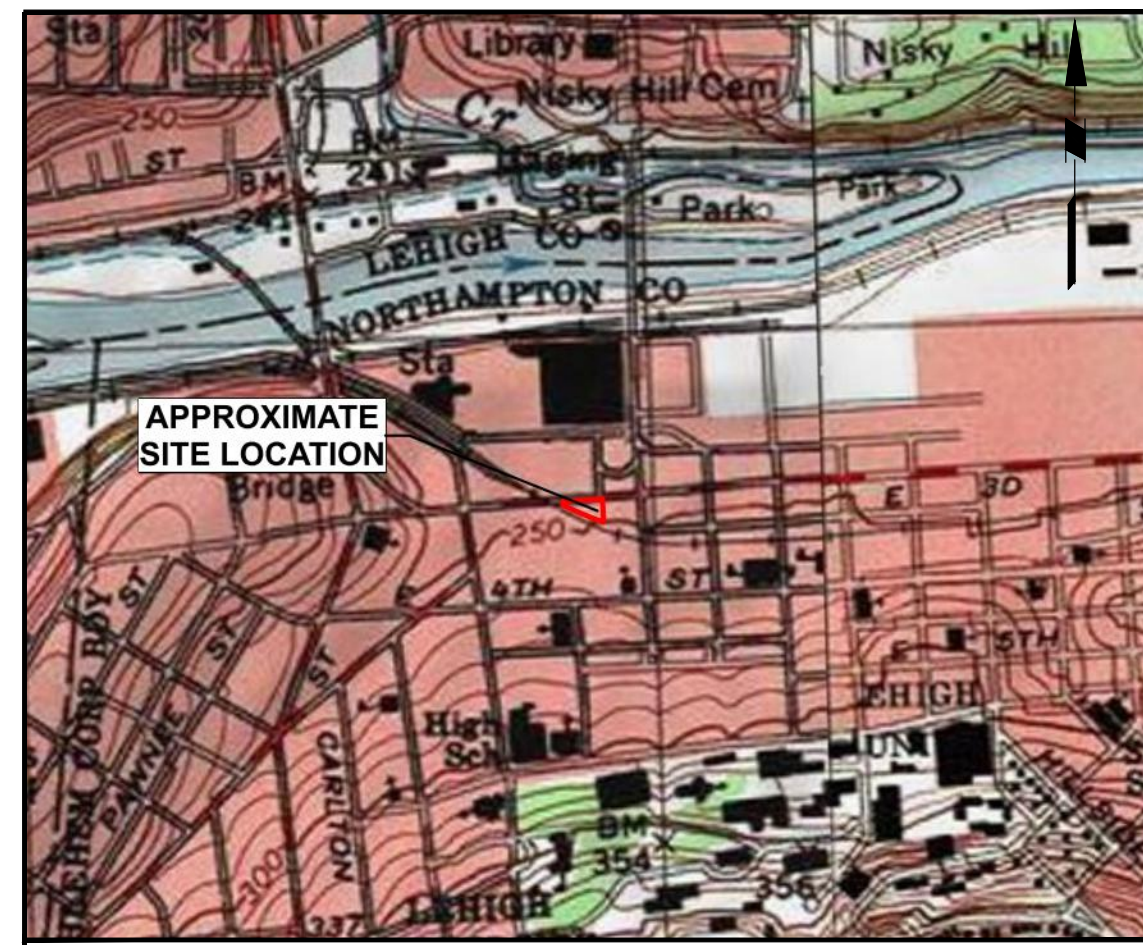


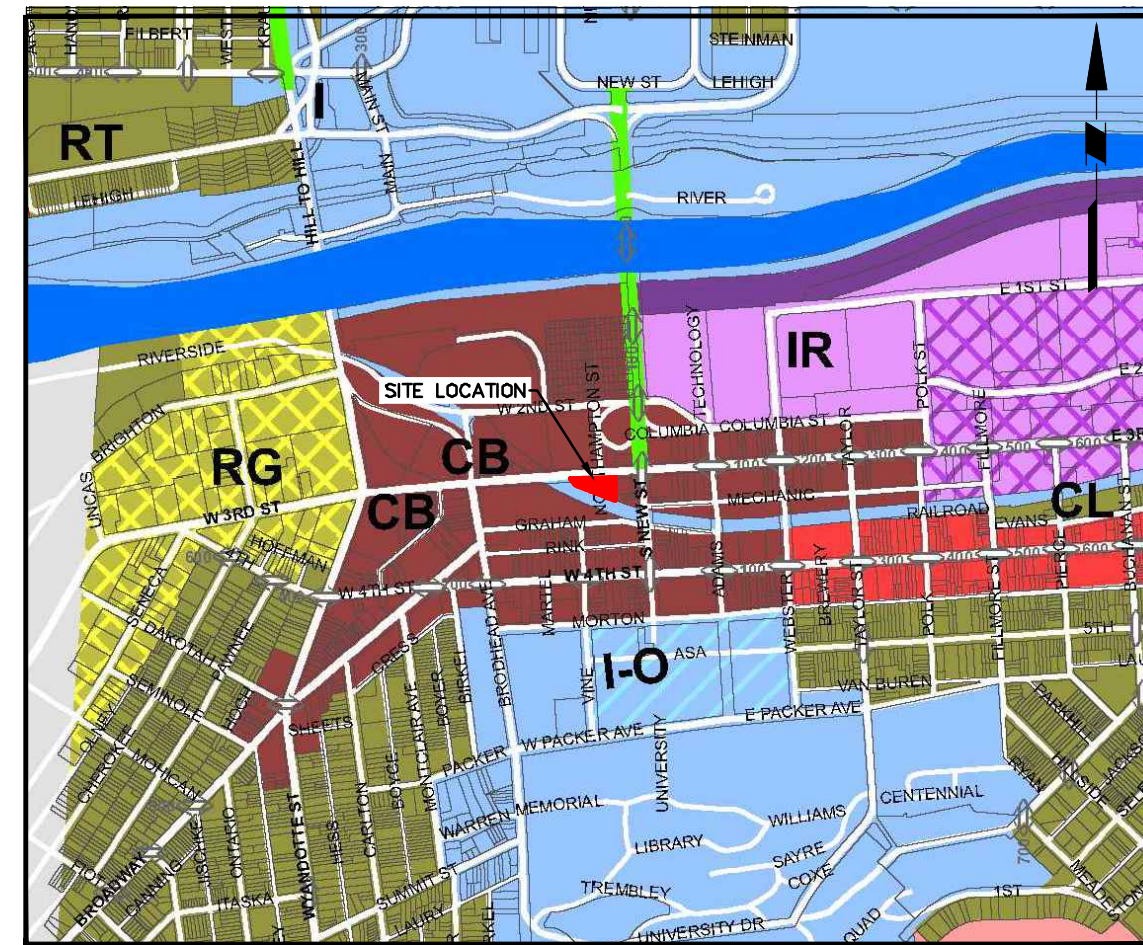
# 3RD STREET MIXED USE BUILDING LAND DEVELOPMENT & LOT CONSOLIDATION PLANS

14-36 W 3RD STREET  
BETHLEHEM, PENNSYLVANIA 18015  
NOVEMBER 5, 2021



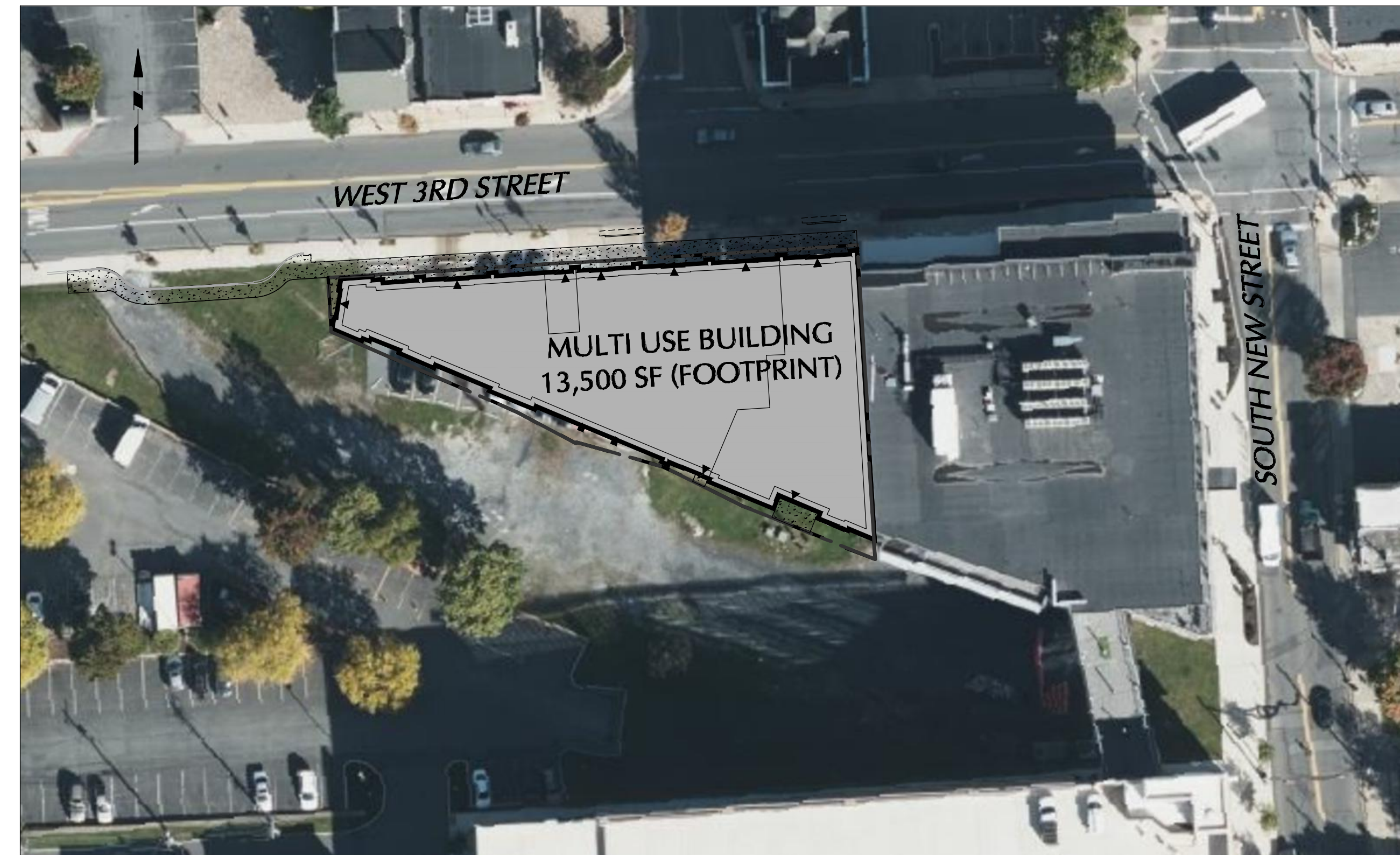
SITE LOCATION MAP

SCALE: 1"=1000'



ZONING MAP

SCALE: 1"=1000'



SITE PLAN

SCALE 1" = 40'

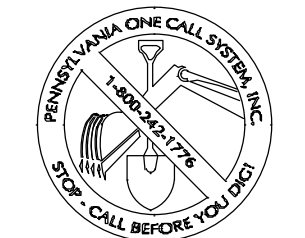
## CONTACT INFORMATION

<b>CITY</b> City of Bethlehem 10 East Church Street Bethlehem, PA 18018 Contact: Darlene Heller, AICP (Director) Phone: (610) 865-7088 Email: dheller@bethlehem-pa.gov	<b>EQUITABLE OWNER/APPLICANT</b> Posh Properties 60 W Broad St Ste 304 Bethlehem, PA 18018 Contact: Joseph Posh Phone: (610) 861-0663 Email: poshproperties@cn.com
<b>WATER</b> 10 East Church Street Bethlehem, PA 18018 Contact: Edward J. Boscola, P.E. Phone: (610) 865-7077 Email: eboscola@bethlehem-pa.gov	<b>LANDSCAPE ARCHITECT</b> Langan Engineering and Environmental Services, Inc. One West Broad Street, Suite 200 Bethlehem, PA 18018 Contact: Nathaniel Burns Phone: (610) 984-8500 Email: nburns@langan.com
<b>SEWER</b> 10 East Church Street Bethlehem, PA 18018 Contact: Edward J. Boscola, P.E. Phone: (610) 865-7077 Email: eboscola@bethlehem-pa.gov	<b>CIVIL ENGINEER</b> Langan Engineering and Environmental Services, Inc. One West Broad Street, Suite 200 Bethlehem, PA 18018 Contact: Jason Engelhardt Phone: (610) 984-8500 Email: jengelhardt@langan.com
<b>GAS</b> UGI Utilities 2121 City Line Road Bethlehem, PA 18017 Phone: (610) 276-2722	

## GENERAL NOTES

- THE CONTRACTOR SHALL FURNISH, INSTALL, TEST AND COMPLETE ALL WORK TO THE SATISFACTION OF THE ENGINEER AND OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION; AS SUCH, THESE PLANS DO NOT COMPLETELY REPRESENT NOR ARE THEY INTENDED TO REPRESENT, ALL SPECIFIC INSTRUCTIONS REQUIRED FOR SITEWORK CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO CONSTRUCT ALL IMPROVEMENTS DEPICTED ON THESE PLANS IN ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS AND LAWS IN EFFECT AT THE TIME OF CONSTRUCTION.
- THE CONTRACTOR SHALL ACCEPT THE SITE AS IS. THE CONTRACTOR SHALL ASSESS CONDITIONS, AND THE KIND, QUALITY AND QUANTITY OF WORK REQUIRED. THE OWNER AND ENGINEER MAKE NO GUARANTEE IN REGARD TO THE ACCURACY OF ANY INFORMATION THAT WAS OBTAINED DURING INVESTIGATIONS. THE CONTRACTOR SHALL MAKE A THOROUGH SITE INSPECTION IN ORDER TO FIELD CHECK EXISTING SITE CONDITIONS; CORRELATE CONDITIONS WITH THE DRAWINGS; AND, RESOLVE ANY POSSIBLE CONSTRUCTION CONFLICTS WITH THE OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL PERFORM ADDITIONAL TOPOGRAPHIC SURVEYS HE/SHE DEEMS NECESSARY, PROVIDED THEY ARE COORDINATED WITH THE OWNER. ANY CONDITIONS DETERMINED BY THE CONTRACTOR THAT DIFFER FROM THE INFORMATION SHOWN ON THE DRAWINGS THAT ARE NOT BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER PRIOR TO THE START OF WORK SHALL NOT BE CONSIDERED GROUNDS FOR ADDITIONAL PAYMENT OR CHANGES TO THE CONTRACT DURATION, OR ANY OTHER CLAIMS AGAINST THE OWNER OR OWNER'S ENGINEER.
- THE CONTRACTOR SHALL, WHEN HE/SHE DEEMS NECESSARY, PROVIDE A WRITTEN REQUEST FOR INFORMATION (RFI) TO THE OWNER AND/OR OWNER'S DESIGNATED REPRESENTATIVE, AND ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITEWORK ITEM. THE (RFI) SHALL BE IN A FORM ACCEPTABLE TO OWNER AND/OR OWNER'S DESIGNATED REPRESENTATIVE, AND ENGINEER AND SHALL ALLOW FOR A MINIMUM OF THREE WORK DAYS FOR A WRITTEN REPLY. RFIS SHALL BE NUMBERED CONSECUTIVELY BY DATE SUBMITTED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITEWORK ITEMS CONSTRUCTED DIFFERENTLY THAN INTENDED OR AS DEPICTED ON THE PLANS.
- INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RIM ELEVATIONS, BUILDING FINISHED FLOOR ELEVATIONS, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL SUFFICIENTLY REVIEW ALL PLANS, PROFILES AND ANY OTHER INFORMATION IN THE CONTRACT DOCUMENTS FOR CONSISTENCY PRIOR TO BID. ANY INCONSISTENCIES OR DISCREPANCIES THAT ARE FOUND BY THE CONTRACTOR OR HIS ASSIGNS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING, IN THE FORMAT OF AN RFI PRIOR TO BID.
- THERE ARE ADDITIONAL NOTES, SPECIFICATIONS AND REQUIREMENTS CONTAINED THROUGHOUT THE PLAN SET AS WELL AS REFERENCES TO SPECIFICATIONS FROM APPLICABLE GOVERNING AUTHORITIES AND INDUSTRY STANDARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN, REVIEW AND ADHERE TO ALL THESE DOCUMENTS.
- CONTRACTOR IS SPECIFICALLY CAUTIONED THAT ALL CONSTRUCTION STAKEOUT FOR THIS PROJECT MUST BE COMPLETED FROM THE SITE SPECIFIC SURVEY CONTROL (HORIZONTAL AND VERTICAL) UPON WHICH THE DESIGN IS BASED. THE CONTRACTOR SHOULD NOT RELY ON OR RE-ESTABLISH SURVEY CONTROL BY GPS OR OTHER METHODS FOR USE IN CONSTRUCTION STAKEOUT OR ANY OTHER PURPOSE FOR THIS PROJECT. ANY DISCREPANCIES BETWEEN THE EXISTING HORIZONTAL OR VERTICAL DATA SHOWN ON THESE DRAWINGS AND THAT ENCOUNTERED IN THE FIELD MUST BE REPORTED TO THE DESIGN TEAM PRIOR TO CONSTRUCTION FOR RESOLUTION.

**ACT 287 AS AMENDED**  
 IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH THE PENNSYLVANIA ACT 287 (AS AMENDED) AND TO CONTRACT THE "ONE CALL SYSTEM" THREE (3) WORKING DAYS (UNLESS OTHERWISE NOTED) PRIOR TO START OF CONSTRUCTION.  
 PENNSYLVANIA ONE CALL: 1-800-342-1776  
 SERIAL NO 00-36 W 3RD STREET: 2021202393



CALL BEFORE YOU DIG  
 IN PA, TOLL FREE  
 1-800-242-1776  
 FOR FREE MARKOUTS TO LOCATE  
 UNDERGROUND UTILITIES  
 \* IT'S THE LAW \*

## CIVIL ENGINEER

**LANGAN**  
 ENGINEERING & ENVIRONMENTAL SERVICES

One West Broad Street, Suite 200  
 Bethlehem, PA 18018  
 P: 610.984.8500 F: 610.984.8501  
 www.langan.com

CONTACT **JASON ENGELHARDT**  
 PHONE **610-984-8500**  
 EMAIL **jengelhardt@langan.com**

DRAWING LIST					
	SHEET NO.	DRAWING No.	DESCRIPTION	DRAWING SCALE	LAST REVISED DATE
*	1 OF 14	GI-001	COVER SHEET	AS SHOWN	11/5/2021
	2 OF 14	VT-101	EXISTING CONDITIONS PLAN	1" = 20'	11/5/2021
*	3 OF 14	CB-101	LOT CONSOLIDATION PLAN	1" = 20'	11/5/2021
	4 OF 14	CD-101	DEMOLITION PLAN	1" = 20'	11/5/2021
*	5 OF 14	CS-101	SITE PLAN	1" = 20'	11/5/2021
	6 OF 14	CG-101	GRADING PLAN	1" = 20'	11/5/2021
	7 OF 14	CE-101	SOIL EROSION AND SEDIMENT CONTROL PLAN	1" = 20'	11/5/2021
	8 OF 14	CE-501	SOIL EROSION AND SEDIMENT CONTROL DETAILS	N.T.S.	11/5/2021
	9 OF 14	CU-101	UTILITY AND DRAINAGE PLAN	1" = 20'	11/5/2021
	10 OF 14	CU-501	UTILITY AND DRAINAGE DETAILS	N.T.S.	11/5/2021
	11 OF 14	LP-101	LANDSCAPE PLAN	1" = 20'	11/5/2021
	12 OF 14	LP-501	LANDSCAPE DETAILS AND NOTES	N.T.S.	11/5/2021
	13 OF 14	LL-101	LIGHTING PLAN	1" = 20'	11/5/2021
	14 OF 14	LL-501	LIGHTING DETAILS AND NOTES	N.T.S.	11/5/2021

\* DENOTES PLANS TO BE RECORDED

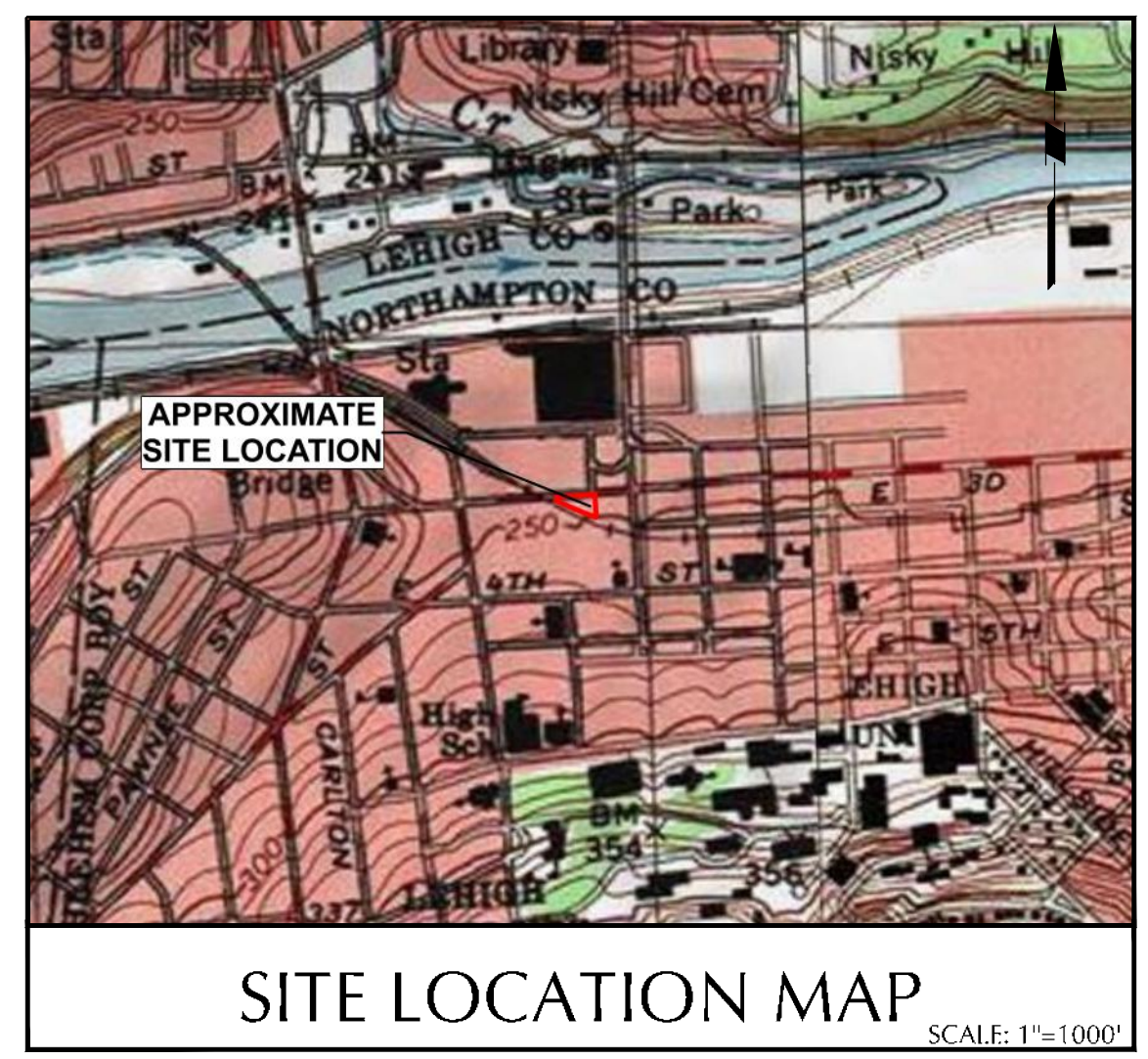
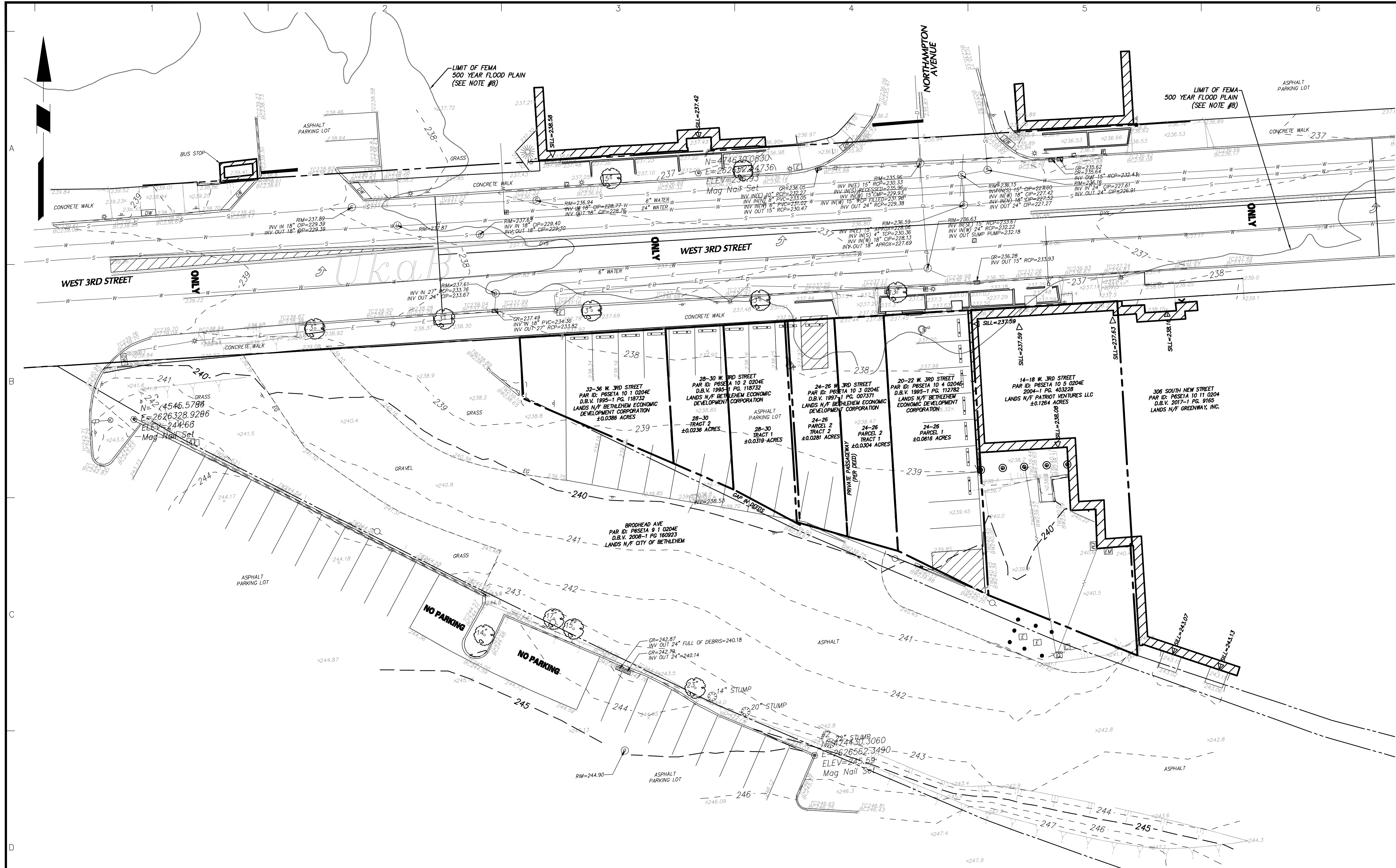
Date	Description	No.
11/05/21	REVISED PER CITY COMMENTS	1
Revisions		

SIGNATURE: *Jason Engelhardt* DATE SIGNED: 11/05/21  
 PROFESSIONAL ENGINEER PA Lic. No. PE-057145-E

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 Langan Engineering and Environmental Services, Inc.  
 One West Broad Street, Suite 200  
 Bethlehem, PA 18018  
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Project  
**3RD STREET MIXED USE BUILDING**  
 CITY OF BETHLEHEM  
 NORTHAMPTON COUNTY PENNSYLVANIA

Drawing Title  
**COVER SHEET**  
 Project No. **240052001**  
 Date **08/09/21**  
 Drawn By **IDL**  
 Checked By **JSE**  
 Drawing No. **GI-001**  
 Sheet 1 of 14



**ACT 287 AS AMENDED**  
 IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH THE PENNSYLVANIA ACT 287 (AS AMENDED) AND TO CONTRACT THE "ONE CALL SYSTEM" THREE (3) WORKING DAYS (UNLESS OTHERWISE NOTED) PRIOR TO START OF CONSTRUCTION.  
 PENNSYLVANIA ONE CALL 1-800-242-1776  
 SERIAL NO 020-36 W 3RD STREET, 20212023993



**LEGEND** (NOT SHOWN TO SCALE)

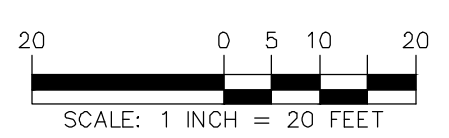
●	BOLLARD
○	COLUMN
△	DOOR
△	DOUBLE DOOR
△	HANDICAP SYMBOL
○	ROOF VENT
○	SIGN
○	SHRUB
○	TREE
○	CATCH BASIN
○	ELECTRIC BOX
○	ELECTRIC METER
○	FILLER VALVE
○	FIRE HYDRANT
○	GAS METER
○	GAS VALVE
○	LIGHT POLE
○	MANHOLE (TYPE AS LABELED)
○	POST INDICATOR VALVE
○	POWER POLE
○	ROOF DRAIN
○	STANDPIPE
○	TRAFFIC SIGNAL ARM
○	UNDERGROUND VAULT
○	VALVE UNKNOWN
○	WATER METER
○	WATER VALVE
○	SPOT ELEVATION
○	CONCRETE PAD
○	EDGE OF GRAVEL
○	DETECTABLE WARNING
○	DOUBLE YELLOW STRIPE
○	OVERHEAD WIRE
○	EASEMENT LINE
○	PROPERTY LINE
○	RIGHT-OF-WAY LINE
○	CONTOUR LINE
○	DRAINAGE
○	ELECTRIC MARK OUT LINE
○	COMMUNICATION MARK OUT LINE
○	GAS MARK OUT LINE
○	SANITARY SEWER
○	WATER MARK OUT LINE

- NOTES**
- EXISTING FEATURES SHOWN BASED ON SURVEY PLAN PERFORMED BY LANGAN ENGINEERING NAMED "20-36 WEST 3RD STREET - BOUNDARY AND TOPOGRAPHIC SURVEY" AND DATED 04-14-2020.
  - THE MERIDIAN OF THIS SURVEY IS REFERENCED TO THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM MAP 83.
  - ELEVATIONS SHOWN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM (NAVD 88).
  - PLANIMETRIC INFORMATION SHOWN HEREON HAS BEEN OBTAINED FROM GROUND SURVEYS BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC. DURING MARCH 2020.
  - OFFSETS (IF SHOWN) ARE FOR SURVEY REFERENCES ONLY AND SHOULD NOT BE USED IN CONSTRUCTION OF ANY TYPE. LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC. RECOMMENDS THE PLACEMENT OF SURVEY MARKERS.
  - WETLANDS, ENVIRONMENTAL AND/OR HAZARDOUS MATERIALS LOCATION, IF ANY, NOT COVERED UNDER THIS CONTRACT.
  - UNLESS SPECIFICALLY NOTED HEREON, STORM AND SANITARY SEWER INFORMATION (INCLUDING PIPE INVERT, PIPE MATERIAL, AND PIPE SIZE) WAS OBSERVED AND MEASURED AT FIELD LOCATED STRUCTURES (MANHOLES/CATCH BASINS, ETC.). CONDITIONS CAN VARY FROM THOSE ENCOUNTERED AT THE TIMES WHEN AND THE LOCATIONS WHERE DATA WAS OBTAINED. DESPITE MEETING THE REQUIRED STANDARD OF CARE THE SURVEYOR CANNOT AND DOES NOT WARRANT THAT PIPE MATERIAL AND/OR PIPE SIZE THROUGHOUT THE PIPE RUN ARE THE SAME AS THOSE OBSERVED AT EACH STRUCTURE, OR THAT THE PIPE RUN IS STRAIGHT BETWEEN THE LOCATED STRUCTURES. ADDITIONAL UTILITY (WATER, GAS, ELECTRIC ETC.) DATA SHOWN FROM FIELD LOCATED EXISTING STRUCTURES, AND/OR FROM EXISTING DRAWINGS, UNLESS SPECIFICALLY NOTED HEREON THE SURVEYOR HAS NOT EXCAVATED TO PHYSICALLY LOCATE THE UNDERGROUND UTILITIES. THE SURVEYOR MAKES NO GUARANTEES THAT THE SHOWN UNDERGROUND UTILITIES ARE EITHER IN SERVICE, ABANDONED OR SUITABLE FOR USE, NOR ARE IN THE EXACT LOCATION OR CONFIGURATION INDICATED HEREON.
  - PRIOR TO ANY DESIGN OR CONSTRUCTION THE PROPER UTILITY AGENCIES MUST BE CONTACTED FOR VERIFICATION OF UTILITY TYPE AND FOR FIELD LOCATIONS.
  - BASED ON FEMA FLOOD INSURANCE RATE MAP(FIRM) COMMUNITY PANEL NO. 307 OF 355, MAP NUMBER 42085C0307E, MAP REVISED DATE JULY 16, 2014, FOR THE CITY OF BETHLEHEM, PENNSYLVANIA, NORTHAMPTON COUNTY, THE SUBJECT PROPERTY LIES IN FLOOD ZONE "X". THE MAJORITY OF THE SITE IS IN AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AND A SMALL PORTION IS WITHIN ZONE "X". 0.2% ANNUAL CHANCE FLOODPLAIN, THE AREA TO THE NORTH OF THE FEMA 500 YEAR FLOODPLAIN LINE IS IN "ZONE X - 0.2% ANNUAL CHANCE FLOOD HAZARD, AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH LESS THAN ONE FOOT, WITH DRAINAGE AREAS OF LESS THAN ONE SQUARE MILE". THE AREA OF THE SITE WITHIN THE 0.2% ANNUAL CHANCE FLOOD HAZARD ZONE IS 870 SQUARE FEET, THE AREA TO THE SOUTH OF THE FEMA 500 YEAR FLOODPLAIN LINE IS IN ZONE "X" AREA OF MINIMAL FLOOD HAZARD" WHICH ENCOMPASSES THE MAJORITY OF THE SITE.

**SOIL TYPES**

SYMBOL	NAME	Hydr/c (Y/N)	DEPTH TO BEDROCK (IN.)	DEPTH TO WATER TABLE (IN.)	HYDROLOGIC SOIL GROUP	LIMITATION	RESOLUTION
UkaB	Urban land, 0 to 8 percent slopes	N	N/A*	N/A*	N/A*	Susceptible to sinkholes	Sinkhole repair shall follow details provided on Drawing CE-501. Ponded water shall be pumped through a filter bag.

\* Depth to Bedrock, Depth to Water Table, and Hydrologic Soil Group are not provided in the Web Soil Survey.



Date	Description	No.
11/05/21	REVISED PER CITY COMMENTS	1

**LANGAN**  
 Langan Engineering and Environmental Services, Inc.  
 One West Broad Street, Suite 200  
 Bethlehem, PA 18018  
 T: 610.984.8500 F: 610.984.8501 www.langan.com

REGISTERED PROFESSIONAL ENGINEER  
 SCOTT ENGELHARDT  
 PE-057145-E

**LANGAN**  
 Langan Engineering and Environmental Services, Inc.  
 One West Broad Street, Suite 200  
 Bethlehem, PA 18018  
 T: 610.984.8500 F: 610.984.8501 www.langan.com

Project  
**3RD STREET MIXED USE BUILDING**  
 CITY OF BETHLEHEM  
 NORTHAMPTON COUNTY PENNSYLVANIA

Drawing Title  
**EXISTING CONDITIONS PLAN**

Project No.  
**240052001**

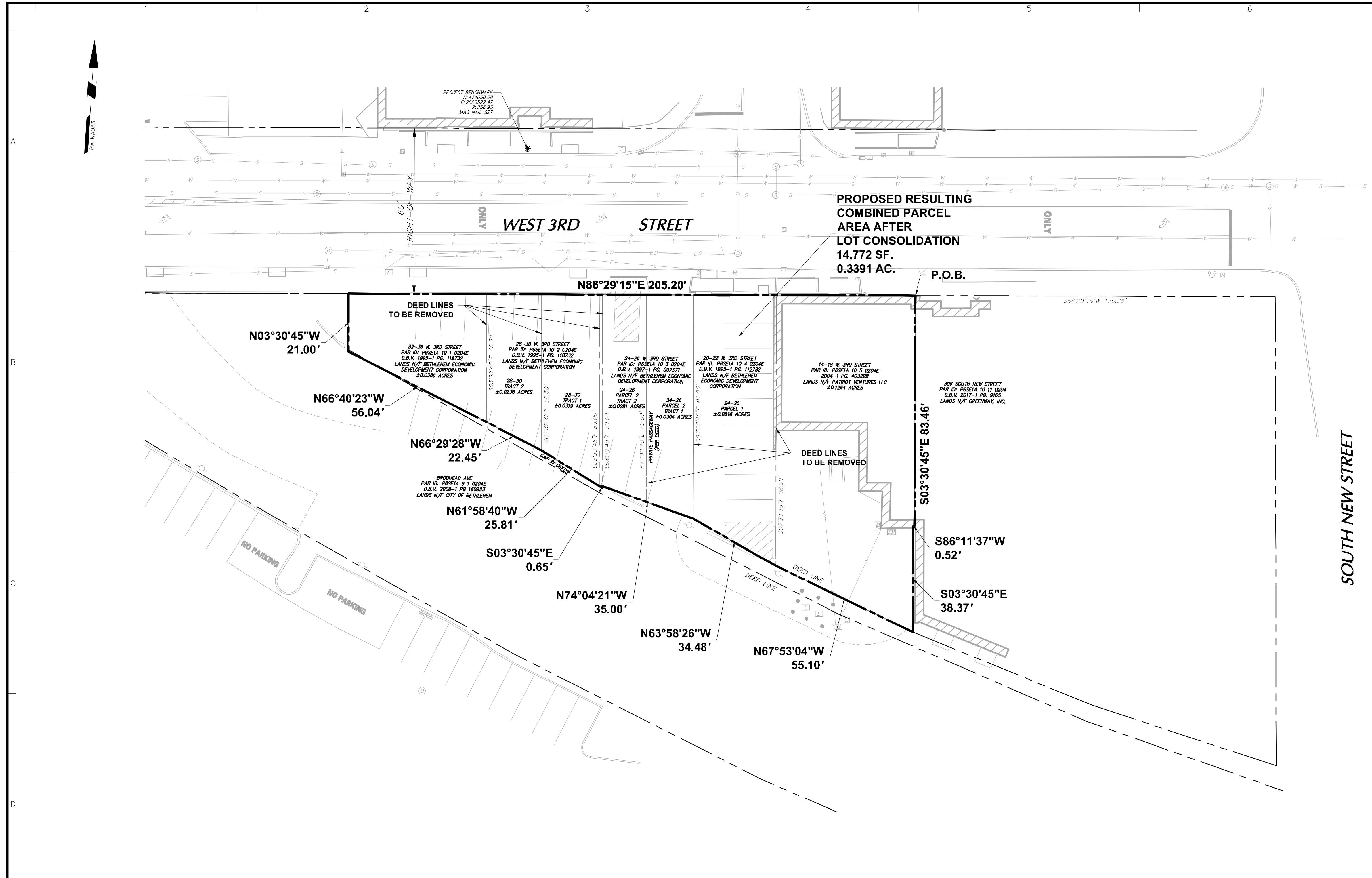
Date  
**08/09/21**

Drawn By  
**TLP**

Checked By  
**ISE**

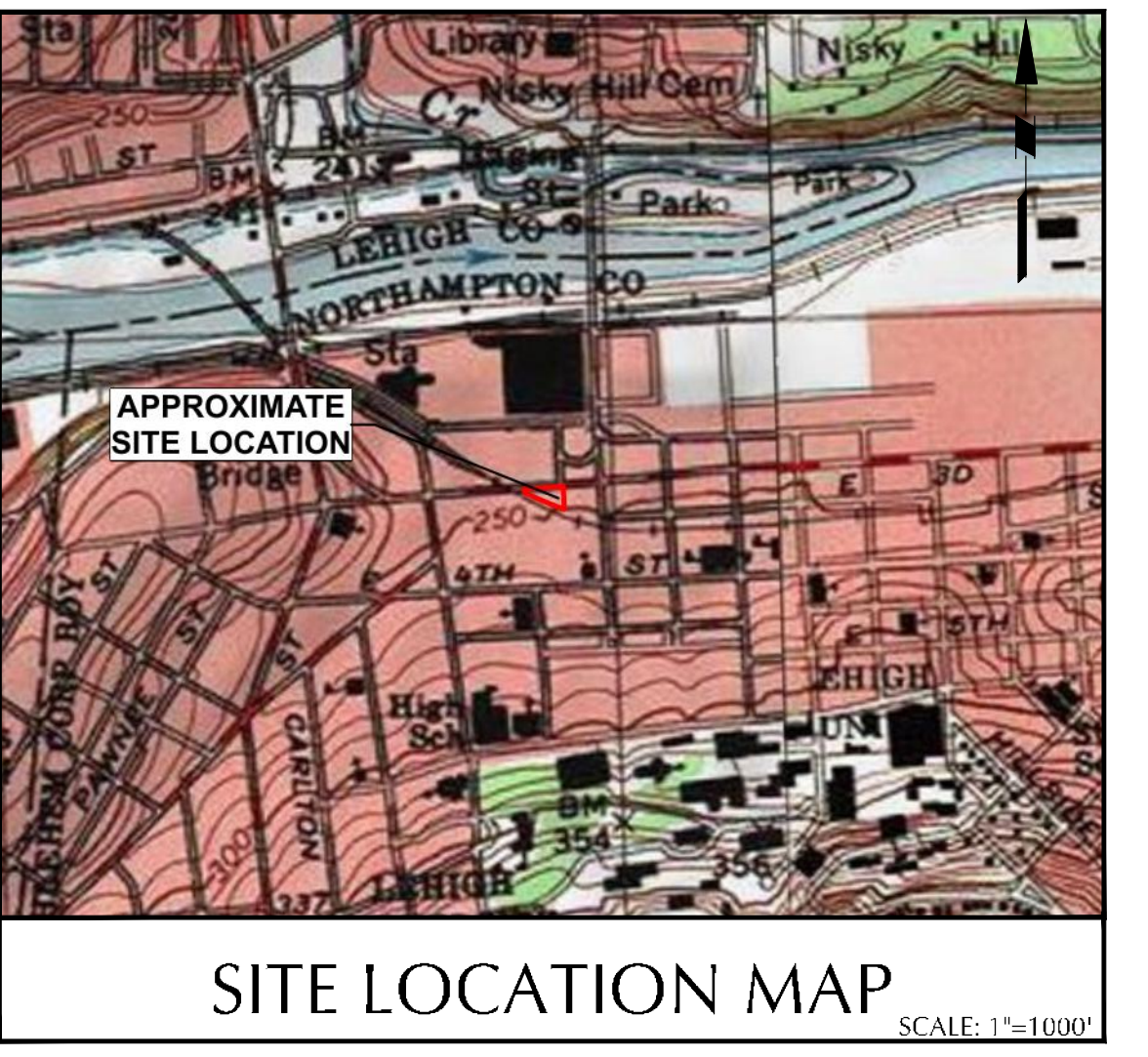
Drawing No.  
**VT-101**

Sheet 2 of 14



**EXISTING LEGEND**

BOLLARD	•
COLUMN	○
DOOR	—
DOUBLE DOOR	—
HANDICAP SYMBOL	♿
ROOF VENT	⊙
SIGN	⊕
SHRUB	⊗
TREE	⊙
CATCH BASIN	⊕
ELECTRIC BOX	⊕
ELECTRIC METER	⊕
FILLER VALVE	⊕
FIRE HYDRANT	⊕
GAS METER	⊕
GAS VALVE	⊕
LIGHT POLE	⊕
MANHOLE (TYPE AS LABELED)	⊕
POST INDICATOR VALVE	⊕
POWER POLE	⊕
ROOF DRAIN	⊕
STANDPIPE	⊕
TRAFFIC SIGNAL ARM	⊕
UNDERGROUND VAULT	⊕
VALVE UNKNOWN	⊕
WATER METER	⊕
WATER VALVE	⊕
SPOT ELEVATION	⊕
CONCRETE PAD	⊕
EDGE OF GRAVEL	⊕
DETECTABLE WARNING	⊕
DOUBLE YELLOW STRIPE	⊕
OVERHEAD WIRE	⊕
EASEMENT LINE	⊕
PROPERTY LINE	⊕
RIGHT-OF-WAY LINE	⊕
CONTOUR LINE	⊕
DRAINAGE	⊕
ELECTRIC MARK OUT LINE	⊕
COMMUNICATION MARK OUT LINE	⊕
GAS MARK OUT LINE	⊕
WATER MARK OUT LINE	⊕
EXISTING SDG GROUP NAME	⊕



**ACT 287 AS AMENDED**  
 IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH THE PENNSYLVANIA ACT 287 (AS AMENDED) AND TO CONTRACT THE PHONE CALL SYSTEM THREE (3) WORKING DAYS (UNLESS OTHERWISE NOTED) PRIOR TO START OF CONSTRUCTION.  
 PENNSYLVANIA ONE CALL 1-800-242-1776  
 SERIAL NO (20-36 W 3RD STREET): 20212023393



**NOTES**

- THIS PLAN IS NOT VALID UNLESS EMBOSSED OR STAMPED WITH THE SEAL OF THE UNDERSIGNED PROFESSIONAL(S).
- THE MERIDIAN OF THIS SURVEY IS REFERENCED TO THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM NAD 83.
- ELEVATIONS SHOWN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM (NAVD 88).
- BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN BASED ON A FIELD SURVEY PERFORMED BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC. DURING MARCH 2020.
- THE PURPOSE OF THIS PLAN IS TO CONSOLIDATE THE FOLLOWING PARCELS INTO ONE.  
 PAR ID: P6SE1A 10 1 0204E  
 PAR ID: P6SE1A 10 2 0204E TRACTS 1 & 2  
 PAR ID: P6SE1A 10 3 0204E PARCEL 2 TRACT 1  
 PAR ID: P6SE1A 10 3 0204E PARCEL 2 TRACT 2  
 PAR ID: P6SE1A 10 4 0204E PARCEL 1  
 PAR ID: P6SE1A 10 5 0204E

LOT CONSOLIDATION TABLE		
PAR ID	OWNER	AREA (AC.)
P6SE1A-10-1-0204E	LANDS N/F BETHLEHEM ECONOMIC DEVELOPMENT CORPORATION	0.0386
P6SE1A-10-2-0204E Tract 1	LANDS N/F BETHLEHEM ECONOMIC DEVELOPMENT CORPORATION	0.0319
P6SE1A-10-2-0204E Tract 2	LANDS N/F BETHLEHEM ECONOMIC DEVELOPMENT CORPORATION	0.0236
P6SE1A-10-3-0204E Parcel 2 Tract 1	LANDS N/F BETHLEHEM ECONOMIC DEVELOPMENT CORPORATION	0.0304
P6SE1A-10-3-0204E Parcel 2 Tract 2	LANDS N/F BETHLEHEM ECONOMIC DEVELOPMENT CORPORATION	0.0281
P6SE1A-10-4-0204E Parcel 1	LANDS N/F BETHLEHEM ECONOMIC DEVELOPMENT CORPORATION	0.0616
P6SE1A-10-5-0204E	LANDS N/F PATRIOT VENTURES LLC	0.1264
<b>PROPOSED RESULTING COMBINED PARCEL AREA AFTER LOT CONSOLIDATION</b>		<b>0.3391</b>

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

JOE POSH, PRESIDENT DATE \_\_\_\_\_  
 POSH PROPERTIES  
 SWORN AND SUBSCRIBED BEFORE ME THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_

NOTARY PUBLIC  
 MY COMMISSION EXPIRES: \_\_\_\_\_

**CERTIFICATE OF APPROVAL BY THE CITY PLANNING COMMISSION**  
 ON \_\_\_\_\_ THE PLANNING COMMISSION OF THE CITY OF BETHLEHEM APPROVED THE LOT CONSOLIDATION PLAN.

PLANNING COMMISSION CHAIRMAN SECRETARY  
 REVIEWED BY THE LEHIGH VALLEY PLANNING COMMISSION  
 DATE \_\_\_\_\_ PLANNER \_\_\_\_\_

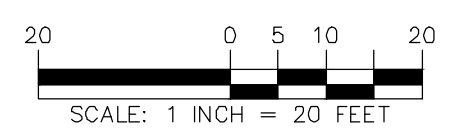
**RECORDING INFORMATION**  
 RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS, NORTHAMPTON COUNTY, PENNSYLVANIA IN VOL. NO. \_\_\_\_\_ PAGE NO. \_\_\_\_\_ ON \_\_\_\_\_, 20\_\_\_\_

**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.

JASON ENGELHARDT, P.E.  
 REGISTRATION NO. PE-057145-E

**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.

SHAUN HIGGINS PROFESSIONAL LAND SURVEYOR  
 PA LIC. NO. SU-051088-E



Date	Description	No.
11/05/21	REVISED PER CITY COMMENTS	1

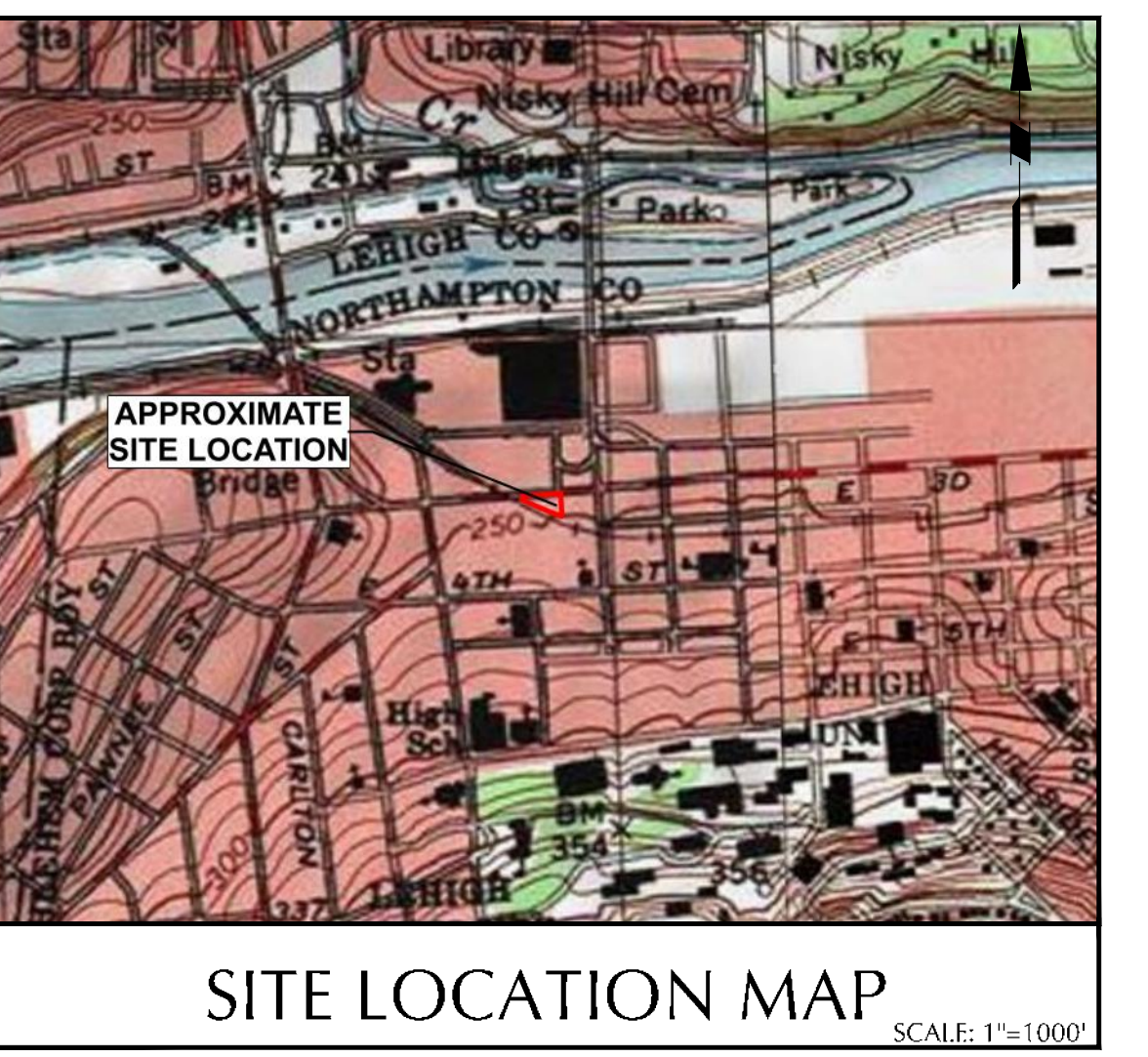
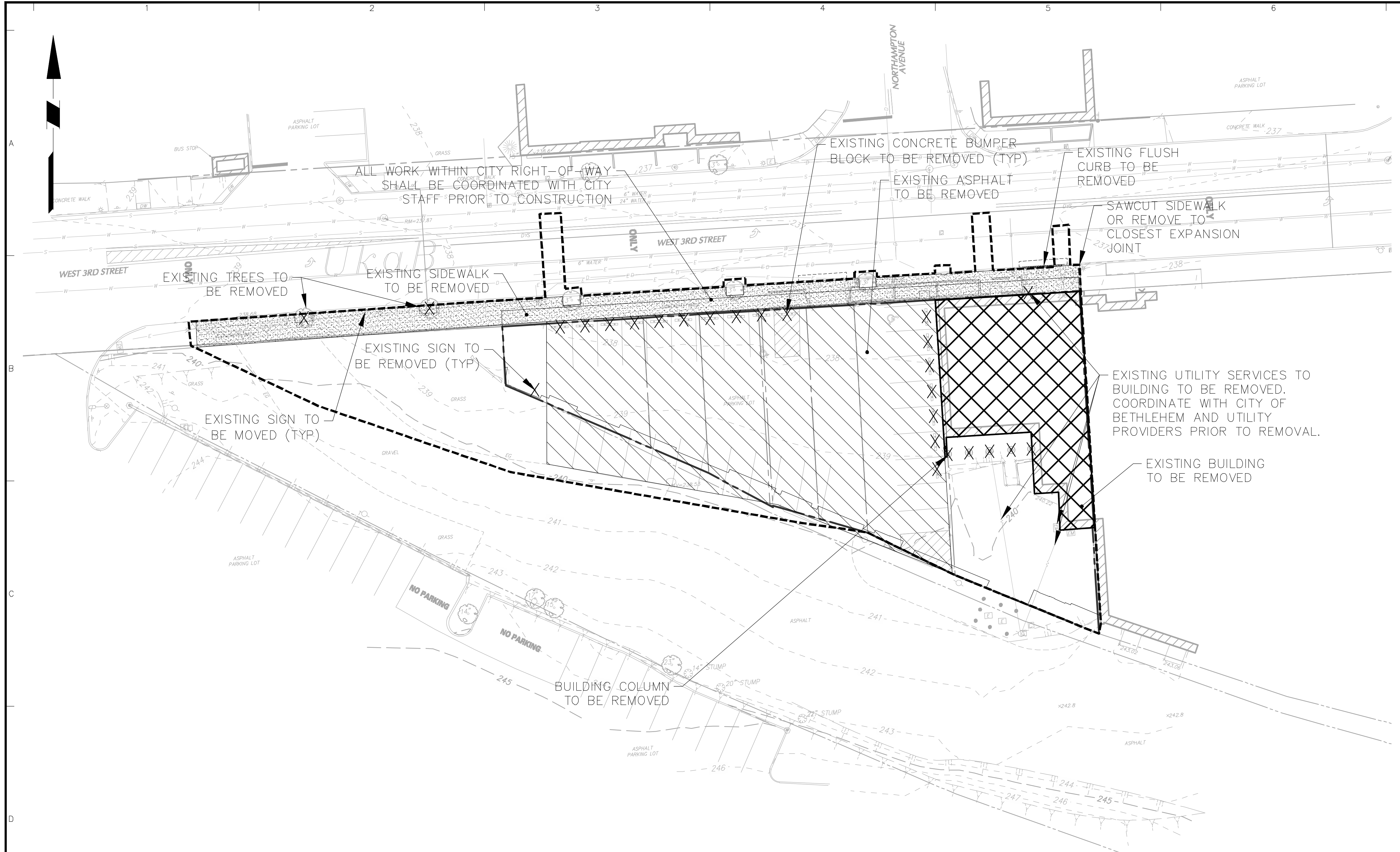
**LANGAN**  
 Langan Engineering and Environmental Services, Inc.  
 One West Broad Street, Suite 200  
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 T: 610.984.8500 F: 610.984.8501 www.langan.com

Project  
**3RD STREET MIXED USE BUILDING**  
 NORTHAMPTON COUNTY PENNSYLVANIA

Drawing Title  
**LOT CONSOLIDATION PLAN**

Project No.  
**240052001**  
 Date  
**08/09/21**  
 Drawn By  
**JDM**  
 Checked By  
**SH**

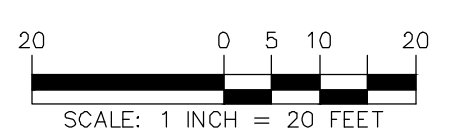
Drawing No.  
**CB-101**  
 Sheet 3 of 14



DEMOLITION LEGEND	
	PROPOSED LIMIT OF DISTURBANCE
	EXISTING ASPHALT TO BE REMOVED
	EXISTING SIDEWALK AREA TO BE REMOVED
	EXISTING BUILDING TO BE REMOVED
	SITE FEATURES TO BE REMOVED

**DEMOLITION NOTES**

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL INSPECT THE SITE THOROUGHLY AND FIELD VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES AND LATERALS. UNDERGROUND ELECTRIC, TELEPHONE, VAULTS, GAS, WATER MAINS, ETC. ARE APPROXIMATE AND MUST BE FIELD VERIFIED. UTILITY INFORMATION HAS BEEN PROVIDED BY OTHERS AND NOT PREPARED BY LANGAN ENGINEERING & ENVIRONMENTAL SERVICES AND FROM UTILITY COMPANY RECORD PLANS. OTHER UTILITIES MAY ALSO EXIST. ALL CONTRACTORS USING THESE PLANS FOR DEMOLITION SHALL CONFIRM ALL UTILITIES IN THE FIELD FOR EXACT LOCATIONS, SIZES, MATERIALS, AND ELEVATIONS.
- THE CONTRACTOR SHALL REVIEW AND COMPLY WITH ALL PROVISIONS OF CITY OF BETHLEHEM, AND OTHER JURISDICTIONAL AGENCIES.
- THE CONTRACTOR SHALL MAINTAIN AND PROTECT ALL OFFSITE PROPERTY AND STRUCTURES FROM ANY AND ALL DAMAGE DURING THE DEMOLITION OPERATION. THE CONTRACTOR SHALL USE ANY NECESSARY PROTECTION SCREENS, PLATFORMS, BRACING, UNDERPINNING, ETC., TO PROTECT OFFSITE PROPERTY. ANY OFFSITE DAMAGE CAUSED BY THE CONTRACTOR OR HIS AGENTS SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSTRUCTION PERMITS INCLUDING, BUT NOT LIMITED TO, SIDEWALK/STREET CLOSING AND DEMOLITION.
- DEMO CONTRACTOR SHALL COORDINATE DECOMMISSIONING AND REMOVAL OF UTILITY LINES WITH UTILITY CONTRACTOR AS TO LOCATION AND CONDITION OF CAPPING. THE ACCESS SHALL REMAIN OPEN AND OPERATIONAL AT ALL TIMES.
- ALL EXISTING STRUCTURES WITHIN CONSTRUCTION AREA, UNLESS OTHERWISE NOTED TO REMAIN, SHALL BE REMOVED & DISPOSED OF OFF SITE.
- THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSING IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES, OF ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE, STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS.
- THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
- ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC CABLE AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. CONTRACTOR SHALL PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN ANY ROAD RIGHT OF WAY DURING CONSTRUCTION.
- CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC.
- PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.
- SHOULD REMOVAL AND/OR RELOCATION ACTIVITIES DAMAGE ANY ITEMS TO REMAIN, THEN THE CONTRACTOR SHALL PROVIDE NEW MATERIALS / STRUCTURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. EXCEPT FOR MATERIALS DESIGNED TO BE RELOCATED ON THIS PLAN, ALL OTHER CONSTRUCTION MATERIALS SHALL BE NEW.
- CONTRACTOR SHALL MAINTAIN EXISTING SIDEWALKS CLEAR AND FREE FROM ANY CONSTRUCTION ACTIVITY AND/OR MATERIAL TO ENSURE EASY AND SAFE PEDESTRIAN TRAFFIC IN FRONT OF THE SITE TO THE MAXIMUM EXTENT PRACTICAL. WHEN SIDEWALK CLOSURE BECOMES NECESSARY, THE CLOSURE AND REQUIRED SIGNAGE SHALL BE COORDINATED WITH THE CITY OF BETHLEHEM.
- THE CONTRACTOR SHALL ENSURE CONTINUOUS UTILITY SERVICE TO EXISTING BUILDINGS DURING DEMOLITION. SEE UTILITY PLAN FOR PROPOSED CONNECTION INFORMATION.
- WHERE APPLICABLE, POLES AND FOOTINGS ARE TO BE REMOVED WITH ASSOCIATED ITEMS.
- TEMPORARY CONSTRUCTION EASEMENT FOR PAVEMENT REMOVAL WORK WITHIN CITY OF BETHLEHEM PROPERTY IS SHOWN ON SHEET CS-101
- THE CONTRACTOR IS TO LOCATE THE EXISTING UTILITY LATERALS AT TIME OF BUILDING DEMO AND TO CAP ALL EXISTING LATERALS. EXISTING SANITARY LATERAL IS TO BE CAPPED AT MAIN.



Date	Description	No.
11/05/21	REVISED PER CITY COMMENTS	1
Revisions		

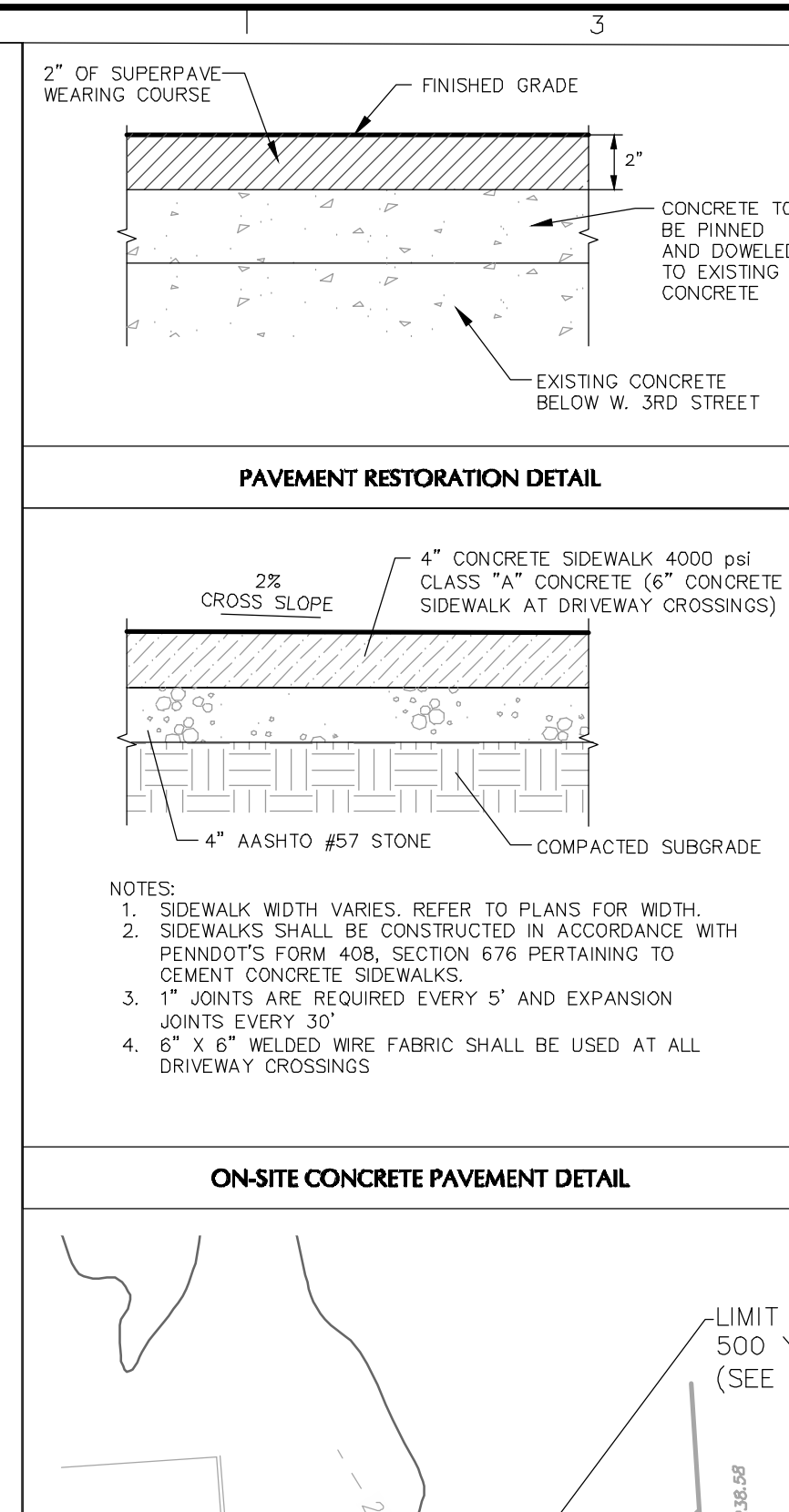
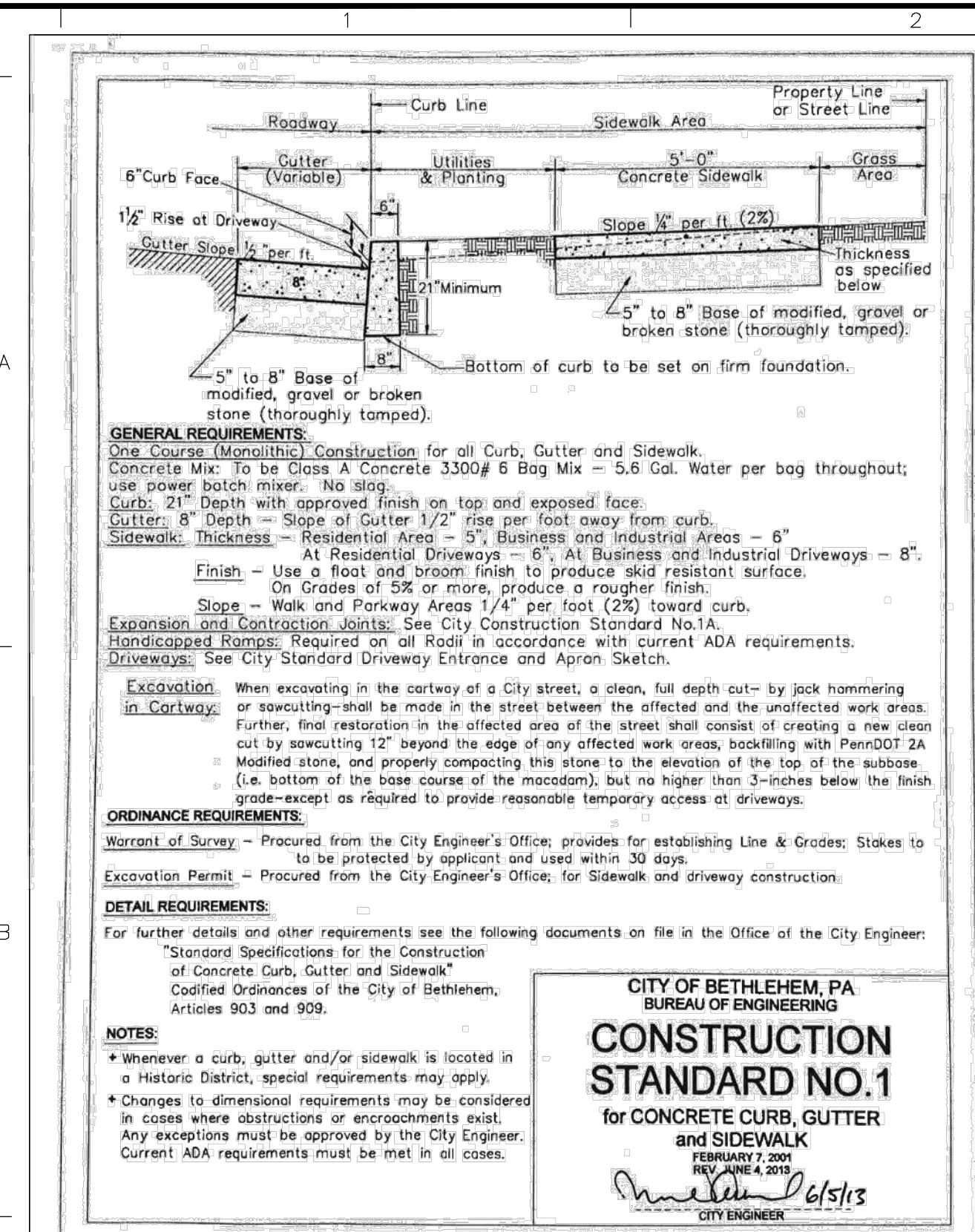
SIGNATURE: *Scott Engelhardt* DATE SIGNED: \_\_\_\_\_  
 PROFESSIONAL ENGINEER PA Lic. No. PE-057145-E

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Project  
**3RD STREET MIXED USE BUILDING**  
 CITY OF BETHLEHEM  
 NORTHAMPTON COUNTY PENNSYLVANIA

Drawing Title  
**DEMOLITION PLAN**

Project No.	240052001	Drawing No.	<b>CD-101</b>	
Date	08/09/21	Sheet		4 of 14
Drawn By	IDL			
Checked By	ISE			



**PROPOSED LEGEND**

- PR. BUILDING PROPERTY LINE
- PR. SETBACK LINE
- PR. LOT LINE
- PR. STORM SEWER
- PR. SANITARY SEWER
- PR. CLEANOUT/CURB STOP
- PR. CONTOUR
- PR. SPOT ELEVATION
- PR. CONCRETE SIDEWALK
- PR. MILL AND OVERLAY
- PR. TEMPORARY EASEMENT

**SIGN LEGEND**

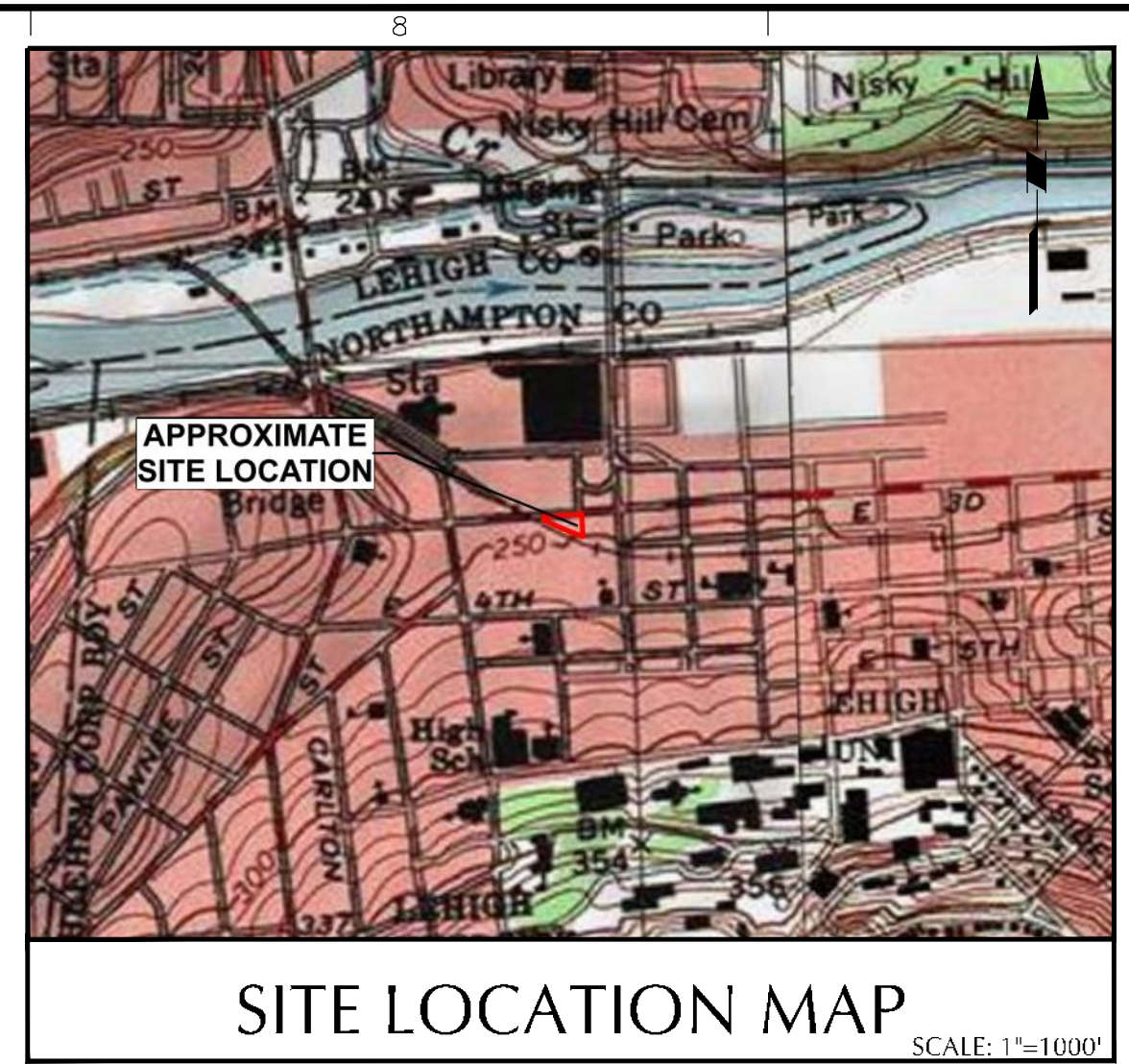
- 25 MPH SPEED LIMIT
- NO PARKING 30 MIN. LOADING ZONE

**EXISTING LEGEND**

- ROLLBAR
- COLUMN
- DOOR
- DOUBLE DOOR
- HANDICAP SYMBOL
- ROOF VENT
- SIGN
- SHRUB
- TREE
- CATCH BASIN
- ELECTRIC BOX
- ELECTRIC METER
- FILLER VALVE
- FIRE HYDRANT
- GAS METER
- GAS VALVE
- LIGHT POLE
- MANHOLE (TYPE AS LABELED)
- POST INDICATOR VALVE
- POWER POLE
- ROOF DRAIN
- STANDARD
- TRAFFIC SIGNAL ARM
- UNDERGROUND VAULT
- VALVE UNKNOWN
- CONCRETE PAD
- WATER METER
- WATER VALVE
- SPOT ELEVATION
- CONCRETE PAD
- EDGE OF GRAVEL
- DETECTABLE WARNING
- DOUBLE YELLOW STRIPE
- OVERHEAD WIRE
- EASEMENT LINE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- CONTOUR LINE
- DRAINAGE
- ELECTRIC MARK OUT LINE
- COMMUNICATION MARK OUT LINE
- GAS MARK OUT LINE
- SANITARY SEWER
- WATER MARK OUT LINE
- EXISTING SOIL GROUP NAME

**City of Bethlehem Zoning Table**

ITEM	ZONING DISTRICT: CB	
	PERMITTED/REQUIRED	PROPOSED
<b>SITE</b>	CB	CB
Land Use:	Mixed Use (1)	Mixed Used Building
Min. Lot Area:	1,800 sq. ft.	14,758 sq. ft.
Min. Lot Width:	18 ft.	201 ft.
<b>BUILDING</b>		
Min. Front:	0 ft.	0 ft.
Min. Side:	0 ft.	0 ft.
Min. Rear:	0 ft.	0 ft.
Maximum Building Height:	150 ft.	<150 ft (8 Stories)
Maximum Impervious Coverage:	100%	96%
Maximum Building Coverage:	100%	91.5%



**STATEMENT OF PURPOSE**

- THE FIRST FLOOR BUILDING TO HAVE APPROXIMATELY 8,300 SQUARE FEET DESIGNATED FOR A RESTAURANT USE. THE REST OF THE FLOOR TO BE USED AS A LOBBY FOR THE APARTMENT UNITS ON THE FLOORS ABOVE, AND STAIRWELLS. THE NUMBER OF EMPLOYEES PER MAXIMUM SHIFT IS EXPECTED TO BE APPROXIMATELY 30.
- THERE ARE 87 APARTMENT UNITS PROPOSED. THE BREAKDOWN OF UNIT TYPES IS AS FOLLOWS: 10 EFFICIENCIES, 59 ONE BEDROOM UNITS, AND 18 TWO BEDROOM UNITS.

**ACT 287 AS AMENDED**

IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH THE PENNSYLVANIA ACT 287 (AS AMENDED) AND TO CONTRACT THE ONE CALL SYSTEM THREE (3) WORKING DAYS (UNLESS OTHERWISE NOTED) PRIOR TO START OF CONSTRUCTION.

PENNSYLVANIA ONE CALL 1-800-242-1776  
SERIAL NO. 020-36 W 3RD STREETS 20212023393



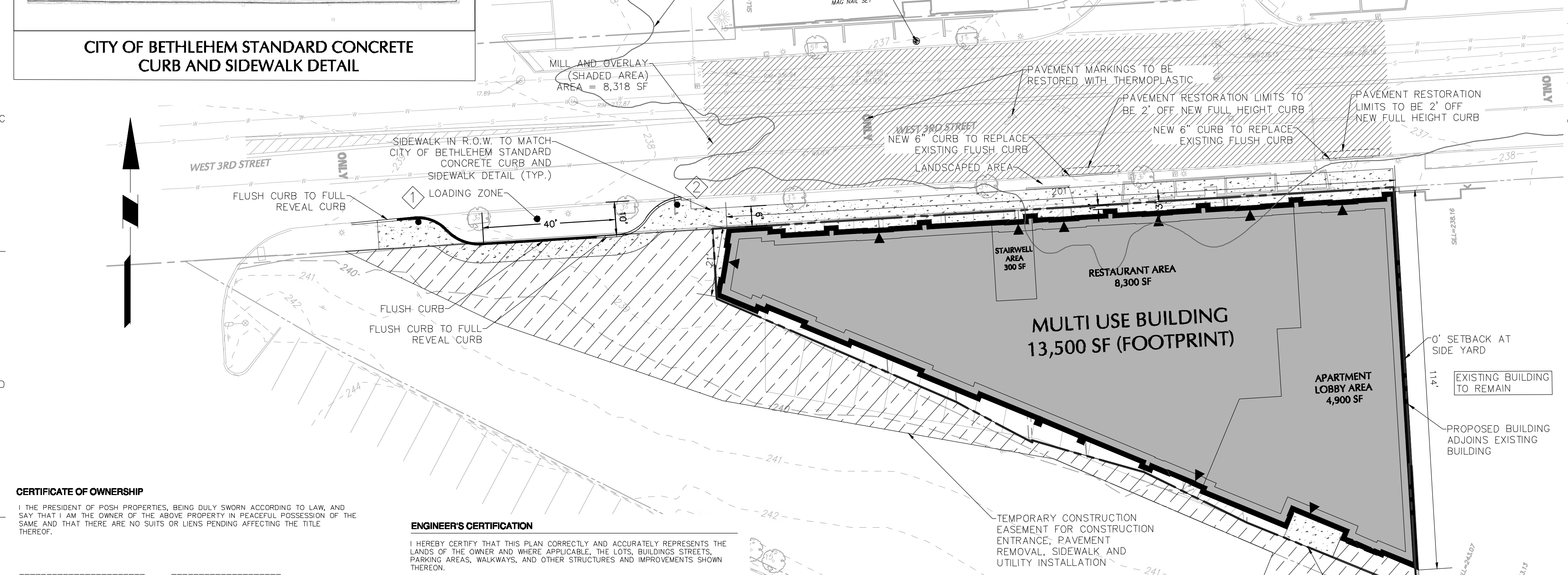
**GENERAL NOTES**

- THE CONTRACTOR SHALL FURNISH, INSTALL, TEST AND COMPLETE ALL WORK TO THE SATISFACTION OF THE ENGINEER AND OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION. AS SUCH, THESE PLANS DO NOT COMPLETELY REPRESENT, NOR ARE THEY INTENDED TO REPRESENT, ALL SPECIFIC INSTRUCTIONS REQUIRED FOR SITEWORK CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO CONSTRUCT ALL IMPROVEMENTS DEPICTED ON THESE PLANS IN ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS AND LAWS IN EFFECT AT THE TIME OF CONSTRUCTION.
- THE CONTRACTOR SHALL ACCEPT THE SITE AS IS. THE CONTRACTOR SHALL ASSESS CONDITIONS, AND THE KIND, QUALITY AND QUANTITY OF WORK REQUIRED. THE OWNER AND ENGINEER MAKE NO GUARANTEE IN REGARD TO THE ACCURACY OF ANY INFORMATION THAT WAS OBTAINED DURING INVESTIGATIONS. THE CONTRACTOR SHALL MAKE A THOROUGH SITE INSPECTION IN ORDER TO FIELD CHECK EXISTING SITE CONDITIONS; CORRELATE CONDITIONS WITH THE DRAWINGS; AND, RESOLVE ANY POSSIBLE CONSTRUCTION CONFLICTS WITH THE OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL PERFORM ADDITIONAL TOPOGRAPHIC SURVEYS HE/SHE DEEMS NECESSARY, PROVIDED THEY ARE COORDINATED WITH THE OWNER. ANY CONDITIONS DETERMINED BY THE CONTRACTOR THAT DIFFER FROM THE INFORMATION SHOWN ON THE DRAWINGS THAT ARE NOT BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER PRIOR TO THE START OF WORK SHALL NOT BE CONSIDERED GROUNDS FOR ADDITIONAL PAYMENT OR CHANGES TO THE CONTRACT DURATION, OR ANY OTHER CLAIMS AGAINST THE OWNER OR OWNER'S ENGINEER.
- THE CONTRACTOR SHALL WHEN HE/SHE BEEMS NECESSARY, PROVIDE A WRITTEN REQUEST FOR INFORMATION (RFI) TO THE OWNER AND/OR OWNER'S DESIGNATED REPRESENTATIVE, AND ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITEWORK ITEM. THE (RFI) SHALL BE IN A FORM ACCEPTABLE TO OWNER AND/OR OWNER'S DESIGNATED REPRESENTATIVE, AND ENGINEER AND SHALL ALLOW FOR A MINIMUM OF THREE WORK DAYS FOR A WRITTEN REPLY. RFIS SHALL BE NUMBERED CONSECUTIVELY BY DATE SUBMITTED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITEWORK ITEMS CONSTRUCTED DIFFERENTLY THAN INTENDED OR AS DEPICTED ON THE PLANS.
- INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RIM ELEVATIONS, GRATE ELEVATIONS, BUILDING FINISHED FLOOR ELEVATIONS, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL SUFFICIENTLY REVIEW ALL PLANS, PROFILES AND ANY OTHER INFORMATION IN THE CONTRACT DOCUMENTS FOR CONSISTENCY PRIOR TO BID. ANY INCONSISTENCIES OR DISCREPANCIES THAT ARE FOUND BY THE CONTRACTOR OR HIS ASSIGNS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING, IN THE FORMAT OF AN RFI PRIOR TO BID.
- THERE ARE ADDITIONAL NOTES, SPECIFICATIONS AND REQUIREMENTS CONTAINED THROUGHOUT THE PLAN SET AS WELL AS REFERENCES TO SPECIFICATIONS FROM APPLICABLE GOVERNING AUTHORITIES AND INDUSTRY STANDARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN, REVIEW AND ADHERE TO ALL THESE DOCUMENTS.
- CONTRACTOR IS SPECIFICALLY CAUTIONED THAT ALL CONSTRUCTION STAKEOUT FOR THIS PROJECT MUST BE COMPLETED FROM THE SITE SPECIFIC SURVEY CONTROL (HORIZONTAL AND VERTICAL) UPON WHICH THE DESIGN IS BASED. THE CONTRACTOR SHOULD NOT RELY ON RE-ESTABLISH SURVEY CONTROL BY GPS OR OTHER METHODS FOR USE IN CONSTRUCTION STAKEOUT OR ANY OTHER PURPOSE FOR THIS PROJECT. ANY DISCREPANCIES BETWEEN THE EXISTING HORIZONTAL OR VERTICAL DATA SHOWN ON THESE DRAWINGS AND THAT ENCOUNTERED IN THE FIELD MUST BE REPORTED TO THE DESIGN TEAM PRIOR TO CONSTRUCTION FOR RESOLUTION.

**SITE PLAN NOTES**

- THIS PLAN IS NOT VALID UNLESS EMBOSSED OR STAMPED WITH THE SEAL OF THE UNDERSIGNED PROFESSIONAL(S).
- THE MERIDIAN OF THIS SURVEY IS REFERENCED TO THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM NAD 83.
- ELEVATIONS SHOWN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM (NAVD 88).
- BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN BASED ON A FIELD SURVEY PERFORMED BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC. DURING MARCH 2020.
- A PENNSYLVANIA ONE CALL DESIGN MARK OUT REQUEST WAS MADE BY LANGAN ENGINEERING. SERIAL #20212023393. IT IS IMPERATIVE THAT THE UTILITY COMPANIES ARE NOTIFIED PRIOR TO ANY EXCAVATION AND / OR CONSTRUCTION. CALL 1-800-242-1776 TO ORDER UTILITY MARK OUTS.
- CONTRACTOR SHALL PROVIDE WRITTEN REQUESTS FOR INFORMATION TO THE OWNER AND ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITEWORK ITEM IF ANY SPECIFIC SITEWORK ITEM DEPICTED ON THE PLANS WARRANTS ADDITIONAL INFORMATION REQUIRED FOR CONSTRUCTION AND IS NOT RELATED TO MEANS AND METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SPECIFIC SITE WORK ITEMS INSTALLED DIFFERENTLY THAN INTENDED AS DEPICTED ON THE PLANS IN THE ABSENCE OF SUBMITTING AND ADDRESSING WRITTEN REQUESTS FOR INFORMATION.
- BASED ON FEMA FLOOD INSURANCE RATE MAP (FIRM), COMMUNITY PANEL NO. 307 OF 355, MAP NUMBER 42095C0307E, MAP REVISED DATE JULY 16, 2014, FOR THE CITY OF BETHLEHEM, PENNSYLVANIA, NORTHAMPTON COUNTY, THE SUBJECT PROPERTY LIES IN FLOOD ZONE "X". THE MAJORITY OF THE SITE IS IN AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AND A SMALL PORTION IS WITHIN ZONE "X". 0.2% ANNUAL CHANCE FLOODPLAIN. THE AREA TO THE NORTH OF THE FEMA 500 YEAR FLOODPLAIN LINE IS IN "ZONE X - 0.2% ANNUAL CHANCE FLOOD HAZARD". AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH LESS THAN ONE FOOT, WITH DRAINAGE AREAS OF 0.2% LESS THAN ONE SQUARE MILE. THE AREA OF THE SITE WITHIN THE 0.2% ANNUAL CHANCE FLOOD HAZARD ZONE IS 870 SQUARE FEET. THE AREA TO THE SOUTH OF THE FEMA 500 YEAR FLOODPLAIN LINE IS IN ZONE "X" AREA OF MINIMAL FLOOD HAZARD WHICH ENCOMPASSES THE MAJORITY OF THE SITE.
- SITE ADDRESS: 14-36 W. 3RD STREET, BETHLEHEM PA, 18015
- ACCURATE AS-BUILT PLANS SHALL BE KEPT UP TO DATE DURING THE CONSTRUCTION PROCESS. 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 COUNTY, FIPS ZONE 3702) 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 A MYLAR COPY. THE ENGINEER OF RECORD SHALL CERTIFY (I.E. P.E. STAMPED AND SIGNED) THAT THE RECORD DRAWINGS COMPLY SUBSTANTIALLY WITH THE APPROVED PLAN AND THAT 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 THIRTY-SIX (36) INCH BY FORTY-EIGHT (48) 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 CADD STANDARDS AND AS DESCRIBED IN APPENDIX A OF THE CITY'S SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.
- CONTRACTOR SHALL REFER TO LANDSCAPE DRAWINGS AND COORDINATE ACCORDINGLY. ARCHITECT AND ENGINEER SHALL BE NOTIFIED IMMEDIATELY IN CASE OF DISCREPANCIES PRIOR TO CONSTRUCTION.
- RECYCLING AND TRASH COLLECTION WILL BE CONDUCTED INSIDE THE BUILDING.
- THE SITE IS LOCATED IN CITY WARD 2, BLOCK 5A.
- THE EXISTING IMPERVIOUS AREA WITHIN THE LIMIT OF DISTURBANCE IS 16,107 SQUARE FEET. THE PROPOSED IMPERVIOUS COVER AREA IS 16,046 SQUARE FEET. THERE IS A NET DECREASE OF 61 SQUARE FEET, WHICH WOULD MEAN THAT THE SITE IS EXEMPT FROM THE DRAINAGE PLAN PREPARATION PROVISIONS OF THE CITY OF BETHLEHEM STORMWATER MANAGEMENT ORDINANCE. FOR PURPOSES OF THIS CALCULATION, THE EXISTING GRAVEL AREA WAS COUNTED AS PERVIOUS SURFACE.
- ALL PUBLIC INLETS SHOULD HAVE INLET MARKERS. THE DESIGN OF THE INLET MARKERS SHALL BE APPROVED BY THE CITY ENGINEER.
- PRIOR TO ANY WORK WITHIN THE RIGHT-OF-WAY, PERMITS MUST BE OBTAINED FROM CITY ENGINEERING OFFICE.
- A SITE MEETING WITH THE CONTRACTOR WILL BE REQUIRED PRIOR TO ANY CONSTRUCTION WITH THE TRAFFIC BUREAU AND ENGINEERING BUREAU TO DISCUSS HOW CONSTRUCTION WILL TAKE PLACE.
- A KNOX BOX FOR CITY OF BETHLEHEM FIRE DEPARTMENT ACCESS MUST BE INSTALLED. THE LOCATION OF THE KNOX BOX IS TO BE DETERMINED BASED ON DIRECTION FROM CITY OF BETHLEHEM FIRE DEPARTMENT.
- ALL LARGE DELIVERIES/LOADING AND UNLOADING SHALL OCCUR ON OFF-PEAK HOURS. DURING THE DAY THE TEMPORARY LOADING ZONE SHALL ONLY BE USED FOR AMAZON, FEDEX, UPS, FOOD DELIVERIES, ETC.

**CITY OF BETHLEHEM STANDARD CONCRETE CURB AND SIDEWALK DETAIL**



**CERTIFICATE OF OWNERSHIP**

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

JOE POSH, PRESIDENT DATE \_\_\_\_\_  
POSH PROPERTIES

SWORN AND SUBSCRIBED BEFORE ME THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_

NOTARY PUBLIC \_\_\_\_\_  
MY COMMISSION EXPIRES: \_\_\_\_\_

**CERTIFICATE OF APPROVAL BY THE CITY PLANNING COMMISSION**

ON \_\_\_\_\_ THE PLANNING COMMISSION OF THE CITY OF BETHLEHEM APPROVED THE FINAL LAND DEVELOPMENT PLAN.

**REVIEWED BY THE LEHIGH VALLEY PLANNING COMMISSION**

DATE \_\_\_\_\_ PLANNER \_\_\_\_\_

**RECORDING INFORMATION**

RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS, NORTHAMPTON COUNTY, PENNSYLVANIA  
IN VOL. NO. \_\_\_\_\_ PAGE NO. \_\_\_\_\_ ON \_\_\_\_\_, 20\_\_\_\_

**ENGINEER'S CERTIFICATION**

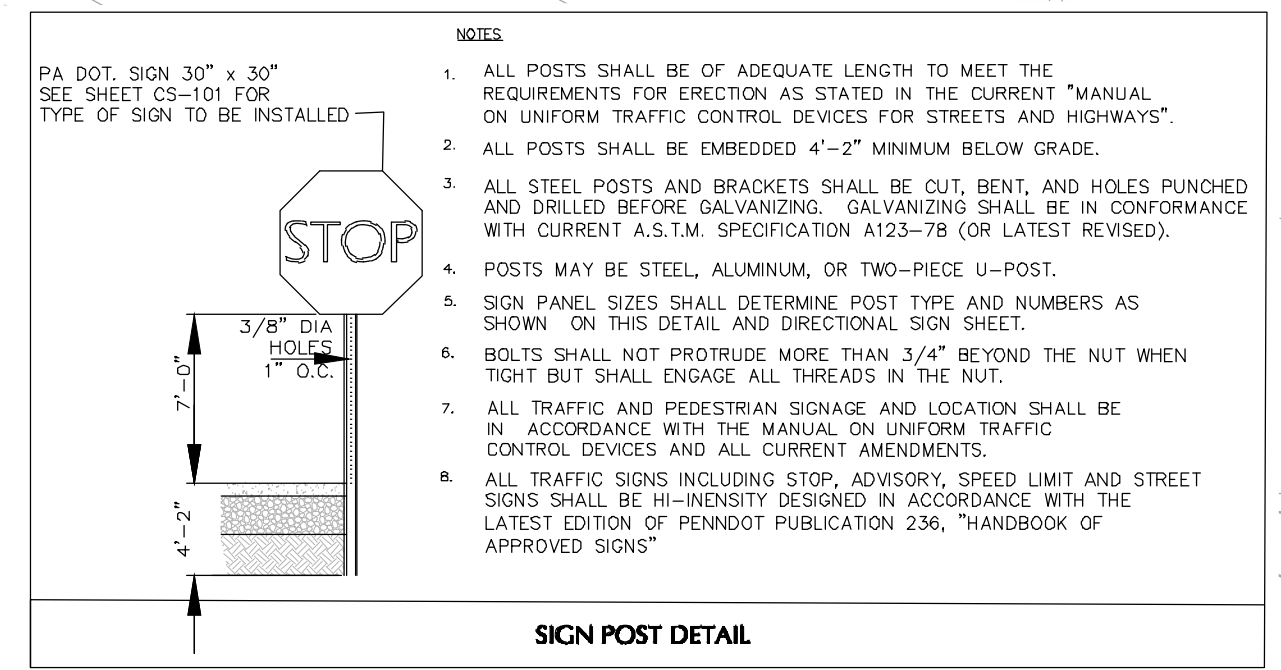
I HEREBY CERTIFY THAT THIS PLAN CORRECTLY AND ACCURATELY REPRESENTS THE LANDS OF THE OWNER AND WHERE APPLICABLE, THE LOTS, BUILDINGS, STREETS, PARKING AREAS, WALKWAYS, AND OTHER STRUCTURES AND IMPROVEMENTS SHOWN THEREON.

JASON ENGELHARDT, P.E.  
REGISTRATION NO. PE-057145-E

**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.

SHAUN HIGGINS PROFESSIONAL LAND SURVEYOR  
PA LIC. NO. SU-051088-E



Date	Description	No.
11/05/21	REVISED PER CITY COMMENTS	1

**LANGAN**  
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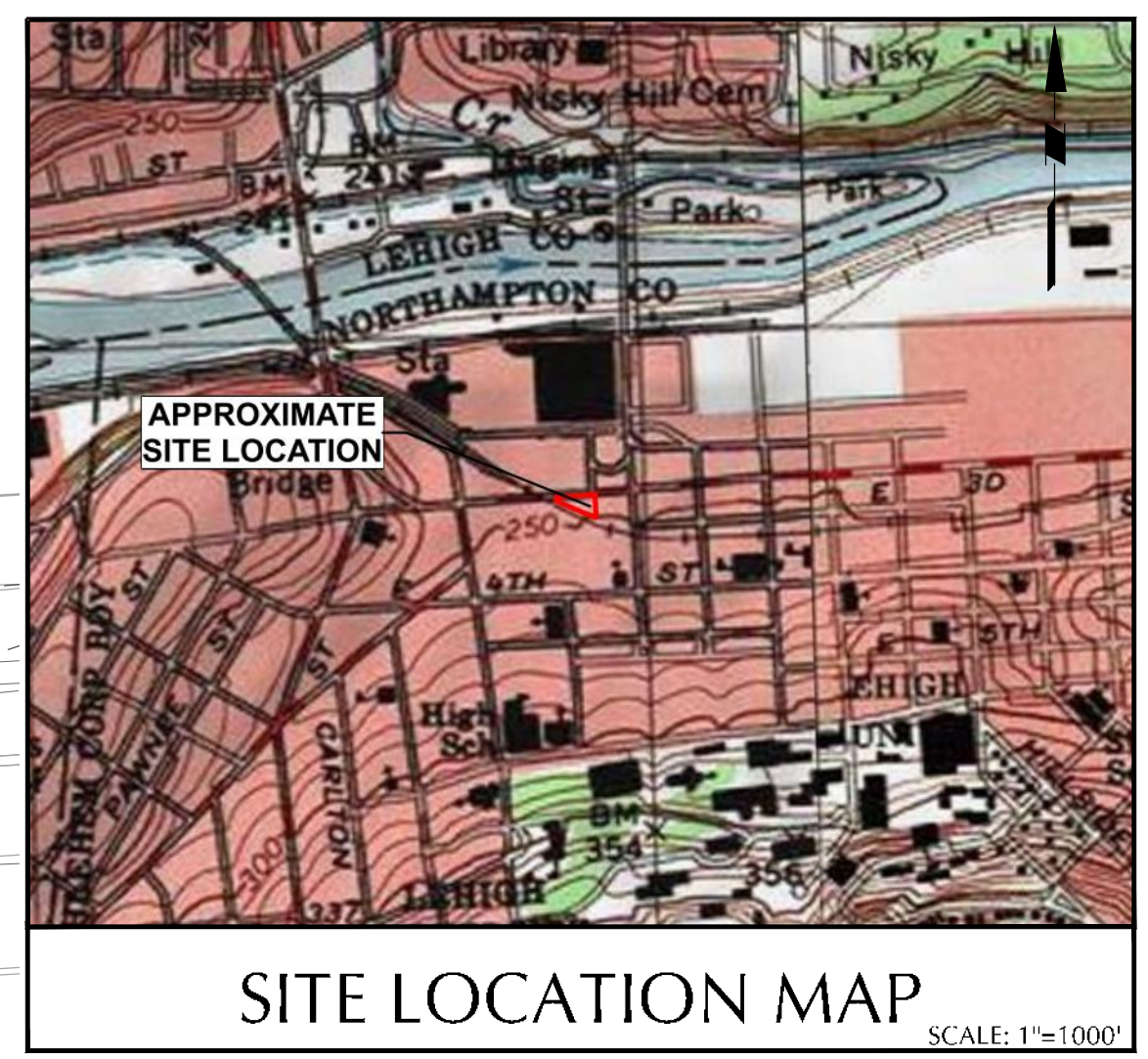
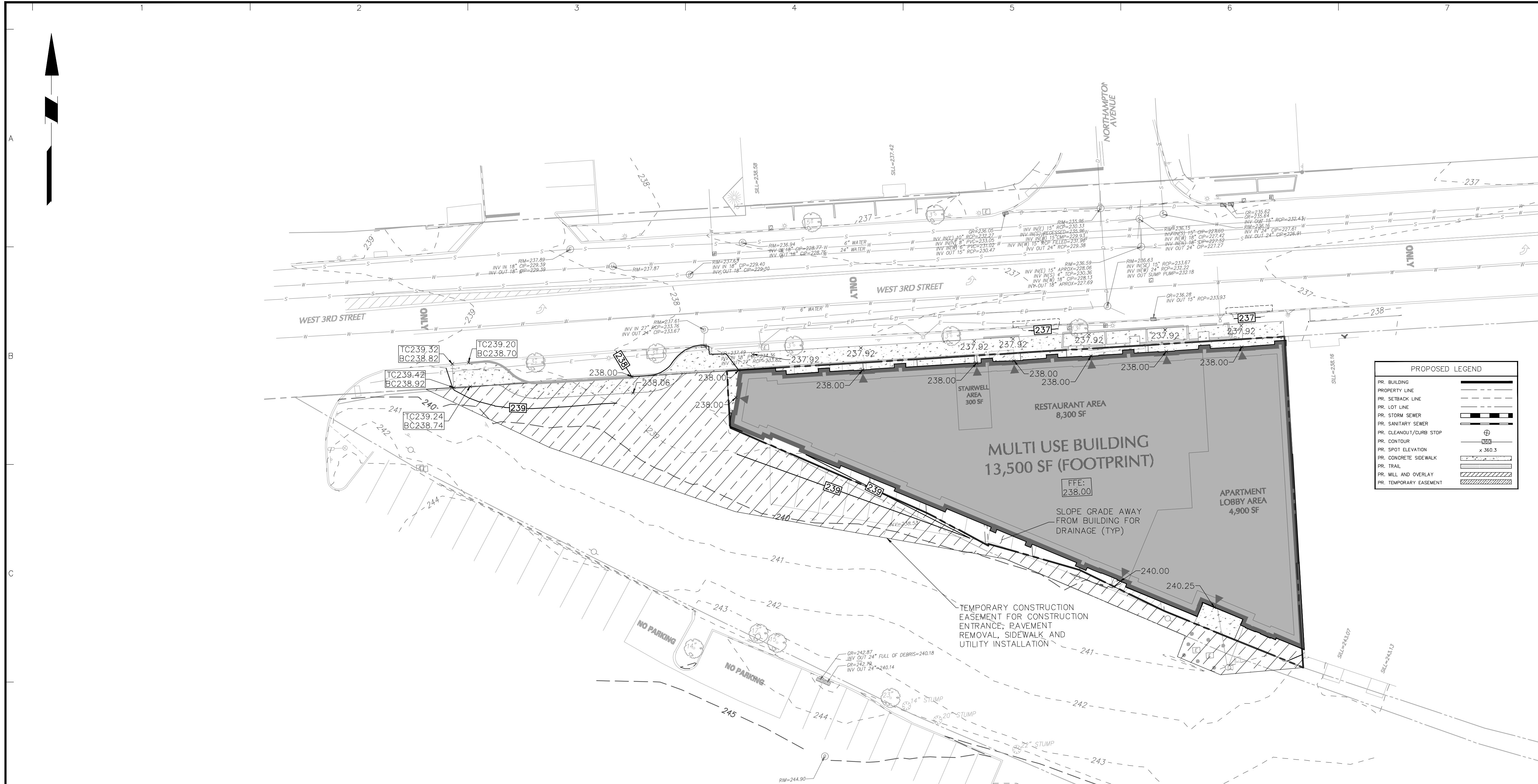
Project: 3RD STREET MIXED USE BUILDING

**CITY OF BETHLEHEM**  
NORTHAMPTON COUNTY PENNSYLVANIA

Project No. 240052001  
Date 08/09/21  
Drawing Title CS-101

Drawn By TLP  
Checked By JSE  
Sheet 5 of 14

Project No. 240052001  
Date 08/09/21  
Drawing Title CS-101  
Sheet 5 of 14



**PROPOSED LEGEND**

PR. BUILDING	---
PR. PROPERTY LINE	---
PR. SETBACK LINE	---
PR. LOT LINE	---
PR. STORM SEWER	---
PR. SANITARY SEWER	---
PR. CLEANOUT/FOUR STOP	---
PR. CONTOUR	---
PR. SPOT ELEVATION	x 360.3
PR. CONCRETE SIDEWALK	---
PR. TRAIL	---
PR. MLL AND OVERLAY	---
PR. TEMPORARY EASEMENT	---

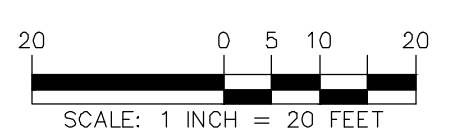
**EXISTING LEGEND**

BOLLARD	●
COLUMN	○
DOOR	△
DOUBLE DOOR	△
HANDICAP SYMBOL	○
ROOF VENT	○
SIGN	○
SHRUB	○
TREE	○
CATCH BASIN	○
ELECTRIC BOX	○
ELECTRIC METER	○
FILLER VALVE	○
FIRE HYDRANT	○
GAS METER	○
GAS VALVE	○
LIGHT POLE	○
MANHOLE (TYPE AS LABELED)	○
POST INDICATOR VALVE	○
POWER POLE	○
ROOF DRAIN	○
STANDPIPE	○
TRAFFIC SIGNAL ARM	○
UNDERGROUND VAULT	○
VALVE UNKNOWN	○
WATER METER	○
WATER VALVE	○
SPOT ELEVATION	x 360.3
CONCRETE PAD	○
EDGE OF GRAVEL	○
DETECTABLE WARNING	○
DOUBLE YELLOW STRIPE	○
OVERHEAD WIRE	○
EASEMENT LINE	---
PROPERTY LINE	---
RIGHT-OF-WAY LINE	---
CONTOUR LINE	---
DRAINAGE	---
ELECTRIC MARK OUT LINE	---
COMMUNICATION MARK OUT LINE	---
GAS MARK OUT LINE	---
SANITARY SEWER	---
WATER MARK OUT LINE	---
EXISTING SOIL GROUP NAME	RhC

**GRADING PLAN NOTES**

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND / OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES, WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC WATER SERVICE, ELECTRICAL TELEPHONE AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND TO ENSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH THE UTILITY COMPANIES AS TO LOCATION AND SCHEDULING OF CONNECTIONS TO THEIR FACILITIES.
- COMPACTION CRITERIA FOR FILL PLACEMENT IN THE FOLLOWING AREAS SHALL MEET OR EXCEED THE FOLLOWING MINIMUM PERCENTAGE OF MAXIMUM MODIFIED PROCTOR DRY DENSITY AS DETERMINED BY ASTM D-1557 USED ON REPRESENTATIVE SOIL SAMPLES, UNLESS MORE STRINGENT CRITERIA GIVEN ELSEWHERE:

FILL AREA	PERCENT OF MAXIMUM MODIFIED PROCTOR DRY DENSITY
BUILDING FOOTPRINT	95%
PAVEMENT AND ROADWAYS	95%
SIDEWALKS	95%
LANDSCAPE AREAS	93%
TRENCH BACKFILL	SAME AS SURROUNDING AREA
- PROTECT SUBGRADE FROM EXCESSIVE WHEEL LOADING DURING CONSTRUCTION, INCLUDING CONCRETE TRUCKS AND DUMP TRUCKS.
- REMOVE AREAS OF FINISHED SUBGRADE FOUND TO HAVE INSUFFICIENT COMPACTION DENSITY TO DEPTH NECESSARY AND REPLACE IN A MANNER THAT WILL COMPLY WITH COMPACTION REQUIREMENTS BY USE OF MATERIAL EQUAL TO OR BETTER THEN BEST SUBGRADE MATERIAL ONSITE. SURFACE OF SUBGRADE AFTER COMPACTION SHALL BE HARD, UNIFORM, SMOOTH, STABLE, AND TRUE TO GRADE AND CROSS SECTION.
- ALL CONCRETE, UNLESS OTHERWISE NOTED OR SPECIFIED BY REGULATORY AUTHORITIES, SHALL BE A MINIMUM OF 4,000 PSI.
- WALL ELEVATIONS SHOWN ON THIS PLAN ARE GIVEN AS SURFACE GRADES AT TOP AND BOTTOM OF WALL AND MAY NOT REPRESENT THE EXACT ELEVATION OF STRUCTURAL RETAINING WALL COMPONENTS (ABOVE AND BELOW GRADE) TO BE CONSTRUCTED.
- FF= FINISHED FLOOR ELEVATION



Date	Description	No.
11/05/21	REVISED PER CITY COMMENTS	1
Revisions		

SIGNATURE: *Scott Enselhardt* DATE SIGNED: \_\_\_\_\_  
 PROFESSIONAL SEAL: SCOTT ENSELHARDT, REGISTERED PROFESSIONAL ENGINEER, PA Lic. No. PE-057145-E

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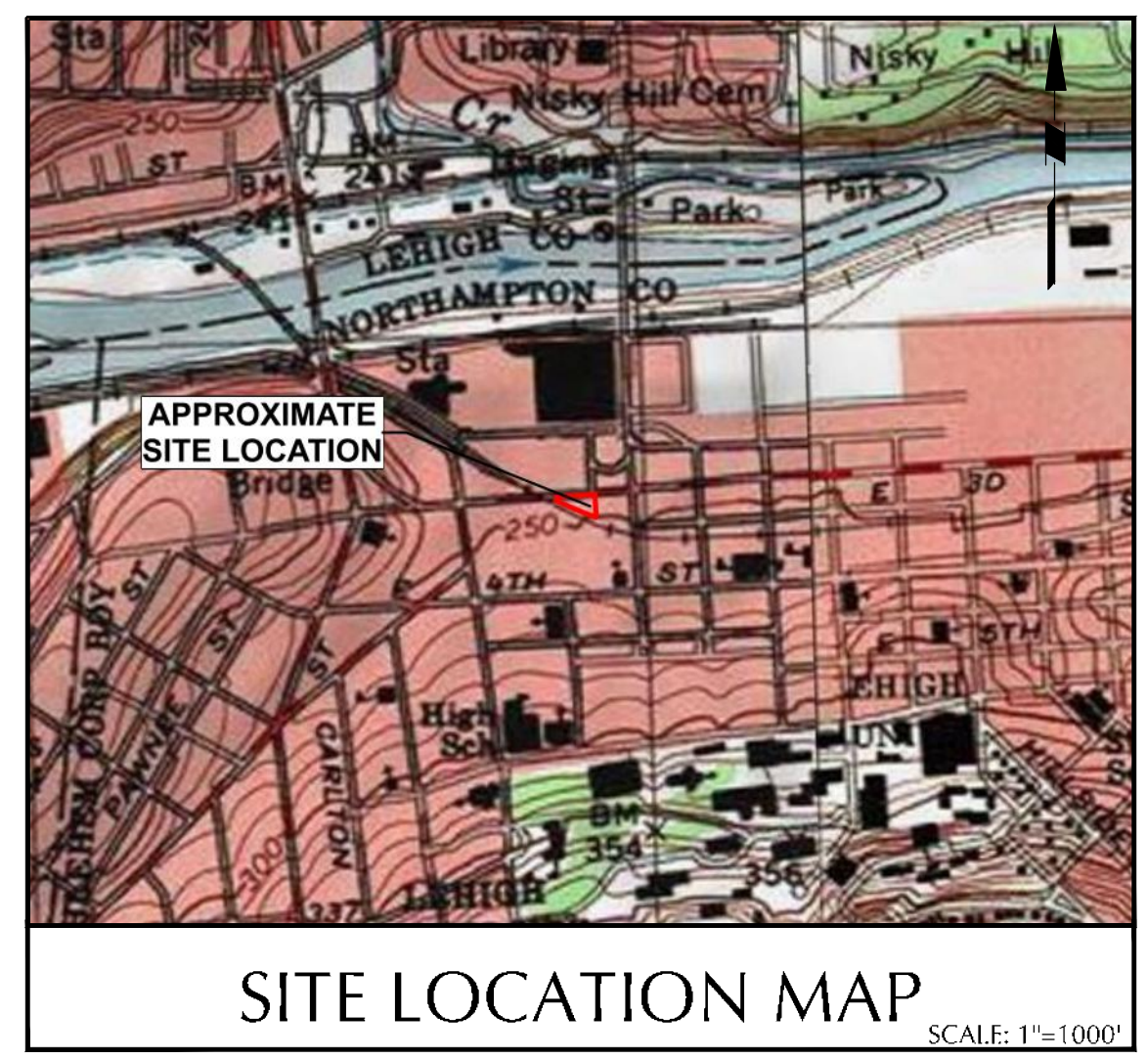
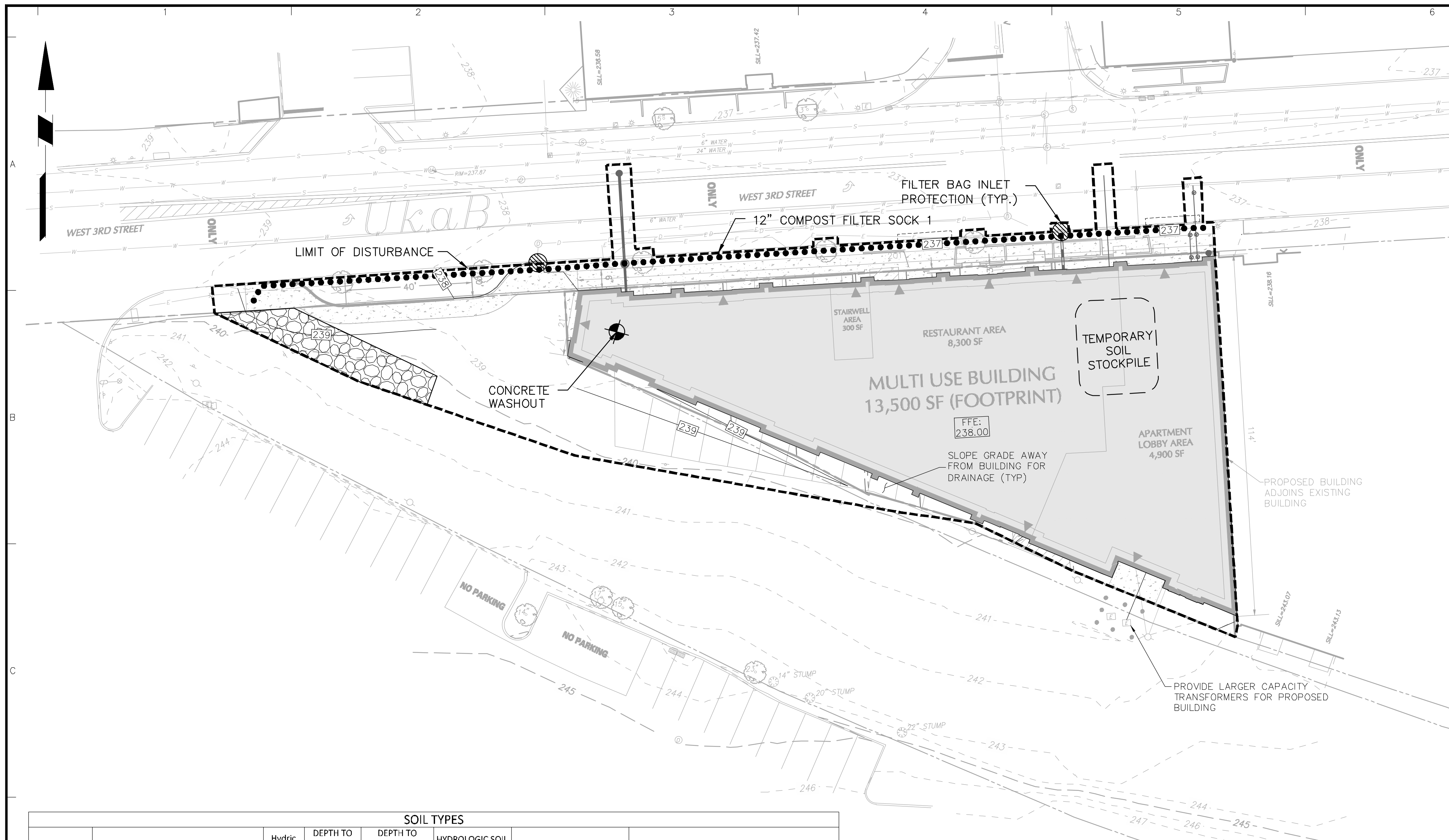
Project  
**3RD STREET MIXED USE BUILDING**  
 CITY OF BETHLEHEM  
 NORTHAMPTON COUNTY PENNSYLVANIA

Drawing Title  
**GRADING PLAN**

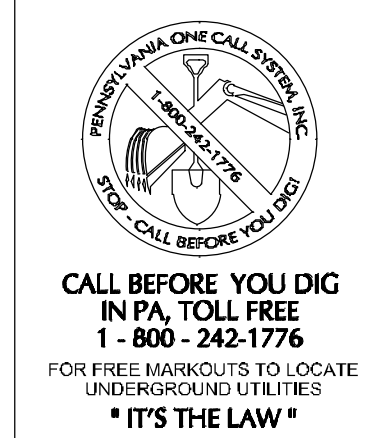
Project No.	240052001	Drawing No.	CG-101
Date	08/09/21	Sheet	6 of 14
Drawn By	JG		
Checked By	ISE		

**ACT 287 AS AMENDED**  
 IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH THE PENNSYLVANIA ACT 287 (AS AMENDED) AND TO CONTRACT THE "ONE CALL SYSTEM" THREE (3) WORKING DAYS (UNLESS OTHERWISE NOTED) PRIOR TO START OF CONSTRUCTION.  
 PENNSYLVANIA ONE CALL 1-800-242-1776  
 SERIAL NO 020-36 W 3RD STREET: 2021.2023393

**CALL BEFORE YOU DIG**  
 IN PA, TOLL FREE  
 1-800-242-1776  
 FOR FREE MARKOUTS TO LOCATE UNDERGROUND UTILITIES  
 \* IT'S THE LAW \*



**ACT 287 AS AMENDED**  
IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH THE PENNSYLVANIA ACT 287 (AS AMENDED) AND TO CONTRACT THE "ONE CALL SYSTEM" THREE (3) WORKING DAYS (UNLESS OTHERWISE NOTED) PRIOR TO START OF CONSTRUCTION.  
PENNSYLVANIA ONE CALL 1-800-242-1776  
SERIAL NO. 20-36 W 3RD STREET, 2021.02.23.953

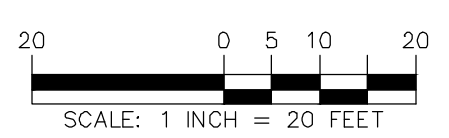


**SEQUENCE OF CONSTRUCTION**

- INSTALL ROCK CONSTRUCTION ENTRANCE IMMEDIATELY BEFORE INITIAL DISTURBANCES AT THE LOCATION SHOWN ON DRAWING CE-101. ROCK CONSTRUCTION ENTRANCES SHALL BE UNDERLAIN BY FILTER FABRIC AS INDICATED ON THE DETAIL. ALL CONSTRUCTION ACTIVITY SHALL USE ONLY THESE AREAS FOR INGRESS AND EGRESS. AS CONDITIONS WARRANT, THESE LOCATIONS MAY BE MODIFIED WITH THE PRIOR APPROVAL FROM THE CITY OF BETHLEHEM.
- INSTALL COMPOST FILTER SOCKS AS INDICATED ON DRAWING CE-101. METHOD OF INSTALLATION AND MAINTENANCE SHALL BE IN ACCORDANCE WITH PADEP REQUIREMENTS AND AS INDICATED ON THE DETAIL. THE INSTALLATION OF THE CONSTRUCTION ENTRANCES AND COMPOST FILTER SOCKS SHALL BE DONE PRIOR TO ANY OTHER EARTH DISTURBANCES.
- ESTABLISH THE STOCKPILE AREA WITH COMPOST FILTER SOCK BARRIER ON THE DOWNSLOPE EDGE OF THE PILE AT THE LOCATION SHOWN ON CE-101. INSTALL THE COMPOST SOCK CONCRETE WASHOUT AT THE LOCATION SHOWN ON CE-101.
- ROUGH GRADE SITE AND BUILDING PAD. THE EARTH MOVING ACTIVITY SHALL BEGIN IN AREAS OF CUT SO THAT THE CUTS CAN BE PLACED IN AREAS OF FILL. PLACE TOPSOIL AND EXCESS FILL MATERIAL IN AREAS DESIGNATED ON THE PLAN. IMMEDIATELY INSTALL LANDLOK S2 ON ALL SLOPES EXCEEDING 3:1 AS SHOWN ON THE PLAN.
- BEGIN CONSTRUCTION OF ON-SITE UTILITIES STARTING AT THE DOWNSTREAM ENDS AND WORKING UPSTREAM. SUBSURFACE UTILITIES SHALL CONSIST OF ELECTRIC, GAS, TELEPHONE, CABLE, WATER AND SANITARY SEWERS. ADVANCE TRENCH EXCAVATION SHALL BE LIMITED TO THE LENGTH OF PIPE THAT CAN BE COMPLETED IN THE SAME DAY. ON THE DAY FOLLOWING INSTALLATION, THE TRENCH AREA SHALL BE GRADED TO SUBGRADE ELEVATION. IMMEDIATELY BACKFILL AND STABILIZE TRENCH EXCAVATIONS.
- CONSTRUCT BUILDING PAD AND BUILDING. COMPLETE FINAL SITE GRADING AND LANDSCAPING. STABILIZE WITH PERMANENT SEED AND MULCH.
- CONSTRUCTION ENTRANCE AND COMPOST FILTER SOCKS SHALL BE MAINTAINED UNTIL ALL IMPROVEMENTS TO THE SITE ARE COMPLETED. ROAD AREAS ARE PAVED AND 70% UNIFORM PERMANENT VEGETATIVE COVERAGE HAS BEEN ESTABLISHED.
- ONCE ALL PERMANENT MEASURES HAVE BEEN INSTALLED, REMOVE THE CONSTRUCTION ENTRANCE AND COMPOST FILTER SOCK. ALL DISTURBANCE CAUSED BY THE REMOVAL OF TEMPORARY SEDIMENT POLLUTION CONTROL DEVICES MUST BE PERMANENTLY STABILIZED.

SOIL TYPES							
SYMBOL	NAME	Hydric (Y/N)	DEPTH TO BEDROCK (IN.)	DEPTH TO WATER TABLE (IN.)	HYDROLOGIC SOIL GROUP	LIMITATION	RESOLUTION
UkaB	Urban land, 0 to 8 percent slopes	N	N/A*	N/A*	N/A*	Susceptible to sinkholes	Sinkhole repair shall follow details provided on Drawing CE-501. Ponded water shall be pumped through a filter bag.

- STANDARD EROSION AND SEDIMENT CONTROL PLAN NOTES**
- ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
  - AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRECONSTRUCTION MEETING.
  - AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
  - ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.
  - AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
  - CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPs SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
  - AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
  - TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAP(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINAL GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
  - IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT.
  - ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
  - ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
  - THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
  - ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
  - VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY NOR EXIT DIRECTLY FROM THE CONSTRUCTION SITE ONTO ADJOINING STREETS. ALL CONSTRUCTION VEHICLES AND EQUIPMENT MUST ENTER AND EXIT THE SITE USING THE CONSTRUCTION ENTRANCE AND BERM ON THE NORTHWEST SIDE OF THE SITE.
  - UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPs SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RESETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
  - A LOG SHOWING DATES THAT E&S BMPs WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
  - SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEEP INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
  - SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.
  - AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES - 6 TO 12 INCHES ON COMPACTED SOILS - PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
  - ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
  - ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
  - FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOIL, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
  - FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
  - FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
  - SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
  - ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDING AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
  - IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
  - PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
  - E&S BMPs SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
  - UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPs.
  - AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPs MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPs. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPs SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
  - UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.
  - FAILURE TO CORRECTLY INSTALL E&S BMPs, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPs MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.



Date	Description	No.
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Project  
**3RD STREET MIXED USE BUILDING**  
CITY OF BETHLEHEM  
NORTHAMPTON COUNTY PENNSYLVANIA

Drawing Title  
**SOIL EROSION AND SEDIMENT CONTROL PLAN**

Project No. **240052001**  
Date **08/09/21**  
Drawn By **JG**  
Checked By **ISE**

Drawing No. **CE-101**  
Sheet 7 of 14

## TEMPORARY SEEDING NOTES

- A) THE FOLLOWING SURFACES OF THE SITE SHALL BE TEMPORARILY SEEDED AND MULCHED
  - 1) THE SURFACE OF TOPSOIL STOCKPILES
  - 2) THE SURFACE OF EXPOSED EARTH AREAS NOT SUBJECT TO CONSTRUCTION
- B) SEEDING SHALL OCCUR IMMEDIATELY AFTER THE ESTABLISHMENT OF THE TOPSOIL STOCKPILES OR ROUGH GRADED AREAS. THE FOLLOWING SEED SHALL BE PLANTED AT A RATE OF 2 TONS PER ACRE.
  - RYEGRASS – BLUE TAG CERTIFIED – 100%MS – 4 TO 5 LBS. PER 1,000 SQUARE FOOT.
  - ANNUAL TYPE – TYPICAL
  - PERENNIAL TYPE – NOT APPLICABLE
- C) PREPARE AREAS TO BE SEEDED AS FOLLOWS:
  - 1) REMOVE ALL DEBRIS, INCLUDING LARGE STONE. TILL SOIL TO A DEPTH OF FOUR INCHES TO SIX INCHES. APPLY PULVERIZED AGRICULTURAL GRADED LIME AT A RATE OF 2 TONS PER ACRE.
  - 2) BEFORE AUGUST, SEPTEMBER OR OCTOBER SEEDING, APPLY 20-25 LBS. OF 10-20-20 FERTILIZER PER 1,000 SQUARE FEET. BEFORE FEBRUARY, MARCH, APRIL, MAY, JUNE, JULY OR NOVEMBER SEEDING, APPLY 40 LBS. OF 10-20-20 FERTILIZER PER 1,000 SQUARE FEET. WORK INTO TOP INCH OF SOIL.
  - 3) STRAW MULCH SHOULD BE APPLIED AT A RATE OF 3 TONS PER ACRE.
- D) 'S' SEED AT THE INDICATED RATE. DIVIDE SEED INTO TWO EQUAL LOTS. SOW ONE LOT IN ONE DIRECTION. SOW SECOND LOT AT RIGHT ANGLE TO FIRST LOT.

## PERMANENT SEEDING NOTES

- LAWN SEED MIX**
1. PRIOR TO SEEDING, AREA IS TO BE TOPSOILED, FINE GRADED, AND RAKED OF ALL DEBRIS LARGER THAN 1/2" DIAMETER.
  2. PRIOR TO SEEDING, CONSULT MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS.
  3. SEEDING RATES:
 

PERENNIAL RYEGRASS	1 LB/1000 SQ FT
KENTUCKY BLUEGRASS	1 1/2 LB/1000 SQ FT
RED FESCUE	1 1/2 LB/1000 SQ FT
SPREADING FESCUE	1 LB/1000 SQ FT
  4. SEEDING DATES FOR THIS MIXTURE SHALL BE BETWEEN MARCH 15TH TO MAY 15TH OR AUGUST 15TH TO OCTOBER 30TH.
  5. GERMINATION RATES WILL VARY AS TO TIME OF YEAR FOR SOWING. CONTRACTOR TO IRRIGATE SEEDED AREA UNTIL A STAND OF COVER IS ESTABLISHED AND FOUND ACCEPTABLE TO THE OWNER.

**MEADOW SEED MIX**

- MEADOW SEED MIX A – ERNST SEED MIX ERNMX-181 "NATIVE STEEP SLOPE MIX WITH ANNUAL RYEGRASS"**
- |       |                          |                               |
|-------|--------------------------|-------------------------------|
| 26.0% | SORGHASTRUM NUTANS       | INDIANGRASS                   |
| 20.0% | LOLIUM MULTIFLORUM       | ANNUAL RYEGRASS               |
| 15.0% | SCHIZANDRUM SCOPARIUM    | LITTLE BLUESTEM               |
| 12.0% | ELYMUS CANADENSIS        | CANADA WILDRYE                |
| 8.0%  | ELYMUS VIRGINICUS        | VIRGINIA WILDRYE              |
| 4.0%  | PANICUM VIRGINICUM       | SWITCHGRASS                   |
| 3.0%  | TRIDENS FLAVUS           | PURPLETOP                     |
| 2.0%  | AGROSTIS PERENNANS       | AUTUMN BENTGRASS              |
| 2.0%  | AGROSTIS SCABRA          | TICKLEGRASS (ROUGH BENTGRASS) |
| 2.0%  | CHAMAECRISTA FASCICULATA | PARTRIDGE PEA                 |
| 2.0%  | RUBICECUM HIRTA          | BLACK-EYED SUSAN              |
| 1.0%  | COREOPSIS LANCEOLATA     | LANCE-LEAF COREOPSIS          |
| 1.0%  | ECHINACEA PURPUREA       | PURPLE CONEFLOWER             |
| 1.0%  | LATRIS SPICATA           | MARSH (DENSE) BLAZING STAR    |
| 1.0%  | MONARDA MEDIA            | PURPLE BERGAMOT               |
- NOTES:  
1. SEED AT A RATE OF 30 LBS./ACRE.  
2. OVERSEED WITH ELYMUS CANADENSIS (CANADA WILD RYE) AND ELYMUS VIRGINICUS (VIRGINIA WILD RYE) AT A RATE OF 5 LBS./1,000 SF EACH.

**MEADOW SEED MIX B – ERNST CUSTOM SEED MIX "NATIVE WILDFLOWER + POLLINATOR SEED MIX"**

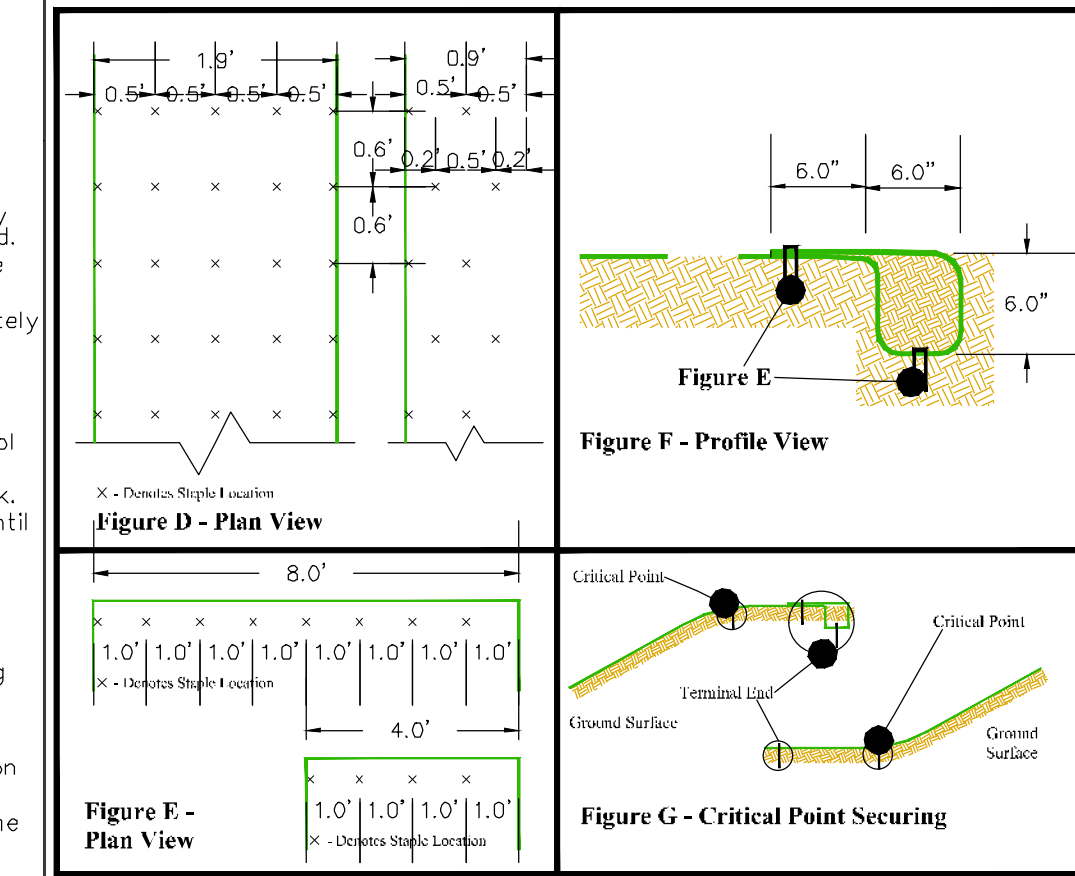
- |      |                         |  |
|------|-------------------------|--|
| 3.0% | LYSIACHIS DAUNORUM      | SLENDER MOUNTAINPURT                           |
| 8.0% | ASCLEPIAS TUBEROSA      | BUTTERFLY MILKWEED, PA. ECOTYPE                |
| 5.0% | ASTER OBLONGIFOLIUS     | AROMATIC ASTER, PA. ECOTYPE                    |
| 5.0% | EURYBIA SPICATISSIMA    | SHOWY ASTER, NC. ECOTYPE                       |
| 4.0% | BAPTISIA ALBESCENTIS    | SPIKED WILD INDIGO, NC. ECOTYPE                |
| 8.0% | BAPTISIA AUSTRALIS      | BLUE FALSE INDIGO, SOUTHERN WV. ECOTYPE        |
| 1.0% | COREOPSIS TINCTORIA     | PLAINS COREOPSIS                               |
| 8.0% | DESMODILLUM CANADENSE   | DESMODIUM TICKLEGRASS, PA. ECOTYPE             |
| 8.0% | ECHINACEA PURPUREA      | PURPLE CONEFLOWER                              |
| 2.0% | LESPEDEZA VIRGINICA     | SLENDER LESPEDEZA, MD. ECOTYPE                 |
| 8.0% | GALLIARDIA ARISTATA     | PERENNIAL GALLIARDIA (BLANKET OWER)            |
| 6.0% | GALLIARDIA PULCHELLA    | ANNUAL GALLIARDIA (NDIAN BLANKET)              |
| 6.0% | LATRIS ASPERA           | ROUGH BLAZING STAR                             |
| 5.0% | LATRIS SPICATA          | MARSH (DENSE) BLAZING STAR (SPIKED GAYFEATHER) |
| 5.0% | PENSTEMON DIGITALIS     | TALL WHITE SPIDERTAIL                          |
| 3.0% | PENSTEMON CANESCENS     | APPALACHIAN BEARDTONGUE, SC. ECOTYPE           |
| 5.0% | ZIZIA AUREA             | GOLDEN ALEXANDERS, PA. ECOTYPE                 |
| 3.0% | ANEMONE CANADENSIS      | CANADIAN ANEMONE, PA. ECOTYPE                  |
| 3.0% | HELIOPSIS HELIANTHOIDES | OKEY'S SUNFLOWER, PA. ECOTYPE                  |
| 2.0% | PENSTEMON HIRSUATUS     | HAIRY BEARDTONGUE                              |
| 2.0% | SENNA HEBECARPA         | WILD SENNA, VA. + WV. ECOTYPE                  |
- NOTES:  
1. SEED AT A RATE OF 15 LBS./ACRE.  
2. OVERSEED WITH ELYMUS CANADENSIS (CANADA WILD RYE) AND ELYMUS VIRGINICUS (VIRGINIA WILD RYE) AT A RATE OF 5 LBS./1,000 SF EACH.

**GENERAL SEEDING NOTES:**

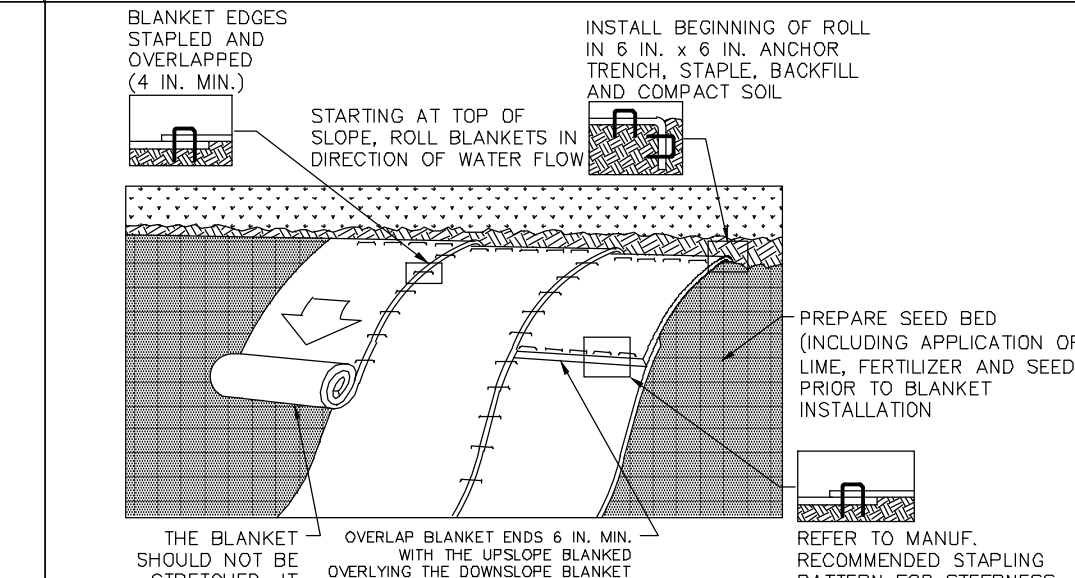
1. SEEDING SHALL TAKE PLACE IN THE SPRING (APRIL 1 TO JUNE 1) OR THE FALL (SEPTEMBER 1 TO OCTOBER 30).
2. ELIMINATE UNWANTED VEGETATION PRIOR TO SEEDING USING A BROAD-SPECTRUM NON-SELECTIVE HERBICIDE PER MANUFACTURER'S SPECIFICATIONS.
3. CONTRACTOR SHALL INSTALL SEED MIXTURE USING A NO-TILL TRUAX-TYPE DRILL IN AREAS TO BE SEEDED WITH MEADOW MIX.
4. CONTRACTOR SHALL IMMEDIATELY ROLL NEWLY SEEDED AREAS WITH CULTI-PACKER OR SIMILAR DEVICE TO ENSURE PROPER SEED/SOIL CONTACT.
5. CONTINUOUS MOISTURE FOR 4-6 WEEKS MUST BE INSURED TO ALLOW PROPER GERMINATION, IF RAIN DOES NOT OCCUR CONTRACTOR SHALL PROVIDE SUPPLEMENTAL IRRIGATION TO NEWLY SEEDED AREAS PER INSTRUCTIONS INCLUDED IN SEEDING SPECIFICATION.
6. REMOVE ALL DEBRIS, INCLUDING LARGE STONES. TILL SOIL TO A DEPTH OF FOUR INCHES TO SIX INCHES. APPLY AGRICULTURAL PULVERIZED GRADED LIME AT A RATE OF 8 TONS PER ACRE. BEFORE JUNE 15, APPLY 500 LBS. OF 10-20-20 FERTILIZER PER ACRE. WORK FERTILIZER INTO TOP INCH OF SOIL. STRAW MULCH SHOULD BE APPLIED AT A RATE OF 3 TONS PER ACRE.

**WEED CONTROL / MAINTENANCE**

1. DURING THE ESTABLISHMENT YEAR, CONTRACTOR SHALL MOW SEEDED AREAS IF WEED HEIGHT EXCEEDS MEADOW MIX HEIGHT. MOW AT A HEIGHT OF 8"-10". DO NOT MOW CLOSE. THE MEADOW MIX MAY BE DAMAGED.
2. AFTER THE FIRST GROWING SEASON, AND IF MEADOW MIX IS WELL ESTABLISHED, THE MEADOW MIX SHALL BE MOWED ONLY ONCE ANNUALLY. ANNUAL MAINTENANCE MOWING SHALL BE DONE IN LATE WINTER DURING THE MONTH OF MARCH.

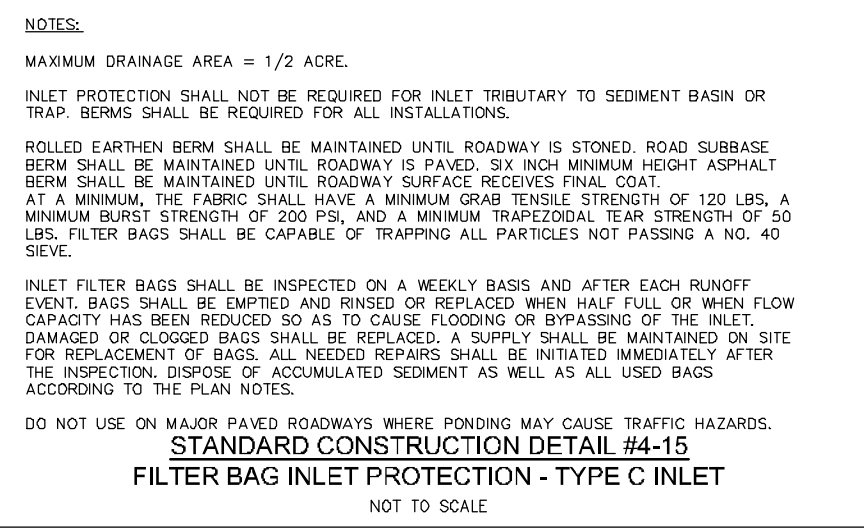


## S-2 MATTING STAPLING PATTERN



- NOTES:  
SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.  
PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.  
SLOPE SURFACE SHALL BE FREE OF ROCKS, CLOUDS, STICKS, AND GRASS.  
BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.  
THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.  
BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.  
EROSION CONTROL MATTING TO BE USED IF ANY SLOPE EXCEEDS 3:1.

## INLET PROTECTION (FILTER BAG)



## EROSION CONTROL MATTING

## MAINTENANCE PROGRAM

THE CONTRACTOR WILL BE RESPONSIBLE FOR THE PROPER CONSTRUCTION, STABILIZATION AND MAINTENANCE OF ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES AND RELATED ITEMS INCLUDED WITHIN THIS PLAN. THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR THE PROPER CONSTRUCTION AND STABILIZATION OF PERMANENT CONTROL MEASURES AND RELATED ITEMS INCLUDED WITHIN THIS PLAN.

THE OWNER WILL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL PERMANENT CONTROL MEASURES.

SOIL SEDIMENT REMOVED FROM ANY TEMPORARY CONTROL MEASURE DURING REGULAR MAINTENANCE WILL BE INCORPORATED BACK INTO THE EARTHWORK AS FILL ON THE SITE. SOIL SEDIMENT MATERIAL SHALL BE DISTRIBUTED ON-SITE WITHOUT CHANGING DRAINAGE PATTERNS DURING A SPECIFIC CONSTRUCTION STAGE.

COMPOST FILTER SOCK INSTALLED ON THE PROJECT SITE SHALL BE MAINTAINED AS FOLLOWS:

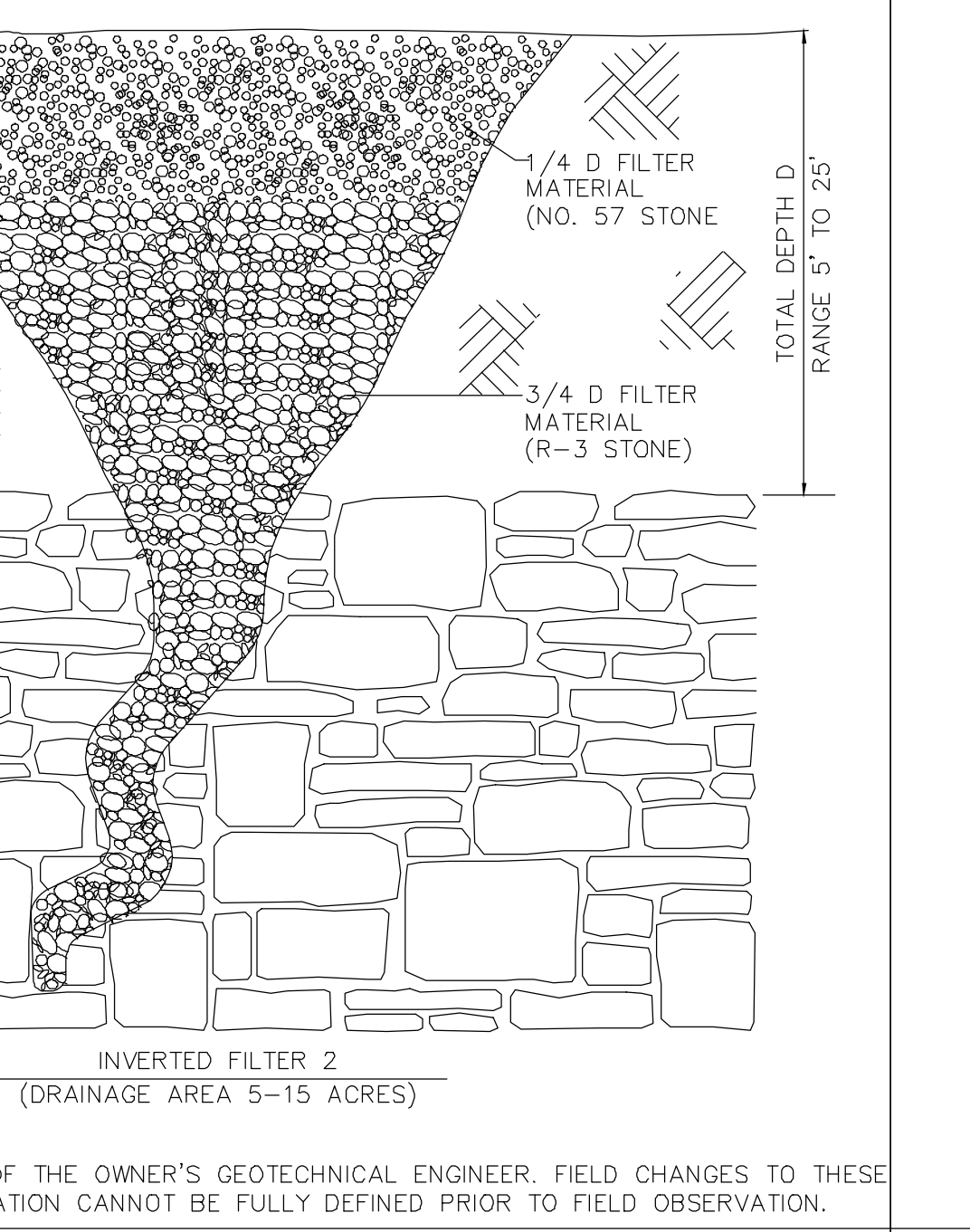
1. THE SOCK CONDITION WILL BE INSPECTED ONCE A WEEK OR AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
2. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED PROPERLY.
3. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
4. ANY MANUFACTURER'S RECOMMENDATIONS WILL BE ADHERED TO FOR REPLACING THE SOCK DUE TO WEATHERING.

THE CONSTRUCTION ENTRANCE WILL BE INSPECTED AT THE END OF EACH WORK DAY. THE THICKNESS WILL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSION BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL WILL BE MAINTAINED ON THE SITE FOR THIS PURPOSE.

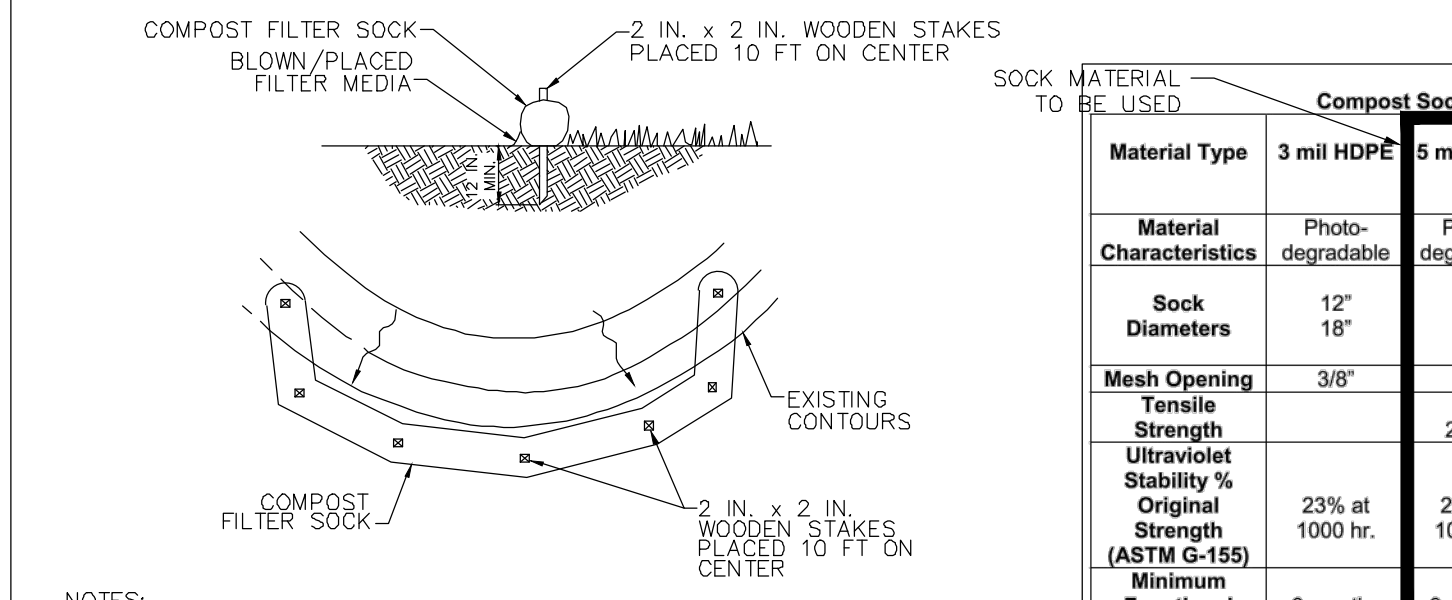
AT THE END OF EACH CONSTRUCTION DAY, ANY SEDIMENT DEPOSITED ON PUBLIC ROADWAYS WILL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. WASHING OF THE ROADWAY WITH WATER WILL NOT BE PERMITTED.

NOTE: THE CONTRACTOR SHALL HAVE ON SITE A WRITTEN REPORT DOCUMENTING INSPECTIONS AND REPAIRS.

## UTILITY TRENCH NOTES



## COMPOST FILTER SOCK



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

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

TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATION OR REPLACED WITHIN 24 HOURS OF INSPECTION.

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

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

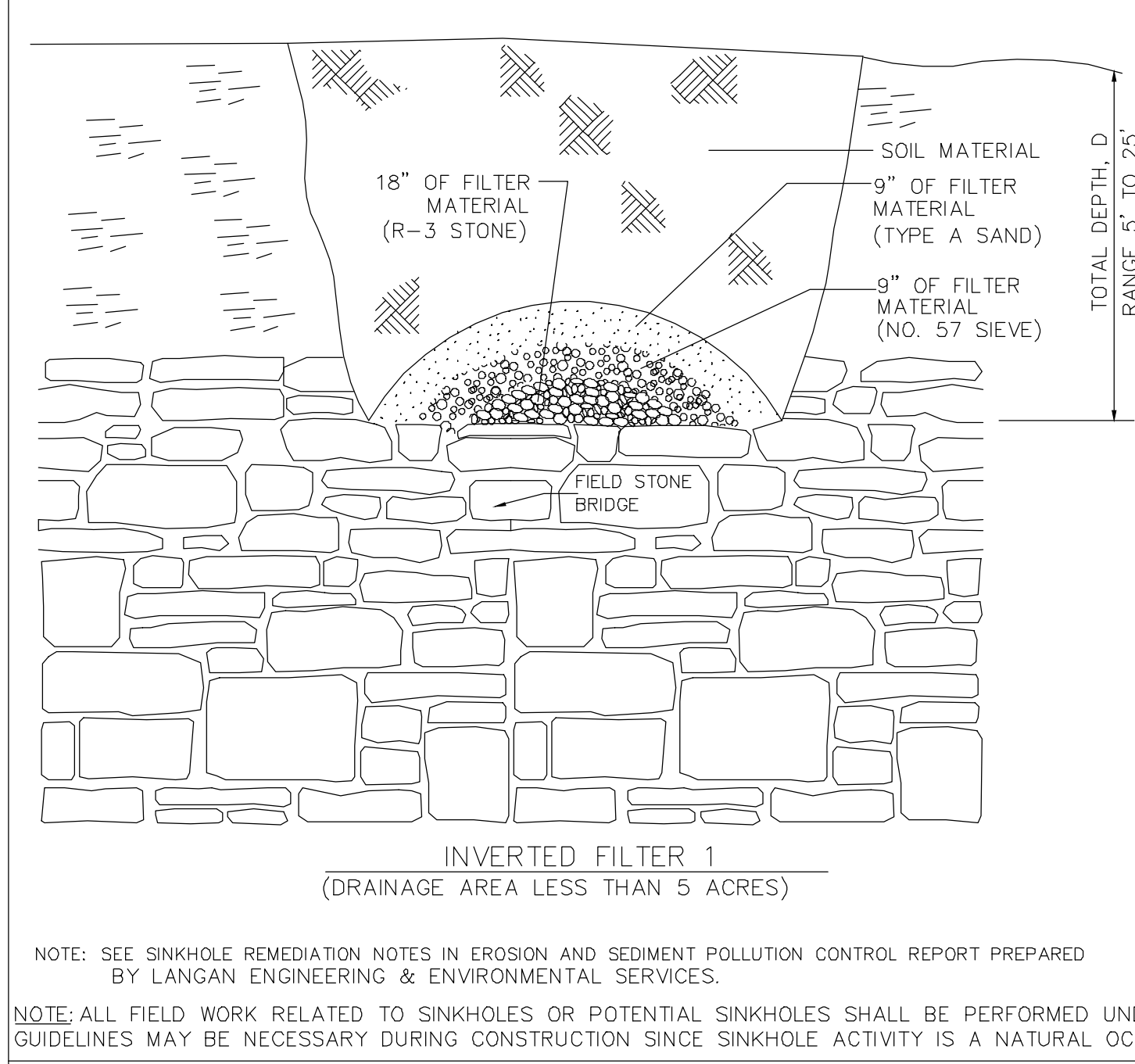
STANDARD CONSTRUCTION DETAIL #4-1  
COMPOST FILTER SOCK

## COMPOST STANDARDS

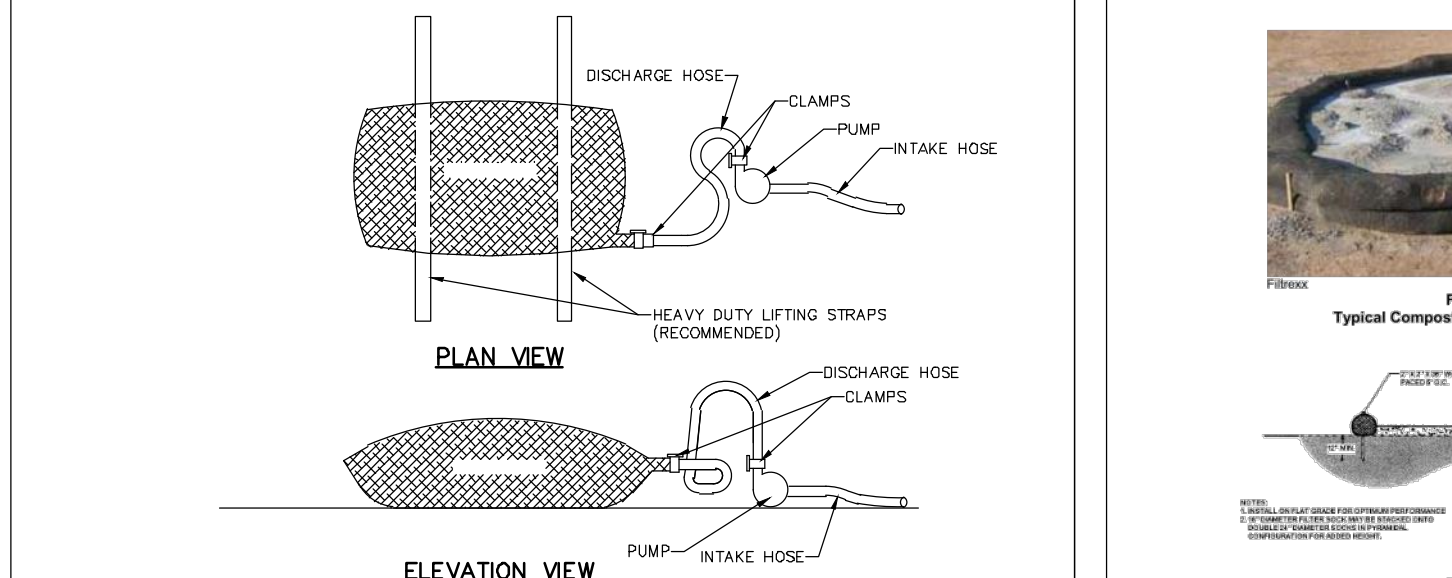
Organic Matter Content	25% - 100% (dry weight basis)
Organic Portion	Fibrous and elongated
pH	5.5 - 8.5
Moisture Content	30% - 60%
Particle Size	30% .08% pass through 3/8" sieve
Soluble Salt Concentration	5.0 (dS/m (electrical)) Maximum

NOTE: SOIL MEDIA TO BE TESTED AND SUBMITTED TO NORTHAMPTON COUNTY CONSERVATION DISTRICT PRIOR TO INSTALLING COMPOST FILTER SOCKS.

## MAINTENANCE NOTES



## SINKHOLE REPAIR DETAIL



LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED 7/8 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-4832	200 LB.
PUNCTURE	ASTM D-4833	110 LB.
MILLER BURST	ASTM D-3786	300 PSI
UV RESISTANCE	ASTM D-4355	70%
APTS % RETAINED	ASTM D-4751	80 SILVE.

A SUITABLE MEANS OF ATTACHING 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 THE USE OF THE CONTRACTOR. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE. BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAMENT 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 2:1 FOR SLOPES EXCEEDING A 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 BEHIND LOCATED HO OR EX 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 BE RESUME UNTIL THE PROBLEM IS CORRECTED.

## PUMPED FILTER BAG



## CONCRETE WASHOUT

A SUITABLE IMPERMEABLE GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE SOCK.

Date	Description	No.
11/05/21	REVISED PER CITY COMMENTS	1

## INLET PROTECTION (FILTER BAG)

NOT TO SCALE

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

LANGAN  
Langan Engineering and Environmental Services, Inc.  
One West Broad Street, Suite 200  
Bethlehem, PA 18018  
T: 610.984.8500 F: 610.984.8501 www.langan.com

## EROSION CONTROL MATTING

Project  
**3RD STREET MIXED USE BUILDING**

Drawing Title  
**SOIL EROSION AND SEDIMENT CONTROL DETAILS**

Project No.  
240052001

Date  
08/09/21

Drawn By  
IDL

Checked By  
JSE

Sheet B of 14

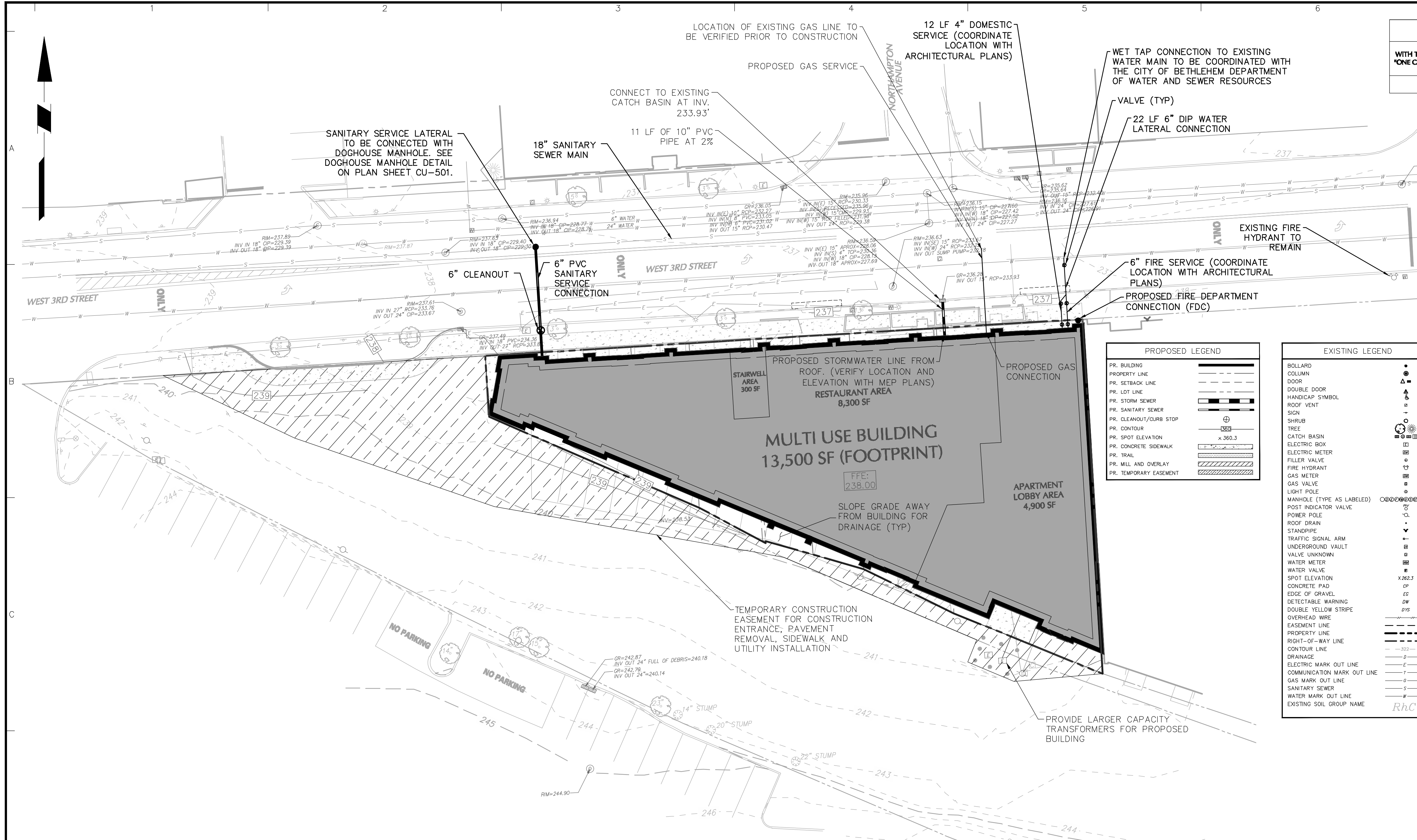
CITY OF BETHLEHEM  
NORTHAMPTON COUNTY PENNSYLVANIA

## EROSION CONTROL MATTING

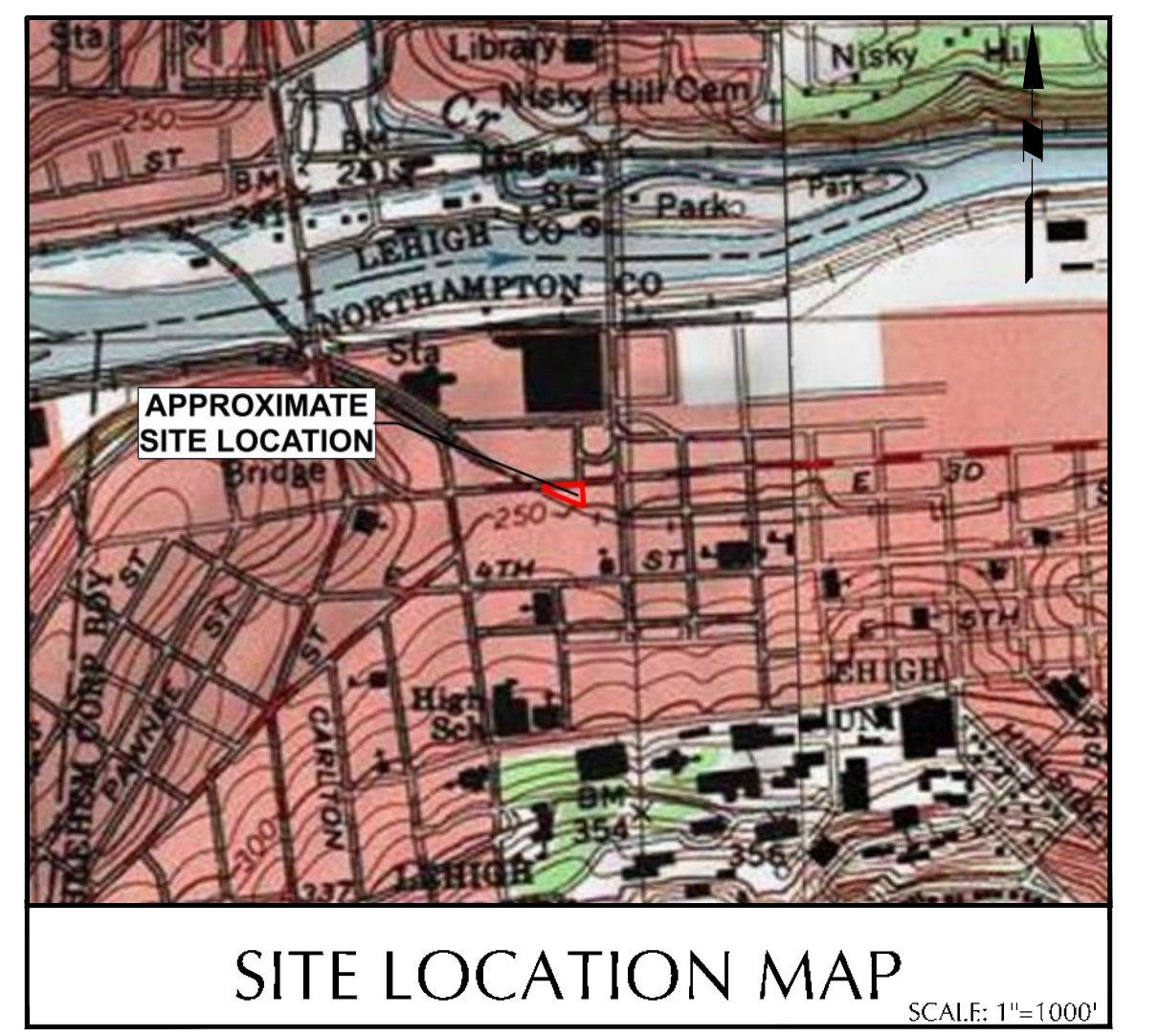
CE-501

Sheet B of 14

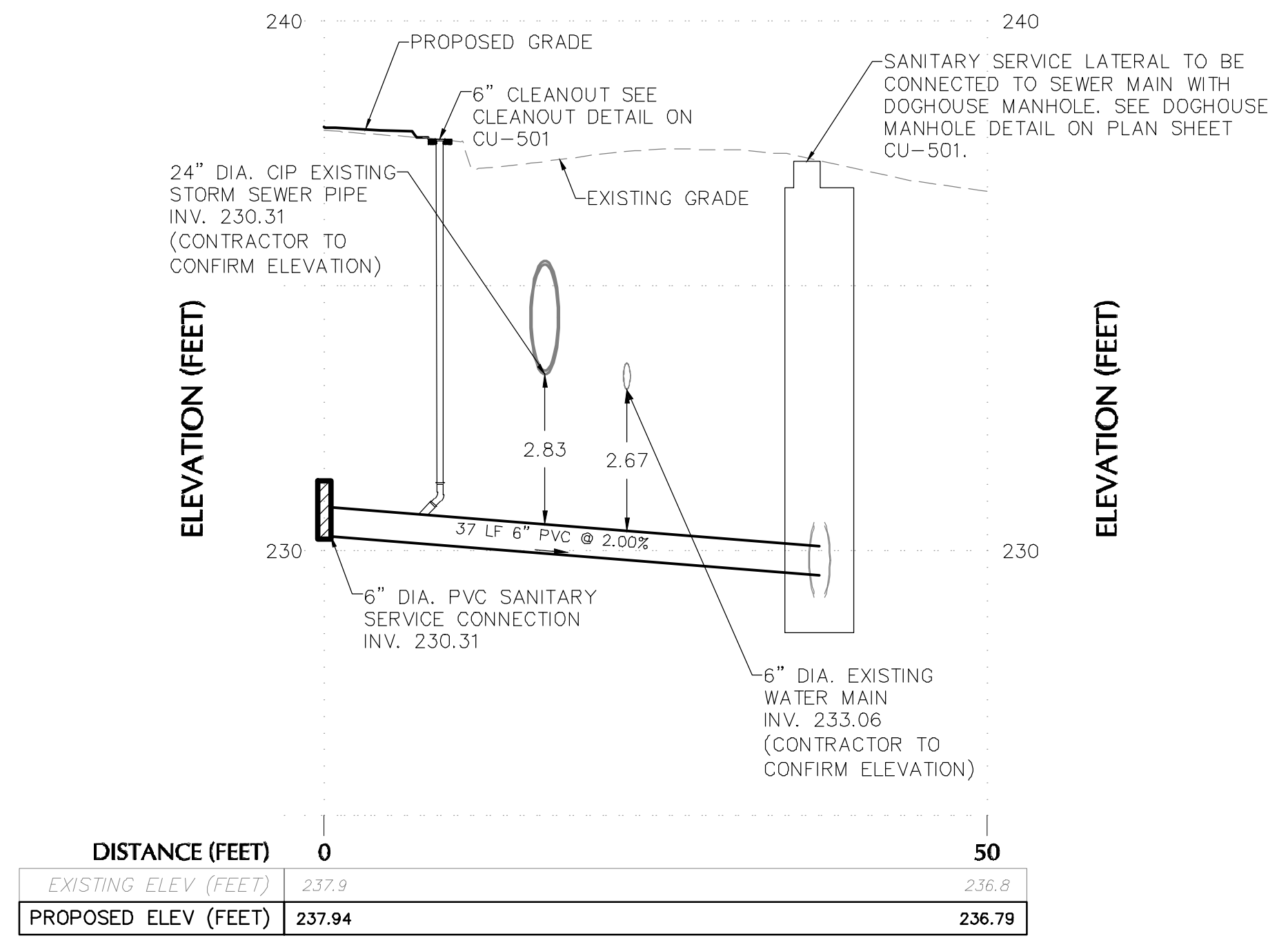




**ACT 287 AS AMENDED**  
 IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH THE PENNSYLVANIA ACT 287 (AS AMENDED) AND TO CONTRACT THE "ONE CALL SYSTEM" THREE (3) WORKING DAYS (UNLESS OTHERWISE NOTED) PRIOR TO START OF CONSTRUCTION.  
 PENNSYLVANIA ONE CALL 1-800-242-1776  
 SERIAL NO (20-36 W 3RD STREET): 2021202393



PROPOSED LEGEND	EXISTING LEGEND
PR. BUILDING	BOLLARD
PR. PROPERTY LINE	COLUMN
PR. SETBACK LINE	DOOR
PR. LOT LINE	DOUBLE DOOR
PR. STORM SEWER	HANDICAP SYMBOL
PR. SANITARY SEWER	ROOF VENT
PR. CLEANOUT/CURB STOP	SIGN
PR. CONTOUR	SHRUB
PR. SPOT ELEVATION	TREE
PR. CONCRETE SIDEWALK	CATCH BASIN
PR. TRAIL	ELECTRIC BOX
PR. MILL AND OVERLAY	ELECTRIC METER
PR. TEMPORARY EASEMENT	FILLER VALVE
	FIRE HYDRANT
	GAS METER
	GAS VALVE
	LIGHT POLE
	MANHOLE (TYPE AS LABELED)
	POST INDICATOR VALVE
	POWER POLE
	ROOF DRAIN
	STANDPIPE
	TRAFFIC SIGNAL ARM
	UNDERGROUND VAULT
	VALVE UNKNOWN
	WATER METER
	WATER VALVE
	SPOT ELEVATION
	CONCRETE PAD
	EDGE OF GRAVEL
	DETECTABLE WARNING
	DOUBLE YELLOW STRIPE
	OVERHEAD WIRE
	EASEMENT LINE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	CONTOUR LINE
	DRAINAGE
	ELECTRIC MARK OUT LINE
	COMMUNICATION MARK OUT LINE
	GAS MARK OUT LINE
	SANITARY SEWER
	WATER MARK OUT LINE
	EXISTING SOIL GROUP NAME



**SANITARY SEWER PROFILE**  
 (PROPOSED SANITARY SEWER LATERAL)

**UTILITY NOTES**

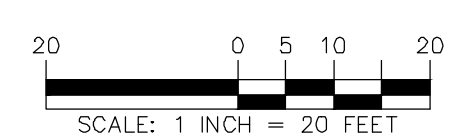
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS IN A MANNER WHICH WILL NOT NEGATIVELY AFFECT ANY EXISTING USERS OF THESE UTILITIES.
- CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE, ELECTRICAL, TELEPHONE AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND ASSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH THE REGULATORY AGENCY AS TO LOCATION AND SCHEDULING OF CONNECTIONS TO THEIR FACILITIES.
- THE LOCATION OF THE EXISTING GAS MAINS ARE APPROXIMATE. THE CONTRACTOR SHOULD CONSULT LOCAL UTILITY COMPANIES FOR ADDITIONAL INFORMATION.
- THE LOCATION OF EXISTING ELECTRIC LINES ARE APPROXIMATE. THE CONTRACTOR SHOULD CONSULT LOCAL UTILITY COMPANIES FOR ADDITIONAL INFORMATION.
- ALL GAS WORK AND OTHER ASSOCIATED APPURTENANCES WILL BE IN CONFORMANCE WITH APPLICABLE LOCAL COUNTY, STATE AND FEDERAL GUIDELINES AND REQUIREMENTS.
- ALL ELECTRICAL WORK, TRANSFORMER PADS, AND ASSOCIATED APPURTENANCES WILL BE IN CONFORMANCE WITH APPLICABLE LOCAL COUNTY, STATE AND FEDERAL GUIDELINES AND REQUIREMENTS. MIN. DEPTH OF COVER OVER ELECTRIC, GAS, AND CABLE SHALL BE 2 FT.
- THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, UTILITY LOCATIONS AND INVERTS PRIOR TO CONSTRUCTION. ANY CONDITIONS FOUND TO DIFFER FROM THOSE SHOWN BY THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
- THE CONTRACTOR SHALL COORDINATE THE WATER WORK WITH THE CITY OF BETHLEHEM.
- THE CONTRACTOR SHALL COORDINATE THE SANITARY SEWER WORK WITH THE CITY OF BETHLEHEM.
- A MINIMUM FOUR (4) FOOT HORIZONTAL CLEARANCE MUST BE MAINTAINED BETWEEN WATER MAIN AND STORM SEWER. A MINIMUM EIGHTEEN (18) INCHES VERTICAL CLEARANCE MUST BE MAINTAINED BETWEEN WATER MAIN AND ALL OTHER UTILITIES. WHERE CLEARANCE CANNOT BE MAINTAINED, THEN WATER MAIN SHALL BE ENCASED IN CONCRETE 10 FEET ON EACH SIDE OF THE CROSSING. IN CASES WHERE, THE UTILITY IS A SANITARY OR STORM SEWER MAIN OR LATERAL AND THE CLEARANCE CANNOT BE MAINTAINED, THEN THE SEWER SHALL ALSO BE ENCASED.
- ALL WATER MAINS ARE TO HAVE A MINIMUM COVER OF 4 FEET FROM THE TOP OF THE PIPE TO THE PROPOSED SURFACE ELEVATION.
- PROVIDE A MINIMUM HORIZONTAL CLEARANCE OF 10 FT BETWEEN SANITARY SEWER MAINS AND WATER MAINS. PROVIDE A 5 FT MINIMUM HORIZONTAL CLEARANCE BETWEEN SANITARY SEWER MAINS AND ALL OTHER UTILITIES. PROVIDE A 5 FT. MINIMUM HORIZONTAL CLEARANCE BETWEEN SANITARY SEWER MAINS AND CONCRETE CURBS. A MINIMUM DISTANCE OF 10 FT SHALL BE PROVIDED BETWEEN NEW WATER AND SEWER SERVICE LINES AND LIGHT POLES, TREES ETC.
- ALL PROPOSED WATER MAINS SHALL BE DUCTILE IRON PIPE CLASS 50 BITUMINOUS COATED DOUBLE CEMENT MORTAR LINED UNLESS ALTERNATE APPROVED BY THE CITY OF BETHLEHEM.
- THE CONTRACTOR MUST CONTACT THE CITY OF BETHLEHEM ONE WEEK PRIOR TO WATER MAIN CONSTRUCTION, AND 72 HOURS PRIOR TO EXCAVATION NEAR AND CONNECTION TO EXISTING WATER AND SEWER MAIN.
- ALL WATER MAIN FITTINGS AND VALVES SHALL BE MECHANICAL JOINT (RESTRAINED) AND THE FITTINGS SHALL BE PROVIDED WITH THRUST BLOCKING. REFER TO DETAILS FOR THRUST BLOCK DETAILS AND FITTING SCHEDULES.
- WATER CUSTOMERS SHALL HAVE A METER WITH A BACKFLOW PREVENTER INSTALLED IN THE BUILDING WITH A REMOTE METER RADIO PAD ON THE OUTSIDE WALL.
- ALL FIRE HYDRANTS AND VALVES SHALL OPEN RIGHT (CLOCKWISE).
- SANITARY LATERALS SHALL BE INSTALLED ACCORDING TO THE TYPICAL SANITARY SEWER LATERAL DETAIL.
- ALL PROPOSED SANITARY SEWER LINES AND APPURTENANCES ARE PRIVATELY OWNED AND SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER.
- ALL UTILITIES SHALL BE LOCATED UNDERGROUND UNLESS REQUIRED BY PROVIDER.
- CONTRACTOR SHALL COORDINATE EXACT LOCATION OF UTILITIES WITH APPROVED BUILDING PLANS.
- ALL METERS, VALVES, ETC. MUST BE RECESSED TYPE AND HEAVY TRAFFIC RATED.
- THERE IS NO WATER TAPPING FEE. WATER METER AND REMOTE READOUT ARE AVAILABLE FOR NO CHARGE FROM THE CITY OF BETHLEHEM. ALL CONNECTIONS ARE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
- THE CONTRACTOR IS TO LOCATE THE EXISTING UTILITY LATERALS AT TIME OF BUILDING DEMO AND TO CAP ALL EXISTING LATERALS. EXISTING SANITARY LATERAL IS TO BE CAPPED AT MAIN.

**UTILITY TRENCH EXCAVATION GUIDELINES**

- CONSTRUCTION REQUIREMENTS
  - WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
  - LIMIT DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
  - ALL DISTURBED AREAS ARE TO BE RESTORED AND STABILIZED WITHIN TWENTY (20) DAYS IN ACCORDANCE WITH THE STABILIZATION METHODS APPLICABLE TO THE AREA OF DISTURBANCE (I.E. SWALES WITH LINER, ROAD WITH BASE COARSE AND ETC.)
- EXCEPTIONS - IN CERTAIN CASES TRENCHES CANNOT BE BACKFILLED UNTIL THE PIPE IS HYDROSTATICALLY TESTED, OR ANCHORS AND OTHER PERMANENT FEATURES ARE INSTALLED IN THESE CASES, ALL OF THE REQUIREMENTS LISTED UNDER ITEM 1 WILL REMAIN IN EFFECT WITH THE FOLLOWING EXCEPTIONS:
  - DAILY BACKFILLING OF THE TRENCH MAY BE DELAYED FOR SIX DAYS. ALL PRESSURE TESTING AND THE COMPLETE BACKFILLING OF THE OPEN TRENCH MUST BE COMPLETED BY THE SEVENTH WORKING DAY.
  - IF DAILY BACKFILLING IS DELAYED, THE DISTURBED AREA WILL BE GRADED TO FINAL HYDROSTATICALLY TESTED, OR ANCHORS AND OTHER PERMANENT FEATURES ARE INSTALLED IN MEASURES/FACILITIES WILL BE INSTALLED, AND THE AREAS SEEDED AND MULCHED WITHIN THE NEXT TWO CALENDAR DAYS.

**UTILITY AND DRAINAGE PLAN NOTES**

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND / OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES, WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC WATER SERVICE, ELECTRICAL TELEPHONE AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND TO ENSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH THE UTILITY COMPANIES AS TO LOCATION AND SCHEDULING OF CONNECTIONS TO THEIR FACILITIES.
- PVC = POLYVINYLCHLORIDE PIPE  
 HDPE = HIGH DENSITY POLYETHYLENE PIPE  
 RCP = REINFORCED CONCRETE PIPE
- STORM DRAINAGE PIPING TO UTILIZE WATER TIGHT JOINTS.
- ALL CONCRETE, UNLESS OTHERWISE NOTED OR SPECIFIED BY REGULATORY AUTHORITIES, SHALL BE A MINIMUM OF 4,000 PSI.
- THE CONTRACTOR SHALL REVIEW THE STORM DRAINAGE CONNECTIONS TO THE INLETS, MANHOLES, ETC. AND PROVIDE THE APPROPRIATE BOX SIZE, MANHOLES SIZE, ETC. AS NECESSARY TO ACCOMMODATE THE PROPOSED INLET AND OUTLET PIPES.
- CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL BY THE OWNER FOR ALL CATCH BASINS, MANHOLES, AND OTHER STORM AND SANITARY STRUCTURES.
- CITY OF BETHLEHEM SHALL HAVE THE RIGHT TO ENTER PRIVATE PROPERTY TO INSPECT AND REPAIR, IF NECESSARY, ANY STORMWATER MANAGEMENT FACILITY.
- ALL STORMWATER MANAGEMENT FACILITIES ARE A PERMANENT PART OF THE DEVELOPMENT AND SHALL NOT BE REMOVED, ALTERED OR MODIFIED WITHOUT PRIOR APPROVAL FROM THE CITY OF BETHLEHEM.
- THE MAINTENANCE OF STORM WATER FACILITIES SHALL BE THE OWNER'S RESPONSIBILITY. THE OWNER'S DEED, AND THE DEED TO ANY SUBSEQUENT OWNER, SHALL NOTE THAT THE OWNER SHALL ACCEPT THE MAINTENANCE RESPONSIBILITIES. THE CITY OF BETHLEHEM SHALL BE PERMITTED TO INSPECT THE STORM WATER FACILITIES ON AT LEAST AN ANNUAL SCHEDULE TO ENSURE THAT ANY NECESSARY CORRECTIVE WORK IS PERFORMED IN A TIMELY MANNER. THE DRAINAGE EASEMENT PROVIDES FOR THE FLOW OF STORM WATER ACROSS LOTS, AND MAY NOT BE ALTERED WITHOUT THE WRITTEN PERMISSION OF THE CITY ENGINEER. NO OBSTRUCTIONS SUCH AS PLANTING BERMS OR FENCES MAY BE INSTALLED IN THE DRAINAGE EASEMENTS AREAS WITHOUT SUFFICIENT PROVISION FOR THE PASSAGE OF STORM WATER, AND ANY SUCH PROPOSED PROVISION SHALL BE APPROVED IN WRITING BY THE CITY ENGINEER.
- FINISHED FLOOR ELEVATION (FFE) = 238.00



Date	Description	No.
11/05/21	REVISED PER CITY COMMENTS	1

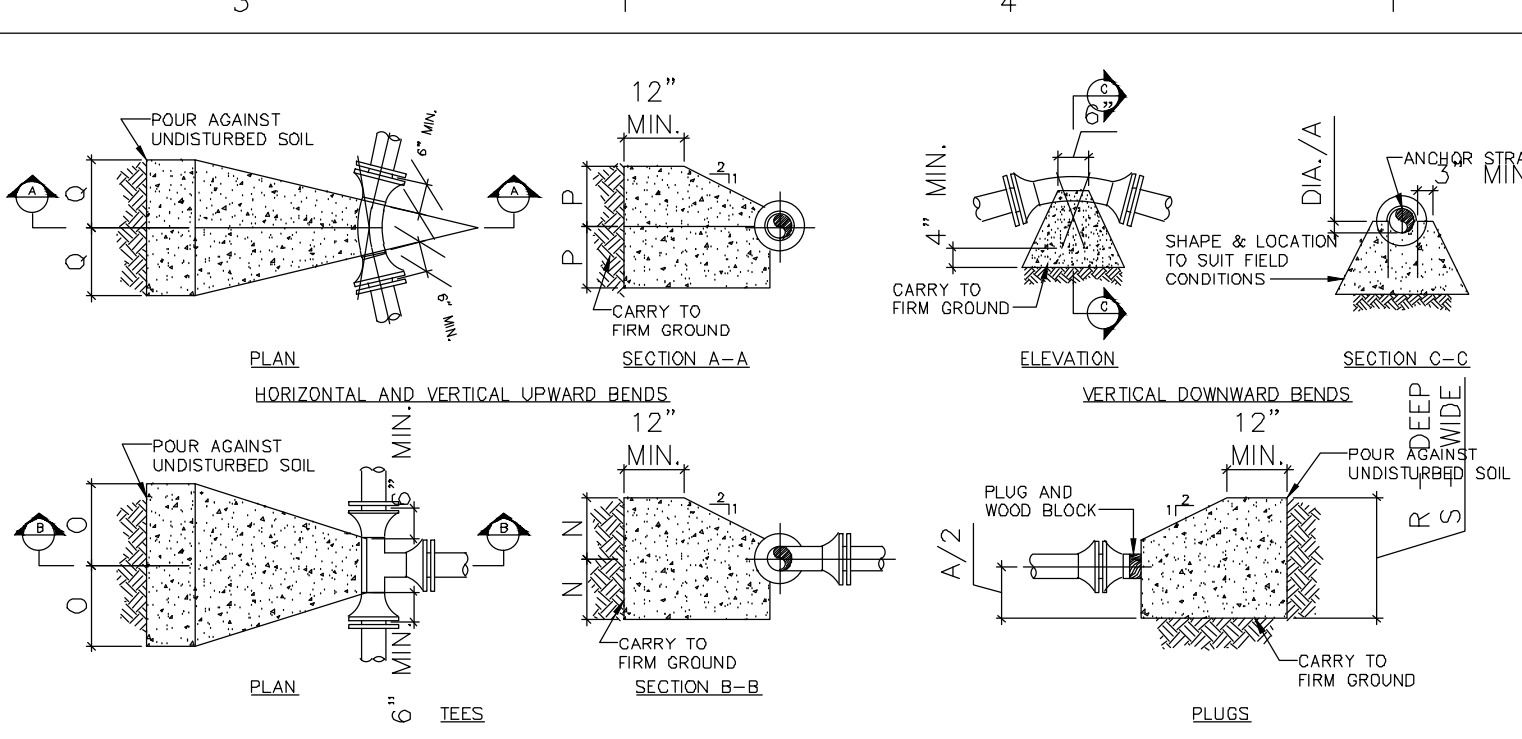
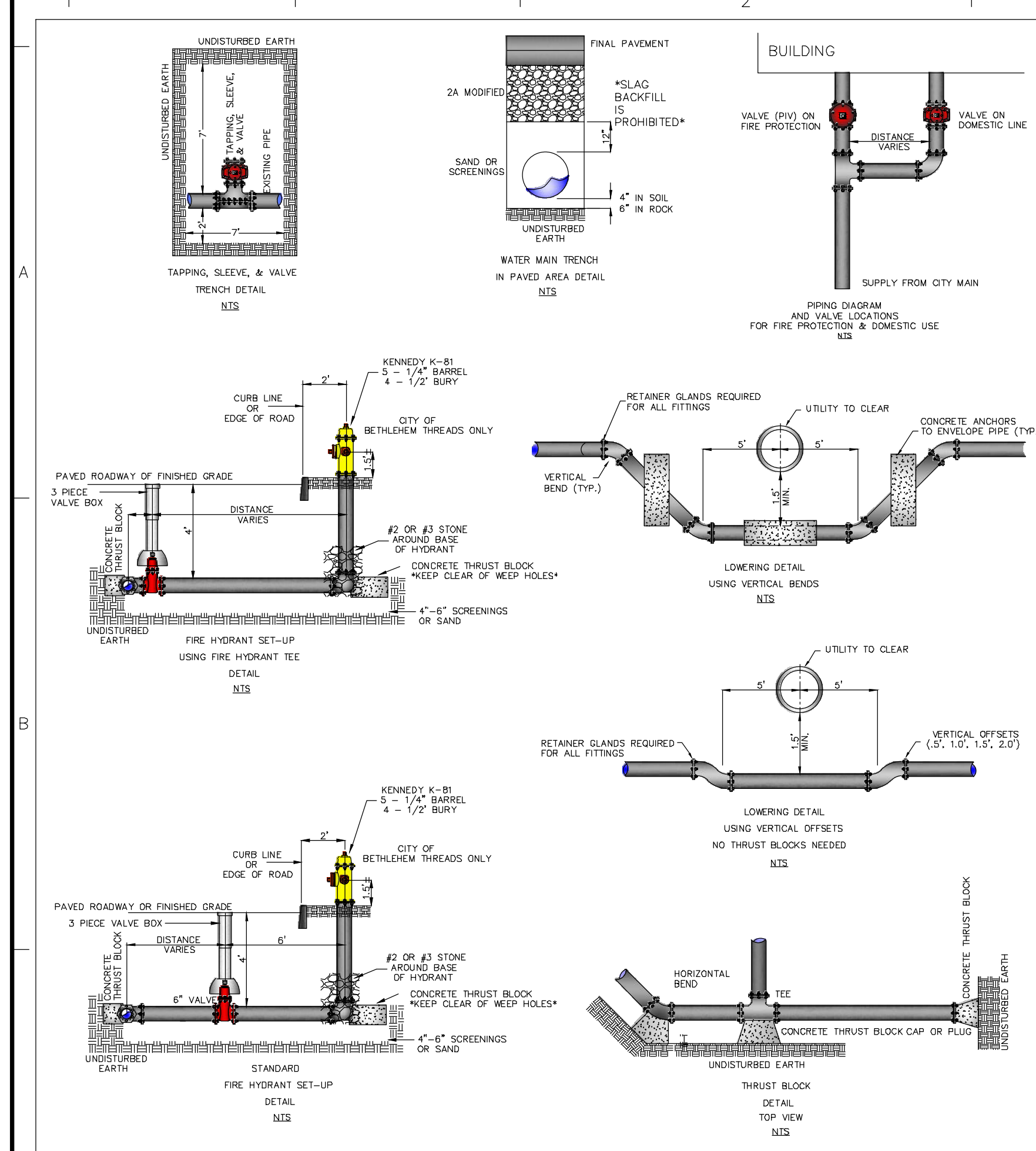
SIGNATURE: *[Signature]* DATE SIGNED: *[Date]*  
 PROFESSIONAL ENGINEER PA Lic. No. PE-057145-E

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Project: **3RD STREET MIXED USE BUILDING**  
 CITY OF BETHLEHEM  
 NORTHAMPTON COUNTY PENNSYLVANIA

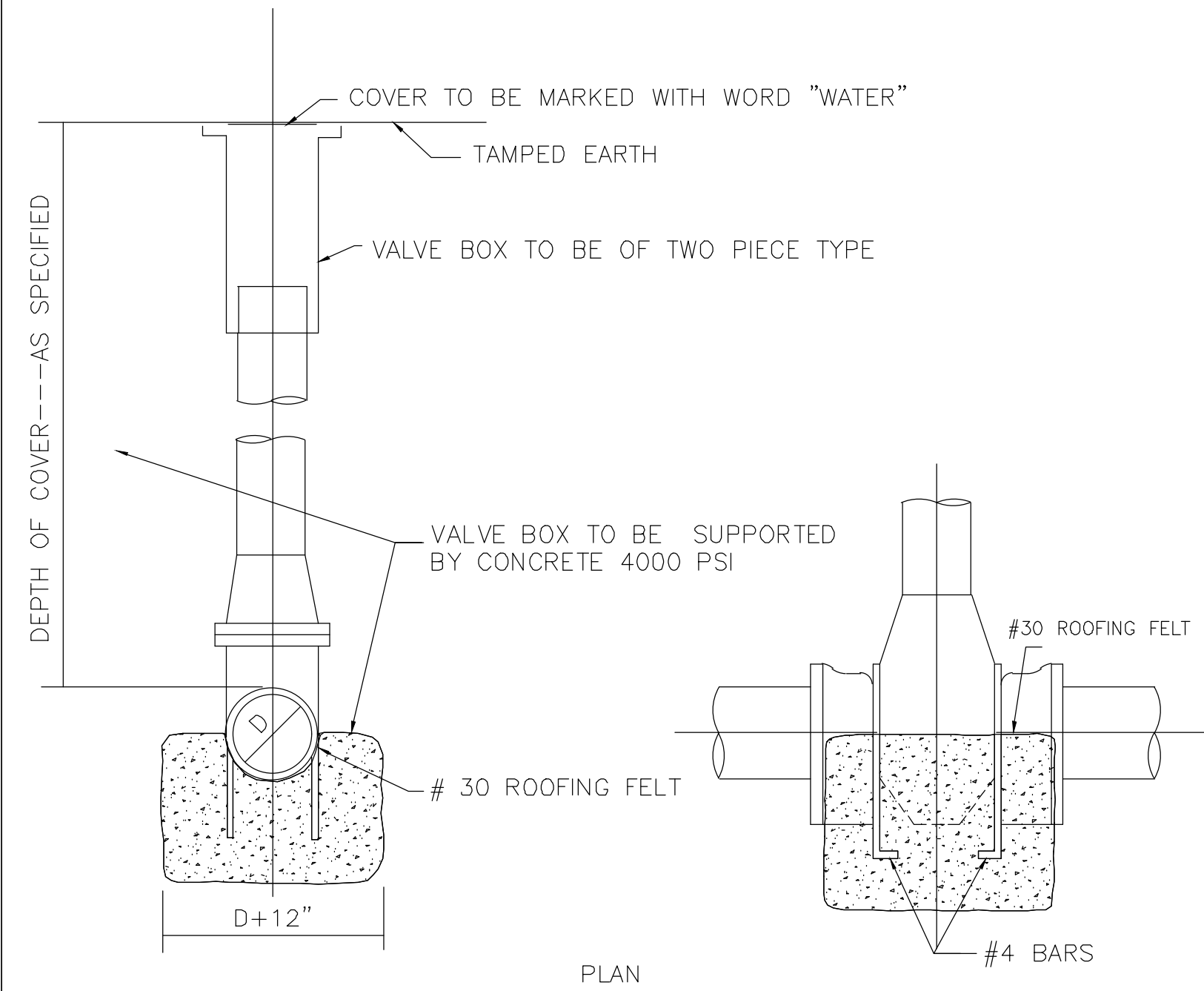
Drawing Title: **UTILITY & DRAINAGE PLAN**

Project No. **240052001**  
 Date: **08/09/21**  
 Drawn By: **TLP**  
 Checked By: **ISE**  
 Drawing No. **CU-101**  
 Sheet 9 of 14



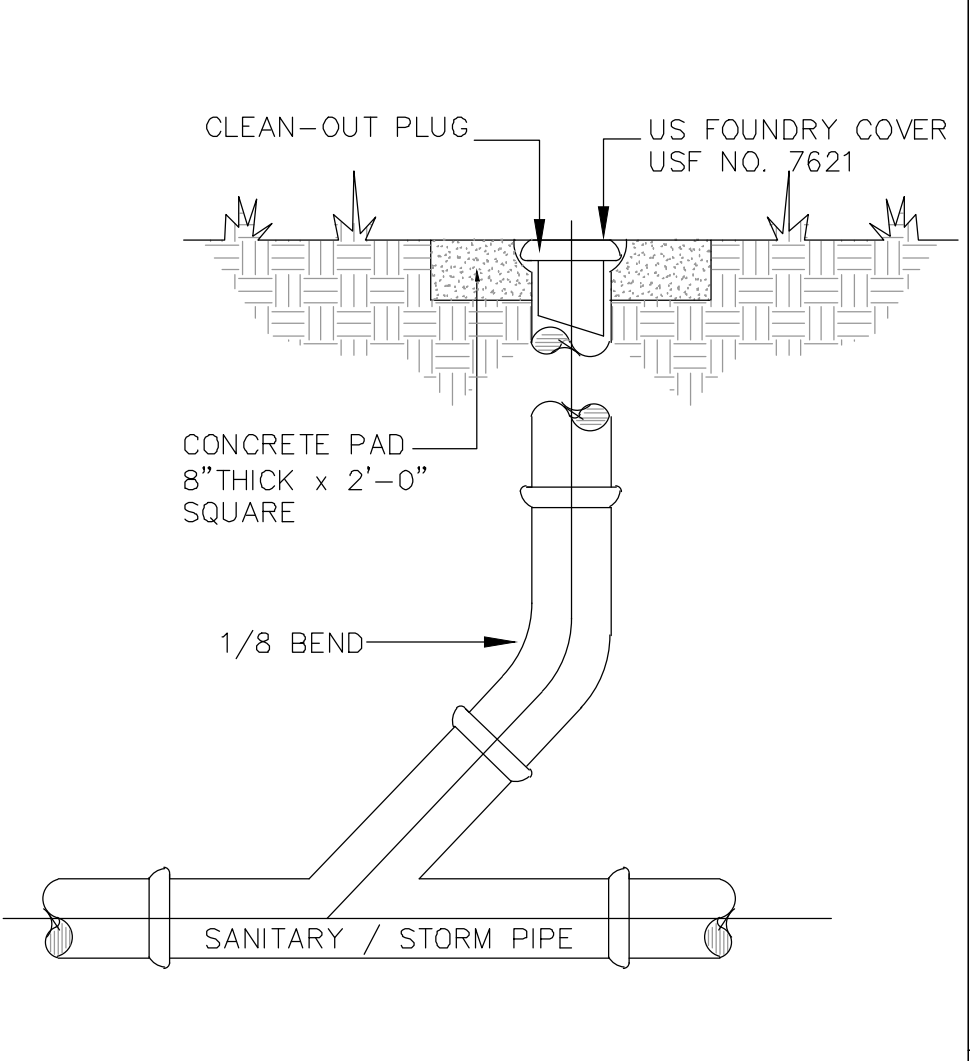
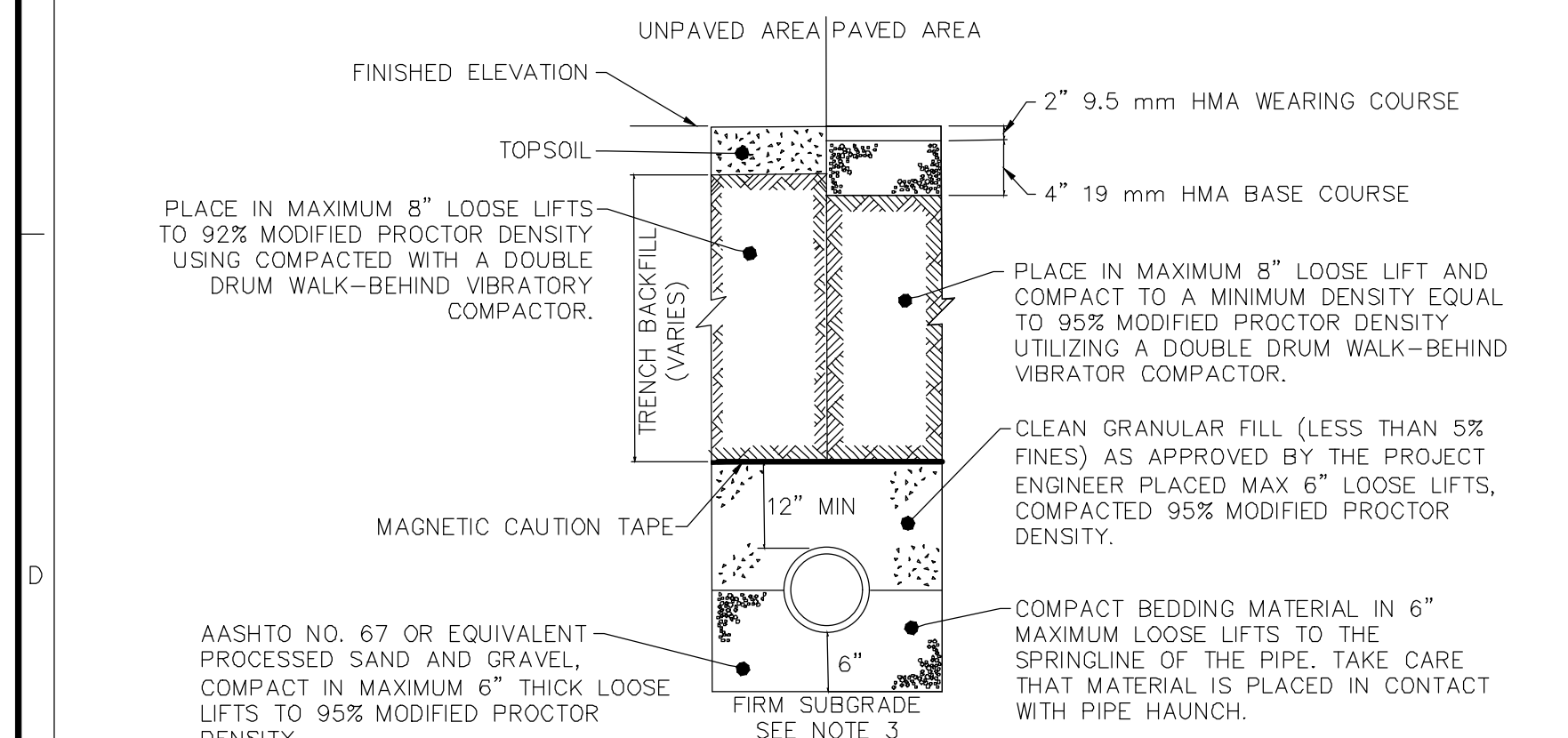
DESCRIPTION	DIMENSION	THRUST BLOCKS DESIGNED FOR REQUIRED TEST PRESSURE AND 2000 PSI SOIL PRESSURE																									
		500 PSI TEST PRESSURE																									
TEES	N	1'-0"	1'-3"	1'-6"	2'-0"	2'-3"	3'-0"	3'-3"	4'-0"	4'-3"	5'-0"	5'-3"	6'-0"	6'-3"	7'-0"	7'-3"	8'-0"	8'-3"	9'-0"	9'-3"							
	G	1'-4"	1'-10"	3'-3"	4'-3"	6'-8"	13'-7"	14'-9"	17'-11"	3'-7"	6'-5"	19'-9"	23'-8"	1'-4"	1'-10"	3'-3"	4'-3"	6'-8"	13'-7"	14'-9"	17'-11"	3'-7"	6'-5"	19'-9"	23'-8"		
90 BENDS	N	1'-0"	1'-3"	1'-6"	2'-0"	2'-3"	3'-0"	3'-3"	4'-0"	4'-3"	5'-0"	5'-3"	6'-0"	6'-3"	7'-0"	7'-3"	8'-0"	8'-3"	9'-0"	9'-3"							
	G	1'-4"	1'-10"	3'-3"	4'-3"	6'-8"	13'-7"	14'-9"	17'-11"	3'-7"	6'-5"	19'-9"	23'-8"	1'-4"	1'-10"	3'-3"	4'-3"	6'-8"	13'-7"	14'-9"	17'-11"	3'-7"	6'-5"	19'-9"	23'-8"		
45 BENDS	N	0'-3"	1'-0"	1'-3"	1'-9"	1'-9"	3'-0"	3'-6"	3'-9"	1'-3"	2'-0"	4'-0"	4'-3"	0'-3"	1'-0"	1'-3"	1'-9"	1'-9"	3'-0"	3'-6"	3'-9"	1'-3"	2'-0"	4'-0"	4'-3"		
	G	1'-0"	1'-3"	2'-2"	3'-8"	4'-11"	7'-8"	8'-7"	10'-8"	2'-4"	3'-11"	10'-3"	13'-9"	1'-0"	1'-3"	2'-2"	3'-8"	4'-11"	7'-8"	8'-7"	10'-8"	2'-4"	3'-11"	10'-3"	13'-9"		
23 BENDS	N	0'-6"	0'-9"	1'-0"	1'-6"	1'-9"	2'-6"	3'-0"	3'-6"	1'-0"	1'-6"	3'-0"	3'-6"	0'-6"	0'-9"	1'-0"	1'-6"	1'-9"	2'-6"	3'-0"	3'-6"	1'-0"	1'-6"	3'-0"	3'-6"		
	G	0'-9"	0'-11"	1'-4"	1'-7"	2'-3"	4'-7"	5'-1"	6'-8"	1'-6"	2'-8"	6'-3"	7'-11"	0'-9"	0'-11"	1'-4"	1'-7"	2'-3"	4'-7"	5'-1"	6'-8"	1'-6"	2'-8"	6'-3"	7'-11"		
11 1/2 BENDS	N	0'-3"	0'-4"	0'-8"	1'-0"	1'-3"	2'-0"	2'-1"	3'-0"	0'-3"	1'-0"	1'-0"	3'-0"	3'-6"	0'-3"	0'-4"	0'-8"	1'-0"	1'-3"	2'-0"	2'-1"	3'-0"	0'-3"	1'-0"	1'-0"	3'-0"	3'-6"
	G	0'-6"	0'-8"	1'-1"	1'-3"	1'-6"	2'-10"	3'-1"	3'-4"	1'-0"	2'-0"	3'-8"	4'-8"	0'-6"	0'-8"	1'-1"	1'-3"	1'-6"	2'-10"	3'-1"	3'-4"	1'-0"	2'-0"	3'-8"	4'-8"		
48 BENDS	N	0'-3"	0'-9"	0'-7"	0'-9"	0'-11"	1'-8"	1'-9"	2'-0"	0'-8"	0'-11"	2'-0"	2'-8"	0'-3"	0'-9"	0'-7"	0'-9"	0'-11"	1'-8"	1'-9"	2'-0"	0'-8"	0'-11"	2'-0"	2'-8"		
	G	0'-3"	0'-9"	0'-8"	0'-10"	1'-0"	1'-11"	2'-3"	2'-6"	0'-10"	1'-2"	2'-9"	2'-10"	0'-3"	0'-9"	0'-8"	0'-10"	1'-0"	1'-11"	2'-3"	2'-6"	0'-10"	1'-2"	2'-9"	2'-10"		
45 BENDS	N	1.4 CY	2.5 CY	5.2 CY	9.0 CY	13.9 CY	43.6 CY	58.8 CY	76.6 CY	5.7 CY	15.3 CY	84.3 CY	106.5 CY	1.4 CY	2.5 CY	5.2 CY	9.0 CY	13.9 CY	43.6 CY	58.8 CY	76.6 CY	5.7 CY	15.3 CY	84.3 CY	106.5 CY		
	G	0.7 CY	1.3 CY	2.7 CY	4.6 CY	7.1 CY	22.2 CY	30.0 CY	39.1 CY	2.9 CY	7.8 CY	43.0 CY	54.3 CY	0.7 CY	1.3 CY	2.7 CY	4.6 CY	7.1 CY	22.2 CY	30.0 CY	39.1 CY	2.9 CY	7.8 CY	43.0 CY	54.3 CY		
23 BENDS	N	0.4 CY	0.7 CY	1.4 CY	2.3 CY	3.6 CY	11.2 CY	15.1 CY	19.6 CY	1.5 CY	3.9 CY	21.6 CY	27.3 CY	0.4 CY	0.7 CY	1.4 CY	2.3 CY	3.6 CY	11.2 CY	15.1 CY	19.6 CY	1.5 CY	3.9 CY	21.6 CY	27.3 CY		
	G	0.2 CY	0.3 CY	0.7 CY	1.2 CY	1.8 CY	5.6 CY	7.6 CY	9.8 CY	0.8 CY	2.0 CY	10.8 CY	13.9 CY	0.2 CY	0.3 CY	0.7 CY	1.2 CY	1.8 CY	5.6 CY	7.6 CY	9.8 CY	0.8 CY	2.0 CY	10.8 CY	13.9 CY		
PLUGS	N	2'-8"	3'-8"	6'-6"	8'-6"	13'-0"	27'-2"	29'-6"	30'-10"	7'-2"	12'-10"	39'-8"	47'-0"	2'-8"	3'-8"	6'-6"	8'-6"	13'-0"	27'-2"	29'-6"	30'-10"	7'-2"	12'-10"	39'-8"	47'-0"		
	G	2'-8"	3'-8"	6'-6"	8'-6"	13'-0"	27'-2"	29'-6"	30'-10"	7'-2"	12'-10"	39'-8"	47'-0"	2'-8"	3'-8"	6'-6"	8'-6"	13'-0"	27'-2"	29'-6"	30'-10"	7'-2"	12'-10"	39'-8"	47'-0"		

### THRUST BLOCK



### GATE VALVE

### CITY OF BETHLEHEM WATER DETAILS



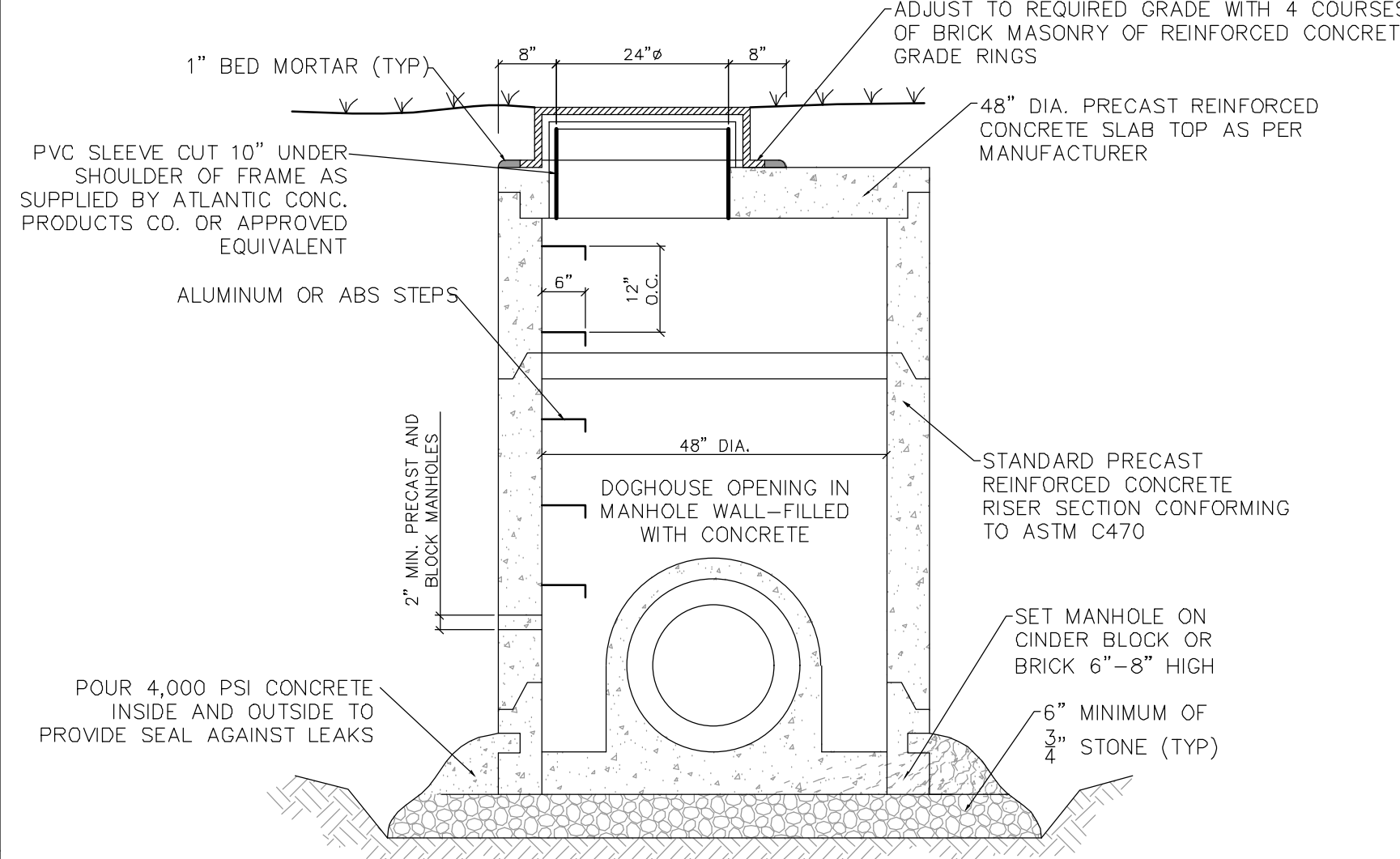
### CLEANOUT

DETECTABLE WARNING TAPE TO BE INSTALLED IN THE TRENCHES OF ALL UTILITIES. THE FOLLOWING SPECIFICATIONS SHALL BE FOLLOWED:

- DETECTABLE WARNING TAPE: ACID- AND ALKALI-RESISTANT POLYETHYLENE FILM WARNING TAPE MANUFACTURED FOR MARKING AND IDENTIFYING UNDERGROUND UTILITIES. A MINIMUM OF 6 INCHES WIDE AND 0.1 MM (4 MILS) THICK, CONTINUOUSLY INSCRIBED WITH A DESCRIPTION OF THE UTILITY, WITH METALLIC CORE ENCASED IN A PROTECTIVE JACKET FOR CORROSION PROTECTION, DETECTABLE BY METAL DETECTOR WHEN TAPE IS BURIED UP TO 30 INCHES DEEP; COLORED AS FOLLOWS:
1. RED: ELECTRIC.
  2. YELLOW: GAS, OIL, STEAM, AND DANGEROUS MATERIALS.
  3. ORANGE: TELEPHONE AND OTHER COMMUNICATIONS.
  4. BLUE: WATER SYSTEMS.
  5. GREEN: SEWER SYSTEMS.

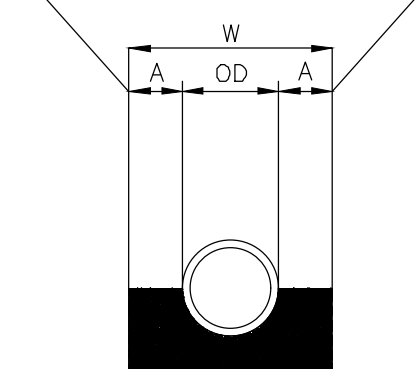
PLACE THE TAPE AT ONE-HALF THE MINIMUM DEPTH OF COVER FOR THE UTILITY LINE OR A MAXIMUM OF 30 INCHES, WHICHEVER IS THE LESS, BUT NEVER ABOVE THE TOP OF SUBGRADE.

### DETECTABLE WARNING TAPE NOTE



### DOGHOUSE MANHOLE

- NOTES:
1. ALL TRENCH EXCAVATIONS ARE TO BE DONE IN COMPLIANCE WITH OSHA REGULATIONS.
  2. MINIMUM TRENCH WIDTHS TO BE DONE IN ACCORDANCE WITH THE CHART ABOVE.
  3. IF SOFT SOIL IS ENCOUNTERED AT BEDDING AT SUBGRADE, THE SOFT SOIL IS TO BE REMOVED (TO A MAXIMUM DEPTH OF 2 FT) AND REPLACED WITH 3/4" CLEAN CRUSHED STONE.
  4. TRENCH BACKFILL SHALL BE PREDOMINANTLY GRANULAR FILL MATERIAL AS APPROVED BY THE PROJECT ENGINEER. MATERIAL EXCAVATED FROM THE TRENCH MAY BE USED FOR BACKFILL PROVIDED IT IS PREDOMINANTLY SAND AND IS AT WATER CONTENT THAT THE MATERIAL CAN BE READILY COMPACTED TO THE DENSITY REQUIRED.
  5. WITHIN PUBLIC RIGHT OF WAY BENEATH PAVEMENT, THE BACKFILL MATERIAL SHALL BE CLEAN CRUSHED STONE EQUIVALENT TO PENNDOT 2A OR CITY ENGINEER APPROVED EQUIVALENT.
  6. MAGNETIC UNDERGROUND MARKING TAPE TO BE PROVIDED FOR ALL UTILITIES. REFER TO DETECTABLE WARNING TAPE NOTES FOR FURTHER DETAIL.
  7. IN AREAS WHERE THERE IS NOT SUFFICIENT WIDTH FOR A DOUBLE DRUM, WALK BEHIND VIBRATORY COMPACTOR THE LIFT THICKNESS SHALL BE DECREASED AS NECESSARY TO ACHIEVE COMPACTION WITH APPROPRIATE EQUIPMENT.
  8. MAXIMUM PARTICLE SIZE FOR TRENCH BACKFILL SHALL BE 4 INCHES UNLESS APPROVED OTHERWISE BY PROJECT ENGINEER.
  9. BACKFILL CONTAIN NO DELETERIOUS OR CONTAMINATED MATERIAL.



PIPE DIAMETER "OD"	MAXIMUM "A"
6" TO 15"	8"
16" TO 21"	10"
24" TO 30"	12"
33" TO 42"	15"
48" & LARGER	16"

- NOTES:
1. MAXIMUM TRENCH WIDTH "W" TAKEN AT TOP OF PIPE.

### SANITARY AND STORM SEWER TRENCH

Date	Description	No.
11/05/21	REVISED PER CITY COMMENTS	1
Revisions		

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Project

3RD STREET MIXED USE BUILDING

CITY OF BETHLEHEM  
NORTHAMPTON COUNTY PENNSYLVANIA

Drawing Title

UTILITY AND DRAINAGE DETAILS

Project No. 240052001

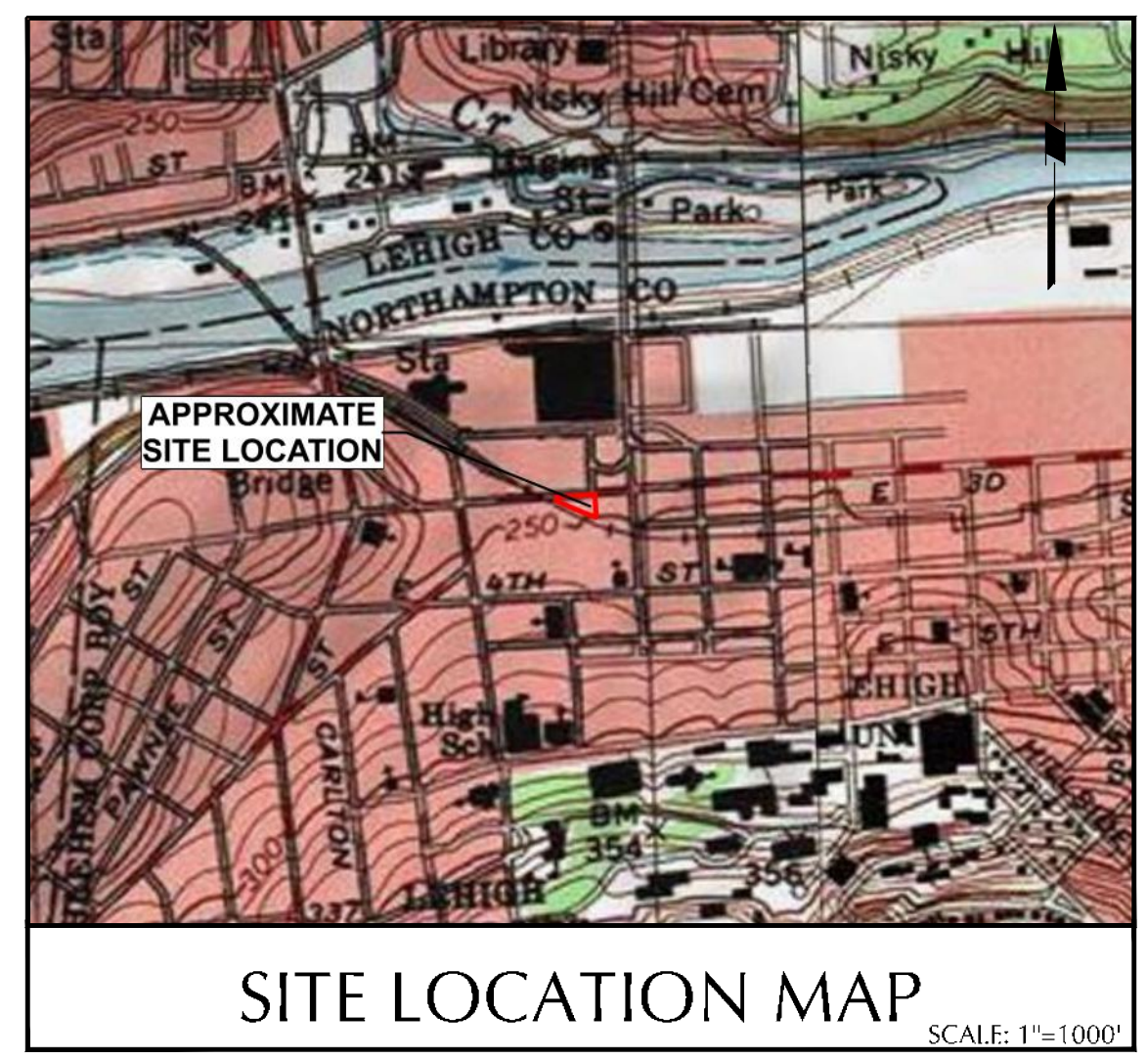
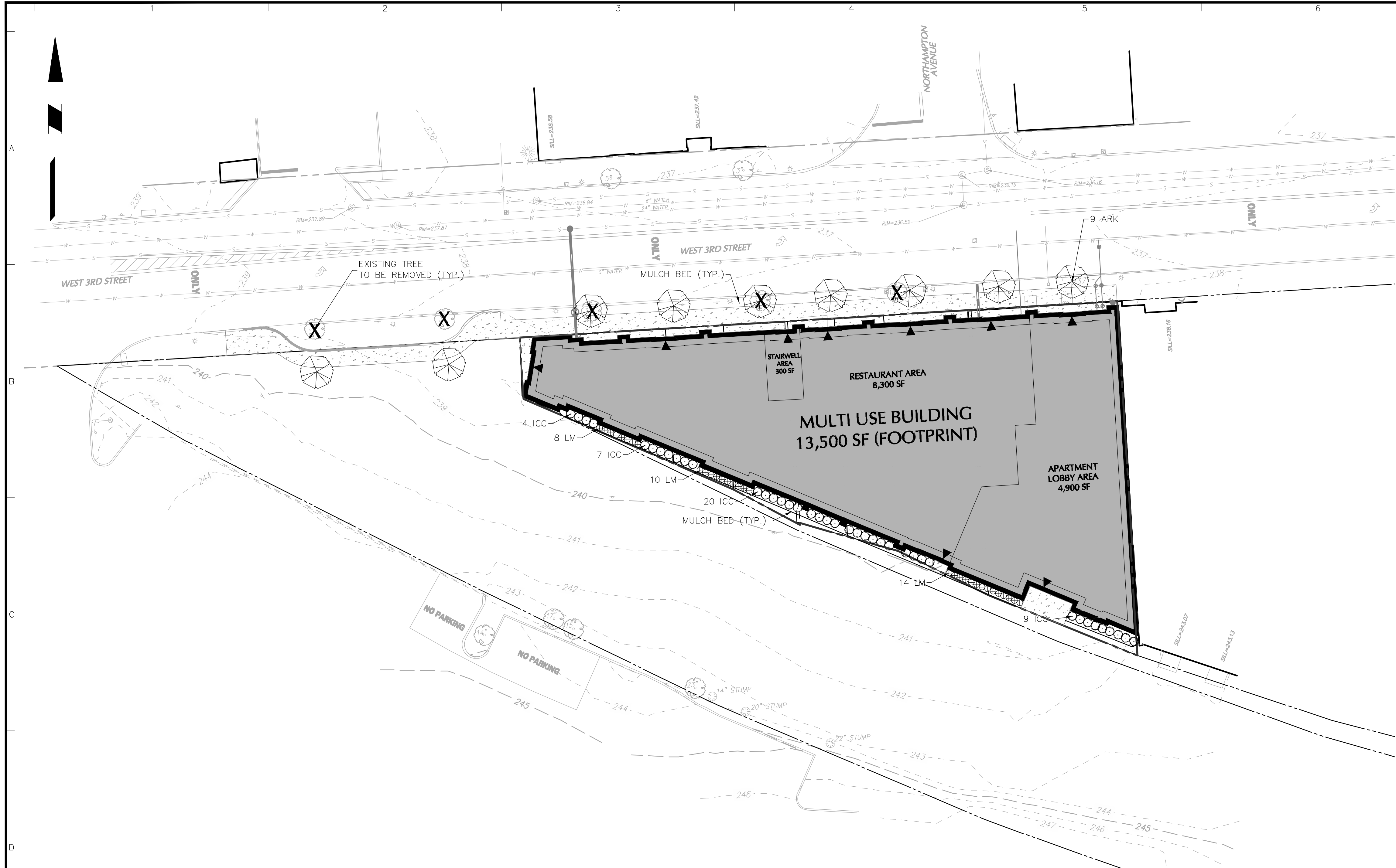
Date 08/09/21

Drawn By IDL

Checked By JSE

Drawing No. CU-501

Sheet 10 of 14



**NOTES**

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

**PLANT SCHEDULE**

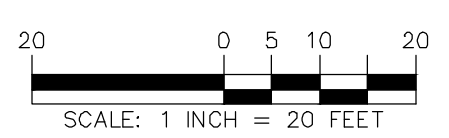
KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
<b>ORNAMENTAL TREE(S)</b>						
ARK	9	ACER RUBRUM 'KARPICK'	KARPICK RED MAPLE	2 1/2" - 3" CAL.	B+B	-
<b>EVERGREEN SHRUB(S)</b>						
ICC	40	ILEX CRENATA 'COMPACTA'	COMPACT JAPANESE HOLLY	24-30"	#3 CAN	spaced @ 12" o.c.
<b>PERENNIAL(S)</b>						
LM	32	LIRIOPE MUSCARI 'BIG BLUE'	BIG BLUE LILYTURF	1 PT.	CONTAINER	spaced @ 12" o.c.

NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN IN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE.

**ORDINANCE COMPLIANCE CHART**

ZONING ORDINANCE SECTION	REQUIREMENTS	CALCULATIONS	PROVIDED
1311.04 C: LANDSCAPING STREET TREES	AN AVERAGE OF AT LEAST ONE STREET TREE SHALL BE PLANTED FOR EACH 30 FEET OF STREET LENGTH, UNLESS EXISTING TREES WILL BE PRESERVED TO SERVE THE SAME PURPOSE.	205 LF STREET FRONTAGE / 30 FEET = 7 TREES	7 PROPOSED TREES

REFER TO LP-501 FOR LANDSCAPE NOTES AND DETAILS



Date	Description	No.
11/05/21	REVISED PER CITY COMMENTS	1

SIGNATURE MICHAEL SZURA DATE SIGNED  
 REGISTERED LANDSCAPE ARCHITECT PA Lic. No. LA-002533

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Project  
**3RD STREET MIXED USE BUILDING**  
 CITY OF BETHLEHEM  
 NORTHAMPTON COUNTY PENNSYLVANIA

Drawing Title  
**LANDSCAPE PLAN**

Project No. **240052001**  
 Date **08/09/21**  
 Drawn By **SW**  
 Checked By **NB**  
 Drawing No. **LP-101**  
 Sheet 11 of 14

# GENERAL LANDSCAPE PLANTING NOTES:

## PLANTING MATERIALS

- NAMES OF PLANTS AS DESCRIBED ON THIS PLAN CONFORM TO THOSE GIVEN IN "STANDARDIZED PLANT NAMES", 1942 EDITION PREPARED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE. NAMES OF PLANT VARIETIES NOT INCLUDED THEREIN CONFORM TO NAMES GENERALLY ACCEPTED IN NURSERY TRADE.
- STANDARDS FOR TYPE, SPREAD, HEIGHT, ROOT BALL AND QUALITY OF NEW PLANT MATERIAL SHALL BE IN ACCORDANCE WITH GUIDELINES AS SET FORTH IN THE "AMERICAN STANDARD FOR NURSERY STOCK", PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSEYMEN. PLANT MATERIAL SHALL HAVE NORMAL HABIT OF GROWTH AND BE HEALTHY, VIGOROUS, AND FREE FROM DISEASES AND INSECT INFESTATION.
- NEW PLANT MATERIAL SHALL BE NURSERY GROWN UNLESS SPECIFIED OTHERWISE. ALL PLANTS SHALL BE SET PLUMB AND SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANT'S ORIGINAL GRADE BEFORE DIGGING. PLANT MATERIAL OF THE SAME SPECIES AND SPECIES AS THE SAME SIZE SHOULD BE SIMILAR IN SHAPE, COLOR AND HABIT. THE LANDSCAPE ARCHITECT HAS THE RIGHT TO REJECT PLANT MATERIAL THAT DOES NOT CONFORM TO THE TYPICAL OR SPECIFIED HABIT OF THAT SPECIES.
- THE CONTRACTOR SHALL NOT MAKE SUBSTITUTIONS. IF THE SPECIFIED LANDSCAPE MATERIAL IS NOT OBTAINABLE, THE CONTRACTOR SHALL SUBMIT PROOF OF NON-AVAILABILITY TO THE LANDSCAPE ARCHITECT AND OWNER TOGETHER WITH A WRITTEN PROPOSAL FOR USE OF AN EQUIVALENT MATERIAL.
- THE LANDSCAPE ARCHITECT MAY REVIEW PLANT MATERIALS AT THE SITE, BEFORE PLANTING, FOR COMPLIANCE WITH REQUIREMENTS FOR GENUS, SPECIES, VARIETY, SIZE, AND QUALITY. THE LANDSCAPE ARCHITECT RETAINS THE RIGHT TO FURTHER REVIEW OF PLANTING FOR DEFECTS OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK. THE CONTRACTOR SHALL REMOVE REJECTED PLANT MATERIALS IMMEDIATELY FROM PROJECT SITE AS DIRECTED BY THE LANDSCAPE ARCHITECT OR OWNER.

## PLANTING SOILS

- REUSE SURFACE SOILS STOCKPILED ON SITE, VERIFYING COMPLIANCE WITH PLANTING SOIL AND TOPSOIL CRITERIA IN THIS SPECIFICATION THROUGH TESTING. CLEAN SURFACE SOIL OF ALL ROOTS, PLANTS, SOD, AND GRAVEL OVER 1" IN DIAMETER AND DELETERIOUS MATERIALS. IF ON-SITE SOILS ARE TO BE USED FOR PROPOSED PLANTING, THE CONTRACTOR SHALL DEMONSTRATE, THROUGH SOIL TESTING, THAT ON-SITE SOILS MEET THE SAME CRITERIA AS INDICATED IN NOTES PLANS AND SPECIFICATIONS.
- SUPPLEMENT WITH IMPORTED OR MANUFACTURED TOPSOIL FROM OFF SITE SOURCES WHEN TOPSOIL AND PLANTING SOIL QUANTITIES ARE INSUFFICIENT. OBTAIN SOIL DISPLACED FROM NATURALLY WELL-DRAINED SITES WHERE TOPSOIL OCCURS AT LEAST 4" DEEP. DO NOT OBTAIN FROM AGRICULTURAL LAND, BOGS, MARSHES OR CONTAMINATED SITES.
- IF DEPTH OF PLANTING SOILS AND TOPSOIL IS NOT INDICATED IN PLANS OR DETAILS, A MINIMUM 18" DEPTH SHALL BE PROVIDED FOR ALL TREES AND LARGE SHRUBS; MINIMUM 12" DEPTH SHALL BE PROVIDED FOR GROUNDCOVERS, HERBACEOUS AND MEADOW OR ORNAMENTAL GRASS AREAS AND A MINIMUM 6" LAYER SHALL BE INSTALLED IN ALL LAWN AREAS. TOPSOIL AND PLANTING SOIL DEPTH INDICATED ON PLANS AND PLANTING DETAILS AND NARRATIVE SPECIFICATIONS SHALL GOVERN DEPTH WHEN PROVIDED.
- WHERE PLANTING AREAS ARE PROPOSED FOR FORMER PAVED OR GRAVEL AREAS, BEDS SHALL BE EXCAVATED TO A MINIMUM 30" DEPTH AND, AT A MINIMUM, BE BACKFILLED WITH BOTTOM LAYER OF SANDY LOAM (ORGANIC CONTENT LESS THAN 2%) OVER WHICH TOPSOIL AND PLANTING SOILS WILL BE PLACED AT DEPTHS INDICATED IN PLANS, DETAILS AND NOTES.
- IF THE QUANTITY OF SOILS FROM THE SITE IS NOT ADEQUATE TO FILL PLANTING AREAS TO A DEPTH INDICATED IN PLANS AND DETAILS, TOPSOIL AND PLANTING SOILS TO DETERMINE IF THE MATERIALS ARE CONDUCTIVE TO SUSTAINING PROPOSED PLANTINGS SHOULD BE FURNISHED BY THE CONTRACTOR. TOPSOIL AND PLANTING SOILS SHALL BE FREE OF BROKEN GLASS, PAINT CHIPS, PLASTIC, DELETERIOUS MATERIALS, ROOTS, WEEDS, BOULDERS, COBBLES AND GRAVEL OVER 1" IN DIAMETER AND COMPLY WITH THE FOLLOWING CRITERIA:
  - SOILS SHALL MEET ALL APPLICABLE SOIL REMEDIATION STANDARDS
  - ORGANIC CONTENT: 2-5% IN NATIVE SOILS; UP TO 10% IN AMENDED SOILS
  - SOLUBLE SALTS: LESS THAN 0.5 MM HOS/CM
  - SOIL PH: 4.5-7% TO BE AMENDED PER SOIL TEST RESULTS
  - PHYSICAL (SIEVE) ANALYSIS/ SOIL TEXTURE:
    - SAND: 40-60% SILT: 25-60% CLAY: 5-20%
    - NOT MORE THAN 1% OF MATERIAL SHALL BE RETAINED BY A #4 SIEVE.
- ALL PLANTING SOILS SHALL BE SUBMITTED FOR TESTING TO THE STATE COOPERATIVE EXTENSION SERVICE, OR APPROVED EQUAL, PRIOR TO DELIVERY TO THE SITE. CONTRACTOR SHALL FURNISH SOIL SAMPLES AND SOIL TEST RESULTS TO LANDSCAPE ARCHITECT OR OWNER AT A RATE OF ONE SAMPLE PER 500 CUBIC YARDS TO ENSURE CONSISTENCY ACROSS THE TOTAL VOLUME OF PLANTING SOIL REQUIRED. TEST RESULTS SHALL EVALUATE FOR ALL CRITERIA LISTED IN THIS SPECIFICATION. IF TESTING AGENCY DETERMINES THAT THE SOILS ARE DEFICIENT IN ANY MANNER AND MAY BE CORRECTED BY ADDING AMENDMENTS, THE CONTRACTOR SHALL FOLLOW STATED RECOMMENDATIONS FOR SOIL IMPROVEMENT AND FURNISH SUBMITTALS FOR ALL AMENDMENTS PRIOR TO DELIVERY OF SOIL TO THE PROJECT SITE.
- IF SOIL ORGANIC CONTENT IS INADEQUATE, SOIL SHALL BE AMENDED WITH COMPOST OR ACCEPTABLE, WEED FREE, ORGANIC MATTER. ORGANIC AMENDMENT SHALL BE WELL COMPOSTED, PH RANGE OF 6-8; MOISTURE CONTENT 35-55% BY WEIGHT 100% PASSING THROUGH 1" SIEVE; SOLUBLE SALT CONTENT LESS THAN 0.5 MM HOS/CM; MEETING ALL APPLICABLE ENVIRONMENTAL CRITERIA FOR CLEAN FILL; FREE OF BROKEN GLASS, PAINT CHIPS, PLASTIC, DELETERIOUS MATERIALS, ROOTS, WEEDS, BOULDERS, COBBLES AND GRAVEL OVER 1" IN DIAMETER
- SCARIFY AND/OR TILL ALL COMPACTED SUBSOILS PRIOR TO ADDING PLANTING SOIL OR TOPSOIL. PLANTING SOILS AND TOPSOIL SHALL BE PLACED IN 12"-18" LIFTS AND WATER THOROUGHLY BEFORE INSTALLING NEXT LIFT. NO SOILS SHALL BE PLACED IN A FROZEN OR MUDDY CONDITION.

## DELIVERY, STORAGE, AND HANDLING

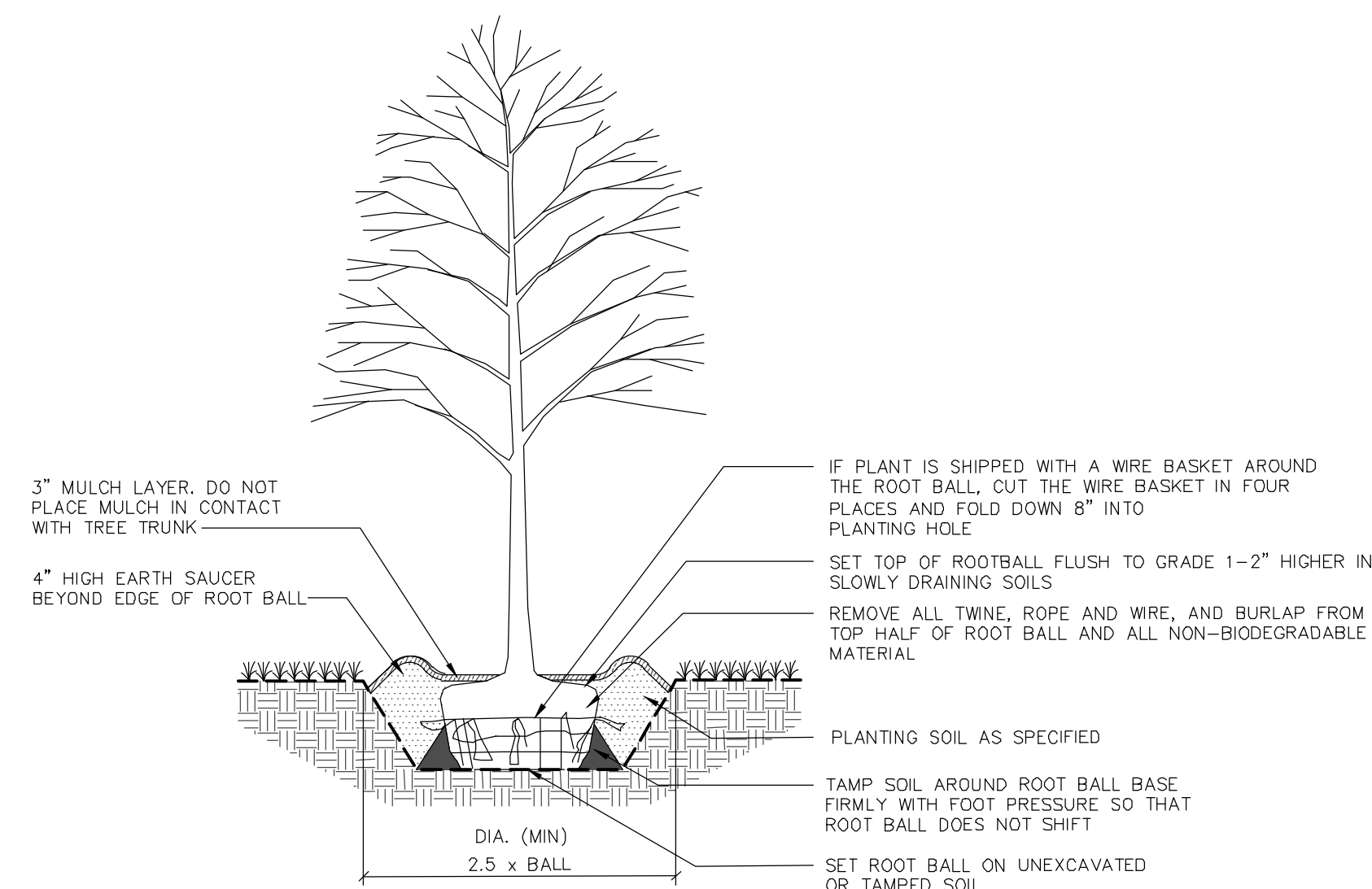
- PACKAGED MATERIALS: PACKAGED MATERIALS SHALL BE DELIVERED IN CONTAINERS SHOWING WEIGHT, ANALYSIS, AND NAME OF MANUFACTURER. MATERIALS SHALL BE PROTECTED FROM DETERIORATION DURING DELIVERY, AND WHILE STORED AT SITE.
- TREES AND SHRUBS: THE CONTRACTOR SHALL PROVIDE TREES AND SHRUBS DUG FOR THE GROWING SEASON FOR WHICH THEY WILL BE PLANTED; DO NOT PRUNE PRIOR TO DELIVERY UNLESS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT. DO NOT BEND OR BIND-TIE TREES OR SHRUBS IN SUCH A MANNER AS TO DAMAGE BARK, BREAK BRANCHES, OR DESTROY NATURAL SHAPE. PROVIDE PROTECTIVE COVERING DURING TRANSIT. DO NOT DROP OR BREAK BALLED STOCK DURING DELIVERY OR HANDLING.
- ALL PLANTS SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL ROOT BALL WRAPPING AND BINDING MATERIAL MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED FROM THE TOP OF THE BALL AT THE TIME OF PLANTING. IF THE PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, THE WIRE BASKET SHALL BE CUT AND FOLDED DOWN 8" INTO THE PLANTING HOLE. WITH CONTAINER-GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE ROOT BALL SHALL BE CUT THROUGH THE SURFACE IN TWO LOCATIONS.
- THE CONTRACTOR SHALL HAVE TREES AND SHRUBS DELIVERED TO SITE AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND PLANT IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN 6 HOURS AFTER DELIVERY, THE CONTRACTOR SHALL SET TREES AND SHRUBS IN SHADE, PROTECT FROM WEATHER AND MECHANICAL DAMAGE AND KEEP ROOTS MOIST BY COVERING WITH MULCH, BURLAP OR OTHER ACCEPTABLE MEANS OF RETAINING MOISTURE.

## INSTALLATION

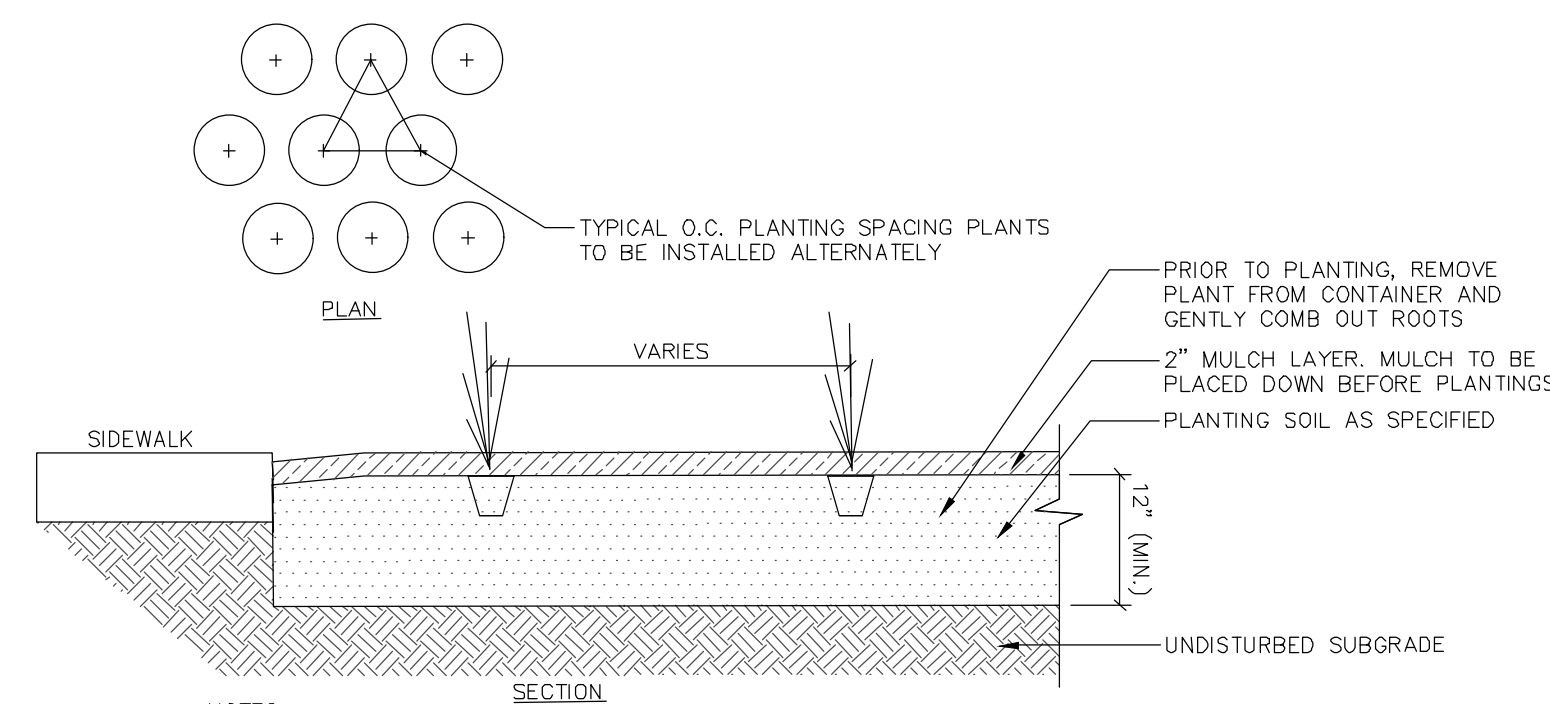
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITY AND SEWER LINES PRIOR TO THE START OF EXCAVATION ACTIVITIES; NOTIFY THE PROJECT ENGINEER AND OWNER IMMEDIATELY OF ANY CONFLICTS WITH PROPOSED PLANTING LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE.
- THE CONTRACTOR TO STAKE OUT PLANTING LOCATIONS, FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT AND/OR OWNER BEFORE PLANTING WORK BEGINS. THE LANDSCAPE ARCHITECT AND/OR OWNER SHALL DIRECT THE CONTRACTOR IN THE FINAL PLACEMENT OF ALL PLANT MATERIAL AND LOCATION OF PLANTING BEDS TO ENSURE COMPLIANCE WITH DESIGN INTENT UNLESS OTHERWISE INSTRUCTED.
- NO PLANT SHALL BE PUT INTO THE GROUND BEFORE ROUGH GRADING HAS BEEN COMPLETED AND APPROVED BY THE PROJECT LANDSCAPE ARCHITECT OR PROJECT ENGINEER.
- ALL LANDSCAPED AREAS TO BE CLEARED OF ROCKS, STUMPS, TRASH AND OTHER UNSIGHTLY DEBRIS. ALL FINE GRADED AREAS SHOULD BE HAND RAKED SMOOTH ELIMINATING ANY CLUMPS AND UNEVEN SURFACES PRIOR TO PLANTING OR MULCHING.
- ALL PLANT MATERIAL SHALL BE INSTALLED AS PER DETAILS, NOTES AND CONTRACT SPECIFICATIONS. THE LANDSCAPE ARCHITECT MAY REVIEW INSTALLATION AND MAINTENANCE PROCEDURES.
- THE CONTRACTOR SHALL KEEP AREA CLEAN DURING DELIVERY AND INSTALLATION OF PLANT MATERIALS. REMOVE AND DISPOSE OF OFF-SITE ANY ACCUMULATED DEBRIS OR UNUSED MATERIALS. REPAIR DAMAGE TO ADJACENT AREAS CAUSED BY LANDSCAPE INSTALLATION OPERATIONS.
- AFTER PLANT IS PLACED IN TREE PIT LOCATION, ALL TWINE HOLDING ROOT BALL TOGETHER SHOULD BE COMPLETELY REMOVED AND THE BURLAP SHOULD BE PULLED DOWN SO 1/3 OF THE ROOT BALL IS EXPOSED. SYNTHETIC BURLAP SHOULD BE COMPLETELY REMOVED AFTER INSTALLATION.
- MULCH SHOULD NOT BE PILED UP AROUND THE TRUNK OF ANY PLANT MATERIAL. NO MULCH OR TOPSOIL SHOULD BE TOUCHING THE BASE OF THE TRUNK ABOVE THE ROOT COLLAR.
- ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY OR AS REQUIRED BY SITE AND WEATHER CONDITIONS TO MAINTAIN VIGOROUS AND HEALTHY PLANT GROWTH.
- AFTER COMPLETION OF A PROJECT, ALL EXPOSED GROUND SURFACES THAT ARE NOT PAVED WITHIN THE CONTRACT LIMIT LINE, AND THAT ARE NOT COVERED BY LANDSCAPE PLANTING OR SEEDING AS SPECIFIED, SHALL BE COVERED BY A SHREDDED HARDWOOD BARK OR APPROVED EQUAL MULCH THAT WILL PREVENT SOIL EROSION AND THE EMANATION OF DUST.
- DECIDUOUS TREES AND EVERGREEN TREES TO BE STAKED WITH THREE VERTICAL STAKES. STAKE AND GUYS SHALL BE LOCATED AND FLAGGED IN A MANNER TO PREVENT TRIPPING HAZARDS. WIRES OR GUYS SHALL BE LOCATED AND COVERED SO AS NOT TO PULL OR DAMAGE BRANCHES AND SHALL BE REMOVED AT THE END OF THE GUARANTEE PERIOD.

## GUARANTEE

- NEW PLANT MATERIAL SHALL BE GUARANTEED TO BE ALIVE AND IN VIGOROUS GROWING CONDITION FOR A PERIOD OF 12 MONTHS FOLLOWING ACCEPTANCE BY THE OWNER. PLANT MATERIAL FOUND TO BE UNHEALTHY, DYING OR DEAD DURING THIS PERIOD, SHALL BE REMOVED AND REPLACED IN KIND BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.



1 DECIDUOUS TREE PLANTING NTS



## NOTES:

- ALL SHRUBS TO BE SET PLUMB.
- REFER TO LANDSCAPE PLAN FOR SPACING OF INDIVIDUAL PLANTS.
- REMOVE ALL WIRE, PLASTIC, TAGS OR SYNTHETIC MATERIAL FROM PLANTS PRIOR TO PLANTING.

2 SHRUB PLANTING NTS

3 GROUNDCOVER/PERENNIAL PLANTING NTS



## NOTES:

- PLANTS ARE TO BE SPACED EQUIDISTANT FROM EACH OTHER.
- REFER TO PLAN AND SCHEDULE FOR SPACING OF INDIVIDUAL PLANTS.
- REMOVE ALL WIRE, PLASTIC, TAGS OR SYNTHETIC MATERIAL FROM PLANTS PRIOR TO PLANTING.

REFER TO LP-101 FOR LANDSCAPE PLAN, LANDSCAPE SCHEDULE AND ORDINANCE COMPLIANCE

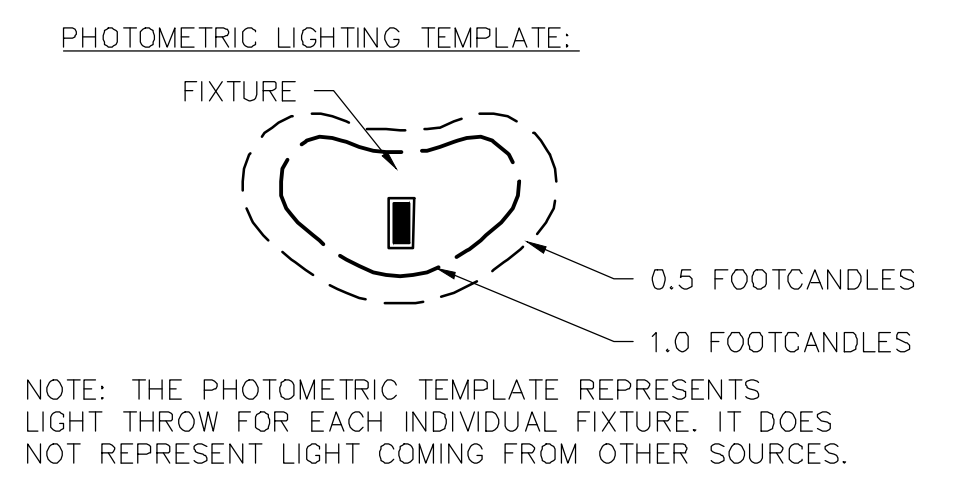
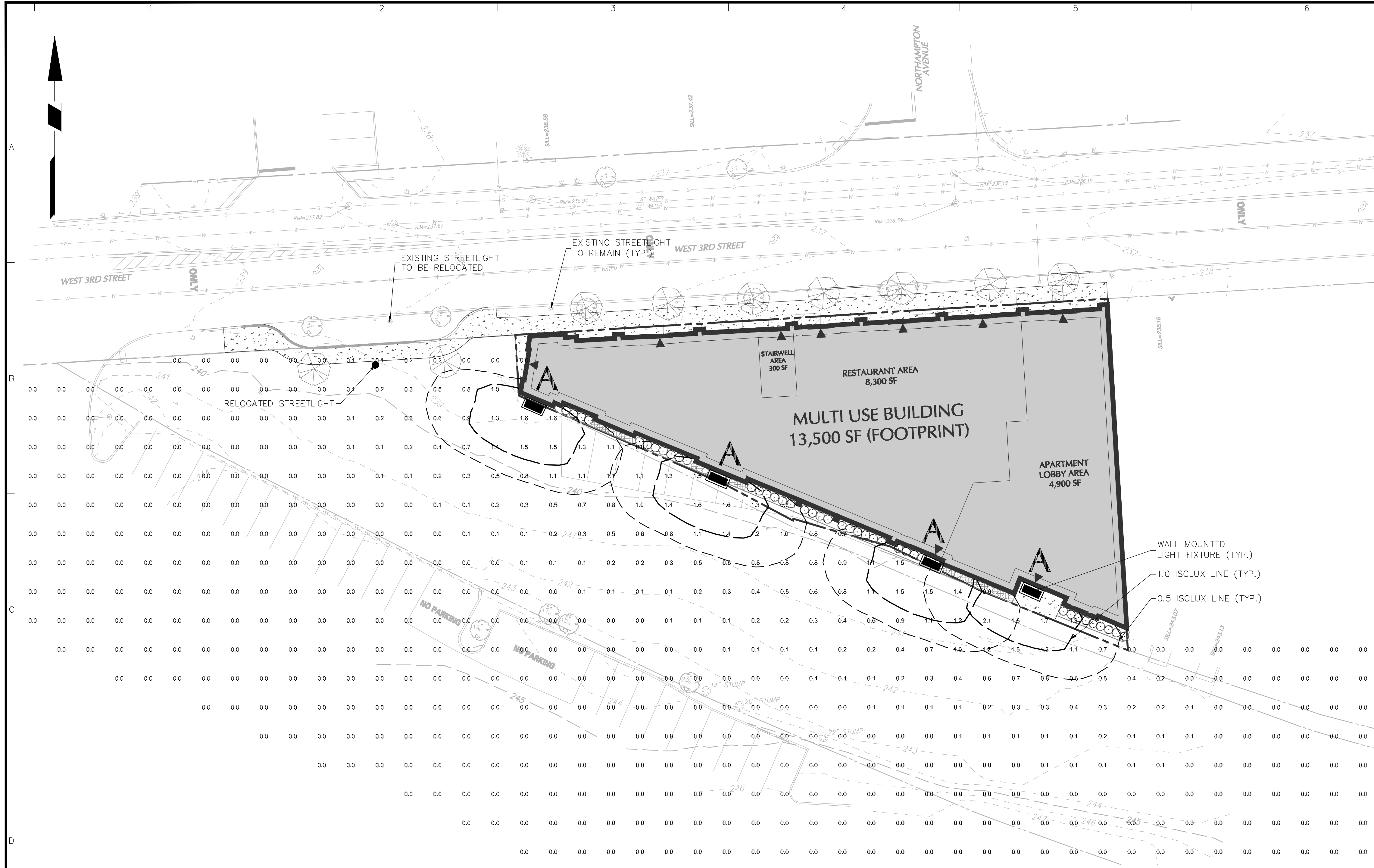
SIGNATURE MICHAEL SZURA DATE SIGNED \_\_\_\_\_
   
 REGISTERED LANDSCAPE ARCHITECT PA Lic. No. LA-002533

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Project
   
**3RD STREET MIXED USE BUILDING**
  
 CITY OF BETHLEHEM
   
 NORTHAMPTON COUNTY PENNSYLVANIA

Drawing Title
   
**LANDSCAPE DETAILS AND NOTES**

Project No.	240052001	Drawing No.	LP-501
Date	08/09/21		
Drawn By	SW	Sheet 12 of 14	
Checked By	RP		

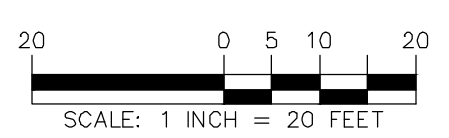


SITE LIGHTING SCHEDULE																
SYMBOL	KEY	QTY.	FIXTURE MANUFACTURER	FIXTURE MODEL	FIXTURE DESCRIPTION	FIXTURE MOUNTING HEIGHT	COLOR TEMPERATURE	LAMP	OPTICS	LUMENS	LLF	IES FILE	FIXTURE CATALOGUE NO.	POLE DESCRIPTION	POLE MANUFACTURER	POLE CATALOGUE NO.
■	A	4	LITHONIA LIGHTING	D-SERIES	LED WALL MOUNTED LUMINAIRE	20'	3,000K	38 WATT LED	TYPE II S	3,685	0.90	DSXWPM-LED-10C-1000-30K-T2S-MVOLT.IES	DSXWPM-LED-10C-1000-30K-T2S-MVOLT	N/A	N/A	N/A

NOTE:

- LIGHT PHOTOMETRY AND CALCULATIONS FOR EXISTING AND ADJACENT LIGHTING TO REMAIN ARE NOT INCLUDED IN THE ABOVE STATISTICS.
- ALL OF THE FOOT-CANDLE LEVELS SHOWN ON THIS PLAN ARE INITIAL FOOT-CANDLE VALUES AND ARE TAKEN AT THE HORIZONTAL PLANE AT GRADE LEVEL.
- STATISTICS AS SHOWN ABOVE REPRESENT INITIAL VALUES AND WILL LIKELY DIMINISH OVER TIME.
- THE CONTRACTOR SHALL SUBMIT A SIGNED, SEALED STATEMENT FROM A STATE-LICENSED STRUCTURAL ENGINEER TO VERIFY THE CONDITION OF THE POLES TO BE REUSED AND CONFIRMING THAT THE POLES WILL WITHSTAND THE ASCE 7-16 WIND LOADS FOR THE SITE AND MEET ALL CURRENT CODE REQUIREMENTS. IF SUCH DOCUMENTATION CANNOT BE FURNISHED, NEW POLES SHOULD BE SPECIFIED TO MEET ALL CURRENT CODES.

**NOTES:**  
 REFER TO LL501 FOR LIGHTING DETAILS AND NOTES.  
 BUILDING MOUNTED LIGHTS TO BE COORDINATED WITH ARCHITECT PRIOR TO INSTALLATION.



Date	Description	No.
11/05/21	REVISED PER CITY COMMENTS	1
Revisions		

SIGNATURE: MICHAEL SZURA DATE SIGNED: \_\_\_\_\_  
 REGISTERED LANDSCAPE ARCHITECT PA Lic. No. LA-002533

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Project  
**3RD STREET MIXED USE BUILDING**  
 CITY OF BETHLEHEM  
 NORTHAMPTON COUNTY PENNSYLVANIA

Drawing Title  
**LIGHTING PLAN**

Project No. <b>240052001</b>	Drawing No. <b>LL-101</b>
Date <b>08/09/21</b>	
Drawn By <b>SW</b>	
Checked By <b>RP</b>	
Sheet 13 of 14	

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# LIGHTING NOTES:

- POINT-BY-POINT CALCULATIONS PROVIDED WITHIN HAVE BEEN PREPARED IN ACCORDANCE TO IESNA STANDARDS AND IN CONSIDERATION OF THE VARIABLES WITHIN THESE NOTES AND SITE LIGHTING SCHEDULE. THE VALUES SHOWN ON THE PLANS ARE NOT AN INDICATION OF THE INITIAL LIGHT INTENSITIES OF THE LAMPS. THESE VALUES ARE AN APPROXIMATION OF THE MAINTAINED INTENSITIES DELIVERED TO THE GROUND PLANE USING INDUSTRY ACCEPTABLE LIGHT LOSS FACTORS (LLF) WHICH COVER LAMP DEGRADATION AND NATURAL BUILDUP ON THE FIXTURE LENS. THE LIGHTING PLAN IS DESIGNED WITH AN INDUSTRY ACCEPTABLE LLF TO ENSURE ADEQUATE LIGHT INTENSITIES OVER YEARS OF USE AND WEAR. MINOR VARIATIONS IN TOPOGRAPHY, PHYSICAL OBSTRUCTIONS, AMBIENT OR ADJACENT LIGHT SOURCES AND/OR OTHER POTENTIAL IMPACTS HAVE NOT BEEN INCLUDED IN THESE CALCULATIONS. THEREFORE, AS-BUILT LIGHT INTENSITIES MAY VARY, IN EITHER DIRECTION, FROM WHAT IS EXPLICITLY PORTRAYED WITHIN THESE DRAWINGS.
- PROVIDE A CONCRETE BASE FOR EACH LIGHT POLE AT THE LOCATIONS INDICATED ON THE CONSTRUCTION DRAWINGS AND IN ACCORDANCE WITH PROJECT PLANS AND SPECIFICATIONS RELATING DIRECTLY TO CAST-IN-PLACE CONCRETE.
- CONTRACTOR TO COORDINATE INSTALLATION OF UNDERGROUND FEEDER CABLE FOR EXTERIOR LIGHTING WITH EXISTING AND PROPOSED UTILITIES, SITE DRAINAGE SYSTEMS, AND PAVING. CONTRACTOR SHALL PROMPTLY NOTIFY THE OWNER'S REPRESENTATIVE SHOULD ANY UTILITIES, NOT SHOWN ON THE PLANS, BE FOUND DURING EXCAVATIONS.
- CONTRACTOR TO OPERATE EACH LUMINAIRE AFTER INSTALLATION AND CONNECTION. INSPECT FOR IMPROPER CONNECTIONS AND OPERATION.
- AIM AND ADJUST ALL LUMINAIRES TO PROVIDE ILLUMINATION LEVELS AND DISTRIBUTION AS INDICATED ON THE CONSTRUCTION DRAWINGS OR AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR OWNER.
- CONTRACTOR TO COORDINATE INSTALLATION OF ALL THE WALL MOUNTED FIXTURES AND ELECTRICAL CONNECTIONS TO SITE STRUCTURE(S) WITH BUILDING MEP, ARCHITECT, AND/OR OWNER.
- INSTALLATION OF ALL LIGHTING FIXTURES, POLES, FOOTINGS, AND FEEDER CABLE TO BE COORDINATED WITH ALL SITE WORK TRADES TO AVOID CONFLICT WITH FINISHED AND PROPOSED WORK.
- POINT SPACING ON PLACE OF CALCULATION IS 10 FT. LEFT TO RIGHT AND 10 FT. TOP TO BOTTOM. POINT BY POINT CALCULATIONS ARE BASED ON A 1.00 MAINTENANCE FACTOR.
- POINT-BY-POINT CALCULATIONS PROVIDED WITHIN HAVE BEEN PREPARED IN ACCORDANCE TO IESNA STANDARDS AND IN CONSIDERATION OF THE VARIABLES WITHIN THESE NOTES AND SITE LIGHTING SCHEDULE. THE VALUES REPRESENTED ON THE PLANS PRESENT AN APPROXIMATION OF THE INITIAL LIGHT LEVELS DELIVERED TO THE GROUND PLANE. MINOR VARIATIONS IN TOPOGRAPHY, PHYSICAL OBSTRUCTIONS, LAMP DEGRADATION, AMBIENT OR ADJACENT LIGHT SOURCES AND/OR OTHER POTENTIAL IMPACTS HAVE NOT BEEN INCLUDED IN THESE CALCULATIONS. GIVEN THIS, AS-BUILT VALUES MAY VARY, GREATER THAN OR LESS THAN, WHAT IS EXPLICITLY PORTRAYED WITHIN THESE DRAWINGS.
- ALL SITE LIGHTING RELATED WORK AND MATERIALS SHALL COMPLY WITH CITY, COUNTY, AND OTHER APPLICABLE GOVERNING AUTHORITY REQUIREMENTS.
- SITE ELECTRICAL CONTRACTOR TO COORDINATE LOCATION OF EASEMENTS, UNDERGROUND UTILITIES AND DRAINAGE BEFORE DRILLING POLE BASES.
- SITE ELECTRICAL CONTRACTOR TO COORDINATE POWER SOURCE WITH LIGHT FIXTURES TO INSURE ALL SITE LIGHTING IS OPERATING EFFECTIVELY, EFFICIENTLY AND SAFELY.
- SITE ELECTRICAL CONTRACTOR SHALL CONFIRM THAT LIGHT FIXTURES MATCH SPECIFICATIONS ON THE PLANS.
- REFER TO ELECTRIFICATION PLAN FOR PROVIDING ADEQUATE POWER FOR SITE LIGHTING.
- SITE ELECTRICAL CONTRACTOR SHALL EXAMINE AND VERIFY THAT SOIL CONDITIONS ARE SUITABLE TO SUPPORT LOADS EXERTED UPON THE FOUNDATIONS DURING EXCAVATION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY UNSATISFACTORY CONDITIONS.
- UNDERGROUND LIGHTING CONDUIT TO BE COORDINATED WITH PROPOSED TREES TO AVOID CONFLICT.
- POLE FOUNDATIONS SHALL NOT BE POURED IF FREE STANDING WATER IS PRESENT IN EXCAVATED AREA.
- ELECTRICIAN AND INSTALLATION OF WALL MOUNTED FIXTURES SHALL BE COORDINATED WITH THE ARCHITECTURAL, STRUCTURAL, AND SITE DRAWINGS FOR SAFETY AND TO PROVEN EXPOSED WIRING.
- LIGHTING SUBSTITUTION REQUIREMENTS:**  
ALL LIGHTING SUBSTITUTIONS MUST BE MADE WITHIN 14 DAYS PRIOR TO THE BID DATE TO PROVIDE AMPLE TIME FOR REVIEW AND TO ISSUE AN ADDENDUM INCORPORATING THE SUBSTITUTION WITH THE FOLLOWING REQUIREMENTS:
  - ANY SUBSTITUTION TO LIGHTING FIXTURES, POLES, ETC. MUST BE APPROVED BY THE OWNER, ENGINEER AND TENANTS. ANY COST ASSOCIATED WITH REVIEW AND/OR APPROVAL OF THE SUBSTITUTIONS SHALL BE ENTIRELY BORNE BY THE CONTRACTOR
  - ALL LIGHTING SUBSTITUTIONS SHALL BE REVIEWED AND APPROVED BY TOWNSHIP PRIOR TO ORDERING OF FIXTURES.
  - COMPUTER PREPARED PHOTOMETRIC LAYOUT OF THE PROPOSED LIGHTED AREA WHICH INDICATES, BY ISOFOOTCANDLE, THE SYSTEM'S PERFORMANCE.
  - A PHOTOMETRIC REPORT FROM A NATIONAL INDEPENDENT TESTING LABORATORY WITH REPORT NUMBER, DATE, FIXTURE CATALOG NUMBER, LUMINAIRE AND LAMP SPECIFICATIONS; IES CALCULATIONS, CANDLEPOWER TABULATIONS, ZONE LUMEN SUMMARY, ISOLUX PLOT, AND CATALOGUE CUTS. CATALOGUE CUTS MUST IDENTIFY, BUT NOT LIMITED TO, OPTICS, LAMP TYPE, DISTRIBUTION TYPE, REFLECTOR, LENS, BALLASTS, WATTAGE, VOLTAGE, FINISH AND HOUSING DESCRIPTION.
  - POLE MANUFACTURER AASHTO CALCULATIONS INDICATING THE POLE AND ANCHOR BOLTS BEING SUBMITTED ARE CAPABLE OF SUPPORTING THE POLE AND FIXTURE SYSTEMS BEING UTILIZED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
  - THE UNDERWRITERS LABORATORY LISTING AND FILE NUMBER FOR THE SPECIFIC FIXTURE(S) TO BE UTILIZED.
  - A COLOR PHOTOGRAPH THAT CLEARLY SHOWS THE REPLACEMENT FIXTURE POLE MOUNTED, THE FIXTURE'S COLOR, FINISH, AND PHYSICAL CHARACTERISTICS.
- LIGHTING LEVELS FOR OFF-STREET PARKING LOTS SHALL BE TURNED OFF NO LATER THAN ONE HOUR AFTER THE ENDING OF THE USE ON SITE EXCEPT FOR LIGHTS WHICH ARE NECESSARY FOR SECURITY PURPOSES
- POST APPROVAL ALTERNATIONS OF LIGHTING PLANS OR INTENDED SUBSTITUTIONS FOR APPROVED LIGHTING EQUIPMENT SHALL BE SUBMITTED TO THE TOWNSHIP FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION
- THE TOWNSHIP RESERVES THE RIGHT TO CONDUCT POST INSTALLATION NIGHTTIME INSPECTIONS TO VERIFY COMPLIANCE WITH COMMITMENTS MADE ON THE APPROVED LIGHTING PLAN AND, IF APPROPRIATE, TO REQUIRE REMEDIAL ACTION AT NO EXPENSE TO THE TOWNSHIP.

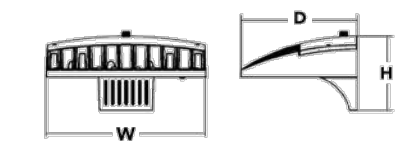


## D-Series Size 1 LED Wall Luminaire

d'series

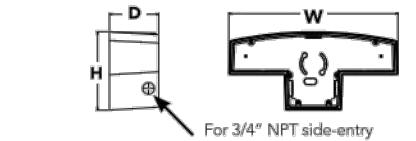
### Specifications Luminaire

**Width:** 13-3/4" (34.9 cm)  
**Depth:** 10" (25.4 cm)  
**Height:** 6-3/8" (16.2 cm)



### Back Box (BBW, E20WC)

**Width:** 13-3/4" (34.9 cm) **Weight:** 5 lbs (2.3 kg)  
**Depth:** 4" (10.2 cm) **Weight:** 10 lbs (4.5 kg)  
**Height:** 6-3/8" (16.2 cm)



### Ordering Information

EXAMPLE: DSXW1 LED 20C 1000 40K T3M MVOLT DBDXTD

Series	LEDs	Drive Current	Color temperature	Distribution	Voltage	Mounting	Control Options
DSXW1 LED	10K 10 LEDs (non engine)	350 350-mA	30K 3000K	T25 Type I Short	MVOLT 120*	Shipped included (blank) Surface mounting bracket	Shipped installed FE Photoelectric cell, button type <sup>1</sup>
	530 530-mA	40K 4000K	T24 Type I Medium	240*	BBW Surface-mounted back box (for conduit entry) <sup>2</sup>	DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)	100* motion/ambient light sensor, <15-mg ft <sup>12</sup>
	700 700-mA	50K 5000K	T35 Type II Short	240*	BBW Surface-mounted back box (for conduit entry) <sup>2</sup>	PBR Motion/ambient light sensor, 15-30-mg ft <sup>12</sup>	180* motion/ambient light sensor, 15-30-mg ft <sup>12</sup>
	20C 20 LEDs (non engine) <sup>1</sup>	1000 1000-mA (1 A) <sup>1</sup>	AMBPC Amber phosphor converted	T34M Type III Medium	277**	PBRFCV Motion/ambient sensor, 6-15' mounting height, ambient sensor enabled at 15'	PBRFCV Motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 15'
				T34M Type III Medium	277**	PBRFCV Motion/ambient sensor, 6-15' mounting height, ambient sensor enabled at 15'	PBRFCV Motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 15'
				T34M Type III Medium	480**		EDWC Emergency battery backup (includes external component enclosure, CA 100-20 compliant <sup>14</sup> )

Other Options	Finish/Accessories
Shipped installed	DDBD Dark bronze
SF Single face (170, 277 or 347V) <sup>10</sup>	DBLX Black
DF Double face (200, 240 or 480V) <sup>10</sup>	DNAL Natural aluminum
HS House side shield <sup>11</sup>	DBLD Textured dark bronze
SPD Separate surge protection <sup>12</sup>	DBLD Textured black
	DNWD White
	DNATD Textured natural aluminum
	DSXGD Textured white
	DSXSD Textured sandstone

Accessories	NOTES
DSXWS1 House side shield (per lamp)	1 20C 1000 is not available with PBR, PBRFCV or PBRFCVCM
DSXRSU Bid-dimmed splices	2 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz)
DSXVPS1 Yard/guard assembly	3 Single face (SF) requires 120, 277 or 347 voltage option. Double face (DF) requires 200, 240 or 480 voltage option.
	4 Only available with 20C, 700mA or 1000mA. Not available with PBR or PBRFCV.
	5 Back box ships installed on fixture. Cannot be field installed. Cannot be ordered as an accessory.
	6 Photometric (PI) requires 120, 200, 240, 277 or 347 voltage option. Not available with motion/ambient light sensors (PBR or PBRFCV).
	7 Reference Motion Sensor table on page 3.
	8 Same as old E20WC Cold weather (COC) rated. Not compatible with conduit entry applications. Not available with BBW mounting option. Not available with lighting. Not available with 347 or 480-voltage option. Emergency components located in back box housing. Emergency mode (E2) file located on product page at <a href="http://www.lithonia.com">www.lithonia.com</a>
	9 Not available with SPD.
	10 Not available with EDWC.
	11 Also available as a separate accessory; see Accessories information.
	12 Not available with EDWC.

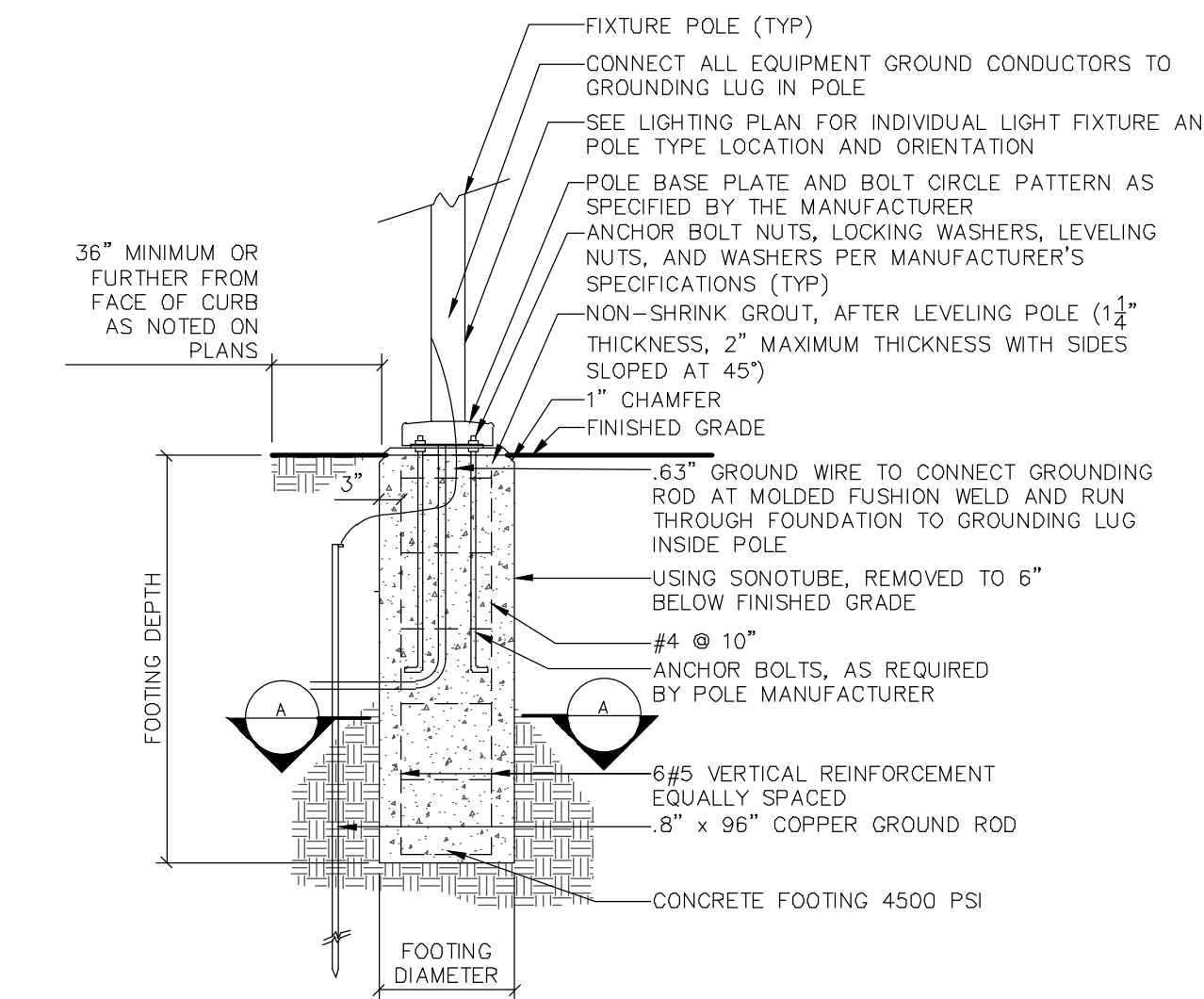
LITHONIA LIGHTING  
 One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • [www.lithonia.com](http://www.lithonia.com)  
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### 1 FIXTURE A - WALL MOUNTED LIGHT FIXTURE NTS

11/05/21	REVISED PER CITY COMMENTS	1
Date	Description	No.
Revisions		

Catalog Number	
Note	
Type	

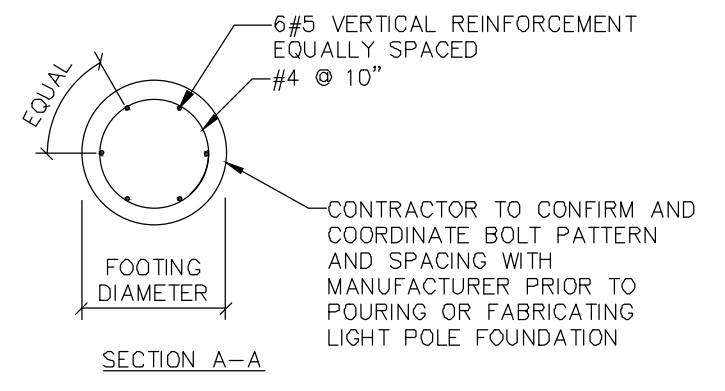
**Introduction**  
 The D-Series Wall luminaire is a stylish, fully integrated LED solution for building-modern applications. It features a sleek, modern design and is carefully engineered to provide long-lasting, energy-efficient lighting with a variety of optical and control options for customized performance.  
 With an expected service life of over 20 years of nighttime use and up to 74% in energy savings over comparable 250W metal halide luminaires, the D-Series Wall is a reliable, low-maintenance lighting solution that produces sites that are exceptionally illuminated.



### 2 LIGHT FIXTURE FOUNDATION NTS

MOUNTING HEIGHT	FOOTING DEPTH	FOOTING DIAMETER	VERTICAL REINFORCEMENT
14'-0"	4'-6"	2'-0"	6 #5 BARS

- NOTES:**
- VERTICAL AND HORIZONTAL BARS SHALL BE FIELD TIED. WELDING IS NOT PERMITTED. THE CONTRACTOR SHALL SUPPORT REINFORCEMENT IN ITS PROPER LOCATION FROM THE FORMWORK DURING CONCRETE OPERATION.
  - THE CONTRACTOR SHALL REMOVE WATER PRESENT IN HOLE PRIOR TO POURING CONCRETE.
  - THE CONTRACTOR SHALL VERIFY ALL INFORMATION PERTAINING TO THE POLE AND FIXTURE INSTALLATION WITH THE MANUFACTURER, THE ENGINEER AND/OR OWNER TO BE NOTIFIED OF ANY DISCREPANCIES.
  - INSTALLATION OF POLE FOOTING IN CONCRETE PAVING REQUIRES 1/2" EXPANSION JOINT FILLER SEALED WITH JOINT SEALANT.
  - THE INFORMATION ILLUSTRATED IN THE LIGHT POLE FOUNDATION DETAIL HAS BEEN PROVIDED FOR GENERAL REFERENCE AND PRELIMINARY COST ESTIMATE PURPOSES; LIGHT POLE FOUNDATIONS SHOULD BE DESIGNED AND DETAILED BY A LICENSED STRUCTURAL ENGINEER BASED ON EXISTING SOIL CONDITIONS, LOCAL DESIGN STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.



REFER TO LL101 FOR LIGHTING PLAN, SCHEDULE AND STATISTICS.

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Project  
**3RD STREET MIXED USE BUILDING**  
 CITY OF BETHLEHEM  
 NORTHAMPTON COUNTY PENNSYLVANIA

Drawing Title  
**LIGHTING DETAILS AND NOTES**

Project No.	240052001	Drawing No.	LL-501
Date	08/09/21	Sheet	14 of 14
Drawn By	SW		
Checked By	RP		