

PRELIMINARY AND FINAL SITE PLAN

FOR 803 S URBAN RENEWAL, LLC PROPOSED MIXED USE BUILDING

BLOCK 645, LOT 12; TAX MAP SHEET #35 - LATEST REV. DATED 3/24/87
803 SOUTH AVENUE
CITY OF PLAINFIELD
UNION COUNTY, NEW JERSEY



NO.	DATE	REVISIONS	BY
1	03/26/20	REVISED PER AMENDED RFP	RRR
2	06/11/20	REVISED PER UNDER COMPLIANCE	RRR
3	08/03/20	REVISED PER RESOLUTION COMPLIANCE	RRR
4	09/17/20	REVISED PER CITY & NJ TRANSIT COMMENTS	RRR
5	10/15/20	REVISED PER CITY POLICE DEPARTMENT COMMENTS	RRR
6	11/17/20	REVISED PER NJ DEP COMMENTS	RRR
7	07/12/21	REVISED PER NJ DEP TWA COMMENTS	RRR
8	04/27/21	REVISED PER CLIENT COMMENTS	RRR
9	08/04/21	REVISED PER CLIENT & PER&E COMMENTS	RRR

FINAL FOR SEWER DESIGN

CONSTRUCTION CHECK _____ DATE _____

CONSTRUCTION CHECK _____ DATE _____

PROJECT: 803 S URBAN RENEWAL, LLC
PROPOSED MIXED USE BUILDING
BLOCK 645, LOT 12
803 SOUTH AVENUE
CITY OF PLAINFIELD, UNION COUNTY, NEW JERSEY

811 PROTECT YOURSELF

ALL STATES REQUIRE NOTIFICATION OF ENGINEERS, DESIGNERS, OR ANY PERSON PREPARING TO DIGGING THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

DYNAMIC ENGINEERING

LAND DEVELOPMENT CONSULTING • PERMITTING
GEOTECHNICAL • ENVIRONMENTAL
TRAFFIC • SURVEY • PLANNING & ZONING

245 Main Street, Suite 110
Chester, NJ 07930
T: 908.879.9229 | F: 908.879.0222

Additional offices conveniently located at:

Little Combs, New Jersey • T: 732.974.0110
Trenton, New Jersey • T: 732.974.0110
Houston, Pennsylvania • T: 281.485.0076
Allen, Texas • T: 972.234.2100
Houston, Texas • T: 281.299.4000
Austin, Texas • T: 512.244.2446
Delray Beach, Florida • T: 561.921.8570

www.dynamiccec.com

BRETT W. SKAPINETZ

PROFESSIONAL ENGINEER
NEW JERSEY LICENSE No. 41985

JOSEPH C. SPARONE

PROFESSIONAL ENGINEER
NEW JERSEY LICENSE No. 47204

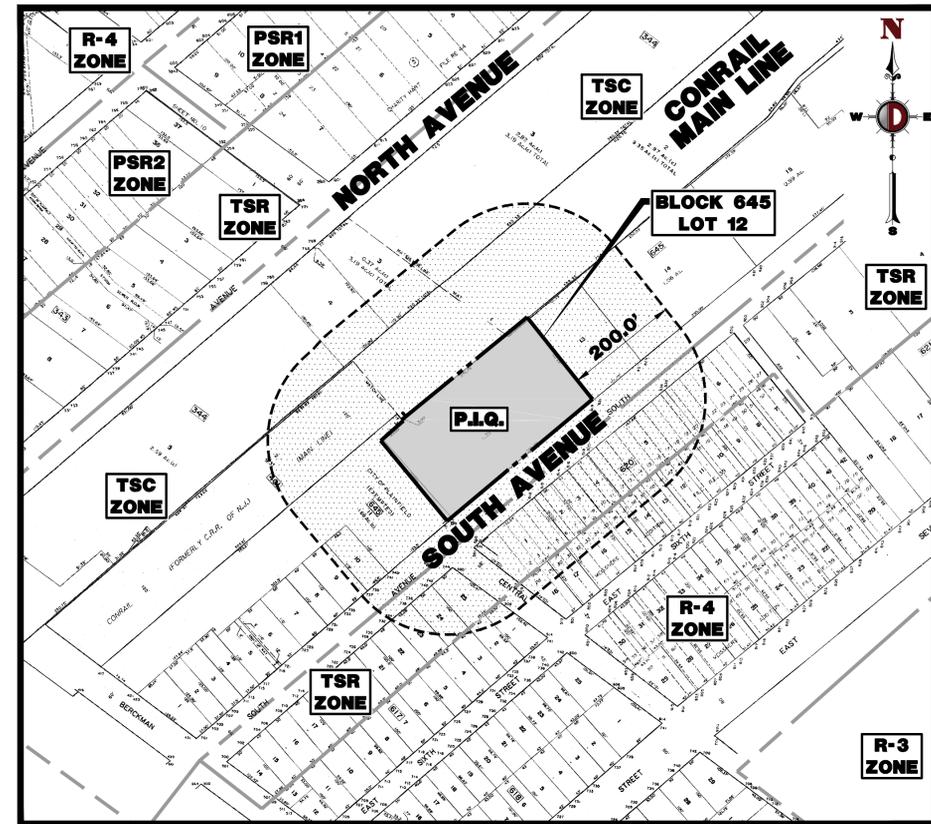
TITLE: **COVER SHEET**

SCALE: (H) AS SHOWN DATE: 02/18/2020 DRAWN BY: JTG DESIGNED BY: RJC
PROJECT No: 0404-99-041 CHECKED BY: BWS

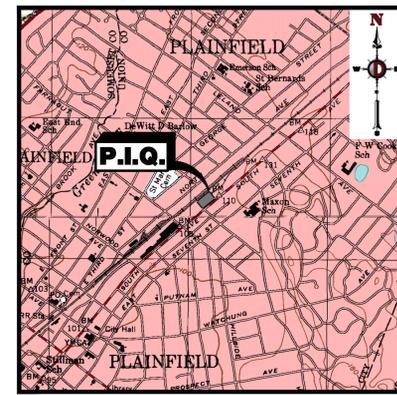
SHEET No: **1** OF 14 Rev. #: 9

200' PROPERTY OWNERS LIST

PROPERTY OWNER	BLOCK	LOT	PROPERTY OWNER	BLOCK	LOT
LIVING LEGACY PROPERTIES, LLC 1101 AERON AV PLAINFIELD, NJ 07060	340	2	ALSO TO BE NOTIFIED		
JESUAD PROPERTIES LLC 13 SPRINGDALE LN WARRON, NJ 07099	340	3	AMERICAN WATER SSC PO BOX 5027 CHERRY HILL, NJ 08034		
BAIK, MARTIN & MARY ANN 15 DOGWOOD HILL WARRON, NJ 07099	340	4	PUBLIC SERVICE ELECTRIC & GAS COMPANY MANAGER - CORPORATE PROPERTIES 80 PARK PLAZA, 708 NEWARK, NJ 07102		
DEPOSE, JOSEPH & BRINDA, JOHN S. 819 NORTH AVENUE PLAINFIELD, NJ 07061	340	5	BELL ATLANTIC NJ 340 BROAD STREET NEWARK, NJ 07102		
JESUAD PROPERTIES LLC 819 NORTH AVE PLAINFIELD, NJ 07061	340	6	PLAINFIELD MUNICIPAL UTILITIES AUTHORITY 127 ROOSEVELT AVENUE PLAINFIELD, NJ 07062		
ROBINSON, PAUL PO BOX 823 SCOTT'S PLAINS, NJ 07076	340	7	COMCAST CABLEVISION 73 ROCK AVENUE PLAINFIELD, NJ 07062		
DOUGLAS, MORRIS 701A E FRONT ST PLAINFIELD, NJ 07060	340	8	AT&T 2315 SAKEM ROAD CONROSS, CA 95023 ATTN: NANCY PENCE		
906-924 NORTH AVE, LLC 924 NORTH AVE NEWARK, NJ 07102	344	1			
NEW JERSEY TRANSIT CORP PO BOX 10009 NEWARK, NJ 07101	402	6			
CITY OF PLAINFIELD 515 WASHINGTON AVE PLAINFIELD, NJ 07061	403 645	1, 27			
1105 NORTH AVE, LLC 122 LINDEN WAY MOUNTAINSIDE, NJ 07092	404	14			
CARAFIO, 1985 LIMITED PTRN. 43 CONSTRUCTION WAY SOMERSET, NJ 08873	645	16			
848 SOUTH AVE COURTY LLC 848-51 SOUTH AVE PLAINFIELD, NJ 07062	645	20			
COURY, RICHARD P & HERBERT R 848 SOUTH AVE PLAINFIELD, NJ 07062	645	21 & 22			
SHUSTER HOLDING CORP 1007 SOUTH AVE PLAINFIELD, NJ 07062	645	23 & 24			
SMS, RONALD & PHYLIS J 1009 SOUTH AVE PLAINFIELD, NJ 07062	645	25			
CODY MILCH 2011 TRUST 106 HENRIETTA ROAD RD WOODMERE, NJ 11588	645	26			
PLAINFIELD DEVELOPMENT, INC. 27 PRINCE STREET ELIZABETH, NJ 07208	645	28			



AREA MAP
1" = 150'



KEY MAP
1" = 2000'

DRAWING INDEX

COVER SHEET	1 of 14
AERIAL MAP	2 of 14
DEMOLITION PLAN	3 of 14
SITE PLAN	4 of 14
GRADING PLAN	5 of 14
DRAINAGE & UTILITY PLAN	6 of 14
LANDSCAPING, STREETScape & LIGHTING PLAN	7 of 14
SOIL EROSION & SEDIMENT CONTROL PLAN	8 of 14
CONSTRUCTION DETAILS	9 - 13 of 14
PLAINFIELD MUA STANDARD CONSTRUCTION DETAILS	14 of 14
SURVEY (BY OTHERS)	1 of 1

PREPARED BY
DYNAMIC ENGINEERING CONSULTANTS, P.C.
245 MAIN STREET - SUITE 110
CHESTER, NJ 07930
WWW.DYNAMICCEC.COM

PLANNING BOARD APPROVAL

APPROVED BY THE PLANNING BOARD OF THE CITY OF PLAINFIELD, UNION COUNTY, NEW JERSEY

BOARD CHAIRMAN _____ DATE _____

BOARD SECRETARY _____ DATE _____

CITY ENGINEER _____ DATE _____

PLAINFIELD MUA APPROVAL BLOCK

PRELIMINARY APPROVAL _____

AUTHORITY ENGINEER _____ DATE _____

TENTATIVE APPROVAL _____

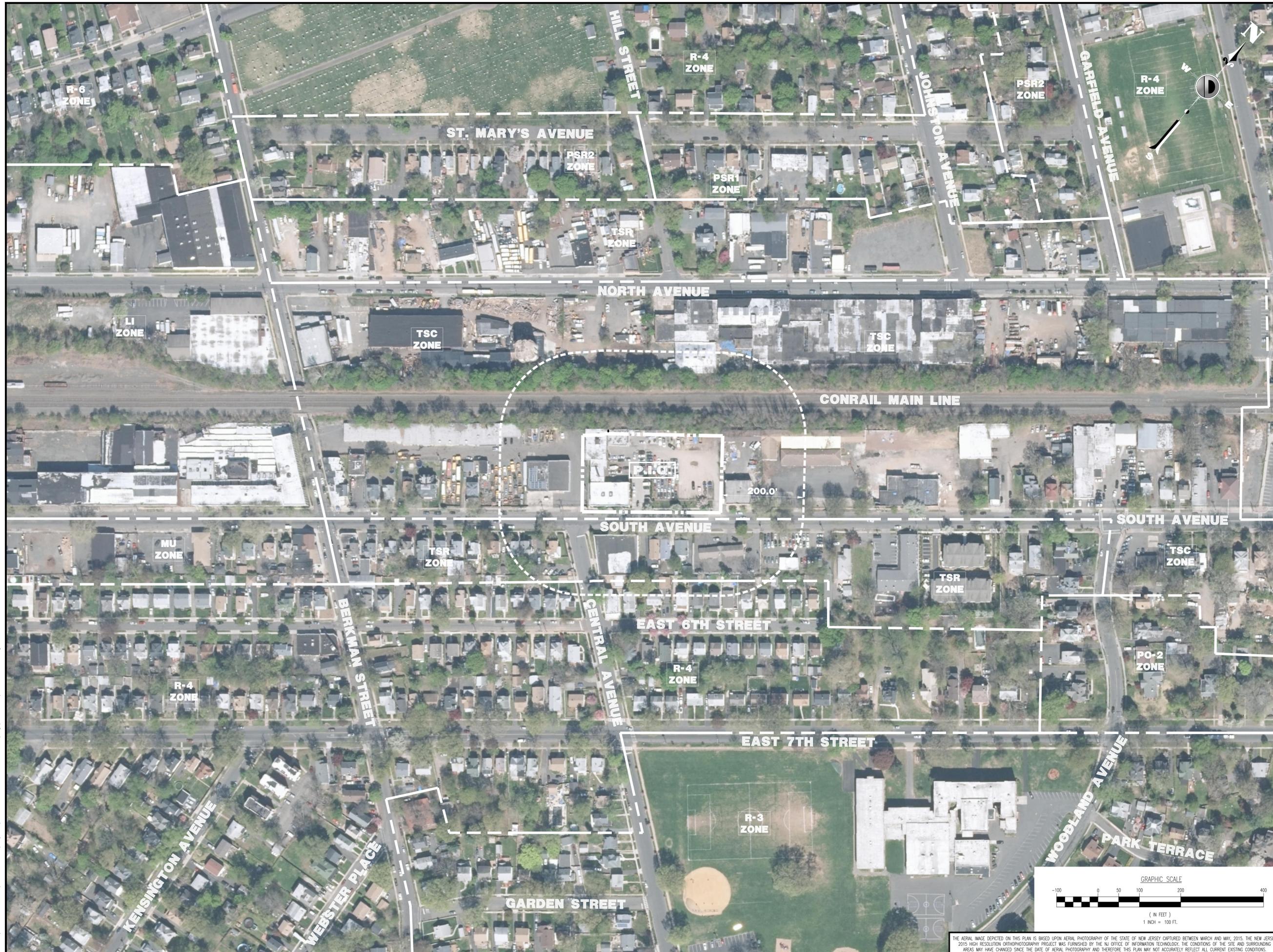
AUTHORITY ENGINEER _____ DATE _____

FINAL APPROVAL _____

AUTHORITY ENGINEER _____ DATE _____

Plotted: 08/04/21 - 4:03 PM. By: gborlock
File: P:\DCEPC PROJECTS\0404 Eden Property Co\99-041 South Avenue, Plainfield\Draw\Site Plans\040499041SRG.dwg. ---> 01 COVER SHEET

Plotted: 08/04/21 - 4:03 PM, By: gberlock
 File: P:\VEPC PROJECTS\0404 Eden Property Co\99-041 South Avenue, Planfiled\Draw\Site Plans\04049904159a.dwg, ----> 02 AERIAL MAP



REV.	DATE	COMMENTS	BY
9	08/04/21	REVISED PER CLIENT & PER&E COMMENTS	
8	04/27/21	REVISED PER CLIENT COMMENTS	
7	07/12/21	REVISED PER NJDEP TWA COMMENTS	
6	11/11/20	REVISED PER CITY POLICE DEPARTMENT COMMENTS	
5	10/15/20	REVISED PER CITY & NJ TRANSIT COMMENTS	
4	09/17/20	REVISED PER RESOLUTION COMPLIANCE	
3	08/03/20	REVISED PER NJDEP COMPLIANCE	
2	06/11/20	REVISED PER AMENDED RFP	
1	03/26/20	REVISED PER AMENDED RFP	

FINAL FOR SEWER DESIGN

CONSTRUCTION CHECK _____ DATE _____ CONSTRUCTION CHECK _____ DATE _____

PROJECT: **803 S URBAN RENEWAL, LLC**
PROPOSED MIXED USE BUILDING
 BLOCK 645, LOT 12
 803 SOUTH AVENUE
 CITY OF PLAINFIELD, UNION COUNTY, NEW JERSEY

811 PROTECT YOURSELF
 ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DIG INTO THE EARTH'S SURFACE ANYWHERE IN ANY STATE.
 FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

DYNAMIC ENGINEERING
 LAND DEVELOPMENT CONSULTING • PERMITTING
 GEOTECHNICAL • ENVIRONMENTAL
 TRAFFIC • SURVEY • PLANNING & ZONING
 245 Main Street, Suite 110
 Chester, NJ 07930
 T: 908.879.9229 | F: 908.879.0222
 Additional offices conveniently located at:
 Lake Carmel, New Jersey • T: 732.974.0119
 Trenton, New Jersey • T: 732.974.0119
 Newburgh, Pennsylvania • T: 517.481.0276
 Allen, Texas • T: 972.234.2100
 Houston, Texas • T: 281.291.6400
 Austin, Texas • T: 512.244.2424
 Delray Beach, Florida • T: 561.921.8510

www.dynamicce.com

BRETT W. SKAPINETZ
 PROFESSIONAL ENGINEER
 NEW JERSEY LICENSE No. 41985

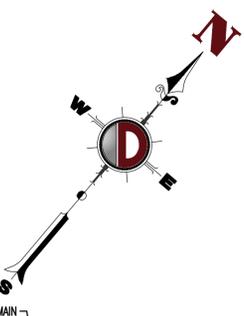
JOSEPH C. SPARONE
 PROFESSIONAL ENGINEER
 NEW JERSEY LICENSE No. 47204

TITLE:
AERIAL MAP

SCALE: (H) 1" = 100' DATE: 02/18/2020 DRAWN BY: GH DESIGNED BY: RJC
 PROJECT No: 0404-99-041 CHECKED BY: EWS
 SHEET No: **2** OF 14 Rev. #: 9

THE AERIAL MAPS DEPICTED ON THIS PLAN IS BASED UPON AERIAL PHOTOGRAPHY OF THE STATE OF NEW JERSEY CAPTURED BETWEEN MARCH AND MAY, 2015. THE NEW JERSEY 2015 HIGH RESOLUTION ORTHOPHOTOGRAPHY PROJECT WAS FURNISHED BY THE NJ OFFICE OF INFORMATION TECHNOLOGY. THE CONDITIONS OF THE SITE AND SURROUNDING AREAS MAY HAVE CHANGED SINCE THE DATE OF AERIAL PHOTOGRAPHY AND THEREFORE THIS PLAN MAY NOT ACCURATELY REFLECT ALL CURRENT EXISTING CONDITIONS.

CLASS-I CONRAIL (FORMERLY C.R.R. OF N.J.) (MAIL LINE)



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.
3. COMPLETE DEMOLITION WORK ABOVE EACH FLOOR OR TIER BEFORE DISTURBING ANY OF THE SUPPORTING MEMBERS OF THE LOWER LEVELS.
4. DEMOLISH CONCRETE AND MASONRY IN SMALL SECTIONS.
5. DEMOLISH STRUCTURAL FRAMING MEMBERS AND LOWER THEM TO THE GROUND BY MEANS OF HOISTS, DERRICKS OR OTHER SUITABLE METHODS.
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 FRAMING.
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 REVERSE 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.

NOTES

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

LIMIT OF DISTURBANCE

BLOCK NO. 401

S60'15"00" W 270.79'

LOT NO. 12 BLOCK NO. 645 DB 3897, PG 170 N/E SALVATORE CARFARO 59,196.15 SQ. FT. 1.36 ACRES

EXIST. BUILDING TO REMAIN

2 STORY DWELLING MASONRY/FRAME

CHAIN LINK FENCE TO REMAIN

LOT NO. 13

16.3" GATE

AC AC OIL TANK

FENCE 0.5' BOLLARD

WINDOW WELL

ASPHALT DRIVE

STEEL PLATE

16.6"

ROYAL PROFESSIONAL REMODELING

No. 861 2 STORY MASONRY BUILDING

VALVE #4

STEEL PLATE

16.6"

CONCRETE CHAMBER

GATE

16.5'

16.2'

15.8'

15.4'

15.0'

14.6'

14.2'

13.8'

13.4'

13.0'

12.6'

12.2'

11.8'

11.4'

11.0'

10.6'

10.2'

9.8'

9.4'

9.0'

8.6'

8.2'

7.8'

7.4'

7.0'

6.6'

6.2'

5.8'

5.4'

5.0'

4.6'

4.2'

3.8'

3.4'

3.0'

2.6'

2.2'

1.8'

1.4'

1.0'

Plotted: 08/04/21 - 4:04 PM, By: gborlock
File: P:\CECPC PROJECTS\0404 Edm Property Co\99-041 South Avenue, Plainfield\Draw\Site Plans\040499041SR9.dwg, ---> 03 DEMOLITION PLAN



NO.	DATE	REVISION	BY
1	03/26/20	REVISED PER AMENDED RFP	RRR
2	06/11/20	REVISED PER NADDER COMMENTS	RRR
3	08/03/20	REVISED PER RESOLUTION COMPLIANCE	RRR
4	09/17/20	REVISED PER CITY & NJ TRANSIT COMMENTS	RRR
5	10/15/20	REVISED PER CITY POLICE DEPARTMENT COMMENTS	RRR
6	11/11/20	REVISED PER NADDER COMMENTS	RRR
7	07/12/21	REVISED PER NADDER COMMENTS	RRR
8	04/27/21	REVISED PER NADDER COMMENTS	RRR
9	08/04/21	REVISED PER CLIENT & PER&E COMMENTS	RRR

FINAL FOR SEWER DESIGN

CONSTRUCTION CHECK _____ DATE _____

CONSTRUCTION CHECK _____ DATE _____

PROJECT: **803 S URBAN RENEWAL, LLC**
PROPOSED MIXED USE BUILDING
BLOCK 645, LOT 12
803 SOUTH AVENUE
CITY OF PLAINFIELD, UNION COUNTY, NEW JERSEY

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF ENGINEERS, DESIGNERS, OR ANY PERSON PREPARING TO DIG OR BORE THE EARTH'S SURFACE ANYWHERE IN ANY STATE.
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

DYNAMIC ENGINEERING
LAND DEVELOPMENT CONSULTING • PERMITTING
GEOTECHNICAL • ENVIRONMENTAL
TRAFFIC • SURVEY • PLANNING & ZONING
245 Main Street, Suite 110
Chester, NJ 07930
T: 908.879.9229 | F: 908.879.0222
Additional offices conveniently located at:
Lone Camp, New Jersey • T: 732.974.0119
Spartanburg, South Carolina • T: 703.749.0119
Newtown, Pennsylvania • T: 247.485.0576
Allen, Texas • T: 972.534.2100
Houston, Texas • T: 281.289.6400
Austin, Texas • T: 512.244.2444
Delray Beach, Florida • T: 561.923.8570
www.dynamiccec.com

BRETT W. SKAPINETZ
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE No. 41985

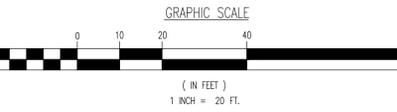
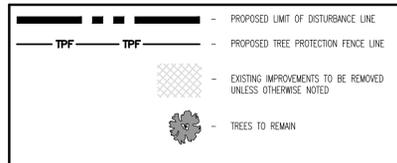
JOSEPH C. SPARONE
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE No. 47204

TITLE: **DEMOLITION PLAN**

SCALE: (H) 1" = 20'
(V) 02/18/2020
DATE: 02/18/2020
DRAWN BY: GH
DESIGNED BY: RJC
PROJECT No: 0404-99-041
CHECKED BY: EWS

SHEET No: **3** OF 14
Rev. #: 9

DEMOLITION PLAN LEGEND



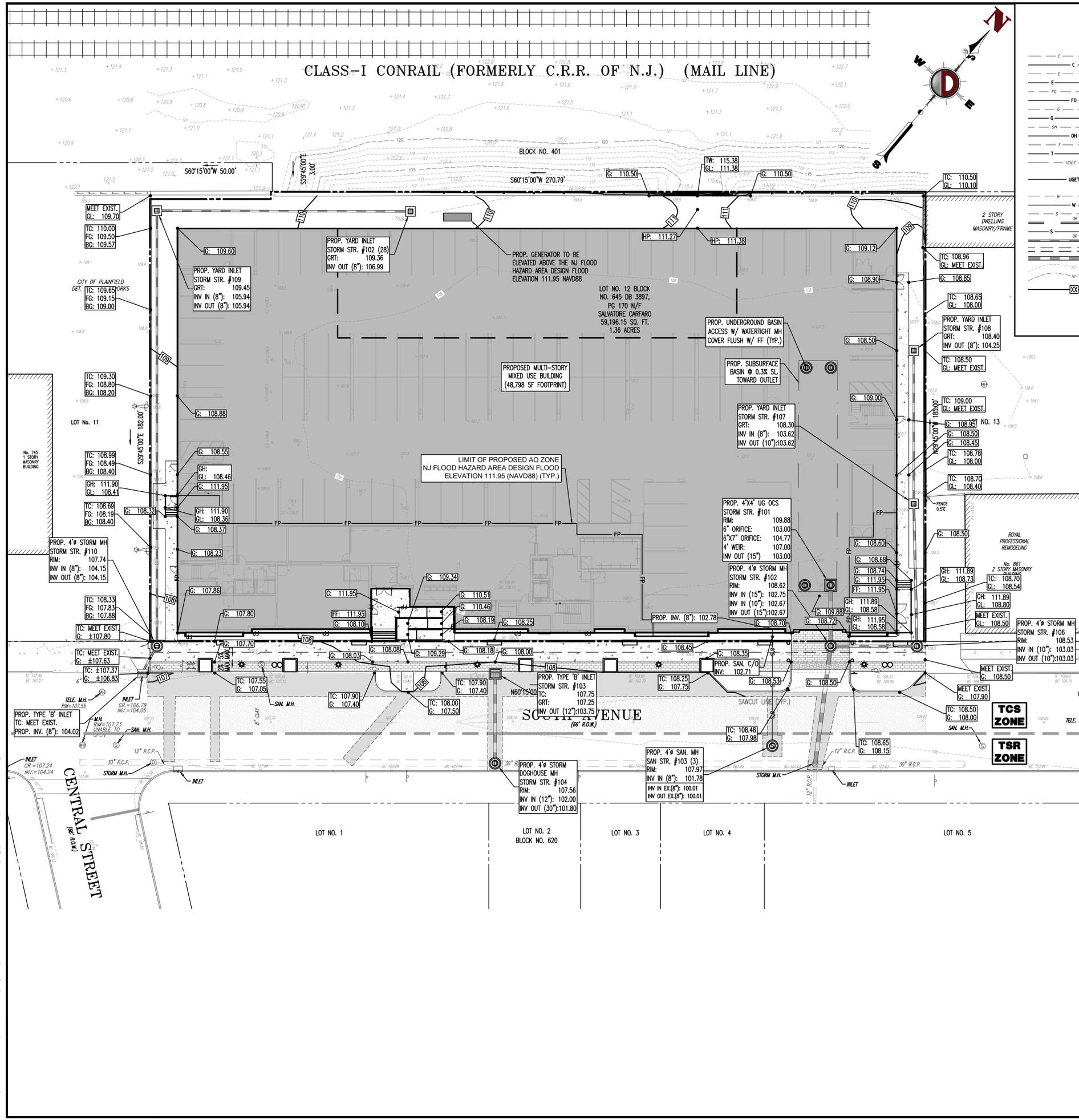
CLASS-I CONRAIL (FORMERLY C.R. OF N.J.) (MAIL LINE)

GRADING/UTILITY GRAPHIC LEGEND

---	EXIST. CABLE LINE	---	EXIST. SPOT ELEVATIONS	0.00/0.00	PROP. GRADE SPOT ELEV.
---	EXIST. CABLE LINE	0.80	EXIST. GUTTER ELEV.	0.00/0.00	PROP. TOP OF CURB & FINISHED GRADE ELEV.
---	EXIST. ELECTRIC LINE	0.80	EXIST. TOP OF CURB ELEV.	0.00/0.00	PROP. FINISHED FLOOR ELEV.
---	PROP. ELECTRIC LINE	0.80	EXIST. FINISH FLOOR ELEV.	0.00/0.00	PROP. TOP OF WALL & FINISHED GRADE @ LOW SIDE OF WALL (ACTUAL BOTTOM OF WALL FOOTING TO BE ESTABLISHED BY WALL DESIGNER)
---	EXIST. FIBER OPTIC LINE	0.80	EXIST. GARAGE FLOOR ELEV.	0.00/0.00	PROP. TOP OF EXTENDED CURB (CH) FINISHED GRADE @ HIGH SIDE OF EXTENDED CURB & (CL) FINISHED GRADE @ LOW SIDE OF EXTENDED CURB
---	PROP. FIBER OPTIC LINE	0.80	EXIST. FIRE HYDRANT	0.00/0.00	PROP. TOP OF CURB (TO) FINISHED GRADE ON SUBJECT SITE & (BO) INLET OF CURB GRADE ON ADJACENT LOT
---	EXIST. GAS LINE	0.80	EXIST. WATER VALVE	0.00/0.00	PROP. DIRECTION OF DRAINAGE FLOW ARROW
---	PROP. GAS LINE	0.80	EXIST. GAS VALVE	0.00/0.00	PROP. WATER VALVE
---	EXIST. OVERHEAD WIRES	0.80	EXIST. GAS METER	0.00/0.00	PROP. GAS VALVE
---	PROP. OVERHEAD WIRES	0.80	EXIST. ELECTRIC METER	0.00/0.00	PROP. STORM CLEANOUT
---	EXIST. TELEPHONE LINE	0.80	EXIST. ELECTRIC BOX	0.00/0.00	PROP. SANITARY CLEANOUT
---	PROP. TELEPHONE LINE	0.80	EXIST. CLEAN OUT	0.00/0.00	PROP. AREA LIGHT
---	EXIST. UNDERGROUND ELEC./TELE. SERVICE (NO. & SIZE OF CONDUITS NOT DEFINED)	0.80	EXIST. WELL	0.00/0.00	PROP. OUTLET CONTROL STRUCTURE
---	PROP. UNDERGROUND ELEC./TELE. SERVICE (NO. & SIZE OF CONDUITS NOT DEFINED)	0.80	EXIST. WATER SHUT OFF VALVE	0.00/0.00	PROP. DRAINAGE MANHOLE
---	EXIST. WATER LINE	0.80	EXIST. TELEPHONE BOX	0.00/0.00	PROP. SANITARY SEWER MANHOLE
---	PROP. WATER LINE	0.80	EXIST. CABLE TV BOX	0.00/0.00	PROP. "A" INLET
---	EXIST. SANITARY SEWER LINE	0.80	EXIST. UTILITY POLE	0.00/0.00	PROP. "B" INLET
---	PROP. SANITARY SEWER LINE	0.80	EXIST. GUY WIRE	0.00/0.00	PROP. "E" INLET
---	EXIST. STORM DRAIN LINE	0.80	EXIST. LIGHT POLE	0.00/0.00	PROP. YARD INLET
---	PROP. STORM DRAIN LINE	0.80	EXIST. BUILDING LIGHT	0.00/0.00	PROP. FLARED END SECTION
---	EXIST. MINOR CONTOUR & ELEVATION	0.80	EXIST. SHOE BOX LIGHT	0.00/0.00	PROP. HEADWALL
---	EXIST. MAJOR CONTOUR & ELEVATION	0.80	EXIST. COBRA LIGHT POLE	0.00/0.00	
---	PROP. FINISH GRADE CONTOUR & ELEVATION	0.80	EXIST. TRAFFIC SIGNAL POLE	0.00/0.00	
---	EXIST. MONITORING WELL	0.80	EXIST. MANHOLE	0.00/0.00	
---	APPROX. TEST PIT LOCATION	0.80	EXIST. "A" INLET	0.00/0.00	
---		0.80	EXIST. "B" INLET	0.00/0.00	
---		0.80	EXIST. "E" INLET	0.00/0.00	
---		0.80	EXIST. YARD INLET	0.00/0.00	
---		0.80	EXIST. FLARED END SECTION	0.00/0.00	
---		0.80	EXIST. HEADWALL	0.00/0.00	

GRADING NOTES

- 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 SOIL, 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 ASTM TEST D-1557. MOISTURE CONTENT AT THE TIME OF PLACEMENT SHALL NOT EXCEED 2% ABOVE NOR 2% 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 FOOTPRINT AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECS AND THE RECOMMENDATIONS SET FORTH IN THE SOILS REPORT.
- 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 CUTTERS, CURBS AND 1.0% ON ALL CONCRETE SURFACES, AND 1-1/2% MIN. ON ASPHALT TO PREVENT PONDING. ANY DISCREPANCIES THAT MAY AFFECT THE PUBLIC SAFETY OR PROJECT COSTS, MUST BE IDENTIFIED TO THE ENGINEER IN WRITING, IMMEDIATELY. PROCEEDING WITH CONSTRUCTION WITH DESIGN DISCREPANCIES IS DONE SO AT THE CONTRACTOR'S OWN RISK.
- 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 OUT SHEETS PRIOR TO INSTALLATION.
- SUBGRADE MATERIAL FOR SIDEWALKS, CURBS, 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 PROCTOR METHOD).
- REFER TO SITE PLAN FOR ADDITIONAL NOTES.
- IN CASE OF DISCREPANCIES BETWEEN PLANS, THE SITE PLAN WILL SUPERCEDE IN ALL CASES. CONTRACTOR MUST NOTIFY ENGINEER OF RECORD OF ANY CONFLICT IMMEDIATELY.
- MAXIMUM CROSS SLOPE OF 2% ON ALL SIDEWALKS.
- 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 3% 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.
- THE OWNER SHALL RETAIN DYNAMIC EARTH, LLC (808-879-7098) 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.
- CONTRACTOR IS TO REMOVE EXISTING UNSUITABLE OR OVERLY COMPACT SOIL OR ROCK AS NEADED TO ACHIEVE REQUIRED PERMEABILITY AS DIRECTED BY THE OWNER'S GEOTECHNICAL ENGINEER, AND NEW FILL, IF NEEDED, SHALL HAVE AN IN PLACE PERMEABILITY GREATER THAN OR EQUAL TO THE DESIGN CRITERIA.
- 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.
- THE CONTRACTOR IS RESPONSIBLE FOR AS-BUILT PLANS AND GRADE CONTROL UNLESS DEFINED OTHERWISE ELSEWHERE IN THE CONTRACT DOCUMENTS.



NO.	DATE	REVISION	BY
1	03/28/20	REVISED PER AMENDED RFP	JKC
2	06/11/20	REVISED PER NJDEP COMMENTS	JKC
3	09/17/20	REVISED PER CITY & NJ TRANSIT COMMENTS	JKC
4	09/17/20	REVISED PER CITY & NJ TRANSIT COMMENTS	JKC
5	10/15/20	REVISED PER NJDEP COMMENTS	JKC
6	11/17/20	REVISED PER NJDEP COMMENTS	JKC
7	07/27/21	REVISED PER NJDEP COMMENTS	JKC
8	07/27/21	REVISED PER NJDEP COMMENTS	JKC
9	08/04/21	REVISED PER CLIENT & PRE&E COMMENTS	JKC

FINAL FOR SEWER DESIGN

CONSTRUCTION CHECK _____ DATE _____

CONSTRUCTION CHECK _____ DATE _____

PROJECT: **803 S URBAN RENEWAL, LLC**
PROPOSED MIXED USE BUILDING
 BLOCK 645, LOT 12
 803 SOUTH AVENUE
 CITY OF PLAINFIELD, UNION COUNTY, NEW JERSEY

811 PROTECT YOURSELF

ALL STATES REQUIRE NOTIFICATION OF ENGINEERS, DESIGNERS, OR ANY PERSON PREPARING TO DIG OR BORE THE EARTH'S SURFACE ANYWHERE IN ANY STATE.

FOR STATE-SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

DYNAMIC ENGINEERING

LAND DEVELOPMENT CONSULTING • PERMITTING
 GEOTECHNICAL • ENVIRONMENTAL
 TRAFFIC • SURVEY • PLANNING & ZONING

245 Main Street, Suite 110
 Chester, NJ 07930
 T: 908.879.9229 | F: 908.879.0222

Additional offices conveniently located at:

Little Combs, New Jersey • T: 732.974.0119
 Harrisburg, New Jersey • T: 732.974.0119
 Harrisburg, Pennsylvania • T: 717.485.0576
 Allen, Texas • T: 972.234.2100
 Houston, Texas • T: 281.289.6400
 Austin, Texas • T: 512.244.2446
 Delray Beach, Florida • T: 561.921.8570

www.dynamiccec.com

BRETT W. SKAPINETZ

PROFESSIONAL ENGINEER
 NEW JERSEY LICENSE NO. 41985

JOSEPH C. SPARONE

PROFESSIONAL ENGINEER
 NEW JERSEY LICENSE NO. 47204

TITLE: **GRADING PLAN**

SCALE: (H) 1" = 20'
 (V) 1" = 10'

DATE: 02/18/2020

DRAWN BY: RJC
 DESIGNED BY: RJC

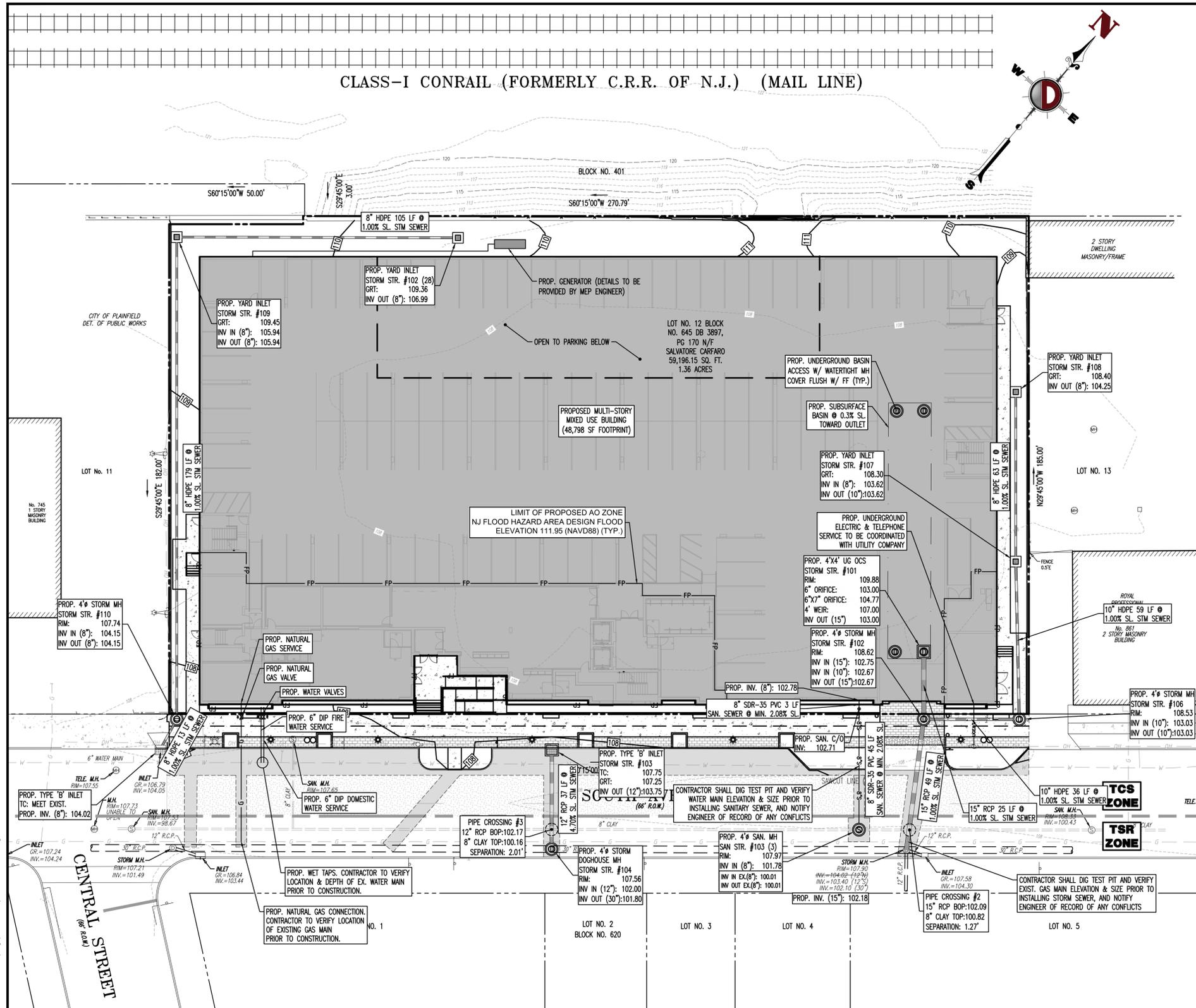
CHECKED BY: EWS

SHEET No: **5** OF 14

Rev. #:

Plotted: 08/04/21 - 4:04 PM. By: gbonick
 File: P:\VEPC PROJECTS\0404 Eden Property Co\99-041 South Avenue, Plainfield\Draw\Site Plans\040499041SG.dwg. ---> 05 GRADING PLAN

CLASS-I CONRAIL (FORMERLY C.R.R. OF N.J.) (MAIL LINE)

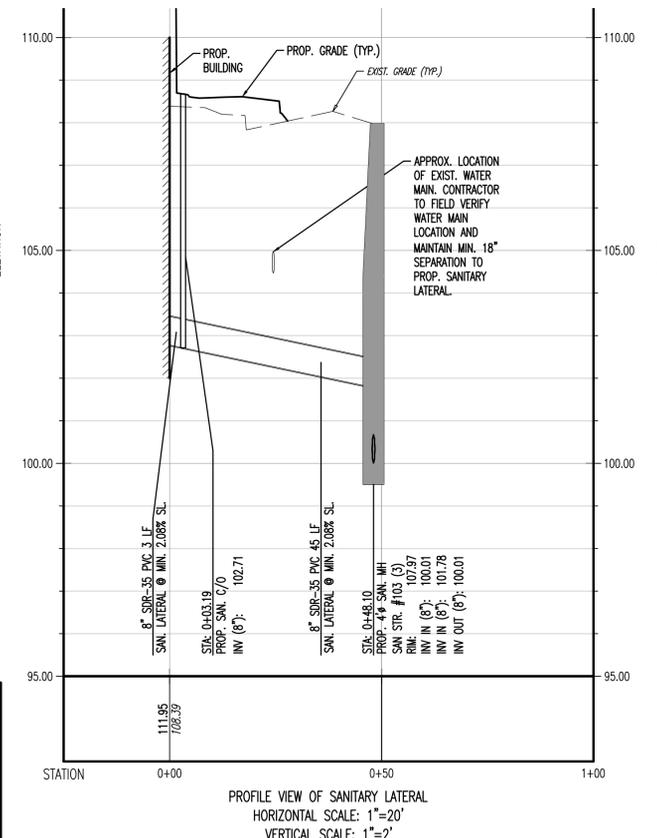


UTILITY NOTES

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. CONTRACTOR'S 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.
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 18 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. 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.
11. 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.
12. ALL SEWER AND WATER FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REGULATORY AUTHORITY'S RULES AND REGULATIONS.
13. ALL PROPOSED UTILITIES TO BE INSTALLED UNDERGROUND UNLESS OTHERWISE NOTED.
14. 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 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-900 TO BE UTILIZED TO PROVIDE A SLT-TIGHT JOINT. WHERE SPECIFICALLY INDICATED, REINFORCED CONCRETE STORM PIPE JOINTS SHALL BE WATER-TIGHT AND CONFORM TO ASTM C-443.
15. HDPE DRAINAGE PIPE SHALL HAVE A SMOOTH WALL INTERIOR WITH ANNUAL EXTERIOR CORRUGATIONS AND CONFORM TO ASTM F2306. SOLID PIPE SHALL HAVE GASKETED WATER-TIGHT JOINTS MEETING THE REQUIREMENTS OF ASTM F2306 AND ASTM D3212. PERFORATED PIPE SHALL HAVE GASKETED SLIT-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 MANUFACTURER RECOMMENDATIONS.
16. RP DRAINAGE PIPE SHALL HAVE A SMOOTH WALL INTERIOR WITH ANNUAL EXTERIOR CORRUGATIONS AND CONFORM TO ASTM F2306 (12'-30\"/>

EXISTING UTILITY NOTES

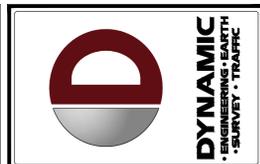
- EXISTING WATER SERVICE NOTE: CONTRACTOR TO LOCATE AND UTILIZE EXISTING WATER SERVICE CONNECTION IF FEASIBLE. OTHERWISE REMOVE EXISTING WATER SERVICE LINE AND CAP AT MAIN IN R.O.W. IN ACCORDANCE WITH THE LOCAL WATER COMPANY REQUIREMENTS. TERMINATION AT THE MAIN MUST BE APPROVED BY THE LOCAL WATER COMPANY 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 REQUIRED STREET OPENING PERMITS FOR REMOVAL OF EXISTING SERVICE AND INSTALLATION OF NEW SERVICE.
- 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.



GRADING/UTILITY GRAPHIC LEGEND

<p>EXIST. GUY WIRE</p> <p>EXIST. LIGHT POLE</p> <p>EXIST. BUILDING LIGHT</p> <p>EXIST. SHOE BOX LIGHT</p> <p>EXIST. COBRA LIGHT POLE</p> <p>EXIST. TRAFFIC SIGNAL POLE</p> <p>EXIST. MANHOLE</p> <p>EXIST. "A" INLET</p> <p>EXIST. "B" INLET</p> <p>EXIST. "E" INLET</p> <p>EXIST. YARD INLET</p> <p>EXIST. FLARED END SECTION</p> <p>EXIST. HEADWALL</p> <p>EXIST. UTILITY POLE</p>	<p>EXIST. MONITORING WELL</p> <p>APPROX. TEST PIT LOCATION</p> <p>EXIST. FIRE HYDRANT</p> <p>EXIST. WATER VALVE</p> <p>EXIST. GAS VALVE</p> <p>EXIST. ELECTRIC METER</p> <p>EXIST. ELECTRIC BOX</p> <p>EXIST. CLEAN OUT</p> <p>EXIST. WELL</p> <p>EXIST. WATER SHUT OFF VALVE</p> <p>EXIST. TELEPHONE BOX</p> <p>EXIST. CABLE TV BOX</p> <p>PROP. HEADWALL</p>	<p>PROP. WATER VALVE</p> <p>PROP. GAS VALVE</p> <p>PROP. STORM CLEANOUT</p> <p>PROP. SANITARY CLEANOUT</p> <p>PROP. AREA LIGHT</p> <p>PROP. OUTLET CONTROL STRUCTURE</p> <p>PROP. DRAINAGE MANHOLE</p> <p>PROP. SANITARY SEWER MANHOLE</p> <p>PROP. "A" INLET</p> <p>PROP. "B" INLET</p> <p>PROP. "E" INLET</p> <p>PROP. YARD INLET</p> <p>PROP. FLARED END SECTION</p>	<p>EXIST. UNDERGROUND ELEC./TELE. SERVICE (NO. & SIZE OF CONDUITS NOT DEFINED)</p> <p>PROP. UNDERGROUND ELEC./TELE. SERVICE (NO. & SIZE OF CONDUITS NOT DEFINED)</p> <p>EXIST. SANITARY SEWER LINE</p> <p>PROP. SANITARY SEWER LINE</p> <p>EXIST. STORM DRAIN LINE</p> <p>PROP. STORM DRAIN LINE</p> <p>EXIST. MINOR CONTOUR & ELEVATION</p> <p>EXIST. MAJOR CONTOUR & ELEVATION</p> <p>PROP. FINISH GRADE CONTOUR & ELEVATION</p> <p>PROP. DIRECTION OF DRAINAGE FLOW ARROW</p>	<p>EXIST. SPOT ELEVATIONS</p> <p>EXIST. GUTTER ELEV.</p> <p>EXIST. TOP OF CURB ELEV.</p> <p>EXIST. FINISH FLOOR ELEV.</p> <p>EXIST. GARAGE FLOOR ELEV.</p> <p>PROP. GRADE SPOT ELEV.</p> <p>PROP. TOP OF CURB & FINISHED GRADE ELEV.</p> <p>PROP. FINISHED FLOOR ELEV.</p> <p>PROP. TOP OF WALL & FINISHED GRADE @ LOW SIDE OF WALL (FACTUAL BOTTOM OF WALL FOOTING TO BE ESTABLISHED BY WALL DESIGNER)</p> <p>PROP. TOP OF EXTENDED CURB (WH) FINISHED GRADE @ HIGH SIDE OF EXTENDED CURB & (GL) FINISHED GRADE @ LOW SIDE OF EXTENDED CURB</p>
--	--	---	--	--

- NOTES:
1. ALL ROOF LEADERS SHALL BE CONNECTED INTERNALLY INTO THE STORMWATER STORAGE BASIN.
 2. CONTRACTOR TO COORDINATE AN INSPECTION OF THE EXCAVATION FOR THE UNDERGROUND BASIN BY THE CITY ENGINEER PRIOR TO INSTALLATION.
 3. CONTRACTOR TO CAP, SEAL, AND ABANDON EXIST. SANITARY LATERAL IN ACCORDANCE W/PNJA REGULATIONS. CAPPING OF THE EXIST. LATERAL SHALL BE OBSERVED BY PNJA STAFF.
 4. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR ALL SANITARY SEWER FACILITIES AND DETAILS TO PNJA FOR APPROVAL PRIOR TO CONSTRUCTION.



NO.	DATE	REVISION	BY
1	02/18/2020	REVISED PER CLIENT & PERMITS COMMENTS	RRR
2	02/18/2020	REVISED PER CLIENT COMMENTS	RRR
3	02/18/2020	REVISED PER N.J. TRANSIT COMMENTS	RRR
4	02/18/2020	REVISED PER N.J. TRANSIT COMMENTS	RRR
5	02/18/2020	REVISED PER N.J. TRANSIT COMMENTS	RRR
6	02/18/2020	REVISED PER N.J. TRANSIT COMMENTS	RRR
7	02/18/2020	REVISED PER N.J. TRANSIT COMMENTS	RRR
8	02/18/2020	REVISED PER N.J. TRANSIT COMMENTS	RRR
9	02/18/2020	REVISED PER N.J. TRANSIT COMMENTS	RRR
10	02/18/2020	REVISED PER N.J. TRANSIT COMMENTS	RRR
11	02/18/2020	REVISED PER N.J. TRANSIT COMMENTS	RRR
12	02/18/2020	REVISED PER N.J. TRANSIT COMMENTS	RRR
13	02/18/2020	REVISED PER N.J. TRANSIT COMMENTS	RRR
14	02/18/2020	REVISED PER N.J. TRANSIT COMMENTS	RRR
15	02/18/2020	REVISED PER N.J. TRANSIT COMMENTS	RRR
16	02/18/2020	REVISED PER N.J. TRANSIT COMMENTS	RRR
17	02/18/2020	REVISED PER N.J. TRANSIT COMMENTS	RRR
18	02/18/2020	REVISED PER N.J. TRANSIT COMMENTS	RRR
19	02/18/2020	REVISED PER N.J. TRANSIT COMMENTS	RRR
20	02/18/2020	REVISED PER N.J. TRANSIT COMMENTS	RRR

FINAL FOR SEWER DESIGN

CONSTRUCTION CHECK _____ DATE _____

CONSTRUCTION CHECK _____ DATE _____

PROJECT: **803 S URBAN RENEWAL, LLC**
PROPOSED MIXED USE BUILDING
 BLOCK# 645, LOT 12
 803 SOUTH AVENUE
 CITY OF PLAINFIELD, UNION COUNTY, NEW JERSEY

811 PROTECT YOURSELF
 ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DIGGING THE EARTH'S SURFACE ANYWHERE IN ANY STATE.
 FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

DYNAMIC ENGINEERING
 LAND DEVELOPMENT CONSULTING • PERMITTING
 GEOTECHNICAL • ENVIRONMENTAL
 TRAFFIC • SURVEY • PLANNING & ZONING
 245 Main Street, Suite 110
 Chester, NJ 07930
 1: 908.879.9229 | F: 908.879.0222
 Additional offices conveniently located at:
 Little Rock, Arkansas • 1.501.941.0119
 Dallas, Texas • 1.214.343.0119
 Houston, Texas • 1.281.481.0276
 Allen, Texas • 1.972.343.0119
 Houston, Texas • 1.281.299.4000
 Austin, Texas • 1.512.444.2444
 Delray Beach, Florida • 1.561.921.8510

BRETT W. SKAPINETZ
 PROFESSIONAL ENGINEER
 NEW JERSEY LICENSE NO. 41985

JOSEPH C. SPARONE
 PROFESSIONAL ENGINEER
 NEW JERSEY LICENSE NO. 47204

TITLE: **DRAINAGE & UTILITY PLAN**

SCALE: (H) 1"=20' DATE: 02/18/2020 DRAWN BY: DESIGNED BY:
 (V) JCH RJC
 PROJECT No: 0404-99-041 CHECKED BY: EWS
 SHEET No: **6** REV. #:

CLASS-I CONRAIL (FORMERLY C.R.R. OF N.J.) (MAIL LINE)

THIS PLAN TO BE UTILIZED FOR LANDSCAPE & LIGHTING PURPOSES ONLY.
SEE SHEET 11 OF 14 FOR LANDSCAPE AND LIGHTING DETAILS



NO.	DATE	REVISION	BY
1	02/20/20	REVISED PER CLIENT COMMENTS	RRR
2	02/20/20	REVISED PER CLIENT COMMENTS	RRR
3	02/20/20	REVISED PER CLIENT COMMENTS	RRR
4	02/20/20	REVISED PER CLIENT COMMENTS	RRR
5	02/20/20	REVISED PER CLIENT COMMENTS	RRR
6	02/20/20	REVISED PER CLIENT COMMENTS	RRR
7	02/20/20	REVISED PER CLIENT COMMENTS	RRR
8	02/20/20	REVISED PER CLIENT COMMENTS	RRR
9	02/20/20	REVISED PER CLIENT COMMENTS	RRR

FINAL FOR SEWER DESIGN

CONSTRUCTION CHECK DATE

PROJECT: 803 S URBAN RENEWAL, LLC
PROPOSED MIXED USE BUILDING
BLOCK 645, LOT 12
CITY OF PLAINFIELD, UNION COUNTY, NEW JERSEY

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DIG BEFORE THE SEWER DIRECT ANNUAL IN ANY STATE
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

DYNAMIC ENGINEERING
LAND DEVELOPMENT CONSULTING • PERMITTING
GEOTECHNICAL • ENVIRONMENTAL
TRAFFIC • SURVEY • PLANNING & ZONING
245 Main Street, Suite 110
Chester, NJ 07930
T: 908.879.9229 | F: 908.879.0222
Additional offices conveniently located at:
Little Ferry, NJ • 201.741.0119
Trenton, NJ • 609.391.1111
Newark, NJ • 973.485.0076
Allentown, PA • 610.261.1100
Horseshoe Bend, AZ • 480.298.6600
Austin, TX • 512.244.2444
Orlando, FL • 407.921.8570

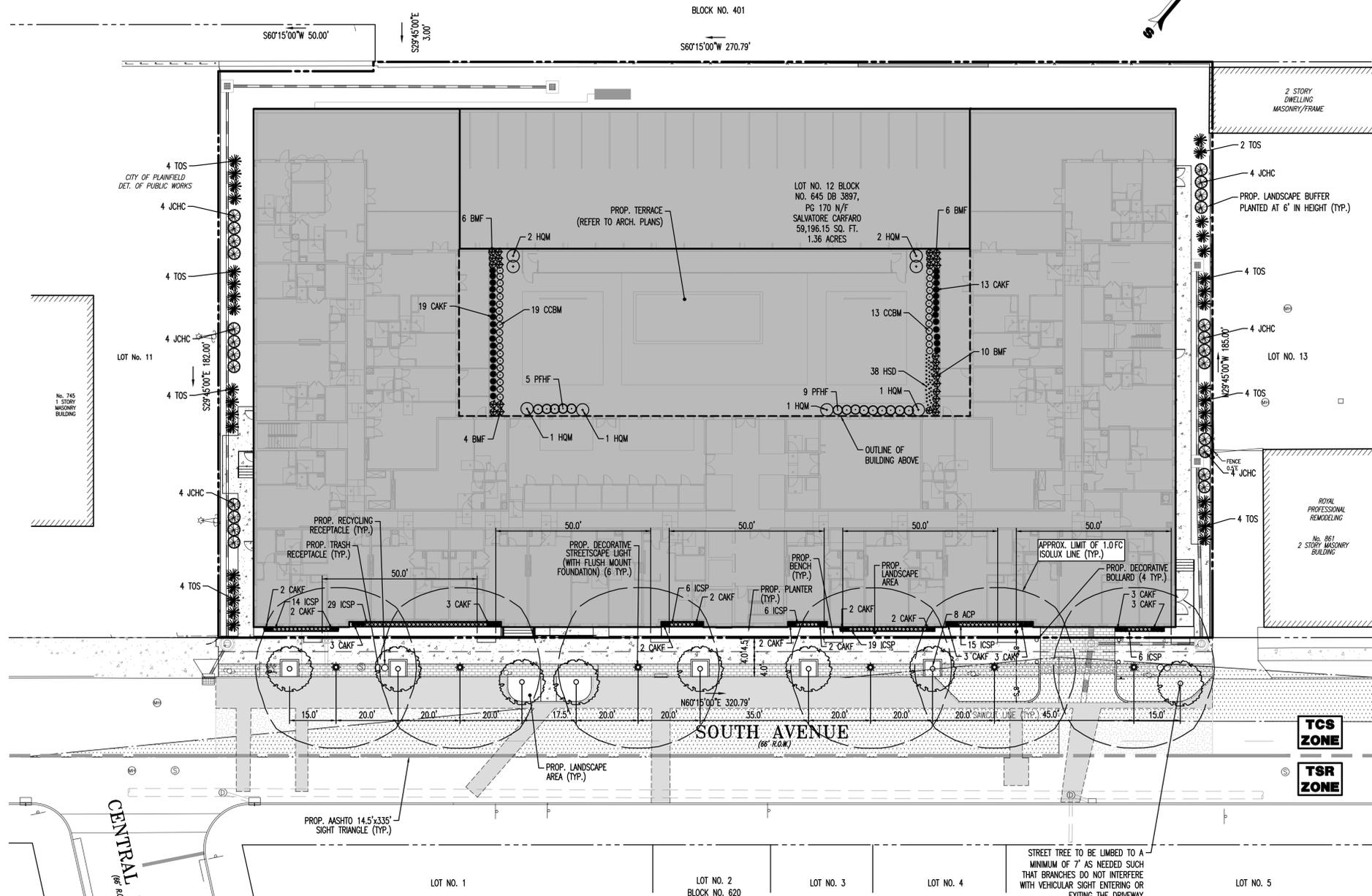
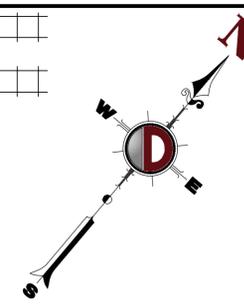
BRETT W. SKAPINETZ
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE NO. 41985

JOSEPH C. SPARONE
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE NO. 47204

TITLE: **LANDSCAPING, STREETSCAPE & LIGHTING PLAN**

SCALE: (H) 1" = 20' DATE: 02/18/2020 DRAWN BY: RUC DESIGNED BY: RUC
PROJECT NO: 0404-99-041 CHECKED BY: EWS

SHEET NO: **7** OF 14



- PLANTING NOTES**
- PLANT MATERIAL SHALL BE FURNISHED AND INSTALLED AS INDICATED, INCLUDING ALL LABOR, MATERIALS, PLANTS, EQUIPMENT, INCIDENTALS, AND CLEAN-UP.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTING AT CORRECT GRADES AND ALIGNMENT. LAYOUT TO BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
 - PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY; HAVE NORMAL GROWTH HABITS; WELL DEVELOPED BRANCHES, DENSELY FOULATED, VIGOROUS ROOT SYSTEMS AND BE FREE FROM DEFECTS AND INJURIES.
 - CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL.
 - ALL PLANT MATERIAL SHALL BE GUARANTEED BY THE CONTRACTOR TO BE IN VIGOROUS GROWING CONDITION. PROVISION SHALL BE MADE FOR A GROWTH GUARANTEE OF AT LEAST ONE (1) YEAR FROM THE DATE OF ACCEPTANCE FOR TREES AND SHRUBS. REPLACEMENTS SHALL BE MADE AT THE BEGINNING OF THE FIRST SUCCEEDING PLANTING SEASON. ALL REPLACEMENTS SHALL HAVE A GUARANTEE EQUAL TO THAT STATED ABOVE.
 - INsofar AS IT IS PRACTICABLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL PROTECT STOCK NOT PLANTED. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE (3) DAY PERIOD AFTER DELIVERY. ANY PLANTS NOT INSTALLED DURING THIS PERIOD WILL BE SELECTED.
 - QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS, AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH ANSI Z60.1 (REV. 2001) "AMERICAN STANDARD FOR NURSERY STOCK" AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION.
 - ALL PLANTS SHALL BE PLANTED IN AMENDED TOPSOIL THAT IS THOROUGHLY WATERED AND TAMPED AS BACK FILLING PROGRESSES. PLANTING MIX TO BE AS SHOWN ON PLANTING DETAILS. LARGE PLANTING AREAS TO INCORPORATE FERTILIZER AND SOIL CONDITIONERS AS STATED IN PLANTING SPECIFICATIONS.
 - PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES. PLANTS SHALL BE HANDLED FROM THE BOTTOM OF THE BALL ONLY.
 - PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION. ALL PLANT MATERIAL SHALL BE SPRAYED WITH "WIL-PROF" OR EQUAL AS PER MANUFACTURER'S INSTRUCTIONS.
 - NO PLANTS EXCEPT GROUND COVERS, SHALL BE PLANTED LESS THAN TWO FEET FROM EXISTING STRUCTURES AND SEWERLINES.
 - SET ALL PLANTS PLUMB AND STRAIGHT, SET AT SUCH LEVEL THAT A NORMAL OR NATURAL RELATIONSHIP TO THE CROWN OF THE PLANT WITH THE GROUND SURFACE WILL ESTABLISHED LOCATE PLANT IN THE CENTER OF THE PIT.
 - ALL INJURED ROOTS SHALL BE PRUNED TO MAKE CLEAN ENDS BEFORE PLANTING UTILIZING CLEAN, SHARP TOOLS. IT IS ADVISABLE TO PRUNE APPROXIMATELY 1/3 OF THE GROWTH OF LARGE TREES (12" CALIPER AND OVER) BY THE REMOVAL OF SUPERFLUOUS BRANCHES, THOSE WHICH CROSS, THOSE WHICH RUN PARALLEL, ETC.
 - MAIN LEADER OF TREES WILL NOT BE CUT BACK LONGER BRANCHES, HOWEVER, MUST BE SHORTENED.
 - EACH TREE AND SHRUB SHALL BE PRUNED IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICE TO PRESERVE NATURAL CHARACTER OF PLANT. PRUNING SHALL BE DONE WITH CLEAN, SHARP TOOLS.
 - ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES AS A RESULT OF CONSTRUCTION OPERATIONS. ALL EXISTING TREES SHALL BE FERTILIZED WITH A REGULAR GARDEN FERTILIZER (5-10-5) UPON COMPLETION OF WORK. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE TRUNK. CONTRACTOR TO ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH SHARP TOOLS AND FILLED AROUND WITH TOPSOIL. COMPLETELY SATURATE THESE AREAS WITH WATER. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR IS TO PROTECT ALL EXISTING TREES TO REMAIN BY ERECTING TREE PROTECTION FENCE AT THE DRIP LINE. THIS WILL ENSURE NO COMPACTION OF THE ROOT MASS.
 - ALL PLANTING BEDS SHALL BE MULCHED WITH 4" LAYER OF DOUBLE SHREDED HARDWOOD BARK MULCH.
 - PLANTING AREAS AND SOIL SHALL BE THOROUGHLY WATERED OR WATERED TO ESTABLISH THE PROPOSED PLANTS AND LAWN.
 - PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE AS SHOWN IN THE APPROVED LANDSCAPE PLAN MUST BE INSTALLED, INSPECTED AND APPROVED BY THE MUNICIPAL LANDSCAPE ARCHITECT, THE MUNICIPAL ENGINEER AND LANDSCAPE ARCHITECT SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS: THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVERS AS REQUIRED BY OR ASSOCIATED WITH A SUBSEQUENT OR SITE PLAN APPROVAL BY THE PLANNING BOARD OR ZONING BOARD OF ADJUSTMENT SHALL BE INSTALLED DURING THE FOLLOWING PLANTING SEASONS:

TYPE	DATES
PLANTS	3/15 TO 12/15
LAWN	3/15 TO 6/15

DATE: 9/15 TO 12/11

ACER RUBRUM, BETULA VARIETIES, CARPINUS VARIETIES, CORNUS VARIETIES, KÖHLERUTHERIA, LIODIUMBAR STRACIOLIA, LIODIUMBAR STRACIOLIA, PLATANUS ACERIFOLIA, PRUNUS VARIETIES, PYRUS VARIETIES, QUERCUS VARIETIES, SALIX VARIETIES, TAXUS VARIETIES, TILIA TOMENTOSA, ZELKOVA VARIETIES

- PLANTING SPECIFICATIONS**
- SCOPE OF WORK
 - THIS WORK SHALL CONSIST OF PERFORMING, CLEARING AND SOIL PREPARATION, FINISH GRADING, PLANTING AND DRAINAGE, INCLUDING ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT.
 - MATERIALS
 - GENERAL - ALL MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION (DOT) MANUAL OF ROADWAY AND BRIDGE CONSTRUCTION (LATEST EDITION) OR APPROVED EQUAL.
 - PLANTS - ALL PLANTS SHALL BE HEALTHY OR NORMAL GROWTH, WELL ROOTED, FREE FROM DISEASE AND INSECTS.
 - TOPSOIL - LOAMY SILT, HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, PH RANGE BETWEEN 4.5 - 7, BE FREE OF DEBRIS, ROCKS LARGER THAN TWO INCHES (2"), WOOD, ROOTS, VEGETABLE MATTER AND CLUMPS.
 - MULCH - FOUR (4") INCHES DOUBLE SHREDED HARDWOOD BARK MULCH.
 - FERTILIZER AND SOIL CONDITIONER - PLANTS 1/15 TO 12/11
 - ORGANIC FERTILIZER - SHALL BE PROCESSED SEWER SLUDGE WITH MINIMAL CONTENT OF 1% NITROGEN AND 2% PHOSPHORIC ACID, EQUAL TO "NITROHUMUS".
 - ORGANIC FERTILIZER AND SOIL CONDITIONER - SHALL BE "PRO-P" POWER AND ORGANIC BASE MATERIALS COMPRISED OF DECOMPOSED ANIMAL AND VEGETABLE MATTER AND COMPOSTED TO SUPPORT BAKING CULTURES, CONTAINING NO POULTRY OR HUMAN WASTE. GUARANTEED ANALYSIS (5-3-1); NITROGEN 5%, PHOSPHATE 3%, POTASH 1%, 50% HUMUS AND 15% HUMIC ACIDS.
 - GENERAL WORK REQUIREMENTS
 - LANDSCAPE WORK SHALL COMMENCE AS SOON AS THOSE PORTIONS OF THE SITE ARE AVAILABLE. CONTRACTOR TO UTILIZE WORKMANLIKE STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH DAY'S WORK. ALL DEBRIS, MATERIALS, AND TOOLS SHALL BE PROPERLY STORED OR DISPOSED OF. ALL GRADED SURFACES SHALL BE SWEEP CLEAN AT THE END OF EACH DAY'S WORK.
 - WEEDING
 - BEFORE AND DURING PRELIMINARY GRADING AND FINISH GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF AT THE CONTRACTOR'S EXPENSE.
 - TOPSOILING
 - CONTRACTOR TO PROVIDE A 4" THICK TOPSOIL LAYER IN ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO PRODUCE A 4" UNSETTLED THICKNESS. TOPSOIL PRESENT AT THE SITE IF ANY, MAY BE USED TO SUPPLEMENT TOTAL AMOUNT REQUIRED. CONTRACTOR TO FURNISH AN ANALYSIS OF ON-SITE TOPSOIL UTILIZED IN ALL PLANTING AREAS. ADJUST pH AND NUTRIENT LEVELS AS REQUIRED TO ENSURE AN ACCEPTABLE GROWING MEDIUM.
 - SOIL CONDITIONING
 - ALL AREAS TO BE PLANTED TO A DEPTH OF 6". ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF AT THE CONTRACTOR'S EXPENSE. SPREAD EVENLY IN ALL PLANTING AREAS AND TILL (2 DIRECTIONS) INTO TOP 4" WITH THE FOLLOWING PER 1,000 SQ. FT.:
 - 20 POUNDS COMPOST
 - 100 POUNDS AGRICULTURAL GYPSUM
 - 20 POUNDS NITROFORM (COURSE) 38-0-0 BLUE CHIP
 - SOIL MODIFICATION
 - MODIFY ALL ORGANIC MATTER INTO THE TOP 6" TO 12" IN. OF MOST PLANTING SOILS TO IMPROVE THE SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS. USE COMPOSTED BARK RECYCLED WOOD WASTE OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A pH HIGHER THAN 7.5.
 - MUDDY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR GYPSUM. COARSE SAND SHOULD BE USED IF FINISH SOILS CONTAIN MORE THAN 10% SAND. IMPROVE DRAINAGE IN HEAVY SOILS BY PLANTING ON RAISED MOUNDS OR BEDS AND INCLUDING SUBSURFACE DRAINAGE LINES.
 - PLANTING EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.
 - PLANTING
 - POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE EXCAVATING.
 - PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH 1" PART SHALL BE FILLED WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:
 - 1 PART PEAT MOSS BY VOLUME
 - 1 PART COMPOST BY VOLUME
 - 3 PARTS TOPSOIL BY VOLUME
 - 21 GRAM AGRICULTURAL PLANTING TABLETS AS FOLLOWS:
 - 3 TABLETS PER 5 GAL PLANT
 - 5 TABLETS PER 5 GAL PLANT
 - 4 TABLETS PER 15 GAL PLANT
 - LARGER PLANTS (2) TWO TABLETS PER 1/2" DIAM. OF TRUNK CALIPER
 - PREPARED SOIL SHALL BE TAMPED FIRMLY AT BOTTOM OF PIT. FILL PREPARED SOIL AROUND BALL OF PLANT 1/2 WAY, AND INSERT PLANT TABLETS. COMPLETE BACK FILL AND WATER THOROUGHLY.
 - ALL PLANTS SHALL BE SET SO THAT, THEY BEAR THE SAME RELATION TO THE REQUIRED GRADE AS THEY BORE TO THE NATURAL GRADE BEFORE BEING TRANSPLANTED.
 - PREPARE BASED EARTH BASIN AS WIDE AS PLANTING HOLE OF EACH TREE.
 - WATER IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACK FILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED.
 - PRUNE ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS TO A MIN. OF 7' BRANCHING HEIGHT.
 - GROUND COVER
 - ALL GROUND COVER AREAS SHALL RECEIVE A 1/4" LAYER OF HUMUS BAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING GROUND COVER.
 - SPACING AND VARIETY OF GROUND COVER SHALL BE AS SHOWN ON DRAWINGS.
 - IMMEDIATELY AFTER PLANTING GROUND COVER, CONTRACTOR SHALL THOROUGHLY WATER GROUND COVER.
 - ALL GROUND COVER AREAS SHALL BE TREATED WITH A PRE-EMERGENT BEFORE FINAL LANDSCAPE INSPECTION. GROUND COVER AREAS SHALL BE WEEDED PRIOR TO APPLYING PRE-EMERGENT. PRE-EMERGENT TO BE APPLIED AS PER MANUFACTURER'S RECOMMENDATION.
 - FINISH GRADING
 - ALL AREAS WILL BE RECEIVED BY THE CONTRACTOR AT SUBSTANTIALLY PLUS/MINUS 1 FOOT OF FINISH GRADE.
 - ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE, UNLESS OTHERWISE DIRECTED BY LANDSCAPE ARCHITECT. SOIL GRADES ADJACENT TO THE BUILDING SHALL BE LIFE LANE.
 - ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER.
 - GUARANTEE
 - CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM ACCEPTANCE OF JOB. OWNER TO SECURE A MAINTENANCE BOND FROM THE CONTRACTOR FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE COMMENCEMENT OF THE GUARANTEE PERIOD AND PASSES A FINAL INSPECTION BY THE OWNER OR OWNER'S REPRESENTATIVE.
 - CLEANUP
 - UPON THE COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. ALL GRADED AREAS SHALL BE BROOM CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
 - MAINTAIN TREES, SHRUBS AND OTHER PLANTS BY PRUNING, CULTIVATING AND WEEDING AS REQUIRED FOR HEALTHY GROWTH. RESTORE PLANTING SAUCERS, TIGHTEN AND REPAIR STAKE AND GUY SUPPORTS AND RESET TREES AND SHRUBS TO PROPER GRADES OR VERTICAL POSITION AS REQUIRED. RESTORE MULCH OR REPLACE DAMAGED WRAPPINGS. SPRAY WITH HERBICIDE AS REQUIRED TO KEEP TREES AND SHRUBS FREE OF INSECTS AND DISEASE.
 - MAINTAIN LAWNS BY WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING, AND OTHER OPERATIONS SUCH AS ROLLING, REGRADING, AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.
 - MAINTENANCE (ALTERNATE BID) COST PER MONTH AFTER INITIAL 90-DAY MAINTENANCE PERIOD.

LANDSCAPE SCHEDULE

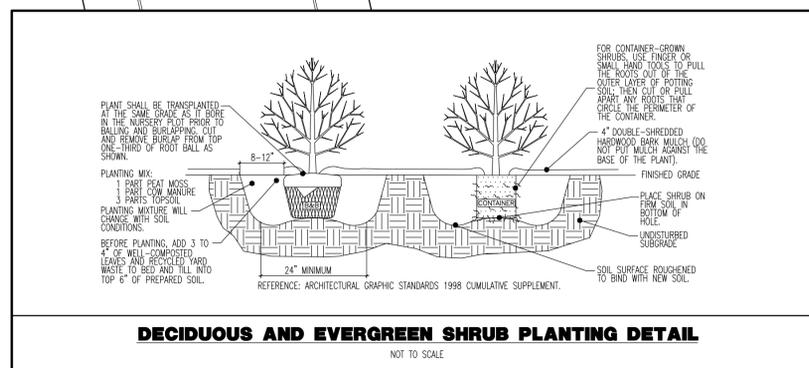
KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
ORNAMENTAL TREE(S)					
ACP	8	ACER CAMPESTRIS	HEDGE MAPLE	8-10'	B+B
EVERGREEN SHRUB(S)					
BMF	26	BUXUS MICROPHYLLA 'FAULKNER'	FAULKNER BOXWOOD	18-24"	5 GAL.
ICSP	95	ILEX CRENATA 'SKY POINTER'	SKY POINTER HOLLY	24-30"	5 GAL.
JCHC	24	JUNIPERUS CHINENSIS 'HETZ COLUMNARIS'	COLUMNAR HETZ JUNIPER	6"	B+B
TOS	33	THAUUS OCCIDENTALIS 'SARAGO'	EMERALD GREEN ARBORVITAE	6"	B+B
DECIDUOUS SHRUB(S)					
CCSM	32	CARYOPTERIS X CLAUDONENSIS 'BEYOND MIDNIGHT'	BEYOND MIDNIGHT BLESSEARD	3'	#3 CAN
HOM	8	HYDRANGEA QUERCIFOLIA 'MUNCHKIN'	MUNCHKIN OAKLEAF HYDRANGEA	24-30"	#3 CAN
PFHF	14	POTENTILLA FRUTICOSA 'XUPINPA'	HAPPY FACE PINK PARADISE CINQUEFOIL	24-30"	#3 CAN
PERENNIAL(S)					
HSD	38	HEMEROCALLIS 'STELLA D'ORO'	STELLA D'ORO DAYLILY	2 GAL.	CONTAINER
ORNAMENTAL GRASSES(S)					
CAKF	66	CALAMAGROSTIS ARUNDINACEA 'YARL FOERSTER'	FEATHER REED GRASS	2 GAL.	CONTAINER

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

LUMINAIRE SCHEDULE

SYMBOL	QTY	LABEL	ARRANGEMENT	MOUNTING HEIGHT	LLF	MANUFACTURER	DESCRIPTION	FILENAME
☼	6	A1	SINGLE	14 FT	0.9	PHILIPS-HAECO LIGHTING	HAGERSTOWN LEDGEGE POST TOP, 80 LEDLUXEON R BOARD, TYPE V OPTICS, VERTICAL RIBB	TX0300-SHNA3-R-12LES

NOTE: REFER TO CONSTRUCTION DETAILS SHEET NO. 11 FOR DECORATIVE POLE (A1) SPECIFICATIONS.



Plotted: 08/04/21 3:46 PM. By: gbonick
File: P:\CEC PROJECTS\0404 Eden Property Co\09-041 South Avenue, Plainfield\Draw\Site Plans\040409041SL.dwg. ----- 07 LANDSCAPING STREETSCAPE & LIGHTING PLAN

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

1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, 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 STATE STANDARDS.
3. PERMANENT VEGETATION SHALL BE SEEDING OR SOODED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING. MULCH WILL BE USED FOR PROTECTION UNTIL SEEDING IS ESTABLISHED.
4. 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 OF PRELIMINARY GRADING.
5. IMMEDIATELY FOLLOWING FINAL 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 STATE STANDARDS.
6. ANY STEEP SLOPES RECEIVING PRELIMINARY INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY AS THE INSTALLATION PROCEEDS (I.E. SLOPES GREATER THAN 3:1).
7. TRAFFIC CONTROL STANDARDS REQUIRE THE INSTALLATION OF A 50'X30'X1' PAD OF 1 1/2" OR 2" STONE, AT ALL CONSTRUCTION DRIVEWAYS, IMMEDIATELY AFTER INITIAL SITE DISTURBANCE.
8. THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING 48 HOURS IN ADVANCE OF ANY LAND DISTURBING ACTIVITY.
9. AT THE TIME WHEN THE SITE PREPARATION FOR PERMANENT VEGETATION STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE SUITABLE ENVIRONMENT TO SUPPORT APPROPRIATE 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 OF TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OR PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
10. IN THAT NJSA 4:24-39 SET FORTH, REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE THE PROVISIONS OF THE CERTIFIED PLAN FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN COMPLETED WITH THE PROVISIONS OF THE CERTIFIED PLAN FOR SOIL EROSION AND SEDIMENT CONTROL. THE CERTIFICATE OF OCCUPANCY WILL BE ISSUED BY THE MUNICIPALITY.
11. THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED OF ANY CHANGES IN OWNERSHIP.
12. CONSENT UNDER PROTECTION MUST BE OBTAINED 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 STATE SOIL EROSION AND SEDIMENT CONTROL STANDARDS.
14. MULCHING IN THE STANDARDS IS REQUIRED FOR OBTAINING A CONDITIONAL REPORT OF COMPLIANCE. CONDITIONS ARE ONLY ISSUED WHEN THE SEASON PROHIBITS SEEDING. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL ADJACENT ROADS OPEN DURING THE USE OF THE CONSTRUCTION PRACTICES. THE CONTRACTOR 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.
15. HYDROSEEDING IS A TWO-STEP PROCESS. THE FIRST STEP INCLUDES SEED, FERTILIZER, LIME, ETC., ALONG WITH MINIMAL AMOUNTS OF MULCH TO PROMOTE CONVEYANCE, GOOD SEED TO SOIL CONTACT, AND GIVE A VISUAL INDICATION OF COVERAGE. UPON COMPLETION OF THE SEEDING OPERATION, HYDRO-MULCH SHOULD BE APPLIED AT A RATE OF 1200 LBS. PER ACRE IN THE SECOND STEP. THE USE OF HYDRO-MULCH, AS OPPOSED TO STRAW, IS LIMITED TO OPTIMUM SEEDING DATES AS LISTED IN THE STANDARDS.

SOMERSET - UNION SOIL CONSERVATION DISTRICT
SOMERSET COUNTY PLANNING DEPARTMENT
308 MILLTOWN ROAD
BRIDGEWATER, NJ 08807

**STANDARD FOR TEMPORARY VEGETATIVE COVER
FOR SOIL STABILIZATION**

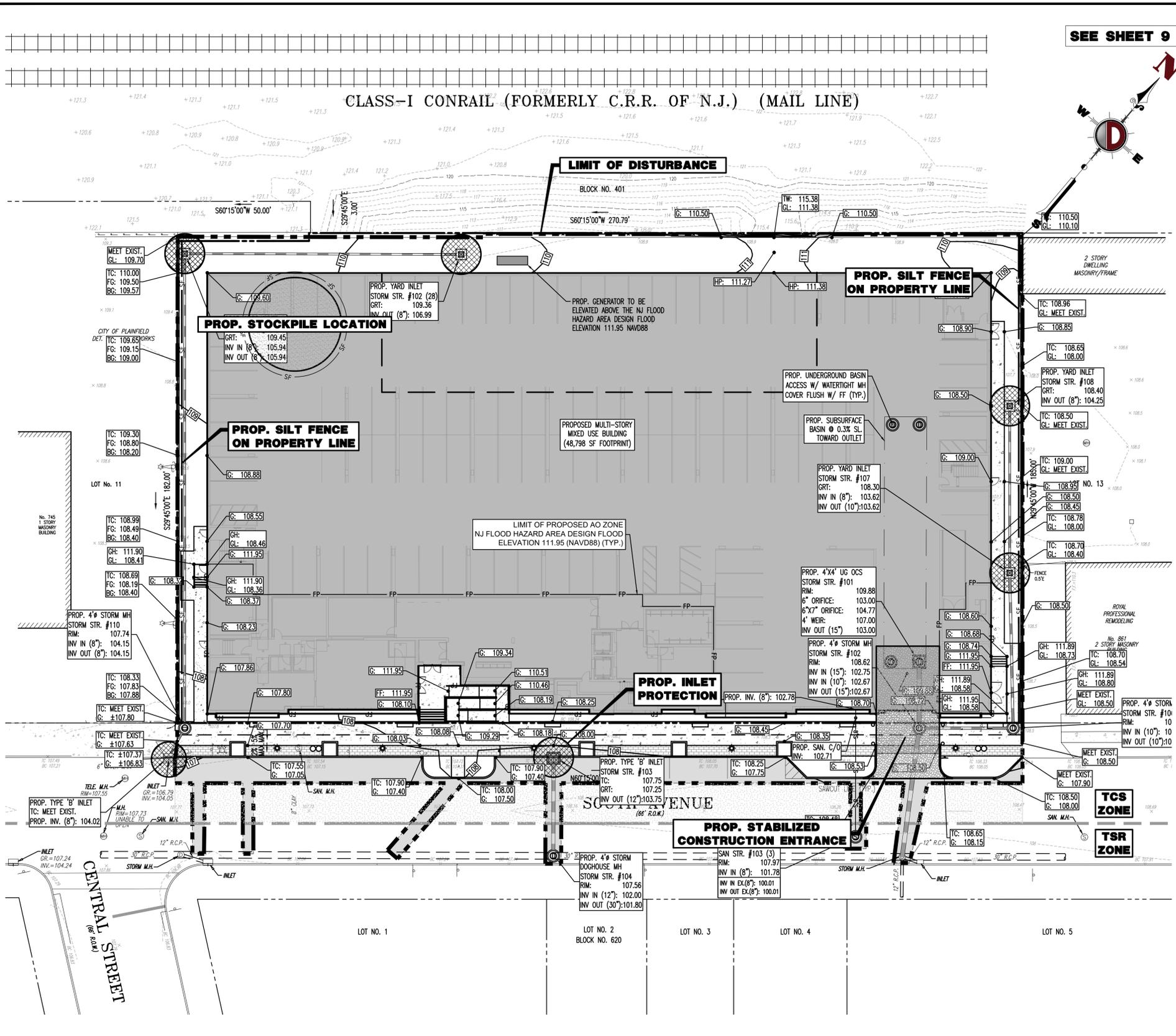
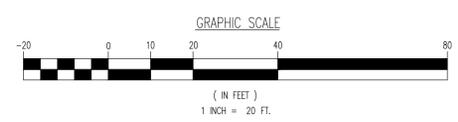
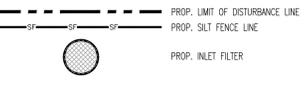
1. SITE PREPARATION
 - A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING.
 - B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.
 - 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 LIME AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION. SOIL SAMPLE MATERIALS AVAILABLE FROM THE LOCAL RUTGERS CO-OPERATIVE EXTENSION OFFICES.
 - B. 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.
 - C. FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES, THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR, CONTINUE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.
 - D. INSPECT SEEDBED BEFORE SEEDING. IF TYPICAL HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RESEDED IN ACCORDANCE WITH THE ABOVE.
 - E. 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.
3. SEEDING
 - A. TEMPORARY VEGETATIVE STABILIZATION GRASSES, SEEDING RATES, DATES AND DEPTHS
 1. COOL SEASON GRASSES:
 - (1) PERENNIAL RHYZOMES - 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 GRASSES - 90 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 - 90 LBS / ACRE; PLANT BETWEEN AUGUST 15 AND OCTOBER 1; AT A DEPTH OF 1.0 INCHES.
 - (4) ANNUAL RHYZOMES - 100 LBS / ACRE; PLANT BETWEEN MARCH 1 AND JUNE 15 BETWEEN AUGUST 15 AND SEPTEMBER 15; AT A DEPTH OF 0.5 INCHES.
 - (5) WINTER CEREAL RYE - 112 LBS / ACRE; PLANT BETWEEN AUGUST 15 AND NOVEMBER 15; AT A DEPTH OF 1.0 INCHES.
 - B. 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 (SPEAR 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, EXCUSE CENTRALIZED SEEDER, DROP SEEDER, SOIL OR CULTIVATOR SEEDER, EXCEPT FOR DRILLED, HYDROSEEDER 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 RAKES AND FERTILIZER APPLICATORS ARE NOT TO BE USED WITH HYDROSEEDING. ALSO SEE SECTION ON MULCHING. HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE HEAVILY INCORPORATED AND NOT INCORPORATED INTO THE SOIL. HYDROSEEDING TO SOIL CONTACT, DESIRED REDUCED SEED GERMINATION AND GROWTH. HYDROSEEDING MAY BE USED FOR AREAS TOO STEEP FOR CONVENTIONAL EQUIPMENT TO TRAVERSE OR FOR AREAS WITH ROCKS, STUMPS, ETC.
 - D. AFTER SEEDING, FIRING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING ESTABLISHMENT. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR, SEED-TO-SOIL CONTACT WILL BE MAXIMIZED AND WATER CONSERVATION WILL BE MAXIMIZED.
4. MULCHING
 - A. MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE EARLIER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DETERMINED WITH THIS MULCHING REQUIREMENT.
 - B. STRAW OR HAY UNMULCHED SMALL GRASS STRAW, MAY FREE OF SEEDS, APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (90 TO 90 POUNDS PER 1,000 SQUARE FEET) EXCEPT THAT WHERE A CRUMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFIER OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. A LIQUID MULCH-BINDER MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEEDS.
 - C. 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 WITH EACH SECTION.
 - D. 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. CRUMPER MULCH ANCHORING COULTER TOOL
 3. CRUMPER MULCH ANCHORING COULTER TOOL
 4. LIQUID MULCH-BINDERS
 - E. 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. 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.
 - F. PELLETED 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 SEEDBED AREA AND WATERED, FORM A MULCH MAT. PELLETED 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 MULCH HAS BEEN FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWNS OR RECREATION AREAS. SEEDING AREAS WHERE WEED-SEED FULFILLMENT IS DESIRED OR ON SITES WHERE STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIRABLE.
 - G. APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETED MULCH ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE.

STANDARD FOR STABILIZATION WITH MULCH ONLY

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 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-GRAN 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, IF DOWN OTHER SUITABLE MATERIALS MAY BE USED IF APPROVED BY THE SOIL CONSERVATION DISTRICT. THE APPROVAL 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 HYDROSEEDER.
 - D. MULCH NETTING SUCH AS PAPER JUTE, EXCELSOR, 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 OR PILE-UP.
 - 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. PEG AND TWINE
 - B. MULCH NETTINGS
 - C. CRUMPER MULCH ANCHORING COULTER TOOL
 - D. LIQUID MULCH-BINDERS

LIMIT OF DISTURBANCE = 67,298 SF. (1.54 Ac.)

EROSION CONTROL LEGEND



NO.	DATE	REVISION	BY
1	02/02/20	REVISED PER CLIENT & PRELIM COMMENTS	JTG
2	02/02/20	REVISED PER CLIENT COMMENTS	JTG
3	02/02/20	REVISED PER CLIENT COMMENTS	JTG
4	02/02/20	REVISED PER CLIENT COMMENTS	JTG
5	02/02/20	REVISED PER CLIENT COMMENTS	JTG
6	02/02/20	REVISED PER CLIENT COMMENTS	JTG
7	02/02/20	REVISED PER CLIENT COMMENTS	JTG
8	02/02/20	REVISED PER CLIENT COMMENTS	JTG
9	02/02/20	REVISED PER CLIENT & PRELIM COMMENTS	JTG

FINAL FOR SEWER DESIGN

CONSTRUCTION CHECK _____ DATE _____

PROJECT: **803 S URBAN RENEWAL, LLC**
 PROPOSED MIXED USE BUILDING
 803 SOUTH AVENUE, LOT 12
 CITY OF PLAINFIELD, UNION COUNTY, NEW JERSEY

811 PROTECT YOURSELF

ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DIG INTO THE EARTH'S SURFACE. CALL 811 IN ANY STATE.

FOR STATE-SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

DYNAMIC ENGINEERING

LAND DEVELOPMENT CONSULTING • PERMITTING
 GEOTECHNICAL • ENVIRONMENTAL
 TRAFFIC • SURVEY • PLANNING & ZONING

245 Main Street, Suite 110
 Chester, NJ 07930
 1: 908.879.9229 | F: 908.879.0222

Additional offices conveniently located at:

Little Rock, Arkansas • 1.782.974.0119
 Dallas, Texas • 1.782.974.0119
 Houston, Texas • 1.782.974.0119
 Atlanta, Georgia • 1.782.974.0119
 Denver, Colorado • 1.782.974.0119

www.dynamiccec.com

BRETT W. SKAPINETZ

PROFESSIONAL ENGINEER
 NEW JERSEY LICENSE NO. 41985

JOSEPH C. SPARONE

PROFESSIONAL ENGINEER
 NEW JERSEY LICENSE NO. 47204

TITLE: **SOIL EROSION & SEDIMENT CONTROL PLAN**

SCALE: (H) 1" = 20' (V) 1" = 10'
 DATE: 02/18/2020
 PROJECT NO: 0404-99-041
 SHEET NO: **8** OF 14
 DRAWN BY: JTG
 DESIGNED BY: RJC
 CHECKED BY: EWS
 REV. #:

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 ADDRESSES - ON MINERAL SOILS (NO EFFECTIVE ON MOCK SOILS). KEEP TRAFFIC OFF THESE AREAS.

ANONIC ASPHALT	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS/ACRE
	7:1	COARSE SPRAY	1,200
EMULSION			
LATEX EMULSION	12.5:1	FINE SPRAY	235
RESIN IN WATER	4:1	FINE SPRAY	300

TILLAGE TO ROUGHEN SURFACE AND BRING CLOSURE 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, BURAP 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 FLOW THROUGH COMMONLY USED SPRAYERS 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.

STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

STANDARD FOR PERMANENT STABILIZATION WITH SOD

METHODS AND MATERIALS

- CULTIVATED SOD IS PREFERRED OVER NATIVE OR PASTURE SOD. SPECIFY "CERTIFIED SOD," OR OTHER HIGH QUALITY CULTIVATED SOD.
- SOD SHOULD BE FREE OF WEEDS AND UNDESIRABLE COARSE WEEDY GRASSES.
- SOD SHOULD BE OF UNIFORM THICKNESS, APPROXIMATELY 5/8 INCH, PLUS OR MINUS 1/4 INCH, AT TIME OF CUTTING. (EXCLUDES TOP GROWTH)
- SOD SHOULD BE VIGOROUS AND DENSE AND BE ABLE TO RETAIN ITS OWN SHAPE AND WEIGHT WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP FROM THE UPPER 10 PERCENT OF THE STRIP. BROKEN PADS OR TORN AND UNEVEN ENDS WILL NOT BE ACCEPTABLE.
- FOR DRAUGHT SITES, A SOD OF KENTUCKY 31 TALL FESCUE AND BLUEGRASS IS PREFERRED OVER A STRAIGHT BLUEGRASS SOD. ONLY MOST, FRESH, UNHEATED SOD SHOULD BE USED. SOD SHOULD BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS.

II. SITE PREPARATION

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR LIMING, FERTILIZING, AND SOIL PREPARATION. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING, PAGE 4.11.

B. INSTALL NEEDED EROSION CONTROL PRACTICES AND FACILITIES, SUCH AS INTERCEPTOR DITCHES, DIKES AND TERRACES, EROSION STOPS, AND DE-SILTING BASINS. SEE STANDARDS 4.2 THROUGH 4.16.

III. SOIL PREPARATION

A. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS SUCH AS THOSE OFFERED BY RUTGERS UNIVERSITY SOIL TESTING LABORATORY. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL COOPERATIVE EXTENSION SERVICE OFFICE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TANNING IS CRITICAL, FERTILIZER MAY 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 AND INCORPORATED INTO THE SURFACE 4" IN ADDITION, 300 POUNDS 38-0-0 PER ACRE OR EQUIVALENT OF SLOW RELEASE NITROGEN MAY BE USED IN LIEU OF TOP-DRESSING. APPLY LIMESTONE AS FOLLOWS:

SOIL TEXTURE	TONS/ACRE	LBS/1000 SQ. FT
CLAY, CLAY LOAM, AND HIGH ORGANIC SOIL	3	135
SANDY LOAM, LOAM, SILT LOAM	2	90
LOAMY SAND, SAND	1	45

B. PULVERIZED DOLOMITE LIMESTONE IS PREFERRED FOR MOST SODS SOUTH OF THE NEW BRUNSWICK-TRENTON LINE.

C. WORK LINE AND FERTILIZER INTO THE SOIL 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 REASONABLY UNIFORM, FINE SEEDBED IS PREPARED.

D. REMOVE FROM THE SURFACE ALL OBJECTS THAT WOULD PREVENT GOOD SOD TO SOIL CONTACT AND REMOVE ALL OTHER DEBRIS, SUCH AS WIRE CABLE, TREE ROOTS, PIECES OF CONCRETE, GLOSS LUMPS, OR OTHER UNSUITABLE MATERIAL.

E. INSPECT SITE JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RE-TILLED AND FIRMED AS ABOVE.

IV. SOD PLACEMENT

A. SOD STRIPS SHOULD BE LAID ON THE CONTOUR, NEVER UP AND DOWN THE SLOPE, STARTING AT THE BOTTOM OF THE SLOPE AND WORKING UP. ON STEEP SLOPES, THE USE OF LADDERS WILL FACILITATE THE WORK AND PREVENT DAMAGE TO THE SOD. DURING PERIODS OF HIGH TEMPERATURE, LIGHTLY IRRIGATE THE SOD IMMEDIATELY PRIOR TO LAYING THE SOD.

B. PLACE SOD STRIPS WITH SNAGS, EVEN JOINTS THAT ARE STAGGERED, OPEN SPACES INVITE EROSION.

C. ROLL OR TAMP SOD IMMEDIATELY FOLLOWING PLACEMENT TO INSURE SOLID CONTACT OF ROOT MAT AND SOIL SURFACE. DO NOT OVERLAP SOD. ALL JOINTS SHOULD BE BUTTED TOGETHUR IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE DRYING OF THE ROOTS.

D. ON SLOPES GREATER THAN 3 TO 1, SECURE SOD TO SURFACE SOIL WITH WOOD PEGS, WIRE STAPLES, OR SPLIT SHINGLES (8 TO 10 INCHES LONG BY 3/4 INCH WIDE).

E. SURFACE WATER CANNOT ALWAYS BE DIVERTED FROM FLOWING OVER THE FACE OF THE SLOPE, BUT A CAPPING STRIP OF HEAVY JUTE OR PLASTIC NETTING, PROPERLY SECURED, ALONG THE CROWN OF THE SLOPE AND EDGES WILL PROVIDE EXTRA PROTECTION AGAINST LIFTING AND UNDERCUTTING OF SOD. THE SAME TECHNIQUE CAN BE USED TO ANCHOR SOD IN WATER CARRYING CHANNELS AND OTHER CRITICAL AREAS. WIRE STAPLES MUST BE USED TO ANCHOR NETTING IN CHANNEL WORK.

F. IMMEDIATELY FOLLOWING INSTALLATION, SOD SHOULD BE WATERED UNTIL MOISTURE PENETRATES THE SOIL LAYER BENEATH SOD TO A DEPTH OF 4 INCHES. MAINTAIN OPTIMUM MOISTURE FOR AT LEAST TWO WEEKS.

V. TOP-DRESSING

IF SLOW RELEASE NITROGEN IS USED IN ADDITION TO SUGGESTED FERTILIZER, THEN A FOLLOW-UP OF TOP DRESSING IS NOT MANDATORY, EXCEPT WHERE GROSS NITROGEN DEFICIENCY EXISTS IN THE SOIL TO THE EXTENT THAT TURF FAILURE MAY DEVELOP.

TOP-DRESS WITH 10-0-10 OR EQUIVALENT AT 400 POUNDS PER ACRE OR 7 POUNDS PER 1,000 SQUARE FEET EVERY 3 TO 5 WEEKS UNTIL THE GROSS NITROGEN DEFICIENCY IN THE TURF IS AMELIORATED.

SEQUENCE OF CONSTRUCTION:

- INSTALL STONE ANTI-TRACKING PAD AND OTHER SOIL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING DOWNSLOPE PERIMETER AND SILT FENCING. (2 DAYS)
- CLEAR AND ROUGH GRADE FOR NEW BUILDING SITE AND OTHER STRUCTURES REQUIRING EXCAVATION. (2 WEEKS)
- EXCAVATE FOR BUILDING FOUNDATION AND INSTALL UNDERGROUND PIPING AND DRAINAGE STRUCTURES. (4 WEEKS)
- COMPLETE BUILDING CONSTRUCTION. (12-18 MONTHS)
- EXCAVATE AND INSTALL ON-SITE IMPROVEMENTS INCLUDING CURBS AND RETAINING WALLS. (1 MONTH)
- FINAL GRADING ON SITE. (1 WEEK)
- INSTALL PAVING, CONCRETE, AND FINAL VEGETATION INCLUDING SEEDING AND LANDSCAPING. (1 WEEK)
- REMOVE SOIL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING DOWNSLOPE PERIMETER AND SILT FENCING UPON COMPLETION. (1 DAY)

STANDARD FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION

I. 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. 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 HANDED 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 TOPSOILING.

D. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE-STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.

II. 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 COOPERATIVE EXTENSION OFFICES (HTTP://NAESS.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 LINE 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 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 PREPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID-PRODUCING SOILS FOR SPECIFIC REQUIREMENTS.

III. 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.

B. CONVENTIONAL SEEDING IS PERFORMED BY APPLYING SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER EXCEPT FOR DRILLED, HYDROSEEDER 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, FIRING 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 OCCURS, THERE IS A REDUCED SEED GERMINATION AND GROWTH.

IV. MULCHING

MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL PROTECT 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 1.5 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRUMPER 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 85% 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:

- PEG AND TWINE
- MULCH NETTINGS
- CRUMPER MULCH ANCHORING COULTER TOOL
- LIQUID MULCH-BINDERS

B. WHIPPED FIBER OR PAPER-FIBER MULCH - SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION WHITING 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 SEEDBED 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 LAWNS OR RENOVATION AREAS, SEEDING 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.

II. 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.

B. CONVENTIONAL SEEDING IS PERFORMED BY APPLYING SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER EXCEPT FOR DRILLED, HYDROSEEDER 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, FIRING 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 OCCURS, THERE IS A REDUCED SEED GERMINATION AND GROWTH.

IV. MULCHING

MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL PROTECT 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 1.5 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRUMPER 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 85% 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:

- PEG AND TWINE
- MULCH NETTINGS
- CRUMPER MULCH ANCHORING COULTER TOOL
- LIQUID MULCH-BINDERS

B. WHIPPED FIBER OR PAPER-FIBER MULCH - SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION WHITING 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 SEEDBED 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 LAWNS OR RENOVATION AREAS, SEEDING 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.

II. 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.

B. CONVENTIONAL SEEDING IS PERFORMED BY APPLYING SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER EXCEPT FOR DRILLED, HYDROSEEDER 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, FIRING 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 OCCURS, THERE IS A REDUCED SEED GERMINATION AND GROWTH.

IV. MULCHING

MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL PROTECT 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 1.5 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRUMPER 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 85% 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:

- PEG AND TWINE
- MULCH NETTINGS
- CRUMPER MULCH ANCHORING COULTER TOOL
- LIQUID MULCH-BINDERS

B. WHIPPED FIBER OR PAPER-FIBER MULCH - SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION WHITING 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 SEEDBED 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 LAWNS OR RENOVATION AREAS, SEEDING 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.

II. 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.

B. CONVENTIONAL SEEDING IS PERFORMED BY APPLYING SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER EXCEPT FOR DRILLED, HYDROSEEDER 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, FIRING 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 OCCURS, THERE IS A REDUCED SEED GERMINATION AND GROWTH.

IV. MULCHING

MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL PROTECT 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 1.5 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRUMPER 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 85% 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:

- PEG AND TWINE
- MULCH NETTINGS
- CRUMPER MULCH ANCHORING COULTER TOOL
- LIQUID MULCH-BINDERS

B. WHIPPED FIBER OR PAPER-FIBER MULCH - SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION WHITING 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 SEEDBED 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 LAWNS OR RENOVATION AREAS, SEEDING 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.

II. 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.

B. CONVENTIONAL SEEDING IS PERFORMED BY APPLYING SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER EXCEPT FOR DRILLED, HYDROSEEDER 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, FIRING 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 OCCURS, THERE IS A REDUCED SEED GERMINATION AND GROWTH.

IV. MULCHING

MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL PROTECT 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.

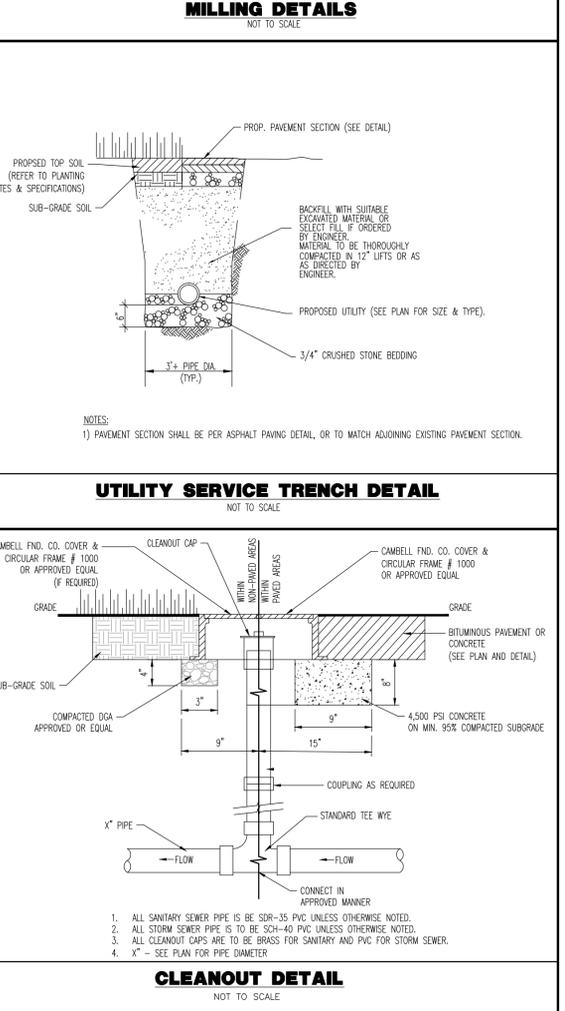
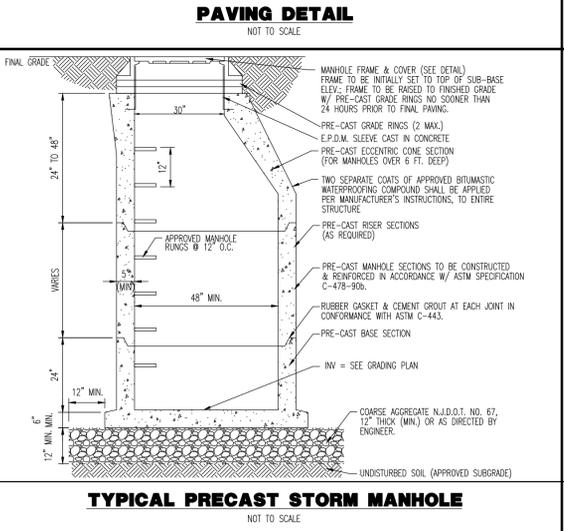
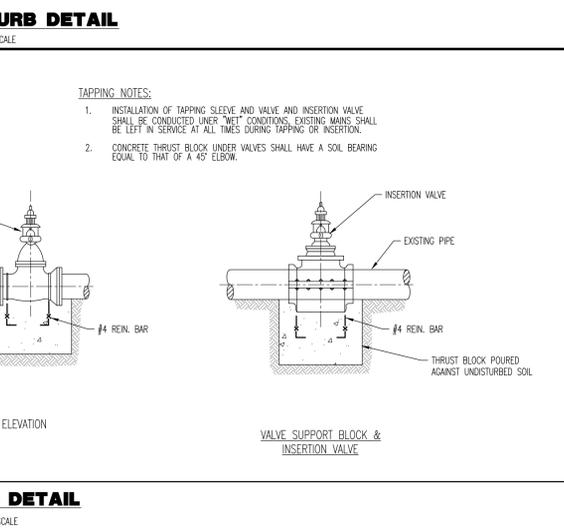
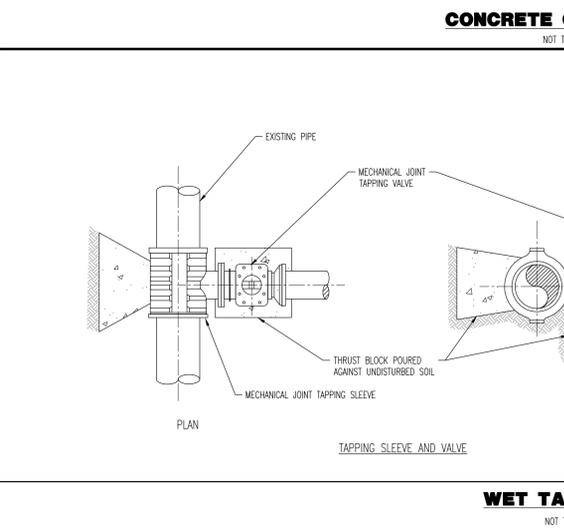
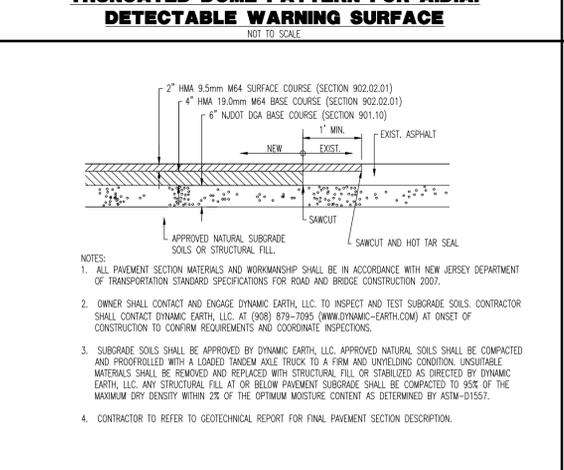
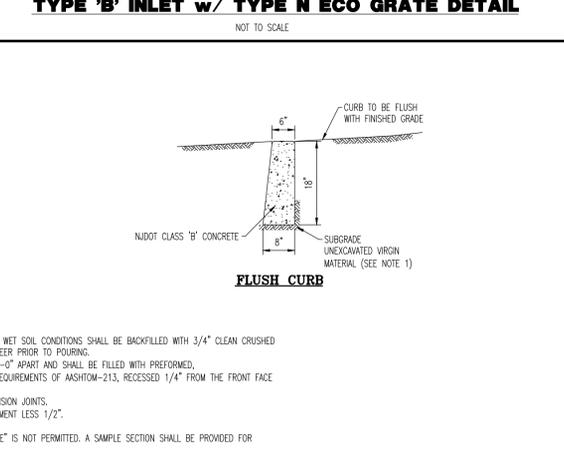
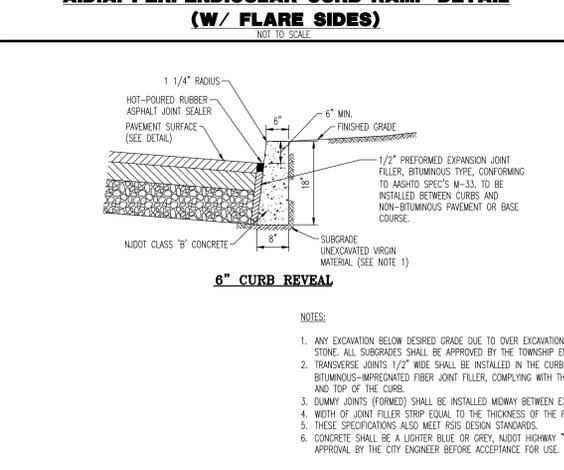
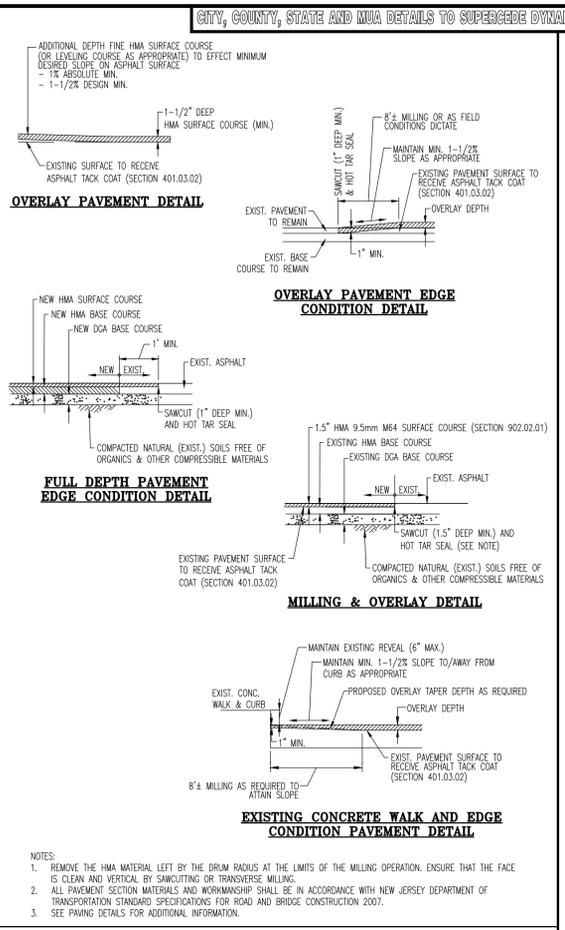
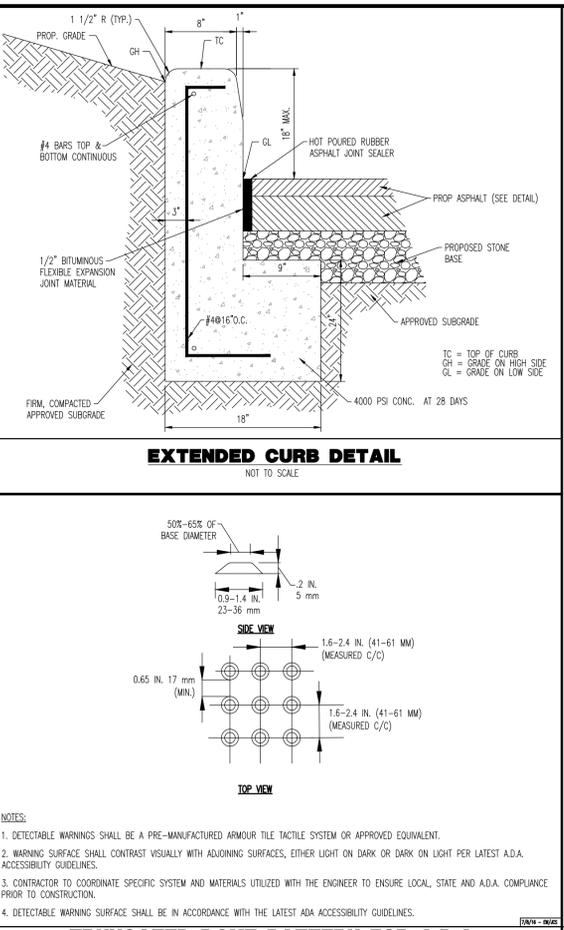
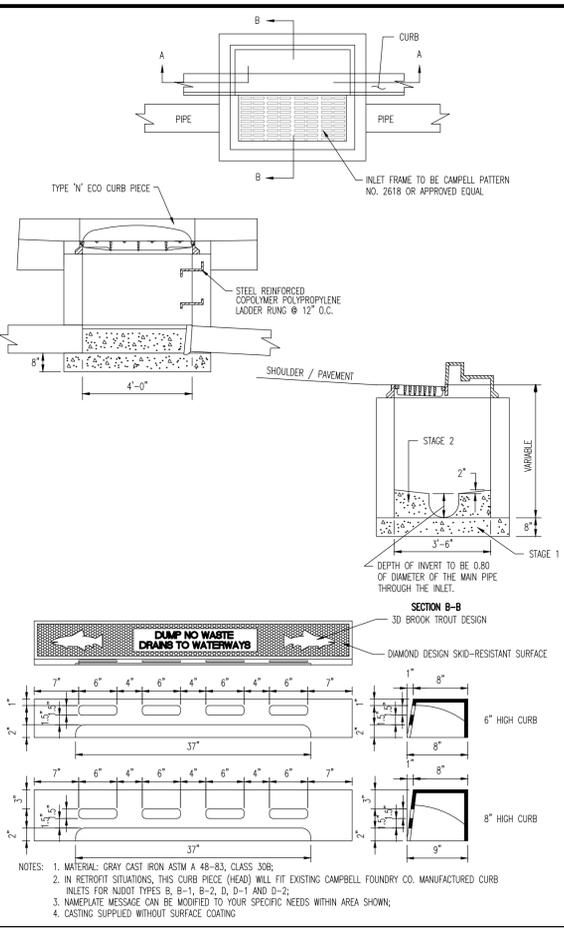
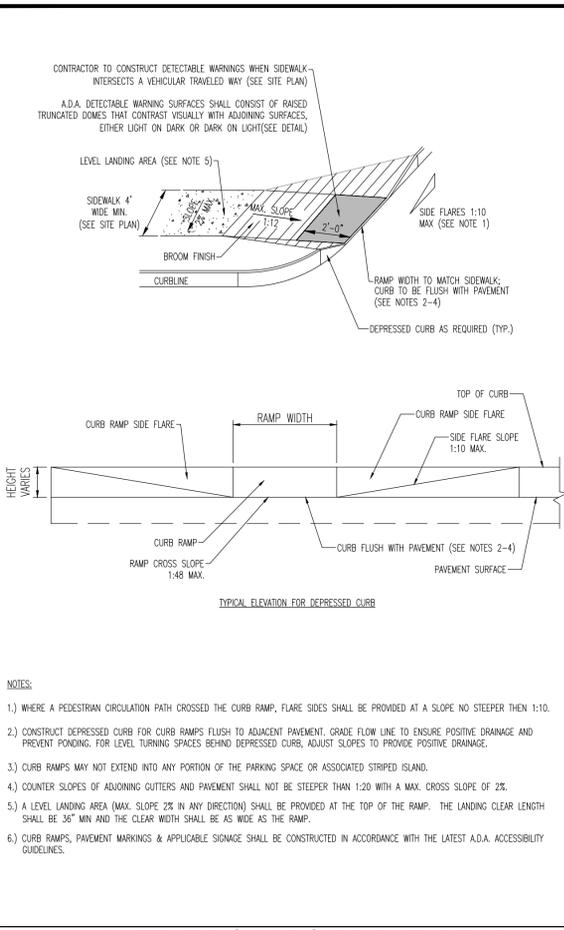
A. STRAW OR HAY, UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, APPLIED AT THE RATE OF 1.5 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRUMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH 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 85% 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:

- PEG AND TWINE
- MULCH NETTINGS
- CR

Plotted: 08/04/21 - 4:05 PM, By: gborlock
 File: P:\PROJECTS\0404 Eden Property Co\09-041 South Avenue, Plainfield\Draw\Site Plans\040409041SD9.dwg, --- --> 10 CONSTRUCTION DETAILS



CITY, COUNTY, STATE AND MUA DETAILS TO SUPERSEDE DYNAMIC ENGINEERING DETAILS WHERE APPLICABLE

NO.	DATE	REVISIONS	BY
1	03/26/20	REVISED PER AMENDED RFP	RRR
2	08/03/20	REVISED PER RESOLUTION COMPLIANCE	JDC
3	09/17/20	REVISED PER NUDOT COMMENTS	RRR
4	09/17/20	REVISED PER CITY & NJ TRANSIT COMMENTS	RRR
5	10/15/20	REVISED PER POLICE DEPARTMENT COMMENTS	RRR
6	11/12/21	REVISED PER NUDOT TWA COMMENTS	RRR
7	07/27/21	REVISED PER CLIENT COMMENTS	RRR
8	04/27/21	REVISED PER CLIENT COMMENTS	RRR
9	08/04/21	REVISED PER CLIENT & PRE&E COMMENTS	JDC/RRR

COMMENTS:

CONSTRUCTION CHECK _____ DATE _____

CONSTRUCTION CHECK _____ DATE _____

PROJECT: 803 S URBAN RENEWAL, LLC
PROPOSED MIXED USE BUILDING
BLOCK #45, LOT 12
803 SOUTH AVENUE
CITY OF PLAINFIELD, UNION COUNTY, NEW JERSEY

DYNAMIC ENGINEERING
LAND DEVELOPMENT CONSULTING • PERMITTING
GEO TECHNICAL • ENVIRONMENTAL
TRAFFIC • SURVEY • PLANNING & ZONING

245 Main Street, Suite 110
Chester, NJ 07930
T: 908.879.9229 | F: 908.879.0222
Additional offices conveniently located at:

www.dynamiccec.com

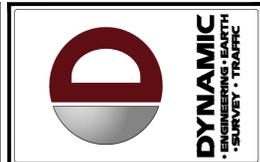
BRETT W. SKAPINETZ
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE NO. 41985

JOSEPH C. SPARONE
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE NO. 47204

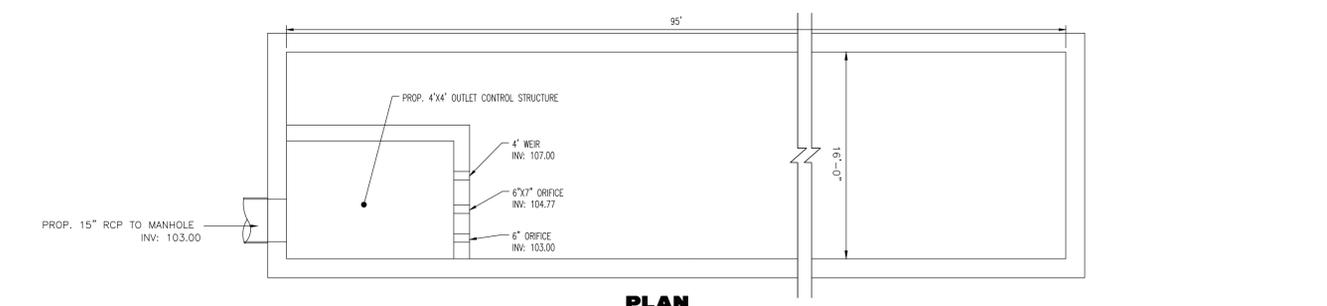
CONSTRUCTION DETAILS

SCALE: (H) AS SHOWN (V) SHOWN 02/18/2020
DATE: 02/18/2020
DRAWN BY: GH
DESIGNED BY: RJC
CHECKED BY: EWS
PROJECT No: 0404-99-041

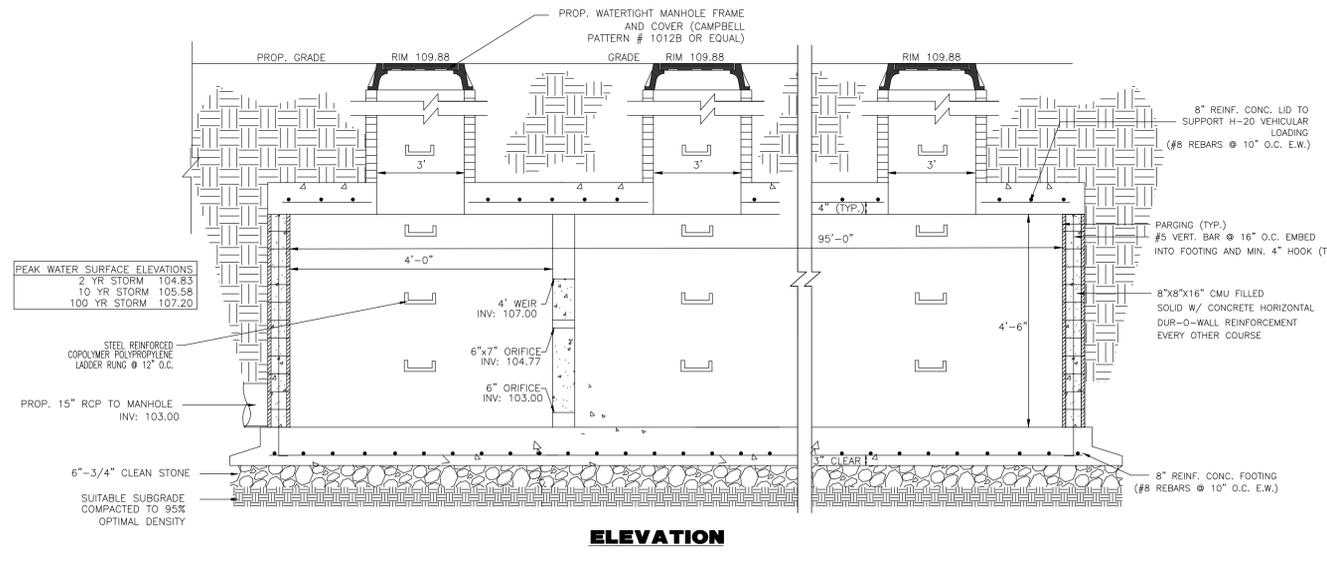
SHEET No: **10** OF 14
Rev. #: 9



NO.	DATE	REVISION	BY
1	03/26/20	REVISED PER AMENDED RFP	RRR
2	06/11/20	REVISED PER NADP COMMENTS	JDC
3	08/03/20	REVISED PER RESOLUTION COMPLIANCE	RRR
4	09/17/20	REVISED PER CITY & NJ TRANSIT COMMENTS	RRR
5	10/15/20	REVISED PER CITY POLICE DEPARTMENT COMMENTS	ADY
6	11/11/20	REVISED PER NADP COMMENTS	RRR
7	07/12/21	REVISED PER NADP TWA COMMENTS	RRR
8	04/27/21	REVISED PER CLIENT COMMENTS	RRR
9	08/04/21	REVISED PER CLIENT & P&E&G COMMENTS	JDC/RRR

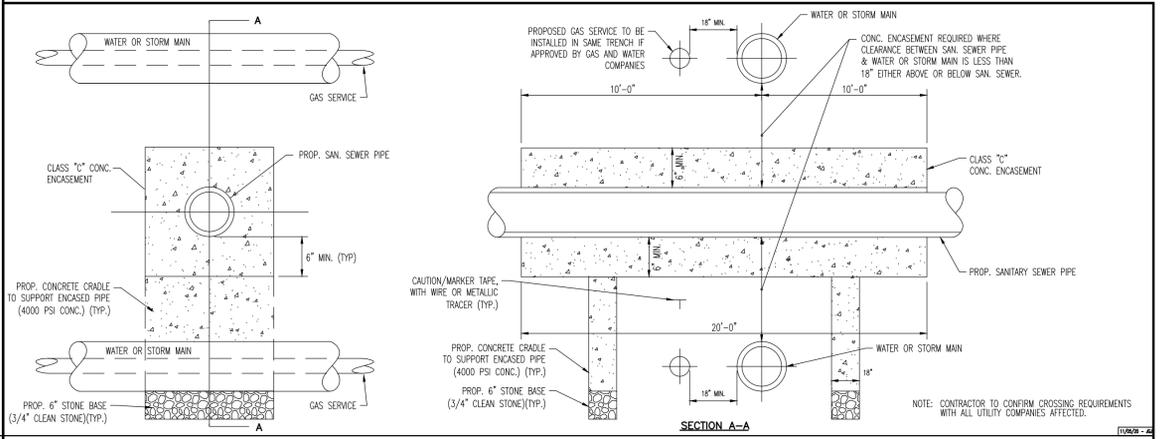


PLAN



ELEVATION

OUTLET STRUCTURE AND UNDERGROUND BASIN DETAIL
NOT TO SCALE



UTILITY CROSSING DETAIL
NOT TO SCALE

GENERAL NOTES

- SOILS NOTES**
- FOOTING DESIGN BASED ON ASSUMED MAXIMUM ALLOWABLE SOILS BEARING CAPACITY OF 2,000 PSF. CONTRACTOR RESPONSIBLE TO VERIFY ADEQUACY OF ASSUMED BEARING CAPACITY PRIOR TO CONSTRUCTION. ADEQUACY OF SUB-STRAUM BEARING CAPACITY TO BE VERIFIED BY GEOTECHNICAL ENGINEER THROUGH TEST PIT OR BORING PRIOR TO CONSTRUCTION. ENGINEER TO BE NOTIFIED OF INCONSISTENCIES.
 - SUB-GRADE TO BE FREE OF ORGANIC AND BE SUITABLE, COMPACTED MATERIAL.
- CONCRETE NOTES**
- CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS WITH A MINIMUM CEMENT CONTENT OF 600 POUNDS PER CUBIC YARD FOR ALL FOOTINGS.
 - ALL CONCRETE SHALL HAVE A SLUMP OF NO GREATER THAN 4" TO WITHIN A TOLERANCE OF 1".
 - ALL EXPOSED CONCRETE SHALL BE AIR-ENTRAINED, (6% WITHIN 1% TOLERANCE), CONFORMING TO ASTM C260.
 - REINFORCING STEEL BARS SHALL BE A MINIMUM ASTM A615, GRADE 60, AND SHALL BE FIELD WIRED IN PLACE.
 - ALL FRAMEWORK AND PLACEMENT OF CONCRETE SHALL COMPLY WITH GOOD CONSTRUCTION PRACTICES AND BE IN ACCORDANCE WITH ALL LOCAL GOVERNING CODES AND REGULATIONS, AS WELL AS THE ACI AND UNIFORM BUILDING CODE.
- NOTES:**
- SYSTEM TO BE WATERTIGHT. CONTRACTOR TO WRAP A GEOSYNTHETIC LINER, OR PROVIDE AN EQUIVALENT WATER TIGHT DESIGN.
 - BASIN ACCESS POINTS, ROOF LEADERS AND OTHER CONNECTIONS TO BE WATER TIGHT.

FINAL FOR SEWER DESIGN

CONSTRUCTION CHECK _____ DATE _____

CONSTRUCTION CHECK _____ DATE _____

PROJECT: **803 S URBAN RENEWAL, LLC**
PROPOSED MIXED USE BUILDING
BLOCK 645, LOT 12
803 SOUTH AVENUE
CITY OF PLAINFIELD, UNION COUNTY, NEW JERSEY

811 PROTECT YOURSELF

ALL STATES REQUIRE NOTIFICATION OF ENGINEERS, DESIGNERS, OR ANY PERSON PREPARING TO DIG OR BORE THE EARTH'S SURFACE ANYWHERE IN ANY STATE

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

DYNAMIC ENGINEERING

LAND DEVELOPMENT CONSULTING • PERMITTING
GEOTECHNICAL • ENVIRONMENTAL
TRAFFIC • SURVEY • PLANNING & ZONING

245 Main Street, Suite 110
Chester, NJ 07930
T: 908.879.9229 | F: 908.879.0222

Additional offices conveniently located at:

Little Combs, New Jersey • T: 732.974.0110
Trenton, New Jersey • T: 732.974.0110
Hawthorn, Pennsylvania • T: 267.485.0576
Allen, Texas • T: 972.334.2100
Houston, Texas • T: 281.281.6400
Austin, Texas • T: 512.244.2444
Delray Beach, Florida • T: 561.921.8570

www.dynamiccec.com

BRETT W. SKAPINETZ

PROFESSIONAL ENGINEER
NEW JERSEY LICENSE No. 41985

JOSEPH C. SPARONE

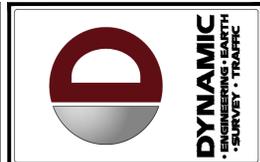
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE No. 47204

TITLE: **CONSTRUCTION DETAILS**

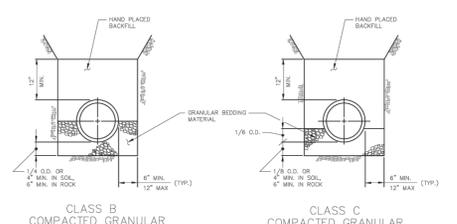
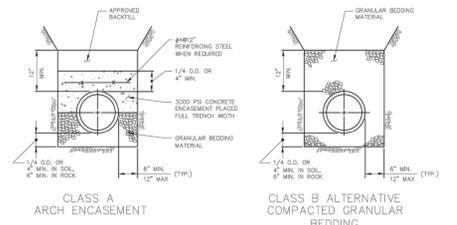
SCALE: (H) AS DATE: 02/18/2020 DRAWN BY: GH DESIGNED BY: RJC
PROJECT No: 0404-99-041 CHECKED BY: BWS

SHEET No: **13** OF 14 Rev. #: 9

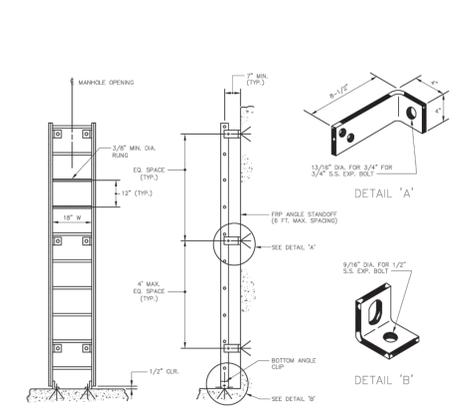
Plotted: 08/04/21 - 4:05 PM, By: gborlock
File: P:\DCEPC PROJECTS\0404 Eden Property Co\99-041 South Avenue, Plainfield\Draw\Site Plans\040499041SD9.dwg, ---> 13 CONSTRUCTION DETAILS



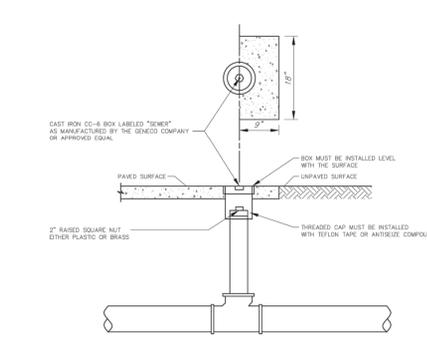
NO.	DATE	REVISIONS	BY
1	03/26/20	REVISED PER AMENDED RFP	RRK
2	06/11/20	REVISED PER NDEP COMMENTS	JDC
3	08/03/20	REVISED PER RESOLUTION COMPLIANCE	RRK
4	09/17/20	REVISED PER CITY & NJ TRANSIT COMMENTS	RRK
5	10/15/20	REVISED PER CITY POLICE DEPARTMENT COMMENTS	RRK
6	11/11/20	REVISED PER NJ DEP TWA COMMENTS	RRK
7	07/12/21	REVISED PER NJ DEP TWA COMMENTS	RRK
8	04/27/21	REVISED PER CLIENT COMMENTS	RRK
9	08/04/21	REVISED PER CLIENT & PRE&E COMMENTS	JDC/RRK



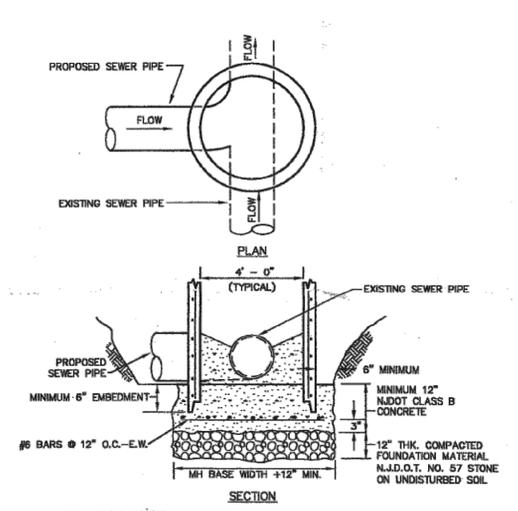
NOTES:
THERE SHALL BE A MINIMUM OF 30" OF BACKFILL OVER THE PIPE BEFORE HEAVY COMPACTION



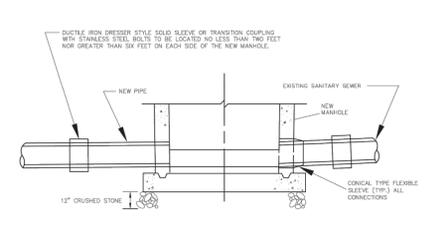
NOTES:
1. LADDERS SHALL BE INSTALLED ON ALL MANHOLES WHERE THE DISTANCE FROM THE INVERT TO THE RIM EXCEEDS 15 FEET.
2. LADDER SHALL BE FIBERGLASS.
3. CURPS, ANGLES, BOLTS, WASHERS AND ALL OTHER HARDWARE SHALL BE 304 STAINLESS STEEL.
4. ALL MANHOLES EXCEEDING 25 FEET FROM INVERT TO RIM SHALL HAVE AT LEAST ONE INTERMEDIATE PLATFORM.



NOTES:
1. AT LEAST ONE CLEANOUT MUST BE PROVIDED ON EACH LATERAL.
2. A CLEANOUT WILL BE PROVIDED FOR EACH LATERAL BETWEEN THE CURB AND THE SIDEWALK.
3. IN GENERAL, OWNERSHIP AND MAINTENANCE OF LATERALS AND CLEANOUTS WILL BE THE RESPONSIBILITY OF THE PROPERTY OWNER.
4. THE LOCATION OF ALL CLEANOUTS MUST BE APPROVED BY THE TOWNSHIP PLUMBING DEPARTMENT.
5. ALL CLEANOUTS LOCATED WITHIN PAVEMENT OR CONCRETE MUST BE PROTECTED WITH A CC-6 BOX.



CONSTRUCTION NOTES:
1. SEE PRECAST STANDARD MANHOLE DETAIL FOR TYPICAL INSTALLATION.
2. PRECAST MANHOLE SECTION TO BE IN ACCORDANCE WITH ASTM DESIGNATION C-478



NOTES:
1. BENCH TO HAVE 2.0% SLOPE (TYP.) WITH NON SKID SURFACE.
2. ALL CONNECTIONS TO BE MADE WITH CONICAL TYPE FLEXIBLE SEAL SUCH AS FOR-N-SEAL OR EQUAL.
3. ALL CHANNELS MUST BE HALF PIPE OR EPOXY COATED.
4. THE MANHOLE MUST MEET ALL REQUIREMENTS FOR MANHOLE CONSTRUCTION SHOWN ON THE OTHER DETAILS OF THE AUTHORITY INCLUDING BUT NOT LIMITED TO THE REQUIREMENT FOR 12" OF CRUSHED STONE TO BE PLACED UNDER THE NEW MANHOLE.

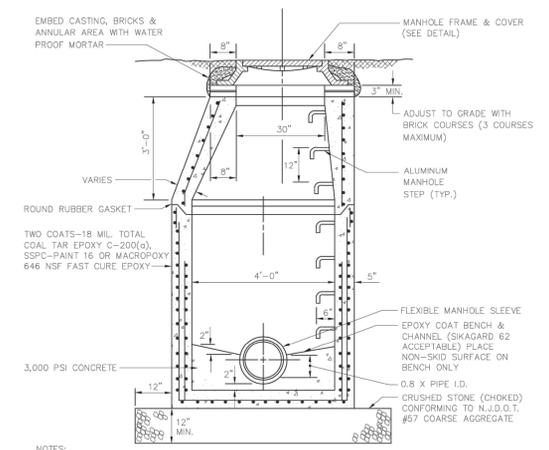
BEDDING DETAIL

FIBERGLASS MANHOLE LADDER DETAIL

STANDARD CLEANOUT

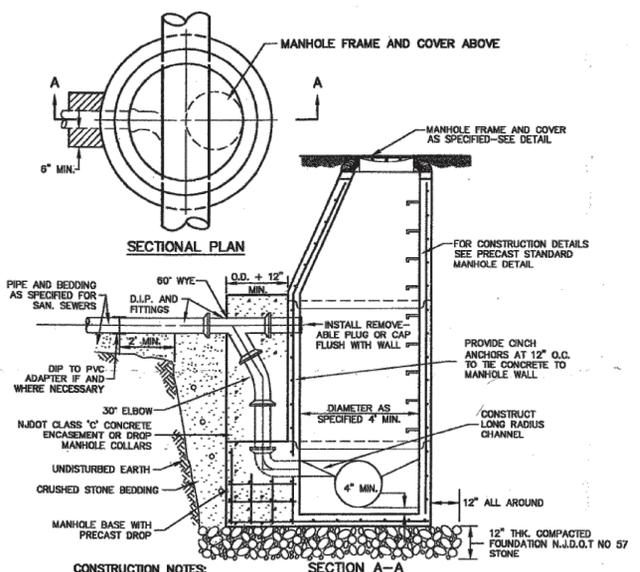
DOGHOUSE MANHOLE

MANHOLE INSTALLED ON EXISTING SEWER



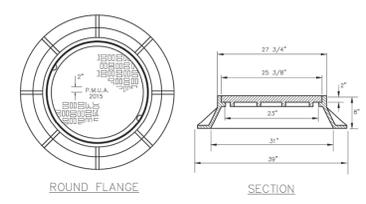
NOTES:
1. INTERIOR SURFACES TO BE COATED WITH TWO COATS, 18 MIL TOTAL, COAL TAR EPOXY MEETING SPECIFICATION C-200(A) OR SSPC-PAIN 16 IF RECEIVING DIRECT DISCHARGE FROM PUMP STATION OR DIFFERENCE IN INVERT ELEVATIONS EXCEEDS 12".
2. RISER, CONES AND SLABS SHALL BE CONSTRUCTED IN ACCORDANCE WITH A.S.T.M. C-478.
3. NON PENETRATING LIFTING HOLES SHALL BE PROVIDED IN ALL UNITS.
4. ABSORPTION NOT TO EXCEED 8% IN ACCORDANCE WITH A.S.T.M. C-76.
5. ALL JOINTS TO BE CONSTRUCTED IN ACCORDANCE WITH A.S.T.M. C-361.
6. NO PRE-CAST BENCHES OR CHANNELS.
7. CAN ONLY BE USED AT DEPTHS GREATER THAN 6.5' AS MEASURED FROM RIM TO INVERT.

CONE TOP MANHOLE



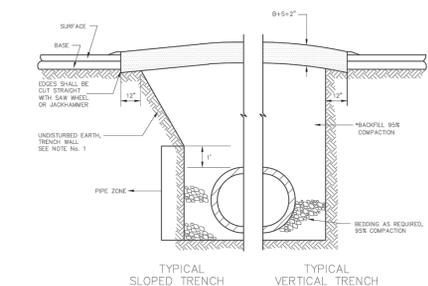
CONSTRUCTION NOTES:
1. DROP PIPE TO BE USED IN ALL CASES WHERE THE DIFFERENCE BETWEEN INLET AND OUTLET INVERT IS TWO (2) FEET OR GREATER.
2. SIZE OF DROP PIPE SHALL BE THE SAME AS MAIN LINE SEWER UNLESS OTHERWISE SPECIFIED.
3. CROWN OF SIDE CONNECTION SEWER SHALL BE AT THE SAME ELEVATION AS THE MAIN SEWER LINE CROWN.

EXTERIOR DROP CONNECTION



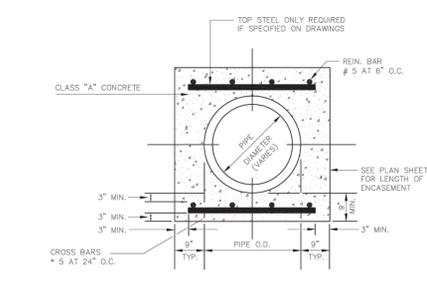
NOTES:
1. FRAME AND COVER TO BE CAMPBELL FOUNDRY NO. 1202 B OR EQUAL.
2. UNLESS SPECIFICALLY NOTED OTHERWISE, ALL FRAMES AND COVERS TO BE "FLOW-SEAL" AS MANUFACTURED BY CAMPBELL FOUNDRY OR EQUAL.
3. COVERS TO BE PROVIDED WITH NON-PENETRATING PICK HOLES.
4. COVERS FOR MANHOLES TO BE OWNED BY AUTHORITY MUST HAVE "P.M.U.A." AND YEAR CAST INTO THE COVERS IN 2" HIGH LETTERS.
5. P.M.U.A. TYPE DISCHARGE CONTROL MANHOLES AND OTHER SANITARY SEWER MANHOLES THAT WILL NOT BE OWNED BY THE AUTHORITY, MUST HAVE THE WORDS "SANITARY SEWER" AND YEAR CAST INTO THE COVER IN 2" LETTERS.

FRAME AND COVER DETAIL



NOTES:
1. TRENCH TO BE SLOPED OR BRACED AND SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKMEN AND THE PROTECTION OF OTHER UTILITIES.
2. TACK COAT ALL PAVEMENT SURFACES PRIOR TO INSTALLATION OF NEW PAVEMENT.
3. THE PATCH SHALL BE FULL DEPTH ASPHALT AND EXTEND 12" BEYOND THE EDGE OF TRENCH. DEPTH OF ASPHALT SHALL BE THE DEPTH OF EXISTING BASE PLUS THE DEPTH OF EXISTING SURFACE PLUS (2) INCHES.
4. PIPE ZONE OF TRENCH TO BE BACKFILLED IN SIX (6) INCH LIFTS. THESE SIX (6) INCH LIFTS ARE TO BE HAND TAMPED.
5. TRENCH TO BE BACKFILLED IN TWELVE (12) INCH LIFTS ABOVE PIPE ZONE.
6. BACKFILL TO BE COMPACTED TO 95% IN ACCORDANCE WITH AASHTO T180 AND AASHTO T99. COMPACTION TESTS TO BE PERFORMED EVERY 24" OF VERTICAL TRENCH HEIGHT. HORIZONTAL DISTANCES BETWEEN TESTS NOT TO EXCEED 200'. A MINIMUM OF TWO TESTS TO BE PERFORMED FOR EACH 24" OF VERTICAL TRENCH HEIGHT.

TYPICAL TRENCH DETAILS



NOTES:
1. TOP STEEL ONLY REQUIRED IF SPECIFIED ON DRAWINGS.
2. REIN. BAR # 5 AT 6" O.C.
3. SEE PLAN SHEET FOR LENGTH OF ENCASUREMENT.
4. CROSS BARS # 5 AT 24" O.C.

STANDARD CONCRETE ENCASUREMENT DETAIL

FINAL FOR SEWER DESIGN

CONSTRUCTION CHECK _____ DATE _____

CONSTRUCTION CHECK _____ DATE _____

PROJECT: 803 S URBAN RENEWAL, LLC
PROPOSED MIXED USE BUILDING
BLOCK 645, LOT 12
803 SOUTH AVENUE
CITY OF PLAINFIELD, UNION COUNTY, NEW JERSEY

811 PROTECT YOURSELF
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DESIGN OR CONSTRUCT SURFACE ANCHORS IN ANY STATE
FOR STATE-SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

DYNAMIC ENGINEERING
LAND DEVELOPMENT CONSULTING • PERMITTING
GEOTECHNICAL • ENVIRONMENTAL
TRAFFIC • SURVEY • PLANNING & ZONING
245 Main Street, Suite 110
Chester, NJ 07930
T: 908.879.9229 | F: 908.879.0222
Additional offices conveniently located at:
Little Combs, New Jersey • T: 732.974.0119
East Rutherford, New Jersey • T: 201.732.9100
Newark, Pennsylvania • T: 247.445.0576
Allen Texas • T: 972.334.2100
Houston, Texas • T: 281.281.6400
Austin, Texas • T: 512.244.2444
Delray Beach, Florida • T: 561.921.8570

www.dynamiccec.com

BRETT W. SKAPINETZ
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE No. 41985

JOSEPH C. SPARONE
PROFESSIONAL ENGINEER
NEW JERSEY LICENSE No. 47204

TITLE:
PLAINFIELD MUA STANDARD CONSTRUCTION DETAILS

SCALE: (H) AS DATE: 02/18/2020 DRAWN BY: RJC DESIGNED BY: RJC
PROJECT No: 0404-99-041 CHECKED BY: EWS

SHEET No: **14** OF 14 Rev. #: 9