

TOWNSHIP OF FERGUSON

3147 Research Drive • State College, Pennsylvania 16801
Telephone: 814-238-4651 • Fax: 814-238-3454
www.twp.ferguson.pa.us

FERGUSON TOWNSHIP PLANNING COMMISSION REGULAR MEETING AGENDA Monday, July 8, 2019 6:00 PM

I. CALL TO ORDER

II. CITIZEN INPUT

III. FERGUSON TOWNSHIP ZONING AND SUBDIVISION AND LAND DEVELOPMENT ORDINANCES UPDATE:

Carolyn Yagle will be present to discuss the changes made since the Planning Commission and the Agricultural Ad Hoc Committee reviewed the Ordinance, dated June 21, 2019. Ms. Yagle has prepared a matrix for the Planning Commission to review, to ensure all of the comments that have been discussed the past few meetings have been satisfied and included in the ordinances. A tentative schedule is attached with the Agenda packet within the Interim Planning Director Report.

Staff Recommendation: That the Planning Commission review the memo and recommend approval of the Zoning Ordinance and Map as of July 8, 2019 and the Subdivision and Land Development Ordinance, as of July 8, 2019 and to recommend the Board of Supervisors Authorize Advertising of both Ordinances.

IV. PRELIMINARY/FINAL REPLOT OF LANDS OF THE STATE COLLEGE BOROUGH WATER AUTHORITY & GARY AND CAROL MYERS – INITIAL REVIEW & COMMENT: Attached within the Agenda Packet is a transmittal letter and the Proposed Replot Plan.

Staff Recommendation: That the Planning Commission review and make initial comments upon the Plan.

V. PRELIMINARY LAND DEVELOPMENT PLAN FOR THE NIXON-KOCHER WATER TREATMENT FACILITY.

Attached within the Agenda Packet is a transmittal letter and the Proposed Land Development Plan for the Nixon-Kocher Water Treatment Facility.

Staff Recommendation: That the Planning Commission review and make initial comments upon the Plan.

VI. CONSENT AGENDA

VII. INTERIM PLANNING DIRECTOR REPORT

VIII. CENTRE REGIONAL PLANNING COMMISSION REPORT

IX. ZONING/SALDO UPDATE

X. PINE GROVE MILLS – SMALL AREA PLAN

XI. APPROVAL OF REGULAR MEETING MINUTES JUNE 24, 2019

XII. ADJOURNMENT

100 Ross Street, Suite 500
Pittsburgh, PA 15219
(412) 261-6000
www.epd-pgh.com

July 8, 2019

To: Lindsay Schoch
From: Carolyn Yagle
Re: July 2019 Ordinance Updates

MEMORANDUM

Attached, please find a status listing of changes in preparation of 7/8/19 Planning Commission meeting discussion.

Principals

Andrew JG Schwartz
Susan M. Simmers
Jack R. Scholl

Senior Associate

Carolyn E. Yagle

Associates

Katherine A. Kovalchik
Jiayu Qin

Emeritus

John Ormsbee Simonds
Philip D. Simonds
Paul Dorr Wolfe

Legend

Plain text: Comment addressed prior to 6/24/19 Plannign Commission meeting discussion

Italic: comment addressed as follow-up to 6/24/19 Planning Commission meeting discussion

A Zoning

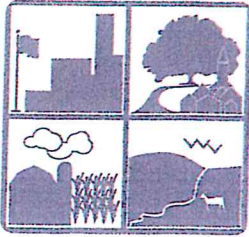
Ordinance Section	Comment	Manner Addressed	Status
119	Letter D permits a "meeting room" in a dwelling unit to be used for people to gather for personal and/or professional purposes. Consideration for removal	Removed "meeting room reference"	completed
RA Quick view.	Area and bulk category 1. A category should read " Usual farm structures and single and two family dwellings not to exceed three dwelling units. Remove single family dwellings (50+acre tract) Remove single family attached dwellings (50 + acre tract) Remove two family dwellings (50+acre tract) Remove " Single -family /two family dwellings (one dwelling for every 50 acres of a primary use, not to exceed 3 dwellings on any one lot". Add to area and bulk category 2 " One single family detached dwelling (for every 50 acres of a primary use- as determined and calculated before the subdivision). Area and bulk category 2 dimensions. For category 2 the building and impervious coverages are both listed as 30%. Suggest that the total impervious coverage be changed to 50%.	Category re-worded Removed (echoing 5/28/19 QV) Removed (echoing 5/28/19 QV) Removed (echoing 5/28/19 QV) Removed (echoing 5/28/19 QV) Removed (echoing 5/28/19 QV)	completed completed completed completed completed
RA , RR and AR Quick View	Accessory uses lists "accessory food operations" as a permitted accessory use in categories 1 and 2. It is not clear based on the definition of Accessory food operation what this use is and why we would want this as an accessory use. Possibly clarify the definition.	Fine-tuned definition; referenced also to Usual farm structures	completed
AR Quick View	Area and bulk category dimension table category 2 the building and impervious surface calculations are both listed as 30%. The total impervious coverage could be listed as 50%.	Updated to 30%	completed
R-1 Quick View	Area and bulk category 4 the building and impervious coverage are listed as 30% . The total impervious coverage could be listed as 50%.	Updated to 50%	completed
R1-B Quick View	The area and bulk categories dimensions chart for category 4 lists the building and impervious coverage as 20%. The impervious surface coverage should be 30%.	Updated to 30%	completed
Village Quick View	Bed and breakfasts are listed as permitted and conditional use for Category 3. By definition a bed and breakfast is an "owner occupied single family dwelling". Category 3 does not list single family dwelling as a use.	Removed use from Category 3	completed
Office Commercial Quick View	Home based business, no impact is listed as a permitted accessory use for categories 2 and 3. This should be removed. Dwelling units are not permitted.	Removed use from Categories 2 and 3	completed
27-712 Accessory Struct	Recommend changing #1 to only apply to RA and RR zoned properties of less than 5 acres. The proposed version applies to all districts. Recommend changing #2 to only apply to RA and RR zoned properties greater than 5 acres. The proposed version applies to all districts. Recommend amending and maintaining our current language in Chapter 27-204 A-1 (1) to read as follows; for all residential lots (excluding RA and RR zoned lots) of 2 acres or less, the combined square footage of all accessory structures may not exceed 25% of the gross useable floor area of the principle building. Maximum of two accessory structures." Recommend amending and changing our current language in Chapter 27-204-A-1 (2) to read as follows: On nonresidential lots or those residential lots (excluding RA and RR zoned lots), the combined square footage of all accessory structure shall not exceed 50% of the area of the principle [sic] building on the same lot. Maximum of two accessory structures.	Updated to RA and RR Updated to RA and RR Updated per recommendation Updated per recommendation	completed completed completed
27-207.B Request for Reasonable Accommodations	Letter D should be changed to Board of Supervisors instead of "Board of Commissioners".	Updated Supervisors	completed
302.B.2.b.14)	Lighting shall be provided for transit services.	"If said service facility is on the lot, a shelter and seating with lighting shall be provided."	completed
302.G	A. Post Final. Comment on potential re-wording	As per PA MPC	No change
303.B.4	reference to Chapter 25	added "Chapter 25, Trees"	completed
402.C.11	40%	revised 'or through the conditional use process provided for in paragraphs .D through .G below, at least "40%" of healthy trees on the site shall be maintained or replaced immediately following construction. Replacement trees "shall be native species to Pennsylvania" and shall have a'	completed
403.A.4	Question posed: Do homeowners associations have control over some of these areas, if not, should we add "or" HOA?	deleted "25%" Added "or as otherwise stipulated by the Ferguson Township Stormwater Management Ordinance." at end of sentence	completed

Ordinance Section	Comment	Manner Addressed	Status
403.B.2	Series of questions posed as related to federal references and impacts	Updated per 5/28/19 comments: 3) Lands, water bodies and wetlands as regulated by State and/or Federal designation 4) Similar land and/or water to those outlined above as encountered during the process of subdivision and land development within Ferguson Township.	completed
404A, D and E	Align Airport name if applicable; account for interior and exterior permit needs and wording on variances	Aligned Airport name; no other update found to be applicable	completed
405.G.1 Part 5	Complete consistency between updated land use names Designations/Listing of Conditional Uses/Special Exceptions to be consistent with Quick Views	Aligned Land Use terms Aligned uses and criteria; updated DD. Water Authority reference	completed completed
701.C.1 and 701.C.2	Change back to current wording	Returned to original language; shift from 2017 memo requested direction	completed
707.A.2 707.A.2.g	Question of where the plant list is general mark-up	Plant list is in same section per Subsection G. added "Mitigate stormwater runoff on site and improving the quality of this water through the use of vegetation."	no change completed
707.B.2	general mark-up	added "provided it is not recognized as an invasive plant by the Commonwealth of Pennsylvania Department of Conservation & Natural Resources."	completed
707.B.3 707.B.6	have arborist participate in review rather than engineer general mark-up	added "and Township Arborist" added "6. All landscaping plans should be verified by the Zoning Administrator and Township Arborist with consultation from the Tree Commission."	completed completed
707.G.1	general mark-up + Do we need to go above and beyond what is stated in our plant list guide plantings?	added "height of at maturity of at least 30 feet with a spread of at least 30 feet"	completed
707.H.1	general mark-up + If feel if the tree is not susceptible to invasive, then ever if they are not on the list – can be kept	deleted "minimum height of 20 feet at maturity" added "strongly" encouraged and substituted for one new tree "that is listed on Township's official plant list"; deleted "The existing tree must be listed on the Township's official plant list or determined by the Township to not be susceptible to invasive growth." revised "All changes to the existing hedgerow or forested area must be approved by the Township Zoning Administrator and Township Arborist with consultation from the Tree Commission."	completed
707.H.2	should	retained "may be" as should and may are parallel in the Ordinance	no change
707.H.3	why?' noted in mark-up	retained "In an area where the canopy trees will not allow for the planting and growth of understory trees, four shrubs could be planted in lieu of each required understory tree." per 12/2019 Township Staff Coordination discussions to date	no change
707.H.4	general mark-up	Added "substitution or removal of existing vegetation must be approved by the Zoning Administrator and Arborist with consultation for the Tree Commission." Deleted "substitution must be verified by the Zoning Administrator"	completed
707.I	Wording requested as related to preservation	Included equation	completed; no additional comments submitted
707.E and 707.M.2 707.M.2.a-d; f	Resolution 2014-25 reference "why are these [tree/shrub ratios] not the same?" (Arborist); The tree Commission feels that canopy density is to sparse i.e. canopy tree density could be increased."	Technical title included reviewed with Township Staff in May 2019 were refined as applicable of the above and incorporated into the May 2019 draft	completed
707.M.2.e 707.M.3.b	6 what simplify	added " if preserved" bufferyard language adjusted per coordination and mark-up of Township Staff	completed completed
707.M.3.c(2)	numbers should be examined (Arborist); TC would like to know how the density of vegetation, including trees, can be increased . . ."	reviewed with Township Staff in May 2019 were refined as applicable of the above and incorporated into the May 2019 draft	completed
707.M.3	avoid mulch volcanoes	Text refined	Align with construction specification/detail
707.M.3c following table	crossed out, then "no"	retained existing per cancellation of cross-out	no change
707.N.1	allow no curb for stormwater - required	no change to text	Align with Chapter 26 Stormwater Management and Township Construction Details
707.N.4	general mark-up (Arborist); TC feels should be revised to increase inclusion of vegetation . . . Mitigate stormwater runoff . . . Improve water through the use of vegetation	no ratios received per Summer/Fall 2018 inquiries; per 12/2018 deleted "No islands are required in parking lots that are less than 62 feet in width as long as perimeter planting is used around the entire parking lot with the exception of where the parking lot abuts the building."	align stormwater items in Chapter 26; revised ZO 10 to 8; revised 12 to 10; revised 10 to 12 per 12/2018 and 2019 comments
707.N.4 707.N.5 711	parking space quantity references change 45 to 40 Simplify reference to notification	retained quantities per deletion of islands comment revised 45s to 40s Updated language to "written form"; removed mail reference	completed completed completed

Ordinance Section	Comment	Manner Addressed	Status
717	One definition in ordinance; Page 110 Conditional Use/Special Exception , letter E lists a minimum of 4 rooms shall be offered as part of this use; In the RA, RR bed and breakfasts are permitted accessory uses , 1 to 3 rooms and 4 to 10 rooms are permitted; In the R-1, 1 to 3 rooms are permitted; It does not appear that bed and breakfasts are permitted in other zoning districts for example the R1-B; It does not appear that there are any standards or criteria for a bed and breakfast	In 717 - Supplemental regulations for those bed and breakfasts permitted by right have been modified; Bed and breakfasts were removed from R1-B in Spring 2019; definition fine-tuned	completed
Part 8	Series of questions posed	No changes	No changes
904	Phasing question	Per general process	No changes
1102	general mark-up	refined canopy tree definition "shall reach a height of at least 30 feet with a spread of at least 30 feet." Other definitions updated per coordination of 5/28/19 mark-up received 6/11/19	completed
* <u>All other Tree Commission-related comments reviewed with Township Staff in May 2019 were refined as applicable of the above and incorporated into the May 2019 draft</u>			completed
* <u>2018 Ag Ad Hoc Committee comments focused on land uses updated in 2018 and 2019</u> Remainig associated Ag AdHoc Committee comments otherwise pertinent to all other changes completed			completed
* <u>2017-2018 Township Staff comments incorporated into previous drafts</u>			completed

Ordinance Section	Comment	Manner Addressed	Status
B SALDO			
Ordinance Section	Comment	Manner Addressed	Status
103.F	general mark-up	Added "Promoting the desirability of Ferguson Township as a place live, work and do business through maximum strategic use of vegetation. Vegetation, in particular trees and shrubs, is known to be effective in mitigation the effects of heat islands by reducing amount temperature; water filtration and purification; stormwater management; improving air quality; providing habitat for pollinators, birds and wildlife; improving the aesthetics and priority values of neighborhoods and commercial developments; and ongoing civic engagement by improving the walkability of transportation corridors."	completed
303.C	Staff coordination; general mark-up	added Tree Commission to Preliminary Plan review list	completed
304.C.1	Staff coordination; general mark-up	added Tree Commission to Final Plan review list	completed
401.A.1.b.3(j)	general mark-up	Inventory of these over 6" diameter trees to preserve, trees to remove	For inclusion within Tree Preservation Ordinance rather than SALDO
22-501		General 3—related: A natural resource inventory that identifies and maps natural areas and resources, including vegetation, is required as part of every development plan.	not completed - scale of text
502.E.7	general mark-up	refined "approval of the Township Engineer after consultation with the Township Arborist"	completed
502.A	general comment	Use vegetation to design streets as gardens or forest. Use vegetation for traffic commute, improving aesthetics of neighborhood street, mitigating heat island effort on streets	completed; Align with design specifics/construction standards
503.C	general comment	request to Add Mid-block walkways encourage ground cover on one or both sides of walkway or other kind of suitable vegetation; no change as already included in document	completed
509	general comment	Specify that canopy width of the street tree cover a certain percentage of the impervious surface. Canopy width is just as important as height of tree as maturity	general reference made to Code of Ordinances - text placed in 707 Zoning can remain there or moved to another ordinance.
501A		(reference to Terraced Streetscape District): Intent Add: to the sentence that starts "Adherence to these design standards will ensure that the built environment is attractive and harmonious, with both other parts of the built environment and the natural environment.	completed
504A		Goals Add to specific goals: To ensure maximum use of vegetation in the design and green practices during development. (Another way to say this is: To ensure sustainability of the development.)	completed
505A		: Context Add environmental context: a sensitivity to the natural features of land, water and vegetation in the development project.	completed
506A		Design Principles B. 4: Use landscaping, green space and existing vegetation to address traffic calming, aesthetics, issues of identity, territoriality and privacy. (mentioned later if Section 507A).	completed
507A		Synergy Encourage the use of vegetation to accomplish the goals mentioned.	not completed - scale of text
509A		Streetscape Design Standards A. 3 Regarding four-foot wide planter beds: Can these be built as rain gardens? Four feet is not wide enough for trees; the authors of "Low Impact Development" recommend six or eight feet Make sure the wells are deep enough for trees as well as wide enough Planter beds: Design and install to accept stormwater? Through use of openings in planter curbs; related to rain garden concept g) Still A3: Language is weak as is. Use this concept as an incentive to strengthen? A.5: Re: street trees: again, specify canopy size; canopy width needs to be proportional to combined width of sidewalk and street to mitigate heat island effect	completed
513A		Storefront Design add) F. Encourage use of vegetation as enhancement for storefronts.	completed
513.B.2b	comments provided on 513.A.2 and 3.	Comments provided "Include forests and groves of trees in the definition of community facilities; and e.g. Preserve 1 acre of forest land in Lieu of 4 acres of parkland of similar equivalent" Refined : The amount of of parkland to be dedicated in each development shall be determined "based upon the calculation identified within Township Fee Schedule or approved equivalent." Therefore, A.3 edits not applicable. Community facilities are not part of calculation, so A.2 definition request not applicable.	completed

Ordinance Section	Comment	Manner Addressed	Status
513.B.5 and 6	request provided to add: "Natural Areas" as one of the criteria for the BOS in determining if the land is accessible for dedication as parkland and Tree Commission: "Natural Areas" is addition to accessory bicycle and pedestrian parts as parkland.	No change per Township Staff Coordination discussions to date	no change
514A		Corner Building Sites. A. 3: Encourage use of vegetation to create public spaces.	completed
515A		Parking Structures and Incentives A. Design: Add green roof to parking structures; it's mentioned in incentives but add it to design?	completed
501B	general mark-up	A. 1. h. 1): Reference to removing invasive species: Work in cooperation with the Township arborist to identify invasive species.	completed
501B	general mark-up	A.5.: Parking, parking lots, parking structures; a.14): Landscaping standards: Add stormwater management and heat mitigation as two more functions of landscaping in parking areas	completed (now subsection 13)
Parking	<p>Page 95. Too many sentences stating Required off-street parking.</p> <p>Page 96. # 17 Car Washes parking is listed as "4 stalls + 1 vacuum unit". This should probably be listed as 4 stalls per wash/detail bay and 1 space per vacuum unit.</p> <p>Page 96 #31 Eating and drinking establishments, sit-down." 1 space per 50 square feet of net indoor floor area plus 1 per 4 chairs of outdoor seating." It is my opinion that the outdoor seating should be based on area not the number of seats. The number of chairs can change in an area.. 1 space per 100 square feet of outdoor seating area would be sufficient.</p> <p>Page 97 #48 Hotels and motels. "1.2 spaces per rooming unit" Should this be changed to room instead of rooming unit?</p> <p>Page 98 #74 Retail Establishments, General. 1 space per 200 square feet of net floor area. The current ordinance has statement that for retail establishments only those areas used to consummate retail sales are counted for the parking calculations. Storage areas are excluded.</p> <p>The ordinance no longer has spillover parking. There are times that spillover parking is needed, especially in townhouse and multi- family developments.</p> <p>Page 103 the diagram at the top of the page has the wrong width listed for parking space. The width is listed as 10'. The ordinance states the that the width is 9'. Realize that this is an old diagram, but it should be corrected.</p>	Ratios and references revised	completed
* All other Tree Commission-related comments reviewed with Township Staff in May 2019 were refined as applicable of the above and incorporated into the May 2019 draft			completed
* 2017-2018 Township Staff comments incorporated into previous drafts			completed



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July 3, 2019

Ferguson Township Planning & Zoning Department
3147 Research Drive
State College, PA 16801

Mr. James May, Director, CRPA; CATA & Pam Adams
DELIVER TO James May/CRPA FIRST
Centre Regional Planning Agency
2643 Gateway Drive
State College, PA 16801

Ronald A. Seybert, P.E., Ferguson Township
3147 Research Drive
State College, PA 16801

Joe Green, Esquire
115 East High Street
Bellefonte, PA 16823

Steve Bair, Director, Centre Region Fire Protection
400 West Beaver Ave
State College, PA 16801

Raymond J. Stolinas, AICP Director
Centre County Planning & Community Development
420 Holmes Street
Bellefonte, PA 16823

Enclosed please find a copy of the following Land Development Plan for your review:

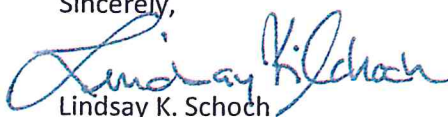
Preliminary/Final Re-Plot of Lands for the State College Borough Water Authority and Gary E. and Carol J. Myers:

Gwin Dobson & Foreman submitted a Preliminary/Final Re-Plot of Lands on behalf of their client, the State College Borough Water Authority. Tax parcel 24-003-007F, owned by the State College Borough Water Authority is currently 15.071 acres and the proposed acreage is 18.047 acres. Mr. and Mrs. Myers own tax parcel 24-003-007K and is currently 45.673 acres, in which 2.974 acres is being transferred to the SCBWA. The land is zoned Rural Agricultural and the current use is a well field property and the proposed use is an addition to well field property. This project was granted seven variances; Variance to encroach upon the fifty-foot riparian buffer, Variance to waive requirements of independent hydrologic and hydraulic study, Variance to allow improvements within the flood plain, Variance to allow construction activities and improvements within the flood way, Variance to minimum lot area (50 acres), and Nonconforming use in Rural Agricultural zoning district.

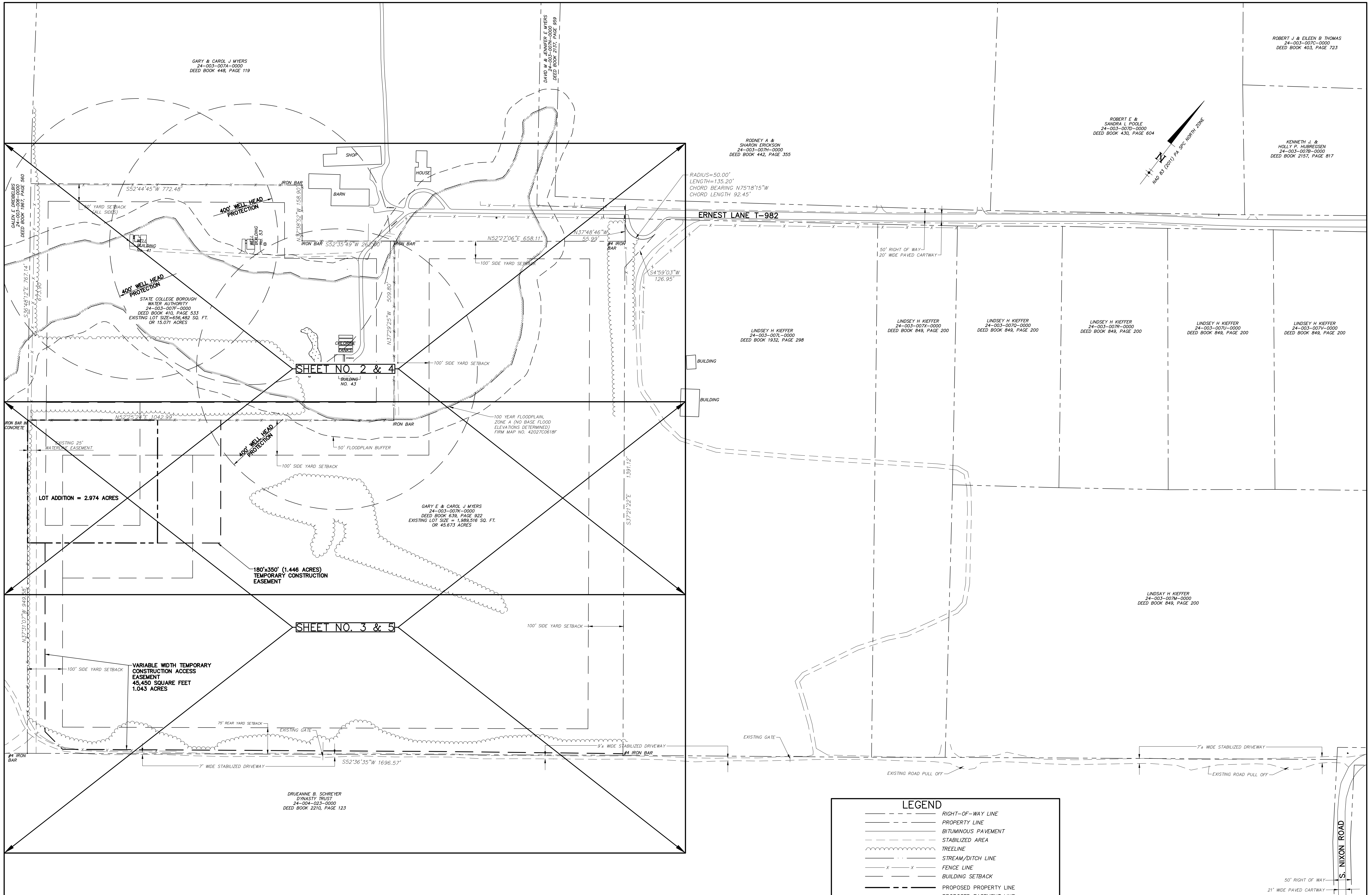
Please Reference ES # 399 in all Correspondence. Kindly have review comments back to me by Wednesday, July 17, 2019, **(Plan Expiration date is Friday, August 16, 2019).**

Thank you.

Sincerely,


Lindsay K. Schoch

cc: Correspondence File/Plan File/Faith Norris/Paula Hockenberry

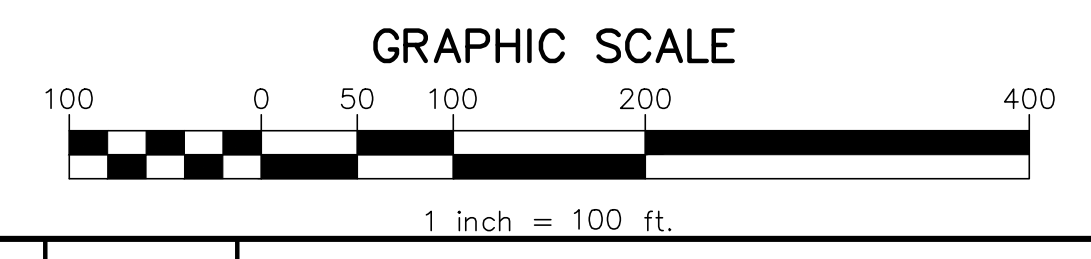


SHEET NO. 2 & 4

SHEET NO. 3 & 5

LEGEND

- RIGHT-OF-WAY LINE
- PROPERTY LINE
- BITUMINOUS PAVEMENT
- STABILIZED AREA
- TREELINE
- STREAM/DITCH LINE
- x x x FENCE LINE
- BUILDING SETBACK
- PROPOSED PROPERTY LINE
- PROPOSED EASEMENT LINE



NO.	DATE	DESCRIPTION



OVERALL INDEX PLAN
 STATE COLLEGE BOROUGH
 WATER AUTHORITY
 AND
 GARY E. AND CAROL J. MYERS
RE-PLOT OF LANDS

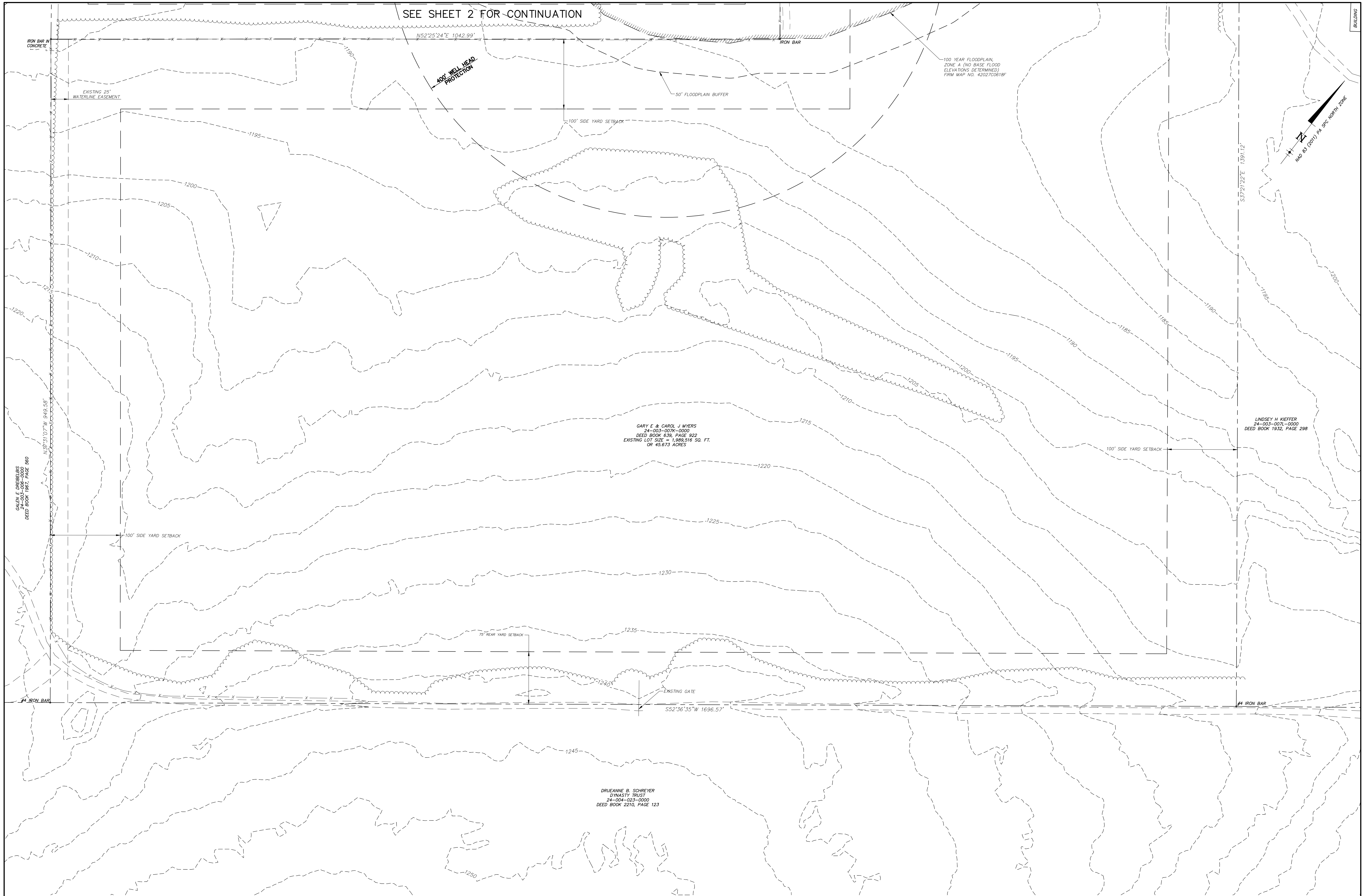
GD&F
 GWIN DOBSON & FOREMAN
 ENGINEERS
 3121 Fairway Drive
 Altoona, PA 16602
 814.943.8214
 gdfengineers.com

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA
 DATE: 06/26/19 JOB: 16049 SCALE: AS SHOWN
 FILE: 16049_SD_001 DRAWN BY: RJB CHECKED BY: KWB

SHEET NO:
1

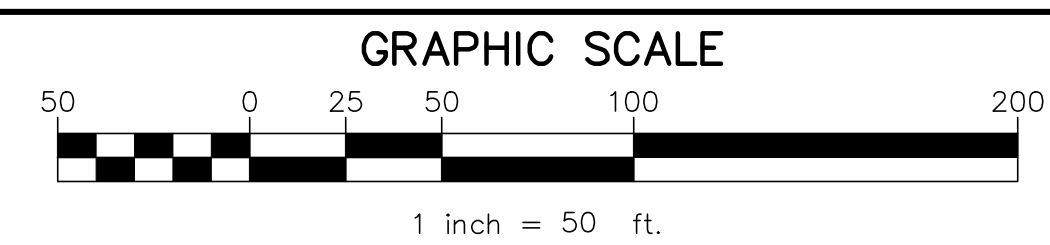
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SEE SHEET 2 FOR CONTINUATION



LEGEND

- RIGHT-OF-WAY LINE
- PROPERTY LINE
- BITUMINOUS PAVEMENT
- STABILIZED AREA
- TREELINE
- STREAM/DITCH LINE
- x-x-x- FENCE LINE
- BUILDING SETBACK
- 1250- MAJOR CONTOUR (5')



NO.	DATE	DESCRIPTION



EXISTING CONDITIONS PLAN (SOUTH)

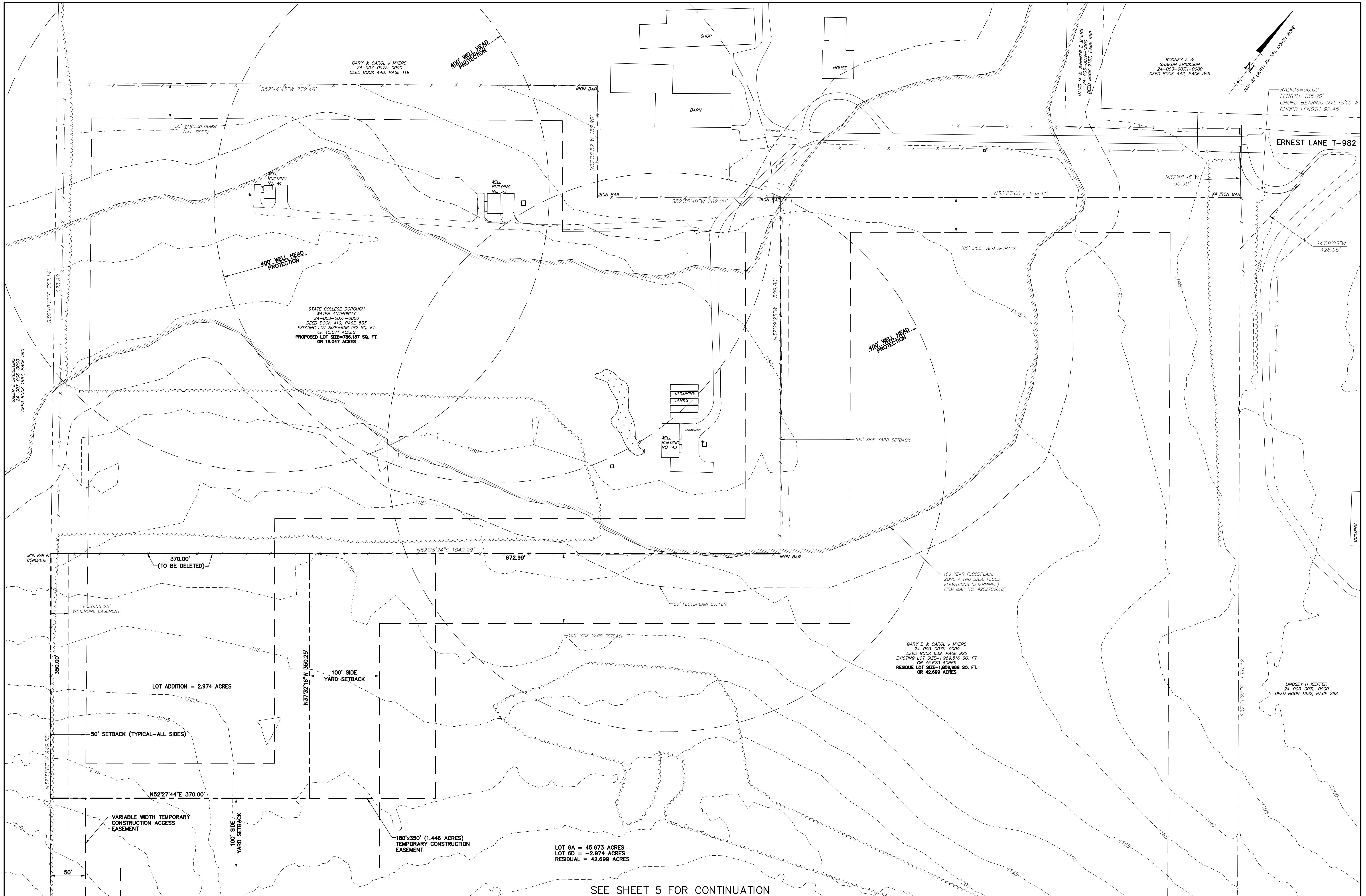
STATE COLLEGE BOROUGH
WATER AUTHORITY
AND
GARY E. AND CAROL J. MYERS
RE-PLOT OF LANDS

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

DATE: 06/26/19 JOB: 16049 SCALE: AS SHOWN
FILE: 16049_SD_003 DRAWN BY: RJB CHECKED BY: KWB



SHEET NO: **3**



LEGEND

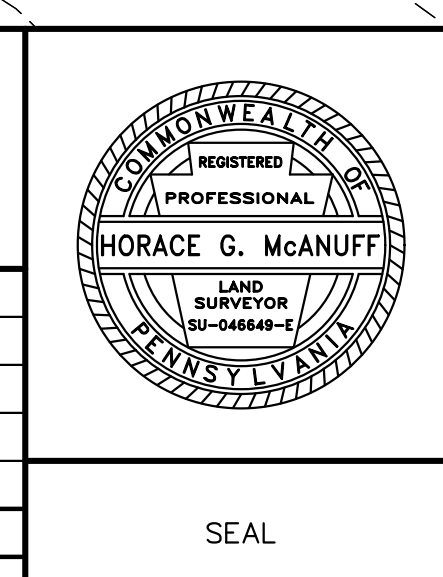
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	PROPERTY LINE		PROPOSED EASEMENT LINE
	BITUMINOUS PAVEMENT		PROPOSED BUILDING SETBACK
	STABILIZED AREA		
	TREELINE		
	STREAM/DITCH LINE		
	FENCE LINE		
	BUILDING SETBACK		
	MAJOR CONTOUR (5')		

GRAPHIC SCALE

50 0 25 50 100 200

1 inch = 50 ft.

NO.	DATE	DESCRIPTION



PROPOSED RE-PLOT PLAN (NORTH)

STATE COLLEGE BOROUGH WATER AUTHORITY
AND
GARY E. AND CAROL J. MYERS
RE-PLOT OF LANDS

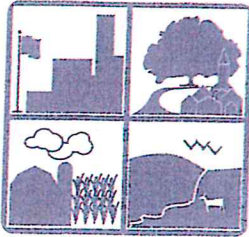
FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

DATE: 06/26/19 JOB: 16049 SCALE: AS SHOWN
FILE: 16049_SD_004 DRAWN BY: RJB CHECKED BY: KWB

GD&F
GWIN DOBSON & FOREMAN ENGINEERS
3121 Fairway Drive
Allison, PA 16802
814.843.8214
gdfengineers.com

SHEET NO: **4**

PLT CREATED: 6/24/2019 2:59 PM



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July 3, 2019

Ferguson Township Planning & Zoning Department
3147 Research Drive
State College, PA 16801

Scott Brown, NTM Engineering, Inc.
341 Science Park Road, Suite 203
State College, PA 16803

Raymond J. Stolinas, AICP Director
Centre County Planning & Community Development
420 Holmes Street
Bellefonte, PA 16823

Mr. James May, Director, CRPA; CATA & Pam Adams
DELIVER TO James May/CRPA FIRST
Centre Regional Planning Agency
2643 Gateway Drive
State College, PA 16801

Steve Bair, Director, Centre Region Fire Protection
400 West Beaver Ave
State College, PA 16801

Joe Green, Esquire
115 East High Street
Bellefonte, PA 16823

Ronald A. Seybert, P.E., Ferguson Township
3147 Research Drive
State College, PA 16801

Howard Fescemyer, Ferguson Township Tree Commission
621 Old Farm Lane
State College, PA 16803

Ed Poprik, Director of Physical Plant
Panorama Village Building
240 Villa Crest Drive
State College, PA 16801

Lance King, Township Arborist
3147 Research Drive
State College, PA 16801

Enclosed please find a copy of the following Land Development Plan for your review: **Preliminary Land Development Plan for Nixon-Kocher Water Treatment Facility:**

Gwin Dobson & Foreman submitted a Preliminary Land Development Plan for the Nixon-Kocher Water Treatment Facility on behalf of the State College Borough Water Authority. Tax Parcel 24-003-007F-0000 is 18.047 acres. The existing land use is forested land/agricultural, the proposed land use is a water treatment facility. We have received a conditional use application; a water treatment facility is a conditional use in the rural agriculture zoning district.

Please Reference ES # 399 in all Correspondence. Kindly have review comments back to me by Wednesday, July 17, 2019, **(Plan Expiration date is Friday, August 16, 2019).**

Thank you.

Sincerely,

Lindsay K. Schoch
Interim Planning & Zoning Director

cc: Correspondence File/Plan File/Faith Norris/Paula Hockenberry



TOWNSHIP OF FERGUSON

3147 Research Drive, State College, Pennsylvania 16801
Telephone: 814-238-4651 Fax: 814-238-3454

TO: Ferguson Township Planning Commission

FROM: Lindsay K. Schoch, Interim Planning and Zoning Director

DATE: July 3, 2019

SUBJECT: Active Development Projects & Interim Planning and Zoning Department Update

In an effort to keep the Planning Commission and Board of Supervisors up-to-date on pending proposals and applications, staff is providing a list of Active Plans and other Projects in the Township.

Currently, the Township has five (5) Active Plans and two (2) conditionally approved plan.

- 1. Whitehall Road Regional Park Phase 1:** Stahl Sheaffer Engineering submitted the final land development plan for the proposed Whitehall Road Regional Park Phase 1 on behalf of Centre Region Parks and Recreation Authority. This is located off the future Blue Course Drive extension, south of the intersection of Blue Course Drive and Whitehall Road. The proposed Phase 1 development involves the development of approximately 55 acres of the 100 acre park property. The property will include: two lighted grass fields (alternate to synthetic turf), two unlighted grass fields, two grass practice/open space areas, accessible walking trail, All-Ability and Universally-Accessible Playground, All-Season Pavilion with attached concession stand and restrooms, and a three-bay park operations storage building. The required park infrastructure includes a paved entrance road, paved parking lots (just under 500 spaces), accessible connector sidewalks and trails, public water and sanitary sewer service, and natural gas service. There will be green stormwater management facilities such as bioswales, stormwater infiltration basins, and rain gardens, all of which connect to the storm water system. A solar installation on the All-Season Pavilion will support the building's energy needs, and there is a proposed landscaping buffer system to include trees, shrubs, and native grasses. **Plan Expiration is September 9, 2019. Plan currently under review. Variance request scheduled for the July 23, 2019 Zoning Hearing Board.**
- 2. Orchard View Land Development Plan:** This land development plan, submitted by Penn Terra Engineering on behalf of the applicants, Aspen Whitehall Partners, LLC proposed a 36 lot subdivision on tax parcel yet to be determined by the approval of the Subdivision & Replot Plan for the Harner Farm (Tax Parcel 24-4-67/C). The land is located in the single-family residential zoning district with corridor overlay. The Plans were submitted to staff on Tuesday, May 14 and will be sent to reviewers. Plan Expiration is Tuesday, August 16, 2019. **Plan Review Comments sent to Penn Terra for their review and consideration.**

3. **Preliminary/Final Land Development Plan – State College, PA (Whitehall Road) Sheetz:** Penn Terra Engineering, Inc. on behalf of the applicant, Aspen Whitehall Partners LLC submitted a Preliminary/Final Land Development Plan for the State College, PA (Whitehall Road) Sheetz. Prior to the submission of this land development plan, a pre-application conference was held with the Ferguson Township Planning Commission as per the optional section 22.302 of the Ferguson Township Subdivision and Land Development Ordinance. The overall concept plan for Harner Farm was discussed at the pre-application conference, including the proposed Sheetz Convenience Store and the subdivision of land as part of the project. The proposed Sheetz Convenience store will be developed on 5.7 acres at the southwest corner of Whitehall Road and West College Avenue. The building will be 6,077 square feet, the site will also have a car wash, stormwater management basins and required access points. A Traffic Impact Study, Stormwater Management Plan and Lighting Plan have been submitted for review. Construction is scheduled to begin in the fall of 2019 and last a year to eighteen months. Prior to the proposed development, the land was actively farmed for the past fifty years. A plan to subdivide tax parcel 24-4-67 and replot of tax parcel 24-4-67C is also being considered concurrently with the review of the land development plan. The Plan is currently being reviewed by staff and other required agencies with comments due back to the Community Planner on May 8, 2019. **Plan Expiration is July 18, 2019. Plan Comments sent to Penn Terra. Staff waiting for response.**
4. **Harner Farm Subdivision Plan – Subdivision of Tax Parcel 24-4-67 and Replot of Tax Parcel 24-4-67C:** Penn Terra Engineering, Inc. on behalf of the applicant, Aspen Whitehall Partners LLC submitted a Plan for the subdivision of tax parcel 24-4-67 and replot of tax parcel 24-4-67C. The purpose of this plan is to subdivide Tax Parcel 24-4-67 into four (4) lots, replot Tax Parcel 24-4-67C and dedicate land from Tax Parcel 24-4-67 to Ferguson Township Right of Way. In conjunction with this Subdivision/Replot Plan is a Land Development Plan for the State College, PA Whitehall Road Sheetz. The Plan is currently being reviewed by staff and other required agencies with comments due back to the Community Planner on May 8, 2019. **Plan Expiration is July 18, 2019. Plan Comments sent to Penn Terra. Staff waiting for response.**
5. **Pine Hall Traditional Town Development General Master Plan:** Staff is currently working with the developer and have come up with the following schedule: July 22, staff will ask the Planning Commission for a recommendation. On August 5, the Board of Supervisors will hold a Public Hearing. On August 19, the Board of Supervisors will act on the Plan. **Plan Expiration is August 30, 2019. Staff meets with the developer and others to discuss traffic mitigations on July 9, 2019.**

Conditionally Approved Plans:

1. **Hummel Subdivision: Plan shall be recorded by August 4, 2019**
2. **Ferguson Township Public Works Facility: Plan shall be recorded by August 2, 2019**

Tentative Schedule moving forward with the Zoning and SALDO Update:

June 24	Planning Commission to reviewed changes and had comments. Staff has gathered all remaining comments and sent to the consultant with the hopes we will receive a memo from EPD outlining where these changes have been made, satisfying staff and the Planning Commission	
July 8, 2019	Planning Commission to review the memo from EPD and the changes, then make a recommendation to the BOS.	
July 15, 2019	BOS Authorizes Advertisement of the Zoning Ordinance, SALDO and Map.	
July 16, 2019	45 day Public Review Period begins	Ordinances go to CRPC, CRPA, County Planning and Community Development Office
August 1, 2019	Centre Regional Planning Commission	Prepare presentation for CRPC
September 14, 2019	End of 45 Day Public Review Period.	
September 16, 2019	Public Hearing of Board of Supervisors	Can hold Public Hearing any time after September 14.

**Interim Planning & Zoning Director's Report
June 26, 2019**

1. On June 3, 2019, the Interim Planning & Zoning Director and Zoning Administrator met with Joseph Waters and Alexander Piehl to discuss tax parcel 18-4-004, which is a Patton Township property proposed for Commercial Development. The Ferguson Township portion of this property is zoned residential, so we discussed the options. One being a pre-application conference.
2. On June 4, the Interim Planning & Zoning Director and Zoning Administrator met to discuss the Traffic Study for Young Scholars.
3. On June 5, 2019, the Interim Planning & Zoning Director and Zoning Administrator met with Carolyn Yagle, EPD, to discuss the SALDO and remaining comments.
4. On June 7, the Interim Planning & Zoning Director and Zoning Administrator met with Brandi Robinson to discuss an approximately 8 acre property in Pine Grove Mills and how it could be potentially subdivided.
5. On June 13, The Interim Planning and Zoning Director met with the Township Manager to review all changes proposed to the Zoning Ordinance and the SALDO and discussed the schedule moving forward; the Zoning Administrator met with the Township Engineer to discuss the requirements for the traffic study and if the school can continue adding students when they are over their agreed upon enrollment numbers; The Interim Planning and Zoning Director met with the Township Manager to discuss Hunters Chase and the existing park land options.
6. On June 27, the Interim Planning and Zoning Director met with the Communications Coordinator to discuss planning items for the fall print newsletter.

STATE COLLEGE BOROUGH WATER AUTHORITY FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

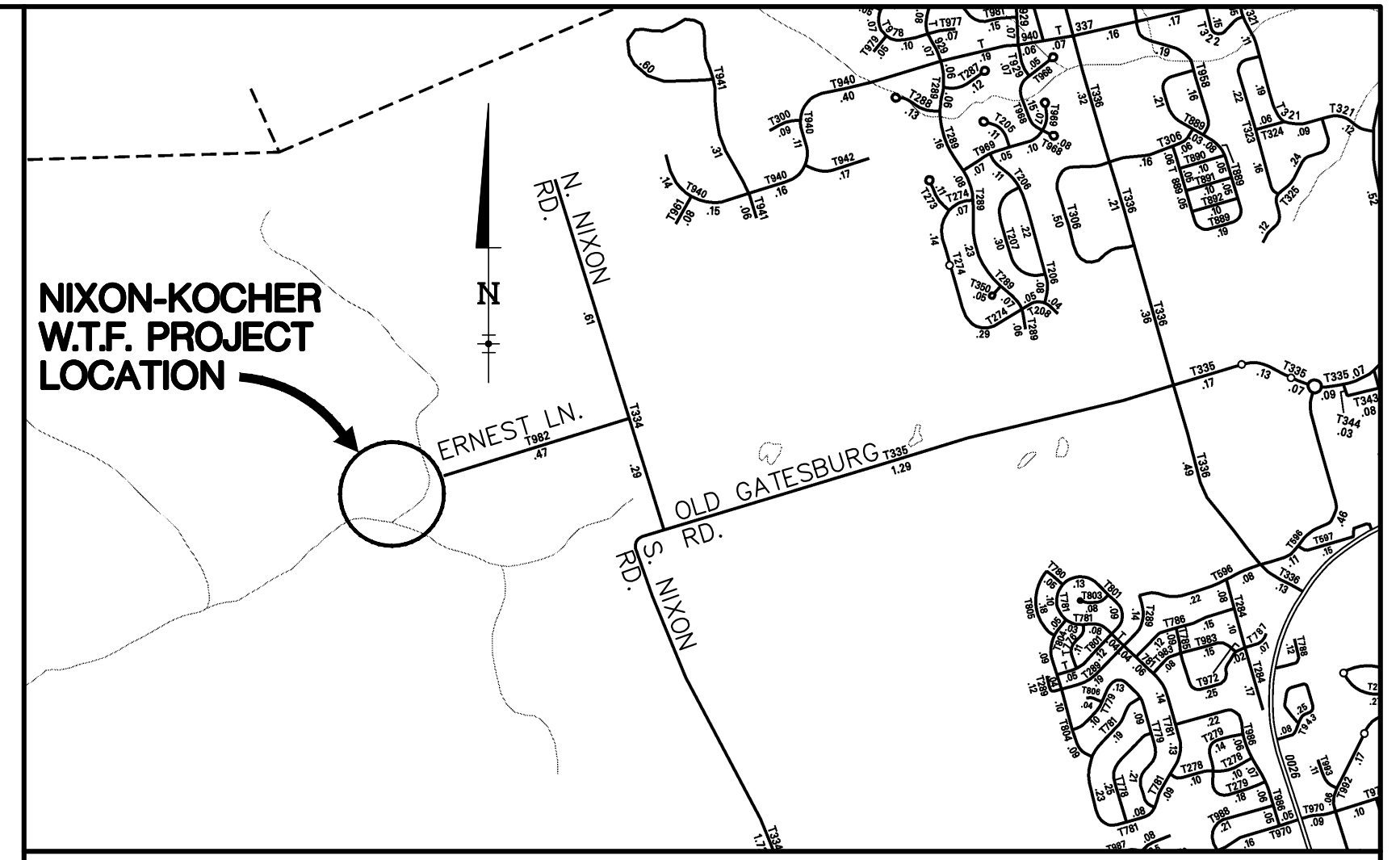
PRELIMINARY LAND DEVELOPMENT PLANS

FOR

NIXON-KOCHER WATER TREATMENT FACILITY

JUNE 26 , 2019

GD&F
GWIN
DOBSON &
FOREMAN
ENGINEERS
3121 Fairway Drive
Altoona, PA 16602
814.943.5214
gdfengineers.com



VICINITY MAP
SCALE: 1" = 2000'

CENTRE COUNTY RECORDER OF DEEDS

COMMONWEALTH OF PENNSYLVANIA COUNTY OF CENTRE
CERTIFICATION OF OWNERSHIP
ON THIS, ____ DAY OF _____, 20____, THE UNDERSIGNED OWNER(S), PERSONALLY APPEARED BEFORE ME AND CERTIFIED THAT THEY WERE THE OWNER(S) OF THE PROPERTIES SHOWN ON THIS PLAN AND ACKNOWLEDGE THE SAME TO BE THEIR ACT AND PLAN AND DESIGNS, THE SAME TO BE RECORDED AS SUCH, ACCORDING TO THE LAW.
OWNER SIGNATURE _____ OWNER PRINT NAME _____ OWNER TITLE _____
WITNESS MY HAND AND SEAL, THIS DATE _____
NOTARY PUBLIC _____ COMMISSION EXPIRES _____

DESIGN PROFESSIONAL CERTIFICATION
I, _____, HAVE REVIEWED AND HEREBY CERTIFY THAT THIS LAND DEVELOPMENT MEETS ALL DESIGN REQUIREMENTS OF THE SUBDIVISION AND LAND DEVELOPMENT ORDINANCE, ZONING ORDINANCE AND ALL OTHER APPLICABLE CHAPTERS OF THE FERGUSON TOWNSHIP CODE.

DESIGN PROFESSIONAL STORMWATER CERTIFICATION
I, _____, HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE FERGUSON TOWNSHIP STORMWATER MANAGEMENT ORDINANCE.

FERGUSON TOWNSHIP ENGINEER CERTIFICATION
I, _____, HAVE REVIEWED AND HEREBY CERTIFY THAT THE PLAN MEETS ALL ENGINEERING DESIGN STANDARDS AND CRITERIA OF THE FERGUSON TOWNSHIP CODE OF ORDINANCES.

FERGUSON TOWNSHIP ENGINEER STORMWATER CERTIFICATION
I, _____, HAVE REVIEWED THIS STORMWATER MANAGEMENT PLAN IN ACCORDANCE WITH THE DESIGN STANDARDS AND CRITERIA OF THE FERGUSON TOWNSHIP STORMWATER MANAGEMENT ORDINANCE.

FERGUSON TOWNSHIP PLANNING COMMISSION
FERGUSON TOWNSHIP PLANNING COMMISSION APPROVED
SECRETARY _____ DATE _____
CHAIRMAN _____ DATE _____

FERGUSON TOWNSHIP BOARD OF SUPERVISORS
FERGUSON TOWNSHIP BOARD OF SUPERVISORS APPROVED
SECRETARY _____ DATE _____
CHAIRMAN _____ DATE _____

FERGUSON TOWNSHIP ZONING OFFICER
FERGUSON TOWNSHIP ZONING OFFICER APPROVED
ZONING OFFICER _____ DATE _____

FIRE CHIEF CERTIFICATION
I HAVE REVIEWED AND HEREBY CERTIFY THAT THE LOCATION OF FIRE LANES AND FIRE HYDRANTS SHOWN ON THIS PLAN ARE ADEQUATE.
FIRE CHIEF _____ DATE _____

PROJECT NOTES

- GENERAL SITE/LOT INFORMATION
 - OWNER/DEVELOPER: STATE COLLEGE BOROUGH WATER AUTHORITY
 - TAX PARCEL NUMBER/LOT ACREAGE: 24-003-007F-0000/18.047 ACRES
 - RECORD BOOK/PAGE NUMBER: 410/533
 - LAND IS ZONED: RURAL AGRICULTURAL (RA)
 - BUILDING SETBACK LINE: FRONT YARD = 50'
SIDE YARD = 50'
REAR YARD = 50'
 - LOT REQUIREMENTS: EXISTING LOT AREA (FOLLOWING RE PLOT) = 786,137 S.F. OR 18.047 ACRES
MAXIMUM BUILDING HEIGHT = 40'/PROPOSED = 39.89'
 - EXISTING LAND USE: FORESTED LAND/AGRICULTURAL
 - PROPOSED LAND USE: WATER TREATMENT FACILITY
 - REQUIRED PARKING: 1 SPACE/4000 GFA (19,883 GFA/4000 = 5 SPACES) AND 1 LOADING SPACE
 - PROPOSED PARKING: 7 SPACES (5 STANDARD, 1 ADA AND 1 LOADING SPACE)
 - BOUNDARY AND TOPOGRAPHIC INFORMATION BASED ON FIELD INSTRUMENT SURVEY COMPLETED BY GWIN, DOBSON AND FOREMAN, INC., COMPLETED FEBRUARY 9, 2018.
 - SOILS INFORMATION FROM UNITED STATE DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE.
 - EXISTING FLOOD PLAIN INFORMATION FROM FIRM MAP NO. 42027C0618F IS INDICATED ON THESE PLANS.
 - THERE WAS ONE WETLAND AREA IDENTIFIED THROUGH FIELD INVESTIGATION NEAR THE EXISTING CHLORINATION BUILDING, HOWEVER, THERE ARE NO WETLANDS WITHIN THE ENVIRONS OF THE PROJECT LIMITS.
 - THERE ARE NO STEEP SLOPES (>25%) WITHIN THE ENVIRONS OF THE PROJECT LIMITS.
- LOT COVERAGE:
 - MAXIMUM BUILDING COVERAGE = 15%
 - PROPOSED BUILDING COVERAGE = 22.182 SQ. FT. OR 2.82%
 - MAXIMUM IMPERVIOUS COVERAGE = 50%
 - PROPOSED IMPERVIOUS COVERAGE = 22.182 SQ. FT. (BUILDING) = 71,618 SQ. FT. (PAVEMENT/CONCRETE) = 93,804 SQ. FT. (TOTAL OR 11.93%)
- DATE OF ZONING PERMIT APPLICATION: JUNE 26, 2019
- LIST OF APPROVED VARIANCES: (FEBRUARY 26, 2019)
 - §27-213.4: VARIANCE TO ENCROACH UPON THE FIFTY (50) FOOT RIPARIAN BUFFER
 - §27-801.1: VARIANCE TO WAIVE REQUIREMENTS OF INDEPENDENT HYDROLOGIC AND HYDRAULIC (H&H) STUDY
 - §27-801.1.C.(1): VARIANCE TO ALLOW IMPROVEMENTS WITHIN THE FLOODPLAIN
 - §27-801.1.H: VARIANCE TO ALLOW CONSTRUCTION ACTIVITIES AND IMPROVEMENTS WITHIN THE FLOODWAY
 - §27-801.1.I: VARIANCE TO ENCROACH UPON THE FIFTY (50) FOOT FLOODPLAIN BUFFER
 - §27-501.1.A VARIANCE TO MINIMUM LOT AREA (50 ACRES)
 - §27-903 NONCONFORMING USE IN RURAL AGRICULTURAL ZONING DISTRICT
- THE PROPOSED BUILDING IS NOT REQUIRED TO BE SPRINKLERED BASED ON USE/OCCUPANCY.
- EXISTING FIRE HYDRANT FLOW DATA:

HYD #	LOCATION	STATIC	RESIDUAL	FLOW	DATE
50001.00	3062 ERNEST LN (WELL FIELD)	102psi	74psi	2050gpm	6/22/18
50002.00	ERNEST LN	82psi	68psi	2000gpm	8/16/17

	COVER SHEET		
	STATE COLLEGE BOROUGH WATER AUTHORITY		
NIXON-KOCHER WATER TREATMENT FACILITY		FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA	
SEAL	DATE: 06/26/19	JOB: 16049	SCALE: AS SHOWN
	FILE: 16049_LD_CST	DRAWN BY: RLN	CHECKED BY:
			SHEET NO: CS-1

PLOT CREATED: 6/25/2019 1:36 PM

COMMONWEALTH OF PENNSYLVANIA ACT NO. 287

THE CONTRACTOR SHALL COMPLY WITH ALL THE APPLICABLE REQUIREMENTS OF ACT NO. 287 OF THE GENERAL ASSEMBLY OF THE COMMONWEALTH OF PENNSYLVANIA, AS AMENDED BY ACT NO. 187 OF 1996, AS AMENDED BY ACT NO. 181 OF 2006, EFFECTIVE MARCH 23, 2007, AND AS AMENDED BY ACT 121 OF 2008, EFFECTIVE OCTOBER 9, 2008. THE FOLLOWING IS A LIST OF MEMBERS LOCATED WITHIN THE PROJECT AREA:

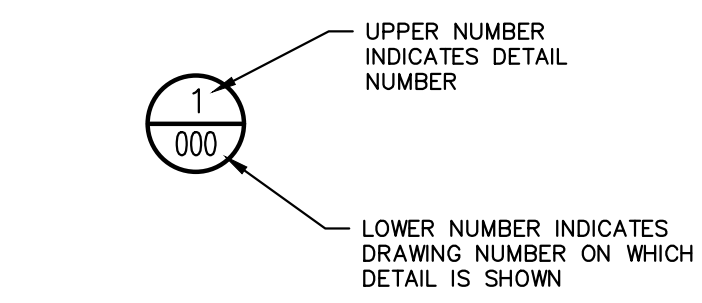
WATER/ WASTEWATER:	UNIVERSITY AREA JOINT AUTHORITY 1576 SPRING VALLEY ROAD STATE COLLEGE, PA. 16801 CONTACT: MARK HARTER EMAIL: mharter@uajpa.com (814) 238-8370	ELECTRIC:	WEST PENN POWER 800 CABIN HILL DRIVE GREENSBURG, PA 15601 CONTACT: ROBERT PAINTER EMAIL: rpainter@firstenergycorp.com
	PENN STATE UNIVERSITY WASTEWATER TREATMENT PLANT 501 UNIVERSITY DRIVE STATE COLLEGE, PA. 16801 CONTACT: JEFF McDONALD EMAIL: jmc86@psu.edu	ROADS/ STORM:	FERGUSON TOWNSHIP CENTRE COUNTY 3147 RESEARCH DRIVE STATE COLLEGE, PA. 16801 CONTACT: CHRIS LEDY EMAIL: cledy@tp.ferguson.pa.us
	STATE COLLEGE BOROUGH WATER AUTHORITY 1201 WEST BRANCH ROAD STATE COLLEGE, PA. 16801 CONTACT: STEVE ALBRIGHT EMAIL: steve@scbwa.org (814) 238-0885		



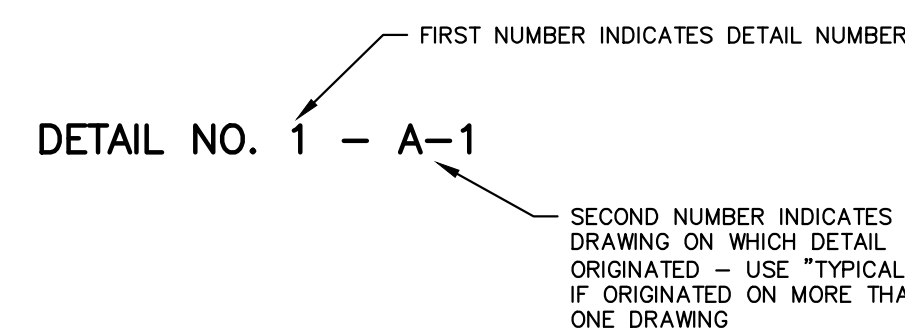
PA ONE-CALL (800) 242-1776
PA ONE-CALL SERIAL NUMBER:
201917630841

GENERAL NOTES:

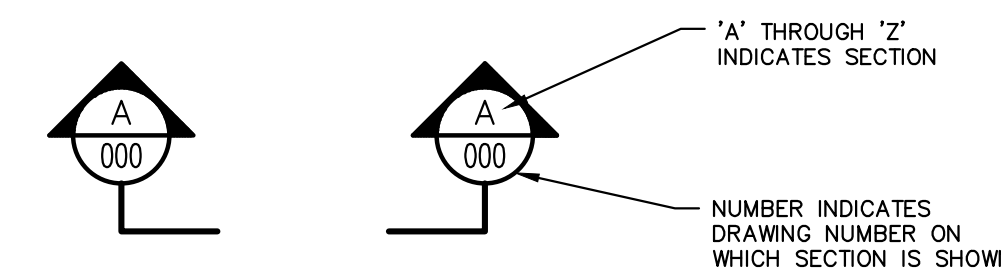
- THE CONTRACTOR IS ADVISED OF THE EXISTENCE OF UNDERGROUND WATERLINES, SANITARY SEWERS, GAS LINES, SERVICE LINES, ELECTRIC AND TELEPHONE, AND OTHER UTILITIES. THE HORIZONTAL AND VERTICAL ALIGNMENTS ARE SHOWN ON THE DRAWINGS FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR IS ADVISED THAT PRIOR TO ANY EXCAVATION HE SHALL PERFORM EXPLORATORY WORK TO DETERMINE THE EXACT LOCATIONS OF ALL UTILITIES. THE CONTRACTOR SHALL NOTIFY THE OWNER OF SAID CONFLICTS. THE CONTRACTOR SHALL ADJUST THE LOCATION OF THE PROPOSED PIPING AND STRUCTURES AS COORDINATED AND APPROVED BY THE OWNER. THE CONTRACTOR SHALL UNDERSTAND THAT NO SEPARATE PAYMENT SHALL BE MADE FOR THE REQUIRED EXPLORATORY EXCAVATIONS OR SUBSEQUENT ADJUSTMENTS REQUIRED. THE CONTRACTOR SHALL DETERMINE THE EXTENT OF EXPLORATORY EXCAVATIONS AND INCLUDE THE COSTS TO PERFORM SAID EXCAVATIONS AND ADJUSTMENTS IN THOSE ITEMS FOR WHICH PAYMENT SHALL BE MADE IN THE BID FORM. IN ADDITION, THE CONTRACTOR SHALL REPAIR ALL UTILITIES DAMAGED DURING THE COURSE OF CONSTRUCTION TO THE SATISFACTION OF THE OWNER. THE CONTRACTOR SHALL INSURE THE MAINTENANCE OF ALL UTILITY SERVICES AND LIMIT SHUTDOWNS, IF REQUIRED, TO A MINIMUM. NO SEPARATE PAYMENTS SHALL BE MADE FOR SAID UTILITY REPAIRS AND SERVICE MAINTENANCE. THE CONTRACTOR SHALL INCLUDE THESE COSTS IN THOSE ITEMS FOR WHICH PAYMENT SHALL BE MADE IN THE BID FORM.
- CONTRACTOR SHALL IMPLEMENT ALL EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP'S) IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
- THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS, TO AN EQUAL OR BETTER CONDITION THAN EXISTED PRIOR TO CONSTRUCTION.
- THE CONTRACTOR WILL, AT ALL TIMES THROUGHOUT THE WORK, COOPERATE FULLY WITH THE OWNER IN PERMITTING ALL NECESSARY OPERATIONS OF THE OWNER TO PROCEED UNIMPEDED BY THE CONTRACTOR'S OPERATIONS.
- DUE TO THE CHARACTER OF CERTAIN PORTIONS OF THE WORK, THE CONTRACTOR WILL REQUIRE THAT LIMITED LOCALIZED SYSTEM SERVICE OUTAGES BE PERMITTED BY OR THAT OPERATIONS CHANGES/ADJUSTMENTS BE MADE BY THE OWNER TO ENABLE THE CONTRACTOR TO PROCEED WITH ITS WORK. SUCH OUTAGES, CHANGES AND/OR ADJUSTMENTS MAY BE REQUIRED FOR WORK ELEMENTS ASSOCIATED WITH THE INSTALLATION OF PIPING SYSTEMS AND INTERCONNECTIONS WITH EXISTING PIPING SYSTEMS; AND SIMILAR WORK. THE CONTRACTOR WILL CAREFULLY PLAN ITS WORK AND NOTIFY THE OWNER AT LEAST TEN (10) WORKING DAYS IN ADVANCE OF ANY WORK ELEMENTS WHICH MAY REQUIRE SUCH OUTAGES, CHANGES, AND/OR ADJUSTMENTS. THE OWNER WILL ENDEAVOR TO ACCOMMODATE THE CONTRACTOR'S PLANNED SCHEDULING IN THIS REGARD; HOWEVER, IN CERTAIN INSTANCES, THE ONGOING RESPONSIBILITIES OF THE OWNER AND/OR PREVAILING OPERATIONS MAY REQUIRE THAT THE CONTRACTOR'S PLANNED SCHEDULE BE ALTERED ACCORDINGLY. THE CONTRACTOR MUST BE PREPARED TO ADJUST ITS SCHEDULE TO SUIT THE NEEDS OF THE OWNER AND TO PERFORM CERTAIN CRITICAL WORK ELEMENTS IN THE EVENINGS, OVER WEEKENDS, OR ON AN AROUND-THE-CLOCK BASIS, SHOULD THE OWNER DETERMINE THAT SUCH PROCEDURES AND WORK SCHEDULES ARE NECESSARY AND APPROPRIATE. THE CONTRACTOR WILL NOT BE ENTITLED TO ANY ADDITIONAL COMPENSATION ON ACCOUNT OF SUCH ALTERATIONS TO ITS WORK SCHEDULE AND/OR HOURS OF WORK SHOULD SUCH BE DEEMED NECESSARY BY THE OWNER. THE DECISION OF THE OWNER IN THIS REGARD WILL BE FINAL.
- SERVICE OUTAGES WILL BE KEPT TO THE MINIMUM EXTENT PRACTICABLE. THE CONTRACTOR WILL MAINTAIN A RECORD OF THE DATE, TIME, AND DURATION OF ALL OUTAGES THROUGHOUT THE PERFORMANCE OF THE WORK AND WILL SUBMIT THIS RECORD MONTHLY TO THE ENGINEER ALONG WITH ITS PERIODIC ESTIMATES FOR PAYMENT. IN NO EVENT WILL ANY SERVICE BE PERMITTED TO BE CURTAILED DURING NONWORKING HOURS, OVERNIGHT, OR OVER WEEKENDS OR HOLIDAYS, UNLESS SPECIFICALLY APPROVED AND PLANNED IN ADVANCE BY THE ENGINEER AND OWNER. ALL PIPING MATERIALS AND PLANT NECESSARY TO INSTALL THE WORK NECESSITATING THE OUTAGE MUST BE ON SITE AND READY FOR INSTALLATION BEFORE NOTIFYING THE OWNER OF THE ANTICIPATED SHUTDOWN.
- THE CONTRACTOR WILL PLAN, COORDINATE, AND SEQUENCE ITS WORK IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH HEREIN AND TO MEET THE NEEDS OF THE OWNER. THE OWNER RESERVES THE RIGHT TO COORDINATE THE SEQUENCING OF WORK ELEMENTS IN WHOLE OR IN PART AS THE JOB CONDITIONS MAY REQUIRE SAME, TO PROPERLY INTERFACE THE WORK OF THE PROJECT WITH PLANT OPERATIONS.
- THE NATURE, LOCATION, CAPACITY, AND TYPE OF FACILITIES INTENDED FOR MAINTAINING CONTINUITY OF OWNER OPERATIONS WILL AT ALL TIMES BE SUBJECT TO THE APPROVAL OF THE OWNER AND ENGINEER.
- THE CONTRACTOR MUST AT ALL TIMES COORDINATE ITS WORK SCHEDULE AND SEQUENCING, THROUGH THE OWNER AND ENGINEER, TO AVOID INTERFERENCE WITH NECESSARY OPERATIONS. IT IS ANTICIPATED THAT MAJOR ALTERATIONS OR ADJUSTMENTS TO THE SEQUENCING AND SCHEDULING OF THE WORK WILL BE PLANNED IN ADVANCE AT THE REGULARLY SCHEDULED PROJECT MEETINGS DURING WHICH REPRESENTATIVES OF THE OWNER AND THE CONTRACTOR WILL COORDINATE THE WORK ELEMENTS IN SUCH A WAY AS WILL BEST MEET THE NEEDS OF THE OWNER.
- THE CONTRACTOR MUST COORDINATE ALL CONSTRUCTION ACTIVITIES AND PROVIDE MONTHLY WRITTEN SCHEDULES WITH WATER OPERATING PERSONNEL AND THE ENGINEER TO INSURE MINIMAL IMPACT ON THE OPERATION OF THE WATER SYSTEM. THIS WOULD INCLUDE DIVERSION OF WATER, WATER MANAGEMENT OF ANY KIND, LOGISTICAL FUNCTIONS, DELIVERIES, CONSTRUCTION ACTIVITIES IN CLOSE PROXIMITY TO THE SYSTEM, CLEAN-UP, SCHEDULING, STORAGE OF MATERIALS AND EQUIPMENT, OFFICE TRAILERS, STAGING FUNCTIONS, ANY OTHER ACTIVITIES THAT MAY IMPACT THE OWNER'S FACILITIES. FAILURE OF THE CONTRACTOR TO COMPLY WITH THE PROVISIONS OF THIS SPECIFICATION MAY BE CAUSE FOR THE OWNER/ENGINEER TO ORDER AN IMMEDIATE STOPPAGE OF THE WORK UNTIL THE SITUATION IS RECTIFIED TO THE SATISFACTION OF THE OWNER/ENGINEER.
- IN THE ADMINISTRATION OF THIS CONTRACT, THE OWNER INTENDS TO EXERCISE DISCRETION IN A REASONABLE AND EQUITABLE MANNER TO PROTECT ITS INTERESTS AND TO PROMOTE TIMELY AND PROPER COMPLETION OF THE WORK OF THIS CONTRACT. SHOULD ANY DISPUTES ARISE WITH RESPECT TO THE COORDINATION OF THE WORK OF THIS CONTRACT AND THAT OF THE OWNER'S OPERATIONS, WHICH REQUIRE SETTLEMENT, THE DECISION OF THE ENGINEER WILL BE FINAL.
- ALL OUTAGES MUST BE COORDINATED/SCHEDULED WITH OWNER AND THE OUTAGES SHALL BE A MAXIMUM OF 24 HOURS.
- ALL EXCESS SPILL MATERIAL SHALL BE TRANSPORTED AND DISPOSED OF AT A LOCATION WITH AN APPROVED EROSION AND SEDIMENT CONTROL PLAN AND/OR NPDES PERMIT. REMOVAL AND PROPER DISPOSAL/RECYCLING OF ANY EXCESS EARTH AND ANY CONSTRUCTION WASTE, EXCESS CONSTRUCTION MATERIAL OR ANY OTHER WASTE GENERATED BY CONSTRUCTION ACTIVITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. SEE EROSION AND SEDIMENT CONTROL NOTES.
- HORIZONTAL INFORMATION IS REFERENCED TO THE PENNSYLVANIA STATE PLANE NORTH ZONE (NAD 83), VERTICAL INFORMATION IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).



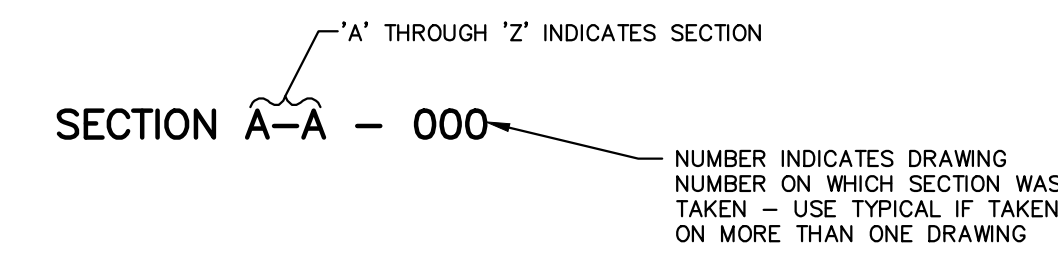
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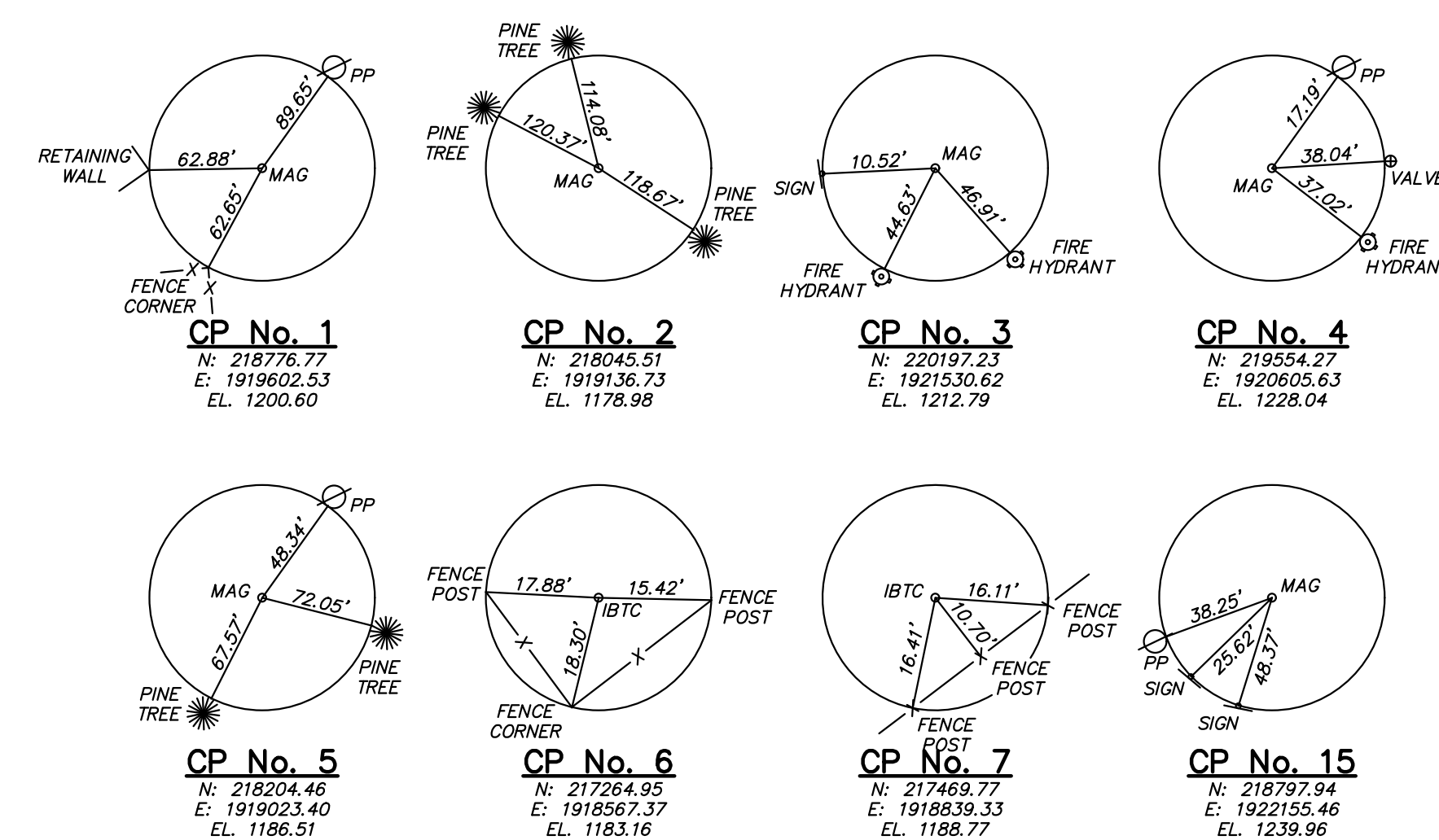
DETAIL IDENTIFICATION



SECTION LOCATION



SECTION IDENTIFICATION



CONTROL POINTS:

BENCHMARKS:

BM-A - CROSS CUT ON CORNER OF CONCRETE HEADWALL LOCATED WEST OF WELL BUILDING, EL. 1176.19.
BM-B - CROSS CUT ON CORNER OF CONCRETE PAD LOCATED EAST OF WELL BUILDING NO. 43, EL. 1179.39.
USGS CONCRETE MONUMENT - LOCATED AT INTERSECTION OF PROPOSED TEMPORARY CONSTRUCTION ACCESS AND SOUTH NIXON ROAD, EL. 1236.31.

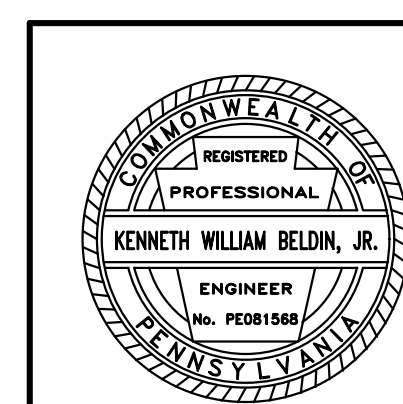
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2	OVERALL PROPOSED SITE PLAN
3	PROPOSED SITE LAYOUT PLAN
4	PROPOSED SITE GRADING, STORMWATER AND UTILITY PLAN
5	PROPOSED LANDSCAPING PLAN
6	PROPOSED SITE CROSS SECTIONS
7	PROPOSED SITE CROSS SECTIONS
8	PROPOSED PRIVATE ACCESS ROAD PROFILE
9	PROPOSED PIPING PROFILES - BASELINE 12 THRU 14
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21	SEDIMENT/STORMWATER MANAGEMENT BASIN DETAILS
22	PROPOSED LANDSCAPING DETAILS AND NOTES

ABBREVIATIONS:

CIP - CAST IRON PIPE
CMP - CORRUGATED METAL PIPE
D.I. - DUCTILE IRON PIPE
DIP - DUCTILE IRON PIPE
EL - ELEVATION
F.F. - FINISHED FLOOR
HDPE - HIGH DENSITY POLYETHYLENE PIPE
H.P. - HIGH POINT
LF - LINEAR FEET
L.P. - LOW POINT
PVC - POLYVINYL CHLORIDE PIPE
RCP - REINFORCED CONCRETE PIPE
T.O.W. - TOP OF WALL
VCP - VITRIFIED CLAY PIPE

NO.	DATE	DESCRIPTION
REVISIONS		
DRAWING INDEX, REFERENCES, BENCHMARKS, ONE CALL AND NOTES		



SEAL

STATE COLLEGE BOROUGH WATER AUTHORITY		GD&F GWIN DOBSON & FOREMAN ENGINEERS 3121 Fairway Drive Altoona, PA 16802 814.943.8214 gdfengineers.com
NIXON-KOCHER WATER TREATMENT FACILITY		
FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA		
DATE: 6/28/19	JOB: 16049	SCALE: AS SHOWN
FILE: 16049_LD_CS2	DRAWN BY: RLN	CHECKED BY: WAA
SHEET NO:		CS-2

GARY & CAROL J MYERS
24-003-0074-0000
DEED BOOK 448, PAGE 119

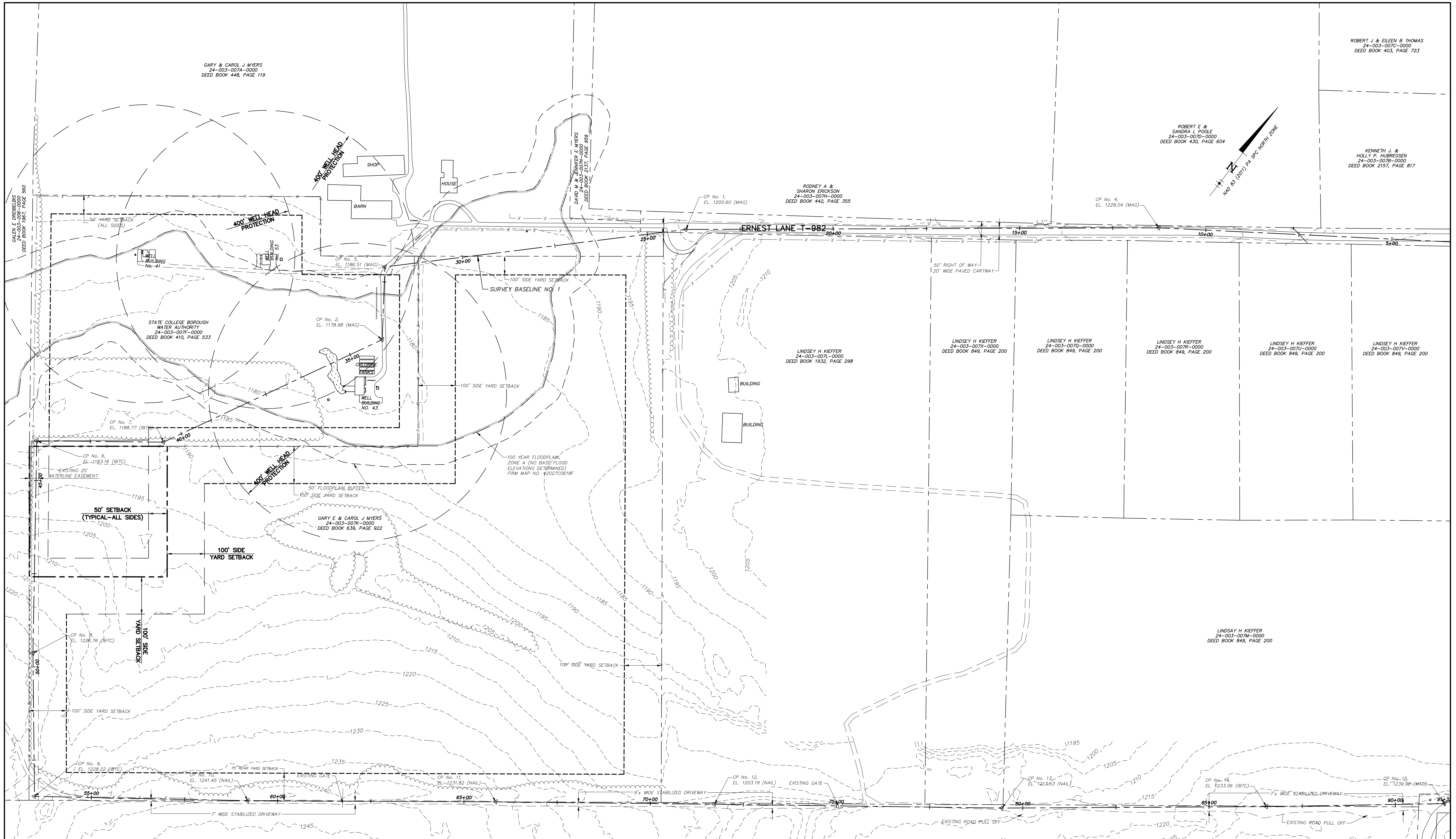
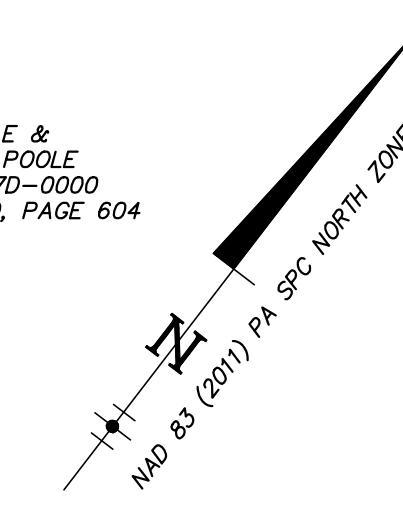
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ROBERT E &
SANDRA L POOLE
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DEED BOOK 430, PAGE 604

KENNETH J &
HOLLY P HUBRECHEN
24-003-0079-0000
DEED BOOK 2157, PAGE 817

RODNEY A &
SHARON ERICKSON
24-003-0071-0000
DEED BOOK 442, PAGE 355

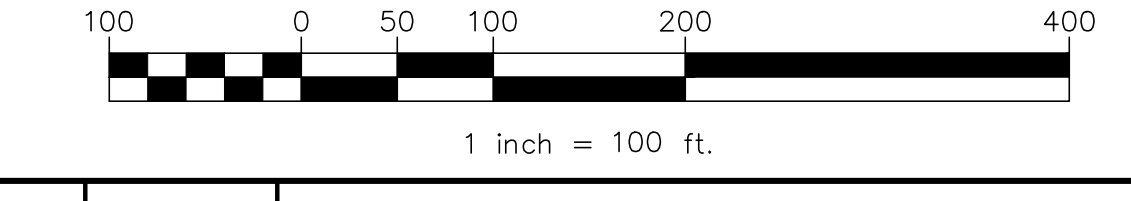
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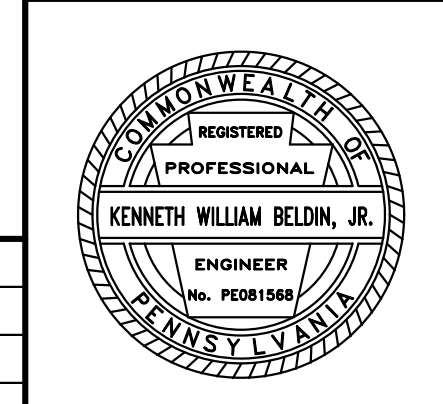
LEGEND

- RIGHT-OF-WAY LINE
- PROPERTY LINE
- BITUMINOUS PAVEMENT
- STABILIZED AREA
- TREELINE
- STREAM/DITCH LINE
- FENCE LINE
- MAJOR CONTOUR (5')
- PROPOSED BUILDING SETBACK

GRAPHIC SCALE



NO.	DATE	DESCRIPTION

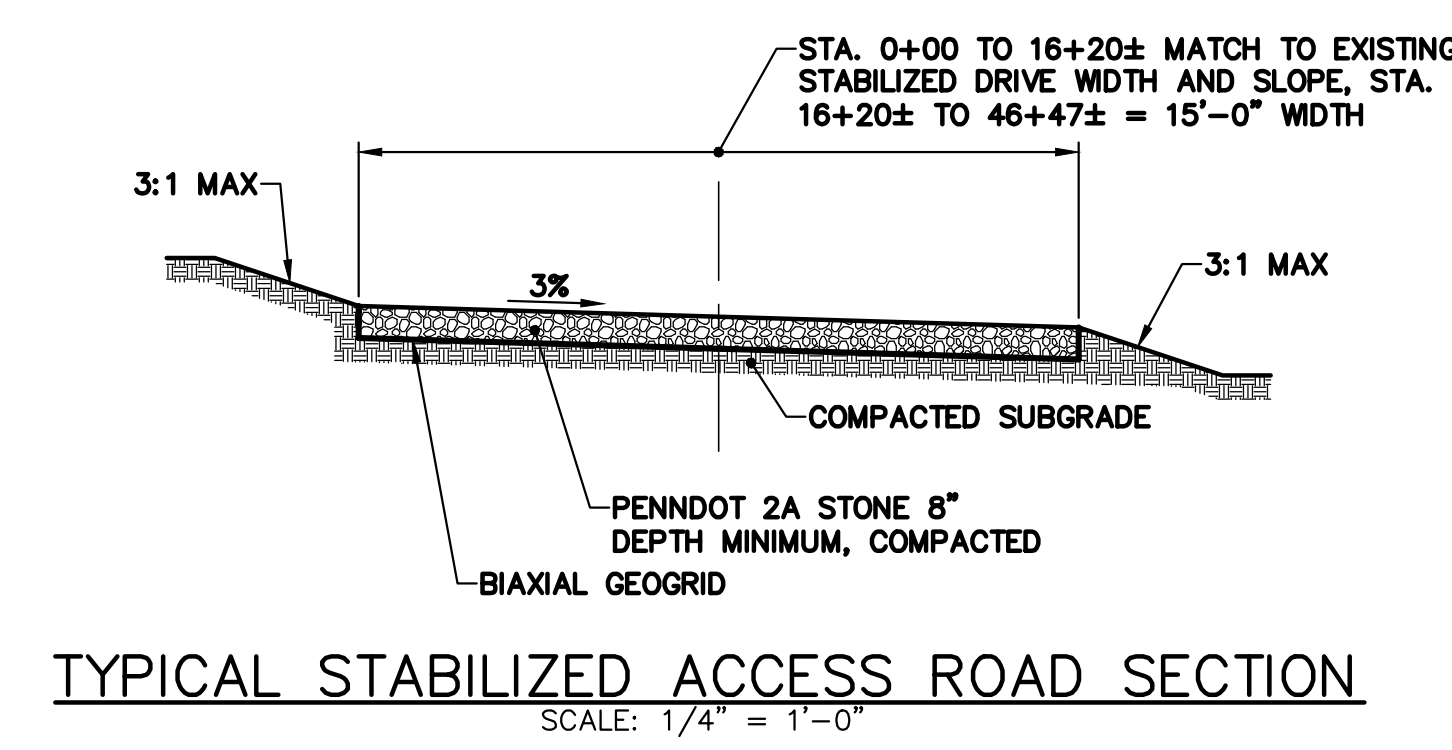
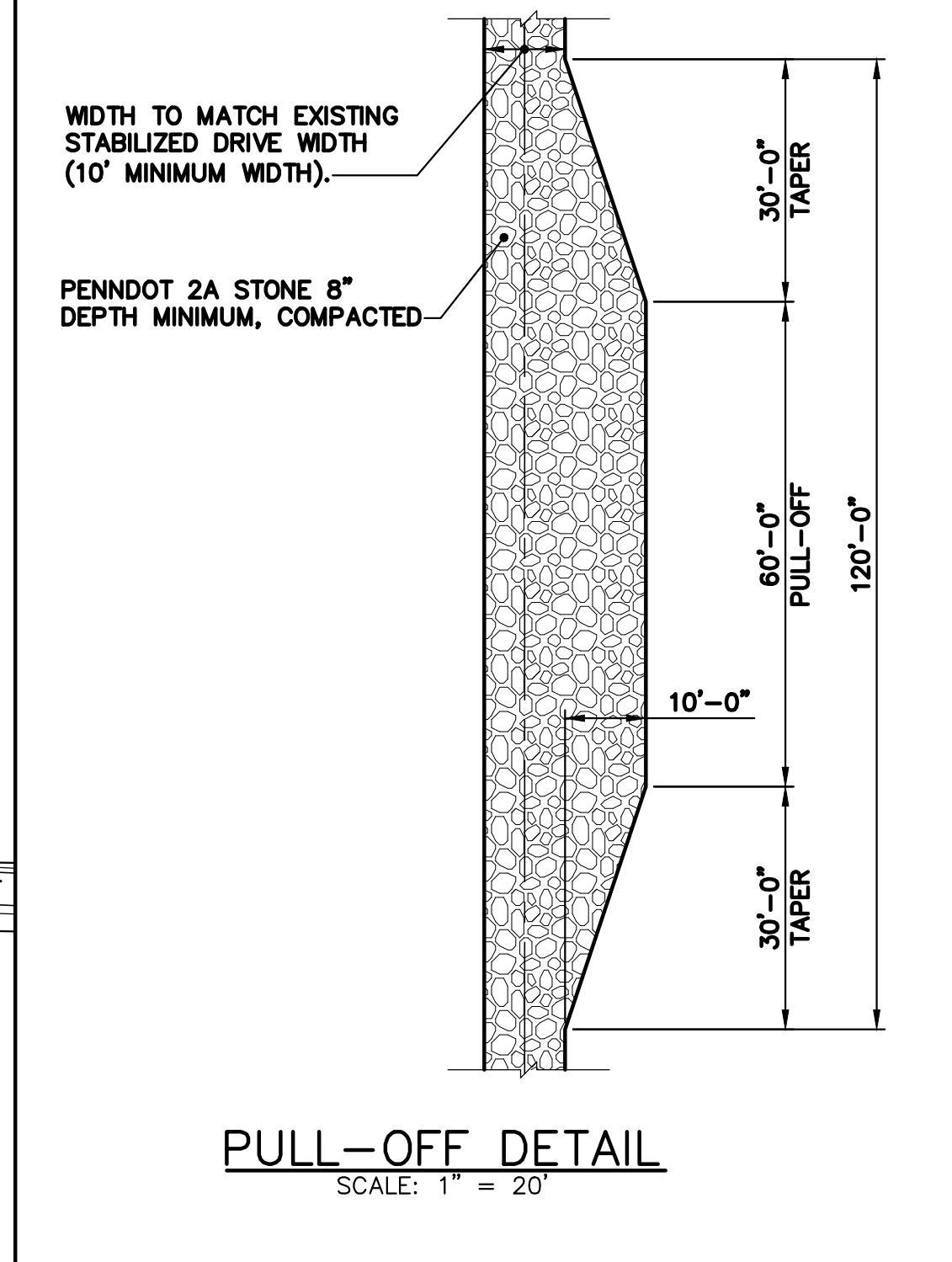
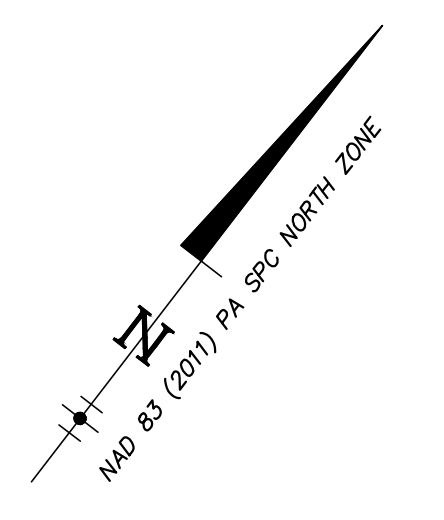
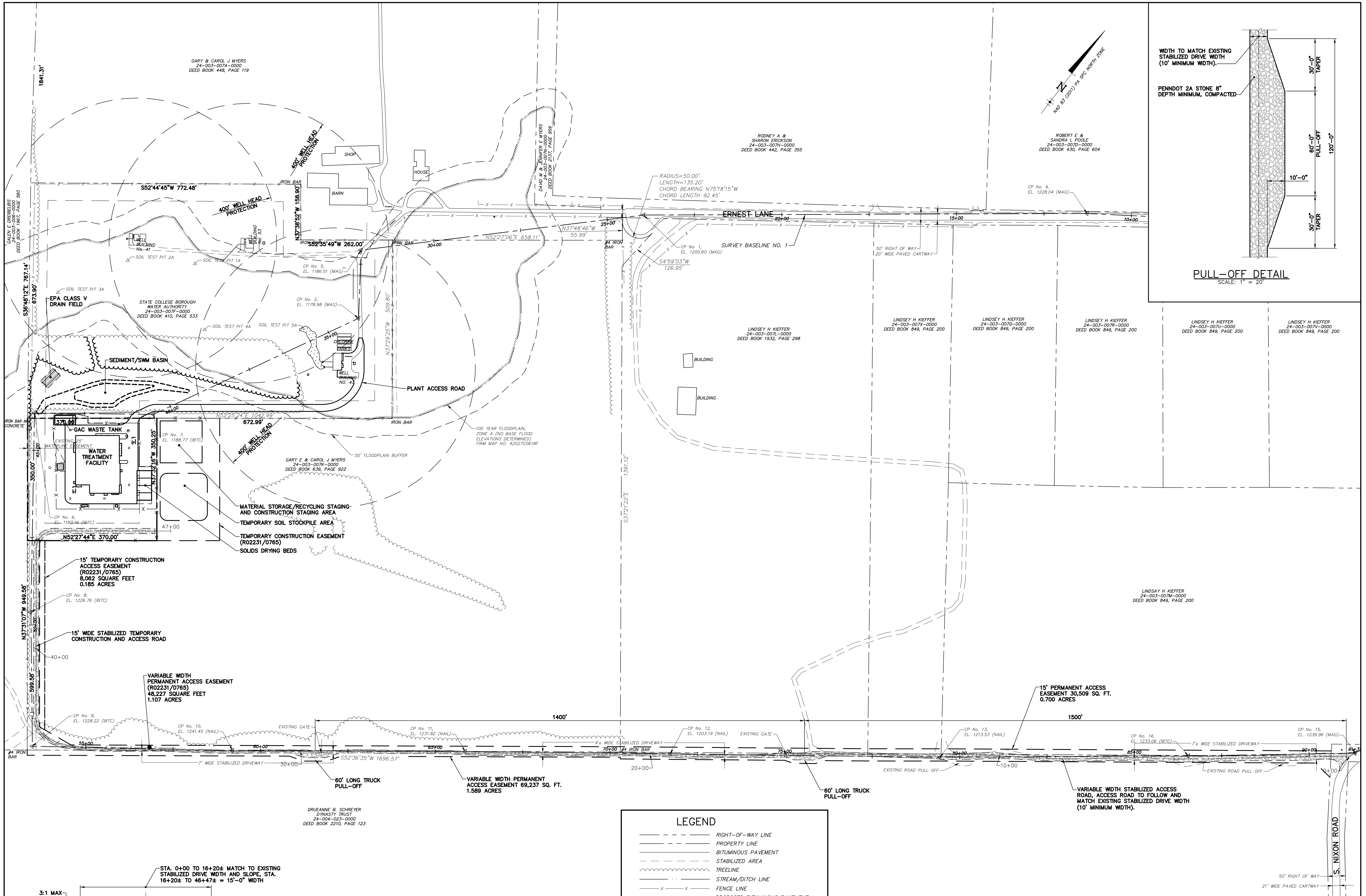


OVERALL EXISTING SITE PLAN
STATE COLLEGE BOROUGH
WATER AUTHORITY
**NIXON-KOCHER
WATER TREATMENT FACILITY**



FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA
DATE: 06/26/19 JOB: 16049 SCALE: AS SHOWN
FILE: 16049_LD_001 DRAWN BY: AJL CHECKED BY: WAA

SHEET NO:
1



LEGEND

- RIGHT-OF-WAY LINE
- PROPERTY LINE
- BITUMINOUS PAVEMENT
- STABILIZED AREA
- TREELINE
- STREAM/DITCH LINE
- x-x- FENCE LINE
- PROPOSED BITUMINOUS PAVEMENT
- PROPOSED STABILIZED AREA
- PROPOSED TREELINE
- x-x- PROPOSED FENCE LINE
- PROPOSED PROPERTY LINE
- PROPOSED BUILDING SETBACK

GRAPHIC SCALE

100 0 50 100 200 400
1 inch = 100 ft.

NO.	DATE	DESCRIPTION

OVERALL PROPOSED SITE PLAN

STATE COLLEGE BOROUGH
WATER AUTHORITY

**NIXON-KOCHER
WATER TREATMENT FACILITY**

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

GD&F

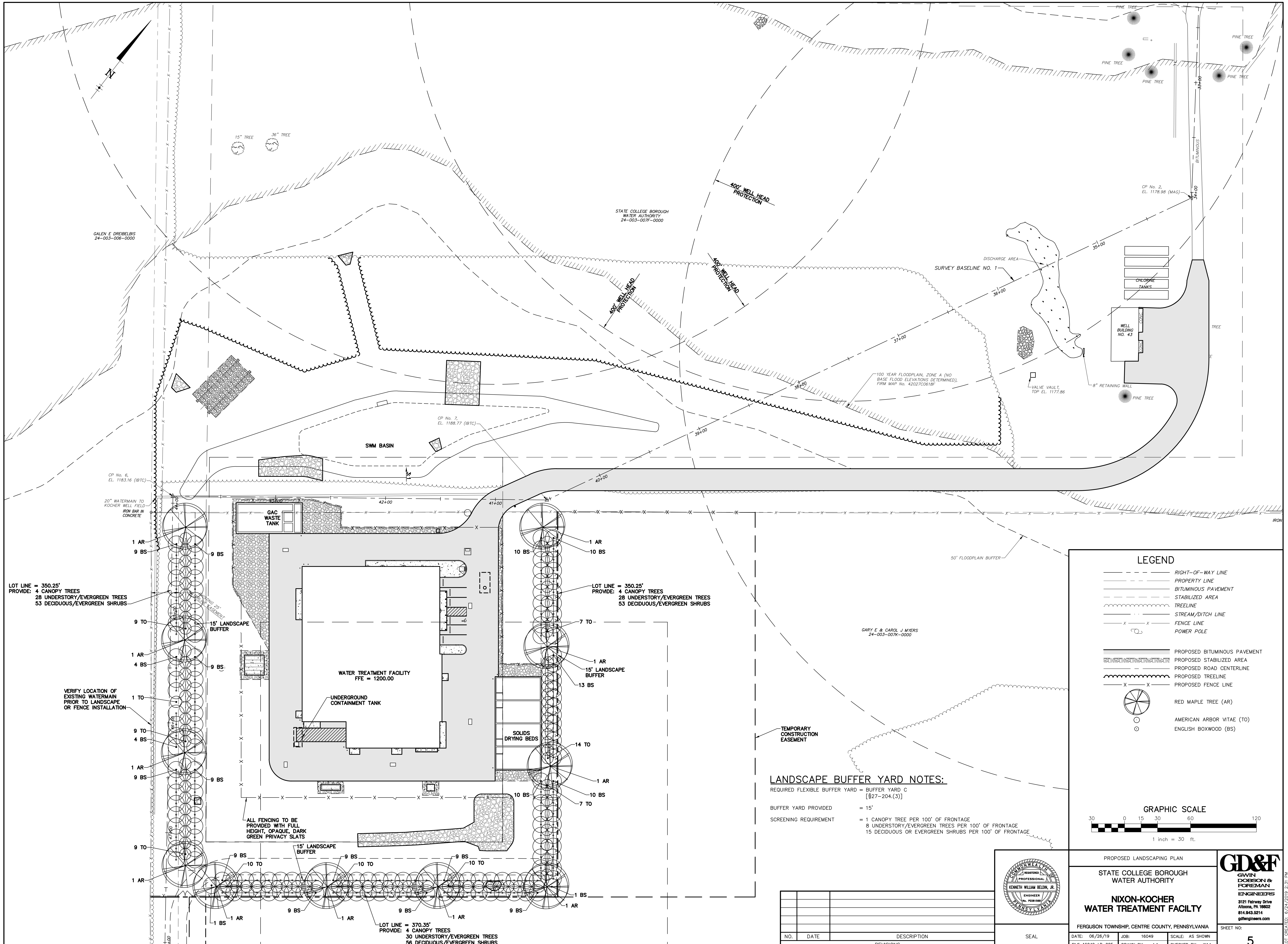
GWIN DOBSON & FOREMAN
ENGINEERS

3121 Fairway Drive
Allentown, PA 18602
610.943.8214
gdfengineers.com

DATE: 06/26/19	JOB: 16049	SCALE: AS SHOWN
FILE: 16049_LD_002	DRAWN BY: AJL	CHECKED BY: C-3

SHEET NO: **2**

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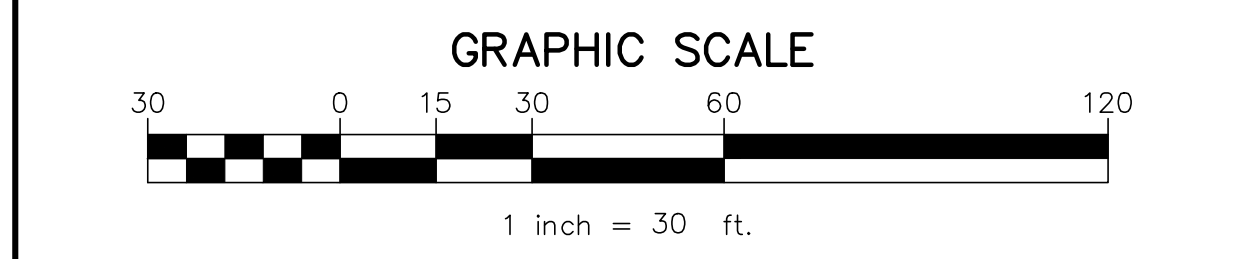


LEGEND

- RIGHT-OF-WAY LINE
- PROPERTY LINE
- BITUMINOUS PAVEMENT
- STABILIZED AREA
- TREELINE
- STREAM/DITCH LINE
- FENCE LINE
- POWER POLE

- PROPOSED BITUMINOUS PAVEMENT
- PROPOSED STABILIZED AREA
- PROPOSED ROAD CENTERLINE
- PROPOSED TREELINE
- PROPOSED FENCE LINE

- RED MAPLE TREE (AR)
- AMERICAN ARBOR VITAE (TO)
- ENGLISH BOXWOOD (BS)



LANDSCAPE BUFFER YARD NOTES:
 REQUIRED FLEXIBLE BUFFER YARD = BUFFER YARD C
 [§27-204.(3)]
 BUFFER YARD PROVIDED = 15'
 SCREENING REQUIREMENT = 1 CANOPY TREE PER 100' OF FRONTAGE
 8 UNDERSTORY/EVERGREEN TREES PER 100' OF FRONTAGE
 15 DECIDUOUS OR EVERGREEN SHRUBS PER 100' OF FRONTAGE

LOT LINE = 350.25'
 PROVIDE: 4 CANOPY TREES
 28 UNDERSTORY/EVERGREEN TREES
 53 DECIDUOUS/EVERGREEN SHRUBS

LOT LINE = 350.25'
 PROVIDE: 4 CANOPY TREES
 28 UNDERSTORY/EVERGREEN TREES
 53 DECIDUOUS/EVERGREEN SHRUBS

LOT LINE = 370.35'
 PROVIDE: 4 CANOPY TREES
 30 UNDERSTORY/EVERGREEN TREES
 56 DECIDUOUS/EVERGREEN SHRUBS

VERIFY LOCATION OF EXISTING WATERMAIN PRIOR TO LANDSCAPE OR FENCE INSTALLATION

ALL FENCING TO BE PROVIDED WITH FULL HEIGHT, OPAQUE, DARK GREEN PRIVACY SLATS

NO.	DATE	DESCRIPTION

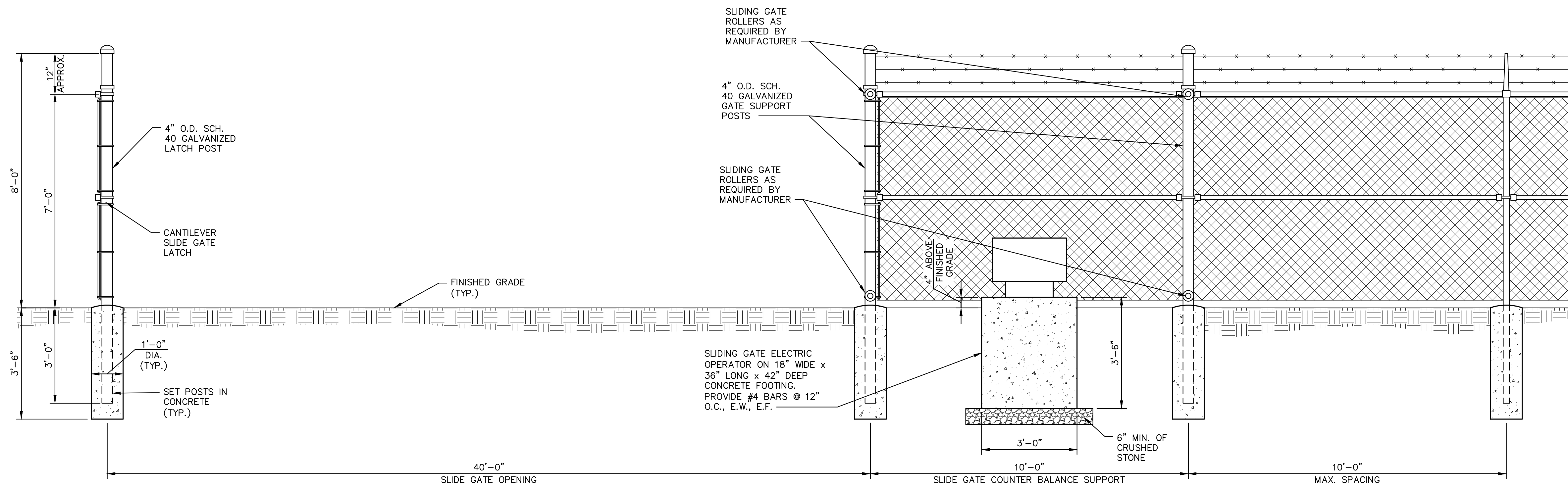
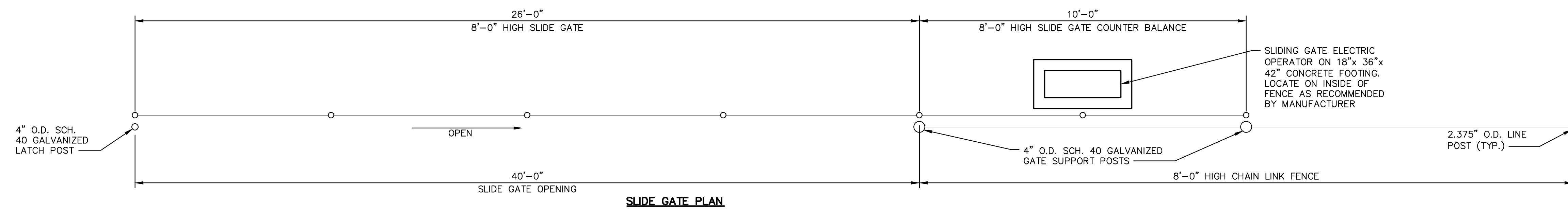


PROPOSED LANDSCAPING PLAN
 STATE COLLEGE BOROUGH
 WATER AUTHORITY
**NIXON-KOCHER
 WATER TREATMENT FACILITY**

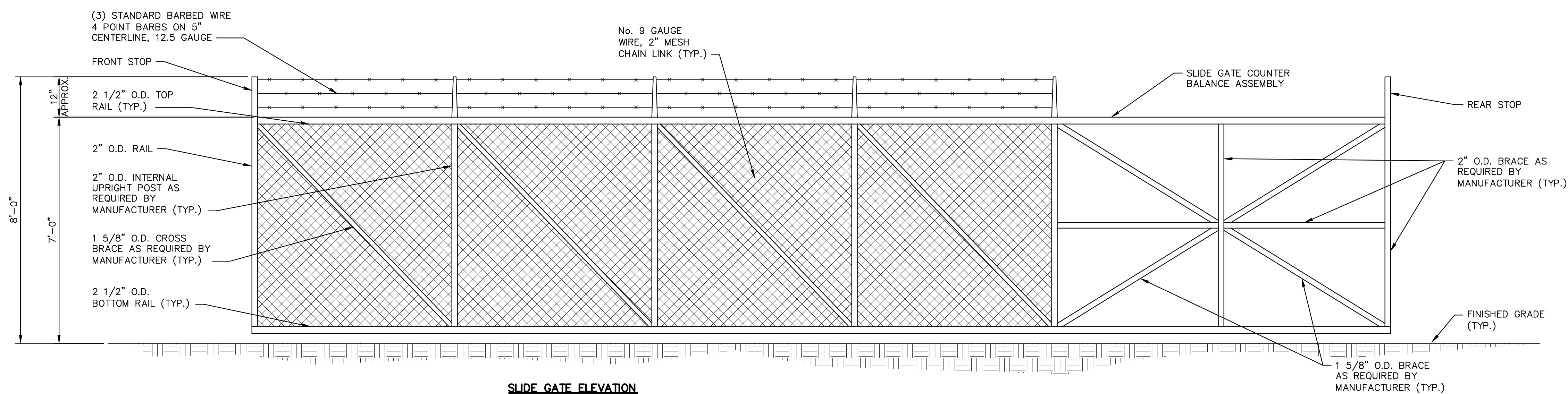
GD&F
 GWIN DOBSON & FOREMAN
 ENGINEERS
 3121 Fairway Drive
 Allentown, PA 18602
 610.493.8214
 gdfengineers.com

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA
 DATE: 06/26/19 JOB: 16049 SCALE: AS SHOWN
 FILE: 16049_LD_005 DRAWN BY: AJL CHECKED BY: WAA

SHEET NO:
5



CHAIN LINK FENCE ELEVATION (SLIDE GATE NOT SHOWN)

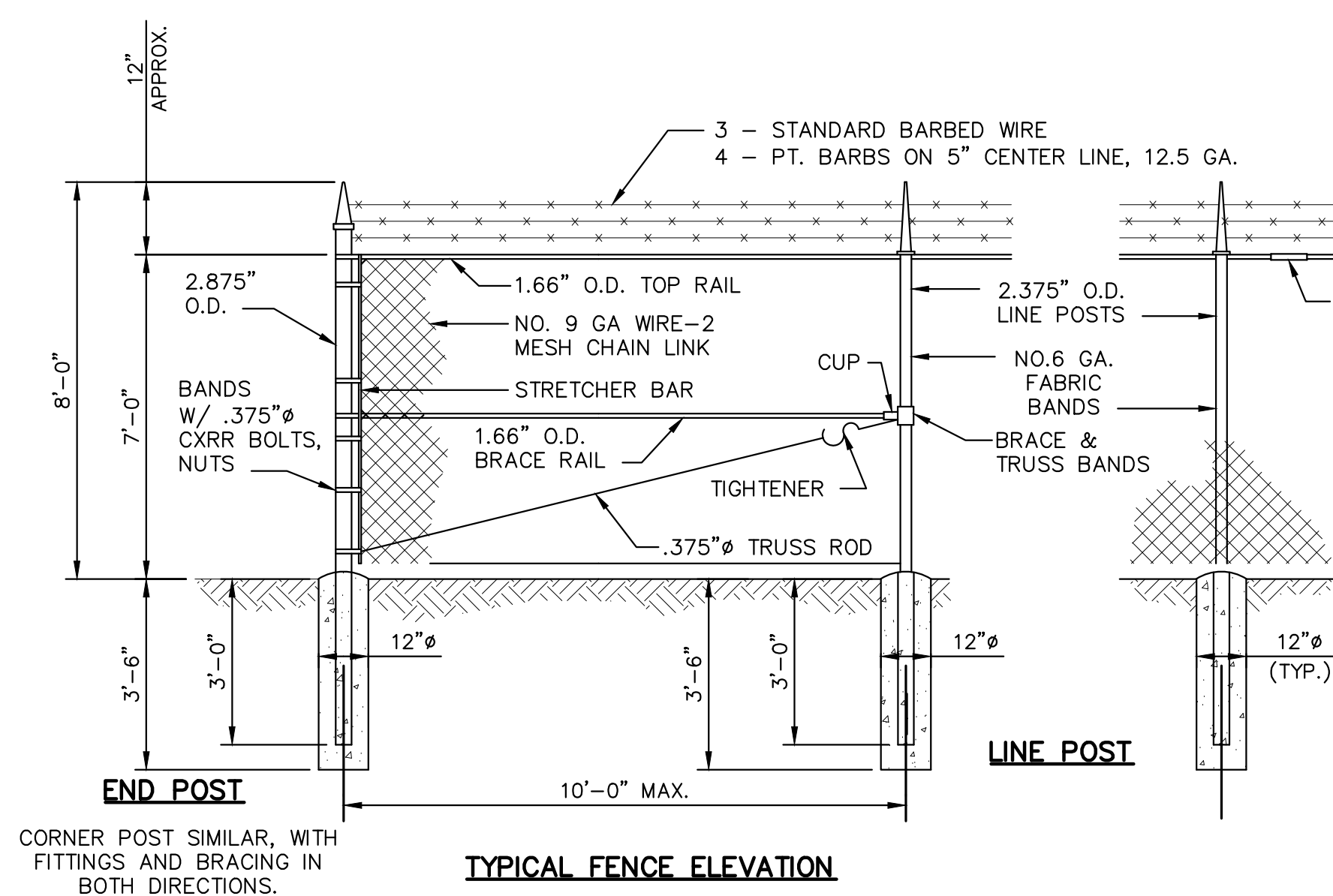


SLIDE GATE ELEVATION

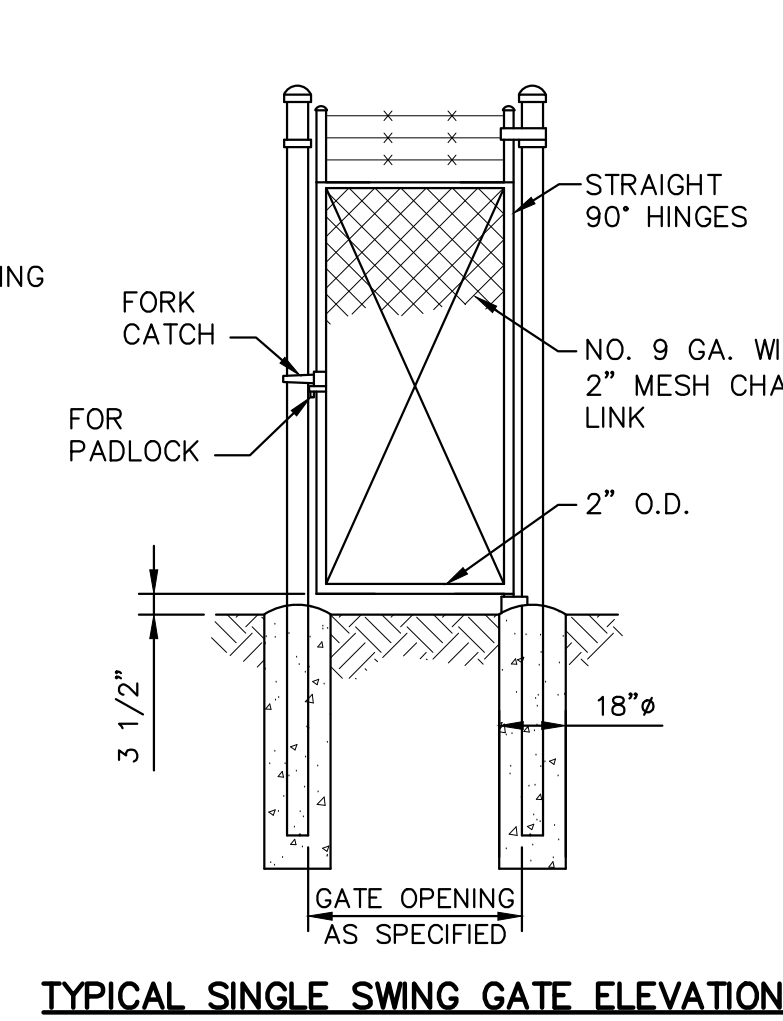
- NOTE:**
- SEE SPECIFICATIONS FOR MOTORIZED SLIDE GATE REQUIREMENTS.
 - THE ALUMINUM SLIDE GATE SHALL CONTAIN BOXED-IN ROLLERS.
 - ALL FENCING, WITH THE EXCEPTION OF GATES, IS TO BE PROVIDED WITH FULL HEIGHT, OPAQUE, DARK GREEN SLATS.

CHAIN LINK FENCE / SLIDE GATE DETAIL

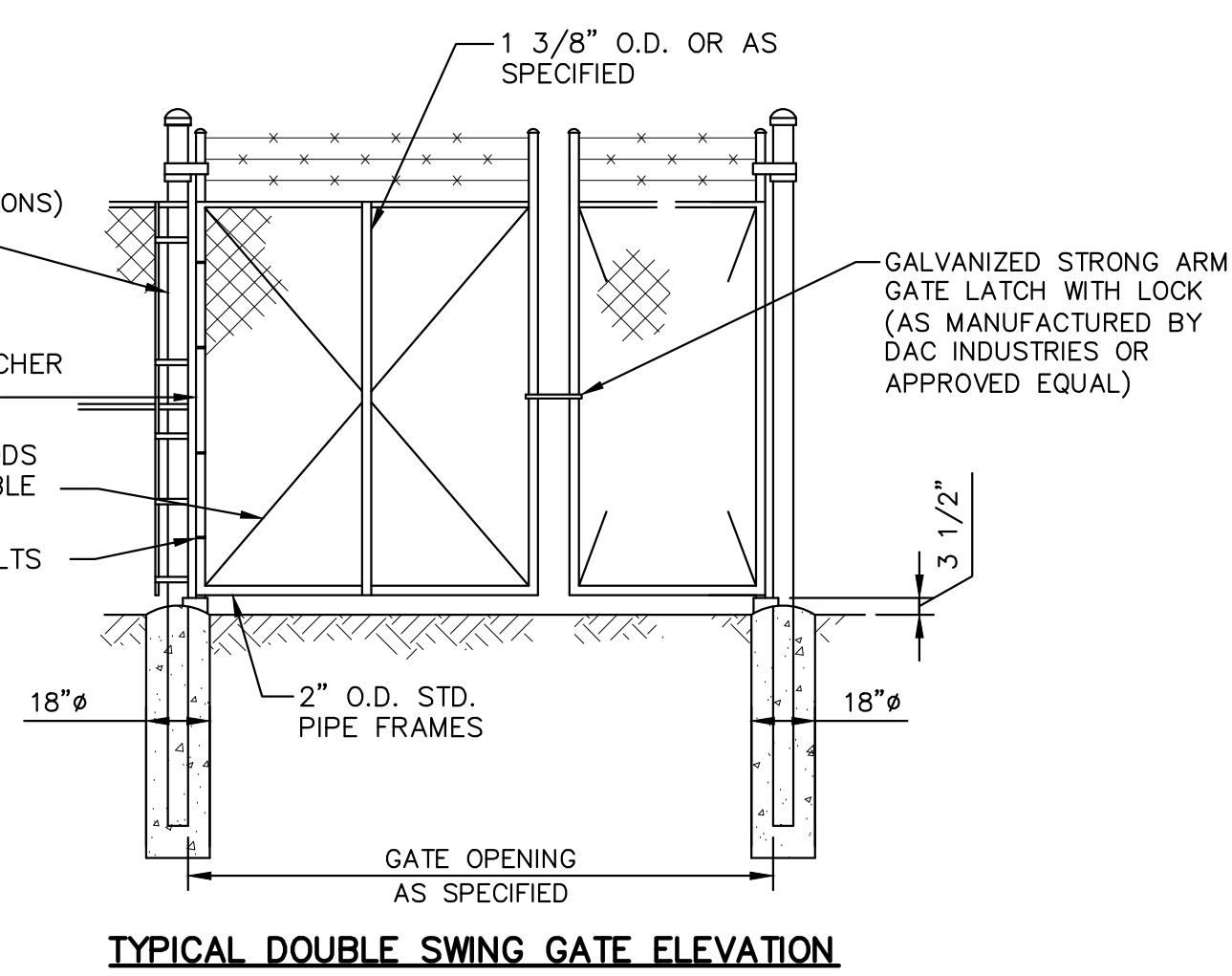
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TYPICAL FENCE ELEVATION



TYPICAL SINGLE SWING GATE ELEVATION

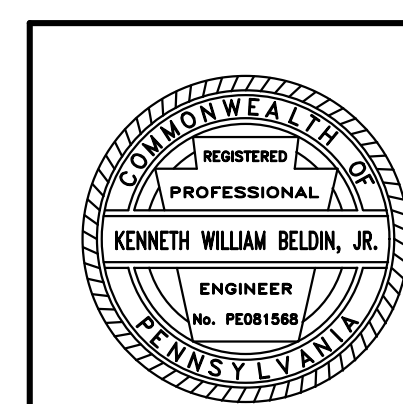


TYPICAL DOUBLE SWING GATE ELEVATION

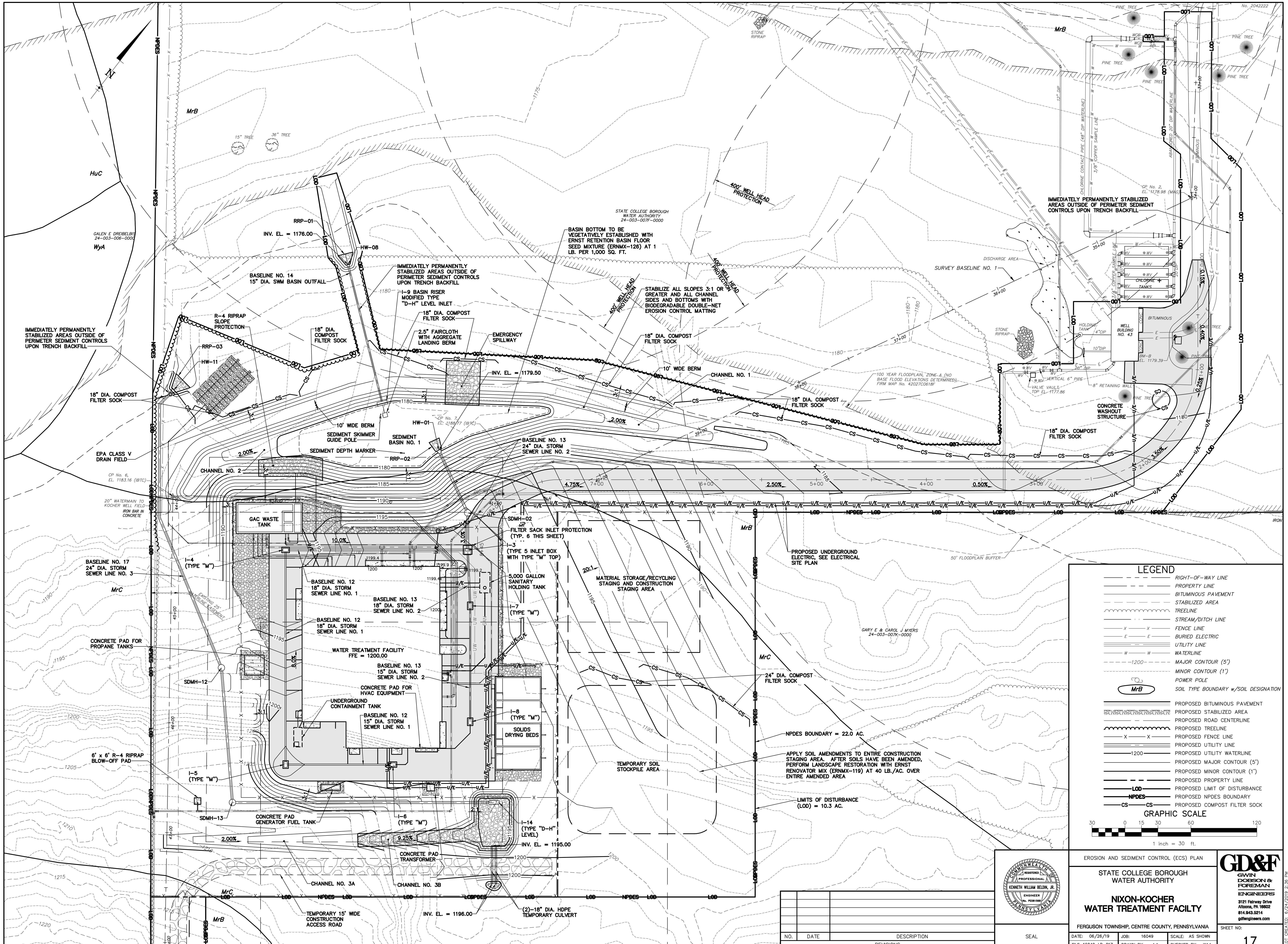
TYPICAL CHAIN-LINK FENCE DETAILS

NO SCALE

NO.	DATE	DESCRIPTION
REVISIONS		
SITE DETAILS		
STATE COLLEGE BOROUGH WATER AUTHORITY		
NIXON-KOCHER WATER TREATMENT FACILITY		
FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA		
DATE: 6/26/19	JOB: 16049	SCALE: AS SHOWN
FILE: 16049_LD_014	DRAWN BY: A.J.L.	CHECKED BY:



SHEET NO: 14



LEGEND

- RIGHT-OF-WAY LINE
- PROPERTY LINE
- BITUMINOUS PAVEMENT
- STABILIZED AREA
- TREELINE
- STREAM/DITCH LINE
- X X FENCE LINE
- E E BURIED ELECTRIC
- UTILITY LINE
- WATERLINE
- MAJOR CONTOUR (5')
- MINOR CONTOUR (1')
- POWER POLE
- SOIL TYPE BOUNDARY w/ SOIL DESIGNATION

--- PROPOSED BITUMINOUS PAVEMENT
 --- PROPOSED STABILIZED AREA
 --- PROPOSED ROAD CENTERLINE
 --- PROPOSED TREELINE
 X X PROPOSED FENCE LINE
 --- PROPOSED UTILITY LINE
 --- PROPOSED UTILITY WATERLINE
 --- PROPOSED MAJOR CONTOUR (5')
 --- PROPOSED MINOR CONTOUR (1')
 --- PROPOSED PROPERTY LINE
 --- PROPOSED LIMIT OF DISTURBANCE
 --- PROPOSED NPDES BOUNDARY
 --- CS --- PROPOSED COMPOST FILTER SOCK

GRAPHIC SCALE

1 inch = 30 ft.

EROSION AND SEDIMENT CONTROL (ECS) PLAN

STATE COLLEGE BOROUGH
 WATER AUTHORITY

**NIXON-KOCHER
 WATER TREATMENT FACILITY**

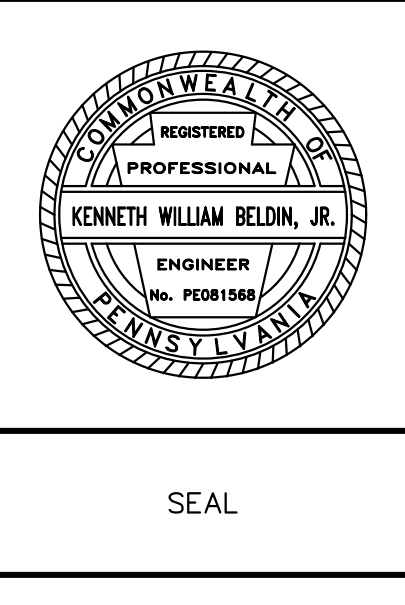
FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

DATE: 06/26/19 JOB: 16049 SCALE: AS SHOWN
 FILE: 16049_LD_017 DRAWN BY: AJL CHECKED BY: WAA

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SHEET NO:
17

NO.	DATE	DESCRIPTION



PLOT CREATED: 6/24/2019 2:36 PM

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 150 MICRONS. 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-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	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 THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

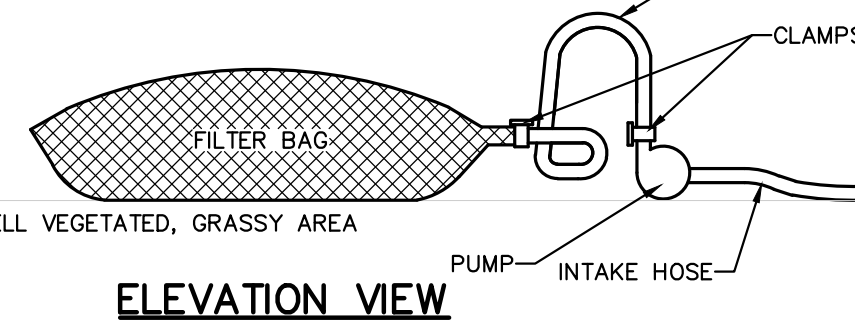
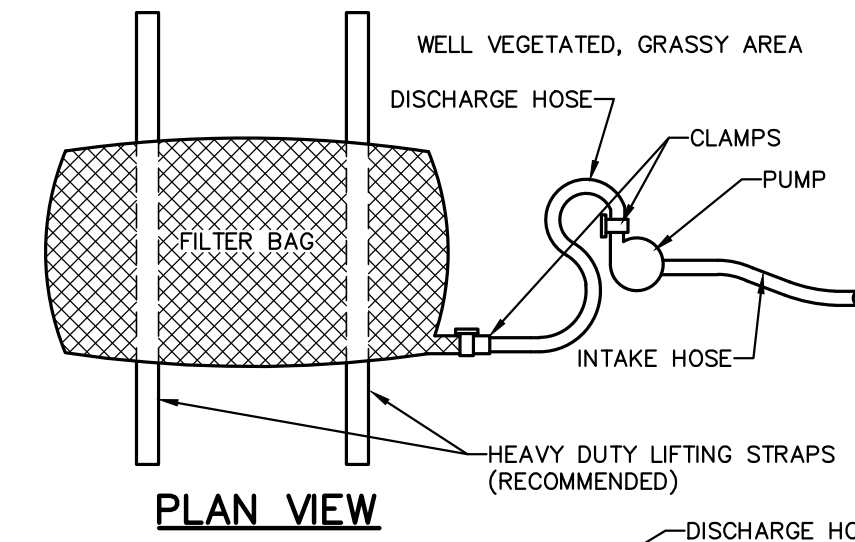
BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5% FOR SLOPES EXCEEDING 5% CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.

NO DOWN-SLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BEAM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

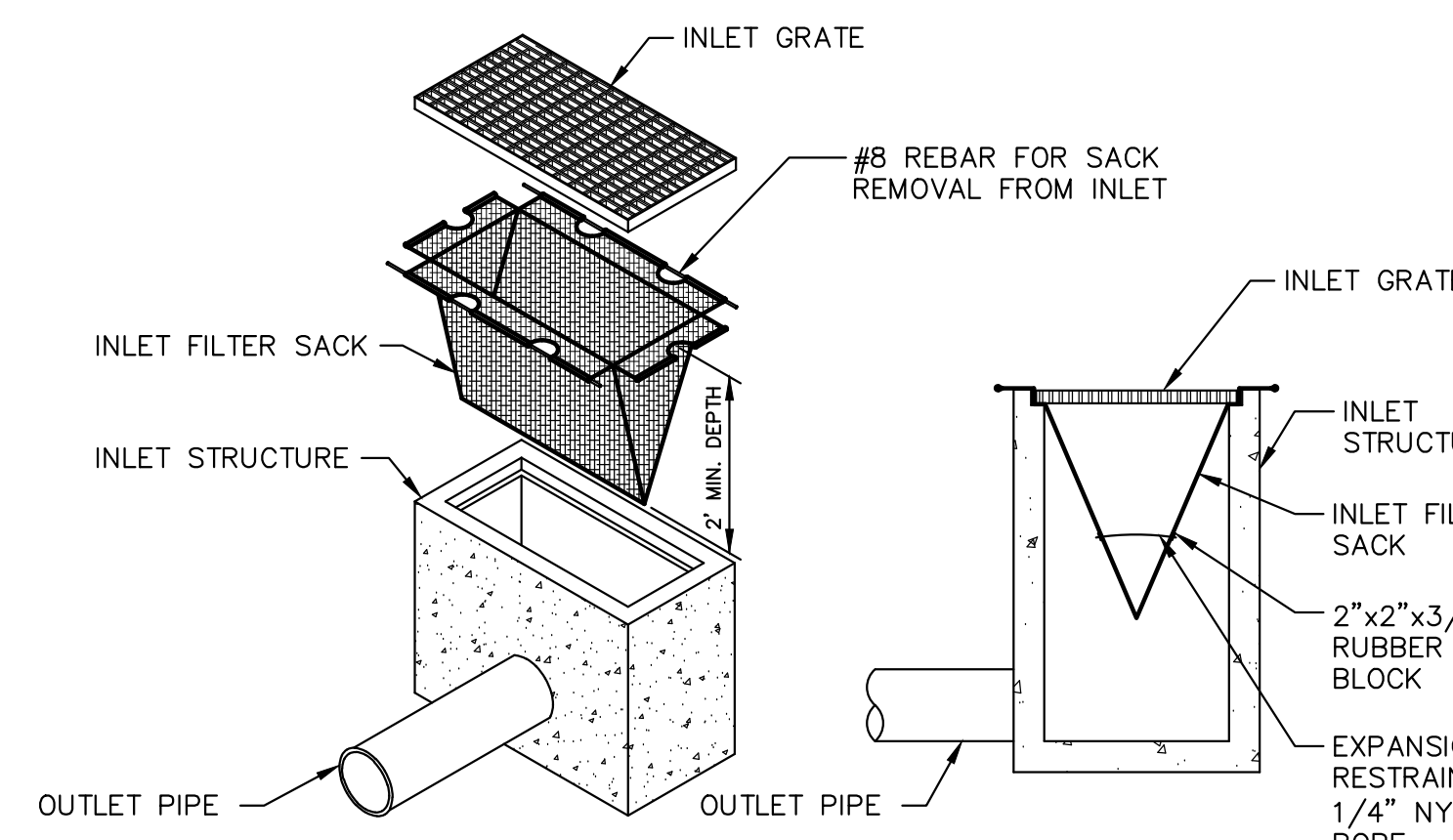
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.



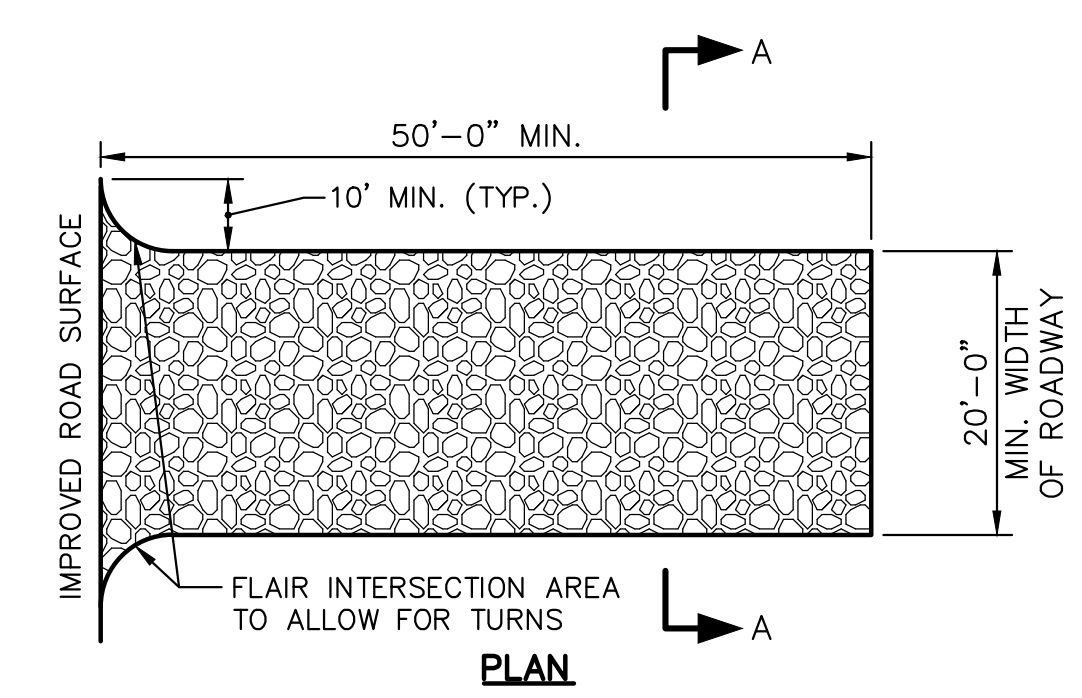
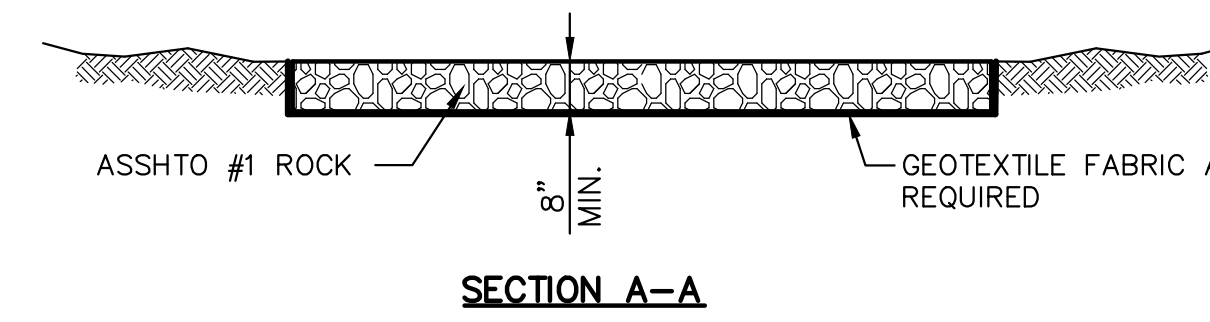
PUMPED WATER FILTER BAG DETAIL
NO SCALE



NOTES:

1. THE INLET FILTER SACK SHOULD TRAP PARTICLES LARGER THAN 150 MICRONS.
2. INLET FILTER BAGS SHOULD BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT.
3. FILTER BAGS SHOULD BE CLEANED AND/OR REPLACED WHEN THE BAG IS 1/3 FULL.
4. DAMAGED FILTER BAGS SHOULD BE REPLACED. NEEDED REPAIRS SHOULD BE INITIATED IMMEDIATELY AFTER INSPECTION.
5. FOR INLETS WITH A CURB OPENING (i.e. TYPE C INLET), A FILTER LOG, SAND BAG, FILTER TUBE OR COMPOST FILTER SOCK SHALL BE USED TO PREVENT SEDIMENT LADEN WATER FROM ENTERING THE CURB OPENING AND BYPASSING THE FILTER BAG.

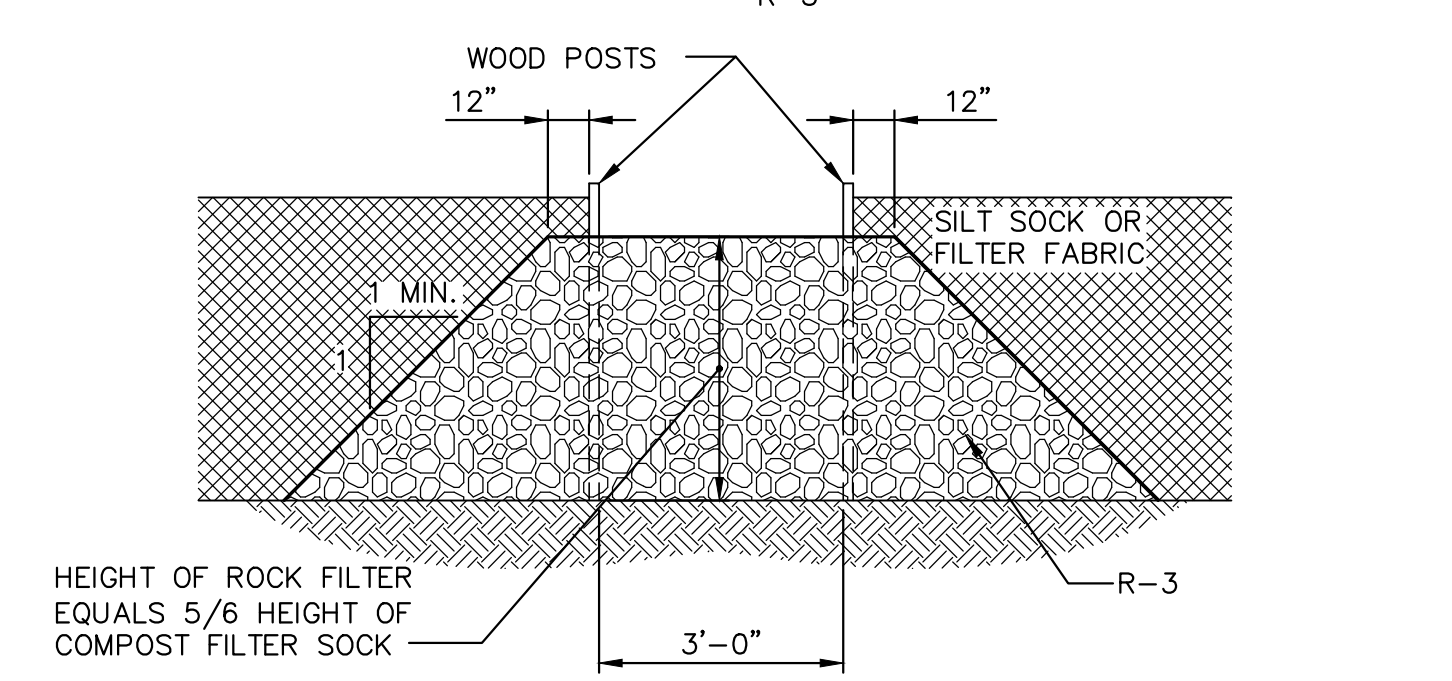
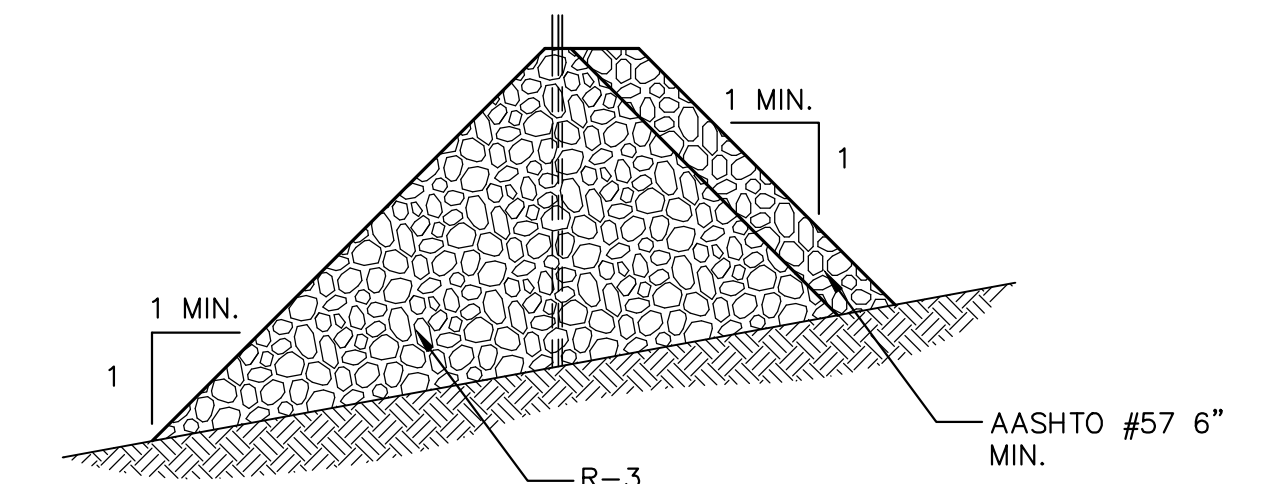
FILTER SACK INLET PROTECTION DETAILS
NO SCALE



NOTES:

1. ROCK CONSTRUCTION ENTRANCES WILL BE CONSTRUCTED TO THE MINIMUM WIDTH, LENGTH, AND THICKNESS OF THE DIMENSIONS SHOWN.
2. ROCK WILL BE ASHTO #1 AS SPECIFIED IN SECTION 703.2 OF PENNDOT PUBLICATION 408.
3. THE THICKNESS OF THE ROCK CONSTRUCTION ENTRANCE SHALL BE CONSISTENTLY MAINTAINED AT THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCK PILE OF ROCK MATERIAL WILL BE MAINTAINED ON THE SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON THE PUBLIC ROADWAYS WILL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. WASHING OF THE ROADWAY WITH WATER IS NOT PERMITTED.

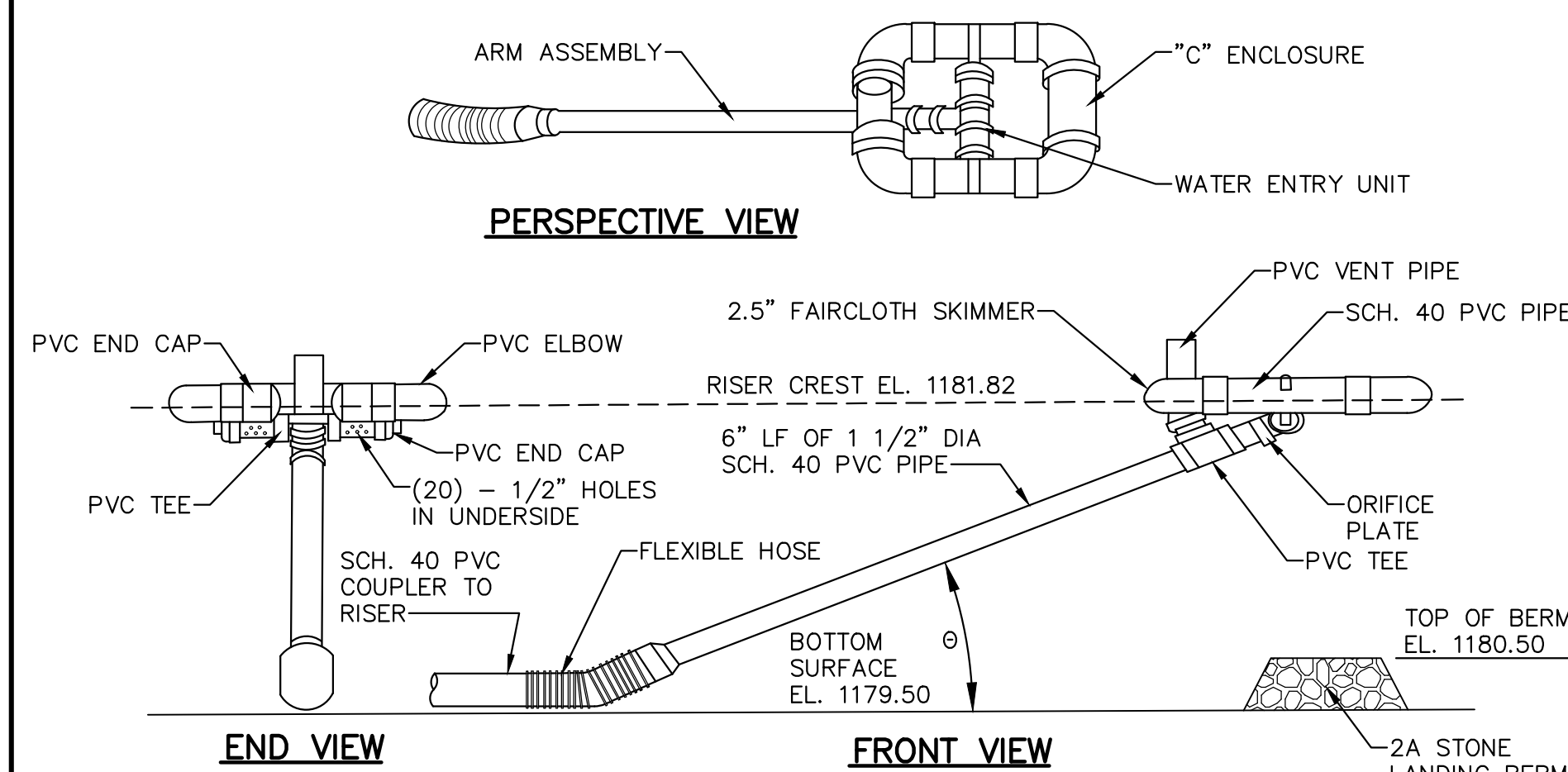
ROCK CONSTRUCTION ENTRANCE DETAIL
NO SCALE



NOTES:

1. THE FILTER SHOULD BE EQUAL IN HEIGHT TO 5/6 THE TOTAL HEIGHT OF THE COMPOST FILTER SOCK OR SILT FENCE WITH A 6" DEPRESSION IN THE CENTER.
2. A SIX INCH THICK LAYER OF ASHTO NO. 57 STONE SHOULD BE PLACED ON THE UPSTREAM SIDE OF THE FILTER. FILTER FABRIC AND STRAW BALES SHOULD NOT BE USED IN ROCK FILTERS.
3. ROCK FILTER OUTLET IS TO BE USED IN AREAS WHERE COMPOST FILTER SOCK AND SILT FENCE HAVE FAILED.

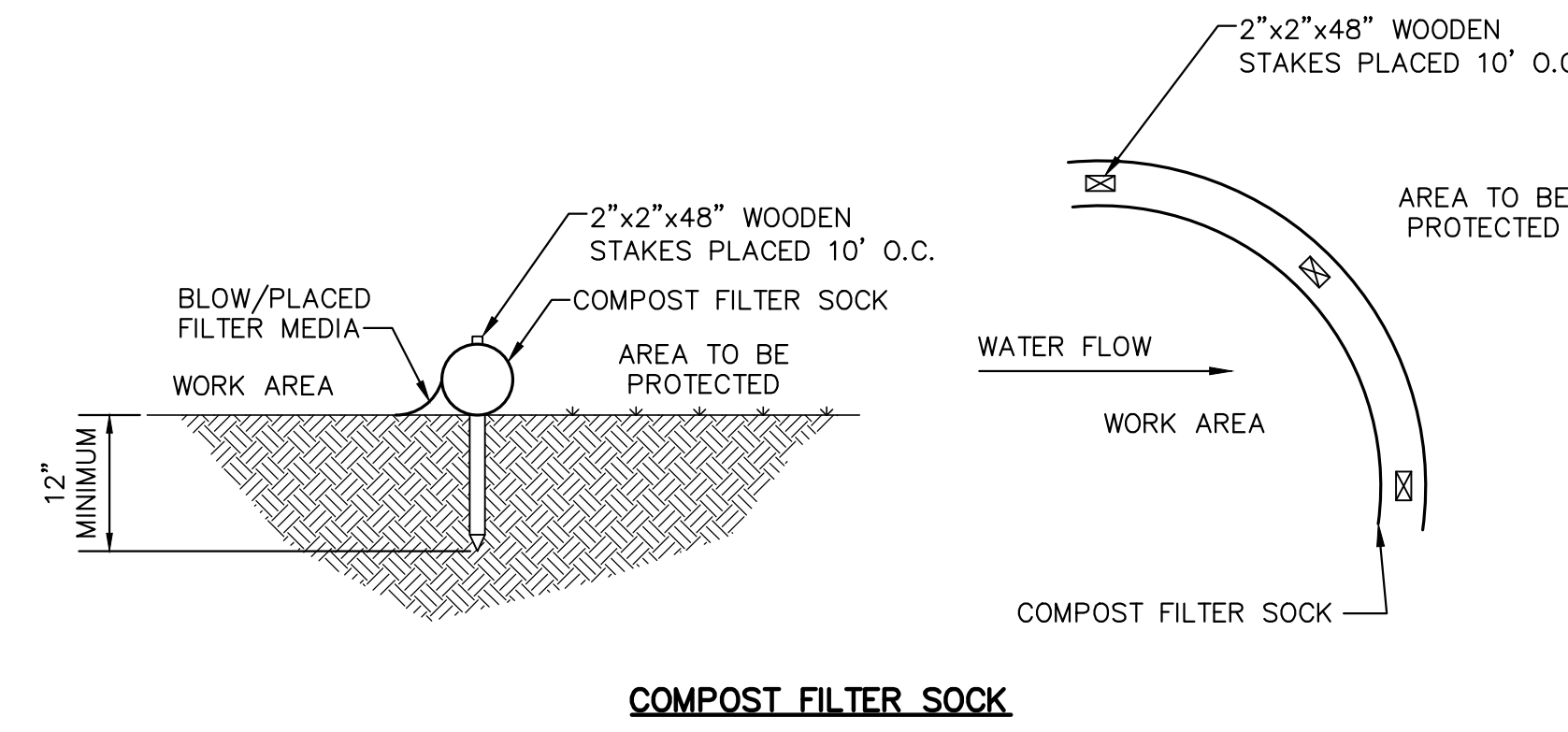
ROCK FILTER OUTLET DETAIL
NO SCALE



NOTES:

1. θ SHOULD BE 45° OR LESS WHEN THE WATER SURFACE IS AT THE MAXIMUM POOL ELEVATION.
2. APPROVAL OF THE USE OF A SKIMMER DOES NOT APPROVE THE USE OF ANY SKIMMER IN VIOLATION OF ANY PATENT, PATENT RIGHTS AND/OR PATENT LAW.

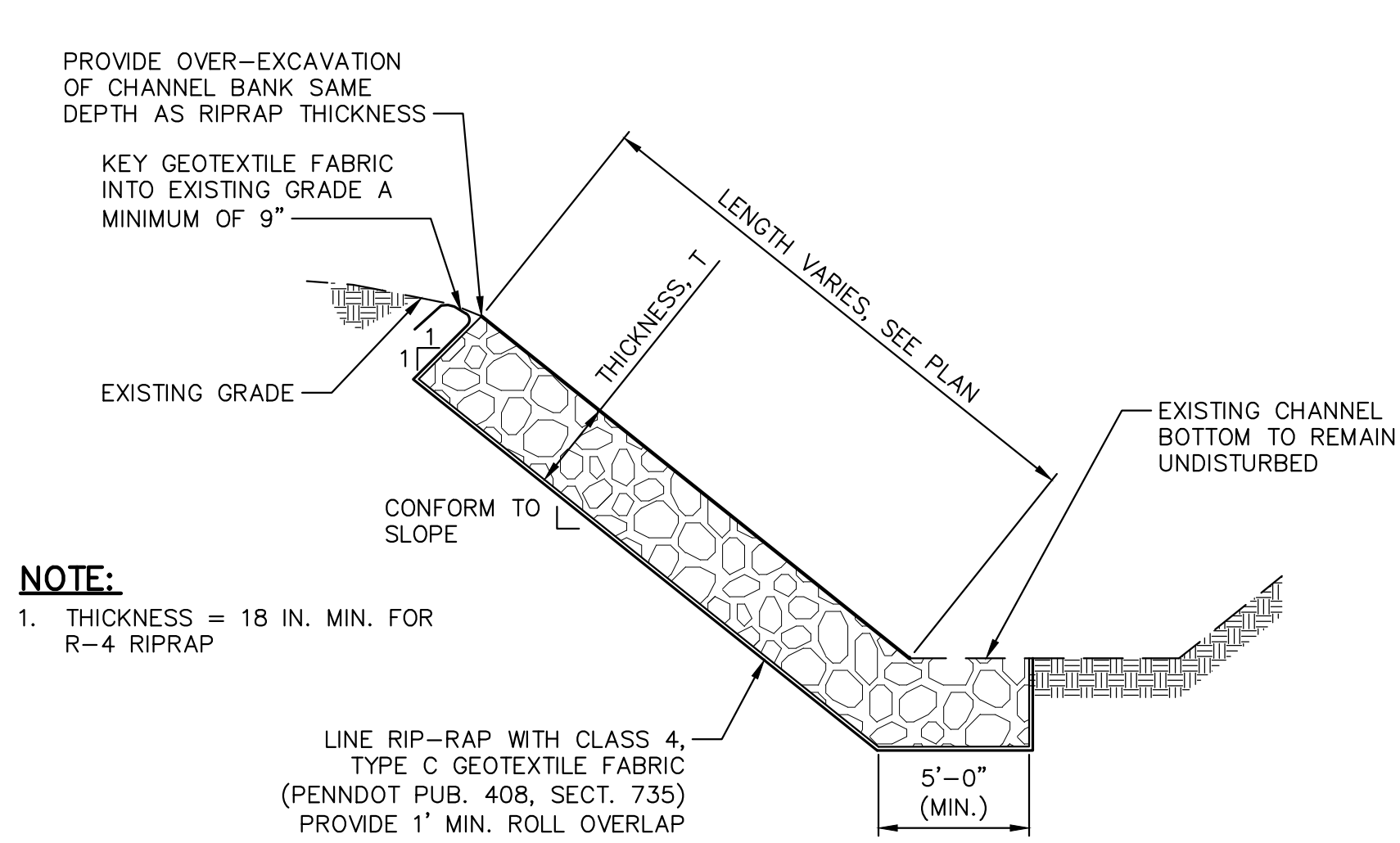
SEDIMENT SKIMMER DETAIL
NO SCALE



NOTES:

1. SEE PLAN VIEW FOR SOCK SIZE AND LOCATION.
2. SOCK FABRIC SHALL MEET THE STANDARDS OF TABLE 4.1 AND COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PADEP EROSION CONTROL BMP MANUAL.
3. SLOPE LENGTHS SHALL NOT EXCEED THE LENGTHS SHOWN ON FIGURE 4.2 OF THE PADEP EROSION CONTROL BMP MANUAL.

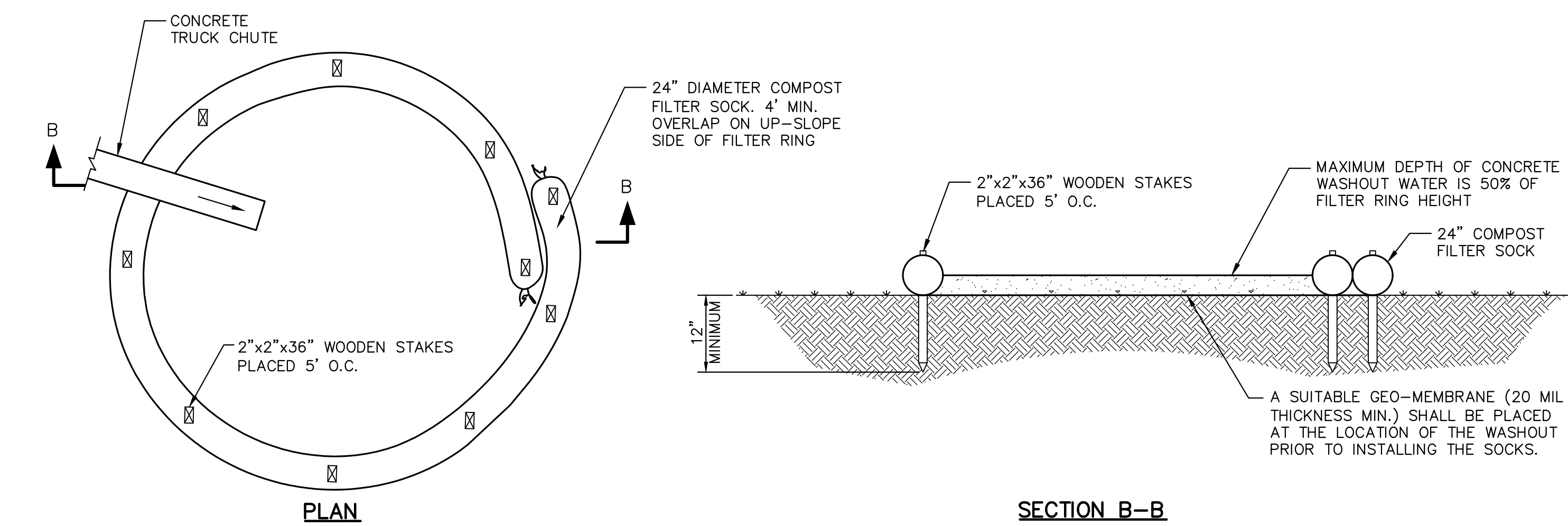
COMPOST FILTER SOCK DETAIL
NO SCALE



NOTE:

1. THICKNESS = 18 IN. MIN. FOR R-4 RIPRAP

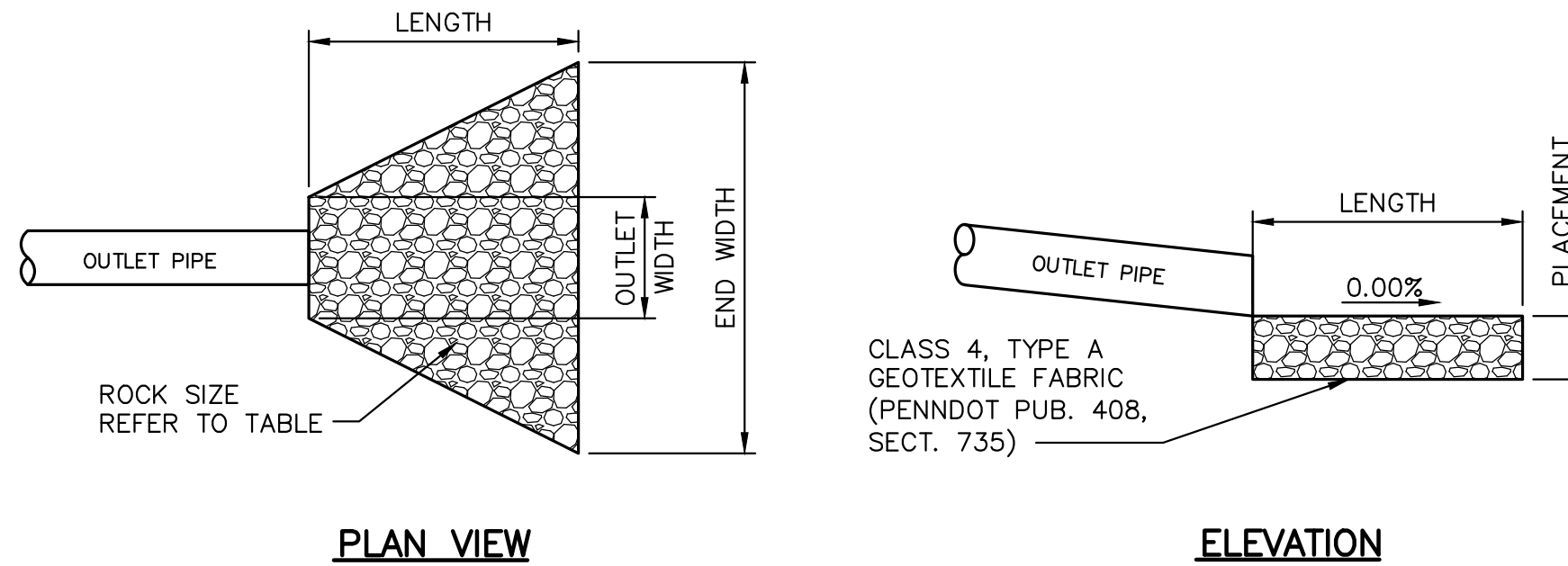
ROCK SLOPE STABILIZATION
NO SCALE



NOTES:

1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
2. 18" DIAMETER MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.

COMPOST SOCK WASHOUT INSTALLATION
NO SCALE



PLAN VIEW

ELEVATION

RIP-RAP OUTLET PROTECTION CHART							
RIP-RAP No.	STRUCTURE TYPE	LENGTH (FT)	MIN. OUTLET WIDTH (FT)	END WIDTH (FT)	ROCK SIZE	PLACEMENT DEPTH (IN)	REMARKS
RRP-01	15" HDPE	10.0	4.0	14.0	R-4	18	BASIN OUTFALL (HW-08)
RRP-02	24" HDPE	10.0	6.0	10.0	R-3	9	STORM DRAIN OUTFALL (HW-01)
RRP-03	24" HDPE	12.0	18.0	13.0	R-4	18	BYPASS OUTFALL (HW-11)

OUTFALL PROTECTION DETAIL
NO SCALE

SOIL AMENDMENT SPECIFICATIONS AND APPLICATIONS

THIS SPECIFICATION COVERS THE USE OF COMPOST FOR SOIL AMENDMENT AND THE MECHANICAL RESTORATION OF COMPACTED, ERODED AND NON-VEGETATED SOILS. SOIL AMENDMENT AND RESTORATION IS NECESSARY WHERE EXISTING SOIL HAS BEEN DEEMED UNHEALTHY IN ORDER TO RESTORE SOIL STRUCTURE AND FUNCTION, INCREASE INFILTRATION POTENTIAL AND SUPPORT HEALTHY VEGETATIVE COMMUNITIES.

COMPOST MATERIALS
SOIL AMENDMENT MEDIA SHALL CONSIST OF COMPOST, BUT CAN INCLUDE MULCH, MANURES, SAND, AND MANUFACTURED MICROBIAL SOLUTIONS.

COMPOST SHOULD BE ADDED AT A RATE OF 2:1 (SOIL:COMPOST). IF A PROPRIETARY PRODUCT IS USED, THE MANUFACTURER'S INSTRUCTIONS SHOULD BE FOLLOWED IN TERMS OF MIXING AND APPLICATION RATE.

ONLY COMPOST PRODUCTS THAT MEET ALL APPLICABLE STATE AND FEDERAL REGULATIONS PERTAINING TO ITS PRODUCTION AND DISTRIBUTION MAY BE USED IN THIS APPLICATION. APPROVED COMPOST PRODUCTS MUST MEET RELATED STATE AND FEDERAL CHEMICAL CONTAMINANT (E.G., HEAVY METALS, PESTICIDES, ETC.) AND PATHOGEN LIMIT STANDARDS PERTAINING TO THE FEEDSTOCKS (SOURCE MATERIALS) IN WHICH IT IS DERIVED.

VERY COARSE COMPOST SHOULD BE AVOIDED FOR SOIL AMENDMENT AS IT WILL MAKE PLANTING ESTABLISHMENT MORE DIFFICULT.

THE USE OF COMPOST PRODUCTS THAT ARE CERTIFIED BY THE U.S. COMPOSTING COUNCIL'S SEAL OF TESTING (STA) PROGRAM (WWW.COMPOSTINGCOUNCIL.ORG) WILL ALLOW FOR THE ACQUISITION OF PRODUCTS THAT ARE ANALYZED ON A ROUTINE BASIS, USING THE SPECIFIED TEST METHODS. STA PARTICIPANTS ARE ALSO REQUIRED TO PROVIDE A STANDARD PRODUCT LABEL TO ALL CUSTOMERS, ALLOWING EASY COMPARISON TO OTHER PRODUCTS.

SUB-SOILING TO RELIEVE COMPACTION

SUB-SOILED AREAS SHALL BE LOOSENED TO LESS THAN 1400 KPA (200 PSI) TO A DEPTH OF 20 INCHES BELOW FINAL TOPSOIL GRADE. THE CONTRACTOR SHALL VERIFY THAT THE SUB-SOILING WORK CONFORMS TO THE SPECIFIED DEPTH.

SUB-SOILING SHALL FORM A TWO-DIRECTIONAL GRID. CHANNELS SHALL BE CREATED BY A COMMERCIALY AVAILABLE, MULTI-SHANKED, PARALLELOGRAM IMPLEMENT (SOLID-SHANK RIPPER). THE EQUIPMENT SHALL BE CAPABLE OF EXERTING A PENETRATION FORCE NECESSARY FOR THE SITE. NO DISC CULTIVATORS CHISEL PLOWS, OR SPRING-LOADED EQUIPMENT WILL BE ALLOWED. THE GRID CHANNELS SHALL BE SPACED A MINIMUM OF 12 INCHES TO A MAXIMUM OF 36 INCHES APART, DEPENDING ON EQUIPMENT, SITE CONDITIONS, AND THE SOIL MANAGEMENT PLAN. THE CHANNEL DEPTH SHALL BE A MINIMUM OF 20 INCHES OR AS DIRECTED. IF SOILS ARE SATURATED, THE CONTRACTOR SHALL DELAY OPERATIONS UNTIL THE SOIL WILL NOT HOLD A BALL WHEN SQUEEZED. ONLY ONE PASS SHALL BE PERFORMED ON ERODIBLE SLOPES GREATER THAN 1 VERTICAL TO 3 HORIZONTAL. WHEN ONLY ONE PASS IS USED, WORK SHOULD BE AT RIGHT ANGLES TO THE DIRECTION OF SURFACE DRAINAGE, WHENEVER PRACTICAL.

EXCEPTIONS TO SUB-SOILING INCLUDE AREAS WITHIN THE DRIP LINE OF ANY EXISTING TREES, OVER UTILITY INSTALLATIONS WITHIN 30 INCHES OF THE SURFACE, WHERE TRENCHING/DRAINAGE LINES ARE INSTALLED, WHERE COMPACTION IS BY DESIGN (ABUTMENTS, FOOTINGS, OR IN SLOPES), AND ON INACCESSIBLE SLOPES.

APPLICATION

BEFORE THE TIME THE COMPOST IS PLACED AND PREFERABLY WHEN EXCAVATION IS COMPLETED, THE SUBSOIL SHALL BE IN A LOOSE, FRABLE CONDITION TO A DEPTH OF 20 INCHES BELOW FINAL TOPSOIL GRADE AND THERE SHALL BE NO EROSION RILLS OR WASHOUTS IN THE SUBSOIL SURFACE EXCEEDING 3 INCHES IN DEPTH.

TO ACHIEVE THIS CONDITION, SUB-SOILING, RIPPING, OR SCARIFICATION OF THE SUBSOIL IS REQUIRED, WHEREVER THE SUBSOIL HAS BEEN COMPACTED BY EQUIPMENT OPERATION OR HAS BECOME DRIED OUT AND CRUSTED, AND WHERE NECESSARY TO OBLITERATE EROSION RILLS. SUB-SOILING SHALL BE REQUIRED TO REDUCE SOIL COMPACTION IN ALL AREAS WHERE PLANT ESTABLISHMENT IS PLANNED.

ON-SITE SOILS WITH AN ORGANIC CONTENT OF AT LEAST 5 PERCENT SHOULD BE PROPERLY STOCKPILED (TO MAINTAIN ORGANIC CONTENT) AND REUSED.

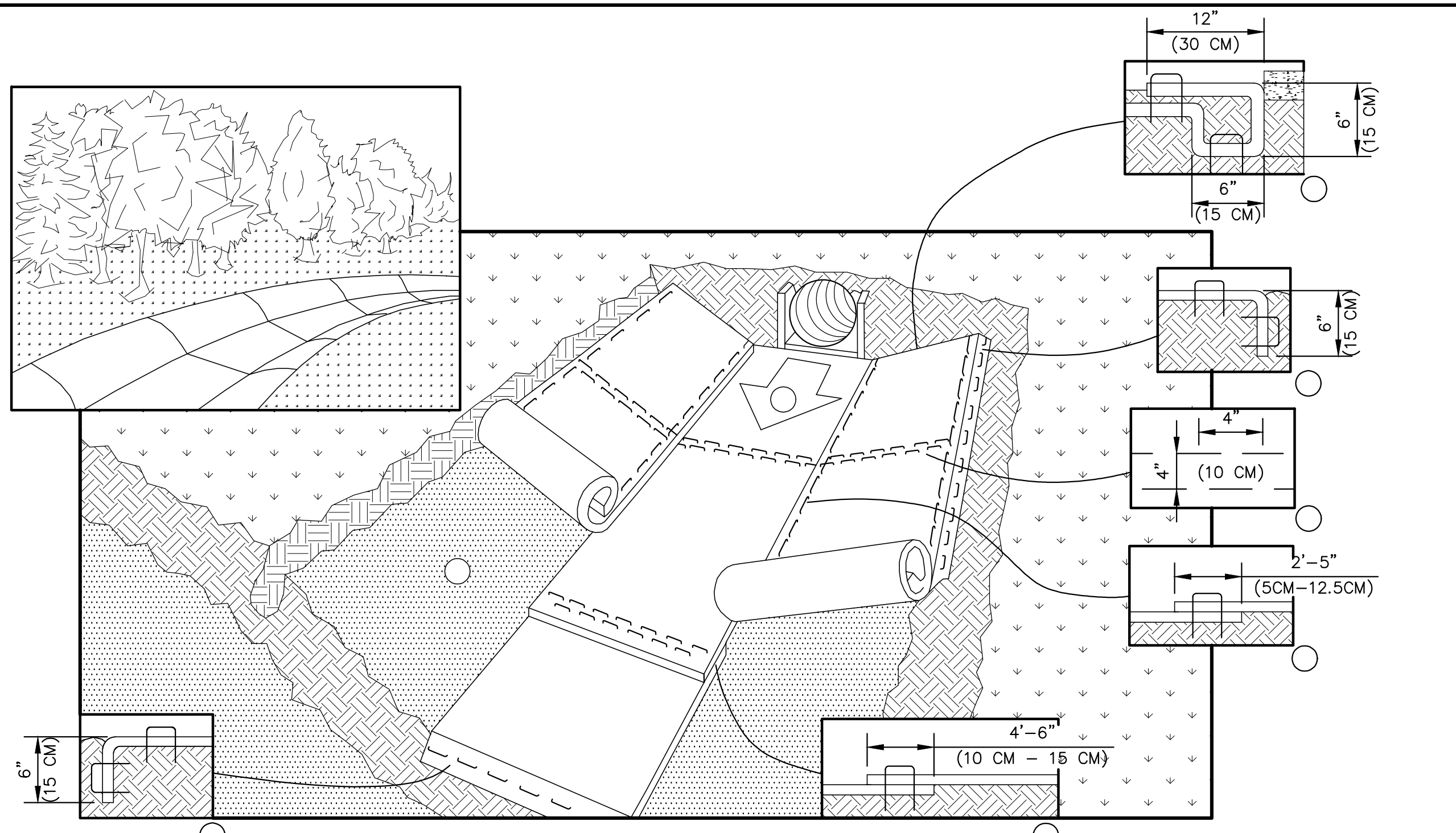
THE AREA TO RECEIVE THE SOIL AMENDMENTS SHALL BE LOOSENED TO LESS THAN 1400 KPA (200 PSI) TO A DEPTH OF 20 INCHES BELOW FINAL TOPSOIL GRADE. THIS MAY BE PERFORMED VIA COMMERCIALY AVAILABLE SOIL RIPPERS, BUT A ROTO-TILLER IS PREFERABLE.

AFTER SOIL TILLING, REMOVE ANY ROCKS AND DISTRIBUTE A LAYER OF 10 INCHES OF COMPOST OVER THE AREA AND TILL THE COMPOST INTO THE SOIL A MINIMUM OF 20 INCHES. APPLY PERMANENT SEED AND MULCH AT THE RATES SHOWN IN THE APPROVED PLAN.

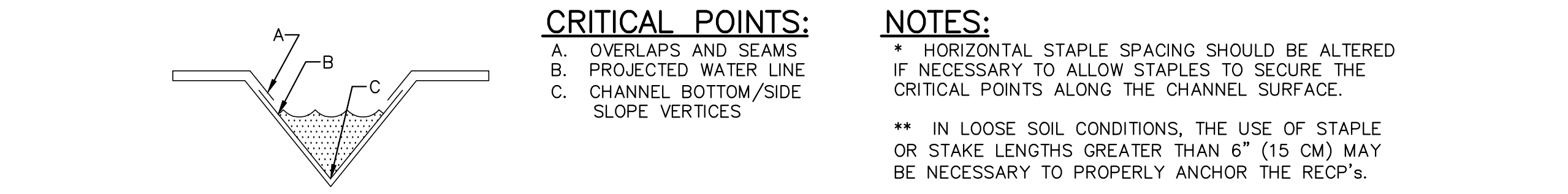


NO.	DATE	DESCRIPTION
REVISIONS		
EROSION AND SEDIMENT CONTROL (ESC) DETAILS		
STATE COLLEGE BOROUGH WATER AUTHORITY		
NIXON-KOCHER WATER TREATMENT FACILITY		
FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA		
DATE: 06/26/19	JOB: 16049	SCALE: AS SHOWN
FILE: 16049_LD_018	DRAWN BY: AJL	CHECKED BY: WAA
SEAL		SHEET NO: 18

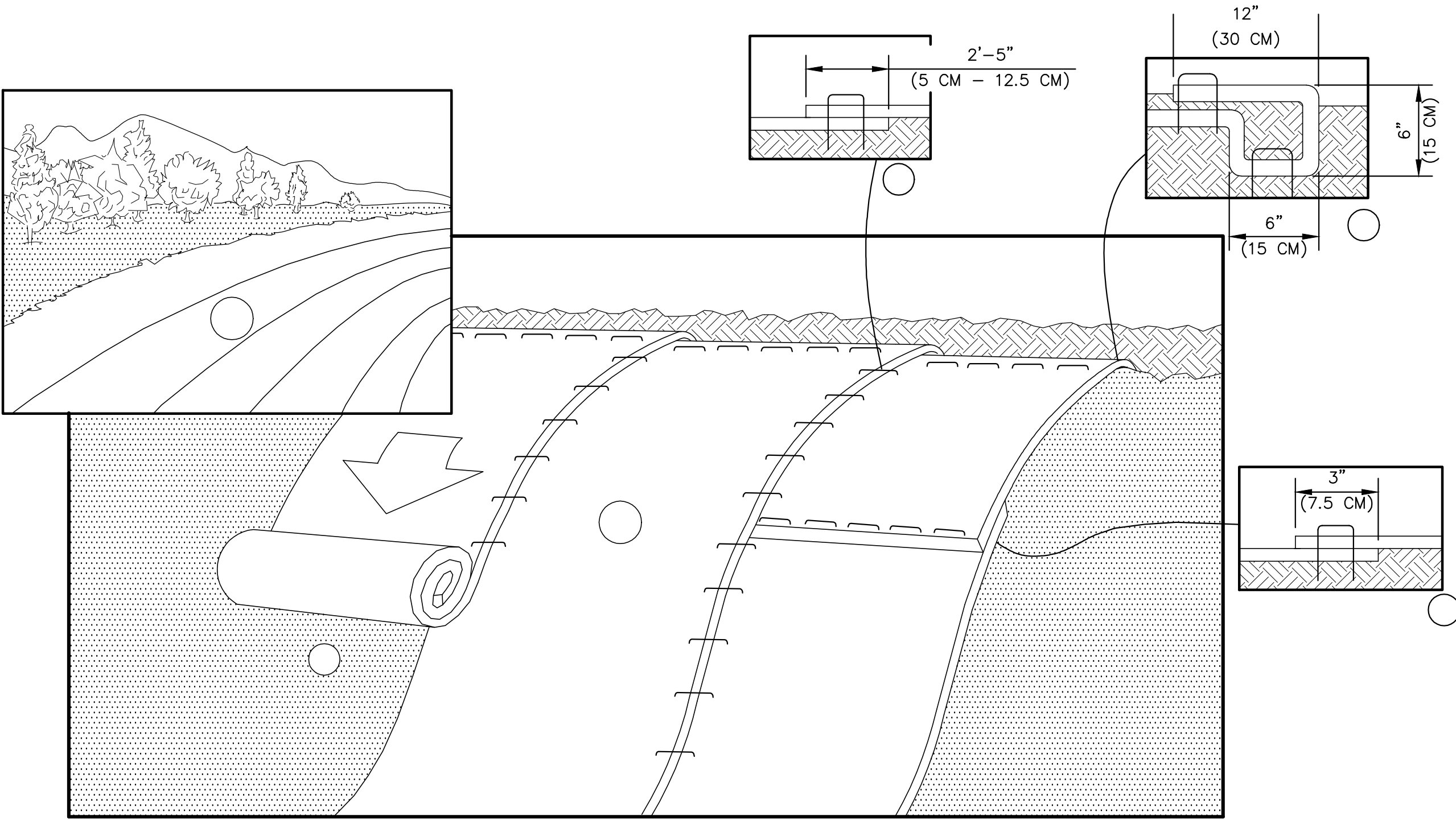




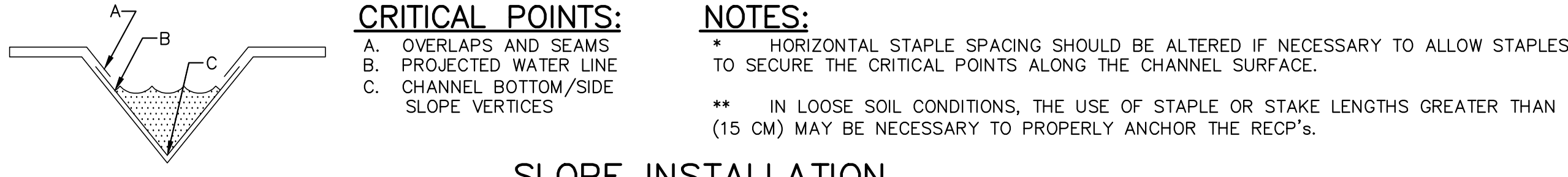
- PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECPs), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE RECPs IN A 6" (15CM) DEEP x 6" (15CM) WIDE TRENCH WITH APPROXIMATELY 12" (30CM) OF RECPs EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECPs WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30CM) PORTION OF RECPs BACK OVER SEED AND COMPACTED SOIL. SECURE RECPs OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) ACROSS THE WIDTH OF THE RECPs.
- ROLL CENTER RECPs IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECPs WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECPs MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- PLACE CONSECUTIVE RECPs END OVER END (SHINGLE STYLE) WITH A 4"-6" (10CM-15CM) OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" (10CM) APART AND 4" (10CM) ON CENTER TO SECURE RECPs.
- FULL LENGTH EDGE OF RECPs AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30CM) APART IN A 6" (15CM) DEEP x 6" (15CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- ADJACENT RECPs MUST BE OVERLAPPED APPROXIMATELY 2"-5" (5CM-12.5CM) (DEPENDING ON RECPs TYPE) AND STAPLED.
- IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT (9M-12M) INTERVALS. USE A DOUBLE ROW STAPLES STAGGERED 4" (10 CM) APART AND 4" (10 CM) ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
- THE TERMINAL END OF THE RECPs MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN A 6" (15 CM) DEEP x 6" (15 CM) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY ANCHOR THE RECPs.



CHANNEL INSTALLATION
NO SCALE



- PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECPs), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECPs IN A 6" (15CM) DEEP x 6" (15CM) WIDE TRENCH WITH APPROXIMATELY 12" (30CM) OF RECPs EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECPs WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30CM) PORTION OF RECPs BACK OVER SEED AND COMPACTED SOIL. SECURE RECPs OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30CM) APART ACROSS THE WIDTH OF THE RECPs.
- ROLL CENTER RECPs (A) DOWN OR (B) HORIZONTALLY ACROSS SLOPE. RECPs WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECPs MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- THE EDGES OF PARALLEL RECPs MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5CM-12.5CM) OVERLAP DEPENDING ON RECPs TYPE.
- CONSECUTIVE RECPs SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30CM) APART ACROSS ENTIRE RECPs WIDTH.
- IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15CM) MAY BE NECESSARY TO PROPERLY ANCHOR THE RECPs.



SLOPE INSTALLATION
NO SCALE

TEMPORARY AND PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS

PROJECT NAME:	NIXON-KOCHER WTF		
LOCATION:	FERGUSON TOWNSHIP, CENTRE COUNTY, PA		
PREPARED BY:	AJL	DATE:	06/24/19
CHECKED BY:	KWB	DATE:	06/24/19

SPECIFICATIONS: THE DEPARTMENT RECOMMENDS THE USE OF THE PENN STATE PUBLICATION, "EROSION CONTROL AND CONSERVATION PLANTINGS ON NONCROPLAND," AS THE STANDARD TO USE FOR THE SELECTION OF SPECIES, SEED SPECIFICATIONS, MIXTURES, LIMING AND FERTILIZING, TIME OF SEEDING, AND SEEDING METHODS. SPECIFICATIONS FOR THESE ITEMS MAY ALSO BE OBTAINED FROM PENNDOT PUBLICATION #408, SECTION 804 OR BY CONTACTING THE APPLICABLE COUNTY CONSERVATION DISTRICT. UPON SELECTION OF A REFERENCE, THAT REFERENCE SHOULD BE USED TO PROVIDE ALL SPECIFICATIONS FOR SEEDING, MULCHING, AND SOIL AMENDMENTS. THE FOLLOWING SPECIFICATION WILL BE USED FOR THIS PROJECT.

(TEMPORARY)

*SPECIES:	ANNUAL RYEGRASS OR WINTER RYE
% PURE LIVE SEED:	SEE SEEDING TABLE
APPLICATION RATE:	10 (RYEGRASS) OR 56 (WINTER RYE) LB./ACRE
FERTILIZER TYPE:	10-10-10
FERTILIZER APPL. RATE:	500 LB./ACRE
LIMING RATE:	1 T./ACRE
MULCH TYPE:	STRAW
MULCHING RATE:	3 T./ACRE

(PERMANENT)

TOPSOIL PLACEMENT DEPTH:	6 IN.
*SPECIES:	FORMULA B
% PURE LIVE SEED:	SEE SEEDING TABLE
APPLICATION RATE:	SEE SEEDING TABLE
FERTILIZER TYPE:	10-10-20
FERTILIZER APPL. RATE:	1000 LB./ACRE
LIMING RATE:	6 T./ACRE
MULCH TYPE:	STRAW
MULCHING RATE:	3 T./ACRE
ANCHOR MATERIAL:	N/A
ANCHORING METHOD:	MECHANICAL CRIMPING
RATE OF ANCHOR MATERIAL APPL:	N/A
SEEDING SEASON DATES:	MARCH 15 - JUNE 1 AND AUGUST 1 - OCTOBER 1

(PERMANENT - STEEP SLOPE)

TOPSOIL PLACEMENT DEPTH:	6 IN.
*SPECIES:	FORMULA D
% PURE LIVE SEED:	SEE SEEDING TABLE
APPLICATION RATE:	SEE SEEDING TABLE
FERTILIZER TYPE:	10-10-20
FERTILIZER APPL. RATE:	1000 LB./ACRE
LIMING RATE:	6 T./ACRE
MULCH TYPE:	STRAW
MULCHING RATE:	3 T./ACRE
ANCHOR MATERIAL:	N/A
ANCHORING METHOD:	MECHANICAL CRIMPING
RATE OF ANCHOR MATERIAL APPL:	N/A
SEEDING SEASON DATES:	MARCH 15 - JUNE 1 AND AUGUST 1 - OCTOBER 1

SEED MIXTURES AND APPLICATION RATES

FORMULA AND SPECIES	% BY WEIGHT	MINIMUM %		MAX. % WEED SEED	SEEDING RATE (lbs./1000yd ²)
		PURITY	GERMINATION		
FORMULA B MIX					42.0 TOTAL
PERENNIAL RYEGRASS MIXTURE (LOLIUM PERENNE). A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 50% OF THE TOTAL BLUEGRASS COMPONENT.	20	97	90	0.10	8.5
CREeping RED FESCUE OR CHEWINGS FESCUE (FESTUCA RUBRA OR SSP COMMUTATE) (IMPROVED AND CERTIFIED)	30	97	85	0.10	12.5
KENTUCKY BLUEGRASS MIXTURE (POA PRATENSIS). A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 50% OF THE TOTAL BLUEGRASS COMPONENT.	50	97	80	0.15	21.0
FORMULA D CONSERVATION MIX					50.0 TOTAL
TALL FESCUE (FESTUCA ARUNDINACEA VAR. KENTUCKY 31)	60	96	85	0.10	30.0
CREeping RED FESCUE OR CHEWINGS FESCUE (FESTUCA RUBRA OR SSP COMMUTATE) (IMPROVED AND CERTIFIED)	30	97	85	0.10	15.0
ANNUAL RYEGRASS (LOLIUM MULTIFLORUM)	10	95	90	0.10	5.0

MULCHING AND SEEDING NOTES:

- SEED MIXTURES AND APPLICATION RATES SHALL BE AS SET FORTH IN SECTION 804 OF THE PENNDOT CONSTRUCTION SPECIFICATIONS (PUBLICATION 408). PLEASE NOTE THAT THERE MAY BE ACIDIC SOILS PRESENT ON THE SITE. THIS LIMITS THE TYPE AND SPECIES OF VEGETATION TO BE USED FOR STABILIZATION.
- PROVIDE SEED CONFORMING TO THE REGULATIONS OF CHAPTER 71 - SEED OF THE PENNSYLVANIA SEED ACT 164 OF 2004, EFFECTIVE JANUARY 29, 2005, AND AMENDMENTS AND MEET ANY OTHER APPLICABLE REGULATIONS OF THE SEED, TESTING AND CERTIFICATION PROGRAMS OF THE PENNSYLVANIA DEPARTMENT OF AGRICULTURE (PDA), BUREAU OF PLANT INDUSTRY. PROVIDE SEEDS THAT HAVE BEEN TESTED AND APPROVED FOR THE SPECIFIED SEED FORMULA'S PURITY, GERMINATION, AND WEED SEED ANALYSIS LIMITS AND OTHER APPLICABLE PDA RULES FOR SEED TESTING. PROVIDE CERTIFIED SEED FOR ALL KENTUCKY BLUEGRASS, PERENNIAL RYEGRASS, CREEPING RED FESCUE, CHEWINGS FESCUE AND HARD FESCUE VARIETIES SUBMITTED FOR EACH SEED FORMULA.
- PROVIDE PREMIUM SEED MIXTURES FROM A LICENSED SEED DISTRIBUTOR/SEED MIXING COMPANY LOCATED WITHIN THE COMMONWEALTH AND MIXED UNDER THE SUPERVISION OF THE PDA FOR THE DESIGNATED PENNDOT SEED FORMULAS. USE ONLY SEED THAT HAS AN APPROVED SEED INSPECTOR'S TAG OR LABEL SIGNED BY A PDA INSPECTOR SEWN OR STAPLED TO THE OUTSIDE OF EACH SEED BAG OR OTHER CONTAINER IN A CONSPICUOUS PLACE. PRESSURE SENSITIVE LABELS MAY BE USED ON PAPER OR PLASTIC CONTAINERS.
- SEED MIXTURES MAY ALSO BE MIXED TO PROJECT SPECIFICATIONS AT THE PROJECT SITE FOR SPECIAL SEED FORMULAS IF ALL SPECIFIED SEED SPECIES HAVE BEEN PREVIOUSLY INSPECTED, TESTED, AND APPROVED BY PDA FOR THE DESIGNATED PURITY, GERMINATION, WEED SEED LIMITS, OR PURE LIVE SEED ANALYSIS. MIX THE SEED SPECIES TO THE DESIGNATED FORMULA OR MIXTURE SPECIFICATIONS UNDER SUPERVISION BY THE ENGINEER.
- DO NOT USE SEED FROM CONTAINERS THAT HAVE NOT BEEN PROPERLY SEALED. DO NOT USE SEED THAT HAS A SELL-BY DATE OF MORE THAN 15 MONTHS FROM THE DATE OF THE INSPECTION, EXCLUSIVE OF THE MONTH OF THE TEST. THE ENGINEER MAY REJECT OR REQUEST RE-TESTING FOR ANY QUESTIONABLE SEED DELIVERED TO THE PROJECT.
- KEEP SEEDING RATE TO THAT RECOMMENDED IN THE TABLES. SEED MIXTURES CONTAINING INVASIVE SPECIES SHOULD NOT BE USED IN AREAS ADJACENT TO WETLANDS OR STREAM CHANNELS.
- PREPARE AREAS FOR SEEDING BY UNIFORMLY APPLYING SUPPLEMENTS. BLEND THE INITIAL SOIL SUPPLEMENTS INTO THE SOIL AT LEAST 2 INCHES. ON TOPSOILED AREAS, BY RAKING, DISKING, HARROWING, OR OTHER ACCEPTABLE METHODS. BLEND THE SUPPLEMENTS INTO THE SOIL DURING TILLAGE OPERATIONS.
- APPLY SLOW-RELEASE NITROGEN FERTILIZER TO THE SURFACE OF FORMULA B AND D SEEDED AREAS BEFORE PROJECT COMPLETION. DO NOT APPLY SLOW-RELEASE NITROGEN FERTILIZER SUPPLEMENT TO FORMULA C SEEDED AREAS.
- FILL SLOPES SHOULD BE SEEDED AND MULCHED AT REGULAR VERTICAL INCREMENTS, 15 TO 25 FEET MAXIMUM, AS THE FILL IS BEING CONSTRUCTED. THIS WILL ALLOW THE BOTTOM OF THE FILL TO PROGRESS TOWARD STABILIZATION WHILE WORK CONTINUES ON THE UPPER PORTION, MAKING FINAL STABILIZATION EASIER TO ACHIEVE AND PROVIDING SOME VEGETATIVE BUFFERING AT THE BOTTOM OF THE SLOPE.
- WHEREVER SEED AND/OR MULCH IS APPLIED BY HYDROSEEDING METHODS, THE SEED AND MULCH SHOULD BE APPLIED IN SEPARATE APPLICATIONS WITH THE SEED BEING APPLIED FIRST AND THE MULCH SPRAYED ON TOP OF THE SEED. THIS IS TO ENSURE THAT THE SEED MAKES CONTACT WITH THE UNDERLYING SOIL. SOIL PREPARATION SHOULD BE COMPLETED PRIOR TO ADDING SEED TO THE HYDROSEEDING EQUIPMENT. RUNNERS THROUGH THE PUMPING SYSTEM SHOULD BE USED TO MINIMIZE ABRASION OF THE SEED AND REDUCE THE PERCENTAGE OF PURE LIVE SEED IN THE APPLICATION. THEREFORE ALL SITE PREPARATION SHOULD BE COMPLETED PRIOR TO THE ARRIVAL OF THE HYDROSEEDER.
- VEHICULAR TRAFFIC SHOULD BE RESTRICTED FROM AREAS TO BE SEEDED TO PREVENT SOIL COMPACTION.
- PLACE MULCH, OF THE TYPE INDICATED, IMMEDIATELY AFTER SEEDING IS COMPLETED. UNLESS OTHERWISE INDICATED, PLACE ONLY STRAW OR WOOD FIBER OVER TOPSOILED AREAS. USE HAY, STRAW, OR WOOD FIBER IN OTHER AREAS.
- PLACE HAY OR STRAW UNIFORMLY, IN A CONTINUOUS BLANKET, AT A MINIMUM RATE OF 1,200 POUNDS PER 1,000 SQUARE YARDS. AN ACCEPTABLE MECHANICAL BLOWER MAY BE USED TO APPLY MULCH. DO NOT USE MACHINES THAT CUT MULCH INTO SHORT PIECES.
- MULCH TEMPORARILY SEEDED AREAS WITH HAY.

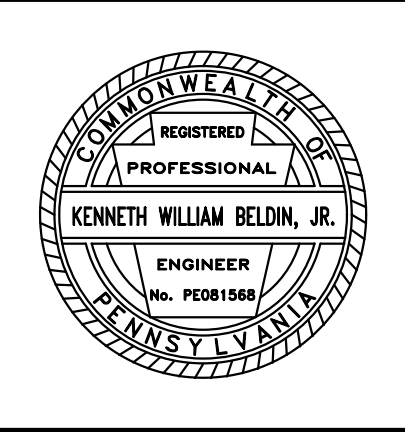
RECYCLING AND DISPOSAL OF WASTE MATERIAL

- ALL BUILDING MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH DEP'S SOLID WASTE MANAGEMENT REGULATIONS OF 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ. AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED MATERIALS SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED AT THE SITE.
 - THE CONTRACTOR WILL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF WASTE FROM THIS PROJECT AT AN APPROVED DISPOSAL SITE (SEE NOTES 2 AND 3 BELOW). THE CONTRACTOR WILL INSPECT THE PROJECT AREA WEEKLY. THE CONTRACTOR WILL PROPERLY AND LEGALLY DISPOSE OF ALL CONSTRUCTION WASTES. MATERIALS WILL BE SEPARATED FROM OTHER WASTES AND HANDLING FOR SUITABLE RECYCLING. RECEIPTS FROM THE RECYCLING CENTERS SHALL BE FILED WITH THE ENGINEER.
 - THE CONTRACTOR IS RESPONSIBLE FOR DEPOSITING OF ALL CLEAN/SAFE FILL, AS DEFINED BY PA CODE, TITLE 25, INCLUDING, BUT NOT LIMITED TO, EXCESS SOIL MATERIALS, AT AN OFFSITE LOCATION TO BE DETERMINED BY THE GENERAL CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. IF POTENTIALLY HAZARDOUS MATERIAL IS OBSERVED DURING CONSTRUCTION EXCAVATION, THE ENGINEER WILL EVALUATE THE MATERIAL IN ACCORDANCE WITH THE CLEAN/SAFE FILL POLICY REGULATIONS. IF QUESTIONABLE MATERIAL IS ENCOUNTERED, ALL CONSTRUCTION ACTIVITIES SHALL CEASE UNTIL THE SITE IS ENVIRONMENTALLY CLEARED.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR A SEPARATE WRITTEN E&S PLAN FOR PROPOSED PERMANENT WASTE/SPOIL AREAS GREATER THAN 5,000 SQUARE FEET IN DISTURBANCE. THE WASTE AREA MUST COMPLY WITH ALL CHAPTER 102 EROSION CONTROL RULES AND REGULATIONS, INCLUDING NPDES PERMIT REQUIREMENTS IF GREATER THAN 1 ACRE OF DISTURBED GROUND OCCURS. THE WASTE/SPOIL AREA MUST COMPLY WITH CHAPTER 105 STREAM ENCROACHMENT REGULATIONS AND BE MORE THAN 50 FEET FROM ANY FLOODWAY, TOP OF STREAM BANK OR WETLANDS.
 - ANY MATERIAL THAT DOES NOT MEET THE CRITERIA OF THE CLEAN/SAFE FILL POLICY SHALL BE DISPOSED OF AT A PA DEP APPROVED SITE.
 - ALL MATERIALS USED FOR THE CONSTRUCTION AND MAINTENANCE OF THE TREATMENT FACILITY AND ANY APPURTENANT CONSTRUCTION, AS WELL AS ANY UNDISCLOSED OR UNKNOWN ITEMS/OBJECTS REVEALED BY EXCAVATING OR GRADING, WILL BE REMOVED FROM THE PROJECT AREA BY THE CONTRACTOR AND DISPOSED OF PROPERLY. WASTE DISPOSAL IN LANDFILLS SHALL BE MINIMIZED TO THE GREATEST EXTENT POSSIBLE. OF THE INEVITABLE WASTE THAT IS GENERATED, AS MUCH OF THE WASTE MATERIAL AS ECONOMICALLY FEASIBLE SHALL BE SALVAGED, RECYCLED OR REUSED.
- THE CONTRACTOR SHALL USE ALL REASONABLE MEANS TO DIVERT CONSTRUCTION AND DEMOLITION WASTE FROM LANDFILLS AND INCINERATORS, AND FACILITATE THEIR SALVAGE AND RECYCLE INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:
- WASTE MANAGEMENT PLAN DEVELOPMENT AND IMPLEMENTATION.
 - TECHNIQUES TO MINIMIZE WASTE GENERATION.
 - SORTING AND SEPARATING OF WASTE MATERIALS.
 - SALVAGE OF EXISTING MATERIALS AND ITEMS FOR REUSE OR RESALE.
 - RECYCLING OF MATERIALS THAT CANNOT BE REUSED OR SOLD.
- AT A MINIMUM, THE FOLLOWING WASTE CATEGORIES SHALL BE DIVERTED FROM LANDFILLS:
- SOIL.
 - INERTS (EG. CONCRETE, MASONRY AND ASPHALT).
 - CLEAN DIMENSIONAL WOOD AND PALLETTE WOOD.
 - GREEN WASTE (BIODEGRADABLE LANDSCAPING MATERIALS).
 - ENGINEERED WOOD PRODUCTS (PLYWOOD, PARTICLE BOARD AND I-JOISTS, ETC).
 - METAL PRODUCTS (EG. STEEL, WIRE, BEVERAGE CONTAINERS, COPPER, ETC).
 - CARDBOARD, PAPER AND PACKAGING.
 - BITUMEN ROOFING MATERIALS.
 - PLASTICS (EG. ABS, PVC).
 - CARPET AND/OR PAD AND OTHER FLOORING MATERIALS.
 - GYPSSUM BOARD.
 - INSULATION.
 - PAINT.
 - FLUORESCENT LAMPS.

THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN THE MANAGEMENT OF NON-HAZARDOUS BUILDING CONSTRUCTION AND DEMOLITION WASTE. THEY SHALL ALSO CONDUCT A SITE ASSESSMENT TO ESTIMATE THE TYPES OF MATERIALS THAT WILL BE GENERATED BY DEMOLITION AND CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF ANY SPECIAL PROGRAMS INVOLVING REBATES OR SIMILAR INCENTIVES RELATED TO RECYCLING AND PROVIDE ALL DEMOLITION, REMOVAL AND LEGAL DISPOSAL OF MATERIALS. THE CONTRACTOR SHALL ENSURE THAT FACILITIES USED FOR RECYCLING, REUSE AND DISPOSAL SHALL BE PERMITTED FOR THE INTENDED USE TO THE EXTENT REQUIRED BY LOCAL, STATE, FEDERAL REGULATIONS. THE WHOLE BUILDING DESIGN GUIDE WEBSITE (HTTP://WWW.WBDG.ORG/TOOLS/CWM.PHP) PROVIDES A CONSTRUCTION WASTE MANAGEMENT DATABASE THAT CONTAINS INFORMATION ON COMPANIES THAT HAUL, COLLECT, AND PROCESS RECYCLABLE DEBRIS FROM CONSTRUCTION PROJECTS.

THE CONTRACTOR SHALL ASSIGN A SPECIFIC ONSITE AREA TO FACILITATE SEPARATION OF MATERIALS FOR REUSE, SALVAGE, RECYCLING AND RETURN. SUCH AREAS ARE TO BE KEPT NEAT AND CLEAN AND CLEARLY MARKED IN ORDER TO AVOID CONTAMINATION OR MIXING OF MATERIALS. ONSITE INSTRUCTIONS AND SUPERVISION OF SEPARATION, HANDLING, SALVAGING, RECYCLING, REUSE AND RETURN METHODS TO BE USED BY ALL PARTIES DURING WASTE GENERATING STAGES SHALL BE AVAILABLE AT ALL TIMES. RECORDS OF DAILY REPORTS INDICATING ANY PROBLEMS IN COMPLYING WITH REUSE, SALVAGE, RECYCLING AND RETURN SHALL BE KEPT ONSITE AT ALL TIMES AND SHALL NOTE ANY CORRECTIVE ACTIONS TAKEN FOR COMPLIANCE.

NO.	DATE	DESCRIPTION
REVISIONS		
EROSION AND SEDIMENT CONTROL (ESC) DETAILS		
STATE COLLEGE BOROUGH WATER AUTHORITY		
NIXON-KOCHER WATER TREATMENT FACILITY		
FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA		
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GD&F
GWIN DOBSON & FOREMAN ENGINEERS
3121 Fairway Drive
Allison, PA 16802
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STANDARD EROSION AND SEDIMENT CONTROL NOTES:

- 1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN...
2. AT LEAST TEN (10) DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL NOTIFY ALL CONTRACTORS...
3. AT LEAST THREE (3) BUSINESS DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED...
4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCES PROVIDED ON THE PLAN DRAWINGS...
5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL...
6. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE...
7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES...
8. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAPS(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS...
9. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION...
10. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS...
11. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE PADEP FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED...
12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL...
13. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPs AFTER EACH RUNOFF EVENT...
14. A LOG SHOWING DATES THAT E&S BMPs WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE...
15. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE...
16. ALL SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN THE MANNER DESCRIBED IN THE PLAN...
17. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES...
18. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS...
19. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS...
20. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS...
21. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS...
22. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES...
23. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD...
24. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE...
25. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUB-AREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS...
26. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER...
27. E&S BMPs SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED...
28. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS...
29. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPs MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPs...
30. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS...
31. FAILURE TO CORRECTLY INSTALL E&S BMPs, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE...
32. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED IN THE PLAN...
33. ALL CHANNELS SHALL BE KEPT FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODY DEBRIS...
34. CHANNELS HAVING RIPRAP, RENO MATTRESS, OR GABION LININGS MUST BE SUFFICIENTLY OVER-EXCAVATED...
35. BIODEGRADABLE DOUBLE NET EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES GREATER THAN 3H:1V...
36. MULCH APPLIED TO PERMANENTLY STABILIZED AREAS IS TO BE MECHANICALLY CRIMPED TO PREVENT BLOW OFF AND LOSS OF MULCH...
37. ALL CHANNELS MUST BE KEPT FREE OF OBSTRUCTIONS SUCH AS FILL GROUND, FALLEN LEAVES & WOODY DEBRIS...
38. ANY UNDERGROUND UTILITIES RUNNING ACROSS/ THROUGH THE CHANNEL(S) SHALL BE IMMEDIATELY BACKFILLED...
39. VEGETATED CHANNELS SHALL BE CONSTRUCTED FREE OF ROCKS, TREE ROOTS, STUMPS OR OTHER PROJECTIONS...
40. SEDIMENT BASINS/TRAPS SHALL BE KEPT FREE OF ALL TRASH, CONCRETE WASH WATER AND OTHER DEBRIS...
41. APPROVAL OF THE USE OF SKIMMER(S) DOES NOT APPROVE USE OF ANY SKIMMER(S) IN VIOLATION OF ANY PATENT...
42. SEDIMENT BASINS MUST BE PROTECTED FROM UNAUTHORIZED ACTS OF THRD PARTIES...
43. ANY DAMAGE THAT OCCURS IN WHOLE OR IN PART AS A RESULT OF BASIN OR TRAP DISCHARGE SHALL BE IMMEDIATELY REPAIRED...
44. UPON REQUEST, THE APPLICANT OR HIS CONTRACTOR SHALL PROVIDE AN AS-BUILT (RECORD DRAWING) FOR ANY SEDIMENT BASIN OR TRAP TO THE MUNICIPAL INSPECTOR...

EROSION AND SEDIMENT CONTROL MAINTENANCE SCHEDULE:

- 1. ALL SEDIMENT AND EROSION CONTROL FACILITIES SHALL BE CHECKED FOR DAMAGE AND CLOGGING ON A WEEKLY BASIS...
2. ANY PERMANENTLY STABILIZED AREAS THAT BECAME ERODED SHALL HAVE THE TOPSOIL REPLACED...
3. IF THE VEGETATIVE COVER ESTABLISHED IS ALLOWED TO DETERIORATE AND BECOME INEFFECTIVE...
4. WHEN THE ACCUMULATION OF SEDIMENT IN THE CONTROL DEVICES REACHES 1/3 THE DEPTH OF THE DEVICE...
5. ALL SEDIMENT AND EROSION FACILITIES MUST BE MAINTAINED IN OPERATING CONDITION UNTIL UPSTREAM AREAS ARE STABILIZED...
6. SEDIMENT DEPOSITED ON PAVED ROADWAYS SHOULD BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE...
7. THE CONTRACTOR SHALL IMPLEMENT THIS PLAN, INCLUDING CONSTRUCTION AND MAINTENANCE...
8. THE OWNER IS RESPONSIBLE TO INSURE THAT THE CONTRACTOR IS PERFORMING THE WORK AS DETAILED IN THIS PLAN...
9. THE OWNER IS RESPONSIBLE FOR CONDUCTING INSPECTIONS DURING CONSTRUCTION ON A WEEKLY BASIS...
10. THE CONTRACTOR SHALL PERMIT ALL OFFICIAL REPRESENTATIVES FROM PADEP AND THE CENTRE COUNTY CONSERVATION DISTRICT...
11. ALL TEMPORARY CONTROLS SHALL BE MAINTAINED AS FOLLOWS:

A. ROCK CONSTRUCTION ENTRANCE MAINTENANCE:

- 1. THE THICKNESS OF THE ROCK CONSTRUCTION ENTRANCE SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS...
2. ACCUMULATED SEDIMENTS WILL BE REMOVED AS REQUIRED TO KEEP THE COMPOST FILTER SOCK FUNCTIONAL...
3. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS...
4. ADHERE TO ANY MANUFACTURER'S RECOMMENDATIONS FOR REPLACING COMPOST FILTER SOCK DUE TO WEATHERING...

B. COMPOST FILTER SOCK MAINTENANCE:

- 1. THE COMPOST FILTER SOCK INSTALLATION SHOULD BE INSPECTED WEEKLY AND AFTER EVERY RAINFALL EVENT...
2. ACCUMULATED SEDIMENTS WILL BE REMOVED AS REQUIRED TO KEEP THE COMPOST FILTER SOCK FUNCTIONAL...
3. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS...
4. ADHERE TO ANY MANUFACTURER'S RECOMMENDATIONS FOR REPLACING COMPOST FILTER SOCK DUE TO WEATHERING...

C. ROCK FILTER MAINTENANCE:

- 1. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET...
2. ROCK FILTERS SHALL BE INSPECTED WEEKLY AND AFTER EACH RAINFALL EVENT...
3. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN FOUR (4) CALENDAR DAYS...

D. EROSION CONTROL BLANKETS MAINTENANCE:

- 1. BLANKETED AREAS SHALL BE INSPECTED WEEKLY OR AFTER ANY RAINFALL EVENT...
2. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN FOUR (4) CALENDAR DAYS...

E. CONCRETE WASHOUT STRUCTURES MAINTENANCE:

- 1. CONCRETE WASHOUT STRUCTURES SHALL BE INSPECTED DAILY...
2. DAMAGED OR LEAKING STRUCTURES SHALL BE DE-ACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY...
3. ACCUMULATED MATERIALS SHALL BE REMOVED WHEN THEY REACH 50% CAPACITY...
4. PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY...

F. INLET PROTECTION MAINTENANCE:

- 1. THE INLET PROTECTION SHALL BE INSPECTED WEEKLY AND AFTER EACH RAINFALL EVENT...
2. ANY DAMAGED / CLOGGED FILTER BAG OR THE SEDIMENT REMOVED FROM THE BAG SHALL BE PROPERLY DISPOSED...
3. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN 1/2 FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED...
4. A SUPPLY OF EXTRA FILTER BAGS SHALL BE KEPT ON SITE...
5. INLET PROTECTION SHALL REMAIN IN PLACE UNTIL ALL UPSTREAM CONTRIBUTING AREAS HAVE REACHED PERMANENT VEGETATIVE STABILIZATION...

G. PUMPED WATER FILTER BAG MAINTENANCE:

- 1. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED...
2. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT...
3. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED...
4. FILTER BAGS SHALL BE INSPECTED DAILY...
5. INLET PROTECTION SHALL REMAIN IN PLACE UNTIL ALL UPSTREAM CONTRIBUTING AREAS HAVE REACHED PERMANENT VEGETATIVE STABILIZATION...

H. SEDIMENT BASIN MAINTENANCE:

- 1. INSPECT ALL SEDIMENT BASINS ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT...
2. EMBANKMENTS SHOULD BE MAINTAINED WITH A GRASSY VEGETATIVE COVER...
3. BASIN EMBANKMENTS, SPILLWAYS, AND OUTLETS SHALL BE INSPECTED FOR EROSION, PIPING AND SETTLEMENT...
4. CLOGGED OR DAMAGED SPILLWAYS SHALL BE REPAIRED IMMEDIATELY...
5. THE DEWATERING SKIMMER SHALL BE INSPECTED WEEKLY...
6. ANY MALFUNCTIONING SKIMMER SHALL BE REPAIRED OR REPLACED WITHIN 24 HOURS OF INSPECTION...
7. ICE OR SEDIMENT BUILDUP AROUND THE PRINCIPAL SPILLWAY SHALL BE REMOVED SO AS TO ALLOW THE SKIMMER TO RESPOND TO FLUCTUATING WATER ELEVATIONS...

EROSION AND SEDIMENT CONTROL CRITICAL STAGES OF CONSTRUCTION

- 1. A LICENSED PROFESSIONAL OR HIS DESIGNEE SHALL BE PRESENT DURING THE CONSTRUCTION OF THE SEDIMENT BASIN...
2. A LICENSED PROFESSIONAL OR HIS DESIGNEE SHALL BE PRESENT DURING THE CONVERSION OF THE SEDIMENT BASIN...
3. RECORD DRAWINGS WILL BE CERTIFIED AND PROVIDED UPON CONSTRUCTION COMPLETION...
4. THE PERMITTEE SHALL INCLUDE WITH THE NOTICE OF TERMINATION "RECORD DRAWINGS" WITH A FINAL CERTIFICATION STATEMENT...

"I, _____ DO HEREBY CERTIFY PURSUANT TO THE PENALTIES OF 18 PA.C.S.A. § 4904 TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THE ACCOMPANYING RECORD DRAWINGS ACCURATELY REFLECT THE AS-BUILT CONDITIONS, ARE TRUE AND CORRECT, AND ARE CONFORMANCE WITH CHAPTER 102 OF THE RULES AND REGULATIONS OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THAT THE PROJECT SITE WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PCSM PLAN, ALL APPROVED PLAN CHANGES AND ACCEPTED CONSTRUCTION PRACTICES."

EROSION AND SEDIMENT CONTROL CONSTRUCTION SEQUENCE:

- A. ALL EARTH DISTURBANCE AND CONSTRUCTION ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE DRAWINGS...
B. A PRE-CONSTRUCTION MEETING SHALL BE HELD AND NOTIFICATION MUST BE PROVIDED TO THE ENGINEER PRIOR TO THE ISSUANCE OF NOTICE TO PROCEED...
C. AT LEAST THREE (3) WORKING DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA THAT WAS PREVIOUSLY UNMARKED...
D. AREAS TO BE PROTECTED, WATERS OF THE COMMONWEALTH AND ANY OTHER SENSITIVE ENVIRONMENTAL FEATURES SHALL ALSO BE CLEARLY MARKED...
E. INSTALL ROCK CONSTRUCTION ENTRANCE (RCE) AT THE LOCATION SHOWN ON THE APPROVED ESC PLAN DRAWINGS...
F. INSTALL GRAVEL CONSTRUCTION ACCESS ROAD FROM SOUTH NIXON ROAD TO THE TREATMENT FACILITY SITE...
G. AFTER CONSTRUCTION OF THE BYPASS SYSTEM, CLEAR AND GRUB THE AREAS NECESSARY TO INSTALL THE PERIMETER SEDIMENT CONTROLS...
H. UPON APPROVAL OF THE CONSERVATION DISTRICT, BEGIN CONSTRUCTION OF THE SEDIMENT BASIN EMBANKMENT AND OUTFALL...
I. UPON COMPLETION OF THE BASIN EMBANKMENT, INSTALL ANY REMAINING PERIMETER EROSION AND SEDIMENT CONTROLS...
J. BEGIN CONSTRUCTION OF TREATMENT FACILITY FOUNDATION PILES...
K. CONTINUE THE CONSTRUCTION OF THE TREATMENT FACILITY, SOLIDS DRYING BEDS, NATURAL GAS PAD AND TRANSFORMER PAD...
L. UPON SUBSTANTIAL COMPLETION OF THE TREATMENT FACILITY, CONSTRUCT THE BITUMINOUS PAVED AREAS ACCESS ROAD...
M. INSTALL ANY REQUIRED LANDSCAPING AND FENCING...
N. REMOVE REMAINING SEDIMENT AND EROSION CONTROLS AFTER UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL VEGETATION HAS BEEN ESTABLISHED...
O. PERMANENTLY STABILIZE ALL AREAS DISTURBED DURING THE REMOVAL OF THE PERIMETER CONTROLS...
NOTE: DUE TO THE SCOPE OF CONSTRUCTION, ITEMS J THROUGH L MAY BE PERFORMED CONCURRENTLY AND ARE NOT REQUIRED TO BE PERFORMED IN THE ORDER LISTED IN THE INDIVIDUAL SEQUENCE ITEM.

IMPORTING FILL MATERIAL:

- 1. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND DETERMINE THAT ALL FILL IMPORTED MEETS PA DEP'S DEFINITION OF CLEAN FILL...
2. CLEAN FILL IS DEFINED AS : UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL...
3. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS : INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERLY OWNERSHIP, REVIEW OF PROPERLY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS...

LANDSCAPE RESTORATION SPECIFICATIONS

SITE PREPARATION AND PLANTING

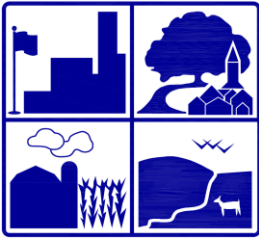
- 1. ALL WEEDS OR EXISTING VEGETATION MUST BE ELIMINATED PRIOR TO SEEDING...
2. PERENNIAL WEEDS MAY REQUIRE YEAR LONG SMOTHERING, REPEATED SPRAYINGS WITH HERBICIDES, OR REPEATED TILLAGE...
3. PLANTING IN JULY AND AUGUST IS GENERALLY NOT RECOMMENDED DUE TO THE FREQUENCY OF DROUGHT DURING THIS TIME...
4. SEEDING CAN BE ACCOMPLISHED BY A VARIETY OF METHODS: NO-TILL SEEDER FOR MULTI-ACRE PLANTING; BROADCAST SEEDER; HAND BROADCAST FOR SMALL AREAS...
5. SEED QUALITY IS CRITICAL AND A SEED MIX SHOULD BE USED WITH A MINIMUM PERCENTAGE OF NON-SEED PLANT PARTS...

MAINTENANCE

- 1. IN THE FIRST YEAR, WEEDS MUST BE CAREFULLY CONTROLLED AND CONSISTENTLY MOWED BACK TO 4-6 INCHES TALL...
2. WEEDS SHOULD NOT BE SPRAYED WITH HERBICIDE AS THE DRIFT FROM THE SPRAY MAY KILL LARGE PATCHES OF DESIRABLE PLANTS...
3. IN THE BEGINNING OF THE THIRD SEASON, THE AREA SHOULD BE BURNED OFF IN MID-SPRING...
4. IN THE BEGINNING OF THE THIRD SEASON, THE AREA SHOULD BE BURNED OFF IN MID-SPRING...

Revision table with columns for NO., DATE, and DESCRIPTION. Includes project title 'STATE COLLEGE BOROUGH WATER TREATMENT FACILITY' and 'NIXON-KOCHER WATER TREATMENT FACILITY'. Logos for Pennsylvania State University and G.D. & F. Engineers are present. Includes project location 'FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA' and sheet number '20'.

PLOT CREATED: 6/24/2019 2:43 PM



TOWNSHIP OF FERGUSON

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FERGUSON TOWNSHIP PLANNING COMMISSION REGULAR MEETING AGENDA Monday, July 8, 2019 6:00 PM

I. CALL TO ORDER

II. CITIZEN INPUT

III. **FERGUSON TOWNSHIP ZONING AND SUBDIVISION AND LAND DEVELOPMENT ORDINANCES UPDATE:**

Carolyn Yagle will be present to discuss the changes made since the Planning Commission and the Agricultural Ad Hoc Committee reviewed the Ordinance, dated June 21, 2019. Ms. Yagle has prepared a matrix for the Planning Commission to review, to ensure all of the comments that have been discussed the past few meetings have been satisfied and included in the ordinances. A tentative schedule is attached with the Agenda packet within the Interim Planning Director Report.

Staff Recommendation: That the Planning Commission review the memo and recommend approval of the Zoning Ordinance and Map as of July 8, 2019 and the Subdivision and Land Development Ordinance, as of July 8, 2019 and to recommend the Board of Supervisors Authorize Advertising of both Ordinances.

IV. **PRELIMINARY/FINAL REPLOT OF LANDS OF THE STATE COLLEGE BOROUGH WATER AUTHORITY & GARY AND CAROL MYERS – INITIAL REVIEW & COMMENT:** Attached within the Agenda Packet is a transmittal letter and the Proposed Replot Plan.

Staff Recommendation: That the Planning Commission review and make initial comments upon the Plan.

V. **PRELIMINARY LAND DEVELOPMENT PLAN FOR THE NIXON-KOCHER WATER TREATMENT FACILITY.**

Attached within the Agenda Packet is a transmittal letter and the Proposed Land Development Plan for the Nixon-Kocher Water Treatment Facility.

Staff Recommendation: That the Planning Commission review and make initial comments upon the Plan.

VI. CONSENT AGENDA

VII. INTERIM PLANNING DIRECTOR REPORT

VIII. CENTRE REGIONAL PLANNING COMMISSION REPORT

IX. ZONING/SALDO UPDATE

X. PINE GROVE MILLS – SMALL AREA PLAN

XI. APPROVAL OF REGULAR MEETING MINUTES JUNE 24, 2019

XII. ADJOURNMENT