PRELIMINARY AND FINAL MAJOR SITE PLAN

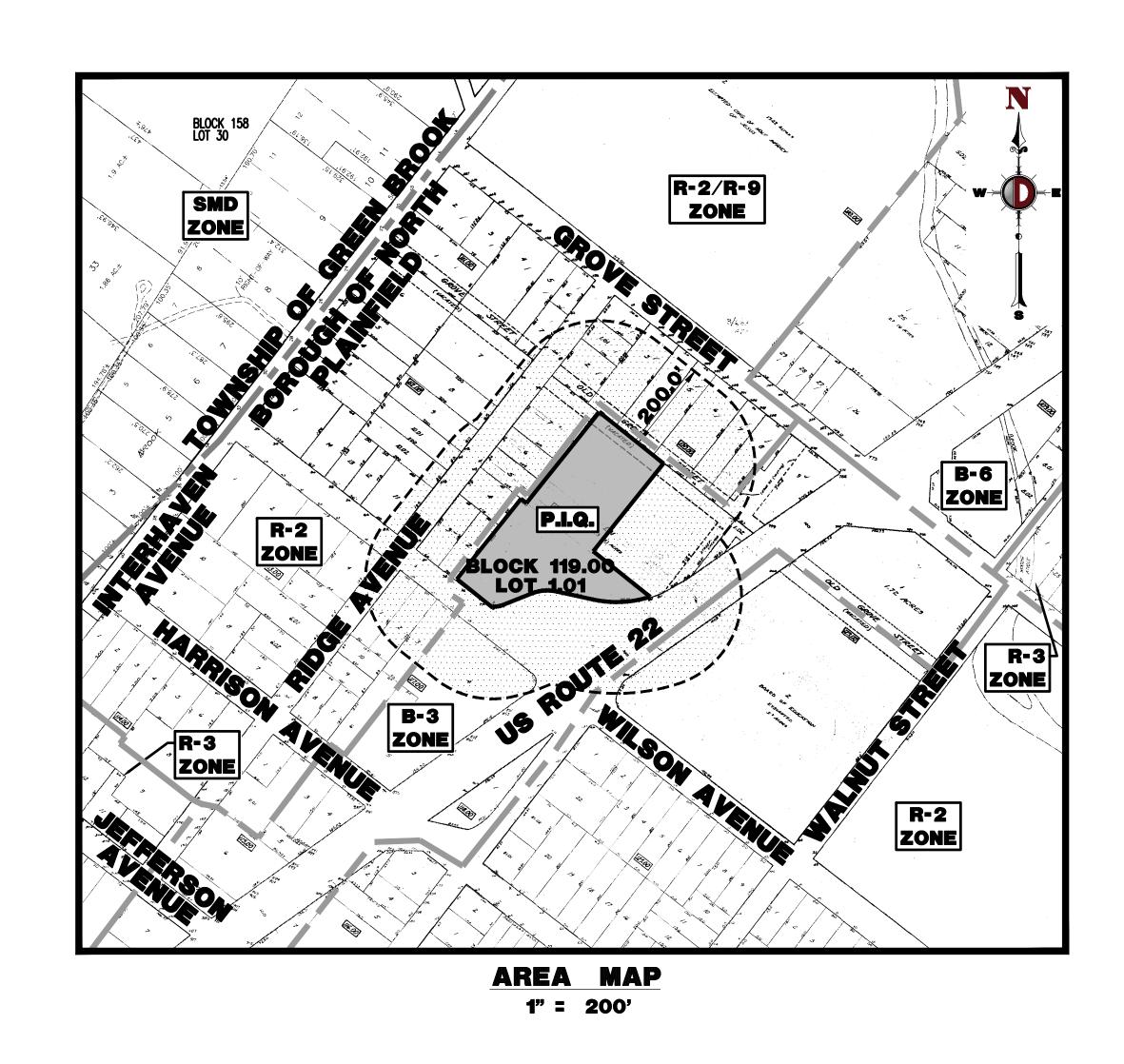
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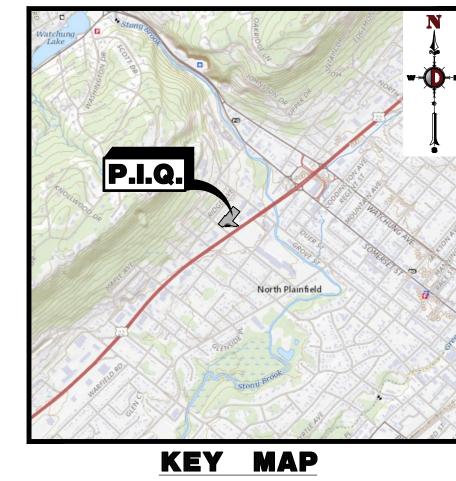
INSITE DEVELOPMENT PARTNERS, LLC PROPOSED 3-STORY SELF STORAGE FACILITY

BLOCK 119.00, LOT 1.01; TAX MAP SHEET #30 - LATEST REV. DATED 01-01-1988 ÚS ROUTE 22 & WILSON AVENUE BOROUGH OF NORTH PLAINFIELD SOMERSET COUNTY, NEW JERSEY

200' PROPERTY OWNERS LIST

			<u> </u>		
PROPERTY OWNER	<u>BLOCK</u>	LOT	PROPERTY OWNER	<u>BLOCK</u>	<u>L0</u>
CRAWFORD, RICHARD 121 RIDGE AVENUE NORTH PLAINFIELD, NJ 07060	119.0	2.01	114 RIDGE ASSOCIATES LLC 358 SOMERSET STREET NORTH PLAINFIELD, NJ 07060	112.0	10.
DIWAKER, NAMAN & DIWAKER, VIRENDER 117 RIDGE AVENUE NORTH PLAINFIELD, NJ 07060	119.0	3.01	BORELL, DARRIN 116 RIDGE AVENUE NORTH PLAINFIELD, NJ 07060	112.0	10.
WILLIAMS, JONATHAN 113 RIDGE AVENUE NORTH PLAINFIELD, NJ 07060	119.0	4	LOPEZ, KRYSTLE & ESCOBAR, DARWIN 120 RIDGE AVENUE NORTH PLAINFIELD, NJ 07060	112.0	11.
RIZZO, ANTHONY & LEILA 111 RIDGE AVENUE NORTH PLAINFIELD, NJ 07060	119.0	5	DIAZ, KATHERINE NAZARIO 124 RIDGE AVENUE NORTH PLAINFIELD, NJ 07060	112.0	11.
GONZALEZ, SILVA 107 RIDGE AVENUE NORTH PLAINFIELD, NJ 07060	119.0	6	ROYER, WILLIAM & CHARLOTTE 90 RIDGE AVENUE NORTH PLAINFIELD, NJ 07060	111.0	7
COOPER, KEVIN & COOPER, SAMSEKETHA 95-103 RIDGE AVENUE NORTH PLAINFIELD, NJ 07060	119.0	7	HEYMAN, BRUCE 155 RIDGE AVENUE NORTH PLAINFIELD, NJ 07060	117.0	1
AHMED, SAJJAD 411 GROVE STREET NORTH PLAINFIELD, NJ 07060	120.0	1	PLAINFIELD 22 DEVELOPERS LLC 1195 ROUTE 70 S2000 LAKEWOOD, NJ 08701	117.0	2
AHMED, RAJA & MUNIR, ASAD 79 RIDGE AVENUE NORTH PLAINFIELD, NJ 07060	120.0	1.01	PLAINFIELD 22 DEVELOPERS LLC 1195 ROUTE 70 S2000 LAKEWOOD, NJ 08701	117.0	3
FOR JOY LLC PO BOX 2917 PLAINFIELD, NJ 07062	120.0	2	PLAINFIELD 22 DEVELOPERS LLC 1195 ROUTE 70 S2000 LAKEWOOD, NJ 08701	117.0	4
405 GROVE REALTY, LLC 405–409 GROVE STREET NORTH PLAINFIELD, NJ 07060	120.0	3	O'REILLY, GREGORY PO BOX 4204 WARREN, NJ 07059	113.0	4
DIAZ-NAVARRETE, LUIS 401 GROVE STREET NORTH PLAINFIELD, NJ 07060	120.0	4	NORTH PLAINFIELD BOARD OF EDUCATION 33 MOUNTAIN AVENUE NORTH PLAINFIELD, NJ 07060	123.0	2
301-399 GROVE STREET, LP 500 RIVER AVENUE, SUITE 250 LAKEWOOD, NJ 08701	120.0	5	,		
301-399 GROVE STREET, LP			ALSO TO BE NOTIFIED:		
22 ESTHER COURT LAKEWOOD, NJ 08701 CABRERA, MANUEL & CABRERA, ADELIA	120.0	6	DONNA SHORT GIS SUPERVISOR NEW JERSEY AMERICAN WATER COMPANY, I 1025 LAUREL OAK ROAD	NC.	
387 GROVE STREET NORTH PLAINFIELD, NJ 07060	120.0	7	VOORHEES, NJ 08043		
MRISOFIA REALTY, LLC 7000 KENNEDY BLVD.E, M-2 GUTTENBERG, NJ 07093	120.0	8	PLAINFIELD AREA REGIONAL SEWERAGE AUT 200 CLAY AVENUE MIDDLESEX, NJ 08846	HORIIY	
BRANDON REALTY, LLC % RYAN PROPERTY PO BOX 460189 HOUSTON, TX 77056	119.0	1.03	PUBLIC SERVICE ELECTRIC AND GAS COMP MANAGER — CORPORATE PROPERTIES 80 PARK PLAZA, T6B NEWARK, NJ 07102	₹NY	
HERNANDEZ, ANGEL 98 RIDGE AVENUE NORTH PLAINFIELD, NJ 07060	112.0	7	VERIZON 540 BROAD STREET NEWARK, NJ 07101		
SALEEM, CHAUDHRY & SULTANA, FARHAT 108 RIDGE AVENUE NORTH PLAINFIELD, NJ 07060	112.0	8	COMCAST OF PLAINFIELD, LLC GENERAL MANAGER 800 RAHWAY AVENUE		
KROM, ETHEL & KROM, ROBERT & ELYSA 112 RIDGE AVENUE NORTH PLAINFIELD, NJ 07060	112.0	9	UNION, NJ 07083		





1" = 2000'

DRAWING IN	IDEX
COVER SHEET	1 of 14
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SITE PLAN	4 of 14
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LANDSCAPE PLAN	8 of 14
LIGHTING PLAN	9 of 14
SOIL EROSION & SEDIMENT CONTROL PLAN	10 of 14
CONSTRUCTION DETAILS	11 of 14
CONSTRUCTION DETAILS	12 of 14
CONSTRUCTION DETAILS	13 of 14
VEHICLE CIRCULATION PLAN (SU-30)	14 of 14

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APPROVED BY THE	ZONING BOARD	OF ADJUSTMENT	OF NORTH PLAINFIELD,	SOMERSET COUNT	Y, NEW JERSEY

PREPARED BY DYNAMIC ENGINEERING CONSULTANTS, P.C. 1904 MAIN STREET LAKE COMO, NJ 07719

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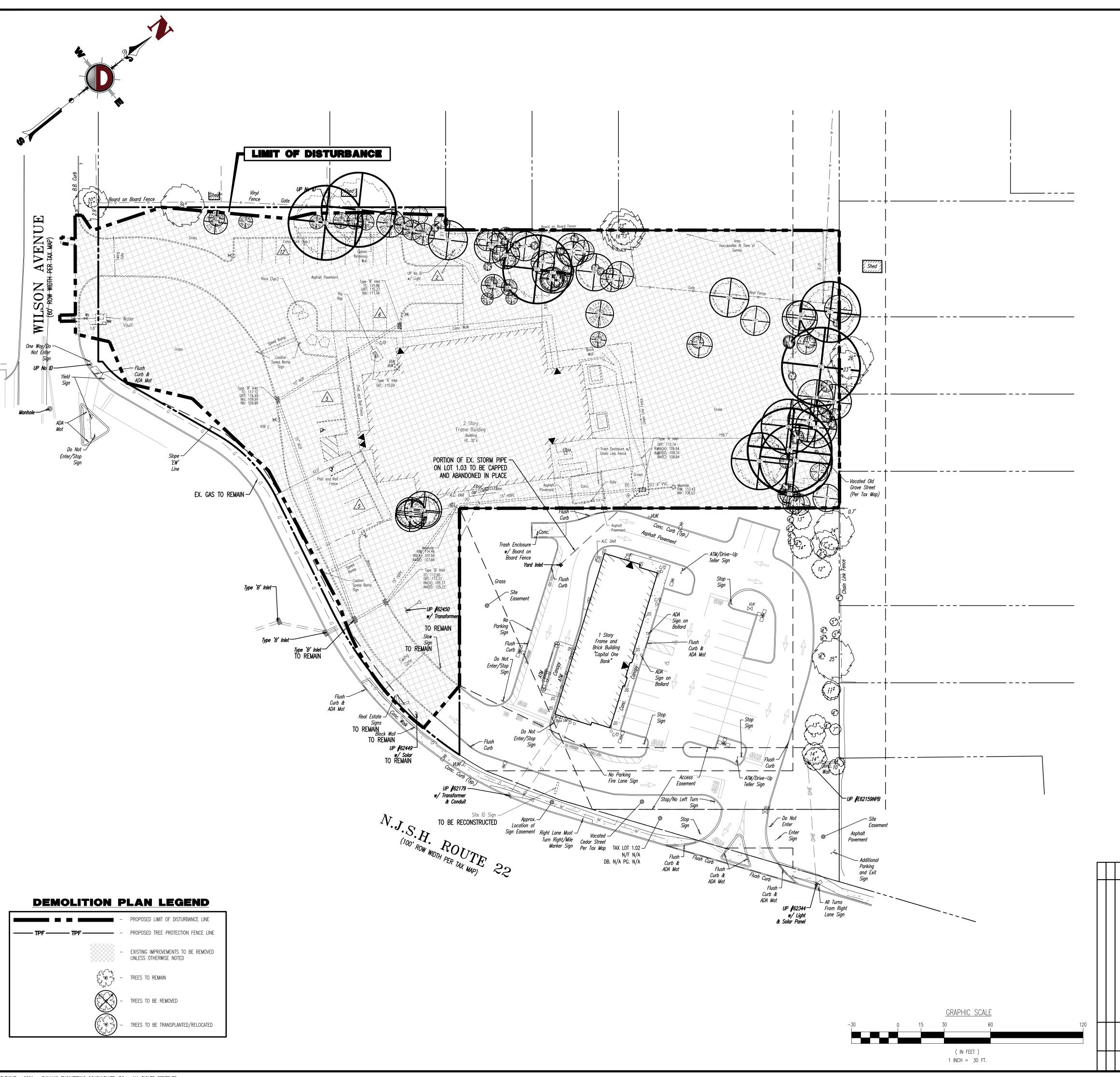
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By	DYNAMIC ENGINEERING LAND DEVELOPMENT CONSULTING • PERMITTING • GEOTECHNICAL • ENVIR Offices conveniently located in: Lake Como, New Jersey T: 732.974.0198 Chester, New Jersey Allen, Texas T: 972.534.2100 Austin, Texas T: 512.646.2646 Houston, Texas T: 281.785 Newtown, Pennsylvania T: 267.685.0276 Philadelphia, Pennsylvania T: 215.253.4888	y T: 973.755.7200 Toms River, New Jersey 7 9.6400 Delray Beach, Florida T: 561.921.8570	1904 Main Street Lake Como, NJ 07719 T: 732.974.0198 F: 732.974.3521 www.dynamicec.com PLANNING & ZONING T: 732.974.0198
	TITLE: COVER SHEE PROJECT: INSITE DEVELOPMENT PARTNERS, LLC PROPOSED 3-STORY SELF STORAGE FACILITY BLOCK 119.00, LOT 1.01	. ,	DATE: 10/18/2021 SCALE:(H) AS (V) SHOWN
omments	US ROUTE 22 & WILSON AVENUE BOROUGH OF NORTH PLAINFIELD, SOMERSET COUNTY, NEW JERSEY THOMAS LAMINATED LOLLNIA DALLIC	DESIGNED BY: LPG CHECKED BY: TJM CHECKED BY:	SHEET No:
. Date Ca	THOMAS J. MULLER JOHN A. PALUS howes	PROTECT YOURSELF ALL STATES REQUIRE NOTIFICATION OF EXCAVATIORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE	OF 14
ě .	NEW DENSET LIGHTSE NO. 41973	FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT	: Rev. # O

CHAIRPERSON

SECRETARY

BOARD ENGINEER





DEMOLITION NOTES

- 1. ALL DEMOLITION ACTIVITIES ARE TO BE PERFORMED IN STRICT ADHERENCE TO ALL FEDERAL, STATE AND LOCAL REGULATIONS.
- 2. PROCEED WITH DEMOLITION IN A SYSTEMATIC MANNER, FROM THE TOP OF THE STRUCTURE(S) TO THE GROUND.
- 4. DEMOLISH CONCRETE AND MASONRY IN SMALL SECTIONS.
- 5. REMOVE STRUCTURAL FRAMING MEMBERS AND LOWER THEM TO THE GROUND BY MEANS OF HOISTS, DERRICKS OR OTHER SUITABLE METHODS.

3. COMPLETE DEMOLITION WORK ABOVE EACH FLOOR OR TIER BEFORE DISTURBING ANY OF THE SUPPORTING MEMBERS OF THE LOWER LEVELS.

- 6. BREAK UP CONCRETE SLABS-ON-GRADE, UNLESS OTHERWISE DIRECTED BY OWNER.
- 7. LOCATE DEMOLITION EQUIPMENT THROUGHOUT THE STRUCTURE AND REMOVE MATERIALS SO AS TO NOT IMPOSE EXCESSIVE LOADS ON SUPPORTING WALLS, FLOORS, OR
- 8. PROVIDE INTERIOR AND EXTERIOR SHORING, BRACING AND SUPPORTS TO PREVENT MOVEMENT, SETTLEMENT OR COLLAPSE OF STRUCTURES TO BE DEMOLISHED (AND ADJACENT FACILITIES. IF APPLICABLE).
- 9. DEMOLISH AND REMOVE ALL FOUNDATION WALLS, FOOTINGS AND OTHER MATERIALS WITHIN THE AREA OF THE DESIGNATED FUTURE BUILDING. ALL OTHER FOUNDATION SYSTEMS, INCLUDING BASEMENTS, SHALL BE DEMOLISHED TO A DEPTH OF NOT LESS THAN ONE FOOT BELOW PROPOSED PAVEMENT OR, BREAK BASEMENT FLOOR SLABS. SEAL ALL OPEN UTILITY LINES WITH CONCRETE. CONTRACTOR TO REVIEW STRUCTURE PRIOR TO DEMOLITION TO DETERMINE IF BASEMENT, CRAWL SPACE OR ANY SUB-STRUCTURE EXISTS. ANY SUB-STRUCTURE, INCLUDING BASEMENTS SHALL BE REMOVED IN ITS ENTIRETY OR AS DIRECTED BY OWNER.
- 10. ERECT AND MAINTAIN COVERED PASSAGEWAYS IN ORDER TO PROVIDE SAFE PASSAGE FOR PERSONS AROUND THE AREA OF DEMOLITION. CONDUCT ALL DEMOLITION OPERATIONS IN A MANNER THAT WILL PREVENT DAMAGE AND PERSONAL INJURY TO STRUCTURES, ADJACENT BUILDINGS AND ALL PERSONS. 11. REFRAIN FROM USING ANY EXPLOSIVES WITHOUT PRIOR WRITTEN CONSENT OF OWNER AND APPLICABLE GOVERNMENTAL AUTHORITIES.
- 12. CONDUCT DEMOLITION SERVICES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS AND OTHER ADJACENT FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER OCCUPIED FACILITIES WITHOUT PRIOR WRITTEN PERMISSION OF OWNER AND ANY APPLICABLE GOVERNMENTAL AUTHORITIES. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS, IF REQUIRED BY APPLICABLE GOVERNMENTAL REGULATIONS.
- 13. USE WATERING, TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS, AS NECESSARY TO LIMIT THE AMOUNT OF DUST AND DIRT RISING AND SCATTERING IN THE AIR. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. RETURN ALL ADJACENT AREAS TO THE CONDITIONS EXISTING PRIOR TO THE START OF WORK.
- 14. ACCOMPLISH AND PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE UNAUTHORIZED ENTRY OF PERSONS AT ANY TIME.
- 15. COMPLETELY FILL BELOW GRADE AREAS AND VOIDS RESULTING FROM THE DEMOLITION OF STRUCTURES AND FOUNDATIONS WITH SOIL MATERIALS IN ACCORDANCE WITH THE GEOTECHNICAL REPORT, CONSISTING OF STONE, GRAVEL AND SAND, FREE FROM DEBRIS, TRASH, FROZEN MATERIALS, ROOTS AND OTHER ORGANIC MATTER. STONES USED WILL NOT BE LARGER THAN 6 INCHES IN DIMENSION. MATERIAL FROM DEMOLITION MAY NOT BE USED AS FILL. PRIOR TO PLACEMENT OF FILL MATERIALS, UNDERTAKE ALL NECESSARY ACTION IN ORDER TO ENSURE THAT AREAS TO BE FILLED ARE FREE OF STANDING WATER, FROST, FROZEN MATERIAL, TRASH, DEBRIS. PLACE FILL MATERIALS IN HORIZONTAL LAYERS NOT EXCEEDING 6 INCHES IN LOOSE DEPTH AND COMPACT EACH LAYER AT PLACEMENT TO 95% OPTIMUM DENSITY. GRADE THE SURFACE TO MEET ADJACENT CONTOURS AND TO PROVIDE SURFACE DRAINAGE.
- 16. REMOVE FROM THE DESIGNATED SITE, AT THE EARLIEST POSSIBLE TIME, ALL DEBRIS, RUBBISH, SALVAGEABLE ITEMS, HAZARDOUS AND COMBUSTIBLE SERVICES. REMOVED MATERIALS MAY NOT BE STORED, SOLD OR BURNED ON THE SITE. REMOVAL OF HAZARDOUS AND COMBUSTIBLE MATERIALS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE PROCEDURES AS AUTHORIZED BY THE FIRE DEPARTMENT OR OTHER APPROPRIATE REGULATORY AGENCIES AND AUTHORITIES.
- 17. DISCONNECT, SHUT OFF AND SEAL IN CONCRETE ALL UTILITIES SERVING THE STRUCTURE(S) TO BE DEMOLISHED BEFORE THE COMMENCEMENT OF THE DESIGNATED DEMOLITION. MARK FOR POSITION ALL UTILITY DRAINAGE AND SANITARY LINES AND PROTECT ALL ACTIVE LINES. CLEARLY IDENTIFY BEFORE THE COMMENCEMENT OF DEMOLITION SERVICES THE REQUIRED INTERRUPTION OF ACTIVE SYSTEMS THAT MAY AFFECT OTHER PARTIES, AND NOTIFY ALL APPLICABLE UTILITY COMPANIES TO ENSURE THE CONTINUATION OF SERVICE.
- 18. THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION OTHER THAN THAT ALL PROCEDURES ARE TO BE IN ACCORDANCE WITH STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS NECESSARY.

- 1. IN ACCORDANCE WITH STATE LAW, THE CONTRACTOR SHALL BE REQUIRED TO CALL THE BOARD OF PUBLIC UTILITIES ONE CALL DAMAGE PROTECTION SYSTEM OR UTILITY MARK OUT IN ADVANCE OF ANY EXCAVATION.
- ENGINEER IN WRITING. 3. ALL EXISTING UTILITIES TO BE ABANDONED SHALL BE DISCONNECTED AND CAPPED AT THE MAIN FOR WATER, AT THE CLEAN-OUT FOR SEWER AND THE

. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING SITE IMPROVEMENTS AND UTILITIES. ALL DISCREPANCIES SHALL BE IDENTIFIED TO THE

SHUT-OFF VALVE OR MAIN FOR GAS IN ACCORDANCE WITH MUNICIPAL AND LOCAL UTILITY REQUIREMENTS.

4. ALL EXISTING DEBRIS SHALL BE REMOVED BY CONTRACTOR IN ACCORDANCE WITH MUNICIPAL AND LOCAL UTILITY COMPANY REQUIREMENTS.

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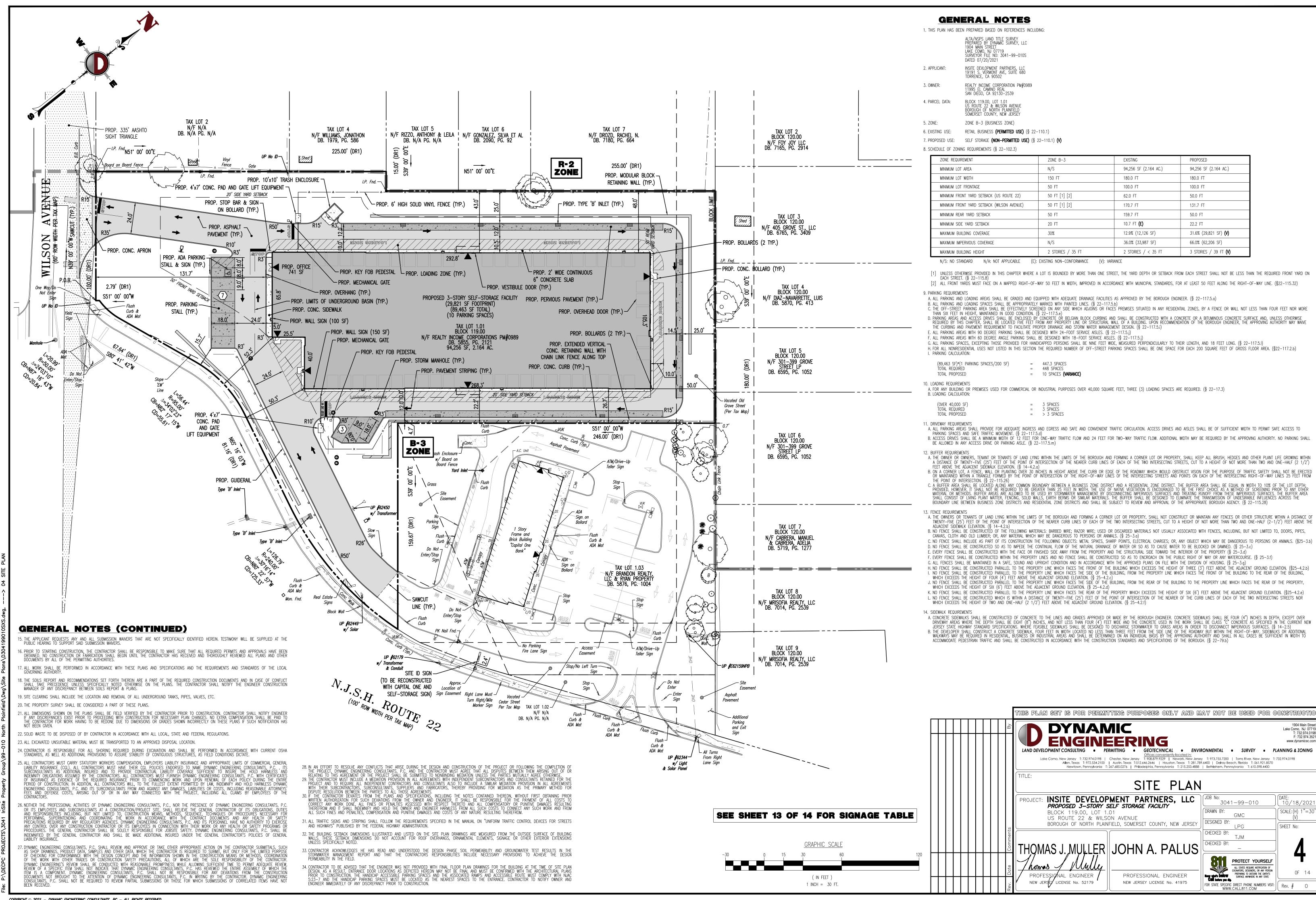
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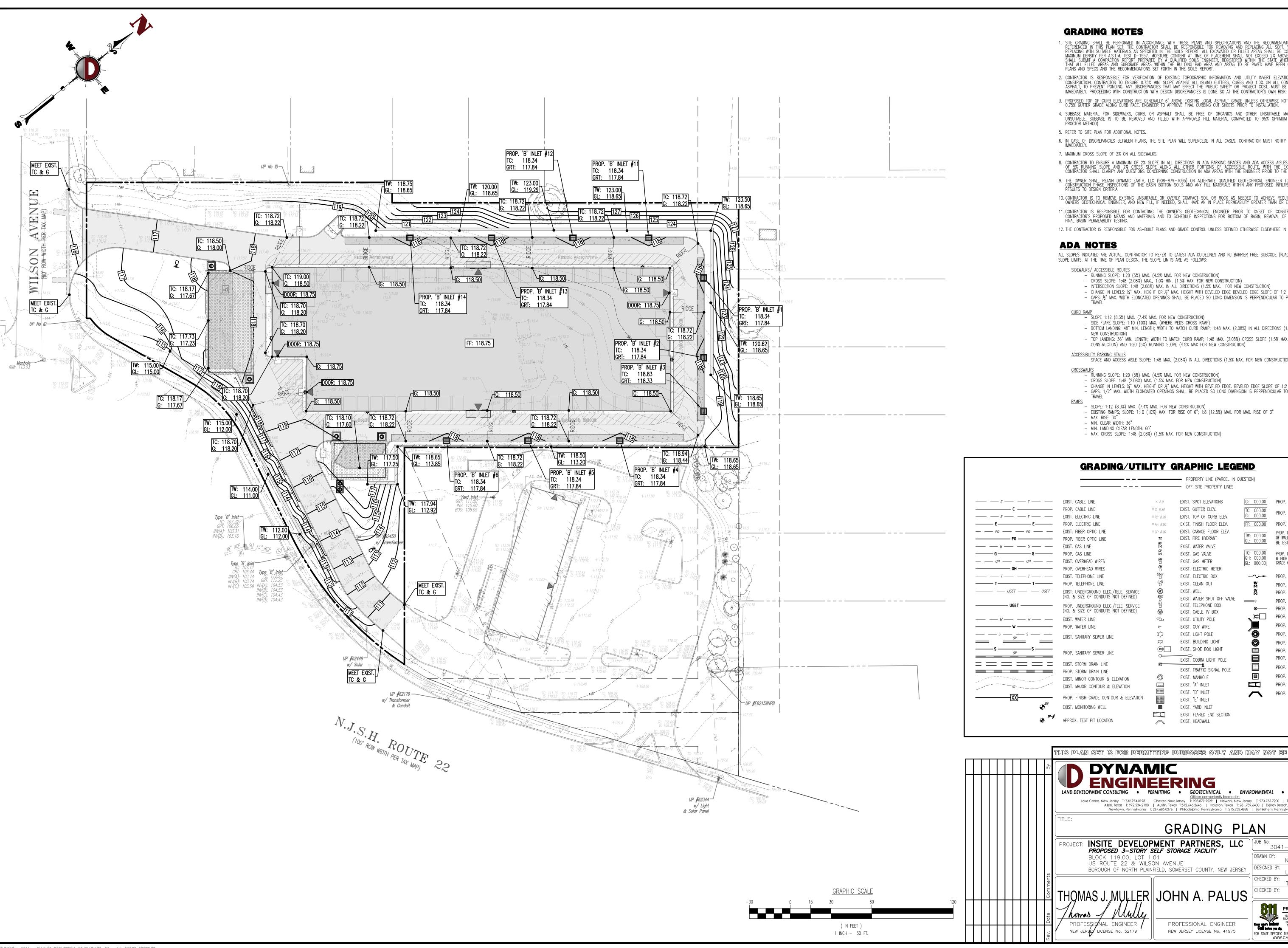
Newtown, Pennsylvania T: 267.685.0276 | Philadelphia, Pennsylvania T: 215.253.4888 | Bethlehem, Pennsylvania T: 610.598.4400 DEMOLITION PLAN PROJECT: INSITE DEVELOPMENT PARTNERS, LLC PROPOSED 3-STORY SELF STORAGE FACILITY 10/18/202 SCALE: (H) 1"=30 BLOCK 119.00, LOT 1.01 US ROUTE 22 & WILSON AVENUE BOROUGH OF NORTH PLAINFIELD, SOMERSET COUNTY, NEW JERSEY SHEET No: CHECKED BY: PROTECT YOURSELF ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

PROFESSIONAL ENGINEER

NEW JERSEY LICENSE No. 41975

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- . SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE SOILS REPORT REFERENCED IN THIS PLAN SET. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ALL SOFT, YIELDING OR UNSUITABLE MATERIALS AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED IN THE SOILS REPORT. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR MAXIMUM DENSITY PER A.S.T.M. TEST D-1557. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL NOT EXCEED 2% ABOVE NOR 3% BELOW OPTIMUM. CONTRACTOR SHALL SUBMIT A COMPACTION REPORT PREPARED BY A QUALIFIED SOILS ENGINEER, REGISTERED WITHIN THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECS AND THE RECOMMENDATIONS SET FORTH IN THE SOILS REPORT.
- 2. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO ENSURE 0.75% MIN. SLOPE AGAINST ALL ISLAND GUTTERS, CURBS AND 1.0% ON ALL CONCRETE SURFACES, AND 1-1/2% MIN. ON ASPHALT, TO PREVENT PONDING. ANY DISCREPANCIES THAT MAY EFFECT THE PUBLIC SAFETY OR PROJECT COST, MUST BE IDENTIFIED TO THE ENGINEER IN WRITING
- 3. PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 6" ABOVE EXISTING LOCAL ASPHALT GRADE UNLESS OTHERWISE NOTED. FIELD ADJUST TO CREATE A MIN. OF 0.75% GUTTER GRADE ALONG CURB FACE. ENGINEER TO APPROVE FINAL CURBING CUT SHEETS PRIOR TO INSTALLATION. 4. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED
- UNSUITABLE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED TO 95% OPTIMUM DENSITY (AS DETERMINED BY MODIFIED
- 6. IN CASE OF DISCREPANCIES BETWEEN PLANS, THE SITE PLAN WILL SUPERCEDE IN ALL CASES. CONTRACTOR MUST NOTIFY ENGINEER OF RECORD OF ANY CONFLICT
- 8. CONTRACTOR TO ENSURE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS IN ADA PARKING SPACES AND ADA ACCESS AISLES. CONTRACTOR TO ENSURE A MAXIMUM OF 5% RUNNING SLOPE AND 2% CROSS SLOPE ALONG ALL OTHER PORTIONS OF ACCESSIBLE ROUTE, WITH THE EXCEPTION OF RAMPS AND CURB RAMPS. CONTRACTOR SHALL CLARIFY ANY QUESTIONS CONCERNING CONSTRUCTION IN ADA AREAS WITH THE ENGINEER PRIOR TO THE START OF CONSTRUCTION.
- 9. THE OWNER SHALL RETAIN DYNAMIC EARTH, LLC (908-879-7095) OR ALTERNATE QUALIFIED GEOTECHNICAL ENGINEER TO TEST SOIL PERMEABILITY AND PROVIDE CONSTRUCTION PHASE INSPECTIONS OF THE BASIN BOTTOM SOILS AND ANY FILL MATERIALS WITHIN ANY PROPOSED INFILTRATION OR RETENTION BASIN TO COMPARE RESULTS TO DESIGN CRITERIA.
- 10. CONTRACTOR IS TO REMOVE EXISTING UNSUITABLE OR OVERLY COMPACT SOIL OR ROCK AS NEEDED TO ACHIEVE REQUIRED PERMEABILITY AS DIRECTED BY THE OWNERS GEOTECHNICAL ENGINEER, AND NEW FILL, IF NEEDED, SHALL HAVE AN IN PLACE PERMEABILITY GREATER THAN OR EQUAL TO THE DESIGN CRITERIA.
- 11. CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE OWNER'S GEOTECHNICAL ENGINEER PRIOR TO ONSET OF CONSTRUCTION TO SUBMIT AND CONFIRM THE CONTRACTOR'S PROPOSED MEANS AND MATERIALS AND TO SCHEDULE INSPECTIONS FOR BOTTOM OF BASIN, REMOVAL OF UNSUITABLE SOIL, FILL PLACEMENT, AND FINAL BASIN PERMEABILITY TESTING.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR AS-BUILT PLANS AND GRADE CONTROL UNLESS DEFINED OTHERWISE ELSEWHERE IN THE CONTRACT DOCUMENTS.

ALL SLOPES INDICATED ARE ACTUAL. CONTRACTOR TO REFER TO LATEST ADA GUIDELINES AND NJ BARRIER FREE SUBCODE (NJAC 5:23-7) FOR

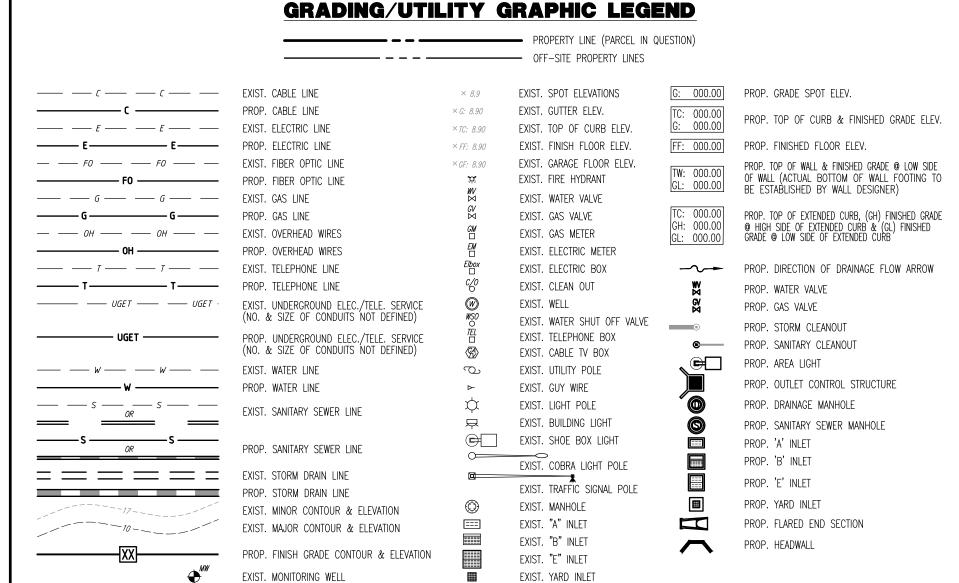
- RUNNING SLOPE: 1:20 (5%) MAX. (4.5% MAX. FOR NEW CONSTRUCTION) CROSS SLOPE: 1:48 (2.08%) MAX.. 1.0% MIN. (1.5% MAX. FOR NEW CONSTRUCTION)
- · INTERSECTION SLOPE: 1:48 (2.08%) MAX. IN ALL DIRECTIONS (1.5% MAX. FOR NEW CONSTRUCTION)
- · CHANGE IN LEVELS: ¼" MAX. HEIGHT OR ½" MAX. HEIGHT WITH BEVELED EDGE BEVELED EDGE SLOPE OF 1:2 (50%) MAX. GAPS: ½" MAX. WIDTH ELONGATED OPENINGS SHALL BE PLACED SO LONG DIMENSION IS PERPENDICULAR TO PATH OF

- SIDE FLARE SLOPE: 1:10 (10%) MAX. (WHERE PEDS CROSS RAMP)
- BOTTOM LANDING: 48" MIN. LENGTH; WIDTH TO MATCH CURB RAMP; 1:48 MAX. (2.08%) IN ALL DIRECTIONS (1.5% MAX. FOR
- TOP LANDING: 36" MIN. LENGTH; WIDTH TO MATCH CURB RAMP; 1:48 MAX. (2.08%) CROSS SLOPE (1.5% MAX. FOR NEW CONSTRUCTION) AND 1:20 (5%) RUNNING SLOPE (4.5% MAX FOR NEW CONSTRUCTION)

SPACE AND ACCESS AISLE SLOPE: 1:48 MAX. (2.08%) IN ALL DIRECTIONS (1.5% MAX. FOR NEW CONSTRUCTION)

RUNNING SLOPE: 1:20 (5%) MAX. (4.5% MAX. FOR NEW CONSTRUCTION)

- CROSS SLOPE: 1:48 (2.08%) MAX. (1.5% MAX. FOR NEW CONSTRUCTION) - CHANGE IN LEVELS: 1/4" MAX. HEIGHT OR 1/2" MAX. HEIGHT WITH BEVELED EDGE. BEVELED EDGE SLOPE OF 1:2 (50%) MAX. GAPS: 1/2" MAX. WIDTH ELONGATED OPENINGS SHALL BE PLACED SO LONG DIMENSION IS PERPENDICULAR TO PATH OF
- MAX. CROSS SLOPE: 1:48 (2.08%) (1.5% MAX. FOR NEW CONSTRUCTION)



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EXIST. FLARED END SECTION

EXIST. HEADWALL



PROPOSED 3-STORY SELF STORAGE FACILITY US ROUTE 22 & WILSON AVENUE BOROUGH OF NORTH PLAINFIELD, SOMERSET COUNTY, NEW JERSEY

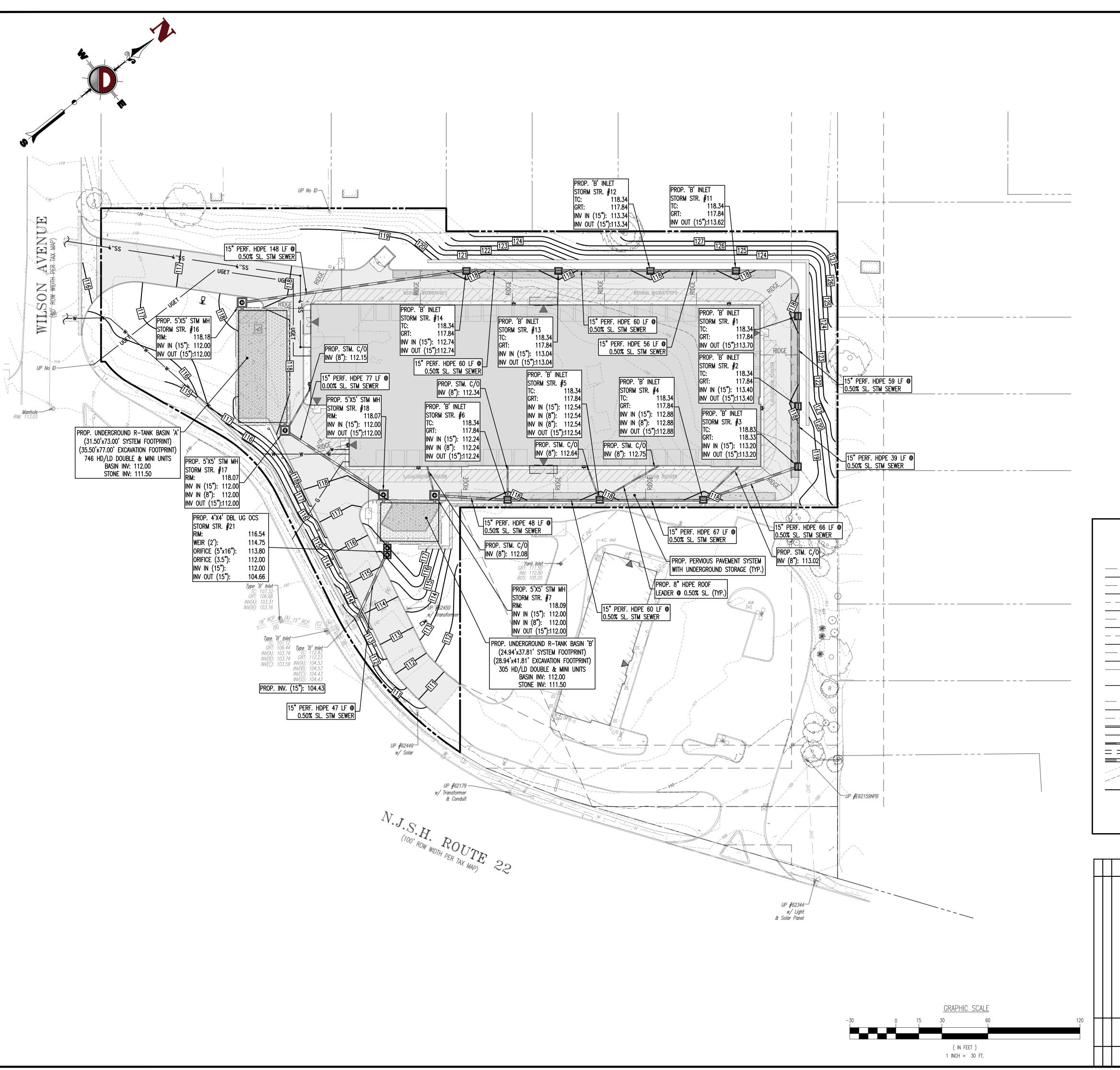
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SCALE: (H) 1"=30

ALL STATES REQUIRE INCIDENCES.

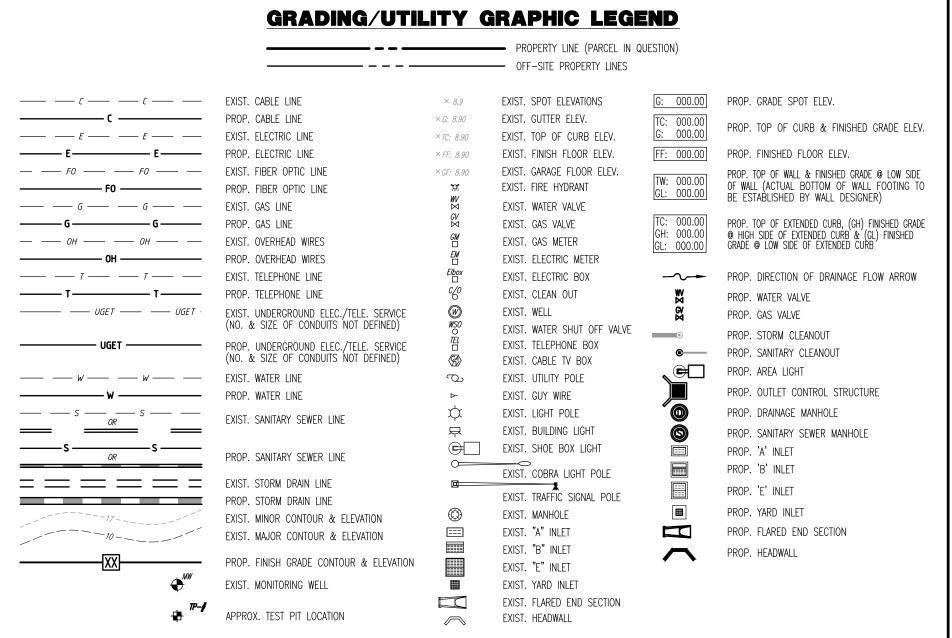
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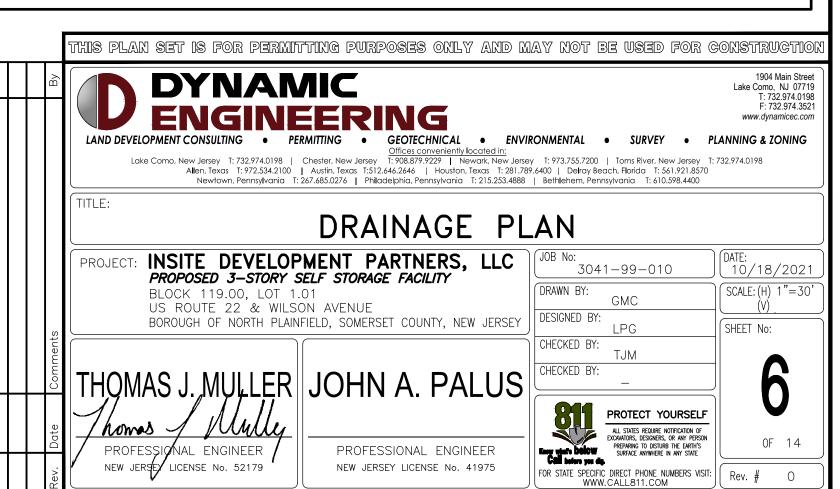


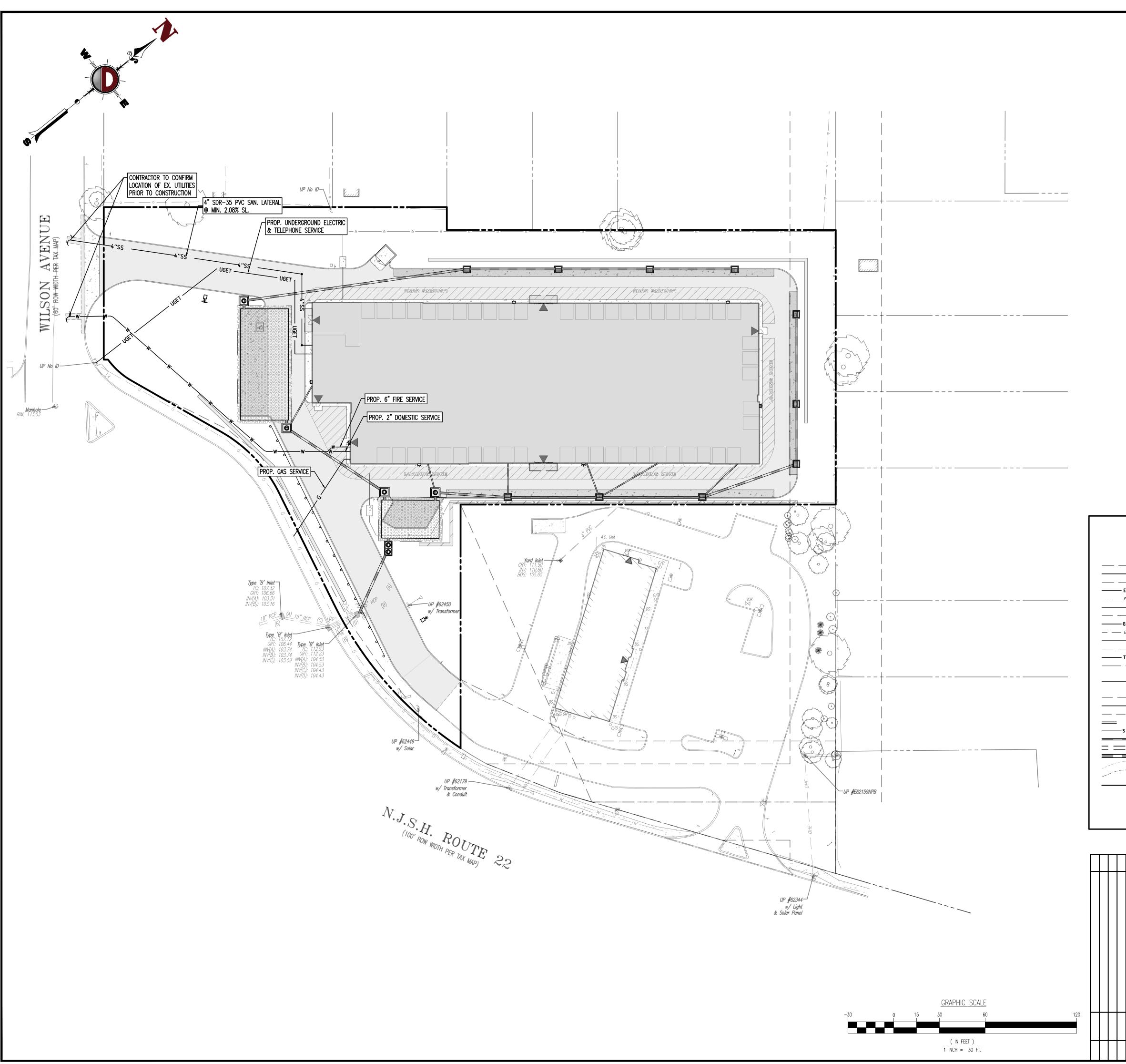
DRAINAGE NOTES

SHALL BE WATERTIGHT AND CONFORM TO ASTM C-443.

- 1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY UTILITY "ONE-CALL" NUMBER 72 HOURS PRIOR TO ANY EXCAVATION ON THIS SITE. CONTRACTOR SHALL ALSO NOTIFY LOCAL WATER & SEWER DEPARTMENTS TO MARK-OUT THEIR UTILITIES.
- 2. ROOF LEADER COLLECTION PIPING ARE CONCEPTUAL IN NATURE AND ARE NOT FOR CONSTRUCTION. ACTUAL ROOF LEADER COLLECTION PIPING IS TO BE COORDINATED W/ ARCHITECTURAL PLANS FOR EACH INDIVIDUAL BUILDING. ALL ROOF LEADER COLLECTION PIPING SHALL BE SCHEDULE 40 PVC UNLESS OTHERWISE DESIGNATED.
- 3. MANUFACTURED REINFORCED CONCRETE STORM PIPE TO CONFORM TO ASTM C-76, CLASS III, UNLESS OTHERWISE DESIGNATED. MANUFACTURED REINFORCED CONCRETE ELLIPTICAL STORM PIPE TO CONFORM TO ASTM C-507, CLASS HE-III, UNLESS OTHERWISE DESIGNATED. REINFORCED CONCRETE STORMWATER PIPE TO BE INSTALLED IN ACCORDANCE WITH AMERICAN CONCRETE PIPE ASSOCIATION INSTALLATION GUIDELINES AND MORTAR OR PREFORMED FLEXIBLE JOINT SEALANTS IN ACCORDANCE WITH ASTM C 990 TO BE UTILIZED TO PROVIDE A SILT-TIGHT JOINT. WHERE SPECIFICALLY INDICATED, REINFORCED CONCRETE STORM PIPE JOINTS
- 4. HDPE DRAINAGE PIPE SHALL HAVE A SMOOTH WALL INTERIOR WITH ANNULAR EXTERIOR CORRUGATIONS AND CONFORM TO ASTM F2306. SOLID PIPE SHALL HAVE GASKETED WATER—TIGHT JOINTS MEETING THE REQUIREMENTS OF ASTM F2306 AND ASTM F2306 AND ASTM D3212. PERFORATED PIPE SHALL HAVE GASKETED SILT—TIGHT JOINTS MEETING THE REQUIREMENTS OF ASTM F2306 AND ASTM F477. HDPE PIPE SHALL BE FROM A MANUFACTURER WHO IS AN EASTERN STATES CONSORTIUM (ESC) QUALIFIED MANUFACTURER OF HDPE PIPE AND INSTALLED IN ACCORDANCE WITH PIPE MANUFACTURE RECOMMENDATIONS.
- 5. HP DRAINAGE PIPE SHALL HAVE A SMOOTH WALL INTERIOR WITH ANNULAR EXTERIOR CORRUGATIONS AND CONFORM TO ASTM F2736 (12"-30" PIPE) AND ASTM F2881 (36"-60" PIPE). PIPE SHALL HAVE GASKETED WATER-TIGHT JOINTS MEETING THE REQUIREMENTS OF ASTM D3212 AND ASTM F477. FIELD WATERTIGHTNESS PERFORMANCE VERIFICATION MAY BE ACCOMPLISHED IN ACCORDANCE WITH ASTM F2487. HP PIPE SHALL BE FROM A MANUFACTURER WHO IS AN EASTERN STATES CONSORTIUM (ESC) QUALIFIED MANUFACTURER OF HP STORM PIPE AND INSTALLED IN ACCORDANCE WITH PIPE MANUFACTURER RECOMMENDATIONS.
- 6. PIPE LENGTHS ON THIS PLAN HAVE BEEN MEASURED AS THE DISTANCE BETWEEN THE CENTER POINT OF THE 2 CONNECTED STRUCTURES. ACTUAL PHYSICAL PIPE LENGTH FOR INSTALLATION IS EXPECTED TO BE LESS AND SHOULD BE ACCOUNTED FOR BY THE CONTRACTOR ACCORDINGLY.







EXISTING UTILITY NOTES

EXISTING WATER SERVICE NOTE: CONTRACTOR TO LOCATE AND UTILIZE EXISTING WATER SERVICE CONNECTION IF FEASIBLE. OTHERWISE REMOVE EXISTING WATER SERVICE LINE AND CAP AT MAIN IN R.O.W. IN ACCORDANCE WITH THE LOCAL WATER COMPANY REQUIREMENTS. TERMINATION AT THE MAIN MUST BE APPROVED BY THE LOCAL WATER COMPANY PRIOR TO COMPLETION. IF THE EXISTING WATER SERVICE CAN NOT BE UTILIZED, THE NEW SERVICE IS TO BE COORDINATED AND VERIFIED FOR LOCATION WITH THE LOCAL WATER COMPANY. CONTRACTOR SHALL OBTAIN ALL REQUIRED STREET OPENING PERMITS FOR REMOVAL OF EXISTING SERVICE AND INSTALLATION OF NEW SERVICE.

EXISTING GAS SERVICE NOTE: CONTRACTOR TO LOCATE AND UTILIZE EXISTING GAS SERVICE CONNECTION IF FEASIBLE. OTHERWISE REMOVE EXISTING GAS SERVICE LINE AND CAP AT MAIN IN R.O.W. IN ACCORDANCE WITH THE LOCAL GAS COMPANY REQUIREMENTS. TERMINATION AT THE MAIN MUST BE APPROVED BY THE LOCAL GAS COMPANY PRIOR TO COMPLETION. ANY NEW SERVICE IS TO BE COORDINATED AND VERIFIED FOR LOCATION WITH THE LOCAL GAS COMPANY. THE CONTRACTOR SHALL OBTAIN ALL

SANITARY SEWER SERVICE NOTE: CONTRACTOR TO LOCATE AND UTILIZE EXISTING SEWER SERVICE CONNECTION IF OF ADEQUATE SIZE AND INTEGRITY AND ACCEPTABLE TO LOCAL SEWER AUTHORITY. OTHERWISE CONTRACTOR TO REMOVE EXISTING SEWER SERVICE LINE AND CAP AT MAIN IN R.O.W. IN ACCORDANCE WITH THE LOCAL SEWER AUTHORITY REQUIREMENTS. TERMINATION AT THE MAIN MUST BE APPROVED BY THE LOCAL SEWER AUTHORITY PRIOR TO COMPLETION. IF EXISTING SEWER SERVICE CAN NOT BE UTILIZED THEN THE NEW SERVICE IS TO BE COORDINATED AND VERIFIED FOR LOCATION WITH THE LOCAL SEWER AUTHORITY. CONTRACTOR SHALL OBTAIN ALL REQUIRED STREET OPENING PERMITS FOR REMOVAL OF EXISTING SERVICE AND INSTALLATION OF NEW SERVICE.

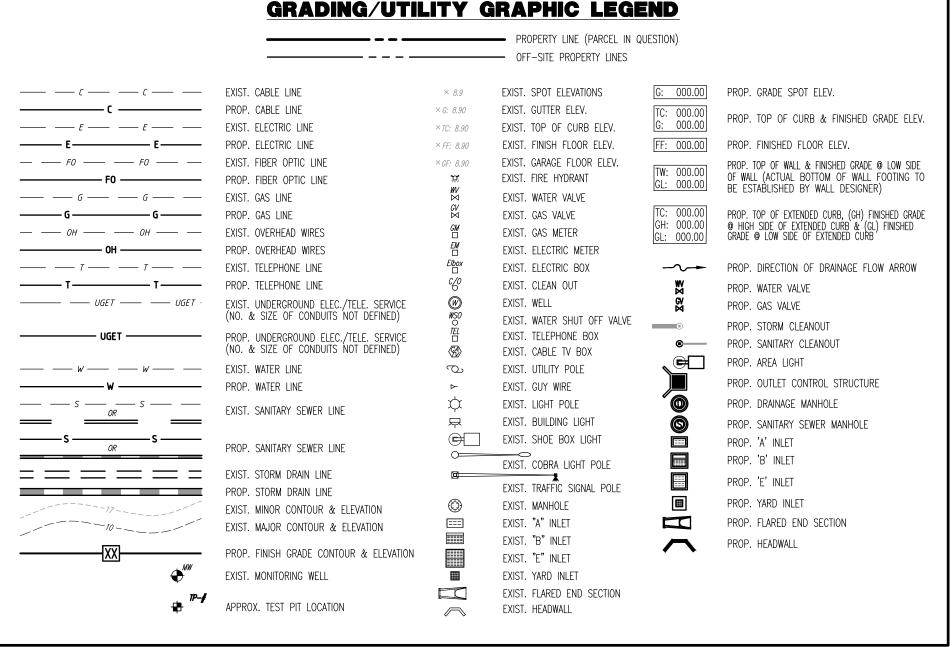
UTILITY NOTES

- 1. LOCATION OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION POINTS SHALL BE CONFIRMED INDEPENDENTLY BY THE CONTRACTOR IN FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED IMMEDIATELY IN WRITING TO THE ENGINEER. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY UTILITY "ONE-CALL" NUMBER 72 HOURS PRIOR TO ANY EXCAVATION ON THIS SITE. CONTRACTOR SHALL ALSO NOTIFY LOCAL WATER & SEWER DEPARTMENTS TO MARK-OUT THEIR UTILITIES.
- 3. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS. WHERE CONFLICTS EXIST WITH THESE SITE PLANS, ENGINEER IS TO BE NOTIFIED PRIOR TO CONSTRUCTION TO RESOLVE SAME. SERVICE SIZES TO BE DETERMINED BY ARCHITECT.
- 4. WATER SERVICE MATERIALS SHALL BE SPECIFIED BY THE LOCAL UTILITY COMPANY. CONTRACTORS PRICE FOR WATER SERVICE SHALL INCLUDE ALL FEES AND APPURTENANCES REQUIRED BY THE UTILITY TO PROVIDE A COMPLETE WORKING SERVICE.
- 5. ALL WATER MAIN SHALL BE CEMENT-LINED, CLASS 52 DUCTILE IRON PIPE, UNLESS OTHERWISE DESIGNATED.

REQUIRED STREET OPENING PERMITS FOR REMOVAL OF EXISTING SERVICE AND INSTALLATION OF NEW SERVICE.

- 6. THE MINIMUM DIAMETER FOR DOMESTIC WATER SERVICES SHALL BE 1 INCH.
- 7. SEWER MAINS SHALL BE SEPARATED FROM WATER MAINS BY A DISTANCE OF AT LEAST 10 FEET HORIZONTALLY. WHERE THIS IS NOT POSSIBLE, THE PIPES SHALL BE IN SEPARATE TRENCHES WITH THE SEWER MAIN AT LEAST 18 INCHES BELOW THE WATER MAIN. ALL SEWER MAINS SHALL BE SDR-35 PVC PIPE UNLESS OTHERWISE DESIGNATED.
- 8. ALL SEWER PIPE INSTALLED WITH LESS THAN 3 FEET OF COVER, GREATER THAN 20 FEET OF COVER OR WITHIN 18 INCHES OF A WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE. ALL DUCTILE IRON SEWER PIPE SHALL BE CEMENT—LINED, CLASS 52 PIPE, FURNISHED WITH SEWER COAT, OR APPROVED EQUAL.
- 9. WHERE SANITARY SEWER LATERALS ARE GREATER THAN 10' DEEP AT CONNECTION TO THE SEWER MAIN, CONCRETE DEEP LATERAL CONNECTIONS ARE TO BE UTILIZED.

 10. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILIZATION OF THE EXISTING SEWER MAIN, STRUCTURES AND APPURTENANCES DURING CONNECTION.
- 11. LOCATION & LAYOUT OF GAS, ELECTRIC & TELECOMMUNICATION UTILITY LINES AND SERVICES SHOWN ON THESE PLANS ARE SCHEMATIC IN NATURE. ACTUAL LOCATION & LAYOUT OF THESE UTILITIES & SERVICES ARE TO BE PER THE APPROPRIATE UTILITY PROVIDER.
- 12. ROOF LEADER COLLECTION PIPING ARE CONCEPTUAL IN NATURE AND ARE NOT FOR CONSTRUCTION. ACTUAL ROOF LEADER COLLECTION PIPING IS TO BE COORDINATED W/ ARCHITECTURAL PLANS FOR EACH INDIVIDUAL BUILDING. ALL ROOF LEADER COLLECTION PIPING SHALL BE SCHEDULE 40 PVC UNLESS OTHERWISE DESIGNATED.
- 13. ALL SEWER AND WATER FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REGULATORY AUTHORITY'S RULES AND REGULATIONS.
- 14. ALL PROPOSED UTILITIES TO BE INSTALLED UNDERGROUND UNLESS OTHERWISE NOTED.
- 15. MANUFACTURED REINFORCED CONCRETE STORM PIPE TO CONFORM TO ASTM C-76, CLASS III, UNLESS OTHERWISE DESIGNATED. MANUFACTURED REINFORCED CONCRETE ELLIPTICAL STORM PIPE TO CONFORM TO ASTM C-507, CLASS HE-III, UNLESS OTHERWISE DESIGNATED. REINFORCED CONCRETE STORMWATER PIPE TO BE INSTALLED IN ACCORDANCE WITH AMERICAN CONCRETE PIPE ASSOCIATION INSTALLATION GUIDELINES AND MORTAR OR PREFORMED FLEXIBLE JOINT SEALANTS IN ACCORDANCE WITH ASTM C 990 TO BE UTILIZED TO PROVIDE A SILT-TIGHT JOINT. WHERE SPECIFICALLY INDICATED, REINFORCED CONCRETE STORM PIPE JOINTS SHALL BE WATERTIGHT AND CONFORM TO ASTM C-443.
- 16. HDPE DRAINAGE PIPE SHALL HAVE A SMOOTH WALL INTERIOR WITH ANNULAR EXTERIOR CORRUGATIONS AND CONFORM TO ASTM F2306. SOLID PIPE SHALL HAVE GASKETED WATER—TIGHT JOINTS MEETING THE REQUIREMENTS OF ASTM F2306 AND ASTM F2306 AND ASTM D3212. PERFORATED PIPE SHALL HAVE GASKETED SILT—TIGHT JOINTS MEETING THE REQUIREMENTS OF ASTM F2306 AND ASTM F477. HDPE PIPE SHALL BE FROM A MANUFACTURER WHO IS AN EASTERN STATES CONSORTIUM (ESC) QUALIFIED MANUFACTURER OF HDPE PIPE AND INSTALLED IN ACCORDANCE WITH PIPE MANUFACTURE RECOMMENDATIONS.
- 17. HP DRAINAGE PIPE SHALL HAVE A SMOOTH WALL INTERIOR WITH ANNULAR EXTERIOR CORRUGATIONS AND CONFORM TO ASTM F2736 (12"-30" PIPE) AND ASTM F2881 (36"-60" PIPE). PIPE SHALL HAVE GASKETED WATER-TIGHT JOINTS MEETING THE REQUIREMENTS OF ASTM D3212 AND ASTM F477. FIELD WATERTIGHTNESS PERFORMANCE VERIFICATION MAY BE ACCOMPLISHED IN ACCORDANCE WITH ASTM F2487. HP PIPE SHALL BE FROM A MANUFACTURER WHO IS AN EASTERN STATES CONSORTIUM (ESC) QUALIFIED MANUFACTURER OF HP STORM PIPE AND INSTALLED IN ACCORDANCE WITH PIPE MANUFACTURER RECOMMENDATIONS.
- 18. PIPE LENGTHS ON THIS PLAN HAVE BEEN MEASURED AS THE DISTANCE BETWEEN THE CENTER POINT OF THE 2 CONNECTED STRUCTURES. ACTUAL PHYSICAL PIPE LENGTH FOR INSTALLATION IS EXPECTED TO BE LESS AND SHOULD BE ACCOUNTED FOR BY THE CONTRACTOR ACCORDINGLY.



THIS PLAN SET IS FOR PERMITTING PURPOSES ONLY AND MAY NOT BE USED FOR CONSTRUCTION

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| PROJECT: INSITE DEVELOPMENT PARTNERS, LLC | PROPOSED 3-STORY SELF STORAGE FACILITY | BLOCK | 119.00, LOT | 1.01 | US ROUTE | 22 & WILSON AVENUE | BOROUGH OF NORTH PLAINFIELD, SOMERSET COUNTY, NEW JERSEY | DESIGNED BY:

| SCALE: (H) 1"=30" | Chester No: SHEET NO. SHEET NO

THOMAS J. MULLER JOHN A. PALUS

PROFESŞIONAL ENGINEER

NEW JERSEY LICENSE No. 52179

PROFESSIONAL ENGINEER
NEW JERSEY LICENSE No. 41975

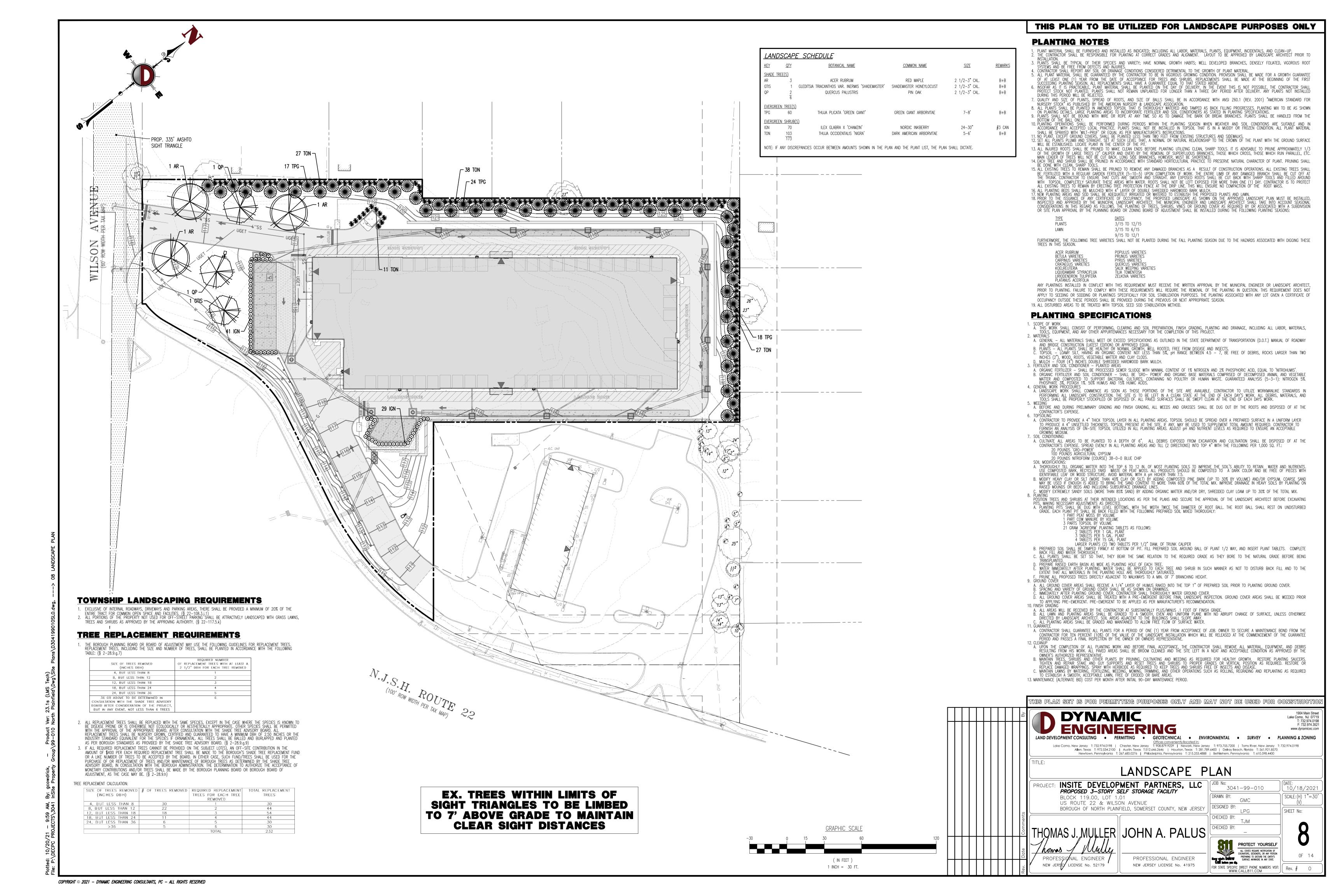
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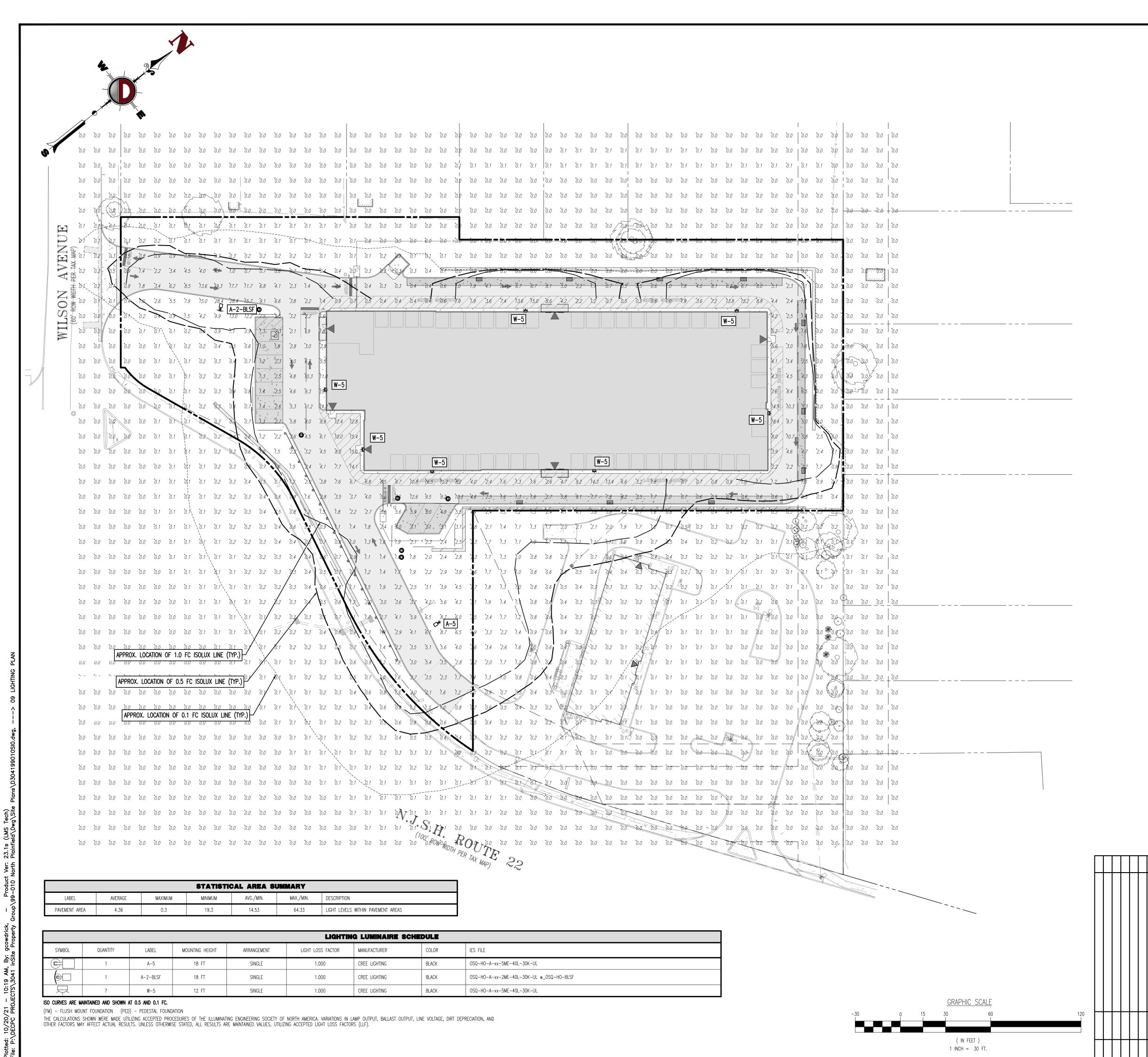
ALL STATES REQUIRE NOTIFICATION OF EXCANATIONS, DESIGNERS, OR ANY PERSON PREPARAND TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT:

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THIS PLAN TO BE UTILIZED FOR LIGHTING PURPOSES ONLY

GENERAL NOTES

1. THIS LIGHTING PLAN ILLUSTRATES ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA) APPROVED METHODS. ACTUAL SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINARIES MAY VARY DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER RELATED VARIABLE FIELD CONDITIONS.

2. ALL EXISTING CONDITIONS LIGHTING LEVELS ARE REPRESENTATIVE OF AN APPROXIMATION UTILIZING LABORATORY DATA FOR SIMILAR FIXTURES AND/OR ACTUAL FIELD MEASUREMENTS TAKEN WITH A LIGHT METER. DUE TO FACTORS SUCH AS FIXTURE MAINTENANCE, EQUIPMENT TOLERANCES, WEATHER CONDITIONS, ETC., ACTUAL LIGHTING LEVELS MAY DIFFER AND THE LIGHTING LEVELS DEPICTED ON THIS PLAN SHOULD BE CONSIDERED AS APPROXIMATE.

3. CONDUITS SHALL BE INSTALLED A MINIMUM OF 2 FEET BEHIND GUIDERAIL POSTS.

4. ALL WIRING METHODS AND EQUIPMENT CONSTRUCTION SHALL CONFORM TO THE CURRENT NATIONAL ELECTRICAL CODE.

5. REFER TO ARCHITECTURAL PLANS FOR SITE LIGHTING DIAGRAM.

LIGHTING REQUIREMENTS

1. ADEQUATE ARTIFICIAL LIGHTING SHALL BE PROVIDED IN PARKING AREAS AND ALONG SIDEWALKS, WALKWAYS AND INTERNAL ROADWAYS. THE SOURCE OF LIGHTING SHALL BE DIRECTED DOWNWARD, AWAY FROM BUILDINGS AND ADJOINING STREETS AND PROPERTY LINES. LIGHTING FIXTURES SHALL BE SO ARRANGED THAT THE DIRECT SOURCE OF LIGHT IS NOT VISIBLE FROM ANY ADJACENT RESIDENCE AREA. (§ 22-108.3.j.3)

2. LIGHTING TO BE DESIGNED AND/OR SHIELDED TO PREVENT BEAM ENCROACHMENT OR GLARE ONTO DWELLINGS IN ANY RESIDENTIAL ZONE R-1 THROUGH R-5; OR ONTO ROADWAYS, CREATING A HAZARDOUS CONDITION TO MOTORISTS. (§ 22-115.15.e.1)

3. ANY LIGHTING IN CONNECTION WITH OFF-STREET PARKING SHALL BE SO ARRANGED AND SHILDED AS TO REFLECT THE LIGHT DOWNWARD AWAY FROM ADJOINING STREETS OR PROPERTIES. (§ 22-117.5.c)

4. LIGHT FIXTURES ATTACHED TO THE EXTERIOR OF A BUILDING SHALL BE DESIGNED TO BE ARCHITECTURALLY COMPATIBLE WITH THE STYLE, MATERIALS, COLORS AND DETAILS OF SUCH BUILDING AND OTHER LIGHTING FIXTURES USED ON THE SITE. CONSIDERATION SHALL ALSO BE GIVEN TO THE TYPE OF LIGHT SOURCE UTILIZED AND THE LIGHT QUALITY SUCH PRODUCES. THE TYPE OF LIGHT SOURCE USED ON BUILDINGS, SIGNS, PARKING AREAS, PEDESTRIAN WALKWAYS AND OTHER AREAS OF A SITE SHALL BE THE SAME OR COMPATIBLE. THE USE OF LOW-PRESSURE SODIUM OR MERCURY VAPOR LIGHTING EITHER ATTACHED TO BUILDINGS OR TO LIGHT THE EXTERIOR OF BUILDINGS SHALL BE PROHIBITED. LIGHTING FOR PARKING LOTS MUST MAINTAIN A MINIMUM OF 0.33 FOOT-CANDLES IN ACCORDANCE WITH THE STANDARDS CONTAINED IN THE BOROUGH LAND DEVELOPMENT ORDINANCE. (§ 22-138.2.i)



PROJECT: INSITE DEVELOPMENT PARTNERS, LLC
PROPOSED 3-STORY SELF STORAGE FACILITY BLOCK 119.00, LOT 1.01 US ROUTE 22 & WILSON AVENUE BOROUGH OF NORTH PLAINFIELD, SOMERSET COUNTY, NEW JERSEY

PROFESŞIONAL ENGINEER

NEW JERSEY LICENSE No. 52179

CHECKED BY: THOMAS J. MULLER JOHN A. PALUS

DESIGNED BY:

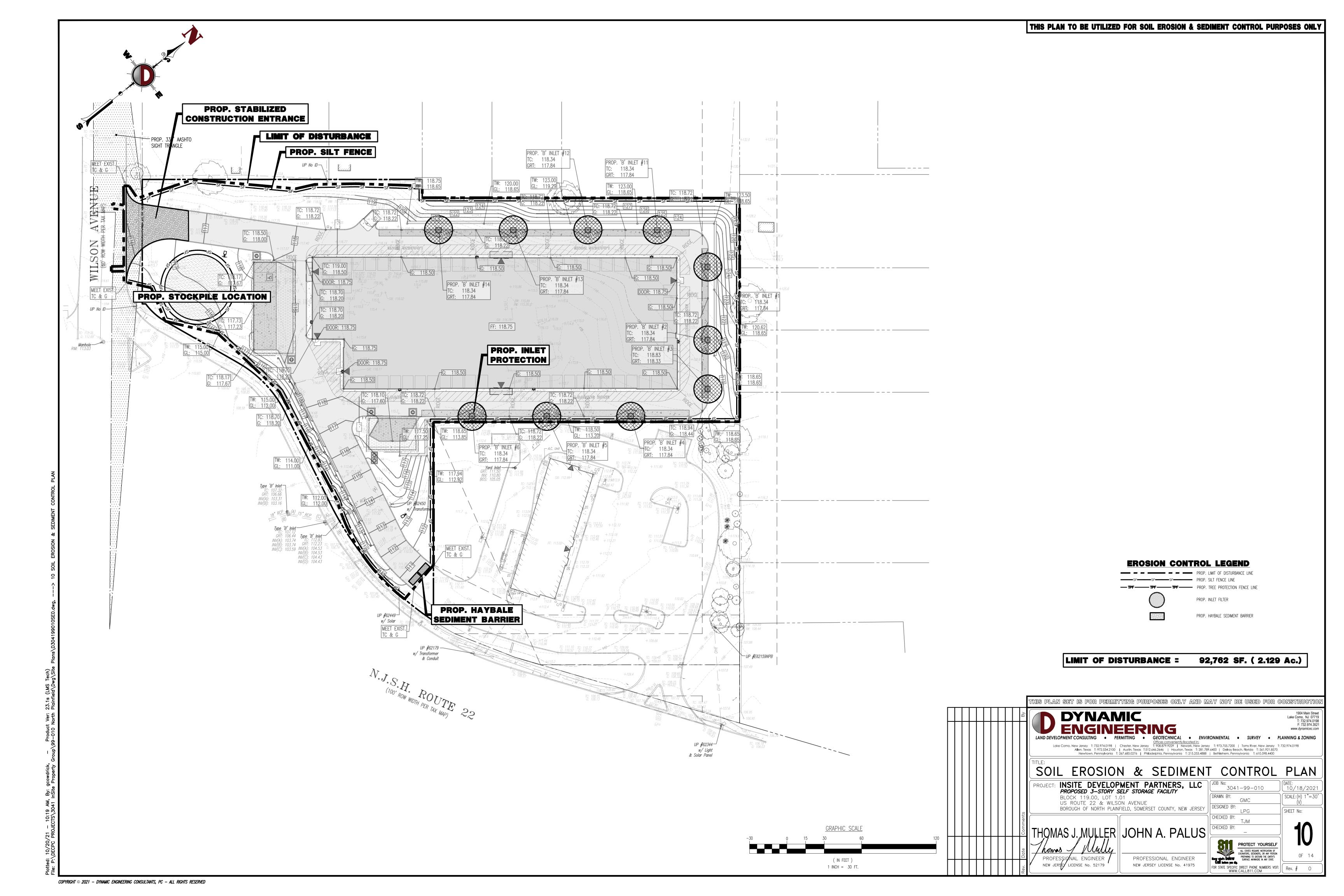
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PROFESSIONAL ENGINEER NEW JERSEY LICENSE No. 41975

ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: Rev. #



STANDARD FOR STABILIZATION WITH MULCH ONLY

- A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING.

 B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS. AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.
- 2. PROTECTIVE MATERIALS

 A. UNROTTED SMALL—GRAIN STRAW, AT 2.0 TO 2.5 TONS PER ACRE, IS SPREAD UNIFORMLY AT 90 TO 115 POUNDS PER 1,000 SQUARE FEET AND ANCHORED WITH A MULCH ANCHORING TOOL, LIQUID MULCH BINDERS, OR NETTING TIE DOWN. OTHER SUITABLE MATERIALS MAY BE USED IF APPROVED BY THE SOIL CONSERVATION DISTRICT. THE APPROVED BATES AROVE HAVE BEEN MET WHEN THE MULCH COVERS THE CROWN COMPLETELY LIPON VISIAL INSPECTION. LET THE SOIL CONSERVATION OF THE APPROVED BY THE SOIL CONSERVATION OF THE BY THE APPROVED BY THE SOIL CONSERVATION OF THE BY THE BY
- DISTRICT. THE APPROVED RATES ABOVE HAVE BEEN MET WHEN THE MULCH COVERS THE GROUND COMPLETELY UPON VISUAL INSPECTION, I.E. THE SOIL CANNOT BE SEEN BELOW THE MULCH.

 B. SYNTHETIC OR ORGANIC SOIL STABILIZERS MAY BE USED UNDER SUITABLE CONDITIONS AND IN QUANTITIES AS RECOMMENDED BY THE MANUFACTURER.

 C. WOOD—FIBER OR PAPER—FIBER MULCH AT THE RATE OF 1,500 POUNDS PER ACRE (OR ACCORDING TO THE MANUFACTURER'S REQUIREMENTS) MAY BE APPLIED BY A
- D. MULCH NETTING, SUCH AS PAPER JUTE, EXCELSIOR, COTTON, OR PLASTIC, MAY BE USED.

 E. WOODCHIPS APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 2 INCHES MAY BE USED. WOODCHIPS WILL NOT BE USED ON AREAS WHERE FLOWING WATER COULD WASH THEM INTO AN INLET AND PLUG IT.

 F. GRAVEL, CRUSHED STONE, OR SLAG AT THE RATE OF 9 CUBIC YARDS PER 1,000 SQ. FT. APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 3 INCHES MAY BE USED. SIZE 2 OR 3 (ASTM C-33) IS RECOMMENDED.
- 3. MULCH ANCHORING SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT OF HAY OR STRAW MULCH TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS IN ACCORDANCE WITH THE STATE STANDARDS, DEPENDING UPON THE SIZE OF THE AREA AND STEEPNESS OF SLOPES.

 A. PFG AND TWINF
- B. MULCH NETTINGS
 C. CRIMPER MULCH ANCHORING COULTER TOOL
 D. LIQUID MULCH-BINDERS

STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

STANDARD FOR DUST CONTROL

DEFINITION - THE CONTROL OF DUST ON CONSTRUCTION SITES AND ROADS.

PURPOSE - TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, REDUCE ON-AND OFF- SITE DAMAGE AND HEALTH HAZARDS, AND IMPROVE TRAFFIC SAFETY.

WHERE APPLICABLE - THE FOLLOWING METHODS SHOULD BE CONSIDERED FOR CONTROLLING DUST:

MULCHES - SEE STANDARDS FOR STABILIZATION WITH MULCHES ONLY

VEGETATIVE COVER - SEE STANDARDS FOR TEMPORARY VEGETATIVE COVER, PERMANENT VEGETATIVE COVER, AND PERMANENT STABILIZATION WITH SOD.

SPRAY-ON ADHESIVES - ON MINERAL SOILS (NOT EFFECTIVE ON MOCK SOILS). KEEP TRAFFIC OFF THESE AREAS.

	WATER DILUTION	TYPE OF NOZZLE	
	7:1	COARSE SPRAY	APPLY GALLONS/ACRE
ANIONIC ASPHALT			1,200
EMULSION	12.5:1		
LATEX EMULSION	4:1	FINE SPRAY	235
DECINI INI WATED	•		

TILLAGE — TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS A TEMPORARY EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL—TYPE PLOWS SPACED ABOUT 12 INCHES APART, AND SPRING — TOOTHED HARROWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.

SPRINKLING — SITE IS SPRINKLED UNTIL THE SURFACE IS WET.

BARRIERS - SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.

CALCIUM CHLORIDE - SHALL BE IN THE FORM OF LOOSE, DRY GRANULES OR FLAKES FINE ENOUGH TO FEED THROUGH COMMONLY USED SPREADERS AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE. IF USED ON STEEPER SLOPES, THEN USE OTHER PRACTICES TO PREVENT WASHING INTO STREAMS OR ACCUMULATION AROUND PLANTS.

SOMERSET-UNION SOIL CONSERVATION DISTRICT SOIL EROSION & SEDIMENT CONTROL NOTES:

- ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCES, OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- 2. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN 30 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO NJ STATE STANDARDS
- 3. PERMANENT VEGETATION SHALL BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN

 (10) DAYS AFTER FINAL GRADING. MULCH WILL BE USED FOR PROTECTION UNTIL SEEDING IS ESTABLISHED
- 4. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NJ STATE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY, 7TH EDITION LAST REVISED JANUARY
- 5. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS IN ORDER TO STABILIZE STREETS, ROADS, DRIVEWAYS AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT. THE SUB-BASE SHALL BE INSTALLED WITHIN 15 DAYS OR PRELIMINARY GRADING.
- 6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING ALL CRITICAL AREAS SUBJECT TO EROSION (I.E.: STEEP SLOPES, ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO THE NJ STATE STANDARDS.
- 7. ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION PROCEEDS (I.E.: SLOPES GREATER THAT 3:1)
- 8. TRAFFIC CONTROL STANDARDS REQUIRE THE INSTALLATION OF A 50'X30'X6'PAD OF 1 1/2" OR 2" STONE, AT ALL CONSTRUCTION DRIVEWAYS, IMMEDIATELY AFTER INITIAL SITE DISTURBANCE.
- 9. THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING 48 HOURS IN ADVANCE OF ANY LAND DISTURBING ACTIVITY
- 10. AT THE TIME WHEN THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER, SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES.
- 11. IN THAT NJSA 4:24-39 ET SEQ., REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE THE PROVISIONS OF THE CERTIFIED PLAN FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES, ALL SITE WORK FOR SITE PLANS AND ALL WORK AROUND INDIVIDUAL LOTS IN SUBDIVISIONS, WILL HAVE TO BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY.
- 12. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
- 13. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT NJ STATE SOIL EROSION & SEDIMENT CONTROL STANDARDS.
- 14. THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED OF ANY CHANGES IN OWNERSHIP.
- 15. MULCHING TO THE NJ STANDARDS IS REQUIRED FOR OBTAINING A CONDITIONAL REPORT OF COMPLIANCE. CONDITIONALS ARE ONLY ISSUED WHEN THE SEASON PROHIBITS
- 16. CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL ADJACENT ROADS CLEAN DURING LIFE OF CONSTRUCTION PROJECT.
- 17. THE DEVELOPER SHALL BE RESPONSIBLE FOR REMEDIATING ANY EROSION OR SEDIMENT PROBLEMS THAT ARISE AS A RESULT OF ONGOING CONSTRUCTION AT THE REQUEST OF THE SOMERSET-UNION SOIL CONSERVATION DISTRICT.
- 18. HYDRO SEEDING IS A TWO- STEP PROCESS. THE FIRST STEP INCLUDES SEED, FERTILIZER, LIME, ETC., ALONG WITH MINIMAL AMOUNTS OF MULCH TO PROMOTE CONSISTENCY, GOOD SEED TO SOIL CONTACT, AND GIVE A VISUAL INDICATION OF COVERAGE. UPON COMPLETION OF SEEDING OPERATION, HYDRO-MULCH SHOULD BE APPLIED AT A RATE OF 1500 LBS. PER ACRE IN SECOND STEP. THE USE OF HYDRO-MULCH, AS OPPOSED TO STRAW, IS LIMITED TO OPTIMUM SEEDING DATES AS LISTED IN THE NJ STANDARDS.

STANDARD FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION

1. SITE PREPARATION

- A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING.

 B. IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND
- GRADING.
 C. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES. TOPSOIL SHALL BE AMENDED WITH ORGANIC MATTER, AS NEEDED, IN ACCORDANCE WITH THE STANDARD FOR
- D. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE—STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.

2. SEEDBED PREPARATION

- A. UNIFORMLY APPLY GROUND LIMESTONE AND FERTILIZER TO TOPSOIL WHICH HAS BEEN SPREAD AND FIRMED, ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES (HTTP://NJAES.RUTGERS.EDU/COUNTY/).

 FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4 INCHES. IF FERTILIZER IS NOT INCORPORATED, APPLY ONE-HALF THE RATE DESCRIBED ABOVE DURING SEEDBED PREPARATION AND REPEAT ANOTHER ONE-HALF RATE APPLICATION OF THE SAME FERTILIZER
- WITHIN 3 TO 5 WEEKS AFTER SEEDING.

 B. WORK LIME AND FERTILIZER INTO THE TOPSOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING—TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS
- PREPARED.
 C. HIGH ACID PRODUCING SOIL. SOILS HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5 OR MORE BEFORE INITIATING SEEDBED REPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID—PRODUCING SOILS FOR SPECIFIC REQUIREMENTS.

3. SEEDING

- A. PERMANENT VEGETATIVE MIXTURES & PLANTING RATES

 (1) HARD FESCUE 175 LBS/ACRE 4 LBS/1000 SQ.FT.

 (2) CHEWING FESCUE 175 LBS/ACRE 4 LBS/1000 SQ.FT.
- 3) STRONG CREEPING RED FESCUE 175 LBS/ACRE 4 LBS/1000 SQ.FT. 4) PERENNIAL RYEGRASS - 45 LBS/ACRE 1 LBS/1000 SQ.FT. 5) KY. BLUEGRASS - 45 LBS/ACRE 1 LBS/1000 SQ.FT.

OCCURS, THERE IS A REDUCED SEED GERMINATION AND GROWTH.

- B. CONVENTIONAL SEEDING IS PERFORMED BY APPLYING SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL WITHIN 24 HOURS OF SEEDBED PREPARATION TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE—TEXTURED SOIL.

 C. AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED—TO—SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING
- EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.

 D. HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK, OR TRAILER—MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORTFIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. (ALSO SEE SECTION 4—MULCHING BELOW). HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. WHEN POOR SEED TO SOIL CONTACT
- IULCHING MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL PROTECT AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER
- A. STRAW OR HAY. UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, APPLIED AT THE RATE OF 1.5 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH—BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER—BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE DESCENDED OF WIFED SEED.

ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.

- APPLICATION. SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 85% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE
- ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS IN ACCORDANCE WITH THE STATE STANDARDS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COST.
- 1. PEG AND TWINE
 2. MULCH NETTINGS

FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.

- 3. CRIMPER MULCH ANCHORING COULTER TOOL
 4. LIQUID MULCH—BINDERS
- B. WOOD-FIBER OR PAPER-FIBER MULCH SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS, USED AT THE RATE OF 1,500 POUNDS PER ACRE (OR AS RECOMMENDED BY THE PRODUCT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. MULCH SHALL NOT BE MIXED IN THE TANK WITH SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.
- C. PELLETIZED MULCH COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT, WHICH MAY CONTAIN CO-POLYMERS, TACKIFIERS, FERTILIZERS, AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO A SEEDED AREA AND WATERED, FORM A MULCH MAT. PELLETIZED MULCH SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60-75 LBS/1,000 SQUARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL HAS BEEN FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS, SEEDED AREAS WHERE WEEDSEED FREE MULCH IS DESIRED, OR ON SITES WHERE STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIRABLE. APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZED MULCH ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE.

SEQUENCE OF CONSTRUCTION:

- PHASE 1: INSTALL STONE ANTI-TRACKING PAD AND OTHER SOIL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING DOWN SLOPE PERIMETER HAYBALES, SILT FENCING AND TREE
- PROTECTION FENCING.

 PHASE 2: CLEAR AND ROUGH GRADE FOR NEW BUILDING SITE AND OTHER STRUCTURES REQUIRING
- PHASE 3: EXCAVATION, CONSTRUCTION, AND STABILIZATION OF DETENTION BASIN(S), EXCAVATE AND INSTALL UNDERGROUND PIPING AND DRAINAGE STRUCTURES.
- PHASE 4: EXCAVATE FOR BUILDING FOUNDATION.
- PHASE 5: COMPLETE BUILDING CONSTRUCTION.
 PHASE 6: EXCAVATE AND INSTALL ON-SITE IMPROVEMENTS INCLUDING CURBING, UNDERGROUND
- PIPING, AND DRAINAGE STRUCTURES.

 PHASE 7: FINAL GRADING ON SITE.

 PHASE 8: INSTALL PAVING CONCRETE AND
- PHASE 8: INSTALL PAVING, CONCRETE, AND FINAL VEGETATION INCLUDING SEEDING AND LANDSCAPING.

 PHASE 9: REMOVE SOIL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING DOWN SLOPE
- SE 9: REMOVE SOIL EROSION AND SEDIMENT CONTROL MEASURES INCLU PERIMETER HAYBALES, SILT FENCING AND TREE PROTECTION FENCING.

STANDARD FOR TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION

- SITE PREPARATION
 A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING, PG. 19–1.
 B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.
 C. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).
- 2. SEEDBED PREPARATION

 A. APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES.
- FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE.
 CALCIUM CARBONATE IS THE EQUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES.
 B. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS
- C. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILED IN ACCORDANCE WITH THE ABOVE. D. SOILS HIGH IN SULFIDES OR HAVING A PH OF 4 OR LESS REFER TO STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, PG. 1-1.

6. SELDING A. TEMPORARY VEGETATIVE STABILIZATION GRASSES, SEEDING RATES, DATES AND DEPTHS

- COOL SEASON GRASSES:

 (1) PERENNIAL RYEGRASS 100 LBS / ACRE; PLANT BETWEEN MARCH 1 AND MAY 15 BETWEEN AUGUST 15 AND OCTOBER 1; AT A DEPTH OF 0.5 INCHES.

 (2) SPRING OATS 86 LBS / ACRE; PLANT BETWEEN MARCH 1 AND MAY 15 BETWEEN AUGUST 15 AND OCTOBER 1; AT A DEPTH OF 1.0 INCHES.
- (3) WINTER BARLEY 96 LBS / ACRE; PLANT BETWEEN AUGUST 15 AND OCTOBER 1; AT A DEPTH OF 1.0 INCHES.

 (4) ANNUAL RYEGRASS 100 LBS / ACRE; PLANT BETWEEN MARCH 1 AND JUNE 15 BETWEEN AUGUST 1 AND SEPTEMBER 15; AT A DEPTH OF 0.5 INCHES.

 (5) WINTER CEREAL RYE 112 LBS / ACRE; PLANT BETWEEN AUGUST 1 AND NOVEMBER 15; AT A DEPTH OF 1.0 INCHES.

-WARM SEASON GRASSES:

- (1) PEARL MILLET 20 LBS / ACRE; PLANT BETWEEN MAY 15 AND AUGUST 15; AT A DEPTH OF 1.0 INCHES.
- (2) MILLET (GERMAN OR HUNGARIAN) 30 LBS / ACRE; PLANT BETWEEN MAY 15 AND AUGUST 15; AT A DEPTH OF 1.0 INCHES.

 B. CONVENTIONAL SEEDING. APPLY SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL, TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE TEXTURED SOIL.
- C. HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK OR TRAILER MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT FIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. (ALSO SEE SECTION IV MULCHING) HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. POOR SEED TO SOIL CONTACT OCCURS REDUCING SEED GERMINATION AND GROWTH. HYDROSEEDING MAY BE USED FOR AREAS TOO STEEP FOR CONVENTIONAL EQUIPMENT TO TRAVERSE OR TOO OBSTRUCTED WITH
- NOURS, STUMPS, ETC.

 D. AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED—TO—SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.

MULCHING

- MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.
- A. STRAW OR HAY. UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.
- APPLICATION. SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 95% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND—SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.

 ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS IN ACCORDANCE WITH THE STATE STANDARDS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COST.
- MULCH NETTINGS
 CRIMPER MULCH ANCHORING COULTER TOOL
 LIQUID MULCH—BINDERS

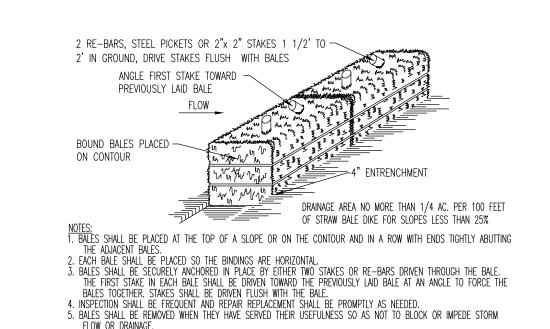
1. PEG AND TWINE

- B. WOOD-FIBER OR PAPER-FIBER MULCH. SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS, USED AT THE RATE OF 1,500 POUNDS PER ACRE (OR AS RECOMMENDED BY THE PROJECT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. THIS MULCH SHALL NOT BE MIXED IN THE TANK WITH SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.
- C. PELLETIZED MULCH. COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT, WHICH MAY CONTAIN CO-POLYMERS, TACKIFIERS, FERTILIZERS AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO A SEEDED AREA AND WATERED, FORM A MULCH MAT. PELLETIZED MULCH SHALL BE APPLIES IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60-75 LBS./1,000 SQUARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL HAS BEEN FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS, SEEDED AREAS WHERE WEED-SEED FREE MULCH IS DESIRED OR ON SITES WHERE STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIRABLE.
- APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZED MULCH ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE.

PAVEMENT 3/4" CLEAN STONE TO SEAL (TYP.) (AS REQUIRED) PLAN VIEW 1. GEOTEXTILE TUBE AND/OR BAGS FILLED WITH 3/4" CLEAN STONE NOTES: 1. GEOTEXTILE TO BE WOVEN POLYPROPYLENE PRODUCT 117F, BY SYNTHETIC INDUSTRIES INC., OR TERRATEX SC, BY WEBTEC INC., OR APPROVED EQUAL. 2. 3/4" CLEAN STONE CORE SHALL BE COMPLETELY CONTAINED WITHIN GEOTEXTILE. SEAMS SHALL BE SEWN OR CLOSED BY SUITABLE MECHANICAL MEANS TO PREVENT LEAKAGE OF STONE. 3. WHEREN OC LORB IS PRESENT, BARRIER SHALL COMPLETELY ENCIRCLE THE DRAIN INLET. 4. INLET GRATE OPENING IS TO BE KEPT CLEAR OF OBSTRUCTIONS AT ALL TIMES. 5. THE PROTECTION DEVICE WILL BE DESIGNED TO CAPTURE OR FILTER PRINDET FROM THE 1 YEAR, 24 HOUR STORM EVENT AND SHALL SAFELY CONVEY HIGHER FLOWS DIRECTLY INTO THE STORM SEWER SYSTEM. 6. OTHER METHODS THAT ACCOMPLISH THE PURPOSE OF STORM SEWER INLET PROTECTION MAY BE USED IF APPROVED BY THE SOIL CONSERVATION DISTRICT. 7. INSPECTIONS SHALL BE FREQUENT. MAINTENANCE, REPAIR, AND REPLACEMENT SHALL BE MADE PROMPTLY, AS

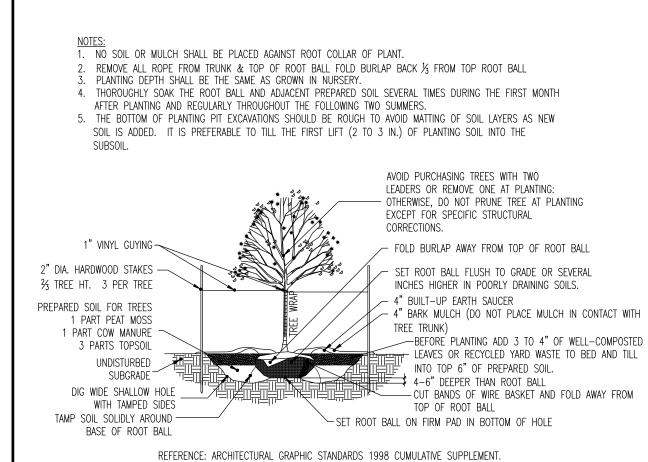
INLET FILTER DETAIL NOT TO SCALE

NEEDED. THE BARRIER SHALL BE REMOVED WHEN THE ARÉA DRAINING TOWARDS THE INLET HAS BEEN STÁBILIZED.

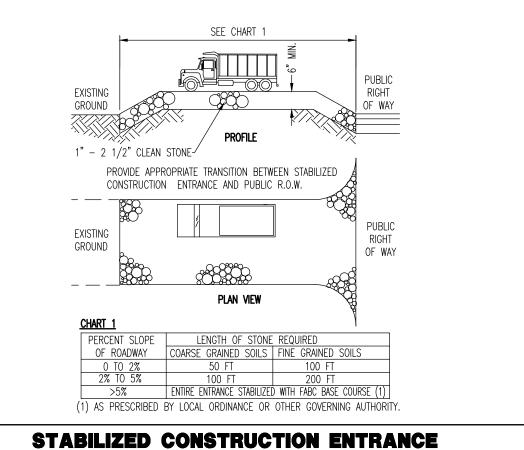


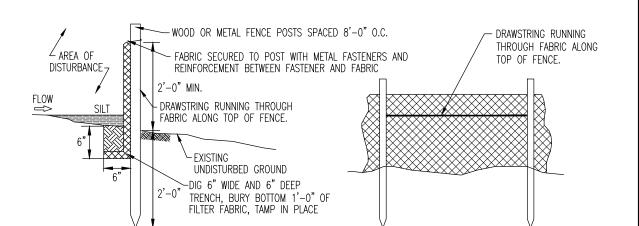
HAYBALE SEDIMENT BARRIER DETAIL

NOT TO SCALE



DECIDUOUS TREE PLANTING DETAIL NOT TO SCALE





- 1. PLACE SILT FENCE AT LOCATIONS AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
 2. THE SLOPE OF THE LAND FOR AT LEAST 30 FEET ADJACENT TO ANY SILT FENCE SHALL NOT EXCEED 5 PERCENT
 3. SILT FENCE AROUND THE SIDES.
- 4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE AS PROMPTLY AS POSSIBLE.

 5. SILT FENCE SHALL REMAIN IN PLACE FOR THE DURATION OF THE PROJECT UNLESS OTHERWISE INSTRUCTED BY THE TOWNSHIP ENGINEER OR SOIL CONSERVATION DISTRICT.

 6. THE BARRIER SHALL BE REMOVED WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM
- 7. FENCE POSTS SHALL BE SPACED 8 FEET CENTER-TO-CENTER OR CLOSER. THEY SHALL EXTEND AT LEAST 2 FEET INTO THE GROUND AND EXTEND AT LEAST 2 FEET ABOVE GROUND. POSTS SHALL BE CONSTRUCTED OF HARDWOOD A MIN. DIAMETER THICKNESS OF 1 1/2 INCHES.

 8. A METAL FENCE WITH 6 INCH OR SMALLER OPENINGS AND AT LEAST 2 FEET HIGH MAY BE UTILIZED, FASTENED TO THE FENCE POSTS, TO PROVIDE REINFORCEMENT AND SUPPORT TO THE GEOTEXTILE FABRIC WHERE SPACE FOR OTHER PRACTICES IS LIMITED AND HEAVY SEDIMENT LOADING IS EXPECTED.

 9. A GEOTEXTILE FABRIC, RECOMMENDED FOR SUCH USE BY THE MANUFACTURER. SHALL BE BURIED AT LEAST 6 INCHES DEEP IN THE GROUND.
- . A GEVIEXTILE FABRIC, RECOMMENDED FOR SUCH USE BY THE MANUFACTURER, SHALL BE BURIED AT LEAST 6 INCHES DEEP IN THE GROUND. THE FABRIC SHALL EXTEND AT LEAST 2 FEET ABOVE GROUND. FABRIC MUST BE SECURELY FASTENED TO THE POSTS USING A SYSTEM CONSISTING OF METAL FASTENERS (NAILS OR STAPLES) AND HIGH STRENGTH REINFORCEMENT MATERIAL (NYLON WEBBING, GROMMETS, WASHERS ETC.) PLACED BETWEEN THE FASTENER AND THE GEOTEXTILE FABRIC. THE FASTENING SYSTEM SHALL RESIST TEARING AWAY FROM THE POST. THE FABRIC SHALL INCORPORATE A DRAWSTRING IN THE TOP PORTION OF THE FENCE FOR ADDED STRENGTH.

SILT FENCE DETAIL

MAINTAIN STOCK PILE SURFACE IN ACCORDANCE WITH TEMPORARY STABILIZATION NOTES

CONSTRUCT SILT FENCE OR HAYBALES

(AS NEEDED) AROUND PERIMETER OF STOCKPILE (SEE DETAIL ON THIS SHEET)

TEMPORARY STOCKPILE DETAIL

REMOVE ALL ROPE FROM TRUNK & TOP OF ROOT BALL FOLD BURLAP BACK 1/3 FROM TOP ROOT BALL PLANTING DEPTH SHALL BE THE SAME AS GROWN IN NURSERY. THOROUGHLY SOAK THE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS. 5. THE BOTTOM OF PLANTING PIT EXCAVATIONS SHOULD BE ROUGH TO AVOID MATTING OF SOIL LAYERS AS NEW SOIL IS ADDED. IT IS PREFERABLE TO TILL THE FIRST LIFT (2 TO 3 IN.) OF PLANTING SOIL INTO THE AVOID PURCHASING TREES WITH TWO LEADERS OR REMOVE ONE AT PLANTING OTHERWISE, DO NOT PRUNE TREE AT PLANTING 1" VINYL GUYING -EXCEPT FOR SPECIFIC STRUCTURAL - FOLD BURLAP AWAY FROM TOP OF ROOT BALL 2" DIA. HARDWOOD STAKES -⅓ TREE HT. 3 PER TREE SET ROOT BALL FLUSH TO GRADE OR SEVERAL INCHES HIGHER IN POORLY DRAINING SOILS. — 4" BUILT-UP EARTH SAUCER - 4" BARK MULCH (DO NOT PLACE MULCH IN CONTACT WITH PREPARED SOIL FOR TREES TREE TRUNK) 1 PART PEAT MOSS BEFORE PLANTING ADD 3 TO 4" OF WELL-COMPOSTED PART COW MANURE THE LEAVES OR RECYCLED YARD WASTE TO BED AND TILL 3 PARTS TOPSOIL INTO TOP 6" OF PREPARED SOIL. UNDISTURBE ₹ 4-6" DEEPER THAN ROOT BALL CUT BANDS OF WIRE BASKET AND FOLD AWAY FROM DIG WIDE SHALLOW HOLE WITH TAMPED SIDES - SET ROOT BALL ON FIRM PAD IN BOTTOM OF HOLE TAMP SOIL SOLIDLY AROUND -BASE OF ROOT BALL REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT. EVERGREEN TREE PLANTING DETAIL

1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.

OF ROADWAY

OF BE USED FOR GONISTIRUGTION

STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

THIS PLAN SET IS FOR PERMITTING PURPOSES ONLY AND MAY NOT BE USED FOR GONISTIRUGTION

THIS PLAN SET IS FOR PERMITTING PURPOSES ONLY AND MAY NOT BE USED FOR GONISTIRUGTION

IN 1904 Main Street

Lake Como, N) 07719

THE TRIESPASSES

WW. dynamics

FOR TOWN OF THE USED FOR GONISTIRUGTION

OF ROADWAY

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