PRELIMINARY/ FINAL LAND DEVELOPMENT PLANS

FOR

BOYLE CONSTRUCTION, INC.

PROPOSED

DATA CENTER

LOCATION OF SITE

2184 INDUSTRIAL DRIVE

BETHLEHEM, PA 18017

PARCEL ID #641847366798-1

CITY WARD 13 CITY BLOCK 177

CERTIFICATION OF OWNERSHIP

I, _____, OF _____ BEING DULY SWORN ACCORDING TO LAW, AND ACTING IN MY CAPACITY AS _____ OF _____ DEPOSE AND SAY THAT THE ABOVE NAMED CORPORATION IS THE TRUE AND LAWFUL OWNER OF THE PROPERTY KNOWN AS _____;

THAT THE ABOVE IS DESCRIBED PROPERTY IS IN PEACEFUL POSSESSION OF SAID CORPORATION AND THAT THERE ARE NO SUITS OR LIENS PENDING AFFECTING THE TITLE THEREOF.

BEING DULY SWORN ACCORDING TO LAW, DEPOSE AND SAY THAT I AM THE SOLE OWNER OF THE ABOVE PROPERTY IN PEACEFUL POSSESSION OF THE SAME AND THAT THERE ARE NO SUITS OR LIENS PENDING
AFFECTING THE TITLE THEREOF.

_____

BY: _____

NAME:_____

TITLE:_____

SWORN BEFORE ME THIS _____ DAY OF _____, 20____

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES: _____

ENGINEER'S CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN CORRECTLY AND ACCURATELY REPRESENTS THE LANDS OF THE OWNER AND, WHERE APPLICABLE, THE LOTS, BUILDINGS, STREETS, PARKING AREAS, WALKWAYS, AND OTHER STRUCTURES AND IMPROVEMENTS SHOWN THEREON.

_____
JEFFREY A. BEAVAN,
REGISTERED No.: PE082005

SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN CORRECTLY AND ACCURATELY REPRESENTS THE LANDS OF THE OWNER AND, WHERE APPLICABLE, THE LOTS, BUILDINGS, STREETS, PARKING AREAS, WALKWAYS, AND OTHER STRUCTURES AND IMPROVEMENTS SHOWN THEREON.

_____
JOSEPH J. WRIGHT,
REGISTERED No.: SU-37826-E

CITY OF BETHLEHEM REQUIRED SITE PLAN NOTES:

NPDES NOTE:
"BY SUBMISSION OF THESE PLANS, THE APPLICANT'S ENGINEER ON RECORD CERTIFIES THAT THESE PLANS ARE IN COMPLETE CONFORMANCE WITH THE CITY OF BETHLEHEM STORM WATER MANAGEMENT ORDINANCE."

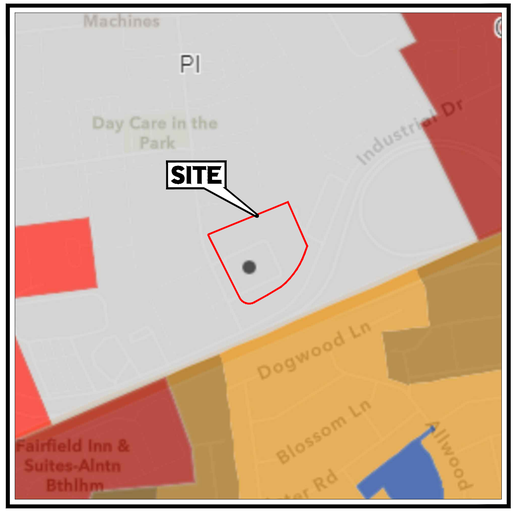
INLET MARKER NOTE:
ALL PUBLIC INLETS SHOULD HAVE INLET MARKERS. THE DESIGN OF THE INLET MARKERS SHALL BE APPROVED BY THE CITY ENGINEER."

STORM WATER NOTES:
THE DRAINAGE EASEMENT PROVIDES FOR THE FLOW OF STORM WATER ACROSS LOTS, AND MAY NOT BE ALTERED WITHOUT THE WRITTEN PERMISSION OF THE CITY ENGINEER. NO OBSTRUCTIONS SUCH AS PLANTING BERMS OR FENCES MAY BE INSTALLED IN THE DRAINAGE EASEMENTS AREAS WITHOUT SUFFICIENT PROVISION FOR THE PASSAGE OF STORM WATER, AND ANY SUCH PROPOSED PROVISION SHALL BE APPROVED IN WRITING BY THE CITY ENGINEER.

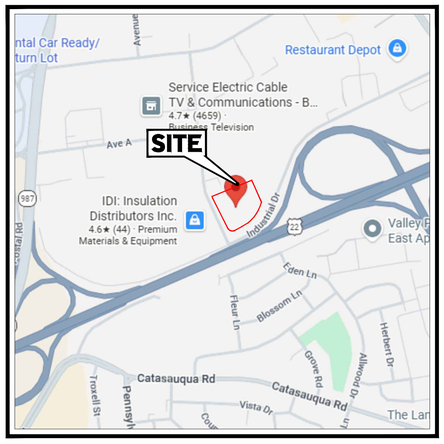
DETENTION POND NOTE:
IF DETENTION IS PROPOSED: "UNLESS A GEOLOGICAL SURVEY DEMONSTRATES THE FEASIBILITY OF ENCOURAGING INFILTRATION IN A DETENTION POND, THE DETENTION POND SHALL, GENERALLY, BE LINED WITH A 6-INCH THICK CLAY LINER WITH A PERMEABILITY OF 1X10-7 CM/SEC OR LESS. THIS CLAY LINER SHALL, IN TURN, BE COVERED BY A 6-INCH LAYER OF VIABLE TOPSOIL ON WHICH A HEALTHY GROWTH OF GRASS SHALL BE ESTABLISHED (UNLESS RIP-RAPPED). THIS LINER SYSTEM SHALL EXTEND FROM THE BOTTOM OF THE POND TO THE ELEVATION OF THE EMERGENCY SPILLWAY. THE LINER PERMEABILITY OF 1X10-7 CM/SEC SHALL BE VERIFIED BY LAB TESTS ON THREE FIELD SAMPLES OR OTHER EQUIVALENT PROCEDURE ACCEPTABLE TO THE CITY ENGINEER. ADDITIONAL TESTS MAY BE REQUIRED BY THE CITY ENGINEER SHOULD ANY OF THE THREE ORIGINAL TESTS YIELD UNACCEPTABLE RESULTS. ALL THE TESTING SHALL BE ARRANGED AND PAID BY THE DEVELOPER; HOWEVER, THE TESTING LAB SHALL BE CERTIFIED IN THIS AREA OF TESTING AND ACCEPTABLE TO THE CITY ENGINEER."

"THE CITY ENGINEER MAY REQUIRE A FULL 12-INCH THICK CLAY LINER WITH PERMEABILITY OF 1 X 10-7 CM/SEC. OR LESS, WHERE CIRCUMSTANCES SUCH AS WATER DEPTH OR NEARBY UTILITIES NECESSITATE A GREATER DEGREE OF ASSURANCE AGAINST THE FORMATION OF SINKHOLES. ALSO, THE CITY ENGINEER MAY APPROVE A DIFFERENT LINER SYSTEM THAT IS, IN THE OPINION OF THE CITY ENGINEER, EQUAL TO OR BETTER THAN THE ABOVE-MENTIONED LINERS."

IF DETENTION IS PROPOSED: "THE CONTRACTOR SHALL CLEAN ALL ACCUMULATED SEDIMENT AND SILT FROM THE POND AT THE END OF THE CONSTRUCTION, AND RETURN THE POND TO ITS ORIGINAL DESIGN CONDITION."



ZONING MAP
SCALE: 1" = 500'
SOURCE: ESRI MAPS
500 250 125 0 500
1"= 500'



LOCATION MAP
SCALE: 1" = 1,000'
SOURCE: GOOGLE MAPS
1000 500 250 0 1000
1"= 1000'



AERIAL MAP
SCALE: 1" = 500'
SOURCE: NEARMAP
500 250 125 0 500
1"= 500'

STATEMENT OF INTENT

DEVELOPER PROPOSES TO CONSTRUCT A TWO-STORY, 66,690 SF AREA/FLOOR DATA CENTER, 61,018 SF AREA FOR A SUBSTATION, 17,159 SF AREA FOR MEDIUM VOLTAGE SWITCHGEAR, TWO 11'X 50' LOADING SPACES, TEN OFF-STREET PARKING SPACES, ACCESS ROADWAYS, LIGHTING, LANDSCAPING, UNDERGROUND STORMWATER MANAGEMENT FACILITIES AND OTHER SITE APPURTENANCES.

PLANNING COMMISSION APPROVAL

APPROVED _____ BY THE CITY OF BETHLEHEM PLANNING COMMISSION.

_____ _____
SECRETARY CHAIRMAN

_____
DATE

LEHIGH VALLEY PLANNING COMMISSION

REVIEWED BY THE LEHIGH VALLEY PLANNING COMMISSION

_____ _____
DATE

RECORDED PLAN CERTIFICATION

PLAN RECORDED IN THE OFFICE FOR THE RECORDING OF DEEDS IN AND FOR THE COUNTY OF LEHIGH, AT EASTON, PENNSYLVANIA, AS INSTRUMENT NUMBER _____, ON THE _____ DAY OF _____, 20_____.

_____
LEHIGH COUNTY RECORDER OF DEEDS

SHEET INDEX

SHEET TITLE	SHEET NUMBER
COVER SHEET	C-101*
GENERAL NOTES AND LEGEND	C-102*
EXISTING CONDITIONS/DEMOLITION PLAN	C-201
SITE PLAN	C-301*
GRADING PLAN	C-401*
ADA GRADING ENLARGEMENT PLAN	C-402
PRE DEVELOPMENT DRAINAGE AREA MAP	C-403
POST DEVELOPMENT DRAINAGE AREA MAP	C-404
INLET DRAINAGE AREA MAP	C-405
UTILITY PLAN	C-501
SANITARY & STORM PROFILES	C-601
WATERLINE PROFILE	C-602
DRIVEWAY PROFILES	C-603
EROSION AND SEDIMENT CONTROL PLAN	C-801
EROSION AND SEDIMENT CONTROL NOTES AND DETAILS	C-802 TO C-804
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN	C-805*
POST CONSTRUCTION STORMWATER MANAGEMENT NOTES AND DETAILS	C-806, C-807*
CONSTRUCTION DETAILS	C-901, C-902
FIRE TRUCK TURN PLAN	C-903
DELIVERY TRUCK TURN PLAN	C-904
LANDSCAPE PLAN	L-101
LANDSCAPE NOTES AND DETAILS	L-102
LIGHTING PLAN	L-201
LIGHTING NOTES AND DETAILS	L-202

* DENOTES PLAN SHEET TO BE RECORDED.

REFERENCES AND CONTACTS

REFERENCES

- BOUNDARY & TOPOGRAPHIC SURVEY:
  BLUE MARSH ASSOCIATES, INC.
  1541 ROUTE 37 EAST, SUITE B
  TOMS RIVER, NJ 08753
  DATED: 03/21/22
  PROJECT #21-B-355
  ELEVATIONS: NAVD 1988
- GEOTECHNICAL INVESTIGATION REPORT:
  GEO-TECHNOLOGY ASSOCIATES, INC.
  2405 JOHN FRIES HIGHWAY, BLDG. 3
  QUAKERTOWN, PA 18951
  DATED: 06/19/26
- ARCHITECTURAL PLAN:
  BOA ARCHITECTS
  74 WEST BROAD STREET, SUITE 260
  BETHLEHEM, PA 18018

THE ABOVE REFERENCED DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THESE PLANS, HOWEVER, BOHLER ENGINEERING DOES NOT CERTIFY THE ACCURACY OF THE WORK REFERENCED OR DERIVED FROM THESE DOCUMENTS, BY OTHERS.

GENERAL NOTE:
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

ZONING DISTRICT LEGEND

- CB - Central Business District
- CG - General Commercial District
- CS - Shopping Center District
- CL - Limited Commercial District
- CMU - Mixed Use Commercial District
- OMU - Office Mixed Use
- CM - Office - Research Center District
- I - Institutional District
- I-O - Institutional Overlay District
- IN - Industrial District
- IN-O - Industrial Overlay District
- LI - Light Industrial District
- PI - Planned Industrial District
- IR - Industrial Redevelopment District
- IR-R - Industrial Redevelopment - Residential Option District
- RT - High Density Residential District
- RG - Medium Density Residential District
- RS - Single Family Residential District
- RR - Rural Residential District
- R-RC - Residential Retirement Complex District
- RT-SH - Residential Overlay District - Student Housing
- RR-F - Residential Overlay District - Friedensville Road
- RR-T - Residential Overlay District - Township Line Road

OWNER
PAXOS ENTERPRISES, LLC
2100 HOOVER AVE.
ALLENTOWN, PA 18109
855-215-2967

APPLICANT
BOYLE CONSTRUCTION, INC.
3850 SIERRA CIRCLE, STE. 400,
CENTER VALLEY, PA 18034
484-223-0726

PREPARED BY

BOHLER

CONTACT: MARY BACHERT, RLA

THE FOLLOWING WAIVERS ARE REQUESTED FOR APPROVAL:

FROM SALDO SECTION 1349.03.E.9.a - PARTIAL RELIEF IS REQUESTED FROM THE REQUIREMENT FOR FILL SLOPES NO STEEPER THAN 3:1 IN ORDER TO PERMIT SLOPES AT 2.5:1.

FROM SALDO SECTION 1349.12.A - RELIEF IS REQUESTED TO PERMIT COMMERCIAL DRIVEWAY WIDTHS EXCEEDING THE MAXIMUM 35-FOOT CURBLINE WIDTH.

FROM SALDO SECTION 1349.19.G - RELIEF IS REQUESTED FROM THE REQUIREMENT TO PLANT AN AVERAGE OF ONE DECIDUOUS OR EVERGREEN TREE PER 4,000 SF OF IMPERVIOUS SURFACE.

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

THE INFORMATION, DESIGN AND CONTENT OF THIS PLAN IS PROPRIETARY AND SHALL NOT BE COPIED OR USED FOR ANY PURPOSE, WITHOUT THE WRITTEN AUTHORIZATION FROM BOHLER. ONLY APPROVED, SEALED PLANS SHALL BE UTILIZED FOR CONSTRUCTION PURPOSES.

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	10/16/2026	PER CITY COMMENTS	ATK / MRB

ATTENTION ALL CONTRACTORS. LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
WWW.PA1CALL.ORG
#(BOHLER)XXXXXXXXXX / #(SURVEY)20212712057

FOR MUNICIPAL REVIEW & APPROVAL

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PAB260025.00-1B
DRAWN BY:	KMH
CHECKED BY:	MRB
DATE:	8/13/2026
CAD I.D.:	P-CIVL-CNDS

PROJECT:
PRELIMINARY/ FINAL LAND DEVELOPMENT PLAN
FOR
BOYLE CONSTRUCTION, INC.
PROPOSED
DATA CENTER
2184 INDUSTRIAL DRIVE
BETHLEHEM, PA 18017
CITY OF BETHLEHEM
LEHIGH COUNTY
PIN: 641847439546-1
CITY WARD 13 BLOCK 177

BOHLER
74 W BROAD STREET, SUITE 500
BETHLEHEM, PA 18018
Phone: (610) 709-9971
Fax: (610) 709-9976
www.BohlerEngineering.com

J. BEAVAN — COMMONWEALTH OF PENNSYLVANIA — NOTARIAL SEAL — PROFESSIONAL ENGINEER
PE082005
PENNSYLVANIA LICENSE NO. PE082005
NEW JERSEY LICENSE NO. GE05339500

SHEET TITLE:
COVER SHEET

SHEET NUMBER:
C-101

REVISION 1 - 10/16/2026

Oct 16, 2026
P:\PA\2026\PAB260025.00\CAD\DRAWINGS\PLAN SET\CIVIL SITE PLANS\P-CIVL-CNDS-PAB260025.00-1B-----LAYOUT_C-101 COVER
ATK

GENERAL NOTES

(Rev. 1/2023)

1. THESE PLANS ARE SOLELY BASED ON INFORMATION THE OWNER AND OTHERS PROVIDED TO BOHLER, LLC (HEREIN "BOHLER") PRIOR TO THE DATE ON WHICH THE PROFESSIONAL OF RECORD AND BOHLER PREPARED THESE PLANS. THE CONTRACTOR MUST FIELD VERIFY ALL EXISTING CONDITIONS AND IMMEDIATELY NOTIFY BOHLER , IN WRITING, IF ANY ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THESE PLANS, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER SITE FEATURES.
2. THE CONTRACTOR MUST STRICTLY COMPLY WITH THESE NOTES AND ALL SPECIFICATIONS/REPORTS CONTAINED HEREIN. THE CONTRACTOR MUST ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE REQUIREMENTS, THESE NOTES, AND THE REQUIREMENTS ARTICULATED IN THE NOTES CONTAINED IN ALL THE OTHER DRAWINGS THAT COMPRISE THE PLAN SET OF DRAWINGS. ADDITIONAL NOTES AND SPECIFIC PLAN NOTES MAY BE FOUND ON THE INDIVIDUAL PLANS. THESE GENERAL NOTES APPLY TO THIS ENTIRE DOCUMENT PACKAGE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CONSTRUCTION CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE, PRIOR TO THE INITIATION AND COMMENCEMENT OF CONSTRUCTION.
3. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST CONFIRM WITH THE PROFESSIONAL OF RECORD AND BOHLER THAT THE LATEST EDITION OF THE DOCUMENTS AND/OR REPORTS REFERENCED WITHIN THE PLAN REFERENCES ARE BEING USED FOR CONSTRUCTION. THIS IS THE CONTRACTOR'S SOLE AND COMPLETE RESPONSIBILITY.
4. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION IS TO BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE CONDITIONS OF APPROVAL TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES AND HAS ALSO CONFIRMED THAT ALL NECESSARY AND REQUIRED PERMITS HAVE BEEN OBTAINED. THE CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.
5. THE CONTRACTOR MUST ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS/REPORTS AND CONDITIONS OF APPROVAL, AND ALL APPLICABLE REQUIREMENTS, RULES, REGULATIONS, STATUTORY REQUIREMENTS, CODES, LAWS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES WITH JURISDICTION OVER THIS PROJECT, AND ALL PROVISIONS IN AND CONDITIONS OF THE CONSTRUCTION CONTRACT WITH THE OWNER/DEVELOPER INCLUDING ALL EXHIBITS, ATTACHMENTS AND ADDENDA TO SAME.
6. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST COORDINATE THE BUILDING LAYOUT BY CAREFULLY REVIEWING THE MOST CURRENT ARCHITECTURAL, CIVIL AND STRUCTURAL CONSTRUCTION DOCUMENTS (INCLUDING, BUT NOT LIMITED TO, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLANS, WHERE APPLICABLE). THE CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER, ARCHITECT AND PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY CONFLICTS, DISCREPANCIES OR AMBIGUITIES WHICH EXIST BETWEEN THESE PLANS AND ANY OTHER PLANS THAT COMPRISE THE CONSTRUCTION DOCUMENTS.
7. CONTRACTOR MUST REFER TO AND ENSURE COMPLIANCE WITH THE APPROVED ARCHITECTURAL/BUILDING PLANS OF RECORD FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.
8. THE CONTRACTOR MUST FIELD VERIFY ALL DIMENSIONS AND MEASUREMENTS SHOWN ON THESE PLANS, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR MUST IMMEDIATELY NOTIFY PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, IF ANY CONFLICTS, DISCREPANCIES, OR AMBIGUITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR WORK WHICH HAS TO BE RE-DONE OR REPAIRED DUE TO DIMENSIONS, MEASUREMENTS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO BOTH (A) THE CONTRACTOR GIVING PROFESSIONAL OF RECORD AND BOHLER WRITTEN NOTIFICATION OF SAME AND (B) PROFESSIONAL OF RECORD AND BOHLER, THEREAFTER, PROVIDING THE CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK.
9. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND MEASUREMENTS INCLUDED ON DESIGN DOCUMENTS HEREIN AND MUST NOT SCALE OFF THE DRAWINGS DUE TO POTENTIAL PRINTING INACCURACIES. ALL DIMENSIONS AND MEASUREMENTS ARE TO BE CHECKED AND CONFIRMED BY THE GENERAL CONTRACTOR PRIOR TO PREPARATION OF SHOP DRAWINGS, FABRICATION/ORDERING OF PARTS AND MATERIALS AND COMMENCEMENT OF SITE WORK. SITE PLAN DRAWINGS ARE NOT INTENDED AS SURVEY DOCUMENTS. DIMENSIONS SUPERSEDE GRAPHICAL REPRESENTATIONS. THE CONTRACTOR MUST MAKE CONTRACTOR'S OWN MEASUREMENTS FOR LAYOUT OF IMPROVEMENTS.
10. THE OWNER AND CONTRACTOR MUST BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
11. WHEN INCLUDED AS ONE OF THE REFERENCED DOCUMENTS, THE GEOTECHNICAL REPORT, SPECIFICATIONS AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND, IN CASE OF CONFLICT, DISCREPANCY OR AMBIGUITY, THE MORE STRINGENT REQUIREMENTS AND/OR RECOMMENDATIONS CONTAINED IN: (A) THE PLANS; AND (B) THE GEOTECHNICAL REPORT AND RECOMMENDATIONS, MUST TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR MUST NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY SUCH CONFLICT, DISCREPANCY OR AMBIGUITY BETWEEN THE GEOTECHNICAL REPORT AND PLANS AND SPECIFICATIONS, PRIOR TO PROCEEDING WITH ANY FURTHER WORK. IF A GEOTECHNICAL REPORT WAS NOT CREATED, THEN THE CONTRACTOR MUST FOLLOW AND COMPLY WITH ALL OF THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE SPECIFICATIONS WHICH HAVE JURISDICTION OVER THIS PROJECT.
12. PROFESSIONAL OF RECORD AND BOHLER ARE NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, HAS NO LIABILITY FOR ANY HAZARDOUS MATERIALS, HAZARDOUS SUBSTANCES, OR POLLUTANTS ON, ABOUT OR UNDER THE PROPERTY.
13. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN AND WHERE SHORING IS REQUIRED AND FOR INSTALLING ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PRECAUTIONS TO BE TAKEN TO ASSURE THE STABILITY OF ADJACENT, NEARBY AND CONTIGUOUS STRUCTURES AND PROPERTIES. ALL OF THIS WORK IS TO BE PERFORMED AT CONTRACTOR'S SOLE COST AND EXPENSE.
14. THE CONTRACTOR MUST EXERCISE EXTREME CAUTION WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. WHICH ARE TO REMAIN EITHER FOR AN INITIAL PHASE OF THE PROJECT OR AS PART OF THE FINAL CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR TAKING ALL APPROPRIATE MEASURES REQUIRED TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT, UTILITIES, BUILDINGS, AND INFRASTRUCTURE WHICH ARE TO REMAIN, AND TO PROVIDE A SAFE WORK AREA FOR THIRD PARTIES, PEDESTRIANS AND ANYONE INVOLVED WITH THE PROJECT.
15. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION AND CONSTRUCTION WASTES, UNSUITABLE EXCAVATED MATERIAL, EXCESS SOIL AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES WHICH HAVE JURISDICTION OVER THIS PROJECT OR OVER THE CONTRACTOR.
16. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN RECORDS TO DEMONSTRATE PROPER AND FULLY COMPLIANT DISPOSAL ACTIVITIES, TO BE PROMPTLY PROVIDED TO THE OWNER UPON REQUEST.
17. THE CONTRACTOR MUST REPAIR, AT CONTRACTOR'S SOLE COST, ALL DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME TO INCLUDE, BUT NOT BE LIMITED TO, REDESIGN, RE-SURVEY, RE-PERMITTING AND CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST REPLACE ALL SIGNAL INTERCONNECTION CABLE, WIRING CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY MUST RESTORE SUCH CONSTRUCTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE CONDITIONS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION, AND IN CONFORMANCE WITH APPLICABLE CODES, LAWS, RULES, REGULATIONS, STATUTORY REQUIREMENTS AND STATUTES. THE CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE CONTRACTOR MUST, PROMPTLY, DOCUMENT ALL EXISTING DAMAGE AND NOTIFY, IN WRITING, THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.
18. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR AND HAVE NO CONTRACTUAL, LEGAL OR OTHER RESPONSIBILITIES FOR JOB SITE SAFETY JOB SITE SUPERVISION, OR ANYTHING RELATED TO SAME. THE PROFESSIONAL OF RECORD AND BOHLER HAVE NOT BEEN RETAINED TO PERFORM OR TO BE RESPONSIBLE FOR JOB SITE SAFETY, SAME BEING WHOLLY OUTSIDE OF PROFESSIONAL OF RECORD'S AND BOHLER SERVICES AS RELATED TO THE PROJECT. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES OR ANY JOB SITE CONDITIONS, AT ANY TIME.
19. THE CONTRACTOR MUST IMMEDIATELY IDENTIFY IN WRITING, TO THE PROFESSIONAL OF RECORD AND BOHLER , ANY DISCREPANCIES THAT MAY OR COULD AFFECT THE PUBLIC SAFETY, HEALTH OR GENERAL WELFARE, OR PROJECT COST. IF THE CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT PROVIDING PROPER WRITTEN NOTIFICATION AS DESCRIBED ABOVE, IT WILL BE AT THE CONTRACTOR'S OWN RISK AND, FURTHER, THE CONTRACTOR MUST INDEMNIFY, DEFEND AND HOLD HARMLESS THE PROFESSIONAL OF RECORD AND BOHLER FOR ANY AND ALL DAMAGES, COSTS, INJURIES, ATTORNEY'S FEES AND THE LIKE WHICH RESULT FROM OR ARE IN ANY WAY RELATED TO SAME INCLUDING, BUT NOT LIMITED TO, ANY THIRD PARTY AND FIRST PARTY CLAIMS.
20. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM THE CONTRACTOR'S FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS, AND CURRENT CODES, RULES, STATUTES AND THE LIKE. IF THE CONTRACTOR AND/OR OWNER FAIL TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, RULES, STATUTES, CODES AND THE LIKE, THE CONTRACTOR AND/OR OWNER AGREE TO AND MUST JOINTLY, INDEPENDENTLY, SEPARATELY, AND SEVERALLY INDEMNIFY AND HOLD THE PROFESSIONAL OF RECORD AND BOHLER HARMLESS FOR AND FROM ALL INJURIES, CLAIMS AND DAMAGES THAT PROFESSIONAL OF RECORD AND BOHLER SUFFER AND ANY AND ALL COSTS THAT PROFESSIONAL OF RECORD AND BOHLER INCUR AS RELATED TO SAME.
21. ALL CONTRACTORS MUST CARRY AT LEAST THE MINIMUM AMOUNT OF THE SPECIFIED AND COMMERCIALLY REASONABLE STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND COMMERCIAL GENERAL LIABILITY INSURANCE (CGL) INCLUDING ALSO ALL UMBRELLA COVERAGES. ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME BOHLER , AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AS ADDITIONAL NAMED INSUREDS AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE (DEFEND, IF APPLICABLE) AND HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED AND AGREED TO BY THE CONTRACTOR HEREIN. ALL CONTRACTORS MUST FURNISH BOHLER WITH CERTIFICATIONS OF INSURANCE OR CERTIFICATES OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE COVERAGES PRIOR TO COMMENCING ANY WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION AND FOR TWO YEARS AFTER THE COMPLETION OF CONSTRUCTION AND AFTER ALL PERMITS ARE ISSUED, WHICHEVER DATE IS LATER. IN ADDITION, ALL CONTRACTORS AGREE THAT THEY WILL, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, INDEMNIFY, DEFEND AND HOLD HARMLESS BOHLER AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS FROM AND AGAINST ANY DAMAGES, INJURIES, CLAIMS, ACTIONS, PENALTIES, EXPENSES, PUNITIVE DAMAGES, TORT DAMAGES, STATUTORY CLAIMS, STATUTORY CAUSES OF ACTION, LOSSES, CAUSES OF ACTION, LIABILITIES OR COSTS, INCLUDING, BUT NOT LIMITED TO, REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH OR TO THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTOR(S), ALL CLAIMS BY THIRD PARTIES AND ALL CLAIMS RELATED TO THE PROJECT. THE CONTRACTOR MUST NOTIFY PROFESSIONAL OF RECORD, IN WRITING, AT LEAST THIRTY (30) DAYS PRIOR TO ANY TERMINATION, SUSPENSION OR CHANGE OF ITS INSURANCE HEREUNDER.
22. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES OR PROCEDURES, GENERALLY OR FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES OR PROCEDURES FOR COMPLETION OF THE WORK DEPICTED BOTH ON THESE PLANS, AND FOR ANY CONFLICTS IN SCOPE AND REVISIONS THAT RESULT FROM SAME. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS FOR COMPLETION OF THE WORK, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
23. NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER, NOR THE PRESENCE OF BOHLER AND/OR ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE (HEREIN "BOHLER PARTIES"), RELIEVES OR WILL RELIEVE THE CONTRACTOR OF AND FROM CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE WITH ALL HEALTH AND SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES WITH JURISDICTION OVER THE PROJECT AND/OR PROPERTY. BOHLER PARTIES HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER (OR ANY RESPONSIBILITY FOR) ANY CONSTRUCTION, THE CONTRACTOR OR ITS EMPLOYEES RELATING TO THEIR WORK AND ANY AND ALL HEALTH AND SAFETY PROGRAMS OR PROCEDURES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. THE CONTRACTOR MUST INDEMNIFY, DEFEND, PROTECT AND HOLD HARMLESS BOHLER PARTIES FOR AND FROM ANY LIABILITY TO BOHLER PARTIES RESULTING FROM THE CONTRACTOR'S WORK, SERVICES AND/OR VIOLATIONS OF THIS NOTE, THESE NOTES OR ANY NOTES IN THE PLAN SET AND, FURTHER, THE CONTRACTOR MUST NAME BOHLER AS AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE AS DESCRIBED ABOVE.
24. WHEN IT IS CLEARLY AND SPECIFICALLY WITHIN BOHLER'S SCOPE OF SERVICES CONTRACT WITH THE OWNER/DEVELOPER, BOHLER WILL REVIEW OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF EVALUATING CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND METHODS AND/OR TECHNIQUES OR PROCEDURES, COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND BOHLER HAS NO RESPONSIBILITY OR LIABILITY FOR SAME. BOHLER WILL PERFORM ITS SHOP DRAWING REVIEW WITH REASONABLE PROMPTNESS, AS CONDITIONS PERMIT. ANY DOCUMENT, DOCUMENTING BOHLER'S REVIEW OF A SPECIFIC ITEM OR LIMITED SCOPE, MUST NOT INDICATE THAT BOHLER HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. BOHLER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR MUST, IN WRITING, PROMPTLY AND IMMEDIATELY BRING ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS TO BOHLER'S ATTENTION. BOHLER IS NOT REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
25. IF THE CONTRACTOR DEVIATES FROM THESE PLANS AND/OR SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE PROFESSIONAL OF RECORD AND BOHLER FOR ALL DEVIATIONS WITHIN PROFESSIONAL OF RECORD'S SCOPE, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK PERFORMED WHICH DEVIATES FROM THE PLANS, ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM AND, FURTHER, MUST DEFEND, INDEMNIFY, PROTECT, AND HOLD HARMLESS THE PROFESSIONAL OF RECORD AND BOHLER PARTIES TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, FOR AND FROM ALL FEES, ATTORNEYS' FEES, DAMAGES, COSTS, JUDGMENTS, CLAIMS, INJURIES, PENALTIES AND THE LIKE RELATED TO SAME.
26. THE CONTRACTOR IS RESPONSIBLE FOR A MAINTAINING AND PROTECTING THE TRAFFIC CONTROL PLAN AND ELEMENTS IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS, FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE RIGHT OF WAY OR ON SITE. THE COST FOR THIS ITEM MUST BE INCLUDED IN THE CONTRACTOR'S PRICE AND IS THE CONTRACTOR'S SOLE RESPONSIBILITY.
27. OWNER MUST MAINTAIN AND PRESERVE ALL PHYSICAL SITE FEATURES AND DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS IN STRICT ACCORDANCE WITH THE APPROVED PLAN(S) AND DESIGN; AND, FURTHER, THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY FAILURE TO SO MAINTAIN OR PRESERVE SITE AND/OR DESIGN FEATURES. IF OWNER FAILS TO MAINTAIN AND/OR PRESERVE ALL PHYSICAL SITE FEATURES AND/OR DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS, OWNER AGREES TO INDEMNIFY AND HOLD THE PROFESSIONAL OF RECORD AND BOHLER PARTIES, HARMLESS FOR ALL INJURIES, DAMAGES AND COSTS THAT PROFESSIONAL OF RECORD AND BOHLER INCUR AS A RESULT OF SAID FAILURE OR FAILURE TO PRESERVE.
28. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES AND MATERIALS COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL RULES AND REGULATIONS, LAWS, ORDINANCES, AND CODES, AND ALL APPLICABLE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, (29 U.S.C. 651 ET SEQ.) AS AMENDED, AND ANY MODIFICATIONS, AMENDMENTS OR REVISIONS TO SAME.
29. THE CONTRACTOR MUST STRICTLY COMPLY WITH THE LATEST AND CURRENT OSHA STANDARDS AND REGULATIONS, AND/OR ANY OTHER AGENCY WITH JURISDICTION OVER EXCAVATION AND TRENCHING PROCEDURES. PROFESSIONAL OF RECORD AND BOHLER HAS NO RESPONSIBILITY FOR OR AS RELATED TO EXCAVATION AND TRENCHING PROCEDURES AND WORK.
30. THE CONTRACTOR AND THE OWNER MUST INSTALL ALL ELEMENTS AND COMPONENTS IN STRICT COMPLIANCE WITH AND IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDED INSTALLATION CRITERIA AND SPECIFICATIONS. IF THE CONTRACTOR AND/OR OWNER FAIL TO DO SO, THEY AGREE TO JOINTLY, INDEPENDENTLY, SEPARATELY, COLLECTIVELY, AND SEVERALLY INDEMNIFY, DEFEND, PROTECT AND HOLD PROFESSIONAL OF RECORD AND BOHLER PARTIES HARMLESS FOR ALL INJURIES AND DAMAGES THAT PROFESSIONAL OF RECORD SUFFERS AND COSTS THAT PROFESSIONAL OF RECORD INCURS AS A RESULT OF SAID FAILURE.
31. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN AN ON-SITE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN COMPLIANCE WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIREMENTS OR LOCAL GOVERNING AGENCY FOR SITES WHERE ONE (1) ACRE OR MORE IS DISTURBED BY CONSTRUCTION ACTIVITIES (UNLESS THE LOCAL JURISDICTION REQUIRES A DIFFERENT THRESHOLD). THE CONTRACTOR MUST ENSURE THAT ALL ACTIVITIES, INCLUDING THOSE OF ALL SUBCONTRACTORS, ARE IN COMPLIANCE WITH THE SWPPP, INCLUDING BUT NOT LIMITED TO LOGGING ACTIVITIES (MINIMUM ONCE PER WEEK AND AFTER RAINFALL EVENTS) AND CORRECTIVE MEASURES, AS APPROPRIATE AND FURTHER, THE CONTRACTOR IS SOLELY AND COMPLETELY RESPONSIBLE FOR FAILING TO DO SO.
32. AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED DOCUMENTS PREPARED BY THE PROFESSIONAL OF RECORD AND BOHLER, THE USE OF THE WORDS 'CERTIFY' OR 'CERTIFICATION' CONSTITUTE(S) AN EXPRESSION ONLY OF PROFESSIONAL OPINION REGARDING THE INFORMATION WHICH IS THE SUBJECT OF THE PROFESSIONAL OF RECORD'S AND BOHLER KNOWLEDGE OR BELIEF AND IN ACCORDANCE WITH COMMON AND ACCEPTED PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE OF ANY NATURE OR TYPE, EITHER EXPRESSED OR IMPLIED, UNDER ANY CIRCUMSTANCES.

DEMOLITION NOTES

(Rev. 1/2023)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
2. THE CONTRACTOR MUST CONDUCT DEMOLITION/REMOVALS ACTIVITIES IN SUCH A MANNER AS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND ALL OTHER ADJACENT FACILITIES. THE CONTRACTOR MUST OBTAIN ALL APPLICABLE PERMITS FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY(IES) PRIOR TO THE COMMENCEMENT OF ANY ROAD OPENING OR DEMOLITION ACTIVITIES IN OR ADJACENT TO THE RIGHT-OF-WAY.
3. WHEN DEMOLITION-RELATED ACTIVITIES IMPACT ROADWAYS AND/OR ROADWAY RIGHT-OF-WAY, THE CONTRACTOR MUST PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FEDERAL HIGHWAY ADMINISTRATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AND THE FEDERAL, STATE, AND LOCAL REGULATIONS.
4. THE DEMOLITION (AND/OR REMOVALS) PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION AND TO IDENTIFY ONLY CONDITIONS REGARDING ITEMS TO BE DEMOLISHED, REMOVED, AND/OR TO REMAIN.
   A. THE CONTRACTOR MUST ALSO REVIEW ALL CONSTRUCTION DOCUMENTS AND INCLUDE WITHIN THE DEMOLITION ACTIVITIES ALL INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS.
   B. THIS PLAN IS NOT INTENDED TO AND DOES NOT PROVIDE DIRECTION REGARDING THE MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE EMPLOYED TO ACCOMPLISH THE WORK. ALL MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE USED MUST BE IN STRICT ACCORDANCE AND CONFORMANCE WITH ALL STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR MUST COMPLY WITH ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE FOR THE CONTRACTOR AND THE PUBLIC.
5. THE CONTRACTOR MUST PROVIDE ALL "METHODS AND MEANS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE CONTRACTOR, AT THE CONTRACTOR'S SOLE COST, MUST REPAIR ALL DAMAGE TO ALL ITEMS AND FEATURES THAT ARE TO REMAIN. CONTRACTOR MUST USE NEW MATERIAL FOR ALL REPAIRS. CONTRACTOR'S REPAIRS MUST INCLUDE THE RESTORATION OF ALL ITEMS AND FEATURES REPAIRED TO THEIR PRE-DEMOLITION CONDITION, OR BETTER. CONTRACTOR MUST PERFORM ALL REPAIRS AT THE CONTRACTOR'S SOLE EXPENSE.
6. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. THE CONTRACTOR MUST PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, COMPLYING WITH ALL OSHA REQUIREMENTS, TO ENSURE PUBLIC AND CONTRACTOR SAFETY AND SAFETY TO ALL PROPERTY ON THE SITE OR ADJACENT OR NEAR TO THE SAME.
7. THE CONTRACTOR IS RESPONSIBLE FOR JOB SITE SAFETY, WHICH MUST INCLUDE, BUT IS NOT LIMITED TO, THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING, OTHER APPROPRIATE AND/OR NECESSARY SAFETY FEATURES AND ITEMS NECESSARY TO PROTECT THE PUBLIC FROM AREAS OF CONSTRUCTION AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR MUST SAFEGUARD THE SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF ALL UNAUTHORIZED PERSONS AT ANY TIME, TO OR NEAR THE DEMOLITION AREA.
8. PRIOR TO THE COMMENCEMENT OF ANY SITE ACTIVITY AND ANY DEMOLITION ACTIVITY, THE CONTRACTOR MUST, IN WRITING, RAISE ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS AND/OR SPECIFICATIONS, ALL CONCERNS OR QUESTIONS REGARDING THE APPLICABLE SAFETY STANDARDS, AND/OR THE SAFETY OF THE CONTRACTOR AND/OR THIRD PARTIES IN PERFORMING THE WORK ON THIS PROJECT. ANY SUCH CONCERNS MUST BE CONVEYED TO THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING AND MUST ADDRESS ALL ISSUES AND ITEMS RESPONDED TO, BY THE PROFESSIONAL OF RECORD AND BY BOHLER, IN WRITING. ALL DEMOLITION ACTIVITIES MUST BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, RULES, REQUIREMENTS, STATUTES, ORDINANCES AND CODES.
9. THE CONTRACTOR MUST BECOME FAMILIAR WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION AND/OR DISCONNECTION AS IDENTIFIED OR REQUIRED FOR THE PROJECT. THE CONTRACTOR MUST PROVIDE THE OWNER WITH WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED, REMOVED AND/OR ABANDONED IN ACCORDANCE WITH THE JURISDICTION AND UTILITY COMPANY REQUIREMENTS AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.
10. PRIOR TO COMMENCING ANY DEMOLITION, THE CONTRACTOR MUST:
    A. OBTAIN ALL REQUIRED PERMITS AND MAINTAIN THE SAME ON SITE FOR REVIEW BY THE PROFESSIONAL OF RECORD AND ALL PUBLIC AGENCIES WITH JURISDICTION THROUGHOUT THE DURATION OF THE PROJECT, SITE WORK, AND DEMOLITION WORK.
    B. NOTIFY, AT A MINIMUM, THE MUNICIPAL ENGINEER, DESIGN ENGINEER, AND LOCAL SOIL CONSERVATION JURISDICTION, AT LEAST 72 BUSINESS HOURS PRIOR TO THE COMMENCEMENT OF WORK.
    C. INSTALL THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE, AND MAINTAIN SAID CONTROLS UNTIL SITE IS STABILIZED
    D. IN ACCORDANCE WITH STATE LAW, THE CONTRACTOR MUST CALL THE STATE ONE-CALL DAMAGE PROTECTION SYSTEM FOR UTILITY MARK OUT, IN ADVANCE OF ANY EXCAVATION.
    E. LOCATE AND PROTECT ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN AND ADJACENT TO THE LIMITS OF PROJECT ACTIVITIES. THE CONTRACTOR MUST USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL UNDERGROUND UTILITIES.
    F. PROTECT AND MAINTAIN IN OPERATION, ALL ACTIVE UTILITIES AND SYSTEMS THAT ARE NOT BEING REMOVED DURING ANY DEMOLITION ACTIVITIES.
    G. ARRANGE FOR AND COORDINATE WITH THE APPLICABLE UTILITY SERVICE PROVIDER(S) FOR THE TEMPORARY OR PERMANENT TERMINATION OF SERVICE REQUIRED BY THE PROJECT PLANS AND SPECIFICATIONS REGARDING THE METHODS AND MEANS TO CONSTRUCT SAME. THESE ARE NOT THE PROFESSIONAL OF RECORD'S OR BOHLER RESPONSIBILITY. IN THE EVENT OF ABANDONMENT, THE CONTRACTOR MUST PROVIDE THE UTILITY ENGINEER AND OWNER WITH IMMEDIATE WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTIONAL AND UTILITY COMPANY REQUIREMENTS.
    H. ARRANGE FOR AND COORDINATE WITH THE APPLICABLE UTILITY SERVICE PROVIDER(S) REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS NECESSARY OR AS REQUIRED TO MINIMIZE THE IMPACT ON, OF, AND TO THE AFFECTED PARTIES. WORK REQUIRED TO BE PERFORMED "OFF-PEAK" IS TO BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.
    I. IN THE EVENT THE CONTRACTOR DISCOVERS ANY HAZARDOUS MATERIAL, THE REMOVAL OF WHICH IS NOT ADDRESSED IN THE PROJECT PLANS AND SPECIFICATIONS OR THE CONTRACT WITH THE OWNER/DEVELOPER, THE CONTRACTOR MUST IMMEDIATELY CEASE ALL WORK IN THE AREA OF DISCOVERY, AND IMMEDIATELY NOTIFY, IN WRITING AND VERBALLY, THE OWNER, PROFESSIONAL OF RECORD AND BOHLER, THE DISCOVERY OF SUCH MATERIALS TO PURSUE PROPER AND COMPLIANT REMOVAL OF SAME.
11. THE CONTRACTOR MUST NOT PERFORM ANY EARTH MOVEMENT ACTIVITIES, DEMOLITION OR REMOVAL OF FOUNDATION WALLS, FOOTINGS, OR OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE, UNLESS SAME IS IN STRICT ACCORDANCE AND CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS, OR PURSUANT TO THE WRITTEN DIRECTION OF THE OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER.
12. DEMOLITION ACTIVITIES AND EQUIPMENT MUST NOT USE OR INCLUDE AREAS OUTSIDE THE DEFINED PROJECT LIMIT LINE, WITHOUT SPECIFIC WRITTEN PERMISSION AND AUTHORITY OF AND FROM THE OWNER AND ALL GOVERNMENTAL AGENCIES WITH JURISDICTION.
13. THE CONTRACTOR MUST BACKFILL ALL EXCAVATION RESULTING FROM, OR INCIDENTAL TO, DEMOLITION ACTIVITIES. BACKFILL MUST BE ACCOMPLISHED WITH APPROVED BACKFILL MATERIALS AND MUST BE SUFFICIENTLY COMPACTED TO SUPPORT ALL NEW IMPROVEMENTS AND MUST BE PERFORMED IN COMPLIANCE WITH THE RECOMMENDATIONS AND GUIDANCE ARTICULATED IN THE GEOTECHNICAL REPORT. BACKFILLING MUST OCCUR IMMEDIATELY AFTER DEMOLITION ACTIVITIES AND MUST BE PERFORMED SO AS TO PREVENT WATER ENTERING THE EXCAVATION. FINISHED SURFACES MUST BE GRADED TO PROMOTE POSITIVE DRAINAGE. THE CONTRACTOR IS RESPONSIBLE FOR COMPACTION TESTING AND MUST SUBMIT SUCH REPORTS AND RESULTS TO THE PROFESSIONAL OF RECORD AND THE OWNER.
14. EXPLOSIVES MUST NOT BE USED WITHOUT PRIOR WRITTEN CONSENT FROM BOTH THE OWNER AND ALL APPLICABLE, NECESSARY AND REQUIRED GOVERNMENTAL AUTHORITIES. PRIOR TO COMMENCING ANY EXPLOSIVE PROGRAM AND/OR ANY DEMOLITION ACTIVITIES, THE CONTRACTOR MUST ENSURE AND OVERSEE THE INSTALLATION OF ALL OF THE REQUIRED PERMIT AND EXPLOSIVE CONTROL MEASURES THAT THE FEDERAL, STATE, AND LOCAL GOVERNMENTS REQUIRE. THE CONTRACTOR IS ALSO RESPONSIBLE TO CONDUCT AND PERFORM ALL INSPECTION AND SEISMIC VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES AND THE LIKE.
15. IN ACCORDANCE WITH FEDERAL, STATE, AND/OR LOCAL STANDARDS, THE CONTRACTOR MUST USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR. AFTER THE DEMOLITION IS COMPLETE, THE CONTRACTOR MUST CLEAN ALL ADJACENT STRUCTURES AND IMPROVEMENTS TO REMOVE ALL DUST AND DEBRIS WHICH THE DEMOLITION OPERATIONS CAUSE. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION AT CONTRACTOR'S SOLE COST.
16. PAVEMENT MUST BE SAW CUT IN STRAIGHT LINES. ALL DEBRIS FROM REMOVAL OPERATIONS MUST BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS OUTSIDE OF APPROVED AREAS WILL NOT BE PERMITTED, INCLUDING BUT NOT LIMITED TO, THE PUBLIC RIGHT-OF-WAY.
17. THE CONTRACTOR MUST MAINTAIN A RECORD SET OF PLANS WHICH INDICATES THE LOCATION OF EXISTING UTILITIES THAT ARE CAPPED, ABANDONED IN PLACE, OR RELOCATED DUE TO DEMOLITION ACTIVITIES. THIS RECORD DOCUMENT MUST BE PREPARED IN A NEAT AND WORKMAN-LIKE MANNER AND TURNED OVER TO THE OWNER/DEVELOPER UPON COMPLETION OF THE WORK, ALL OF WHICH IS AT THE CONTRACTOR'S SOLE COST.
18. THE CONTRACTOR MUST EMPTY, CLEAN AND REMOVE FROM THE SITE ALL UNDERGROUND STORAGE TANKS, IF ENCOUNTERED, IN ACCORDANCE WITH FEDERAL, STATE, COUNTY AND LOCAL REQUIREMENTS, PRIOR TO CONTINUING CONSTRUCTION IN THE AREA AROUND THE TANK WHICH EMPTYING, CLEANING AND REMOVAL ARE AT THE CONTRACTOR'S SOLE COST.

SOIL EROSION & SEDIMENT CONTROL PLAN NOTES

(Rev. 12/2024)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN AND CONTRACTOR MUST REFER TO THEM. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
2. INSTALLATION OF EROSION CONTROL DEVICES MUST BE IN ACCORDANCE WITH ALL OF THE MANUFACTURER'S RECOMMENDATIONS.
3. CONTRACTOR MUST INSTALL ADDITIONAL EROSION CONTROL MEASURES IF ENGINEER OR JURISDICTIONAL AGENCY SO REQUIRES, TO PREVENT THE DISCHARGE OF SEDIMENT LADEN RUNOFF FROM EXITING THE SITE.
4. THE CONTRACTOR IS RESPONSIBLE FOR INSPECTING AND MAINTAINING ALL EROSION CONTROL MEASURES ON THE SITE UNTIL PERMANENT STABILIZATION IS ESTABLISHED UNLESS INDICATED OTHERWISE IN LOCAL, STATE AND/OR FEDERAL PROJECT APPROVALS. THE COST OF INSTALLING AND MAINTAINING THE EROSION CONTROL MEASURES MUST BE INCLUDED IN THE BID PRICE FOR THE SITE WORK AND THE CONTRACTOR IS RESPONSIBLE FOR ALL SUCH COSTS.

SITE LAYOUT NOTES

(Rev. 1/2020)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
2. PRIOR TO THE COMMENCEMENT OF GENERAL CONSTRUCTION, THE CONTRACTOR MUST INSTALL SOIL EROSION CONTROL AND ANY STORMWATER POLLUTION PREVENTION PLAN (SWPPP) MEASURES NECESSARY, AS INDICATED ON THE APPROVED SOIL EROSION AND SEDIMENT CONTROL PLAN AND IN ACCORDANCE WITH APPLICABLE AND/OR APPROPRIATE AGENCIES' GUIDELINES TO PREVENT SEDIMENT AND/OR LOOSE DEBRIS FROM WASHING ONTO ADJACENT PROPERTIES OR THE RIGHT OF WAY.
3. ALL DIRECTIONAL/TRAFFIC SIGNING AND PAVEMENT STRIPING MUST CONFORM TO THE LATEST STANDARDS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND ANY APPLICABLE STATE OR LOCALLY APPROVED SUPPLEMENTS, GUIDELINES, RULES, REGULATIONS, STANDARDS AND THE LIKE.
4. THE LOCATIONS OF PROPOSED UTILITY POLES AND TRAFFIC SIGNS SHOWN ON THE PLANS ARE SCHEMATIC AND PRELIMINARY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR FIELD-VERIFYING THEIR LOCATION. THE CONTRACTOR MUST COORDINATE THE RELOCATION OF TRAFFIC SIGNS WITH THE ENTITY WITH JURISDICTION OVER THE PROJECT.
5. ALL DIMENSIONS SHOWN ARE TO BOTTOM FACE OF CURB, EDGE OF PAVEMENT, OR EDGE OF BUILDING, EXCEPT WHEN DIMENSION IS TO A PROPERTY LINE, STAKE OUT OF LOCATIONS OF INLETS, LIGHT POLES, ETC. MUST BE PERFORMED IN STRICT ACCORDANCE WITH THE DETAILS, UNLESS NOTED CLEARLY OTHERWISE.

GRADING NOTES

(Rev. 1/2023)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
2. SITE GRADING MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AS REFERENCED IN THIS PLAN SET. IF NO GEOTECHNICAL REPORT HAS BEEN REFERENCED, THE CONTRACTOR MUST HAVE A GEOTECHNICAL ENGINEER PROVIDE WRITTEN SPECIFICATIONS AND RECOMMENDATIONS PRIOR TO THE CONTRACTOR COMMENCING THE GRADING WORK. THE CONTRACTOR MUST FOLLOW THE REQUIREMENTS OF ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS, WHICH HAVE JURISDICTION OVER THIS PROJECT.
3. THE CONTRACTOR IS REQUIRED TO SECURE ALL NECESSARY AND/OR REQUIRED PERMITS AND APPROVALS FOR ALL OFF-SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. THE CONTRACTOR MUST SUPPLY A COPY OF APPROVALS TO THE PROFESSIONAL OF RECORD, BOHLER AND THE OWNER PRIOR TO THE CONTRACTOR COMMENCING ANY WORK.
4. THE CONTRACTOR IS FULLY RESPONSIBLE FOR VERIFYING EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCING ANY CONSTRUCTION. SHOULD DISCREPANCIES BETWEEN THE PLANS AND INFORMATION OBTAINED THROUGH FIELD VERIFICATIONS BE IDENTIFIED OR EXIST, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING.
5. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING AND REPLACING ALL UNSUITABLE MATERIALS WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT. THE CONTRACTOR MUST COMPACT ALL EXCAVATED OR FILLED AREAS IN STRICT ACCORDANCE WITH THE GEOTECHNICAL REPORT'S GUIDANCE. MOISTURE CONTENT AT TIME OF PLACEMENT MUST BE SUBMITTED IN A COMPACTION REPORT PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE WORK IS PERFORMED. THIS REPORT MUST VERIFY THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES WHICH ARE IN EFFECT AND WHICH ARE APPLICABLE TO THE PROJECT. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT MUST BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE BY OWNER/DEVELOPER, OR OWNER/DEVELOPER'S REPRESENTATIVE, SUBBASE MUST BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL, COMPACTED AS THE GEOTECHNICAL REPORT DIRECTS. EARTHWORK ACTIVITIES INCLUDING, BUT NOT LIMITED TO, EXCAVATION, BACKFILL, AND COMPACTING MUST COMPLY WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. EARTHWORK ACTIVITIES MUST COMPLY WITH THE STANDARD STATE DOT SPECIFICATIONS FOR ROADWAY CONSTRUCTION (LATEST EDITION) AND ANY AMENDMENTS OR REVISIONS THERETO.
6. IN THE EVENT OF A DISCREPANCY(IES) AND/OR A CONFLICT(S) BETWEEN PLANS, OR RELATIVE TO OTHER PLANS, THE GRADING PLAN TAKES PRECEDENCE AND CONTROLS. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY DISCREPANCY(IES) AND/OR CONFLICT(S).
7. THE CONTRACTOR IS RESPONSIBLE TO IMPORT FILL OR EXPORT EXCESS MATERIAL AS NECESSARY TO CONFORM TO THE PROPOSED GRADING, AND TO BACKFILL EXCAVATIONS FOR THE INSTALLATION OF UNDERGROUND IMPROVEMENTS.

ACCESSIBILITY DESIGN GUIDELINES

(Rev. 7/2026)

1. ALL ACCESSIBLE (A.K.A. ADA) COMPONENTS AND ACCESSIBLE ROUTES MUST BE CONSTRUCTED TO MEET, AT A MINIMUM, THE MORE STRINGENT OF: (A) THE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" (ADA) CODE (42 U.S.C. § 12101 ET SEQ. AND 42 U.S.C. § 4151 ET SEQ.); AND (B) ANY APPLICABLE LOCAL AND STATE GUIDELINES, AND ANY AND ALL AMENDMENTS TO BOTH, WHICH ARE IN EFFECT WHEN THESE PLANS WERE COMPLETED.
2. THE CONTRACTOR MUST REVIEW ALL DOCUMENTS REFERENCED IN THESE NOTES FOR ACCURACY, COMPLIANCE AND CONSISTENCY WITH INDUSTRY GUIDELINES.
3. THE CONTRACTOR MUST EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ACCESSIBLE (ADA) COMPONENTS AND ACCESSIBLE ROUTES FOR THE SITE. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACES, PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, AND INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EXIT, MUST COMPLY WITH THE ACCESSIBLE GUIDELINES AND REQUIREMENTS WHICH INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
   A. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SLOPES MUST NOT EXCEED 1:50 (2.0%) IN ANY DIRECTION.
   B. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE MUST PROVIDE A 48-INCHES MINIMUM WIDTH OR AS SPECIFIED BY THE GOVERNING AGENCY. UNOBSTRUCTED WIDTH OF TRAVEL (CAR OVERHANGS AND/OR HANDRAILS) MUST NOT REDUCE THIS MINIMUM WIDTH. THE SLOPE MUST NOT EXCEED 1:20 (5.0%) IN THE DIRECTION OF TRAVEL AND MUST NOT EXCEED 1:50 (2.0%) IN CROSS SLOPE. WHERE ACCESSIBLE PATH OF TRAVEL IS GREATER THAN 1:20 (5.0%), AN ACCESSIBLE RAMP MUST BE PROVIDED. ALONG THE ACCESSIBLE PATH OF TRAVEL, OPENINGS MUST NOT EXCEED 1/2-INCH IN WIDTH. VERTICAL CHANGES OF UP TO 1/2-INCH ARE PERMITTED ONLY IF THEY INCLUDES A 1/4-INCH BEVEL AT A SLOPE NOT STEEPER THAN 1:2. NO VERTICAL CHANGES OVER 1/4-INCH ARE PERMITTED.
   C. ACCESSIBLE RAMPS MUST NOT EXCEED A SLOPE OF 1:12 (8.3%) AND A RISE OF 30-INCHES. LEVEL LANDINGS MUST BE PROVIDED AT EACH END OF ACCESSIBLE RAMPS. LANDING MUST PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES, AND MUST NOT EXCEED 1:50 (2.0%) SLOPE IN ANY DIRECTION. RAMPS THAT CHANGE DIRECTION BETWEEN RUNS AT LANDINGS MUST HAVE A CLEAR LANDING OF A MINIMUM OF 60-INCHES BY 60-INCHES. HAND RAILS ON BOTH SIDES OF THE RAMP MUST BE PROVIDED ON AN ACCESSIBLE RAMP WITH A RISE GREATER THAN 6-INCHES.
   D. ACCESSIBLE CURB RAMPS MUST NOT EXCEED A SLOPE OF 1:12 (8.3%). WHERE FLARED SIDES ARE PROVIDED, THEY MUST NOT EXCEED 1:10 (10%) SLOPE. LEVEL LANDING MUST BE PROVIDED AT RAMPS TOP AT A MINIMUM OF 36-INCHES LONG (48-INCHES PREFERRED). IN ALTERATIONS, WHEN THERE IS NO LANDING AT THE TOP, FLARE SIDES SLOPES MUST NOT EXCEED A SLOPE OF 1:12 (8.3%).
   E. DOORWAY LANDINGS AREAS MUST BE PROVIDED ON THE EXTERIOR SIDE OF ANY DOOR LEADING TO AN ACCESSIBLE PATH OF TRAVEL. THIS LANDING MUST BE SLOPED AWAY FROM THE DOOR NO MORE THAN 1:50 (2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA MUST BE NO FEWER THAN 60-INCHES (5 FEET) LONG, EXCEPT WHERE OTHERWISE CLEARLY PERMITTED BY ACCESSIBLE STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS. (SEE ICC/ANSI A117.1-2017 AND OTHER REFERENCES INCORPORATED BY CODE).
   F. WHEN THE PROPOSED CONSTRUCTION INVOLVES RECONSTRUCTION, MODIFICATION, REVISION OR EXTENSION OF OR TO ACCESSIBLE COMPONENTS FROM EXISTING DOORWAYS OR SURFACES, THE CONTRACTOR MUST VERIFY ALL EXISTING ELEVATIONS SHOWN ON THE PLAN. NOTE THAT TABLE 405.2 OF THE DEPARTMENT OF JUSTICE'S ADA STANDARDS FOR ACCESSIBLE DESIGN ALLOWS FOR STEEPER RAMP SLOPES, IN RARE CIRCUMSTANCES. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, OF ANY DISCREPANCIES AND/OR FIELD CONDITIONS THAT DIFFER IN ANY WAY OR IN ANY RESPECT FROM WHAT IS SHOWN ON THE PLANS BEFORE COMMENCING ANY WORK. CONSTRUCTED IMPROVEMENTS MUST FALL WITHIN THE MAXIMUM AND MINIMUM LIMITATIONS IMPOSED BY THE BARRIER FREE REGULATIONS AND THE ACCESSIBLE GUIDELINES.
   G. THE CONTRACTOR MUST VERIFY ALL OF THE SLOPES OF THE CONTRACTOR'S FORMS PRIOR TO POURING CONCRETE. IF ANY NON-CONFORMANCE EXISTS OR IS OBSERVED OR DISCOVERED, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, PRIOR TO POURING CONCRETE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL COSTS TO REMOVE, REPAIR AND/OR REPLACE NON-CONFORMING CONCRETE AND/OR PAVEMENT SURFACES.
4. IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION TO ENSURE SAME IS CONSISTENT WITH THE LOCAL BUILDING CODE PRIOR TO COMMENCING CONSTRUCTION.

DRAINAGE AND UTILITY NOTES

(Rev. 3/2023)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
2. LOCATIONS OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE, AND THE CONTRACTOR MUST INDEPENDENTLY VERIFY AND CONFIRM THOSE LOCATIONS AND SERVICES WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCING ANY CONSTRUCTION OR EXCAVATION. THE CONTRACTOR MUST INDEPENDENTLY VERIFY AND CONFIRM ALL SANITARY CONNECTION POINTS AND ALL OTHER UTILITY SERVICE CONNECTION POINTS IN THE FIELD, PRIOR TO COMMENCING ANY CONSTRUCTION. THE CONTRACTOR MUST REPORT ALL DISCREPANCIES, ERRORS AND OMISSIONS IN WRITING, TO THE PROFESSIONAL OF RECORD AND BOHLER.
3. THE CONTRACTOR MUST VERTICALLY AND HORIZONTALLY LOCATE ALL UTILITIES AND SERVICES INCLUDING, BUT NOT LIMITED TO, GAS, WATER, ELECTRIC, SANITARY AND STORM, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE OR WORK SPACE, WHICHEVER IS GREATER. THE CONTRACTOR MUST USE, REFER TO, AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL OF THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO ANY EXISTING UTILITIES WHICH OCCUR DURING CONSTRUCTION, AT NO COST TO THE OWNER AND AT CONTRACTOR'S SOLE COST AND EXPENSE. THE CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH DAMAGE TO ANY EXISTING UTILITIES WHICH OCCURS DURING CONSTRUCTION.
4. THE CONTRACTOR MUST FIELD VERIFY THE PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES BY USING A TEST PIT TO CONFIRM EXACT DEPTH, PRIOR TO COMMENCEMENT OF CONSTRUCTION.
5. STORMWATER ROOF DRAIN LOCATIONS ARE BASED ON ARCHITECTURAL PLANS. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATIONS, SIZE, AND MATERIAL OF SAME BASED UPON FINAL ARCHITECTURAL PLANS.
6. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING SITE PLAN DOCUMENTS AND ARCHITECTURAL PLANS FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS; GREASE TRAP REQUIREMENTS; AND DETAILS, DOOR ACCESS, AND EXTERIOR GRADING. THE ARCHITECT WILL DETERMINE THE UTILITY SERVICE SIZES. THE CONTRACTOR MUST COORDINATE INSTALLATION OF UTILITY SERVICES WITH THE INDIVIDUAL COMPANIES TO AVOID CONFLICTS AND TO ENSURE THAT PROPER DEPTHS ARE ACHIEVED. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT INSTALLATION OF ALL IMPROVEMENTS COMPLIES WITH ALL UTILITY REQUIREMENTS OF THE APPLICABLE JURISDICTION AND REGULATORY AGENCIES AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES AND, FURTHER, IS RESPONSIBLE FOR COORDINATING THE UTILITY TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE A CONFLICT(S) EXISTS BETWEEN THESE DOCUMENTS AND THE ARCHITECTURAL PLANS, OR WHERE ARCHITECTURAL PLAN UTILITY CONNECTION POINTS DIFFER, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROFESSIONAL OF RECORD AND BOHLER, IN WRITING, AND PRIOR TO CONSTRUCTION, MUST RESOLVE SAME.
7. ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION MUST BE EXACTLY AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND THE CONTRACTOR MUST COORDINATE SAME WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS. WHEN THE PROJECT DOES NOT HAVE GEOTECHNICAL RECOMMENDATIONS, FILL AND COMPACTION MUST COMPLY WITH APPLICABLE REQUIREMENTS AND SPECIFICATIONS. THE PROFESSIONAL OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR DESIGN OF TRENCH BACKFILL OR FOR COMPACTION REQUIREMENTS
8. DURING THE INSTALLATION OF SANITARY, STORM, AND ALL UTILITIES, THE CONTRACTOR MUST MAINTAIN A CONTEMPORANEOUS AND THOROUGH RECORD OF CONSTRUCTION TO IDENTIFY THE AS-INSTALLED LOCATIONS OF ALL UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR MUST CAREFULLY NOTE ANY INSTALLATIONS THAT DEVIATE, IN ANY RESPECT, FROM THE INFORMATION CONTAINED IN THESE PLANS. THIS RECORD MUST BE KEPT ON A CLEAN COPY OF THE APPROPRIATE PLAN(S), WHICH THE CONTRACTOR MUST PROMPTLY PROVIDE TO THE OWNER IMMEDIATELY UPON THE COMPLETION OF WORK.
9. THE CONTRACTOR MUST ENSURE THAT ALL UTILITY TRENCHES LOCATED IN EXISTING PAVED ROADWAYS INCLUDING SANITARY, WATER AND STORM SYSTEMS, ARE REPAIRED IN ACCORDANCE WITH REFERENCED MUNICIPAL, COUNTY AND OR STATE DOT DETAILS AS APPLICABLE. THE CONTRACTOR MUST COORDINATE INSPECTION AND APPROVAL OF COMPLETED WORK WITH THE AGENCY WITH JURISDICTION OVER SAME.
10. FINAL LOCATIONS OF PROPOSED UTILITY POLES, AND/ OR POLES TO BE RELOCATED ARE AT THE SOLE DISCRETION OF THE RESPECTIVE UTILITY COMPANY, REGARDLESS OF WHAT THIS PLAN DEPICTS.
11. WATER SERVICE MATERIALS, BURIAL DEPTH, AND COVER REQUIREMENTS MUST BE SPECIFIED BY THE LOCAL UTILITY COMPANY. THE CONTRACTOR MUST CONTACT THE APPLICABLE MUNICIPALITY TO CONFIRM THE PROPER WATER METER AND VAULT, PRIOR TO COMMENCING CONSTRUCTION.
12. THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT MUST BE ADJUSTED, AS NECESSARY, TO MATCH PROPOSED FINISHED GRADES WITH NO TRIPPING OR SAFETY HAZARD IN ACCORDANCE WITH ALL APPLICABLE STANDARDS, REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.

OUTSIDE SOURCE NOTES

(Rev. 11/2023)

ANY INFORMATION, DRAWINGS, DATA, PLANS, SPECIFICATIONS, MATERIALS, FIGURES, DOCUMENTATION, REPORTS, AND THE LIKE WHICH IS INDICATED TO HAVE BEEN PREPARED "BY OTHERS" (HEREIN, "BY OTHERS REPORTS, DOCUMENTS AND DETAILS") HAS BEEN OR WILL BE CREATED, DEVELOPED, PREPARED, PERFORMED, AND ANALYZED BY AN ENTITY OR PARTY OTHER THAN THE "BOHLER" ENTITY INVOLVED WITH THIS PROJECT. THE "BOHLER" ENTITY IS NOT IN ANY WAY RESPONSIBLE FOR THE BY OTHERS REPORTS, DOCUMENTS AND DETAILS EVEN IF/WHERE INCLUDED IN THE "BOHLER" ENTITY'S PLANS, REPORTS, ETC. SAME HAS BEEN INCLUDED ON THIS PLAN FOR THE CONVENIENCE, ONLY, OF THE PROJECT OWNER, DEVELOPERS, CONTRACTORS AND CONSULTANTS AND IN ORDER TO COORDINATE THE "BOHLER" ENTITY'S DESIGN WITH THAT OF "OTHERS". THE "BOHLER" ENTITY HAS ASSUMED, FOR PURPOSES OF THIS PLAN, THAT THE BY OTHERS REPORTS, DOCUMENTS AND DETAILS ARE CURRENT AND, IF APPLICABLE, PREPARED IN STRICT ACCORDANCE WITH ALL APPLICABLE COUNTY, STATE, FEDERAL AND OTHER STATUTES, LAWS, RULES, REGULATIONS, ORDINANCES AND THE LIKE. THE "BOHLER" ENTITY SPECIFICALLY DISCLAIMS ANY AND ALL LIABILITY AND RESPONSIBILITY FOR BY OTHERS REPORTS, DOCUMENTS AND DETAILS. THE ENTITY OR PERSON WHO CREATED THE INFORMATION CONTAINED IN THE BY OTHERS REPORTS, DOCUMENTS AND DETAILS (EXCLUDING INFORMATION AND/OR DETAILS SOLELY SUPPLIED BY A JURISDICTION AND/OR GOVERNING BODY) AGREES BY PARTICIPATING IN THIS PROJECT, RECEIVING, REVIEWING, USING AND/OR RELYING UPON THIS DOCUMENT, AND/OR BY AGREEING TO THE PROJECT OWNER/DEVELOPER'S CONTRACT DOCUMENTS, TO DEFEND, INDEMNIFY, PROTECT AND HOLD HARMLESS THE "BOHLER" ENTITY THAT PREPARED THIS DOCUMENT AND ITS EMPLOYEES FOR ANY AND ALL DAMAGES, INJURIES, COSTS, EXPENSES AND THE LIKE, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, WHICH THE "BOHLER" ENTITY AND/OR ITS EMPLOYEES SUFFER OR INCUR AS A RESULT OF INCLUDING ANY BY OTHERS REPORTS, DOCUMENTS AND DETAILS IN AND ON OR IN THIS PLAN. ANYONE OR ANY ENTITY WHO RECEIVED, RELIES UPON AND/OR USES THIS PLAN, AGREES TO HOLD THE "BOHLER" ENTITY AND ITS EMPLOYEES HARMLESS FROM ANY CLAIMS, DAMAGES, INJURIES, COSTS AND EXPENSES, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, FOR ANY DAMAGES, INJURIES, COSTS, EXPENSES AND THE LIKE, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, WHICH IT OR THEY SUFFER OR INCUR AS A RESULT OF THE ANY BY OTHERS REPORTS, DOCUMENTS AND DETAILS INCORPORATED IN THE PLAN, AND EXPRESSLY CONFIRMS THAT BY RECEIVING, RELYING UPON AND/OR USING SAME, THE "BOHLER" ENTITY SHALL HAVE NO LIABILITY RELATED TO SAME. WITH RESPECT TO ALL BY OTHERS REPORTS, DOCUMENTS AND DETAILS, CONTRACTOR MUST VERIFY ALL INFORMATION CONTAINED IN THE SCOPE OF ALL PARTIES INVOLVED IN PREPARING THE BY OTHERS REPORTS, DOCUMENTS AND DETAILS PRIOR TO COMMENCING ANY CONSTRUCTION AND MUST VERIFY THAT THE INFORMATION IS THE LATEST, THE MOST RECENT AND THE MOST CURRENT REPORT, DOCUMENT AND DETAIL. REFERENCES ON THIS PLAN TO INFORMATION PREPARED OR CONTAINED IN BY OTHERS REPORTS, DOCUMENTS AND DETAILS DEPICTING AN OFF-SITE AREA WHERE NO DETAIL IS INCLUDED IS A REFERENCE TO AN AREA, DETAIL, SPECIFICATION OR DESIGN THAT HAS NOT BEEN DESIGNED OR CONSTRUCTED BY THE "BOHLER" ENTITY AND REGARDING WHICH THE "BOHLER" ENTITY HAS NO CONTROL OVER OR LIABILITY REGARDING, BUT IS ADDED TO THIS PLAN FOR INFORMATIONAL PURPOSES, ONLY.

STANDARD ABBREVIATIONS

FOR ENTIRE PLAN SET

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
AC	ACRE / ACRES
AD	AREA DRAIN
ADA	ACCESSIBLE / AMERICANS WITH DISABILITIES ACT
AG	ABOVE GROUND
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
ASPH	ASPHALT
ASSF	AREA SUBJECT TO STORMWATER FLOWAGE
ASSOC	ASSOCIATION
BC	BOTTOM OF CURB
BF	BASEMENT FLOOR
BIO	BIOGARDEN
BIT	BITUMINOUS
BK	BLOCK
BL	BASELINE
BLDG	BUILDING
BM	BENCH MARK
BRL	BUILDING RESTRICTION LINE
BVW	BORDERING VEGETATIVE WETLAND
CB	CATCH BASIN
CF	CUBIC FEET
CI	CURB INLET
CIT	CHANGE IN TYPE
CL	CENTER LINE
CMP	CORRUGATED METAL PIPE
C/O	CLEAN OUT
CONC	CONCRETE
CONN	CONNECTION
COORD	COORDINATE
CPP	CORRUGATED PLASTIC PIPE
CY	CUBIC YARD
DEC	DECORATIVE
DEP	DEPARTMENT OF ENVIRONMENTAL PROTECTION
DET	DETENTION
DIA	DIAMETER
DMH	DRAINAGE MANHOLE
DOM	DOMESTIC
DOT	DEPARTMENT OF TRANSPORTATION
DP	DESIGN POINT
DWL	DASHED WHITE LINE
DYL	DOUBLE YELLOW LINE
EG	EXISTING GRADE
ELEC	ELECTRIC
ELEV	ELEVATION
EOR	ENGINEER OF RECORD
EP / EOP	EDGE OF PAVEMENT
ES / EOS	EDGE OF SHOULDER
EW	END WALL
EX	EXISTING
FDC	FIRE DEPARTMENT CONNECTION
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY
FES	FLARED END SECTION
FF	FINISH / FIRST FLOOR
FFE	FINISH / FIRST FLOOR ELEVATION
FG	FINISH GRADE
FH	FIRE HYDRANT
FM	FORCE MAIN
FO	FIBER OPTIC
G	GRADE
GC	GENERAL CONTRACTOR
GEO	GEOTECH/GEOTECHNICAL
GF / GFE	GARAGE FLOOR ELEVATION (AT DOOR)
GFA	GROSS FLOOR AREA
GH	GRADE HIGH (WALL)
GL	GRADE LOW (WALL)
GRT	GRATE
GT	GREASE TRAP
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HOR	HORIZONTAL
HP	HIGH POINT
HW	HEADWALL
ICS	INLET CONTROL STRUCTURE
INF	INFILTRATION
INT	INTERSECTION
INV	INVERT
LF	LINEAR FOOT
LOC	LIMIT OF CLEARING
LOD	LIMIT OF DISTURBANCE
LOS	LINE OF SIGHT
LOW	LIMIT OF WORK
LP	LOW POINT
LS	LANDSCAPE
LSA	LANDSCAPE AREA
MAX	MAXIMUM
ME	MATCH EXISTING
MEP	MECHANICAL, ELECTRICAL, AND PLUMBING
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
NOAA	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NRCS	NATIONAL RESOURCE CONSERVATION SERVICE
O&M	OPERATIONS AND MAINTENANCE
OC	ON CENTER
OCS	OUTLET CONTROL STRUCTURE
OGS	OIL AND GRIT SEPARATOR
ORD	ORDINANCE
PA / POA	POINT OF ANALYSIS
PC	POINT OF CURVATURE
PCCR	POINT OF CURVATURE, CURB RETURN
PERF	PERFORATED
PG	PROPOSED GRADE
PI	POINT OF INTERSECTION
POG	POINT OF GRADE
PP	POLYPROPYLENE PIPE
PROP	PROPOSED
PT	POINT OF TANGENCY
PTCR	POINT OF TANGENCY, CURB RETURN
PVI	POINT OF VERTICAL INTERSECTION
PVMT	PAVEMENT
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS / RADII
R/W	RIGHT-OF-WAY / RIGHTS-OF-WAY
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REGS	REGULATIONS
RELO	TO BE RELOCATED
REQ	REQUIRED
RET	RETENTION
RET WALL	RETAINING WALL
RETO	TO BE RETURNED TO OWNER
RG	RAIN GARDEN
S	SLOPE
SAN	SANITARY SEWER
SESC	SOIL EROSION AND SEDIMENT CONTROL
SF	SQUARE FEET
SHLO	STATE HIGHWAY LAYOUT
SMH	SANITARY MANHOLE
STA	STATION
STM	STORM WATER / STORM SEWER
SWL	SINGLE/SOLID WHITE LINE
SWPPP	STORMWATER POLLUTION PREVENTION PLAN
TBA	TO BE ABANDONED
TBR	TO BE REMOVED
TBV	TO BE VACATED
TC	TOP OF CURB
Tc	TIME OF CONCENTRATION
TD	TRENCH DRAIN
TELE	TELECOMMUNICATIONS / TELEDATA
TPF	TREE PROTECTION FENCE
TR	TO REMAIN
TRANS	TRANSITION
TYP	TYPICAL
UG	UNDERGROUND
UP	UTILITY POLE
USGS	UNITED STATES GEOLOGICAL SURVEY
VERT	VERTICAL
VIF	VERIFY IN FIELD
W	WIDE / WIDTH
W/L	WATER LINE
WM	WATER METER
WQU	WATER QUALITY UNIT
YD	YARD DRAIN
#	NUMBER
#:#	SLOPE EXPRESSED IN HORIZONTAL:VERTICAL IN FEET
±	PLUS OR MINUS
°	DEGREE
Ø	DIAMETER
'	FEET/FOOT
"	INCHES

PROP LINE LEGEND

PROPERTY LINE	
RIGHT-OF-WAY LINE	
INTERIOR PROPERTY LINE	
LEASE LINE	
EASEMENT LINE	
SETBACK LINE	
LIMIT OF WORK	LOW
LIMIT OF DISTURBANCE	LOD
SAWCUT LINE	
OVERHEAD WIRE	OH
ELECTRIC LINE	E
TELEPHONE LINE	T
CABLE LINE	C
GAS LINE	G
STORM SEWER	
SANITARY MAIN 12" OR GREATER	
SANITARY MAIN	S
SANITARY LATERAL	SL
SANITARY FORCE MAIN	FM
WATER MAIN 12" OR GREATER	
WATER MAIN	W
WATER LATERAL	WL
WATER FIRE LINE	F

PROP SYMBOL LEGEND

TYPICAL SIGN	
TYPICAL BOLLARD	
UTILITY POLE WITH LIGHT	
UTILITY POLE	
TYPICAL LIGHT	
FIRE HYDRANT	
CLEANOUT	C/O
SANITARY MANHOLE	S
STORM MANHOLE	D
WATER METER	WM
WATER VALVE	
GAS VALVE	GV
TEST PIT	T-#
BORING	B-#

TM

BOHLER //

SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

THE INFORMATION, DESIGN AND CONTENT OF THIS PLAN ARE PROPRIETARY AND SHALL NOT BE COPIED OR USED FOR ANY PURPOSE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM BOHLER. ONLY APPROVED, SIGNED AND SEALED PLANS SHALL BE UTILIZED FOR CONSTRUCTION PURPOSES
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	10/16/2026	PER CITY COMMENTS	ATK / MRB

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ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
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FOR MUNICIPAL REVIEW & APPROVAL

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PROJECT No.:	PAB260025.00-1B
DRAWN BY:	KMH
CHECKED BY:	MRB
DATE:	8/13/2026
CAD I.D.:	P-CIVL-CNDS

PROJECT:

PRELIMINARY/ FINAL LAND DEVELOPMENT PLAN

FOR

BOYLE CONSTRUCTION, INC.

PROPOSED
DATA CENTER

2184 INDUSTRIAL DRIVE
BETHLEHEM, PA 18017
CITY OF BETHLEHEM
LEHIGH COUNTY
PIN: 641847439546-1
CITY WARD 13 BLOCK 177

BOHLER //
74 W BROAD STREET, SUITE 500
BETHLEHEM, PA 18018
Phone: (610) 709-9971
Fax: (610) 709-9976
www.BohlerEngineering.com

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PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE082005
NEW YORK LICENSE No. ...093204
NEW JERSEY LICENSE No. 24GE05339500
JEFFREY A. BEAVAN
PE082005

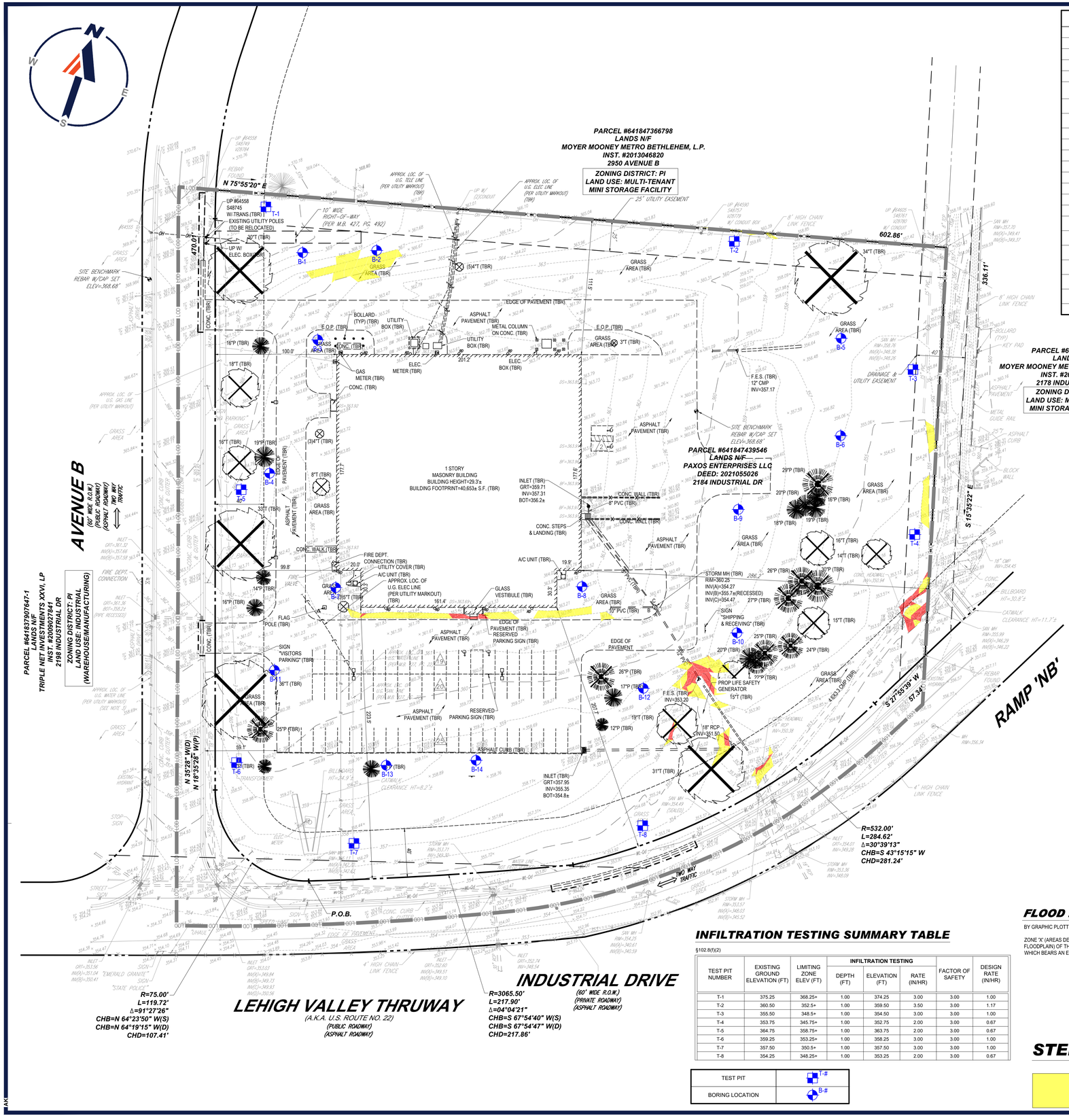
SHEET TITLE:

GENERAL NOTES AND LEGEND

SHEET NUMBER:

C-102

REVISION 1 - 10/16/2026



DEMO LEGEND

PROPERTY LINE	
EASEMENT LINE	
SETBACK LINE	
UTILITY POLE	
TYPICAL SIGN	
PARKING COUNT	
CONTOUR	
SPOT ELEVATIONS	TC 516.4 OR 516.4
SANITARY LATERAL	
SANITARY MAIN	
WATER LINE	
ELECTRIC LINE	
GAS LINE	
OVERHEAD WIRE	
STORM SEWER	
FIRE HYDRANT	
SANITARY MANHOLE	
STORM MANHOLE	
WATER VALVE	
WATER METER	
GAS VALVE	
TYPICAL END SECTION	
CLEANOUT	

EXISTING LEGEND

CONTOUR	
SPOT ELEVATION	
EDGE OF PAVEMENT ELEVATION	
TOP OF CURB ELEVATION	
GUTTER ELEVATION	
TOP OF WALL ELEVATION	
BOTTOM OF WALL ELEVATION	
TOP OF ISLAND ELEVATION	
BOTTOM OF ISLAND ELEVATION	
FIRE HYDRANT	
FIRE DEPARTMENT CONNECTION	
WATER VALVE	
GAS VALVE	
OVERHEAD WIRES	
APPROX LOC UNDERGROUND CABLE LINE PER UTILITY MARKOUT	
APPROX LOC UNDERGROUND ELEC LINE PER UTILITY MARKOUT	
APPROX LOC UNDERGROUND FIBER OPTIC LINE PER UTILITY MARKOUT	
APPROX LOC UNDERGROUND GAS LINE PER UTILITY MARKOUT	
APPROX LOC UNDERGROUND SEWER LINE PER REF __	
APPROX LOC UNDERGROUND TEL LINE PER UTILITY MARKOUT	
APPROX LOC UNDERGROUND WATER LINE PER UTILITY MARKOUT	
APPROX LOC UNDERGROUND STORM SEWER LINE PER REF __	
LIMITS OF FLOODPLAIN	
FLARED END SECTION	
UTILITY POLE	
TRAFFIC SIGNAL	
MONITORING WELL	
ELECTRIC METER	EM
ELECTRIC BOX	EB
TRANSFORMER	T
SANITARY MANHOLE	S
TELEPHONE MANHOLE	T
ELECTRIC MANHOLE	E
WATER MANHOLE	W
STORM DRAIN MANHOLE	D
WATER METER	WM
GAS METER	GM
ROOF DRAIN	RD
SIGN	
MAIL BOX	
BOLLARD	
METAL GUARDRAIL	
FENCE	
LANDSCAPED AREA	LSA
AREA LIGHT	
CLEAN OUT	CO
PAINTED ARROWS	
TITLE REPORT EXCEPTION	
DENOTES PARKING SPACE COUNT	
BENCHMARK	
UTILITY POLE/LIGHT POLE	
STREET LIGHT	
GUY WIRE	
TRAFFIC SIGNAL POLE	
TREE LINE	
TREE (SIZE AS NOTED)	
PROP CORNERS TO BE SET	
BORING LOCATION	T-2 ELEV=28.50
WETLANDS	WF-29 WF-28

SURVEY NOTES

1. PROPERTY KNOWN AS PARCEL #641847439546 AS IDENTIFIED ON THE OFFICIAL TAX MAPS OF LEHIGH COUNTY, CITY OF BETHLEHEM. COMMONWEALTH OF PENNSYLVANIA.
2. AREA = 296,117 S.F. OR 6.798 AC.
3. LOCATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE. ALL LOCATIONS AND SIZES ARE BASED ON UTILITY MARK OUTS, ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD, AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE ASBUILT PLANS AND UTILITY MARKOUT DOES NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. BEFORE THE PREPARATION OF DESIGN PLANS AND/OR EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANY.
4. THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY BLUE MARSH ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE COMMITMENT REPORT. A TITLE BRINGDOWN SEARCH OF THE PROPERTY WAS PREPARED BY FITZPATRICK LENTZ & BUBBA, P.C. ON 8/27/2026.
5. THE EXISTENCE OF UNDERGROUND STORAGE TANKS, IF ANY, WAS NOT KNOWN AT THE TIME OF THE FIELD SURVEY.
6. THIS PROPERTY SUBJECT TO RESTRICTIONS, COVENANTS AND/OR EASEMENTS, WRITTEN OR IMPLIED.
7. ELEVATIONS ARE BASED UPON (NAVD 88) DATUM ESTABLISHED ONSITE UTILIZING GLOBAL POSITIONING SYSTEM DATA COLLECTION.
8. ENCROACHMENTS AND VAULTS, IF ANY, BELOW SURFACE NOT SHOWN HEREON.

SURVEY REFERENCES

1. THE OFFICIAL TAX MAPS OF LEHIGH COUNTY, CITY OF BETHLEHEM, COMMONWEALTH OF PENNSYLVANIA.
2. MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, LEHIGH COUNTY, PENNSYLVANIA (ALL JURISDICTIONS)", PANEL NOT PRINTED, MAP NUMBER 42095C0243E, EFFECTIVE DATE: JULY 16, 2014.
3. MAP ENTITLED "THIRD REVISED SUBDIVISION, LEHIGH VALLEY INDUSTRIAL PARK, SITUATE IN HTE CITY OF BETHLEHEM, LEHIGH COUNTY, PENNSYLVANIA" APPROVED FEBRUARY 20, 1974 AND FILED IN MAJOR VOL. 13, PG. 35.
4. MAP ENTITLED "COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION DRAWINGS REESTABLISHING LIMITED ACCESS HIGHWAY AND AUTHORIZING ACQUISITION OF RIGHT-OF-WAY FOR STATE ROUTE 22 SECTION 04M R/W (B) IN LEHIGH & NORTHAMPTON COUNTIES' SHEETS 1-55 OF 55.
5. MAP ENTITLED "COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION DRAWINGS FOR CONSTRUCTION OF STATE ROUTE 22, SECTION 04M IN LEHIGH & NORTHAMPTON COUNTIES, STATE ROUTE 22, SECTION 027 IN LEHIGH COUNTY, STATE ROUTE 22, SECTION 01M IN NORTHAMPTON COUNTY" SHEETS 1, 4, 202, 204, 206 & 209 OF 247.

FLOOD NOTE

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS LOCATED IN:

ZONE 'X' (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) OF THE FLOOD INSURANCE RATE MAP, MAP NO. 42095C0243E. WHICH BEARS AN EFFECTIVE DATE OF JULY 16, 2014.

INFILTRATION TESTING SUMMARY TABLE

§102.8(f)(2)

TEST PIT NUMBER	EXISTING GROUND ELEVATION (FT)	LIMITING ZONE ELEV (FT)	INFILTRATION TESTING			FACTOR OF SAFETY	DESIGN RATE (IN/HR)
			DEPTH (FT)	ELEVATION (FT)	RATE (IN/HR)		
T-1	375.25	368.25+	1.00	374.25	3.00	3.00	1.00
T-2	360.50	352.5+	1.00	359.50	3.50	3.00	1.17
T-3	355.50	348.5+	1.00	354.50	3.00	3.00	1.00
T-4	353.75	345.75+	1.00	352.75	2.00	3.00	0.67
T-5	364.75	358.75+	1.00	363.75	2.00	3.00	0.67
T-6	359.25	353.25+	1.00	358.25	3.00	3.00	1.00
T-7	357.50	350.5+	1.00	357.50	3.00	3.00	1.00
T-8	354.25	348.25+	1.00	353.25	2.00	3.00	0.67

TEST PIT	T-#
BORING LOCATION	B-#

STEEP SLOPES LEGEND

15-25% >25%

THIS PLAN TO BE UTILIZED FOR DEMOLITION PURPOSES ONLY

40 20 10 0 40

SCALE: 1" = 40'

BOHLER

SITE CIVIL AND CONSULTING ENGINEERING
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PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
PERMITTING SERVICES
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JOSEPH A. BEAVAN
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. GE052005
NEW JERSEY LICENSE NO. GE05339500

SHEET TITLE:

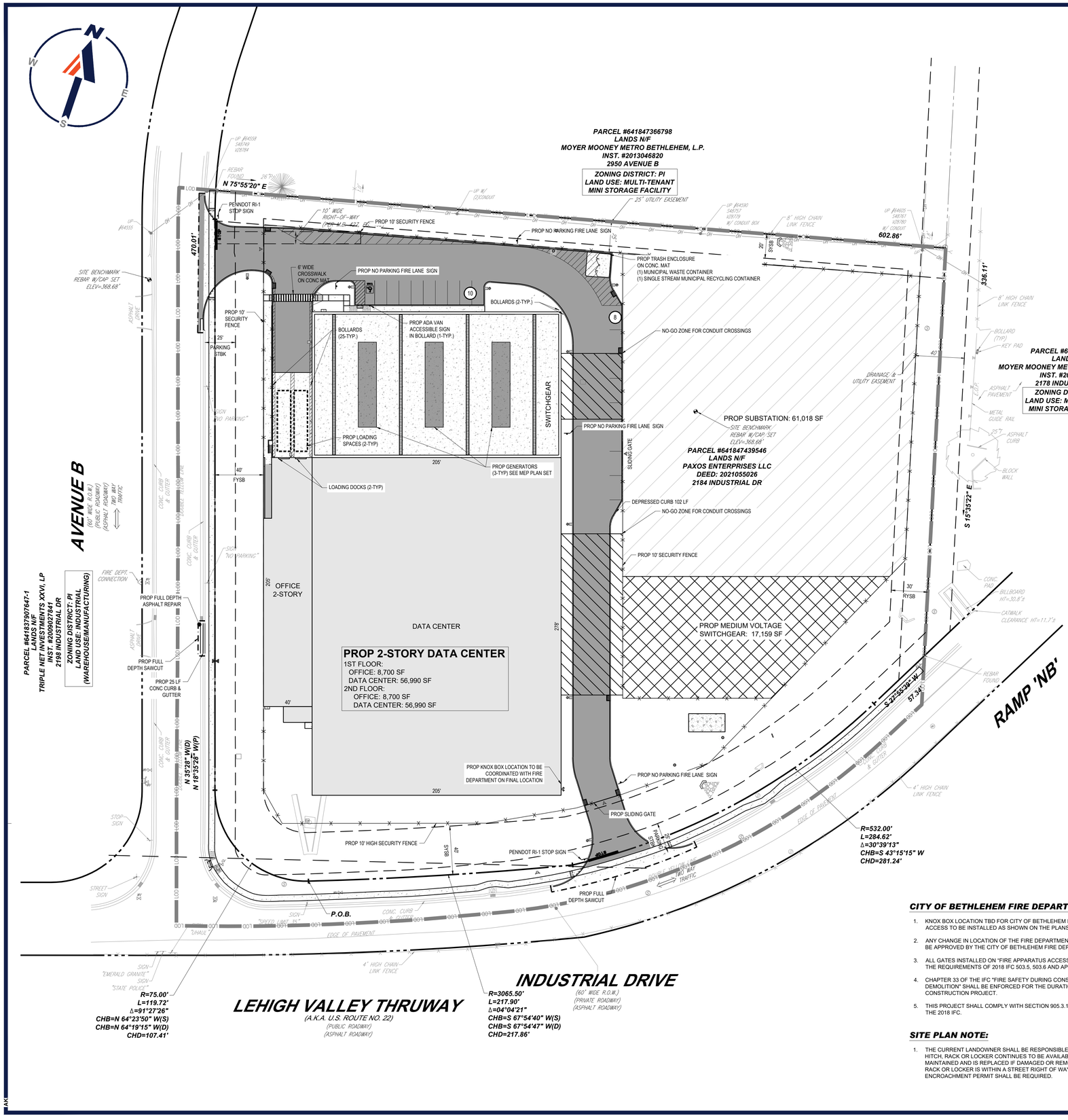
EXISTING CONDITIONS/ DEMOLITION PLAN

SHEET NUMBER:

C-201

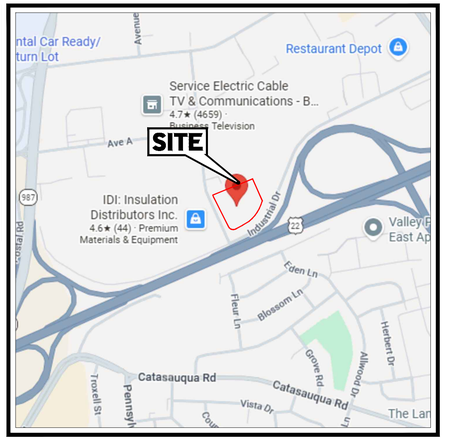
REVISION 1 - 10/16/2026

Oct 16, 2026
P:\PA\2026\PAB260025.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LDVP-PAB260025.00-1B---LAYOUT, C-201 EXDM



PROP SITE LEGEND

PROPERTY LINE	
EASEMENT LINE	
SETBACK LINE	
INTERIOR PROPERTY LINE	
LEASE LINE	
LIMIT OF WORK	LOW
LIMIT OF DISTURBANCE	LOD
CURB	
UTILITY POLE	
TYPICAL SIGN	
BOLLARD	
UTILITY POLE W/ LIGHT	
TYPICAL LIGHT	
PARKING COUNT	X



LOCATION MAP

SCALE: 1" = 1,000'
SOURCE: GOOGLE MAPS

STATEMENT OF INTENT

DEVELOPER PROPOSES TO CONSTRUCT A TWO-STORY, 66,690 SF AREA/FLOOR DATA CENTER, 61,018 SF AREA FOR A SUBSTATION, 17,159 SF AREA FOR MEDIUM VOLTAGE SWITCHGEAR, TWO 11'X 50' LOADING SPACES, TEN OFF-STREET PARKING SPACES, ACCESS ROADWAYS, LIGHTING, LANDSCAPING, UNDERGROUND STORMWATER MANAGEMENT FACILITIES AND OTHER SITE APPURTENANCES.

ZONING TABLE

ZONE: PI - PLANNED INDUSTRIAL
USE: DATA CENTER **(PERMITTED BY-RIGHT)**
PIN: 641847439546

APPLICANT/ OWNER INFORMATION

APPLICANT:	BOYLE CONSTRUCTION, INC. 3850 SIERRA CIRCLE, SUITE 400 CENTER VALLEY, PA 18034
PROPERTY OWNER:	PAXOS ENTERPRISES LLC 2100 HOOVER AVE ALLENTOWN, PA 18109

BULK REQUIREMENTS

ITEM	CODE	PERMITTED	EXISTING	PROPOSED
MIN LOT AREA	§ 1306.01(b)	43,560 SF (1.00 AC)	296,117 SF (6.80 AC)	NO CHANGE
MIN LOT WIDTH	§ 1306.01(b)	140.0'	498.4'	NO CHANGE
MIN YARD SETBACKS				
FRONT YARD (INDUSTRIAL DRIVE)	§ 1306.01(b)	40.0' FROM STREET R/W	207.7'	58.0'
SIDE YARD (SOUTH)	§ 1306.01(b)	20.0' FROM SIDE LOT LINE	99.8'	40.0'
SIDE YARD (NORTH)	§ 1306.01(b)	20.0' FROM SIDE LOT LINE	88.3'	77.2'
REAR YARD (EAST)	§ 1306.01(b)	30.0' FROM REAR LOT LINE	286.2'	299.0'
MAX PERMITTED HEIGHT	§ 1306.01(b)	60.0' OR 5 STORIES, WHICHEVER IS MORE RESTRICTIVE.	29.3'	<60.0'
MAX LOT COVERAGE	§ 1306.01(b)	80.0%	37.9% (112,233 SF)	69.9% (206,895 SF)
MAX BUILDING COVERAGE	§ 1306.01(b)	60.0%	13.7% (40,653 SF)	22.2% (65,690 SF)
MIN PARKING SETBACKS				
FROM THE CURB LINE OF A PUBLIC STREET	§ 1306.01(b)	25.0'	59.1'	125.2'
			KEY =	VARIANCE REQUIRED

PARKING REQUIREMENTS

ITEM	CODE	PERMITTED	EXISTING	PROPOSED
MIN STALL SIZE	§ 1319.03(a)(1)	9' X 18'	10' X 20'	10' X 20'
MIN AISLE WIDTH	§ 1319.03(a)(3)	24'	24'	30'
MIN LOADING SIZE	§ 1319.04(b)	11' X 50'	11' X 50'	11' X 50'
MIN NUMBER OF PARKING SPACES	§ 1319.01(a)(19)	18 SPACES	64 SPACES	18 SPACES
MIN NUMBER OF LOADING SPACES	§ 1319.04(b)	2 SPACES	2 SPACES	2 SPACES

PARKING REQUIREMENT:
INDUSTRIAL OR MANUFACTURING ESTABLISHMENT:
REQUIRED FOR DATA CENTER USE = ONE PARKING SPACE FOR EACH 1.5 EMPLOYEES (BASED UPON THE MAXIMUM NUMBER EMPLOYED AT ANY ONE SHIFT), PLUS ONE PARKING SPACE FOR EACH 10,000 SQUARE FEET OF GROSS FLOOR AREA IN THE BUILDINGS.
= 1 SPACE X (6 EMPLOYEES / 1.5) + 1 SPACE X (131,380 SF / 10,000)
= 4 + 13.14 = 17.14 OR **18 PARKING SPACES**
PROVIDED: 18 SPACES (COMPLIES)

LOADING REQUIREMENT:
MANUFACTURING USES AND OTHER INDUSTRIAL USES NOT LISTED SEPARATELY:
REQUIRED FOR DATA CENTER USE = 1 LOADING SPACE FOR THE FIRST 10,000 SF OF FLOOR AREA. FOURTEEN THOUSAND OR MORE SQUARE FEET FLOOR AREA SHALL REQUIRE TWO SPACES.
= **2 LOADING SPACES**
PROVIDED: 2 LOADING SPACES (COMPLIES)

BICYCLE PARKING REQUIREMENT:
REQUIRED = 5% OF THE OFF-STREET VEHICLE PARKING REQUIREMENT (18), WITH A MINIMUM OF 2 SPACES IN ANY EVENT.
= **0.9 BICYCLE SPACES OR 2 BICYCLE SPACES**
PROVIDED: 2 BICYCLE SPACES INTERNAL TO THE BUILDING (SEE ARCHITECTURE PLANS)

KEY =	VARIANCE REQUIRED

CITY OF BETHLEHEM FIRE DEPARTMENT NOTES:

1. KNOX BOX LOCATION TBD FOR CITY OF BETHLEHEM FIRE DEPARTMENT ACCESS TO BE INSTALLED AS SHOWN ON THE PLANS.
2. ANY CHANGE IN LOCATION OF THE FIRE DEPARTMENT CONNECTION MUST BE APPROVED BY THE CITY OF BETHLEHEM FIRE DEPARTMENT.
3. ALL GATES INSTALLED ON "FIRE APPARATUS ACCESS ROADS" SHALL MEET THE REQUIREMENTS OF 2018 IFC 503.5, 503.6 AND APPENDIX D.
4. CHAPTER 33 OF THE IFC "FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION" SHALL BE ENFORCED FOR THE DURATION OF THE CONSTRUCTION PROJECT.
5. THIS PROJECT SHALL COMPLY WITH SECTION 905.3.1, 905.4.1, AND 905.3.9 OF THE 2018 IFC.

SITE PLAN NOTE:

1. THE CURRENT LANDOWNER SHALL BE RESPONSIBLE TO ENSURE THAT THE HITCH, RACK OR LOCKER CONTINUES TO BE AVAILABLE AND IS WELL MAINTAINED AND IS REPLACED IF DAMAGED OR REMOVED. IF THE HITCH, RACK OR LOCKER IS WITHIN A STREET RIGHT OF WAY, A CITY ENCROACHMENT PERMIT SHALL BE REQUIRED.

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY

40 20 10 0 40
SCALE: 1" = 40'

BOHLER™
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
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PIN: 641847439546-1
CITY WARD 13 BLOCK 177

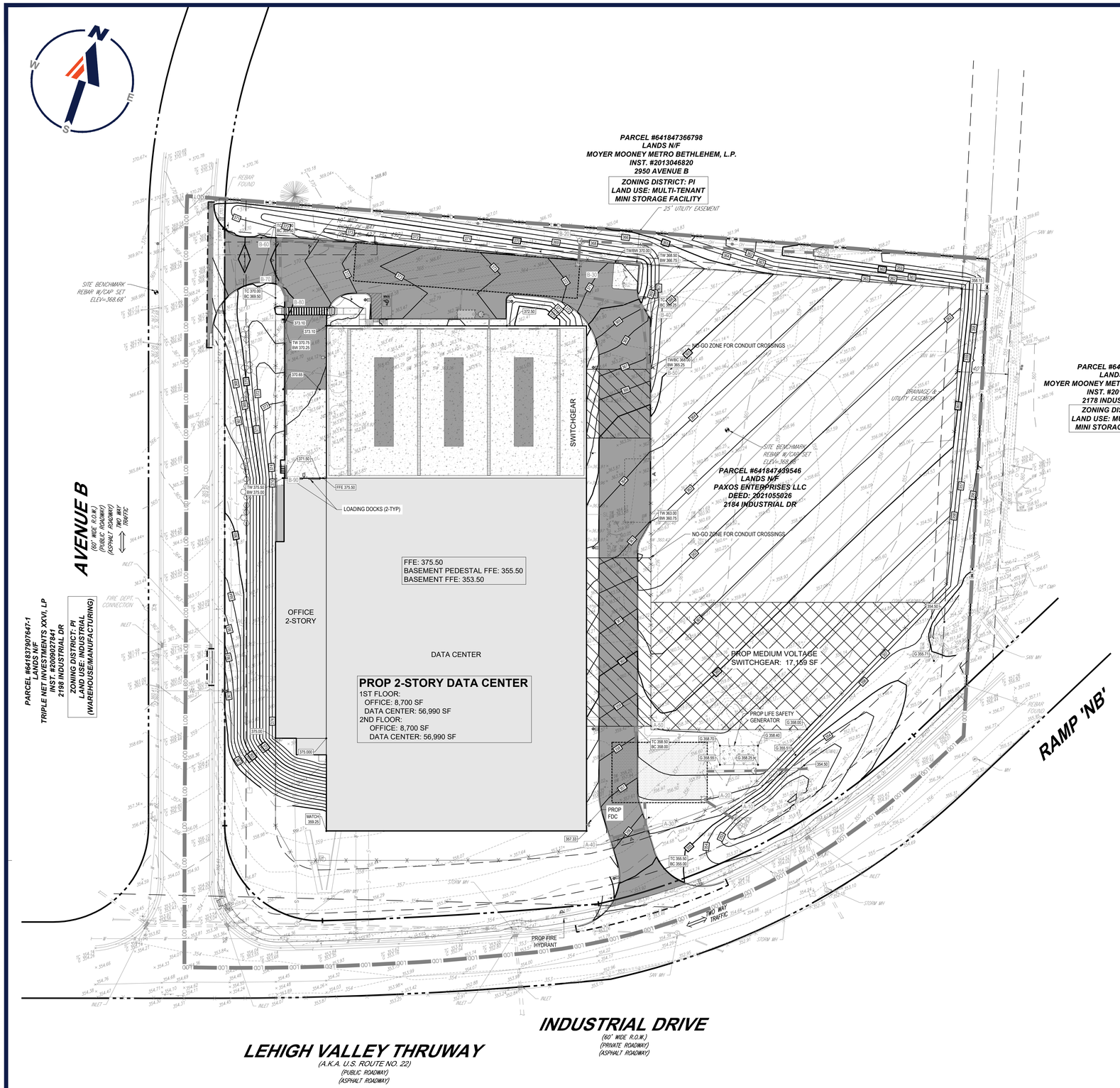
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PENNSYLVANIA LICENSE NO. PE082005
NEW YORK LICENSE NO. 102204
NEW JERSEY LICENSE NO. GE06339000

SHEET TITLE:
SITE PLAN
SHEET NUMBER:
C-301

REVISION 1 - 10/16/2026

Oct 16, 2026
P:\PA\2026\PAB260025.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LDVP-PAB260025.00-1B----LAYOUT C-301 SITE
AKH



PROP GRADING LEGEND

PROPERTY LINE	
EASEMENT LINE	
SETBACK LINE	
INTERIOR PROPERTY LINE	
LEASE LINE	
LIMIT OF WORK	LOW
LIMIT OF DISTURBANCE	LOD
SAWCUT LINE	
CONTOUR	191 / 190
SPOT ELEVATIONS	FF 517.00 / TC 516.00 BC 515.85 / ME 516.00
TEST PIT	T-#
BORING	B-#

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SCALE: 1" = 40'

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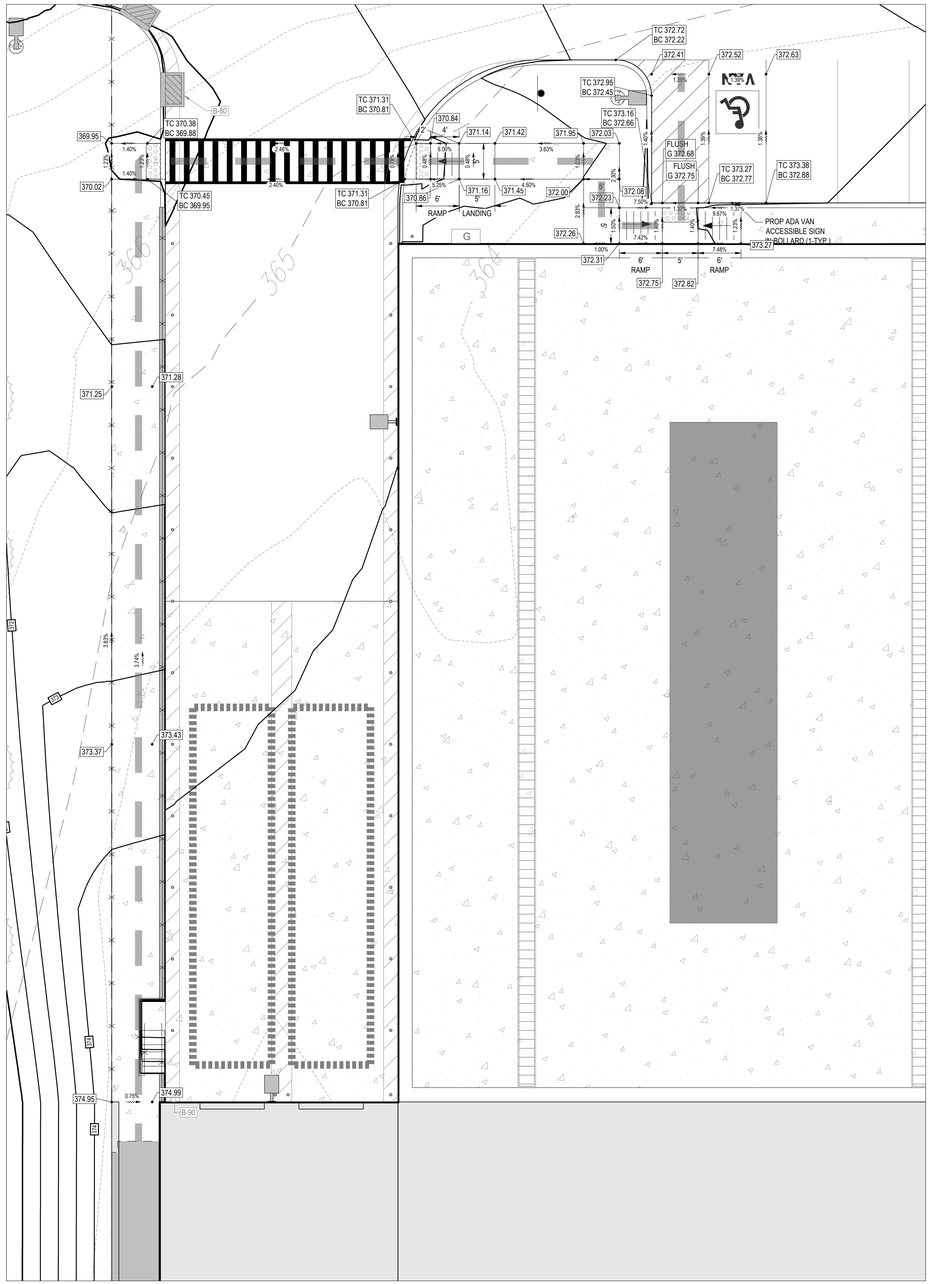
GRADING PLAN

SHEET NUMBER:

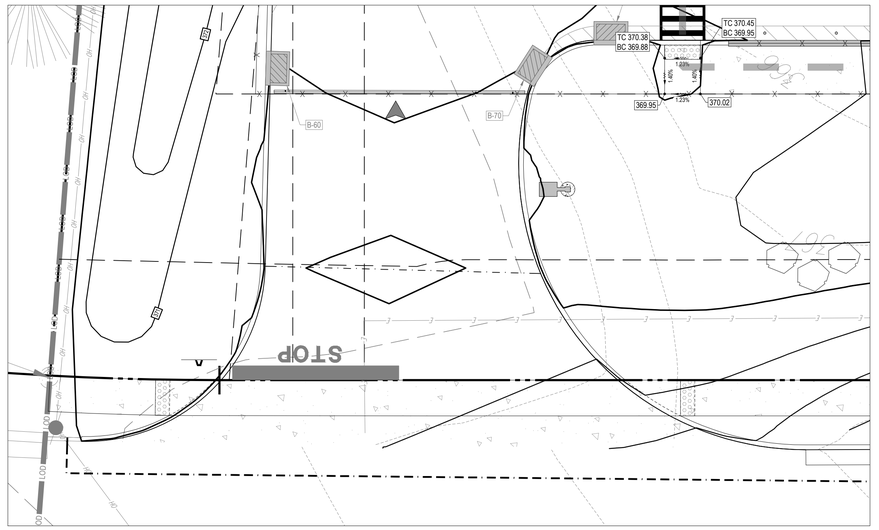
C-401

REVISION 1 - 10/16/2026

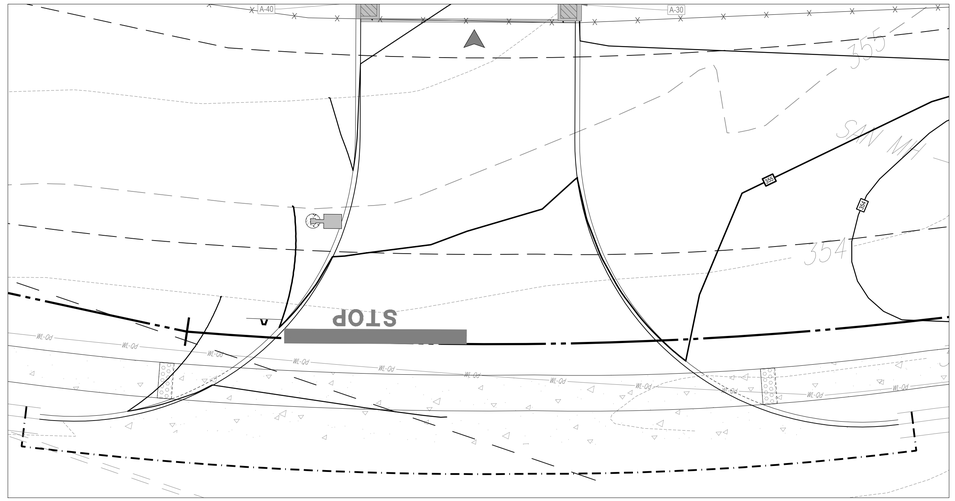
Oct 16, 2026
P:\PA\20\PAB260025.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LDVP-PAB260025.00-1B---LAYOUT: C-401 GRAD
AKH



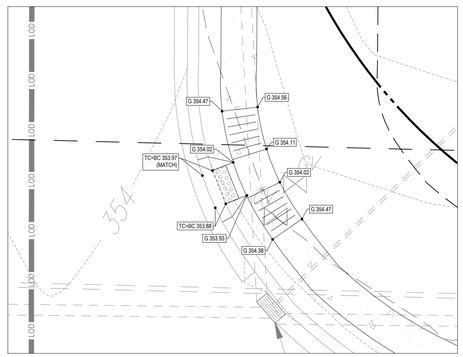
SCALE: 1" = 10'



DRIVEWAY APRON (AVENUE B)



DRIVEWAY APRON (INDUSTRIAL DRIVE)



CURB RAMP (AVENUE B)

ADA LEGEND

ADA PATH	
RAMP DIRECTION	→

THIS PLAN TO BE UTILIZED FOR SITE GRADING PURPOSES ONLY

PROP GRADING LEGEND

PROPERTY LINE	
EASEMENT LINE	
SETBACK LINE	
INTERIOR PROPERTY LINE	
LEASE LINE	
LIMIT OF WORK	LOW
LIMIT OF DISTURBANCE	LOD
SAWCUT LINE	
CONTOUR	191 / 190
SPOT ELEVATIONS	EFF 517.00 · TC 516.00 BC 515.95 · ME 516.00
TEST PIT	T-#
BORING	B-#

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PROJECT No.:	PAB260025.00-1B
DRAWN BY:	KMH
CHECKED BY:	MRB
DATE:	8/13/2026
CAD I.D.:	P-CIVL-LDVP

PROJECT:

PRELIMINARY/ FINAL LAND DEVELOPMENT PLAN

FOR

BOYLE CONSTRUCTION, INC.

PROPOSED DATA CENTER

**2184 INDUSTRIAL DRIVE
BETHLEHEM, PA 18017
CITY OF BETHLEHEM
LEHIGH COUNTY
PIN: 641847439546-1
CITY WARD 13 BLOCK 177**

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J. T. BEAVAN
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. GE082005
NEW JERSEY LICENSE NO. GE05339500

SHEET TITLE:

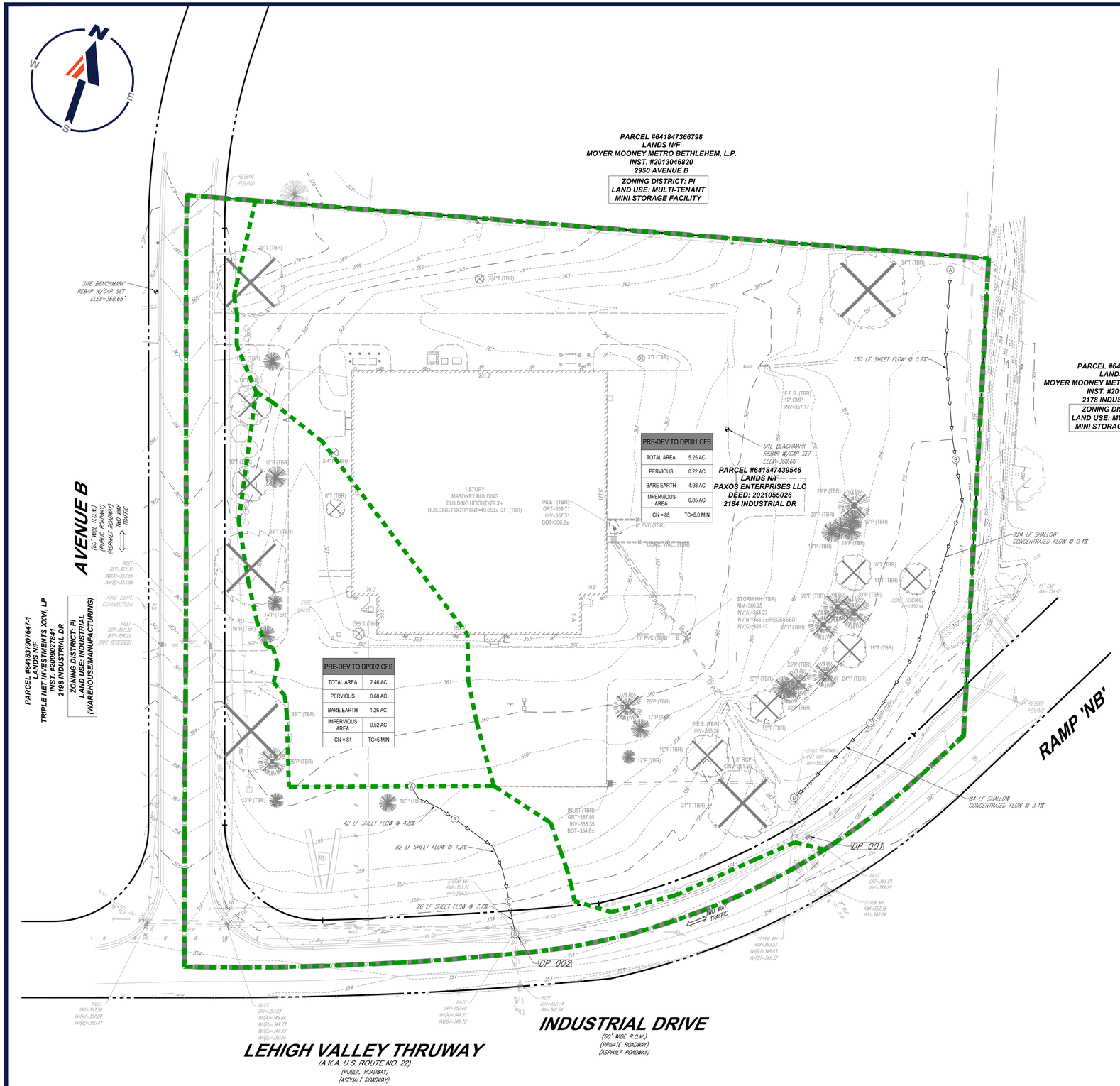
ADA GRADING ENLARGEMENT PLAN

SHEET NUMBER:

C-402

REVISION 1 - 10/16/2026

Oct 16, 2026
P:\PA\2026\PAB260025.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LDVP-PAB260025.00-1B---LAYOUT: C-402 GRAD
AX



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PROJECT No.:	PAB260025.00-1B
DRAWN BY:	KMH
CHECKED BY:	MRB
DATE:	8/13/2026
CAD I.D.:	P-CIVIL-LDVP

PROJECT:
PRELIMINARY/ FINAL LAND DEVELOPMENT PLAN
FOR
BOYLE CONSTRUCTION, INC.
PROPOSED DATA CENTER
2184 INDUSTRIAL DRIVE
BETHLEHEM, PA 18017
CITY OF BETHLEHEM
LEHIGH COUNTY
PIN: 641847439546-1
CITY WARD 13 BLOCK 177

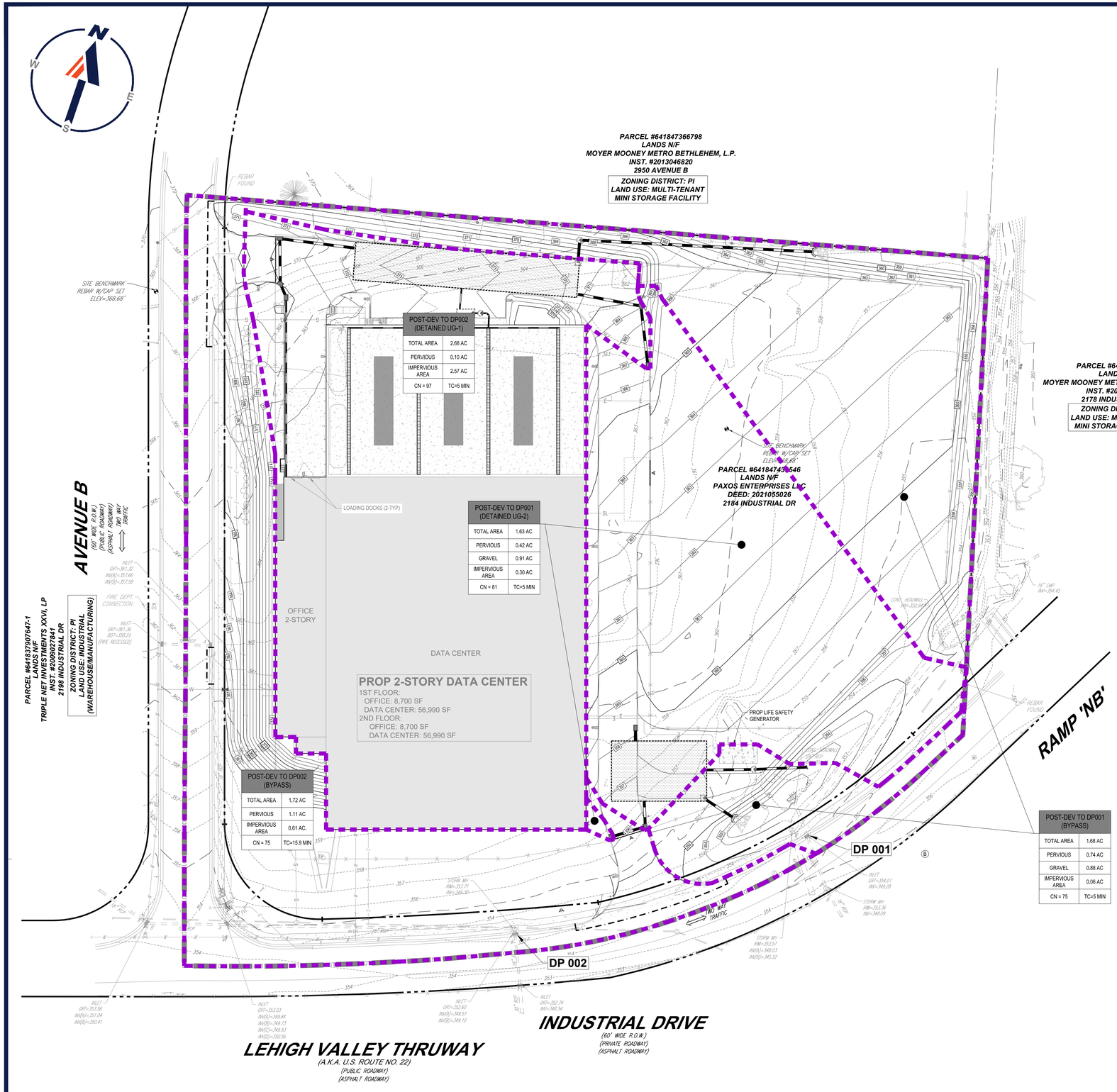
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JEFFREY A. BEAVAN
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NEW JERSEY LICENSE NO. GE05339500

SHEET TITLE:
PRE DEVELOPMENT DRAINAGE AREA MAP
SHEET NUMBER:
C-403

REVISION 1 - 10/16/2026

Oct 16, 2026
P:\PA\2026\PAB260025.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LDVP-PAB260025.00-1B----3-LAYOUT C-403 PRED
ATK



DRAINAGE AREA LEGEND

LIMIT OF DISTURBANCE	LOD
DRAINAGE AREA BOUNDARY	

40 20 10 0 40

SCALE: 1" = 40'

Oct 16, 2026
P:\PA\2026\PAB260025.00\CADD\RAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LDVP-PAB260025.00-1B----LAYOUT: C-404 PSTD
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CAD I.D.: P-CIVIL-LDVP

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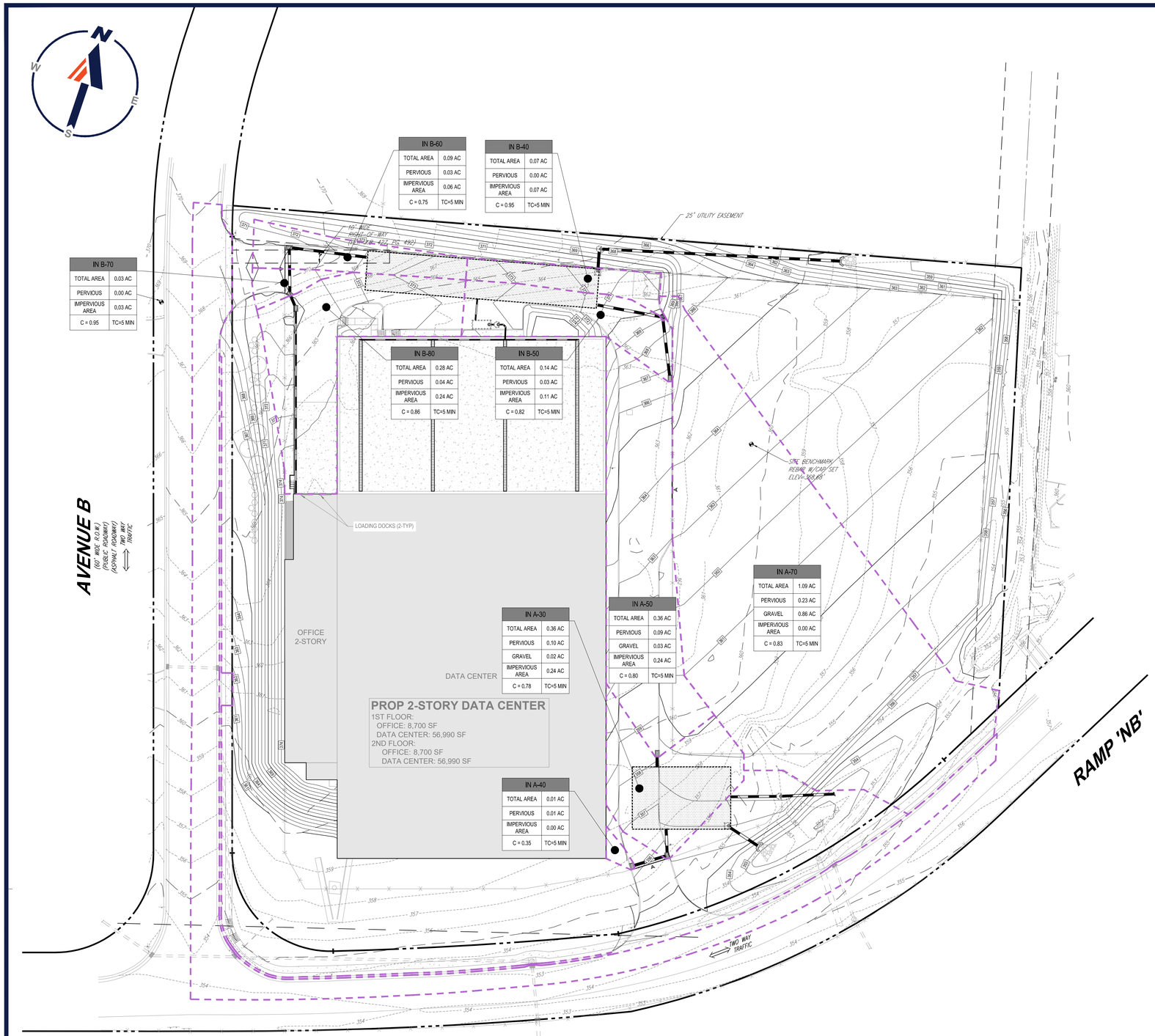
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NEW YORK LICENSE NO. 132204
NEW JERSEY LICENSE NO. GE05339500

SHEET TITLE:
POST DEVELOPMENT DRAINAGE AREA MAP

SHEET NUMBER:
C-404

REVISION 1 - 10/16/2026



DRAINAGE AREA LEGEND

LIMIT OF DISTURBANCE	LOD
INLET DRAINAGE AREA BOUNDARY	

40 20 10 0 40

SCALE: 1" = 40'

Oct 16, 2026
P:\PA\2026\PAB260025.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LDVP-PAB260025.00-1B----3LAYOUT C-405 INLT
AKH

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NEW YORK PE LICENSE NO. 132204
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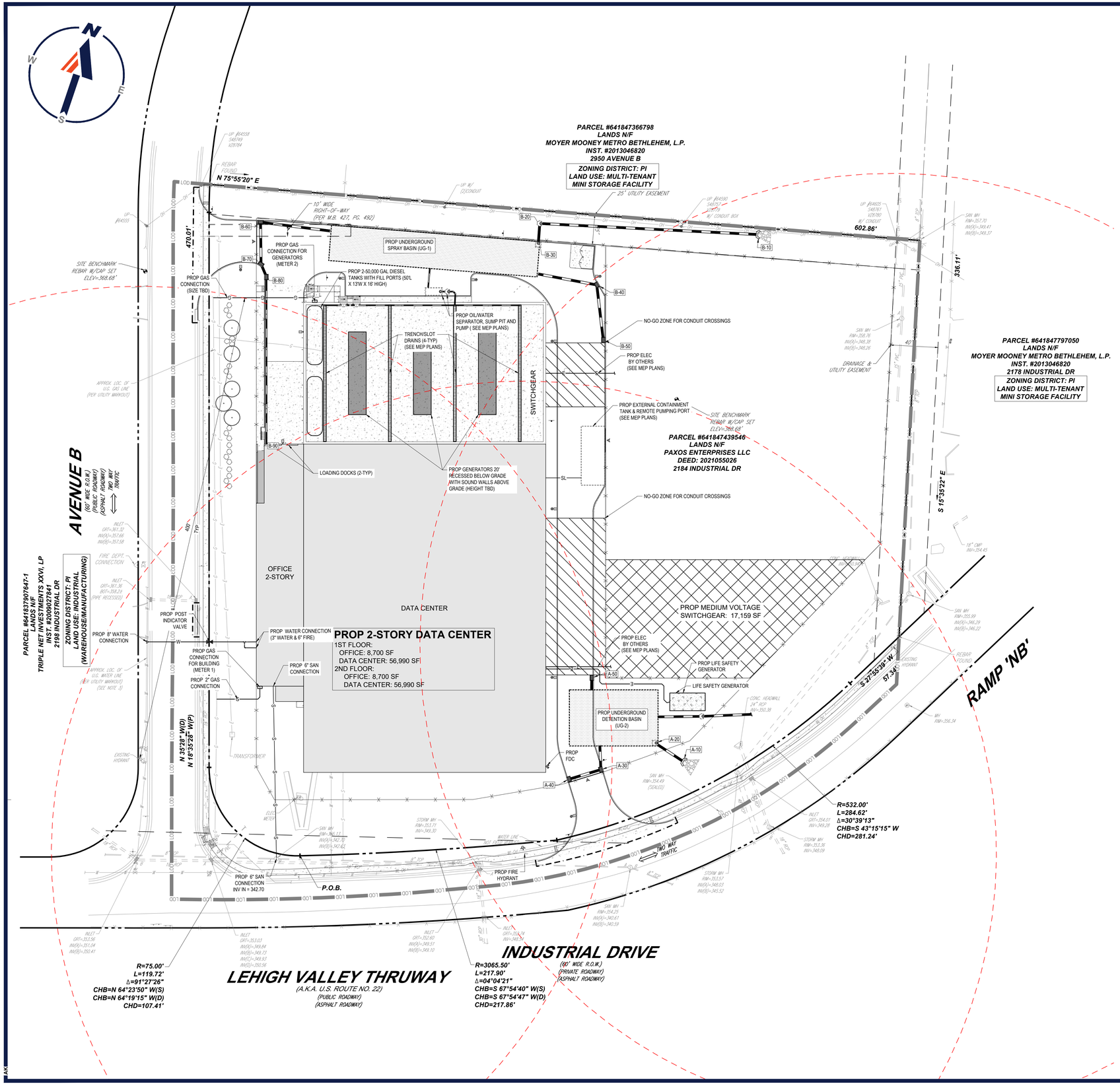
SHEET TITLE:

POST DEVELOPMENT DRAINAGE AREA MAP

SHEET NUMBER:

C-405

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DATE:	8/13/2026
CAD I.D.:	P-CIVL-LDVP

PROJECT:

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FOR

BOYLE CONSTRUCTION, INC.

PROPOSED
DATA CENTER

2184 INDUSTRIAL DRIVE
BETHLEHEM, PA 18017
CITY OF BETHLEHEM
LEHIGH COUNTY
PIN: 641847439546-1
CITY WARD 13 BLOCK 177

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PENNSYLVANIA LICENSE NO. PE080056
NEW YORK LICENSE NO. 103204
NEW JERSEY LICENSE NO. GE05339500

SHEET TITLE:

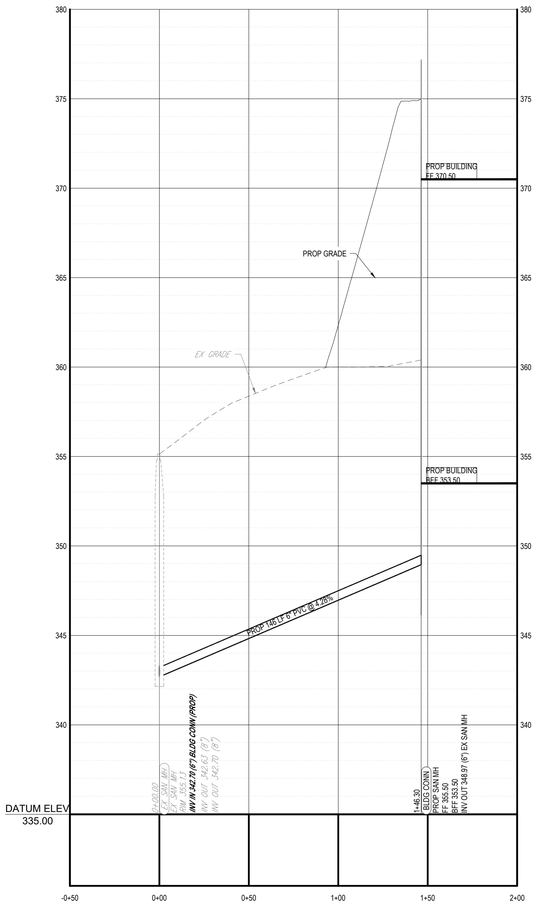
UTILITY PLAN

SHEET NUMBER:

C-501

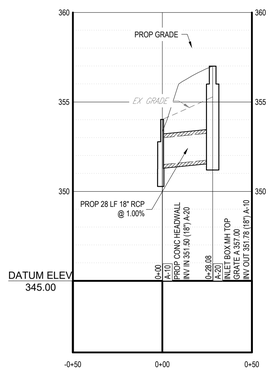
REVISION 1 - 10/16/2026

Oct 16, 2026
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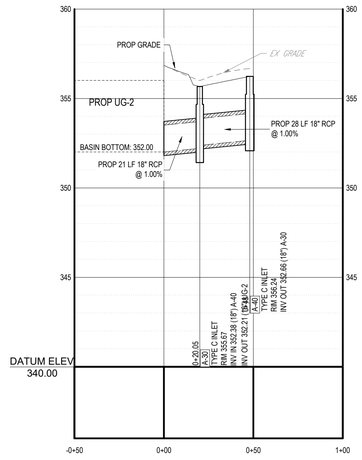
PROPOSED SANITARY PROFILE (EX SAN MH - BUILDING)

SCALE: 1"= 20 ' HORIZONTAL
1"= 2 ' VERTICAL



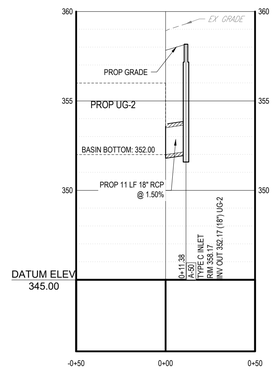
PROPOSED STORM PROFILE (A-10 - A-20)

SCALE: 1"= 20 ' HORIZONTAL
1"= 2 ' VERTICAL



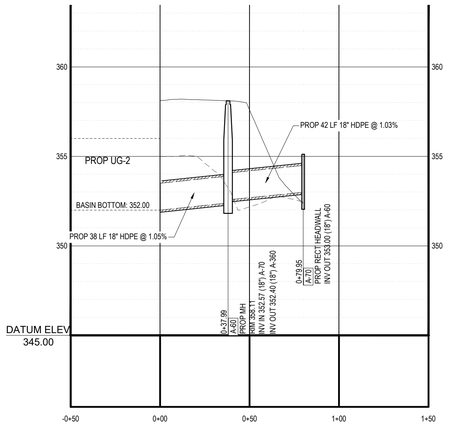
PROPOSED STORM PROFILE (UG-2 - A-40)

SCALE: 1"= 20 ' HORIZONTAL
1"= 2 ' VERTICAL



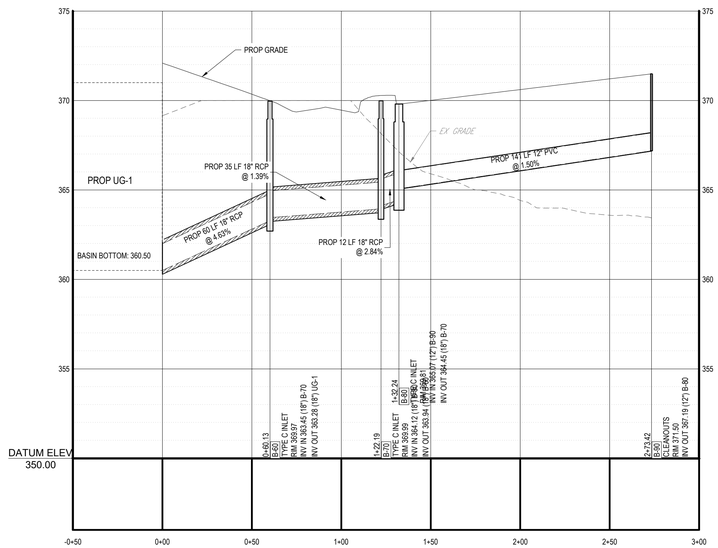
PROPOSED STORM PROFILE (UG-2 - A-50)

SCALE: 1"= 20 ' HORIZONTAL
1"= 2 ' VERTICAL



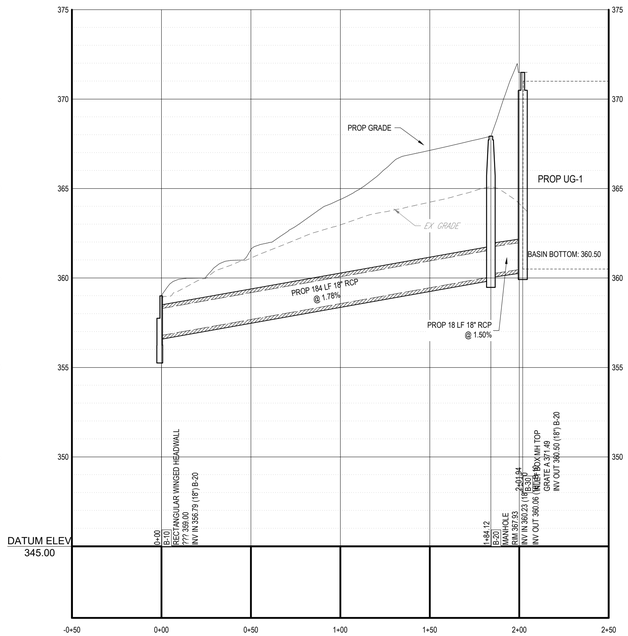
PROPOSED STORM PROFILE (UG-2 - A-70)

SCALE: 1"= 20 ' HORIZONTAL
1"= 2 ' VERTICAL



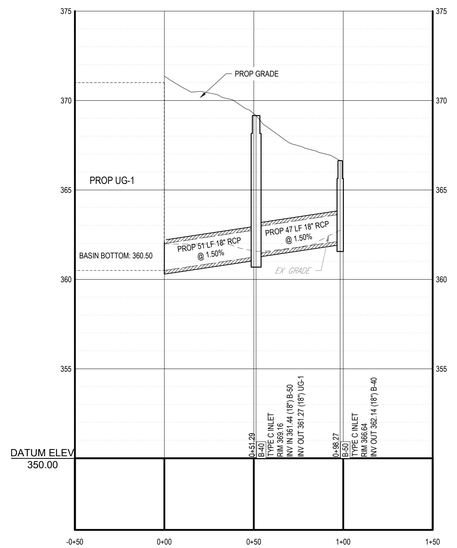
PROPOSED STORM PROFILE (UG-1 - B-90)

SCALE: 1"= 20 ' HORIZONTAL
1"= 2 ' VERTICAL



PROPOSED STORM PROFILE (B-10 - B-30)

SCALE: 1"= 20 ' HORIZONTAL
1"= 2 ' VERTICAL



PROPOSED STORM PROFILE (UG-1 - B-50)

SCALE: 1"= 20 ' HORIZONTAL
1"= 2 ' VERTICAL

PROFILE	
EXISTING GRADE	----------
PROPOSED GRADE	————

Oct 16, 2026
P:\PA\2026\PAB260025.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-PROF-PAB260025.00-1B ----> LAYOUT: C-601 PSAN

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PROJECT:

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— FOR —

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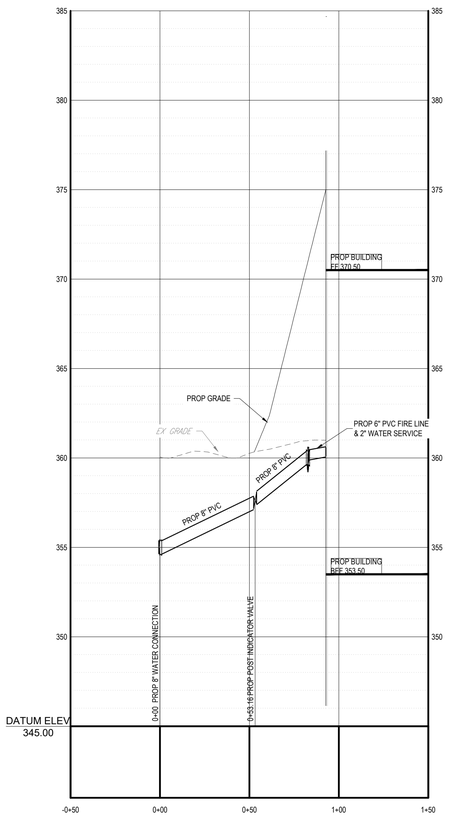
SHEET TITLE:

SANITARY & STORM PROFILES

SHEET NUMBER:

C-601

REVISION 1 - 10/16/2026



PROPOSED WATER PROFILE (PROP TEE - BUILDING)

SCALE: 1"= 20 ' HORIZONTAL
1"= 2 ' VERTICAL

PROFILE	
EXISTING GRADE	----------
PROPOSED GRADE	————

Oct 16, 2026
P:\PA\026\PAB260025.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-PROF-PAB260025.00-1B----1LAYOUT, C-602 PWAT
AKH

BOHLER

SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABILITY DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	10/16/2026	PER CITY COMMENTS	ATK / MRB

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PROJECT No.:	PAB260025.00-1B
DRAWN BY:	KMH
CHECKED BY:	MRB
DATE:	8/13/2026
CAD I.D.:	P-CIVL-PROF

PROJECT:

PRELIMINARY/ FINAL LAND DEVELOPMENT PLAN

FOR

BOYLE CONSTRUCTION, INC.

PROPOSED DATA CENTER

2184 INDUSTRIAL DRIVE
BETHLEHEM, PA 18017
CITY OF BETHLEHEM
LEHIGH COUNTY
PIN: 641847439546-1
CITY WARD 13 BLOCK 177

BOHLER

74 W BROAD STREET, SUITE 500
BETHLEHEM, PA 18018
Phone: (610) 709-9971
Fax: (610) 709-9976
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JEFFREY A. GEAVAN
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. GE082550 2005
NEW JERSEY LICENSE NO. GE05339500

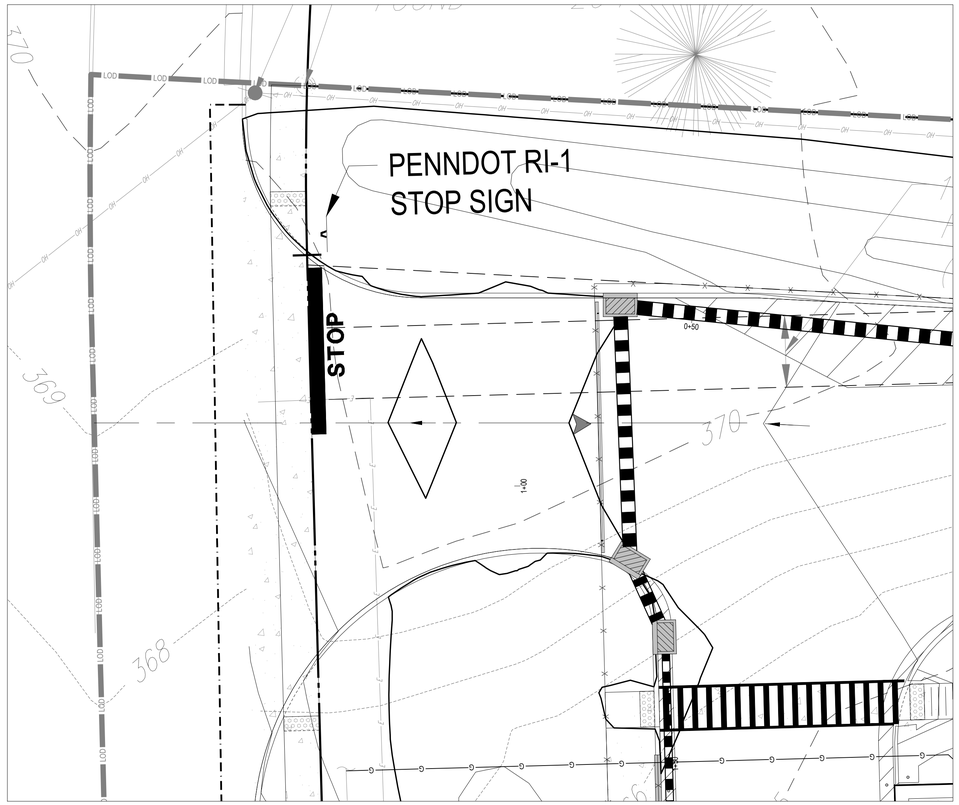
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WATER PROFILE

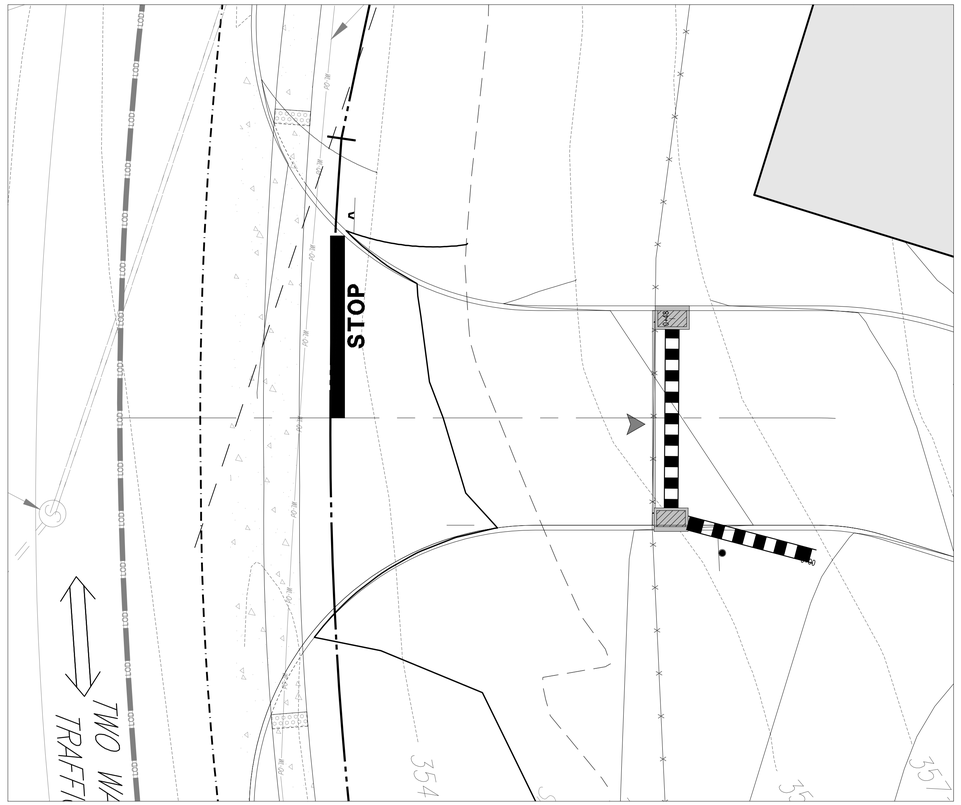
SHEET NUMBER:

C-602

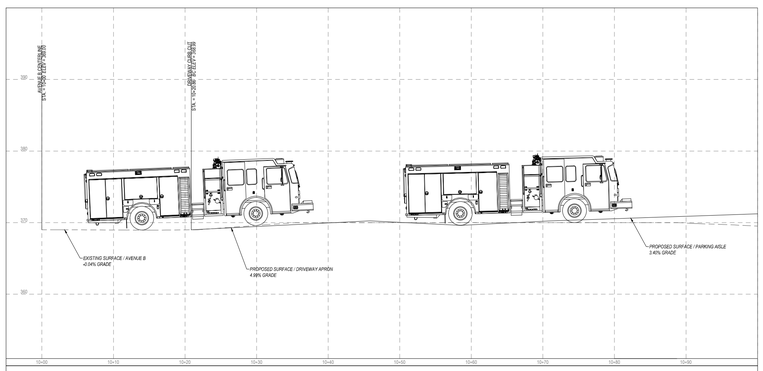
REVISION 1 - 10/16/2026



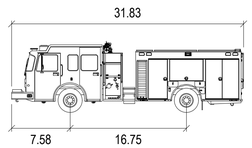
FIRE TRUCK AVENUE B ACCESS PROFILE
(ENGINE 6)
SCALE 1" = 10'



FIRE TRUCK INDUSTRIAL DRIVE ACCESS PROFILE
(ENGINE 6)
SCALE 1" = 10'

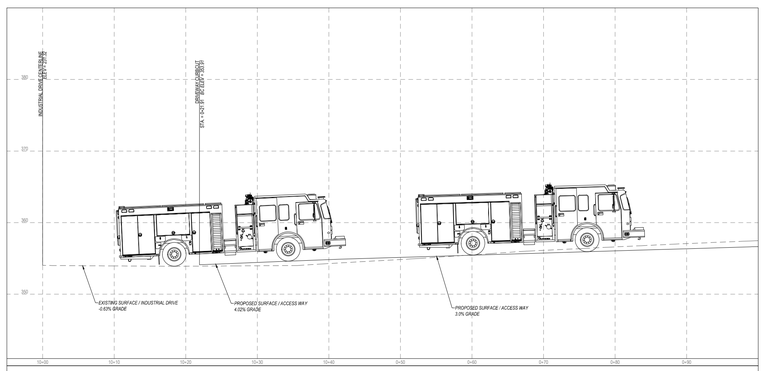


FIRE TRUCK ACCESS - AVENUE B ACCESS PROFILE



Bethlehem E6 - Fire Truck

		feet
Width	:	8.00
Track	:	6.91
Lock to Lock Time	:	6.0
Steering Angle	:	45.0



FIRE TRUCK ACCESS - INDUSTRIAL DRIVE ACCESS PROFILE

PROFILE	
EXISTING GRADE	----------
PROPOSED GRADE	————

10 5 2.5 0 10
SCALE: 1" = 10'

Oct 16, 2026
P:\PA\026\PAB260025.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-PROF-PAB260025.00-1B-----LAYOUT, C-603 ROAD
AXIS

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PROJECT No.:	PAB260025.00-1B
DRAWN BY:	KMH
CHECKED BY:	MRB
DATE:	8/13/2026
CAD I.D.:	P-CIVL-PROF

PROJECT:
PRELIMINARY/ FINAL LAND DEVELOPMENT PLAN
FOR
BOYLE CONSTRUCTION, INC.
PROPOSED DATA CENTER
2184 INDUSTRIAL DRIVE
BETHLEHEM, PA 18017
CITY OF BETHLEHEM
LEHIGH COUNTY
PIN: 641847439546-1
CITY WARD 13 BLOCK 177

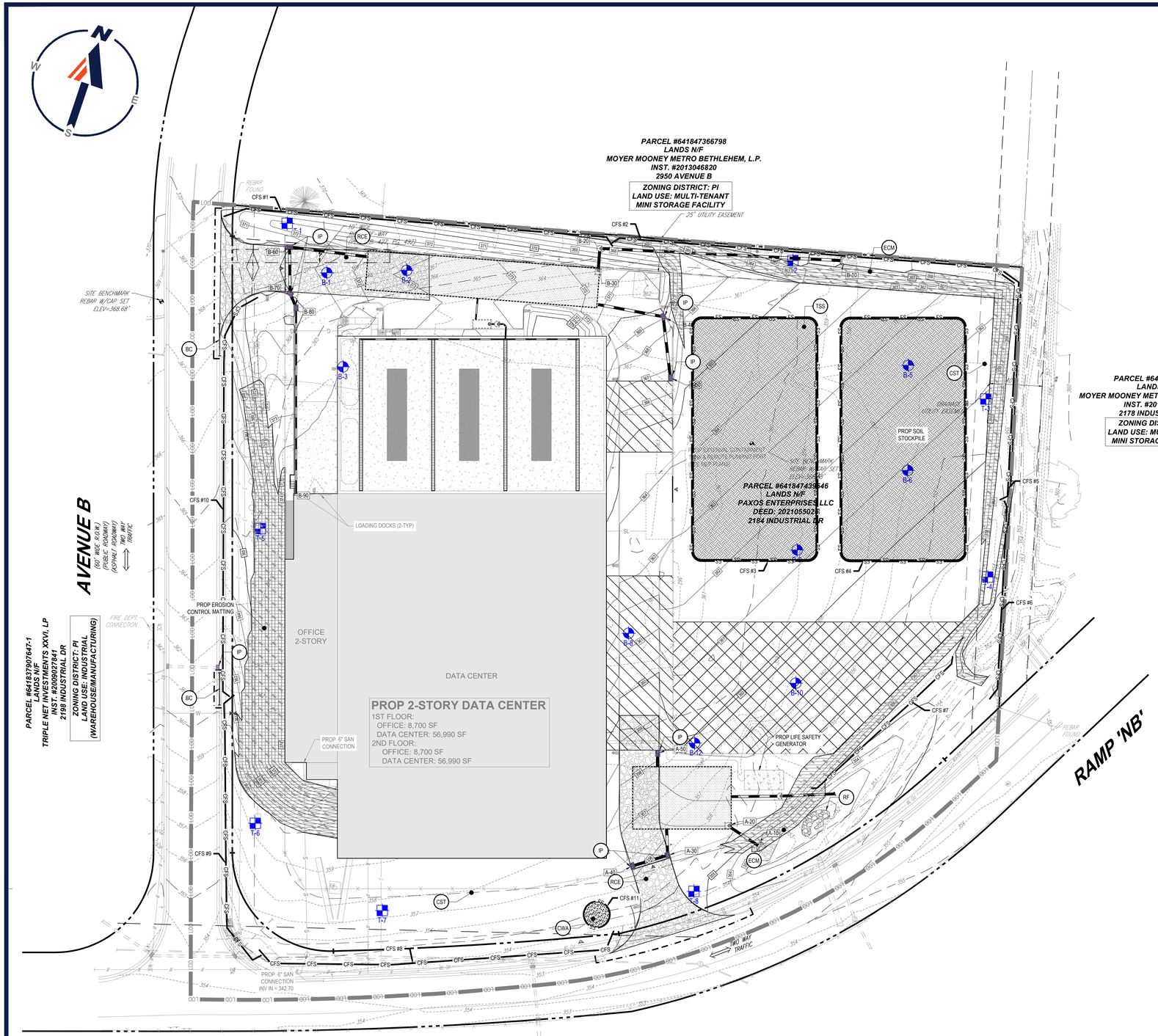
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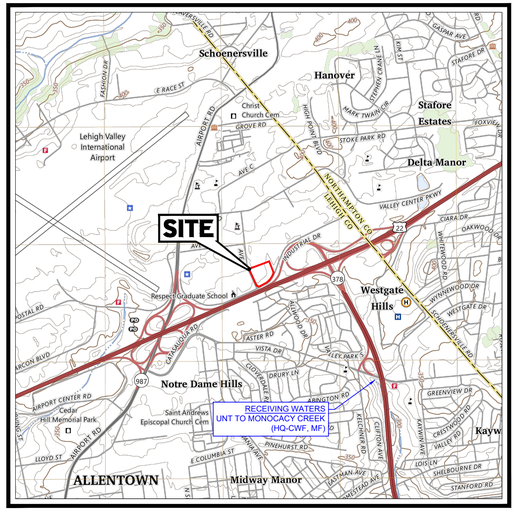
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COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
J. A. BEAVAN
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE082005
NEW YORK LICENSE NO. 103204
NEW JERSEY LICENSE NO. GE05339500

SHEET TITLE:
DRIVEWAY PROFILES

SHEET NUMBER:
C-603

REVISION 1 - 10/16/2026





USGS MAP

SCALE: 1" = 2,000'
SOURCE: USGS CATASAUQUA QUADRANGLE

DEMO LEGEND

PROPERTY LINE	
EASEMENT LINE	
SETBACK LINE	
UTILITY POLE	
TYPICAL SIGN	
PARKING COUNT	
CONTOUR	
SPOT ELEVATIONS	TC 516.4 DR 516.4
SANITARY LATERAL	
SANITARY MAIN	
WATER LINE	
ELECTRIC LINE	
GAS LINE	
OVERHEAD WIRE	
STORM SEWER	
FIRE HYDRANT	
SANITARY MANHOLE	
STORM MANHOLE	
WATER VALVE	
WATER METER	
GAS VALVE	
TYPICAL END SECTION	
CLEANOUT	

PROP EROSION LEGEND

LIMIT OF DISTURBANCE/ PROJECT SITE BOUNDARY	LOD/PSB
DURING CONSTRUCTION INLET DRAINAGE AREA	
DURING CONSTRUCTION SWALE DRAINAGE AREA	
SOIL DELINEATION BOUNDARY	
SOIL TYPE LABEL	UssB
EXISTING CONTOUR	419 / 420
EXISTING STORM SEWER	
EXISTING SANITARY SEWER	
EXISTING ELECTRIC LINE	
EXISTING TELEPHONE LINE	
EXISTING WATER LINE	
UTILITY LOCATION QUALITY	-Qv
EXISTING INLET	
EXISTING STORM MANHOLE	
EXISTING SANITARY MAHOLE	
EXISTING TREE	
TELECOM LINE	TC
SANITARY MAIN	S
WATER MAIN	W
WATER FIRE LINE	F
FIRE HYDRANT	
PROPOSED SANITARY MANHOLE	S
TEST PIT	T-#
BORING LOCATION	B-#
BARRICADE	
INLET PROTECTION	
18" COMPOST FILTER SOCK	CFS
ROCK FILTER	
DISCHARGE POINT	DP 001
CONCRETE WASHOUT	CWA
TEMPORARY STOCKPILE	ES SS SD
EXTENDED LENGTH ROCK CONSTRUCTION ENTRANCE	
EROSION CONTROL MATTING	

E&S BMP KEY LEGEND

- CWA — CONCRETE WASHOUT AREA
- CST — COMPOST FILTER SOCK TRAP
- IP — FILTER BAG INLET PROTECTION
- RCE — ROCK CONSTRUCTION ENTRANCE
- ECM — EROSION CONTROL MATTING
- SSP — TEMPORARY SOIL STOCKPILE
- BC — BARRICADE
- RF — ROCK FILTER

CHAPTER 93 STREAM CLASSIFICATION: TRIB 64099 TO MONOCACY CREEK VIA STORM SEWERS (HQ-CWF, MF)

IMPAIRMENT & SOURCE:
SOURCE UNKNOWN - PATHOGENS

THIS PLAN TO BE UTILIZED FOR SOIL EROSION AND SEDIMENT CONTROL PURPOSES ONLY

40 20 10 0 40
SCALE: 1" = 40'

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PROJECT No.: PAB260025.00-1B
DRAWN BY: KMH
CHECKED BY: MRB
DATE: 8/13/2026
CAD I.D.: P-CIVIL-LDVP

PROJECT:
PRELIMINARY/ FINAL LAND DEVELOPMENT PLAN
FOR
BOYLE CONSTRUCTION, INC.
PROPOSED DATA CENTER
2184 INDUSTRIAL DRIVE
BETHLEHEM, PA 18017
CITY OF BETHLEHEM
LEHIGH COUNTY
PIN: 641847439546-1
CITY WARD 13 BLOCK 177

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SHEET TITLE:
SOIL EROSION AND SEDIMENT CONTROL PLAN

SHEET NUMBER:
C-801

REVISION 1 - 10/16/2026

Oct 16, 2026
P:\PA\20\PAB260025.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LDVP-PAB260025.00-1B-----LAYOUT: C-801 EROS
AKH

SOIL EROSION GENERAL NOTES

(Rev. 6/2024)

1. THIS PLAN REPRESENTS THE MINIMUM LEVEL OF IMPLEMENTATION OF TEMPORARY EROSION AND SEDIMENTATION CONTROL STRUCTURES. ADDITIONAL FACILITIES OR MEASURES SHALL BE INSTALLED WHERE NECESSARY OR WHERE DIRECTED BY EITHER THE TOWNSHIP OR THE COUNTY CONSERVATION DISTRICT AS CONSTRUCTION PROGRESSES.
2. THE OWNER/CONSTRUCTION MANAGER IS RESPONSIBLE FOR ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROLS AND SITE STABILIZATION. THE OWNER SHALL ASSIGN ONE INDIVIDUAL TO BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL FACILITIES AND MEASURES.
3. PROTECTION TO THE EXISTING TREES AND SHRUBS SHALL BE TAKEN BY THE CONTRACTOR TO ELIMINATE UNNECESSARY DAMAGE.
4. ANY DRY FILL HAULED OFFSITE MUST BE TAKEN TO A LOCATION WITH AN EROSION AND SEDIMENTATION CONTROL PLAN WHICH HAS BEEN REVIEWED BY THE COUNTY CONSERVATION DISTRICT FOR ADEQUACY
5. EROSION AND SEDIMENTATION CONTROLS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE WITHIN TRIBUTARY AREAS OF THOSE CONTROLS.
6. STOCKPILES MUST BE STABILIZED IMMEDIATELY.
7. NO GRADING, EXCAVATING, REMOVAL OR DESTRUCTION OF THE TOPSOIL, TREES OR OTHER VEGETATIVE COVER OF THE LAND SHALL BE COMMENCED WITHIN A PROPOSED SUBDIVISION OR LAND DEVELOPMENT TRACT UNTIL SUCH TIME THAT A PLAN FOR SEDIMENTATION CONTROL AND MINIMIZING EROSION HAS BEEN REVIEWED AND FOUND SATISFACTORY BY THE COUNTY CONSERVATION DISTRICT AND REVIEWED AND APPROVED BY THE TOWNSHIP, OR THERE HAS BEEN A DETERMINATION BY THE TOWNSHIP, UPON RECOMMENDATION BY THE COUNTY CONSERVATION DISTRICT, THAT SUCH PLANS ARE NOT NECESSARY.
8. BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE COUNTY CONSERVATION DISTRICT.
9. THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE COUNTY CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.
10. CONTRACTOR SHALL USE TREADED MACHINERY AND MINIMIZE SOIL COMPACTION WHEREVER POSSIBLE.

DEFINITION OF CLEAN FILL AND IMPORT/EXPORT MATERIAL NOTES

(Rev. 5/2024)

IF THE SITE WILL NEED TO IMPORT OR EXPORT MATERIAL FROM THE SITE, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND DETERMINATION OF CLEAN FILL WILL REST WITH THE APPLICANT.

1. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE).
2. CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS IN TABLES FP-1A AND FP-1B FOUND IN THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL".
3. ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL. A COPY OF FORM FP-001 CAN BE FOUND AT THE END OF THESE INSTRUCTIONS.
4. ENVIRONMENTAL DUE DILIGENCE: THE APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL".

FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA. CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE. THE REGULATIONS ARE AVAILABLE ON-LINE AT WWW.PACODE.COM.

RECYCLING OR DISPOSAL OF MATERIAL

(Rev. 5/2024)

§102.4(b)(5)(xi)

THE FOLLOWING IS A LIST THAT INCLUDES, BUT THAT IS NOT LIMITED TO, THE POTENTIAL CONSTRUCTION WASTES THAT MAY EXIST ON-SITE:
- CONCRETE CURB AND SIDEWALK
- ASPHALT
- E&S BMP - COMPOST FILTER SOCKS
- E&S BMP - TEMPORARY RISER
- E&S BMP - EROSION CONTROL MATTING
- E&S BMP - INLET PROTECTION

ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 Pa. CODE 260.1 ET SEQ, 271.1, AND 287.1 ET SEQ NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE. BELOW IS A LIST OF METHODS FOR THE PROPER RECYCLING/DISPOSAL OF VARIOUS MATERIALS:

1. DUST CONTROL - CONSTRUCTION TRAFFIC MUST ENTER AND EXIT THE SITE AT THE STABILIZED CONSTRUCTION ENTRANCE. THE PURPOSE IS TO TRAP DUST AND MUD THAT WOULD OTHERWISE BE CARRIED OFF-SITE BY CONSTRUCTION TRAFFIC. WATER TRUCKS WILL BE USED AS NEEDED DURING CONSTRUCTION TO REDUCE DUST GENERATED ON THE SITE. DUST CONTROL MUST BE PROVIDED BY THE CONTRACTOR TO A DEGREE THAT IS ACCEPTABLE TO THE LOCAL CONSERVATION DISTRICT. AFTER CONSTRUCTION, THE SITE WILL BE STABILIZED, WHICH WILL REDUCE THE POTENTIAL FOR DUST GENERATION.
2. SOLID WASTE DISPOSAL - NO SOLID MATERIALS, INCLUDING BUILDING MATERIALS, ARE ALLOWED TO BE DISCHARGED FROM THE SITE WITH STORMWATER. ALL SOLID WASTE, INCLUDING DISPOSABLE MATERIALS INCIDENTAL TO THE MAJOR CONSTRUCTION ACTIVITIES, MUST BE COLLECTED AND PLACED IN CONTAINERS. THE CONTAINERS WILL BE EMPTIED AS NECESSARY BY A CONTRACT TRASH DISPOSAL SERVICE AND HAULED AWAY FROM THE SITE.
3. SANITARY FACILITIES - ALL PERSONNEL INVOLVED WITH CONSTRUCTION ACTIVITIES MUST COMPLY WITH STATE AND LOCAL SANITARY OR SEPTIC SYSTEM REGULATIONS. TEMPORARY SANITARY FACILITIES WILL BE PROVIDED AT THE SITE THROUGHOUT THE CONSTRUCTION PHASE. THEY MUST BE UTILIZED BY ALL CONSTRUCTION PERSONNEL AND WILL BE SERVICED BY A LICENSED COMMERCIAL OPERATOR.
4. WATER SOURCE - NON-STORMWATER COMPONENTS OF SITE DISCHARGE MUST BE CLEAN WATER. WATER USED FOR CONSTRUCTION WHICH DISCHARGES FROM THE SITE MUST ORIGINATE FROM A PUBLIC WATER SUPPLY OR PRIVATE WELL APPROVED BY THE STATE HEALTH DEPARTMENT. WATER USED FOR CONSTRUCTION THAT DOES NOT ORIGINATE FROM AN APPROVED PUBLIC SUPPLY MUST NOT DISCHARGE FROM THE SITE.
5. CONCRETE WASTE FROM CONCRETE READY-MIX TRUCKS - DISCHARGE OF EXCESS OR WASTE CONCRETE AND/OR WASH WATER FROM CONCRETE TRUCKS WILL BE ALLOWED ON THE CONSTRUCTION SITE, BUT ONLY IN SPECIFICALLY DESIGNATED DIKED AREAS PREPARED TO PREVENT CONTACT BETWEEN THE CONCRETE AND/OR WASH WATER AND STORMWATER THAT WILL BE DISCHARGED FROM THE SITE.

E&S PLAN DESIGNED AND IMPLEMENTED TO BE CONSISTENT WITH PCSM PLAN

(Rev. 5/2024)

§102.4(b)(5)(xiv)

REGARDING THE LOCATIONS OF EXISTING RIPARIAN BUFFERS RELATIVE TO THE LIMIT OF DISTURBANCE AND WHETHER PROPOSED INFILTRATION FACILITIES ARE OUTSIDE OF PROPOSED GRADING AREAS, NOTE THE FOLLOWING:
- THERE ARE NO EXISTING OR PROPOSED RIPARIAN BUFFERS.
- THERE ARE NO PROPOSED INFILTRATION BMPs OUTSIDE OF PROPOSED GRADING AREAS.

CRITICAL STAGES

(Rev. 5/2024)

- INSTALLATION OF SPRAY BASIN UG1
- INSTALLATION OF DETENTION BASIN UG2
- INSTALLATION OF VEGETATED SWALE
- INSTALLATION OF SUMP AND SNOUTS
- INSTALLATION OF LANDSCAPING

LOCATION OF ALL SURFACE WATERS AND THEIR CLASSIFICATION UNDER CHAPTER 93

(Rev. 5/2024)

§102.4(b)(5)(v)

THE SUBJECT SITE DRAINS TO UNT TO THE MONOCACY CREEK, WHICH HAS A HIGH QUALITY-COLD WATER FISHES, MIGRATORY FISHES (HQ-CWF, MF) CHAPTER 93 CLASSIFICATION.

RECEIVING SURFACE WATERS

(Rev. 5/2024)

§102.8(f)(5)

1. THE SUBJECT SITE DRAINS TO AN UNT TO THE MONOCACY CREEK, WHICH HAS A HIGH QUALITY-COLD WATER FISHES, MIGRATORY FISHES (HQ-CWF, MF) CHAPTER 93 CLASSIFICATION.
2. THE DEVELOPMENT IS IN AN HQ WATERSHED
3. THERE ARE NO WETLANDS LOCATED ON THE PROJECT SITE.

OVERALL SITE CONSTRUCTION SEQUENCE

(Rev. 06/2025)

§102.8(f)(7)

A. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED IN COMPLIANCE WITH CHAPTER 102 REGULATIONS BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY THAT WILL EXCEED FOUR (4) DAYS, OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION.

B. REFERENCES TO 'CONSERVATION DISTRICT' USED THROUGHOUT THIS SEQUENCE ARE MEANT TO REFER TO THE LEHIGH COUNTY CONSERVATION DISTRICT.

C. AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES INCLUDING, BUT NOT LIMITED TO: THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS AND A REPRESENTATIVE OF THE CONSERVATION DISTRICT FOR AN ON-SITE PRE-CONSTRUCTION MEETING. ALSO, AT LEAST THREE (3) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INC. AT 1-800-242-1776 FOR BURIED UTILITIES LOCATION.

D. BEFORE INITIATING ANY REVISION TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE CONSERVATION DISTRICT. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.

E. THE TERM 'PERMANENT STABILIZATION' USED THROUGHOUT THIS SEQUENCE IS MEANT TO DESCRIBE THE PROPER PLACING, GRADING, CONSTRUCTING, REINFORCING, LINING, AND COVERING OF SOIL, ROCK OR EARTH TO ENSURE THEIR PERMANENT RESISTANCE TO EROSION, SLIDING OR OTHER MOVEMENT. FOR AN EARTH DISTURBANCE TO BE PERMANENTLY STABILIZED, THE DISTURBED AREA SHALL BE COVERED WITH ONE OF THE FOLLOWING: A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION; OR AN ACCEPTABLE BMP THAT PERMANENTLY MINIMIZES ACCELERATED EROSION AND SEDIMENTATION.

F. FOR EACH OF THE 'CRITICAL STAGES' SPECIFIED BELOW, THE PERMITTEE SHALL PROVIDE ENGINEERING OVERSIGHT. A LICENSED PROFESSIONAL OR DESIGNEE KNOWLEDGEABLE IN THE DESIGN AND CONSTRUCTION OF SAID BMP, PREFERABLY THE DESIGN ENGINEER, SHALL CONDUCT THE OVERSIGHT.

G. SEDIMENT CONTROL FACILITIES, SUCH AS BASINS AND TRAPS, MUST BE PROTECTED FROM UNAUTHORIZED ACTS OF THIRD PARTIES. REFER ALSO TO THE MONITORING, INSPECTION AND REPORTING REQUIREMENTS PROVIDED HEREIN FOR ADDITIONAL REQUIREMENTS DURING CONSTRUCTION.

H. AS SOON AS SLOPES, CHANNELS, DITCHES AND OTHER DISTURBED AREAS REACH FINAL GRADE, THEY MUST BE STABILIZED. WHEN FINAL GRADE IS ACHIEVED DURING NON-GERMINATING MONTHS, THE AREA SHOULD BE MULCHED UNTIL THE BEGINNING OF THE NEXT PLANTING SEASON. AS DISTURBED AREAS WITHIN A PROJECT APPROACH FINAL GRADE, PREPARATIONS SHOULD BE MADE FOR SEEDING AND MULCHING TO BEGIN (I.E. ANTICIPATE THE COMPLETION DATE AND SCHEDULE THE SEEDER). IN NO CASE SHOULD AN AREA EXCEEDING 15,000 SQUARE FEET, WHICH IS TO BE STABILIZED BY VEGETATION, REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED. WAITING UNTIL EARTHMOVING IS COMPLETED BEFORE MAKING PREPARATIONS FOR SEEDING AND MULCHING IS NOT ACCEPTABLE. SEEDING AND MULCHING REQUIREMENTS ARE SPECIFIED IN THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.

1. STAKE OUT LIMIT OF DISTURBANCE.
2. INSTALL BARRIERS AT EXISTING ENTRANCES AND INSTALL ROCK CONSTRUCTION ENTRANCEAS DESIGNATED ON THE PLANS.
3. INSTALL ALL COMPOST FILTER SOCKS AND INLET PROTECTION WITHIN THE DESIGNATED LIMIT OF DISTURBANCE AS INDICATED ON THE PLANS. ONLY LIMITED CLEARING AND GRUBBING NECESSARY TO INSTALL THE PERIMETER EROSION AND SEDIMENT
4. INSTALL COMPOST FILTER SOCK TRAPS PRIOR TO GROUNDBREAK.
5. INITIATE THE NECESSARY EARTHWORK TO REACH THE GRADES INDICATED ON THE PLANS. BUILDING PAD CONSTRUCTION CAN COMMENCE CONCURRENTLY WITH ON-SITE IMPROVEMENTS. NOTE THAT BUILDING CONSTRUCTION MAY COMMENCE UPON ACCEPTANCE OF BUILDING PAD BY OWNER.
   a. THE CONCRETE WASHOUT MUST BE INSTALLED BEFORE ANY CONCRETE CAN BE POURED ON-SITE.
   b. THE CONTRACTOR MUST PERFORM BULK OF EARTHWORK TO BALANCE CUTS AND FILLS TO THE GREATEST EXTENT POSSIBLE.
   c. ALL AREAS DISTURBED DURING THE EARTHWORK PHASE OF CONSTRUCTION MUST BE TEMPORARILY SEEDED AND STABILIZED IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS AND SEEDING SPECIFICATIONS IF PERMANENT STABILIZATION CANNOT BE ACHIEVED WITHIN FOUR (4) DAYS.

7\. INITIATE SANITARY SEWER INSTALLATION, BEGINNING WITH THE CONNECTION AT THE EXISTING MANHOLE AND WORKING UP-SLOPE.
   a. PRIOR TO INSTALLATION WITHIN THE ROADWAY, ENSURE THAT THE APPROPRIATE TRAFFIC CONTROL MEASURES ARE IN PLACE.

8\. CRITICAL STAGE - INSTALLATION OF THE UNDERGROUND SPRAY BASIN (UG-1)
   a. INSTALLATION OF THE UNDERGROUND SPRAY BASIN SHALL INCLUDE THE INSTALLATION OF THE OUTFALL SYSTEM (B10 TO B30).
   b. REFER TO THE ADDITIONAL SPRAY FACILITY SEQUENCING, INSTALLATION AND MAINTENANCE & INSPECTION NOTES PROVIDED ON THE SPRAY IRRIGATION PLANS FOR CONSTRUCTION OF THE SPRAY BASINS.
   c. PRIOR TO INITIATING CONSTRUCTION, THE CONTRACTOR IS TO PERFORM INFILTRATION TESTING AT THE DESIGNATED SPRAY AREA(S) TO CONFIRM INFILTRATION RATES. THE RESULTS OF THE TESTING ARE TO BE GIVEN TO THE ENGINEER PROVIDING OVERSIGHT, WHO WILL THEN MAKE A DETERMINATION IF BASIN CONSTRUCTION SHOULD COMMENCE.
   d. INLETS DISCHARGING TO THE SPRAY BASIN MUST BE BLOCKED IMMEDIATELY AFTER INSTALLATION AND REMAIN BLOCKED UNTIL SITE IS FULLY STABILIZED TO PREVENT SEDIMENT FROM ENTERING THE DETENTION BASIN.
   e. UPON INSTALLATION OF THE UNDERGROUND SPRAY BASIN, THE CONTRACTOR SHALL REFER TO THE MANUFACTURER'S SPECIFICATIONS REGARDING THE APPROPRIATE AMOUNT AND TYPE OF COVER THAT SHALL BE PLACED OVER TOP OF THE BASIN DURING CONSTRUCTION ACTIVITIES AND PRIOR TO THE BASIN AREA RECEIVING PERMANENT COVER.

8\. CRITICAL STAGE - INSTALLATION OF THE UNDERGROUND DETENTION BASIN (UG-2)
   a. INSTALLATION OF THE UNDERGROUND SPRAY BASIN SHALL INCLUDE THE INSTALLATION OF THE OUTFALL SYSTEM (A10 TO A20).
   b. INLETS DISCHARGING TO THE DETENTION BASIN MUST BE BLOCKED IMMEDIATELY AFTER INSTALLATION AND REMAIN BLOCKED UNTIL SITE IS FULLY STABILIZED TO PREVENT SEDIMENT FROM ENTERING THE DETENTION BASIN.
   c. UPON INSTALLATION OF THE UNDERGROUND DETENTION BASIN, THE CONTRACTOR SHALL REFER TO THE MANUFACTURER'S SPECIFICATIONS REGARDING THE APPROPRIATE AMOUNT AND TYPE OF COVER THAT SHALL BE PLACED OVER TOP OF THE BASIN DURING CONSTRUCTION ACTIVITIES AND PRIOR TO THE BASIN AREA RECEIVING PERMANENT COVER.CONTINUE WITH THE INSTALLATION OF THE REMAINING STORM DRAINAGE.

9\. CONTINUE WITH THE BALANCE OF EARTHWORK.
10\. INSTALL UTILITIES (ELECTRIC, GAS, TELEPHONE, CABLE, ETC.) PRIOR TO CONNECTIONS IN AVENUE B & INDUSTRIAL DRIVE, THE APPROPRIATE TRAFFIC CONTROL MEASURES ARE TO BE IN PLACE.
11\. INSTALL THE STONE SUBBASE FOR CURB AND INSTALL CURBING AND CRUSHED AGGREGATE BASE COURSE FOR PAVING.
12\. FINAL GRADE AND PLACE TOPSOIL IN ALL LANDSCAPE AREAS.
15\. CRITICAL STAGE - INSTALL THE INLET WATER QUALITY DEVICES CONSISTING OF THE SNOUT HOODS AND THE BIO-SKIRT.
16\. CRITICAL STAGE - INSTALL THE MEADOW PLANTINGS.
17\. INSTALL BITUMINOUS PAVEMENT AND CONCRETE INCLUDING SIDEWALKS.
18\. INSTALL FINAL VEGETATION AND LANDSCAPING SPECIFIED ON THE LANDSCAPE PLAN.
19\. UPON PERMANENT STABILIZATION AND NOTIFICATION TO THE CONSERVATION DISTRICT, REMOVE ANY REMAINING EROSION AND SEDIMENT CONTROL FACILITIES. ANY AREA DISTURBED DURING THE REMOVAL OF EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE STABILIZED IMMEDIATELY.
20\. CLEAR SITE OF DEBRIS AND ALL UNWANTED MATERIALS. OPERATOR SHALL REMOVE FROM SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ, 271.1 ET SEQ THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP OR DISCHARGE ANY BUILDING MATERIAL OR WASTE AT THIS SITE.
21\. DEMOBILIZE.
22\. A NOTICE OF TERMINATION FORM SHOULD BE SUBMITTED TO THE CONSERVATION DISTRICT UPON STABILIZATION AND FINAL COMPLETION OF THIS PROJECT.

GEOLOGIC FORMATIONS/SOIL CONDITIONS THAT MAY HAVE THE POTENTIAL TO CAUSE POLLUTION

(Rev. 5/2024)

§102.4(b)(5)(xii)

THERE ARE NO GEOLOGIC FORMATIONS OR SOIL CONDITIONS THAT COULD CAUSE CONTAMINANT POLLUTION DURING EARTH DISTURBANCE ACTIVITIES.

GENERAL CONSERVATION NOTES AND SPECIFICATIONS

(Rev. 10/2024)

I. GENERAL INFORMATION

A. THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE AVAILABLE AT THE SITE.
B. NO SEDIMENT OR SEDIMENT LADEN WATER MUST BE ALLOWED TO LEAVE THE SITE WITHOUT FIRST BEING PROPERLY FILTERED.
C. ANY SEDIMENT THAT IS TRACKED ONTO THE ROAD MUST BE CLEANED OFF BEFORE THE END OF THE DAY.
D. DISTURBED AREAS ON WHICH EARTHMOVING ACTIVITIES HAVE CEASED AND WHICH WILL REMAIN EXPOSED SHALL BE STABILIZED IMMEDIATELY, EITHER TEMPORARILY OR PERMANENTLY, INCLUDING THE RESTORATION OF DRIVEWAYS, STOCKPILES, OFF-SITE UNDERGROUND UTILITY LINES AND GRADED PERIMETER AREAS. DURING NON-GERMINATION PERIODS, MULCH MUST BE APPLIED AT RECOMMENDED RATES. CRUSHED STONE ON PAVEMENT SUBGRADES IS CONSIDERED ADEQUATE PROTECTION.
E. AREAS THAT FAIL TO GERMINATE MUST BE RE-SEEDED OR MULCHED.
F. WHERE DISTURBED AREAS ARE DIFFICULT TO STABILIZE, NETTING SHOULD BE USED TO HOLD SEED AND MULCH IN PLACE; THIS IS ESPECIALLY IMPORTANT AROUND WATERCOURSES, IN SWALES AND AREAS OF CONCENTRATED FLOWS, STEEP SLOPES.
G. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING, AND RE-NETTING, MUST BE PERFORMED IMMEDIATELY. IF AT ANY TIME PRIOR TO SITE STABILIZATION ANY E&SP PROBLEMS OCCUR WHICH REQUIRE ADDITIONAL CONTROLS, IMMEDIATE ACTION MUST BE TAKEN TO CORRECT THE PROBLEMS.
H. THE CONTRACTOR MUST DEVELOP AND COORDINATE WITH OWNER AND HAVE APPROVED BY THE COUNTY CONSERVATION DISTRICT, A SEPARATE EROSION AND SEDIMENT POLLUTION CONTROL PLAN FOR EACH SPOIL, BORROW OR OTHER WORK AREA NOT DETAILED ON THE PERMITTED PLANS, WHETHER LOCATED WITHIN OR OUTSIDE OF THE LIMITS OF CONSTRUCTION.
I. CONTRACTOR SHALL NOTIFY THE COUNTY CONSERVATION DISTRICT OF DISPOSAL METHOD AND LOCATION OF MATERIALS (IF ANY) TO BE REMOVED FROM SITE.
J. ALL MATERIALS TO BE RECYCLED OR DISPOSED OF MUST DO SO IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL REGULATIONS. STOCKPILES TO BE HAULED OFF SITE MUST HAVE AN APPROVED EROSION AND SEDIMENT CONTROL PLAN AT THE DESTINATION LOCATION.
K. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN SOIL STABILIZATION THROUGHOUT CONSTRUCTION. ADDITIONAL MEASURES REQUIRED TO ENSURE ON-SITE AND OFF-SITE STABILIZATION IN AND ADJACENT TO CONSTRUCTION ACTIVITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE AT NO COST TO THE OWNER. IMMEDIATE NOTIFICATION SHALL BE GIVEN TO THE OWNER AND ENGINEER SHOULD ADDITION STABILIZATION MEASURES BE NECESSARY; IN ACCORDANCE WITH THE NPDES AND/OR SWPPP REQUIREMENTS FOR THE PROJECT.
L. NPDES PERMIT REQUIRES THAT A VISUAL SITE INSPECTION REPORT USING THE CURRENT PADEP FORM BE COMPLETED BY A QUALIFIED SITE INSPECTOR AT THE FOLLOWING FREQUENCY:
   L.1. WEEKLY,
   L.2. AFTER RAINFALL EVENTS OF AT LEAST 0.25 INCH IN A 24-HOUR PERIOD, AND
   L.3. AS A FOLLOW-UP TO DEFICIENCIES FOUND.
M. THE PERMITTEE MUST TAKE COLOR PHOTOGRAPHS OF E&S BMPS AND PCSM SCMS ON THE PROJECT SITE AT LEAST MONTHLY, UNLESS OTHERWISE APPROVED IN WRITING BY DEP/CCD, AND WHEN DEFICIENCIES IN BMPS AND SCMS ARE IDENTIFIED. THE PHOTOGRAPHS MUST HAVE A DATE AND TIME STAMP AND BE MADE AVAILABLE FOR DEP/CCD REVIEW UPON REQUEST.
N. WITHIN 30 DAYS FOLLOWING COMPLETION OF A STRUCTURAL PCSM SCM, AS DEFINED IN THE REISSUED PAG-02 GENERAL PERMIT, THE PERMITTEE MUST SUBMIT THE SCM CONSTRUCTION CERTIFICATION FORM (3800-FM-BCW0271J) TO DEP/CCD, SIGNED BY THE PERMITTEE AND A LICENSED PROFESSIONAL.
O. BEGINNING DECEMBER 8, 2025, THE PERMITTEE MUST COMPLETE CONFIRMATION TESTING FOR INFILTRATION CAPACITY TO VERIFY THAT INFILTRATION SCMS WILL PERFORM AS DESIGNED. TESTING IS REQUIRED FOR BOTH THE SUBGRADE PREPARATION AND POST CONSTRUCTION CONDITION.
P. UPON THE REDUCTION, LOSS, OR FAILURE OF ANY BMP OR PCSM SCM, THE PERMITTEE AND CO-PERMITTEE(S) MUST INITIATE THE REPAIR OR REPLACEMENT OF THE BMP SCM AS FOLLOWS:
   P.1. IMMEDIATELY UPON DISCOVERY IF THE REDUCTION, LOSS, OR FAILURE OF A BMP OR SCM HAS RESULTED IN OR IS LIKELY TO RESULT IN SEDIMENT OR OTHER POLLUTANTS FLOWING OFF THE PROJECT SITE AND/OR DISCHARGING TO SURFACE WATERS. COMPLETION OF THE REPAIR OR REPLACEMENT OF THE BMP OR SCM MUST OCCUR WITHIN 24 HOURS UNLESS OTHERWISE REQUIRED BY DEP/CCD.
   P.2. WHEN FAILURE OF A BMP OR SCM IS NOT LIKELY TO CAUSE POLLUTION, THE PERMITTEE MUST INITIATE REPAIR OR REPLACEMENT WITHIN 24 HOURS OF DISCOVERY AND COMPLETE THE REPAIR OR REPLACEMENT WITHIN 7 DAYS, UNLESS OTHERWISE REQUIRED BY DEP/CCD.
Q. IF SOIL CONTAMINATION OR GROUNDWATER CONTAMINATION IS ENCOUNTERED DURING CONSTRUCTION THE PERMITTEE IS TO NOTIFY DEP AND CCD OF NEWLY DISCOVERED ON-SITE SOIL OR GROUNDWATER CONTAMINATION. NOTIFICATION IS TO BE PROVIDED WITHIN 24 HOURS OF RECEIVING THE SAMPLING RESULTS INDICATING THE CONTAMINATION.
R. BY DECEMBER 7 OF EACH YEAR, THE PERMITTEE MUST SUBMIT AN ANNUAL REPORT (3800-PM-BCW0405E) TO THE OFFICE OF DEP/CCD THAT APPROVED GENERAL PERMIT COVERAGE TO REPORT ON THE STATUS OF EARTH DISTURBANCE ACTIVITIES. THE FIRST ANNUAL REPORT FOR EXISTING PERMITTEES IS DUE DECEMBER 7, 2025.
S. RESIDENTIAL ONLY - WHENEVER A LOT OR PARCEL CONTAINING A PCSM SCM IS SOLD DURING THE TERM OF GENERAL PERMIT COVERAGE, THE PERMITTEE MUST PROVIDE THE NEW PROPERTY OWNER WITH 1) RECORD DRAWINGS OR OTHER PLANS IDENTIFYING THE SCM; 2) A LONG-TERM OPERATION AND MAINTENANCE (O&M) PLAN FOR THE SCM; AND 3) A COMPLETED NEW PROPERTY OWNER NOTIFICATION FORM (3800-FM-BCW00271I). THE PERMITTEE MUST SUBMIT COPIES OF COMPLETED NEW PROPERTY OWNER NOTIFICATION FORMS TO DEP/CCD AND TO THE MUNICIPALITY WHERE THE SCM IS LOCATED WITHIN 30 DAYS OF THE DATE OF TRANSFER OF THE PROPERTY.

II. STANDARD FOR LAND GRADING

A. DEFINITION: RESHAPING THE GROUND SURFACE BY GRADING TO PLAN GRADES, WHICH ARE DETERMINED BY TOPOGRAPHIC SURVEY AND LAYOUT.
   A.1. PROVISIONS SHALL BE MADE TO SAFELY CONDUCT SURFACE WATER TO STORM DRAINS OR SUITABLE WATER COURSES AND TO PREVENT SURFACE RUNOFF FROM DAMAGING CUT FACES AND FULL SLOPES.
   A.2. ADJOINING PROPERTY SHALL BE PROTECTED FROM EXCAVATION AND FILLING OPERATIONS.
B. INSTALLATION REQUIREMENTS
   B.1. TIMBER, LOGS, BRUSH, RUBBISH, ROCKS, STUMPS AND VEGETABLE MATTER WHICH WILL INTERFERE WITH THE GRADING OPERATION OR AFFECT THE PLANNED STABILITY OR FILL AREAS SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH STANDARD FOR DISPOSAL OF MATERIALS.
   B.2. FILL MATERIAL IS TO BE FREE OF BRUSH, RUBBISH, TIMBER, LOGS, VEGETATIVE MATTER AND STUMPS IN AMOUNTS THAT WILL BE DETRIMENTAL TO CONSTRUCTING STABLE FILLS.
   B.3. ALL FILLS SHALL BE COMPACTED SUFFICIENTLY FOR THEIR INTENDED PURPOSE AND AS REQUIRED TO REDUCE SLIPPING, EROSION OR EXCESS SATURATION.
   B.4. ALL DISTURBED AREAS SHALL BE LEFT WITH A NEAT AND FINISHED APPEARANCE AND SHALL BE PROTECTED FROM EROSION.
   B.5. (SEE I. D.)

III. STANDARD FOR UTILITY TRENCH EXCAVATION

A. LIMIT ADVANCE CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
B. LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY. DAILY BACKFILLING OF THE TRENCH MAY BE DELAYED FOR A MAX OF SIX DAYS FOR CERTAIN CASES REQUIRING TESTING OF THE INSTALLED PIPE.
C. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING TO A FACILITY FOR REMOVAL OF SEDIMENT (SEDIMENT FILTER BAG, SEE DETAIL) BEFORE PIPE PLACEMENT AND/OR BACKFILLING BEGINS.
D. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND APPROPRIATE TEMPORARY EROSION AND SEDIMENT POLLUTION CONTROL MEASURES / FACILITIES WILL BE INSTALLED. SEEDING AND MULCHING OF ALL DISTURBED AREAS WILL BE DONE IMMEDIATELY.
E. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FORM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
F. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.

IV. STANDARD FOR TEMPORARY STABILIZATION

A. STANDARD FOR TEMPORARY STABILIZATION WITH FIBERMULCH
   A.1. MULCHING IS MOST APPLICABLE TO THOSE AREAS SUBJECT TO PERIODIC DISTURBANCE AND REWORKING IN ADDITION, STABILIZATION WITH FIBER MULCH SHALL BE USED DURING NON-GERMINATION PERIODS.
   A.2. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO THE SLOPE.
   A.3. GRADE AS NEED AND FEASIBLE. SEE STANDARD FOR LAND GRADING.
   A.4. PROTECTIVE MATERIALS TO BE USED:
   A.4.a. UNROTTED SMALL-GRAIN UN-CHOPPED STRAW OR HAY AT 3.0 TONS PER ACRE (4 TONS PER ACRE BETWEEN NOVEMBER 1 AND MARCH 1) SPREAD UNIFORMLY AND ANCHORED WITH LIQUID MULCH BINDER. BINDER PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH THE PRODUCT MANUFACTURER'S SPECIFICATIONS.
   A.4.b. HYDROMULCHER. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL. LIQUID MULCH BINDERS: APPLY IMMEDIATELY AFTER PLACEMENT OF HAY OR STRAW MULCH TO MINIMIZE LOSS BY WIND OR WATER. PRODUCTS TO BE INSTALLED AT A RATE OF 1 TON PER ACRE (MINIMUM) OR PER MANUFACTURER'S SPECIFICATIONS.

B. STANDARD FOR TEMPORARY STABILIZATION WITH SEED
   B.1. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN TWELVE (12) MONTHS MUST BE SEEDED AND MULCHED IMMEDIATELY WITH A TEMPORARY COVER.
   B.2. ALL AREAS TO BE PERMANENTLY SEEDED SHALL ALSO RECEIVE TEMPORARY SEEDING CONCURRENTLY.
   B.3. SEEDBED PREPARATION FOR TEMPORARY SEEDING
   B.3.A. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO SLOPE.
   B.3.B. APPLY AGRICULTURAL LIME AT A RATE OF 1 TONE PER ACRE
   B.3.C. APPLY 10-10-10 FERTILIZER A RATE OF 500 POUNDS PER ACRE
   B.3.D. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF FOUR (4) INCHES.

C. SEEDING: SEE SEEDING SPECIFICATIONS

V. STANDARD FOR PERMANENT STABILIZATION

A. SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER
   A.1. SITE PREPARATION
   A.1.a. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE.
   A.1.b. SUBSOIL SHOULD BE TESTED FOR LIME REQUIREMENT AND LIMESTONE, IF NEEDED, SHOULD BE APPLIED TO BRING SOIL PH TO BETWEEN 5.5 AND 7 AND INCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES.
   A.1.c. IMMEDIATELY PRIOR TO TOPSOIL DISTRIBUTION, THE SURFACE SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3-5 INCHES TO PROVIDE A GOOD BOND WITH THE TOPSOIL.
   A.2. APPLYING TOPSOIL
   A.2.a. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE.
   A.2.b. REMOVAL OF TOPSOIL IS NOT ALLOWED UNLESS APPROVED BY THE MUNICIPALITY OR UNLESS AS SPECIFIED BY THE SITE GEOTECHNICAL ENGINEER DUE TO THE SOIL'S UNSUITABILITY FOR PLACEMENT.
   A.2.c. CONTRACTOR SHALL PROVIDE SIX INCH (6") MINIMUM DEPTH OF TOPSOIL.
   A.3. SEEDBED PREPARATION
   A.3.a. A SOIL TEST SHALL BE CONDUCTED TO ACCURATELY DETERMINE NECESSARY SOIL AMENDMENTS.
   A.3.b. PERFORM ALL CULTURAL OPERATIONS AT RIGHT ANGLES TO SLOPE.
   A.3.c. SOIL MODIFICATIONS:
   A.3.c.1. APPLY 10-20-20 RATED FERTILIZER AT A RATE OF 1000 POUNDS PER ACRE OR 25 POUNDS PER 1000 SQUARE FEET, OR AS DIRECTED BY SOIL TEST.
   A.3.c.2. APPLY AGRICULTURAL LIME AT A RATE OF 6 TONS PER ACRE OR 240 POUNDS PER 1000 SQUARE FEET, OR AS DIRECTED BY SOIL TEST.
   A.3.d. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM FINE SEEDBED IS PREPARED.
   A.3.e. REMOVE FROM THE SURFACE ALL STONES ONE INCH (1") OR LARGER IN ANY DIMENSION, REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE MATERIAL.
   A.3.f. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RE-TILLED AND FIRMED AS ABOVE.
   A.4. SEEDING: SEE SEEDING SPECIFICATIONS
   A.5. SEED BED AREAS SHALL ALSO BE STABILIZED USING AN APPROVED METHOD (EG: HYDROMULCHING) AS OUTLINED IN ITEM IV.A. HEREIN

B. STANDARD FOR PERMANENT STABILIZATION WITH SOD
   B.1. METHODS AND MATERIALS
   B.1.a. CULTIVATED SOD IS PREFERRED OVER NATIVE OR PASTURE SOD. SPECIFY "CERTIFIED SOD," OR OTHER HIGH QUALITY CULTIVATED SOD.
   B.1.b. SOD SHOULD BE FREE OF WEEDS AND UNDESIRABLE COARSE WEEDY GRASSES.
   B.1.c. SOD SHOULD BE OF UNIFORM THICKNESS, APPROXIMATELY 5/8 INCH, PLUS OR MINUS 1/4 INCH, AT TIME OF CUTTING. (EXCLUDES TOP GROWTH).
   B.1.d. SOD SHOULD BE VIGOROUS AND DENSE AND BE ABLE TO RETAIN ITS OWN SHAPE AND WEIGHT WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP FROM THE UPPER 0% OF THE STRIP. BROKEN PADS OR TORN AND UNEVEN ENDS WILL NOT BE ACCEPTABLE.
   B.1.e. A SOD OF KENTUCKY 31 TALL FESCUE WITH BLUEGRASS, OR A FESCUE BLEND IS PREFERRED.
   B.1.f. ONLY MOIST, FRESH UNHEATED SOD SHOULD BE USED. SOD SHOULD BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS.
   B.2. SITE PREPARATIONS: SEE SPECIFICATION FOR SEEDING & SOIL TREATMENT FOR PERMANENT VEGETATIVE COVER (ITEM V.A. ABOVE)
   B.3. SOD PLACEMENT
   B.3.a. SOD STRIPS SHOULD BE LAID ON THE CONTOUR, NEVER UP AND DOWN THE SLOPE, STARTING AT THE BOTTOM OF THE SLOPE AND WORKING UP. ON STEEP SLOPES, THE USE OF LADDERS WILL FACILITATE THE WORK AND PREVENT DAMAGE TO THE SOD. DURING PERIODS OF HIGH TEMPERATURE, LIGHTLY IRRIGATE THE SOIL IMMEDIATELY PRIOR TO LAYING THE SOD.
   B.3.b. PLACE SOD STRIPS WITH SNUG EVEN JOINTS THAT ARE STAGGERED. OPEN SPACES INVITE EROSION.
   B.3.c. ROLL OR TAMP SOD IMMEDIATELY FOLLOWING PLACEMENT TO INSURE SOLID CONTACT OF ROOT MAT AND SOIL SURFACE. DO NOT OVERLAP SOD. ALL JOINTS SHOULD BE BUTTED TIGHTLY IN ORDER TO PREVENT VOIDS, WHICH WOULD CAUSE DRYING OF THE ROOTS.
   B.3.d. ON SLOPES GREATER THAN 3 TO 1, SECURE SOD TO SURFACE SOIL WITH WOOD PEGS, WIRE STAPLES OR A BIODEGRADABLE FASTENER.
   B.3.e. SURFACE WATER CANNOT ALWAYS BE DIVERTED FROM FLOWING OVER THE FACE OF THE SLOPE, BUT A CAPPING STRIP OF HEAVY JUTE OR PLASTIC NETTING, PROPERLY SECURED, ALONG THE CROWN OF THE SLOPE AND EDGES WILL PROVIDE EXTRA PROTECTION AGAINST LIFTING AND UNDERCUTTING OF SOD. THE SAME TECHNIQUE CAN BE USED TO ANCHOR SOD IN WATER-CARRYING CHANNELS AND OTHER CRITICAL AREAS. WIRE STAPLES MUST BE USED TO ANCHOR NETTING IN CHANNEL WORK.
   B.3.f. IMMEDIATELY FOLLOWING INSTALLATION, SOD SHOULD BE WATERED UNTIL MOISTURE PENETRATES THE SOIL LAYER BENEATH SOD TO A DEPTH OF 4 INCHES. MAINTAIN OPTIMUM MOISTURE FOR AT LEAST TWO WEEKS.
   B.4. FOLLOW-UP INSPECTION: AFTER THE FIRST GROWING SEASON, THE SOD SHOULD BE INSPECTED TO DETERMINE IF ADDITIONAL FERTILIZATION OR LIMING IS NEEDED.

MAINTENANCE, MONITORING AND INSPECTION PROGRAM

(Rev. 5/2024)

§102.4(b)(5)(x)

UNTIL THE SITE IS STABILIZED AND DURING CONSTRUCTION ACTIVITIES, ALL BMPs MUST BE MAINTAINED PROPERLY BY THE CONTRACTOR. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS TO ENSURE THEIR EFFECTIVE AND EFFICIENT OPERATION. SEE EROSION AND SEDIMENT DETAILS FOR ADDITIONAL INSPECTION AND MAINTENANCE REQUIREMENTS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN-OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING MUST BE PERFORMED IMMEDIATELY AND IN ACCORDANCE WITH THESE PROCEDURES, PLANS AND DETAILS. ANY AREAS DISTURBED DURING MAINTENANCE MUST BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS. ALL SITE INSPECTIONS MUST BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE INDICATING THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME OF THE PERSON CONDUCTING THE INSPECTION. THE INSPECTION LOG MUST BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.

INSPECTIONS SHALL EVALUATE DISTURBED AREAS AND AREAS USED FOR STORING MATERIALS THAT ARE EXPOSED TO RAINFALL FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM OR DISCHARGING FROM THE SITE. IF NECESSARY, THE MATERIALS MUST BE COVERED OR ORIGINAL COVERS MUST BE REPAIRED OR SUPPLEMENTED. ALL AREAS DISTURBED DURING THE EARTHWORK PHASE OF CONSTRUCTION MUST BE TEMPORARILY SEEDED AND STABILIZED IF STABILIZATION CANNOT BE ACHIEVED WITHIN FOUR (4) DAYS. ALSO, PROTECTIVE BERMS MUST BE CONSTRUCTED, IF NEEDED, IN ORDER TO CONTAIN RUNOFF FROM MATERIAL STORAGE AREAS.

GRASSED AREAS SHALL BE INSPECTED TO CONFIRM THAT A HEALTHY STAND OF GRASS IS MAINTAINED. THE SITE HAS ACHIEVED FINAL STABILIZATION ONCE ALL AREAS ARE COVERED WITH BUILDING FOUNDATION OR PAVEMENT, OR HAVE A STAND OF GRASS WITH AT LEAST 70 PERCENT DENSITY OR GREATER IN ACCORDANCE WITH PERMIT REQUIREMENTS. THE VEGETATIVE DENSITY MUST BE MAINTAINED TO BE CONSIDERED STABILIZED. AREAS MUST BE WATERED, FERTILIZED, AND RESEEDED AS NEEDED TO ACHIEVE THIS REQUIREMENT.

ALL DISCHARGE POINTS MUST BE INSPECTED TO DETERMINE WHETHER EROSION AND SEDIMENT CONTROL MEASURES ARE EFFECTIVE IN PREVENTING DISCHARGE OF SEDIMENT FROM THE SITE OR IMPACTS TO RECEIVING WATERS.

VISUAL INSPECTIONS

THE PERMITTEE AND CO-PERMITTEE(S) MUST ENSURE THAT VISUAL SITE INSPECTIONS ARE CONDUCTED WEEKLY, AND WITHIN 24 HOURS AFTER EACH MEASURABLE RAINFALL EVENT THROUGHOUT THE DURATION OF CONSTRUCTION AND UNTIL THE RECEIPT AND ACKNOWLEDGEMENT OF THE NOT BY THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT. THE VISUAL SITE INSPECTIONS AND REPORTS SHALL BE COMPLETED IN A FORMAT PROVIDED BY THE DEPARTMENT, AND CONDUCTED BY QUALIFIED PERSONNEL, TRAINED AND EXPERIENCED IN EROSION AND SEDIMENT CONTROL, TO ASCERTAIN THAT E&S BMPs AND PCSM BMPs ARE PROPERLY CONSTRUCTED AND MAINTAINED TO EFFECTIVELY MINIMIZE POLLUTION TO THE WATERS OF THIS COMMONWEALTH. A WRITTEN REPORT OF EACH INSPECTION SHALL BE KEPT AND INCLUDE AT A MINIMUM:
1. A SUMMARY OF SITE CONDITIONS, E&S BMP AND PCSM BMP, IMPLEMENTATION AND MAINTENANCE AND COMPLIANCE ACTIONS; AND
2. THE DATE, TIME, NAME AND SIGNATURE OF THE PERSON CONDUCTING THE INSPECTION.

NONCOMPLIANCE REPORTING

WHERE E&S, PCSM OR PPC BMPs ARE FOUND TO BE INOPERATIVE OR INEFFECTIVE DURING AN INSPECTION, OR ANY OTHER TIME, THE PERMITTEE AND CO_PERMITTEE(S) SHALL, WITHIN 24 HOURS, CONTACT THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT, BY PHONE OR PERSONAL CONTACT, FOLLOWED BY THE SUBMISSION OF A WRITTEN REPORT WITHIN 5 DAYS OF THE INITIAL CONTACT. NONCOMPLIANCE REPORTS SHALL INCLUDE THE FOLLOWING INFORMATION:
1. ANY CONDITION ON THE PROJECT SITE WHICH MAY ENDANGER PUBLIC HEALTH, SAFETY, OR THE ENVIRONMENT, OR INVOLVE INCIDENTS WHICH CAUSE OR THREATEN POLLUTION;
2. THE PERIOD OF NONCOMPLIANCE, INCLUDING EXACT DATES AND TIMES AND/OR ANTICIPATED TIME WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE;
3. STEPS BEING TAKEN TO REDUCE, ELIMINATE, AND PREVENT RECURRENCE OF THE NONCOMPLIANCE; AND
4. THE DATE OR SCHEDULE OF DATES, AND IDENTIFYING REMEDIES FOR CORRECTING NONCOMPLIANCE CONDITIONS.

REDUCTION, LOSS, OR FAILURE OF THE BMPs

UPON REDUCTION, LOSS, OR FAILURE OF THE BMPs, THE PERMITTEE AND CO_PERMITTEE SHALL TAKE IMMEDIATE ACTION TO RESTORE THE BMPs OR PROVIDE AN ALTERNATIVE METHOD OF TREATMENT. SUCH RESTORED BMPs OR ALTERNATIVE TREATMENT SHALL BE AT LEAST AS EFFECTIVE AS THE ORIGINAL BMPs.

TERMINATION OF COVERAGE

NOT: UPON PERMANENT STABILIZATION OF EARTH DISTURBANCE ACTIVITIES ASSOCIATED WITH CONSTRUCTION ACTIVITY THAT ARE AUTHORIZED BY THIS PERMIT AND WHEN BMPs IDENTIFIED IN THE PCSM PLAN HAVE BEEN PROPERLY INSTALLED, THE PERMITTEE AND/OR CO_PERMITTEE OF THE FACILITY MUST SUBMIT A NOT FORM THAT IS SIGNED IN ACCORDANCE WITH PART B, SECTION 1.C, SIGNATORY REQUIREMENTS, OF THIS PERMIT. ALL LETTERS CERTIFYING DISCHARGE TERMINATION ARE TO BE SENT TO THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT. THE NOT MUST CONTAIN THE FOLLOWING INFORMATION: FACILITY NAME, ADDRESS, AND LOCATION, OPERATOR NAME AND ADDRESS, PERMIT NUMBER, IDENTIFICATION AND PROOF OF ACKNOWLEDGMENT FROM THE PERSON(S) WHO WILL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE PCSM BMPs IN ACCORDANCE WITH THE APPROVED PCSM PLAN, AND THE REASON FOR PERMIT TERMINATION. UNTIL THE PERMITTEE HAS RECEIVED WRITTEN ACKNOWLEDGEMENT OF THE NOT, THE PERMITTEE WILL REMAIN RESPONSIBLE FOR OPERATING AND MAINTAINING ALL E&S BMPs AND PCSM BMPs ON THE PROJECT SITE AND WILL BE RESPONSIBLE FOR VIOLATIONS OCCURRING ON THE PROJECT SITE.

COMPLETION CERTIFICATE AND FINAL PLANS

WITHIN 30 DAYS AFTER THE COMPLETION OF EARTH DISTURBANCE ACTIVITIES AUTHORIZED BY THIS PERMIT, INCLUDING THE PERMANENT STABILIZATION OF THE SITE AND PROPER INSTALLATION OF PCSM BMPs IN ACCORDANCE WITH THE APPROVED PCSM PLAN, OR UPON SUBMISSION OF THE NOT IF SOONER, THE PERMITTEE SHALL FILE WITH THE DEPARTMENT OR AUTHORIZED CONSERVATION DISTRICT A STATEMENT SIGNED BY A LICENSED PROFESSIONAL AND BY THE PERMITTEE CERTIFYING THAT WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THIS PERMIT AND THE APPROVED E&S AND PCSM PLANS.

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SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	10/16/2026	PER CITY COMMENTS	ATK / MRB

PENNSYLVANIA ONE CALL SYSTEM, INC. 1-800-242-1776 STOP-CALL BEFORE YOU DIG!

ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
WWW.PA1CALL.ORG
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FOR MUNICIPAL REVIEW & APPROVAL

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PAB260025.00-1B
DRAWN BY:	KMH
CHECKED BY:	MRB
DATE:	8/13/2026
CAD I.D.:	P-CIVL-CNDS

PROJECT:
PRELIMINARY/ FINAL LAND DEVELOPMENT PLAN
FOR
BOYLE CONSTRUCTION, INC.

PROPOSED DATA CENTER

2184 INDUSTRIAL DRIVE
BETHLEHEM, PA 18017
CITY OF BETHLEHEM
LEHIGH COUNTY
PIN: 641847439546-1
CITY WARD 13 BLOCK 177

BOHLER™
74 W BROAD STREET, SUITE 500
BETHLEHEM, PA 18018
Phone: (610) 709-9971
Fax: (610) 709-9976
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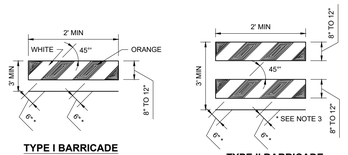
J. A. BEAVAN
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE082005
NEW YORK LICENSE No. 103204
NEW JERSEY LICENSE No. GE05339500

SHEET TITLE:
EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

SHEET NUMBER:
C-802

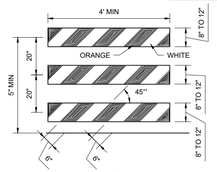
REVISION 1 - 10/16/2026

Oct 16, 2026
P:\PA\2026\PAB260025.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-CNDS-PAB260025.00-1B----->LAYOUT: C-802 EROD
AK



TYPE I BARRICADE

TYPE II BARRICADE



TYPE III BARRICADE

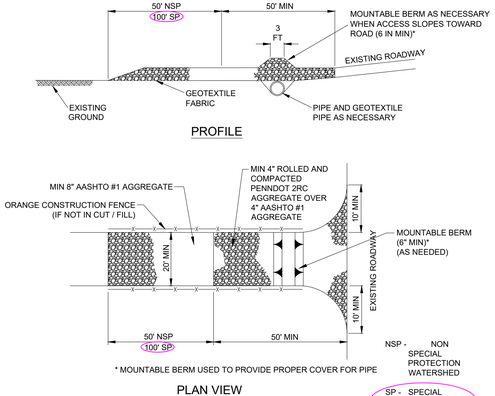
NOTES

1. "RIGHT" BARRICADES ARE SHOWN. THE DESIGN CHARACTERISTICS OF "LEFT" BARRICADES SHALL BE THE SAME, EXCEPT THE STRIPES SHALL SLOPE DOWNWARD TO THE RIGHT.
2. FOR WOODEN BARRICADES, NOMINAL LUMBER DIMENSIONS WILL BE SATISFACTORY.
3. FOR RAILS LESS THAN 3 FEET LONG, 4-INCH WIDE STRIPES SHALL BE USED.
4. ALL BARRICADES SHALL HAVE A MINIMUM OF 270 SQUARE INCHES OF REFLECTIVE AREA FACING TRAFFIC.
5. DURING HOURS OF DARKNESS, A STEADY BURN OR FLASHING WARNING LIGHT SHALL BE MOUNTED ON EACH TYPE I BARRICADE REFLECTORIZED WITH CLASS I OR CLASS I-A REFLECTIVE SHEETING THAT HAS LESS THAN 350 SQUARE INCHES OF REFLECTIVE SHEETING MATERIAL FACING TRAFFIC APPROACHING IN EACH DIRECTION.
6. THE NUMBER OF REFLECTORIZED RAIL FACES FOR EACH TYPE OF BARRICADE SHALL BE AS FOLLOWS:

TYPE OF BARRICADE	NO. OF REFLECTORIZED RAIL FACES
I	2 (ONE EACH DIRECTION)
II	4 (TWO EACH DIRECTION)
III	3 IF FACING TRAFFIC IN ONE DIRECTION
	6 IF FACING TRAFFIC IN TWO DIRECTION

TEMPORARY BARRICADE DESIGN

NOT TO SCALE (PA-0030301 - 09/2023)



PROFILE

PLAN VIEW

* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

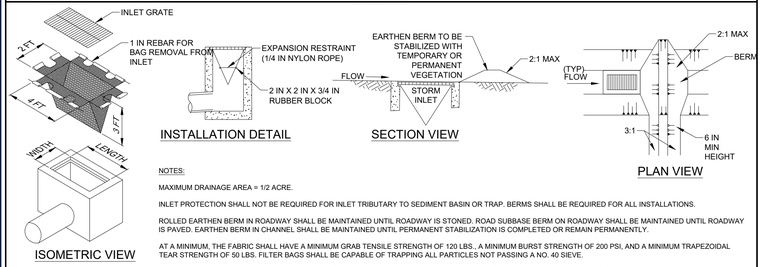
RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

STANDARD CONSTRUCTION DETAIL #3-1 (ABACT)
EXTENDED ROCK CONSTRUCTION ENTRANCE

(PADEP - MARCH 2012) NOT TO SCALE



ISOMETRIC VIEW

INSTALLATION DETAIL

SECTION VIEW

PLAN VIEW

NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.

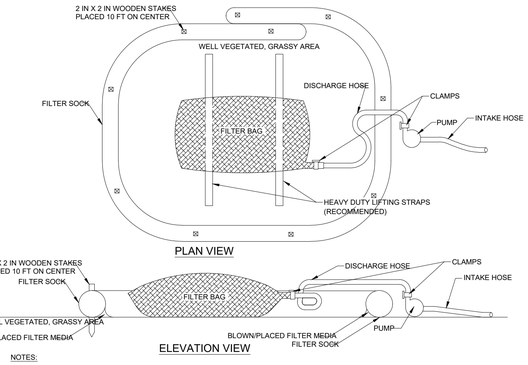
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

STANDARD CONSTRUCTION DETAIL #4-16
FILTER BAG INLET PROTECTION - TYPE M INLET

NOT TO SCALE (PADEP - MARCH 2012)



PLAN VIEW

ELEVATION VIEW

NOTES:

LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

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

AS THE PROPOSED DEVELOPMENT IS WITHIN AN IMPAIRED WATERSHED, ALL FILTER BAGS MUST BE SURROUNDED BY A COMPOST FILTER SOCK RING OR OPERATED IN CONJUNCTION WITH A SUMP PIT.

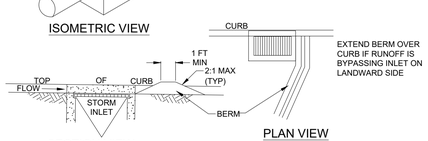
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

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

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

STANDARD CONSTRUCTION DETAIL #3-16 (ABACT) PUMPED WATER FILTER BAG

NOT TO SCALE (PADEP - MARCH 2012)



ISOMETRIC VIEW

INSTALLATION DETAIL



SECTION VIEW

PLAN VIEW

NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

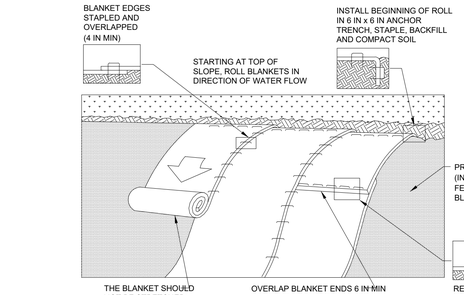
ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT. AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

STANDARD CONSTRUCTION DETAIL #4-15
FILTER BAG INLET PROTECTION - TYPE C INLET

NOT TO SCALE (PADEP - MARCH 2012)



NOTES:

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

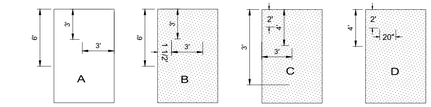
PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.

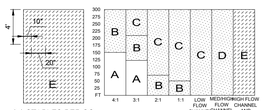
SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

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

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

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



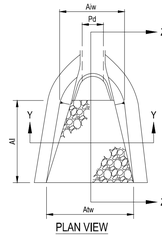


NOTE:
STAPLE PATTERNS APPLY TO ALL NORTH AMERICAN GREEN EROSION CONTROL BLANKETS. STAPLE PATTERNS WILL VARY DEPENDING UPON APPLICATION TYPE, SLOPE LENGTH, SLOPE GRADE, SOIL TYPE AND ANNUAL RAINFALL. THE FOLLOWING ARE GENERAL STAPLE RECOMMENDATIONS BASED ON SLOPE LENGTH, SLOPE GRADE, AND ESTIMATED RUNOFF. SPECIFIC STAPLE PLACEMENT PATTERNS ARE ILLUSTRATED IN DIAGRAMS A,B,C,D, AND E. INCREASED STAPLE RATES MAY BE NECESSARY DEPENDING UPON SITE CONDITIONS. FOR DETAILED SPECIFIC RECOMMENDATIONS, CONTACT YOUR NEAREST AUTHORIZED NORTH AMERICAN GREEN DISTRIBUTOR OR CALL NORTH AMERICAN GREEN TECHNICAL SERVICES.
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EROSION CONTROL BLANKET STAPLE PATTERN GUIDE

STANDARD CONSTRUCTION DETAIL #11-1
EROSION CONTROL BLANKET INSTALLATION

NOT TO SCALE (PADEP - MARCH 2012)

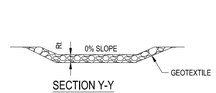


OUTLET NO.	PIPE DIA Pd (IN)	RIPRAP SIZE R-_	RIPRAP THICK. Rt (IN)	APRON LENGTH Al (FT)	APRON INITIAL WIDTH Aiw (FT)	APRON TERMINAL WIDTH Atw (FT)
A-10	88	3	9	14	4.5	18.5
B-10	88	3	9	8	4.5	12.5

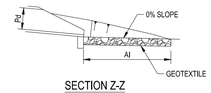
NOTES:

ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN, TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.

ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT, DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.



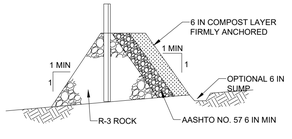
SECTION Y-Y



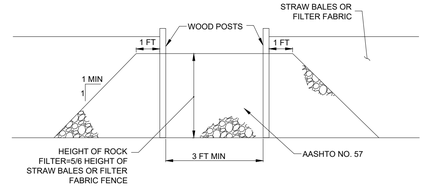
SECTION Z-Z

STANDARD CONSTRUCTION DETAIL #9-1
RIPRAP APRON AT PIPE OUTLET WITH FLARED END SECTION OR ENDWALL

NOT TO SCALE (PADEP - MARCH 2012)



OUTLET CROSS-SECTION



UP-SLOPE FACE

NOTES:

A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A SILT FENCE OR STRAW BALE BARRIER HAS OCCURRED DUE TO CONCENTRATED FLOW. ANCHORED COMPOST LAYER SHALL BE USED ON UPSLOPE FACE IN HQ, EV AND IMPAIRED WATERSHEDS.
SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.

STANDARD CONSTRUCTION DETAIL #4-6
(ABACT) ROCK FILTER OUTLET WITH COMPOST LAYER

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PROJECT No.:	PAB260025.00-1B
DRAWN BY:	KMH
CHECKED BY:	MRB
DATE:	8/13/2026
CAD I.D.:	P-CIVL-CNDS

PROJECT:
PRELIMINARY/ FINAL LAND DEVELOPMENT PLAN
FOR
BOYLE CONSTRUCTION, INC.
PROPOSED DATA CENTER
2184 INDUSTRIAL DRIVE
BETHLEHEM, PA 18017
CITY OF BETHLEHEM
LEHIGH COUNTY
PIN: 641847439546-1
CITY WARD 13 BLOCK 177

BOHLER
74 W BROAD STREET, SUITE 500
BETHLEHEM, PA 18018
Phone: (610) 709-9971
Fax: (610) 709-9976
www.BohlerEngineering.com

J. PETER A. BEAVAN
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE082005
NEW YORK LICENSE NO. 102204
NEW JERSEY LICENSE NO. GE05339500

SHEET TITLE:
EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

SHEET NUMBER:
C-803

REVISION 1 - 10/16/2026

Oct 16, 2026
P:\PA\2026\PAB260025.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-CNDS-PAB260025.00-1B-----LAYOUT: C-803 EROD
ATK



SOIL MAP

SCALE: 1" = 150'
SOURCE: WEB SOIL SURVEY

TYPES, DEPTH, SLOPE, LOCATIONS, AND LIMITATIONS OF THE SOILS

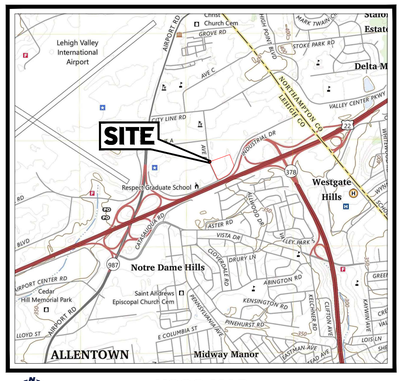
§102.4(b)(5)(ii)

SOIL DESCRIPTIONS

SOIL	DESCRIPTION	HYDROLOGIC SOIL GROUP
UmB	URBAN LAND-DUFFIELD COMPLEX, 0 TO 8 PERCENT SLOPES	D

LIMITATIONS FOR PENNSYLVANIA SOILS PERTAINING TO EARTH DISTURBANCE PROJECTS

SOIL NAME	CUTBANKS ARE CORROSIVE TO CONCRETE/ STEEL	DROUGHTY	ERODIBLE	FLOODING	DEPTH TO SATURATED ZONE (SEASONAL HIGH WATER TABLE)	HYDRIC/ HYDRIC INCLUSIONS	LOW STRENGTH LANDSLIDE PRONE	SLOW PERCOLATION	PIPING	POOR SOURCE OF TOPSOIL	FROST HEAVING	SHRINK-SWELL	POTENTIAL SINKHOLE	PONDING	WETNESS
URBANA					X						X				



USGS MAP

SCALE: 1" = 2,000'
SOURCE: USGS MAPS CATASAQUA QUADRANGLE

SOIL USE LIMITATIONS AND THEIR RESOLUTIONS PROVIDED

CONTRACTOR SHALL CONSULT WITH GEOTECHNICAL ENGINEER TO DETERMINE SOIL LIMITATIONS AND RESOLUTIONS SPECIFIC TO THIS PROJECT.

1. SOIL TYPES POORLY SUITED AS SOURCES OF TOPSOIL RESTRICT OR PLACE CONDITIONS ON PLANNING VEGETATIVE STABILIZATION. ACIDIC, LOW FERTILITY, EXCESSIVE DRYNESS AND EXCESSIVE WETNESS LIMIT PLANT GROWTH.

RESOLUTIONS: IDENTIFYING AND RESOLVING CHARACTERISTICS, THAT RENDER THE SOIL TYPES POORLY, SUITED AS TOPSOIL

2. ACIDIC SOIL TYPES EXHIBITING PH REACTION VALUES LOWER THAN ABOUT 5.5, LIMIT VEGETATIVE STABILIZATION. SOIL TESTS MIGHT BE NECESSARY TO DETERMINE SITE SPECIFIC PH REACTION.

RESOLUTIONS: APPLYING LIME CONSISTENT WITH RATES DETERMINED BY SOIL TESTING; SELECTING VEGETATIVE SPECIES TOLERANT TO ACIDIC SOIL CONDITIONS; AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.

3. LOW FERTILITY SOIL TYPES LACKING IN SUFFICIENT AMOUNTS OF ESSENTIAL PLANT NUTRIENTS SUCH AS: NITRPGEN, PHOSPHOROUS, POTASSIUM, SULFER, MAGNESIUM, CALCIUM, IRON, MANGANESE, BORON, CHLORINE, ZINC, COPPER AND MOLYBDENUM. LIMIT VEGETATION STABILIZATION. SOIL TESTS MIGHT BE NECESSARY TO DETERMINE SITE SPECIFIC SOIL FERTILITY.

RESOLUTIONS: INCORPORATING SOIL NUTRIENTS CONSISTENT WITH RATES DETERMINED BY SOIL TESTING; SELECTIVE VEGETATIVE SPECIES TOLERANT TO LOW FERTILITY SOIL CONDITIONS, AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.

4. ERODIBLE SOIL TYPES EXHIBITING K VALUES GREATER THAN 0.36 OR PLASTICITY INDEX VALUES LOWER THAN 10, LIMIT VEGETATIVE STABILIZATION OF CHANNELS.

RESOLUTIONS: TEMPORARY CHANNEL LINING, PROVIDING PERMANENT CHANNEL LINING, DECREASING CHANNEL GRADE, INCREASING CHANNEL WIDTH, SELECTING VEGETATIVE WITH GREATER RETARDANCE, SELECTING PERMANENT LININGS OTHER THAN GRASSES, AND IMPLEMENTING COMBINATION OF THESE AND/OR METHODS. VEGETATIVE RETARDANCE INFORMATION IS PROVIDED IN TABLES 6 AND 7 OF THE EROSION AND SEDIMENT POLLUTION CONTROL MANUAL PUBLISHED BY PADEP.

5. WET SOIL TYPES HAVE EXCESSIVE ROOT ZONE AND SOIL MOISTURES. SOME SOIL SURVEYS INDICATE WETNESS, HIGH WATER TABLE AND FLOODING. THIS INDICATOR IS AFFECTED BY SOIL DISTURBANCE.

RESOLUTIONS: SELECTING VEGETATIVE SPECIES TOLERANT TO WET CONDITIONS, TILING VEGETATIVE AREAS, AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY THE PENN STATE.

6. DRY SOIL TYPES LACK SUFFICIENT ROOT ZONE SOIL MOISTURES. THIS INDICATOR IS AFFECTED BY SOIL DISTURBANCE.

RESOLUTIONS: SELECTING VEGETATIVE SPECIES TOLERANT TO DRY CONDITIONS, IRRIGATING VEGETATED AREAS AND IMPLEMENTING COMBINATION OF THESE AND/OR OTHER METHODS. SPECIFIC TOLERANCE INFORMATION IS PROVIDED IN TABLE 1 OF THE EROSION CONTROL & CONSERVATION PLANTINGS ON NONCROPLAND PUBLISHED BY PENN STATE.

7. SOIL TYPES SUSCEPTIBLE TO SINKHOLE AND SOLUTION CHANNEL/CHAMBER FORMATION POSE LIMITATIONS ON LOCATING RESERVOIR AREAS OF SEDIMENT BASINS, SEDIMENT TRAPS, STORMWATER RETENTION BASINS, AND STORMWATER DETENTION BASINS.

RESOLUTIONS: LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, LINING RESERVOIR AREAS WITH IMPERMEABLE LINNINGS, LIMITING STANDING WATER DEPTHS, LIMITING RETENTION TIMES AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.

8. SOIL TYPES THAT EXHIBIT INSTABILITY IN POND EMBANKMENTS OR SUSCEPTIBILITY TO PIPING AND SEEPING POSE LIMITATIONS ON PLANNING EMBANKMENTS OF SEDIMENT BASINS, SEDIMENT TRAPS, STORMWATER RETENTION BASINS AND STORMWATER DETENTION BASINS.

RESOLUTIONS: IMPORTING OTHER SOIL FOR EMBANKMENT OF THOSE FACILITIES, LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, LIMITING EMBANKMENT SLOPE STEEPNESS AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS.

9. SOIL THAT ARE DIFFICULT TO COMPACT, UNSUITABLE FOR WINTER GRADING, OR SUSCEPTIBLE TO FROST ACTION POSE LIMITATIONS ON PLANNING EMBANKMENTS OF SEDIMENT BASINS, SEDIMENT TRAPS, STORMWATER RETENTION BASINS AND STORMWATER DETENTION BASINS.

RESOLUTIONS: IMPORTING OTHER SOIL FOR EMBANKMENT OF THOSE FACILITIES, LOCATING THOSE FACILITIES ON OTHER SOIL TYPES, NOT CONSTRUCTING EMBANKMENTS DURING PERIODS PRONE TO FROST AND IMPLEMENTING COMBINATIONS OF THESE AND/OR OTHER METHODS

10. SUSCEPTIBILITY FOR THE DEVELOPMENT OF SINKHOLE WITHIN IDENTIFIED SOILS.

RESOLUTIONS: IN THE EVENT THAT PRESENCE OF A SINKHOLE IS DETECTED DURING THE COURSE OF WORK, CORRECTIVE MEASURES SHALL BE PERFORMED UNDER THE OBSERVATION AND GUIDANCE OF THE OWNER'S GEOTECHNICAL CONSULTANT.
EXCAVATE THE LOOSE, WET SOILS SURROUNDING THE SINKHOLE TO EXPOSE THE SINKHOLE "THROAT" (THE OPENING IN THE ROCK) AND THE ADJACENT STABLE SOILS/ROCK WHERE POSSIBLE, THE EXCAVATION SHALL EXTEND A MINIMUM OF TWO FEET (2') BEYOND THE STABLE SOILS OR TO THE ROCK SURFACE, WHICHEVER IS ENCOUNTERED FIRST.
FILL THE EXPOSED SINKHOLE "THROAT" WITH LEAN CONCRETE TO BLOCK THE MIGRATION OF THE UPPER LAYERS OF SOIL THROUGH THE ROCK OPENING.
AFTER CONCRETE HAS CURED OVERNIGHT BACKFILL THE REMAINDER OF THE EXCAVATION WITH CLAYEY SOILS TO PROVIDE A LOW PERMEABILITY BARRIER. THE CLAYEY SOILS SHALL BE PLACED IN 8" LIFTS AND EACH LIFT COMPACTED BY REPEATED PASSES OF THE COMPACTION EQUIPMENT UNTIL STABLE. CARE SHALL BE TAKEN TO ASSURE THAT THE SOIL AT THE EDGES OF THE EXCAVATION ARE WELL COMPACTED.

Compost Filter Sock Worksheet

Project: **Proposed Data Center**

Description: **Compost Filter Socks**

Location	SiltSoxx Size (inches)	Slope (%)	Max. Allowable Slope Length Above Barrier (ft)*	Provided Slope Length Above Barrier (ft)
CFS #1	12	33.33	42	24
CFS #2	12	33.33	42	24
CFS #3 Topsoil Stockpile	24	33.33	93	93
CFS #4 Topsoil Stockpile	24	33.33	93	93
CFS #5	12	33.33	42	22
CFS #6	12	3.30	403	237
CFS #7 Concrete Washout	24	33.33	93	15
CFS #8	12	4.31	312	232
CFS #9	18	40.00	60	46
CFS #10	18	33.88	68	42

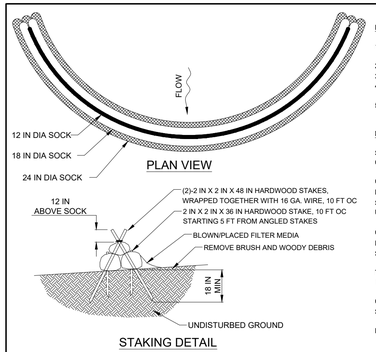
**Silt socks greater in size than 32" are the total stacked size. Refer to the plans for stacked configuration.*

TABLE 4.1
Compost Sock Fabric Minimum Specifications

MATERIAL TYPE	3 mil HDPE	5 mil HDPE	5 MIL HDPE	Multi-Filament Polypropylene (MFPP)	Heavy-Duty Multi-Filament Polypropylene (MFPP)
Material Characteristics	Photo-degradable	Photo-degradable	Bio-degradable	Photo-degradable	Photo-degradable
Sock Diameters	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		26 PSI	26 PSI	44 PSI	202 PSI
Ultraviolet Stability % Original Strength (ASTM G-155	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
Minimum Functional Longevity	6 months	9 months	6 months	1 year	2 years
Two-Ply systems					
Inner Containment Netting	HDPE biaxial net				
	Continuously wound				
	Fusion-welded junctions				
	3/4" X 3/4" Max. aperture size				
Outer Filtration Mesh	Composite Polypropylene Fabric (woven layer and non-woven fleece mechanically fused via needle punch)				
	3/16" Max aperture size				
Sock fabrics composed of burlap may be used on projects lasting 6 months or less.					

TABLE 4.2
Compost Standards

ORGANIC MATTER CONTENT	25%-100% (DRY WEIGHT BASE)
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	5.5-8.5
MOISTURE CONTENT	30%-60%
PARTICLE SIZE	30%-50% PASS THROUGH 3/8" SIEVE
SOLUBLE SALT CONCENTRATION	5.0 dS/m (mmhos/cm) MAXIMUM



DESIGN NOTES:

1. COMPOST SOCK SEDIMENT TRAP SHALL BE SIZED TO PROVIDE 2000 CUBIC FEET OF STORAGE CAPACITY FOR EACH ACRE TRIBUTARY TO THE TRAP.
2. MINIMUM BASE WIDTH IS EQUAL TO THE HEIGHT.
3. SEDIMENT ACCUMULATION SHALL NOT EXCEED 1/3 THE TOTAL HEIGHT OF THE TRAP.
4. SOCKS SHALL BE OF LARGER DIAMETER AT THE BASE OF THE TRAP AND DECREASE IN DIAMETER FOR SUCCESSIVE LAYERS AS SHOWN ON THE PLAN VIEW.
5. ENDS OF THE TRAP SHALL BE A MINIMUM OF 1 FOOT HIGHER IN ELEVATION THAN THE MID-SECTION, WHICH SHALL BE LOCATED AT THE POINT OF DISCHARGE.

NOTES:

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

COMPOST SOCK SEDIMENT TRAPS SHALL NOT EXCEED THREE SOCKS IN HEIGHT AND SHALL BE STACKED IN PYRAMIDAL FORM AS SHOWN ABOVE. MINIMUM TRAP HEIGHT IS ONE 24" DIAMETER SOCK. ADDITIONAL STORAGE MAY BE PROVIDED BY MEANS OF AN EXCAVATED SUMP 12" DEEP EXTENDING 1 TO 3 FEET UPSLOPE OF THE SOCKS ALONG THE LOWER SIDE OF THE TRAP.

COMPOST SOCK SEDIMENT TRAPS SHALL PROVIDE 2,000 CUBIC FEET STORAGE CAPACITY WITH 12" FREEBOARD FOR EACH TRIBUTARY DRAINAGE ACRE. (SEE MANUFACTURER FOR ANTICIPATED SETTLEMENT.)

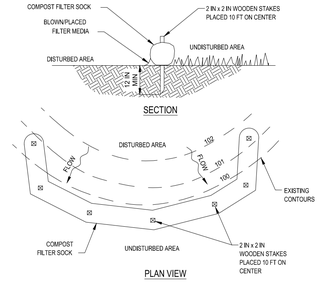
THE MAXIMUM TRIBUTARY DRAINAGE AREA IS 5.0 ACRES. SINCE COMPOST SOCKS ARE "FLOW-THROUGH," NO SPILLWAY IS REQUIRED.

COMPOST SOCK SEDIMENT TRAPS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/3 THE HEIGHT OF THE SOCKS.

PHOTODEGRADABLE AND BIODEGRADABLE SOCKS SHALL NOT BE USED FOR MORE THAN 1 YEAR.

STANDARD CONSTRUCTION DETAIL #3-11 COMPOST SOCK SEDIMENT TRAP

NOT TO SCALE (PADEP - MARCH 2012)



FILTREXX NOTES:

- SOCK MATERIAL SHALL MEET THE STANDARDS OF PA DEP EROSION CONTROL MANUAL, TABLE 4.1. COMPOST SHALL MEET THE STANDARDS OF PA DEP EROSION CONTROL MANUAL, TABLE 4.2.
- COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST EIGHT (8) FEET UP SLOPE AT 45° TO THE MAIN SOCK ALIGNMENT (PA DEP EROSION CONTROL MANUAL FIGURE 4.1). MAXIMUM SLOPE LENGTH ABOVE ANY SOCK SHALL NOT EXCEED THAT SHOWN ON PA DEP EROSION CONTROL MANUAL FIGURE 4.2. STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURER.
- TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
- ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
- SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
- BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER SIX (6) MONTHS, PHOTODEGRADABLE SOCKS AFTER ONE (1) YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

STANDARD CONSTRUCTION DETAIL #4-1 COMPOST FILTER SOCK

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DRAWN BY:	KMH
CHECKED BY:	MRB
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PROJECT:

PRELIMINARY/ FINAL LAND DEVELOPMENT PLAN
FOR
BOYLE CONSTRUCTION, INC.

PROPOSED DATA CENTER
2184 INDUSTRIAL DRIVE
BETHLEHEM, PA 18017
CITY OF BETHLEHEM
LEHIGH COUNTY
PIN: 641847439546-1
CITY WARD 13 BLOCK 177

BOHLER™
74 W BROAD STREET, SUITE 500
BETHLEHEM, PA 18018
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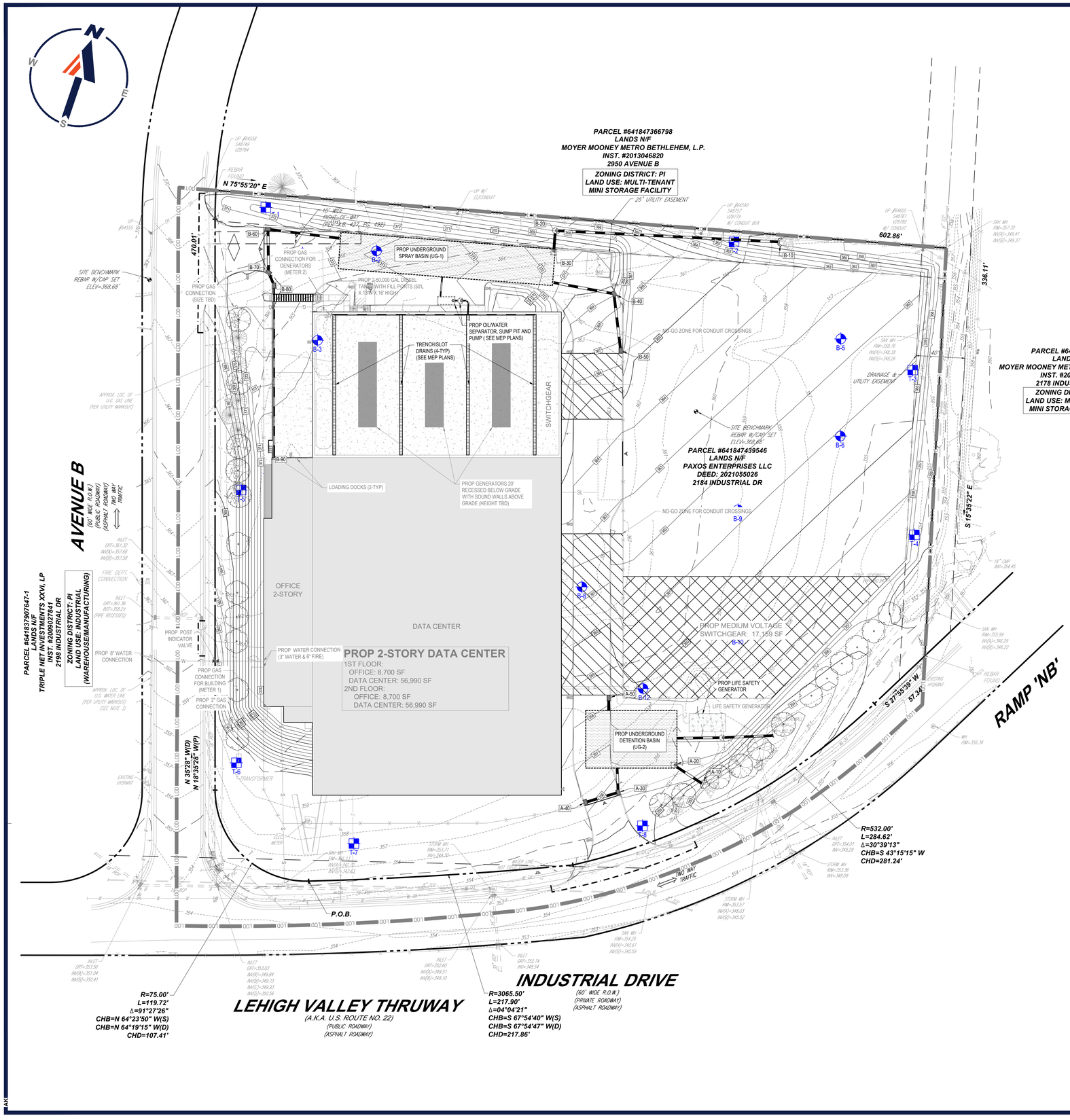
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J. CLAYTON BEAVAN
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE086205
NEW JERSEY LICENSE NO. GE05339500

SHEET TITLE:
EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

SHEET NUMBER:
C-804

REVISION 1 - 10/16/2026

Oct 16, 2026
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PROP PCSM LEGEND

LIMIT OF DISTURBANCE/ PROJECT SITE BOUNDARY	LOD
OVERALL DRAINAGE AREA	
SUB-DRAINAGE AREA	
SOIL DELINEATION BOUNDARY	
SOIL TYPE LABEL	UssB
EXISTING CONTOUR	419 / 420
EXISTING STORM SEWER	
EXISTING SANITARY SEWER	
EXISTING ELECTRIC LINE	
EXISTING TELEPHONE LINE	
EXISTING WATER LINE	
UTILITY LOCATION QUALITY	--Qa
EXISTING INLET	
EXISTING STORM MANHOLE	D
EXISTING SANITARY MAHOLE	S
EXISTING TREE	
SANITARY MAIN / LATERAL	S
STORM SEWER	
WATER LINE	W
ELECTRIC LINE	E
TELECOM LINE	TC
WATER FIRE LINE	F
FIRE HYDRANT	
SANITARY MANHOLE	S
STORM SEWER MANHOLE	D
CONTOUR LINE	190 / 187
TEST PIT	T-#
BORING LOCATION	B-#
DISCHARGE POINT	DP 001
LANDSCAPING	

PROP SCM LEGEND

(SCM 6.5.2) RUNOFF CAPTURE/REUSE	
(SCM 6.6.3) DRY EXTENDED DETENTION BASIN	
(SCM 6.6.4) WATER QUALITY FILTERS & HYDRODYNAMIC DEVICES	

DEMO LEGEND

PROPERTY LINE	
EASEMENT LINE	
SETBACK LINE	
UTILITY POLE	
TYPICAL SIGN	
PARKING COUNT	
CONTOUR	170
SPOT ELEVATIONS	TC 516.4 OR 516.4
SANITARY LATERAL	S
SANITARY MAIN	S
WATER LINE	W
ELECTRIC LINE	E
GAS LINE	G
OVERHEAD WIRE	OH
STORM SEWER	
FIRE HYDRANT	
SANITARY MANHOLE	S
STORM MANHOLE	D
WATER VALVE	WV
WATER METER	WM
GAS VALVE	
TYPICAL END SECTION	
CLEANOUT	

CHAPTER 93 STREAM CLASSIFICATION: TRIB 64099 TO MONOCACY CREEK VIA STORM SEWERS (HQ-CWF, MF)

IMPAIRMENT & SOURCE:
SOURCE UNKNOWN - PATHOGENS

THIS PLAN TO BE UTILIZED FOR POST CONSTRUCTION STORMWATER MANAGEMENT PURPOSES ONLY

40 20 10 0 40
SCALE: 1" = 40'

BOHLER™
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	10/16/2026	PER CITY COMMENTS	ATK / MRB

ATTENTION ALL CONTRACTORS. LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
WWW.PA1CALL.ORG
#(BOHLER)XXXXXXXXX / #(SURVEY)20121712057

FOR MUNICIPAL REVIEW & APPROVAL

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PAB260025.00-1B
DRAWN BY:	KMH
CHECKED BY:	MRB
DATE:	8/13/2026
CAD I.D.:	P-CIVIL-LDVP

PROJECT:
PRELIMINARY/ FINAL LAND DEVELOPMENT PLAN
FOR
BOYLE CONSTRUCTION, INC.
PROPOSED DATA CENTER
2184 INDUSTRIAL DRIVE
BETHLEHEM, PA 18017
CITY OF BETHLEHEM
LEHIGH COUNTY
PIN: 641847439546-1
CITY WARD 13 BLOCK 177

BOHLER™
74 W BROAD STREET, SUITE 500
BETHLEHEM, PA 18018
Phone: (610) 709-9971
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COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
J. JEFFREY A. BEAVAN
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE082005
NEW YORK P.E. LICENSE NO. 110105204
NEW JERSEY P.E. LICENSE NO. GE05339500

SHEET TITLE:
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

SHEET NUMBER:
C-805

REVISION 1 - 10/16/2026

Oct 16, 2026
P:\PA\20\PAB260025.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LDVP-PAB260025.00-1B----LAYOUT: C-805 PCSM
AKT

PCSM - GENERAL SCM NOTES

(Rev. 01/2025)

1. A SITE INSPECTION AND APPROVAL BY THE COUNTY CONSERVATION DISTRICT IS REQUIRED PRIOR TO THE REMOVAL OR CONVERSION OF SEDIMENT BASINS AND TRAPS.
2. BOHLER ENGINEERING SHALL BE NOTIFIED OF PRE-CONSTRUCTION MEETING DATE AND SCM CONSTRUCTION SCHEDULE.
3. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO LIMIT THE COMPACTION IN THE PROPOSED SCM BOTTOMS.
4. REFER TO THE SCM CONSTRUCTION DETAILS FOR THE CONSTRUCTION OF ALL PROPOSED STORMWATER MANAGEMENT SCMs.
5. REFER TO THE PCSM PLAN AND DETAILS FOR SPECIFIC SCM CONSTRUCTION GUIDELINES.
6. AS-BUILT PLANS OF THE STORMWATER SCMs FOR EACH PROJECT PHASE SHALL BE PROVIDED WITHIN FOURTEEN DAYS FOLLOWING THE COMPLETION OF EACH PHASE. THIS IS TO ENSURE THAT THE CERTIFICATION FORM CAN BE COMPLETED WITHIN THIRTY DAYS OF CONSTRUCTION COMPLETION. THE AS-BUILT PLANS SHALL BE SIGNED AND SEALED BY A PA REGISTERED PROFESSIONAL SURVEYOR.
7. A NOTICE OF TERMINATION (NOT) WILL BE REQUIRED TO BE SUBMITTED FOLLOWING APPROVAL OF THE FINAL AS-BUILT PLANS. PRIOR TO ACCEPTING THE NOT, THE DEPARTMENT AND/OR CONSERVATION DISTRICT STAFF WILL PERFORM A FINAL INSPECTION TO ENSURE SITE STABILIZATION AND VERIFY ADEQUATE INSTALLATION AND FUNCTION OF STORMWATER SCMs.

LONG-TERM OPERATION AND MAINTENANCE SCHEDULE

(Rev. 01/2025)

§102.8(f)(10)

1. UNTIL THE SITE IS STABILIZED AND DURING THE CONSTRUCTION ACTIVITIES, ALL SCMs MUST BE MAINTAINED PROPERLY BY CONTRACTOR. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL SCMs AS SPECIFIED. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN-OUT, REPAIR, REPLACEMENT, RE-GRADING, RE-SEEDING, RE-MULCHING AND RE-NETTING MUST BE PERFORMED IMMEDIATELY AND IN ACCORDANCE WITH THESE PROCEDURES, PLANS, AND DETAILS. ANY AREAS DISTURBED DURING MAINTENANCE MUST BE STABILIZED IMMEDIATELY IN ACCORDANCE WITH THE GENERAL CONSERVATION NOTES AND SPECIFICATIONS.
2. ALL SITE INSPECTIONS MUST BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE INDICATING THE COMPLIANCE ACTIONS AND THE DATE, TIME AND NAME OF THE PERSON CONDUCTING THE INSPECTION. THE INSPECTION LOG MUST BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.
3. SHOULD ON-SITE EROSION OCCUR FROM THE LANDSCAPED AREAS, THE SOURCE OF EROSION SHALL BE IMMEDIATELY STABILIZED AND THE INLETS AND STORMWATER PIPING SHALL BE CHECKED FOR ACCUMULATION AND CLEARED IF ACCUMULATION OF SEDIMENT EXISTS.
4. HEAVY CONSTRUCTION VEHICLES SHALL NOT BE PARKED ON OR DRIVEN OVER SCM FACILITIES AND CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY EQUIPMENT, INCLUDING MOWERS.
5. INSPECT INFILTRATION FACILITIES AFTER RUNOFF EVENTS AND MAKE SURE THAT RUNOFF DRAINS DOWN WITHIN 72 HOURS. INSPECT FOR ACCUMULATION OF SEDIMENT, DAMAGE TO OUTLET CONTROL STRUCTURES, SIGNS OF WATER CONTAMINATION/SPILLS, AND SIGNS OF EROSION.
6. REMOVE ACCUMULATED SEDIMENT FROM THE FACILITIES AS REQUIRED. RESTORE ORIGINAL CROSS-SECTION IF NECESSARY. PROPERLY DISPOSE OF SEDIMENT AS SPECIFIED. FOR ABOVE-GROUND INFILTRATION FACILITIES, REMOVE AND REPLACE SAND/STONE LAYER AS NECESSARY IF FACILITY DEWATERING TIME EXCEEDS 72 HOURS.

_____ IS RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE STORMWATER MANAGEMENT SCMs AS DESCRIBED HEREIN

DEFINITION OF CLEAN FILL AND IMPORT/EXPORT MATERIAL NOTES

(Rev. 5/2024)

IF THE SITE WILL NEED TO IMPORT OR EXPORT MATERIAL FROM THE SITE, THE RESPONSIBILITY FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND DETERMINATION OF CLEAN FILL WILL REST WITH THE APPLICANT.

1. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE).
2. CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS IN TABLES FP-1A AND FP-1B FOUND IN THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL".
3. ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL. A COPY OF FORM FP-001 CAN BE FOUND AT THE END OF THESE INSTRUCTIONS.
4. ENVIRONMENTAL DUE DILIGENCE: THE APPLICANT MUST PERFORM ENVIRONMENTAL DUE DILIGENCE TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL".

FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA. CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE. THE REGULATIONS ARE AVAILABLE ON-LINE AT WWW.PACODE.COM.

CRITICAL STAGES

(Rev. 5/2024)

- INSTALLATION OF SPRAY BASIN UG1
- INSTALLATION OF DETENTION BASIN UG2
- INSTALLATION OF VEGETATED SWALE
- INSTALLATION OF SUMP AND SNOUTS
- INSTALLATION OF LANDSCAPING

LOCATION OF ALL SURFACE WATERS AND THEIR CLASSIFICATION UNDER CHAPTER 93

(Rev. 5/2024)

§102.4(b)(5)(v)

THE SUBJECT SITE DRAINS TO UNT TO THE MONOCACY CREEK, WHICH HAS A HIGH QUALITY-COLD WATER FISHES, MIGRATORY FISHES (HQ-CWF, MF) CHAPTER 93 CLASSIFICATION.

RECEIVING SURFACE WATERS

(Rev. 5/2024)

§102.8(f)(5)

1. THE SUBJECT SITE DRAINS TO AN UNT TO THE MONOCACY CREEK, WHICH HAS A HIGH QUALITY-COLD WATER FISHES, MIGRATORY FISHES (HQ-CWF, MF) CHAPTER 93 CLASSIFICATION.
2. THE DEVELOPMENT IS IN AN HQ WATERSHED
3. THERE ARE NO WETLANDS LOCATED ON THE PROJECT SITE.

GEOLOGIC FORMATIONS/SOIL CONDITIONS THAT MAY HAVE THE POTENTIAL TO CAUSE POLLUTION

(Rev. 5/2024)

§102.4(b)(5)(xii)

THERE ARE NO GEOLOGIC FORMATIONS OR SOIL CONDITIONS THAT COULD CAUSE CONTAMINANT POLLUTION DURING EARTH DISTURBANCE ACTIVITIES.

RECYCLING OR DISPOSAL OF MATERIALS

(Rev. 01/2025)

§102.8(f)(11)

THE FOLLOWING IS A LIST THAT INCLUDES, BUT THAT IS NOT LIMITED TO, THE POTENTIAL CONSTRUCTION WASTES THAT MAY EX ON-SITE:
- TRASH (CANS, BOTTLES, ETC.)
- YARD WASTE (LEAVES, GRASS CLIPPINGS, ETC.)
- DEBRIS COLLECTED IN INLETS
- SEDIMENT CAPTURED IN ANY PCSM SCM

ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH LOCAL REQUIREMENTS. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

SEQUENCE OF PSCM INSTALLATION AND REMOVAL

(Rev. 01/2025)

§102.4(b)(5)(vii)

A. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED IN COMPLIANCE WITH CHAPTER 102 REGULATIONS BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. UPON COMPLETION OR TEMPORARY CESSATION OF THE EARTH DISTURBANCE ACTIVITY THAT WILL EXCEED FOUR (4) DAYS , OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED WITH THE APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION.
B. AT LEAST SEVEN (7) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES INCLUDING, BUT NOT LIMITED TO: THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICIALS AND A REPRESENTATIVE OF THE LEHIGH COUNTY CONSERVATION DISTRICT FOR AN ON-SITE PRE-CONSTRUCTION MEETING.
C. AT LEAST THREE (3) DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INC. AT 1-800-242-1776 FOR BURIED UTILITIES LOCATION.
D. BEFORE INITIATING ANY REVISION TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE LEHIGH COUNTY CONSERVATION DISTRICT. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
1. CRITICAL STAGE - INSTALLATION OF THE UNDERGROUND SPRAY BASIN (UG-1)
   a. INSTALLATION OF THE UNDERGROUND SPRAY BASIN SHALL INCLUDE THE INSTALLATION OF THE OUTFALL SYSTEM (B10 TO B30).
   b. REFER TO THE ADDITIONAL SPRAY FACILITY SEQUENCING, INSTALLATION AND MAINTENANCE & INSPECTION NOTES PROVIDED ON THE SPRAY IRRIGATION PLANS FOR CONSTRUCTION OF THE SPRAY BASINS.
   c. PRIOR TO INITIATING CONSTRUCTION, THE CONTRACTOR IS TO PERFORM INFILTRATION TESTING AT THE DESIGNATED SPRAY AREA(S) TO CONFIRM INFILTRATION RATES. THE RESULTS OF THE TESTING ARE TO BE GIVEN TO THE ENGINEER PROVIDING OVERSIGHT, WHO WILL THEN MAKE A DETERMINATION IF BASIN CONSTRUCTION SHOULD COMMENCE.
   d. INLETS DISCHARGING TO THE SPRAY BASIN MUST BE BLOCKED IMMEDIATELY AFTER INSTALLATION AND REMAIN BLOCKED UNTIL SITE IS FULLY STABILIZED TO PREVENT SEDIMENT FROM ENTERING THE DETENTION BASIN.
   e. UPON INSTALLATION OF THE UNDERGROUND SPRAY BASIN, THE CONTRACTOR SHALL REFER TO THE MANUFACTURER'S SPECIFICATIONS REGARDING THE APPROPRIATE AMOUNT AND TYPE OF COVER THAT SHALL BE PLACED OVER TOP OF THE BASIN DURING CONSTRUCTION ACTIVITIES AND PRIOR TO THE BASIN AREA RECEIVING PERMANENT COVER.
2. CRITICAL STAGE - INSTALLATION OF THE UNDERGROUND DETENTION BASIN (UG-2)
   a. INSTALLATION OF THE UNDERGROUND SPRAY BASIN SHALL INCLUDE THE INSTALLATION OF THE OUTFALL SYSTEM (A10 TO A20).
   b. INLETS DISCHARGING TO THE DETENTION BASIN MUST BE BLOCKED IMMEDIATELY AFTER INSTALLATION AND REMAIN BLOCKED UNTIL SITE IS FULLY STABILIZED TO PREVENT SEDIMENT FROM ENTERING THE DETENTION BASIN.
   c. UPON INSTALLATION OF THE UNDERGROUND DETENTION BASIN, THE CONTRACTOR SHALL REFER TO THE MANUFACTURER'S SPECIFICATIONS REGARDING THE APPROPRIATE AMOUNT AND TYPE OF COVER THAT SHALL BE PLACED OVER TOP OF THE BASIN DURING CONSTRUCTION ACTIVITIES AND PRIOR TO THE BASIN AREA RECEIVING
3. CRITICAL STAGE - INSTALL THE INLET WATER QUALITY DEVICES CONSISTING OF THE SNOUT HOODS AND THE BIO-SKIRT.
4. CRITICAL STAGE - INSTALL THE MEADOW PLANTINGS.
5. UPON PERMANENT STABILIZATION AND NOTIFICATION TO THE CONSERVATION DISTRICT, REMOVE ANY REMAINING EROSION AND SEDIMENT CONTROL FACILITIES. ANY AREA DISTURBED DURING THE REMOVAL OF EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE STABILIZED IMMEDIATELY.
6. CLEAR SITE OF DEBRIS AND ALL UNWANTED MATERIALS. OPERATOR SHALL REMOVE FROM SITE, RECYCLE OR DISPOSE OF ALL BUILDING MATERIALS AND WASTES IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ, 271.1 ET SEQ THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP OR DISCHARGE ANY BUILDING MATERIAL OR WASTE AT THIS SITE.
7. DEMOBILIZE.
8. A NOTICE OF TERMINATION FORM SHOULD BE SUBMITTED TO THE CONSERVATION DISTRICT UPON STABILIZATION AND FINAL COMPLETION OF THIS PROJECT.

INFILTRATION TESTING SUMMARY TABLE

§102.8(f)(2)

TEST PIT NUMBER	EXISTING GROUND ELEVATION (FT)	LIMITING ZONE ELEV (FT)	INFILTRATION TESTING			FACTOR OF SAFETY	DESIGN RATE (IN/HR)
			DEPTH (FT)	ELEVATION (FT)	RATE (IN/HR)		
T-1	375.25	368.25+	1.00	374.25	3.00	3.00	1.00
T-2	360.50	352.5+	1.00	359.50	3.50	3.00	1.17
T-3	355.50	348.5+	1.00	354.50	3.00	3.00	1.00
T-4	353.75	345.75+	1.00	352.75	2.00	3.00	0.67
T-5	364.75	358.75+	1.00	363.75	2.00	3.00	0.67
T-6	359.25	353.25+	1.00	358.25	3.00	3.00	1.00
T-7	357.50	350.5+	1.00	357.50	3.00	3.00	1.00
T-8	354.25	348.25+	1.00	353.25	2.00	3.00	0.67

TYPES, DEPTH, SLOPE, LOCATIONS, AND LIMITATIONS OF THE SOILS

§102.4(b)(5)(ii)

SOIL DESCRIPTIONS

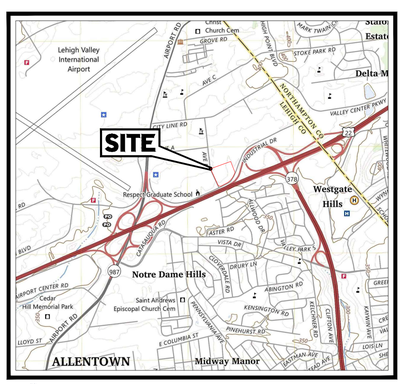
SOIL	DESCRIPTION	HYDROLOGIC SOIL GROUP
UmB	URBAN LAND-DUFFIELD COMPLEX, 0 TO 8 PERCENT SLOPES	D

LIMITATIONS FOR PENNSYLVANIA SOILS PERTAINING TO EARTH DISTURBANCE PROJECTS

SOIL NAME	CUTBANKS CAVE	CORROSIVE TO CONCRETE/ STEEL	DROUGHTY	EASILY ERODIBLE	FLOODING	DEPTH TO SEASONAL HIGH WATER TABLE	HYDRIC/ HYDRIC INCLUSIONS	LOW STRENGTH/ LANDSLIDE PRONE	SLOW PERCOLATION	PIPING	POOR SOURCE OF TOPSOIL	FROST ACTION	SHRINK-SWELL	POTENTIAL SINKHOLE	PONDING	WETNESS
URBANA						X						X				

LONG-TERM OPERATION AND MAINTENANCE SCHEDULE

SCM	QUANTITY	SCHEDULE	INSPECTION TASK	MAINTENANCE	FAILURE INDICATORS
SCM 6.4.8 VEGETATED SWALE		2 TIMES PER YEAR	- INSPECT FOR EROSION/FORMATION OF GULLIES OR RILLS AND LITTER - INSPECT VEGETATION CONDITION - INSPECT FOR POOLING/STANDING WATER	NEEDED MAINTENANCE SHOULD BE CONDUCTED IMMEDIATELY AFTER EACH INSPECTION. THE LITTER AND SEDIMENT SHALL BE REMOVED TO RESTORE DESIGN CAPACITIES AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. AREAS OF EROSION SHALL BE REGRADED AND STABILIZED AND SEDIMENT MUST BE REMOVED TO RESTORE DESIGN CAPACITIES. SEDIMENT AND LITTER SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.	FAILURE INDICATORS OF VEGETATED SWALES INCLUDE THE CHANNEL ERODING OR VEGETATION FAILS TO ESTABLISH OR DIES OFF UPON OBSERVING A FAILURE INDICATOR A QUALIFIED INDIVIDUAL SUCH AS A LANDSCAPE ARCHITECT/ARBORIST OR SOIL SCIENTIST/ENGINEER SHALL BE CONSULTED TO DETERMINE THE EXACT CAUSE OF FAILURE. UPON FURTHER INVESTIGATION PERFORMED BY THE QUALIFIED INDIVIDUAL A REMEDIATION PLAN SHALL BE IMPLEMENTED TO RESTORE THE VEGETATED SWALE TO ITS ORIGINAL DESIGN.
		4 TIMES PER YEAR	- INSPECT FOR LITTER		
		ANNUALLY	- INSPECT FOR ACCUMULATION OF ANTI-SKID MATERIALS FOLLOWING WINTER		
SCM 6.5.2 RUNOFF CAPTURE & REUSE		2 TIMES PER YEAR	- INSPECT CISTERN FOR ACCUMULATED DEBRIS. - CHECK PUMP TO ENSURE IT IS FUNCTIONING CORRECTLY	NEEDED MAINTENANCE SHOULD BE CONDUCTED IMMEDIATELY AFTER EACH INSPECTION. ACCUMULATED DEBRIS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. ANY MAINTENANCE ON THE PUMP SHALL BE CONDUCTED BY A QUALIFIED INDIVIDUAL.	FAILURE INDICATORS OF A CAPTURE AND REUSE SYSTEM ARE IF THE CISTERN BACKS UP. REMOVE ANY ACCUMULATED DEBRIS WHICH MIGHT KEEP THE PUMP FROM FUNCTIONING CORRECTLY. IF THE PUMP HAS MALFUNCTIONED A QUALIFIED INDIVIDUAL SHALL CONDUCT THE REPAIR.
SCM 6.6.3 DRY EXTENDED DETENTION BASIN		AFTER EACH STORM >1"	- INSPECT WATER DRAWDOWN TIME TO BE WITHIN 72 HOURS	ACCUMULATED DEBRIS AND SEDIMENT IN INLETS OR YARD DRAINS SHOULD BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.	IF ANY DRY EXTENDED DETENTION BASIN IS OBSERVED TO FAIL TO DEWATER WITHIN THE ALLOWABLE 72 HOURS THE OWNER SHALL NOTIFY THE ENGINEER OF RECORD OR QUALIFIED GEOTECHNICAL ENGINEER TO DEVELOP A PLAN TO ADDRESS THE DEFICIENCY
		4 TIMES PER YEAR	- INSPECT FOR ANY PONDING WATER		
		2 TIMES PER YEAR	- INSPECT STRUCTURES - INSPECT FOR SEDIMENT ACCUMULATION - INSPECT VEGETATIVE COVER CONDITION		
		ANNUALLY	- INSPECT FOR INVASIVE PLANT SPECIES		
SCM 6.6.4 WATER QUALITY FILTERS & HYDRODYNAMIC DEVICES		2 TIMES PER YEAR	- INSPECT OPERATION OF DEVICE - INSPECT FOR ACCUMULATION OF COLLECTED MATERIALS - INSPECT FOR RIPPED MEMBRANE IN THE CARTRIDGE/TENTACLE.	NEEDED MAINTENANCE SHALL BE PERFORMED IMMEDIATELY AFTER THE INSPECTION. ACCUMULATION OF SEDIMENT/DEBRIS SHALL BE REMOVED IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS/RECOMMENDATIONS. THE SEDIMENT/DEBRIS SHALL BE REMOVED, RECYCLED OR DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. IF UPON INSPECTION THE MEMBRANE FROM ANY CARTRIDGE/TENTACLE IS FOUND TO BE TORN, THE ENTIRE CARTRIDGE/TENTACLE SHALL BE REPLACED IMMEDIATELY. THE CARTRIDGE/TENTACLE SHALL BE REPLACED EVERY 5 YEARS REGARDLESS OF CONDITION.	SIGNS OF FAILURE IN A JELLYFISH INCLUDE SEDIMENT/DEBRIS LADEN RUNOFF FLOWING OUT OF THE FILTER. MAINTENANCE SHALL BE PERFORMED IMMEDIATELY IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS AND RECOMMENDATIONS.



USGS MAP
SCALE: 1" = 2,000'
SOURCE: USGS MAPS CATASAQUA QUADRANGLE



SOIL MAP
SCALE: 1" = 150'
SOURCE: WEB SOIL SURVEY

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
INDUSTRIAL & ARCHITECTURE
PERMITTING SERVICES
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1	10/16/2026	PER CITY COMMENTS	ATK / MRB

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PROJECT No.:	PAB260025.00-1B
DRAWN BY:	KMH
CHECKED BY:	MRB
DATE:	8/13/2026
CAD I.D.:	P-CIVL-CNDS

PROJECT:

PRELIMINARY/ FINAL LAND DEVELOPMENT PLAN
FOR

BOYLE CONSTRUCTION, INC.

PROPOSED DATA CENTER

2184 INDUSTRIAL DRIVE
BETHLEHEM, PA 18017
CITY OF BETHLEHEM
LEHIGH COUNTY
PIN: 641847439546-1
CITY WARD 13 BLOCK 177

BOHLER
74 W BROAD STREET, SUITE 500
BETHLEHEM, PA 18018
Phone: (610) 709-9971
Fax: (610) 709-9976
www.BohlerEngineering.com

J. CASEY BEAVAN
COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
CASEY A. BEAVAN
NOTARY PUBLIC
MY COMMISSION EXPIRES
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE086205
NEW JERSEY LICENSE NO. GE05339500

SHEET TITLE:
POST CONSTRUCTION STORMWATER MANAGEMENT NOTES & DETAILS

SHEET NUMBER:
C-806

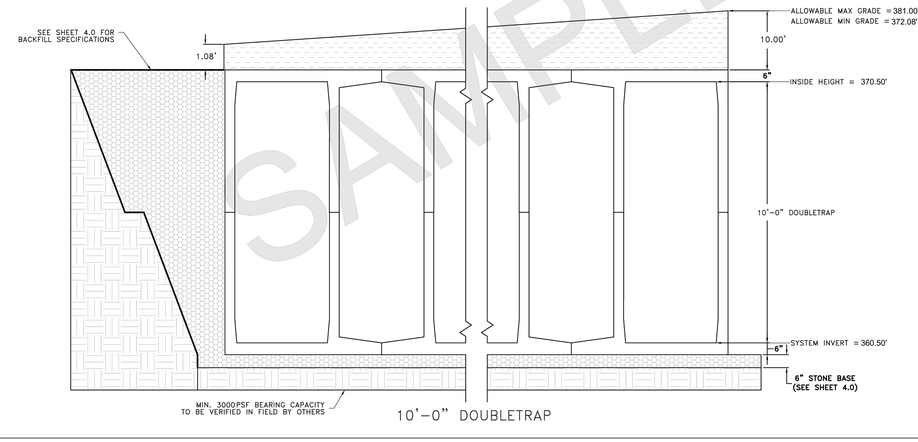
REVISION 1 - 10/16/2026

Oct 16, 2026
P:\PA\2026\PAB260025.00\CAD\DRAWINGS\PLAN SET\SCN\S_SITE PLANS\P-CIVL-CNDS-PAB260025.00-1B---LAYOUT_C-806 PCSM

STORMTRAP SYSTEM INFORMATION	
UNIT HEADROOM:	10'-0" DOUBLETRAP
TOTAL STORAGE PROV:	40974.28 CUBIC FEET

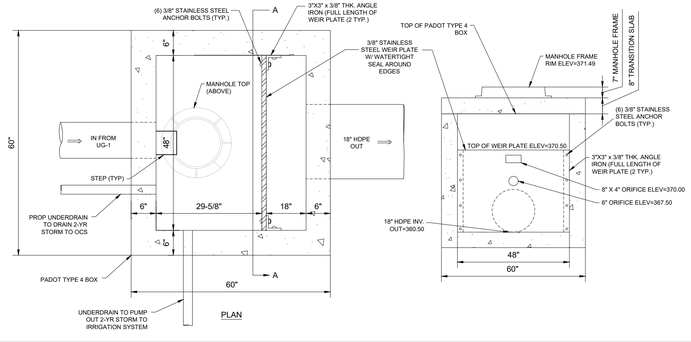
SITE SPECIFIC DESIGN CRITERIA

1. STORMTRAP UNITS SHALL BE MANUFACTURED AND INSTALLED ACCORDING TO SHOP DRAWINGS APPROVED BY THE INSTALLING CONTRACTOR AND ENGINEER OF RECORD. THE SHOP DRAWINGS SHALL INDICATE SIZE AND LOCATION OF ROOF OPENINGS AND INLET/OUTLET PIPE TYPES, SIZES, INVERT ELEVATIONS AND SIZE OF OPENINGS.
2. COVER RANGE: MIN. 1.08' MAX. 10.00' CONSULT STORMTRAP FOR ADDITIONAL COVER OPTIONS.
3. ALL DIMENSIONS AND SOIL CONDITIONS, INCLUDING BUT NOT LIMITED TO GROUNDWATER AND SOIL BEARING CAPACITY ARE REQUIRED TO BE VERIFIED IN THE FIELD BY OTHERS PRIOR TO STORMTRAP INSTALLATION.



UNDERGROUND DETENTION BASIN (UG-1)
STORMTRAP DOUBLETRAP CROSS-SECTION

(PA-U010403 - 04/2024) - CUSTOM NOT TO SCALE



NOTES:
1. ALL PIPE CONNECTIONS AND THE ORIFICE PLATE MUST BE WATER-TIGHT AND ACCESSIBLE FOR MAINTENANCE.
2. NON-SHRINK GROUT SHALL BE PROVIDED ALONG ALL EDGES OF THE ORIFICE PLATE. NEOPRENE GASKET TO BE UTILIZED.

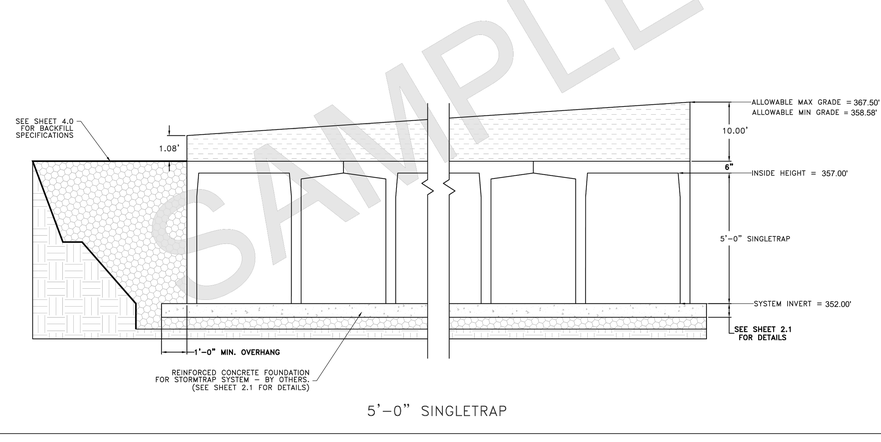
UNDERGROUND DETENTION BASIN (UG-1)
OUTLET CONTROL STRUCTURE

(PA-U010403 - 04/2024) - CUSTOM NOT TO SCALE

STORMTRAP SYSTEM INFORMATION	
UNIT HEADROOM:	5'-0" SINGLETRAP
TOTAL STORAGE PROV:	20483.57 CUBIC FEET

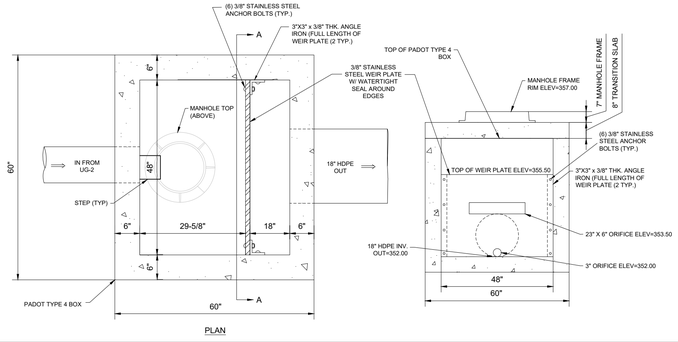
SITE SPECIFIC DESIGN CRITERIA

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UNDERGROUND DETENTION BASIN (UG-2)
STORMTRAP SINGLETRAP CROSS-SECTION

(PA-U010403 - 04/2024) - CUSTOM NOT TO SCALE



NOTES:
1. ALL PIPE CONNECTIONS AND THE ORIFICE PLATE MUST BE WATER-TIGHT AND ACCESSIBLE FOR MAINTENANCE.
2. NON-SHRINK GROUT SHALL BE PROVIDED ALONG ALL EDGES OF THE ORIFICE PLATE. NEOPRENE GASKET TO BE UTILIZED.

UNDERGROUND DETENTION BASIN (UG-2)
OUTLET CONTROL STRUCTURE

(PA-U010403 - 04/2024) - CUSTOM NOT TO SCALE

SAMPLE

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
SUSTAINABILITY DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES
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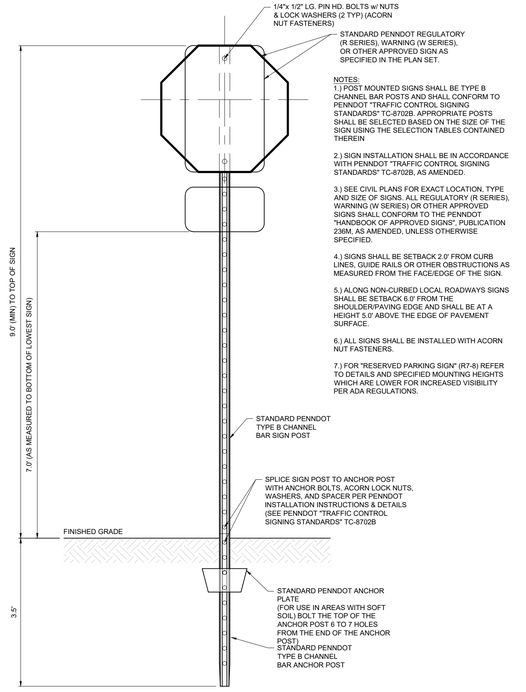
J. JEFFREY A. BEAVAN
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE087205
NEVADA LICENSE NO. 021524
NEW JERSEY LICENSE NO. GE05339500

SHEET TITLE:
POST CONSTRUCTION STORMWATER MANAGEMENT NOTES & DETAILS

SHEET NUMBER:
C-807

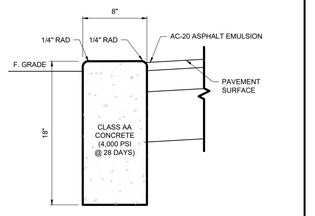
REVISION 1 - 10/16/2026

Oct 16, 2026
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ATK



STANDARD POLE MOUNTED SIGN INSTALLATION

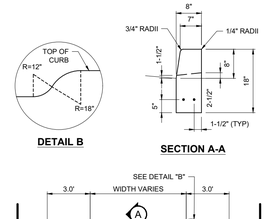
(PA-S060201 - 09/2023) NOT TO SCALE



CONTRACTION JOINTS 2" DEEP AND 3/4" WIDE SHALL BE INSTALLED IN THE CURB 20' APART AND SHALL BE FILLED WITH PREMOLDED EXPANSION JOINT FILLER MATERIAL AS SPECIFIED RECESSED 1/4" IN FROM FRONT FACE AND TOP OF CURB.

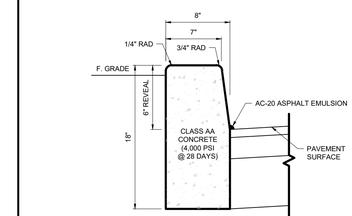
TYPICAL FLUSH CONCRETE CURB

(PA-S020202 - 03/2024) NOT TO SCALE



DEPRESSED CURB

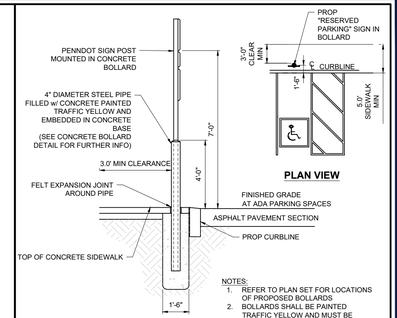
(PA-S020204 - 09/2023) NOT TO SCALE



CONTRACTION JOINTS 2" DEEP AND 3/4" WIDE SHALL BE INSTALLED IN THE CURB 20' APART AND SHALL BE FILLED WITH PREMOLDED EXPANSION JOINT FILLER MATERIAL AS SPECIFIED RECESSED 1/4" IN FROM FRONT FACE AND TOP OF CURB.

TYPICAL CONCRETE CURB

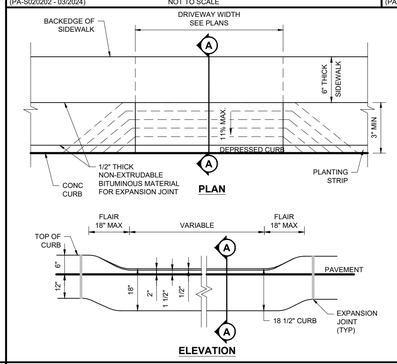
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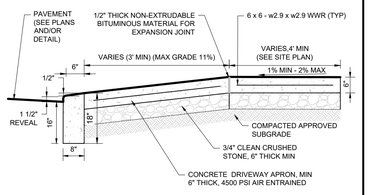


NOTES:
1. REFER TO PLAN SET FOR LOCATIONS OF PROPOSED BOLLARDS
2. BOLLARDS SHALL BE PAINTED TRAFFIC YELLOW AND MUST BE PERPETUALLY MAINTAINED / REPAINTED BY PROPERTY OWNER OR PARTY RESPONSIBLE FOR SITE MAINTENANCE.

RESERVED PARKING SIGN WITHIN BOLLARD

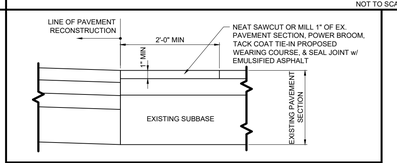
NOT TO SCALE (PA-S060103 - 09/2023)





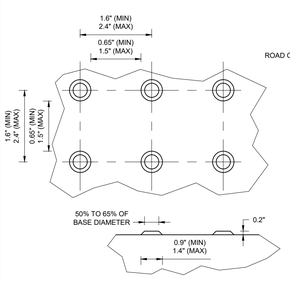
DEPRESSED CONCRETE AND CURB APRON AT DRIVEWAY

NOT TO SCALE (BE-S040101 - 08/2023)



NOTES:
1. CONSTRUCT NOTCH AS SHOWN TO PROVIDE FULL THICKNESS SIDEWALK UNDER DETECTABLE WARNING SURFACE.
2. OPTIONAL: CONSTRUCT 2" MAX CONCRETE BORDER AROUND DWS TO PROVIDE PROPER INSTALLATION.

DETECTABLE WARNING SURFACE EMBEDDING DETAIL



SIZE AND SPACING DETAIL

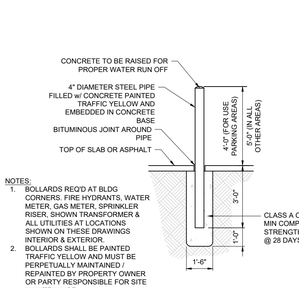
NOTES:
1. APPEARANCE - TRUNCATED DOMES THAT PROVIDE THE DETECTABLE WARNING SURFACE SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT ON DARK OR DARK ON LIGHT.
2. LOCATION - CONTRACTOR TO INSTALL DETECTABLE WARNING SURFACES WHEN SIDEWALK IS WITHIN PUBLIC ROW AND WHERE INDICATED ON THE PLAN.
3. MATERIAL - TRUNCATED DOMES SHALL BE AN INTEGRAL PART OF THE ADA CURB RAMP CONSTRUCTION CONSISTING OF CAST IN PLACE COMPOSITE TILES/MAT. THE TILE/MAT MATERIAL SHALL BE A HOMOGENEOUS GLASS AND CARBON REINFORCED COMPOSITE MATERIAL THAT IS, COLOR FAST AND UV STABLE AND COMPLIES WITH ASTM STANDARDS D638, D695, AND D790. RUBBERIZED MATERIAL TO BE GLUED TO RAMP SURFACE SHALL NOT BE ACCEPTABLE.
4. PLACEMENT - TRUNCATED DOMES SHALL EXTEND THE FULL WIDTH OF THE TRAVEL PATH EXCLUDING FLARES. LOCATE ONE CORNER OF THE DWS AT THE BACK OF CURB OR EDGE OF WALKING SURFACE. NO OTHER POINT ON THE LEADING EDGE OF THE DWS MAY BE MORE THAN 5FT AWAY FROM THE BACK OF CURB OR EDGE OF WALKING SURFACE.

DETECTABLE WARNING SURFACE (DWS)

NOT TO SCALE (BE-S030509 - 10/2025)

PAVEMENT TIE-IN

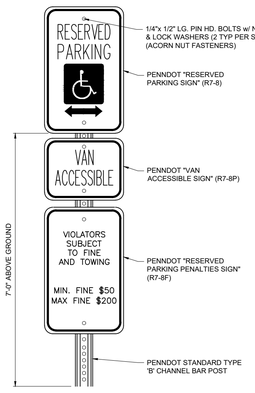
(PA-S019901 - 09/2023) NOT TO SCALE



NOTES:
1. BOLLARDS REQ'D AT BLDG CORNERS. FIRE HYDRANTS, WATER METER, GAS METER, SPRINKLER RISER, SHOWN TRANSFORMER & ALL UTILITIES AT LOCATIONS SHOWN ON THESE DRAWINGS INTERIOR & EXTERIOR.
2. BOLLARDS SHALL BE PAINTED TRAFFIC YELLOW AND MUST BE PERPETUALLY MAINTAINED / REPAINTED BY PROPERTY OWNER OR PARTY RESPONSIBLE FOR SITE MAINTENANCE.

BOLLARD

(PA-S070101 - 09/2023) NOT TO SCALE



NOTES:
1. POST MOUNTED SIGNS SHALL BE TYPE B CHANNEL BAR POSTS AND SHALL CONFORM TO PENNDOT "TRAFFIC CONTROL SIGNING STANDARDS" TC-8702B. APPROPRIATE POSTS SHALL BE SELECTED BASED ON THE SIZE OF THE SIGN USING THE SELECTION TABLES CONTAINED THEREIN
2. SIGN INSTALLATION SHALL BE IN ACCORDANCE WITH PENNDOT "TRAFFIC CONTROL SIGNING STANDARDS" TC-8702B, AS AMENDED.
3. SEE CIVIL PLANS FOR EXACT LOCATION, TYPE AND SIZE OF SIGNS. ALL REGULATORY (R SERIES), SIGNS SHALL CONFORM TO THE PENNDOT "HANDBOOK OF APPROVED SIGNS", PUBLICATION 236M, AS AMENDED, UNLESS OTHERWISE SPECIFIED.
4. SIGNS SHALL BE SETBACK 2.0' FROM CURB LINES OR OTHER OBSTRUCTIONS AS MEASURED FROM THE FACE/EDGE OF THE SIGN.
5. RESERVED PARKING SPACE SIGNS SHALL CONFORM TO DEPARTMENT OF JUSTICE "ADA STANDARDS FOR ACCESSIBLE DESIGN" AS AMENDED.
6. ALL SIGNS SHALL BE INSTALLED WITH ACORN NUT FASTENERS.

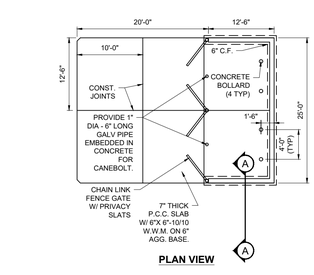
RESERVED PARKING SPACE WITH PENALTIES AND VAN ACCESSIBLE SIGNS

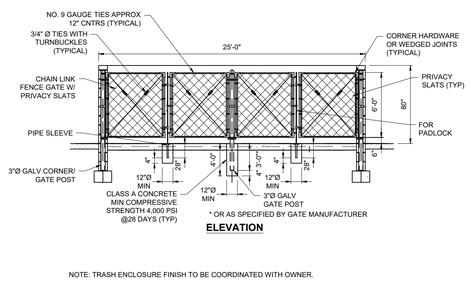
NOT TO SCALE (PA-S060101 - 09/2023)

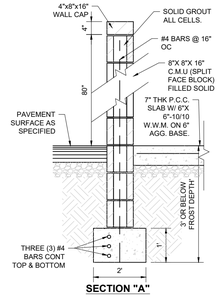


RESERVED PARKING SPACE AND PENALTIES SIGNS

NOT TO SCALE (PA-S060102 - 09/2023)



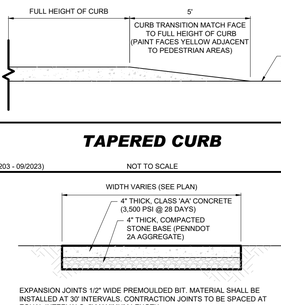




NOTE: TRASH ENCLOSURE FINISH TO BE COORDINATED WITH OWNER.

12'-6" x 25'-0" CMU TRASH ENCLOSURE

NOT TO SCALE (PA-S100201 - 09/2023)



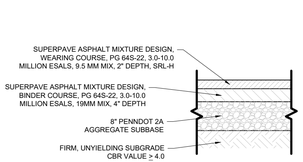
TAPERED CURB

(PA-S020203 - 09/2023) NOT TO SCALE

EXPANSION JOINTS 1/2" WIDE PREMOULDED BIT. MATERIAL SHALL BE INSTALLED AT 30' INTERVALS. CONTRACTION JOINTS TO BE SPACED AT EQUAL INTERVALS, 5' MAXIMUM LENGTH.

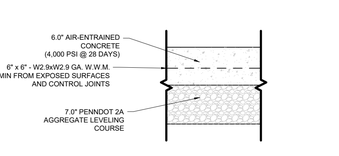
CONCRETE SIDEWALK

(PA-S030201 - 09/2023) NOT TO SCALE



HEAVY DUTY ASPHALT PAVEMENT

(PA-S010102 - 03/2024) NOT TO SCALE



REINFORCED CONCRETE PAVEMENT

(BE-S010203 - 03/2024) NOT TO SCALE

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
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J. BEAVAN
JEFFREY A. BEAVAN
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE073005
NEW JERSEY LICENSE NO. GE50339500

SHEET TITLE:

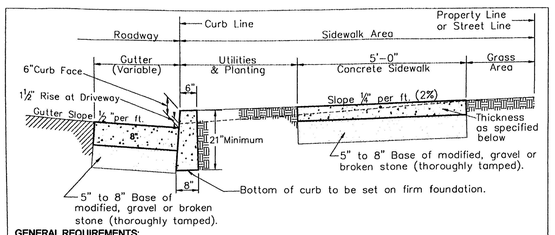
CONSTRUCTION DETAILS

SHEET NUMBER:

C-901

REVISION 1 - 10/16/2026

Oct 16, 2026
P:\PA2025\PAB260025.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-CNDS-PAB260025.00-1B ——LAYOUT: C-901 DETL



GENERAL REQUIREMENTS:

One Course (Monolithic) Construction for all Curb, Gutter and Sidewalk.
Concrete Mix: To be Class A Concrete 3300# 6 Bag Mix – 5.6 Gal. Water per bag throughout; use power batch mixer. No slag.
Curb: 21" Depth with approved finish on top and exposed face.
Gutter: 8" Depth – Slope of Gutter 1/2" rise per foot away from curb.
Sidewalk: Thickness – Residential Area – 5", Business and Industrial Areas – 6"
At Residential Driveways – 6", At Business and Industrial Driveways – 8".
Finish – Use a float and broom finish to produce skid resistant surface.
On Grades of 5% or more, produce a rougher finish.
Slope – Walk and Parkway Areas 1/4" per foot (2%) toward curb.
Expansion and Contraction Joints: See City Construction Standard No.1A.
Handicapped Ramps: Required on all Radii in accordance with current ADA requirements.
Driveways: See City Standard Driveway Entrance and Apron Sketch.

Excavation in Cartway: When excavating in the cartway of a City street, a clean, full depth cut– by jack hammering or sawcutting–shall be made in the street between the affected and the unaffected work areas. Further, final restoration in the affected area of the street shall consist of creating a new clean cut by sawcutting 12" beyond the edge of any affected work areas, backfilling with PennDOT 2A Modified stone, and properly compacting this stone to the elevation of the top of the subbase (i.e. bottom of the base course of the macadam), but no higher than 3–inches below the finish grade–except as required to provide reasonable temporary access at driveways.

ORDINANCE REQUIREMENTS:

Warrant of Survey – Procured from the City Engineer's Office; provides for establishing Line & Grades; Stakes to to be protected by applicant and used within 30 days.
Excavation Permit – Procured from the City Engineer's Office; for Sidewalk and driveway construction.

DETAIL REQUIREMENTS:

For further details and other requirements see the following documents on file in the Office of the City Engineer:
"Standard Specifications for the Construction of Concrete Curb, Gutter and Sidewalk"
Codified Ordinances of the City of Bethlehem, Articles 903 and 909.

NOTES:

+ Whenever a curb, gutter and/or sidewalk is located in a Historic District, special requirements may apply.
+ Changes to dimensional requirements may be considered in cases where obstructions or encroachments exist. Any exceptions must be approved by the City Engineer. Current ADA requirements must be met in all cases.

CITY OF BETHLEHEM, PA
BUREAU OF ENGINEERING

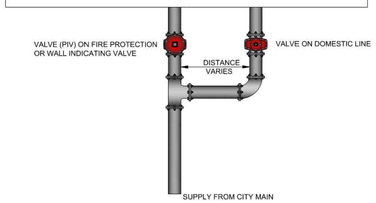
CONSTRUCTION STANDARD NO.1

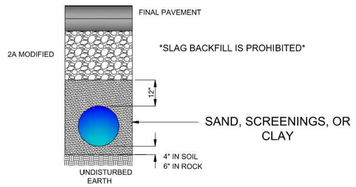
for CONCRETE CURB, GUTTER and SIDEWALK

FEBRUARY 7, 2001
REV. JUNE 4, 2013

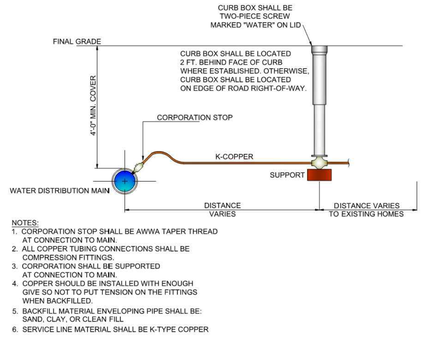
6/5/13
CITY ENGINEER

COMMERCIAL BUILDING
FIRE LINE PIPE DETAIL



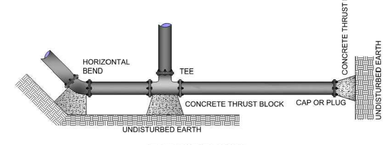


WATER MAIN TRENCH
IN PAVED AREA DETAIL
DUCTILE IRON PIPE or C-900

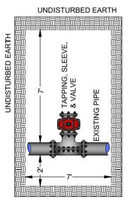


NOTES:
1. CORPORATION STOP SHALL BE AWWA TAPER THREAD AT CONNECTION TO MAIN.
2. ALL COPPER TUBING CONNECTIONS SHALL BE COMPRESSION FITTINGS.
3. CORPORATION SHALL BE SUPPORTED AT CONNECTION TO MAIN.
4. COPPER SHOULD BE INSTALLED WITH ENOUGH GIVE SO NOT TO PUT TENSION ON THE FITTINGS WHEN BACKFILLED.
5. BACKFILL MATERIAL ENVELOPING PIPE SHALL BE: SAND, CLAY, OR CLEAN FILL.
6. SERVICE LINE MATERIAL SHALL BE K-TYPE COPPER

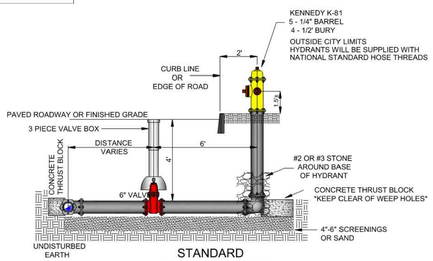
TYPICAL WATER SERVICE
CONNECTION



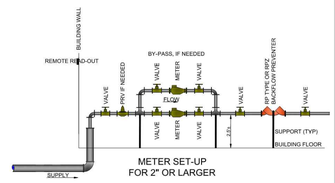
THRUST BLOCK
DETAIL
TOP VIEW



TAPPING, SLEEVE, & VALVE
TRENCH DETAIL

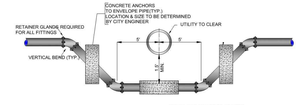


STANDARD
FIRE HYDRANT SET-UP
DETAIL

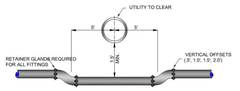


METER SET-UP
FOR 2" OR LARGER

OMNI™ Compound (C²) Water Meters
SUPPLIED
BY THE CITY

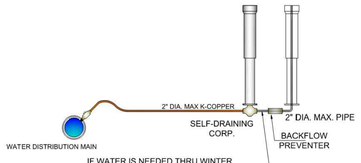


LOWERING DETAIL
USING VERTICAL BENDS

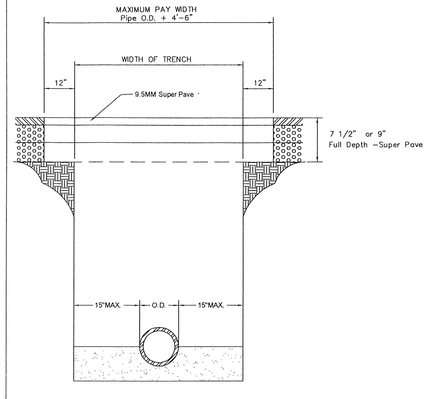


LOWERING DETAIL
USING VERTICAL OFFSETS
NO THRUST BLOCKS NEEDED

TEMPORARY
CONSTRUCTION
WATER DETAIL



IF WATER IS NEEDED THRU WINTER MONTHS
A TEMPORARY PIT IS REQUIRED AND PROVISIONS
MADE TO KEEP METER FROM FREEZING



Residential Streets – 7 1/2" Full Depth – 3 course – 3"–19MM+3" –19MM+1 1/2"–9.5MM– Super Pave
Arterial Streets – 9" Full Depth – 3 course – 4"–19MM+3 1/2"–19MM+1 1/2"–9.5MM– Super Pave

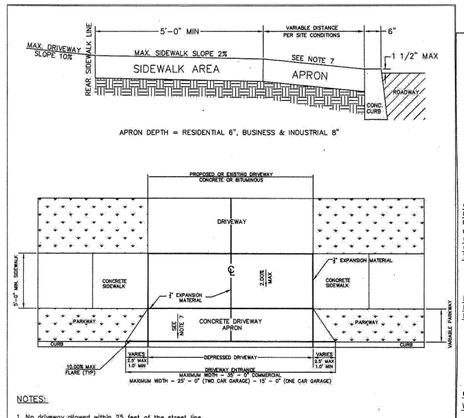
NOTES:
1. All joints abutting existing pave to be primed with a bituminous tack coat, E–1 in accordance with Section 460 of Form 408.
2. All super pave wearing course and super pave base course shall refer to PennDOT Specifications Publication 408/ 2003–1 effective April 2, 2004.
3. All joints to be sealed for one (1) foot (6" on either side of joint) with E–2 in accordance with Section 470 of form 408.
4. All measurements made to the nearest 0.1 foot.

CITY OF BETHLEHEM, PA

FULL DEPTH-SUPER PAVE
PAVEMENT REPLACEMENT

SCALE: NTS DATE: FEBRUARY 26, 2006

CITY ENGINEER



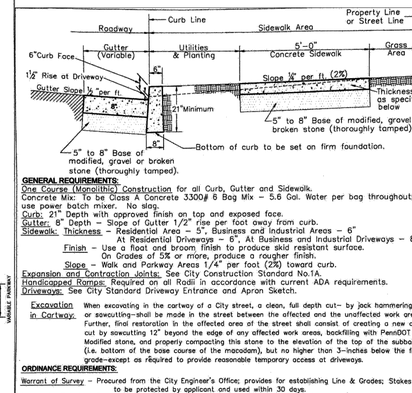
NOTES:
1. No driveway allowed within 25 feet of the street line intersection.
2. An off street parking area shall be at least 9' wide by 19' deep on private property.
3. One driveway entrance allowed for each 100' feet of property frontage.
4. Maximum slope for driveway behind public right–of–way shall be 10%.
5. A monolithic driveway apron and curb may be permitted.
6. Changes to dimensional requirements may be considered in cases where obstructions or encroachments exist. Any exceptions must be approved by the City Engineer. Current ADA requirements must be met in all cases.
7. Desired 8% max allowable change in grade between road surface and driveway apron. 10% max grade for driveway aprons.

NOTE: Whenever a curb, gutter and/or sidewalk is located in a Historic District, special requirements may apply.

CITY OF BETHLEHEM, PA
BUREAU OF ENGINEERING

TYPE 1 DRIVEWAY
ENTRANCE AND APRON

12/19/14
CITY ENGINEER



GENERAL REQUIREMENTS:

One Course (Monolithic) Construction for all Curb, Gutter and Sidewalk.
Concrete Mix: To be Class A Concrete 3300# 6 Bag Mix – 5.6 Gal. Water per bag throughout; use power batch mixer. No slag.
Curb: 21" Depth with approved finish on top and exposed face.
Gutter: 8" Depth – Slope of Gutter 1/2" rise per foot away from curb.
Sidewalk: Thickness – Residential Area – 5", Business and Industrial Areas – 6"
At Residential Driveways – 6", At Business and Industrial Driveways – 8".
Finish – Use a float and broom finish to produce skid resistant surface.
On Grades of 5% or more, produce a rougher finish.
Slope – Walk and Parkway Areas 1/4" per foot (2%) toward curb.
Expansion and Contraction Joints: See City Construction Standard No.1A.
Handicapped Ramps: Required on all Radii in accordance with current ADA requirements.
Driveways: See City Standard Driveway Entrance and Apron Sketch.

Excavation in Cartway: When excavating in the cartway of a City street, a clean, full depth cut– by jack hammering or sawcutting–shall be made in the street between the affected and the unaffected work areas. Further, final restoration in the affected area of the street shall consist of creating a new clean cut by sawcutting 12" beyond the edge of any affected work areas, backfilling with PennDOT 2A Modified stone, and properly compacting this stone to the elevation of the top of the subbase (i.e. bottom of the base course of the macadam), but no higher than 3–inches below the finish grade–except as required to provide reasonable temporary access at driveways.

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DETAIL REQUIREMENTS:

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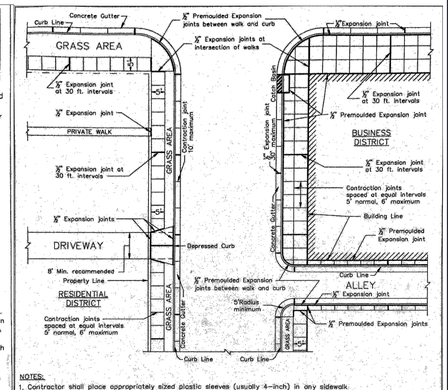
CITY OF BETHLEHEM, PA
BUREAU OF ENGINEERING

CONSTRUCTION STANDARD NO.1

for CONCRETE CURB, GUTTER and SIDEWALK

FEBRUARY 7, 2001
REV. JUNE 4, 2013

6/5/13
CITY ENGINEER



NOTES:
1. Contractor shall place appropriately sized plastic sleeves (usually 4–inch) in any sidewalk area requiring placement or replacement of signposts or other similar items that penetrate through any newly placed concrete structure. Posts or other items that are replaced shall be located at the same location they were originally, unless otherwise specified by the City Engineer or his designee.
2. Large items, such as utility poles and foundations of traffic signal posts, penetrating any newly placed concrete structure shall be properly isolated and boxed out with a 1/2–inch expansion joint.
3. Whenever a curb, gutter and/or sidewalk is located in the Historical Area, special requirements apply.
4. Changes to dimensional requirements may be considered in cases where obstructions or encroachments exist. Any exceptions must be approved by the City Engineer. Current ADA requirements must be met in all cases.

CITY OF BETHLEHEM, PA
BUREAU OF ENGINEERING

CONSTRUCTION STANDARD NO.1A

CONCRETE CURB, GUTTER AND SIDEWALK
EXPANSION AND CONTRACTION JOINT DETAIL

FEBRUARY 7, 2001
REV. JUNE 4, 2013

6/5/13
CITY ENGINEER

Oct 16, 2026
P:\PA\2026\PAB260025.00\CAD\DRAWINGS\PLAN SET\CIVIL SITE PLANS\P-CIVL-CNDS-PAB260025.00-1B-----LAYOUT: C-902 DETL
AKH

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
INDUSTRIAL DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	10/16/2026	PER CITY COMMENTS	ATK / MRB

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WWW.PA1CALL.ORG
#(BOHLER)XXXXXXXXXX / #(SURVEY)20121712057

FOR MUNICIPAL REVIEW & APPROVAL

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PROJECT No.:	PAB260025.00-1B
DRAWN BY:	KMH
CHECKED BY:	MRB
DATE:	8/13/2026
CAD I.D.:	P-CIVL-CNDS

PROJECT:

PRELIMINARY/ FINAL LAND DEVELOPMENT PLAN

FOR

BOYLE CONSTRUCTION, INC.

PROPOSED DATA CENTER
2184 INDUSTRIAL DRIVE
BETHLEHEM, PA 18017
CITY OF BETHLEHEM
LEHIGH COUNTY
PIN: 641847439546-1
CITY WARD 13 BLOCK 177

BOHLER
74 W BROAD STREET, SUITE 500
BETHLEHEM, PA 18018
Phone: (610) 709-9971
Fax: (610) 709-9976
www.BohlerEngineering.com

J. A. BEAVAN
COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
JEFFREY A. BEAVAN
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE082656
NEW YORK LICENSE NO. 132204
NEW JERSEY LICENSE NO. GE05339500

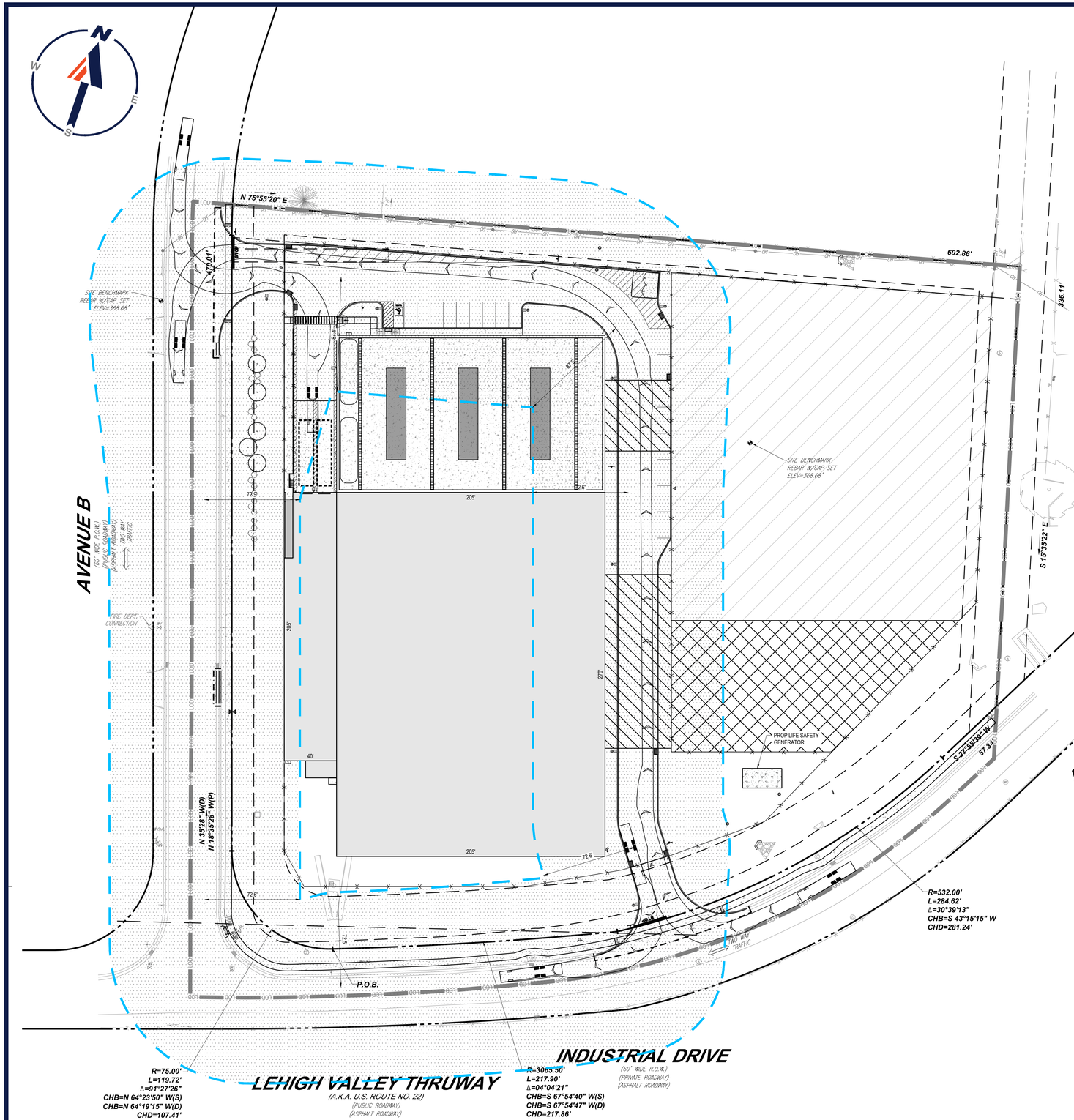
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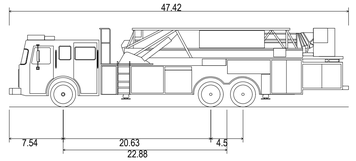
CONSTRUCTION DETAILS

SHEET NUMBER:

C-902

REVISION 1 - 10/16/2026

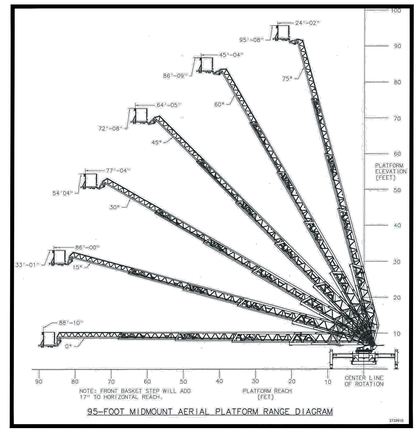




CITY OF BETHLEHEM FIRE TRUCK LADDER 2

Overall Length	47.420ft
Overall Width	8.250ft
Overall Body Height	11.000ft
Min Body Ground Clearance	1.086ft
Track Width	8.000ft
Lock-to-lock time	6.00s
Wall to Wall Turning Radius	43.083ft

LADDER REACH



95-FOOT MIDMOUNT AERIAL PLATFORM RANGE DIAGRAM

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY

SCALE: 1" = 40'

BOHLER

SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

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PROJECT No.:	PAB260025.00-1B
DRAWN BY:	KMH
CHECKED BY:	MRB
DATE:	8/13/2026
CAD I.D.:	P-CIVIL-LDVP

PROJECT:

PRELIMINARY/ FINAL LAND DEVELOPMENT PLAN

FOR

BOYLE CONSTRUCTION, INC.

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BETHLEHEM, PA 18017
CITY OF BETHLEHEM
LEHIGH COUNTY
PIN: 641847439546-1
CITY WARD 13 BLOCK 177

BOHLER
74 W BROAD STREET, SUITE 500
BETHLEHEM, PA 18018
Phone: (610) 709-9971
Fax: (610) 709-9976
www.BohlerEngineering.com

J. JEFFREY A. BEAVAN
COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL ENGINEER
JEFFREY A. BEAVAN
PROFESSIONAL ENGINEER
I PERSONALLY APPEARED BEFORE ME AND ACKNOWLEDGE THAT I AM DULY LICENSED IN THE FOLLOWING JURISDICTIONS:
PENNSYLVANIA LICENSE NO. PE082005
NEW JERSEY LICENSE NO. 24GE05053204
NEW JERSEY CERTIFICATE OF AUTHORIZATION NO. 24GE06339900

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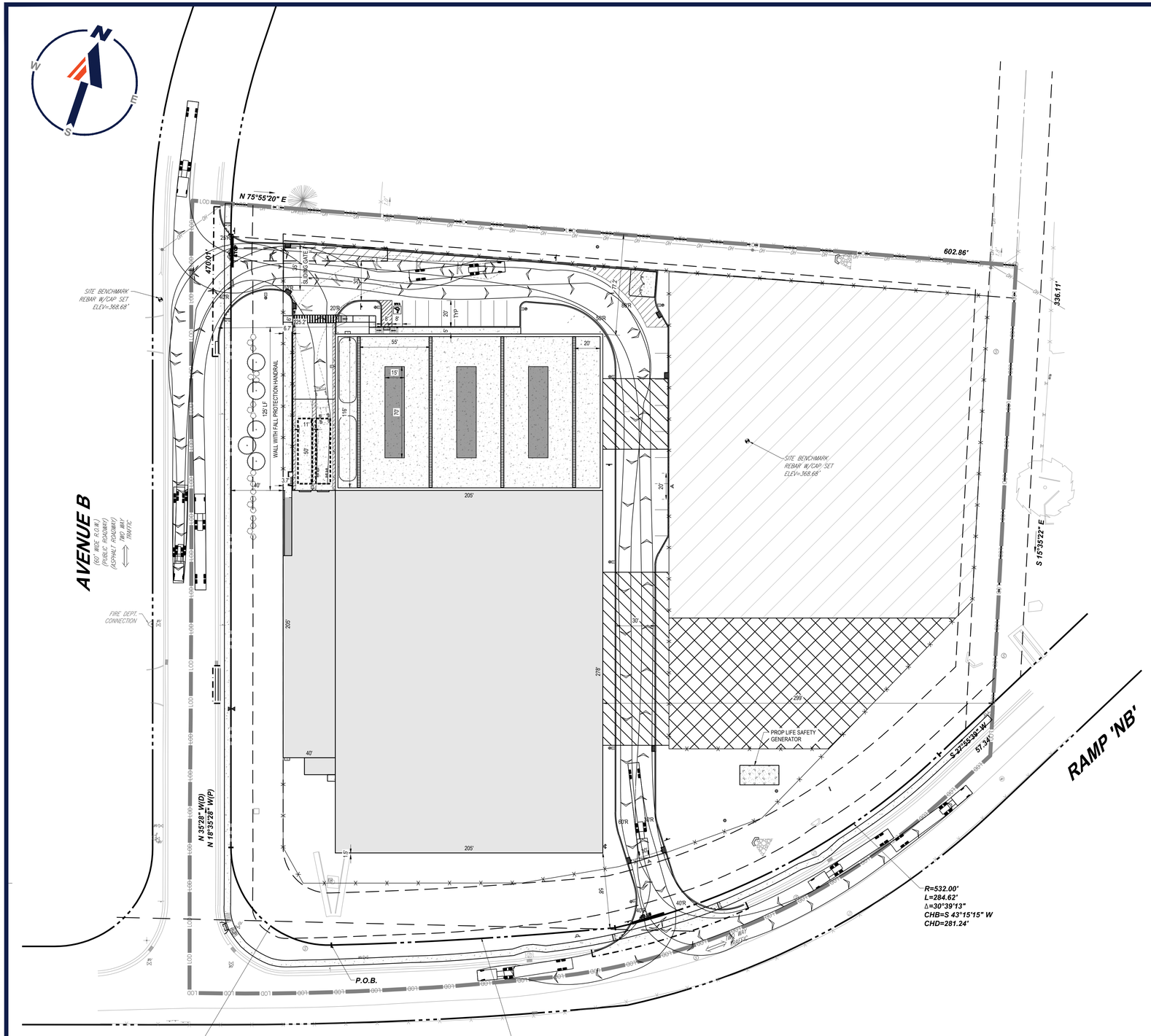
FIRE TRUCK TURN PLAN

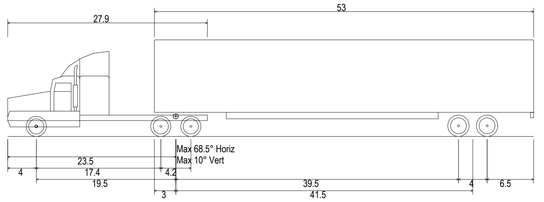
SHEET NUMBER:

C-902

REVISION 1 - 10/16/2026

Oct 16, 2026
P:\PA\20\PAB260025.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LDVP-PAB260025.00-1B-----3LAYOUT C-903 TRCK TURN
AKH





WB-67 - (PA LEGAL)

Overall Length	73.501ft
Overall Width	8.500ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.334ft
Max Track Width	8.500ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	28.40°

THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY

40 20 10 0 40

SCALE: 1" = 40'

BOHLER™

SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
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J.M. ILLIGASH
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002666

SHEET TITLE:

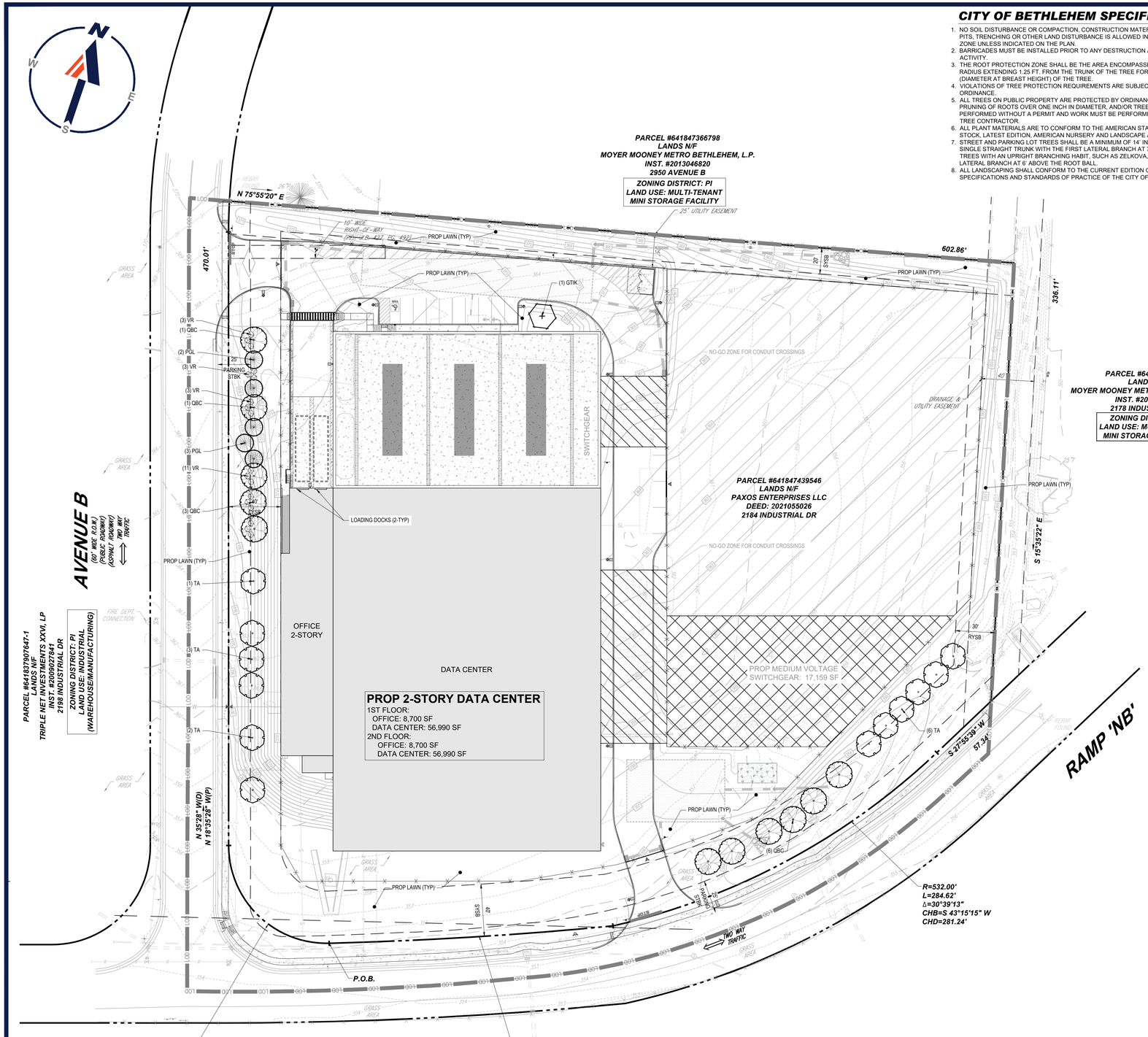
DELIVERY TRUCK TURN PLAN

SHEET NUMBER:

C-903

REVISION 1 - 10/16/2026

Oct 16, 2026
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CITY OF BETHLEHEM SPECIFIC NOTES:

1. NO SOIL DISTURBANCE OR COMPACTION, CONSTRUCTION MATERIALS, TRAFFIC, BURIAL PITS, TRENCHING OR OTHER LAND DISTURBANCE IS ALLOWED IN THE TREE PROTECTION ZONE UNLESS INDICATED ON THE PLAN.
2. BARRICADES MUST BE INSTALLED PRIOR TO ANY DESTRUCTION AND/OR CONSTRUCTION ACTIVITY.
3. THE ROOT PROTECTION ZONE SHALL BE THE AREA ENCOMPASSED BY A CIRCLE WITH A RADIUS EXTENDING 1.25 FT. FROM THE TRUNK OF THE TREE FOR EVERY INCH DBH (DIAMETER AT BREAST HEIGHT) OF THE TREE.
4. VIOLATIONS OF TREE PROTECTION REQUIREMENTS ARE SUBJECT TO PENALTY PER CITY ORDINANCE.
5. ALL TREES ON PUBLIC PROPERTY ARE PROTECTED BY ORDINANCE: NO PRUNING, ROOT PRUNING OF ROOTS OVER ONE INCH IN DIAMETER, AND/OR TREE REMOVAL IS TO BE PERFORMED WITHOUT A PERMIT AND WORK MUST BE PERFORMED BY A CITY LICENSED TREE CONTRACTOR.
6. ALL PLANT MATERIALS ARE TO CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION, AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
7. STREET AND PARKING LOT TREES SHALL BE A MINIMUM OF 14' IN HEIGHT AND HAVE A SINGLE STRAIGHT TRUNK WITH THE FIRST LATERAL BRANCH AT 7' ABOVE THE ROOT BALL. TREES WITH AN UPRIGHT BRANCHING HABIT, SUCH AS ZELKOVA, MAY HAVE THE FIRST LATERAL BRANCH AT 6' ABOVE THE ROOT BALL.
8. ALL LANDSCAPING SHALL CONFORM TO THE CURRENT EDITION OF THE ARBORICULTURAL SPECIFICATIONS AND STANDARDS OF PRACTICE OF THE CITY OF BETHLEHEM.

GENERAL LANDSCAPE NOTES:

1. THESE LANDSCAPE PLANS ARE TO BE READ IN CONJUNCTION WITH THE LANDSCAPE SPECIFICATIONS, AND ASSOCIATED DETAILS FOUND ON THE LANDSCAPE DETAILS SHEET. THE GENERAL NOTES, FOUND ON THE NOTES PAGE OF THIS PLAN SET, ARE CONSIDERED PART OF LANDSCAPE PLANS. THE CONTRACTOR MUST REFER TO, AND FULLY COMPLY WITH, ALL NOTES, SPECIFICATIONS AND DETAILS DESCRIBED HEREIN, ON THE LANDSCAPE PLANS AND IN THE LANDSCAPE DETAILS SHEET.
2. ALL DISTURBED UNPAVED AREAS, EXCLUDING PLANTING BEDS, ARE TO BE INSTALLED AS LAWN IN ACCORDANCE WITH "MATERIALS" SECTION OF THE LANDSCAPE SPECIFICATIONS, UNLESS OTHERWISE SPECIFICALLY STATED ON THIS PLAN.
3. SHRUBS PLANTED ALONG HEAD-IN PARKING STALLS SHALL BE INSTALLED TO ALLOW A CLEARANCE OF TWO FEET FROM FACE OF CURB TO ALLOW FOR BUMPER OVERHANG.
4. PLANT MATERIAL SUBSTITUTIONS MUST BE FORMALLY SUBMITTED TO BOHLER AND THE MUNICIPALITY'S ENGINEERING AND LANDSCAPE CONSULTANTS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
5. WITHOUT EXCEPTION, WEED BARRIER FABRIC SHALL NOT BE INSTALLED WITHIN ANY STORMWATER FACILITY, INCLUDING RAINGARDENS, INFILTRATION TRENCHES, VEGETATIVE SWALES AND STORMWATER BASINS.
6. IF IRRIGATION IS REQUIRED BY THE OWNER OR APPROVING MUNICIPALITY, THE CONTRACTOR SHALL PROVIDE AN IRRIGATION SYSTEM MEETING THE SPECIFICATIONS OF THE CHOSEN PRODUCT'S MANUFACTURER. THE IRRIGATION DESIGN SHALL ACCOMMODATE LAWN AND BED AREAS EACH UNDER SEPARATE ZONES TO MAXIMIZE WATER EFFICIENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ANY PERMITS REQUIRED FOR THE INSTALLATION OF AN IRRIGATION SYSTEM.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPING UNTIL PROJECT MAINTENANCE IS TURNED OVER TO THE PROPERTY OWNER OR OTHER RESPONSIBLE PARTY. SUCH RESPONSIBILITIES INCLUDE, BUT ARE NOT LIMITED TO, THE CARE, WATERING, AND MAINTENANCE OF ALL PLANT MATERIAL; LAWN MOWING; AND SEASONAL MAINTENANCE.

LANDSCAPE COMPLIANCE CHART

SECTION	REQUIREMENT	CALCULATIONS (REQUIRED / PROVIDED)	COMPLIANCE
ZONING: 1306.06 ADDITIONAL REQUIREMENTS IN THE PI DISTRICT	(a) A MINIMUM OF 20 PERCENT OF THE LOT AREA SHALL BE LANDSCAPED WITH TREES AND SHRUBS	TOTAL LOT AREA: 296,117± SF REQUIRED (20%): 59,223.4± SF LANDSCAPE AREA PROVIDED: 89,722± SF LANDSCAPE AREA (30.3%)	COMPLIES
1318.23 BUFFER YARDS	BUFFER YARDS ARE REQUIRED ALONG REAR AND SIDE LOT LINES IN ALL PRIMARILY NONRESIDENTIAL DISTRICTS (SUCH AS THE OM, INDUSTRIAL REDEVELOPMENT, COMMERCIAL AND INDUSTRIAL DISTRICTS), ALONG THE DISTRICT BOUNDARIES BETWEEN A NEW OR EXPANDED NON-RESIDENTIAL USE AND ANY RESIDENTIAL AND INSTITUTIONAL DISTRICTS THAT DIRECTLY ABUTS THE NON-RESIDENTIAL DISTRICT OR IS ONLY SEPARATED FROM THE NON-RESIDENTIAL DISTRICT BY AN ORDAINED ALLEY OR LOCAL STREET.	NO RESIDENTIAL OR INSTITUTIONAL DISTRICTS ABUTTING OR SEPARATED FROM SUBJECT SITE BY ALLEY OR LOCAL STREET. NOT APPLICABLE.	NOT APPLICABLE
	(i) A BUFFER YARD SHALL ALSO BE REQUIRED IN THE FOLLOWING SITUATIONS: (1) IF OUTDOOR PROCESSING OR MANUFACTURING ACTIVITY OR OVERNIGHT PARKING OF 2 OR MORE TRACTOR-TRAILER TRUCKS OR OUTDOOR STORAGE OF INDUSTRIAL MATERIALS ARE VISIBLE FROM A PUBLIC STREET.	BUFFER PLANTINGS MEETING THE INTENT OF THIS REQUIREMENT HAVE BEEN PROVIDED NEARBY THE LOADING SPACES ALONG AVENUE 'B.'	COMPLIES
1318.28 TREE CONSERVATION	(a) WHERE ANY EXISTING HEALTHY TREE(S) THAT HAS A TRUNK DIAMETER OF 8 INCHES OR GREATER (MEASURED 4.5 FEET ABOVE THE GROUND LEVEL) ARE REMOVED FROM A SITE AS PART OF OR IN PREPARATION FOR A DEVELOPMENT PROJECT, 1 NEW TREE SHALL BE PLANTED FOR EACH SUCH TREE THAT IS REMOVED. THE NEW TREES SHALL HAVE A MINIMUM TRUNK DIAMETER OF 2.5 INCHES MEASURED 6 INCHES ABOVE THE GROUND LEVEL AND SHALL MEET THE CITY SPECIES REQUIREMENTS THAT WOULD APPLY TO STREET TREES, UNLESS OTHER SPECIES ARE APPROVED BY THE CITY FORESTER. IF THERE IS MUTUAL CONSENT BY THE APPLICANT AND THE CITY, SOME OR ALL OF THE REPLACEMENT TREES MAY BE PLANTED ON CITY OWNED LAND AS AN IN LIEU OF REQUIREMENT. IN THE RR (RURAL RESIDENTIAL) AND CM (OFFICE RESEARCH CENTER) DISTRICTS, ALL OF THE ABOVE PROVISIONS SHALL APPLY, EXCEPT THAT 2 NEW TREES SHALL BE PLANTED FOR EACH SUCH TREE THAT IS REMOVED.	TOTAL EXISTING TREES 8"+ DBH PROPOSED TO BE REMOVED: 39 REQUIRED: 39 REPLACEMENT TREES PROVIDED: 0 REPLACEMENT TREES DEFICIENCY: 39 REPLACEMENT TREES	FEE-IN-LIEU
1319.02 GENERAL REGULATIONS APPLYING TO REQUIRED OFF-STREET PARKING FACILITIES	(j)(1) STREET TREES MEETING REQUIREMENTS OF THE CITY SHALL BE REQUIRED ON EACH SIDE OF EVERY PUBLIC AND PRIVATE STREET. A MINIMUM AVERAGE OF ONE STREET TREE SHALL BE REQUIRED FOR EACH 30 FEET OF PUBLIC OR PRIVATE STREET LENGTH, UNLESS EXISTING TREES WILL BE PRESERVED TO SERVE THE SAME PURPOSE, OR UNLESS THE CITY ALLOWS AN AVERAGE OF ONE TREE FOR EVERY 50 FEET FOR TREES WITH LARGER CANOPIES.	LENGTH ALONG INDUSTRIAL DRIVE: 620± LF REQUIRED: 620 / 50 = 12.4 OR 12 STREET TREES (LARGE STREET TREES PER APPROVED TREE LIST) PROVIDED: 6 QBC, 6 TA (12 LARGE STREET TREES)	COMPLIES
		LENGTH ALONG AVENUE 'B': 554± LF REQUIRED: 554 / 50 = 11.1 OR 11 STREET TREES (LARGE STREET TREES PER APPROVED TREE LIST) PROVIDED: 5 QBC, 6 TA (11 LARGE STREET TREES)	COMPLIES
	(j)(2) IN ADDITION, A MINIMUM AVERAGE OF ONE DECIDUOUS SHADE TREE SHALL BE REQUIRED FOR EVERY 15 SURFACE PARKING SPACES. SUCH DECIDUOUS TREES SHALL MEET THE STREET TREES REQUIREMENTS OF THE SUBDIVISION AND LAND DEVELOPMENT ORDINANCE. NO MORE THAN 20 CONSECUTIVE SURFACE PARKING SPACES SHALL BE LOCATED IN A STRAIGHT ROW (NOT INCLUDING ADJACENT SPACES ACCESSED FROM A DIFFERENT AISLE) WITHOUT BEING SEPARATED BY A LANDSCAPED ISLAND WITH A DECIDUOUS TREE	TOTAL PROPOSED SURFACE PARKING SPACES: 18 REQUIRED: 18 / 15 = 1.2 OR 1 SHADE TREE PROVIDED: 1 GTIK (1 SHADE TREE)	COMPLIES
SALDO: 1349.19 LANDSCAPING	A. STREET TREES. STREET TREES SHALL BE REQUIRED MEETING THE REQUIREMENTS OF THE ZONING ORDINANCE. FOR RECOMMENDED SPECIES, SEE THE BROCHURE "CITY OF BETHLEHEM STREET TREES: SELECTION AND PLANTING." THE CITY MAY REQUIRE THE INSTALLATION OF STREET TREE GRATES IN URBAN AREAS WITH HIGH PEDESTRIAN TRAFFIC. A STREET TREE GRATE SHALL HAVE A MINIMUM SIZE OF 4 BY 4 FEET, AND SHOULD BE EXPANDED TO BE A MINIMUM SIZE OF 4 BY 8 FEET WHERE SPACE IS AVAILABLE.	SEE ZONING 1319.02(j)(1) ABOVE FOR STREET TREE CALCULATIONS AND COMPLIANCE.	COMPLIES
	B. SEE THE REQUIREMENTS IN SECTION 1318.23 OF THE CITY ZONING ORDINANCE.	SEE ZONING 1318.23 ABOVE FOR BUFFER APPLICABILITY AND COMPLIANCE.	COMPLIES (NOT APPLICABLE)
	G. AN AVERAGE MINIMUM OF ONE DECIDUOUS OR EVERGREEN TREE SHALL BE REQUIRED TO BE PLANTED AND THEN MAINTAINED FOR EVERY 4,000 SQUARE FEET OF IMPERVIOUS SURFACE. THIS REQUIREMENT SHALL BE IN ADDITION TO REQUIRED STREET TREES AND BUFFER YARD PLANTINGS REQUIRED BY THE ZONING ORDINANCE. THE MAJORITY OF SUCH TREES SHALL BE PLANTED IN PARKING LOTS OR IN PORTIONS OF A SITE THAT ARE VISIBLE FROM STREETS, ACCESS DRIVES OR ADJOINING PROPERTIES, AS OPPOSED TO BEING PLACED WITHIN TRUCK LOADING OR TRUCK MOVEMENT AREAS. THE REQUIREMENT IN E. FOR TREE PLANTINGS SHALL BE REDUCED BY 50 PERCENT WITHIN THE CB DISTRICT OR FOR PARKING STRUCTURES IF THERE PHYSICALLY IS NOT ROOM FOR ALL OF THE TREE PLANTINGS.	PROPOSED IMPERVIOUS AREA: 206,395± SF REQUIRED: 206,395 / 4,000 = 51.6 OR 52 DECIDUOUS OR EVERGREEN TREES PROVIDED: NONE DEFICIENCY: 52 DECIDUOUS OR EVERGREEN TREES	WAIVER
	H.1. ON PRINCIPAL COMMERCIAL, INDUSTRIAL, INSTITUTIONAL AND MULTI-FAMILY APARTMENT LOTS, A MINIMUM OF 10 PERCENT OF THE LOT AREA SHALL BE LANDSCAPED IN TREES AND SHRUBS, AND WITH A VEGETATED GROUND COVER. THESE PLANTINGS SHALL BE IN ADDITION TO ANY BUFFER YARDS WHICH MAY BE NECESSARY. PARKING LOT TREES REQUIRED IN SECTION 1319 OF THE ZONING ORDINANCE CAN BE COUNTED TOWARDS FULFILLING THIS 10 PERCENT REQUIREMENT. THIS 10 PERCENT REQUIREMENT SHALL NOT APPLY IN THE CB DISTRICT. WHERE AN ENTITY OWNS ADJACENT LOTS, THE 10 PERCENT REQUIREMENT MAY BE AVERAGED ACROSS TWO OR MORE LOTS, PROVIDED THE RESULTING REQUIREMENT IS ESTABLISHED ON A CITY-APPROVED PLAN.	TOTAL LOT AREA: 296,117± SF REQUIRED (10%): 29,611.7± SF LANDSCAPE AREA PROVIDED: 89,722± SF LANDSCAPE AREA (30.3%)	COMPLIES

PLANT SCHEDULE

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
CANOPY TREES					
GTIK	1	GLEDITSIA TRIACANTHOS INERMIS 'SKYCOLE'	SKYLINE THORNLESS HONEY LOCUST	2.5" CAL.	B&B
QBC	11	QUERCUS BICOLOR	SWAMP WHITE OAK	2.5" CAL.	B&B
TA	12	TILIA AMERICANA	AMERICAN LINDEN	2.5" CAL.	B&B
EVERGREEN TREES					
PGL	5	PICEA GLAUCA	WHITE SPRUCE	6-8'	B&B
SHRUBS					
VR	20	VIBURNUM RHYTIDOPHYLLUM	LEATHERLEAF VIBURNUM	4-5'	B&B

THIS PLAN TO BE UTILIZED FOR LANDSCAPE PURPOSES ONLY

40 20 10 0 40

SCALE: 1" = 40'

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
LAND DEVELOPMENT
PERMITTING SERVICES
TRANSPORTATION SERVICES

THE WORK INCLUDES DESIGN AND CONTENT OF THIS PLAN IS COPYRIGHTED AND SHALL NOT BE COPIED OR USED FOR ANY PURPOSE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM BOHLER. ONLY APPROVED, SEALED PLAN SHEETS SHALL BE UTILIZED FOR CONSTRUCTION PURPOSES.

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	10/16/2026	PER CITY COMMENTS	ATK / MRB

ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
WWW.PA1CALL.ORG
#(BOHLER)XXXXXXXXXX / #(SURVEY)20121712057

FOR MUNICIPAL REVIEW & APPROVAL

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: PAB260025.00-1B
DRAWN BY: KMH
CHECKED BY: MRB
DATE: 8/13/2026
CAD I.D.: P-CIVIL-LLGT

PROJECT:

PRELIMINARY/ FINAL LAND DEVELOPMENT PLAN
FOR
BOYLE CONSTRUCTION, INC.

PROPOSED DATA CENTER
2184 INDUSTRIAL DRIVE
BETHLEHEM, PA 18017
CITY OF BETHLEHEM
LEHIGH COUNTY
PIN: 641847439546-1
CITY WARD 13 BLOCK 177

BOHLER
74 W BROAD STREET, SUITE 500
BETHLEHEM, PA 18018
Phone: (610) 709-9971
Fax: (610) 709-9976
www.BohlerEngineering.com

J.M. ILLIGASH
COMMONWEALTH OF PENNSYLVANIA
REGISTERED LANDSCAPE ARCHITECT
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002666

SHEET TITLE:

LANDSCAPE PLAN

SHEET NUMBER:

L-101

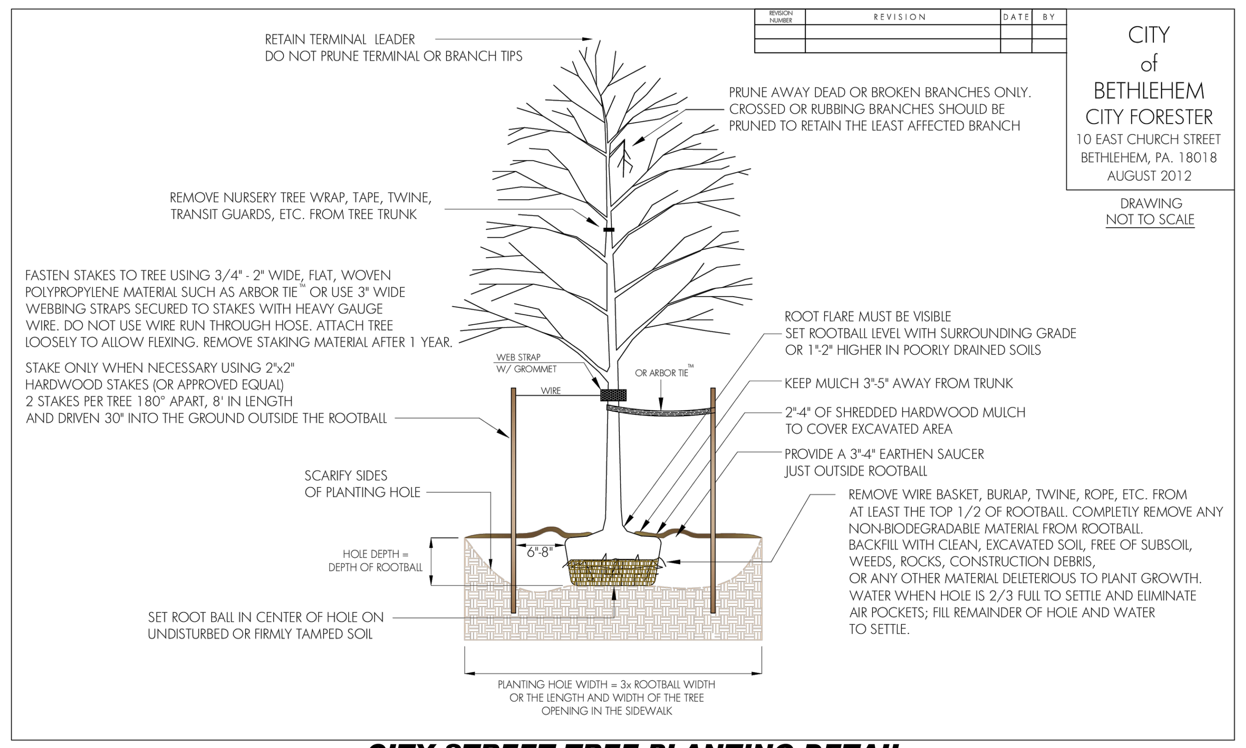
REVISION 1 - 10/16/2026

Oct 16, 2026
P:\PA\2026\PAB260025.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LLGT PAB260025.00-1B---1LAYOUT L-101 LSCP

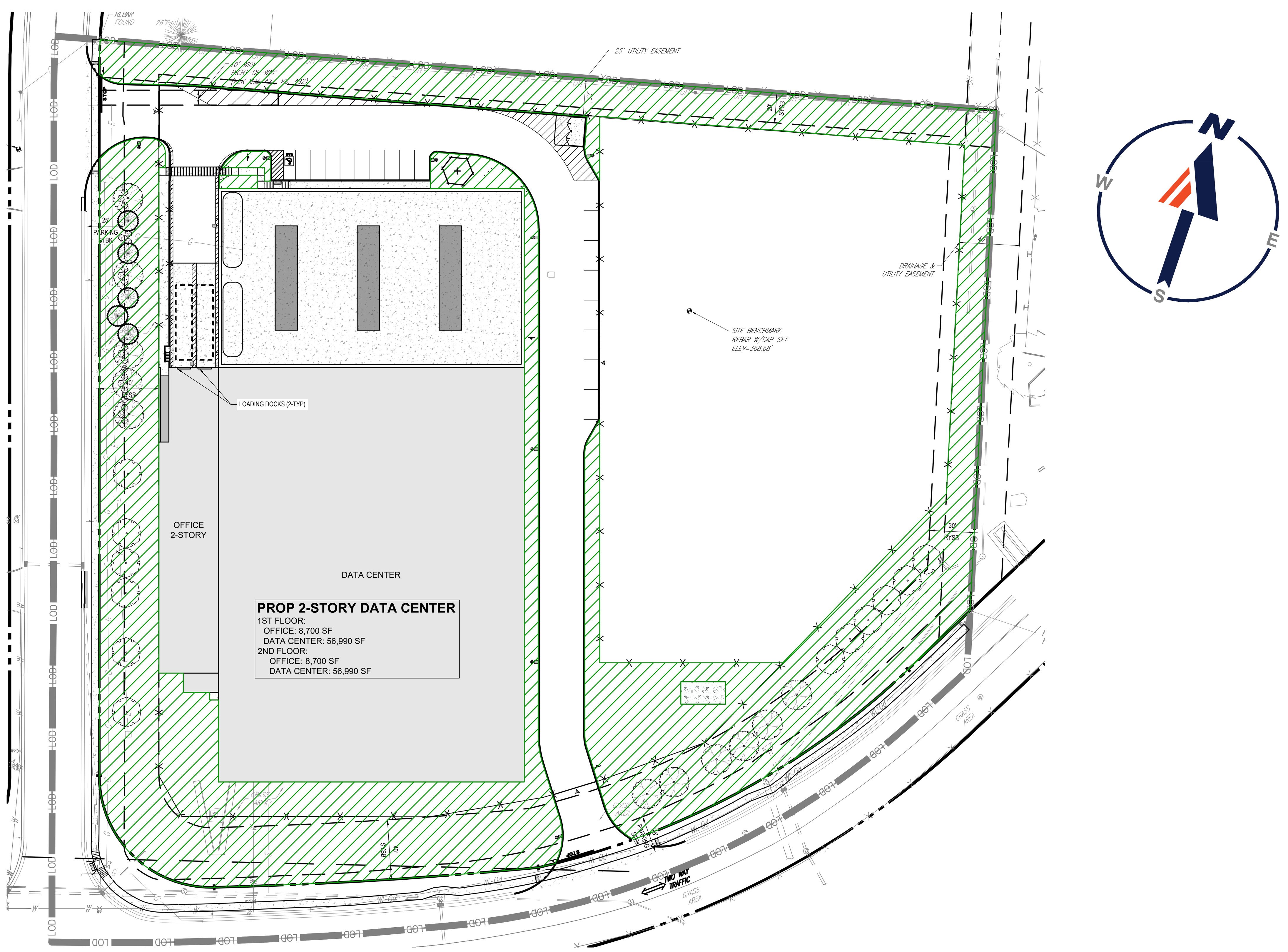
NOTES REGARDING DETAILS BY OTHERS:
1. DETAILS PREPARED BY OTHERS ARE IDENTIFIED AS SUCH BY WAY OF A TITLE BLOCK, REFERENCE, LOGO, OR OTHER NOTATION.
2. WHERE AN ORIGINAL DETAIL BY OTHERS HAS BEEN MODIFIED, THE MODIFICATIONS ARE IDENTIFIED BY REVISION CLOUDS.
3. REFER TO OUTSIDE SOURCE NOTES ON THE GENERAL NOTES AND LEGEND SHEET.
4. WHEN THE SOURCE OF THE DETAIL IS A REVIEWING/REGULATORY AGENCY, FABRICATION AND INSTALLATION SHALL BE IN ACCORDANCE WITH APPLICABLE REQUIREMENTS AND SPECIFICATIONS. WHEN APPROPRIATE, SHOP DRAWINGS SHALL BE FORWARDED TO THE REVIEWING/REGULATORY AGENCY PRIOR TO FABRICATION.

DETAILS BY OTHERS DISCLAIMER

DETAIL REFERENCE:
DETAIL PROVIDED/PREPARED BY OTHERS AND IS FROM CITY OF BETHLEHEM FORESTER, DATED AUGUST 2012. REFER TO NOTES THIS SHEET.



CITY STREET TREE PLANTING DETAIL (FOR PLANTING OF STREET TREES)



60 30 15 0 60
SCALE: 1" = 60'

LEGEND

LANDSCAPE AREA
TOTAL LOT AREA: 296,117± SF
REQUIRED (20%): 59,223.4± SF LANDSCAPE AREA
PROVIDED: 89,722± SF LANDSCAPE AREA (30.3%)

LANDSCAPE SPECIFICATIONS

1. SCOPE OF WORK:
THE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.

2. MATERIALS
A. GENERAL - ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS.
B. TOPSOIL - NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 5.5-7.0. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.
C. LAWN - LAWN AREAS SHALL BE SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED WITHIN THE SOIL EROSION AND SEDIMENT CONTROL NOTES. FOR SOIL BED PREPARATIONS, REFER TO ITEM 8 BELOW.
- LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED.
- SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/PEST FREE WITH A UNIFORM THICKNESS. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.
D. MULCH - ALL PLANTING BEDS SHALL BE MULCHED WITH A 3" THICK LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN.
E. FERTILIZER
- FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY PRIOR TO USE.
- FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY.
F. PLANT MATERIAL
- ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.2), LATEST EDITION, AS PUBLISHED BY AMERICAN HORT (FORMERLY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION).
- IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL.
- PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.
- TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1¼", WHICH HAVE NOT BEEN COMPLETELY CALLUSED, SHALL BE REJECTED. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES.
- ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH: WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE.
- CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE.
- SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH.
- TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.

3. GENERAL WORK PROCEDURES
A. CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF.
B. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.

4. SITE PREPARATIONS
A. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.
B. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE BRANCH COLLAR. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.
C. CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.

5. TREE PROTECTION
A. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR 15 FEET FROM THE TRUNK OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.
B. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY 'VISI-FENCE', OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.
C. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.
D. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.

6. SOIL MODIFICATIONS
A. CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY.
B. CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE CONTRACTOR DEPENDING ON SITE CONDITIONS.
C. THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY.
- TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6-12". USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5.
- TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE.
- MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

7. FINISHED GRADING
A. UNLESS OTHERWISE CONTRACTED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.
B. CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1"±).
C. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.
D. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.

8. TOPSOILING
A. CONTRACTOR SHALL PROVIDE A SIX INCH (6") THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AND LAWN AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS.
B. ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION.
C. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE.
D. ALL LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA - FOR BID PURPOSES ONLY [SEE SPECIFICATION 6.A.]):
- 20 POUNDS 'GRO-POWER' OR APPROVED EQUAL SOIL CONDITIONER/FERTILIZER
- 20 POUNDS 'NITRO-FORM' (COURSE) 38-0-0 BLUE CHIP OR APPROVED NITROGEN FERTILIZER
E. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

9. PLANTING
A. INSOFAR THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.
B. 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. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.
C. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.
D. ALL PLANTING CONTAINERS, BASKETS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING.
E. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.
F. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS:
- PLANTS: MARCH 15TH TO DECEMBER 15TH
- LAWN AND MEADOW SEED MIXES: MARCH 1ST TO MAY 15TH OR BETWEEN AUGUST 15TH AND OCTOBER 15TH
PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.
G. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON:

ACER RUBRUM	PLATANUS X ACERIFOLIA
BETULA VARIETIES	POPULUS VARIETIES
CARPINUS VARIETIES	PRUNUS VARIETIES
CRATAEGUS VARIETIES	PYRUS VARIETIES
KOELREUTERIA	QUERCUS VARIETIES
LIQUIDAMBAR STYRACIFLUA	TILIA TOMENTOSA
LIRIODENDRON TULIPIFERA	ZELKOVA VARIETIES

H. PLANTING PITS SHALL BE DUG WITH LEVEL OR CONVEX BOTTOMS, WITH THE WIDTH THREE TIMES THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:
- 1 PART PEAT MOSS
- 1 PART COMPOSTED COW MANURE BY VOLUME
- 3 PARTS TOPSOIL BY VOLUME
- 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:
  -- 2 TABLETS PER 1 GALLON PLANT
  -- 3 TABLETS PER 5 GALLON PLANT
  -- 4 TABLETS PER 15 GALLON PLANT
  -- LARGER PLANTS: 2 TABLETS PER ½" CALIPER OF TRUNK
I. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.
J. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.
K. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE. NO PRUNING SHALL BE CONDUCTED WITHIN THE FIRST YEAR OF PLANTING.
L. GROUND COVER AREAS SHALL RECEIVE A ¼" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION.
M. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS.
N. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.
O. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.

10. TRANSPLANTING (WHEN REQUIRED)
A. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT. (SEE SPECIFICATION 2.F. ABOVE)
B. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.
C. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10TH AND JUNE 30TH.
D. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.
E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.
F. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.

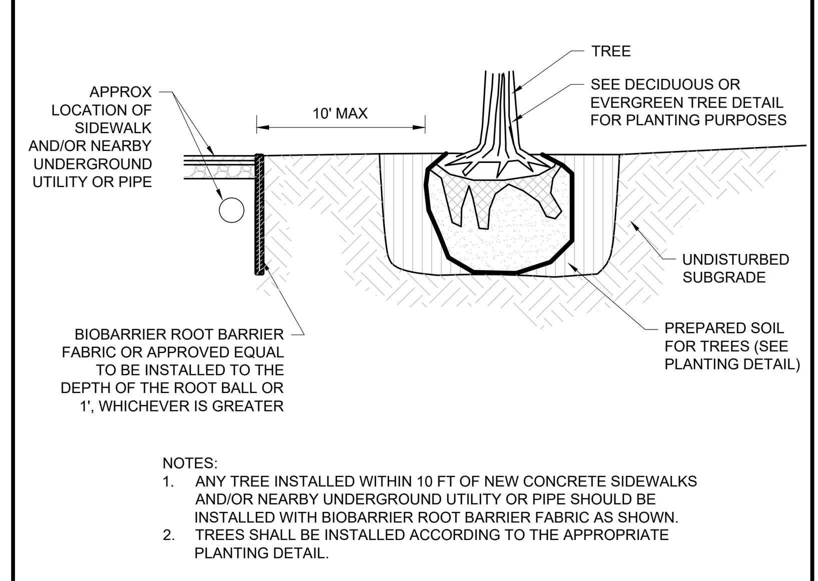
11. WATERING
A. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED.
B. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES.
C. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.

12. GUARANTEE
A. THE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.
B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION. A PLANT SHALL BE CONSIDERED "DEAD OR DYING" IF MORE THAN 30% OF ITS BRANCHES ARE DEAD.
C. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND UNTIL TURNOVER TO THE OWNER/OPERATOR. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.
D. LAWNS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND UNTIL TURNOVER TO THE OWNER/OPERATOR THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.

13. CLEANUP
A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.
B. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

CITY OF BETHLEHEM REQUIRED NOTES

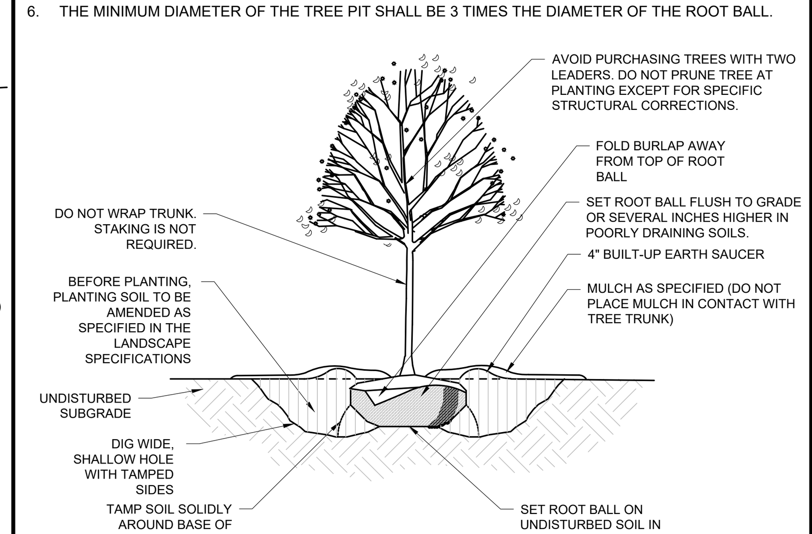
- ALL LANDSCAPING, AS APPROVED ON FINAL SITE PLANS SHALL BE COMPLETED AND MAINTAINED, INCLUDING THE REPLACEMENT OF DEAD PLANTINGS BY THE APPLICANT OR THEIR SUCCESSORS AND ASSIGNS.



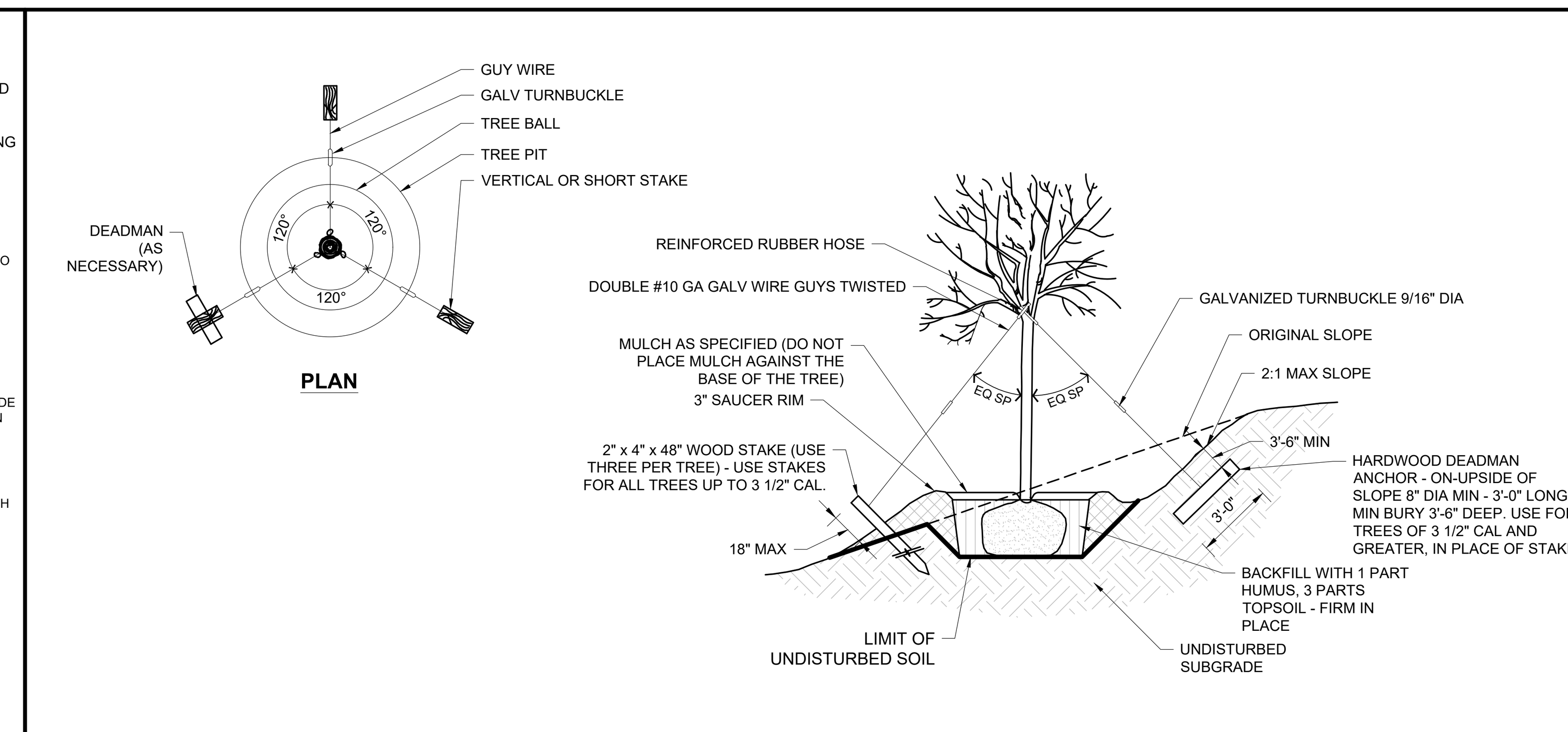
NOTES:
1. ANY TREE INSTALLED WITHIN 10 FT OF NEW CONCRETE SIDEWALKS AND/OR NEARBY UNDERGROUND UTILITY OR PIPE SHOULD BE INSTALLED WITH BIOBARRIER ROOT BARRIER FABRIC AS SHOWN.
2. TREES SHALL BE INSTALLED ACCORDING TO THE APPROPRIATE PLANTING DETAIL.

BIOBARRIER ROOT BARRIER
NOT TO SCALE (PA-L049903 - 11/2023)

NOTES:
1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2. REMOVE ALL NON-BIODEGRADABLE MATERIAL AND ROPE FROM TRUNK & TOP OF ROOT BALL. FOLD OR CUT BURLAP BACK FROM TOP 1/3 OF ROOT BALL.
3. PLANTING DEPTH SHALL BE THE SAME AS GROWN IN NURSERY.
4. THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
5. THE BOTTOM OF PLANTING PIT EXCAVATIONS SHOULD BE SCARIFIED TO AVOID MATTING OF SOIL.
6. THE MINIMUM DIAMETER OF THE TREE PIT SHALL BE 3 TIMES THE DIAMETER OF THE ROOT BALL.



DECIDUOUS TREE PLANTING
NOT TO SCALE (PA-L040101 - 11/2023)



SLOPE TREE PLANTING
NOT TO SCALE (PA-L040105 - 12/2023)

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PROGRAM MANAGEMENT
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SUSTAINABLE DESIGN
PERMITTING SERVICES
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	10/16/2026	PER CITY COMMENTS	ATK / MRB

PENNSYLVANIA ONE CALL SYSTEM, INC. 1-800-242-1776 STOP-CALL BEFORE YOU DIG!

ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
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FOR MUNICIPAL REVIEW & APPROVAL

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PAB260025.00-1B
DRAWN BY:	KMH
CHECKED BY:	MRB
DATE:	8/13/2026
CAD I.D.:	P-CIVL-LLGT

PROJECT:
PRELIMINARY/ FINAL LAND DEVELOPMENT PLAN
FOR
BOYLE CONSTRUCTION, INC.
PROPOSED DATA CENTER
2184 INDUSTRIAL DRIVE
BETHLEHEM, PA 18017
CITY OF BETHLEHEM
LEHIGH COUNTY
PIN: 641847439546-1
CITY WARD 13 BLOCK 177

BOHLER
74 W BROAD STREET, SUITE 500
BETHLEHEM, PA 18018
Phone: (610) 709-9971
Fax: (610) 709-9976
www.BohlerEngineering.com

J.M. ILLIGASH
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002666

SHEET TITLE:
LANDSCAPE NOTES AND DETAILS

SHEET NUMBER:
L-102

REVISION 1 - 10/16/2026

Oct 16, 2026
P:\PA\2026\PAB260025.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-LLGT-PAB260025.00-1B----->LAYOUT: L-102 LSCP
AK

LUMINAIRE SCHEDULE

LABEL	QTY	MOUNTING HEIGHT	ARRANGEMENT	LUMINAIRE LUMENS	LLF	BUG RATING	DESCRIPTION	POLE
P2	2	25'-0" AFG	SINGLE	19480	0.900	B3-U0-G4	LITHONIA LIGHTING, D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE 2, ZERO UP-LIGHT (DSX1-LED-P6-30K-70CRI-T2M-x-SPA-x)	LITHONIA LIGHTING, SQUARE STRAIGHT STEEL POLE, 22'-6" LENGTH (SSS-22.5-5C-DM19AS-x)
P2-S	1	25'-0" AFG	SINGLE	16902	0.900	B2-U0-G4	LITHONIA LIGHTING, D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE 2 WITH HOUSE-SIDE SHIELD, ZERO UP-LIGHT (DSX1-LED-P5-30K-70CRI-T2M-x-SPA-x-HS)	LITHONIA LIGHTING, SQUARE STRAIGHT STEEL POLE, 22'-6" LENGTH (SSS-22.5-5C-DM19AS-x)
P3	1	25'-0" AFG	SINGLE	19706	0.900	B3-U0-G5	LITHONIA LIGHTING, D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE 3, ZERO UP-LIGHT (DSX1-LED-P6-30K-70CRI-T3M-x-SPA-x)	LITHONIA LIGHTING, SQUARE STRAIGHT STEEL POLE, 22'-6" LENGTH (SSS-22.5-5C-DM19AS-x)
P5W	3	25'-0" AFG	SINGLE	20909	0.900	B5-U0-G3	LITHONIA LIGHTING, D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE 5W, ZERO UP-LIGHT (DSX1-LED-P6-30K-70CRI-T5W-x-SPA-x)	LITHONIA LIGHTING, SQUARE STRAIGHT STEEL POLE, 22'-6" LENGTH (SSS-22.5-5C-DM19AS-x)
PF	1	25'-0" AFG	SINGLE	20138	0.900	B3-U0-G5	LITHONIA LIGHTING, D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE FT, ZERO UP-LIGHT (DSX1-LED-P6-30K-70CRI-TFTM-x-SPA-x)	LITHONIA LIGHTING, SQUARE STRAIGHT STEEL POLE, 22'-6" LENGTH (SSS-22.5-5C-DM19AS-x)
W3	1	16'-0" AFF	SINGLE	15382	0.900	B2-U0-G4	LITHONIA LIGHTING, D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE 3, ZERO UP-LIGHT (DSX1-LED-P4-30K-70CRI-T3M-x-WBA-x)	-----
WF	1	16'-0" AFF	SINGLE	15720	0.900	B2-U0-G4	LITHONIA LIGHTING, D-SERIES SIZE 1 LED AREA LUMINAIRE, TYPE FT, ZERO UP-LIGHT (DSX1-LED-P4-30K-70CRI-TFTM-x-WBA-x)	-----

CALCULATION SUMMARY

LABEL	CALCTYPE	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN	MAX/AVG
ALL POINTS	ILLUMINANCE	Fc	0.16	5.9	0.0	N.A.	N.A.	36.88
PAVED AREA	ILLUMINANCE	Fc	2.12	5.9	1.0	2.12	5.90	2.78

LIGHTING COMPLIANCE CHART

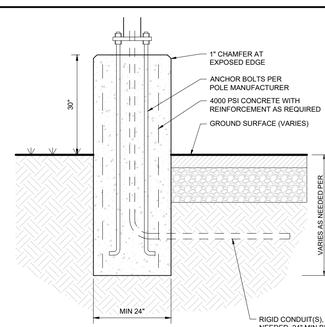
SECTION	REQUIREMENT	COMPLIANCE
ZONING: 1318.25 LIGHTING CONTROL	(b) NO LUMINAIRE, SPOTLIGHT, WALLPACK OR OTHER LIGHT SOURCE SHALL BE PLACED AT A HEIGHT EXCEEDING 20 FEET ABOVE THE AVERAGE SURROUNDING GROUND LEVEL. THE MAXIMUM HEIGHT LIMIT IN ANY INDUSTRIAL ZONE MAY BE INCREASED TO 30 FEET UNLESS THE LIGHT SOURCE IS WITHIN 200' OF A RESIDENTIALLY-ZONED LOT	COMPLIES
	(c) DIFFUSED. ALL LIGHT SOURCES, INCLUDING SIGNS BUT NOT INCLUDING LED LIGHTING, SHALL BE PROPERLY DIFFUSED AS NEEDED WITH A TRANSLUCENT OR SIMILAR COVER TO PREVENT EXPOSED BULBS FROM BEING DIRECTLY VISIBLE FROM STREETS, PUBLIC SIDEWALKS, DWELLINGS OR ADJACENT LOTS.	COMPLIES
	(d) SHIELDING. ALL LIGHT SOURCES, INCLUDING SIGNS, SHALL BE SHIELDED AROUND THE LIGHT SOURCE AND CAREFULLY DIRECTED AND PLACED TO PREVENT THE LIGHTING FROM CREATING A NUISANCE IN ADJACENT DWELLINGS, AND TO PREVENT THE LIGHTING FROM SHINING INTO THE EYES OF PASSING MOTORISTS.	COMPLIES
	(f) SPILLOVER. EXTERIOR LIGHTING ON AN INSTITUTIONAL, COMMERCIAL, INDUSTRIAL OR RESIDENTIAL PROPERTY SHALL NOT CAUSE A SPILLOVER OF LIGHT ONTO A PRINCIPALLY RESIDENTIAL LOT IN A RESIDENTIAL DISTRICT THAT EXCEEDS 0.1 HORIZONTAL FOOT-CANDLE MEASURED LINE OF SIGHT INSIDE THE RESIDENTIAL LOT LINE	COMPLIES
SALDO: 1349.16 STREET LIGHTING	(A) STREET LIGHTS OR OTHER CITY-APPROVED LIGHTING SHALL BE PROVIDED AND INSTALLED BY THE DEVELOPER'S CONTRACTOR OR UTILITY COMPANY ALONG STREETS WITHIN AND ABUTTING A PROPOSED SUBDIVISION OR LAND DEVELOPMENT. THE CITY MAY REQUIRE THAT THE LIGHTING BE INSTALLED BY THE DEVELOPER'S CONTRACTOR IF IT WILL RESULT IN A LOWER ELECTRIC RATE FOR THE CITY. STREET LIGHTING SHALL BE PLACED AT INTERSECTIONS OF STREETS AND, AT THE DISCRETION OF THE PLANNING COMMISSION, AN APPLICANT MAY BE DIRECTED PLACE ADDITIONAL STREET LIGHTING ALONG A CURVE OF A STREET AND AT MAJOR PEDESTRIAN CROSSINGS	COMPLIES
	(B) PRIVATE LIGHTING. ON ALL PRIVATE STREETS, PARKING AREAS AND OTHER AREAS REQUIRING LIGHTING, THE DEVELOPER SHALL PROVIDE MATERIALS, INSTALLATION, ELECTRIC CONNECTION FOR ALL LIGHTING SYSTEMS NECESSARY FOR SECURITY AND PUBLIC SAFETY. IF THE LIGHTING WILL NOT BE FUNDED BY THE LANDOWNER, THEN A SYSTEM ACCEPTABLE TO THE CITY SHALL BE ESTABLISHED FOR THE FUNDING OF THE LIGHTS (SUCH AS A PROPERTY-OWNER ASSOCIATION ALONG A PRIVATE STREET). THE CITY MAY REQUIRE THAT BUSINESS AND MULTI-FAMILY PARKING LOTS AND RELATED WALKWAYS MAINTAIN A MINIMUM 0.5 FOOTCANDLES OF ILLUMINATION DURING HOURS OF USE. A SITE LIGHTING PLAN SHALL BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL	COMPLIES

GENERAL LIGHTING NOTES:

1. THE GENERAL NOTES, FOUND ON THE NOTES PAGE OF THIS PLAN SET, MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE ELECTRICAL CONTRACTOR MUST BECOME FAMILIAR WITH, REFER TO AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY.
2. THE ELECTRICAL CONTRACTOR MUST COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THIS LIGHTING PLAN, INCLUDING BUT NOT LIMITED TO GENERAL NOTES, GRADING AND SAFETY, AND ALL APPLICABLE AGENCY AND GOVERNMENTAL REGULATIONS. THE LIGHTING PLAN DEPICTS PROPOSED, SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER(S). ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY DIFFER FROM THE VALUES DEPICTED ON THIS PLAN DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, MAINTENANCE, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES, EXISTING AMBIENT LIGHT SOURCE ON AND OFF SITE, AND OTHER RELATED VARIABLE FIELD CONDITIONS.
3. THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT GROUND LEVEL UNLESS OTHERWISE NOTED. ILLUMINATION LEVELS ARE SHOWN IN FOOTCANDLES (FC).
4. THE LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES. POWER SYSTEM, CONDUITS, WIRING, CONTROLS, AND OTHER ELECTRICAL COMPONENTS ARE SOLELY THE ARCHITECT'S, ELECTRICAL ENGINEER'S AND/OR ELECTRICAL CONTRACTOR'S RESPONSIBILITY, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THE CONTRACTOR MUST COORDINATE WITH THE PROJECT ARCHITECT AND/OR ELECTRICAL ENGINEER REGARDING ANY AND ALL POWER SOURCES AND TIMING DEVICES NECESSARY TO MEET THE DESIGN INTENT. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY FEDERAL, STATE AND LOCAL REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC) AND ALL APPLICABLE BUILDING AND LOCAL ELECTRICAL CODES.
5. THE ELECTRICAL CONTRACTOR MUST BRING IMMEDIATELY, IN WRITING, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURE(S) TO THE PROFESSIONAL OF RECORD'S ATTENTION, PRIOR TO THE START OF CONSTRUCTION.
6. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL LIGHTING IS INSTALLED PER THIS LIGHTING PLAN, INCLUDING THE LOCATION, ORIENTATION, SHIELDING, AND/OR ROTATED OPTICS IN ORDER TO ACHIEVE THE LIGHTING LEVELS DEPICTED ON THIS PLAN. EXISTING POLES AND FOUNDATIONS ARE NOT TO BE REUSED.
7. UPON OWNER'S ACCEPTANCE OF THE COMPLETED PROJECT, THE OWNER SHALL BE RESPONSIBLE FOR ALL MAINTENANCE, SERVICING, REPAIR AND INSPECTION OF THE LIGHTING SYSTEM AND ALL OF ITS COMPONENTS AND RELATED SYSTEMS. THE LUMINAIRES, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THAT THEY FUNCTION PROPERLY. THIS WORK SHOULD INCLUDE, BUT IS NOT LIMITED TO, VISUAL OBSERVATION, CLEANING OF LENSES, AND OTHER MAINTENANCE SPECIFIED BY THE MANUFACTURER. FAILURE TO FOLLOW THE ABOVE STEPS COULD RESULT IN IMPROPER LIGHT DISTRIBUTION AND FAILURE TO COMPLY WITH THE APPROVED DESIGN.
8. THE LIGHT LOSS FACTORS (LLF) DEPICTED IN THE LUMINAIRE SCHEDULE ON THIS PLAN ARE BASED ON DATA PROVIDED BY THE MANUFACTURER FOLLOWING IES LM-80-21 TESTING (OR MOST RECENT EDITION). THE LIGHT LEVELS DEPICTED ON THIS PLAN WERE CALCULATED BASED ON THE LLF LISTED IN THE LUMINAIRE SCHEDULE.
9. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE SUBMITTALS TO BOHLER FOR REVIEW AND APPROVAL. SUBSTITUTION REQUESTS MUST BE ACCOMPANIED BY A HORIZONTAL PHOTOMETRIC STUDY DEMONSTRATING THAT THE LUMINAIRE(S) IN QUESTION WILL MEET THE DESIGN INTENT OF THIS PLAN. SUBSTITUTION REQUESTS WITHOUT A PHOTOMETRIC STUDY WILL BE REJECTED.
10. LIGHT POLE FOUNDATIONS ARE SHOWN ON THE PLAN IN THE INTENDED LOCATION BASED ON THE LIGHTING CALCULATIONS, UNLESS OTHERWISE NOTED. LIGHT SYMBOLS ARE SHOWN LARGER THAN ACTUAL SIZE, HOWEVER FOUNDATION SIZE IS SHOWN AT ACTUAL SIZE.

THIS PLAN TO BE UTILIZED FOR LIGHTING PURPOSES ONLY

SCALE: 1" = ##



NOTE:
THIS DETAIL SERVES AS A GUIDELINE ONLY. CONTRACTOR SHALL ENSURE DESIGN IS PREPARED BY A QUALIFIED STRUCTURAL ENGINEER CONSIDERING LIGHTING MANUFACTURER REQUIREMENTS, LOCAL WIND LOADS, AND SITE-SPECIFIC SOIL PARAMETERS. SOME SITE LOCATIONS MAY REQUIRE VIBRATION DAMPENING MEASURES AS DETERMINED BY A STRUCTURAL ENGINEER. THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF THE INTENT TO MOUNT ANYTHING ASIDE FROM THE LIGHT FIXTURE INCLUDING (BUT NOT LIMITED TO) CAMERAS, BANNERS, FLAGS, SIGNAGE, ETC. AS IT WILL IMPACT THE POLE AND FOUNDATION DESIGN.

CONCRETE LIGHT POLE BASE - 30" REVEAL

NOT TO SCALE (BE-L020101 - 04/2026)

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
PERMITTING SERVICES
TRANSPORTATION SERVICES

THE INFORMATION, DESIGN AND CONTENT OF THIS PLAN ARE PROPRIETARY AND SHALL NOT BE COPIED OR USED FOR ANY PURPOSE, WITHOUT PRIOR WRITTEN AUTHORIZATION FROM BOHLER. ONLY APPROVED AND SIGNED PLANS SHALL BE UTILIZED FOR CONSTRUCTION PURPOSES.

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	10/16/2026	PER CITY COMMENTS	ATK / MRB

ATTENTION ALL CONTRACTORS: LOCATIONS OF ALL EXISTING UTILITIES SHOWN HEREIN HAVE BEEN DEVELOPED FROM UTILITY COMPANY RECORDS AND/OR ABOVE-GROUND INSPECTION OF THE SITE. COMPLETENESS OR ACCURACY OF TYPE, SIZE, DEPTH OR HORIZONTAL LOCATION OF UNDERGROUND FACILITIES OR STRUCTURES CANNOT BE GUARANTEED. PURSUANT TO REQUIREMENTS OF PENNSYLVANIA LEGISLATIVE ACT NUMBER 287 OF 1974 AS AMENDED BY ACT 50 OF 2017, CONTRACTORS MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO START OF WORK.
WWW.PA1CALL.ORG
#(BOHLER)XXXXXXXXXX / #(SURVEY)20212712057

FOR MUNICIPAL REVIEW & APPROVAL

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	PAB260025.00-1B
DRAWN BY:	KMH
CHECKED BY:	MRB
DATE:	8/13/2026
CAD I.D.:	P-CIVIL-LLGT

PROJECT:

PRELIMINARY/ FINAL LAND DEVELOPMENT PLAN

FOR

BOYLE CONSTRUCTION, INC.

PROPOSED DATA CENTER

2184 INDUSTRIAL DRIVE
BETHLEHEM, PA 18017
CITY OF BETHLEHEM
LEHIGH COUNTY
PIN: 641847439546-1
CITY WARD 13 BLOCK 177

BOHLER
74 W BROAD STREET, SUITE 500
BETHLEHEM, PA 18018
Phone: (610) 709-9971
Fax: (610) 709-9976
www.BohlerEngineering.com

C.M. ILLIGASH
COMMONWEALTH OF PENNSYLVANIA
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002666

SHEET TITLE:

LIGHTING PLAN

SHEET NUMBER:

L-201

REVISION 1 - 10/16/2026

Oct 16, 2026
P:\PA2025\PAB260025.00\CAD\BKWGS\PLAN SETS\CIVIL SITE PLANS\P-CIVIL-LLGT-PAB260025.00-1B-----3-LAYOUT L-201 LIGHT
AKM

D-Series Size 1
LED Area Luminaire



d"series

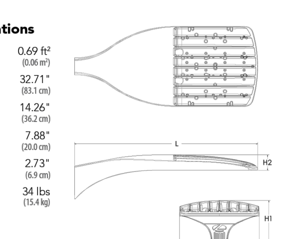
DLC LISTED PREMIUM · DLC LISTED · NIGHTTIME FRIENDLY · ida · ds · BAA · BABA

Catalog Number	
Notes	
Type	

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA:	0.69 ft² (0.06 m²)
Length:	32.71" (83.1 cm)
Width:	14.26" (36.2 cm)
Height H1:	7.88" (20.0 cm)
Height H2:	2.73" (6.9 cm)
Weight:	34 lbs (15.4 kg)



ds Design Select options indicated by this color background.

Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

ds design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect. *See ordering tree for details

Ordering Information

EXAMPLE: DSX1 LED P7 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX1 LED

Series	LEDs	Color temperature[2]	Color Rendering Index[2]	Distribution	Voltage	Mounting
DSX1 LED	Forward optics P1 P6 P2 P7 P3 P8 P4 P9 P5 Rotated optics P10[1] P12[1] P11[1] P13[1]	(this section 70CRI only) 30K 3000K 40K 4000K 50K 5000K 27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K	70CRI 70CRI 70CRI 80CRI 80CRI 80CRI 80CRI 80CRI	AFR Automotive front row T1S Type I short T2M Type II medium T3M Type III medium T3LG Type III low glare[3] T4M Type IV medium T4LG Type IV low glare[3] TFTM Forward throw medium T5M Type V medium T5LG Type V low glare T5W Type V wide BLC3 Type III backlight control[3] BLC4 Type IV backlight control[3] LCCO Left corner cutoff[3] RCCO Right corner cutoff[3]	MVOLT (120V-277V)[4] HVOLT (347V-480V)[5,6] XVOLT (277V - 480V)[7,8] 120[16,26] 208[16,26] 240[16,26] 277[16,26] 347[16,26] 480[16,26]	Shipped included SPA Square pole mounting (#8 drilling) RPA Round pole mounting (#8 drilling) SPA5 Square pole mounting #5 drilling[9] RPA5 Round pole mounting #5 drilling[9] SPA8N Square narrow pole mounting #8 drilling WBA Wall bracket[10] MA Mast arm adapter (mounts on 2 3/8" OD horizontal tenon)

Control options		Other options	Finish (required)
Shipped installed NLTAIR2 PIRHN nLight AIR gen 2 enabled with bi-level motion / ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc.[11,12,20,21] PIR High/low, motion/ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc.[13,20,21] PER NEMA twist-lock receptacle only (controls ordered separate)[14] PERS Five-pin receptacle only (controls ordered separate)[14,21]	PER7 Seven-pin receptacle only (controls ordered separate)[14,21] FAO Field adjustable output[15,21] BL30 Bi-level switched dimming, 30%[16,21] BL50 Bi-level switched dimming, 50%[16,21] DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)[17] DS Dual switching[18,19,21]	Shipped installed SPD20KV 20KV surge protection HS Houseside shield (black finish standard)[22] L90 Left rotated optics[1] R90 Right rotated optics[1] CCE Coastal Construction[23] HA 50°C ambient operation[24] BAA Buy America(n) Act and/or Build America Buy America Qualified SF Single fuse (120, 277, 347V)[26] DF Double fuse (208, 240, 480V)[26] Shipped separately EGSR External Glare Shield (reversible, field install required, matches housing finish) BSDB Bird Spikes (field install required)	DDBXD Dark Bronze DBLXD Black DNAXD Natural Aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

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Ordering Information

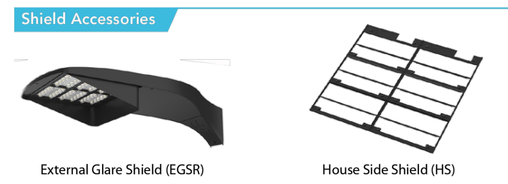
Accessories

Ordered and shipped separately.

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V)[20]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V)[20]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V)[20]
DSHORT SBK	Shorting cap[20]
DSX1HS P#	House-side shield (enter package number 1-13 in place of #)
DSX1RPA (FINISH)	Round pole adapter (#8 drilling, specify finish)
DSXSPA5 (FINISH)	Square pole adapter #5 drilling (specify finish)
DSXRPA5 (FINISH)	Round pole adapter #5 drilling (specify finish)
DSX1EGSR (FINISH)	External glare shield (specify finish)
DSX1BSDB (FINISH)	Bird spike deterrent bracket (specify finish)

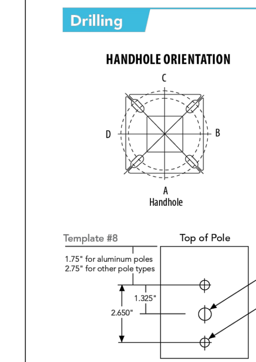
NOTES
1. Rotated optics available with packages P10, P11, P12 and P13. Must be combined with option L90 or R90.
2. 30K, 40K, and 50K available in 70CRI and 80CRI. 27K and 35K only available with 80CRI. Contact Technical Support for other possible combinations.
3. T3LG, T4LG, BLC3, BLC4, LCCO, RCCO not available with option HS.
4. MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
5. HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
6. HVOLT not available with package P1 and P10 when combined with option NLTAIR2 PIRHN or option PIR.
7. XVOLT operates with any voltage between 277V and 480V (50/60 Hz).
8. XVOLT not available in packages P1 or P10. XVOLT not available with P1 ,P2, P5, P7, P9, P10, P11 and P13 when combined with option NLTAIR2 PIRHN or PIR. XVOLT not available with fusing (SF or DF).
9. SPA5 and RPA5 for use with #5 drilling only (Not for use with #8 drilling).
10. WBA cannot be combined with Type 5 distributions plus photocell (PER).
11. NLTAIR2 and PIRHN must be ordered together. For more information on nLight AIR2 visit this link
12. NLTAIR2 PIRHN not available with other controls including PIR, PER, PER5, PER7, FAO, BL30, BL50, DMG and DS. NLTAIR2 PIRHN not available with P1 and P10 using HVOLT.
13. PIR not available with NLTAIR2 PIRHN, PER, PER5, PER7, BL30, BL50, FAO, DMG and DS.
14. PER/PER5/PER7 not available with NLTAIR2 PIRHN, PIR, BL30, BL50, FAO, DMG and DS. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
15. FAO not available with other dimming control options NLTAIR2 PIRHN, PIR, PER5, PER7, BL30, BL50, DMG and DS.
16. BL30 and BL50 are not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, FAO, DMG and DS. BL30 or BL50 must specify 120 or 277V.
17. DMG not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DS.
18. DS not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DMG.
19. DS requires (2) separately switched circuits. DS provides 50/50 fixture operation via (2) different sets of leads using (2) drivers. DS only available with packages P8, P9, P10, P11, P12 and P13.
20. Reference Motion Sensor Default Settings table on page 4 to see functionality.
21. Reference Controls Options table on page 4.
22. HS not available with T3LG, T4LG, BLC3, BLC4, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
23. CCE option not available with option BS and EGSR. Contact Technical Support for availability.
24. Option HA not available with performance packages P4, P5, P7, P8, P9 and P13.
25. Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.
26. Single fuse (SF) requires 120V, 277V, or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF).

Shield Accessories



External Glare Shield (EGSR) · House Side Shield (HS)

Drilling



Tenon Mounting Slipfitter

Tenon O.D.	Mounting	Single Unit	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
2-3/8"	RPA	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 390	AS3-5 320	AS3-5 490
2-7/8"	RPA	AST25-190	AST25-280	AST25-290	AST25-390	AST25-320	AST25-490
4"	RPA	AST35-190	AST35-280	AST35-290	AST35-390	AST35-320	AST35-490

Mounting Option	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
Head Location		Side B	Side B & D	Side B & C	Side B, C & D	Round Pole Only	Side A, B, C & D
Drill Nomenclature	#8	DM19AS	DM28AS	DM29AS	DM39AS	DM32AS	DM49AS
Minimum Acceptable Outside Pole Dimension							
SPA	#8	3.5"	3.5"	3.5"	3.5"		3.5"
RPA	#8	3"	3"	3"	3"	3"	3"
SPA5	#5	3"	3"	3"	3"		3"
RPA5	#5	3"	3"	3"	3"	3"	3"
SPA8N	#8	3"	3"	3"	3"		3"

DSX1 Area Luminaire - EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

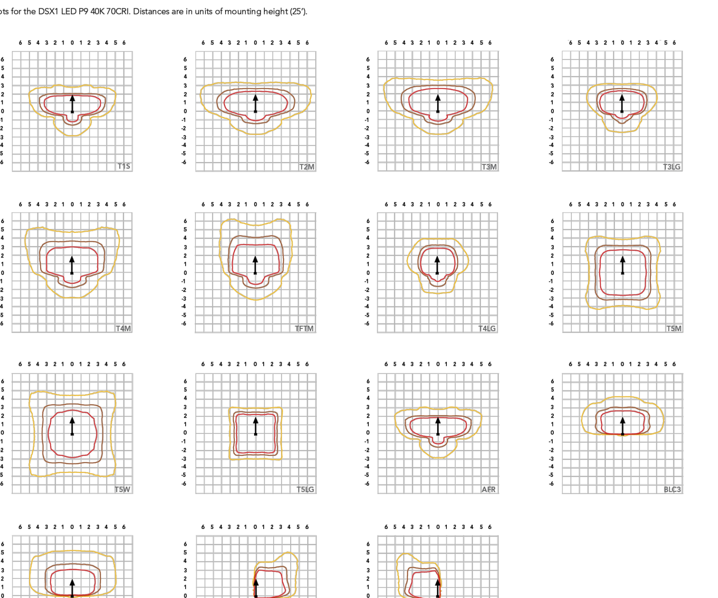
Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
DSX1 with SPA	0.69	1.38	1.23	1.54	---	1.58
DSX1 with SPA5, SPA8N	0.70	1.40	1.30	1.66	---	1.68
DSX1 with RPA, RPA5	0.70	1.40	1.30	1.66	1.60	1.68
DSX1 with MA	0.83	1.66	1.50	2.09	2.09	2.09

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Photometric Diagrams

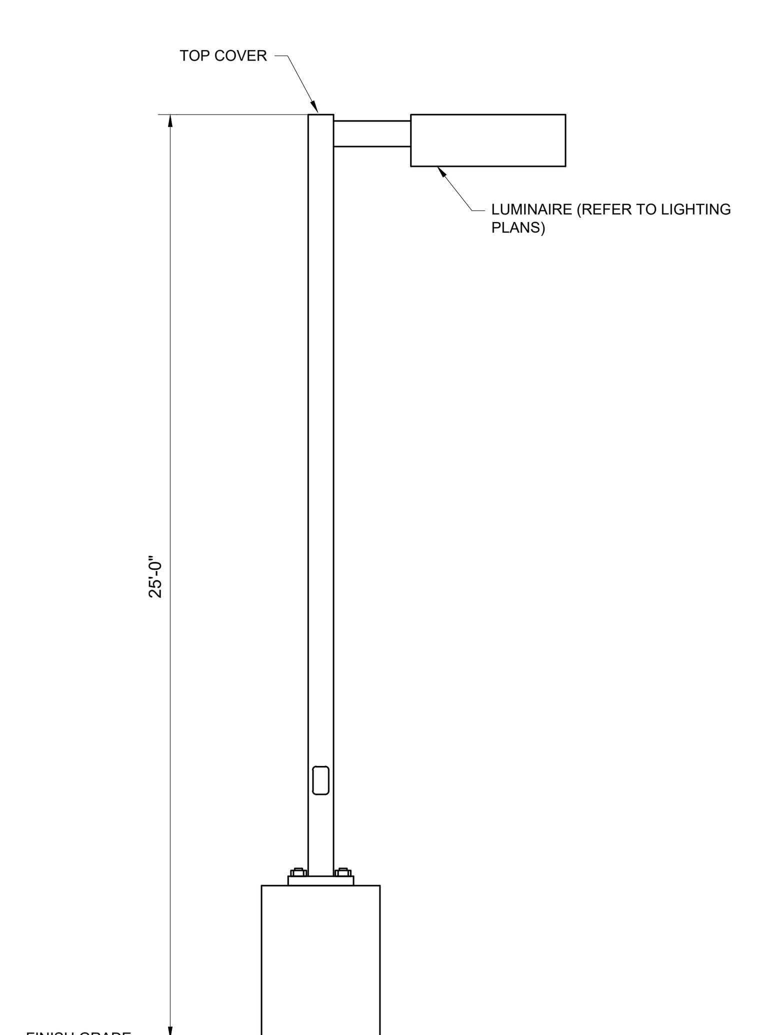
To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's homepage.

Isofootcandle plots for the DSX1 LED P9 40K 70CRI. Distances are in units of mounting height (25').



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DETAIL REFERENCE:
DETAIL PROVIDED/PREPARED BY OTHERS AND IS FROM LITHONIA LIGHTING, DATED 08/28/2025.
REFER TO NOTES THIS SHEET.



STANDARD LIGHT POLE ELEVATION

NOT TO SCALE

Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	50°F	1.02
20°C	68°F	1.01
25°C	**77°C**	**1.00**
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	Lumen Maintenance Factor
0	1.00
25,000	0.95
50,000	0.90
100,000	0.81

Electrical Load

	Performance Package	LED Count	Drive Current (mA)	Wattage	120V	208V	240V	277V	347V	480V
					Current (A)					
Forward Optics (Non-Rotated)	P1	30	530	51	0.42	0.24	0.21	0.18	0.15	0.11
	P2	30	700	68	0.56	0.33	0.28	0.24	0.20	0.14
	P3	30	1050	104	0.85	0.49	0.43	0.37	0.29	0.21
	P4	30	1250	125	1.03	0.60	0.52	0.45	0.36	0.26
	P5	30	1400	142	1.15	0.66	0.58	0.50	0.40	0.29
	P6	40	1250	167	1.38	0.79	0.69	0.60	0.48	0.34
	P7	40	1400	188	1.54	0.89	0.77	0.67	0.53	0.38
	P8	60	1100	216	1.80	1.04	0.90	0.78	0.62	0.45
	P9	60	1400	279	2.31	1.33	1.15	1.00	0.80	0.58
Rotated Optics (Requires L90 or R90)	P10	60	530	101	0.84	0.49	0.42	0.37	0.29	0.21
	P11	60	700	135	1.12	0.65	0.56	0.49	0.39	0.28
	P12	60	1050	206	1.72	0.99	0.86	0.74	0.59	0.43
	P13	60	1400	279	2.30	1.33	1.15	1.00	0.79	0.57

FAO Dimming Settings

FAO Position	% Wattage	% Lumen Output
8	100%	100%
7	93%	95%
6	80%	85%
5	66%	73%
4	54%	61%
3	41%	49%
2	29%	36%
1	15%	20%

*Note: Calculated values are based on original performance package data. When calculating new values for given FAO position, use maximum published values by package listed on specification sheet (input watts and lumens by optic type).

LED Color Temperature / Color Rendering Multipliers

	70 CRI		80CRI		90CRI	
	Lumen Multiplier	Availability	Lumen Multiplier	Availability	Lumen Multiplier	Availability
5000K	102%	Standard	92%	Extended lead-time	71%	(see note)
4000K	100%	Standard	92%	Extended lead-time	67%	(see note)
3500K	100%	(see note)	90%	Extended lead-time	63%	(see note)
3000K	96%	Standard	87%	Extended lead-time	61%	(see note)
2700K	94%	(see note)	85%	Extended lead-time	57%	(see note)

Note: Some LED types are available as per special request. Contact Technical Support for more information.

Motion Sensor Default Settings

Option	Unoccupied Dimmed Level	High Level (when occupied)	Photocell Operation	Dwell Time	Ramp-up Time	Dimming Fade Rate
PIR	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min
NLTAIR2 PIRHN	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min

Controls Options

Nomenclature	Description	Functionality	Primary control device	Notes
FAO	Field adjustable output device installed inside the luminaire; wired to the driver dimming leads.	Allows the luminaire to be manually dimmed, effectively trimming the light output.	FAO device	Cannot be used with other controls options that need the 0-10V leads
DS (not available on DSX0)	Drivers wired independently for 50/50 luminaire operation	The luminaire is wired to two separate circuits, allowing for 50/50 operation.	Independently wired drivers	Requires two separately switched circuits. Consider nLight AIR as a more cost effective alternative.
PER5 or PER7	Twist-lock photocell receptacle	Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide 0-10V dimming signals.	Twist-lock photocells such as DLL Elite or advanced control nodes such as ROAM.	Pins 4 & 5 to dimming leads on driver, Pins 6 & 7 are capped inside luminaire. Cannot be used with other controls options that need the 0-10V leads.
PIR	Motion sensor with integral photocell. Sensor suitable for 8' to 40' mounting height.	Luminaires dim when no occupancy is detected.	Acuity Controls rSBG	Cannot be used with other controls options that need the 0-10V leads.
NLTAIR2 PIRHN	nLight AIR enabled luminaire for motion sensing, photocell and wireless communication.	Motion and ambient light sensing with group response. Scheduled dimming with motion sensor over-ride when wirelessly connected to the nLight Eclypse.	nLight Air rSBG	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app. Cannot be used with other controls options that need the 0-10V leads.
BL30 or BL50	Integrated bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output	BLC device provides input to 0-10V dimming leads on all drivers providing either 100% or dimmed (30% or 50%) control by a secondary circuit	BLC UVOLT1	BLC device is powered off the 0-10V dimming leads, thus can be used with any input voltage from 120 to 480V

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Performance Data

Lumen Output

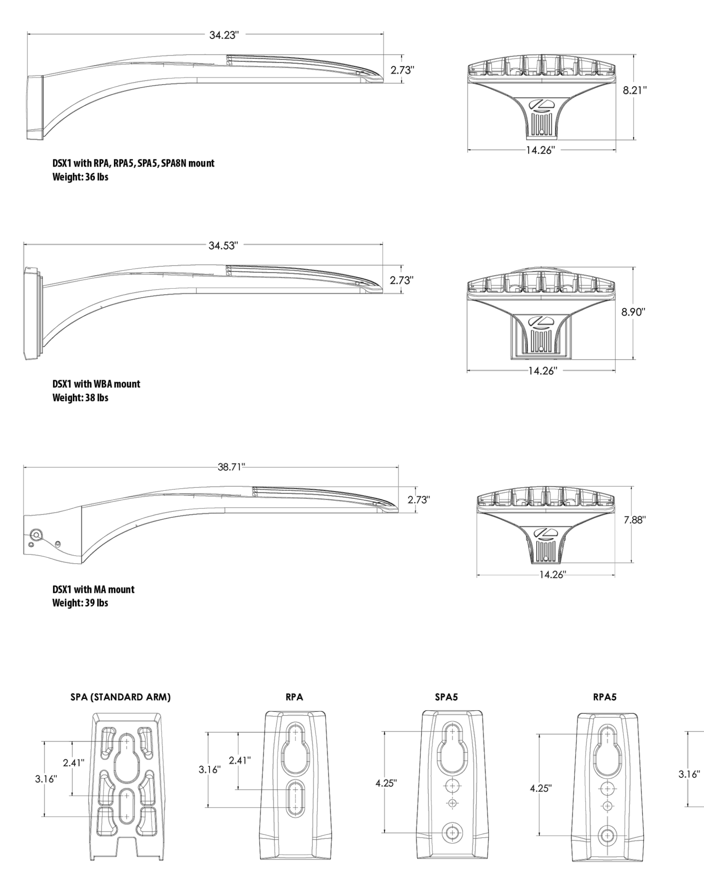
Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

Forward Optics

Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type	30K (3000K, 70 CRI) Lumens	B	U	G	LPW	40K (4000K, 70 CRI) Lumens	B	U	G	LPW	50K (5000K, 70 CRI) Lumens	B	U	G	LPW
P4	124W	30	1250	T1S	16,416	2	0	3	132	17,109	2	0	3	138	17,442	2	0	3	141
				T2M	15,207	3	0	4	123	15,849	3	0	4	128	16,158	3	0	4	130
				T3M	15,383	2	0	4	124	16,032	2	0	4	129	16,345	2	0	4	132
				T3LG	13,742	2	0	2	111	14,321	2	0	2	116	14,600	2	0	2	118
				T4M	15,613	2	0	4	126	16,272	2	0	4	131	16,589	2	0	4	134
				T4LG	14,200	2	0	2	115	14,799	2	0	2	119	15,087	2	0	2	122
				TFTM	15,721	2	0	4	127	16,384	2	0	4	132	16,703	2	0	4	135
				T5M	16,063	4	0	2	130	16,741	4	0	2	135	17,067	4	0	2	138
				T5W	16,324	5	0	3	132	17,013	5	0	3	137	17,344	5	0	3	140
				T5LG	16,110	3	0	2	130	16,790	4	0	2	135	17,117	4	0	2	138
				BLC3	11,190	0	0	3	90	11,662	0	0	3	94	11,889	0	0	3	96
				BLC4	11,557	0	0	4	93	12,044	0	0	4	97	12,279	0	0	4	99
				RCCO	11,291	1	0	3	91	11,767	1	0	3	95	11,996	1	0	3	97
				LCCO	11,291	1	0	3	91	11,767	1	0	3	95	11,996	1	0	3	97
				AFR	16,416	2	0	3	132	17,109	2	0	3	138	17,442	2	0	3	141
P5	138W	30	1400	T1S	18,052	2	0	3	131	18,814	2	0	3	136	19,180	2	0	3	139
				T2M	16,723	3	0	4	121	17,428	3	0	4	126	17,768	3	0	4	129
				T3M	16,917	3	0	4	122	17,630	3	0	4	128	17,974	3	0	4	130
				T3LG	15,111	2	0	2	109	15,749	2	0	2	114	16,055	2	0	2	116
				T4M	17,169	3	0	5	124	17,893	3	0	5	130	18,242	3	0	5	132
				T4LG	15,615	2	0	2	113	16,274	2	0	2	118	16,591	2	0	2	120
				TFTM	17,288	2	0	4	125	18,017	2	0	5	130	18,368	3	0	5	133
				T5M	17,664	5	0	3	128	18,410	5	0	3	133	18,768	5	0	3	136
				T5W	17,951	5	0	3	130	18,708	5	0	3	135	19,073	5	0	3	138
				T5LG	17,716	4	0	2	128	18,463	4	0	2	134	18,823	4	0	2	136
				BLC3	12,305	0	0	3	89	12,824	0	0	3	93	13,074	0	0	3	95
				BLC4	12,709	0	0	4	92	13,245	0	0	4	96	13,503	0	0	4	98
				RCCO	12,416	1	0	3	90	12,940	1	0	3	94	13,192	1	0	3	95
				LCCO	12,416	1	0	3	90	12,940	1	0	3	94	13,192	1	0	3	95
				AFR	18,052	2	0	3	131	18,814	2	0	3	136	19,180	2	0	3	139
P6	165W	40	1250	T1S	21,031	2	0	3	127	21,918	2	0	3	133	22,345	2	0	3	135
				T2M	19,482	3	0	4	118	20,303	3	0	4	123	20,699	3	0	4	125
				T3M	19,708	3	0	5	119	20,539	3	0	5	124	20,939	3	0	5	127
				T3LG	17,604	2	0	2	107	18,347	2	0	2	111	18,704	2	0	2	113
				T4M	20,001	3	0	5	121	20,845	3	0	5	126	21,251	3	0	5	129
				T4LG	18,191	2	0	2	110	18,959	2	0	2	115	19,328	2	0	2	117
				TFTM	20,140	3	0	5	122	20,989	3	0	5	127	21,398	3	0	5	129
				T5M	20,579	5	0	3	125	21,447	5	0	3	130	21,865	5	0	3	132
				T5W	20,912	5	0	3	127	21,795	5	0	3	132	22,219	5	0	3	134
				T5LG	20,638	4	0	2	125	21,509	4	0	2	130	21,928	4	0	2	133
				BLC3	14,335	0	0	3	87	14,940	0	0	3	90	15,231	0	0	3	92
				BLC4	14,805	0	0	4	90	15,430	0	0	4	93	15,731	0	0	4	95
				RCCO	14,464	1	0	3	88	15,074	1	0	3	91	15,368	1	0	3	93
				LCCO	14,464	1	0	3	88	15,074	1	0	3	91	15,368	1	0	3	93
				AFR	21,031	2	0	3	127	21,918	2	0	3	133	22,345	2	0	3	135

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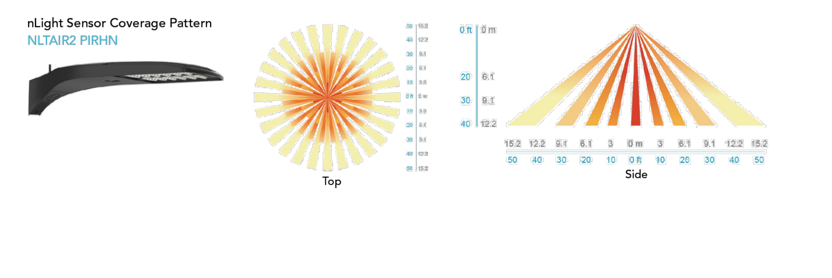
Dimensions



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nLight Control - Sensor Coverage and Settings

nLight Sensor Coverage Pattern
NLTAIR2 PIRHN



FEATURES & SPECIFICATIONS

INTENDED USE
The sleek design of the D-Series Size 1 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and streetscapes.

CONSTRUCTION
Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED drivers are mounted in direct contact with the casting to promote low operating temperature and long life. Housing driver compartment is completely sealed against moisture and environmental contaminants (IP66). Vibration rated per ANSI C136.31 for 3G for SPA and MA. 1.5G for mountings RPA, RPA5, SPA5 and SPA8N. Low EPA (0.69 ft²) for optimized pole wind loading.

FINISH
Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

Coastal Construction (CCE)
Optional corrosion resistant construction is engineered with added corrosion protection in materials and/or pre-treatment of base material under super durable paint. Provides additional corrosion protection for applications near coastal areas. Finish is salt spray tested to over 5,000 hours per ASTM B117 with scribe rating of 10. Additional lead-times may apply.

OPTICS
Precision-molded proprietary silicone lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in standard 3000 K, 4000 K and 5000 K (70 CRI) configurations. 80CRI configurations are also available. The D-Series Size 1 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL
Light engine configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L81/100,000 hours at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS
The DSX1 LED area luminaire has a number of control options. DSX Size 1, comes standard with 0-10V dimming drivers. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. Integrated motion sensor with on-board photocells feature field-adjustable programing and are suitable for mounting heights up to 40 feet. Control option BL features a bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output.

nLIGHT AIR CONTROLS
The DSX1 LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocontrol functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaires can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

INSTALLATION
Integral mounting arm allows for fast mounting using Lithonia standard #8 drilling and accommodates pole drilling's from 2.41 to 3.12" on center. The standard "SPA" option for square poles and the "RPA" option for round poles use the #8 drilling. For #5 pole drillings, use SPA5 or RPA5. Additional mountings are available including a wall bracket (WBA) and mast arm (MA) option that allows luminaire attachment to a 2 3/8" horizontal mast arm.

LISTINGS
UL listed to meet U.S. and Canadian standards. UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP66 rated. Rated for -40°C minimum ambient.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

GOVERNMENT PROCUREMENT
BAA – Buy America(n) Act: Product with the BAA option qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product with the BAA option also qualifies as manufactured in the United States under DOT Buy America regulations.
BABA – Build America Buy America: Product with the BAA option also qualifies as produced in the United States under the definitions of the Build America, Buy America Act.
Please refer to www.acuitybrands.com/buy-american for additional information.

WARRANTY
5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

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DETAILS BY OTHERS DISCLAIMER

LITHONIA LIGHTING

Catalog Number	
Notes	
Type	

FEATURES & SPECIFICATIONS

INTENDED USE — These specifications are for USA standards only. Square Straight Steel is a general purpose light pole for up to 39-foot mounting heights. This pole provides a robust yet cost effective option for mounting area lights and floodlights.

CONSTRUCTION —

Pole Shaft: The pole shaft is of uniform dimension and wall thickness and is made of a weldable-grade, hot-rolled, commercial-quality steel tubing with a minimum yield of 55 KSI (11-gauge, 0.120"), or 50 KSI (7-gauge, 0.179"). Shaft is one-piece with a full-length longitudinal high-frequency electric resistance weld. Uniformly square in cross-section with flat sides, small corner radii and excellent torsional qualities. Available shaft widths are 4", 5" and 6".

Pole Top: Options include 4" tenon top, drilled for side mount fixture, tenon with drilling (includes extra handhole) and open top. Side drilled and open top poles include a removable top cap.

Handhole: A reinforced handhole with grounding provision is provided at 18" from the base on side A. Positioning the handhole lower may not be possible and requires engineering review; consult Tech Support-Outdoor for further information. Every handhole includes a cover and cover attachment hardware. The handhole has a nominal dimension of 2.5" x 5".

Base Cover: A durable ABS plastic two-piece full base cover, finished to match the pole, is provided with each pole assembly. Additional base cover options are available upon request.

Anchor Base/Bolts: Anchor base is fabricated from steel that meets ASTM A36 standards and can be altered to match existing foundations; consult factory for modifications. Anchor bolts are manufactured to ASTM F1554 Standards grade 55, (55 KSI minimum yield strength and tensile strength of 75-95 KSI). Top threaded portion (nominal 12") is hot-dipped galvanized per ASTM A-153.

HARDWARE — All structural fasteners are high-strength galvanized carbon steel. All non-structural fasteners are galvanized or zinc-plated carbon steel or stainless steel.

GROUNDING — Provision located immediately inside handhole rim. Grounding hardware not included (provided by others).

FINISH — Exterior of pole and base plate is protected by a zinc-infused TGIC (Triglycidyl Isocyanurate) powder coat finish that provides superior resistance to corrosion and weathering and meets 5A and 5B classifications of ASTM D3359. A tightly controlled multi-stage process ensures superior adhesion as well as a minimum finish thickness of 3 mils. Architectural Colors and Special Finishes are available by quote and include, but are not limited to Paint over Hot-dipped Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes.

GOVERENMENT PROCUREMENT —

BAA – Buy America(n) Act: Product qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product also qualifies as manufactured in the United States under DOT Buy America regulations.

BABA – Build America Buy America: Product qualifies as produced in the United States under the definitions of the Build America, Buy America Act.

Please refer to www.acuitybrands.com/buy-american for additional information.

INSTALLATION — Do not erect poles without having fixtures installed. Factory-supplied templates must be used when setting anchor bolts. Lithonia Lighting will not accept claim for incorrect anchorage placement due to failure to use Lithonia Lighting factory templates. If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage. Lithonia Lighting is not responsible for the foundation design.

WARRANTY — 1-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

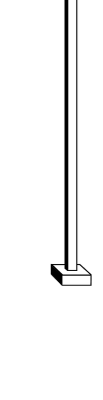
NOTE: Actual performance may differ as a result of end-user environment and application.
Specifications subject to change without notice.

Anchor Base Poles

SSS

SQUARE STRAIGHT STEEL

BAA BABA



SSS Square Straight Steel Poles

ORDERING INFORMATION — Lead times will vary depending on options selected. Consult with your sales representative.

Example: SSS 20 5C DM28AS DDBXD

Series	Nominal fixture mounting height	Nominal shaft base size/wall thickness[1]	Mounting[2]	Options	Finish
SSS	10'-39' (for 1/2 ft increments, add -6 to the pole height. **Ex:** 20-6 equals 20ft 6in.) (See technical information table for complete ordering information.)	4C 4" 11g (0.120") 4G 4" 7g (0.179") 5C 5" 11g (0.120") 5G 5" 7g (0.179") 6G 6" 7g (0.179") (See technical information table for complete ordering information.)	Tenon mounting PT Open top (includes top cap) T20 2-3/8" O.D. (2" NPS) T25 2-7/8" O.D. (2-1/2" NPS) T30 3-1/2" O.D. (3" NPS) T35 4" O.D. (3-1/2" NPS) DSX/RSX/EAX Drill mounting[3] DM19AS 1 at 90° DM28AS 2 at 180° DM29AS 2 at 90° DM39AS 3 at 90° DM49AS 4 at 90° RAD drill mounting[3] DM19RAD 1 at 90° DM28RAD 2 at 180° DM29RAD 2 at 90° DM39RAD 3 at 90° DM49RAD 4 at 90° Arm drill mounting To be added as series + drill orientations **EX:** SMAC19 for SMAC arm drilling 1 at 90°	Shipped installed VD Vibration damper[4] JHxy J-Hook for cable strain relief[5] HAxy Horizontal arm bracket (1 fixture)[5,6] FDLxy Festoon outlet less electrical[5,7] FDLGFCIxy Festoon with GFCI outlet and in-use cover[5,8] CPL12/xy 1/2" coupling[5] CPL34/xy 3/4" coupling[5] CPL1/xy 1" coupling[5] NPL12/xy 1/2" threaded nipple[5] NPL34/xy 3/4" threaded nipple[5] NPL1/xy 1" threaded nipple[5] EHHxy Extra handhole[5,9] STLTMP Steel anchor bolt template (standard is paper) STLHHC Steel handhole cover (standard is plastic, finish is smooth)[10] FBCSTL2PC 2 Piece steel base cover (standard is plastic)[10] IC Interior coating[11] L/AB Less anchor bolts (Include when anchor bolts are not needed) TP Tamper resistant handhole cover fasteners NEC NEC 410.30 compliant gasketed handhole (Not UL Labeled) UL UL listed with label (Includes NEC compliant cover) BAA Buy America(n) Act Compliant[12] VM/original order# Match pole to prior order or project[13]	Super durable paint colors DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DSSXD Sandstone DGCXD Charcoal gray DTGXD Tennis green DBRXD Bright red DSBXD Steel blue DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white Other finishes GALV Galvanized finish Architectural colors and special finishes[14] [PAINT] GALV Paint over galvanizing VP30 3 year warranty extension VP53 5 year warranty extension RAL#### Use designated Lithonia Lighting nomenclature in brochure Custom color Nomenclature assigned through Customer Care "Custom Color Process"

Accessories: *Order as separate catalog number.*

PL DT20	Plugs for RAD drillings
PL DT8	Plugs for DMxxAS drillings
FVD xxFT	Field installed vibration damper (snake style)[4]

NOTES:
1. Wall thickness will be signified with a "C" (11 Gauge) or a "G" (7-Gauge) in nomenclature. "C" - 0.120" \| "G" - 0.179".
2. PT open top poles include top cap. When ordering tenon mounting and drill mounting for the same pole, specify as drilling option/tenon option. The combination includes a required extra handhole. *Example: DM28/T20.*
3. Refer to the fixture spec sheet for the correct drilling template pattern and orientation compatibility.
4. On 4" and 5" poles, VD cannot be installed if provisions (EHH, FDL, NPL, CPL) are located higher than 2/3 of the pole's total height. Use FVD accessory kit instead. *Example: Pole height is 25ft, A provision cannot be placed above 16ft.*
5. Specify location and orientation when ordering option.
   For "x": Specify the height above the base of pole in feet or feet and inches; separate feet and inches with a "-". *Example: 5ft = 5 and 20ft 3in = 20-3*
   For "y": Specify orientation from handhole (A,B,C,D) Refer to the Handhole Orientation diagram below. *Example: 1/2" coupling at 5' 8", orientation C = CPL12/5-8C*
6. Horizontal arm is 18" x 2-3/8" O.D. tenon standard, with radius curve providing 12" rise and 2-3/8" O.D. If ordering two horizontal arm at the same height, specify with HAxyy. *Example: HA20BD.*
7. FDL does not come with GFCI outlet or handhole cover. These must be supplied by contractor or electrician.
8. Festoon option that comes with GFCI and in-use cover. GFCI and in-use cover ship separately from pole.
9. Combination of tenon-top and drill mount includes extra handhole. EHH includes cover.
10. Plastic hand hole cover and base covers come standard with all poles. Items ship separately. Additional parts can be ordered as replacements.
11. N/A with GALV.
12. Use when mill certifications are required.
13. Must add original order number. Not for replacement parts or post sales issues, contact tech support or post sales teams. VM is used to ensure poles match in appearance exactly from order to order, on a single project site. A common use case would be a multi-phase project with multiple orders. *Example: VM/010-36784*
14. Must be quoted through AQD. Finishes do not require RFA. RAL colors available are shown in "Architectural Colors brochure". Lead times may be extended up to 2 weeks due to paint procurement.

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SSS Square Straight Steel Poles

TECHNICAL INFORMATION — EPA (ft²) with 1.3 gust

Catalog Number	Nominal Shaft Length (ft.)*	Pole Shaft Size (Base in. x Top in. x ft.)	Wall thick (in.)	Gauge	80 MPH	Max. weight	90 MPH	Max. weight	100 MPH	Max. weight	Approximate ship weight (lbs.)
SSS 10 4C	10	4.0 x 10.0	0.120"	11	30.6	765	23.8	595	18.9	473	75
SSS 12 4C	12	4.0 x 12.0	0.120"	11	24.4	610	18.8	470	14.8	370	90
SSS 14 4C	14	4.0 x 14.0	0.120"	11	19.9	498	15.1	378	11.7	293	100
SSS 16 4C	16	4.0 x 16.0	0.120"	11	15.9	398	11.8	295	8.9	223	115
SSS 18 4C	18	4.0 x 18.0	0.120"	11	12.6	315	9.2	230	6.7	168	125
SSS 20 4C	20	4.0 x 20.0	0.120"	11	9.6	240	6.7	167	4.5	150	140
SSS 20 4G	20	4.0 x 20.0	0.179"	7	14	350	11	275	8	200	198
SSS 20 5C	20	5.0 x 20.0	0.120"	11	17.7	443	12.7	343	9.4	235	185
SSS 20 5G	20	5.0 x 20.0	0.179"	7	28.1	703	21.4	535	16.2	405	265
SSS 25 4C	25	4.0 x 25.0	0.120"	11	4.8	150	2.6	100	1	50	170
SSS 25 4G	25	4.0 x 25.0	0.179"	7	10.8	270	7.7	188	5.4	135	245
SSS 25 5C	25	5.0 x 25.0	0.120"	11	9.8	245	6.3	157	3.7	150	225
SSS 25 5G	25	5.0 x 25.0	0.179"	7	18.5	463	13.3	333	9.5	238	360
SSS 30 4G	30	4.0 x 30.0	0.179"	7	6.7	168	4.4	110	2.6	65	295
SSS 30 5C	30	5.0 x 30.0	0.120"	11	4.7	150	2	50	--	--	265
SSS 30 5G	30	5.0 x 30.0	0.179"	7	10.7	267	6.7	167	3.9	100	380
SSS 30 6G	30	6.0 x 30.0	0.179"	7	19	475	13.2	330	9	225	520
SSS 35 5G	35	5.0 x 35.0	0.179"	7	5.9	150	2.5	100	--	--	440
SSS 35 6G	35	6.0 x 35.0	0.179"	7	12.4	310	7.6	190	4.2	105	540
SSS 39 6G	39	6.0 x 39.0	0.179"	7	7.2	180	3	75	--	--	605

NOTE: EPA values are based ASCE 7-93 wind map.
* For 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.

TECHNICAL INFORMATION — EPA (ft²) WITH 3-SECOND GUST PER AASHTO 2013

Series	Mounting Height (ft.)*	Shaft Base Size	90 MPH	Max. weight	100 MPH	Max. weight	110 MPH	Max. weight	120 MPH	Max. weight	130 MPH	Max. weight	140 MPH	Max. weight	150 MPH	Max. weight	Approximate ship weight (lbs.)
SSS	10	4C	20	500	16	400	13	325	10.5	263	8.5	213	7	175	6	150	75
SSS	12	4C	16	400	13	325	10	250	8	200	6.5	163	5	125	4	100	90
SSS	14	4C	13.5	338	10	250	7.5	188	6	150	4.5	113	3.5	88	2.5	63	100
SSS	16	4C	10.5	263	7.5	188	5.5	138	4	100	3	75	1.5	38	1	25	115
SSS	18	4C	8	200	5.5	138	4	100	2.5	63	1.5	38	0.5	13	-	-	125
SSS	18	4G	13	325	9.5	238	7	175	5	125	3.5	88	2.5	63	1.5	38	185
SSS	18	5C	13	325	9.5	238	6.5	163	4.5	113	3	75	1.5	38	.5	13	170
SSS	20	4C	6	150	4	100	2.5	63	1	25	-	-	-	-	-	-	140
SSS	20	4G	10.5	263	7.5	188	5.5	138	3.5	88	2	50	1	25	-	-	205
SSS	20	5C	10	250	7	175	4.5	113	2.5	63	1	25	-	-	-	-	185
SSS	20	5G	20	500	15	375	11.5	288	8.5	213	6	150	4.5	113	3	75	265
SSS	25	4C	2	50	0.5	13	-	-	-	-	-	-	-	-	-	-	170
SSS	25	4G	5.5	138	3	75	1.5	38	-	-	-	-	-	-	-	-	245
SSS	25	5C	4.5	113	2	50	-	-	-	-	-	-	-	-	-	-	225
SSS	25	5G	12	300	8.5	213	5.5	138	3	75	1.5	38	-	-	-	-	360
SSS	25	6G	19	475	13.5	338	9	225	5.5	138	3	75	1	25	-	-	445
SSS	30	4G	1.5	38	-	-	-	-	-	-	-	-	-	-	-	-	291
SSS	30	5C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	265
SSS	30	5G	6.5	163	3.5	88	1	25	-	-	-	-	-	-	-	-	380
SSS	30	6G	11	275	6	150	2.5	63	-	-	-	-	-	-	-	-	520
SSS	35	5G	2	50	-	-	-	-	-	-	-	-	-	-	-	-	440
SSS	35	6G	4	100	-	-	-	-	-	-	-	-	-	-	-	-	540
SSS	39	6G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	605

NOTE: AASHTO 2013 design criteria is the most common EPA and uses wind map ASCE7-05. Please review the project Spec document to determine the correct design criteria for the poles on your jobsite.
*For 1/2 ft increments, add -6 to the pole height. Ex: 20-6 equals 20ft 6in.

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SSS Square Straight Steel Poles

TECHNICAL INFORMATION - EPA (ft²) PER FLORIDA BULIDING CODE 2023

Series	Mounting Height (ft.)	Shaft Base Size	115 MPH	Max. weight	120 MPH	Max. weight	130 MPH	Max. weight	140 MPH	Max. weight	150 MPH	Max. weight	160 MPH	Max. weight	170 MPH	Max. weight	180 MPH	Max. weight	Approximate ship weight (lbs.)
SSS	10	4C	17.2	430	16	400	14	350	12	300	10.2	255	9	225	7.9	198	7	175	75
SSS	12	4C	15	375	13.9	348	11.8	295	10	250	8.6	215	7.4	185	6.2	155	5.4	135	90
SSS	14	4C	12.5	325	11	275	9.6	240	8.2	205	6.6	165	5.8	145	4.6	115	3.6	90	100
SSS	16	4C	10.4	260	9.5	238	8	200	6.5	163	5	125	4	100	3	75	2	50	115
SSS	18	4C	8.4	210	8	100	6	150	4.5	113	3.5	88	2.5	63	1.5	38	1	25	125
SSS	20	4C	7	175	6	150	4.5	113	3	75	2	50	1	25	-	-	-	-	140
SSS	20	4G	12	300	9.5	238	7.5	188	5.5	138	4.5	113	3	75	2	50	1.5	38	205
SSS	20	5C	W/t Ratio Exceeded																
SSS	20	5G	22	550	20	500	16.8	420	14	350	11.6	290	9.4	235	7.6	190	6	150	265
SSS	25	4C	3	75	2	50	0.8	20	-	-	-	-	-	-	-	-	-	-	170
SSS	25	4G	6	150	5	125	3.2	80	2	50	0.8	20	-	-	-	-	-	-	245
SSS	25	5C	W/t Ratio Exceeded																
SSS	25	5G	15	375	13.2	330	10.2	255	7.6	190	5.6	140	4	100	2.4	60	1.2	30	360
SSS	30	4G	2	50	1	25	-	-	-	-	-	-	-	-	-	-	-	-	291
SSS	30	5C	W/t Ratio Exceeded																
SSS	30	5G	8.8	220	7.4	185	4.8	120	2.8	70	1	25	-	-	-	-	-	-	380
SSS	30	6G	13	325	11.5	288	8	200	5	125	2.5	63	1	25	-	-	-	-	520
SSS	35	5G	3.8	95	2.6	65	0.6	15	-	-	-	-	-	-	-	-	-	-	440
SSS	35	6G	7	175	5	125	2	50	-	-	-	-	-	-	-	-	-	-	540
SSS	39	6G	2.4	60	0.8	20	-	-	-	-	-	-	-	-	-	-	-	-	605

NOTE:
1) Listed capacities assume the location of the design loads are a maximum of 2'-6" above the pole top and 2'-0" eccentric to the pole centerline.
2) Design capacities are in accordance with 2023 FBC category II wind loading (ASCE 7-22 wind maps) and exposure category C. Contact Product Support Outdoor for criteria outside of these conditions.
3) The listed capacities are only valid for applications installed in the state of FL. Contact Product Support Outdoor for applications in other states or jurisdictions.

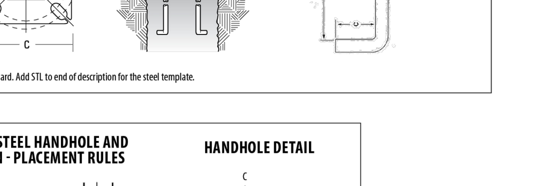
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SSS Square Straight Steel Poles

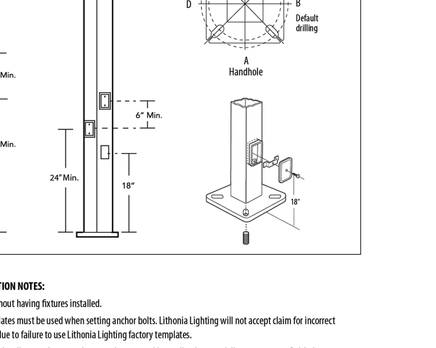
ANCHORAGE AND TEMPLATE INFORMATION

Shaft base size	Bolt circle A	Bolt projection B	Base square C	Base plate thickness	Template description*	Anchor bolt description	Bolt size (in.) D x L x C	Anchor bolt/ Template Combo
4"C	8" – 9"	3.25"- 3.75"	8"- 8.25"	0.75"	ABTEMPLATE PJ50004	AB18-0	3/4 x 18 x 3	ABSSS-4C
4"G	8" – 9"	3.38"- 3.75"	8"- 8.25"	0.875"	ABTEMPLATE PJ50004	AB30-0	3/4 x 30 x 3	ABSSS-4G
5"	10" – 12"	3.5"- 4"	11"	1"	ABTEMPLATE PJ50010	AB36-0	1 x 36 x 4	ABSSS-5
6"	11" – 13"	4"- 4.50"	12.5"	1"	ABTEMPLATE PJ50011	AB36-0	1 x 36 x 4	N/A

BASE & BOLT DETAIL



* Paper template standard. Add STL to end of description for the steel template.



IMPORTANT INSTALLATION NOTES:
- **Do not** erect poles without having fixtures installed.
- Factory-supplied templates must be used when setting anchor bolts. Lithonia Lighting will not accept claim for incorrect anchorage placement due to failure to use Lithonia Lighting factory templates.
- If poles are stored outside, all protective wrapping must be removed immediately upon delivery to prevent finish damage.
- Lithonia Lighting is not responsible for the foundation design.
- Bolt circles have +/- 1/2" tolerance.

CAUTION: These specifications are intended for general purposes only. Lithonia Lighting reserves the right to change material or design, without prior notice, in a continuing effort to upgrade its products.

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DETAIL REFERENCE:
DETAIL PROVIDED/PREPARED BY OTHERS AND IS FROM LITHONIA LIGHTING, DATED 04/10/2026.
REFER TO NOTES THIS SHEET.

BOHLER// ™
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	10/16/2026	PER CITY COMMENTS	ATK / MRB

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PROJECT No.:	PAB260025.00-1B
DRAWN BY:	KMH
CHECKED BY:	MRB
DATE:	8/13/2026
CAD I.D.:	P-CIVL-LLGT

PROJECT:

PRELIMINARY/ FINAL LAND DEVELOPMENT PLAN

FOR

BOYLE CONSTRUCTION, INC.

PROPOSED DATA CENTER

**2184 INDUSTRIAL DRIVE
BETHLEHEM, PA 18017
CITY OF BETHLEHEM
LEHIGH COUNTY
PIN: 641847439546-1
CITY WARD 13 BLOCK 177**

BOHLER// ™
74 W BROAD STREET, SUITE 500
BETHLEHEM, PA 18018
Phone: (610) 709-9971
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J.M. ILLIGASH
REGISTERED LANDSCAPE ARCHITECT
PENNSYLVANIA LICENSE No. LA002666

SHEET TITLE:

LIGHTING NOTES AND DETAILS

SHEET NUMBER:

L-202

REVISION 1 - 10/16/2026

Oct 16, 2026
P:\PA\2026\PAB260025.00\CAD\DRAWINGS\PLAN SETS\CIVIL SITE PLANS\P-CIVL-LLGT-PAB260025.00-1B------>LAYOUT: L-202 LGHT
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