CONSTRUCTION DOCUMENTS

FOR

FLANNERY TRACK IMPROVEMENTS

WYOMISSING AREA SCHOOL DISTRICT

630 EVANS AVENUE WYOMISSING, PA 19610

MARCH 6, 2019

LOCATION MAP



ATHLETIC FACILITY CONSULTANTS



1034 EAST CHOCOLATE AVENUE HERSHEY, PA 17033

PHONE: (717) 312-3012 **WWW.TURFTRACKANDCOURT.COM**



CIVIL CONSULTANT

SPOTTS, STEVENS AND MCCOY

1047 NORTH PARK ROAD READING, PA 19610-0307 PHONE: (610) 610.621.2000 WWW.SSMGROUP.COM

SHEET INDEX

SITE DEVELOPMENT

EXISTING CONDITIONS / DEMOLITION PLAN

DESCRIPTIVE SITE PLAN

DETAILS DETAILS

STORMWATER, SOIL EROSION AND SEDIMENT CONTROLS

COVER SHEET LEGENDS AND NOTES

EXISTING CONDITIONS PLAN C.1-55 DEMOLITION PLAN

EROSION AND SEDIMENT CONTROL PLAN

EROSION AND SEDIMENT CONTROL DETAILS EROSION AND SEDIMENT CONTROL NOTES

UNDERGROUND UTILITIES

INFORMATION CONCERNING UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE COMPLETE OR ACCURATE. THE CONTRACTOR IS RESPONSIBLE TO CONTACT ALL UTILITIES AND / OR HAND EXCAVATE TO DETERMINE THE LOCATION AND DEPTH OF THE UTILITIES PRIOR TO EXCAVATION. THE CONTRACTOR WILL CONTACT THE UNDERGROUND LOCATING SERVICE, TEL. 1800-242-1776 (PA ONE CALL) FOR THE ACTUAL LOCATION OF THEIR FACILITIES BEFORE ANY EXCAVATION WORK IS STARTED. ALSO CONFER WITH OWNER CONCERNING ANY ADDITIONAL UTILITY INFORMATION PRIOR TO EXCAVATION.



TERATIONS OR ADDITIONS
THIS PROJECT SHALL BE AT USER'S SOLE RISK AND WITHOUT LIABILITY TO TURF, TRACK & COURT, LLC



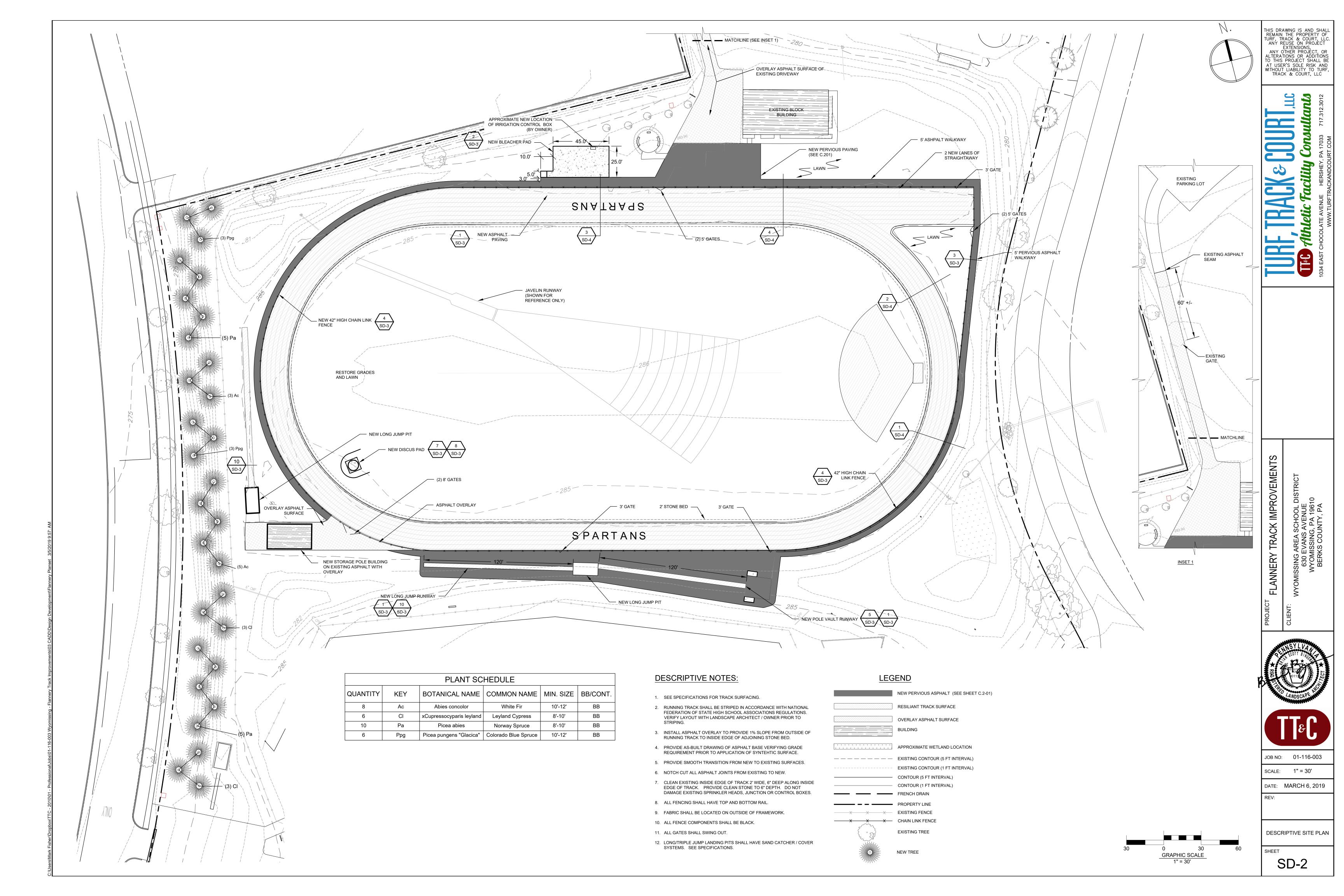


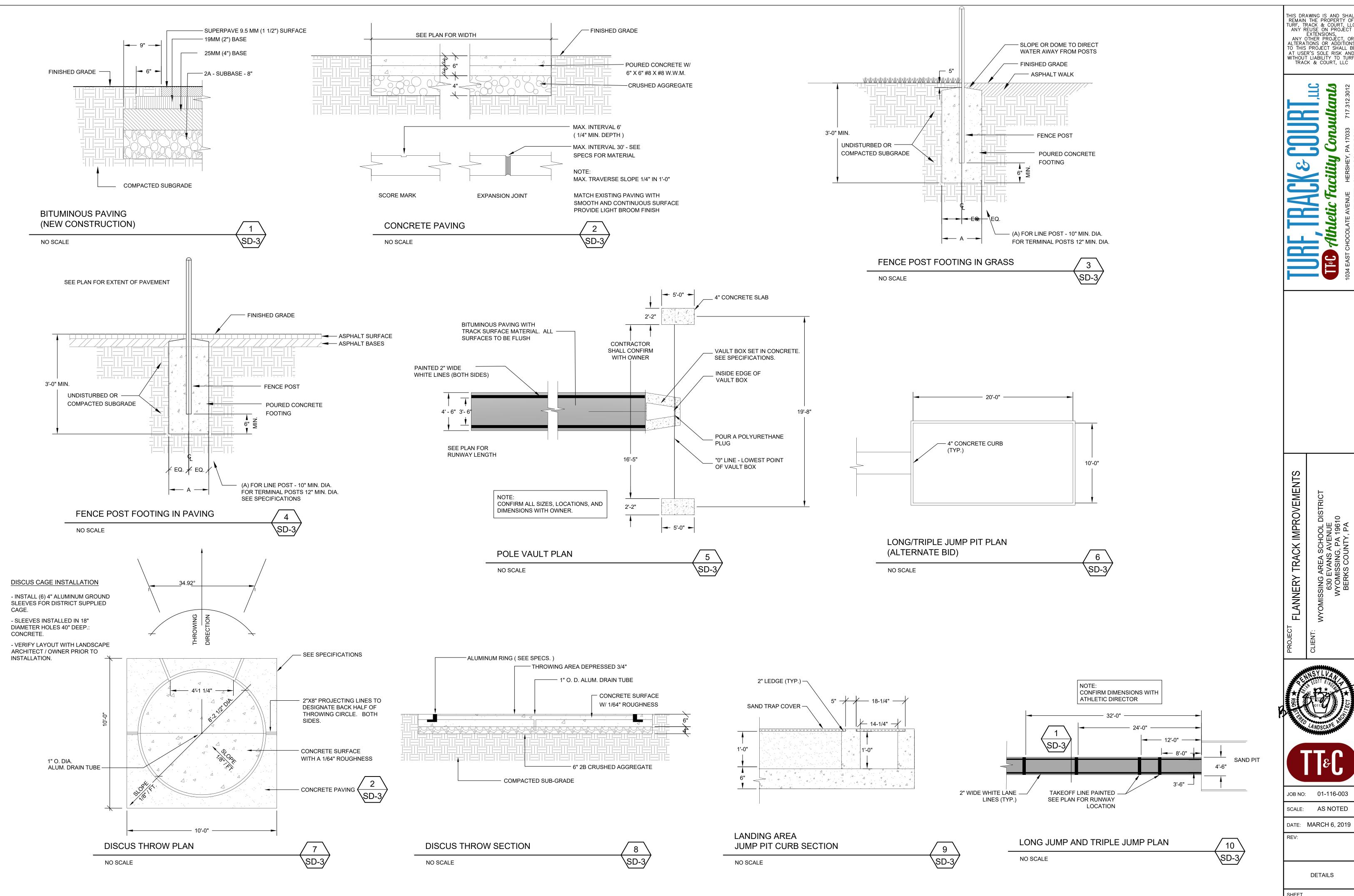
JOB NO: 01-116-003

SCALE: 1" = 30' DATE: MARCH 6, 2019

EXISTING CONDITIONS DEMO PLAN

SD-1





THIS DRAWING IS AND SHALL REMAIN THE PROPERTY OF TURF, TRACK & COURT, LLC. ANY REUSE ON PROJECT EXTENSIONS, ANY OTHER PROJECT, OR ALTERATIONS OR ADDITIONS TO THIS PROJECT SHALL BE AT USER'S SOLE RISK AND WITHOUT LIABILITY TO TURF, TRACK & COURT, LLC



JOB NO: 01-116-003

SCALE: AS NOTED

DETAILS

SD-3

THIS DRAWING IS AND SHALI REMAIN THE PROPERTY OF TURF, TRACK & COURT, LLC ANY REUSE ON PROJECT EXTENSIONS, ANY OTHER PROJECT, OR ALTERATIONS OR ADDITIONS TO THIS PROJECT SHALL BE

AT USER'S SOLE RISK AND WITHOUT LIABILITY TO TURF, TRACK & COURT, LLC



JOB NO: 01-116-003 SCALE: AS NOTED

DATE: MARCH 6, 2019

DETAILS

SD-4

FLANNERY TRACK IMPROVEMENTS

PREPARED FOR

WYOMISSING AREA SCHOOL DISTRICT

BOROUGH OF WYOMISSING, BERKS COUNTY PENNSYLVANIA

BY

PLAN SUBMITTAL /REVISION DATES
02/19/19 INITIAL PLAN SUBMISSION

1047 North Park Road
PO Box 6307
Reading, PA 19610-0307
P: 610.621.2000
F: 610.621.2001
LEHIGH VALLEY
Roma Corporate Center,
Suite 106
1605 N Cedar Crest Blvd
Allentown, PA 18104
P: 610.849.9700
F: 610.621.2001
LANCASTER
701 Creekside Lane
Lititz, PA 17543
P: 717.568.2678

F: 610.621.2001



110116.0001 C.0-0

INDEX TO DRAWINGS

DESCRIPTION

DWG NO.	DESCRIPTION
C.0-01	COVER SHEET
C.0-02	LEGENDS AND NOTES
C.1-01	SITE PLAN
C.1-50	EXISTING CONDITIONS PLAN
C.1-55	DEMOLITION PLAN
C.2-01	SITE GRADING PLAN
C.2-50	EROSION AND SEDIMENT CONTROL PLAN
C.2-51	EROSION AND SEDIMENT CONTROL DETAILS
C.2-52	EROSION AND SEDIMENT CONTROL NOTES

PA ONE CALL INFORMATION



PA ONE CALL SERIAL NUMBER: 20190020646

MUNICIPALITY: WYOMISSING BOROUGH, BERKS COUNTY, PA

IT IS THE CONTRACTORS RESPONSIBILITY TO COMPLY WITH
THE PENNSYLVANIA ACT 287 AND TO CONTACT THE "ONE CALL
SYSTEM" THREE (3) WORKING DAYS (UNLESS OTHERWISE
NOTED) PRIOR TO START OF CONSTRUCTION.

OWNER:

WYOMISSING AREA SCHOOL DISTRICT 630 EVANS AVE READING, PA 19610

PROJECT DESCRIPTION:

THIS PROJECT PROPOSES RELOCATION OF THE POLE VAULT AND LONG JUMP AREAS, NEW BLEACHERS AND THE ADDITION OF A WALKWAY AROUND THE EXISTING TRACK. BOTH STANDARD AND IMPERVIOUS PAVING WILL BE USED IN THE EXPANSION OF THE PROPOSED PAVEMENT AREAS.

ELEVATION DATUM:

COORDINATES ARE BASED ON NORTH AMERICAN DATUM OF 1983 AND ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988, OBTAINED BY A VIRTUAL REFERENCE SPATIAL SYSTEM.

SOURCE OF TITLE:

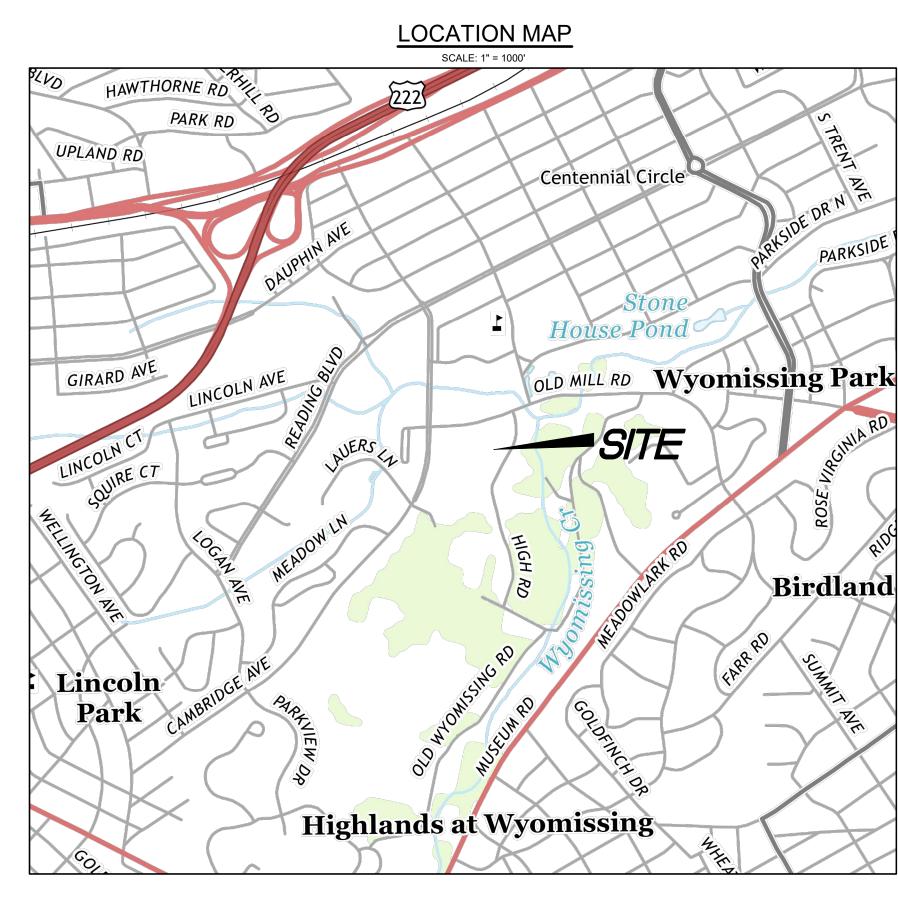
(A) BEING THE SAME PROPERTY WHICH THUN INVESTMENT COMPANY BY DEED DATED MAY 18, 1962 AND RECORDED IN DEED BOOK VOLUME 1408, PAGE 818, BERKS COUNTY RECORDS AT READING, PENNSYLVANIA, GRANTED AND CONVEYED UNTO THE SCHOOL DISTRICT OF THE BOROUGH OF WYOMISSING

PIN #439615544692 AREA = 10.37 ACRES

B ALSO BEING THE SAME PROPERTY WHICH WYOMISSING FOUNDATION, INC. BY DEED DATED SEPTEMBER 14, 1984 AND RECORDED IN DEED BOOK VOLUME 1863, PAGE 630, BERKS COUNTY RECORDS AT READING, PENNSYLVANIA, GRANTED AND CONVEYED UNTO WYOMISSING AREA SCHOOL DISTRICT.

PIN #439615545265 AREA = 5.59 ACRES

<u>RMATION</u>



COPYRIGHT 2019 SPOTTS, STEVENS & MCCOY

LEGEND

EXISTING LIGHTEXISTING TREE

EXISTING SIGN

EXISTING GASLINE

EXISTING WATERLINE

EXISTING SANITARY

EXISTING WITEREINE

====== EXISTING STORMWATER

—×—×— EXISTING FENCE

EXISTING WATER MANHOLE

• S. Co. EXISTING SANITARY CLEANOUT

- — -235— — EXISTING MAJOR CONTOUR

---- EXISTING MINOR CONTOUR

————— EXISTING PROPERTY LINE

EXISTING PROPERTY CORNER

= = = =

PROPOSED PERVIOUS PAVED AREA

PROPOSED STANDARD PAVED AREA

PROPOSED CONCRETE

TEST PIT

GENERAL NOTES:

- 1. EXISTING SITE CONDITIONS SURVEYED BY SPOTTS, STEVENS AND MCCOY, INC. ON JULY 13, 2018. COORDINATES ARE BASED ON NORTH AMERICAN DATUM OF 1983 AND ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988, OBTAINED BY A VIRTUAL REFERENCE SPATIAL SYSTEM.
- 2. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION. ALL KNOWN OR VISIBLE TO SURFACE UTILITIES HAVE BEEN SHOWN ON THE PLAN. SOME EXPLORATORY DIGGING MAY BE REQUIRED BY THE CONTRACTOR TO ACCURATELY LOCATE AND VERIFY LOCATION, SIZE, MATERIAL AND APPURTENANCES OF ON-SITE UTILITIES.
- 3. DURING CONSTRUCTION, CONTRACTOR SHALL PROTECT ALL PEDESTRIAN WALKWAYS AND VEHICULAR DRIVEWAY AREAS WITH APPROPRIATE BARRICADES AND WARNING DEVICES. TEMPORARY CONSTRUCTION FENCING SHALL BE IMPLEMENTED TO KEEP THE AREA OF DISTURBANCE FREE OF NON-CONSTRUCTION RELATED PERSONNEL. THE CONTRACTOR SHALL UTILIZE TRAFFIC CONTROL DEVICES, EMPLOY FLAG MAN OR TRAFFIC CONTROL PERSONNEL AS NECESSARY TO ENSURE VEHICULAR MOTORISTS NAVIGATE THE WORK ZONE SAFELY.
- CONTRACTOR SHALL SAFEGUARD ALL UTILITIES DURING CONSTRUCTION.
- 5. THE CONTRACTOR SHALL MAINTAIN AND PROTECT ALL EXISTING UTILITIES INCLUDING BUT NOT LIMITED TO SANITARY SEWER FACILITIES, STORMWATER MANAGEMENT FACILITIES, THROUGHOUT THE CONSTRUCTION OF THE PROJECT.

	L				
RELEASED FOR					
. בייראים					
K. DBIM					
N.B.:	0	03/06/19	RELEASED FOR BIDDING	K.M.F. K.M.F. K.M.F.	F. K.M.F.
DESIGNED BY: KMF CHKD: DBM	NO.	DATE	DESCRIPTION	MADE CHKD APVD	D APVD



SPOTTS, STEVENS & MCCOY
Engineers and Consultants

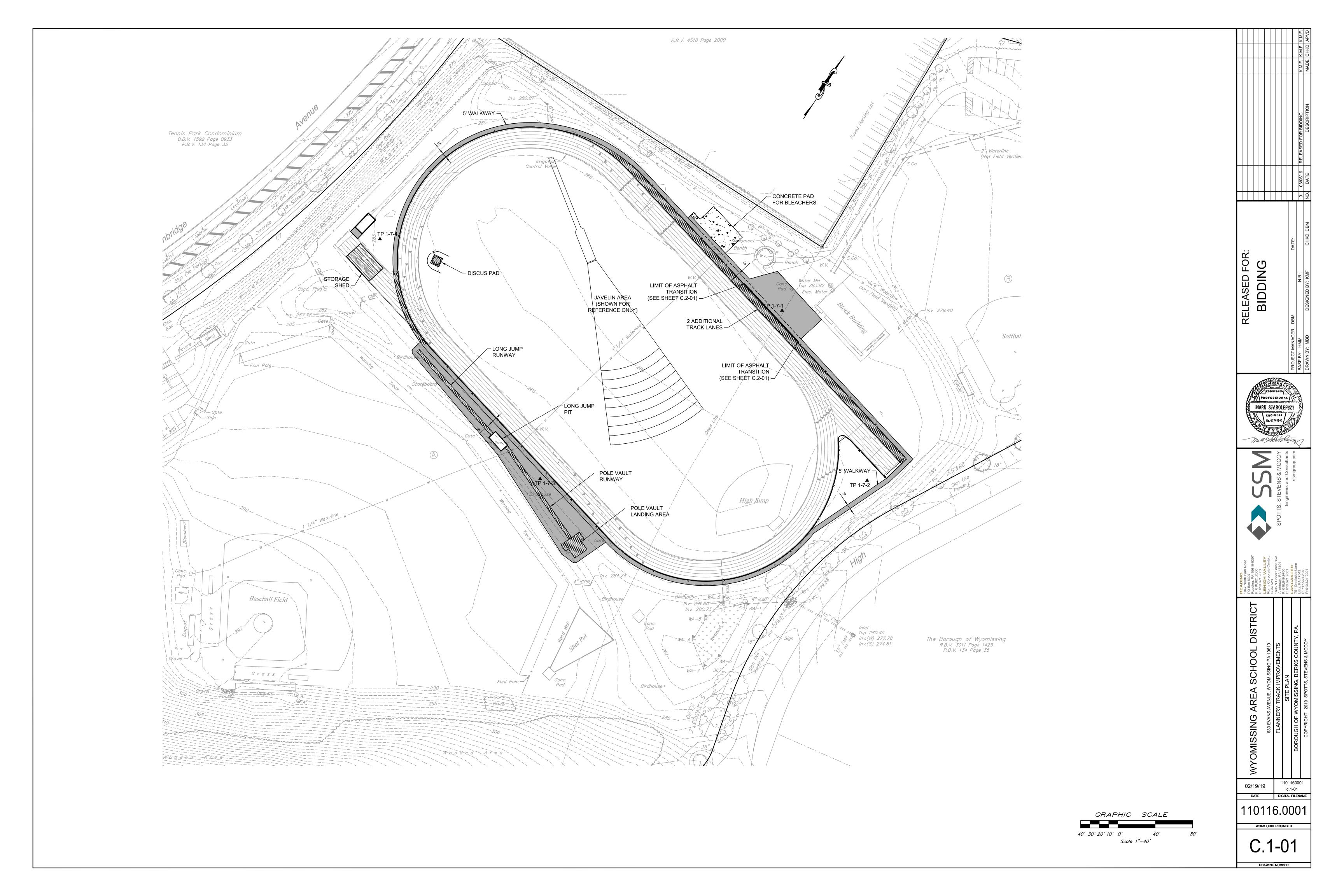
PO Box 6307
Reading, PA 19610-0307
P: 610,621.2000
F: 610,621.2001
LEHIGH VALLEY
Roma Corporate Center,
Suite 520
1605 N Cedar Crest Blvd
Allentown, PA 18104
P: 610,849.9700
F: 610,621.2001

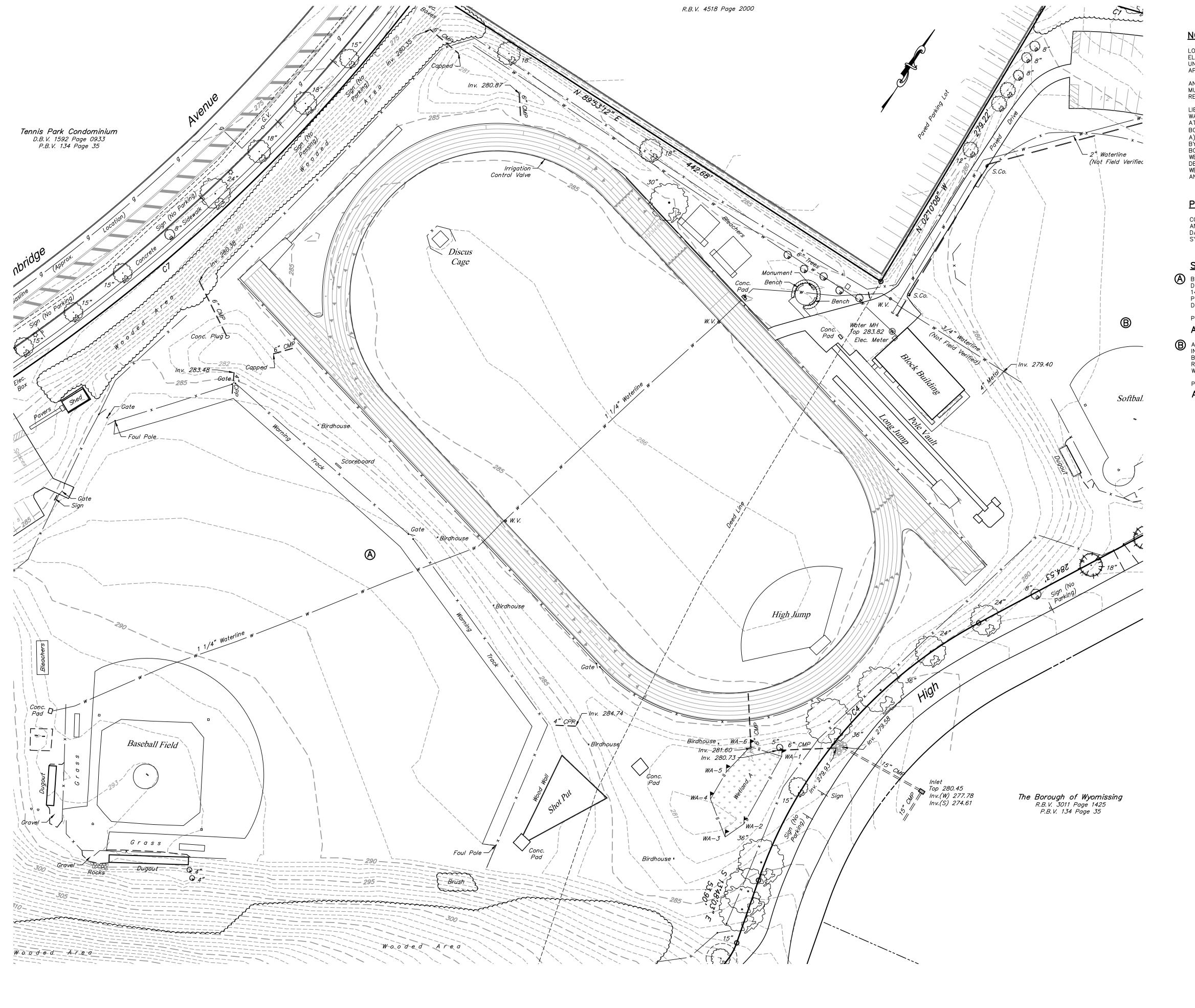
630 EVANS AVENUE, WYOMISSING PA 19610
FLANNERY TRACK IMPROVEMENTS
LEGENDS AND NOTES
BOROUGH OF WYOMISSING, BERKS COUNTY, PA.
COPYRIGHT 2019 SPOTTS, STEVENS & MCCOY

110116.0001

WORK ORDER NUMBER

DRAWING NUMBE





NOTES:

LOCATION OF SANITARY AND STORM MANHOLES, CURB INLETS, ELECTRIC AND LIGHT POLES AS SHOWN ARE FIELD LOCATED. ALL UNDERGROUND WATER, STORM, GAS AND SEWER SERVICES ARE APPROXIMATE AS SHOWN OR NOT KNOWN.

ANY CONSTRUCTION OR OPERATION UNDERTAKEN ON THIS SITE MUST CONFORM WITH ANY AND ALL LOCAL, STATE, DEED OR OTHER RESTRICTIONS IN EFFECT AT THE TIME OF OPERATION.

LIBERTY ENVIRONMENTAL, INC. INVESTIGATED FOR REGULATED WATERS WITHIN AN APPROXIMATELY 16 ACRE INVESTIGATION AREA AT THE FLANNERY FIELD PROJECT LOCATED IN WYOMISSING BOROUGH, BERKS COUNTY, PENNSYLVANIA. ONE WETLAND (WETLAND A) WAS DELINEATED WITHIN THE INVESTIGATION AREA AS DEFINED BY THE 1987 MANUAL AND SUBSEQUENT GUIDANCE. A PHASE 1 BOG TURTLE HABITAT ASSESSMENT WAS PERFORMED WITHIN WETLAND A CONCURRENTLY WITH THE REGULATED WATER THE PROPERTY OF THE PROPER DELINEATION. BOG TURTLE HABITAT IS NOT PRESENT WITHIN WETLAND A DUE TO LACK OF APPROPRIATE SOILS, VEGETATION AND HYDROLOGY ASSOCIATED WITH THE SPECIES.

PROJECT DATUM:

COORDINATES ARE BASED ON NORTH AMERICAN DATUM OF 1983 AND ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988, OBTAINED BY A VIRTUAL REFERENCE SPATIAL SYSTEM.

SOURCE OF TITLE

BEING THE SAME PROPERTY WHICH THUN INVESTMENT COMPANY BY DEED DATED MAY 18, 1962 AND RECORDED IN DEED BOOK VOLUME 1408, PAGE 818, BERKS COUNTY RECORDS AT READING, PENNSYLVANIA, GRANTED AND CONVEYED UNTO THE SCHOOL DISTRICT OF THE BOROUGH OF WYOMISSING.

PIN #439615544692 AREA = 10.37 ACRES

ALSO BEING THE SAME PROPERTY WHICH WYOMISSING FOUNDATION, INC. BY DEED DATED SEPTEMBER 14, 1984 AND RECORDED IN DEED BOOK VOLUME 1863, PAGE 630, BERKS COUNTY RECORDS AT READING, PENNSYLVANIA, GRANTED AND CONVEYED UNTO WYOMISSING AREA SCHOOL DISTRICT.

GRAPHIC SCALE

Scale 1"=40'

PIN #439615545265 AREA = 5.59 ACRES ELEASED FO BIDDING MARK STABOLEPSZY Mul Stato gos SSI

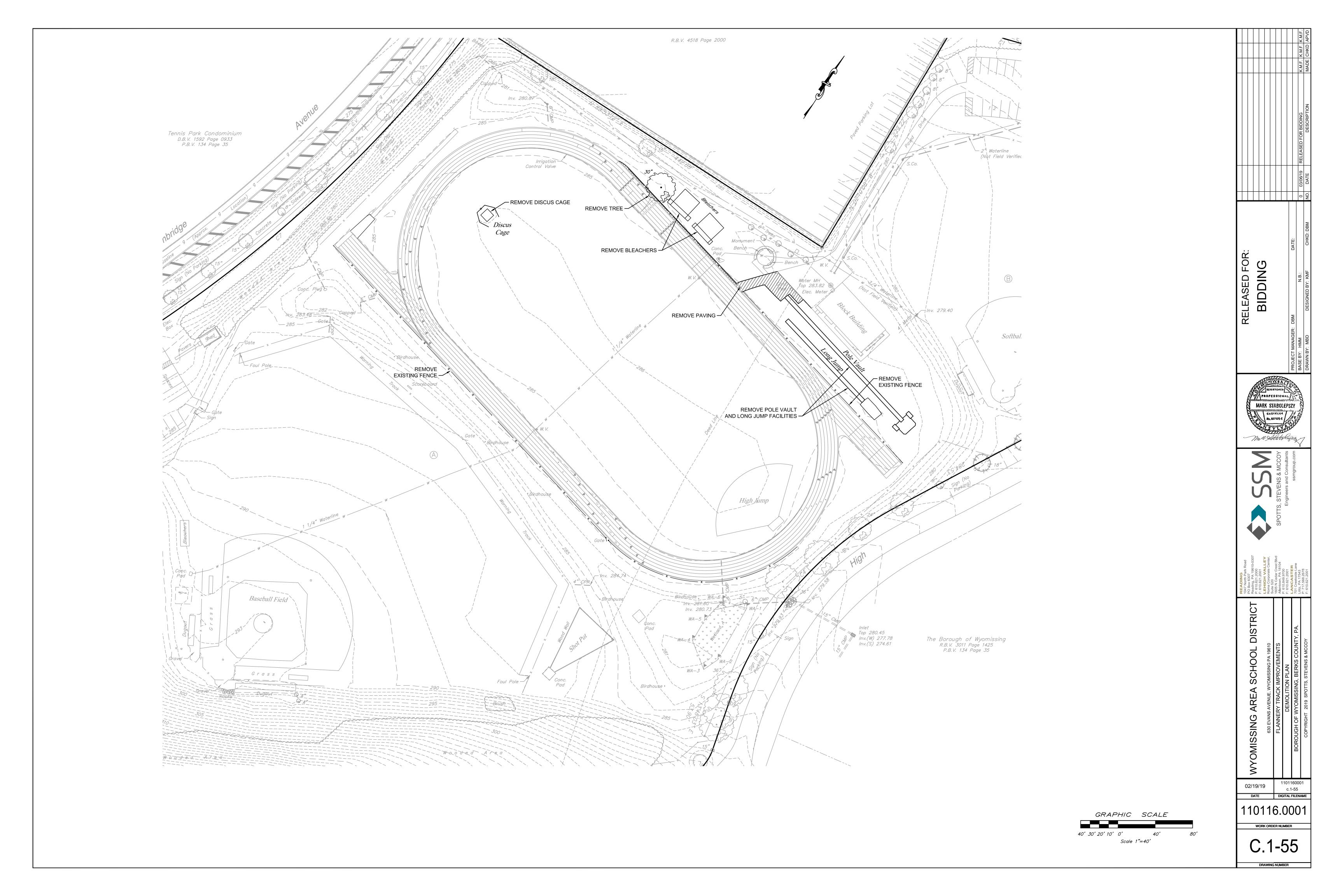
DIST

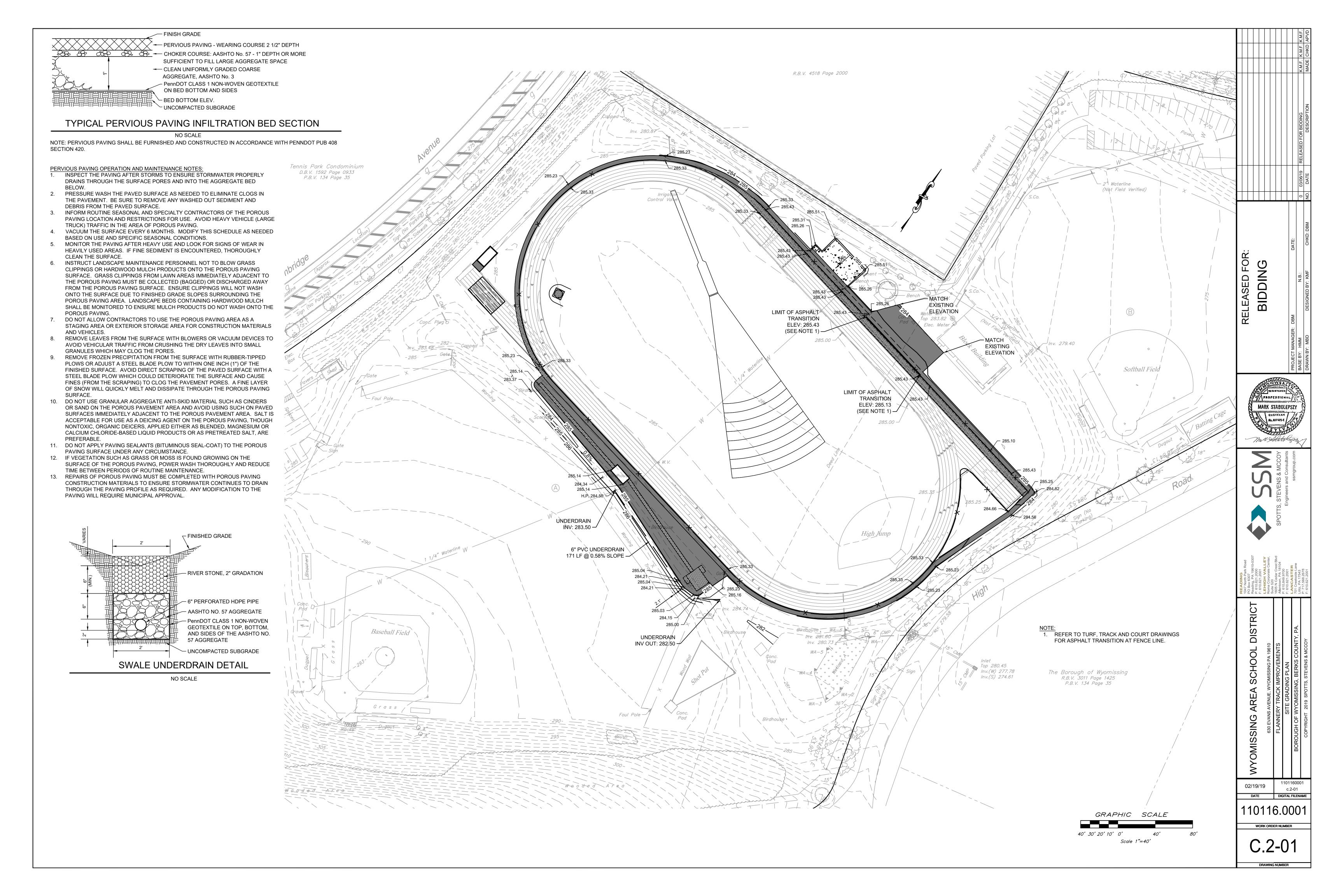
02/19/19 c.1-50

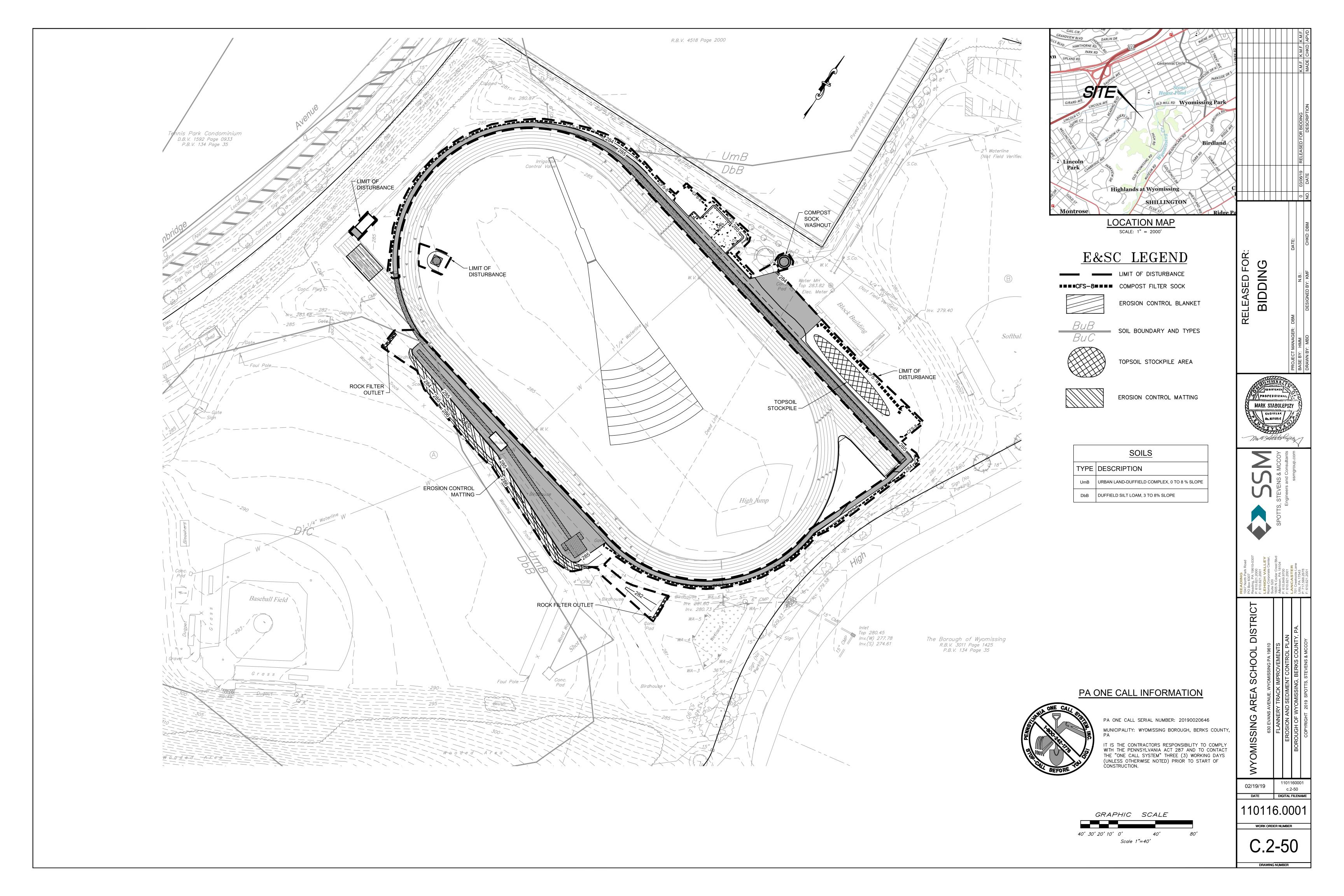
DATE DIGITAL FILENAME 110116.0001

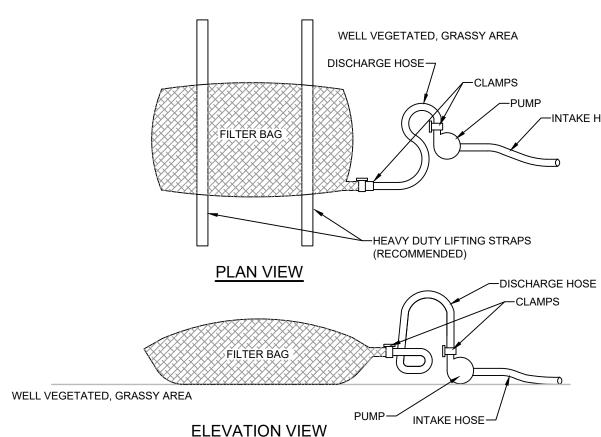
WORK ORDER NUMBER

02/19/19









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

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.

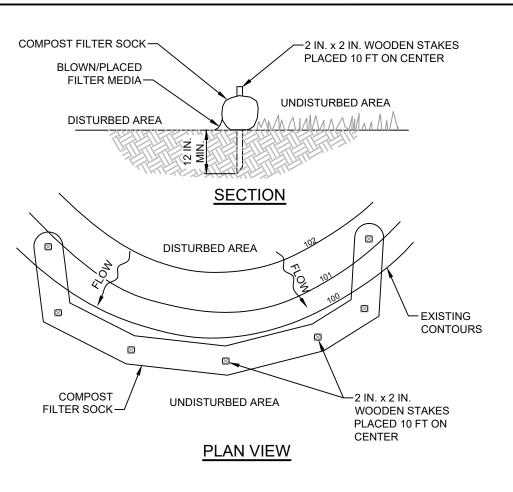
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

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 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.

STANDARD CONSTRUCTION DETAIL #3-16 PUMPED WATER FILTER BAG

NOT TO SCALE



SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN. COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED

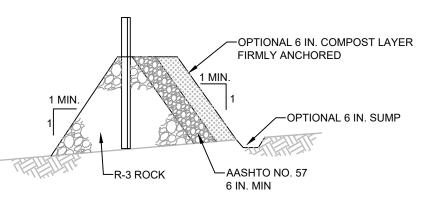
SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED

WITHIN 24 HOURS OF INSPECTION. BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

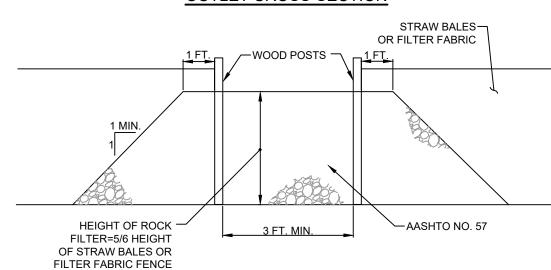
UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

STANDARD CONSTRUCTION DETAIL #4-1 COMPOST FILTER SOCK

NOT TO SCALE



OUTLET CROSS-SECTION

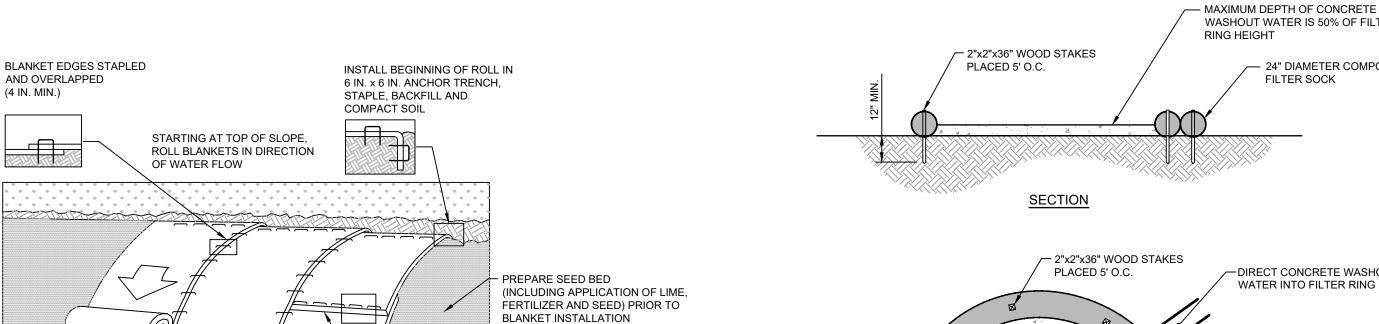


UP-SLOPE FACE

A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A SILT FENCE OR STRAW BALE BARRIER HAS OCCURRED DUE TO CONCENTRATED FLOW. ANCHORED COMPOST LAYER SHALL BE USED ON UPSLOPE FACE IN HQ AND EV WATERSHEDS.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET. STANDARD CONSTRUCTION DETAIL #4-6

ROCK FILTER OUTLET



NOT BE STRETCHED; IT MUST MAINTAIN GOOD SOIL CONTACT

THE BLANKET SHOULD —

AND OVERLAPPED

(4 IN. MIN.)

STAPLE SECURELY.

OVERLAP BLANKET ENDS 6 IN. MIN. WITH— REFER TO MANUF. RECOMMENDED THE UPSLOPE BLANKED OVERLYING THE STAPLING PATTERN FOR STEEPNESS DOWNSLOPE BLANKET (SHINGLE STYLE). AND LENGTH OF SLOPE BEING

BLANKETED

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

PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.

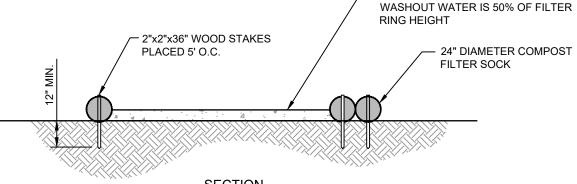
SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

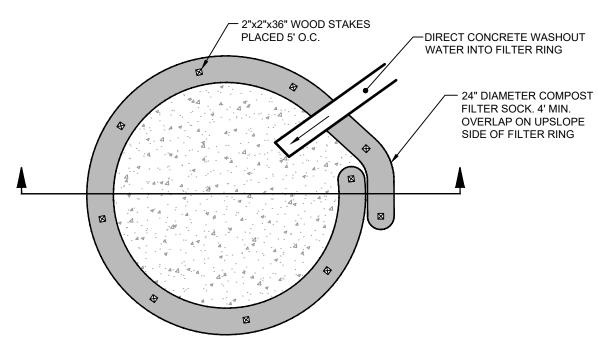
BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

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

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

STANDARD CONSTRUCTION DETAIL #11-1 **EROSION CONTROL BLANKET INSTALLATION**



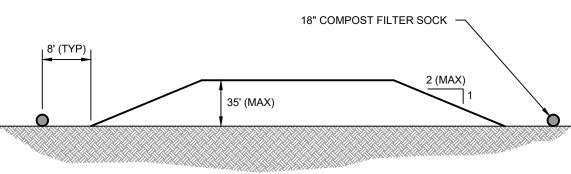


1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.

2. 18" DIAMETER FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.

COMPOST SOCK WASHOUT

NOT TO SCALE



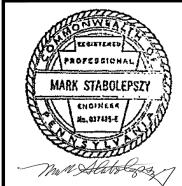
1. STOCKPILE HEIGHT SHALL NOT EXCEED 35'.

2. TOPSOIL STOCKPILES SHALL BE SEEDED IN ACCORDANCE WITH THE TEMPORARY SEEDING SPECIFICATIONS, AT THE END OF EACH WORKING DAY.

3. STOCKPILES SHALL BE SURROUNDED BY 18" COMPOST FILTER SOCKS (OR THE DOWNSTREAM EDGE IF ON A SLOPE) ALONG EXISTING LEVEL GRADE AT LEAST 8' FROM THE BASE OF THE STOCKPILE SIDE SLOPES. ACCUMULATED SEDIMENT SHALL BE REMOVED ONCE IT REACHES 1/2 THE HEIGHT OF THE SOCKS

TOPSOIL STOCKPILE

K.M.F. P	K.M.F. K.M.F. K	0 03/06/19 RELEASED FOR BIDDING NO. DATE DESCRIPTION	03/06/19 DATE	o Q	рате: СНКD: DBM







WYOMISSING AREA SCHOOL DISTRIC	630 EVANS AVENUE, WYOMISSING PA 19610	FLANNERY TRACK IMPROVEMENTS	EROSION AND SEDIMENT CONTROL DETAILS	BOROUGH OF WYOMISSING, BERKS COUNTY, PA.	COPYRIGHT 2019 SPOTTS, STEVENS & MCCOY
--------------------------------	---------------------------------------	-----------------------------	--------------------------------------	--	--

c.2-51 DATE DIGITAL FILENAME

110116.0001

02/19/19

SOILS INFORMATION

ACCORDING TO THE USDA NRCS WEB SOIL SURVEY, SITE SOILS INCLUDE THE DUFFIELD SILT LOAM. THIS SOIL IS RESIDUUM WEATHERED FROM LIMESTONE AND SILTSTONE. THEY ARE WELL DRAINED, WITH A DEPTH TO BED ROCK BETWEEN 48 AND 120 INCHES, AND A DEPTH TO THE WATER TABLE OF MORE THAN 80 INCHES. PLEASE REFER TO APPENDIX C FOR A COPY OF THE WEB SOIL SURVEY.

SITE SOILS USE LIMITATIONS

DUE TO THE NATURAL CHARACTERISTICS OF DUFFIELD SILT LOAM SOILS, THE POTENTIAL FOR SINKHOLES EXISTS. IF SINKHOLES ARE ENCOUNTERED DURING THE CONSTRUCTION PROCESS, THE PROJECT OWNER, PROJECT ENGINEER, AND THE COUNTY CONSERVATION DISTRICT SHOULD BE CONTACTED IMMEDIATELY UPON SINKHOLE DISCOVERY.

LAND USES: PAST, PRESENT, AND PROPOSED

THE PROPERTY, AS IT IS TODAY, HAS EXISTED AS A TRACK FACILITY FOR AT LEAST THE PAST 40 YEARS. THIS USE WILL CONTINUE AFTER CONSTRUCTION ACTIVITIES.

RECEIVING WATERS OF THE COMMONWEALTH CH. 93 CLASSIFICATION

THE PROJECT SITE DRAINS TO THE WYOMISSING CREEK, WHICH IS CLASSIFIED AS HIGH QUALITY COLD WATER FISHERY AND MIGRATORY FISHERY (HQ-CWF, MF) ACCORDING TO PA CHAPTER 93 WATER QUALITY STANDARDS. THERE IS ONE SMALL WETLAND AREA LOCATED ADJACENT TO THE TRACK IN AN EXISTING DETENTION BASIN. THIS WETLAND WILL BE UNDISTURBED DURING CONSTRUCTION ACTIVITIES. THE PROJECT IS NOT LOCATED WITHIN THE FEMA 100-YEAR FLOODPLAIN.

DESCRIPTION OF BMPS

BMPS USED PRIOR TO CONSTRUCTION

PRIOR TO THE START OF CONSTRUCTION, A STAGING AREA WILL BE ESTABLISHED IN A LOCATION MUTUALLY AGREED UPON BY THE CONTRACTOR AND THE OWNER. THE STAGING AREA SHALL BE MAINTAINED IN AN ORDERLY FASHION AND WILL BE REQUIRED TO INSTALL ALL NECESSARY BMP MEASURES IN ORDER TO ALLOW NON-SEDIMENT LADEN RUNOFF FROM THE STAGING AREA. ROCK CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS INDICATED ON THE PLANS.

BMPS USED DURING CONSTRUCTION

DURING CONSTRUCTION, ALL EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS AND SPECIFICATIONS PROVIDED ON THE PLANS AND IN THIS REPORT. ALL EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AND STABILIZED PRIOR TO SITE DISTURBANCE AND CONSTRUCTION. THE FOLLOWING TEMPORARY CONTROL MEASURES WILL BE USED DURING

- CONSTRUCTION ACTIVITIES: COMPOST FILTER SOCK.
- EROSION CONTROL BLANKET ROCK FILTER.
- CONCRETE WASHOUT.
- PUMPED WATER FILTER BAG.

BMPS USED AFTER CONSTRUCTION

AFTER ALL CONSTRUCTION ACTIVITIES ARE COMPLETE, ALL REMAINING DISTURBED AREAS WILL BE STABILIZED WITH PERMANENT SEEDING. AFTER FINAL STABILIZATION (MINIMUM UNIFORM 70% PERENNIAL VEGETATION COVER OR PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION AND SEDIMENTATION) HAS BEEN ACHIEVED, THE CONTRACTOR MUST REMOVE ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS. ANY AREAS THAT ARE DISTURBED DURING REMOVAL OF THE TEMPORARY CONTROL MEASURES MUST BE STABILIZED IMMEDIATELY. ALL PERMANENT CONTROL MEASURES USED AFTER CONSTRUCTION SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS AND SPECIFICATIONS PROVIDED ON THE PLANS AND IN THIS REPORT THE FOLLOWING PERMANENT CONTROL MEASURES WILL BE USED

- AFTER CONSTRUCTION: PERMANENT SEEDING.
- PAVED AREAS.

STAGING OF EARTHMOVING ACTIVITIES

GENERAL COMMENTS

- 1. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROLS PROPOSED FOR THIS PROJECT. EROSION AND SEDIMENT CONTROLS SHALL BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE WITHIN THE TRIBUTARY AREAS OF THOSE CONTROLS.
- 2. A COPY OF THE EROSION & SEDIMENT CONTROL PLANS SHALL BE POSTED AT THE CONSTRUCTION SITE IN ACCORDANCE WITH PENNSYLVANIA STATE LAW.
- THE GENERAL CONTRACTOR SHALL NOTIFY THE BERKS COUNTY CONSERVATION DISTRICT AT LEAST 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
- ALL CONSTRUCTION VEHICLES AND EQUIPMENT ACCESSING OR LEAVING THE LIMITS OF DISTURBANCE SHALL DO SO VIA A ROCK CONSTRUCTION ENTRANCE AT A LOCATION SHOWN ON THE PLANS OR SHALL ACCESS THE LIMITS OF DISTURBANCE VIA THE MACADAM ROAD SURFACE. ALL CONSTRUCTION VEHICLES SHALL BE ADEQUATELY CLEANED OF ALL SEDIMENT PRIOR TO LEAVING THE SITE VIA THE MACADAM ROAD SURFACE. OTHERWISE, ALL CONSTRUCTION VEHICLES SHALL LEAVE THE SITE VIA A FLATBED TRAILER AND SHALL BE LOADED WITHIN THE LIMITS OF DISTURBANCE. THE FLATBED TRAILER SHALL REMAIN ON THE MACADAM ROAD SURFACE AT ALL TIMES.
- CONSTRUCTION SHALL REMAIN WITHIN THE LIMITS OF DISTURBANCE UNTIL THE WORK IS STABILIZED.
- AREAS UTILIZED FOR CONSTRUCTION STAGING AND LAY DOWN SHALL BE STABILIZED AT ALL TIMES DURING CONSTRUCTION.

- ALL STRIPPING OF VEGETATION, GRADING, FILLING AND EXCAVATION SHALL BE DONE IN SUCH A WAY AS TO MINIMIZE EROSION. WHEREVER NOTED ON THE PLANS, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED AND SUPPLEMENTED. DISTURBED AREAS SHALL BE KEPT TO A PRACTICAL MINIMUM AND STABILIZED AS QUICKLY AS POSSIBLE IN ACCORDANCE WITH THE TEMPORARY OR PERMANENT MEASURES OUTLINED IN THE SEEDING AND MULCHING SCHEDULES.
- STOCKPILE HEIGHTS SHALL NOT EXCEED 35'. STOCKPILE SLOPES SHALL BE 2:1 OR FLATTER.
- STOCKPILES SHALL BE STABILIZED IMMEDIATELY.

10. ALL CONSTRUCTED AND DISTURBED SLOPES (3:1 OR

- STEEPER) SHALL BE SEEDED AND STABILIZED WITH EROSION CONTROL BLANKET. 11. SEDIMENT REMOVED FROM EROSION AND SEDIMENT
- CONTROLS MAY BE USED AS TOPSOIL, IF SUITABLE, OR SHALL BE PROPERLY DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS AND DRAINAGE SWALES, OR DISPOSED OF LEGALLY, OFFSITE.
- 12. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 4 INCHES 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 3:1 OR GREATER SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
- 13. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A DIRT BAG FILTRATION DEVICE (I.E.: PUMPED WATER FILTER BAG), OR EQUIVALENT SEDIMENT REMOVAL FACILITY, OVER STABILIZED AREAS DOWNSTREAM OF ANY EARTH DISTURBANCE. DISCHARGE POINTS SHOULD BE ESTABLISHED TO PROVIDE FOR MAXIMUM DISTANCE TO **ACTIVE WATERWAYS.**
- 14. STORMWATER RUNOFF SHALL BE PREVENTED FROM ENTERING STORM SEWER FACILITIES VIA AN OPEN TRENCH. IF ANY EMERGENCY REPAIRS/REPLACEMENT OF STORM SEWER FACILITIES MUST OCCUR, RUNOFF SHALL BE PREVENTED FROM ENTERING THE FACILITIES AT THE POINTS OF REPAIR/REPLACEMENT.
- UPON REDUCTION, LOSS OR FAILURE OF THE EROSION AND SEDIMENT CONTROLS, IMMEDIATE ACTION SHALL BE TAKEN TO RESTORE THE CONTROLS OR PROVIDE AN ALTERNATIVE METHOD OF CONTROL
- 16. WHERE EROSION AND SEDIMENT CONTROLS ARE FOUND TO BE INOPERATIVE OR INEFFECTIVE DURING AN INSPECTION, OR ANY OTHER TIME, THE GENERAL CONTRACTOR SHALL IMMEDIATELY CONTACT THE BERKS COUNTY CONSERVATION DISTRICT, BY PHONE OR PERSONAL CONTACT, FOLLOWED BY THE SUBMISSION OF A WRITTEN REPORT WITHIN FIVE (5) DAYS OF THE INITIAL CONTACT.
- 17. IN THE EVENT THAT ARCHEOLOGICAL ARTIFACTS ARE DISCOVERED, THE GENERAL CONTRACTOR SHALL ENSURE PROTECTION AND REPORT THE DISCOVERY TO THE OWNER AND THE DIRECTOR OF THE BUREAU OF HISTORIC PRESERVATION, HISTORICAL AND MUSEUM COMMISSION, P.O. BOX 1026, HARRISBURG, PA 17120.
- 18. IF SINKHOLES ARE ENCOUNTERED DURING CONSTRUCTION, THE OWNER SHALL RETAIN THE SERVICES OF A QUALIFIED GEOLOGIST OR GEOTECHNICAL ENGINEER FOR THEIR PROFESSIONAL OPINION AND REMEDIAL RECOMMENDATIONS.
- 19. ANY AND ALL SEDIMENT TRACKED ONTO ADJACENT ROADS OR PARKING AREAS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION AREA, BY THE END OF EACH WORKING DAY. REMOVAL MAY BE COMPLETED THROUGH USE OF MECHANICAL OR HAND TOOLS, BUT SEDIMENT SHALL NEVER BE WASHED OFF THE ROAD SURFACE WITH WATER.
- 20. UPON TEMPORARY CESSATION OF AN EARTH DISTURBANCE OR ANY STAGE OR PHASE OF AN ACTIVITY WHERE A CESSATION OF EARTH DISTURBANCE ACTIVITIES EXCEED 4 DAYS. THE SITE SHALL BE IMMEDIATELY SEEDED. MULCHED. OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION PENDING FUTURE EARTH DISTURBANCE ACTIVITIES.
- 21. UPON COMPLETION OF AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY. THE OPERATOR SHALL IMMEDIATELY STABILIZE THE DISTURBED AREAS SO AS TO PROTECT FROM ACCELERATED EROSION. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN 1 YEAR MAY BE STABILIZED IN ACCORDANCE WITH TEMPORARY SEEDING SPECIFICATIONS. DISTURBED AREAS, WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE RE-DISTURBED WITHIN 1 YEAR, MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT SEEDING SPECIFICATIONS.
- 22. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATORS SHALL CONTACT THE BERKS COUNTY CONSERVATION DISTRICT FOR A FINAL INSPECTION PRIOR TO THE REMOVAL OF TEMPORARY EROSION AND SEDIMENT CONTROLS.
- 23. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM OF 70% UNIFORM PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING OR OTHER MOVEMENTS. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS SHALL BE STABILIZED IMMEDIATELY.
- 24. ALTERNATE PRODUCTS TO THOSE SPECIFIED ON THE DRAWINGS MUST BE REVIEWED AND APPROVED AS EQUAL BY THE OWNER, ENGINEER AND CONSERVATION DISTRICT.
- 25. THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 E. SEQ. AND 287.1 ET SEQ.

26. BEFORE DISPOSING OF SOIL OR RECEIVING BORROW FOR THE SITE, THE OPERATOR SHALL ASSURE THAT EACH SPOIL OR BORROW AREA HAS AN EROSION AND SEDIMENT CONTROL PLAN APPROVED BY THE GOVERNING CONSERVATION DISTRICT, AND WHICH IS BEING IMPLEMENTED AND MAINTAINED IN ACCORDANCE WITH CHAPTER 102 REGULATIONS. THE OPERATOR SHALL NOTIFY THE BERKS COUNTY CONSERVATION DISTRICT IN WRITING OF ALL RECEIVING SPOIL AND BORROW AREAS ONCE THEY HAVE BEEN IDENTIFIED.

CONSTRUCTION SEQUENCE

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED IN COMPLIANCE WITH CHAPTER 102 REGULATIONS BEFORE ANY FOLLOWING STAGE IS INITIATED. THE GENERAL CONTRACTOR SHALL TAKE INTO ACCOUNT THE LOCAL WEATHER FORECAST PRIOR TO BEGINNING ANY EXCAVATION ACTIVITIES.

DEVIATION FROM THAT SEQUENCE MUST BE APPROVED BY THE BERKS COUNTY CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION. EACH STEP OF THE SEQUENCE SHALL BE COMPLETED BEFORE PROCEEDING TO THE NEXT STEP, EXCEPT WHERE NOTED.

AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL CONTACT ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS, THE EROSION AND SEDIMENT CONTROL PLAN PREPARER, AND A REPRESENTATIVE OF THE BERKS COUNTY CONSERVATION DISTRICT TO SCHEDULE AN ON-SITE PRECONSTRUCTION MEETING. ALSO, AT LEAST THREE (3) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM, INC. AT 1-800-242-1776 FOR BURIED UTILITIES LOCATION.

- 1. DUE TO THE NATURE OF THIS PROJECT, NO ROCK CONSTRUCTION ENTRANCES ARE PROPOSED. INSTEAD, ALL CONSTRUCTION VEHICLES SHALL LEAVE THE SITE VIA A FLATBED TRAILER AND SHALL BE LOADED WITHIN THE LIMITS OF DISTURBANCE. ALL CONSTRUCTION VEHICLES SHALL BE ADEQUATELY CLEANED OF ALL SEDIMENT PRIOR TO LEAVING THE LIMIT OF DISTURBANCE. THE FLATBED TRAILER SHALL REMAIN ON THE MACADAM ROAD SURFACE AT ALL TIMES.
- DELINEATE AND MARK THE LIMIT OF DISTURBANCE (I.E. SURVEY STAKES, POST AND ROPE, ORANGE CONSTRUCTION FENCE, ETC.). ALL CONSTRUCTION ACTIVITIES SHALL REMAIN WITHIN THIS LIMIT AT ALL TIMES.
- INSTALL COMPOST FILTER SOCKS, AS INDICATED.
- INSTALL ROCK FILTERS, AS INDICATED. CLEAR AND GRUB SITE, AS NECESSARY
- BEGIN EXCAVATION AND GRADING ACTIVITIES. INSTALL PROPOSED PAVING AND OTHER IMPROVEMENTS.
- UPON COMPLETION OF EARTHMOVING ACTIVITIES, PERMANENTLY SEED AND STABILIZE ALL DISTURBED AREAS. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS SHALL BE STABILIZED IMMEDIATELY. AN AREA
- SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM OF 70% UNIFORM PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST

BMP MAINTENANCE AND OPERATION PROGRAM

SLIDING OR OTHER MOVEMENTS.

- THE GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR THE COMPLETE CONSTRUCTION, STABILIZATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL FACILITIES.
- STOCKPILES OF WOOD CHIPS, CRUSHED STONE, AND OTHER MULCHES SHALL BE READILY AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
- UNTIL THE SITE HAS ACHIEVED FINAL STABILIZATION, THE GENERAL CONTRACTOR SHALL PROPERLY IMPLEMENT. OPERATE AND MAINTAIN ALL EROSION AND SEDIMENT CONTROLS. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROLS FOR CONDITION AND INTEGRITY AFTER EACH STORM EVENT, AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEANOUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING SHALL BE PERFORMED IMMEDIATELY. A WRITTEN REPORT MUST BE COMPLETED TO DOCUMENT EACH INSPECTION AND ALL BMP REPAIR, REPLACEMENT, AND MAINTENANCE ACTIVITIES. EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED IN THE FOLLOWING MANNER:

COMPOST FILTER SOCK:

- A. INSPECT SOCKS AFTER EVERY RUNOFF EVENT. ANY NECESSARY REPAIRS SHALL BE MADE IMMEDIATELY.
- B. REMOVE ACCUMULATED SEDIMENT AS NEEDED AND WHEN SEDIMENT ACCUMULATES TO 1/2 THE HEIGHT OF THE SOCKS.

EROSION CONTROL BLANKET:

- A. PREPARE (FERTILIZE, SEED, ETC.) SOIL PRIOR TO INSTALLING BLANKET.
- B. BEGIN INSTALLATION AT THE TOP OF THE SLOPE TO BE STABILIZED. ANCHOR THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT AFTER STAPLING BLANKET INTO THE TRENCH.
- C. ROLL THE BLANKETS DOWN OR HORIZONTALLY ACROSS THE SLOPE. D. STAPLE THE EDGES OF PARALLEL BLANKETS TO PROVIDE
- APPROXIMATELY 2" OF OVERLAP.
- E. BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

ROCK FILTER:

- A. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION REACHES ONE-HALF THE HEIGHT OF THE FILTER.
- B. UPON STABILIZATION OF ENTIRE CONTRIBUTORY DRAINAGE AREA, REMOVE ACCUMULATED SEDIMENT AND REMOVE ROCK FILTER WITH MINIMAL DISTURBANCE TO STREAM BED.

- C. ROCK FILTER SHALL SPAN THE ENTIRE WIDTH BETWEEN STREAM BANKS AND SHALL HAVE A MINIMUM DEPTH OF
- D. THE ROCK FILTER SHALL BE ORIENTED SUCH THAT ALL RUNOFF FROM THE WORK ZONE MUST PASS THROUGH

CONCRETE WASHOUT:

- A. WASHOUTS SHALL BE INSPECTED DAILY.
- B. DAMAGED OR LEAKING WASHOUTS SHALL BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY.
- C. ACCUMULATED MATERIALS SHALL BE REMOVED WHEN
- THEY REACH 75% CAPACITY. D. PLASTIC LINERS SHALL BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.

PUMPED WATER FILTER BAG:

- A. FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL WITH HIGH STRENGTH, DOUBLE
- STITCHED "J" TYPE SEAMS. B. GEOTEXTILE MATERIAL SHALL BE CAPABLE OF TRAPPING
- PARTICLES LARGER THAN 150 MICRONS. C. REPLACE FILTER BAGS WHEN THEY BECOME ONE-HALF
- D. PLACE BAGS ON 6" AASHTO #57 STONE IN A WELL-VEGETATED AREA.
- E. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN
- 4. IF CONCENTRATED FLOWS ARE IDENTIFIED THAT ARE NOT ADDRESSED IN THIS REPORT, THE APPROPRIATE STEPS SHALL BE TAKEN TO MITIGATE THE CONDITION. CHANGES TO THE DESIGN, CONFIGURATION OR TIMING OF ELEMENTS DESCRIBED IN THIS REPORT MUST BE REPORTED TO THE APPROPRIATE REGULATORY AUTHORITIES. THE FOLLOWING INSTRUCTIONS SHALL BE FOLLOWED:
- A. SHOULD UNFORESEEN EROSIVE CONDITIONS DEVELOP DURING CONSTRUCTION, THE APPROPRIATE ACTION SHALL BE TAKEN TO REMEDY SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT PROPERTIES AS A RESULT OF INCREASED RUNOFF AND/OR SEDIMENT DISPLACEMENT. STOCKPILES OF WOOD CHIPS, CRUSHED STONE AND OTHER MULCHES SHALL BE HELD ONSITE TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS OF EROSION.
- B. THE GENERAL CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUB-PART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III WATER RESOURCES, CHAPTER 102, EROSION CONTROL.
- C. A COPY OF THIS EROSION AND SEDIMENT CONTROL REPORT AND PLANS SHALL BE POSTED AT THE CONSTRUCTION SITE IN ACCORDANCE WITH PENNSYLVANIA STATE LAW.

PROCEDURES FOR DISPOSAL OF MATERIALS

POTENTIAL CONSTRUCTION WASTES ANTICIPATED FROM THIS PROJECT INCLUDE BUT ARE NOT LIMITED TO: TOPSOIL/FILL MATERIAL, CONCRETE WASH WATER, BUILDING MATERIALS, AND EXCAVATED ROCK. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE, RECYCLED, OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT OF SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ.

EXCAVATED MATERIAL SHALL BE PLACED DIRECTLY INTO CONSTRUCTION VEHICLES. ANY SOIL OR ROCK THAT IS REMOVED FROM THE SITE WILL REQUIRE A SEPARATE EROSION AND SEDIMENTATION CONTROL PLAN PROVIDED BY THE CONTRACTOR. ALL SOILS REMOVED FROM AN E&S BMP DURING ROUTINE MAINTENANCE SHALL BE REMOVED FROM THE PROJECT AREA AND TAKEN AS SOIL STOCKPILE TO THE OFF-SITE STOCKPILE AREA.

GEOLOGIC CONDITIONS WITH POTENTIAL TO CAUSE POLLUTION

THE NATURALLY OCCURRING GEOLOGIC FORMATIONS WITHIN THE PROJECT SITE ARE CARBONATE, CAUSING THE POTENTIAL FOR SINKHOLES TO EXIST. REMEDIATION OF ENCOUNTERED SINKHOLES SHALL BE DONE IMMEDIATELY AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS. THE PROJECT OWNER, PROJECT ENGINEER, AND THE COUNTY CONSERVATION DISTRICT SHALL BE CONTACTED IMMEDIATELY UPON DISCOVERY OF A SINKHOLE WITHIN THE PROJECT CONSTRUCTION AREA.

POTENTIAL THERMAL IMPACTS

THERE IS A POTENTIAL FOR THERMAL IMPACTS ON SURFACE WATERS DURING CONSTRUCTION. THE AMOUNT OF EARTH DISTURBANCE FOR THIS PROJECT IS MINIMAL AND WILL BE CONTROLLED BY THE CONSTRUCTION SEQUENCE. ADDITIONALLY, RUNOFF DISCHARGED FROM THE PROJECT SITE WILL FLOW OVER GRASS AREAS AND VEGETATED SWALES BEFORE ENTERING THE CREEK. THESE MEASURES SHALL BE SUFFICIENT TO REDUCE/ELIMINATE THE POTENTIAL FOR THERMAL IMPACTS DURING CONSTRUCTION.

THERE IS A POTENTIAL FOR THERMAL IMPACTS ON SURFACE WATERS AFTER THE PROPOSED IMPROVEMENTS HAVE BEEN CONSTRUCTED. THE PROJECT PROPOSES TO USE PERVIOUS PAVING TO INFILTRATE RUNOFF FROM THE PROPOSED IMPROVEMENTS. ADDITIONALLY, RUNOFF DISCHARGED FROM THE PROJECT SITE WILL FLOW OVER GRASS AREAS AND VEGETATED SWALES BEFORE ENTERING THE CREEK. THESE PROPOSED FACILITIES SHALL BE SUFFICIENT TO REDUCE/ELIMINATE THE POTENTIAL FOR THERMAL IMPACTS

SEEDING AND MULCHING SCHEDULES

- TEMPORARY SEEDING
- A. TEMPORARY SEEDING SHALL BE DONE IN DISTURBED AREAS WHERE NO ACTIVE WORK WILL BE PERFORMED. ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED MUST BE SEEDED AND MULCHED IMMEDIATELY.
- B. DURING NON-GERMINATING PERIODS, ONLY MULCH SHOULD BE APPLIED AT THE RECOMMENDED RATES.
- C. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN ONE (1) YEAR MAY BE SEEDED AND MULCHED WITH A QUICK GROWING TEMPORARY SEED MIXTURE.
- D. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE DISTURBED AGAIN WITHIN ONE (1) YEAR MUST BE SEEDED WITH A PERMANENT SEED MIXTURE AND MULCHED.

- E. TEMPORARY SEEDING STEPS:
- (1) APPLY AGRICULTURAL LIMESTONE OR HYDRATED LIME
- AT A RATE OF ONE (1) TON PER ACRE. (2) APPLY FERTILIZER AT THE APPLICATION RATE OF
- 50-50-50 (N-P2O5-K2O) POUNDS PER ACRE (LBS./ACRE). (3) WORK THE LIMESTONE AND FERTILIZER INTO THE
- (4) UTILIZE THE FOLLOWING SEEDING TYPES, RATES AND
- TIME SCHEDULE:

TEMPORARY SEEDING

SEASON

MARCH 1 TO AUGUST 15 40 LBS./ACRE ANNUALRYEGRASS AUGUST 16 TO OCTOBER 15 168 LBS./ACRE WINTER RYE

- (5) APPLY HAY OR STRAW MULCH (IN ACCORDANCE WITH SECTION NO. 5) AT A RATE OF THREE (3) TONS PER
- F. ALL SEED SHALL BE LABELED, DATED AND THE QUALITY CONSISTENT WITH SECTION NO. 2.
- PERMANENT SEEDING A. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE DISTURBED AGAIN WITHIN ONE (1) YEAR MUST BE SEEDED WITH A PERMANENT SEED MIXTURE AND MULCHED.
- B. SEEDING SHALL BE DONE DURING PERIODS FROM APRIL 15TH TO OCTOBER 1ST. UNLESS OTHERWISE DIRECTED. IF SEEDING IS DONE AFTER OCTOBER 1ST, DORMANT SEED MUST BE USED AND DISTURBED AREAS MUST BE
- C. DISTURBED FINAL GRADED AREAS SHALL BE
- PERMANENTLY SEEDED AS FOLLOWS: (1) AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 4 INCHES 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 3:1 OR GREATER SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
- (2) A SOIL ANALYSIS IS RECOMMENDED, BUT IN LIEU OF AN ANALYSIS APPLY GROUND LIMESTONE OR HYDRATED LIME AND FERTILIZER AT RATES RECOMMENDED IN SECTION NO. 3 (OR AS SUGGESTED BY THE SOILS TEST RESULTS [ONE (1) TEST PER 25
- (3) THE LIMESTONE AND FERTILIZER SHALL BE WORKED INTO THE SOIL TO A MINIMUM DEPTH OF 6 INCHES.
- (4) SEED SHALL NOT BE PLANTED AFTER HEAVY RAIN OR
- (5) ALL SEED USED SHALL BE LABELED IN ACCORDANCE WITH THE U.S. DEPARTMENT OF AGRICULTURE RULES AND REGULATIONS UNDER THE FEDERAL SEED ACT IN EFFECT AT THE TIME OF PURCHASE. INERT MATTER SHALL NOT EXCEED 15% AND BLUE TAG CERTIFIED SEED SHALL BE SUPPLIED WHEREVER POSSIBLE.
- (6) SMOOTH AND FIRM SEED BED WITH CULTIPACKER OR SIMILAR EQUIPMENT PRIOR TO SEEDING. APPLY SEED UNIFORMLY BY HYDROSEEDING. COVER SEEDS WITH 1/2" OF SOIL (MINIMUM) WITH SUITABLE EQUIPMENT.
- (7) APPLY MULCH (IN ACCORDANCE WITH SECTION NO. 5) AT A RATE OF THREE (3) TONS PER ACRE.

PERMANENT SEEDING

SEASON **RATE**

MAR. 1 TO JUNE 1 & 4 LBS./1000 S.F. AUG. 15 TO OCT. 1

WINTER RYE 70% TALL FESCUE 22% RED TOP 2% BIRDSFOOT TREFOIL 6%

RED TOP* 53%

TYPE

OCT. 1 TO MAR. 1 & 3 LBS./1000 S.F. WINTER RYE 47% JUNE 1 TO AUG. 15

[(*)USE DORMANT SEED, UNIFORMLY APPLIED, WORKED INTO A DEPTH OF 1/4 INCH. THE USE OF MULCH IS REQUIRED. THE USE OF NETTING OR EROSION CONTROL MATS MAY BE REQUIRED.]

SEEDING PERIODS AND SPECIFICATIONS MAY VARY DUE TO SITE

CONDITIONS AND VARIANCES FROM THE TIME THIS REPORT IS

WRITTEN AND APPROVED. IT MAY BE NECESSARY TO ADAPT

SEED SPECIFICATION, VARIETIES, AND QUANTITIES. FOR SPECIAL CONDITIONS CONSULT "GUIDELINES FOR RECLAMATION OF SEVERELY DISTURBED AREAS", PENNSYLVANIA STATE

- 3. FERTILIZER: APPLY GROUND LIMESTONE OR HYDRATED LIME AT A RATE OF 4 TONS PER ACRE AND 100-200-200 POUNDS PER ACRE (LBS./ACRE) FERTILIZER. THESE MATERIALS WILL BE UNIFORMLY APPLIED AND WORKED INTO THE TOPSOIL TO A MINIMUM DEPTH OF 6 INCHES.
- 4. HYDROSEEDING: AGRICULTURAL GRADE LIMESTONE AND WATER (4000 LBS. LIMESTONE/1000 GALLONS OF H2O PER ACRE) ALONG WITH THE SEED SHALL BE AS SPECIFIED ABOVE, AND FERTILIZER SHALL BE APPLIED AT A RATE OF 50-100-100 POUNDS PER ACRE (LBS./ACRE). SHOULD FERTILIZER BE APPLIED WITH AN INOCULANT, THE MIXTURE SHALL NOT REMAIN IN A SLURRY FOR MORE THAN ONE HOUR. SYNTHETIC MULCH BINDER, SUCH AS CURASOL DCA-70 OR TERRE-TACK SHALL BE USED PER THE MANUFACTURER'S INSTRUCTIONS TO ANCHOR THE MULCH. THE CONTRACTOR IS RESPONSIBLE FOR PROPER STABILIZATION. IF SEVERAL APPLICATIONS OF HYDROSEEDING ARE REQUIRED TO OBTAIN PROPER STABILIZATION, THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT RE-APPLICATION IS DONE.
- MULCHING: MULCHING SHALL BE APPLIED AS FOLLOWS:

APPLY STRAW MULCH, FREE FROM UNDESIRABLE SEEDS AND COARSE MATERIAL, AT A RATE OF THREE (3) TONS PER ACRE. CHECK MULCHED AREAS PERIODICALLY AND IMMEDIATELY AFTER STORMS AND HIGH WINDS. REPLACE DAMAGED OR MISSING MULCH. APPLY A TACKIFIER AFTER APPLYING THE STRAW MULCH. THE TACKIFIER MAY BE CUT-BACK ASPHALT OR POLYMER SPRAY. APPLY THE TACKIFIER AT A RATE OF 100-150 GALLONS PER ACRE WITH SUITABLE EQUIPMENT.

B. FLEXTERRA FLEXIBLE GROWTH MEDIUM (FGM) ALL CONSTRUCTED AND DISTURBED SLOPES (3:1 OR GREATER) SHALL BE SEEDED AND STABILIZED WITH FLEXTERRA FLEXIBLE GROWTH MEDIUM (FGM), AS INDICATED, AT THE END OF EACH WORKING DAY. FGM SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

C. EROSION CONTROL BLANKETS THE USE AND INSTALLATION OF EROSION CONTROL BLANKETS OR NETTING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION AND SHALL BE SELECTED FOR THE PROPER APPLICATION AND CONDITIONS.

CLEAN FILL AND ENVIRONMENTAL DUE DILIGENCE

- APPLICANTS AND/OR OPERATORS MUST USE ENVIRONMENTAL DUE DILIGENCE TO ENSURE THAT THE FILL MATERIAL ASSOCIATED WITH THIS PROJECT QUALIFIES AS CLEAN FILL. DEFINITIONS OF CLEAN FILL AND ENVIRONMENTAL DUE DILIGENCE ARE PROVIDED BELOW ALL FILL MATERIAL MUST BE USED IN ACCORDANCE WITH THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL", DOCUMENT NUMBER 258-2182-773. A COPY OF THIS POLICY IS AVAILABLE ONLINE AT WWW.DEPWEB.STATE.PA.US UNDER THE HEADING QUICK ACCESS ON THE LEFT SIDE OF THE SCREEN, CLICK "FORMS AND PUBLICATIONS." ON THE LEFT SIDE OF THE SCREEN CLICK "TECHNICAL GUIDANCE DOCUMENTS - FINAL." THEN TYPE THE DOCUMENT NUMBER 258-2182-773 INTO THE SEARCH WINDOW AND CONDUCT THE SEARCH. CLICK ON "MANAGEMENT OF 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.)
- CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS IN TABLES FP-1A AND FP-1B FOUND IN THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL."
- 4. ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM F-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM F-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL. A COPY OF FORM FP-001 CAN BE FOUND ONLINE.
- ENVIRONMENTAL DUE DILIGENCE: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, **ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION** SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL TESTING SHALL BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL." FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA. CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE.





110116.0001

DATE DIGITAL FILENAME

02/19/19

1101160001

c.2-52