GENERAL NOTES (Rev. 2/2021)

- THESE PLANS ARE SOLELY BASED ON INFORMATION THE OWNER AND OTHERS PROVIDED TO BOHLER ENGINEERING,
  (HEREIN "BOHLER") PRIOR TO THE DATE ON WHICH THE ENGINEER 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 CONTRICTION.
- PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST CONFIRM WITH THE ENGINEER 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 REPORTS AND/OR PROPERTY AND ADMINISTRACTORY OF THE PROPERTY AND ADMINISTRATION OF THE PROPERTY ADMINISTRATION OF THE PROPERTY AND ADMINISTRATION OF THE PROP
- 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.
- 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
- 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 ENGINEER OF RECORD AND BOHLER, IN WRITING, OF ANY CONFLICTS, DESCRIPTION OF ANY CONFLICTS AND ANY CONFLICTS OF ANY CONFLICTS.
- PLANS, WHERE APPLICABLE). THE CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER, ARCHITECT AND ENGINEER 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.

  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

A SAFE WORK AREA FOR THIRD PARTIES, PEDESTRIANS AND ANYONE INVOLVED WITH THE PROJECT

- THE CONTRACTOR MUST FIELD VERIFY ALL DIMENSIONS AND MEASUREMENTS SHOWN ON THESE PLANS, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR MUST IMMEDIATELY NOTIFY ENGINEER 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 ENGINEER OF RECORD AND BOHLER WRITTEN NOTIFICATION OF SAME AND (B) ENGINEER OF RECORD AND BOHLER, THEREAFTER, PROVIDING THE CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SLICH ADDITIONAL WORK
- THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND MEASUREMENTS INCLUDED ON DESIGN DOCUMENTS HEREIN AND MUST <u>NOT</u> 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
- 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 ENGINEER 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. ENGINEER 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
- 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
- 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 ENGINEER 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 ENGINEER OF RECORD AND BOHLER HAVE NOT BEEN RETAINED TO PERFORM OR TO BE RESPONSIBLE FOR JOB SITE SAFETY, SAME BEING WHOLLY OUTSIDE OF ENGINEER OF RECORD'S AND BOHLER SERVICES AS RELATED TO THE PROJECT. THE ENGINEER 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 ENGINEER 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 ENGINEER 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 ENGINEER 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 ENGINEER OF RECORD AND BOHLER HARMLESS FOR AND FROM ALL INJURIES, CLAIMS AND DAMAGES THAT ENGINEER AND BOHLER SUFFER AND ANY AND ALL COSTS THAT ENGINEER AND BOHLER INCUR AS RELATED TO SAME.
- 1. 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, 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 EMPLO
- 22. THE ENGINEER 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 ROOTES 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
- 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 MOT BEEN PECCENCED.
- 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 ENGINEER OF RECORD AND BOHLER FOR ALL DEVIATIONS WITHIN ENGINEER'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 ENGINEER 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 ENGINEER 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 ENGINEER OF RECORD AND BOHLER PARTIES, HARMLESS FOR ALL INJURIES, DAMAGES AND COSTS THAT ENGINEER 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. ENGINEER OF RECORD AND BOHLER HAS NO RESPONSIBILITY FOR OR AS RELATED TO EXCAVATION AND TRENCHING
- 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 ENGINEER OF RECORD AND BOHLER PARTIES HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS AS A RESULT OF SAID FAILURE.
- 1. 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 ENGINEER 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 ENGINEER 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.

33. IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE SUBMITTALS PREPARED FOR ANY CONSTRUCTION DETAILED ITEMS AND TO COORDINATE THE SUBMITTALS WITH THE

# CITY OF BETHLEHEM NOTES

ACCURATE AS-BUILT PLANS SHALL BE KEPT UP TO DATE DURING THE CONSTRUCTION PROFESS. AT THE COMPLETION OF THE PROJECT RECORD DRAWINGS SHALL BE DEVELOPED FROM THE AS-BUILT PLANS AND SUBMITTED TO THE CITY ENGINEER'S OFFICE. ALL FINAL DRAWINGS SHALL SHOW NORTH AMERICAN DATUM (NAD) 1983 STATE PLANE COORDINATES IN FEET (PENNSYLVANIA SOUTH, FIPS ZONE 3 702) AND THE DIGITAL FILE SHALL BE IN STATE PLANE FEET COORDINATES AS APPLICABLE. THE HARD COPY OF THE RECORD DRAWINGS SHALL BE IN THE FORM OF MYLAR COPY. THE ENGINEER OF RECORD SHALL CERTIFY (I.E. P.E. STAMPED AND SIGNED) THAT THE RECORD DRAWINGS COMPLY SUSTAINABILITY WITH THE APPROVED PLAN AND THEY CONFORM TO INDUSTRY STANDARDS. ALL DIGITAL FILES SHALL RESIDE ON PC COMPATIBLE CD ROM CONTAINING THE DIGITAL REPRESENTATION OF THE FINAL PLAN AS PRESENTED ON THE TWENTY-FOUR (24) INCH BY THIRTY-SIX (36) INCH SHEETS. THE DIGITAL MAP SHALL BE AUTOCAD COMPATIBLE. ALL LAYERS INCLUDED IN THE DIGITAL MAPS SHALL BE THE STANDARDIZED LAYERS PREPARED AND UTILIZED BY THE CITY OF BETHLEHEM TO ENSURE COMPATIBILITY WITH THE CITY'S EXISTING CAD STANDARDS AND AS DESCRIBED IN APPENDIX A OF THE CITY'S SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.

PRIOR TO ANY WORK WITHIN THE RIGHT-OF-WAY, PERMITS MUST BE OBTAINED FROM THE CITY ENGINEERING OFFICE.

# PRELIMINARY | FINAL LAND DEVELOPMENT PLANS

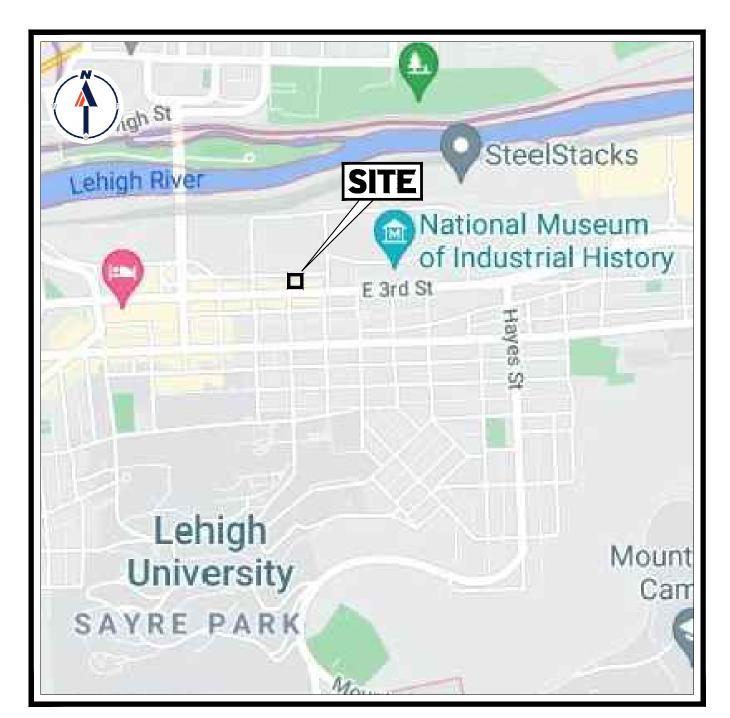
— FOR ————

PERON DEVELOPMENT, LLC
PROPOSED

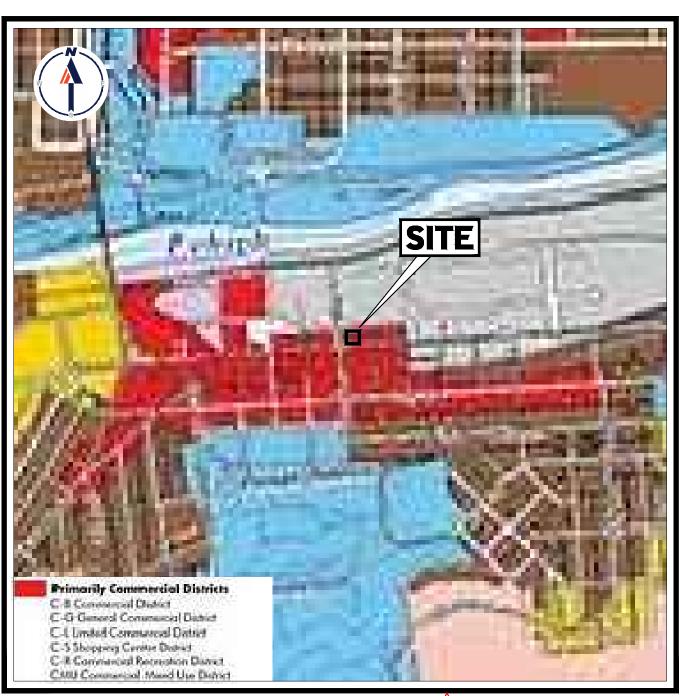
PROPOSED RESIDENTIAL
MIXED-USE DEVELOPMENT

**LOCATION OF SITE** 

305 EAST 3RD STREET & TAYLOR STREET, CITY OF BETHLEHEM NORTHAMPTON COUNTY, PENNSYLVANIA PARID #P6SE1B-2-7, #P6SE1B-2-8 & P6SE1B-2-9



SCALE: 1"=1000'
SOURCE: GOOGLE
500' 0 1000'



SCALE: 1" =1000' SOURCE: CITY OF BETHLEHEM

# DRAWING SHEET INDEX

SHEET TITLE	SHEET NUMBER
COVER SHEET	C-101
EXISTING CONDITIONS/DEMOLITION PLAN	C-201
LAND DEVELOPMENT SITE PLAN	C-301
GRADING PLAN	C-401
UTILITY PLAN	C-402
LANDSCAPE PLAN & DETAILS	C-501, C-502
LIGHTING PLAN & DETAILS	C-503, C-504
EROSION & SEDIMENT CONTROL PLAN & DETAILS	C-601
CONSTRUCTION DETAILS	C-701, C-702
PRE AND POST DRAINAGE AREA PLANS	C-801, C-802
LOT CONSOLIDATION	LC-101

REVISIONS			
REV	DATE	COMMENT	DRAWN BY
1	12/17/2021	PER CITY COMMENT	MRB MSL
DRA			/212011 MRB MSL /17/2021 DDEV-1

# REFERENCES AND CONTACT INFORMATION

1.	BETHWORKS RENOVATION, LLC 60 W. BROAD STREET, SUITE 102 BETHLEHEM, PA 18018 C/O ROB DEBEER 631-764-3247	5.	GEOTECHNICAL REPORT (STORMWATER): A REPORT BY FRENCH & PARRELLO ASSOCIATES 235 FROST AVENUE, PHILLIPSBURG, NJ 08865 ENTITLED: "REPORT OF SUBSURFACE EXPLORATION & GEOTECHNICAL ENGINEERING EVALUATION" PROJECT: "THIRD & TAYLOR DEVELOPMENT" DATED 06/24/2021, NO REVISION
2.	APPLICANT/DEVELOPER: PERON DEVELOPMENT, LLC 60 W. BROAD STREET, SUITE 102 BETHLEHEM, PA 18018 C/O ROB DEBEER 631-764-3247	6.	GEOTECHNICAL REPORT (SOILS): A REPORT BY FRENCH & PARRELLO ASSOCIATES 235 FROST AVENUE, PHILLIPSBURG, NJ 08865 ENTITLED: "REPORT OF SUBSURFACE EXPLORATION & GEOTECHNICAL ENGINEERING EVALUATION" PROJECT: "THIRD & TAYLOR DEVELOPMENT"
3.	ENGINEER & LANDSCAPE ARCHITECT: BOHLER ENGINEERING PA, LLC		DATED 06/24/2021, NO REVISION
	74 W. BROAD STREET, SUITE 500 BETHLEHEM , PA 18018 610-709-9971	7.	ARCHITECT: USA ARCHITECTS, PLANNERS AND INTERIOR DESIGNERS, LTD. 1 SOUTH THIRD STREET, 7TH FLOOR, EASTON, PA 18042 (610) 559- 6000
4.	SURVEY: PLANS BY BLUE MARSH ASSOCIATES, INC. 551 EASTON ROAD, SUITE A, WARRINGTON, PA 18976 ENTITLED: "ALTA/NSPS LAND TITLE SURVEY" FILE NO: 21-B-118 DATED: 4-17-2021, NO REVISION SHEET 1 OF 1		(,

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.

# **ENGINEERING PERMITS NOTE**

PRIOR TO ANY WORK WITHIN THE RIGHT-OF-WAY, PERMITS MUST BE OBTAINED FROM CITY ENGINEERING OFFICE.

# STATEMENT OF INTENT

IT IS THE INTENT OF THIS PLAN TO DEMOLISH THE EXISTING ASPHALT PARKING LOT AND CONSTRUCT A FIVE (5) RESIDENTIAL MIXED-USED BUILDING.

# **CERTIFICATION OF OWNERSHIP**

I, ROB DEBEER OF BETHWORKS RENOVATION, LLC. BEING DULY SWORN ACCORDING TO LAW, AND ACTING IN MY CAPACITY AS MEMBER DEPOSE AND SAY THAT THE ABOVE NAMED CORPORATION IS THE TRUE AND LAWFUL OWNER OF PROPERTY KNOWN AS 307, 309, & 311 E. 3RD STREET, BETHLEHEM, PA 18015; 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.

		BETHWORKS RENOVATIONS, LLC.
ATTEST:	BY:	
		ROB DEBEER, MEMBER

# **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.

	MICHAEL E. JEITNER, PE
SEAL	PA LICENSE No. PE055733

# **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, PLS
PA LICENSE No. SU-37826-E

# PLANNING BUREAU APPROVAL

PER ARTICLE 1319 OF THE ZONING ORDINANCE OF THE CITY OF BETHLEHEM CITY SIGNATURE BLOCK SHOULD BE INCLUDED ON THE PLANS AS FOLLOWS:

APPROVED BY THE CITY OF BETHLEHEM PLANNING BUREAU ON \_\_\_\_\_

LVPC REVIEWER

PLANNING DIRECTOR

# LEHIGH VALLEY PLANNING COMMISSION REVIEW

REVIEWED THIS \_\_\_\_\_\_ DAY OF \_\_\_\_\_\_, 20 \_\_\_\_\_ BY THE LEHIGH VALLEY PLANNING COMMISSION.

# NORTHAMPTON COUNTY RECORDER OF DEED

RECORDED IN THE OFFICE OF THE RECORDER OF DEED OF NORTHAMPTON COUNTY, PENNSYLVANIA ON \_\_\_\_\_\_\_, 20\_\_\_\_\_\_, IN MAP BOOK VOLUME\_\_\_\_\_\_\_, PAGE

NORTHMAPTON COUNTY RECORDER OF DEEDS



BOHLER//

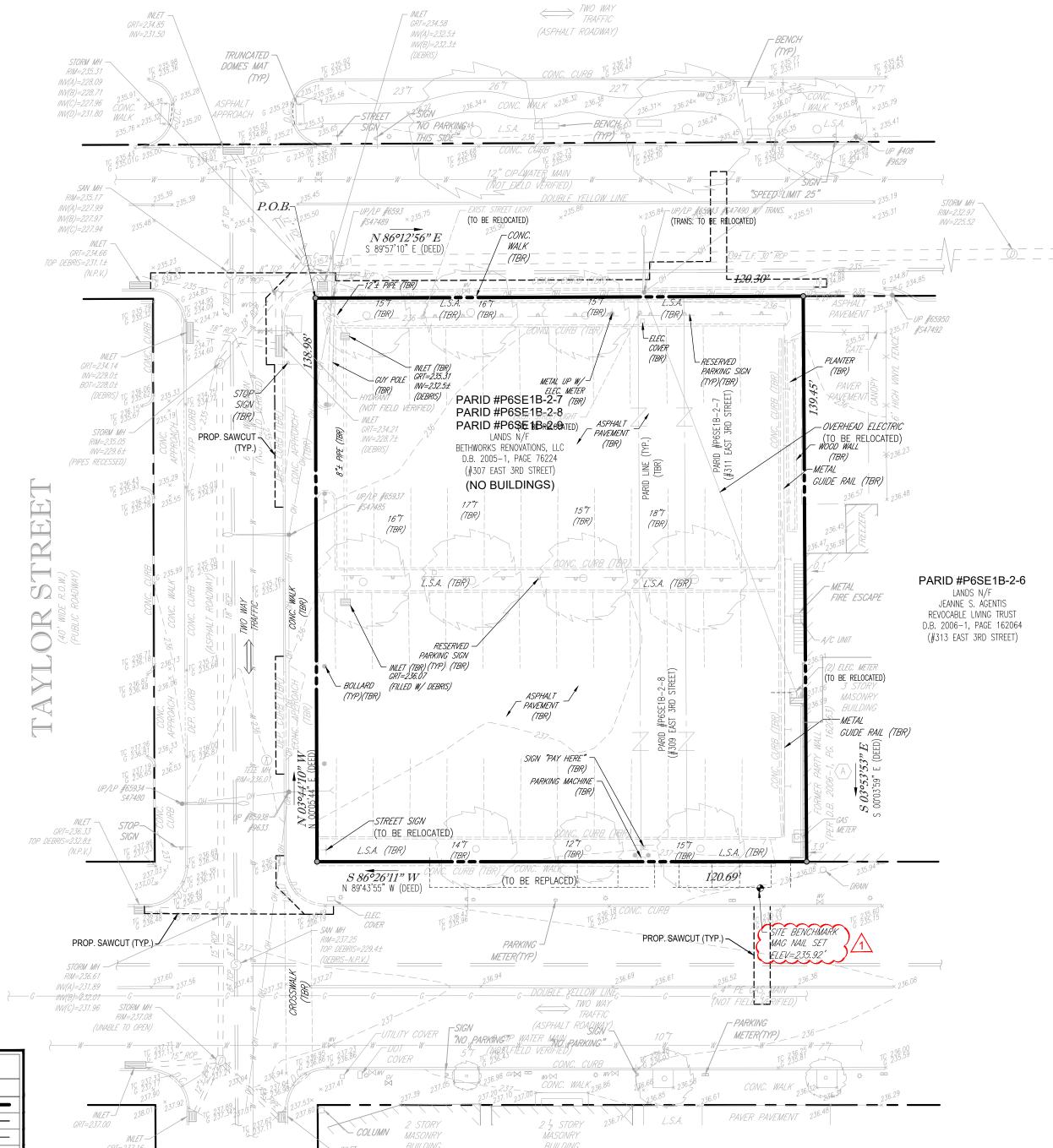
PREPARED BY





# COLUMBIA STREET

(38' WIDE R.O.W.)
(PUBLIC ROADWAY)



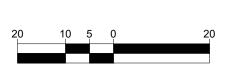
LEGE	ND
EXISTI	NG
PROPERTY LINE	
R.O.W. LINE	
ADJACENT PROPERTY LINE	
EASEMENT LINE	
SETBACK LINE	
LEASE LINE	
BUILDING	
RETAINING WALL	
CONCRETE CURB	
FLUSH CURB	
FENCE	X
GUIDE RAIL	
TREELINE	
ACCESSIBLE SYMBOL	Ė
CONCRETE MONUMENT/ IRON PIN	· •
SIGN	
PARKING COUNT	10
AREA LIGHT	
TREE	$\odot$
DRAINAGE INLET	
STORM/SANITARY MANHOLE	Ø (S)
WATER/GAS VALVES	es es
ROOF DRAIN/CLEANOUT	○ <sup>RD</sup> ○ <sup>CO</sup>
FIRE HYDRANT	7
UTILITY POLE W/ LIGHT	<del>-</del>
UTILITY POLE	
OVERHEAD UTILITY WIRES	OH
ELECTRIC LINE	——- E
TELEPHONE LINE	
GAS LINE	——- G———
WATER LINE	W
CANITADY CEMED	

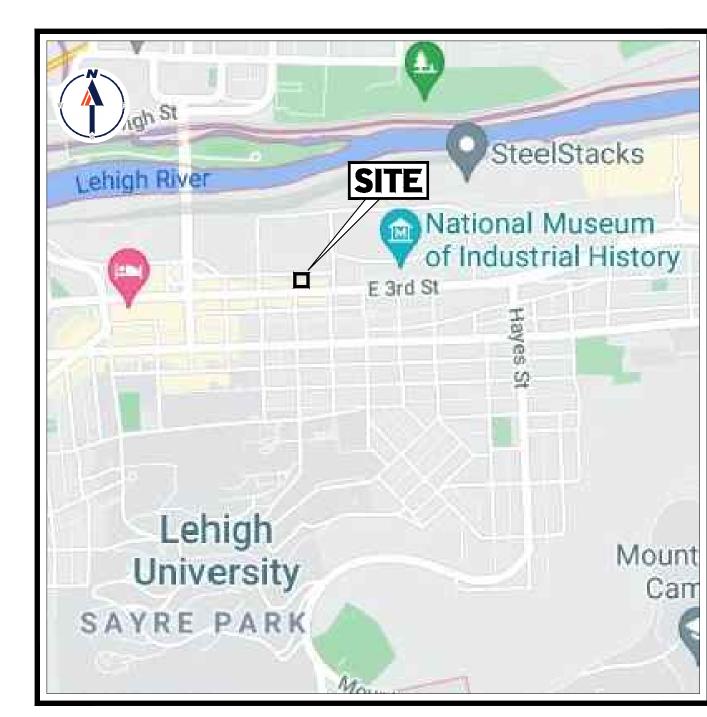
SANITARY SEWER

STORM PIPE IRON PIN EAST 3RD STREET
(A.K.A. S.R. 412)

(60' WIDE R.O.W.)

(PUBLIC ROADWAY)





# LOCATION MAP

SCALE: 1"=1000' SOURCE: GOOGLE

VERIZON 1-855-489-2367 **SURVEY REFERENCES** 

610-865-7000

1-800-242-3707

1-800-746-4726

610-375-4441

1. THE OFFICIAL TAX MAPS OF THE NORTHAMPTON COUNTY, CITY OF BETHLEHEM COMMONWEALTH OF PENNSYLVANIA.

2. MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, NORTHAMPTON COUNTY, PENNSYLVANIA (ALL JURISDICTIONS)", PANEL 326 OF 355, MAP NUMBER 42095C0326F, MAP REVISED: JULY 16, 2014

**SURVEY NOTES** 

**UTILITIES** 

UTILITY COMPANY

BETHLEHEM CITY

SERVICE

RCN

RESPONSE TO THIS REQUEST. SERIAL NUMBER (S): 2020834249

. PROPERTY KNOWN AS PARID #P6SE1B-2-7, #P6SE1B-2-8 & #P6SE1B-2-9 AS IDENTIFIED ON THE OFFICIAL TAX MAP OF NORTHAMPTON COUNTY, CITY OF BETHLEHEM, COMMONWEALTH OF PENNSYLVANIA.

THE FOLLOWING COMPANIES WERE NOTIFIED BY PENNSYLVANIA ONE CALL SYSTEM, INC (1-800-242-1776) AND REQUESTED TO MARK OUT UNDERGROUND

FACILITIES AFFECTING AND SERVICING THE SITE. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE UTILITY COMPANIES

2. TOTAL AREA = 16,775 S.F. OR 0.385 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.

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.

# SITE SPECIFIC DEMOLITION NOTES

ENCROACHMENTS AND VALETS, IF ANT, BELOW SURFACE NOT SHOWN HEREON.

1. THE 2 LIGHT POLES AND ELECTRICAL SERVICE EQUIPMENT WILL NEED TO BE RETURNED TO THE CITY OF BETHLEHEM ELECTRICAL BUREAU AT 248
E GARRISON STREET DURING WORKING HOURS. (7:00 AM TQ 3:00 PM M-F).

(Rev. 2/2021)

# DEMOLITION NOTES

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, SECULENCING TECHNIQUES AND PROCEDURES TO BE EMPLOYED TO ACCOMPLISE THE WORK ALL MEANS, METHODS.

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. ENGINEER 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 ENGINEER OF RECORD AND BOHLER, IN WRITING AND MUST ADDRESS ALL ISSUES AND ITEMS RESPONDED TO, BY THE ENGINEER 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.

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.

PRIOR TO COMMENCING ANY DEMOLITION, THE CONTRACTOR MUST:
 OBTAIN ALL REQUIRED PERMITS AND MAINTAIN THE SAME ON SITE FOR REVIEW BY THE ENGINEER 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.

INSTALL THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE, AND MAINTAIN SAID CONTROLS UNTIL SITE IS STABILIZED

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.

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.

PROTECT AND MAINTAIN IN OPERATION, ALL ACTIVE UTILITIES AND SYSTEMS THAT ARE NOT BEING REMOVED DURING ANY DEMOLITION ACTIVITIES.

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 ENGINEER OF RECORD'S 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 AND ENGINEER OF RECORD AND BOHLER, THE DISCOVERY OF SUCH MATERIALS TO PURSUE PROPER AND COMPLIANT REMOVAL OF SAME.

. 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.

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 ENGINEER 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.

5. 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.

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 INC. UDING BUT NOT LIMITED TO THE PUBLIC RIGHT-OF-WAY

7. 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

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

TRANSPORTATION SERVICES

TRANSPORTATION SERVICES

TRANSPORTATION SERVICES

	REVISIONS			
v	DATE	COMMENT	DRAWN BY	
<u> </u>	DAIL	30mment	CHECKED BY	
	12/17/2021	PER CITY COMMENT	MRB	
	12/11/2021	I LIX GITT COMMENT	MSL	



THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY
EVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION

PROJECT No.:

PROJECT No.:

PROJECT No.:

PROJECT No.:

PY21201

DRAWN BY:

CHECKED BY:

PY21201

MSI

PROJECT:
PRELIMINARY
FINAL LAND

FINAL LAND DEVELOPMENT PLANS

FOR —

PERON DEVELOPMENT LLC.

PROPOSED RESIDENTIAL

MIXED-USE DEVELOPMENT

EAST 3RD STREET & TAYLOR STREE

CITY OF BETHLEHEM

WARD 3, BLOCK 3

NORTHAMPTON COUNTY

# BOHLER //

COMMONWEALTH OF PENNSYLVANIA

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

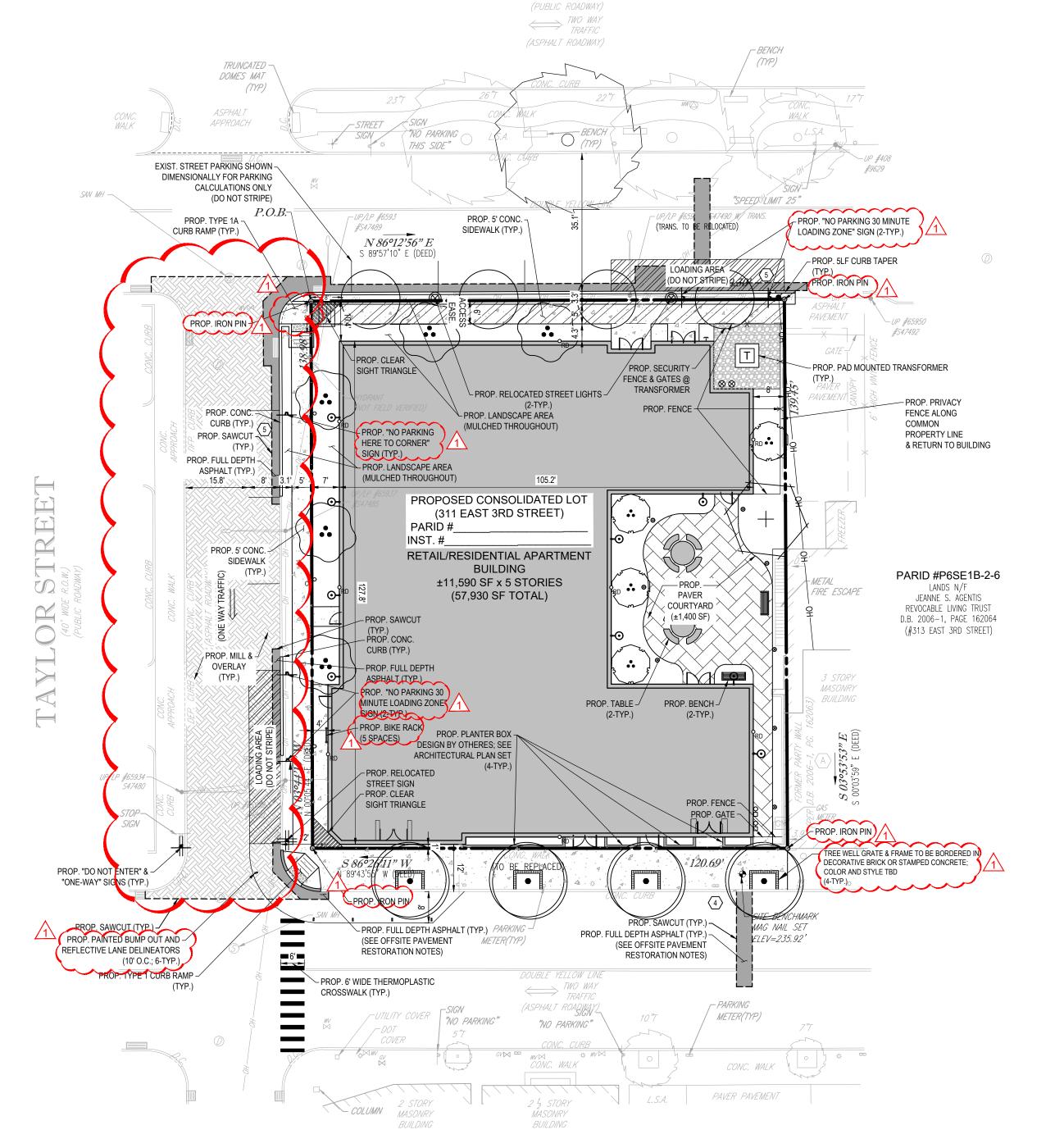


EXISTING CONDITIONS/DEMOLITION

PLAN
EET NUMBER:

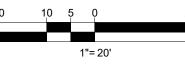


# (38' WIDE R.O.W.)



(A.K.A. S.R. 412) (60' WIDE R.O.W.)

(PUBLIC ROADWAY)



LEGEND		
PROPOSED/EXISTING		
PROP. BUILDING		
PROP. SAWCUT		
PROP. LOADING AREA		
PROP. CONCRETE CURB		
PROP. FENCE	——————————————————————————————————————	
PROP. SIDEWALK		
PROP. FULL DEPTH ASPHALT		
PROP. MILL & OVERLAY		
PROP. RAMP		
PROP. SIGN	<del></del>	
PROP. PARKING COUNT	(10)	
PROP. UTILITY POLE	ø	
PROP. STREET LIGHT	<b>⊗</b>	
EXIST. MANHOLE	(S)	
EXIST. OVERHEAD UTILITY WIRES	—— ОН——	
IRON PIN	•	

# PARKING REQUIREMENTS

REQUIRED: = 16 SPACES (COMPLIES) PROPOSED:

(4 SPACES ON EAST 3RD STREET STREET, 5 SPACES ON TAYLOR STREET, & 7 SPACES OFF-SITE)

MULTI-FAMILY DWELLINGS (UNITS 2 BEDROOMS OR LESS): NONE

REQUIRED: = 0 SPACES 45 UNITS X 1.3 = 58.5 PROPOSED:

= 59 SPACES (COMPLIES)

(5 SPACES ON COLUMBIÁ STREET & 54 SPACES OFF-SITE)

BICYCLE PARKING: 5% OF OFF STREET VEHICLE PARKING (11 + 59 PROPOSED SPACES)\* 5% = 3.5 SPACES

SITE PLAN NOTES

1. THIS PLAN REFERENCES AN "ALTA / NSPS LAND TITLE SURVEY" PREPARED FOR: PERON DEVELOPMENT, LLC PREPARED BY: BLUE MARSH ASSOCIATES, INC

551 EASTON ROAD, SUITE A WARRINGTON, PA 18976-2370 PROJECT NO.: 21-B-118 DATED: 04-17-2021

2. OWNER:

APPLICANT: BETHWORKS RENOVATIONS, LLC PERON DEVELOPMENT, LLC 60 W. BROAD STREET, SUITE 102 60 W. BROAD STREET, SUITE 102 BETHLEHEM, PA 18018 BETHLEHEM, PA 18018 C/O ROB DEBEER

ZONING DATA: 307, 309 & 311 EAST 3RD STREET CITY OF BETHLEHEM, NORTHAMPON COUNTY COMMONWEALTH OF PENNSYLVANIA PARID #P6SE1B-2-7, P6SE1B-2-8 & P6SE1B-2-9

4. ALL FEATURES ARE EXISTING TO REMAIN UNLESS OTHERWISE NOTED.

5. (TBR) INDICATES EXISTING SITE FEATURES TO BE REMOVED.

6. MY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS LOCATED IN FLOOD HAZARD ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD PLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, NORTHAMPTON COUNTY, PENNSYLVANIA (ALL JURISDICTIONS)", PANEL 326 OF 355, MAP NUMBER 42095C0326E, MAP REVISED: JULY 16, 2014.

# **ZONING REQUIREMENTS**

ZONING REQUIREMENTS TAKEN FROM THE CITY OF BETHLEHEM ZONING ORDINANCE, EFFECTIVE DATE 06/15/2012 LAST REVISED 5/20/2021

ZONING DISTRICT: CB - CENTRAL BUSINESS DISTRICT OVERLAY DISTRICT: SOUTHSIDE HISTORIC DISTRICT

EXISTING USE: PARKING LOT (PERMITTED BY RIGHT)

PROPOSED USE: MULTI-FAMILY DWELLINGS & RETAIL (RESIDENTIAL MIXED-USE) (PERMITTED BY RIGHT)\*

\*PER §1305.01.a. MULTI-FAMILY DWELLINGS SHALL BE LOCATED IN THE SAME BUILDING AS PRINCIPAL RETAIL, RESTAURANT OR PERSONAL SERVICE USE THAT IS ON THE FRONT STREET LEVEL.

BULK REQUIREMENTS			
	REQUIRED	EXISTING	PROPOSED
MINIMUM LOT AREA	1,800 SF	16,775 SF (0.385 AC)	NO CHANGE
MINIMUM LOT WIDTH (AT BUILDING SETBACK)	18 FT	120.69 FT	NO CHANGE
FRONT YARD SETBACK (EAST 3RD STREET)	0 FT	N/A	1.0 FT
REAR YARD SETBACK (COLUMBIA STREET)	0 FT	N/A	10.4 FT
SIDE YARD SETBACK	0 FT	N/A	4.0 FT/8.0 FT
MAXIMUM BUILDING COVERAGE	100%	0% (0 SF)	68.4% (11,480 SF)
MAYIMUM BUIL DING LIFICUT	450 FT	NI/A	<150 FT

# **APARTMENT TABULATION:**

ONE-BEDROOM: 27 UNITS TWO-BEDROOM 17 UNITS

COVERAGE

44 UNITS

MAXIMUM BUILDING HEIGHT

MAXIMUM IMPERVIOUS

# OFFSITE PAVEMENT RESTORATION NOTES:

FULL DEPTH PAVEMENT REPAIR FOR CURBING AND UTILITY TRENCHES TO BE PINNED AND DOWELLED PER PENNDOT RC STANDARDS WITHIN ALL STREETS CONSTRUCTED AS CONCRETE ROADWAYS (E. 3RD STREET & COLUMBIA STREET).

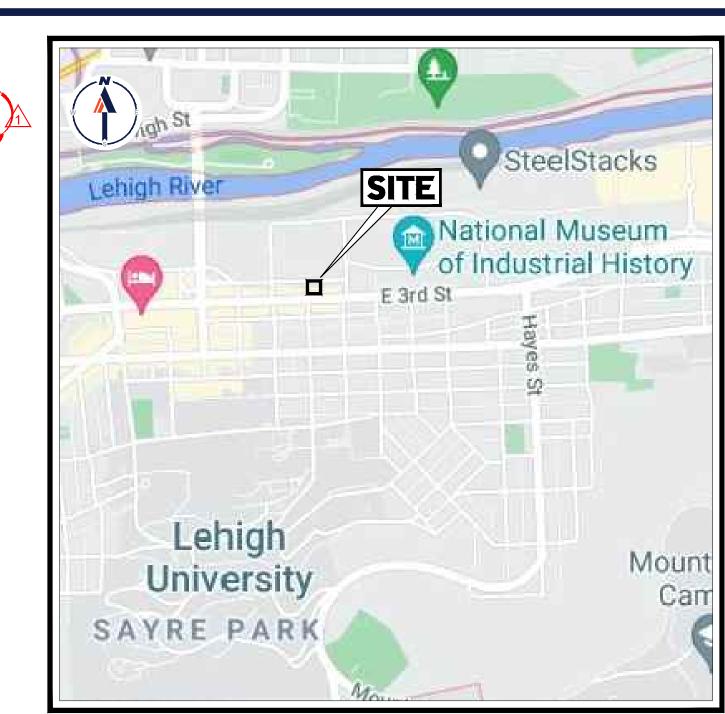
# CITY OF BETHLEHEM FIRE DEPARTMENT NOTES

1. A KNOX BOX FOR CITY OF BETHLEHEM FIRE DEPARTMENT ACCESS MUST BE INSTALLED. LOCATION

TO BE DETERMINED

2. ANY CHANGE IN THE LOCATION OF THE FIRE DEPARTMENT CONNECTION MUST BE APPROVED BY THE CITY OF BETHLEHEM FIRE DEPARTMENT.

3. SIGNAGE TO BE PLACED ON E 3RD STREET FRONTAGE INDICATING FDC CONNECTION IS ON REAR OF BUILDING/COLUMBIA STREET. PLACEMENT, STYLE, SIZE, AND WORDING OF SIGN TO BE APPROVED BY THE CITY



# **LOCATION MAP**

SCALE: 1"=1000' SOURCE: GOOGLE

# **CERTIFICATION OF OWNERSHIP**

I, \_\_\_\_ROB DEBEER \_\_\_\_OF BETHWORKS RENOVATION, LLC. BEING DULY SWORN ACCORDING TO LAW, AND ACTING IN MY CAPACITY AS \_\_\_\_MEMBER \_\_\_\_ DEPOSE AND SAY THAT THE ABOVE NAMED CORPORATION IS THE TRUE AND LAWFUL OWNER OF PROPERTY KNOWN AS 307, 309, & 311 E. 3RD STREET, BETHLEHEM, PA 18015; 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.

BETHWORKS RENOVATIONS, LLC. ATTEST:

# **ENGINEER'S CERTIFICATION**

(5 STORIES)

86.8%

(14,558 SF)

(14,775 SF)

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.

ROB DEBEER, MEMBER

MICHAEL E. JEITNER, PE

PA LICENSE No. PE055733

# 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, PLS

SEAL PA LICENSE No. SU-37826-E

# PLANNING BUREAU APPROVAL

PER ARTICLE 1319 OF THE ZONING ORDINANCE OF THE CITY OF BETHLEHEM CITY SIGNATURE BLOCK SHOULD BE INCLUDED ON THE PLANS AS FOLLOWS: APPROVED BY THE CITY OF BETHLEHEM PLANNING BUREAU ON

PLANNING DIRECTOR

SEAL

# LEHIGH VALLEY PLANNING COMMISSION REVIEW

BY THE LEHIGH VALLEY PLANNING REVIEWED THIS COMMISSION.

LVPC REVIEWER

# NORTHAMPTON COUNTY RECORDER OF DEED

RECORDED IN THE OFFICE OF THE RECORDER OF DEED OF NORTHAMPTON COUNTY, PENNSYLVANIA ON \_, IN MAP BOOK VOLUME\_

NORTHMAPTON COUNTY RECORDER OF DEEDS

# **REVISIONS**

DATE	COMMENT	DRAWN BY
DATE	COMMENT	CHECKED BY
2/17/2021	PER CITY COMMENT	MRB
2/11/2021	2021 PER CITY COMMENT	

Call before you dig. PENNSYLVANIA
YOU MUST CALL 811 BEFORE ANY EXCAVATION WHETHER IT'S ON PRIVATE OR PUBLIC LAND www.pa1call.org #20210834249

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PROJECT No. DRAWN BY:

PY212011\_LANDDEV-CAD I.D.: PRELIMINARY/

FINAL LAND **DEVELOPMENT PLANS** 

# PERON DEVELOPMENT

PROPOSED RESIDENTIAL

MIXED-USE DEVELOPMENT **EAST 3RD STREET & TAYLOR STREET** 

CITY OF BETHLEHEM WARD 3, BLOCK 3 NORTHAMPTON COUNTY COMMONWEALTH OF PENNSYLVANIA

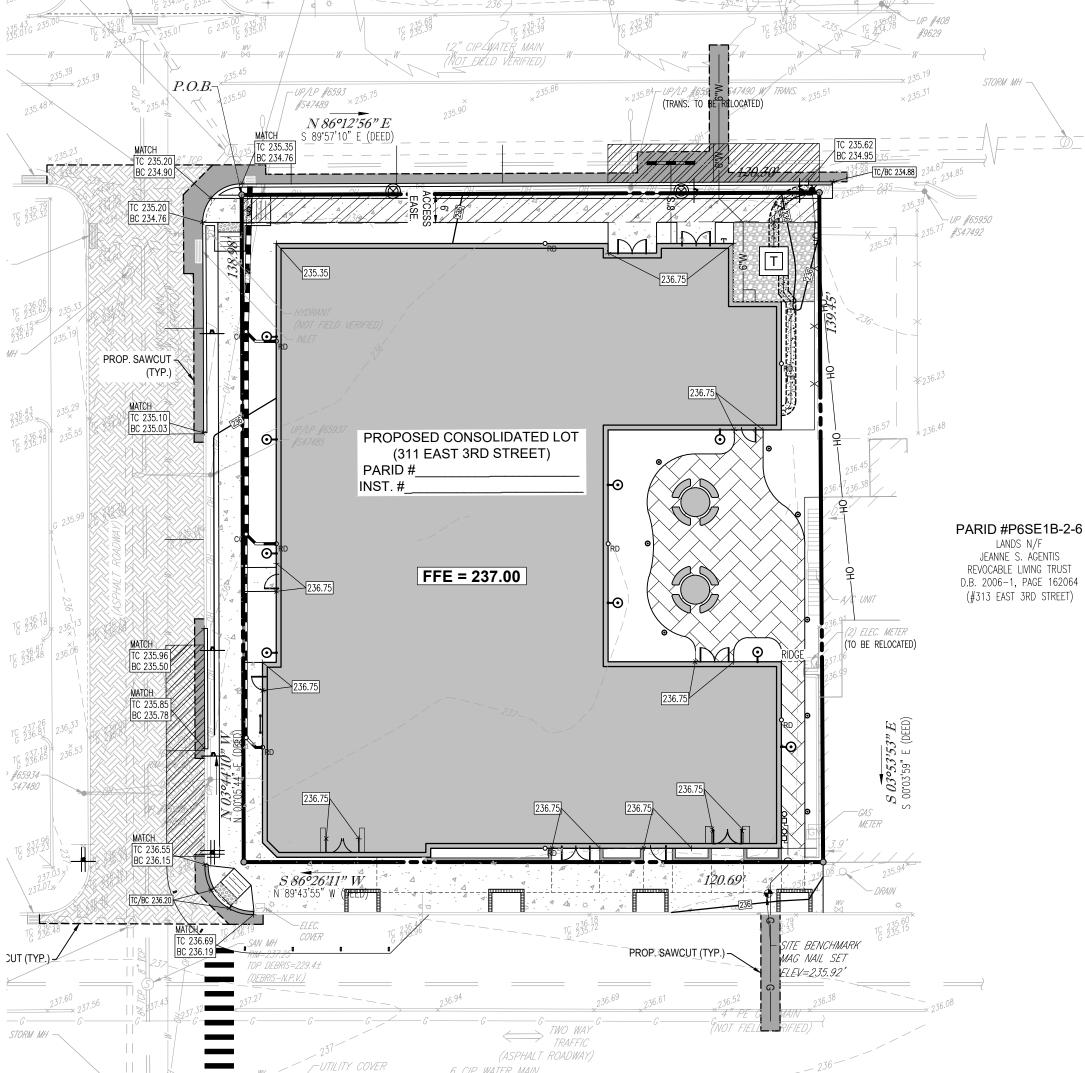
74 W BROAD STREET, SUITE 500 BETHLEHEM, PA 18018 Phone: (610) 709-9971 Fax: (610) 709-9976 www.BohlerEngineering.com



**LAND DEVELOPMENT** SITE PLAN

C-301





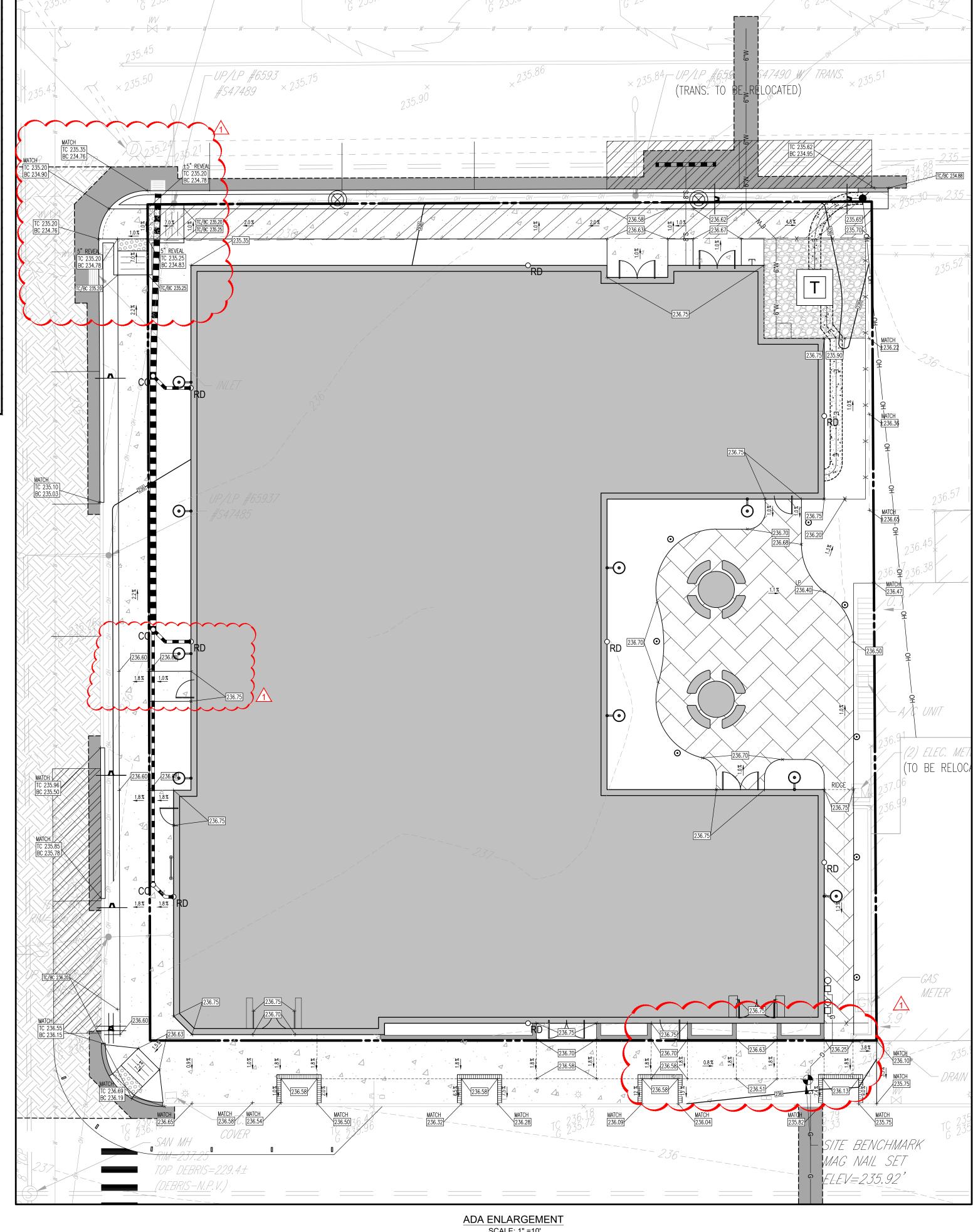
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	TELEPHONE LINE	——т——
	GAS LINE	———G———
	WATER LINE	——
	SANITARY SEWER	———S———
	STORM PIPE	
	RETAINING WALL	
	CONCRETE CURB	
	FLUSH CURB	
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	GUIDE RAIL	
	TREELINE	
	ACCESSIBLE SYMBOL	Ė,
	CONCRETE MONUMENT/ IRON PIN	· •
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<u>)                                    </u>	PARKING COUNT	10
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	ROOF DRAIN/CLEANOUT	o <sup>RD</sup> o <sup>CO</sup>
	FIRE HYDRANT	8
	UTILITY POLE W/ LIGHT	•
	UTILITY POLE	-
	OVERHEAD UTILITY WIRES	—— ОН ———
	IRON PIN	•
•		

**LEGEND GRADING** 

> **---**

AREA LIGHT

DRAINAGE INLET





# **REVISIONS** REV DATE COMMENT 12/17/2021 PER CITY COMMENT



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

CHECKED BY: PY212011\_LANDDEV-1 CAD I.D.:

DRAWN BY:

PRELIMINARY/ FINAL LAND **DEVELOPMENT PLANS** 

PERON DEVELOPMENT

PROPOSED RESIDENTIAL MIXED-USE DEVELOPMENT

EAST 3RD STREET & TAYLOR STREET CITY OF BETHLEHEM WARD 3, BLOCK 3 NORTHAMPTON COUNTY

**COMMONWEALTH OF PENNSYLVANIA** 

74 W BROAD STREET, SUITE 500 BETHLEHEM, PA 18018 Phone: (610) 709-9971

Fax: (610) 709-9976 www.BohlerEngineering.com



**GRADING PLAN** 

**REVISION 1 - 12/17/2021** 

# **GRADING NOTES**

GENERAL

ACCESSIBLE COMPONENTS AND ACCESS ROUTES FOR THE SITE. THESE COMPONENTS, AS

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE

CONSTRUCTED, MUST COMPLY WITH THE CURRENT ADA STANDARDS AND REGULATIONS' PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE BARRIER FREE ACCESS AND ANY MODIFICATIONS, REVISIONS OR UPDATES TO SAME. FINISHED CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACE, PUBLIC

GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES. 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

• PARKING SPACES AND PARKING AISLES - SLOPE SHALL NOT EXCEED 1:50 (1/4" PER FOOT OR 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 • CURB RAMPS - SLOPE MUST NOT EXCEED 1:12 (8.3%) REQUIREMENTS OF ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS, WHICH HAVE JURISDICTION OVER THIS PROJECT.

- 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 • PATH OF TRAVEL ALONG ACCESSIBLE ROUTE - MUST PROVIDE A 36-INCH OR GREATER MUST SUPPLY A COPY OF APPROVALS TO THE ENGINEER OF RECORD AND THE OWNER PRIOR TO THE CONTRACTOR COMMENCING ANY WORK.
- I. 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 ENGINEER OF RECORD. IN WRITING.
- 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

  • WHEN THE PROPOSED CONSTRUCTION INVOLVES RECONSTRUCTION, MODIFICATION, REVISION 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 DWNER/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 

  • THE CONTRACTOR MUST VERIFY THE SLOPES OF CONTRACTOR'S FORMS PRIOR TO POURING ACTIVITIES MUST COMPLY WITH THE STANDARD STATE DOT SPECIFICATIONS FOR ROADWAY
- : 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 ENGINEER OF RECORD, IN WRITING, OF ANY DISCREPANCY(IES) AND/OR

  • ALL HORIZONTAL LINES SHOWN ON THE RAMP SURFACES ARE FOR ILLUSTRATIVE PURPOSES
- TO CONFORM TO THE PROPOSED GRADING, AND TO BACKFILL EXCAVATIONS FOR THE INSTALLATION WITH THE LOCAL BUILDING CODE PRIOR TO COMMENCEMENT OF CONSTRUCTION. OF UNDERGROUND IMPROVEMENTS.

CONSTRUCTION (LATEST EDITION) AND ANY AMENDMENTS OR REVISIONS THERETO.

# ADA INSTRUCTIONS TO CONTRACTOR

CONTRACTORS MUST EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ADA THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE TRANSPORTATION, PEDESTRIAN ACCESS, INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EXIT, MUST COMPLY WITH THESE ADA CODE REQUIREMENTS. THESE

NOMINALLY 2.0%) IN ANY DIRECTION.

INCLUDE, BUT ARE <u>NOT</u> LIMITED TO THE FOLLOWING:

• LANDINGS - MUST BE PROVIDED AT EACH END OF RAMPS, MUST PROVIDE POSITIVE DRAINAGE, AND MUST NOT EXCEED 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) IN ANY DIRECTION.

UNOBSTRUCTED WIDTH OF TRAVEL (CAR OVERHANGS AND/OR HANDRAILS CANNOT REDUCE THIS MINIMUM WIDTH). THE SLOPE MUST BE NO GREATER THAN 1:20 (5.0%) IN THE DIRECTION OF TRAVEL, AND MUST NOT EXCEED 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) IN CROSS SLOPE. WHERE PATH OF TRAVEL WILL BE GREATER THAN 1:20 (5.0%), ADA RAMP MUST BE ADHERED TO. A MAXIMUM SLOPE OF 1:12 (8.3%), FOR A MAXIMUM RISE OF 2.5 FEET, MUST BE PROVIDED. THE RAMP MUST HAVE ADA HAND RAILS AND "LEVEL" LANDINGS ON EACH END THAT ARE CROSS SLOPED NO MORE THAN 1:50 IN ANY DIRECTION (1/4" PER FOOT OR NOMINALLY 2.0%) FOR POSITIVE DRAINAGE.

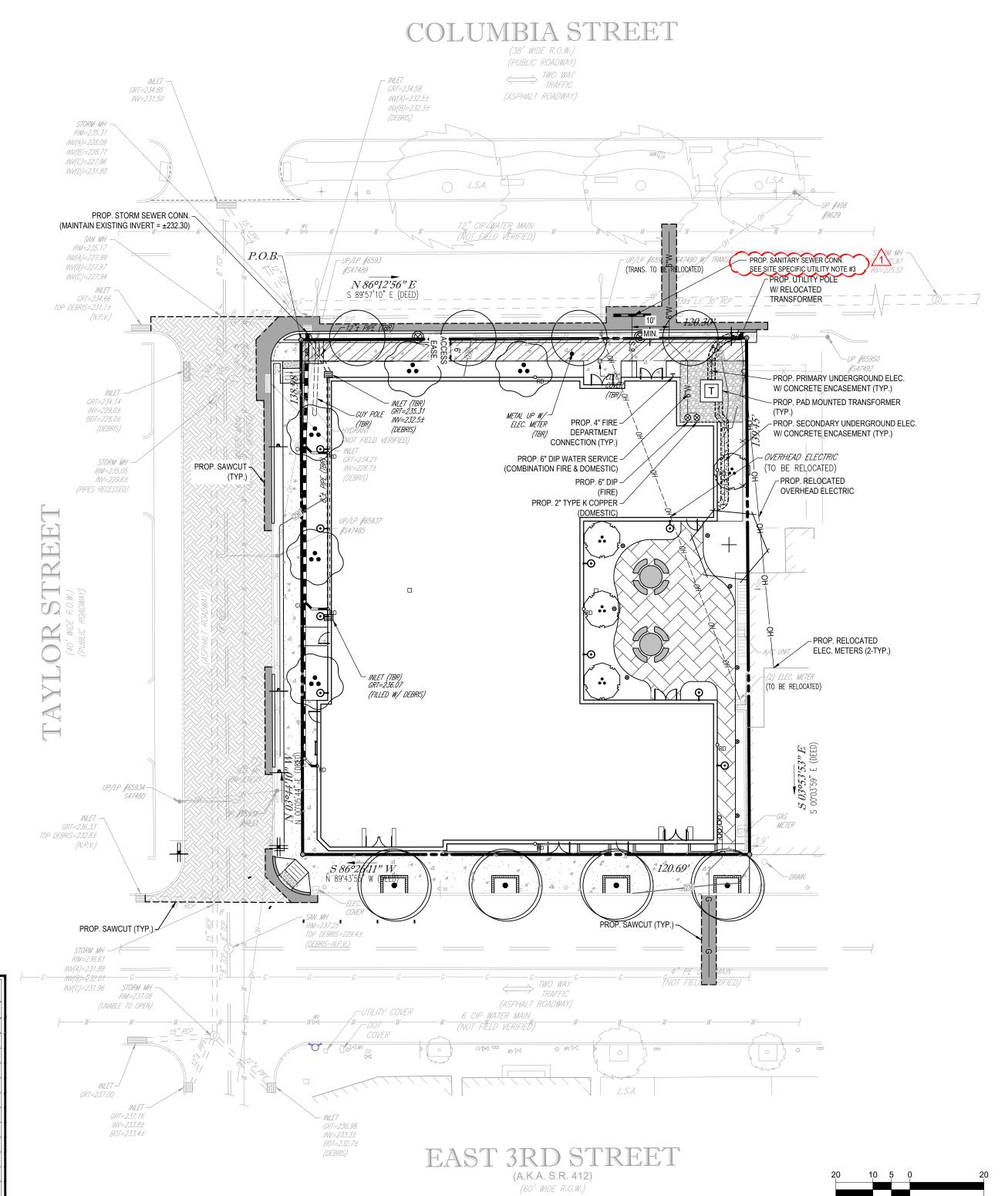
5. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING AND REPLACING ALL UNSUITABLE MATERIALS • DOORWAYS - MUST HAVE A "LEVEL" LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED AWAY FROM THE DOOR NO MORE THAN 1:50 (1/4" PER FOOT OR NOMINALLY 2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA MUST BE NO LESS THAN 60 INCHES (5 FEET) LONG. EXCEPT WHERE OTHERWISE PERMITTED BY ADA STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS. (SEE ICC/ANSI A117.1-2009 AND OTHER REFERENCES INCORPORATED BY CODE.)

> OR EXTENSION OF OR TO ADA COMPONENTS FROM EXISTING DOORWAYS OR SURFACES, CONTRACTOR MUST VERIFY EXISTING ELEVATIONS SHOWN ON THE PLAN. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES AND/OR FIELD CONDITIONS THAT DIFFER IN ANY WAY OR ANY RESPECT FROM WHAT IS SHOWN ON THE PLANS, IN WRITING, BEFORE COMMENCEMENT OF WORK. CONSTRUCTED IMPROVEMENTS MUST FALL WITHIN THE MAXIMUM AND MINIMUM LIMITATIONS IMPOSED BY THE BARRIER FREE REGULATIONS AND THE ADA REQUIREMENTS.

CONCRETE. IF ANY NON-CONFORMANCE IS OBSERVED OR EXISTS, CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER PRIOR TO POURING CONCRETE. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS TO REMOVE, REPAIR AND REPLACE NON-CONFORMING

1. THE CONTRACTOR IS RESPONSIBLE TO IMPORT FILL OR EXPORT EXCESS MATERIAL AS NECESSARY IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION





	UTILIT	ΓY
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Ī	CLEANOUT	o <sup>CO</sup>
	FIRE HYDRANT	•
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	OVERHEAD UTILITY WIRES	—— OH——
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	WATER LINE	——
	SANITARY SEWER	——-s——
	STORM PIPE	
	RETAINING WALL	
	CONCRETE CURB	
	FLUSH CURB	
	FENCE	X
	GUIDE RAIL	
	TREELINE	
	ACCESSIBLE SYMBOL	Ł
	CONCRETE MONUMENT/ IRON PIN	• •
	SIGN	W SV
	PARKING COUNT	10
	AREA LIGHT	
	TREE	$\odot$
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	STORM/SANITARY MANHOLE	0 0
	ROOF DRAIN/CLEANOUT	o RD o CO
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	UTILITY POLE W/ LIGHT	-
	UTILITY POLE	
1		

**OVERHEAD UTILITY WIRES** 

IRON PIN

**LEGEND** 

# DRAINAGE AND UTILITY NOTES

GENERAL

- GENERAL

  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 ENGINEER OF RECORD.
- 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 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 ENGINEER OF RECORD, 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. ENGINEER 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.

- 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.
   FINAL LOCATIONS OF PROPOSED UTILITY POLES, AND/ OR POLES TO BE RELOCATED ARE AT THE SOLE
- 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.

DISCRETION OF THE RESPECTIVE UTILITY COMPANY, REGARDLESS OF WHAT THIS PLAN DEPICTS.

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

# **UTILITIES**

THE FOLLOWING COMPANIES WERE NOTIFIED BY PENNSYLVANIA ONE CALL SYSTEM, INC (1-800-242-1776) AND REQUESTED TO MARK OUT UNDERGROUND FACILITIES AFFECTING AND SERVICING THE SITE. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE UTILITY COMPANIES RESPONSE TO THIS REQUEST.

SERIAL NUMBER (S): 2020834249

 UTILITY COMPANY
 PHONE NUMBER

 PPL
 1-800-342-5775

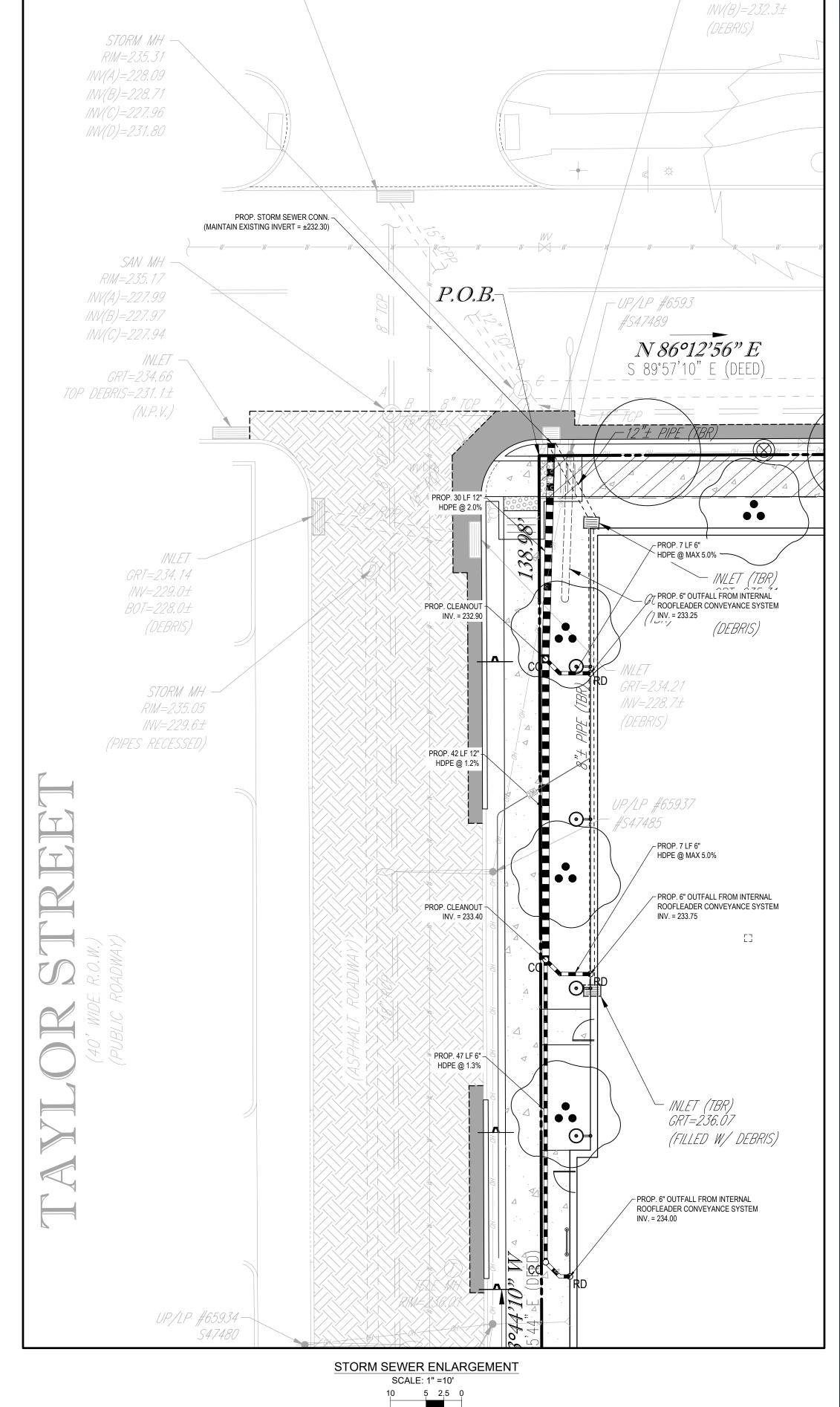
 BETHLEHEM CITY
 610-865-7000

 SERVICE
 1-800-242-3707

 RCN
 1-800-746-4726

 UGI
 610-375-4441

 VERIZON
 1-855-489-2367



SITE SPECIFIC UTILITY NOTES

#79402-91000 WITH PPL.

PROPOSED GAS TRENCHING AND CONSTRUCTION ACTIVITIES RELATED TO THE INSTALLATION AND CONNECTION OF

FOR CONNECTION TO EXISTING 8" TERRA COTTA PIPE SANITARY MAIN A 10' SECTION OF PIPE IS SHALL BE REPLACED

CONNECTED AT THE NEWLY REPLACED SECTION OF MAIN VIA A WYE CONNECTION - SEE SANITARY LATERAL DETAIL

WITH 8" PVC PIPE (5' ON EITHER SIDE OF THE PROPOSED CONNECTION). THE CONNECTION FROM TERRA COTTA PIPE

THE PROPOSED GAS LINE WITHIN E. 3RD STREET TO BE PERFORMED AT NIGHT TO LESSEN TRAFFIC IMPACTS.

RELOCATED STREET LIGHTS ALONG COLUMBIA STREET TO BE PLACED ON THE CITY STREET LIGHTING ACCOUNT

TO PVC TO BE ACHIEVED WITH FERNCO FITTINGS. PROPOSED SANITARY CONNECTION FOR BUILDING TO BE

INLET

GRT=234.85

/NV=231.50

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

GRT=234.58

REVISIONS

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 DATE
 COMMENT
 DRAWN BY CHECKED BY

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DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:
DRAWN BY:
CHECKED BY:
DATE:

CAD I.D.:

PRELIMINARY FINAL LAND DEVELOPMENT

**PLANS** 

—— FOR ———

PY212011\_LANDDEV-

PERON DEVELOPMENT LLC.

PROPOSED RESIDENTIAL MIXED-USE DEVELOPMENT

EAST 3RD STREET & TAYLOR STREE CITY OF BETHLEHEM WARD 3, BLOCK 3 NORTHAMPTON COUNTY

**BOHLER**//

COMMONWEALTH OF PENNSYLVANIA

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

www.BohlerEngineering.com

PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. 24GE04493300
DELAWARE LICENSE NO. 18813

SHEET TITLE:

UTILITY PLAN

SHEET NUMBER:

C-402

REVISION 1 - 12/17/2021

CITY OF BETHLEHEM FIRE DEPARTMENT NOTES

1. A KNOX BOX FOR CITY OF BETHLEHEM FIRE DEPARTMENT ACCESS MUST BE INSTALLED. LOCATION TO BE DETERMINED..

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(38' WIDE R.O.W.) (PUBLIC ROADWAY) (ASPHALT ROADWAY)

TINO PARKING "SPEED LIMIT 25" . \_ \_ \_ \_ \_ \_ \_ \_ /\- \_ \_ \_\- - -

PROP. LANDSCAPE AREA PROP. SAWCUT

- PROP. LANDSCAPE AREA (MULCHED THROUGHOUT) 15.8' PROP. MIXED USE (5) OC

RETAIL/RESIDENTIAL APARTMENT BUILDING ±11,590 SF x 5 STORIES (57,930 SF TOTAL)

SIGHT TRIANGLE

(4-TYP.)

PROP. SAWCUT (TYP.)

(60' WIDE R.O.W.) (PUBLIC ROADWAY)

## 5. GEOTECHNICAL REPORT (STORMWATER): BETHWORKS RENOVATION, LLC A REPORT BY FRENCH & PARRELLO ASSOCIATES 60 W. BROAD STREET, SUITE 102 235 FROST AVENUE, PHILLIPSBURG, NJ 08865 BETHLEHEM, PA 18018 ENTITLED: "REPORT OF SUBSURFACE EXPLORATION & C/O ROB DEBEER GEOTECHNICAL ENGINEERING EVALUATION" 631-764-3247 PROJECT: "THIRD & TAYLOR DEVELOPMENT" DATED 06/24/2021, NO REVISION APPLICANT/DEVELOPER: 6. GEOTECHNICAL REPORT (SOILS):

REFERENCES AND CONTACT INFORMATION

PERON DEVELOPMENT, LLC 60 W. BROAD STREET, SUITE 102 A REPORT BY FRENCH & PARRELLO ASSOCIATES BETHLEHEM, PA 18018 235 FROST AVENUE, PHILLIPSBURG, NJ 08865 ENTITLED: "REPORT OF SUBSURFACE EXPLORATION & C/O ROB DEBEER 631-764-3247 GEOTECHNICAL ENGINEERING EVALUATION" PROJECT: "THIRD & TAYLOR DEVELOPMENT" ENGINEER & LANDSCAPE ARCHITECT: DATED 06/24/2021, NO REVISION

**BETHLEHEM** . PA 18018

PLANS BY BLUE MARSH ASSOCIATES, INC.

DATED: 4-17-2021, NO REVISION

ENTITLED: "ALTA/NSPS LAND TITLE SURVEY"

610-709-9971

FILE NO: 21-B-118

SHEET 1 OF 1

BOHLER ENGINEERING PA, LLC 74 W. BROAD STREET, SUITE 500 1 SOUTH THIRD STREET, 7TH FLOOR, EASTON, PA 18042 (610) 559- 6000

# USA ARCHITECTS, PLANNERS AND INTERIOR DESIGNERS, LTD. 551 EASTON ROAD, SUITE A, WARRINGTON, PA 18976

## GLEDITSIA TRIACANTHOS INERMIS 'SKYCOLE' SKYLINE THORNLESS HONEY LOCUST 2.5" CAL. B&B ZELKOVA SERRATA 'MUSASHINO' MUSASHINO SAWLEAF ZELKOVA 2.5" CAL. B&B ORNAMENTAL TREES | QTY | BOTANICAL NAME CONTAINER COMMON NAME SIZE CERCIS CANADENSIS EASTERN REDBUD 2.5" CAL. B&B LAGERSTROEMIA INDICA X FAURIEI 'TUSCARORA' TUSCARORA CRAPE MYRTLE MULTI-TRUNK 5-6' B&B MAGNOLIA VIRGINIANA SWEET BAY 12-14` QTY BOTANICAL NAME COMMON NAME SIZE CONTAINER 6 HYDRANGEA PANICULATA 'LIMELIGHT' LIMELIGHT PANICLE HYDRANGEA 3 GAL. CONTAINER 14 ILEX CRENATA 'HELERII' HELER JAPANESE HOLLY 15-18" CONTAINER ILEX GLABRA `SHAMROCK` SHAMROCK INKBERRY 24-30" CONTAINER 13 RHODODENDRON X 'NOVA ZEMBLA' NOVA ZEMBLA RHODODENDRON 30-36" CONTAINER QTY BOTANICAL NAME PERENNIALS COMMON NAME CONTAINER ASTILBE CHINENSIS 'VISION IN PINK' CONTAINER VISION IN PINK CHINESE ASTILBE HOSTA FORTUNEI 'ROYAL STANDARD' HOSTA 2 GAL. CONTAINER 26 OSMUNDA CINNAMOMEA CINNAMON FERN 1 GAL. CONTAINER QTY BOTANICAL NAME COMMON NAME CONTAINER SPACING

COMMON NAME

BIG BLUE LILYTURF

PLANT SCHEDULE

QTY BOTANICAL NAME

163 LIRIOPE MUSCARI 'BIG BLUE'

CANOPY TREES

PERENNIALS

# **ZONING REQUIREMENTS**

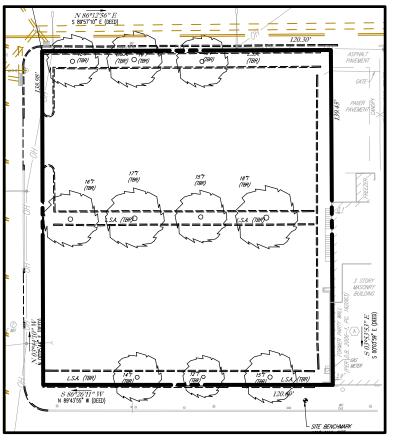
ZONING REQUIREMENTS TAKEN FROM THE CITY OF BETHLEHEM ZONING ORDINANCE, EFFECTIVE DATE 06/15/2012. LAST REVISED 5/20/2021

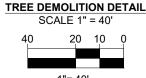
ZONING DISTRICT: CB - CENTRAL BUSINESS DISTRICT OVERLAY DISTRICT: SOUTHSIDE HISTORIC DISTRICT

EXISTING USE: PARKING LOT (PERMITTED BY RIGHT) PROPOSED USE: MULTI-FAMILY DWELLINGS & RETAIL (RESIDENTIAL MIXED-USE) (PERMITTED BY RIGHT)\*

\*PER §1305.01.a. MULTI-FAMILY DWELLINGS SHALL BE LOCATED IN THE SAME BUILDING AS PRINCIPAL RETAIL, RESTAURANT OR PERSONAL SERVICE USE THAT IS ON THE FRONT STREET LEVEL.

## **BULK REQUIREMENTS** REQUIRED **EXISTING PROPOSED MINIMUM LOT AREA** 1,800 SF NO CHANGE (0.385 AC) MINIMUM LOT WIDTH 18 FT 120.69 FT NO CHANGE (AT BUILDING SETBACK) FRONT YARD SETBACK 1.0 FT N/A (EAST 3RD STREET) REAR YARD SETBACK 10.4 FT (COLUMBIA STREET) SIDE YARD SETBACK 0 FT 4.0 FT/8.0 FT N/A 68.4% MAXIMUM BUILDING COVERAGE 100% (0 SF) (11,480 SF) <150 FT MAXIMUM BUILDING HEIGHT 150 FT (5 STORIES) MAXIMUM IMPERVIOUS 86.8% 100% (14,775 SF) (14,558 SF) COVERAGE





NOTE: ALL TEN (10) SYCAMORE EXISTING TREES, VARYING BETWEEN 15" - 18" CALIPER, TO BE REMOVED AS SHOWN ABOVE.

CONTAINER

1 GAL. CONTAINER 24" o.c.

# **GENERAL NOTES:**

- 1. THIS PLAN IS TO BE UTILIZED FOR LANDSCAPE PURPOSES ONLY.
- 2. ALL DISTURBED UNPAVED AREAS, EXCLUDING PLANTING BEDS, ARE TO BE INSTALLED AS LAWN IN ACCORDANCE WITH LANDSCAPE SPECIFICATION #2.C., UNLESS OTHERWISE 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. 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.
- 5. PLANT MATERIAL SUBSTITUTIONS MUST BE FORMALLY SUBMITTED TO BOHLER ENGINEERING AND THE MUNICIPAL ENGINEER AND LANDSCAPE CONSULTANTS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. ANY PLANT MATERIAL THAT ARE TO BE INSTALLED WITHIN STORMWATER BMP FEATURES MUST BE NATIVE SPECIES.
- 6. WITHOUT EXCEPTION, WEED BARRIER FABRIC SHALL NOT BE INSTALLED WITHIN ANY BMP FACILITY. BMP FACILITIES INCLUDE RAINGARDENS, INFILTRATION TRENCHES, VEGETATIVE SWALES AND STORMWATER BASINS.

# CITY OF BETHLEHEM SPECIFIC NOTES

• 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.

• BARRICADES MUST BE INSTALLED PRIOR TO ANY DESTRUCTION AND/OR CONSTRUCTION ACTIVITY • 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. • VIOLATION OF TREE PROTECTION REQUIREMENTS ARE SUBJECT TO PENALTY PER CITY ORDINANCE.

• 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. • ALL PLANT MATERIALS ARE TO CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION, AMERICAN

NURSERY AND LANDSCAPE ASSOCIATION. • 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.

CALCULATIONS (REQUIRED / PROVIDED)

COMPLIANCE

• ALL LANDSCAPING SHALL CONFORM TO THE CURRENT EDITION OF THE ARBORICULTURAL SPECIFICATIONS AND STANDARDS OF PRACTICE OF THE CITY OF BETHLEHEM.

# **PARKING REQUIREMENTS**

INDOOR RETAIL: NONE

SECTION

REQUIREMENT

REQUIRED: = 0 SPACES PROPOSED:

= 16 SPACES (COMPLIES) (4 SPACES ON EAST 3RD STREET STREET, 5 SPACES ON TAYLOR STREET, & 7 SPACES OFF-SITE)

MULTI-FAMILY DWELLINGS (UNITS 2 BEDROOMS OR LESS): NONE

REQUIRED: = 0 SPACES

PROPOSED: 45 UNITS X 1.3 = 58.5 = 59 SPACES (COMPLIES) (5 SPACES ON COLUMBIA STREET & 54 SPACES OFF-SITE)

(11 + 59 PROPOSED SPACES)\* 5% = 3.5 SPACES 5 SPACES (COMPLIES) PROPOSED:

BICYCLE PARKING: 5% OF OFF STREET VEHICLE PARKING

# **COMPLIANCE CHART**

SECTION	REQUIREMENT	CALCULATIONS (REQUIRED / PROVIDED)	COMPLIANCE
ZONING: 1318.23 BUFFER YARDS	YARDS ARE REQUIRED ALONG REAR AND SIDE LOT LINES IN ALL PRIMARILIY NON-RESIDENTIAL DISTRICTS (SUCH AS THE CM, INDUSTRIAL REDEVELOPMENT, COMMERCIAL AND INDUSTRIAL DISTRICTS THAT DIRECTLY ABUTS THE NON-RESIDENTIAL DISTRICT OR IS ONLY SEPARATED BY AN ORDAINED ALLEY OR LOCAL STREET. HOWEVER, IN A CB DISTRICT, A BUFFER YARD SHALL NOT BE REQUIRED WHERE THE DISTRICTS ARE SEPARATED BY AN ORDAINED STREET OR ALLEY. BUFFER YARDS ARE ALSO REQUIRED FOR SPECIFIC LAND USES AS INDICATED IN OTHER SECTIONS OF THIS ORDINANCE.	ALL ADJACENT PROPERTIES ARE LOCATED WITHIN THE SAME ZONING DISTRICT AS THE SUBJECT PARCEL (CB)	NOT APPLICABLE
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.	REQUIRED: 10 TREES PROVIDED: 10 TREES (1 GTIK, 4 LIT, & 5 MV)	COMPLIES
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	EAST 3RD STREET REQUIRED: 120/30 = 4 STREET TREES PROVIDED: 4 TYPE I STREET TREES (4 CC)  COLUMBIA STREET REQUIRED: 120/30 = 4 STREET TREES PROVIDED: 4 TYPE III STREET TREES (4 ZM)  TAYLOR STREET: NOT APPLICABLE (PER DISCUSSION WITH CITY STAFF ON 4/29/2021)	COMPLIES
	(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.	NO SURFACE PARKING SPACES PROPOSED. NOT APPLICABLE.	NOT APPLICABLE
SALDO: 1349.08 PLANTING	(c) LANDSCAPED SCREENS OR BUFFER YARDS SHALL CONSIST OF EVERGREEN TREES AND/OR EVERGREEN SHRUBS.	SEE ZONING SECTION 1319.23 ABOVE.	NOT APPLICABLE
	(d) STREET TREES SHALL BE PLANTED ALONG ALL STREET RIGHTS-OR-WAY WHICH ABUT THE APPLICANT'S PROPERTY, UNLESS THIS REQUIREMENT IS WAIVED BY THE PLANNING COMMISSION. TREE SPECIES AND SPACING FOR PLANTING SHALL FOLLOW THE GUIDELINES IN THE CURRENT EDITION OF THE PAMPHLET ENTITLED "STREET TREES FOR THE CITY OF BETHLEHEM". ALL TREES SHALL BE BALLED AND BURLAPPED UNLESS THIS REQUIREMENT IS WAIVED BY THE CITY FORESTER FOR ANY SPECIFIED VARIETY.	SEE ZONING SECTION 1319.02(j)(1) ABOVE.	COMPLIES SEE ABOVE
	(f) THE FOLLOWING USES SHALL BE LANDSCAPED AS FOLLOWS: (2) MULTI-FAMILY, TOWNHOUSE, AND PUD DEVELOPMENTS SHALL HAVE A MINIMUM OF TEN (10%) PERCENT OF THE AREA REPRESENTED BY APPROVED PLANTINGS IN ADDITION TO FRONT AND SIDE FOUNDATION SHRUBS AND ANY BUFFER PLANTING WHICH MAY BE NECESSARY TO SCREEN GARBAGE COLLECTION OR PARKING AREAS.	16,775 SF LOT AREA * 10% = 1,677.50 SF  REQUIRED: 1,678 SF (10%) PROVIDED: 3,567 SF (21.3%)  LARGE TREES: 1 * 200SF = 200 SF  MEDIUM TREES: 5 * 150SF = 750 SF  SMALL TREES: 4 * 100SF = 400 SF  SHRUBS/FLOWER BEDS: 2,217 SF	COMPLIES

	REVISIONS											
REV	REV DATE COMMENT											
IXLV	DAIL	COMMENT	CHECKED BY									
1	12/17/2021	PER CITY COMMENT	MRB									
'	12/11/2021	FER CITT COMMENT	MSL									



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

PROJECT No.: DRAWN BY: **CHECKED BY:** PY212011\_LANDDEV-CAD I.D.:

PROJECT: PRELIMINARY/ FINAL LAND **DEVELOPMENT PLANS** 

PERON DEVELOPMENT

PROPOSED RESIDENTIAL

MIXED-USE DEVELOPMENT EAST 3RD STREET & TAYLOR STREET CITY OF BETHLEHEM WARD 3, BLOCK 3

**COMMONWEALTH OF PENNSYLVANIA** 

NORTHAMPTON COUNTY

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

M. S. LONGENBERGER

SHEET TITLE:

**LANDSCAPE** PLAN

C-501

**REVISION 1 - 12/17/2021** 

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.

## 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.

I. LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED.

II. 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

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

I. 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.

II. 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.

HOLD SOD IN PLACE.

F. PLANT MATERIAL
I. ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE
"AMERICAN STANDARD FOR NURSERY STOCK" (ANSI 260.1), LATEST EDITION, AS
PUBLISHED BY AMERICAN HORT (FORMERLY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION).
II. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES
FOR ANY AND ALL PLANT MATERIAL.
III. 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.

IV. TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1½", 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

V. 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.

VI. CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRINK SXI NICHES (67) 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.

VII. SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH.

VIII. 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

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.

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

C. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED. IT SHALL BE INSPECTED BY THE APPROVING

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.

I. 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.

II. 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

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.

III. 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. IOPSOILING
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.]):

1. 20 POUNDS 'GRO-POWER' OR APPROVED EQUAL SOIL CONDITIONER/FERTILIZER

II. 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
HELD PORSERVE DOOT MOISTING.

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

I. PLANTS: MARCH 15TH TO DECEMBER 15TH
II. LAWN AND 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

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

CARPINUS VARIETIES PRUNUS VARIETIES
CRATAEGUS VARIETIES PYRUS VARIETIES
KOELREUTERIA QUERCUS VARIETIES
KIQUIDAMBAR 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. 1 PART PEAT MOSS

II. 1 PART COMPOSTED COW MANURE BY VOLUME
III. 3 PARTS TOPSOIL BY VOLUME
IV. 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:
A) 2 TABLETS PER 1 GALLON PLANT

B) 3 TABLETS PER 5 GALLON PLANT
C) 4 TABLETS PER 15 GALLON PLANT
D) 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

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 1/4" 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-EMERGEN'

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 6 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. IE AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE. IT SHALL BE USED TO WATER PROPOSED PLANT.

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.

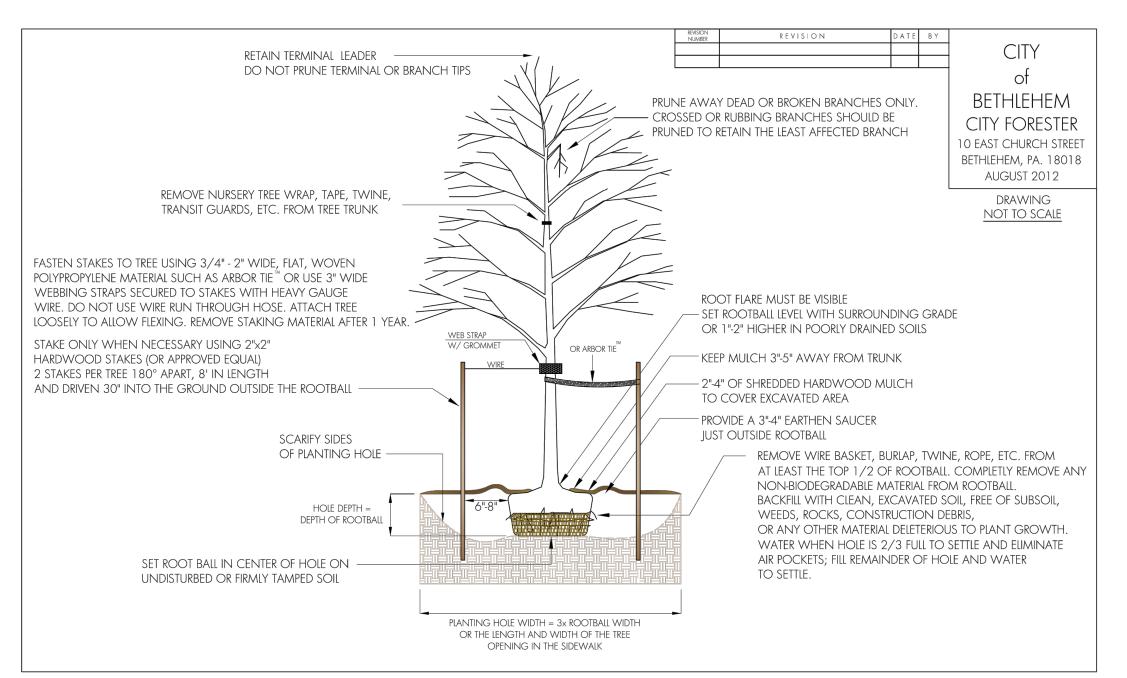
B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION. A PLANT SHALL BE CONSIDERED "DEAD OR DYING" IF MORE THAN 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.

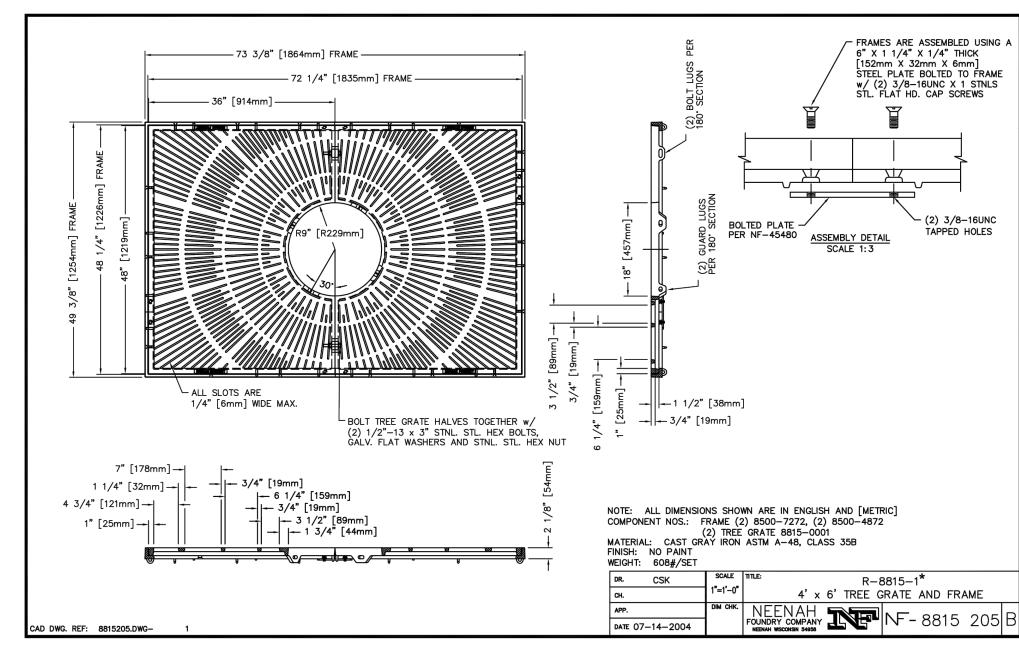
D. LAWNS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND UNTIL TURNOVER TO THE OWNER/OPERATOR THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.

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.

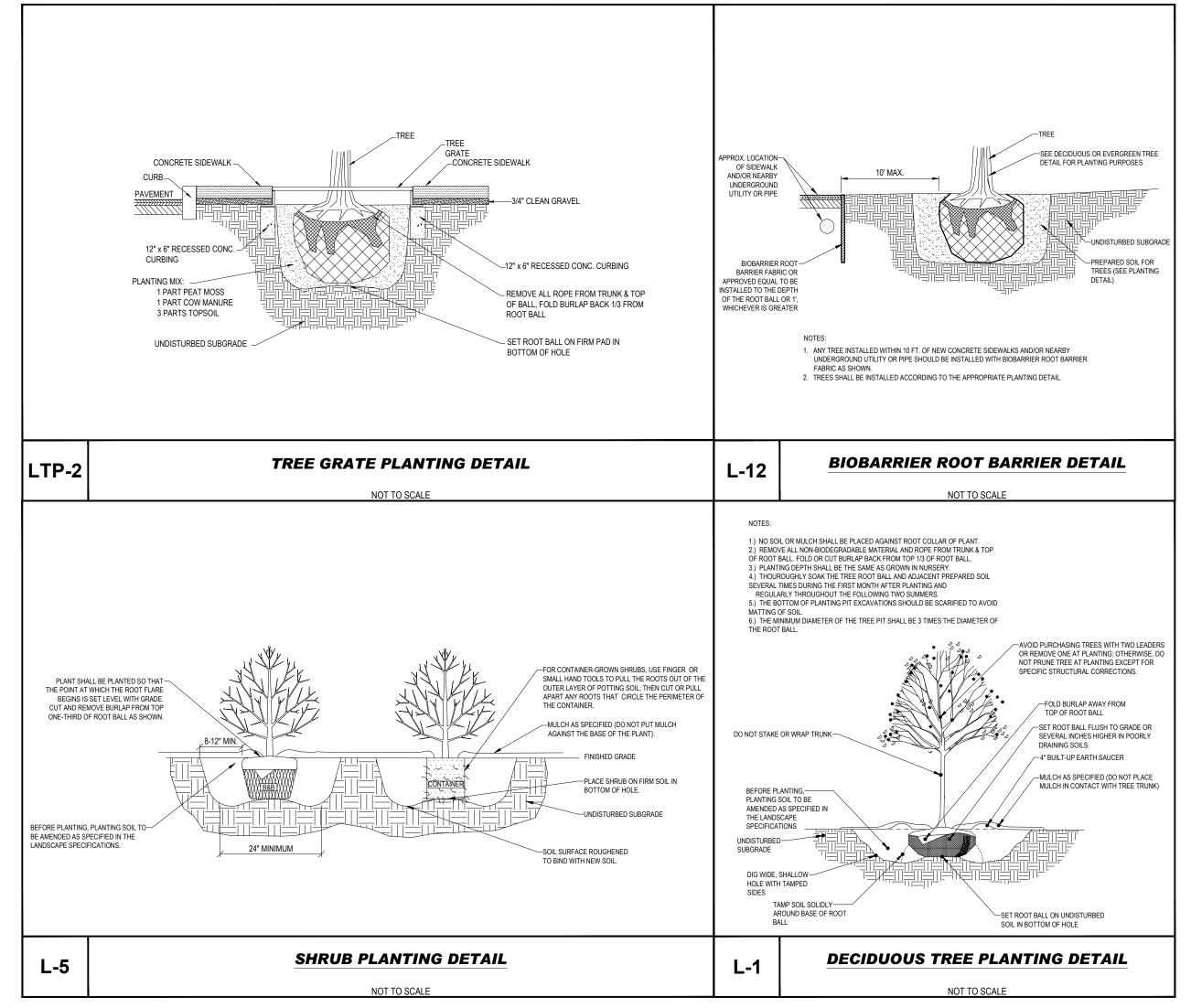
B. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.



CITY DETAIL TO BE UTILIZED FOR PLANTING OF STREET TREES



\*OR APPROVED EQUAL



TO BE UTILIZED FOR PLANTING OF ON-SITE TREES



# REVISIONS REV DATE COMMENT 1 12/17/2021 PER CITY COMMENT MRB MSL



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.: PY212011
DRAWN BY: MRB
CHECKED BY: MSL
DATE: 09/17/2021
CAD I.D.: PY212011\_LANDDEV-1

PRELIMINARY/
PRELIMINARY/
FINAL LAND
DEVELOPMENT
PLANS

PERON DEVELOPMENT

PROPOSED RESIDENTIAL
MIXED-USE DEVELOPMENT

EAST 3RD STREET & TAYLOR STREET
CITY OF BETHLEHEM
WARD 3, BLOCK 3
NORTHAMPTON COUNTY
COMMONWEALTH OF PENNSYLVANIA

# **BOHLER**//

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

M. S. LONGENS ERGER

REGISTER LANDSCAPE ARCHITECT
PENNS /LVA A LIGENSE & LAND2782

SHEET TITLE:

LANDSCAPE DETAILS

C-502



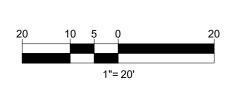
# (38' WIDE R.O.W.)

(PUBLIC ROADWAY)

(ASPHALT ROADWAY) "NO PARKING P.O.B. PROP. SAWCUT -PROP. MIXED USE RETAIL/RESIDENTIAL APARTMENT BUILDING ±11,590 SF x 5 STORIES (57,930 SF TOTAL) 120.69' PROP. SAWCUT (TYP.)

MAG NAIL SET

ELEV=235.92' L SITE BENCHMARK PROP. SAWCUT (TYP.) DOUBLE YELLOW LINE



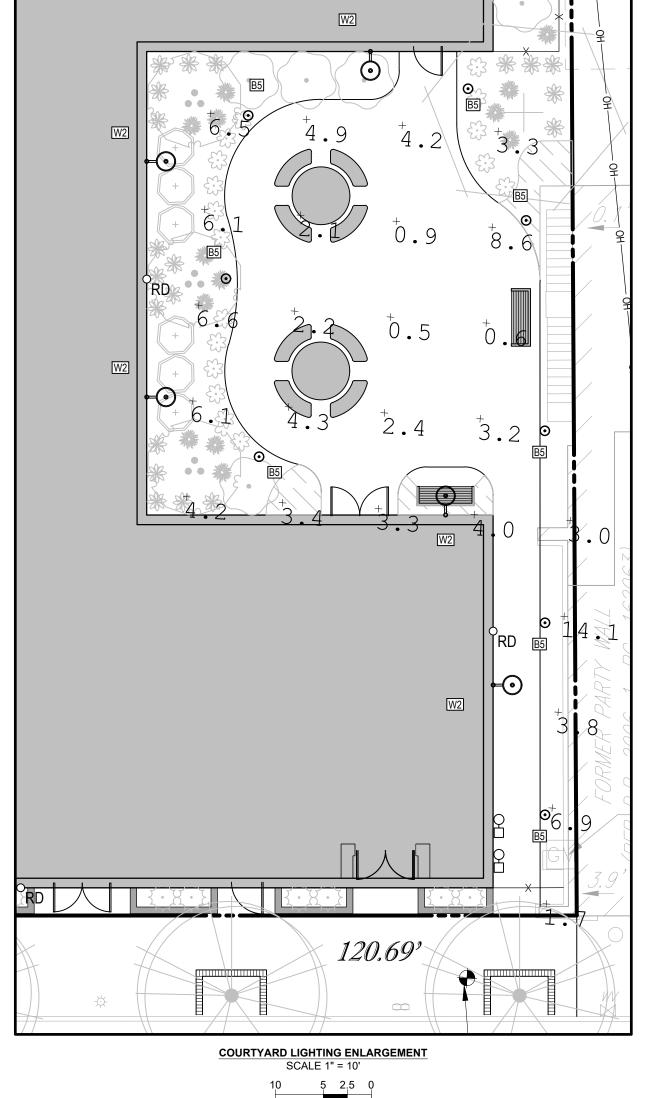
# (A.K.A. S.R. 412) (60' WIDE R.O.W.) (PUBLIC ROADWAY)

TWO WAY
TRAFFIC

-SIGN "NO PARKING"

	LUMINARE SCHEDULE												
SYMBOL	LABEL	QTY	MOUNTING HEIGHT	LLF	DESCRIPTION								
0	B5	8	2.5'	0.90	LUMEC, DOMUS BOLLARD, 16 LED, 4000K, TYPE 5, FROSTED CYLINDRICAL GLOBE (DOSB1-20W16LED4K-120)								
<b>©</b>	W2	8	12'	0.90	LUMEC, DOMUS SMALL PENDANT, 16 LED, 4000K, TYPE 2, FLAT GLASS (DOS-24W16LED4K-T-LE2F)								

NOTE: ANY ADDITIONAL LIGHTING PROVIDED FOR SIGNAGE ILLUMINATION, ILLUMINATION OF ARCHITECTURAL FEATURES, PEDESTRIAN ENTRANCES, EMERGENCY EGRESS, ETC. IS NOT INCLUDED ON THIS PLAN AND IS TO BE INSTALLED PER ARCHITECTURAL PLAN SET



# **COMPLIANCE CHART**

	COMP LIANCE CHA	<u> </u>	
SECTION	REQUIREMENT	CALCULATIONS (REQUIRED / PROVIDED)	COMPLIANCE
ZONING: 1318.25 LIGHTING CONTROL	(b) HEIGHT OF LIGHTS. NO LUMINAIRE, SPOTLIGHT, WALLPACK OR OTHER LIGHT SOURCE SHALL BE PLACES 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. THIS LIMITATION SHALL NOT APPLY TO: a) LIGHTS NEEDED FOR AIRS SAFETY, b) LIGHTS INTENDED SOLELY TO ILLUMINATE AN ARCHITECTURAL FEATURE OF A BUILDING OR AN AMERICAN FLAG, c) LIGHTING OF OUTDOOR PUBLIC RECREATION FACILITIES, d) LIGHTS THAT ARE PART OF A PERMITTED SIGN, e) OR LIGHTS WITHIN AN OPEN AIR PARKING STRUCTURE. SEE ALSO SECTION 1319.02(i)	PROPOSED MOUNTING HEIGHTS: WALL MOUNTED PENDANTS - 12' BOLLARDS - 2.5' (40" BOLLARD)	COMPLIES
	(d) <u>SHIELDING.</u> ALL LIGHT SOURCES, INCLUDING SIGNS, SHALL BE SHIELDED AROUND THE LIGHT SOURCE AND CAREFULLY DIRECTED AND PLACED TO PREVENT THE LIGHTING FROM SHINING INTO THE EYES OF PASSING MOTORISTS, DWELLINGS, AND TO PREVENT THE LIGHTING FROM SHINING INTO THE EYES OF PASSING MOTORISTS.	-	COMPLIES
	(f) <u>SPILLOVER</u> . 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 DISTRICTS THAT EXCEEDS 0.1 HORIZONTAL FOOT-CANDLE MEASURED LINE OF SIGHT INSIDE THE RESIDENTIAL LOT LINE.	-	NOT APPLICABLE
	(h) <u>LIGHTING OF HORIZONTAL SURFACES</u> . FOR THE LIGHTING OF PREDOMINANTLY HORIZONTAL SURFACES SUCH AS PARKING AREAS, OUTDOOR STORAGE AND OUTDOOR SALES AREAS, LIGHTING FIXTURES SHALL BE AIMED DOWNWARD AND SHALL INCLUDE FULL CUT-OFF MEASURES AS NEEDED TO PROPERLY DIRECT THE LIGHT AND TO MEET THE MAXIMUM SPILLOVER REQUIREMENTS OF SUBSECTION (F) AND TO PREVENT GLARE ONTO STREETS.	-	COMPLIES
SALDO: 1349.11 STREET LIGHTS	FOR SAFETY, CONVENIENCE, AND ATTRACTIVENESS OF THE SUBDIVISION OR DEVELOPMENT, ONSITE STREET LIGHTING SHALL BE INSTALLED EITHER BY THE APPROPRIATE PUBLIC UTILITY OR THE APPLICANT. THE DIRECTOR OR PARKS AND PUBLIC PROPERTY SHALL DETERMINE WHETHER THE UTILITY OF THE APPLICANT SHALL HAVE THIS RESPONSIBILITY. THIS DETERMINATION SHALL BE MADE ACCORDING TO THE ABILITY OF THE SUBDIVISION OR DEVELOPMENT AREA TO OBTAIN THE SE ENERGY RATE FOR LIGHTING AND BE CONTIGUOUS WITH OTHER CITY OWNED STREET LIGHTS. NEW STREET LIGHTING ELIGIBLE FOR THIS RATE SHALL BE APPLICANT-INSTALLED. ALL OTHERS SHALL BE UTILITY-INSTALLED.  (a) ALL APPLICANT-INSTALLED LIGHTS MUST BE INSTALLED BY A CONTRACTOR ACCORDING TO CITY SPECIFICATIONS. AL SUCH WORK SHALL BE SUBJECT TO THE REVIEW AND APPROVAL OF THE CITY ELECTRICIAN.  (b) IF PUBLIC UTILITY IS TO INSTALL THE STREET LIGHTS, THE APPLICANT SHALL PAY ALL COSTS FOR EQUIPMENT AND INSTALLATION AS CALCULATED BY THE PUBLIC UTILITY, THIS MONEY SHALL BE PAID TO THE CITY IN ADVANCE AS PART OF THE SECURITY OF THE DEVELOPER'S AGREEMENT.  (c) THE APPLICANT SHALL PROVIDE A SUM OF MONEY TO THE CITY TO PAY FOR ALL COSTS FOR THE ENERGIZING AND MAINTENANCE OF ALL STREET LIGHTS UNTIL SUCH TIME AS A FINAL REVIEW AND APPROVAL IS ISSUED BY THE CITY ELECTRICIAN.	EXISTING: A TOTAL OF SIX (6) CITY OWNED, ACORN STYLE, POLE MOUNTED LIGHTS (E. 3RD STREET - 2 LIGHTS) (COLUMBIA STREET - 2 LIGHTS) (INTERIOR LOT LIGHTING - 2 LIGHTS)  PROPOSED: A TOTAL OF FOUR (4) CITY OWNED, ACORN STYLE, POLE MOUNTED LIGHTS ARE PROPOSED TO REMAIN (E. 3RD STREET - 2 LIGHTS; TO BE RELOCATED TO ACCOMMODATE NEW SIDEWALK AND STREET TREES) (COLUMBIA STREET - 2 LIGHTS; NO CHANGE) (INTERIOR LOT LIGHTING - TO BE REMOVED)	COMPLIES

# **LIGHTING GENERAL NOTES:**

- 1. WHERE EXISTING POLE LOCATIONS ARE BEING UTILIZED, EXISTING FOUNDATIONS SHOULD NOT BE USED. CONTRACTOR MAY UTILIZE EXISTING WIRING AND CONDUIT IF POSSIBLE. (SEE POLE DETAIL.)
- 2. WHERE FIXTURES ARE PROPOSED AT NEW LOCATIONS, CONTRACTOR MAY NEED TO DISTURB SOIL /OR PAVEMENT TO PROVIDE REQUIRED CONDUIT AND WIRING. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING PAVEMENT AND RESTORING LANDSCAPED AREAS. ALL WORK MUST BE DONE PRIOR TO MILLING AND OVERLAYING TOPSOIL.
- 3. THE EXISTING FIXTURES SHOWN AND ACCOUNTED FOR THIS DRAWING HAVE BEEN MODELED BASED ON KNOWN INFORMATION INCLUDING, BUT NOT LIMITED TO, MANUFACTURER, TYPE, LUMEN OUTPUT, MOUNTING HEIGHTS, PLACEMENT AND AIMING. THIS MODEL REFLECTS EXPECTED LIGHT LEVELS ASSUMING ALL OF THE EXISTING FIXTURES HAVE BEEN PROPERLY MAINTAINED ACCORDING TO MANUFACTURER GUIDELINES. ACTUAL LIGHT LEVELS MAY BE SLIGHTLY DIMINISHED IN THE EVENT THAT ONE OR MORE OF THE EXISTING FIXTURES IS NOT PERFORMING AS EXPECTED.

	REVISIONS											
REV	DATE	COMMENT	DRAWN BY CHECKED BY									
1	12/17/2021	PER CITY COMMENT	MRB MSL									



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PROJECT No.: DRAWN BY: CHECKED BY: DATE: CAD I.D.: 09/17/2021 PY212011\_LANDDEV-1

> PROJECT: PRELIMINARY FINAL LAND **DEVELOPMENT**

> > **PLANS**

PERON DEVELOPMENT, LLC.

> PROPOSED RESIDENTIAL MIXED-USE DEVELOPMENT

EAST 3RD STREET & TAYLOR STREET CITY OF BETHLEHEM WARD 3, BLOCK 3 NORTHAMPTON COUNTY

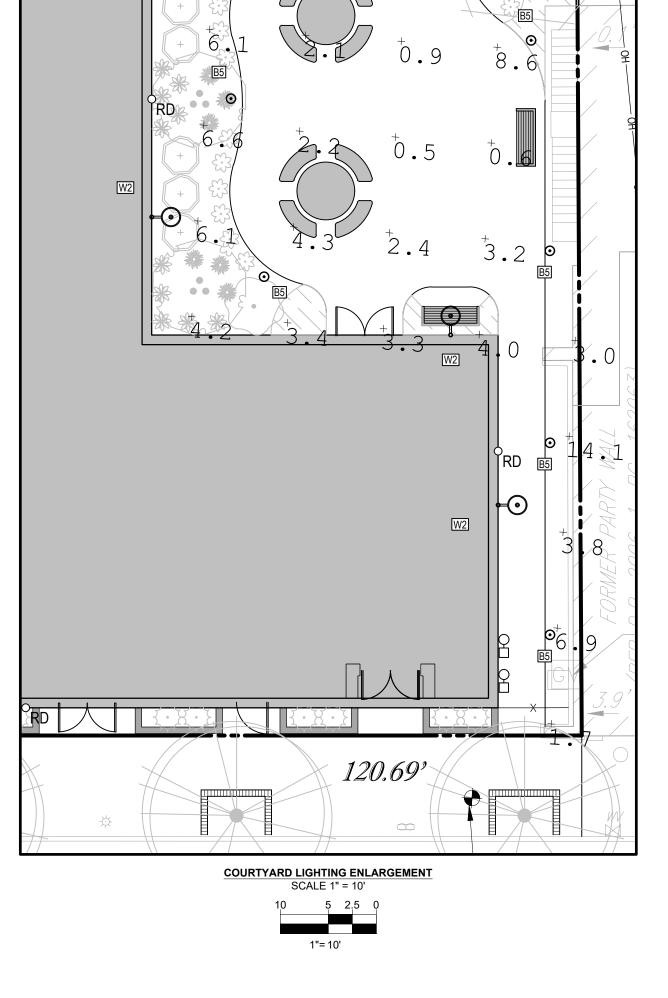
**COMMONWEALTH OF PENNSYLVANIA** 

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

M. S. LONGENSERGER

LIGHTING PLAN

C-503



# **DOSB1** Bollard & Light Column Series

Bollard

# DOSB1

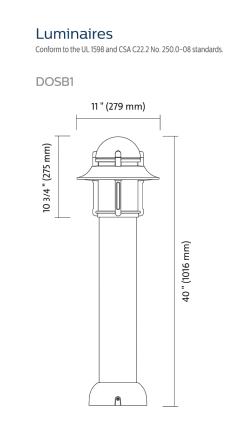
Ordering guide

	Lamp	Voltage	Options	Finish <sup>1</sup>
OSB1				
SB1	35 MH	<b>120</b> 120V	PH7 Photoelectric cell	BE2TX Midnight Blue Textured
	50 MH	208 208V	VPA Vandalproof hardware	BE6TX Ocean Blue Textured
		<b>240</b> 240V		BESTX Royal Blue Textured
		<b>277</b> 277V		BG2TX Sandstone Gold Textured
		<b>347</b> 347V		BKTX Black Textured
	35 HPS	-		BRTX Bronze Textured
	50 HPS			GN4TX Blue Green Textured
	18 CF	-		GN6TX Forest Green Textured
	26 CF			GN8TX Dark Forest Green Textured
	32 CF			GNTX Green Textured
	20W16LED4K	<b>120</b> 120V		GY3TX Medium Grey Textured
	30W16LED4K	<b>208</b> 208V		RD2TX Burgundy Textured
		<b>240</b> 240V		RD4TX Scarlet Textured
		<b>277</b> 277V		WHTX White Textured
				NP Natural Alum.
				TG Hammer-tone
				TS Hammer-tone Silver

1. Consult Lumec's Color Chart for complete specifications.  $Socket: GX24Q-2 \ (18W), GX24Q-3 \ (26 \ or \ 32W), GX24Q-4 \ (42W), triple \ tube \ compact \ fluorescent \ (lamp \ not \ included).$ 

# **DOSB1** Bollard & Light Column Series

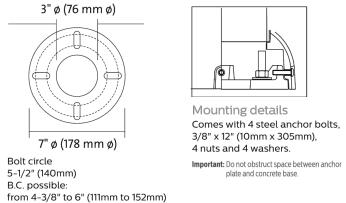
Bollard



Anchor Plate 3" ø (76 mm ø)

> 5-1/2" (140mm) B.C. possible:

7" ø (178 mm ø)



**Specifications** 

Hood Made from cast (356) aluminum, mechanically High power factor of 90%. Assembled on a assembled. Round shape, made from cast (356) aluminum,

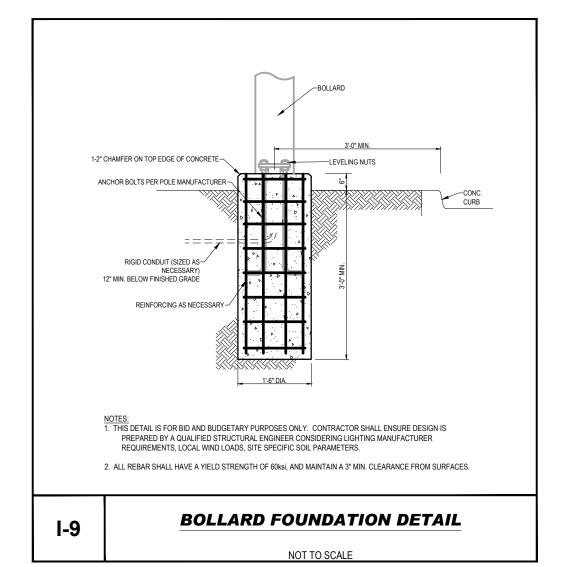
c/w one louver, welded to the base.

Made from cast (356) aluminum, mechanically unitized removable tray with quick disconnect secured to the anchor plate.

Made from aluminum, 5" (127mm) outside

diameter, welded to the base cover.

"Hot dip" chemical etching preparation. Lumital  $^{\text{\tiny{M}}}$ polyester powder coat finish. Excellent color retention as per #ASTM D2244, and outstanding salt-spray resistance according to #ASTM D2247 testing procedures.



Bollard\_series 12/18 page 13 of 21



example: DOSB1-50MH-120-PH7-BE2TX

The **Domus Series** of products - **Domus, Domus 55**, and **Domus Small** - are all designed to complement each other and bring balance to any environment. Their charm is undeniable. Simplicity, refinement, and elegance, all fuse together to create harmonious beauty through designed equilibrium.

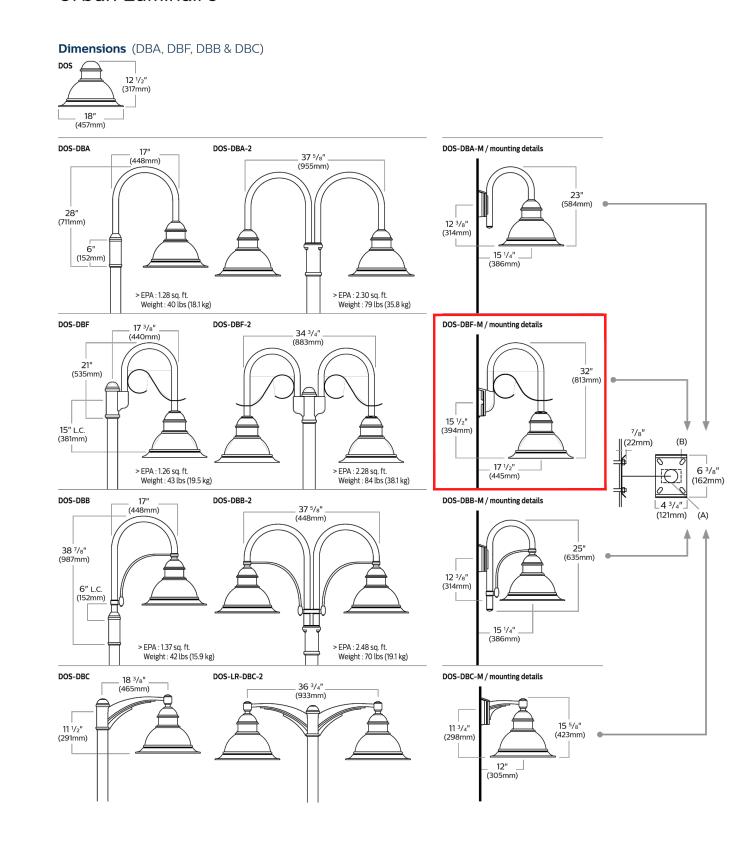
Project:	
Location:	
Cat.No:	
Туре:	
Lamps:	Qty:

Prefix	Lamp or LED	Lamp Type	Optical System	Ballast	Luminaire Options	Driver Options	Adaptor	Mounting	Configuration	Pole*	Finish	$\neg$	
DOS		Т							]		_		
OOS Domus	24W16LED4K	т	LE2F Type 2	<b>120</b> 120V	HS House Side Shield	AST Adjustable Start Time	MAS Adaptor for an	DBA	1A			Textured Midnight Blue Textured Ocean Blue	
Small LED	30W16LED4K 35W32LED4K		1	<b>208</b> 208V <b>240</b> 240V	SP2 Surge	CLO	existing mounting supplied by others	DBB	2 M		BE8TX	Textured Royal Blue Textured Sandstone	
	55W32LED4K		1	<b>277</b> 277V	Protection, 20KV 20KA	Constant Light Output (V 20KA)  Dall Digitally Adressable Lighting Interface Dynadimmer  OTL Over The Life  CDMGP Dimming Level determined by user Economy Profile  CDMGE25	DBF	I <sup>M</sup>		вктх	Textured Black Textured Bronze		
					120-277		Digitally Adressable					GN4TX	Textured Blue Green Textured Forest Green
	24W16LED3K 30W16LED3K										GN8TX	Textured Dark Forest Green Textured Green	
	35W32LED3K										GR GY3TX	Gray Sandtex Textured Medium Grey	
	55W32LED3K										NP RD2TX RD4TX	Natural Aluminum Textured Burgundy Textured Scarlet	
								CDMGE25					TG TS WHTX
						CDMGE75							
						Median Profile  CDMGM25  CDMGM50  CDMGM75							
						Safety Profile CDMGS25							
						CDMGS50 CDMGS75							

Bollard\_series 12/18 page 14 of 21

# **DOS** Domus Small

**Urban Luminaire** 



**DOS** Domus Small

Urban Luminaire

LED light engine technical information for DOS

LED Module	Typical delivered	Typical system		Typical	current		LED	HID	Luminaire Efficacy Rating (Lm/W)	
	lumens	wattage <sup>2</sup>	@ 120V	@ 208V	@ 240V	@ 277V	current	Replacement <sup>3</sup>		BUG ratin
24W16LED3K-T-LE2F	2277	29	0.25	0.15	0.13	0.12	530	70-100	79	B1-U0-G
24W16LED3K-T-LE3F	2181	29	0.25	0.15	0.13	0.12	530	70-100	76	B1-U0-G
24W16LED3K-T-LE4F	2132	29	0.25	0.15	0.13	0.12	530	70-100	74	B1-U0-0
24W16LED3K-T-LE5F	2042	29	0.25	0.15	0.13	0.12	530	70-100	71	B2-U0-G
30W16LED3K-T-LE2F	2865	38	0.32	0.19	0.17	0.15	700	70-100	76	B1-U0-0
30W16LED3K-T-LE3F	2744	38	0.32	0.19	0.17	0.15	700	70-100	73	B1-U0-0
30W16LED3K-T-LE4F	2683	38	0.32	0.19	0.17	0.15	700	70-100	71	B1-U0-0
30W16LED3K-T-LE5F	2546	38	0.32	0.19	0.17	0.15	700	70-100	68	B2-U0-0
35W32LED3K-T-LE2F	3113	36	0.31	0.19	0.17	0.16	350	70-100	87	B1-U0-0
35W32LED3K-T-LE3F	2982	36	0.31	0.19	0.17	0.16	350	70-100	83	B1-U0-0
35W32LED3K-T-LE4F	2915	36	0.31	0.19	0.17	0.16	350	70-100	82	B1-U0-0
35W32LED3K-T-LE5F	2766	36	0.31	0.19	0.17	0.16	350	70-100	77	B2-U0-
55W32LED3K-T-LE2F	4515	53	0.47	0.27	0.24	0.22	530	100-150	85	B1-U0-0
55W32LED3K-T-LE3F	4325	54	0.47	0.27	0.24	0.22	530	100-150	80	B1-U0-0
55W32LED3K-T-LE4F	4228	54	0.47	0.27	0.24	0.22	530	100-150	79	B1-U0-0
55W32LED3K-T-LE5F	4013	54	0.47	0.27	0.24	0.22	530	100-150	74	B3-U0-

ED = Lumileds Luxeon T, CRI = 70, CCT = 4000K (3985K +/- 275K or 3710K to 4260K), System (LED + driver) rated life = 100,000 hrs¹										
	Typical delivered	Typical system	Typical current				LED	HID	Luminaire Efficacy	
LED Module	lumens	wattage <sup>2</sup>	@ 120V	@ 208V	@ 240V	@ 277V	current	Replacement <sup>3</sup>	Rating (Lm/W)	BUG rating
24W16LED4K-T-LE2F	2596	29	0.25	0.15	0.13	0.12	530	70-100	91	B1-U0-G1
24W16LED4K-T-LE3F	2487	29	0.25	0.15	0.13	0.12	530	70-100	87	B1-U0-G0
24W16LED4K-T-LE4F	2431	29	0.25	0.15	0.13	0.12	530	70-100	85	B1-U0-G1
24W16LED4K-T-LE5F	2333	29	0.25	0.15	0.13	0.12	530	70-100	81	B2-U0-G0
30W16LED4K-T-LE2F	3267	38	0.32	0.19	0.17	0.15	700	70-100	87	B1-U0-G1
30W16LED4K-T-LE3F	3129	38	0.32	0.19	0.17	0.15	700	70-100	83	B1-U0-G1
30W16LED4K-T-LE4F	3059	38	0.32	0.19	0.17	0.15	700	70-100	81	B1-U0-G1
30W16LED4K-T-LE5F	2903	38	0.32	0.19	0.17	0.15	700	70-100	77	B2-U0-G1
35W32LED4K-T-LE2F	3550	36	0.31	0.19	0.17	0.16	350	70-100	99	B1-U0-G1
35W32LED4K-T-LE3F	3400	36	0.31	0.19	0.17	0.16	350	70-100	95	B1-U0-G1
35W32LED4K-T-LE4F	3324	36	0.31	0.19	0.17	0.16	350	70-100	93	B1-U0-G1
35W32LED4K-T-LE5F	3155	36	0.31	0.19	0.17	0.16	350	70-100	88	B2-U0-G1
55W32LED4K-T-LE2F	5149	53	0.47	0.27	0.24	0.22	530	100-150	96	B1-U0-G1
55W32LED4K-T-LE3F	4932	54	0.47	0.27	0.24	0.22	530	100-150	91	B1-U0-G1
55W32LED4K-T-LE4F	4822	54	0.47	0.27	0.24	0.22	530	100-150	90	B1-U0-G1
55W32LED4K-T-LE5F	4576	54	0.47	0.27	0.24	0.22	530	100-150	85	B3-U0-G1

L70 = 100,000 hrs (at ambient temperature = 25°C).
 System wattage or total luminaire wattage includes the LED module and the LED driver.
 These guidelines show typical replacements for the HID wattage ranges shown. Replacements should always be confirmed with a photometric layout.

Note: Due to rapid and continuous advances in LED technology, LED luminaire data is subject to change without notice and at the discretion of Signify.

	REVISIONS											
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> PRELIMINARY FINAL LAND **DEVELOPMENT PLANS**

PERON DEVELOPMENT, LLC.

PROPOSED RESIDENTIAL MIXED-USE DEVELOPMENT

EAST 3RD STREET & TAYLOR STREET CITY OF BETHLEHEM WARD 3, BLOCK 3 NORTHAMPTON COUNTY **COMMONWEALTH OF PENNSYLVANIA** 

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

M. S. LONGENBERGER

**LIGHTING DETAILS** 

C-504

**REVISION 1 - 12/17/2021** 

DOS-LED 01/19 page 1 of 4

1. Not available with HS option.

DOS-LED 01/19 page 2 of 4

# **OVERALL SITE CONSTRUCTION SEQUENCE**

8102 8(f)(7)

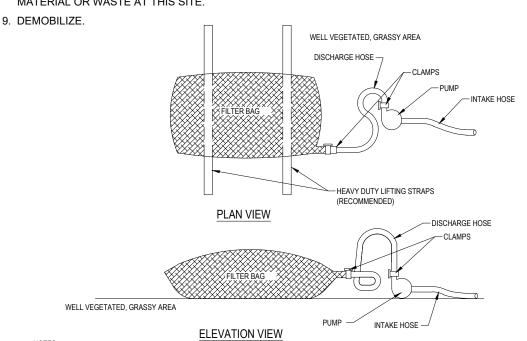
ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED IN COMPLIANCE WITH CHAPTER 102 REGULATIONS BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. UPON COMPLETION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

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 NORTHAMPTON COUNTY 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.

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 NORTHAMPTON 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. INSTALL ALL PERIMETER CONTROLS (INLET FILTER BAGS) AS INDICATED ON THE PLANS. ONLY LIMITED CLEARING AND GRUBBING NECESSARY TO INSTALL THE PERIMETER EROSION AND SEDIMENT POLLUTION CONTROLS IS PERMITTED.

- 2. INITIATE THE NECESSARY EARTHWORK TO REACH THE GRADES INDICATED ON THE PLANS. BUILDING CONSTRUCTION MAY COMMENCE UPON ACCEPTANCE OF BUILDING PAD BY OWNER. THE CONCRETE WASHOUT MUST BE INSTALLED BEFORE ANY CONCRETE CAN BE POURED ON-SITE. CONTRACTOR MUST PERFORM BULK OF EARTHWORK TO BALANCE CUTS AND FILLS TO THE GREATEST EXTENT POSSIBLE. 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.
- 3. INITIATE STORM SEWER INSTALLATIONS FOR THE FEATURES SHOWN ON THE PLANS STARTING AT THE FURTHEST DOWNSTREAM STRUCTURE. CONTINUE WITH THE BALANCE OF EARTHWORK INCLUDING UTILITY INSTALLATION (SANITARY, ELECTRIC, TELEPHONE, CABLE AND GAS) WHERE APPLICABLE.
- 4. INSTALL ALL CURBING AND SIDEWALKS SHOWN IN THIS PHASE
- 5. INITIATE FINAL GRADING AND PLACEMENT OF TOPSOIL IN ALL LANDSCAPE AREAS. AS SOON AS SLOPES, CHANNELS, DITCHES AND OTHER DISTURBED AREAS REACH FINAL GRADE, THEY MUST BE STABILIZED. ALL LANDSCAPE AREAS MUST BE STABILIZED AND PERMANENT SEEDING OR PLACEMENT OF SOD MUST BE APPLIED. WHEN FINAL GRADE IS ACHIEVED DURING NON-GERMINATING MONTHS, THE AREA SHOULD BE MULCHED UNTIL THE BEGINNING OF THE NEXT PLANTING SEASON. HOWEVER, THE AREA WILL NOT BE CONSIDERED STABILIZED UNTIL A MINIMUM UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL SPECIES HAS BEEN ACHIEVED. 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.
- 6. INSTALL FINAL VEGETATION AND LANDSCAPING SPECIFIED ON THE LANDSCAPE PLAN.
- 7. UPON SITE STABILIZATION (UNIFORM COVERAGE OR DENSITY OF 70% ACROSS ALL DISTURBED AREAS), REMOVE EROSION AND SEDIMENT CONTROL FACILITIES INCLUDING. ANY AREA DISTURBED DURING THE REMOVAL OF EROSION AND SEDIMENT CONTROL FACILITIES SHALL BE STABILIZED IMMEDIATELY.
- 8. 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.



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
LIV RESISTANCE	ASTM D-4355	70%

ASTM D-4751

AOS % RETAINED

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

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

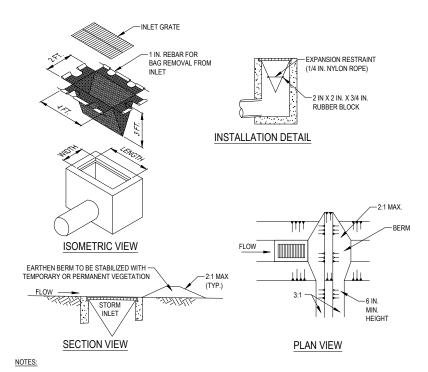
NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

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

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

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

# STANDARD CONSTRUCTION DETAIL #3-16 PUMPED WATER FILTER BAG



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.

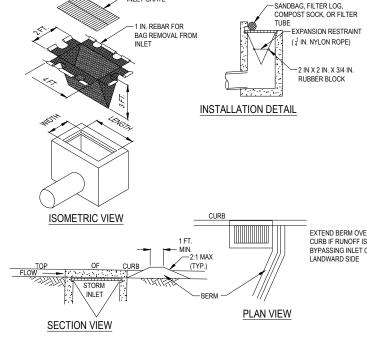
SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.

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



NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE

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

PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT

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.

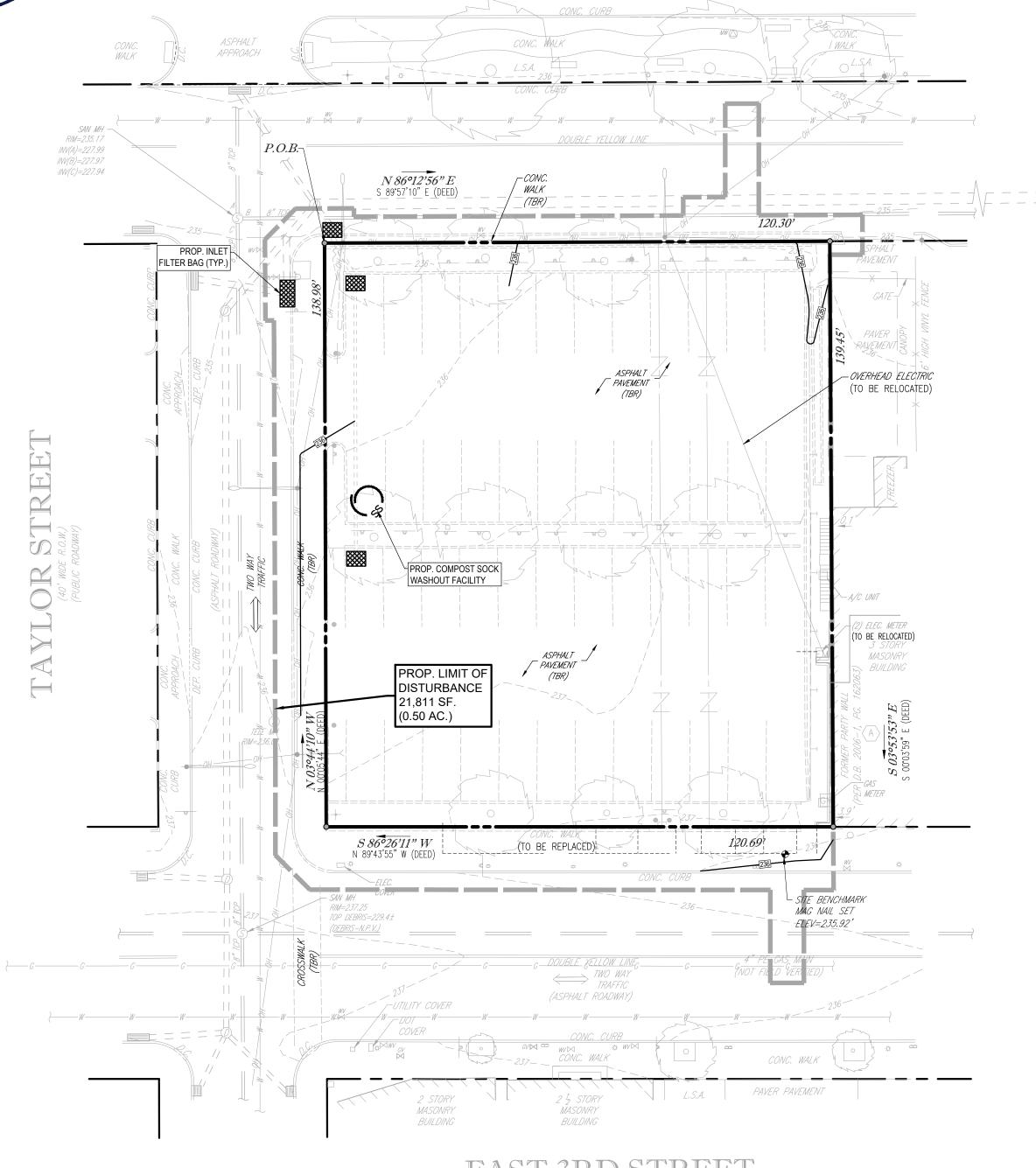
DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

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

# COLUMBIA STREET

(PUBLIC ROADWAY)

(ASPHALT ROADWAY)



(A.K.A. S.R. 412)

(60' WIDE R.O.W.)

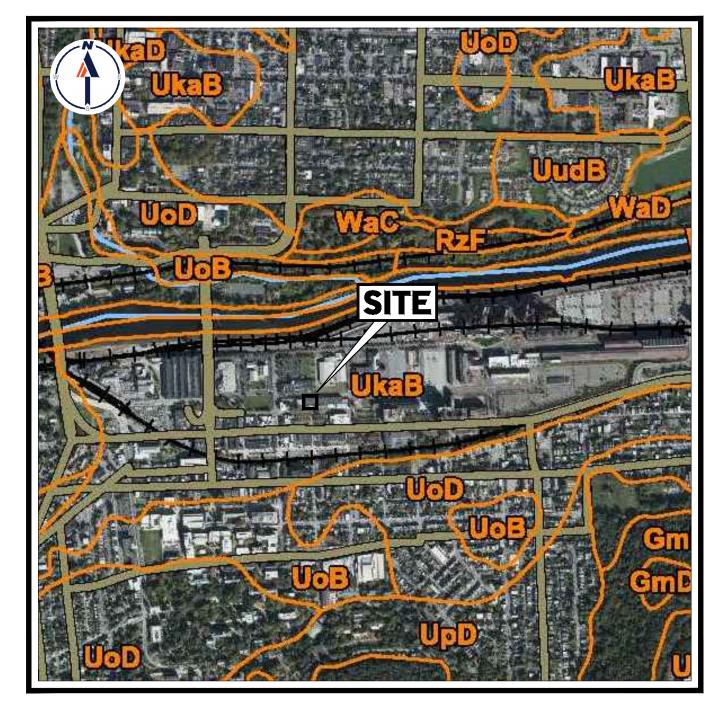
(PUBLIC ROADWAY)





PROP. COMPOST FILTER SOCK
CONCRETE WASHOUT FACILITY
PROP. FILTER BAG INLET PROTECTION

CONSTRUCTION ENTRANCE NOTE: PRE-EXISTING
ASPHALT PAVEMENT TO BE USED AND ROADS
MUST BE KEPT FREE OF SEDIMENT



# SOIL MAP

SCALE: 1"=1000'
SOURCE: USDA WEB SOIL SURVEY
7/20/2021

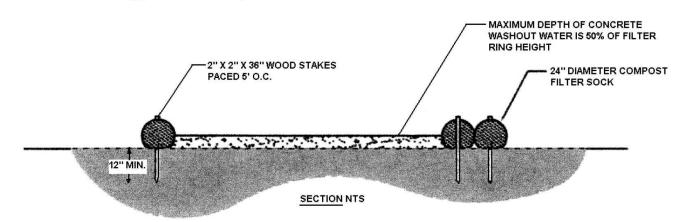
SOIL DESCRIPTIONS

SOIL DESCRIPTION

- URBAN LAND, 0 TO 8 PERCENT SLOPES

SOIL GROUP

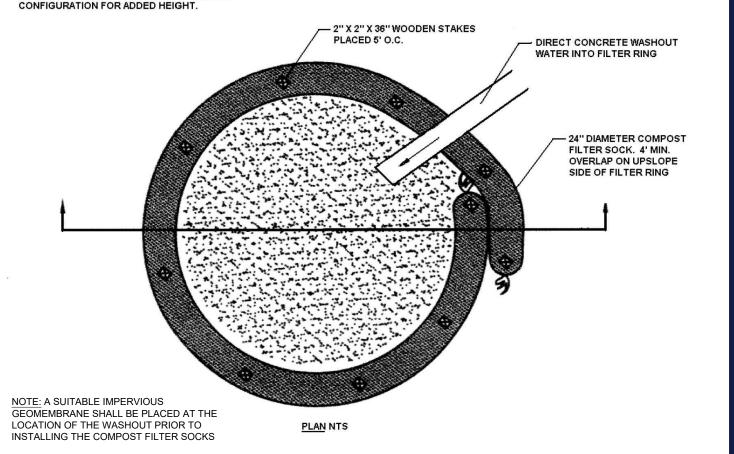
# FIGURE 3.18 Typical Compost Sock Washout Installation



NOTES:

1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE

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





REVISIONS

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1 12/17/2021 PER CITY COMMENT MSL



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CHECKED BY: MSL
DATE: 09/17/2021
CAD I.D.: PY212011\_LANDDEV-1

PROJECT:
PRELIMINARY/
FINAL LAND
DEVELOPMENT

**PLANS**—— FOR ———

LLC.

PERON DEVELOPMENT

PROPOSED RESIDENTIAL MIXED-USE DEVELOPMENT

EAST 3RD STREET & TAYLOR STREET
CITY OF BETHLEHEM
WARD 3, BLOCK 3
NORTHAMPTON COUNTY
COMMONWEALTH OF PENNSYLVANIA

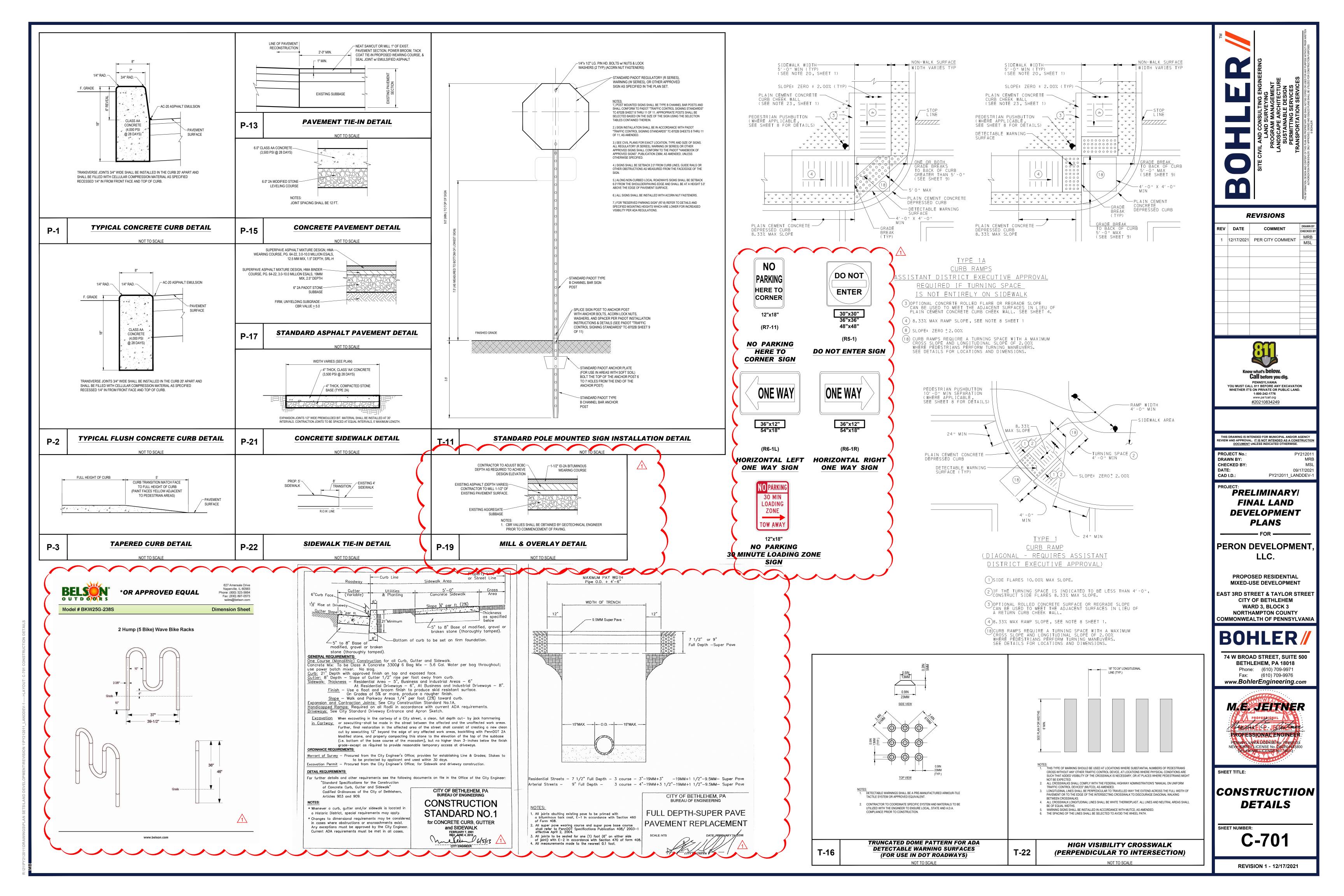
**BOHLER** 

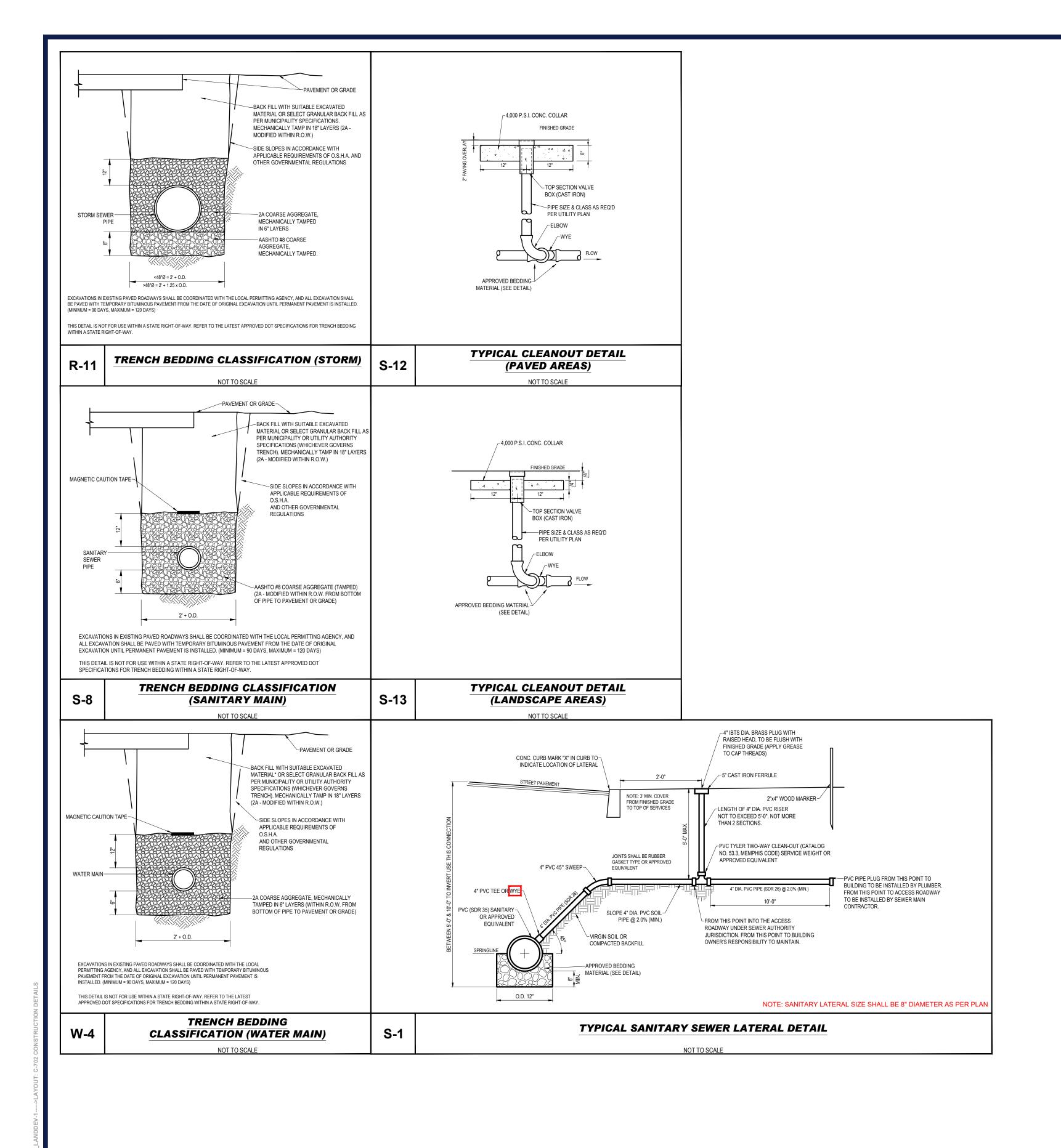
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BETHLEHEM, PA 18018
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Fax: (610) 709-9976
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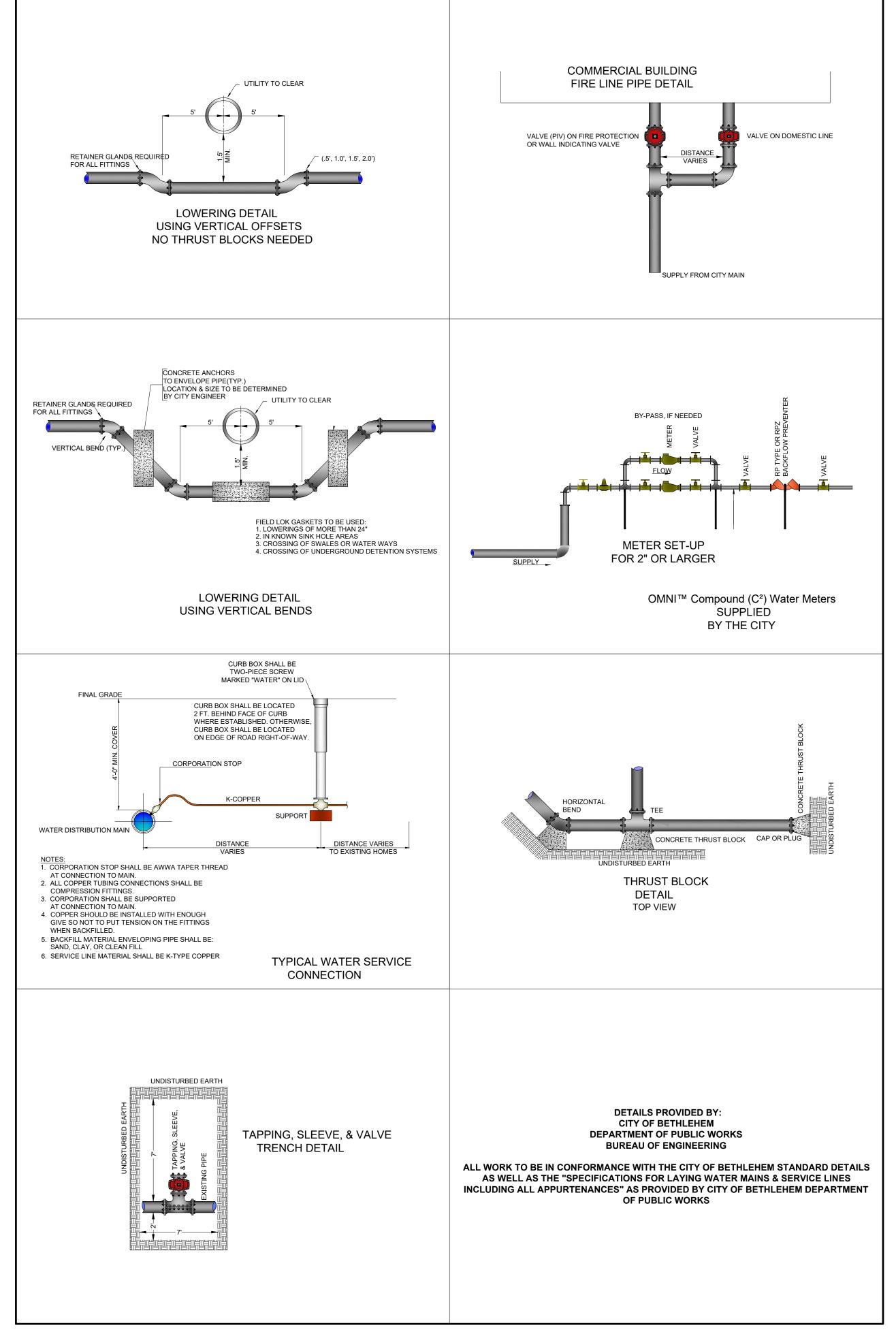


EROSION &
SEDIMENT
CONTROL PLAN
& DETAILS

C-601









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PROJECT No.:

PRELIMINARY/
FINAL LAND
DEVELOPMENT
PLANS

— FOR ———

PERON DEVELOPMENT

PROPOSED RESIDENTIAL
MIXED-USE DEVELOPMENT

EAST 3RD STREET & TAYLOR STREET CITY OF BETHLEHEM

WARD 3, BLOCK 3 NORTHAMPTON COUNTY COMMONWEALTH OF PENNSYLVANIA

# |BOHLER/

74 W BROAD STREET, SUITE 500
BETHLEHEM, PA 18018
Phone: (610) 709-9971
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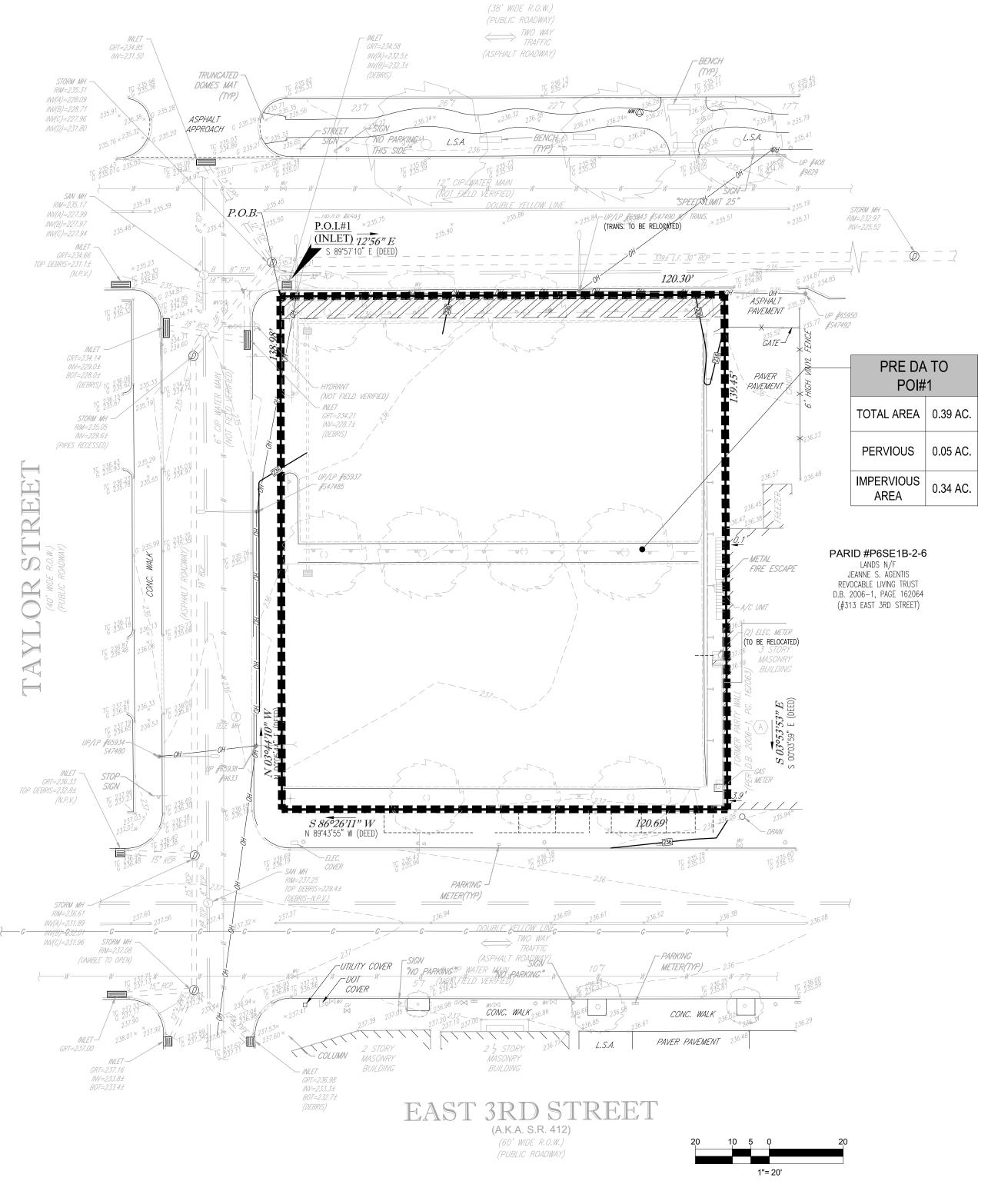
| CONSTRUCTION | DETAILS

SHEET NUMBER

C-702



# COLUMBIA STREET





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DEVELOPMENT

09/17/2021 PY212011\_LANDDEV-1

FINAL LAND DEVELOPMENT PLANS

PERON DEVELOPMENT, LLC.

PROPOSED RESIDENTIAL MIXED-USE DEVELOPMENT

EAST 3RD STREET & TAYLOR STREET
CITY OF BETHLEHEM
WARD 3, BLOCK 3
NORTHAMPTON COUNTY
COMMONWEALTH OF PENNSYLVANIA

# BOHLER/

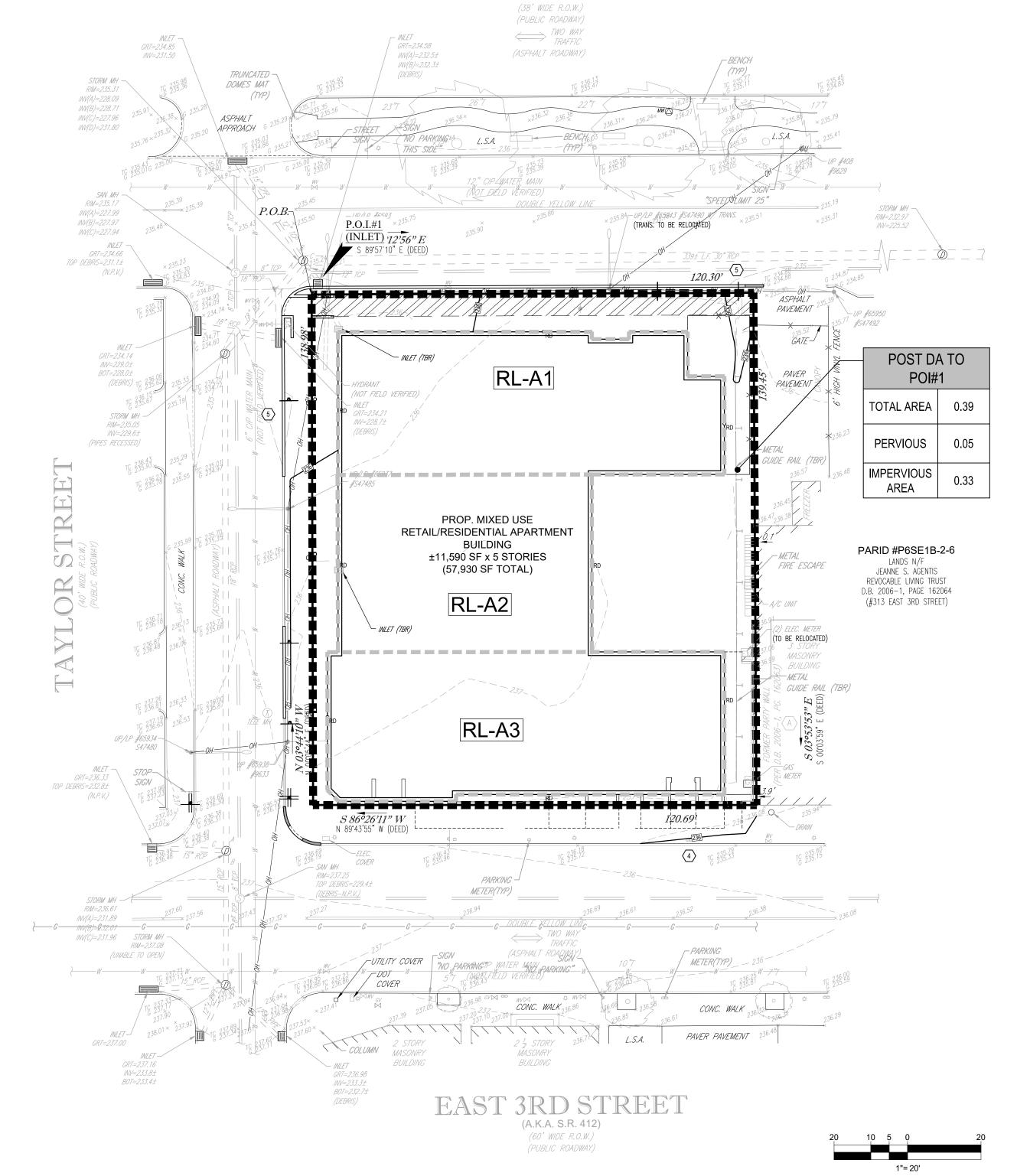
74 W BROAD STREET, SUITE 500
BETHLEHEM, PA 18018
Phone: (610) 709-9971
Fax: (610) 709-9976
www.BohlerEngineering.com



PRE
PRE
DEVELOPMENT
DRAINAGE
AREA PLAN

T NUMBER: **C-801** 







REVISIONS					
REV	DATE	COMMENT	DRAWN BY CHECKED BY		
1	12/17/2021	PER CITY COMMENT	MRB MSL		



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.: DRAWN BY: CHECKED BY: DATE: CAD I.D.:

> PROJECT: PRELIMINARY FINAL LAND

09/17/2021 PY212011\_LANDDEV-1

**DEVELOPMENT PLANS** 

PERON DEVELOPMENT,

LLC.

PROPOSED RESIDENTIAL MIXED-USE DEVELOPMENT

EAST 3RD STREET & TAYLOR STREET CITY OF BETHLEHEM WARD 3, BLOCK 3 NORTHAMPTON COUNTY **COMMONWEALTH OF PENNSYLVANIA** 

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**POST DEVELOPMENT** DRAINAGE AREA PLAN

C-802

**REVISION 1 - 12/17/2021** 

# **INLET DRAINAGE AREAS** DRAINAGE IMPERVIOUS **AREA** 0.091 AC. RL-A2

RL-A3

0.077 AC.

0.098 AC.