FERGUSON TOWNSHIP PLANNING COMMISSION REGULAR MEETING AGENDA Monday, September 14, 2020 6:00 PM Zoom Meeting

https://us02web.zoom.us/j/83813225915

Meeting ID: 838 1322 5915

- I. Call To Order
- I. Approval of Regular Meeting Minutes—August 24, 2020
- II. Citizen Input
- III. Land Development Plans

A. Kocher Well Field Water Pumping Improvements Land Development Plan

This Land Development Plan was submitted by Gwin, Dobson & Foreman Engineering, Inc. on behalf of their client, The State College Borough Water Authority. The Land Development Plan proposes water pumping improvements to the Kocher well fields on Tax parcel 24-006-055E, located at 3961 W. Whitehall Road. The construction consists of two (2) buildings that measure 9 feet 4 inches by 12 feet 4 inches. Each building will be in close proximity to existing well #71 and well #78. There is an existing floodplain that traverses the parcel and no construction is planned in the floodplain. On June 23, 2020, a variance was approved to utilize FEMA Mapping for Floodplain Boundary determination instead of independent Hydrologic and Hydraulic (H&H) study as required by §27-701. The parcel is 47.7 acres and is zoned Rural Residential (RA). This is the Preliminary review of the land development plan.

Staff Recommendation: Staff asks the Planning Commission make a recommendation to the Board of Supervisors to approve the Preliminary Land Development Plan.

IV. Official Reports and Correspondences

- A. Board of Supervisors
- **B.** CRPC Report
- C. Land Development Plans
- D. Staff Updates

- i. September 15th Joint Board and Planning Commission Meeting
 The purpose of this meeting will be to present and discuss zoning map amendment recommendations to the Board of Supervisors.
- ii. September 16th Joint Board and Planning Commission Meeting
 The purpose of this meeting will be to continue discussions on the draft
 Workforce Housing Ordinance amendment.

V. Adjournment

FERGUSON TOWNSHIP PLANNING COMMISSION REGULAR MEETING MINUTES MONDAY, AUGUST 24, 2020 6:00 PM

ATTENDANCE

The Planning Commission held its regular meeting of the month on Monday, August 24, 2020, as a virtual meeting. In attendance:

Commission:

Jeremie Thompson – Chair Rob Crassweller – Secretary Shannon Holliday Bill Keough Lisa Rittenhouse Ellen Taricani Ralph Wheland Qian Zhang – Alternate

Staff:

Jenna Wargo, Planning & Zoning Director Jeff Ressler, Zoning Administrator Kristina Aneckstein, Community Planner David Pribulka, Township Manager Dave Modricker, Public Works Director

Others in attendance: Rhonda Demchak, Recording Secretary; Marc McMaster, Real Estate Agent, State College; Nicole Pollock, Ferguson Township Resident; Betsy Dupuis, Ferguson Township Resident; Derek Anderson, Pine Hall TDD Developer; Charles Suhr, Attorney, Stevens & Lee; Joseph Green, Ferguson Township Resident; Ken Beldin, GD&F Engineers

Ms. Wargo took roll call and the Planning Commission had a quorum.

I. CALL TO ORDER

Mr. Thompson called the Ferguson Township Planning Commission's regular meeting to order on Monday, August 24, 2020 at 6:10 p.m.

II. APPROVAL OF REGULAR MEETING MINUTES JULY 27, 2020

Mr. Thompson called for a motion to approve the minutes from July 27, 2020. Mr. Crassweller made a motion to approve the minutes. Ms. Taricani seconded the motion. The motion passed unanimously.

III. CITIZEN INPUT - NONE

IV. LAND DEVELOPMENT PLANS

A. Kocher Well Field Water Pumping Improvements LDP

Ms. Aneckstein introduced and presented the land development plan that was submitted by Gwin, Dobson & Foreman Engineering, Inc. on behalf of their client, The State College Borough Water Authority. The Land Development Plan proposes water pumping improvements to the Kocher well fields on tax parcel 24-006-055E, located at 3961 West Whitehall Road. The construction of two (2) buildings that measure 9 feet 4 inches by 12 feet 4 inches. Each building is near well #71 and well #78. There is an existing floodplain that traverses the parcel and no construction is planned in the floodplain. On June 23, 2020, a variance was approved to utilize FEMA Mapping for Floodplain Boundary determination instead of independent Hydrologic and Hydraulic (H&H) study as required by §27-701. The parcel is 47.7 acres and is currently zoned Rural Agriculture (RA). This was a preliminary submission and no action is required.

B. Parkview Subdivision - Replot of Tax Parcel 24-118-128 and Tax Parcel 24-118-128A

Ms. Aneckstein presented the Parkview Subdivision submitted by PennTerra Engineering, Inc. on behalf of their client, Alec J. Pringle and Jodi L. Green, owners of Tax parcel 24-118-128 and 24-118-128A. The parcels are located at 1401 Circleville Road and 1403 Circleville Road respectively. Tax Parcel 24-118-128, referred to as Lot 3R on the subdivision plan, is currently 0.786 acres. Tax Parcel 24-118-128A, referred to as Lot 4R on the subdivision plan, is currently 1.971 acres. This replot proposes to add 0.546 acres to Lot 3R to create a 1.333-acre parcel (Lot 3RR). Lot 4 will be reduced to 1.425 acres (Lot 4R) with this replot. There is a shared access driveway to both parcels. The parcels are zoned Residential-single family (R1). Mr. Crassweller moved that the Planning Commission recommend the application for consideration of a modification to the Board of Supervisors. Mr. Wheland seconded the motion. The motion passed unanimously. Mr. Crassweller moved that the Planning Commission recommend the land development plan to the Board of Supervisors. Ms. Taricani seconded the motion. The motion passed unanimously.

V. COMMUNITY PLANNNING

A. Affordable Housing Ordinance

Ms. Wargo presented the draft ordinance. The Workforce Housing Ordinance is codified under Supplemental Regulations in Chapter 27, Zoning and applies to zoning districts where the provisions of workforce housing units are required or incentivized. Currently, the Township requires workforce housing to be built in the Traditional Town Development (TTD) Zoning District and it is incentivized in the Terraced Streetscape (TS) District. The original ordinance was adopted in 2015 and achieves a very specific objective of establishing a legacy workforce housing program through deed restricted, owner-occupied units. Provided with the agenda is the draft amendment to the Workforce Housing Ordinance. This draft includes input and direction from the Board of Supervisors and the established technical working group. The ordinance would be applicable to the development of or rehabilitation of ten or more residential dwelling units, conversion of an existing residential structure to a multi-family dwelling that results in ten or more residential dwelling unit and conversion of a non-residential property to a residential property that results in ten or more residential dwelling units within the TTD or TS Zoning Districts. It expands upon the legacy workforce program by allowing for rentals or owner-occupied units; and provides workforce housing units to be built off-sight, designated off-site, land and/or building donation and fee-in-lieu. The Working Group met on August 21, 2020, the designated off site and land/building donation was taken off for now. The group wants to spend more time on all the options to ensure it is correct. There will be continued discussions in the future. Ms. Wargo indicated that a poll was sent out for your availability for a Joint Board and Planning Commission meeting to discuss the ordinance. Ms. Wargo addressed several questions regarding eligibility, incentives, and clarified language within the ordinance. Mr. Keough expressed his concerns with the 99-year attachment to the Affordable Housing Program within the Township. Mr. Keough indicated that he would like the ordinance to address major repairs on a home that has a 99-year life span by the ordinance. Ms. Wargo noted it will be discussed during the joint meeting. A discussion ensued regarding MOU's. Mr. Pribulka noted that Ferguson Township has an MOU with the Centre County Housing and Land Trust and the Township pays \$5,000 per year as an allocation to the Land Trust to assist them with administration services. Additionally, there is a menu of services they provide

to the Township in exchange of our partnership in the trust. Mr. Pribulka noted that in exchange of the allocation, a member of the Township Staff, typically the Planning and Zoning Director, has a seat on the Board of Directors of the Centre County Housing and Land Trust. Ms. Rittenhouse requested a copy of the MOU and the scope of services that are provided. Mr. Pribulka noted that they will be sent to each member of the Planning Commission. Mr. McMaster noted that the demand for houses in State College is very busy, houses are still selling for over full price and there is a supply issue. Mr. McMaster indicated that it is difficult to develop in Centre County due to rules and regulations, so the supply backs up. Ms. Rittenhouse noted that new construction is backed up and takes up to 8 months to finish. During public comment, Mr. Suhr noted that he and Mr. Anderson are pleased with how the ordinance is being developed and will send their comments to Ms. Wargo by August 31st. Mr. Suhr noted that perhaps utilize the fee-in-lieu money to be an incentive for when people purchase or rent a unit. Perhaps use for down payments, security deposits, and closing costs. Mr. Anderson noted that more clarity needs to be included with regards to fee-in-lieu in the ordinance.

VI. SPECIAL REPORTS

A. Stormwater Program Implementation and Fee Study

Mr. Pribulka presented the recent developments with the Stormwater Program. The slides that were presented can be found on the Township's website. Mr. Pribulka reviewed Phase I which is the feasibility study that was completed in 2019 and then reviewed Phase II. The Advisory Committee is comprised by a broad representation from the community. Ms. Rittenhouse indicated that the Township needs to be cautious of the charges because the millage rate and transfer tax is one of the higher rates. Continued discussion on program cost estimation and revenue ensued after the slide presentation. Ms. Holliday and Chair Thompson expressed concerns over the millage and the lack of cost of living raises. Mr. Pribulka will share data with the Commission on the millage.Mr. Pribulka noted that the decision regarding the program has not been made and that it is not an either-or proposition. Mr. Pribulka presented a hybrid scenario to the Board recently. If the fee is enacted this year, perhaps give a 100% credit in 2021 due to the impact that the pandemic has had on the economy. Mr. Keough noted that there is a perception that there are only two choices and stated that the hybrid scenario should be included more when presenting. Mr. Pribulka encouraged anyone with questions to visit the website or contact his office.

VII. OFFICIAL REPORTS AND CORRESPONDENCES

A. Board of Supervisors

Ms. Wargo reported that the Board met on August 17, 2020, and the Board amended Chapter 19, Signs and Billboards and Chapter 27, Section 720 the Domestic Chicken and Ducks ordinace. Ms. Wargo presented the Workforce Housing Ordinance at the Board meeting as well.

B. CRPC Report

Ms. Taricani noted that the Committee met on August 6, 2020 and discussed the need for making space for adult use. The Bon Ton space at the Nittany Mall is being considered perhaps for a casino. Also discussed was the pandemic and how it is impacting the community.

C. Land Development Plans

Ms. Aneckstein reported that they are reviewing the Parkview Subdivision and the

Kocher Well Fields Improvements Land Development Plan. The West College Avenue Student Housing land development plan was submitted to the Township. The parcels are located on West College Avenue and Buckhout Street. There are five lots that will be consolidated. The plan proposes 6 story multi-family residential apartment buildings with commercial and retail on the first floor. There will be underground parking. There will be 96 residential units proposed. In addition, they are also proposing 14 short-term bicycle spaces and 159 vehicle parking spaces. It is in the Terraced Streetscape District; however, it crosses over into the State College Borough. The plan was also submitted to the State College Borough for their review.

D. Staff Updates

Ms. Wargo asked the Commission to please respond to the Doodle Poll that was sent on August 21, 2020 regarding the joint meeting for the Workforce Housing Ordinance and the rezoning map amendment map process.

Mr. Keough noted that he is COVID at-risk but stated that he is ready for the Planning Commission to meet in person considering the new developments that are going to be approved in the near future.

VIII. ADJOUNMENT

Mr. Wheland made a motion to adjourn the August 22, 2020 Planning Commission meeting at 8:45 p.m. Ms. Holliday seconded the motion. The motion passed unanimously.

Respectfully Submitted,

Rob Crassweller, Secretary
For the Planning Commission



TOWNSHIP OF FERGUSON

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

TO: Ferguson Township Planning Commission

FROM: Kristina Aneckstein, Community Planner

DATE: September 14, 2020

SUBJECT: Kocher Well Field Water Pumping Improvements

This Land Development Plan was submitted by Gwin, Dobson & Foreman Engineering, Inc. on behalf of their client, The State College Borough Water Authority. The Land Development Plan proposes water-pumping improvements to the Kocher well fields on Tax parcel 24-006-055E, located at 3961 W. Whitehall Road. The construction of two (2) buildings that measure 9 feet 4 inches by 12 feet 4 inches. Each building will be in close proximity to existing well #71 and well #78. There is an existing floodplain that traverses the parcel; however, no construction is planned in the floodplain. On June 23, 2020, a variance was approved to utilize FEMA Mapping for Floodplain Boundary determination instead of independent Hydrologic and Hydraulic (H&H) study as required by §27-701. The parcel is 47.7 acres and is zoned Rural Residential (RA). This is the Preliminary submission. All outstanding comments are administrative.

Staff Recommendation: Staff recommends the Planning Commission make a recommendation to the Board of Supervisors to approve the Kocher Well Field Water Pumping Improvements Land Development Plan.

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

PRELIMINARY LAND DEVELOPMENT PLANS

FOR

KOCHER WELL FIELD WATER PUMPING IMPROVEMENTS

JULY 22, 2020 REVISED: AUGUST 20, 2020

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 29, 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:

ROOM B100N

GREENSBURG, PA 15601

3147 RESEARCH DRIVE

CONTACT: CHRIS LEIDY

STATE COLLEGE, PA. 16801

EMAIL: cleidy@twp.ferguson.pa.us

CONTACT: ROBERT PAINTER

EMAIL: rpainte@firstenergycorp.com

FERGUSON TOWNSHIP CENTRE COUNTY

UNIVERSITY AREA JOINT AUTHORITY WASTEWATER: STATE COLLEGE, PA. 16801 CONTACT: MARK HARTER

(814) 238-0885

RECORD PLAN NOTE

EMAIL: mharter@uaja.com (814) 238-8370 PENN STATE UNIVERSITY

WASTEWATER TREATMENT PLANT 501 UNIVERSITY DRIVE STATE COLLEGE, PA. 16801

CONTACT: JEFF MCDONALD EMAIL: jam86@psu.edu STATE COLLEGE BOROUGH WATER AUTHORITY 1201 WEST BRANCH ROAD STATE COLLEGE, PA. 16801 CONTACT: STEVEN ALBRIGHT EMAIL: steve@scbwa.org

THIS RECORD PLAN CONFORMS WITH THE PLAN RECEIVING FINAL APPROVAL BY

ALL IMPROVEMENTS ARE OR WILL BE INSTALLED IN ACCORDANCE WITH SUCH

THE FERGUSON TOWNSHIP BOARD OF SUPERVISORS ON __

PLAN IN A MANNER AND TIME SO SPECIFIED THEREIN.

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



EXISTING SITE PLAN PRELIMINARY LAND DEVELOPMENT PLAN KOCHER WELL BUILDING PLANS AND SECTIONS EROSION AND SEDIMENT CONTROL (ESC) PLAN LANDSCAPING PLAN PRELIMINARY LAND DEVELOPMENT SECTIONS EROSION AND SEDIMENT CONTROL (ESC) NOTES AND DETAILS

EROSION AND SEDIMENT CONTROL (ESC) NOTES

814.943.5214 gdfengineers.com

INDEX OF DRAWINGS

PROPOSED KOCHER WELL BUILDING LOCATIONS— RAMBLEWOOL ACCESS DRIVE -(T-926)-

PROJECT NOTES CENTRE COUNTY RECORDER OF DEEDS GENERAL SITE/LOT INFORMATION

G. LOT REQUIREMENTS: EXISTING LOT AREA =

INFORMATION SHOWN ON THESE PLANS.

SPATIAL DATA ACCESS (PASDA) CLEARINGHOUSE.

PLANE (NAD 83) SOUTH ZONE.

PROJECT LIMITS.

LAND USE NO. 40).

. PARKING ANALYSIS:

HYDRAULIC (H&H) STUDY.

08/20/202

DATE

A. MAXIMUM IMPERVIOUS COVERAGE = 10.00%

A. REQUIRED PARKING - §22-5C01.1.B.(2)

B. PARKING PROVIDED = 3 SPACES (SEE PLANS)

5. LIST OF APPROVED VARIANCES: (JUNE 23, 2020)

DATE OF ZONING PERMIT APPLICATION: JULY 19, 2019

B. PROPOSED IMPERVIOUS COVERAGE = 3.16% (65,638 SQ. FT.)

= 1 SPACE / FACILITY X 3 FACILITIES = 3 PARKING SPACES

A. §27-701 - VARIANCE TO UTILIZE FEMA MAPPING FOR FLOODPLAIN

BOUNDARY DETERMINATION INSTEAD OF INDEPENDENT HYDROLOGIC AND

REVISED PER TOWNSHIP COMMENTS

DESCRIPTION

REVISIONS

2. LOT COVERAGE:

2,077,627 SQ. FT. OR 47.70 ACRES [BY DEED]

MAXIMUM BUILDING HEIGHT = 50

. INFORMATION CONCERNING EXISTING FEATURES, RIGHT OF WAYS, PROPERTY

OBTAINED FROM DEEDS, RECORD DRAWINGS, FIELD OBSERVATIONS AND DATA

REPRESENT CONDITIONS EXACTLY AS THEY EXIST AT THE PRESENT, NOR DO

K. HORIZONTAL CONTROLS ARE REFERENCED TO THE PENNSYLVANIA STATE

M. SOILS INFORMATION FROM UNITED STATE DEPARTMENT OF AGRICULTURE

N. EXISTING FLOODPLAIN INFORMATION FROM FLOOD INSURANCE RATE MAP (FIRM) PANEL NOS. 42027C0830F AND 42027C0835F FOR FERGUSON

TOWNSHIP, EFFECTIVE DATE MAY 4, 2009, IS INDICATED ON THESE PLANS

Q. THE PROPOSED WELL PUMP VFD BUILDINGS ARE LOCATED IN THE WELLHEA

BUILDINGS ARE TO BE USED TO INSTALL ELECTRICAL IMPROVEMENTS IN SUPPORT OF AN EXISTING POTABLE WATER PUMP STATION FACILITY. NO

HAZARDOUS MATERIALS ARE TO BE STORED, HANDLED OR USED IN THE WELL PUMP VFD BUILDINGS. AS SUCH, THE CONSTRUCTION AND OPERATION OF THESE BUILDINGS BY THE STATE COLLEGE BOROUGH WATER AUTHORITY

IS A PERMITTED USE IN ACCORDANCE WITH §27-504.7.B.40 (TABLE 405,

AND SUPPLEMENTED WITH FLOODPLAIN DATA FROM A DETAILED STUDY PERFORMED BY GWIN, DOBSON & FOREMAN, INC. AND DATED APRIL, 2020.

D. THERE ARE NO IDENTIFIABLE WETLANDS WITHIN THE ENVIRONS OF THE

ZONE 1 PROTECTION AREA AS DEFINED BY \$27-504 (SOURCE WATER PROTECTION OVERLAY DISTRICT) OF THE FERGUSON TOWNSHIP CODE. THE

P. THERE ARE NO STEEP SLOPES (>25%) WITHIN THE ENVIRONS OF THE

PRIMARILY OF SILT LOAMS UNDERLAIN BY CARBONATE ROCK.

NATURAL RESOURCES CONSERVATION SERVICE. ONSITE SOILS CONSIST

. VERTICAL CONTROLS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). TOPOGRAPHIC AND LOCATION INFORMATION INDICATED ON THESE PLANS WAS OBTAINED FROM THE PENNSYLVANIA

LINES. ZONING BOUNDARIES. ETC. SHOWN ON THESE DRAWINGS WAS

OBTAINED FROM THE CENTRE COUNTY GIS SYSTEM AND MAY NOT

THEY CONSTITUTE ACTUAL FIELD INSTRUMENT SURVEYS FOR ALL

H. EXISTING LAND USE: POTABLE WATER PUMP STATION FACILITY

PROPOSED LAND USE: POTABLE WATER PUMP STATION FACILITY

PROPOSED BUILDING HEIGHT = 12.4'

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

OWNER SIGNATURE OWNER PRINT NAME OWNER TITLE

WITNESS MY HAND AND SEAL, THIS DATE _

NOTARY PUBLIC COMMISSION EXPIRES

DESIGN PROFESSIONAL CERTIFICATION

SUCH, ACCORDING TO THE LAW.

, KENNETH W. BELDIN, JR., PE, 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.

FERGUSON TOWNSHIP ENGINEER CERTIFICATION

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

FERGUSON TOWNSHIP PLANNING COMMISSION

FERGUSON TOWNSHIP PLANNING COMMISSION APPROVED

FERGUSON TOWNSHIP BOARD OF SUPERVISORS

FERGUSON TOWNSHIP BOARD OF SUPERVISORS APPROVED

FERGUSON TOWNSHIP ZONING OFFICER APPROVED

F1165049_KOCHER_LD_(

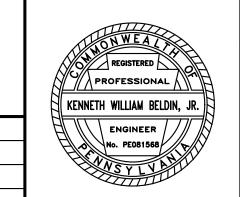
ZONING OFFICER

FIRE CHIEF CERTIFICATION

FERGUSON TOWNSHIP ZONING OFFICER

HAVE REVIEWED AND HEREBY CERTIFY THAT THE LOCATION OF FIRE LANES AND FIRE HYDRANTS SHOWN ON THIS PLAN ARE ADEQUATE.

FIRE CHIEF



SEAL

SECRETARY

STATE COLLEGE BOROUGH WATER AUTHORITY

COVER SHEET

KOCHER WELL FIELD

WATER PUMPING IMPROVEMENTS FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

OSTORAWN BY: RLN

814.943.5214 gdfengineers.com JOB: 16049 SCALE: AS SHOWN

CHECKED BY: KWB G:\16049\LAND DEVELOPMENT\KOCHER WELL FIELD LDP\16049_KOCHER_LD_CS

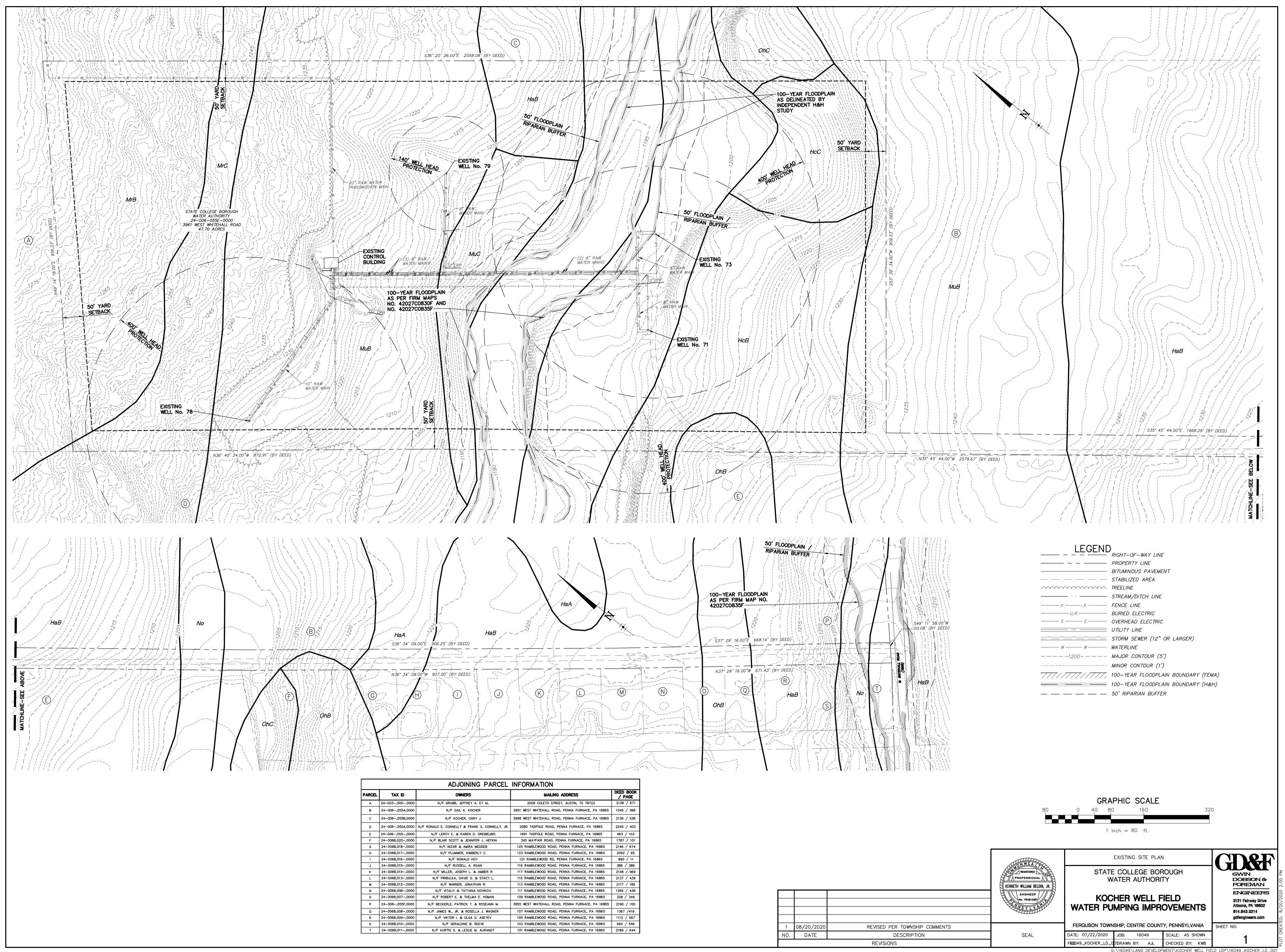
DOBSON & FOREMAN

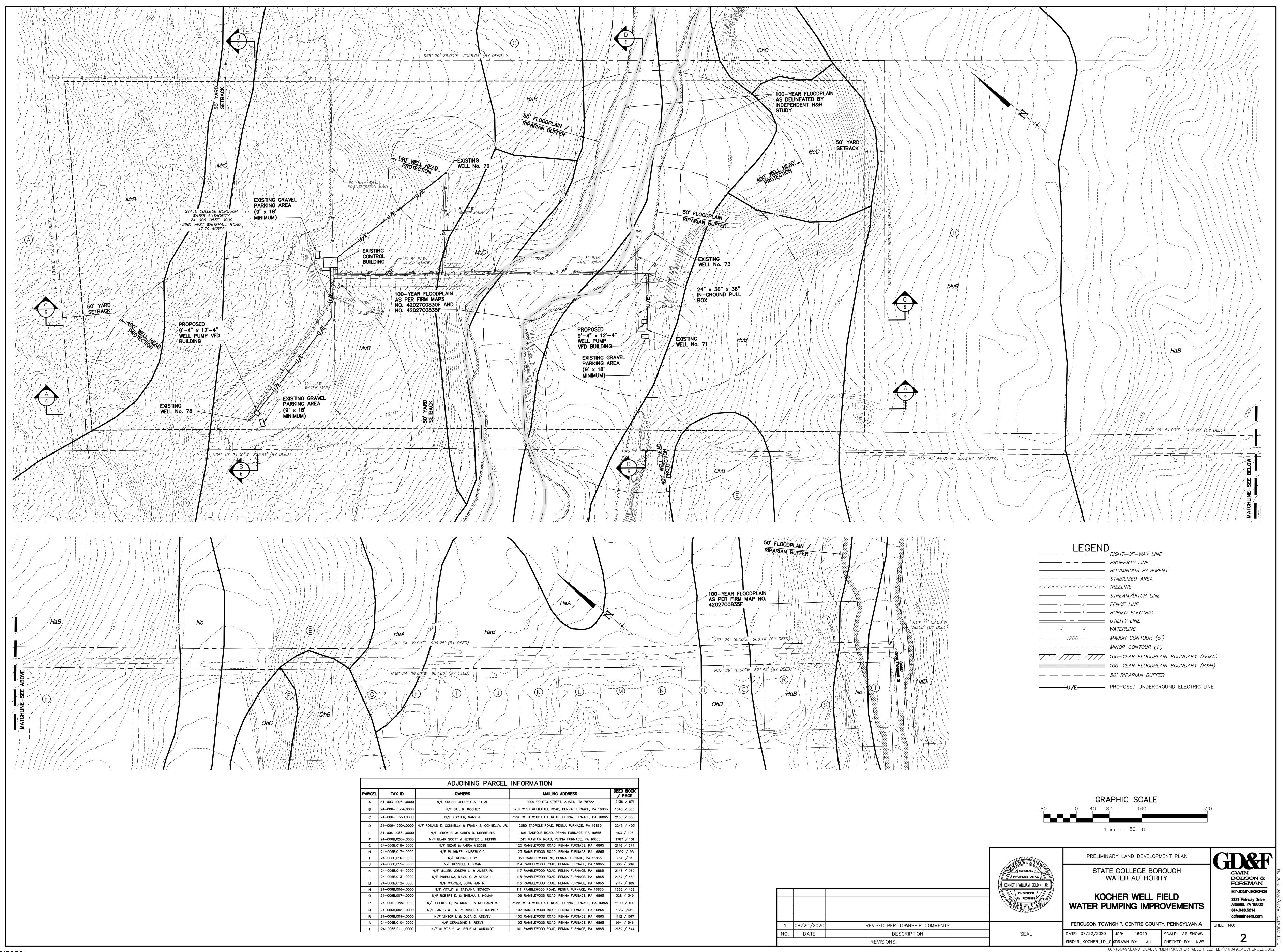
ENGINEERS

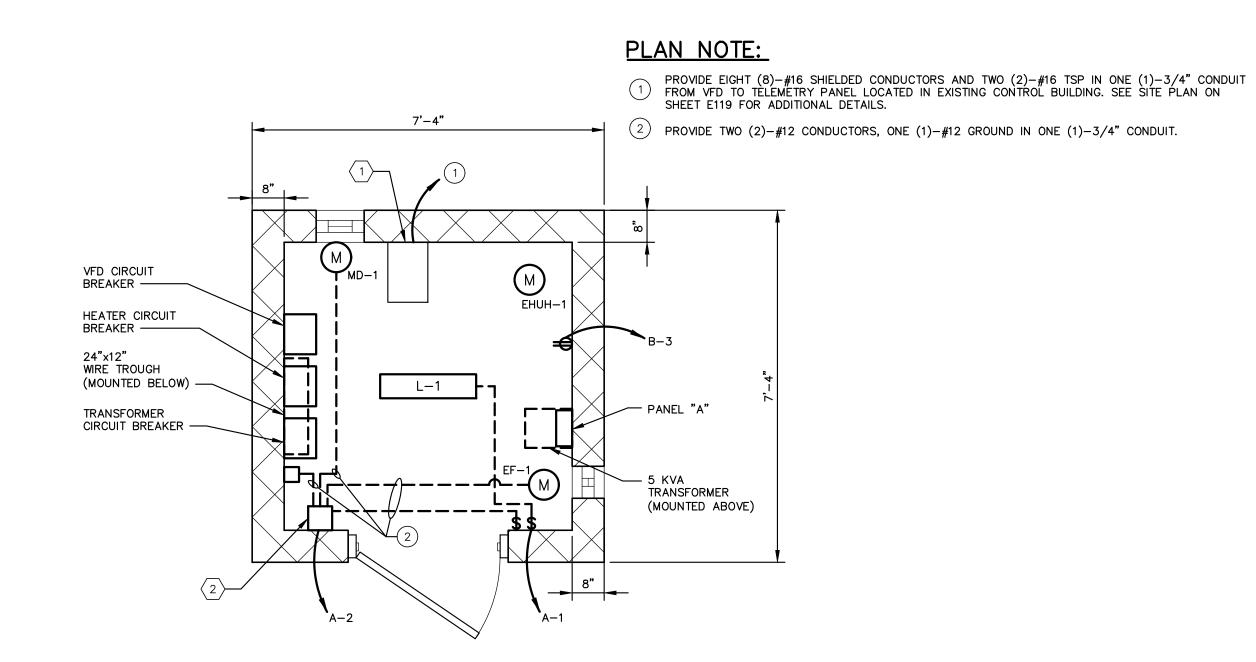
3121 Fairway Drive

Altoona, PA 16602

COUNTY OF CENTRE







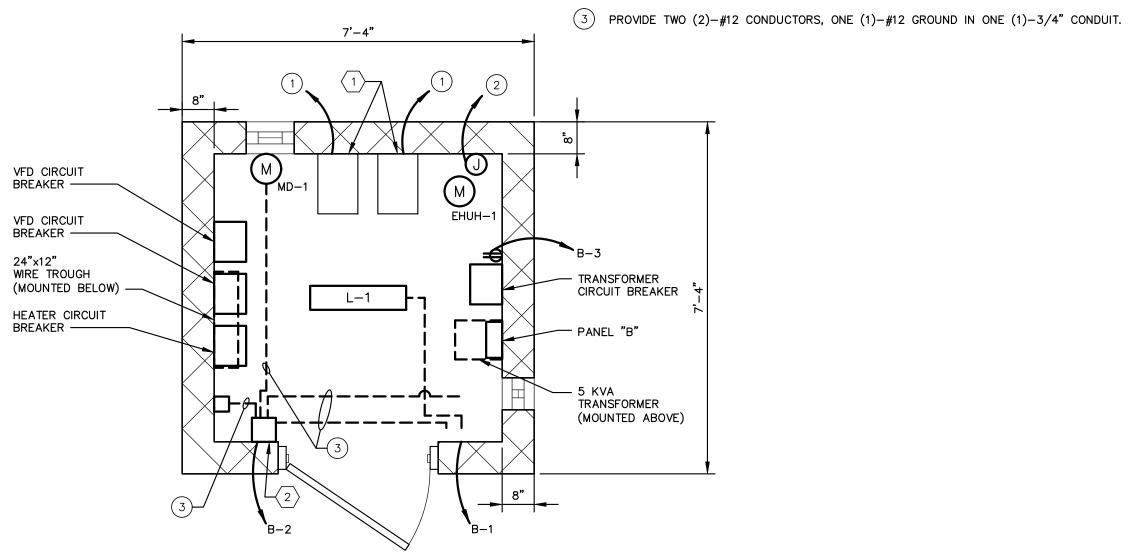
WELL PUMP No. 78 VFD BUILDING

EQUIPMENT NOTES:

- 100 HP, THREE PHASE, 480 VOLT, VFD, NEMA 12 ENCLOSURE. PROVIDE LINE REACTOR MOUNTED ABOVE VFD AND LOAD REACTOR MOUNTED BELOW VFD. SEE SPECIFICATIONS SECTION 262419.
- $\left\langle 2\right\rangle$ 6"x6"x6" NEMA 12 ENCLOSURE, 4PDT RELAY. SEE WIRING DETAIL THIS SHEET.

PLAN NOTE:

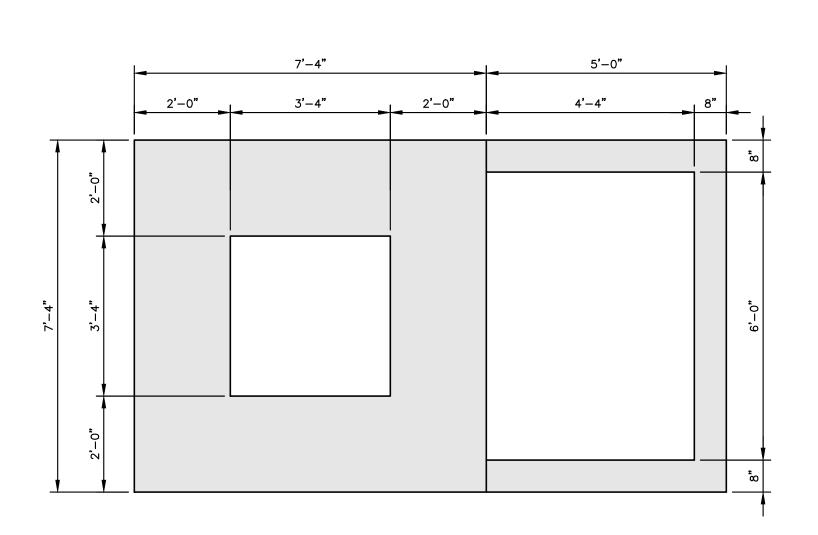
- PROVIDE EIGHT (8)-#16 SHIELDED CONDUCTORS AND TWO (2)-#16 TSP IN ONE (1)-1" CONDUIT FROM VFD TO JUNCTION BOX.
- PROVIDE SIXTEEN (16)—#16 SHIELDED CONDUCTORS AND FOUR (4)—#16 TSP IN ONE (1)—2" CONDUIT FROM JUNCTION BOX TO EXISTING CONTROL BUILDING UTILIZING PROPOSED PULL BOX AND EXISTING 4" CONDUIT FROM PULL BOX TO THE EXISTING CONTROL BUILDING. SEE SITE PLAN ON SHEET E119 FOR ADDITIONAL DETAILS.



WELL PUMP No. 71/73 VFD BUILDING

EQUIPMENT NOTES:

- 100 HP, THREE PHASE, 480 VOLT, VFD, NEMA 12 ENCLOSURE. PROVIDE LINE REACTOR MOUNTED ABOVE VFD AND LOAD REACTOR MOUNTED BELOW VFD. SEE SPECIFICATIONS SECTION 262419.
- $\left\langle 2\right\rangle$ 6"x6"x6" NEMA 12 ENCLOSURE, 4PDT RELAY. SEE WIRING DETAIL THIS SHEET.

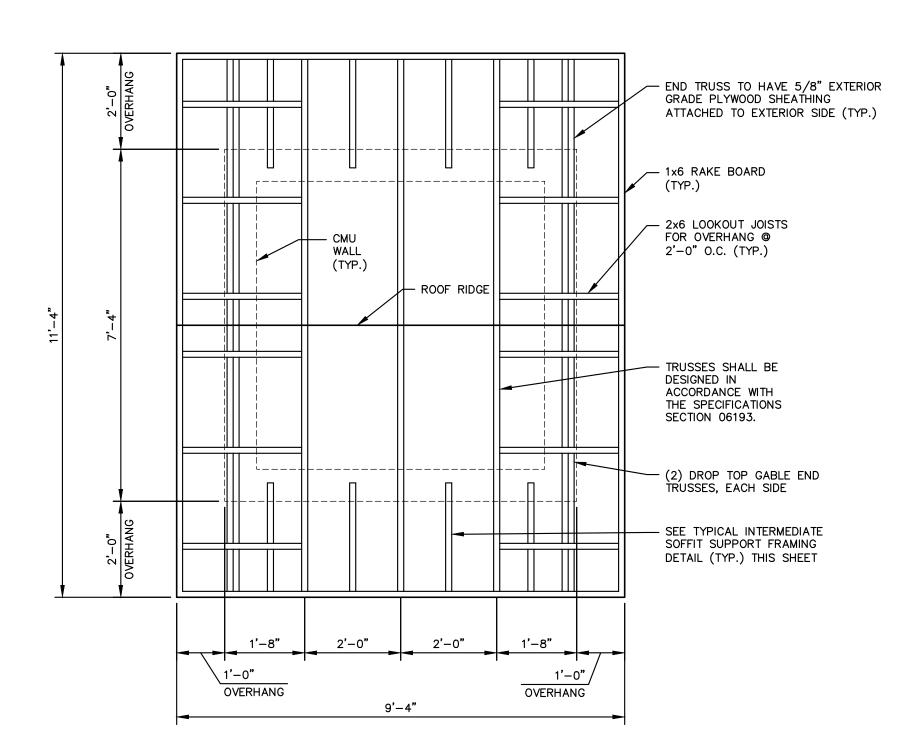


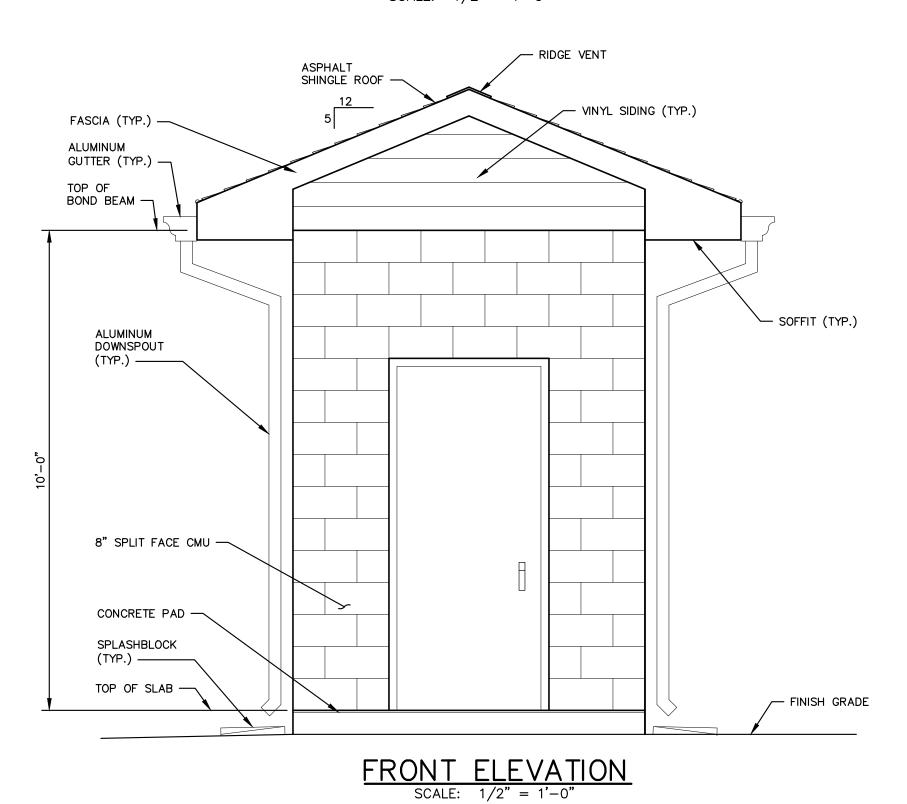
GRADE BEAM FOUNDATION NOTE: REQUIRED SOIL BEARING CAPACITY: 2,000 PSF

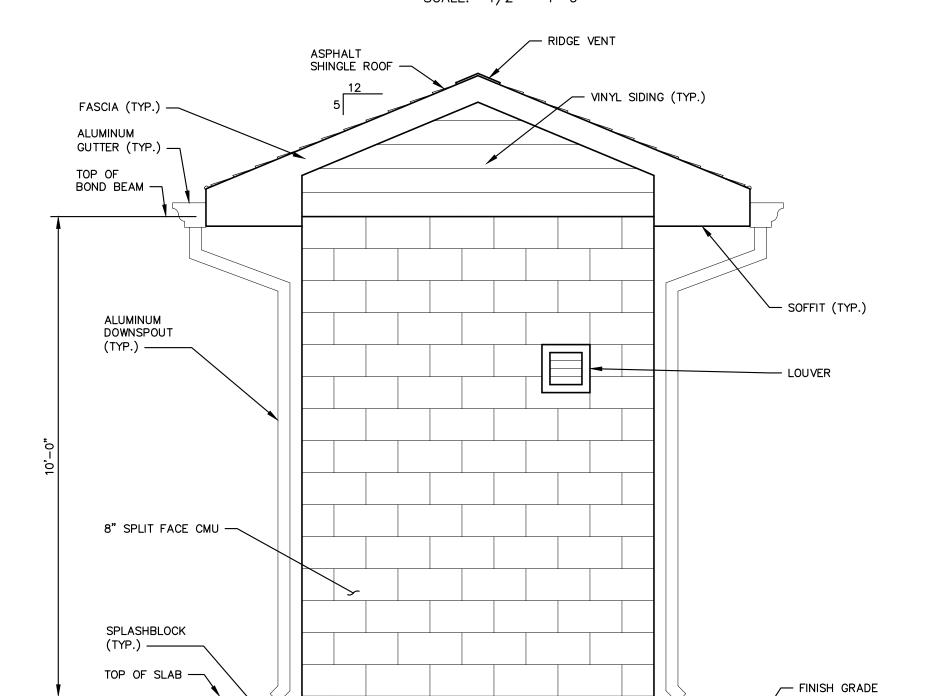
<u>LEGEND</u>

FOUNDATION PLAN

SCALE: 1/2" = 1'-0"







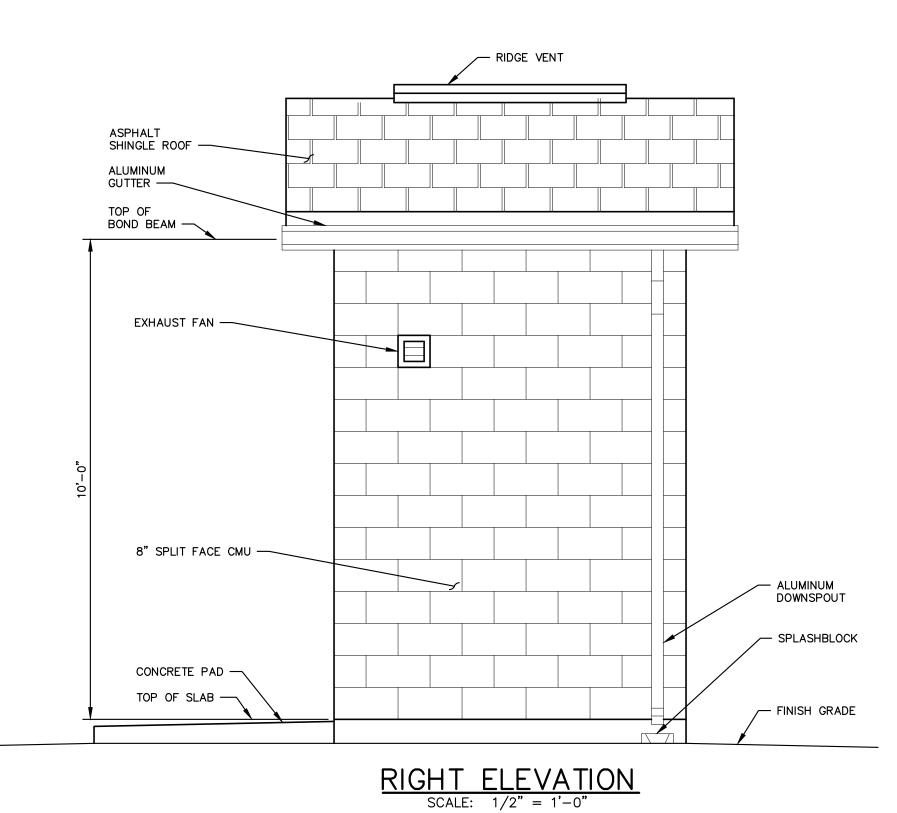


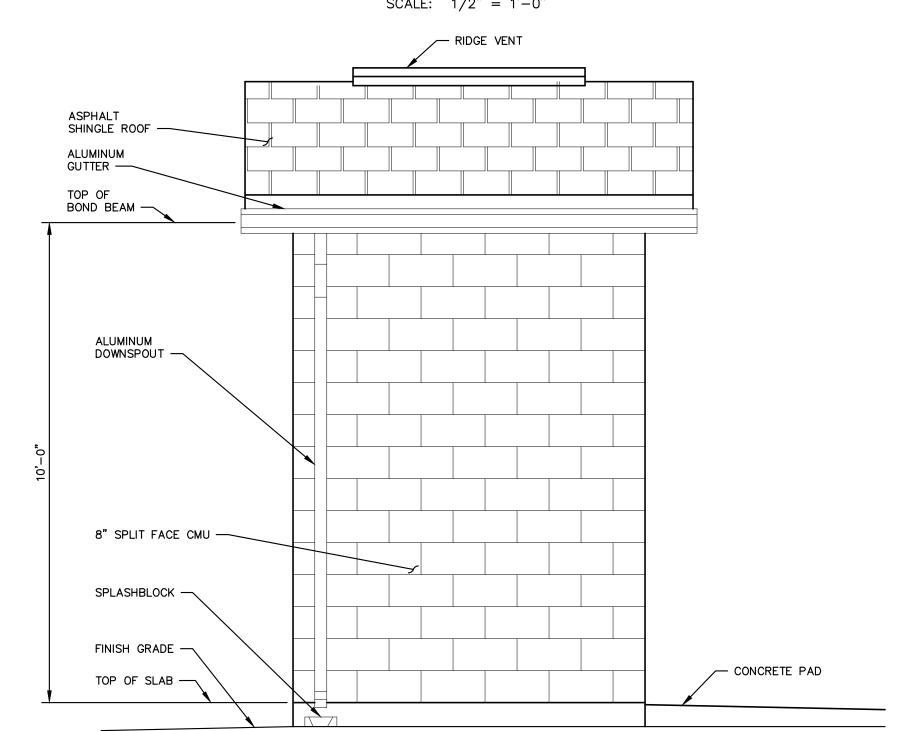
ROOF FRAMING NOTES:

- 1. ROOF TRUSSES AND ROOF FRAMING SHALL BE ENGINEERED AND
- WIND LOAD: RISK CATEGORY III: BASIC WIND SPEED V = 120 MPHWIND DIRECTIONALITY FACTOR $K_d = 0.85$ EXPOSURE CATEGORY = CTOPOGRAPHIC FACTOR $K_{zt} = 1.0$ GUST EFFECT FACTOR = 0.85 ENCLOSURE CLASSIFICATION = ENCLOSED INTERNAL PRESSURE COEFFICIENT GC, = ± 0.18 VELOCITY PRESSURE EXPOSURE COEFFICIENT, K_h AND K_z = 0.85 VELOCITY PRESSURE $q_h = 26.6$ PSF ROOF SLOPE = 5:12, 22.6° MEAN ROOF HEIGHT h = 12.4WALL DESIGN WIND PRESSURE p = 22.9 PSF
- <u>SNOW LOAD:</u> RISK CATEGORY III GROUND SNOW LOAD = 40 PSFIMPORTANCE FACTOR I = 1.1SLOPED ROOF SNOW LOAD= 33.9 PSF CEILING AND INSULATION= 12 PSF MIN. BOTTOM CHORD ROOFING MATERIAL LOAD= 10 PSF MIN. TOP CHORD

ROOF DESIGN WIND PRESSURE p = -34.2 PSF

- SEISMIC LOAD: IMPORTANCE FACTOR I = 1.25SEISMIC DESIGN CATEGORY = E SITE CLASSIFICATION = DBASIC STRUCTURAL SYSTEM AND SEISMIC RESISTING SYSTEM—BEARING WALL SYSTEM
- 3. PROVIDE TRUSS BRACING AS RECOMMENDED BY TRUSS MANUFACTURER.





LEFT ELEVATION

SCALE: 1/2" = 1'-0"

N W E A PROFESSIONAL (KENNETH WILLIAM BELDIN, JR. ENGINEER
No. PE081568 REVISED PER TOWNSHIP COMMENTS 1 08/20/202 DATE DESCRIPTION SEAL

REVISIONS

KOCHER WELL BUILDING PLANS AND SECTIONS

STATE COLLEGE BOROUGH WATER AUTHORITY KOCHER WELL FIELD

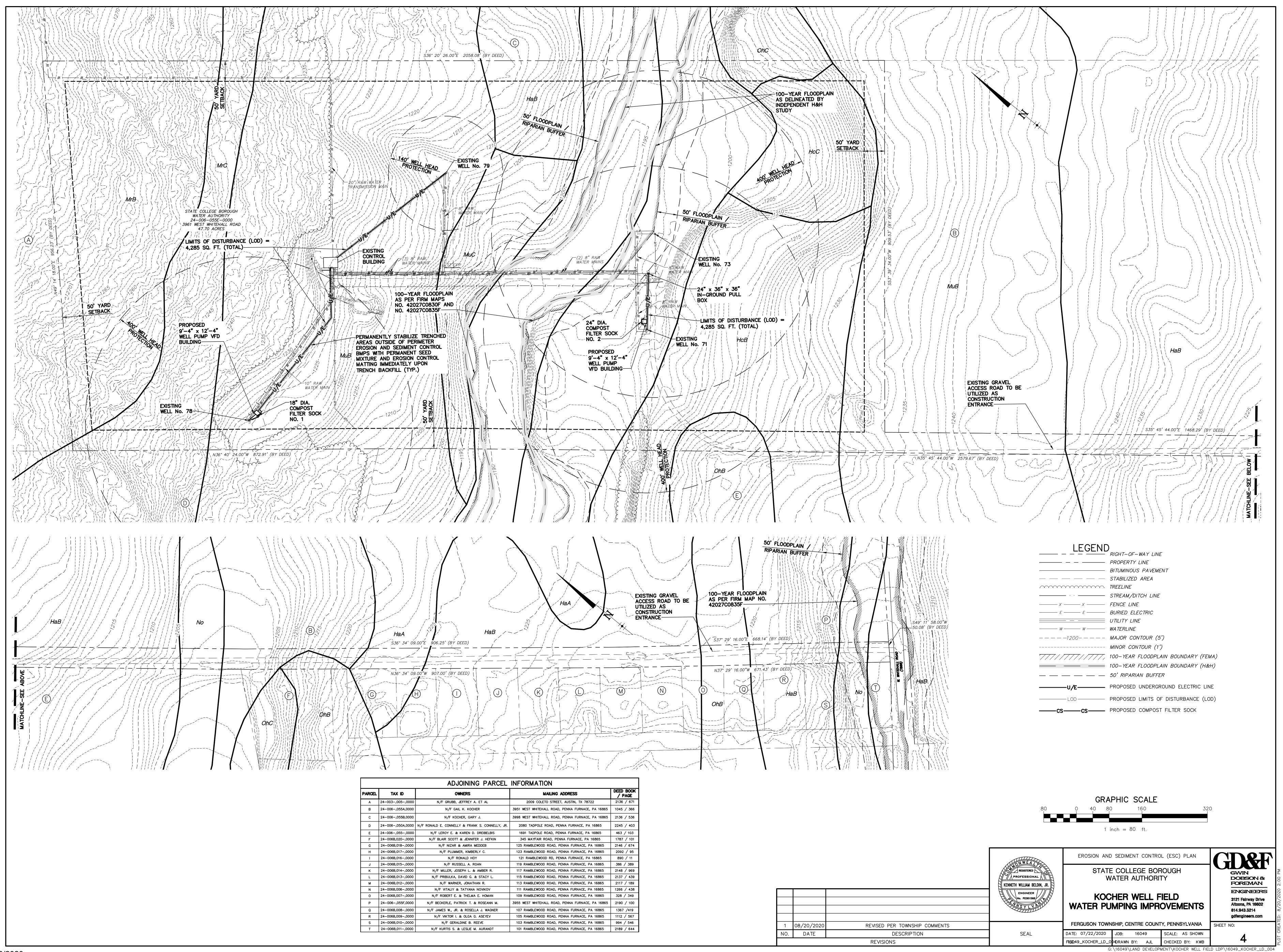
WATER PUMPING IMPROVEMENTS FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA JOB: 16049 SCALE: AS SHOWN

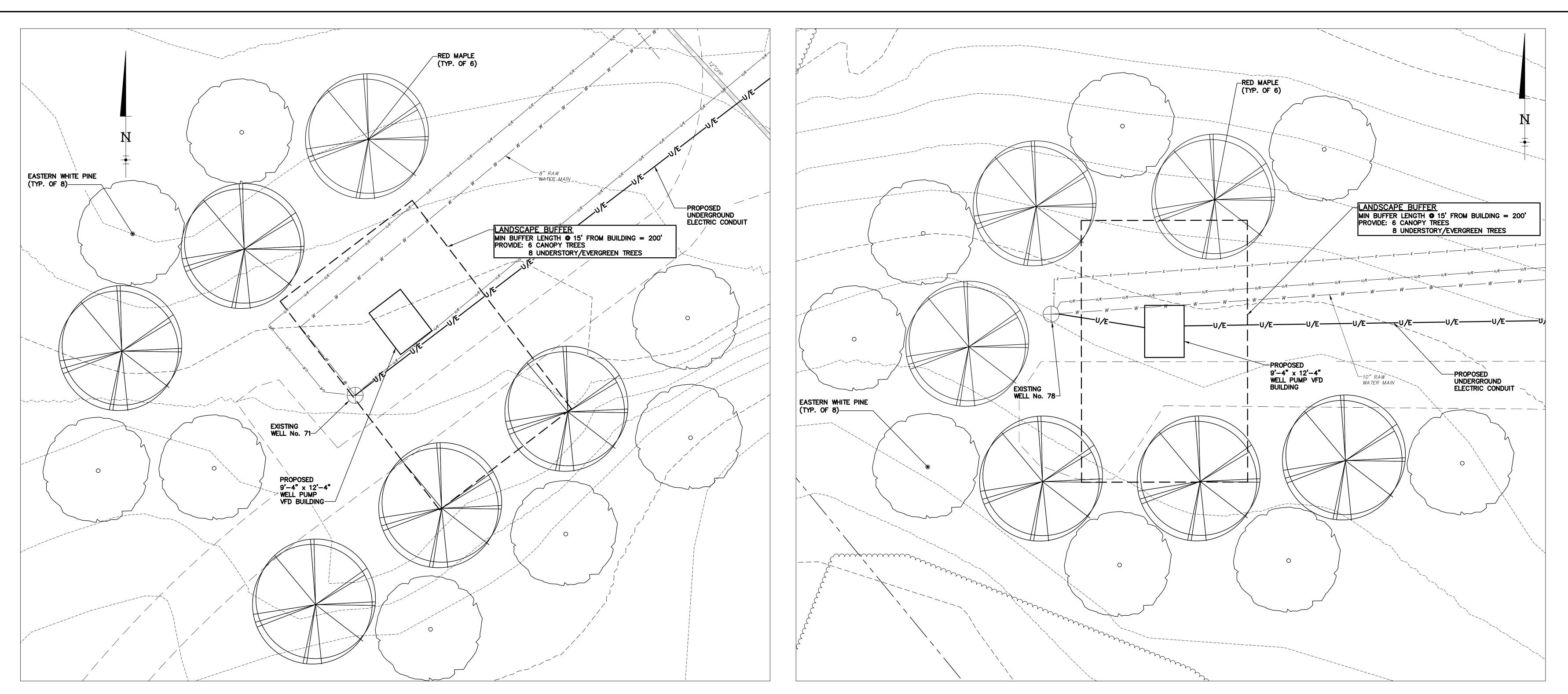
CHECKED BY: KWB

G: \16049\LAND DEVELOPMENT\KOCHER WELL FIELD LDP\16049_KOCHER_LD_003

F160:49_KOCHER_LD_0D3DRAWN BY: RLN

GD&F
GWIN
DOBSON &
FOREMAN ENGINEERS 3121 Fairway Drive Altoona, PA 16602 814.943.5214 gdfengineers.com SHEET NO:





PLANTING SCHEDULE

DECIDUOUS TREES								
BOTANICAL NAME (SYME	BOL)	COMMON NAME	SPACING	SIZE	CONTAINER	QUANTITY	MATURE HEIGHT	MATURE SPREAD
ACER RUBRUM (AR)		RED MAPLE	AS SHOWN	2" CAL.	B & B	12	50'	40'
EVERGREEN TREES								
BOTANICAL NAME		COMMON NAME	SPACING	SIZE	CONTAINER	QUANTITY	MATURE HEIGHT	MATURE SPREAD
PINUS STROBUS (PS)		EASTERN WHITE PINE	AS SHOWN	6'	В & В	16	60'	30'

LANDSCAPE BUFFER YARD REQUIREMENTS:

4 UNDERSTORY/EVERGREEN TREES PER 100' OF BUFFER YARD

REQUIRED BUFFER YARD = 15' [\\$27-707]

BUFFER YARD PROVIDED = 15' (MINIMUM)

BUFFER YARD REQUIREMENTS = 3 CANOPY TREES PER 100' OF BUFFER YARD

LANDSCAPING GENERAL NOTES:

- 1. THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
- 2. THE CONTRACTOR SHALL REFER TO THE PLANT LIST FOR SEASONAL REQUIREMENTS AND OTHER RESTRICTIONS RELATED TO THE TIME OF PLANTING.
- 3. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING SHOWN ON ALL DRAWINGS.
- 4. ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN OR EQUIVALENT.
- 5. NO PLANT SHALL BE PUT INTO THE GROUND BEFORE ROUGH GRADING HAS BEEN FINISHED AND APPROVED BY THE PROJECT ENGINEER.

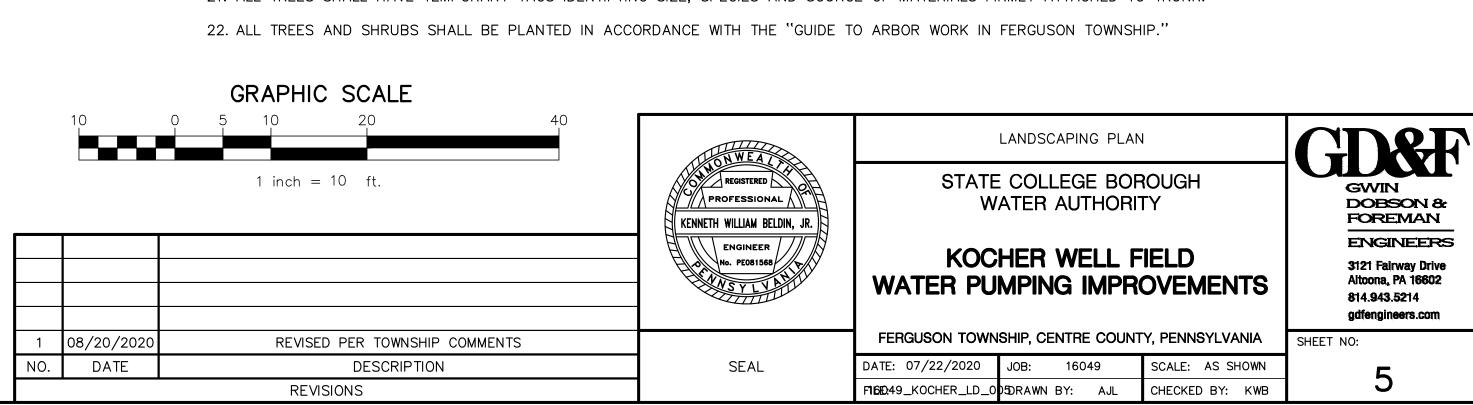
 6. THE DAY PRIOR TO PLANTING, THE LOCATION OF ALL TREES AND SHRUBS SHALL BE STAKED FOR APPROVAL BY THE OWNER.
- 7. ALL PLANTS SHALL BE INSTALLED AS PER DETAILS AND THE CONTRACT SPECIFICATIONS AND IN ACCORDANCE WITH THE "GUIDE TO PLANTING IN FERGUSON
- TOWNSHIP."

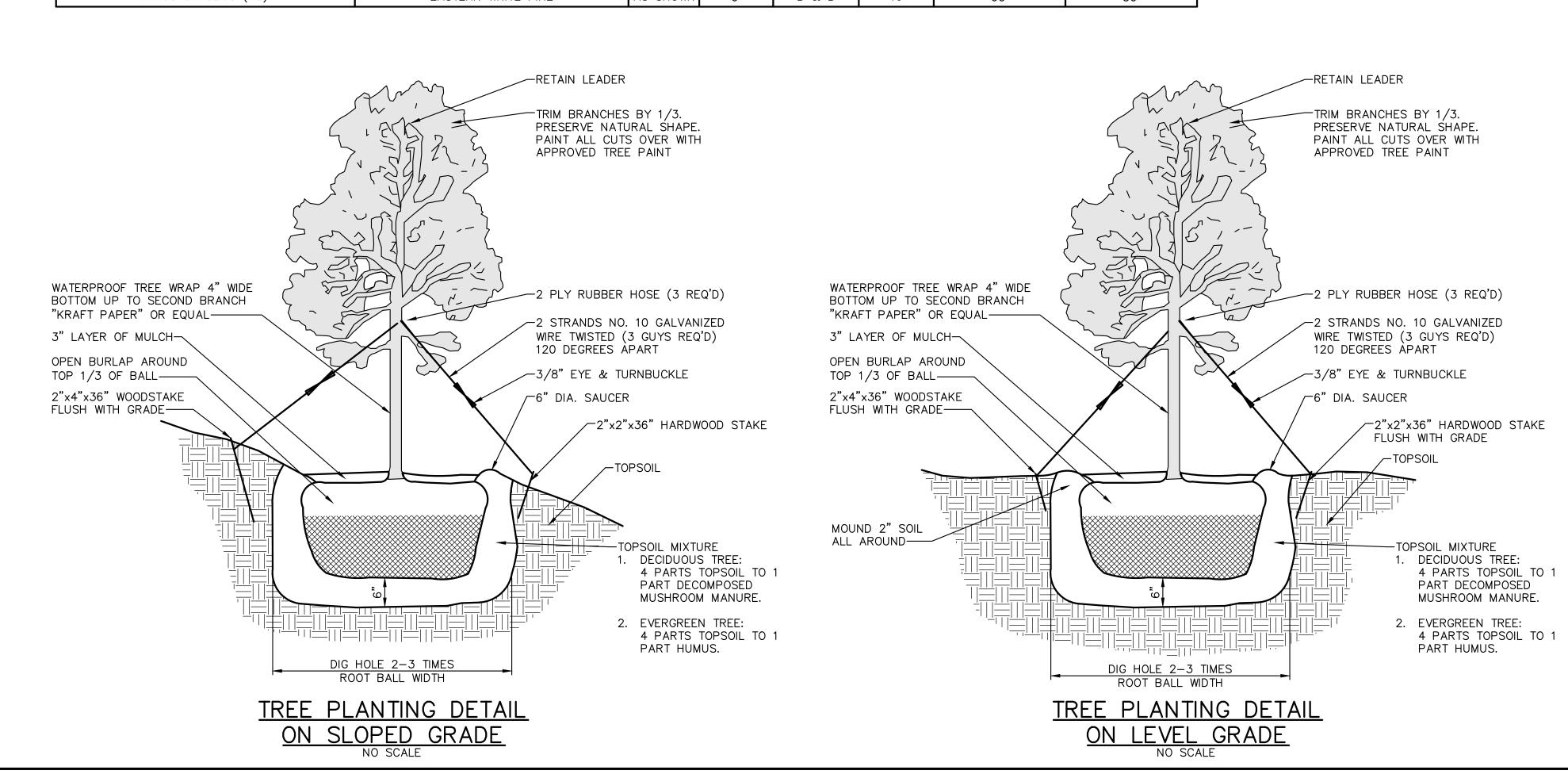
 8. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANT'S ORIGINAL GRADE BEFORE DIGGING.
- 9. ALL PLANTS SHALL BE BALLED AND WRAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL ROOT WRAPPING MATERIAL MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED AT TIME OF PLANTING.
- 10. WITH CONTAINER GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE CONTAINER BALL SHALL BE CUT THROUGH THE SURFACE IN TWO VERTICAL
- LOCATIONS.

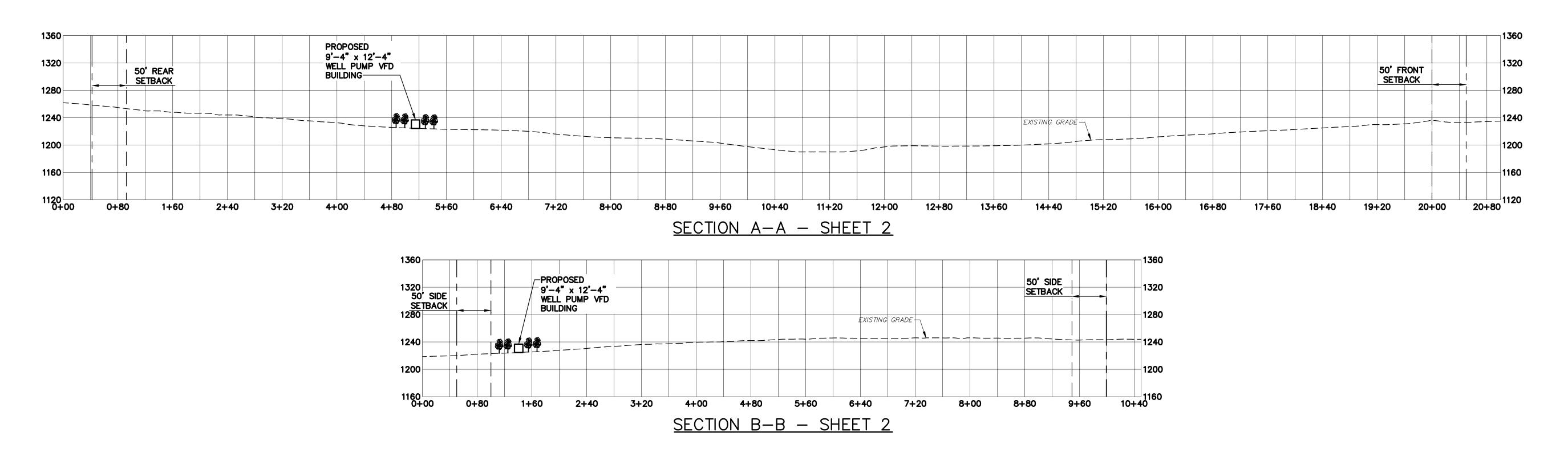
 11. PLANT AT ABOUT THE SAME DEPTH, OR NOT TO EXCEED ONE—HALF INCH DEEPER THAN IT WAS IN THE NURSERY. USE THE ROOT COLLAR FOR DEPTH JUDGMENT.
- 12. INSTALL THE MAIN ROOTS NEARLY STRAIGHT AND SPREAD OUT, NOT DOUBLED, OR SHARPLY BENT.
- 13. INSTALL THE SOIL FIRMLY AROUND THE ROOTS. LEAVE NO AIR POCKETS.
- 14. INSTALL THE TREE IN AN UPRIGHT POSITION, AND HAVE IT NEARLY EVEN WITH THE GENERAL GROUND LEVEL, NOT SUNK IN A HOLE OR RAISED ON A MOUND.
- 15. ALL PLANTS AND STAKES SHALL BE SET PLUMB UNLESS OTHERWISE SPECIFIED.
- 16. ALL PLANTS SHALL BE SPRAYED WITH AN ANTIDESSICANT WITHIN 24 HOURS AFTER PLANTING. IN TEMPERATE ZONES, ALL PLANTS SHALL BE SPRAYED WITH AN ANTIDESSICANT AT THE BEGINNING OF THEIR FIRST WINTER.
- 17. THE CONTRACTOR SHALL PROVIDE LOAM FILL AS PER THE CONTRACT DOCUMENTS.
- 18. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24—HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY OR
- MORE OFTEN, IF NECESSARY, DURING THE FIRST GROWING SEASON.

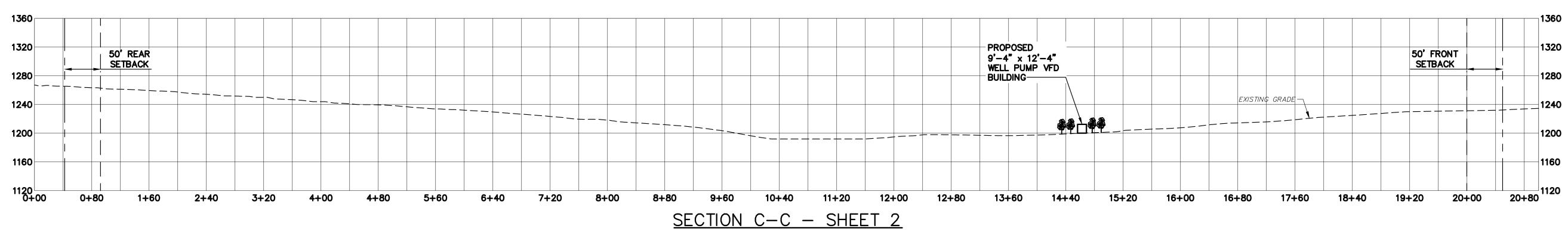
 19. THE GENERAL CONTRACTOR SHALL REFER TO THE CONTRACT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- 19. THE GENERAL CONTRACTOR SHALL REFER TO THE CONTRACT SPECIFICATIONS FOR ADDITIONAL REQUIRE

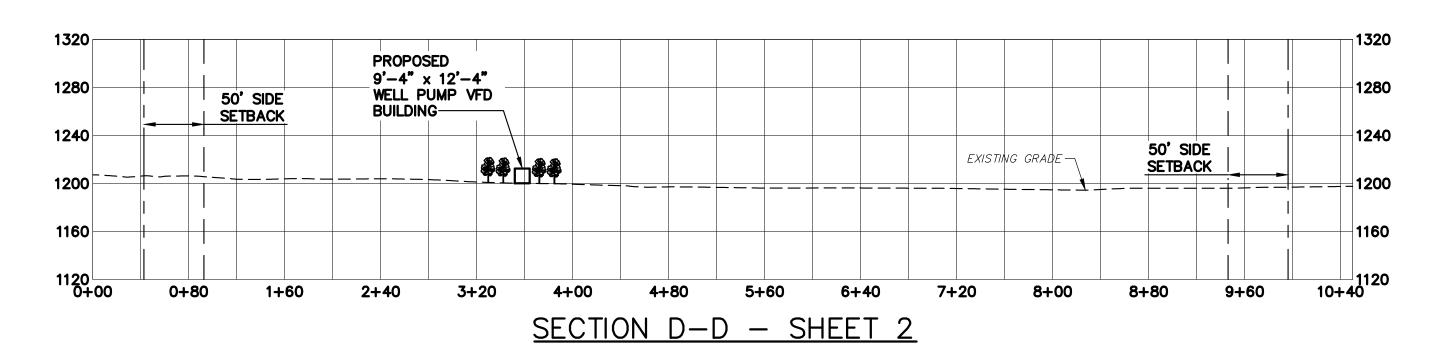
 20. MULCH COLOR TO BE SELECTED BY THE OWNER. MINIMUM MULCH DIAMETER SHALL BE 6 FEET.
- 21. ALL TREES SHALL HAVE TEMPORARY TAGS IDENTIFYING SIZE, SPECIES AND SOURCE OF MATERIALS FIRMLY ATTACHED TO TRUNK.











1 08/20/2020 REVISED PER TOWNSHIP COMMENTS

DESCRIPTION

REVISIONS

SEAL

NO.

DATE

PRELIMINARY LAND DEVELOPMENT SECTIONS

STATE COLLEGE BOROUGH WATER AUTHORITY

KOCHER WELL FIELD WATER PUMPING IMPROVEMENTS

ANIA SHEET NO:

KWB

GWIN DOBSON & FOREMAN

ENGINEERS

3121 Fairway Drive Altoona, PA 16602

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

DATE: 07/22/2020 JOB: 16049 SCALE: AS SHOWN
F166049_KOCHER_LD_0 60RAWN BY: BRP CHECKED BY: KWB

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

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.

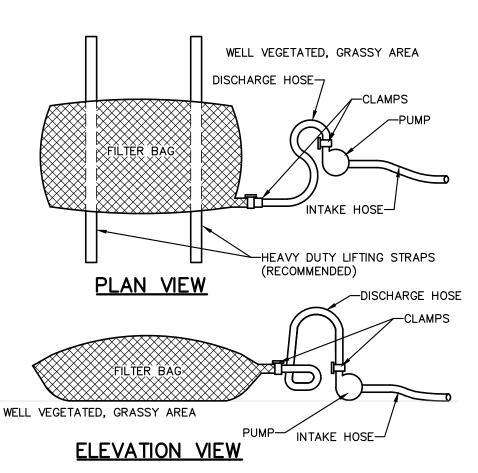
BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY, BAGS SHALL NOT BE PLACED ON SLOPES GREATER 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 DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM 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.

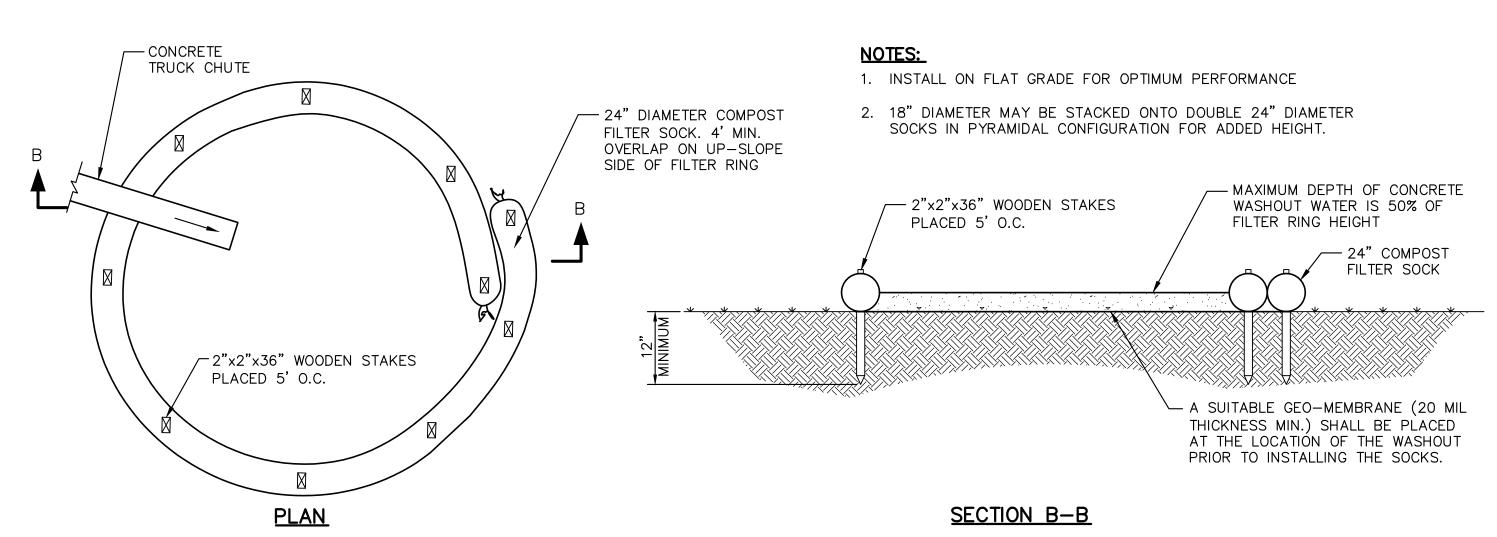
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS

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

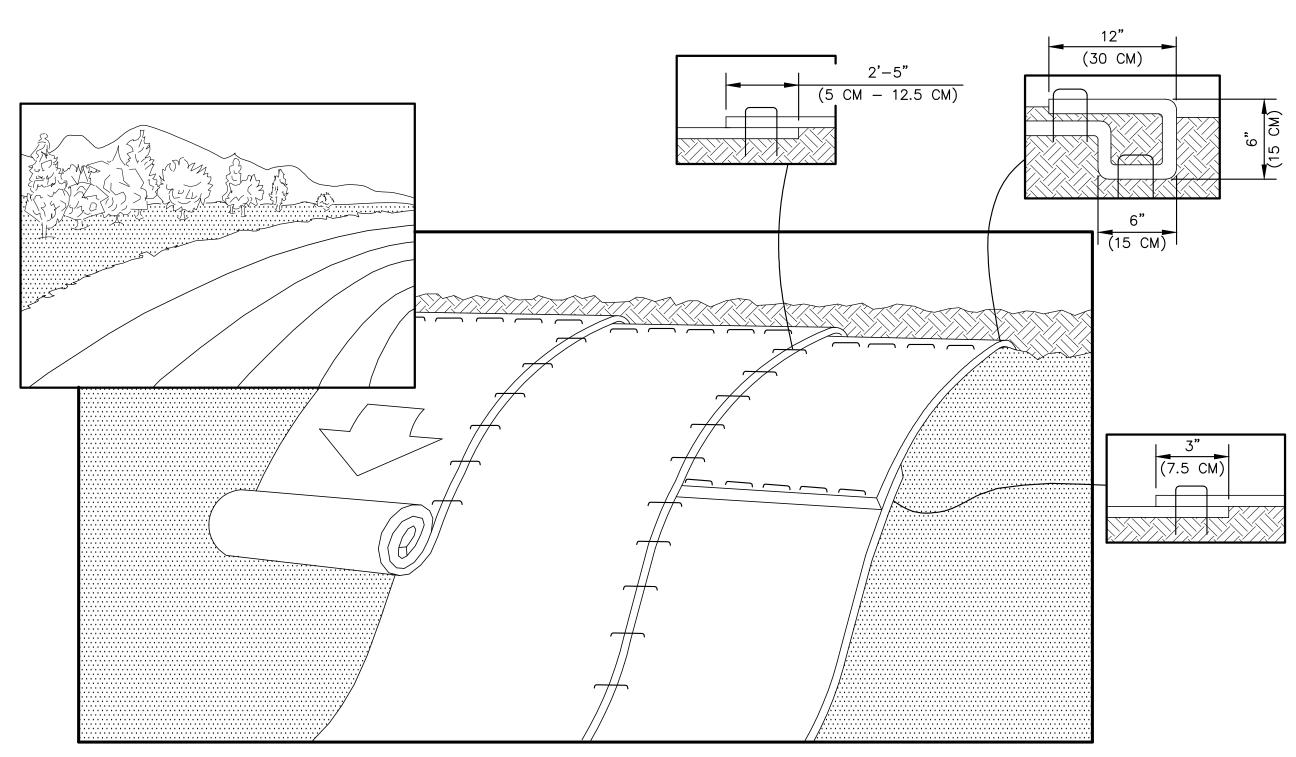
FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.



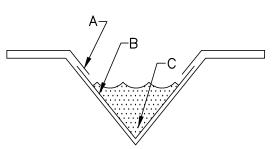
PUMPED WATER FILTER BAG DETAIL



COMPOST SOCK WASHOUT INSTALLATION



- 1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S), 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.
- 2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6" (15CM) DEEP x 6" (15CM) WIDE TRENCH WITH APPROXIMATELY 12" (30CM) OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S 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 RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30CM) APART ACROSS THE WIDTH OF THE RECP's.
- 3. ROLL CENTER RECP'S (A.) DOWN OR (B.) HORIZONTALLY ACROSS SLOPE. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP'S 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.
- 4. THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5CM-12.5CM) OVERLAP DEPENDING ON RECP'S TYPE.
- 5. CONSECUTIVE RECP'S 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 RECP'S WIDTH.
- 6. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15CM) MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP'S.



CRITICAL POINTS: OVERLAPS AND SEAMS PROJECTED WATER LINE CHANNEL BOTTOM/SIDE SLOPE VERTICES

* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.

SLOPE INSTALLATION DETAIL

TEMPORARY AND PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS PROJECT NAME: KOCHER WELL FIELD FERGUSON TOWNSHIP, LOCATION: CENTRE COUNTY, PA PREPARED BY: 8/18/20 AJL DATE: 8/18/20 CHECKED BY: DATE:

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:	85%
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:	PA VALLEY & RIDGE PROVINCE UPLAND GRASS MIX (ERNST SEED MIX NO. ERNMX-230)
% PURE LIVE SEED:	87%
APPLICATION RATE:	20 LB./ACRE
FERTILIZER TYPE:	10-10-20

FERTILIZER APPL. RATE: 1000 LB./ACRE 6 T./ACRE LIMING RATE: **MULCH TYPE:** STRAW **MULCHING RATE:** 3 T./ACRE ANCHOR MATERIAL N/A **ANCHORING METHOD:** MECHANICAL CRIMPING N/A RATE OF ANCHOR MATERIAL APPL: **SEEDING SEASON DATES:** MARCH 15 - JUNE 1 AND AUGUST 1 - OCTOBER 1

PERMANENT SEED SCHEDULE

ERNMX #ERNMX-230 (PA VALLEY & RIDGE PROVINCE UPLAND GRASS MIX) SEEDING RATE 20 LBS/ACRE, OR 1/2 LB/1,000 SQ. FT. MIX TYPE: UPLANDS & MEADOWS

SPECIES LIST:

• 32.0% SCHIZACHYRIUM SCOPARIUM, FORT INDIANTOWN GAP-PA ECOTYPE (LITTLE BLUESTEM, FORT INDIANTOWN GAP-PA ECOTYPE)

~2"x2"x48" WOODEN

STAKES PLACED 10' O.C.

- 32.0% SORGHASTRUM NUTANS, PA ECOTYPE (INDIANGRASS, PA ECOTYPE) 25.0% ELYMUS VIRGINICUS, PA ECOTYPE (VIRGINIA WILDRYE, PA ECOTYPE)
- 5.0% ANDROPOGON GERARDII, 'NIAGARA' (BIG BLUESTEM, 'NIAGARA')
- 5.0% PANICUM VIRGATUM, 'SHELTER' (SWITCHGRASS, 'SHELTER')
- 1.0% PANICUM CLANDESTINUM, TIOGA (DEERTONGUE, TIOGA)

MULCHING AND SEEDING NOTES

- A. 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 PREMIXED 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.
- G. 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.
- H. 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.
- J. 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. RUNNING SEED THROUGH THE PUMPING SYSTEM CAN RESULT IN EXCESSIVE 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.
- K. 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.
- M. 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
- 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 PROPÈRLY 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.
- 5. ANY MATERIAL THAT DOES NOT MEET THE CRITERIA OF THE CLEAN/SAFE FILL POLICY SHALL BE DISPOSED OF AT A PA DEP
- 6. 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:

A. WASTE MANAGEMENT PLAN DEVELOPMENT AND IMPLEMENTATION.

B. TECHNIQUES TO MINIMIZE WASTE GENERATION. SORTING AND SEPARATING OF WASTE MATERIALS

SALVAGE OF EXISTING MATERIALS AND ITEMS FOR REUSE OR RESALE. E. RECYCLING OF MATERIALS THAT CANNOT BE REUSED OR SOLD.

AT A MINIMUM, THE FOLLOWING WASTE CATEGORIES SHALL BE DIVERTED FROM LANDFILLS:

INERTS (EG, CONCRETE, MASONRY AND ASPHALT)

 CLEAN DIMENSIONAL WOOD AND PALETTE 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.

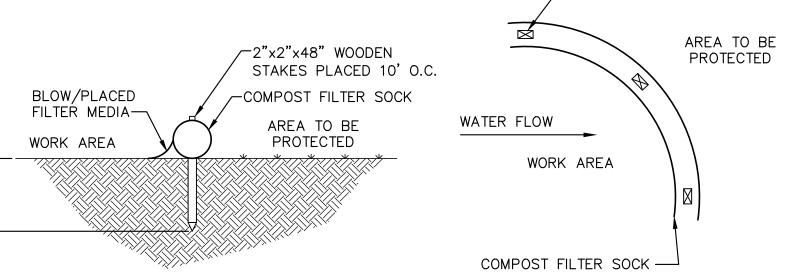
 PLASTICS (EG, ABS, PVC). CARPET AND/OR PAD AND OTHER FLOORING MATERIALS.

 GYPSUM 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



COMPOST FILTER SOCK

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

1	08/20/2020	REVISED PER TOWNSHIP COMMENTS	
NO.	DATE	DESCRIPTION	
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PROFESSIONAL / TH WILLIAM BELDIN, JR ENGINEER / / No. PE081568 SEAL

EROSION AND SEDIMENT CONTROL (ESC) NOTES AND DETAILS STATE COLLEGE BOROUGH WATER AUTHORITY

KOCHER WELL FIELD WATER PUMPING IMPROVEMENTS

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA DATE: 07/22/2020 JOB: 16049 SCALE: AS SHOWN

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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. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
- 2. AT LEAST TEN (10) DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION MEETING.
- 3. AT LEAST THREE (3) BUSINESS DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND
- 4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCES PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (PADEP) PRIOR TO IMPLEMENTATION.
- 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. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
- 7. 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 THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
- 8. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE CENTRE COUNTY CONSERVATION DISTRICT AND/OR THE DEP REGIONAL OFFICE.
- 9. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED. BURIED, DUMPED, OR DISCHARGED AT THE SITE.
- 10. 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.
- 11. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
- 12. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- 13. 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 AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
- 14. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
- 15. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED IN THE PLAN.
- 16. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES 6 TO 12 INCHES ON COMPACTED SOILS PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 6 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
- 17. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
- 18. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- 19. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- 20. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- 21. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- 22. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- 23. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
- 24. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUB-AREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
- 25. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
- 26. E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
- 27. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE CENTRE COUNTY CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPS.
- 28. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPS. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPS SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID RE-VEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
- 29. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE CENTRE COUNTY CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.
- 30. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT—LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE PADEP AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.
- 31. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED IN THE PLAN. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS.
- 32. BIODEGRADABLE DOUBLE NET EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES GREATER THAN 3H:1V, ALL CHANNEL SIDES AND BOTTOMS AND IN ALL DISTURBED AREAS WITHIN 100 FEET OF WATER OF THE COMMONWEALTH.
- 33. MULCH APPLIED TO PERMANENTLY STABILIZED AREAS IS TO BE MECHANICALLY CRIMPED TO PREVENT BLOW OFF AND LOSS OF MULCH FROM RAINFALL. IN THE EVENT THAT MECHANICAL CRIMPING IS INEFFECTIVE, THE MULCH SHALL BE ANCHORED BY A NON-TOXIC BINDING EMULSION APPLIED TO THE MULCH AT THE MANUFACTURERS RECOMMENDED RATE. MANUFACTURERS INFORMATION MUST BE PROVIDED TO THE ENGINEER TO VERIFY THAT THE COMPONENTS OF THE EMULSION ARE NON-TOXIC TO VEGETATION AND ANIMAL SPECIES.

STORMWATER MANAGEMENT STATEMENT

THE DEVELOPMENT ACTIVITIES IDENTIFIED IN THIS PLAN ARE EXEMPT FROM THE REQUIREMENT TO SUBMIT A STORMWATER MANAGEMENT SITE PLAN TO FERGUSON TOWNSHIP FOR REVIEW, BUT REMAIN SUBJECT TO THE DESIGN STANDARDS AND CRITERIA OF CHAPTER 26 (STORMWATER MANAGEMENT) OF THE FERGUSON TOWNSHIP CODE OF ORDINANCES. THE DEVELOPMENT WILL CREATE A LAND DISTURBANCE OF LESS THAN 5,000 SQUARE FEET. RUNOFF FROM THE VFD BUILDINGS IS DISCHARGED VIA GUTTERS TO SPLASH BLOCKS WHICH THEN TRAVELS OVERLAND TO A FEMA IDENTIFIED FLOODPLAIN. ADEQUATE DISCONNECTION OF THE RUNOFF FROM THE DISCHARGE LOCATION AT EACH STRUCTURE IS PROVIDED BEFORE REACHING THE FLOODPLAIN OR LEAVING THE PROPERTY AND THE HEALTH, SAFETY, AND PROPERTY OF DOWNSTREAM OWNERS WILL NOT BE NEGATIVELY AFFECTED BY THE CONSTRUCTION OF THE VFD BUILDINGS.

EROSION AND SEDIMENT CONTROL CONSTRUCTION SEQUENCE

- A. ALL EARTH DISTURBANCE AND CONSTRUCTION ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE DRAWINGS.

 DEVIATION FROM THIS SEQUENCE MUST BE APPROVED BY THE ENGINEER, THE CENTRE COUNTY CONSERVATION DISTRICT AND/OR THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (PADEP) PRIOR TO IMPLEMENTATION. EACH STEP OF THE SEQUENCE SHALL BE COMPLETED BEFORE PROCEEDING TO THE NEXT STEP, EXCEPT AS NOTED.
- B. A PRE-CONSTRUCTION MEETING SHALL BE HELD AND NOTIFICATION MUST BE PROVIDED TO THE ENGINEER PRIOR TO THE ISSUANCE OF NOTICE TO PROCEED WITH CONSTRUCTION. THE CONTRACTOR IS TO NOTIFY THE ENGINEER, OWNER AND THE CENTRE COUNTY CONSERVATION DISTRICT AT LEAST TEN (10) WORKING DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION TO SCHEDULE THE MEETING. THE CONTRACTOR MAY ALSO BE REQUIRED BY THE STATE COLLEGE BOROUGH WATER AUTHORITY TO BE LISTED AS A CO-PERMITTEE ON SOME PERMITS.
- C. AT LEAST THREE (3) WORKING DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA THAT WAS PREVIOUSLY UNMARKED, NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM FOR THE LOCATION OF ANY EXISTING UNDERGROUND UTILITIES. THE LIMITS OF DISTURBANCE (LOD), WATERS OF THE COMMONWEALTH AND ANY OTHER SENSITIVE ENVIRONMENTAL FEATURES SHALL ALSO BE CLEARLY MARKED AND DELINEATED IN THE FIELD PRIOR TO THE BEGINNING OF ANY EARTH DISTURBANCE ACTIVITY.
- D. AREAS TO BE PROTECTED, WATERS OF THE COMMONWEALTH AND ANY OTHER SENSITIVE ENVIRONMENTAL FEATURES SHALL ALSO BE CLEARLY MARKED AND DELINEATED IN THE FIELD PRIOR TO THE BEGINNING OF ANY EARTH DISTURBANCE ACTIVITY. ANY AREA THAT IS LEFT UNDISTURBED FOR FOUR (4) DAYS OR GREATER SHALL BE TEMPORARILY STABILIZED UNTIL GRADING OPERATIONS RE—COMMENCE. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES GREATER THAN 3H:1V AND IN ALL DISTURBED AREAS WITHIN 100 FEET OF WATERS OF THE COMMONWEALTH. AREAS WITHIN 100 FEET OF WATERS OF THE COMMONWEALTH SHALL BE PERMANENTLY STABILIZED WITH SEED AND EROSION CONTROL MATTING IMMEDIATELY UPON REACHING FINAL GRADE.
- E. INSTALL COMPOST FILTER SOCKS AS SHOWN ON THE APPROVED ESC PLAN DRAWINGS. AFTER INSTALLATION OF THE PERIMETER SEDIMENT CONTROLS, NOTIFY THE CENTRE COUNTY CONSERVATION DISTRICT AT LEAST THREE (3) WORKING DAYS PRIOR TO ANY FURTHER CONSTRUCTION TO PERFORM AN INSPECTION OF THE LOCATION AND CONSTRUCTION OF THE PERIMETER SEDIMENT CONTROLS. NO CONSTRUCTION ACTIVITIES MAY BE PERFORMED UNTIL AUTHORIZATION TO PROCEED WITH CONSTRUCTION ACTIVITIES IS PROVIDED TO THE CONTRACTOR BY A REPRESENTATIVE FROM THE CENTRE COUNTY CONSERVATION DISTRICT.
- F. BEGIN CONSTRUCTION OF VFD CONTROL BUILDING FOUNDATIONS AND THE UNDERGROUND ELECTRICAL CONDUITS LINKING THE MAIN CONTROL BUILDING TO EACH VFD CONTROL BUILDING. UPON COMPLETION OF THE FOUNDATION CONSTRUCTION AND CONDUIT INSTALLATION, TEMPORARILY STABILIZE ALL DISTURBED AREAS WITH THE APPROPRIATE SEED MIXTURE AND MULCH BEFORE CONTINUING CONSTRUCTION ACTIVITIES.
- G. CONTINUE THE CONSTRUCTION OF THE VFD CONTROL BUILDINGS. INSTALL ANY REQUIRED LANDSCAPING AND PERMANENTLY STABILIZED ALL DISTURBED AREAS WITH THE APPROPRIATE SEED MIXTURE AND BIODEGRADABLE, DOUBLE NET EROSION CONTROL MATTING.
- H. REMOVE REMAINING SEDIMENT AND EROSION CONTROLS AFTER UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL VEGETATION HAS BEEN ESTABLISHED AND APPROVAL TO REMOVE THE CONTROLS HAS BEEN PROVIDED BY THE CENTRE COUNTY CONSERVATION DISTRICT. PERMANENTLY STABILIZE ALL AREAS DISTURBED DURING THE REMOVAL OF THE PERIMETER CONTROLS. ADDITIONAL SEED AND MULCH, AND IF APPLICABLE, EROSION CONTROL MATTING ARE TO BE PLACED AS NECESSARY TO PROMOTE REVEGETATION OF ANY AREAS WHICH ARE DISTURBED DUE TO REMOVAL OF CONTROLS.

EROSION AND SEDIMENT CONTROL MAINTENANCE SCHEDULE

- 1. ALL SEDIMENT AND EROSION CONTROL FACILITIES SHALL BE CHECKED FOR DAMAGE AND CLOGGING ON A WEEKLY BASIS AND AFTER EACH STORM EVENT. ALL FACILITIES THAT ARE DAMAGED, CLOGGED, OR CAN NO LONGER PERFORM IN THE MANNER FOR WHICH THEY WERE DESIGNED SHALL BE REPLACED.
- 2. ANY PERMANENTLY STABILIZED AREAS THAT BECOME ERODED SHALL HAVE THE TOPSOIL REPLACED AND THE GRASS SOWN AGAIN WITH NEW MULCH APPLIED. IF CULTIVATION OF A NEW LEGUME OR GRASS CROP IS NOT PRACTICAL IN THE ERODED AREA, THE CONTRACTOR SHALL INSTALL NYLON EROSION CONTROL MATS.
- 3. IF THE VEGETATIVE COVER ESTABLISHED IS ALLOWED TO DETERIORATE AND BECOME INEFFECTIVE, A FERTILIZATION AND SEEDING PROGRAM SHALL BE ESTABLISHED AND CARRIED OUT AS THE CONSTRUCTION PROCEEDS. AREAS WHERE FAILURES HAVE BEEN EXPERIENCED IN THE ESTABLISHMENT OF BOTH PERMANENT AND TEMPORARY VEGETATIVE PROTECTION SHALL BE PROMPTLY TREATED. THE RE-ESTABLISHMENT OF PERMANENT VEGETATIVE COVER SHALL BE INITIATED AS SOON AS POSSIBLE.
- 4. WHEN THE ACCUMULATION OF SEDIMENT IN THE CONTROL DEVICES REACHES 1/3 THE DEPTH OF THE DEVICE OR AS SPECIFIED BY THE MANUFACTURER, THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN SUCH LOCATIONS AS DETERMINED BY THE CONTRACTOR AND APPROVED BY THE OWNER. THESE LOCATIONS SHALL BE SELECTED SUCH THAT THE SEDIMENT WILL NOT ERODE INTO THE CONSTRUCTION AREA OR ANY NATURAL WATERWAY.
- 5. ALL SEDIMENT AND EROSION FACILITIES MUST BE MAINTAINED IN OPERATING CONDITION UNTIL UPSTREAM AREAS ARE STABILIZED WITH FINAL GROUND COVER AND HAVE ESTABLISHED UNIFORM 70% VEGETATIVE COVER OR GREATER OF EROSION RESISTANT PERENNIAL SPECIES.
- 6. SEDIMENT DEPOSITED ON PAVED ROADWAYS SHOULD BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE THROUGH STREET SWEEPING AS NEEDED. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO THE ROADWAY DITCHES, SEWERS, CULVERTS OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE
- 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 AND AFTER EACH RAINFALL EVENT AND RECORDING ANY DEFICIENCIES THAT MAY BE FOUND IN A LOG WHICH WILL BE MADE AVAILABLE UPON REQUEST.
- 10. THE CONTRACTOR SHALL PERMIT ALL OFFICIAL REPRESENTATIVES FROM PADEP AND THE CENTRE COUNTY CONSERVATION DISTRICT ON SITE TO INSPECT THE EROSION CONTROLS INSTALLED FOR THIS PROJECT. ALL DEFICIENCIES IN THE CONTROLS MUST BE CORRECTED IMMEDIATELY.
- 11. ALL TEMPORARY CONTROLS SHALL BE MAINTAINED AS FOLLOWS:

A. COMPOST FILTER SOCK MAINTENANCE;

- THE COMPOST FILTER SOCK INSTALLATION SHOULD BE INSPECTED WEEKLY AND AFTER EVERY RAINFALL EVENT.
- ACCUMULATED SEDIMENTS WILL BE REMOVED AS REQUIRED TO KEEP THE COMPOST FILTER SOCK FUNCTIONAL. IN ALL CASES, REMOVE DEPOSITS WHERE ACCUMULATIONS REACH 1/3 THE ABOVE GROUND HEIGHT OF THE COMPOST FILTER SOCK.
- 3. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
- 4. ADHERE TO ANY MANUFACTURER'S RECOMMENDATIONS FOR REPLACING COMPOST FILTER SOCK DUE TO WEATHERING.

B. EROSION CONTROL BLANKETS MAINTENANCE

- 1. BLANKETED AREAS SHALL BE INSPECTED WEEKLY OR AFTER ANY RAINFALL EVENT UNTIL A MINIMUM UNIFORM 70% COVERAGE OF EROSION RESISTANT PERENNIAL VEGETATION IS ESTABLISHED.
- DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN FOUR (4) CALENDAR DAYS.

C. CONCRETE WASHOUT STRUCTURES MAINTENANCE

- 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.

D. 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. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED.
- 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. IF ANY PROBLEMS ARE DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

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. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE.)
- 3. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS.

1 08/20/2020 REVISED PER TOWNSHIP COMMENTS
NO. DATE DESCRIPTION SEAL

REVISIONS

EROSION AND SEDIMENT CONTROL (ESC) NOTES

STATE COLLEGE BOROUGH WATER AUTHORITY

KOCHER WELL FIELD WATER PUMPING IMPROVEMENTS

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

DATE: 07/22/2020 JOB: 16049

sheet no:

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SCALE: AS SHOWN