

#### LOCATION MAP

1" = 2000'

#### APPLICANT / RECORD OWNER

**NICHOLAS BOZAKIS**  
822 MAIN STREET  
BETHLEHEM, PA 18017  
610-428-5060

#### STATEMENT OF INTENT

THE APPLICANT INTENDS TO RAZE TWO (2) EXISTING SINGLE-FAMILY DETACHED DWELLINGS ON THE SUBJECT PROPERTY AND CONSTRUCT A 3.5-STORY, 8-UNIT APARTMENT BUILDING, OFF-STREET PARKING (13 VEHICLES), UTILITY SERVICE CONNECTIONS, SITE LANDSCAPING AND RELATED PUBLIC AND PRIVATE IMPROVEMENTS, ALL AS DEPICTED HEREIN.

#### SITE DATA

RECORD OWNER: NICHOLAS BOZAKIS  
PROPERTY ADDRESS: 62-68 UNION BLVD W  
TAX MAP REFERENCE: P6NE1A-12-5  
DEED REFERENCE: D.B.V. 2022-1, PG. 301983  
EX. LOT AREA (BY DEED): 17,136 S.F./0.3934 AC.  
CITY WARD/BLOCK: 6/1A  
ZONING CLASSIFICATION: HIGH-DENSITY RESIDENTIAL (RT)  
WATER: CITY OF BETHLEHEM  
SANITARY SEWER: CITY OF BETHLEHEM  
NO. EXISTING/PROPOSED LOTS: 1/1

#### ZONING DATA

##### HIGH-DENSITY RESIDENTIAL (RT) ZONING DISTRICT (MULTI-FAMILY DWELLING, MORE THAN 2-1/2 STORIES USE)

	PER ORD.	PER PLAN
MIN. TRACT AREA:	9,000 S.F.	17.1K S.F.
MIN. LOT AREA PER D.U.:	1,200 S.F.	2,142 S.F.
MIN. LOT WIDTH:	90 FEET	102 FEET
FRONT YARD SETBACK (UNION BLVD):	10 FEET	10 FEET (1)
SIDE YARD SETBACK (ONE):	15 FEET	15 FEET
SIDE YARD SETBACK (BOTH):	30 FEET	30 FEET
REAR YARD SETBACK (SPRUCE ST):	20 FEET	20 FEET
MAX. BUILDING HEIGHT:	40 FEET	30 FEET (2)
	3.5 STORY	3.5 STORY
MAX. BUILDING COVER:	80%	16%
MAX. IMPERVIOUS COVER:	---	46%

#### NOTES:

- BUILD-TO LINES FOR WEST UNION BOULEVARD AND WEST SPRUCE STREET VARY FROM 0 TO 5 FEET (REFER TO Z0 SECTION 1306.05).
- HEIGHT OF A STRUCTURE IS DEFINED AS THE VERTICAL DISTANCE MEASURED FROM THE AVERAGE ELEVATION OF THE PROPOSED FINISHED GRADE AT THE FRONT OF THE BUILDING (ELEV. 275.5) TO THE AVERAGE TOP OF FASCIA HEIGHT (ELEV. 304.9) OF A PITCHED ROOF, PROVIDED THAT THERE IS NO LIVING SPACE ABOVE THE FASCIA HEIGHT (REFER TO Z0 SECTION 1302.53).
- NO NEW VEHICLE PARKING SPACES SHALL BE LOCATED BETWEEN THE FRONT LOT LINE ALONG A PUBLIC STREET AND THE FRONT OF A PRINCIPAL BUILDING.
- ADDITIONAL STANDARDS APPLICABLE TO THE RT ZONING DISTRICT (REFER TO Z0 SECTION 1311, EXCLUDING 1311.05 AND .06)



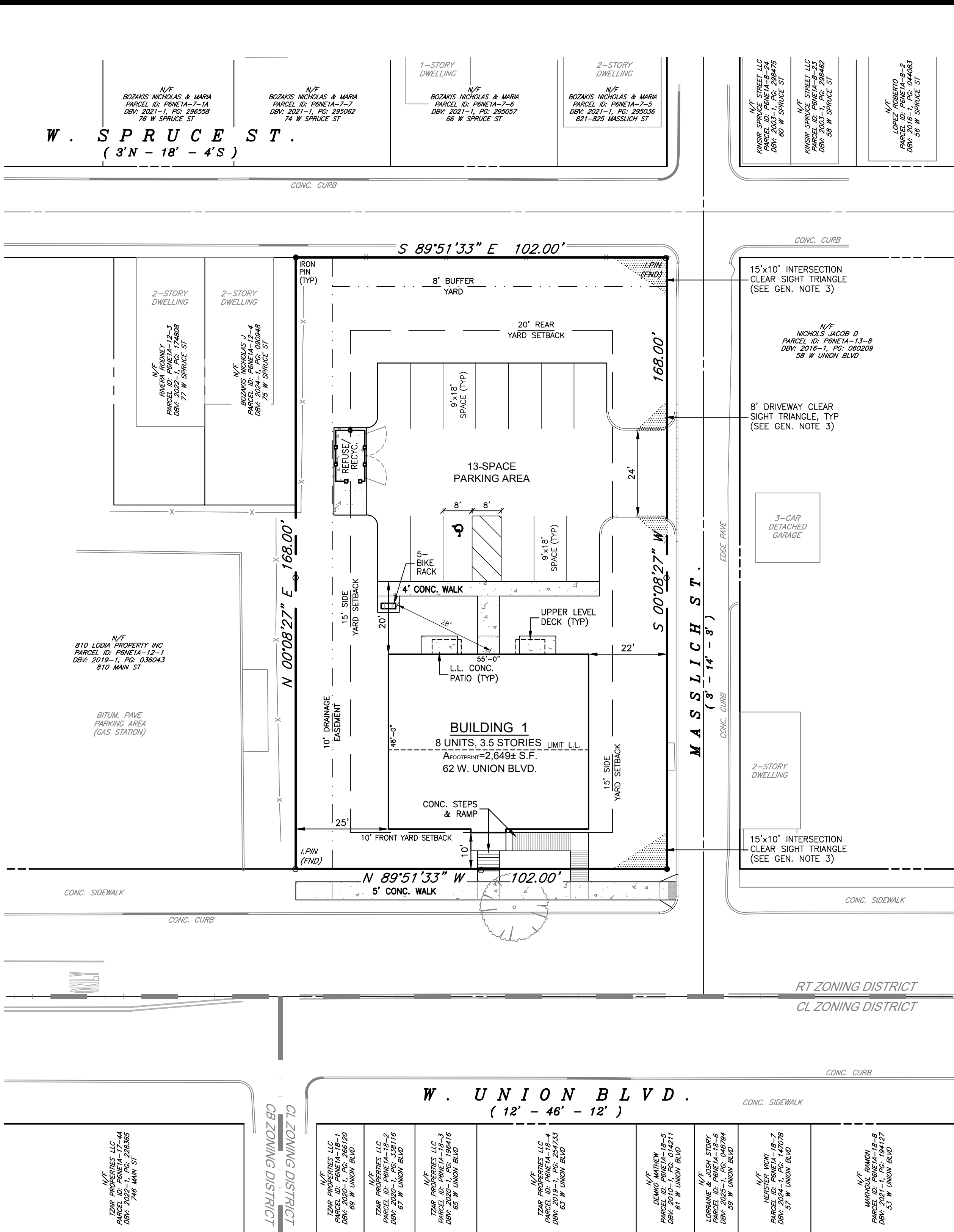
DIAL 8-1-1 OR 1-800-242-1776 NOT LESS THAN 3 BUSINESS DAYS NOR MORE THAN 10 BUSINESS DAYS PRIOR TO THE START OF EXCAVATION

PRELIM. DESIGN SERIAL NUMBER: 0000000000-000

FINAL DESIGN SERIAL NUMBER: 0000000000-000

KEYSTONE CONSULTING ENGINEERS, INC., PREPARED THESE DRAWINGS FOR THE PURPOSE OF THE DESIGN OF THE SUBDIVISION OR LAND DEVELOPMENT IMPROVEMENTS SHOWN, PURSUANT TO THE REQUIREMENTS OF PA ACT 287 OF 1974, AS AMENDED, KEYSTONE CONSULTING ENGINEERS, INC., HAS:

- REQUESTED LINE AND FACILITY INFORMATION FROM A ONE CALL SYSTEM NOT LESS THAN TEN NOR MORE THAN NINETY WORKING DAYS BEFORE FINAL DESIGN IS TO BE COMPLETED.
  - SHOWN UPON THE DRAWINGS THE POSITION AND TYPE OF EACH FACILITY OWNER'S LINE, DERIVED PURSUANT TO THE REQUEST MADE, INCLUDING THE FACILITY OWNER'S NAME, OFFICE ADDRESS AND TELEPHONE NUMBER AS SHOWN ON THE LIST MAINTAINED BY THE ONE-CALL SYSTEM;
  - MADE A REASONABLE EFFORT IN PREPARATION OF THE CONSTRUCTION DRAWINGS TO AVOID DAMAGE TO AND MINIMIZE INTERFERENCE WITH THE FACILITY OWNER'S FACILITIES IN THE CONSTRUCTION AREA BY MAINTAINING AN EIGHTEEN-INCH CLEARANCE OF THE FACILITY OWNER'S FACILITIES;
  - SHOWN UPON THE DRAWINGS THE SERIAL NUMBER AND DATE OF THE ONE CALL NOTICE.
- KEYSTONE CONSULTING ENGINEERS, INC., MAKES NO REPRESENTATION, ASSURANCE, OR GUARANTEE THAT THE INFORMATION OBTAINED AS NOTED ABOVE AND ILLUSTRATED HEREON ACCURATELY DEPICTS FIELD CONDITIONS. ALL CONTRACTORS PERFORMING ACTUAL EXCAVATION OR DEMOLITION WORK ON THIS SITE ARE HEREBY ALERTED TO THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE ONE-CALL SYSTEM AS REQUIRED BY ACT 287, AS AMENDED.



#### PLAN PREPARER'S NOTES

- THIS PLAN IS BASED ON A FIELD SURVEY BY VALLEY LAND SERVICES, LLC AND VERIFIED BY KEYSTONE CONSULTING ENGINEERS, INC. ON JULY 26, 2025 USING A TRIMBLE S-5 ROBOTIC TOTAL STATION AND A TRIMBLE R-8 GPS WITH KEYNET AND REPRESENTS A EXISTING FEATURES AND TOPOGRAPHIC SURVEY OF LANDS NOW OR FORMERLY OF NICHOLAS BOZAKIS.
- LOCATIONS OF AND INFORMATION PERTAINING TO UNDERGROUND UTILITIES CONTAINED HEREIN ARE APPROXIMATE AND WERE INTERPOLATED BASED ON FIELD LOCATIONS OF OBVIOUS ABOVE-GROUND EVIDENCE. UNDERGROUND UTILITIES NOT EVIDENCED ON THE SURFACE BY MARKINGS OR STRUCTURES AT THE TIME OF THE FIELD SURVEY HAVE NOT BEEN DEPICTED HEREIN.
- CONTRACTOR SHALL VERIFY THE EXISTENCE AND LOCATIONS OF UNDERGROUND UTILITIES ON THE SITE IN ACCORDANCE WITH PA ACT 187 AND 121 PRIOR TO COMMENCING ANY EARTH DISTURBANCE ACTIVITY.
- PROPERTY OWNERS' NAMES, DEED REFERENCES, AND TAX PARCEL IDENTIFIER INFORMATION CONTAINED HEREIN ARE BASED ON NORTHAMPTON COUNTY TAX ASSESSMENT RECORDS AND ARE SUBJECT TO THE ACCURACIES OR INACCURACIES THEREOF.
- PROPERTY BOUNDARIES DEPICTED HEREIN AND ANNOTATED WITH BEARING ANGLES, DISTANCES, OR CURVE DATA DEMONSTRATE BOUNDARIES MEASURED BY THIS SURVEY. PROPERTY BOUNDARIES WITHOUT GEOMETRIC ANNOTATION MAY HAVE BEEN PLOTTED USING RECORD INFORMATION AND ARE INTENDED FOR GENERAL SITE ORIENTATION PURPOSES ONLY.
- HORIZONTAL BEARING ANGLES AND COORDINATES CONTAINED HEREIN ARE BASED ON THE PA SOUTH ZONE STATE PLANE COORDINATE SYSTEM IN US FEET. DISTANCES ANNOTATED HEREIN REPRESENT GROUND MEASUREMENTS (NO GRID SCALE FACTOR HAS BEEN APPLIED).
- SPOT ELEVATIONS AND CONTOUR LINES CONTAINED HEREIN ARE BASED ON GPS OBSERVATIONS USING A TRIMBLE R-8 GPS WITH KEYNET AND ARE ACCURATE WITHIN 0.15' OF THE U.S.G.S. NORTH AMERICAN VERTICAL DATUM OF 1988.
- 'IRON PIN (TO BE SET)' IDENTIFIED HEREIN DENOTES A 3/4-INCH DIAMETER REINFORCING BAR WITH YELLOW PLASTIC CAP INSCRIBED "KEYSTONE ENG." TO BE SET BY KEYSTONE CONSULTING ENGINEERS, INC.
- PLAN REFERENCES: PLAN REFERENCES: "BLOCK SURVEY SHOWING DEED AND OCCUPATION DISTANCES - WARD 8 BLOCK 1A", BY CITY OF BETHLEHEM DEPARTMENT OF ENGINEERING, DATED 1919, REVISED MARCH 19, 1940; LOT CONSOLIDATION PLAN TITLED, W UNION BOULEVARD LOT CONSOLIDATION PLAN, 62-68 W UNION BOULEVARD, PREPARED BY VALLEY LAND SERVICES, LLC, DATED AUGUST 15, 2024, LAST REVISED FEBRUARY 18, 2025, AND RECORDED IN NORTHAMPTON COUNTY RECORDER OF DEEDS OFFICE IN DBV 2025-5, PG. 280.
- THIS SURVEY AND PLAN WERE PREPARED WITHOUT THE BENEFIT OF A TITLE SEARCH AND ARE THEREFORE SUBJECT TO ANY EASEMENTS OR OTHER PERTINENT FACTS WHICH SUCH SEARCH MAY DISCLOSE.

#### LEGEND

---	SUBJECT PROPERTY LINE
- - -	ADJOINER PROPERTY LINE OR RIGHT-OF-WAY LINE
---	ADJOINER PROPERTY OWNER I.D.
---	EX. ROADWAY CENTERLINE
---	EX. SAN. SEWER EASEMENT LINE
---	EX. FLOODWAY/FLOODPLAIN LIMIT
---	EX. CONCRETE CURB
---	EX. EDGE OF PAVE
---	EX. WOOD FENCE
---	EX. CHAIN LINK FENCE
---	EX. IRON PIN (OR AS NOTED)
---	EX. CONCRETE MONUMENT
---	PROPOSED BUILDING FOOTPRINT (AT GROUND LEVEL)
---	PROPOSED IMPROVEMENT
---	PROPOSED CONCRETE CURB
---	PROPOSED DEPRESSED CONC. CURB
---	PROPOSED FENCE/RAILING (AS NOTED)
---	PROPOSED PROPERTY CORNER MARKER (IRON PIN OR AS NOTED)

#### NOTE:

ITALIC TEXT IN PLAN VIEW DENOTES EXISTING FEATURES WHILE UPRIGHT TEXT DENOTES PROPOSED FEATURES.

#### PLAN SHEET INDEX

	RECORD PLAN *
L01 OF 6	EXISTING CONDITIONS & DEMOLITION PLAN
L03 OF 6	SITE GRADING & UTILITIES PLAN
L04 OF 6	SITE LANDSCAPING & SIGNAGE PLAN
L05 OF 6	SITE LIGHTING PLAN
L06 OF 6	CONSTRUCTION DETAILS & SPECS PLAN
ES1 OF 2	EROSION & SEDIMENT POLLUTION CONTROL (ESPC) PLAN
ES2 OF 2	ESPC BMP DETAILS & SPECIFICATIONS PLAN

\* DENOTES PLAN TO BE RECORDED IN NORTHAMPTON COUNTY RECORDER OF DEEDS OFFICE UPON APPROVAL BY CITY OF BETHLEHEM.

#### PLAN OF RECORD

RECORDED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_  
IN THE OFFICE OF THE RECORDER OF DEEDS IN AND FOR THE COUNTY OF NORTHAMPTON, PENNSYLVANIA, IN PLAN BOOK NO. \_\_\_\_\_, PAGE \_\_\_\_\_.

#### RECORDER OF DEEDS

#### PLANNING COMMISSION REVIEW

REVIEWED AND ACCEPTED FOR RECORDING BY THE CITY OF BETHLEHEM PLANNING COMMISSION THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_.

#### CHAIRMAN

#### SECRETARY

#### L.V.P.C. REVIEW

REVIEWED BY THE LEHIGH VALLEY PLANNING COMMISSION

#### L.V.P.C. STAFF PERSON

RESPONSIBLE FOR REVIEW

#### OWNER'S STATEMENT

I, THE UNDERSIGNED, NICHOLAS BOZAKIS, DEPOSE AND SAY THAT I, NICHOLAS BOZAKIS, AM THE OWNER OF THE PROPERTY HEREIN SUBDIVIDED OR DEVELOPED, THAT NO LITIGATION OR LENS EXIST ON OR ARE PENDING AGAINST THE PROPERTY, THAT THIS PLAN HAS BEEN PROCESSED WITH OWNER'S FREE CONSENT, AND DESIRES THAT THIS PLAN BE RECORDED ACCORDING TO LAW.

#### NAME

#### TITLE

#### SIGNATURE

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

IN WITNESS THEREOF, I HERETO SET MY HAND AND OFFICIAL SEAL

#### NOTARY PUBLIC

#### ENGINEER'S CERTIFICATION

I, KEVIN J. HORVATH, A REGISTERED PROFESSIONAL ENGINEER IN THE COMMONWEALTH OF PENNSYLVANIA, DO HEREBY CERTIFY THAT THESE PLANS AND THE ACCOMPANYING APPLICATION AND SUPPORTING DOCUMENTATION ARE TRUE AND CORRECT, TO THE BEST OF MY KNOWLEDGE.

KEYSTONE CONSULTING ENGINEERS, INC. DATE: \_\_\_\_\_  
BY KEVIN J. HORVATH, P.E. (AGENT)  
REGISTRATION NO. PE-060641

THIS PLAN IS NULL AND VOID UNLESS IT CONTAINS AN ORIGINAL SIGNATURE, DATE, AND PROFESSIONAL SEAL.

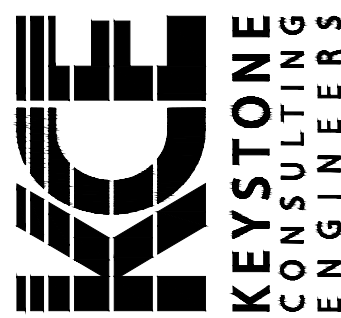
#### SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT: THE SURVEY DEPICTED ON THIS PLAN WAS CONDUCTED UNDER MY SUPERVISION TO THE LOCAL STANDARDS OF CARE; THIS PLAN IS BASED ON A FIELD SURVEY COMPLETED AS OF THE DATE(S) INDICATED IN PLAN PREPARER'S NOTE 1 HEREIN. THE SURVEY REPRESENTS A RETRACEMENT OF LANDS AS DESCRIBED IN THE DEEDS OF RECORD LISTED IN THE SITE DATA TABLE HEREIN; AND THE SURVEY DIMENSIONS ARE CORRECT IN THE FIELD AS INDICATED HEREIN AND SUBSTANTIALLY MEET THE PRECISION STANDARDS OF A "SUBURBAN" SURVEY AS PUBLISHED BY THE AMERICAN CONGRESS ON SURVEYING AND MAPPING IN 1992. THIS SURVEY AND PLAN HAVE BEEN PREPARED WITHOUT THE BENEFIT OF A TITLE SEARCH AND ARE THEREFORE SUBJECT TO ANY EASEMENTS, ENCUMBRANCES, OR OTHER PERTINENT FACTS WHICH A TITLE SEARCH MAY DISCLOSE.

KEYSTONE CONSULTING ENGINEERS, INC. DATE: \_\_\_\_\_  
BY DOUGLAS HARMICK, P.L.S. (AGENT)  
REGISTRATION NO. SU075503

THIS PLAN IS NULL AND VOID UNLESS IT CONTAINS AN ORIGINAL SIGNATURE, DATE, AND PROFESSIONAL SEAL.

KEYSTONE CONSULTING ENGINEERS, INC.  
Engineering firm of choice since 1972



RECORD PLAN  
LAND DEVELOPMENT  
MULTI-FAMILY RESIDENTIAL DEVELOPMENT  
62-68 WEST UNION BOULEVARD

BETHLEHEM CITY  
NORTHAMPTON COUNTY, PENNSYLVANIA

DESIGNED BY:	DATE:
KJH	10-31-2025
DRAWN BY:	DATE:
KJH	10-31-2025
CHECKED BY:	DATE:
KJH	10-31-2025
SCALE:	SCALE:
1" = 20'	1" = 20'
KCE JOB NO.:	DATE:
CB-25-054	AUG. 18, 2025
SHEET:	SHEET:
LD1 OF 6	LD1 OF 6



DEMOLITION NOTES

- CONTRACTOR SHALL REMOVE OR ABANDON-IN-PLACE AS APPLICABLE ALL ABOVE AND BELOW-GRADE STRUCTURES, SITE IMPROVEMENTS, AND TREES ON THE PROJECT SITE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.
- CONTRACTOR SHALL FIELD-LOCATE AND CUT/CAP, REMOVE, AND/OR ABANDON-IN-PLACE ANY ABOVE AND BELOW-GRADE UTILITY LINES AND APPURTENANCES ON THE PROJECT SITE (THAT ARE NOT IDENTIFIED HEREIN AS TO BE REUSED) IN ACCORDANCE WITH RESPECTIVE FACILITY OWNERS STANDARDS AND SPECIFICATIONS.
- CONTRACTOR SHALL FIELD-LOCATE AND REMOVE ANY ABOVE OR BELOW-GRADE STORAGE TANKS AND RELATED APPURTENANCES ON THE PROJECT SITE IN ACCORDANCE WITH PennDEP REGULATIONS.
- CONTRACTOR SHALL REMOVE FROM THE PROJECT SITE, RECYCLE OR DISPOSE OF ALL CONSTRUCTION MATERIALS AND WASTE IN ACCORDANCE WITH PennDEP SOLID WASTE MANAGEMENT REGULATIONS CONTAINED IN CHAPTER 25 PA CODE 260.1 ET. SEQ., 271.1 ET. SEQ. AND 287.1 ET. SEQ. CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY CONSTRUCTION MATERIALS OR WASTE ON THE PROJECT SITE.
- CONTRACTOR SHALL BE RESPONSIBLE TO IMPLEMENT ANY AND ALL MEASURES NECESSARY, INCLUDING BUT NOT LIMITED TO FENCING, BARRICADES, SHEETING AND SHORING, TEMPORARY SIGNAGE AND TRAFFIC CONTROLS, TEMPORARY PEDESTRIAN ACCOMMODATIONS, SECURITY PERSONNEL OR DEVICES, ETC., TO ADEQUATELY SECURE THE SITE, MAINTAIN A SAFE AND CLEAN WORK AREA, MAINTAIN ROADWAYS AND WALKWAYS IN A SAFE AND PASSABLE CONDITION, PREVENT INJURY TO PEDESTRIANS AND MOTORISTS, AND AVOID DAMAGE TO SURROUNDING PUBLIC AND PRIVATE PROPERTY FOR THE DURATION OF THE PROJECT.

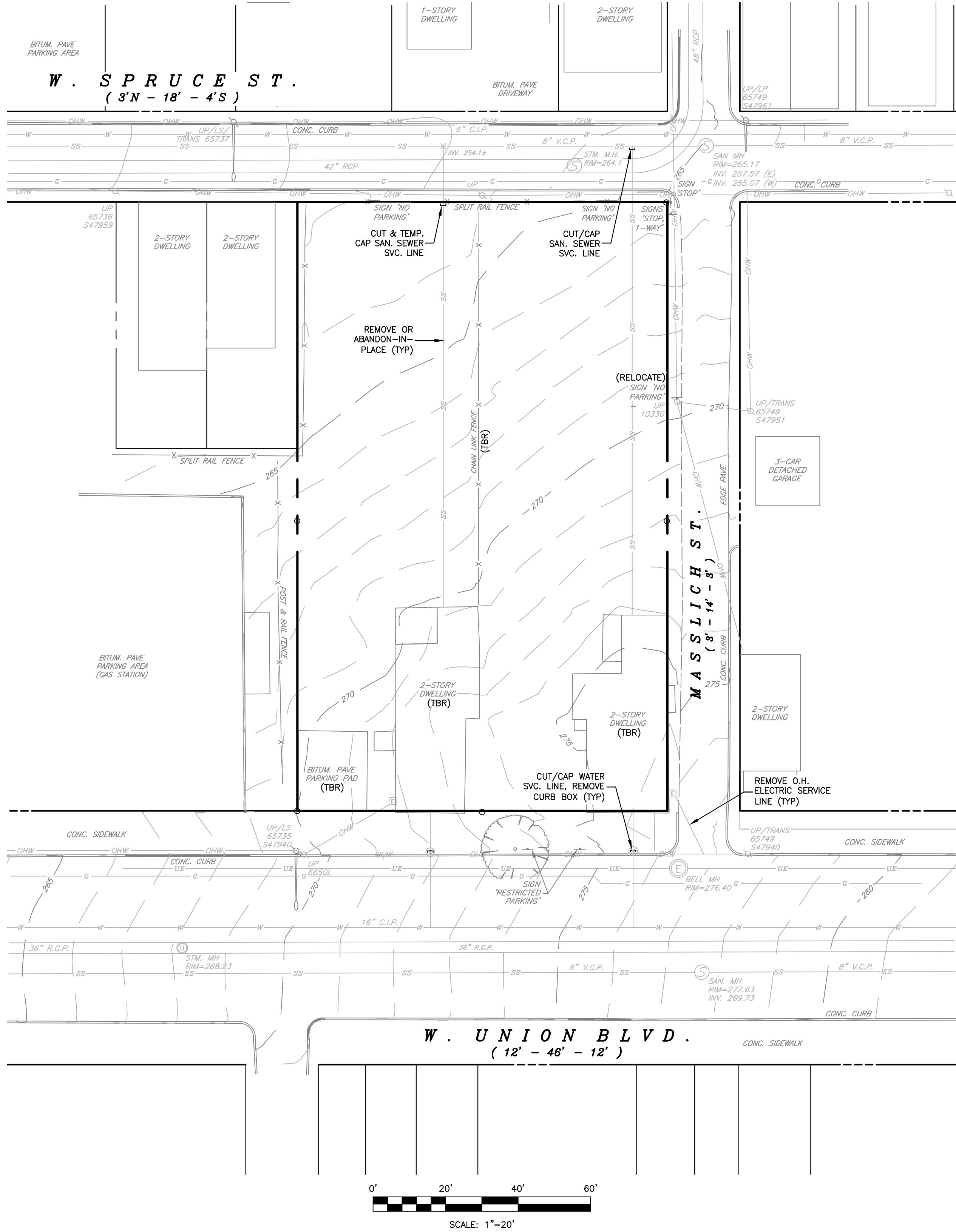
SOIL TYPES, LIMITATIONS & RESOLUTIONS

SOIL TYPES AND LIMITATIONS:

1. URBAN LAND - DUFFIELD COMPLEX
- A. UoB, 0 TO 8 PERCENT SLOPES
- B. UoD, 8 TO 25 PERCENT SLOPES
- LIMITATIONS: MODERATE DEPTH TO GROUNDWATER;  
MODERATE DEPTH TO BEDROCK.

RESOLUTIONS:

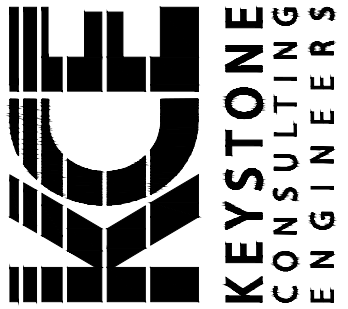
1. IF ENCOUNTERED DURING CONSTRUCTION, CONTRACTOR SHALL REMOVE AND REPLACE OR REMEDIATE WET OR OTHERWISE UNSUITABLE SOILS AS DIRECTED BY THE PROJECT GEOTECHNICAL ENGINEER.
2. IF ENCOUNTERED DURING CONSTRUCTION, CONTRACTOR SHALL EXCAVATE ROCK TO A SUFFICIENT DEPTH AND REPLACE SAME WITH SUITABLE MATERIAL, AS DIRECTED BY THE PROJECT GEOTECHNICAL ENGINEER.
3. CONSTRUCTION ACTIVITIES WILL BE SEQUENCED TO MINIMIZE THE EXTENT AND DURATION OF EARTH DISTURBANCE.
4. CONSTRUCTION ACTIVITIES WILL BE SEQUENCED TO AVOID THE CREATION OF LOW SPOTS AND STANDING WATER.
5. CONTRACTOR SHALL DEWATER OR OTHERWISE MAINTAIN ALL EXCAVATIONS AND TRENCHES FREE OF WATER FOR THE DURATION OF THE PROJECT.



LEGEND

- |  |                               |
|--|-------------------------------|
|  | SUBJECT PROPERTY LINE         |
|  | ADJOINER PROPERTY LINE        |
|  | LEGAL R/W LINE                |
|  | EX. ROADWAY CENTERLINE        |
|  | EX. SAN. SEWER EASEMENT LINE  |
|  | EX. FLOODWAY/FLOODPLAIN LIMIT |
|  | SOIL TYPE BOUNDARY LINE       |
|  | EX. CONTOUR LINE              |
|  | EX. CONCRETE CURB             |
|  | EX. EDGE OF PAVE              |
|  | EX. OVERHEAD UTILITY LINES    |
|  | EX. NATURAL GAS MAIN          |
|  | EX. STORM SEWER               |
|  | EX. WATER MAIN                |
|  | EX. SANITARY SEWER MAIN       |
|  | EX. WOOD FENCE                |
|  | EX. CHAIN LINK FENCE          |
|  | EX. TREE ROW OR EDGE OF WOODS |
|  | EX. CONIFEROUS TREE           |
|  | EX. DECIDUOUS TREE            |
|  | EX. IRON PIN (OR AS NOTED)    |
|  | EX. CONCRETE MONUMENT         |
|  | EX. FEATURE TO BE REMOVED     |

NOTE:  
ITALIC TEXT IN PLAN VIEW DENOTES EXISTING FEATURES  
WHILE UPRIGHT TEXT DENOTES PROPOSED FEATURES.



EXISTING CONDITIONS & DEMOLITION PLAN

LAND DEVELOPMENT  
MULTI-FAMILY RESIDENTIAL DEVELOPMENT

62-68 WEST UNION BOULEVARD  
BETHLEHEM CITY  
NORTHAMPTON COUNTY, PENNSYLVANIA

DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE:	SCALE:	KCE JOB NO:	SHEET:
KJH	KJH	KJH	AUG. 18, 2025	1" = 20'	CB-25-054	LD2 OF 6

KEYSTONE CONSULTING ENGINEERS, INC.  
*Engineering firm of choice since 1972*

2870 EMRICKBOULEVARD, BETHLEHEM, PA 18020 610-865-4555  
East Office: Bethlehem, West Office: Allentown, North Office: Kresgeville  
www.KCEinc.com



GENERAL NOTES

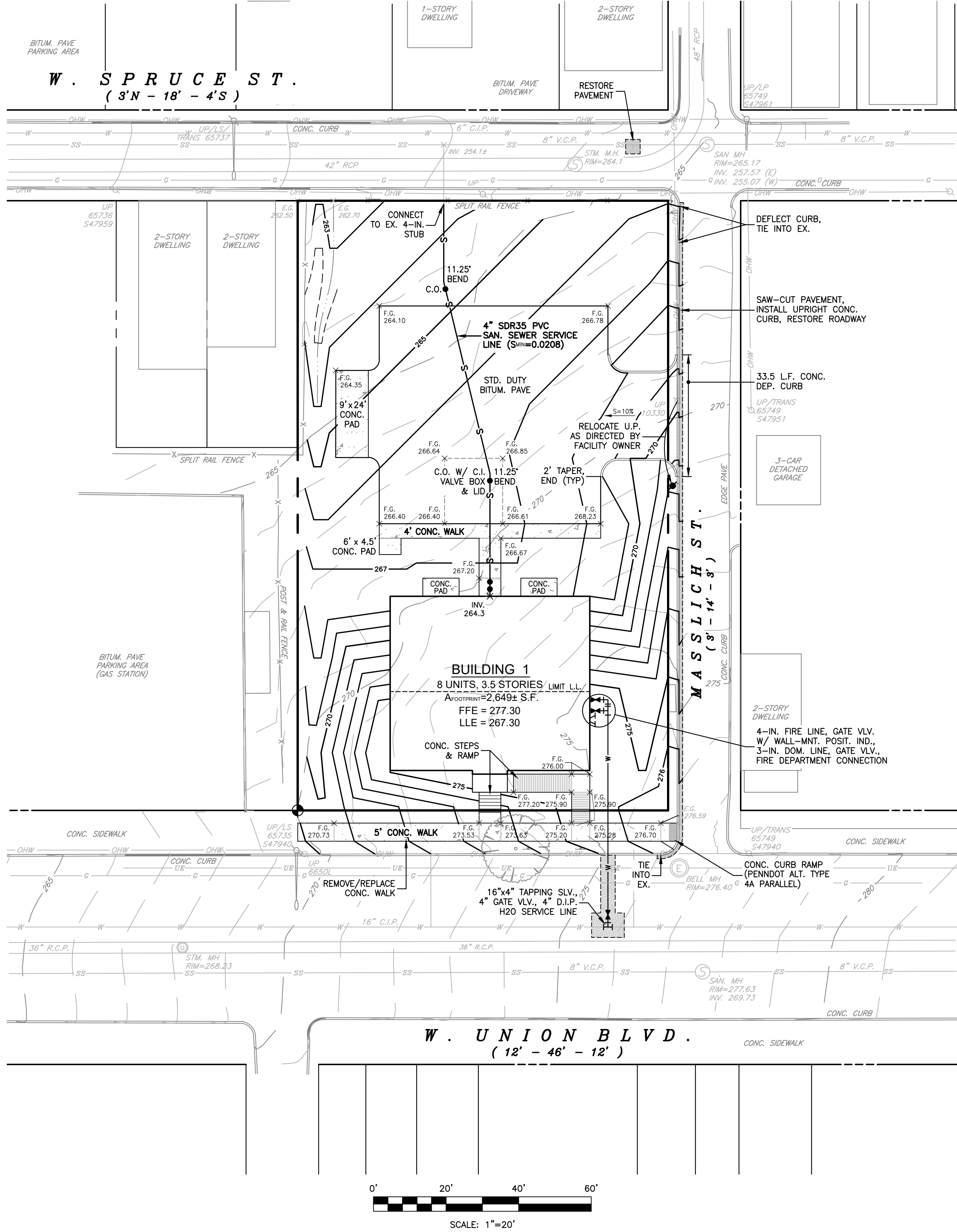
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF BETHLEHEM, PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND PENNSYLVANIA DEPARTMENT OF TRANSPORTATION STANDARDS AND REGULATION AS APPLICABLE.
- CONTRACTOR SHALL LOCATE OR CAUSE TO HAVE LOCATED ANY AND ALL UNDERGROUND UTILITIES IN ACCORDANCE WITH PA ACT 121 PRIOR TO ANY EXCAVATION. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CONSTRUCTION MANAGER IN THE EVENT THAT A CONFLICT IS DISCOVERED.
- PROPOSED ELEVATION CONTOUR LINES DEPICTED ON THIS PLAN REPRESENT FINAL GRADES AT THE COMPLETION OF CONSTRUCTION. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AT ALL TIMES DURING CONSTRUCTION TO PREVENT THE FLOODING OF WATER ON THE SITE.
- CONTRACTOR SHALL DEWATER AND OTHERWISE MAINTAIN UTILITY TRENCHES AND OTHER EXCAVATIONS FREE OF WATER (GROUND WATER AND SURFACE WATER) AT ALL TIMES USING A PUMPED WATER FILTER BAG OR OTHER APPROVED METHODS (REFER TO PUMPED WATER FILTER BAG DETAIL ON EAS POLLUTION CONTROL DETAILS PLAN). ADDITIONALLY, CONTRACTOR SHALL PROPERLY GRADE ADJACENT AREAS AND TAKE ANY OTHER REASONABLE PRECAUTIONS NECESSARY TO PREVENT WATER FROM ENTERING EXCAVATIONS.
- IF CONTRACTOR ENCOUNTERS SOFT OR SATURATED SOILS DEEMED UNSUITABLE BY THE PROJECT ENGINEER DURING CONSTRUCTION, CONTRACTOR SHALL EXCAVATE, REMOVE, AND REPLACE ANY SUCH UNSUITABLE MATERIAL WITH COMPACTED CLEAN FILL OR AGGREGATE MATERIAL AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
- WHERE PLACEMENT OF FILL BENEATH SETTLEMENT SENSITIVE STRUCTURES (E.G. BUILDING PADS, PARKING LOTS, UTILITY AND STORM SEWERS LINES, AND RELATED STRUCTURES) IS NECESSARY TO ACHIEVE DESIRED SUBGRADE, CONTRACTOR SHALL PLACE AND COMPACT APPROPRIATE FILL MATERIAL IN MAXIMUM 8-INCH LIFTS TO A MINIMUM OF 95% OF THE MODIFIED PROCTOR DENSITY OF THE MATERIAL (98% FOR BUILDING PADS) OR AS OTHERWISE DIRECTED BY THE GEOTECHNICAL ENGINEER.
- SPOT ELEVATIONS AND CONTOUR LINES CONTAINED HEREIN ARE BASED ON GPS OBSERVATIONS USING A TRIMBLE R-8 GPS WITH KEYNET AND ARE ACCURATE WITHIN 0.15' OF THE U.S.G.S. NORTH AMERICAN VERTICAL DATUM OF 1988.
- LOCATIONS OF PROPOSED WATER AND SANITARY SEWER SERVICE LINES AS DEPICTED HEREIN ARE APPROXIMATE AND COULD BE SUBJECT TO FIELD ADJUSTMENT.
- LOCATIONS, SIZES, AND SPECIFICATIONS FOR PROPOSED NATURAL GAS, ELECTRIC, AND COMMUNICATIONS SERVICE LINES SHALL BE AS DETERMINED BY THE FACILITY OWNER AT THE TIME OF APPLICATION FOR SERVICE.  
  
ELECTRIC UTILITY SERVICE LINES (E.G. ELECTRIC POWER, CABLE TV, TELECOMMUNICATION) SHALL BE INSTALLED UNDERGROUND. INSTALLATION OF UNDERGROUND FACILITIES SHALL BE SO LOCATED AS TO PERMIT MULTIPLE INSTALLATIONS WITHIN A COMMON TRENCH WHERE FEASIBLE.
- PERMITS PRIOR TO ANY WORK WITHIN PUBLIC RIGHTS-OF-WAY, PERMITS MUST BE OBTAINED FROM THE CITY OF BETHLEHEM ENGINEERING OFFICE.  
  
A WARRANT OF SURVEY IS REQUIRED FOR ANY CURB REPLACEMENT OR INSTALLATION IN EXCESS OF 20 LINEAR FEET.
- CURB RAMPS DESIGN OF CONCRETE CURB RAMPS SHALL BE IN STRICT ACCORDANCE WITH PENNDOT PUBLICATION 72M, STANDARDS FOR ROADWAY CONSTRUCTION, RC-87M, MATERIALS AND CONSTRUCTION SHALL MEET PENNDOT PUBLICATION 40B, SECTIONS 350, 409, 630, 676, 694, AND 695 STANDARDS, AS APPLICABLE. DETECTABLE WARNING SURFACES SHALL BE BRICK RED IN COLOR.
- SIDEWALK DEVELOPER SHALL REPLACE CONCRETE SIDEWALK ALONG THE ENTIRE FRONTAGE OF THE SUBJECT PROPERTY ON GUETTER STREET TO INCLUDE INLAYED BRICK OR PATTERNED CONCRETE AND PROVIDE A FINISHED SURFACE APPEARANCE SIMILAR TO THAT OF THE EXISTING CONCRETE SIDEWALK ALONG THE WEST BROAD STREET FRONTAGE. PATTERNS AND COLORS SHALL BE SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEERING BUREAU PRIOR TO SIDEWALK CONSTRUCTION.
- THE SITE/PLAN BENCHMARK IS THE TOP OF THE IRON PIN FOUND AT THE SOUTHWESTERLY CORNER OF THE SUBJECT PROPERTY AND HAVING AN ELEVATION OF 270.11 FEET (ACCURATE WITHIN 0.15' OF THE U.S.G.S. NORTH AMERICAN VERTICAL DATUM OF 1988).

WATER SYSTEM NOTES

- WATER DISTRIBUTION SYSTEM SHALL BE CONSTRUCTED AND TESTED IN ACCORDANCE WITH CITY OF BETHLEHEM, PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, AND AMERICAN WATER WORKS ASSOCIATION STANDARDS AND REGULATION AS APPLICABLE.
- PIPING FOR INDIVIDUAL SERVICE LINES SHALL BE CLASS 52 DUCTILE IRON PIPE OF THE SIZES INDICATED HEREIN. WATER SYSTEM PIPING AND APPURTENANCES SHALL COMPLY WITH AMERICAN WATER WORKS ASSOCIATION STANDARDS.
- PROVIDE A MINIMUM 10-FOOT HORIZONTAL SEPARATION OR 18-INCH CLEAR VERTICAL SEPARATION BETWEEN WATERLINES AND SANITARY OR STORM SEWERS WHERE PRACTICABLE.
- INSTALL WATER LINES AT LEAST FOUR FEET BELOW FINAL GRADE.

SANITARY SEWER SYSTEM NOTES

- SANITARY SEWERAGE SYSTEM SHALL BE CONSTRUCTED AND TESTED IN ACCORDANCE WITH CITY OF BETHLEHEM AND PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION STANDARDS AND REGULATION AS APPLICABLE.
- PIPING FOR INDIVIDUAL SERVICE LINE SHALL BE 8-INCH DIAMETER SDR-35 PVC PIPE.
- PIPING, STRUCTURES, AND APPURTENANCES SHALL BE DESIGNED TO WITHSTAND HS-25 HIGHWAY LOADING AND SHALL MEET OR EXCEED APPLICABLE Penndot AND ASTM STANDARDS.



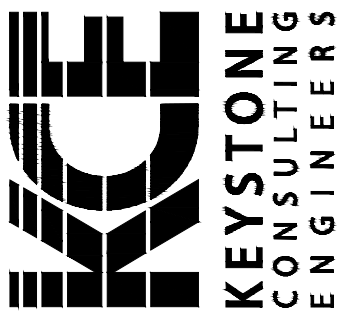
LEGEND

- |  |   |
|--|---|
|  | SUBJECT PROPERTY LINE                         |
|  | ADJOINER PROPERTY LINE                        |
|  | EX. ROADWAY CENTERLINE                        |
|  | EX. SAN. SEWER EASEMENT LINE                  |
|  | EX. CONTOUR LINE                              |
|  | EX. CONCRETE CURB                             |
|  | EX. EDGE OF PAVE                              |
|  | EX. OVERHEAD UTILITY LINES                    |
|  | EX. NATURAL GAS MAIN                          |
|  | EX. STORM SEWER                               |
|  | EX. WATER MAIN (H.P. DENOTES HIGH PRESSURE)   |
|  | EX. SANITARY SEWER MAIN                       |
|  | EX. WOOD FENCE                                |
|  | EX. CHAIN LINK FENCE                          |
|  | EX. TREE, ROW OR EDGE OF WOODS                |
|  | EX. CONIFEROUS TREE                           |
|  | EX. DECIDUOUS TREE                            |
|  | EX. IRON PIN (OR AS NOTED)                    |
|  | EX. CONCRETE MONUMENT                         |
|  | PROPOSED BUILDING FOOTPRINT (AT GROUND LEVEL) |
|  | PROPOSED IMPROVEMENT                          |
|  | PROPOSED CONCRETE CURB                        |
|  | PROPOSED DEPRESSED CONC. CURB                 |
|  | PROPOSED FULL-DEPTH PAVEMENT RESTORATION      |
|  | PROPOSED CONCRETE PAVEMENT                    |
|  | PROPOSED CONTOUR LINE                         |
|  | PROPOSED WATER LINE                           |
|  | PROPOSED SANITARY SEWER GRAVITY LINE          |
|  | PROPOSED STORM SEWER                          |
|  | SITE/PLAN BENCHMARK                           |

NOTE:  
ITALIC TEXT IN PLAN VIEW DENOTES EXISTING FEATURES  
WHILE UPRIGHT TEXT DENOTES PROPOSED FEATURES.

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SITE GRADING & UTILITIES PLAN

LAND DEVELOPMENT  
MULTI-FAMILY RESIDENTIAL DEVELOPMENT

62-68 WEST UNION BOULEVARD

BETHLEHEM CITY  
NORTHAMPTON COUNTY, PENNSYLVANIA

DESIGNED BY:	KJH	REVISIONS	
		BY	DATE
DRAWN BY:	KJH	KJH	10-31-2025
CHECKED BY:	KJH		
DATE:	AUG. 18, 2025		
SCALE:	1" = 20'		
KCE JOB NO.:	CB-25-054		
SHEET:	LDS OF 6		



## LANDSCAPING NOTES

- CONTRACTOR SHALL VERIFY THE PRESENCE, LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO BEGINNING LANDSCAPE CONSTRUCTION. CALL PA ONE CALL (800) 242-1776.
- CONTRACTOR SHALL LAYOUT AND REVIEW ALL PLANT MATERIAL AND PLANT LOCATIONS WITH LANDSCAPE ARCHITECT OR OWNER PRIOR TO INSTALLATION.
- CONTRACTOR SHALL LOCATE PLANTINGS TO AVOID PLACEMENT WITHIN SWALE CENTERLINES.
- MULCH FOR ALL PLANTINGS SHALL BE DOUBLE SHREDDED HARDWOOD BARK MULCH, DARK BROWN IN COLOR, AGED AT LEAST ONE YEAR AND CLEAN AND FREE OF WEEDS.
- ALL PLANT GROUPINGS AND HEDGES SHALL BE COMPLETELY ENCOMPASSED WITHIN ONE LARGE MULCH BED AT EACH PLANT GROUPING LOCATION.
- CONTRACTOR SHALL APPLY A PRE-EMERGENT WEED PREVENTATIVE SUCH AS TREPLAN TO TOPSOIL PRIOR TO MULCHING ACTIVITIES.
- CONTRACTOR SHALL MAINTAIN ALL NEW PLANTINGS FOR A PERIOD OF THIRTY DAYS. THIS SHALL INCLUDE WATERING, FERTILIZING, MULCHING, CULTIVATING, ETC. FOR A WEED FREE HEALTHY LANDSCAPE.
- CONTRACTOR SHALL PERMANENTLY RESTORE ALL NON-PAVED AREAS ON THE SUBJECT PROPERTY TO A GRASSED CONDITION.
- CONTRACTOR SHALL TEST EXISTING TOPSOIL TO DETERMINE PROPER LIME AND FERTILIZER APPLICATION RATES. PERMANENT LAWN ESTABLISHMENT SHALL INCLUDE FINE GRADING OF TOPSOIL, SEEDING, FERTILIZER, MULCH, AND DEQUATE 60-DAY MAINTENANCE IN ORDER TO ACHIEVE A "GOOD STAND" OF TURF. A "GOOD STAND" OF TURF SHALL BE DEFINED AS A WEED FREE LAWN WITH 95% COVERAGE UPON CLOSE EXAMINATION OF ANY GIVEN FOUR SQUARE FOOT AREA.
- CONTRACTOR SHALL GUARANTEE ALL REQUIRED PLANTINGS FOR A PERIOD OF TWENTY-FOUR MONTHS FROM THE DATE OF FINAL ACCEPTANCE. PLANTINGS SHALL BE ALIVE AND HEALTHY AS DETERMINED BY THE ARCHITECT, OWNER, OR HIS AGENT AT THE END OF THE GUARANTEE PERIOD. FINAL ACCEPTANCE SHALL BEGON UPON SUCCESSFUL COMPLETION OF THE REQUIRED MAINTENANCE PERIOD.
- 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.
- TREE PROTECTION BARRICADES MUST BE INSTALLED PRIOR TO ANY DESTRUCTION AND/OR CONSTRUCTION ACTIVITY.
- THE ROOT PROTECTION ZONE SHALL BE DEFINED AS 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.
- VIOLATIONS OF TREE PROTECTION REQUIREMENTS ARE SUBJECT TO PENALTY PER CITY ORDINANCE.
- ALL TREES ON PUBLIC PROPERTY ARE PROTECTED BY ORDINANCE; NO PRUNING, ROOT PRUNING OF ROOTS OVER ONE INCH IN DIAMETER, AND/OR TREE REMOVAL IS TO BE PERFORMED WITHOUT A PERMIT AND WORK MUST BE PERFORMED BY A CITY LICENSED TREE CONTRACTOR.
- ALL PLANT MATERIALS ARE TO CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION, AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
- STREET AND PARKING LOT TREES SHALL BE A MINIMUM OF 14 FT. IN HEIGHT AND HAVE A SINGLE STRAIGHT TRUNK WITH THE FIRST LATERAL BRANCH AT 7 FT. ABOVE THE ROOT BALL. TREES WITH AN UPRIGHT BRANCHING HABIT, SUCH AS ZELKOVA, MAY HAVE THE FIRST LATERAL BRANCH AT 6 FT. ABOVE THE ROOT BALL.
- ALL LANDSCAPING SHALL CONFORM TO THE CURRENT EDITION OF THE ARBORCULTURAL SPECIFICATIONS AND STANDARDS OF PRACTICE OF THE CITY OF BETHLEHEM.
- A ROOT CONTROL SYSTEM IS REQUIRED WHEN INSTALLING STREET TREES. THE ROOT BARRIER SHALL BE OF THE BIO-BARRIER TYPE AND A MINIMUM OF EIGHTEEN (18) INCHES WIDE. ANY SUBSTITUTION SHALL BE APPROVED BY THE CITY FORESTER. THE ROOT-CONTROL SYSTEM IS TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. TREE OPENINGS IN THE SIDEWALK SHALL HAVE THE BIO-BARRIER INSTALLED ALONG THE FACE OF THE TREE OPENING WHICH IS PARALLEL TO THE STREET AND CLOSEST TO THE PROPERTY LINE, OVERLAPPING THE NEAREST TWO CORNERS BY APPROXIMATELY FOUR (4) INCHES. WHERE TREES ARE TO BE PLANTED IN A PARKWAY OR PLANTING STRIP BETWEEN CURB AND SIDEWALK, THE BARRIER SHALL BE INSTALLED ALONG THE SIDEWALK EDGE CLOSEST TO THE CURB AND CENTERED ON THE ROOT SOURCE. THE LENGTH OF THE BARRIER SHALL BE A MINIMUM LENGTH EQUAL TO THE SPREAD OF THE TREE CANOPY AT MATURITY PLUS TEN (10) FEET.
- ALL AREAS NOT SPECIFICALLY IDENTIFIED HEREIN AS BUILDING OR PAVEMENT AREAS OR MULCHED PLANTING BEDS SHALL BE PERMANENTLY STABILIZED WITH TURF GRASS.

PLANT SCHEDULE								
SYM.	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	COND.	CLASS.	NOTES	S.F. CREDIT/PLANT
STREET TREES								
ST.AG	7	AMELANCHIER x GRANDIFLORA "AUTUMN BRILLIANCE"	SERVICEBERRY	2½" CAL.	B&B	SMALL		N/A
GENERAL PLANTINGS								
P.BM	14	BUXUS MICROPHYLLA VAR. JAPONICA "WINTER GEM"	JAPANESE HOLLY	#5	CONT.	SHRUB		N/A
P.CA	81	CALAMAGROSTIS x ACUTIFOLIA "KARL FOERSTER"	FEATHER REED GRASS	#1	CONT.	GRNDCLR	24" O.C.	N/A
P.IG	7	ILEX GLABRA "SHAMROCK"	SHAMROCK INKBERRY HOLLY	#7	CONT.	SHRUB		N/A
P.IV	8	ITEA VIRGINICA "HENRY'S GARNET"	COMPACT VIRGINIA SWEETSPICE	#5	CONT.	SHRUB		N/A
P.KP	4	KOELREUTERIA PANICULATA	GOLDENRAIN TREE	2½" CAL.	B&B	MEDIUM		150
P.VD	2	VIBURNUM DENTATUM "BLUE MUFFIN"	ARROWWOOD VIBURNUM	#5	CONT.	SHRUB		N/A
P.ZS	4	ZELKOVA SERRATA "GREEN VASE"	JAPANESE ZELKOVA	2½" CAL.	B&B	LARGE		200
PARKING AREA BUFFER SCREEN PLANTINGS								
BP.IG	21	ILEX GLABRA "SHAMROCK"	SHAMROCK INKBERRY HOLLY	#7	CONT.	SHRUB	4' O.C.	N/A
BP.TM	20	TAXUS x MEDIA "DENSIFORMIS"	JAPANESE YEW	24" HT.	B&B	SHRUB	4' O.C.	N/A
OPTIONAL PLANTINGS (NON-CREDITED)								
O.JV	16	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	5' HT.	B&B	EVERGRN	4' O.C.	N/A

## LANDSCAPE TABULATION

## STREET TREES:

UNION BLVD.: 102 L.F. FRONTAGE: 1 TREE REQ'D. PER 25 L.F.  
SPRUCE ST.: 102 L.F. FRONTAGE: 1 TREE REQ'D. PER 25 L.F.  
8 STREET TREES REQ'D.; 7 PROPOSED, 1 EXISTING

## GENERAL SITE LANDSCAPING:

FOR MULTI-FAMILY RESIDENTIAL DEVELOPMENTS, PROVIDE LANDSCAPE CREDITS EQUIV. TO 10% OF THE AREA  
AREA: 17,136 S.F.; CREDITS REQUIRED: 1,714 S.F.  
SM. TREES: (0) @ 100 S.F. EA. 0 S.F.  
MED. TREES: (4) @ 150 S.F. EA. 600 S.F.  
LG. TREES: (4) @ 200 S.F. EA. 800 S.F.  
EVERGREEN TREES: (0) @ 100 S.F. EA. 0 S.F.  
PLANTING BEDS: 510 S.F.

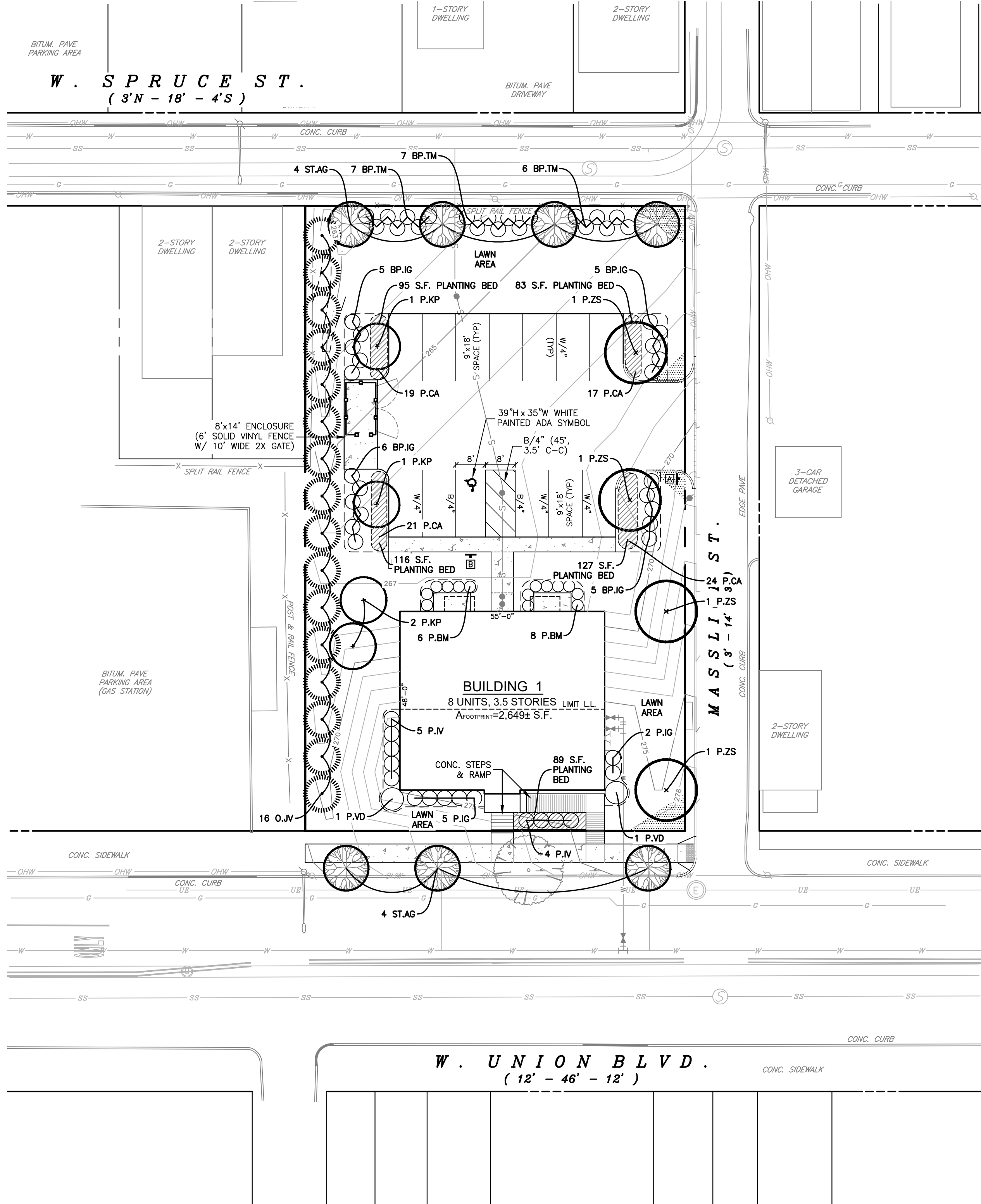
TOTAL CREDITS PROPOSED: 1,910 S.F.  
(INCLUDED IN ABOVE CREDITS) 1 SHADE TREE REQ'D. PER 15 PARKING SPACES; 13 PARKING SPACES PROPOSED  
1 SHADE TREE REQ'D.; 8 SHADE TREES PROPOSED

## NOTE:

(1) DUE TO THE PRESENCE OF OVERHEAD UTILITY LINES, ALLOWABLE STREET TREE SPECIES SHALL BE LIMITED TO THOSE APPEARING IN GROUP 1 OF APPROVED STREET TREES FOR THE CITY OF BETHLEHEM, LATEST EDITION, OR AS OTHERWISE APPROVED BY THE CITY FORESTER.

## NOTES

- MATERIALS (INCLUDING PLANT TYPE, QUANTITIES, QUALITY, ETC.) AND INSTALLATION FOR SITE LANDSCAPING SHALL BE IN ACCORDANCE WITH CITY OF BETHLEHEM SALDO SECTION 1349.08 STANDARDS AND REGULATIONS, AS APPLICABLE.
- 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.
- IN THE EVENT OF ANY DISCREPANCIES BETWEEN THE PLANT SCHEDULE AND PLAN, THE PLAN SHALL PREVAIL.



## LEGEND

	SUBJECT PROPERTY LINE
	ADJOINER PROPERTY LINE
	EX. ROADWAY CENTERLINE
	EX. SAN. SEWER EASEMENT LINE
	EX. CONTOUR LINE
	EX. CONCRETE CURB
	EX. EDGE OF PAVE
	EX. OVERHEAD UTILITY LINES
	EX. NATURAL GAS MAIN
	EX. STORM SEWER
	EX. WATER MAIN
	EX. SANITARY SEWER MAIN
	EX. WOOD FENCE
	EX. CHAIN LINK FENCE
	EX. TREE ROW OR EDGE OF WOODS
	EX. CONIFEROUS TREE
	EX. DECIDUOUS TREE
	EX. IRON PIN (OR AS NOTED)
	EX. CONCRETE MONUMENT
	PROPOSED BUILDING FOOTPRINT (AT GROUND LEVEL)
	PROPOSED IMPROVEMENT
	PROPOSED CONCRETE CURB
	PROPOSED DEPRESSED CONC. CURB
	PROPOSED CONTOUR LINE
	PROPOSED WATER LINE
	PROPOSED SANITARY SEWER GRAVITY LINE
	PROPOSED STORM SEWER
	PROPOSED FENCE/RAILING (AS NOTED)
	PROPOSED CLEAR SIGHT TRIANGLE

**NOTE:**  
ITALIC TEXT IN PLAN VIEW DENOTES EXISTING FEATURES WHILE UPRIGHT TEXT DENOTES PROPOSED FEATURES.

## PLAN SYMBOL LEGEND


## PAVEMENT MARKING LEGEND

W/X"	EX. X-IN. WIDE WHITE LINE
Y/X"	EX. X-IN. WIDE YELLOW LINE
DY/4"	EX. 4-IN. WIDE DOUBLE YELLOW LINE
B/Y/4"	EX. 4-IN. WIDE BROKEN YELLOW LINE
B/X"	PROPOSED X-IN. WIDE BLUE LINE
W/X"	PROPOSED X-IN. WIDE WHITE LINE
Y/X"	PROPOSED X-IN. WIDE YELLOW LINE
DY/X"	PROPOSED X-IN. WIDE DOUBLE YELLOW LINE

## PAVEMENT MARKING NOTES

- PAVEMENT MARKINGS ON PRIVATE PROPERTY SHALL BE OF WATERBORNE TRAFFIC PAINT. LOCATIONS, SIZES, TYPES, AND COLORS OF PAVEMENT MARKINGS SHALL BE AS INDICATED HEREIN. MATERIALS AND WORKMANSHIP FOR WATERBORNE PAVEMENT MARKINGS SHALL CONFORM TO PennDOT PUBLICATION 408 SECTION 962.
- PAVEMENT MARKINGS IN PUBLIC ROADWAYS SHALL BE HOT THERMOPLASTIC PAVEMENT MARKINGS, EXCEPT FOR CENTERLINE STRIPING WHICH SHALL BE OF WATERBORNE TRAFFIC PAINT.
- LOCATIONS, SIZES, TYPES, AND COLORS OF PAVEMENT MARKINGS IN PUBLIC ROADS SHALL BE AS INDICATED HEREIN FOR MUNICIPAL ROADWAYS OR IN THE APPROVED HIGHWAY OCCUPANCY PERMIT PLANS FOR THE PROJECT FOR STATE HIGHWAYS. MATERIALS AND WORKMANSHIP FOR HOT THERMOPLASTIC PAVEMENT MARKINGS SHALL CONFORM TO PennDOT PUBLICATION 408 SECTION 960.
- PRIOR TO APPLICATION OF PAVEMENT MARKINGS CLEAN PAVEMENT SURFACES OF DIRT, DEBRIS, AND OTHER CONTAMINANTS THAT MAY INHIBIT ADHESION USING A PRESSURE WASHER, COMPRESSED AIR OR OTHER APPROPRIATE METHOD.
- APPLY PAVEMENT MARKINGS TO CLEAN, DRY PAVEMENT WITH MINIMUM AIR AND PAVEMENT TEMPERATURES OF 50 DEGREES FAHRENHEIT AND A MAXIMUM RELATIVE HUMIDITY OF 80%.
- WHERE BITUMINOUS SEALANT RENDERS THE EXTENSION OF PAVEMENT MARKINGS TO THE FACE OF CURB IMPRACTICAL, MARKINGS SHALL EXTEND TO THE FACE OF SEALANT OR WITHIN 1 FOOT OF THE FACE OF CURB, WHICHEVER IS LESS.

## SIGNAGE NOTES

- TRAFFIC CONTROL SIGNS SHALL COMPLY WITH PennDOT PUBLICATION 236, HANDBOOK OF APPROVED SIGNS OR INTERNATIONAL BUILDING CODE STANDARDS, AS APPLICABLE.
- TRAFFIC CONTROL SIGNS SHALL BE MOUNTED ON PennDOT APPROVED BREAKAWAY POSTS IN ACCORDANCE WITH PennDOT PUBLICATION 236.
- STOP SIGNS SHALL BE PLACED TEN FEET BEHIND THE EDGE OF PAVEMENT AT A HEIGHT OF NINE FEET TO THE TOP OF SIGN.

TRAFFIC SIGNAGE SCHEDULE				
I.D.	SERIES	SIZE	QTY.	MESSAGE
[A]	R-1	24x24	1	STOP
[B]	R7-B	12x18	1	RESERVED PARKING
	R7-BF	12x18	1	RESERVED PARKING PENALTIES
	R7-BP	12x6	1	VAN ACCESSIBLE

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SITE LANDSCAPING & SIGNAGE PLAN

LAND DEVELOPMENT  
MULTI-FAMILY RESIDENTIAL DEVELOPMENT  
62-68 WEST UNION BOULEVARD

BETHLEHEM CITY  
NORTHAMPTON COUNTY, PENNSYLVANIA

REVISIONS

BY DATE

KJH 10-31-2025

DESIGNED BY: KJH

DRAWN BY: KJH

CHECKED BY: KJH

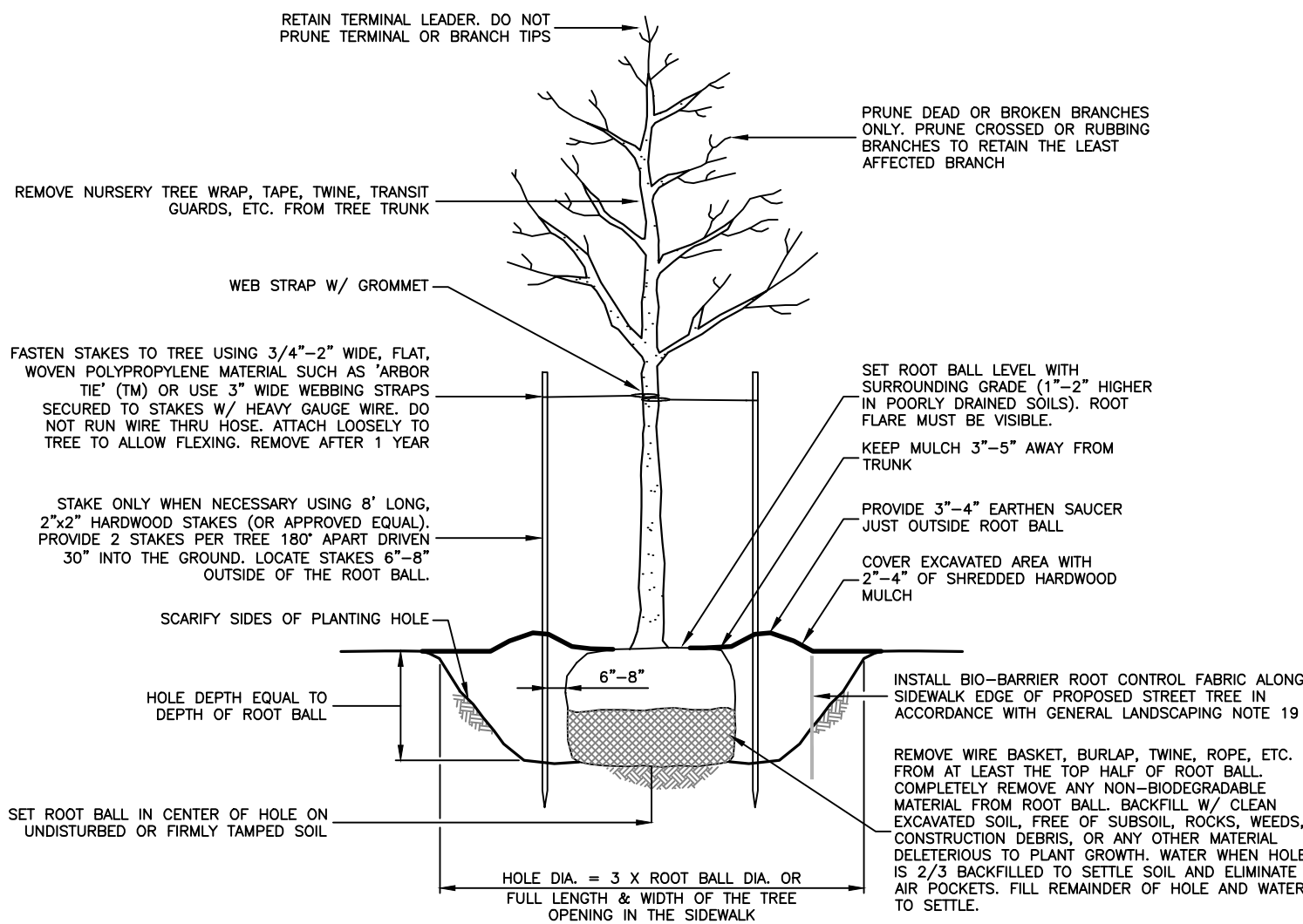
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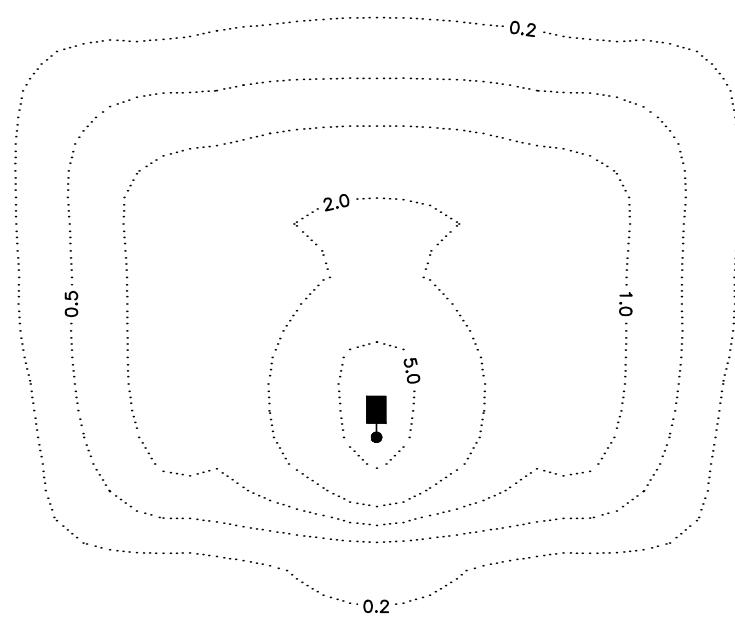
KCE JOB NO.: CB-25-054

SHEET: LD4 OF 6





CITY OF BETHLEHEM TREE PLANTING AND STAKING DETAIL  
NO SCALE



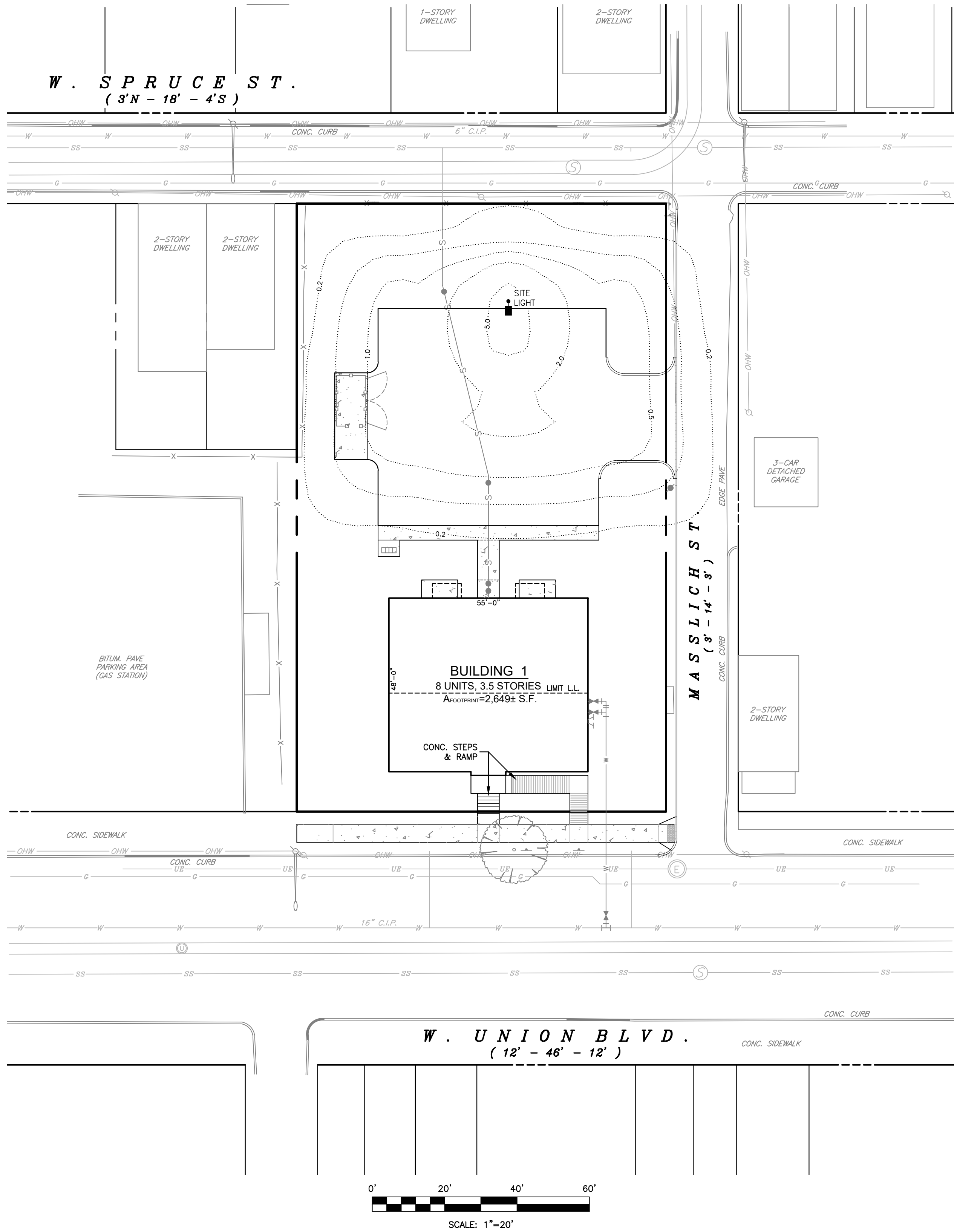
SPECIFICATIONS:

SINGLE TMJ TALON LED LIGHTING FIXTURE WITH FOUR (4) 21+LED LIGHTBARS HAVING A TYPE IV WITH SPILL CONTROL DISTRIBUTION (MODEL NO. TMJ-ED4-LED-E-U-SL4-XX). FIXTURE COLOR AND FINISH AND ADDITIONAL OPTIONS TO BE SPECIFIED BY THE OWNER. POLE-MOUNTED AT 20 FEET ABOVE FINISHED GRADE (1 REQUIRED).

SITE LIGHT PHOTOMETRIC DIAGRAM

(20 FT. POLE-MOUNTED, SINGLE FIXTURE, TYPE IV DIST.)

SCALE: 1" = 30'



LEGEND

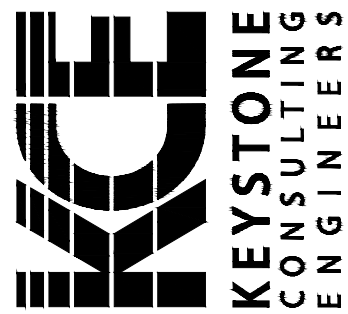
- SUBJECT PROPERTY LINE
- ADJOINER PROPERTY LINE
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SITE LIGHTING PLAN

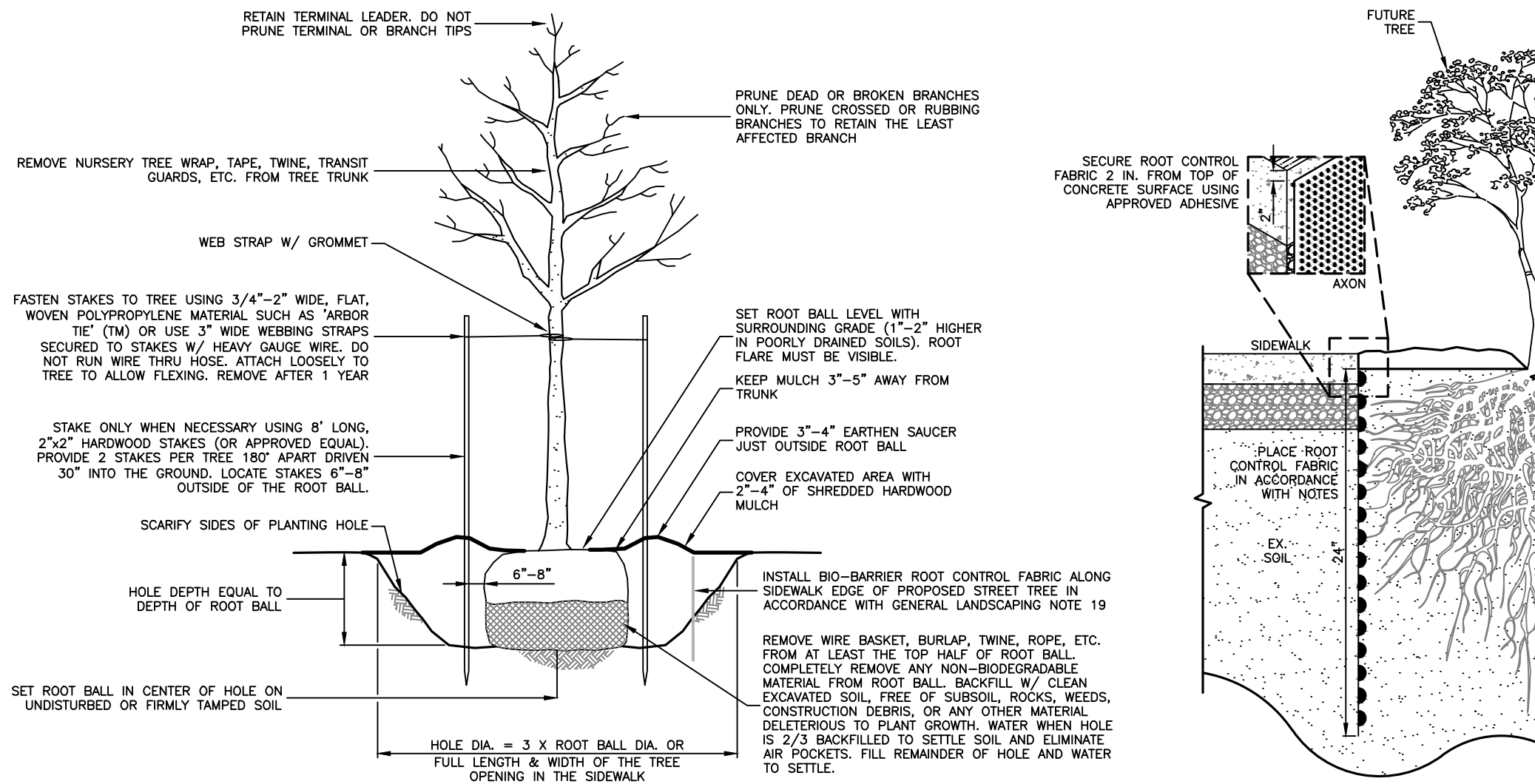
LAND DEVELOPMENT  
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BETHLEHEM CITY  
NORTHAMPTON COUNTY, PENNSYLVANIA

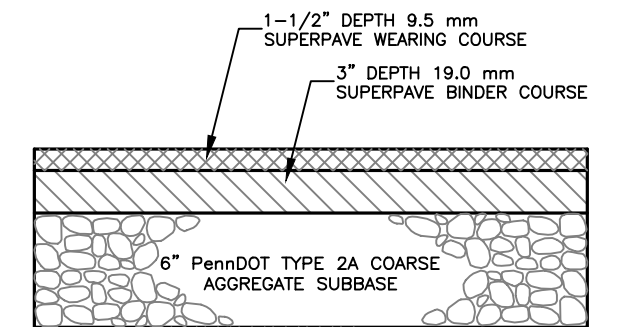
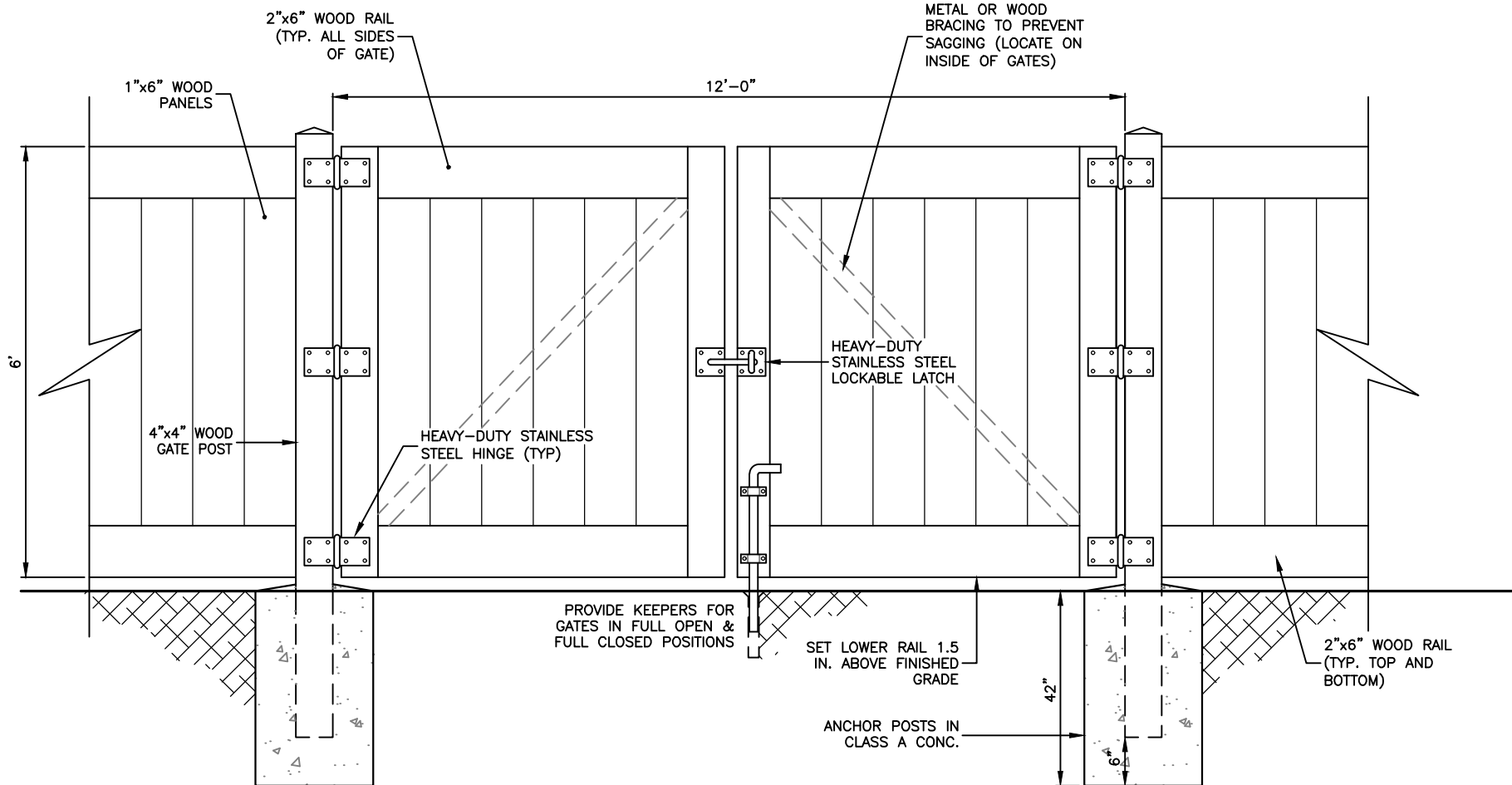
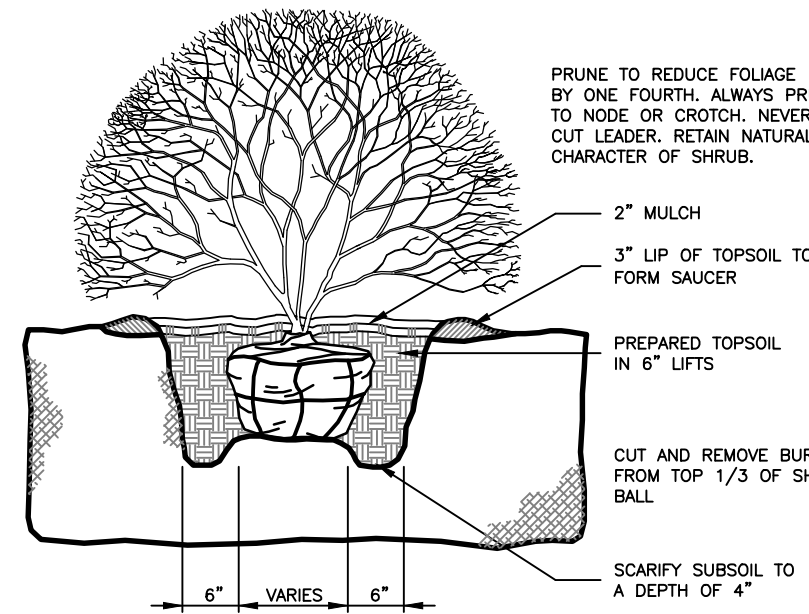
REVISIONS

DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE:	SCALE:	KCE JOB NO.:	SHEET:
KJH	KJH	KJH	AUG. 18, 2025	1" = 20'	CB-25-054	LD5 OF 6
KJH	KJH	KJH	10-31-2025			

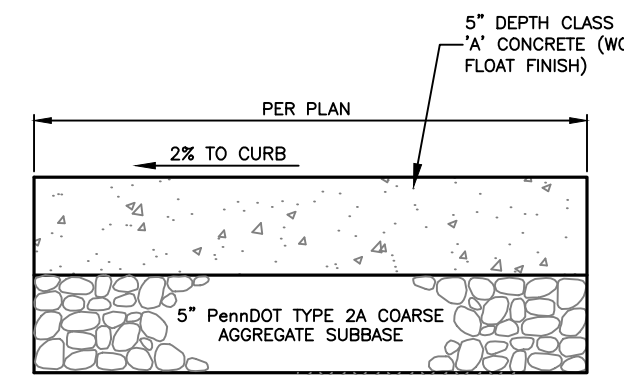




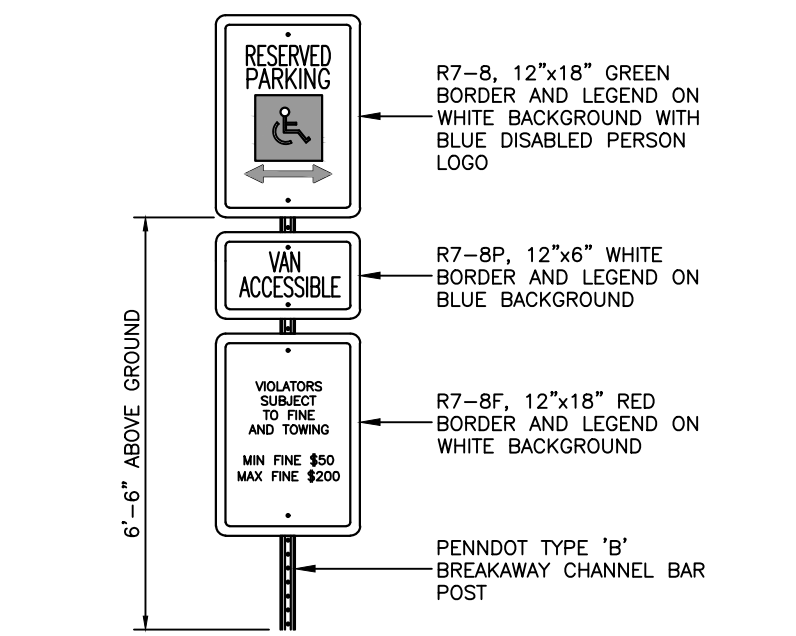
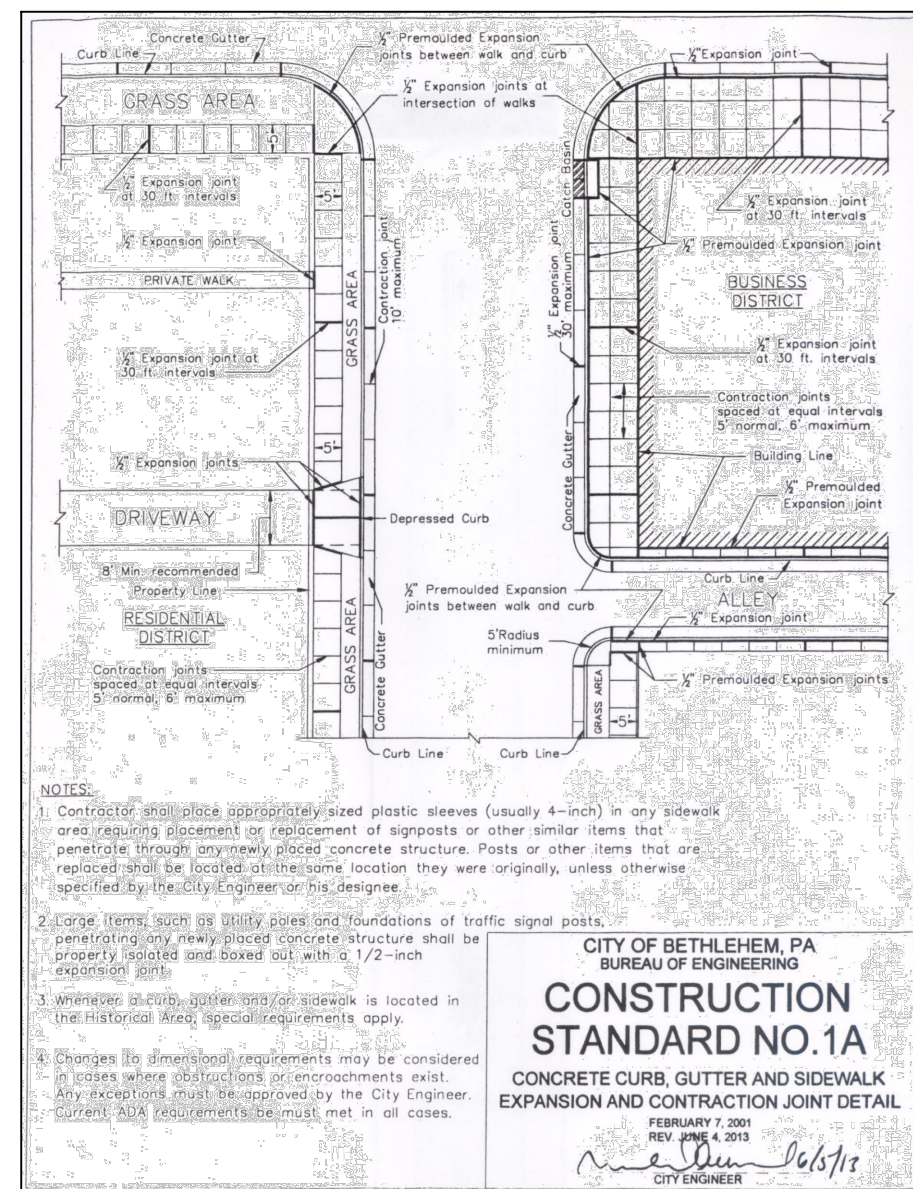
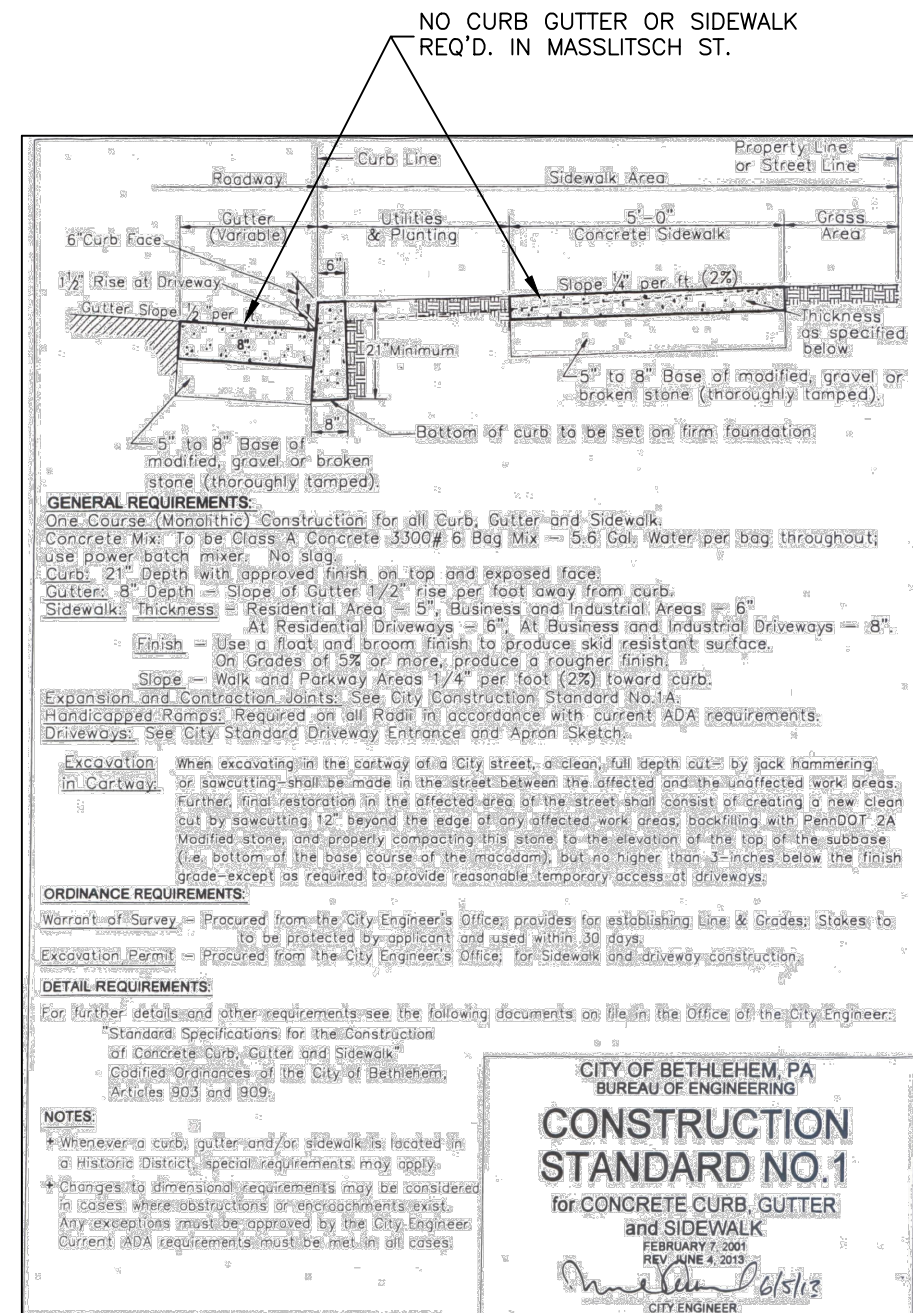
- NOTES:**
1. CONTRACTOR SHALL VERIFY LOCATIONS OF ANY AND ALL UNDERGROUND UTILITIES IN ACCORDANCE WITH PA ACT 121 PRIOR TO ANY EXCAVATION.
  2. INSTALL AND BACKFILL ROOT CONTROL FABRIC AS SOON AS POSSIBLE (WITHIN 12 HOURS) AFTER OPENING. MANUFACTURER'S PACKAGING, HIGH TEMPERATURES AND DIRECT SUNLIGHT CAN REDUCE THE EFFECTIVE LIFE OF THE PRODUCT.
  3. DIG TRENCHES AT LEAST 4 IN. WIDE WITH A MINIMUM LENGTH EQUAL TO THE WIDTH OF THE MATURE PLANT CANOPY PLUS 10 FEET CENTERED ON THE ROOT SOURCE, ADJACENT TO THE PROTECTION AREA.
  4. INSTALL ROOT CONTROL FABRIC ON THE SIDE OF THE TRENCH OPPOSITE THE ROOT SOURCE.
  5. INSTALL ROOT CONTROL FABRIC WITH NODULES FACING TOWARD ROOT/WEED SOURCE.
  6. FIXING PINS SHOULD PENETRATE FABRIC BETWEEN THE NODULES 1/4 IN. FROM TOP EDGE OF FABRIC AND AT A 45° ANGLE TO THE TRENCH WALL.
  7. REFER TO THE MANUFACTURER'S WEBSITE FOR ADDITIONAL INFORMATION.



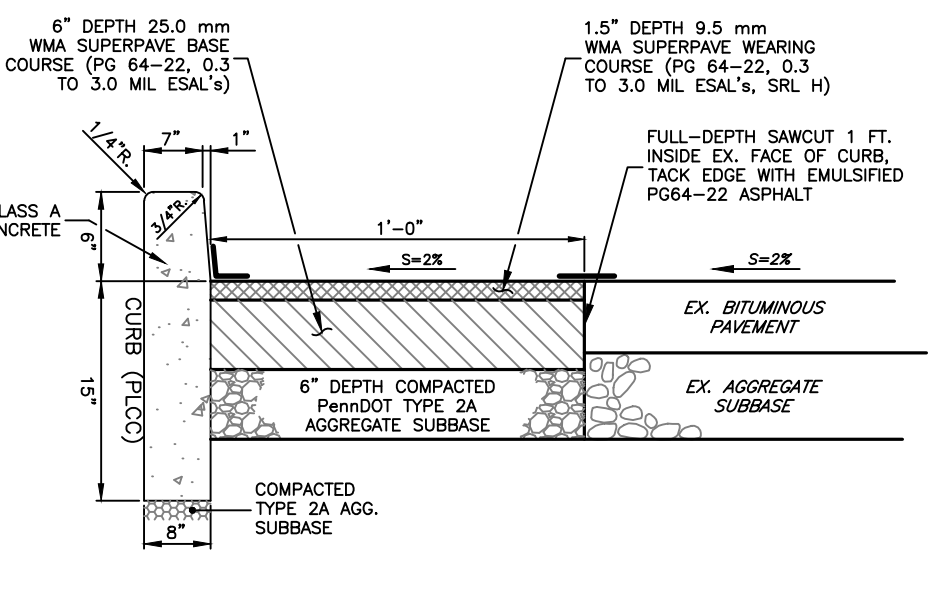
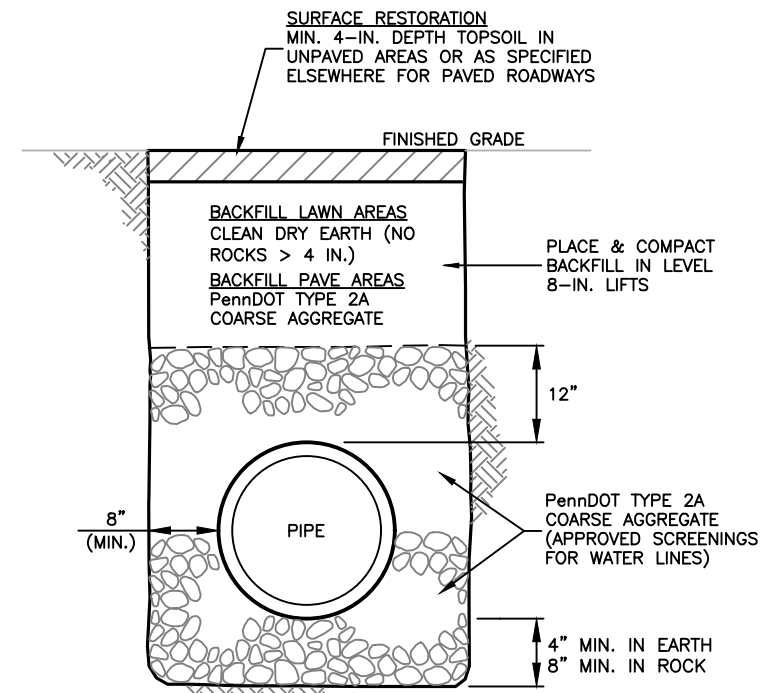
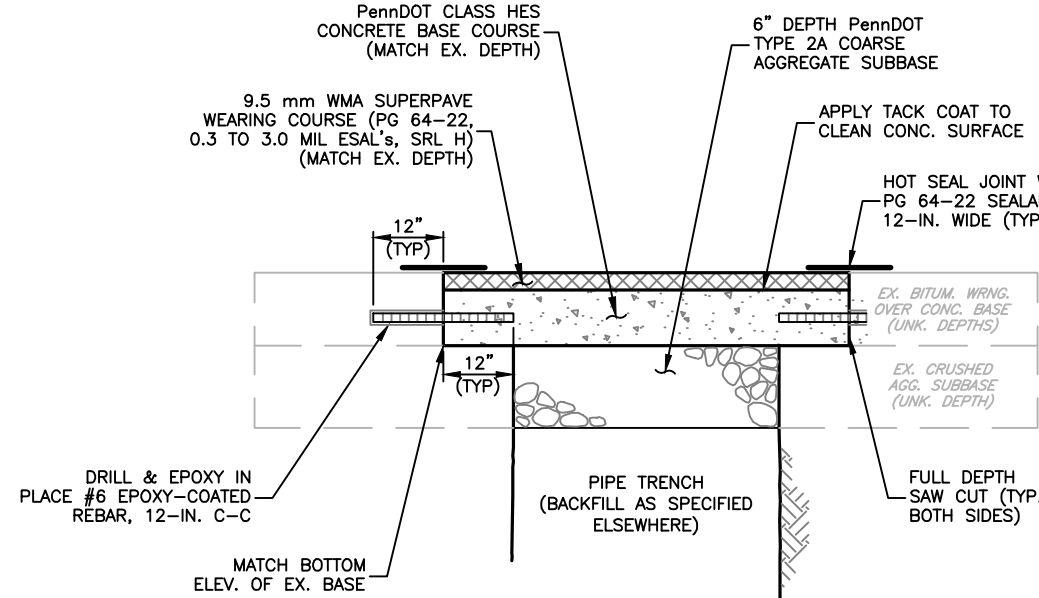
NO SCALE



- NOTES:**
1. MATERIALS AND CONSTRUCTION IN ACCORDANCE WITH SECTIONS 704 AND 1001 OF PENNDOT PUBLICATION 408.
  2. SIDEWALK SECTIONS SHALL HAVE AN AVERAGE AREA OF W X W SQUARE FEET.
  3. SIDEWALK SECTIONS SHALL BE FORMED USING MAXIMUM ONE-QUARTER (1/4) INCH THICK DIVISION PLATES OR EXPANSION JOINT MATERIAL THAT EXTENDS THE FULL DEPTH OF THE SLAB.
  4. NOSING ON ALL EDGES SHALL BE FINISHED TO A RADIUS OF NOT MORE THAN ONE-HALF (1/2) INCH.
  5. PLACE 1/2-INCH PREMOULDED BITUM. EXPANSION JOINT MATERIAL AT STRUCTURES (INCLUDING EXISTING SIDEWALK). TRM MATERIAL TO CONFORM TO FINISHED SIDEWALK CROSS-SECTION.



- NOTES:**
1. POST MOUNTED SIGNS SHALL BE TYPE B CHANNEL BAR POSTS AND SHALL CONFORM TO PADOT "TRAFFIC CONTROL SIGNING STANDARDS" TC-87028 SHEET 8 THRU 11 OF 11. APPROPRIATE POSTS SHALL BE SELECTED BASED ON THE SIZE OF THE SIGN USING THE SELECTION TABLES CONTAINED THEREIN.
  2. SIGN INSTALLATION SHALL BE IN ACCORDANCE WITH PADOT "TRAFFIC CONTROL SIGNING STANDARDS" TC-87028 SHEETS 8 THRU 11 OF 11 AS AMENDED.
  3. SEE CIVIL PLANS FOR EXACT LOCATION, TYPE AND SIZE OF SIGNS. ALL REGULATORY (R) SERIES SIGNS SHALL CONFORM TO THE PADOT "HANDBOOK OF APPROVED SIGNS", PUBLICATION 2356M, AS AMENDED UNLESS OTHERWISE SPECIFIED.
  4. SIGNS SHALL BE SETBACK 2' FROM CURBLINES OR OTHER OBSTRUCTIONS AS MEASURED FROM THE FACE/EDGE OF THE SIGN.
  5. RESERVED PARKING SPACE SIGNS SHALL CONFORM TO DEPARTMENT OF JUSTICE "ADA STANDARDS FOR ACCESSIBLE DESIGN" AS AMENDED.
  6. ALL SIGNS SHALL BE INSTALLED WITH ACORN NUT FASTENERS.



- NOTES:**
1. FOR CURB REPLACEMENT, SAW-CUT AND REMOVE EXISTING ROADWAY PAVEMENT 1 FT. FROM THE FACE OF THE EXISTING CURB.
  2. CONSTRUCT AGGREGATE BASE COURSE IN ACCORDANCE WITH SECTION 350.3 OF PENNDOT PUBLICATION 408.
  3. MATERIALS AND CONSTRUCTION FOR ROADWAY WIDENING IN ACCORDANCE WITH CITY OF BETHLEHEM AND PENNDOT STANDARDS, AS APPLICABLE.
  4. CONSTRUCT PLAIN CEMENT CONCRETE CURBS IN ACCORDANCE WITH PENNDOT "STANDARDS FOR ROADWAY CONSTRUCTION", RC-64M, OCT. 29, 2006 EDITION.

