



UPPER UWCHLAN TOWNSHIP
PLANNING COMMISSION
AGENDA

October 10, 2024

6:00 p.m. Workshop, 7:00 p.m. Meeting

LOCATION: Upper Uwchlan Township Building, 140 Pottstown Pike, Chester Springs PA 19425

		Packet Page #
I.	6:00 p.m. Workshop Review Planned Industrial/Office and Residential Zoning District Uses	2
II.	Call To Order	
III.	500 Pottstown Pike Preliminary Land Development Plan Introduction of a proposed plan to construct an approximately 45,774 SF footprint vehicle service center. Accept plan for consultants' review.	13
IV.	Meeting Updates ~ Reports A. Environmental Advisory Council (EAC) B. Historical Commission (HC) C. Comprehensive Plan Update (CompPlan)	
V.	Approval of Minutes: September 12, 2024 Meeting minutes	52
VI.	Next Meeting Date: November 14, 2024 7:00 p.m.	
VII.	Open Session	
VIII.	Adjournment	

Upper Uwchlan Township Zoning, PI District

§ 200-48 Purpose.

A. It is the intent of the PI District to provide and require unified and organized arrangement of buildings, service and parking areas, together with adequate circulation and designated open space, all planned and designed as integrated units, in a manner as to provide and constitute efficient, safe, convenient and attractive planned campus-like office park, corporate center, hotels/conference center and other appropriate uses. It is also the intent of the PI District to promote large unified developments which have direct access on a major highway, while discouraging the application of this district in areas of the Township which cannot support the above stated intentions. All ground considered for this district must be in single ownership. The requirement for a plan will provide the Board of Supervisors with a means to review proposals and permit the development of those facilities which, in addition to demonstrating a contribution to the community and the region, would incorporate design innovations in building and landscaping so no adverse impacts of any kind would occur. The development plan shall reflect sensitivity in the designation of areas for different uses that will allow for homogenous uses to be contiguous.

Commented [JS1]: Update if/as appropriate

§ 200-49. Use regulations.

A building may be erected, altered or used, and a lot may be used or occupied, for any of the following purposes, and no other:

- A. Manufacturing, assembling and/or servicing electronic equipment only.
- A.1. Medical marijuana grower/processor. [Added 6-19-2017 by Ord. No. 2017-02]
- B. Passenger station for public transportation; electric substation; telephone central office.
- C. Hotel and/or conference center where a conference center is designed as a building or series of buildings, designed and used as a professional meeting and training facility and may include conference rooms, recreational facilities, restaurants, sundries shops and other accessory facilities; a minimum of five acres shall be required for this use.
- D. Offices or office building for administrative, executive and professional activity, and similar activities involving the performance or rendering of professional service, such as a bank, financial institution, the sale of real estate and business office including the showing of samples, sale promotion and demonstration of equipment; provided, however, that no merchandise shall be warehoused on the premises for sale, exchange or delivery thereon, and further provided that nothing herein preclude sale or manufacturers' representatives from arranging for the sale of merchandise manufactured, fabricated or warehoused at, or delivered to, locations outside of the PI District.
- E. Restaurant, cafeteria or recreational facilities designed for the comfort and convenience of employees shall be permitted provided such facilities are located inside the confines of the building and provided further that such facilities are not offered for use by the general public.
- F. Churches.
- G. Public uses, structures, or buildings owned or operated by the municipality, a municipal authority organized by the municipality or an authority of which the

Commented [JS2]: Why just electronic equipment

Commented [JS3R2]: Need to expand?

Commented [JS4]: Does not belong here. Move.

Commented [JS5R4]: Move and modify L.?

Commented [JS6]: Comp Plan wants more restaurants. Why not in PI?

municipality is a member.

H. Indoor recreational facilities containing amenities such as a swimming pool, spa, indoor track, nautilus equipment, handball and racquetball courts and facilities typical of a YMCA facility.

Commented [JS7]: But not limited to

I. Laboratory for scientific research and development including animal research provided such animal research is conducted pursuant to the Guiding Principles in the Use of Animals in Toxicology as adopted by Society of Toxicology in July 1989 and revised in March 1999. [Amended 12-2-2002 by Ord. No. 02-07]

Commented [JS8]: Why allow animal research?

J. Day-care centers.

K. Wholesaling, warehousing and distributing, provided that there shall be no exterior evidence of such, and, further, no aboveground storage tanks shall be allowed on the exterior of the building except as permitted by § 200-49O(3). [Amended 10-18-2021 by Ord. No. 2021-04]

L. Existing agriculture.

Commented [JS9]: Rename and move MJ growing here?

§ 200-49

M. Any one of the following uses when authorized as a conditional use by the Board of Supervisors, subject to § 200-116 of this chapter:

(1) Manufacturing and processing provided there shall be no raw materials or finished products permitted on the exterior of the building, and, further, no above ground storage tanks shall be allowed on the exterior of the building except as permitted by § 200-49O(3). [Amended 10-18-2021 by Ord. No. 2021-04]

Commented [JS10]: Expand?

(2) Any other use as determined by the Board of Supervisors to be the same general character as the above permitted uses.

Commented [JS11]: Cite section

(3) A building may exceed the thirty-five-foot height limitation as set forth in § 200-50 by conditional use approval; however, in no event shall any building or structure exceed 45 feet in height. [Added 10-17-2011 by Ord. No. 2011-06]

(4) Adaptive reuse for historic preservation where indicated as a use subject to approval by the Board of Supervisors as a conditional use in accordance with § 200-72.1. [Added 9-19-2016 by Ord. No. 2016-07]

(5) Any one of the following uses when authorized as a special exception by the Zoning Hearing Board, subject to Article XX of this chapter:

Commented [JS12]: Affordable housing?

O. The following accessory uses shall be permitted provided they are incidental to any of the foregoing permitted uses:

(1) Private parking areas pursuant to § 200-73 of this chapter, except that the minimum number of parking spaces for office buildings other than provided for

herein shall be one space for each 250 square feet of gross floor area. However, if, in the opinion of the Board of Supervisors, parking proves to be inadequate, a sufficient number of additional spaces shall be added to alleviate the problem to the satisfaction of the Board of Supervisors. Also, the size of the parking spaces within the entire district for each vehicle shall consist of a rectangular area having a dimension of not less than 10 feet in width and 20 feet in length. Where a parking space abuts a grass median of at least two feet in width or four feet in width where parking spaces are on each side of the median, only 18 feet of paving shall be necessary with the remaining two feet being with the grass median area.

- (2) Other customary accessory uses, structures or buildings, provided such are clearly incidental to the principal use.
- (3) Aboveground storage tanks for storage of Inert gases, liquids and solids, water and brine; provided, however, that the storage of any materials and/or substances that meet the definition of a Regulated Substance as that term is defined in 25 Pa. Code § 245.1 shall be prohibited. **[Added 10-18-2021 by Ord. No. 2021-04]**

P. Adaptive reuse for historic preservation where indicated as a use by right in accordance with § 200-72.1. **[Added 9-19-2016 by Ord. No. 2016-07]**

Township of Uwchlan, PA PIC Planned Industrial-Commercial District (NOTE: “Eagleview”. Sections deleted for clarity)

§ 508. PCID Planned Commercial Industrial Development Districts.

[Amended 4-8-1996 by Ord. No. 96-04; 9-8-1997 by Ord. No. 97-12]

508.1 Purpose. The purpose of the PCID District is to provide for unified and flexible development of a large area of land with a mixture of uses.

508.2 Criteria for PCID District. All land to be considered for development within the PCID District and all proposals for development within the PCID District shall comply with the following criteria:

- 1) Areas zoned PCID shall contain a total tract area of at least 275 contiguous acres and have direct frontage on a major highway as defined by the Uwchlan Township Zoning Ordinance.
- 2) All land proposed for development within the PCID District must be in single ownership, or subject to an agreement among all owners to develop pursuant to a coordinated plan.

508.3 Review procedures. In order to assure that development of the PCID District complies with the intent of this section, a Master Concept Plan for the tract shall be submitted to the Board of Supervisors in conformance with the following procedure:

- a. An applicant for approval of any development within the PCID District shall initially present a Master Concept Plan that shall, following approval, stand as an official tentative plan, with phased submittals for final approval as development proceeds. The Master Concept Plan shall include the entire tract and shall contain the following information:
 - (1) Location, proposed site layout, parking facilities, all adjacent highways, streets and alleys with traffic flow patterns, and a tentative list of the kind of establishments to be located on the site.
 - (2) Sketches, elevations and engineering plans showing proposed methods of stormwater control, type of sewage treatment and disposal, and the source of water supply.
- b. In addition to the Master Concept Plan, the applicant shall submit the following studies: traffic, utility investigations and a detailed report that evaluates the effect of the Planned Commercial Industrial Development on municipal services (such as police, fire, recreation), public facilities, utilities, budget, environmental impact, stormwater drainage and transportation system.
- c. Following approval of the Master Concept Plan, and, where applicable, conditional use approval, site development plans for sections of the tract shall be submitted and reviewed in accordance with the current Subdivision and Land Development Ordinance regulations. The provisions of the Subdivision and Land Development Ordinance, shall apply unless the regulations are altered by this § 508.

508.4 Permitted uses. The following uses shall be permitted in the areas of the PCID designated on the Master Concept Plan for office park uses:

- a. Manufacturing, assembling and/or servicing electronic equipment.
- b. Passenger station for public transportation; electric substation; telephone central office.
- c. Hotel and/or conference center.
- d. Professional and other business offices.
- e. Restaurant, cafeteria or recreational facilities designed for the comfort and convenience of employees, provided such facilities are located inside the confines of the building and are not offered for use by the general public.
 - f. Churches.
- g. Public uses, structures, or buildings owned, operated or subsidized by the Township, a Municipal Authority organized

by the Township or an Authority of which the Township is a member.

- h. Indoor recreational facilities containing amenities such as a swimming pool, spa, indoor track, nautilus equipment, handball courts and facilities typical of a YMCA facility.
- i. Laboratory for scientific research and development, excluding animal research for cosmetics purposes.
- j. Day-care centers.
- k. Wholesaling, warehousing and distributing, provided that there shall be no exterior evidence of such, and, further, no bulk storage of liquid or gaseous fuel or chemicals shall be permitted except for immediate consumption on the premises.

508.5 Permitted accessory uses to office park uses.

- a. Off-street parking pursuant to § 607, provided that, where a parking space abuts a grass median of at least two feet in width, or four feet in width where parking spaces are on each side of the median, the minimum length of the parking space may be 18 feet.
- b. Signs pursuant to § 606.
- c. Other accessory uses, structures or building, provided such are clearly incidental to the principal use.

508.6 Uses permitted by conditional use. The following uses shall be permitted in the PCID District when approved by the Board of Supervisors as a conditional use:

- a. Convenience centers. Principal uses as stated in § 605 shall be permitted subject to the provisions thereof except that no gasoline service stations, garages (private or public) or drive-in food establishments shall be permitted. In addition, the following convenience uses are permitted in the PCID District:
 - (1) Theater (movie or performing) within a permanent building; library, civic or cultural center.
 - (2) Automatic self-service laundry and dry-cleaning establishment.
- b. Manufacturing and processing, provided that there shall be no bulk storage of liquid or gaseous fuels or chemicals except for immediate consumption on the premises, and no raw materials or finished products shall be permitted on the exterior of the building.
- c. Restaurant, tearoom, cafe, confectionery or other place serving food or beverages, provided that no curb service shall be permitted.
- d. Any nonresidential buildings in excess of three stories but not more than five stories or 65 feet in height, provided that:
 - (1) Structures up to 65 feet in height may be permitted, provided they are sprinklered and have standpipe systems in accordance with the Uwchlan Township Fire Code, and provided that for each foot in excess of 35 feet, there shall be a corresponding decrease in both maximum impervious coverage and building coverage by 0.7% and provided such height increase does not impinge on the rights of existing or future property owners in the community. The decrease in impervious coverage shall be 0.2% for each one foot over 35 feet height limit for a structure in the Town center only. [Amended 9-14-2009 by Ord. No. 2009-03]
 - (2) The minimum parking spaces for office buildings shall be one space for each 300 square feet of leasable floor area. The number of required parking spaces for all other uses shall be in accordance with § 607.2 of this ordinance. If in the opinion of the Board of Supervisors parking proves to be inadequate, a sufficient number of additional spaces shall be added to alleviate the problem to the satisfaction of the Board of Supervisors.
- e. Wagering and gambling facilities, provided that no such use shall be located on any lot or parcel of land unless said lot or parcel of land or any part thereof is separated by either (a) a distance of 1,500 feet (except for a hotel) or (b) the right-of-way of a limited access highway, from any lot or parcel of land which is used for residential purposes (except for a hotel) in the Township or an adjoining Township; or which is included in whole or in part within a residential zoning district of the Township or an adjoining Township.
- f. Town center as defined in § 508.11.^[1]

[1] *Editor's Note: Former Subsection g, regarding wagering and gambling facilities, which immediately followed this subsection, was deleted 10-22-2009 by Ord. No. 2009-04.*

g. Hospitals.

[Added 12-9-2013 by Ord. No. 2013-06^[2]]

[2] *Editor's Note: This ordinance also redesignated former § 508.6.g and h as § 508.6.h and i, respectively.*

- h. Off-premises outdoor advertising signs, subject to the regulations of § 606. [Added 1-24-2000 by Ord. No. 2000-01]
- i. Any other use as determined by the Board of Supervisors to be the same general character as the permitted uses.
- j. Any legitimate use not specifically provided for in any zoning district and which is not inherently objectionable. [Added 12-9-2013 by Ord. No. 2013-06]
- k. Planned life care facility in compliance with all of the requirements of §§ 508.13 and 806.4. [Added 6-8-2015 by Ord. No. 2015-03]

508.7 Uses permitted by special exception.

- a. A private-use helistop as an accessory use to a permitted principal use subject to Planning Commission review and recommendation and conformance to the general standards prescribed in § 610.

- b. Accessory uses not located on the same lot with the permitted principal use.

508.8 Minimum lot size and open space requirement for office park uses.

- a. Area: Two acre minimum with a three acre average. However, one to 1.99 acre size lots may be permitted for a maximum of 5% of the total number of lots in the development. Also, any lot which is less than three acres shall be under single ownership and shall contain one specific use, company or corporation.
 - b. Width: 200 feet.
- c. Designated open space. In areas to be developed for office park uses the developer shall allow for a minimum of 5% of the total net tract area, which may include stormwater management areas, that shall be properly landscaped, separate from any lots, and usable for any active or passive recreation.
- d. Maximum impervious coverage: No lot three net acres or larger shall be covered by more than 65% of impervious surface, including but not limited to principal and accessory buildings, driveways and walkways and parking areas. Lots three acres or less may have up to 75% impervious coverage.

508.9 Minimum yard dimensions for office park uses.

- a. Front yard: minimum of 40 feet, except when an agricultural use or residential district is adjacent to the front yard, in which case front yard setback shall be 150 feet minimum.
- b. Each side yard: minimum of 15 feet, except when an agricultural use or residential district, or lot containing an occupied dwelling, is adjacent to the side yard, in which case the side yard setback shall be 150 feet on the side thus abutted. On a corner lot there shall be a side yard of not less than 40 feet.
- c. Rear yard: minimum of 15 feet, except when an agricultural use or residential district, or lot containing an occupied dwelling unit, is adjacent to the rear yard, in which case the rear yard setback shall be 150 feet.
- d. By conditional use: subject to § 806, the setbacks required when a building abuts a residential or agricultural district or a lot containing an occupied dwelling may be reduced from 150 feet to a distance determined by the Board of Supervisors to be sufficient to allow for proper protection of abutting property and its use but in no case to a distance less than the district normally requires.

508.10 Requirements governing residential uses within residential use portions of the PCID. Residential uses will be permitted as the exclusive use only on a minimum of 100 contiguous acres.

- a. Permitted density.

[Amended 9-14-2009 by Ord. No. 2009-03]

The maximum allowable residential density calculated with reference to the portion of the tract to be developed exclusively for residential uses shall be four dwelling units per acre, provided that a maximum density of 4.15 dwelling units per acre shall be permitted if the dwelling units in excess of 4.0 dwelling units per acre consist entirely of units designed and intended for occupancy by senior citizens pursuant to a program of housing subsidization under the auspices of an agency of the county, commonwealth, or United States government. In no event shall the net residential density of any specific use area and calculated with reference to that area exceed the following:

Dwelling Unit Type		Maximum Permitted Net Density
(1)	Single-family detached	4 dwelling units per acre
(2)	Single-family semidetached	6 dwelling units per acre
(3)	Single-family attached (townhouse or quadraplex)	8 dwelling units per acre
(4)	Apartments, low rise apartments and multifamily dwellings	12 dwelling units per acre
(5)	Single-family garden lot development	5 dwelling units per acre
(6)	Attached garden lots	8 dwelling units per acre

Category	R-1 Zoning District
Purpose	to support the preservation of critical natural resources, such as streams, floodplains, wet soils, variable groundwater yield areas, and conditionally suitable for on-lot sewage disposal systems; to encourage continued agricultural, open space and conservation uses; to provide for continued low density residential development that is compatible with established use patterns; and to encourage and promote phased development throughout the Township by permitting low density residential uses in the R-1 District until other areas of the Township more accessible to adequate services and transportation are fully developed in medium and high density residential uses. The R-1 District establishes maximum density standards which provide for low density residential uses and promote the conservation of surface water and groundwater supplies, soils for on-lot sewage disposal systems, and the control of soil erosion and flooding.
By-Right	A. Single-family detached dwelling and group home. B. Agriculture
Conditional Use	(1) Nursery, excluding retail sales and landscaping business, provided that they are situated no less than 100 feet from an adjoining property line or public right-of-way. (2) Educational or religious use. (3) Recreation uses, provided that no commercial activity or use such as amusement park, driving ranges, pitch and putt or miniature golf course, or similar use customarily carried on as a business, shall be permitted (see § 200-68). (4) Bed-and-breakfast [see § 200-62B(5)]. (5) (Reserved) (6) Adaptive reuse for historic preservation where indicated as a use subject to approval by the Board of Supervisors as a conditional use in accordance with § 200-72.1.
Accessory Use	(1) Customary residential accessory uses. (2) Customary agricultural accessory uses. (3) Private swimming pools
Special Exception	(1) Municipal or public uses; governmental or public utility building or uses. (2) Cemetery. (3) Kennels. (4) Home occupations
Other	Adaptive reuse for historic preservation where indicated as a use by right in accordance with § 200-72.1.

Category	R-2 Zoning District
Purpose	to provide for low to moderate density residential development in areas of the Township which are not generally characterized by steep slopes or floodplains, but which nevertheless contain soils conditional for on-lot sewage disposal systems and variable groundwater yields; to encourage continued agricultural, open space and conservation uses in the R-2 District while also permitting low to moderate density residential development compatible with established use patterns; and to encourage and promote phased development throughout the Township by permitting low to moderate density residential uses in the R-2 District until other areas of the Township more accessible to adequate services and transportation are fully developed in medium and high density residential uses. The R-2 District establishes maximum density standards which provide the conservation of surface water and groundwater supplies, soils for on-lot sewage disposal systems, and the control of soil erosion and flooding.
By-Right	Any use permitted by right in the R-1 District.
Conditional Use	(1) Educational or religious use. (2) Cemetery. (3) Adaptive reuse for historic preservation where indicated as a use subject to approval by the Board of Supervisors as a conditional use in accordance with § 200-72.1.
Accessory Use	Any accessory use permitted in the R-1 District.
Special Exception	None
Other	Adaptive reuse for historic preservation where indicated as a use by right in accordance with § 200-72.1.

Category	R-3 Zoning District
Purpose	to encourage medium to high density residential development which is compatible with established use patterns; located in areas of the Township which contain environmental features generally suitable for such development; and accessible to transportation systems and community facilities appropriate for such development. The R-3 District is designed: (1) To provide a transition between areas of low and high density residential; and (2) To supply additional flexibility and opportunity for accommodating multifamily units at a lower density than permitted in other zoning districts of the Township.
By-Right	In addition to those uses permitted by right in the R-1 District, the following uses shall be permitted: (1) Single-family semidetached dwelling (twin). (2) Two-family detached dwelling (duplex).
Conditional Use	(1) Multifamily dwellings. (2) Mobile home park. (3) Nursing or convalescent home (see § 200-66). (4) Cemetery. (5) Municipal or public uses; governmental or public utility building or use. (6) Adaptive reuse for historic preservation where indicated as a use subject to approval by the Board of Supervisors as a conditional use in accordance with § 200-72.1.
Accessory Use	Any accessory use permitted in the R-1 District.
Special Exception	None
Other	Adaptive reuse for historic preservation where indicated as a use by right in accordance with § 200-72.1.

Category	R-4 Zoning District
Purpose	to provide the opportunity for high density residential development to occur in areas which are compatible with established use patterns; located in areas of the Township which contain environmental features generally suitable for such development; and accessible to transportation systems and community facilities appropriate for such development. The R-4 District is designed to provide the opportunity for accommodating multifamily units at a density consistent with the character of the Township.
By-Right	Any use permitted by right in the R-3 District.
Conditional Use	(1) Multifamily dwellings. (2) Adaptive reuse for historic preservation where indicated as a use subject to approval by the Board of Supervisors as a conditional use in accordance with § 200-72.1.
Accessory Use	Any accessory use permitted in the R-1 District.
Special Exception	
Other	Adaptive reuse for historic preservation where indicated as a use by right in accordance with § 200-72.1.



SUBDIVISION / LAND DEVELOPMENT APPLICATION



Preliminary Submittal



Final Submittal

The undersigned hereby applies for review of the Plan submitted herewith and described below:

1. Name of Subdivision / Development: Chester Springs Service Center
2. Plan Dated: August 1, 2024 County Deed Book/Page No. B: 11052 P: 1945
3. Name of property owner(s): Rockhill Real Estate Enterprises XVII, LP

Address: 4005 West Chester Pike, Newtown Square

State/Zip: PA 19073 Phone No.: (856) 816-2200

Email: rd@rdsautogroup.com; Dlebeau@rdsreserve.com

4. Name of Applicant (If other than owner):

Same as owner.

Address: _____

State/Zip: _____ Phone No.: _____

Email: _____

5. Applicant's interest (If other than owner): _____

6. Engineer, Architect, Surveyor, or Landscape Architect responsible for Plan.

Keith Lieberman, P.E., T&M Associates, Inc.

Address: 1700 Market Street, Suite 3110, Philadelphia

State/Zip: PA 19103 Phone No.: (215) 282-7853

Email: KLieberman@tandmassociates.com

7. Total acreage: 13.79 acres Number of Lots: 1

8. Acreage of adjoining land in same ownership: (If any) N/A

9. Describe Type of Development Planned: An approximately 45,774 SF footprint vehicle service enter with associated parking and stormwater management facilities.

10. This Application shall be accompanied by: the Application Fee as listed below, an aerial image of the property, and the quantity of plans/supporting information as detailed in the Township Code §162-8.B.(1)(b) and/or §162-8.C.(1)(d).

[One-half of the required plan submissions may be of a reduced size, i.e. 11 x 17]

11. List all subdivision and zoning standards or requirements which have not been met and for which a waiver or change is requested.

See enclosed waiver list.

12. The Applicant or his/her agent shall enter into a Subdivision / Land Development Review Escrow Agreement (attached) and place into escrow with the Township at the time of application an amount estimated by the Township to cover all costs of engineering and professional planning reviews (not including County application fee), legal services and other professional services used by the Township in connection with the application.

Signature of Property Owner or Applicant:


By: Alyson M. Zarro, Attorney for the Applicant

Date: October 3, 2024

*Development subject to ACT 209 Impact Fee.

*Park & Recreation Fee per residence is levied. Contact Township Offices to determine amount.

SUBDIVISION / LAND DEVELOPMENT APPLICATION FEE

1-2 Lots \$250

3-5 Lots \$500

Plus \$25 for each Lot over 3

Over 5 Lots \$1000

Plus \$50 for each Lot over 5

Form revised January 2015



October 3, 2024

Mr. Tony Scheivert
Township Manager, Upper Uwchlan Township
140 Pottstown Pike
Chester Springs, PA 19425

**RE: Waiver Request Letter – Chester Springs Service Center
500 Pottstown Pike
Upper Uwchlan Township, Chester County, Pennsylvania
T&M Project No. PORS00021**

Below is a list of the waivers Rockhill Real Estate Enterprises XVII LP requests as part of the Preliminary Land Development Application for the Chester Springs Service Center Project.

WAIVER #1

Chapter: Chapter 152, Stormwater Management

Section: 152-301.T – General Requirements

Requirement: Disturbance of existing ground cover during construction of the proposed regulated activity is prohibited within 75 feet of top-of-bank of all perennial and intermittent waterways, water bodies (lakes, ponds, etc.) and wetlands, except for activities otherwise approved by state or local agencies (e.g. stream restoration projects, road crossings, subsurface utility projects, etc.).

Request: A waiver is requested to disturb existing ground cover within 75 feet of areas identified as potential wetlands for proposed improvements, specifically portions of the parking lot and the stormwater management basin.

Justification: Section 162-5 of the Subdivision and Land Development Ordinance (“SALDO”) defines “Riparian Buffer Area” in pertinent part as “any wetlands and any area within 25 feet of any wetland.” The proposed development complies with the requirement to provide this Riparian Buffer Area. Sections 162-55.C and D of the SALDO also permit regulated activities/disturbance permitted by State and Federal law in wetlands and Riparian Buffer Area. Applicant is seeking a waiver to disturb area within the 75 feet but outside of the Riparian Buffer Area. The wetlands on the property are manmade as a result of the decommissioning of the tank farm that was previously located on the property and are of low quality. The decommissioning left containment areas, which trapped water and created these artificial wetlands. The proposed development to occur within 75 feet of wetlands will be not direct untreated runoff to any wetland area. All proposed impervious cover within 75 feet will be contained within a curbline and collected by storm conveyance before discharging to a constructed wetlands stormwater BMP, thereby enhancing water quality prior to discharging into the existing wetlands. Accordingly, although disturbance is not otherwise permitted under this Stormwater Management Ordinance Section, it is permitted under the SALDO and Applicant is designing it stormwater management system to address water quality requirements.

WAIVER #2

Chapter: Chapter 162, Subdivision and Land Development

Section: 162-9.H(5) – Historic Impact Statement

Requirement: A historic resources impact statement is required when any of the following actions is proposed within 250 feet of an historic resource as identified in the document entitled "Historic Resources Inventory: Upper Uwchlan Township, Chester County, Pennsylvania (Wise Preservation Planning, 2001)."

Request: A waiver is requested to not provide a Historic Resource Impact Study.

Justification: The “John Keeley House”, located at 210 Font Road, is identified as a Township Class II Historic Resource (No. 30) on the Township’s Historic Resource Inventory. The property containing the John Keeley House is separated from the property that is the subject of this application (“Property”) by Pottstown Pike. The John Keeley House has been adaptively reused and now operates as a WSFS bank branch. There is a significant visual vegetated buffer that exists on the Property today that is intended to remain as part of the proposed

development and there is a separation of over 200 feet between the proposed development and existing John Keeley House. Additionally, Applicant will comply with the condition of approval imposed by the Board of Supervisors as part of the Conditional Use Approval pertaining to providing an effective buffer between the John Keeley House and the proposed development.

WAIVER #3

Chapter: Chapter 162, Subdivision and Land Development

Section: 162-55.B – Woodland Replacement

Requirement: Where woodland or hedgerow disturbance involves more than the maximum area permitted under Subsection B(3) above, one tree and two shrubs shall be planted for each 300 square feet of woodland or hedgerow disturbance area, or fraction thereof, in excess of the maximum permitted area of disturbance.

Request: A waiver is requested to the extent required to provide a fee in lieu of required plantings

Justification: Under Section 165-55.B(12) of the SALDO, the Township may permit an applicant to pay a fee in lieu of required replacement trees, “especially if the site in question cannot accommodate the replacement trees required pursuant to [the SALDO].” The required number of replacement vegetation cannot be accommodated onsite in addition to other planting requirements. To require the Applicant to plant trees required to comply with 162-55.B would substantially change the layout presented and generally approved as part of the Conditional Use process for this project.

WAIVER #4

Chapter: Chapter 162, Subdivision and Land Development

Section: 162-57.D(1) – Minimum Planting Standards

Requirement: The total number of plantings required shall be no less than the total calculated from all columns in the table located in section D.1 and shall be in addition to any required replacement plantings due to woodland disturbance. The total number of required plantings may be dispersed throughout the tract to meet the objectives of this section.

Request: A waiver is requested to provide less than the required number of plantings set forth in this section.

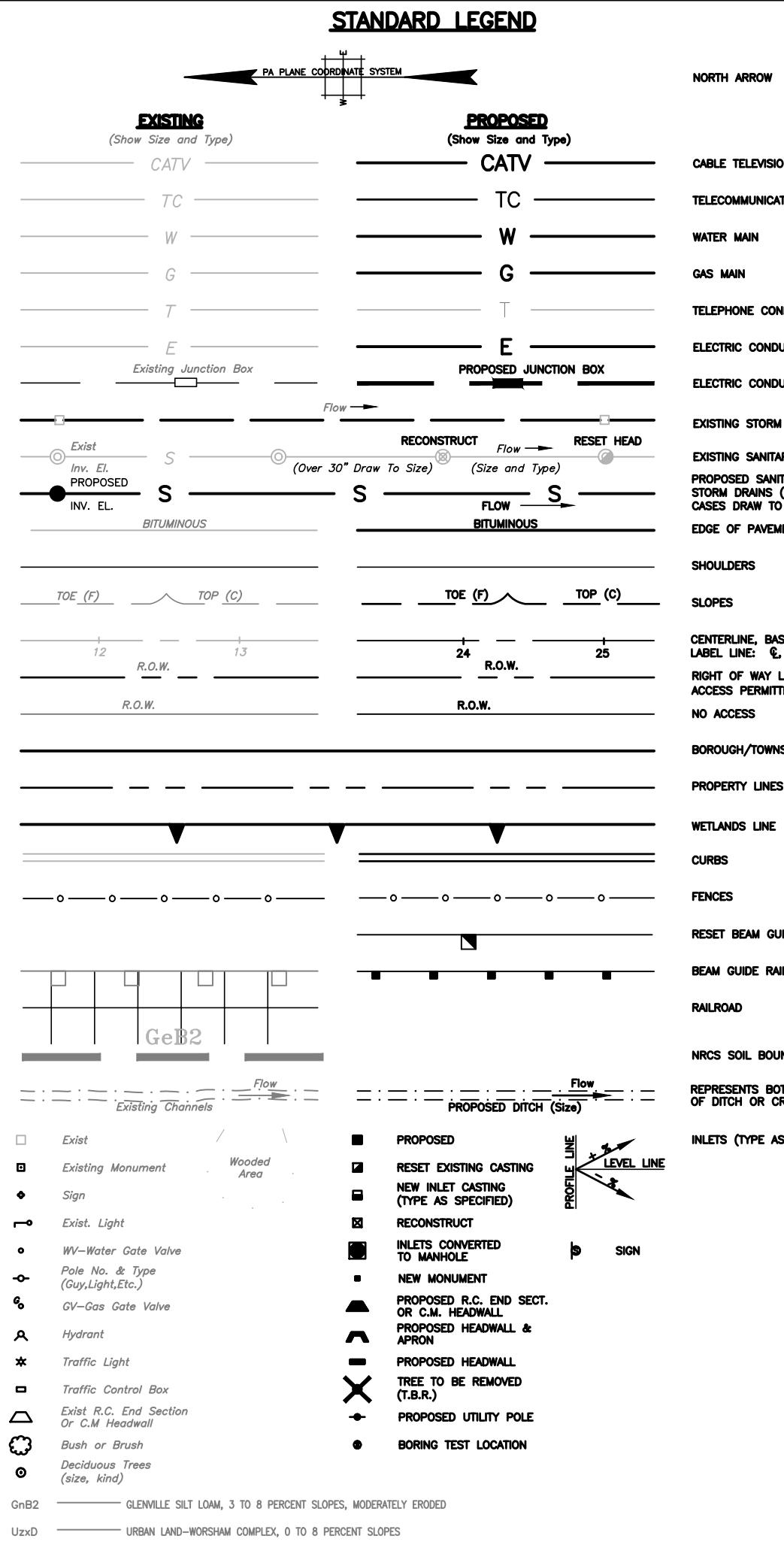
Justification: The required number of plantings cannot be accommodated onsite while allowing the vegetation remain viable. The proposed plantings have been practically maximized on the Property.

If you have any questions or require any additional information, please do not hesitate to contact me by phone at 215-282-7853 or by email jtackett@tandmassociates.com.

Sincerely,
T&M Associates



Jacob Tackett
Principal Staff Designer



SITE DATA & NOTES

GENERAL NOTES

- RECORD OWNER: ROCKHILL REAL ESTATE ENTERPRISES XVII LP 4005 WEST CHESTER PINE NEWTOWN SQUARE, PA 19073
- SOURCE OF TITLE: DEED BOOK 11052, PAGE 1945
- TAX PARCEL (UPI): 32-1-34.1C
- LOT AREA: EXISTING GROSS: 600,739.30 SF (13.791 AC) WITHIN ULTIMATE R-O-W: 7,768.42 SF (0.178 AC) EXISTING NET: 592,970.88 SF (13.613 AC)
- TOPOGRAPHIC FEATURES SHOWN FROM ACTUAL FIELD SURVEY BY ASH ASSOCIATES COMPLETED SEPTEMBER 30, 2022 AND IS LIMITED TO SHOWING FEATURES OF INTEREST ONLY.
- VERTICAL DATUM IS NAVD 1988 AND ESTABLISHED BY GPS OBSERVATIONS REFERENCED TO THE NGS CORS NETWORK. SITE BENCHMARK IS A METAL SPIKE SET AS SHOWN. SITE BENCHMARK ELEVATION=509.22.
- HORIZONTAL DATUM IS NAD 83, STATE PLANE COORDINATES OF PENNSYLVANIA AND ESTABLISHED GPS OBSERVATIONS REFERENCED TO THE NGS CORS NETWORK. BOTH DEED BEARINGS AND NAD 83 PENNSYLVANIA STATE PLANE BEARINGS ARE SHOWN. PARENTHESIS () INDICATES DEED BEARINGS.
- ENTIRE SITE IS LOCATED IN FLOOD ZONE "X" AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN. PER FEMA FLOOD INSURANCE RATE MAP (FIRM) OF CHESTER COUNTY, PANEL 90 OF 380, MAP # 4202900906, REVISED SEPTEMBER 29, 2017.

REFERENCE PLANS

- REFERENCE PLAN: LOT 3 ON "TITLE PLAN, FINAL MINOR SUBDIVISION PLAN FOR TOLL BROS., INC.", PREPARED BY COMMONWEALTH ENGINEERS, INC., DATED FEBRUARY 2, 2001, LAST REVISED MARCH 11, 2002 AND RECORDED IN THE CHESTER COUNTY RECORDER OF DEEDS AS PLAN BOOK 1623, PAGE 1 ON MAY 30, 2002.
- "FINAL PLAN, TITLE PLAN, REIFSENHEIMER TRANSPORTATION, INC.", PREPARED BY HARRY STRONG ENG. & LAND SURVEYING, DATED DECEMBER 3 1997, LAST REVISED JANUARY 27, 1998 AND RECORDED IN THE CHESTER COUNTY RECORDER OF DEEDS AS PLAN BOOK 14828, PAGE 1.
- "SITE PLAN, FELLOWSHIP FIELDS", PREPARED BY TAYLOR WISEMAN & TAYLOR, AND RECORDED IN THE CHESTER COUNTY RECORDER OF DEEDS AS BOOK 9186, PAGE 876.
- "PRELIMINARY/FINAL LAND DEVELOPMENT PLAN, LAND DEVELOPMENT PLAN, OVERALL TRACT" PREPARED BY HARRIS COMMUNICATIONS DIVISION, AND RECORDED IN THE CHESTER COUNTY RECORDER OF DEEDS AS PLAN BOOK 19822, PAGE 1.
- "PROPOSED WAREHOUSE BUILDING, PLAN OF PROPERTY FOR F. BRIAN FORCINE", PREPARED BY JMR ENGINEERING, LLC, DATED AUGUST 18, 2017, AND RECORDED IN THE CHESTER COUNTY RECORDER OF DEEDS AS PLAN BOOK 20216, PAGE 1.
- "MINOR LAND DEVELOPMENT PLAN FOR DUKE ENERGY GAS TRANSMISSION, GENERAL SITE PLAN", PREPARED BY COMMONWEALTH ENGINEERS, INC., DATED SEPTEMBER 5, 2000, LAST REVISED MARCH 13, 2001, AND RECORDED IN THE CHESTER COUNTY RECORDER OF DEEDS AS PLAN BOOK 15752, PAGE 1.

- CROSS SLOPES OF THE ACCESSIBLE ROUTE SHALL NOT EXCEED 2%, INCLUDING CURB RAMPS AND ASSOCIATED GUTTERS AND CROSS WALKS.
- RUNNING SLOPES ALONG THE ACCESSIBLE ROUTE (INCLUDING GUTTERS) SHALL NOT EXCEED 5%. IF RUNNING SLOPES OF ACCESSIBLE ROUTES EXCEED 5%, THEN ALL RAMP CRITERIA SHALL APPLY. SURFACES SHALLOWER THAN A RUNNING SLOPE OF NO MORE THAN 5% FOR WALKING SURFACES AND 8.3% FOR RAMPS.
- SLOPES AT INTERSECTIONS OF ACCESSIBLE ROUTES SHALL NOT EXCEED 2% IN ANY DIRECTION.
- SLOPES OF MANEUVERING CLEARANCES AT DOORS SHALL NOT EXCEED 2% IN ANY DIRECTION.
- A 30X48 INCH CLEAR FLOOR SPACE FLUSH SHALL BE PROVIDED WITH A CONTROL (E.G., MAGNETIC CARD READER). SLOPES OF CLEAR FLOOR SPACES AT FIXTURES AND CONTROLS SHALL NOT EXCEED 2% IN ANY DIRECTION.
- LEVEL CHANGES BETWEEN GROUND SURFACE MATERIALS (E.G., PAVERS TO CONCRETE) SHALL COMPLY WITH THE FOLLOWING:
 - VERTICAL LEVEL SHALL NOT EXCEED $\frac{1}{4}$ INCH
 - LEVEL CHANGES UP TO $\frac{1}{4}$ INCH ARE BEVELED WITH A SLOPE NOT EXCEEDING 1:2
 - LEVEL CHANGES EXCEEDING $\frac{1}{4}$ INCH ARE RAMPED
- GAPS OR OPENINGS ALONG THE ACCESSIBLE ROUTE SHALL NOT EXCEED $\frac{1}{2}$ INCH IN WIDTH, PERPENDICULAR TO THE PREDOMINATE FLOW OF PEDESTRIAN TRAFFIC.

STORM SEWER NOTES

- ALL STORM CONVEYANCE PIPE SHALL BE SMOOTH LINED DOUBLE WALL HIGH DENSITY POLYETHYLENE PIPE (HDPE), UNLESS OTHERWISE SPECIFIED. ANY ROOF LEADERS SHALL BE SCHEDULE 40 PVC.
- IF A CONFLICT ARISES DURING THE INSTALLATION OF ANY PART OF THE STORM SEWER SYSTEM THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY IN WRITING.
- LANDSCAPING, FENCES AND STRUCTURES SHALL BE PLACED A MINIMUM OF 10 FEET AWAY FROM STORM SEWERS OUTSIDE OF THE RIGHT OF WAY OF STREETS.
- REFER TO SITE / RECORD PLAN FOR ADDITIONAL NOTES.

STANDARD LEGEND

GENERAL NOTES

- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS, SPECIFICATIONS, AND REFERENCED DOCUMENTS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND THE CONTRACTOR FIND A COPY OF THE SPECIFICATIONS AND DRAWINGS RELATED TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE CONSTRUCTION MEETS ALL APPLICABLE CODE REQUIREMENTS.
- ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVEGROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF SIZE, DEPTH OR HORIZONTAL AND VERTICAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF THE PENNSYLVANIA LEGISLATIVE ACT NUMBER 387 OF 1974, AS AMENDED BY ACT 181 OF 2006, CONTRACTORS MUST VERIFY LOCATION AND WIDTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO THE START OF WORK. THE LAW REQUIREMENT FOR WORKING DAYS NOTICE FOR CONSTRUCTION PHASE, CALL THE PA ONE CALL SYSTEM AT 1-800-242-1776. SERIAL NO. 20240653115-000 WAS PLACED FOR SURVEY PURPOSES ONLY.
- PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS BY ALL OF THE PERMITTING AUTHORITIES.
- ALL PROPOSED IMPROVEMENTS SHALL COMPLY WITH "THE AMERICAN DISABILITIES ACT", "ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES", AND "THE PENNSYLVANIA UNIVERSAL ACCESSIBILITY ACT".
- THIS PLAN SHALL NOT BE USED FOR BUILDING STAKEOUT PURPOSES. PROPOSED BUILDING LOCATION AS DEPICTED IS WITHIN ACCEPTABLE TOLERANCES FOR SITE WORK ONLY. PLEASE REFER TO ARCHITECTURAL/STRUCTURAL PLANS FOR EXACT BUILDING PLACEMENT.
- THE BUILDING FOOTPRINTS DEPICTED HEREON HAVE BEEN TRANSPONSED FROM ARCHITECTURAL PLANS. FINAL BUILDING DIMENSIONS MAY VARY SLIGHTLY FROM THOSE DEPICTED HEREON BUT SHALL ULTIMATELY CONFORM TO ALL APPLICABLE ZONING SETBACKS, IMPERVIOUS SURFACE COVERAGE RATIOS, ETC. CONTRACTOR SHALL NOTIFY PROJECT ENGINEER IF FINAL BUILDING FOOTPRINTS SUBSTANTIALLY VARY FROM THE FOOTPRINTS HEREON.
- CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH PENNDOT "PUBLICATION 40B", LATEST EDITION, MUNICIPAL STANDARDS AND SPECIFICATIONS, AND UTILITY AUTHORITY/CO. STANDARDS AND SPECIFICATIONS, WHICHEVER ARE MORE RESTRICTIVE.
- CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS AND COMPLETE ALL WORK INDICATED OR IMPLIED ON THE PROJECT PLANS AND/OR SPECIFICATIONS THAT ARE NOT EXISTING ON THE PROJECT SITE AND THAT ARE NOT SPECIFICALLY NOTED AS "FUTURE" OR "NOT IN CONTRACT" (NIC), "BY OWNERS", "BY OTHER CONTRACTORS", "BY EC", "BY PC", "BY MC".
- CONTRACTOR SHALL BE FAMILIAR WITH AND RESPONSIBLE FOR ANY/ALL CERTIFICATIONS, INSPECTIONS, ETC. REQUIRED BY ALL COVERING JURISDICTIONAL AGENCIES DURING AND AFTER CONSTRUCTION FOR SIGN-OFF AND CERTIFICATE OF OCCUPANCY ISSUANCE INCLUDING BUT NOT LIMITED TO PROCUREMENT OF SERVICES, SCHEDULING OF FIELD OBSERVATIONS AND COORDINATION WITH REPRESENTATIVES OF THE APPROPRIATE PARTIES. CONTRACTOR IS RESPONSIBLE TO COORDINATE CERTIFICATIONS, SIGN-OFFS, ETC. NECESSARY FOR JOB CLOSEOUT AND ISSUANCE OF CERTIFICATE OF OCCUPANCY.
- THE PROPERTY SURVEY AS CERTIFIED SHALL BE CONSIDERED A PART OF THESE PLANS.
- THESE PLANS ARE BASED ON INFORMATION PROVIDED TO OUR OFFICE AT THE TIME OF PLAN PREPARATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY THE ENGINEER IN WRITING IF ACTUAL SITE CONDITIONS DIFFER FROM THAT SHOWN ON THE PLAN, OR IF THE PROPOSED WORK WOULD BE INHIBITED BY ANY OTHER EXISTING SITE FEATURES.
- ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK DUE TO DISCREPANCIES OR CONFLICTS ON THE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN PRIOR TO THE START OF WORK AND MATERIALS PROCUREMENT.
- THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL/MEPP PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, EXACT BUILDING UTILITY SERVICE LOCATIONS AND SITE ELECTRICAL DESIGN.
- DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE. ALL EXCAVATED MATERIAL AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, COUNTY, STATE AND FEDERAL LAWS AND APPLICABLE CODES. CONTRACTOR SHALL PROPERLY REMOVE AND DISPOSE OF HAZARDOUS/UNUSABLE MATERIAL IN ACCORDANCE WITH ALL APPLICABLE CODES, ORDINANCES AND LAWS.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL SHORING REQUIRED DURING EXCAVATION AND SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS, AS WELL AS ADDITIONAL PROVISIONS TO ASSURE STABILITY OF CONTIGUOUS STRUCTURES AS FIELD CONDITIONS DICTATE.
- THE CONTRACTOR IS TO EXERCISE CARE WHEN PERFORMING WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES AND FACILITIES THAT ARE TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING THE APPROPRIATE MEASURES AS NECESSARY TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT TO REMAIN, AND PROVIDE A SAFE WORK AREA.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REPLACE ALL SIGNAL INTERCONNECTION CABLE, CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO EXISTING ITEMS DURING CONSTRUCTION SUCH AS BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPPING, CURB, SIDEWALK, ETC. REPAIR SHALL BE EQUAL TO OR BETTER THAN EXISTING CONDITIONS. CONTRACTOR IS RESPONSIBLE TO PROVIDE DOCUMENTATION OF THE CONDITION OF EXISTING ITEMS TO THE OWNER'S DESIGNATED REPRESENTATIVE PRIOR TO CONSTRUCTION START.
- CONCRETE SHALL HAVE THE MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS AS INDICATED IN SPECIFICATIONS AND REFERENCE DOCUMENTS UNLESS OTHERWISE NOTED ON THE PLANS, DETAILS AND/OR GEOTECHNICAL REPORT.
- THE ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION METHODS/MEANS FOR COMPLETION OF THE WORK DEPICTED ON THESE PLANS NOR ANY CONFLICTS/SCOPES/REVISONS WHICH RESULT FROM THE SAME. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING METHODS/MEANS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND NOTIFICATION OF OWNER AND ENGINEER OF RECORD IN WRITING WHEN A CONFLICT IS IDENTIFIED.
- NEITHER THE PROFESSIONAL ACTIVITIES OF T&M ASSOCIATES NOR THE PRESENCE OF T&M ASSOCIATES OR ITS EMPLOYEES, SUB-CONSULTANTS OR CONTRACTORS ON THE SITE SHALL AFFECT THE CONTRACTOR'S PERFORMANCE OF ITS OWN PROFESSIONAL SERVICES. CONTRACTOR SHALL NOT LIMIT THE CONTRACTOR'S ACTIVITIES, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERVISING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES. T&M ASSOCIATES AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE CONTROL OVER THE CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR HEALTH OR SAFETY PRECAUTIONS ON THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE JOB SITE SAFETY NOR HAS BEEN RETAINED FOR SUCH PURPOSES. T&M ASSOCIATES SHALL BE INDEMNIFIED BY THE CONTRACTOR, AND SHALL BE MADE AN ADDITIONAL INSURED UNDER THE CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE.
- T&M ASSOCIATES SHALL REVIEW AND COMMENT OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMISSIONS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH THE DESIGN CONCEPT AND THE INFORMATION SHOWN IN THE CONSTRUCTION MEANS OR METHODS. COORDINATION OF THE WORK WITH OTHER TRADES AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. T&M ASSOCIATES SHALL BE PROVIDED WITH REASONABLE TIME AND ACCESS TO THE SITE, ALLOWING SUFFICIENT TIME TO PERMIT ADEQUATE REVIEW. REVIEW OF A SPECIFIC ITEM SHALL NOT INDICATE THAT T&M ASSOCIATES HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. T&M ASSOCIATES SHALL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS NOT BROUGHT TO THE ATTENTION OF T&M IN WRITING BY THE CONTRACTOR. T&M ASSOCIATES SHALL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OR CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
- ALL RADII SHALL BE MIN. 5' UNLESS OTHERWISE NOTED OR DIMENSIONED.
- THE OWNER/EQUITABLE OWNER OF THE PROPERTIES WILL BE RESPONSIBLE FOR THE ONGOING INSPECTIONS, OPERATIONS, REPAIRS AND MAINTENANCE OF THE STORMWATER MANAGEMENT BMP'S AND CONVEYANCE SYSTEMS AFTER COMPLETION OF CONSTRUCTION.
- ALL PROPOSED PEDESTRIAN FACILITIES WITHIN THE SITE AND WITHIN THE PUBLIC RIGHT-OF-WAY (INCLUDING CURB RAMPS AND PEDESTRIAN ROUTES) SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE U.S. ACCESS BOARD, PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG) OF THE ACCESSIBILITY GUIDELINES OF BUILDINGS AND FACILITIES (ADAAG), PENNDOT DESIGN MANUAL PART 2, CHAPTER 6, AND PENNDOT STANDARDS FOR ROADWAY CONSTRUCTION (PUBLICATION 72M, RC-67M). UNLESS SPECIFIED OTHERWISE THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO INSTALLATION.
- CONTRACTOR SHALL PROVIDE A DUST CONTROL PLAN WITH SPECIFIC INFORMATION ABOUT THE GENERATION AND CONTROL OF DUST EMISSIONS DURING EXCAVATION, STOCKPILING, STABILIZATION, BACK FILLING AND ASSOCIATED ACTIVITIES OF THIS PROJECT.

- CROSS SLOPES OF THE ACCESSIBLE ROUTE SHALL NOT EXCEED 2%, INCLUDING CURB RAMPS AND ASSOCIATED GUTTERS AND CROSS WALKS.
- RUNNING SLOPES ALONG THE ACCESSIBLE ROUTE (INCLUDING GUTTERS) SHALL NOT EXCEED 5%. IF RUNNING SLOPES OF ACCESSIBLE ROUTES EXCEED 5%, THEN ALL RAMP CRITERIA SHALL APPLY. SURFACES SHALLOWER THAN A RUNNING SLOPE OF NO MORE THAN 5% FOR WALKING SURFACES AND 8.3% FOR RAMPS.
- SLOPES AT INTERSECTIONS OF ACCESSIBLE ROUTES SHALL NOT EXCEED 2% IN ANY DIRECTION.
- SLOPES OF MANEUVERING CLEARANCES AT DOORS SHALL NOT EXCEED 2% IN ANY DIRECTION.
- A 30X48 INCH CLEAR FLOOR SPACE FLUSH SHALL BE PROVIDED WITH A CONTROL (E.G., MAGNETIC CARD READER). SLOPES OF CLEAR FLOOR SPACES AT FIXTURES AND CONTROLS SHALL NOT EXCEED 2% IN ANY DIRECTION.
- LEVEL CHANGES BETWEEN GROUND SURFACE MATERIALS (E.G., PAVERS TO CONCRETE) SHALL COMPLY WITH THE FOLLOWING:
 - VERTICAL LEVEL SHALL NOT EXCEED $\frac{1}{4}$ INCH
 - LEVEL CHANGES UP TO $\frac{1}{4}$ INCH ARE BEVELED WITH A SLOPE NOT EXCEEDING 1:2
 - LEVEL CHANGES EXCEEDING $\frac{1}{4}$ INCH ARE RAMPED
- GAPS OR OPENINGS ALONG THE ACCESSIBLE ROUTE SHALL NOT EXCEED $\frac{1}{2}$ INCH IN WIDTH, PERPENDICULAR TO THE PREDOMINATE FLOW OF PEDESTRIAN TRAFFIC.

ADA CONSTRUCTION NOTES

- CROSS SLOPES OF THE ACCESSIBLE ROUTE SHALL NOT EXCEED 2%, INCLUDING CURB RAMPS AND ASSOCIATED GUTTERS AND CROSS WALKS.
- RUNNING SLOPES ALONG THE ACCESSIBLE ROUTE (INCLUDING GUTTERS) SHALL NOT EXCEED 5%. IF RUNNING SLOPES OF ACCESSIBLE ROUTES EXCEED 5%, THEN ALL RAMP CRITERIA SHALL APPLY. SURFACES SHALLOWER THAN A RUNNING SLOPE OF NO MORE THAN 5% FOR WALKING SURFACES AND 8.3% FOR RAMPS.
- SLOPES AT INTERSECTIONS OF ACCESSIBLE ROUTES SHALL NOT EXCEED 2% IN ANY DIRECTION.
- SLOPES OF MANEUVERING CLEARANCES AT DOORS SHALL NOT EXCEED 2% IN ANY DIRECTION.
- A 30X48 INCH CLEAR FLOOR SPACE FLUSH SHALL BE PROVIDED WITH A CONTROL (E.G., MAGNETIC CARD READER). SLOPES OF CLEAR FLOOR SPACES AT FIXTURES AND CONTROLS SHALL NOT EXCEED 2% IN ANY DIRECTION.
- LEVEL CHANGES BETWEEN GROUND SURFACE MATERIALS (E.G., PAVERS TO CONCRETE) SHALL COMPLY WITH THE FOLLOWING:
 - VERTICAL LEVEL SHALL NOT EXCEED $\frac{1}{4}$ INCH
 - LEVEL CHANGES UP TO $\frac{1}{4}$ INCH ARE BEVELED WITH A SLOPE NOT EXCEEDING 1:2
 - LEVEL CHANGES EXCEEDING $\frac{1}{4}$ INCH ARE RAMPED
- GAPS OR OPENINGS ALONG THE ACCESSIBLE ROUTE SHALL NOT EXCEED $\frac{1}{2}$ INCH IN WIDTH, PERPENDICULAR TO THE PREDOMINATE FLOW OF PEDESTRIAN TRAFFIC.

STORM SEWER NOTES

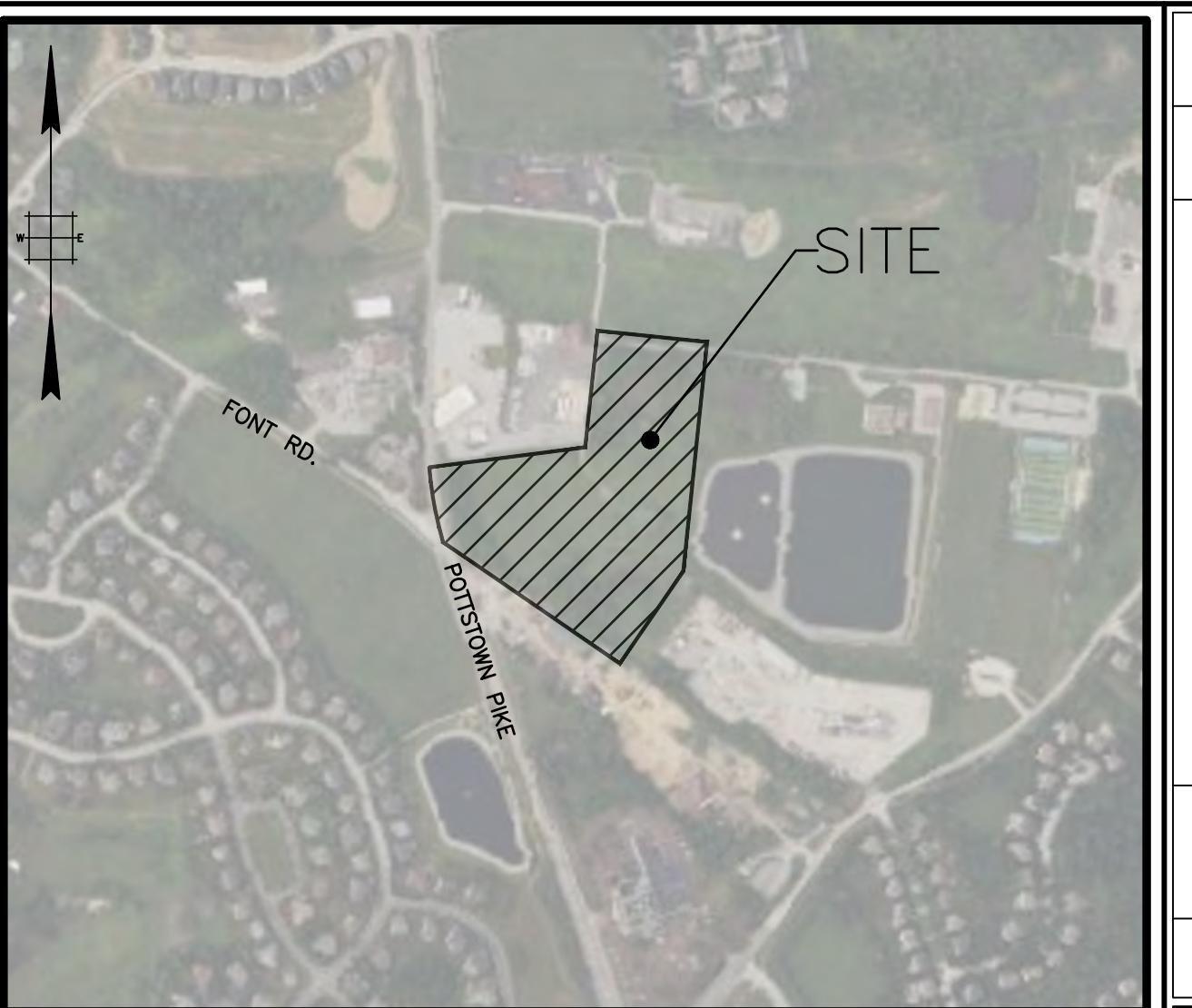
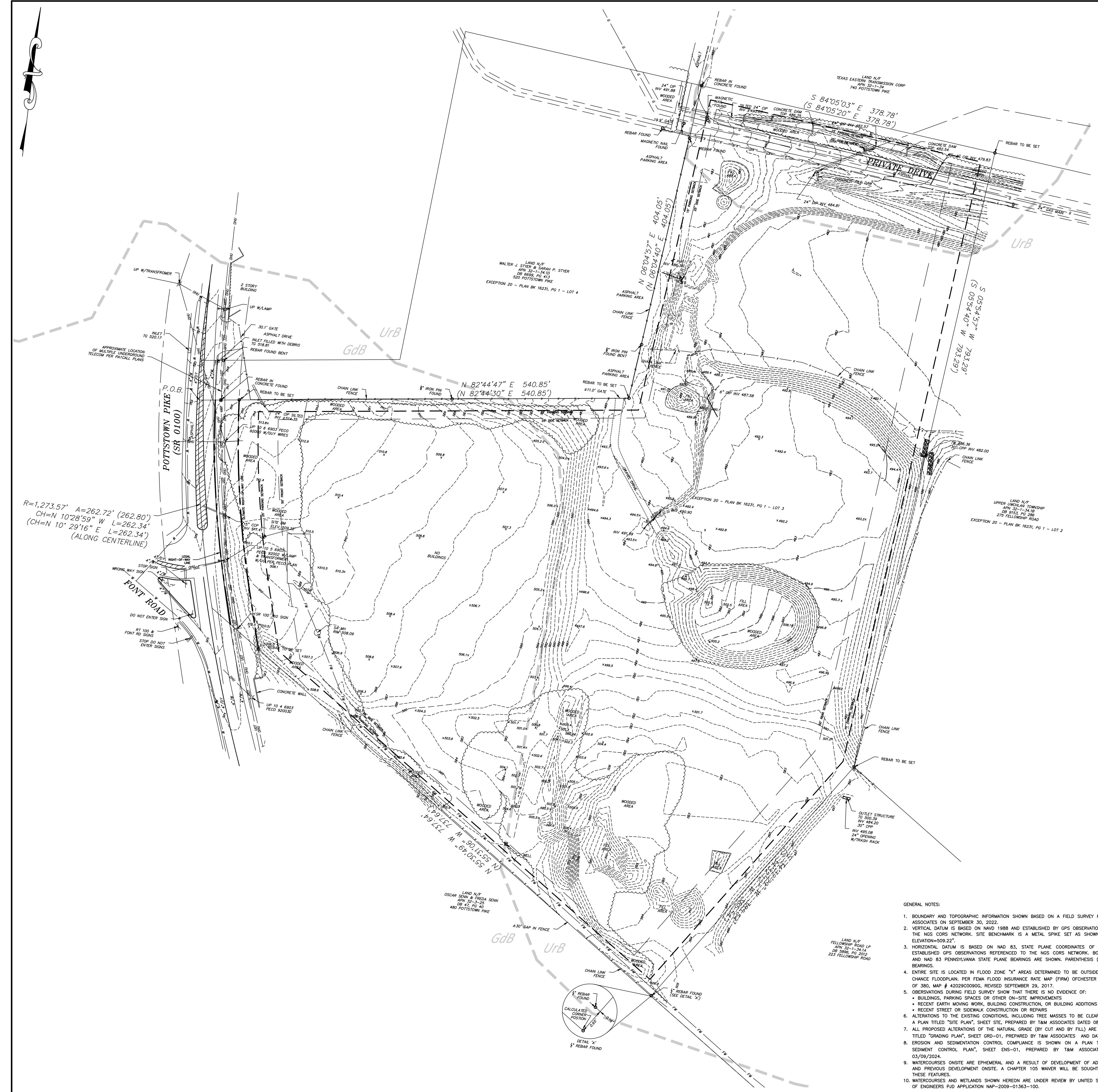
- ALL STORM CONVEYANCE PIPE SHALL BE SMOOTH LINED DOUBLE WALL HIGH DENSITY POLYETHYLENE PIPE (HDPE), UNLESS OTHERWISE SPECIFIED. ANY ROOF LEADERS SHALL BE SCHEDULE 40 PVC.
- IF A CONFLICT ARISES DURING THE INSTALLATION OF ANY PART OF THE STORM SEWER SYSTEM THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY IN WRITING.
- LANDSCAPING, FENCES AND STRUCTURES SHALL BE PLACED A MINIMUM OF 10 FEET AWAY FROM STORM SEWERS OUTSIDE OF THE RIGHT OF WAY OF STREETS.
- REFER TO SITE / RECORD PLAN FOR ADDITIONAL NOTES.

GENERAL NOTES

- ALL NEW UTILITIES/SERVICES, INCLUDING ELECTRIC, CABLE TV, ETC. ARE TO BE INSTALLED UNDERGROUND. ALL NEW UTILITIES/SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE UTILITY/SERVICE PROVIDER INSTALLATION SPECIFICATIONS AND STANDARDS.
- THE LOCATION OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF CONSTRUCTION, REMOVAL OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION POINT CONFLICTS SHALL BE REPORTED IMMEDIATELY IN WRITING TO THE ENGINEER.
- ALL UTILITY EXTENSIONS FROM THE BUILDING BY OTHER TRADES SHALL BE CONNECTED TO THE CONDUIT/PIPE LINE. THE CONTRACTOR SHALL MAKE THE CONNECTION AT INVERT 5' FROM THE BUILDING WALL WHERE OTHER TRADES HAVE ENDED THEIR WORK. THE GC SHALL COORDINATE SCHEDULING OF THESE CONNECTIONS WITH OTHER TRADES TO ASSURE THE SYSTEM IS COMPLETE WHEN FLOW WILL BEGIN IN THE LINES.
- CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- DEFINE AND LOCATE VERTICALLY AND HORIZONTALLY ALL ACTIVE UTILITY AND/OR SERVICE SYSTEMS THAT ARE NOT TO REMAIN. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ALL ACTIVE SYSTEMS THAT ARE NOT BEING REMOVED/RELOCATED DURING SITE ACTIVITY.
- THE CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY WORK AS IDENTIFIED OR REQUIRED FOR PROJECT. THE CONTRACTOR SHALL PROVIDE THE OWNER WRITTEN NOTIFICATIONS THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTION AND UTILITY COMPANY REQUIREMENTS.
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF SITE PLAN DOCUMENTS AND ARCHITECTURAL DESIGN FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, DOOR, ACCESS, AND EXTERIOR GRADING. (THE UTILITY SERVICE SIZES ARE TO BE DETERMINED BY ARCHITECT). THE CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES/SERVICES WITH THE INDIVIDUAL COMPANIES TO AVOID CONFLICTS AND ENFORCE PROPER DEPTHS ARE ACHIEVED. IN ADDITION, THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING UTILITY TIE-INS/CONNECTIONS SHALL BE COORDINATED. THIS SHALL BE COMPLETED PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE, WHERE CONFLICTS EXIST WITH THESE PLANS, THE ENGINEER OF RECORD SHALL BE NOTIFIED IN WRITING TO RESOLVE SAID CONFLICTS PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL CONTACT THE TOWNSHIP CODE ENFORCEMENT OFFICE WHEN UNDERGROUND PIPING IS BEING HYDROSTATICALLY TESTED ON SITE. APPLICANTS ARE ALSO REMINDED THAT FLUSHING OF THE UNDERGROUND PIPING SHALL BE WITNESSED BY A TOWNSHIP OFFICIAL PRIOR TO FINAL RISER CONNECTIONS, PER NFPA 13.
- REFER TO THE SITE / RECORD PLAN FOR ADDITIONAL NOTES.
- ALL PROPOSED SANITARY SEWER SHALL COMPLY WITH THE AUTHORITY HAVING JURISDICTION'S POLICIES AND SPECIFICATIONS.
11. CONTRACTOR SHALL MAKE EVERY EFFORT TO PROTECT AND AVOID DAMAGE TO EXISTING SEWER SYSTEM.
12. ANY DAMAGES TO THE AUTHORITY SYSTEM DURING THE CONSTRUCTION FOR SEWER CONNECTION SHALL BE REPAIRED TO THE SATISFACTION OF THE AUTHORITY. THE AUTHORITY SHALL NOT BE RESPONSIBLE FOR ANY COSTS FOR THE REPAIRS DUE TO THE DAMAGES.
13. THE EXISTING SANITARY SEWER SHALL MAINTAIN A MINIMUM DEPTH OF 4' OF COVER FROM THE FINISHED GRADE ELEVATION TO THE SEWER INVERT ELEVATION.

GENERAL UTILITIES NOTES

1. VERTICAL DATUM IS NAVD 1988 AND ESTABLISHED BY GPS OBSERVATIONS REFERENCED TO THE NGS CORS NETWORK.
2. THE MINIMUM SLOPE IN GRASSED AREAS SHALL NOT BE LESS THAN 2% AND THE MINIMUM IN PAVED AREAS SHOULD NOT BE LESS THAN 1%.
3. PAVEMENT SHALL BE SAW CUT IN STRAIGHT LINES TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.
4. IN CASE OF DISCREPANCIES BETWEEN PLANS, THE SITE / RECORD PLAN WILL SUPERSEDE IN ALL CASES. THE ENGINEER OF RECORD MUST BE IMMEDIATELY NOTIFIED IN WRITING OF ANY CONFLICTS.
- 5



LOCATION MAP

SCALE: 1"=600'

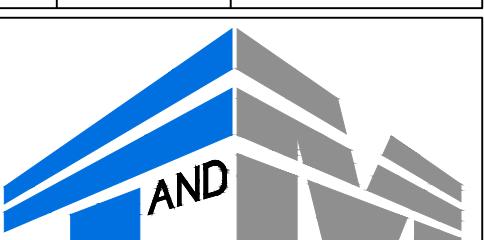
RECORD OWNER:

PROPERTY:

ROCKHILL REAL ESTATE ENTERPRISES XVII LP
4005 WEST CHESTER PIKE
NEWTOWN SQUARE, PA 19073

00 POTTSTOWN PIKE
PI: 32-1-34.1C
ARCEL ID: 3201 003401C0

CONSERVATION PLAN



YOUR GOALS. OUR MISSION

FAX 215-627-3459
www.tandmassociates.com

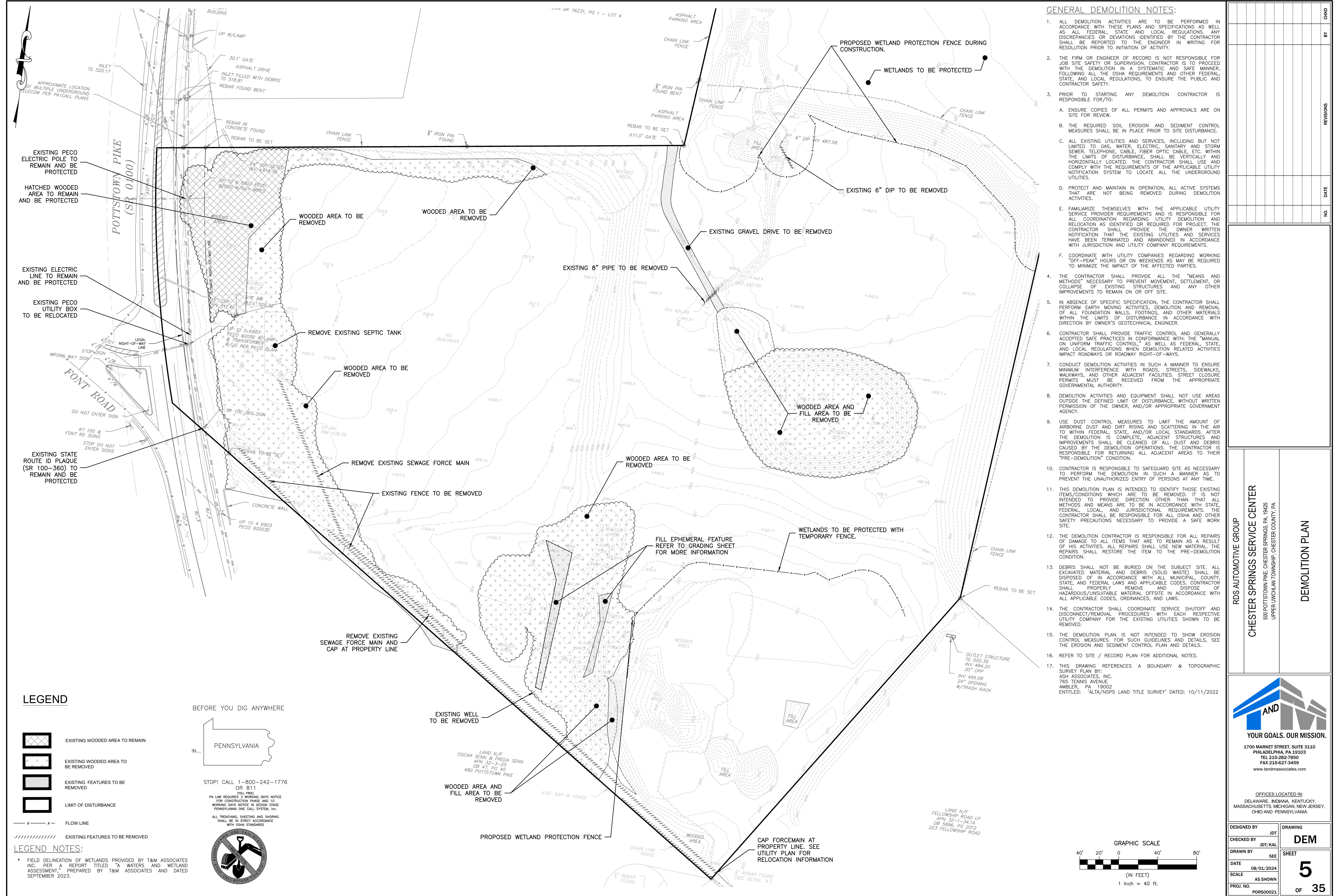
OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,

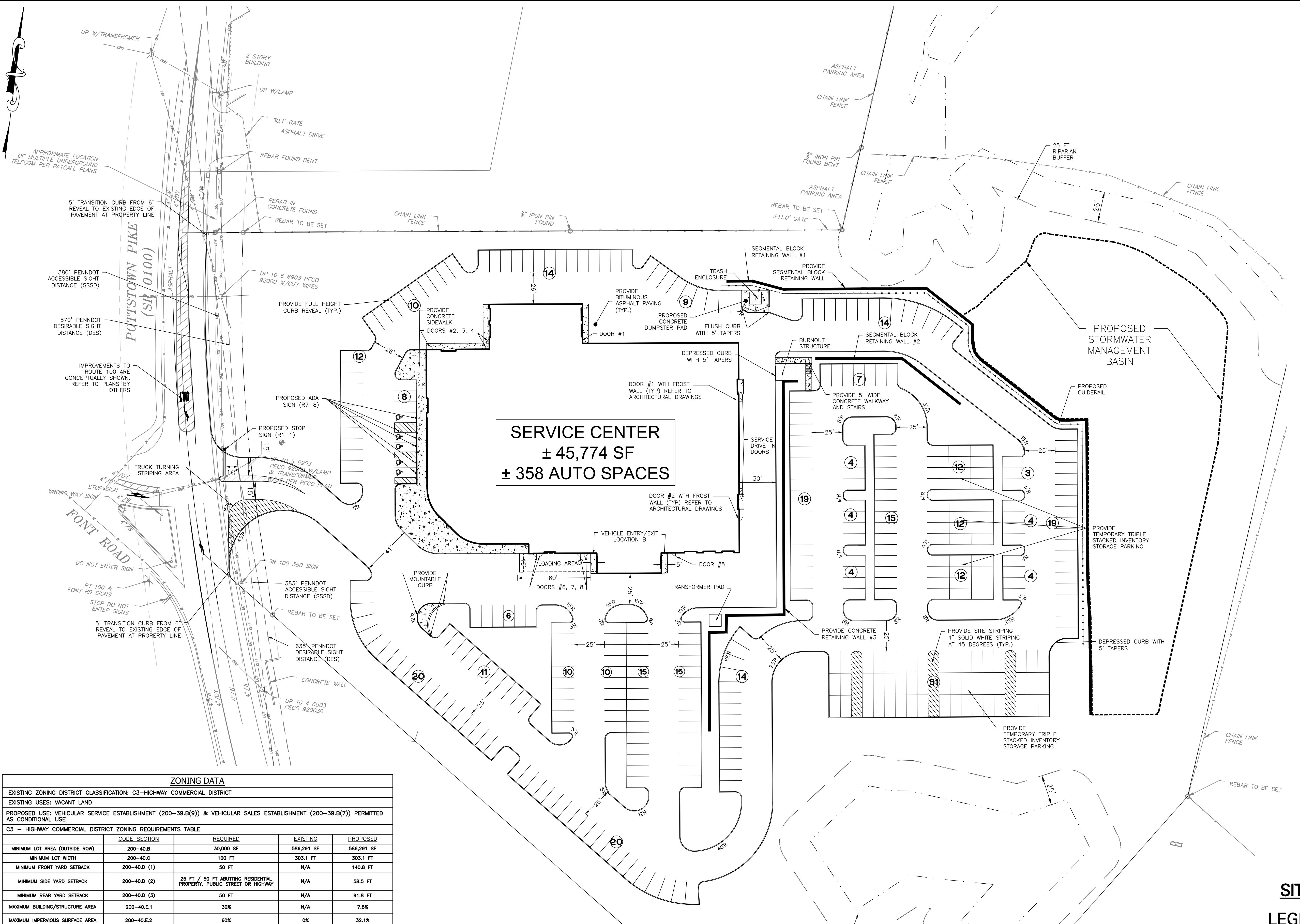
LEGEND

SOIL TYPE BOUNDARY

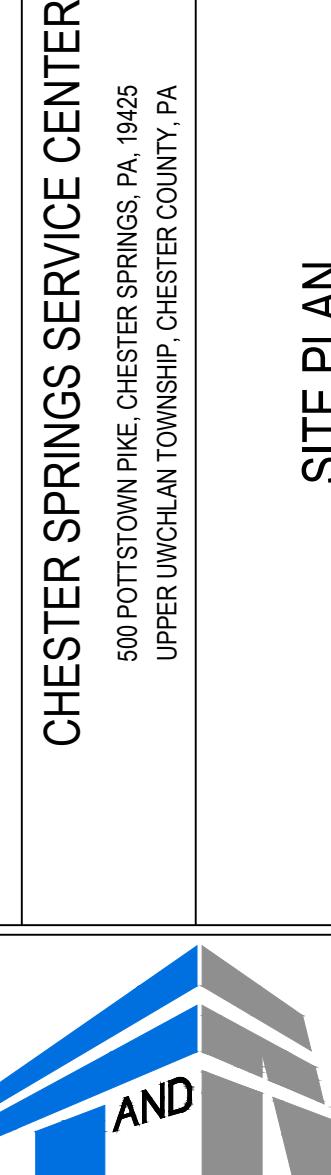
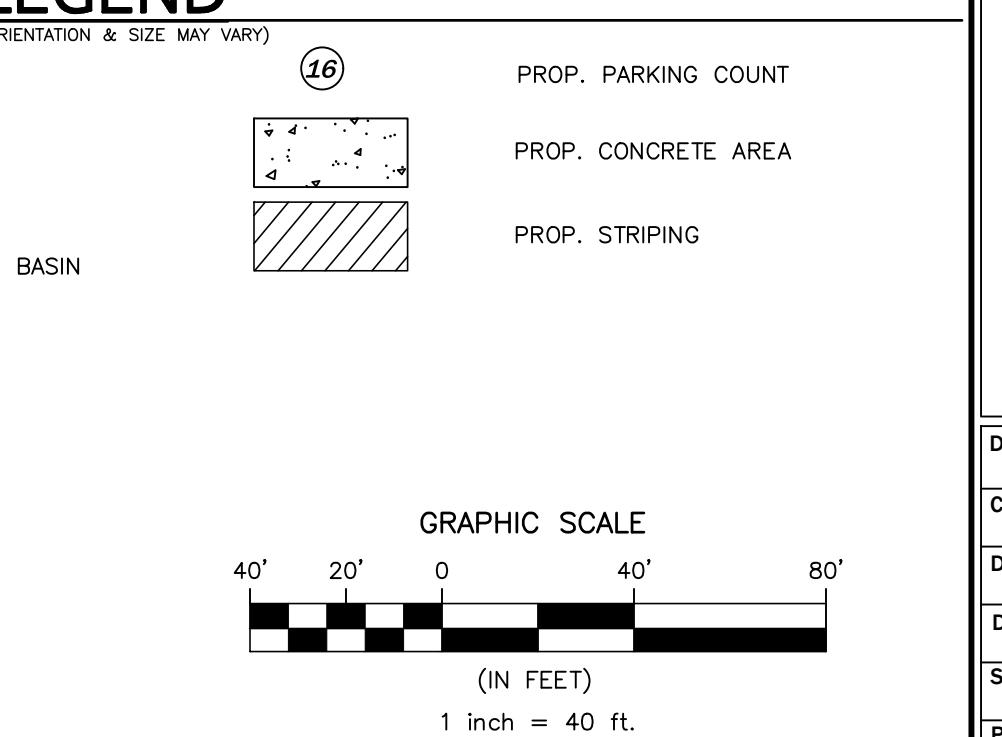
SOIL TYPE		
UrB	URBAN LAND	0 TO 8%
GdB	GLADSTONE GAVELLY LOAM	3 TO 8%

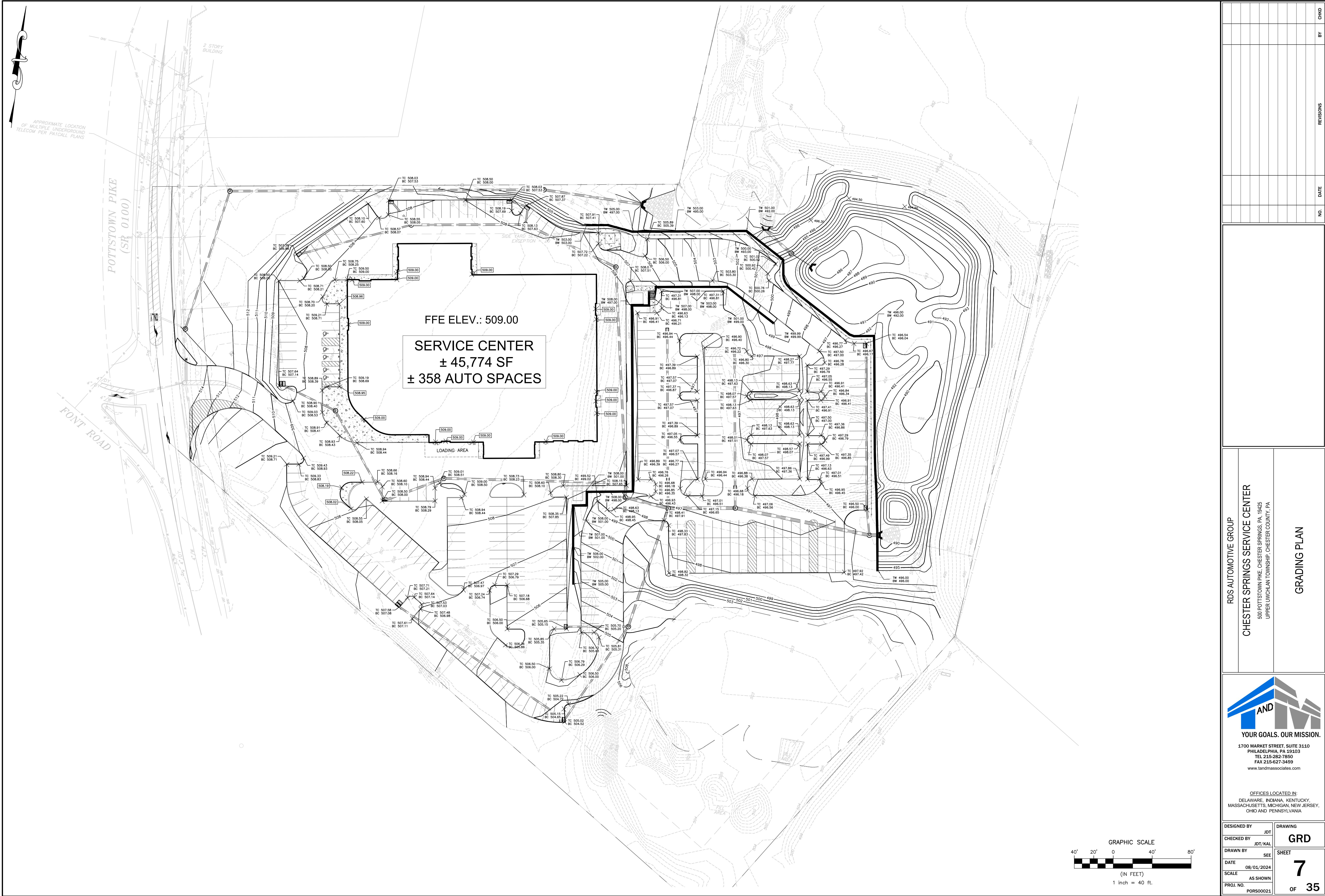
CVF
EET
4
OF **35**

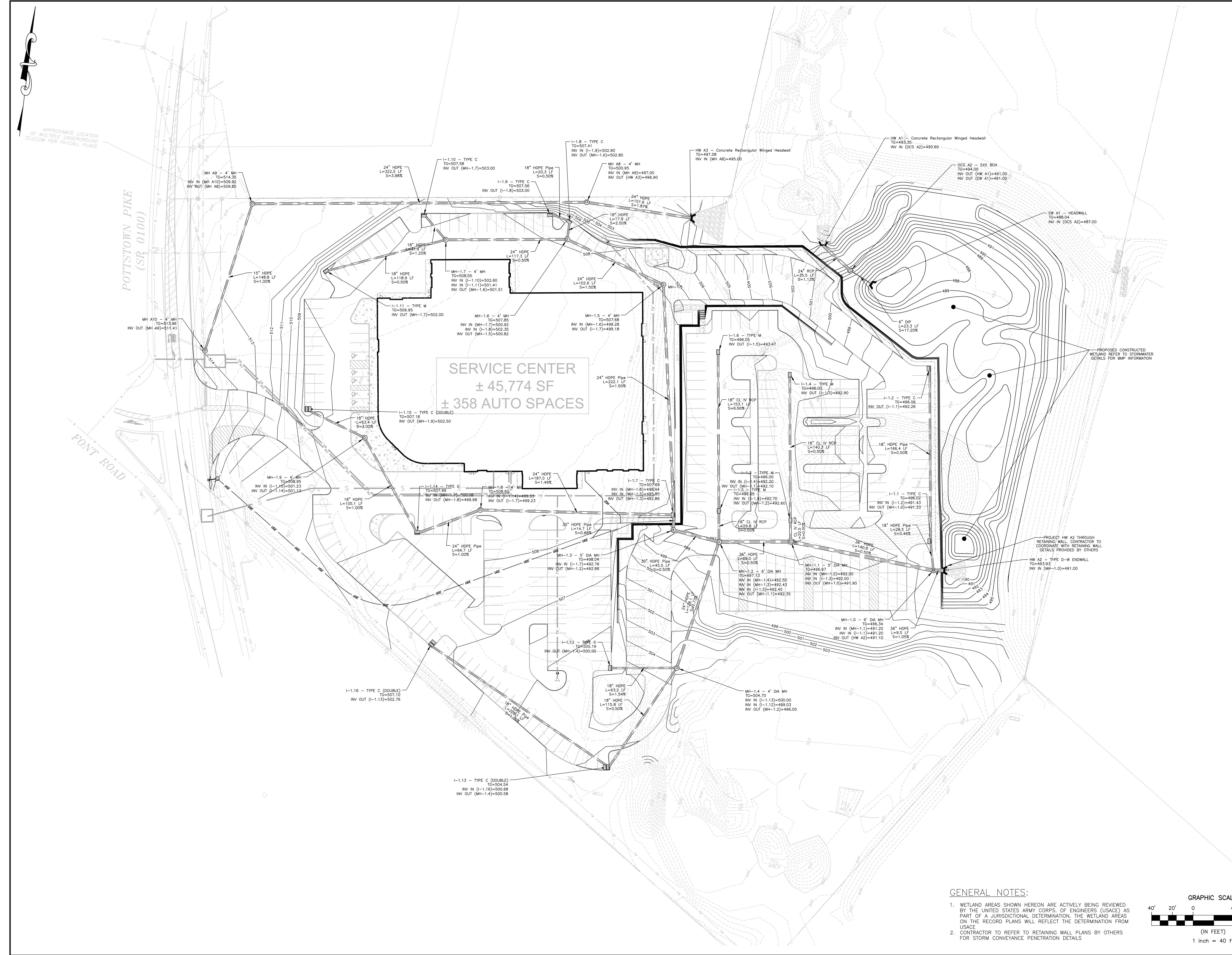




SITE
LEGEND







DESIGNED BY	DRN
CHECKED BY	MB
DRAWN BY	JDT/KAL
DATE	08/01/2024
SCALE	AS SHOWN
PROJ. NO.	PORS0021
REVISIONS	
NO. DATE	
NO. BY	

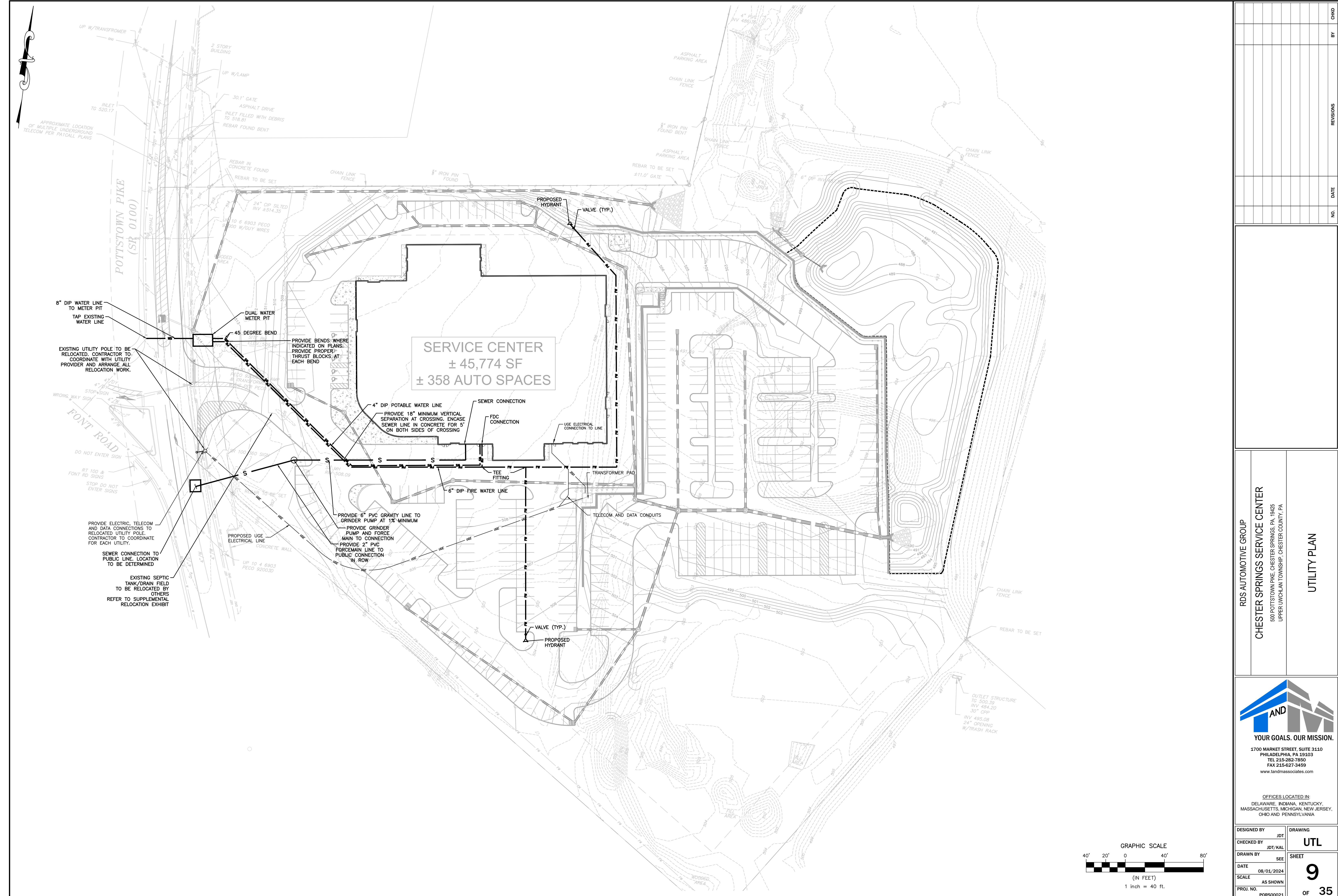
DRAINAGE PLAN

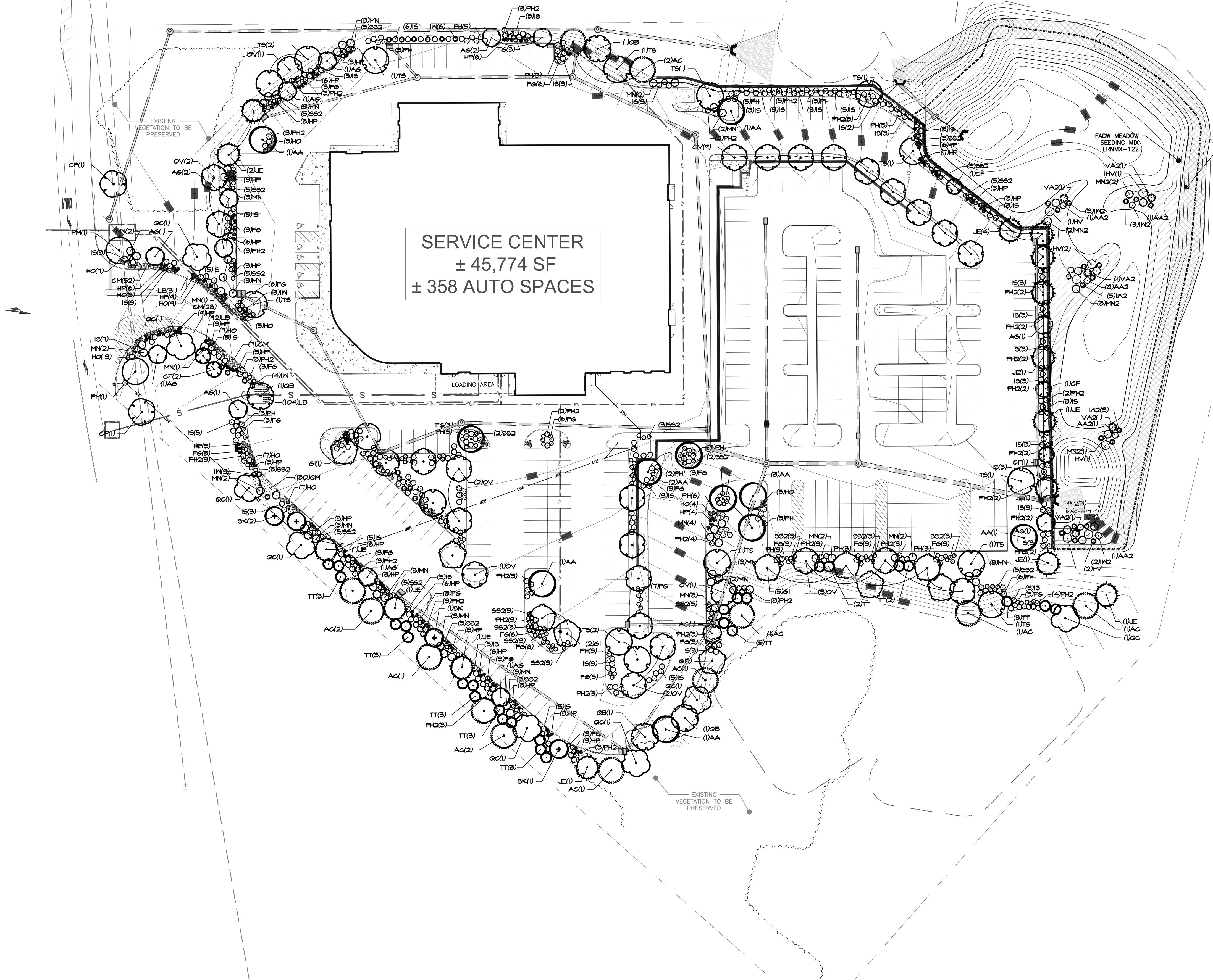
RDS AUTOMOTIVE GROUP
CHESTER SPRINGS SERVICE CENTER
500 POTTSTOWN PIKE, CHESTER SPRINGS, PA, 19425
UPPER UMHIAN TOWNSHIP, CHESTER COUNTY, PA

OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

TAND
YOUR GOALS. OUR MISSION.
1700 MARKET STREET, SUITE 3100
PHILADELPHIA, PA 19103
TEL 215-262-3950
FAX 215-627-3459
www.tandmassociates.com

8 OF **35**

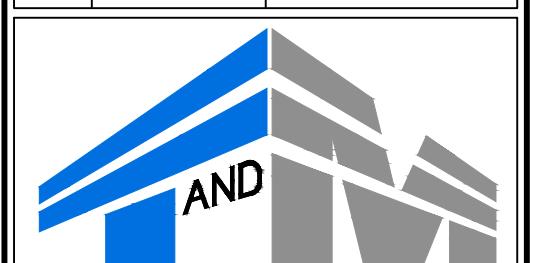




GRAPHIC SCALE
40' 20' 0 40' 80'
(IN FEET)
1 inch = 40 ft.

DESIGNED BY JDT
CHECKED BY JDT/KAL
DRAWN BY SEE
DATE 08/01/2024
SCALE AS SHOWN
PROJ. NO. PORS0021
10 OF 35

LANDSCAPE PLAN
RDS AUTOMOTIVE GROUP
CHESTER SPRINGS SERVICE CENTER
500 POTTSVILLE Pike, CHESTER SPRINGS, PA 19425
UPPER UMBRAN TOWNSHIP, CHESTER COUNTY, PA

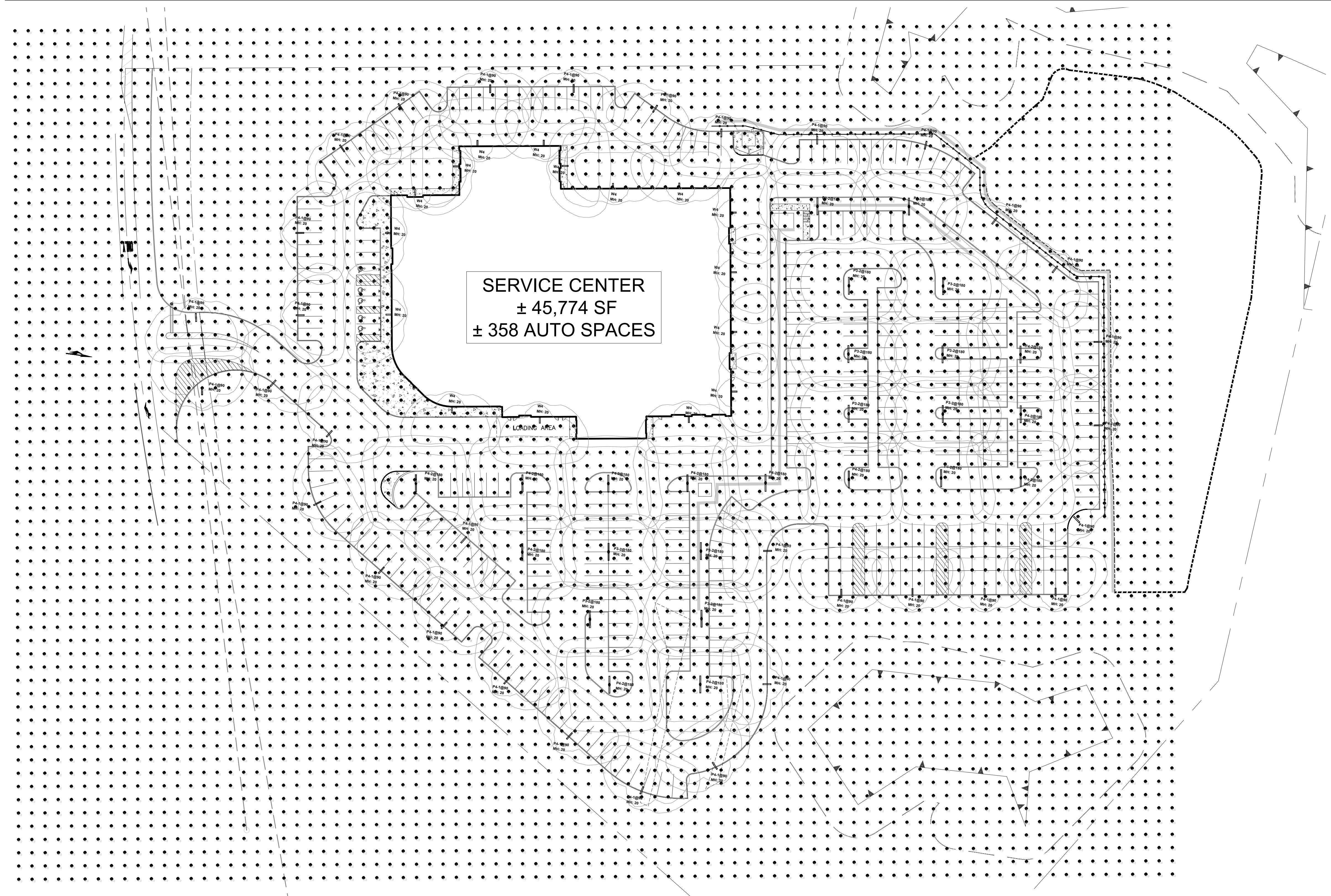

YOUR GOALS. OUR MISSION.
1700 MARKET STREET, SUITE 3110
PHILADELPHIA, PA 19103
TEL 215-627-3450
FAX 215-627-3459
www.tandmassassociates.com

OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

DRAWING
LSP
SHEET
10
OF 35

LUMINAIRE SCHEDULE **REFER TO LIGHTING FIXTURE CUTSHEETS FOR COMPLETE CATALOG NUMBERS**

Symbol	Qty	Arrangement	Fixture Type	Description	Manufacturer	Catalog Number	CCT	LLF	Total Watts	Delivered Lumens	Mounting Height	Pole Spec	Filename
■■■	12	Back-Back	P3-2@180	POLE MOUNTED FULL CUT-OFF AREA LIGHT, TYPE 3 DISTRIBUTION, DOUBLE SETUP	ARCHITECTURAL AREA LIGHTING	K42-T3-MO-7040-P	4000K	0.900	138.22	11312	20	K4-2-P-S-4-20-125	K4X-T3-MO-7040.ies
■■■	33	Single	P4-1@90	POLE MOUNTED FULL CUT-OFF AREA LIGHT, TYPE 4 DISTRIBUTION, SINGLE SETUP	ARCHITECTURAL AREA LIGHTING	K41-T4-MO-7040-P	4000K	0.900	63.92	5979	20	K4-1-P-S-4-20-125	K4X-T4-MO-7040.ies
■■■	13	Back-Back	P4-2@180	POLE MOUNTED FULL CUT-OFF AREA LIGHT, TYPE 4 DISTRIBUTION, DOUBLE SETUP	ARCHITECTURAL AREA LIGHTING	K42-T4-MO-7040-P	4000K	0.900	127.84	11958	20	K4-2-P-S-4-20-125	K4X-T4-MO-7040.ies
■■■	16	Single	W4	WALL MOUNTED FULL CUT-OFF AREA LIGHT, TYPE 4 DISTRIBUTION	ARCHITECTURAL AREA LIGHTING	KM51-T4-MO-5040-WMK	4000K	0.900	50	5214	20	N/A	KM5-T4-MO-5040.ies



CALCULATION SUMMARY										
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	PtSpcLr	PtSpcTb	Grid Z
CALC PTS TO ZERO_Ground	Illuminance	Fc	1.0	10.0	0.0	N.A.	N.A.	10	N.A.	N.A.
PARKING LOT & DRIVELANES_Ground	Illuminance	Fc	2.5	10.0	0.6	4.2	16.7	10	N.A.	N.A.

GRAPHIC SCALE
40' 20' 0 40' 80'
(IN FEET)
1 inch = 40 ft.

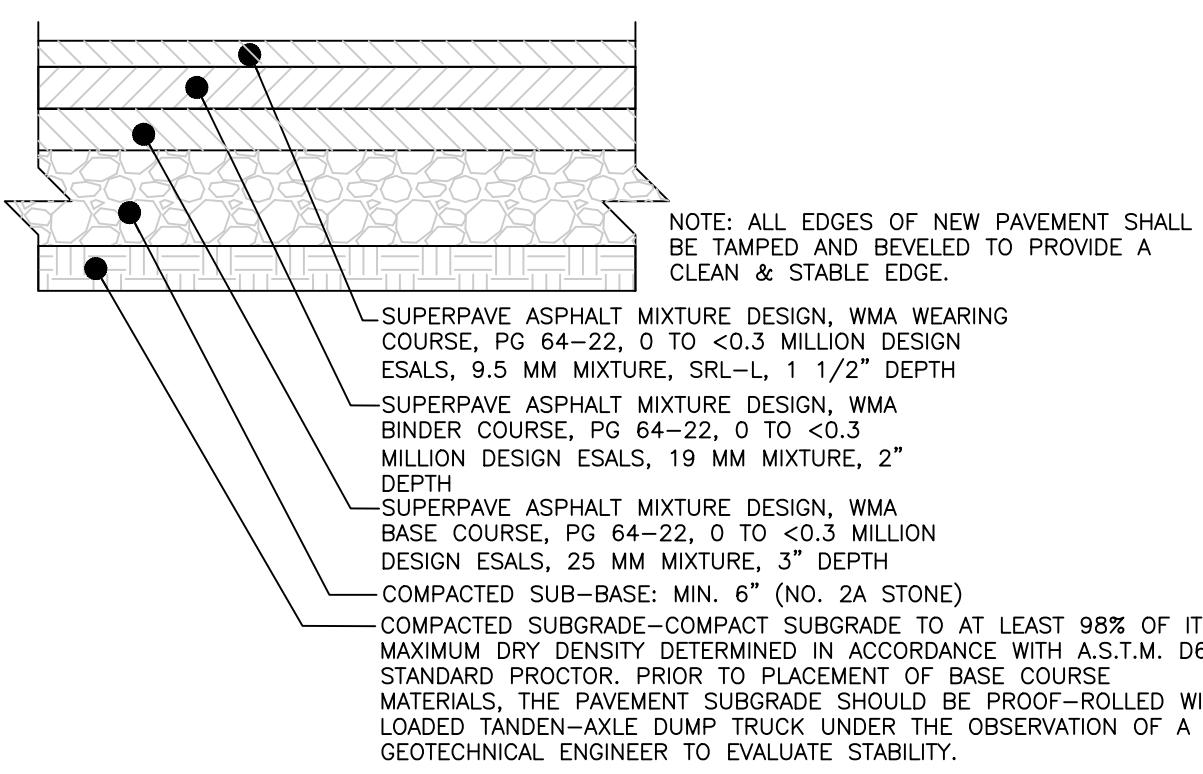
OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

DESIGNED BY	JDT
CHECKED BY	JDT/KAL
DRAWN BY	SEE
DATE	08/01/2024
SCALE	AS SHOWN
PROJ. NO.	PORS00021

LGT
SHEET
11
OF **35**

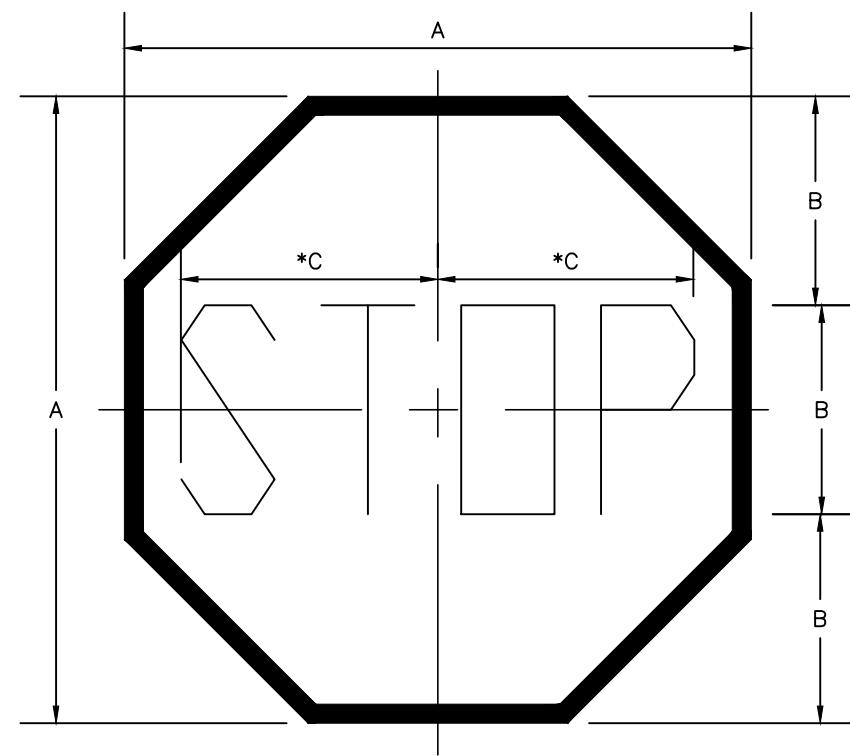
RDS AUTOMOTIVE GROUP
CHESTER SPRINGS SERVICE CENTER
500 POTTSVILLE Pike, CHESTER SPRINGS, PA 19425
UPPER UMHIAN TOWNSHIP, CHESTER COUNTY, PA

T AND M
YOUR GOALS. OUR MISSION.
1700 MARKET STREET, SUITE 3100
PHILADELPHIA, PA 19103
TEL 215-627-3450
FAX 215-627-3459
www.tandmassociates.com



TYPICAL PAVEMENT SECTION

NTS
(OUTSIDE RIGHT-OF-WAY)



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

COLOR:

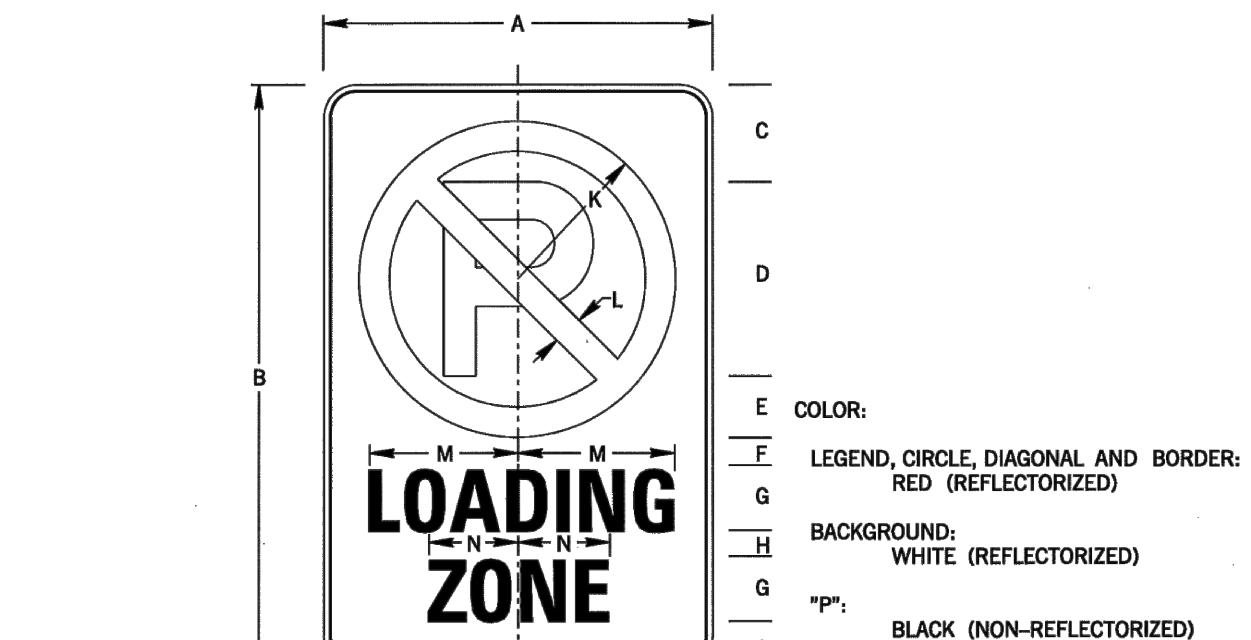
LEGEND AND BORDER: BLACK (NON-REFLECTORIZED)

BACKGROUND: WHITE (REFLECTORIZED)

DIMENSIONS - IN											L	MARGIN	BOR- DER	BLANK	STD.
SIGN SIZE	A	B	C	D	E	F	G	H	J	K	L	MARGIN	BOR- DER	BLANK	STD.
24" x 30"	3.2	3C	2.4	2C	9.6	2.1	10.2	7.8	4.1	0.4	0.4	0.4	0.4	BS-3024	

R5-101

EMERGENCY AND AUTHORIZED VEHICLES ONLY SIGN

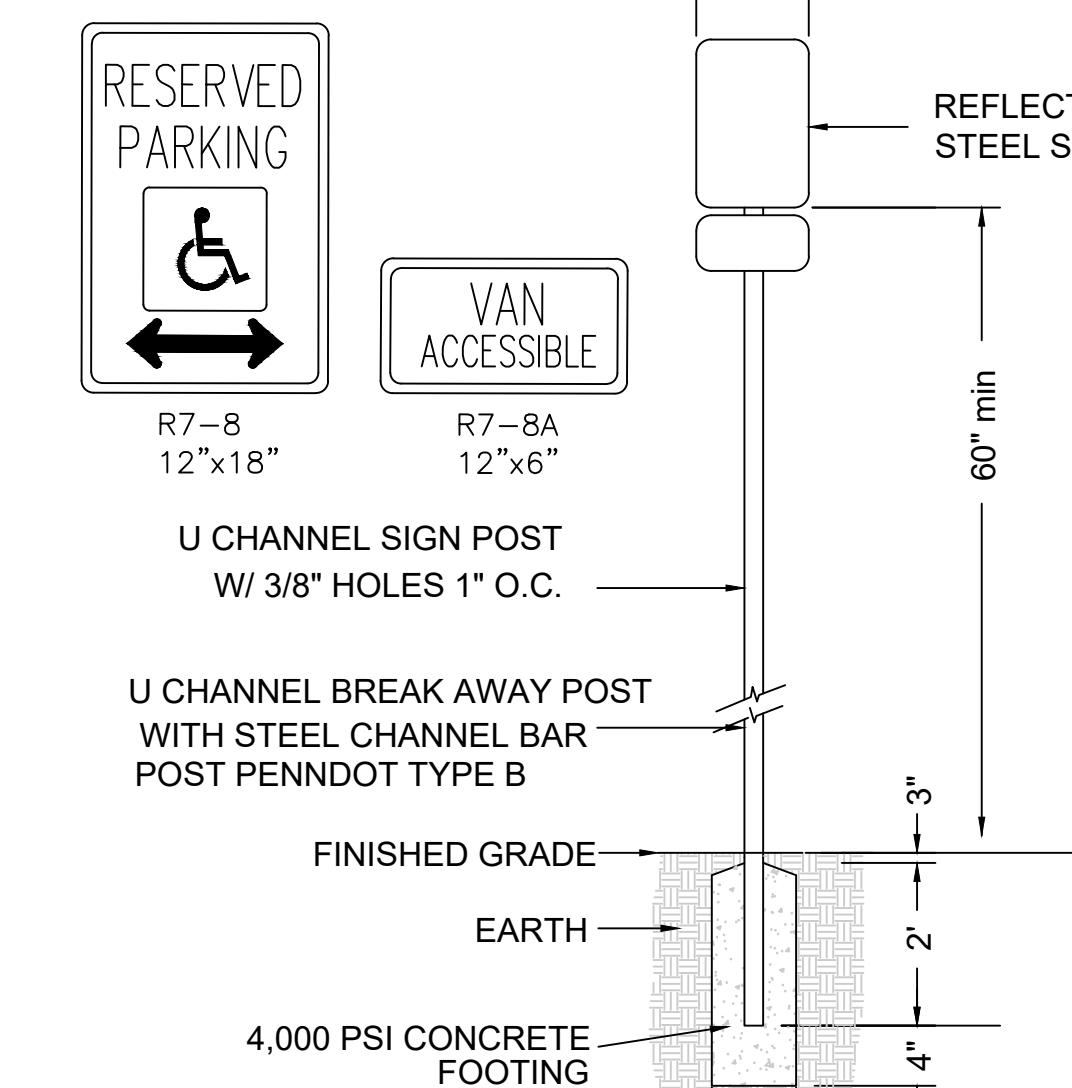


DIMENSIONS - IN											L	M	N	MAR- GIN	BOR- DER	BLANK	STD.
SIGN SIZE	A	B	C	D	E	F	G	H	J	K	L	M	N	MAR- GIN	BOR- DER	BLANK	STD.
30x30	30	10	12	2	C	3	2	10	12	2	C	3	2	B1-30			

DIMENSIONS - IN											L	M	N	MAR- GIN	BOR- DER	BLANK	STD.
SIGN SIZE	A	B	C	D	E	F	G	H	J	K	L	M	N	MAR- GIN	BOR- DER	BLANK	STD.
30x30	30	10	12	2	C	3	2	10	12	2	C	3	2	B1-30			

NOTES:
1. MOUNTING HEIGHT TO BOTTOM OF SIGN SHALL BE 4'-0".
2. TO BE MOUNTED ON BREAKAWAY SIGN POST INSTALLED IN ACCORDANCE WITH PENNDOT PUB. 40B, SECTION 931 AND SECTION 1103.08.

STOP SIGN (R1-1) DETAIL

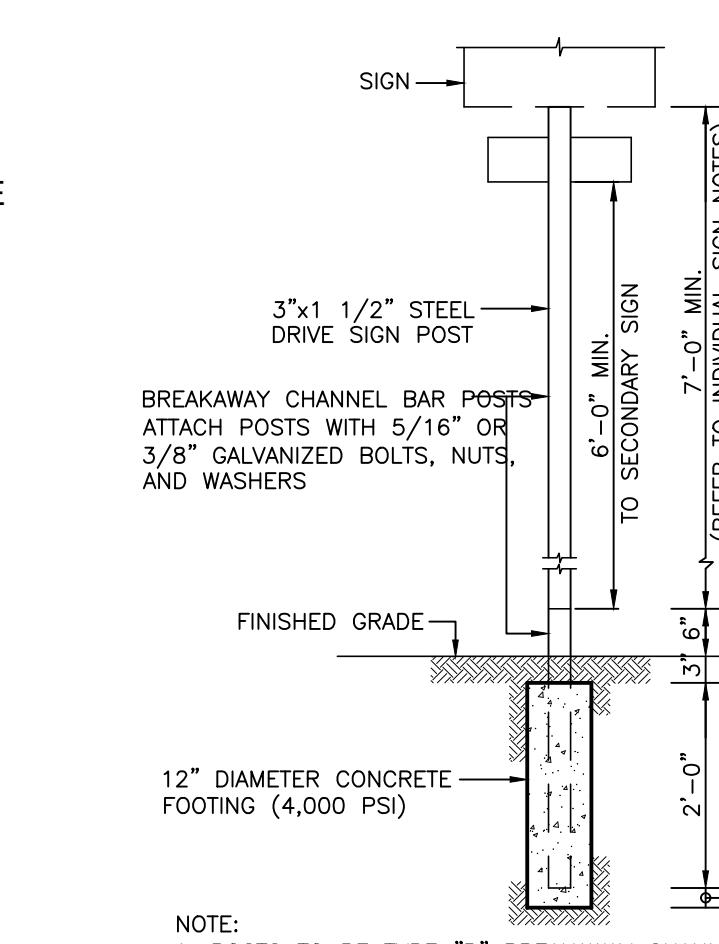


HANDICAP ACCESSIBLE PARKING SIGN DETAIL

NTS

R7-6-1

NO PARKING LOADING ZONE SIGN



SIGN POST DETAIL

NOT TO SCALE

NOTES:
1. SEE FENCE (CHAIN LINK) DETAIL FOR ADDITIONAL NOTES AND SPECIFICATIONS.
2. DROP ROD IS OPTIONAL IF GATE FRAMES EXTEND DOWN TO CENTER REST. USE LATCH SHOWN FOR WALK OR SINGLE GATE.
3. SEE FENCE (CHAIN LINK) DETAIL FOR CONCRETE BASE DIAMETER REQUIREMENTS.
4. FINISH (FABRIC, POSTS, AND RAIL): GALVANIZED WITH BLACK PVC COATING

GATE MATERIAL

GATE FRAME WIDTH	STRAIN POST		CONCRETE BASE	
	ROUND PIPE I.D.	FABRIC HEIGHT THRU 6' DEPTH >6' THRU 18'	FABRIC HEIGHT THRU 6' DEPTH >6' THRU 18'	ROUND PIPE I.D.
3 THRU 6	3	48	72	
>6 THRU 13	3.5	48	72	
>13 THRU 18	6.0	48	72	
>18 THRU 23	8.0	48	72	

GATE MATERIAL

GATE FRAME WIDTH	GATE FRAME WIDTH		FRAME PIPE		BRACE PIPE	
	FEET	INCHES	FEET	INCHES	FEET	INCHES
3 THRU 6	3	48	1.25	1.25		
>6 THRU 13	3.5	48	1.50	1.50		
>13 THRU 18	6	48	1.50	1.50		
>18 THRU 23	6	48	1.50	1.50		

NOT TO SCALE

NOTES:
1. H (HEIGHT OF FABRIC) SHALL BE AS SHOWN ON THE PLANS.
2. CHAIN LINK FENCE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 181.
3. CHAIN LINK FABRIC SHALL BE 2" MESH NO. 9 GAGE GALVANIZED OR ALUMINUM COATED WIRE SECURELY FASTENED TO TENSION WIRE. LINE POSTS, RAILS, BRACES, AND STRETCHER BARS SPACED AS SHOWN. WIRE CAGE, ALL IN CONFORMANCE WITH ASTM F 628.
4. ATTACH FABRIC TO ALL FENCE AND GATE STRUCTURES AT 12" INTERVALS VERTICALLY AND AT 20' HORIZONTALLY.
5. STEEL POSTS, RAILS, AND GATE FRAMES SHALL CONFORM TO AASHTO M 181 TYPE 1, GRADE 1 OR GRADE 2.
6. TENSION WIRE SHALL BE CONTINUOUS BEING ATTACHED END TO END OR CORNER POST AND LINE BRACE POST. A TURNBUCKLE OR TURNBUCKLES SHALL BE PROVIDED FOR EACH CONTINUOUS SPAN OF TENSION WIRE.
7. TENSION WIRE SHALL BE SPECIFIED IN AASHTO M 181.
8. CONCRETE FOOTINGS SHALL HAVE TOPS CROWNED AT GROUND LEVEL AND SHALL BE PENNDOT CLASS B.
9. CHAIN LINK FABRIC SHALL BE KNUCKLED AT THE TOP AND BOTTOM SELVAGES.
10. BRACE RAIL WILL NOT BE REQUIRED FOR 36", 42", 48", FABRIC HEIGHTS. BRACE RAIL FOR FENCE WITH ROLL-FORMED STEEL POSTS AND RAIL SHALL BE 2" INCHES.
11. FENCE MAY BE CONSTRUCTED WITH EITHER ROUND PIPE OR ROLL-FORMED STEEL COMPONENTS.
12. FINISH (MESH, POSTS, AND RAIL): GALVANIZED WITH BLACK PVC COATING.
13. CHAIN LINK FENCE AT LOADING DOCK TO BE 10FT HIGH TO MATCH MASONRY WALL FOR GENERATOR/TRANSFORMER. NO MESH. PROVIDE PVC SCREENING SLATS, OWNER CHOICE COLOR.

FENCE - CHAIN LINK

NOT TO SCALE

NOTES:
1. H (HEIGHT OF FABRIC) SHALL BE AS SHOWN ON THE PLANS.
2. CHAIN LINK FENCE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 181.
3. CHAIN LINK FABRIC SHALL BE 2" MESH NO. 9 GAGE GALVANIZED OR ALUMINUM COATED WIRE SECURELY FASTENED TO TENSION WIRE. LINE POSTS, RAILS, BRACES, AND STRETCHER BARS SPACED AS SHOWN. WIRE CAGE, ALL IN CONFORMANCE WITH ASTM F 628.
4. ATTACH FABRIC TO ALL FENCE AND GATE STRUCTURES AT 12" INTERVALS VERTICALLY AND AT 20' HORIZONTALLY.
5. STEEL POSTS, RAILS, AND GATE FRAMES SHALL CONFORM TO AASHTO M 181 TYPE 1, GRADE 1 OR GRADE 2.
6. TENSION WIRE SHALL BE CONTINUOUS BEING ATTACHED END TO END OR CORNER POST AND LINE BRACE POST. A TURNBUCKLE OR TURNBUCKLES SHALL BE PROVIDED FOR EACH CONTINUOUS SPAN OF TENSION WIRE.
7. TENSION WIRE SHALL BE SPECIFIED IN AASHTO M 181.
8. CONCRETE FOOTINGS SHALL HAVE TOPS CROWNED AT GROUND LEVEL AND SHALL BE PENNDOT CLASS B.
9. CHAIN LINK FABRIC SHALL BE KNUCKLED AT THE TOP AND BOTTOM SELVAGES.
10. BRACE RAIL WILL NOT BE REQUIRED FOR 36", 42", 48", FABRIC HEIGHTS. BRACE RAIL FOR FENCE WITH ROLL-FORMED STEEL POSTS AND RAIL SHALL BE 2" INCHES.
11. FENCE MAY BE CONSTRUCTED WITH EITHER ROUND PIPE OR ROLL-FORMED STEEL COMPONENTS.
12. FINISH (MESH, POSTS, AND RAIL): GALVANIZED WITH BLACK PVC COATING.
13. CHAIN LINK FENCE AT LOADING DOCK TO BE 10FT HIGH TO MATCH MASONRY WALL FOR GENERATOR/TRANSFORMER. NO MESH. PROVIDE PVC SCREENING SLATS, OWNER CHOICE COLOR.

FENCE - CHAIN LINK

NOT TO SCALE

NOTES:
1. H (HEIGHT OF FABRIC) SHALL BE AS SHOWN ON THE PLANS.
2. CHAIN LINK FENCE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 181.
3. CHAIN LINK FABRIC SHALL BE 2" MESH NO. 9 GAGE GALVANIZED OR ALUMINUM COATED WIRE SECURELY FASTENED TO TENSION WIRE. LINE POSTS, RAILS, BRACES, AND STRETCHER BARS SPACED AS SHOWN. WIRE CAGE, ALL IN CONFORMANCE WITH ASTM F 628.
4. ATTACH FABRIC TO ALL FENCE AND GATE STRUCTURES AT 12" INTERVALS VERTICALLY AND AT 20' HORIZONTALLY.
5. STEEL POSTS, RAILS, AND GATE FRAMES SHALL CONFORM TO AASHTO M 181 TYPE 1, GRADE 1 OR GRADE 2.
6. TENSION WIRE SHALL BE CONTINUOUS BEING ATTACHED END TO END OR CORNER POST AND LINE BRACE POST. A TURNBUCKLE OR TURNBUCKLES SHALL BE PROVIDED FOR EACH CONTINUOUS SPAN OF TENSION WIRE.
7. TENSION WIRE SHALL BE SPECIFIED IN AASHTO M 181.
8. CONCRETE FOOTINGS SHALL HAVE TOPS CROWNED AT GROUND LEVEL AND SHALL BE PENNDOT CLASS B.
9. CHAIN LINK FABRIC SHALL BE KNUCKLED AT THE TOP AND BOTTOM SELVAGES.
10. BRACE RAIL WILL NOT BE REQUIRED FOR 36", 42", 48", FABRIC HEIGHTS. BRACE RAIL FOR FENCE WITH ROLL-FORMED STEEL POSTS AND RAIL SHALL BE 2" INCHES.
11. FENCE MAY BE CONSTRUCTED WITH EITHER ROUND PIPE OR ROLL-FORMED STEEL COMPONENTS.
12. FINISH (MESH, POSTS, AND RAIL): GALVANIZED WITH BLACK PVC COATING.
13. CHAIN LINK FENCE AT LOADING DOCK TO BE 10FT HIGH TO MATCH MASONRY WALL FOR GENERATOR/TRANSFORMER. NO MESH. PROVIDE PVC SCREENING SLATS, OWNER CHOICE COLOR.

FENCE - CHAIN LINK

NOT TO SCALE

NOTES:
1. H (HEIGHT OF FABRIC) SHALL BE AS SHOWN ON THE PLANS.
2. CHAIN LINK FENCE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 181.
3. CHAIN LINK FABRIC SHALL BE 2" MESH NO. 9 GAGE GALVANIZED OR ALUMINUM COATED WIRE SECURELY FASTENED TO TENSION WIRE. LINE POSTS, RAILS, BRACES, AND STRETCHER BARS SPACED AS SHOWN. WIRE CAGE, ALL IN CONFORMANCE WITH ASTM F 628.
4. ATTACH FABRIC TO ALL FENCE AND GATE STRUCTURES AT 12" INTERVALS VERTICALLY AND AT 20' HORIZONTALLY.
5. STEEL POSTS, RAILS, AND GATE FRAMES SHALL CONFORM TO AASHTO M 181 TYPE 1, GRADE 1 OR GRADE 2.
6. TENSION WIRE SHALL BE CONTINUOUS BEING ATTACHED END TO END OR CORNER POST AND LINE BRACE POST. A TURNBUCKLE OR TURNBUCKLES SHALL BE PROVIDED FOR EACH CONTINUOUS SPAN OF TENSION WIRE.
7. TENSION WIRE SHALL BE SPECIFIED IN AASHTO M 181.
8. CONCRETE FOOTINGS SHALL HAVE TOPS CROWNED AT GROUND LEVEL AND SHALL BE PENNDOT CLASS B.
9. CHAIN LINK FABRIC SHALL BE KNUCKLED AT THE TOP AND BOTTOM SELVAGES.
10. BRACE RAIL WILL NOT BE REQUIRED FOR 36", 42", 48", FABRIC HEIGHTS. BRACE RAIL FOR FENCE WITH ROLL-FORMED STEEL POSTS AND RAIL SHALL BE 2" INCHES.
11. FENCE MAY BE CONSTRUCTED WITH EITHER ROUND PIPE OR ROLL-FORMED STEEL COMPONENTS.
12. FINISH (MESH, POSTS, AND RAIL): GALVANIZED WITH BLACK PVC COATING.
13. CHAIN LINK FENCE AT LOADING DOCK TO BE 10FT HIGH TO MATCH MASONRY WALL FOR GENERATOR/TRANSFORMER. NO MESH. PROVIDE PVC SCREENING SLATS, OWNER CHOICE COLOR.

FENCE - CHAIN LINK

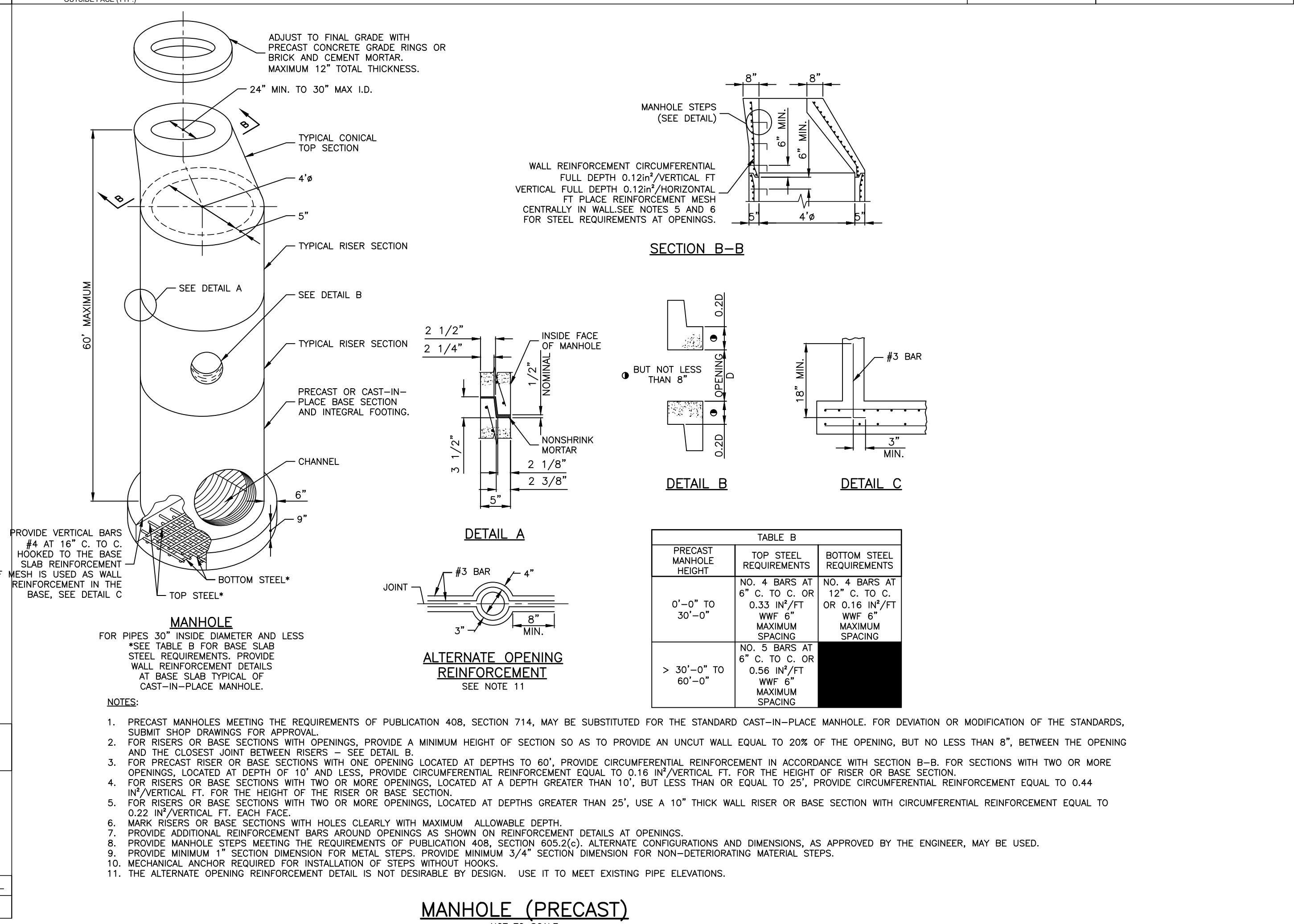
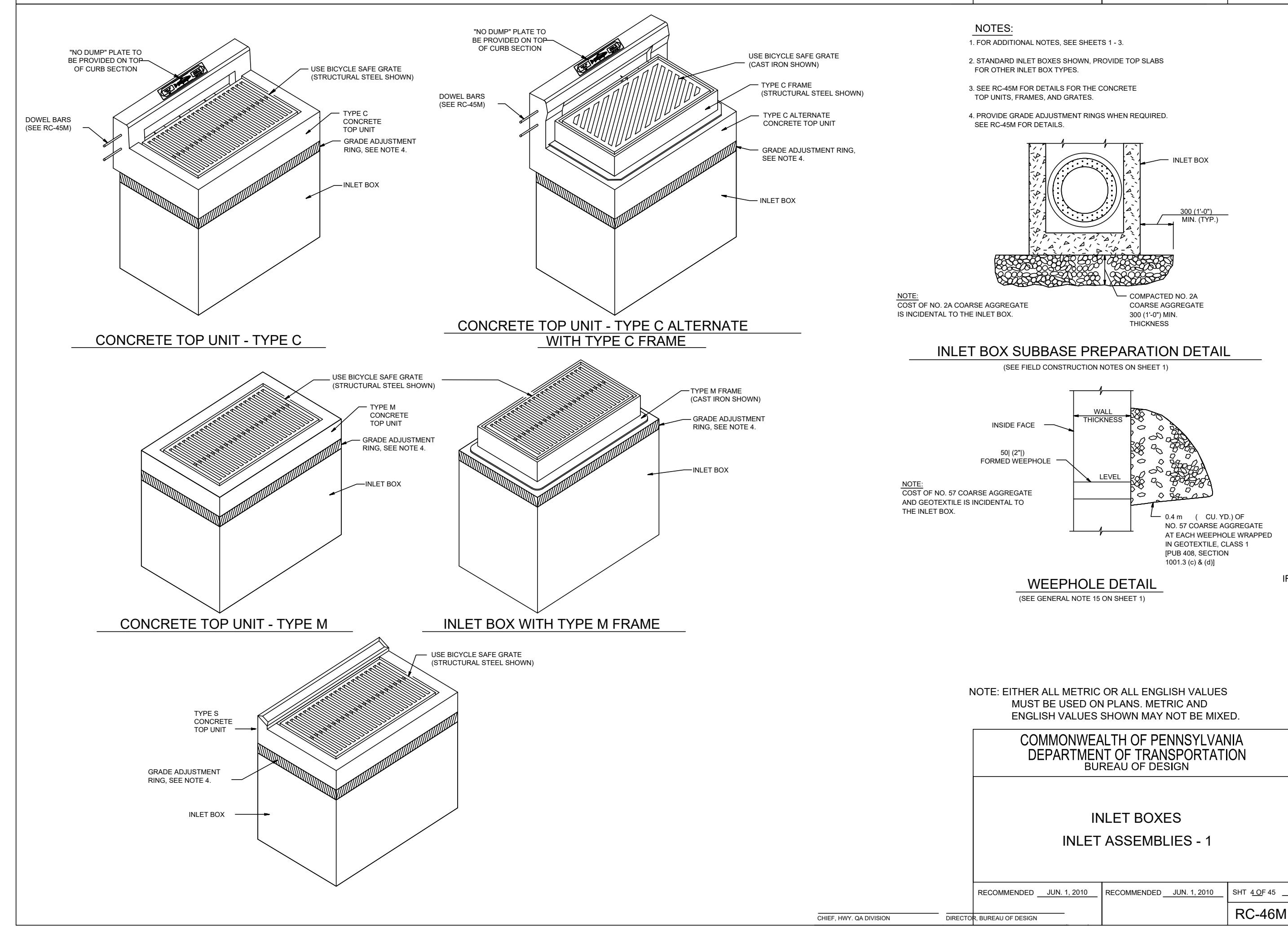
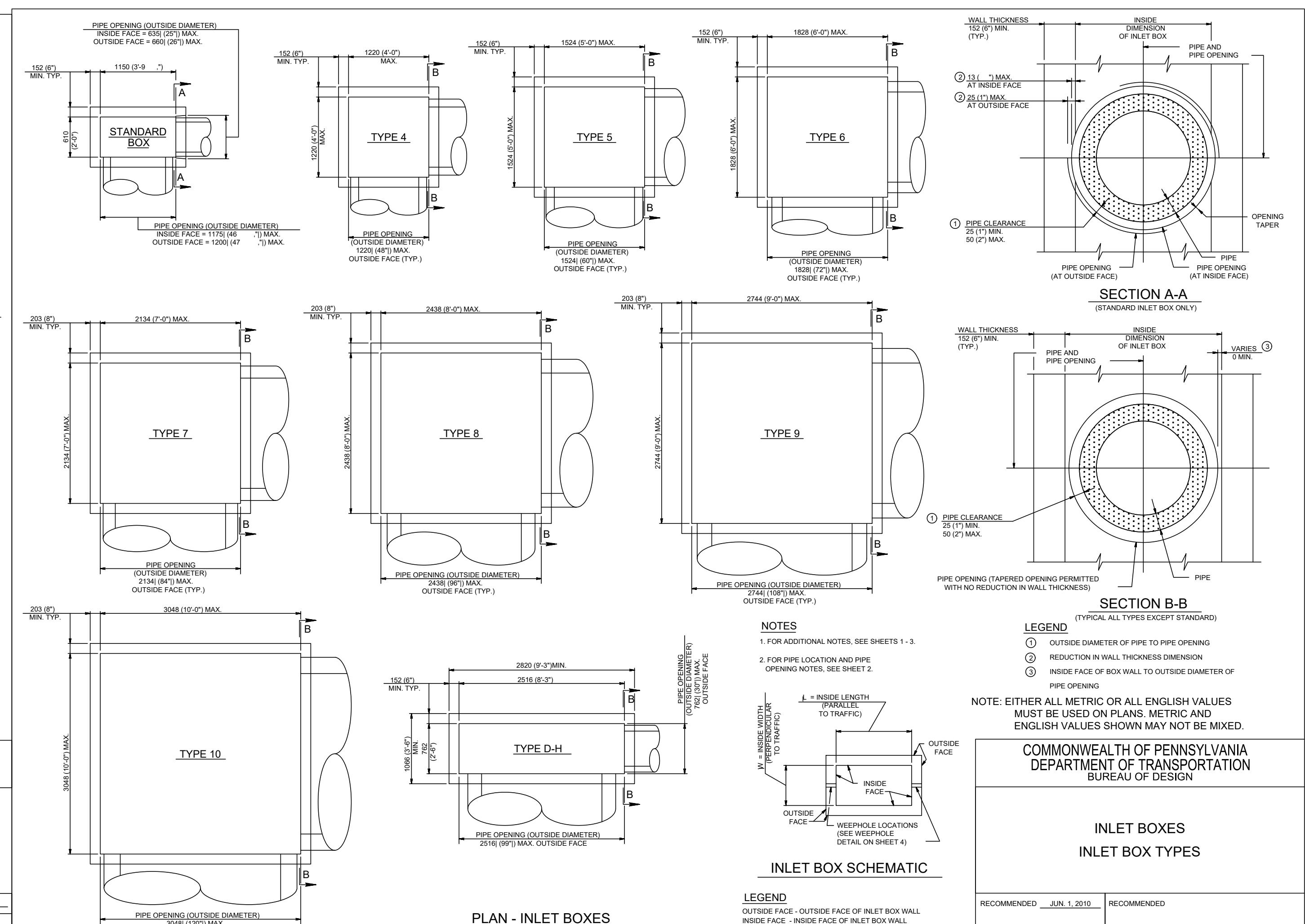
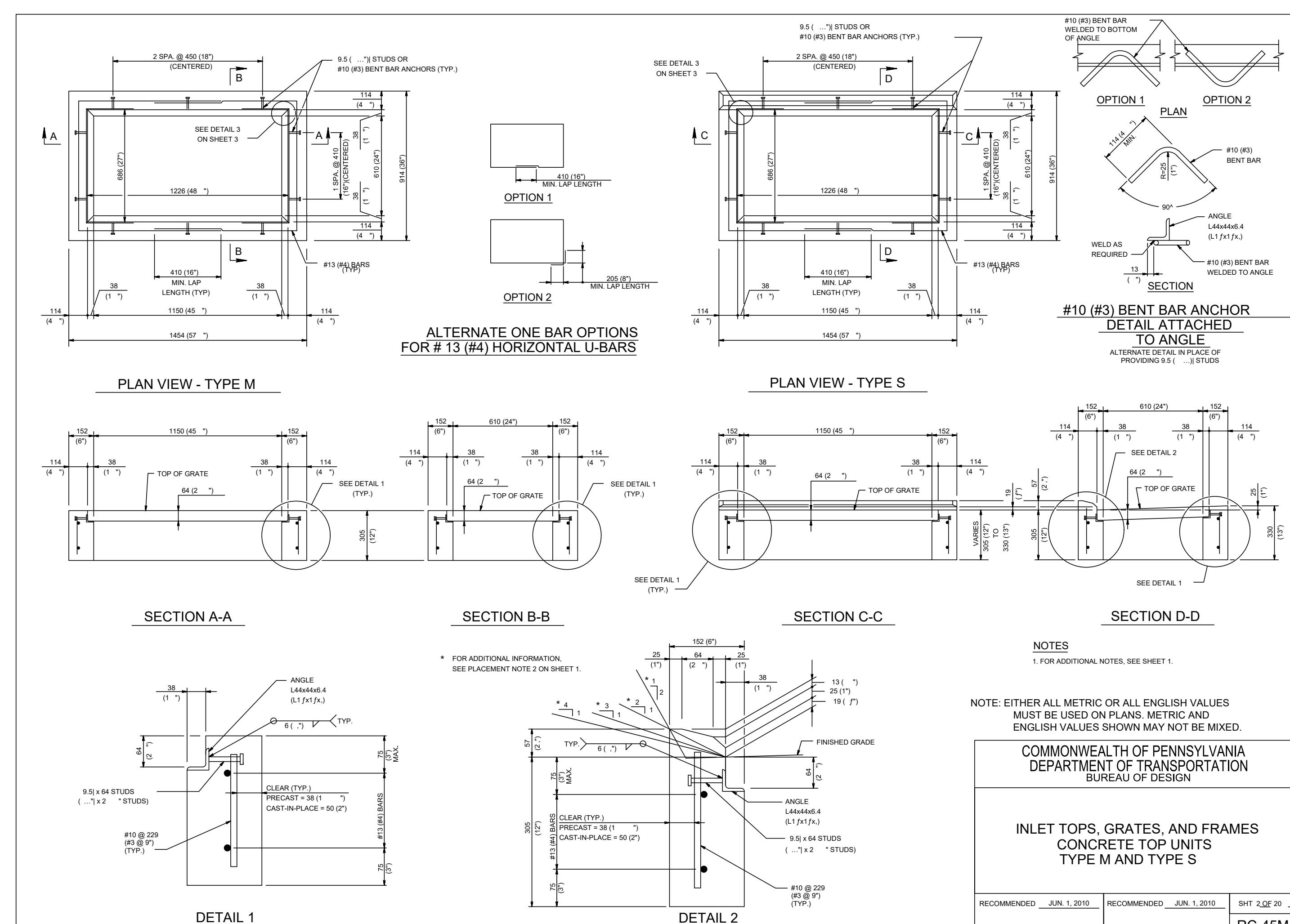
NOT TO SCALE

NOTES:
1. H (HEIGHT OF FABRIC) SHALL BE AS SHOWN ON THE PLANS.
2. CHAIN LINK FENCE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 181.
3. CHAIN LINK FABRIC SHALL BE 2" MESH NO. 9 GAGE GALVANIZED OR ALUMINUM COATED WIRE SECURELY FASTENED TO TENSION WIRE. LINE POSTS, RAILS, BRACES, AND STRETCHER BARS SPACED AS SHOWN. WIRE CAGE, ALL IN CONFORMANCE WITH ASTM F 628.
4. ATTACH FABRIC TO ALL FENCE AND GATE STRUCTURES AT 12" INTERVALS VERTICALLY AND AT 20' HORIZONTALLY.
5. STEEL POSTS, RAILS, AND GATE FRAMES SHALL CONFORM TO AASHTO M 181 TYPE 1, GRADE 1 OR GRADE 2.
6. TENSION WIRE SHALL BE CONTINUOUS BEING ATTACHED END TO END OR CORNER POST AND LINE BRACE POST. A TURNBUCKLE OR TURNBUCKLES SHALL BE PROVIDED FOR EACH CONTINUOUS SPAN OF TENSION WIRE.
7. TENSION WIRE SHALL BE SPECIFIED IN AASHTO M 181.
8. CONCRETE FOOTINGS SHALL HAVE TOPS CROWNED AT GROUND LEVEL AND SHALL BE PENNDOT CLASS B.
9. CHAIN LINK FABRIC SHALL BE KNUCKLED AT THE TOP AND BOTTOM SELVAGES.
10. BRACE RAIL WILL NOT BE REQUIRED FOR 36", 42", 48", FABRIC HEIGHTS. BRACE RAIL FOR FENCE WITH ROLL-FORMED STEEL POSTS AND RAIL SHALL BE 2" INCHES.
11. FENCE MAY BE CONSTRUCTED WITH EITHER ROUND PIPE OR ROLL-FORMED STEEL COMPONENTS.
12. FINISH (MESH, POSTS, AND RAIL): GALVANIZED WITH BLACK PVC COATING.
13. CHAIN LINK FENCE AT LOADING DOCK TO BE 10FT HIGH TO MATCH MASONRY WALL FOR GENERATOR/TRANSFORMER. NO MESH. PROVIDE PVC SCREENING SLATS, OWNER CHOICE COLOR.

FENCE - CHAIN LINK

NOT TO SCALE

NOTES:
1. H (HEIGHT OF FABRIC) SHALL BE AS SHOWN ON THE PLANS.
2. CHAIN LINK FENCE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 181.
3. CHAIN LINK FABRIC SHALL BE 2" MESH NO. 9 GAGE GALVANIZED OR ALUMINUM COATED WIRE SECURELY FASTENED TO TENSION WIRE. LINE POSTS, RAILS, BRACES, AND STRETCHER BARS SPACED AS SHOWN. WIRE CAGE, ALL IN CONFORMANCE WITH ASTM F 628.
4. ATTACH FABRIC TO ALL FENCE AND GATE STRUCTURES AT 12" INTERVALS VERTICALLY AND AT 20' HORIZONTALLY.
5. STEEL POSTS, RAILS, AND GATE FRAMES SHALL CONFORM TO AASHTO M 181 TYPE 1, GRADE 1 OR GRADE 2.
6. TENSION WIRE SHALL BE CONTINUOUS BEING ATTACHED END TO END OR CORNER POST AND LINE BRACE POST. A TURNBUCKLE OR TURNBUCKLES SHALL BE PROVIDED FOR EACH CONTINUOUS SPAN OF TENSION WIRE.
7. TENSION WIRE SHALL BE SPECIFIED IN AASHTO M 181.
8. CONCRETE FOOTINGS SHALL HAVE TOPS CROWNED AT GROUND LEVEL AND SHALL BE PENNDOT CLASS B.
9. CHAIN LINK FABRIC SHALL BE KNUCKLED AT THE TOP AND BOTTOM SELVAGES.<



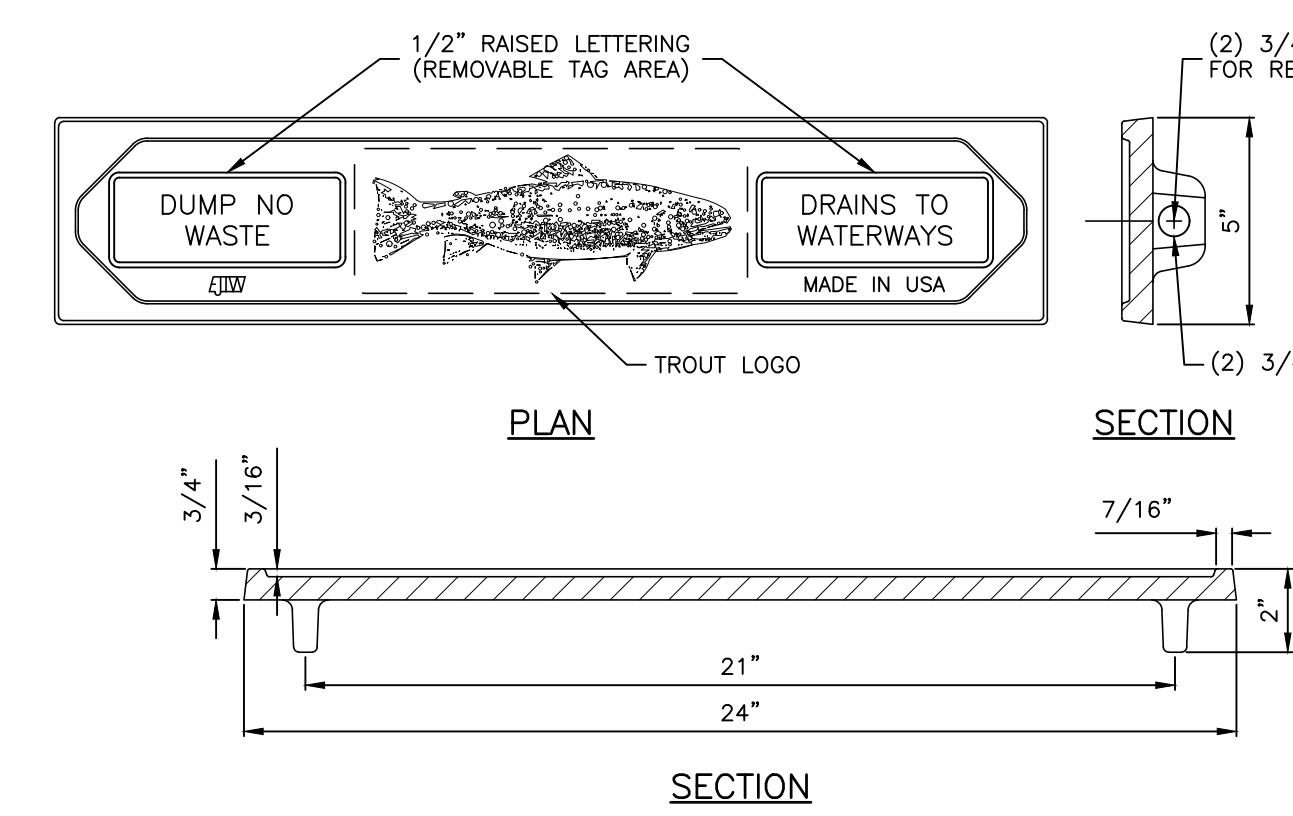
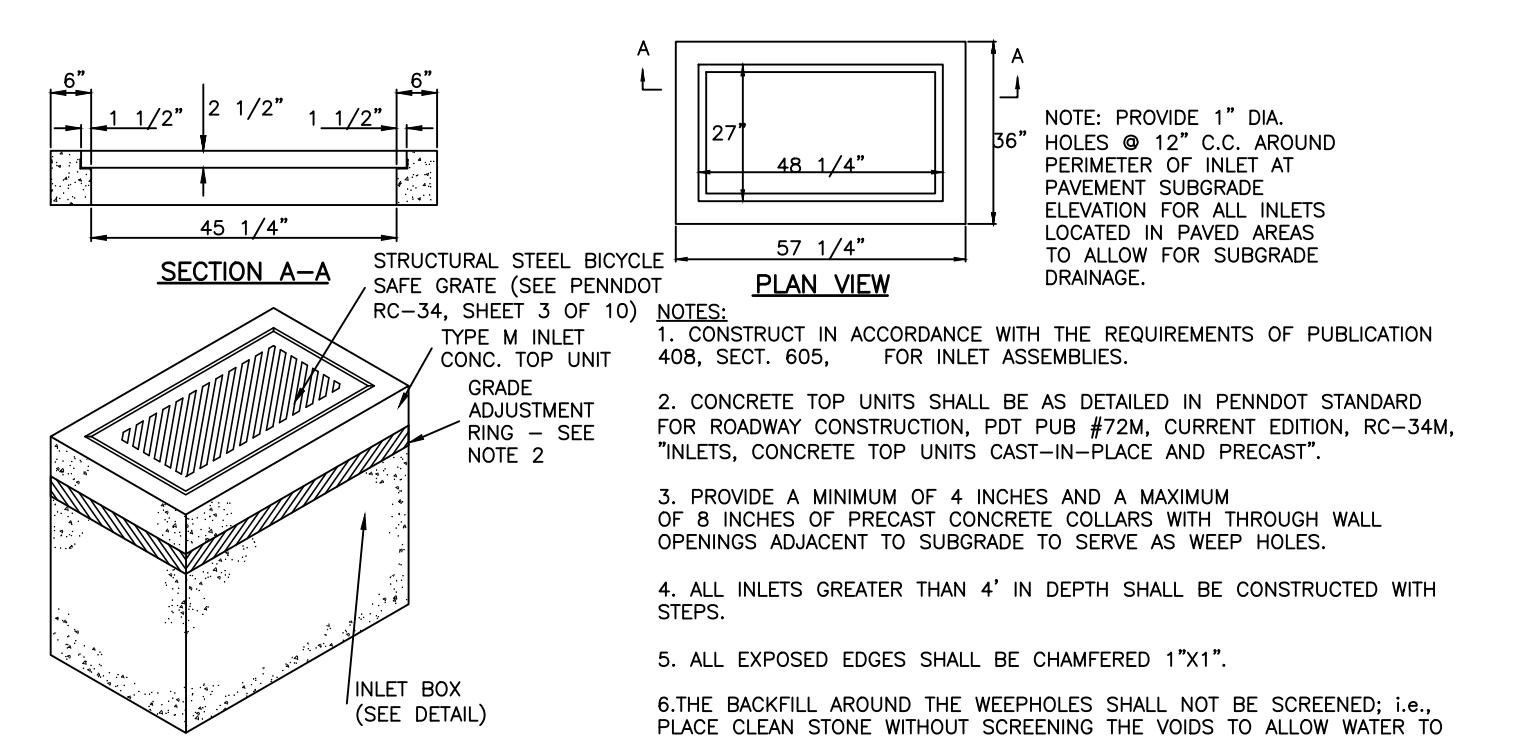


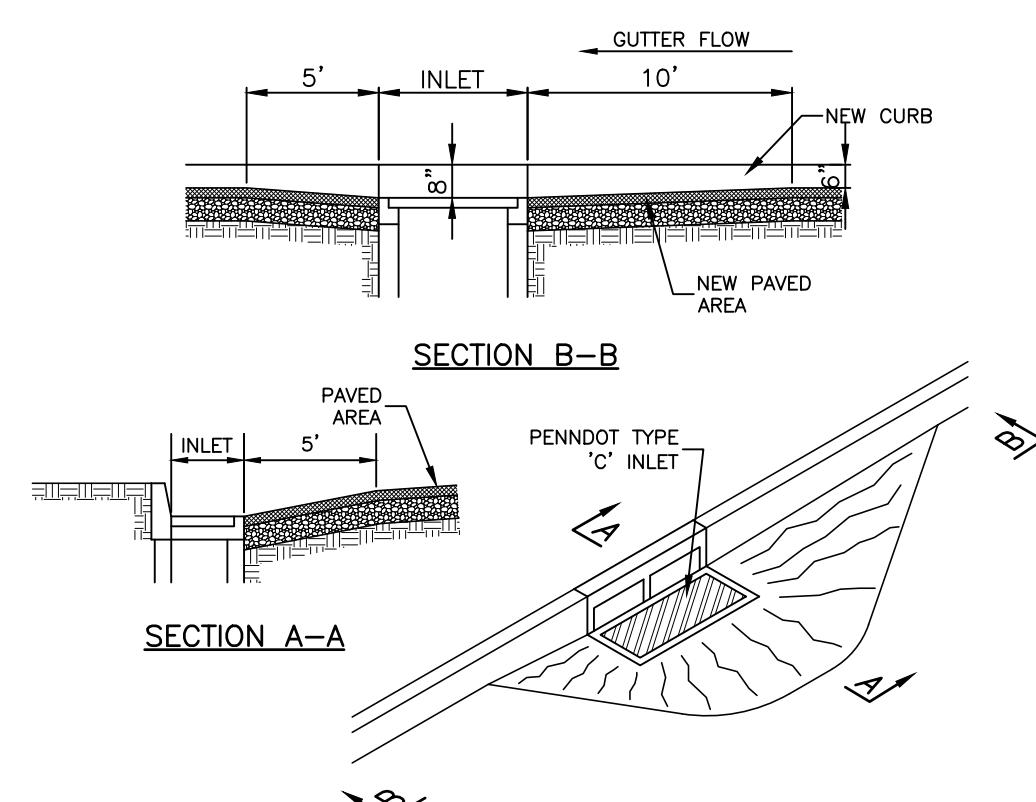
PLATE - NO DUMP

NOT TO SCALE



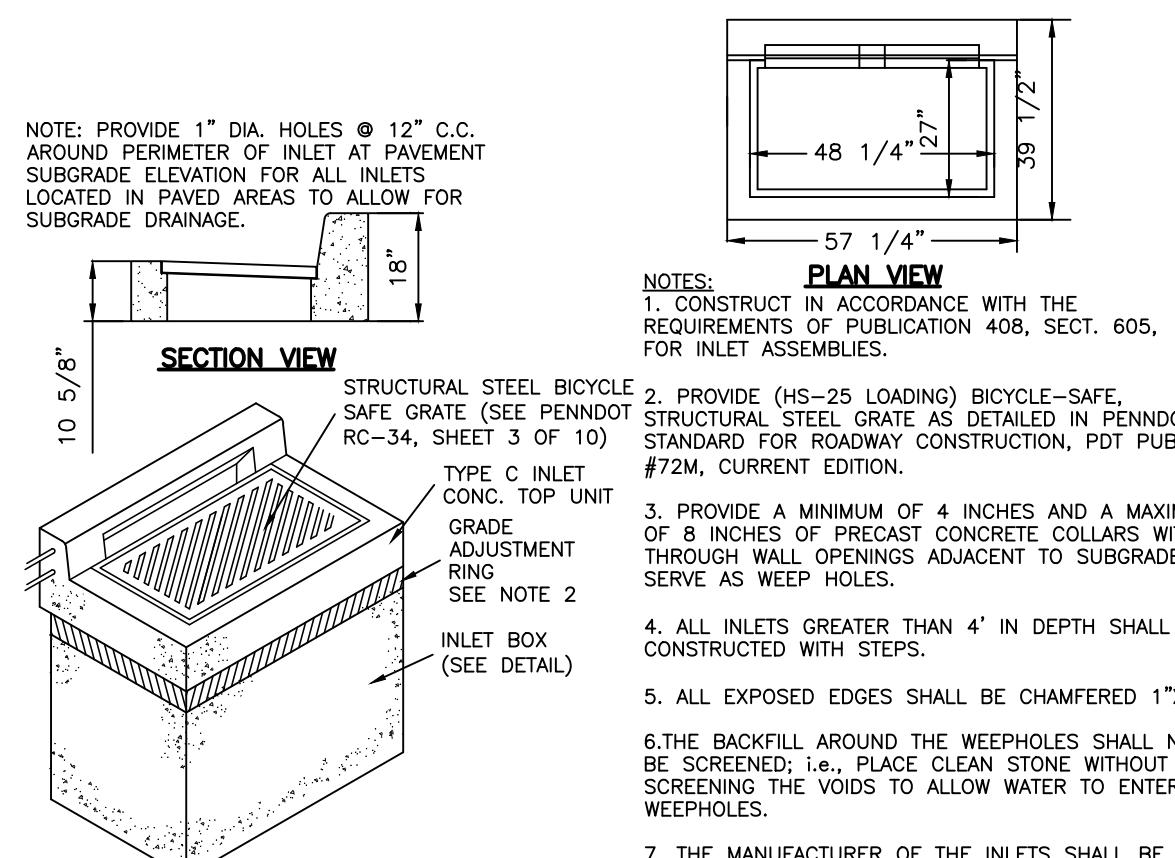
STANDARD TYPE 'M' INLET

NOT TO SCALE



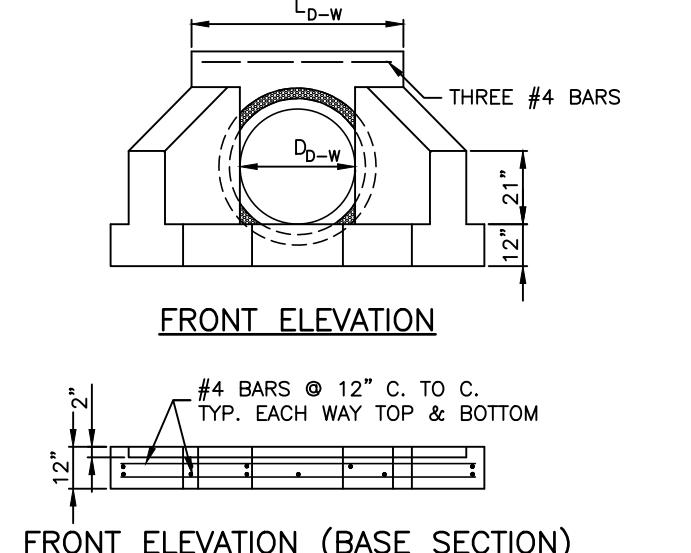
INLET PAVING TAPER

NOT TO SCALE

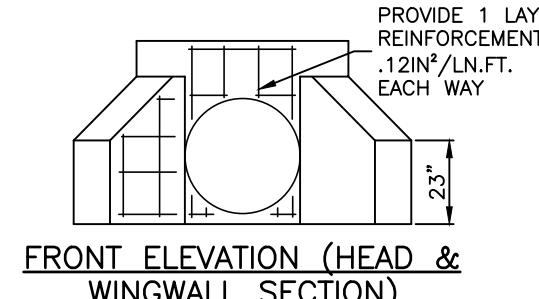


TYPE 'C' INLET

NOT TO SCALE



FRONT ELEVATION (BASE SECTION)



FRONT ELEVATION (HEAD & WINGWALL SECTION)

PIPE DIAMETER	SKW = 90° TO 60° θ = 30°			
	D _d (IN.)	L _{d-w} (FT.)	a (FT.)	W _d & W _w (FT.)
12	3.5	0	0.0	12
18	4.0	0	1.2	12
24	4.6	0	2.3	12
30	5.2	0	3.5	12
36	5.8	0	4.6	12
42	6.3	0	5.8	12
48	6.9	0	6.9	12
54	7.5	0	8.0	12
60	8.1	0	9.2	12
72	9.2	0	11.5	12

NOTES:

- ALL MATERIALS AND CONSTRUCTION METHODS TO MEET THE REQUIREMENTS OF PENNDOT PUBLICATION 408 AND 72-M (RC-31M), LATEST REVISION.
- CHILD SAFETY GRATES SHALL BE PROVIDED ON ALL ENDWALLS. TRASH RACKS SHALL BE PROVIDED ON ALL HEADWALLS.
- THE MUNICIPALITY/AUTHORITY HAVING JURISDICTION.
- AREAS AROUND MANHOLES, INLETS, AND OTHER APPURTENANCES SHALL BE HAND COMPACTION AS DIRECTED BY THE MUNICIPALITY/AUTHORITY HAVING JURISDICTION.
- NO SLAG MATERIAL PERMITTED.
- FOR ALL CONCRETE MANHOLES, THE EXCAVATION TRENCH, ASHTO #57 AGGREGATE MUST BE USED.
- ALL MATERIALS AND CONSTRUCTION METHODS SHALL COMPLY WITH PENNDOT SPECIFICATIONS, PUBLICATION 408 AND 67 PA CODE SECTION 459.
- UNDER NO CIRCUMSTANCES SHALL WATER BE ALLOWED TO COLLECT IN EXCAVATED TRENCHES. ANY WATER IN THE TRENCHES SHALL BE REMOVED THROUGH A PUMPED WATER FILTER BAG.

HEADWALL/ENDWALL - TYPE D-W

NOT TO SCALE

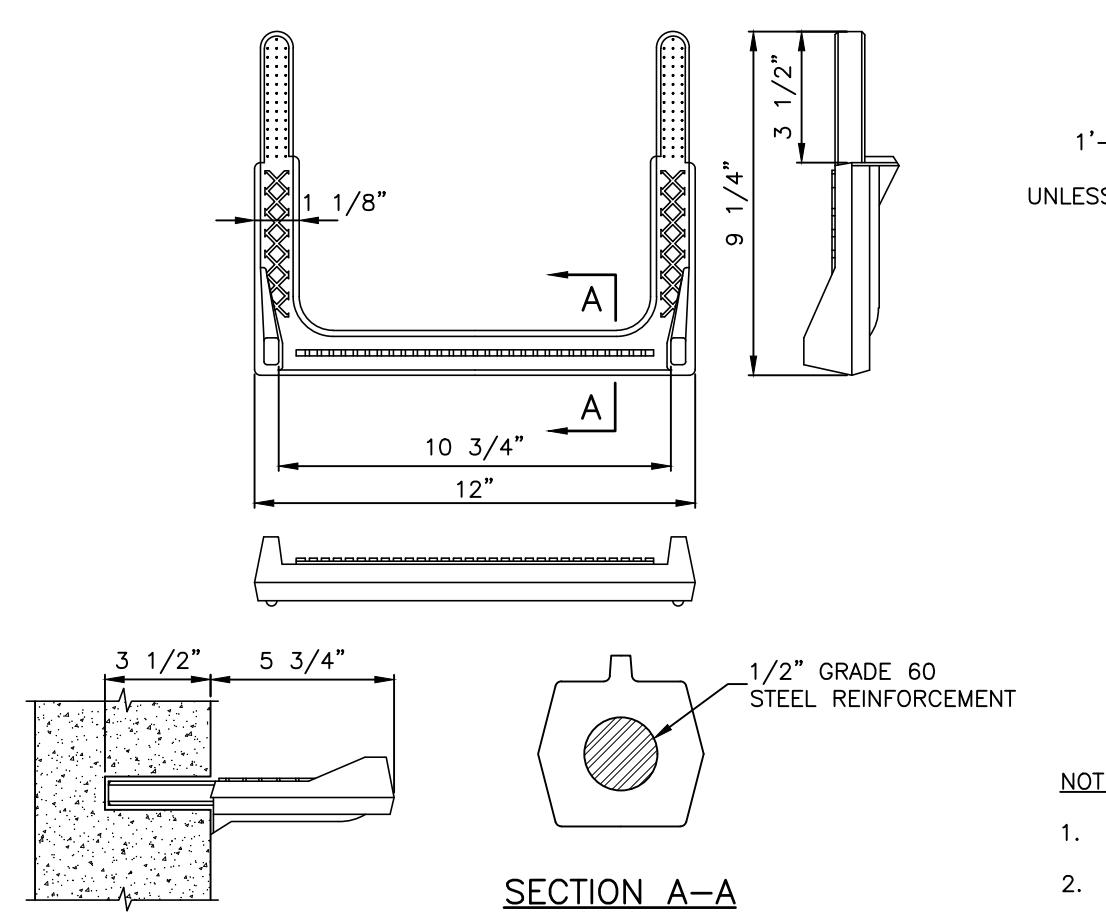
- TRENCH COMPACTION TO BE TESTED, AT THE DEVELOPER'S EXPENSE, IN ACCORDANCE WITH PENNDOT PUB 408, LATEST REVISION, AS REQUIRED BY THE MUNICIPALITY/AUTHORITY HAVING JURISDICTION.
- CLEAN FILM MUST BE APPROVED BY THE MUNICIPALITY/AUTHORITY HAVING JURISDICTION PRIOR TO PLACEMENT IN THE TRENCH.
- AREAS AROUND MANHOLES, INLETS, AND OTHER APPURTENANCES SHALL BE HAND COMPACTION AS DIRECTED BY THE MUNICIPALITY/AUTHORITY HAVING JURISDICTION.
- NO SLAG MATERIAL PERMITTED.
- FOR ALL CONCRETE MANHOLES, THE EXCAVATION TRENCH, ASHTO #57 AGGREGATE MUST BE USED.
- ALL MATERIALS AND CONSTRUCTION METHODS SHALL COMPLY WITH PENNDOT SPECIFICATIONS, PUBLICATION 408 AND 67 PA CODE SECTION 459.
- UNDER NO CIRCUMSTANCES SHALL WATER BE ALLOWED TO COLLECT IN EXCAVATED TRENCHES. ANY WATER IN THE TRENCHES SHALL BE REMOVED THROUGH A PUMPED WATER FILTER BAG.

BACKFILL (TRENCH)

NOT TO SCALE

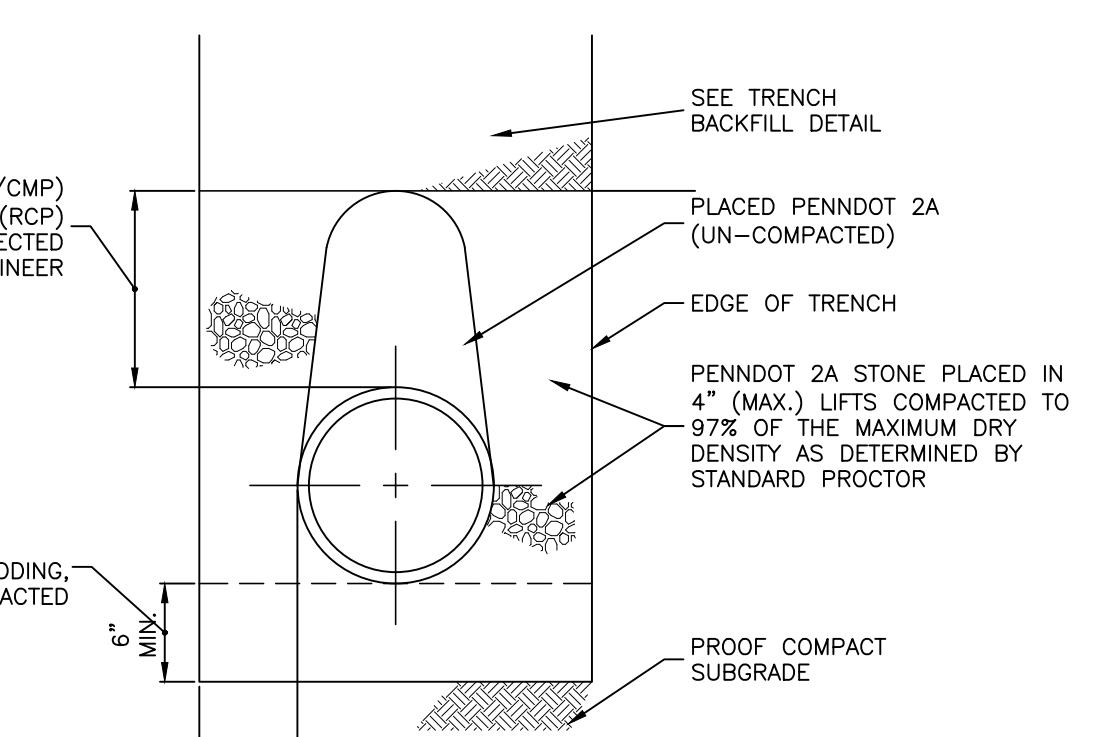
MANHOLE STEP
(STEEL REINFORCED POLYPROPYLENE)

NOT TO SCALE



NOTES:

- STEPS FOR ALL MANHOLES AND INLETS SHALL BE COPOLYMER POLYPROPYLENE PLASTIC MODEL NO. PS-4-B AS MANUFACTURED BY MA. INDUSTRIES, INC. OR APPROVED EQUAL.
- THE PORTION TO BE EMBEDDED IN THE CONCRETE SHALL BE IN ACCORDANCE WITH THE LATEST O.S.H.A. STANDARDS (3 1/2" MINIMUM EMBEDMENT).
- ALL MANHOLE STEPS TO MEET OR EXCEED ASTM AND O.S.H.A. STANDARDS.
- VERTICAL SPACING OF STEPS TO BE 1'.



NOTES:

- IF TRENCH IS EXTREMELY WET DUE TO HIGH GROUNDWATER, USE AASHTO #57 STONE UP TO THE HAUNCHES OF THE PIPE, REMAINDER OF BEDDING TO BE PENNDOT 2A.
- FOLLOW 'PIPE INSTALLATION PROCEDURES' PER PENNDOT PUBLICATION 72M - RC-30M.

PIPE BEDDING (STORM SEWER)

NOT TO SCALE

DESIGNED BY	JDT
CHECKED BY	JDT/KAL
DRAWN BY	SEE
DATE	08/01/2024
SCALE	AS SHOWN
PROJ. NO.	PORS00021

OFFICES LOCATED IN:

DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

1700 MARKET STREET, SUITE 3100

PHILADELPHIA, PA 19103

TEL: 215-626-1950

FAX: 215-627-3459

www.tandmassociates.com

TANDM ASSOCIATES

YOUR GOALS. OUR MISSION.

1700 MARKET STREET, SUITE 3100

PHILADELPHIA, PA 19103

TEL: 215-626-1950

FAX: 215-627-3459

www.tandmassociates.com

DESIGNED BY

JDT

CHECKED BY

JDT/KAL

DRAWN BY

SEE

DATE

08/01/2024

SCALE

AS SHOWN

PROJ. NO.

PORS00021

15

OF 35

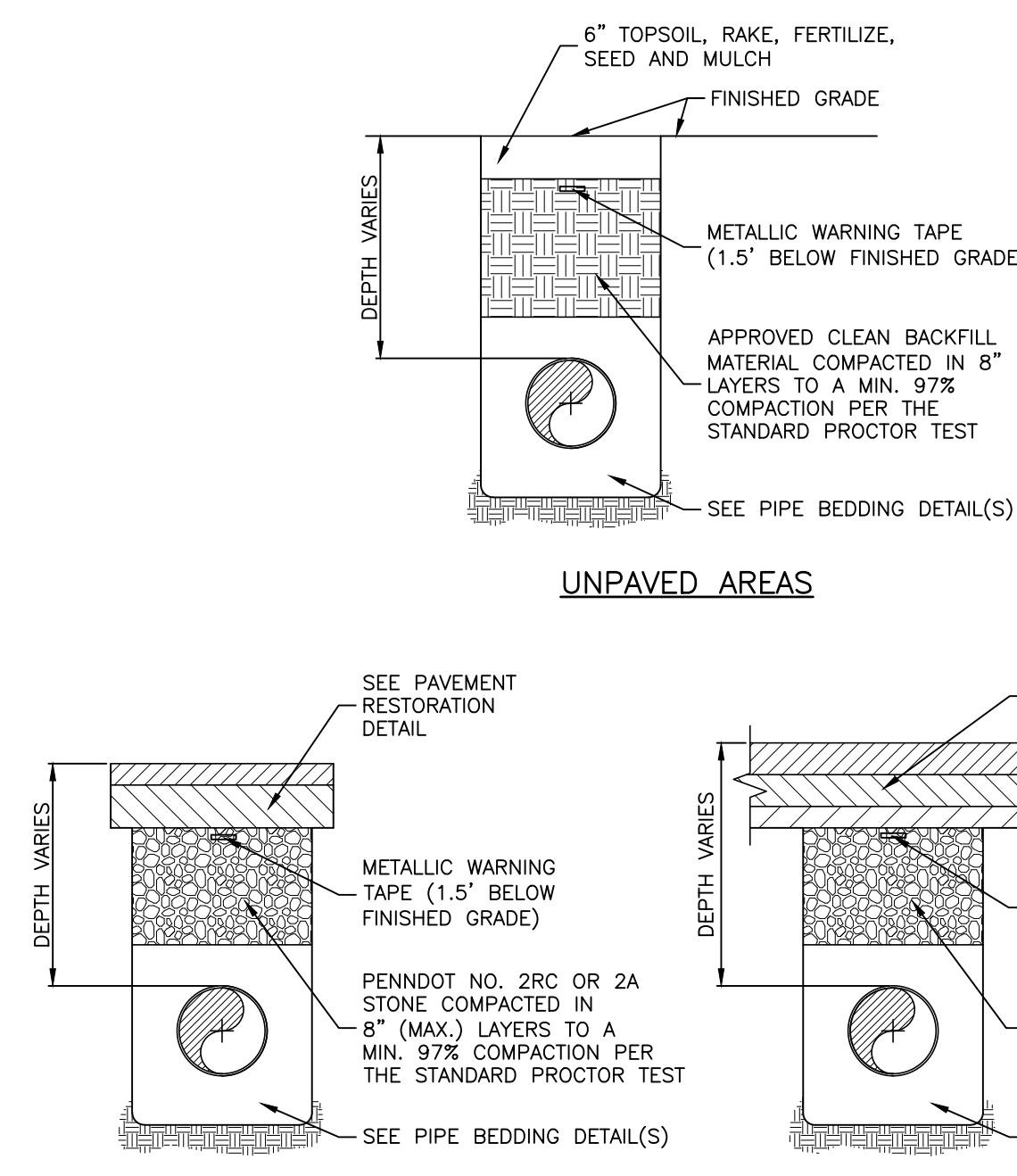
REVISIONS

NO. DATE

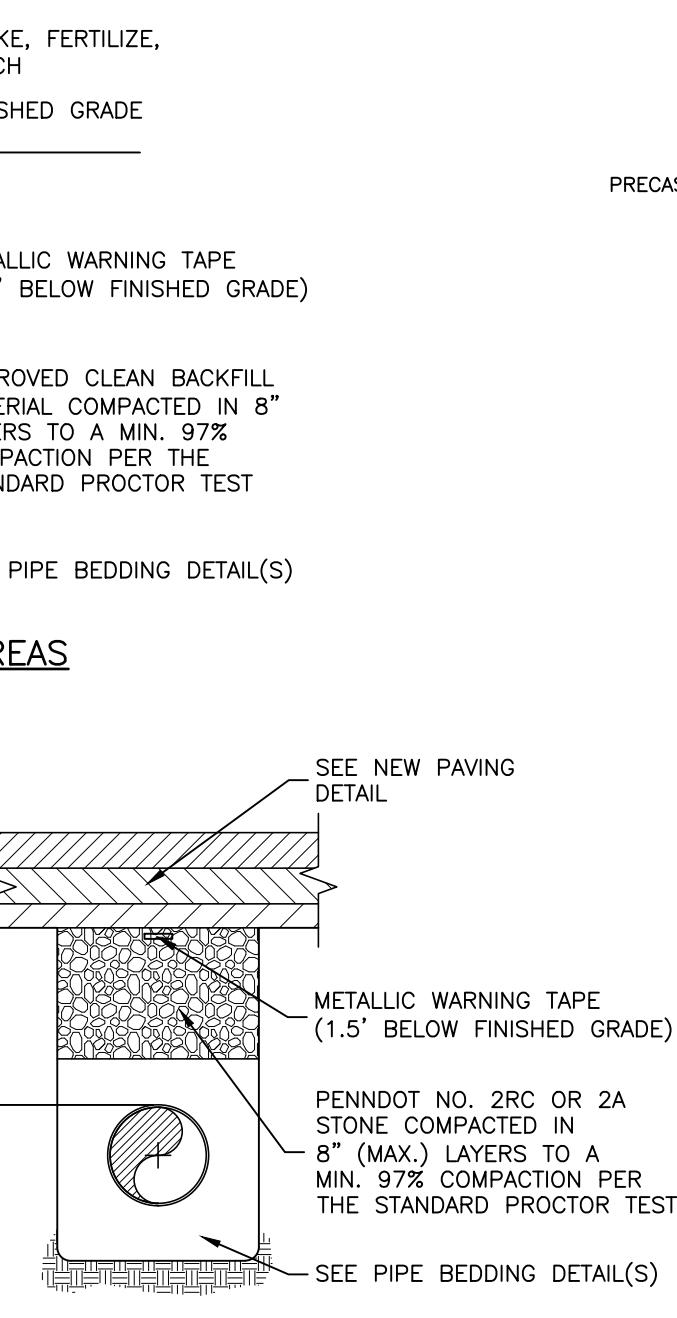
CHKD

BY

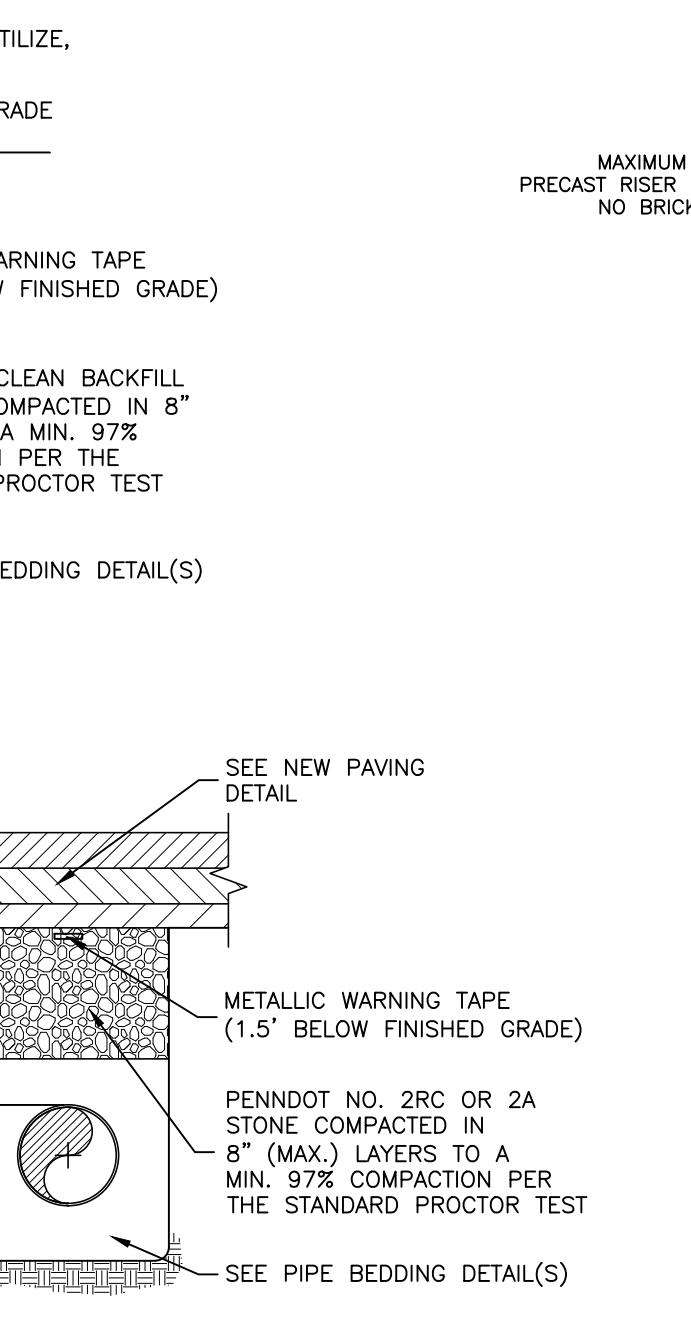
CHKD



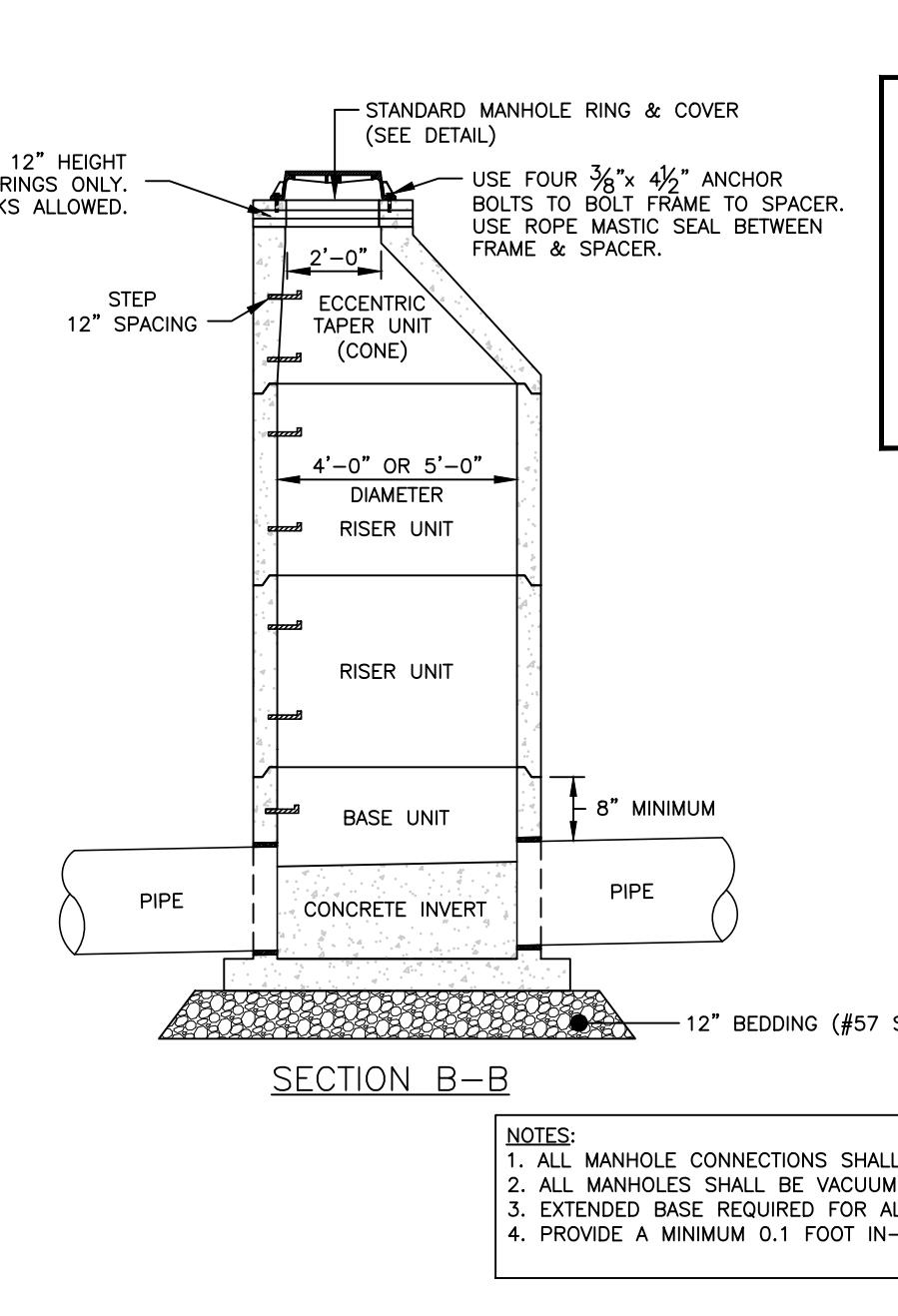
UNPAVED AREAS



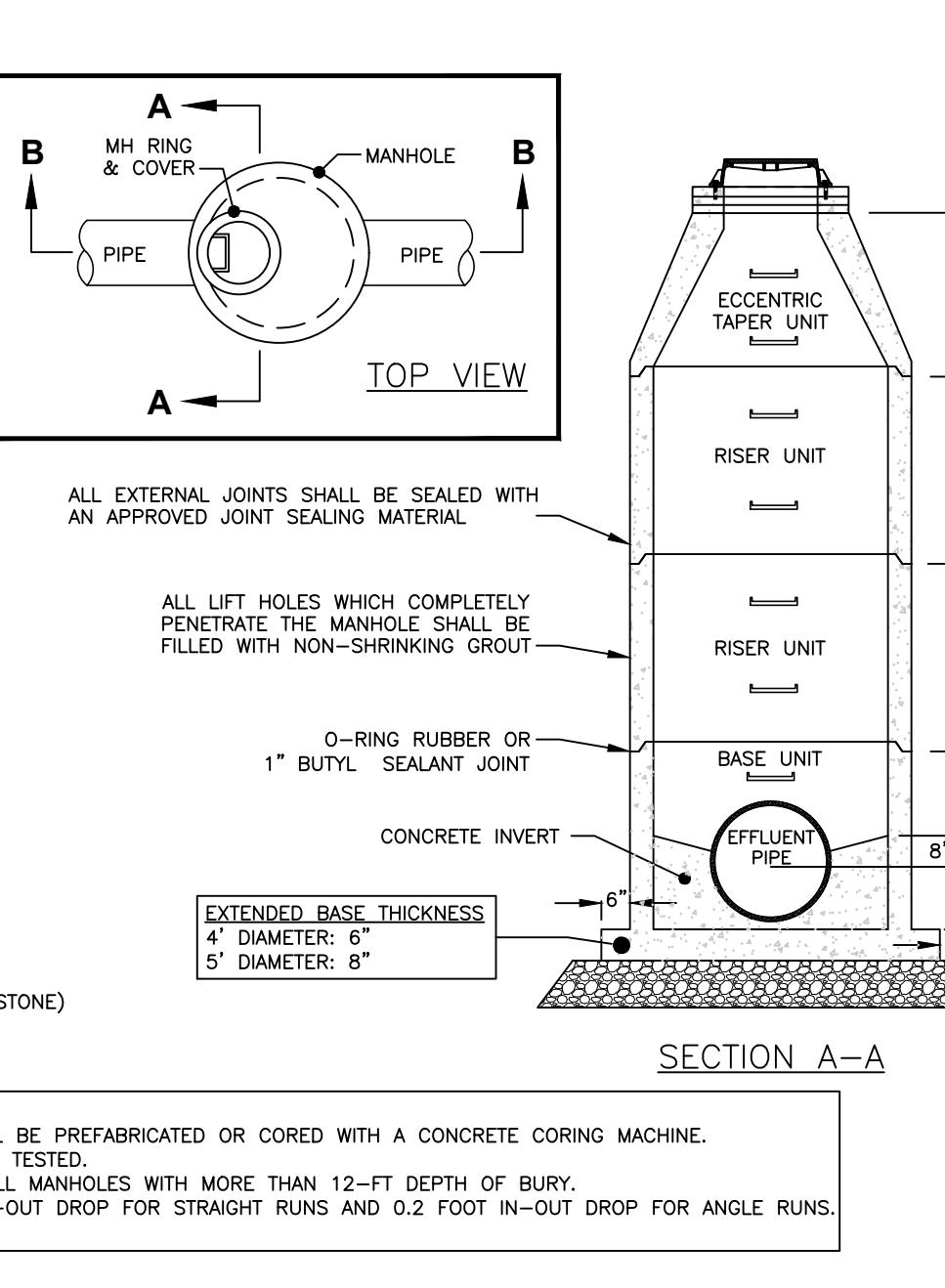
EXISTING PAVED AREAS



NEW ROADWAYS & PARKING AREAS



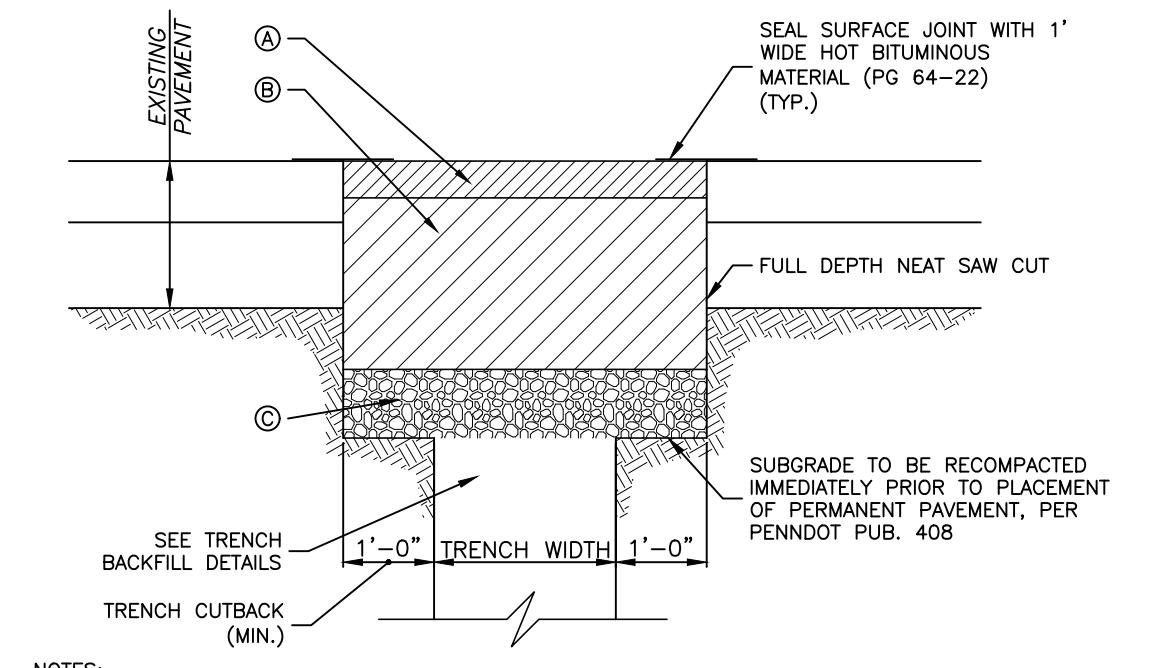
SECTION B-B



SECTION A-A

NOTES:
 1. ALL MANHOLE CONNECTIONS SHALL BE PREFABRICATED OR CORED WITH A CONCRETE CORING MACHINE.
 2. ALL MANHOLES SHALL BE APPROVED BY THE MUNICIPALITY/AUTHORITY HAVING JURISDICTION.
 3. ATTENTION IS REQUIRED FOR ALL MANHOLES WITH MORE THAN 12'-FT DEPTH OF BURY.
 4. PROVIDE A MINIMUM 0.1 FOOT IN-OUT DROP FOR STRAIGHT RUNS AND 0.2 FOOT IN-OUT DROP FOR ANGLE RUNS.

NOT TO SCALE

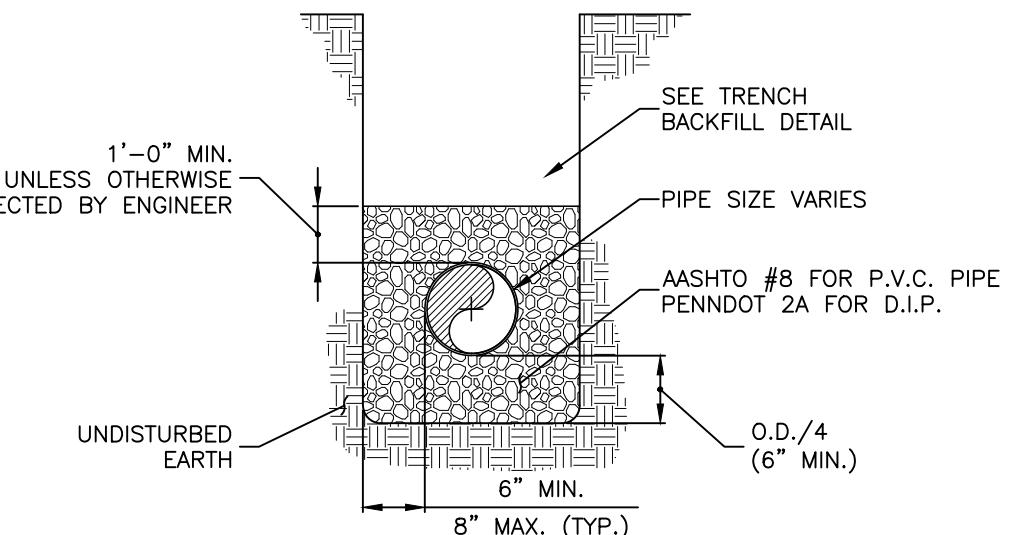


NOTES:
 1. EXPOSED VERTICAL AND HORIZONTAL SURFACES SHALL BE PREPARED AS STATED IN PENNDOT PUB 408, SECT. 401.3(C).
 2. THE EXPOSED SURFACE SHALL BE APPLIED TO THE ENTIRE SURFACE PRIOR TO APPLICATION OF THE WEARING SURFACE UNLESS WAIVED BY PENNDOT.
 3. ALL MATERIAL AND CONSTRUCTION METHODS SHALL COMPLY WITH PENNDOT SPECIFICATIONS, PUBLICATION 408, LATEST REVISION.
 4. IF WORK IS COMPLETED WITHIN THE PENNDOT RIGHT-OF-WAY, SPECIAL CONDITIONS OF THE HIGHWAY OCCUPANCY PERMIT SHALL SUPERCEDE THIS DETAIL.
 5. REFER TO TYPICAL STREET CROSS SECTION FOR DESCRIPTIONS OF A,B,C AND D.

PAVEMENT RESTORATION (BITUMINOUS)

NOT TO SCALE

- ① SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COURSE, PG 64-22, 0 TO <0.3 MILLION DESIGN ESALS, 9.5 MM MIXTURE, 1 1/2" DEPTH, SRL H
- ② SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BASE COURSE, PG 64-22, 0 TO <0.3 MILLION DESIGN ESALS, 25 MM MIXTURE, 4 1/2" DEPTH
- ③ SUBBASE (PENNDOT, 2A) 6" DEPTH



PIPE BEDDING - SANITARY MAIN AND LATERAL

NOT TO SCALE

1'-0" MIN. UNLESS OTHERWISE DIRECTED BY ENGINEER

SEE TRENCH BACKFILL DETAIL

PIPE SIZE VARIES

AASHTO #8 FOR P.V.C. PIPE

PENNDOT 2A FOR D.I.P.

UNDISTURBED EARTH

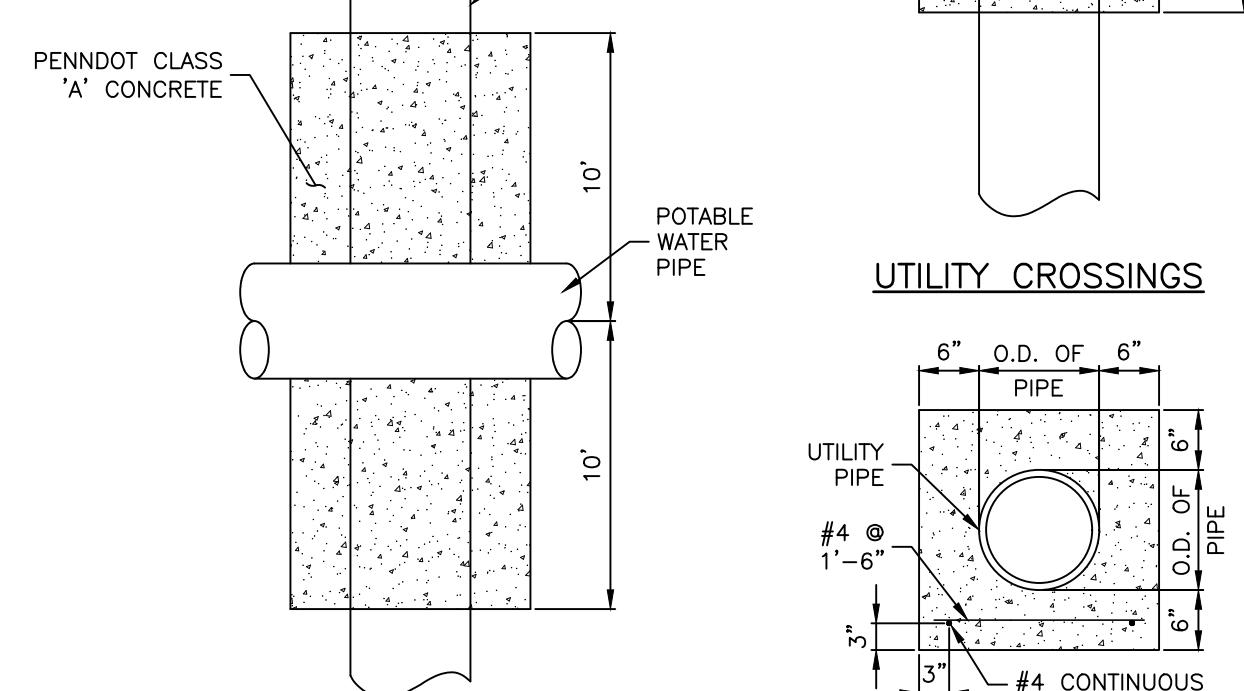
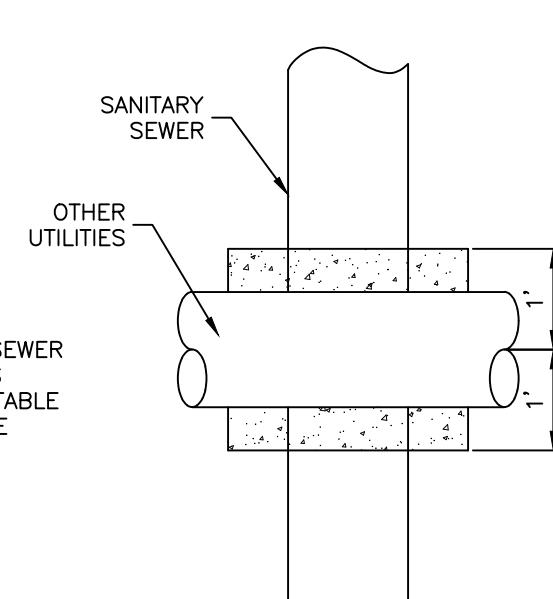
6" MIN.

8" MAX. (TYP.)

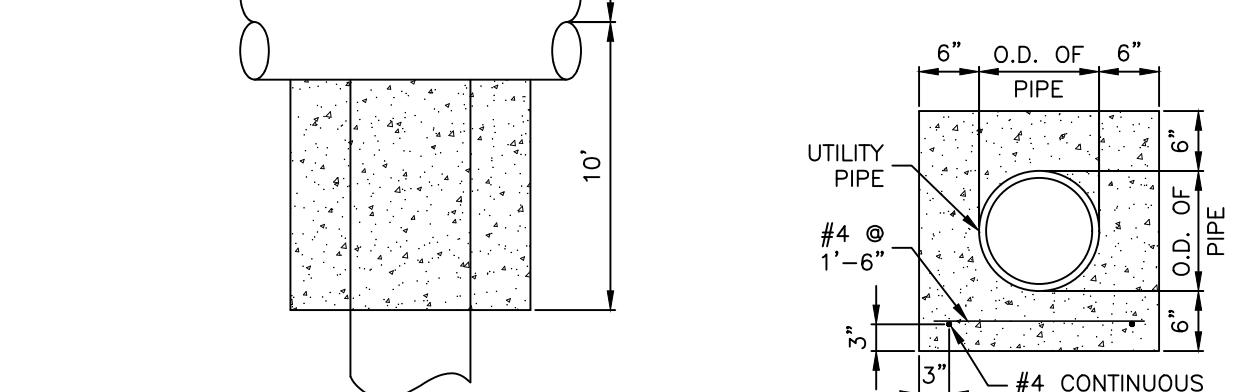
O.D./4 (6" MIN.)

STANDARD SANITARY SEWER PRECAST CONCRETE MANHOLE DETAIL

NOT TO SCALE



UTILITY CROSSINGS



WATER CROSSINGS

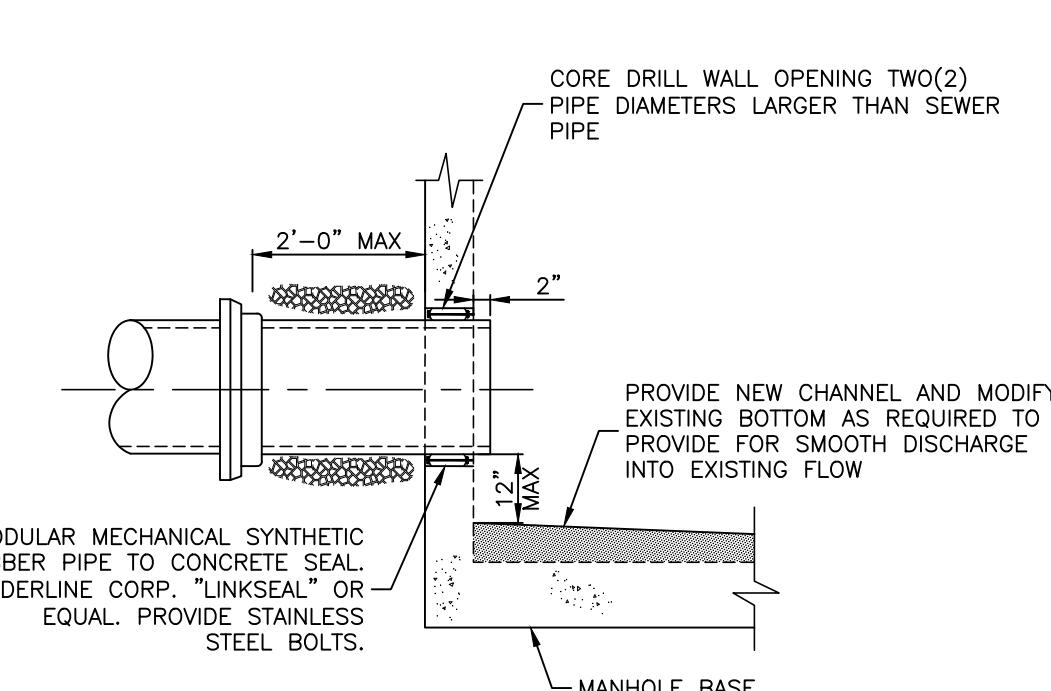
ENCASEMENT SECTION

NOTES:

1. PROVIDE REINFORCEMENT AT UTILITY CROSSINGS OR AS DIRECTED BY THE MUNICIPALITY/AUTHORITY HAVING JURISDICTION.

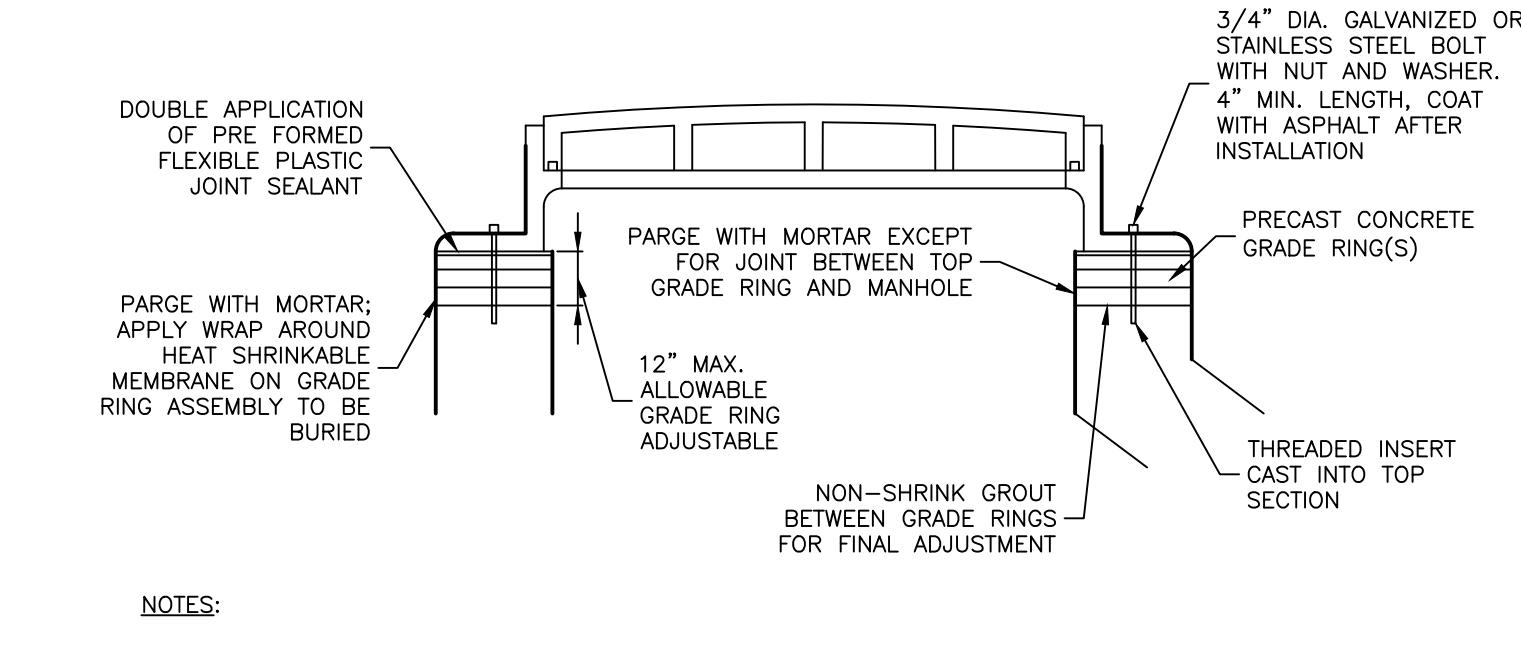
UTILITY CROSSING - CONCRETE ENCASEMENT

NOT TO SCALE



PIPE CONNECTION (EXISTING MANHOLE)

NOT TO SCALE



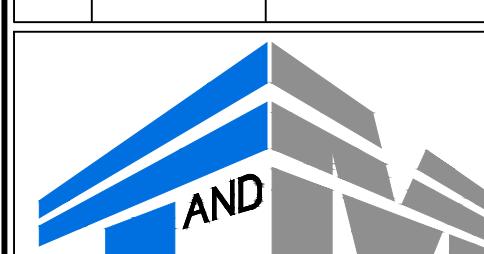
MANHOLE ADJUSTMENT (GRADE RING)

NOT TO SCALE

1. ALL NON-SHRINK CONCRETE GROUT SHALL BE TROWELED SMOOTH.

2. EXCESS PRE-FORMED FLEXIBLE PLASTIC JOINT SEALANT SHALL BE NEATLY TRIMMED AT ALL JOINTS.

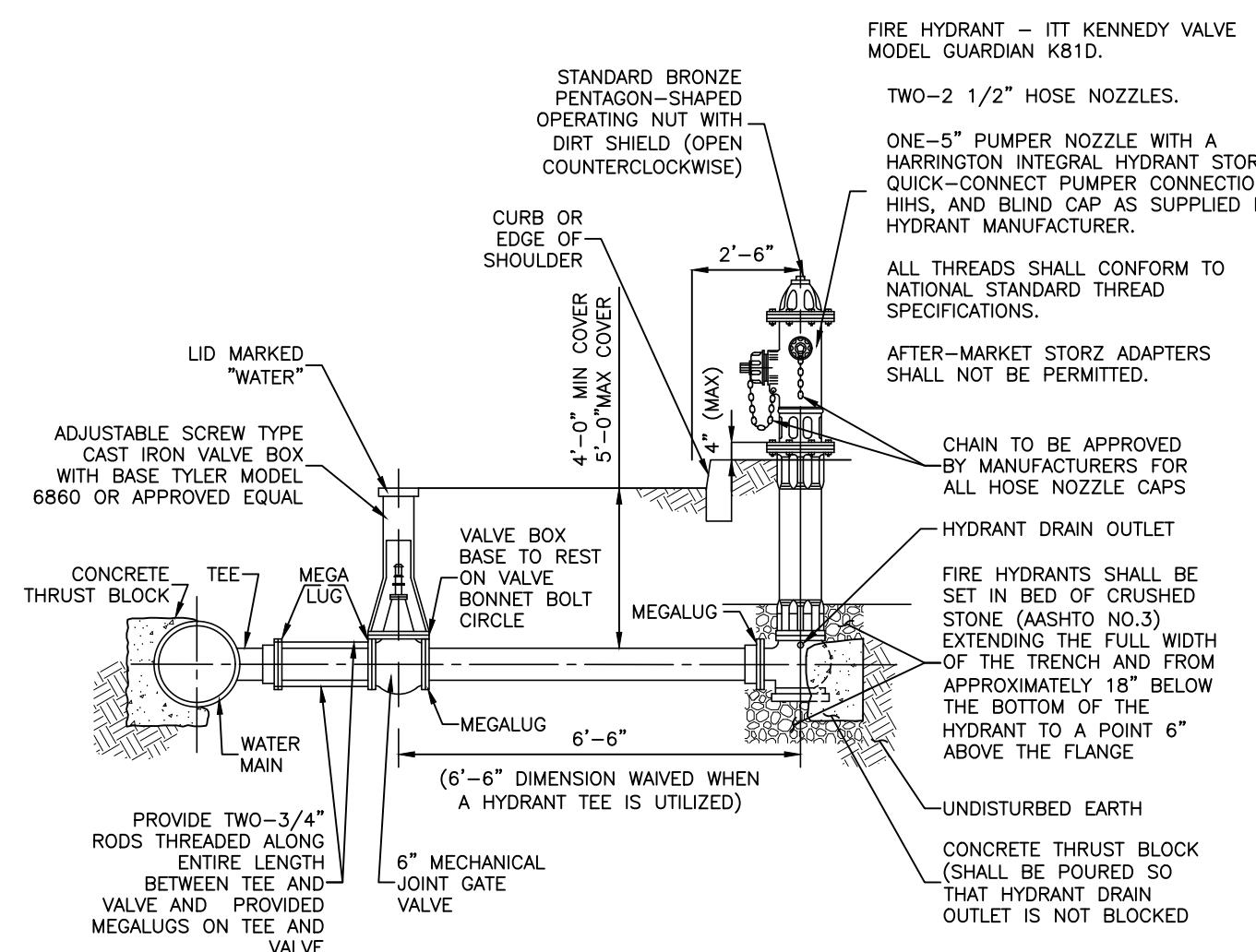
3. CONCRETE SURFACES SHALL BE CLEAN AND DRY PRIOR TO PARGING AND PRIOR TO APPLICATION OF WRAP AROUND HEAT SHRINKABLE MEMBRANE.



1700 MARKET STREET, SUITE 3110
PHILADELPHIA, PA 19103
TEL: 215-626-3450
FAX: 215-627-3459
www.tandmassociates.com

OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

DESIGNED BY	JDT
CHECKED BY	JDT/KAL
DRAWN BY	SEE
DATE	08/01/2024
SCALE	AS SHOWN
PROJ. NO.	PORS00021

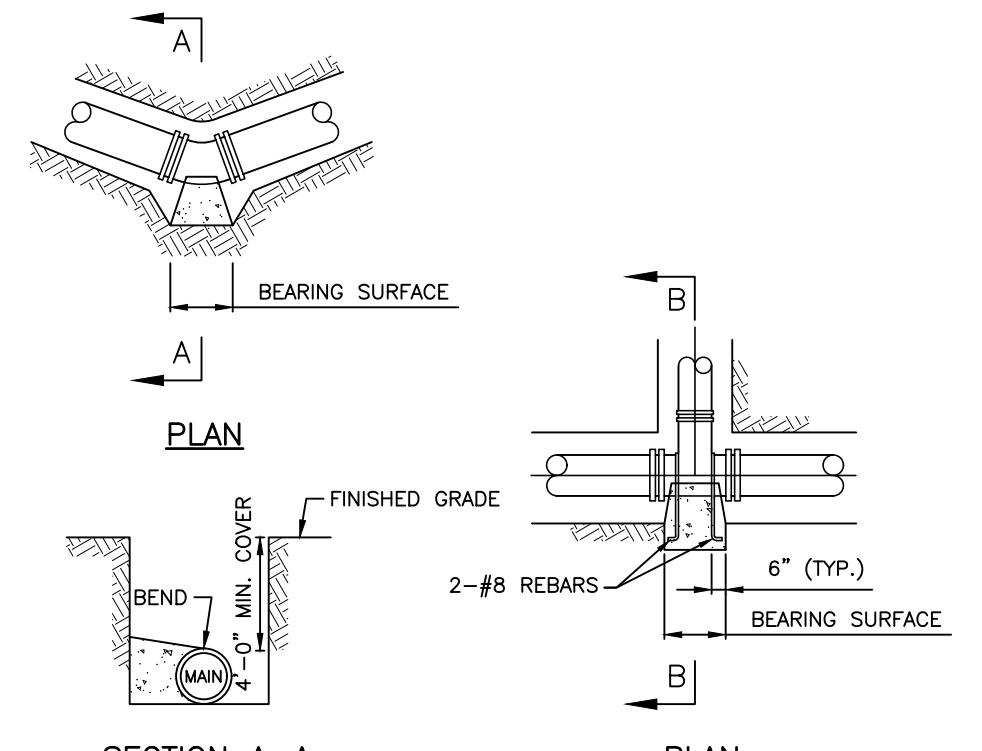


NOTES:

1. TEES AND ELBOWS SHALL BE BLOCKED WITH CONCRETE AS SHOWN. PIPING SHALL BE HARNESSSED WITH TEE NUTS AND TIE RODS.
2. FIRE HYDRANTS SHALL BE DESIGNED FOR A MAXIMUM WORKING PRESSURE OF 250 PSI AND COMPLY WITH AWWA C502.
3. HYDRANTS SHALL BE INSTALLED FOR 5'-0" DEPTH OF BURROW FROM GROUND LINE TO BOTTOM OF CONNECTING TEE.
4. A HYDRANT TEE MAY BE USED IN PLACE OF RODS TO SECURE THE VALVE, AS REVIEWED BY THE AUTHORITY HAVING JURISDICTION ON A CASE BY CASE BASIS.
5. PROVIDE A SPECIALIZED HYDRANT LOCK FOR EACH HYDRANT. HYDRANT LOCKS SHALL BE MANUFACTURED BY MCGARD, INC. CONTACT AUTHORITY HAVING JURISDICTION FOR SPECIAL ORDERING INSTRUCTIONS.
6. PROVIDE FLAG ON HYDRANT - HEAVY DUTY FIVE (5) FOOT FIBERGLASS, WITH SPRING AND "L" BRACKET.
7. THE BARREL SHALL BE PAINTED YELLOW AND THE BONNET AND CAPS PAINTED RED. FACTORY APPLIED, ALL BELOW GRADE EXTERIOR SURFACES SHALL BE TREATED WITH A WATERPROOF BITUMINOUS COATING.

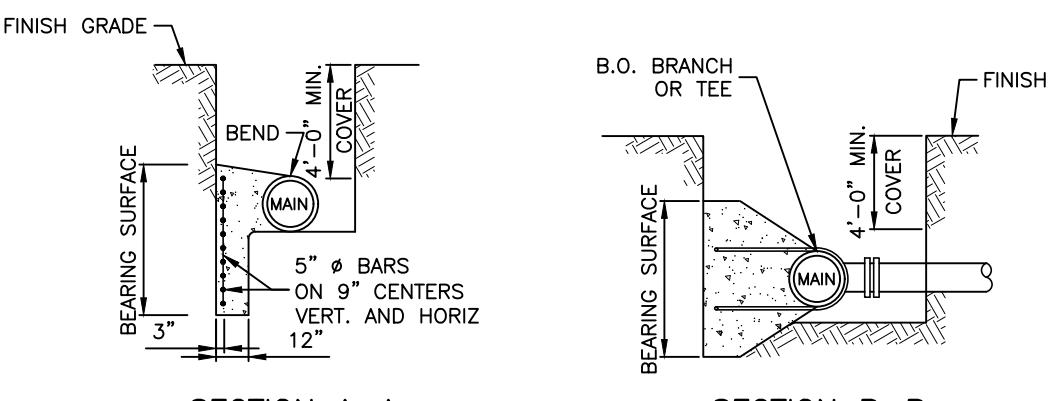
FIRE HYDRANT

NOT TO SCALE



SECTION A-A

PLAN



SECTION A-A

SECTION B-B

NOTES:

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4500 PSI.
2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS (ASTM GRADE 60).
3. ALL FITTINGS AND JOINTS SHALL BE COVERED WITH POLYETHYLENE FILM BEFORE PLACING OF CONCRETE.
4. PAINT ALL EXPOSED STEEL WITH TWO COATS OF BITUMASTIC PAINT OR EPOXY COATING.
5. FOR THE REQUIRED BEARING SURFACE SEE STANDARD THRUST BLOCKING DETAIL.
6. BEARING SURFACE MUST BE UNDISTURBED EARTH.

WATER-HORIZONTAL THRUST BLOCKING

NOT TO SCALE

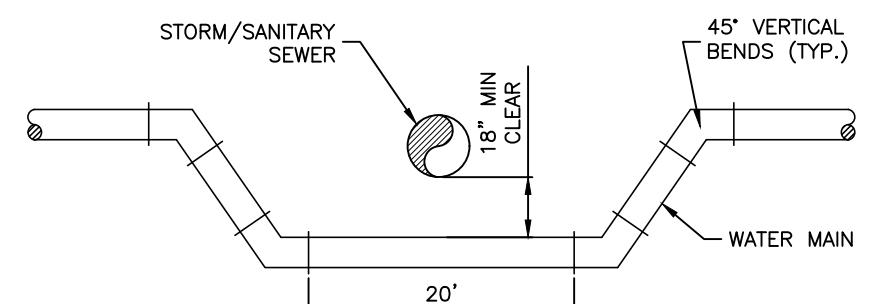
BEARING SURFACE REQUIRED - SQ.FT. HORIZONTAL THRUST BLOCKING & VERTICAL THRUST DOWNWARD 125 P.S.I.												
PIPE SIZE	6" & 8"			10" & 12"			16" - 18" 20"			24"		
	DEGREE OF BEND OR DEFLECTION			DEGREE OF BEND OR DEFLECTION			DEGREE OF BEND OR DEFLECTION			DEGREE OF BEND OR DEFLECTION		
22.5°	45°	90°	D.E.	22.5°	45°	90°	D.E.	22.5°	45°	90°	D.E.	
SAND 0.75 TON/SQ.FT.	3.4	6.0	11.0	6.4	6.7	12.8	23.4	14.2	14.8	28.8	52.9	
SOFT CLAY 1 TON/SQ.FT.	2.6	4.6	8.2	4.8	5.0	9.6	17.5	10.7	11.2	21.7	39.7	
SAND AND GRAVEL 2 TON/SQ.FT.	1.3	2.3	4.1	2.4	2.5	4.8	8.8	5.3	5.6	10.8	20.0	
CLAY 4 TON/SQ.FT.	1.0	1.2	2.1	1.3	1.3	2.4	4.4	2.7	2.8	5.4	10.0	
SAND AND GRAVEL 5 TON/SQ.FT.	1.0	1.0	1.6	1.0	1.9	3.5	2.2	1.6	4.4	8.0	5.7	
ROCK 15 TON/SQ.FT.	-	-	1.0	0.4	-	1.0	1.2	0.8	1.0	1.4	2.6	
PIPE SIZE	30"			36"			42"			48"		
22.5°	45°	90°	D.E.	22.5°	45°	90°	D.E.	22.5°	45°	90°	D.E.	
SAND 0.75 TON/SQ.FT.	40.3	76.5	139.0	99.1	55.5	107.5	197.5	140.0	74.3	144.7	266	
SOFT CLAY 1 TON/SQ.FT.	30.2	57.4	104.3	74.3	41.6	80.6	148.0	103.0	55.7	108.5	200	
SAND AND GRAVEL 2 TON/SQ.FT.	15.1	28.7	52.1	37.2	20.8	40.3	74.0	52.5	27.9	54.3	100.0	
CLAY 4 TON/SQ.FT.	7.6	14.6	26	18.6	10.4	20.2	37.0	26.3	14.0	27.0	50.0	
SAND AND GRAVEL 5 TON/SQ.FT.	6.0	11.5	20.9	14.9	8.3	16.1	29.6	21.0	11.2	21.7	40.0	
ROCK 15 TON/SQ.FT.	2.0	3.8	7.0	5.0	1.4	2.8	5.4	7.0	3.7	7.2	13.3	

NOTES:

1. D.E. DENOTES DEAD END.

WATER-THRUST BLOCKING TABLE

NOT TO SCALE

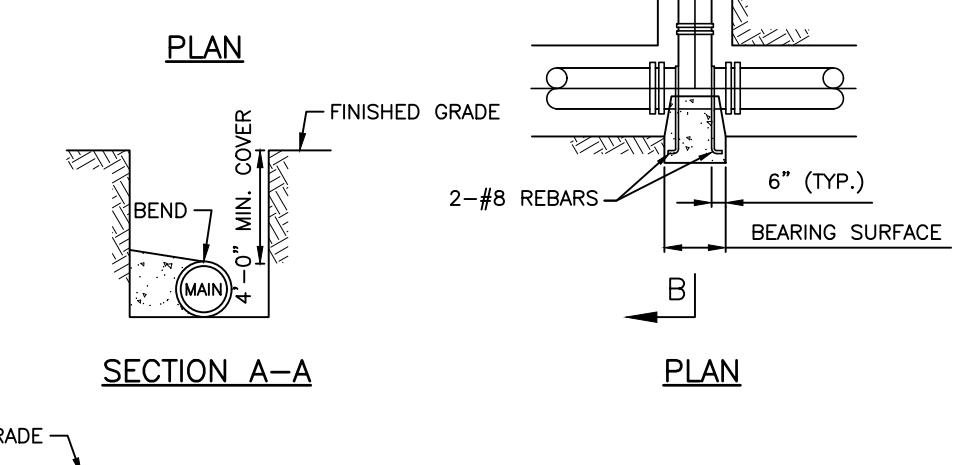


NOTES:

1. ALL PIPE AND FITTINGS SHALL BE RESTRAINED PER AUTHORITY SPECIFICATIONS AND BY DIRECTION OF THE ENGINEER.
2. THE USE OF CONCRETE THRUST BLOCK SHALL BE PER THE DIRECTION OF THE AUTHORITY AND ENGINEER.

STORM SEWER - SANITARY SEWER WATER CROSSING

NOT TO SCALE

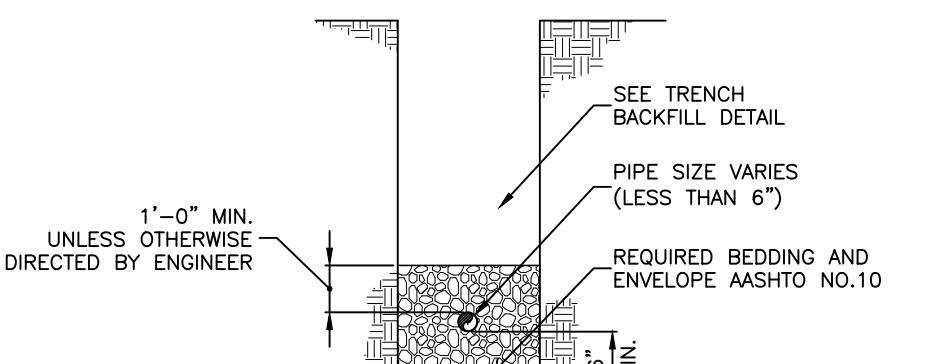


SECTION A-A

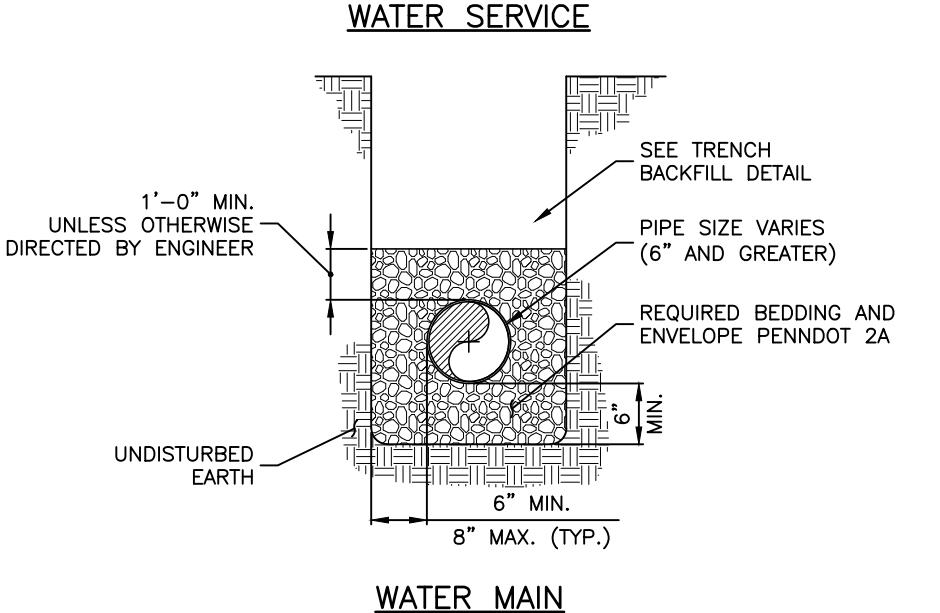
SECTION B-B

NOTES:

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4500 PSI.
2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS (ASTM GRADE 60).
3. ALL FITTINGS AND JOINTS SHALL BE COVERED WITH POLYETHYLENE FILM BEFORE PLACING OF CONCRETE.
4. PAINT ALL EXPOSED STEEL WITH TWO COATS OF BITUMASTIC PAINT OR EPOXY COATING.
5. FOR THE REQUIRED BEARING SURFACE SEE STANDARD THRUST BLOCKING DETAIL.
6. BEARING SURFACE MUST BE UNDISTURBED EARTH.



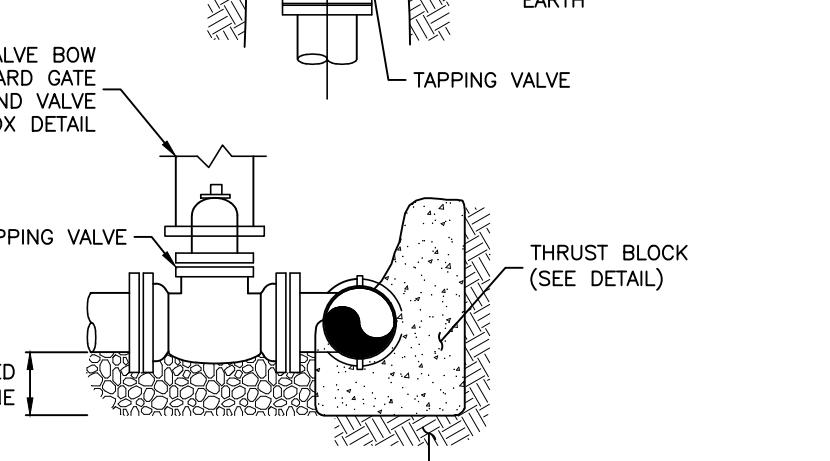
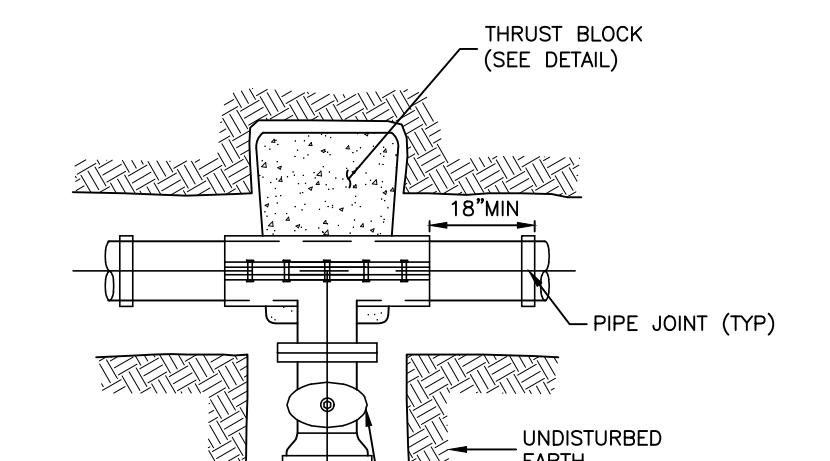
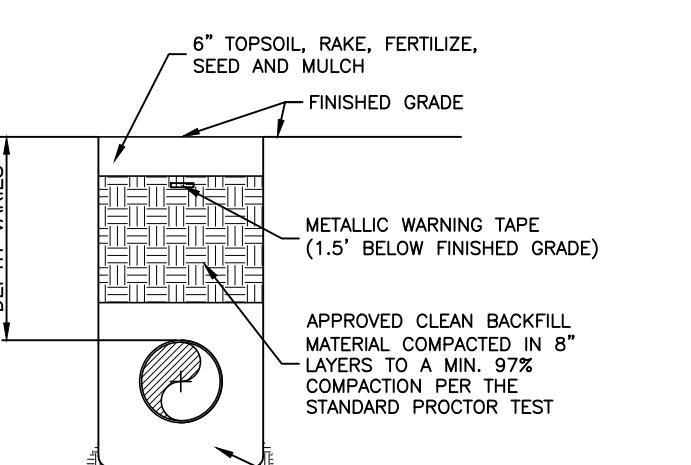
WATER SERVICE



WATER MAIN

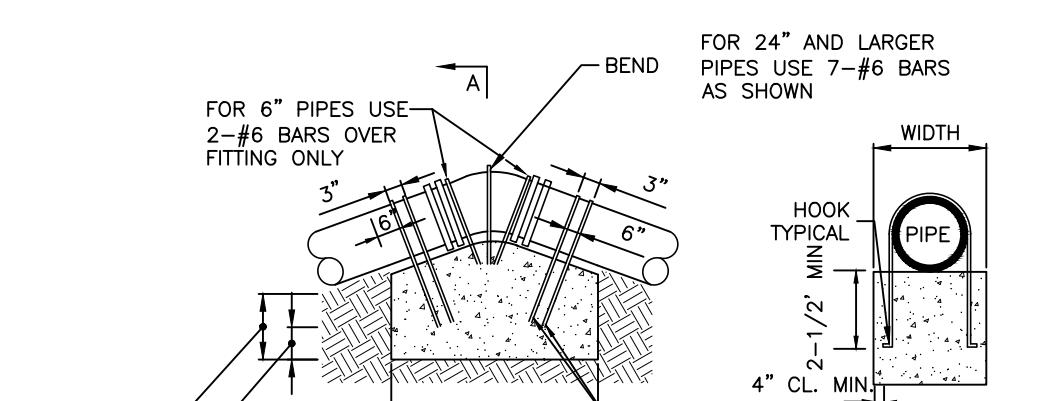
PIPE BEDDING - WATER MAIN AND SERVICE

NOT TO SCALE



TAPPING SLEEVE AND VALVE

NOT TO SCALE



TYPICAL SECTION - VERTICAL THRUST UPWARD SECTION A-A

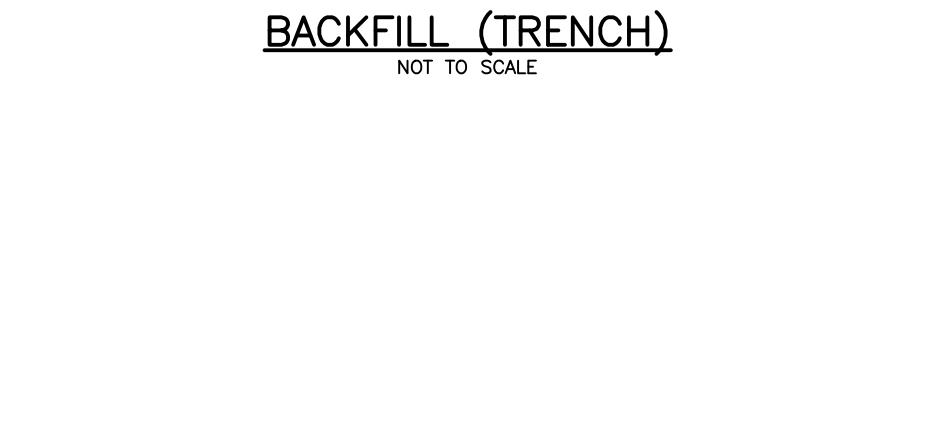
CONCRETE BLOCKING DIMENSIONS, VERTICAL THRUST UPWARD 150 P.S.I. WORKING PRESSURE											
PIPE SIZES	11.25"	22.25"	45"	11.25"	22.25"	45"	11.25"	22.25"	45"	11.25"	22.25"
6" & 8"	3'	4'	6'	3'	4'	6'	3'	4'	6'	2'	3'
10" & 12"	3.5'	4'	7'	4'	4'	7'	4'	4'	7'	2.5'	3'
14" & 16"	4'	6'	9'	4.5'	4.5'	9.5'	4.5'	4.5'	9.5'	4'	5'
18" & 20"	5'	6.5'	11.5'	5'	5'	11.5'	5'	5'	11.5'	5'	5.5'
24"	5'	9'	12.5'	5'	5'	12.5'	5'	5'	12.5'	5'	5.5'
30"	5.5'	9'	13.5'	5.5'	6'	13.5'	5.5'	6'	13.5'	6'	7'
36"	6.5'	11'	14'	5.5'	6.5'	14'	5.5'	6.5'	14'	6.5'	7'
42"	9'	13.5'	15'	6'	7'	15'	6'	7'	15'	7'	7'
48"	10'	14'	16'	6'	7'	16'	6'	7'	16'	7'	7'

NOTES:

1. ALL CONCRETE SHALL HAVE MIN. COMPRESSIVE STRENGTH OF 3000 PSI AT THE END OF 28 DAYS.
2. ALL REINFORCING STEEL SHALL BE DEFORMED BARS, (ASTM GRADE 60).
3. ALL FITTINGS AND JOINTS SHALL BE COVERED WITH POLYETHYLENE FILM BEFORE PLACING CONCRETE.
4. FOR ALL EXPOSED STEEL WITH TWO COATS OF VALDURA PAINT OR APPROVED EQUAL.

BACKFILL (TRENCH)

NOT TO SCALE



PLANT SCHEDULE								
SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	ROOT	CALIPER	HEIGHT	REMARKS
DECIDUOUS TREES								
•	AG	14	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE APPLE SERVICEBERRY	B & B	2 1/2"-3"		
•	CF	5	CERCIS CANADENSIS 'FOREST PANSY'	FOREST PANSY EASTERN REDBUD	B & B	2 1/2"-3"		
•	SK	4	STEWARTIA KOREANA	KOREAN STEWARTIA	B & B	2 1/2"-3"		
EVERGREEN TREES								
•	AC	12	ABIES CONCOLOR	WHITE FIR	B & B	8'-10'		
•	JE	15	JUNIPERUS VIRGINIANA 'CORCORAN'	EMERALD SENTINEL EASTERN REDCEDAR	B & B	8'-10'		
•	TT	27	THUJA OCCIDENTALIS 'TECHNY'	TECHNY ARBORVITAE	B & B	8'-10'		
PARKING AREA TREES								
•	AA	11	ACER RUBRUM 'AUTUMN FLAME'	AUTUMN FLAME RED MAPLE	B & B	2 1/2"-3"		
•	GI	10	GLEDTISIA TRIACANTHOS INERMIS	THORNLESS HONEY LOCUST	B & B	2 1/2"-3"		
•	OV	26	OSTRYA VIRGINIANA	AMERICAN HOPHORNBEAM	B & B	2 1/2"-3"		
•	QB	4	QUERCUS BICOLOR	SWAMP WHITE OAK	B & B	2 1/2"-3"		
•	QC	8	QUERCUS COCCINEA	SCARLET OAK	B & B	2 1/2"-3"		
•	TS	17	TILIA TOMENTOSA 'STERLING'	STERLING SILVER LINDEN	B & B	2 1/2"-3"		
STREET TREES								
•	CP	2	CARPINUS CAROLINIANA 'COSQU'	PALISADE AMERICAN HORNBEAM	B & B	2 1/2"-3"		
•	PM	2	PLATANUS X ACERIFOLIA 'MORTON CIRCLE'	EXCLAMATION LONDON PLANE TREE	B & B	2 1/2"-3"		
SHRUBS								
•	FG	117	FOTHERGILLA GARDENII	DWARF FOTHERGILLA	3 GAL	18"-24"		
•	IS	171	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY HOLLY	5 GAL	24"-30"		
•	IW	21	ILEX VERTICILLATA	WINTERBERRY	5 GAL	24"-30"		
•	MN	55	MORELLA PENNSYLVANICA	NORTHERN BAYBERRY	7 GAL	30"-36"		
•	PH	90	PANICUM VIRGATUM 'HEAVY METAL'	HEAVY METAL SNAFFLE GRASS	3 GAL	18"-24"		
•	PH2	119	PENNISETUM ALOPECUROIDES 'HAMELN'	HAMELN FOUNTAIN GRASS	5 GAL	24"-36"		
•	SS2	106	SPRAEA JAPONICA 'ANTHONY WATERER'	ANTHONY WATERER JAPANESE SPIREA	3 GAL	18"-24"		
BASIN PLANTINGS								
•	AA2	7	ARONIA ARBUTIFOLIA 'BRILLIANTISSIMA'	BRILLIANT RED CHokeBERRY	5 GAL	24"-36"		
•	HV	7	HAMAMELIS VIRGINIANA	COMMON WITCH HAZEL	7 GAL	36" MIN		
•	IW2	19	ILEX VERTICILLATA	WINTERBERRY	5 GAL	24"-30"		
•	MN2	11	MORELLA PENNSYLVANICA	NORTHERN BAYBERRY	7 GAL	30"-36"		
•	VA2	5	VIBURNUM DENTATUM	ARROWWOOD VIBURNUM	7 GAL	30"-36"		
PERENNIALS								
•	HO	95	HEMEROCALLIS X 'STELLA DE ORO'	STELLA DE ORO DAYLILY	1 GAL			
•	HP	155	HOSTA X 'PATRIOT'	PATRIOT HOSTA	1 GAL			
GROUND COVERS								
CM	281	COTONEASTER DAMMERI 'MOONGREEPER'	MOONGREEPER COTONEASTER	2" PLUG		12" o.c.		
LB	227	LIRIOPE MUSCARI 'BIG BLUE'	BIG BLUE LILYTURF	2" PLUG		12" o.c.		

Landscape Requirements Table - SALDO						
No.	Section	Requirement	Proposed	Waiver	REVISIONS	CHNO
1	162-57.A(2)	Perimeter Buffer Requirement	Minimum twenty-foot-wide buffer planting strip shall be provided along the entire perimeter of any tract subject to subdivision or land development approval, or any tract occupied by a use subject to the provisions of §200-78	Minimum twenty-foot-wide buffer planting strip around entire tract	YES	
2	162-55.B(3)	Woodland and hedgerow disturbance	Woodland and hedgerow disturbance exceeding any of the following standards shall require woodland replacement in accordance with Subsection B(6) through B(9) (a) Woodland and disturbance in excess of 10,000 SF for each principal use permitted	39,462 SF of existing woodland area to be disturbed 39,462 SF woodland disturbance - 10,000 SF maximum allowable disturbance area = 29,462 SF 29,462 / 300 = 98.2067	Replacement requirements listed below	
3	162-55.B(6)	Woodland Replacement	one tree and two shrubs shall be planted for each 300 SF of disturbed woodland area above the maximum area permitted under Subsection B(3) 39,462 SF woodland disturbance - 300 = 39,162 SF 39,162 / 300 = 130.5333 trees Shrubs Required: 99 Shrubs Required: 98.2067 x 2 = 197	A fee-in-lieu for required plantings is proposed	YES	
4	162-55.B(7)	Woodland Replacement	In addition to the vegetative replacement standards established in Subsection B(6), for each tree greater than six inches DBH removed, replacement trees shall be planted in accordance with the following schedule:	A fee-in-lieu for required plantings is proposed	YES	
			For Each Tree to be Removed, at the Following Sizes, dbh (inches)	Minimum Number and Caliper of Replacement Trees		
			One, 6 to 8 dbh	One, 3 to 1 1/2 inch caliper		
			One, 8 to 12 dbh	One, 4 to 4 1/2 or two 3 to 3 1/2 inch caliper		
			One, 12 to 18 dbh	One, 5 to 5 1/2 or three 3 to 3 1/2 inch caliper		
			One, 18 to 24 dbh	One, 6 to 6 1/2 or four 3 to 3 1/2 inch caliper		
			One, greater than 24 dbh	Two, 6 to 6 1/2 or five 3 to 3 1/2 inch caliper		
4	162-57.C(6)		Any Subdivision or Land Development shall provide street trees along the entire length of any public street	4 Street trees	NO	
			Spacing between street trees shall be no greater than 50 feet			
			315 LF of road frontage - 35 LF of access drive - 90 LF of existing wooded area to remain = 190 / 50 = 4 Street Trees			
5	162-57.C(7)(c)	Parking Lot Trees	The interior of each parking area or lot shall have at least one shade tree for every five parking spaces 380 parking spaces / 5 = 76 trees	76 trees	NO	
6	162-57.C(7)(f)	Parking Lot Interior Landscaping	[1] Landscaped areas at least 10 feet wide shall be provided around the periphery of parking areas [2] Landscaped islands at least 15 feet wide shall be provided between each set of two parking bays [3] Landscaped islands shall be provided at the end of each parking bay where such parking bay abuts or opens onto any street or accessway. Such landscaped islands shall be at least 15 feet in width; No more than 20 parking spaces shall occur between islands		NO	
7	162-57.D(1)	Minimum Planting Standards	The total number of plantings required shall be no less than the total calculated from all columns in the following table and shall be in addition to any required replacement plantings due to woodland disturbance	Deciduous Trees = 99 Evergreen Trees = 54 Shrubs = 728	YES	
			Improvement/Conditions	Deciduous Trees	Evergreen Trees	Shrubs
			Per 1,000 square feet gross building area, ground floor only (building "footprint"); residential subdivisions exempt	2	1	8
			Per 3,000 square feet off-street parking or loading area, excluding driveways less than 18 feet wide; residential subdivisions exempt	1	1	4
			Per 100 linear feet of new or existing public or private road frontage, measured on both sides where applicable	2	1	5
			Per 100 linear feet of existing tract boundary, where not coincident with existing or proposed road frontage	1	2	8
			Building Area Improvements/Conditions: 45,722 SF of gross building area / 1,000 = 45.72			
			45.72 x 2 = 92 Deciduous Trees			
			45.72 x 1 = 46 Evergreen Trees			
			45.72 x 8 = 366 Shrubs			
			Parking & Loading Area Improvements/Conditions: 132,319 SF of parking & loading area / 2000 = 66.16			
			66.16 x 1 = 67 Deciduous Trees			
			66.16 x 1 = 67 Evergreen Trees			
			66.16 x 4 = 265 Shrubs			
			Road Frontage Improvements/Conditions: 315 LF of road frontage / 100 = 3.15			
			3.15 x 2 = 7 Deciduous Trees			
			3.15 x 1 = 4 Evergreen Trees			
			3.15 x 5 = 16 Shrubs			
			Tract Boundary Improvements/Conditions: 3,112 LF of Tract Boundary / 100 = 31.12			
			31.12 x 1 = 32 Deciduous Trees			
			31.12 x 2 = 63 Evergreen Trees			
			31.12 x 8 = 249 Shrubs			
			Total Calculated Plantings Required per §162-57.D(1): Deciduous Trees = 198 Evergreen Trees = 180 Shrubs = 896			

LANDSCAPE NOTES & DETAILS

RDS AUTOMOTIVE GROUP	CHESTER SPRINGS SERVICE CENTER
500 POTTSVILLE PKWY, CHESTER SPRINGS, PA 19425 UPPER UMBRILIAN TOWNSHIP, CHESTER COUNTY, PA	

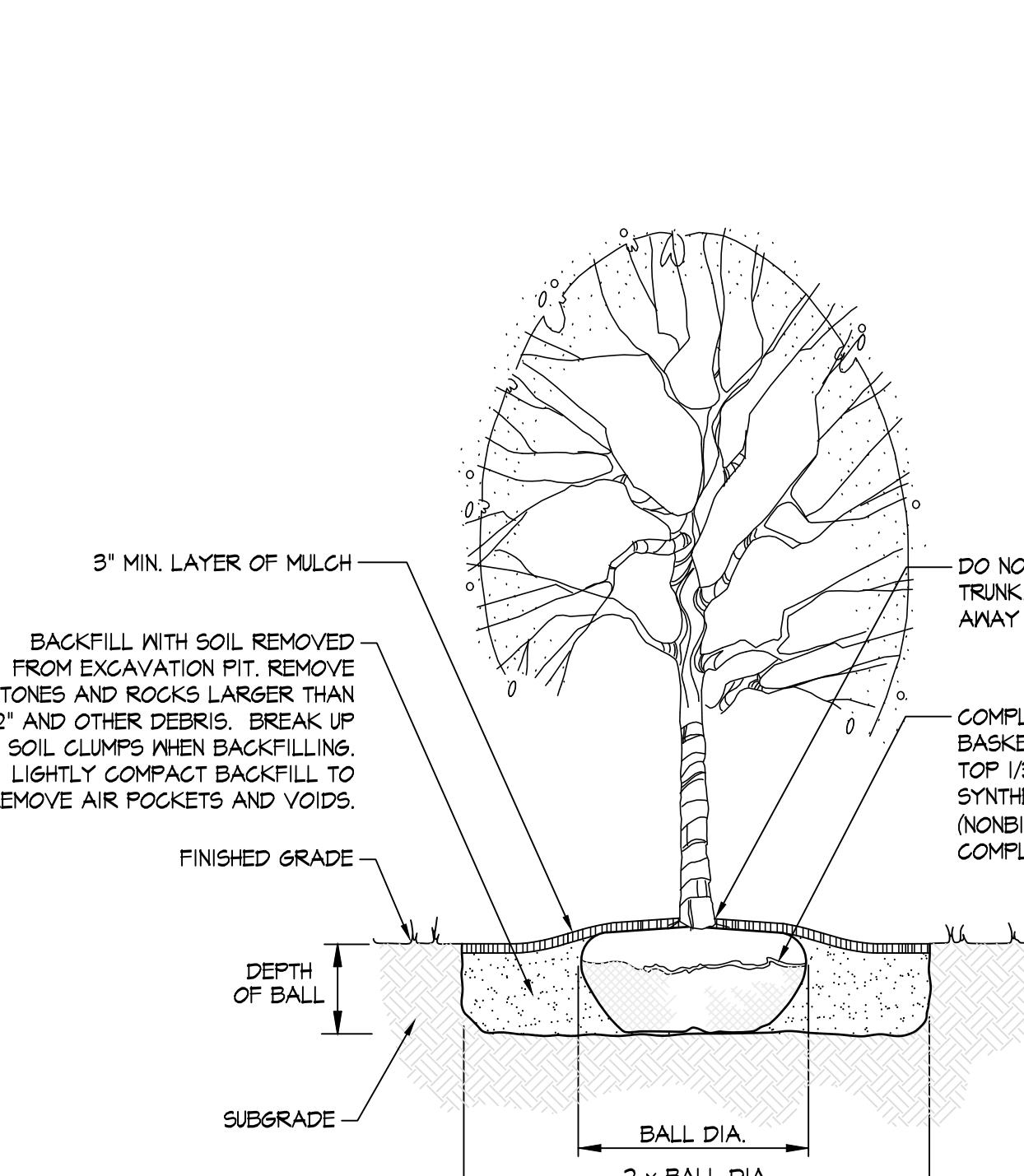
TAN AND ASSOCIATES
YOUR GOALS. OUR MISSION.
1700 MARKET STREET, SUITE 3100
PHILADELPHIA, PA 19103
TEL: 215-262-3950
FAX: 215-627-3459
www.tandassociates.com

OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

DESIGNED BY **JDT**
CHECKED BY **JDT/KAL**
DRAWN BY **SEE**
DATE **08/01/2024**
SCALE **AS SHOWN**
PROJ. NO. **PORS00021**

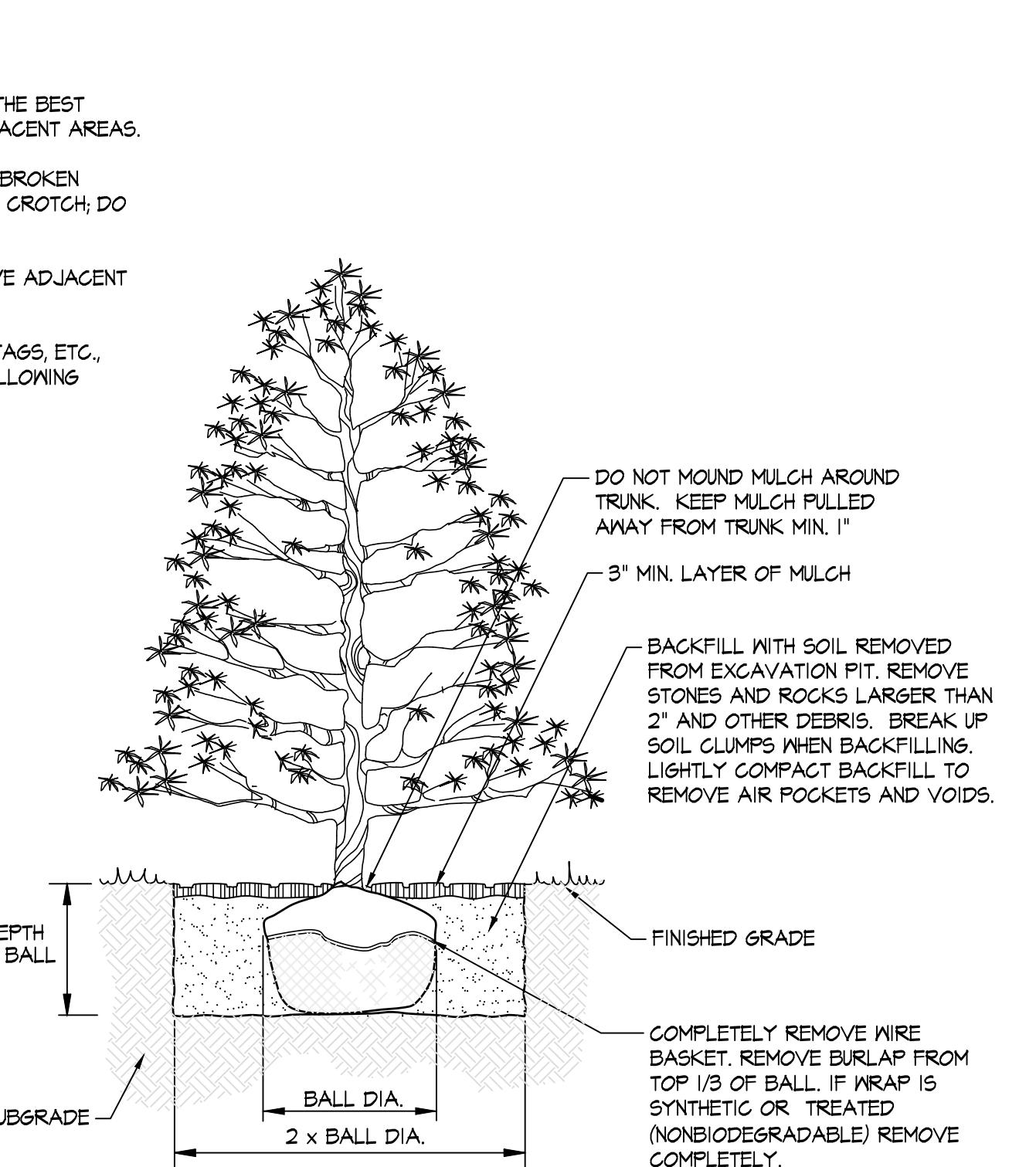
LSP-DTL-1

18 OF **35**



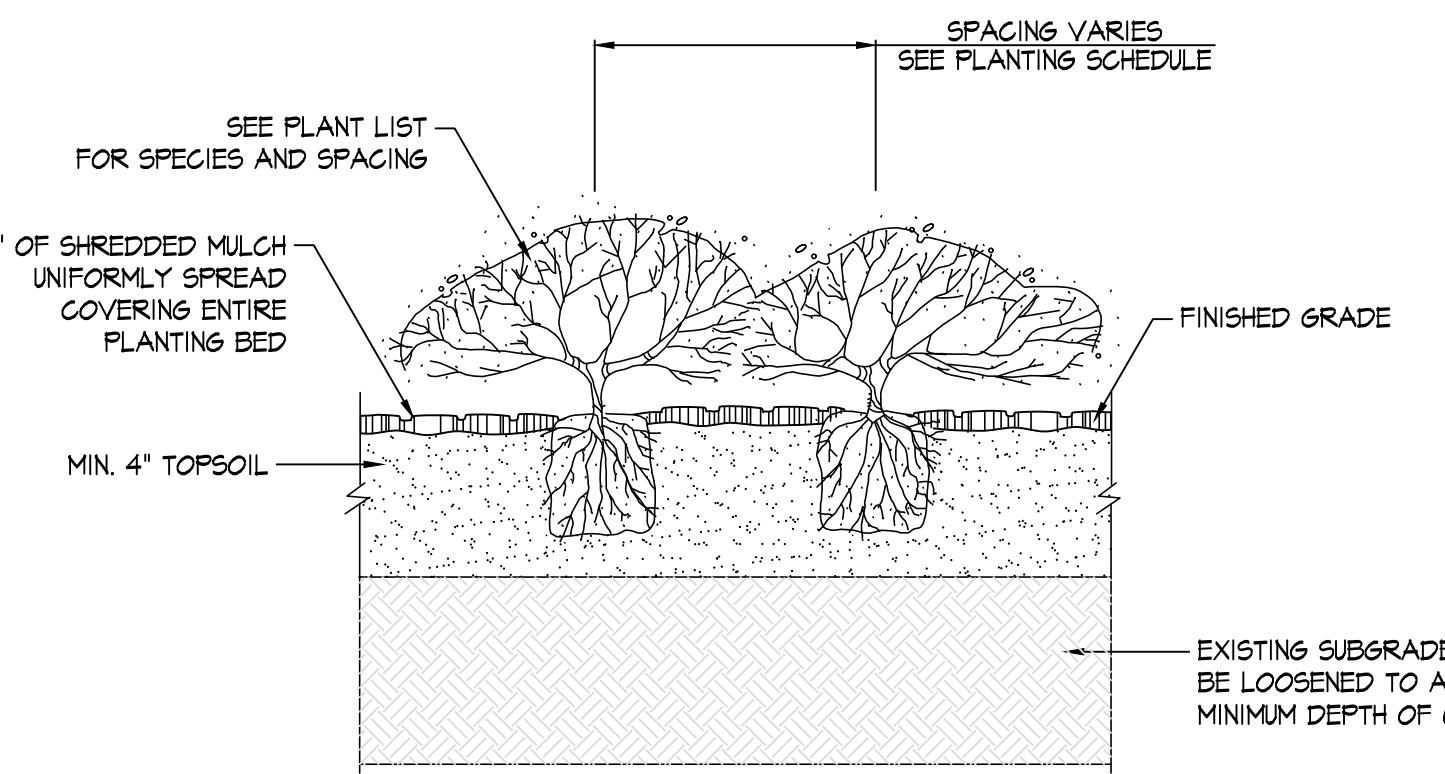
DECIDUOUS TREE PLANTING

NOT TO SCALE



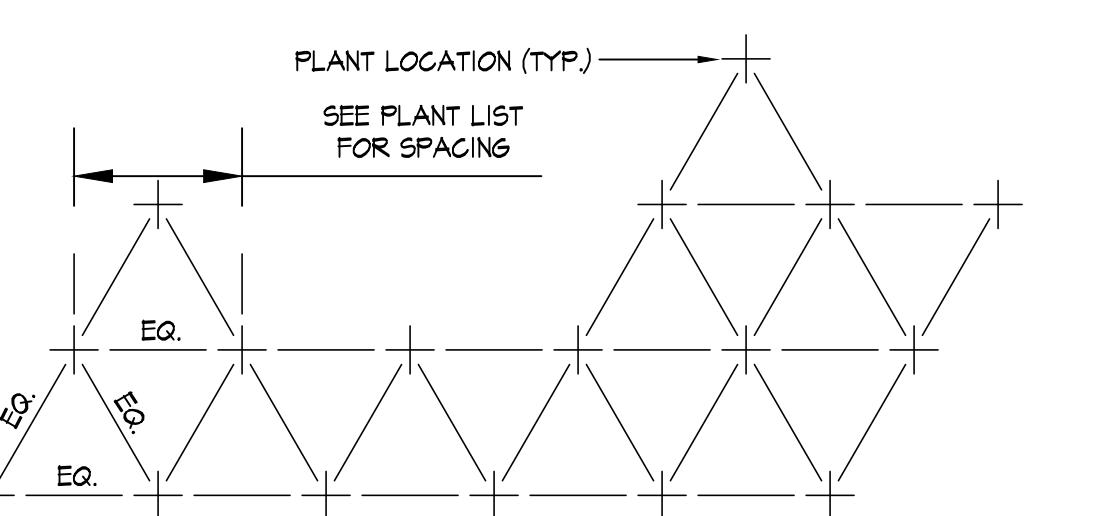
EVERGREEN TREE PLANTING

NOT TO SCALE



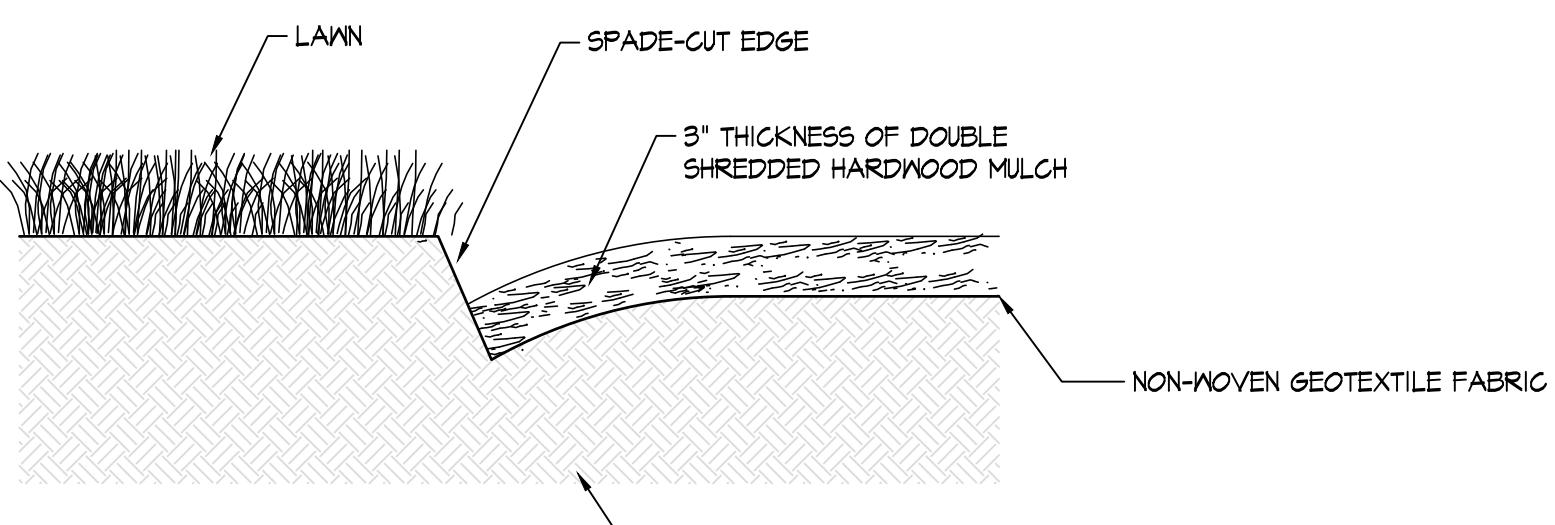
PLUG AND PERENNIAL PLANTING

NOT TO SCALE



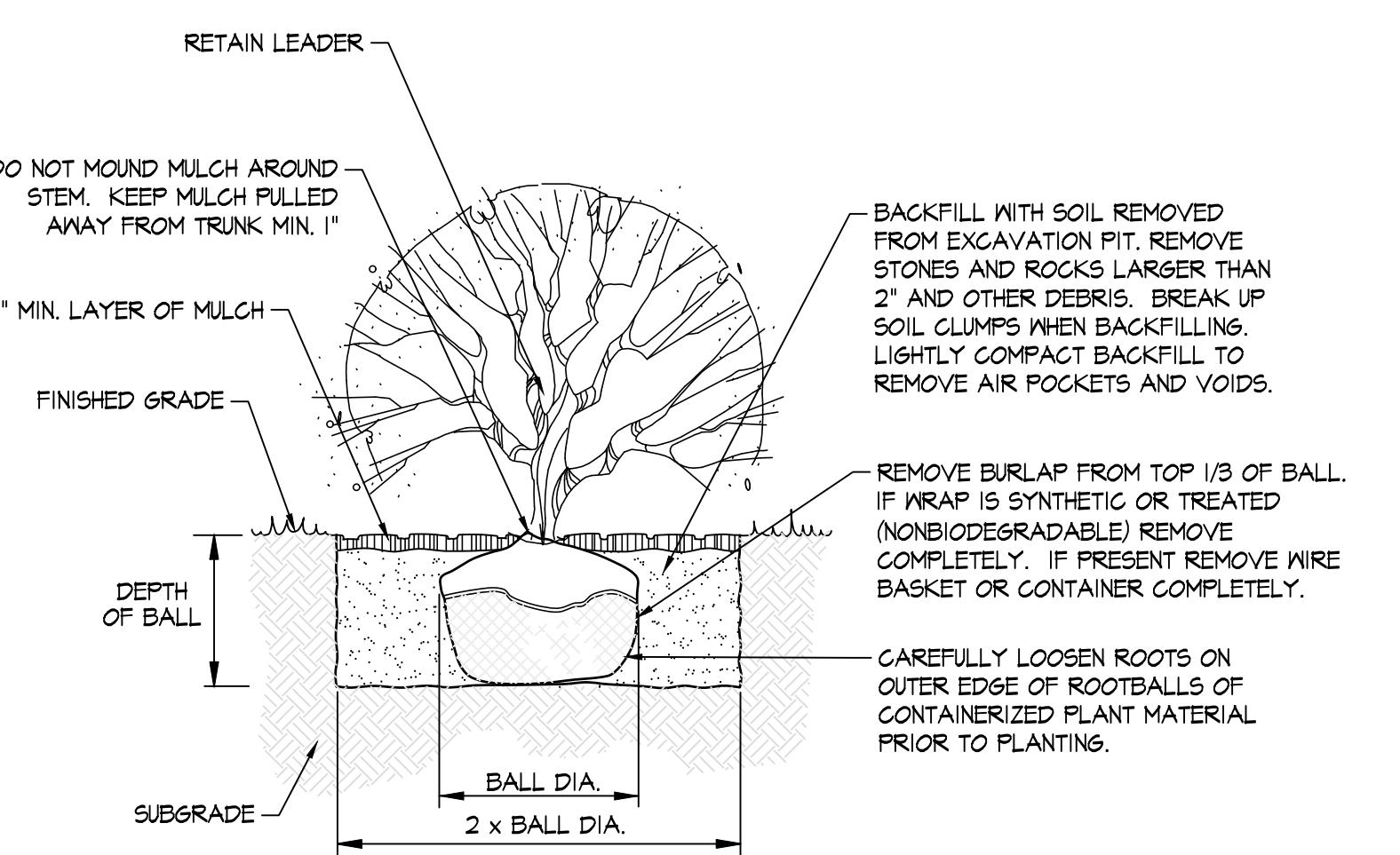
PLANT SPACING DIAGRAM

NOT TO SCALE



EDGING AT MULCH BED

NOT TO SCALE



SHRUB PLANTING

NOT TO SCALE

LANDSCAPE PLANTING NOTES AND SPECIFICATIONS:

- ALL PLANT MATERIAL SHALL BE PROVIDED AND INSTALLED IN STRICT CONFORMANCE WITH USDA STANDARDS FOR NURSERY STOCK AND THE 'AMERICAN NURSERY AND LANDSCAPE ASSOCIATION' STANDARDS LATEST EDITIONS.
- THE CONTRACTOR SHALL VERIFY ALL UTILITIES WITHIN WORK AREA PRIOR TO COMMENCING WITH ANY EXCAVATIONS AND SHALL BE RESPONSIBLE FOR THEIR PROTECTION.
- THE CONTRACTOR SHALL FURNISH AND PLANT ALL PLANTS SHOWN ON THE DRAWINGS, AS SPECIFIED, AND IN QUANTITIES INDICATED ON THE PLANT LIST. IF A DISCREPANCY SHOULD ARISE BETWEEN THE AMOUNT OF PLANTS SHOWN ON THE PLAN VS. THE PLANT SCHEDULE, THE PLAN SHALL GOVERN.
- ALL PLANTS SHALL BE NURSERY GROWN.
- ALL PLANTS SHALL BE HARDY UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT.
- ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OR GROWTH. THEY SHALL BE SOUND, HEALTHY AND VIGOROUS WELL BRANCHED AND DENSELY FOLIATED WHEN IN LEAF. THEY SHALL BE FREE OF DISEASE AND INSECT PESTS, EGGS OR LARVAE. THEY SHALL HAVE HEALTHY WELL-DEVELOPED ROOT SYSTEMS.
- SUBSTITUTIONS: WHEN PLANTS OF A SPECIFIED KIND OR SIZE ARE NOT AVAILABLE WITHIN A REASONABLE DISTANCE, SUBSTITUTIONS MAY BE MADE UPON REQUEST BY THE CONTRACTOR IF APPROVED BY THE LANDSCAPE ARCHITECT OR HIS/HER REPRESENTATIVE.
- ALL AREAS TO BE SHOWN AS LAWN SHALL BE SEDED, AS SPECIFIED, AND WATERED UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
- TREE LOCATIONS MAY NEED TO BE ADJUSTED BASED ON LOCATIONS OF UTILITIES, FIELD CONDITIONS, OR FINAL GRADING. THE CONTRACTOR SHALL NOTIFY THE OWNER AND/OR THEIR REPRESENTATIVE IF ADJUSTMENTS ARE NECESSARY.
- ALL PLANTING BEDS TO RECEIVE 3" SHREDDED HARDWOOD MULCH.
- ROOT BALLS OF ALL PLANTS SHALL BE ADEQUATELY PROTECTED AT ALL TIMES FROM SUN AND DRYING WINDS OR FROST.
- PLANTS WITH BROKEN ROOT BALLS, TRUNK AND BARK DAMAGE OR EXCESSIVE DAMAGE TO THE CROWN SHALL BE REPLACED PRIOR TO PLANTING.
- ROPE AT TOP OF BALL SHALL BE CUT. REMOVE TOP 1/3 OF BURLAP. ALL NON-BIODEGRADABLE MATERIAL SHALL BE TOTALLY REMOVED. WIRE BASKETS SHALL BE CAREFULLY REMOVED ENTIRELY AT THE TIME OF PLANTING, PREFERABLY AFTER THE ROOT BALL HAS BEEN INSTALLED IN THE PLANTING PIT.
- PREPARATION OF PLANTING: CLEAN SOIL EXCAVATED FROM PLANTING PIT OF ROOTS, PLANTS, STONES LARGER THAN 2", CLAY LUMPS, AND OTHER EXTRANEous MATERIALS HARMFUL OR TOXIC TO PLANT GROWTH.
- DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING.
- NO PLANT SHALL BE PLACED IN THE GROUND BEFORE ROUGH GRADING HAS BEEN COMPLETED AND APPROVED BY THE PROJECT LANDSCAPE ARCHITECT OR HIS/HER EQUAL.
- INSTALL ALL PLANTS SO THAT THE TOP OF THE ROOTBALL IS SLIGHTLY ABOVE FINISHED GRADE. IN NO CASE SHALL THE PLANT BE INSTALLED WITH NO LESS THAN THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANT'S ORIGINAL ROOT CROWN. EXCESS SOIL MAY EXIST AROUND THE ROOT CROWN FROM NURSERY OPERATIONS. THIS EXCESS MATERIAL SHALL BE REMOVED PRIOR TO PLANTING TO DETERMINE THE PROPER BALL INSTALLATION DEPTH.
- ALL EXISTING TREES THAT ARE TO BE SAVED AS DETERMINED BY LANDSCAPE ARCHITECT SHALL BE PROTECTED UNTIL CONSTRUCTION HAS BEEN COMPLETED. AREA WITHIN DRIFLINE SHALL NOT BE TRAVELED ACROSS BY CONSTRUCTION TRAFFIC.
- TREES PLANTED ALONG STREETS SHALL HAVE A SINGLE STRAIGHT TRUNK THAT DOES NOT FORK BELOW 6'.
- ALL PLANTS SHALL BE BALLED AND WRAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL NON-BIODEGRADABLE ROOT WRAPPING MATERIAL SHALL BE REMOVED AT TIME OF PLANTING.
- WITH CONTAINER GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE CONTAINER BALL CUT THROUGH THE SURFACE IN TWO VERTICAL LOCATIONS MINIMUM.
- THE CONTRACTOR SHALL LAYOUT WITH IDENTIFIABLE STAKES INDIVIDUAL TREE AND SHRUB LOCATIONS AND AREAS FOR MULTIPLE PLANTING ALONG WITH THE ARRANGEMENTS AND OUTLINE OF PLANTING BEDS AS INDICATED ON DRAWING. THE LAYOUT OF PLANTING WILL THEN BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO ANY EXCAVATION OF PLANT PITS OR PLANT BEDS.
- AT PLANTING TIME, ALL PLANT MATERIAL SHALL BE TRIMMED TO REMOVE BROKEN AND/OR DEAD VEGETATIVE MATERIAL.
- ALL PLANTS SHALL BE INSTALLED AS PER THE PLANTING DETAILS AND THE CONTRACT SPECIFICATIONS, WHERE APPLICABLE.
- ALL PLANTS SHALL BE INSTALLED PLUMB UNLESS OTHERWISE SPECIFIED.
- ALL PLANTS SHALL BE THOROUGHLY WATERED TWICE AFTER THE FIRST 24 HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY OR MORE OFTEN, IF NECESSARY, DURING THE FIRST GROWING SEASON.
- CONDITIONS DETERIMENTAL TO PLANTS: THE CONTRACTOR SHALL NOTIFY THE PROJECT REPRESENTATIVE IN WRITING OF ALL SOIL OR DRAINAGE CONDITIONS WHICH THE CONTRACTOR CONSIDERS DETERIMENTAL TO THE GROWTH OF PLANTS. HE SHALL STATE THE CONDITIONS AND SUBMIT A PROPOSAL FOR CORRECTING THE CONDITIONS INCLUDING ANY CHANGE IN COST FOR REVIEW AND ACCEPTANCE BY THE PROJECT REPRESENTATIVE.
- WARRANT TREES AND SHRUBS FOR A MINIMUM PERIOD OF 18 MONTHS AFTER DATE OF WRITTEN FINAL ACCEPTANCE BY THE LANDSCAPE ARCHITECT AND/OR THE OWNERS AUTHORIZED REPRESENTATIVE AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MONITOR THE PROJECT PLANTINGS DURING THE WARRANTY PERIOD AND NOTIFY THE OWNER IF PROBLEMS DEVELOP. PLANTS THAT DIE DURING THE WARRANTY PERIOD SHALL BE REMOVED IMMEDIATELY AND REPLACED.

TREE PROTECTION NOTES:

- NO MORE THAN THREE (3) INCHES OF SOIL SHALL BE PLACED AROUND THE TRUNKS OF TREES WHICH ARE TO REMAIN. FOR THOSE TREES WHICH ARE TO REMAIN, WHERE MORE THAN THREE (3) INCHES OF SOIL ARE TO BE PLACED, TREE WELLS SHALL BE CONSTRUCTED TO PRESERVE TREES.
- TREES TO REMAIN SHALL BE PROTECTED BY WOODEN SLAT SNOW FENCING OR ORANGE SAFETY CONSTRUCTION FENCE, PLACED AROUND THE DRIP LINE OF SUCH TREES, AS SHOWN IN THE TREE PROTECTION DETAIL.
- NO BOARDS OR OTHER MATERIAL SHALL BE NAILED TO TREES DURING CONSTRUCTION, AND NO TREES TO REMAIN SHALL BE SPRAYED WITH PAINT.
- HEAVY EQUIPMENT OPERATORS SHALL AVOID DAMAGING EXISTING TREE TRUNKS AND ROOTS. FEEDER ROOTS OF TREES TO BE PRESERVED SHALL NOT BE CUT CLOSER THAN TWENTY-FIVE (25) FEET FROM TREE TRUNKS.
- TREE TRUNKS AND EXPOSED ROOTS DAMAGED DURING CONSTRUCTION SHALL BE PROTECTED FROM FURTHER DAMAGE BY BEING PRUNED FLUSH, AND IF TRUNKS ARE SCARRED THEY SHALL BE TRACED OUT FOR PROPER HEALING.
- TREE LIMBS DAMAGED DURING CONSTRUCTION SHALL BE SAWED FLUSH TO TREE TRUNKS AND TREATED WITH TREE PAINTS AS NECESSARY.
- THE OPERATION OF HEAVY EQUIPMENT OVER ROOT SYSTEMS OF SUCH TREES SHALL BE MINIMIZED IN ORDER TO PREVENT SOIL COMPACTION.
- DECIDUOUS TREES SHALL BE GIVEN A HEAVY APPLICATION OF FERTILIZER TO AID IN THEIR RECOVERY FROM POSSIBLE DAMAGE CAUSED BY CONSTRUCTION OPERATIONS.
- CONSTRUCTION DEBRIS SHALL NOT BE DISPOSED OF NEAR OR AROUND THE BASES OF SUCH TREES.

LANDSCAPE NOTES & DETAILS
RPS AUTOMOTIVE GROUP
CHESTER SPRINGS SERVICE CENTER
500 POTTSVILLE PKWY, CHESTER SPRINGS, PA 19425
UPPER UCHIAN TOWNSHIP, CHESTER COUNTY, PA



OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

DESIGNED BY JDT
CHECKED BY JDT/KAL
DRAWN BY SEE
DATE 08/01/2024
SCALE AS SHOWN
PROJ. NO. PORS0021

DRAWING LSP-DTL-2
SHEET 19
OF 35



OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

BY	JDT
BY	JDT/KAL
BY	SEE
08/01/2024	
AS SHOWN	
O.	PORS00021

COPYRIGHT 2019, T&M ASSOCIATES – ALL RIGHTS RESERVED. THE COPYING OR REUSE OF THIS DOCUMENT OR PORTIONS THEREOF, FOR OTHER THAN THE ORIGINAL PROJECT OR THE PURPOSE ORIGINALLY INTENDED, WITHOUT THE WRITTEN PERMISSION OF T&M ASSOCIATES IS PROHIBITED.

PROJECT INFORMATION:
FILE PATH: G:\Projects\PORS\00021\Plans\
FILE NAME: PORS00021_DTL.dwg
LAST SAVED DATE AND TIME: 02 Oct 2024 10:45AM


HUBBELL
Outdoor Lighting

DATE:
LOCATION:

TYPE:
PROJECT:

CATALOG #:

RATIO Series

AREA/SITE LIGHTER

FEATURES

- Low profile LED area/site luminaire with a variety of IES distributions for lighting applications such as retail, commercial and campus parking lots
- Featuring Micro Strike Optics which maximizes target zone illumination with minimal losses at the house-side, reducing light trespass issues
- Visual comfort standard
- Compact and lightweight design with low EPA
- 3G rated for high vibration applications including bridges and overpasses
- Control options including photo control, occupancy sensing, NX Distributed Intelligence™ and 7-Pin with networked controls
- Best in class surge protection available



RELATED PRODUCTS

[Airo](#)
 [Cimarron LED](#)
 [Ratio Family](#)











See Certification
Specifications

CONTROL TECHNOLOGY





SPECIFICATIONS

CONSTRUCTION

- Rectilinear form mimics the traditional shoebox form factor keeping a similar but updated style and appearance, ideal for retrofit applications
- Die-cast housing with hidden vertical heat fins that are optimal for heat dissipation while keeping a clean smooth outer surface
- Corrosion resistant, die-cast aluminum housing with powder coat paint finish

OPTICS

- Entire optical aperture illuminates to create a larger luminous surface area resulting in a low glare appearance without sacrificing optical performance
- 80, 160, 320 or 480 midpower LEDs
- 3000K, 4000K or 5000K (70 CRI) CCT
- Zero uplight at 0 degrees of tilt
- Field rotatable optics

INSTALLATION

- Standard square arm mount, compatible with B3 drill pattern
- Optional universal mounting block for ease of installation during retrofit applications. Available as an option or accessory for square and round poles.
- Knuckle arm fitter option available for 2-3/8" OD tenon. Max tilt of 60 degrees with 4 degree adjustable increments. (Restrictions apply for 7-pin options)

ELECTRICAL

- Universal 120-277 VAC or 347-480 VAC input voltage, 50/60 Hz

ELECTRICAL (CONTINUED)

- Ambient operating temperature -40°C to 40°C
- Drivers have greater than 90% power factor and less than 20% THD
- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- Field replaceable surge protection device provides 20kA protection meeting ANSI/IEEE C62.41.2 Category C High and Surge Location Category C3; Automatically takes fixture off-line for protection when device is compromised

CONTROLS

- Photo control, occupancy sensor and wireless available for complete on/off and dimming control
- 7-pin ANSI C136.41-2013 photocontrol receptacle option available for twist lock photocontrols or wireless control modules (control accessories sold separately)
- 0-10 V Dimming Drivers are standard and dimming leads are extended out of the luminaire unless control options require connection to the dimming leads. Must specify if wiring leads are to be greater than the 6" standard
- SiteSync™ wireless control system is available via 7-pin See ordering information and details at: www.hubbelllighting.com/sitesync
- NX Distributed Intelligence™ available with in fixture wireless control module, features dimming and occupancy sensor
- wiSCAPE® available with in fixture wireless control module, features dimming and occupancy sensor via 7-pin

CERTIFICATIONS

- DLC® (DesignLights Consortium Qualified) with some Premium Qualified configurations. Please refer to the DLC website for specific product qualifications at www.designlights.org
- Listed to UL1598 and CSA C22.2#250 for wet locations and 40°C ambient temperatures
- 3G rated for ANSI C136.31 high vibration applications
- Fixture is IP66 rated
- Meets IDA recommendations using 3K configuration at 0 degrees of tilt
- This product qualifies as a "designate country construction material" per FAS 52.225-11 Buy American-Construction Materials under Trade Agreements effective 04/23/2020. See [Buy American Soluti](http://BuyAmerican.gov)

WARRANTY

- 5 year limited warranty
- See [HLI Standard Warranty](#) for additional information

KEY DATA

Lumen Range	3,000-48,000
Wattage Range	25-340W
Efficacy Range (LPW)	118-155
Fixture Projected Life (Hours)	170>60,000
Weights lbs. (kg)	13.5-24 (6.1-10.8)

PROJECT INFORMATION:

FILE PATH: G:\Projects\PORS\00021\Plans\

FILE NAME: PORS00021_DTL.dwg

LAST SAVED DATE AND TIME: 02 Oct 2024, 10:46AM

LAST SAVE BY: JTackett


HUBBELL
Outdoor Lighting

RATIO SERIES

AREA/SITE LIGHTER

ORDERING GUIDE

CATALOG #

Example: RAR1-80L-25-3K7-2-UNV-ASQ-BL-NXWE-BC

ORDERING INFORMATION

Series	# LEDs - Wattage	CCT/CRI	Distribution	Optics Rotation	Voltage
RAR1 Ratio Area Size 1	80L-25 25W - 3,000 Lumens 80L-39 39W - 5,200 Lumens 80L-50 50W - 6,000 Lumens 160L-70 70W - 9,000 Lumens 160L-100 100W - 12,000 Lumens 160L-115 115W - 15,000 Lumens 160L-135 135W - 18,000 Lumens	3K7 3000K, 70 CRI 4K7 4000K, 70 CRI 5K7 5000K, 70 CRI	2 IES TYPE II 3 IES TYPE III 4W IES TYPE IV 5QW IES TYPE V	Blank for no rotation L Optic rotation left R Optic rotation right	UNV Universal 120-277V 120 120V 208 208V 240 240V 277 277V 347 347V 480 480V
RAR2 Ratio Area Size 2	320L-110 110W - 15,000 Lumens 320L-140 140W - 18,000 Lumens 320L-165 165W - 21,000 Lumens 480L-185 185W - 24,000 Lumens 480L-210 210W - 27,000 Lumens 480L-240 240W - 30,000 Lumens 480L-255 255W - 36,000 Lumens 480L-295 295W - 42,000 Lumens 480L-340 340W - 48,000 Lumens				

Mounting	Color	Control Options Network	Options
ASQ Arm mount for square pole/flat surface	BLT Black Matte Textured	NXWE NX Wireless Enabled (module + radio)	BC Backlight control
ASQU Universal arm mount for square pole/flat surface	BLS Black Gloss Smooth	NXSPW_F NX Wireless, PIR Occupancy Sensor, Daylight Harvesting ⁴	F Fusing (must specify voltage)
Mounting Round Poles	DBT Dark Bronze Matte Textured	NXSP_F NX, PIR Occupancy Sensor, Daylight Harvesting ⁴	TB Terminal block
A_ Arm mount for round pole ¹	DBS Dark Bronze Gloss Smooth		2PF 2 power feed with 2 drivers ²
A_U Universal arm mount for round pole ¹	GTT Graphite Matte Textured		
Mounting Other	LGS Light Grey Gloss Smooth		
WB Wall bracket	PSS Platinum Silver Smooth		
MAF Mast arm fitter for 2-3/8" OD horizontal arm	WHT White Matte Textured		
K Knuckle	WHS White Gloss Smooth		
	VGT Verde Green Textured		
	Color Option	Control Options Other	
	CC Custom Color	SCP-40F Programmable occupancy sensor ³	
		7PR 7-Pin twist lock receptacle	
		7PR-SC 7-Pin receptacle with shorting cap	
		7PR-MD40F Low voltage sensor for 7PR	
		7PR-TL 7-Pin PCR with photocontrol	
		Sensors	
		BTS_F Bluetooth Programmable, PIR Occupancy/Daylight Sensor, 360° lens ⁴	
		BTSO_F Bluetooth Programmable, PIR Occupancy/Daylight Sensor, 360° lens, up to 12' mounting height ⁵	

Notes:

- 1 Replace "—" with "3" for 3.5"-4.13" OD pole, "4" for 4.18"-5.25" OD pole, "5" for 5.51"-6.5" OD pole
- 2 Not available with 25, 50, 255, 295 & 340W configurations
- 3 At least one SCPREMOTE required to program SCP motion sensor
- 4 Replace "—" with "14" for up to 14' mounting height, "40F" for 15'-40' mounting height
- 5 Replace "—" with "12" for up to 12' mounting height

STOCK ORDERING INFORMATION

Catalog Number	Lumens	Wattage	LED Count	CCT/CRI	Voltage	Distribution	Mounting	Finish
RAR1-100-4K-3	12,000	100W	160L	4000K/70CRI	120-277V	Type 3	Square Arm	Bronze
RAR1-100-4K-4W	12,000	100W	160L	4000K/70CRI	120-277V	Type 4W	Square Arm	Bronze
RAR1-135-4K-3	18,000	135W	160L	4000K/70CRI	120-277V	Type 3	Square Arm	Bronze
RAR1-135-4K-4W	18,000	135W	160L	4000K/70CRI	120-277V	Type 4W	Square Arm	Bronze
RAR2-165-4K-3	21,000	165W	320L	4000K/70CRI	120-277V	Type 3	Square Arm	Bronze
RAR2-165-4K-4W	21,000	165W	320L	4000K/70CRI	120-277V	Type 4W	Square Arm	Bronze

PHOTOMETRY

RATIO BROCHURE

RAR1/RAR2 PSG PAGE

INSTALLATION INSTRUCTIONS

HUBBELL®
Outdoor Lighting

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

RESET

SSS-H SERIES POLES

SQUARE STRAIGHT STEEL

APPLICATIONS

Lighting installations for side and top mounting of luminaires with effective projected area (EPA) not exceeding maximum allowable loading of the specified pole in its installed geographic location

CONSTRUCTION

- Shaft: One-piece straight steel with square cross section, flat sides and minimum 0.23" radius on all corners; Minimum yield of 46,000 psi (ASTM-A500, Grade B); Longitudinal weld seam to appear flush with shaft side wall; Steel base plate with axial bolt circle slots welded to pole shaft having minimum yield of 36,000 psi (ASTM A36)
- base cover: Two-piece square aluminum base cover included standard
- pole cap: Pole shaft supplied with removable cover when applicable; Tenon and post-top configurations also available
- hand hole: Rectangular 3x5 steel hand hole frame (2.38" x 4.38" opening); Mounting provisions for grounding lug located behind gasketed cover
- anchor bolts: Four galvanized anchor bolts provided per pole with minimum yield of 55,000 psi (ASTM F1554). Galvanized hardware with two washers and two nuts per bolt for leveling
- Anchor bolt part numbers:
 - 3/4 x 30 x 3 — TAB-30-M38
 - 1 x 36 x 4 — TAB-36-M38

FINISH

- Durable thermoset polyester powder coat paint finish with nominal 3.0 mil thickness
- Powder paint prime applied over "white metal" steel substrate cleaned via mechanical shot blast method
- Decorative finish coat available in multiple standard colors; Custom colors available; RAL number preferable

WAREHOUSE 'STOCKED' POLES:

- SSSH-20-40-STK and SSSH-25-40-STK
- The above catalog numbers use a combination of the S2 and B3 drill pattern

POLE CAP

TENON

BASE COVER

BASE DETAIL

HUBBELL®
Outdoor Lighting

RATIO Wall

RWL1/RWL2 LED WALLPACK

FEATURES

- Low profile LED wall luminaire with a variety of IES distributions for lighting applications such as retail, commercial and industrial building mount
- Featuring Micro Strike Optics which maximizes target zone illumination with minimal losses at the house-side, reducing light trespass issues
- Visual comfort standard
- Control options including photo control, occupancy sensing, NX Distributed Intelligence™, WiScape and 7-Pin with networked controls
- Battery Backup options available for emergency code compliance
- Quick-mount adapter allows easy installation/maintenance
- 347V and 480V versions for industrial applications and Canada
- Stock versions available in 3500lm and 5500lm configurations at 4000K

CONTROL TECHNOLOGY

SPECIFICATIONS

CONSTRUCTION

- Die-cast housing with hidden vertical heat fins that are optimal for heat dissipation while keeping a clean smooth outer surface
- Corrosion resistant, die-cast aluminum housing with powder coat paint finish
- Powder paint finish provides durability in outdoor environments. Tested to meet 1000 hour salt spray rating.

OPTICS

- Entire optical aperture illuminates to create a larger luminous surface area resulting in a low glare appearance without sacrificing optical performance
- 48 or 160 midpower LEDs
- 3000K, 4000K or 5000K (70 CRI/80 CRI) CCT
- Zero uplight distributions
- LED optics provide IES type II, III and IV distributions. Type II only available in RWL2 configurations.

INSTALLATION

- Quick-mount adapter provides easy installation to wall or to recessed junction boxes (4" square junction box)
- Designed for direct j-box mount.
- Integral back box contains 1/2" conduit hubs
- Integral back box standard with Dual Driver, Dual Power Feed, NX, WiScape and battery versions (battery versions for RWL1 only)

ELECTRICAL

- 120V-277V universal voltage 50/60Hz 0-10V dimming drivers
- 347V and 480V dimmable driver option for all wattages above 35W.

DATE: _____ LOCATION: _____
 TYPE: _____ PROJECT: _____
 CATALOG #: _____

RELATED PRODUCTS

[Ratio Family](#) [Ratio Area](#) [Ratio Flood](#)

ELECTRICAL (CONTINUED)

- Ambient operating temperature -40°C to 40°C
- Drivers have greater than .90 power factor and less than 20% Total Harmonic Distortion
- Driver RoHS and IP66
- Field replaceable surge protection device provides 20kA protection meeting ANSI/IEEE C62.41.2 Category C High and Surge Location Category C3; Automatically takes fixture off-line for protection when device is compromised
- Dimming drivers are standard and dimming leads are extended out of the luminaire unless control options require connection to the dimming leads. Must specify if wiring leads are to be greater than 6" standard.

CONTROLS

- Photo control, occupancy sensor and wireless available for complete on/off and dimming control
- Button photocell is suitable for 120-277V operation
- 7-pin ANSI C136.41-2013 photocontrol receptacle option available for twist lock photocontrols or wireless control modules (control accessories sold separately)
- NX Distributed Intelligence™ available with in fixture wireless control module, features dimming and occupancy sensor wiSCAPE® available with in fixture wireless control module, features dimming and occupancy sensor
- Integral Battery Backup provides emergency lighting for the required 90 minute path of egress
- Battery Backup suitable for operating temperatures -25°C to 40°C. RWL1 battery is 12.5W RWL2 battery is 18W

CONTROLS (CONTINUED)

- Dual Driver and Dual Power Feed options creates product configuration with 2 internal drivers for code compliance
- Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application.

CERTIFICATIONS

- Listed to UL1598 and CSAC22.2#250.0-24 for wet locations
- IP65 rated housing
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 04/23/2020. See Buy American Solutions
- DLC® (DesignLights Consortium Qualified), with some Premium Qualified configurations. Please refer to the DLC website for specific product qualifications at www.designlights.org

WARRANTY

- 5 year limited warranty
- See [HLI Standard Warranty](#) for additional information

KEY DATA

Lumen Range	1,300–18,800
Wattage Range	10–155
Efficacy Range (LPW)	119–148
Fixture Projected Life (Hours)	L70>60K
Weights lbs. (kg)	6.5/16.5 (2.9/7.5)

[PHOTOMETRY](#)

[RATIO BROCHURE](#)

[RARI/RAR2 PSG PAGE](#)

[INSTALLATION INSTRUCTIONS](#)

<p>RDS AUTOMOTIVE GROUP</p> <p>CHESTER SPRINGS SERVICE CENTER</p> <p>500 POTTSTOWN PIKE, CHESTER SPRINGS, PA, 19425 UPPER UWCHLAN TOWNSHIP, CHESTER COUNTY, PA</p>	<p>LIGHTING DETAILS</p>
--	-------------------------

©COPYRIGHT 20119, T&M ASSOCIATES - ALL RIGHTS RESERVED. THE COPYING OR REUSE
OF THIS DOCUMENT OR PORTIONS THEREOF, FOR OTHER THAN THE ORIGINAL PROJECT
OR THE PURPOSE ORIGINALLY INTENDED, WITHOUT THE WRITTEN PERMISSION OF T&M
ASSOCIATES IS PROHIBITED.

2'-0" FOR LIGHTS WITHIN 5' OF VEHICULAR TRAFFIC

0'-3" FOR LIGHTS OUTSIDE 5' OF VEHICULAR TRAFFIC

4' FOR POLES UNDER 20'

5' FOR POLES 20' TO 29'

6' FOR POLES OVER 30'
OR PER MANUFACTURER'S RECOMMENDATIONS (WHICHEVER IS GREATER)

P.V.C. CONDUIT FOR BRANCH WIRING

BASE COVER

HANDHOLE

GROUND BOUNDING JUMPER

PROVIDE GROUT BETWEEN BASE COVER & TOP OF CONCRETE

GRIND ALL EXPOSED CONCRETE SMOOTH

GRADE

SONOTUBE POURED CONCRETE (18" FOR POLES UP TO 25' HIGH FOR POLES OVER 25' HIGH INC AS REQUIRED TO SUIT BOLT CIR)

ANCHOR BOLTS

REINFORCING RODS (8 #3 VERT #3 HORZ. AT 12" O.C.)

DEFORMED RE-BAR 2'-0" BELOW BASE

SBP-LED Battery Park

Luminaires: Tulips - Struts

Throughout Battery Park and Brookfield Place (formerly the World Financial Center) in New York, these luminaires stand silhouetted against the sky of the famed harbor. By day their tulip contour and reserved detailing evoke 19th Century Manhattan. By night their brilliant light enables the enclave to continue as an active recreational facility well into the evening. Plazas, esplanades, and streets shine in the light of this luminaire.

Built to NYC's stringent specifications for durability and vandal resistance with high-strength cast aluminum structure and polycarbonate globe. Several decorative bases are available for appropriate mating with a variety of ornamental posts.

Luminaire Height: 27 1/2" to 30"
Diameter: 17 1/2"

For Ordering Information see reverse.

Shown with 10 ft. aluminum pole. Catalog #: SAL-B-10'

SBP Battery Park Luminaire at
Battery Park City in New York City

SBP-LED utilizes the most current solid state technology to deliver high lumen output, exceptional light distribution, superior visual comfort, extended service life, and energy reduction.

RSA

Round Straight Aluminum Pole
No Arm — 4-Bolt Base

Satin Aluminum or Powder Coated Finish per Customer Specification.

Pole
The pole shaft will be constructed of seamless extruded tube of 6063 Aluminum Alloy per the requirements of ASTM B221. The shaft assembly shall be full-length heat treated after base weld to produce a T6 temper.

Base Style

4-Bolt Cast Aluminum Base Flange of Alloy 356-T6 with Aluminum Bolt Covers (Alloy 356-F) and Stainless Steel Hex Head Attaching Screws.

Handhole

4"-5" Butt Diameters - 2" x 4" Handhole with curved Lap Style Aluminum Door and two (2) SS Self-Tapping Attaching Screws. A Grounding Provision incorporating a 1/4"-20NC hole is provided opposite the Handhole.

6" Butt Diameter - Reinforced, 3" x 5" curved Cast Aluminum Frame (Alloy 356-T6) with Aluminum Door and two (2) SS Hex Head Screws. A Grounding Provision incorporating a 3/8" diameter hole is provided opposite the Handhole.

7 1/4" Butt Diameters - Reinforced, 4" x 6" curved Cast Aluminum Frame (Alloy 356-T6) with Aluminum Door and two (2) SS Hex Head Screws. Reinforced Frame will contain a tapped 3/8"-16NC Grounding Provision.

Anchorage

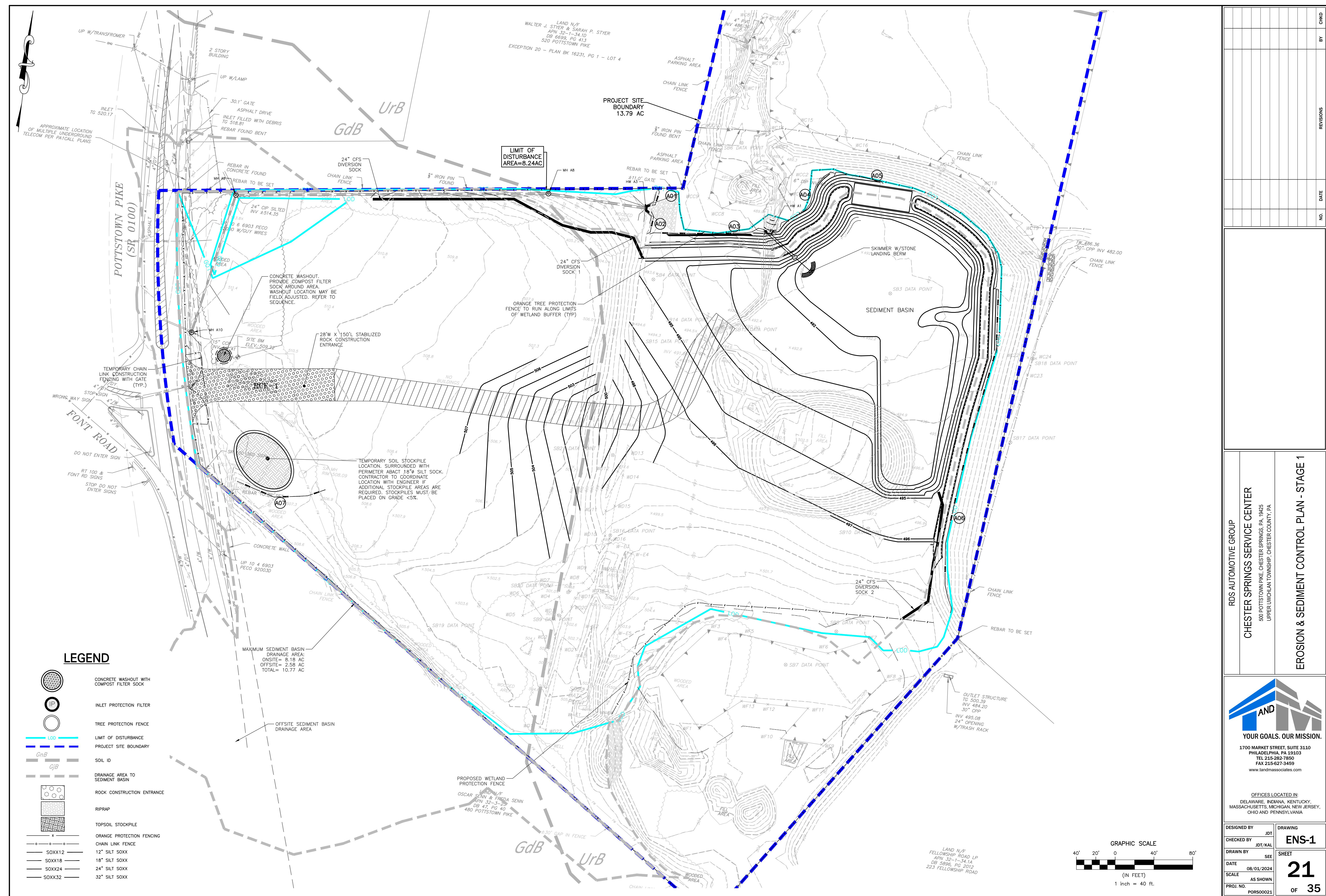
Anchorage Kit will include four (4) L-shaped Steel Anchor Bolts conforming to AASHTO M314-90 Grade 55, Ten inches (10") of threaded end will be galvanized per ASTM A153. Kits will contain four (4) Hex Nuts, four (4) Lock Washers, and four (4) Flat Washers (all components Galvanized Steel). A bolt circle template will be provided.

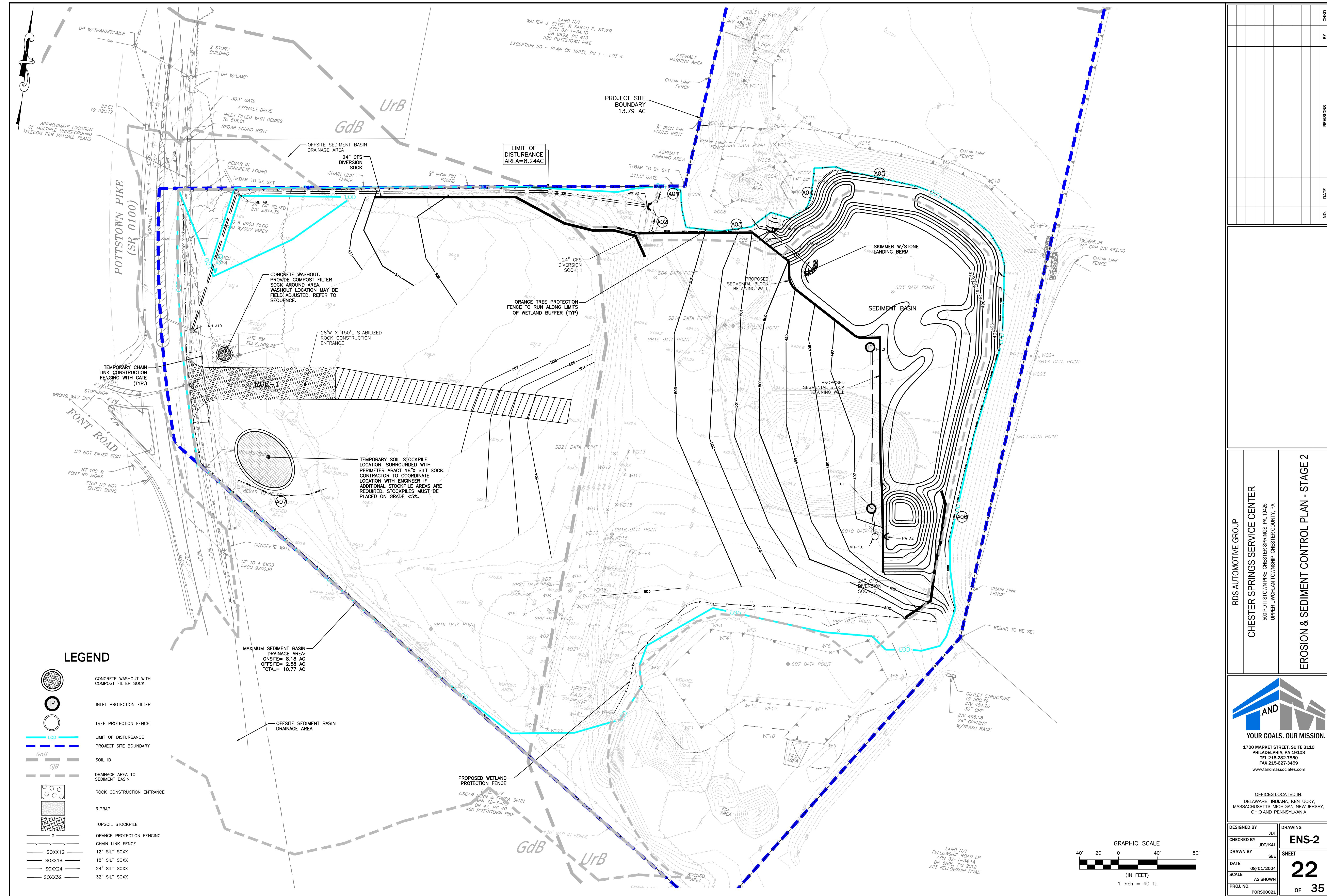
Vibration Damper
When determined necessary by Hapco, a Vibration Damper will be factory-installed inside the pole shaft. Customer specification of the damper is available.

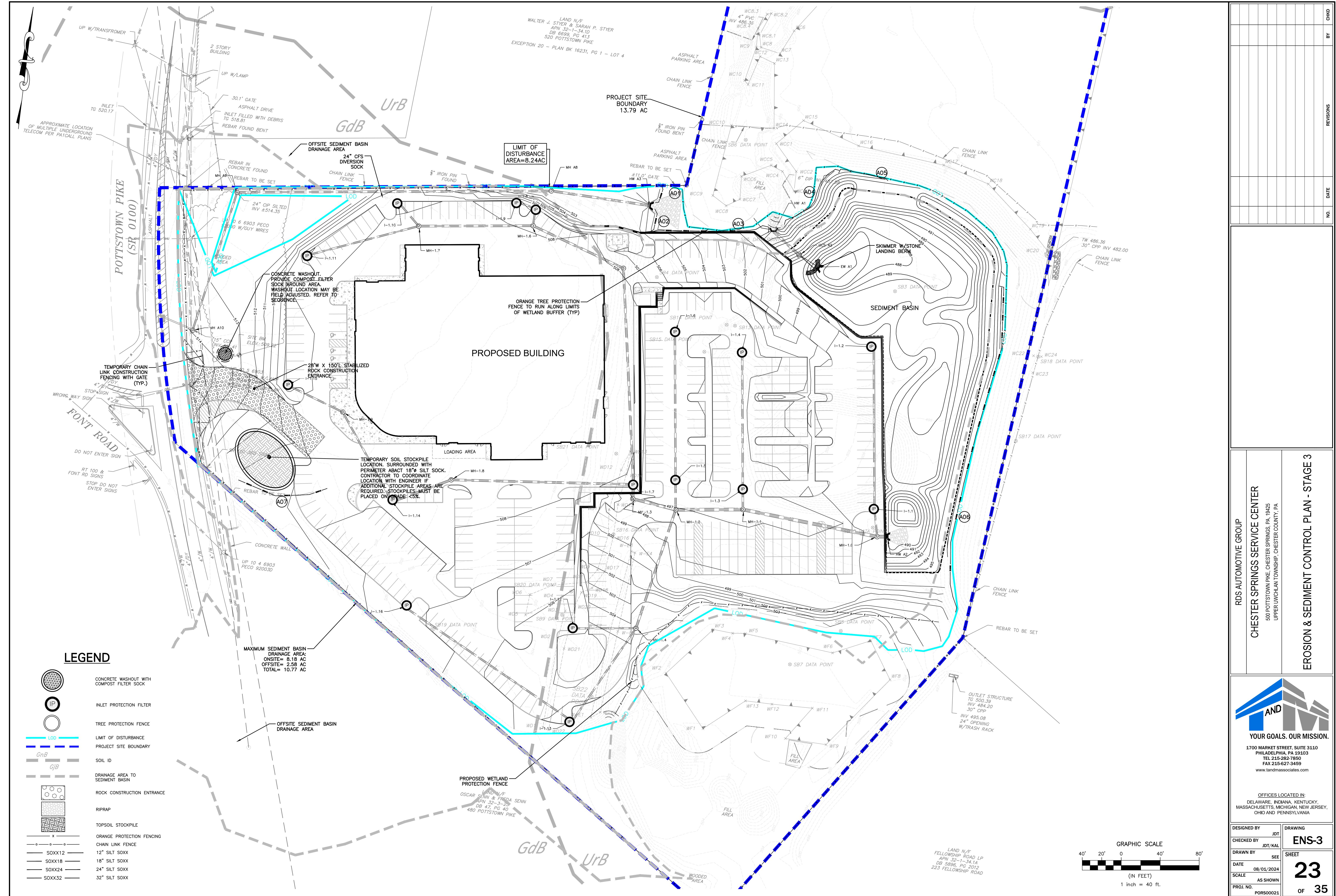
Mounting Designation

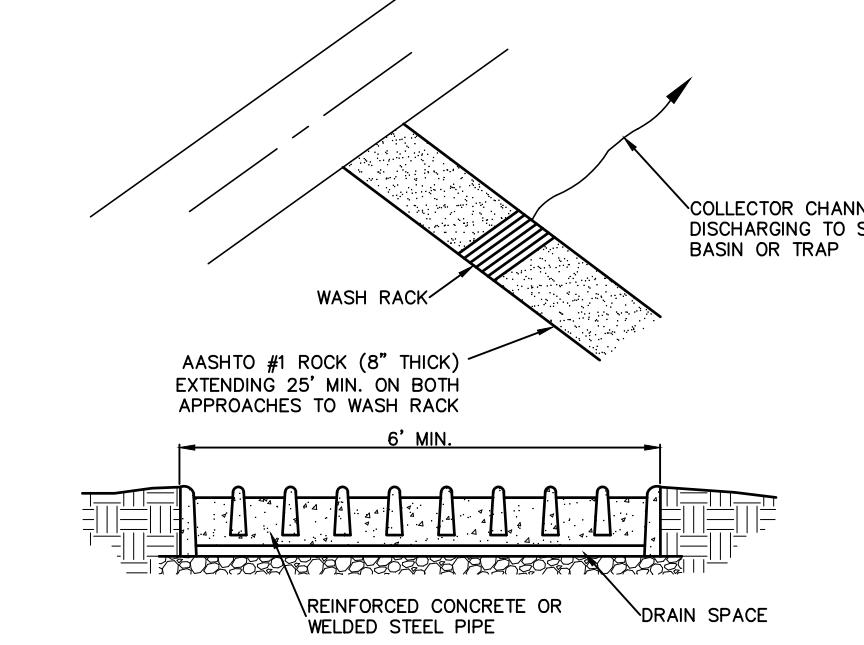
Side Drill Mount
For Side Drill Mount applications specify luminaire type, quantity and orientation. A luminaire drilling template must be supplied at time of order.

Tenon Mount









NOTES:
WASH RACK SHALL BE 20 FEET (MIN.) WIDE OR TOTAL WIDTH OF ACCESS.
WASH RACK SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE ANTIPLICATED 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 THE APPROACHES TO THE WASH RACK. THE WASH RACK SHALL BE KEPT OPEN AT ALL TIMES. DAMAGE TO THE WASH RACK SHALL BE REPAIRED PRIOR TO FURTHER USE OF THE RACK. ALL SEDIMENT DEPOSITED ON ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY UPON LEAVING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

STANDARD CONSTRUCTION DETAIL #3-2 ROCK CONSTRUCTION ACCESS WITH WASH RACK

NOT TO SCALE

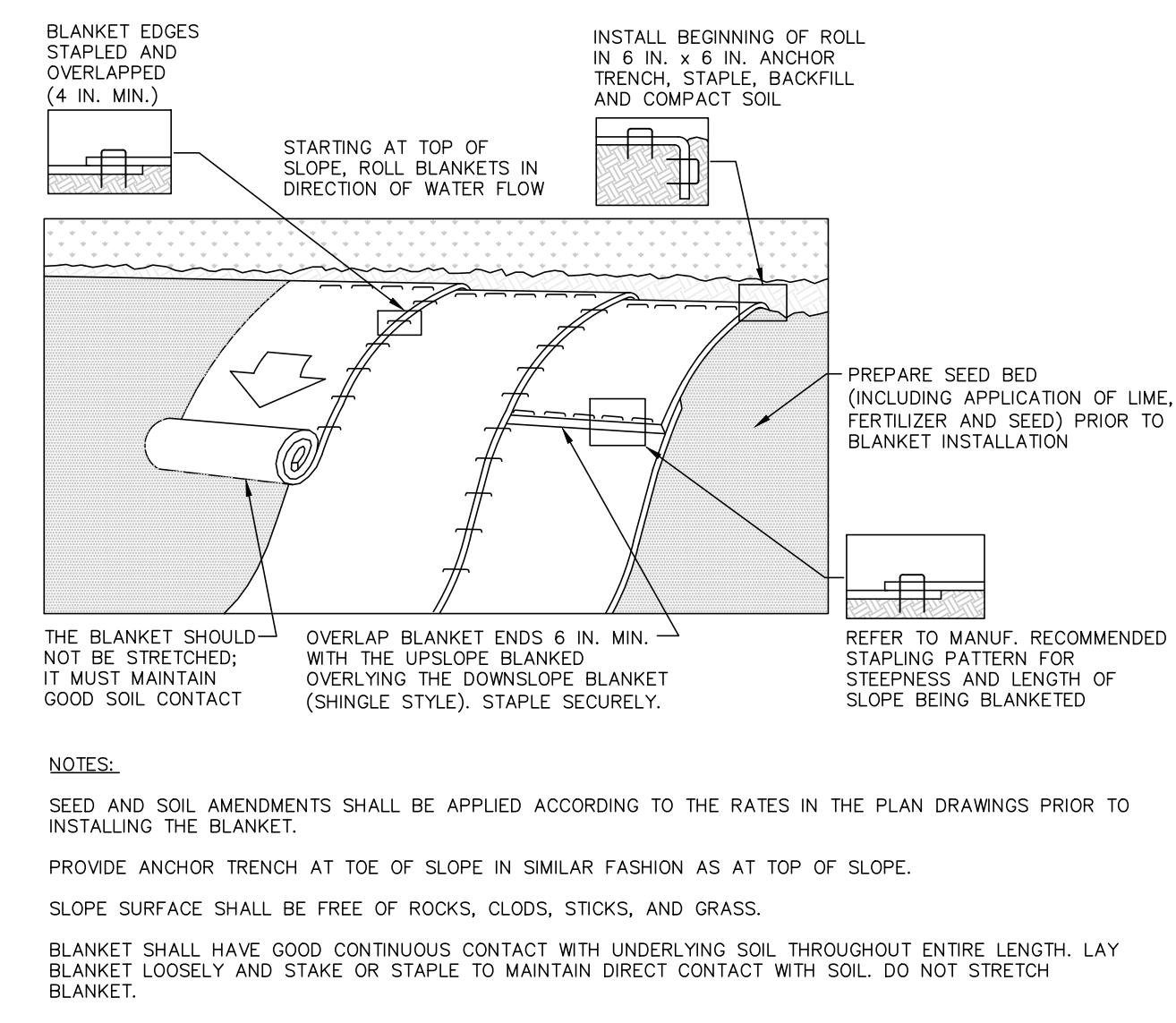
COMPOST FILTER SOCK
BLOWN/PLACED
FILTER MEDIA
DISTURBED AREA
UNDISTURBED AREA

SECTION

2 IN. x 2 IN.
WOODEN STAKES
PLACED 10 FT ON
CENTER

PLAN VIEW

2 IN. x 2 IN.
WOODEN STAKES
PLACED 10 FT ON
CENTER



NOTES:
SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.

PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.
SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

STANDARD CONSTRUCTION DETAIL #11-1 EROSION CONTROL BLANKET INSTALLATION

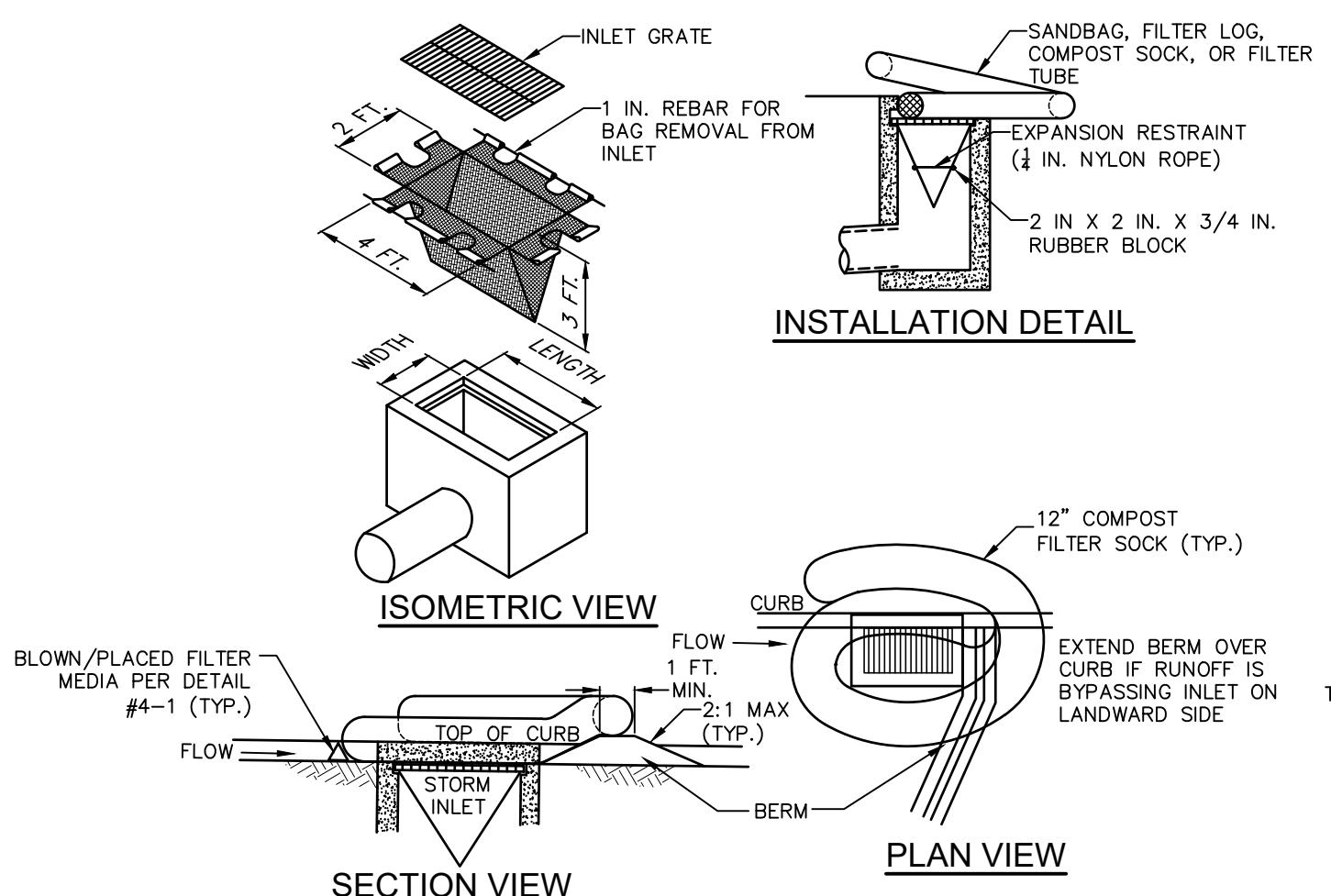
NOT TO SCALE

SECTION

2 IN. x 2 IN.
WOODEN STAKES
PLACED 10 FT ON
CENTER

PLAN VIEW

2 IN. x 2 IN.
WOODEN STAKES
PLACED 10 FT ON
CENTER



INSTALLATION DETAIL

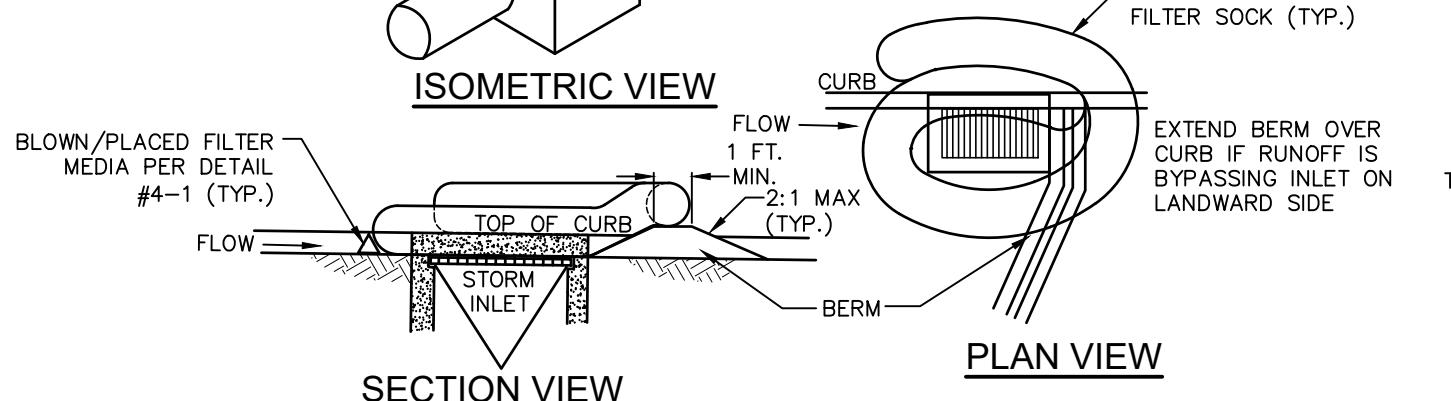


TABLE 11.4 Recommended Seed Mixtures			
Mixture Number	Species	Seeding Rate - Pure Live Seed ¹	
		Most Sites	Adverse Sites
1 ²	Spring oats (spring), or Annual ryegrass (spring or fall), or Winter wheat (fall), or Winter rye (fall)	64 70 60 56	96 15 120 112
2 ³	Tall fescue, or Fine fescue, or Kentucky bluegrass, plus Redtop, or Perennial ryegrass	60 35 25 15	75 40 30 25
3	Birdsfoot trefoil, plus Tall fescue	6 30	10 35
4	Birdsfoot trefoil, plus Reed canarygrass	6 10	10 15
5 ⁴	Crownvetch, plus Tall fescue, or Perennial ryegrass	10 20 20	15 25 25
6 ^{5,8}	Crownvetch, plus Annual ryegrass	10 20	15 25
7 ⁶	Birdsfoot trefoil, plus Crownvetch, plus Tall fescue	6 10 10	10 30 30
8	Flaupea, plus Tall fescue, or Perennial ryegrass	20 20 20	30 30 25
9 ⁶	Sericea lespedeza, plus Tall fescue, plus Redtop ⁷	10 20 20	20 25 3
10	Tall fescue, plus Fine fescue	40 10	60 15
11	Deergrass, plus Birdsfoot trefoil	15 6	20 10
12 ⁷	Switchgrass, or Big bluestem, plus Birdsfoot trefoil	15 15 6	20 20 10
13	Orchardgrass, or Smooth bromegrass, plus Birdsfoot trefoil	20 25 6	30 35 10

Penn State, "Erosion Control and Conservation Plantings on Noncropland"

- PLS is the product of the percentage of pure seed times percentage germination divided by 100. For example, to secure the actual planting rate for switchgrass, divide 12.5 PLS shown on the seed tag, thus, if the PLS content of a given seed lot is 35%, divide 12.5 by 0.35 to obtain 34.3 pounds of seed required per acre.
- If high-quality seed is used, for most sites seed spring oats at a rate of 2 bushels per acre, winter wheat at 11.5 bushels per acre, and winter rye at 1 bushel per acre. If germination is below 90%, increase these suggested sowing rates by 0.5 bushel per acre.
- Keep seedling area free of weeds. Do not cut shorter than 4 inches.
- Keep seedling area free of weeds. These species have many seeds per pound and are very competitive. To seed small amounts of small seeds such as weeping lovegrass and redtop, dilute with dry sand or soil to a minimum of 10% seed.
- Use for highway slopes and similar sites where the desired species after establishment is crownvetch.
- Use only in extreme southeastern or extreme southwestern Pennsylvania. *Sericea lespedeza* is not well adapted to most of PA.
- Do not mow shorter than 9 to 10 inches.
- Seed mixtures containing crown vetch should not be used in areas adjacent to wetlands or stream channels due to the invasive nature of this species.

TABLE 11.6
Mulch Application Rates

Mulch Type	Application Rate (Min.)	Notes
Straw	3 tons	140 lb. 1,240 lb. Either wheat or oat straw, free of weeds, not chopped or finely broken
Hay	3 tons	140 lb. 1,240 lb. Timothy, mixed clover and timothy, native forage grasses
Wood Chips	4 - 6 tons	185 - 275 lb. 1,650 - 2,500 lb. May prevent germination of grasses and legumes
Hydromulch	1 ton	47 lb. 415 See limitations above

Mulch on slopes of 6% or steeper should be held in place with netting. Lightweight plastic, fiber, or paper nets may be stapled over the mulch according to manufacturer's recommendations.

Shredded paper hydromulch should not be applied on slopes steeper than 5%. Wood fiber hydromulch may be applied on steeper slopes provided a tackifier is used. The application rate for any hydromulch should be 2,000 lb/acre at a minimum.

TABLE 11.1
Cubic Yards of Topsoil Required for Application to Various Depths

Depth (in)	Per 1,000 Square Feet	Per Acre
1	6.2	268
2	9.3	403
3	12.4	537
4	15.5	672
5	18.6	806
6	21.7	940
7	24.6	1,074

Adapted from VA DSWC

NOTES:

- USE SEED MIX 1 PLUS SEED MIX 2 FOR TEMPORARY/PERMANENT STABILIZATION OF ALL DISTURBED AREAS. FERTILIZE AND MULCH PER THE METHODS DESCRIBED IN TASKS 11.2 AND 11.6.
- ALL PROPOSED SEED MIX SHALL SHALL BE A MINIMUM OF 90 PERCENT PURE LIVE SEED.
- ALL PROPOSED SEED MIX SHALL BE A MINIMUM OF 90 PERCENT PURE LIVE SEED.

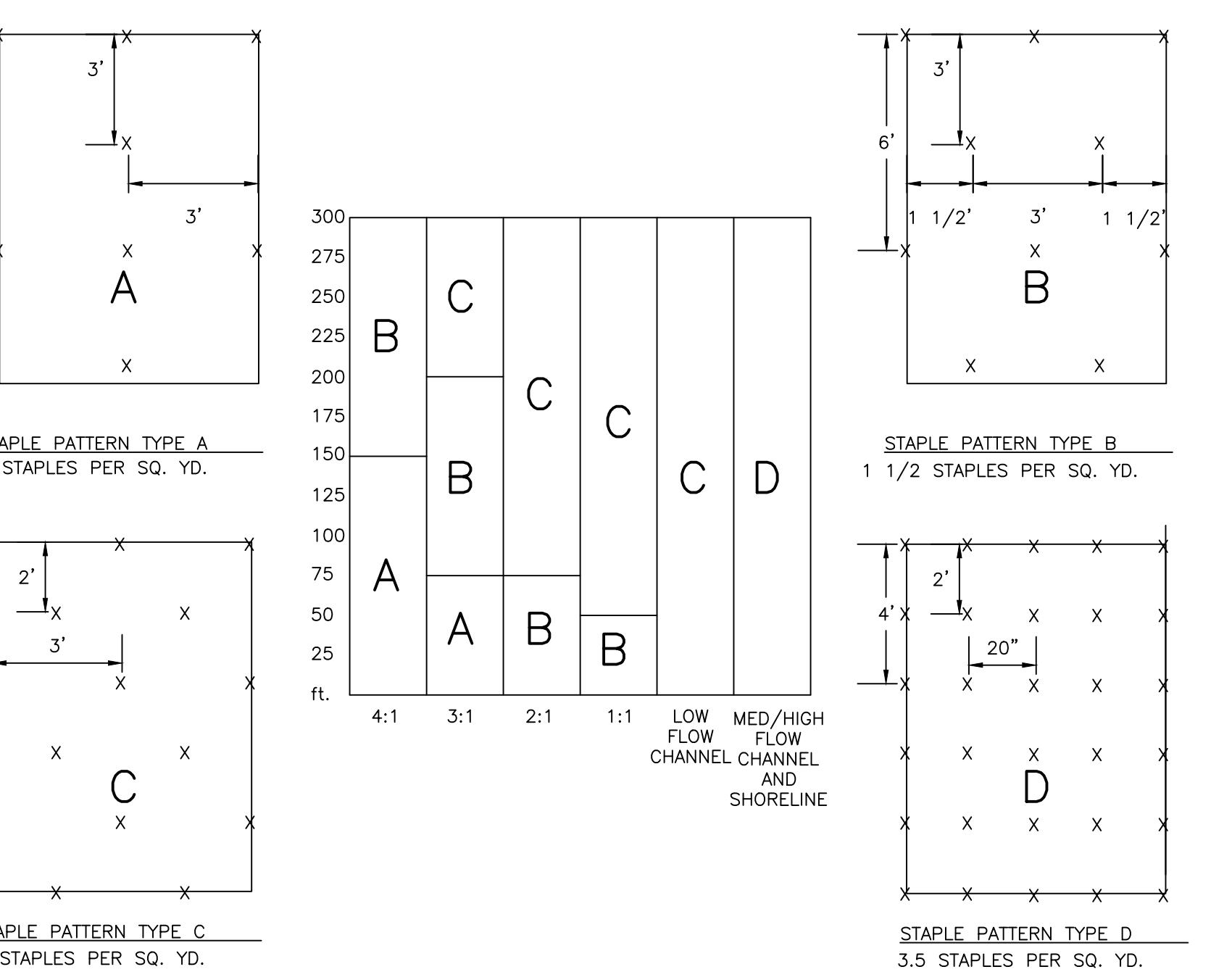
TABLE 11.5 Recommended Seed Mixtures for Stabilizing Disturbed Areas		
Site Condition	Nurse Crop	Seed Mixture (Select one mixture)
Slopes and Banks (not mowed)	1 plus 1 plus	3, 5, 8, or 12 ¹ 3 or 7 ¹
Well-drained Variable drainage Variable drainage	1 plus	2 or 10
Slopes and Banks (grazed/hay)	1 plus	2, 3, or 13
Wet areas	1 plus	3, 5, 7, or 12 ¹
Gullies and Eroded Areas	1 plus	
Erosion Control Facilities (BMPs)		
Sod waterways, spillways, frequent water flow areas	1 plus	2, 3, or 4
Drainage ditches	1 plus	2, 3, or 4
Shallow areas less than 3 feet deep	1 plus	5 or 7
Deep, not mowed	1 plus	
Pond banks, dikes, levees, dams, diversion channels, and occasional water flow areas	1 plus	
Meadows	1 plus	2 or 3
Non-mowed areas	1 plus	5 or 7
For hay or silage on diversion channels and occasional water flow areas	1 plus	3 or 13
Highways		
Non-mowed areas		
Pure crownvetch ¹	1 plus	5 or 8
Well-drained	1 plus	5, 7, 8, 9, or 10
Variable drained	1 plus	3 or 7
Poorly drained	1 plus	3 or 7
Areas mowed several times per year	1 plus	2, 3, or 10
Utility Right-of-way		
Well-drained	1 plus	5, 8, or 12 ¹
Variable drained	1 plus	1, 4, 7
Well-drained areas for grazing/hay	1 plus	2, 3, or 13
Effluent Disposal Areas	1 plus	3 or 4
Sanitary Landfills	1 plus	3, 5, 7, 11, or 12 ¹
Surface Runoff		
Solid, fine wastes, fly ash, slag, settling basin residues and other severely disturbed areas (time to soil test)	1 plus	3, 4, 7, 8, 9, 11 ¹ , or 12 ¹
Severely disturbed areas for grazing/hay	1 plus	3 or 13

1. For seed mixtures 11 and 12, only use spring oats or weeping lovegrass (included in mix) as nurse crop.
2. Contact the Pennsylvania Department of Transportation district roadside specialist for specific suggestions on treatment techniques and management practices.
3. Seed mixtures containing crown vetch should not be used in areas adjacent to wetlands or stream channels due to the invasive nature of this species.

TABLE 11.2
Soil Amendment Application Rate Equivalents

Soil Amendment	Permanent Seeding Application Rate			Notes
	Per Acre	Per 1,000 sq. ft.	Per 1,000 sq. yd.	
Agricultural lime	6 tons	240 lb.	2,480 lb.	Or as per soil test; may not be required in agricultural fields
10-20-20 fertilizer	1,000 lb.	25 lb.	210 lb.	Or as per soil test; may not be required in agricultural fields
Temporary Seeding Application Rate				
Agricultural lime	1 ton	40 lb.	410 lb.	Typically not required for topsoil stockpiles
10-10-10 fertilizer	500 lb.	12.5 lb.	100 lb.	Typically not required for topsoil stockpiles

Adapted from Penn State, "Erosion Control and Conservation Plantings on Noncropland"

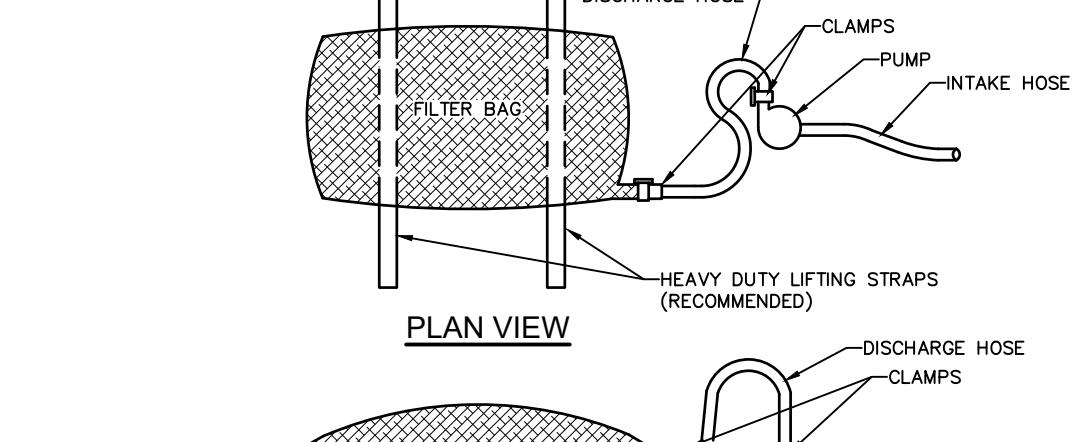


NORTH AMERICAN GREEN STAPLE PATTERNS

Species	TEMPORARY SEEDING		PERMANENT SEEDING	
	PennDOT Formula D	PennDOT Formula E	General Seeding / Sod	
70% Kentucky 31 Fescue/30% Annual			20% turf type perennial ryegrass	
20% Pennisetum Red Fescue/20% Grass			30% fine red or chewings fescue	
10% Weeping Alkali Grass			50% Kentucky bluegrass mixture (poa pratensis)	
Application Rate/1000 SY	21 lbs.	10 lbs.	8 lbs. (min.)	
Where Applied	Anywhere	Anywhere	Anywhere	
Seeding Dates	March 5 - June 1 August 1 - October 1	March 5-Oct.1	March 5 - October 1	
Fert. and Rate/1000 SY	Commercial Fert. (10-20-20) 20 lbs. Pulverized Agricultural Limestone 90 lbs.	Comm. Fert. (10-20-20) 192 lbs. Urea Form (38-0-0) 50 lbs.	Min. 1lb. Nitrogen Per 1000 Sq. Ft. and 4% Phosph. Acid and 2% Potassium (50% of Nitrogen To Be Organic)	
Mulch: @ Min. 3 ton/ac.	Hay or Straw Mulch *	Hay (As directed)	* Hay (As directed)	

* OR WOOD CELLULOSE (ON SLOPES 4:1 OR FLATTER), EXCEPT USE HAY

SOIL, SEEDING, FERTILIZATION SCHEDULE AND SPECIFICATIONS

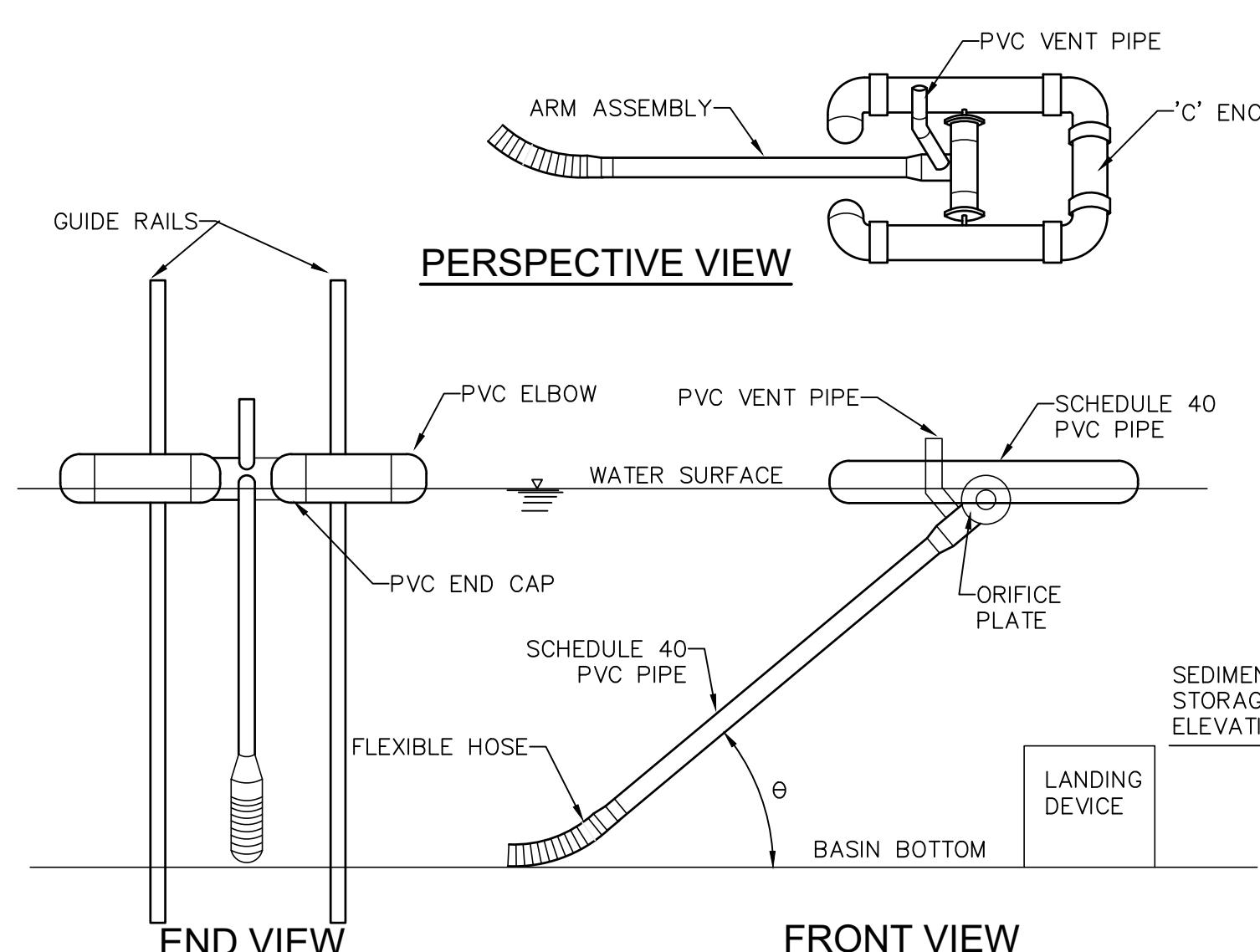


NOTES:

LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 1/4 IN. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4881	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-3766	110 LB
MULCH TEST	ASTM D-3766	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN



NOTES:

ORIFICE DIAMETER MUST BE EQUAL TO OR LESS THAN ARM DIAMETER

A ROPE SHALL BE ATTACHED TO THE SKIMMER ARM TO FACILITATE ACCESS TO THE SKIMMER ONCE INSTALLED.

SKIMMER SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT.
ANY MALFUNCTIONING SKIMMER SHALL BE REPAIRED OR REPLACED WITHIN 24 HOURS OF INSPECTION.

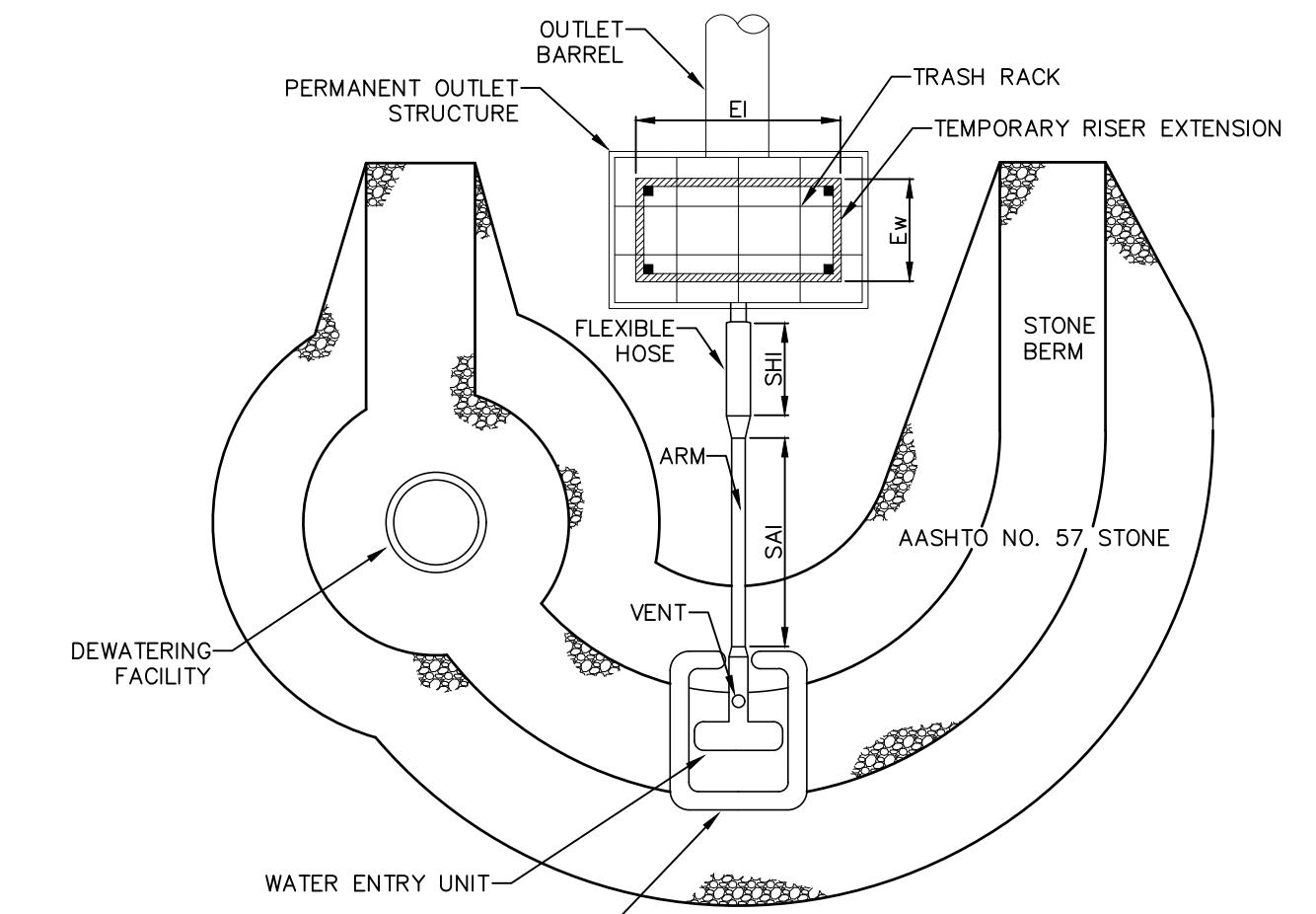
ICE OR SEDIMENT BUILDUP AROUND THE PRINCIPAL SPILLWAY SHALL BE REMOVED SO AS TO ALLOW THE SKIMMER TO RESPOND TO FLUCTUATING WATER ELEVATIONS.

SEDIMENT SHALL BE REMOVED FROM THE BASIN WHEN IT REACHES THE LEVEL MARKED ON THE SEDIMENT CLEAN-OUT STAKE OR THE TOP OF THE LANDING DEVICE.

A SEMI-CIRCULAR LANDING ZONE MAY BE SUBSTITUTED FOR THE GUIDE RAILS (STANDARD CONSTRUCTION DETAIL # 7-3).

MODIFIED STANDARD CONSTRUCTION DETAIL #7-1
SKIMMER

NOT TO SCALE



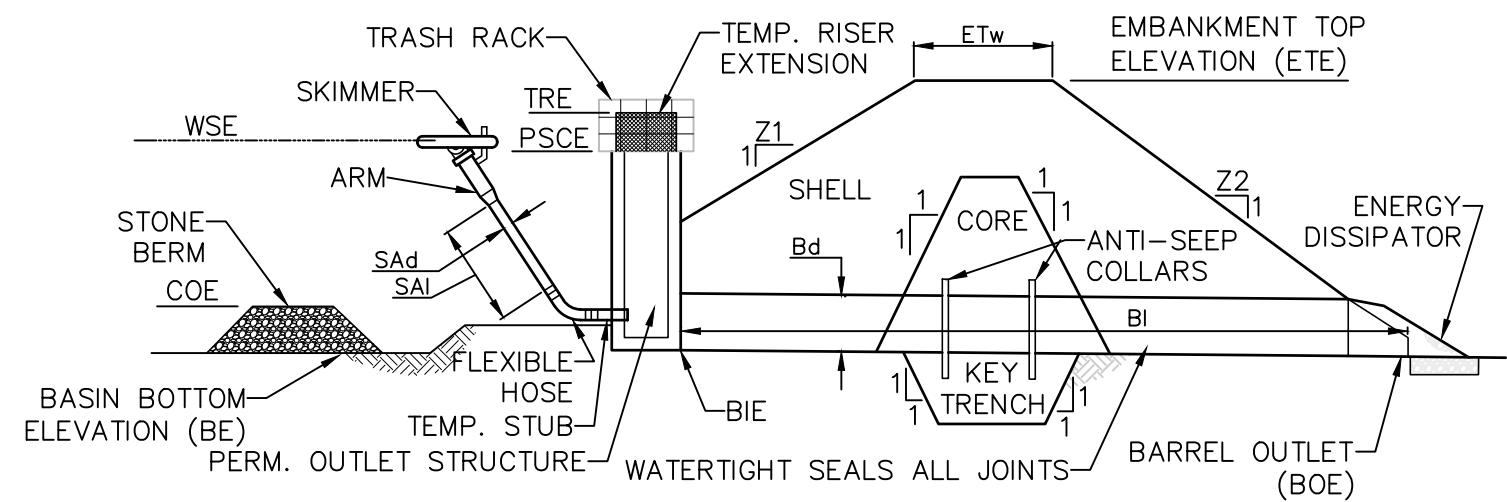
NOTES:

NO GUIDE RAILS SHALL BE REQUIRED FOR THIS INSTALLATION.

THIS DETAIL SHALL BE USED IN CONJUNCTION WITH STANDARD CONSTRUCTION DETAILS #7-2 AND #7-4.

STANDARD CONSTRUCTION DETAIL #7-3
SKIMMER WITH STONE LANDING BERM

NOT TO SCALE



TRAP NO.	Z1 (FT)	Z2 (FT)	TEMP. RISER EXT. ELEV. TRE (FT)	EMBANKMENT			CLEAN OUT ELEV COE (FT)	BOTTOM ELEV BE (FT)
				TOP ELEV ETE (FT)	TOP WIDTH ETW (FT)	KEY TRENCH DEPTH (FT)		
1	3	3	493.40	496.30	8	2	4	491.40
								491.00

SKIMMER			OUTLET BARREL		
DIA Sad (IN)	LENGTH SAI (FT)	MATL	DIA Bd (IN)	INLET ELEV BIE (FT)	MAT'L LENGTH BI (FT)
0	8	PVC	24	491.00	RCP 60
					489.00

NOTES:

SEDIMENT TRAPS, 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. IN ORDER TO FACILITATE MAINTENANCE AND RESTORATION, THE POOL AREA SHALL BE CLEARED OF ALL BRUSH, TREES, AND OBJECTIONABLE MATERIAL. 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, MULCHED, BLANKETED OR OTHERWISE STABILIZED ACCORDING TO THE SPECIFICATIONS OF THE E&S PLAN DRAWINGS. TREES SHALL NOT BE PLANTED ON THE EMBANKMENT.

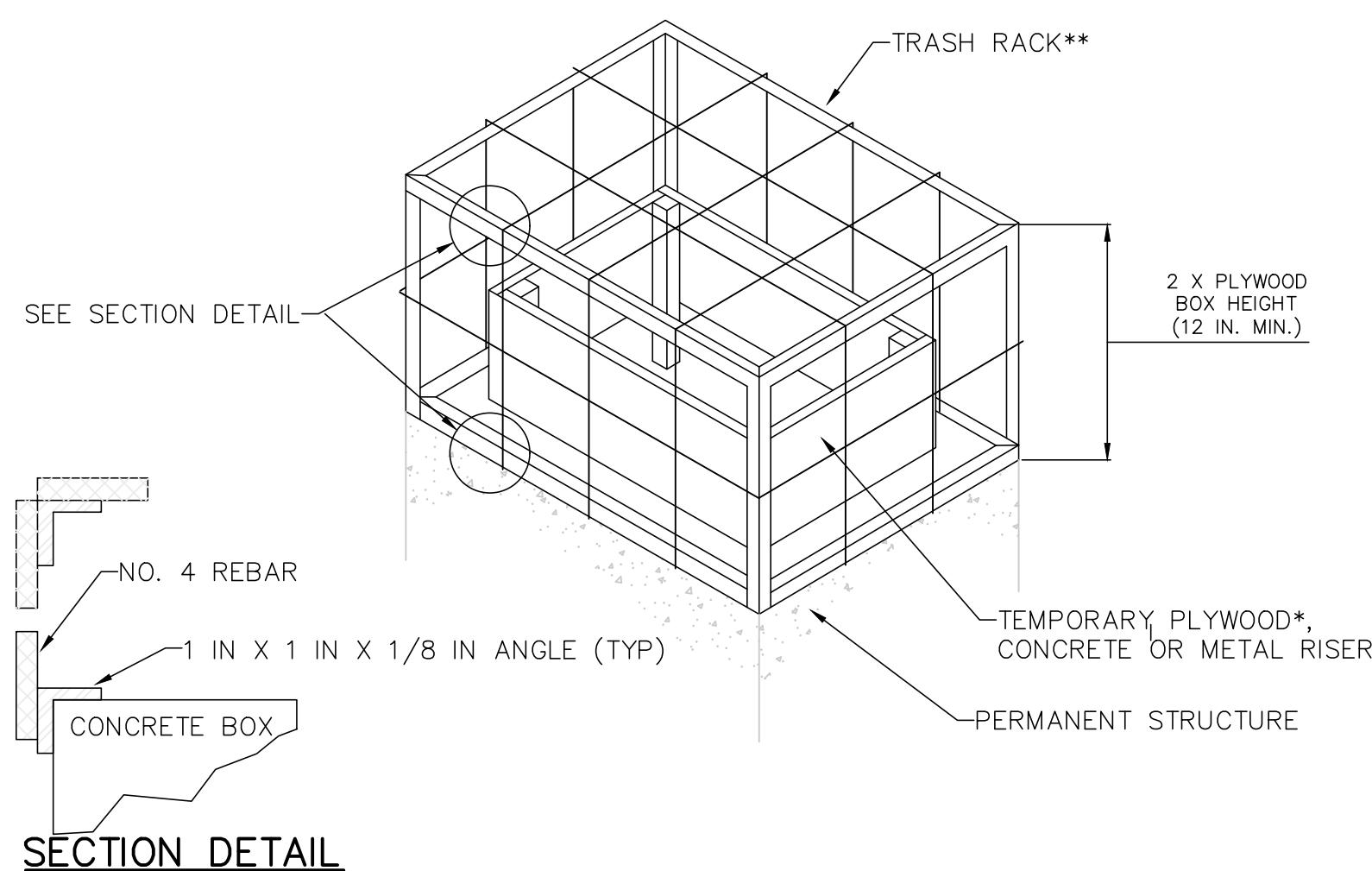
INSPECT ALL SEDIMENT TRAPS ON AT LEAST A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. PROVIDE ACCESS FOR SEDIMENT REMOVAL AND OTHER REQUIRED MAINTENANCE ACTIVITIES. A CLEAN OUT STAKE SHALL BE PLACED NEAR THE CENTER OF EACH BASIN. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED THE CLEAN OUT ELEVATION ON THE STAKE AND THE BASIN RESTORED TO ITS ORIGINAL DIMENSIONS. DISPOSE OF MATERIALS REMOVED FROM THE BASIN IN THE MANNER DESCRIBED IN THE E&S PLAN.

BASIN EMBANKMENTS, SPILLWAYS, AND OUTLETS SHALL BE INSPECTED FOR EROSION, PIPING AND SETTLEMENT. NECESSARY REPAIRS SHALL BE IMMEDIATELY. DISPLACED RIPRAP WITHIN THE OUTLET ENERGY DISSIPATOR 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.

MODIFIED STANDARD CONSTRUCTION DETAIL #7-4
SEDIMENT BASIN EMBANKMENT AND SPILLWAY DETAILS - SKIMMER

ITALICIZED ITEMS ARE MODIFICATIONS OF STANDARD DETAIL
NOT TO SCALE



SECTION DETAIL

* 3/4 IN. PRESSURE TREATED PLYWOOD BOX WITH 2 IN. X 2 IN. PRESSURE TREATED CORNER SUPPORTS, SET INTO 1-1/2 IN. GRATE OFFSETS, CAULK ALL SEAMS TO FORM WATERTIGHT SURFACE.

** TRASH RACK COMPOSED OF 1 IN. X 1 IN. X 1/8 IN. L (TYP.) AND #4 BARS (TYP.) WELDED TO THE ANGLES AND AT EACH INTERSECTION OF THE BARS; #4 BARS SPACED AT HALF THE DIAMETER OF THE BARREL MAX.

NOTES:

BOX SHALL BE BOLTED, STRAPPED, OR OTHERWISE SECURED TO THE PERMANENT RISER.

TOP OF TEMPORARY RISER EXTENSION SHALL BE 6 IN. (MINIMUM) BELOW CREST OF EMERGENCY SPILLWAY.

ALL JOINTS SHALL BE WATER TIGHT.

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

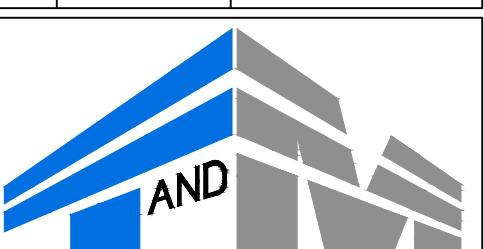
STANDARD CONSTRUCTION DETAIL #7-10
TEMPORARY RISER EXTENSION AND
TRASH RACK FOR PERMANENT STRUCTURE

NOT TO SCALE

THIS DETAIL APPLIES TO SEDIMENT TRAP 1 AT STRUCTURE C2

RDS AUTOMOTIVE GROUP

CHESTER SPRINGS SERVICE CENTER
500 POTTSVILLE PKWY, CHESTER SPRINGS, PA 19425
UPPER UCHIAN TOWNSHIP, CHESTER COUNTY, PA



YOUR GOALS. OUR MISSION.
1700 MARKET STREET, SUITE 3100
PHILADELPHIA, PA 19103
TEL 215-627-3450
FAX 215-627-3459
www.tandmassociates.com

OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

DESIGNED BY JDT
CHECKED BY JDT/KAL
DRAWN BY SEE
DATE 08/01/2024
SCALE AS SHOWN
PROJ. NO. POR50021
DRAWING ENS-DTL-3
SHEET 26 OF 35

GENERAL EROSION & SEDIMENT CONTROL PROCEDURES

- ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN PREPARED BY TAM ASSOCIATES. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE LOCAL CONSERVATION DISTRICT AND THE DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) ARE NOTIFIED OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
- AT LEAST SEVEN (7) DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS INCLUDING TOWNSHIP ENGINEER, THE EROSION AND SEDIMENT CONTROL PLAN PREPARER, THE PLAN DRAWINGS, AND A REPRESENTATIVE OF THE CHESTER COUNTY CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.
- AT LEAST THREE (3) DAYS PRIOR TO THE START OF ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE-CALL SYSTEM INCORPORATED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.
- AREAS TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, AND OTHER OBJECTIONAL MATERIAL.
- CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE APPROVED E&S PLAN. CLEARING, GRUBBING, AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
- AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS UNLESS REQUIRED TO MINIMIZE DISTURBANCE.
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN IN THE AMOUNTS NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:IV OR FLATTER.
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENTATION, THE CONTRACTOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT.
- ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AND RECYCLED OR DISPOSED 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. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THIS SITE.
- ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CERTIFIED CLEAN FILL. FORM FP-201 MUST BE RETAINED BY THE PROPERTY OWNER FOR FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
- ALL PUMPED WATER FROM AN UNDISTURBED AREA SHALL BE DISPOSED IN ACCORDANCE WITH THE PROCEDURE DESCRIBED IN THE PLAN DRAWINGS. PUMPED WATER FROM DISTURBED AREAS THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS.
- VEHICLES AND EQUIPMENT MAY NEITHER ENTER NOR EXIT DIRECTLY FROM THE CONSTRUCTION SITE ONTO ANY PUBLIC ROAD. VEHICLES AND EQUIPMENT MAY ENTER AND EXIT THE CONSTRUCTION SITE ONLY VIA A STABILIZED ROCK CONSTRUCTION ENTRANCE.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMP SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMP AFTER EACH RUNOFF EVENT AND THE CONTRACTOR WILL MAINTAIN AND MAKE AVAILABLE TO THE LOCAL CONSERVATION DISTRICT, WRITTEN REPORTS OF LOSSES AND REPAIRS MADE TO THE EROSION AND SEDIMENT CONTROL FACILITIES, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RETENING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THE DEFICIENCIES WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
- SEDIMENT TRACKED ONTO ANY ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND AS NEEDED THROUGHOUT THE WORKDAY OR AS DIRECTED BY CONSTRUCTION DISTRICT OR MUNICIPALITY AND DISPOSED AS A MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, ROLLED, OR SWEEPED INTO ANY ROADSIDE DITCH, STREAM, SEWER, OR SURFACE WATER.
- ALL SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN A MANNER DESCRIBED ON PLAN DRAWINGS. SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED IN OF LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.
- UPON FINAL GRADING, AREAS WHICH ARE TO BE TOPSOLED SHALL BE SCARFED TO A MINIMUM DEPTH OF 3 TO 5 INCHES. THE SCARFING INSTRUCTIONS FOR SOILS – PRIOR TO PLACEMENT OF TOPSOIL AREAS TO BE VEGETATED SHALL HAVE A MINIMUM FOUR (4) INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTCROPS SHALL HAVE A MINIMUM OF 4 INCHES OF TOPSOIL.
- ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED ACCORDING WITH LOCAL REQUIREMENTS OR CODES.
- ALL EARTH FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, COD, OR OTHER FOREIGN OR OBJECTIONAL MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE CONSTRUCTION OF APPROVED METHOD.
- ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
- IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT AND UPON COMPLETION OF CLEAN TEST SAMPLES, THE OWNER AND/OR OPERATOR SHALL STABILIZE THOSE AREAS DISTURBED BY THE ACTIVITIES. DURING THE CONSTRUCTION PHASE, THE CONTRACTOR SHALL MAINTAIN AND MAINTAIN THE E&S BMPs AT THE RECOMMENDED RATES AND METHODS. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN 1 YEAR SHALL BE SEDED AND MULCHED WITH A QUICK GROWING TEMPORARY SEEDING MIXTURE AND MULCH. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE RE-DISTURBED WITHIN 1 YEAR SHALL BE STABILIZED ACCORDING TO THE APPROVED E&S BMPS.
- PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERENNIAL NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION, CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
- EROSION AND SEDIMENT CONTROLS (BMPs) MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE GENERAL SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE CONTROLS. EROSION AND SEDIMENT BMPs SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
- UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL OR CONVERSION OF E&S BMPs. TEMPORARY CONTROLS MAY BE REMOVED ONLY UPON APPROVAL OF THE LOCAL CONSERVATION DISTRICT.
- AFER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENTATION CONTROLS MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPs. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE CONTROLS SHALL BE STABILIZED IMMEDIATELY, IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS. SUCH REMOVALS/CONVERSIONS ARE TO BE DONE ONLY DURING GERMINATION SEASON.
- FAILURE TO CORRECTLY INSTALL EROSION CONTROL FACILITIES OR FAILURE TO PREVENT SEDIMENT LAWN RUNOFF FROM LEAVING THE CONSTRUCTION SITE OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTIONS TO RESOLVE FAILURES OF EROSION CONTROL FACILITIES MAY RESULT IN ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AS DEFINED IN SECTION 602 OF THE CLEAN STREAMS LAW OF PENNSYLVANIA. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES UP TO \$1,000,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.

RECYCLING OR DISPOSAL METHODS

- IN THE EVENT OF SINKHOLE DISCOVERY OR OCCURRENCE, A PROFESSIONAL GEOLOGIST OR ENGINEER SHALL BE CONTACTED CONCERNING MITIGATION. ADDITIONAL THE CHESTER COUNTY CONSERVATION DISTRICT SHALL BE IMMEDIATELY MADE AWARE OF THE SINKHOLE DISCOVERY.
- THE CONTRACTOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.
- THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF APPROPRIATE MUNICIPAL OFFICIALS INCLUDING TOWNSHIP ENGINEER, THE EROSION AND SEDIMENT CONTROL PLAN PREPARER, THE PLAN DRAWINGS, AND A REPRESENTATIVE OF THE CHESTER COUNTY CONSERVATION DISTRICT.
- STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
- THE OPERATOR / PERMITTEE SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROLS (BMPs) AND RELATED TEMPS INCLUDED WITHIN THIS PLAN AND NARRATIVE.
- EROSION AND SEDIMENT BMP CONTROLS MUST BE CONSISTENT WITH STANDARDS AND SPECIFICATIONS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION "EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL" DATED MARCH 2012.
- AREAS TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, AND OTHER OBJECTIONAL MATERIAL.
- CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE APPROVED E&S PLAN. CLEARING, GRUBBING, AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
- AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS UNLESS REQUIRED TO MINIMIZE DISTURBANCE.
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN IN THE AMOUNTS NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:IV OR FLATTER.
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENTATION, THE CONTRACTOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT.
- ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AND RECYCLED OR DISPOSED 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. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THIS SITE.
- ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CERTIFIED CLEAN FILL. FORM FP-201 MUST BE RETAINED BY THE PROPERTY OWNER FOR FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
- ALL PUMPED WATER FROM AN UNDISTURBED AREA SHALL BE DISPOSED IN ACCORDANCE WITH THE PROCEDURE DESCRIBED IN THE PLAN DRAWINGS. PUMPED WATER FROM DISTURBED AREAS THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS.
- VEHICLES AND EQUIPMENT MAY NEITHER ENTER NOR EXIT DIRECTLY FROM THE CONSTRUCTION SITE ONTO ANY PUBLIC ROAD. VEHICLES AND EQUIPMENT MAY ENTER AND EXIT THE CONSTRUCTION SITE ONLY VIA A STABILIZED ROCK CONSTRUCTION ENTRANCE.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMP SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMP AFTER EACH RUNOFF EVENT AND THE CONTRACTOR WILL MAINTAIN AND MAKE AVAILABLE TO THE LOCAL CONSERVATION DISTRICT, WRITTEN REPORTS OF LOSSES AND REPAIRS MADE TO THE EROSION AND SEDIMENT CONTROL FACILITIES, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RETENING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THE DEFICIENCIES WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
- SEDIMENT TRACKED ONTO ANY ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND AS NEEDED THROUGHOUT THE WORKDAY OR AS DIRECTED BY CONSTRUCTION DISTRICT OR MUNICIPALITY AND DISPOSED AS A MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, ROLLED, OR SWEEPED INTO ANY ROADSIDE DITCH, STREAM, SEWER, OR SURFACE WATER.
- ALL SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN A MANNER DESCRIBED ON PLAN DRAWINGS. SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED IN OF LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.
- UPON FINAL GRADING, AREAS WHICH ARE TO BE TOPSOLED SHALL BE SCARFED TO A MINIMUM DEPTH OF 3 TO 5 INCHES. THE SCARFING INSTRUCTIONS FOR SOILS – PRIOR TO PLACEMENT OF TOPSOIL AREAS TO BE VEGETATED SHALL HAVE A MINIMUM FOUR (4) INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTCROPS SHALL HAVE A MINIMUM OF 4 INCHES OF TOPSOIL.
- ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED ACCORDING WITH LOCAL REQUIREMENTS OR CODES.
- ALL EARTH FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, COD, OR OTHER FOREIGN OR OBJECTIONAL MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE CONSTRUCTION OF APPROVED METHOD.
- ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
- IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT AND UPON COMPLETION OF CLEAN TEST SAMPLES, THE OWNER AND/OR OPERATOR SHALL STABILIZE THOSE AREAS DISTURBED BY THE ACTIVITIES. DURING THE CONSTRUCTION PHASE, THE CONTRACTOR SHALL MAINTAIN AND MAINTAIN THE E&S BMPs AT THE RECOMMENDED RATES AND METHODS. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN 1 YEAR SHALL BE SEDED AND MULCHED WITH A QUICK GROWING TEMPORARY SEEDING MIXTURE AND MULCH. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE RE-DISTURBED WITHIN 1 YEAR SHALL BE STABILIZED ACCORDING TO THE APPROVED E&S BMPs.
- PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERENNIAL NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION, CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
- EROSION AND SEDIMENT CONTROLS (BMPs) MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE GENERAL SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE CONTROLS. EROSION AND SEDIMENT BMPs SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
- UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL OR CONVERSION OF E&S BMPs. TEMPORARY CONTROLS MAY BE REMOVED ONLY UPON APPROVAL OF THE LOCAL CONSERVATION DISTRICT.
- AFER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENTATION CONTROLS MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPs. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE CONTROLS SHALL BE STABILIZED IMMEDIATELY, IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS. SUCH REMOVALS/CONVERSIONS ARE TO BE DONE ONLY DURING GERMINATION SEASON.
- FAILURE TO CORRECTLY INSTALL EROSION CONTROL FACILITIES OR FAILURE TO PREVENT SEDIMENT LAWN RUNOFF FROM LEAVING THE CONSTRUCTION SITE OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTIONS TO RESOLVE FAILURES OF EROSION CONTROL FACILITIES MAY RESULT IN ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AS DEFINED IN SECTION 602 OF THE CLEAN STREAMS LAW OF PENNSYLVANIA. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES UP TO \$1,000,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.

CONSTRUCTION SEQUENCE

EROSION AND SEDIMENT CONTROL SEQUENCE NOTES

AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL NOTIFY THE LOCAL CONSERVATION DISTRICT AND THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ. THE CONTRACTOR SHALL NOTIFY THE PENNSYLVANIA ONE-CALL SYSTEM INCORPORATED AT 1-800-242-1776 FOR BURIED UTILITIES LOCATIONS.

EROSION AND SEDIMENT BMPs MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMPs.

ALL EARTH DISTURBANCE ACTIVITIES SHOULD OCCUR ACCORDING TO THE FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.

Critical Stage Items that require inspection by the design engineer and/or geologist/geotechnical engineer are specified.

All sediment basin permanent detention basin construction and conversion, swale construction and stream relocation shall be overseen by project geologist/geotechnical engineer shall directly coordinate with the design engineer through all stages of construction.

Site construction sequence

General sequence notes:

* Stockpile note: All project soil stockpiling and material stockpiling shall occur in the designated area.

* During construction, the contractor must notify the township and design engineer's office three (3) days prior to the construction of any proposed bmp stormwater facility.

* Every effort shall be made to protect the underlying infiltration of the subsoil by not compacting and preventing silting, including concrete washout water, from entering the surface or underlying beds.

* Limit trenching for installation to that which can be backfilled and temporary stability with topsoil and mulch at the end of each day.

* Contractor shall supply structure and post construction stormwater management controls including but not limited to, storm conveyance structures (structure inverts, top of grates/manholes, etc.), outlet control structures (structure inverts, grifice/weir inverts, top of structures, etc.), outlet protection (bottom of basin, stone bedding, pipe/pre-manufactured device inverts, top of media, etc.).

* Specific sequence of construction:

Stage 1

1. Clear entrance to site at Pottstown Pike.

2. Install rock construction entrance.

3. Construct haul road and temporarily grade site.

4. Establish sediment basin and all corresponding components: skimmer, riser pipe, anti-vortex device, anti-seep collar.

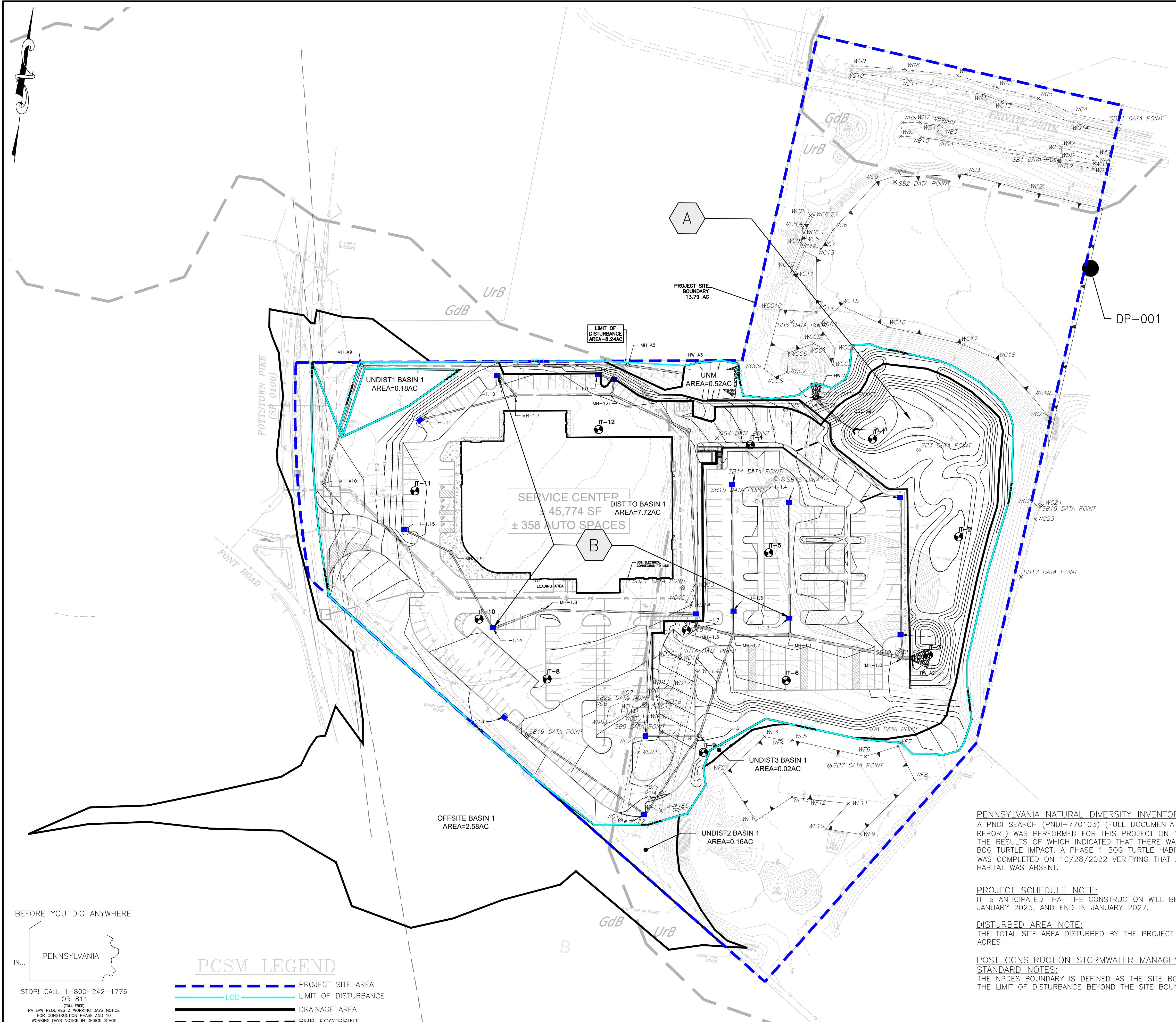
5. Install perimeter barrier controls (i.e. compost sock, chain link fence), orange tree protection fencing, concrete washout, temporary soil stockpile.

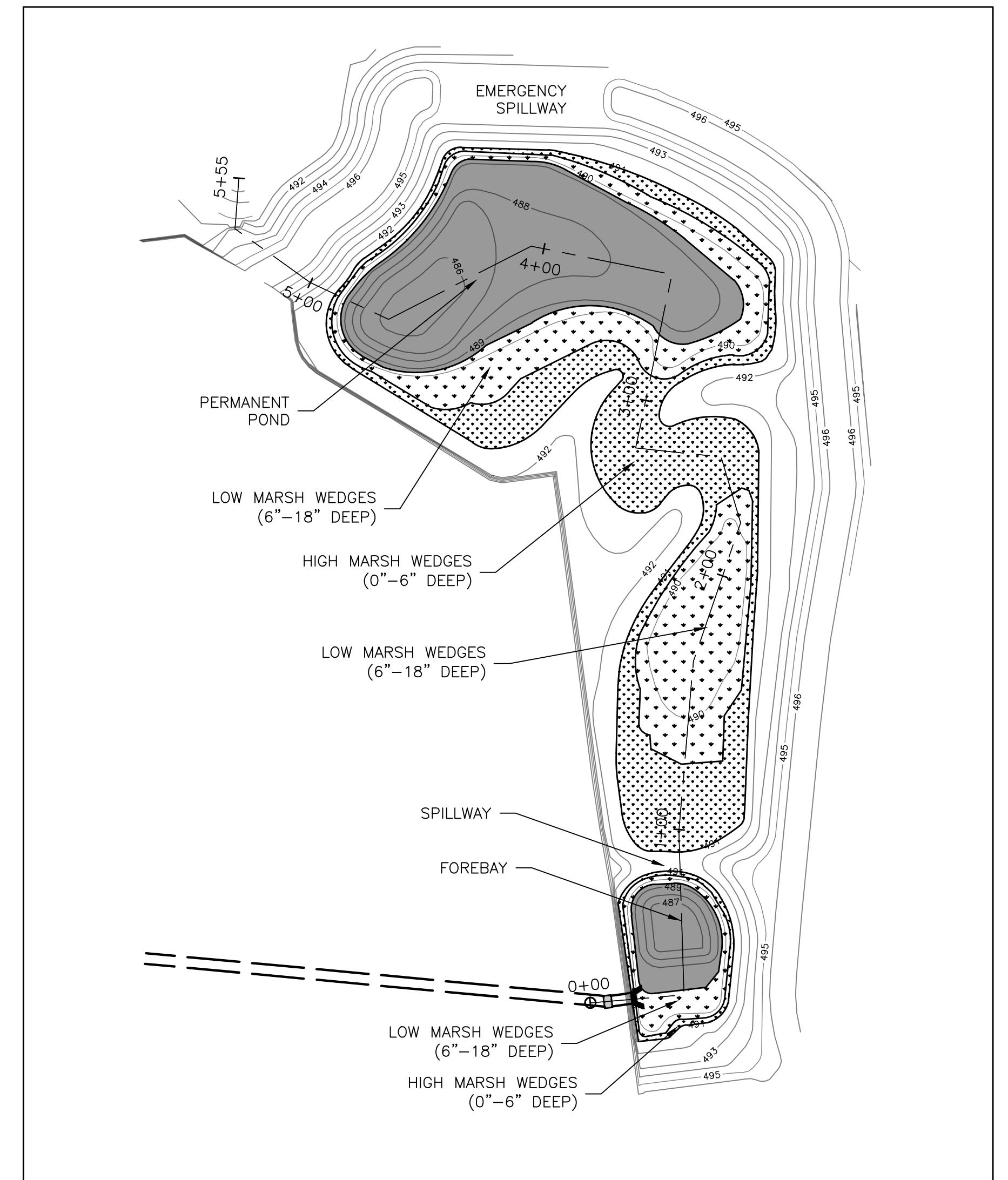
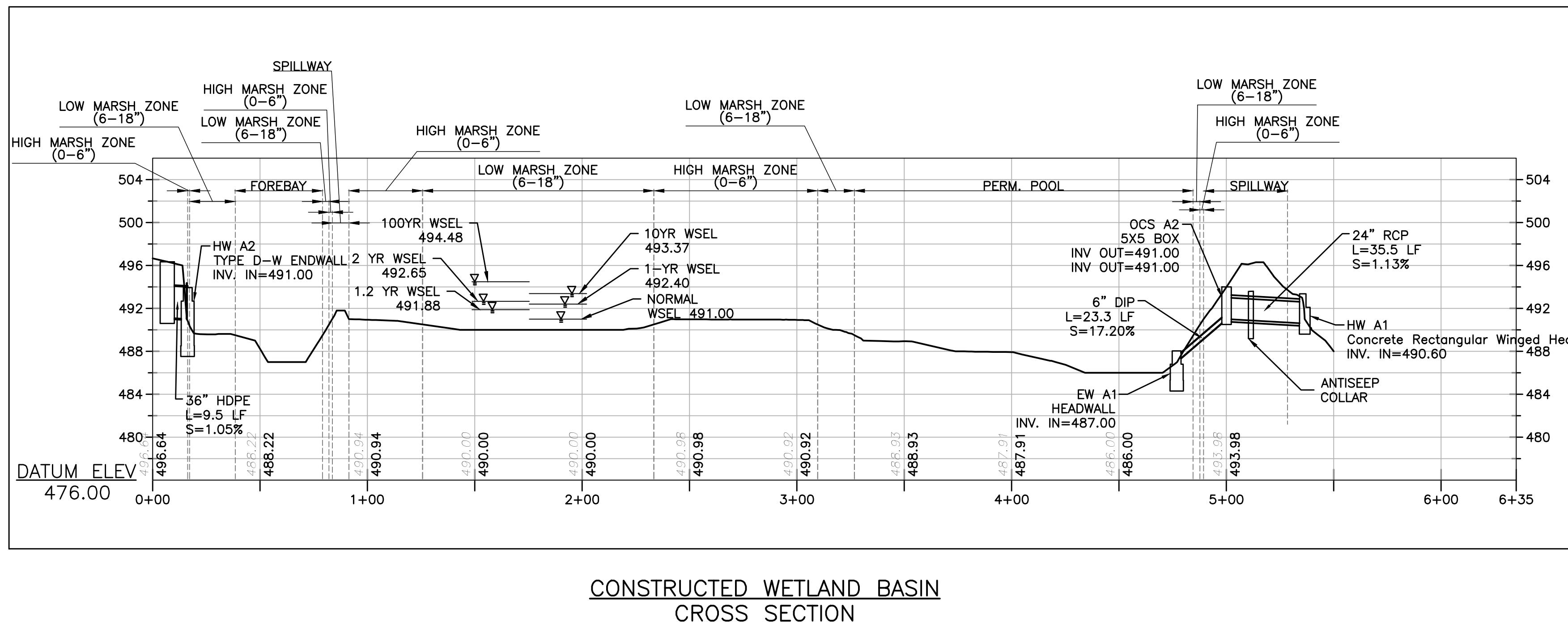
6. Install retaining walls.

Stage 2

7. Commence bulk grading and earthmoving while concurrently installing storm sewer pipes and structures. stub utilities from utility sources.

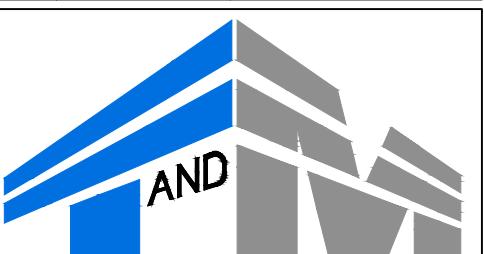
8. Install inlet protection across site.





CONSTRUCTED WETLAND BASIN

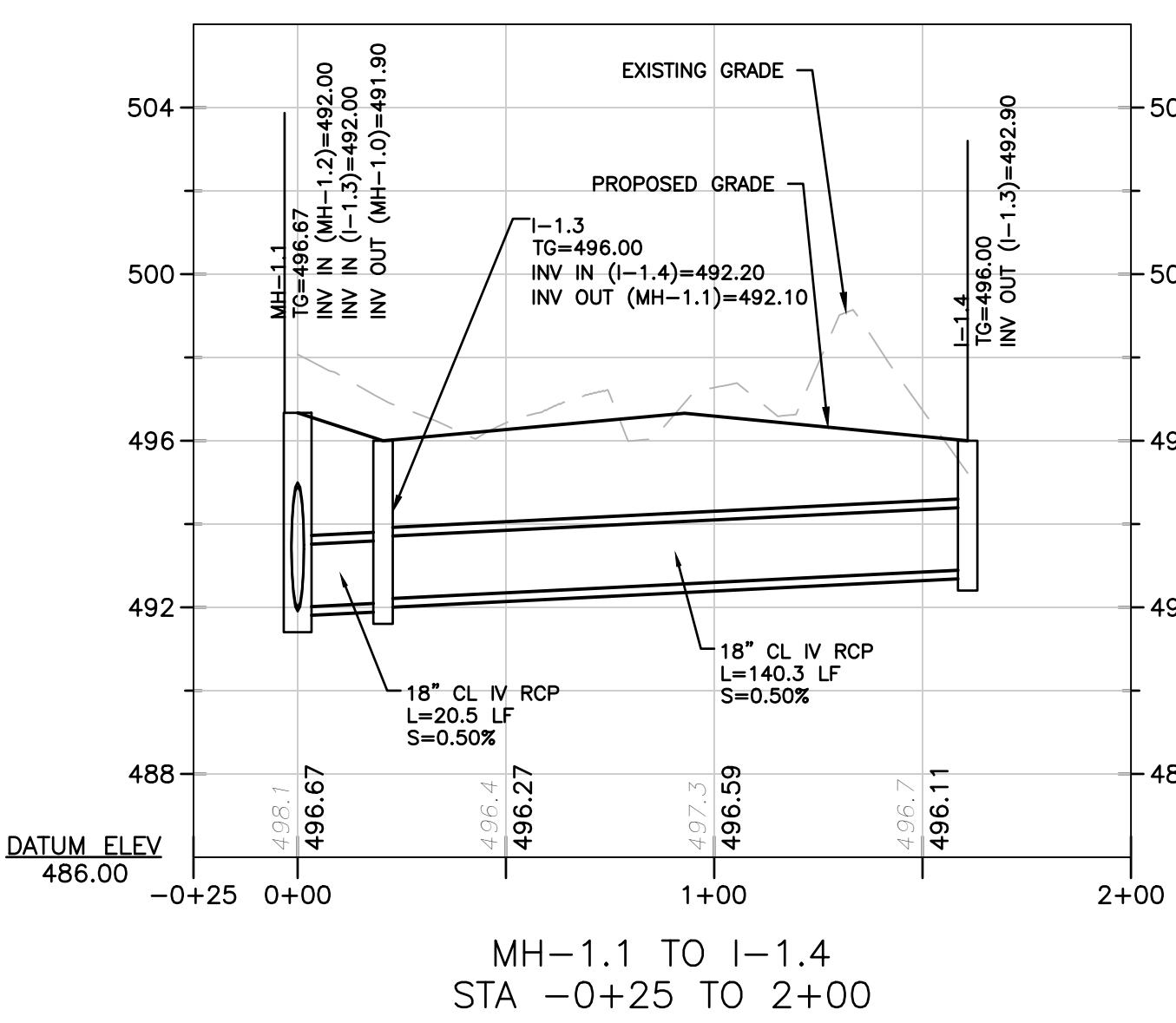
PLAN VIEW



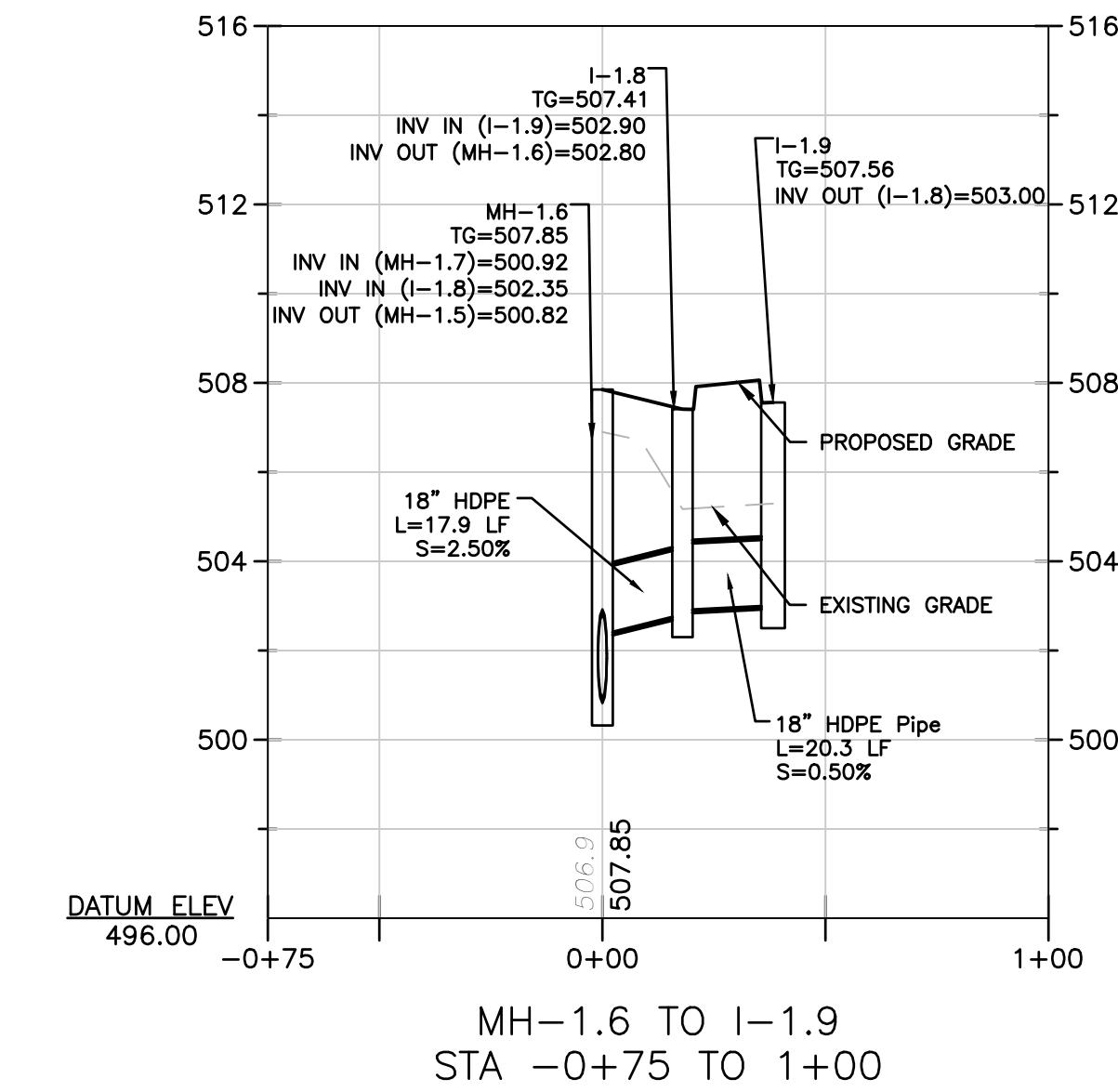
YOUR GOALS. OUR MISSION.

OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

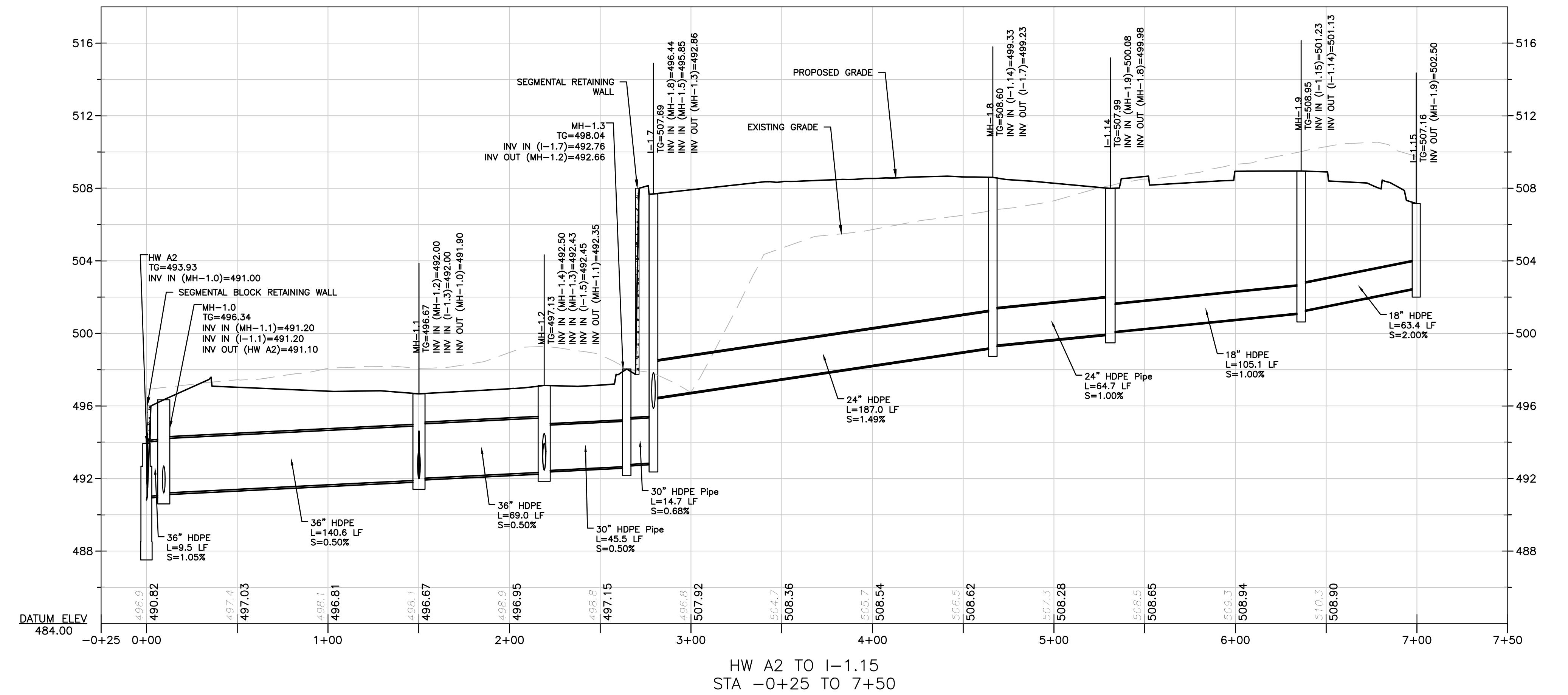
ED BY	JDT
D BY	JDT/KAL
BY	SEE
08/01/2024	
AS SHOWN	
O.	PORS00021



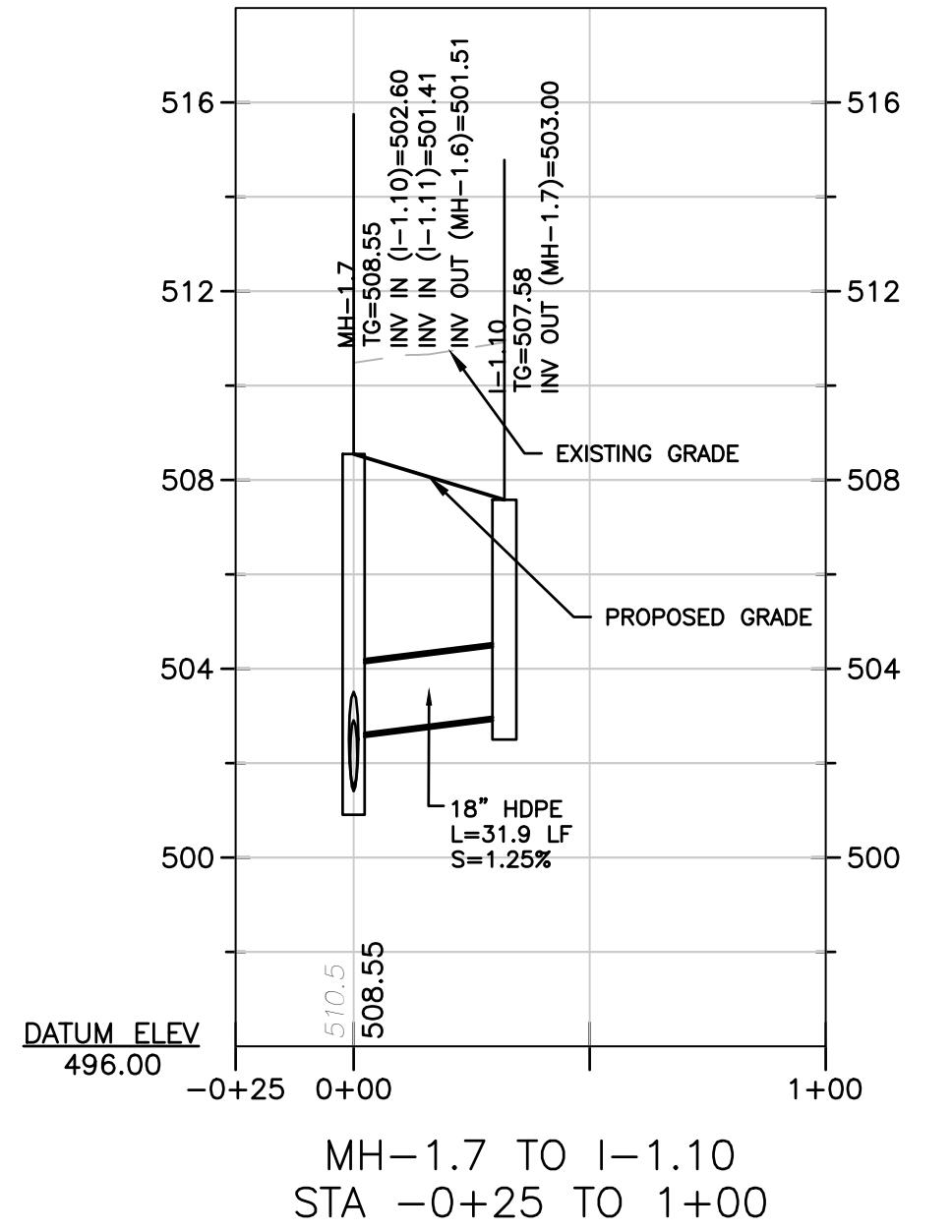
MH-1.1 TO I-1.4
STA -0+25 TO 2+00



MH-1.6 TO I-1.9
STA -0+75 TO 1+00



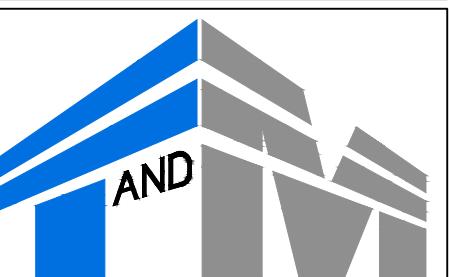
HW A2 TO I-1.15
STA -0+25 TO 7+50



MH-1.7 TO I-1.10
STA -0+25 TO 1+00

STORM PROFILES

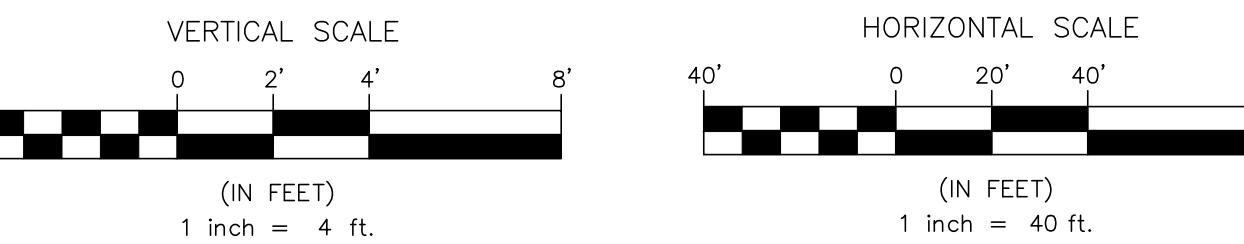
RDS AUTOMOTIVE GROUP
CHESTER SPRINGS SERVICE CENTER
500 POTTSVILLE PKWY, CHESTER SPRINGS, PA, 19425
UPPER UMBRAN TOWNSHIP, CHESTER COUNTY, PA

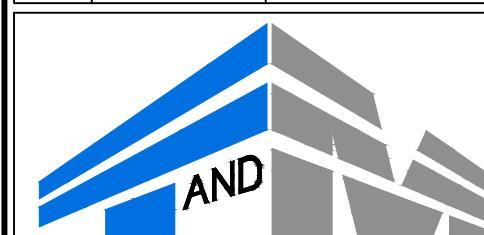
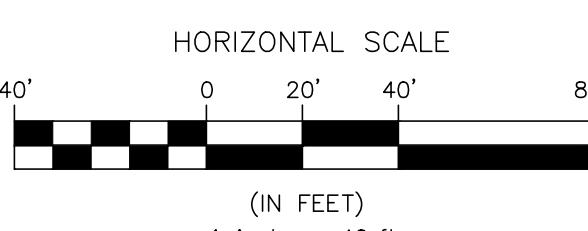
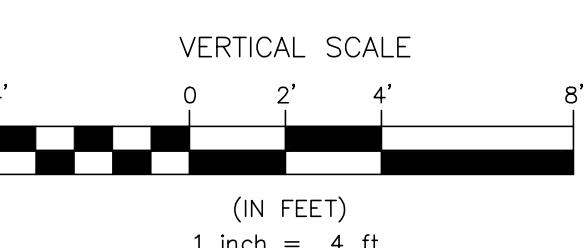
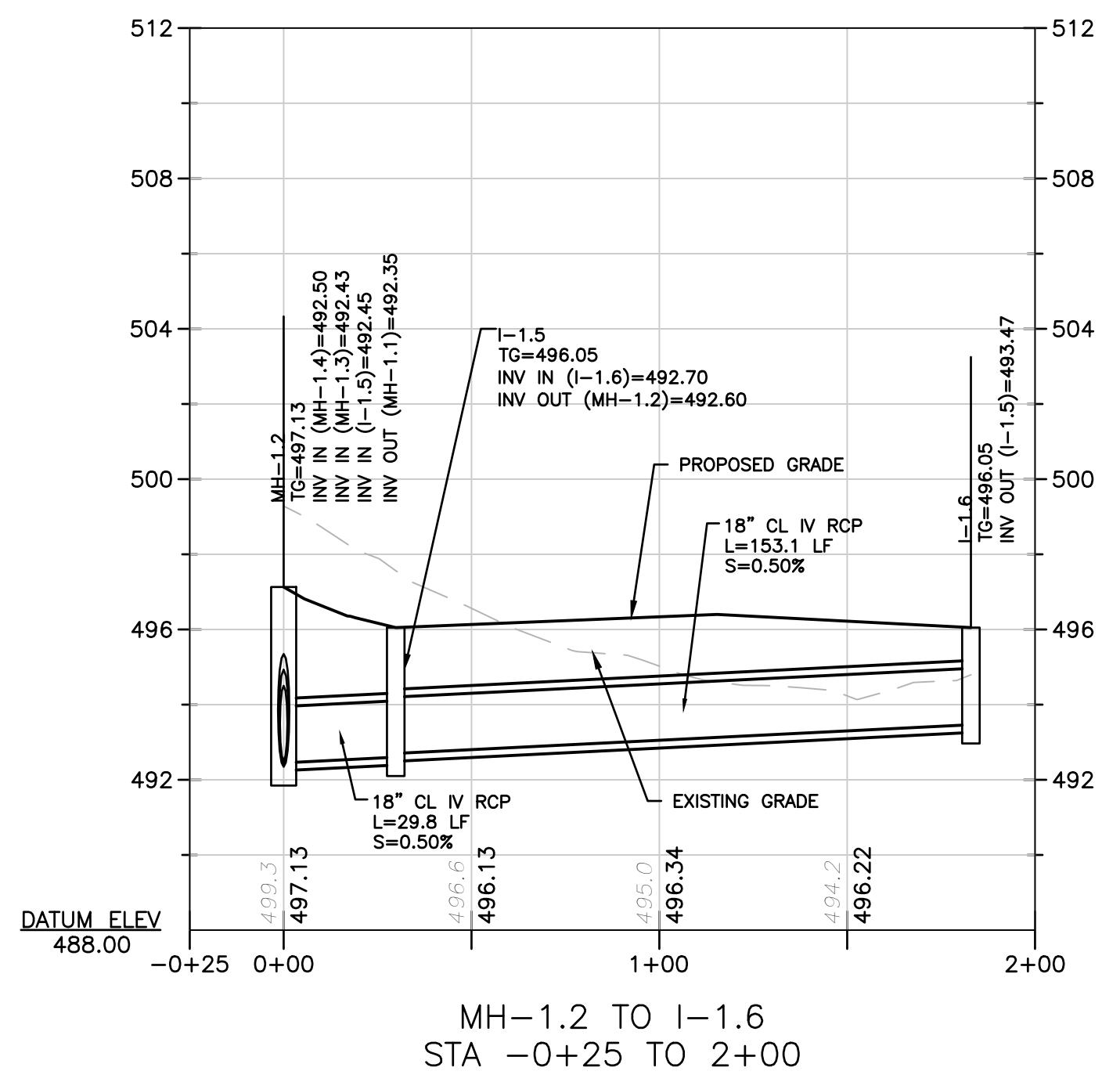
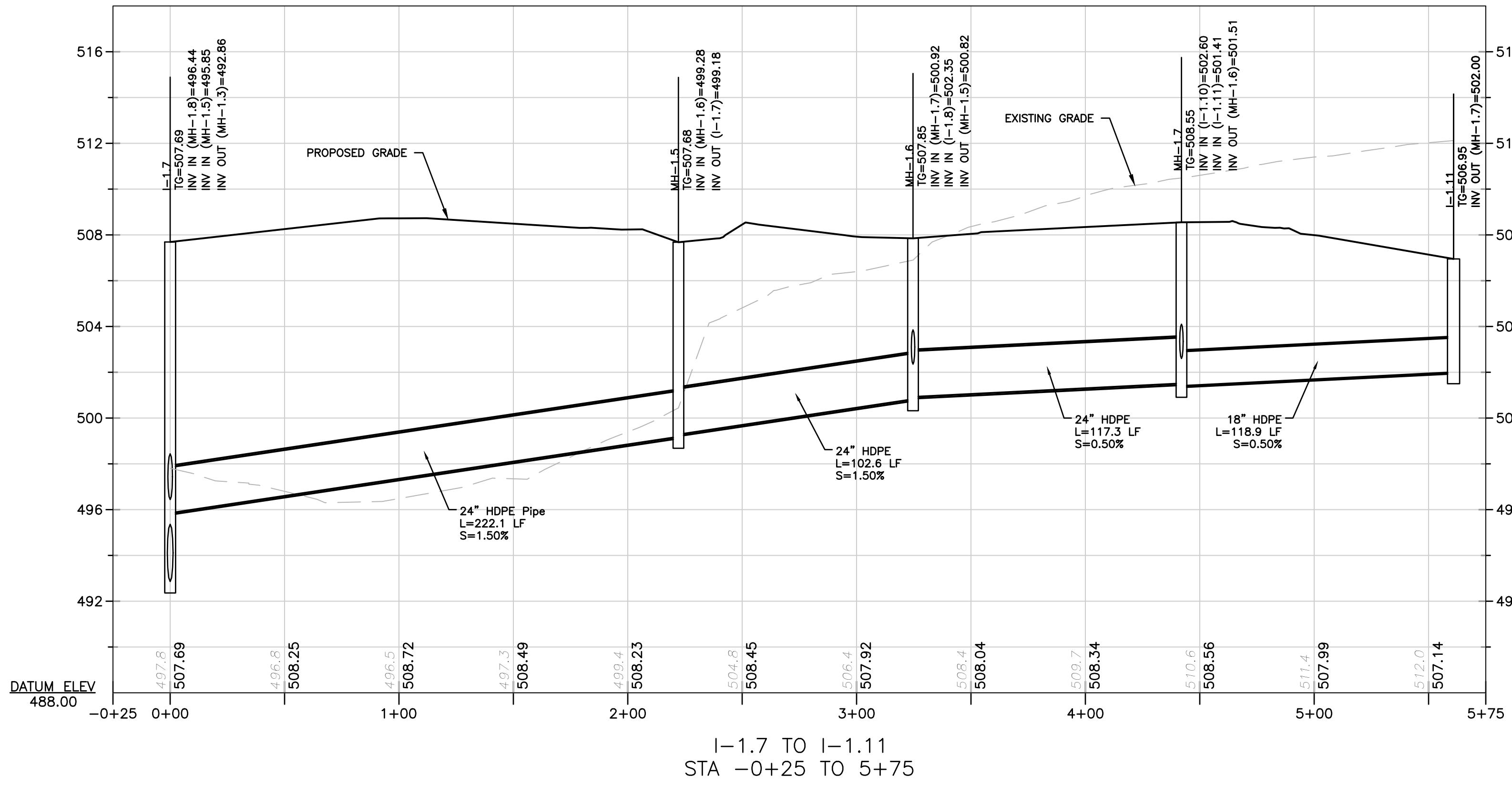
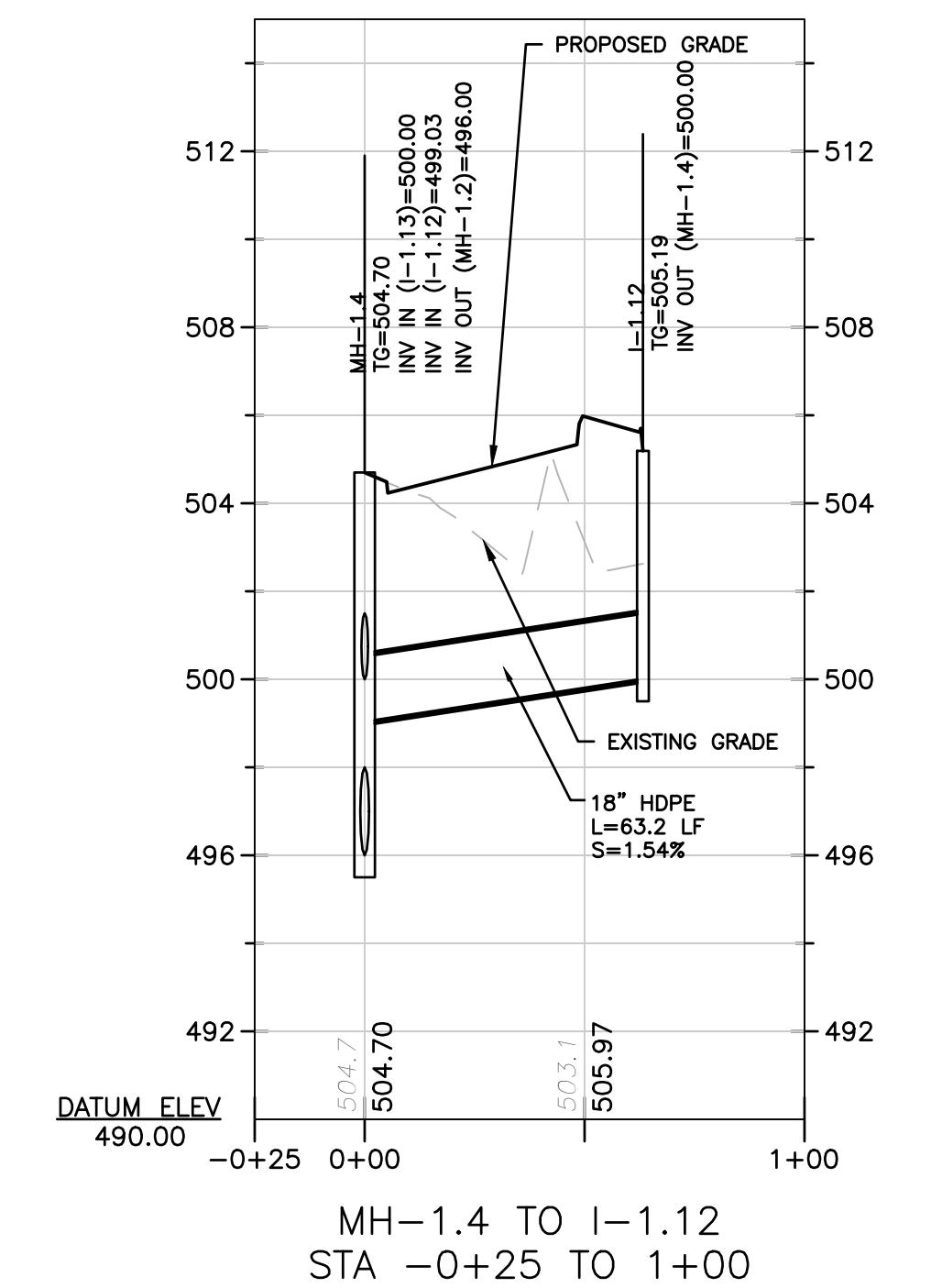
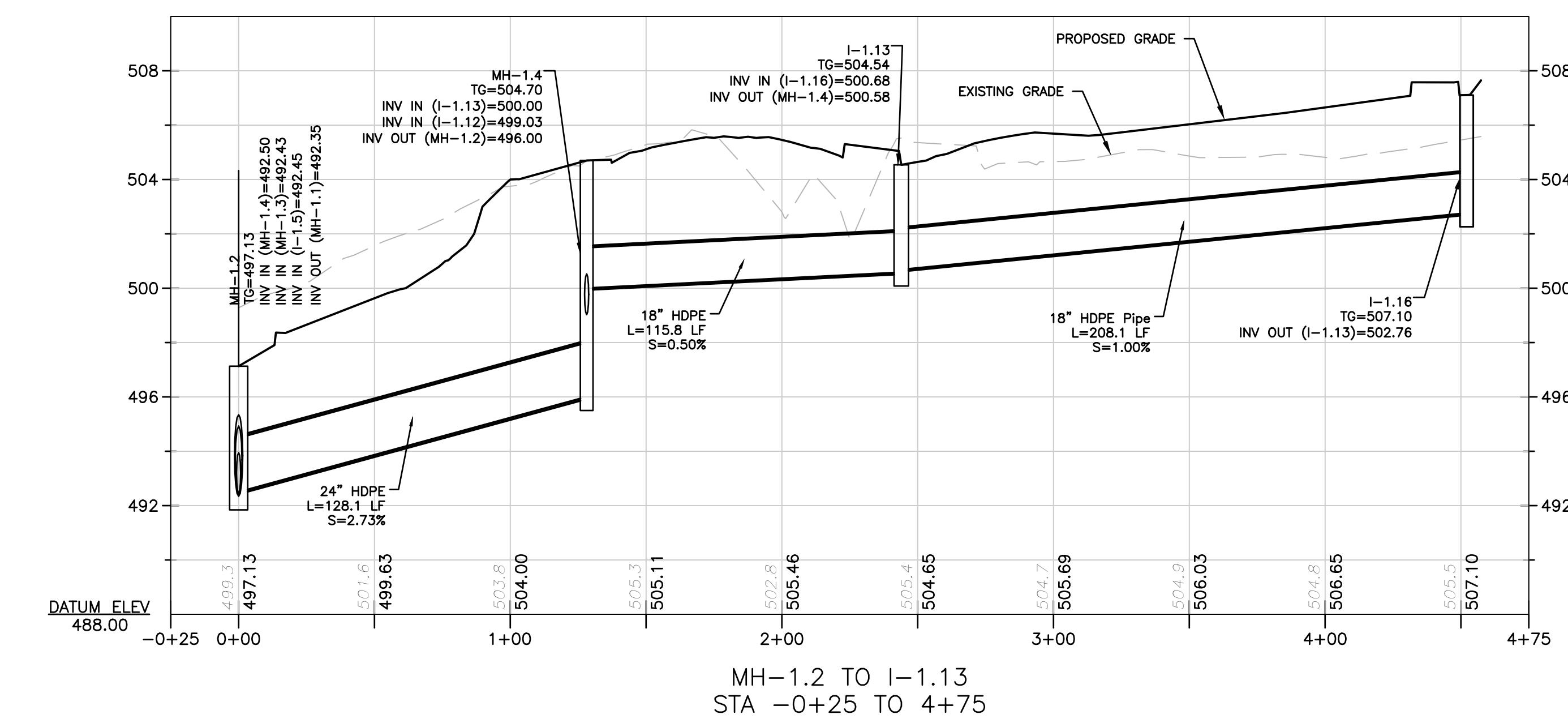


1700 MARKET STREET, SUITE 3110
PHILADELPHIA, PA 19103
TEL 215-627-3450
FAX 215-627-3459
www.tandmassociates.com

DESIGNED BY	JDT
CHECKED BY	JDT/KAL
DRAWN BY	SEE
DATE	08/01/2024
SCALE	AS SHOWN
PROJ. NO.	PORS00021

32
OF 35

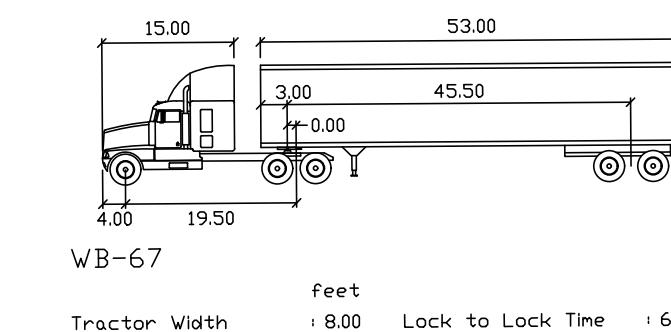




OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

DESIGNED BY	JDT	DRAWING	PRF 2
CHECKED BY	JDT/KAL	REVISIONS	
DRAWN BY	SEE	NO. DATE	
DATE	08/01/2024	NO. DATE	
SCALE	AS SHOWN	NO. DATE	
PROJ. NO.	POR50021	NO. DATE	

STEERING LOCK ANGLE = 24.4 deg.
ACHIEVED STEERING ANGLE:
60 deg. SWEEP ANGLE: 17.3 deg.
90 deg. SWEEP ANGLE: 17.9 deg.
120 deg. SWEEP ANGLE: 18.0 deg.

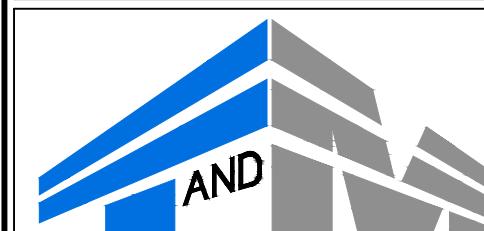
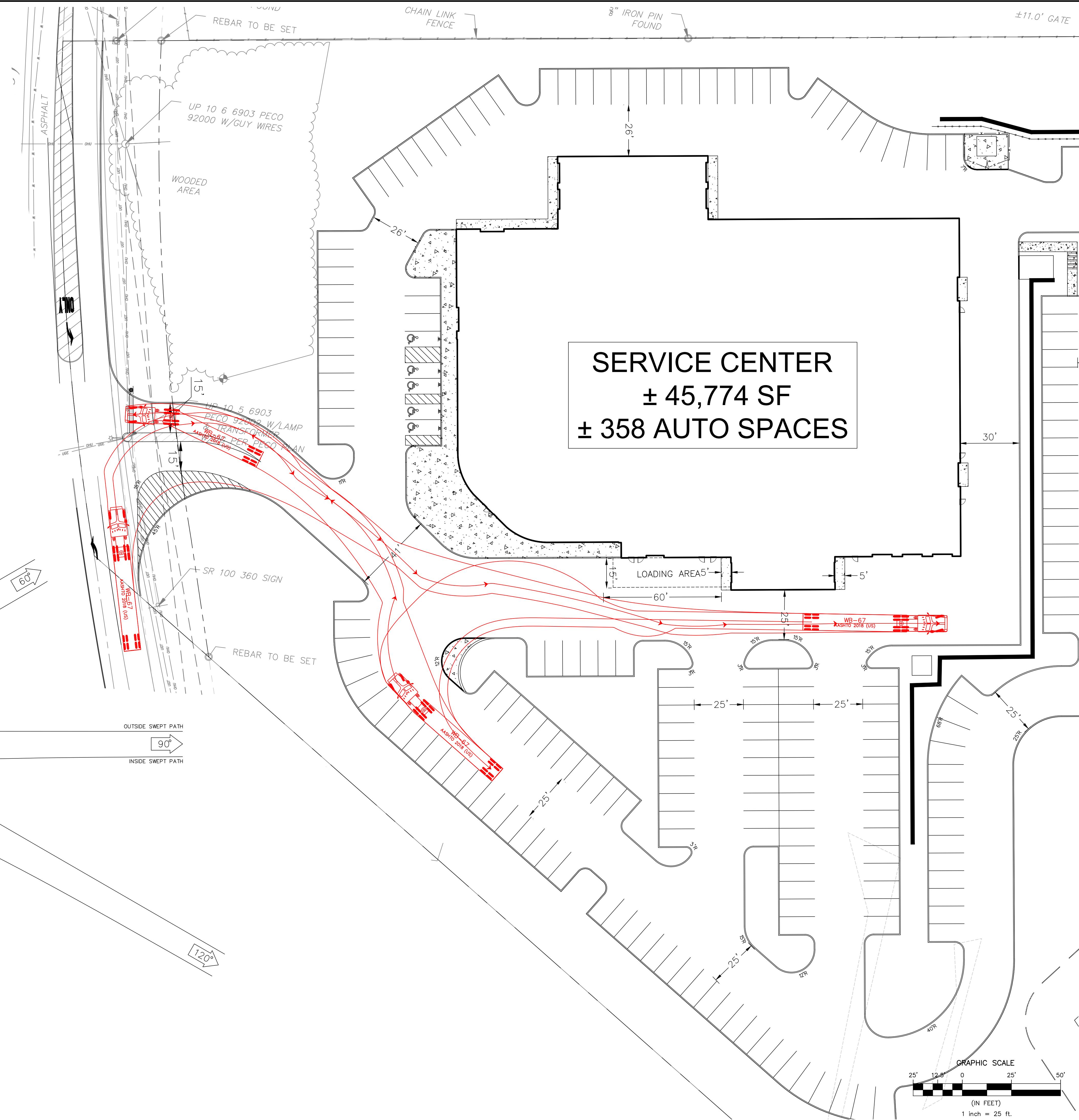


Commercial Design Vehicle
ODOT 2020 (US)

[ft]

feet

Tractor Width : 8.00 ft
Tractor Track : 4.00 ft
Tractor Width : 8.00 ft
Tractor Track : 8.50 ft
Articulating Angle : 75.0 degrees



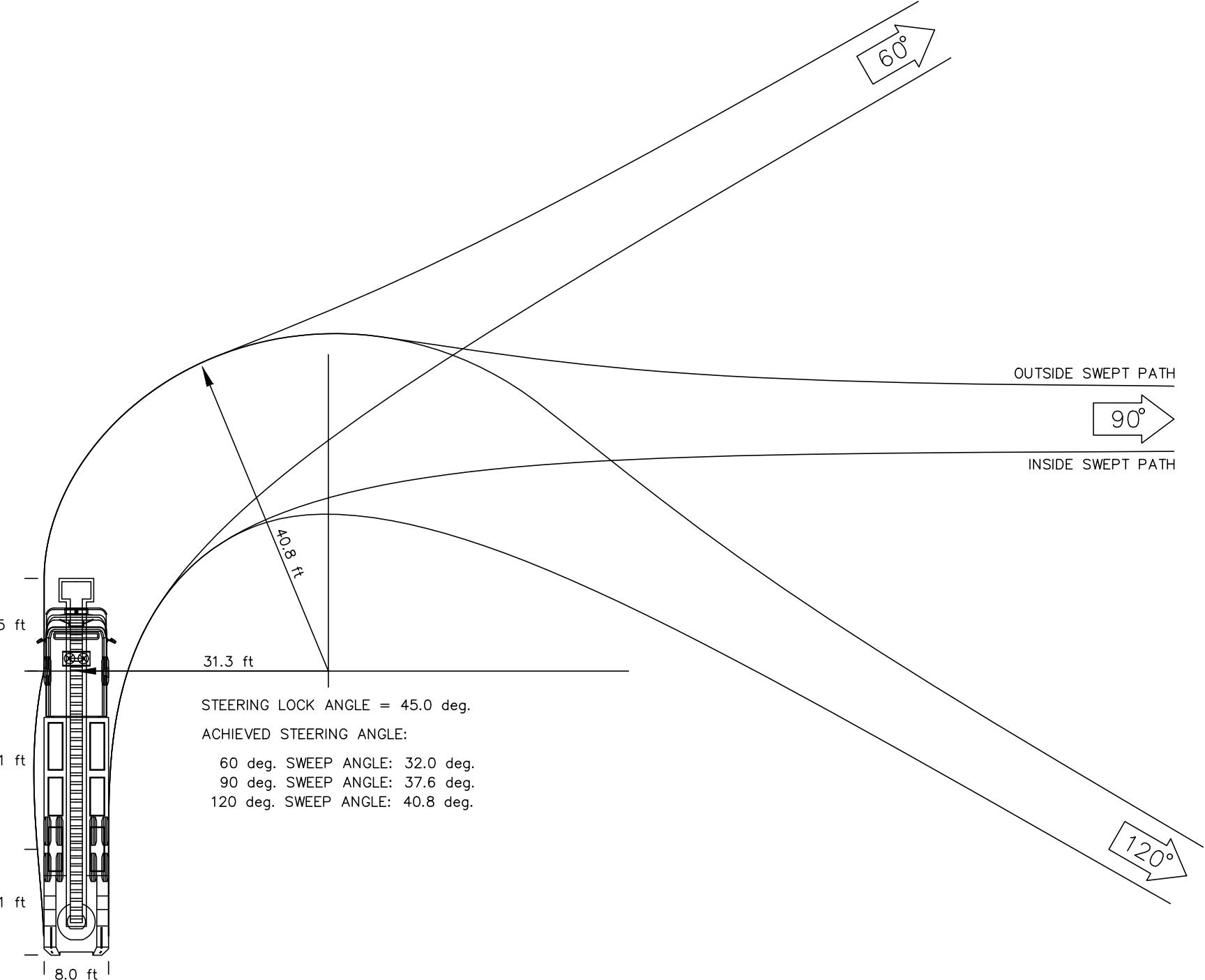
1700 MARKET STREET, SUITE 3110
PHILADELPHIA, PA 19103
TEL: 215-222-1550
FAX: 215-627-3459
www.tandmassassociates.com

OFFICES LOCATED IN:
DELAWARE, INDIANA, KENTUCKY,
MASSACHUSETTS, MICHIGAN, NEW JERSEY,
OHIO AND PENNSYLVANIA

DESIGNED BY	JDT
CHECKED BY	JDT/KAL
DRAWN BY	SEE
DATE	08/01/2024
SCALE	AS SHOWN
PROJ. NO.	PORS0021

COPYRIGHT 2019, T&M ASSOCIATES – ALL RIGHTS RESERVED. THE COPYING OR REUSE OF THIS DOCUMENT OR PORTIONS THEREOF, FOR OTHER THAN THE ORIGINAL PROJECT OR THE PURPOSE ORIGINALLY INTENDED, WITHOUT THE WRITTEN PERMISSION OF T&M ASSOCIATES IS PROHIBITED.

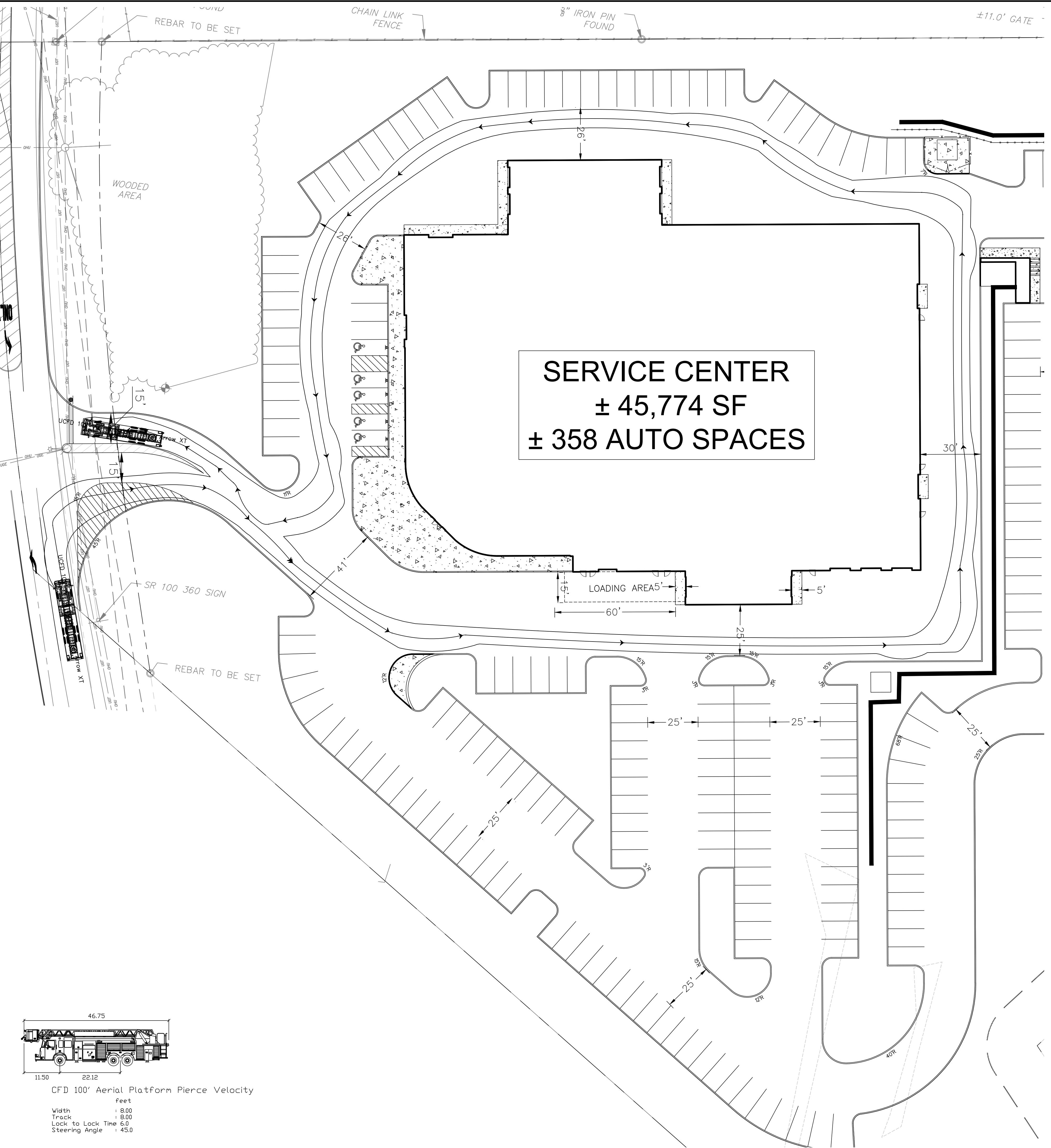
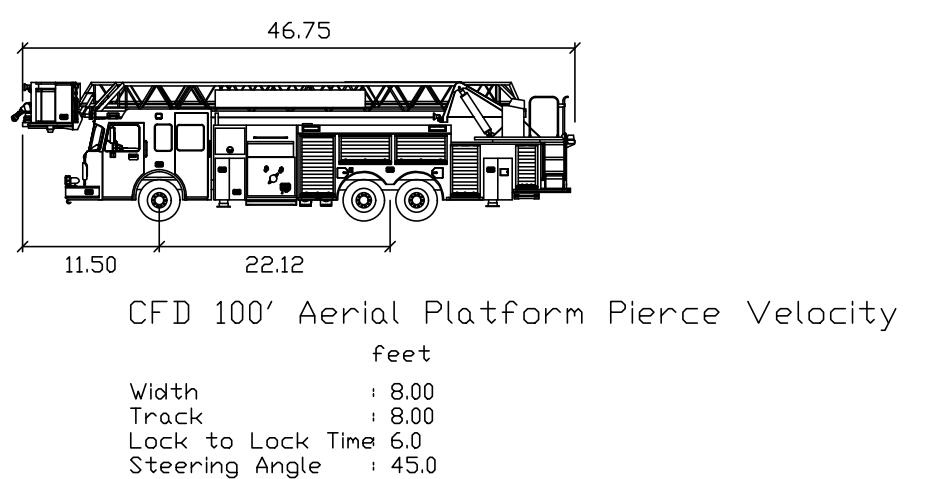
PROJECT INFORMATION:
FILE PATH: G:\Projects\PORS\00021\Plans\
FILE NAME: PORS00021-TRUCK.dwg
LAST SAVED DATE AND TIME: 01 Oct 2024, 3:34PM
LAST SAVE BY: EPasnak



CFD 100' Aerial Platform Pierce Velocity
CITY – FIRE & RESCUE (PENNSYLVANIA)
[54]

(c) 2024 Transoft Solutions, Inc. All rights reserved.

A horizontal scale bar with three tick marks labeled "0ft", "10ft", and "20ft" from left to right. The distance between the first and second tick marks is labeled "10ft", and the distance between the second and third tick marks is labeled "20ft". The scale bar is 20ft long.



SERVICE CENTER

± 45,774 SF

± 358 AUTO SPACES

The logo is a vertical composition. On the left, the text 'RDS AUTOMOTIVE GROUP' is written vertically. In the center, the text 'CHESTER SPRINGS SERVICE CENTER' is written vertically. On the right, the text 'FIRE TRUCK TURNING PLAN' is written vertically. The background features a stylized building facade with blue and grey panels, and the word 'AND' is written in a bold, black, sans-serif font at the bottom center.

<u>OFFICES LOCATED IN:</u>	
DELAWARE, INDIANA, KENTUCKY, MASSACHUSETTS, MICHIGAN, NEW JERSEY OHIO AND PENNSYLVANIA	
DESIGNED BY	JDT
CHECKED BY	JDT/KAL
DRAWN BY	SEE
DATE	08/01/2024
CALE	AS SHOWN
PROJ. NO.	PORS00021
DRAWING	
FIRE	
SHEET	
35	
OF 35	



UPPER UWCHLAN TOWNSHIP

Planning Commission
September 12, 2024
6:00 p.m. Workshop
7:00 p.m. Meeting
Minutes
Draft

LOCATION: Township Building, 140 Pottstown Pike, Chester Springs PA 19425

Attendees:

Sally Winterton, Chair; Joe Stoyack, Vice-Chair; Chad Adams (Meeting), David Colajezzi, Jim Dewees, Steve Fean (Meeting), Jessica Wilhide

Rob Daniels, Brandywine Conservancy – Workshop
Mary Lou Lowrie, Gilmore & Associates – Meeting
Gwen Jonik, Planning Commission Secretary

Absent: Jeff Smith, Taylor Young,

Sally Winterton called the Workshop to order at 6:02 p.m. There was 1 citizen in attendance.

Rob Daniels presented a high-level summary of the September 5, 2024 draft Comprehensive Plan (CompPlan) via a slide presentation. The CompPlan is a guiding document; it contains recommendations for land use, development, and preservation efforts for the next 10-20 years. It doesn't change regulations. CompPlans are to be consistent with the County's CompPlan and neighboring municipalities. They are to be updated every 10 years. This Plan updates the Plan of 2014. We started the process late 2022 with our Boards and Commission, publicized the update, received public input at a booth at the 2023 Block Party, conducted an online survey, etc. The Township's Village Design Guidelines, Village Concept Plan and Active Transportation Plan were updated along the way. We received 759 responses to the online survey, a pretty good response rate compared to other municipalities. General priorities are to preserve open space, preserve scenic areas and views, protect natural resources, retain the village feel. Toward the end of the process, a vision and key values were crafted: history, connectivity, community, resilience and stewardship. Chapters include Future Land Use, Historic Resources, Village Concept Plan, Transportation, Community Facilities and Services, Natural Resources and Open Space, Parks and Recreation, and Implementation. On the Future Land Use Map, "site responsive" means they are open space, larger lots, with on-lot water and septic, during any development, recognizing and trying to protect natural and historic resources. At Township boundaries, we try to match neighboring townships' land uses to keep things harmonious.

After the Planning Commission's review, the next step in the process is for the Planning Commission to approve forwarding the draft to the Board of Supervisors. The Board of Supervisors will open the County's Act 247 public review period, which provides a 45-day review period for the public, Downingtown School District, County Planning Commission and our surrounding municipalities to make comment on the CompPlan. The Board will then hold a public hearing and consider adoption.

The Planning Commission's comments included:

1. input was received from our boards/commissions over the past few years; not everyone will agree 100% with everything; it's a guideline;
2. they like the action items/ recommendations;
3. all previous comments have been incorporated into this draft

4. this was a collaborative piece; all of the task force members agreed they wanted it to move along.
5. Hopefully the recommendations and strategies will be discussed at the semi-annual Joint Boards & Commissions Workshop, as well as the Board's and Commission's monthly meetings.
6. Priority needs to be given to effectuate the swap of Route 100 and Graphite Mine Road.
7. Replacing traffic lights with roundabouts keeps traffic moving.

Rob Daniels advised he'll make an excel spreadsheet that will list the overall recommendations plus tabs for each Board/Commission's specific tasks.

7:00 p.m. Meeting

Sally Winterton called the Meeting to order at 7:00 p.m. There was 1 citizen in attendance.

Sally Winterton moved to add an item to the agenda -- to vote on the draft Comprehensive Plan as discussed at the work session. Jim Dewees seconded and the motion carried unanimously.

211 Byers Road – Eagle Animal Hospital Final Land Development Plan

Bob Linn, Linn Architects, Cameron Wolfson, Riley Riper Hollin and Colagreco and Jenn Matunis, attended. Bob Linn distributed a color rendering that the Board of Supervisors had approved of previously – gray roof, sloping dormer as preferred, pent roof over the porch only, did not wrap it to the wings. Mr. Linn reiterated the history of the project proposing constructing a new 2-story building, within the impervious cover threshold. Plans had been revised July 31, 2024 and the consultants' August 30 review letter followed. He distributed 11x17 size plans revised September 11 and the rendering dated "February 2024" but which had been distributed to the Planning Commission March 14, 2024 and that's the date referenced on what the Board approved. They responded to 18 comments in the consultants' review letter, including a \$10,000 in-lieu-of-sidewalk fee. Regarding the Historical Commission's comments, German siding is not available in the cement-based product they're using and they cannot duplicate the quoins with the cement-based product. They're going to preserve the garden shed and the privy.

They are requesting 2 waivers: to not widen Byers road and from requiring 20% of the existing impervious area to be counted as meadow. They will meet infiltration requirements, and by connecting to public sewer, the on-lot system will be properly abandoned and will help absorb stormwater.

Joe Stoyack moved, seconded by Chad Admas, to recommend approval of the July 31, 2024 land development plan conditioned on compliance with the comments in the August 30, 2024 Gilmore & Associates' review letter, and to grant the requested waiver from Code Section 152.309.D.(2). The motion carried unanimously.

480 Pottstown Pike Minor Subdivision Plan

Cameron Wolfson, Riley Riper Hollin and Colagreco and Jacob Tackett, T&M Associates reviewed the proposed 2-Lot subdivision plan and consultants' review letter. There is no land development proposed at this time. The subdivision plan is for 1 lot to become 2 lots, both will be compliant with zoning. They are asking for a waiver from prohibiting further subdivision for both lots. They are not considering an easement access from Fellowship Road to Route 100.

Discussion included the number of times a parcel can be subdivided, and will they beautify the eastern lot. Mr. Wolfson did not know what would be planned for the eastern lot because no land development is proposed at this time. One of the consultants' comments was to consider consolidating the larger lot with the adjacent lot and if that happened, there would be the potential

for subdivision and/or land development, which would conflict with the “no further subdivision” requirement. Discussion continued regarding the requested waiver.

Jessica Wilhise moved to recommend approval of the subdivision plan and to not grant the waiver. After further conversation, she withdrew her motion.

Joe Stoyack moved, seconded by David Colajezzi, to recommend approval of the Minor Subdivision Plan with a note that Lot 1 is not be further subdivided and the requested waiver be granted for only Lot 2. The motion carried with five (5) in favor and two (2) opposed (Winterton and Dewees).

The Applicant will seek approval at the October 21, 2024 Board of Supervisors meeting.

Comprehensive Plan ~ Recommendation

Joe Stoyack moved, seconded by Chad Adams, that the Planning Commission recommends to the Board of Supervisors to proceed with advertising for public review of the draft Comprehensive Plan and open the Act 247 review process as appropriate. The motion carried unanimously.

Meeting Updates

Environmental Advisory Council (EAC). Sally Winterton mentioned they're holding a clothing drive September 21.

Historical Commission (HC). Gerry Stein reported an upcoming lecture on native Americans and the Minquas Trail; they're opening the Upland Farm farmhouse for museum sessions hopefully the last Sunday of each month, replicating the slide show and displays as they had for the Block Party. Comprehensive Plan (CompPlan). Activity as noted above.

Approval of Minutes

Jim Dewees moved, seconded by Chad Adams, to approve as presented the minutes of the August 8, 2024. The motion carried unanimously. Sally Winterton thanked Sandy Diffendal for attending the meeting and recording the minutes.

Sally announced the next Planning Commission meeting is scheduled for October 10. A workshop will be held at 6:00 to discuss the Planned Industrial/Office zoning district uses, Residential Districts, parking, signs / billboards, lighting, etc.

Open Session

Gerry Stein mentioned that Mr. Durkin had asked if there is a comparison of what's different between the previous and the updated Plans.

Sally Winterton asked the status of the sale of 1800 Station Boulevard, an historic resource. Gwen Jonik advised it's listed as “under contract”.

Gerry Stein commented that we should always be looking for grants.

Adjournment

Jim Dewees moved, seconded by Chad Adams, to adjourn at 8:22 p.m. All were in favor.

Respectfully submitted,

Gwen A. Jonik
Planning Commission Secretary