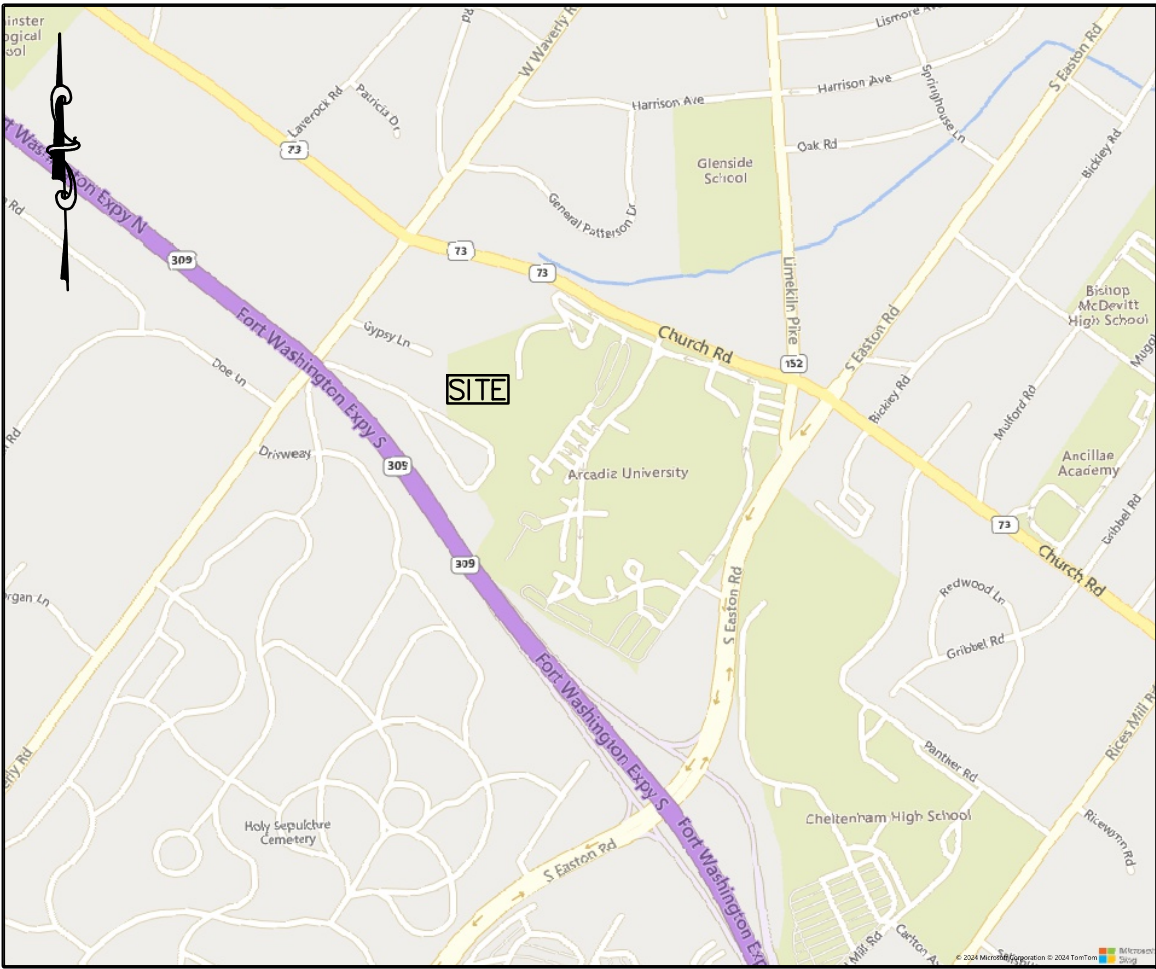


*PRELIMINARY / FINAL
LAND DEVELOPMENT PLAN*

*FOR
ARCADIA UNIVERSITY
ARCADIA INDOOR HITTING FACILITY
CHELTENHAM TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA*

DRAWING LIST

DRAWING NO.	SHEET NO.	DRAWING NAME
C0.00	SHEET 1 OF 23	COVER SHEET
C1.00	SHEET 2 OF 23	GENERAL NOTES
C2.00	SHEET 3 OF 23	CAMPUS RECORD PLAN
C2.10	SHEET 4 OF 23	SITE CONSERVATION PLAN
C3.00	SHEET 5 OF 23	EXISTING CONDITIONS PLAN
C3.10	SHEET 6 OF 23	TREE INVENTORY PLAN
C3.20	SHEET 7 OF 23	DEMOLITION PLAN
C4.00	SHEET 8 OF 23	SITE LAYOUT PLAN
C5.00	SHEET 9 OF 23	SITE GRADING AND DRAINAGE PLAN
C6.00	SHEET 10 OF 23	SITE UTILITY PLAN
C6.10	SHEET 11 OF 23	SITE UTILITY DETAILS
C7.00	SHEET 12 OF 23	EROSION AND SEDIMENT CONTROL PLAN
C7.10	SHEET 13 OF 23	EROSION AND SEDIMENT CONTROL NOTES
C7.20	SHEET 14 OF 23	EROSION AND SEDIMENT CONTROL DETAILS
C8.00	SHEET 15 OF 23	PRE-DEVELOPMENT DRAINAGE AREA PLAN
C8.10	SHEET 16 OF 23	POST-DEVELOPMENT DRAINAGE AREA PLAN
C9.00	SHEET 17 OF 23	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN
C9.10	SHEET 18 OF 23	POST CONSTRUCTION STORMWATER MANAGEMENT NOTES
C9.20	SHEET 19 OF 23	POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS
C10.00	SHEET 20 OF 23	LANDSCAPE PLAN
C10.10	SHEET 21 OF 23	TREE REMOVAL PLAN
C10.20	SHEET 22 OF 23	LANDSCAPE NOTES AND DETAILS
C11.00	SHEET 23 OF 23	CONSTRUCTION DETAILS



LOCATION MAP
SCALE: 1"=1000'

OWNER/APPLICANT INFO:

ARCADIA UNIVERSITY
450 S EASTON ROAD
GLENSIDE, PA, 19038
215-572-2900

PROJECT LOCATION:

450 S EASTON ROAD
GLENSIDE, PA, 19038
CHELTENHAM TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

TAX PARCEL:

31-00-08860-00-1

- THESE GENERAL NOTES APPLY TO ALL PLANS, SPECIFICATIONS, AND WORK ASSOCIATED WITH THIS PROJECT.
2. EXISTING FEATURES BACKGROUND AND EXISTING CONDITIONS INFORMATION IS BASED UPON SURVEYS PERFORMED BY GILMORE & ASSOCIATES, INC. IN JANUARY 2016, AUGUST 2022 AND LAST REVISED IN MAY 2024. ALL LOCATIONS ARE TO BE CONSIDERED APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD. NO DIGGING OR EXCAVATIONS WERE DONE IN THE PREPARATION OF THE EXISTING FEATURES BACKGROUND OR EXISTING CONDITIONS INFORMATION, THEREFORE, ALL UNDERGROUND UTILITIES SHOWN OR DEPICTED SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES AND/OR FACILITIES NOT SHOWN HEREON. ALL THE DESIGNERS AND CONTRACTORS UTILIZING THIS PLAN AND THE INFORMATION CONTAINED HEREON ARE CAUTIONED TO COMPLY WITH THE REQUIREMENTS OF PENNSYLVANIA ACT 187, HUBBARD 2027, AMENDING THE ACT OF DECEMBER 17, 1974 (PL 852, NO. 287) PH 1400 1996 EFFECTIVE 12/19/96.
3. LOCATIONS OF EXISTING UNDERGROUND UTILITIES/FACILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM RECORDS. NO EXCAVATIONS WERE PERFORMED IN THE PREPARATION OF THESE DRAWINGS. THEREFORE, ALL UTILITIES SHOWN SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH, AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES/FACILITIES TO BE PRESENT WHICH ARE NOT SHOWN ON THE DRAWINGS. ONLY THE VISIBLE LOCATIONS OF UNDERGROUND UTILITIES/FACILITIES AT THE TIME OF FIELD SURVEY SHALL BE CONSIDERED TRUE AND ACCURATE. COMPLETENESS OR ACCURACY OF UNDERGROUND UTILITIES/FACILITIES ARE NOT GUARANTEED BY GILMORE & ASSOCIATES INC.
4. ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES/FACILITIES PRIOR TO THE START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF P.L. 852, NO. 287 DECEMBER 10, 1974 AS LAST AMENDED ON MARCH 29, 2007, PENNSYLVANIA ACT 181. GILMORE & ASSOCIATES INC. HAS OBTAINED A PA-ONE CALL SERIAL NUMBER FOR DESIGN PURPOSES ONLY.
5. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL CONTACT THE PA ONE CALL SYSTEM AT 1-800-242-1776 AT LEAST 3-WORKING DAYS PRIOR TO THE COMMENCEMENT OF WORK.
6. DO NOT SCALE DRAWINGS. ALL MEASUREMENTS SHALL BE TAKEN FROM DIMENSIONS SHOWN ON THE DRAWING. WHERE DIMENSIONS BETWEEN SMALL SCALE AND DETAIL DRAWINGS DIFFER, NOTIFY THE DESIGN PROFESSIONAL FOR CLARIFICATION. FIELD VERIFY ALL DIMENSIONS AND NOTIFY DESIGN PROFESSIONAL OF ANY DISCREPANCIES.
7. INSTALL ALL MANUFACTURED ITEMS IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND RECOMMENDATIONS COMPLETE WITH ALL ITEMS AND COMPONENTS AS REQUIRED FOR A COMPLETE INSTALLATION.
8. ALL CONTRACTORS WORKING ON THIS PROJECT SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES RELATED TO THIS PROJECT WILL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE O.S.H.A. (OCCUPATIONAL SAFETY AND HEALTH) ADMINISTRATION STANDARDS.
9. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE APPROPRIATE CONTRACT DOCUMENTS (PLANS, SPECIFICATIONS, AND OTHER INFORMATION) TO THE VARIOUS SUBCONTRACTORS AND TRADES IN ORDER FOR THEM TO COORDINATE AND PERFORM THE WORK.
10. THE GENERAL CONTRACTOR SHALL COORDINATE AND COMPLY WITH ALL UTILITY COMPANY REGULATIONS AND REQUIREMENTS FOR UTILITIES AFFECTED BY THE PROJECT AND PAY ALL REQUIRED FEES AND COSTS ASSOCIATED WITH THOSE UTILITIES.
11. THE CONTRACTOR(S) SHALL OBTAIN ALL PERMITS RELATING TO THIS PROJECT PRIOR TO CONSTRUCTION.
12. IT IS THE RESPONSIBILITY OF ALL CONTRACTORS TO MEET ALL OF THE REQUIREMENTS OF FEDERAL, STATE, AND LOCAL AUTHORITIES, HEALTH DEPARTMENT, AND UTILITY COMPANIES IN ADDITION TO THE INFORMATION STATED IN THESE PLANS, THE SPECIFICATIONS, AND THE CONTRACT DOCUMENTS.
13. IN THE CASE OF CONFLICT BETWEEN ANY PART OF THESE PLANS, THE SPECIFICATIONS, OR THE CONTRACT DOCUMENTS, OR IF DISCREPANCIES ARE DISCOVERED THE CONTRACTOR SHALL NOTIFY THE OWNER AND DESIGN PROFESSIONAL IMMEDIATELY BY PHONE AND IN WRITING AND SHALL REQUEST A WRITTEN DETERMINATION PRIOR TO PROCEEDING WITH THE WORK INVOLVED. IF THE WORK PROCEEDS WITH THE KNOWLEDGE OF A DISCREPANCY AND WITHOUT A WRITTEN DETERMINATION, SUCH WORK WILL NOT BE CONSIDERED IN COMPLIANCE WITH THESE PLANS, THE SPECIFICATIONS, AND CONTRACT DOCUMENTS.
14. ALL WORK WITHIN A RIGHT OF WAY (R.O.W) OR EASEMENT SHALL BE DONE IN ACCORDANCE WITH THE AGENCY OR ENTITY HAVING JURISDICTION OR OWNERSHIP OF THAT R.O.W. OR EASEMENT. THE CONTRACTOR SHALL OBTAIN ALL PERMITS, APPROVALS, INSPECTIONS, ETC. FROM THE AGENCY OF ENTITY HAVING JURISDICTION FOR THIS WORK.
15. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR(S) TO PROTECT EXISTING STRUCTURES AND FACILITIES, INCLUDING UTILITIES, NOT DESIGNATED FOR DEMOLITION OR REPLACEMENT/UPGRADE SUCH AS BUILDINGS, PIPES, INLETS/MANHOLES, CABLES/WIRES, CONDUITS, APRONS, PAVEMENTS, BRIDGES, UTILITIES, TREES, ETC. FROM DAMAGE WHICH MIGHT OCCUR DURING CONSTRUCTION. EXTREME CARE SHALL BE TAKEN IN UNDERCUT AREAS. THE CONTRACTOR(S) SHALL REPLACE OR REPAIR, AS DIRECTED BY THE OWNER OR DESIGN PROFESSIONAL, ANY STRUCTURES OR FACILITIES DAMAGED DURING CONSTRUCTION/THE LIFE OF THE CONTRACT. NO PAYMENT WILL BE MADE FOR REPLACEMENT OR REPAIR OF DAMAGED ITEMS.
16. THE CONTRACTOR(S) SHALL PROVIDE POSITIVE PROTECTION (MAT/SHEET COVERINGS) FOR ALL EXPOSED EXCAVATIONS TO PROTECT FROM INSTABILITY AND DETERIORATION DUE TO RAIN, WIND OR SNOWICE.
17. THE CONTRACTOR SHALL PROVIDE SURFACE DRAINAGE CHANNELS OR DIVISION DIKES, SUMPS AND SUMP PUMPS AND/OR OTHER Dewatering MEASURES AS REQUIRED TO PROTECT ALL EXCAVATIONS FROM FLOODING. FLOODING OF ANY EXCAVATION OF THE SUBGRADE WILL BE CAUSE FOR COMPLETE REPREPARATION AND REAPPROVAL OF THE SUBGRADE.
18. ALL ORGANIC, WET, SOFT AND/OR OTHER UNSUITABLE MATERIALS SHALL BE REMOVED FROM PAVEMENT SUBGRADE AND BACKFILLED WITH SUITABLE GRANULAR, FINE DRAINING MATERIAL. NO PAVEMENTS OR SLABS SHALL BE PLACED ON SUBGRADE CONTAINING FREE WATER. FROST OR ICE SHOULD WATER OR FROST ENTER AN EXPOSED EXCAVATION AFTER SUBGRADE APPROVAL. THE SUBGRADE SHALL BE REINSPECTED BY THE INDEPENDENT TESTING AND INSPECTION AGENCY AFTER REMOVAL OF WATER OR FROST.
19. THE CONTRACTOR(S) SHALL MAINTAIN ALL EROSION CONTROLS DURING CONSTRUCTION.
20. THE CONTRACTOR(S) SHALL ERECT PROTECTIVE DEVICES MEETING THE OWNERS REQUIREMENTS, SUCH AS TEMPORARY CHAIN-LINK FENCING, TO PROTECT THE SITE FROM UNAUTHORIZED PERSONS FROM ENTERING THE WORK SITE.
21. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF EXISTING TREES TO REMAIN. NO EQUIPMENT, MATERIALS, SOIL, OR OTHER DEBRIS SHALL BE STORED UNDER THE DRIFLINE OF THE TREE. IF TREES ARE DAMAGED, ITEMS ARE STORED, OR AREA UNDER THE DRIP LINE IS DISTURBED OTHER THAN DISTURBANCE CALLED FOR ON THE PLANS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CORRECT THE DAMAGE TO THE SATISFACTION OF THE OWNER OR THE DESIGN PROFESSIONAL.
22. IF IT BECOMES NECESSARY TO CLOSE A PORTION OF THE ADJACENT STREET OR SIDEWALK DURING CONSTRUCTION, THE CONTRACTOR(S) SHALL NOTIFY THE LOCAL AUTHORITY HAVING JURISDICTION. THE CONTRACTOR(S) SHALL OBTAIN ALL PERMITS REQUIRED FOR THIS WORK OR CLOSURE.
23. THE CONTRACTOR(S) SHALL KEEP ALL PUBLIC AREAS CLEAN OF DEBRIS ON A DAILY BASIS. THE TOWNSHIP OF CHELTENHAM MAINTAINS THE RIGHT TO CLEAN THE PROJECT SITE FOR CONTRACTOR NON-COMPLIANCE AT CONTRACTOR'S EXPENSE.
24. ALL MATERIAL REMOVED FROM THE PROJECT SITE SHALL BE DISPOSED OF IN A LAWFUL MANNER ACCORDING TO APPLICABLE LOCAL, STATE, AND/OR FEDERAL REGULATIONS.

1. THE CONTRACTOR(S) SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION. NOTIFY THE OWNER, OWNER'S REPRESENTATIVE AND DESIGN PROFESSIONAL OF ANY DISCREPANCIES. COMMENCEMENT WITH ANY WORK MEANS THE CONTRACTOR HAS ACCEPTED EXISTING AND FIELD CONDITIONS.
2. IN ACCORDANCE WITH PENNSYLVANIA STATE LAW, NOTIFY ALL UTILITY COMPANIES (1-800-242-1776 PENNSYLVANIA ONE CALL SYSTEM) AT LEAST (3) THREE BUSINESS DAYS IN ADVANCE OF BEGINNING CONSTRUCTION.
3. THE CONTRACTOR(S) SHALL OBTAIN ALL REQUIRED/PERTINENT PERMITS FOR THIS WORK AND COMPLY AND ADHERE TO ALL APPLICABLE REGULATIONS AND SET FORTH.
4. PERFORM DEMOLITION WORK IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND/OR FEDERAL REGULATIONS AND ORDINANCES AND WITH NATIONAL STANDARD SAFETY REQUIREMENTS FOR DEMOLITION.
5. DO NOT INTERFERE WITH THE USE OF ADJACENT BUILDING(S) OR SITE AREAS.
6. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR(S) TO PROTECT EXISTING STRUCTURES AND FACILITIES, INCLUDING UTILITIES, NOT DESIGNATED FOR DEMOLITION OR REPLACEMENT/UPGRADE SUCH AS BUILDINGS, PIPES, INLETS/MANHOLES, CABLES/WIRES, CONDUITS, APRONS, PAVEMENTS, BRIDGES, UTILITIES, TREES, ETC. FROM DAMAGE WHICH MIGHT OCCUR DURING CONSTRUCTION. EXTREME CARE SHALL BE TAKEN IN UNDERCUT AREAS. THE CONTRACTOR SHALL REPLACE OR REPAIR, AS DIRECTED BY THE DESIGNER, ANY STRUCTURES OR FACILITIES DAMAGED DURING CONSTRUCTION THE LIFE OF THE CONTRACT. NO PAYMENT WILL BE MADE FOR REPLACEMENT OR REPAIR OF DAMAGED ITEMS.
7. PREVENT MOVEMENT, SETTLEMENT, OR DAMAGE TO ADJACENT WALKWAYS, PAVEMENT, STRUCTURES, OR OTHER SITE ELEMENTS TO REMAIN. ANY ADJACENT DAMAGE, OR SETTLEMENT THAT OCCURS SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
8. PROTECT ALL EXISTING PLANT MATERIALS FROM DAMAGE UNLESS THEY ARE INDICATED TO BE REMOVED. DO NOT PARK OR STORE CONSTRUCTION VEHICLES, EQUIPMENT, AND/OR MATERIALS UNDER THE CANOPY (WITHIN THE DRIP LINE) OF ANY TREE TO REMAIN. ANY DAMAGE SHALL BE REPAIRED OR THE PLANT MATERIAL REPLACED WITH PLANTS OF THE SAME SIZE BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER. ANY REPLACEMENT PLANT MATERIAL SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT.
9. PROVIDE, ERECT AND MAINTAIN BARRICADE AND LIGHTING AS REQUIRED BY APPLICABLE REGULATION TO PROTECT OCCUPANTS OF THE BUILDING/FACILITY AND WORKERS.
10. DEMOLISH AND REMOVE WORK IN A MANNER WHICH ALLOWS FOR THE INTRODUCTION OF NEW ADJACENT WORK WITHOUT DAMAGING EDGE CONDITIONS TO THE EXISTING WORK.
11. DEMOLITION OF EXISTING UTILITIES INCLUDES THE REMOVAL OF PIPE, UTILITY STRUCTURES, DRAINS, MANHOLES, ENCASEMENT, FITTINGS, VALVES, ETC.
12. DISPOSE OF ALL UNSAVABLE MATERIAL AND DEBRIS RESULTING FROM THE WORK OFF OF THE SITE AND LEAVE THE WORK AREAS CLEAN AND READY FOR NEW WORK.
13. MAINTAIN UTILITY SERVICES TO ACTIVE EXISTING BUILDINGS AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PERIOD. COORDINATE WITH THE OWNER AND UTILITY PROVIDERS FOR ALL SHUTDOWNS FOR UTILITY CONNECTION AND RELOCATION WORK.
14. ALL UTILITIES NOT SCHEDULED/INDICATED FOR DEMOLITION WITHIN THE LIMIT OF DEMOLITION/WORK AREA SHALL BE PROTECTED AND MAINTAINED DURING CONSTRUCTION.
15. SEE SOIL EROSION AND SEDIMENTATION CONTROL PLANS, NOTES AND DETAILS FOR EROSION CONTROL MEASURES AND CONSTRUCTION SEQUENCE.
16. ALL MATERIALS DEMOLISHED, UNLESS IDENTIFIED TO BE SAVED OR SALVAGED (CONCRETE, PAVING, ROOF MAT, FENCING AND ALL OTHER DEBRIS) SHALL BE REMOVED FROM THE SITE AND DISPOSED OF PER FEDERAL, STATE, AND LOCAL REGULATIONS. ALL COSTS OF HAULING, DISPOSAL, AND TIPPING FEES ARE THE RESPONSIBILITY OF THE CONTRACTOR AS PART OF THE BASE BID.
17. ALL MATERIALS IDENTIFIED TO BE SALVAGED SHALL BE REMOVED WITH CARE TO PREVENT AND MINIMIZE DAMAGE AND SHALL BE STORED ON-SITE FOR REUSE OR FOR RETRIEVAL BY OWNER OR THE OWNER'S REPRESENTATIVE.
18. ALL UTILITIES OF DEMOLITION SHALL BE DETERMINED BY THE CONTRACTOR AND COVERED IN THE BASE BID. CONTRACTOR SHALL MAKE NECESSARY SITE INSPECTIONS PRIOR TO BID TO VERIFY ALL QUANTITIES AND CONDITIONS TO HIS/HER SATISFACTION.
19. SAWCUT AND TRIM ALL EXISTING CONCRETE AND ASPHALT PAVEMENT EDGES PRIOR TO INSTALLING NEW PAVING. ENDS OF DAILY NEW ASPHALT PAVEMENT INSTALLATIONS SHALL BE SAWCUT AND TRIMMED NEATLY TO RECEIVE AND INTERSECT THE NEXT AREA OF NEW ASPHALT PAVEMENT.
20. ALL EXCAVATED MATERIALS REMOVED FROM THE SITE SHALL BE DISPOSED OF IN A LAWFUL MANNER.
21. ALL HAZARDOUS MATERIALS ARE TO BE REMOVED OR REMEDIATED BY A LICENSED AND INSURED PROFESSIONAL.

1. VERIFY ALL DIMENSIONS AND ACCEPT SITE CONDITIONS PRIOR TO COMMENCING WORK. COMMENCING WORK MEANS THE CONTRACTOR(S) HAVE ACCEPTED SITE CONDITIONS.
2. ALL DIMENSIONS ARE FROM THE FACE OF BUILDING/CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED. WALKWAYS ABUTTING CURBS OR WALLS SHALL BE MEASURED FROM THE BACK OF THE CURB/WALL.
3. ALL ANGLES ARE 90 DEGREES UNLESS OTHERWISE NOTED.
4. ALL RADI AND DIMENSIONS ARE TO THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL UNLESS OTHERWISE NOTED WITH (B-B), WHICH INDICATES BACK OF CURB, WALL, ETC.
5. THE CONTRACTOR(S) SHALL BE RESPONSIBLE FOR THE LAYOUT AS DETAILED IN THESE DOCUMENTS FOR THIS PROJECT.
6. THE NEW PAVING SHALL PROVIDE A SMOOTH TRANSITION TO EXISTING PAVING WITHOUT ABRUPT CHANGE IN GRADE.

1. PROVIDE CAST-IN-PLACE CONCRETE WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI AND IN ACCORDANCE WITH THE CURRENT VERSION OF ACI-318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE."
2. CONCRETE SHALL CONTAIN EITHER A WATER-REDUCING, PLASTICIZING ADMIXTURE OR A HIGH-RANGE WATER-REDUCING ADMIXTURE. ALL CONCRETE SHALL CONTAIN AN AIR ENTRAINMENT ADJUTANT TO PROVIDE 5%-7% AIR ENTRAINMENT. MAXIMUM CHLORIDE CONTENT SHALL BE 0.15%. MAXIMUM WATER/CEMENT RATIO SHALL BE 0.45. MAXIMUM DESIGN SLUMP SHALL BE 3 INCHES WITHOUT SUPER PLASTICIZERS. AGGREGATE SIZE SHALL BE 3/4" OF AN INCH WITH A DESIGNATION OF 45 PER ASTM C33.
3. WELDED WIRE FABRIC SHALL BE GALVANIZED AND COMPLY WITH ASTM A185.
4. REINFORCING STEEL BARS SHALL BE GRADE 60 PER ASTM A615.
5. MIX DESIGNS MUST BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO THE START OF CONSTRUCTION. SUBMIT MIX DESIGN TO THE OWNER'S REPRESENTATIVE FOR APPROVAL. THE OWNER'S REPRESENTATIVE MAY REJECT DESIGN MIX FOR NON-COMPLIANCE. RE-SUBMIT DESIGN MIX UNTIL DESIGN PROFESSIONAL APPROVES.
6. METALLIC CONCRETE WICKER AND COMMENCE MUST CURING AS SOON AS FINISHES WILL NOT BE MARRED. INSULATING BLANKETS WATERPROOFED CARPET PAPER, OR POLYETHYLENE FILM AS PER ASTM C-171 SHALL BE USED TO KEEP THE CONCRETE CONTINUOUSLY MOIST DURING THE CURING PROCESS.
7. CONCRETE WALKING SURFACES INCLUDING RAMPS SHALL HAVE A NON-SLIP FINISH LIGHT BROOM FINISH PERPENDICULAR TO SLOPE. JOINTS AND PERIMETER EDGES SHALL BE TOOLED FIRST AND THEN CONCRETE SURFACE SWEEP FOR NON-SLIP FINISH TO ELIMINATE "WINDOW PANE" LOOK. "WINDOW PANE" CONCRETE FINISH WILL NOT BE ACCEPTED.
8. EXPANSION JOINT MATERIAL SHALL BE IN ACCORDANCE WITH PENNDOT PUBLICATION 408 SECTION 705.1
9. EXPANSION JOINTS SHALL BE CALLED AND SEALED WITH AN ELASTOMERIC, SINGLE COMPONENT, SELF-LEVELING, NON-BUBBLING POLYURETHANE SEALANT, SUCH AS W.R. MEADOWS POURTHANE SL, SIKAFLEX SL, OR APPROVED EQUIV. PROVIDE DESIGNER WITH CHOICE OF SEALANT COLORS TO SELECT FROM.
10. CONCRETE SHALL BE PLACED ON A MINIMUM OF 6 INCHES OF COMPACTED CRUSHED WASHED AGGREGATE (NO. 57 OR 3/4 INCH CLEAN) PLACED ON COMPACTED SUBGRADE. SUBGRADE SHALL BE NON-YIELDING.

1. COMPLY WITH APPLICABLE SECTIONS AND PROVISIONS OF THE STANDARD SPECIFICATION OF PAVEMENT CONSTRUCTION PER PENNDOT PUBLICATION 408. BITUMINOUS MATERIALS SHALL BE APPLIED WHEN THE SURFACE IS DRY, FIRM AND CURED, AND OTHERWISE ACCEPTABLE.
2. CONTINUITY: NEW PAVING SHALL BE OF LIKE COMPOSITION OF INGREDIENTS FOR UNIFORMITY AND THICKNESS AND SHALL MATCH THE FINISH OF EXISTING ASPHALT PAVING.
3. PERFORM THE WORK WITHOUT STAINING OR INJURY TO OTHER PERMANENT WORK, INCLUDING CURBS AND SIDEWALKS.
4. WHERE NEW PAVING MEETS EXISTING, CUT EXISTING PAVING AS REQUIRED WITH A POWER SAW TO CLEAN STRAIGHT LINES WITH VERTICAL EDGES. CUT THE EXISTING PAVEMENT TO ALLOW AN OVERLAP OF ONE FOOT OF NEW WEARING COURSE OVER THE EXISTING BINDER COURSE ALONG THE CONTINUOUS EDGES OF THE TRENCH.
5. APPLY PRIMER OF TACK COAT TO ALL EXPOSED SURFACES OF EXISTING WEARING AND BINDER COURSES.
6. SEAL PAVEMENT JOINTS AND ALONG PAVEMENT/CURB INTERFACE WITH PG64-22 HOT BITUMINOUS JOINT SEAL.
7. INSTALL SUPPORT GEOTEXTILE FABRIC OVER JOINTS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
8. THE NEW PAVING SHALL PROVIDE A SMOOTH TRANSITION TO EXISTING PAVING WITHOUT ABRUPT CHANGE IN GRADE. MAINTAIN POSITIVE DRAINAGE AND ELIMINATE LOW SPOTS.

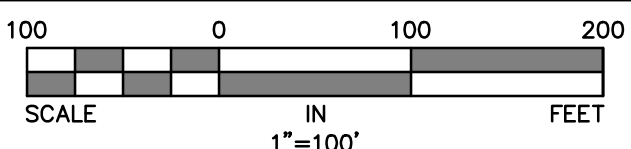
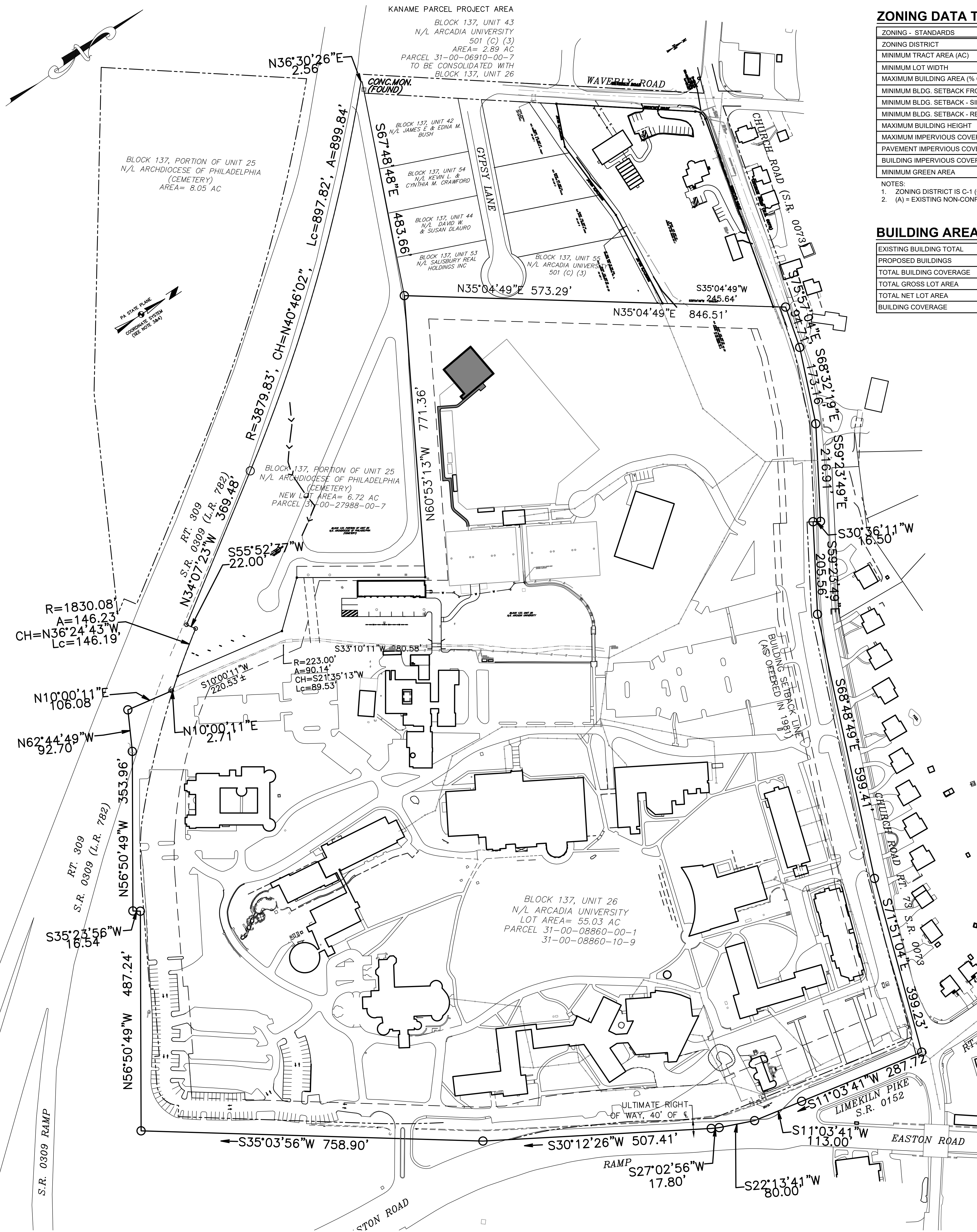
1. LIMIT ADVANCED CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
2. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
3. ALL SOILS EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPSHILL SIDE OF THE TRENCH.
4. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUS INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
5. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND / OR BACKFILLING BEGINS. WATER REMOVED FROM THE TRENCH SHALL BE PUMPED THROUGH A FILTRATION DEVICE.
6. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED.
7. SOILS EXCAVATED FROM EXISTING SURFACE LAYER SHOULD BE STOCKPILED SEPARATELY AND RETURNED AS FINAL SURFACE LAYER FOLLOWING TRENCH BACKFILLING.
8. PLACE EROSION CONTROL MEASURES DOWN-SLOPE OF THE PROPOSED TRENCHING ACTIVITIES. PLACE EXCAVATED MATERIALS ON THE UPSLOPE SIDE OF THE TRENCH.
9. TOPSOIL SHALL BE REMOVED AND STOCKPILED SEPARATELY FROM BACKFILL SOILS. TOPSOIL SHALL BE REPLACED UPON FINAL GRADING FOR STABILIZATION.
10. REMOVE EROSION CONTROL MEASURES AFTER AREA IS STABILIZED. ANY AREAS DISTURBED DURING THE REMOVAL OF THE SILT FENCE SHALL BE RESTABILIZED IMMEDIATELY.

2. PROVIDE POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES.
3. MAINTAIN POSITIVE DRAINAGE ON PAVING AND NATURAL / EARTHEN SURFACES.
4. UNLESS OTHERWISE NOTED, A MAXIMUM SLOPE SHALL NOT EXCEED 3:1 (H:V) OR 33% FOR NON-PAVED SURFACES.
5. GRADES ON DESIGNATED HANDICAPPED ACCESSIBLE AREAS/ROUTES SHALL COMPLY WITH THE MOST RECENT PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (A.D.A.)
6. GRADE EARTHEN, NON-PAVED, SURFACES TO A SMOOTH FINISH. SLOPE LAWN AREAS IN SWALES TO A GENTLE CROWN ALONG THE CENTERLINE UNLESS OTHERWISE SHOWN.
7. GRADE ALL SEEDED FINE LAWN AREAS FLUSH WITH FINISH GRADE. IF AREA IS TO BE SODDED, ADJUST FINISHED GRADE TO THE PROPER DEPTH WHERE SOD ABUTS PAVED AREAS.
8. GRADE ALL TREE/SHRUB/GROUNDCOVER PLANTING BEDS TO 3 INCHES BELOW TOP OF ABUTTING CURBS, PAVING, OR LAWN AREAS TO ALLOW FOR MULCHING.
9. ADJUST EXISTING AND NEW MANHOLE, CATCH BASINS, AND DRAINS RIM/GRADE ELEVATIONS TO NEW GRADE ELEVATIONS (PAVEMENT OR SOIL).
10. ELIMINATE ROUGH AND LOW AREAS TO ENSURE POSITIVE DRAINAGE.
11. PIPE SLOPES ARE APPROXIMATE. CONTRACTOR SHALL USE INVERTS TO INSTALL GRAVITY LINES.
12. FINISHED SURFACES SHALL BE GRADED SMOOTH AND EVEN WITH NO ABRUPT OR AWKWARD CHANGES IN GRADE. SURFACE FINISHES NOT MEETING THIS STANDARD OR NOT DEEMED ACCEPTABLE BY THE DESIGNER OR OWNER SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
13. NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY IF SLOPE REQUIREMENTS CANNOT BE MET. AT NO TIME WILL SLOPES IN EXCESS OF THOSE ABOVE THE MAXIMUM ALLOWED WILL BE ACCEPTED, UNLESS PRIOR APPROVAL IS RECEIVED IN WRITING BY THE DESIGNER.
14. PLANS INDICATE ALL FINISH GRADE ELEVATIONS. PROVIDE SUBGRADE ELEVATIONS AS REQUIRED BY PLANS, DETAILS, OR SPECIFICATIONS. PROVIDE PROPERLY COMPACTED SUBGRADES OF NATIVE SOIL OR APPROVED FILL. SUBGRADES SHALL BE INSPECTED BY A QUALIFIED INSPECTOR TO ENSURE COMPLETION OF ALL REQUIREMENTS ARE MET. NATIVE SOILS, FILL, OR SUBGRADES DEEMED INSUFFICIENT SHALL BE REMOVED AND REPLACED WITH APPROPRIATE MATERIAL.
15. COORDINATE GRADING WORK WITH WORK OF OTHER TRADES OR SUBS BY OTHERS AS REQUIRED TO COMPLETE THE PROJECT.
16. ALL WALKWAYS SHALL HAVE A CROSS SLOPE OF 1% MINIMUM AND 2% MAXIMUM UNLESS OTHERWISE APPROVED BY THE DESIGNER PRIOR TO INSTALLATION.

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OVERALL CAMPUS RECORD PLAN



ZONING DATA TABLE FOR TAX MAP PARCEL NUMBER 31-00-08860-00-1

ZONING - STANDARDS	REQUIRED	EXISTING	PROPOSED	APPROVED
ZONING DISTRICT	C-1	C-1	C-1	
MINIMUM TRACT AREA (AC)	2.0 AC	55.03 AC	55.03 AC	
MINIMUM LOT WIDTH	200'	846.51'	846.51'	
MAXIMUM BUILDING AREA (% OF TRACT)	25%	12.4%	12.7%	
MINIMUM BLDG. SETBACK FROM ULTIMATE RIGHT-OF-WAY	40'	55.73'	55.73'	
MINIMUM BLDG. SETBACK - SIDE YARD	40'	117.48'	117.48'	
MINIMUM BLDG. SETBACK - REAR YARD	40'	26.16' (A)	26.16' (A)	
MAXIMUM BUILDING HEIGHT	50'	72.1' (A)	28'	
MAXIMUM IMPERVIOUS COVERAGE	65%	36.62%	37%	
PAVEMENT IMPERVIOUS COVERAGE	-	579,761 SF (24.19%)	582,411 SF (24.30%)	
BUILDING IMPERVIOUS COVERAGE	-	297,960 SF (12.43%)	304,360 SF (12.70%)	
MINIMUM GREEN AREA	35%	63.41%	63.03%	

NOTES:
1. ZONING DISTRICT IS C-1 (COMMERCIAL DISTRICT)
2. (A) = EXISTING NON-CONFORMITY

BUILDING AREA SUMMARY

EXISTING BUILDING TOTAL	297,888 SF
PROPOSED BUILDINGS	6,400 SF
TOTAL BUILDING COVERAGE	304,288 SF
TOTAL GROSS LOT AREA	2,397,107 SF (55.03 AC)
TOTAL NET LOT AREA	2,336,756 SF (53.64 AC)
BUILDING COVERAGE	304,288 / 2,397,107 = 0.127 = 12.7%

PARKING SUMMARY

USE	PARKING REQUIREMENT	PARKING SPACES REQUIRED
ADMINISTRATION (41,029 GSF)	1 PER 300 GSF	137
UNIVERSITY STUDENTS	1/CR + 1/5 STUDENTS	826
BALL FIELDS	1/3 SEATS	100
TOTAL REQUIRED PARKING SPACES		1,063
TOTAL EXISTING PARKING SPACES		1,118

GENERAL NOTES

- THE EXISTING FEATURES AND TOPOGRAPHY AS SHOWN ARE BASED ON A FIELD SURVEY PERFORMED BY GILMORE & ASSOCIATES INC. IN JANUARY 2016, AUGUST 2022, AND LAST REVISED MAY 2024. THIS PLAN DOES NOT REPRESENT A BOUNDARY SURVEY.
- VERTICAL DATUM IS NAVD83 AND WAS ESTABLISHED BY GLOBAL POSITIONING SYSTEM (GPS) WITH OBSERVATIONS REFERENCED TO THE KEYNET-GPS VIRTUAL REFERENCE STATION SYSTEM (TOPCON TOPSURV GPS BASE STATION NETWORK).
- HORIZONTAL DATUM IS BASED ON THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM (NAD 83) ESTABLISHED BY GLOBAL POSITIONING SYSTEM (GPS) WITH OBSERVATIONS REFERENCED TO THE KEYNET-GPS VIRTUAL REFERENCE STATION SYSTEM (TOPCON TOPSURV GPS BASE STATION NETWORK).
- ALL STEEP SLOPES BEING DISTURBED OR WITHIN THE PROJECT AREA ARE MANMADE AND THEREFORE CONSERVATION RESTRICTIONS WILL NOT APPLY.

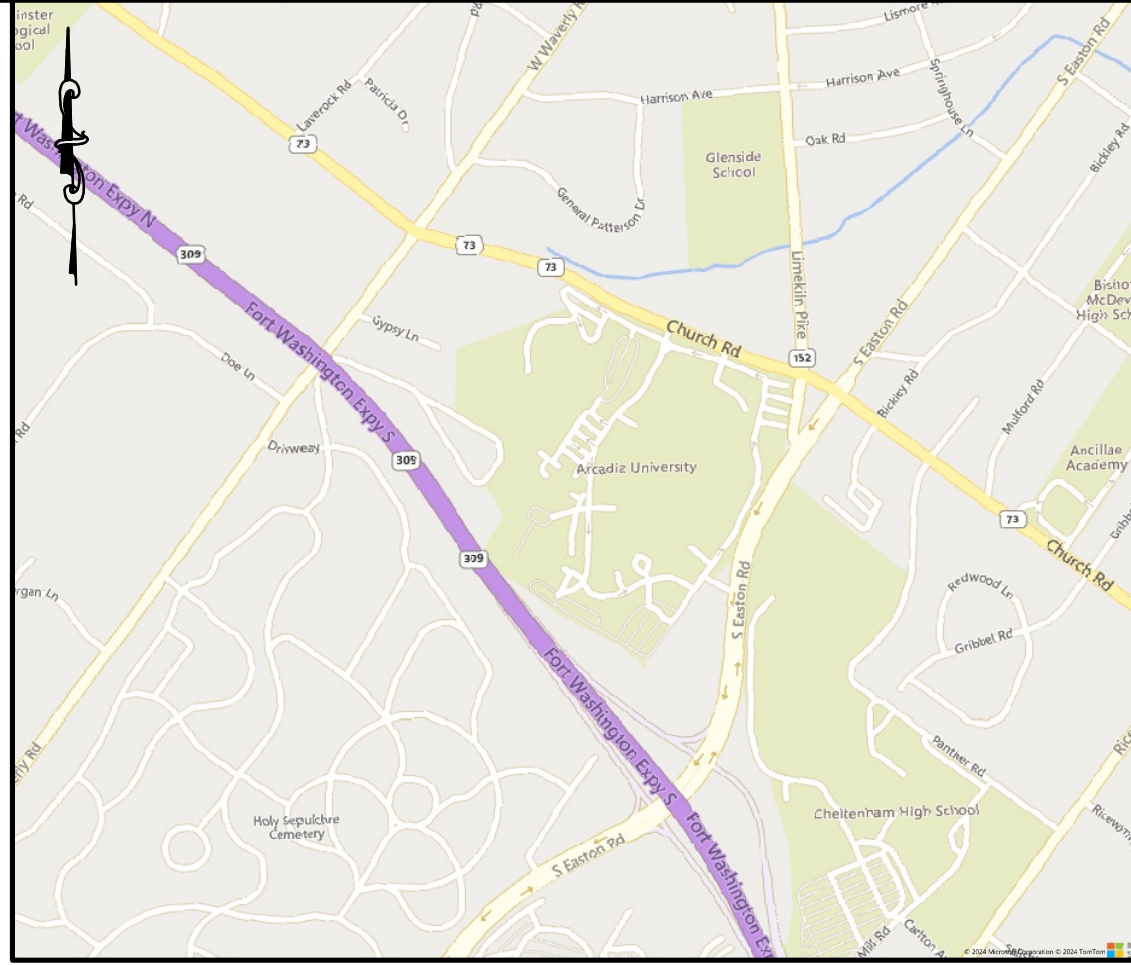
CHELTENHAM TOWNSHIP STANDARD NOTES

- THIS LAND DEVELOPMENT/SUBDIVISION SHALL BE CONSTRUCTED IN ACCORDANCE WITH ALL CHELTHENHAM TOWNSHIP ORDINANCES.
- ALL PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE PORTIONS OF THE PENNDOT PUBLICATION 408 STANDARDS AND SPECIFICATIONS AND WITH ALL TOWNSHIP STANDARDS AND SPECIFICATIONS.
- ALL NEW PUBLIC UTILITIES, INCLUDING BUT NOT LIMITED TO, ELECTRIC, GAS AND TELEPHONE, SHALL BE PLACED UNDERGROUND WITHIN THE LAND DEVELOPMENT/SUBDIVISION. SUCH UTILITIES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE PREVAILING STANDARDS AND PRACTICES OF THE UTILITY OR OTHER COMPANY PROVIDING SERVICE, EXCEPT WHERE IT IS DEMONSTRATED TO THE SATISFACTION OF THE BOARD OF COMMISSIONERS THAT UNDERGROUND INSTALLATIONS ARE NOT FEASIBLE BECAUSE OF PHYSICAL CONDITIONS OF THE LAND.
- ANY UTILITY CONFLICTS WITH PROPOSED CONSTRUCTION ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE TOWNSHIP ENGINEER AND THE ENGINEER OF RECORD. ALL EXISTING UTILITIES THAT ARE TO BE RELOCATED OR ALTERED IN ANY MANNER ARE TO BE DONE IN ACCORDANCE WITH THE RESPECTIVE UTILITY COMPANY STANDARDS. ALL EXISTING UTILITIES EXPOSED DURING CONSTRUCTION ARE TO BE SUPPORTED UNTIL BACKFILL IS IN PLACE. ANY CROSSING LESS THAN ONE FOOT CLEAR IS TO BE SUPPORTED WITH A SADDLE (CONCRETE OR SAND AS NOTED).
- NO ADDITIONAL IMPERVIOUS AREAS (DECKS, ADDITIONS, PATIOS, SHEDS, WALKWAYS, ETC.) FROM THAT SHOWN ON THIS PLAN SET SHALL BE ADDED TO THESE LOTS WITHOUT MITIGATING STORMWATER MANAGEMENT MEASURES APPROVED BY TOWNSHIP ENGINEER TO ENSURE NO ADDITIONAL STORMWATER RUNOFF OCCURS.
- IT SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER TO PROPERLY MAINTAIN, REPAIR AND/OR REPLACE THE STORMWATER MANAGEMENT FACILITIES LOCATED ON THEIR PROPERTY. THE MAINTENANCE, REPAIR AND/OR REPLACEMENT OF THE STORMWATER MANAGEMENT FACILITIES SHALL BE TO THE DEGREE CONSIDERED SATISFACTORY BY THE TOWNSHIP.
- LIMITS OF DISTURBANCE, AS SHOWN ON THE PLANS, SHALL BE CLEARLY MARKED IN THE FIELD PRIOR TO THE START OF THE CONSTRUCTION, (INCLUDING INSTALLATION OF EROSION/SEDIMENT CONTROL MEASURES). THE LIMITS OF DISTURBANCE SHALL BE MARKED WITH STAKED YELLOW SAFETY RIBBON OR OTHER MATERIALS ACCEPTABLE TO THE TOWNSHIP. THE MARKING MATERIALS SHALL BE MAINTAINED, REPAIRED OR RESET UNTIL CONSTRUCTION WITHIN THE ENCLOSED AREAS IS COMPLETE AND UNTIL THE PERVIOUS AREAS ACHIEVE A 75% CATCH OF GROUND COVER. NO DISTURBANCE OF GROUND COVER, CUTS OR FILL PLACEMENT SHALL BE PERMITTED OUTSIDE THE STAKED LIMITS OF DISTURBANCE.
- DURING CONSTRUCTION, THE DEVELOPER/OWNER IS SOLELY RESPONSIBLE FOR INSURING THE PROPER FUNCTIONING OF THE EROSION AND SEDIMENT CONTROL MEASURES. THE DEVELOPER/OWNER SHALL TAKE WHATEVER MEASURES ARE REQUIRED TO INSURE THAT NO SEDIMENT LEAVES THE SITE.
- NO DEBRIS DISPOSAL PITS SHALL BE PERMITTED.
- NO OPEN BURNING SHALL BE PERMITTED.
- ALL TREES TO BE SAVED SHALL BE TAGGED IN THE FIELD PRIOR TO THE START OF CONSTRUCTION; ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO THE REQUIREMENTS OF SECTION 280-10 OF THE CHELTHENHAM CODE.
- ALL EXTERIOR LIGHTING FIXTURES SHALL BE SHIELDED TO DEFLECT LIGHTING FROM ADJACENT RESIDENTIAL PROPERTIES AND FROM PASSING MOTORISTS.
- THE OWNER SHALL PRESERVE ALL TREES ON THIS SITE EXCEPT WHERE NECESSARY TO CONSTRUCT BUILDINGS, PARKING, ACCESSWAYS, AND UTILITIES AND SELECTIVE THINNING OF EXISTING TREES, SPECIFIC SPECIES OF PLANT MATERIALS AS DESIGNATED ON THIS PLAN OR THE LANDSCAPE PLAN SHALL BE PRESERVED AND PROPERLY PROTECTED DURING CONSTRUCTION. IN THE CASE OF UTILITY RIGHTS-OF-WAY AND EASEMENTS, ANY DISTURBED AREA SHALL BE REPLANTED SO AS TO ACHIEVE A RECURRENCE OF NATURAL VEGETATION.

PENNSYLVANIA ONE CALL SYSTEM, INC.



SERIAL NO. 2022064231-000



LOCATION MAP
SCALE: 1"=1000'

CERTIFICATE OF DESIGN

I, _____, HEREBY CERTIFY THAT I AM A PROFESSIONAL ENGINEER, THAT THE SITE DESIGN CONFORMS TO ALL APPLICABLE SUBDIVISION AND ZONING REGULATIONS, AND THAT SITE DESIGN MEETS ACCEPTED DESIGN STANDARDS AND PRACTICES.

DATE _____ PROFESSIONAL ENGINEER _____ PA LICENSE NO. _____

SURVEYOR'S CERTIFICATE, BOUNDARY, AND TOPOGRAPHY

THIS IS TO CERTIFY THAT THIS PLAN REPRESENTS A FIELD SURVEY BY ME OR UNDER MY SUPERVISION, THAT ALL PROPERTY CORNERS ARE SET AS SHOWN HEREON, THAT ALL GEOMETRIC AND GEODETIC DETAILS AS SHOWN ARE CORRECT, AND THAT ALL LOTS OR TRACTS HAVE A BOUNDARY CLOSURE ERROR OF 1:10,000 OR BETTER.

DATE _____ PROFESSIONAL LAND SURVEYOR _____ PA LICENSE NO. _____

CERTIFICATION OF OWNERSHIP

I HEREBY CERTIFY THAT ARCADIA UNIVERSITY IS THE OWNER OF THE LAND DESIGNATED ON THIS PLAN AND THAT WE DO HEREBY ADOPT THIS PLAN AND DESIRE THAT IT BE RECORDED.

DATE _____ JOAN SINGLETON, VICE PRESIDENT _____

OWNER'S ACKNOWLEDGMENT COMMONWEALTH OF PENNSYLVANIA: COUNTY OF MONTGOMERY:

ON THE _____ DAY OF _____, A.D. 2025, BEFORE ME THE SUBSCRIBER, A NOTARY PUBLIC OF THE COMMONWEALTH OF PENNSYLVANIA, PERSONALLY APPEARED JOAN SINGLETON WHO ACKNOWLEDGED HERSELF TO BE THE VICE PRESIDENT OF ARCADIA UNIVERSITY, AND AS SUCH VICE PRESIDENT, BEING AUTHORIZED TO DO SO, EXECUTED THE FOREGOING PLAN BY SIGNING THAT THE SAID ENTITY IS THE OWNER OF THE DESIGNATED LAND, THAT ALL NECESSARY APPROVALS OF THE PLAN HAVE BEEN OBTAINED AND ARE ENDORSED THEREON, AND THAT THE SAID ENTITY DESIRES THAT THE PLAN BE DULY RECORDED ACCORDING TO LAW. WITNESS MY HAND AND NOTARIAL SEAL, THE DAY AND YEAR AFORESAID.

NOTARY PUBLIC _____ (SEAL)
MY COMMISSION EXPIRES: _____

TOWNSHIP APPROVALS

APPROVED BY THE BOARD OF COMMISSIONERS OF THE TOWNSHIP OF CHELTHENHAM THIS _____ DAY OF _____, 2025.

PRESIDENT

SECRETARY

ATTEST

REVIEWED AND APPROVED BY THE CHELTHENHAM TOWNSHIP ENGINEER THIS _____ DAY OF _____, 2025.

TOWNSHIP ENGINEER

CERTIFIED BY THE MONTGOMERY COUNTY PLANNING COMMISSION THIS _____ DAY OF _____, 2025.

RECORDING NOTATION

RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS, ETC., NORRISTOWN PA.

IN DEED BOOK _____, PAGE NO. _____, ON _____.

OWNER OF RECORD:

ARCADIA UNIVERSITY
450 SOUTH EASTON ROAD
GLENDELE, PA 19038

APPLICANT:

ARCADIA UNIVERSITY
450 SOUTH EASTON ROAD
GLENDELE, PA 19038
THOMAS MACCHI
ASSOCIATE VICE PRESIDENT
PHONE: (215) 947-2654
EMAIL: MACCHI@ARCADIA.EDU

DESIGNER:

GILMORE & ASSOCIATES, INC.
1617 JFK BOULEVARD, SUITE 425
PHILADELPHIA, PA 19103
PHONE: (215) 687-4246
KEVIN SELGER, RLA - VICE PRESIDENT
EMAIL: KSELGER@GILMORE-ASSOC.COM
TREVOR WOODWARD, P.G.
GEOTECHNICAL SERVICES MANAGER
PHONE: (267) 263-9709
EMAIL: TWOODWARD@GILMORE-ASSOC.COM

RECORDER OF DEEDS - MONTGOMERY COUNTY:

RECORDED THIS _____ DAY OF _____, _____, IN THE OFFICE OF THE RECORDING OF DEEDS, ETC., IN AND FOR THE COUNTY OF MONTGOMERY IN NORRISTOWN, PENNSYLVANIA IN PLAN BOOK NO. _____, PAGE _____.

RECORDER OF DEEDS

MCPC USE ONLY

MCPC NO. _____
PROCESSED AND REVIEWED, REPORT PREPARED BY MONTGOMERY COUNTY PLANNING COMMISSION IN ACCORDANCE WITH THE MUNICIPALITIES PLANNING CODE
CERTIFIED THIS DATE _____
FOR THE DIRECTOR
MONTGOMERY COUNTY PLANNING COMMISSION

MUNICIPAL FILE No.:

TAX MAP PARCEL No.: 31-00-08860-00-1

TOTAL AREA: 59.10 AC. TOTAL LOTS: 1

DATE: 04/22/2025 SCALE: 1"=100'

DRAWN BY: AB CHECKED BY: KS
SHEET NO.: 3 OF 23

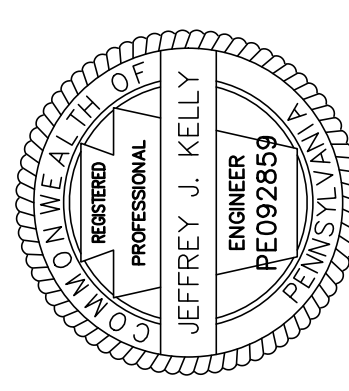
LAND DEVELOPMENT PLAN

ARCADIA INDOOR HITTING FACILITY

CHELTHENHAM TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

CAMPUS RECORD PLAN

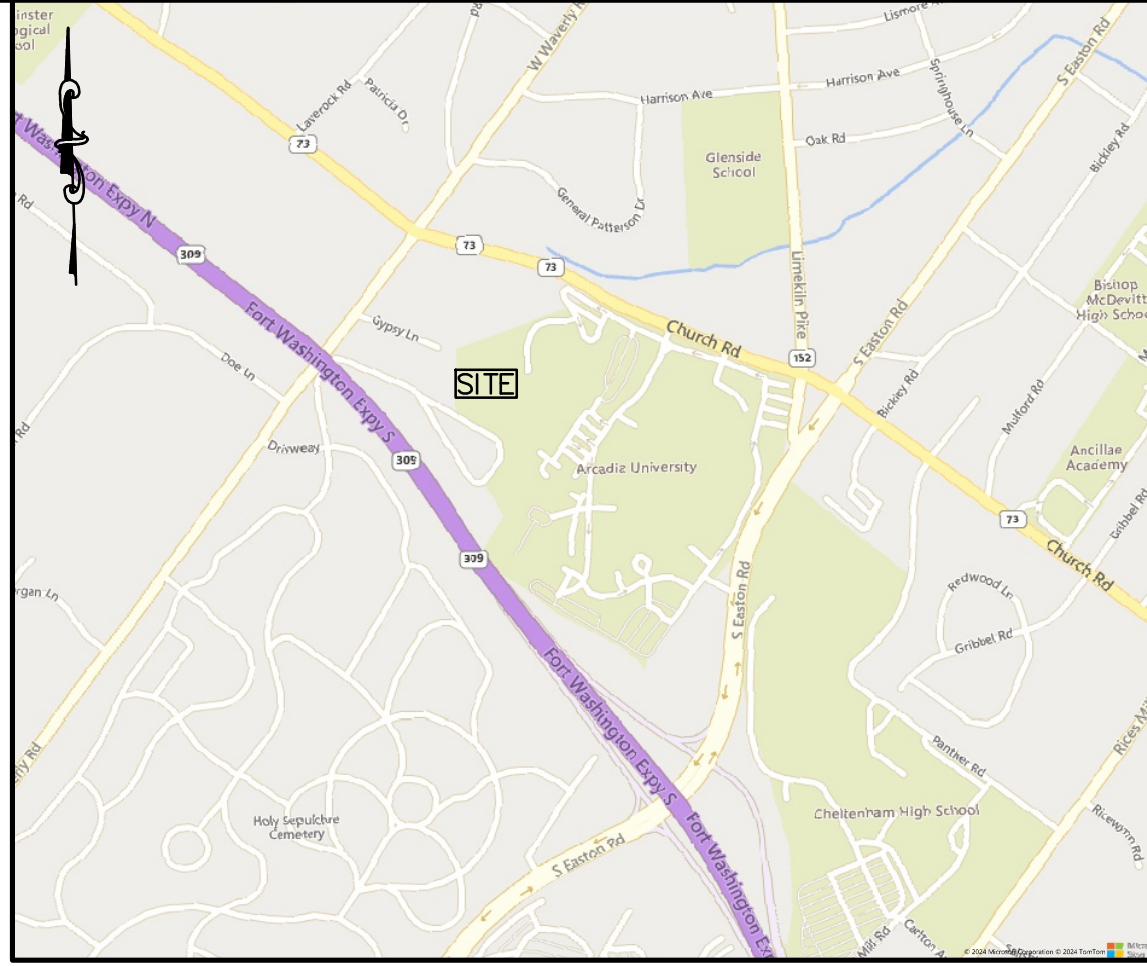
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DATE: 04/22/2025

REV.	DESCRIPTION	DATE	BY

NOT APPROVED FOR CONSTRUCTION



TREE INVENTORY (WITHIN LOD)									
Tree ID#	Species	Condition	DBH (Inches)						
			To Be Removed		To Be Preserved (To Remain)				
			Dead	Live	1"-7"	8"-11"	12"-17"	18" & Up	
1	Tulip Poplar	Good							✓
2	Maple	Fair		✓					
3	Tulip Poplar	Good		✓					
4	Tulip Poplar	Fair		✓					
5	Red Maple	Good		✓					
6	Pennsylvania Cherry	Fair		✓					
7	Tulip Poplar	Good		✓					
8	White Pine	Good		✓					
9	Fir	Poor	✓						
10	Red Maple	Good		✓					
11	Norway Maple	Good		✓					
12	Red Maple	Poor		✓					
13	White Pine	Good		✓					
14	Red Maple	Good		✓					
15	Tulip Poplar	Good		✓					
16	Norway Maple	Good		✓					
17	Tulip Poplar	Poor							✓
18	Tulip Poplar	Fair							✓
19	Tulip Poplar	Fair							✓
20	Tulip Poplar	Good							✓
21	Tulip Poplar	Good							✓
22	Sourwood	Fair					✓		
23	Tulip Poplar	Good							✓
24	Tulip Poplar	Good							✓
25	Tulip Poplar	Poor							✓
26	Tulip Poplar	Good							✓
27	Tulip Poplar	Good							✓
28	Norway Maple	Good				✓			
29	Tulip Poplar	Poor							✓
30	Tulip Poplar	Good							✓
31	Norway Maple	Good						✓	
32	Tulip Poplar	Good						✓	
33	Cherry	Good				✓			
34	Tulip Poplar	Good							✓
35	Tulip Poplar	Good							✓
36	Tulip Poplar	Fair							✓
37	Tulip Poplar	Good							✓
38	Tulip Poplar	Good							✓
39	Tulip Poplar	Poor							✓
40	Tulip Poplar	Good		✓					
41	Red Maple	Fair	✓	✓					
42	Red Maple	Good							✓
43	Red Oak	Good		✓					
44	Cherry	Good		✓					
45	Tulip Poplar	Good		✓					
46	Red Maple	Good		✓					
47	Cherry	Good		✓					
48	Oak	Poor	✓						
49	Cherry	Good		✓					
50	Cherry	Good			✓				

6 TREE INVENTORY PLAN

PENNSYLVANIA ONE CALL SYSTEM, INC.

925 Iron Run Road
West Mifflin, Pennsylvania
15122-1078

811

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NON-MEMBERS MUST BE CONTACTED DIRECTLY

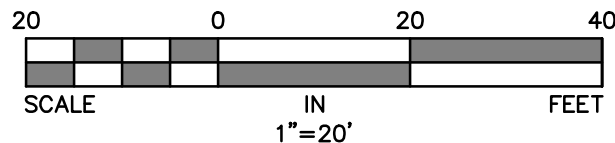
PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR GRADEN

SERIAL NO. 2022064231-000

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

ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES/FACILITIES PRIOR TO START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF P.L. 852, NO. 287 DECEMBER 10, 1974, AS LAST AMENDED ON APRIL 28, 2018 PENNSYLVANIA ACT 50.

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



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LAND DEVELOPMENT PLAN
ARCADIA INDOOR HITTING FACILITY
CHELTNHAM TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

G&A
GILMORE & ASSOCIATES, INC.
ENGINEERING CONSULTING SERVICES

PROJECT No.: 20100306906

OWNERS INFO:
ARCADIA UNIVERSITY
450 S EASTON ROAD
GLENSIDE, PA 19038
215-572-2900

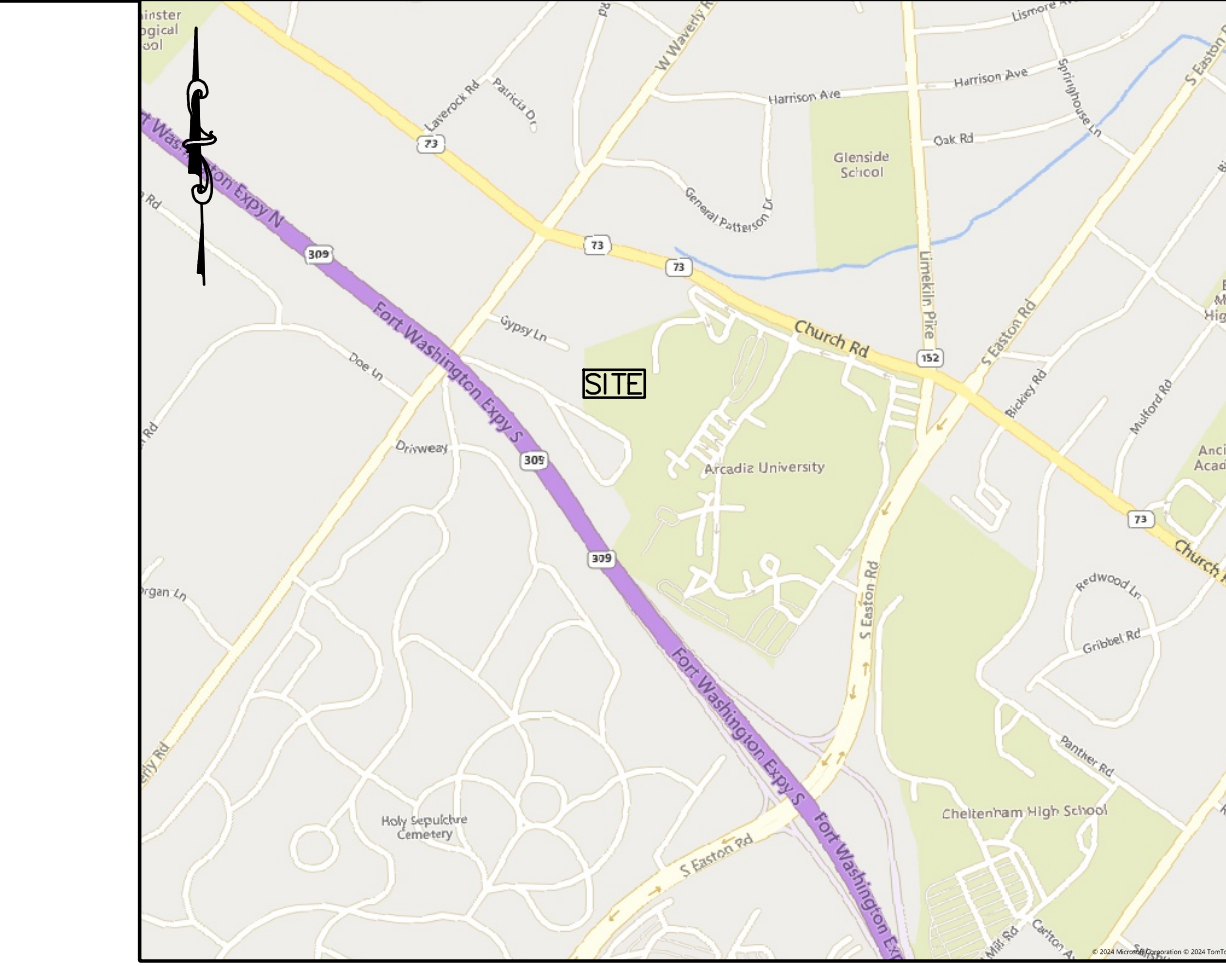
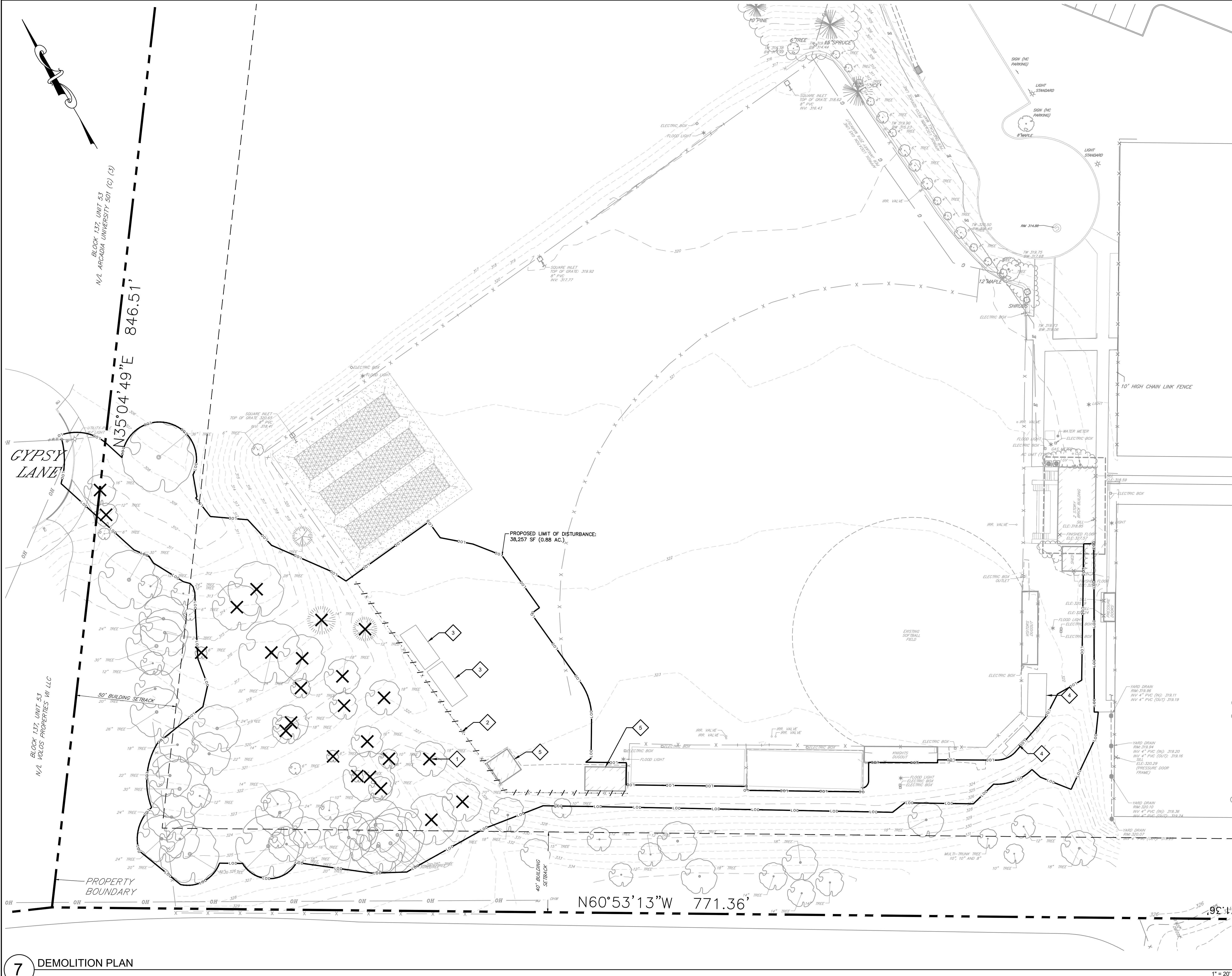
MUNICIPAL FILE No.: 31-00-08860-00-1

TAX MAP PARCEL No.: 59.10 AC. TOTAL LOTS: 1

DATE: 04/22/2025 SCALE: 1"=20'

DRAWN BY: AB CHECKED BY: KS

SHEET NO.: 6 OF 23



EXISTING CONDITIONS LEGEND	
---	EXISTING MAJOR CONTOURS
---	EXISTING MINOR CONTOURS
---	EXISTING SPOT ELEVATION
---	TREE LINE
---	LEGAL RIGHT-OF-WAY
---	ULTIMATE RIGHT-OF-WAY
---	STORM LINE
---	GAS LINE
---	OVERHEAD ELECTRIC LINE
---	ELECTRIC LINE
---	SANITARY LINE
---	SANITARY LATERAL
---	WATER LINE
---	WATER LATERAL
---	EDGE OF STREAM
---	EXISTING EASEMENT
---	SOIL BOUNDARY
---	WATERS OF THE US AND COMMONWEALTH
---	100 YEAR FLOOD PLAN
○	SANITARY MANHOLE
■	STORM INLET
■	DETECTABLE WARNING SURFACE
+	GAS VALVE
+	WATER VALVE
+	GUY
+	ELECTRIC METER
+	FIRE HYDRANT
+	UTILITY POLE
+	MAILBOX
+	LIGHT STANDARD
+	CONCRETE MONUMENT FND
+	IRON PIN FOUND
+	CONIFER TREE
+	DECIDUOUS TREE
+	TREE STUMP
+	SOIL LABEL

DEMOLITION LEGEND	
---	LIMIT OF DISTURBANCE
---	EXISTING SITE FEATURE TO BE REMOVED
---	EXISTING TREE TO BE REMOVED

DEMOLITION PLAN KEY NOTES	
1	REMOVE EXISTING TREE, GRUB AND REMOVE STUMP AND ROOT MAT
2	REMOVE EXISTING FENCE / NET (±193 LF)
3	RELOCATE EXISTING BLEACHERS
4	RELOCATE EXISTING BLEACHERS DURING CONSTRUCTION
5	RELOCATE EXISTING SHEDS - SEE LAYOUT PLAN FOR LOCATION

PENNSYLVANIA ONE CALL SYSTEM, INC.

925 Iroquois Run Road
West Mifflin, Pennsylvania
15122-1078

811

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NON-MEMBERS MUST BE CONTACTED DIRECTLY
PA LAW REQUIRES THREE WORKING DAYS
NOTICE TO UTILITIES BEFORE YOU EXCAVATE,
DRILL, BLAST OR DEMOLISH

SERIAL NO. 2022064231-000

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NOT APPROVED FOR CONSTRUCTION

DATE: 04/22/2025

REV.	DESCRIPTION	DATE	BY
1			

LAND DEVELOPMENT PLAN

ARCADIA INDOOR HITTING FACILITY

CHELTHAM TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

DEMOLITION PLAN

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.: 20100306906

OWNERS INFO:
ARCADIA UNIVERSITY
450 S EASTON ROAD
GLENSIDE, PA 19038
215-572-2900

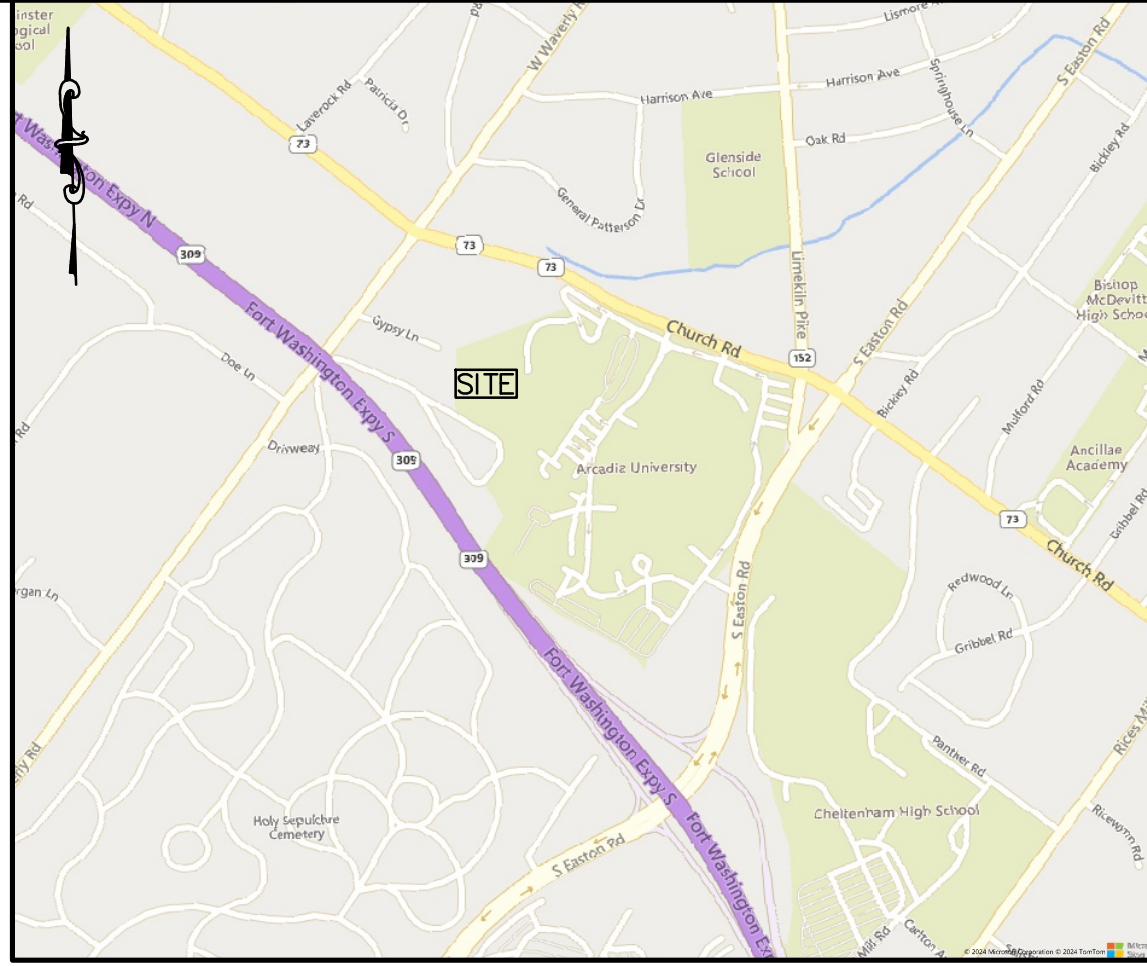
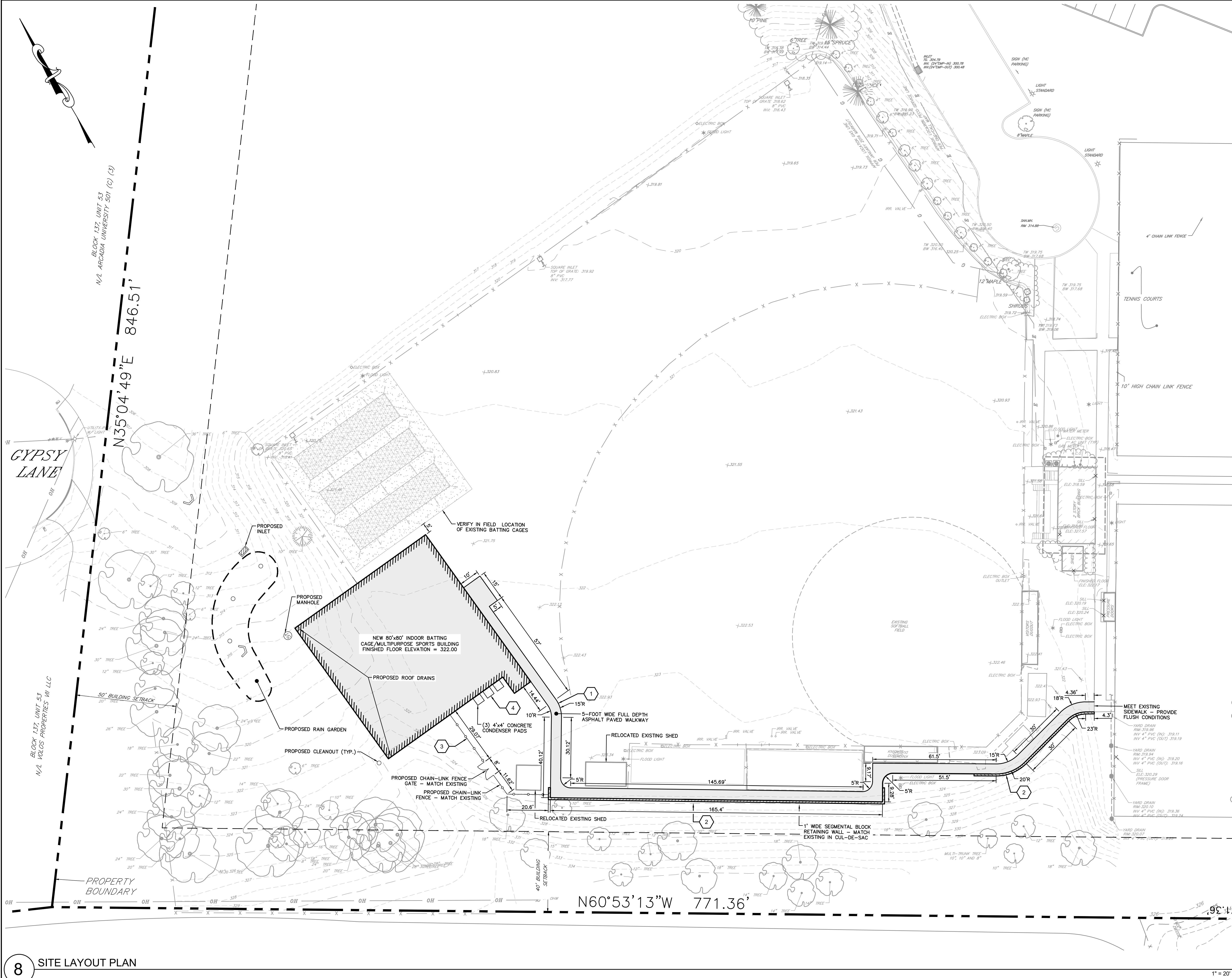
MUNICIPAL FILE No.: 31-00-08860-00-1

TAX MAP PARCEL No.: 59.10 AC. TOTAL AREA: 59.10 AC. TOTAL LOTS: 1

DATE: 04/22/2025 SCALE: 1"=20'

DRAWN BY: AB CHECKED BY: KS

SHEET NO.: 7 OF 23



LOCATION MAP
SCALE: 1"=1000'

EXISTING LEGEND

---	EXISTING MAJOR CONTOURS	⊙	SANITARY MANHOLE
---	EXISTING MINOR CONTOURS	⊠	STORM INLET
---	EXISTING SPOT ELEVATION	⊠	DETECTABLE WARNING SURFACE
---	TREE LINE	⊠	GAS VALVE
---	LEGAL RIGHT-OF-WAY	⊠	WATER VALVE
---	ULTIMATE RIGHT-OF-WAY	+	GUY
---	STORM LINE	⊠	ELECTRIC METER
---	GAS LINE	⊠	FIRE HYDRANT
---	OVERHEAD ELECTRIC LINE	⊠	UTILITY POLE
---	ELECTRIC LINE	⊠	MAILBOX
---	SANITARY LINE	⊠	LIGHT STANDARD
---	SANITARY LATERAL	⊠	CONCRETE MONUMENT FND
---	WATER LINE	⊠	IRON PIN FOUND
---	WATER LATERAL	⊠	CONIFER TREE
---	EDGE OF STREAM	⊠	DECIDUOUS TREE
---	EXISTING EASEMENT	⊠	TREE STUMP
---	SOIL BOUNDARY	⊠	SOIL LABEL
---	WATERS OF THE US AND COMMONWEALTH	⊠	
---	100 YEAR FLOOD PLAN	⊠	

LAYOUT LEGEND

⊠	PROPOSED ASPHALT PAVING
⊠	PROPOSED CONCRETE PAVING
⊠	PROPOSED RETAINING WALL
⊠	PROPOSED CHAIN-LINK FENCE
⊠	PROPOSED MANHOLE
⊠	PROPOSED CLEANOUT
⊠	PROPOSED ENDWALL
⊠	PROPOSED RIPRAP
⊠	PROPOSED INLET

MATERIALS DETAIL KEY NOTES

1	FULL DEPTH ASPHALT PAVING (DETAIL 1 / C9.00)
2	RETAINING WALL (DETAIL 3 / C9.00)
3	CHAIN-LINK FENCE (DETAIL 2 / C9.00)
4	CONCRETE EQUIPMENT PAD (DETAIL 4 / C9.00)

8 SITE LAYOUT PLAN

PENNSYLVANIA ONE CALL SYSTEM, INC.

925 Iron Run Road
West Mifflin, Pennsylvania
15122-1078

811

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SERIAL NO. 2022064231-000

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

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ENGINEERING & CONSULTING SERVICES

66 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 19001 • (717) 345-0300 • www.gilmore-associates.com

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NOT APPROVED FOR CONSTRUCTION

DATE: 04/22/2025

PROFESSIONAL
JEFFREY J. KELLY
PE092859

REV.	DATE	BY	DESCRIPTION

LAND DEVELOPMENT PLAN

ARCADIA INDOOR HITTING FACILITY

CHELTNHAM TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

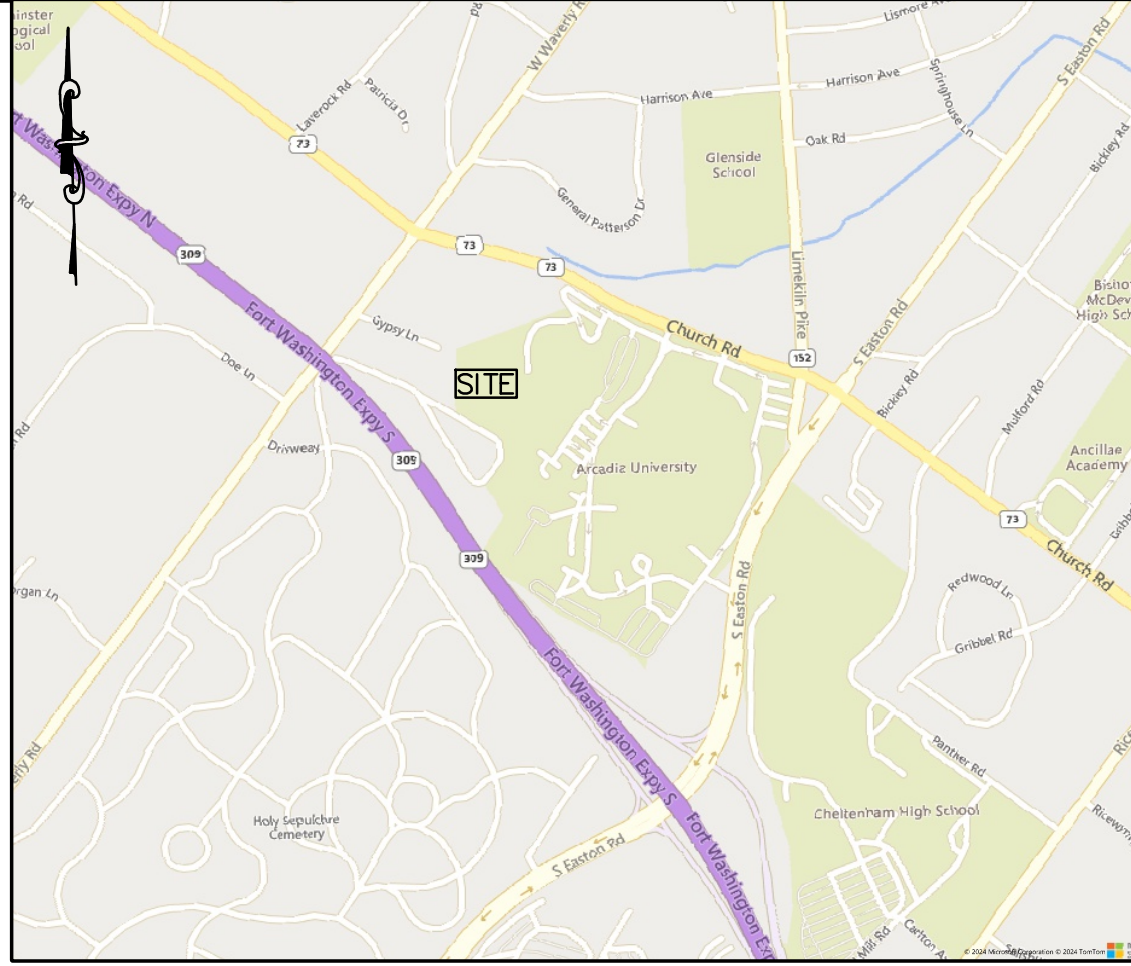
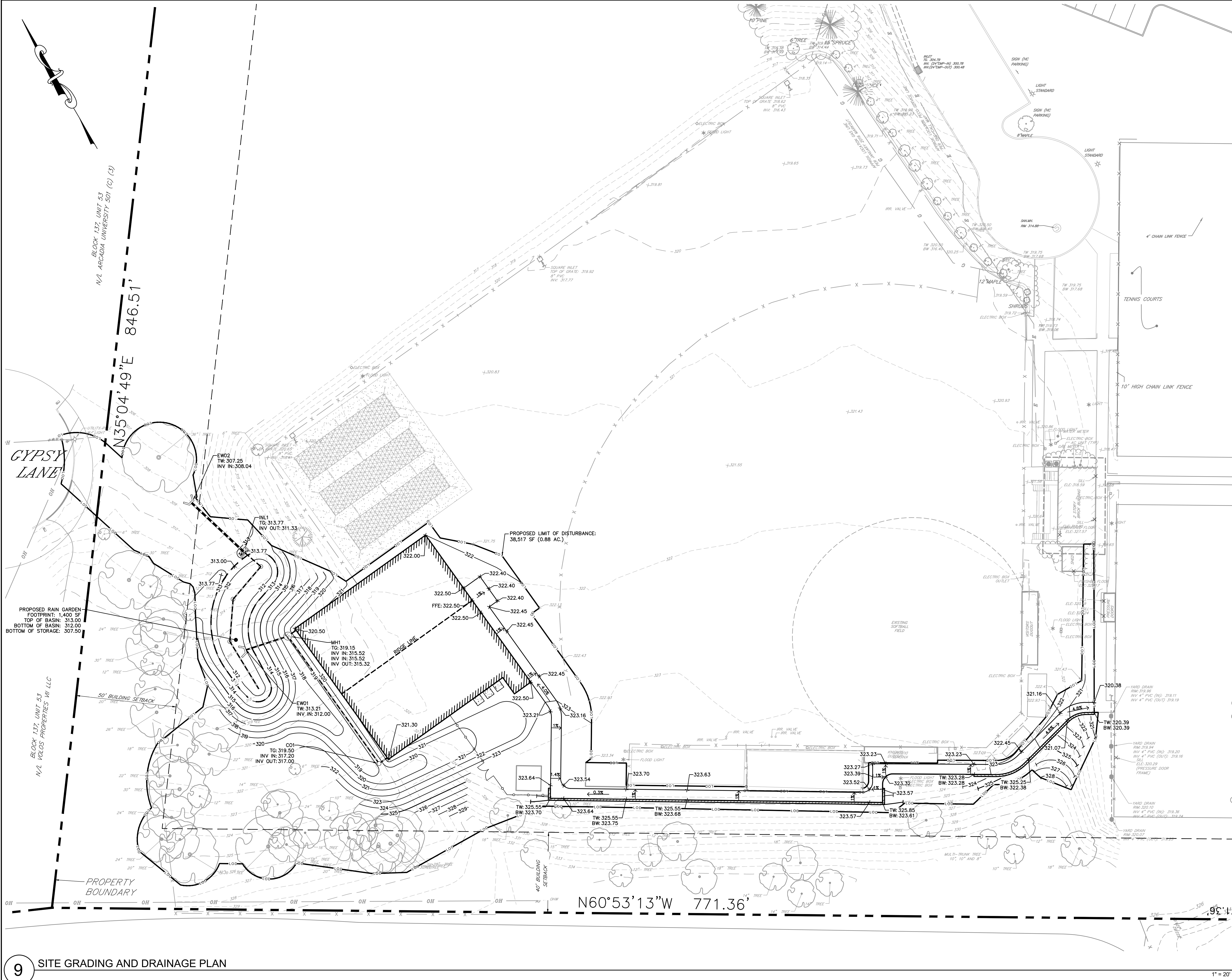
SITE LAYOUT PLAN

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.: 20100306906

OWNERS INFO:
ARCADIA UNIVERSITY
450 S EASTON ROAD
GLENSIDE, PA 19038
215-572-2900

MUNICIPAL FILE No.:
TAX MAP PARCEL No.: 31-00-08860-00-1
TOTAL AREA: 59.10 AC. TOTAL LOTS: 1
DATE: 04/22/2025 SCALE: 1"=20'
DRAWN BY: AB CHECKED BY: KS
SHEET NO.: 8 OF 23



EXISTING LEGEND

---	EXISTING MAJOR CONTOURS	⊙	SANITARY MANHOLE
---	EXISTING MINOR CONTOURS	⊠	STORM INLET
---	EXISTING SPOT ELEVATION	⊠	DETECTABLE WARNING SURFACE
---	TREE LINE	⊠	GAS VALVE
---	LEGAL RIGHT-OF-WAY	⊠	WATER VALVE
---	ULTIMATE RIGHT-OF-WAY	⊠	GUY
---	STORM LINE	⊠	ELECTRIC METER
---	GAS LINE	⊠	FIRE HYDRANT
---	OVERHEAD ELECTRIC LINE	⊠	UTILITY POLE
---	ELECTRIC LINE	⊠	MAILBOX
---	SANITARY LINE	⊠	LIGHT STANDARD
---	SANITARY LATERAL	⊠	CONCRETE MONUMENT END
---	WATER LINE	⊠	IRON PIN FOUND
---	WATER LATERAL	⊠	CONIFER TREE
---	EDGE OF STREAM	⊠	DECIDUOUS TREE
---	EXISTING EASEMENT	⊠	TREE STUMP
---	SOIL BOUNDARY	⊠	SOIL LABEL
---	WATERS OF THE US AND COMMONWEALTH	⊠	
---	100 YEAR FLOOD PLAIN	⊠	

GRADING LEGEND

---	PROPOSED MAJOR CONTOUR
---	PROPOSED MINOR CONTOUR
---	PROPOSED SPOT ELEVATION
---	PROPOSED SLOPE

PLAN NOTES

- THIS LAND DEVELOPMENT/SUBDIVISION SHALL BE CONSTRUCTED IN ACCORDANCE WITH ALL CHELTENHAM TOWNSHIP ORDINANCES.
- ALL PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE PORTIONS OF THE PENNDOT PUBLICATION 408 STANDARDS AND SPECIFICATIONS AND WITH ALL TOWNSHIP STANDARDS AND SPECIFICATIONS.
- ALL NEW PUBLIC UTILITIES, INCLUDING BUT NOT LIMITED TO, ELECTRIC, GAS AND TELEPHONE, SHALL BE PLACED UNDERGROUND WITHIN THE LAND DEVELOPMENT/SUBDIVISION. SUCH UTILITIES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE PREVAILING STANDARDS AND PRACTICES OF THE UTILITY OR OTHER COMPANY PROVIDING SERVICE, EXCEPT WHERE IT IS DEMONSTRATED TO THE SATISFACTION OF THE BOARD OF COMMISSIONERS THAT UNDERGROUND INSTALLATIONS ARE NOT FEASIBLE BECAUSE OF PHYSICAL CONDITIONS OF THE LAND.
- ANY UTILITY CONFLICTS WITH PROPOSED CONSTRUCTION ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE TOWNSHIP ENGINEER AND THE ENGINEER OF RECORD. ALL EXISTING UTILITIES THAT ARE TO BE RELOCATED OR ALTERED IN ANY MANNER ARE TO BE DONE IN ACCORDANCE WITH THE RESPECTIVE UTILITY COMPANY STANDARDS. ALL EXISTING UTILITIES EXPOSED DURING CONSTRUCTION ARE TO BE SUPPORTED UNTIL BACKFILL IS IN PLACE. ANY CROSSING LESS THAN ONE FOOT CLEAR IS TO BE SUPPORTED WITH A SADDLE (CONCRETE OR SAND AS NOTED).
- NO ADDITIONAL IMPERVIOUS AREAS (DECKS, ADDITIONS, PATIOS, SHEDS, WALKWAYS, ETC.) FROM THIS PLAN SET SHALL BE ADDED TO THESE LOTS WITHOUT MITIGATING STORMWATER MANAGEMENT MEASURES APPROVED BY TOWNSHIP ENGINEER TO ENSURE NO ADDITIONAL STORMWATER RUNOFF OCCURS.
- LIMITS OF DISTURBANCE, AS SHOWN ON THE PLANS, SHALL BE CLEARLY MARKED IN THE FIELD PRIOR TO THE START OF THE CONSTRUCTION. (INCLUDING INSTALLATION OF EROSION/SEDIMENT CONTROL MEASURES). THE LIMITS OF DISTURBANCE SHALL BE MARKED WITH STAKED YELLOW SAFETY RIBBON OR OTHER MATERIALS ACCEPTABLE TO THE TOWNSHIP. THE MARKING MATERIALS SHALL BE MAINTAINED, REPAIRED OR RESET UNTIL CONSTRUCTION WITHIN THE ENCLOSED AREAS IS COMPLETE AND UNTIL THE PVIOUS AREAS ACHIEVE A 75% CATCH OF GROUND COVER. NO DISTURBANCE OF GROUND COVER, CUTS OR FILL PLACEMENT SHALL BE PERMITTED OUTSIDE THE STAKED LIMITS OF DISTURBANCE.
- DURING CONSTRUCTION, THE DEVELOPER/OWNER IS SOLELY RESPONSIBLE FOR INSURING THE PROPER FUNCTIONING OF THE EROSION AND SEDIMENT CONTROL MEASURES. THE DEVELOPER/OWNER SHALL TAKE WHATEVER MEASURES ARE REQUIRED TO INSURE THAT NO SEDIMENT LEAVES THE SITE.
- NO DEBRIS DISPOSAL PITS SHALL BE PERMITTED.
- NO OPEN BURNING SHALL BE PERMITTED.
- ALL TREES TO BE SAVED SHALL BE TAGGED IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO THE REQUIREMENTS OF SECTION 280-10 OF THE CHELTENHAM CODE.
- ALL EXTERIOR LIGHTING FIXTURES SHALL BE SHIELDED TO DEFLECT LIGHTING FROM ADJACENT RESIDENTIAL PROPERTIES AND FROM PASSING MOTORISTS.
- THE OWNER SHALL PRESERVE ALL TREES ON THIS SITE EXCEPT WHERE NECESSARY TO CONSTRUCT BUILDINGS, PARKING, ACCESSWAYS, AND UTILITIES AND SELECTIVE THINNING OF EXISTING TREES. SPECIFIC SPECIES OF PLANT MATERIALS AS DESIGNATED ON THIS PLAN OR THE LANDSCAPE PLAN SHALL BE PRESERVED AND PROPERLY PROTECTED DURING CONSTRUCTION. IN THE CASE OF UTILITY RIGHTS-OF-WAY AND EASEMENTS, ANY DISTURBED AREA SHALL BE REPLANTED/AS TO ACHIEVE A RECURRENCE OF NATURAL VEGETATION.
- AN UNDERGROUND STORMWATER MANAGEMENT SYSTEM WAS CONSTRUCTED IN 2010 TO ACCOMMODATE UP TO AN ADDITIONAL 10,000 SQUARE FEET OF IMPERVIOUS COVERAGE WITHIN THE AREA OF THE KUCH BUILDING. ACCORDANCE WITH A LETTER FROM BOUCHER SJ JAMES, INC. TO CHELTENHAM TOWNSHIP, DATED MARCH 28, 2019, SUBSEQUENT CONSTRUCTION HAS ACCOUNTED FOR 2,280 SQUARE FEET OF THIS 10,000 ALLOTMENT. CURRENT APPLICATION PROPOSES AN ADDITIONAL 1,169 SQUARE FEET OF IMPERVIOUS COVERAGE.

9 SITE GRADING AND DRAINAGE PLAN

PENNSYLVANIA ONE CALL SYSTEM, INC.

925 Iron Run Road
West Mifflin, Pennsylvania
15122-1078

811

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SERIAL NO. 2022064231-000

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NOT APPROVED FOR CONSTRUCTION

REV.	DATE	BY	DESCRIPTION

LAND DEVELOPMENT PLAN
ARCADIA INDOOR HITTING FACILITY
CHELTENHAM TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

SITE GRADING AND DRAINAGE PLAN

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.: 20100306906

OWNERS INFO:
ARCADIA UNIVERSITY
450 S EASTON ROAD
GLENSIDE, PA 19038
215-572-2900

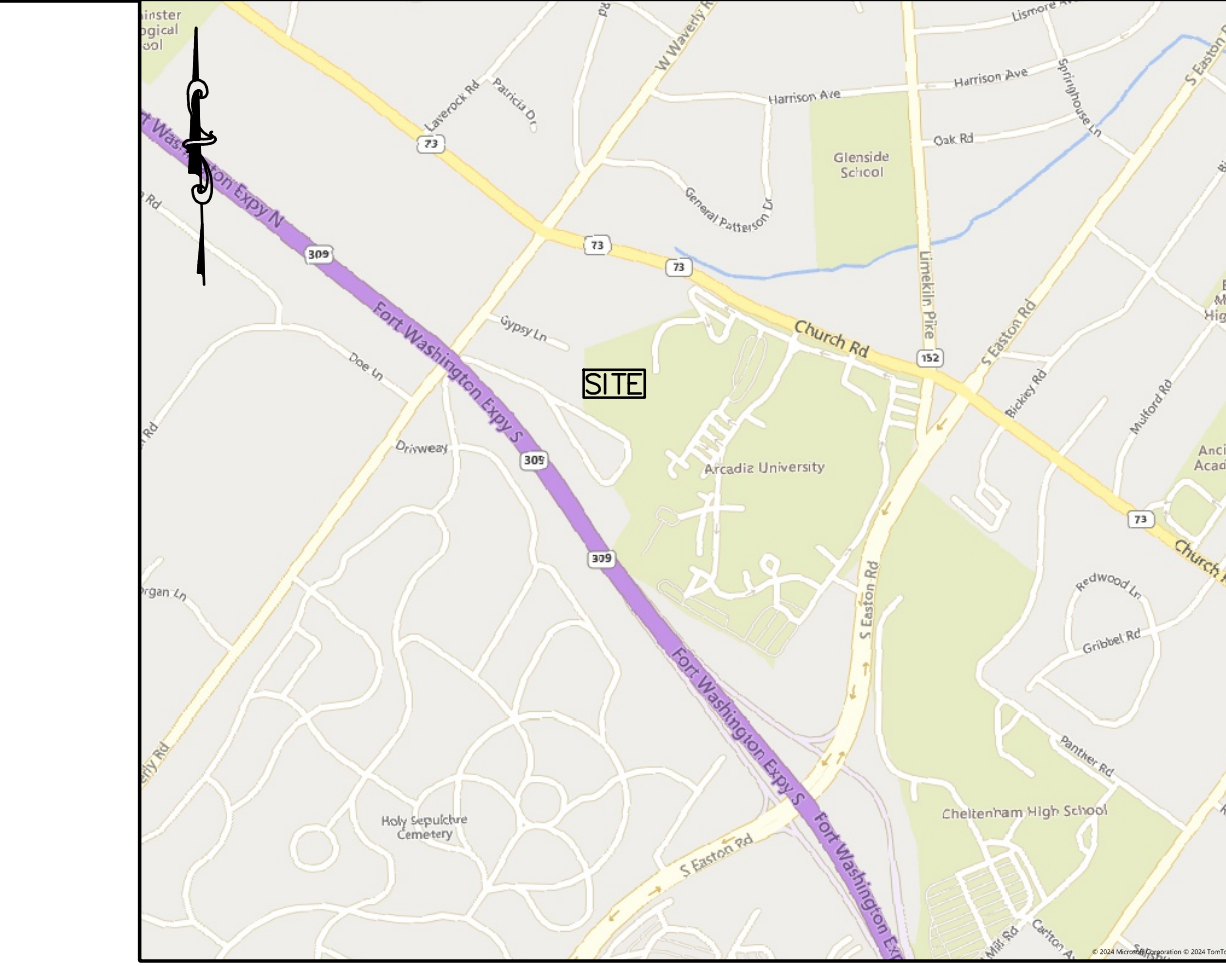
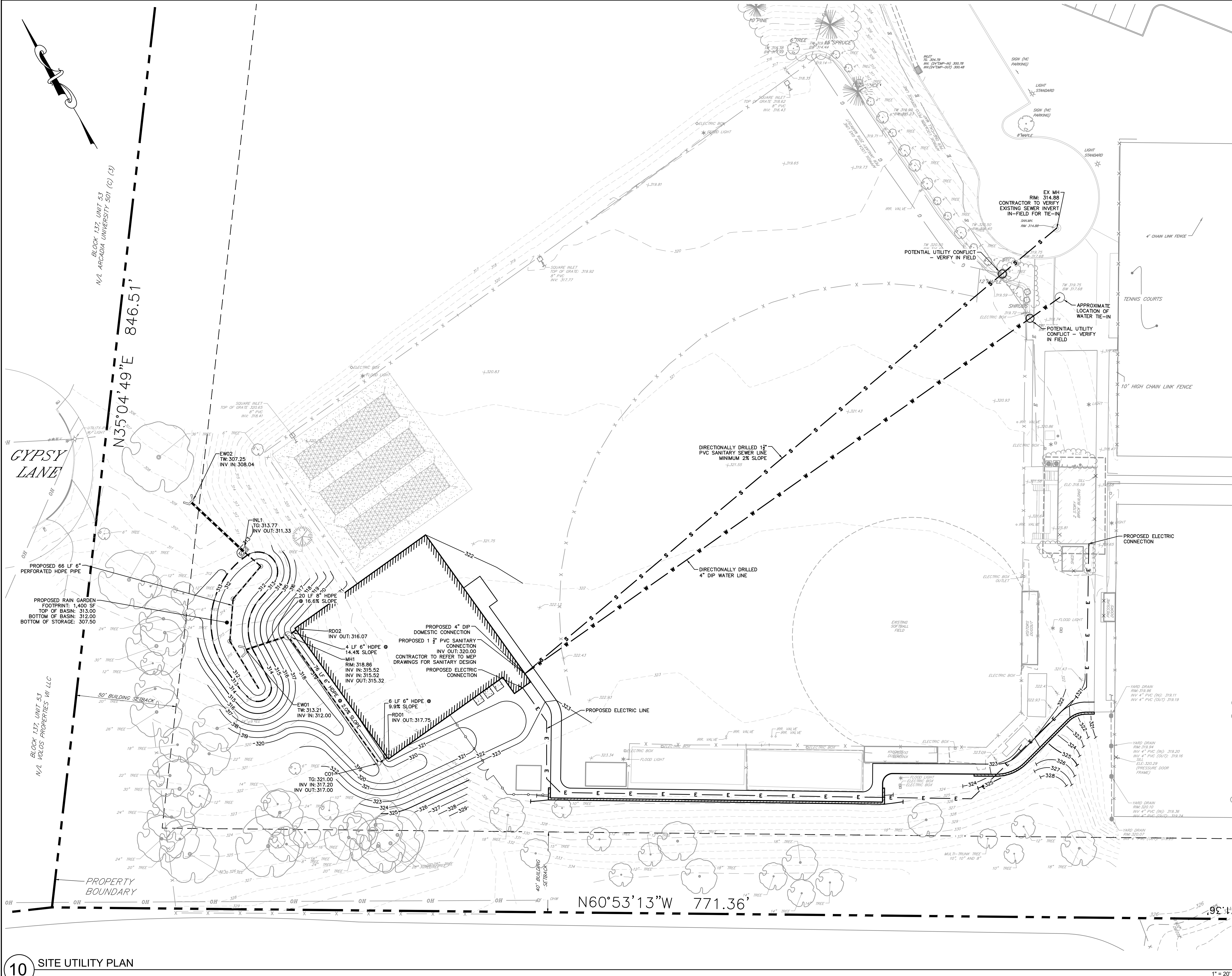
MUNICIPAL FILE No.: 31-00-08860-00-1

TAX MAP PARCEL No.: 59.10 AC. TOTAL LOTS: 1

DATE: 04/22/2025 SCALE: 1"=20'

DRAWN BY: AB CHECKED BY: KS

SHEET NO.: 9 OF 23



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

EXISTING LEGEND	
---	EXISTING MAJOR CONTOURS
---	EXISTING MINOR CONTOURS
---	EXISTING SPOT ELEVATIONS
---	TREE LINE
---	LEGAL RIGHT-OF-WAY
---	ULTIMATE RIGHT-OF-WAY
---	STORM LINE
---	GAS LINE
---	OVERHEAD ELECTRIC LINE
---	ELECTRIC LINE
---	SANITARY LINE
---	SANITARY LATERAL
---	WATER LINE
---	WATER LATERAL
---	EDGE OF STREAM
---	EXISTING EASEMENT
---	SOIL BOUNDARY
---	WATERS OF THE US AND COMMONWEALTH
---	100 YEAR FLOOD PLAN
○	SANITARY MANHOLE
□	STORM INLET
□	DETECTABLE WARNING SURFACE
□	GAS VALVE
□	WATER VALVE
+	GUY
+	ELECTRIC METER
+	FIRE HYDRANT
+	UTILITY POLE
+	MAILBOX
+	LIGHT STANDARD
+	CONCRETE MONUMENT FND
+	IRON PIN FOUND
+	CONIFER TREE
+	DECIDUOUS TREE
+	TREE STUMP
+	SOIL LABEL

UTILITY LEGEND	
---	PROPOSED WATER LINE
---	PROPOSED SANITARY SEWER LINE
---	PROPOSED ELECTRIC LINE
---	PROPOSED MANHOLE
---	PROPOSED STORM SEWER
---	PROPOSED INLET
---	PROPOSED CLEANOUT
---	PROPOSED ENDWALL
---	PROPOSED RIPRAP

10 SITE UTILITY PLAN

PENNSYLVANIA ONE CALL SYSTEM, INC.

925 Iron Run Road
West Mifflin, Pennsylvania
15122-1078

811

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PROFESSIONAL
JEFFREY J. KELLY
ENGINEER
PE092959

DATE: 04/22/2025

DATE	BY
04/22/2025	JK

REVISION	DATE	DESCRIPTION
1	04/22/2025	ISSUED FOR PERMIT

GILMORE & ASSOCIATES, INC.
ENGINEERING CONSULTING SERVICES

PROJECT No.: 20100306906

OWNERS INFO:
ARCADIA UNIVERSITY
450 S EASTON ROAD
GLENSIDE, PA 19038
215-572-2900

MUNICIPAL FILE No.: 31-00-08860-00-1

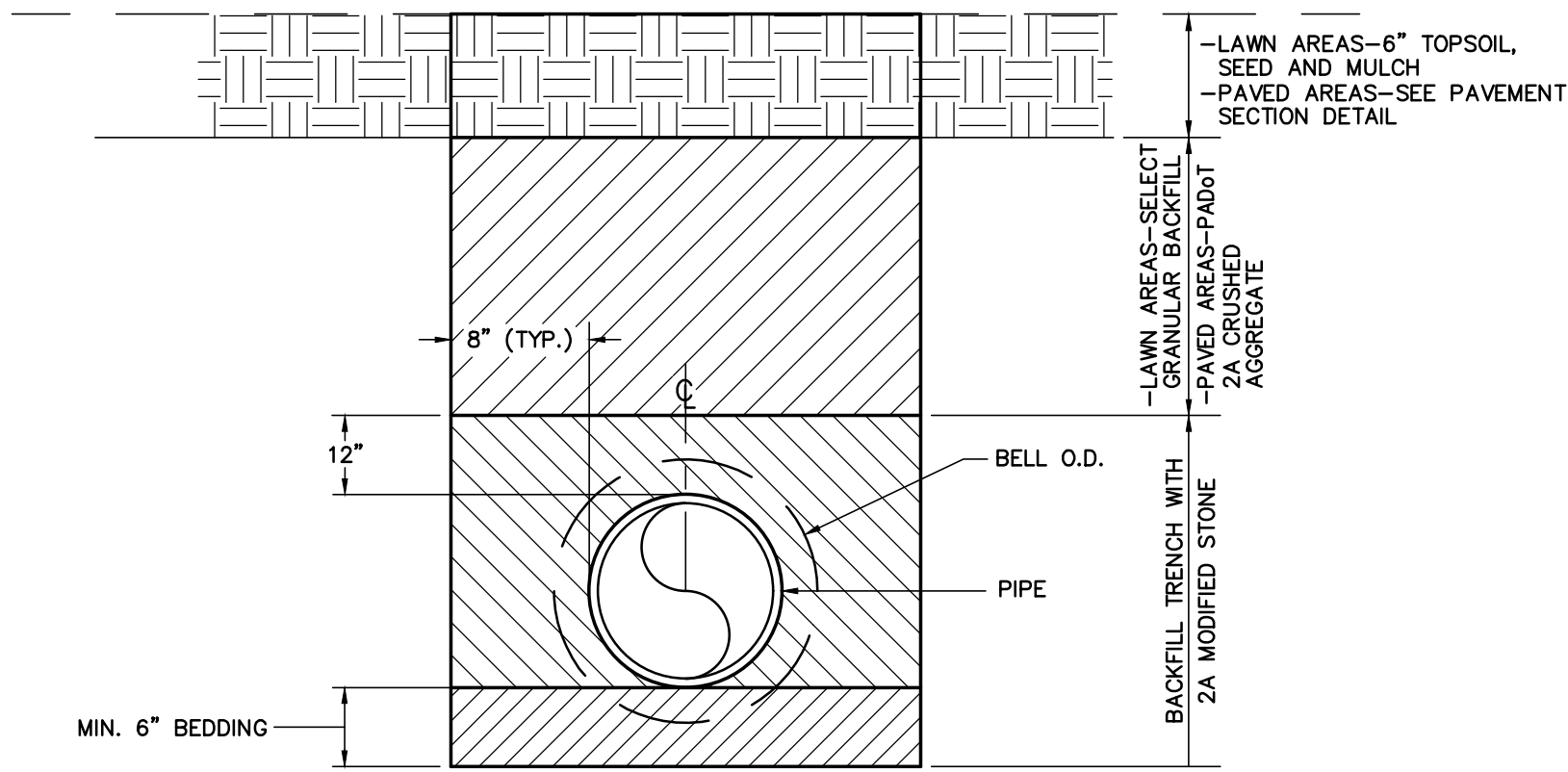
TAX MAP PARCEL No.: 59.10 AC. TOTAL LOTS: 1

DATE: 04/22/2025 SCALE: 1"=20'

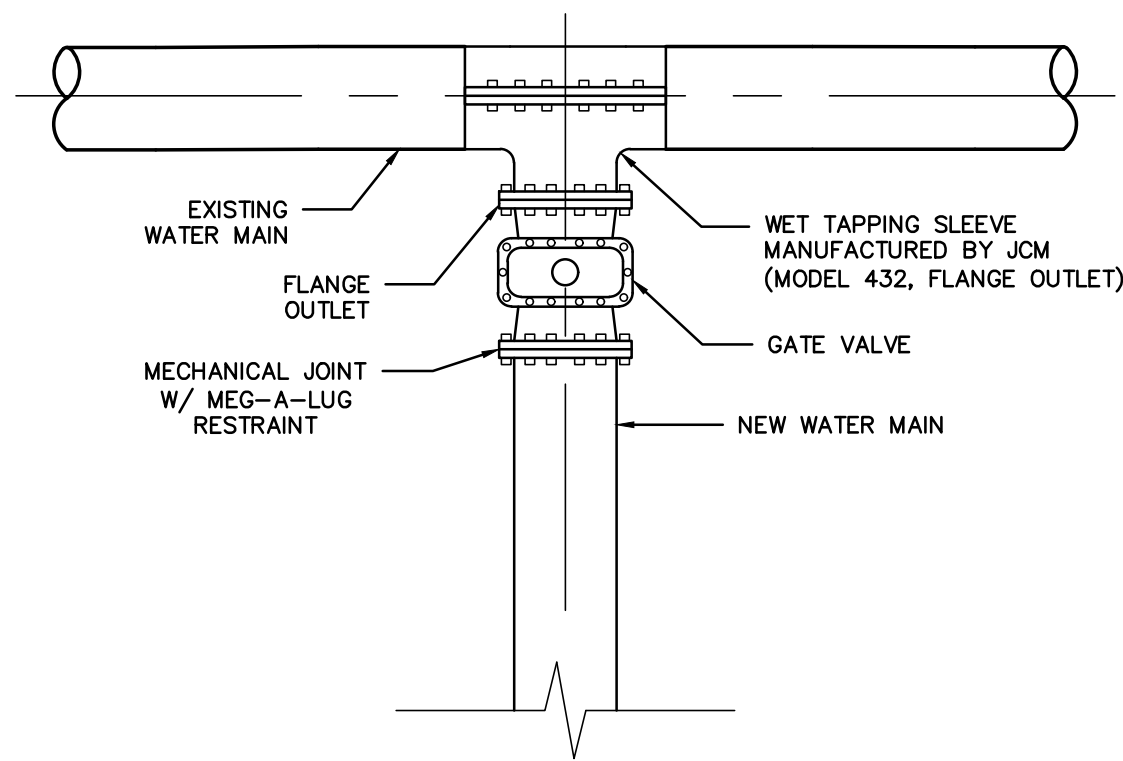
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SHEET NO.: 10 OF 23

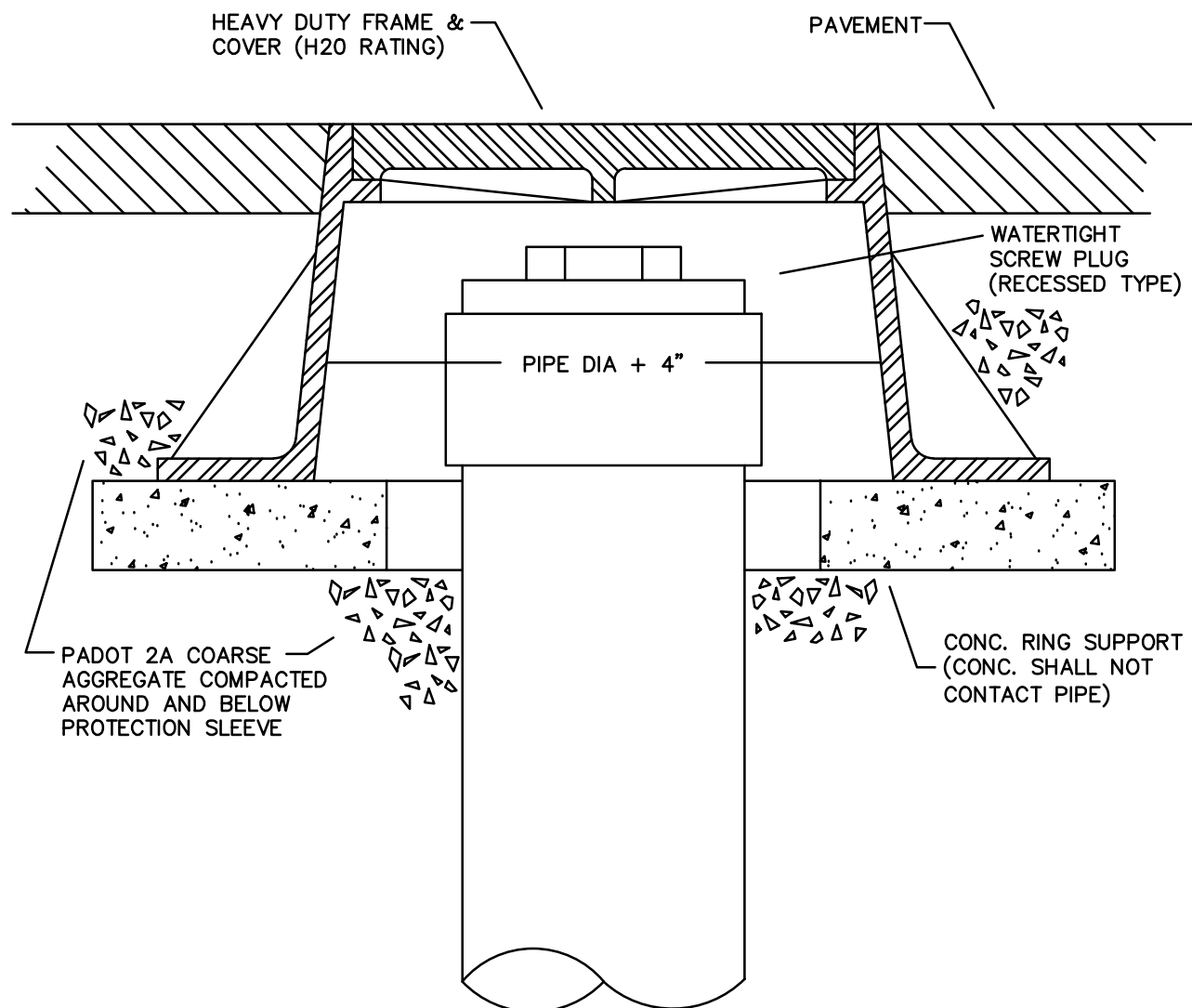
G:\Vandave\2010\20100306906 - Arcadia Substation\DESIGN\CAD\Production Drawings\Battling Cage Facility - LD SAN\10 Site Utility Plan.dwg Layout: Site Utility Details Plotted By: Jerez, on Wed Apr 23, 2025 at 10:05am



STORM PIPE TRENCH DETAIL
NOT TO SCALE

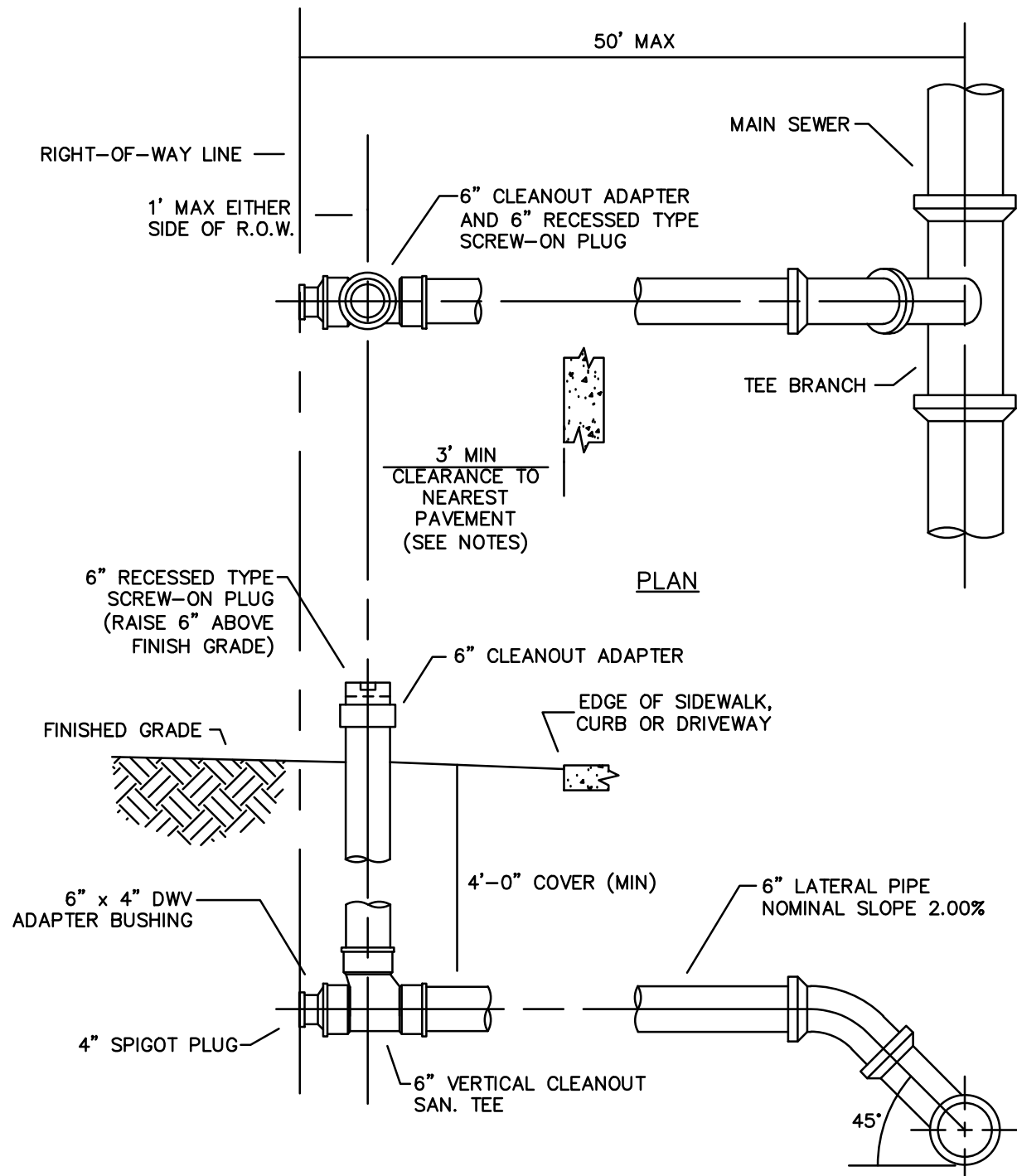


WATER MAIN CONNECTION
TO EXISTING WATER MAIN
NTS



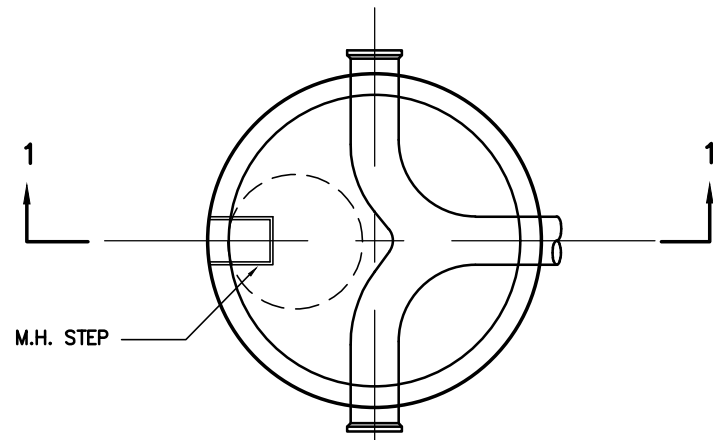
- NOTES:
1. FRAME AND COVER SHALL BE NEENAH FOUNDRY COMPANY MODEL R-1976 OR APPROVED EQUAL.
 2. CLEANOUT PROTECTION SLEEVES ARE TO BE INSTALLED FOR CLEANOUTS LOCATED IN PAVED AREAS, OR LESS THAN 3 FEET FROM A PAVED AREA.

CLEANOUT PROTECTION SLEEVE
NTS

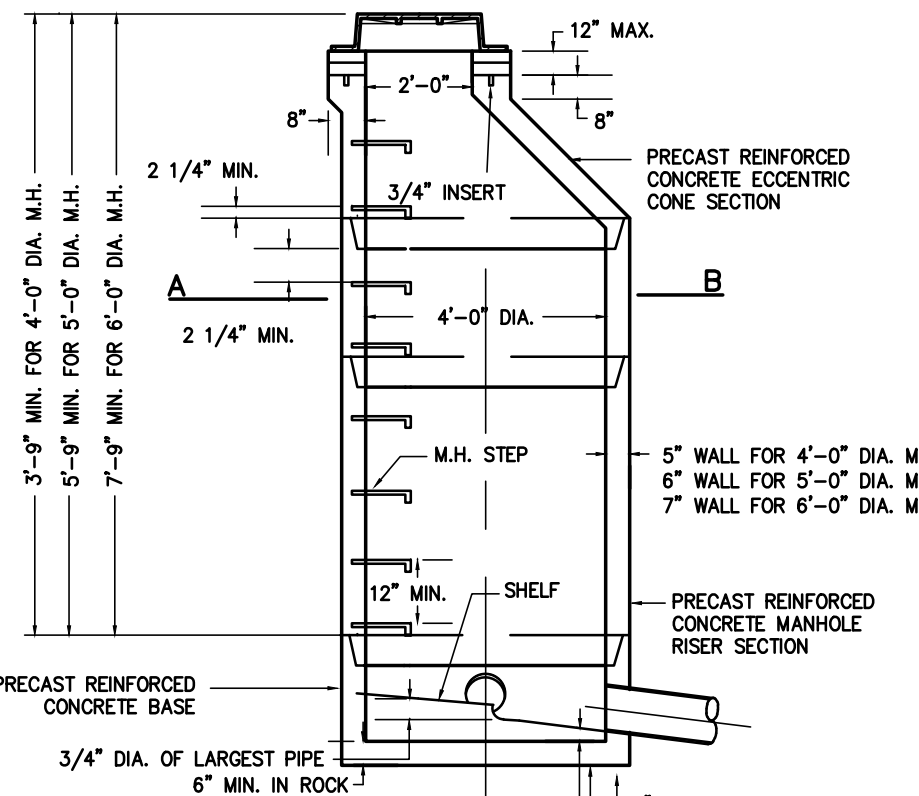


NOTE:
CLEANOUTS SHOULD NOT TYPICALLY BE INSTALLED IN OR NEAR PAVED AREAS. UNDER SPECIAL CONDITIONS, A CLEANOUT LOCATED IN, OR LESS THAN 3 FEET FROM, A PAVED AREA MAY BE INSTALLED IF A PROTECTION SLEEVE AS SHOWN IN DETAIL 5-12 IS PROVIDED.

LATERAL CONNECTION SHALLOW SEWER
NTS

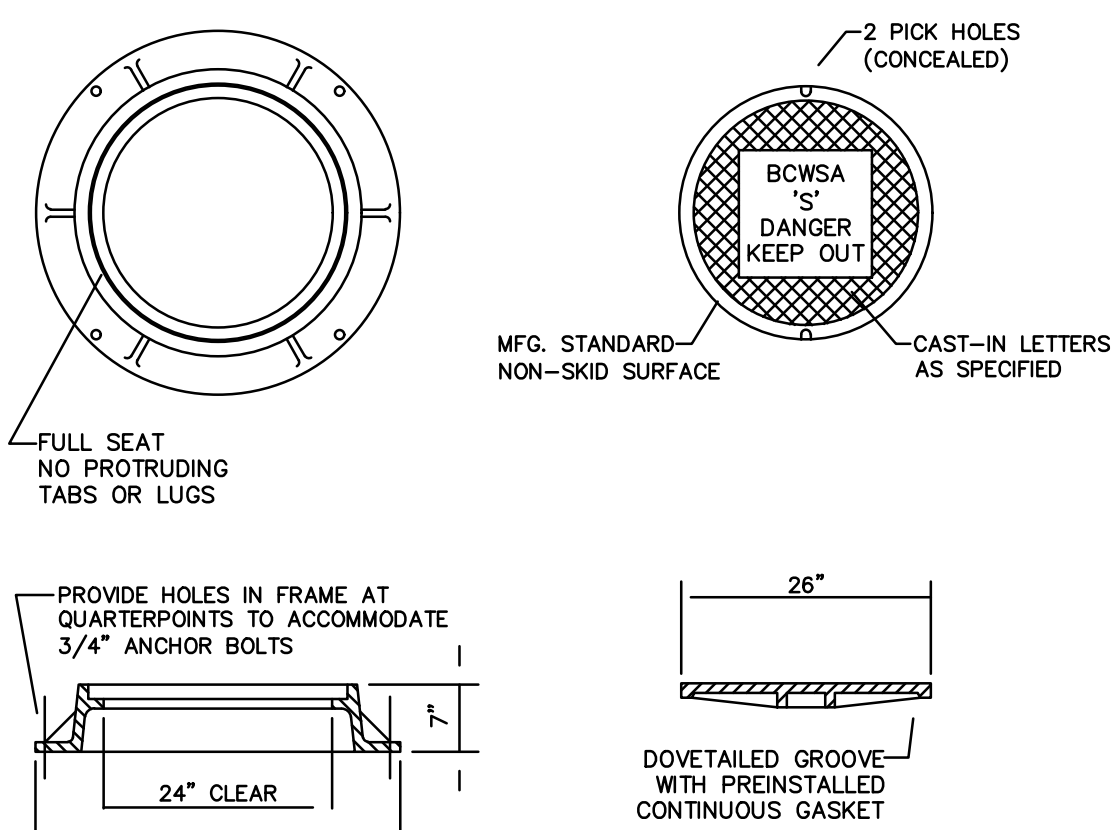


PLAN BELOW LINE A-B



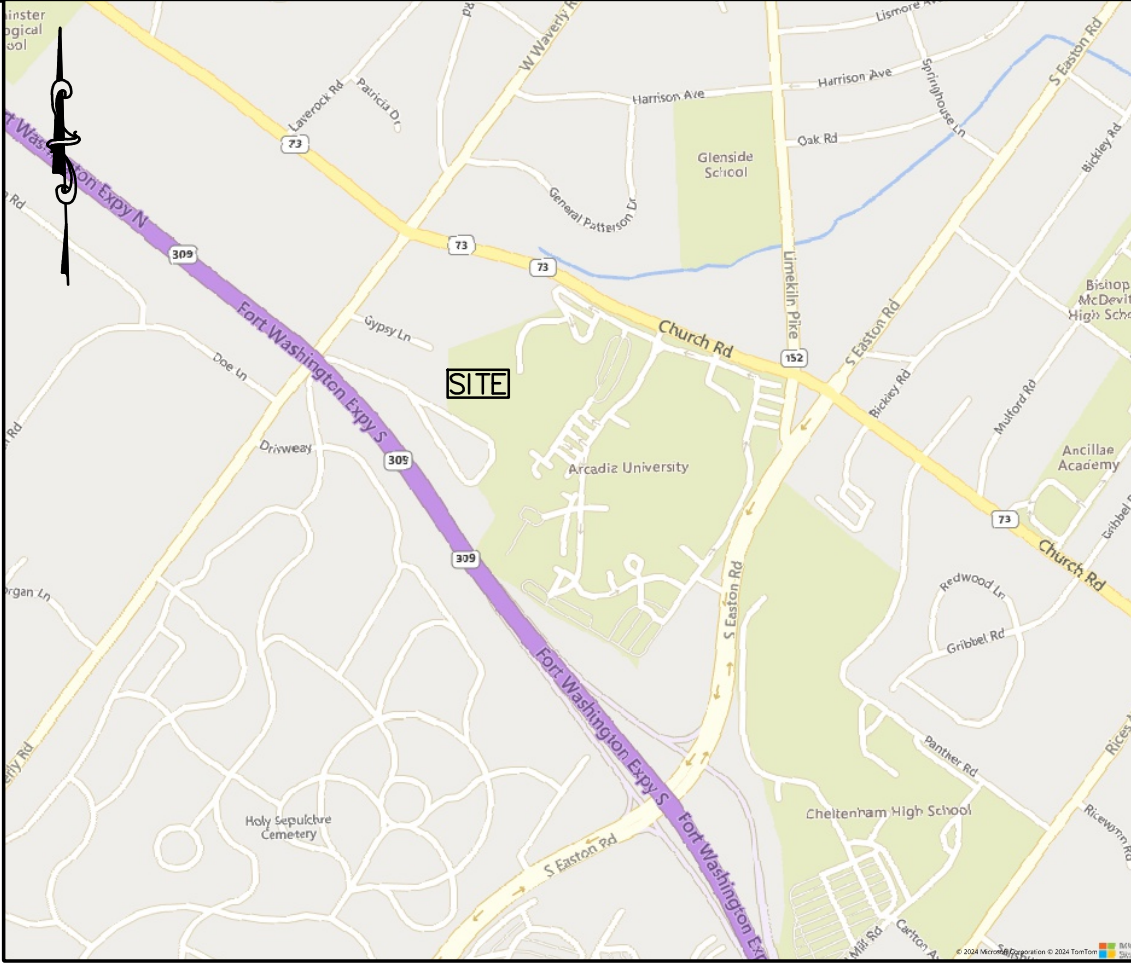
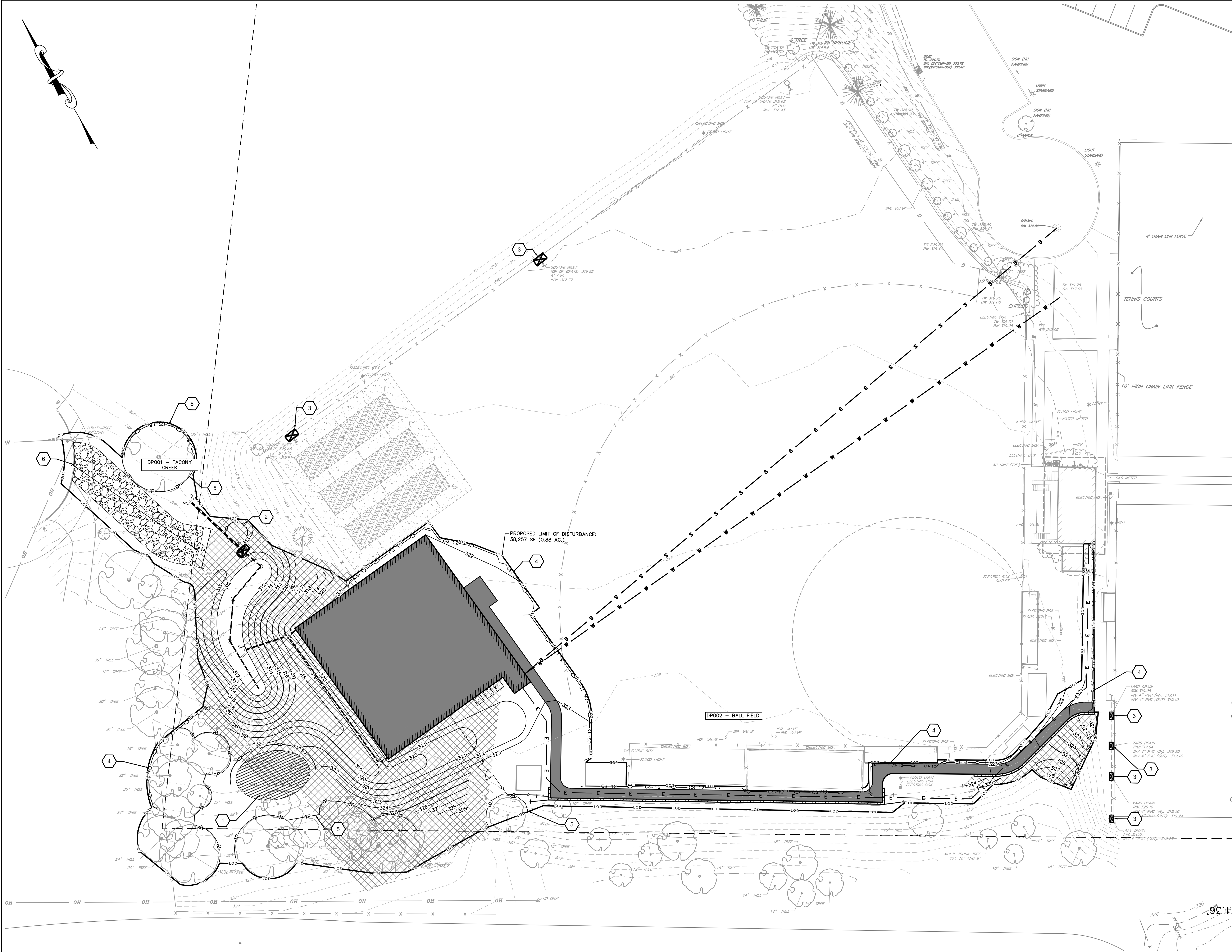
SECTION 1-1
TYPE "A" STANDARD MANHOLE
NOT TO SCALE

- NOTES:
1. THE DEPTH OF THE INVERT CHANNEL SHALL BE EQUAL TO 3/4 OF THE DIAMETER OF THE SEWER.
 2. THE SHELF SHALL SLOPE TOWARD THE INVERT CHANNEL AT A RATE OF 1" PER FOOT.
 3. TYPE "B" MANHOLES (SHALLOW TYPE) TO BE PROVIDED WHERE REQUIRED BY DEPTH CONDITIONS.
 4. FOR MANHOLES HAVING 5' DIA. AND 6' DIA. BASE, REDUCTION IN DIAMETER TO 4' SHALL START AT THE FIRST JOINT ABOVE THE UPPERMOST PIPE CONNECTION TO WALL, WHERE DEPTH IS SUFFICIENT.
 5. ALL MANHOLE FRAMES SHALL BE BOLTED TO THE CONE SECTION OR CONCRETE SLAB WITH 2- 3/4" DIA. BOLTS WITH WASHERS AND NUTS. BOLTS TO BE AT 180° ON THE BOLT CIRCLE.
 6. SEE THE SPECIFICATIONS FOR LENGTH OF PIPE CONNECTIONS TO MANHOLES.
 7. ALL CONCRETE SHALL BE 4000 PSI MINIMUM.
 8. ENTIRE OUTSIDE SURFACE OF MANHOLE SHALL RECEIVE TWO COATS OF BITUMINOUS COATING, KOPFERS 300M, PENNOXY TAR 32-B-4, OR APPROVED EQUAL.
 9. INSTALL 2 LAYERS PLASTIC PREFORMED JOINT SEALANT BETWEEN ALL SECTIONS AND UNDER FRAME.
 10. MANHOLE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ASTM C478 NOTES.
 11. STEPS TO BE ALUMINUM ALLOY WITH DEEP TREAD; STEEL REINFORCED POLYPROPYLENE IS OPTIONAL.
 12. 4' DIA. MANHOLE - 6" TO 15" PIPES
5' DIA. MANHOLE - 15" TO 27" PIPES
6' DIA. MANHOLE - 30" TO 48" PIPES
 13. WHEN 2 OR MORE GRADE ADJUSTMENT RINGS ARE USED, A WATERTIGHT PVC CONNECTOR SHALL BE INSTALLED BETWEEN THE FRAME AND THE CONE OR SLAB. CONNECTOR SHALL BE WATER-LOK CONNECTOR BFA ANTI-FLOATING BY A-LOK PRODUCTS INC. OR APPROVED EQUAL.
 14. MANHOLES THAT RECEIVE FORCE MAIN DISCHARGE OR THAT ARE LOCATED ON INTERCEPTORS OR TRUNK SEWERS SHALL BE CONSTRUCTED WITH A PVC LINER.



- NOTES:
1. MANHOLE FRAME AND COVER SHALL BE NEENAH FOUNDRY CO. MODEL R-1642, WITH SELF-SEALING LID GASKET (OR APPROVED EQUAL).
 2. ALL MATERIALS TO BE GRAY CAST IRON ASTM A-48, CLASS 35.
 3. FRAME AND COVER SHALL BE FOR HEAVY DUTY TRAFFIC, AASHTO HS-20.
 4. PROVIDE FOUR (4) STAINLESS STEEL ANCHOR BOLTS, 3/4" DIA. MINIMUM.
 5. COVER SHALL HAVE THE WORDS "BOWSA SANITARY SEWER" OR "BOWSA 'S' DANGER KEEP OUT" CAST THEREON IN 2" LETTERS.
 6. FRAME AND COVER SHALL BE COATED WITH BLACK ASPHALTIC PAINT.
 7. THE FOLLOWING MANUFACTURER'S STANDARD CASTING, OR APPROVED EQUAL, SHALL BE USED.

STANDARD MANHOLE FRAME AND COVER
NTS



LOCATION MAP

SCALE: 1"=1000'

EXISTING LEGEND

- | | |
|-----------------------------------|----------------------------|
| EXISTING MAJOR CONTOURS | SANITARY MANHOLE |
| EXISTING MINOR CONTOURS | STORM INLET |
| EXISTING SPOT ELEVATION | DETECTABLE WARNING SURFACE |
| TREE LINE | GAS VALVE |
| LEGAL RIGHT-OF-WAY | WATER VALVE |
| ULTIMATE RIGHT-OF-WAY | GUY |
| STORM LINE | ELECTRIC METER |
| GAS LINE | FIRE HYDRANT |
| OVERHEAD ELECTRIC LINE | UTILITY POLE |
| ELECTRIC LINE | MAILBOX |
| SANITARY LINE | LIGHT STANDARD |
| SANITARY LATERAL | CONCRETE MONUMENT FND |
| WATER LINE | IRON PIN FOUND |
| WATER LATERAL | CONIFER TREE |
| EDGE OF STREAM | DECIDUOUS TREE |
| EXISTING EASEMENT | TREE STUMP |
| SOIL BOUNDARY | SOIL LABEL |
| WATERS OF THE US AND COMMONWEALTH | |
| 100 YEAR FLOOD PLAN | |

E&S LEGEND

- | | |
|-------|---|
| CS-12 | 12" COMPOST SOCK |
| LOD | LIMIT OF DISTURBANCE |
| TP | TREE PROTECTION FENCE |
| TS | TOPSOIL STOCKPILE WITH 12" COMPOST SOCK |
| | CONCRETE WASHOUT STATION |
| | ROCK CONSTRUCTION ENTRANCE |
| | INLET PROTECTION |
| | EROSION CONTROL MATTING |
| | PROPOSED RIPRAP |

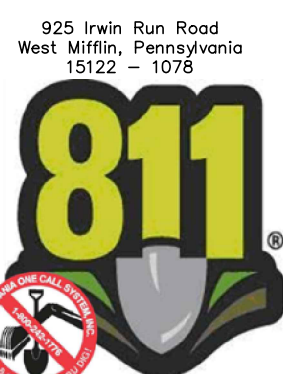
E&S DETAIL KEY NOTES

- | | |
|---|---|
| 1 | TOPSOIL STOCKPILE (DETAIL 4 / C7.20) |
| 2 | CONCRETE WASHOUT STATION (DETAIL 7 / C7.20) |
| 3 | INLET PROTECTION (DETAIL 8 / C7.20) |
| 4 | 12" COMPOST SOCK (DETAIL 2 / C7.20) |
| 5 | TREE PROTECTION FENCING (DETAIL 6 / C7.20) |
| 6 | ROCK CONSTRUCTION ENTRANCE (DETAIL 1 / C7.20) |
| 7 | EROSION CONTROL MATTING (DETAIL 3 / C7.20) |
| 8 | 18" COMPOST SOCK (DETAIL 2 / C7.20) |

12 EROSION AND SEDIMENT CONTROL PLAN

1" = 20'

PENNSYLVANIA ONE CALL SYSTEM, INC.



SERIAL NO. 2022064231-000

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

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NOT APPROVED FOR CONSTRUCTION

DATE: 04/22/2025
BY: KS

DESCRIPTION: E&S PLAN

REV. 1

DATE: 04/22/2025
BY: KS

DESCRIPTION: E&S PLAN

REV. 1

DATE: 04/22/2025
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DATE: 04/22/2025
BY: KS

DESCRIPTION: E&S PLAN

REV. 1

DATE: 04/22/2025
BY: KS

DESCRIPTION: E&S PLAN

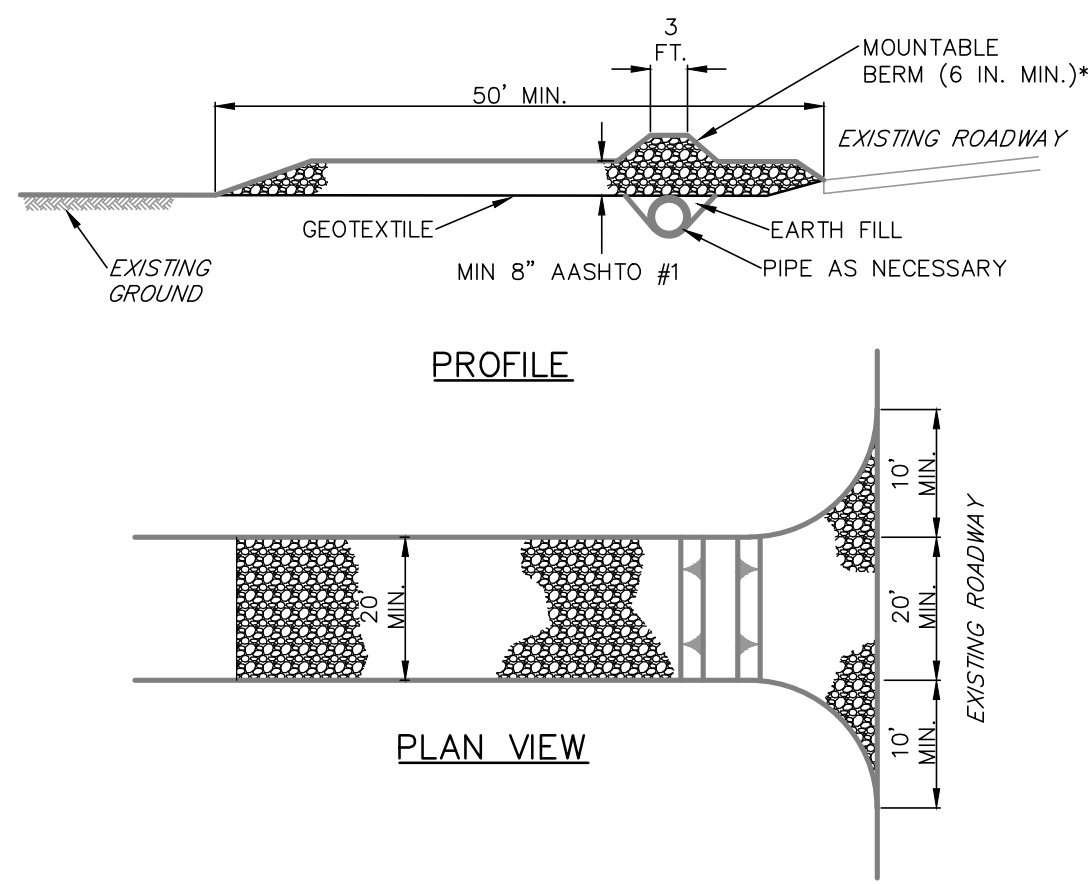
REV. 1

DATE: 04/22/2025
BY: KS

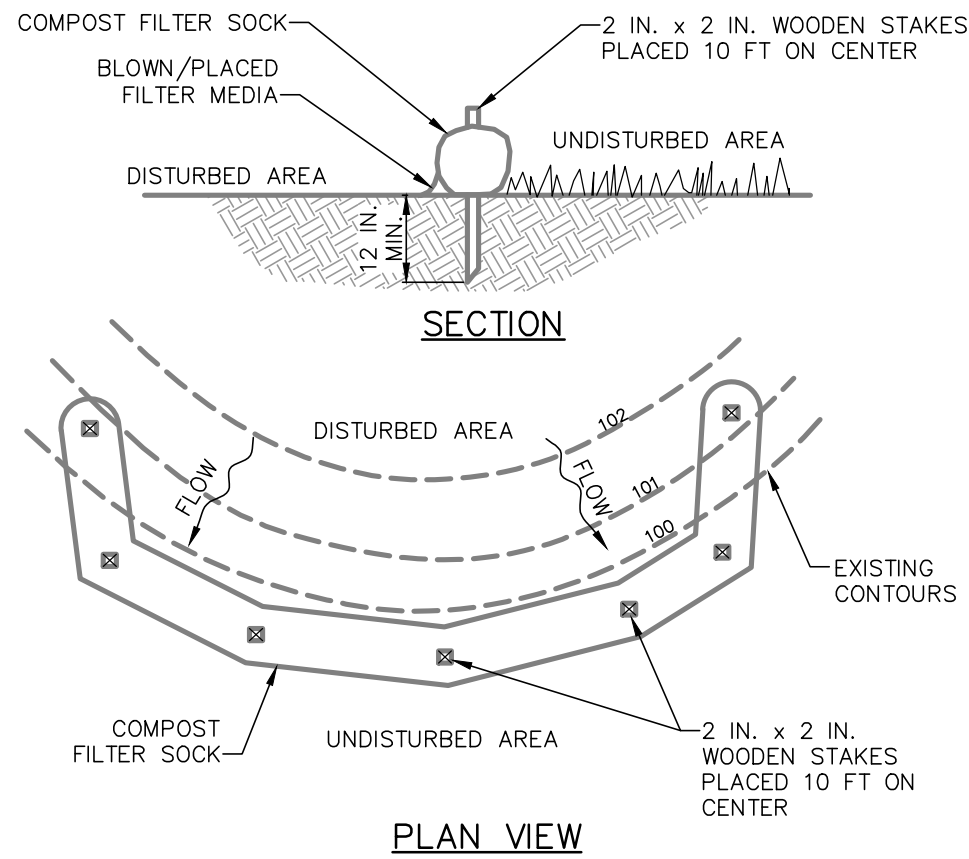
DESCRIPTION: E&S PLAN

REV. 1

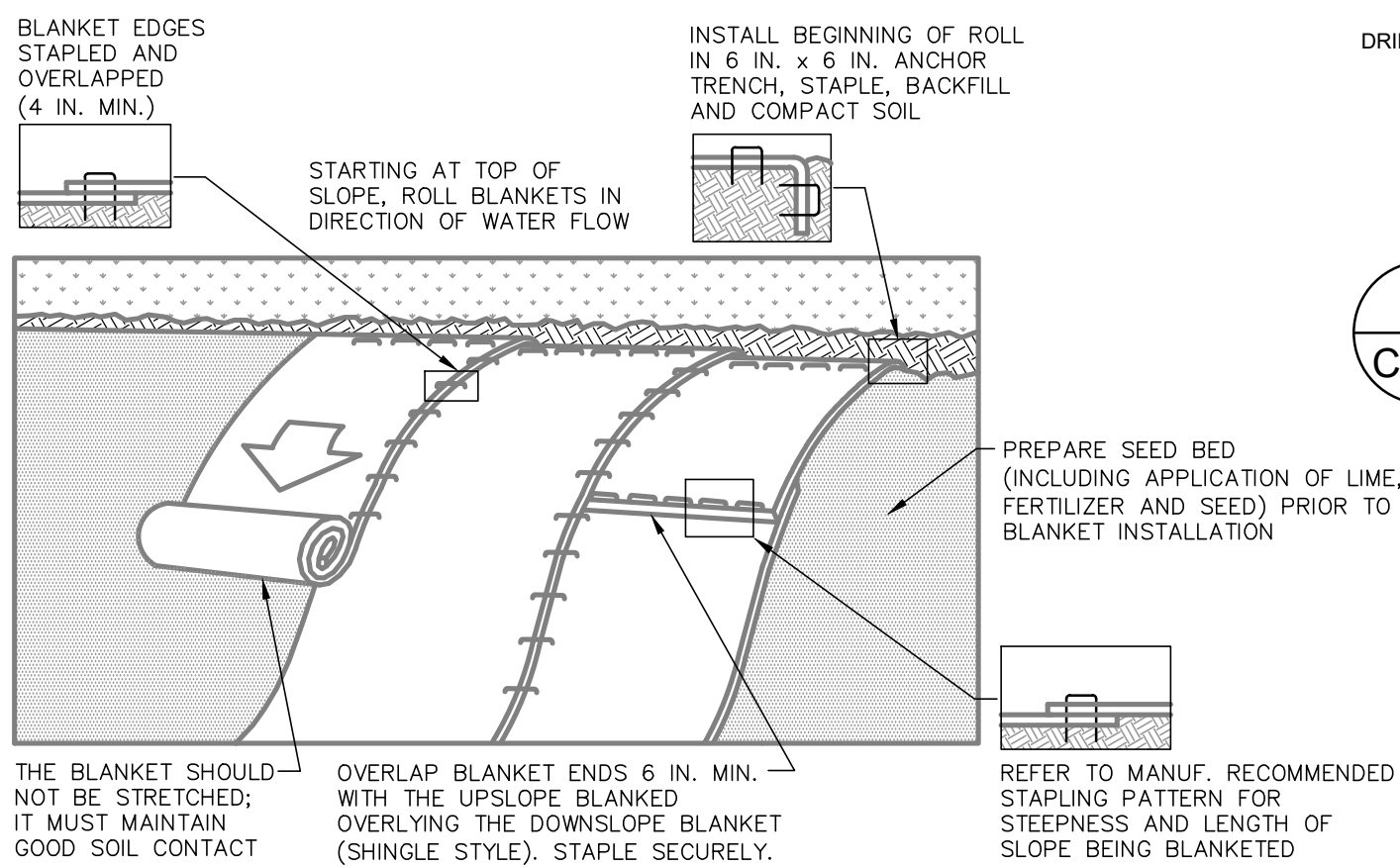
G:\Vandave\2010\20100306906 - Arcadia Softball\DESIGN\CAD\Production Drawings\Batting Cage Facility - LD Set\15 E&S Notes and Detailing Layout: E&S Details Plotted By: jerez on Wed Apr 23, 2025 at 10:06am



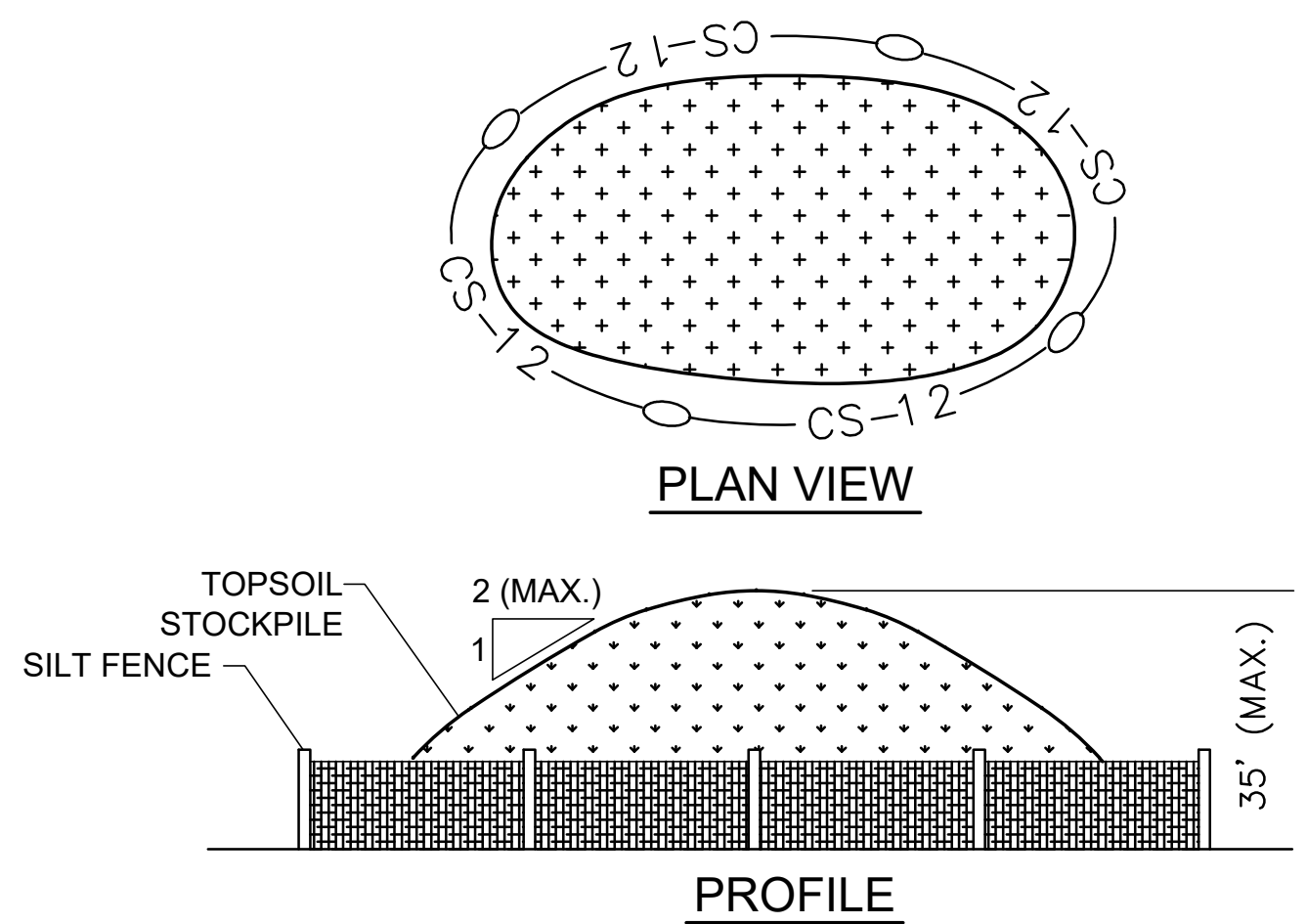
1 STANDARD ROCK CONSTRUCTION ENTRANCE DETAIL
C7.20 TYPICAL NTS



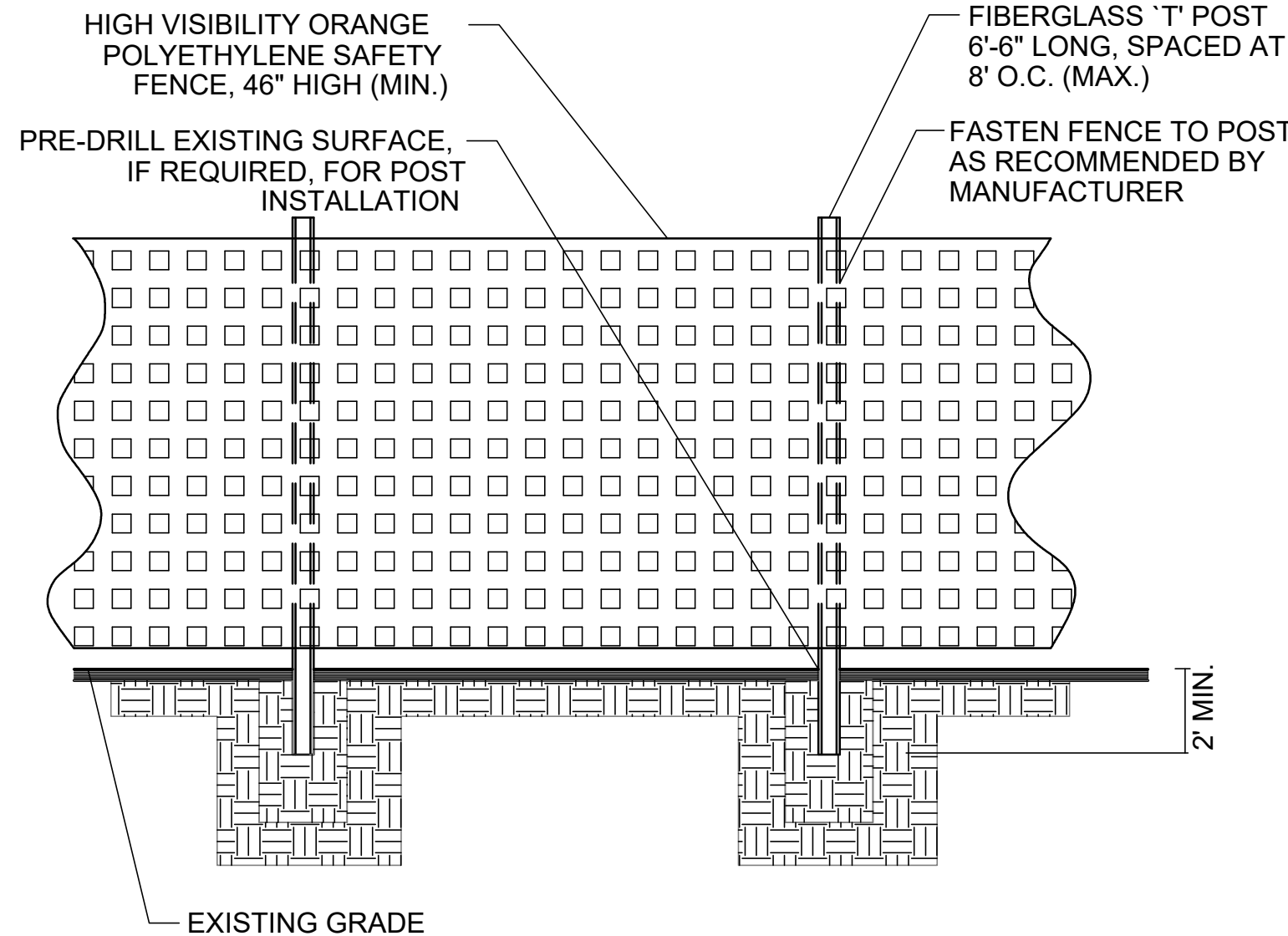
2 STANDARD COMPOST FILTER SOCK DETAIL
C7.20 TYPICAL NTS



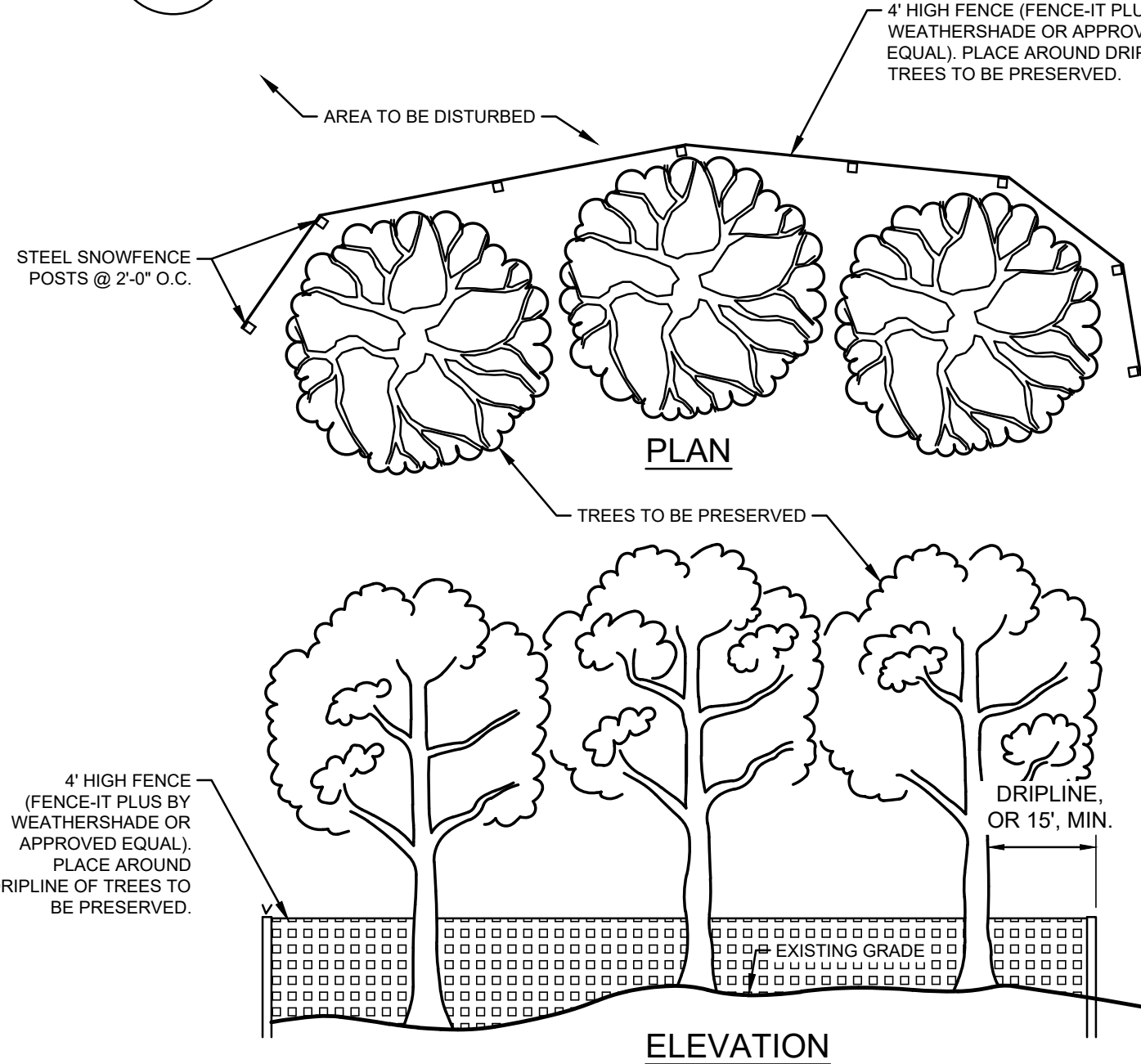
3 STANDARD EROSION CONTROL BLANKET INSTALLATION DETAIL
C7.20 TYPICAL NTS



4 TOPSOIL STOCKPILE DETAIL
C7.20 TYPICAL NTS



5 ORANGE CONSTRUCTION SAFETY FENCE DETAIL
C7.20 TYPICAL NTS



6 TREE PROTECTION FENCING DETAIL
C7.20 TYPICAL NTS

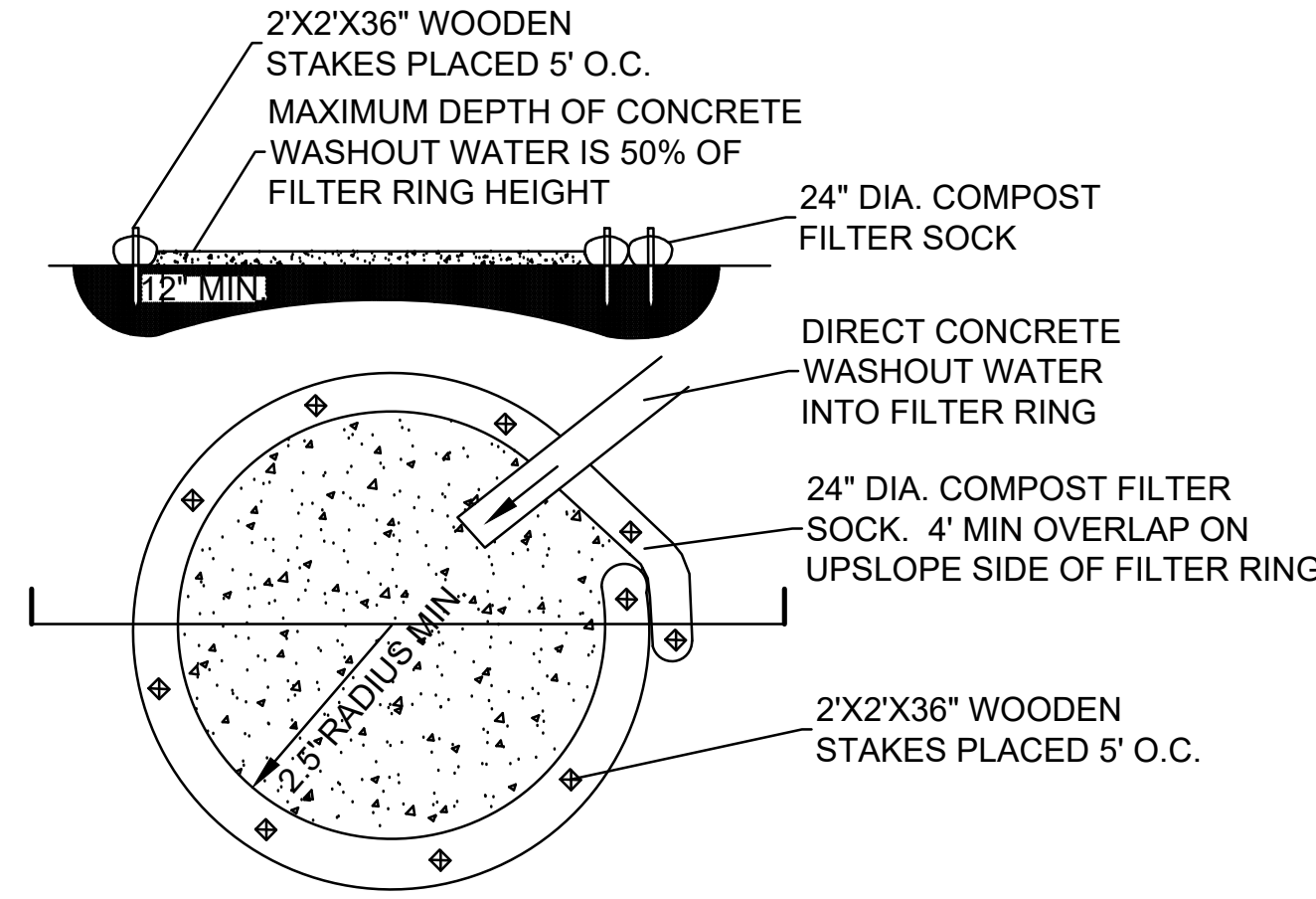
TREE PROTECTION NOTES:

- TREE PROTECTION SHALL BE PROVIDED FOR ANY AND ALL TREES TO BE PRESERVED DURING AND AFTER CONSTRUCTION TO THE EXTENT NOTED ON THE PLANS. PROTECTION SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION.
- BOARDS, FENCING, ETC. SHALL NOT BE NAILED TO ANY TREES OR SHRUBS.
- ROOTS SHALL NOT BE CUT IN AN AREA INSIDE THE DRIP-LINE OF THE TREE BRANCHES.
- TREE LIMB REMOVAL, WHERE NECESSARY, SHALL BE DONE FLUSH THE TRUNK OR MAIN LIMB, PAINTED IMMEDIATELY WITH A GOOD TREE PAINT, AND BE PERFORMED UNDER THE IMMEDIATE SUPERVISION OF A LICENSED NURSERYMAN.

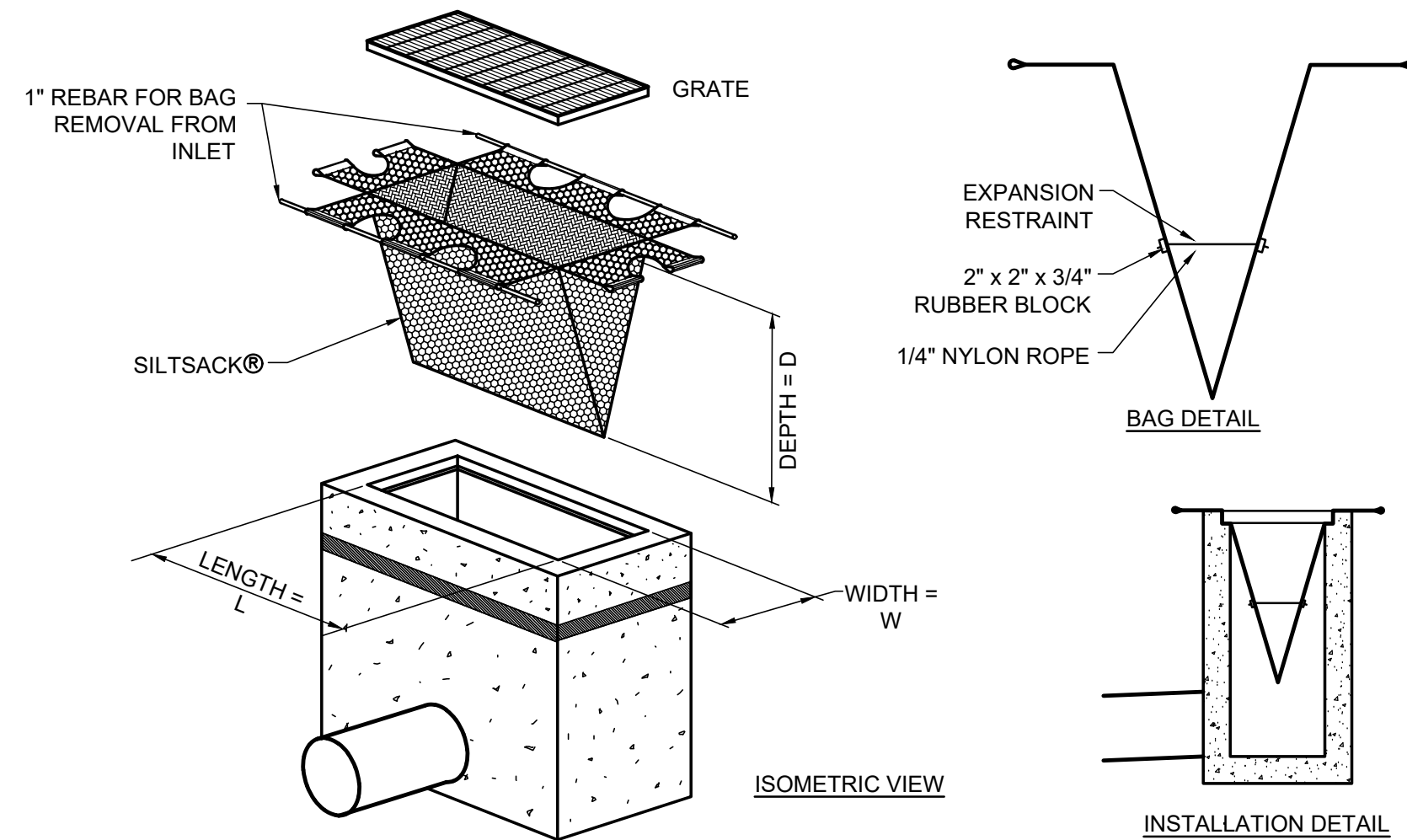
- NOTES:
- INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
 - 18" DIA. FILTER SOCK MAY BE STACKED ONTO DOUBLE 24" DIA. SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT, IF NEEDED.
 - A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCKS.

MAINTENANCE:

- WHEN CONCRETE REACHES HALF OF THE HEIGHT OF THE FILTER SOCKS, ALLOW ANY CONCRETE IN THE WASHOUT AREA TO HARDEN AND THEN REMOVE CONCRETE AND LEGALLY DISPOSE OF CONCRETE AT OFF-SITE LOCATION.



7 COMPOST SOCK CONCRETE WASHOUT STATION DETAIL
C7.20 TYPICAL NTS



8 SILT SACK @ INLET PROTECTION DETAIL
C7.20 TYPICAL NTS

EROSION AND SEDIMENT CONTROL PLAN

Page 1 of 1

STANDARD WORKSHEET
Run-Run Apron Outlet Protection

PROJECT NAME: Arcadia University
LOCATION: Cheltenham Township, Montgomery County
PREPARED BY: JP DATE: 4/18/2025
CHECKED BY: DATE:

METHODOLOGY:

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

Equations Utilized:

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

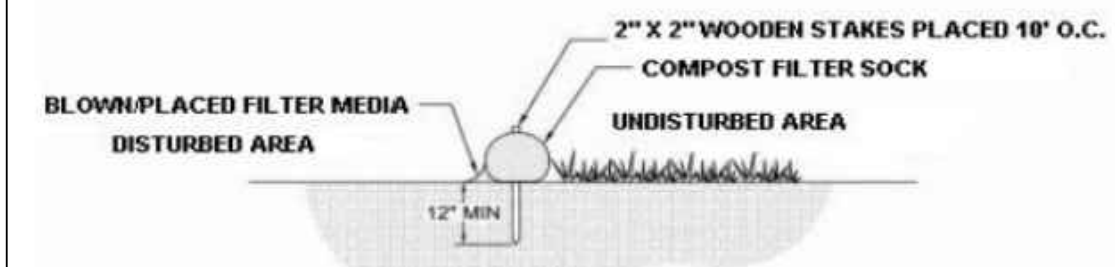
STRUCTURE DATA							RIP-RAP DATA			APRON DATA		
FES #	PIPE DIA.	Tailwtr Cond.	Mngs	Pipe Slope	Q	V	D50	ROCK	Rock T	La	W at pipe	W at tailwtr
	(in)	MIN/MAX	"n"	(ft/ft)	(cfs)	(fps)	(in.)	SIZE	(in.)	(ft)	(ft)	(ft)
EW01	8	MIN	0.012	4.90	1.20	7.74	4	R-4	12	6	2	8
FES 1	6	MIN	0.012	6.00	0.49	4.98	3	R-3	9	6	1.5	7.5

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

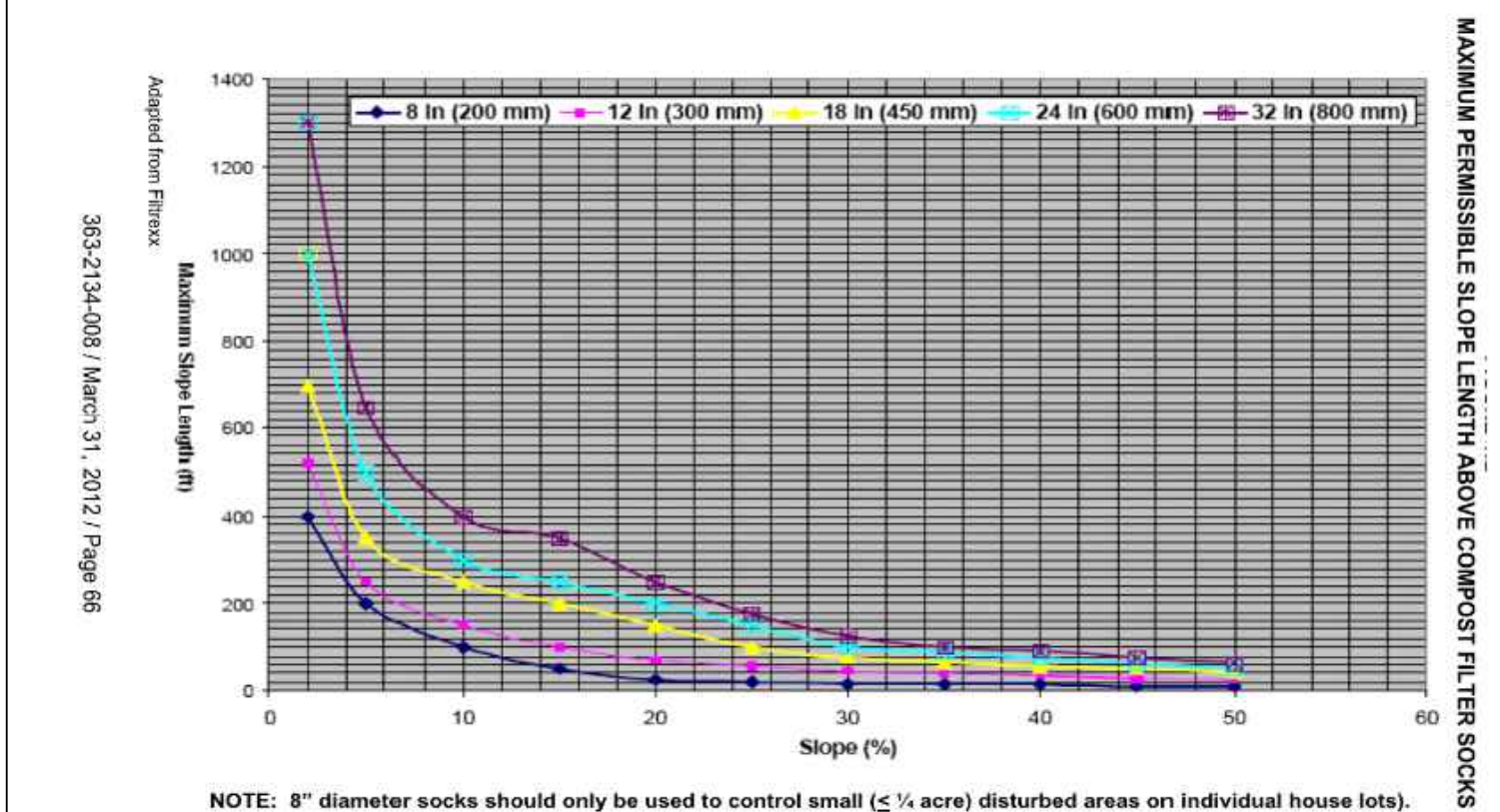
Rip-rap Gradation	Filter Blanket Requirements				
	depth	stone #	max.	d50	min.
R-5	6"	AASHTO #3	2"	1 1/2"	3/8"
R-6	8"	AASHTO #1	3 1/2"	2 1/2"	1/2"
R-7	10"	AASHTO #1	3 1/2"	2 1/2"	1/2"
R-8	12"	AASHTO #1	3 1/2"	2 1/2"	1/2"

	R-3	R-4	R-5	R-6	R-7	R-8
Vmax	6.5	9	11.5	13	14.5	17
D50	3	6	9	12	15	18

PROJECT NAME: Arcadia Indoor Hitting Facility
LOCATION: Cheltenham Township, Montgomery County, Pennsylvania
PREPARED BY: JP DATE: 4/18/2025
CHECKED BY: DATE:

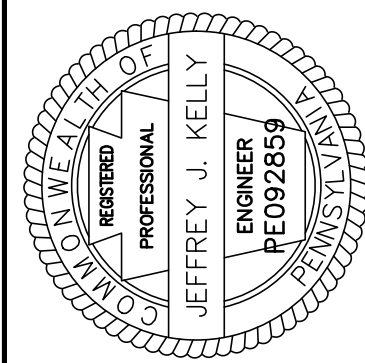


Sock #	Dia.	Location (See E&S Plan-Phase 1)	Slope Percent	Slope Length Above Barrier
CFS#1	18	36" Tree Adjacent to Gypsy Lane	20.0%	120
CFS#2	12	Temporary Soil Stockpile	10.0%	65
CFS#3	12	West Trees	9.1%	87
CFS#4	12	Asphalt Walkway North	3.4%	22
CFS#5	12	Asphalt Walkway East	20.0%	20
CFS#6	12	Southeast Berm	17.0%	30
CFS#7	12	Electric Trench	10.0%	5



* Minimum 12" Compost Sock size utilized for design.

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DATE: 04/22/2025

LAND DEVELOPMENT PLAN

ARCADIA INDOOR HITTING FACILITY

CHELTEHAM TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

E&S DETAILS



PROJECT No.: 20100306906

OWNERS INFO:
ARCADIA UNIVERSITY
450 S EASTON ROAD
GLENSIDE, PA 19038
215-572-2900

MUNICIPAL FILE No.:

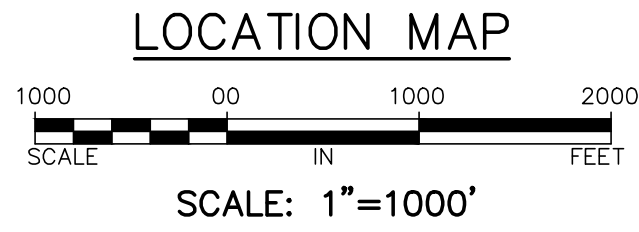
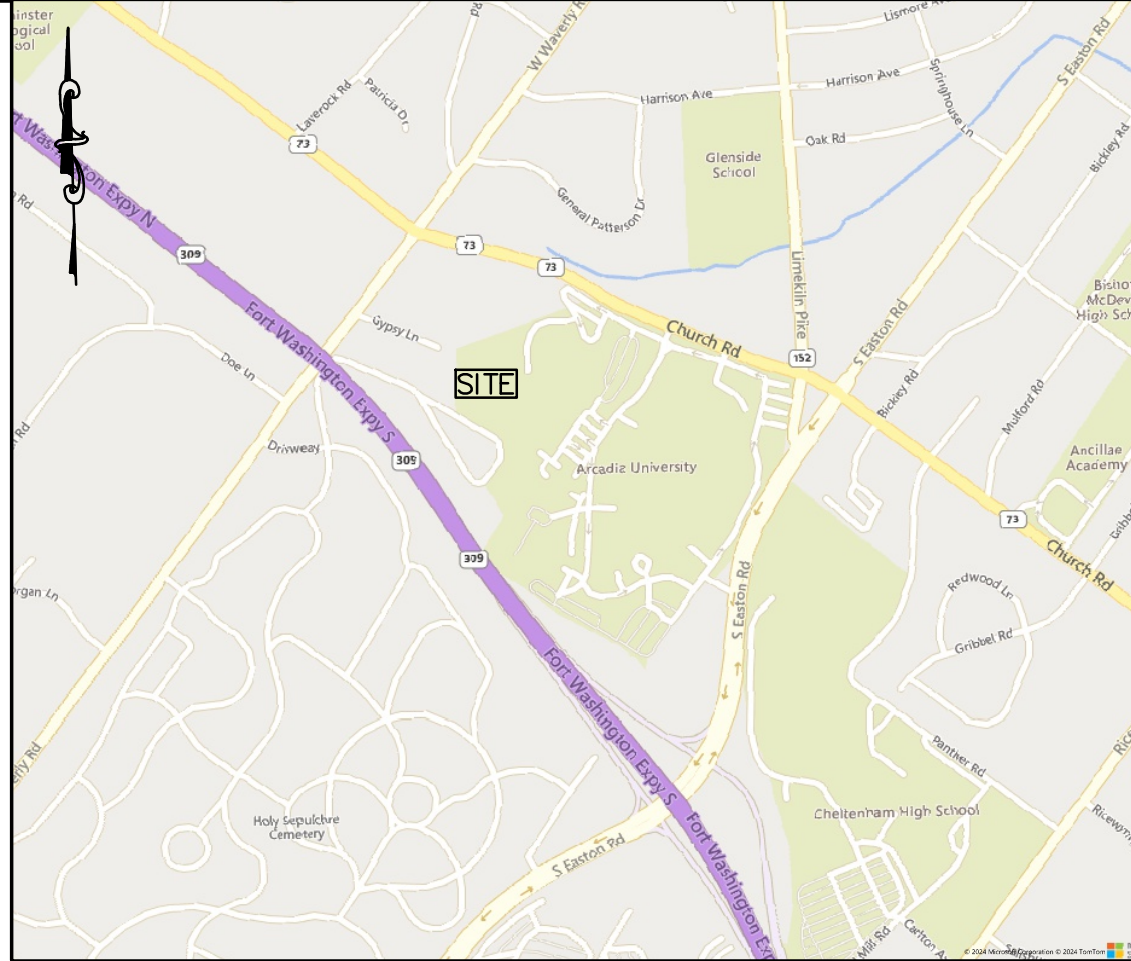
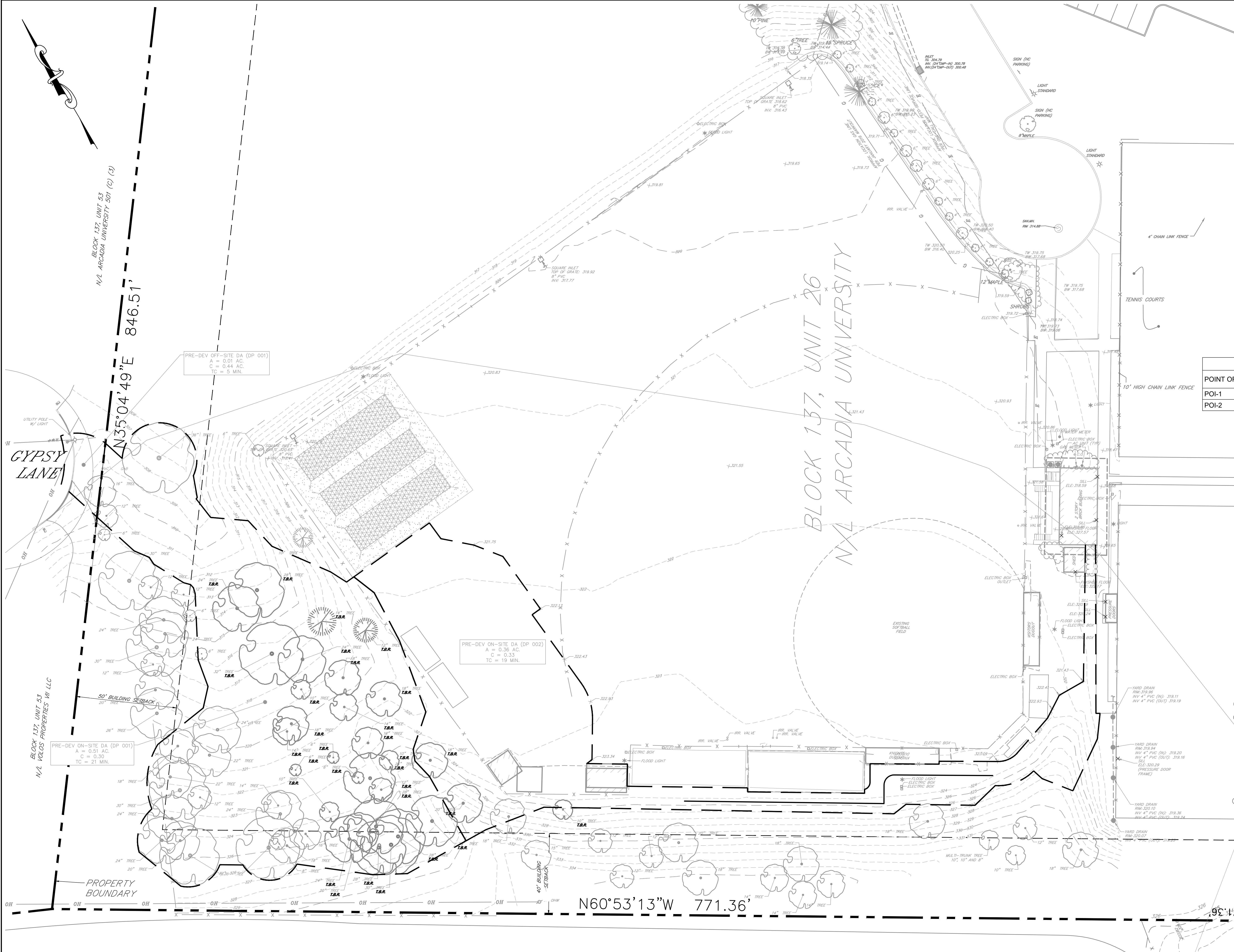
TAX MAP PARCEL No.: 31-00-08860-00-1
TOTAL AREA: 59.10 AC. TOTAL LOTS: 1

DATE: 04/22/2025 SCALE:

DRAWN BY: AB CHECKED BY: KS

SHEET NO.: 14 OF 23

NOT APPROVED FOR CONSTRUCTION



DRAINAGE AREA LEGEND

- PRE-DEVELOPMENT DRAINAGE BOUNDARY
- - - EXISTING CONTOURS

PRE-DEVELOPMENT DRAINAGE AREA TABLE			
POINT OF INTEREST	TOTAL DRAINAGE AREA	IMPERVIOUS AREA	PERVIOUS AREA
POI-1	22,680 SF	136 SF	22,544 SF
POI-2	15,577 SF	789 SF	14,788 SF

15 PRE-DEVELOPMENT DRAINAGE AREA PLAN

1" = 20'

PENNSYLVANIA ONE CALL SYSTEM, INC.

925 Iron Run Road
West Mifflin, Pennsylvania
15122-1078

811

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

NON-MEMBERS MUST BE CONTACTED DIRECTLY

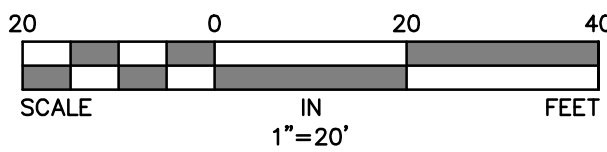
PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR GRADEN

SERIAL NO. 2022064231-000

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PROFESSIONAL
JEFFREY J. KELLY
ENGINEER
PE092959

DATE: 04/22/2025

LAND DEVELOPMENT PLAN
ARCADIA INDOOR HITTING FACILITY
CHELTNHAM TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

PRE-DEVELOPMENT DA PLAN

G&A

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.: 20100306906

OWNERS INFO:
ARCADIA UNIVERSITY
450 S EASTON ROAD
GLENSIDE, PA 19038
215-572-2900

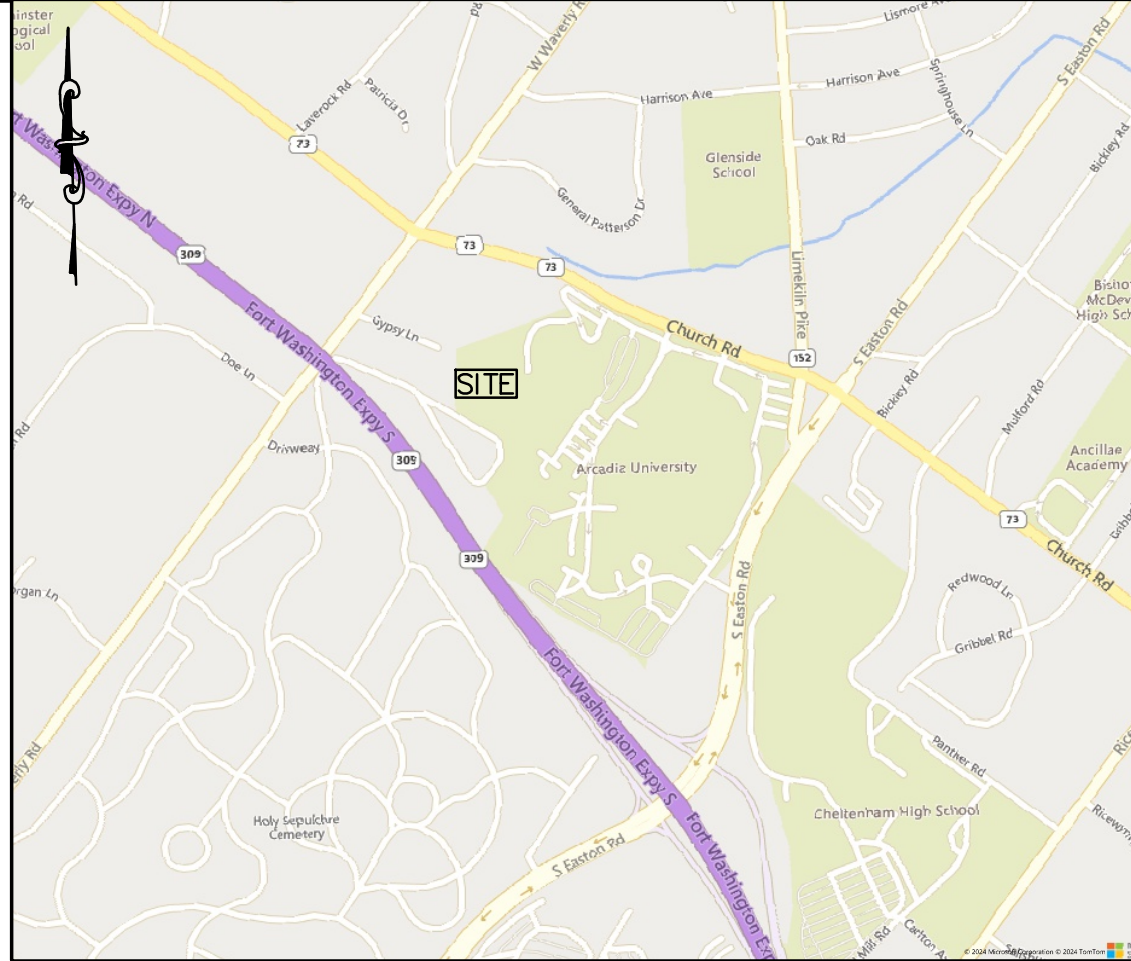
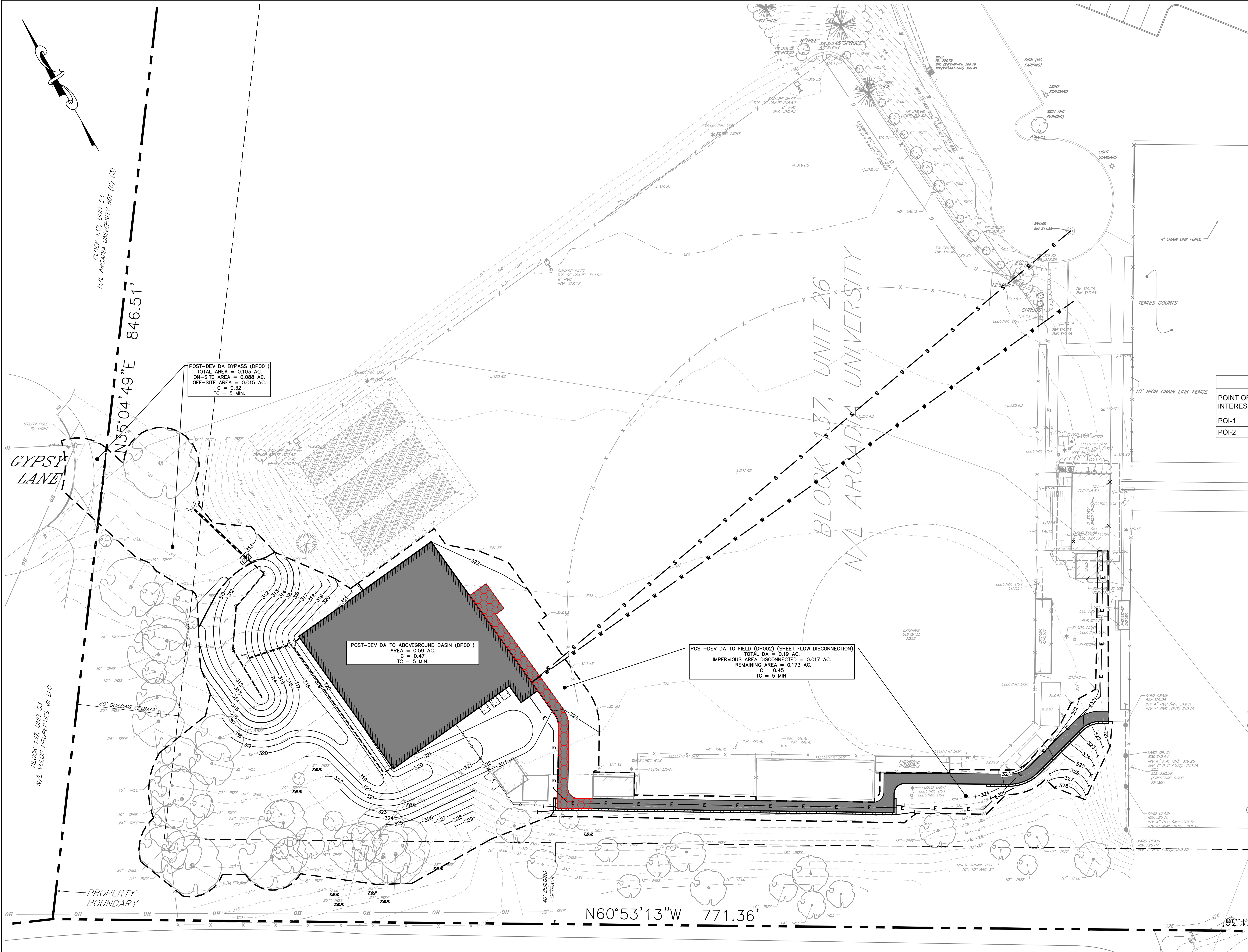
MUNICIPAL FILE No.: 31-00-08860-00-1

TAX MAP PARCEL No.: 59.10 AC. TOTAL AREA: 59.10 AC. TOTAL LOTS: 1

DATE: 04/22/2025 SCALE: 1"=20'

DRAWN BY: AB CHECKED BY: KS

SHEET NO.: 15 OF 23



LOCATION MAP
SCALE: 1"=1000'
1000 0 1000 2000
FEET

DRAINAGE AREA LEGEND

- POST-DEVELOPMENT DRAINAGE BOUNDARY
- SHEET FLOW DISCONNECTED AREA
- PROPOSED CONTOURS
- EXISTING CONTOURS

POST-DEVELOPMENT DRAINAGE AREA TABLE

POINT OF INTEREST	TOTAL DRAINAGE AREA	IMPERVIOUS AREA	IMPERVIOUS AREA DISCONNECTED	PERVIOUS AREA
POI-1	29,984 SF	6,789 SF	---	23,195 SF
POI-2	8,273 SF	2,385 SF	1,642 SF	5,888 SF

16 POST-DEVELOPMENT DRAINAGE AREA PLAN

1" = 20'

PENNSYLVANIA ONE CALL SYSTEM, INC.

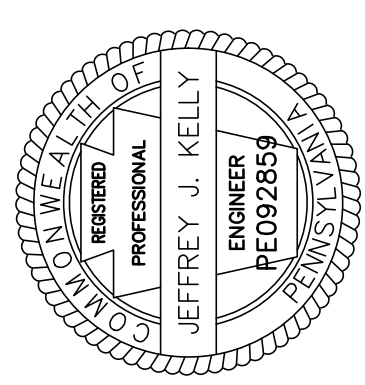


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NON-MEMBERS MUST BE CONTACTED DIRECTLY
NOTICE TO UTILITIES BEFORE YOU EXCAVATE,
DRILL, BLAST OR DEMOLISH
SERIAL NO. 2022064231-000

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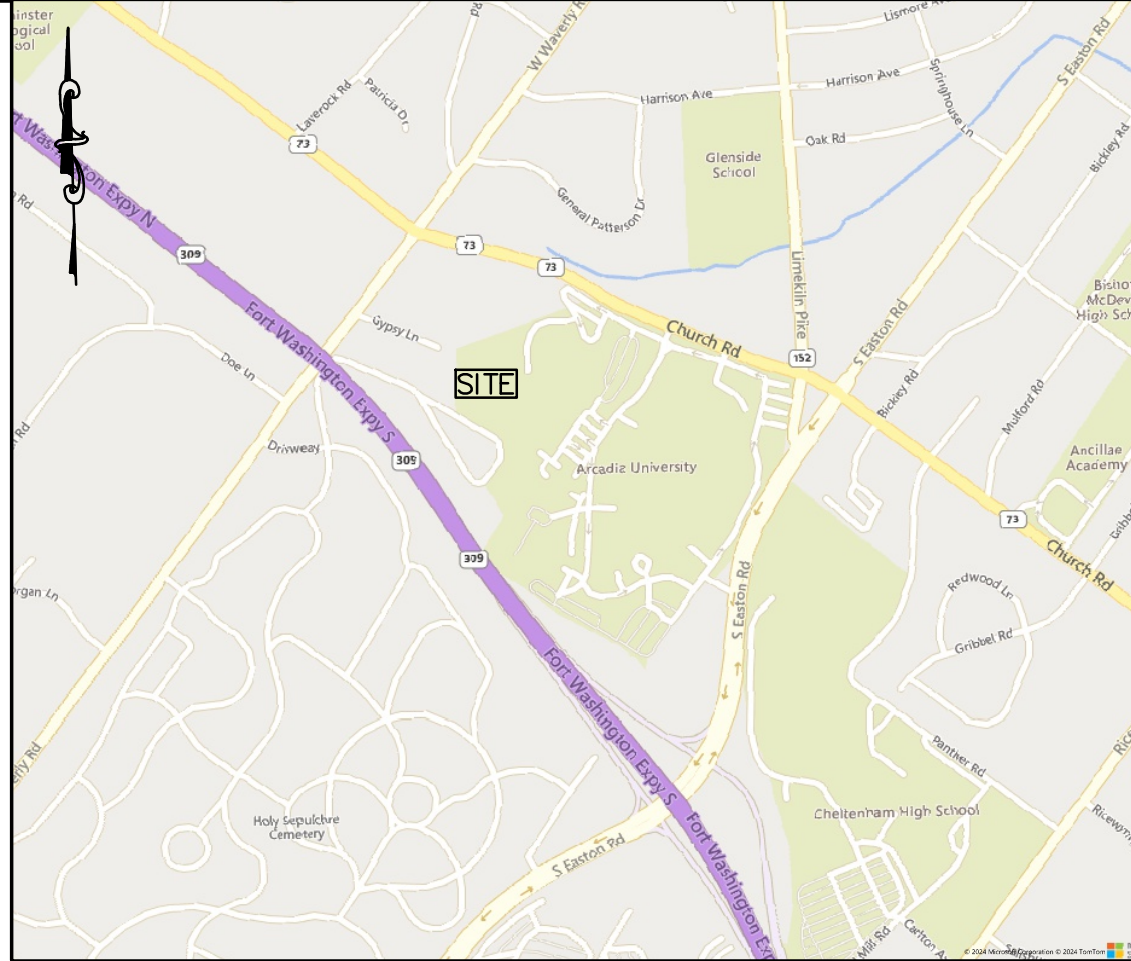
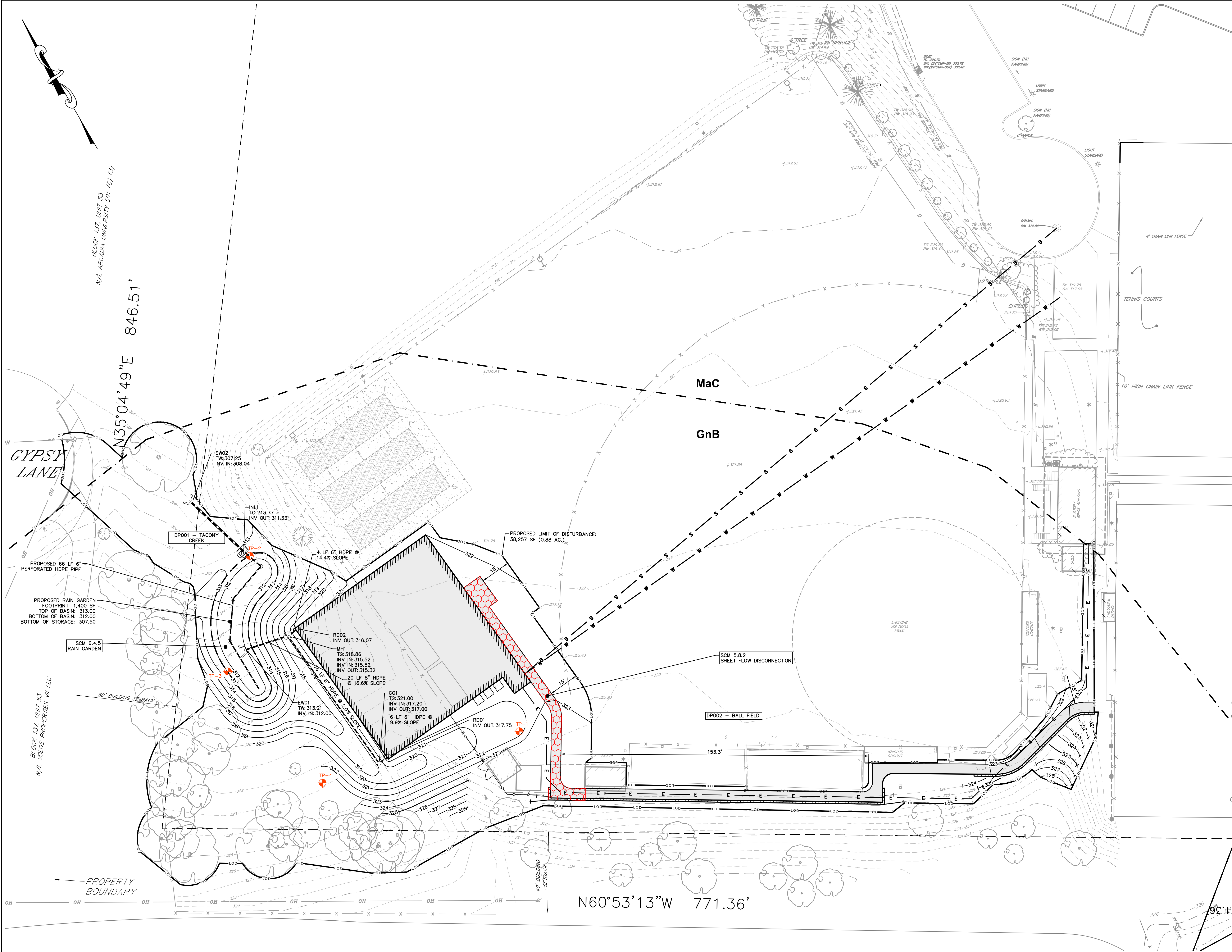


DATE: 04/22/2025

LAND DEVELOPMENT PLAN
ARCADIA INDOOR HITTING FACILITY
CHELTENHAM TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA
POST-DEVELOPMENT DA PLAN



PROJECT No.: 20100306906
OWNERS INFO: ARCADIA UNIVERSITY
450 S EASTON ROAD
GLENSIDE, PA 19038
215-572-2900
MUNICIPAL FILE No.:
TAX MAP PARCEL No.: 31-00-08860-00-1
TOTAL AREA: 59.10 AC. TOTAL LOTS: 1
DATE: 04/22/2025 SCALE: 1"=20'
DRAWN BY: AB CHECKED BY: KS
SHEET No.: 16 OF 23



LOCATION MAP
SCALE: 1"=1000'

EXISTING LEGEND

—	EXISTING MAJOR CONTOURS	⊙	SANITARY MANHOLE
- - -	EXISTING MINOR CONTOURS	⊠	STORM INLET
—	EXISTING SPOT ELEVATION	⊠	DETECTABLE WARNING SURFACE
—	TREE LINE	⊠	GAS VALVE
—	LEGAL RIGHT-OF-WAY	⊠	WATER VALVE
—	ULTIMATE RIGHT-OF-WAY	⊠	GUY
—	STORM LINE	⊠	ELECTRIC METER
—	GAS LINE	⊠	FIRE HYDRANT
—	OVERHEAD ELECTRIC LINE	⊠	UTILITY POLE
—	ELECTRIC LINE	⊠	MAILBOX
—	SANITARY LINE	⊠	LIGHT STANDARD
—	SANITARY LATERAL	⊠	CONCRETE MONUMENT FND
—	WATER LINE	⊠	IRON PIN FOUND
—	WATER LATERAL	⊠	CONIFER TREE
—	EDGE OF STREAM	⊠	DECIDUOUS TREE
—	EXISTING EASEMENT	⊠	TREE STUMP
—	SOIL BOUNDARY	⊠	SOIL LABEL
—	WATERS OF THE US AND COMMONWEALTH	⊠	
—	100 YEAR FLOOD PLAN	⊠	

PCSM LEGEND

— W —	PROPOSED WATER LINE
— S —	PROPOSED SANITARY SEWER LINE
— E —	PROPOSED ELECTRIC LINE
⊙	PROPOSED MANHOLE
⊠	PROPOSED STORM SEWER
⊠	PROPOSED INLET
⊠	PROPOSED CLEANOUT
⊠	PROPOSED ENDWALL
⊠	PROPOSED RIPRAP
⊠	SHEET FLOW DISCONNECTED AREA
⊠	TEST PITS

SOILS LEGEND BASED ON USDA-NRCS WEB SOIL SURVEY

SYMBOL	MAPPING UNITS	SLOPE	DRAINAGE CLASS
MaC	MANOR LOAM	8-15%	WELL DRAINED
GnB	GILPIN SILT LOAM	3-8%	WELL DRAINED

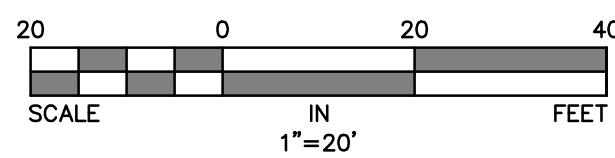
17 POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

PENNSYLVANIA ONE CALL SYSTEM, INC.



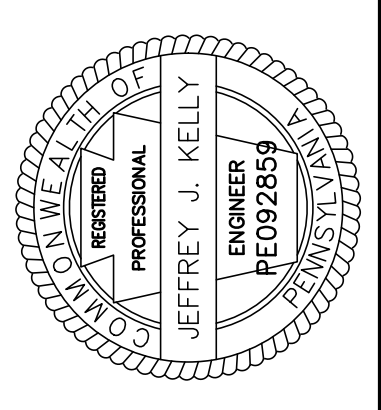
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DATE: 04/22/2025

LAND DEVELOPMENT PLAN
ARCADIA INDOOR HITTING FACILITY
CHELTENHAM TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

PCSM PLAN

PROJECT No.: 20100306906
OWNERS INFO: ARCADIA UNIVERSITY
450 S EASTON ROAD
GLENSIDE, PA 19038
215-572-2900

MUNICIPAL FILE No.:
TAX MAP PARCEL No.: 31-00-08860-00-1
TOTAL AREA: 59.10 AC. TOTAL LOTS: 1
DATE: 04/22/2025 SCALE: 1"=20'
DRAWN BY: AB CHECKED BY: KS
SHEET NO.: 17 OF 23



GILMORE & ASSOCIATES, INC.
ENGINEERING CONSULTING SERVICES

GENERAL PCSM NOTES:

- SOILS INFORMATION TAKEN FROM USDA-NRCS "WEB SOIL SURVEY OF MONTGOMERY COUNTY".
- ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES/FACILITIES PRIOR TO THE START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF P.L. 892 NO. 287 DECEMBER 19, 1974 AS LAST AMENDED ON OCTOBER 9, 2008, PENNSYLVANIA ACT 121. GILMORE & ASSOCIATES INC. HAS OBTAINED PA-ONE CALL SERIAL NUMBER(S) AS NOTED ON THIS PLAN FOR DESIGN PURPOSES ONLY.
- ALL CONTRACTORS WORKING ON THE PROJECT SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES RELATED TO THE PROJECT ARE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION) STANDARDS.
- ALL CONSTRUCTION REQUIREMENTS AND MATERIAL SPECIFICATIONS SHALL BE IN ACCORDANCE WITH THE STANDARDS AND DETAILS OF CHELTENHAM TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCES, PADEP AND/OR PENNDOT FORM 408, LATEST EDITION, AND PA-UCS WHERE APPLICABLE.
- CONTRACTOR SHALL NOT ENCR OACH ONTO ADJOINING PROPERTIES UNLESS A TEMPORARY CONSTRUCTION EASEMENT HAS BEEN GRANTED BY THE ADJOINING PROPERTY OWNER. CONTRACTOR SHALL HAVE PROPERTY LINES CLEARLY MARKED IN AREAS WHERE GRADING WILL ENCR OACH WITHIN FIVE FEET OF THE PROPERTY LINE AND SHALL CONSTRUCT SUCH BARRIERS WHICH ARE NECESSARY TO PREVENT ENCR OACHMENT ONTO ADJOINING PROPERTIES.
- SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARDS FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- ANY SLOPE GREATER THAN THREE HORIZONTAL TO ONE VERTICAL (3:1) SHALL RECEIVE A STEEP SLOPE SEED MIXTURE AND BE PROTECTED WITH EROSION CONTROL MATTING BY NORTH AMERICAN GREEN OR APPROVED EQUAL. SEE EROSION & SEDIMENT CONTROL PLANS FOR DETAILS AND LOCATIONS.
- FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT SATISFACTORY COMPACTION.
- A MINIMUM OF FOUR INCHES OF TOPSOIL SHALL BE REDISTRIBUTED OVER ALL DISTURBED AREAS OF THE SITE, WITH THE EXCEPTION OF PAVED AND PROPOSED BUILDING AREAS. SURFACE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 5-12" PRIOR TO SPREADING OF TOPSOIL.
- BURYING OF CONSTRUCTION DEBRIS AND STUMPS ON THE SITE IS PROHIBITED.
- PROJECT WASTES FROM THE SITE INCLUDE MATERIALS ASSOCIATED WITH THE DEMOLITION OF EXISTING BUILDINGS, CONCRETE WASHOUT, AND OTHER CONSTRUCTION MATERIALS. THE CONTRACTOR SHALL REMOVE FROM THE SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIAL AND WASTES IN ACCORDANCE WITH DEP'S SOLID WASTE MANAGEMENT REGULATIONS, AND/OR ANY ADDITIONAL LOCAL, STATE OR FEDERAL REGULATIONS. NO BUILDING MATERIALS (USED OR UNUSED) OR WASTE MATERIALS SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED AT THE SITE.
- THE TOWNSHIP ENGINEER SHALL BE NOTIFIED FORTY EIGHT (48) HOURS PRIOR TO THE INSTALLATION OF THE SCMs, AND PRIOR TO THE START OF EARTH-MOVING ACTIVITIES.
- THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE IN REGARDS TO ANY IMPROVEMENT ON-SITE OR OFF-SITE.
- ALL CONCRETE CURB TAPERS TO MATCH EXISTING CURB REVEAL.
- NO PERSON SHALL MODIFY, REMOVE, FILL, LANDSCAPE, OR ALTER ANY EXISTING STORMWATER SCM WITHOUT THE WRITTEN APPROVAL OF THE MUNICIPALITY UNLESS IT IS PART OF AN APPROVED MAINTENANCE PROGRAM.
- NO PERSON SHALL PLACE ANY STRUCTURES, FILL, LANDSCAPING, OR VEGETATION INTO A STORMWATER SCM OR WITHIN A DRAINAGE EASEMENT, WHICH WOULD LIMIT OR ALTER THE FUNCTIONING OF THE SCM, WITHOUT THE WRITTEN APPROVAL OF THE MUNICIPALITY.
- THE MUNICIPALITY SHALL HAVE THE RIGHT TO ENTER PRIVATE PROPERTY TO INSPECT AND REPAIR, IF NECESSARY, ANY STORMWATER MANAGEMENT FACILITY.
- THE STORMWATER MANAGEMENT FACILITIES ARE A PERMANENT PART OF THE DEVELOPMENT AND SHALL NOT BE REMOVED, ALTERED, OR MODIFIED, WITHOUT THE WRITTEN APPROVAL OF THE MUNICIPALITY AND CONSERVATION DISTRICT.
- THE PCSM PLAN, INSPECTION REPORTS, AND MONITORING RECORDS SHALL BE AVAILABLE FOR REVIEW AND INSPECTION BY PADEP OR THE MONTGOMERY COUNTY CONSERVATION DISTRICT.

SEQUENCE OF CONSTRUCTION:

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED, UNLESS NOTED OTHERWISE. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. NOTE: CESSATION OF CONSTRUCTION ACTIVITIES FOR 4 DAYS OR LONGER REQUIRES TEMPORARY STABILIZATION.

AT LEAST 7 DAYS PRIOR TO START OF WORK OR EARTH DISTURBANCE ACTIVITIES, A PRECONSTRUCTION MEETING SHALL BE HELD INCLUDING THE OWNER, SITE CONTRACTOR, TOWNSHIP ENGINEER, MONTGOMERY COUNTY CONSERVATION DISTRICT, AND A LICENSED PROFESSIONAL.

AT LEAST 3 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 UTILITIES.

- INSTALL STAKE OUT LIMIT OF DISTURBANCE AS SHOWN ON THE PLANS. INSTALL COMPOST FILTER SOCK AS SHOWN ON THE PLANS.
 - FILTER SOCKS SHALL BE CHECKED DAILY AT THE BEGINNING OF THE WORK DAY. REPLACEMENT SOCKS IN KIND SHALL BE PROVIDED IF DAMAGED OR NOT FUNCTIONING PROPERLY.
- INSTALL ALL TREE PROTECTION FENCING AS SHOWN ON THE PLANS PRIOR TO INITIATION OF EARTH DISTURBANCE ACTIVITIES. TREE PROTECTION FENCING SHALL BE CHECKED DAILY AT THE BEGINNING OF THE WORK DAY. REPLACEMENT FENCING IN KIND SHALL BE PROVIDED IF DAMAGED OR NOT FUNCTIONING PROPERLY.
- INSTALL ROCK CONSTRUCTION ENTRANCE WHERE INDICATED ON THE PLANS, AND ALL OTHER EROSION AND SEDIMENT CONTROLS INDICATED ON PLAN.
 - EXISTING VEGETATION SHALL BE CUT TO GROUND AS NECESSARY PRIOR TO INSTALLATION OF COMPOST FILTER SOCK TO ENSURE CONTACT WITH EARTH. LOOSE COMPOST OR EARTHEN MATERIAL SHALL BE BLOWN OR PLACED INTO UPSTREAM SIDE TO MINIMIZE UNDERMINING.
 - NO DEMOLITION OR EARTH DISTURBANCE SHOULD OCCUR IN ANY AREA UNTIL PERIMETER SEDIMENT CONTROLS HAVE BEEN INSTALLED.
- CLEAR AND GRUB REMAINDER OF THE CONSTRUCTION AREA AND TREES AS DELINEATED ON THE PLAN. DISTURBED AREAS TO BE TO STABILIZED IMMEDIATELY WITH TEMPORARY SEED AND MULCH. RELOCATE ANY SITE FEATURES THAT ARE PROPOSED TO BE RELOCATED AS SHOWN ON THE DEMOLITION PLAN.
- STRIP AND STOCKPILE TOPSOIL, WHERE INDICATED ON THE PLANS. STOCKPILE SHALL BE IMMEDIATELY STABILIZED UPON CONSOLIDATION. COMPOST FILTER SOCK SHALL BE IN STALLED AROUND PERIMETER OF SOIL STOCKPILE ON THE DOWNSLOPE SIDE. IMMEDIATELY APPLY TEMPORARY SEEDING AND MULCH TO THE STOCKPILE.
- EROSION AND SEDIMENTATION CONTROLS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE GENERAL SITE DISTURBANCE WITHIN THE TRIBUTARY AREAS OF THOSE CONTROLS.
- ALL EROSION CONTROL DEVICES SHALL BE CHECKED WEEKLY (OR DAILY IF SPECIFIED) AND AFTER EACH RAIN EVENT. ALL PREVENTATIVE REMEDIAL MAINTENANCE WORK INCLUDING REPAIR, REPLACEMENT, RE-GRADING, RESEEDING, REMULCHING, AND RENETTING SHALL BE PERFORMED IMMEDIATELY.
- SHOULD UNFORESEEN EROSION CONDITIONS DEVELOP DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ACTION TO REMEDY SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT PROPERTIES AS A RESULT OF RUNOFF OR SEDIMENT DISPLACEMENT. SPECIAL ATTENTION SHALL BE GIVEN TO FROZEN SLOPES. STOCKPILES OF WOOD CHIPS, HAY BALES, CRUSHED STONE, AND OTHER MULCHES SHALL BE HELD IN READINESS TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS OF EROSION.
- INSTALL CONCRETE WASHOUT AS SHOWN ON PLANS.
- ROUGH GRADE SITE. CONTRACTOR TO ADJUST UPSLOPING PORTIONS OF THE ALL COMPOST FILTER SOCKS TO ACCOUNT FOR ELEVATION CHANGES FROM EXISTING TO PROPOSED LAND SLOPES. SOCKS SHALL BE CHECKED FOR DAMAGE AND RESTAKED TO ENSURE PROPER FUNCTIONALITY. INSTALL PROPOSED DRAINAGE SWALES AS SHOWN ON THE PLANS. INSTALL EROSION CONTROL SLOPE AND SWALE MATTING AS SHOWN ON THE PLANS.
- NO IMPERVIOUS SURFACES SHALL BE CREATED UNTIL THE PROPOSED STORMWATER CONTROL MEASURE (SCM) IS INSTALLED AND PROPERLY FUNCTIONING.
- RUNOFF SHALL NOT BE DIRECTED TO THE PROPOSED RAIN GARDEN SCM UNTIL ALL TRIBUTARY DRAINAGE AREAS ARE STABILIZED.
- CRITICAL STAGE: EXCAVATE AND INSTALL RAIN GARDEN SCM. EXCAVATE TO BED INFILTRATION ELEVATION. INSTALL EROSION CONTROL BLANKETS PER PLAN.**
- CONSTRUCTION MACHINERY SHALL NOT BE DRIVEN OVER THE INFILTRATION AREA TO PREVENT COMPACTION OF SOILS. CARE SHALL BE TAKEN TO NOT COMPACT THE SOILS AROUND THE INFILTRATION AREA DURING ANY AND ALL OTHER CONSTRUCTION ACTIVITIES.
 - INSTALL ORANGE CONSTRUCTION FENCE AROUND THE RAIN GARDEN SCM AREA WHERE SHOWN ON THE PLANS TO PREVENT COMPACTION DURING CONSTRUCTION ACTIVITIES. CONSTRUCTION FENCE SHALL REMAIN IN PLACE FOR THE RAIN GARDEN SCM UNTIL ALL DRAINAGE AREAS TO SCM ARE COMPLETELY STABILIZED.
- INSTALL STORM PIPING AND ASSOCIATED STORM STRUCTURES AS SHOWN ON PLAN, BEGINNING WITH THE FURTHEST DOWNSTREAM CONNECTION/STRUCTURE.
 - A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE PRESENT ON THE PROJECT SITE DURING INSTALLATION OF THESE SCMs.**
- CONTRACTOR SHALL CONTACT THE MONTGOMERY COUNTY CONSERVATION DISTRICT (MCCD) THREE (3) DAYS PRIOR TO FINAL RAIN GARDEN STABILIZATION FOR THE PURPOSES OF INSPECTION OF SAID STABILIZATION.
- INSTALL DIRECT DRILLED SEWER AND WATER SERVICE AND ELECTRIC SERVICE LINES ON SITE. STABILIZE AREAS AS NECESSARY.
- BEGIN INSTALLATION OF PROPOSED BUILDING AND ASSOCIATED FEATURES ON-SITE.
 - INSTALL RETAINING WALLS AND NEW ASPHALT WALKWAY. INSTALL NEW CONCRETE CONDENSOR PADS OUTSIDE OF BUILDING. INSTALL NEW FENCES, GATES, AND ASSOCIATED FEATURES.
 - ALL RUNOFF FROM THE SITE MUST BE TREATED UNTIL THE SITE IS STABILIZED.
- AS LAWN AREAS ARE BROUGHT TO GRADE, THEY SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 5-12" THEN PROVIDED WITH A MINIMUM 8" OF TOPSOIL AND SEEDED IMMEDIATELY. ALL VEGETATED AREAS SHALL BE STABILIZED WITH VEGETATION AND MULCH AS SOON AS POSSIBLE.
 - ALL 4:1 SLOPES OF MORE THAN 6' VERTICAL HEIGHT SHALL BE PROVIDED WITH EROSION CONTROL MATTING IN ACCORDANCE WITH PLANS AND DETAIL 'N.A.G. SLOPE INSTALLATION'.
 - ALL SWALES AND AREAS OF CONCENTRATED DISCHARGE SHALL BE PROVIDED WITH EROSION CONTROL MATTING IN ACCORDANCE WITH PLANS AND DETAIL 'N.A.G. SWALE INSTALLATION'.
- FINISH GRADE ALL DISTURBED AREAS THAT ARE NOT SPECIFIED TO BE PAVED OR GRAVEL SHALL BE TOPSOILED AND SEEDED. PLACE 6" OF TOPSOIL IN DISTURBED AREAS, REMOVE UNSUITABLE MATERIAL LARGER THAN 1/2" IN ANY DIMENSION, UNIFORMLY GRADE THE SURFACE TO THE REQUIRED CONTOURS WITHOUT THE FORMATION OF WATER POCKETS. APPLY FERTILIZER AND LIME PER SOIL TESTS AND WORK THEM INTO THE SOIL, THEN IMMEDIATELY SEED FOR PERMANENT STABILIZATION, AND APPLY PROSCAPE PENNMULCH SEED ACCELERATOR MULCH TO ALL SEEDED AREAS (NO STRAW OR HAY). DO NOT BROADCAST OR DROP SEED WHEN WIND VELOCITY EXCEEDS 5MPH.
- PLANT ALL PROPOSED TREES AS SHOWN ON THE LANDSCAPING IN ACCORDANCE WITH THE SPECIFICATIONS NOTED ON THE LANDSCAPING NOTES AND DETAILS PLAN SHEET.
- UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE BOROUGH ENGINEER TO SCHEDULE AN INSPECTION.
- UPON APPROVAL FROM BOROUGH ENGINEER, EROSION AND SEDIMENT CONTROLS SHALL BE REMOVED. IMMEDIATELY STABILIZE ANY AREA DISTURBED BY REMOVAL OF EROSION AND SEDIMENT CONTROLS WITH TOPSOIL AND SEED.

ALL ACCUMULATED SEDIMENT SHALL BE DISPOSED OF IN APPROVED UPLAND AREAS.

STABILIZATION SHALL BE CONSIDERED THE PLACEMENT OF BASE COURSE IN PAVED AREAS OR BY 75% OR MORE VEGETATION, UNIFORM COVERAGE, IN LAWN AREAS OR BY OTHER PERMANENT MEANS WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.

RECEIVING SURFACE WATERS:

RUNOFF FROM THIS SITE DRAINS TO TACONY CREEK.

TACONY CREEK HAS AN EXISTING AND DESIGNATED RECEIVING WATER CLASSIFICATION OF WARM WATER FISHES (WWF) PER CHAPTER 93 OF THE PA CODE.

THE SITE IS NOT LOCATED AND NOR DRAINS TO A HIGH QUALITY (HQ) WATERSHED.

THERE ARE NO FLOODPLAINS, STREAMS/WATERCOURSES, WETLANDS, OR RIPARIAN CORRIDORS ON OR NEAR THE PROPERTY BOUNDARY FOR THIS PROJECT.

SEQUENCE OF PCSM SCM IMPLEMENTATION / INSTALLATION

INDIVIDUAL SEQUENCE OF SCM INSTALLATION-SECTION 102.8(b)(7)

THE PADEP CHAPTER 102 REGULATIONS WHICH BECAME EFFECTIVE NOVEMBER 19, 2010, REQUIRE A LICENSED PROFESSIONAL OR HIS/HER DESIGNEE TO BE PRESENT ON-SITE TO OBSERVE, INSPECT, AND SIGN-OFF ON THE CRITICAL STAGES OF THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN (PCSM) IMPLEMENTATION AND FACILITY INSTALLATION. THE LICENSED PROFESSIONAL OR DESIGNEE SHALL BE PRESENT ON-SITE FOR THE FOLLOWING **CRITICAL STAGES** OF THE PCSM PLAN IMPLEMENTATION:

- DISCONNECTION FROM STORM SEWERS (SCM 5.8.2)
- RAIN GARDEN/BIORETENTION (SCM 6.4.5)
- LANDSCAPE RESTORATION (SCM 6.7.2)

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

AT LEAST 7 DAYS PRIOR TO START OF WORK OR EARTH DISTURBANCE ACTIVITIES, A PRE-CONSTRUCTION MEETING SHALL BE HELD INCLUDING THE OWNER, SITE CONTRACTOR, BOROUGH ENGINEER, MONTGOMERY COUNTY CONSERVATION DISTRICT, AND THE PLAN DESIGNER.

RAIN GARDEN/BIORETENTION (SCM 6.4.5) -SEQUENCE OF INSTALLATION

- INSTALL TEMPORARY SEDIMENT CONTROL SCMs AS SHOWN ON THE PLANS.
- COMPLETE SITE GRADING. IF APPLICABLE, CONSTRUCT CURB CUTS OR OTHER INFLOW ENTRANCE BUT PROVIDE PROTECTION SO THAT DRAINAGE IS PROHIBITED FROM ENTERING CONSTRUCTION AREA.
- STABILIZE GRADING WITHIN THE LIMIT OF DISTURBANCE EXCEPT WITHIN THE RAIN GARDEN AREA. RAIN GARDEN BED AREAS MAY BE USED AS TEMPORARY SEDIMENT TRAPS PROVIDED THAT THE PROPOSED FINISH ELEVATION OF THE BED IS 12 INCHES LOWER THAN THE BOTTOM ELEVATION OF THE SEDIMENT TRAP.
- EXCAVATE RAIN GARDEN TO PROPOSED INVERT DEPTH AND SCARIFY THE EXISTING SOIL SURFACES. DO NOT COMPACT IN-SITU SOILS.
- BACKFILL RAIN GARDEN WITH AMENDED SOIL AS SHOWN ON PLANS AND SPECIFICATIONS. OVERFLIPPING IS RECOMMENDED TO ACCOUNT FOR SETTLEMENT. LIGHT HAND TAMPING IS ACCEPTABLE IF NECESSARY.
- PRESOAK THE PLANTING SOIL PRIOR TO PLANTING VEGETATION TO AID IN SETTLEMENT.
- COMPLETE FINAL GRADING TO ACHIEVE PROPOSED DESIGN ELEVATIONS, LEAVING SPACE FOR UPPER LAYER OF COMPOST, MULCH OR TOPSOIL AS SPECIFIED ON PLANS.
- PLANT VEGETATION ACCORDING TO PLANTING PLAN.
- MULCH AND INSTALL EROSION PROTECTION AT SURFACE FLOW ENTRANCES WHERE NECESSARY.

LANDSCAPE RESTORATION (SCM 6.7.2)

- PLANT SELECTION
- SELECT PLANTS THAT ARE WELL ADAPTED TO THE SPECIFIC SITE CONDITIONS. MEADOW PLANTS MUST BE ABLE TO OUT COMPETE WEED SPECIES IN THE FIRST FEW YEARS AS THEY BECOME ESTABLISHED.
- PREPARE SITE
- ALL WEEDS OR EXISTING VEGETATION MUST BE ELIMINATED PRIOR TO SEEDING.
- PERENNIAL WEEDS MAY REQUIRE YEAR LONG SMOTHERING, REPEATED SPRAYINGS WITH HERBICIDES, OR REPEATED TILLAGE WITH EQUIPMENT THAT CAN UPROOT AND KILL PERENNIAL WEEDS.
- PLANTING DAY
- PLANTING CAN TAKE PLACE FROM SPRING THAW THROUGH JUNE 30 OR FROM SEPTEMBER 1 THROUGH SOIL FREEZE-UP (DORMANT SEEDING)
- PLANTING IN JULY AND AUGUST IS GENERALLY NOT RECOMMENDED DUE TO THE FREQUENCY OF DROUGHT DURING THIS TIME.
- SEEDING CAN BE ACCOMPLISHED BY A VARIETY OF METHODS: NO-TILL SEEDER FOR MULTI-ACRE PLANTING; BROADCAST SEEDER, HAND BROADCAST FOR SMALL AREAS OF ONE ACRE OR LESS.
- SEED QUALITY IS CRITICAL, AND A SEED MIX SHOULD BE USED WITH A MINIMUM PERCENTAGE OF NON-SEED PLANT PARTS.
- SITE MAINTENANCE (ADDITIONAL INFORMATION BELOW)
- ASSIGN RESPONSIBILITIES FOR WATERING, WEEDING, MOWING, AND MAINTENANCE
- MONITOR SITE REGULARLY FOR GROWTH AND POTENTIAL PROBLEMS

POTENTIAL THERMAL IMPACTS:

POST CONSTRUCTION THERMAL IMPACTS FROM THE IMPERVIOUS SURFACES WITHIN THE SITE ARE MITIGATED IN SEVERAL WAYS. FIRST, PROPOSED LAWN AREAS PROVIDE TURBULENT FLOW AREAS AND THEREFORE ENERGY (HEAT) IS RELEASED FROM THE WATER AS IT FLOWS OVER THE LAWN AREAS. ADDITIONALLY, THE PROPOSED STORMWATER MANAGEMENT RAIN GARDEN PROVIDES INFILTRATION AND THE STORMWATER WILL NATURALLY COOL WHEN IT IS IN THE UNDERGROUND SOIL MEDIA. IF ANY POTENTIAL FOR THERMAL IMPACTS IS IDENTIFIED, IMMEDIATELY CONTACT CHELTENHAM TOWNSHIP ENGINEER AND THE MONTGOMERY COUNTY CONSERVATION DISTRICT FOR INFORMATION TO AVOID, MINIMIZE, OR MITIGATE ANY IMPACTS.

RECYCLING OR DISPOSAL OF MATERIALS:

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

THE FOLLOWING IS A LIST THAT INCLUDES, BUT THAT IS NOT LIMITED TO, THE POTENTIAL PROJECT WASTES SPECIFIC TO PCSM SCMs AND/OR PROJECT CONSTRUCTION:

- CONCRETE
- STONE, GRAVEL, AND/OR ROCK
- TOP SOIL AND SUBSURFACE SOILS
- TREES, SHRUBS, WEEDS, VEGETATION
- MISCELLANEOUS TRASH AND DEBRIS

RIPIARIAN FOREST BUFFER MANAGEMENT PLAN:

THERE ARE NO AREAS OF HIGH QUALITY (HQ) OR EXCEPTIONAL VALUE (EV) WATERSHEDS ON THE PROPERTY SITE, NOR DOES ANY AREA OF THE PROPERTY FLOW TO AN HQ OR EV WATERSHED. THEREFORE, RIPIARIAN BUFFER, RIPIARIAN FOREST BUFFER, OR EQUIVALENCY DEMONSTRATION ARE NOT REQUIRED NOR APPLICABLE AS PART OF THIS PROJECT.

PCSM SHORT AND LONG-TERM OPERATION AND MAINTENANCE REQUIREMENTS:

THE PERMITTEE OR CO-PERMITTEE SHALL BE RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF PCSM SCMs UNLESS A DIFFERENT PERSON IS IDENTIFIED AND HAS AGREED TO LONG-TERM OPERATION AND MAINTENANCE OF PCSM SCMs.

FOR ANY PROPERTY CONTAINING A PCSM SCM, THE PERMITTEE OR CO-PERMITTEE SHALL RECORD AN INSTRUMENT WITH THE RECORDER OF DEEDS WHICH WILL ASSURE DISCLOSURE OF THE PCSM SCM AND THE RELATED OBLIGATIONS IN THE ORDINARY COURSE OF A TITLE SEARCH OF THE SUBJECT PROPERTY. THE RECORDED INSTRUMENT MUST IDENTIFY THE PCSM SCM, PROVIDE FOR NECESSARY ACCESS RELATED TO LONG-TERM OPERATION AND MAINTENANCE FOR PCSM SCMs AND PROVIDE NOTICE THAT THE RESPONSIBILITY FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM SCM IS A COVENANT THAT RUNS WITH THE LAND THAT IS BINDING UPON AND ENFORCEABLE BY SUBSEQUENT GRANTEES.

THE PERSON RESPONSIBLE FOR PERFORMING LONG-TERM OPERATION AND MAINTENANCE MAY ENTER INTO AN AGREEMENT WITH ANOTHER PERSON, INCLUDING A CONSERVATION DISTRICT, NONPROFIT ORGANIZATION, MUNICIPALITY, AUTHORITY, PRIVATE CORPORATION, OR OTHER PERSON, TO TRANSFER THE RESPONSIBILITY FOR PCSM SCMs OR TO PERFORM LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM SCMs LOCATED ON THE PROPERTY.

A PERMITTEE OR CO-PERMITTEE THAT FAILS TO TRANSFER LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM SCM OR OTHERWISE FAILS TO COMPLY WITH THIS REQUIREMENT SHALL REMAIN JOINTLY AND SEVERALLY RESPONSIBLE WITH THE LANDOWNER FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PCSM SCMs LOCATED ON THE PROPERTY.

SCMs SHOULD BE INSPECTED AT LEAST ONE (1) TIME PER YEAR AND AFTER RUNOFF EVENTS.

THE PCSM SCMs MUST BE INSPECTED AND MAINTAINED AS NOTED UNDER THE INSPECTION, MAINTENANCE AND/OR REPLACEMENT PLAN NOTES, AND THE INDIVIDUAL OPERATION AND MAINTENANCE NOTES AS INDICATED ON THE PLANS. THIS INCLUDES REPAIRS AND REPLACEMENT IF REQUIRED TO ENSURE THEY FUNCTION/OPERATE PROPERLY.

A WRITTEN REPORT DOCUMENTING EACH INSPECTION AND ALL SCM REPAIRS AND MAINTENANCE ACTIVITIES MUST BE COMPLETED AND MADE AVAILABLE FOR DEP OR BCDD STAFF FOR REVIEW.

LONG TERM OPERATION AND MAINTENANCE SCHEDULE

SCM TYPE	MAINTENANCE ACTIVITY & SCHEDULE
RAIN GARDEN / BIORETENTION (SCM 6.4.5)	PROPERLY DESIGNED AND INSTALLED BIORETENTION AREAS REQUIRE SOME REGULAR MAINTENANCE. <ul style="list-style-type: none">WHILE VEGETATION IS BEING ESTABLISHED, PRUNING AND WEEDING MAY BE REQUIRED.DISTURBED AREAS ALSO NEED TO BE REMOVED EVERY YEAR. PERENNIAL PLANTINGS MAY BE CUT DOWN AT THE END OF THE GROWING SEASON.MULCH SHOULD BE RE-SPREAD WHEN EROSION IS EVIDENT AND BE REPLENISHED AS NEEDED. ONCE EVERY 2 TO 3 YEARS THE ENTIRE AREA MAY REQUIRE MULCH REPLACEMENT.BIORETENTION AREAS SHOULD BE INSPECTED AT LEAST TWO TIMES PER YEAR FOR SEDIMENT BUILDUP, EROSION, VEGETATIVE CONDITIONS, ETC.DURING PERIODS OF EXTENDED DROUGHT, BIORETENTION AREAS MAY REQUIRE WATERING.TREES AND SHRUBS SHOULD BE INSPECTED TWICE PER YEAR TO EVALUATE HEALTH.
LANDSCAPE RESTORATION (SCM 6.7.2)	MEADOWS AND FORESTS ARE LOW MAINTENANCE BUT NOT "NO MAINTENANCE". THEY USUALLY REQUIRE MORE FREQUENT MAINTENANCE IN THE FIRST FEW YEARS IMMEDIATELY FOLLOWING INSTALLATION. <p>FOREST RESTORATION AREAS PLANTED WITH A PROPER COVER CROP CAN BE EXPECTED TO REQUIRE ANNUAL MOWING IN ORDER TO CONTROL INVASIVES. APPLICATION OF A CAREFULLY SELECTED HERBICIDE (ROUNDUP OR SIMILAR GLYPHOSATE HERBICIDE) AROUND THE PROTECTIVE TREE SHELTERS/TUBES MAY BE NECESSARY, REINFORCED BY SELECTIVE CUTTING/MANUAL REMOVAL, IF NECESSARY. THIS INITIAL MAINTENANCE ROUTINE IS NECESSARY FOR THE INITIAL 2 TO 3 YEARS OF GROWTH AND MAY BE NECESSARY FOR UP TO 5 YEARS UNTIL TREE GROWTH AND TREE CANOPY BEGINS TO FORM. NATURALLY INHIBITING WEED GROWTH (ONCE SHADING IS ADEQUATE, GROWTH OF INVASIVES AND OTHER WEEDS WILL BE NATURALLY PREVENTED, AND THE WOODLAND BECOMES SELF-MAINTAINING). REVIEW OF THE NEW WOODLAND SHOULD BE UNDERTAKEN INTERMITTENTLY TO DETERMINE IF REPLACEMENT TREES SHOULD BE PROVIDED (SOME MODEST RATE OF PLANTING FAILURE IS USUAL).</p> MEADOW MANAGEMENT IS SOMEWHAT MORE STRAIGHTFORWARD; A SEASONAL MOWING OR BURNING MAY BE REQUIRED, ALTHOUGH CARE MUST BE TAKEN TO MAKE SURE THAT ANY MANAGEMENT IS COORDINATED WITH ESSENTIAL RESEEDING AND OTHER IMPORTANT ASPECTS OF MEADOW REESTABLISHMENT. IN THE FIRST YEAR WEEDS MUST BE CAREFULLY CONTROLLED AND CONSISTENTLY MOVED BACK TO 4-6 INCHES TALL WHEN THEY REACH 12 INCHES IN HEIGHT. IN THE SECOND YEAR, WEEDS SHOULD CONTINUE TO MONITORED AND MOWED AND RHIZOMATOUS WEEDS SHOULD BE HAND TREATED WITH HERBICIDE. WEEDS SHOULD NOT BE SPRAYED WITH HERBICIDE AS THE DRIFT FROM THE SPRAY MAY KILL LARGE PATCHES OF DESIRABLE PLANTS, ALLOWING WEEDS TO MOVE IN TO THESE NEW OPEN AREAS. IN THE BEGINNING OF THE THIRD SEASON, THE YOUNG MEADOW SHOULD BE BURNED OFF IN MID-SPRING. IF BURNING IS NOT POSSIBLE, THE MEADOW SHOULD BE MOWED VERY CLOSELY TO THE GROUND INSTEAD. THE MOWED MATERIAL SHOULD BE REMOVED FROM THE SITE TO EXPOSE THE SOIL TO THE SUN. THIS HELPS ENCOURAGE RAPID SOIL WARMING WHICH FAVORS THE ESTABLISHMENT OF "WARM SEASON" PLANTS OVER "COOL SEASON" WEEDS.

GENERAL PCSM PLANNING AND DESIGN:

I. STREAM INTEGRITY PRESERVATION - §102.8(b)(1)

THE PROPOSED SCMs, AS PART OF THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN, HAVE BEEN PLANNED AND PROVIDED IN ORDER TO PRESERVE THE INTEGRITY OF STREAM CHANNELS, AND TO MAINTAIN AND PROTECT THE PHYSICAL, BIOLOGICAL, AND CHEMICAL QUALITY OF THE RECEIVING STREAMS.

II. PREVENT STORMWATER RUNOFF RATE INCREASE - §102.8(b)(2)

THE PROPOSED POST CONSTRUCTION STORMWATER MANAGEMENT PLAN WILL PREVENT AN INCREASE IN STORMWATER RUNOFF RATES THROUGH THE USE OF STRUCTURAL SCMs.

III. MINIMIZE STORMWATER RUNOFF VOLUME INCREASE - §102.8(b)(3)

THE PROPOSED POST CONSTRUCTION STORMWATER MANAGEMENT PLAN WILL MINIMIZE AN INCREASE IN STORMWATER RUNOFF VOLUME THROUGH THE USE OF STRUCTURAL SCMs.

IV. MINIMIZE IMPERVIOUS AREAS - §102.8(b)(4)

THE PROPOSED DEVELOPMENT LAYOUT PROVIDES AN EFFICIENT CONFIGURATION OF IMPERVIOUS SURFACE FOR THE PROPOSED USE TO MINIMIZE IMPERVIOUS AREAS. THE PLAN ALSO DIRECTS IMPERVIOUS SURFACES AND ROOFTOPS TO VEGETATED AREAS AND STRUCTURAL SCMs.

V. MAXIMIZE DRAINAGE AND VEGETATION PROTECTION - §102.8(b)(5)

THE EXISTING DRAINAGE FEATURES AND VEGETATION SHALL BE PROTECTED TO THE MAXIMUM EXTENT PRACTICAL. TO ACHIEVE THIS GOAL, THE AREAS ON-SITE, OUTSIDE OF THE LIMITS OF DISTURBANCE ARE SUBJECT TO THE FOLLOWING CRITERIA:

- AREAS SHALL NOT BE SUBJECT TO GRADING OR MOVEMENT OF EXISTING SOIL.
- EXISTING VEGETATION IN A HEALTHY CONDITION MAY NOT BE REMOVED, INCLUDING TREES, SHRUBS, OR WELL-ESTABLISHED MEADOW/GRASS LAND COVER.
- INVASIVE NON-NATIVE VEGETATION MAY BE REMOVED.
- PRUNING OR OTHER REQUIRED MAINTENANCE OF VEGETATION IS PERMITTED. ADDITIONAL PLANTING IS PERMITTED.
- AREAS SHALL BE PROTECTED AND DELINEATED IN THE FIELD.
- THE AREAS NOT SUBJECT TO GRADING ARE ALSO DELINEATED ON THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN. IF ANY FUTURE GRADING OR DISTURBANCE OF THESE AREAS OCCURS, SUBSEQUENT STORMWATER MANAGEMENT MUST BE PROVIDED TO ADDRESS THE ADDITIONAL DISTURBANCE.

VI. MINIMIZE LAND CLEARING AND GRADING - §102.8(b)(6)

IN ORDER TO MINIMIZE LAND CLEARING AND GRADING, THE AREAS BETWEEN TREE PROTECTION FENCING AND PROPERTY BOUNDARIES ARE SUBJECT TO THE FOLLOWING CRITERIA:

- AREAS SHALL NOT BE SUBJECT TO GRADING OR MOVEMENT OF EXISTING SOIL.
- EXISTING VEGETATION IN A HEALTHY CONDITIONS MAY NOT BE REMOVED, INCLUDING TREES, SHRUBS, OR WELL-ESTABLISHED MEADOW/GRASS LAND COVER.
- INVASIVE NON-NATIVE VEGETATION MAY BE REMOVED.
- PRUNING OR OTHER REQUIRED MAINTENANCE OF VEGETATION IS PERMITTED. ADDITIONAL PLANTING IS PERMITTED.
- AREAS SHALL BE PROTECTED AND DELINEATED IN THE FIELD.
- THE AREAS NOT SUBJECT TO GRADING ARE ALSO DELINEATED ON THE POST CONSTRUCTION STORMWATER MANAGEMENT PLAN. IF ANY FUTURE GRADING OR DISTURBANCE OF THESE AREAS OCCURS, SUBSEQUENT STORMWATER MANAGEMENT MUST BE PROVIDED TO ADDRESS THE ADDITIONAL DISTURBANCE.

VII. MINIMIZE SOIL COMPACTION - §102.8(b)(7)

THE LIMITS OF DISTURBANCE HAVE BEEN DELINEATED AS THE MINIMUM PRACTICAL AREAS AND ALL OTHER AREAS SHALL NOT BE DISTURBED AND ARE SUBJECT TO THE FOLLOWING CRITERIA:

- AREAS SHALL NOT BE SUBJECT TO GRADING OR MOVEMENT OF EXISTING SOIL.
- EXISTING VEGETATION IN A HEALTHY CONDITIONS MAY NOT BE REMOVED, INCLUDING TREES, SHRUBS, OR WELL-ESTABLISHED MEADOW/GRASS LAND COVER.
- INVASIVE NON-NATIVE VEGETATION MAY BE REMOVED.
- PRUNING OR OTHER REQUIRED MAINTENANCE OF VEGETATION IS PERMITTED. ADDITIONAL PLANTING IS PERMITTED.
- AREAS SHALL BE PROTECTED AND DELINEATED IN THE FIELD.

VII. OTHER SCM CONTROLS TO MINIMIZE RUNOFF - §102.8(b)(8)

OTHER STRUCTURAL AND NON-STRUCTURAL SCMs SHALL BE UTILIZED TO PREVENT OR MINIMIZE THE GENERATION OF ADDITIONAL STORMWATER RUNOFF SUCH AS THE FOLLOWING:

- DISCONNECTION FROM STORM SEWERS (SCM 5.8.2)
- RAIN GARDEN/BIO-INFILTRATION (SCM 6.4.5)
- LANDSCAPE RESTORATION (SCM 6.7.2)

LONG-TERM OPERATION AND MAINTENANCE SCHEDULE FOR PCSM SCMs

OPERATION AND MAINTENANCE PROGRAM

- THE PERMITTEE IS TO PROVIDE PROOF BY THE DESIGN ENGINEER OR ON-SITE INSPECTOR THAT MAJOR DRAINAGE STRUCTURES AND CONTROLS HAVE BEEN CONSTRUCTED AS DESIGNED.
- MAINTENANCE OF THE STORMWATER MANAGEMENT FACILITIES AND OTHER FACILITIES SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER. THE PROPERTY OWNER MAY DELEGATE AUTHORITY FOR MAINTAINING THE MAINTENANCE TO OTHER INDIVIDUALS OR CONTRACTORS, BUT THE ULTIMATE RESPONSIBILITY FOR PROPER MAINTENANCE IS THE PROPERTY OWNER.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT SCMs MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL SCMs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, RE-GRADING, RESEEDING, REMULCHING, AND RENETTING, MUST BE DONE IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL SCMs FAIL TO PERFORM AS EXPECTED, REPLACEMENT SCMs OR MODIFICATIONS TO THOSE INSTALLED WILL BE REQUIRED.
- A WRITTEN REPORT DOCUMENTING EACH INSPECTION AND ALL BMP REPAIR AND MAINTENANCE ACTIVITIES SHALL BE COMPLETED FOR EACH POST CONSTRUCTION STORMWATER MANAGEMENT BMP AND INSPECTION/REPAIR ACTIVITY.
- SEDIMENT SHALL BE REMOVED FROM STORMWATER SCMs WHEN IT HAS ACCUMULATED TO A DEPTH OF 6 INCHES. COLLECTED SEDIMENT SHALL BE SPREAD ELSEWHERE (IN AREAS UNDER CONSTRUCTION) DURING CONSTRUCTION AND STABILIZATION. SEEDING AND MULCHING OF SLOPES SHALL CONFORM TO THE RECOMMENDATIONS WITHIN OR APPROVED EQUAL. TOPSOIL (MINIMUM 6 INCHES) SHALL BE PLACED PRIOR TO SEEDING.
- THE STORMWATER SCMs AND WATER QUALITY FEATURES ARE TO BE MAINTAINED AND THE OUTLET STRUCTURES CHECKED AND REPAIRED IF NECESSARY.
- MAINTENANCE OF THE STORMWATER SCMs AND OTHER FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF RECORD. THE OWNER OF RECORD MAY DELEGATE AUTHORITY FOR MAINTAINING THE MAINTENANCE TO OTHER INDIVIDUALS OR CONTRACTORS BUT THE ULTIMATE RESPONSIBILITY FOR PROPER MAINTENANCE IS THE OWNER OF RECORD.
- VEGETATION SHALL BE MOWED WHENEVER NECESSARY TO MAINTAIN A PLEASING APPEARANCE AND DISCOURAGE WEED GROWTH. ALL LOCAL REGULATIONS WILL BE COMPLIED WITH.
- AREAS THAT CONTAIN SOD SHALL BE CHECKED CAREFULLY TO ENSURE THE JOINTS BETWEEN SOD STRIPS ARE TIGHT AND SECURE. WHERE JOINT SEPARATION IS EVIDENT, A CARPENTER SHALL BE MADE TO DETERMINE WHETHER THE JOINT STRIP SHALL BE MADE TO DETERMINE WHETHER THE JOINT IS OCCURRING. IF IT IS, THE STRIPS SHALL BE ROLLED UP, THE SUBSURFACE SHALL BE FILLED AND GRADED AS REQUIRED AND THE SOD STRIPS SHALL BE RE-LAID WITH TIGHT JOINTS AND PEGGING.
- SEEDED AREAS THAT HAVE WASHED AWAY SHALL BE FILLED AND GRADED AS NECESSARY AND THEN RESEEDED. A BURLAP OR STRAW COVER WILL BE APPLIED AT A RATE OF 3 TONS PER ACRE TO RETAIN THE SOIL UNTIL IT HAS A CHANCE TO ROOT PROPERLY.
- THE ABOVE PROCEDURE SHALL BE REPEATED AFTER EACH SIZEABLE STORM UNTIL NO MORE SIGNS OF EROSION ARE EVIDENT. AT WEEKLY INTERVALS THEREAFTER, INSPECTION AND NECESSARY CLEANING WILL BE DONE. PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, RE-GRADING, RESEEDING, REMULCHING AND RENETTING MUST BE DONE IMMEDIATELY.
- TRASH REMOVED FROM ANY OF THE CONTROL DEVICES SHALL BE DISPOSED OF AT A PENNSYLVANIA DEPARTMENT OF THE ENVIRONMENTAL PROTECTION APPROVED DISPOSAL AREA. THERE WILL BE NO BURNING OR BURYING OF WASTE ON THE SITE. SILT THAT HAS ACCUMULATED SHALL BE REMOVED AND USED AS FILL WHENEVER REQUIRED ON THE SITE.
- ALL ACCUMULATED SEDIMENT SHALL BE REMOVED AT COMPLETION OF THE PROJECT AFTER ALL EXPOSED SOIL SURFACES ARE FINISH GRADED AND STABILIZED.
- UPON REDUCTION, LOSS, OR FAILURE OF ANY BMP, THE PERMITTEE OR CO-PERMITTEE SHALL TAKE IMMEDIATE ACTION TO RESTORE, REPAIR, OR REPLACE BMP, OR PROVIDE AN ALTERNATE METHOD OF TREATMENT.
- THE RESPONSIBLE PARTY FOR MAINTAINING THE POST CONSTRUCTION STORMWATER MANAGEMENT FACILITIES SHALL PERFORM THE FOLLOWING AT A MINIMUM.

BMP 5.6.2 MINIMIZE SOIL COMPACTION IN DISTURBED AREAS - OPERATION AND MAINTENANCE

MAINTENANCE ACTIVITIES ARE REQUIRED TO ENSURE PROPER FUNCTIONALITY OF THE AREAS OF MINIMIZED SOIL COMPACTION. THE FOLLOWING REPRESENTS THE RECOMMENDED MAINTENANCE EFFORTS:

- SITES THAT HAVE MINIMIZED SOIL COMPACTION PROPERLY DURING THE DEVELOPMENT PROCESS SHOULD REQUIRE LESS MAINTENANCE THAN SITES THAT HAVE NOT. LANDSCAPE VEGETATION WILL LIKELY BE HEALTHIER, HAVE A HIGHER SURVIVAL RATE, REQUIRE LESS IRRIGATION AND FERTILIZER.
- SOME MAINTENANCE ACTIVITIES SUCH AS FREQUENT LAWN MOWING CAN CAUSE CONSIDERABLE SOIL COMPACTION AFTER CONSTRUCTION AND SHOULD BE AVOIDED WHENEVER POSSIBLE. PLANTING LOW-MAINTENANCE NATIVE VEGETATION IS THE BEST WAY TO AVOID DAMAGE DUE TO MAINTENANCE.

BMP 6.7.2 LANDSCAPE RESTORATION - OPERATION AND MAINTENANCE

MAINTENANCE ACTIVITIES ARE REQUIRED TO ENSURE PROPER FUNCTIONALITY OF THE LANDSCAPING/TREES. THE FOLLOWING REPRESENTS THE RECOMMENDED MAINTENANCE EFFORTS:

- ALL TREES MUST BE INSPECTED EACH SPRING TO CONFIRM THEY ARE HEALTHY. REPLACE ANY DEAD TREES WITH THE SAME TYPE OF TREE BEING REMOVED.
- IF TREES ARE DEAD, THE BMP HAS FAILED AND MUST BE REPLACED.

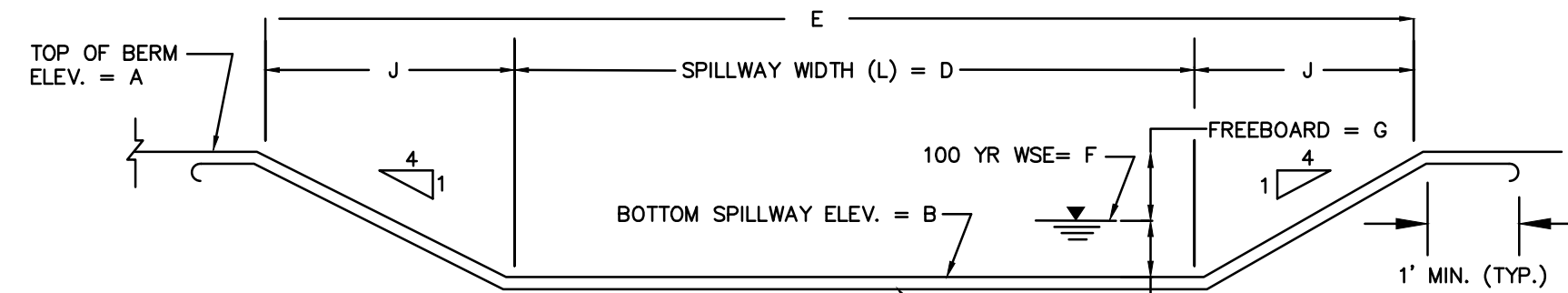
RIP-RAP APRONS - OPERATION AND MAINTENANCE

MAINTENANCE ACTIVITIES ARE REQUIRED TO ENSURE PROPER FUNCTIONALITY OF THE RIP-RAP APRONS. THE FOLLOWING REPRESENTS THE RECOMMENDED MAINTENANCE EFFORTS:

- INSPECT RIP-RAP APRONS EVERY THREE (3) MONTHS FOR:
 - EXAMINE RIP-RAP APRON FOR SHIFTING OF EXCESSIVE SETTLEMENT.
 - ENSURE THAT RIP-RAP APRON IS NOT OVERGROWN WITH UNDERBRUSH OR TREES.
 - LOOK FOR GULLIES OR BARE AREAS DOWNSTREAM FROM APRON. THESE AREAS SHOULD NOT BE ERODED OR BARE, REPAIR AS NECESSARY IMMEDIATELY.
 - ENSURE THE AREA DOWNSTREAM FROM THE APRON IS CLEAR OF OBSTRUCTIONS.
- FAILURE OF THE RIP-RAP APRONS COULD ENTAIL STANDING WATER OBSERVED 72 HOURS AFTER THE STORM EVENT. SHOULD THIS OCCUR, TAKE CORRECTIVE ACTION AS NECESSARY. RIP-RAP APRONS THAT BECOME LADEN WITH SILT OR DEVELOP VEGETATION GROWTH SHALL BE REMOVED AND RE-INSTALLED AFTER THE APRON AREA HAS BEEN CLEANED AND RE-GRADED.

GEOLOGIC FORMATIONS OR SOIL CONDITIONS:

SCALE: 1"=20'



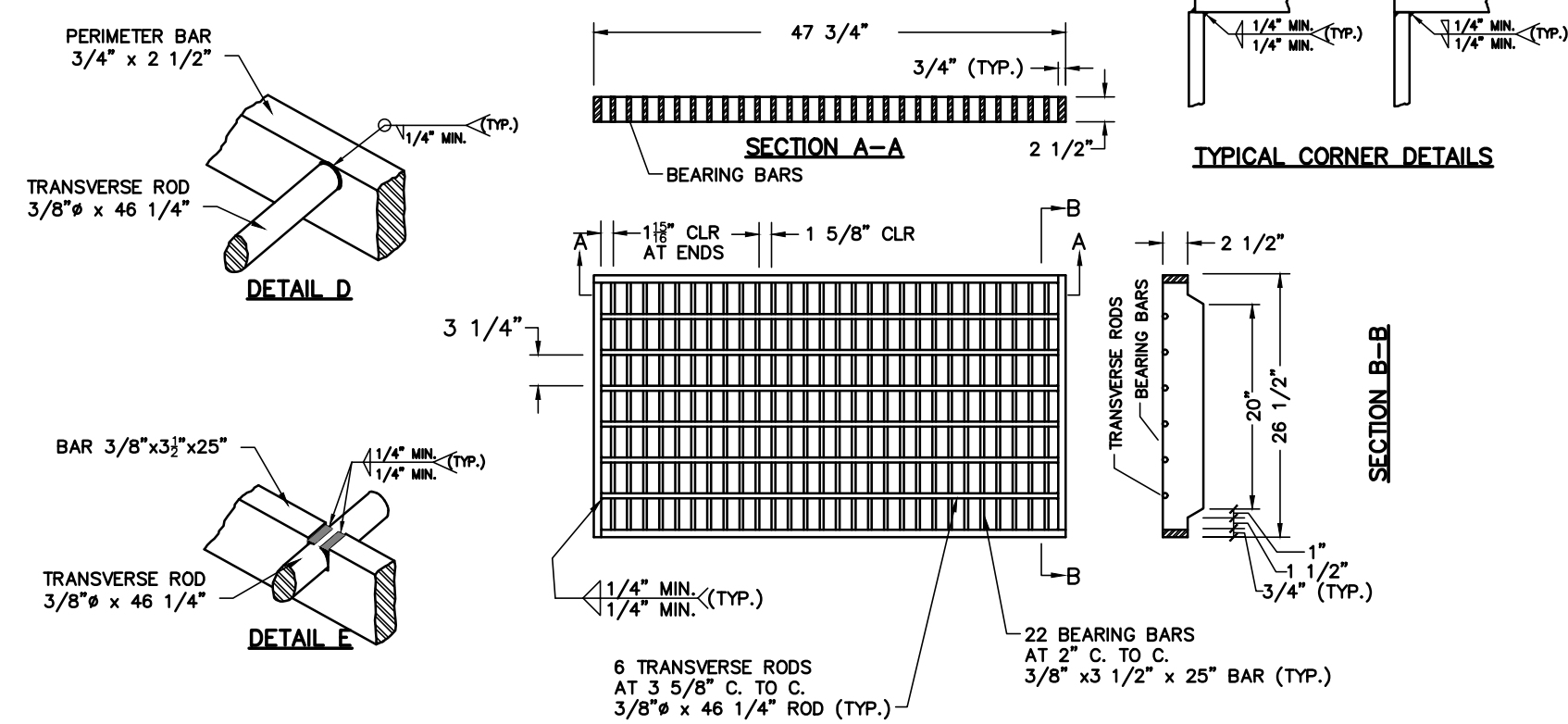
* SPILLWAY TO BE PLANTED WITH GRASS IN ADDITION TO BEING LINED WITH EROSION CONTROL FABRIC.

STRUCTURE	A	B	D	E	F	G	H	J
RAIN GARDEN	313.77	313.00	10'	14'	312.13	1.64	0.13	2'

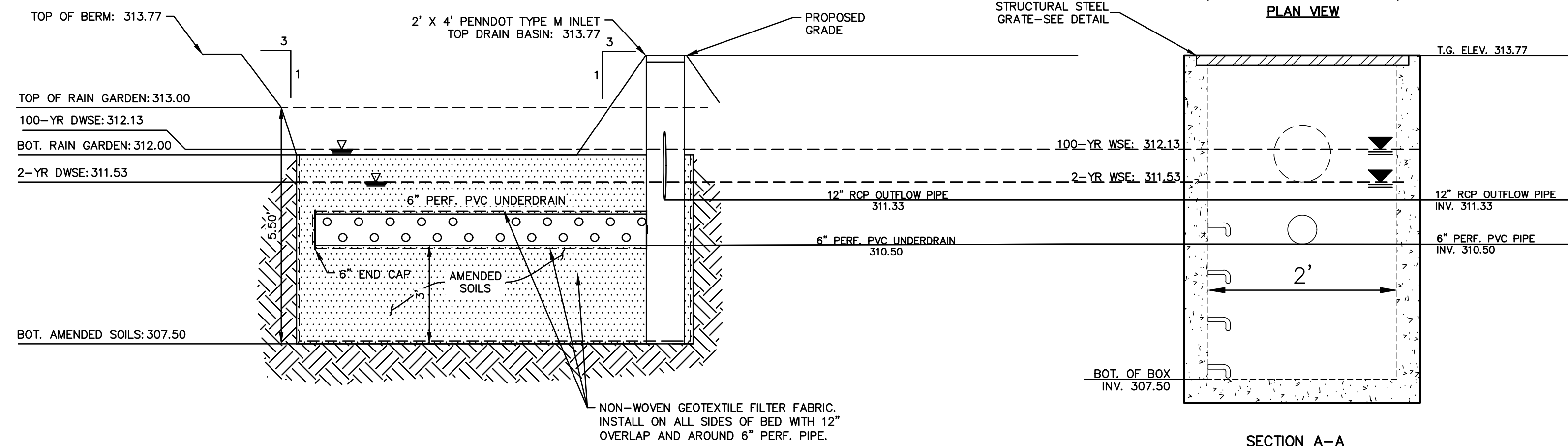
SPILLWAY DETAIL

RAIN GARDEN OVERFLOW SPILLWAY DETAIL

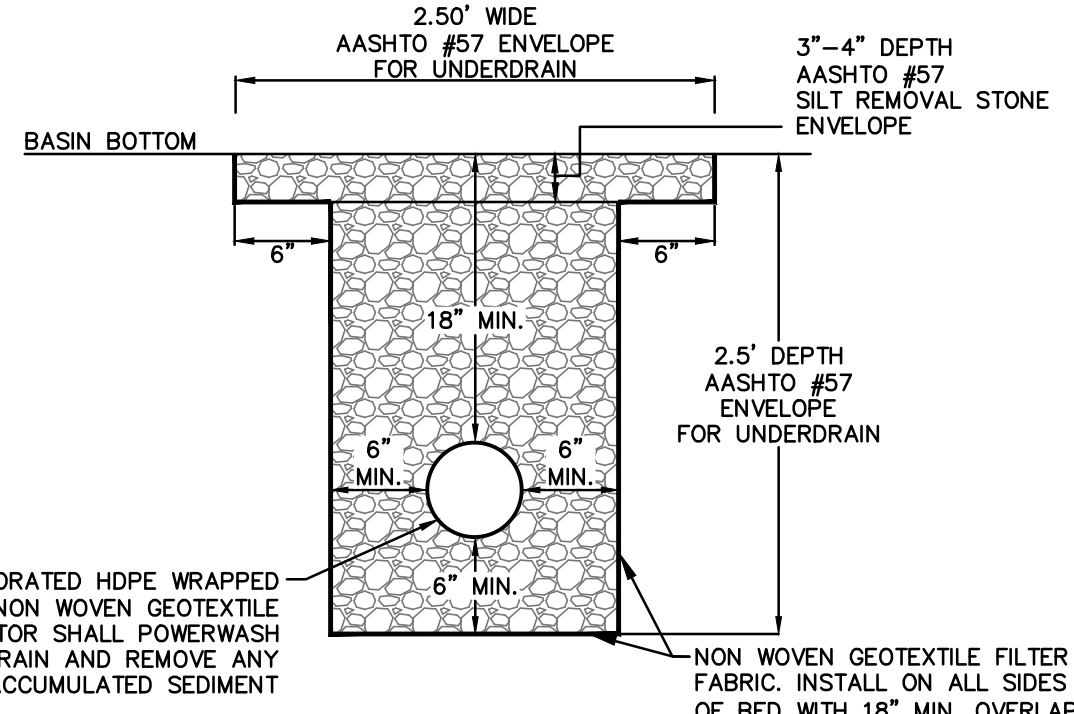
NOT TO SCALE



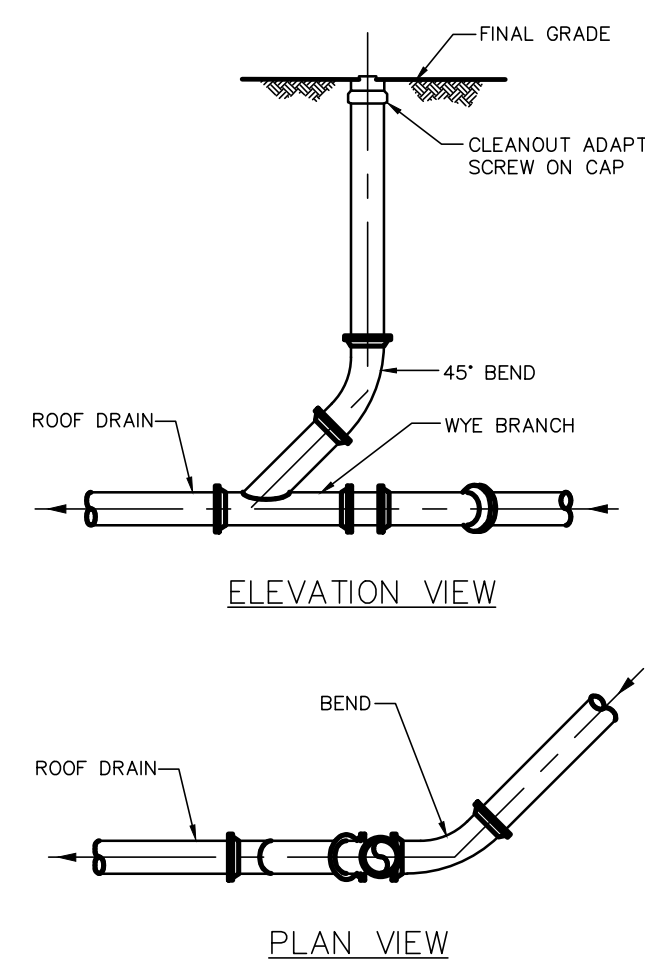
STRUCTURAL STEEL GRATE
BICYCLE SAFE
NOT TO SCALE



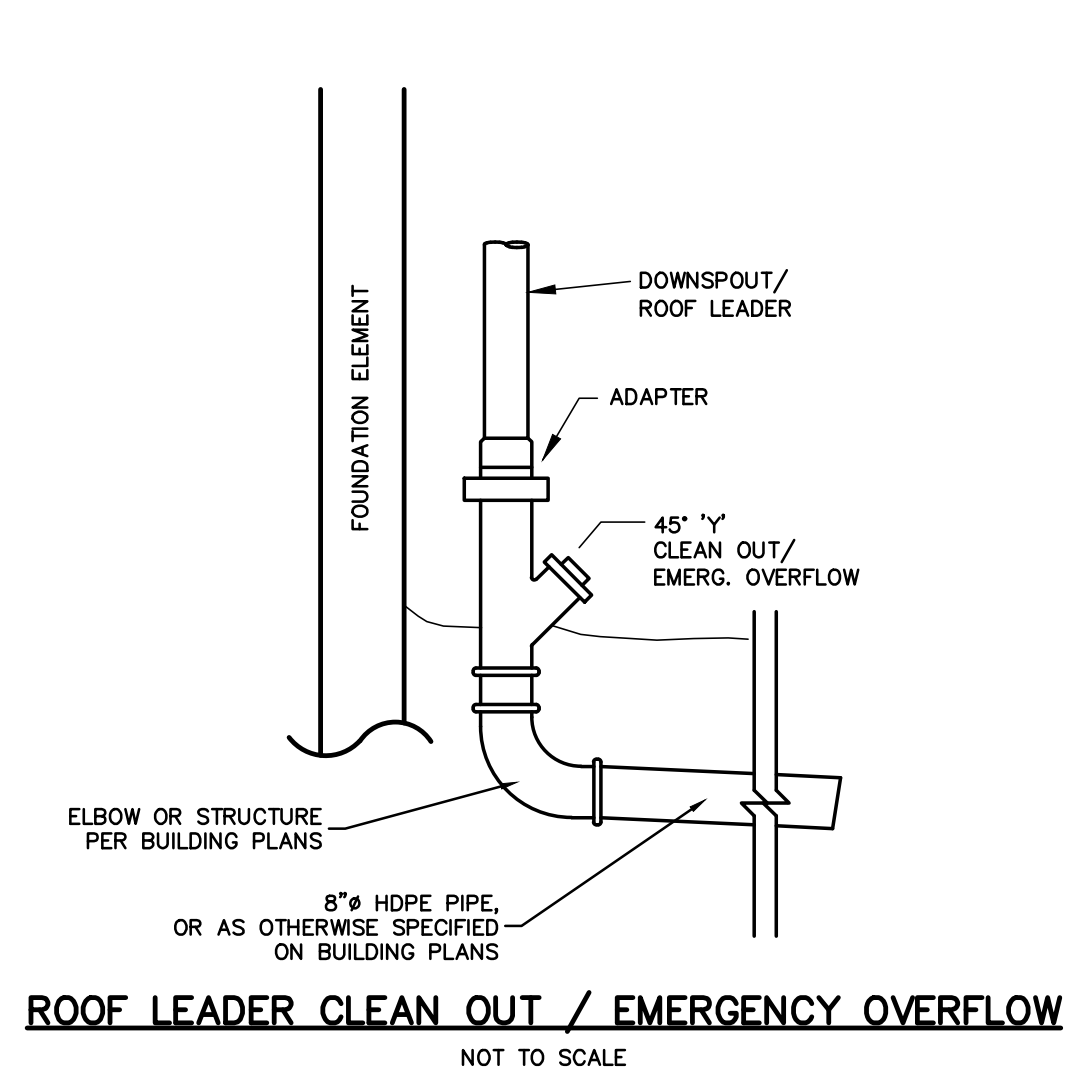
RAIN GARDEN SECTION A-A
NOT TO SCALE



6" UNDERDRAIN
NOT TO SCALE



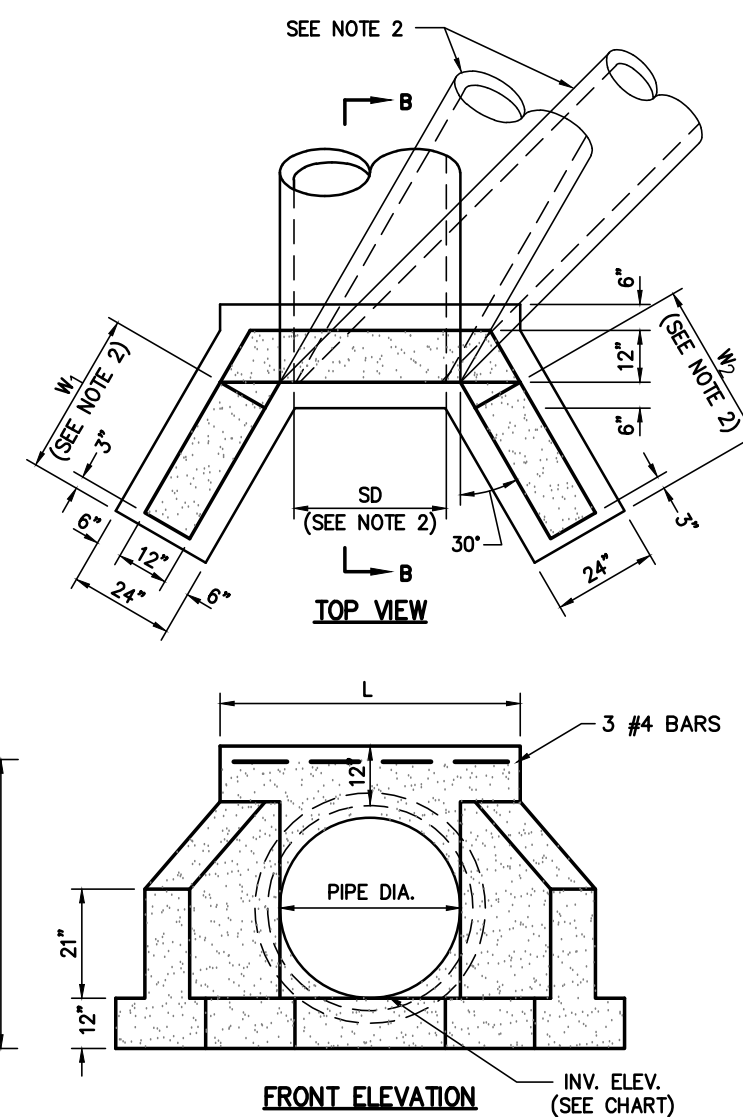
ROOF DRAIN CLEAN-OUT DETAIL
NOT TO SCALE



ROOF LEADER CLEAN OUT / EMERGENCY OVERFLOW

STORMWATER INFILTRATION TEST PITS					
TEST PIT	APPROX. GROUND ELEV.	DEPTH TO ROCK	GROUND WATER ELEV.	INFILTRATION TEST	
				DEPTH	RATE (N/HR)
TP-1	322.75	57"	NE	NOT TESTED	NT
TP-2	322.75	N/A	NE	60"	3.00
TP-3	316.50	84"	NE	48"	0.25
TP-4	311.50	N/A	NE	48"	6.00

PIPE I.D.	L	W	H
15"	3.5'	3.0'	2.4'
18"	3.8'	3.0'	2.7'
21"	4.1'	3.5'	3.0'
24"	4.3'	3.5'	3.2'
27"	4.5'	4.0'	3.5'
30"	4.8'	4.0'	3.8'
36"	5.8'	4.8'	4.3'
42"	6.3'	5.8'	4.9'
48"	6.9'	6.9'	5.4'
54"	7.5'	7.8'	6.0'
60" *	8.1'	9.2'	6.5'
72" *	9.2'	11.5'	7.6'

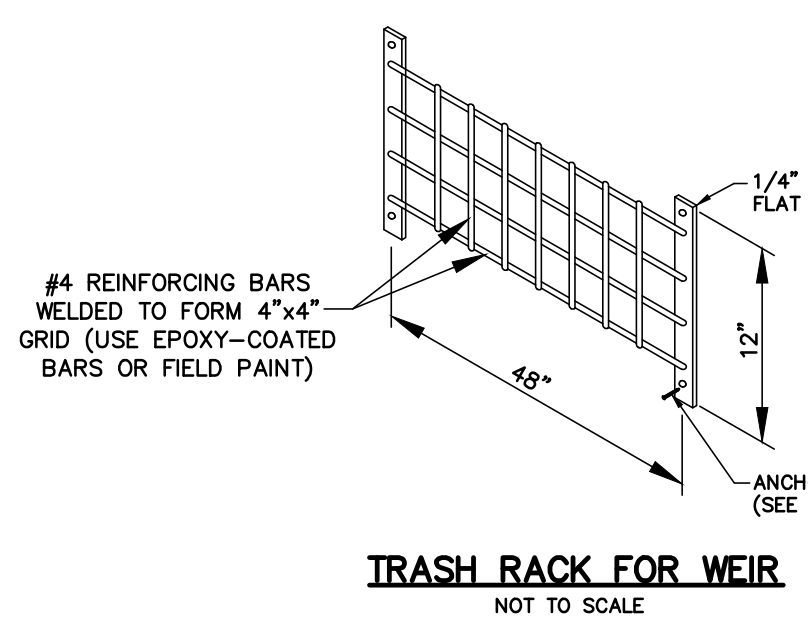


PENNDOT TYPE D-W ENDWALL

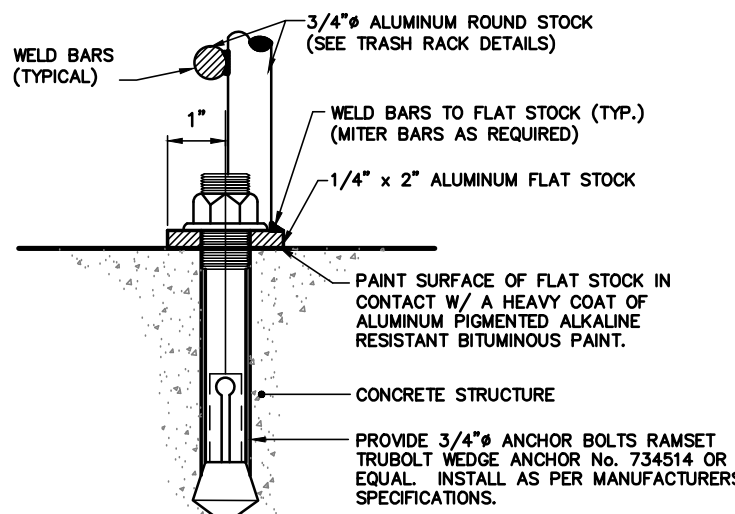
TYPE D-V
NOT TO SCALE

NOTES

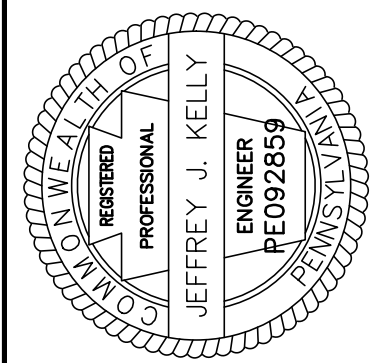
1. PRECAST ENDWALLS SHALL CONFORM AND USERS SHALL REFER TO "COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, BUREAU OF HIGHWAY DESIGN, STANDARDS FOR ROADWAY CONSTRUCTION," PAGE RC-31M, LATEST ISSUE, FOR NOTES REGARDING PRECAST CONCRETE ENDWALL CONSTRUCTION.
2. REFER TO "COMMONWEALTH OF PENNSYLVANIA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



TRASH RACK FOR WEIR
NOT TO SCALE



ANCHOR BOLT DETAIL FOR
TRASH RACK



DATE: 04/22/2025

REV.	DESCRIPTION	DATE	BY

LAND DEVELOPMENT PLAN

ARCADIA INDOOR HITTING FACILITY

CHEL TENHAM TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

PCSM DETAILS



GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.:
20100306906

OWNERS INFO:
ARCADIA UNIVERSITY
450 S EASTON ROAD
GLENDSIDE, PA, 19038
215-572-2900

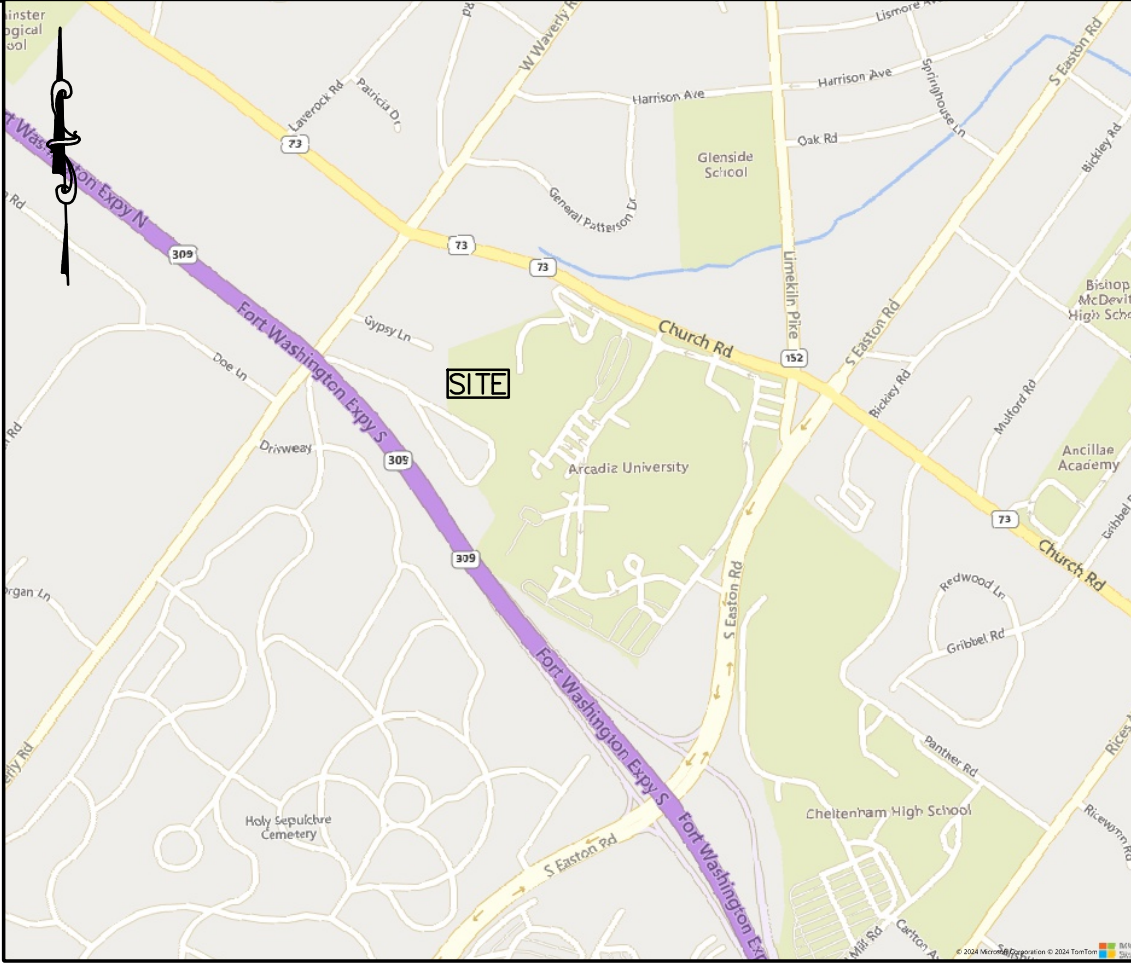
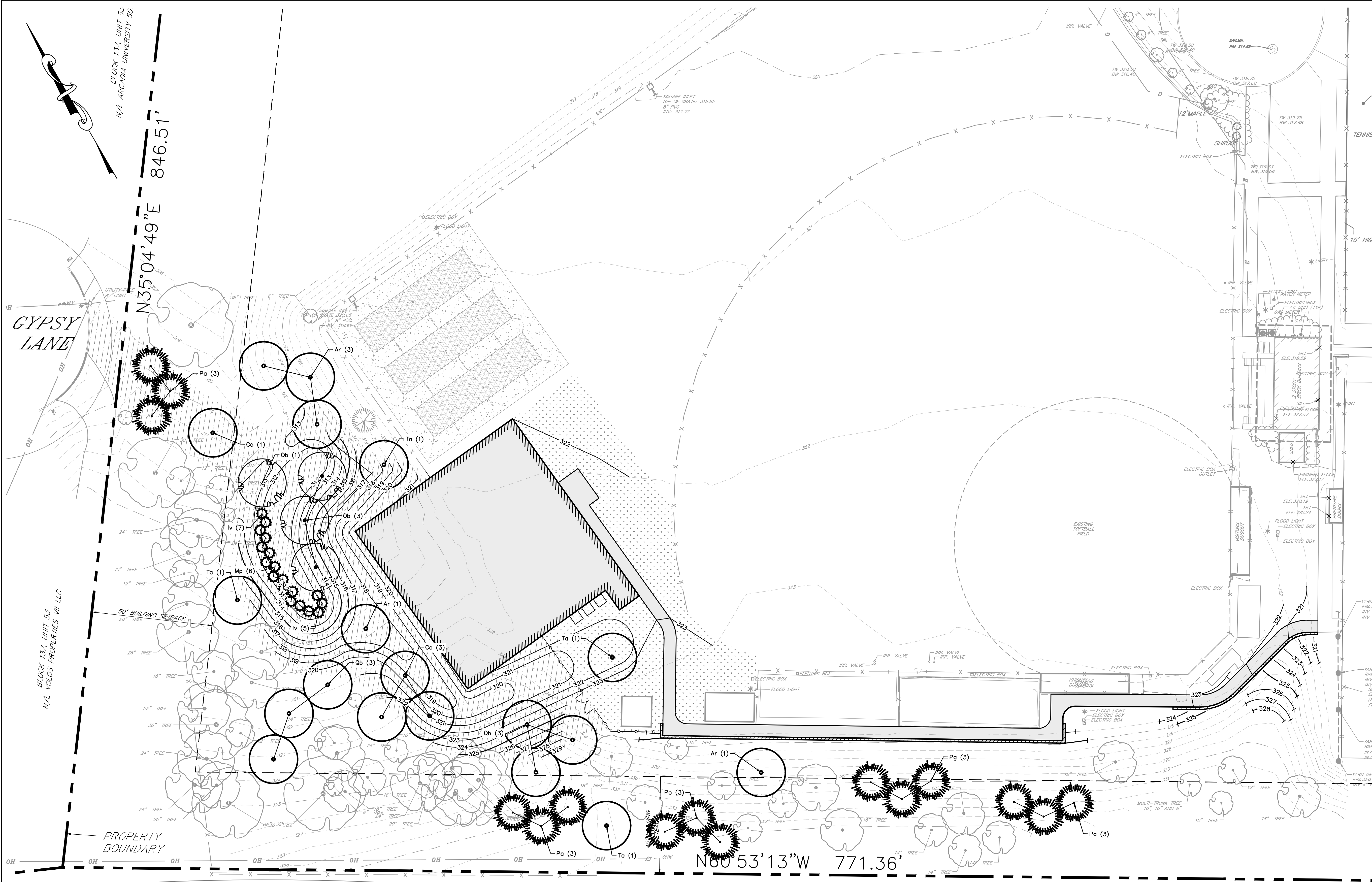
MUNICIPAL FILE No.:

TAX MAP PARCEL No.:
31-00-08860-00

TOTAL AREA:	TOTAL
59.10 AC.	

DATE: 04/22/2025	SCALE: N.
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DRAWN BY: AB	CHECKED BY: H
SHEET NO.:	



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

EXISTING LEGEND

- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- EXISTING SPOT ELEVATION
- TREE LINE
- LEGAL RIGHT-OF-WAY
- ULTIMATE RIGHT-OF-WAY
- STORM LINE
- GAS LINE
- OVERHEAD ELECTRIC LINE
- ELECTRIC LINE
- SANITARY LINE
- SANITARY LATERAL
- WATER LINE
- WATER LATERAL
- EDGE OF STREAM
- EXISTING EASEMENT
- SOIL BOUNDARY
- WATERS OF THE US AND COMMONWEALTH
- 100 YEAR FLOOD PLAIN
- SANITARY MANHOLE
- STORM INLET
- DETECTABLE WARNING SURFACE
- GAS VALVE
- WATER VALVE
- GUY
- ELECTRIC METER
- FIRE HYDRANT
- UTILITY POLE
- MAILBOX
- LIGHT STANDARD
- CONCRETE MONUMENT FND
- IRON PIN FOUND
- CONIFER TREE
- DECIDUOUS TREE
- TREE STUMP
- SOIL LABEL

LANDSCAPE LEGEND

- PROPOSED CANOPY REPLACEMENT TREE (19 TOTAL)
- PROPOSED EVERGREEN REPLACEMENT TREE (15 TOTAL)
- PROPOSED BASIN PLANTING TREE (4 TOTAL)
- PROPOSED BASIN PLANTING SHRUB (18 TOTAL)
- PROPOSED LAWN SEED MIX - SEE TOPOSIL AND SEEDING NOTES ON SHEET 22
- PROPOSED LOW MAINTENANCE SEED MIX - SEE TOPOSIL AND SEEDING NOTES ON SHEET 22

19 LANDSCAPE PLAN

PLANTING SCHEDULE

TREE REPLACEMENTS

Canopy Trees	Qty.	Botanical Name	Common Name	Size	Root	Spacing
Ar	5	Acer rubrum 'October Glory'	October Glory Red Maple	2.5" Cal min.	B&B	See Plan
Co	4	Celtis occidentalis	Common Hackberry	2.5" Cal min.	B&B	See Plan
Qb	6	Quercus bicolor	Swamp White Oak	2.5" Cal min.	B&B	See Plan
Ta	4	Tilia americana	American Linden	2.5" Cal min.	B&B	See Plan
Total	19					

Evergreen Trees	Qty.	Botanical Name	Common Name	Size	Root	Spacing
Pa	9	Picea abies	Norway Spruce	8' Height min.	B&B	See Plan
Pg	3	Picea glauca	White Spruce	8' Height min.	B&B	See Plan
Po	3	Picea omorika	Siberian Spruce	8' Height min.	B&B	See Plan
Total	15					

BASIN PLANTINGS

Canopy Trees	Qty.	Botanical Name	Common Name	Size	Root	Spacing
Qb	4	Quercus bicolor	Swamp White Oak	2.5" Cal min.	B&B	See Plan
Total	4					

Evergreen Trees	Qty.	Botanical Name	Common Name	Size	Root	Spacing
Iv	12	Ilex verticillata	Winterberry Holly	2' Height min.	B&B	18"-24"
Mp	6	Myrica pensylvanica	Northern Bayberry	2' Height min.	B&B	18"-24"
Total	18					

PLANTING CALCULATIONS

Section	Requirement	Calculation	Required	Proposed
\$260-34.D Tree Replacement	All tree DBH removed in excess of 10% shall be replaced. Each tree $\geq 3"$ DBH that is destroyed or removed minus the credit for preserved trees.	$10\% = 96"$ $84" / 2.5" \text{ DBH Replacement} = 34 \text{ Trees}$	34 Trees	34 Trees
\$260-62.A(1) SWM Areas	A minimum of two trees and 10 shrubs per 100 linear feet of basin perimeter, measured at the top of berm, shall be planted in and around the basin.	Basin Perimeter = 174 LF / 100 LF = 1.74 $1.74 \times 2 \text{ Trees} = 4 \text{ Trees}$ $1.74 \times 10 \text{ Shrubs} = 18 \text{ Shrubs}$	4 Trees 18 Shrubs	4 Trees 18 Shrubs

20 0 20 40
SCALE IN FEET
1"=20'

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ENGINEERING & CONSULTING SERVICES
605 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 19001 • (717) 345-0300 • www.gilmore-associates.com
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NOT APPROVED FOR CONSTRUCTION

EXISTING LEGEND

- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- EXISTING SPOT ELEVATION
- TREE LINE
- LEGAL RIGHT-OF-WAY
- ULTIMATE RIGHT-OF-WAY
- STORM LINE
- GAS LINE
- OVERHEAD ELECTRIC LINE
- ELECTRIC LINE
- SANITARY LINE
- SANITARY LATERAL
- WATER LINE
- WATER LATERAL
- EDGE OF STREAM
- EXISTING EASEMENT
- SOIL BOUNDARY
- WATERS OF THE US AND COMMONWEALTH
- 100 YEAR FLOOD PLAIN
- SANITARY MANHOLE
- STORM INLET
- DETECTABLE WARNING SURFACE
- GAS VALVE
- WATER VALVE
- GUY
- ELECTRIC METER
- FIRE HYDRANT
- UTILITY POLE
- MAILBOX
- LIGHT STANDARD
- CONCRETE MONUMENT FND
- IRON PIN FOUND
- CONIFER TREE
- DECIDUOUS TREE
- TREE STUMP
- SOIL LABEL

LANDSCAPE LEGEND

- PROPOSED CANOPY REPLACEMENT TREE (19 TOTAL)
- PROPOSED EVERGREEN REPLACEMENT TREE (15 TOTAL)
- PROPOSED BASIN PLANTING TREE (4 TOTAL)
- PROPOSED BASIN PLANTING SHRUB (18 TOTAL)
- PROPOSED LAWN SEED MIX - SEE TOPOSIL AND SEEDING NOTES ON SHEET 22
- PROPOSED LOW MAINTENANCE SEED MIX - SEE TOPOSIL AND SEEDING NOTES ON SHEET 22

LAND DEVELOPMENT PLAN
ARCADIA INDOOR HITTING FACILITY
CHELTNHAM TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA
LANDSCAPE PLAN

GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.: 20100306906
OWNERS INFO: ARCADIA UNIVERSITY
450 S EASTON ROAD
GLENSIDE, PA 19038
215-572-2900
MUNICIPAL FILE No.:
TAX MAP PARCEL No.: 31-00-08860-00-1
TOTAL AREA: 59.10 AC. TOTAL LOTS: 1
DATE: 04/22/2025 SCALE: 1"=20'
DRAWN BY: AB CHECKED BY: KS
SHEET NO.: 20 OF 23



1 TREE REMOVAL PLAN

PENNSYLVANIA ONE CALL SYSTEM, INC.

925 Iron Run Road
West Mifflin, Pennsylvania
15122-1078

811

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

NON-MEMBERS MUST BE CONTACTED DIRECTLY

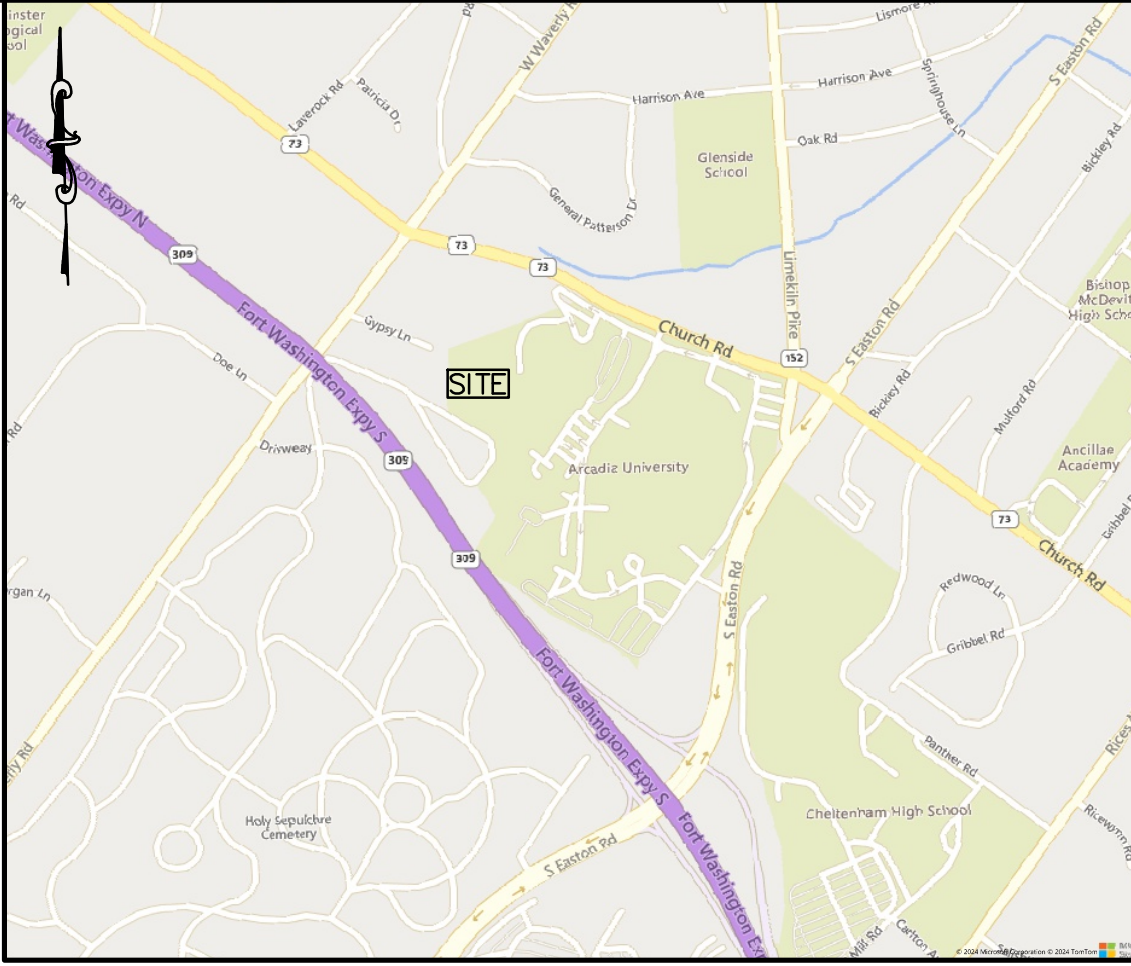
PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR GRIND

SERIAL NO. 2022064231-000

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

ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES/FACILITIES PRIOR TO START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF P.L. 852, NO. 287 DECEMBER 10, 1974, AS LAST AMENDED ON APRIL 28, 2018 PENNSYLVANIA ACT 50.

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



LOCATION MAP

SCALE 1"=1000'

EXISTING CONDITIONS LEGEND

- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- EXISTING SPOT ELEVATION
- TREE LINE
- LEGAL RIGHT-OF-WAY
- ULTIMATE RIGHT-OF-WAY
- STORM LINE
- GAS LINE
- OVERHEAD ELECTRIC LINE
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- CONCRETE MONUMENT FND
- IRON PIN FOUND
- CONIFER TREE
- DECIDUOUS TREE
- TREE STAMP
- SOIL LABEL

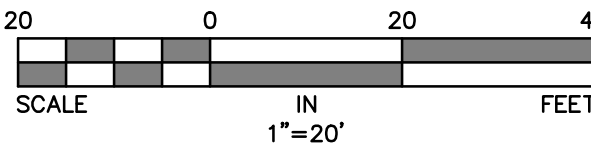
TREE REMOVAL LEGEND

- EXISTING DECIDUOUS TREE
- EXISTING CONIFEROUS TREE
- EXISTING TREE TO BE REMOVED

TREES TO BE REMOVED		
Tree Size (DBH)	Number of Trees Removed	Total Tree DBH Removed
32"	1	32"
28"	1	28"
26"	2	52"
24"	2	48"
20"	1	20"
18"	4	72"
16"	2	32"
14"	3	42"
12"	3	36"
10"	2	20"
6"	3	18"
Total:		400"

TREES PRESERVED		
Preserved Tree (DBH)	Number of Trees Preserved	Total DBH
≥18"	20 Trees (1 - 36", 1 - 32", 3 - 30", 3 - 28", 5 - 24", 2 - 22", 2 - 20", 3 - 18")	500"
12"-17"	3 Trees (1 - 16", 1 - 14", 1 - 12")	42"
8"-11"	2 Trees (1 - 10", 1 - 8")	18"
1"-6"	1 Tree (1 - 6")	0"
Calculation of Required Replacement Trees		
Total DBH of Existing, Live Trees, 3" DBH or Greater		966"
10% of Total DBH of Existing, Live Trees, 3" DBH or Greater		96"
Total DBH of Existing, Live Trees, 3" DBH or Greater, To Be Removed		400"
Minus Credit for Preserved Trees		

Preserved Tree (DBH)	Number of Trees Preserved	Number of Trees Credited	Tree DBH	Total Trees Credit (DBH)
≥18"	20 Trees	4 Trees	2.5"	200"
12"-17"	3 Trees	2 Trees	2.5"	15"
8"-11"	2 Trees	1 Tree	2.5"	5"
Total Preserved Tree Credit DBH:				220"
Required Replacement Total DBH:				84"
Required Replacement Total Trees @ 2.5" Cal.				34 Trees
Proposed Total Replacement Trees				34 Trees



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NOT APPROVED FOR CONSTRUCTION

LAND DEVELOPMENT PLAN
ARCADIA INDOOR HITTING FACILITY
CHETENHAM TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

TREE REMOVAL PLAN

G&A
GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

PROJECT No.: 20100306906

OWNERS INFO:
ARCADIA UNIVERSITY
450 S EASTON ROAD
GLENSIDE, PA 19038
215-572-2900

MUNICIPAL FILE No.: 31-00-08860-00-1

TAX MAP PARCEL No.: 59.10 AC. TOTAL LOTS: 1

DATE: 04/22/2025 SCALE: 1"=20'

DRAWN BY: AB CHECKED BY: KS

SHEET NO.: 21 OF 23

1. PLANT MATERIAL SHALL BE FURNISHED AND INSTALLED AS INDICATED INCLUDING ALL LABOR, MATERIALS, PLANTS EQUIPMENT, INCIDENTALS AND CLEAN UP.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTING AT CORRECT GRADES AND ALIGNMENT.
3. PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY, HAVE NORMAL GROWTH HABITS, WELL-DEVELOPED BRANCHES, BE DENSELY FOLIATED, HAVE VIGOROUS ROOT SYSTEMS AND BE FREE OF DEFECTS AND INJURIES.
4. ANY SOIL OR OTHER CONDITIONS CONSIDERED DETRIMENTAL TO THE PLANT MATERIAL, SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF PLANT MATERIAL.
5. ALL PLANT MATERIAL SHALL BE GUARANTEED BY THE CONTRACTOR FOR 18 MONTHS (1.5 YEARS) FOR TREES AND SHRUBS. REPLACEMENT SHALL BE MADE AT THE BEGINNING OF THE FIRST SUCCEEDING PLANTING SEASON. ALL REPLACEMENTS SHALL HAVE A GUARANTEE EQUAL TO THAT STATED ABOVE, INsofar AS IT IS PRACTICABLE.
6. PLANT MATERIALS SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL PROTECT STOCK NOT PLANTED. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE (3) DAY PERIOD AFTER DELIVERY.
7. QUALITY AND SIZE OF TREES, SPREAD OF FOLIAGE AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH THE MOST RECENT "AMERICAN STANDARD FOR NURSERY STOCK, AND" AS PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE TRADING SURVEYORS ASSOCIATION, TEST EDITION.
8. ALL PLANTS SHALL BE PLANTED IN TOPSOIL THAT IS THOROUGHLY WATERED AND TAMPED AS BACK FILLING PROGRESSES. NOTHING BUT SUITABLE TOPSOIL, FREE OF DRY SOD, STIFF CLAY, LITTER, ETC., SHALL BE USED FOR PLANTING.
9. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE.
10. SET ALL PLANTS PLUMB AND STRAIGHT. SET AT SUCH A LEVEL THAT AFTER SETTLEMENT, A NORMAL OR NATURAL RELATIONSHIP TO THE CROWN OF THE PLANT WITH THE GROUND SURFACE WILL BE ESTABLISHED. LOCATE PLANT IN THE CENTER OF THE PLANTING PIT.
11. EACH TREE AND SHRUB SHALL BE PRUNED IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICE TO PRESERVE NATURAL CHARACTER OF THE PLANT. PRUNING SHALL BE DONE WITH SHARP, STAINLESS STEEL TOOLS.
12. LANDSCAPE CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES PRIOR TO PLACEMENT OF LANDSCAPE MATERIAL. CONTRACTOR SHALL NOT PLACE LANDSCAPING MATERIAL ON TOP OF UTILITY PIPING.
13. PLANT QUANTITIES SUPERSEDE PLANT SCHEDULE.
14. PLANTING PLAN SHALL BE USED FOR PLANT AND LANDSCAPE INSTALLATION ONLY.

PLANTING SOIL MIXTURE

A. TREE PLANTING HOLE/PIT (OUTSIDE OF MAN-MADE PLANTERS): THOROUGHLY MIX PLANTING SOIL MIXTURE PRIOR TO INSTALLATION IN PLANTING HOLE/TREE PIT. PLANTING MIX WILL CONSIST OF THE FOLLOWING:

- 3 PARTS EXISTING/IN-SITU SOIL FROM PLANTING HOLE
- 1 PART SELECTED ORGANIC SOIL AMENDMENT.

ORGANIC SOIL AMENDMENT MATERIALS

A. COMPOST: A MIXTURE OF PARTIALLY DECOMPOSED ORGANIC MATERIALS (CHIPPED, SHREDDED, OR GROUND VEGETATION OR WASTE OR RECYCLED WOOD PRODUCTS), MUSHROOM SOIL/SPENT MUSHROOM SOIL SUBSTRATE (SMS), COMPOSTED ANIMAL MANURE, WELL COMPOSTED LEAF MOLD, OR EXCEPTIONAL QUALITY (CLASS A) COMPOSTED BIO-SOLIDS.

B. COMPOST SHALL BE PROCESSED OR COMPLETED TO REDUCE WEED SEEDS, PATHOGENS, AND DELETERIOUS MATERIAL, AND SHALL NOT CONTAIN PAINT, PETROLEUM PRODUCTS, HERBICIDES, FUNGICIDES, OR OTHER CHEMICAL RESIDUES THAT WOULD BE HARMFUL TO PLANT OR ANIMAL LIFE. OTHER DELETERIOUS MATERIAL, PLASTIC, GLASS, METAL, OR ROCKS SHALL NOT EXCEED 0.1 PERCENT BY WEIGHT OR VOLUME.

C. COMPOST PRODUCED FROM BIO-SOLIDS (SEWAGE/WASTE WATER SLUDGE) SHALL BE "CLASS A GRADE" (EXCEPTIONAL QUALITY) AND MEET US EPA'S 40 CFR PART 503 REGULATIONS.

D.COMPOST SHALL MEET THE FOLLOWING ANALYSIS:

1. ORGANIC MATTER CONTENT: ON DRY WEIGHT BASIS, 40 TO 75 PERCENT
2. NITROGEN CONTENT: 1 TO 2.5 PERCENT.
3. PHOSPHORUS CONTENT: 1 TO 2 PERCENT.
4. POTASSIUM CONTENT: 0.5 TO 1.5 PERCENT.
5. CARBON - NITROGEN RATIO: 12 TO 25:1
6. MOISTURE CONTENT RANGE: 40 TO 60 PERCENT.
7. MOISTURE ABSORPTION: 100 PERCENT (DRY WEIGHT BASIS) MINIMUM.
PH RANGE: 6.0 TO 8.0
8. BULK DENSITY RANGE: 800 TO 1,000 LBS. PER CUBIC YARD.
9. SOLUBLE SALT CONTENT: 5 DS (MMHOSIC) OR LESS.
10. TRACE ELEMENTS: MEET US EPA 40 CFR PART 503 REQUIREMENTS.
11. PARTICLE SIZE: MUST PASS 1 INCH SIEVE OR SMALLER.
12. STABILITY RATING: STABLE.

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

2. TOPSOILING: AREAS DISTURBED SHALL BE TOPSOILED TO A DEPTH OF 6 INCHES TO PROVIDE PROPER SEED BED FOR LAWN SEEDING. TOPSOIL SHALL BE RAKED SMOOTH AND BLENDED WITH ADJACENT GRADE. TOPSOIL SHALL BE FRABLE AND FREE FROM ROOTS, DEBRIS, STONES GREATER THAN 1 INCH IN DIA. PERMANENT SEEDING SPECIFICATION:

LAWN SEED MIX - TURF TYPE FESCUE (OR APPROVED EQUAL)

- 60% TALL FESCUE (NOT KY-31)
- 10% KENTUCKY BLUEGRASS
- 30% PERENNIAL RYEGRASS

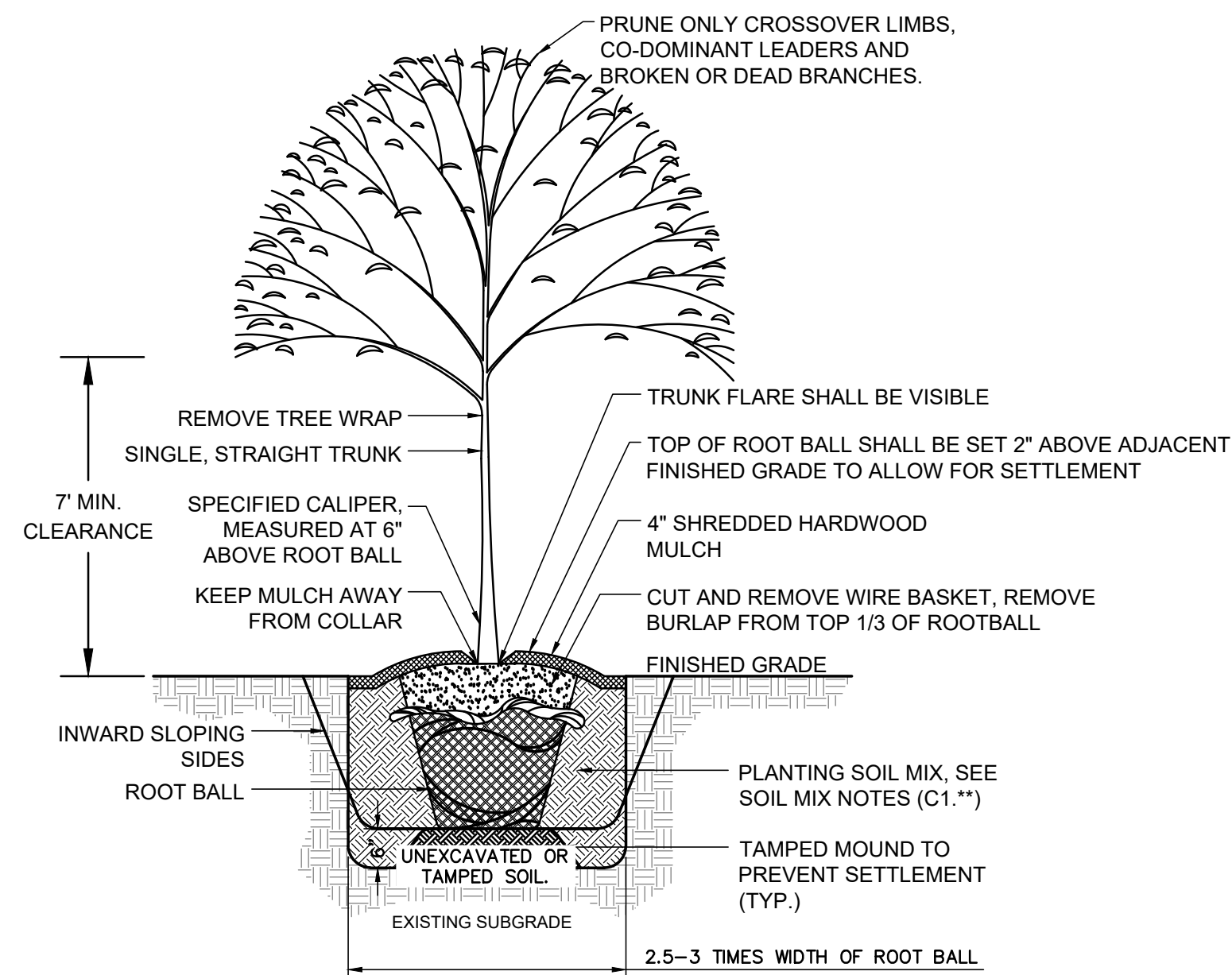
LOW MAINTENANCE SEED MIX - ERNST RIGHT-OF-WAY NATIVE WOODS MIX W/ ANNUAL RYEGRASS (OR APPROVED EQUAL)

4. HAY OR STRAW MULCH SHALL BE APPLIED AT THE RATES OF AT LEAST 3.0 TONS PER ACRE.

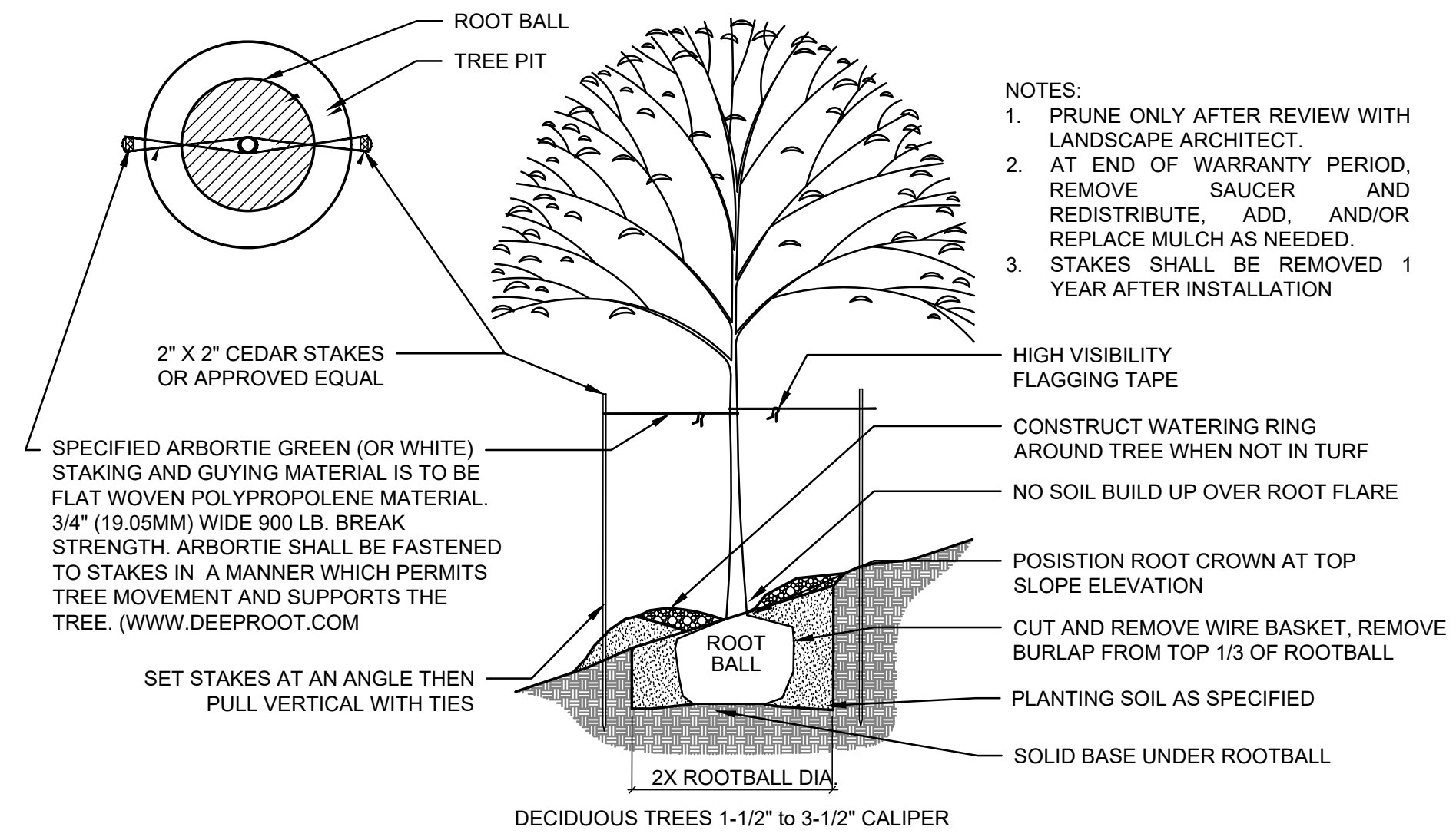
5. PULVERIZED AGRICULTURAL LIMESTONE AND NO COMMERCIAL FERTILIZER SHALL BE APPLIED TO ALL DISTURBED AREAS WHICH ARE TO BE SEEDED EXCEPT FOR TEMPORARY SEED AREAS ARE THE FOLLOWING RATES:

5.1. PULVERIZED AGRICULTURAL LIMESTONE = 90 LBS/1,000 SF

5.2. 10-20-20 ANALYSIS COMMERCIAL FERTILIZER = 20 LBS/1,000 SF



1 DECIDUOUS TREE PLANTING DETAIL
C7.20 TYPICAL NTS

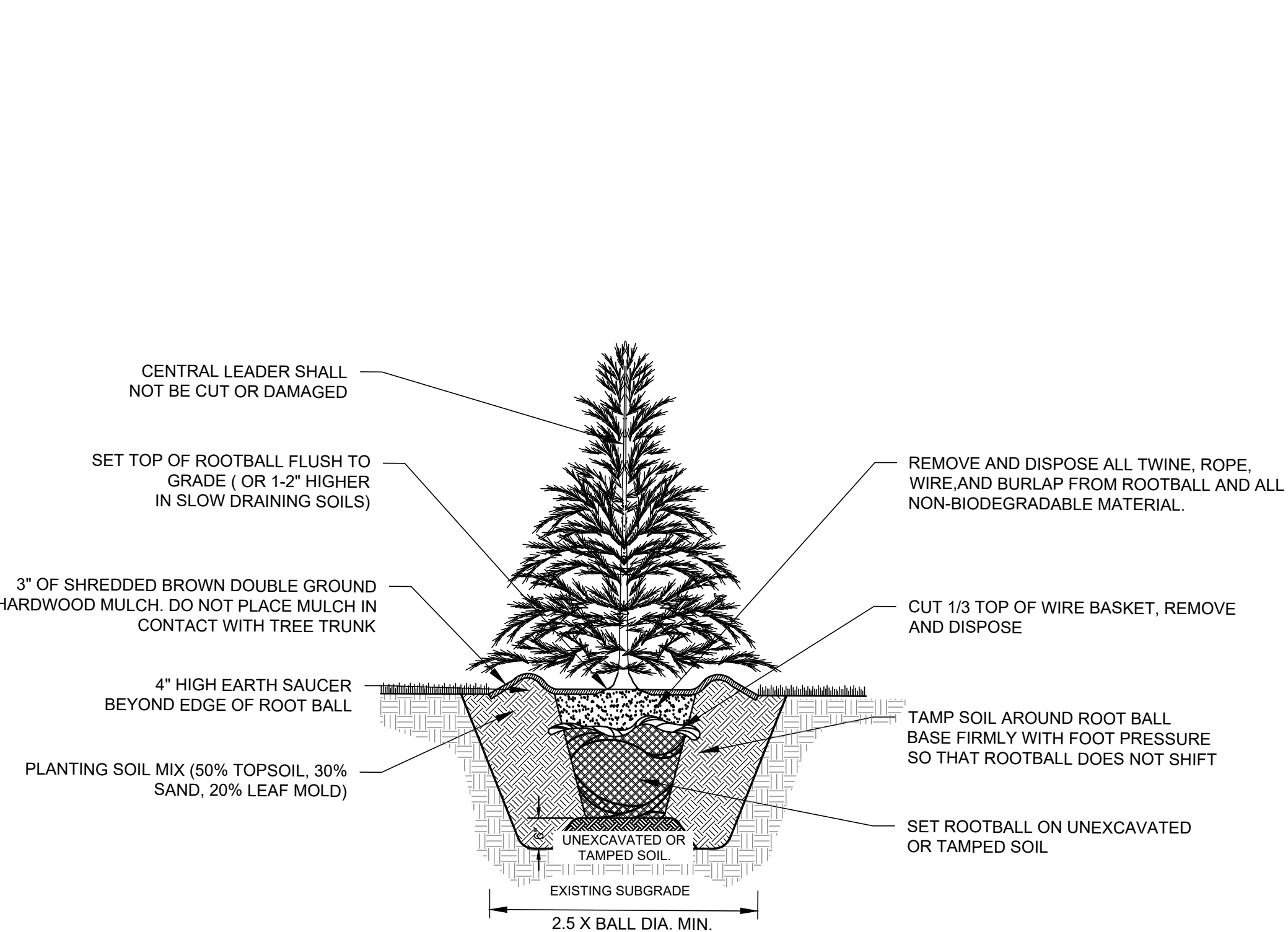


TREE STAKING & GUYING SHALL NOT BE IMPLEMENTED UNLESS SITE CONDITIONS SUCH AS WET/UNSTABLE SOILS, EXCESSIVE WIND, AND STEEP SLOPES (3:1 OR GREATER) EXIST. STAKING SHALL NOT BE INSTALLED WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT RESPONSIBLE FOR THE PREPARATION OF THESE PLANS. ALL STAKES SHALL BE PAINTED ORANGE, AND ALL WIRES SHALL BE FLAGGED WITH HIGH-VISIBILITY FLAGGING TAPE.

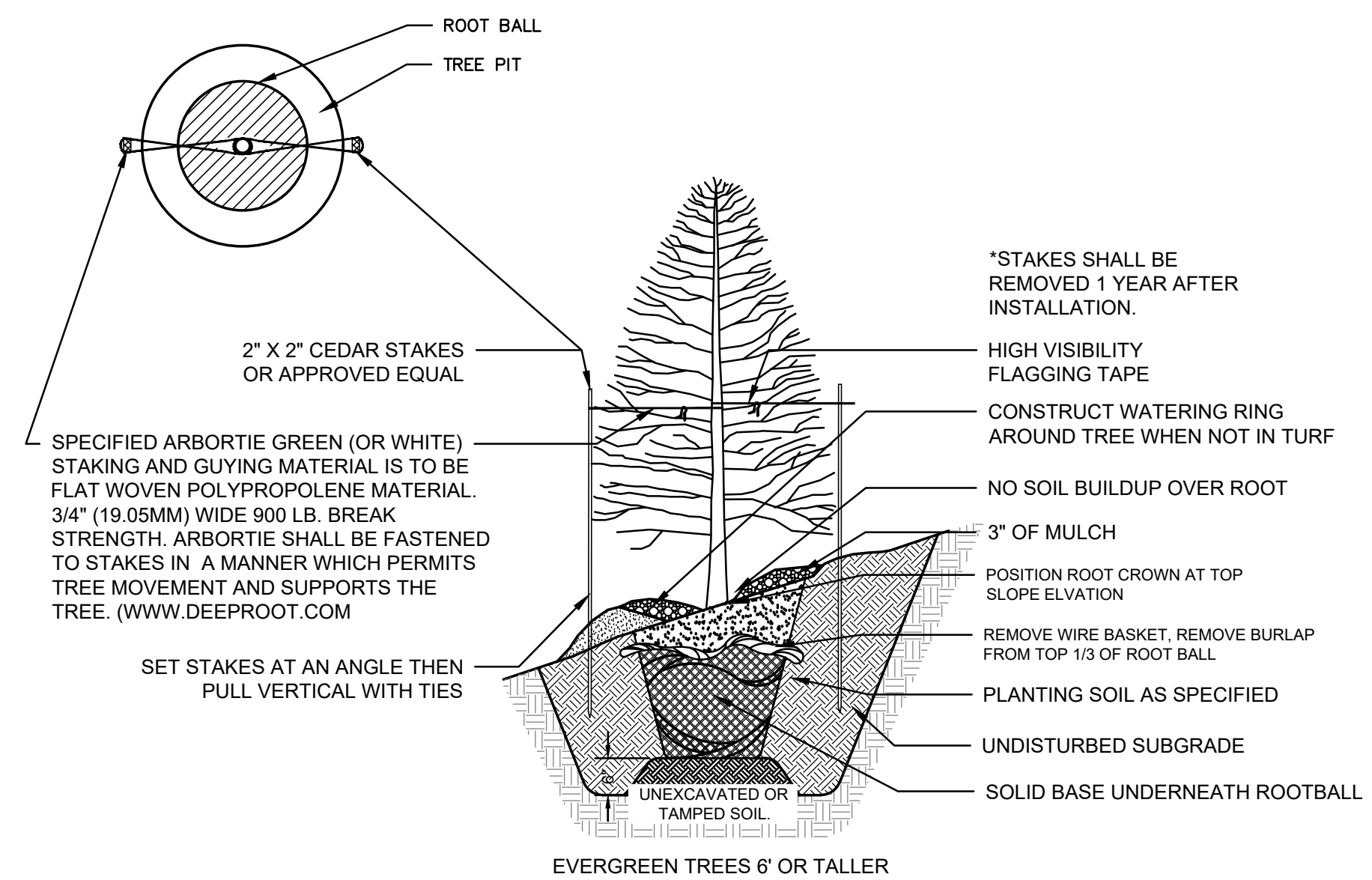
STAKES AND WIRING SHALL BE REMOVED AFTER ONE (1) FULL GROWING SEASON. WHEN REMOVED, STAKES SHALL BE DRIVEN BELOW GROUND LEVEL OR REMOVED FROM THE SITE ENTIRELY.

2 DECIDUOUS TREE PLANTING ON SLOPE DETAIL

C7.20 TYPICAL NTS



3 EVERGREEN TREE PLANTING DETAIL
C7.20 TYPICAL NTS

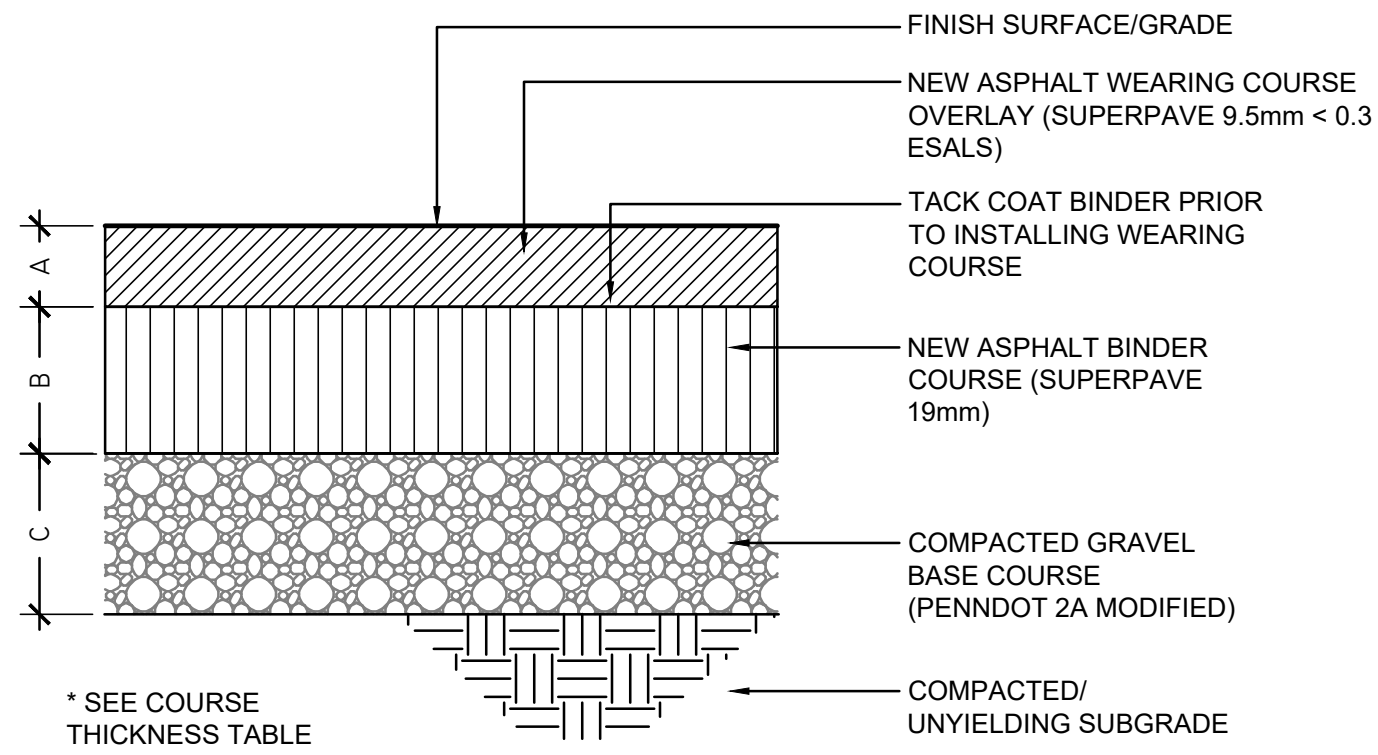


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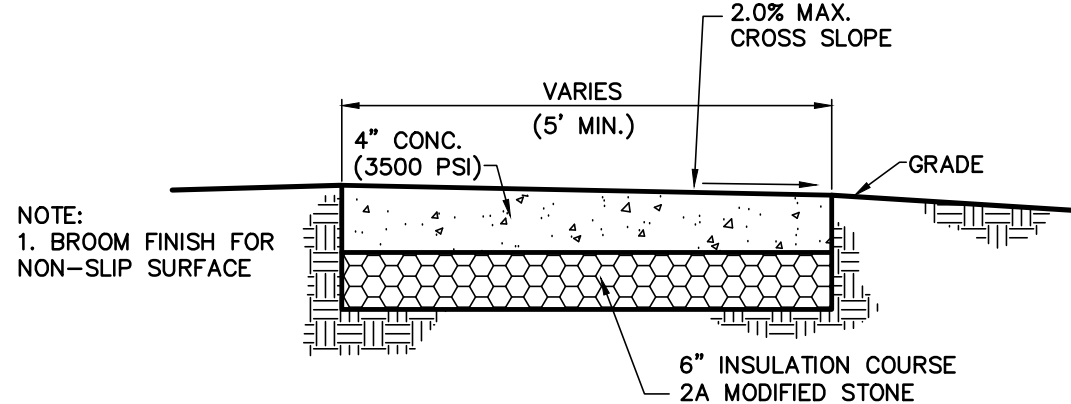
STAKES AND WIRING SHALL BE REMOVED AFTER ONE (1) FULL GROWING SEASON. WHEN REMOVED, STAKES SHALL BE DRIVEN BELOW GROUND LEVEL OR REMOVED FROM THE SITE ENTIRELY.

4 EVERGREEN TREE PLANTING ON SLOPE DETAIL
C7.20 TYPICAL NTS

G:\Vendex\2010\20100306906 - Arcadia Softball\DESIGN\CAD\Production Drawings\Batting Cage Facility - LD Set\16 Construction Details.dwg Layout: Construction Details Plotted By: Perez, on Wed Apr 23, 2025 at 10:10am

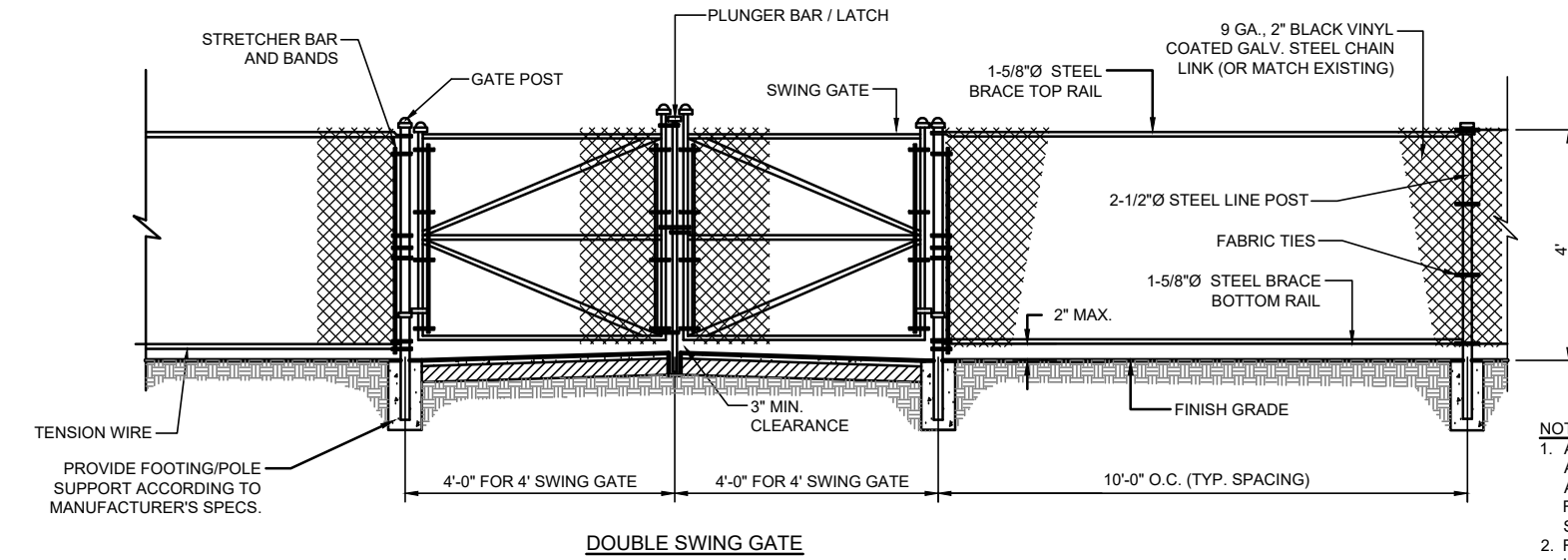


ASPHALT COURSE THICKNESS TABLE		
SECTION	COURSE	WALKWAY
A	WEARING (SUPERPAVE 9.5 MM)	1.5 INCHES
B	BINDER (SUPERPAVE 19MM)	3 INCHES
C	GRAVEL BASE	6 INCHES

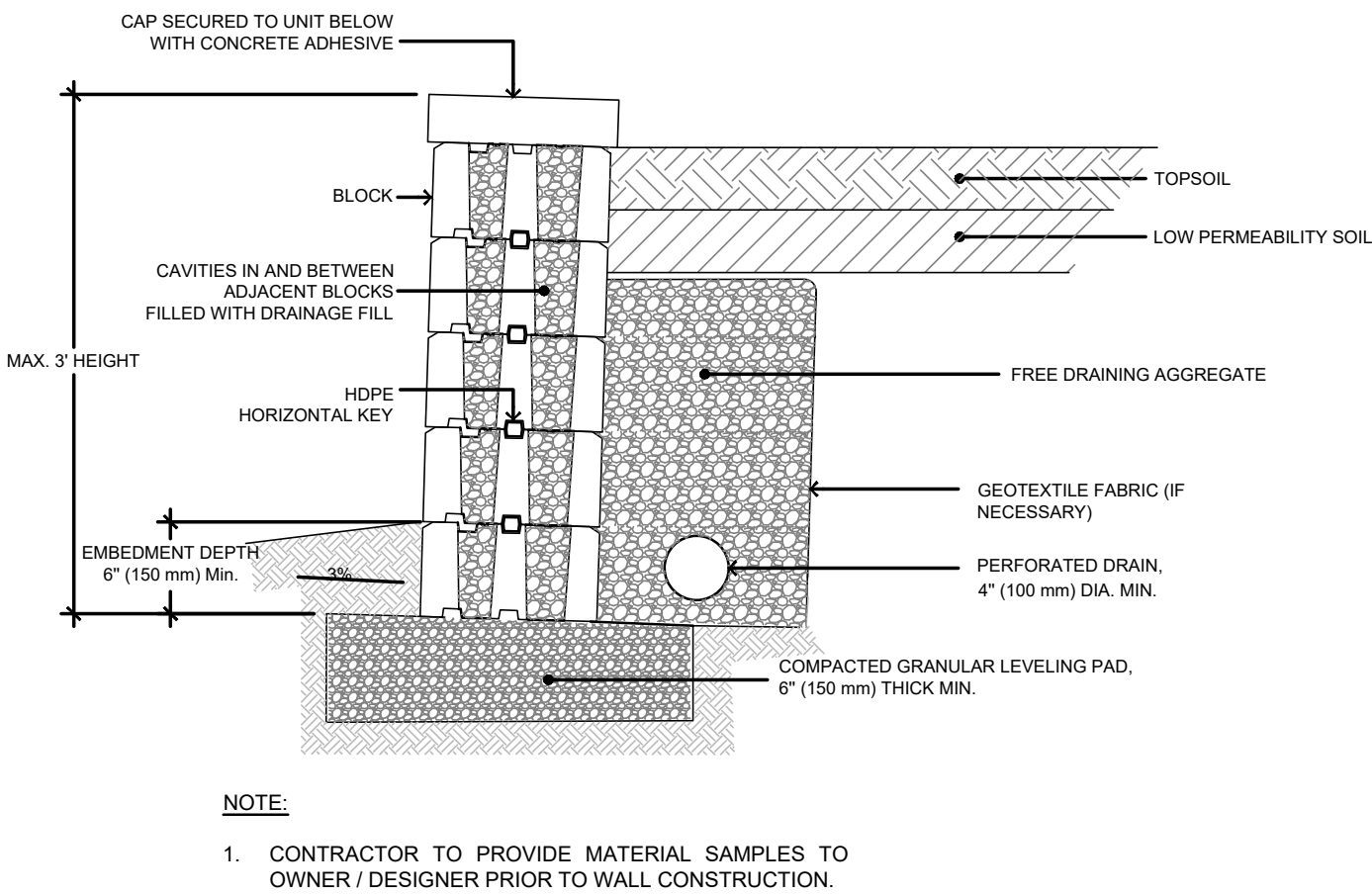


1 FULL DEPTH ASPHALT PAVING DETAIL
C9.00 TYPICAL NTS

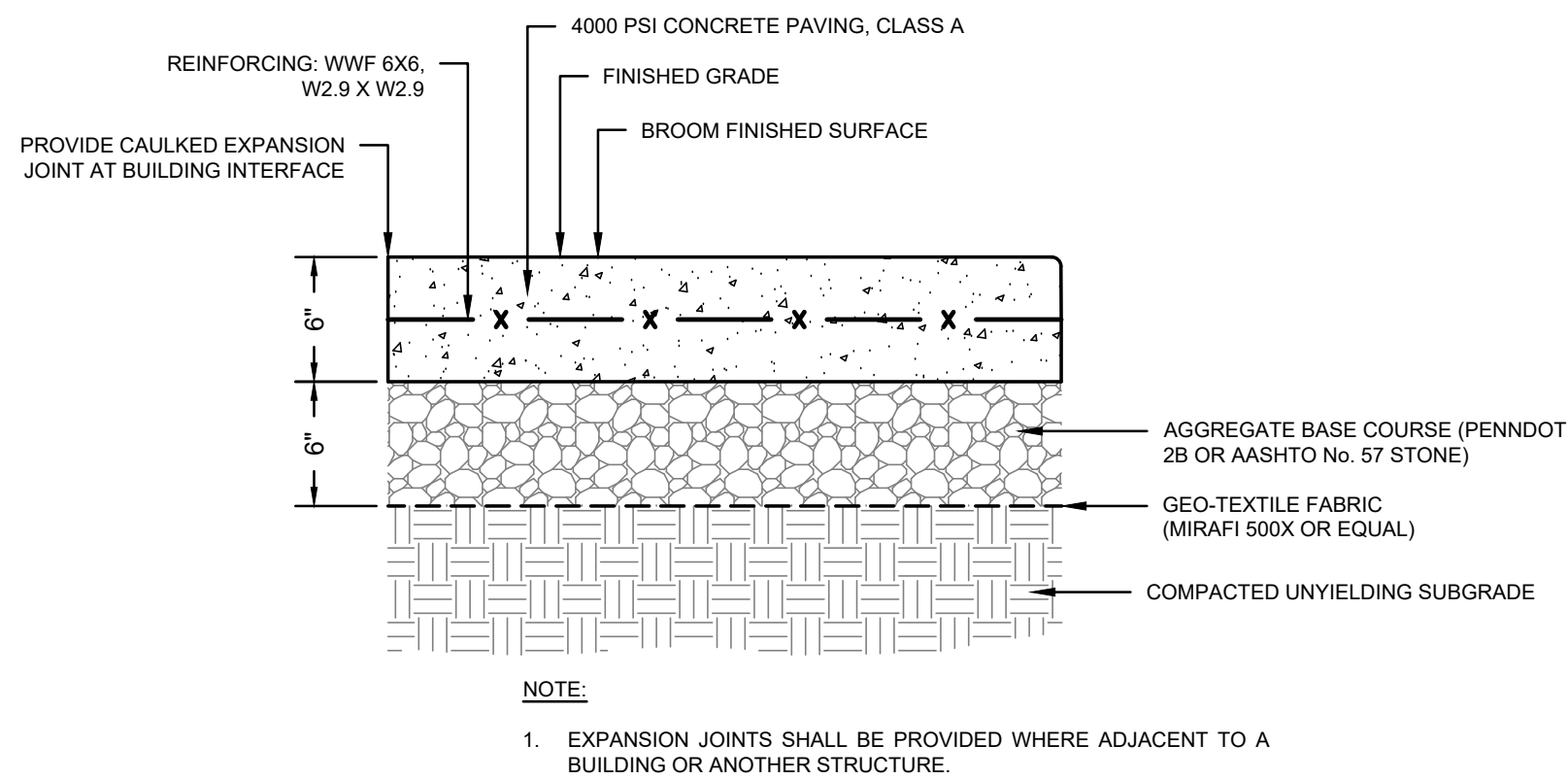
5 SIDEWALK DETAIL
C9.00 TYPICAL NTS



2 4' CHAIN-LINK FENCE AND GATE DETAIL
C9.00 TYPICAL NTS



3 STANDARD VERTICAL RETAINING DETAIL
C9.00 TYPICAL NTS



4 CONCRETE CONDENSOR PAD DETAIL
C9.00 TYPICAL NTS