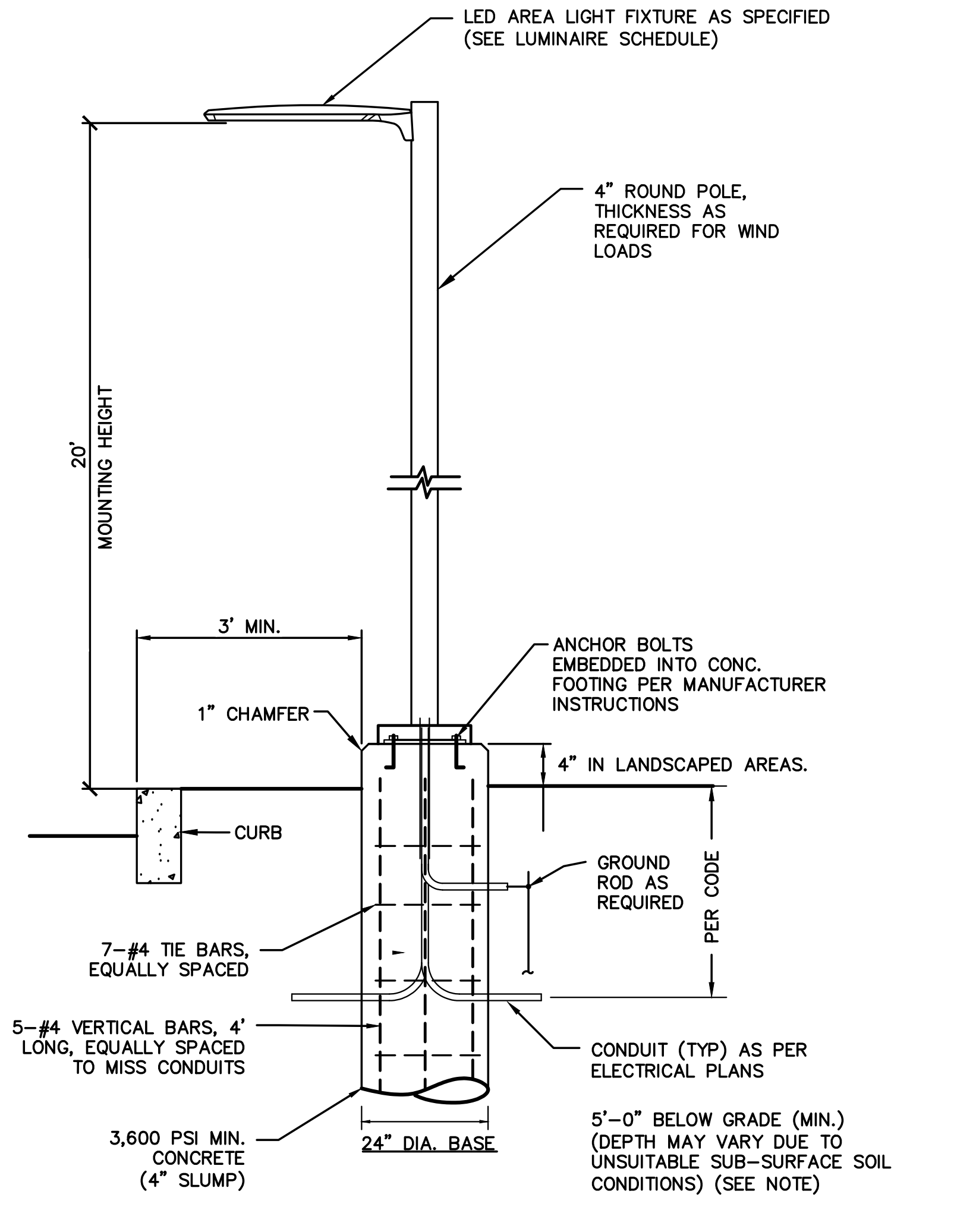
GILMORE & ASSOCIATES INC. HAS OBTAINED A PA-ONE CALL SERIAL NUMBER AS NOTED HEREON FOR DESIGN PURPOSES ONLY.

## SITE LIGHTING SCHEDULE

| SYMBOL | LABEL | QTY. | MANUFACTURER | CATALOG # | DESCRIPTION | LAMPS | LUMENS | LLF | WATTS | MTG. HT. |
|---|---|---|---|---|---|---|---|---|---|---|
| ⊗ | A | 27 | American Electric Lighting | AVPCL2 P101 30K R3 | AVPCL2 Valiant LED Full Cutoff, P101 Performance Package, 3000K CCT, R3 Distribution | 1 | 3229 | 0.9 | 30 | 14' |
| ⊗ | B | 10 | American Electric Lighting | AVPCL2 P101 30K R4 | AVPCL2 Valiant LED Full Cutoff, P101 Performance Package, 3000K CCT, R4 Distribution | 1 | 3540 | 0.9 | 30 | 14' |
| ⊗ | C | 5 | American Electric Lighting | AVPCL2 P101 30K R5 | AVPCL2 Valiant LED Full Cutoff, P101 Performance Package, 3000K CCT, R5 Distribution | 1 | 3518 | 1 | 30 | 14' |
| ⊠ | D | 4 | Gardco by Signify | P26–A03–730–BLC | P0045253 PureForm Family Upgrade Ph 2–P26, 40 LED's, 3000K CCT, 70 CRI, TYPE BLC OPTIC | 1 | 13188 | 0.9 | 103.3 | 20' |
| ⊠ | E | 2 | Gardco by Signify | P26–A03–730–T4M | P0045253 PureForm Family Upgrade Ph 2–P26, 40 LED's, 3000K CCT, 70 CRI, TYPE T4M OPTIC | 1 | 17364 | 1 | 103.3 | 20' |
| ⊠ | F | 2 | Gardco by Signify | P26–A03–730–T3M | P0045253 PureForm Family Upgrade Ph 2–P26, 40 LED's, 3000K CCT, 70 CRI, TYPE T3M OPTIC | 1 | 17525 | 0.9 | 103.3 | 20' |
| ⊠ | G | 5 | Gardco by Signify | P26–A03–730–T5W | P0045253 PureForm Family Upgrade Ph 2–P26, 40 LED's, 3000K CCT, 70 CRI, TYPE T5W OPTIC | 1 | 17348 | 1 | 103.3 | 20' |

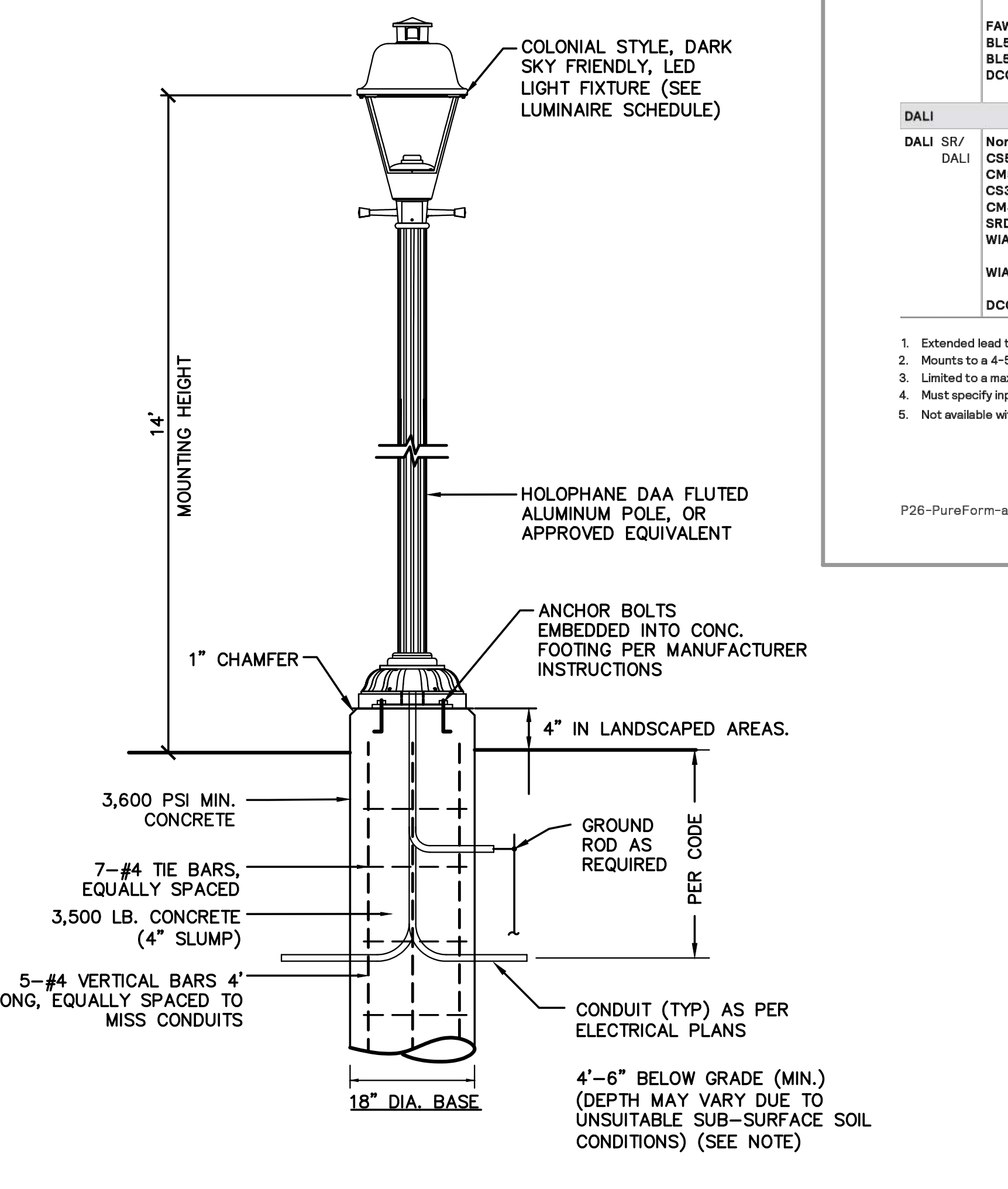
## SITE LIGHTING STATISTICS

| DESCRIPTION | AVG | MAX | MIN | MAX/MIN | AVG/MIN |
|---|---|---|---|---|---|
| BUILDING 1 SURFACE PARKING | 0.9 fc | 2.3 fc | 0.3 fc | 7.7:1 | 3.0:1 |
| BUILDING 2 SURFACE PARKING | 1.4 fc | 5.7 fc | 0.4 fc | 14.3:1 | 3.5:1 |
| BUILDINGS 3&4 SURFACE PARKING | 1.5 fc | 5.8 fc | 0.4 fc | 14.5:1 | 3.8:1 |
| DRIVES | 0.9 fc | 2.5 fc | 0.2 fc | 12.5:1 | 4.5:1 |


LED AREA LIGHT FIXTURE AS SPECIFIED (SEE LUMINAIRE SCHEDULE)
4" ROUND POLE, THICKNESS AS REQUIRED FOR WIND LOADS
20' MOUNTING HEIGHT
3' MIN.
1" CHAMFER
ANCHOR BOLTS EMBEDDED INTO CONC. FOOTING PER MANUFACTURER INSTRUCTIONS
4" IN LANDSCAPED AREAS.
CURB
GROUND ROD AS REQUIRED
PER CODE
7–#4 TIE BARS, EQUALLY SPACED
5–#4 VERTICAL BARS, 4' LONG, EQUALLY SPACED TO MISS CONDUITS
CONDUIT (TYP) AS PER ELECTRICAL PLANS
3,600 PSI MIN. CONCRETE (4" SLUMP)
24" DIA. BASE
5'–0" BELOW GRADE (MIN.) (DEPTH MAY VARY DUE TO UNSUITABLE SUB–SURFACE SOIL CONDITIONS) (SEE NOTE)

## PARKING AREA LIGHT POLE DETAIL

SCALE: NTS


COLONIAL STYLE, DARK SKY FRIENDLY, LED LIGHT FIXTURE (SEE LUMINAIRE SCHEDULE)
14' MOUNTING HEIGHT
HOLOPHANE DAA FLUTED ALUMINUM POLE, OR APPROVED EQUIVALENT
ANCHOR BOLTS EMBEDDED INTO CONC. FOOTING PER MANUFACTURER INSTRUCTIONS
1" CHAMFER
4" IN LANDSCAPED AREAS.
3,600 PSI MIN. CONCRETE
GROUND ROD AS REQUIRED
PER CODE
7–#4 TIE BARS, EQUALLY SPACED
3,500 LB. CONCRETE (4" SLUMP)
5–#4 VERTICAL BARS 4' LONG, EQUALLY SPACED TO MISS CONDUITS
CONDUIT (TYP) AS PER ELECTRICAL PLANS
18" DIA. BASE
4'–6" BELOW GRADE (MIN.) (DEPTH MAY VARY DUE TO UNSUITABLE SUB–SURFACE SOIL CONDITIONS) (SEE NOTE)

## ORNAMENTAL LIGHT POLE DETAIL

SCALE: NTS

| FOUNDATION DEPTH SCHEDULE | |
|---|---|
| MOUNTING HEIGHT (FEET) | MIN. FOOTING DEPTH (FEET) |
| 8 TO 16 FEET | 4'–6" MIN. |
| 16 TO 25 FEET | 5'–0" MIN. |
| 25+ TO 30 FEET | 5'–6" MIN. |

NOTE(S):
1. FOOTING DEPTH MAY VARY DUE TO UNSUITABLE SUB–SURFACE SOIL CONDITIONS, VERIFY IN FIELD.

50 0 50 100
SCALE IN FEET
1"=50'

**GILMORE & ASSOCIATES, INC.**
**ENGINEERING & CONSULTING SERVICES**
CORPORATE HEADQUARTERS
65 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901 • (215) 345-4330 • www.gilmore-assoc.com

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**NOT APPROVED FOR CONSTRUCTION**

CHRISTOPHER E. GREEN
REGISTRATION NUMBER LA002522

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# *661 PENN STREET REDEVELOPMENT*

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## SITE LIGHTING PLAN

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.: 2500866

APPLICANTS INFO:
661 PENN STREET, LLC
209 PENN'S TRAIL
NEWTOWN, PA 18940
215–968–0600

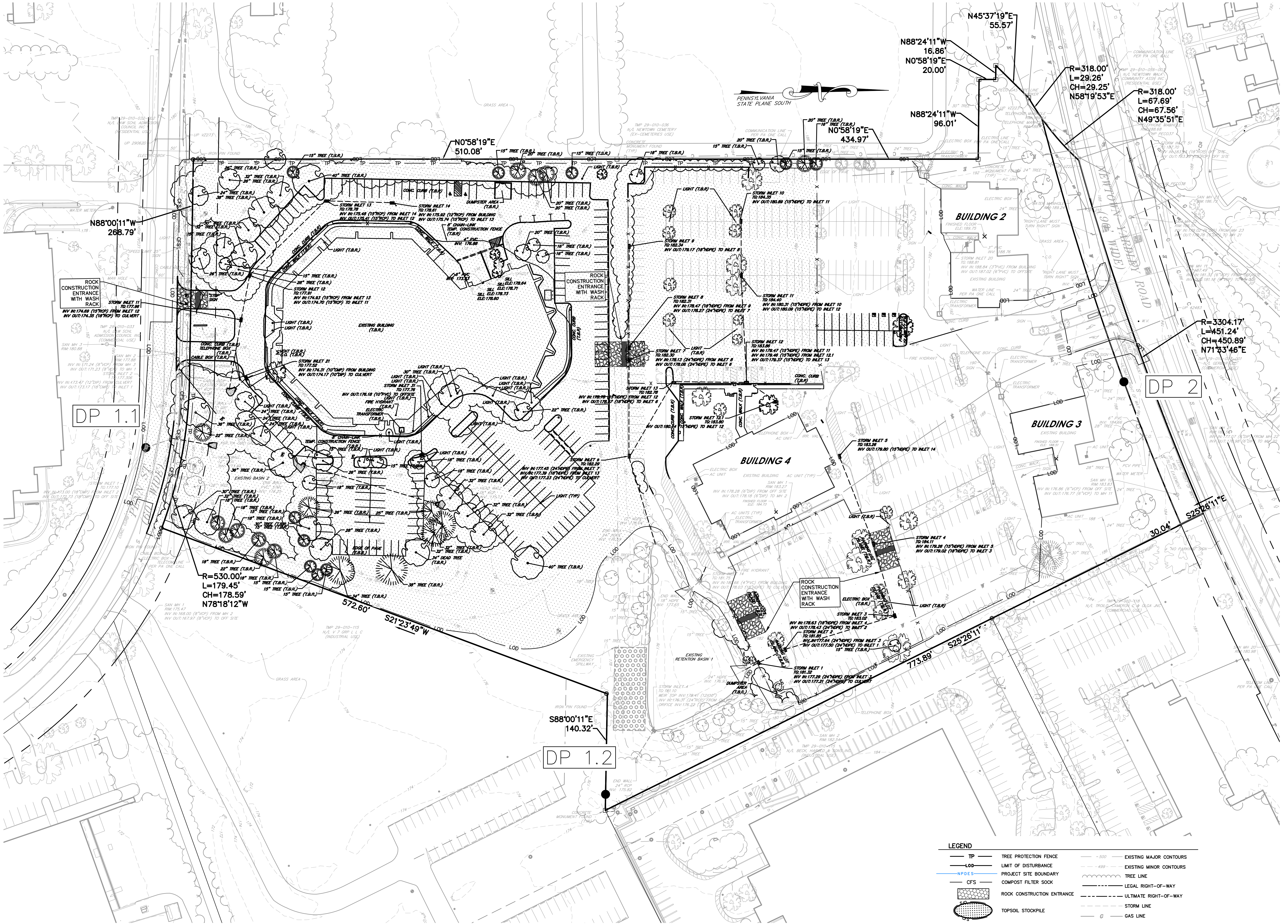
MUNICIPAL FILE No.:

TAX MAP PARCEL No.: 29–010–119–001 & 29–010–037

| | |
|---|---|
| TOTAL AREA: 15.75 AC. | TOTAL LOTS: 2 |
| DATE: 01/21/26 | SCALE: 1"=50' |
| DRAWN BY: GY/BH | CHECKED BY: RGM |

SHEET NO.: 14 OF 33

C:\Autodesk Docs\ACCDocs\Gilmore and Associates\2500866_661_Penn_Street_Re-Dev\Project Files\2025\2500866\DESIGN\CAD\Prod_Dwgs\2500866_Lighting.dwg Layout: LIGHTING PLAN Plotted By: rmoskres on Wed Jul 29, 2026 at 8:26am


PENNSYLVANIA STATE PLANE SOUTH
N45°37'19"E 55.57'
N88°24'11"W 16.86'
N0°58'19"E 20.00'
N88°24'11"W 96.01'
N0°58'19"E 434.97'
N0°58'19"E 510.08'
N88°00'11"W 268.79'
R=318.00' L=29.26' CH=29.25' N58°19'53"E
R=318.00' L=67.69' CH=67.56' N49°35'51"E
R=3304.17' L=451.24' CH=450.89' N71°53'46"E
S25°26'11"E 30.04'
S25°26'11" 773.89'
R=530.00' L=179.45' CH=178.59' N78°18'12"W
S21°23'49"W 572.60'
S88°00'11"E 140.32'
DP 1.1
DP 1.2
DP 2
BUILDING 2
BUILDING 3
BUILDING 4
EXISTING BUILDING (T.B.R.)
ROCK CONSTRUCTION ENTRANCE WITH WASH RACK
NEWTOWN-YARDLEY ROAD
EXISTING RETENTION BASIN 1

## SEQUENCE OF CONSTRUCTION: PHASE 1

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED, UNLESS NOTED OTHERWISE. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.

AT LEAST 7 DAYS PRIOR TO START OF WORK OR EARTH DISTURBANCE ACTIVITIES FOR EACH STAGE, A PRECONSTRUCTION MEETING SHALL BE HELD INCLUDING THE OWNER, SITE CONTRACTOR, TOWNSHIP ENGINEER, BUCKS COUNTY CONSERVATION DISTRICT, AND THE PLAN DESIGNER.

EROSION AND SEDIMENT CONTROLS MUST BE CONSTRUCTED, STABILIZED AND FUNCTIONING BEFORE SITE DISTURBANCE WITHIN THE TRIBUTARY AREAS OF THOSE CONTROLS. THE BCCD SHALL APPROVE THE CONTROLS ONCE IN PLACE.

OWNER AND/OR CONTRACTOR MUST NOTIFY EXISTING OFFICE BUILDING TENANTS/BUSINESSES IN ADVANCE OF CONSTRUCTION IN ORDER TO COORDINATE/MAINTAIN ACCESS TO THEIR PROPERTIES. THE CONTRACTOR SHALL DEVELOP A CONSTRUCTION SCHEDULE WHICH ACCOMMODATES DELIVERIES AND COMMERCIAL ACCESS FOR SAID BUSINESSES.

UTILITY NOTES:

WHEN INSTALLING UNDERGROUND UTILITIES IN AREAS WHERE THERE WILL BE PEDESTRIAN AND/OR VEHICULAR TRAFFIC, CONTRACTOR TO SETUP MAINTENANCE AND PROTECTION OF TRAFFIC FOR TRENCHING OPERATIONS FOR UTILITY CONNECTIONS ACROSS STATE ROUTES USING PENNDOT FIGURES 5, 7, 8, 10A AND 10B AS WELL AS FOR ACCESSWAYS INTERNAL TO SITE. MAINTENANCE AND PROTECTION CONTROLS MAY NEED TO BE ADJUSTED TO SUIT CONSTRUCTION ACTIVITIES DURING PERFORMANCE OF WORK.

THE CONTRACTOR SHALL COORDINATE WITH NEWTOWN BUCKS COUNTY JOINT MUNICIPAL AUTHORITY WHEN INSTALLING THE PROPOSED SANITARY SEWER, NEWTOWN ARTESIAN WATER COMPANY WHEN INSTALLING THE PROPOSED WATER SYSTEM, AND PECO WHEN INSTALLING THE PROPOSED GAS AND ELECTRIC SERVICES.

WHEN INSTALLING THE PROPOSED SANITARY SEWER, CONTRACTOR TO PROVIDE TEMPORARY BYPASS PUMPS WITH FILTER BAGS AS NECESSARY TO CREATE DE-WATERED ZONE FOR WORK, WHERE NECESSARY. CONNECTIONS TO EXISTING SEWER SHALL BE ACCOMPLISHED WHILE SEWAGE IS BEING CONVEYED THROUGH EXISTING INFRASTRUCTURE. IF THE DEPTH OF SEWAGE PRECLUDES CONSTRUCTION OF THE CONNECTION, THE WORK SHALL BE SCHEDULED AT NIGHT DURING LOW FLOW CONDITIONS OR A BYPASS PUMPING ARRANGEMENT SHALL BE IMPLEMENTED FROM EXISTING MANHOLE (TO BE REPLACED) TO NEAREST NEWLY INSTALLED MANHOLE DOWNSTREAM.

PHASE 1: SITE DEMOLITION

1. PRIOR TO EARTH DISTURBANCE ACTIVITIES COMMENCING, THE LIMIT OF DISTURBANCE SHALL BE FIELD MARKED.
2. INSTALL TEMPORARY ROCK CONSTRUCTION ENTRANCES WITH WASHOUT RACK AS SHOWN AND WHERE INDICATED ON PLAN.
3. INSTALL COMPOST FILTER SOCK(S) AND TREE PROTECTION FENCE(S) ALONG PERIMETER OF SITE WHERE INDICATED ON THE PLAN.
4. INSTALL TEMPORARY CONSTRUCTION FENCING WHERE INDICATED ON THE PLAN.
5. CONDUCT TREE CLEARING AND GRUBBING, PER PLAN. BURYING TREE STUMPS OR OTHER WASTE MATERIALS IS PROHIBITED.
6. DEMOLISH THE EXISTING BUILDING AND OTHER FEATURES LOCATED WITHIN THE DEMOLITION BOUNDARY LIMITS AS SHOWN ON THE PLAN. THE EXISTING EXTERIOR PAVED AREA FOUND OUTSIDE OF BOUNDARY IS TO REMAIN AS A VEHICLE ACCESS FOR PHASE 1 CONSTRUCTION UNTIL THE MAIN ACCESS WAY HAS BEEN ESTABLISHED AND STABILIZED FOR USE. DEMOLITION DEBRIS IS TO BE HAULED OFFSITE WITHIN 48 HOURS OF TEAR DOWN TO AN APPROPRIATE FACILITY. REFER TO E&S NOTES FOR REQUIREMENTS FOR DISPOSAL OF WASTE MATERIALS.
7. UPON COMPLETION OF DEMOLITION ACTIVITIES SHOWN WITHIN THE DEMOLITION BOUNDARY ON THIS PLAN, PERIMETER E&S CONTROLS SHALL BE INSTALLED PER PHASE 2 EROSION & SEDIMENT CONTROL PLAN. E&S CONTROLS INSTALLED FOR THE DEMOLITION PHASE SHALL STAY REMAIN INTACT UNTIL ALL OTHER DEMOLITION ACTIVITY INCLUDING REMAINING EXISTING PAVEMENT REMOVAL HAS TAKEN PLACE AND WHEN SAID AREAS HAVE BEEN STABILIZED TO THE SATISFACTION OF THE BCCD.
8. SILT SOCKS AND/OR TREE PROTECTION FENCES FOR DEMOLITION PHASE SHALL BE REMOVED OR RELOCATED AS NECESSARY FOR PHASE 2 CONSTRUCTION UPON BCCD INSPECTION.
   A. ALL ACCUMULATED SEDIMENTS SHALL BE DISPOSED OF IN APPROVED UPLAND AREAS.
   B. ANY AREAS OF EXPOSED EARTH WHICH SHALL REMAIN UNDISTURBED BY CONSTRUCTION WORK SHALL BE STABILIZED WITH SEED AND MULCH PER SCHEDULE.
   C. STONE TIRE CLEANER SHALL REMAIN FOR CONSTRUCTION PHASE.

## DEMOLITION NOTES

1. THE SCOPE OF THIS CONTRACT INCLUDES THE FOLLOWING WORK SHOWN WITHIN THE LIMIT OF DISTURBANCE AND AS OTHERWISE NOTED ON THE PLAN AND IN THE SPECIFICATIONS:
   A. REMOVAL OF EXISTING BUILDINGS, FOOTINGS AND FLOOR SLABS. TYP SHOWN WITHIN THE DOT HATCHING.
   B. REMOVAL OF EXISTING ALL UTILITIES TO WITHIN 10 FEET OF MAINS AT PENN STREET, UNLESS DICTATED ELSEWHERE IN THE PLANS.
   C. REMOVAL OF PAVEMENTS TYP SHOWN HATCHED.
   D. REMOVAL OF RETAINING WALLS AND FOOTINGS.
   E. REMOVAL OF CURBS ALONG ALL DRIVES AND PARKING AREAS.
   F. CLEARING AND GRUBBING WITHIN THE LIMITS OF DISTURBANCE.
   G. REMOVAL OF STORM/SANITARY STRUCTURES AND PIPES WITHIN PAVEMENT/BUILDING REMOVAL LIMITS, AND LIMIT OF GRADING SHOWN OTHERWISE NOTED.
2. COMPACTION – THE ACCEPTABILITY OF SUBGRADES AND FILLS IS TO BE DETERMINED BY REGULAR PERIODIC COMPACTION AND TESTS BY THE GEOTECHNICAL ENGINEER WITH REPORTS SUBMITTED TO THE OWNER AND ENGINEER FOR REVIEW AND TO THE CONTRACTOR. TESTS FOR MOISTURE CONTENT, SOILS ANALYSIS AND COMPACTION ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST ASTM STANDARDS WHICH WILL INCLUDE ASTM D-1140 AND ASTM D-1557. TESTS FOR COMPACTION ARE TO BE CONDUCTED IN ACCORDANCE WITH ASTM D-1557. COMPACTION OF STRUCTURAL FILLS AND COMPACTED SUBGRADES SHALL NOT BE LESS THAN 98% RELATIVE DENSITY. COMPACTION FOR FILLS IN OTHER AREAS (LAWN AND UNPAVED AREAS) SHALL NOT BE LESS THAN 90% RELATIVE DENSITY.
3. BACKFILL AND FILL MATERIALS – FILL MATERIALS ARE TO CONSIST OF IN-SITU EXCAVATED MATERIALS AND IMPORTED MATERIAL. THE SUITABILITY OF IN-SITU MATERIALS AND IMPORTED MATERIALS IS TO BE DETERMINED BY THE GEOTECHNICAL ENGINEER. BACKFILL AND FILL MATERIALS ARE TO CONSIST OF SOIL MATERIALS CONFORMING TO ASTM D2487 SOIL CLASSIFICATIONS GW, SP, GM, SM, AND SP WITH MAXIMUM DIMENSION OF 4 INCHES. UNSATISFACTORY SOILS ARE THOSE CLASSIFICATIONS GC, SC, ML, MH, CL, OL, OH, AND PT. DEMOLITION MATERIALS SUCH AS CONCRETE AND BITUMINOUS PAVING MAY BE RE-USED AS BACKFILL AND FILL MATERIALS PROVIDED THEY ARE PULVERIZED SO THAT NO DIMENSION EXCEEDS 3" AND THEY ARE THOROUGHLY MIXED WITH OTHER BACKFILL AND FILL MATERIALS TO PROVIDE A SOLID BACKFILL FREE OF VOIDS. BACKFILL AND FILL MATERIALS ARE TO BE FREE OF DEBRIS, WASTE, FROZEN MATERIALS AND ORGANICS. IF SUFFICIENT ACCEPTABLE MATERIAL IS NOT AVAILABLE ON THE SITE, THE CONTRACTOR IS RESPONSIBLE TO ACQUIRE ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE CONTRACT.

## LEGEND

| | |
|---|---|
| — TP — | TREE PROTECTION FENCE |
| —LOD— | LIMIT OF DISTURBANCE |
| —NPDES— | PROJECT SITE BOUNDARY |
| — CFS — | COMPOST FILTER SOCK |
| ▨ | ROCK CONSTRUCTION ENTRANCE |
| CFS | TOPSOIL STOCKPILE |
| ☒ | INLET PROTECTION |
| (T.B.R.) | EXISTING FEATURES TO BE REMOVED |
| — — | SOIL BOUNDARY |
| WF B12 | WETLANDS |
| ▨ | LIMIT OF PHASE 1 DEMOLITION |
| — X — | TEMPORARY CONSTRUCTION FENCING |
| ▨ | EXISTING EMERGENCY SPILLWAY |
| — 500 — | EXISTING MAJOR CONTOURS |
| — 499 — | EXISTING MINOR CONTOURS |
| | TREE LINE |
| | LEGAL RIGHT-OF-WAY |
| | ULTIMATE RIGHT-OF-WAY |
| | STORM LINE |
| — G — | GAS LINE |
| — OH — | OVERHEAD ELECTRIC LINE |
| — E — | ELECTRIC LINE |
| — S — | SANITARY LINE |
| — W — | WATER LINE |
| | EXISTING EASEMENT |
| Ⓢ | SANITARY MANHOLE |
| ▨ | STORM INLET |
| ▨ | DETECTABLE WARNING SURFACE |
| | GAS VALVE |
| | WATER VALVE |
| ● | FIRE HYDRANT |
| ● | ELECTRIC METER |
| | GUY |
| -○- | UTILITY POLE |
| | MAILBOX |
| ✳ | LIGHT STANDARD |
| □ | CONCRETE MONUMENT FOUND |
| ◎ | IRON PIN FOUND |

## PARKING COUNT SUMMARY PHASE 1:

| | GARAGE SPACES | SURFACE SPACES | TOTAL SPACES |
|---|---|---|---|
| EXISTING PARKING PH1 | 0 | 200 | 0 |
| PROPOSED PARKING PH1 | 0 | 0 | 0 |
| TOTAL SPACES | 0 | 200 | 200 |

LIMIT OF DISTURBANCE: 12.64 AC.
PROJECT SITE BOUNDARY: 15.75 AC.

SEE SHEET 25 – E&S NOTES FOR SOILS CHART

PENNSYLVANIA ONE CALL SYSTEM, INC.

925 Irwin Run Road
West Mifflin, Pennsylvania
15122 – 1078

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1-800-242-1776

NON-MEMBERS MUST BE CONTACTED DIRECTLY

PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

LOCATIONS OF EXISTING UNDERGROUND UTILITIES/FACILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM RECORDS, FIELD MARKOUTS BY UTILITY OWNERS, AND/OR ABOVE-GROUND OBSERVATION OF THE SITE. NO EXCAVATIONS WERE PERFORMED IN THE PREPARATION OF THESE DRAWINGS; THEREFORE ALL UTILITIES SHOWN SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH, AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES/FACILITIES TO BE PRESENT WHICH ARE NOT SHOWN ON THE DRAWINGS. ONLY THE VISIBLE LOCATIONS OF UNDERGROUND UTILITIES/FACILITIES AT THE TIME OF FIELD SURVEY SHALL BE CONSIDERED TRUE AND ACCURATE. COMPLETENESS OR ACCURACY OF UNDERGROUND UTILITIES/FACILITIES ARE NOT GUARANTEED BY GILMORE & ASSOCIATES INC.

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GILMORE & ASSOCIATES INC. HAS NOT OBTAINED A PA-ONE CALL SERIAL NUMBER FOR DESIGN PURPOSES.

50 0 50 100
SCALE IN FEET
1"=50'

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES
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65 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901 • (215) 345-4330 • www.gilmore-assoc.com

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**NOT APPROVED FOR CONSTRUCTION**

RONALD G. MONKRES II
ENGINEER 603164-E
DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# 661 PENN STREET REDEVELOPMENT

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## E&S PLAN PHASE 1

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.: 2500866

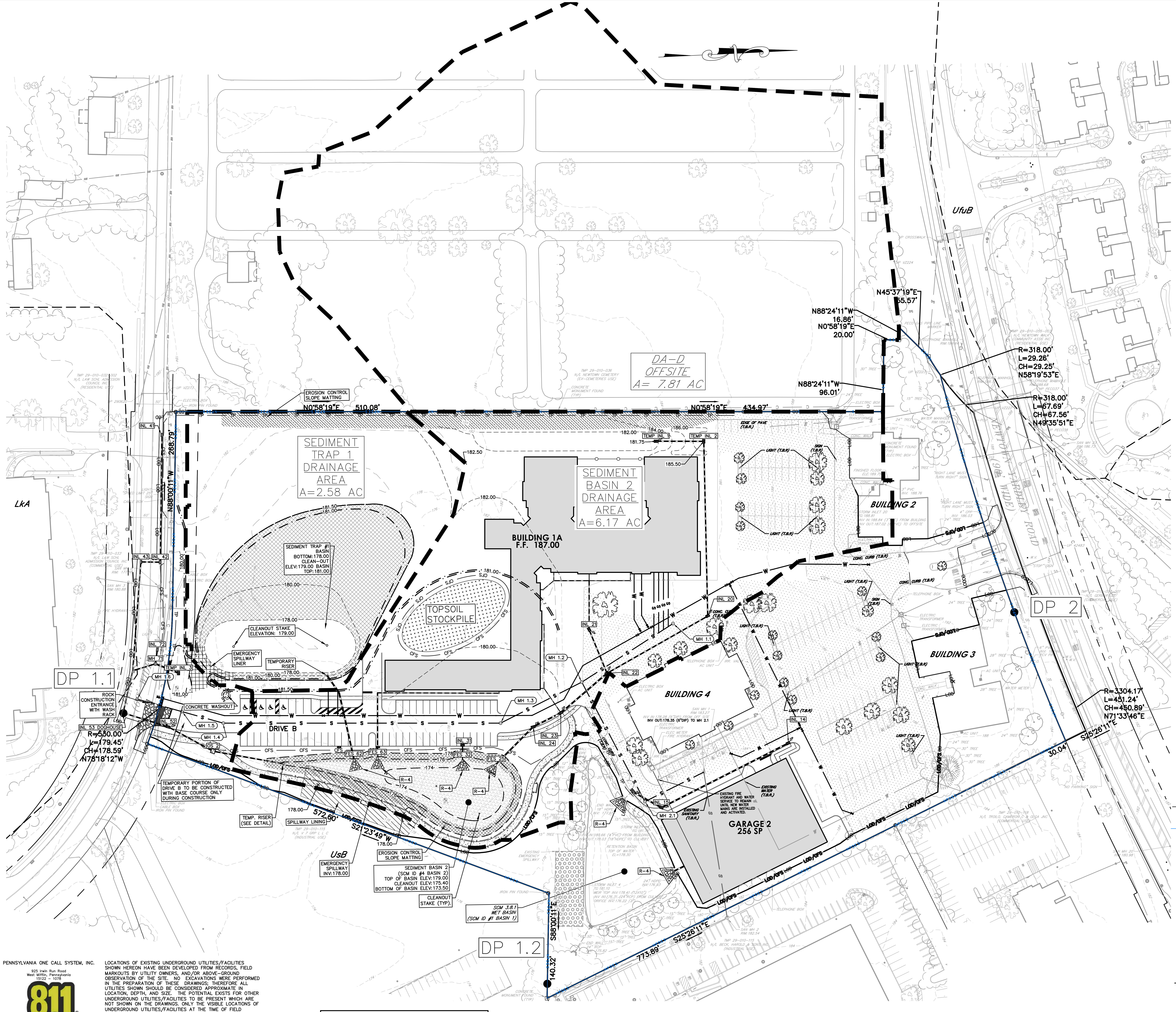
APPLICANTS INFO:
661 PENN STREET, LLC
209 PENN'S TRAIL
NEWTOWN, PA 18940
215-968-0600

MUNICIPAL FILE No.:

TAX MAP PARCEL No.: 29-010-119-001 & 29-010-037

| | |
|---|---|
| TOTAL AREA: 15.75 AC. | TOTAL LOTS: 2 |
| DATE: 01/21/26 | SCALE: 1"=50' |
| DRAWN BY: GY/BH | CHECKED BY: RGM |

SHEET NO.: 15 OF 33


DA–D
OFFSITE
A= 7.81 AC
SEDIMENT TRAP 1 DRAINAGE AREA A=2.58 AC
SEDIMENT BASIN 2 DRAINAGE AREA A=6.17 AC
BUILDING 1A F.F. 187.00
BUILDING 2
BUILDING 3
BUILDING 4
GARAGE 2 256 SP
TOPSOIL STOCKPILE
DRIVE B
DP 1.1
DP 1.2
DP 2
NEWTOWN–YARDLEY ROAD (90' WIDE)
LkA
UfuB
UsB
N0°58'19"E 510.08'
N0°58'19"E 434.97'
N88°00'11"W 268.79'
N88°24'11"W 96.01'
N88°24'11"W 16.86'
N0°58'19"E 20.00'
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R=318.00' L=29.26' CH=29.25' N58°19'53"E
R=318.00' L=67.69' CH=67.56' N49°35'51"E
R=3304.17' L=451.24' CH=450.89' N71°33'46"E
S25°26'11"E 30.04'
S25°26'11"E 773.89'
S88°00'11"E 140.32'
S21°23'49"W 572.60'
R=550.00' L=179.45' CH=178.59' N76°18'12"W
SEDIMENT TRAP #1 BASIN BOTTOM: 178.00 CLEAN–OUT ELEV:179.00 BASIN TOP:181.00
CLEANOUT STAKE ELEVATION: 179.00
EMERGENCY SPILLWAY LINER
TEMPORARY RISER
EROSION CONTROL SLOPE MATTING
ROCK CONSTRUCTION ENTRANCE WITH WASH RACK
INL 53 DOGHOUSE
CONCRETE WASHOUT
TEMPORARY PORTION OF DRIVE B TO BE CONSTRUCTED WITH BASE COURSE ONLY DURING CONSTRUCTION
TEMP. RISER (SEE DETAIL)
SPILLWAY LINING
EMERGENCY SPILLWAY INV:178.00
SEDIMENT BASIN 2 (SCM ID #4 BASIN 2) TOP OF BASIN ELEV:179.00 CLEANOUT ELEV:175.40 BOTTOM OF BASIN ELEV:173.50
CLEANOUT STAKE (TYP)
SCM 3.B.1 WET BASIN (SCM ID #1 BASIN 1)
TEMP INL 1
TEMP INL 2
TEMP INL 3
MH 1.1
MH 1.2
MH 1.3
MH 1.4
MH 1.5
MH 1.6
MH 2.1
INL 14
INL 15
INL 20
INL 21
INL 22
INL 23
INL 24
INL 31
INL 41
INL 42
INL 43
INL 52
INL 71
INL 72
FES 25
FES 32
FES 62
FES 63
R–4
LOD/CFS
CFS
TP

# SEQUENCE OF CONSTRUCTION: PHASE 2

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED, UNLESS NOTED OTHERWISE. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.

AT LEAST 7 DAYS PRIOR TO START OF WORK OR EARTH DISTURBANCE ACTIVITIES FOR EACH STAGE, A PRECONSTRUCTION MEETING SHALL BE HELD INCLUDING THE OWNER, SITE CONTRACTOR, TOWNSHIP ENGINEER, BUCKS COUNTY CONSERVATION DISTRICT, AND THE PLAN DESIGNER.

EROSION AND SEDIMENT CONTROLS MUST BE CONSTRUCTED, STABILIZED AND FUNCTIONING BEFORE SITE DISTURBANCE WITHIN THE TRIBUTARY AREAS OF THOSE CONTROLS. THE BCCD SHALL APPROVE THE CONTROLS ONCE IN PLACE.

OWNER AND/OR CONTRACTOR MUST NOTIFY EXISTING OFFICE BUILDING TENANTS/BUSINESSES IN ADVANCE OF CONSTRUCTION IN ORDER TO COORDINATE/MAINTAIN ACCESS TO THEIR PROPERTIES. THE CONTRACTOR SHALL DEVELOP A CONSTRUCTION SCHEDULE WHICH ACCOMMODATES DELIVERIES AND COMMERCIAL ACCESS FOR SAID BUSINESSES.

UTILITY NOTES:

WHEN INSTALLING UNDERGROUND UTILITIES IN AREAS WHERE THERE WILL BE PEDESTRIAN AND/OR VEHICULAR TRAFFIC, CONTRACTOR TO SETUP MAINTENANCE AND PROTECTION OF TRAFFIC FOR TRENCHING OPERATIONS FOR UTILITY CONNECTIONS ACROSS STATE ROUTES USING PENNDOT FIGURES 5, 7, 8, 10A AND 10B AS WELL AS FOR ACCESSWAYS INTERNAL TO SITE. MAINTENANCE AND PROTECTION CONTROLS MAY NEED TO BE ADJUSTED TO SUIT CONSTRUCTION ACTIVITIES DURING PERFORMANCE OF WORK.

THE CONTRACTOR SHALL COORDINATE WITH NEWTOWN BUCKS COUNTY JOINT MUNICIPAL AUTHORITY WHEN INSTALLING THE PROPOSED SANITARY SEWER, NEWTOWN ARTESIAN WATER COMPANY WHEN INSTALLING THE PROPOSED WATER SYSTEM, AND PECO WHEN INSTALLING THE PROPOSED GAS AND ELECTRIC SERVICES.

WHEN INSTALLING THE PROPOSED SANITARY SEWER, CONTRACTOR TO PROVIDE TEMPORARY BYPASS PUMPS WITH FILTER BAGS AS NECESSARY TO CREATE DE–WATERED ZONE FOR WORK, WHERE NECESSARY. CONNECTIONS TO EXISTING SEWER SHALL BE ACCOMPLISHED WHILE SEWAGE IS BEING CONVEYED THROUGH EXISTING INFRASTRUCTURE. IF THE DEPTH OF SEWAGE PRECLUDES CONSTRUCTION OF THE CONNECTION, THE WORK SHALL BE SCHEDULED AT NIGHT DURING LOW FLOW CONDITIONS OR A BYPASS PUMPING ARRANGEMENT SHALL BE IMPLEMENTED FROM EXISTING MANHOLE (TO BE REPLACED) TO NEAREST NEWLY INSTALLED MANHOLE DOWNSTREAM.

PHASE 2: SITE IMPROVEMENTS

1. MAINTAIN TEMPORARY ROCK CONSTRUCTION ENTRANCE WITH WASHOUT RACK AS SHOWN ON PLAN.
2. INSPECT EXISTING E&S CONTROLS AND INSTALL ADDITIONAL COMPOST FILTER SOCK(S) AND TREE PROTECTION FENCE(S) ALONG PERIMETER OF SITE AS SHOWN. REPAIR AND MAINTAIN ALL E&S BMPS.
3. INSTALL SEDIMENT BASIN IN ACCORDANCE WITH PLANS AND DETAILS.
   A. STRIP TOPSOIL FROM SEDIMENT TRAP AREAS ACCORDING TO THE PLAN. PLACE TOPSOIL IN DESIGNATED TOPSOIL STOCKPILES ONLY AS SHOWN ON THE PLAN.
   B. COMPLETE SEDIMENT TRAP EXCAVATION, INSTALL KEYWAY, BERM TEMPORARY OUTLET STRUCTURES, DEWATERING DEVICES AND OTHER COMPONENTS AS PER THE PLAN.
   C. COMPLETELY STABILIZE THE TRAP AREAS AND OTHER AREAS ASSOCIATED WITH THEIR INSTALLATIONS WITH TEMPORARY SEED AND MULCH PER THE PLAN. EMPLOY OTHER MEANS AS NECESSARY TO ENSURE THAT NO UNFORESEEN ADVERSE EROSIVE CONDITIONS ARE PRESENT THROUGHOUT CONSTRUCTION OF THE PROJECT.
   D. UPON COMPLETION OF THE SEDIMENT TRAPS, AN INSPECTION SHALL BE PERFORMED BY THE TOWNSHIP ENGINEER AND/OR CONSERVATION DISTRICT INSPECTOR.
4. PREPARE FORMER BUILDING PAD AREA SUBGRADES TO RECEIVE FILL MATERIAL. FILL MATERIAL TO BE PROVIDED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE RESIDENT PROJECT GEOTECHNICAL ENGINEER AND THEIR REPORT. COMPACTION TESTING BY A CERTIFIED SOILS ENGINEER/GEOLOGIST MUST BE COMPLETED TO VERIFY ADEQUATE COMPACTION HAS BEEN ACHIEVED PRIOR TO PROCEEDING TO SUBSEQUENT PLACEMENT OF LIFTS.
5. INSTALL UTILITIES ACCORDING TO THE PLAN. INSTALL STORM AND SANITARY PIPES AND MANHOLES. INSTALL WATER, GAS, ELECTRIC AND OTHER UTILITIES AS INDICATED ON THE PLAN. ALL AREAS THAT WILL NOT BE RE–DISTURBED WITHIN ONE YEAR SHALL BE PERMANENTLY STABILIZED IMMEDIATELY.
6. EXTEND NEW WATER MAIN AROUND PROPOSED GARAGE 2 FOOTPRINT, PER PLAN. ALSO EXTEND NEW SEWER MAIN FROM MH 1.2 TO REACH EXISTING MH 1 BEHIND BUILDING 4.
7. BEGIN EXCAVATION AND EARTH MOVING FOR GARAGE 2 BUILDING FOUNDATION.
8. COMPLETING REMAINING IMPROVEMENTS AS PER STANDARD CONSTRUCTION TECHNIQUES AND PER THE SEQUENCE BELOW. ANY CHANGES IN THE CONSTRUCTION SEQUENCE MUST BE APPROVED BY THE MUNICIPALITY, COUNTY CONSERVATION, DESIGN ENGINEER OR PROPER AGENCY PRIOR TO BEING IMPLEMENTED INTO THE PLAN.
   A. AREAS FOR PROPOSED INFILTRATION FACILITY BMP 2 SHALL BE PROTECTED AGAINST OVER–COMPACTION AND SEDIMENT DEPOSITION.
   B. INLET PROTECTION DEVICES SHALL BE INSTALLED ON ALL INLETS IMMEDIATELY UPON COMPLETION AND MAINTAINED UNTIL THE TRIBUTARY AREA IS STABILIZED.
9. STRIP TOPSOIL FROM THE PROPOSED BUILDING AND PARKING AREAS AND DRIVEWAYS. STORE IN DESIGNATED TOPSOIL STOCKPILES AS SHOWN ON THE PLAN.
10. ONCE GARAGE 2 IS CONSTRUCTED AND APPROVED FOR OCCUPANCY, BEGIN EXCAVATION AND EARTH MOVING FOR BUILDING 1A FOUNDATION, DRIVEWAY AND REMAINING SITE UTILITIES. EARTHWORK SHALL COMMENCE TO BRING PROPOSED FEATURES TO GRADE.
11. INSTALL SUBBASE, CONCRETE CURBING AND BASE COURSE FOR DRIVEWAYS AND PARKING AREAS ASSOCIATED WITH PHASE 2 CONSTRUCTION. POROUS PAVEMENT FACILITIES ARE TO BE CONSTRUCTED IN PHASE 3.
12. NO CONSTRUCTION VEHICLES ARE TO TAKE ACCESS TO SITE FROM NEWTOWN–YARDLEY ROAD.
13. COMPLETE BUILDING FOUNDATION AND EXTERIOR WORK INCLUDING UTILITY ROUGH–IN, DRAINAGE FEATURES AND EXTERIOR GRADING. STABILIZE ALL AREAS EITHER TEMPORARILY OR PERMANENTLY BASED UPON THE NEED TO RE–DISTURB SAID AREA WITHIN ONE YEAR.
14. AS LAWN AREAS ARE BROUGHT TO GRADE, THEY SHALL BE PROVIDED WITH A MINIMUM OF 8" TOPSOIL AND SEEDED IMMEDIATELY. ALL VEGETATED AREAS SHALL BE STABILIZED WITH VEGETATION AND MULCH AS SOON AS POSSIBLE.

# DEMOLITION NOTES

1. THE SCOPE OF THIS CONTRACT INCLUDES THE FOLLOWING WORK SHOWN WITHIN THE LIMIT OF DISTURBANCE AND AS OTHERWISE NOTED ON THE PLAN AND IN THE SPECIFICATIONS:
   A. REMOVAL OF EXISTING BUILDINGS, FOOTINGS AND FLOOR SLABS. TYP SHOWN WITHIN THE DOT HATCHING.
   B. REMOVAL OF EXISTING ALL UTILITIES TO WITHIN 10 FEET OF MAINS AT PENN STREET, UNLESS DICTATED ELSEWHERE IN THE PLANS.
   C. REMOVAL OF PAVEMENTS TYP SHOWN HATCHED.
   D. REMOVAL OF RETAINING WALLS AND FOOTINGS.
   E. REMOVAL OF CURBS ALONG ALL DRIVES AND PARKING AREAS.
   F. CLEARING AND GRUBBING WITHIN THE LIMITS OF DISTURBANCE.
   G. REMOVAL OF STORM/SANITARY STRUCTURES AND PIPES WITHIN PAVEMENT/BUILDING REMOVAL LIMITS, AND LIMIT OF GRADING SHOWN OTHERWISE NOTED.
2. COMPACTION – THE ACCEPTABILITY OF SUBGRADES AND FILLS IS TO BE DETERMINED BY REGULAR PERIODIC COMPACTION AND TESTS BY THE GEOTECHNICAL ENGINEER WITH REPORTS SUBMITTED TO THE OWNER AND ENGINEER FOR REVIEW AND TO THE CONTRACTOR. TESTS FOR MOISTURE CONTENT, SOILS ANALYSIS AND COMPACTION ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST ASTM STANDARDS WHICH WILL INCLUDE ASTM D–1140 AND ASTM D–1557. TESTS FOR COMPACTION ARE TO BE CONDUCTED IN ACCORDANCE WITH ASTM D–1557. COMPACTION OF STRUCTURAL FILLS AND COMPACTED SUBGRADES SHALL NOT BE LESS THAN 98% RELATIVE DENSITY. COMPACTION FOR FILLS IN OTHER AREAS (LAWN AND UNPAVED AREAS) SHALL NOT BE LESS THAN 90% RELATIVE DENSITY.
3. BACKFILL AND FILL MATERIALS – FILL MATERIALS ARE TO CONSIST OF IN–SITU EXCAVATED MATERIALS AND IMPORTED MATERIAL. THE SUITABILITY OF IN–SITU MATERIALS AND IMPORTED MATERIALS IS TO BE DETERMINED BY THE GEOTECHNICAL ENGINEER. BACKFILL AND FILL MATERIALS ARE TO CONSIST OF SOIL MATERIALS CONFORMING TO ASTM D2487 SOIL CLASSIFICATIONS GW, SP, GM, SM, AND SP WITH MAXIMUM DIMENSION OF 4 INCHES. UNSATISFACTORY SOILS ARE THOSE CLASSIFICATIONS GC, SC, ML, MH, CL, OL, OH, AND PT. DEMOLITION MATERIALS SUCH AS CONCRETE AND BITUMINOUS PAVING MAY BE RE–USED AS BACKFILL AND FILL MATERIALS PROVIDED THEY ARE PULVERIZED SO THAT NO DIMENSION EXCEEDS 3" AND THEY ARE THOROUGHLY MIXED WITH OTHER BACKFILL AND FILL MATERIALS TO PROVIDE A SOLID BACKFILL FREE OF VOIDS. BACKFILL AND FILL MATERIALS ARE TO BE FREE OF DEBRIS, WASTE, FROZEN MATERIALS AND ORGANICS. IF SUFFICIENT ACCEPTABLE MATERIAL IS NOT AVAILABLE ON THE SITE, THE CONTRACTOR IS RESPONSIBLE TO ACQUIRE ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE CONTRACT.

## LEGEND

| | | | |
|---|---|---|---|
| —— TP —— | TREE PROTECTION FENCE | —— -500 —— | EXISTING MAJOR CONTOURS |
| —— —— | LIMIT OF DISTURBANCE | — — -499 — — | EXISTING MINOR CONTOURS |
| ——NPDES—— | PROJECT SITE BOUNDARY | | TREE LINE |
| —— CFS —— | COMPOST FILTER SOCK | | LEGAL RIGHT–OF–WAY |
| | ROCK CONSTRUCTION ENTRANCE | | ULTIMATE RIGHT–OF–WAY |
| | TOPSOIL STOCKPILE | | STORM LINE |
| ☒ | INLET PROTECTION | —— G —— | GAS LINE |
| (T.B.R.) | EXISTING FEATURES TO BE REMOVED | —— OH —— | OVERHEAD ELECTRIC LINE |
| | SOIL BOUNDARY | —— E —— | ELECTRIC LINE |
| | PROPOSED RIP RAP APRON | —— S —— | SANITARY LINE |
| | SWALE CONTROL BLANKET | —— W —— | WATER LINE |
| | CONCRETE WASHOUT | | EXISTING EASEMENT |
| ——LOD—— | LIMIT OF DISTURBANCE | Ⓢ | SANITARY MANHOLE |
| —— LOD/CFS —— | LIMIT OF DISTURBANCE/CFS | ▨ | STORM INLET |
| —— CFS —— | COMPOST FILTER SOCK | | DETECTABLE WARNING SURFACE |
| | EROSION CONTROL BLANKET | | GAS VALVE |
| | LIMIT OF PHASE 2 DEMOLITION | | WATER VALVE |
| —— X —— | TEMPORARY CONSTRUCTION FENCING | | FIRE HYDRANT |
| Ⓢ | PROPOSED SANITARY MANHOLE | | ELECTRIC METER |
| | PORTION OF CONSTRUCTED DRIVE B WITH BASE COURSE ONLY | | GUY |
| | EXISTING EMERGENCY SPILLWAY | | UTILITY POLE |
| | DRAINAGE AREA OF SEDIMENT BASIN | | MAILBOX |
| | | ✳ | LIGHT STANDARD |
| | | ☐ | CONCRETE MONUMENT FOUND |
| | | ◎ | IRON PIN FOUND |

SCALE 50 0 50 100 IN FEET
1"=50'

PENNSYLVANIA ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania
15122 – 1078

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1–800–242–1776
NON–MEMBERS MUST BE CONTACTED DIRECTLY
PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

LOCATIONS OF EXISTING UNDERGROUND UTILITIES/FACILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM RECORDS, FIELD MARKOUTS BY UTILITY OWNERS, AND/OR ABOVE–GROUND OBSERVATION OF THE SITE. NO EXCAVATIONS WERE PERFORMED IN THE PREPARATION OF THESE DRAWINGS; THEREFORE ALL UTILITIES SHOWN SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH, AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES/FACILITIES TO BE PRESENT WHICH ARE NOT SHOWN ON THE DRAWINGS. ONLY THE VISIBLE LOCATIONS OF UNDERGROUND UTILITIES/FACILITIES AT THE TIME OF FIELD SURVEY SHALL BE CONSIDERED TRUE AND ACCURATE. COMPLETENESS OR ACCURACY OF UNDERGROUND UTILITIES/FACILITIES ARE NOT GUARANTEED BY GILMORE & ASSOCIATES INC.

ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES/FACILITIES PRIOR TO START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF P.L. 852, NO. 287 DECEMBER 10, 1974 AS LAST AMENDED ON OCT. 29, 2024 PENNSYLVANIA ACT 127.

GILMORE & ASSOCIATES INC. HAS NOT OBTAINED A PA–ONE CALL SERIAL NUMBER FOR DESIGN PURPOSES.

**LIMIT OF DISTURBANCE: 12.64 AC.**
**PROJECT SITE BOUNDARY: 15.75 AC.**

SEE SHEET 25 – E&S NOTES FOR SOILS CHART

## PARKING COUNT SUMMARY PHASE 2:

| | GARAGE SPACES | SURFACE SPACES | TOTAL SPACES |
|---|---|---|---|
| EXISTING PARKING PH2 | 0 | 0 | 0 |
| PROPOSED PARKING PH2 | 256 | 94 | 350 |
| TOTAL SPACES | 256 | 94 | 350 |

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES
CORPORATE HEADQUARTERS
65 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901 • (215) 345-4330 • www.gilmore-assoc.com

ONLY THOSE PLANS INCORPORATING THE PROFESSIONAL SEAL SHOULD BE CONSIDERED OFFICIAL AND RELIED UPON BY USER. THIS PLAN IS PREPARED SPECIFICALLY FOR THE CLIENT AND PROJECT DESIGNATED HEREON. MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT THE CONSENT OF GILMORE & ASSOCIATES, INC. IS PROHIBITED.
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**NOT APPROVED FOR CONSTRUCTION**

RONALD G. MONKRES II
ENGINEER
603164–E

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# *661 PENN STREET REDEVELOPMENT*

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## E&S PLAN PHASE 2

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.:
2500866

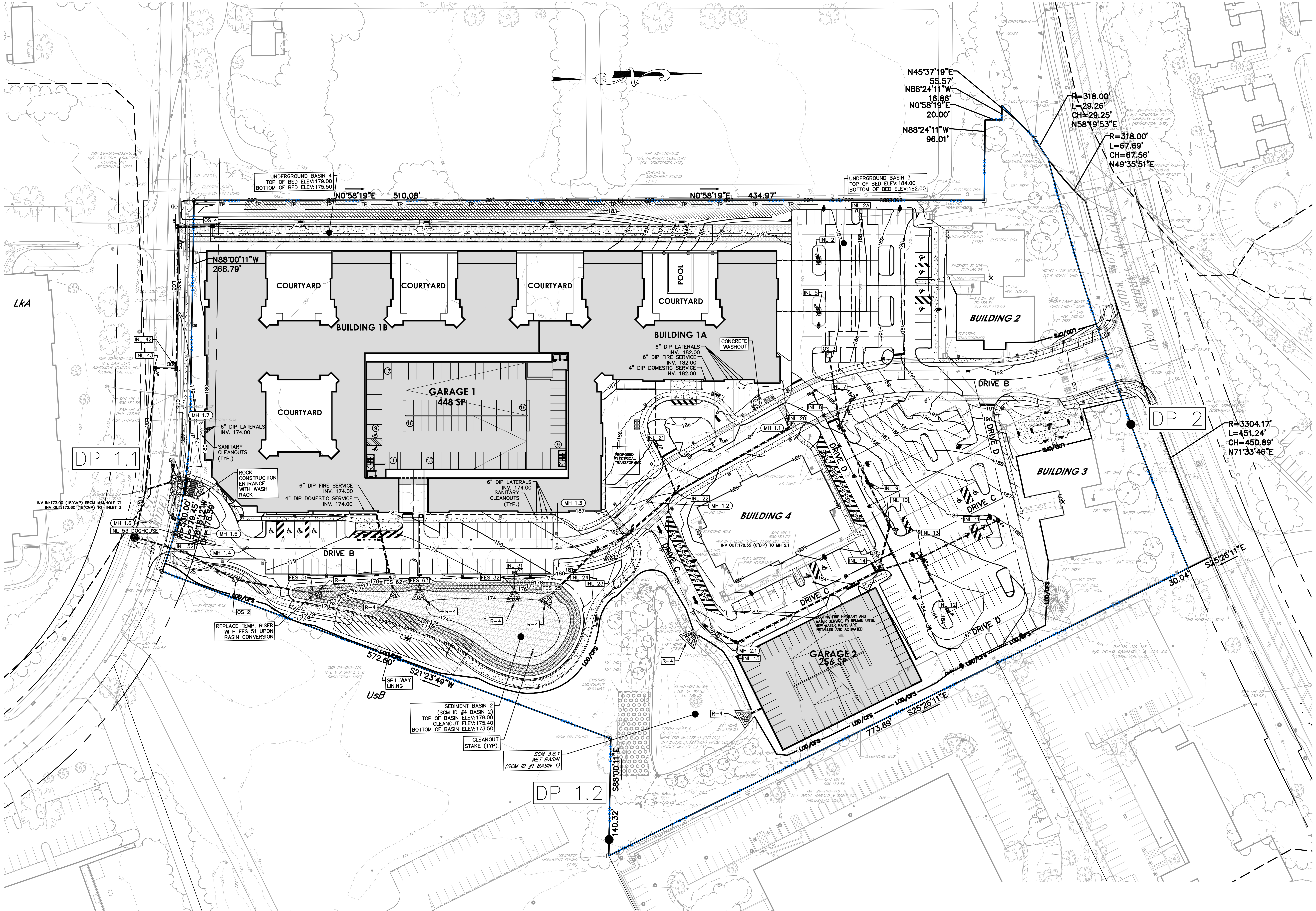
APPLICANTS INFO:
661 PENN STREET, LLC
209 PENN'S TRAIL
NEWTOWN, PA 18940
215–968–0600

MUNICIPAL FILE No.:

TAX MAP PARCEL No.:
29–010–119–001 & 29–010–037

| | |
|---|---|
| TOTAL AREA:<br>15.75 AC. | TOTAL LOTS:<br>2 |
| DATE:<br>01/21/26 | SCALE:<br>1"=50' |
| DRAWN BY:<br>GY/BH | CHECKED BY:<br>RGM |

SHEET NO.:
16 OF 33



UNDERGROUND BASIN 4
TOP OF BED ELEV:179.00
BOTTOM OF BED ELEV:175.50
N0°58'19"E 510.08'
N0°58'19"E 434.97'
UNDERGROUND BASIN 3
TOP OF BED ELEV:184.00
BOTTOM OF BED ELEV:182.00
N45°37'19"E 55.57'
N88°24'11"W 16.86'
N0°58'19"E 20.00'
N88°24'11"W 96.01'
R=318.00' L=29.26' CH=29.25' N58°19'53"E
R=318.00' L=67.69' CH=67.56' N49°35'51"E
R=3304.17' L=451.24' CH=450.89' N71°33'46"E
N88°00'11"W 268.79'
R=530.00' L=179.45' N78°18'12"W CH=178.59'
S25°26'11"E 30.04'
S25°26'11"E 773.89'
S21°23'49"W 572.60'
S88°00'11"E 140.32'
NEWTOWN-YARDLEY ROAD (96' WIDE)
COURTYARD
COURTYARD
COURTYARD
POOL
COURTYARD
COURTYARD
BUILDING 1B
BUILDING 1A
BUILDING 2
BUILDING 3
BUILDING 4
GARAGE 1 448 SP
GARAGE 2 256 SP
DRIVE B
DRIVE C
DRIVE D
NO PARKING FIRE LANE
DP 1.1
DP 1.2
DP 2
LkA
UsB
CONCRETE WASHOUT
6" DIP LATERALS INV. 182.00
6" DIP FIRE SERVICE INV. 182.00
4" DIP DOMESTIC SERVICE INV. 182.00
6" DIP LATERALS INV. 174.00
SANITARY CLEANOUTS (TYP.)
6" DIP FIRE SERVICE INV. 174.00
4" DIP DOMESTIC SERVICE INV. 174.00
ROCK CONSTRUCTION ENTRANCE WITH WASH RACK
PROPOSED ELECTRICAL TRANSFORMER
INV IN:173.00 (18"CMP) FROM MANHOLE 71
INV OUT:172.60 (18"CMP) TO INLET 3
REPLACE TEMP. RISER WITH FES 51 UPON BASIN CONVERSION
SPILLWAY LINING
SEDIMENT BASIN 2
(SCM ID #4 BASIN 2)
TOP OF BASIN ELEV:179.00
CLEANOUT ELEV:175.40
BOTTOM OF BASIN ELEV:173.50
CLEANOUT STAKE (TYP).
SCM 3.8.1 WET BASIN (SCM ID #1 BASIN 1)
EXISTING FIRE HYDRANT AND WATER SERVICE TO REMAIN UNTIL NEW WATER MAINS ARE INSTALLED AND ACTIVATED.
MH 1.1
MH 1.2
MH 1.3
MH 1.4
MH 1.5
MH 1.6
MH 1.7
MH 2.1
INL 2
INL 2A
INL 5
INL 7
INL 8
INL 9
INL 10
INL 11
INL 12
INL 13
INL 14
INL 15
INL 20
INL 21
INL 22
INL 23
INL 24
INL 31
INL 42
INL 43
INL 52
INL 53 DOGHOUSE
OS 2
OS 3
OS 4
FES 25
FES 32
FES 51
FES 62
FES 63
R-4
LOD/CFS
TP
TMP 29-010-032-002 N/L LAW SCHL ADMISSION COUNCIL INC (RESIDENTIAL USE)
TMP 29-010-033 N/L LAW SCHL ADMISSION COUNCIL INC (COMMERCIAL USE)
TMP 29-010-036 N/L NEWTOWN CEMETERY (EX-CEMETERIES USE)
TMP 29-010-055-003 N/L NEWTOWN WALK COMMUNITY ASSN INC (RESIDENTIAL USE)
TMP 29-010-037-001 N/L GERBER LLC (COMMERCIAL USE)
TMP 29-010-118 N/L TROILO, CAMERON C & OLGA JNC (COMMERCIAL USE)
TMP 29-010-115 N/L V 7 GRP L L C (INDUSTRIAL USE)
TMP 29-010-115 N/L BECK, HAROLD & SONS INC (INDUSTRIAL USE)
EXISTING EMERGENCY SPILLWAY
RETENTION BASIN TOP OF WATER

## SEQUENCE OF CONSTRUCTION: PHASE 3

**ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED, UNLESS NOTED OTHERWISE. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.**

**AT LEAST 7 DAYS PRIOR TO START OF WORK OR EARTH DISTURBANCE ACTIVITIES FOR EACH STAGE, A PRECONSTRUCTION MEETING SHALL BE HELD INCLUDING THE OWNER, SITE CONTRACTOR, TOWNSHIP ENGINEER, BUCKS COUNTY CONSERVATION DISTRICT, AND THE PLAN DESIGNER.**

**EROSION AND SEDIMENT CONTROLS MUST BE CONSTRUCTED, STABILIZED AND FUNCTIONING BEFORE SITE DISTURBANCE WITHIN THE TRIBUTARY AREAS OF THOSE CONTROLS. THE BCCD SHALL APPROVE THE CONTROLS ONCE IN PLACE.**

**OWNER AND/OR CONTRACTOR MUST NOTIFY ADJACENT PROPERTY OWNERS IN ADVANCE OF CONSTRUCTION IN ORDER TO COORDINATE/MAINTAIN ACCESS TO THEIR PROPERTIES. THE CONTRACTOR SHALL DEVELOP A CONSTRUCTION SCHEDULE WHICH ACCOMMODATES DELIVERIES AND COMMERCIAL ACCESS FOR BOTH, ON-SITE BUSINESS AND STATE STREET PROPERTIES, UTILIZING THE COMMON ACCESS DRIVE DURING CONSTRUCTION.**

**UTILITY NOTES:**

**WHEN INSTALLING UNDERGROUND UTILITIES IN AREAS WHERE THERE WILL BE PEDESTRIAN AND/OR VEHICULAR TRAFFIC, CONTRACTOR TO SETUP MAINTENANCE AND PROTECTION OF TRAFFIC FOR TRENCHING OPERATIONS FOR UTILITY CONNECTIONS ACROSS STATE ROUTES USING PENNDOT FIGURES 5, 7, 8, 10A AND 10B (REFER TO HOP PLANS BY TRAFFIC ENGINEER) AS WELL AS FOR ACCESSWAYS INTERNAL TO THE SITE. MAINTENANCE AND PROTECTION CONTROLS MAY NEED TO BE ADJUSTED TO SUIT CONSTRUCTION ACTIVITIES DURING PERFORMANCE OF WORK.**

**THE CONTRACTOR SHALL COORDINTATE WITH NEWTOWN BUCKS COUNTY JOINT MUNICIPAL AUTHORITY WHEN INSTALLING THE PROPOSED SANITARY SEWER, NEWTOWN ARTESIAN WATER COMPANY WHEN INSTALLING THE PROPOSED WATER SYSTEM, AND PECO WHEN INSTALLING THE PROPOSED GAS AND ELECTRIC SERVICES.**

**WHEN INSTALLING THE PROPOSED SANITARY SEWER, CONTRACTOR TO PROVIDE TEMPORARY BYPASS PUMPS WITH FILTER BAGS AS NECESSARY TO CREATE DE-WATERED ZONE FOR WORK, WHERE NECESSARY. CONNECTIONS TO EXISTING SEWER SHALL BE ACCOMPLISHED WHILE SEWAGE IS BEING CONVEYED THROUGH EXISTING INFRASTRUCTURE. IF THE DEPTH OF SEWAGE PRECLUDES CONSTRUCTION OF THE CONNECTION, THE WORK SHALL BE SCHEDULED AT NIGHT DURING LOW FLOW CONDITIONS OR A BYPASS PUMPING ARRANGEMENT SHALL BE IMPLEMENTED FROM EXISTING MANHOLE (TO BE REPLACED) TO NEAREST NEWLY INSTALLED MANHOLE DOWNSTREAM.**

PHASE 3: SITE IMPROVEMENTS

1. MAINTAIN TEMPORARY ROCK CONSTRUCTION ENTRANCE WITH WASHOUT RACK AS SHOWN ON PLAN.
2. INSPECT EXISTING E&S CONTROLS, AND INSTALL ADDITIONAL COMPOST FILTER SOCK(S) AND TREE PROTECTION FENCE(S) ALONG PERIMETER OF SITE AS NEEDED. REPAIR AND MAINTAIN ALL E&S BMPS.
3. BEGIN EXCAVATION AND EARTH MOVING FOR BUILDING 1B FOUNDATION AND GARAGE 1, AND ANY REMAINING DRIVEWAYS AND SITE UTILITIES.
4. NO CONSTRUCTION VEHICLES ARE TO TAKE ACCESS TO SITE FROM NEWTOWN-YARDLEY ROAD.
5. CONSTRUCT BMP 3 & 4 AND RELATED STORM SEWER, BEING MINDFUL NOT TO CUTOFF ACCESS TO SOUTHERLY BUILDING CONSTRUCTION. BASIN EXCAVATIONS ARE A CRITICAL STAGE OF CONSTRUCTION, AND EARTHWORK CONTRACTOR SHALL CONTACT REPRESENTATIVE FROM G&A A MINIMUM OF 24 HOURS IN ADVANCE TO OBSERVE BED BOTTOM CONDITIONS PRIOR TO PLACEMENT OF GEOFABRIC. CONTRACTOR TO PROVIDE INTERIM AS-BUILT SURVEY PLAN AND CERTIFICATION BY A PA-PLS THAT THE AS-BUILT INVERT ELEVATIONS AND FOOTPRINT MEET THE DESIGN SPECIFICATIONS.CONSTRUCT COURTYARD AND AMENITIES. CERTIFICATE OF OCCUPANCY FOR ANY BUILDING WILL NOT BE ISSUED BEFORE INSTALLATION OF TRAIL ARE COMPLETED.
6. AS CONSTRUCTION OF BUILDING IB CONTINUES, CONSTRUCT COURTYARD AND AMENITIES.
7. AS PHASE 3 LAWN AREAS ARE BROUGHT TO GRADE, THEY SHALL BE PROVIDED WITH A MINIMUM OF 8" TOPSOIL AND SEEDED IMMEDIATELY. ALL VEGETATED AREAS SHALL BE STABILIZED WITH VEGETATION AND MULCH AS SOON AS POSSIBLE.
8. FINE GRADE AND STABILIZE LAWN AREAS. INSTALL REMAINING REQUIRED SITE LANDSCAPE PLANT MATERIALS AND SITE LIGHTING.
9. IMMEDIATE STABILIZATION SHALL BE PROVIDED UPON TEMPORARY CESSATION OF WORK -4 OR MORE DAYS -OR AS SOON AS ANY GRADED AREA REACHES FINAL GRADE.
10. ALL ACCUMULATED SEDIMENTS SHALL BE DISPOSED OF IN APPROVED UPLAND AREAS.
11. AS-BUILT DRAWINGS OF THE SITE SHALL BE SUBMITTED AND ACCEPTED BY THE TOWNSHIP PER THE ACCEPTANCE/DEDICATION REQUIREMENTS.
12. AFTER TRIBUTARY AREA HAS BEEN STABILIZED, SEDIMENT BASIN 2 SHALL BE CONVERTED TO THE PERMANENT CONDITION. ACCUMULATED SEDIMENTS AND BASIN BOTTOM SHALL BE EXCAVATED TO BIORETENTION SUBGRADE ELEVATION. INSTALL AMENDED SOILS IN ACCORDANCE WITH BIORETENTION DETAILS. BASINS SHALL BE LANDSCAPED IN ACCORDANCE WITH THE LANDSCAPE PLANS.
13. AFTER THE SITE HAS BEEN STABILIZED, ALL TEMPORARY E&S CONTROLS SHALL BE REMOVED.
    - A. ALL ACCUMULATED SEDIMENTS SHALL BE DISPOSED IN APPROVED UPLAND AREAS.
    - B. STABILIZATION SHALL BE CONSIDERED THE PLACEMENT OF BASE COURSE IN PAVED AREAS OR BY 75% OR MORE VEGETATION, UNIFORM COVERAGE, IN LAWN AREAS OR BY OTHER PERMANENT MEANS WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
    - C. AREAS DISTURBED DURING THE REMOVAL OF BMPS SHALL BE STABILIZED IMMEDIATELY.

## DEMOLITION NOTES

1. THE SCOPE OF THIS CONTRACT INCLUDES THE FOLLOWING WORK SHOWN WITHIN THE LIMIT OF DISTURBANCE AND AS OTHERWISE NOTED ON THE PLAN AND IN THE SPECIFICATIONS:
    - A. REMOVAL OF EXISTING BUILDINGS, FOOTINGS AND FLOOR SLABS. TYP SHOWN WITHIN THE DOT HATCHING.
    - B. REMOVAL OF EXISTING ALL UTILITIES TO WITHIN 10 FEET OF MAINS AT PENN STREET, UNLESS DICTATED ELSEWHERE IN THE PLANS.
    - C. REMOVAL OF PAVEMENTS TYP SHOWN HATCHED.
    - D. REMOVAL OF RETAINING WALLS AND FOOTINGS.
    - E. REMOVAL OF CURBS ALONG ALL DRIVES AND PARKING AREAS.
    - F. CLEARING AND GRUBBING WITHIN THE LIMITS OF DISTURBANCE.
    - G. REMOVAL OF STORM/SANITARY STRUCTURES AND PIPES WITHIN PAVEMENT/BUILDING REMOVAL LIMITS, AND LIMIT OF GRADING SHOWN OTHERWISE NOTED.
2. COMPACTION – THE ACCEPTABILITY OF SUBGRADES AND FILLS IS TO BE DETERMINED BY REGULAR PERIODIC COMPACTION AND TESTS BY THE GEOTECHNICAL ENGINEER WITH REPORTS SUBMITTED TO THE OWNER AND ENGINEER FOR REVIEW AND TO THE CONTRACTOR. TESTS FOR MOISTURE CONTENT, SOILS ANALYSIS AND COMPACTION ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST ASTM STANDARDS WHICH WILL INCLUDE ASTM D-1140 AND ASTM D-1557. TESTS FOR COMPACTION ARE TO BE CONDUCTED IN ACCORDANCE WITH ASTM D-1557. COMPACTION OF STRUCTURAL FILLS AND COMPACTED SUBGRADES SHALL NOT BE LESS THAN 98% RELATIVE DENSITY. COMPACTION FOR FILLS IN OTHER AREAS (LAWN AND UNPAVED AREAS) SHALL NOT BE LESS THAN 90% RELATIVE DENSITY.
3. BACKFILL AND FILL MATERIALS – FILL MATERIALS ARE TO CONSIST OF IN-SITU EXCAVATED MATERIALS AND IMPORTED MATERIAL. THE SUITABILITY OF IN-SITU MATERIALS AND IMPORTED MATERIALS IS TO BE DETERMINED BY THE GEOTECHNICAL ENGINEER. BACKFILL AND FILL MATERIALS ARE TO CONSIST OF SOIL MATERIALS CONFORMING TO ASTM D2487 SOIL CLASSIFICATIONS GW, SP, GM, SM, AND SP WITH MAXIMUM DIMENSION OF 4 INCHES. UNSATISFACTORY SOILS ARE THOSE CLASSIFICATIONS GC, SC, ML, MH, CL, OL, OH, AND PT. DEMOLITION MATERIALS SUCH AS CONCRETE AND BITUMINOUS PAVING MAY BE RE-USED AS BACKFILL AND FILL MATERIALS PROVIDED THEY ARE PULVERIZED SO THAT NO DIMENSION EXCEEDS 3" AND THEY ARE THOROUGHLY MIXED WITH OTHER BACKFILL AND FILL MATERIALS TO PROVIDE A SOLID BACKFILL FREE OF VOIDS. BACKFILL AND FILL MATERIALS ARE TO BE FREE OF DEBRIS, WASTE, FROZEN MATERIALS AND ORGANICS. IF SUFFICIENT ACCEPTABLE MATERIAL IS NOT AVAILABLE ON THE SITE, THE CONTRACTOR IS RESPONSIBLE TO ACQUIRE ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE CONTRACT.

## LEGEND

| | |
|---|---|
| — TP — | TREE PROTECTION FENCE |
| — — | LIMIT OF DISTURBANCE |
| —NPDES— | PROJECT SITE BOUNDARY |
| — CFS — | COMPOST FILTER SOCK |
| ▩ | ROCK CONSTRUCTION ENTRANCE |
| CFS | TOPSOIL STOCKPILE |
| ☒ | INLET PROTECTION |
| (T.B.R.) | EXISTING FEATURES TO BE REMOVED |
| — — | SOIL BOUNDARY |
| ▽ | PROPOSED RIP RAP APRON |
| ▨ | SWALE CONTROL BLANKET |
| CFS | CONCRETE WASHOUT |
| —LOD— | LIMIT OF DISTURBANCE |
| — LOD/CFS — | LIMIT OF DISTURBANCE/CFS |
| — CFS — | COMPOST FILTER SOCK |
| ☒ | EROSION CONTROL BLANKET |
| ▨ | PROPOSED EMERGENCY SPILLWAY |
| — X — | TEMPORARY CONSTRUCTION FENCING |
| Ⓢ | PROPOSED SANITARY MANHOLE |
| ▦ | EXISTING EMERGENCY SPILLWAY |
| — -500 — | EXISTING MAJOR CONTOURS |
| — — -499- — — | EXISTING MINOR CONTOURS |
| ⌒⌒⌒ | TREE LINE |
| —-—-— | LEGAL RIGHT-OF-WAY |
| — - - — - - | ULTIMATE RIGHT-OF-WAY |
| — — — — | STORM LINE |
| — G — | GAS LINE |
| — OH — | OVERHEAD ELECTRIC LINE |
| — E — | ELECTRIC LINE |
| — S — | SANITARY LINE |
| — W — | WATER LINE |
| — — — | EXISTING EASEMENT |
| Ⓢ | SANITARY MANHOLE |
| ▨ | STORM INLET |
| ▦ | DETECTABLE WARNING SURFACE |
| ⋈ | GAS VALVE |
| ⋈ | WATER VALVE |
| ● | FIRE HYDRANT |
| ● | ELECTRIC METER |
| ● | GUY |
| -○- | UTILITY POLE |
| ▭ | MAILBOX |
| ✱ | LIGHT STANDARD |
| □ | CONCRETE MONUMENT FOUND |
| ◎ | IRON PIN FOUND |

**LIMIT OF DISTURBANCE: 12.64 AC.**
**PROJECT SITE BOUNDARY: 15.75 AC.**

SEE SHEET 25 – E&S NOTES FOR SOILS CHART

### PARKING COUNT SUMMARY PHASE 3:

| | GARAGE SPACES | SURFACE SPACES | TOTAL SPACES |
|---|---|---|---|
| EXISTING PARKING PH2 | 0 | 0 | 0 |
| PROPOSED PARKING PH2 | 704 | 264 | 968 |
| TOTAL SPACES | 704 | 264 | 968 |

50 0 50 100
SCALE IN FEET
1"=50'

PENNSYLVANIA ONE CALL SYSTEM, INC.
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West Mifflin, Pennsylvania
15122 – 1078

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GILMORE & ASSOCIATES INC. HAS NOT OBTAINED A PA-ONE CALL SERIAL NUMBER FOR DESIGN PURPOSES.

C:\Autodesk Docs\ACCDocs\Gilmore and Associates\2500866_661_Penn_Street_Re-Dev\Project Files\2025\2500866\DESIGN\CAD\Prod_Dwgs\2500866_E&S Plan Phase 3.dwg Layout: E&S PLAN PHASE 3 Plotted By: rmonkres on: Wed Jul 29, 2026 at 8:27am

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GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES
CORPORATE HEADQUARTERS
65 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901 • (215) 345-4330 • www.gilmore-assoc.com

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RONALD G. MONKRES II
ENGINEER 603164-E

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# 661 PENN STREET REDEVELOPMENT

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## E&S PLAN PHASE 3

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.: 2500866

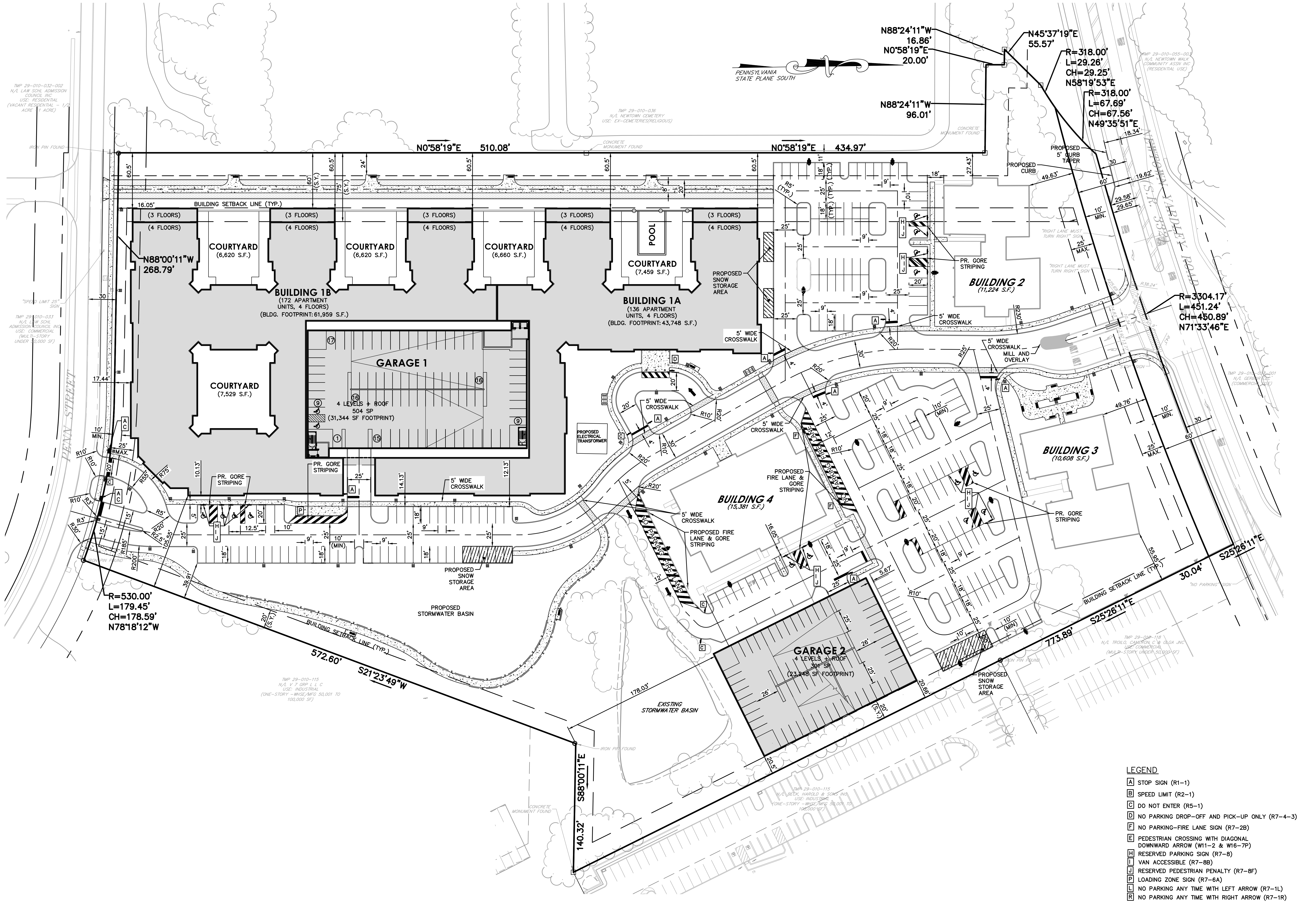
APPLICANTS INFO:
661 PENN STREET, LLC
209 PENN'S TRAIL
NEWTOWN, PA 18940
215-968-0600

MUNICIPAL FILE No.:

TAX MAP PARCEL No.:
29-010-119-001 & 29-010-037

| | |
|---|---|
| TOTAL AREA: 15.75 AC. | TOTAL LOTS: 2 |
| DATE: 01/21/26 | SCALE: 1"=50' |
| DRAWN BY: GY/BH | CHECKED BY: RGM |

SHEET NO.: 17 OF 33



LEGEND

- A STOP SIGN (R1-1)
- B SPEED LIMIT (R2-1)
- C DO NOT ENTER (R5-1)
- D NO PARKING DROP-OFF AND PICK-UP ONLY (R7-4-3)
- F NO PARKING-FIRE LANE SIGN (R7-2B)
- E PEDESTRIAN CROSSING WITH DIAGONAL DOWNWARD ARROW (W11-2 & W16-7P)
- H RESERVED PARKING SIGN (R7-8)
- I VAN ACCESSIBLE (R7-8B)
- J RESERVED PEDESTRIAN PENALTY (R7-8F)
- P LOADING ZONE SIGN (R7-6A)
- L NO PARKING ANY TIME WITH LEFT ARROW (R7-1L)
- R NO PARKING ANY TIME WITH RIGHT ARROW (R7-1R)
- ✕ STREET SIGNS
- ✱ SITE LIGHTING

50 0 50 100
SCALE IN FEET
1"=50'

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West Mifflin, Pennsylvania
15122 – 1078

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SERIAL NO. 20252790540

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GILMORE & ASSOCIATES INC. HAS OBTAINED A PA-ONE CALL SERIAL NUMBER AS NOTED HEREON FOR DESIGN PURPOSES ONLY.

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**NOT APPROVED FOR CONSTRUCTION**

RONALD G. MONKRES II
ENGINEER
603164-E

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# 661 PENN STREET REDEVELOPMENT

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## STRIPING & SIGNAGE

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.: 2500866

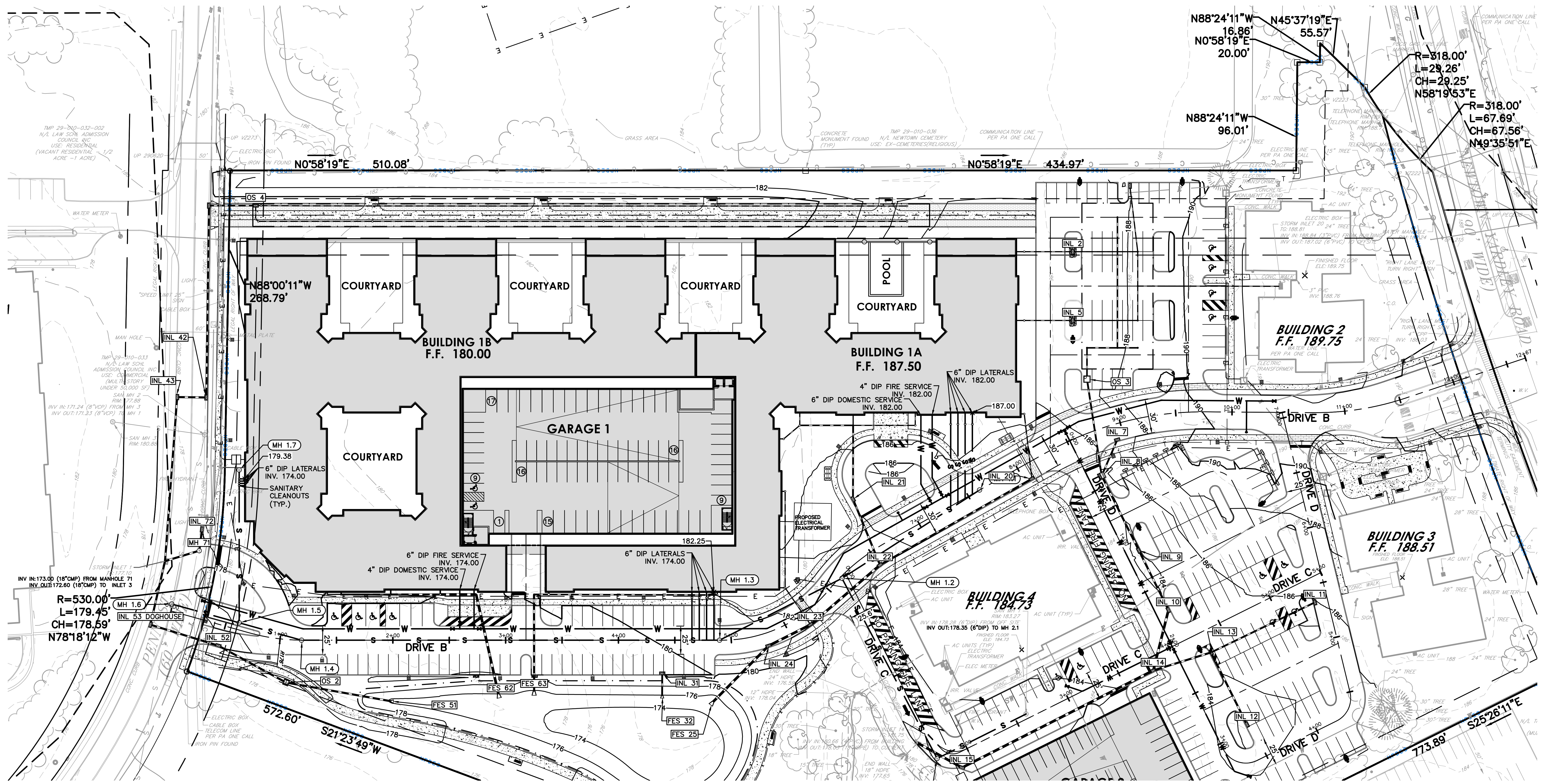
APPLICANTS INFO:
661 PENN STREET, LLC
209 PENN'S TRAIL
NEWTOWN, PA 18940
215-968-0600

MUNICIPAL FILE No.:

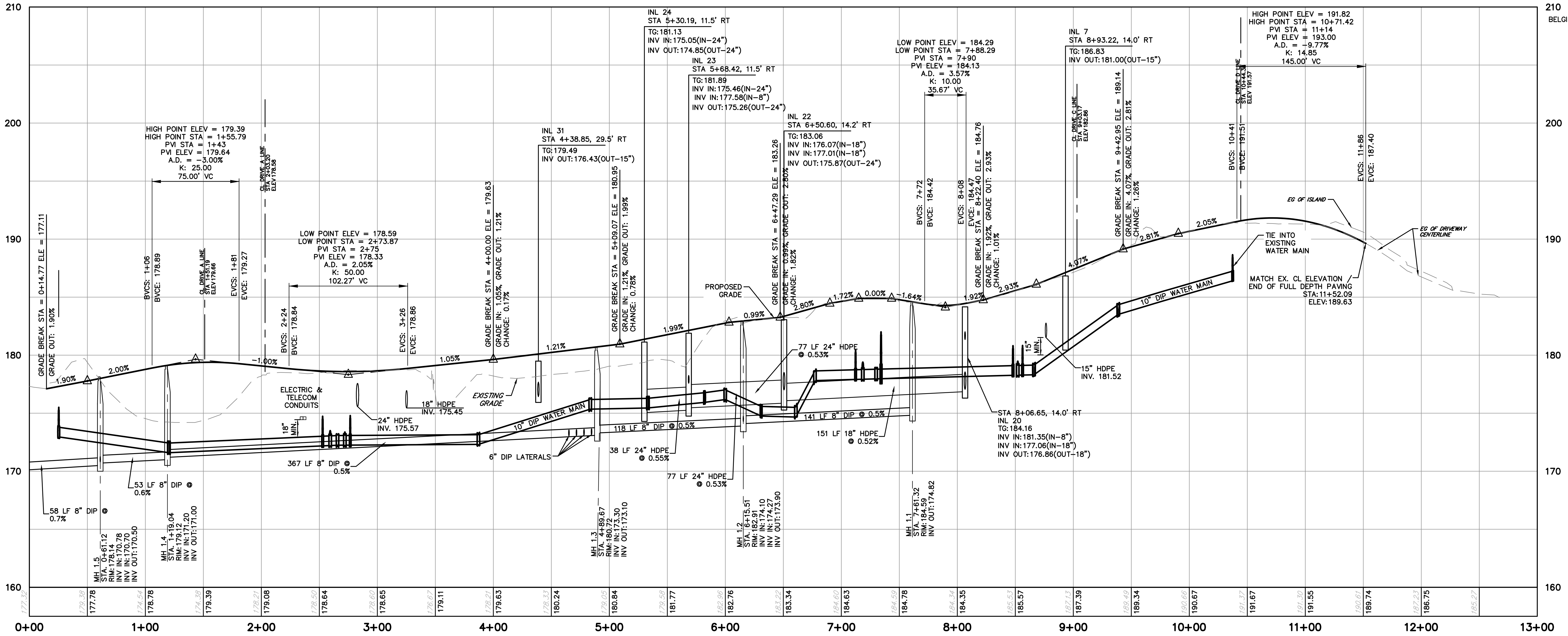
TAX MAP PARCEL No.: 29-010-119-001 & 29-010-037

| | |
|---|---|
| TOTAL AREA: 15.75 AC. | TOTAL LOTS: 2 |
| DATE: 01/21/26 | SCALE: 1"=50' |
| DRAWN BY: GY/BH | CHECKED BY: RGM |

SHEET NO.: 18 OF 33



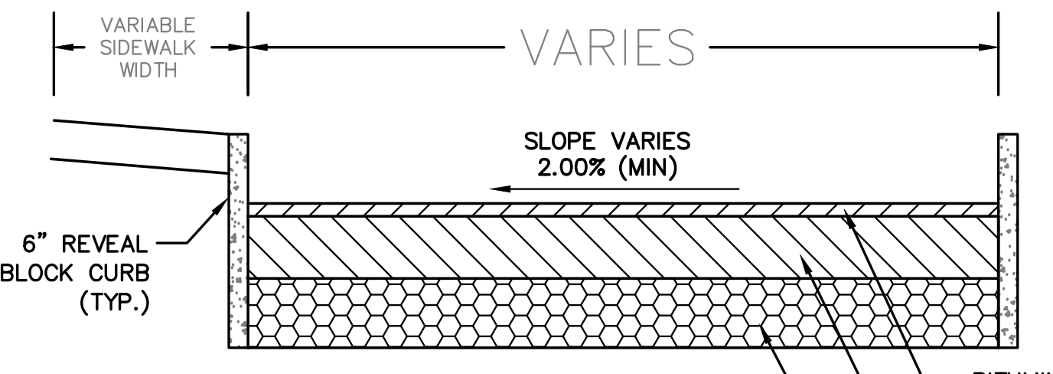
DRIVE B PLAN
SCALE 1"=50'



PROFILE: DRIVE B
STATION 0+00 TO 13+00
SCALE: HORZ 1"=50'
VERT 1"=5'

## LEGEND

| | |
|---|---|
| *N07°37'37"E 750.15'* | PROPERTY / DEED LINE |
| | EXISTING PHYSICAL CENTERLINE OF ROAD |
| | EXISTING LEGAL RIGHT-OF-WAY |
| | EXISTING EASEMENT |
| | EXISTING WETLANDS |
| ▨ | EXISTING WATERS OF THE U.S. |
| | 100-YEAR FLOODPLAIN |
| | EXISTING 2 FT CONTOURS |
| 250 | EXISTING 10 FT CONTOURS |
| 126.32 × | EXISTING SPOT ELEVATION |
| | EXISTING UTILITY POLE |
| G G | EXISTING GAS MAIN |
| W W | EXISTING WATER MAIN |
| S S | EXISTING SANITARY SEWER |
| E E | EXISTING ELECTRIC TRANSMISSION |
| | EXISTING FENCE |
| | EXISTING SIGN |
| *UfuB* | EXISTING SOIL CLASSIFICATION |
| | EXISTING SOIL BOUNDARY |
| | EXISTING STORM SEWER |
| ■ | EXISTING STORM INLET |
| 188 | PROPOSED MINOR CONTOUR |
| 190 | PROPOSED MAJOR CONTOUR |
| 126.32 × | PROPOSED SPOT ELEVATION |
| | PROPOSED STORM SEWER |
| TP-6 | INFILTRATION TEST PIT |
| POI #1 | POINT OF INTEREST (FOR DRAINAGE AREA) |
| LOD LOD | LIMIT OF DISTURBANCE |
| | EXISTING EMERGENCY SPILLWAY |



DRIVE 'B' TYPICAL SECTION
NOT TO SCALE

PENNSYLVANIA ONE CALL SYSTEM, INC.

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West Mifflin, Pennsylvania
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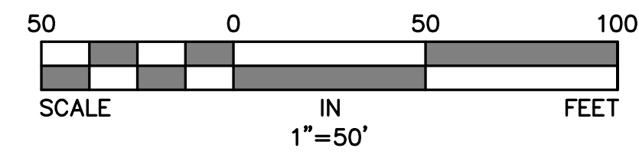

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RONALD G. MONKRES II
ENGINEER 603164-E

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# *661 PENN STREET REDEVELOPMENT*

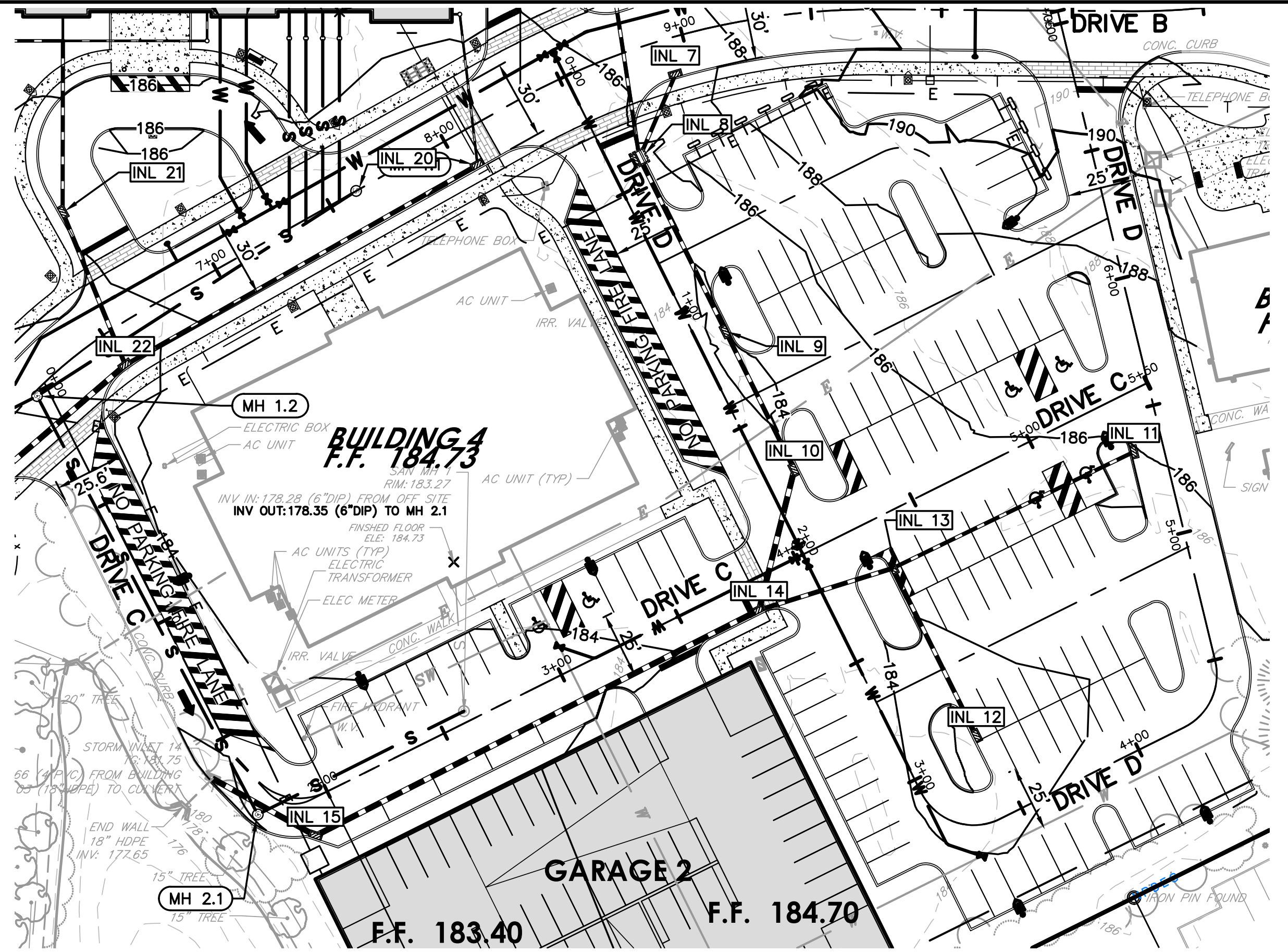
NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## PLAN & PROFILE – DRIVE B

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

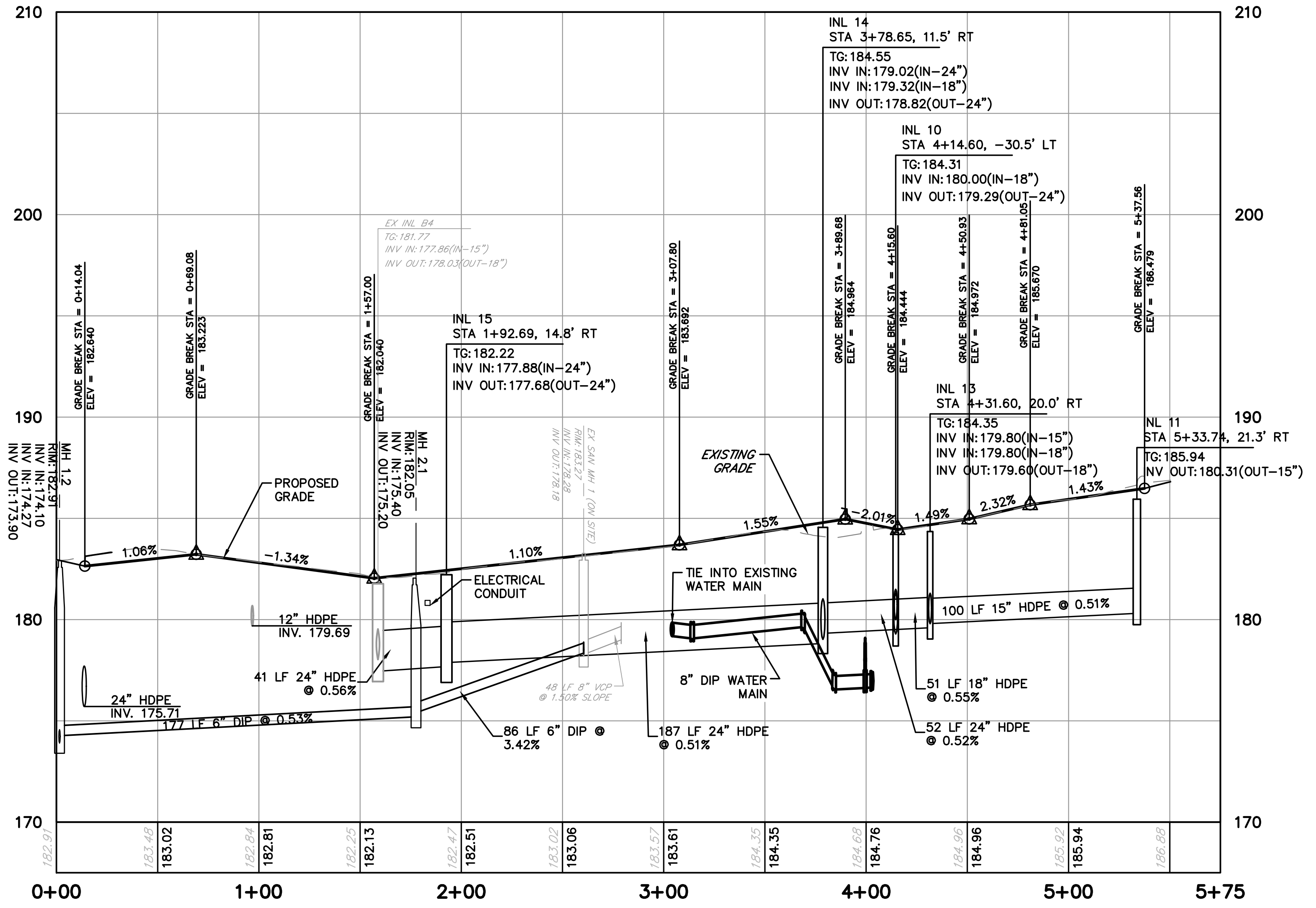
| | |
|---|---|
| PROJECT No.: 2500866 | |
| APPLICANTS INFO:<br>661 PENN STREET, LLC<br>209 PENN'S TRAIL<br>NEWTOWN, PA 18940<br>215-968-0600 | |
| MUNICIPAL FILE No.: | |
| TAX MAP PARCEL No.:<br>29-010-119-001 & 29-010-037 | |
| TOTAL AREA:<br>15.75 AC. | TOTAL LOTS:<br>2 |
| DATE:<br>01/21/26 | SCALE:<br>1"=50' |
| DRAWN BY:<br>GY/BH | CHECKED BY:<br>RGM |

SHEET NO.:
19 OF 33



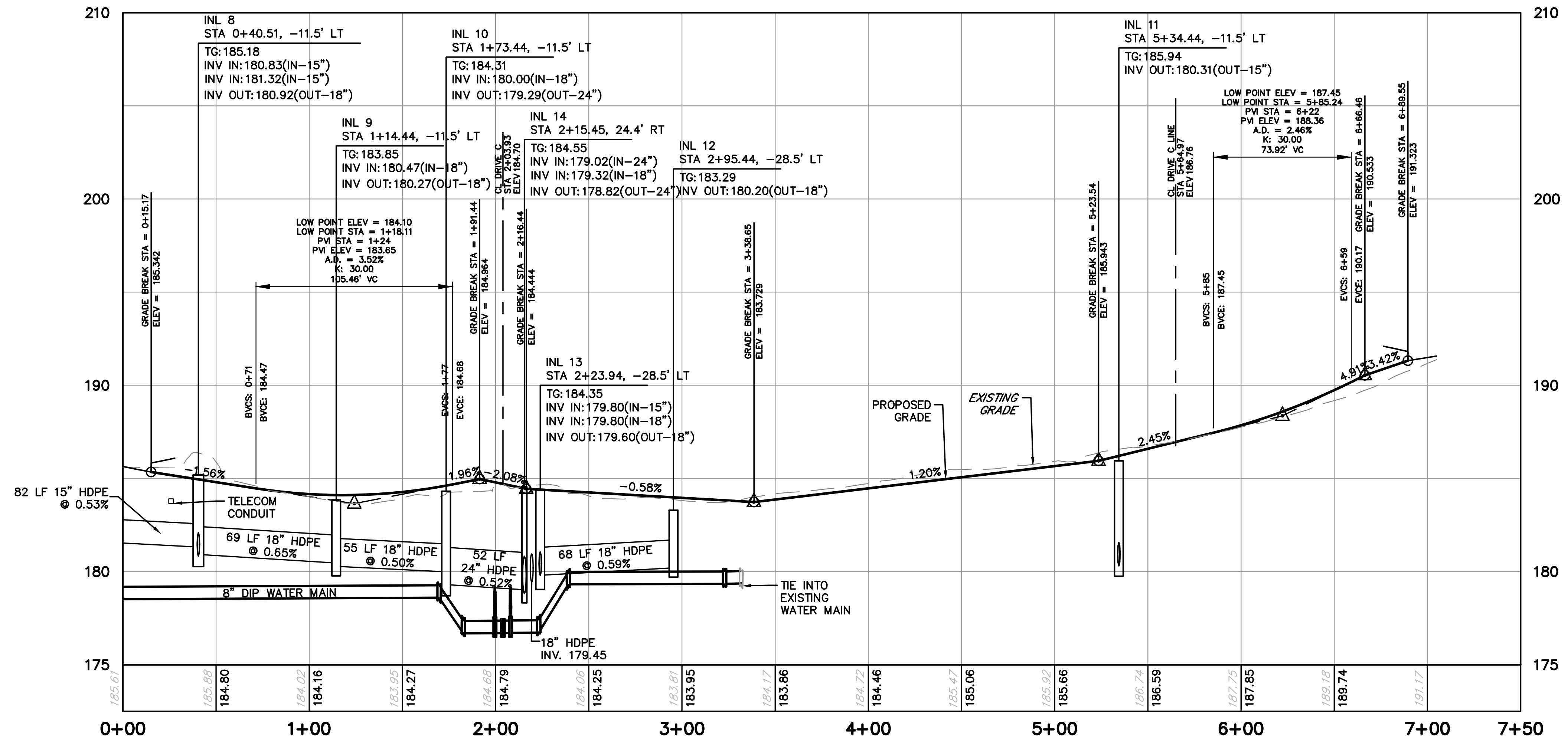
DRIVE C & D PLAN

SCALE 1"=50'



## PROFILE: DRIVE C

STATION 0+00 TO 5+75
SCALE: HORZ 1"=50'
VERT 1"=5'



## PROFILE: DRIVE D

STATION 0+00 TO 7+50
SCALE: HORZ 1"=50'
VERT 1"=5'

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West Mifflin, Pennsylvania
15122 – 1078

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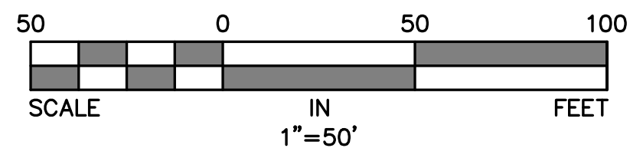

## LEGEND

| | |
|---|---|
| *N07°37'37"E 750.15'* | PROPERTY / DEED LINE |
| | EXISTING PHYSICAL CENTERLINE OF ROAD |
| | EXISTING LEGAL RIGHT-OF-WAY |
| | EXISTING EASEMENT |
| | EXISTING WETLANDS |
| ▨ | EXISTING WATERS OF THE U.S. |
| | 100-YEAR FLOODPLAIN |
| | EXISTING 2 FT CONTOURS |
| 250 | EXISTING 10 FT CONTOURS |
| 126.32 × | EXISTING SPOT ELEVATION |
| | EXISTING UTILITY POLE |
| G G | EXISTING GAS MAIN |
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| S S | EXISTING SANITARY SEWER |
| E E | EXISTING ELECTRIC TRANSMISSION |
| | EXISTING FENCE |
| | EXISTING SIGN |
| *UfuB* | EXISTING SOIL CLASSIFICATION |
| | EXISTING SOIL BOUNDARY |
| | EXISTING STORM SEWER |
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| 188 | PROPOSED MINOR CONTOUR |
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| POI #1 | POINT OF INTEREST (FOR DRAINAGE AREA) |
| LOD LOD | LIMIT OF DISTURBANCE |
| | EXISTING EMERGENCY SPILLWAY |

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RONALD G. MONKRES II
ENGINEER 603164-E

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# *661 PENN STREET REDEVELOPMENT*

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## PLAN & PROFILE – ADDITIONAL DRIVES

**GILMORE & ASSOCIATES, INC.**
**ENGINEERING & CONSULTING SERVICES**

PROJECT No.:
2500866

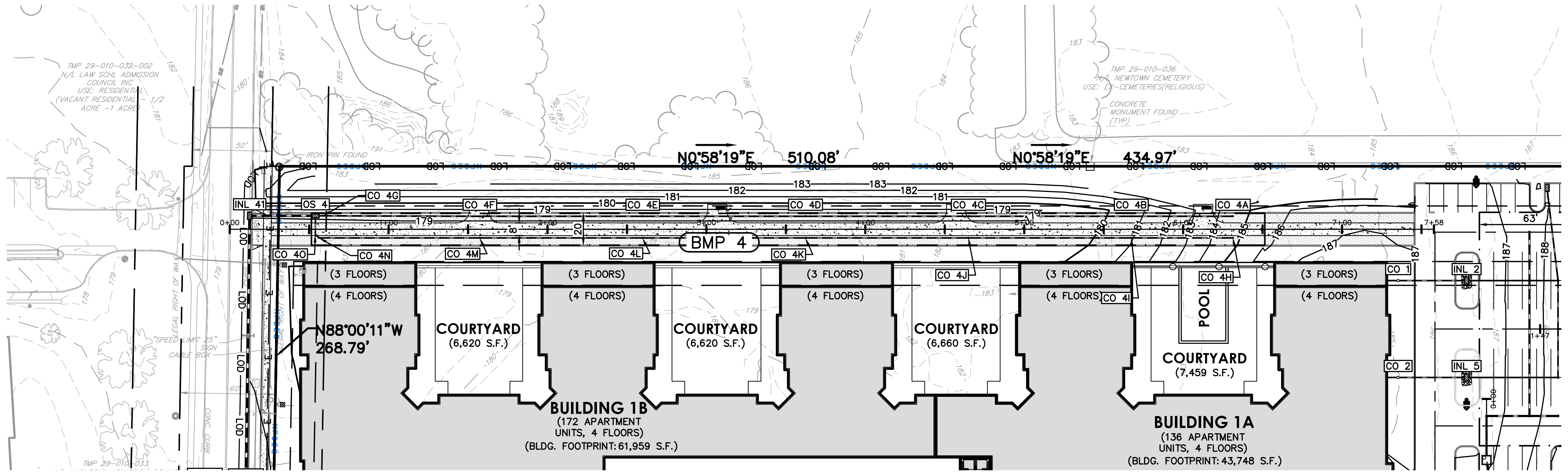
APPLICANTS INFO:
661 PENN STREET, LLC
209 PENN'S TRAIL
NEWTOWN, PA 18940
215-968-0600

MUNICIPAL FILE No.:

TAX MAP PARCEL No.:
29-010-119-001 & 29-010-037

| | |
|---|---|
| TOTAL AREA:<br>15.75 AC. | TOTAL LOTS:<br>2 |
| DATE:<br>01/21/26 | SCALE:<br>1"=50' |
| DRAWN BY:<br>GY/BH | CHECKED BY:<br>RGM |

SHEET NO.:
20 OF 33

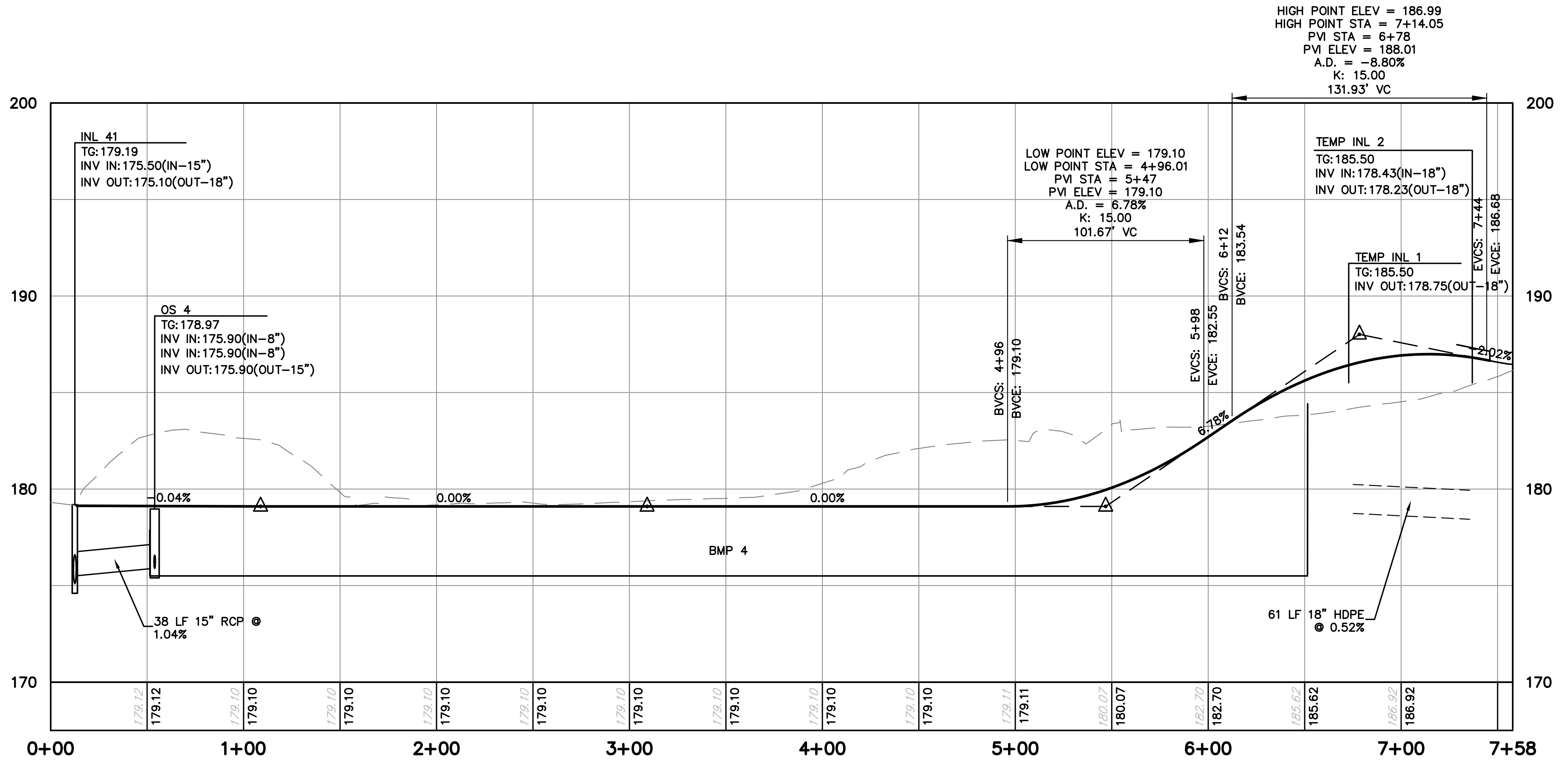


## FIRE LANE PLAN

SCALE 1"=50'

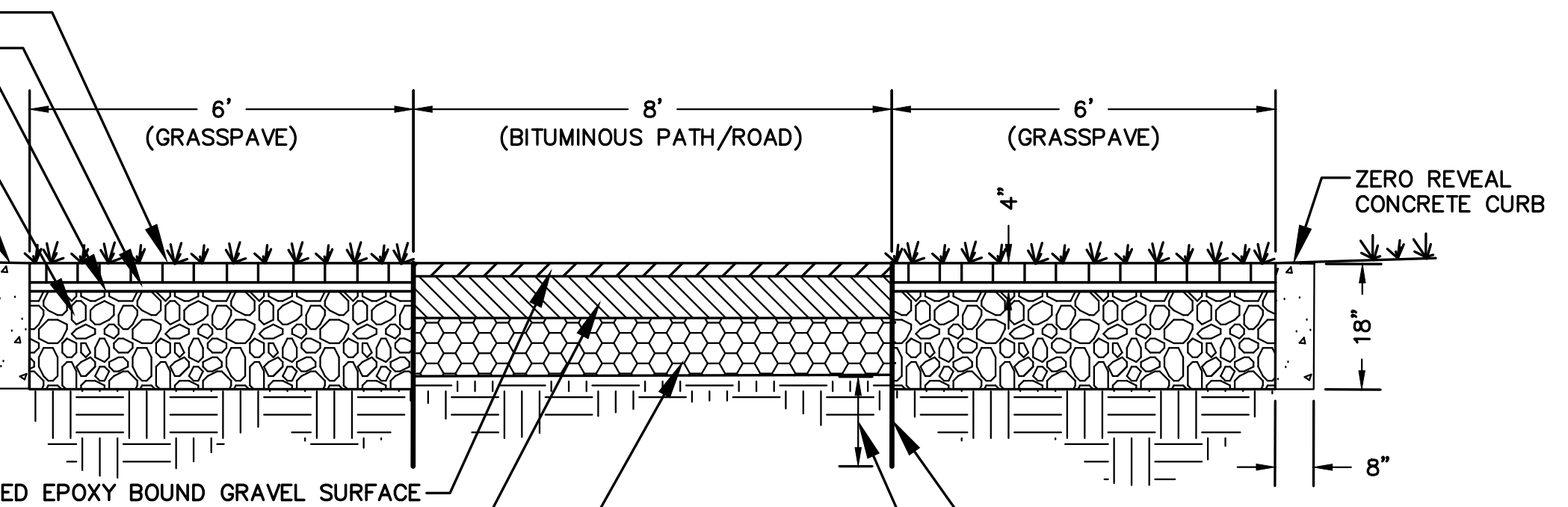
## LEGEND

| | |
|---|---|
| *N07°37'37"E 750.15'* | PROPERTY / DEED LINE |
| ——— — ——— | EXISTING PHYSICAL CENTERLINE OF ROAD |
| ——— – – ——— | EXISTING LEGAL RIGHT–OF–WAY |
| ——— ——— ——— | EXISTING EASEMENT |
| ▒ | EXISTING WETLANDS |
| ▨ | EXISTING WATERS OF THE U.S. |
| — · — · — | 100–YEAR FLOODPLAIN |
| - - - - | EXISTING 2 FT CONTOURS |
| — 250 — | EXISTING 10 FT CONTOURS |
| 126.32 × | EXISTING SPOT ELEVATION |
| ø | EXISTING UTILITY POLE |
| —— G —— G —— | EXISTING GAS MAIN |
| —— W —— W —— | EXISTING WATER MAIN |
| —— S —— S —— | EXISTING SANITARY SEWER |
| —— E —— E —— | EXISTING ELECTRIC TRANSMISSION |
| ——o—— | EXISTING FENCE |
| ⌂ | EXISTING SIGN |
| *UfuB* | EXISTING SOIL CLASSIFICATION |
| ——— ——— ——— | EXISTING SOIL BOUNDARY |
| ═ ═ ═ ═ | EXISTING STORM SEWER |
| ▬ | EXISTING STORM INLET |
| — 188 — | PROPOSED MINOR CONTOUR |
| — 190 — | PROPOSED MAJOR CONTOUR |
| 126.32 × | PROPOSED SPOT ELEVATION |
| ━━━ | PROPOSED STORM SEWER |
| TP–6 ● | INFILTRATION TEST PIT |
| POI #1 | POINT OF INTEREST (FOR DRAINAGE AREA) |
| —LOD—LOD— | LIMIT OF DISTURBANCE |
| ⬡ | EXISTING EMERGENCY SPILLWAY |



## FIRE LANE

STATION 0+00 TO 7+58
SCALE: HORZ 1"=50'
VERT 1"=5'


4" GRASS FILLED GRASSPAVE2 UNITS
2" SAND BED
SOIL AMENDMENT/FERTILIZER PER MANUF. SPECS
12" CLEAN STONE (AASHTO #57) BASE
ZERO REVEAL CONCRETE CURB
6' (GRASSPAVE)
8' (BITUMINOUS PATH/ROAD)
6' (GRASSPAVE)
ZERO REVEAL CONCRETE CURB
4"
18"
8"
RED EPOXY BOUND GRAVEL SURFACE
BITUMINOUS BINDER COURSE
5" SUPERPAVE VOLUMETRIC ASPHALT DESIGN
25 mm, PG 64–22
HMA BASE COURSE
0.3 TO 3 MILLION ESALS
6" GRANULAR SUBBASE OVER COMPACTED SUBGRADE
6 MIL IMPERMEABLE LINER
EXTEND IMPERMEABLE LINER 12" BELOW BASE COURSE DEPTH

## FIRE LANE ACCESS/WALKING TRAIL

SCALE: 1"=10'-0"

PENNSYLVANIA ONE CALL SYSTEM, INC.

925 Irwin Run Road
West Mifflin, Pennsylvania
15122 – 1078

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1–800–242–1776

NON–MEMBERS MUST BE CONTACTED DIRECTLY

PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

LOCATIONS OF EXISTING UNDERGROUND UTILITIES/FACILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM RECORDS, FIELD MARKOUTS BY UTILITY OWNERS, AND/OR ABOVE–GROUND OBSERVATION OF THE SITE. NO EXCAVATIONS WERE PERFORMED IN THE PREPARATION OF THESE DRAWINGS; THEREFORE ALL UTILITIES SHOWN SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH, AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES/FACILITIES TO BE PRESENT WHICH ARE NOT SHOWN ON THE DRAWINGS. ONLY THE VISIBLE LOCATIONS OF UNDERGROUND UTILITIES/FACILITIES AT THE TIME OF FIELD SURVEY SHALL BE CONSIDERED TRUE AND ACCURATE. COMPLETENESS OR ACCURACY OF UNDERGROUND UTILITIES/FACILITIES ARE NOT GUARANTEED BY GILMORE & ASSOCIATES INC.

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GILMORE & ASSOCIATES INC. HAS NOT OBTAINED A PA–ONE CALL SERIAL NUMBER FOR DESIGN PURPOSES.

C:\Autodesk Docs\ACCDocs\Gilmore and Associates\2500866_661_Penn_Street_Re-Dev\Project Files\2025\2500866\DESIGN\CAD\Prod_Dwgs\2500866_X-Lots.dwg Layout: FIRE LANE PROFILE Plotted By: rmonkres, on Wed Jul 29, 2026 at 8:29am

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES
CORPORATE HEADQUARTERS
65 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901 • (215) 345-4330 • www.gilmore-assoc.com

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**NOT APPROVED FOR CONSTRUCTION**

RONALD G. MONKRES II
ENGINEER 603164–E

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

***661 PENN STREET REDEVELOPMENT***

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

**FIRE LANE PLAN AND PROFILE**

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.: 2500866

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661 PENN STREET, LLC
209 PENN'S TRAIL
NEWTOWN, PA 18940
215–968–0600

MUNICIPAL FILE No.:

TAX MAP PARCEL No.: 29–010–119–001 & 29–010–037

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|---|---|
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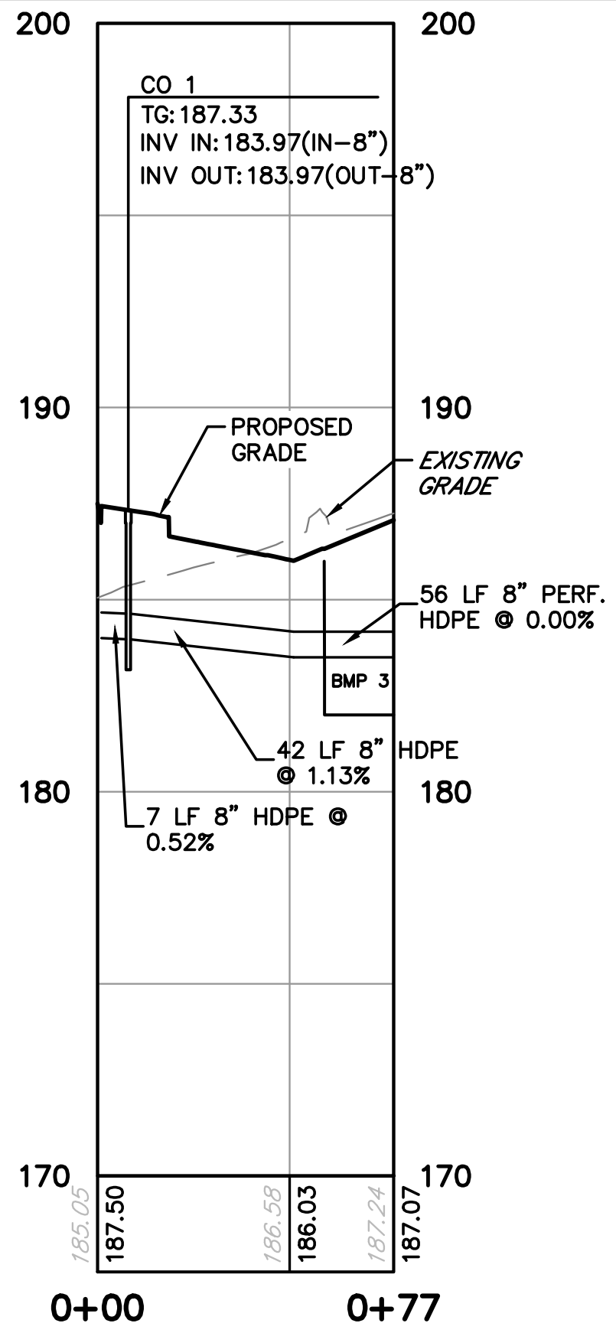
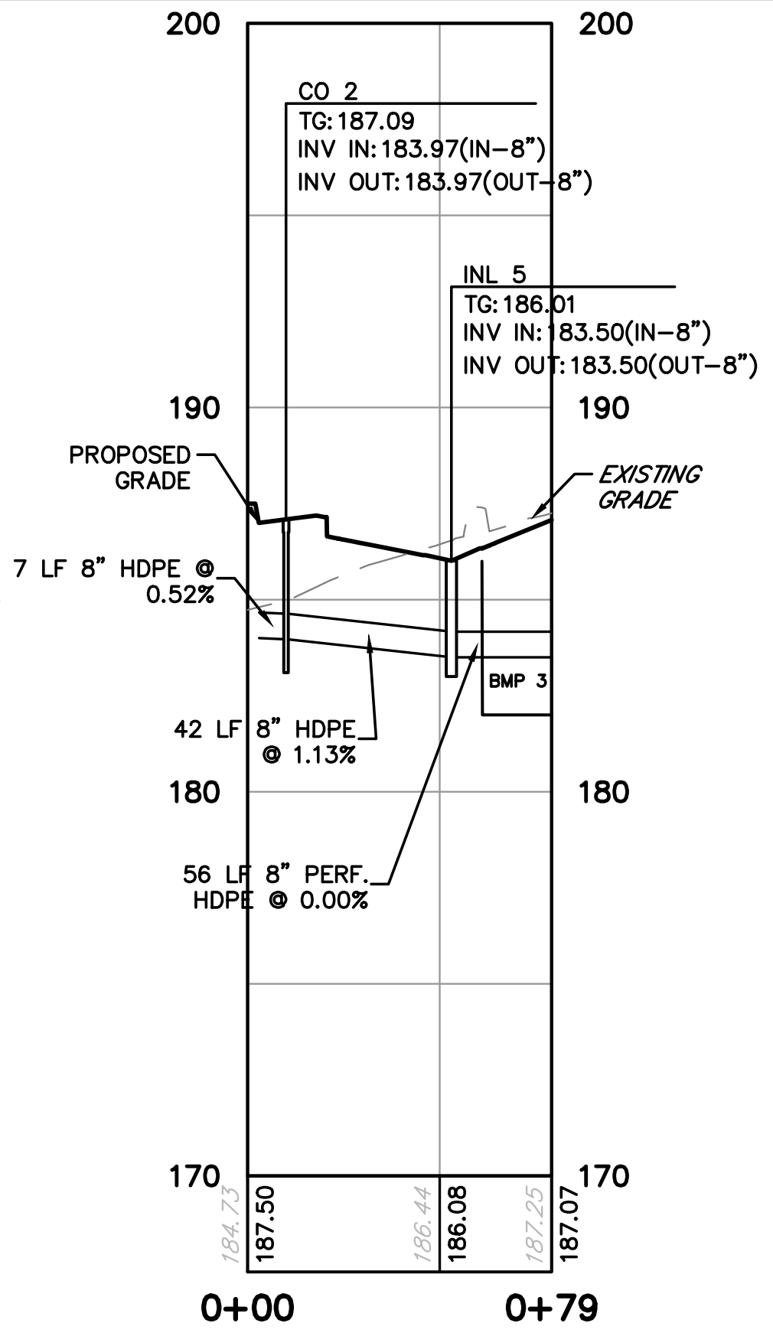
| DATE: 01/21/26 | SCALE: AS NOTED |
| DRAWN BY: GY/BH | CHECKED BY: RGM |

SHEET NO.: 21 OF 33



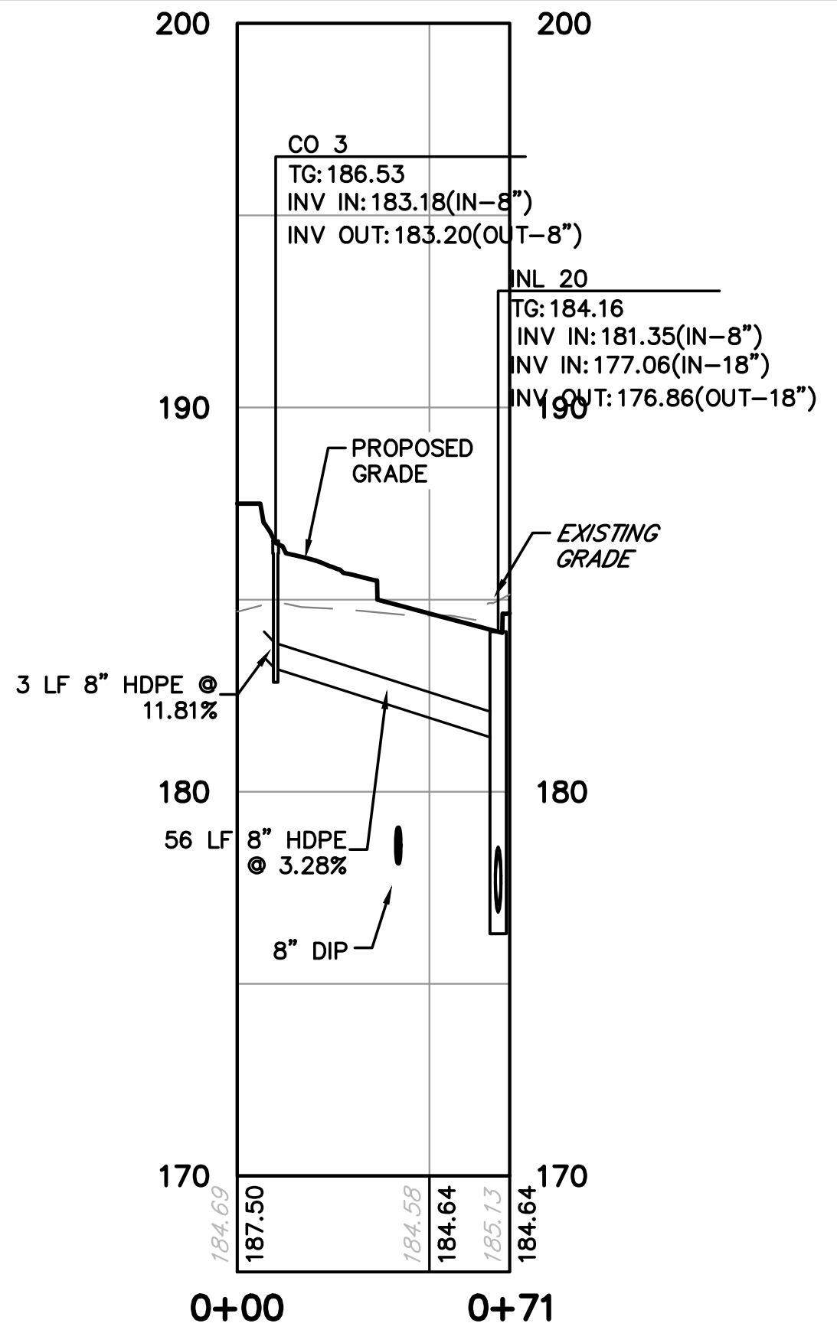
## CO 1 – BMP 3

STATION 0+00 TO 0+77
SCALE: HORZ 1"=50'
VERT 1"=5'



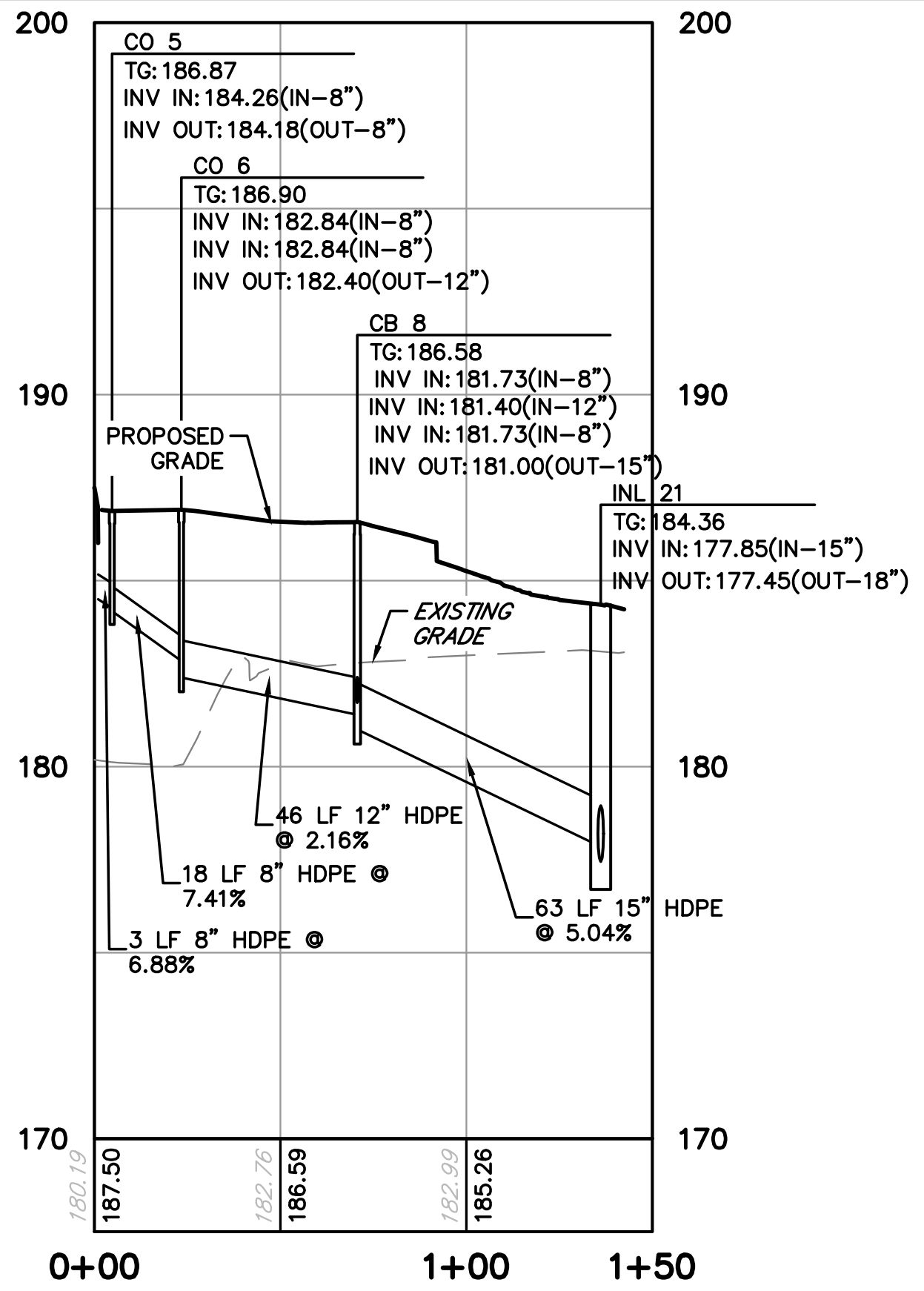
## CO 2 – BMP 3

STATION 0+00 TO 0+79
SCALE: HORZ 1"=50'
VERT 1"=5'



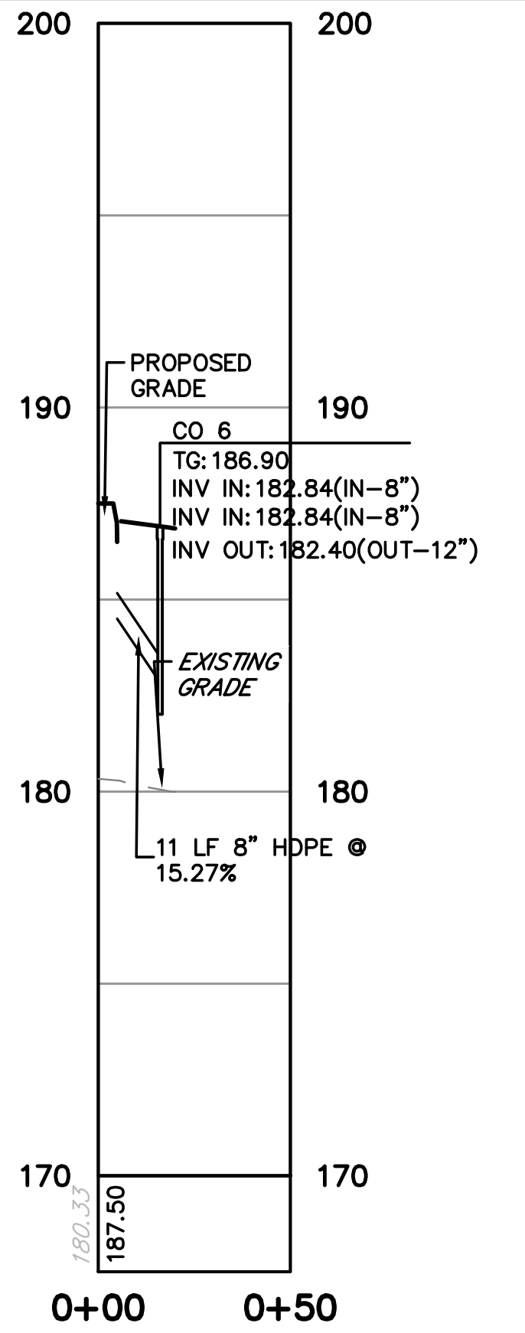
## CO 3 – INL 20

STATION 0+00 TO 0+71
SCALE: HORZ 1"=50'
VERT 1"=5'



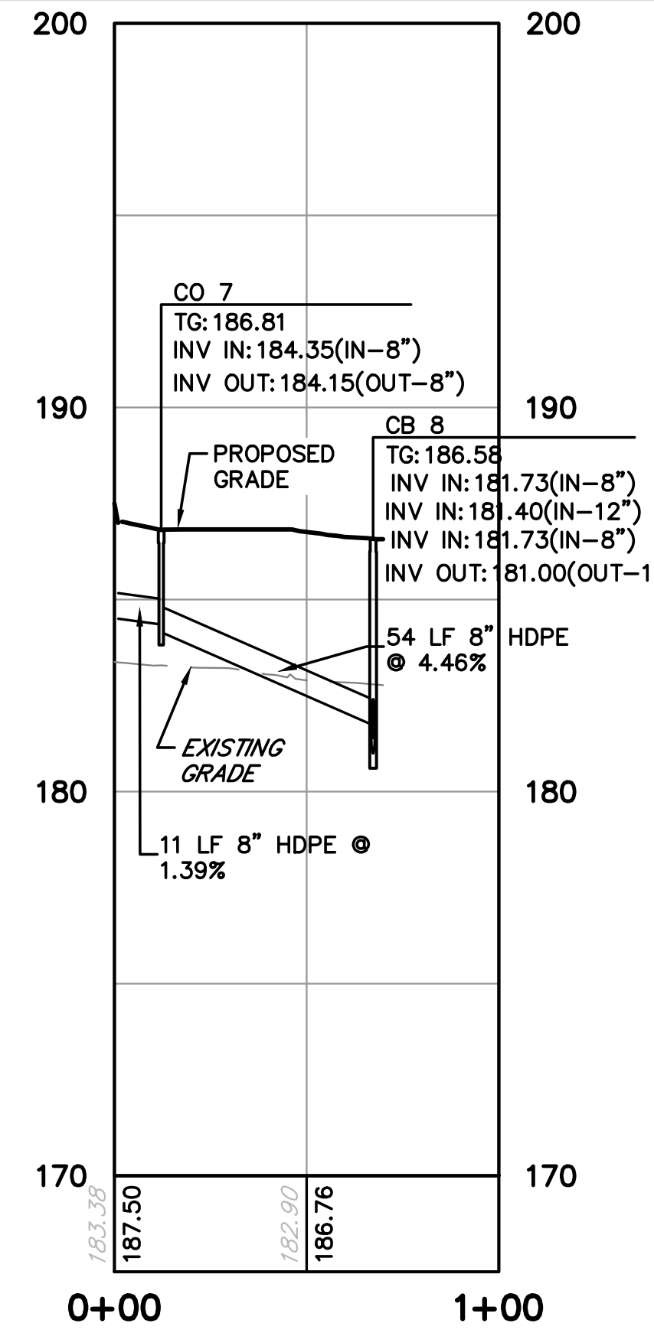
## CO 5 – INL 21

STATION 0+00 TO 1+50
SCALE: HORZ 1"=50'
VERT 1"=5'



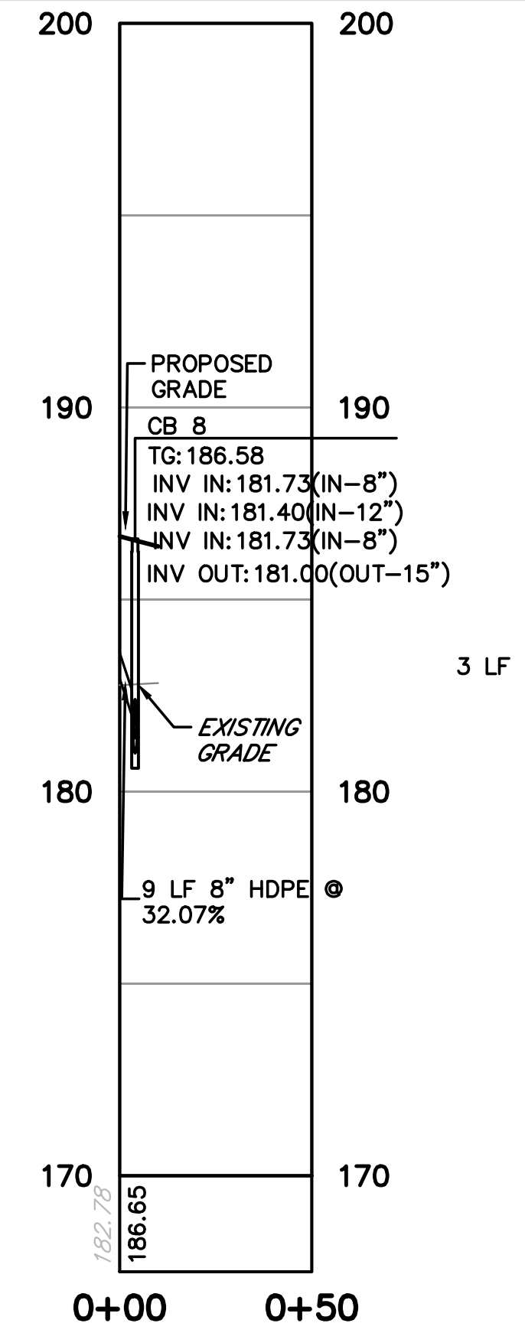
## BLDG 1A – CO 6

STATION 0+00 TO 0+50
SCALE: HORZ 1"=50'
VERT 1"=5'



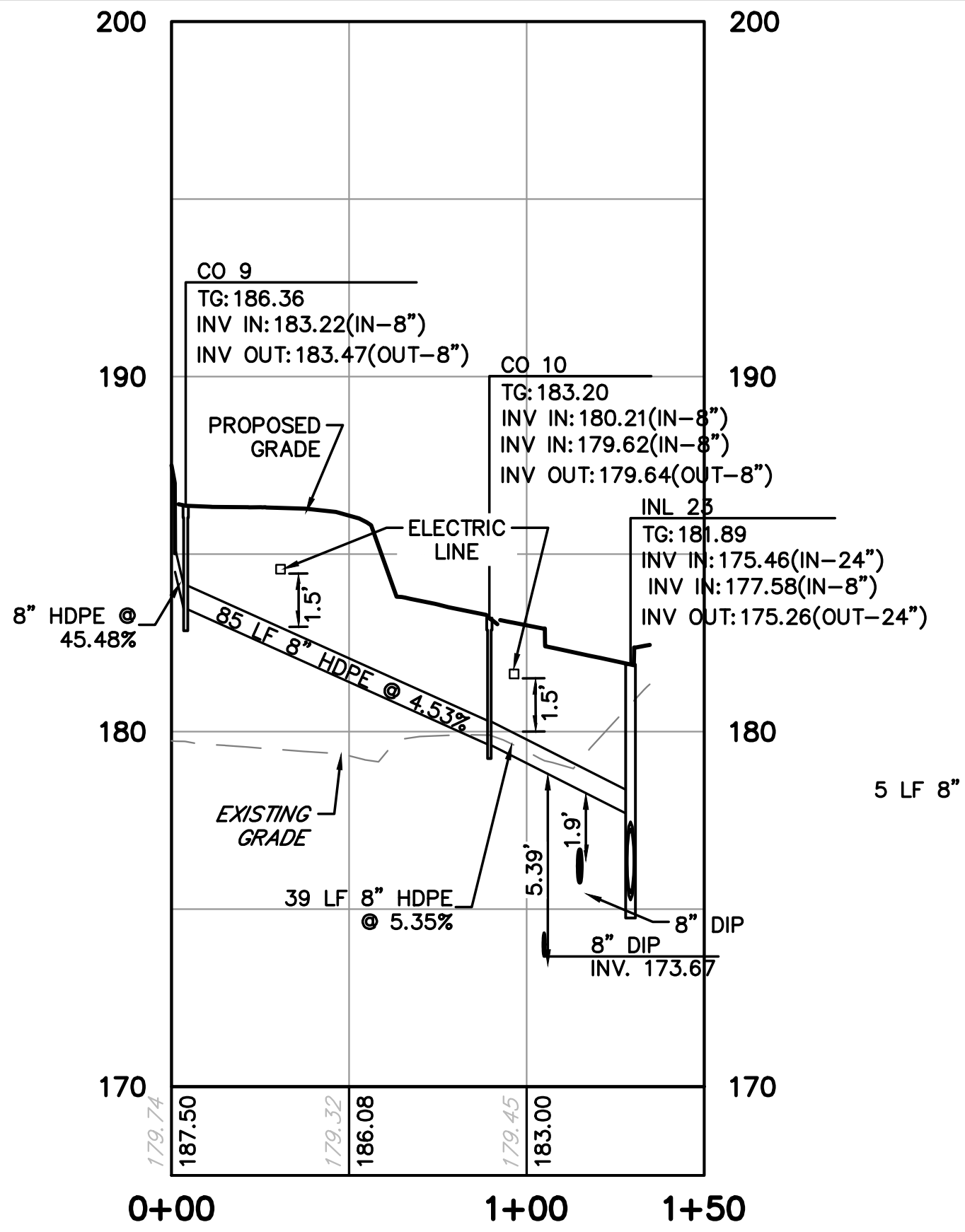
## CO7 – CB 8

STATION 0+00 TO 1+00
SCALE: HORZ 1"=50'
VERT 1"=5'



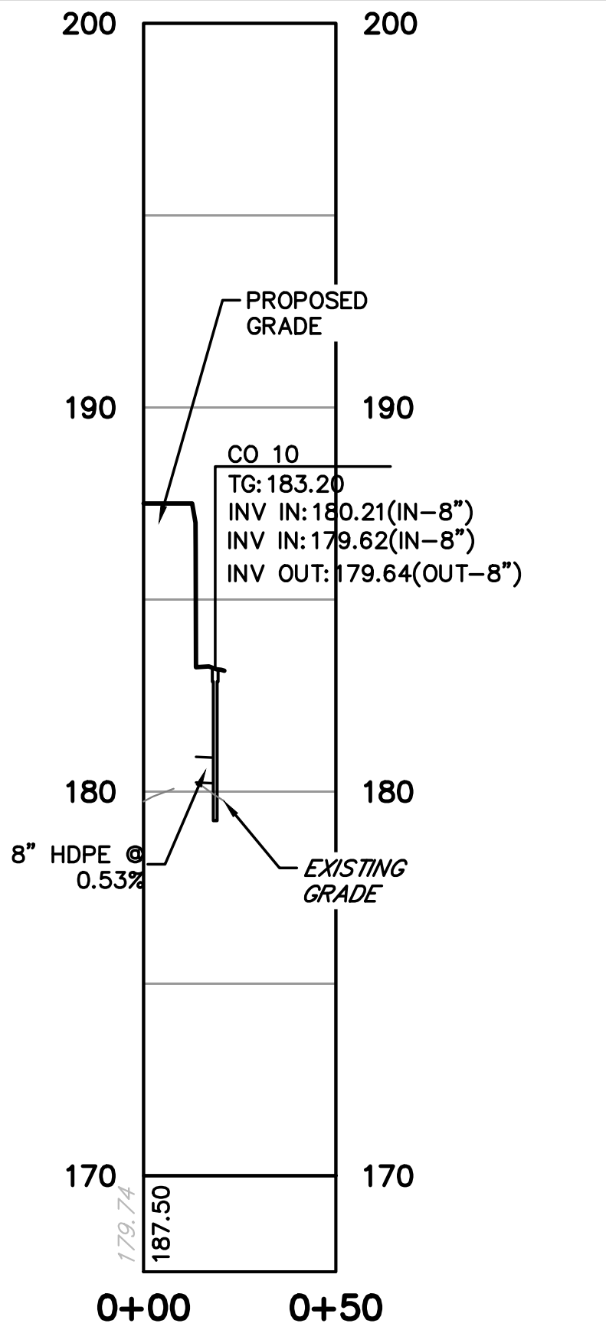
## BLDG 1A – CB 8

STATION 0+00 TO 0+50
SCALE: HORZ 1"=50'
VERT 1"=5'



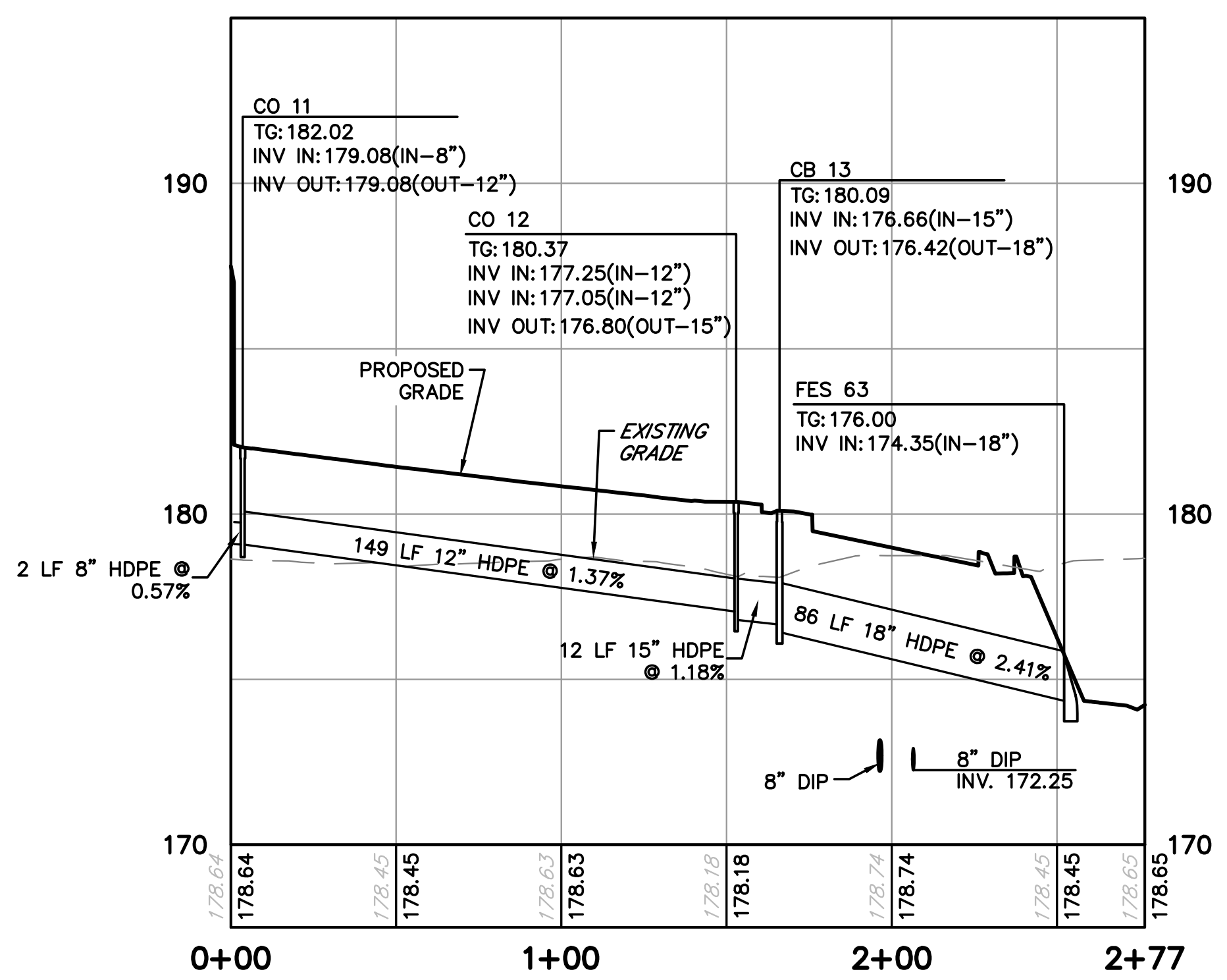
## CO 9 – INL 23

STATION 0+00 TO 1+50
SCALE: HORZ 1"=50'
VERT 1"=5'



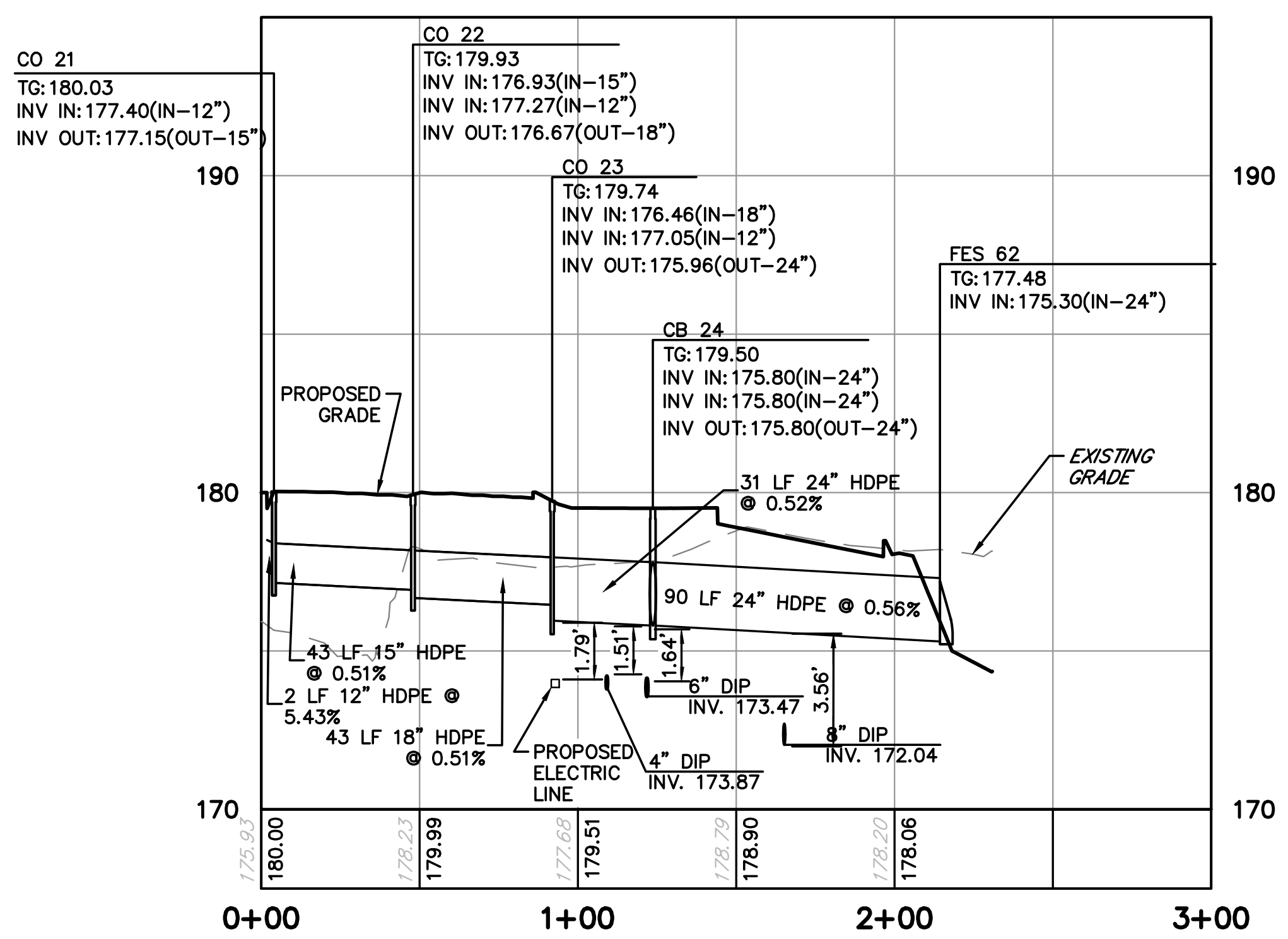
## BLDG 1A – CO 10

STATION 0+00 TO 0+50
SCALE: HORZ 1"=50'
VERT 1"=5'



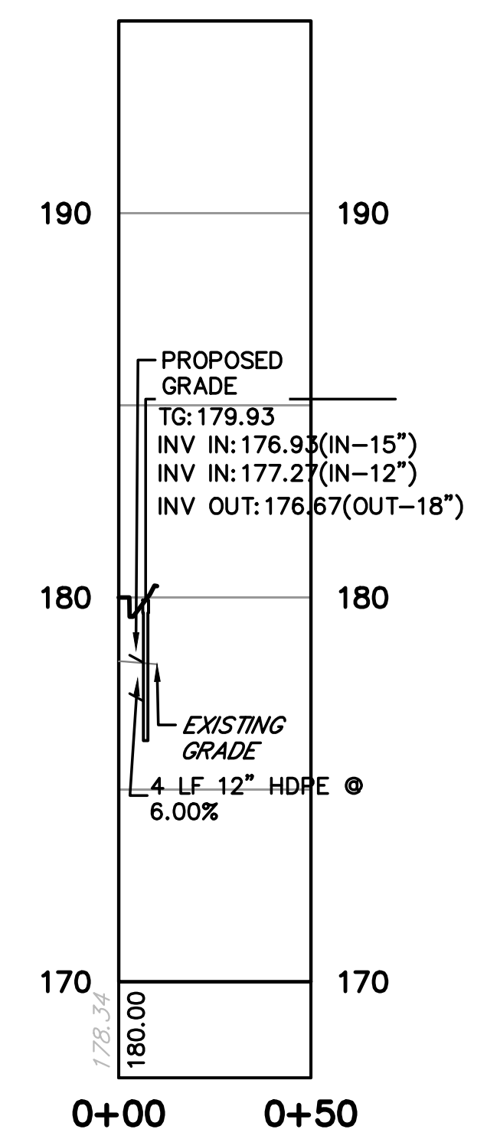
## CO 11 – FES 63

STATION 0+00 TO 2+77
SCALE: HORZ 1"=50'
VERT 1"=5'



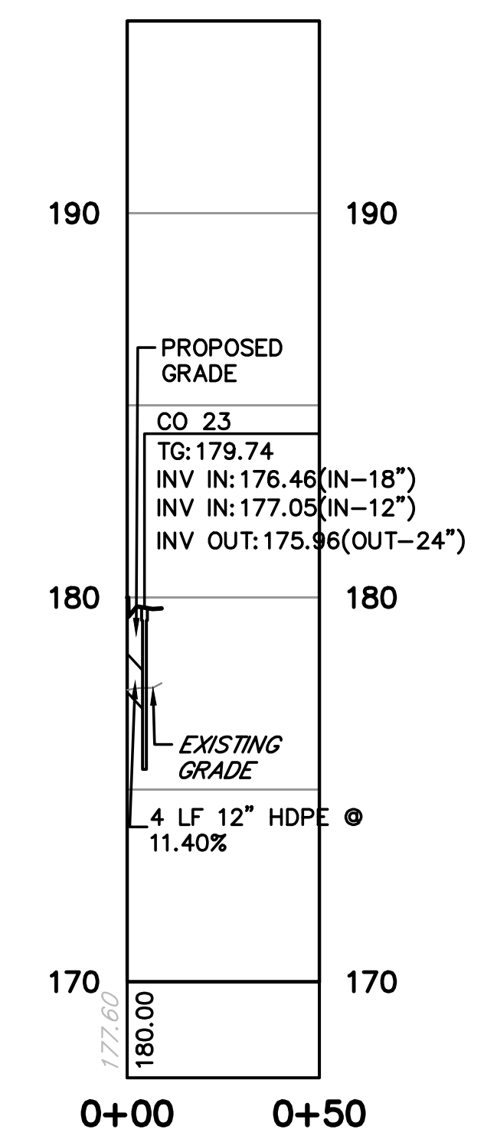
## CO 21 – FES 62

STATION 0+00 TO 3+00
SCALE: HORZ 1"=50'
VERT 1"=5'



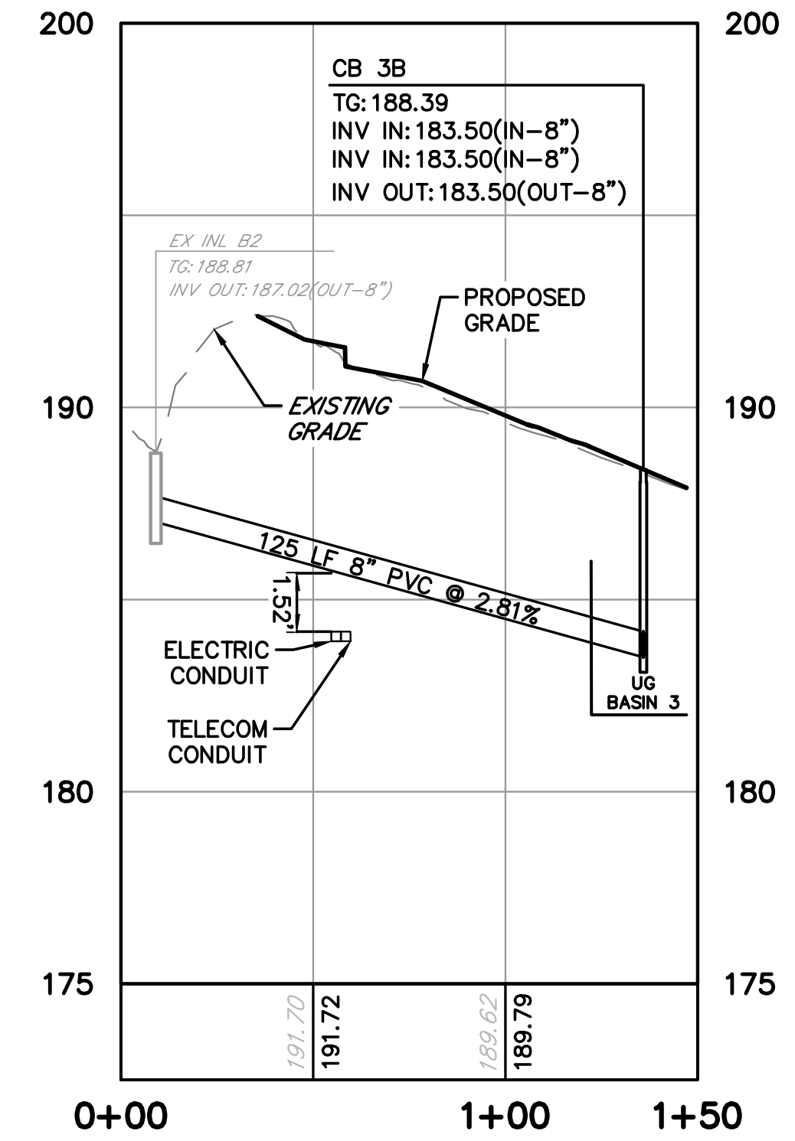
## BLDG 1B – CO 22

STATION 0+00 TO 0+50
SCALE: HORZ 1"=50'
VERT 1"=5'



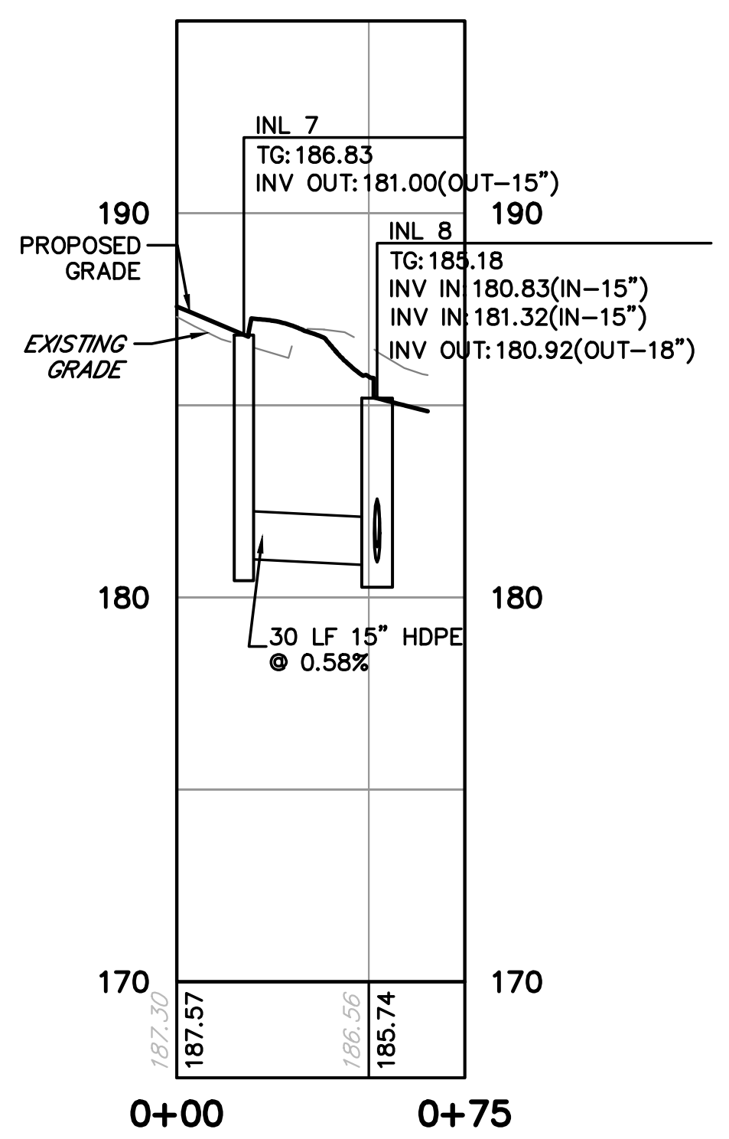
## BLDG 1B – CO 23

STATION 0+00 TO 0+50
SCALE: HORZ 1"=50'
VERT 1"=5'



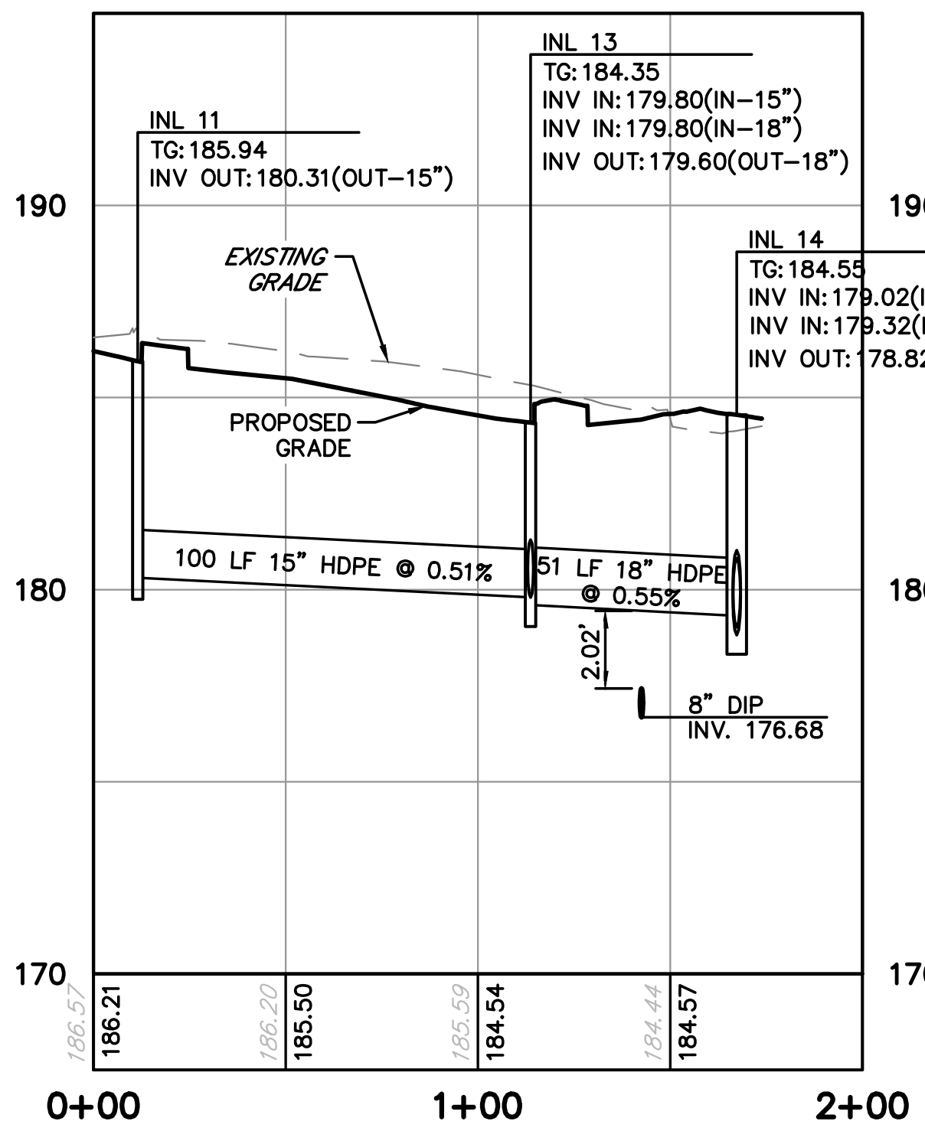
## EX INL B2 – UGB 3

STATION 0+00 TO 1+50
SCALE: HORZ 1"=50'
VERT 1"=5'



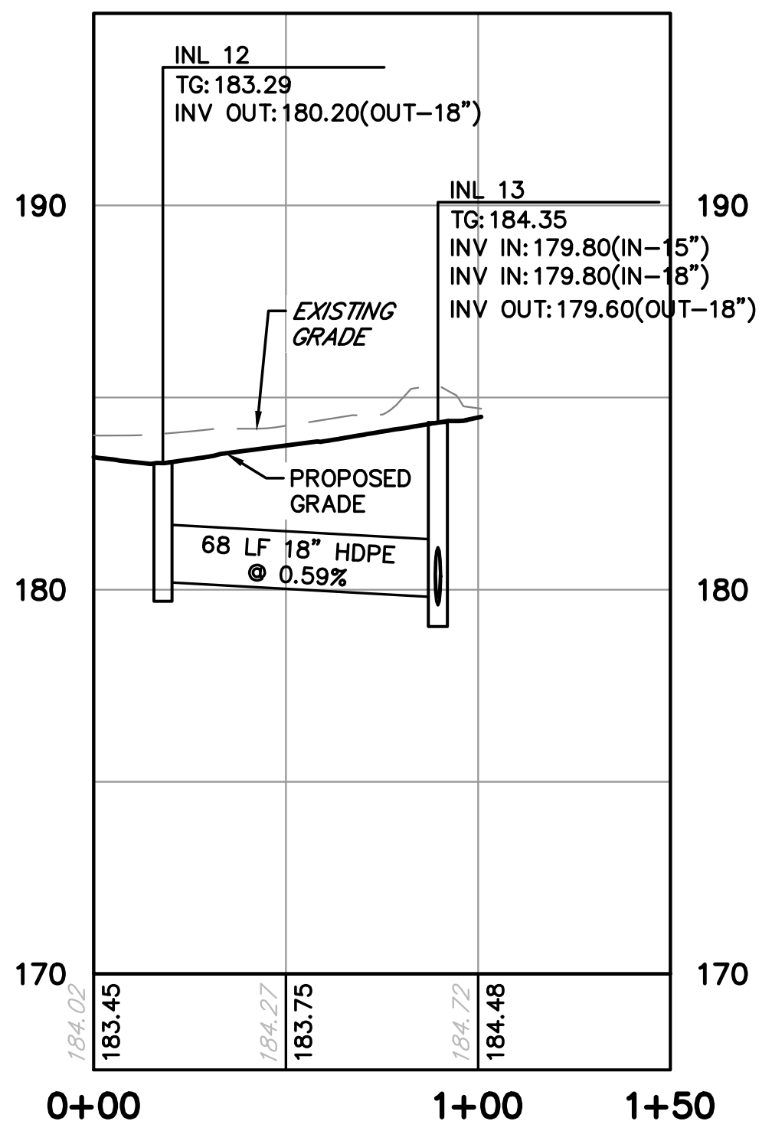
## INL 7 – INL 8

STATION 0+00 TO 0+75
SCALE: HORZ 1"=50'
VERT 1"=5'



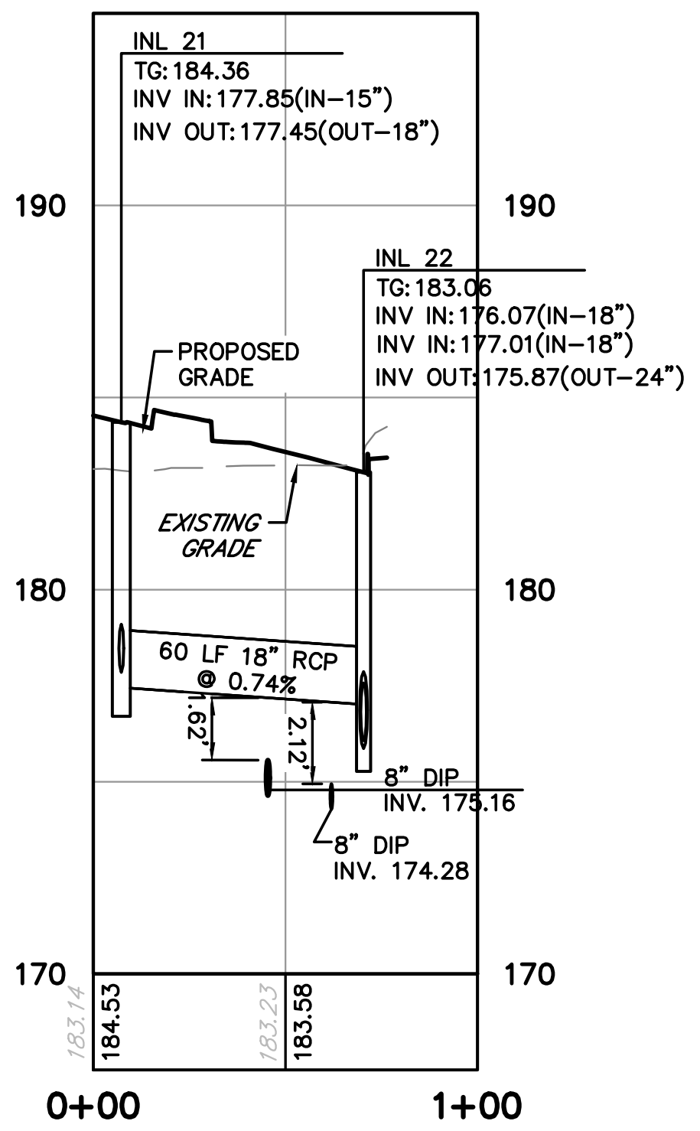
## INL 11 – INL 14

STATION 0+00 TO 2+00
SCALE: HORZ 1"=50'
VERT 1"=5'



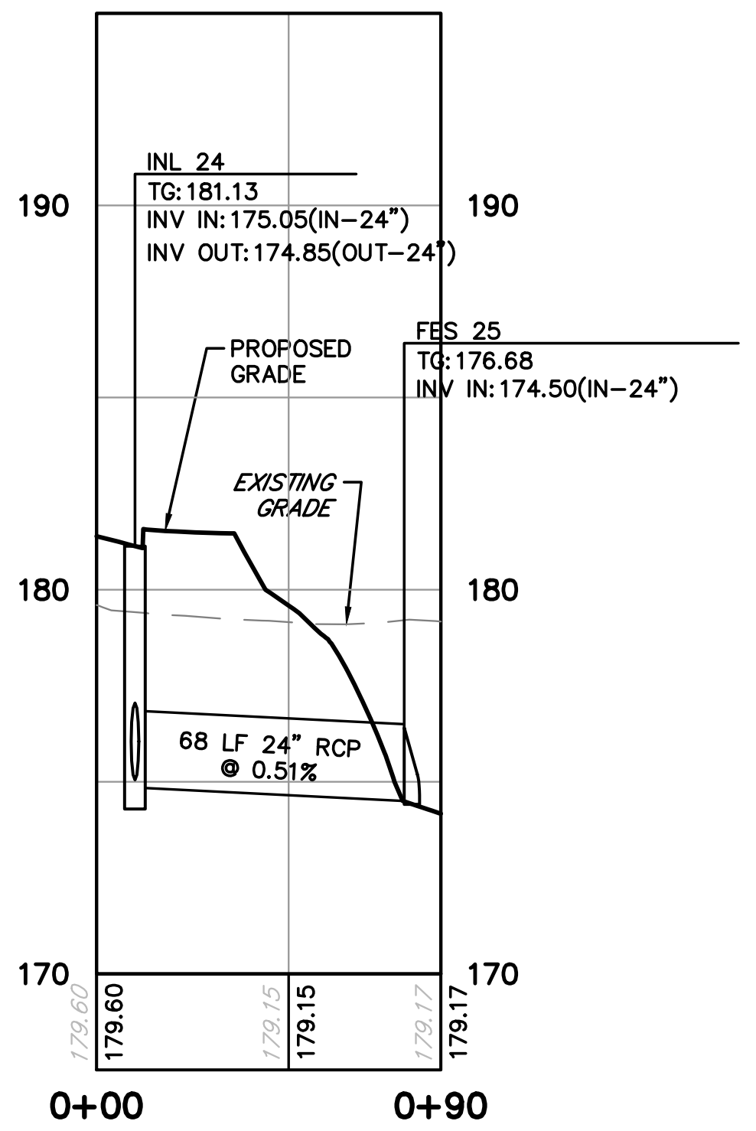
## INL 12 – INL 13

STATION 0+00 TO 1+50
SCALE: HORZ 1"=50'
VERT 1"=5'



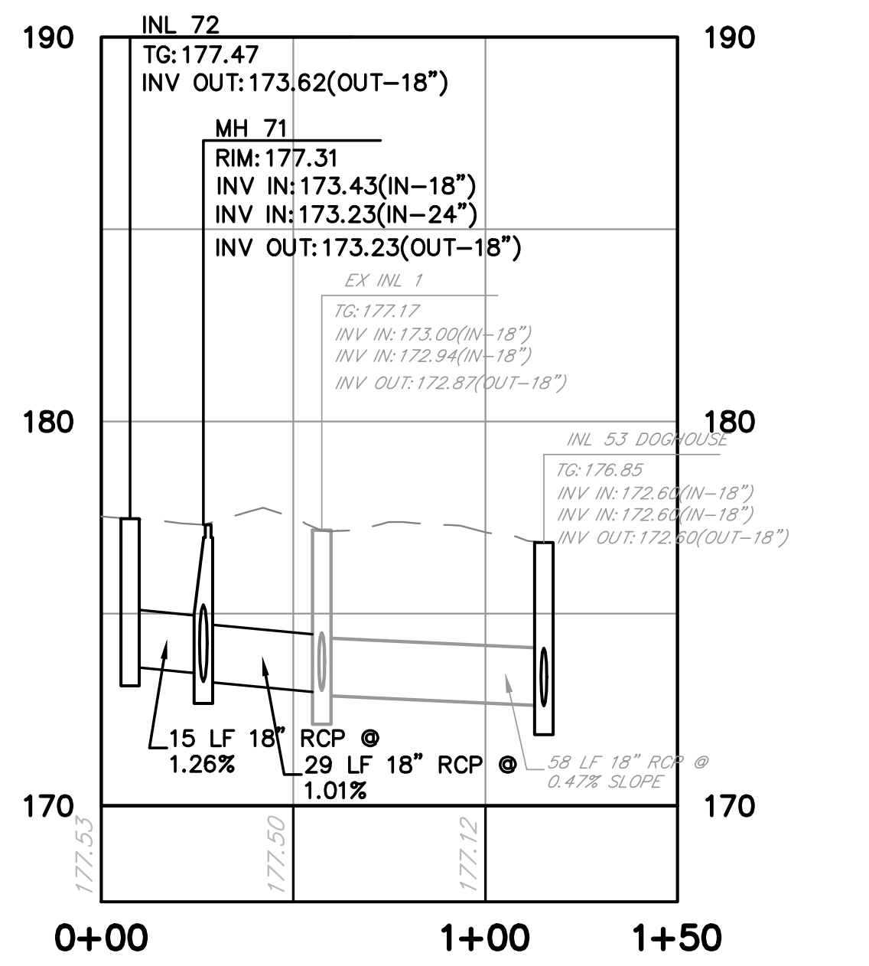
## INL 21 – INL 22

STATION 0+00 TO 1+00
SCALE: HORZ 1"=50'
VERT 1"=5'



## INL 24 – FES 25

STATION 0+00 TO 0+90
SCALE: HORZ 1"=50'
VERT 1"=5'



## INL 72 – EX INL 1

STATION 0+00 TO 1+50
SCALE: HORZ 1"=50'
VERT 1"=5'

PENNSYLVANIA ONE CALL SYSTEM, INC.

925 Irwin Run Road
West Mifflin, Pennsylvania
15122 – 1078

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CORPORATE HEADQUARTERS
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RONALD G. MONKRES II
ENGINEER 603164-E

DATE: 07/27/2026

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PRELIMINARY LAND DEVELOPMENT PLAN

# *661 PENN STREET REDEVELOPMENT*

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## CROSS LOT PROFILES 2

**GILMORE & ASSOCIATES, INC.**
**ENGINEERING & CONSULTING SERVICES**

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MUNICIPAL FILE No.:

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| DRAWN BY: GY/BH | CHECKED BY: RGM |

SHEET NO.: 22 OF 33

## EXISTING/PROPOSED RIPARIAN FOREST BUFFERS
§102.4(B)(5)(XV)

REGARDING EXISTING OR PROPOSED RIPARIAN BUFFERS, NOTE THE FOLLOWING:
- THE SUBJECT SITE IS >5,200' FROM THE EDGE OF THE CORE CREEK AND INVOLVES A REDEVELOPMENT PROJECT. RIPARIAN BUFFER REQUIREMENTS AS SET FORTH BY THE PA DEP ARE NOT APPLICABLE TO THIS PROJECT.

## EROSION & SEDIMENT CONTROL NOTES

1. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED, STABILIZED AND FUNCTIONAL PRIOR TO EARTH DISTURBANCE WITHIN THE TRIBUTARY AREA TO SAID E&S MEASURE.
2. GENERAL SITE CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S MEASURES SPECIFIED IN THE SEQUENCE FOR THAT STAGE/PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS INTENDED.
3. LOCAL ROADS ARE TO REMAIN FREE OF SEDIMENT AND CONSTRUCTION VEHICLES AND EQUIPMENT.
4. UPON COMPLETION OF AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY, THE SITE SHALL BE IMMEDIATELY SEEDED, MULCHED OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION AS PER SEEDING AND MULCHING SCHEDULE.
5. SILT FENCING MAY BE REMOVED WHEN THE SITE IS PERMANENTLY STABILIZED. ACCUMULATED SEDIMENT MAY BE SPREAD AT THE SITE IN AREAS NOT SUBJECT TO EROSION.
6. THE TREE PROTECTION FENCING SHALL NOT BE REMOVED UNTIL ALL DEVELOPMENT AREAS ARE STABILIZED AND WRITTEN CONFIRMATION IS RECEIVED FROM THE BUCKS COUNTY CONSERVATION DISTRICT.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
8. BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN, OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE CONTRACTOR SHALL RECEIVE APPROVAL OF THE REVISIONS FROM THE BUCKS COUNTY CONSERVATION DISTRICT.
9. THE CONTRACTOR IS ADVISED TO BECOME FAMILIAR WITH THE PROVISIONS OF APPENDIX 64, 'EROSION CONTROL RULES AND REGULATIONS,' TITLE 25, PART 1, DEPT. OF ENVIRONMENTAL PROTECTION, SUBPART C–PROTECTION OF NATURAL RESOURCES, ARTICLE III–WATER RESOURCES, CHAPTER 102–EROSION CONTROL AND WITH THE "EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL" BY THE COMMONWEALTH OF PA., DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 2012 OR LATEST EDITION.
10. TECHNICAL ADVICE FOR THE IMPLEMENTATION OF THIS PROGRAM MAY BE OBTAINED BY CONTACTING THE BUCKS COUNTY CONSERVATION DISTRICT AT (215)345–7577.
11. COPIES OF THESE PLANS MUST BE AVAILABLE ON SITE THROUGHOUT CONSTRUCTION.
12. THE CONTRACTOR SHALL ASSURE THAT AN APPROVED EROSION & SEDIMENT CONTROL PLAN IS BEING IMPLEMENTED AND MAINTAINED FOR ALL OFFSITE BORROW OR SPOIL SITES.
    A. ALL FILL MATERIALS TO BE USED ON THIS SITE SHALL BE CLEAN FILL UNLESS OTHERWISE APPROVED BY THE MUNICIPALITY AND THE CONSERVATION DISTRICT. THE CONTRACTOR SHALL BE RESPONSIBLE TO PERFORM DUE DILIGENCE FOR ALL IMPORTED MATERIAL IN DETERMINING THAT FILL IS CLEAN.
    B. INVESTIGATIVE TECHNIQUES SHALL INCLUDE, BUT ARE NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS.
13. **CONTRACTOR SHALL FOLLOW THE PROCEDURES OUTLINED BY THE APPROVED EROSION & SEDIMENT CONTROL PLAN AND THE SEQUENCE OF CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE TOWNSHIP ENGINEER AND THE BUCKS COUNTY CONSERVATION DISTRICT.**
14. **NOTES ON TEMPORARY CONTROL MEASURES:**
    A. EXISTING TREES AND OTHER EXISTING VEGETATION WILL BE DISRUPTED AS LITTLE AS POSSIBLE.
    B. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITY HAS CEASED, ALL AREAS SHALL BE STABILIZED. DURING NON–GERMINATING PERIODS, MULCH SHALL BE APPLIED AT SPECIFIED RATES. DISTURBED AREAS THAT ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE YEAR SHALL BE STABILIZED WITH TEMPORARY VEGETATION. AREAS WHICH ARE AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN ONE YEAR SHALL RECEIVE PERMANENT STABILIZATION. (SEE SEEDING AND MULCHING TABLE FOR DETAILS)
    C. ALL TOPSOIL FROM THE OVERALL SITE PREPARATIONS WILL BE STOCKPILED AND REDISTRIBUTED UNIFORMLY AT THE TIME OF FINAL GRADING. ALL STOCKPILES SHALL HAVE PERIMETER SILT FENCE INSTALLED AND BE SEEDED AND MULCHED IMMEDIATELY. STOCKPILE(S) SHALL HAVE A SIDE SLOPE OF 2:1 OR FLATTER AND SHALL HAVE A HEIGHT NOT GREATER THAN 35 FEET. SEE PLAN FOR LOCATION OF TOPSOIL STOCKPILES.
    D. GRADE ALL CUT AND FILL SLOPES TO 3 FOOT HORIZONTAL FOR EVERY 1 FOOT VERTICAL OR FLATTER, AND APPLY SEEDING AND MULCH. AREAS WITH GRADES GREATER THAN 3:1 SHALL RECEIVE STEEP SLOPE SEED MIX AND PERMANENT TURF REINFORCEMENT MAT: NORTH AMERICAN GREEN #C350 OR EQUAL
    E. RIP–RAP WILL BE APPLIED TO ALL AREAS WHERE HEAVY CONCENTRATIONS OF DRAINAGE ARE PREVALENT (GREATER THAN 3.5 CFS). THIS WOULD BE AT CULVERT OUTLETS, WHERE WATER IS IN TRANSITION FROM AN OPEN CHANNEL INTO A CULVERT, OR AS SPECIFIED.
    F. SIGNIFICANT STANDS OF TREES, DESIGNATED TO REMAIN, WILL BE PROTECTED WITH FENCING, SEE DETAIL. INSTALL ALONG THE DRIP LINE OF THE TREE BRANCHES.
    G. EROSION CONTROL FACILITIES MUST DISCHARGE INTO ADEQUATE STORM SEWERS, NATURAL WATERWAYS, OR STABLE EROSION RESISTANT AREAS.
    H. CONCRETE WASHOUT AREA SHALL BE PROVIDED FOR CLEANING OF CHUTES, MIXERS, AND HOPPERS OF DELIVERY VEHICLES. NO WASH WATER FROM THESE VEHICLES SHALL BE ALLOWED TO ENTER ANY SURFACE WATERS. WASHOUT FACILITIES SHALL NOT BE LOCATED WITHIN 50 FEET OF STORM DRAINS, OPEN DITCHES, INFILTRATION FACILITIES OR SURFACE WATERS.
    I. ANY SEDIMENT OR MUD THAT IS TRACKED ONTO THE PUBLIC ROADWAY MUST BE CLEANED OFF IMMEDIATELY BY BROOMING AND/OR SHOVELING TO THE SATISFACTION OF THE TOWNSHIP AT THE EXPENSE OF THE DEVELOPER AND/OR RESPONSIBLE CONTRACTOR. USE OF A BACKHOE BUCKET TO SCRAPE ROADWAY SURFACE IS PROHIBITED. WHERE SAND AND/OR SEDIMENT IS CAUSING SLICK OR HAZARDOUS CONDITIONS, ROADWAY SURFACE SHALL BE PRESSURE WASHED TO REMOVE THE CONDITION. ALL SEDIMENT LADEN WATER MUST BE FILTERED IN A MANNER SATISFACTORY TO THE BUCKS COUNTY CONSERVATION DISTRICT BEFORE ENTERING STORM SEWERS AND/OR DRAINAGE CHANNELS.
    J. NO SEDIMENT OR SEDIMENT LADEN WATER MUST BE ALLOWED TO LEAVE THE SITE/PROPERTY WITHOUT FIRST BEING FILTERED TO THE SATISFACTION OF BUCKS COUNTY CONSERVATION DISTRICT. ANY INLETS WHICH DO NOT DIRECT FLOW TO A SEDIMENT BASIN MUST BE PROTECTED WITH STONE FILTER INLET PROTECTION.
    K. ALL PUMPING OF SEDIMENT–LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A FILTER BAG, DISCHARGING OVER UNDISTURBED AREAS.
    L. ABSOLUTELY NO EARTHMOVING, PLACEMENT OF FILL MATERIAL OR THE ENTRY OF SEDIMENT LADEN WATER MUST TAKE PLACE IN WETLANDS. ALL WETLANDS SHALL BE PROTECTED FROM ENCROACHMENT WITH FENCING.
    M. ROCK FILTER OUTLETS MUST BE PROVIDED IMMEDIATELY WHERE SILT FENCING HAS BEEN UNDERMINED OR OVERTOPPED.
    N. THE SEDIMENT AND EROSION CONTROL MEASURES SHOWN ON THIS PLAN HAVE BEEN PREPARED IN ACCORDANCE WITH REQUIREMENTS OF THE BUCKS COUNTY CONSERVATION DISTRICT. GILMORE AND ASSOCIATES DOES NOT TAKE ANY RESPONSIBILITY IN OBSERVING AND CERTIFYING THE CONSTRUCTION OF THESE FACILITIES UNLESS REQUESTED SPECIFICALLY BY THE OWNER AND/OR CONTRACTOR. THEREFORE, GILMORE AND ASSOCIATES DOES NOT ACCEPT ANY RESPONSIBILITY FOR DAMAGES AS A RESULT OF IMPROPER CONSTRUCTION AND/OR MAINTENANCE OF FACILITIES DURING CONSTRUCTION.
    O. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE CONTRACTOR SHALL IMPLEMENT APPROPRIATE MEASURES TO ADDRESS SAID CIRCUMSTANCES.
    P. ACCUMULATED SEDIMENTS REMOVED FROM ANY AND ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES. IMMEDIATELY STABILIZE REPLACED SOILS WITH SEED & MULCH OR DEPOSIT IN SOIL STOCKPILES AND STABILIZE.
    Q. THE CONTRACTOR SHALL REMOVE FROM THE SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIAL AND WASTES IN ACCORDANCE WITH DEP'S SOLID WASTE MANAGEMENT REGULATIONS, AND/OR ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS. NO BUILDING MATERIALS (USED OR UNUSED) OR WASTE MATERIALS SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED AT THE SITE.

## MAINTENANCE PROGRAM
§102.4(B)(5)(X)

- MAINTENANCE OF TEMPORARY FACILITIES: UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROPERLY MAINTAINED. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL CONTROL MEASURES AFTER EACH STORM EVENT AND AT LEAST ONCE PER WEEK. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND REFENCING SHALL BE PERFORMED IMMEDIATELY. CONSTRUCTION ENTRANCES SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK WHERE NECESSARY. SEE THE DETAIL SHEET(S) FOR SPECIFIC MAINTENANCE PROCEDURES.

LONG–TERM POLLUTANT CONTROLS – STORM WATER POLLUTANT CONTROL MEASURES INSTALLED DURING CONSTRUCTION THAT WILL ALSO PROVIDE BENEFITS AFTER CONSTRUCTION, INCLUDE MAINTAINING THE DIRECT RUNOFF TO THE PROPOSED INFILTRATION BASINS (BMP 1), THE PROPOSED SUBSURFACE BASINS W/ SLOW RELEASE (BMP 3 & BMP 4), AND THE EXISTING WET POND (BMP 2), LANDSCAPING, INLET WATER QUALITY FILTERS, AND PERMANENT GRASS/PAVEMENT COVER.

## TOPSOIL APPLICATION

1. BEFORE SEEDING BEGINS, TOPSOIL SHOULD BE APPLIED AND ANY REQUIRED SOIL AMENDMENTS WORKED INTO THE SOIL TO A DEPTH OF 4 TO 6 INCHES. IF COMPOST IS TO BE ADDED TO THE TOPSOIL, IS SHOULD BE WORKED INTO THE SOIL WITH THE OTHER SOIL AMENDMENTS UNLESS IT IS BEING APPLIED AS AN EROSION CONTROL BMP.
2. GRADED AREAS SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES TO PERMIT BONDING OF THE TOPSOIL TO THE SURFACE AREAS AND TO PROVIDE A ROUGHENED SURFACE TO PREVENT TOPSOIL FROM SLIDING DOWN SLOPE.
3. TOPSOIL SHOULD BE UNIFORMLY DISTRIBUTED ACROSS THE DISTURBED AREA TO A DEPTH OF 4 TO 8 INCHES MINIMUM – 2 INCHES ON FILL OUTSLOPES. SPREADING SHOULD BE DONE IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL TILLAGE. IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOIL PLACEMENT SHOULD BE CORRECTED IN ORDER TO PREVENT FORMATION OF DEPRESSIONS UNLESS SUCH DEPRESSIONS ARE PART OF THE PCSM PLAN.
4. TOPSOIL SHOULD NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITIONS, WHEN THE SUBSOIL IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION. COMPACTED SOILS SHOULD BE SCARIFIED 6 TO 12 INCHES ALONG CONTOUR WHEREVER POSSIBLE PRIOR TO SEEDING.

## MAINTENANCE OF FACILITIES

1. COMPOST FILTER SOCK SHOULD BE INSPECTED AND MAINTAINED ON A DAILY BASIS. IN THE EVENT COMPOST FILTER SOCK SHOULD NEED TO BE REPLACED, THE CONTRACTOR SHALL REPLACE THE COMPOST FILTER SOCK WITHIN 24 HOURS
2. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT CONTROL DEVICES MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROLS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF E&S CONTROL BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS OR MODIFICATIONS OF INSTALLED MEASURES WILL BE REQUIRED.
3. CONTRACTOR SHALL MAINTAIN AND MAKE AVAILABLE TO THE BUCKS COUNTY CONSERVATION DISTRICT COMPLETE, WRITTEN INSPECTION LOGS OF THE ABOVE NOTED INSPECTION AND MAINTENANCE.
4. SEEDING, MULCHING AND FERTILIZING SHALL BE IN ACCORDANCE WITH THE SEEDING AND MULCHING SCHEDULE.
5. SHOULD THE TREE PROTECTION FENCING BE DISTURBED AT ANY POINT, IT SHALL BE REPLACED IMMEDIATELY.
6. THE CONTRACTOR SHALL HAVE AVAILABLE WATER TRUCKS OR OTHER MEANS OF CONTROLLING EXCESSIVE DUST AND AIRBORNE DEBRIS.
7. ALL DRAINAGE SWALES SHALL BE SEEDED AND MULCHED, AND PROTECTED WITH TURF REINFORCEMENT MAT: NORTH AMERICAN GREEN #SC150 (OR EQUAL). IF SWALES ARE TO BE SODDED, TURF REINFORCEMENT IS NOT REQUIRED.
8. ALL AREAS OF CONCENTRATED SURFACE DRAINAGE SHALL BE SEEDED AND MULCHED, AND PROTECTED WITH TEMPORARY TURF REINFORCEMENT MAT: NORTH AMERICAN GREEN #SC150 (OR EQUAL). IF AREAS ARE TO BE SODDED, TURF REINFORCEMENT IS NOT REQUIRED.
9. AFTER THE STORM CONVEYANCE SYSTEM IS CONSTRUCTED, MONTHLY INSPECTIONS FOR EACH DEVICE WILL BE MADE. AN INSPECTION OF ALL FACILITIES WILL BE MADE AFTER EVERY STORM TO DETERMINE THEIR RESISTANCE TO DRIVING RAINS AND ACCUMULATED RUNOFF.
10. SEEDED AREAS THAT HAVE WASHED AWAY SHALL BE FILLED AND GRADED AS NECESSARY AND THEN RESEEDED. A BURLAP OR STRAW COVER WILL BE APPLIED TO RETAIN THE SEED UNTIL IT HAS A CHANCE TO ROOT PROPERLY.
11. THE ABOVE PROCEDURE SHALL BE REPEATED AFTER EACH SIZABLE STORM UNTIL NO MORE SIGNS OF EROSION ARE EVIDENT. AT MONTHLY INTERVALS THEREAFTER, INSPECTIONS AND NECESSARY CLEANING WILL BE DONE. TRASH THAT IS REMOVED FROM ANY OF THE CONTROL DEVICES SHALL BE DISPOSED OF AT AN APPROVED DISPOSAL AREA. SILT THAT HAS ACCUMULATED SHALL BE REMOVED AND ALLOWED TO DRY AND USED AS FILL WHEREVER REQUIRED ON THE SITE.

## PLANNING & DESIGN
§102.4(B)(4)

THE FOLLOWING MEASURES ARE TAKEN TO MINIMIZE THE EXTENT AND DURATION OF EARTH DISTURBANCE:
- ACCESS THE SITE THRU DESIGNATED CONSTRUCTION ENTRANCES.
- PROTECT EXISTING VEGETATION TO REMAIN WITH TREE PROTECTION FENCING.
- SEQUENCE CONSTRUCTION ACTIVITIES BY LIMITING DISTURBANCES TO A SPECIFIC TASK SUCH THAT EACH TASK IS COMPLETED BEFORE THE NEXT TASK IS INITIATED.
- AREAS NOT TO BE DISTURBED SHALL NOT BE SUBJECT TO GRADING OR MOVEMENT OF EXISTING SOIL.
- AREAS NOT TO BE DISTURBED SHALL BE PROTECTED AND DELINEATED IN THE FIELD.

THE FOLLOWING MEASURES ARE TAKEN TO MAXIMIZE PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION:
- ACCESS THE SITE THRU DESIGNATED CONSTRUCTION ENTRANCES.
- PROTECT EXISTING VEGETATION TO REMAIN WITH TREE PROTECTION FENCING.
- AREAS NOT TO BE DISTURBED SHALL NOT BE SUBJECT TO GRADING OR MOVEMENT OF EXISTING SOIL.
- AREAS NOT TO BE DISTURBED SHALL BE PROTECTED AND DELINEATED IN THE FIELD.

THE FOLLOWING MEASURES ARE TAKEN TO MINIMIZE SOIL COMPACTION:
- ACCESS THE SITE THRU DESIGNATED CONSTRUCTION ENTRANCES.
- USE OF TREADED MACHINERY WHERE PRACTICAL DURING EARTHMOVING OPERATIONS.
- GRADE SITE TO MINIMIZE EXTENT OF CUTS/FILLS.

THE FOLLOWING MEASURES ARE TAKEN TO PREVENT OR MINIMIZE GENERATION OF INCREASED STORM WATER RUNOFF:
- DIRECT RUNOFF TO THE PROPOSED INFILTRATION BASINS (BMP 1), THE PROPOSED SUBSURFACE BASINS W/ SLOW RELEASE (BMP 3 & BMP 4), AND THE EXISTING WET POND (BMP 2).
- PROVIDE INLET WATER QUALITY FILTERS AND REVEGETATE DISTURBED AREAS TO IMPROVE STORMWATER QUALITY AND REDUCE THE ACCUMULATION OF SEDIMENT GETTING TO DOWNSTREAM STORMWATER FACILITIES.

## E&S PLAN DESIGNED AND IMPLEMENTED TO BE CONSISTENT WITH PCSM PLAN
§102.4(B)(5)(XIV)

THE EROSION & SEDIMENT CONTROL PLAN AND THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN HAVE BEEN PROVIDED SEPARATELY; HOWEVER, THEY HAVE BEEN PLANNED, DESIGNED AND IMPLEMENTED TO BE CONSISTENT WITH ONE ANOTHER. THE EROSION & SEDIMENT CONTROL PLAN IS PROVIDED AS PART OF THIS REPORT, AND THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN HAS BEEN PROVIDED AS PART OF A SEPARATE REPORT.

## CLEAN FILL REQUIREMENTS

IF THE SITE WILL NEED TO IMPORT OR EXPORT MATERIAL FROM THE SITE, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND DETERMINATION OF CLEAN FILL WILL REST WITH THE CONTRACTOR.

CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON–WATER SOLUBLE, NON–DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE–USE).

CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS AS NOTED IN TABLES FP–1A AND FP–1B FOUND IN THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S POLICY "MANAGEMENT OF FILL."

ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP–001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP–001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL.

ENVIRONMENTAL DUE DILIGENCE: THE LANDOWNER/APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S POLICY "MANAGEMENT OF FILL."

FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA CODE CHAPTER 287 RESIDUAL WASTE MANAGEMENT OR CHAPTER 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE. THESE REGULATIONS ARE AVAILABLE ON–LINE AT WWW.PACODE.COM .

## CHAPTER 93 SURFACE WATER CLASSIFICATION
§102.4(B)(5)(V)

THE SITE RUNOFF DRAINS TO core CREEK, WHICH ULTIMATELY DRAIN INTO THE NESHAMINY CREEK STORMWATER WATERSHED. NEWTOWN CREEK HAVE A CHAPTER 93 CLASSIFICATION OF WARM WATER–MIGRATORY FISHERY (WW–MF).

## SEEDING AND MULCHING SCHEDULE

1. SITE PREPARATION, STABILIZATION AND MAINTENANCE SHALL BE PERFORMED IN ACCORDANCE WITH PENN STATE UNIVERSITY'S "THE AGRONOMY GUIDE" AND PENNDOT FORM 408 SPECIFICATIONS' MOST RECENT ADDITION.

   TEMPORARY SEEDING SPECIFICATION FORMULA E – ANNUAL RYE GRASS

   PERMANENT SEEDING SPECIFICATION FORMULA B –
   50% KENTUCKY BLUEGRASS MIXTURE
   30% PENNLAWN RED FESCUE
   20% PERENNIAL RYEGRASS MIXTURE

   STEEP SLOPE SEEDING SPECIFICATION FORMULA W –
   70% TALL FESCUE
   20% BIRDSFOOT TREFOIL MIXTURE
   10% REDTOP

   SEEDING RATE FOR THE ABOVE MIXTURES:
   10 LBS/1,000 SY FOR TEMPORARY SEEDING
   21 LBS/1,000 SY FOR PERMANENT SEEDING
   11 LBS/1,000 SY FOR STEEP SLOPE SEEDING (SEE NOTE 5)
2. HAY OR STRAW MULCH SHALL BE APPLIED AT THE RATES OF AT LEAST 3.0 TONS PER ACRE. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN. SLOPES OF 3:1 SHALL BE ANCHORED WITH MULCH CONTROL NETTING.
3. PULVERIZED AGRICULTURAL LIMESTONE AND COMMERCIAL FERTILIZER SHALL BE APPLIED TO ALL DISTURBED AREAS WHICH ARE TO BE SEEDED EXCEPT FOR TEMPORARY SEED AREAS ARE THE FOLLOWING RATES:

   PULVERIZED AGRICULTURAL LIMESTONE – 90 LBS/1,000 SF
   10–20–20 ANALYSIS COMMERCIAL FERTILIZER – 20 LBS/1,000 SF

   **NOTE:** APPLICATION OF LIME AND FERTILIZER FOR TEMPORARY SEEDING IS UNNECESSARY AND ONLY SERVES TO CONTRIBUTE TO AN OVERABUNDANCE OF NUTRIENT POLLUTION IN THE WATERSHED.
4. PERMANENT SEEDING SHALL TAKE PLACE FROM MARCH 15 TO JUNE 1 OR FROM AUGUST 1 TO OCTOBER 15. IF COMPLETED AT IN OTHER SEASONS, AREAS SHALL RECEIVE TEMPORARY SEEDING AND 3.0 TONS PER ACRE MULCH.
5. STEEP SLOPE AREAS, CONSIDERED SLOPES GREATER THAN 3:1, SHALL BE PROTECTED FROM EROSION BY ONE OF THE FOLLOWING METHODS. MANUFACTURER'S RECOMMENDATIONS SHALL BE FOLLOWED FOR PARTICULAR METHOD AND SPECIFIC SITE CONDITIONS.

   FLEXIBLE GROWTH MEDIUM: SHALL BE HYDRAULICALLY APPLIED COMBINATION OF SEED, MULCH, AND EROSION PROTECTION MATERIAL SIMILAR TO "FLEXTERRA" BY ACF OR EQUAL BY OTHER MANUFACTURER.

   EROSION CONTROL MATTING: SHALL BE TEMPORARY MATTING SIMILAR TO SC350 BY NORTH AMERICAN GREEN OR EQUAL BY OTHER MANUFACTURER.

## STANDARD EROSION & SEDIMENT CONTROL NOTES– BUCKS COUNTY CONSERVATION DISTRICT

1. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
2. THE OPERATOR/RESPONSIBLE PERSON ON SITE SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.
3. IMMEDIATELY UPON DISCOVERING UNFORUNTIL THE SITE ACHIEVES FINAL STABILIZATION, THE OPERATOR SHALL ASSURE THAT THE BEST MANAGEMENT PRACTICES ARE IMPLEMENTED, OPERATED, AND MAINTAINED PROPERLY AND COMPLETELY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL BEST MANAGEMENT PRACTICE FACILITIES. THE OPERATOR SHALL MAINTAIN AND MAKE AVAILABLE TO LOCAL CONSERVATION DISTRICT COMPLETE, WRITTEN INSPECTION LOGS OF ALL THOSE INSPECTIONS. ALL MAINTENANCE WORK, INCLUDING CLEANING, REPAIR, REPLACEMENT, REGRADING, AND RESTABILIZATION SHALL BE PERFORMED IMMEDIATELY.
4. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
5. BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE LOCAL CONSERVATION DISTRICT.
6. THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE LOCAL CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.
7. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON–DISTURBED AREAS.
8. THE OPERATOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL.
9. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
10. THE E&S CONTROL PLAN MAPPING MUST DISPLAY A PA ONE CALL SYSTEM INCORPORATED SYMBOL INCLUDING THE SITE IDENTIFICATION NUMBER. (THIS IS A NUMBERED SYMBOL NOT A NOTE.)
11. ONLY LIMITED DISTURBANCE WILL BE PERMITTED TO PROVIDE ACCESS TO EXISTING PARKING LOTS FOR GRADING.
12. EROSION AND SEDIMENT BMP'S MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMP'S.
13. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMP'S MUST BE STABILIZED IMMEDIATELY.
14. AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENT CONTROL PLAN PREPARER, AND THE LOCAL CONSERVATION DISTRICT TO AN ON–SITE MEETING. ALSO, AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1–800–242–1776 FOR BURIED UTILITIES LOCATIONS.
15. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE OF CONSTRUCTION. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.
16. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON–GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
17. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% 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.
18. SEDIMENT MUST BE REMOVED FROM STORM WATER INLET PROTECTION AFTER EACH RUNOFF EVENT.
19. HAY OR STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.
20. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES 3:1 AND STEEPER.
21. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
22. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGARDING, RESEEDING, REMULCHING, AND RENETTING, MUST BE PERFORMED IMMEDIATELY, IF EROSION AND SEDIMENT CONTROL BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
23. SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.
24. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTE IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.11 ET DEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE.

## POTENTIAL THERMAL IMPACTS TO SURFACE WATERS
§102.4(B)(5)(XIII)

DURING CONSTRUCTION, THERMAL IMPACTS WILL BE MITIGATED SEVERAL WAYS. RUNOFF WILL BE FILTERED THROUGH SEDIMENT TRAPS, COMPOST SOCKS AND/OR INLET PROTECTION. AFTER CONSTRUCTION HAS BEEN COMPLETED, THE PROPOSED BMPs ARE DESIGNED TO MITIGATE THERMAL IMPACTS. THE SUBSURFACE BMPs, COUPLED WITH INCREASED RESIDENCE TIME, SHOULD HELP RESTORE AMBIENT TEMPERATURE OF STORMWATER RUNOFF. THE USE OF MULTIPLE "POCKET" BMPs SERVE TO EXTEND TIME OF CONCENTRATION, REDUCE OVERLAND FLOWS TO THE EXISTING BASIN AND OFF–SITE, PROVIDE INFILTRATION WHERE POSSIBLE AND PROMOTE GROUNDWATER RECHARGE. LASTLY, LANDSCAPING WILL BE PROVIDED THROUGHOUT THE SITE ALLOWING FOR RUNOFF TO BE FILTERED THROUGH SHADED VEGETATION REDUCING THERMAL IMPACTS.

## MONITORING, INSPECTION, AND REPORTING REQUIREMENTS

VISUAL INSPECTIONS
THE PERMITEE / CO–PERMITTEE(S) MUST ENSURE THAT VISUAL SITE INSPECTIONS ARE CONDUCTED WEEKLY, AND WITHIN 24 HOURS AFTER EACH MEASURABLE RUNOFF EVENT THROUGHOUT THE DURATION OF CONSTRUCTION AND UNTIL THE RECEIPT AND ACKNOWLEDGEMENT OF THE NOTICE OF TERMINATION BY THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT. THE VISUAL SITE INSPECTIONS AND REPORTS SHALL BE COMPLETED IN A FORMAT PROVIDED BY THE DEPARTMENT, AND CONDUCTED BY QUALIFIED PERSONNEL TRAINED AND EXPERIENCED IN EROSION AND SEDIMENT CONTROL TO ASCERTAIN THAT E&S BMPS AND PCSM BMPS ARE PROPERLY CONSTRUCTED AND MAINTAINED TO EFFECTIVELY MINIMIZE POLLUTION TO THE WATERS OF THE COMMONWEALTH. A WRITTEN REPORT OF EACH INSPECTION SHALL BE KEPT AND INCLUDE AT A MINIMUM:
1. A SUMMARY OF SITE CONDITIONS, E&S BMP AND PCSM BMP IMPLEMENTATION AND MAINTENANCE, AND COMPLIANCE ACTIONS; AND
2. THE DATE, TIME, NAME, AND SIGNATURE OF THE PERSON CONDUCTING THE INSPECTION.

NONCOMPLIANCE REPORTING
WHERE E&S, PCSM OR PPC BMPS AREA FOUND TO BE INOPERATIVE OR INEFFECTIVE DURING AND INSPECTION, OR ANY OTHER TIME, THE PERMITTEE / CO–PERMITTEE(S) SHALL, WITHIN 24 HOURS, CONTACT THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT, BY PHONE OR PERSONAL CONTACT, FOLLOWED BY THE SUBMISSION OF A WRITTEN REPORT WITHIN 5 DAYS OF THE INITIAL CONTACT. NONCOMPLIANCE REPORTS SHALL INCLUDE THE FOLLOWING INFORMATION:
1. ANY CONDITION ON THE PROJECT SITE WHICH MAY ENDANGER PUBLIC HEALTH, SAFETY, OR THE ENVIRONMENT, OR INVOLVE INCIDENTS WHICH CAUSE OR THREATEN POLLUTION;
2. THE PERIOD OF NONCOMPLIANCE, INCLUDING EXACT DATES AND TIMES AND/OR ANTICIPATED TIME WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE;
3. STEPS BEING TAKEN TO REDUCE, ELIMINATE, AND PREVENT RECURRENCE OF THE NONCOMPLIANCE; AND
4. THE DATE OR SCHEDULE OF DATES, AND IDENTIFYING REMEDIES FOR CORRECTING NONCOMPLIANCE CONDITIONS.

REDUCTION, LOSS, OR FAILURE OF THE BMPS
UPON REDUCTION, LOSS, OR FAILURE OF THE BMPS, THE PERMITTEE / CO–PERMITTEE SHALL TAKE IMMEDIATE ACTION TO RESTORE THE BMPS OR PROVIDE AN ALTERNATIVE METHOD OF TREATMENT. SUCH RESTORED BMPS OR ALTERNATIVE TREATMENT SHALL BE AT LEAST AS EFFECTIVE AS THE ORIGINAL BMPS.

TERMINATION OF COVERAGE
NOTE: UPON PERMANENT STABILIZATION OF EARTH DISTURBANCE ACTIVITIES ASSOCIATED WITH CONSTRUCTION ACTIVITIES THAT ARE AUTHORIZED BY THIS PERMIT AND WHEN BMPS IDENTIFIED IN THE PCSM PLAN HAVE BEEN PROPERLY INSTALLED, THE PERMIT AND/OR CO–PERMITTEE OF THE FACILITY MUST SUBMIT A NOTICE OR TERMINATION (N.O.T.) FORM THAT IS SIGNED IN ACCORDANCE WITH PART B, SECTION 1.C, SIGNATORY REQUIREMENTS, OF THIS PERMIT. ALL LETTERS CERTIFYING DISCHARGE TERMINATION ARE TO BE SENT TO THE DEPARTMENT R AUTHORIZED CONSERVATION DISTRICT. THE N.O.T. MUST CONTAIN THE FOLLOWING INFORMATION: FACILITY NAME, ADDRESS, AND LOCATION, OPERATOR NAME AND ADDRESS, PERMIT NUMBER, IDENTIFICATION AND PROOF OF ACKNOWLEDGEMENT FROM THE PERSON(S)WHO WILL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE PCSM BMPS IN ACCORDANCE WITH THE APPROVED PCSM PLAN, AND THE REASON FOR PERMIT TERMINATION. UNTIL THE RESPONSIBLE FOR OPERATING AND MAINTAINING ALL E&S BMPS AND PCSM BMPS ON THE PROJECT SITE AND WILL BE RESPONSIBLE FOR VIOLATIONS OCCURRING ON THE PROJECT SITE.

COMPLETION CERTIFICATE AND FINAL PLANS
WITHIN 30 DAYS AFTER THE COMPLETION OF EARTH DISTURBANCE ACTIVITIES AUTHORIZED BY THIS PERMIT, INCLUDING THE PERMANENT STABILIZATION OF THE SITE AND PROPER INSTALLATION OF PCSM BMPS IN ACCORDANCE WITH THE APPROVED PCSM PLAN, OR UPON SUBMISSION OF THE N.O.T. IF SOONER, THE PERMITTEE SHALL FILE WITH THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT A STATEMENT SIGNED BY A LICENSED PROFESSIONAL AND BY THE PERMITTEE CERTIFYING THAT WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THIS PERMIT AND THE APPROVED E&S AND PCSM PLANS.

## GEOLOGICAL FORMATIONS/SOIL CONDITIONS THAT MAY HAVE THE POTENTIAL TO CAUSE POLLUTION
§102.4(B)(5)(XII)

THERE ARE NO KNOWN GEOLOGICAL FORMATIONS OR SOIL CONDITIONS THAT HAVE POTENTIAL TO CAUSE POLLUTION DURING EARTH DISTURBANCE ACTIVITIES. IF ANY SUCH MATERIAL IS ENCOUNTERED DURING CONSTRUCTION, PROPER HANDLING AND/OR DISPOSAL OF ALL SUCH MATERIALS SHALL BE EMPLOYED BY CONTRACTOR PER METHODS OUTLINED ON THESE PLANS.

## RECYCLING OR DISPOSAL OF MATERIALS
§102.4(B)(5)(XI)

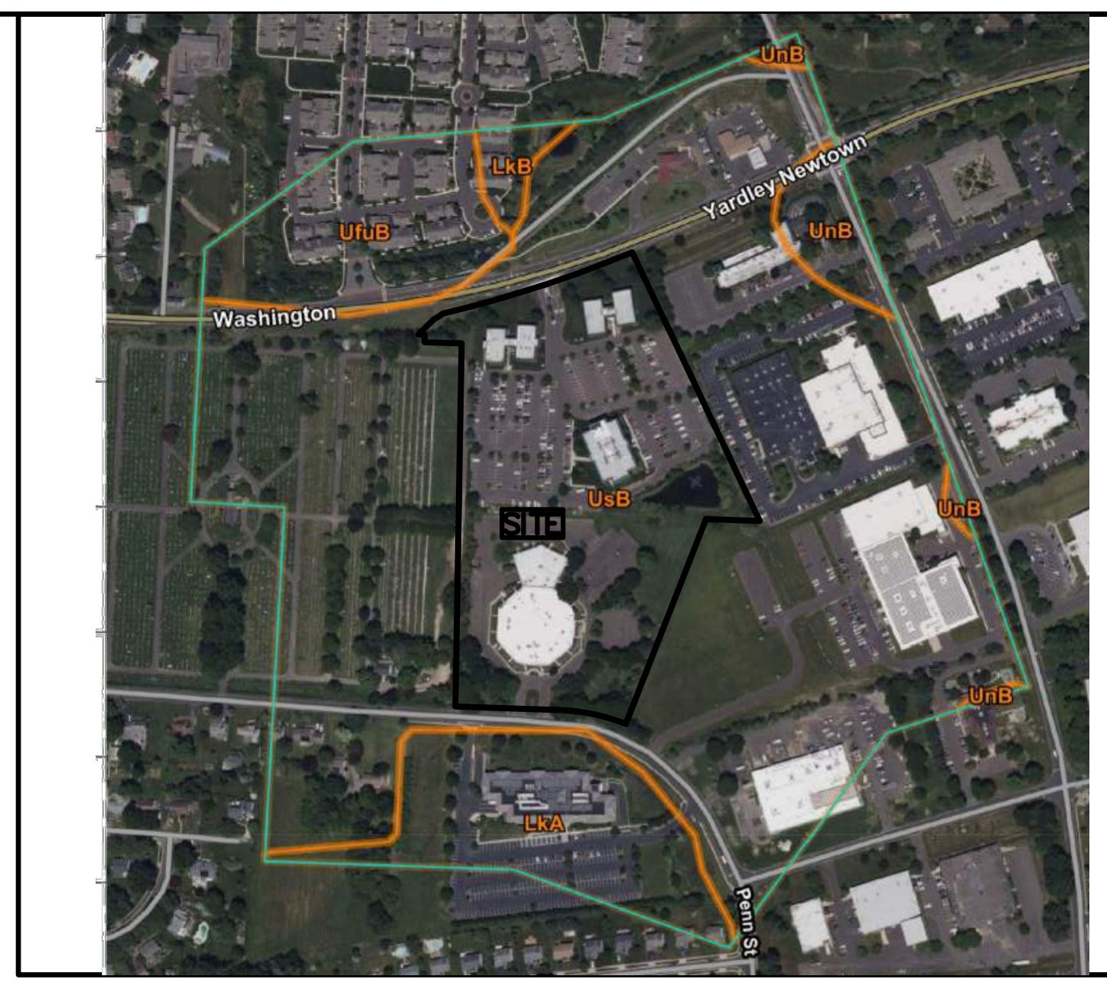
THE FOLLOWING IS A LIST THAT INCLUDES, BUT THAT IS NOT LIMITED TO, THE POTENTIAL CONSTRUCTION WASTES THAT MAY EXIST ON–SITE:
- EXISTING CONCRETE, CURB, SIDEWALK AND BUILDINGS
- EXISTING ASPHALT
- E&S BMP– STABILIZED ROCK CONSTRUCTION ENTRANCE
- E&S BMP– COMPOST FILTER SOCK
- E&S BMP– INLET PROTECTION
- E&S BMP– CONCRETE WASHOUT
- E&S BMP– PUMPED WATER FILTER BAG
- E&S BMP– REGULATED FILL MATERIALS
- E&S BMP– ROCK FILTER

ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

1. DUST CONTROL – CONSTRUCTION TRAFFIC MUST ENTER AND EXIT THE SITE AT THE STABILIZED CONSTRUCTION ENTRANCE. THE PURPOSE IS TO TRAP DUST AND MUD THAT WOULD OTHERWISE BE CARRIED OFF–SITE BY CONSTRUCTION TRAFFIC. WATER TRUCKS, VEGETATIVE COVER, STONE, AND/OR MULCH WILL BE USED AS NEEDED DURING CONSTRUCTION TO REDUCE DUST GENERATED ON THE SITE. DUST CONTROL MUST BE PROVIDED BY THE CONTRACTOR TO A DEGREE THAT IS ACCEPTABLE TO THE LOCAL CONSERVATION DISTRICT. AFTER CONSTRUCTION, THE SITE WILL BE STABILIZED, WHICH WILL REDUCE THE POTENTIAL FOR DUST GENERATION.
2. WATER SOURCE – NON–STORMWATER COMPONENTS OF SITE DISCHARGE MUST BE CLEAN WATER. WATER USED FOR CONSTRUCTION WHICH DISCHARGES FROM THE SITE MUST ORIGINATE FROM A PUBLIC WATER SUPPLY OR PRIVATE WELL APPROVED BY THE STATE HEALTH DEPARTMENT. WATER USED FOR CONSTRUCTION THAT DOES NOT ORIGINATE FROM AN APPROVED PUBLIC SUPPLY MUST NOT DISCHARGE FROM THE SITE.
3. CONCRETE WASTE FROM CONCRETE READY–MIX TRUCKS – DISCHARGE OF EXCESS OR WASTE CONCRETE AND/OR WASH WATER FROM CONCRETE TRUCKS WILL BE ALLOWED ON THE CONSTRUCTION SITE, BUT ONLY IN SPECIFICALLY DESIGNATED DIKED AREAS PREPARED TO PREVENT CONTACT BETWEEN THE CONCRETE AND/OR WASH WATER AND STORMWATER THAT WILL BE DISCHARGED FROM THE SITE.

RECYCLING OR DISPOSAL OF MATERIALS §102.8(F)(11)

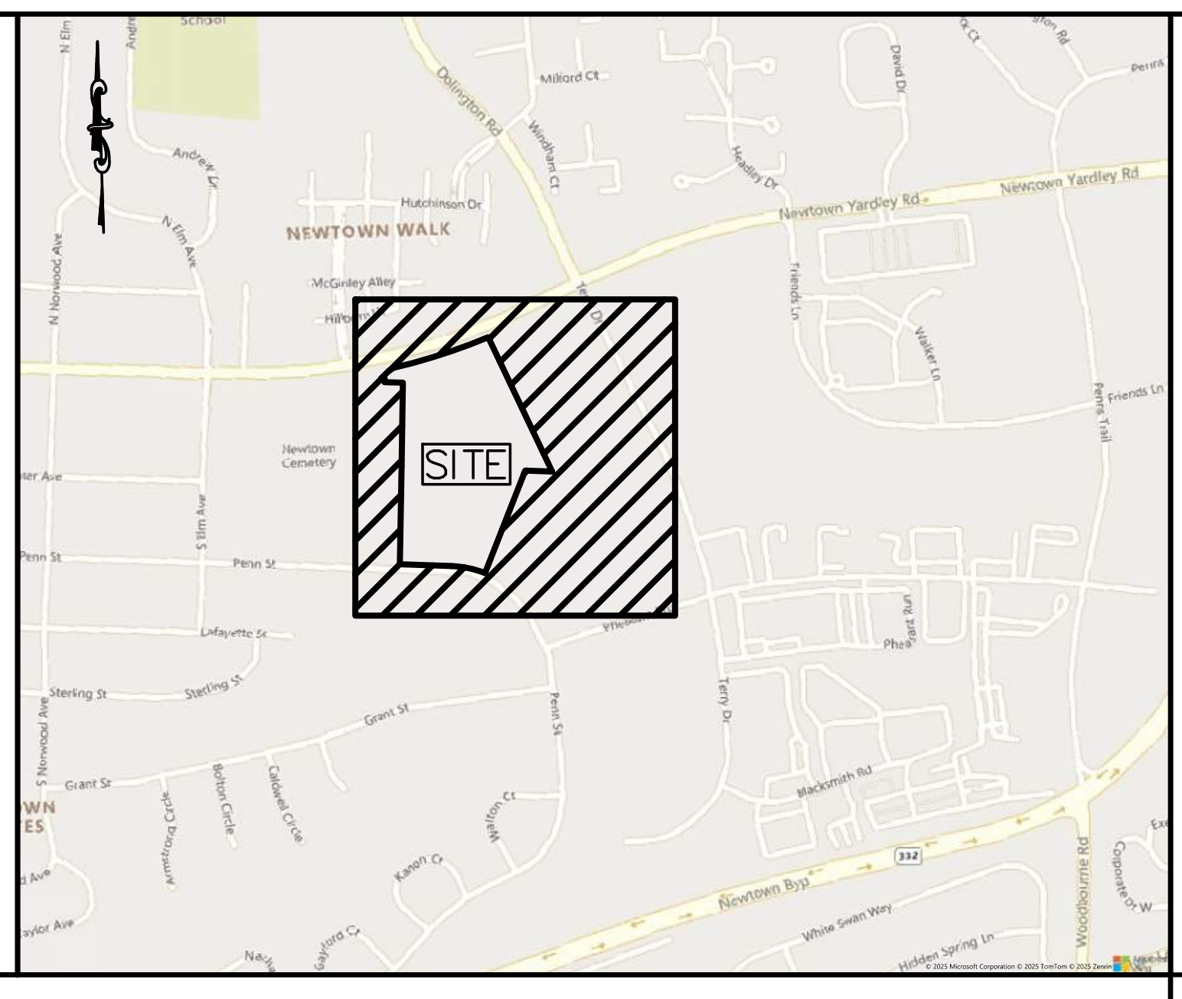
1. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTE IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE.
2. EXCEPT FOR ITEMS OR MATERIALS INDICATED TO BE REUSED, SALVAGED, REINSTALLED, OR OTHERWISE INDICATED TO REMAIN ON THE PROPERTY, DEMOLISHED OR EXCAVATED MATERIALS SHALL BE REMOVED FROM THE SITE. MATERIALS SLATED FOR REMOVAL FROM THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH ANY AND ALL APPLICABLE MUNICIPAL OR OTHER GOVERNMENTAL AGENCY CURRENT REGULATIONS. DEBRIS SHALL NOT BE PERMITTED TO ACCUMULATE ON THE JOB–SITE. DUST AND DIRT SHALL BE HELD TO A MINIMUM DURING DEMOLITION, BY WETTING DOWN, AS REQUIRED. ON SITE BURNING OF MATERIALS WILL NOT BE PERMITTED. AT THE COMPLETION OF WORK, THE ENTIRE AREA INVOLVED WILL BE CLEAN AND LEFT IN A NEAT CONDITION, FREE OF RUBBISH. RECYCLING OR DISPOSAL OF MATERIALS ASSOCIATED WITH OR FROM THIS PROJECT SITE SHALL BE UNDERTAKEN IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION RULES AND REGULATIONS.



## SOILS MAP

300 00 300 600
SCALE IN FEET

SCALE: 1"=300'



## LOCATION MAP

1000 00 1000 2000
SCALE IN FEET

SCALE: 1"=1000'

### SOILS LEGEND AND TABLE OF LIMITATIONS & RESOLUTIONS BASED ON USDA–NRCS WEB SOIL SURVEY OF CHESTER COUNTY

| SYMBOL | MAPPING UNITS | SLOPE | LAND CAPBLTY | HYDRIC SOIL | HYDRO. GROUP | DEPTH TO BEDROCK | DEPTH TO WATER TABLE | LIMITATIONS FOR CONSTRUCTION | RESOLUTION OF LIMITATIONS |
|---|---|---|---|---|---|---|---|---|---|
| *LkA* | LAWRENCEVILLE SILT LOAM | 0–3% | 2w | NO | C | 48"–99" | 18"–36" | NOT LIMITED | |
| *LkB* | LAWRENCEVILLE SILT LOAM | 3–8% | 2e | NO | C | 48"–99" | 18"–36" | NOT LIMITED | |
| *UfuB* | URBAN LAND | 0–8% | 8s | NO | D | 10"–100" | > 80" | NOT LIMITED | |
| *UnB* | URBAN LAND – DUFFIELD COMPLEX | 0–8% | 8s | NO | B | 48"–120" | > 80" | NOT LIMITED | |
| *UsB* | URBAN LAND – LAWRENCEVILLE COMPLEX | 0–8% | 2e | NO | C | 48"–99" | 18"–36" | NOT LIMITED | |

**GILMORE & ASSOCIATES, INC.**
**ENGINEERING & CONSULTING SERVICES**
CORPORATE HEADQUARTERS
65 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901 • (215) 345-4330 • www.gilmore-assoc.com

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**NOT APPROVED FOR CONSTRUCTION**

RONALD G. MONKRES II
ENGINEER 603164–E
DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN
*661 PENN STREET REDEVELOPMENT*
NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

PCSM NOTES

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.: 2500866

APPLICANTS INFO:
661 PENN STREET, LLC
209 PENN'S TRAIL
NEWTOWN, PA 18940
215–968–0600

MUNICIPAL FILE No.:

TAX MAP PARCEL No.: 29–010–119–001 & 29–010–037

| | |
|---|---|
| TOTAL AREA: 15.75 AC. | TOTAL LOTS: 2 |
| DATE: 01/21/26 | SCALE: N.T.S. |
| DRAWN BY: GY/BH | CHECKED BY: RGM |

SHEET NO.: 23 OF 33

C:\Autodesk Docs\ACCDocs\Gilmore and Associates\2500866_661_Penn_Street_Re-Dev\Project Files\2025\2500866\DESIGN\CAD\Prod_Dwgs\2500866_PCSM DETAILS.dwg Layout: PCSM NOTES Plotted By: rmonkres, on Wed Jul 29, 2026 at 8:29am

**FLARED END SECTIONS SCHEDULE OF ELEVATIONS**

| FES # | PIPE DIA. | INV. ELEV. | TOP OF WALL EL. |
|---|---|---|---|
| 24 | 24 | 174.50 | 176.68 |
| 36 | 24 | 174.00 | 176.18 |
| 51 | 18 | 175.40 | 177.23 |
| 62 | 12 | 174.95 | 176.24 |
| 63 | 14x23 | 174.35 | 175.83 |

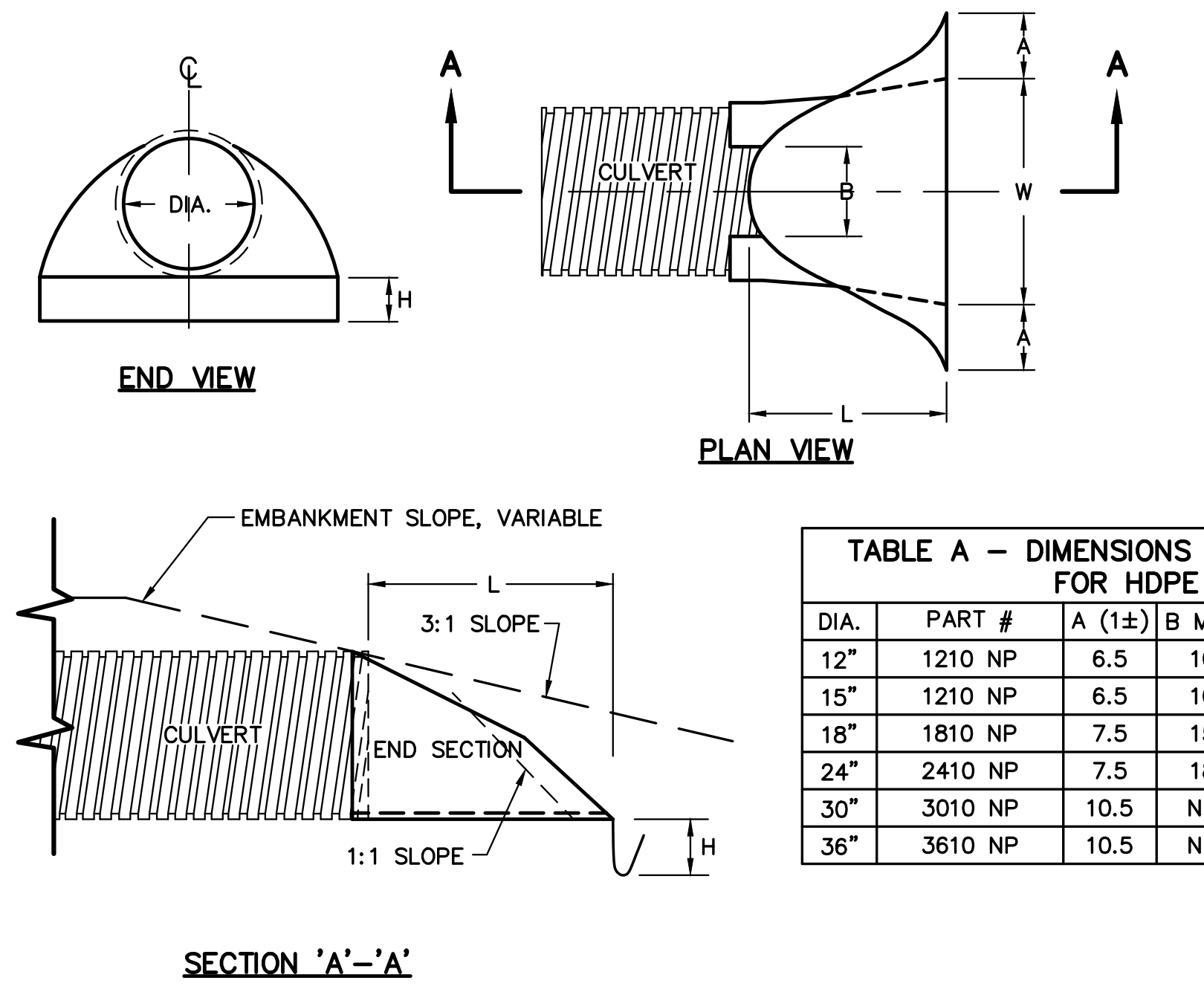
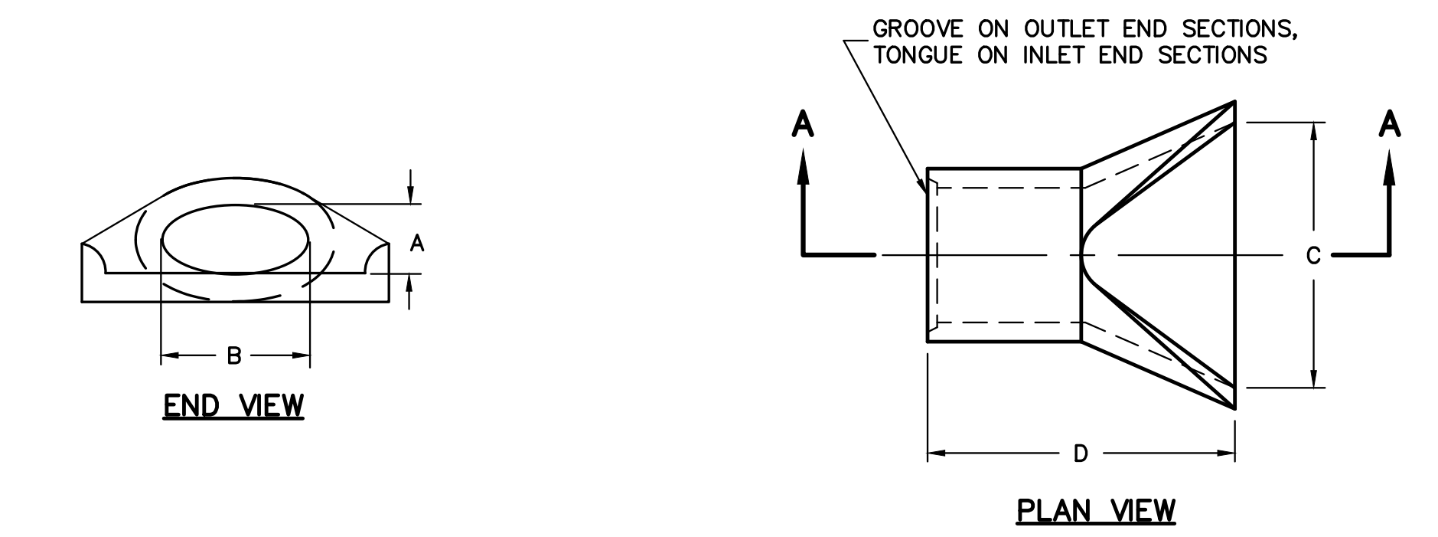


**TABLE A – DIMENSIONS FOR END SECTIONS FOR HDPE PIPE**

| DIA. | PART # | A (1±) | B MAX | H (1±) | L (.5±) | W (.5±) |
|---|---|---|---|---|---|---|
| 12" | 1210 NP | 6.5 | 10 | 6.5 | 25 | 29 |
| 15" | 1210 NP | 6.5 | 10 | 6.5 | 25 | 29 |
| 18" | 1810 NP | 7.5 | 15 | 6.5 | 32 | 35 |
| 24" | 2410 NP | 7.5 | 18 | 6.5 | 36 | 45 |
| 30" | 3010 NP | 10.5 | NA | 7.0 | 53 | 68 |
| 36" | 3610 NP | 10.5 | NA | 7.0 | 53 | 68 |

## HDPE FLARED END SECTION

NOT TO SCALE



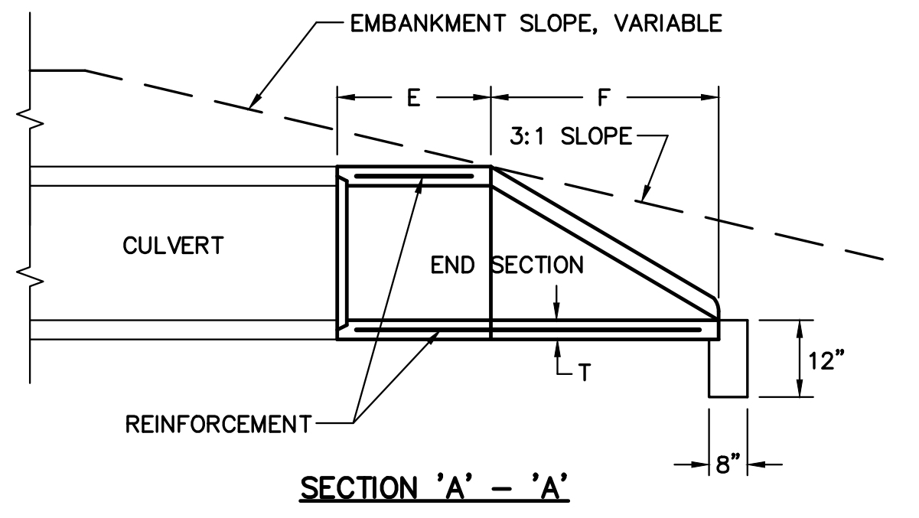


**TABLE A – DIMENSIONS FOR HORIZ. ELLIPTICAL FLARED END SECTIONS FOR CONCRETE PIPES**

| DIA. | A | B | C | D | E | F | T |
|---|---|---|---|---|---|---|---|
| 18" | 14" | 23" | 42" | 72" | 24" | 48" | 2 1/2" |
| 24" | 19" | 30" | 54" | 72" | 24" | 48" | 3 1/2" |
| 27" | 22" | 34" | 58" | 72" | 24" | 48" | 3 1/2" |
| 30" | 24" | 38" | 62" | 72" | 24" | 48" | 3 3/4" |
| 36" | 29" | 45" | 70" | 72" | 24" | 48" | 4 1/2" |
| 42" | 34" | 53" | 78" | 96" | 36" | 60" | 5" |
| 48" | 38" | 60" | 84" | 96" | 36" | 60" | 5 1/2" |
| 54" | 43" | 68" | 90" | 96" | 36" | 60" | 6" |
| 60" | 48" | 76" | 98" | 96" | 36" | 60" | 6 1/2" |

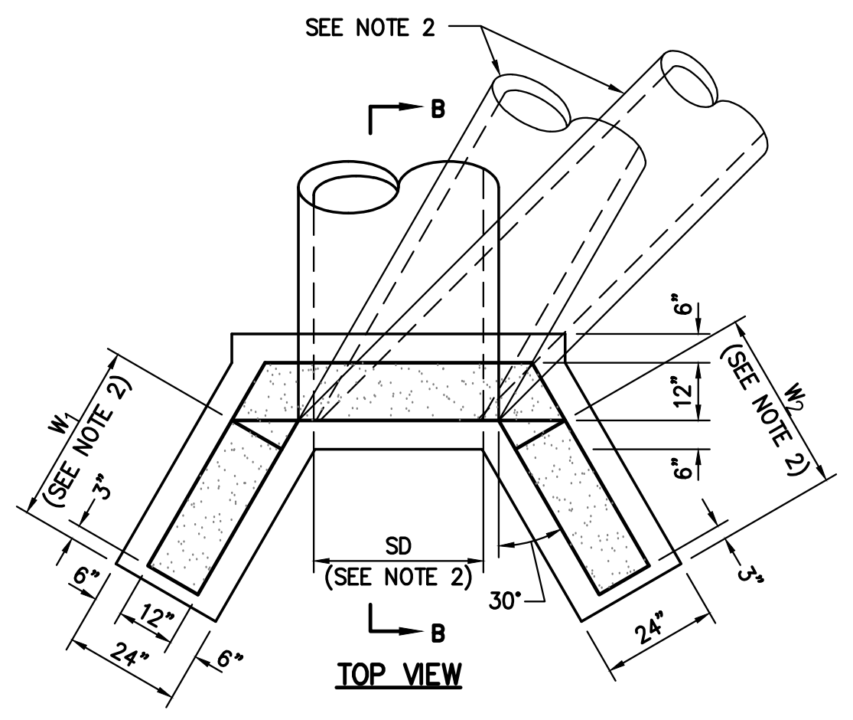
NOTE: PRECAST CONCRETE END SECTION TO BE IN CONFORMANCE WITH PennDOT PUBLICATION 408.

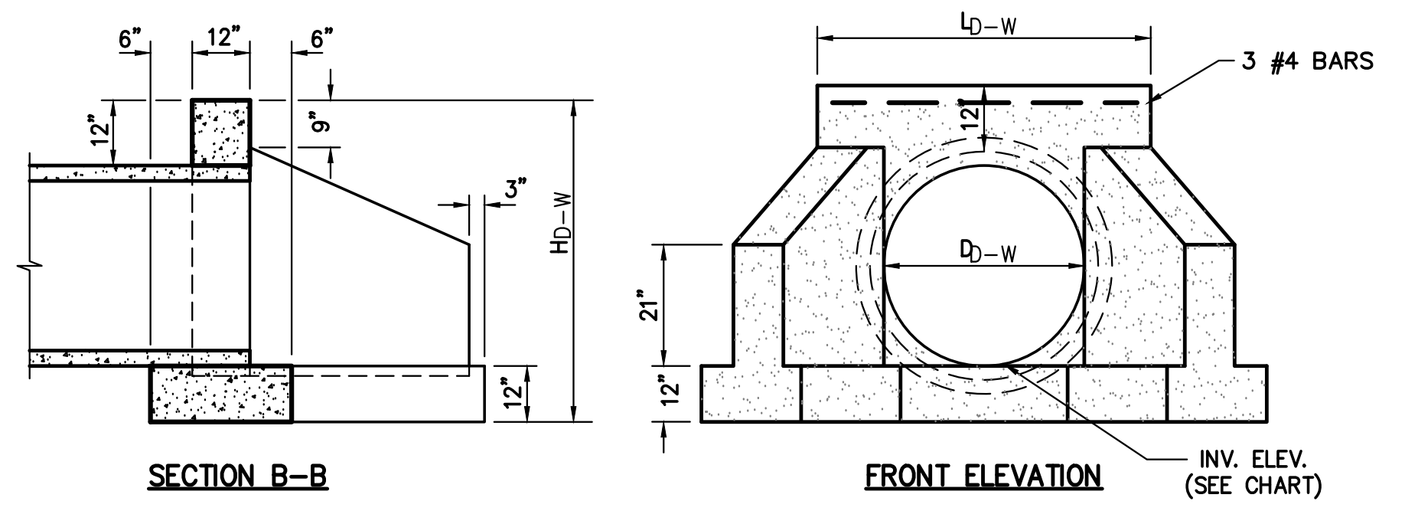
## ELLIPTICAL CONCRETE FLARED END SECTION

NOT TO SCALE

**NOTES**

1. PRECAST ENDWALLS SHALL CONFORM AND USERS SHALL REFER TO "COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, BUREAU OF HIGHWAY DESIGN, STANDARDS FOR ROADWAY CONSTRUCTION," PAGE RC-31M, LATEST ISSUE, FOR NOTES REGARDING PRECAST CONCRETE ENDWALL CONSTRUCTION.
2. REFER TO "COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, BUREAU OF HIGHWAY DESIGN, STANDARDS FOR ROADWAY CONSTRUCTION," PAGE RC-31M, SHEET 2 OF 2, TABLE 'A' FOR SPECIFIC DIMENSIONS THAT ARE DEPENDENT UPON PIPE SKEW.
3. WING WALL DIMENSIONS ASSUME AN EMBANKMENT SLOPE OF 2:1. WING WALL LENGTHS SHALL BE ADJUSTED TO PROVIDE REQUIRED EMBANKMENT SLOPE AS SHOWN ON GRADING PLANS.





## PENNDOT TYPE D-W ENDWALL

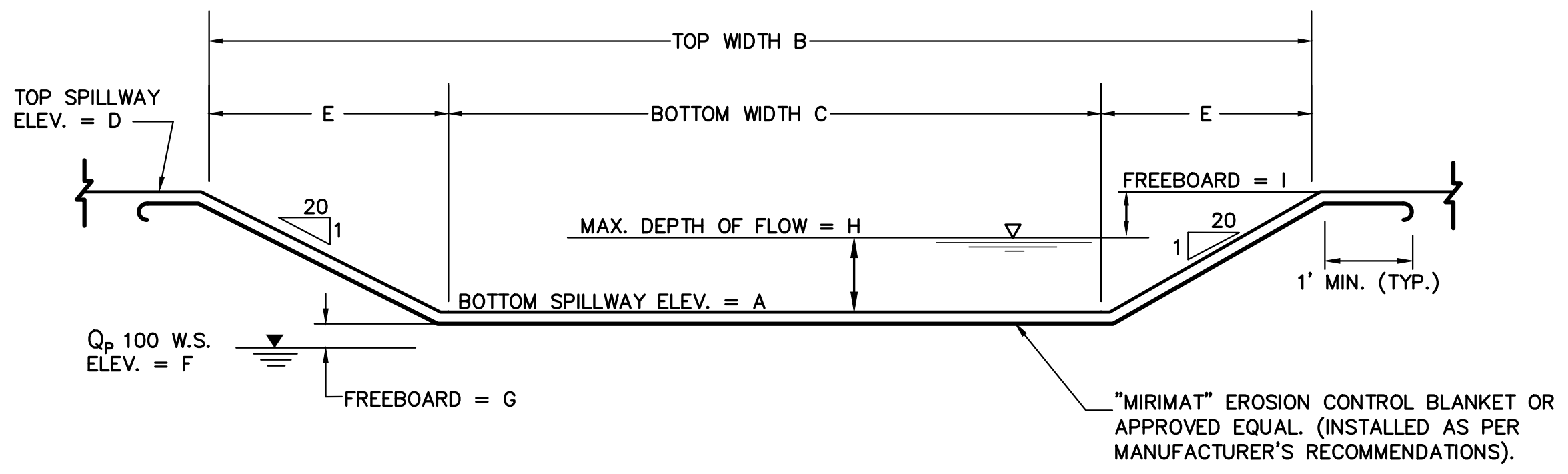
NOT TO SCALE

**TYPE D-W ENDWALL SCHEDULE OF ELEVATIONS**

| HW # | PIPE DIA. | INV. ELEV. | TOP OF WALL EL. |
|---|---|---|---|
| 18 | 24 | xxx | xxx |

**NOTES:**

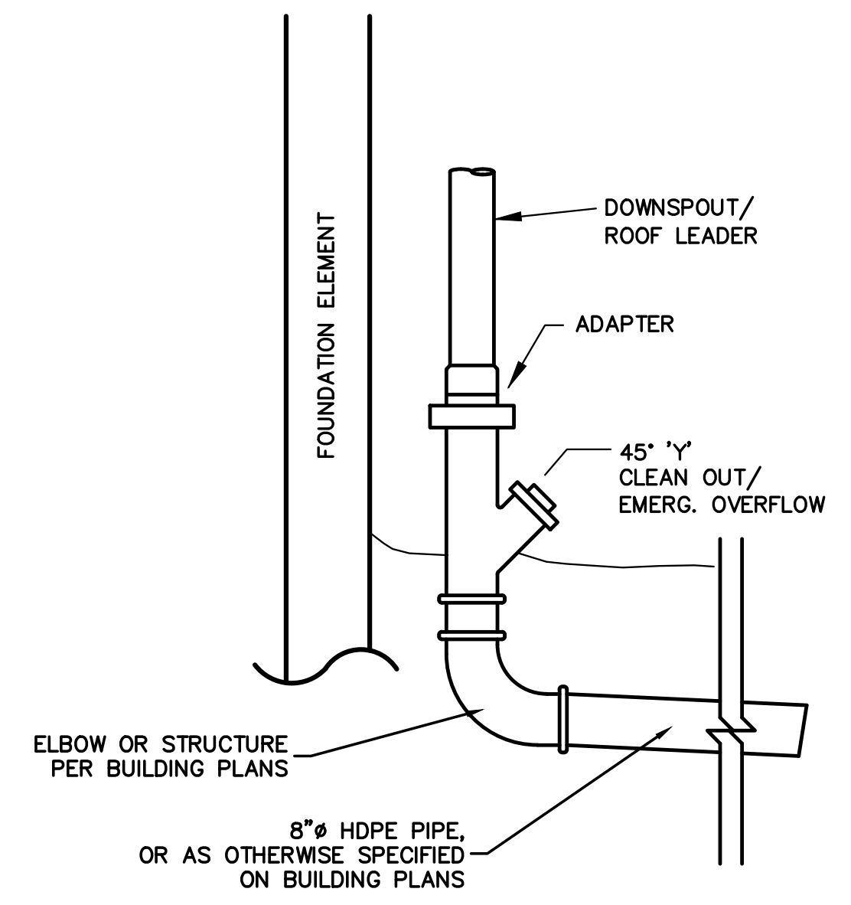
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN LINER 3' BELOW SPILLWAY ON INSIDE OF BASIN BY ANCHORING THE BLANKET IN A 12" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW OVER THE SPILLWAY AND TO THE TOE OF THE EMBANKMENT. PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH A 6" OVERLAP. USE A DOUBLE ROW OF STAGGERED STAPLES, 4" APART, TO SECURE BLANKETS.
4. STAPLE LINING PER MANUFACTURER'S RECOMMENDED STAPLE PATTERN OVER ENTIRE WIDTH/LENGTH OF THE SPILLWAY.
5. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED IN A 12" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. HEAVY EQUIPMENT SHALL NOT CROSS OVER SPILLWAY WITHOUT PRECAUTIONS TAKEN TO PROTECT EROSION CONTROL LINING.
7. DISPLACED LINER WITHIN THE SPILLWAY AND/OR ON THE EMBANKMENTS SHALL BE REPLACED IMMEDIATELY.
8. RIPRAP AT TOE OF EMBANKMENT SHALL BE EXTENDED A SUFFICIENT LENGTH IN BOTH DIRECTIONS TO PREVENT SCOUR.



| BASIN | A | B | C | D | E | F | G | H | I |
|---|---|---|---|---|---|---|---|---|---|
| 2 | 177.50 | 160' | 100' | 179.00 | 30' | 177.40 | 0.10' | 0.26' | 1.24' |

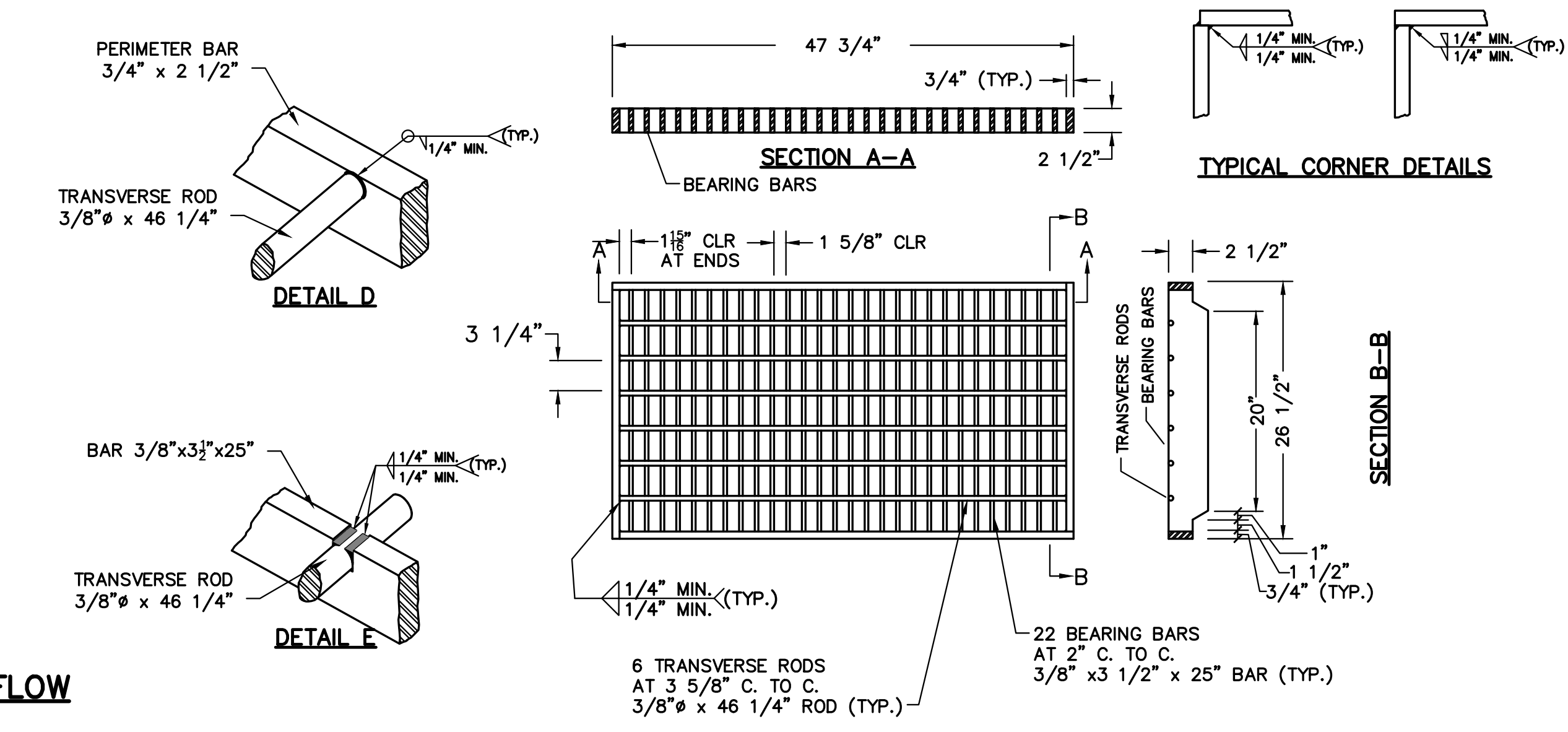
## EMERGENCY SPILLWAY DETAIL

NOT TO SCALE


FOUNDATION ELEMENT
DOWNSPOUT/ ROOF LEADER
ADAPTER
45° 'Y' CLEAN OUT/ EMERG. OVERFLOW
ELBOW OR STRUCTURE PER BUILDING PLANS
8"ø HDPE PIPE, OR AS OTHERWISE SPECIFIED ON BUILDING PLANS

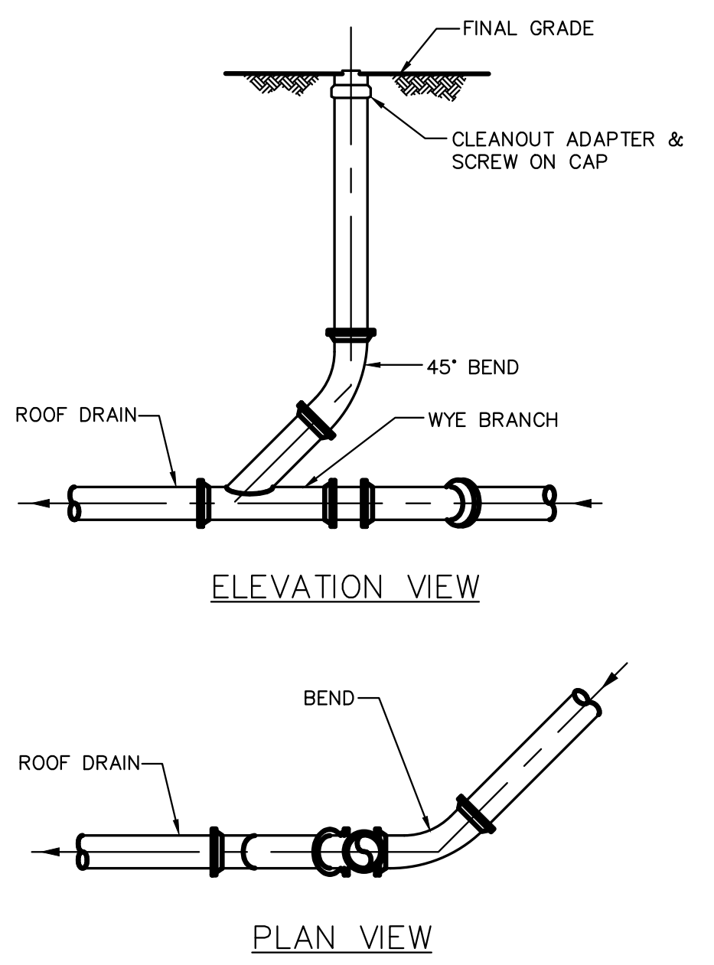
## ROOF LEADER CLEAN OUT / EMERGENCY OVERFLOW

NOT TO SCALE



## STRUCTURAL STEEL GRATE BICYCLE SAFE

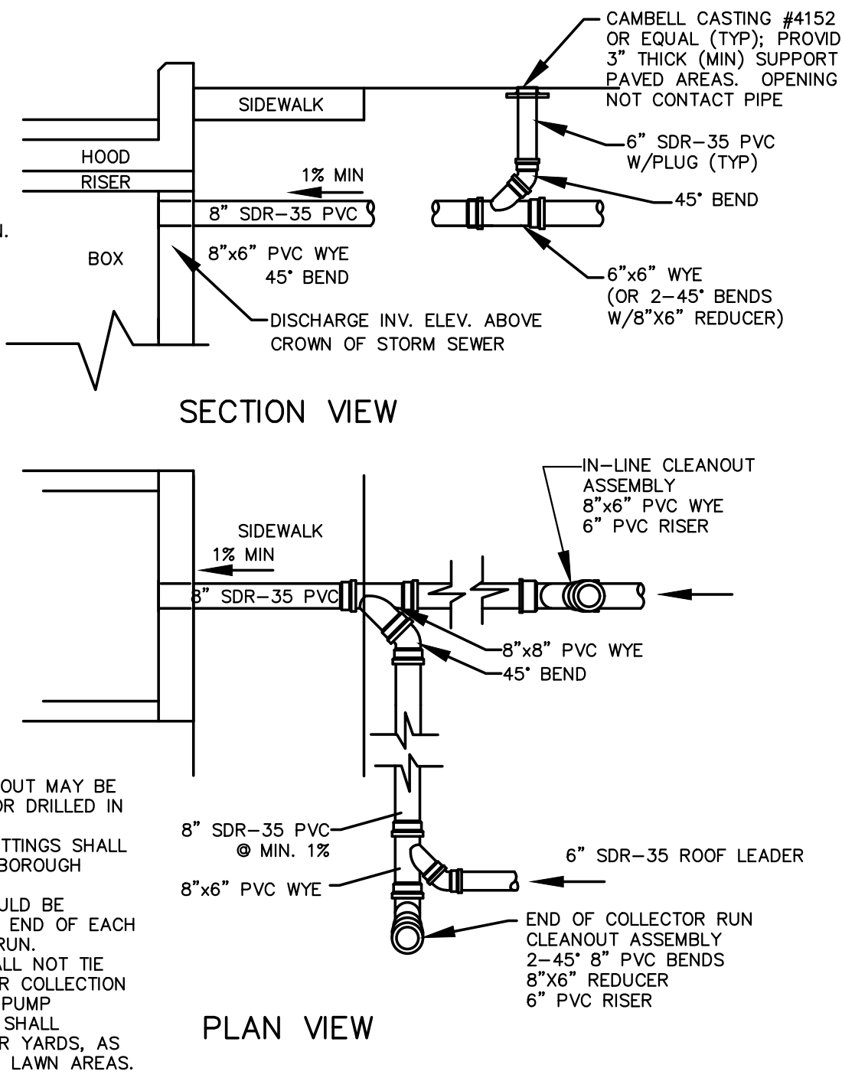
NOT TO SCALE



## ROOF DRAIN CLEAN-OUT DETAIL

NOT TO SCALE

1. INLET BOX KNOCKOUT MAY BY PRE-FABRICATED OR OR DRILLED IN FIELD
2. ALL PIPES AND FITTINGS SHALL BE SDR-35 PER BOROUGH STANDARDS
3. A CLEANOUT SHOULD BE PROVIDED AT THE END OF EACH COLLECTOR LINE RUN.

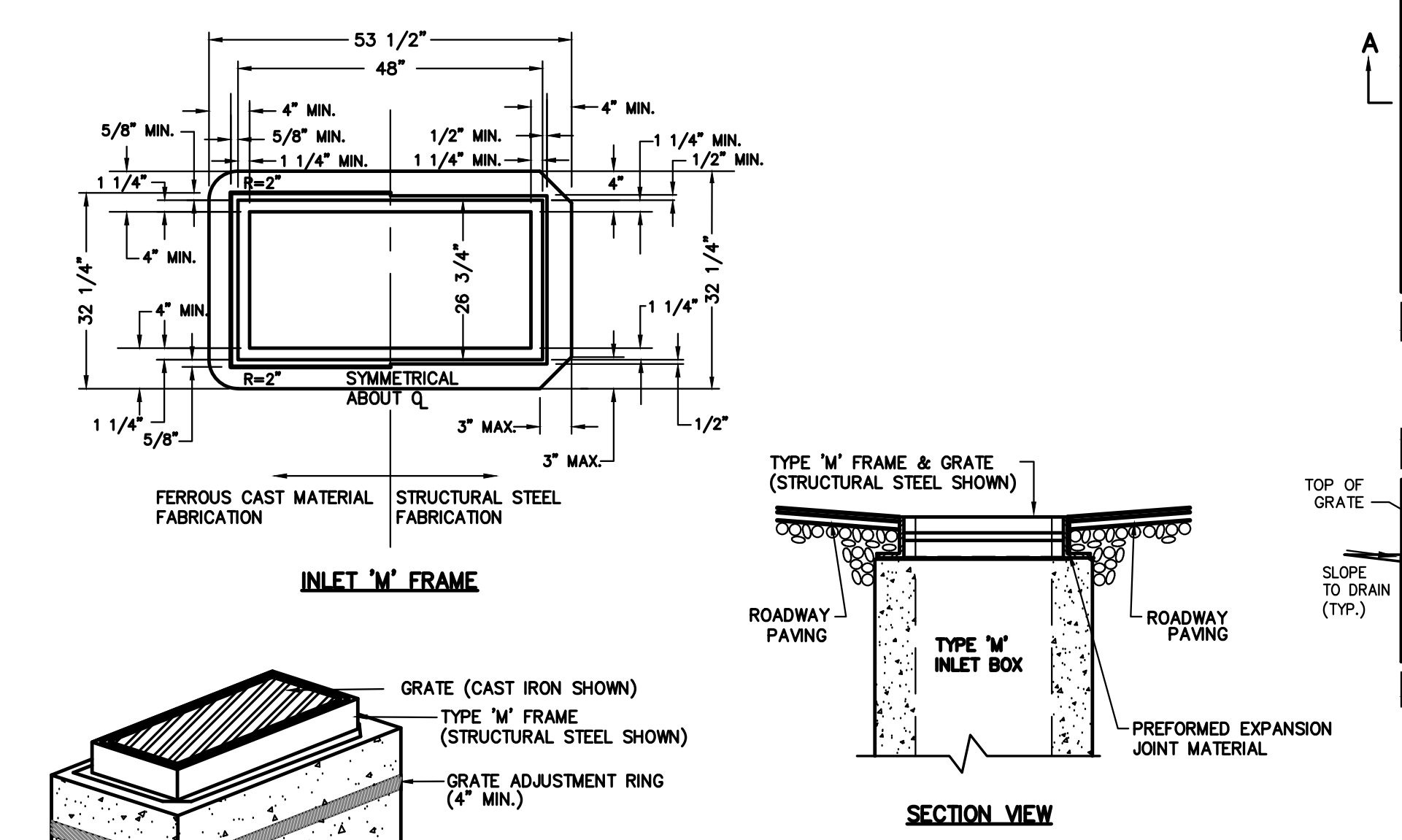

CAMBELL CASTING #4152 OR EQUAL (TYP); PROVIDE 18" DIA 3" THICK (MIN) SUPPORT RING IN PAVED AREAS. OPENING SHALL NOT CONTACT PIPE
SIDEWALK
HOOD
RISER
1% MIN
8" SDR-35 PVC
6" SDR-35 PVC W/PLUG (TYP)
45° BEND
BOX
8"x6" PVC WYE 45° BEND
6"x6" WYE (OR 2-45° BENDS W/8"X6" REDUCER)
DISCHARGE INV. ELEV. ABOVE CROWN OF STORM SEWER
SECTION VIEW
IN-LINE CLEANOUT ASSEMBLY 8"x6" PVC WYE 6" PVC RISER
SIDEWALK
1% MIN
8" SDR-35 PVC
8"x8" PVC WYE
45° BEND
8" SDR-35 PVC @ MIN. 1%
6" SDR-35 ROOF LEADER
8"x6" PVC WYE
END OF COLLECTOR RUN CLEANOUT ASSEMBLY 2-45° 8" PVC BENDS 8"X6" REDUCER 6" PVC RISER
PLAN VIEW

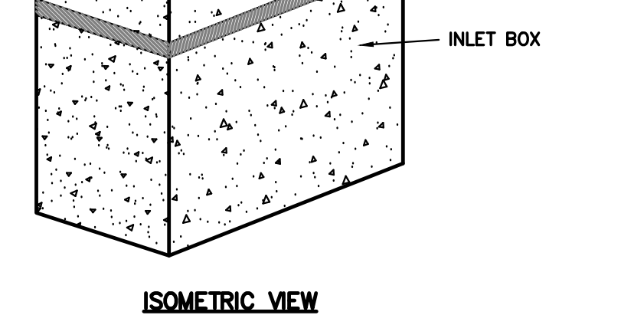
NOTES

1. INLET BOX KNOCKOUT MAY BE RE-FABRICATED OR DRILLED IN FIELD.
2. ALL PIPES AND FITTINGS SHALL BE SDR-35 PER BOROUGH STANDARDS.
3. A CLEANOUT SHOULD BE PROVIDED AT THE END OF EACH COLLECTOR LINE RUN.
4. SUMP PUMPS SHALL NOT TIE INTO ROOF LEADER COLLECTION SYSTEMS. SUMP PUMP DISCHARGE LINES SHALL DAYLIGHT TO REAR YARDS, AS TO DISCHARGE TO LAWN AREAS.

## ROOF DRAINAGE DISCHARGE SYSTEM HEADER DETAIL

NOT TO SCALE



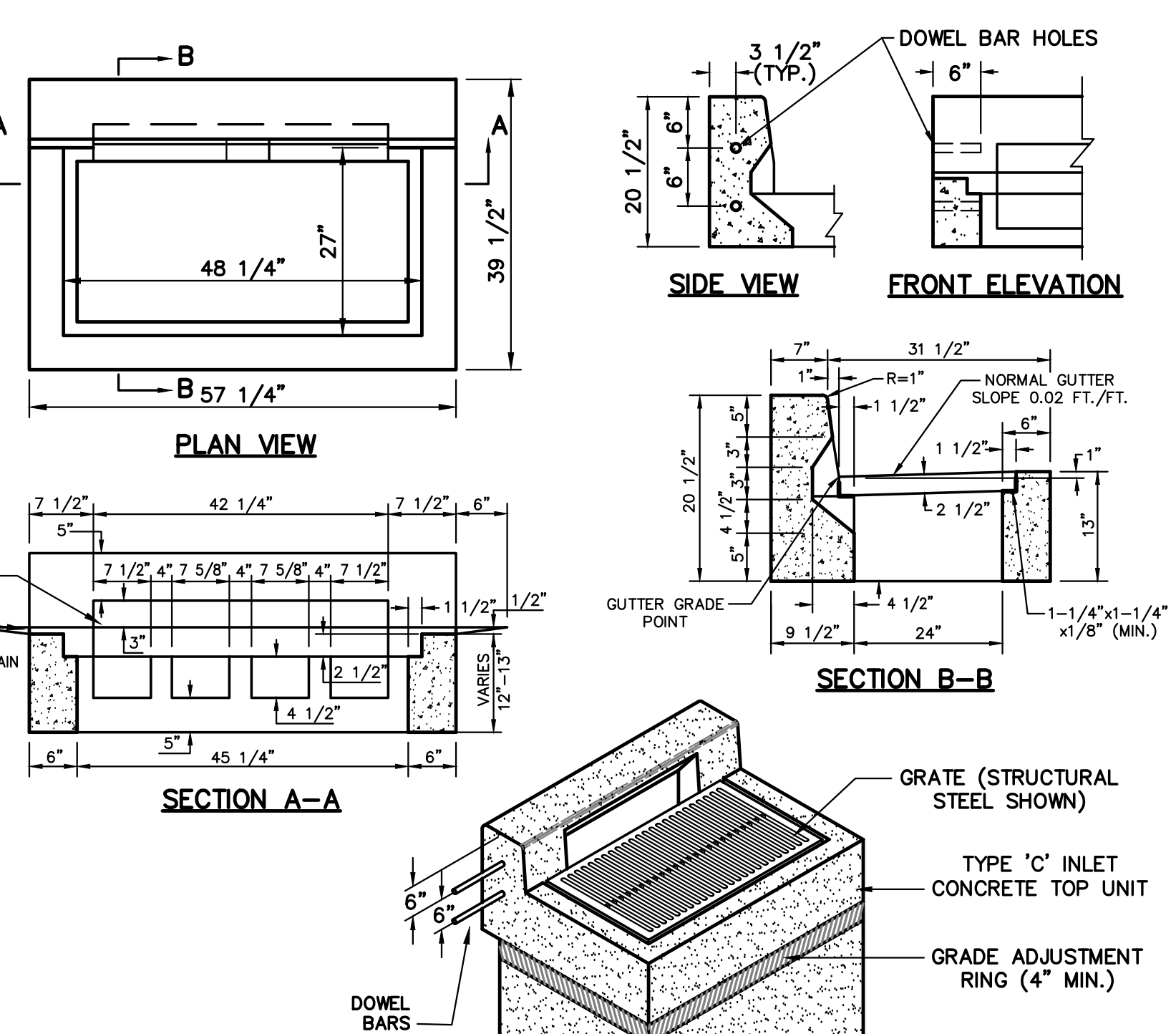

GRATE (CAST IRON SHOWN)
TYPE 'M' FRAME (STRUCTURAL STEEL SHOWN)
GRATE ADJUSTMENT RING (4" MIN.)
INLET BOX
ISOMETRIC VIEW

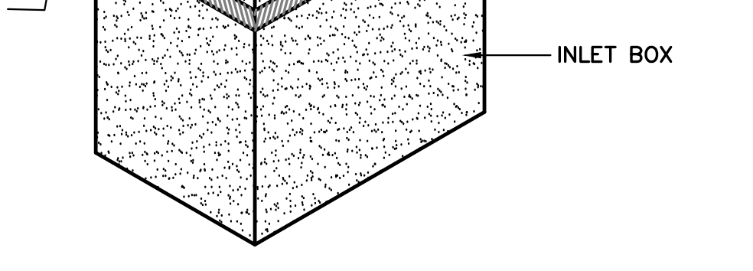
NOTES:

1. PROVIDE STRUCTURAL STEEL BICYCLE SAFE GRATE PER PENNDOT RC-45M.
2. EXPANSION JOINT MATERIAL SHALL CONFORM TO PUB. 408 SEC.
3. REFER TO "COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, BUREAU OF DESIGN, STANDARDS FOR ROADWAY CONSTRUCTION", PAGE RC-46M, LATEST ISSUE, FOR NOTES AND SPECIFICATIONS REGARDING PRECAST INLET CONSTRUCTION.
4. TYPE 'M' OPEN FRAME INLETS TO BE INSTALLED IN ALLEYWAYS, WITH THE LONG EDGE ORIENTED PARALLEL TO THE ALLEY CENTERLINE

## TYPE 'M' INLET, OPEN FRAME

NOT TO SCALE

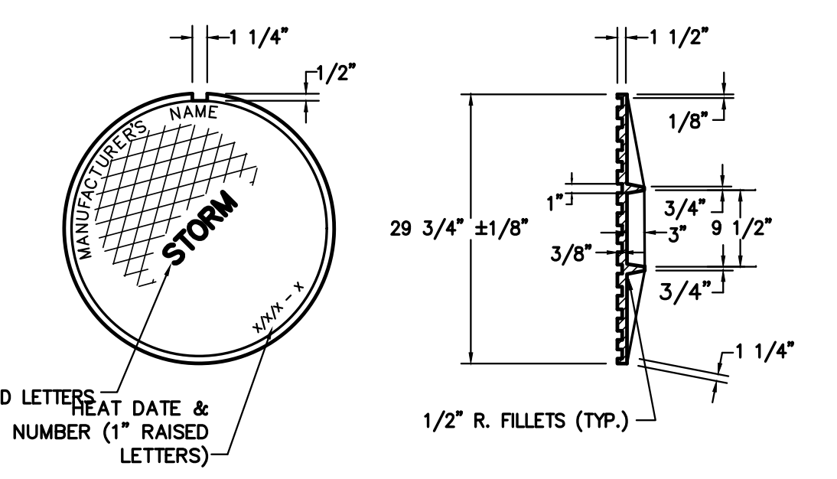




NOTE:
REFER TO "COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, BUREAU OF DESIGN, STANDARDS FOR ROADWAY CONSTRUCTION", PAGE RC-46M, LATEST ISSUE, FOR NOTES AND SPECIFICATIONS REGARDING PRECAST INLET CONSTRUCTION.

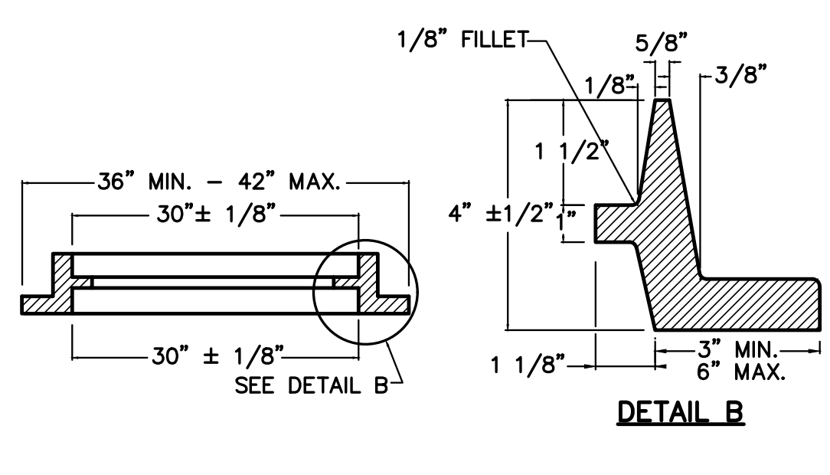
## TYPE 'C' INLET DETAIL

NOT TO SCALE



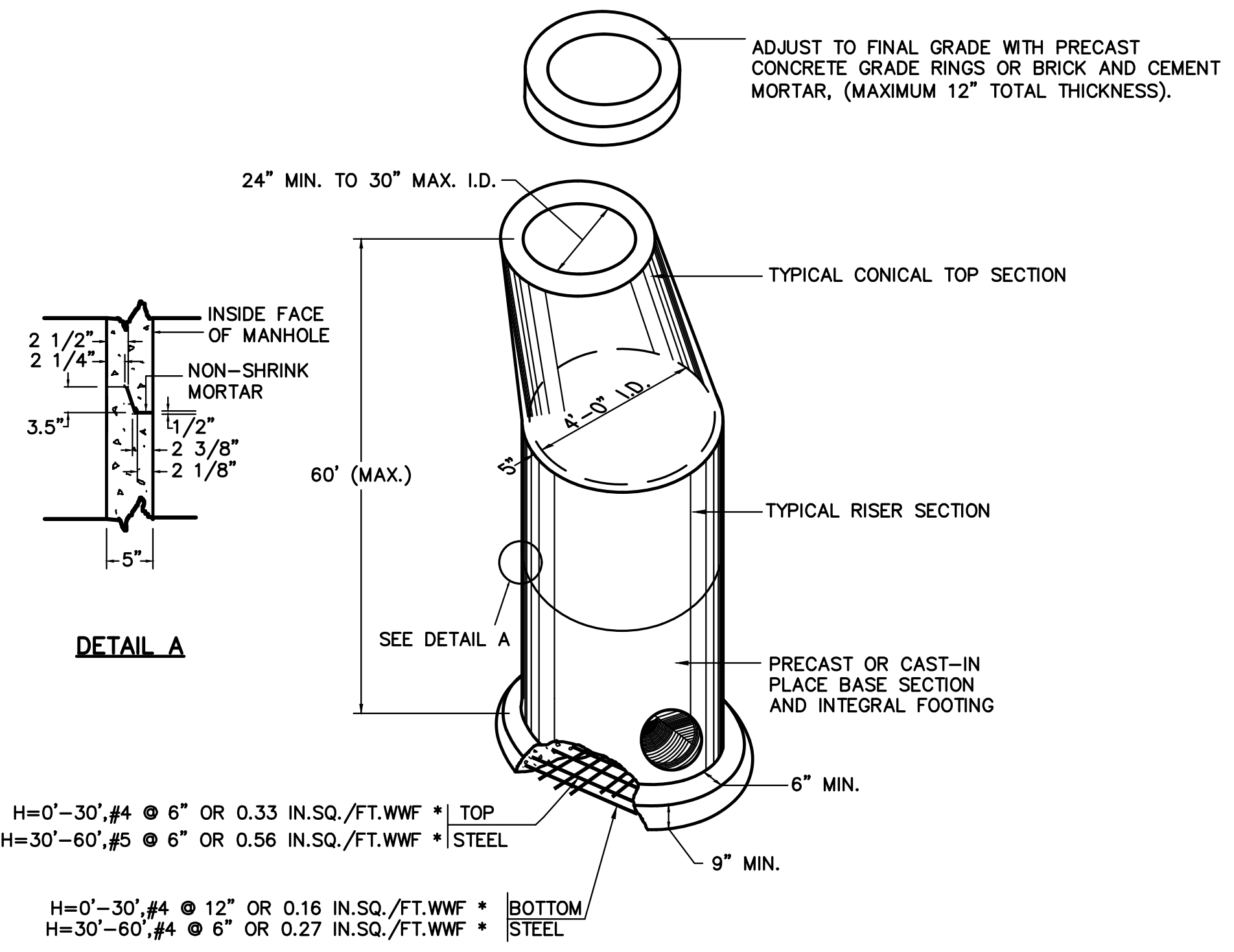
## CAST IRON COVER

NOT TO SCALE



## CAST IRON FRAME

(ALL ROUNDS AND FILLETS TO BE 1/4" R. UNLESS OTHERWISE NOTED.)


ADJUST TO FINAL GRADE WITH PRECAST CONCRETE GRADE RINGS OR BRICK AND CEMENT MORTAR, (MAXIMUM 12" TOTAL THICKNESS).
24" MIN. TO 30" MAX. I.D.
TYPICAL CONICAL TOP SECTION
INSIDE FACE OF MANHOLE
NON-SHRINK MORTAR
3.5"
5"
DETAIL A
60' (MAX.)
TYPICAL RISER SECTION
SEE DETAIL A
PRECAST OR CAST-IN PLACE BASE SECTION AND INTEGRAL FOOTING
6" MIN.
9" MIN.
H=0'-30',#4 @ 6" OR 0.33 IN.SQ./FT.WWF * TOP
H=30'-60',#5 @ 6" OR 0.56 IN.SQ./FT.WWF * STEEL
H=0'-30',#4 @ 12" OR 0.16 IN.SQ./FT.WWF * BOTTOM
H=30'-60',#4 @ 6" OR 0.27 IN.SQ./FT.WWF * STEEL

**NOTES:**

PRECAST MANHOLES, MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 714, MAY BE SUBSTITUTED FOR STANDARD CAST-IN-PLACE MANHOLE.

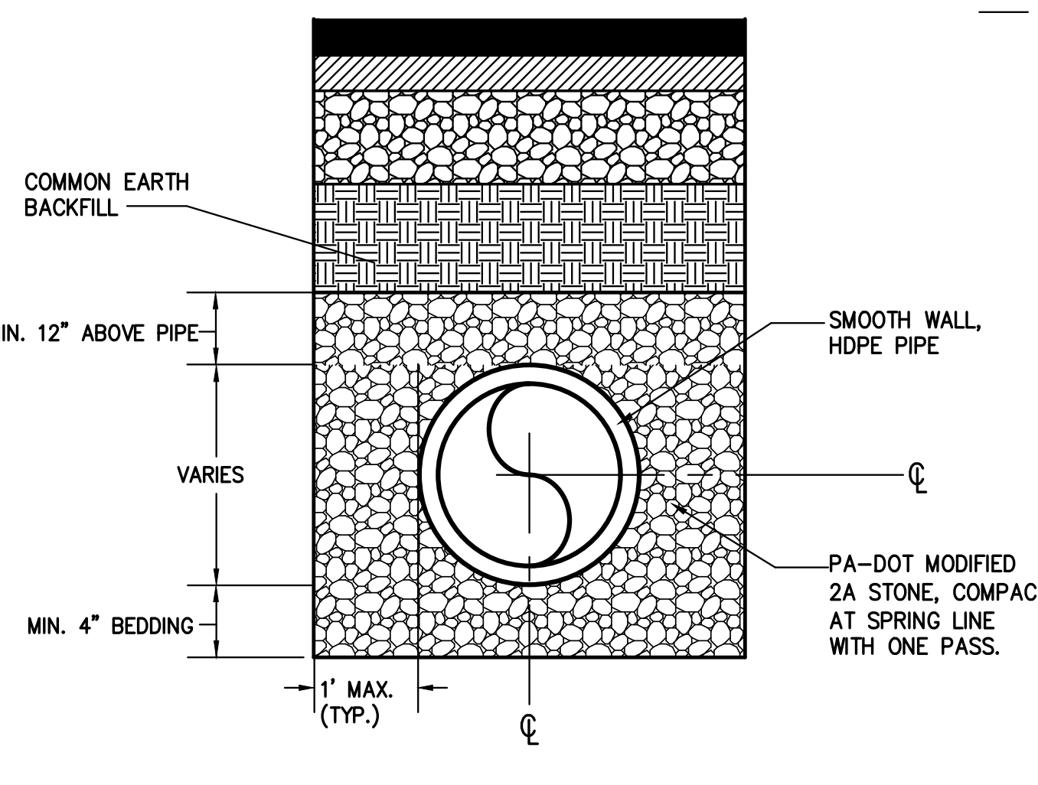
REFER TO "COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, BUREAU OF HIGHWAY DESIGN, STANDARDS FOR ROADWAY CONSTRUCTION", PAGE RC-39, SHEET 3 of 5, LATEST ISSUE, FOR NOTES AND SPECIFICATIONS REGARDING PRECAST MANHOLE CONSTRUCTION.

* PROVIDE WELDED WIRE FABRIC MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 709.3.

MANHOLE STEPS SHALL BE PROVIDED IN ANY CASE WHERE THE STRUCTURE IS 5 FEET OR GREATER IN DEPTH.

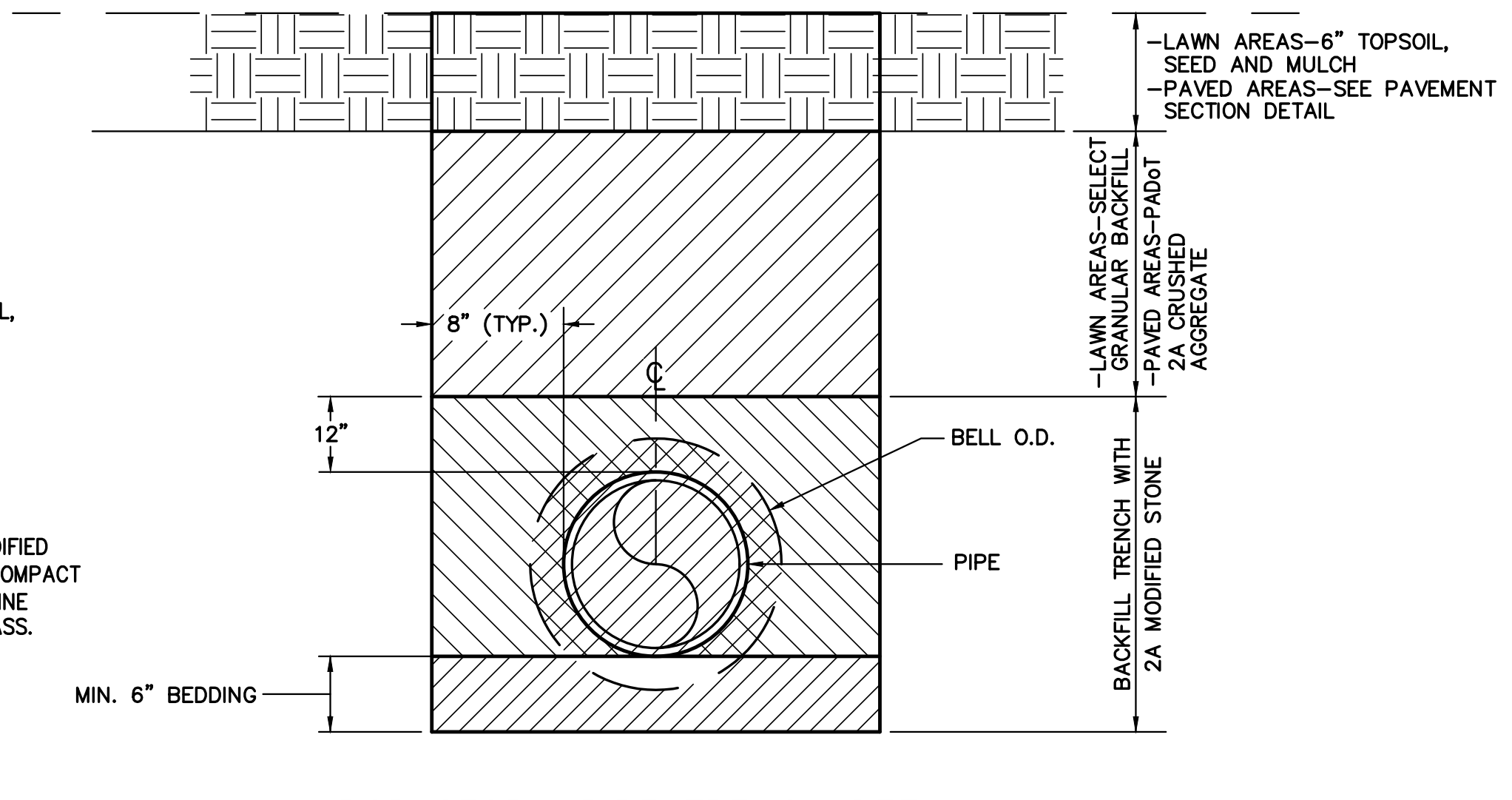
## PRECAST STORMWATER MANHOLE

NOT TO SCALE



## HDPE BACKFILL DETAIL

NOT TO SCALE


LAWN AREAS-6" TOPSOIL, SEED AND MULCH
PAVED AREAS-SEE PAVEMENT SECTION DETAIL
LAWN AREAS-SELECT GRANULAR BACKFILL
PAVED AREAS-PADOT 2A MODIFIED AGGREGATE
8" (TYP.)
12"
℄
BELL O.D.
PIPE
MIN. 6" BEDDING
BACKFILL TRENCH WITH 2A MODIFIED STONE

## RCP STORM PIPE TRENCH DETAIL

NOT TO SCALE

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES
CORPORATE HEADQUARTERS
65 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901 • (215) 345-4330 • www.gilmore-assoc.com

ONLY THOSE PLANS INCORPORATING THE PROFESSIONAL SEAL SHOULD BE CONSIDERED OFFICIAL AND RELIED UPON BY USER. THIS PLAN IS PREPARED SPECIFICALLY FOR THE CLIENT AND PROJECT DESIGNATED HEREON. MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT THE CONSENT OF GILMORE & ASSOCIATES, INC. IS PROHIBITED.

**NOT APPROVED FOR CONSTRUCTION**

RONALD G. MONKRES II
ENGINEER 603164-E

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

***661 PENN STREET REDEVELOPMENT***

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

PCSM DETAILS 1

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.: 2500866

APPLICANTS INFO:
661 PENN STREET, LLC
209 PENN'S TRAIL
NEWTOWN, PA 18940
215-968-0600

MUNICIPAL FILE No.:

TAX MAP PARCEL No.: 29-010-119-001 & 29-010-037

| | |
|---|---|
| TOTAL AREA: 15.75 AC. | TOTAL LOTS: 2 |
| DATE: 01/21/26 | SCALE: N.T.S. |
| DRAWN BY: GY/BH | CHECKED BY: RGM |

SHEET NO.: 24 OF 33

## EXISTING/PROPOSED RIPARIAN FOREST BUFFERS

§102.4(B)(5)(XV)

REGARDING EXISTING OR PROPOSED RIPARIAN BUFFERS, NOTE THE FOLLOWING:

- THE SUBJECT SITE IS >5,200' FROM THE EDGE OF THE CORE CREEK AND INVOLVES A REDEVELOPMENT PROJECT. RIPARIAN BUFFER REQUIREMENTS AS SET FORTH BY THE PA DEP ARE NOT APPLICABLE TO THIS PROJECT.

## EROSION & SEDIMENT CONTROL NOTES

1. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED, STABILIZED AND FUNCTIONAL PRIOR TO EARTH DISTURBANCE WITHIN THE TRIBUTARY AREA TO SAID E&S MEASURE.
2. GENERAL SITE CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S MEASURES SPECIFIED IN THE SEQUENCE FOR THAT STAGE/PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS INTENDED.
3. LOCAL ROADS ARE TO REMAIN FREE OF SEDIMENT AND CONSTRUCTION VEHICLES AND EQUIPMENT.
4. UPON COMPLETION OF AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY, THE SITE SHALL BE IMMEDIATELY SEEDED, MULCHED OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION AS PER SEEDING AND MULCHING SCHEDULE.
5. SILT FENCING MAY BE REMOVED WHEN THE SITE IS PERMANENTLY STABILIZED. ACCUMULATED SEDIMENT MAY BE SPREAD AT THE SITE IN AREAS NOT SUBJECT TO EROSION.
6. THE TREE PROTECTION FENCING SHALL NOT BE REMOVED UNTIL ALL DEVELOPMENT AREAS ARE STABILIZED AND WRITTEN CONFIRMATION IS RECEIVED FROM THE BUCKS COUNTY CONSERVATION DISTRICT.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
8. BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN, OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE CONTRACTOR SHALL RECEIVE APPROVAL OF THE REVISIONS FROM THE BUCKS COUNTY CONSERVATION DISTRICT.
9. THE CONTRACTOR IS ADVISED TO BECOME FAMILIAR WITH THE PROVISIONS OF APPENDIX 64, 'EROSION CONTROL RULES AND REGULATIONS,' TITLE 25, PART 1, DEPT. OF ENVIRONMENTAL PROTECTION, SUBPART C–PROTECTION OF NATURAL RESOURCES, ARTICLE III–WATER RESOURCES, CHAPTER 102–EROSION CONTROL AND WITH THE "EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL" BY THE COMMONWEALTH OF PA., DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 2012 OR LATEST EDITION.
10. TECHNICAL ADVICE FOR THE IMPLEMENTATION OF THIS PROGRAM MAY BE OBTAINED BY CONTACTING THE BUCKS COUNTY CONSERVATION DISTRICT AT (215)345–7577.
11. COPIES OF THESE PLANS MUST BE AVAILABLE ON SITE THROUGHOUT CONSTRUCTION.
12. THE CONTRACTOR SHALL ASSURE THAT AN APPROVED EROSION & SEDIMENT CONTROL PLAN IS BEING IMPLEMENTED AND MAINTAINED FOR ALL OFFSITE BORROW OR SPOIL SITES.
    A. ALL FILL MATERIALS TO BE USED ON THIS SITE SHALL BE CLEAN FILL UNLESS OTHERWISE APPROVED BY THE MUNICIPALITY AND THE CONSERVATION DISTRICT. THE CONTRACTOR SHALL BE RESPONSIBLE TO PERFORM DUE DILIGENCE FOR ALL IMPORTED MATERIAL IN DETERMINING THAT FILL IS CLEAN.
    B. INVESTIGATIVE TECHNIQUES SHALL INCLUDE, BUT ARE NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS.
13. **CONTRACTOR SHALL FOLLOW THE PROCEDURES OUTLINED BY THE APPROVED EROSION & SEDIMENT CONTROL PLAN AND THE SEQUENCE OF CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE TOWNSHIP ENGINEER AND THE BUCKS COUNTY CONSERVATION DISTRICT.**
14. **NOTES ON TEMPORARY CONTROL MEASURES:**
    A. EXISTING TREES AND OTHER EXISTING VEGETATION WILL BE DISRUPTED AS LITTLE AS POSSIBLE.
    B. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITY HAS CEASED, ALL AREAS SHALL BE STABILIZED. DURING NON–GERMINATING PERIODS, MULCH SHALL BE APPLIED AT SPECIFIED RATES. DISTURBED AREAS THAT ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE YEAR SHALL BE STABILIZED WITH TEMPORARY VEGETATION. AREAS WHICH ARE AT FINISHED GRADE OR WHICH WILL NOT BE REDISTURBED WITHIN ONE YEAR SHALL RECEIVE PERMANENT STABILIZATION. (SEE SEEDING AND MULCHING TABLE FOR DETAILS)
    C. ALL TOPSOIL FROM THE OVERALL SITE PREPARATIONS WILL BE STOCKPILED AND REDISTRIBUTED UNIFORMLY AT THE TIME OF FINAL GRADING. ALL STOCKPILES SHALL HAVE PERIMETER SILT FENCE INSTALLED AND BE SEEDED AND MULCHED IMMEDIATELY. STOCKPILE(S) SHALL HAVE A SIDE SLOPE OF 2:1 OR FLATTER AND SHALL HAVE A HEIGHT NOT GREATER THAN 35 FEET. SEE PLAN FOR LOCATION OF TOPSOIL STOCKPILES.
    D. GRADE ALL CUT AND FILL SLOPES TO 3 FOOT HORIZONTAL FOR EVERY 1 FOOT VERTICAL OR FLATTER, AND APPLY SEEDING AND MULCH. AREAS WITH GRADES GREATER THAN 3:1 SHALL RECEIVE STEEP SLOPE SEED MIX AND PERMANENT TURF REINFORCEMENT MAT: NORTH AMERICAN GREEN #C350 OR EQUAL
    E. RIP–RAP WILL BE APPLIED TO ALL AREAS WHERE HEAVY CONCENTRATIONS OF DRAINAGE ARE PREVALENT (GREATER THAN 3.5 CFS). THIS WOULD BE AT CULVERT OUTLETS, WHERE WATER IS IN TRANSITION FROM AN OPEN CHANNEL INTO A CULVERT, OR AS SPECIFIED.
    F. SIGNIFICANT STANDS OF TREES, DESIGNATED TO REMAIN, WILL BE PROTECTED WITH FENCING, SEE DETAIL. INSTALL ALONG THE DRIP LINE OF THE TREE BRANCHES.
    G. EROSION CONTROL FACILITIES MUST DISCHARGE INTO ADEQUATE STORM SEWERS, NATURAL WATERWAYS, OR STABLE EROSION RESISTANT AREAS.
    H. CONCRETE WASHOUT AREA SHALL BE PROVIDED FOR CLEANING OF CHUTES, MIXERS, AND HOPPERS OF DELIVERY VEHICLES. NO WASH WATER FROM THESE VEHICLES SHALL BE ALLOWED TO ENTER ANY SURFACE WATERS. WASHOUT FACILITIES SHALL NOT BE LOCATED WITHIN 50 FEET OF STORM DRAINS, OPEN DITCHES, INFILTRATION FACILITIES OR SURFACE WATERS.
    I. ANY SEDIMENT OR MUD THAT IS TRACKED ONTO THE PUBLIC ROADWAY MUST BE CLEANED OFF IMMEDIATELY BY BROOMING AND/OR SHOVELING TO THE SATISFACTION OF THE TOWNSHIP AT THE EXPENSE OF THE DEVELOPER AND/OR RESPONSIBLE CONTRACTOR. USE OF A BACKHOE BUCKET TO SCRAPE ROADWAY SURFACE IS PROHIBITED. WHERE SAND AND/OR SEDIMENT IS CAUSING SLICK OR HAZARDOUS CONDITIONS, ROADWAY SURFACE SHALL BE PRESSURE WASHED TO REMOVE THE CONDITION. ALL SEDIMENT LADEN WATER MUST BE FILTERED IN A MANNER SATISFACTORY TO THE BUCKS COUNTY CONSERVATION DISTRICT BEFORE ENTERING STORM SEWERS AND/OR DRAINAGE CHANNELS.
    J. NO SEDIMENT OR SEDIMENT LADEN WATER MUST BE ALLOWED TO LEAVE THE SITE/PROPERTY WITHOUT FIRST BEING FILTERED TO THE SATISFACTION OF BUCKS COUNTY CONSERVATION DISTRICT. ANY INLETS WHICH DO NOT DIRECT FLOW TO A SEDIMENT BASIN MUST BE PROTECTED WITH STONE FILTER INLET PROTECTION.
    K. ALL PUMPING OF SEDIMENT–LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A FILTER BAG, DISCHARGING OVER UNDISTURBED AREAS.
    L. ABSOLUTELY NO EARTHMOVING, PLACEMENT OF FILL MATERIAL OR THE ENTRY OF SEDIMENT LADEN WATER MUST TAKE PLACE IN WETLANDS. ALL WETLANDS SHALL BE PROTECTED FROM ENCROACHMENT WITH FENCING.
    M. ROCK FILTER OUTLETS MUST BE PROVIDED IMMEDIATELY WHERE SILT FENCING HAS BEEN UNDERMINED OR OVERTOPPED.
    N. THE SEDIMENT AND EROSION CONTROL MEASURES SHOWN ON THIS PLAN HAVE BEEN PREPARED IN ACCORDANCE WITH REQUIREMENTS OF THE BUCKS COUNTY CONSERVATION DISTRICT. GILMORE AND ASSOCIATES DOES NOT TAKE ANY RESPONSIBILITY IN OBSERVING AND CERTIFYING THE CONSTRUCTION OF THESE FACILITIES UNLESS REQUESTED SPECIFICALLY BY THE OWNER AND/OR CONTRACTOR. THEREFORE, GILMORE AND ASSOCIATES DOES NOT ACCEPT ANY RESPONSIBILITY FOR DAMAGES AS A RESULT OF IMPROPER CONSTRUCTION AND/OR MAINTENANCE OF FACILITIES DURING CONSTRUCTION.
    O. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE CONTRACTOR SHALL IMPLEMENT APPROPRIATE MEASURES TO ADDRESS SAID CIRCUMSTANCES.
    P. ACCUMULATED SEDIMENTS REMOVED FROM ANY AND ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES. IMMEDIATELY STABILIZE REPLACED SOILS WITH SEED & MULCH OR DEPOSIT IN SOIL STOCKPILES AND STABILIZE.
    Q. THE CONTRACTOR SHALL REMOVE FROM THE SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIAL AND WASTES IN ACCORDANCE WITH DEP'S SOLID WASTE MANAGEMENT REGULATIONS, AND/OR ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS. NO BUILDING MATERIALS (USED OR UNUSED) OR WASTE MATERIALS SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED AT THE SITE.

## MAINTENANCE PROGRAM

§102.4(B)(5)(X)

- MAINTENANCE OF TEMPORARY FACILITIES: UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROPERLY MAINTAINED. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL CONTROL MEASURES AFTER EACH STORM EVENT AND AT LEAST ONCE PER WEEK. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND REFENCING SHALL BE PERFORMED IMMEDIATELY. CONSTRUCTION ENTRANCES SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK WHERE NECESSARY. SEE THE DETAIL SHEET(S) FOR SPECIFIC MAINTENANCE PROCEDURES.

LONG–TERM POLLUTANT CONTROLS – STORM WATER POLLUTANT CONTROL MEASURES INSTALLED DURING CONSTRUCTION THAT WILL ALSO PROVIDE BENEFITS AFTER CONSTRUCTION, INCLUDE MAINTAINING THE DIRECT RUNOFF TO THE PROPOSED INFILTRATION BASINS (BMP 1), THE PROPOSED SUBSURFACE BASINS W/ SLOW RELEASE (BMP 3 & BMP 4), AND THE EXISTING WET POND (BMP 2), LANDSCAPING, INLET WATER QUALITY FILTERS, AND PERMANENT GRASS/PAVEMENT COVER.

## TOPSOIL APPLICATION

1. BEFORE SEEDING BEGINS, TOPSOIL SHOULD BE APPLIED AND ANY REQUIRED SOIL AMENDMENTS WORKED INTO THE SOIL TO A DEPTH OF 4 TO 6 INCHES. IF COMPOST IS TO BE ADDED TO THE TOPSOIL, IS SHOULD BE WORKED INTO THE SOIL WITH THE OTHER SOIL AMENDMENTS UNLESS IT IS BEING APPLIED AS AN EROSION CONTROL BMP.
2. GRADED AREAS SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES TO PERMIT BONDING OF THE TOPSOIL TO THE SURFACE AREAS AND TO PROVIDE A ROUGHENED SURFACE TO PREVENT TOPSOIL FROM SLIDING DOWN SLOPE.
3. TOPSOIL SHOULD BE UNIFORMLY DISTRIBUTED ACROSS THE DISTURBED AREA TO A DEPTH OF 4 TO 8 INCHES MINIMUM – 2 INCHES ON FILL OUTSLOPES. SPREADING SHOULD BE DONE IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL TILLAGE. IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOIL PLACEMENT SHOULD BE CORRECTED IN ORDER TO PREVENT FORMATION OF DEPRESSIONS UNLESS SUCH DEPRESSIONS ARE PART OF THE PCSM PLAN.
4. TOPSOIL SHOULD NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITIONS, WHEN THE SUBSOIL IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION. COMPACTED SOILS SHOULD BE SCARIFIED 6 TO 12 INCHES ALONG CONTOUR WHEREVER POSSIBLE PRIOR TO SEEDING.

## MAINTENANCE OF FACILITIES

1. COMPOST FILTER SOCK SHOULD BE INSPECTED AND MAINTAINED ON A DAILY BASIS. IN THE EVENT COMPOST FILTER SOCK SHOULD NEED TO BE REPLACED, THE CONTRACTOR SHALL REPLACE THE COMPOST FILTER SOCK WITHIN 24 HOURS
2. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT CONTROL DEVICES MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROLS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF E&S CONTROL BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS OR MODIFICATIONS OF INSTALLED MEASURES WILL BE REQUIRED.
3. CONTRACTOR SHALL MAINTAIN AND MAKE AVAILABLE TO THE BUCKS COUNTY CONSERVATION DISTRICT COMPLETE, WRITTEN INSPECTION LOGS OF THE ABOVE NOTED INSPECTION AND MAINTENANCE.
4. SEEDING, MULCHING AND FERTILIZING SHALL BE IN ACCORDANCE WITH THE SEEDING AND MULCHING SCHEDULE.
5. SHOULD THE TREE PROTECTION FENCING BE DISTURBED AT ANY POINT, IT SHALL BE REPLACED IMMEDIATELY.
6. THE CONTRACTOR SHALL HAVE AVAILABLE WATER TRUCKS OR OTHER MEANS OF CONTROLLING EXCESSIVE DUST AND AIRBORNE DEBRIS.
7. ALL DRAINAGE SWALES SHALL BE SEEDED AND MULCHED, AND PROTECTED WITH TURF REINFORCEMENT MAT: NORTH AMERICAN GREEN #SC150 (OR EQUAL). IF SWALES ARE TO BE SODDED, TURF REINFORCEMENT IS NOT REQUIRED.
8. ALL AREAS OF CONCENTRATED SURFACE DRAINAGE SHALL BE SEEDED AND MULCHED, AND PROTECTED WITH TEMPORARY TURF REINFORCEMENT MAT: NORTH AMERICAN GREEN #SC150 (OR EQUAL). IF AREAS ARE TO BE SODDED, TURF REINFORCEMENT IS NOT REQUIRED.
9. AFTER THE STORM CONVEYANCE SYSTEM IS CONSTRUCTED, MONTHLY INSPECTIONS FOR EACH DEVICE WILL BE MADE. AN INSPECTION OF ALL FACILITIES WILL BE MADE AFTER EVERY STORM TO DETERMINE THEIR RESISTANCE TO DRIVING RAINS AND ACCUMULATED RUNOFF.
10. SEEDED AREAS THAT HAVE WASHED AWAY SHALL BE FILLED AND GRADED AS NECESSARY AND THEN RESEEDED. A BURLAP OR STRAW COVER WILL BE APPLIED TO RETAIN THE SEED UNTIL IT HAS A CHANCE TO ROOT PROPERLY.
11. THE ABOVE PROCEDURE SHALL BE REPEATED AFTER EACH SIZABLE STORM UNTIL NO MORE SIGNS OF EROSION ARE EVIDENT. AT MONTHLY INTERVALS THEREAFTER, INSPECTIONS AND NECESSARY CLEANING WILL BE DONE. TRASH THAT IS REMOVED FROM ANY OF THE CONTROL DEVICES SHALL BE DISPOSED OF AT AN APPROVED DISPOSAL AREA. SILT THAT HAS ACCUMULATED SHALL BE REMOVED AND ALLOWED TO DRY AND USED AS FILL WHEREVER REQUIRED ON THE SITE.

## PLANNING & DESIGN

§102.4(B)(4)

THE FOLLOWING MEASURES ARE TAKEN TO MINIMIZE THE EXTENT AND DURATION OF EARTH DISTURBANCE:

- ACCESS THE SITE THRU DESIGNATED CONSTRUCTION ENTRANCES.
- PROTECT EXISTING VEGETATION TO REMAIN WITH TREE PROTECTION FENCING.
- SEQUENCE CONSTRUCTION ACTIVITIES BY LIMITING DISTURBANCES TO A SPECIFIC TASK SUCH THAT EACH TASK IS COMPLETED BEFORE THE NEXT TASK IS INITIATED.
- AREAS NOT TO BE DISTURBED SHALL NOT BE SUBJECT TO GRADING OR MOVEMENT OF EXISTING SOIL.
- AREAS NOT TO BE DISTURBED SHALL BE PROTECTED AND DELINEATED IN THE FIELD.

THE FOLLOWING MEASURES ARE TAKEN TO MAXIMIZE PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION:

- ACCESS THE SITE THRU DESIGNATED CONSTRUCTION ENTRANCES.
- PROTECT EXISTING VEGETATION TO REMAIN WITH TREE PROTECTION FENCING.
- AREAS NOT TO BE DISTURBED SHALL NOT BE SUBJECT TO GRADING OR MOVEMENT OF EXISTING SOIL.
- AREAS NOT TO BE DISTURBED SHALL BE PROTECTED AND DELINEATED IN THE FIELD.

THE FOLLOWING MEASURES ARE TAKEN TO MINIMIZE SOIL COMPACTION:

- ACCESS THE SITE THRU DESIGNATED CONSTRUCTION ENTRANCES.
- USE OF TREADED MACHINERY WHERE PRACTICAL DURING EARTHMOVING OPERATIONS.
- GRADE SITE TO MINIMIZE EXTENT OF CUTS/FILLS.

THE FOLLOWING MEASURES ARE TAKEN TO PREVENT OR MINIMIZE GENERATION OF INCREASED STORM WATER RUNOFF:

- DIRECT RUNOFF TO THE PROPOSED INFILTRATION BASINS (BMP 1), THE PROPOSED SUBSURFACE BASINS W/ SLOW RELEASE (BMP 3 & BMP 4), AND THE EXISTING WET POND (BMP 2).
- PROVIDE INLET WATER QUALITY FILTERS AND REVEGETATE DISTURBED AREAS TO IMPROVE STORMWATER QUALITY AND REDUCE THE ACCUMULATION OF SEDIMENT GETTING TO DOWNSTREAM STORMWATER FACILITIES.

## E&S PLAN DESIGNED AND IMPLEMENTED TO BE CONSISTENT WITH PCSM PLAN

§102.4(B)(5)(XIV)

THE EROSION & SEDIMENT CONTROL PLAN AND THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN HAVE BEEN PROVIDED SEPARATELY; HOWEVER, THEY HAVE BEEN PLANNED, DESIGNED AND IMPLEMENTED TO BE CONSISTENT WITH ONE ANOTHER. THE EROSION & SEDIMENT CONTROL PLAN IS PROVIDED AS PART OF THIS REPORT, AND THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN HAS BEEN PROVIDED AS PART OF A SEPARATE REPORT.

## CLEAN FILL REQUIREMENTS

IF THE SITE WILL NEED TO IMPORT OR EXPORT MATERIAL FROM THE SITE, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND DETERMINATION OF CLEAN FILL WILL REST WITH THE CONTRACTOR.

CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON–WATER SOLUBLE, NON–DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE–USE).

CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS AS NOTED IN TABLES FP–1A AND FP–1B FOUND IN THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S POLICY "MANAGEMENT OF FILL."

ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP–001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP–001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL.

ENVIRONMENTAL DUE DILIGENCE: THE LANDOWNER/APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S POLICY "MANAGEMENT OF FILL."

FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA CODE CHAPTER 287 RESIDUAL WASTE MANAGEMENT OR CHAPTER 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE. THESE REGULATIONS ARE AVAILABLE ON–LINE AT WWW.PACODE.COM .

## CHAPTER 93 SURFACE WATER CLASSIFICATION

§102.4(B)(5)(V)

THE SITE RUNOFF DRAINS TO core CREEK, WHICH ULTIMATELY DRAIN INTO THE NESHAMINY CREEK STORMWATER WATERSHED. NEWTOWN CREEK HAVE A CHAPTER 93 CLASSIFICATION OF WARM WATER–MIGRATORY FISHERY (WW–MF).

## SEEDING AND MULCHING SCHEDULE

1. SITE PREPARATION, STABILIZATION AND MAINTENANCE SHALL BE PERFORMED IN ACCORDANCE WITH PENN STATE UNIVERSITY'S "THE AGRONOMY GUIDE" AND PENNDOT FORM 408 SPECIFICATIONS' MOST RECENT ADDITION.

   TEMPORARY SEEDING SPECIFICATION FORMULA E – ANNUAL RYE GRASS

   PERMANENT SEEDING SPECIFICATION FORMULA B –
   50% KENTUCKY BLUEGRASS MIXTURE
   30% PENNLAWN RED FESCUE
   20% PERENNIAL RYEGRASS MIXTURE

   STEEP SLOPE SEEDING SPECIFICATION FORMULA W –
   70% TALL FESCUE
   20% BIRDSFOOT TREFOIL MIXTURE
   10% REDTOP

   SEEDING RATE FOR THE ABOVE MIXTURES:
   10 LBS/1,000 SY FOR TEMPORARY SEEDING
   21 LBS/1,000 SY FOR PERMANENT SEEDING
   11 LBS/1,000 SY FOR STEEP SLOPE SEEDING (SEE NOTE 5)
2. HAY OR STRAW MULCH SHALL BE APPLIED AT THE RATES OF AT LEAST 3.0 TONS PER ACRE. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN. SLOPES OF 3:1 SHALL BE ANCHORED WITH MULCH CONTROL NETTING.
3. PULVERIZED AGRICULTURAL LIMESTONE AND COMMERCIAL FERTILIZER SHALL BE APPLIED TO ALL DISTURBED AREAS WHICH ARE TO BE SEEDED EXCEPT FOR TEMPORARY SEED AREAS ARE THE FOLLOWING RATES:

   PULVERIZED AGRICULTURAL LIMESTONE – 90 LBS/1,000 SF
   10–20–20 ANALYSIS COMMERCIAL FERTILIZER – 20 LBS/1,000 SF

   **NOTE:** APPLICATION OF LIME AND FERTILIZER FOR TEMPORARY SEEDING IS UNNECESSARY AND ONLY SERVES TO CONTRIBUTE TO AN OVERABUNDANCE OF NUTRIENT POLLUTION IN THE WATERSHED.
4. PERMANENT SEEDING SHALL TAKE PLACE FROM MARCH 15 TO JUNE 1 OR FROM AUGUST 1 TO OCTOBER 15. IF COMPLETED AT IN OTHER SEASONS, AREAS SHALL RECEIVE TEMPORARY SEEDING AND 3.0 TONS PER ACRE MULCH.
5. STEEP SLOPE AREAS, CONSIDERED SLOPES GREATER THAN 3:1, SHALL BE PROTECTED FROM EROSION BY ONE OF THE FOLLOWING METHODS. MANUFACTURER'S RECOMMENDATIONS SHALL BE FOLLOWED FOR PARTICULAR METHOD AND SPECIFIC SITE CONDITIONS.

   FLEXIBLE GROWTH MEDIUM: SHALL BE HYDRAULICALLY APPLIED COMBINATION OF SEED, MULCH, AND EROSION PROTECTION MATERIAL SIMILAR TO "FLEXTERRA" BY ACF OR EQUAL BY OTHER MANUFACTURER.

   EROSION CONTROL MATTING: SHALL BE TEMPORARY MATTING SIMILAR TO SC350 BY NORTH AMERICAN GREEN OR EQUAL BY OTHER MANUFACTURER.

## STANDARD EROSION & SEDIMENT CONTROL NOTES– BUCKS COUNTY CONSERVATION DISTRICT

1. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
2. THE OPERATOR/RESPONSIBLE PERSON ON SITE SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.
3. IMMEDIATELY UPON DISCOVERING UNFORUNTIL THE SITE ACHIEVES FINAL STABILIZATION, THE OPERATOR SHALL ASSURE THAT THE BEST MANAGEMENT PRACTICES ARE IMPLEMENTED, OPERATED, AND MAINTAINED PROPERLY AND COMPLETELY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL BEST MANAGEMENT PRACTICE FACILITIES. THE OPERATOR SHALL MAINTAIN AND MAKE AVAILABLE TO LOCAL CONSERVATION DISTRICT COMPLETE, WRITTEN INSPECTION LOGS OF ALL THOSE INSPECTIONS. ALL MAINTENANCE WORK, INCLUDING CLEANING, REPAIR, REPLACEMENT, REGRADING, AND RESTABILIZATION SHALL BE PERFORMED IMMEDIATELY.
4. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
5. BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE LOCAL CONSERVATION DISTRICT.
6. THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE LOCAL CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.
7. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON–DISTURBED AREAS.
8. THE OPERATOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL.
9. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
10. THE E&S CONTROL PLAN MAPPING MUST DISPLAY A PA ONE CALL SYSTEM INCORPORATED SYMBOL INCLUDING THE SITE IDENTIFICATION NUMBER. (THIS IS A NUMBERED SYMBOL NOT A NOTE.)
11. ONLY LIMITED DISTURBANCE WILL BE PERMITTED TO PROVIDE ACCESS TO EXISTING PARKING LOTS FOR GRADING.
12. EROSION AND SEDIMENT BMP'S MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMP'S.
13. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMP'S MUST BE STABILIZED IMMEDIATELY.
14. AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENT CONTROL PLAN PREPARER, AND THE LOCAL CONSERVATION DISTRICT TO AN ON–SITE MEETING. ALSO, AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1–800–242–1776 FOR BURIED UTILITIES LOCATIONS.
15. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE OF CONSTRUCTION. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.
16. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON–GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
17. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% 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.
18. SEDIMENT MUST BE REMOVED FROM STORM WATER INLET PROTECTION AFTER EACH RUNOFF EVENT.
19. HAY OR STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.
20. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES 3:1 AND STEEPER.
21. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
22. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGARDING, RESEEDING, REMULCHING, AND RENETTING, MUST BE PERFORMED IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
23. SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.
24. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTE IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.11 ET DEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE.

## POTENTIAL THERMAL IMPACTS TO SURFACE WATERS

§102.4(B)(5)(XIII)

DURING CONSTRUCTION, THERMAL IMPACTS WILL BE MITIGATED SEVERAL WAYS. RUNOFF WILL BE FILTERED THROUGH SEDIMENT TRAPS, COMPOST SOCKS AND/OR INLET PROTECTION. AFTER CONSTRUCTION HAS BEEN COMPLETED, THE PROPOSED BMPs ARE DESIGNED TO MITIGATE THERMAL IMPACTS. THE SUBSURFACE BMPs, COUPLED WITH INCREASED RESIDENCE TIME, SHOULD HELP RESTORE AMBIENT TEMPERATURE OF STORMWATER RUNOFF. THE USE OF MULTIPLE "POCKET" BMPs SERVE TO EXTEND TIME OF CONCENTRATION, REDUCE OVERLAND FLOWS TO THE EXISTING BASIN AND OFF–SITE, PROVIDE INFILTRATION WHERE POSSIBLE AND PROMOTE GROUNDWATER RECHARGE. LASTLY, LANDSCAPING WILL BE PROVIDED THROUGHOUT THE SITE ALLOWING FOR RUNOFF TO BE FILTERED THROUGH SHADED VEGETATION REDUCING THERMAL IMPACTS.

## MONITORING, INSPECTION, AND REPORTING REQUIREMENTS

VISUAL INSPECTIONS

THE PERMITEE / CO–PERMITTEE(S) MUST ENSURE THAT VISUAL SITE INSPECTIONS ARE CONDUCTED WEEKLY, AND WITHIN 24 HOURS AFTER EACH MEASURABLE RUNOFF EVENT THROUGHOUT THE DURATION OF CONSTRUCTION AND UNTIL THE RECEIPT AND ACKNOWLEDGEMENT OF THE NOTICE OF TERMINATION BY THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT. THE VISUAL SITE INSPECTIONS AND REPORTS SHALL BE COMPLETED IN A FORMAT PROVIDED BY THE DEPARTMENT, AND CONDUCTED BY QUALIFIED PERSONNEL TRAINED AND EXPERIENCED IN EROSION AND SEDIMENT CONTROL TO ASCERTAIN THAT E&S BMPS AND PCSM BMPS ARE PROPERLY CONSTRUCTED AND MAINTAINED TO EFFECTIVELY MINIMIZE POLLUTION TO THE WATERS OF THE COMMONWEALTH. A WRITTEN REPORT OF EACH INSPECTION SHALL BE KEPT AND INCLUDE AT A MINIMUM:

1. A SUMMARY OF SITE CONDITIONS, E&S BMP AND PCSM BMP IMPLEMENTATION AND MAINTENANCE, AND COMPLIANCE ACTIONS; AND
2. THE DATE, TIME, NAME, AND SIGNATURE OF THE PERSON CONDUCTING THE INSPECTION.

NONCOMPLIANCE REPORTING

WHERE E&S, PCSM OR PPC BMPS AREA FOUND TO BE INOPERATIVE OR INEFFECTIVE DURING AND INSPECTION, OR ANY OTHER TIME, THE PERMITTEE / CO–PERMITTEE(S) SHALL, WITHIN 24 HOURS, CONTACT THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT, BY PHONE OR PERSONAL CONTACT, FOLLOWED BY THE SUBMISSION OF A WRITTEN REPORT WITHIN 5 DAYS OF THE INITIAL CONTACT. NONCOMPLIANCE REPORTS SHALL INCLUDE THE FOLLOWING INFORMATION:

1. ANY CONDITION ON THE PROJECT SITE WHICH MAY ENDANGER PUBLIC HEALTH, SAFETY, OR THE ENVIRONMENT, OR INVOLVE INCIDENTS WHICH CAUSE OR THREATEN POLLUTION;
2. THE PERIOD OF NONCOMPLIANCE, INCLUDING EXACT DATES AND TIMES AND/OR ANTICIPATED TIME WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE;
3. STEPS BEING TAKEN TO REDUCE, ELIMINATE, AND PREVENT RECURRENCE OF THE NONCOMPLIANCE; AND
4. THE DATE OR SCHEDULE OF DATES, AND IDENTIFYING REMEDIES FOR CORRECTING NONCOMPLIANCE CONDITIONS.

REDUCTION, LOSS, OR FAILURE OF THE BMPS

UPON REDUCTION, LOSS, OR FAILURE OF THE BMPS, THE PERMITTEE / CO–PERMITTEE SHALL TAKE IMMEDIATE ACTION TO RESTORE THE BMPS OR PROVIDE AN ALTERNATIVE METHOD OF TREATMENT. SUCH RESTORED BMPS OR ALTERNATIVE TREATMENT SHALL BE AT LEAST AS EFFECTIVE AS THE ORIGINAL BMPS.

TERMINATION OF COVERAGE

NOTE: UPON PERMANENT STABILIZATION OF EARTH DISTURBANCE ACTIVITIES ASSOCIATED WITH CONSTRUCTION ACTIVITIES THAT ARE AUTHORIZED BY THIS PERMIT AND WHEN BMPS IDENTIFIED IN THE PCSM PLAN HAVE BEEN PROPERLY INSTALLED, THE PERMIT AND/OR CO–PERMITTEE OF THE FACILITY MUST SUBMIT A NOTICE OR TERMINATION (N.O.T.) FORM THAT IS SIGNED IN ACCORDANCE WITH PART B, SECTION 1.C, SIGNATORY REQUIREMENTS, OF THIS PERMIT. ALL LETTERS CERTIFYING DISCHARGE TERMINATION ARE TO BE SENT TO THE DEPARTMENT R AUTHORIZED CONSERVATION DISTRICT. THE N.O.T. MUST CONTAIN THE FOLLOWING INFORMATION: FACILITY NAME, ADDRESS, AND LOCATION, OPERATOR NAME AND ADDRESS, PERMIT NUMBER, IDENTIFICATION AND PROOF OF ACKNOWLEDGEMENT FROM THE PERSON(S)WHO WILL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE PCSM BMPS IN ACCORDANCE WITH THE APPROVED PCSM PLAN, AND THE REASON FOR PERMIT TERMINATION. UNTIL THE RESPONSIBLE FOR OPERATING AND MAINTAINING ALL E&S BMPS AND PCSM BMPS ON THE PROJECT SITE AND WILL BE RESPONSIBLE FOR VIOLATIONS OCCURRING ON THE PROJECT SITE.

COMPLETION CERTIFICATE AND FINAL PLANS

WITHIN 30 DAYS AFTER THE COMPLETION OF EARTH DISTURBANCE ACTIVITIES AUTHORIZED BY THIS PERMIT, INCLUDING THE PERMANENT STABILIZATION OF THE SITE AND PROPER INSTALLATION OF PCSM BMPS IN ACCORDANCE WITH THE APPROVED PCSM PLAN, OR UPON SUBMISSION OF THE N.O.T. IF SOONER, THE PERMITTEE SHALL FILE WITH THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT A STATEMENT SIGNED BY A LICENSED PROFESSIONAL AND BY THE PERMITTEE CERTIFYING THAT WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THIS PERMIT AND THE APPROVED E&S AND PCSM PLANS.

## GEOLOGICAL FORMATIONS/SOIL CONDITIONS THAT MAY HAVE THE POTENTIAL TO CAUSE POLLUTION

§102.4(B)(5)(XII)

THERE ARE NO KNOWN GEOLOGICAL FORMATIONS OR SOIL CONDITIONS THAT HAVE POTENTIAL TO CAUSE POLLUTION DURING EARTH DISTURBANCE ACTIVITIES. IF ANY SUCH MATERIAL IS ENCOUNTERED DURING CONSTRUCTION, PROPER HANDLING AND/OR DISPOSAL OF ALL SUCH MATERIALS SHALL BE EMPLOYED BY CONTRACTOR PER METHODS OUTLINED ON THESE PLANS.

## RECYCLING OR DISPOSAL OF MATERIALS

§102.4(B)(5)(XI)

THE FOLLOWING IS A LIST THAT INCLUDES, BUT THAT IS NOT LIMITED TO, THE POTENTIAL CONSTRUCTION WASTES THAT MAY EXIST ON–SITE:

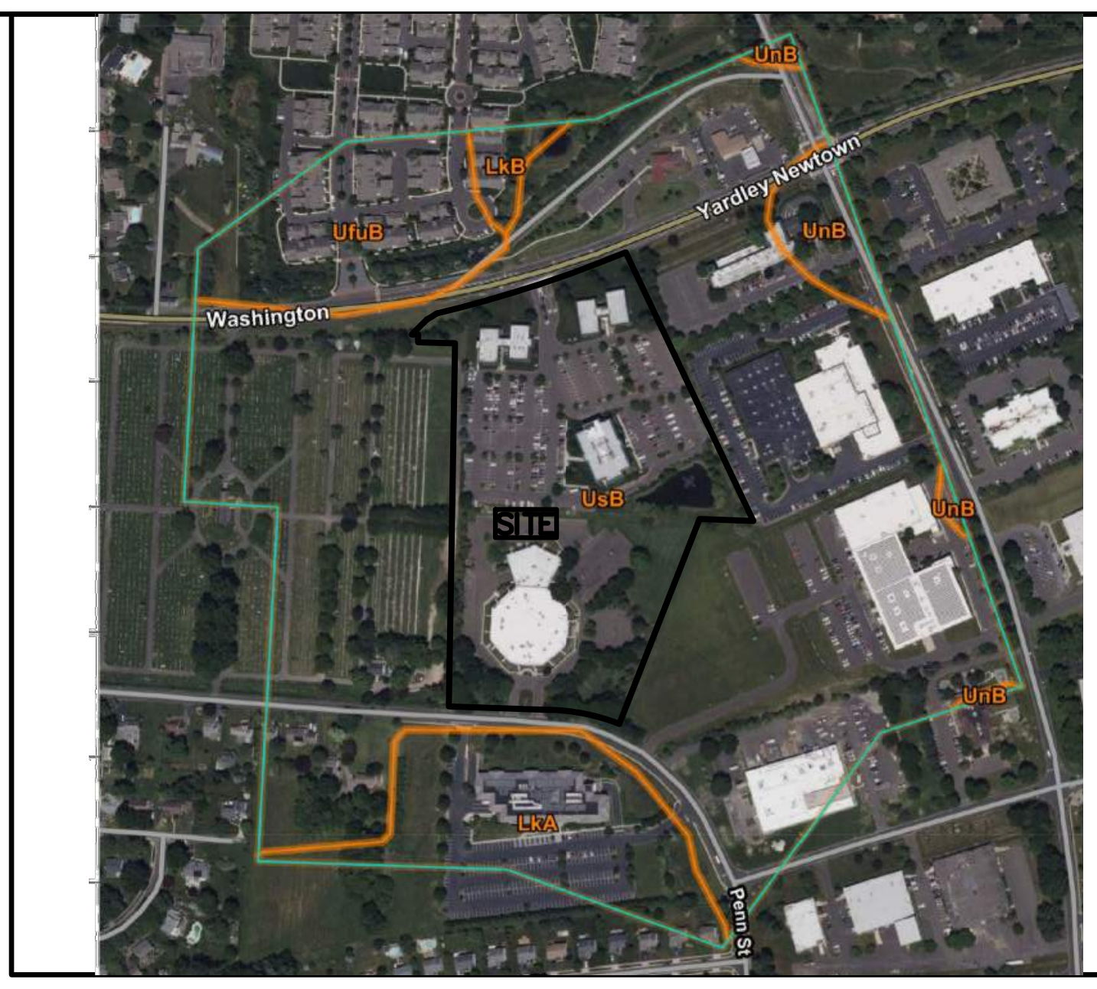
– EXISTING CONCRETE, CURB, SIDEWALK AND BUILDINGS
– EXISTING ASPHALT
– E&S BMP– STABILIZED ROCK CONSTRUCTION ENTRANCE
– E&S BMP– COMPOST FILTER SOCK
– E&S BMP– INLET PROTECTION
– E&S BMP– CONCRETE WASHOUT
– E&S BMP– PUMPED WATER FILTER BAG
– E&S BMP– REGULATED FILL MATERIALS
– E&S BMP– ROCK FILTER

ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

1. DUST CONTROL – CONSTRUCTION TRAFFIC MUST ENTER AND EXIT THE SITE AT THE STABILIZED CONSTRUCTION ENTRANCE. THE PURPOSE IS TO TRAP DUST AND MUD THAT WOULD OTHERWISE BE CARRIED OFF–SITE BY CONSTRUCTION TRAFFIC. WATER TRUCKS, VEGETATIVE COVER, STONE, AND/OR MULCH WILL BE USED AS NEEDED DURING CONSTRUCTION TO REDUCE DUST GENERATED ON THE SITE. DUST CONTROL MUST BE PROVIDED BY THE CONTRACTOR TO A DEGREE THAT IS ACCEPTABLE TO THE LOCAL CONSERVATION DISTRICT. AFTER CONSTRUCTION, THE SITE WILL BE STABILIZED, WHICH WILL REDUCE THE POTENTIAL FOR DUST GENERATION.
2. WATER SOURCE – NON–STORMWATER COMPONENTS OF SITE DISCHARGE MUST BE CLEAN WATER. WATER USED FOR CONSTRUCTION WHICH DISCHARGES FROM THE SITE MUST ORIGINATE FROM A PUBLIC WATER SUPPLY OR PRIVATE WELL APPROVED BY THE STATE HEALTH DEPARTMENT. WATER USED FOR CONSTRUCTION THAT DOES NOT ORIGINATE FROM AN APPROVED PUBLIC SUPPLY MUST NOT DISCHARGE FROM THE SITE.
3. CONCRETE WASTE FROM CONCRETE READY–MIX TRUCKS – DISCHARGE OF EXCESS OR WASTE CONCRETE AND/OR WASH WATER FROM CONCRETE TRUCKS WILL BE ALLOWED ON THE CONSTRUCTION SITE, BUT ONLY IN SPECIFICALLY DESIGNATED DIKED AREAS PREPARED TO PREVENT CONTACT BETWEEN THE CONCRETE AND/OR WASH WATER AND STORMWATER THAT WILL BE DISCHARGED FROM THE SITE.

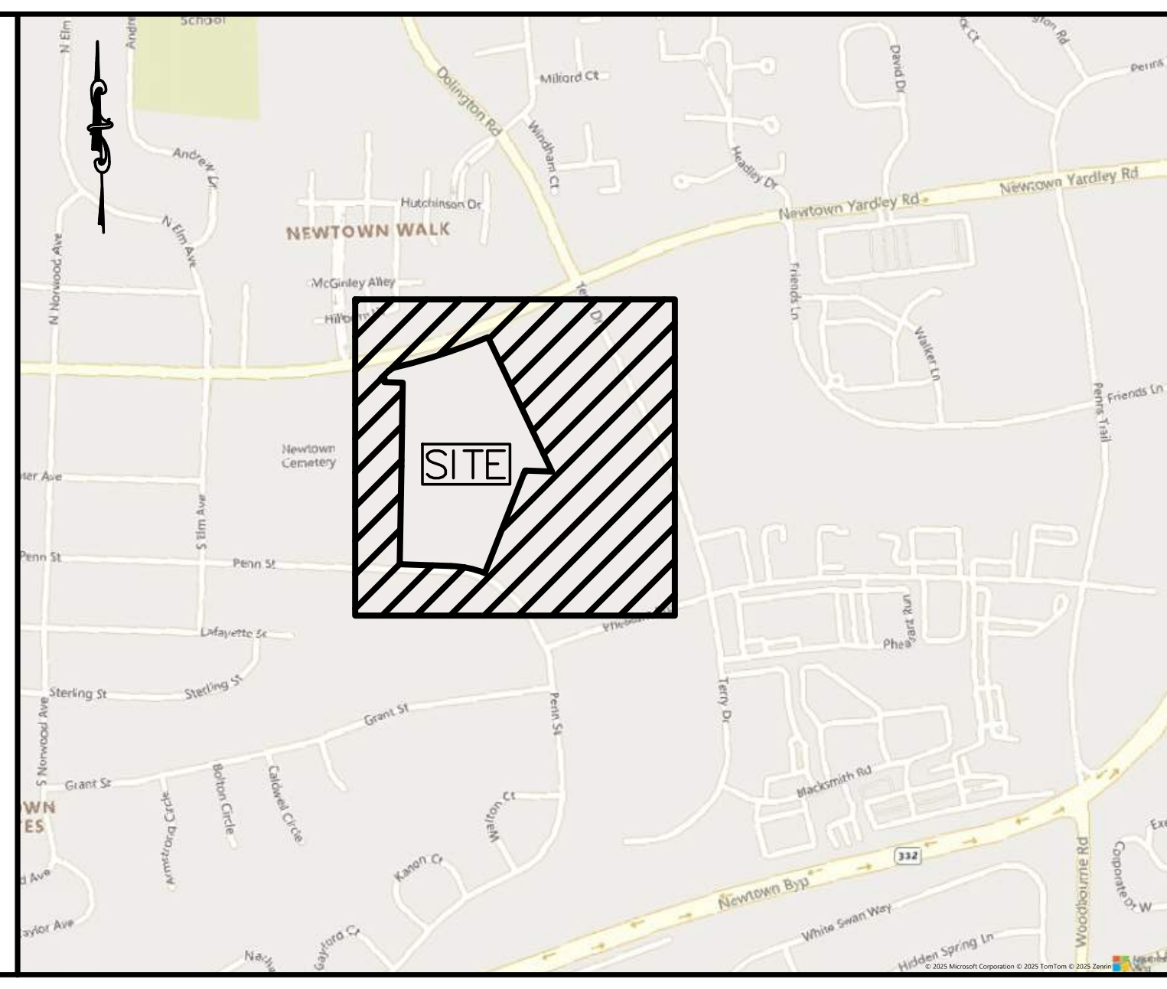
RECYCLING OR DISPOSAL OF MATERIALS §102.8(F)(11)

1. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTE IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE.
2. EXCEPT FOR ITEMS OR MATERIALS INDICATED TO BE REUSED, SALVAGED, REINSTALLED, OR OTHERWISE INDICATED TO REMAIN ON THE PROPERTY, DEMOLISHED OR EXCAVATED MATERIALS SHALL BE REMOVED FROM THE SITE. MATERIALS SLATED FOR REMOVAL FROM THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH ANY AND ALL APPLICABLE MUNICIPAL OR OTHER GOVERNMENTAL AGENCY CURRENT REGULATIONS. DEBRIS SHALL NOT BE PERMITTED TO ACCUMULATE ON THE JOB–SITE. DUST AND DIRT SHALL BE HELD TO A MINIMUM DURING DEMOLITION, BY WETTING DOWN, AS REQUIRED. ON SITE BURNING OF MATERIALS WILL NOT BE PERMITTED. AT THE COMPLETION OF WORK, THE ENTIRE AREA INVOLVED WILL BE CLEAN AND LEFT IN A NEAT CONDITION, FREE OF RUBBISH. RECYCLING OR DISPOSAL OF MATERIALS ASSOCIATED WITH OR FROM THIS PROJECT SITE SHALL BE UNDERTAKEN IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION RULES AND REGULATIONS.



## SOILS MAP

300 00 300 600
SCALE IN FEET
SCALE: 1"=300'



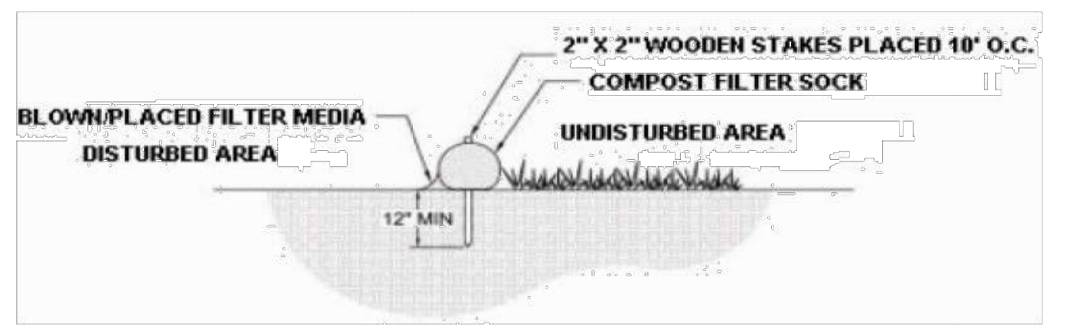
## LOCATION MAP

1000 00 1000 2000
SCALE IN FEET
SCALE: 1"=1000'

## SOILS LEGEND AND TABLE OF LIMITATIONS & RESOLUTIONS BASED ON USDA–NRCS WEB SOIL SURVEY OF CHESTER COUNTY

| SYMBOL | MAPPING UNITS | SLOPE | LAND CAPBLTY | HYDRIC SOIL | HYDRO. GROUP | DEPTH TO BEDROCK | DEPTH TO WATER TABLE | LIMITATIONS FOR CONSTRUCTION | RESOLUTION OF LIMITATIONS |
|---|---|---|---|---|---|---|---|---|---|
| *LkA* | LAWRENCEVILLE SILT LOAM | 0–3% | 2w | NO | C | 48"–99" | 18"–36" | NOT LIMITED | |
| *LkB* | LAWRENCEVILLE SILT LOAM | 3–8% | 2e | NO | C | 48"–99" | 18"–36" | NOT LIMITED | |
| *UfuB* | URBAN LAND | 0–8% | 8s | NO | D | 10"–100" | > 80" | NOT LIMITED | |
| *UnB* | URBAN LAND – DUFFIELD COMPLEX | 0–8% | 8s | NO | B | 48"–120" | > 80" | NOT LIMITED | |
| *UsB* | URBAN LAND – LAWRENCEVILLE COMPLEX | 0–8% | 2e | NO | C | 48"–99" | 18"–36" | NOT LIMITED | |

| | | | |
|---|---|---|---|
| **PROJECT NAME:** | 661 Penn Street | | |
| **LOCATION:** | Newtown Township | | |
| **PREPARED BY:** | | **DATE:** | 7/23/2025 |
| **CHECKED BY:** | | **DATE:** | |


2" X 2" WOODEN STAKES PLACED 10' O.C.
COMPOST FILTER SOCK
BLOWN/PLACED FILTER MEDIA
DISTURBED AREA
UNDISTURBED AREA
12" MIN

| Sock # | Dia. | Location (See E&S Plans) | Slope Percent | Slope Length Above Barrier |
|---|---|---|---|---|
| | (in) | | % | (ft) |
| CFS#1 | 12 | Phase 1 - Northeast of Penn Street | 3.5% | 115 |
| CFS#2 | 12 | Phase 1 - Northwest of Penn Street | 4.0% | 25 |
| CFS#3 | 18 | Phase 2 - Topsoil Stockpile #1 | 33.3% | 20 |
| CFS#4 | 18 | Phase 2 - West of Sediment Basin 2 | 5.0% | 10 |
| CFS#5 | 18 | Phase 2 - East of Existing Building 4 | 10.0% | 10 |
| CFS#6 | 12 | Phase 2 - East of Sediment Basin 2 | 6.5% | 30 |
| | | | | |
| | | | | |

**EROSION AND SEDIMENT CONTROL PLAN** Page 1 of 1

STANDARD WORKSHEET
Rip-Rap Apron Outlet Protection

| | | | |
|---|---|---|---|
| PROJECT NAME: | **661 Penn Street** | | |
| LOCATION: | **Newtown Township** | | **Bucks County** |
| PREPARED BY: | **LS** | DATE: | **7/23/2026** |
| CHECKED BY: | | DATE: | |

**METHODOLOGY:**
Utilize *PA D.E.P. Erosion and Sediment Control Manual* to construct a Rock Apron at culvert, endwall, headwall or channel outfalls. First, tailwater condition must be determined (minimum or maximum). Second, with a known discharge, determine D50 rock size and length of apron "La". Third, determine the width and thickness of the apron. Lastly, ensure the permissible velocity of the rock size chosen is not exceeded by the velocity of the discharge entering the apron.

**Equations Utilized:**
Minimum Tailwater Condition: W2 = 3do + La
Maximum Tailwater Condition: W2 = 3do + 0.4La
Blanket Thickness: T = 1.5*Dmax
Discharge (Q) and Velocity (V) - obtained from the 100 Year Storm
**do** = pipe diameter
**Width 1** = initial width of apron at end of structure
**Width 2** = terminal width of apron, W2

| STRUCTURE DATA | | | | | | | RIP-RAP DATA | | | APRON DATA | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FES # | PIPE DIA. (in) | Tailwtr Cond. MIN/MAX | Mngs "n" | Pipe Slope (ft/ft) | Q (cfs) | V (fps) | D50 (in.) | ROCK SIZE | Rock T (in.) | La (ft) | W at pipe (ft) | W at tailwtr (ft) |
| **Stage 1:** | | | | | | | | | | | | |
| FES 25 | 24 | MIN | 0.011 | 0.50 | 14.17 | 5.59 | 6 | R-4 | 18 | 12 | 6 | 18 |
| FES 32 | 15 | MIN | 0.011 | 12.23 | 0.79 | 1.73 | 6 | R-4 | 18 | 12 | 3.75 | 15.75 |
| FES 63 | 18 | MIN | 0.011 | 2.42 | 7.36 | 4.87 | 6 | R-4 | 18 | 13 | 4.5 | 17.5 |
| FES 62 | 24 | MIN | 0.011 | 0.55 | 12.41 | 6.15 | 6 | R-4 | 18 | 14 | 6 | 20 |
| FES 51 | 18 | MIN | 0.011 | 0.51 | 0.63 | 2.75 | 6 | R-4 | 18 | 8 | 4.5 | 12.5 |
| EX EW 2 | 24 | MIN | 0.011 | 12.06 | 4.44 | 3.52 | 6 | R-4 | 18 | 12 | 6 | 18 |
| HW 17 | 24 | MIN | 0.011 | 3.45 | 15.42 | 7.12 | 6 | R-4 | 18 | 12 | 6 | 18 |

Note: Rock size selected has been increased from the suggested d50 values based upon flow (Q) and/or velocity parameters. Energy Dissipator shall be hand placed and dimensions adjusted to conform to the existing roadside conveyance.
Stone larger than R-4 shall have stone filter blanket installed prior to the rip-rap in lieu of non-woven geotextile. Filter stone shall meet the

**GILMORE & ASSOCIATES, INC.**
**ENGINEERING & CONSULTING SERVICES**
CORPORATE HEADQUARTERS
65 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901 • (215) 345-4330 • www.gilmore-assoc.com

ONLY THOSE PLANS INCORPORATING THE PROFESSIONAL SEAL SHOULD BE CONSIDERED OFFICIAL AND RELIED UPON BY USER. THIS PLAN IS PREPARED SPECIFICALLY FOR THE CLIENT AND PROJECT DESIGNATED HEREON. MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT THE CONSENT OF GILMORE & ASSOCIATES, INC. IS PROHIBITED.

**NOT APPROVED FOR CONSTRUCTION**

RONALD G. MONKRES II
ENGINEER 603164-E

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN
*661 PENN STREET REDEVELOPMENT*
NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

**E&S NOTES**

**GILMORE & ASSOCIATES, INC.**
**ENGINEERING & CONSULTING SERVICES**

| | |
|---|---|
| PROJECT No.: 2500866 | |
| APPLICANTS INFO:<br>661 PENN STREET, LLC<br>209 PENN'S TRAIL<br>NEWTOWN, PA 18940<br>215–968–0600 | |
| MUNICIPAL FILE No.: | |
| TAX MAP PARCEL No.: 29–010–119–001 & 29–010–037 | |
| TOTAL AREA: 15.75 AC. | TOTAL LOTS: 2 |
| DATE: 01/21/26 | SCALE: N.T.S. |
| DRAWN BY: GY/BH | CHECKED BY: RGM |

SHEET NO.:
25 OF 33

C:\Autodesk Docs\ACCDocs\Gilmore and Associates\2500866_661_Penn_Street_Re-Dev\Project Files\2025\2500866\DESIGN\CAD\Prod_Dwgs\2500866_E&S DETAILS.dwg Layout: E&S NOTES Plotted By: rmonkres, on Wed Jul 29, 2026 at 8:29am

**INSTALLATION INSTRUCTIONS:**

ADDITIONAL ITEMS NEEDED FOR INSTALLATION:
- GRASS SEED
- FERTILIZER
- RUBBER MALLET
- SCISSORS OR SHEARS
- SAFETY GLASSES/GOGGLES

CAUTION: ALWAYS WEAR EYE AND HAND PROTECTION DURING INSTALLATION OF BIOSTAKES.

1. PREPARE THE AREA TO BE PROTECTED BY RAKING THE SOIL TO A DEPTH OF 1–2 INCHES AND REMOVING LARGE DIRT CLODS, STICKS AND OTHER OBSTRUCTIONS. APPLY SEED AND FERTILIZER AND LIGHTLY RAKE INTO THE SOIL. (NOTE: THIS PRODUCT DOES NOT INCLUDE SEED OR FERTILIZER. FOR SEEDING AND FERTILIZER SEE THE SEEDING & MULCHNG SCHEDULE)
2. STARTING AT THE TOP OF SLOPE, ANCHOR THE BLANKET IN A 6"x6" TRENCH WITH A ROW OF BIODEGRADABLE PLASTIC BIOSTAKES. A RUBBER MALLET IS RECOMMENDED FOR DRIVING THE BIOSTAKES INTO THE GROUND. **CAUTION!** BIOSTAKES MAY SHATTER IF BROKEN, THEREFORE, ALWAYS WEAR EYE AND HAND PROTECTION DURING INSTALLATION. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL OUT BLANKET (a) DOWN OR (b) HORIZONTALLY ACROSS THE SLOPE. SECURE BLANKET WITH BIOSTAKES IN APPROPRIATE PATTERN PER STAPLING PATTERN, FIGURE 2. IF APPLICABLE USE DOT SYSTEM PROVIDED ON FABRIC BY MANUFACTURER. BE SURE TO SMOOTH OUT ANY WRINKLES OR FOLDS IN MATERIAL AS WORK PROGRESSES.
4. EDGES OF PARALLEL BLANKETS SHALL OVERLAP A MINIMUM OF 6" AND BE STAKED AT 12" INTERVALS.
5. CONSECUTIVE BLANKETS ALONG SLOPE SHALL OVERLAP, SHINGLE STYLE, WITH A MINIMUM 6" OVERLAP. STAKE THROUGH OVERLAP AREA AT 12" INTERVALS.
6. IMMEDIATELY FOLLOWING INSTALLATION, GENTLY WATER ENTIRE AREA, THOROUGHLY WETTING BOTH THE BLANKET AND UNDERLYING SOIL. FOR BEST RESULTS, KEEP SOIL MOIST FOR THE FIRST 30 TO 60 DAYS, OR UNTIL UNIFORM GRASS ESTABLISHMENT IS ACHIEVED.

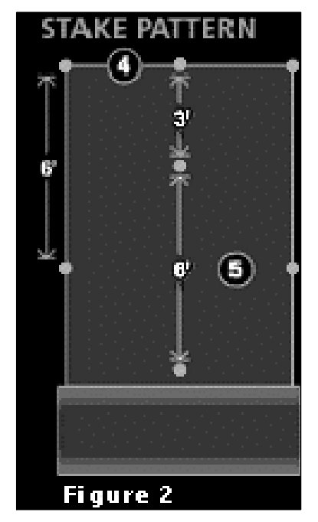
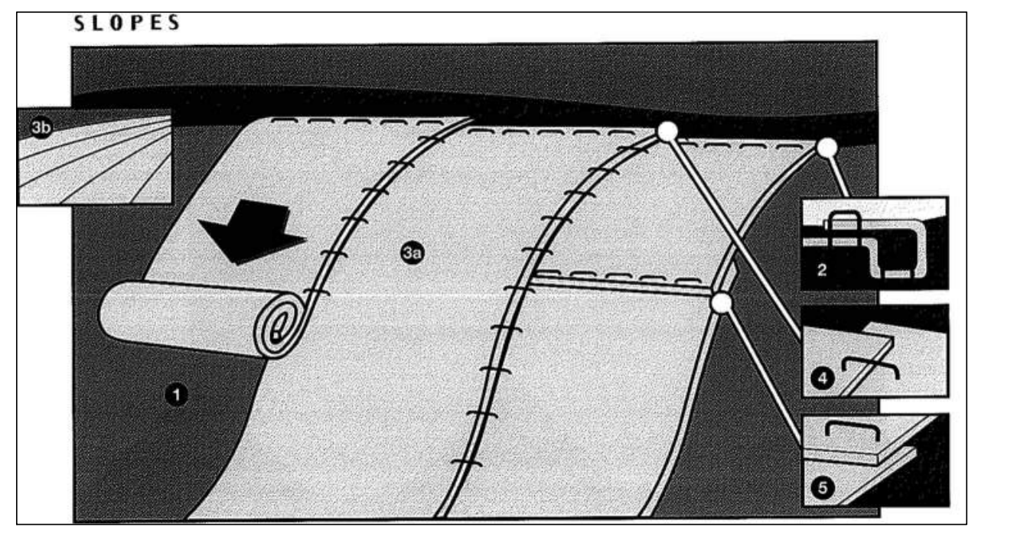


Figure 2

## NORTH AMERICAN GREEN SLOPE INSTALLATION

NOT TO SCALE



CONTRACTOR SHALL USE NORTH AMERICAN GREEN (OR EQUAL) EROSION CONTROL FABRICS WITH THE MANUFACTURER'S RECOMMENDED STAPLE PATTERN. CLASS OF FABRIC SHALL BE AS NOTED ELSEWHERE IN THE PLANS.

**INSTALLATION INSTRUCTIONS:**

ADDITIONAL ITEMS NEEDED FOR INSTALLATION:
- GRASS SEED
- FERTILIZER
- RUBBER MALLET
- SCISSORS OR SHEARS
- SAFETY GLASSES/GOGGLES

CAUTION: ALWAYS WEAR EYE AND HAND PROTECTION DURING INSTALLATION OF BIOSTAKES.

1. PREPARE THE AREA TO BE PROTECTED BY RAKING THE SOIL TO A DEPTH OF 1–2 INCHES AND REMOVING LARGE DIRT CLODS, STICKS AND OTHER OBSTRUCTIONS. APPLY SEED AND FERTILIZER AND LIGHTLY RAKE INTO THE SOIL. (NOTE: THIS PRODUCT DOES NOT INCLUDE SEED OR FERTILIZER. FOR SEEDING AND FERTILIZER SEE THE SEEDING & MULCHING SCHEDULE.)
2. BEGIN INSTALLATION AT THE TOP OF THE SWALE, ANCHORING THE BLANKET IN A 6"x6" TRENCH. STAKE THE FABRIC INTO THE BOTTOM OF THE TRENCH WITH BIODEGRADABLE PLASTIC BIOSTAKES AT 12" INTERVAL. BACKFILL AND COMPACT THE TRENCH.
3. ROLL CENTER BLANKET OVER THE PREPARED BOTTOM OF THE SWALE IN THE DIRECTION OF WATER FLOW. SECURE BLANKET WITH BIOSTAKES IN APPROPRIATE PATTERN PER FIGURE 2 OR USING DOT SYSTEM PROVIDED ON BLANKET BY MANUFACTURER. A RUBBER MALLET IS RECOMMENDED FOR DRIVING THE BIOSTAKES INTO THE GROUND. **CAUTION!** BIOSTAKES MAY SHATTER IF BROKEN, THEREFORE, ALWAYS WEAR EYE AND HAND PROTECTION DURING INSTALLATION.
4. PLACE SUBSEQUENT BLANKETS END OVER END, SHINGLE STYLE, WITH MINIMUM 6" OVERLAP. SECURE WITH DOUBLE ROW OF STAPLES/STAKES, 4" APART AND 6" ON CENTER ACROSS FULL WIDTH OF BLANKET.
5. FULL LENGTH OF BLANKET ALONG SIDE SLOPES SHALL BE ANCHORED WITH STAPLES/STAKES AT 12" INTERVALS IN 6"x6" TRENCH. BACKFILL AND COMPACT TRENCH.
6. ADJACENT BLANKETS ON SIDE SLOPES, IF NEEDED, SHALL BE OVERLAPPED A MINIMUM OF 6" AND SECURED WITH STAPLES/STAKES AT 12" INTERVALS.
7. IN HIGH FLOW CHANNELS, CHECK SLOT SHALL BE INSTALLED 30 FEET ON CENTER ALONG CHANNEL. SLOT SHALL BE A DOUBLE ROW OF STAPLES/STAKES 4" APART AND 6" ON CENTER ACROSS THE FULL WIDTH OF THE CHANNEL.
8. TERMINAL END OF THE BLANKET SHALL BE ANCHORED IN 6"x6" TRENCH WITH STAPLES/STAKES AT 12" INTERVAL. TRENCH SHALL BE BACKFILLED AND COMPACTED AFTER ANCHORING.
9. IMMEDIATELY FOLLOWING INSTALLATION, GENTLY WATER ENTIRE AREA, THOROUGHLY WETTING BOTH THE BLANKET AND UNDERLYING SOIL. FOR BEST RESULTS, KEEP SOIL MOIST FOR THE FIRST 30 TO 60 DAYS OR UNTIL UNIFORM GRASS ESTABLISHMENT IS ACHIEVED.

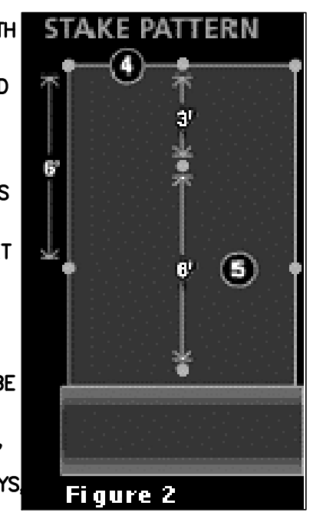
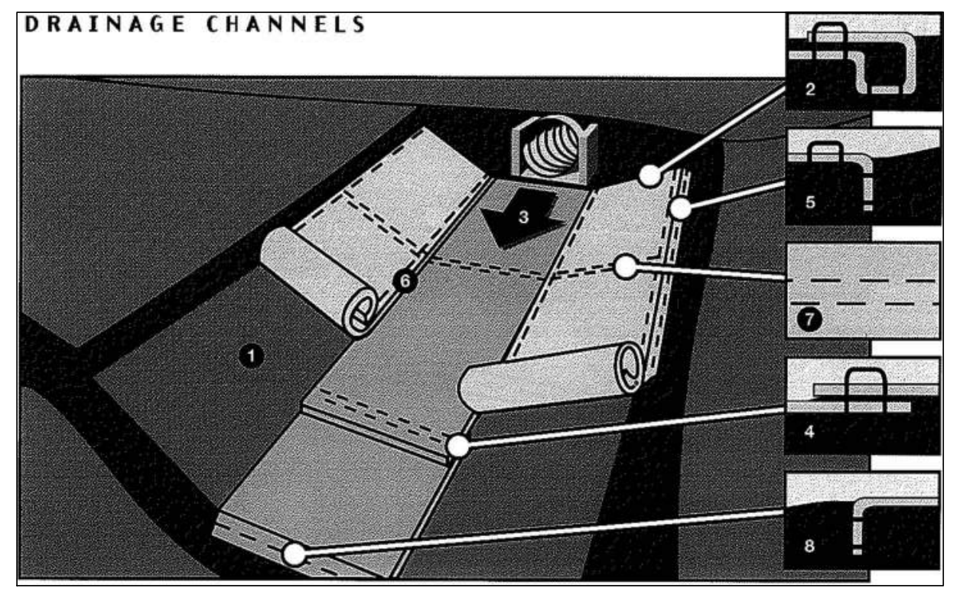


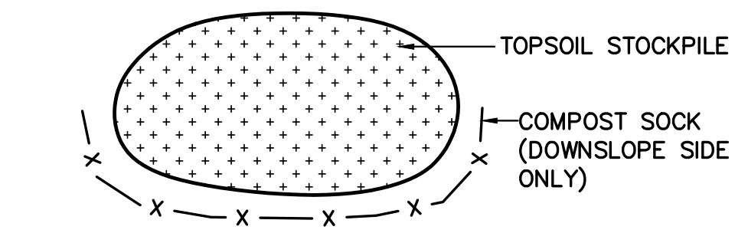
Figure 2

## NORTH AMERICAN GREEN SWALE INSTALLATION

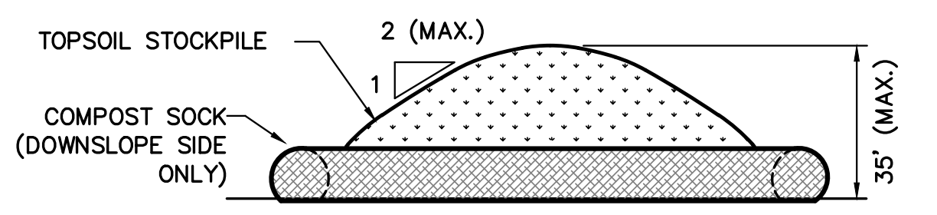
NOT TO SCALE



CONTRACTOR SHALL USE NORTH AMERICAN GREEN (OR EQUAL) EROSION CONTROL FABRICS WITH THE MANUFACTURER'S RECOMMENDED STAPLE PATTERN. CLASS OF FABRIC SHALL BE AS NOTED ELSEWHERE IN THE PLANS.



PLAN VIEW

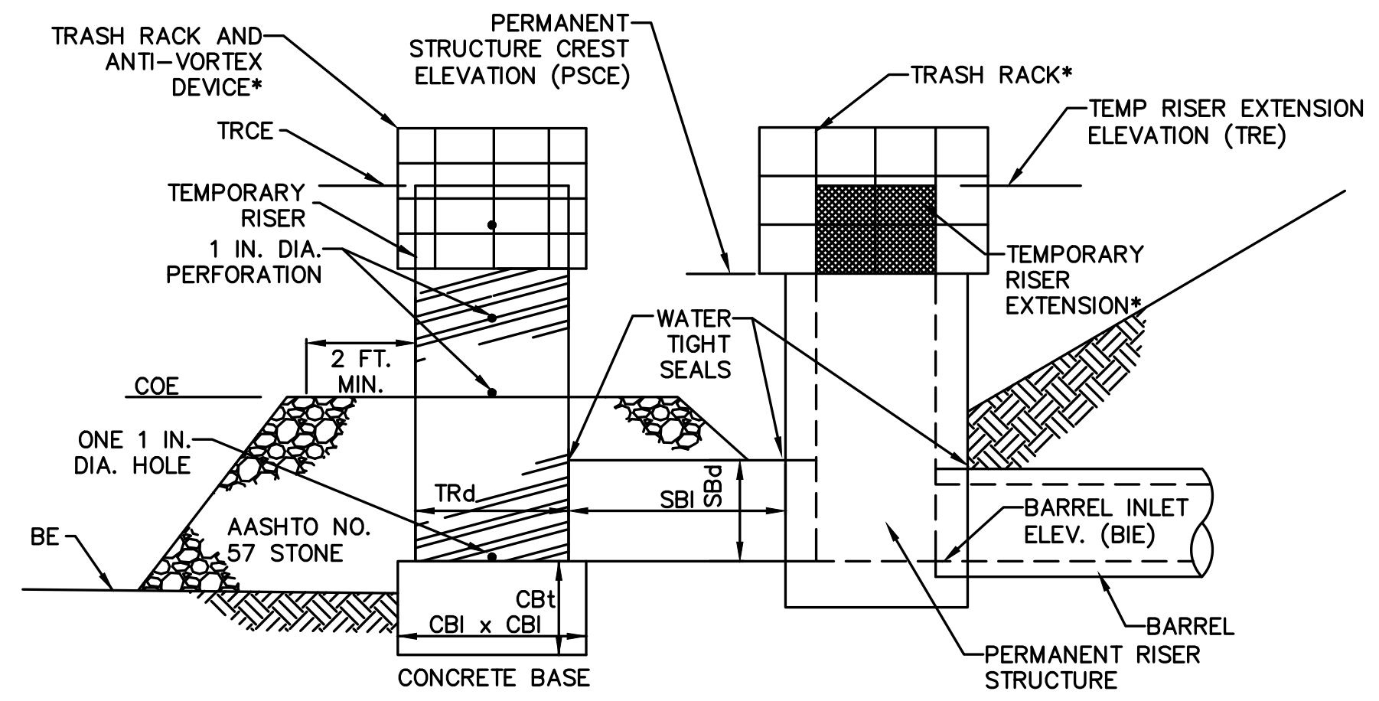


PROFILE

SEDIMENT BARRIER MUST BE PLACED AROUND THE PERIMETER OF ALL STOCKPILES. IMMEDIATELY APPLY TEMPORARY SEEDING & MULCH TO ALL STOCKPILES.

## TOPSOIL STOCKPILE AREA DETAIL

NOT TO SCALE



*SEE STANDARD CONSTRUCTION DETAIL #7–5, TRASH RACK AND ANTI–VORTEX DEVICE. TOP OF TEMPORARY RISER EXTENSION (TRE) SHALL BE EQUAL TO OR ABOVE TEMPORARY RISER CREST ELEVATION (TRCE). REMOVE FLAT GRATE FROM PERMANENT RISER FOR AS LONG AS BASIN FUNCTIONS AS A SEDIMENT REMOVAL BMP.

** LOWEST ROW OF HOLES AT SEDIMENT CLEAN–OUT ELEVATION

| BMP NO. | TEMPORARY RISER | | | PERFORATIONS | | | | CONCRETE BASE | |
|---|---|---|---|---|---|---|---|---|---|
| | DIA TRd (IN) | CREST ELEV TRCE (FT) | MAT'L | LOWEST ROW OF HOLES ELEV (FT) | NO. ROWS** | NO. HOLES PER ROW | VERT. SPACING OF ROWS (FT) | LENGTH AND WIDTH CBl (IN) | THICKNESS CBt (IN) |
| ST 1 | 24 | 180.00 | HDPE | 179.25 | 1 | 1 | N/A | 28 | 24 |

| BMP NO. | TEMPORARY STUB | | | | PERMANENT STRUCTURE | | BARREL | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | DIA SBd (IN) | INVERT ELEV BIE (FT) | MAT'L | LENGTH SBl (FT) | CREST ELEV PSCE (FT) | CREST ELEV TRE (FT) | INLET ELEV. (FT) | DIA (IN) | MAT'L | LENGTH (FT) | OUTLET ELEV. (FT) |
| ST 1 | 24 | 178.00 | CMP | 3.5 | N/A | N/A | 176.00 | 24 | HDPE | 28 | 180.00 |

NOTES:

A MINIMUM OF 2–#8 REBAR SHALL BE PLACED AT RIGHT ANGLES AND PROJECTING THROUGH SIDES OF RISER TO ANCHOR IT TO CONCRETE BASE. REBAR SHALL PROJECT A MINIMUM OF 1/4 RISER DIAMETER BEYOND OUTSIDE OF RISER.

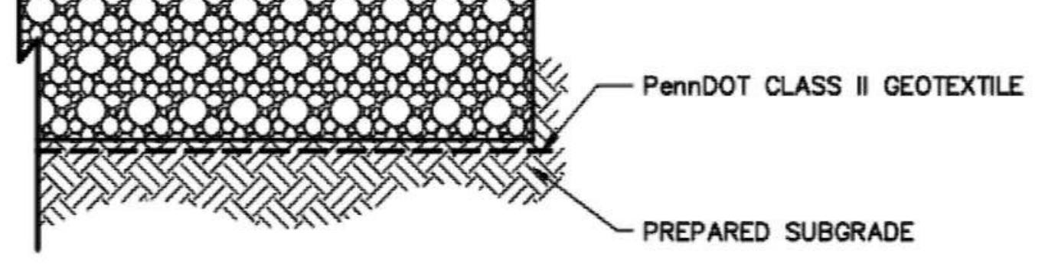
CONCRETE BASE SHALL BE POURED IN SUCH A MANNER SO AS TO INSURE THAT CONCRETE FILLS BOTTOM OF RISER TO INVERT OF THE OUTLET PIPE TO PREVENT RISER FROM BREAKING AWAY FROM THE BASE. MINIMUM BASE WIDTH EQUALS 2 TIMES RISER DIAMETER.

EMBEDDED SECTION OF ALUMINUM OR ALUMINIZED PIPE SHALL BE PAINTED WITH ZINC CHROMATE OR EQUIVALENT.

CLOGGED OR DAMAGED SPILLWAYS SHALL BE REPAIRED IMMEDIATELY. TRASH AND OTHER DEBRIS SHALL BE REMOVED FROM THE BASIN AND RISER.

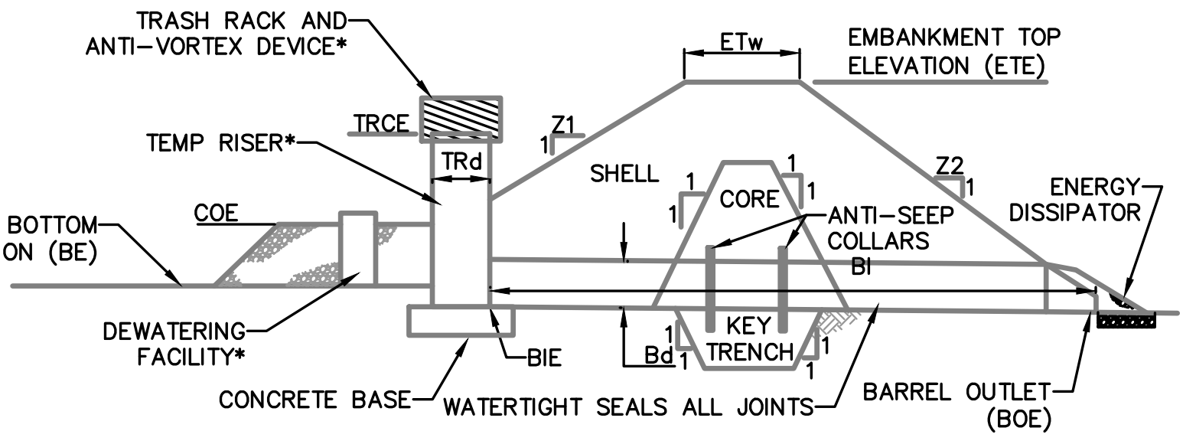
## SEDIMENT TRAP RISER STRUCTURES

NOT TO SCALE



## TEMPORARY ACCESS ROAD/STAGING AREA DETAIL

NOT TO SCALE



* ALSO REFER TO SEDIMENT BASIN TEMPORARY RISER, EMERGENCY SPILLWAY, ENERGY DISSIPATER, TRASH RACK AND ANTI–VORTEX DEVICE, AND SEDIMENT STORAGE DEWATERING FACILITY DETAILS.

| BASIN NO. | Z1 (FT) | Z2 (FT) | TEMPORARY RISER | | | BARREL | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | DIA TRd (IN) | CREST ELEV TRCE (FT) | MAT'L | DIA Bd (IN) | INLET ELEV BIE (FT) | MAT'L | LENGTH (FT) | OUTLET ELEV BOE (FT) |
| SB 2 | 4 | 4 | 24 | 177.00 | CMP | 18 | 175.40 | RCP | 107 | 174.85 |
| | | | | | | | | | | |

| EMBANKMENT | | | | CLEANOUT ELEV COE (FT) | BOTTOM ELEV BE (FT) |
|---|---|---|---|---|---|
| TOP ELEV ETE (FT) | TOP WIDTH ETw (FT) | KEY TRENCH DEPTH (FT) | KEY TRENCH WIDTH (FT) | | |
| 179.00 | 12 | 4 | 8 | 175.40 | 173.50 |
| | | | | | |

NOTES:

SEDIMENT BASINS, INCLUDING ALL APPURTENANT WORKS, SHALL BE CONSTRUCTED TO THE DETAIL AND DIMENSIONS SHOWN ON THE E&S PLAN DRAWINGS.

AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO A DEPTH OF TWO FEET PRIOR TO ANY PLACEMENT AND COMPACTION OF EARTHEN FILL. FILL MATERIAL FOR THE EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN LAYERED LIFTS OF NOT MORE THAN 6 TO 9 IN. THE MAXIMUM ROCK SIZE SHALL BE NO GREATER THAN 2/3 THE LIFT THICKNESS. UPON COMPLETION, THE EMBANKMENT SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED ACCORDING TO THE SPECIFICATIONS OF THE E&S PLAN DRAWINGS. TREES SHALL NOT BE PLANTED ON THE EMBANKMENT.

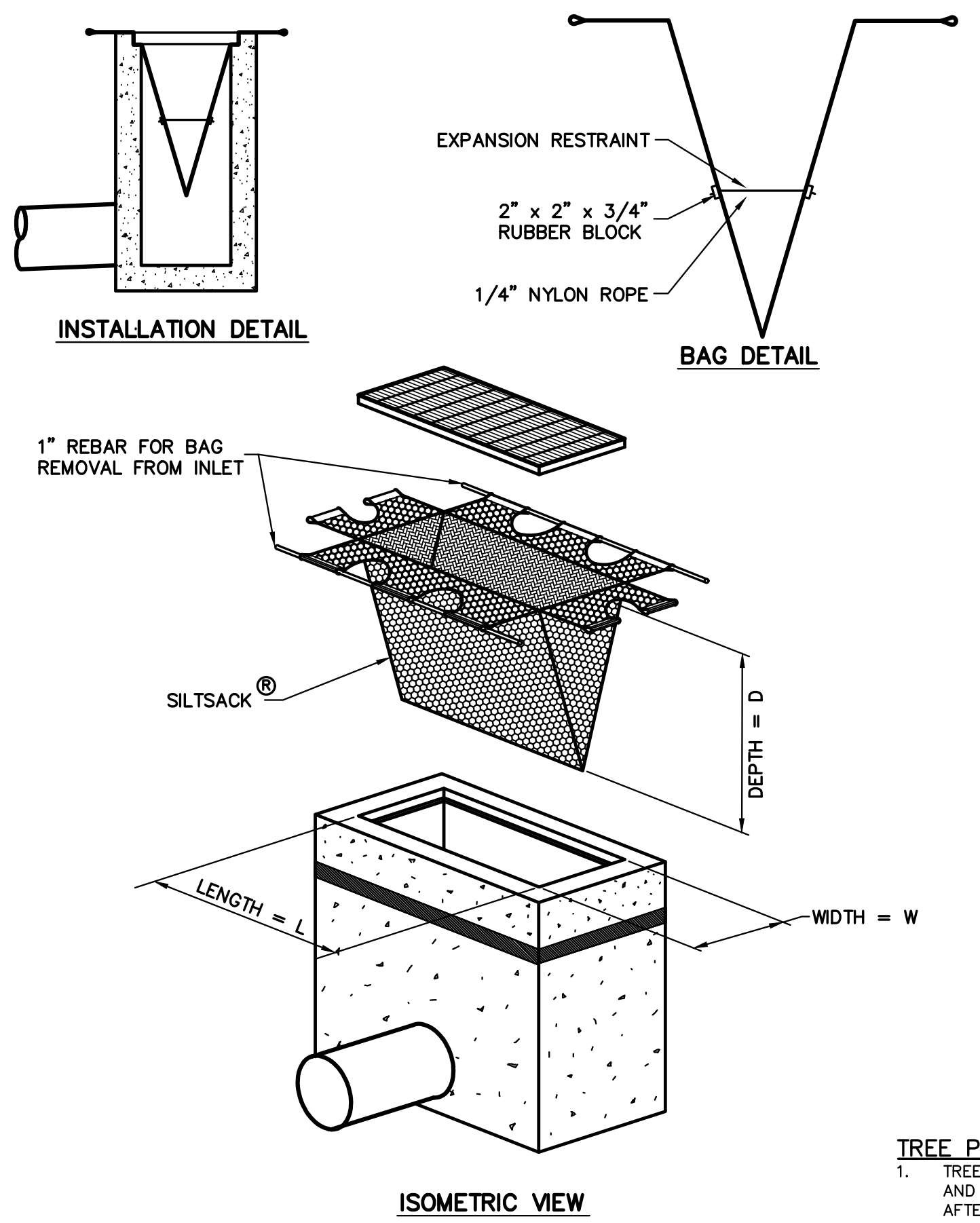
ACCESS SHALL BE PROVIDED FOR SEDIMENT REMOVAL AND OTHER REQUIRED MAINTENANCE ACTIVITIES.

A CLEAN OUT STAKE SHALL BE PLACED NEAR THE CENTER OF EACH BASIN. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED THE CLEAN OUT ELEVATION ON THE STAKE AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS. DISPOSE OF MATERIALS REMOVED FROM THE BASIN IN THE MANNER DESCRIBED IN THE E&S PLAN.

INSPECT ALL SEDIMENT BASINS ON AT LEAST A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. CHECK BASIN EMBANKMENTS, SPILLWAYS, AND OUTLETS FOR EROSION, PIPING AND SETTLEMENT. NECESSARY REPAIRS SHALL BE MADE IMMEDIATELY. DISPLACED RIPRAP WITHIN THE OUTLET ENERGY DISSIPATER SHALL BE REPLACED IMMEDIATELY. ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISTURBED AREAS SHALL BE STABILIZED INSIDE THE BASIN BEFORE CONVERSION TO A STORMWATER MANAGEMENT FACILITY. THE DEVICE SHOWN IN STANDARD CONSTRUCTION DETAIL #7–16 MAY BE USED TO DEWATER SATURATED SEDIMENT PRIOR TO ITS REMOVAL. ROCK FILTERS SHALL BE ADDED AS NECESSARY.

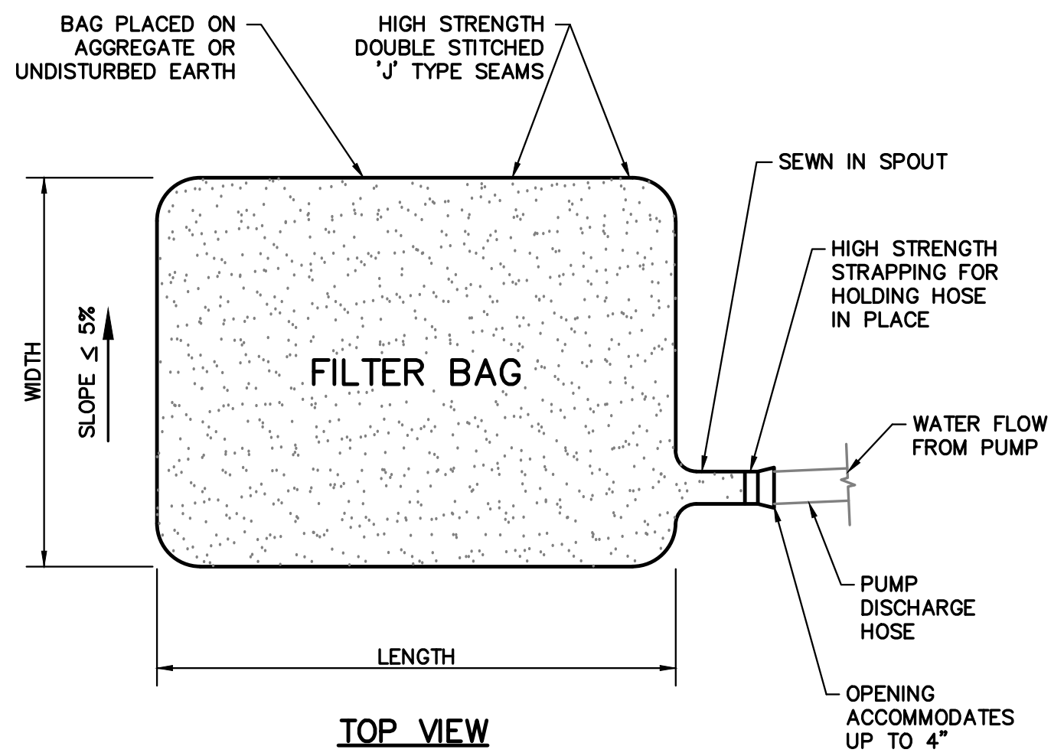
## STANDARD CONSTRUCTION DETAIL #7-6
## SEDIMENT BASIN EMBANKMENT AND SPILLWAY DETAILS PERFORATED RISER

NOT TO SCALE

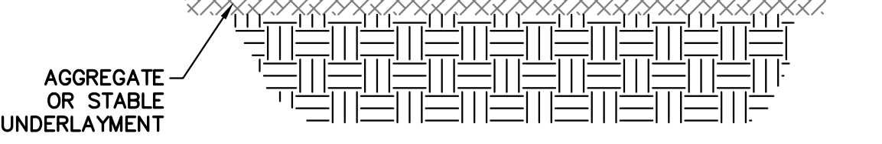


## SILTSACK TYPE 'M' INLET PROTECTION DETAIL

NOT TO SCALE


BAG PLACED ON AGGREGATE OR UNDISTURBED EARTH
HIGH STRENGTH DOUBLE STITCHED 'J' TYPE SEAMS
SEWN IN SPOUT
HIGH STRENGTH STRAPPING FOR HOLDING HOSE IN PLACE
WIDTH
SLOPE ≤ 5%
FILTER BAG
WATER FLOW FROM PUMP
PUMP DISCHARGE HOSE
LENGTH
OPENING ACCOMMODATES UP TO 4" DISCHARGE HOSE

TOP VIEW



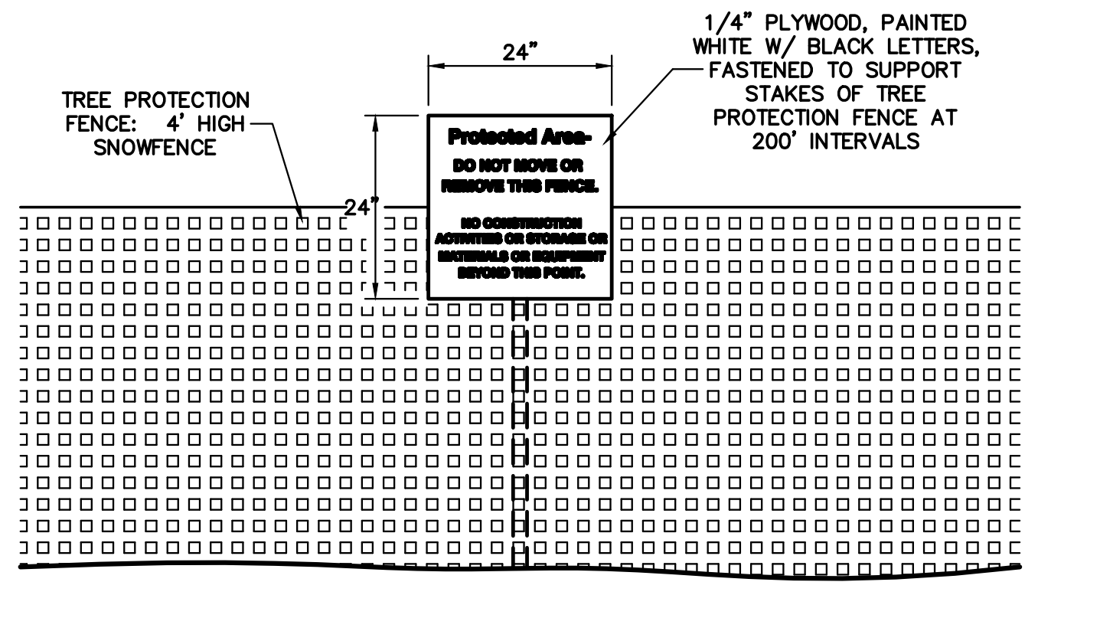
SIDE VIEW

**FILTER BAG TO BE USED WHEN/IF WATER PONDS IN EXCAVATIONS.**

1. THE FILTER BAG SHALL BE MADE OF NON–WOVEN GEOTEXTILE WHICH RETAINS ALL SEDIMENT PARTICLES LARGER THAN 150 MICRONS.
2. PLACE FILTER BAGS ON STABLE OR WELL VEGETATED AREAS WHICH ARE FLATTER THAN 5% AND WHICH WILL NOT ERODE WHEN SUBJECTED TO BAG DISCHARGES.
3. CLAMP PUMP DISCHARGE HOSES SECURELY INTO FILTER BAG.
4. LIMIT PUMPING TO 1/2 THE MANUFACTURER'S MAXIMUM PUMPING RATE.
5. SEDIMENT FILTER BAGS SHALL BE INSPECTED DAILY. WHEN SEDIMENT FILLS 1/2 THE VOLUME OF A FILTER BAG, IMMEDIATELY REMOVE THAT BAG FROM SERVICE. PROPERLY DISPOSE OF SPENT BAGS WITH THEIR SEDIMENTS. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.
6. THE DISCHARGE FROM THE FILTER BAG SHOULD NOT PASS THROUGH A DISTURBED AREA OR CAUSE AN EROSION PROBLEM DOWN SLOPE.

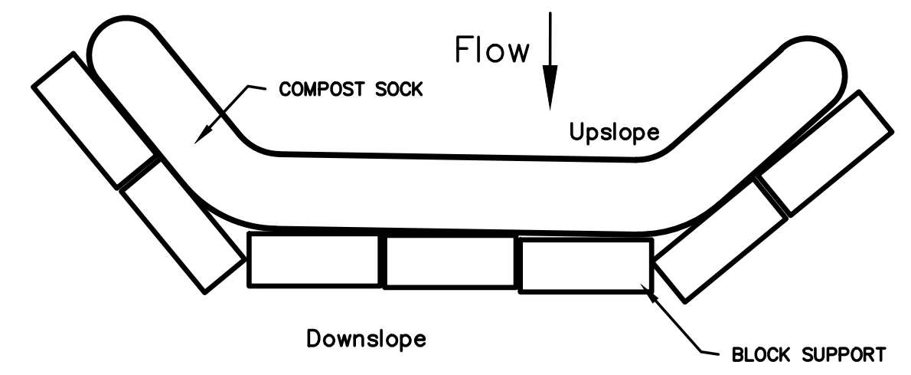
## SEDIMENT FILTER BAG FOR PUMPED WATER

NOT TO SCALE

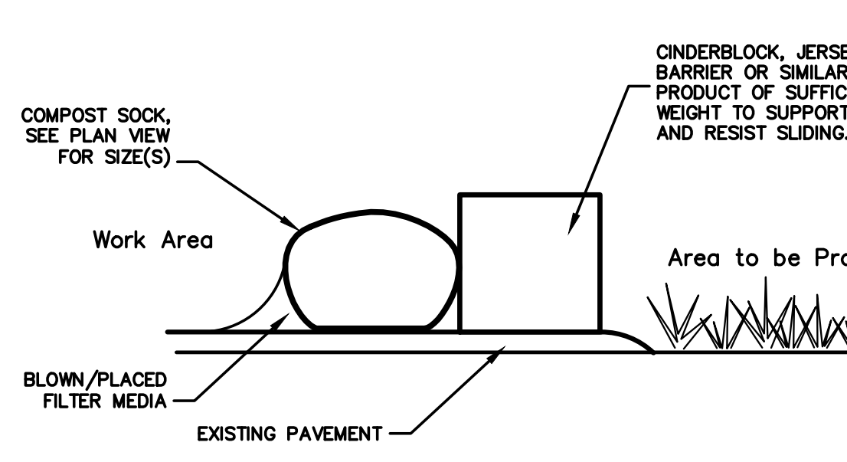

24"
1/4" PLYWOOD, PAINTED WHITE W/ BLACK LETTERS, FASTENED TO SUPPORT STAKES OF TREE PROTECTION FENCE AT 200' INTERVALS
TREE PROTECTION FENCE: 4' HIGH SNOWFENCE
24"
Protected Area–
DO NOT MOVE OR REMOVE THIS FENCE.

## TREE PROTECTION SIGN DETAIL

NOT TO SCALE



PLAN VIEW: SLOPE PROTECTION ON PAVEMENT


CINDERBLOCK, JERSEY BARRIER OR SIMILAR PRODUCT OF SUFFICIENT WEIGHT TO SUPPORT SOCK AND RESIST SLIDING.
COMPOST SOCK, SEE PLAN VIEW FOR SIZE(S)
Work Area
Area to be Protected
BLOWN/PLACED FILTER MEDIA
EXISTING PAVEMENT

SECTION VIEW: COMPOST SOCK INSTALLATION

NOTES:

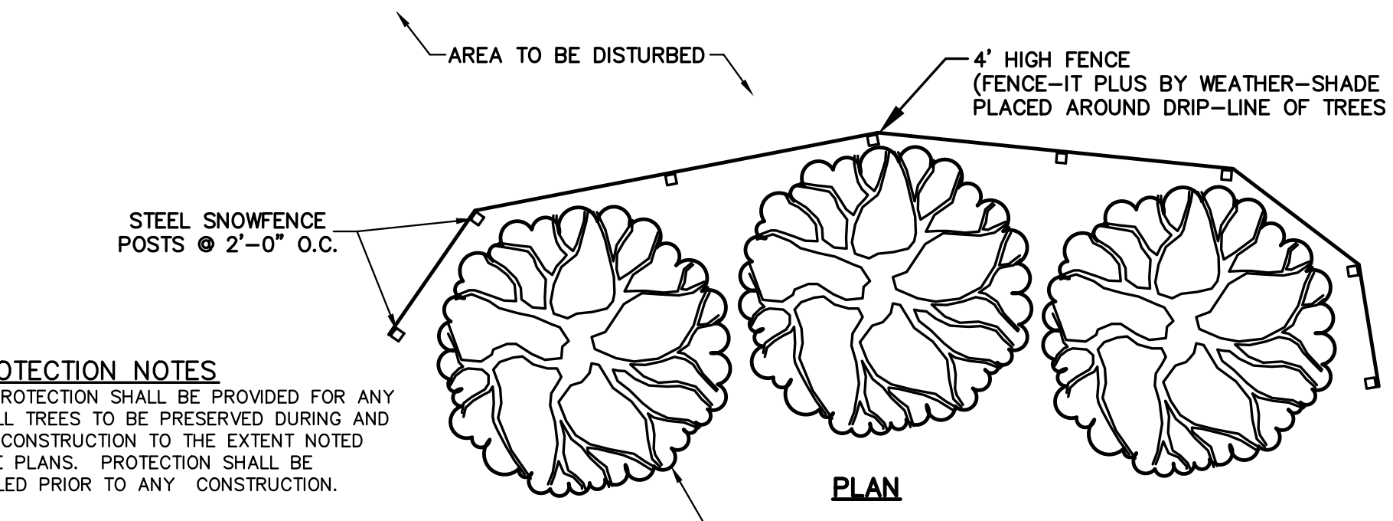
1. COMPOST SOCK SHALL BE "SILTSOXX" AS SUPPLIED BY MCS INC. (1971 N. BLACK HORSE PIKE, WILLIAMSTOWN, NJ 08094, 856–629–1044, www.mcsnjinc.com) OR EQUAL PRODUCT BY OTHER MANUFACTURER.
2. FOR INSTALLATIONS ON EXISTING PAVEMENT, CINDER BLOCKS ON DOWNSTREAM SIDE MAY BE USED IN LIEU OF WOOD STAKES TO ANCHOR THE SOCKS.
3. UPON COMPLETION OF THE PROJECT, COMPOST MATERIAL SHALL BE MIXED WITH ONSITE SOIL/TOPSOIL AND SPREAD ON THE SITE AS DETAILED IN SEEDING AND MULCHING SCHEDULE.
4. SOCK FABRIC SHALL BE 5mil PHOTO–DEGRADABLE, HDPE FOR INSTALLATIONS LESS THAN 9 MONTHS. FOR PROJECTS WITH LONGER DURATIONS, SOCKS SHALL BE MULTI–FILAMENT POLYPROPYLENE FABRIC.
5. INFILL MATERIAL SHALL BE WEED FREE COMPOST DERIVED FROM WELL–DECOMPOSED ORGANIC MATTER. COMPOST SHALL BE PRODUCED USING AEROBIC COMPOSTING PROCESS MEETING CFR 503 REGULATIONS. COMPOST MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS:

| | |
|---|---|
| ORGANIC MATTER CONTENT | 25% – 100% |
| ORGANIC PORTION | FIBROUS & ELONGATED |
| pH | 5.5 – 8.5 |
| MOISTURE CONTENT | 30% – 60% |
| PARTICLE SIZE | 30–50% PASS 3/8" SIEVE |
| SOLUBLE SALT | 5.0 dS/m MAXIMUM |

6. COMPOST SOCKS SHALL BE PLACED AT LEVEL GRADE AND BOTH ENDS EXTENDED 8' MIN. UP SLOPE AT 45° ANGLE.
7. ACCUMULATED SEDIMENT SHALL BE REMOVED WHENIT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED OF IN APPROVED UPLAND AREA.

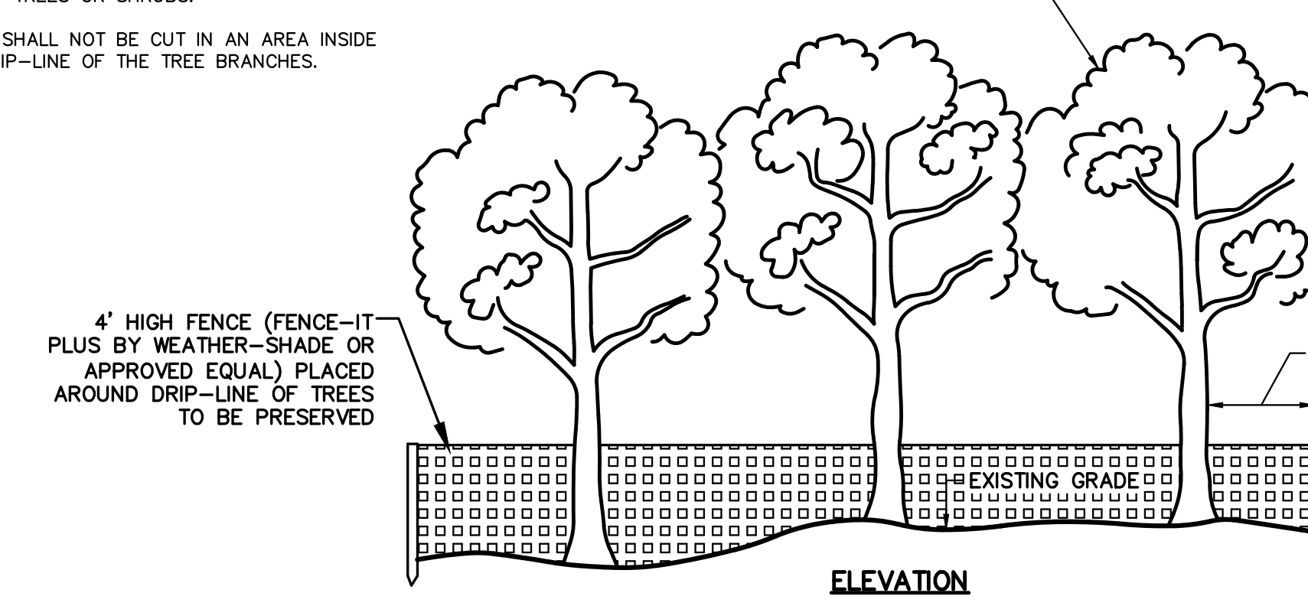
## COMPOST SOCK "SILT FENCE" ON PAVEMENT DETAIL

NOT TO SCALE


AREA TO BE DISTURBED
4' HIGH FENCE (FENCE–IT PLUS BY WEATHER–SHADE OR APPROVED EQUAL). PLACED AROUND DRIP–LINE OF TREES TO BE PRESERVED
STEEL SNOWFENCE POSTS @ 2'–0" O.C.
TREES TO BE PRESERVED

PLAN

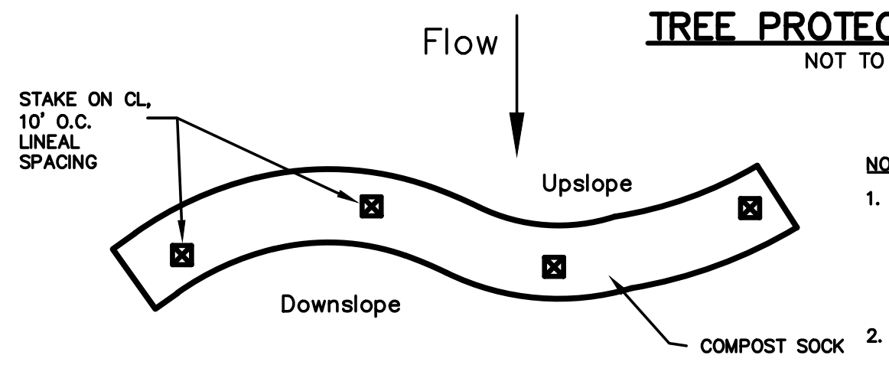
TREE PROTECTION NOTES
1. TREE PROTECTION SHALL BE PROVIDED FOR ANY AND ALL TREES TO BE PRESERVED DURING AND AFTER CONSTRUCTION TO THE EXTENT NOTED ON THE PLANS. PROTECTION SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION.
2. BOARDS, FENCING, ETC. SHALL NOT BE NAILED TO ANY TREES OR SHRUBS.
3. ROOTS SHALL NOT BE CUT IN AN AREA INSIDE THE DRIP–LINE OF THE TREE BRANCHES.


4' HIGH FENCE (FENCE–IT PLUS BY WEATHER–SHADE OR APPROVED EQUAL) PLACED AROUND DRIP–LINE OF TREES TO BE PRESERVED
DRIP–LINE OR 15', WHICHEVER IS GREATER
EXISTING GRADE

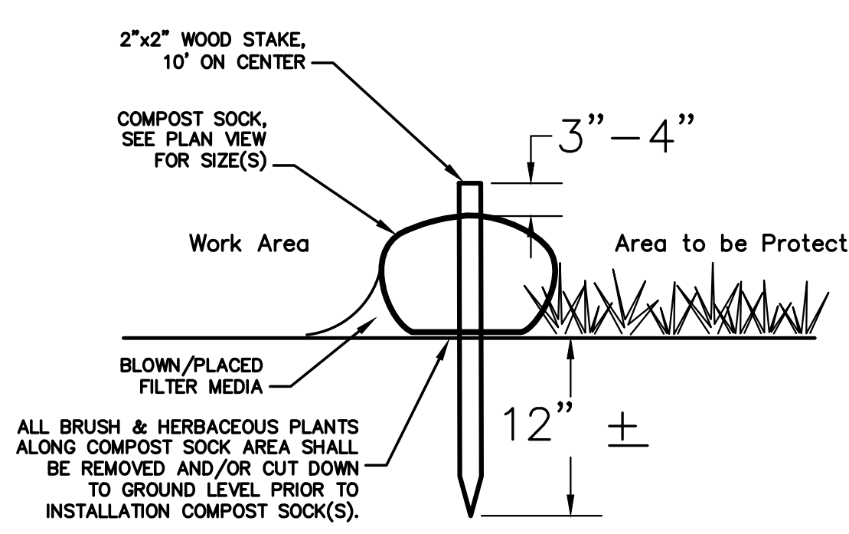
ELEVATION

## TREE PROTECTION DETAIL

NOT TO SCALE



PLAN VIEW: SLOPE PROTECTION (SILT FENCE)


2"x2" WOOD STAKE, 10' ON CENTER
COMPOST SOCK, SEE PLAN VIEW FOR SIZE(S)
3"–4"
Work Area
Area to be Protected
BLOWN/PLACED FILTER MEDIA
ALL BRUSH & HERBACEOUS PLANTS ALONG COMPOST SOCK AREA SHALL BE REMOVED AND/OR CUT DOWN TO GROUND LEVEL PRIOR TO INSTALLATION COMPOST SOCK(S).
12" ±

SECTION VIEW: COMPOST SOCK INSTALLATION

NOTES:

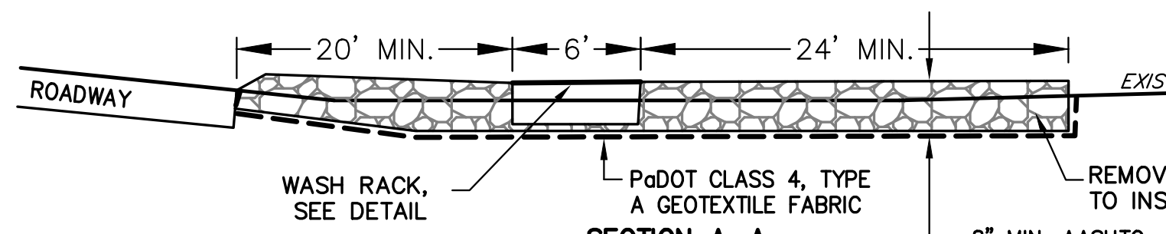
1. COMPOST SOCK SHALL BE "SILTSOXX" AS SUPPLIED BY MCS INC. (1971 N. BLACK HORSE PIKE, WILLIAMSTOWN, NJ 08094, 856–629–1044, www.mcsnjinc.com) OR EQUAL PRODUCT BY OTHER MANUFACTURER.
2. FOR INSTALLATIONS ON EXISTING PAVEMENT, CINDER BLOCKS ON DOWNSTREAM SIDE MAY BE USED IN LIEU OF WOOD STAKES TO ANCHOR THE SOCKS.
3. UPON COMPLETION OF THE PROJECT, COMPOST MATERIAL SHALL BE MIXED WITH ONSITE SOIL/TOPSOIL AND SPREAD ON THE SITE AS DETAILED IN SEEDING AND MULCHING SCHEDULE.
4. SOCK FABRIC SHALL BE 5mil PHOTO–DEGRADABLE, HDPE FOR INSTALLATIONS LESS THAN 9 MONTHS. FOR PROJECTS WITH LONGER DURATIONS, SOCKS SHALL BE MULTI–FILAMENT POLYPROPYLENE FABRIC.
5. INFILL MATERIAL SHALL BE WEED FREE COMPOST DERIVED FROM WELL–DECOMPOSED ORGANIC MATTER. COMPOST SHALL BE PRODUCED USING AEROBIC COMPOSTING PROCESS MEETING CFR 503 REGULATIONS. COMPOST MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS:

| | |
|---|---|
| ORGANIC MATTER CONTENT | 25% – 100% |
| ORGANIC PORTION | FIBROUS & ELONGATED |
| pH | 5.5 – 8.5 |
| MOISTURE CONTENT | 30% – 60% |
| PARTICLE SIZE | 30–50% PASS 3/8" SIEVE |
| SOLUBLE SALT | 5.0 dS/m MAXIMUM |

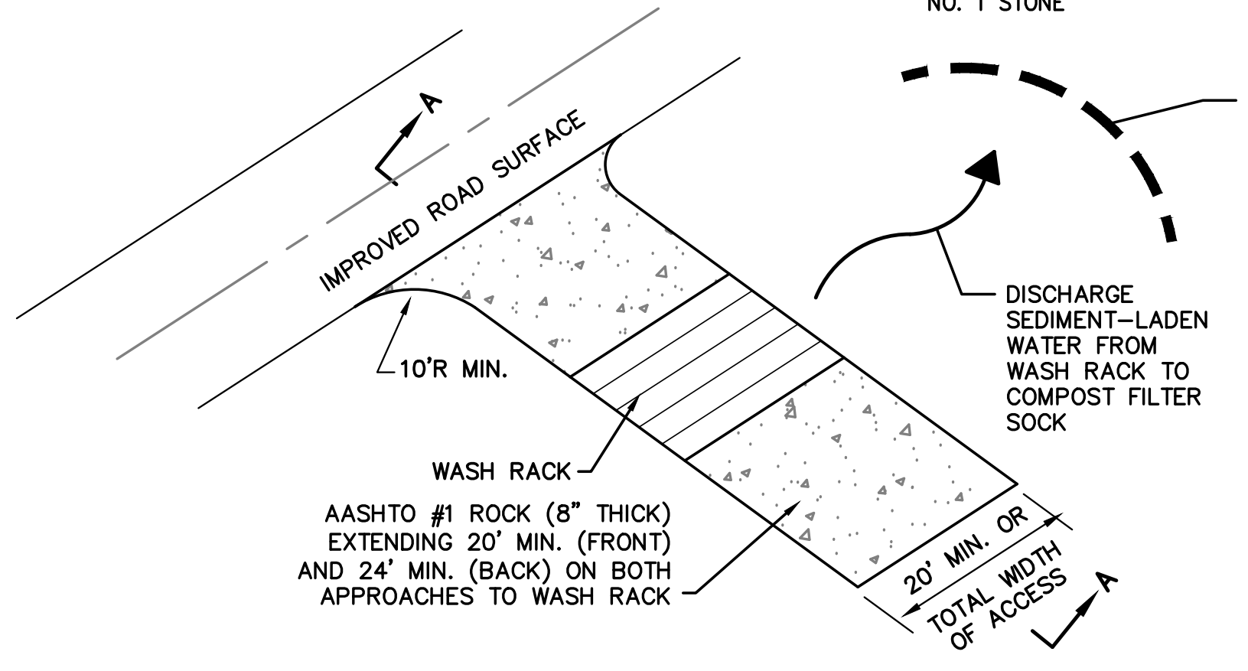
6. COMPOST SOCKS SHALL BE PLACED AT LEVEL GRADE AND BOTH ENDS EXTENDED 8' MIN. UP SLOPE AT 45° ANGLE.
7. ACCUMULATED SEDIMENT SHALL BE REMOVED WHENIT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED OF IN APPROVED UPLAND AREA.

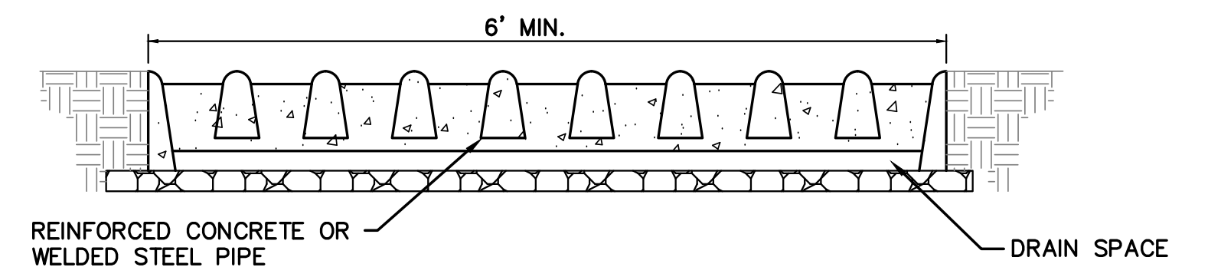
## COMPOST SOCK "SILT FENCE" DETAIL

NOT TO SCALE


20' MIN.
6'
24' MIN.
ROADWAY
EXISTING GRADE
WASH RACK, SEE DETAIL
PaDOT CLASS 4, TYPE A GEOTEXTILE FABRIC
REMOVE TOPSOIL PRIOR TO INSTALLATION
8" MIN. AASHTO NO. 1 STONE

SECTION A–A


A
IMPROVED ROAD SURFACE
12"–DIA. COMPOST FILTER SOCK
DISCHARGE SEDIMENT–LADEN WATER FROM WASH RACK TO COMPOST FILTER SOCK
10'R MIN.
WASH RACK
AASHTO #1 ROCK (8" THICK) EXTENDING 20' MIN. (FRONT) AND 24' MIN. (BACK) ON BOTH APPROACHES TO WASH RACK
20' MIN. OR TOTAL WIDTH OF ACCESS
A



WASH RACK SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE ANTICIPATED CONSTRUCTION VEHICULAR TRAFFIC.

A WATER SUPPLY SHALL BE MADE AVAILABLE TO WASH THE WHEELS OF ALL VEHICLES EXITING THE SITE.

MAINTENANCE:

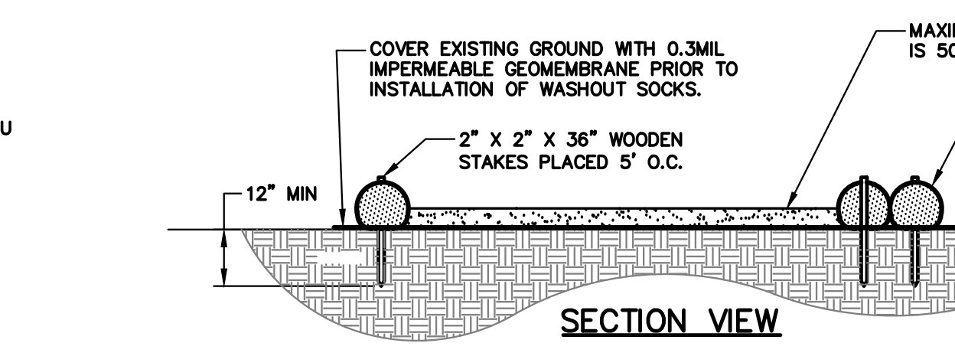
ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE.

DRAIN SPACE UNDER WASH RACK SHALL BE KEPT OPEN AT ALL TIMES. DAMAGE TO THE WASH RACK SHALL BE REPAIRED PRIOR TO FURTHER USE OF THE RACK.

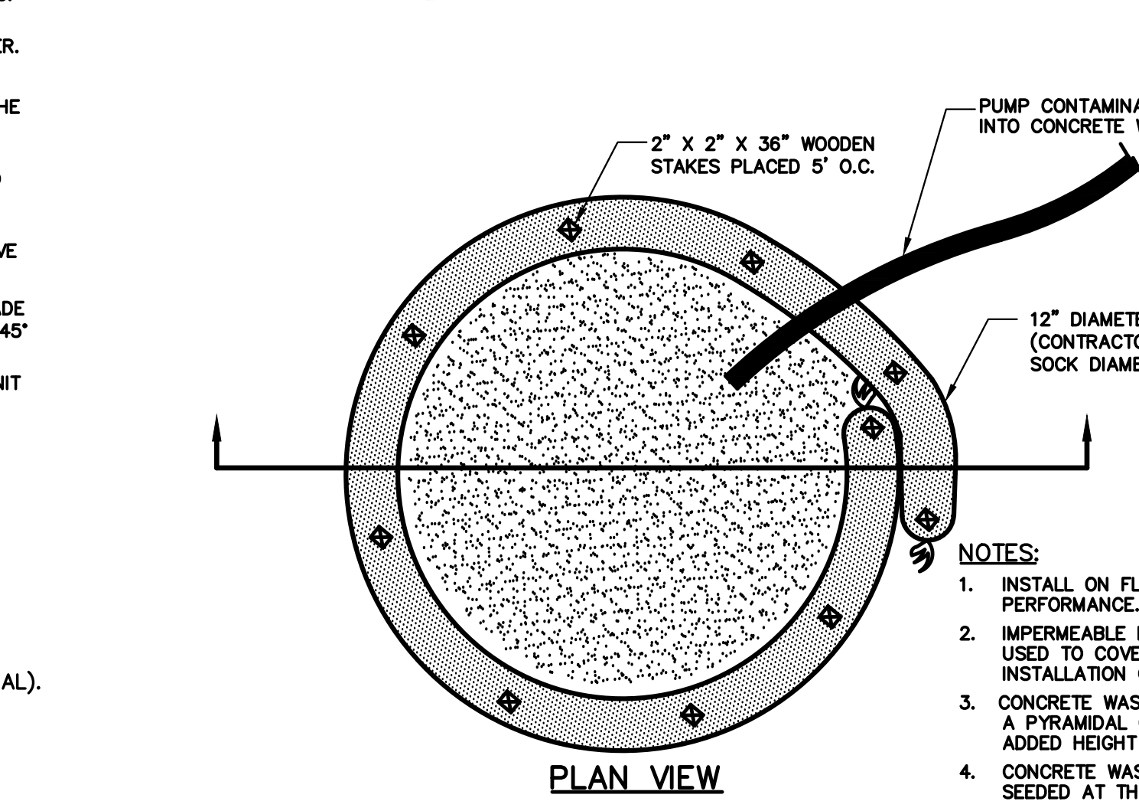
AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROAD DITCHES, SEWERS, CULVERTS OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

## ROCK CONSTRUCTION ENTRANCE W/ WASH RACK

NOT TO SCALE


COVER EXISTING GROUND WITH 0.3MIL IMPERMEABLE GEOMEMBRANE PRIOR TO INSTALLATION OF WASHOUT SOCKS.
MAXIMUM DEPTH OF CONTAMINATED WATER IS 50% OF CONCRETE WASHOUT HEIGHT
2" X 2" X 36" WOODEN STAKES PLACED 5' O.C.
12" DIAMETER COMPOST SOCK (CONTRACTOR MAY CHOOSE TO INCREASE SOCK DIAMETER FOR GREATER CAPACITY)
12" MIN

SECTION VIEW

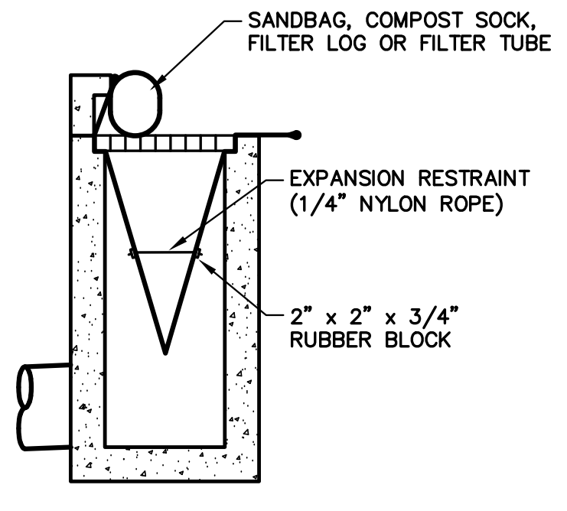

2" X 2" X 36" WOODEN STAKES PLACED 5' O.C.
PUMP CONTAMINATED WATER INTO CONCRETE WASHOUT
12" DIAMETER COMPOST SOCK (CONTRACTOR MAY CHOOSE TO INCREASE SOCK DIAMETER FOR GREATER CAPACITY)

PLAN VIEW

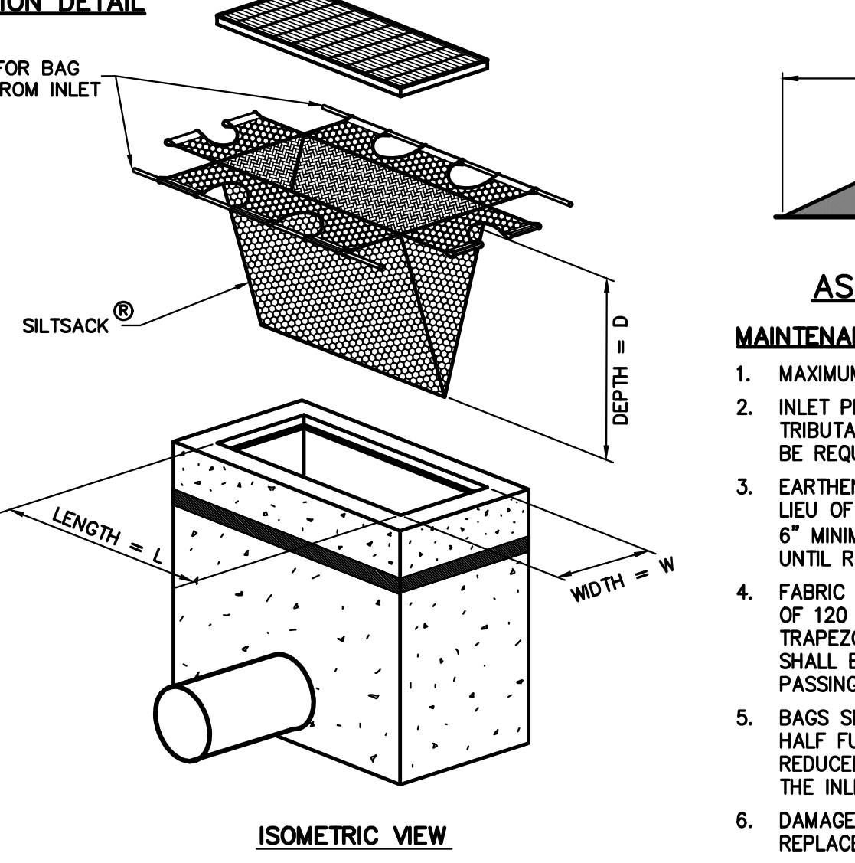
NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.
2. IMPERMEABLE MEMBRANE SHALL BE USED TO COVER GROUND PRIOR TO INSTALLATION OF COMPOST SOCK.
3. CONCRETE WASHOUT MAY BE STACKED IN A PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT AND STABILITY.
4. CONCRETE WASHOUT MAY BE DIRECT SEEDED AT THE TIME OF INSTALLATION.

## COMPOST SOCK CONCRETE WASHOUT DETAIL

NOT TO SCALE


SANDBAG, COMPOST SOCK, FILTER LOG OR FILTER TUBE
EXPANSION RESTRAINT (1/4" NYLON ROPE)
2" x 2" x 3/4" RUBBER BLOCK

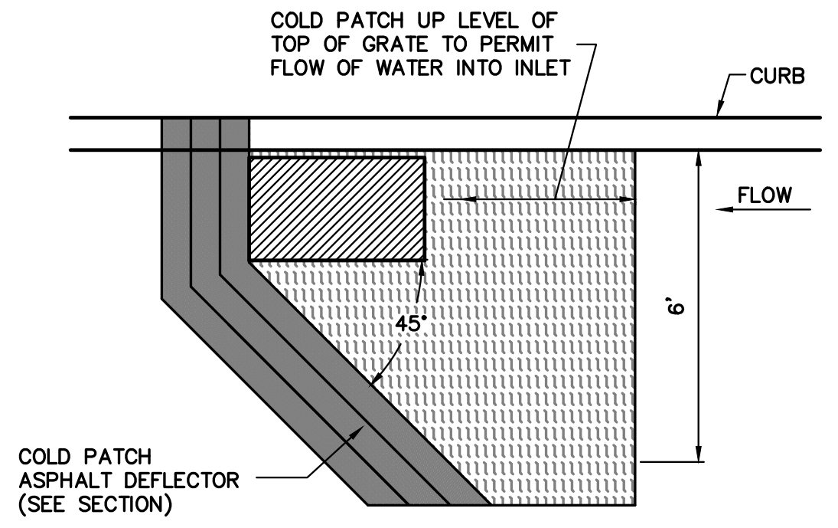
INSTALLATION DETAIL

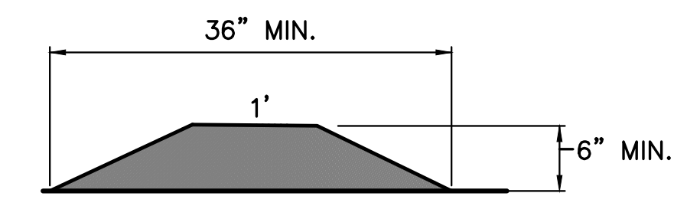


ISOMETRIC VIEW

## SILTSACK TYPE 'C' INLET PROTECTION DETAIL

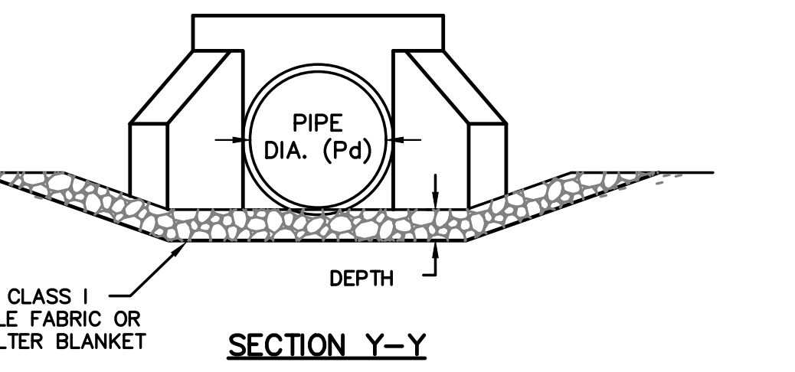
NOT TO SCALE


COLD PATCH UP LEVEL OF TOP OF GRATE TO PERMIT FLOW OF WATER INTO INLET
CURB
FLOW
6'
45°
COLD PATCH ASPHALT DEFLECTOR (SEE SECTION)



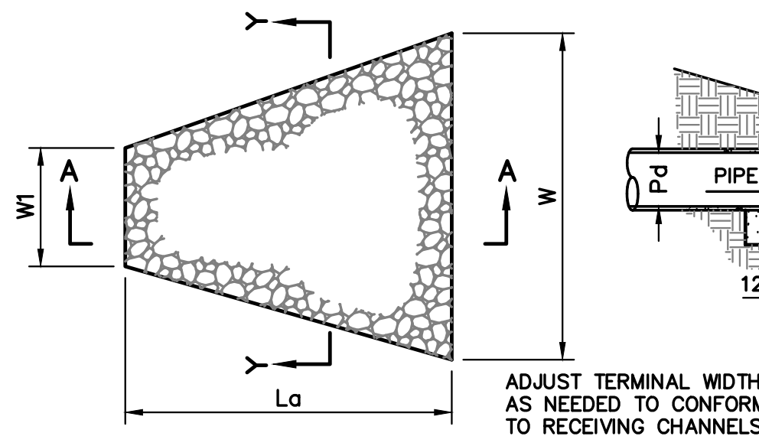
ASPHALT DEFLECTOR SECTION

**MAINTENANCE:**
1. MAXIMUM DRAINAGE AREA = 1/2 ACRE
2. INLET PROTECTION SHALL NOT BE REQUIRED FOR INLETS TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.
3. EARTHEN BERM SHALL BE INSTALLED & MAINTAINED IN LIEU OF ASPHALT BERMS UNTIL ROADWAY IS STONED. 6" MINIMUM HEIGHT ASPHALT BERM TO BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.
4. FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LB, BURST STRENGTH OF 200 PSI, AND TRAPEZOIDAL TEAR STRENGTH OF 50 LB. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A #40 SIEVE.
5. BAGS SHALL BE EMPTIED & RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET.
6. DAMAGED OR CLOGGED BAGS SHALL BE REPAIRED OR REPLACED IMMEDIATELY UPON INSPECTION.

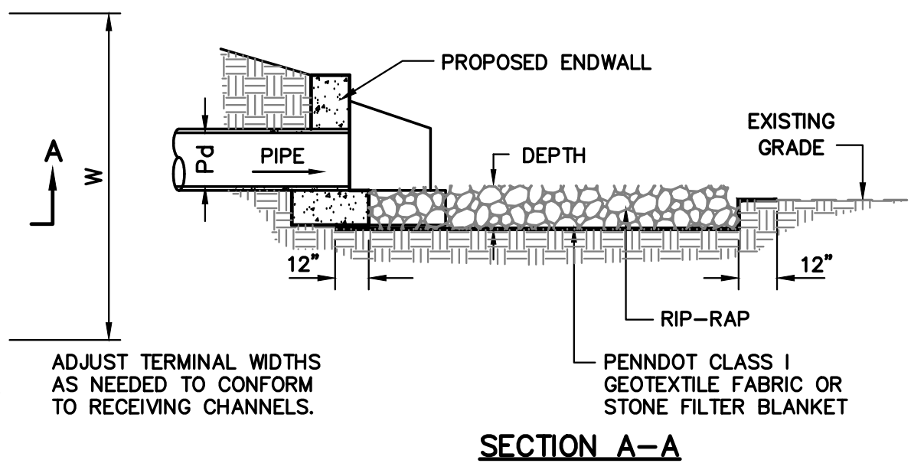


SECTION Y–Y

| STONE FILTER BLANKET SHALL BE USED IN LIEU OF GEOTEXTILE AS PER THE FOLLOWING: | | |
|---|---|---|
| RIP–RAP | STONE # | DEPTH |
| R–5 | AASHTO #3 | 6" |
| R–6 | AASHTO #1 | 8" |
| R–7 | AASHTO #1 | 10" |


W1
A
W
La
ADJUST TERMINAL WIDTHS AS NEEDED TO CONFORM TO RECEIVING CHANNELS.

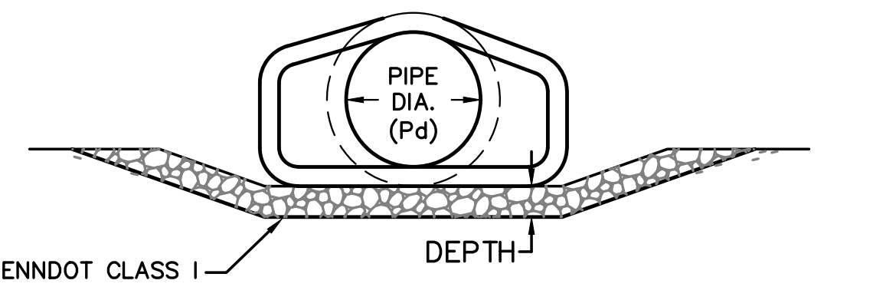
PLAN



SECTION A–A

## ENERGY DISSIPATER AT PIPE ENDWALL

NOT TO SCALE



SECTION Y–Y

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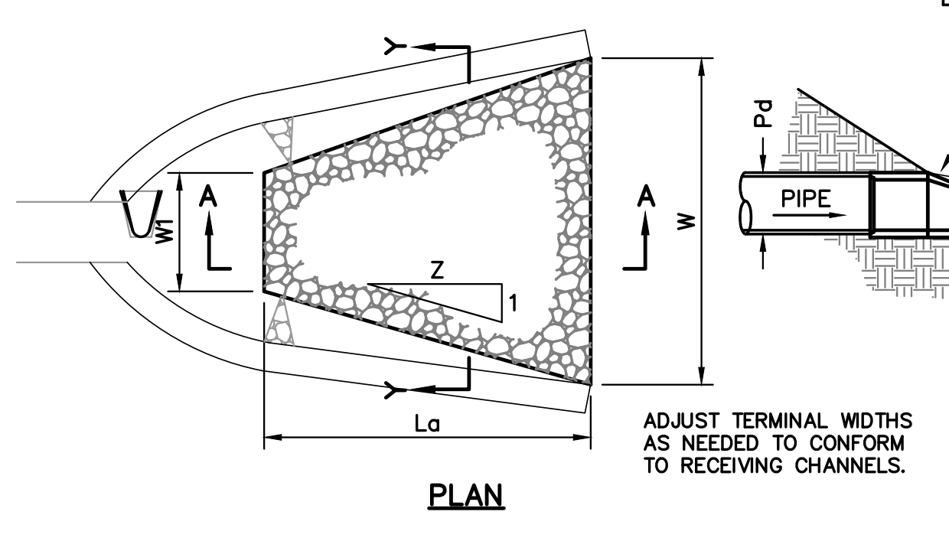
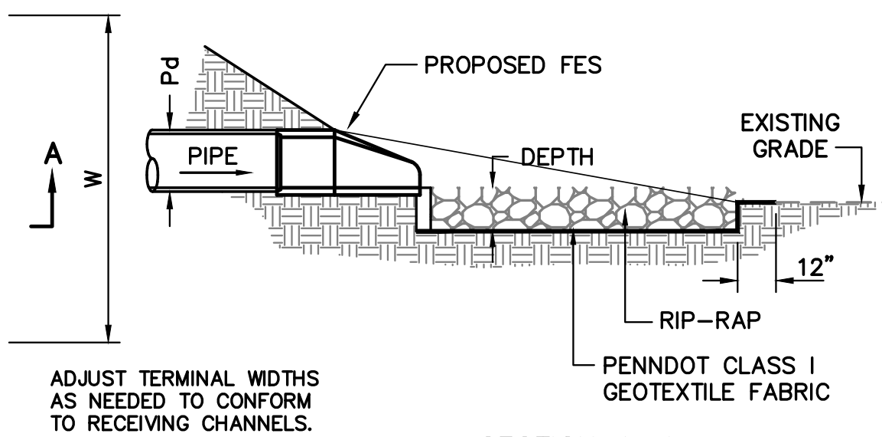

W1
A
W
Z
1
La
ADJUST TERMINAL WIDTHS AS NEEDED TO CONFORM TO RECEIVING CHANNELS.

PLAN



SECTION A–A

## ENERGY DISSIPATER AT PIPE F.E.S.

NOT TO SCALE

**GILMORE & ASSOCIATES, INC.**
ENGINEERING & CONSULTING SERVICES
CORPORATE HEADQUARTERS
65 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901 • (215) 345-4330 • www.gilmore-assoc.com

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**NOT APPROVED FOR CONSTRUCTION**

RONALD G. MONKRES II
ENGINEER 603164-E

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

## *661 PENN STREET REDEVELOPMENT*

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## E&S DETAILS 1

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.: 2500866

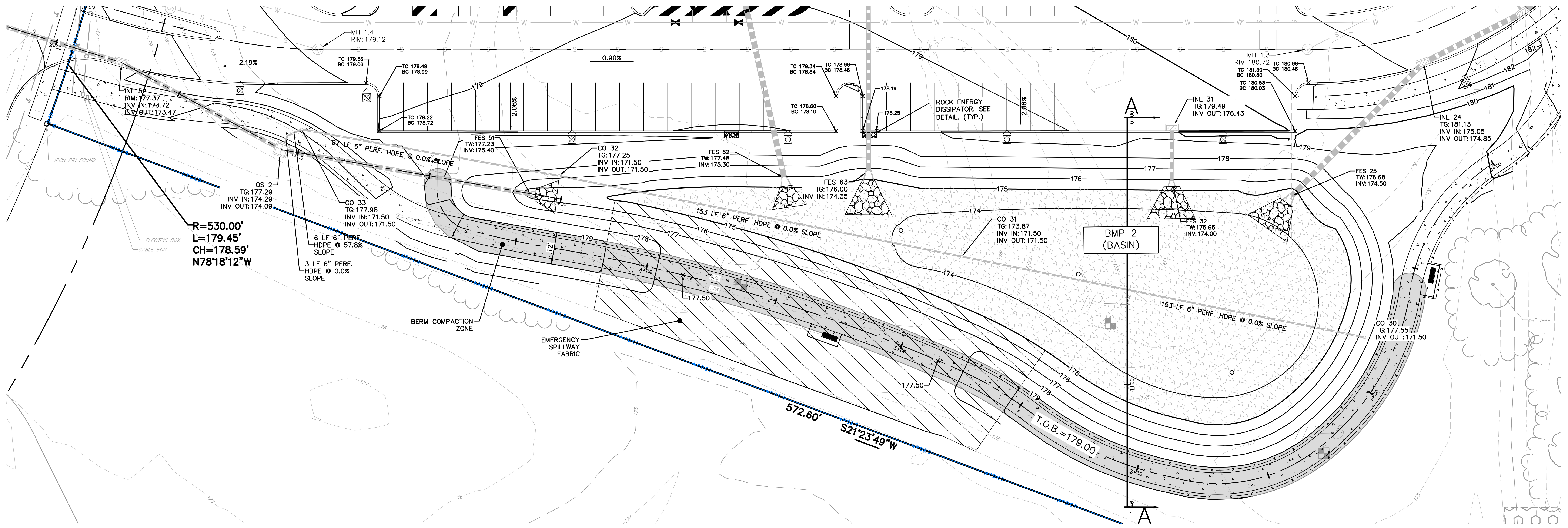
APPLICANTS INFO:
661 PENN STREET, LLC
209 PENN'S TRAIL
NEWTOWN, PA 18940
215–968–0600

MUNICIPAL FILE No.:

TAX MAP PARCEL No.: 29–010–119–001 & 29–010–037

| | |
|---|---|
| TOTAL AREA: 15.75 AC. | TOTAL LOTS: 2 |
| DATE: 01/21/26 | SCALE: N.T.S. |
| DRAWN BY: GY/BH | CHECKED BY: RGM |

SHEET NO.: 26 OF 33

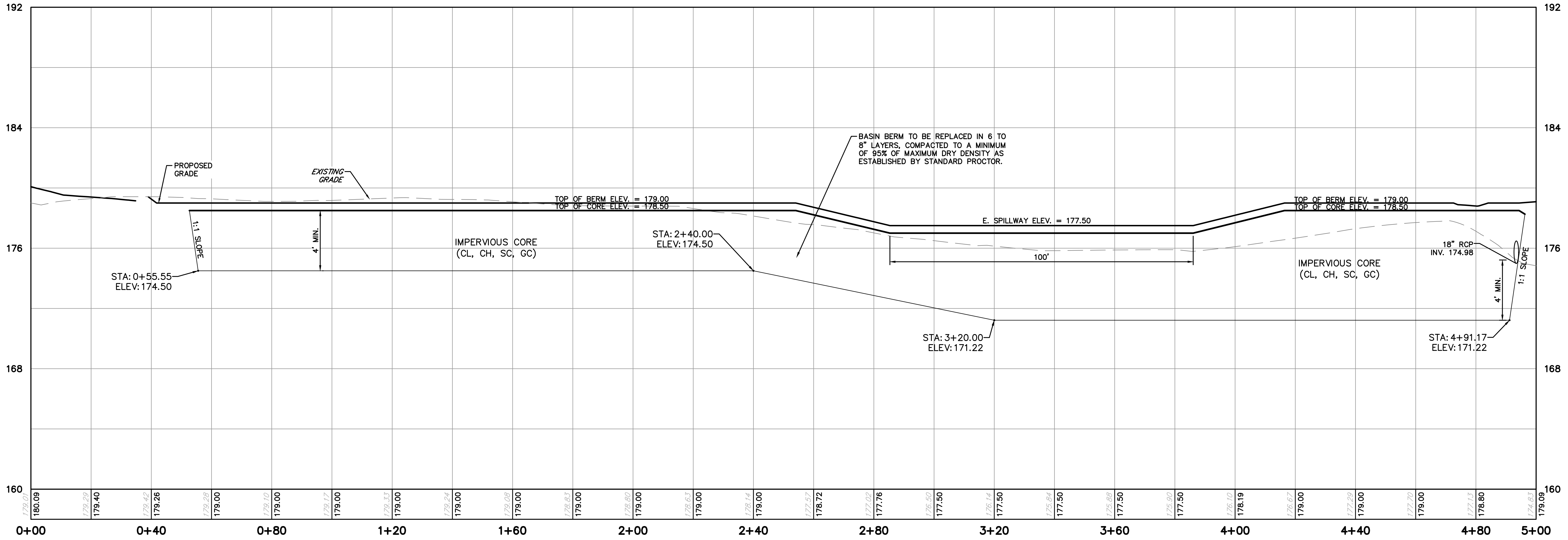


## PLAN VIEW: INFILTRATION BASIN BMP 2

SCALE: 1" = 20'

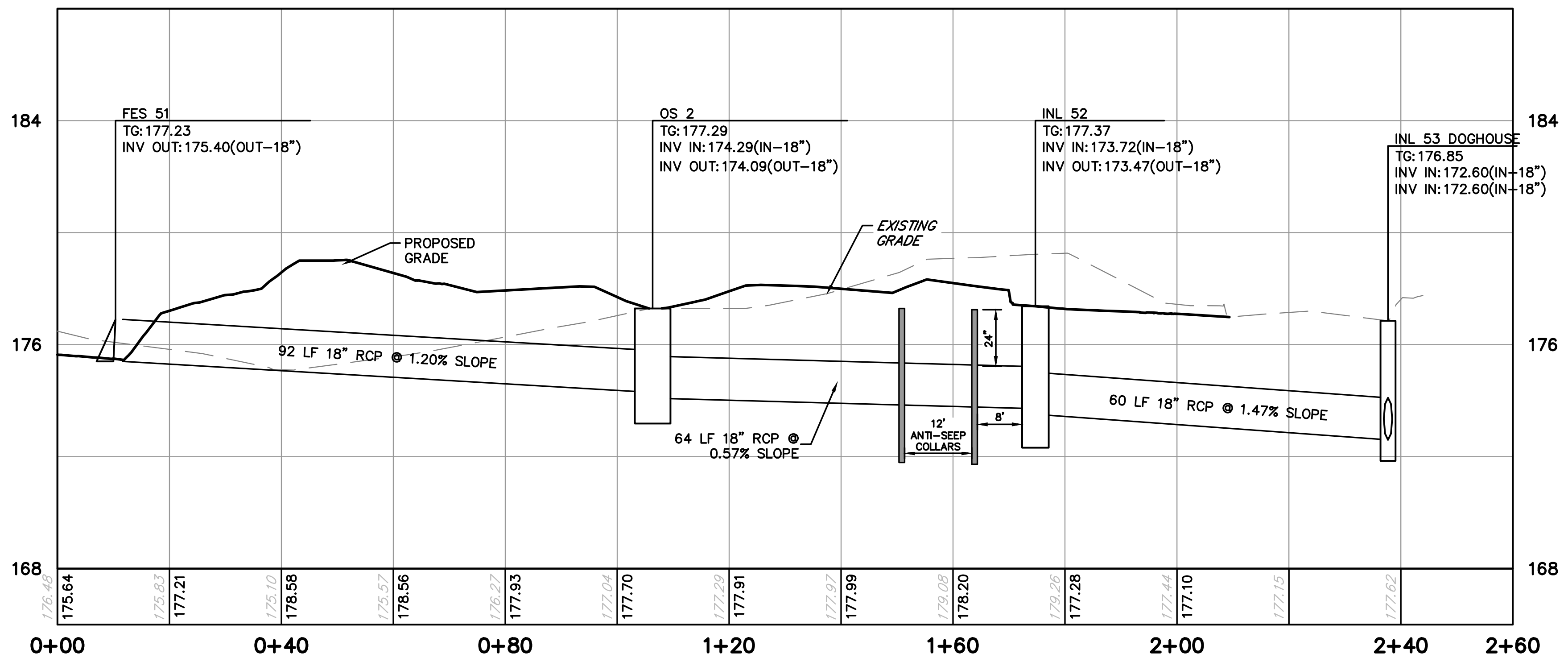
| | |
|---|---|
| ▬▬▬▬▬ | PROPERTY LINE |
| —— 489 —— | PROPOSED CONTOUR |
| —— NPDES —— NPDES —— | PROJECT SITE BOUNDARY |
| —— LOD —— LOD —— LOD —— | LIMIT OF DISTURBANCE |
| ▬ ▬ ▬ ▬ | EXISTING SANITARY EASEMENT |
| — — — — | EXISTING MAJOR CONTOUR |
| - - - - - | EXISTING MINOR CONTOUR |
| —— PS-X —— PS-X —— PS-X —— | PROPOSED PERMANENT SWALE |
| —— W —— | EXISTING WATER MAIN |
| — W — W — W — W — | PROPOSED WATER MAIN |
| — — — — — — | EXISTING STORM SEWER |
| ═══════ | PROPOSED STORM SEWER |
| —— S —— | EXISTING SANITARY SEWER |
| — S — S — S — S — | PROPOSED SANITARY SEWER |
| | PROPOSED LANDSCAPING |
| TP<br>TP-XX | PROPOSED TEST PIT |
| —— —— —— —— | EXISTING SOIL BOUNDARIES |
| | PROPOSED RIP-RAP APRON |
| | PROPOSED BASIN LANDSCAPING |
| ▨ | PROPOSED STORM INLET |
| ■ ■ ■ ■ ■ | POST-DEV DRAINAGE AREA BOUNDARY |
| ▬ PS-1 ▬ PS-1 ▬ | PERMANENT SWALE PATH WITH LABELS |
| | BMP FOOTPRINT |
| ● | PROPOSED POA |

| STORMWATER INFILTRATION TEST PITS | | | | | |
|---|---|---|---|---|---|
| TEST PIT / LOT # | APPROX. GROUND ELEV. | DEPTH TO ROCK | GROUND WATER ELEV. | INFILTRATION TEST | |
| | | | | DEPTH | RATE (IN/HR) |
| TP-3 | 175.50 | NE | NE | 6 | 10.50 |
| TP-4 | 176.90 | NE | NE | 5 | 0.00 |
| TP-5 | 178.60 | NE | NE | 5 | 0.50 |



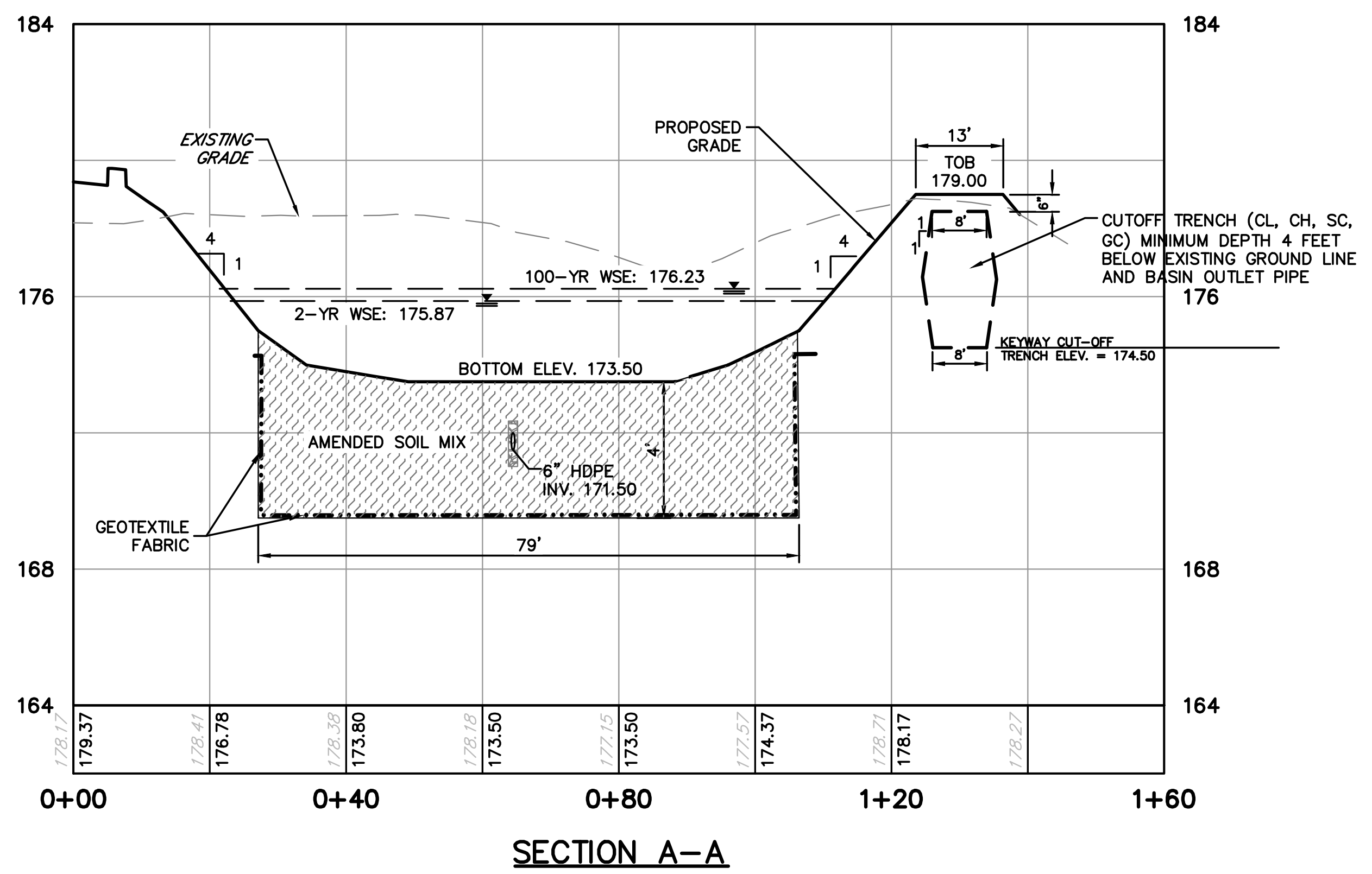
## BMP 2 BERM CL

STATION 0+00 TO 5+00
SCALE: HORZ 1"=20'
VERT 1"=4'



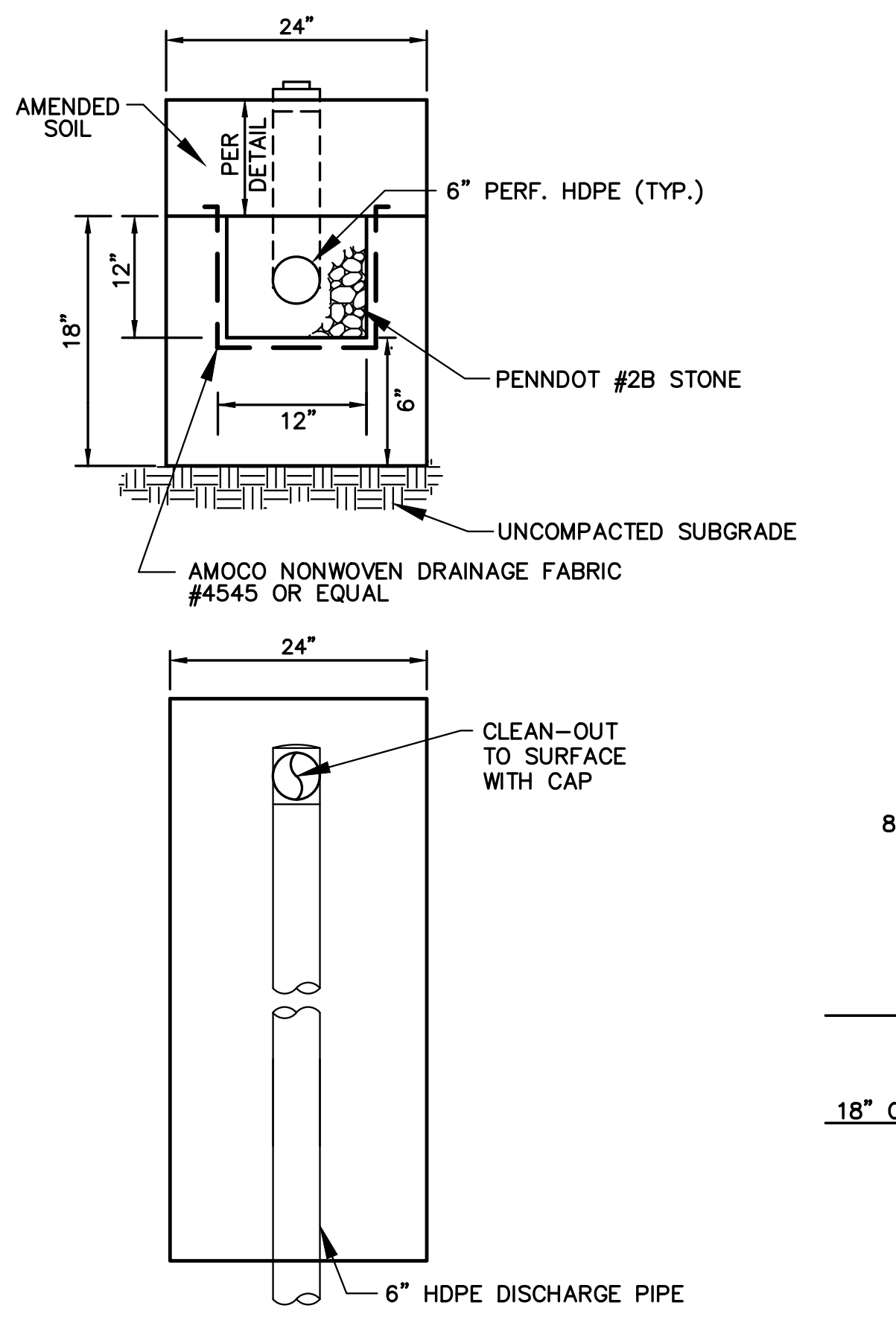
## BMP 2 OUTLET

STATION 0+00 TO 2+60
SCALE: HORZ 1"=20'
VERT 1"=4'



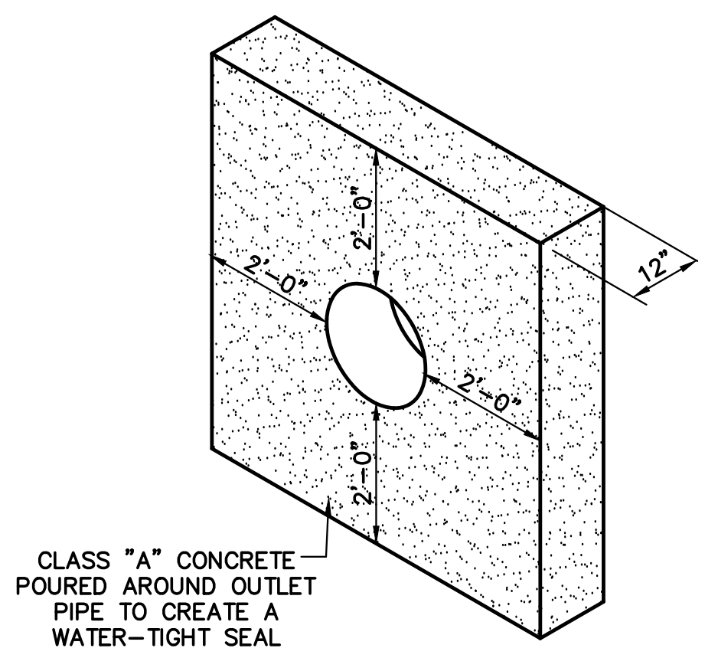
## SECTION A-A

STATION 0+00 TO 1+60
SCALE: HORZ 1"=20'
VERT 1"=4'



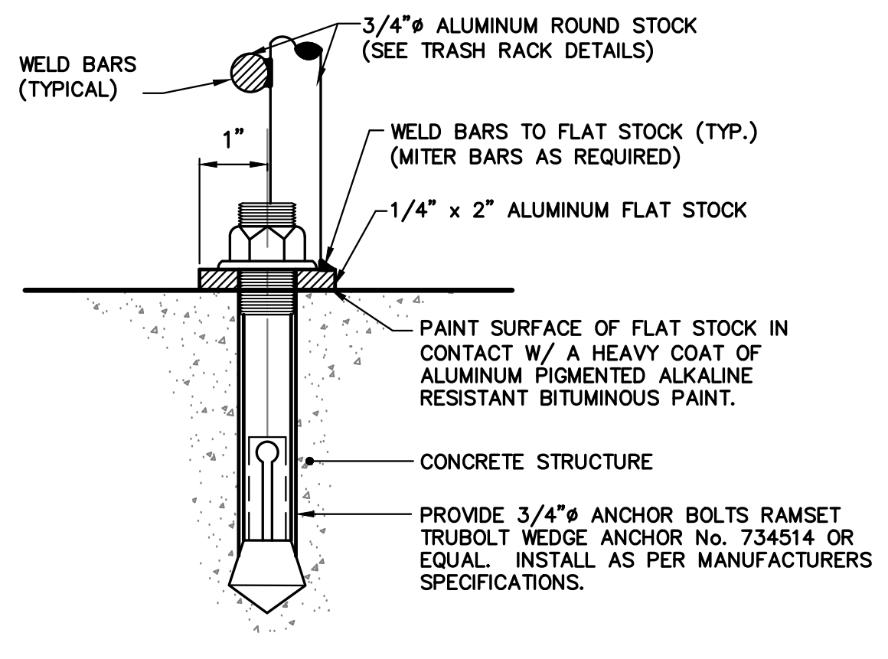
## UNDERDRAIN DETAIL

NOT TO SCALE


2'-0"
2'-0"
2'-0"
2'-0"
12"
CLASS "A" CONCRETE POURED AROUND OUTLET PIPE TO CREATE A WATER-TIGHT SEAL

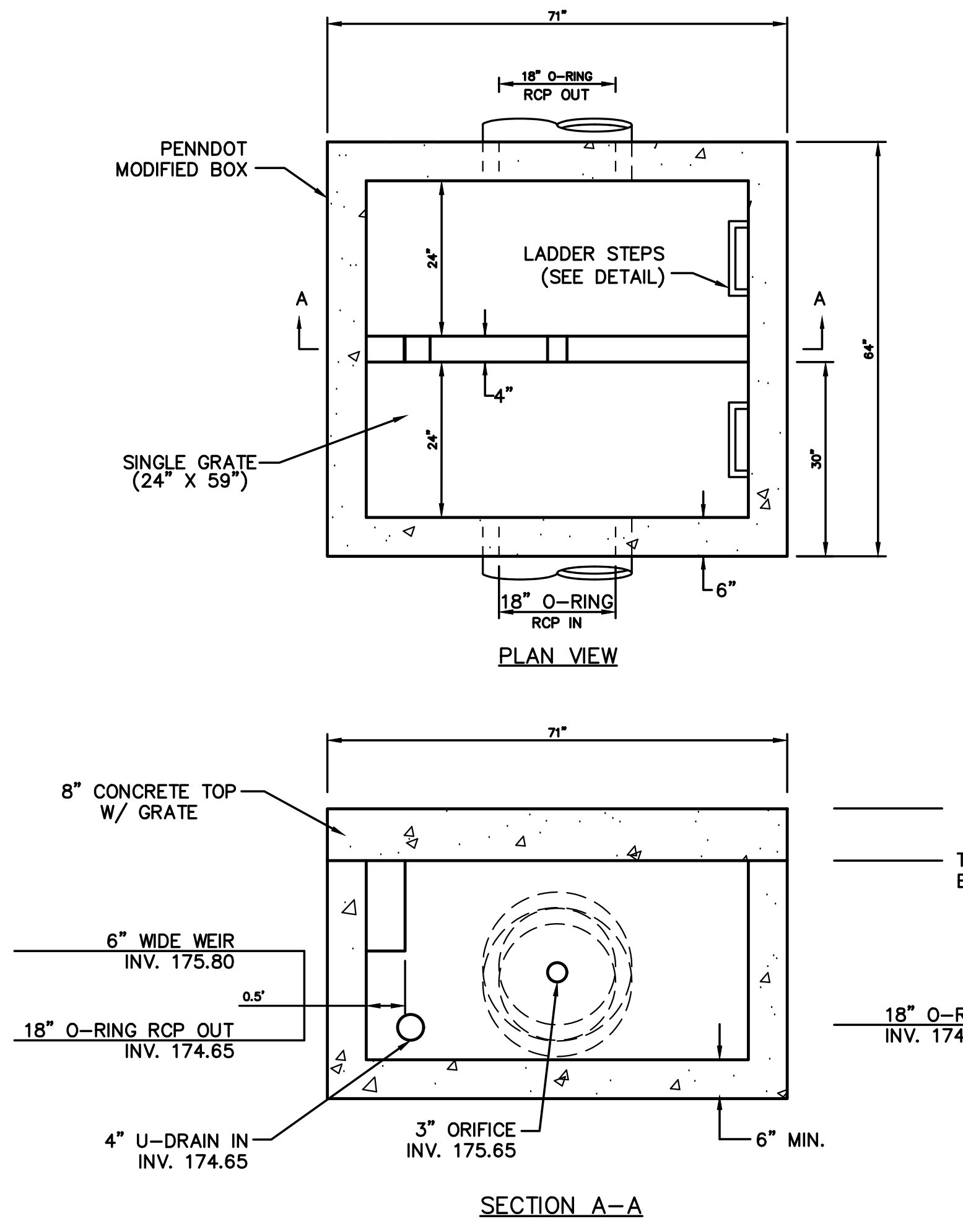
## ANTI-SEEP COLLAR DETAIL

NOT TO SCALE


WELD BARS (TYPICAL)
3/4"ø ALUMINUM ROUND STOCK (SEE TRASH RACK DETAILS)
1"
WELD BARS TO FLAT STOCK (TYP.) (MITER BARS AS REQUIRED)
1/4" x 2" ALUMINUM FLAT STOCK
PAINT SURFACE OF FLAT STOCK IN CONTACT W/ A HEAVY COAT OF ALUMINUM PIGMENTED ALKALINE RESISTANT BITUMINOUS PAINT.
CONCRETE STRUCTURE
PROVIDE 3/4"ø ANCHOR BOLTS RAMSET TRUBOLT WEDGE ANCHOR No. 734514 OR EQUAL. INSTALL AS PER MANUFACTURERS SPECIFICATIONS.

## ANCHOR BOLT DETAIL FOR TRASH RACK/SAFETY GRATE

NOT TO SCALE



PLAN VIEW

SECTION A-A

## BMP 2 OUTLET STRUCTURE

SCALE 1"=2'

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CORPORATE HEADQUARTERS
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**NOT APPROVED FOR CONSTRUCTION**

RONALD G. MONKRES II
ENGINEER
603164-E

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# *661 PENN STREET REDEVELOPMENT*

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## BMP 2 DETAILS

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.:
2500866

APPLICANTS INFO:
661 PENN STREET, LLC
209 PENN'S TRAIL
NEWTOWN, PA 18940
215-968-0600

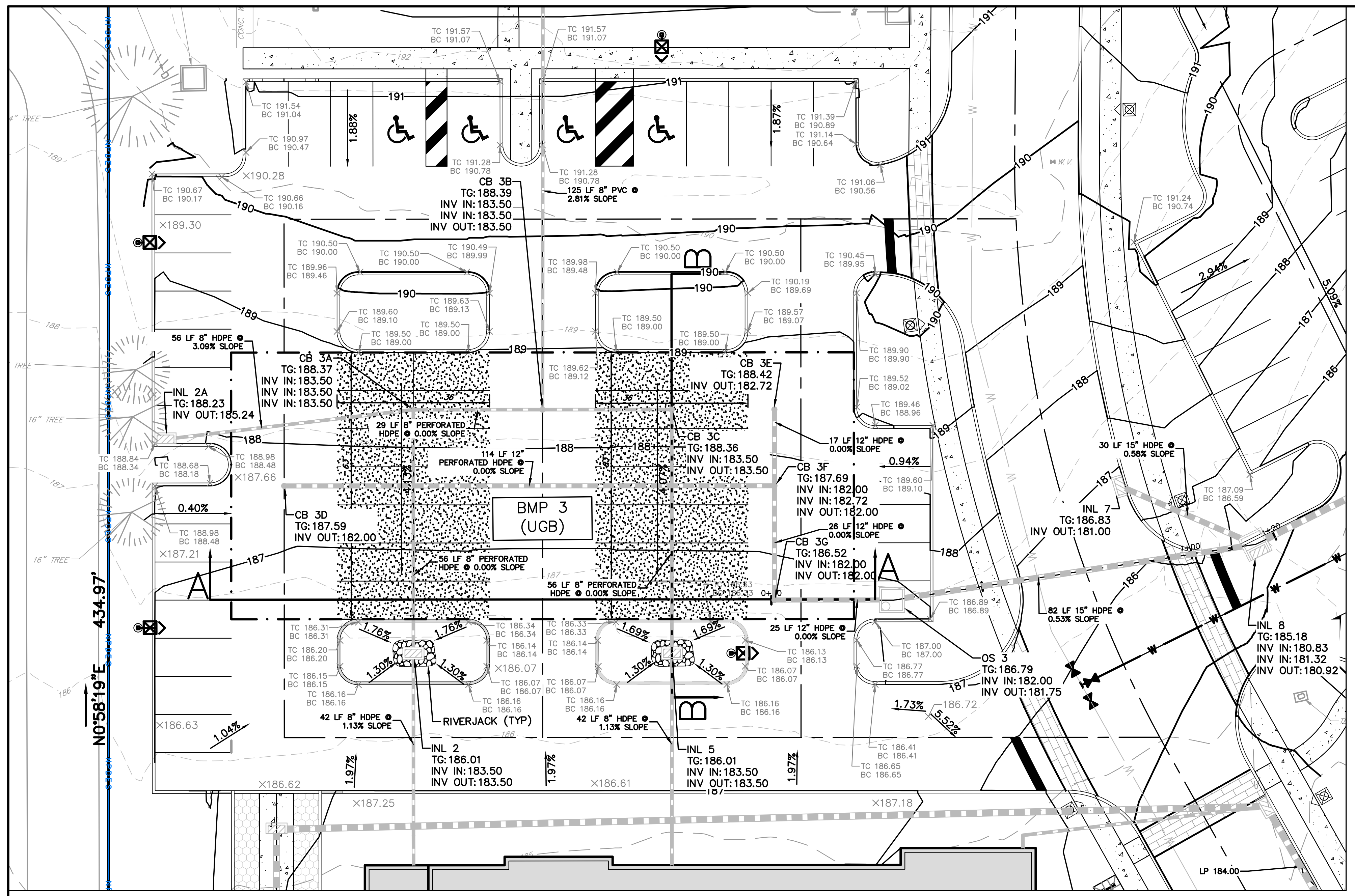
MUNICIPAL FILE No.:

TAX MAP PARCEL No.:
29-010-119-001 & 29-010-037

| | |
|---|---|
| TOTAL AREA:<br>15.75 AC. | TOTAL LOTS:<br>2 |
| DATE:<br>01/21/26 | SCALE:<br>AS NOTED |
| DRAWN BY:<br>GY/BH | CHECKED BY:<br>RGM |

SHEET NO.:
27 OF 33

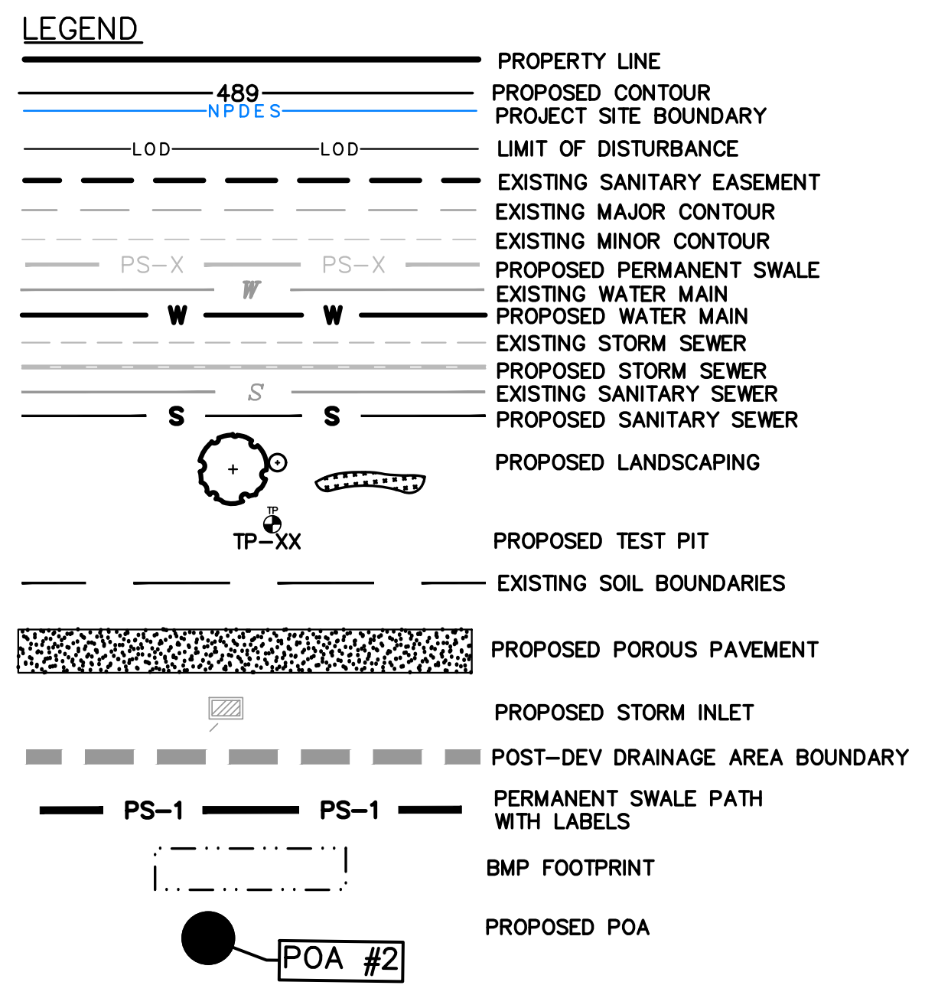
C:\Autodesk Docs\ACCDocs\Gilmore and Associates\2500866_661_Penn_Street_Re-Dev\Project Files\2025\2500866\DESIGN\CAD\Prod_Dwgs\2500866_BMP 2 Detail Sheet.dwg Layout: BMP 2 DETAILS Plotted By: rmonkres, on Wed Jul 29, 2026 at 8:30am

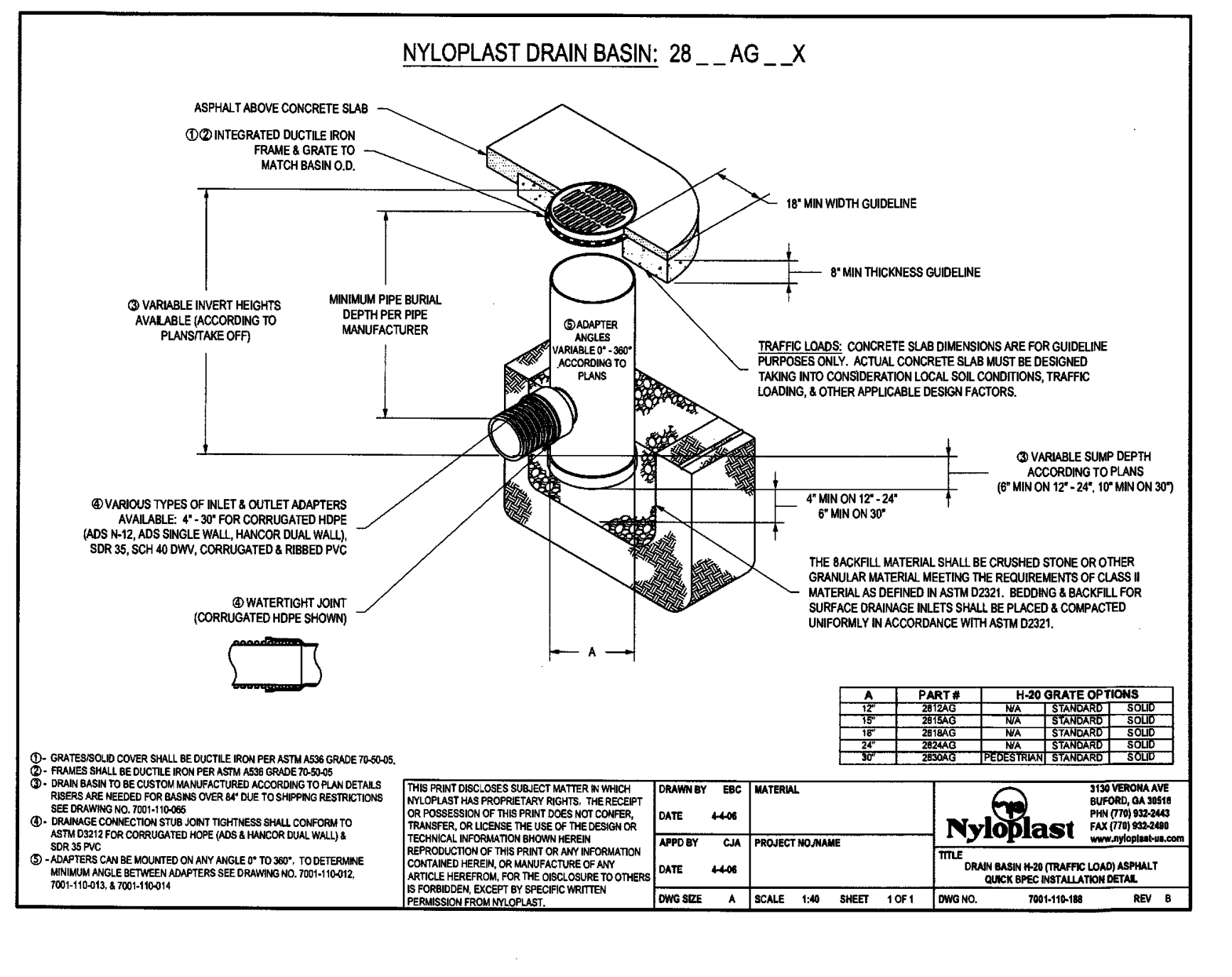


## PLAN VIEW: UNDERGROUND BASIN BMP 3

SCALE: 1" = 20'

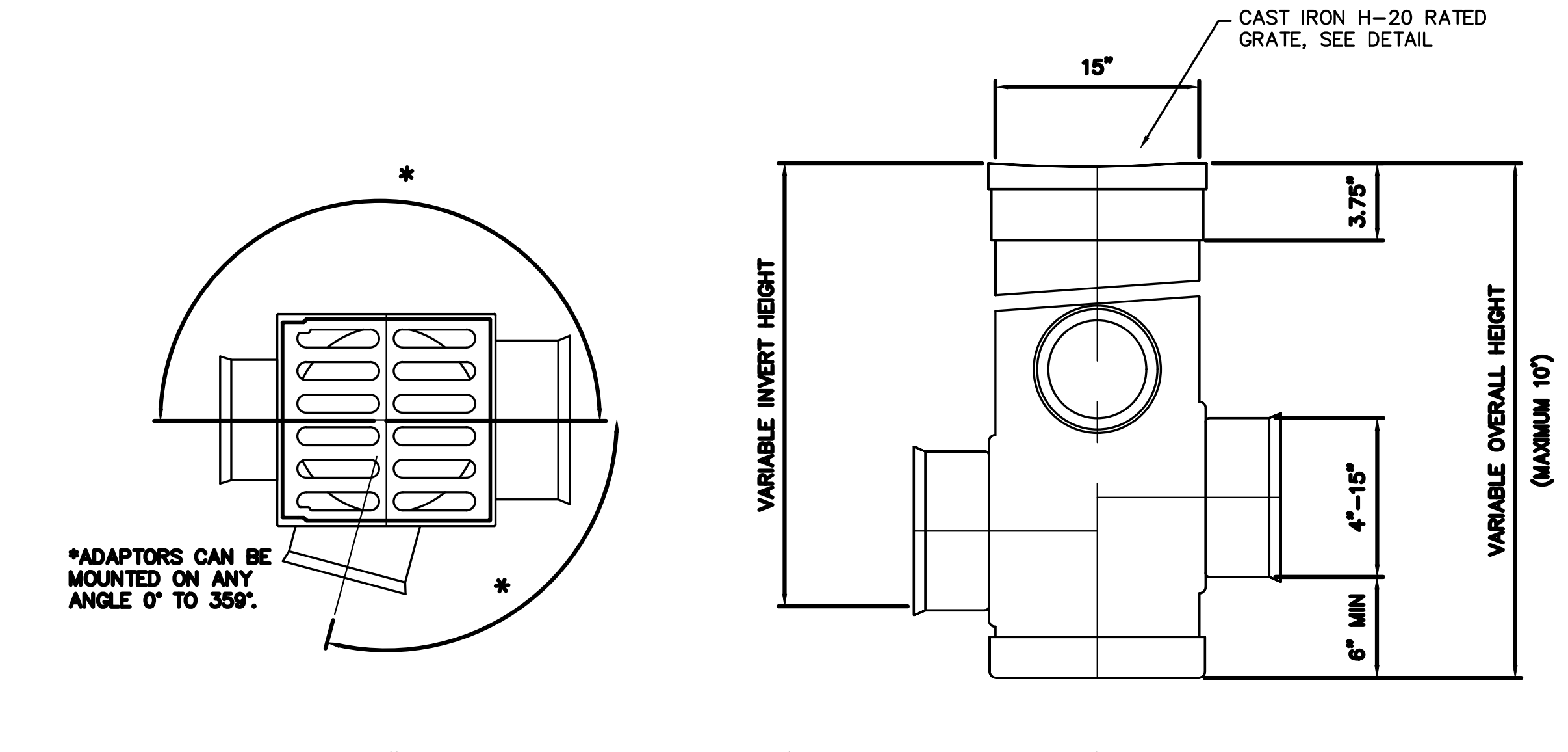
## LEGEND





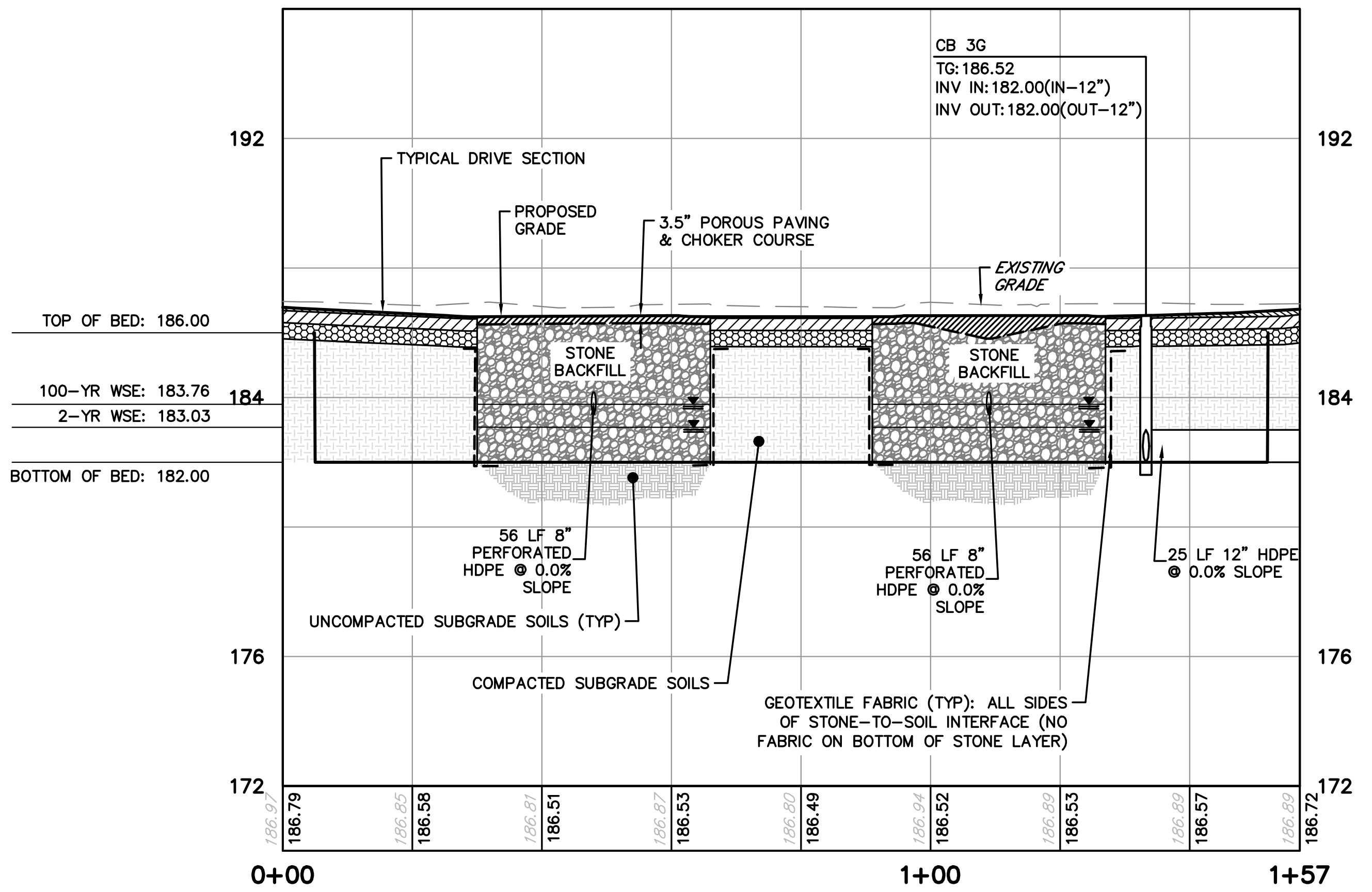
## CATCH BASIN COLLAR DETAIL (FOR TRAFFIC LOADING)

NOT TO SCALE


15"
CAST IRON H-20 RATED GRATE, SEE DETAIL
3.75"
VARIABLE INVERT HEIGHT
VARIABLE OVERALL HEIGHT (MAXIMUM 10')
4"-15"
6" MIN
*ADAPTORS CAN BE MOUNTED ON ANY ANGLE 0° TO 350°.

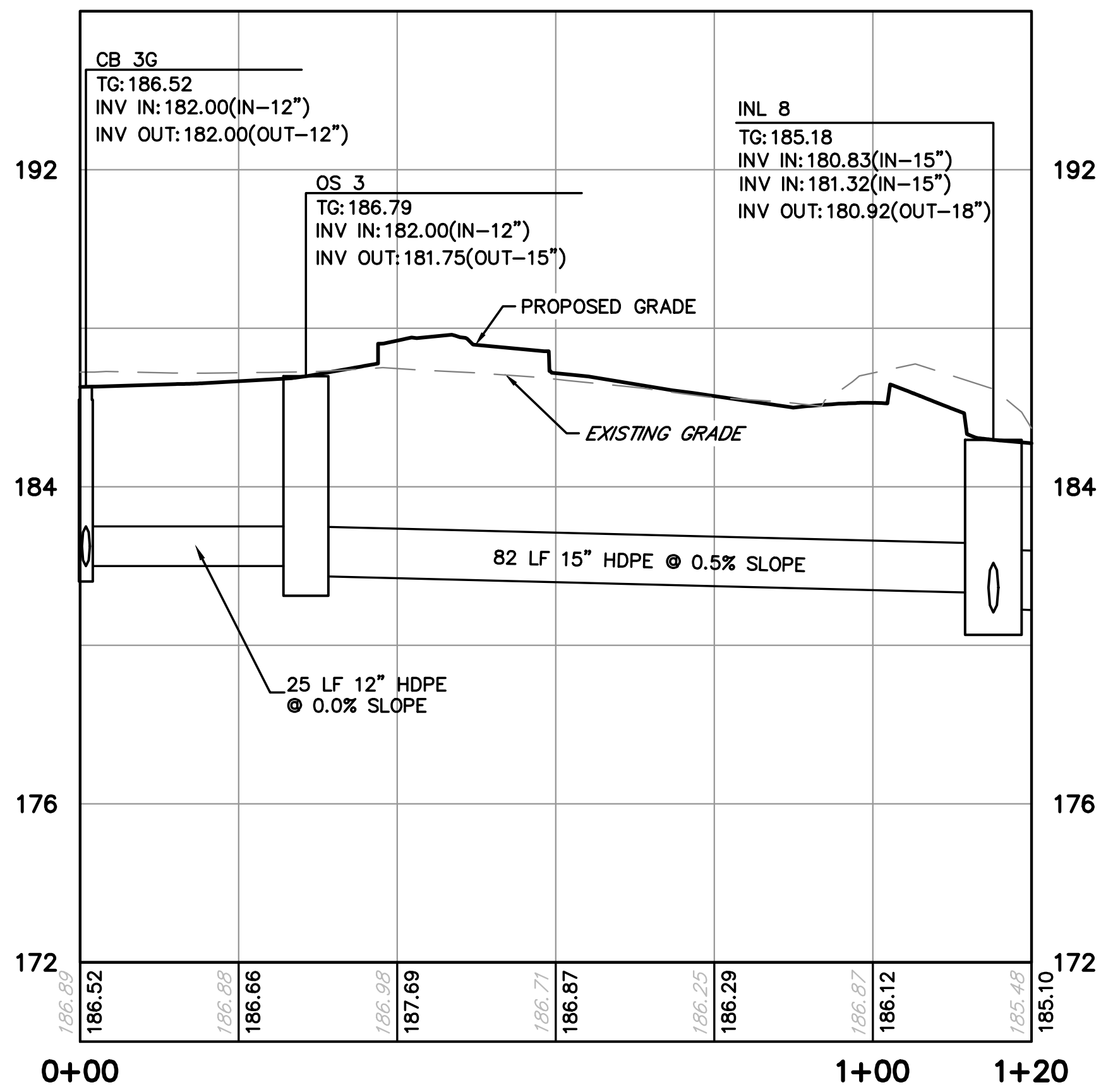
## 15" DRAIN BASIN BY ADS (CATCH BASIN, C.B.)

NOT TO SCALE



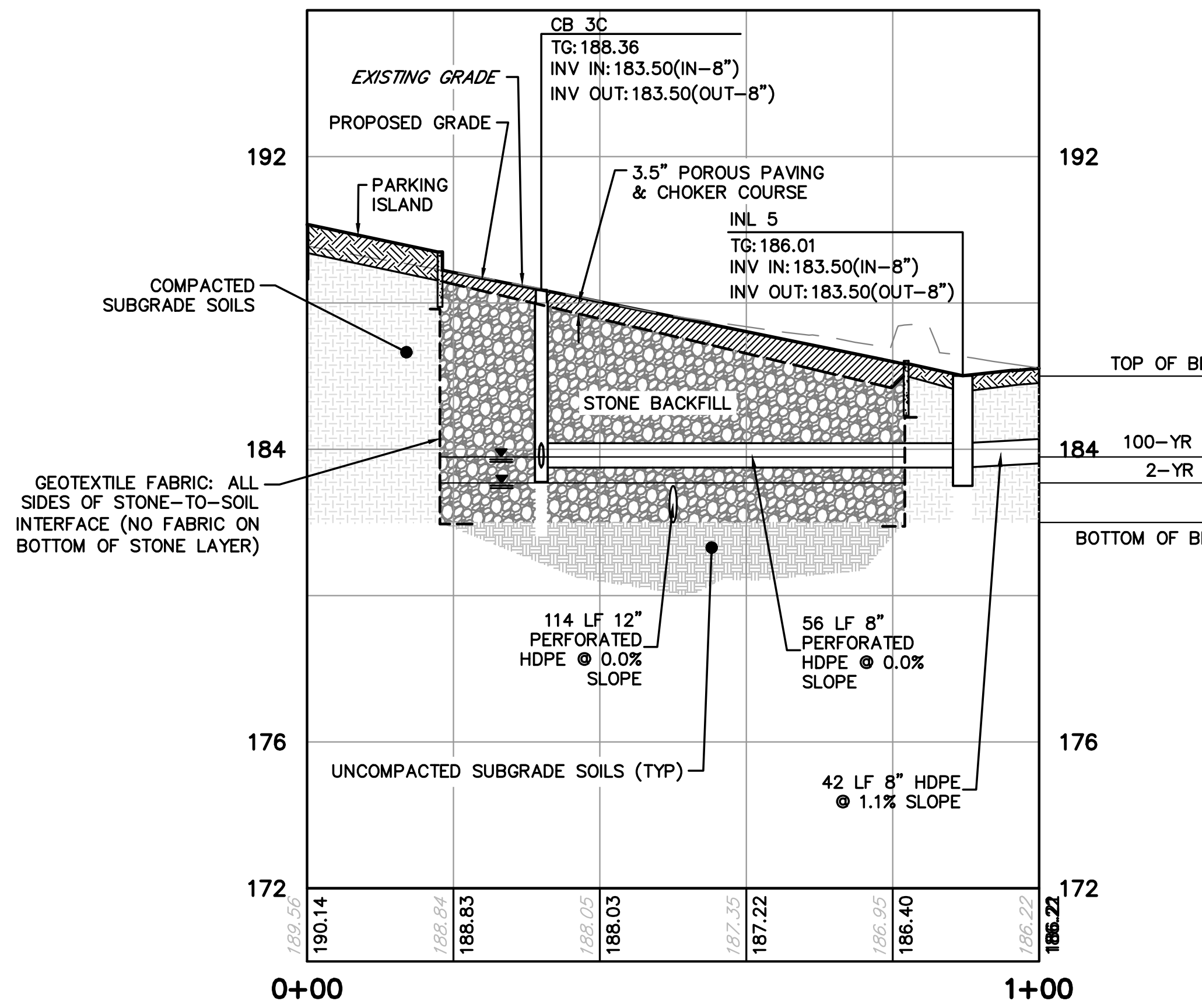
## BMP 3 SECTION A-A

STATION 0+00 TO 1+57
SCALE: HORZ 1"=20'
VERT 1"=4'



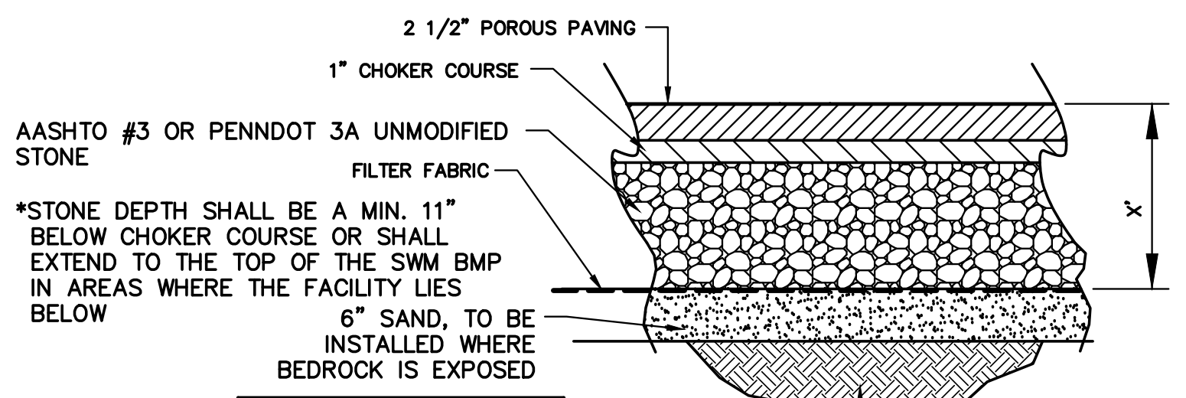
## BMP 3 OUTLET

STATION 0+00 TO 1+20
SCALE: HORZ 1"=20'
VERT 1"=4'



## BMP 3 SECTION B-B

STATION 0+00 TO 1+00
SCALE: HORZ 1"=20'
VERT 1"=4'


2 1/2" POROUS PAVING
1" CHOKER COURSE
AASHTO #3 OR PENNDOT 3A UNMODIFIED STONE
FILTER FABRIC
*STONE DEPTH SHALL BE A MIN. 11" BELOW CHOKER COURSE OR SHALL EXTEND TO THE TOP OF THE SWM BMP IN AREAS WHERE THE FACILITY LIES BELOW
6" SAND, TO BE INSTALLED WHERE BEDROCK IS EXPOSED
X*
UNCOMPACTED SUBGRADE

| POROUS PAVING AGGREGATE | |
|---|---|
| SIEVE SIZE | % PASSING |
| 1/2 " | 100 – 85 |
| 3/8 " | 75 – 50 |
| # 4 | 40 – 20 |
| # 8 | 10 – 5 |
| # 200 | 4 – 2 |

SPECIFICATION BASED ON F.H.A. GUIDELINES FOR OPEN-GRADED FRICTION COURSE.

## POROUS PAVING DETAIL

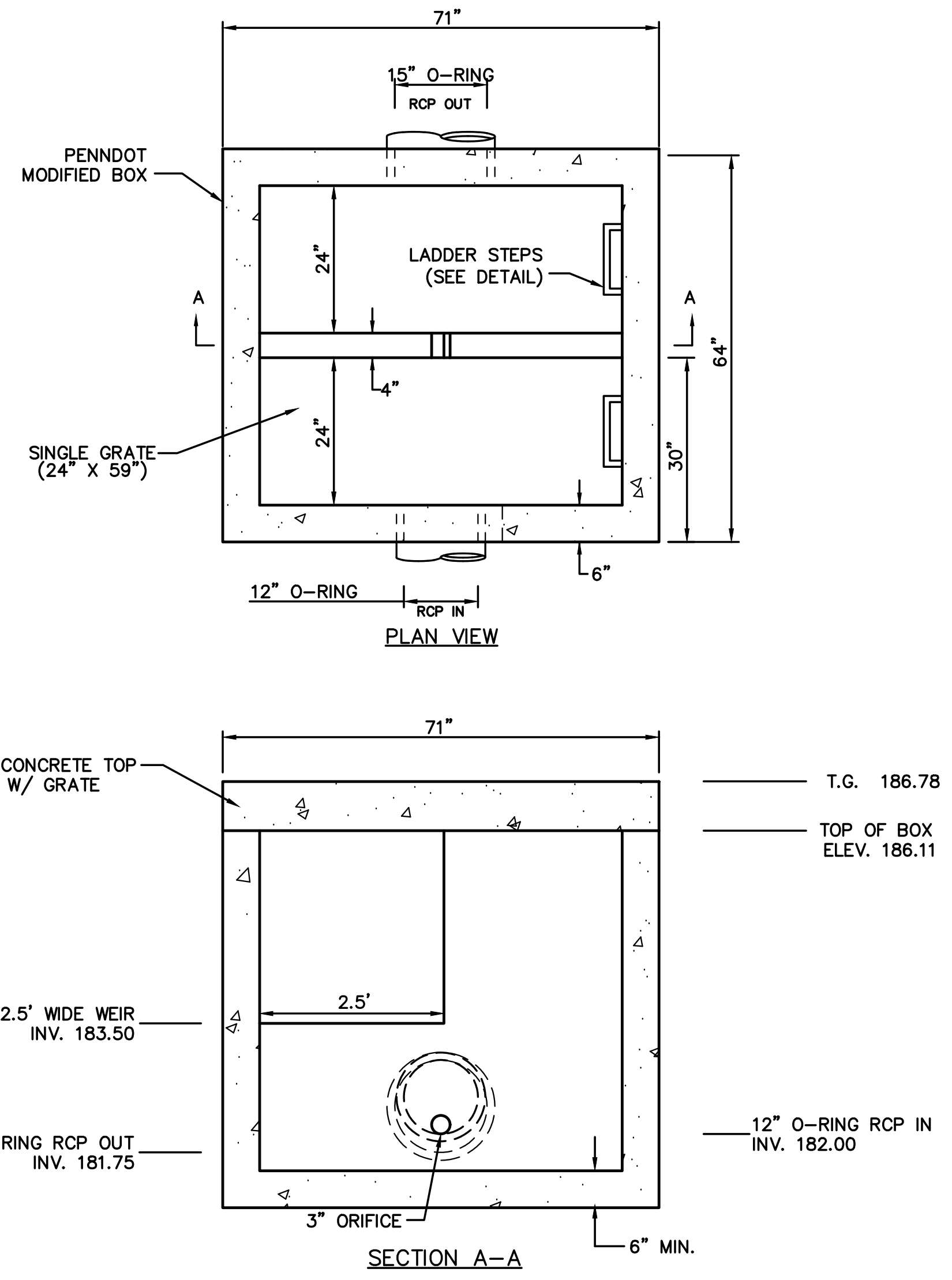
NOT TO SCALE

## POROUS PAVING MAINTENANCE NOTES:

1. DO NOT APPLY SAND OR CINDERS DURING SNOW REMOVAL OPERATIONS.
2. POROUS PAVING AREAS SHALL BE VACUUM SWEPT SEMIANNUALLY.
3. DO NOT PAVE WITH CONVENTIONAL PAVEMENT.
4. DO NOT PRESSURE WASH SURFACES.
5. DO NOT PLACE MULCH OR DIRT ON POROUS PAVING.
6. ANY DAMAGE TO THE POROUS PAVEMENT RESULTING FROM DELIVERY TRUCKS OR OTHER DELIVERY VEHICLES SHALL BE REPAIRED.
7. ANY NEW POROUS PAVING OR REPAIRS TO THE POROUS PAVING SHALL BE PERFORMED USING POROUS PAVING MATERIALS OF EQUIVALENT ABSORPTION RATES.

## POROUS PAVING INSTALLATION NOTES:

1. THE INSTALLATION OF POROUS PAVING IS TO BE INCORPORATED WITH THE INSTALLATION OF BMP 3.
2. BASE MATERIAL SHALL BE WASHED AASHTO #3 STONE OR PENNDOT 3A UNMODIFIED, FREE OF SLATE, SHALE, CLAY, SILT, AND/OR VEGETATION.
3. BASE MATERIAL SHALL BE WRAPPED IN FILTER FABRIC TO MAINTAIN SEPARATION FROM SUBGRADE MATERIAL AND CABC UNDER STANDARD PAVEMENT.
4. STONE BASE SHALL BE COMPACTED WITH STATIC ROLLER ONLY. USE OF A VIBRATORY ROLLER IS NOT PERMITTED.
5. CHOKER COURSE SHALL BE AASHTO #57 STONE.
6. ASPHALT BINDER SHALL BE MODIFIED WITH AN ELASTOMERIC POLYMER TO PRODUCE A BINDER MEETING THE REQUIREMENTS OF PG 76-22. POROUS PAVING SHALL CONSIST THE SPECIFIED AGGREGATE WITH 5.75 – 6.0% ASPHALT BINDER BY WEIGHT.
7. POROUS PAVING SHALL BE PLACED IN A SINGLE LIFT OF 2 1/2" FINAL THICKNESS. PAVING MATERIAL SHALL BE COMPACTED BY NO MORE THAN 2 PASSES OF A 10-TON ROLLER.
8. AFTER COMPACTION, POROUS PAVING AREAS SHALL REMAIN UNDISTURBED FOR A MINIMUM OF 24 HOURS.
9. AT NO TIME SHALL POROUS PAVING AREAS BE USED BY CONSTRUCTION VEHICHLES OR FOR THE STORAGE OF MATERIALS.



## BMP 3 OUTLET STRUCTURE

SCALE 1"=2'

**GILMORE & ASSOCIATES, INC.**
**ENGINEERING & CONSULTING SERVICES**
CORPORATE HEADQUARTERS
65 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901 • (215) 345-4330 • www.gilmore-assoc.com

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**NOT APPROVED FOR CONSTRUCTION**

RONALD G. MONKRES II
ENGINEER 603164-E

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# *661 PENN STREET REDEVELOPMENT*

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## BMP 3 DETAILS

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.:
2500866

APPLICANTS INFO:
661 PENN STREET, LLC
209 PENN'S TRAIL
NEWTOWN, PA 18940
215-968-0600

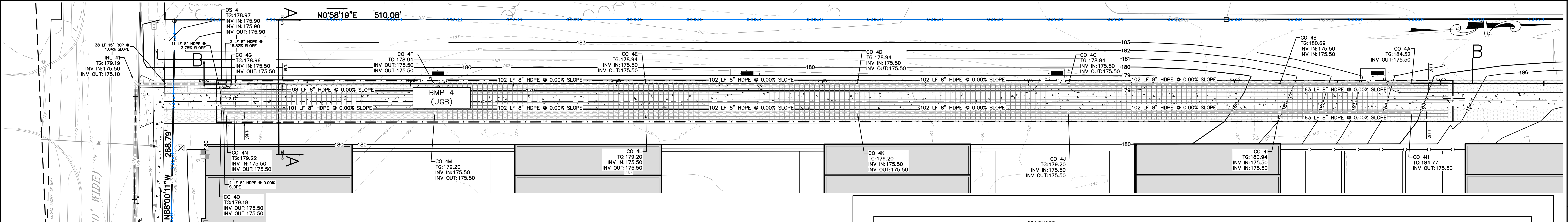
MUNICIPAL FILE No.:

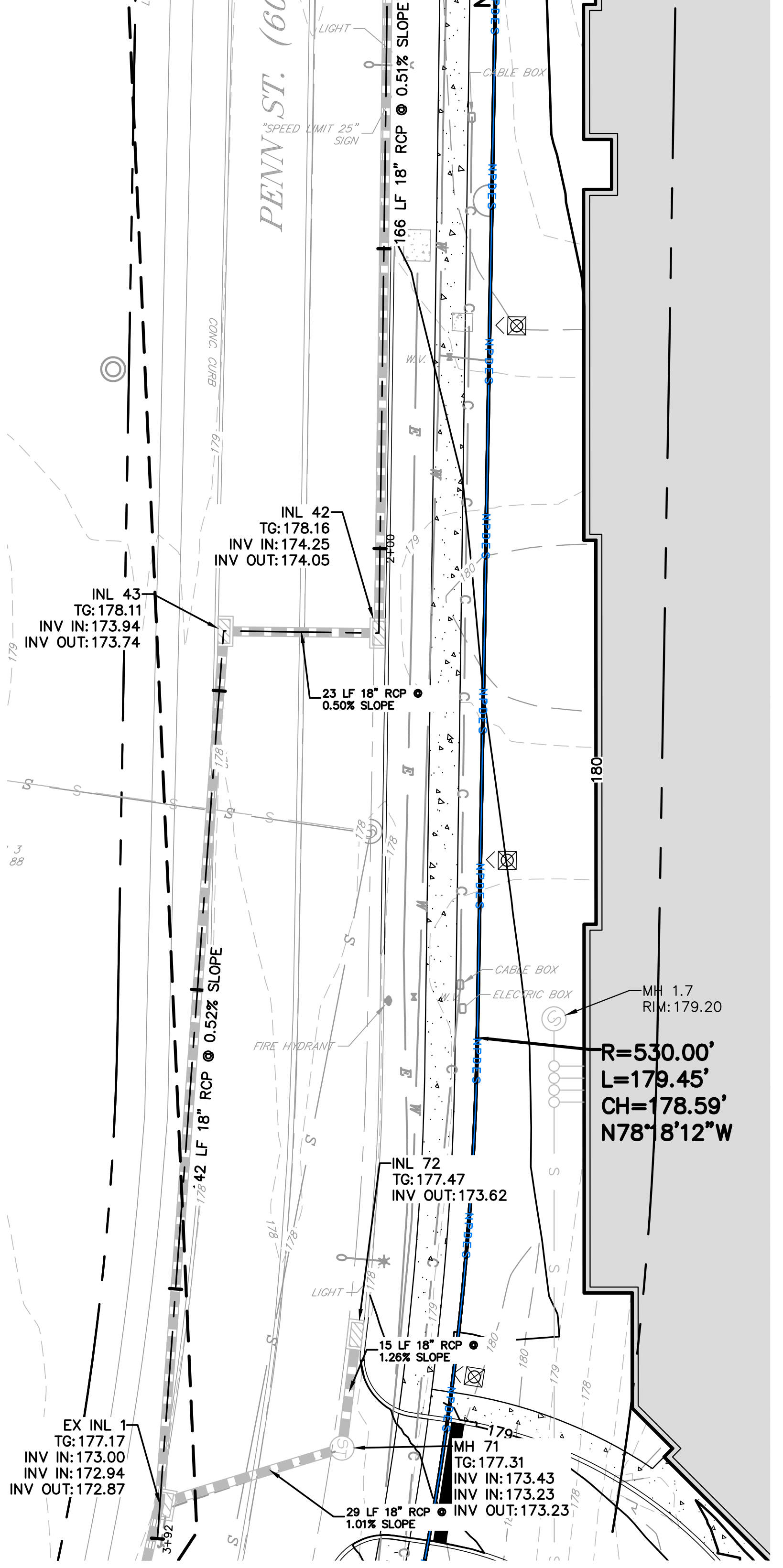
TAX MAP PARCEL No.:
29-010-119-001 & 29-010-037

| TOTAL AREA: | TOTAL LOTS: |
|---|---|
| 15.75 AC. | 2 |
| DATE: | SCALE: |
| 01/21/26 | AS NOTED |
| DRAWN BY: | CHECKED BY: |
| GY/BH | RGM |

SHEET NO.:
28 OF 33

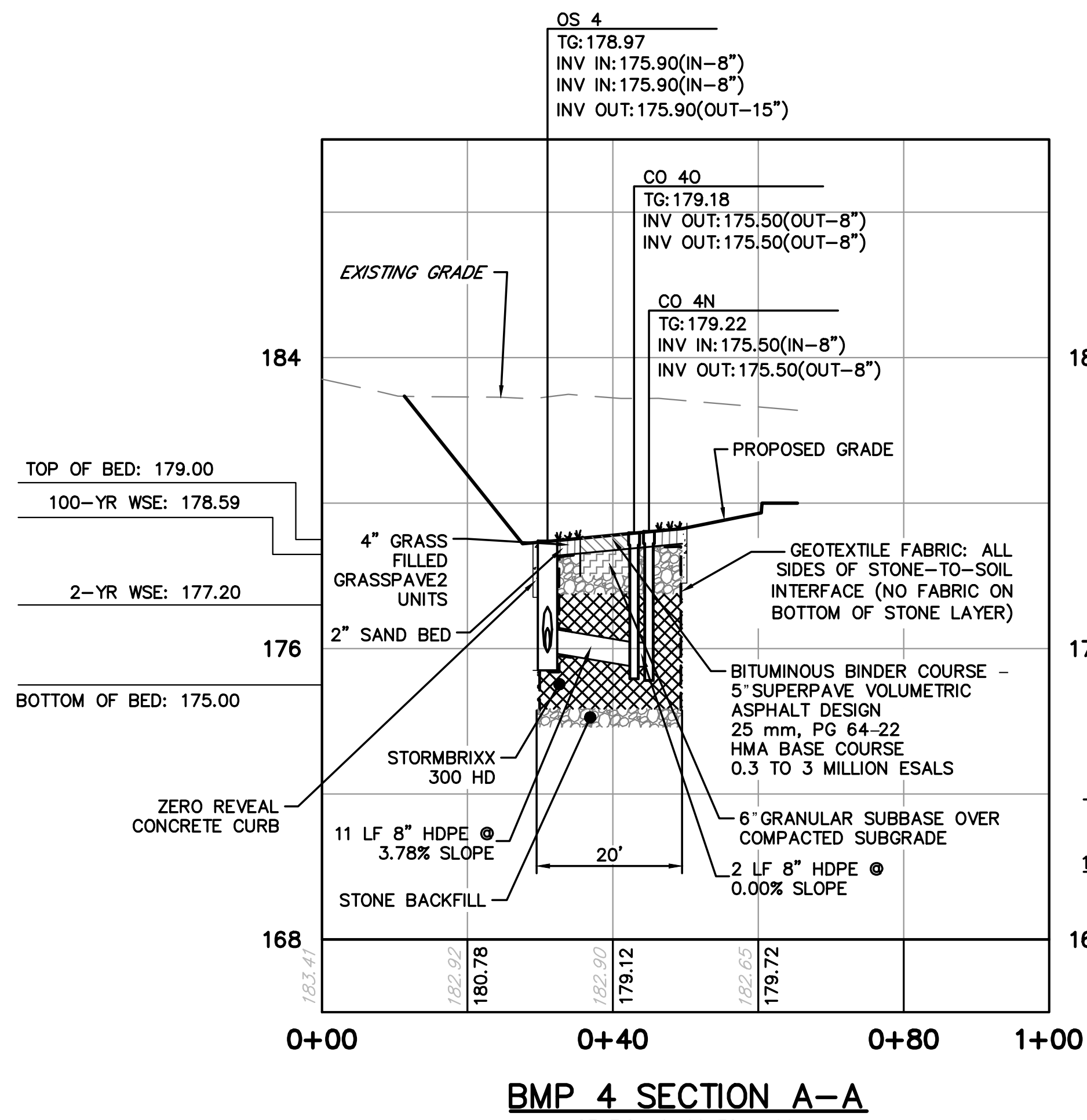
C:\Autodesk Docs\ACCDocs\Gilmore and Associates\2500866_661_Penn_Street_Re-Dev\Project Files\2025\2500866\DESIGN\CAD\Prod_Dwgs\2500866_BMP 3 Detail Sheet.dwg Layout: BMP 3 DETAILS Plotted By: rmonkres on Wed Jul 29, 2026 at 8:31am





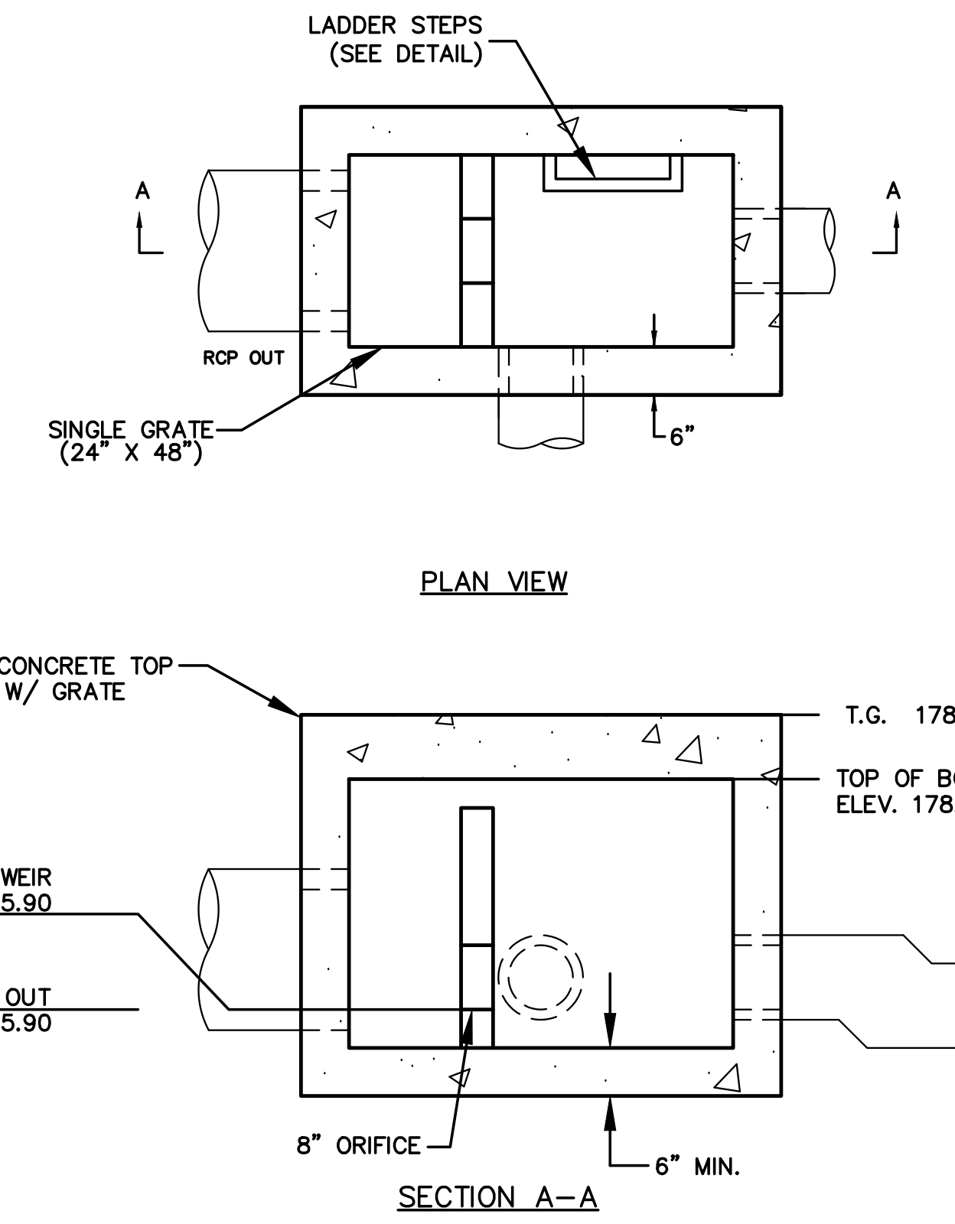
## PLAN VIEW: UNDERGROUND BASIN BMP 4

SCALE: 1" = 20'



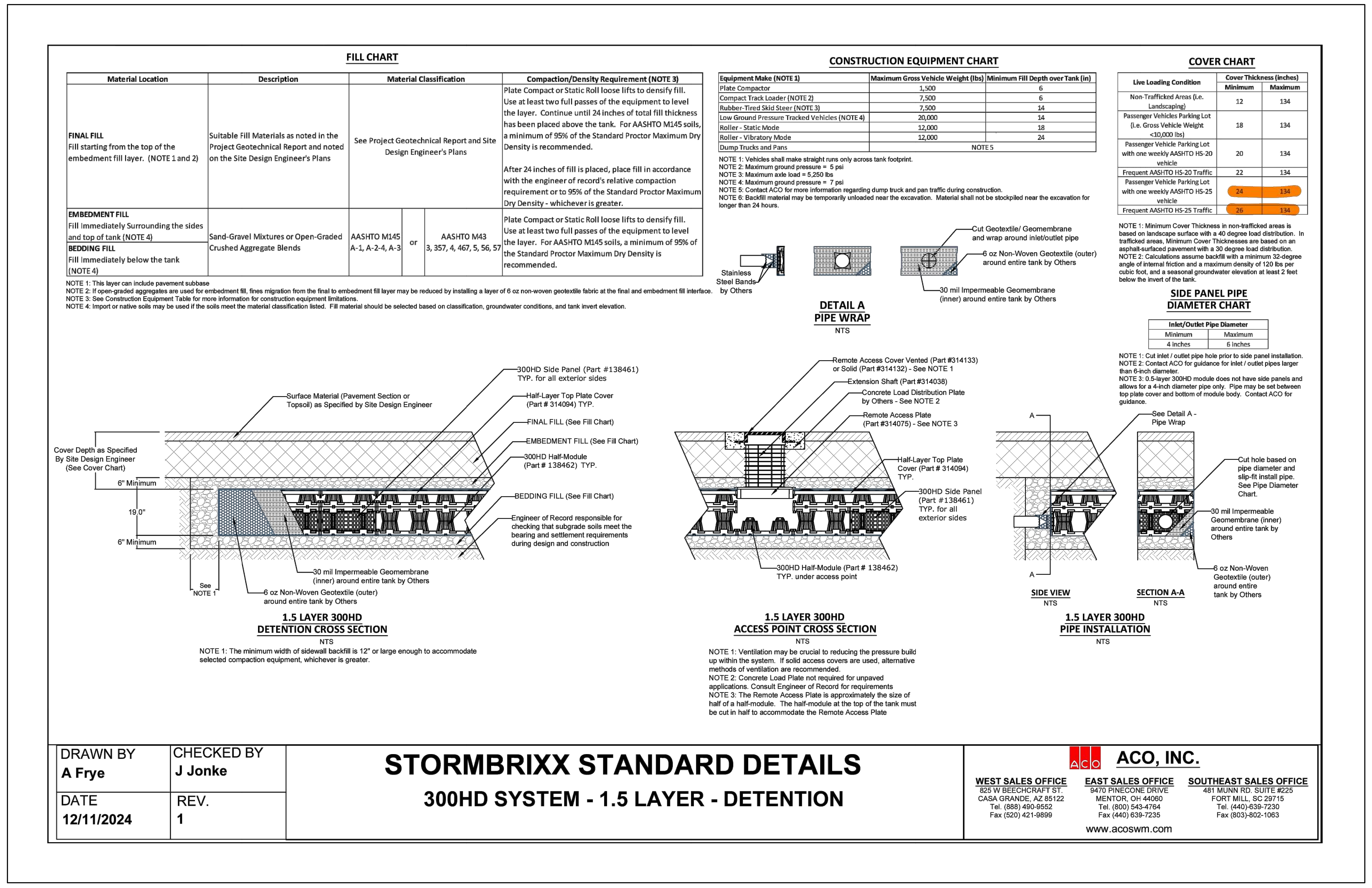
## BMP 4 SECTION A-A

STATION 0+00 TO 1+00
SCALE: HORZ 1"=20'
VERT 1"=4'



## BMP 4 OUTLET STRUCTURE

SCALE 1"=2'



**FILL CHART**

| Material Location | Description | Material Classification | | | Compaction/Density Requirement (NOTE 3) |
|---|---|---|---|---|---|
| **FINAL FILL**<br>Fill starting from the top of the embedment fill layer. (NOTE 1 and 2) | Suitable Fill Materials as noted in the Project Geotechnical Report and noted on the Site Design Engineer's Plans | See Project Geotechnical Report and Site Design Engineer's Plans | | | Plate Compact or Static Roll loose lifts to densify fill. Use at least two full passes of the equipment to level the layer. Continue until 24 inches of total fill thickness has been placed above the tank. For AASHTO M145 soils, a minimum of 95% of the Standard Proctor Maximum Dry Density is recommended.<br>After 24 inches of fill is placed, place fill in accordance with the engineer of record's relative compaction requirement or to 95% of the Standard Proctor Maximum Dry Density - whichever is greater. |
| **EMBEDMENT FILL**<br>Fill Immediately Surrounding the sides and top of tank (NOTE 4)<br>**BEDDING FILL**<br>Fill Immediately below the tank (NOTE 4) | Sand-Gravel Mixtures or Open-Graded Crushed Aggregate Blends | AASHTO M145<br>A-1, A-2-4, A-3 | or | AASHTO M43<br>3, 357, 4, 467, 5, 56, 57 | Plate Compact or Static Roll loose lifts to densify fill. Use at least two full passes of the equipment to level the layer. For AASHTO M145 soils, a minimum of 95% of the Standard Proctor Maximum Dry Density is recommended. |

NOTE 1: This layer can include pavement subbase
NOTE 2: If open-graded aggregates are used for embedment fill, fines migration from the final to embedment fill layer may be reduced by installing a layer of 6 oz non-woven geotextile fabric at the final and embedment fill interface.
NOTE 3: See Construction Equipment Table for more information for construction equipment limitations.
NOTE 4: Import or native soils may be used if the soils meet the material classification listed. Fill material should be selected based on classification, groundwater conditions, and tank invert elevation.

**CONSTRUCTION EQUIPMENT CHART**

| Equipment Make (NOTE 1) | Maximum Gross Vehicle Weight (lbs) | Minimum Fill Depth over Tank (in) |
|---|---|---|
| Plate Compactor | 1,500 | 6 |
| Compact Track Loader (NOTE 2) | 7,500 | 6 |
| Rubber-Tired Skid Steer (NOTE 3) | 7,500 | 14 |
| Low Ground Pressure Tracked Vehicles (NOTE 4) | 20,000 | 14 |
| Roller - Static Mode | 12,000 | 18 |
| Roller - Vibratory Mode | 12,000 | 24 |
| Dump Trucks and Pans | NOTE 5 | |

NOTE 1: Vehicles shall make straight runs only across tank footprint.
NOTE 2: Maximum ground pressure = 5 psi
NOTE 3: Maximum axle load = 5,250 lbs
NOTE 4: Maximum ground pressure = 7 psi
NOTE 5: Contact ACO for more information regarding dump truck and pan traffic during construction.
NOTE 6: Backfill material may be temporarily unloaded near the excavation. Material shall not be stockpiled near the excavation for longer than 24 hours.

**COVER CHART**

| Live Loading Condition | Cover Thickness (inches) | |
|---|---|---|
| | Minimum | Maximum |
| Non-Trafficked Areas (i.e. Landscaping) | 12 | 134 |
| Passenger Vehicles Parking Lot (i.e. Gross Vehicle Weight <10,000 lbs) | 18 | 134 |
| Passenger Vehicle Parking Lot with one weekly AASHTO HS-20 vehicle | 20 | 134 |
| Frequent AASHTO HS-20 Traffic | 22 | 134 |
| Passenger Vehicle Parking Lot with one weekly AASHTO HS-25 vehicle | 24 | 134 |
| Frequent AASHTO HS-25 Traffic | 26 | 134 |

NOTE 1: Minimum Cover Thickness in non-trafficked areas is based on landscape surface with a 40 degree load distribution. In trafficked areas, Minimum Cover Thicknesses are based on an asphalt-surfaced pavement with a 30 degree load distribution.
NOTE 2: Calculations assume backfill with a minimum 32-degree angle of internal friction and a maximum density of 120 lbs per cubic foot, and a seasonal groundwater elevation at least 2 feet below the invert of the tank.

**SIDE PANEL PIPE DIAMETER CHART**

| Inlet/Outlet Pipe Diameter | |
|---|---|
| Minimum | Maximum |
| 4 inches | 6 inches |

NOTE 1: Cut inlet / outlet pipe hole prior to side panel installation.
NOTE 2: Contact ACO for guidance for inlet / outlet pipes larger than 6-inch diameter.
NOTE 3: 0.5-layer 300HD module does not have side panels and allows for a 4-inch diameter pipe only. Pipe may be set between top plate cover and bottom of module body. Contact ACO for guidance.

Stainless Steel Bands by Others
Cut Geotextile/ Geomembrane and wrap around inlet/outlet pipe
6 oz Non-Woven Geotextile (outer) around entire tank by Others
30 mil Impermeable Geomembrane (inner) around entire tank by Others

**DETAIL A PIPE WRAP**
NTS

Surface Material (Pavement Section or Topsoil) as Specified by Site Design Engineer
300HD Side Panel (Part #138461) TYP. for all exterior sides
Half-Layer Top Plate Cover (Part # 314094) TYP.
FINAL FILL (See Fill Chart)
EMBEDMENT FILL (See Fill Chart)
300HD Half-Module (Part # 138462) TYP.
BEDDING FILL (See Fill Chart)
Engineer of Record responsible for checking that subgrade soils meet the bearing and settlement requirements during design and construction
Cover Depth as Specified By Site Design Engineer (See Cover Chart)
6" Minimum
19.0"
6" Minimum
See NOTE 1
30 mil Impermeable Geomembrane (inner) around entire tank by Others
6 oz Non-Woven Geotextile (outer) around entire tank by Others

**1.5 LAYER 300HD DETENTION CROSS SECTION**
NTS

NOTE 1: The minimum width of sidewall backfill is 12" or large enough to accommodate selected compaction equipment, whichever is greater.

Remote Access Cover Vented (Part #314133) or Solid (Part #314132) - See NOTE 1
Extension Shaft (Part #314038)
Concrete Load Distribution Plate by Others - See NOTE 2
Remote Access Plate (Part #314075) - See NOTE 3
Half-Layer Top Plate Cover (Part # 314094) TYP.
300HD Side Panel (Part #138461) TYP. for all exterior sides
300HD Half-Module (Part # 138462) TYP. under access point

**1.5 LAYER 300HD ACCESS POINT CROSS SECTION**
NTS

NOTE 1: Ventilation may be crucial to reducing the pressure build up within the system. If solid access covers are used, alternative methods of ventilation are recommended.
NOTE 2: Concrete Load Plate not required for unpaved applications. Consult Engineer of Record for requirements
NOTE 3: The Remote Access Plate is approximately the size of half of a half-module. The half-module at the top of the tank must be cut in half to accommodate the Remote Access Plate

A
See Detail A - Pipe Wrap
Cut hole based on pipe diameter and slip-fit install pipe. See Pipe Diameter Chart.
30 mil Impermeable Geomembrane (inner) around entire tank by Others
6 oz Non-Woven Geotextile (outer) around entire tank by Others
A

**SIDE VIEW** NTS

**SECTION A-A** NTS

**1.5 LAYER 300HD PIPE INSTALLATION**
NTS

| DRAWN BY | CHECKED BY |
|---|---|
| A Frye | J Jonke |
| DATE | REV. |
| 12/11/2024 | 1 |

**STORMBRIXX STANDARD DETAILS**
**300HD SYSTEM - 1.5 LAYER - DETENTION**

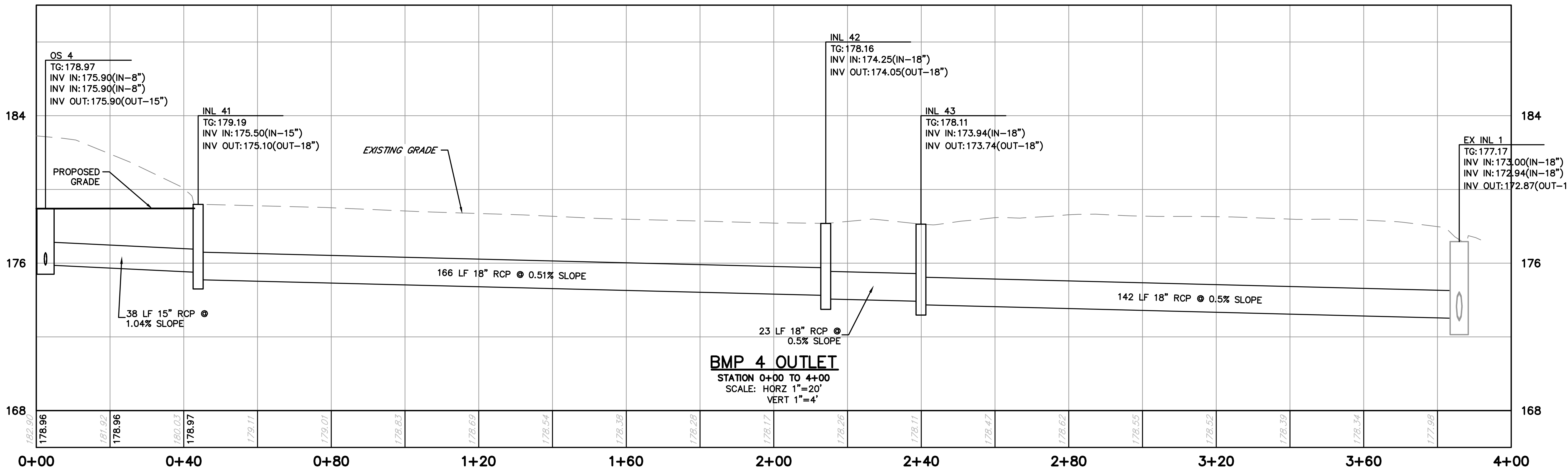
ACO, INC.

WEST SALES OFFICE
825 W BEECHCRAFT ST.
CASA GRANDE, AZ 85122
Tel. (888) 490-9552
Fax (520) 421-9899

EAST SALES OFFICE
9470 PINECONE DRIVE
MENTOR, OH 44060
Tel. (800) 543-4764
Fax (440) 639-7235

SOUTHEAST SALES OFFICE
481 MUNN RD. SUITE #225
FORT MILL, SC 29715
Tel. (440)-639-7230
Fax (803)-802-1063

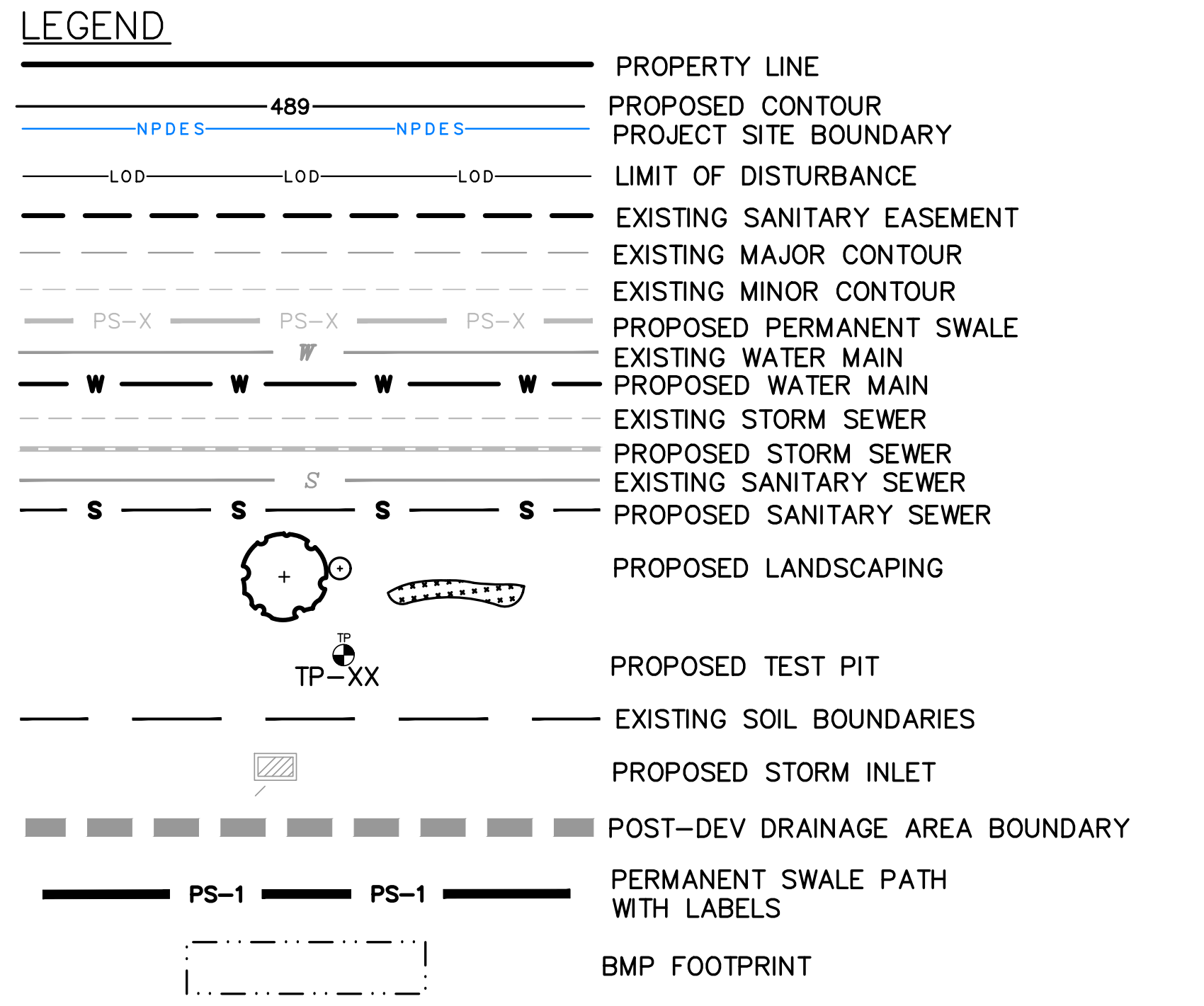
www.acoswm.com



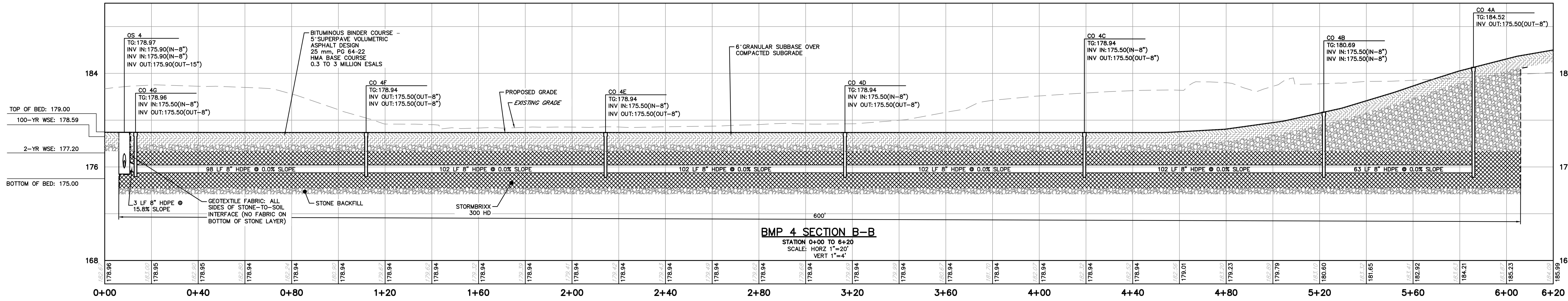
## BMP 4 OUTLET

STATION 0+00 TO 4+00
SCALE: HORZ 1"=20'
VERT 1"=4'

## LEGEND



PROPERTY LINE
PROPOSED CONTOUR
PROJECT SITE BOUNDARY
LIMIT OF DISTURBANCE
EXISTING SANITARY EASEMENT
EXISTING MAJOR CONTOUR
EXISTING MINOR CONTOUR
PROPOSED PERMANENT SWALE
EXISTING WATER MAIN
PROPOSED WATER MAIN
EXISTING STORM SEWER
PROPOSED STORM SEWER
EXISTING SANITARY SEWER
PROPOSED SANITARY SEWER
PROPOSED LANDSCAPING
PROPOSED TEST PIT
EXISTING SOIL BOUNDARIES
PROPOSED STORM INLET
POST-DEV DRAINAGE AREA BOUNDARY
PERMANENT SWALE PATH WITH LABELS
BMP FOOTPRINT



## BMP 4 SECTION B-B

STATION 0+00 TO 6+20
SCALE: HORZ 1"=20'
VERT 1"=4'

C:\Autodesk Docs\ACCDocs\Gilmore and Associates\2500866_661_Penn_Street_Re-Dev\Project Files\2025\2500866\DESIGN\CAD\Prod_Dwgs\2500866_BMP 4 Detail Sheet.dwg Layout: BMP 4 DETAILS Plotted By: rmonkres on Wed Jul 29, 2026 at 8:31am

**GILMORE & ASSOCIATES, INC.**
**ENGINEERING & CONSULTING SERVICES**
CORPORATE HEADQUARTERS
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**NOT APPROVED FOR CONSTRUCTION**

RONALD G. MONKRES II
603164-E

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# *661 PENN STREET REDEVELOPMENT*

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## BMP 4 DETAILS

**GILMORE & ASSOCIATES, INC.**
**ENGINEERING & CONSULTING SERVICES**

PROJECT No.:
2500866

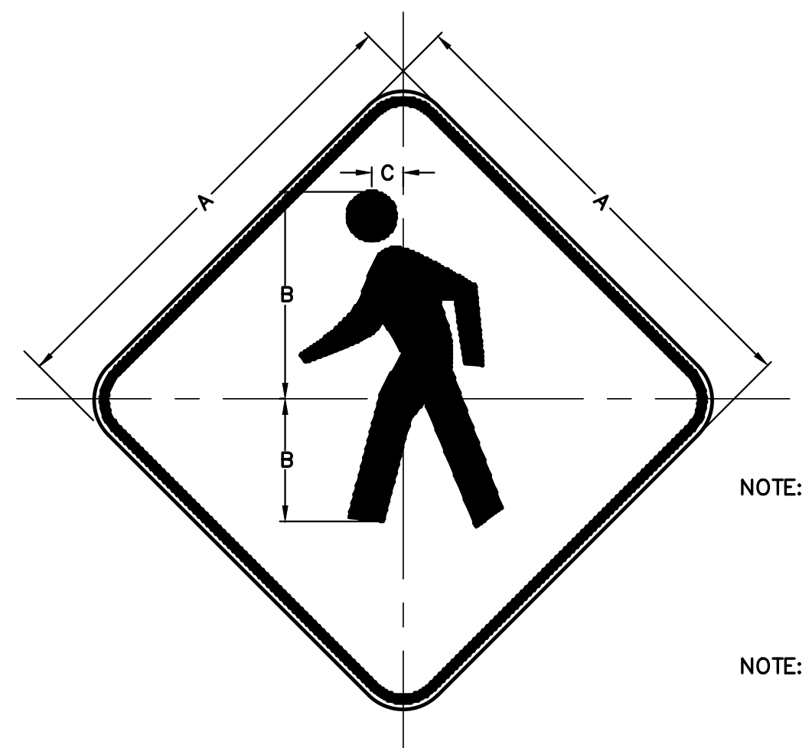
APPLICANTS INFO:
661 PENN STREET, LLC
209 PENN'S TRAIL
NEWTOWN, PA 18940
215-968-0600

MUNICIPAL FILE No.:

TAX MAP PARCEL No.:
29-010-119-001 & 29-010-037

| TOTAL AREA: | TOTAL LOTS: |
|---|---|
| 15.75 AC. | 2 |
| DATE: | SCALE: |
| 01/21/26 | AS NOTED |
| DRAWN BY: | CHECKED BY: |
| GY/BH | RGM |

SHEET NO.:
29 OF 33

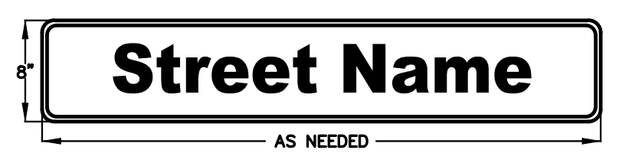


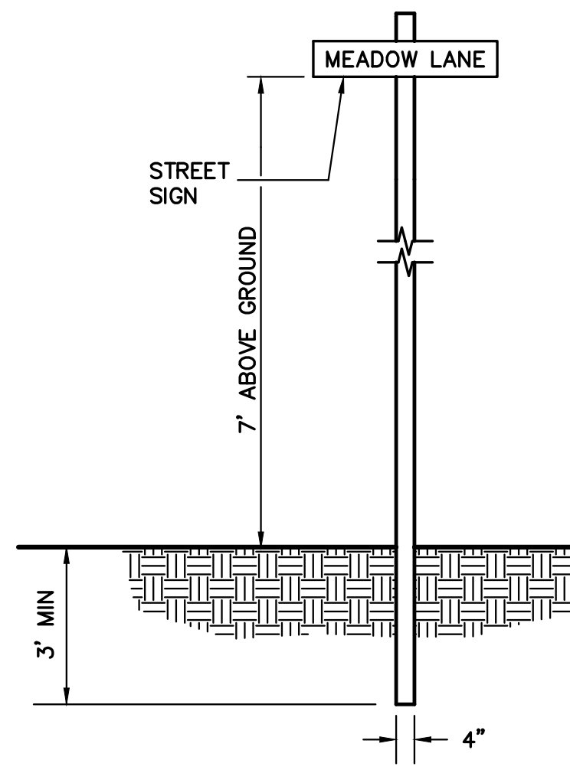
| DIMENSIONS – mm (IN) | | | | | |
|---|---|---|---|---|---|
| SIGN SIZE A x A | B | C | MARGIN | BORDER | BLANK STD. |
| 750 x 750 (30" x 30") | 340 (13.6) | 38 (1.5) | 10 (0.4) | 20 (0.8) | B3-750 (B3-30) |

COLOR:
SYMBOL AND BORDER: BLACK (NON-REFLECTORIZED)
BACKGROUND: YELLOW OR FLUORESCENT YELLOW GREEN (REFLECTORIZED)

## PEDESTRIAN AREA SIGN (W11-2)
NOT TO SCALE

FONT: CLEARVIEWONE CD-45
6" UPPERCASE
4" LOWERCASE

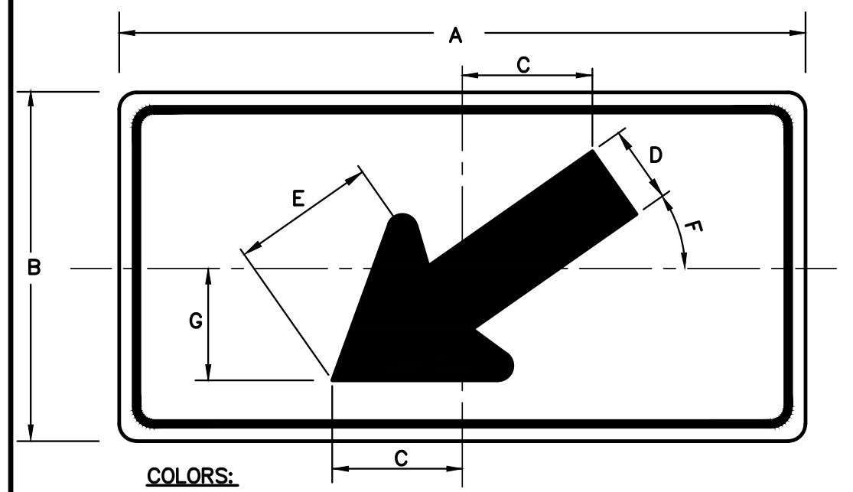




NOTE: STREET SIGNS TO BE WOOD (1"x 8") PAINTED GREEN. THE STREET NAME SHALL BE PAINTED REFLECTIVE WHITE WITH 6" HIGH BLOCK LETTERS, 4" HIGH FOR SUFFIX, AS APPROVED BY THE BOROUGH. POSTS WILL BE 10 L.F. MINIMUM, 4"x 4" PENTA TREATED, PLACED A MINIMUM OF 3' IN THE GROUND.

NOTE: LOCATION OF SIGN MUST NOT OBSCURE ANY POTENTIAL TRAFFIC HAZARD. AT ANY LOCATION WHERE THE TYPICAL PLACEMENT OF A SIGN INTERFERES WITH A SAFE SIGHT DISTANCE, AN ALTERNATIVE LOCATION MUST BE FOUND.

## STREET SIGN DETAIL
NOT TO SCALE

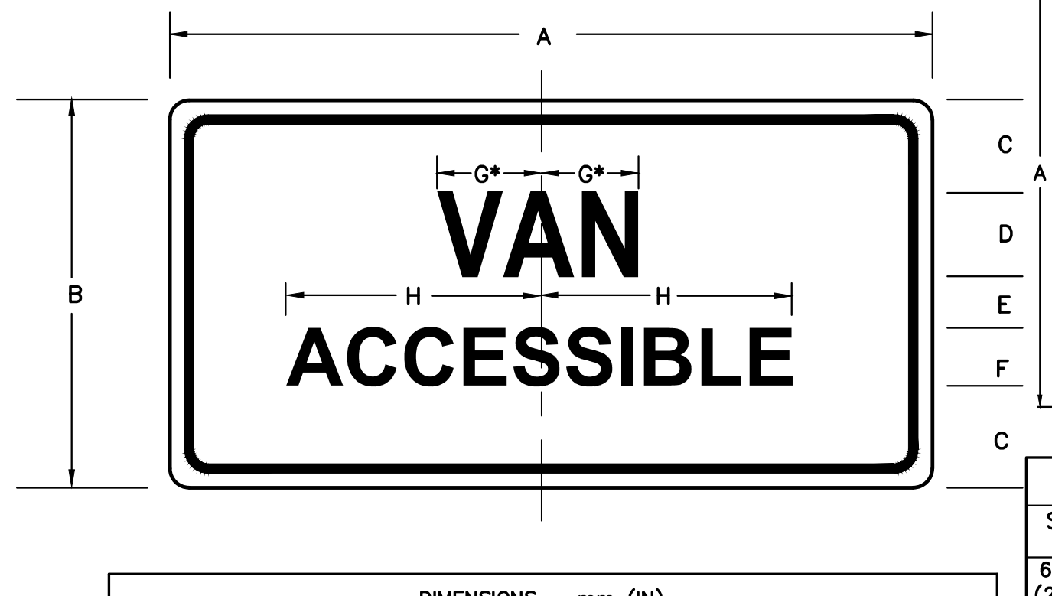


COLORS:
LEGEND & BORDER: BLACK (NON-REFLECTORIZED)
BACKGROUND: YELLOW OR FLUORESCENT YELLOW-GREEN (REFLECTORIZED)

| DIMENSIONS – mm (IN) | | | | | | | |
|---|---|---|---|---|---|---|---|
| SIGN SIZE A x B | C | D | E | F | MARGIN | BORDER | BLANK STD. |
| 600x300 (24"x12") | 50 (2) | 75D (3D) | 75* (3*) | 126 (5) | 10 (0.4) | 15 (0.6) | B5-600300 (B5-2412) |

*CHOOSE STANDARD ALPHABETS SERIES FOR BEST FIT.

## DIAGONAL DOWNWARD ARROW (W16-7P)
NOT TO SCALE

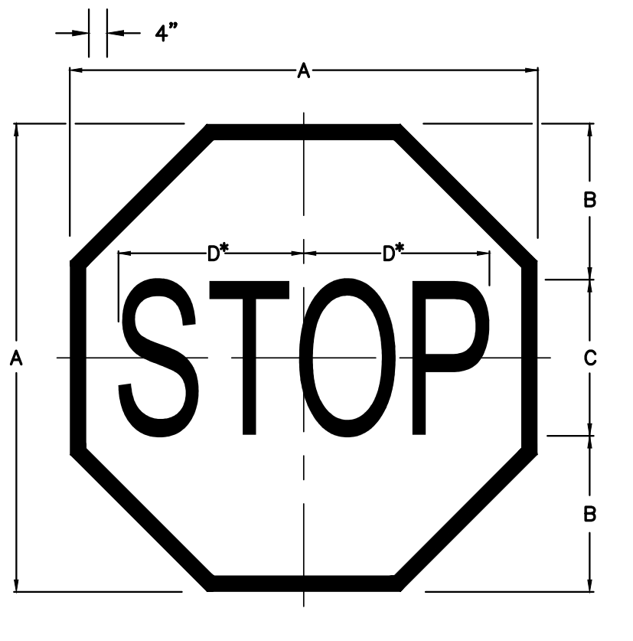


| DIMENSIONS – mm (IN) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SIGN SIZE A x B | C | D | E | F | G | H | MARGIN | BORDER | BLANK STD. |
| 300 x 150 (12" x 6") | 35 (1.4) | 40D (1.6D) | 15 (0.6) | 25D (1D) | 54 (2.1) | 102 (4) | 10 (0.4) | 10 (0.4) | B5-300150 (B5-1206) |

* INCREASE SPACING 50%

COLOR: LEGEND AND BORDER: WHITE (NON-REFLECTORIZED)
BACKGROUND: BLUE (REFLECTORIZED)

## VAN ACCESSIBLE SIGN (R7-8B)
NOT TO SCALE

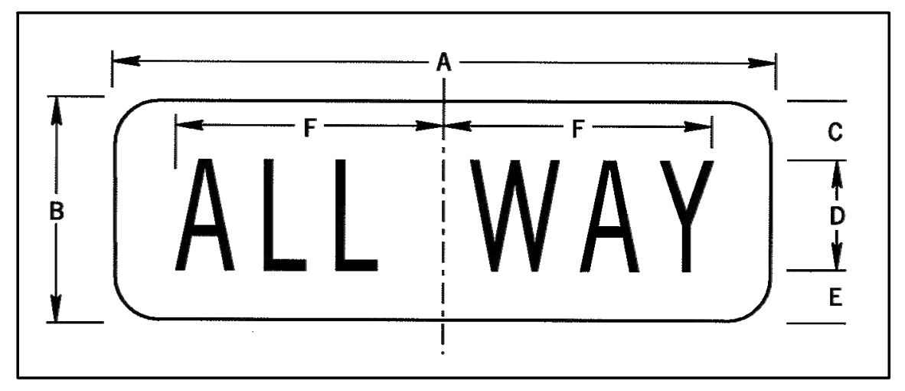


| DIMENSIONS – mm (IN) | | | | | |
|---|---|---|---|---|---|
| SIGN SIZE A x A | B | C | D | BORDER | BLANK STD. |
| 600 x 600 (24" x 24") | 200 (8) | 200C (8C) | 254 (10) | 15 (0.6) | B1-600 (B1-24) |
| 750 x 750 (30" x 30") | 250 (10) | 250C (10C) | 318 (12.6) | 20 (0.8) | B1-750 (B1-30) |
| 900 x 900 (36" x 36") | 300 (12) | 300C (12C) | 381 (15) | 20 (0.8) | B1-900 (B1-36) |
| 1200 x 1200 (48" x 48") | 400 (16) | 400C (16C) | 508 (20) | 30 (1.2) | B1-1200 (B1-48) |

* REDUCE SPACING 40%

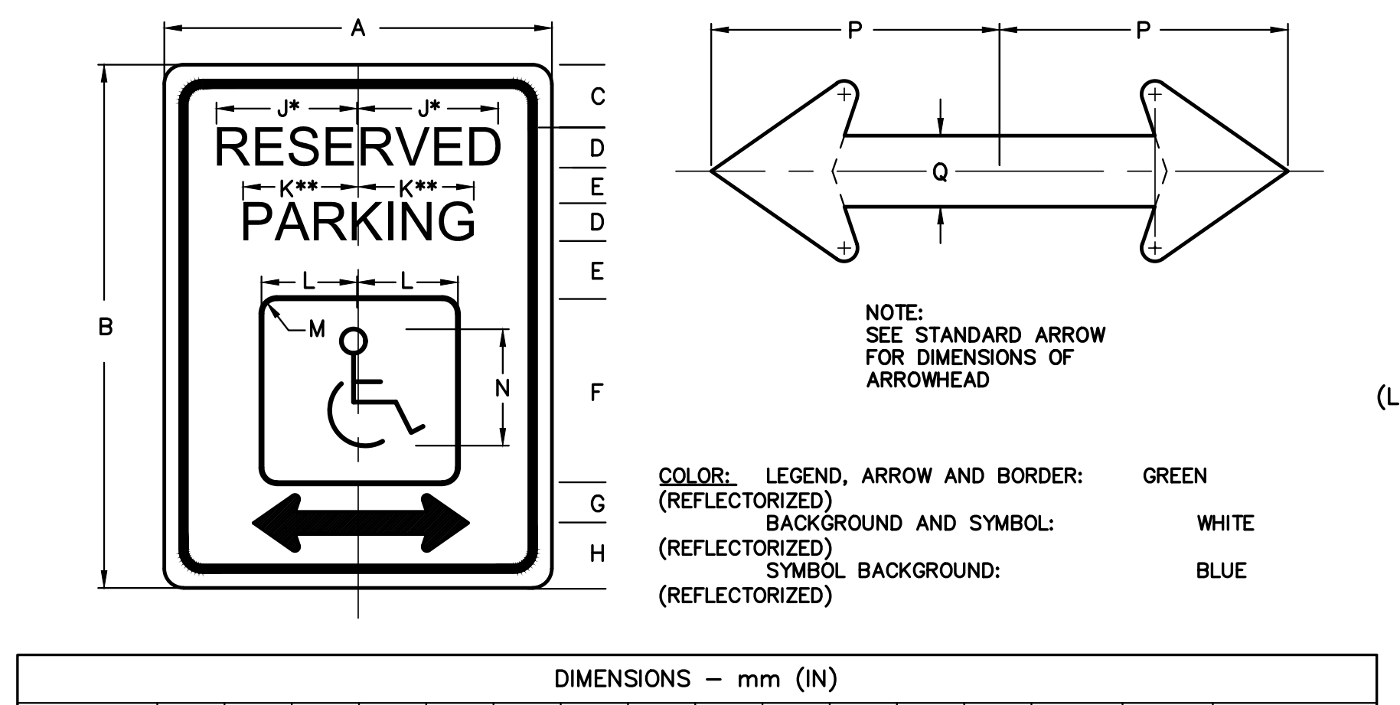
COLOR:
LEGEND AND BORDER: WHITE (REFLECTORIZED)
BACKGROUND: RED (REFLECTORIZED)

## STOP SIGN (R1-1)
NOT TO SCALE



| DIMENSIONS – IN | | | | | | |
|---|---|---|---|---|---|---|
| SIGN SIZE A x B | C | D | E | F | BOR-DER | BLANK STD. |
| 18" x 6" | 1.5 | 3C | 1.5 | 7.3 | 0.4 | B5-1806 |

## ALL-WAY STOP SIGN (R1-3P)
NOT TO SCALE



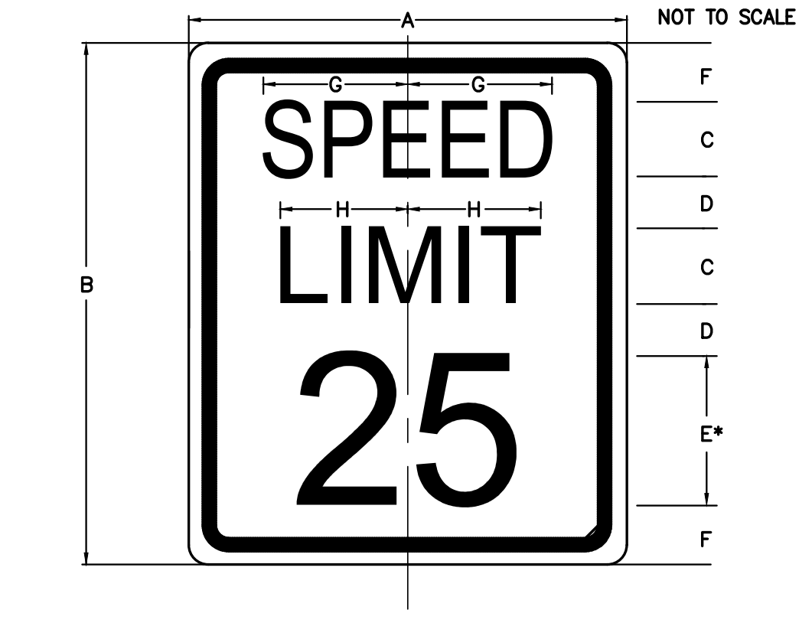
NOTE:
SEE STANDARD ARROW FOR DIMENSIONS OF ARROWHEAD

COLOR: LEGEND, ARROW AND BORDER: GREEN (REFLECTORIZED)
BACKGROUND AND SYMBOL: WHITE (REFLECTORIZED)
SYMBOL BACKGROUND: BLUE (REFLECTORIZED)

| DIMENSIONS – mm (IN) | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SIGN SIZE A x B | C | D | E | F | G | H | J | K | L | M | N | P | Q | MARGIN | BORDER | BLANK STD. |
| 300 x 450 (12" x 18") | 50 (2) | 50C (2C) | 25 (1) | 150 (6) | 40 (1.6) | 60 (2.4) | 126 (4.9) | 109 (4.3) | 759 (3) | 10 (0.4) | 100 (4) | 95 (3.8) | 20 (0.8) | 10 (0.4) | 10 (0.4) | B5-300450 (B5-1218) |

* REDUCE SPACING 50% ** REDUCE SPACING 33%

## RESERVED PARKING SIGN (R7-8)
NOT TO SCALE

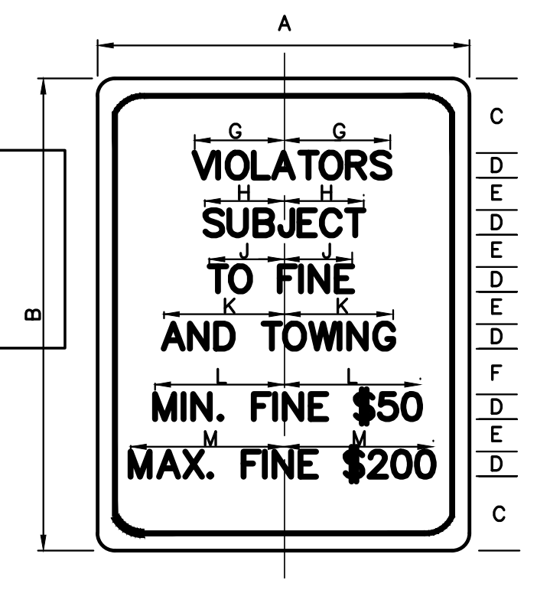


| DIMENSIONS – mm (IN) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SIGN SIZE A x B | C | D | E | F | G | H | MARGIN | BORDER | BLANK STD. |
| 600 x 750 (24" x 30") | 100E (4E) | 50 (2) | 250E (10E) | 100 (4) | 244 (9.6) | 187 (7.3) | 10 (0.4) | 15 (0.6) | B5-750600 (B5-3024) |
| 600 x 750 (24" x 30") | 100E (4E) | 50 (2) | 250E (10E) | 100 (4) | 244 (9.6) | 187 (7.3) | 10 (0.4) | 15 (0.6) | B5-750600 (B5-3024) |
| 600 x 750 (24" x 30") | 100E (4E) | 50 (2) | 250E (10E) | 100 (4) | 244 (9.6) | 187 (7.3) | 10 (0.4) | 15 (0.6) | B5-750600 (B5-3024) |

* OPTICALLY SPACE NUMERALS ABOUT VERTICAL CENTERLINE

COLOR:
LEGEND AND BORDER: BLACK (NON-REFLECTORIZED)
BACKGROUND: WHITE (REFLECTORIZED)

## SPEED LIMIT SIGN (R2-1)
NOT TO SCALE

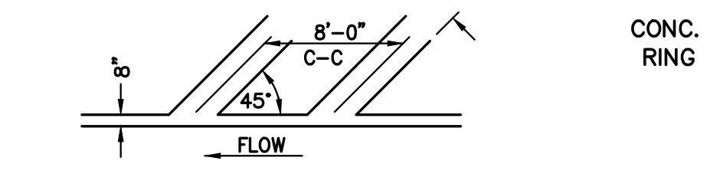


| DIMENSIONS – mm (IN) | | | | | | |
|---|---|---|---|---|---|---|
| SIGN SIZE A x B | C | D | E | F | G | H |
| 300 x 450 (12" x 18") | 75 (3) | 25C (1C) | 25 (1) | 50 (2) | 75 (3) | 61 (2.4) |

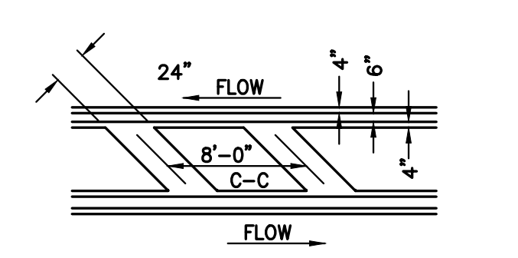
| J | K | L | M | MARGIN | BORDER | BLANK STD. |
|---|---|---|---|---|---|---|
| 58 (2.3) | 90 (3.6) | 101 (4) | 117 (4.6) | 10 (0.4) | 10 (0.4) | B5-300450 (B5-1218) |

COLOR:
LEGEND & BORDER: RED (REFLECTORIZED)
BACKGROUND: WHITE (REFLECTORIZED)

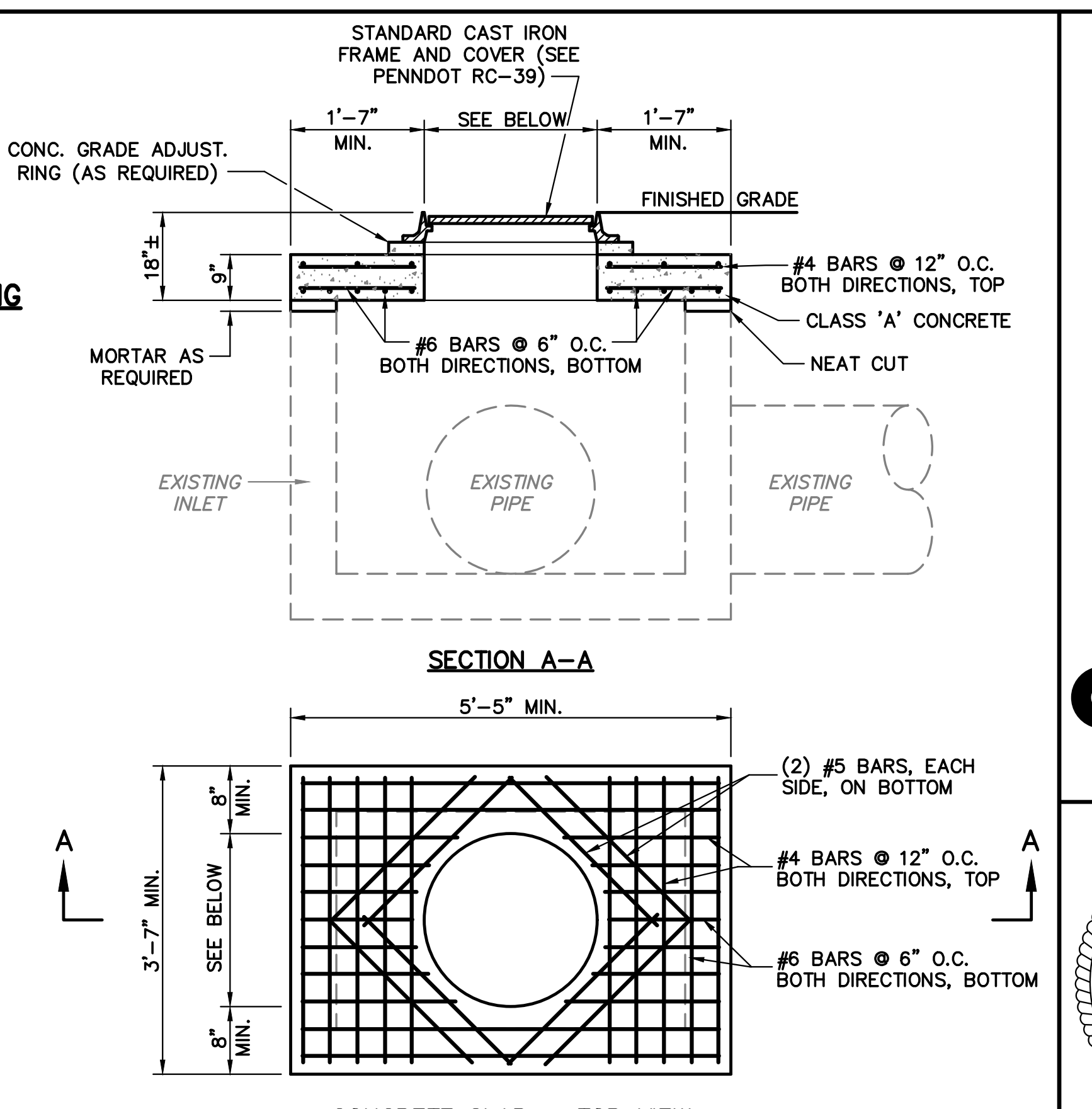
## RESERVED PARKING PENALTIES SIGN (R7-8F)
NOT TO SCALE



## (WHITE) ONE-WAY BARRIER GORE MARKING
NOT TO SCALE



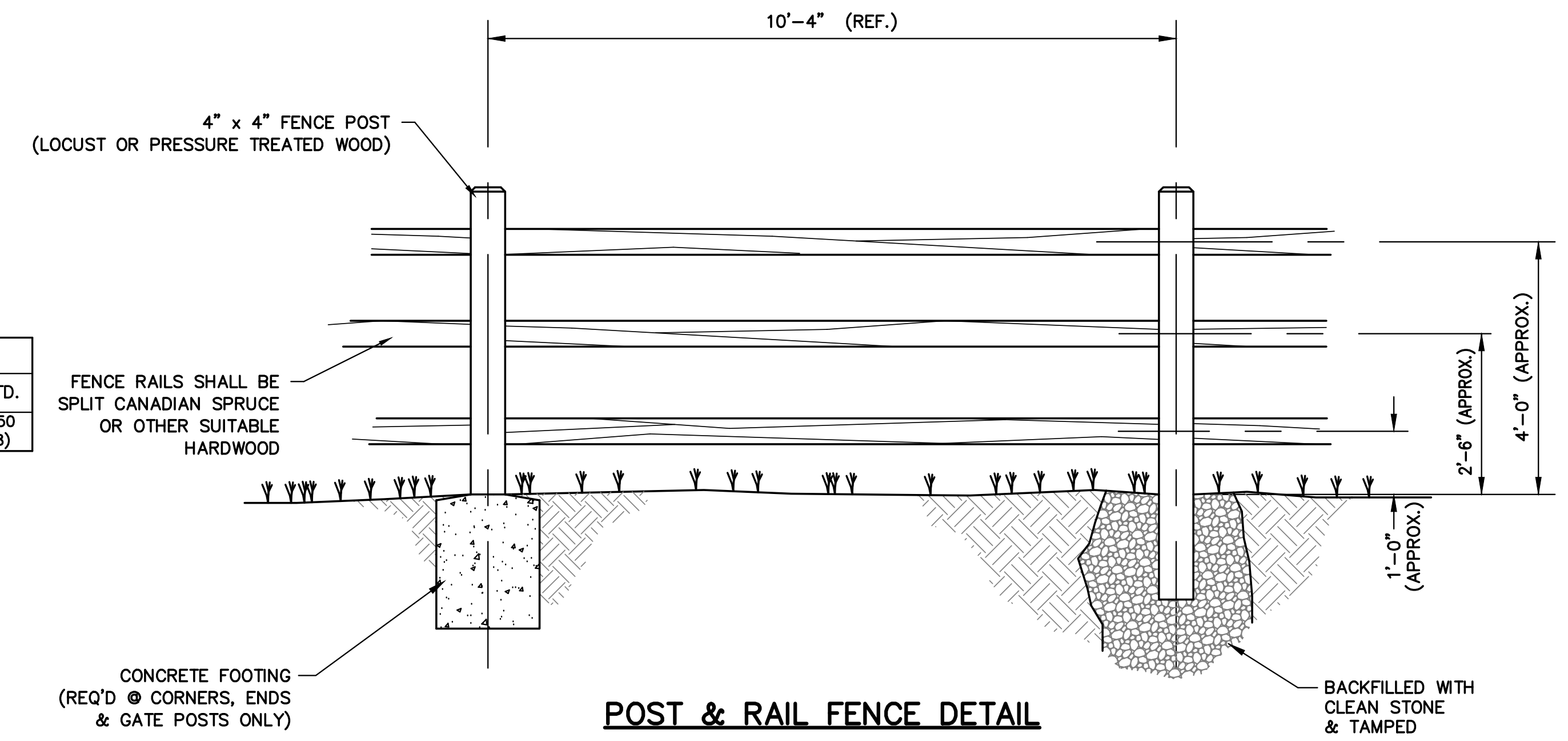
## (YELLOW) TRANSVERSE MEDIAN MARKING
NOT TO SCALE


STANDARD CAST IRON FRAME AND COVER (SEE PENNDOT RC-39)
1'-7" MIN.
SEE BELOW
1'-7" MIN.
CONC. GRADE ADJUST. RING (AS REQUIRED)
FINISHED GRADE
18"±
9"
#4 BARS @ 12" O.C. BOTH DIRECTIONS, TOP
CLASS 'A' CONCRETE
NEAT CUT
MORTAR AS REQUIRED
#6 BARS @ 6" O.C. BOTH DIRECTIONS, BOTTOM
EXISTING INLET
EXISTING PIPE
EXISTING PIPE
SECTION A-A
5'-5" MIN.
(2) #5 BARS, EACH SIDE, ON BOTTOM
#4 BARS @ 12" O.C. BOTH DIRECTIONS, TOP
#6 BARS @ 6" O.C. BOTH DIRECTIONS, BOTTOM
A
A
3'-7" MIN.
SEE BELOW
8" MIN.
8" MIN.
CONCRETE SLAB – TOP VIEW

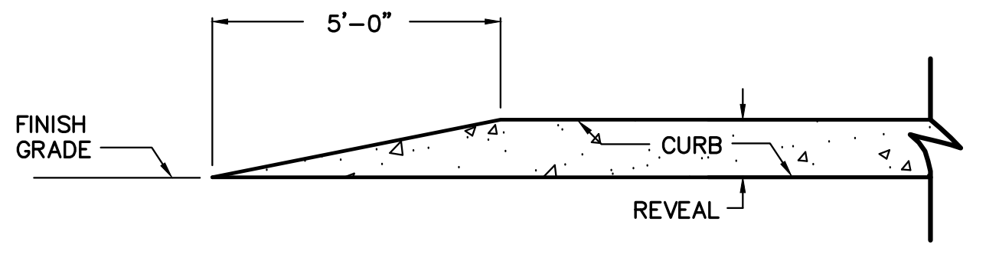
CIRCULAR OPENINGS:
1. THE FOLLOWING CIRCULAR OPENINGS ARE PERMITTED: 24"ø, 27"ø, 30"ø
2. FOR A STANDARD BOX, ONLY A 24"ø OPENING IS PERMITTED.
3. MAINTAIN MINIMUM COVER ON ALL REINFORCING STEEL:

| | |
|---|---|
| PRECAST CONCRETE | 1 1/2" |
| CAST-IN-PLACE CONCRETE | 2" |

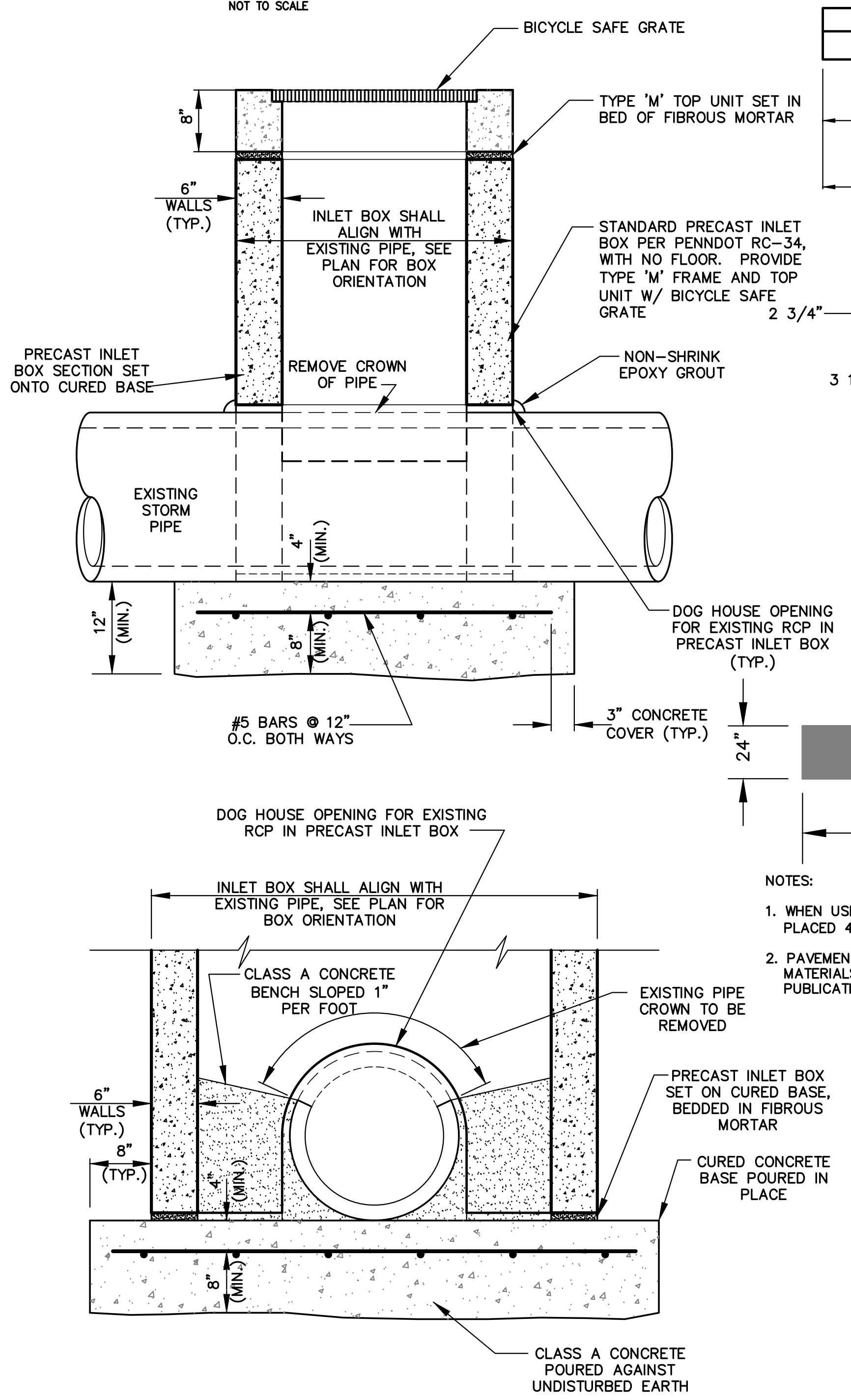
## EXISTING INLET TO MANHOLE CONVERSION
NOT TO SCALE


10'-4" (REF.)
4" x 4" FENCE POST (LOCUST OR PRESSURE TREATED WOOD)
FENCE RAILS SHALL BE SPLIT CANADIAN SPRUCE OR OTHER SUITABLE HARDWOOD
2'-6" (APPROX.)
4'-0" (APPROX.)
1'-0" (APPROX.)
CONCRETE FOOTING (REQ'D @ CORNERS, ENDS & GATE POSTS ONLY)
BACKFILLED WITH CLEAN STONE & TAMPED

## POST & RAIL FENCE DETAIL
NOT TO SCALE

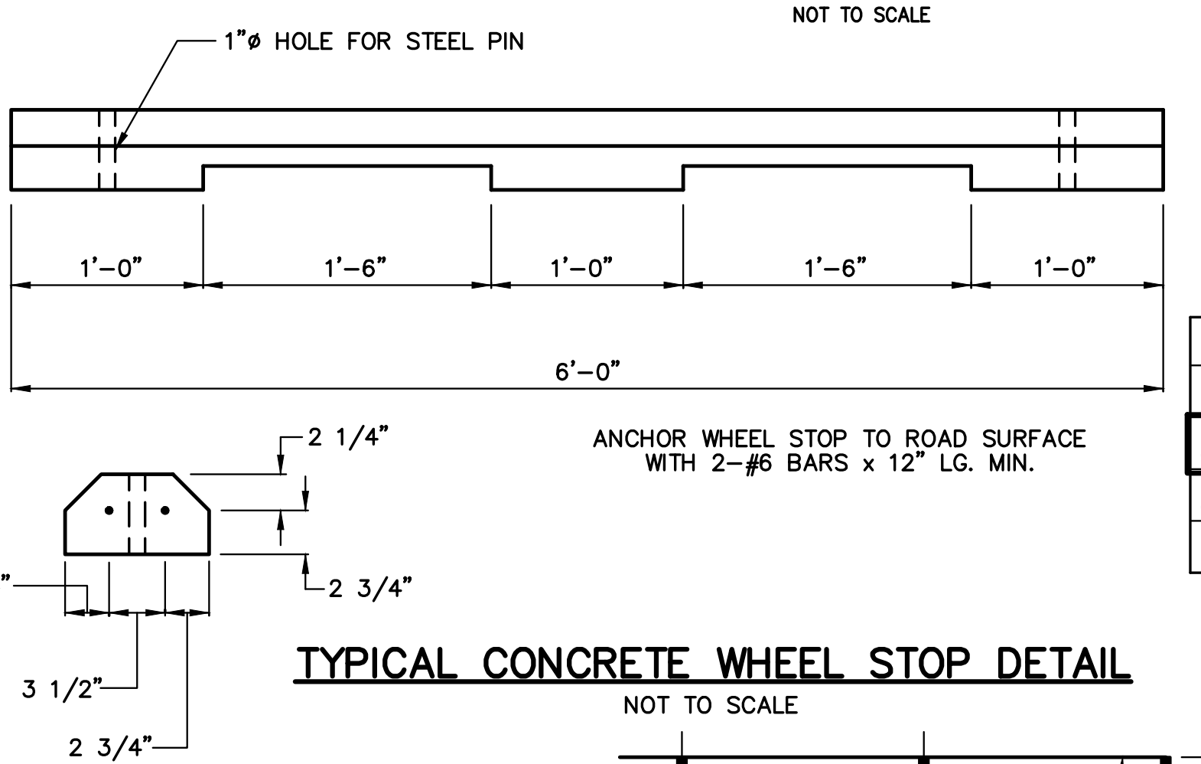


## CURB TAPER DETAIL
NOT TO SCALE


BICYCLE SAFE GRATE
TYPE 'M' TOP UNIT SET IN BED OF FIBROUS MORTAR
8"
6" WALLS (TYP.)
INLET BOX SHALL ALIGN WITH EXISTING PIPE, SEE PLAN FOR BOX ORIENTATION
STANDARD PRECAST INLET BOX PER PENNDOT RC-34, WITH NO FLOOR. PROVIDE TYPE 'M' FRAME AND TOP UNIT W/ BICYCLE SAFE GRATE
PRECAST INLET BOX SECTION SET ONTO CURED BASE
REMOVE CROWN OF PIPE
NON-SHRINK EPOXY GROUT
EXISTING STORM PIPE
4" (MIN.)
12" (MIN.)
8" (MIN.)
DOG HOUSE OPENING FOR EXISTING RCP IN PRECAST INLET BOX (TYP.)
#5 BARS @ 12" O.C. BOTH WAYS
3" CONCRETE COVER (TYP.)
DOG HOUSE OPENING FOR EXISTING RCP IN PRECAST INLET BOX
INLET BOX SHALL ALIGN WITH EXISTING PIPE, SEE PLAN FOR BOX ORIENTATION
CLASS A CONCRETE BENCH SLOPED 1" PER FOOT
EXISTING PIPE CROWN TO BE REMOVED
PRECAST INLET BOX SET ON CURED BASE, BEDDED IN FIBROUS MORTAR
6" WALLS (TYP.)
8" (TYP.)
4" (MIN.)
CURED CONCRETE BASE POURED IN PLACE
8" (MIN.)
CLASS A CONCRETE POURED AGAINST UNDISTURBED EARTH

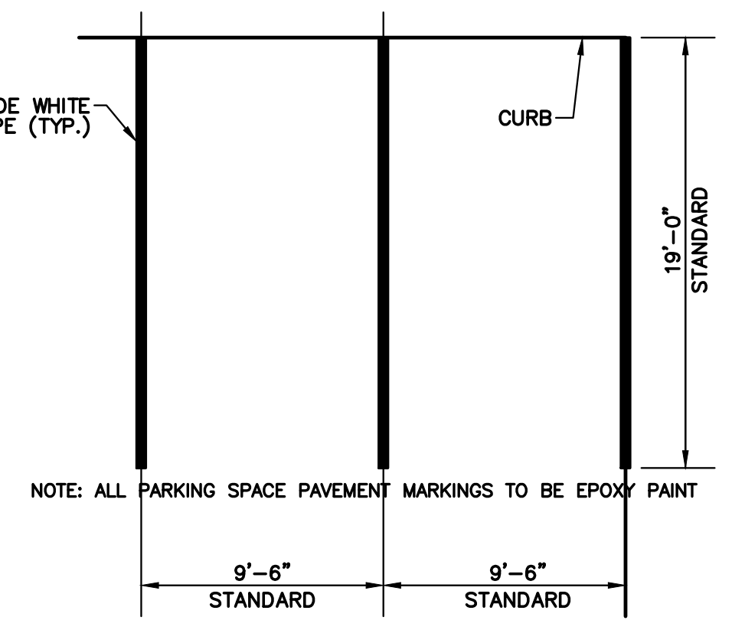
## DOGHOUSE INLET ON EXISTING STORM PIPE
NOT TO SCALE

CONSTRUCTION SEQUENCE
1. EXCAVATE AREA OF INLET BASE AROUND EXISTING PIPE.
2. PLACE BASE REINFORCING AND POUR BASE. ALLOW TO CURE FOR 24 HOURS.
3. REMOVE CROWN OF PIPE.
4. PLACE PRECAST DOGHOUSE INLET ON CAST-IN-PLACE BASE. BED INLET BOX IN FIBROUS MORTAR.
5. GROUT ALL OPENINGS OF INLET BOX WITH NON-SHRINK GROUT.
6. POUR CONCRETE BENCH IN INLET BOX.
7. INSTALL TOP UNIT AND GRATE.
8. PARGE JOINT BETWEEN INLET BOX AND TOP UNIT.
9. BACKFILL AND RESTORE DISTURBED AREAS.



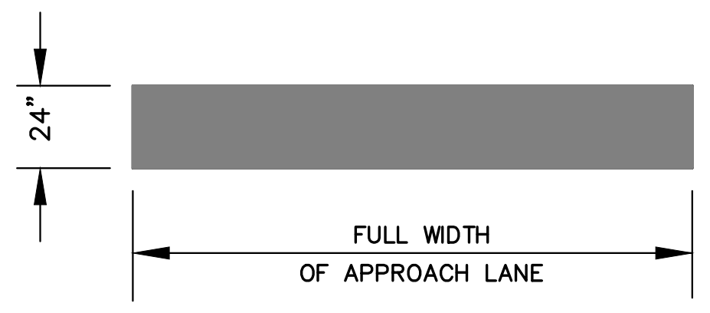
ANCHOR WHEEL STOP TO ROAD SURFACE WITH 2-#6 BARS x 12" LG. MIN.

## TYPICAL CONCRETE WHEEL STOP DETAIL
NOT TO SCALE



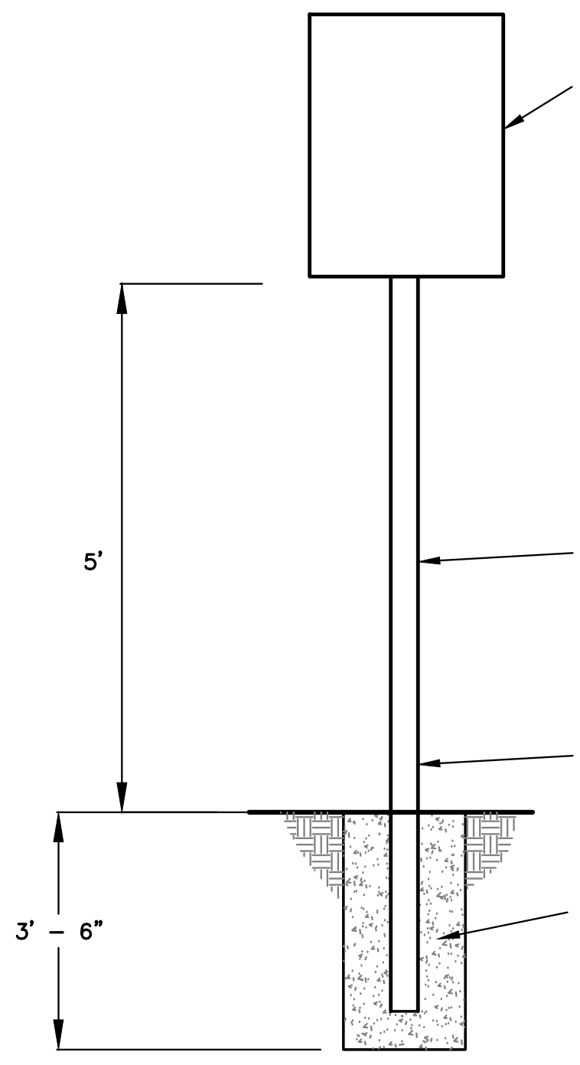
NOTE: ALL PARKING SPACE PAVEMENT MARKINGS TO BE EPOXY PAINT

## TYPICAL PARKING SPACE STRIPING
NOT TO SCALE

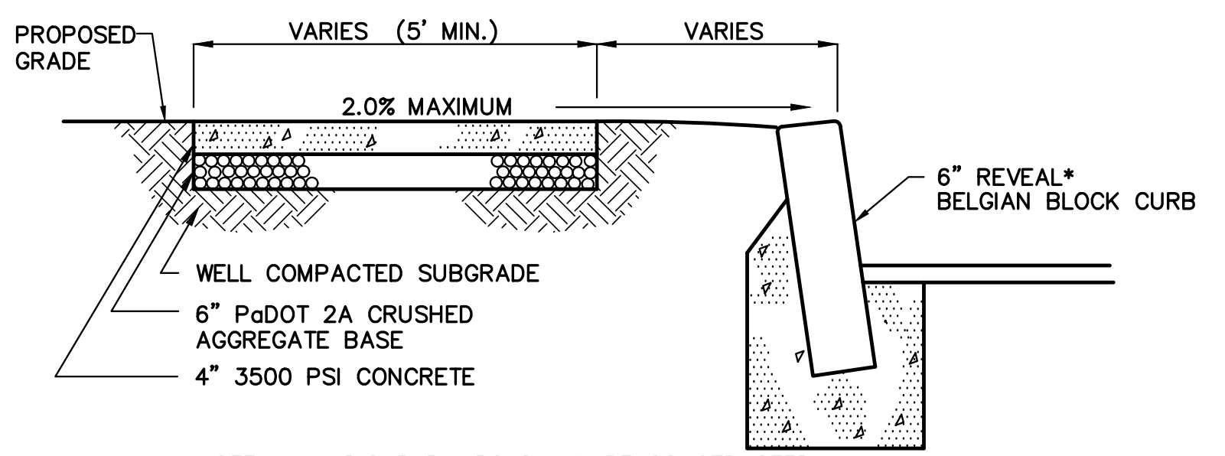


NOTES:
1. WHEN USED BEFORE A CROSSWALK, STOP BAR MUST BE PLACED 4' (MIN.) BEFORE CLOSEST EDGE OF CROSSWALK.
2. PAVEMENT MARKINGS SHALL BE HOT THERMOPLASTIC MATERIALS MEETING THE REQUIREMENTS OF PENNDOT PUBLICATION 408, SECTION 960

## (WHITE) STOP BAR
NOT TO SCALE


FINISH SIZE & SHAPE TO BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES & PENN. DOT REQUIREMENTS
5'
3 5/8" x 2" 6061-T6 ALUM. U POST
PROVIDE BREAK-AWAY CONNECTION PER PENN. DOT SPECIFICATIONS.
3' – 6"
CLASS "D" CONCRETE 2500 PSI @ 28 DAYS

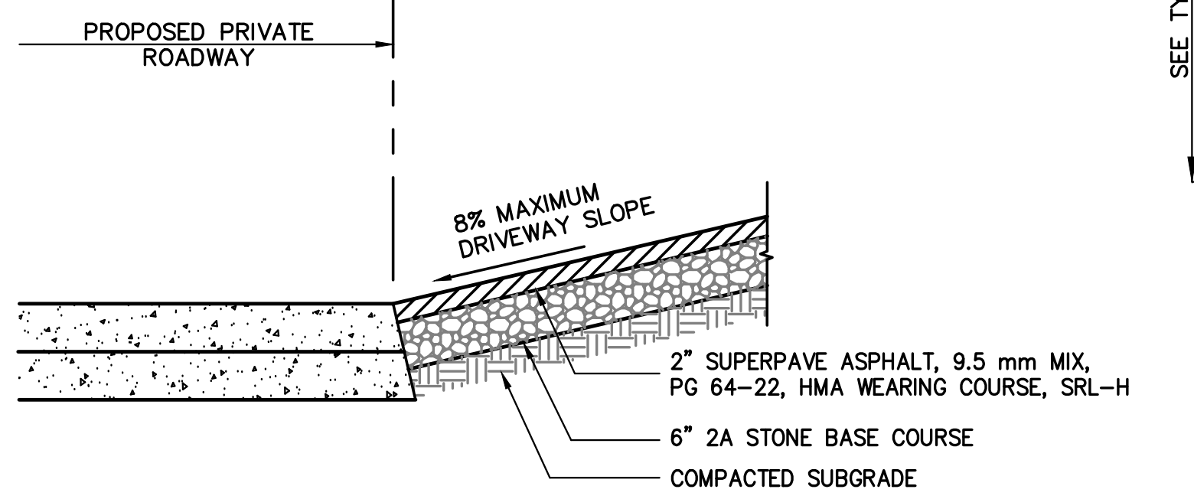
## WARNING / REGULATORY SIGN DETAIL
## (RESERVED POST OFFICE PARKING SIGN)
NOT TO SCALE



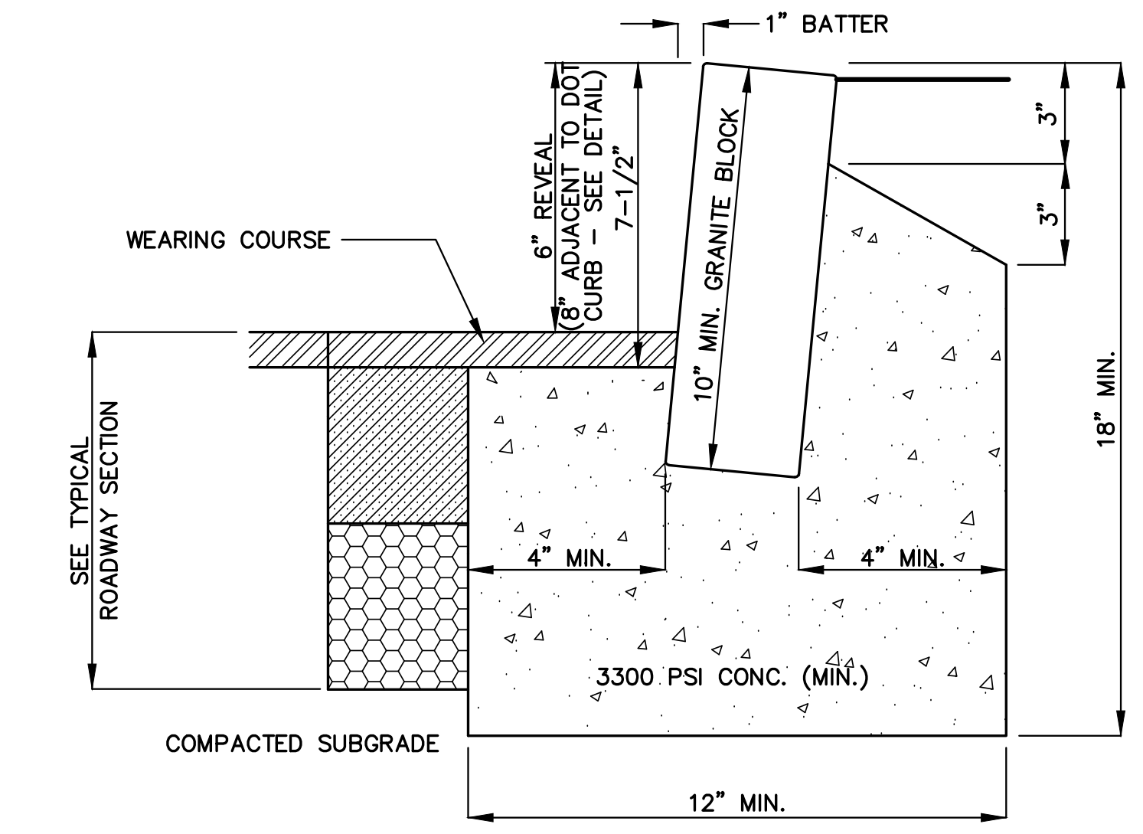
NOTE: HANDICAP RAMPS SHALL BE CONSTRUCTED WITH A PREFERRED SLOPE OF 1:14 (1:12 SLOPE OR 8.33% MAXIMUM).

## CONCRETE SIDEWALK DETAIL
NOT TO SCALE

*CURBING WITHIN PENNDOT RIGHT-OF-WAY TO BE 8" REVEAL, PER HIGHWAY OCCUPANCY PERMIT (HOP) PLANS.

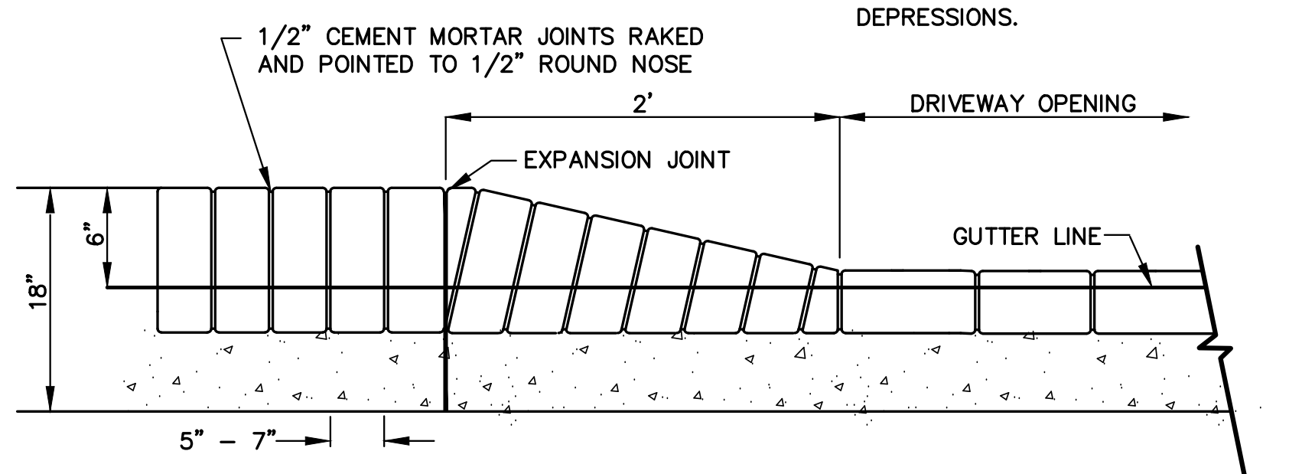

PROPOSED PRIVATE ROADWAY
8% MAXIMUM DRIVEWAY SLOPE
2" SUPERPAVE ASPHALT, 9.5 mm MIX, PG 64-22, HMA WEARING COURSE, SRL-H
6" 2A STONE BASE COURSE
COMPACTED SUBGRADE

## RESIDENTIAL DRIVEWAY DETAIL
NOT TO SCALE



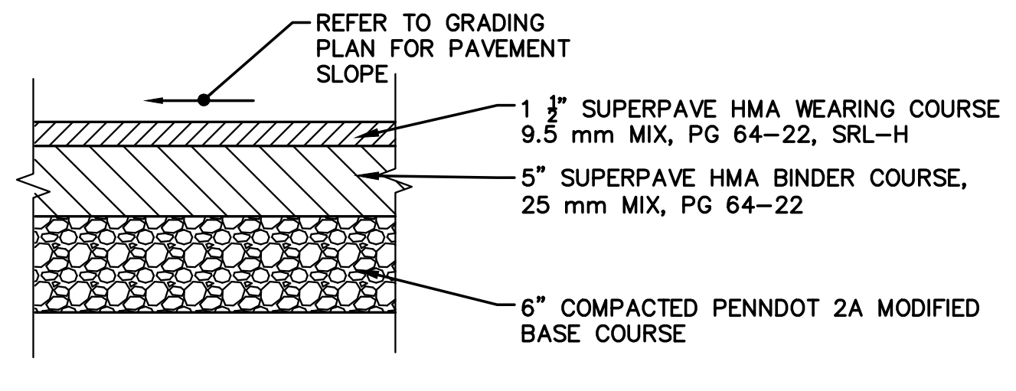
SECTION VIEW

NOTES:
1. JOINTS NOT TO EXCEED 1/2" IN WIDTH.
2. EXPANSION JOINTS EVERY 50', AT THE P.C. AND P.T. OF CURVES AND AT DRIVEWAY DEPRESSIONS.
3. 10" BLOCK MAY BE USED IN CURB DEPRESSIONS.

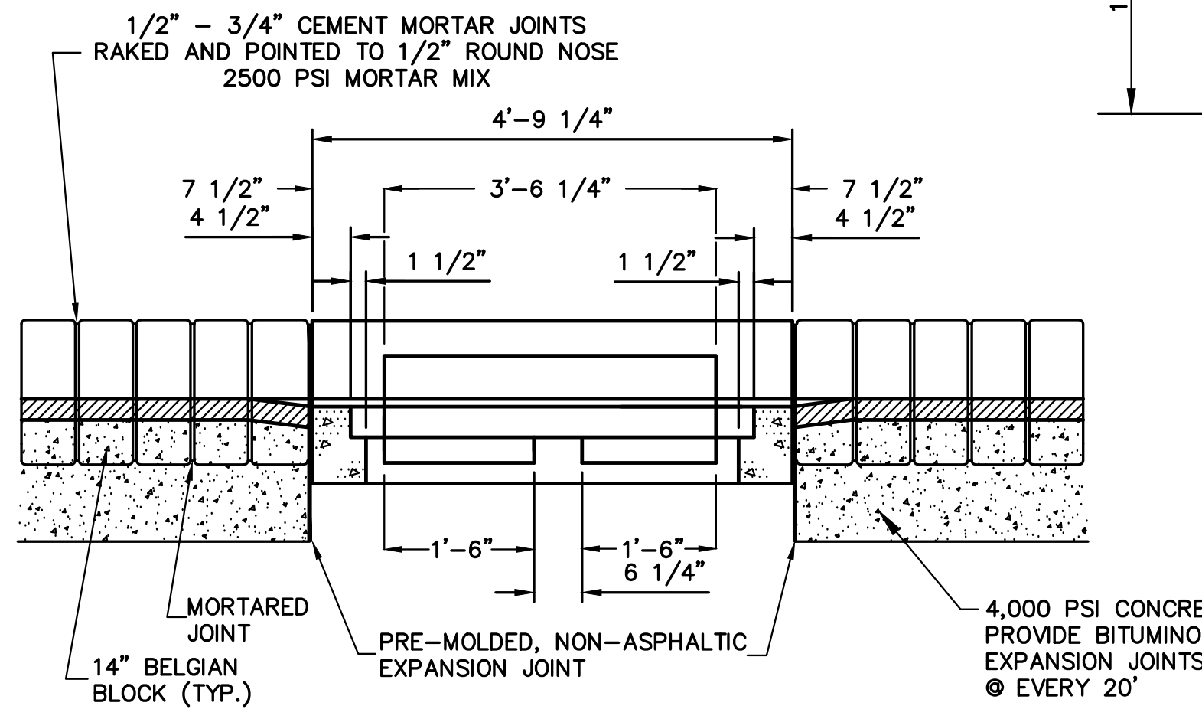

1/2" CEMENT MORTAR JOINTS RAKED AND POINTED TO 1/2" ROUND NOSE
2'
DRIVEWAY OPENING
EXPANSION JOINT
GUTTER LINE
6"
18"
5" – 7"

ELEVATION VIEW

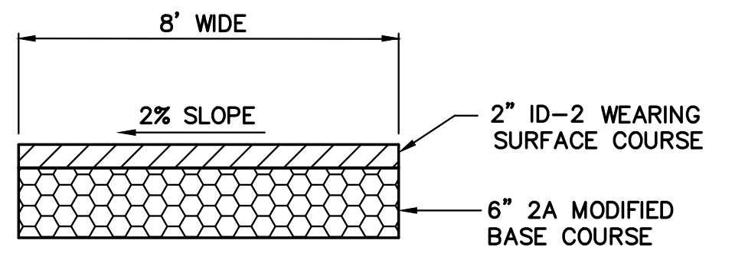
## BELGIAN BLOCK CURB DETAIL
NOT TO SCALE


REFER TO GRADING PLAN FOR PAVEMENT SLOPE
1 1/2" SUPERPAVE HMA WEARING COURSE 9.5 mm MIX, PG 64-22, SRL-H
5" SUPERPAVE HMA BINDER COURSE, 25 mm MIX, PG 64-22
6" COMPACTED PENNDOT 2A MODIFIED BASE COURSE

## CONVENTIONAL SITE PAVING DETAIL
NOT TO SCALE

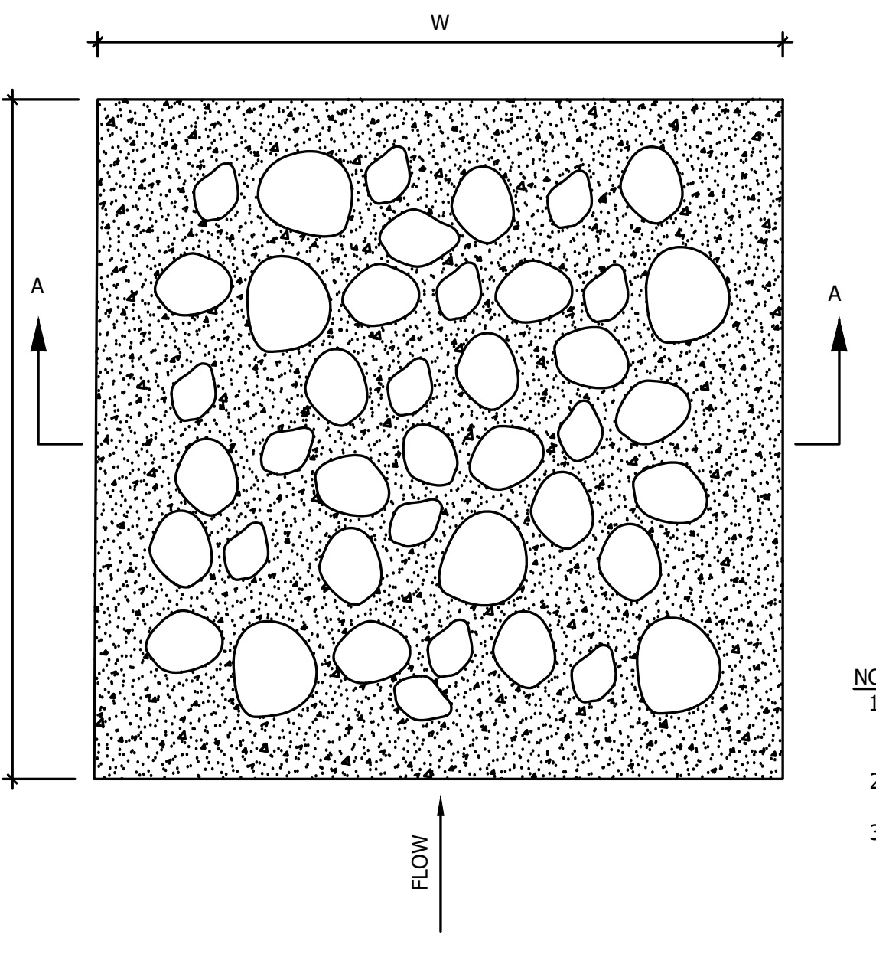

1/2" – 3/4" CEMENT MORTAR JOINTS RAKED AND POINTED TO 1/2" ROUND NOSE 2500 PSI MORTAR MIX
4'-9 1/4"
3'-6 1/4"
7 1/2"
4 1/2"
7 1/2"
4 1/2"
1 1/2"
1 1/2"
1'-6"
1'-6"
6 1/4"
MORTARED JOINT
14" BELGIAN BLOCK (TYP.)
PRE-MOLDED, NON-ASPHALTIC EXPANSION JOINT
4,000 PSI CONCRETE PROVIDE BITUMINOUS EXPANSION JOINTS @ EVERY 20'

## ELEVATION ADJACENT TO TYPE 'C' INLET TOP FOR UPRIGHT BELGIAN BLOCK CURB
NOT TO SCALE



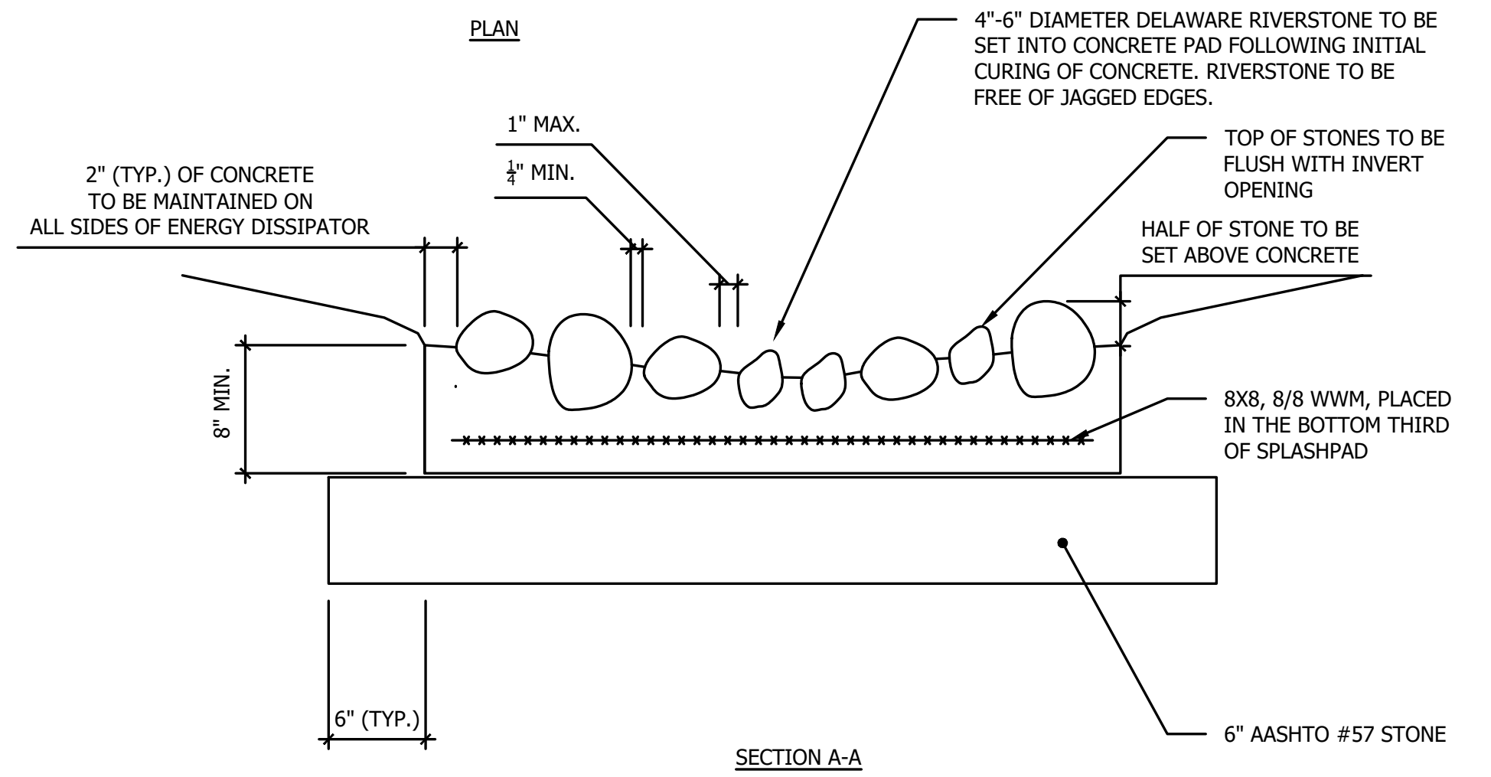
(FOR USE AT PROPOSED TRAIL AND PEDESTRIAN BRIDGE APPROACHES )

## ASPHALT WALKING PATH
NOT TO SCALE

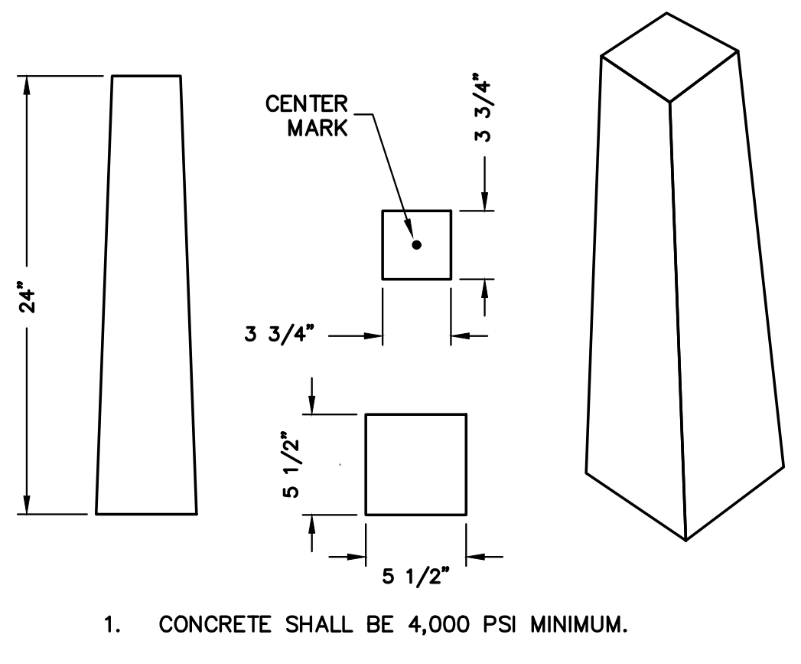


| ENERGY DISSIPATOR NO. | L (FT) | W (FT) |
|---|---|---|
| ALL | 2 | 5.25 |

NOTES:
1. ROCKS SHALL BE ARRANGED IN PATTERN THAT PREVENTS LINEAR FLOW PATHS THROUGH THE ENERGY DISSIPATOR.
2. ENSURE THAT SOIL BENEATH ENERGY DISSIPATORS IS STABLE AND WILL NOT SETTLE OVER TIME.
3. ENSURE CONCAVITY IN BOTH DIRECTIONS OF ENERGY DISSIPATOR.

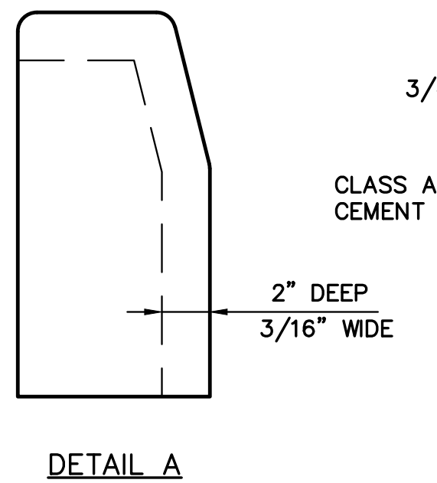

4"-6" DIAMETER DELAWARE RIVERSTONE TO BE SET INTO CONCRETE PAD FOLLOWING INITIAL CURING OF CONCRETE. RIVERSTONE TO BE FREE OF JAGGED EDGES.
1" MAX.
1/4" MIN.
2" (TYP.) OF CONCRETE TO BE MAINTAINED ON ALL SIDES OF ENERGY DISSIPATOR
TOP OF STONES TO BE FLUSH WITH INVERT OPENING
HALF OF STONE TO BE SET ABOVE CONCRETE
8" MIN.
8X8, 8/8 WWM, PLACED IN THE BOTTOM THIRD OF SPLASHPAD
6" (TYP.)
6" AASHTO #57 STONE
SECTION A-A

## ROCK ENERGY DISSIPATOR DETAIL
NOT TO SCALE

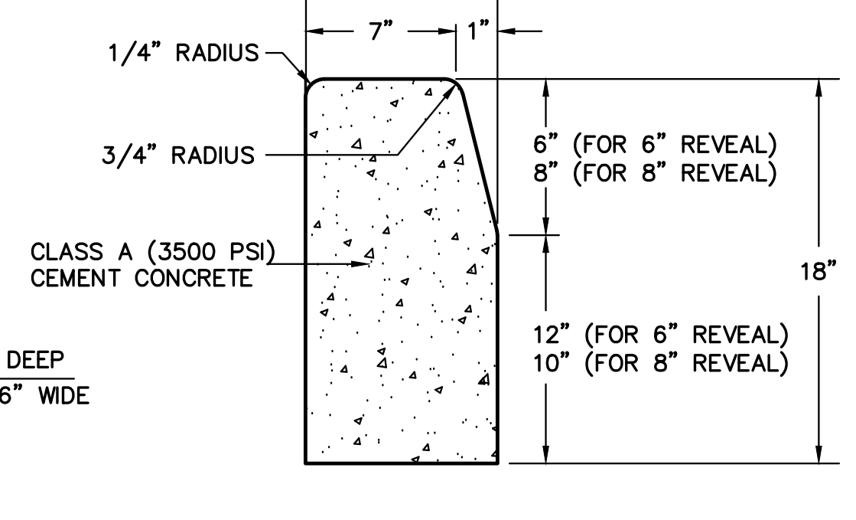


1. CONCRETE SHALL BE 4,000 PSI MINIMUM.
2. CENTER MARK SHALL BE STEEL FOR POSITIVE METAL DETECTION.

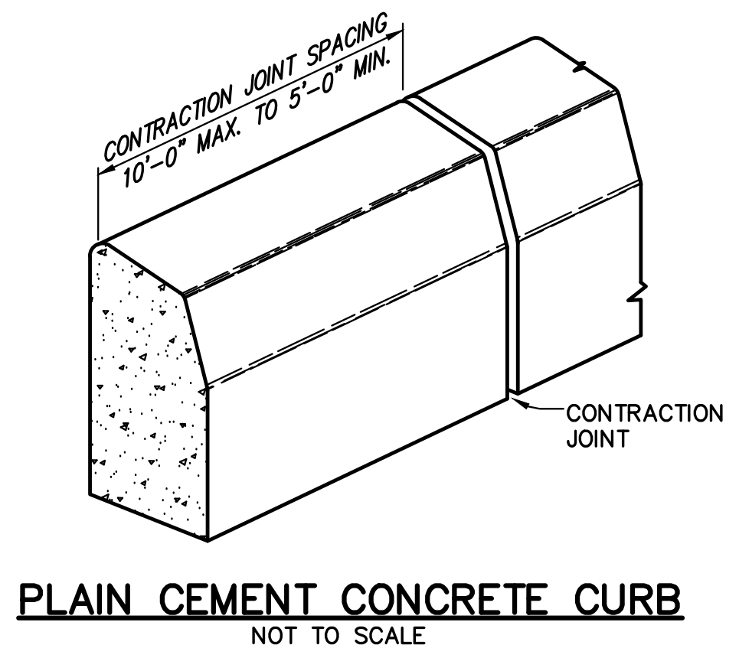
## CONCRETE MONUMENT
NOT TO SCALE



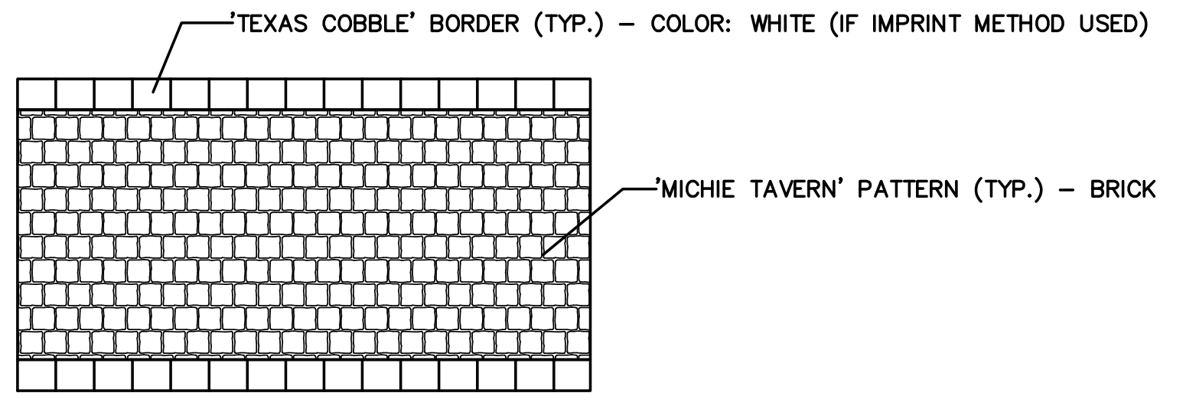
DETAIL A
CONTRACTION JOINT



TYPICAL
CROSS SECTION



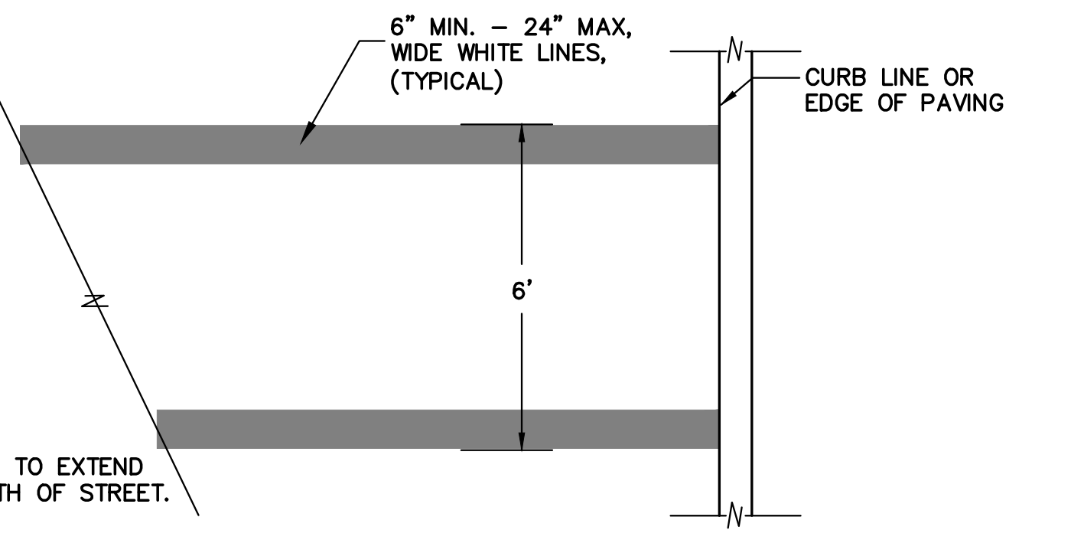
## PLAIN CEMENT CONCRETE CURB
NOT TO SCALE


'TEXAS COBBLE' BORDER (TYP.) – COLOR: WHITE (IF IMPRINT METHOD USED)
'MICHIE TAVERN' PATTERN (TYP.) – BRICK

ASHLAR SLATE WITH TEXAS COBBLE BORDER PATTERN

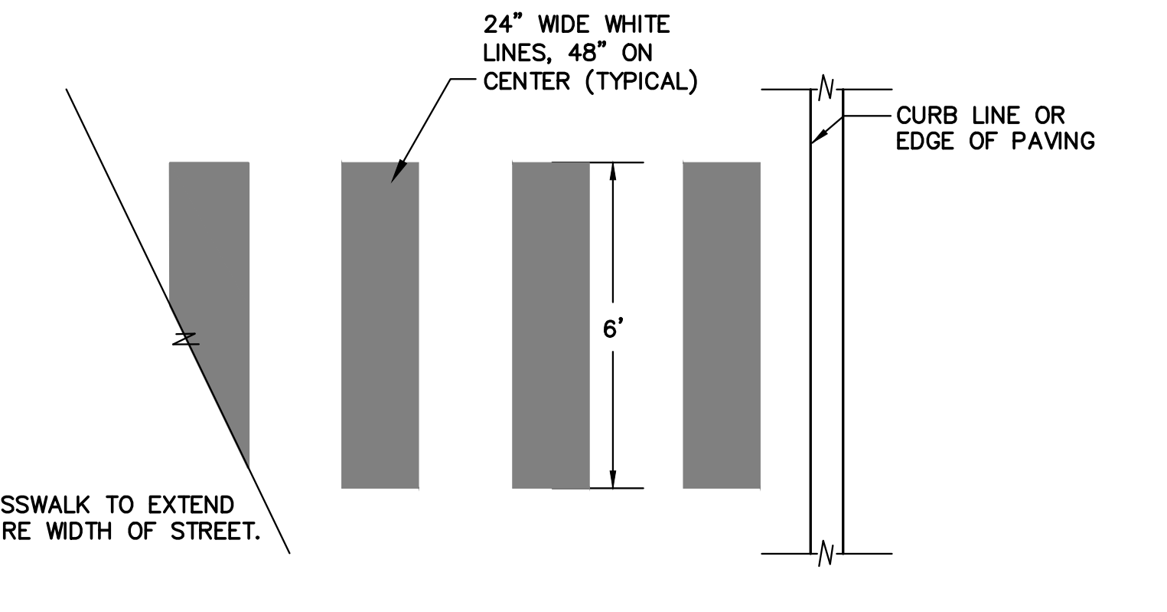
NOTES:
1. IMPRINTING PATTERN MAY BE SET INTO PAVEMENT EITHER AT THE TIME SURFACE COURSE IS LAID AND STILL HOT OR AFTER THE WEARING COURSE HAS BEEN GIVEN TIME TO SET, WHEREBY THE CROSSWALK SECTION WOULD BE REHEATED AND THE PATTERN IMPRINTED INTO THE PAVING. CONTRACTOR SHALL CONSULT WITH SUPPLIER FOR SPECIFIC REQUIREMENTS AND COORDINATE WITH TOWNSHIP ENGINEER FOR INSPECTION PURPOSES.
2. COLOR: SEE ABOVE
3. IMPRINTING PATTERN TO BE INSTALLED UNDER STRICT COMPLIANCE WITH PennDOT PUBLICATION MS-0530-0024, SECTION 500 'PATTERNED / TEXTURED CROSSWALK.' ADD-A-PRINT, STREETPRINT-XD, OR APPROVED EQUAL PRODUCT.

## ASPHALT IMPRINTED TEXTURED CROSSWALK DETAIL
NOT TO SCALE


6" MIN. – 24" MAX, WIDE WHITE LINES, (TYPICAL)
CURB LINE OR EDGE OF PAVING
6'

NOTE: CROSSWALK TO EXTEND ENTIRE WIDTH OF STREET.

## CROSSWALK DETAIL – TYPE A
NOT TO SCALE


24" WIDE WHITE LINES, 48" ON CENTER (TYPICAL)
CURB LINE OR EDGE OF PAVING
6'

NOTE: CROSSWALK TO EXTEND ENTIRE WIDTH OF STREET.

## CROSSWALK DETAIL
NOT TO SCALE

**GILMORE & ASSOCIATES, INC.**
ENGINEERING & CONSULTING SERVICES
CORPORATE HEADQUARTERS
65 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901 • (215) 345-4330 • www.gilmore-assoc.com

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**NOT APPROVED FOR CONSTRUCTION**

RONALD G. MONKRES II
ENGINEER 603164-E

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# 661 PENN STREET REDEVELOPMENT

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## SITE DETAILS 1

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.: 2500866

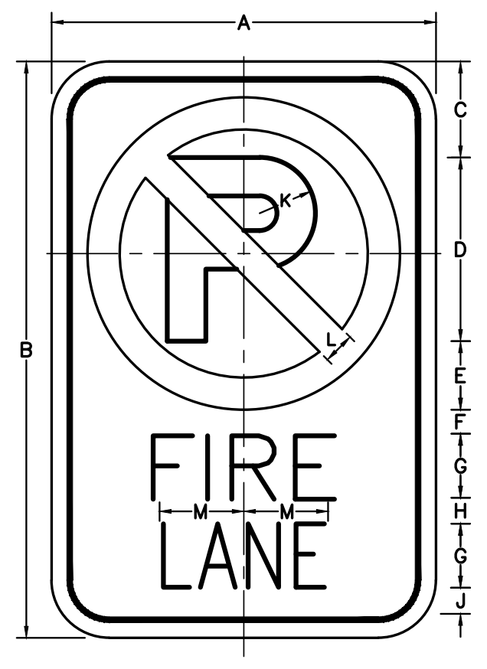
APPLICANTS INFO:
661 PENN STREET, LLC
209 PENN'S TRAIL
NEWTOWN, PA 18940
215-968-0600

MUNICIPAL FILE No.:

TAX MAP PARCEL No.: 29-010-119-001 & 29-010-037

| | |
|---|---|
| TOTAL AREA: 15.75 AC. | TOTAL LOTS: 2 |
| DATE: 01/21/26 | SCALE: N.T.S. |
| DRAWN BY: GY/BH | CHECKED BY: RGM |

SHEET NO.: 30 OF 33

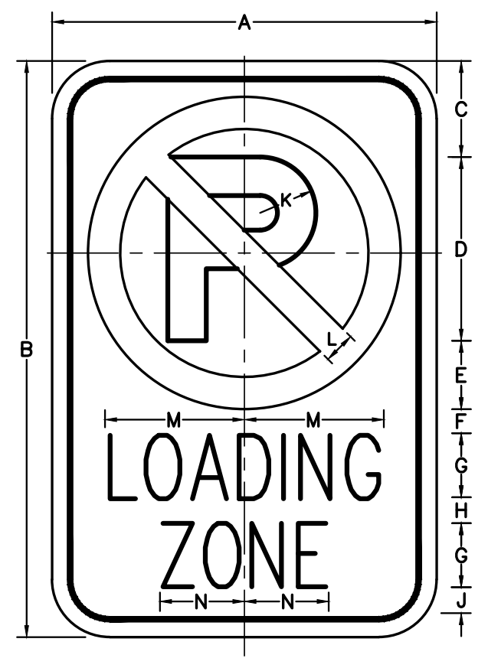


COLOR: LEGEND, BORDER — RED (REFLECTORIZED)
CIRCLE, DIAGONAL — RED (REFLECTORIZED)
BACKGROUND — WHITE (REFLECTORIZED)
"P" — BLACK (NON-REFLECTORIZED)

| DIMENSIONS – mm (IN) | | | | | | | |
|---|---|---|---|---|---|---|---|
| SIGN SIZE A x B | C | D | E | F | G | H | J |
| 300 x 450 (12" x 18") | 75 (3) | 150E(M) (6E(M)) | 47 (1.9) | 21 (0.8) | 50B (2B) | 20 (0.8) | 37 (1.5) |

| K | L | M | | MARGIN | BORDER | BLANK STD. |
|---|---|---|---|---|---|---|
| 122 (4.9) | 25 (1) | 56 (2.2) | | 10 (0.4) | 10 (0.4) | B5–300450 (B5–1218) |

## NO PARKING–FIRE LANE SIGN (R7–2B)
NOT TO SCALE

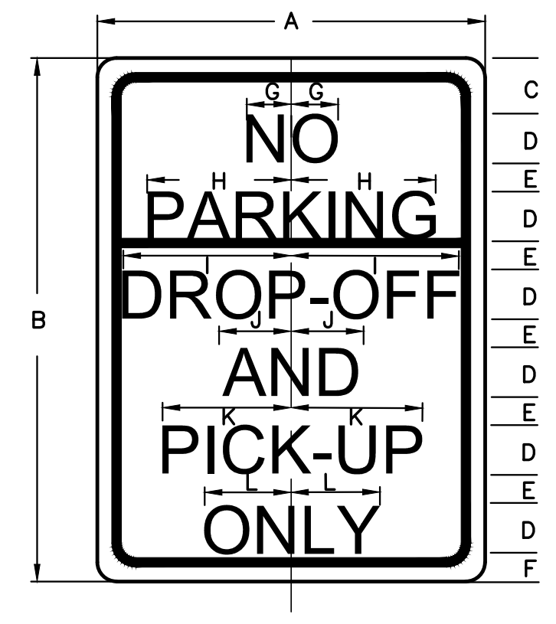


COLOR: LEGEND, BORDER — RED (REFLECTORIZED)
CIRCLE, DIAGONAL — RED (REFLECTORIZED)
BACKGROUND — WHITE (REFLECTORIZED)
"P" — BLACK (NON-REFLECTORIZED)

| DIMENSIONS – mm (IN) | | | | | | | |
|---|---|---|---|---|---|---|---|
| SIGN SIZE A x B | C | D | E | F | G | H | J |
| 300 x 450 (12" x 18") | 75 (3) | 150E(M) (6E(M)) | 47 (1.9) | 21 (0.8) | 50B (2B) | 20 (0.8) | 37 (1.5) |

| K | L | M | N | MARGIN | BORDER | BLANK STD. |
|---|---|---|---|---|---|---|
| 122 (4.9) | 25 (1) | 96 (3.8) | 56 (2.2) | 10 (0.4) | 10 (0.4) | B5–300450 (B5–1218) |

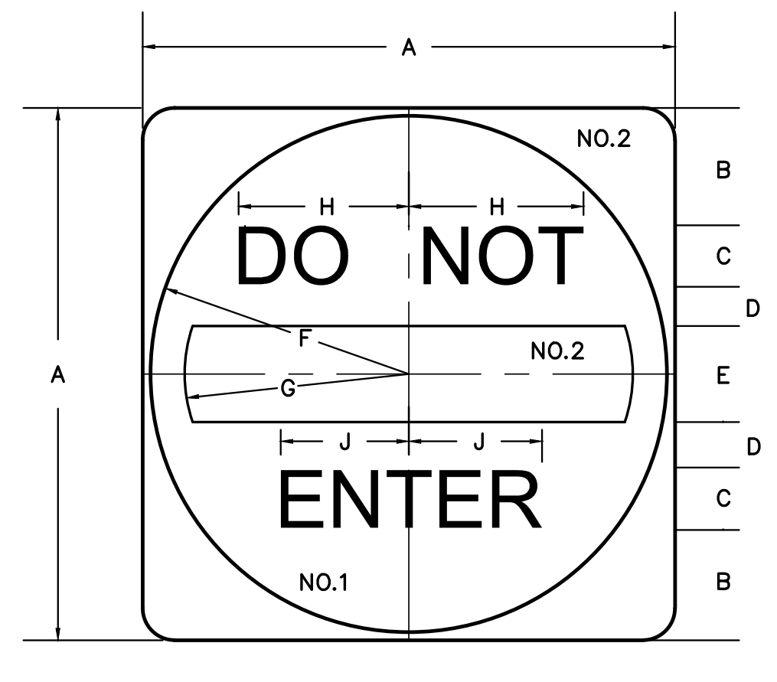
## NO PARKING–LOADING ZONE SIGN (R7–6A)
NOT TO SCALE



COLOR: LEGEND AND BORDER: RED
(REFLECTORIZED)
BACKGROUND: WHITE
(REFLECTORIZED)

| DIMENSIONS – mm (IN) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SIGN SIZE A x B | C | D | E | F | G | H | I | J | K | L | MARGIN | BORDER | BLANK STD. |
| 300 x 450 (12" x 18") | 50 (2) | 50 (2) | 25 (1) | 25 (1) | 36 (1.4) | 112 (4.4) | 150 (5.9) | 60 (2.4) | 90 (3.5) | 50 (2) | 10 (0.4) | 10 (0.4) | B5–300450 (B5–1218) |

## NO PARKING DROP–OFF AND PICK–UP ONLY (R7–4–3)
NOT TO SCALE



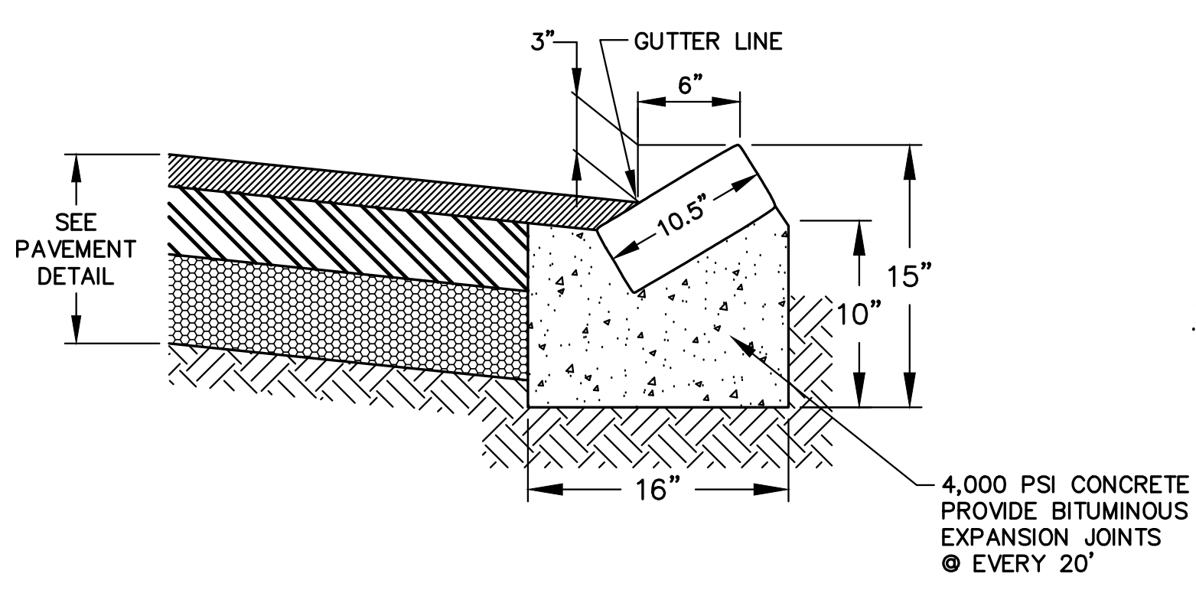
| DIMENSIONS – mm (IN) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SIGN SIZE A x A | B | C | D | E | F | G | H | J | BLANK STD. |
| 750 x 750 (30" x 30") | 165 (6.6) | 100D (4D) | 47 (1.9) | 126 (5) | 365 (14.6) | 310 (12.4) | 251 (9.9) | 199 (7.9) | B3–750 (B3–30) |
| 900 x 900 (36" x 36") | 190 (7.6) | 125D (5D) | 60 (2.4) | 150 (6) | 440 (17.6) | 375 (15) | 314 (12.4) | 249 (9.8) | B3–900 (B3–36) |
| 1200 x 1200 (48" x 48") | 275 (11) | 150D (6D) | 75 (3) | 200 (8) | 590 (23.6) | 500 (20) | 377 (14.9) | 298 (11.8) | B3–1200 (B3–48) |

* OPTICALLY SPACE NUMERALS ABOUT VERTICAL CENTERLINE

COLOR: NO. 1: LEGEND: WHITE (NON–REFLECTORIZED)
BACKGROUND: RED (REFLECTORIZED)

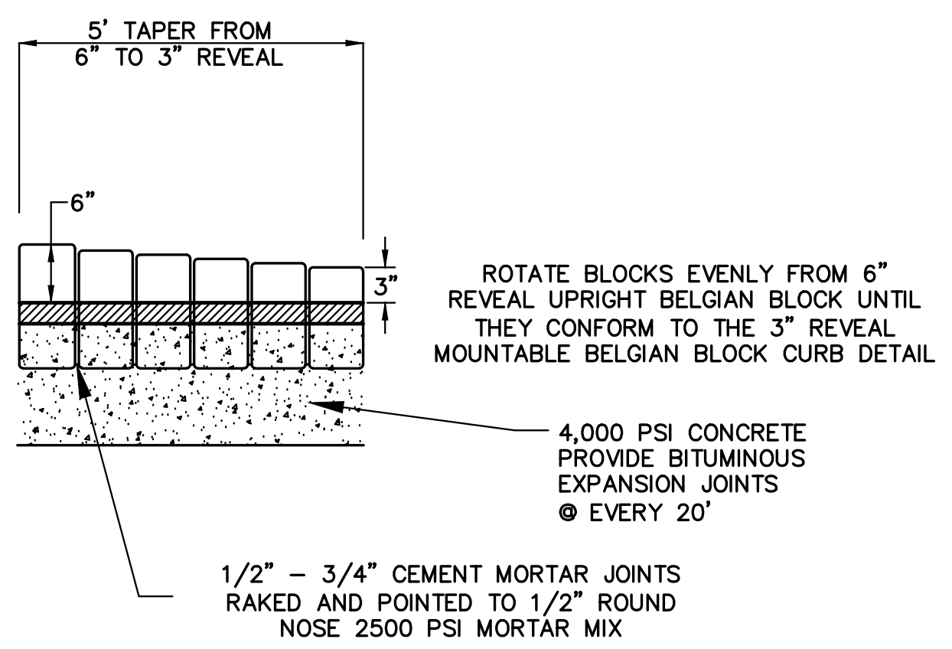
NO. 2: BACKGROUND: WHITE (REFLECTORIZED)

## DO NOT ENTER SIGN (R5–1)
NOT TO SCALE

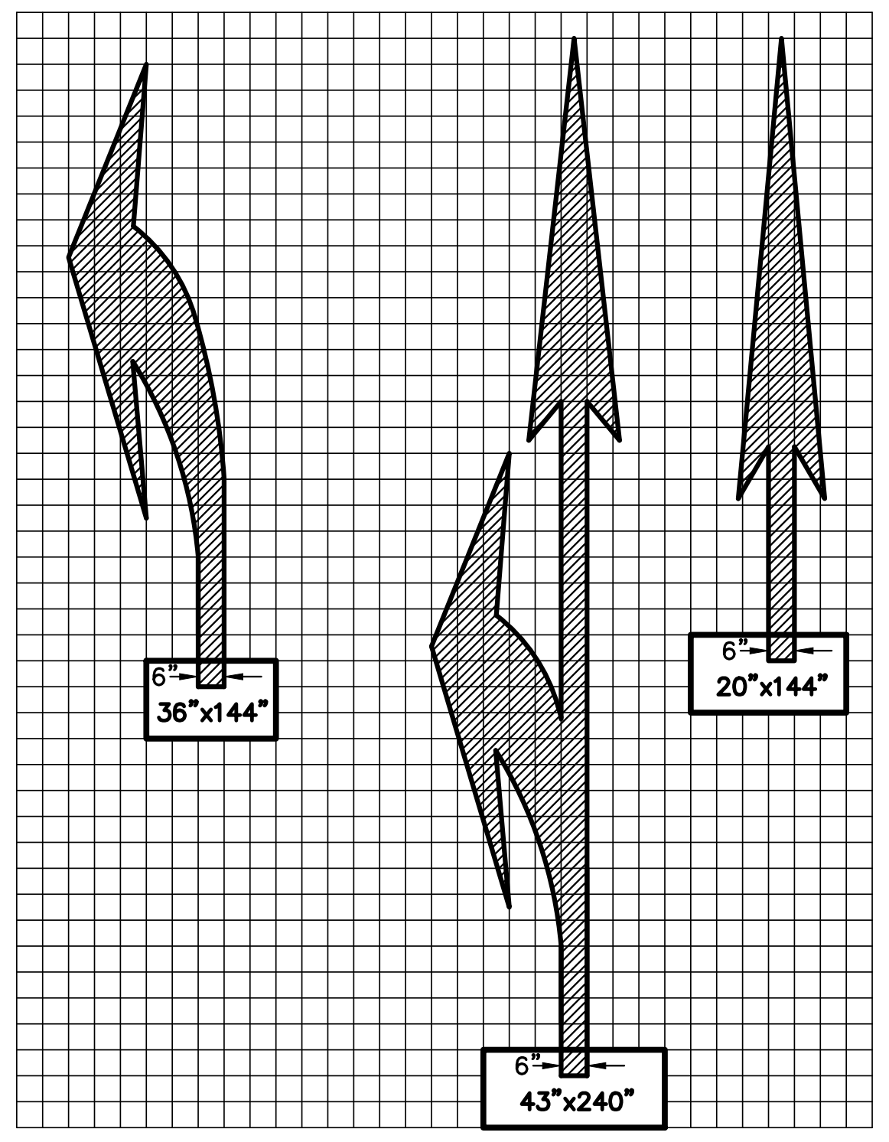

3"
GUTTER LINE
6"
SEE PAVEMENT DETAIL
10.5"
15"
10"
16"
4,000 PSI CONCRETE PROVIDE BITUMINOUS EXPANSION JOINTS @ EVERY 20'

NOTE: SEE TRANSITION DETAIL TO STANDARD CURB

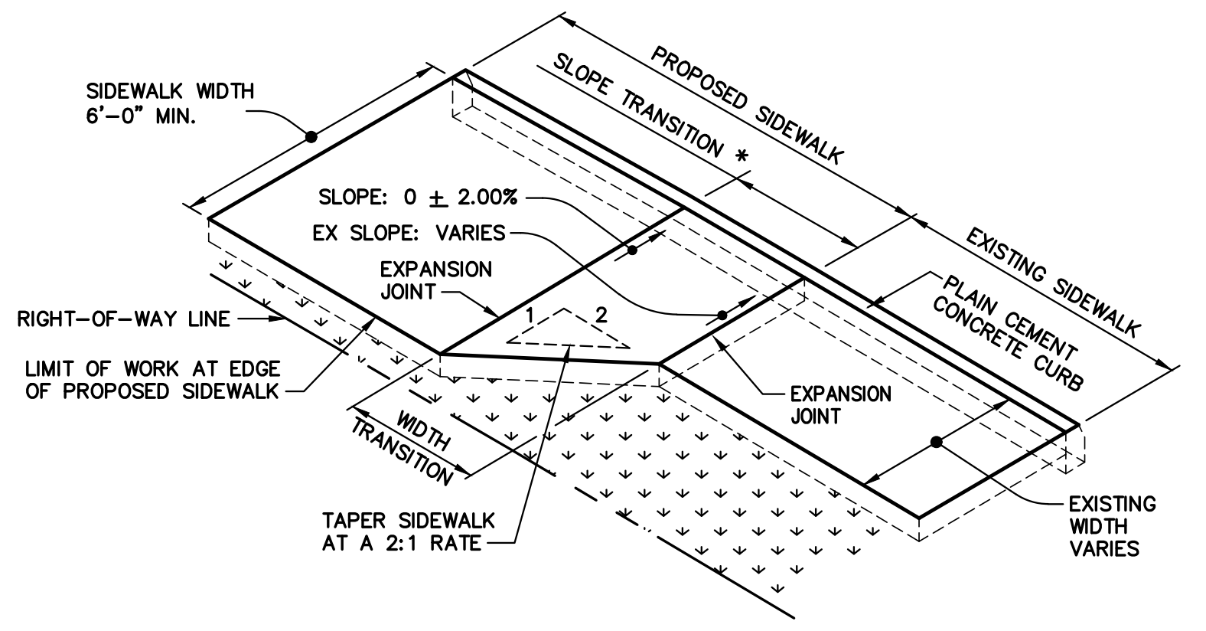
## MOUNTABLE BELGIAN BLOCK CURB
NOT TO SCALE


5' TAPER FROM 6" TO 3" REVEAL
6"
3"
ROTATE BLOCKS EVENLY FROM 6" REVEAL UPRIGHT BELGIAN BLOCK UNTIL THEY CONFORM TO THE 3" REVEAL MOUNTABLE BELGIAN BLOCK CURB DETAIL
4,000 PSI CONCRETE PROVIDE BITUMINOUS EXPANSION JOINTS @ EVERY 20'
1/2" – 3/4" CEMENT MORTAR JOINTS RAKED AND POINTED TO 1/2" ROUND NOSE 2500 PSI MORTAR MIX

## TRANSITION DETAIL FROM MOUNTABLE TO UPRIGHT BELGIAN BLOCK CURB
NOT TO SCALE



## ELONGATED ARROW PAVEMENT MARKING DETAIL
NOT TO SCALE



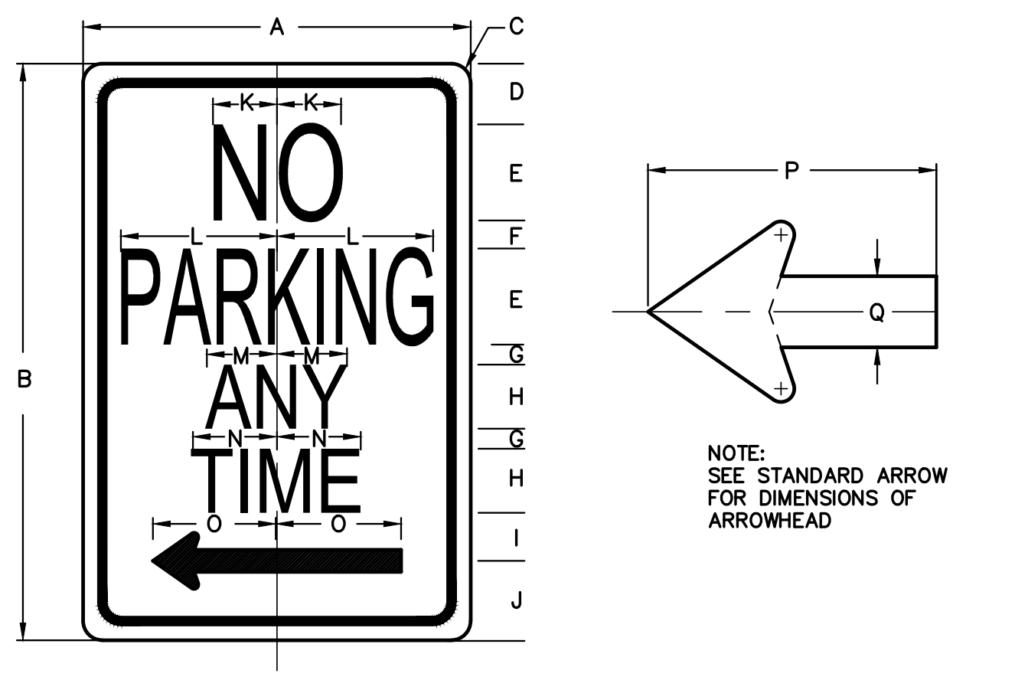
* MINIMUM SLOPE TRANSITION LENGTH BASED ON THE DIFFERENCE OF PROPOSED SIDEWALK CROSS SLOPE AND EXISTING SIDEWALK CROSS SLOPE AT THE LOCATION OF TIE IN BY THE FOLLOWING FORMULA: DELTA % SLOPE X 0.5'

THE MINIMUM WIDTH TRANSITION SHALL BE CALCULATED USING THE FOLLOWING FORMULA: CHANGE IN WIDTH X (2)

DEPENDING ON WHICH IS LONGEST, EITHER THE SLOPE TRANSITION OR WIDTH TRANSITION WILL DETERMINE THE LENGTH OF SIDEWALK TRANSITION.

TRANSITION AREAS SERVE AS TEMPORARY CONNECTIONS OF THE PEDESTRIAN ACCESS ROUTE. FUTURE IMPROVEMENTS TO THE REMAINING PORTION OF EXISTING SIDEWALK SHALL INCLUDE REMOVING THE TRANSITION AREA AND CONSTRUCTING A FULLY COMPLIANT SIDEWALK.

## TRANSITION TO EXISTING SIDEWALK
NOT TO SCALE



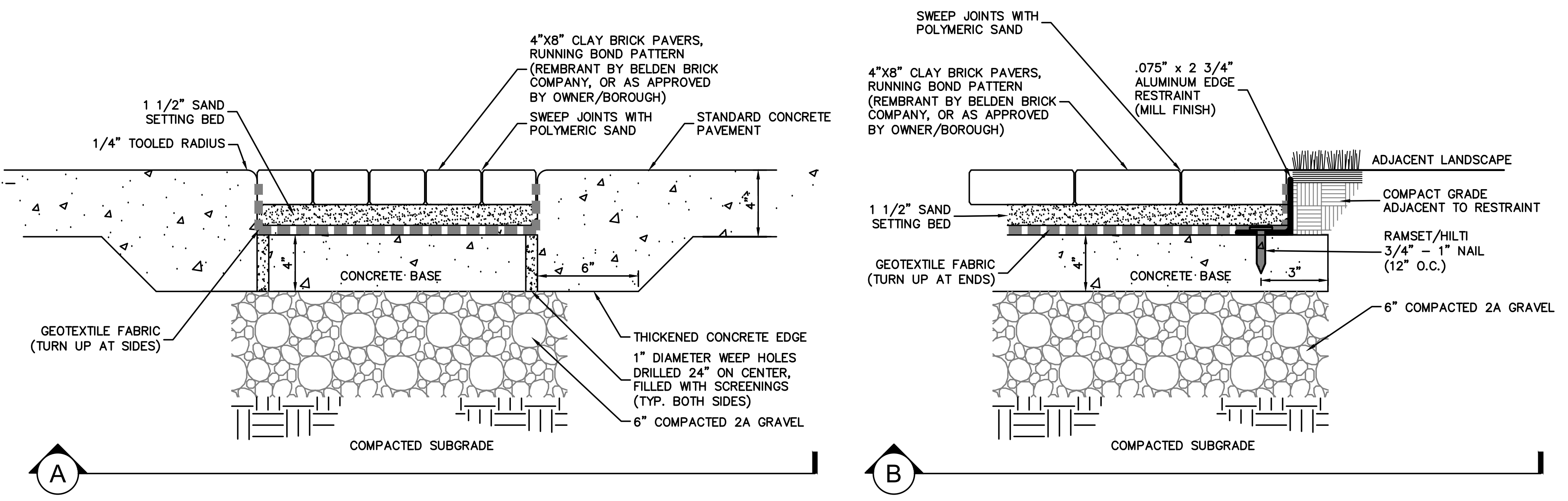
NOTE: SEE STANDARD ARROW FOR DIMENSIONS OF ARROWHEAD

COLOR: LEGEND, ARROW AND BORDER: RED (REFLECTORIZED)
BACKGROUND: WHITE (REFLECTORIZED)

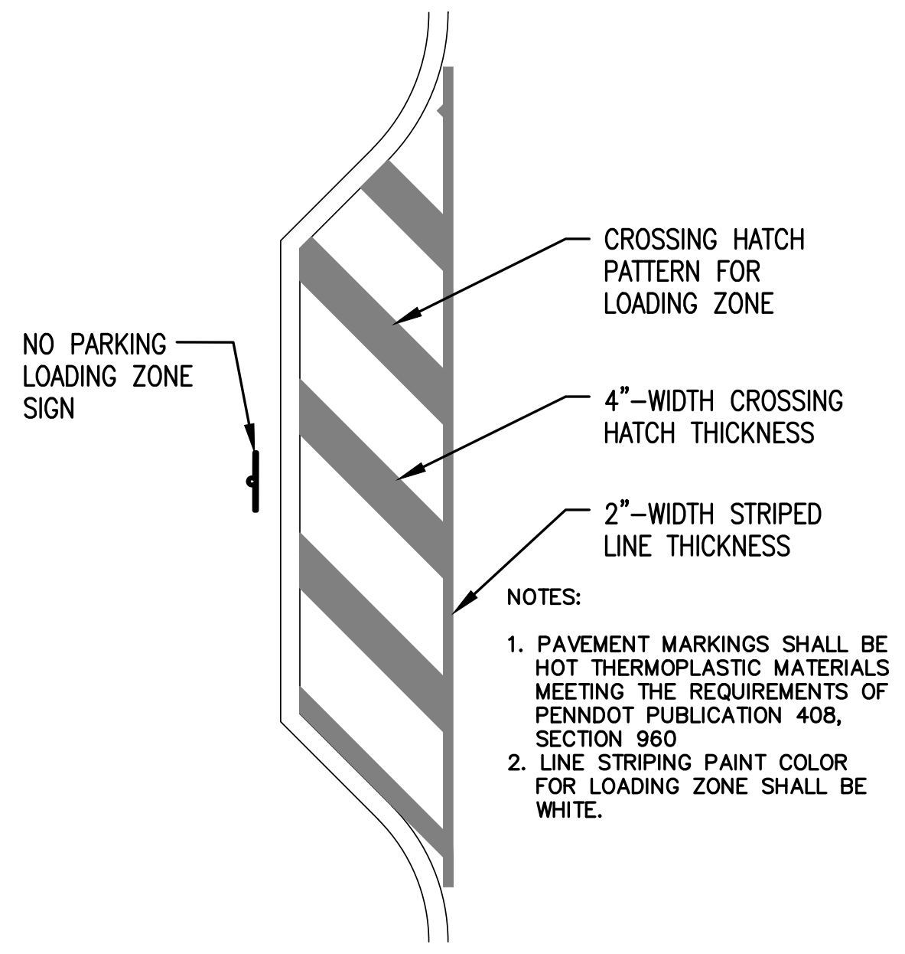
| DIMENSIONS – mm (IN) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SIGN SIZE A x B | C | D | E | F | G | H | I | J |
| 300 x 450 (12" x 18") | 38 (1.5) | 47 (1.9) | 75 (3) | 22 (0.9) | 16 (0.6) | 50 (2) | 38 (1.5) | 63 (2.5) |

| DIMENSIONS – mm (IN) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| K | L | M | N | O | P | Q | MARGIN | BORDER | BLANK STD. |
| 50 (2) | 122 (4.9) | 55 (2.2) | 66 (2.6) | 97 (3.9) | 194 (7.8) | 20 (0.8) | 10 (0.4) | 10 (0.4) | B5–300450 (B5–1218) |

## NO PARKING – ANY TIME SIGN (R7–1L)
NOT TO SCALE


4"X8" CLAY BRICK PAVERS, RUNNING BOND PATTERN (REMBRANT BY BELDEN BRICK COMPANY, OR AS APPROVED BY OWNER/BOROUGH)
1 1/2" SAND SETTING BED
1/4" TOOLED RADIUS
SWEEP JOINTS WITH POLYMERIC SAND
STANDARD CONCRETE PAVEMENT
4"
CONCRETE BASE
6"
GEOTEXTILE FABRIC (TURN UP AT SIDES)
THICKENED CONCRETE EDGE
1" DIAMETER WEEP HOLES DRILLED 24" ON CENTER, FILLED WITH SCREENINGS (TYP. BOTH SIDES)
6" COMPACTED 2A GRAVEL
COMPACTED SUBGRADE
A
SWEEP JOINTS WITH POLYMERIC SAND
4"X8" CLAY BRICK PAVERS, RUNNING BOND PATTERN (REMBRANT BY BELDEN BRICK COMPANY, OR AS APPROVED BY OWNER/BOROUGH)
.075" x 2 3/4" ALUMINUM EDGE RESTRAINT (MILL FINISH)
ADJACENT LANDSCAPE
COMPACT GRADE ADJACENT TO RESTRAINT
1 1/2" SAND SETTING BED
RAMSET/HILTI 3/4" – 1" NAIL (12" O.C.)
GEOTEXTILE FABRIC (TURN UP AT ENDS)
CONCRETE BASE
4"
3"
6" COMPACTED 2A GRAVEL
COMPACTED SUBGRADE
B

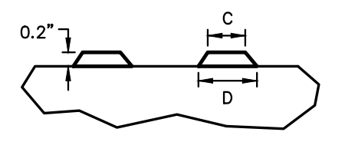
## 1 BRICK PAVERS ON CONCRETE BASE
NOT TO SCALE


NO PARKING LOADING ZONE SIGN
CROSSING HATCH PATTERN FOR LOADING ZONE
4"–WIDTH CROSSING HATCH THICKNESS
2"–WIDTH STRIPED LINE THICKNESS

NOTES:

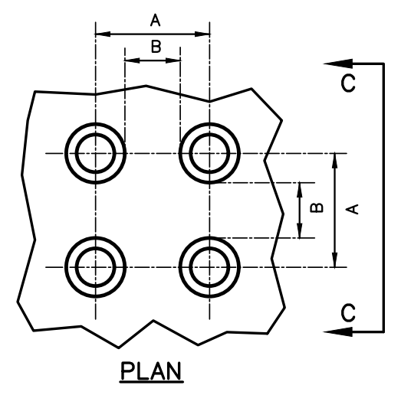
1. PAVEMENT MARKINGS SHALL BE HOT THERMOPLASTIC MATERIALS MEETING THE REQUIREMENTS OF PENNDOT PUBLICATION 408, SECTION 960
2. LINE STRIPING PAINT COLOR FOR LOADING ZONE SHALL BE WHITE.

## LOADING ZONE STRIPING DETAIL
NOT TO SCALE



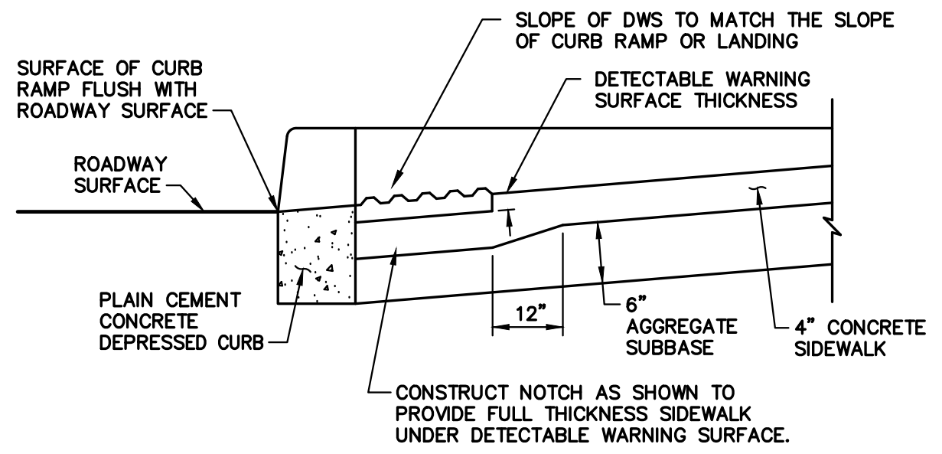
SECTION C–C

| TRUNCATED DOME DIMENSIONS | | |
|---|---|---|
| DIM. | MIN. | MAX. |
| A | 1.6" | 2.4" |
| B | 0.65" | 1.5" |
| C | 50% OF D | 65% OF D |
| D | 0.9" | 1.4" |

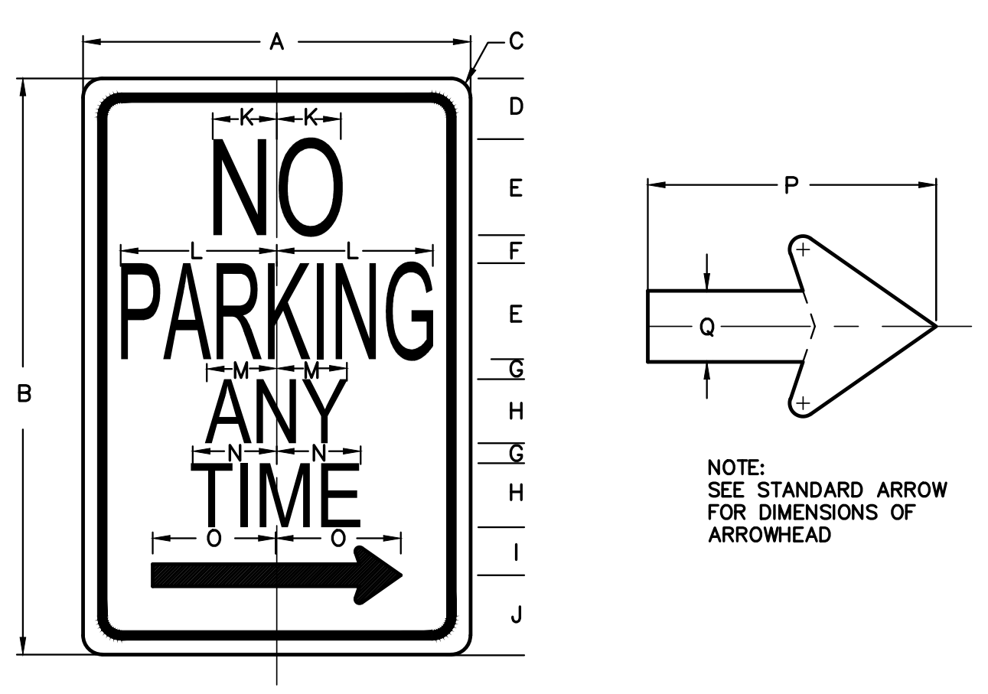


PLAN

## DETECTABLE WARNING TRUNCATED DOME DETAIL


SLOPE OF DWS TO MATCH THE SLOPE OF CURB RAMP OR LANDING
SURFACE OF CURB RAMP FLUSH WITH ROADWAY SURFACE
DETECTABLE WARNING SURFACE THICKNESS
ROADWAY SURFACE
PLAIN CEMENT CONCRETE DEPRESSED CURB
12"
6" AGGREGATE SUBBASE
4" CONCRETE SIDEWALK
CONSTRUCT NOTCH AS SHOWN TO PROVIDE FULL THICKNESS SIDEWALK UNDER DETECTABLE WARNING SURFACE.

## DETECTABLE WARNING SURFACE EMBEDDING
NOT TO SCALE



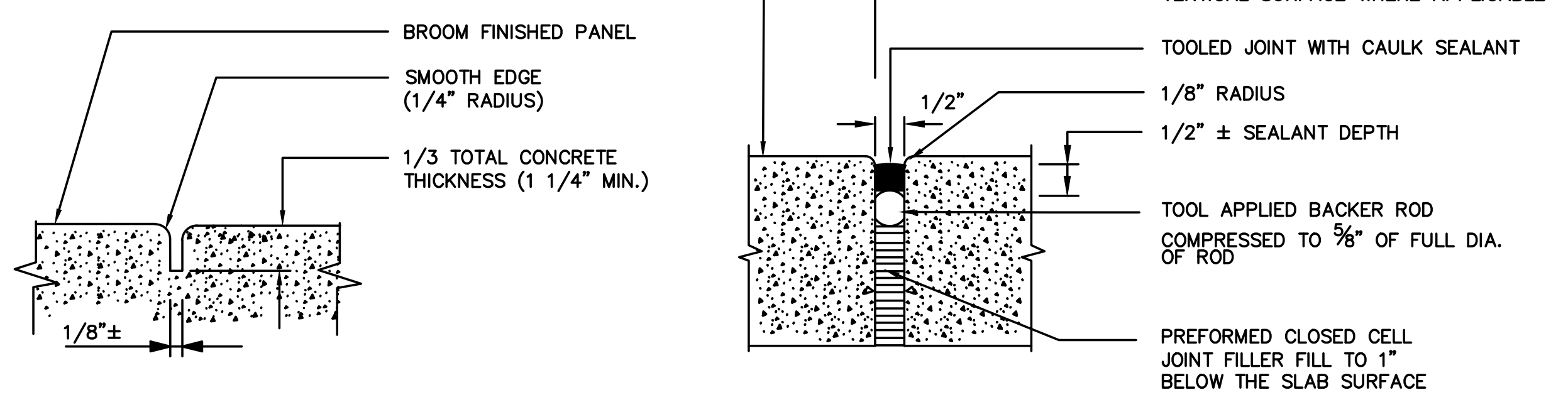
NOTE: SEE STANDARD ARROW FOR DIMENSIONS OF ARROWHEAD

COLOR: LEGEND, ARROW AND BORDER: RED (REFLECTORIZED)
BACKGROUND: WHITE (REFLECTORIZED)

| DIMENSIONS – mm (IN) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SIGN SIZE A x B | C | D | E | F | G | H | I | J |
| 300 x 450 (12" x 18") | 38 (1.5) | 47 (1.9) | 75 (3) | 22 (0.9) | 16 (0.6) | 50 (2) | 38 (1.5) | 63 (2.5) |

| DIMENSIONS – mm (IN) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| K | L | M | N | O | P | Q | MARGIN | BORDER | BLANK STD. |
| 50 (2) | 122 (4.9) | 55 (2.2) | 66 (2.6) | 97 (3.9) | 194 (7.8) | 20 (0.8) | 10 (0.4) | 10 (0.4) | B5–300450 (B5–1218) |

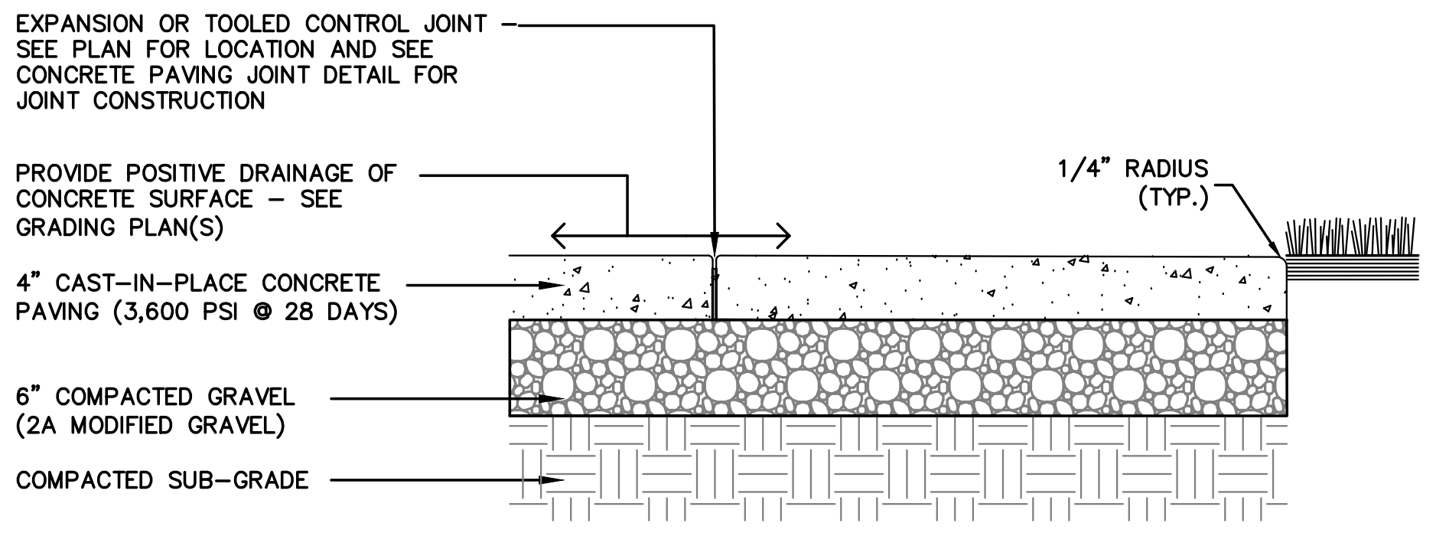
## NO PARKING – ANY TIME SIGN (R7–1R)
NOT TO SCALE


BROOM FINISHED PANEL
SMOOTH EDGE (1/4" RADIUS)
1/3 TOTAL CONCRETE THICKNESS (1 1/4" MIN.)
1/8"±
BROOM FINISHED PANEL
VERTICAL SURFACE WHERE APPLICABLE
TOOLED JOINT WITH CAULK SEALANT
1/2"
1/8" RADIUS
1/2" ± SEALANT DEPTH
TOOL APPLIED BACKER ROD COMPRESSED TO ⅝" OF FULL DIA. OF ROD
PREFORMED CLOSED CELL JOINT FILLER FILL TO 1" BELOW THE SLAB SURFACE

TOOLED CONTROL JOINT (CJ)
NTS

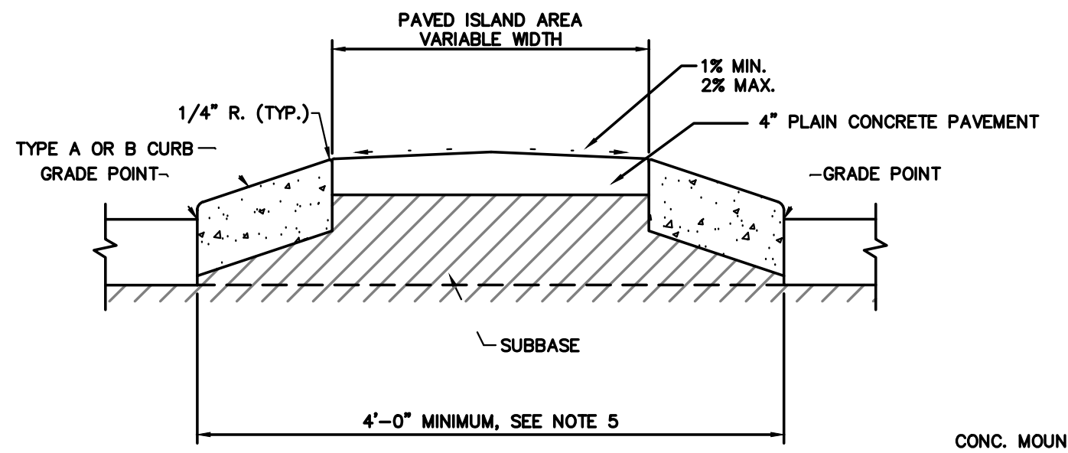
EXPANSION JOINT (EJ)
NTS

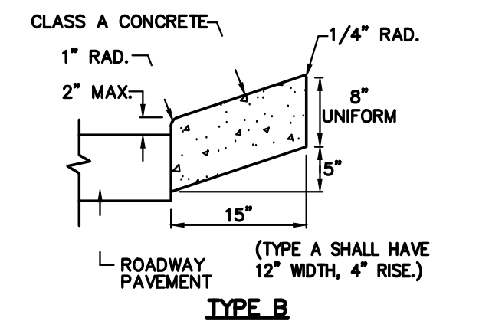
## CONCRETE PAVING JOINTS


EXPANSION OR TOOLED CONTROL JOINT SEE PLAN FOR LOCATION AND SEE CONCRETE PAVING JOINT DETAIL FOR JOINT CONSTRUCTION
PROVIDE POSITIVE DRAINAGE OF CONCRETE SURFACE – SEE GRADING PLAN(S)
1/4" RADIUS (TYP.)
4" CAST–IN–PLACE CONCRETE PAVING (3,600 PSI @ 28 DAYS)
6" COMPACTED GRAVEL (2A MODIFIED GRAVEL)
COMPACTED SUB–GRADE

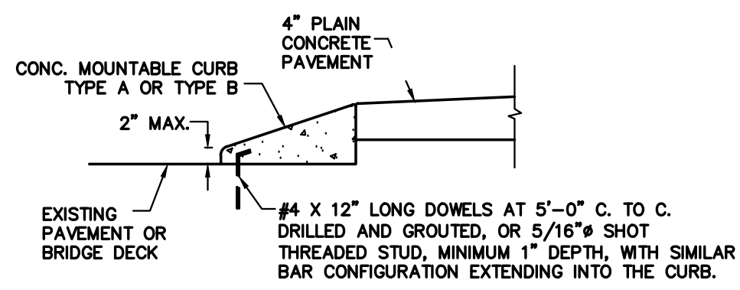
## STANDARD CONCRETE PAVEMENT

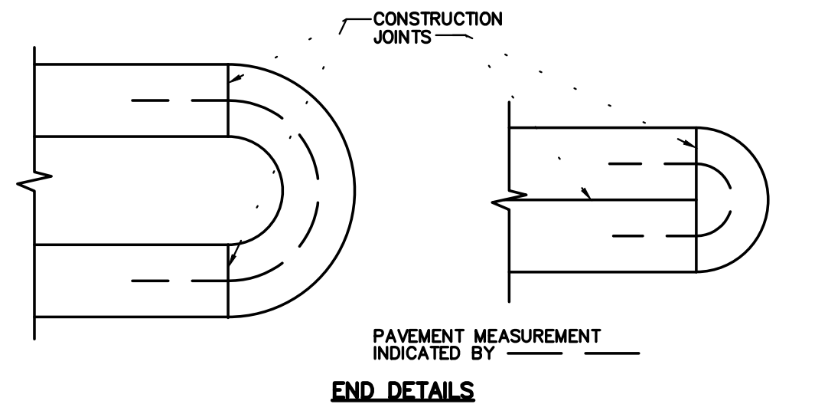
## 3 CONCRETE PAVING AND JOINT DETAILS
NOT TO SCALE


PAVED ISLAND AREA VARIABLE WIDTH
1% MIN. 2% MAX.
1/4" R. (TYP.)
4" PLAIN CONCRETE PAVEMENT
TYPE A OR B CURB
GRADE POINT
GRADE POINT
SUBBASE
4'–0" MINIMUM, SEE NOTE 5

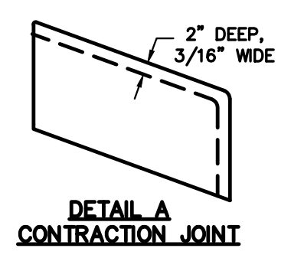


TYPE B


4" PLAIN CONCRETE PAVEMENT
CONC. MOUNTABLE CURB TYPE A OR TYPE B
2" MAX.
EXISTING PAVEMENT OR BRIDGE DECK
#4 X 12" LONG DOWELS AT 5'–0" C. TO C. DRILLED AND GROUTED, OR 5/16"ø SHOT THREADED STUD, MINIMUM 1" DEPTH, WITH SIMILAR BAR CONFIGURATION EXTENDING INTO THE CURB.



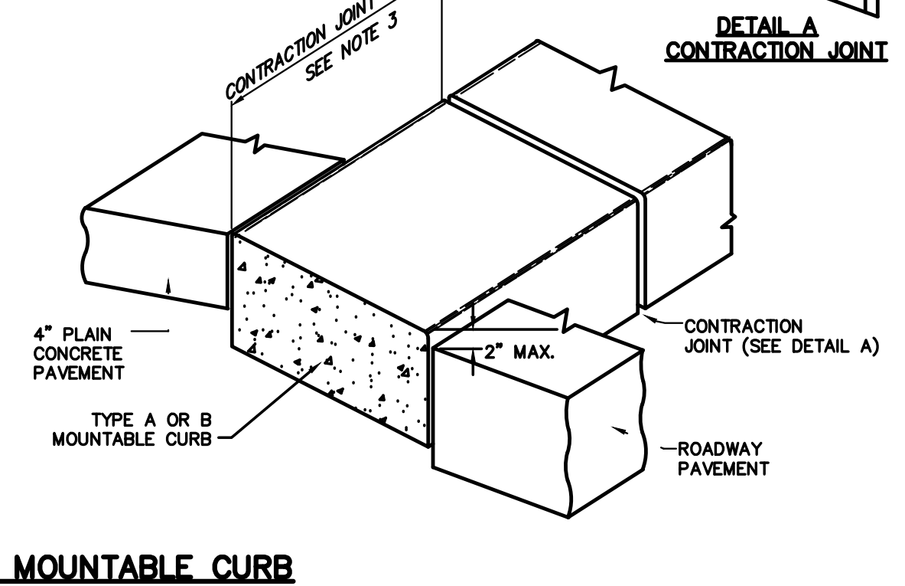
END DETAILS



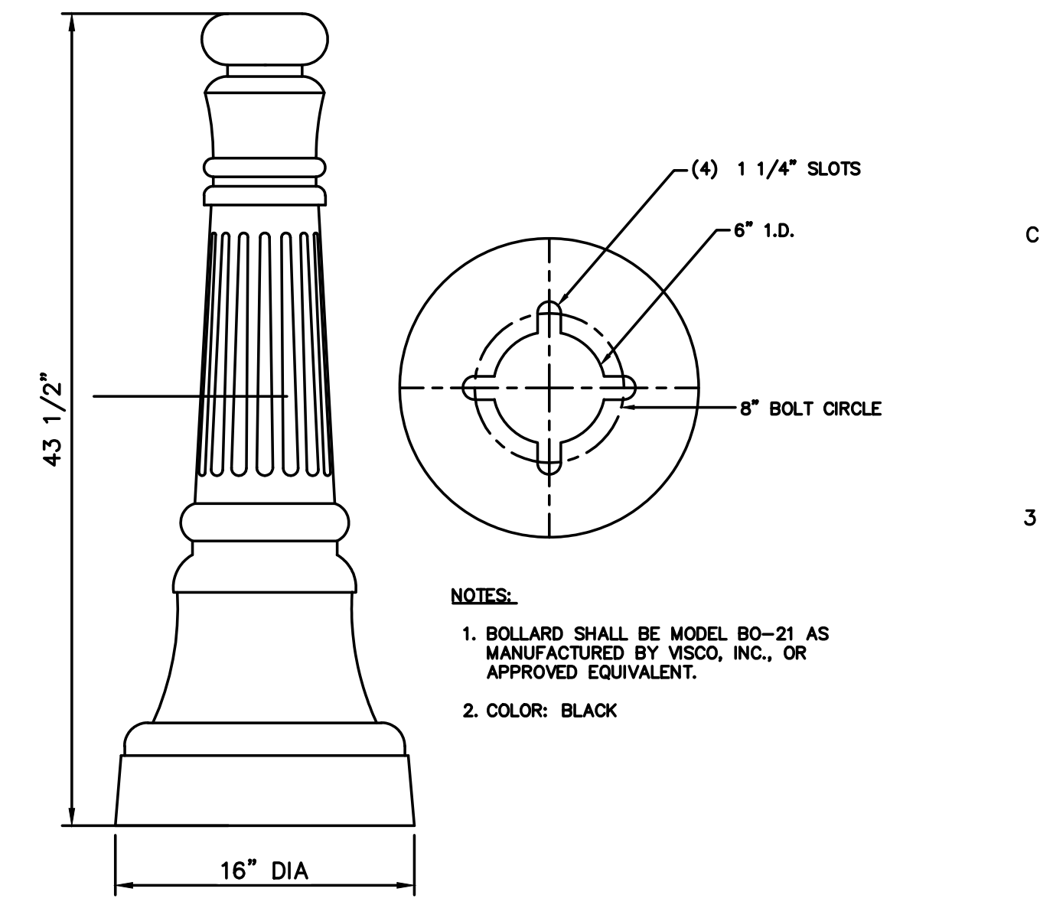
DETAIL A
CONTRACTION JOINT

NOTES:

1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUB. 408, SECTION 633.
2. INSTALL TYPE M INLETS WITH MOUNTABLE CURBS AND LOCATE INLET IN ACCORDANCE WITH RC–65M. MAKE BACK SLOPE TRAVERSABLE IN THE AREA OF THE INLET.
3. SPACE CONTRACTION JOINTS TO ALIGN WITH ADJACENT PAVEMENT JOINTS TO ELIMINATE SAWCUT AND SYMPATHY CRACKING. SEAL AS SPECIFIED IN PUB. 408, SECTION 501.3(n).
4. PLACE PREMOLDED EXPANSION JOINT FILLER MATERIAL, 1/2" THICK, AND POLYSTYRENE BOND BREAKER, 1/4" THICK, ADJACENT TO CURBS AND OTHER STRUCTURES AND AT THE END OF THE WORK DAY. CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO CONFORM TO CROSS SECTIONAL AREA OF CURB.
5. PROVIDE ELONGATED ISLANDS NOT LESS THAN 4' WIDE AND 20' LONG, EXCEPT IN SPECIAL CASES WHERE SPACE IS SEVERLY LIMITED.


CONTRACTION JOINT SPACING SEE NOTE 3
4" PLAIN CONCRETE PAVEMENT
TYPE A OR B MOUNTABLE CURB
2" MAX.
CONTRACTION JOINT (SEE DETAIL A)
ROADWAY PAVEMENT

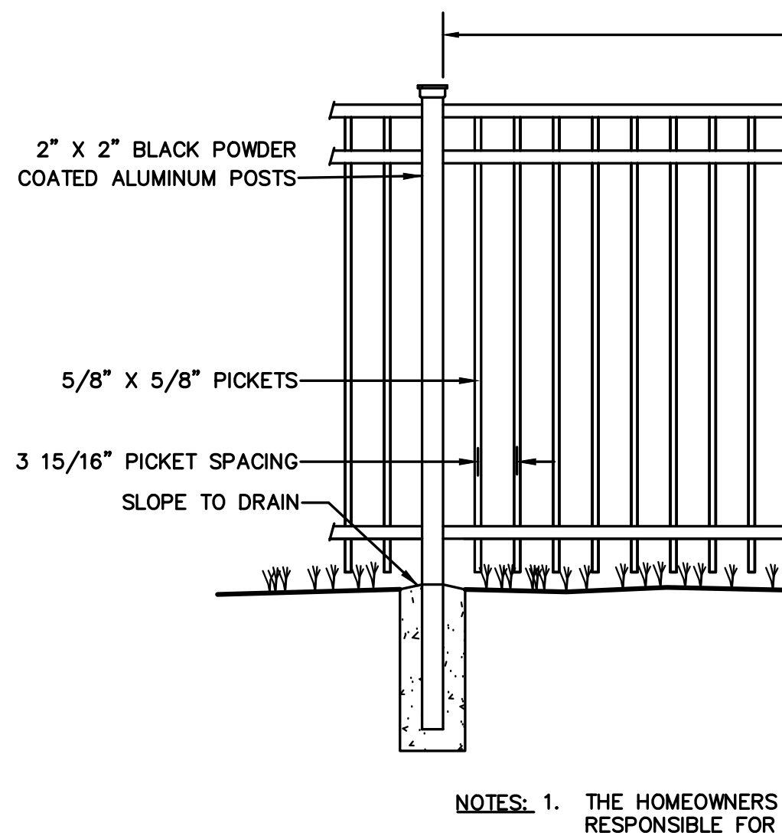
## CONCRETE MOUNTABLE CURB
NOT TO SCALE



NOTES:

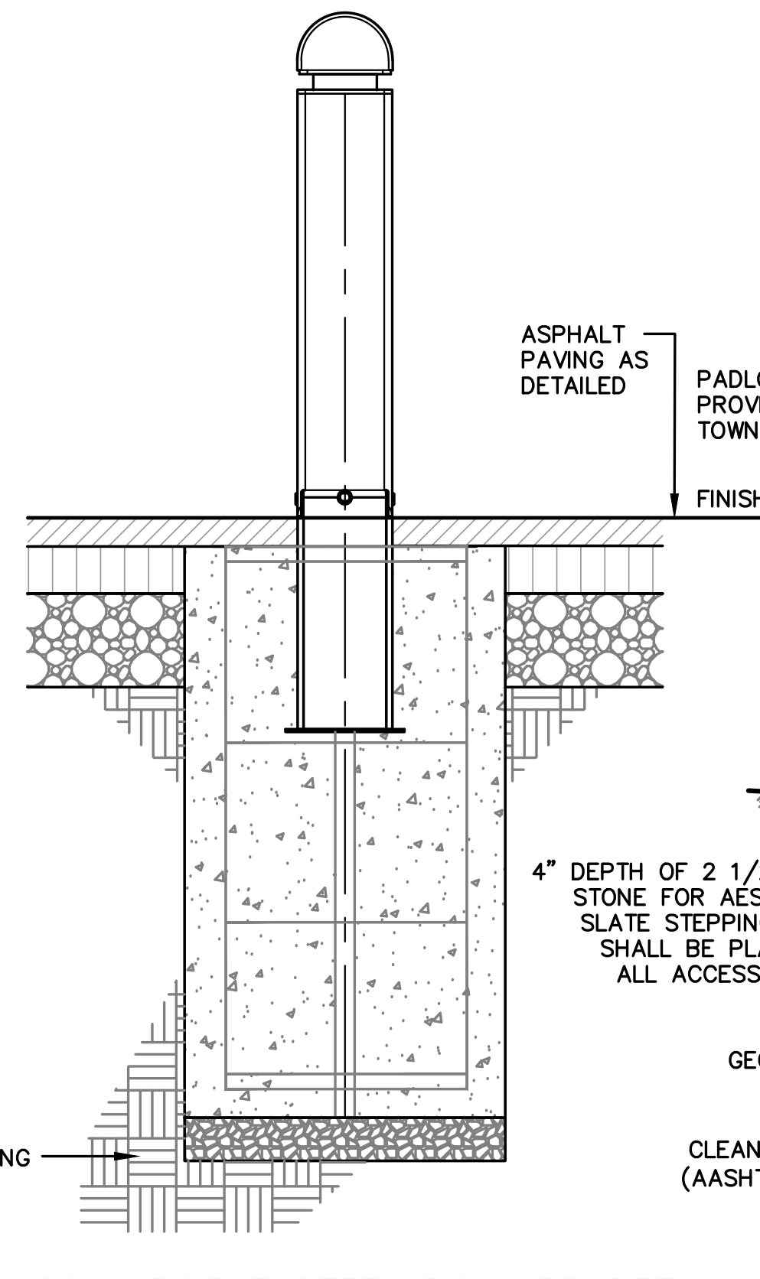
1. BOLLARD SHALL BE MODEL BO–21 AS MANUFACTURED BY VISCO, INC., OR APPROVED EQUIVALENT.
2. COLOR: BLACK

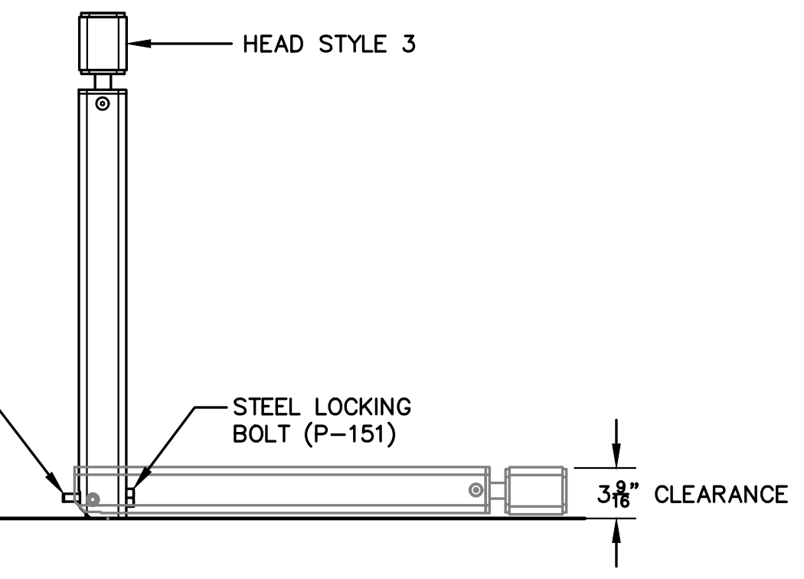
## 1 ORNAMENTAL BOLLARD
NOT TO SCALE


6'
POST CAP
2" X 2" BLACK POWDER COATED ALUMINUM POSTS
5/8" X 5/8" PICKETS
3 15/16" PICKET SPACING
SLOPE TO DRAIN
48" HEIGHT
6"
2"
CONCRETE FOOTING PER MANUFACTURER'S SPECIFICATIONS

NOTES:
1. THE HOMEOWNERS ASSOCIATION SHALL BE THE PARTY RESPONSIBLE FOR THE MAINTENANCE AND FUTURE REPLACEMENT OF FENCE.
2. FENCE SHALL BE JERITH ALUMINUM STYLE NO 202, BLACK POWDERCOATED ALUMINUM OR APPROVED EQUAL.
3. NO GATES ARE PROPOSED OR PERMITTED FOR THE 60" BUFFER/PERIMETER FENCE.

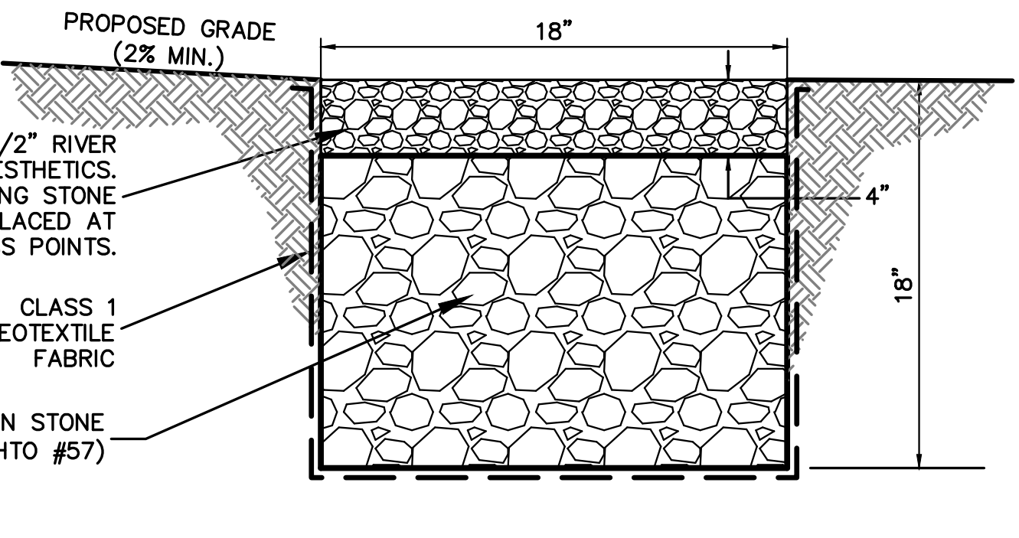
## ORNAMENTAL ALUMINUM FENCE DETAIL
NOT TO SCALE



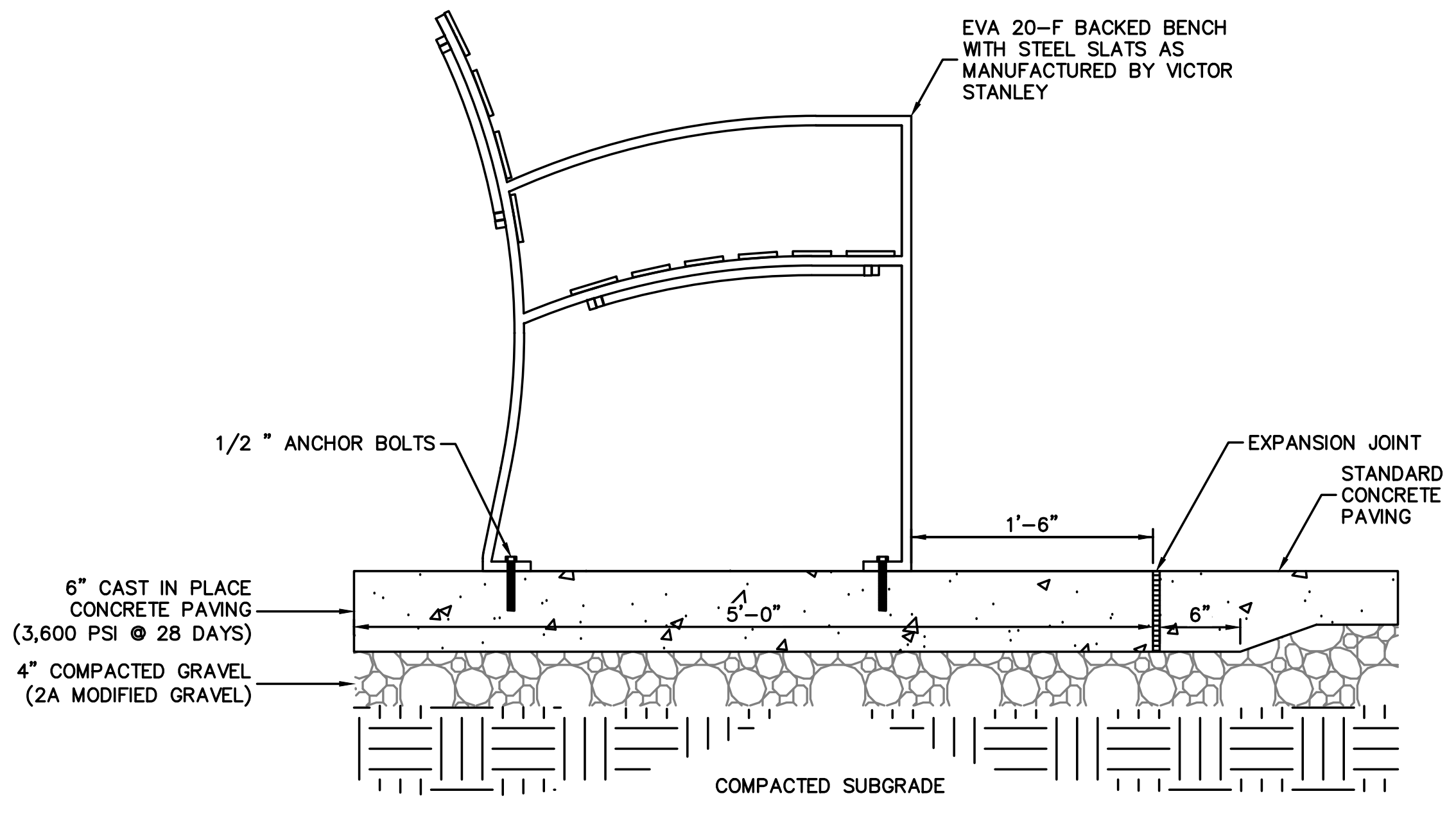


COLLAPSIBLE BOLLARD SHALL BE MODEL #MC–SP–SS3–S, AS MANUFACTURED BY MAXIFORCE, OR APPROVED EQUIVALENT.

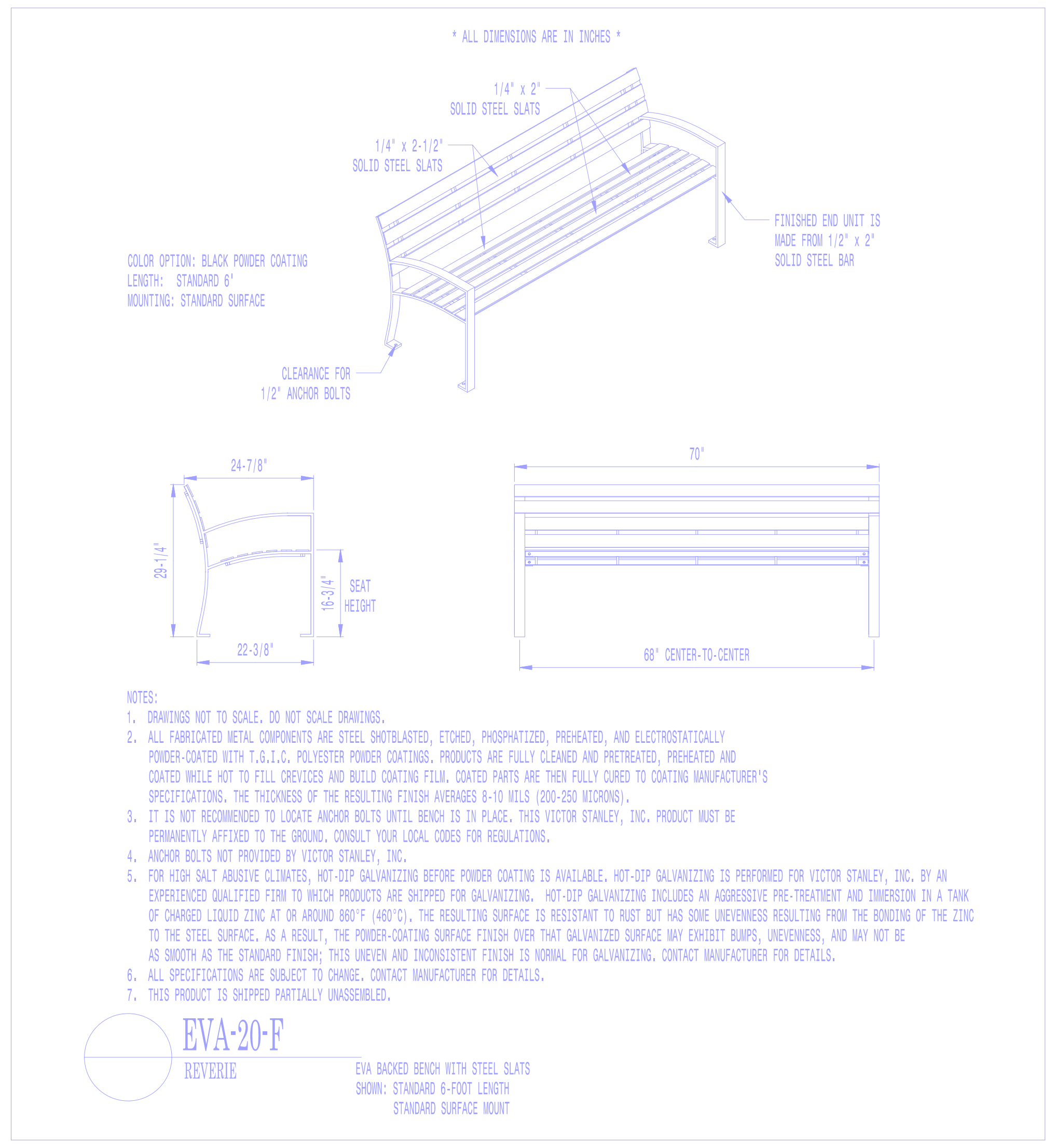
## COLLAPSIBLE STEEL BOLLARD DETAIL
NOT TO SCALE


PROPOSED GRADE (2% MIN.)
18"
4" DEPTH OF 2 1/2" RIVER STONE FOR AESTHETICS. SLATE STEPPING STONE SHALL BE PLACED AT ALL ACCESS POINTS.
4"
18"
CLASS 1 GEOTEXTILE FABRIC
CLEAN STONE (AASHTO #57)

## RIVER STONE EDGE DETAIL
NOT TO SCALE


EVA 20–F BACKED BENCH WITH STEEL SLATS AS MANUFACTURED BY VICTOR STANLEY
1/2 " ANCHOR BOLTS
EXPANSION JOINT
STANDARD CONCRETE PAVING
1'–6"
6" CAST IN PLACE CONCRETE PAVING (3,600 PSI @ 28 DAYS)
4" COMPACTED GRAVEL (2A MODIFIED GRAVEL)
5'–0"
6"
COMPACTED SUBGRADE

## 1 CONCRETE PAD AND BENCH SURFACE MOUNTING
NOT TO SCALE

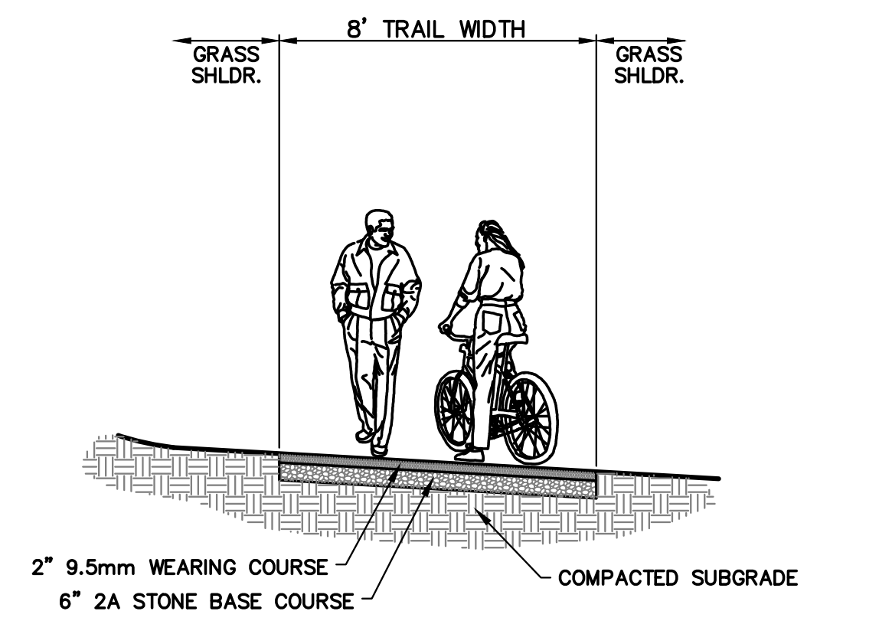

1/4" x 2" SOLID STEEL SLATS
1/4" x 2-1/2" SOLID STEEL SLATS
FINISHED END UNIT IS MADE FROM 1/2" x 2" SOLID STEEL BAR
CLEARANCE FOR 1/2" ANCHOR BOLTS
24-7/8"
29-1/4"
16-3/4"
SEAT HEIGHT
22-3/8"
70"
68" CENTER-TO-CENTER

* ALL DIMENSIONS ARE IN INCHES *

COLOR OPTION: BLACK POWDER COATING
LENGTH: STANDARD 6'
MOUNTING: STANDARD SURFACE

NOTES:
1. DRAWINGS NOT TO SCALE. DO NOT SCALE DRAWINGS.
2. ALL FABRICATED METAL COMPONENTS ARE STEEL SHOTBLASTED, ETCHED, PHOSPHATIZED, PREHEATED, AND ELECTROSTATICALLY POWDER-COATED WITH T.G.I.C. POLYESTER POWDER COATINGS. PRODUCTS ARE FULLY CLEANED AND PRETREATED, PREHEATED AND COATED WHILE HOT TO FILL CREVICES AND BUILD COATING FILM. COATED PARTS ARE THEN FULLY CURED TO COATING MANUFACTURER'S SPECIFICATIONS. THE THICKNESS OF THE RESULTING FINISH AVERAGES 8-10 MILS (200-250 MICRONS).
3. IT IS NOT RECOMMENDED TO LOCATE ANCHOR BOLTS UNTIL BENCH IS IN PLACE. THIS VICTOR STANLEY, INC. PRODUCT MUST BE PERMANENTLY AFFIXED TO THE GROUND. CONSULT YOUR LOCAL CODES FOR REGULATIONS.
4. ANCHOR BOLTS NOT PROVIDED BY VICTOR STANLEY, INC.
5. FOR HIGH SALT ABUSIVE CLIMATES, HOT-DIP GALVANIZING BEFORE POWDER COATING IS AVAILABLE. HOT-DIP GALVANIZING IS PERFORMED FOR VICTOR STANLEY, INC. BY AN EXPERIENCED QUALIFIED FIRM TO WHICH PRODUCTS ARE SHIPPED FOR GALVANIZING. HOT-DIP GALVANIZING INCLUDES AN AGGRESSIVE PRE-TREATMENT AND IMMERSION IN A TANK OF CHARGED LIQUID ZINC AT OR AROUND 860°F (460°C). THE RESULTING SURFACE IS RESISTANT TO RUST BUT HAS SOME UNEVENNESS RESULTING FROM THE BONDING OF THE ZINC TO THE STEEL SURFACE. AS A RESULT, THE POWDER-COATING SURFACE FINISH OVER THAT GALVANIZED SURFACE MAY EXHIBIT BUMPS, UNEVENNESS, AND MAY NOT BE AS SMOOTH AS THE STANDARD FINISH; THIS UNEVEN AND INCONSISTENT FINISH IS NORMAL FOR GALVANIZING. CONTACT MANUFACTURER FOR DETAILS.
6. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE. CONTACT MANUFACTURER FOR DETAILS.
7. THIS PRODUCT IS SHIPPED PARTIALLY UNASSEMBLED.

EVA-20-F
REVERIE
EVA BACKED BENCH WITH STEEL SLATS
SHOWN: STANDARD 6-FOOT LENGTH
STANDARD SURFACE MOUNT



## TYPICAL SECTION: ASPHALT WALKING TRAIL
NOT TO SCALE

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES
CORPORATE HEADQUARTERS
65 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901 • (215) 345-4330 • www.gilmore-assoc.com

ONLY THOSE PLANS INCORPORATING THE PROFESSIONAL SEAL SHOULD BE CONSIDERED OFFICIAL AND RELIED UPON BY USER. THIS PLAN IS PREPARED SPECIFICALLY FOR THE CLIENT AND PROJECT DESIGNATED HEREON. MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT THE CONSENT OF GILMORE & ASSOCIATES, INC. IS PROHIBITED.

**NOT APPROVED FOR CONSTRUCTION**

RONALD G. MONKRES II
ENGINEER 603164–E
DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN
*661 PENN STREET REDEVELOPMENT*
NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

SITE DETAILS 2

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.: 2500866

APPLICANTS INFO:
661 PENN STREET, LLC
209 PENN'S TRAIL
NEWTOWN, PA 18940
215–968–0600

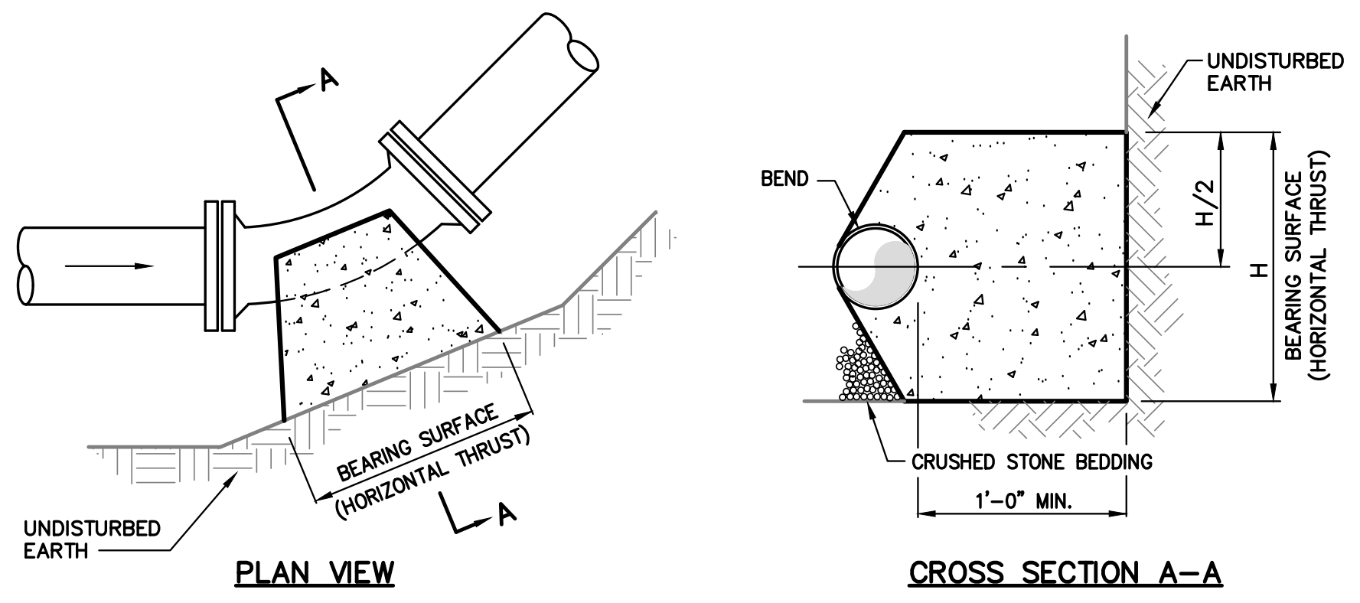
MUNICIPAL FILE No.:

TAX MAP PARCEL No.: 29–010–119–001 & 29–010–037

| | |
|---|---|
| TOTAL AREA: 15.75 AC. | TOTAL LOTS: 2 |
| DATE: 01/21/26 | SCALE: N.T.S. |
| DRAWN BY: GY/BH | CHECKED BY: RGM |

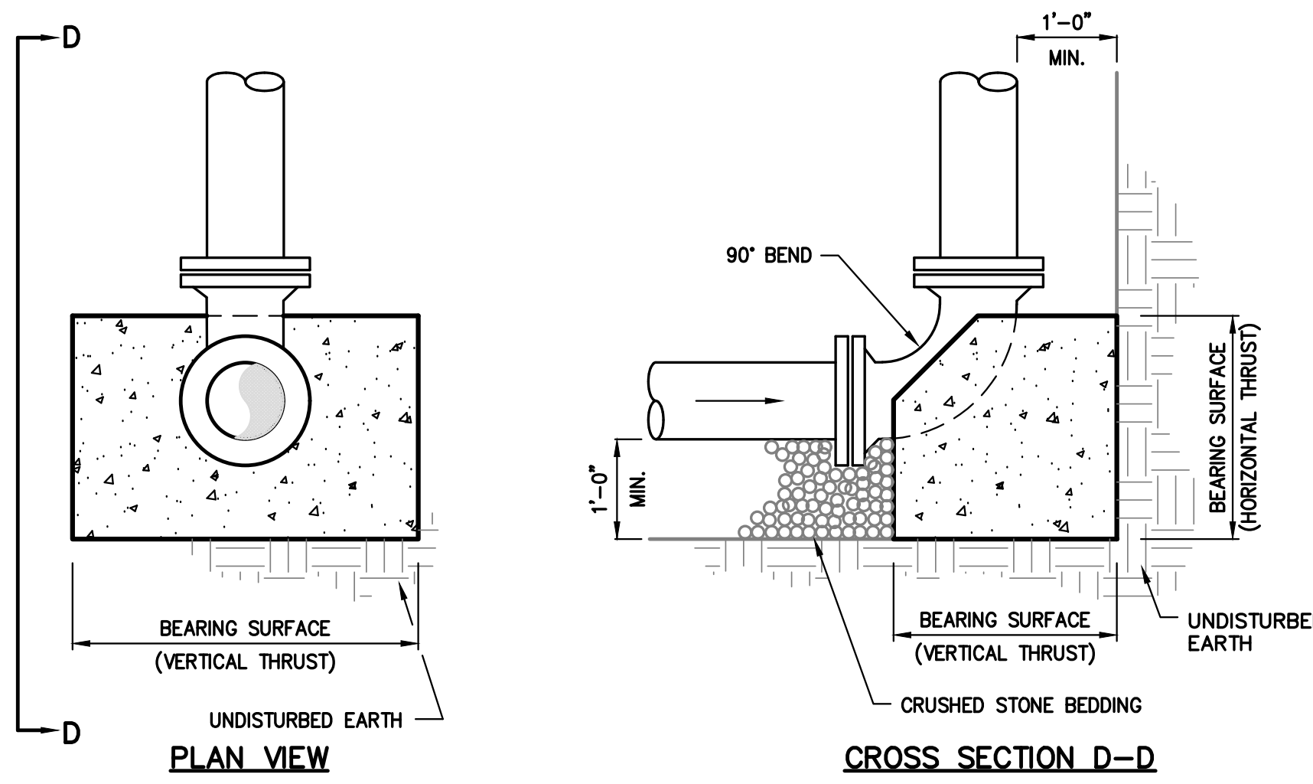
SHEET NO.: 31 OF 33

C:\Autodesk Docs\ACCDocs\Gilmore and Associates\2500866_661_Penn_Street_Re-Dev\Project Files\2025\2500866\DESIGN\CAD\Prod_Dwgs\2500866_DET.dwg Layout: SITE DETAILS 2 Plotted By: rmonkres, on Wed Jul 29, 2026 at 8:31am



## THRUST BLOCK AT HORIZONTAL BEND

NOT TO SCALE

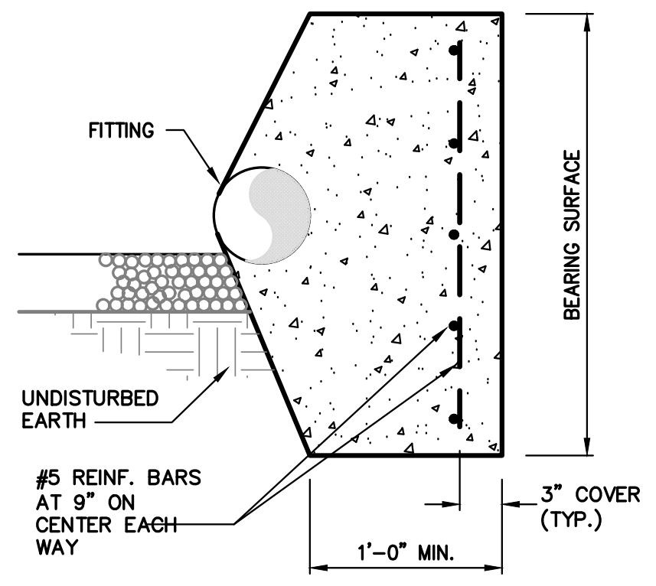


## THRUST BLOCK AT 90° VERTICAL BEND

NOT TO SCALE

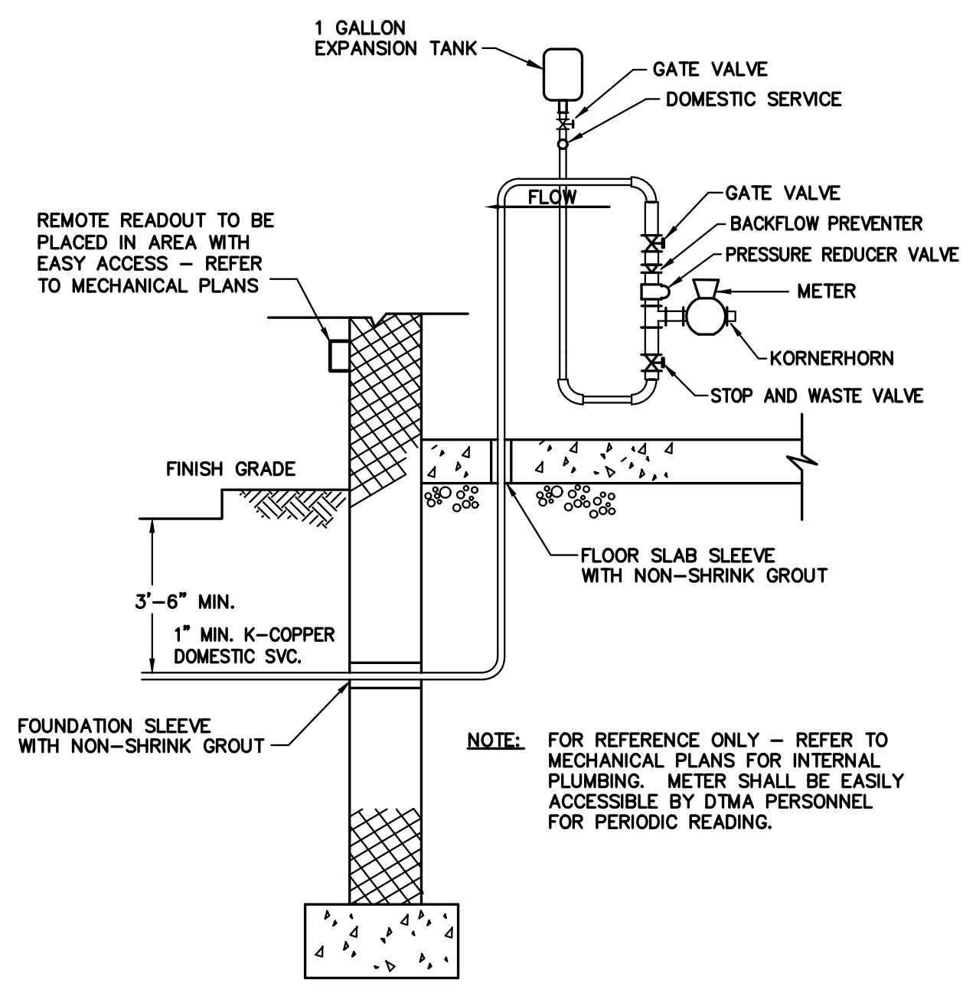
NOTES:

1. THE BEARING SURFACE(S) OF THE CONCRETE THRUST BLOCK MUST BEAR AGAINST UNDISTURBED EARTH. THE BEARING AREA PROVIDED MUST BE IN ACCORDANCE WITH TABLE 1 FOR DESIGNATED THRUST BLOCKS.
2. THE CONCRETE THRUST BLOCK MUST EXTEND FROM BELL TO BELL ON FITTINGS BUT MUST NOT INTERFERE WITH ACCESS TO THE FITTING JOINTS.
3. ALL CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 2000 PSI AT THE END OF 28 DAYS (PENNDOT CLASS C).
4. WHEN BEARING SURFACE IS GREATER THAN 10 SQUARE FEET, THRUST BLOCK SHALL INCLUDE REINFORCEMENT PARALLEL TO EACH BEARING SURFACE AS SHOWN IN THE DETAIL. ALL REINFORCEMENT BARS SHALL BE DEFORMED BARS.



## REINFORCEMENT DETAIL

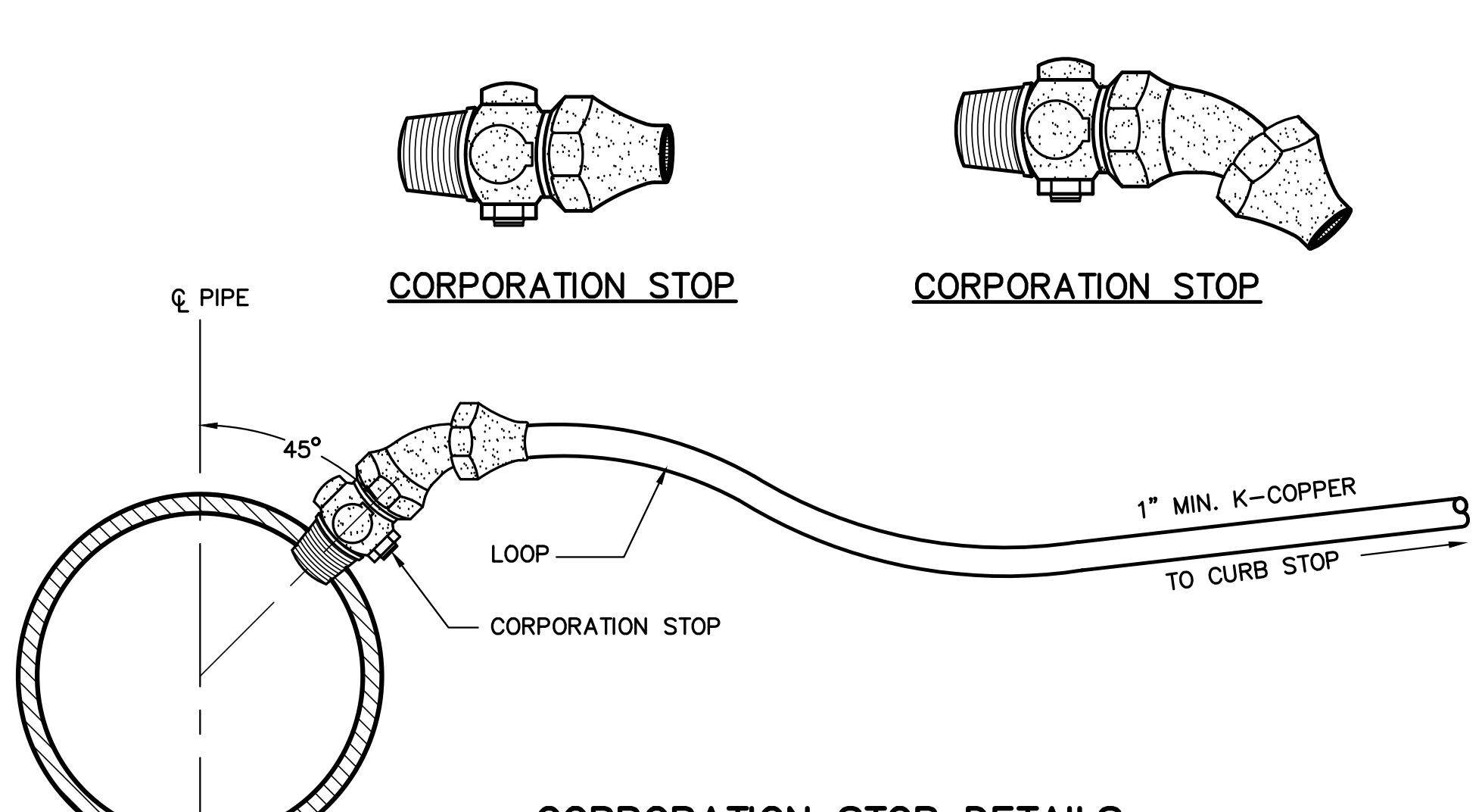
NOT TO SCALE


1 GALLON EXPANSION TANK
GATE VALVE
DOMESTIC SERVICE
GATE VALVE
BACKFLOW PREVENTER
PRESSURE REDUCER VALVE
METER
KORNERHORN
STOP AND WASTE VALVE
FLOW
REMOTE READOUT TO BE PLACED IN AREA WITH EASY ACCESS – REFER TO MECHANICAL PLANS
FINISH GRADE
FLOOR SLAB SLEEVE WITH NON-SHRINK GROUT
3'-6" MIN.
1" MIN. K-COPPER DOMESTIC SVC.
FOUNDATION SLEEVE WITH NON-SHRINK GROUT

NOTE: FOR REFERENCE ONLY – REFER TO MECHANICAL PLANS FOR INTERNAL PLUMBING. METER SHALL BE EASILY ACCESSIBLE BY DTMA PERSONNEL FOR PERIODIC READING.

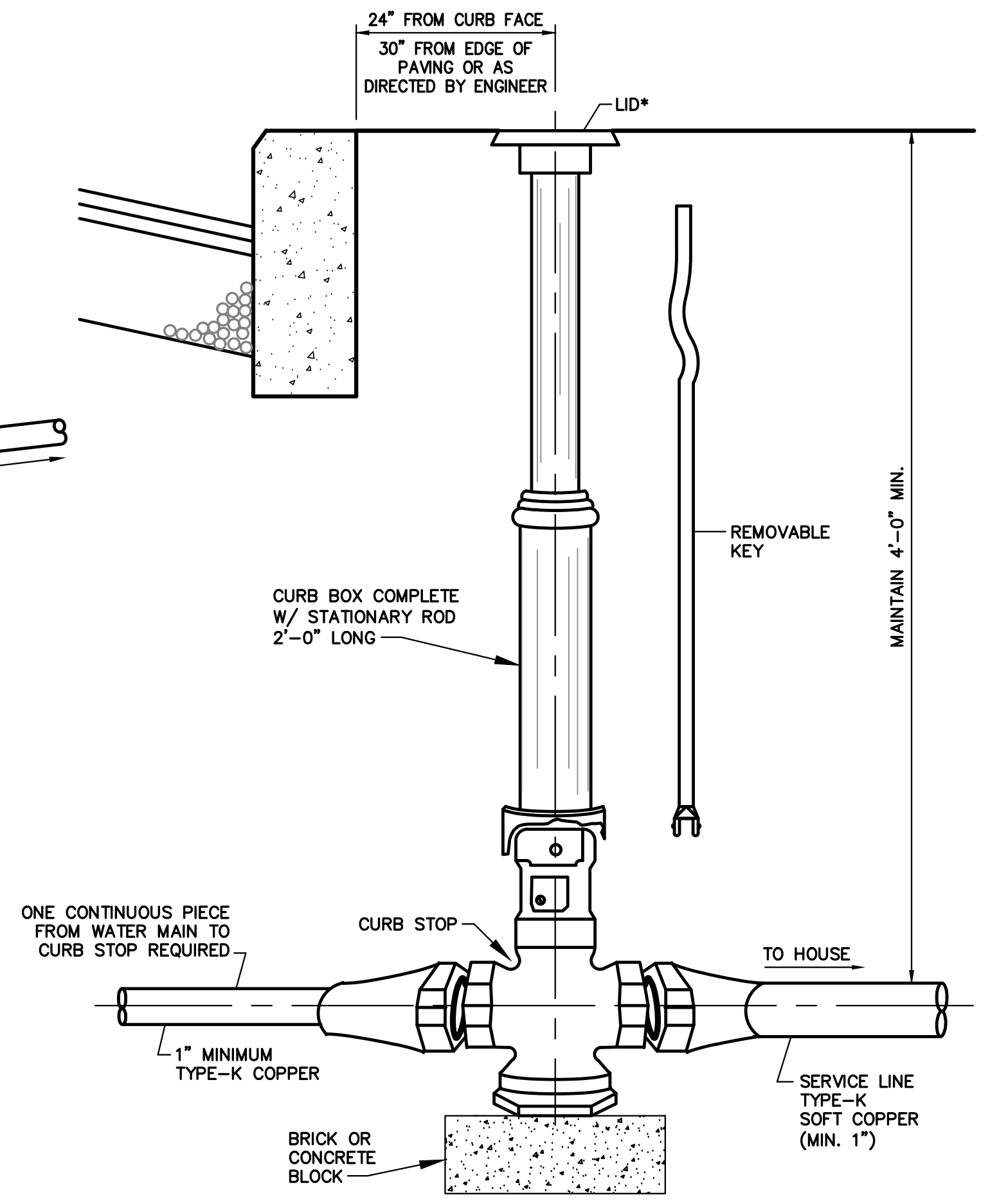
## SERVICE WATER METER INSTALLATION DETAIL

NOT TO SCALE



## CORPORATION STOP DETAILS

NOT TO SCALE


24" FROM CURB FACE
30" FROM EDGE OF PAVING OR AS DIRECTED BY ENGINEER
LID*
REMOVABLE KEY
MAINTAIN 4'-0" MIN.
CURB BOX COMPLETE W/ STATIONARY ROD 2'-0" LONG
ONE CONTINUOUS PIECE FROM WATER MAIN TO CURB STOP REQUIRED
CURB STOP
TO HOUSE
1" MINIMUM TYPE-K COPPER
BRICK OR CONCRETE BLOCK
SERVICE LINE TYPE-K SOFT COPPER (MIN. 1")

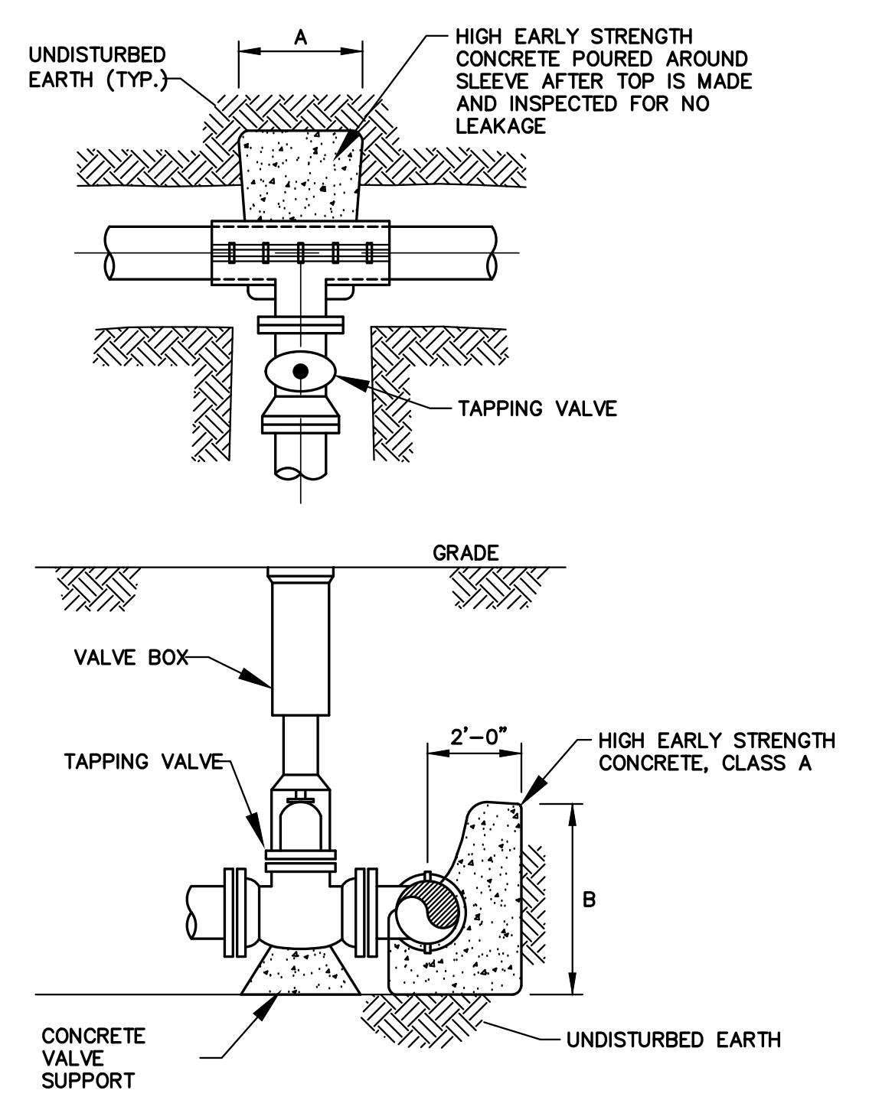
## CURB BOX DETAILS

NOT TO SCALE

NOTES:

1. LID WITH CENTER, REMOVABLE, PENTAGONAL PLUG: MUELLER 89375, OR McDONALD 56141.
2. CURB STOP TO HAVE COMPRESSION FITTINGS. FLARE FITTINGS NOT PERMITTED.

| MATERIAL | MANUFACTURER | MANUFACTURER |
|---|---|---|
| CURB STOPS | MUELLER<br>FORD | H-15209<br>B44-333 |
| CURB BOXES (UNPAVED) | MUELLER<br>FORD | H-10314 W/89982 LIDS<br>EA1-45-40-36R |


UNDISTURBED EARTH (TYP.)
A
HIGH EARLY STRENGTH CONCRETE POURED AROUND SLEEVE AFTER TOP IS MADE AND INSPECTED FOR NO LEAKAGE
TAPPING VALVE
GRADE
VALVE BOX
TAPPING VALVE
2'-0"
HIGH EARLY STRENGTH CONCRETE, CLASS A
B
CONCRETE VALVE SUPPORT
UNDISTURBED EARTH

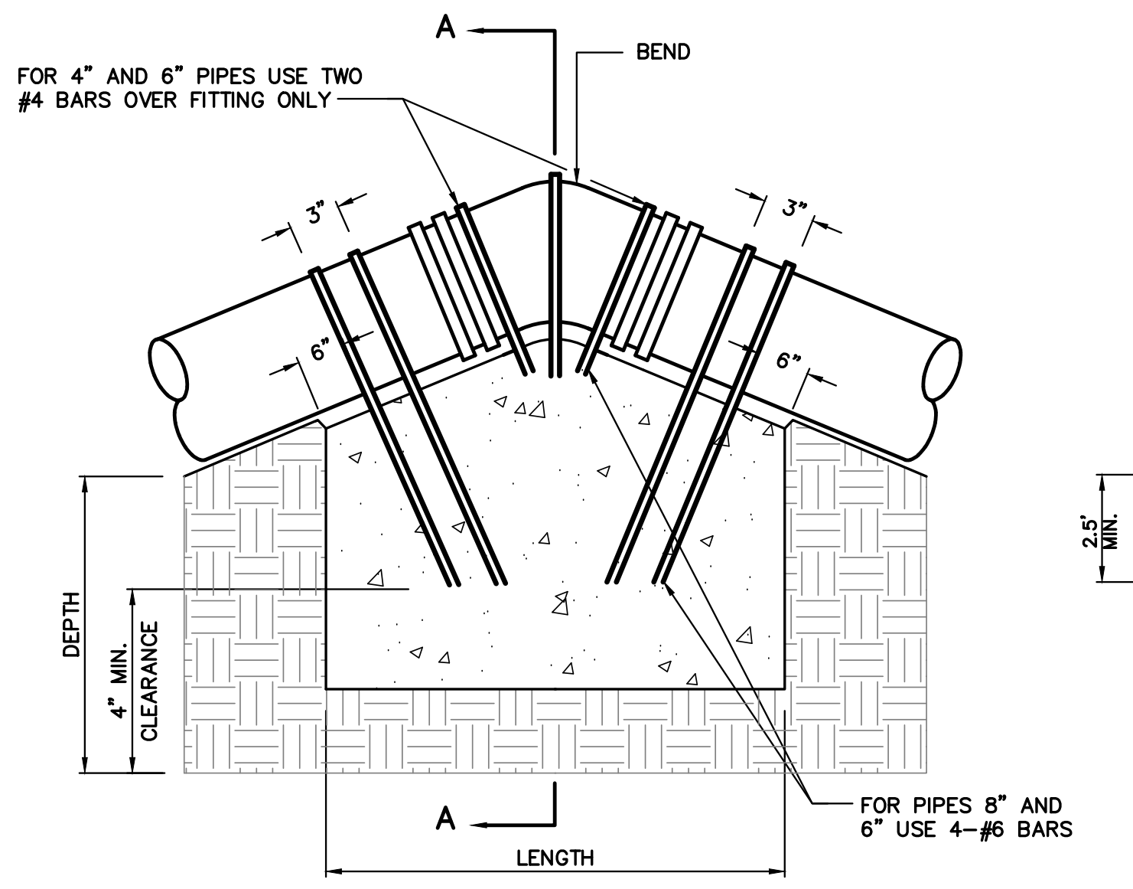
## TAPPING SLEEVE AND VALVE

NOT TO SCALE

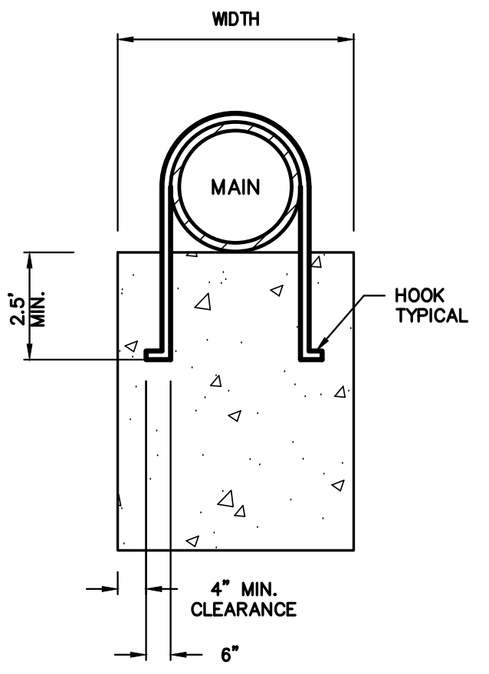
NOTES:

1. PROVIDE PLASTIC COVERING TO PROTECT PIPE JOINTS FROM CONCRETE.
2. ALL CONCRETE SHALL BE PENNDOT CLASS A.
3. USE 150 PSI TEST PRESSURE UNLESS DIRECTED OTHERWISE BY RTWA.
4. PROVIDE MEGA-LUG RETAINER GLAND AT ALL JOINTS.
5. ALL FITTINGS SHALL BE CLASS 350 COMPACT DUCTILE IRON WITH MECHANICAL JOINTS.

| TEST PRESSURE | PIPE DIAMETER | REACTION BACKING DIMENSIONS | |
|---|---|---|---|
| | | A | B |
| 150 PSI | 16 | 5'-6" | 3'-4" |
| | 12 | 4'-2" | 2'-6" |
| | 8 | 3'-0" | 1'-8" |
| | 6 | 2'-2" | 1'-3" |
| 200 PSI | 16 | 7'-3" | 3'-4" |
| | 12 | 5'-7" | 2'-6" |
| | 8 | 4'-0" | 1'-8" |
| | 6 | 3'-1" | 1'-3" |
| 250 PSI | 16 | 9'-3" | 3'-4" |
| | 12 | 6'-4" | 2'-6" |
| | 8 | 5'-0" | 1'-8" |
| | 6 | 3'-10" | 1'-3" |


A
BEND
FOR 4" AND 6" PIPES USE TWO #4 BARS OVER FITTING ONLY
3"
6"
DEPTH
4" MIN. CLEARANCE
A
LENGTH
FOR PIPES 8" AND 6" USE 4-#6 BARS

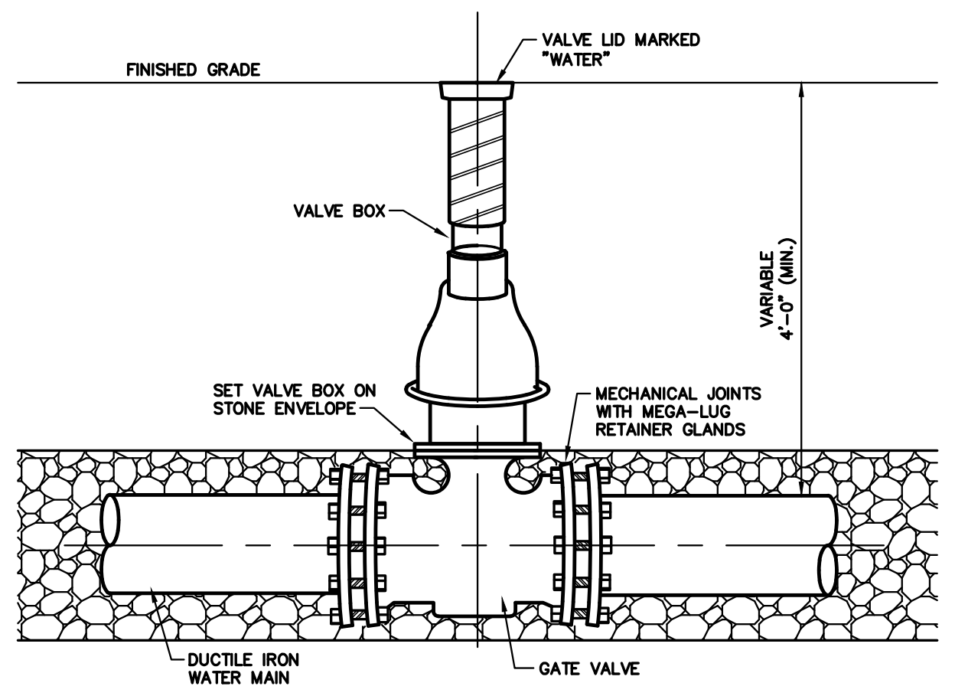
## TYPICAL SECTION VERTICAL THRUST UPWARD



## SECTION A–A

| MINIMUM SQUARE FEET OF BEARING SURFACE REQUIRED FOR HORIZONTAL THRUST BLOCKING AND VERTICAL THRUSTS DOWNWARD | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| TYPE OF BEARING MATERIAL AND ALLOWABLE LOADS | 6" AND 8" | | | | 10" AND 12" | | | |
| | DEGREE BEND OR DEFLECTION | | | | DEGREE BEND OR DEFLECTION | | | |
| | 11 1/4° | 22 1/2° | 45° | 90° | 11 1/4° | 22 1/2° | 45° | 90° |
| SAND, 1 TON/SQ.FT. SOFT CLAY, 1 TON/SQ.FT. | 1.50 | 3.00 | 6.00 | 12.00 | 3.00 | 6.00 | 12.00 | 24.50 |
| SAND & GRAVEL, 2 TON/SQ.FT. | 1.00 | 1.50 | 3.00 | 6.00 | 1.50 | 3.00 | 6.00 | 12.00 |
| CLAY, 3 TON/SQ.FT. | 1.00 | 1.00 | 2.00 | 4.00 | 1.00 | 2.00 | 4.00 | 8.00 |
| SOFT ROCK, 5 TON/SQ.FT. | 1.00 | 1.00 | 1.00 | 2.50 | 1.00 | 1.00 | 2.50 | 5.00 |
| ROCK, 20 TON/SQ.FT. | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

| CONCRETE BLOCKING DIMENSIONS, VERTICAL THRUST UPWARD 100 P.S.I. WORKING PRESSURE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PIPE SIZE | LENGTH | | | WIDTH | | | DEPTH | | |
| | 11.25° | 22.5° | 45° | 11.25° | 22.5° | 45° | 11.25° | 22.5° | 45° |
| 8" | 3' | 4' | 6' | 3' | 3' | 3' | 2' | 3' | 4' |
| 10" & 12" | 3.5' | 4' | 7' | 4' | 4' | 4' | 2.5' | 3' | 4' |
| 14" & 16" | 4' | 6' | 9' | 4.5' | 4.5' | 4.5' | 3.5' | 4' | 5' |
| 18" & 20" | 5' | 6.5' | 11.5' | 5' | 5' | 5 | 4' | 5' | 5.5' |
| 24" | 5' | 9' | 12.5' | 5' | 5' | 6' | 4.5' | 5' | 6' |
| 30" | 5.5' | 9' | 13.5' | 5.5' | 6' | 7' | 5.5' | 6' | 7' |
| 36" | 6.5' | 11' | 14' | 5.5' | 6.5' | 7' | 6' | 6.5' | 7' |
| 42" | 9' | 13.5' | 15' | 6' | 7' | 7' | 6' | 7' | 7' |
| 48" | 10' | 14' | 16' | 6' | 7' | 7' | 6' | 7' | 7' |

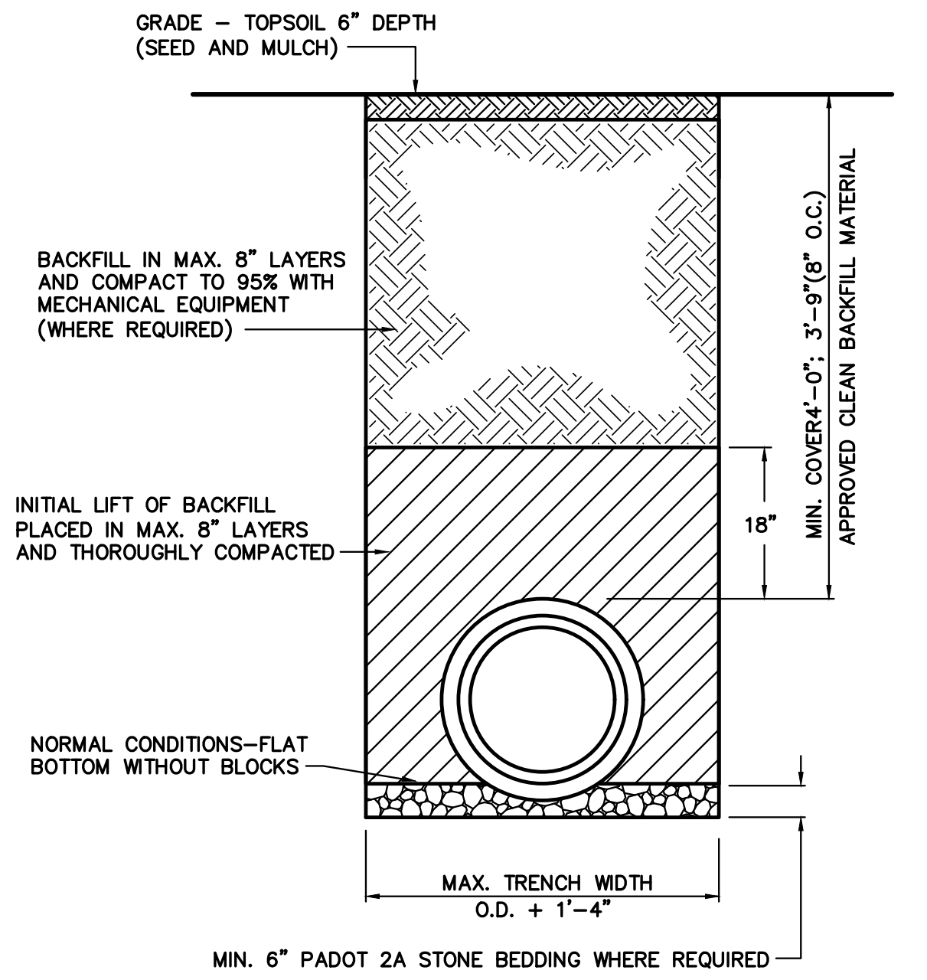


NOTES:

1. GATE VALVE SHALL BE MUELLER A-2360 RESILIENT SEATED GATE VALVES WITH MECHANICAL JOINTS.
2. VALVE BOXES SHALL BE TWO PIECE CAST IRON, SLIP TYPE.

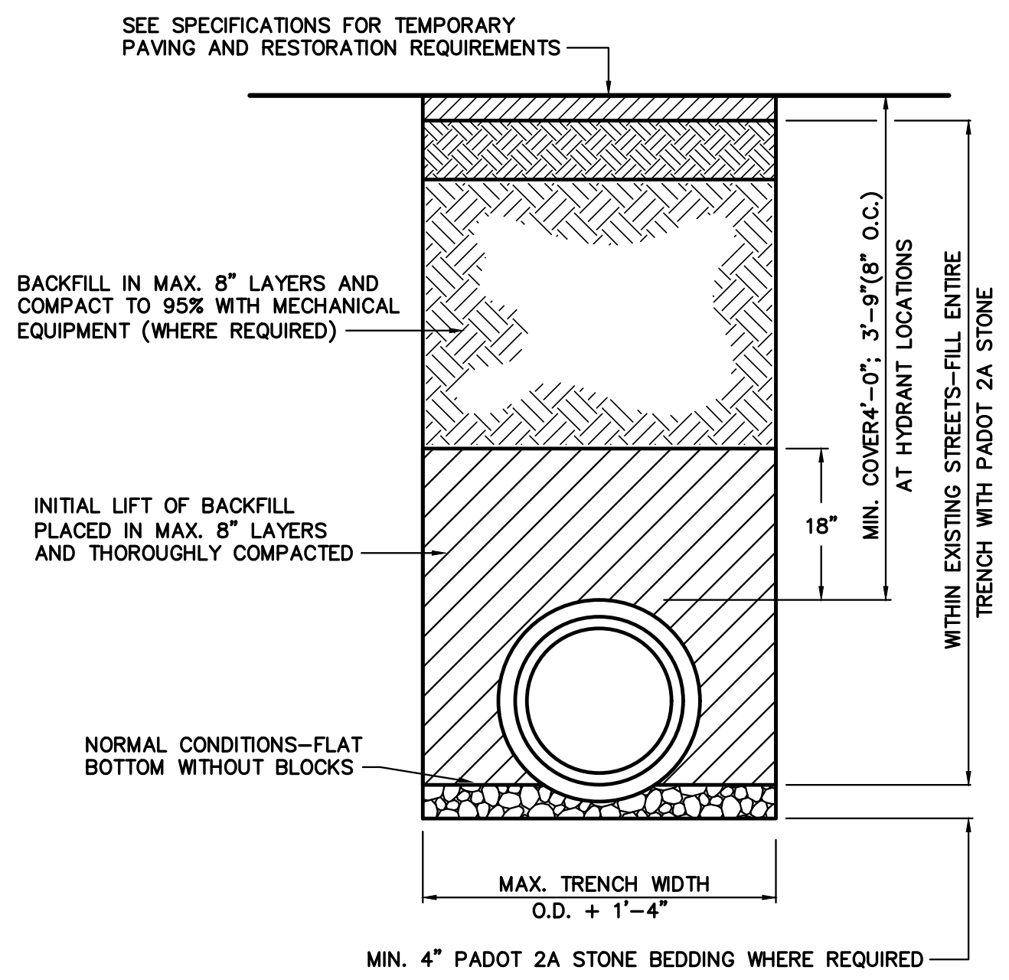
## GATE VALVE WITH VALVE BOX DETAIL

NOT TO SCALE


GRADE – TOPSOIL 6" DEPTH (SEED AND MULCH)
BACKFILL IN MAX. 8" LAYERS AND COMPACT TO 95% WITH MECHANICAL EQUIPMENT (WHERE REQUIRED)
APPROVED CLEAN BACKFILL MATERIAL
MIN. COVER=4'-0", 3'-6"(4" O.C.)
INITIAL LIFT OF BACKFILL PLACED IN MAX. 8" LAYERS AND THOROUGHLY COMPACTED
18"
NORMAL CONDITIONS–FLAT BOTTOM WITHOUT BLOCKS
MAX. TRENCH WIDTH O.D. + 1'-4"
MIN. 6" PADOT 2A STONE BEDDING WHERE REQUIRED

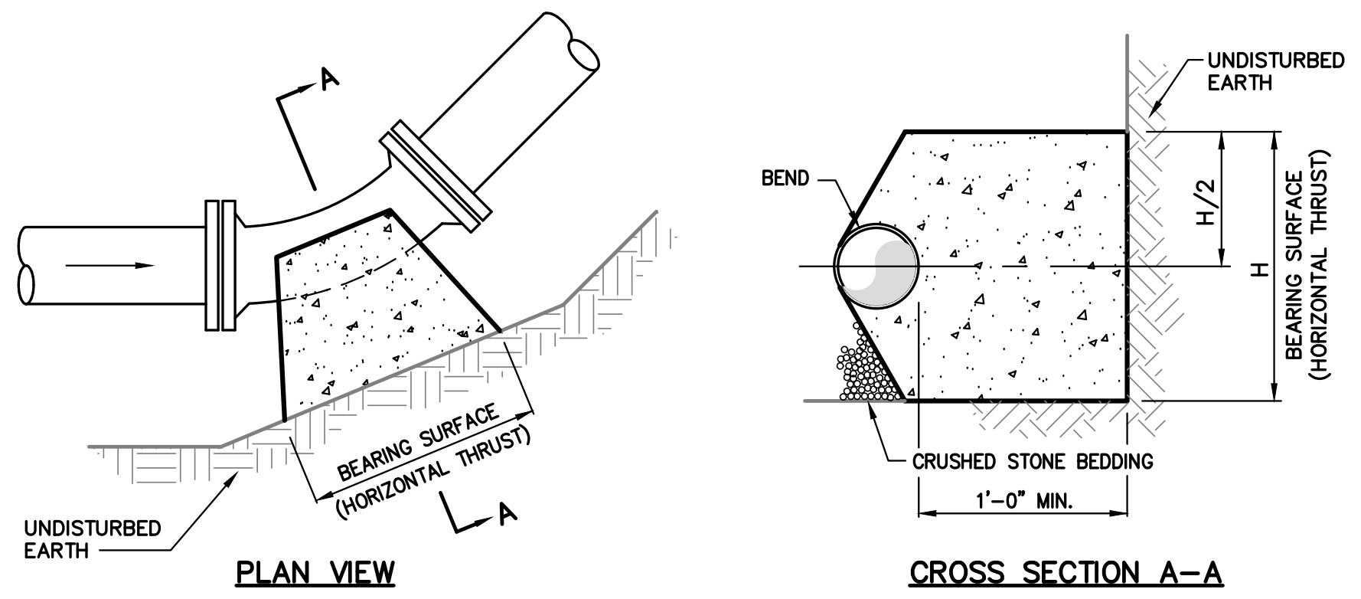
## WATER TRENCH DETAIL (NON-PAVED AREAS)

NOT TO SCALE


SEE SPECIFICATIONS FOR TEMPORARY PAVING AND RESTORATION REQUIREMENTS
BACKFILL IN MAX. 8" LAYERS AND COMPACT TO 95% WITH MECHANICAL EQUIPMENT (WHERE REQUIRED)
MIN. COVER=4'-0", 3'-6"(4" O.C.) AT HYDRANT LOCATIONS
WITHIN EXISTING STREETS–FILL ENTIRE TRENCH WITH PADOT 2A STONE
INITIAL LIFT OF BACKFILL PLACED IN MAX. 8" LAYERS AND THOROUGHLY COMPACTED
18"
NORMAL CONDITIONS–FLAT BOTTOM WITHOUT BLOCKS
MAX. TRENCH WIDTH O.D. + 1'-4"
MIN. 4" PADOT 2A STONE BEDDING WHERE REQUIRED

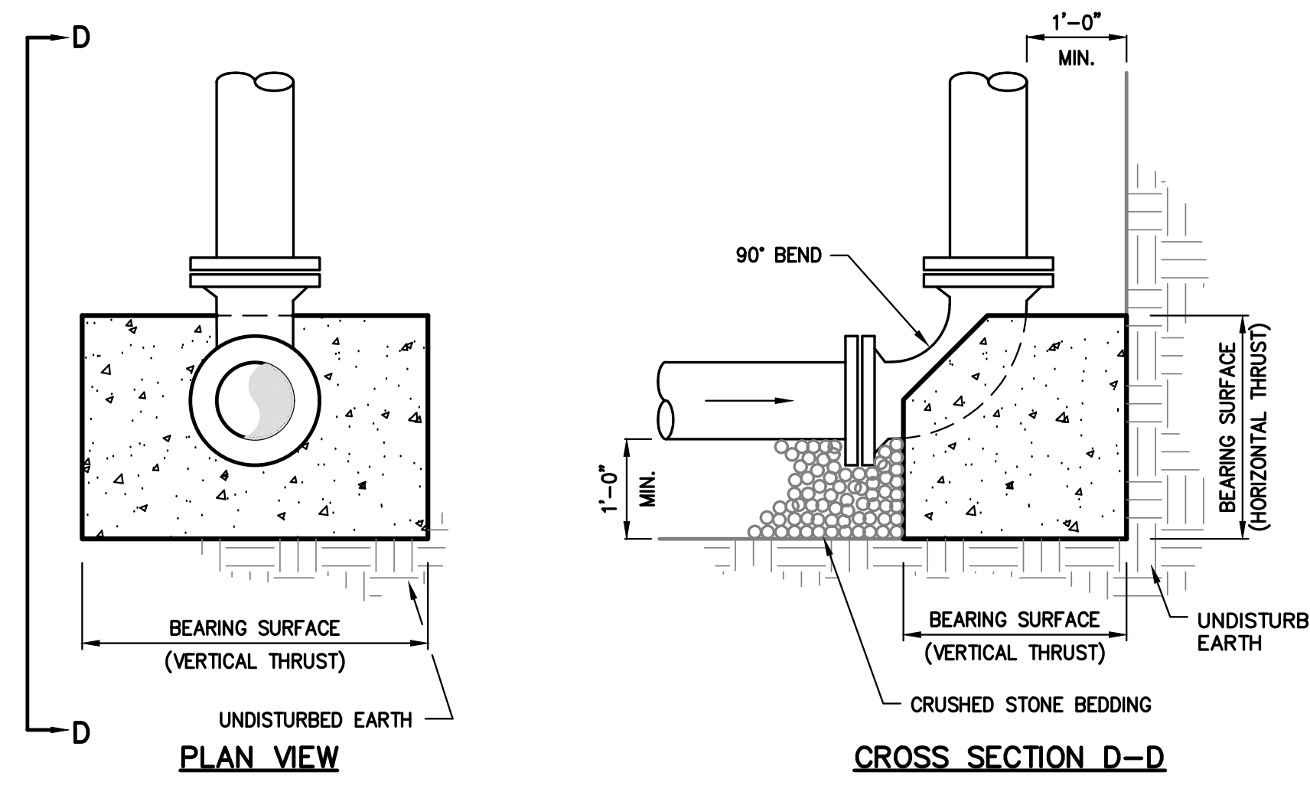
## WATER TRENCH DETAIL (PAVED AREAS)

NOT TO SCALE



## THRUST BLOCK AT HORIZONTAL BEND

NOT TO SCALE

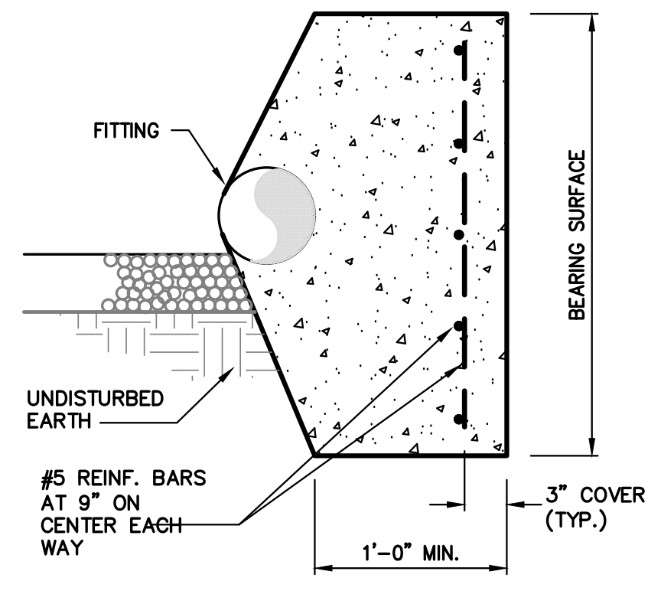


## THRUST BLOCK AT 90° VERTICAL BEND

NOT TO SCALE

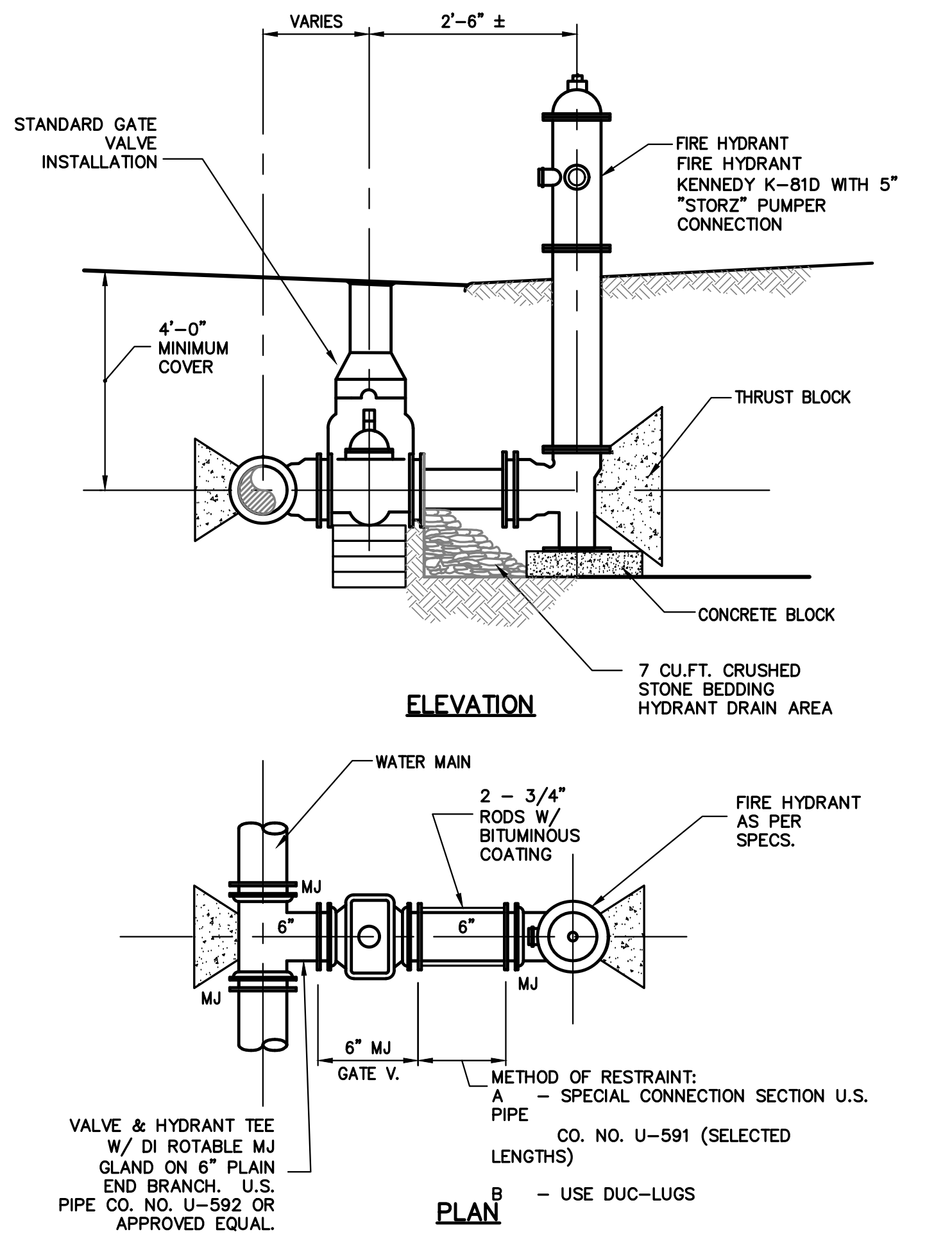
NOTES:

1. THE BEARING SURFACE(S) OF THE CONCRETE THRUST BLOCK MUST BEAR AGAINST UNDISTURBED EARTH. THE BEARING AREA PROVIDED MUST BE IN ACCORDANCE WITH TABLE 1 FOR DESIGNATED THRUST BLOCKS.
2. THE CONCRETE THRUST BLOCK MUST EXTEND FROM BELL TO BELL ON FITTINGS BUT MUST NOT INTERFERE WITH ACCESS TO THE FITTING JOINTS.
3. ALL CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 2000 PSI AT THE END OF 28 DAYS (PENNDOT CLASS C).
4. WHEN BEARING SURFACE IS GREATER THAN 10 SQUARE FEET, THRUST BLOCK SHALL INCLUDE REINFORCEMENT PARALLEL TO EACH BEARING SURFACE AS SHOWN IN THE DETAIL. ALL REINFORCEMENT BARS SHALL BE DEFORMED BARS.



## REINFORCEMENT DETAIL

NOT TO SCALE


VARIES
2'-6" ±
STANDARD GATE VALVE INSTALLATION
FIRE HYDRANT
FIRE HYDRANT KENNEDY K-81D WITH 5" "STORZ" PUMPER CONNECTION
4'-0" MINIMUM COVER
THRUST BLOCK
CONCRETE BLOCK
7 CU.FT. CRUSHED STONE BEDDING HYDRANT DRAIN AREA
WATER MAIN
2 – 3/4" RODS W/ BITUMINOUS COATING
FIRE HYDRANT AS PER SPECS.
MJ
6"
6" MJ
GATE V.
VALVE & HYDRANT TEE W/ DI ROTABLE MJ GLAND ON 6" PLAIN END BRANCH. U.S. PIPE CO. NO. U-592 OR APPROVED EQUAL.

ELEVATION

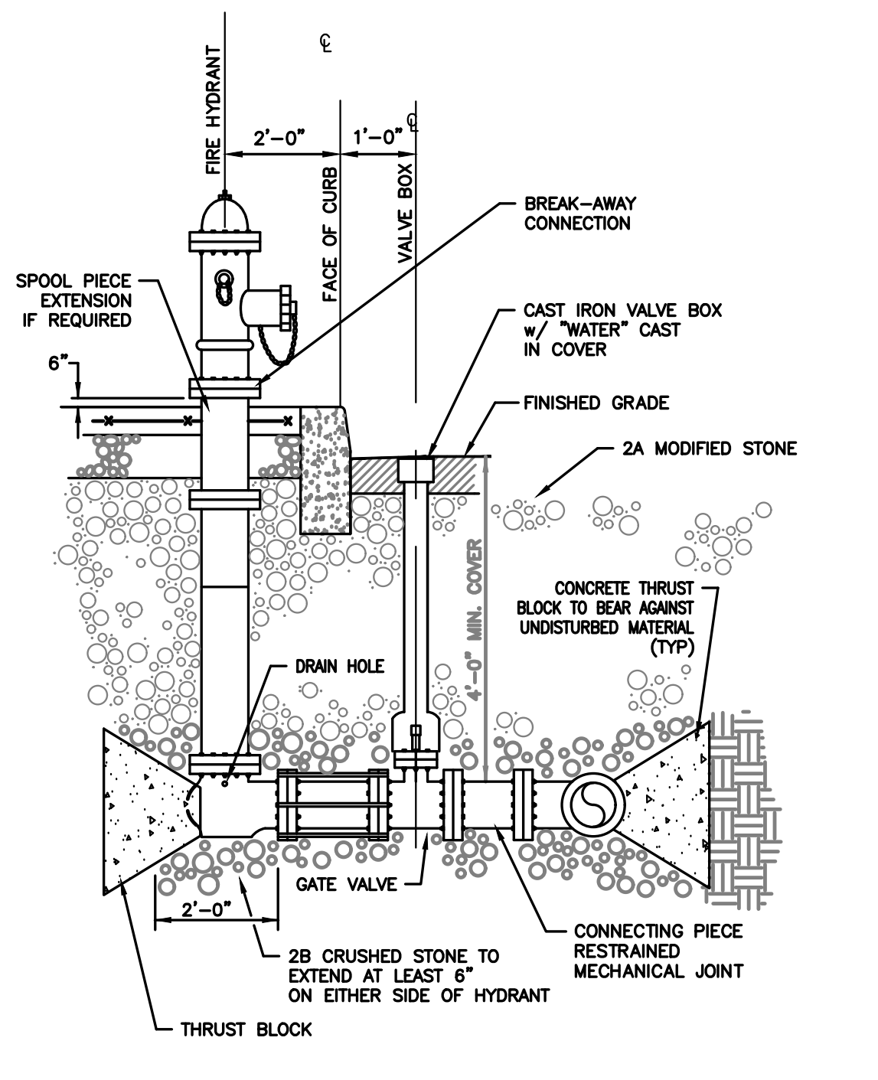
METHOD OF RESTRAINT:
A – SPECIAL CONNECTION SECTION U.S. PIPE CO. NO. U-591 (SELECTED LENGTHS)
B – USE DUC-LUGS

PLAN

## TYPICAL FIRE HYDRANT PIPING & RESTRAINTS DETAIL

NOT TO SCALE

NOTE:
A MINIMUM COVER OF FIVE (5) FEET WITH RESPECT TO HYDRANT LOCATION SHALL BE PROVIDED WITH THE NECESSARY BENDS, FITTINGS, AND RESTRAINTS AS DIRECTED BY WATER COMPANY'S ENGINEER.


℄
FIRE HYDRANT
2'-0"
1'-0"
FACE OF CURB
VALVE BOX
BREAK-AWAY CONNECTION
SPOOL PIECE EXTENSION IF REQUIRED
CAST IRON VALVE BOX W/ "WATER" CAST IN COVER
FINISHED GRADE
2A MODIFIED STONE
MIN. COVER
CONCRETE THRUST BLOCK TO BEAR AGAINST UNDISTURBED MATERIAL (TYP.)
DRAIN HOLE
GATE VALVE
2'-0"
2B CRUSHED STONE TO EXTEND AT LEAST 6" ON EITHER SIDE OF HYDRANT
CONNECTING PIECE RESTRAINED MECHANICAL JOINT
THRUST BLOCK

## FIRE HYDRANT LOCATION DETAIL

NOT TO SCALE

PENNSYLVANIA ONE CALL SYSTEM, INC.

925 Irwin Run Road
West Mifflin, Pennsylvania
15122 – 1078

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1-800-242-1776

NON-MEMBERS MUST BE CONTACTED DIRECTLY

PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

SERIAL NO. 20252790540

LOCATIONS OF EXISTING UNDERGROUND UTILITIES/FACILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM RECORDS, FIELD MARKOUTS BY UTILITY OWNERS, AND/OR ABOVE-GROUND OBSERVATION OF THE SITE. NO EXCAVATIONS WERE PERFORMED IN THE PREPARATION OF THESE DRAWINGS; THEREFORE ALL UTILITIES SHOWN SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH, AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES/FACILITIES TO BE PRESENT WHICH ARE NOT SHOWN ON THE DRAWINGS. ONLY THE VISIBLE LOCATIONS OF UNDERGROUND UTILITIES/FACILITIES AT THE TIME OF FIELD SURVEY SHALL BE CONSIDERED TRUE AND ACCURATE. COMPLETENESS OR ACCURACY OF UNDERGROUND UTILITIES/FACILITIES ARE NOT GUARANTEED BY GILMORE & ASSOCIATES INC.

ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES/FACILITIES PRIOR TO START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF P.L. 852, NO. 287 DECEMBER 10, 1974 AS LAST AMENDED ON OCT. 29, 2024 PENNSYLVANIA ACT 127.

GILMORE & ASSOCIATES INC. HAS OBTAINED A PA-ONE CALL SERIAL NUMBER AS NOTED HEREON FOR DESIGN PURPOSES ONLY.

C:\Autodesk Docs\ACCDocs\Gilmore and Associates\2500866_661_Penn_Street_Re-Dev\Project Files\2025\2500866\DESIGN\CAD\Prod_Dwgs\2500866_DET.dwg Layout: WATER DETAILS Plotted By: rmonkres on Wed Jul 29, 2026 at 8:31am

NOT APPROVED FOR CONSTRUCTION

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES
CORPORATE HEADQUARTERS
65 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901 • (215) 345-4330 • www.gilmore-assoc.com

ONLY THOSE PLANS INCORPORATING THE PROFESSIONAL SEAL SHOULD BE CONSIDERED OFFICIAL AND RELIED UPON BY USER. THIS PLAN IS PREPARED SPECIFICALLY FOR THE CLIENT AND PROJECT DESIGNATED HEREON. MODIFICATION, REVISION, DUPLICATION OR USE WITHOUT THE CONSENT OF GILMORE & ASSOCIATES, INC. IS PROHIBITED.

RONALD G. MONKRES II
ENGINEER 603164-E

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# 661 PENN STREET REDEVELOPMENT

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## WATER DETAILS

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.: 2500866

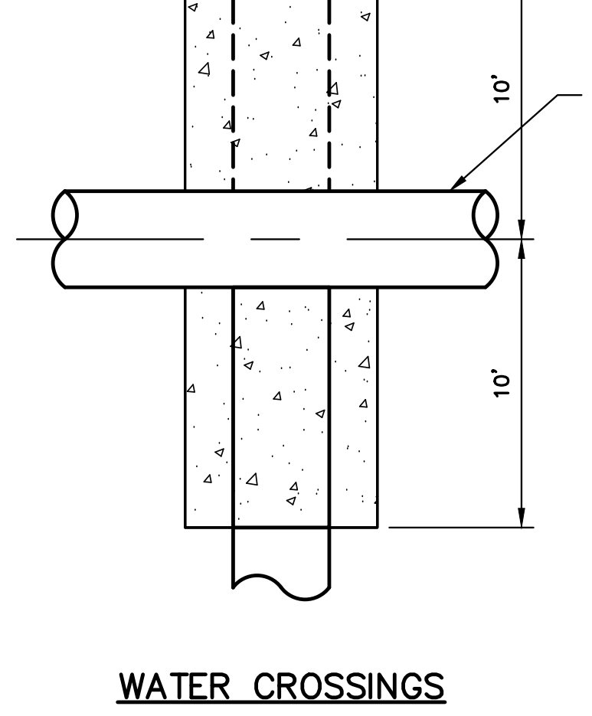
APPLICANTS INFO:
661 PENN STREET, LLC
209 PENN'S TRAIL
NEWTOWN, PA 18940
215-968-0600

MUNICIPAL FILE No.:

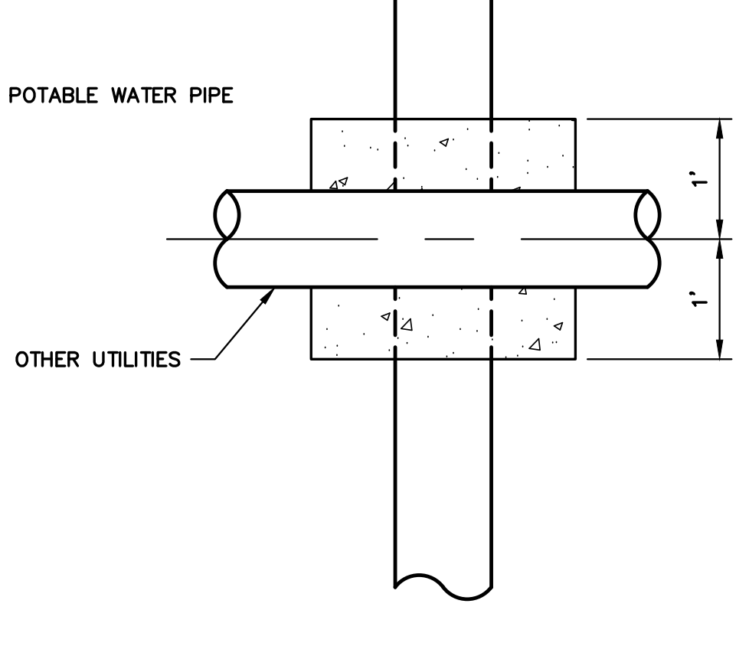
TAX MAP PARCEL No.: 29-010-119-001 & 29-010-037

| TOTAL AREA: 15.75 AC. | TOTAL LOTS: 2 |
|---|---|
| DATE: 01/21/26 | SCALE: N.T.S. |
| DRAWN BY: GY/BH | CHECKED BY: RGM |

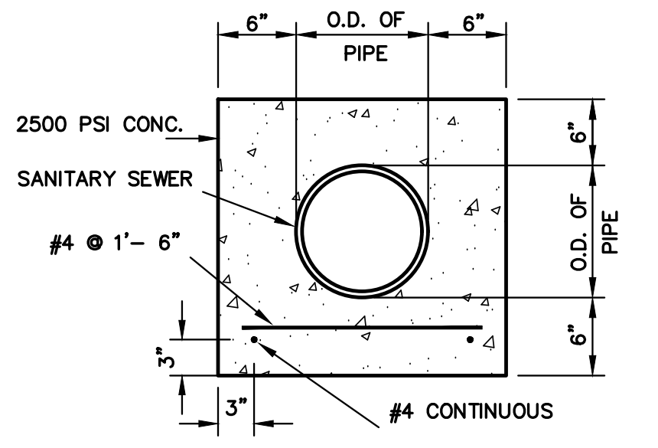
SHEET NO.: 32 OF 33



WATER CROSSINGS



UTILITY CROSSINGS

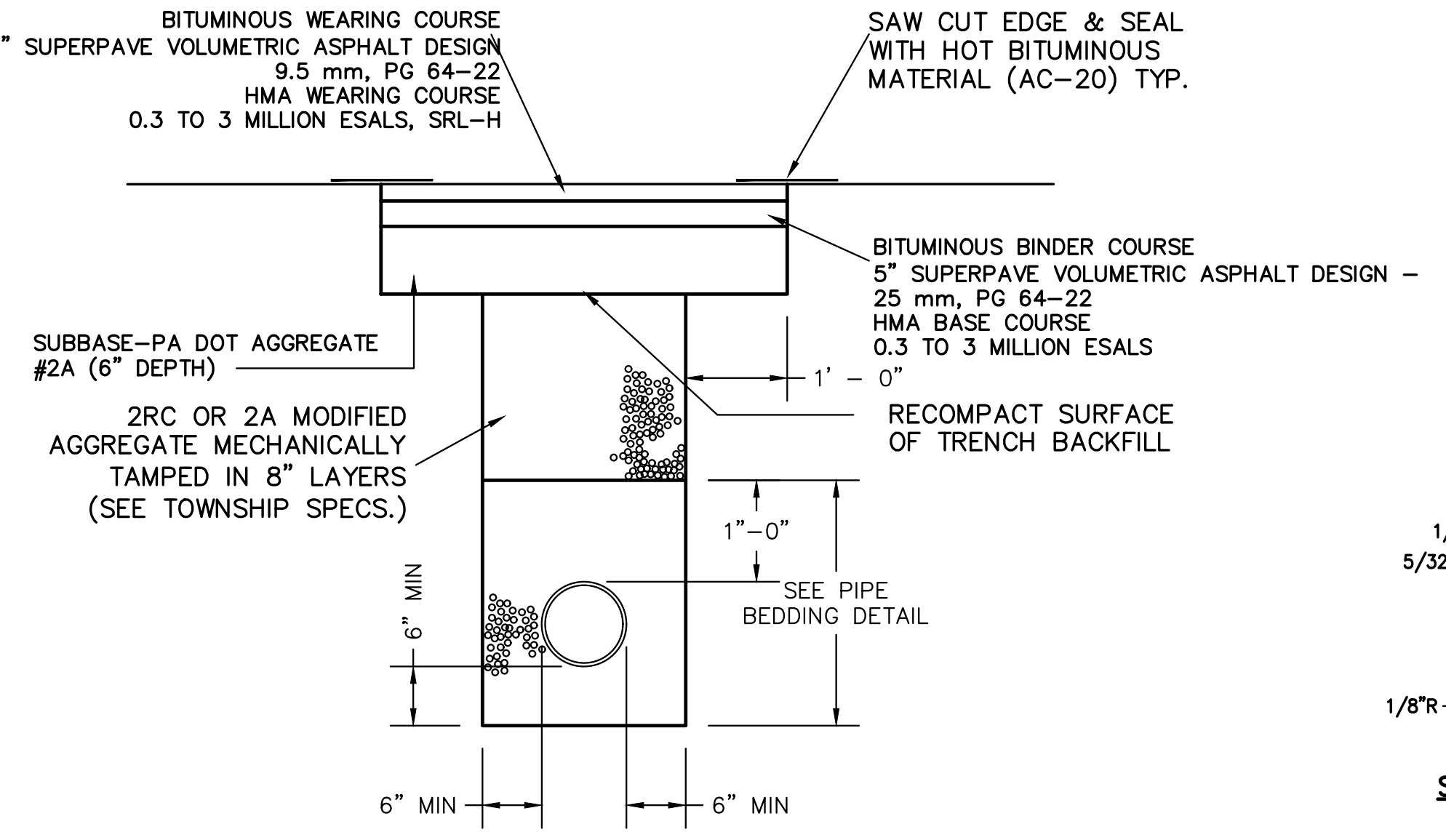


ENCASEMENT SECTION

NOTE: PROVIDE REINFORCEMENT AT UTILITY CROSSINGS OR AS DIRECTED BY THE AUTHORITY'S ENGINEER.

## CONCRETE ENCASEMENT

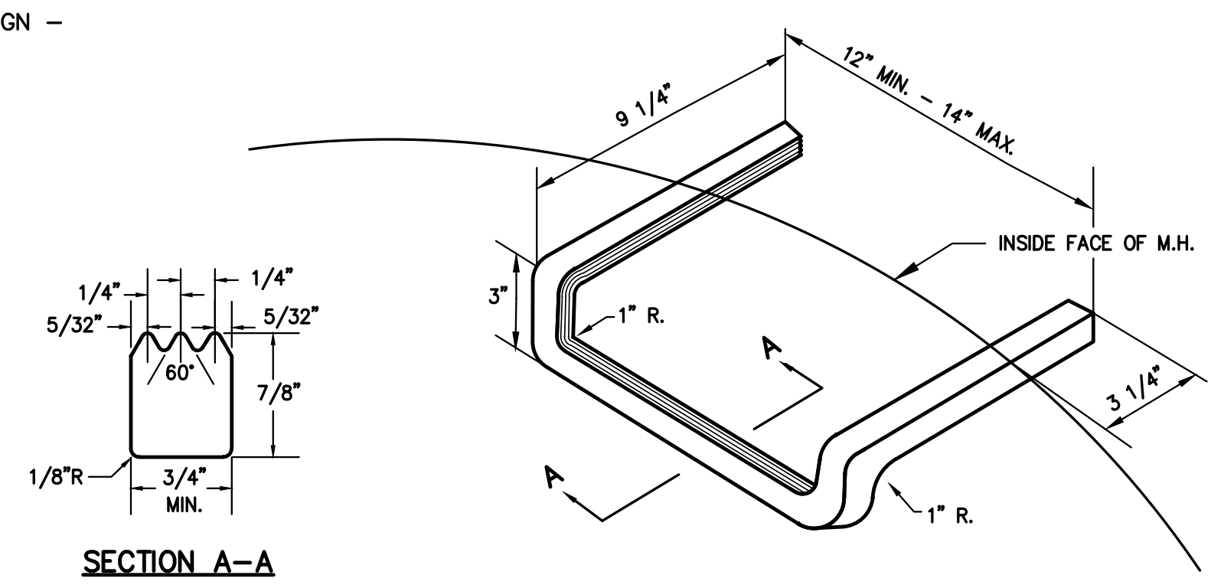
NOT TO SCALE


BITUMINOUS WEARING COURSE
1-1/2" SUPERPAVE VOLUMETRIC ASPHALT DESIGN
9.5 mm, PG 64-22
HMA WEARING COURSE
0.3 TO 3 MILLION ESALS, SRL-H
SAW CUT EDGE & SEAL WITH HOT BITUMINOUS MATERIAL (AC-20) TYP.
BITUMINOUS BINDER COURSE
5" SUPERPAVE VOLUMETRIC ASPHALT DESIGN –
25 mm, PG 64-22
HMA BASE COURSE
0.3 TO 3 MILLION ESALS
SUBBASE-PA DOT AGGREGATE #2A (6" DEPTH)
1' - 0"
2RC OR 2A MODIFIED AGGREGATE MECHANICALLY TAMPED IN 8" LAYERS (SEE TOWNSHIP SPECS.)
RECOMPACT SURFACE OF TRENCH BACKFILL
1"-0"
SEE PIPE BEDDING DETAIL
6" MIN
6" MIN
6" MIN

NOTE: SPECIAL CONDITIONS OF HIGHWAY OCCUPANCY PERMIT MAY SUPERSEDE THIS DETAIL

## PERMANENT PAVEMENT, TRENCH RESTORATION AND BACKFILL FOR BOROUGH ROADS

NOT TO SCALE



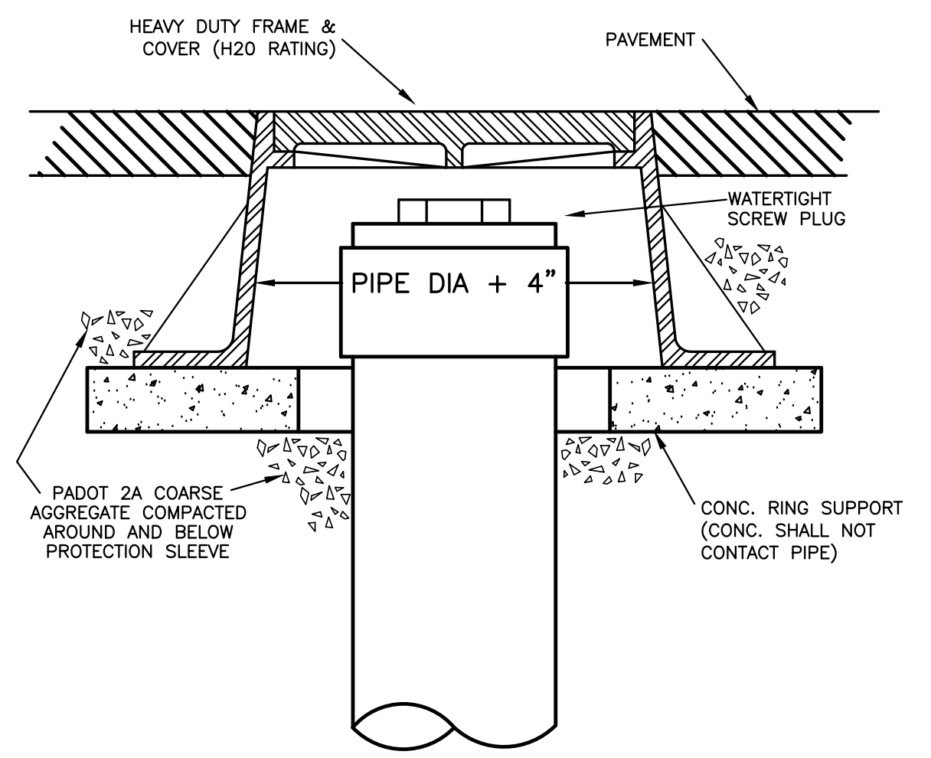
SECTION A–A

NOTES:
STEPS TO BE FABRICATED OF ALUMINUM ALLOY 6061-T6.

PORTIONS OF STEPS TO BE EMBEDDED IN WALLS OF MANHOLES OR CHAMBERS TO BE DIPPED IN HEAVY BODIED BITUMINOUS PAINT, OR PROVIDE PLASTIC INSERT.

## MANHOLE STEP

NOT TO SCALE

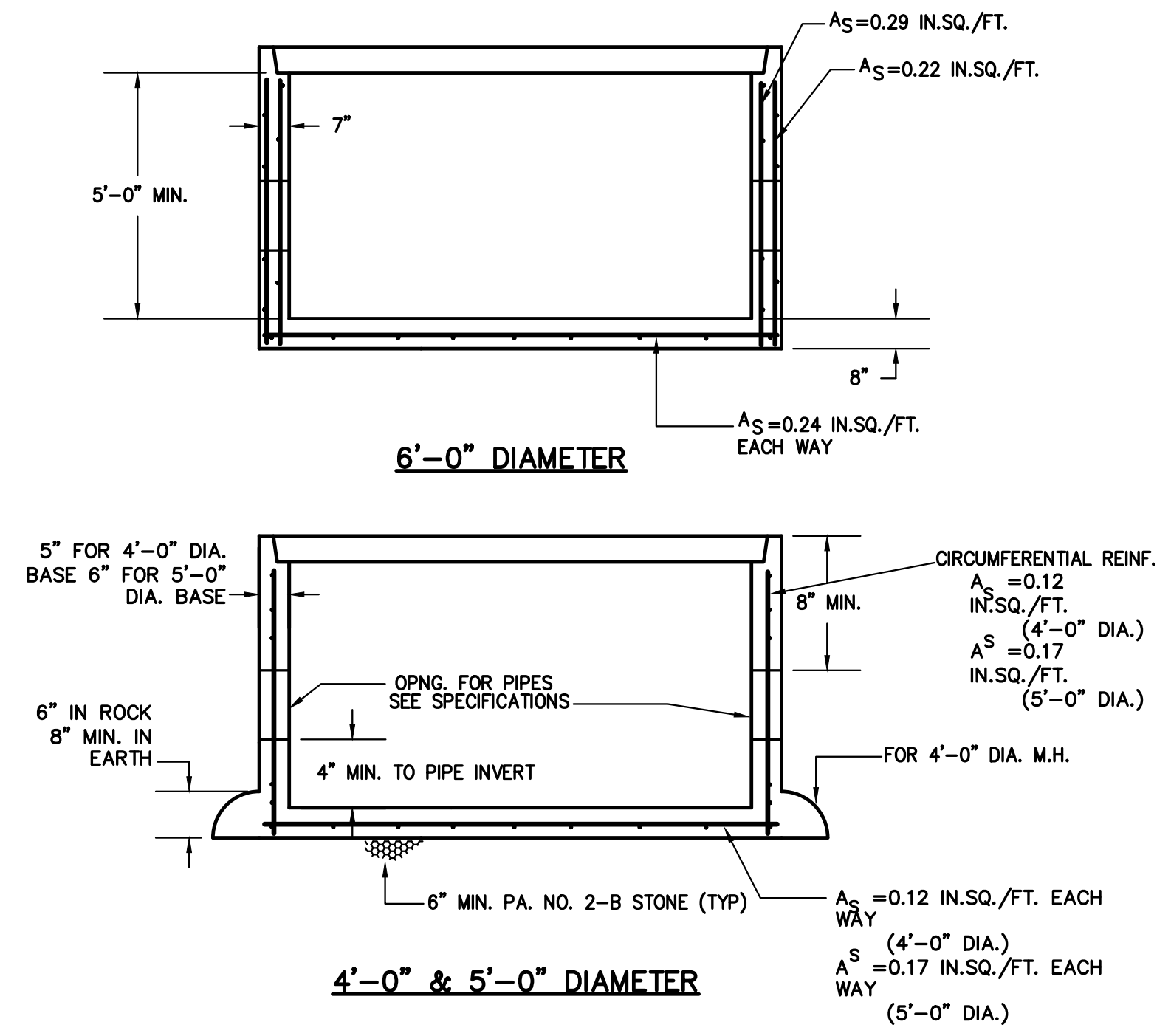

HEAVY DUTY FRAME & COVER (H20 RATING)
PAVEMENT
WATERTIGHT SCREW PLUG
PIPE DIA + 4"
PADOT 2A COARSE AGGREGATE COMPACTED AROUND AND BELOW PROTECTION SLEEVE
CONC. RING SUPPORT (CONC. SHALL NOT CONTACT PIPE)

NOTES:

1. FRAME AND COVER SHALL BE NEENAH FOUNDRY COMPANY MODEL R-1976 OR APPROVED EQUAL
2. CLEAN-OUT PROTECTION SLEEVES ARE TO BE INSTALLED FOR CLEAN-OUTS LOCATED IN PAVED AREAS, OR LESS THAN 3 FEET FROM A PAVED AREA.

## CLEAN-OUT PROTECTION SLEEVE

(FOR USE IN OR NEAR PAVED AREAS)

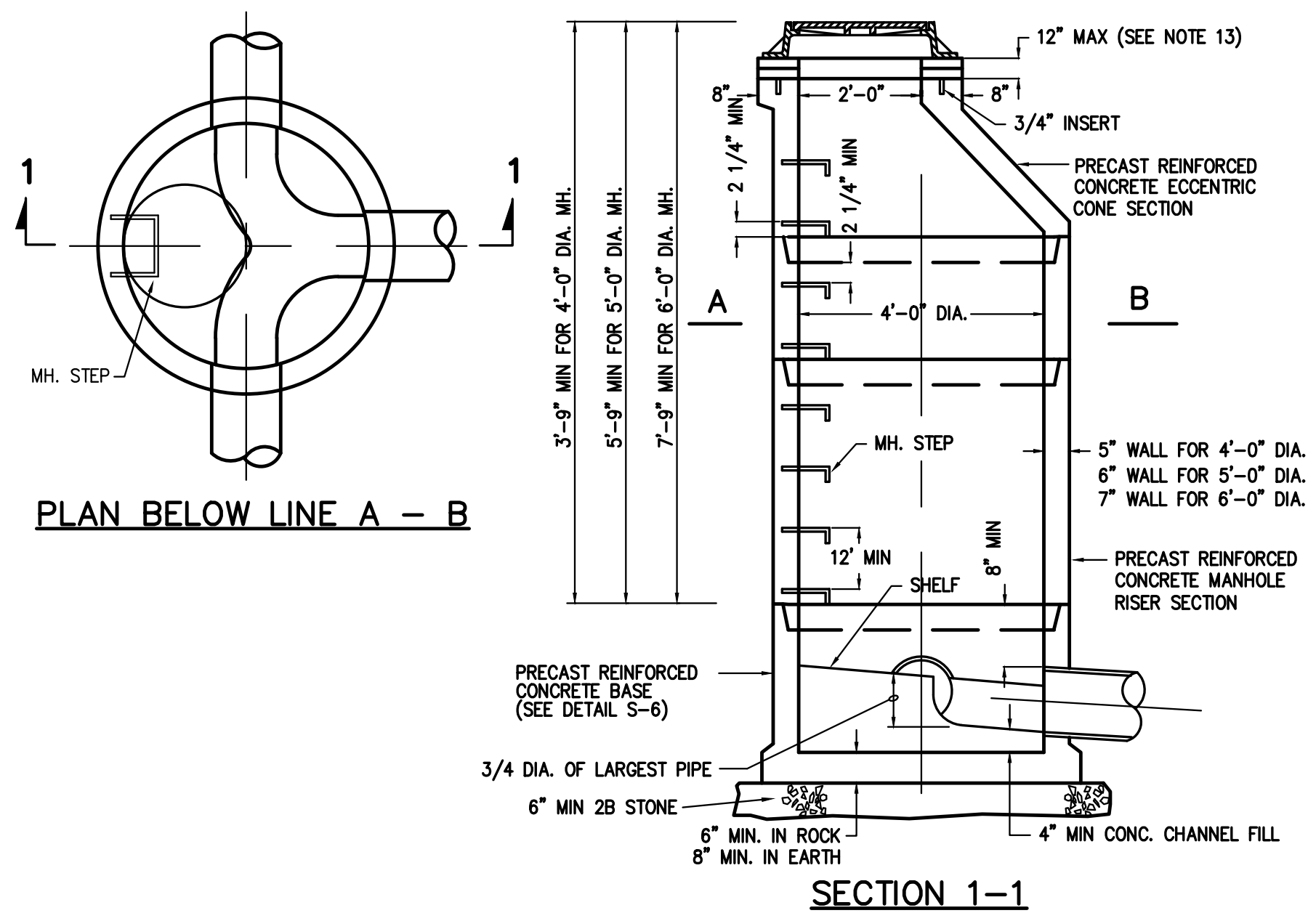

$A_S$=0.29 IN.SQ./FT.
$A_S$=0.22 IN.SQ./FT.
7"
5'-0" MIN.
8"
$A_S$=0.24 IN.SQ./FT. EACH WAY
5" FOR 4'-0" DIA. BASE 6" FOR 5'-0" DIA. BASE
8" MIN.
CIRCUMFERENTIAL REINF.
$A_S$ =0.12 IN.SQ./FT. (4'-0" DIA.)
$A^S$ =0.17 IN.SQ./FT. (5'-0" DIA.)
OPNG. FOR PIPES SEE SPECIFICATIONS
6" IN ROCK 8" MIN. IN EARTH
4" MIN. TO PIPE INVERT
FOR 4'-0" DIA. M.H.
6" MIN. PA. NO. 2-B STONE (TYP)
$A_S$ =0.12 IN.SQ./FT. EACH WAY (4'-0" DIA.)
$A^S$ =0.17 IN.SQ./FT. EACH WAY (5'-0" DIA.)

6'-0" DIAMETER

4'-0" & 5'-0" DIAMETER

## PRECAST BASE DETAIL

NOT TO SCALE


1
1
MH. STEP
3'-9" MIN FOR 4'-0" DIA. MH.
5'-9" MIN FOR 5'-0" DIA. MH.
7'-9" MIN FOR 6'-0" DIA. MH.
12" MAX (SEE NOTE 13)
8"
2'-0"
8"
3/4" INSERT
2 1/4" MIN
2 1/4" MIN
PRECAST REINFORCED CONCRETE ECCENTRIC CONE SECTION
A
B
4'-0" DIA.
MH. STEP
5" WALL FOR 4'-0" DIA. MH.
6" WALL FOR 5'-0" DIA. MH.
7" WALL FOR 6'-0" DIA. MH.
12' MIN
SHELF
8" MIN
PRECAST REINFORCED CONCRETE MANHOLE RISER SECTION
PRECAST REINFORCED CONCRETE BASE (SEE DETAIL S-6)
3/4 DIA. OF LARGEST PIPE
6" MIN 2B STONE
6" MIN. IN ROCK 8" MIN. IN EARTH
4" MIN CONC. CHANNEL FILL

PLAN BELOW LINE A – B

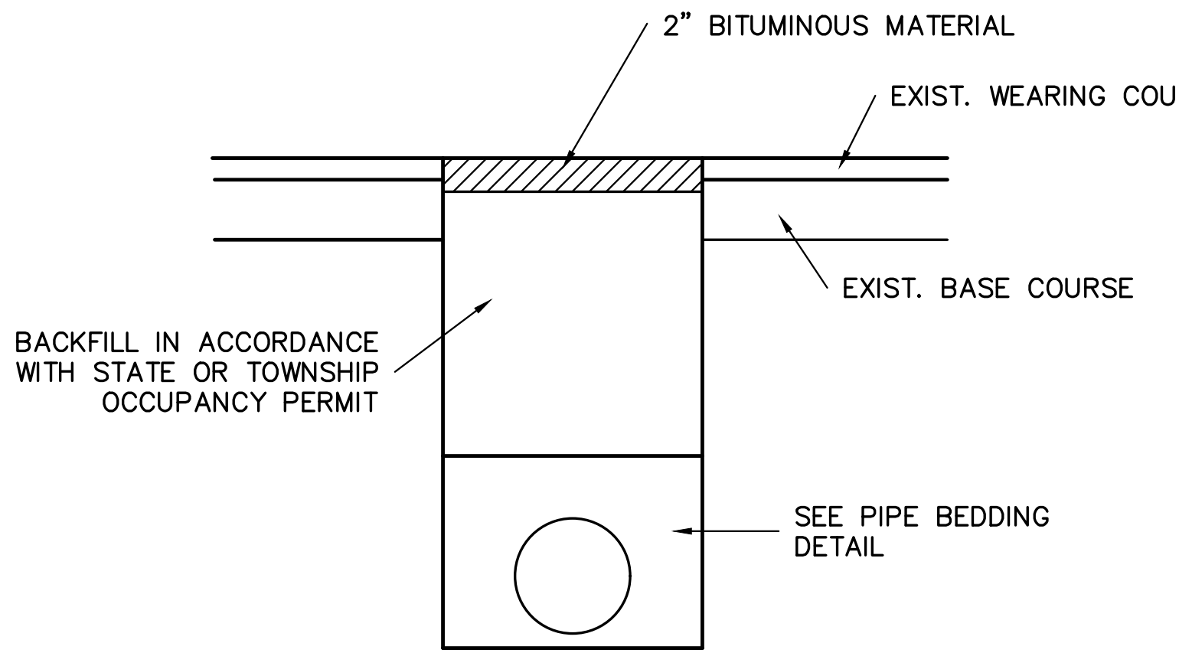
SECTION 1–1

NOTES:

1. THE DEPTH OF THE INVERT CHANNEL SHALL BE EQUAL TO 3/4 OF THE DIAMETER OF THE LARGEST SEWER PIPE.
2. THE SHELF SHALL SLOPE TOWARD THE INVERT CHANNEL AT A RATE OF 1" PER FOOT.
3. TYPE "B" MANHOLES (SHALLOW TYPE) TO BE PROVIDED WHERE REQUIRED BY DEPTH CONDITIONS.
4. FOR MANHOLES HAVING 5' DIAMETER AND 6' DIAMETER BASE, REDUCTION IN DIAMETER TO 4' SHALL START AT THE FIRST JOINT ABOVE THE UPPERMOST PIPE CONNECTION TO WALL WHERE DEPTH IS SUFFICIENT.
5. ALL MANHOLE FRAMES SHALL BE BOLTED TO THE CONE SECTION WITH 2 – 3/4" DIAMETER BOLTS WITH WASHERS AND NUTS. BOLTS TO BE AT 180° ON BOLT CIRCLE.
6. SEE THE SPECIFICATIONS FOR LENGTH OF PIPE CONNECTIONS TO MANHOLE.
7. ALL CONCRETE SHALL BE 4000 PSI MINIMUM.
8. ENTIRE OUTSIDE SURFACE OF MANHOLE SHALL RECEIVE TWO COATS OF BITUMINOUS COATING. KOPPERS 300M PENNOXY TAR 32-B-4, OR APPROVED EQUAL.
9. INSTALL 2 LAYERS OF PLASTIC PREFORMED JOINT SEALANT BETWEEN ALL SECTIONS AND UNDER FRAME.
10. MANHOLE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ASTM C478
11. STEPS TO BE ALUMINUM ALLOY WITH DEPRESSED TREAD. STEEL REINFORCED POLYPROPYLENE IS OPTIONAL. (SEE DETAIL S-10 AND S-11)
12. 4' DIAMETER MANHOLE – 8" TO 15" PIPES
    5' DIAMETER MANHOLE – 16" TO 27" PIPES
    6' DIAMETER MANHOLE – 30" TO 48" PIPES
13. WHEN TWO OR MORE GRADE ADJUSTMENT RINGS ARE USED, A WATERTIGHT PVC CONNECTOR SHALL BE INSTALLED BETWEEN THE FRAME AND THE CONE. CONNECTOR SHALL BE WATER-LOK CONNECTOR BFA ANTI-FLOATING BY A-LOK PRODUCTS INC. OR APPROVED EQUAL.
14. MANHOLES THAT RECEIVE FORCE MAIN DISCHARGE OR THAT ARE LOCATED ON INTERCEPTORS OR TRUNK SEWERS SHALL BE CONSTRUCTED WITH A PVC LINER CAST INTO WALL: DURA PLATE 100 BY ATLANTIC CONCRETE PRODUCTS OR EQUAL.
15. CHANNEL(S) SHALL BE CONSTRUCTED WITHIN MANHOLE BASE FROM ALL CONNECTING TRUNK LINES AND LATERALS TO THE OUTFLOW EFFLUENT LINE.
16. A 6-INCH OPENING WITH AN "A-LOK" (OR APPROVED EQUAL) JOINT SHALL BE PRECAST IN THE MANHOLE BASE.
17. PROPOSED SANITARY SEWER PIPES SHALL NOT TIE INTO EXISTING OR PROPOSED SANITARY MANHOLES AT ACUTE ANGLES (>90°) TO THE DIRECTION OF EFFLUENT OUTFLOW.

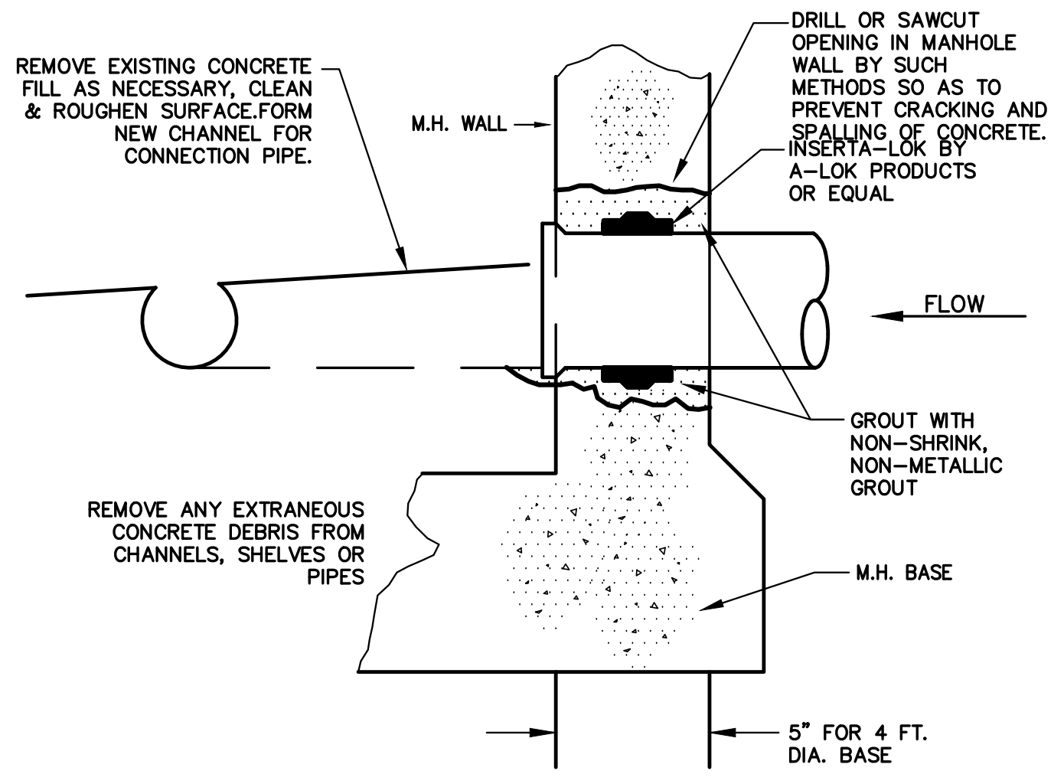
## SANITARY SEWER MANHOLE – TYPE 'A'

NOT TO SCALE



## TEMPORARY PAVEMENT RESTORATION FOR BOROUGH ROADS

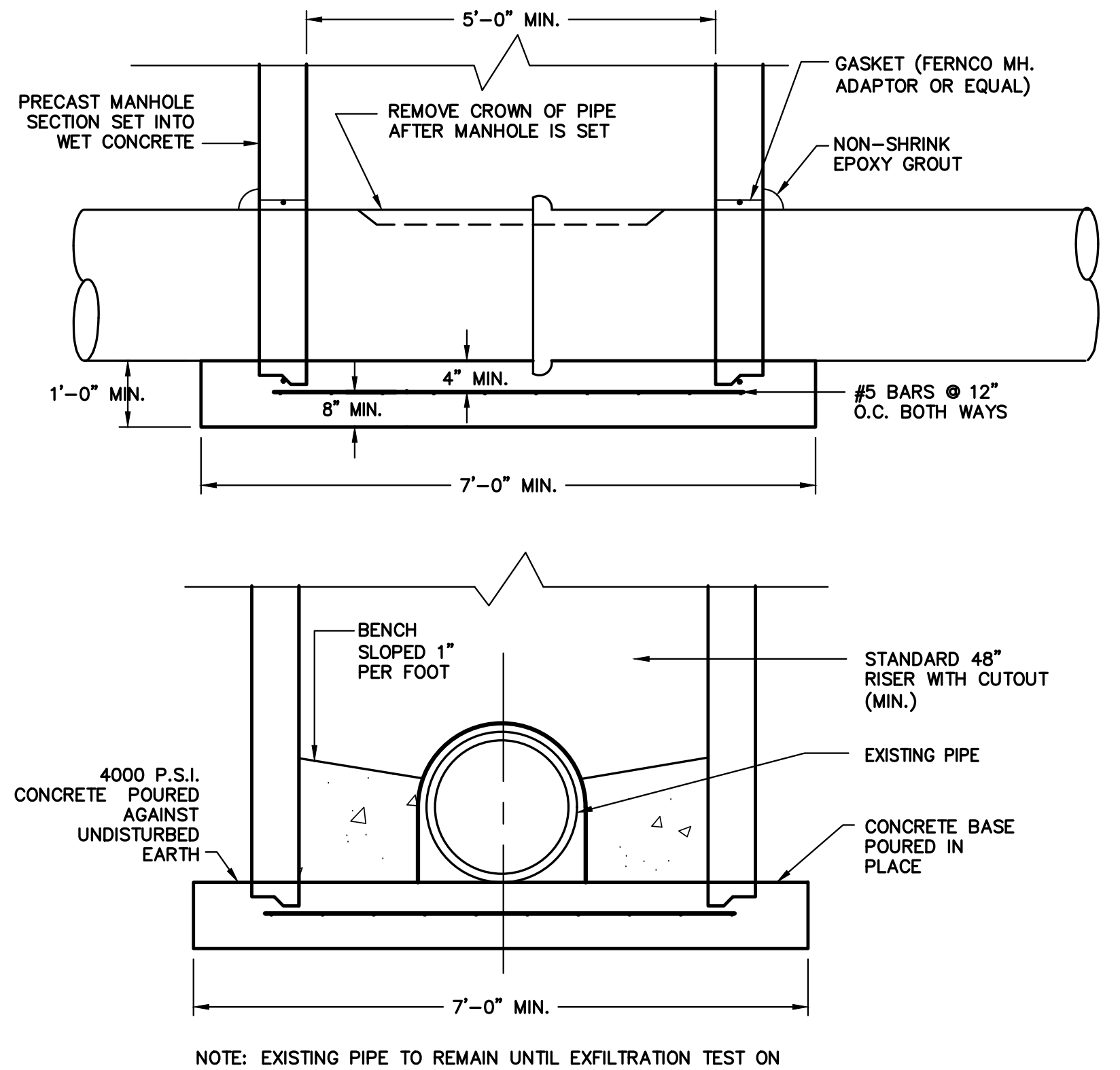
NOT TO SCALE


REMOVE EXISTING CONCRETE FILL AS NECESSARY, CLEAN & ROUGHEN SURFACE.FORM NEW CHANNEL FOR CONNECTION PIPE.
M.H. WALL
DRILL OR SAWCUT OPENING IN MANHOLE WALL BY SUCH METHODS SO AS TO PREVENT CRACKING AND SPALLING OF CONCRETE.
INSERTA-LOK BY A-LOK PRODUCTS OR EQUAL
FLOW
GROUT WITH NON-SHRINK, NON-METALLIC GROUT
REMOVE ANY EXTRANEOUS CONCRETE DEBRIS FROM CHANNELS, SHELVES OR PIPES
M.H. BASE
5" FOR 4 FT. DIA. BASE

## DETAIL OF PIPE PENETRATION OF EXISTING MANHOLE

NOT TO SCALE

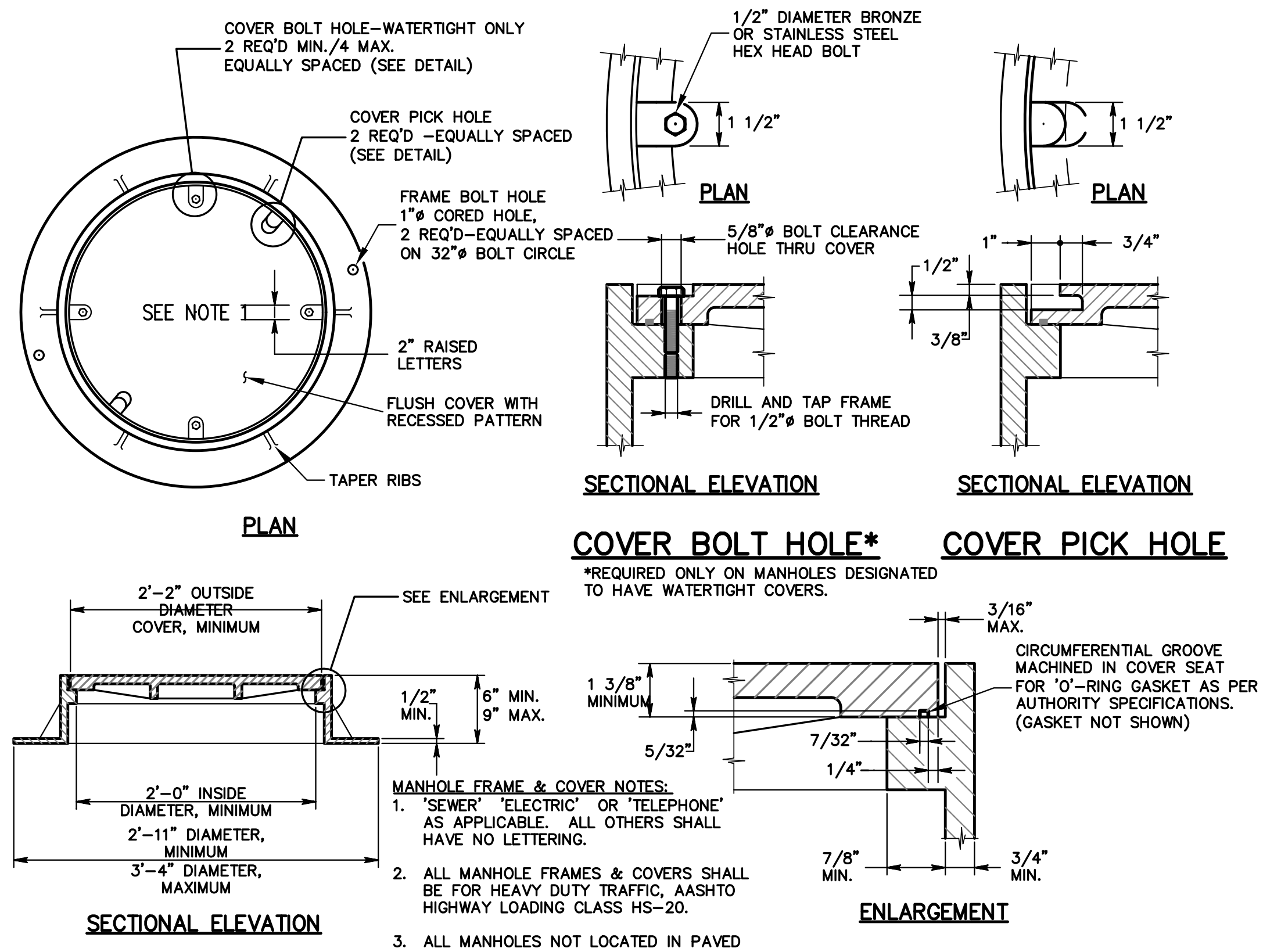
CONNECTIONS TO EXISTING MANHOLES SHALL BE MADE BY CUTTING REQUIRED OPENING BY SUCH METHODS SO AS TO PREVENT CRACKING AND SPALLING OF CONCRETE. MAKE OPENINGS OF SUFFICIENT SIZE TO ACCOMMODATE PIPE WITH INSERTA-LOK BY A-LOK PRODUCTS. GROUT ANNULAR SPACE USING NON-SHRINK, NON-METALLIC GROUT.


5'-0" MIN.
PRECAST MANHOLE SECTION SET INTO WET CONCRETE
REMOVE CROWN OF PIPE AFTER MANHOLE IS SET
GASKET (FERNCO MH. ADAPTOR OR EQUAL)
NON-SHRINK EPOXY GROUT
1'-0" MIN.
4" MIN.
8" MIN.
#5 BARS @ 12" O.C. BOTH WAYS
7'-0" MIN.
BENCH SLOPED 1" PER FOOT
STANDARD 48" RISER WITH CUTOUT (MIN.)
EXISTING PIPE
4000 P.S.I. CONCRETE POURED AGAINST UNDISTURBED EARTH
CONCRETE BASE POURED IN PLACE
7'-0" MIN.

NOTE: EXISTING PIPE TO REMAIN UNTIL EXFILTRATION TEST ON MANHOLE IS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.

## DOGHOUSE MANHOLE CONSTRUCTION

NOT TO SCALE


COVER BOLT HOLE-WATERTIGHT ONLY 2 REQ'D MIN./4 MAX. EQUALLY SPACED (SEE DETAIL)
COVER PICK HOLE 2 REQ'D -EQUALLY SPACED (SEE DETAIL)
FRAME BOLT HOLE 1"ø CORED HOLE, 2 REQ'D-EQUALLY SPACED ON 32"ø BOLT CIRCLE
SEE NOTE 1
2" RAISED LETTERS
FLUSH COVER WITH RECESSED PATTERN
TAPER RIBS
1/2" DIAMETER BRONZE OR STAINLESS STEEL HEX HEAD BOLT
1 1/2"
1 1/2"
5/8"ø BOLT CLEARANCE HOLE THRU COVER
DRILL AND TAP FRAME FOR 1/2"ø BOLT THREAD
1"
3/4"
1/2"
3/8"
2'-2" OUTSIDE DIAMETER COVER, MINIMUM
SEE ENLARGEMENT
1/2" MIN.
6" MIN. 9" MAX.
2'-0" INSIDE DIAMETER, MINIMUM
2'-11" DIAMETER, MINIMUM
3'-4" DIAMETER, MAXIMUM
3/16" MAX.
1 3/8" MINIMUM
5/32"
7/32"
1/4"
CIRCUMFERENTIAL GROOVE MACHINED IN COVER SEAT FOR 'O'-RING GASKET AS PER AUTHORITY SPECIFICATIONS. (GASKET NOT SHOWN)
7/8" MIN.
3/4" MIN.

PLAN

PLAN

PLAN

SECTIONAL ELEVATION

SECTIONAL ELEVATION

COVER BOLT HOLE*

COVER PICK HOLE

*REQUIRED ONLY ON MANHOLES DESIGNATED TO HAVE WATERTIGHT COVERS.

SECTIONAL ELEVATION

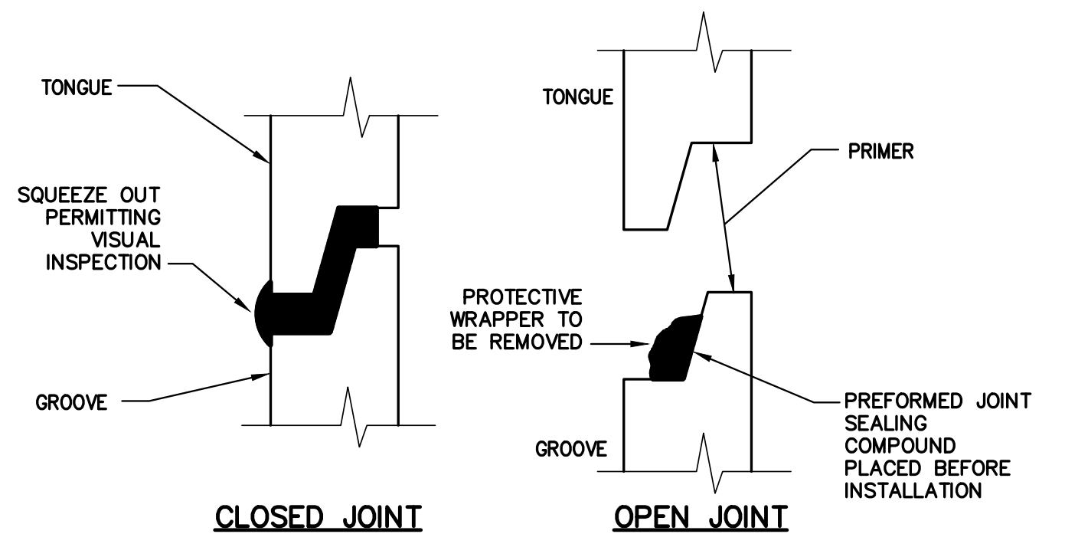
ENLARGEMENT

MANHOLE FRAME & COVER NOTES:

1. 'SEWER' 'ELECTRIC' OR 'TELEPHONE' AS APPLICABLE. ALL OTHERS SHALL HAVE NO LETTERING.
2. ALL MANHOLE FRAMES & COVERS SHALL BE FOR HEAVY DUTY TRAFFIC, AASHTO HIGHWAY LOADING CLASS HS-20.
3. ALL MANHOLES NOT LOCATED IN PAVED AREAS MUST BE EQUIPPED WITH WATERTIGHT FRAMES AND COVERS.

## STANDARD & WATERTIGHT MANHOLE FRAME AND COVER

NOT TO SCALE

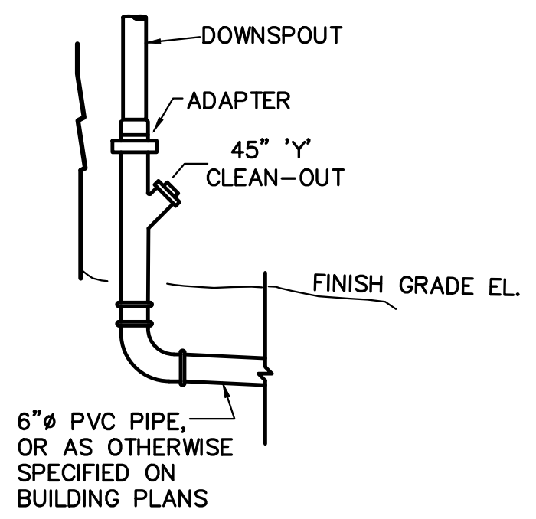

TONGUE
SQUEEZE OUT PERMITTING VISUAL INSPECTION
GROOVE
TONGUE
PRIMER
PROTECTIVE WRAPPER TO BE REMOVED
GROOVE
PREFORMED JOINT SEALING COMPOUND PLACED BEFORE INSTALLATION

CLOSED JOINT

OPEN JOINT

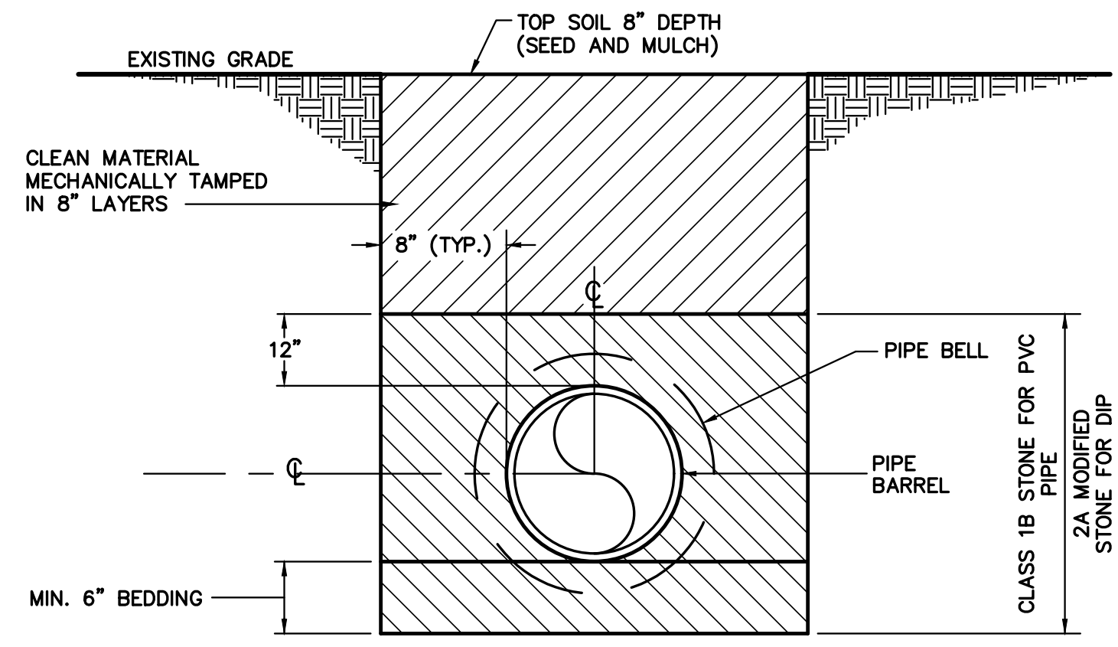
## JOINT DETAIL

NOT TO SCALE



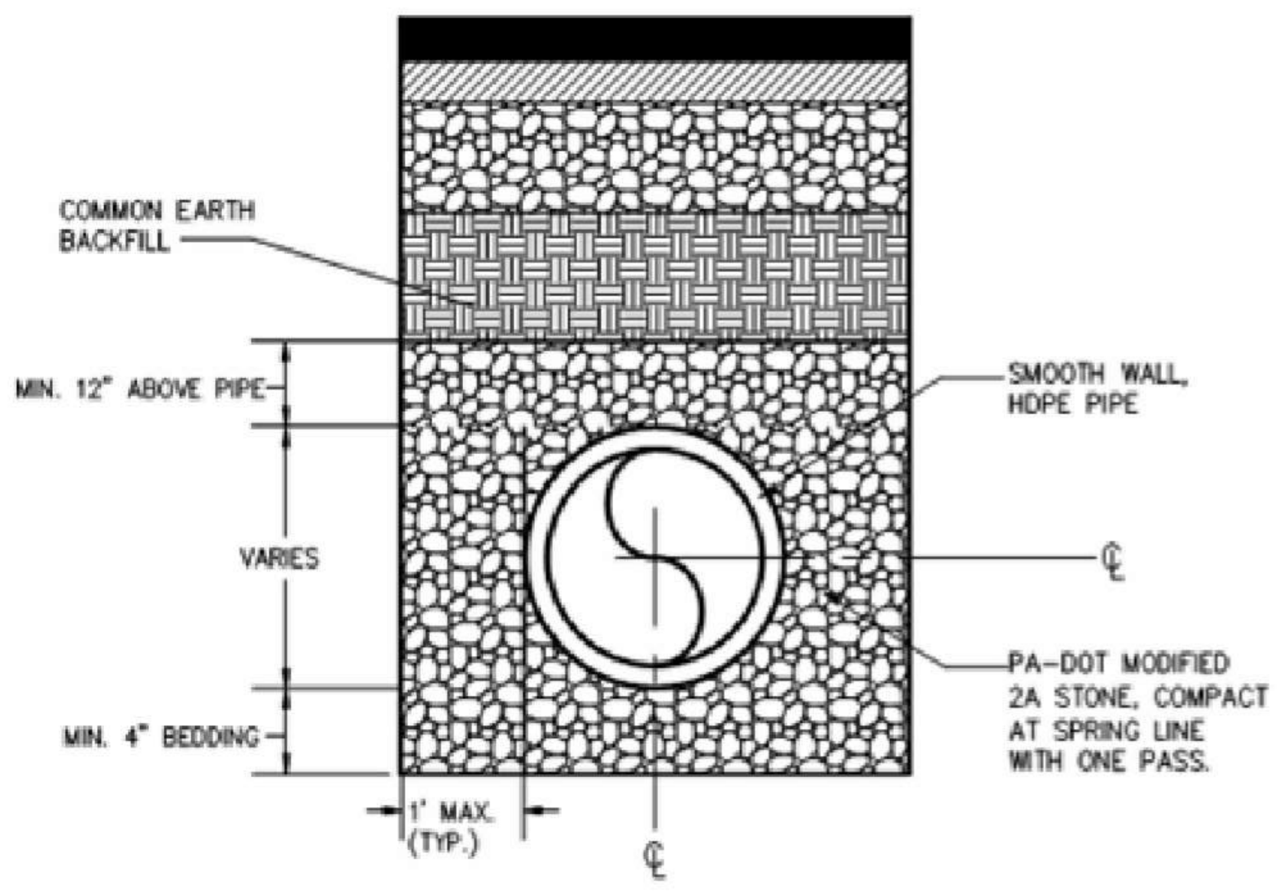
## DOWNSPOUT DETAIL

NOT TO SCALE


TOP SOIL 8" DEPTH (SEED AND MULCH)
EXISTING GRADE
CLEAN MATERIAL MECHANICALLY TAMPED IN 8" LAYERS
8" (TYP.)
12"
PIPE BELL
PIPE BARREL
MIN. 6" BEDDING
CLASS 1B STONE FOR PVC PIPE
2A MODIFIED STONE FOR DIP PIPE

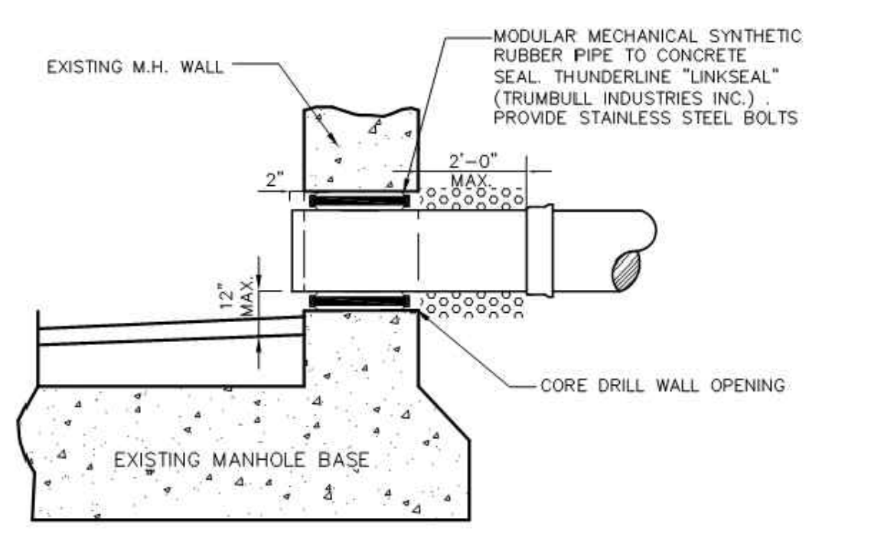
## SANITARY TRENCH DETAIL NON-PAVED AREAS

NOT TO SCALE



## HDPE BACKFILL DETAIL

NOT TO SCALE


EXISTING M.H. WALL
MODULAR MECHANICAL SYNTHETIC RUBBER PIPE TO CONCRETE SEAL. THUNDERLINE "LINKSEAL" (TRUMBULL INDUSTRIES INC.) . PROVIDE STAINLESS STEEL BOLTS
2"
2'-0" MAX.
12" MAX.
CORE DRILL WALL OPENING
EXISTING MANHOLE BASE

NOTES:

1. CORE AN OPENING IN MANHOLE WALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. LOCATE OPENING AS INDICATED ON THE DRAWINGS. CONSTRUCT A FLOW CHANNEL ABOVE THE EXISTING BENCH TO DIRECT FLOW INTO THE EXISTING FLOW CHANNEL. OTHERWISE, CUT A FLOW CHANNEL THROUGH THE EXISTING BENCH TO DIRECT FLOW INTO OR OUT OF THE EXISTING CHANNEL AS SHOWN ON THE DRAWINGS. TAKE ALL NECESSARY PRECAUTIONS TO PREVENT CUTTING DEBRIS FROM ENTERING THE EXISTING FLOW. THE NEWLY CUT CHANNELS SHALL BE FINISHED WITH A NON-SHRINK GROUT AND TROWELED TO MEET THE EXISTING CHANNEL.
2. THE FIRST SECTION OF NEW PIPE OUT OF THE MANHOLE SHALL BE NO LONGER THAN TWO (2) FEET AND SET ON LINE AND GRADE. INSTALL "LINKSEAL" MODULAR SEALS AROUND THE PIPE AND SLIDE ASSEMBLY INTO CORED OPENING. TIGHTEN BOLTS PER MANUFACTURER'S INSTRUCTIONS.
3. FOR CONNECTION TO AN EXISTING MANHOLE, CORE AN OPENING IN THE MANHOLE WALL NO LARGER THAN TWO (2) INCHES AROUND THE NEW PIPE AND MODIFY THE EXISTING BENCH AS REQUIRED TO CREATE A NEW CHANNEL WHICH SHALL BE FINISHED WITH NON-SHRINK GROUT. INSTALL A RESILIENT PIPE-TO-MANHOLE CONNECTION DEVICE AROUND THE NEW PIPE AND POSITION THE PIPE TO THE CORRECT ALIGNMENT; FILL AND SEAL THE ANNULAR SPACE BETWEEN THE RESILIENT PIPE-TO-MANHOLE CONNECTION DEVICE AND THE EXISTING MANHOLE WALL WITH NON-SHRINK GROUT. APPLY A COAL TAR EPOXY PROTECTIVE COATING OVER THE OUTER SURFACE OF THE SEALED ANNULAR OPENING AND APPLY A WHITE EPOXY PROTECTIVE COATING OVER THE INTERIOR SURFACE AFFECTED BY THE MODIFICATIONS IN MANHOLES WHICH HAVE A PROTECTIVE COATING.

## GRAVITY SEWER CONNECTION TO EX. MH

NOT TO SCALE

PENNSYLVANIA ONE CALL SYSTEM, INC.

925 Irwin Run Road
West Mifflin, Pennsylvania
15122 – 1078

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1-800-242-1776

NON-MEMBERS MUST BE CONTACTED DIRECTLY

PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

SERIAL NO. 20252790540

LOCATIONS OF EXISTING UNDERGROUND UTILITIES/FACILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM RECORDS, FIELD MARKOUTS BY UTILITY OWNERS, AND/OR ABOVE-GROUND OBSERVATION OF THE SITE. NO EXCAVATIONS WERE PERFORMED IN THE PREPARATION OF THESE DRAWINGS; THEREFORE ALL UTILITIES SHOWN SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH, AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES/FACILITIES TO BE PRESENT WHICH ARE NOT SHOWN ON THE DRAWINGS. ONLY THE VISIBLE LOCATIONS OF UNDERGROUND UTILITIES/FACILITIES AT THE TIME OF FIELD SURVEY SHALL BE CONSIDERED TRUE AND ACCURATE. COMPLETENESS OR ACCURACY OF UNDERGROUND UTILITIES/FACILITIES ARE NOT GUARANTEED BY GILMORE & ASSOCIATES INC.

ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES/FACILITIES PRIOR TO START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF P.L. 852, NO. 287 DECEMBER 10, 1974 AS LAST AMENDED ON OCT. 29, 2024 PENNSYLVANIA ACT 127.

GILMORE & ASSOCIATES INC. HAS OBTAINED A PA-ONE CALL SERIAL NUMBER AS NOTED HEREON FOR DESIGN PURPOSES ONLY.

C:\Autodesk Docs\ACCDocs\Gilmore and Associates\2500866_661_Penn_Street_Re-Dev\Project Files\2025\2500866\DESIGN\CAD\Prod_Dwgs\2500866_DET.dwg Layout: SANITARY SEWER DETAILS Plotted By: rmonkres, on Wed Jul 29, 2026 at 8:32am

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES
CORPORATE HEADQUARTERS
65 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901 • (215) 345-4330 • www.gilmore-assoc.com

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**NOT APPROVED FOR CONSTRUCTION**

RONALD G. MONKRES II
ENGINEER
603164-E

DATE: 07/27/2026

| REV. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | REVISED PER CONSULTANT REVIEWS | 07/27/26 | RGM |

PRELIMINARY LAND DEVELOPMENT PLAN

# *661 PENN STREET REDEVELOPMENT*

NEWTOWN TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

## SANITARY SEWER DETAILS

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ENGINEERING & CONSULTING SERVICES

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