PRELIMINARY & FINAL SITE PLAN
FOR
GALILEE EGLISE ADVENTISTE, INC.
PROPOSED CHURCH
LOT 4, BLOCK 3301
TOWNSHIP OF NEPTUNE
MONMOUTH COUNTY, NEW JERSEY

CERTIFIED LIST OF PROPERTY OWNERS WITHIN 200' OF LOT 4, BLOCK 3301 TOWNSHIP OF NEPTUNE

BLOCK	LOT	QUAL.	CLA	PROPERTY OWNER	PROPERTY LOCATION
2801	1		15A	BD OF ED-TOWNSHIP OF NEPTUNE 50 NEPTUNE BLVD NEPTUNE, NJ 07753	1 SUMMERFIELD LANE
3001	7		2	DILLER, CYNTHIA A 21 HOLDEN DRIVE FORT MEAD, FL 33040	3322 HIGHWAY 33
3001	8		2	DILLERT, MACK DAVIDSON 3320 HIGHWAY 33 NEPTUNE, NJ 07753	3320 HIGHWAY 33
3001	9		4A	C & D LAW OFFICES, LLC 3318 HIGHWAY 33 NEPTUNE, NJ 07753	3318 HIGHWAY 33
3001	10		4A	WOSNER, J ELY ENTERPRISES LLC 3316 CONLEY AVENUE NEPTUNE TWP, NJ 07753	3316 HIGHWAY 33
3001	11		4A	MARFA HOSPITALITY, INC. 1006 DELAWARE DRIVE MONMOUTH, NJ 08857	3310 HIGHWAY 33
3301	2.01		2	HELEYTIS, DIANE & THEODORE 3317 HIGHWAY 33 NEPTUNE, NJ 07753	3317 HIGHWAY 33
3301	3		15D	UNITED METHODIST HOMES 3311 HIGHWAY 33 NEPTUNE, NJ 07753	3311 HIGHWAY 33
3301	4		2	GALILEE EGLISE ADVANTISTE CHURCH 3313 HIGHWAY 33 NEPTUNE, NJ 07753	3313 HIGHWAY 33
3301	5		2	ALLOCCA, PAUL & PATRICIA 3315 HIGHWAY 33 NEPTUNE, NJ 07753	3315 HIGHWAY 33
3301	6		4A	3321 HIGHWAY 33 NEPTUNE, LLC 1 RYJAC COURT STATEN ISLAND, NY 10314	3321 HIGHWAY 33
3401	22		15C	TOWNSHIP OF NEPTUNE PO BOX 138 NEPTUNE, NJ 07754	30 HILL DR

Please be advised that pursuant to Chapter 245, P.L. 1961, As of August 7th 1991, any Applicant seeking a Major Sub-division or Site Plan Approval, is required to provide a Notice of Public Hearing to all Public Utilities and CATV companies that own land or Possess any easement that is within two hundred feet (200') of the proposed development.

Below is the list of Public Utilities which provide this service to the Neptune area:

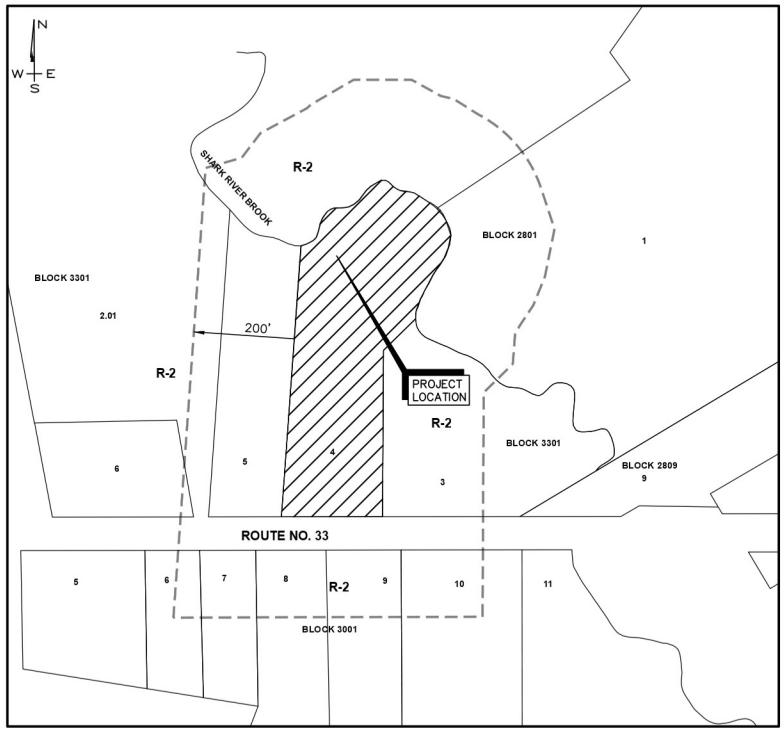
New Jersey- American Water Co npany, Inc.
Attn: Donna Short GIS Supervisor
1025 Laurel Oak Road
Voorhees, N.J. 08043

Verizon
Legal Department 17th Floor
C/o Land Use Matters
540 Broad Street
Newark, N.J. 07102

New Jersey Natural Gas Company
Attn: Right of Way Depar ment
1415 Wyckoff Road
Wall Twp, N.J. 07719

Jersey Central Power & Light Company
Attn: Land Use Matters
300 Madison Avenue
Morristown, N.J. 07960

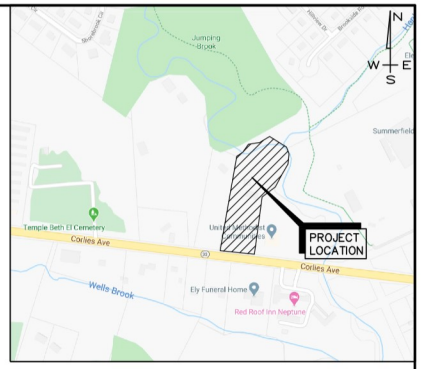
Monmouth Cablevision
Attn: Land Use Matters
1501 18th Avenue
Wall Twp, N.J. 07719



LEGEND
R-2: SINGLE FAMILY RESIDENTIAL
4 – LOT NUMBER
BLOCK 3001 – BLOCK NUMBER

200' RADIUS AND ZONNING MAP
SCALE: 1"= 100'

100 0 100 200
SCALE IN FEET
(1"=100')



SITE LOCATION MAP
SCALE: 1"= 200'

GENERAL NOTES

1. THE PROPERTY IS KNOWN AS LOT 4, BLOCK 3301 AS SHOWN ON SHEET 33 OF THE OFFICIAL TAX MAP OF THE TOWNSHIP OF NEPTUNE, MONMOUTH COUNTY, NEW JERSEY. LAST REVISED APRIL 8, 2014.
2. OWNER/APPLICANT: GALILEE EGLISE ADVENTISTE, INC..
3. THE APPLICANT PROPOSES TO CONSTRUCT A 4,000 SF CHURCH FACILITY WITH A BASEMENT LEVEL.
4. THE PROPERTY IS LOCATED IN THE TOWNSHIP'S LOW DENSITY SINGLE FAMILY RESIDENTIAL (R-2) ZONE AND CONTAINS A TOTAL TRACT AREA OF 3.24 ACRES.
5. R-2 ZONE (HOUSE OF WORSHIP) REQUIREMENTS

MINIMUM REQUIREMENTS	REQUIRED	EXISTING	PROVIDED
LOT AREA	12,500 SF	141,136.89 SF	141,136.89 SF
FRONT YARD SETBACK	15 FT	N/A	283.24 FT
SIDE YARD SETBACK	20 FT	N/A	21.82 FT
REAR YARD SETBACK	20 FT	N/A	>20 FT
SET BACK FROM RESIDENTIAL PROPERTY LINE	1.5 X HGT. OF MAIN ROOF LINE = 1.5X20=30 FT	N/A	11.4 FT *
SIDE YARD PARKING LOT SET BACK	20 FT	N/A	19.2 FT *
REAR YARD PARKING LOT SETBACK	10 FT	N/A	>10 FT
MAXIMUM REQUIREMENTS			
NUMBER OF STORIES	2.5	N/A	1
BUILDING HEIGHT	35 FT	N/A	< 35 FT
PARKING REQUIREMENTS 1 SPACE/4 SEATS =	250/4=63	N/A	64

* VARIANCE REQUESTED

6. R-2 ZONE (ACCESSORY RESIDENCE) REQUIREMENTS

MINIMUM REQUIREMENTS	REQUIRED	EXISTING	PROVIDED
LOT AREA	10,000 SF	141,135.89 SF	141,136.89 SF
LOT WIDTH	100 FT	205.11 FT	205.11FT
LOT FRONTAGE	100 FT	205.11 FT	205.11 FT
LOT DEPTH	100 FT	600 FT	600 FT
FRONT YARD SETBACK	25 FT	320.24 FT	320.24 FT
SIDE YARD SETBACK	10 FT	11.57 FT	50.79 FT
COMBINED SIDE YARD SETBACK	25 FT	62.36 FT	N/A
REAR YARD SETBACK	30 FT	> 30 FT.	> 30 FT
IMPROVABLE AREA	2,400 SF		
MAXIMUM REQUIREMENTS			
DENSITY (DU/ACRE)	4.30	0.31	0.31
BUILDING COVER	30%	2.53%	
TOTAL LOT COVER	40%	6.60%	
BUILDING HEIGHT	35 FT	25 FT	25 FT
NUMBER OF STORIES	2.5	1.5	1.5

7. THE APPLICANT IS REQUESTING THE FOLLOWING VARIANCES FROM THE TOWNSHIP'S ORDINANCE.
8. BOUNDARY & TOPOGRAPHIC INFORMATION SHOWN ON SHEET 2 IS FROM A PLAN ENTITLED "BOUNDARY AND TOPOGRAPHIC SURVEY, 3313 STATE HIGHWAY ROUTE NO. 33, LOT 4, BLOCK 3301, SITUATED IN TOWNSHIP OF NEPTUNE, MONMOUTH COUNTY, NEW JERSEY" DATED DECEMBER 9, 2019, PREPARED BY HERBERT G. MCDONALD, FOR HERBERT G. MCDONALD ASSOCIATES, INC. PROFESSIONAL LAND SURVEYOR LIC NO. 34030.

   ADDITIONAL TOPOGRAPHIC INFORMATION (REAR OF SITE AND OFFSITE) IS BASED ON MONMOUTH COUNTY GIS MAPPING.
9. VERTICAL DATUM IS BASED ON NAVD 88.
10. SANITARY SEWER SERVICE WILL BE PROVIDED BY CONNECTION TO THE EXISTING ON SITE 4-INCH LATERAL THAT CURRENTLY SERVES THE EXISTING RESIDENTIAL BUILDING. THE EXISTING LATERAL CONNECTS TO AN EXISTING SANITARY MAIN LOCATED ON ROUTE 33.
11. WATER SERVICE WILL BE PROVIDED FROM AN EXISTING ON SITE WELL THAT CURRENTLY PROVIDES DOMESTIC WATER SERVICE TO THE EXISTING RESIDENTIAL BUILDING.
12. UTILITY RELOCATIONS SHOWN HEREON, IF ANY, ARE FOR INFORMATIONAL PURPOSES ONLY AND MAY NOT REPRESENT ALL REQUIRED UTILITY RELOCATIONS. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING AND/OR COORDINATING ALL REQUIRED UTILITY RELOCATIONS IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANIES/AUTHORITIES.
13. DO NOT SCALE DRAWINGS AS THEY PERTAIN TO ADJACENT AND SURROUNDING PHYSICAL CONDITIONS, BUILDINGS, STRUCTURES, ETC. THEY ARE SCHEMATIC ONLY, EXCEPT WHERE DIMENSIONS ARE SHOWN THERETO.
14. THIS IS A SITE DEVELOPMENT PLAN AND UNLESS SPECIFICALLY NOTED ELSEWHERE HEREON IS NOT A SURVEY.
15. ALL TRAFFIC SIGNAGE AND STRIPING SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
16. THIS SET OF PLANS HAS BEEN PREPARED FOR PURPOSES OF MUNICIPAL AND AGENCY REVIEW AND APPROVAL. THIS SET OF PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL STAMPED "ISSUED FOR CONSTRUCTION", ALL APPROVALS REQUIRED HAVE BEEN OBTAINED AND ALL CONDITIONS OF APPROVAL HAVE BEEN SATISFIED. THIS SHALL INCLUDE APPROVAL OF ALL CATALOG CUTS, SHOP DRAWINGS AND/OR DESIGN CALCULATIONS AS REQUIRED BY THE MUNICIPAL ENGINEER.
17. EXISTING UTILITY INFORMATION SHOWN HEREON HAS BEEN COLLECTED FROM VARIOUS SOURCES AND IS NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO EXCAVATION. WHERE EXISTING UTILITIES ARE TO BE CROSSED BY PROPOSED CONSTRUCTION, TEST PITS SHALL BE DUG BY THE CONTRACTOR PRIOR TO CONSTRUCTION TO ASCERTAIN EXISTING INVERTS, MATERIALS AND SIZES. TEST PIT INFORMATION SHALL BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION TO PERMIT ADJUSTMENTS AS REQUIRED TO AVOID CONFLICTS.
18. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION FOR SITE IMPROVEMENTS SHOWN HEREON SHALL BE IN ACCORDANCE WITH:
    A. N.J. DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", 2001; AS SUPPLEMENTED.
    B. CURRENT, PREVAILING MUNICIPAL, COUNTY AND/OR STATE AGENCY SPECIFICATIONS, STANDARDS, CONDITIONS AND REQUIREMENTS.
    C. CURRENT, PREVAILING UTILITY COMPANY/AUTHORITY SPECIFICATIONS, STANDARDS, AND REQUIREMENTS.
    D. CURRENT MANUFACTURER'S SPECIFICATIONS, STANDARDS AND REQUIREMENTS.
    E. FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
    F. RESIDENTIAL SITE IMPROVEMENT STANDARDS.
19. THE CONTRACTOR SHALL NOTIFY THE UNDERSIGNED PROFESSIONAL IMMEDIATELY IF ANY FIELD CONDITIONS ENCOUNTERED DIFFER MATERIALLY FROM THOSE REPRESENTED HEREON. SUCH CONDITIONS COULD RENDER THE DESIGNS SHOWN HEREON INAPPROPRIATE OR INEFFECTIVE.
20. THE CONTRACTOR IS RESPONSIBLE FOR PROJECT SAFETY INCLUDING PROVISION OF ALL APPROPRIATE SAFETY DEVICES AND TRAINING REQUIRED.
21. ALL UTILITIES AND OTHER SITE IMPROVEMENTS TO BE MAINTAINED BY THE APPLICANT AT THEIR SOLE EXPENSE.
22. ALL TEMPORARY ENCROACHMENTS INTO THE PUBLIC RIGHT-OF-WAY SHALL REQUIRE TOWNSHIP COUNCIL AND N.J.D.O.T. APPROVAL.
23. ALL CONSTRUCTION STAGING SHALL BE DONE ON SITE UNLESS AN ENCROACHMENT FOR SAME SHALL BE APPROVED BY CITY COUNCIL.
24. TRACKING PADS SHALL BE INSTALLED AT ALL CONSTRUCTION EXITS AND ALL STREET CLEANING SHALL BE PERFORMED AS PER THE DIRECTION OF THE DIRECTOR OF PUBLIC WORKS.
25. LIST OF PERMITS OR APPROVALS TO BE OBTAINED:
    PRELIMINARY AND FINAL MINOR SITE PLAN APPROVAL
    MONMOUTH COUNTY PLANNING BOARD
    NEPTUNE TOWNSHIP ROAD OPENING PERMIT
    NEPTUNE TOWNSHIP PERFORMANCE BOND
    NEPTUNE TOWNSHIP PUBLIC WORKS DEPARTMENT
    NJDOT MINOR ACCESS PERMIT
26. THE SITE IS LOCATED IN FLOOD ZONE X, AN AREA OF MINIMUM FLOOD ZONE, PER FLOOD INSURANCE RATE MAP OF MONMOUTH COUNTY (MAP NUMBER 34025C0329F) DATED SEPTEMBER 25, 2009.
27. THESE GENERAL NOTES APPLY TO ALL SHEETS IN THE SET.

SHT. No.	DESCRIPTION	LATEST REVISION
1	COVER SHEET	
2	EXISTING CONDITIONS PLAN	
3	EXISTING TREE SURVEY PLAN	
4	DEMOLITION PLAN	
5	DIMENSION & CIRCULATION PLAN AND CONSTRUCTION DETAILS	
6	SIGHT TRIANGLE PLAN	
7	GRADING PLAN	
8	UTILITY PLAN AND PROFILES	
9	SOIL EROSION & SEDIMENT CONTROL PLAN	
10	SOIL EROSION AND SEDIMENT CONTROL DETAILS	
11	LANDSCAPE AND LIGHTING PLAN AND DETAILS	
12	CONSTRUCTION DETAILS	
13	NJ DEP PERMIT PLAN	

APPROVED BY THE PLANNING BOARD OF THE TOWNSHIP OF NEPTUNE AT THE MEETING HELD ON THE _____ DAY OF _____ 2022
DATE MONTH

PLANNING BOARD CHAIRPERSON _____ DATE _____

BOARD SECRETARY _____ DATE _____

PLANNING BOARD ENGINEER _____ DATE _____

RESOLUTION NUMBER _____ DATE _____

OWNER AND APPLICANT:
GALILEE EGLISE ADVENTISTE, INC.
3 RYJAC COURT
BRICK, NEW JERSEY 08724

ARCHITECT:
BUCKMAN ARCHITECTURAL GROUP
1127 WATCHUNG AVENUE
PLAINFIELD, NEW JERSEY 07060
TEL.: (908) 241-3457

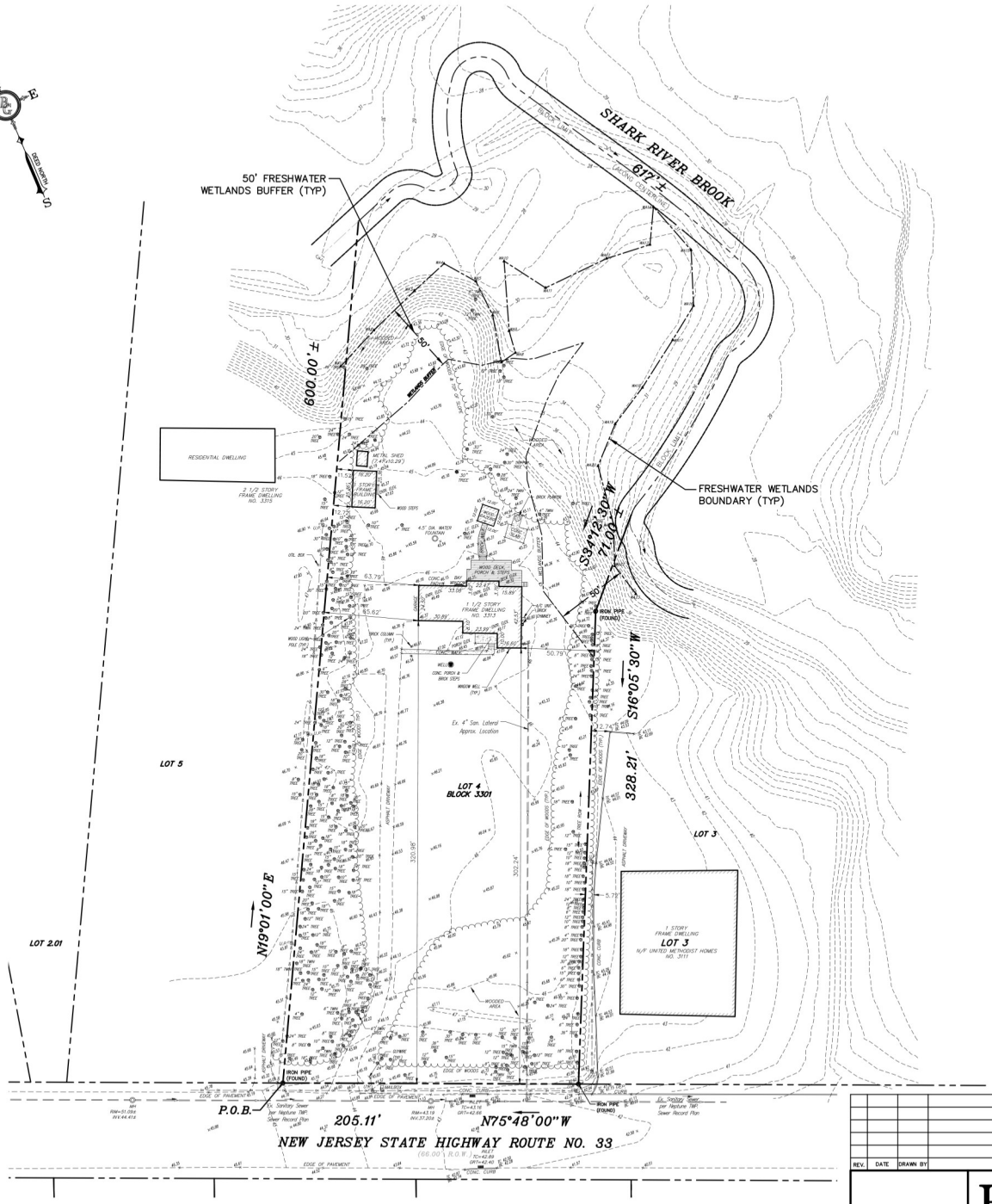
REV.	DATE	DRAWN BY	DESCRIPTION

BESRICK G. PLUMMER
PROFESSIONAL ENGINEER
NEW JERSEY LIC. NO. 39534

B&G Engineering LLC
State of N.J. Certificate of Authorization: 24GA28168000
30 BERNARD DRIVE
EWING, N.J. 08628
Phone (732) 588-8616
Fax (609) 671-0715

PRELIMINARY & FINAL SITE PLAN
COVER SHEET
FOR
GALILEE EGLISE ADVENTISTE, INC.
PROPOSED CHURCH
LOT 4, BLOCK 3301
NEPTUNE TOWNSHIP MONMOUTH COUNTY NEW JERSEY

JOB NUMBER: 1943A
DATE: DEC. 5, 2022
SCALE: AS SHOWN
LATEST REVISION:
DESIGN BY: BP
CHECKED BY: BP
SHEET NUMBER: 1 of 13



GENERAL NOTES

1. THIS SITE IS KNOWN AND DESIGNATED AS LOT 4, BLOCK 3301, AS SHOWN ON THE OFFICIAL TAX MAP OF THE TOWNSHIP OF NEPTUNE, MONMOUTH COUNTY, NEW JERSEY. CONTAINING AN AREA OF 141,136.89± SQUARE FEET OR 3.240057 ± ACRES.
2. THIS PLAN IS BASED ON A PROPERTY SURVEY BY HERBERT G. MCDONALD ASSOCIATES, INC. AND IS SUBJECT TO SUCH FACTS THAT MAY BE DISCLOSED BY A COMPLETE UP TO DATE AND THOROUGH TITLE REPORT OF THE SUBJECT PROPERTY.
3. ADDITIONAL TOPOGRAPHIC INFORMATION (REAR AND OFFSITE) WAS OBTAINED FROM MONMOUTH COUNTY GIS MAPPING.
4. VERTICAL DATUM IS NAVD 1988.

30 0 30 60
SCALE IN FEET (1"=30')

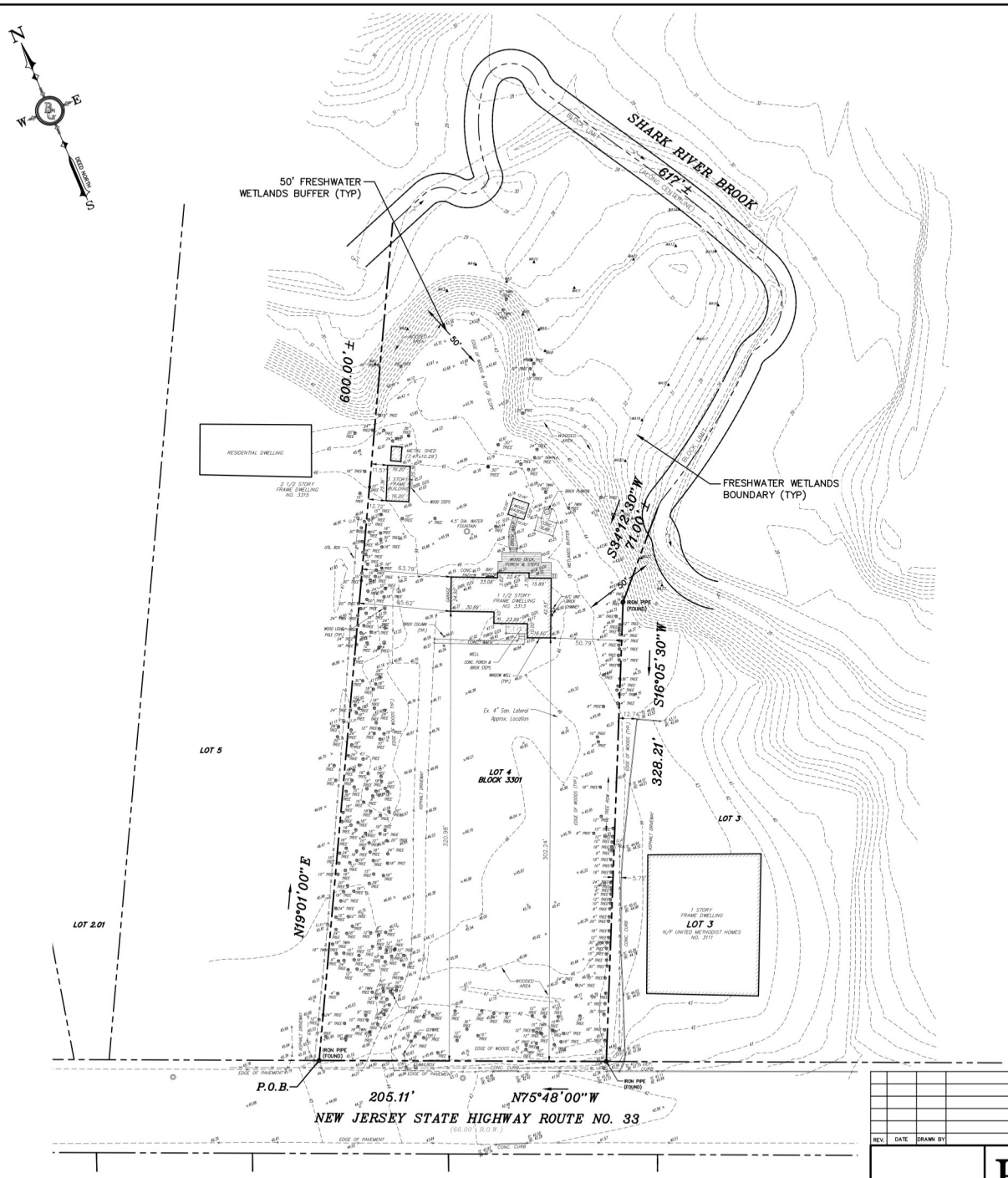
REV.	DATE	DRAWN BY	DESCRIPTION

BESRICK G. PLUMMER
PROFESSIONAL ENGINEER
NEW JERSEY LIC. NO. 39534

B&G Engineering LLC
State of N.J. Certificate of Authorization: 24GA28168000
30 BERNARD DRIVE
EWING, N.J. 08628
Phone (732) 388-8616
Fax (609) 671-0715

PRELIMINARY & FINAL SITE PLAN
EXISTING CONDITIONS PLAN
FOR
GALILEE EGLISE ADVENTISTE, INC.
PROPOSED CHURCH
LOT 4, BLOCK 3301
NEPTUNE TOWNSHIP MONMOUTH COUNTY NEW JERSEY

JOB NUMBER: 1943A
DATE: DEC. 5, 2022
SCALE: 1" = 30"
LATEST REVISION:
DESIGN BY: BP
CHECKED BY: BP
SHEET NUMBER: 2 of 13



SURVEY NOTES

1] KNOWN AND DESIGNATED AS LOT 4 IN BLOCK 3301 AS SHOWN ON THE OFFICIAL TAX MAP OF THE TOWNSHIP OF NEPTUNE, MONMOUTH COUNTY, NEW JERSEY, CONTAINING AN AREA OF 141,136.89± SQUARE FEET OR 3.240057± ACRE.

2] THIS SURVEY IS BASED UPON THE FOLLOWING DATA AND/OR EXCEPTIONS:

	YES	NO
DEEDS OF RECORD	X	
FILED MAP		X
TITLE SEARCH		X
TAX MAP/RECORD	X	
PRIOR SURVEY	X	

3] THIS SURVEY REPRESENTS CONDITIONS VISIBLE ON OR ABOVE THE SURFACE OF THE GROUND AT THE TIME OF THE SURVEY. THE UNDERSIGNED PROFESSIONAL IS NOT RESPONSIBLE FOR THE PRESENCE OF UNDERGROUND UTILITIES OR STRUCTURES IF SAME ARE NOT VISIBLE OR OTHERWISE DISCLOSED BY ANY OF THE SHOWN DATA.

4] A WRITTEN WAIVER AND DIRECTION NOT TO SET CORNER MARKERS HAS BEEN OBTAINED FROM THE ULTIMATE USER PURSUANT TO N.J.A.C.13: 40-5.2(C).

5] IF THIS DOCUMENT DOES NOT CONTAIN A RAISED IMPRESSION SEAL OF THE UNDERSIGNED PROFESSIONAL, IT IS NOT AN AUTHORIZED ORIGINAL DOCUMENT AND MAY HAVE BEEN ALTERED.

6] THE COPYING OR REUSE OF THIS DOCUMENT OR PORTIONS THEREOF FOR OTHER THAN THE ORIGINAL PROJECT OR THE PURPOSE ORIGINALLY INTENDED WITHOUT THE WRITTEN PERMISSION OF HERBERT G. MCDONALD ASSOCIATES, INC., IS PROHIBITED.

7] THIS SURVEY MAP IS AN ACCURATE REPRESENTATION OF CONDITIONS EXISTING AS OF NOVEMBER 30, 2019 AND UPDATED MARCH 30, 2021.

8] THIS SURVEY IS BASED ON A PROPERTY SURVEY BY HERBERT G. MCDONALD ASSOCIATES, INC., AND IS SUBJECT TO SUCH FACTS THAT MAY BE DISCLOSED BY A COMPLETE UP TO DATE AND THOROUGH TITLE REPORT OF THE SUBJECT PROPERTY.

9] INVERT ELEVATIONS NOT SHOWN HEREON ARE DUE TO THEIR INACCESSIBILITY AT THE TIME OF SURVEY, STRUCTURES ARE FILLED WITH DEBRIS AND DIRT.

10] VERTICAL DATUM IS NAVD 1988.

EXISTING TREES TABULATION TABLE

TREE DIAMETER	NO. OF TREES
4"	9
6"	18
8"	31
10"	18
12"	30
15"	30
18"	51
20"	10
24"	27
28"	7
30"	15
36"	4

REV.	DATE	DRAWN BY	DESCRIPTION

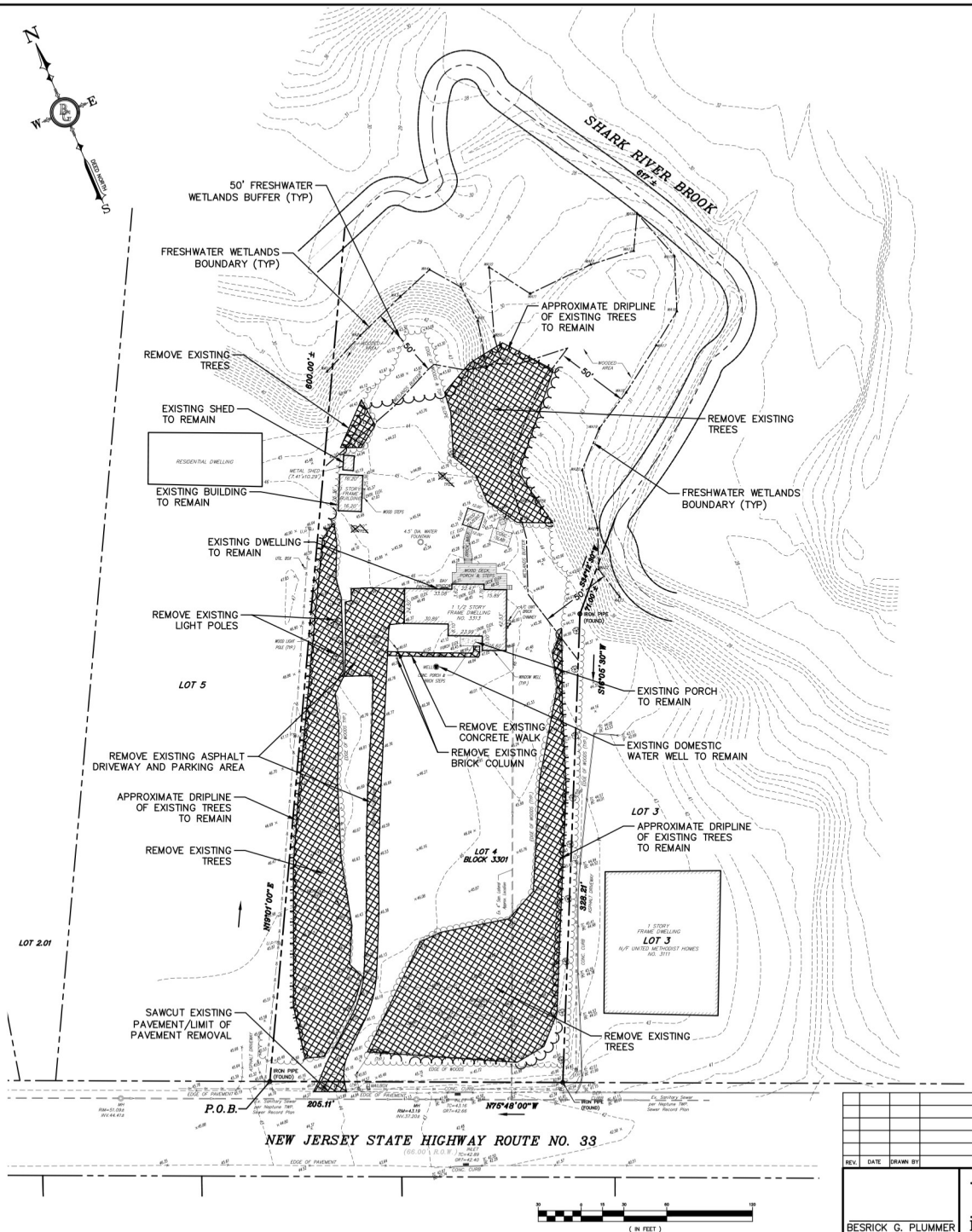
BESRICK G. PLUMMER
PROFESSIONAL ENGINEER
NEW JERSEY LIC. NO. 39534

B&G Engineering LLC
State of N.J. Certificate of Authorization: 24GA28168000

30 BERNARD DRIVE
EWING, N.J. 08628
Phone (732) 588-8616
Fax (609) 671-0715

PRELIMINARY & FINAL SITE PLAN
EXISTING TREE SURVEY PLAN
FOR
GALILEE EGLISE ADVENTISTE, INC.
PROPOSED CHURCH
LOT 4, BLOCK 3301
NEPTUNE TOWNSHIP MONMOUTH COUNTY NEW JERSEY

JOB NUMBER: 1943A
DATE: DEC. 5, 2022
SCALE: 1" = 30"
LATEST REVISION:
DESIGN BY: BP
CHECKED BY: BP
SHEET NUMBER: 3 of 13



REV.	DATE	DRAWN BY	DESCRIPTION

BESRICK G. PLUMMER
PROFESSIONAL ENGINEER
NEW JERSEY LIC. NO. 39534

B&G Engineering LLC
State of N.J. Certificate of Authorization: 24GA28168000

30 BERNARD DRIVE
EWING, N.J. 08628
Phone (732) 388-8616
Fax (609) 671-0715

PRELIMINARY & FINAL SITE PLAN

DEMOLITION PLAN

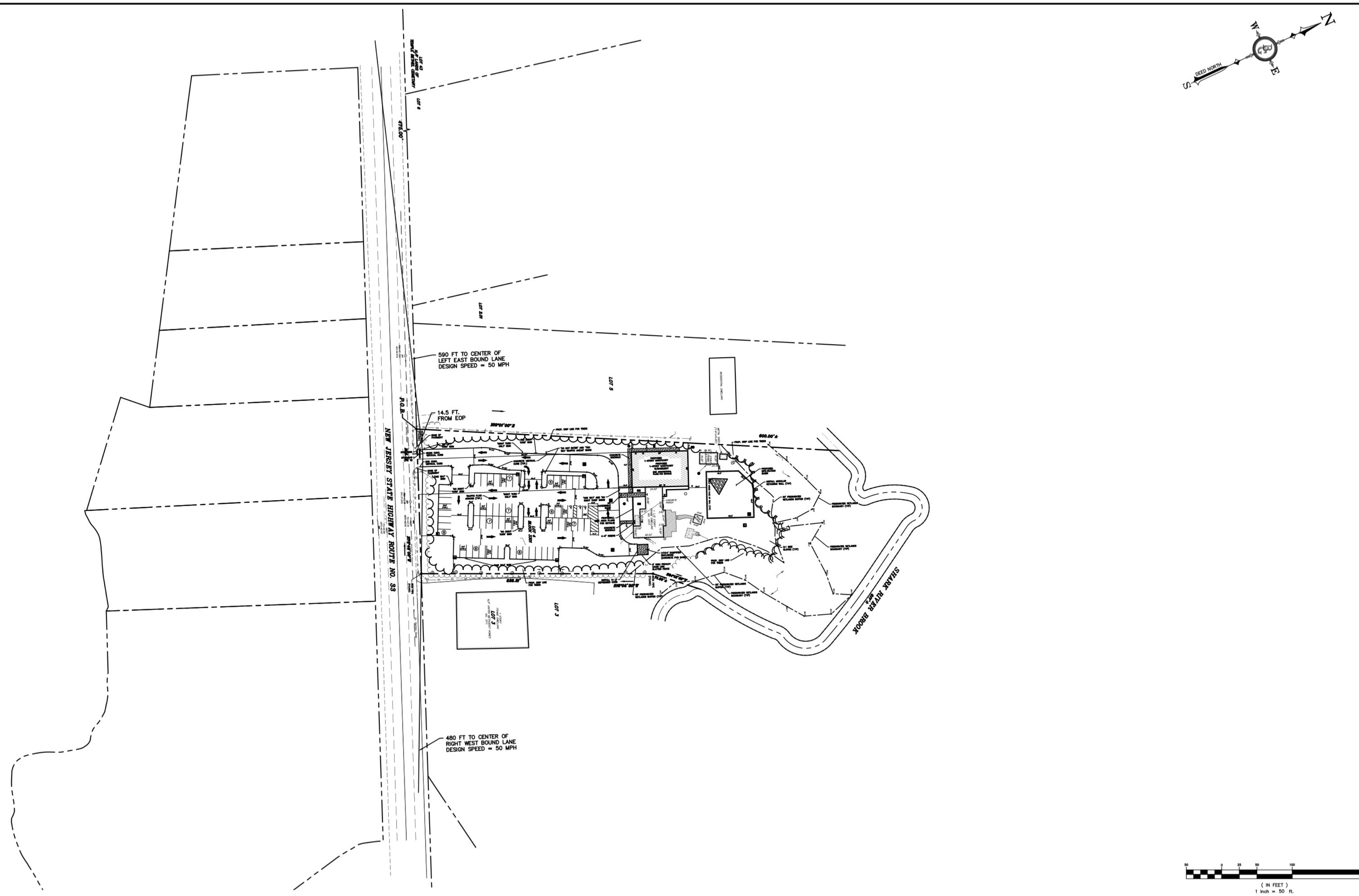
FOR

GALILEE EGLISE ADVENTISTE, INC.
PROPOSED CHURCH

LOT 4, BLOCK 3301

NEPTUNE TOWNSHIP MONMOUTH COUNTY NEW JERSEY

JOB NUMBER: 1943A	DATE: DEC. 5, 2022
SCALE: 1" = 30"	LATEST REVISION:
DESIGN BY: BP	CHECKED BY: BP
SHEET NUMBER: 4 of 13	



REV.	DATE	DRAWN BY	DESCRIPTION

BESRICK G. PLUMMER
PROFESSIONAL ENGINEER
NEW JERSEY LIC. NO. 39534

B&G Engineering LLC
State of N.J. Certificate of Authorization: 24GA28168000
30 BERNARD DRIVE
EWING, N.J. 08628
Phone (732) 598-6616
Fax (609) 671-0715

PRELIMINARY & FINAL SITE PLAN

SIGHT TRIANGLE PLAN

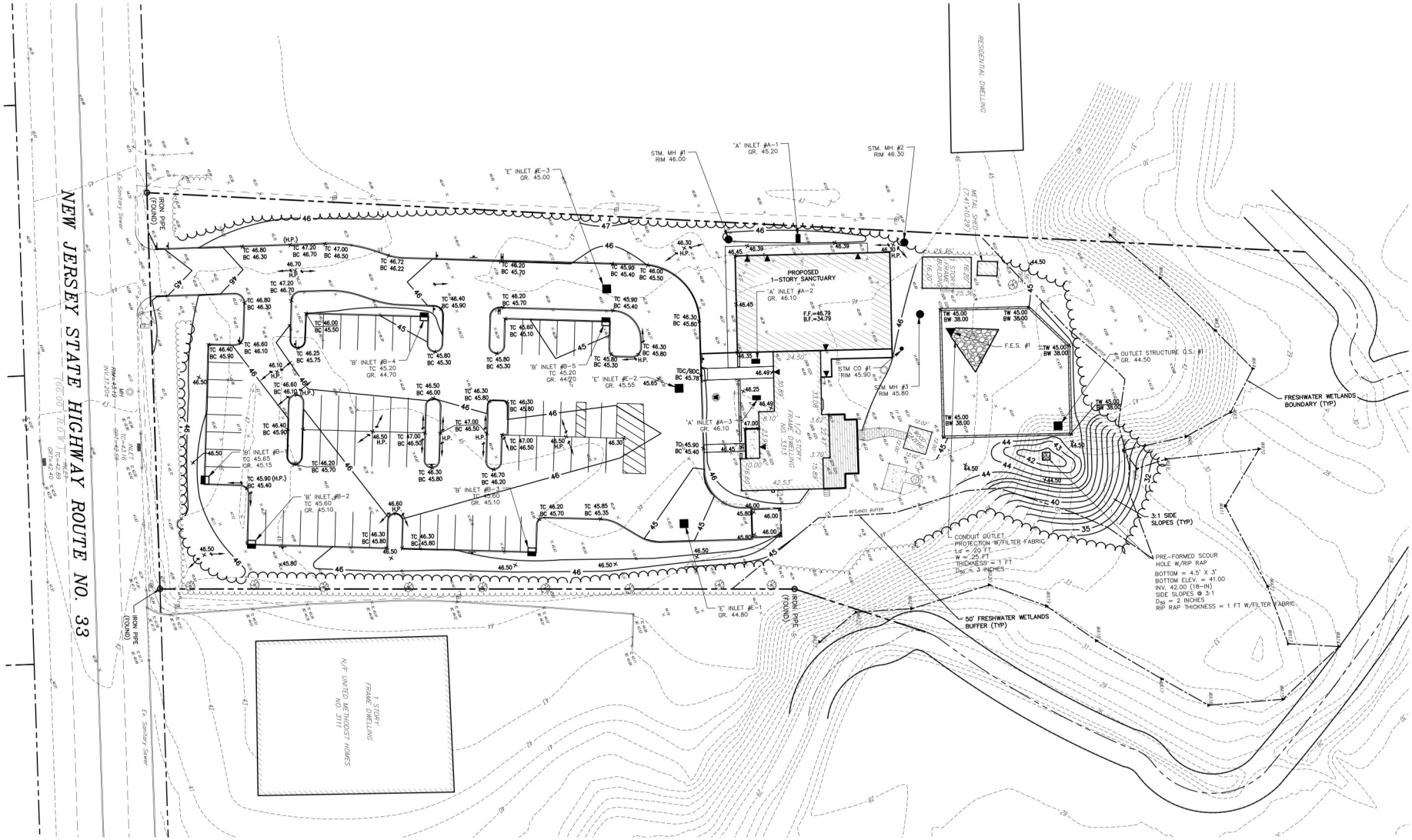
FOR

GALILEE EGLISE ADVENTISTE, INC.
PROPOSED CHURCH

LOT 4, BLOCK 3301

NEPTUNE TOWNSHIP MONMOUTH COUNTY NEW JERSEY

JOB NUMBER: 1943A	DATE: DEC. 5, 2022
SCALE: 1" = 50"	LATEST REVISION:
DESIGN BY: BP	CHECKED BY: BP
SHEET NUMBER: 6	of 13



(IN FEET)
1 inch = 20 ft.

REV.	DATE	DRAWN BY	DESCRIPTION

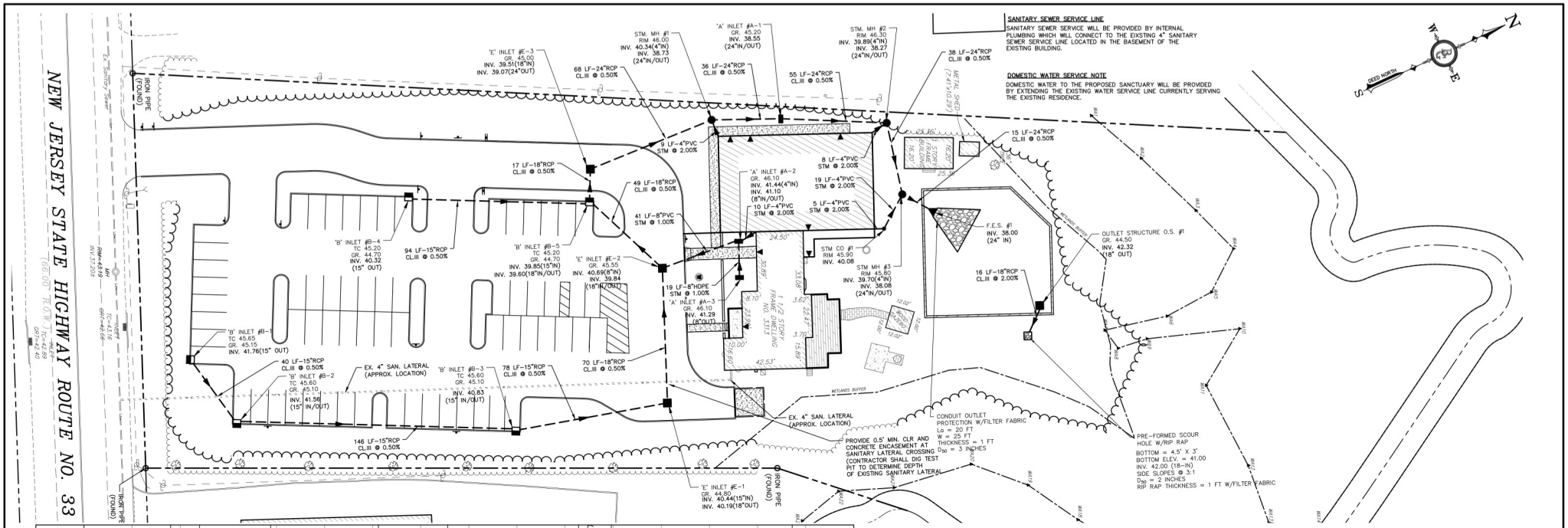
BESRICK G. PLUMMER
PROFESSIONAL ENGINEER
NEW JERSEY LIC. NO. 39534

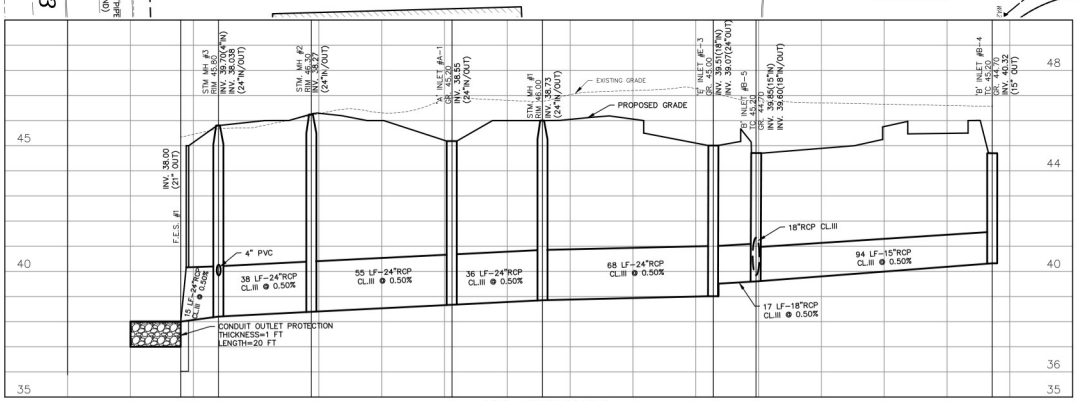
B&G Engineering LLC
State of N.J. Certificate of Authorization: 24GA28168000

30 BERNARD DRIVE
EWING, N.J. 08628
Phone (732) 388-8616
Fax (609) 671-0715

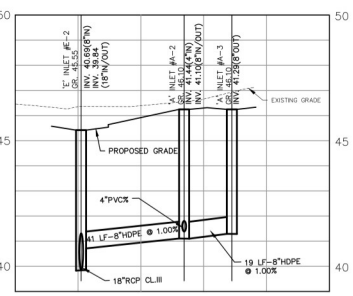
PRELIMINARY & FINAL SITE PLAN
GRADING PLAN
FOR
GALILEE EGLISE ADVENTISTE, INC.
PROPOSED CHURCH
LOT 4, BLOCK 3301
NEPTUNE TOWNSHIP MONMOUTH COUNTY NEW JERSEY

JOB NUMBER: 1943A	DATE: DEC. 5, 2022
SCALE: 1" = 20"	LATEST REVISION:
DESIGN BY: BP	CHECKED BY: BP
SHEET NUMBER: 7 of 13	

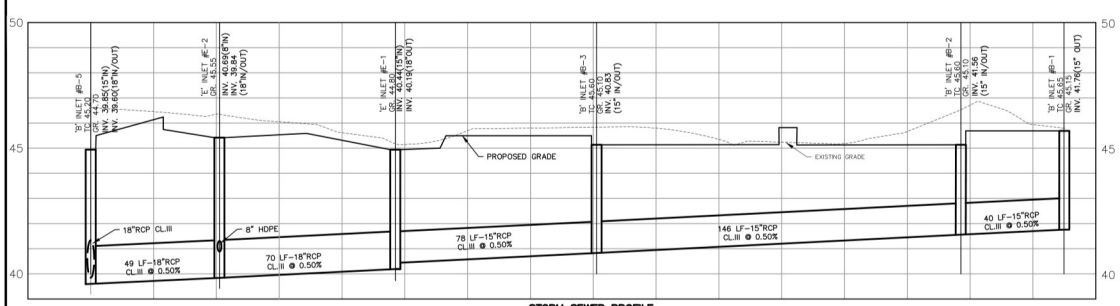




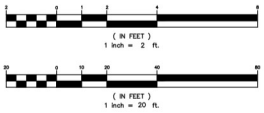
STORM SEWER PROFILE
FES #1 TO 'B' INLET #B-4
VERTICAL: 1" = 2'
HORIZONTAL: 1" = 20"



STORM SEWER PROFILE
INLET #E-2 TO 'A' INLET #A-3
VERTICAL: 1" = 2'
HORIZONTAL: 1" = 20"



STORM SEWER PROFILE
'B' INLET B-5 TO 'B' INLET #B-1
VERTICAL: 1" = 2'
HORIZONTAL: 1" = 20"



REV.	DATE	DRAWN BY	DESCRIPTION

BESRICK G. PLUMMER
PROFESSIONAL ENGINEER
NEW JERSEY LIC. NO. 39534

B&G Engineering LLC
State of N.J. Certificate of Authorization: 24GA28168000

30 BERNARD DRIVE
EWING, N.J. 08628
Phone (732) 588-8616
Fax (609) 671-0715

PRELIMINARY & FINAL SITE PLAN
UTILITY PLAN AND PROFILE
FOR
GALILEE EGLISE ADVENTISTE, INC.
PROPOSED CHURCH
LOT 4, BLOCK 3301
NEPTUNE TOWNSHIP MONMOUTH COUNTY NEW JERSEY

JOB NUMBER: 1943A
DATE: DEC. 5, 2022
SCALE: AS SHOWN
LATEST REVISION:
DESIGN BY: BP
CHECKED BY: BP
SHEET NUMBER: 8 of 13

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. THE FREEHOLD SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY SOIL DISTURBING ACTIVITY.
2. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
3. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLANS 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.
4. N.J.S.A 4:24-39 ET. SEQ. REQUIRES THAT NO CERTIFICATES OF OCCUPANCY BE ISSUED BEFORE THE DISTRICT DETERMINES THAT A PROJECT OR PORTION THEREOF IS IN FULL COMPLIANCE WITH THE CERTIFIED PLAN AND STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY AND A REPORT OF COMPLIANCE HAS BEEN ISSUED. UPON COMPLETION OF THE PROJECT, THE PERMITTEE MUST NOTIFY THE DISTRICT OF COMPLIANCE WITH CONDITIONS ON A LOT-BY-LOT OR SECTION-BY-SECTION BASIS, PROVIDED THAT THE PROJECT OR PORTION THEREOF IS IN SATISFACTORY COMPLIANCE WITH THE CERTIFIED PLAN. PERMANENT AND TEMPORARY MEASURES FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN IMPLEMENTED, INCLUDING PROVISIONS FOR STABILIZATION AND SITE WORK.
5. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN SIXTY (60) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING AND MULCH IN ACCORDANCE WITH THE STANDARDS FOR TEMPORARY SEEDING. DISTURBED AREAS WILL BE MULCHED WITH STRAW OR EQUIVALENT MATERIAL, AT A RATE OF 2 TO 2 ½ TONS PER ACRE, ACCORDING TO THE STANDARD FOR STABILIZATION WITH MULCH ONLY.
6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. SOIL STOCKPILES, STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AND A MULCH ANCHOR, IN ACCORDANCE WITH STATE STANDARDS.
7. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF UNDERGROUND UTILITIES ON THE FOREST FLOOR, FIRE LANES, MAIN AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN FIFTEEN (15) DAYS OF THE PRELIMINARY GRADING.
8. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A PAD OF AGGREGATE OVER A PROPERLY INSTALLED FILTER FABRIC AT ALL ACCESSES TO A CONSTRUCTION SITE. AFTER INTERIOR ROADWAYS ARE PAVED, INDIVIDUAL LOTS REQUIRE A STABILIZED CONSTRUCTION ACCESS CONSISTING OF ONE INCH TO TWO INCH (1 – 2) STONE FOR A MINIMUM LENGTH OF TEN FEET (10') EQUAL TO THE LOT ENTRANCE WIDTH. ALL OTHER ACCESS POINTS SHALL BE BLOCKED OFF.
9. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAYS WILL BE REMOVED IMMEDIATELY.
10. PERMANENT VEGETATION IS TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING.
11. AT THE TIME THAT SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS DEEMED TO BE ACCEPTABLE, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT IT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
12. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS/ACRE (OR 454 LBS/1,000 SQ FT OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 24 INCHES OF SOIL WITH A PH OF 5 OR MORE. OR 24 WHERE TREES OR SHRUBS ARE TO BE PLANTED.
13. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
14. UNFILTERED DEWATERING IS NOT PERMITTED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH THE STANDARD FOR DEWATERING.
15. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED DAILY. THE SURFACE IS WET. TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED AS REQUIRED BY THE STANDARD FOR DUST CONTROL.
16. STOCKPILE AND STAGING LOCATIONS ESTABLISHED IN THE FIELD SHALL BE PLACED WITHIN THE LIMIT OF DISTURBANCE ACCORDING TO THE CERTIFIED PLAN. STAGING AND STOCKPILES NOT LOCATED WITHIN THE LIMIT OF DISTURBANCE WILL REQUIRE CERTIFICATION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN. CERTIFICATION OF A NEW SOIL EROSION AND SEDIMENT CONTROL PLAN MAY BE REQUIRED FOR THESE ACTIVITIES IF AN AREA GREATER THAN 5,000 SQUARE FEET IS DISTURBED.
17. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH SOIL EROSION AND SEDIMENT CONTROL NOTE #9.
18. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.

MITIGATION NOTES FOR ACIDIC SOIL

1. LIMIT THE EXCAVATION AREA AND EXPOSURE TIME WHEN HIGH ACID PRODUCING SOILS ARE ENCOUNTERED.
2. TOPSOIL STRIPPED FROM THE SITE SHALL BE STORED SEPARATELY FROM TEMPORARILY STOCKPILED HIGH ACID PRODUCING SOILS.
3. STOCKPILES OF HIGH ACID PRODUCING SOIL SHOULD BE LOCATED ON LEVEL LAND TO MINIMIZE ITS MOVEMENT, ESPECIALLY WHEN THIS MATERIAL HAS A HIGH CLAY CONTENT.
4. TEMPORARILY STOCKPILED HIGH ACID PRODUCING SOIL MATERIAL TO BE EXPOSED MORE THAN 30 DAYS SHOULD BE COVERED WITH PROPERLY ANCHORED, HEAVY GRADE SHEETS OF POLYETHYLENE WHICH PROVIDES, IF NOT POSSIBLE, A COMPLETE BARRIER TO PRECIPITATION. A LAYER OF STRAW OR WOOD CHIPS TO MINIMIZE ERODING OF THE STOCKPILE. SILT FENCE SHALL BE INSTALLED AT THE TOE OF SLOPE TO CONTAIN MOVEMENT OF THE STOCKPILED MATERIAL. TOPSOIL SHALL NOT BE APPLIED TO THE STOCKPILES TO PREVENT TOPSOIL CONTAMINATION WITH HIGH ACID PRODUCING SOIL.
5. HIGH ACID PRODUCING SOILS WITH A pH OF 4 OR LESS, OR CONTAINING IRON SULFIDE, (INCLUDING BORROW FROM CUTS OR DREDGED SEDIMENT) SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT A RATE OF 6 TONS PER ACRE (OR 275 POUNDS PER 1,000 SQUARE FEET OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12 INCHES OF SETTLED SOIL WITH A pH OF 5 OR MORE EXCEPT AS FOLLOWS:
6. A. AREAS WHERE TREES OR SHRUBS ARE TO BE PLANTED, SHALL BE COVERED WITH A MINIMUM OF 24 INCHES OF SOIL WITH A pH OF 5 OR MORE.
7. B. DISPOSAL AREAS SHALL NOT BE LOCATED WITHIN 24 INCHES OF ANY SURFACE OF A SLOPE OR BANK, SUCH AS BERMS, STREAM BANKS, DITCHES AND OTHERS TO PREVENT POTENTIAL LATERAL LEACHING DAMAGES.
8. EQUIPMENT USED FOR MOVEMENT OF HIGH ACID PRODUCING SOILS SHOULD BE CLEANED AT THE END OF EACH DAY TO PREVENT SPREADING OF HIGH ACID SOIL MATERIAL TO OTHER PARTS OF THE SITE, INCLUDING STORMWATER CONVEYANCES AND TO PROTECT MACHINERY FROM ACCELERATED RUSTING.
9. NON VEGETATIVE EROSION CONTROL PRACTICES (STONE TRACKING PADS, STRATEGICALLY PLACED LIMESTONE CHECK DAM, SILT FENCE, WOOD CHIPS) SHOULD BE INSTALLED TO LIMIT THE MOVEMENT OF HIGH ACID PRODUCING SOILS FROM, AROUND OR OFF THE SITE.
10. FOLLOWING BURIAL OR REMOVAL OF HIGH ACID PRODUCING SOIL, TOPSOILING AND SEEDING OF THE SITE, MONITORING SHOULD CONTINUE FOR APPROXIMATELY 6 TO 12 MONTHS TO ASSURE THERE IS ADEQUATE STABILIZATION AND THAT NO HIGH ACID SOIL PROBLEMS EMERGE. IF PROBLEMS STILL EXIST THE AFFECTED AREA MUST BE TREATED AS INDICATED ABOVE TO CORRECT THE PROBLEM.

SEQUENCE OF CONSTRUCTION

1. INSTALL ALL PRECONSTRUCTION SOIL EROSION & SEDIMENT CONTROL MEASURES INCLUDING CONSTRUCTION ENTRANCES, SILT FENCE AND INLET PROTECTIONS. (2 DAYS)
2. CLEAR SITE AS SHOWN ON PLANS WITH APPROPRIATE EROSION CONTROL FACILITIES IN PLACE. (2 WEEKS).
3. PROVIDE AND INSTALL TEMPORARY STABILIZATION MEASURES AS REQUIRED. (DURATION)
4. INSTALL INFILTRATION BASIN. (1 WEEK)
5. INSTALL PROPOSED UTILITIES. (2 WEEKS)
6. INSTALL ADDITIONAL INLET PROTECTIONS AT NEW INLET. (1 DAY)
7. BUILDING CONTRUCTION. (2 MONTHS)
8. SITE GRADING FOR PARKING LOT. (1 WEEK)
9. INSTALL CONCRETE CURB. (2 DAYS)
10. INSTALL CONCRETE SIDEWALK. (2 DAYS)
11. INSTALL PAVEMENT BASE COURSES. (1 WEEK)
12. INSTALL PAVEMENT SURFACE COURSE. (3 DAYS)
13. REGRADING & STABILIZATION OF LAWN AREAS. (2 DAYS)
14. REMOVAL OF SOIL EROSION & SEDIMENT CONTROL FACILITIES WHEN PERMANENT EROSION CONTROL MEASURES ARE ACCEPTED BY THE CONSERVATION DISTRICT AND TOWNSHIP ENGINEER. (2 WEEKS)

SOIL REMOVAL NOTE
ALL SOIL WASHED, DROPPED, TRACKED OR SPILLED ONTO PAVED SURFACES SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR.

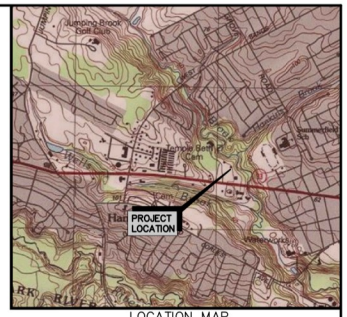
DUST CONTROL NOTE
THE CONTRACTOR SHALL IMPLEMENT DUST CONTROL AT DISTURBED AREAS BY SPRINKLING DISTURBED SOIL WITH WATER OR BY USING OTHER APPROVED METHODS OF DUST CONTROL.

STORM DRAIN INLET PROTECTION NOTE
ALL INLETS (EXISTING AND PROPOSED) WITHIN THE LIMITS OF DISTURBANCE MUST BE RETROFITTED WITH STORM DRAIN INLET PROTECTION (ACCEPTABLE BY THE SOIL CONSERVATION DISTRICT) PRIOR TO ANY LAND DISTURBANCE. OTHER INLETS LOCATED IN CLOSE PROXIMITY TO THE PROPOSED DISTURBED AREA MUST ALSO BE PROTECTED FROM SEDIMENTS AS SHOWN ON THIS PLAN.

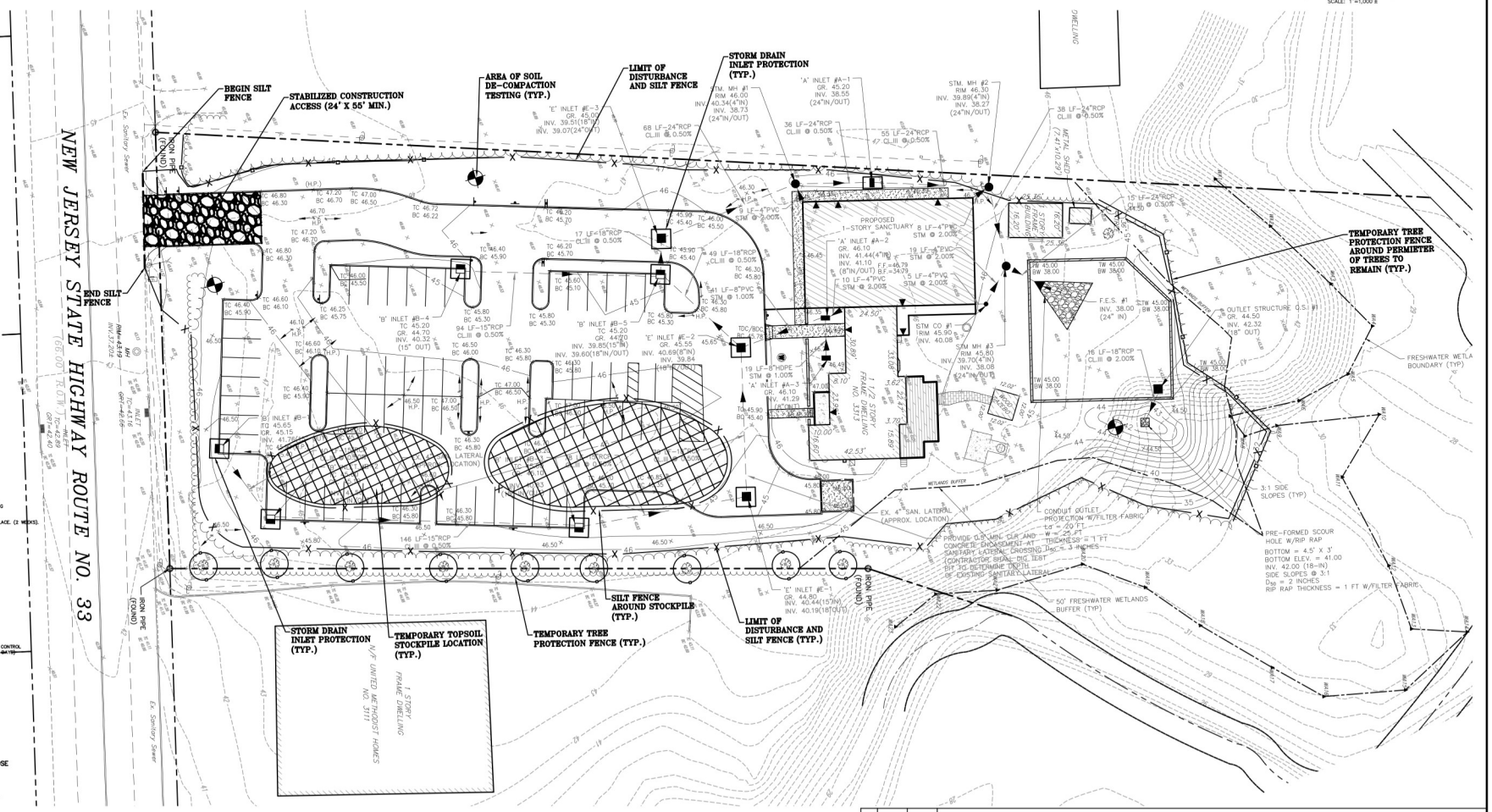
LEGEND

- STORM DRAIN INLET PROTECTION
- AREA OF SOIL COMPACTION TESTING
- STABILIZED CONSTRUCTION ACCESS
- SILT FENCE AND LIMIT OF DISTURBANCE
- LIMIT OF DISTURBANCE

THIS SHEET TO BE USED FOR SOIL EROSION AND SEDIMENT CONTROL PURPOSES ONLY!!
TOTAL AREA OF DISTURBANCE = 81,009 S.F., 1.860 ACRES



LOCATION MAP
SCALE: 1"=1,000'±



(IN FEET)
1 inch = 20 ft.

REV.	DATE	DRAWN BY	DESCRIPTION

BESRICK G. PLUMMER
PROFESSIONAL ENGINEER
NEW JERSEY LIC. NO. 39534

B&G Engineering LLC
30 BERNARD DRIVE
EWING, N.J. 08628
Phone (732) 588-8616
Fax (609) 671-0715
State of N.J. Certificate of Authorization: 24GA28168000

PRELIMINARY & FINAL SITE PLAN
SOIL EROSION AND SEDIMENT CONTROL PLAN
FOR
GALILEE EGLISE ADVENTISTE, INC.
PROPOSED CHURCH
LOT 4, BLOCK 3301
NEPTUNE TOWNSHIP MONMOUTH COUNTY NEW JERSEY

JOB NUMBER: 1943A
DATE: DEC. 5, 2022
SCALE: 1" = 20"
LATEST REVISION:
DESIGN BY: BP
CHECKED BY: BP
SHEET NUMBER: 9 of 13

STANDARDS FOR TOPSOILING

METHODS AND MATERIALS

1. MATERIALS

A. TOPSOIL SHOULD BE FRIABLE, LOAMY, FREE OF DEBRIS, OBJECTIONABLE WEEDS AND STONES, AND CONTAIN NO TOXIC SUBSTANCE OR ADVERSE CHEMICAL OR PHYSICAL CONDITION THAT MAY BE HARMFUL TO PLANT GROWTH. SOLUBLE SALTS SHOULD NOT BE EXCESSIVE (CONDUCTIVITY LESS THAN 0.5 MILLIMHOS PER CENTIMETER. MORE THAN 0.5 MILLIMHOS MAY DESICCATE SEEDLINGS AND ADVERSELY IMPACT GROWTH). IMPORTED TOPSOIL SHALL HAVE A MINIMUM ORGANIC MATTER CONTENT OF 2.75 PERCENT. ORGANIC MATTER CONTENT MAY BE RAISED BY ADDITIVES.

B. TOPSOIL SUBSTITUTE IS A SOIL MATERIAL WHICH MAY HAVE BEEN AMENDED WITH SAND, SILT, CLAY, ORGANIC MATTER, FERTILIZER OR LIME AND HAS THE APPEARANCE OF TOPSOIL. TOPSOIL SUBSTITUTES MAY BE UTILIZED ON SITES WITH INSUFFICIENT TOPSOIL FOR ESTABLISHING PERMANENT VEGETATION. ALL TOPSOIL SUBSTITUTE MATERIALS SHALL MEET THE REQUIREMENTS OF TOPSOIL NOTED ABOVE. SOIL TESTS SHALL BE PERFORMED TO DETERMINE THE COMPONENTS OF SAND, SILT, CLAY, ORGANIC MATTER, SOLUBLE SALTS AND PH LEVEL.

2. STRIPPING AND STOCKPILING

A. FIELD EXPLORATION SHOULD BE MADE TO DETERMINE WHETHER QUANTITY AND OR QUALITY OF SURFACE SOIL JUSTIFIES STRIPPING.

B. STRIPPING SHALL BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA.

C. WHERE FEASIBLE, LIME MAY BE APPLIED BEFORE STRIPPING AT A RATE DETERMINED BY SOIL TESTS TO BRING THE SOIL PH TO APPROXIMATELY 6.5.

D. A 4-6 INCH STRIPPING DEPTH IS COMMON, BUT MAY VARY DEPENDING ON THE PARTICULAR SOIL.

E. STOCKPILES OF TOPSOIL SHOULD BE SITUATED SO AS NOT TO OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE.

F. STOCKPILES SHOULD BE VEGETATED IN ACCORDANCE WITH STANDARDS PREVIOUSLY DESCRIBED HEREIN; SEE STANDARDS FOR PERMANENT (PG. 4-1) OR TEMPORARY (PG.7-1) VEGETATIVE COVER FOR SOIL STABILIZATION. WEEDS SHOULD NOT BE ALLOWED TO GROW ON STOCKPILES.

3. SITE PREPARATION

A. GRADE AT THE ONSET OF THE OPTIMAL SEEDING PERIOD SO AS TO MINIMIZE THE DURATION AND AREA OF EXPOSURE OF DISTURBED SOIL TO EROSION. IMMEDIATELY PROCEED TO ESTABLISH VEGETATIVE COVER IN ACCORDANCE WITH THE SPECIFIED SEED MIXTURE. TIME IS OF THE ESSENCE

B. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE. SEE THE STANDARD FOR LAND GRADING, PG. 19-1.

C. AS GUIDANCE FOR IDEAL CONDITIONS, SUBSOIL SHOULD BE TESTED FOR LIME REQUIREMENT. LIMESTONE, IF NEEDED, SHOULD BE APPLIED TO BRING SOIL TO A PH OF APPROXIMATELY 6.5 AND INCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES.

D. PRIOR TO TOPSOILING, THE SUBSOIL SHALL BE IN COMPLIANCE WITH THE STANDARD FOR LAND GRADING, PG. 19-1.

E. EMPLOY NEEDED EROSION CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENTATION BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.

4. APPLYING TOPSOIL

A. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE; I.E., LESS THAN FIELD CAPACITY (SEE GLOSSARY).

B. A UNIFORM APPLICATION TO AN AVERAGE DEPTH OF 5.0 INCHES, MINIMUM OF 4 INCHES, FIRMED IN PLACE IS REQUIRED. ALTERNATIVE DEPTHS MAY BE CONSIDERED WHERE SPECIAL REGULATORY AND/OR INDUSTRY DESIGN STANDARDS ARE APPROPRIATE SUCH AS ON GOLF COURSES, SPORTS FIELDS, LANDFILL CAPPING, ETC.. SOILS WITH A PH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF SOIL HAVING A PH OF 5.0 OR MORE, IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOIL (PG. 1-1).

C. PURSUANT TO THE REQUIREMENTS IN SECTION 7 OF THE STANDARD FOR PERMANENT VEGETATIVE STABILIZATION, THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT PERMANENT VEGETATIVE COVER BECOMES ESTABLISHED ON AT LEAST 80% OF THE SOILS TO BE STABILIZED WITH VEGETATION. FAILURE TO ACHIEVE THE MINIMUM COVERAGE MAY REQUIRE ADDITIONAL WORK TO BE PERFORMED BY THE CONTRACTOR TO INCLUDE SOME OR ALL OF THE FOLLOWING: SUPPLEMENTAL SEEDING, RE-APPLICATION OF LIME AND FERTILIZERS, AND/OR THE ADDITION OF ORGANIC MATTER (I.E. COMPOST) AS A TOP DRESSING. SUCH ADDITIONAL MEASURES SHALL BE BASED ON SOIL TESTS SUCH AS THOSE OFFERED BY RUTGERS COOPERATIVE EXTENSION SERVICE OR OTHER APPROVED LABORATORY FACILITIES QUALIFIED TO TEST SOIL SAMPLES FOR AGRONOMIC PROPERTIES.

STANDARDS FOR STABILIZATION WITH MULCH ONLY

METHODS AND MATERIALS

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. THE APPROVED RATES ABOVE HAVE BEEN MET WHEN THE MULCH COVERS THE GROUND COMPLETELY UPON VISUAL INSPECTION, I.E. THE SOIL CANNOT BE SEEN BELOW THE MULCH.

2. PROTECTIVE MATERIALS

A. UNROTTED SMALL-GRAIN STRAW, OR SALT HAY AT 2.0 TO 2.5 TONS PER ACRE IS SPREAD UNIFORMLY AT 90 TO 115 POUNDS PER 1,000 SQUARE FEET AND ANCHORED WITH A MULCH ANCHORING TOOL, LIQUID MULCH BINDERS, OR NETTING TIE DOWN. OTHER SUITABLE MATERIALS MAY BE USED IF APPROVED BY THE SOIL CONSERVATION DISTRICT.

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, EXCELSIOR, COTTON, OR PLASTIC, MAY BE USED.

E. WOODCHIPS APPLIED UNIFORMLY TO A MINIMUM DEPTH OF2 INCHES MAY BE USED. WOODCHIPS WILL NOT BE USED ON AREAS WHERE FLOWING WATER COULD WASH THEM INTO AN INLET AND PLUG IT.

F. GRAVEL, CRUSHED STONE, OR SLAG AT THE RATE OF9 CUBIC YARDS PER 1,000 SQ. FT. APPLIED UNIFORMLY TO A MINIMUM DEPTH OF3 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, DEPENDING UPON THE SIZE OF THE AREA AND STEEPNESS OF SLOPES.

A. PEG AND TWINE- DRIVE 8 TO 1 0 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIFSURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRIS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.

B. MULCH NETTINGS- STAPLE PAPER, COTTON, OR PLASTIC NETTINGS OVER MULCH. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED. NETTING IS USUALLY VAILABLE IN ROLLS 4 FEET WIDE AND UP TO 300 FEET LONG.

C. CRIMPER MULCH ANCHORING COULTER TOOL -A TRACTOR-DRAWN IMPLEMENT ESPECIALLY DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE. THIS PRACTICE AFFORDS MAXIMUM EROSION CONTROL, BUT ITS USE IS LIMITED TO THOSE SLOPES UPON WHICH THE TRACTOR CAN OPERATE SAFELY. SOIL PENETRATION SHOULD BE ABOUT 3 TO 4 INCHES. ON SLOPING LAND, THE OPERATION SHOULD BE ON THE CONTOUR.

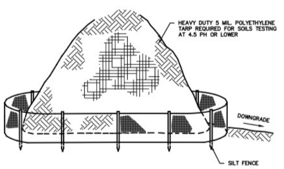
D. LIQUID MULCH-BINDERS

1. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. REMAINDER OF AREA SHOULD BE UNIFORM IN APPEARANCE.

2. USE ONE OF THE FOLLOWING:

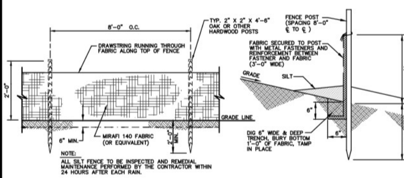
a. ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS THAT MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. VEGETABLE BASED GELS SHALL BE APPLIED AT RATES AND WEATHER CONDITIONS RECOMMENDED BY THE MANUFACTURER.

b. SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES AND WEATHER CONDITIONS RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.



TEMPORARY TOPSOIL STOCKPILE DETAIL

N.T.S.



NOTE:
ALL SILT FENCE TO BE INSPECTED AND REMEDIAL MAINTENANCE PERFORMED BY THE CONTRACTOR WITHIN 24 HOURS AFTER EACH RAIN.

SILT FENCE DETAIL

N.T.S.

PERMANENT SEEDING SPECIFICATIONS

1. SITE PREPARATION

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

B. IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING.

C. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES. TOPSOIL SHALL BE AMENDED WITH ORGANIC MATTER, AS NEEDED, IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING.

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

2. SEEDBED PREPARATION

A. UNIFORMLY APPLY GROUND LIMESTONE AND FERTILIZER TO TOPSOIL WHICH HAS BEEN SPREAD AND FIRMED, ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES (HTTP://NJAES.RUTGERS.EDU/COUNTY/). FERTILIZ.ER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4 INCHES. IF FERTILIZER IS NOT INCORPORATED, APPLY ONE-HALF THE RATE DESCRIBED ABOVE DURING SEEDBED PREPARATION AND REPEAT ANOTHER ONE-HALF RATE APPLICATION OF THE SAME FERTILIZER WITHIN 3 TO 5 WEEKS AFTER SEEDING.

B. WORK LIME AND FERTILIZER INTO THE TOPSOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING-TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.

C. HIGH ACID PRODUCING SOIL. SOILS HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5 OR MORE BEFORE INITIATING SEEDBED REPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID-PRODUCING SOILS FOR SPECIFIC REQUIREMENTS.

3. SEEDING

A. SELECT A MIXTURE FROM TABLE 4-2 OR USE A MIXTURE RECOMMENDED BY RUTGERS COOPERATIVE EXTENSION OR NATURAL RESOURCES CONSERVATION SERVICE WHICH IS APPROVED BY THE SOIL CONSERVATION DISTRICT. SEED GERMINATION SHALL HAVE BEEN TESTED WITHIN 12 MONTHS OF THE PLANTING DATE. NO SEED SHALL BE ACCEPTED WITH A GERMINATION TEST DATE MORE THAN 12 MONTHS OLD UNLESS RETESTED.

LOCATION		ACCEPTABLE SEED MIXES			OPTIMAL SEEDING DATES	ACCEPTABLE SEEDING DATES
LAWN	MIX # 15 –	HARD FESCUE	130 LBS/ACRE	3.0 LBS/1,000SF	8/15 TO 10/15	3/1 TO 4/30 5/1 TO 8/14
		CHEWING FESCUE	45 LBS/ACRE	1.0 LBS/1,000SF		
		STRONG CREEPING RED FESCUE	45 LBS/ACRE	1.0 LBS/1,000SF		
		PERENNIAL RYEGRASS	10 LBS/ACRE	0.25 LBS/1,000SF		
	MIX # 16 –	ROUGH BLUEGRASS	90 LBS/ACRE	2.0 LBS/1,000SF	8/15 TO 10/15	3/1 TO 4/30 5/1 TO 8/14
		STRONG CREEPING RED FESCUE	130 LBS/ACRE	3.0 LBS/1,000SF		

1. SEEDING RATES SPECIFIED ARE REQUIRED WHEN A REPORT OF COMPLIANCE IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT OF PERMANENT VEGETATION. UP TO 50% REDUCTION IN RATES MAY BE USED WHEN PERMANENT VEGETATION IS ESTABLISHED PRIOR TO A REPORT OF COMPLIANCE INSPECTION. THESE RATES APPLY TO ALL METHODS OF SEEDING. ESTABLISHING PERMANENT VEGETATION MEANS 80% VEGETATIVE COVERAGE WITH THE SPECIFIED SEED MIXTURE FOR THE SEEDED AREA AND MOWED ONCE.

2. WARM-SEASON MIXTURES ARE GRASSES AND LEGUMES WHICH MAXIMIZE GROWTH AT HIGH TEMPERATURES, GENERALLY 85 F AND ABOVE. SEE TABLE 4-2 MIXTURES 1TO 7. PLANTING RATES FOR WARM-SEASON GRASSES SHALL BE THE AMOUNT OF PURE LIVE SEED (PLS) AS DETERMINED BY GERMINATION TESTING RESULTS.

3. COOL-SEASON MIXTURES ARE GRASSES AND LEGUMES WHICH MAXIMIZE GROWTH AT TEMPERATURES BELOW 85°F. MANY GRASSES BECOME ACTIVE AT 65°F. SEE TABLE 4-2, MIXTURES 8-20. ADJUSTMENT OF PLANTING RATES TO COMPENSATE FOR THE AMOUNT OF PLS IS NOT REQUIRED FOR COOL SEASON GRASSES.

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

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

D. HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK, OR TRAILER-MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT FIBERED 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.

4. 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, TO BE APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.

APPLICATION - SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT AT LEAST 85% OF THE SOIL SURFACE IS 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, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COSTS.

1. PEG AND TWINE. DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STABS MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRISS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.

2. MULCH NETTINGS - STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.

3. CRIMPER (MULCH ANCHORING COULTER TOOL) - A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.

4. LIQUID MULCH-BINDERS - MAY BE USED TO ANCHOR SALT HAY, HAY OR STRAW MULCH.

a. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND MAY CATCH THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE.

b. USE ONE OF THE FOLLOWING:

(1) ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING, POWDER-BASED, HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURF GRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE, SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS STATE.

(2) SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND, FOLLOWING APPLICATION OF MULCH, DRYING AND CURING, SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. BINDER SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

NOTE: ALL NAMES GIVEN ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A RECOMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.

B. WOOD-FIBER OR PAPER-FIBER MULCH - SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS, USED AT THE RATE OF 1,500POUNDS PER ACRE (OR AS RECOMMENDED BY THE PRODUCT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. MULCH SHALL NOT BE MIXED IN THE TANK WITH SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.

C. PELLETIZED MULCH - COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT, WHICH MAY CONTAIN CO-POLYMERS, TACKIFIERS, FERTILIZERS, AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO A SEEDED AREA AND WATERED, FORM A MULCH MAT. PELLETIZED MULCH SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60-75 LBS/1,000 SQUARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL HAS BEEN FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS, SEEDED AREAS WHERE WEED SEED FREE MULCH IS DESIRED, OR ON SITES WHERE STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIRABLE. APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZED MULCH ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE.

5. IRRIGATION (WHERE FEASIBLE)

IF SOIL MOISTURE IS DEFICIENT SUPPLY NEW SEEDING WITH ADEQUATE WATER (A MINIMUM OF 1/4 INCH APPLIED UP TO TWICE A DAY UNTIL VEGETATION IS WELL ESTABLISHED). THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE IN ABNORMALLY DRY OR HOT WEATHER OR ON DROUGHTY SITES.

6. TOPDRESSING

SINCE SOIL ORGANIC MATTER CONTENT AND SLOW RELEASE NITROGEN FERTILIZER (WATER INSOLUBLE) ARE PRESCRIBED IN SECTION 2A - SEEDBED PREPARATION IN THIS STANDARD, NO FOLLOW-UP OF TOPDRESSING IS MANDATORY. AN EXCEPTION MAY BE MADE WHERE GROSS NITROGEN DEFICIENCY EXISTS IN THE SOIL TO THE EXTENT THAT TURF FAILURE MAY DEVELOP. IN THAT INSTANCE, TOPDRESS WITH 10-10-10 OR EQUIVALENT AT 300 POUNDS PER ACRE OR 7POUNDS PER 1,000 SQUARE FEET EVERY 3 TO 5 WEEKS UNTIL THE GROSS NITROGEN DEFICIENCY IN THE TURF IS AMELIORATED.

7. ESTABLISHING PERMANENT VEGETATIVE STABILIZATION

THE QUALITY OF PERMANENT VEGETATION RESTS WITH THE CONTRACTOR. THE TIMING OF SEEDING, PREPARING THE SEEDBED, APPLYING NUTRIENTS, MULCH AND OTHER MANAGEMENT ARE ESSENTIAL. THE SEED APPLICATION RATES IN TABLE 4-3 ARE REQUIRED WHEN A REPORT OF COMPLIANCE IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT OF PERMANENT VEGETATION. UP TO 50% REDUCTION IN APPLICATION RATES MAY BE USED WHEN PERMANENT VEGETATION IS ESTABLISHED PRIOR TO REQUESTING A REPORT OF COMPLIANCE FROM THE DISTRICT. THESE RATES APPLY TO ALL METHODS OF SEEDING. ESTABLISHING PERMANENT VEGETATION MEANS 80% VEGETATIVE COVER (OF THE SEEDED SPECIES) AND MOWED ONCE. NOTE: THIS DESIGNATION OF MOWED ONCE DOES NOT GUARANTEE THE PERMANENCY OF THE TURF SHOULD OTHER MAINTENANCE FACTORS BE NEGLECTED OR OTHERWISE MISMANAGED.

TEMPORARY SEEDING SPECIFICATIONS

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, PG. 19-1.

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

C. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.)

2. SEEDBED PREPARATION *

A. APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE.

* SOIL TESTING SHOULD BE DONE TO DETERMINE AMOUNT OF LIMESTONE REQUIRED AND APPLICATION RATE.

B. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.

C. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED IN ACCORDANCE WITH THE ABOVE.

D. SOILS HIGH IN SULFIDES OR HAVING A PH OF 4 OR LESS REFER TO STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, PG. 1-1.

3. SEEDING

A. SELECT SEED FROM RECOMMENDATIONS IN TABLE 7-2.

LOCATION	ACCEPTABLE SEED MIXES			OPTIMAL SEEDING DATES
LAWN	SPRING OATS	86 LBS/ACRE	2.0 LBS/1,000SF	3/01 TO 5/15 AND 8/15 TO 10/01
	ANNUAL RYEGRASS	100 LBS/ACRE	1.0 LBS/1,000SF	3/15 TO 6/01 AND 8/01 TO 9/15
	PERENNIAL RYEGRASS	100 LBS/ACRE	1.0 LBS/1,000SF	3/01 TO 5/15 AND 8/15 TO 10/01

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

C. HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK OR TRAILER MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT FIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. (ALSO SEE SECTION IV MULCHING) HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. POOR SEED TO SOIL CONTACT OCCURS REDUCING SEED GERMINATION AND GROWTH. HYDROSEEDING MAY BE USED FOR AREAS TOO STEEP FOR CONVENTIONAL EQUIPMENT TO TRAVERSE OR TOO OBSTRUCTED WITH ROCKS, STUMPS, ETC.

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

4. MULCHING

MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.

A. STRAW OR HAY. UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.

APPLICATION. SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 95% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.

ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COSTS.

1. PEG AND TWINE. DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRISS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.

2. MULCH NETTINGS. STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.

3. CRIMPER (MULCH ANCHORING TOOL). A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.

4. LIQUID MULCH-BINDERS. -MAY BE USED TO ANCHOR HAY OR STRAW MULCH.

a. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND MAY CATCH THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE.

b. USE ONE OFTHE FOLLOWING:

(1) ORGANIC AND VEGETABLE BASED BINDERS- NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BYTHE MANUFACTURER TO ANCHOR MULCH MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE, SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS STATE.

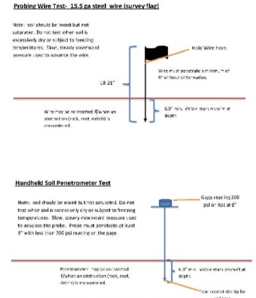
(2) SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

NOTE: ALL NAMES GIVE ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A COMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.

B. WOOD-FIBER OR PAPER-FIBER MULCH. SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS, USED AT THE RATE OF 1,500POUNDS PER ACRE (OR AS RECOMMENDED BY THE PROJECT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. THIS MULCH SHALL NOT BE MIXED IN THE TANK WITH SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.

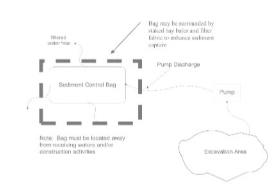
C. PELLETIZED MULCH. COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT, WHICH MAY CONTAIN CO-POLYMERS, TACKIFIERS, FERTILIZERS AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO A SEEDED AREA AND WATERED, FORM A MULCH MAT. PELLETIZED MULCH SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60-75 LBS./1,000 SQUARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL HAS BEEN FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS, SEEDED AREAS WHERE WEED-SEED FREE MULCH IS DESIRED OR ON SITES WHERE STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIRABLE.

APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZED MULCH ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE.



SIMPLIFIED TESTING METHODS DETAIL

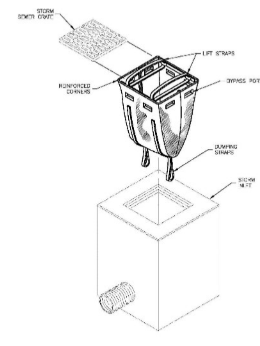
N.T.S.



Bags must be disposed of according to manufacturer's instructions. Bags may not be reused.

DEWATERING DETAIL

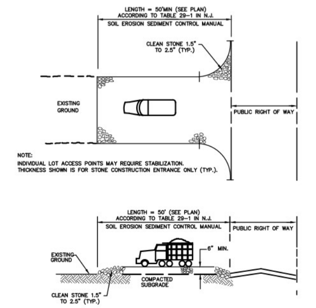
N.T.S.



NOTES
1. CONTRACTOR IS TO CLEAN INLET FILTER AFTER EVERY STORM
2. CONTRACTOR TO REMOVE FABRIC AND MESH JUST PRIOR TO PAVING
3. REMOVE INLET PROTECTION WHEN THE CONTRIBUTING DRAINAGE AREAS HAVE BEEN STABILIZED.

INLET FILTER DETAIL

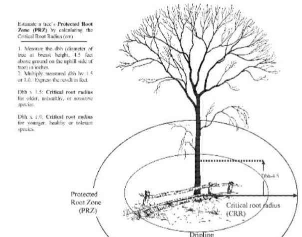
N.T.S.

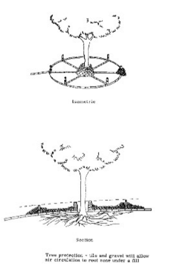


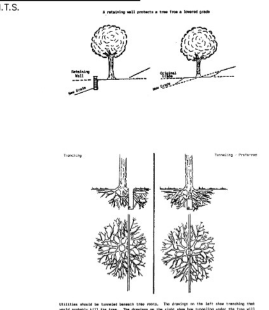
NOTE:
INDIVIDUAL LOT ACCESS POINTS MAY REQUIRE STABILIZATION. THICKNESS SHOWN IS FOR STONE CONSTRUCTION ENTRANCE ONLY (TYP.).

STABILIZED CONSTRUCTION ACCESS DETAIL

N.T.S.



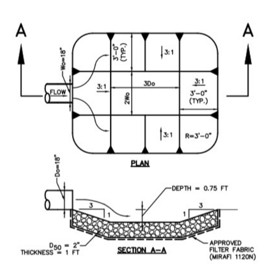




NOTES:
1. PROTECTIVE FENCING IS TO BE ERECTED PRIOR TO CONSTRUCTION AND MAINTAINED DURING CONSTRUCTION AS DIRECTED BY THE LANDSCAPE ARCHITECT, SOIL CONSERVATION DISTRICT AND/OR MUNICIPAL ENGINEER.
2. NO CONSTRUCTION ACTIVITY IS PERMITTED WITHIN THE PROTECTIVE FENCING.
3. AS CONSTRUCTION NEARS COMPLETION THE FENCING WILL BE REMOVED AS DIRECTED.
4. AT THE COMPLETION OF CONSTRUCTION ALL TREES WILL BE PRUNED AS NECESSARY TO CORRECT ANY DAMAGE RESULTING FROM CONSTRUCTION ACTIVITY.
5. GENERAL MECHANICAL DAMAGE - SEE DETAIL ABOVE FOR CORRECT PLACEMENT OF TREE PROTECTION.
6. BOX TREES WITHIN 25 FEET OF A BUILDING SITE TO PREVENT MECHANICAL INJURY. FENCING OR OTHER BARRIER SHOULD BE INSTALLED AT THE DRIP LINE OF THE TREE BRANCHES.
7. BOARDS WILL NOT BE NAILED TO TREES DURING BUILDING OPERATIONS.
8. FEEDER ROOTS SHOULD NOT BE CUT IN AN AREA INSIDE THE DRIP LINE OF THE TREE BRANCHES.
9. DAMAGED TRUNKS OR EXPOSED ROOTS SHOULD HAVE DAMAGED BARK REMOVED IMMEDIATELY AND NO PAINT SHALL BE APPLIED. EXPOSED ROOTS SHOULD BE COVERED WITH TOPSOIL IMMEDIATELY AFTER EXCAVATION IS COMPLETE. ROOTS SHALL BE PRUNED TO GIVE A CLEAN, SHARP SURFACE AMENABLE TO HEALING. ROOTS EXPOSED DURING HOT WEATHER SHOULD BE IRRIGATED TO PREVENT PERMANENT TREE INJURY. CARE FOR SERIOUS INJURY SHOULD BE PRESCRIBED BY A PROFESSIONAL FORESTER OR CERTIFIED TREE EXPERT.
10. TREE LIMB REMOVAL WHERE NECESSARY, WILL BE DONE AS NATURAL TARGET PRUNING TO REMOVE THE DESIRED BRANCH COLLAR. THERE SHOULD BE NO FLUSH CUTS. FLUSH CUTS DESTROY A MAJOR DEFENSE SYSTEM OF THE TREE. NO TREE PAINT SHALL BE APPLIED. ALL CUTS SHALL BE MADE AT THE OUTSIDE EDGE OF THE BRANCH COLLAR. CUTS MADE TOO FAR BEYOND THE BRANCH COLLAR MAY LEAD TO EXCESS SPROUTING, CRACKS AND ROT. REMOVAL OF A "V" CROTCH SHOULD BE CONSIDERED FOR FREE STANDING SPECIMEN TREES TO AVOID FUTURE SPLITTING DAMAGE.

TEMPORARY TREE PROTECTION DETAILS

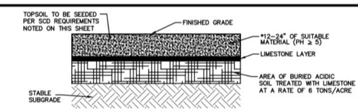
N.T.S.



D_{50} = 2"
THICKNESS = 1 FT

PREFORMED SCOUR HOLE DETAIL

N.T.S.

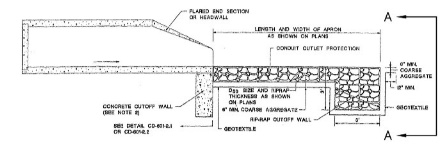


* 24" OF TOPSOIL TO BE INSTALLED IN AREAS DESIGNATED FOR TREE OR SHRUB PLANTING.

1. ACID PRODUCING SOILS ARE DEFINED AS SOILS CONTAINING IRON SULFIDE MINERALS OR SOILS WITH A pH OF 4.0 OR LESS.
2. IRON SULFIDE MINERALS WILL PRODUCE SULFURIC ACID WHEN EXPOSED TO THE AIR AND SURFACE WATERS.
3. SOIL USED TO COVER ACID PRODUCING SOILS SHALL HAVE A pH OF 5.0 OR MORE.
4. SLOPED AREAS AND AREAS WITH TREE AND SHRUB PLANTINGS WILL BE COVERED WITH 2 FEET OF SUITABLE MATERIAL, THE TOP 5 INCHES SHALL BE TOPSOIL.
5. ACID SOIL BURIAL WILL AVOID AREAS OF RESIDENTIAL LOTS.

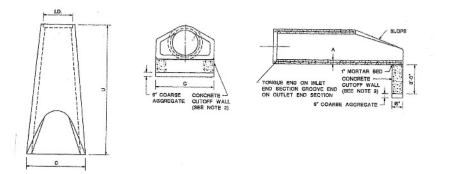
ACID SOIL MITIGATION DETAIL

N.T.S.



CONDUIT OUTLET PROTECTION DETAIL

N.T.S.



DIMENSIONS (INCHES)												
I.D.	12	15	18	21	24	27	30	36	42	48	54	60
A	2	2¼	2½	2¾	3	3¼	3½	4	4½	5	5½	6
U	72	72	72	72	72	72	72	96	96	96	96	96
C	28	34.5	41	47.5	54	60.5	67	80	87	94	101	108

NOTES:
1. MINOR VARIATIONS TO THE ABOVE DIMENSIONS ARE ACCEPTABLE WITH THE EXCEPTION OF THE INSIDE DIAMETER DIMENSION.
2. A 1INCH THICK MORTAR BED AND A 6 INCH DEEP LAYER OF COARSE AGGREGATE ARE REQUIRED WHEN A PRECAST CONCRETE CUTOFF WALL IS USED.
3. NO SEPARATE PAYMENT WILL BE MADE FOR THE CONCRETE CUTOFF WALL. THE COST OF THE CONCRETE CUTOFF WALL SHALL BE INCLUDED IN THE COST OF THE END SECTION.
4. THE WIDTH OF THE CONCRETE CUTOFF WALL SHALL BE EQUAL TO THE MAXIMUM WIDTH OF THE END SECTION AS INDICATED ON THE DETAIL BY DIMENSION "C". HOWEVER, IF THE ACTUAL MAXIMUM WIDTH EXCEEDS THE CHART VALUE OF "C", THE WIDTH OF THE CONCRETE CUTOFF WALL SHALL EQUAL THE ACTUAL MAXIMUM WIDTH OF THE END SECTION.

CONCRETE FLARED END SECTION DETAIL

N.T.S.

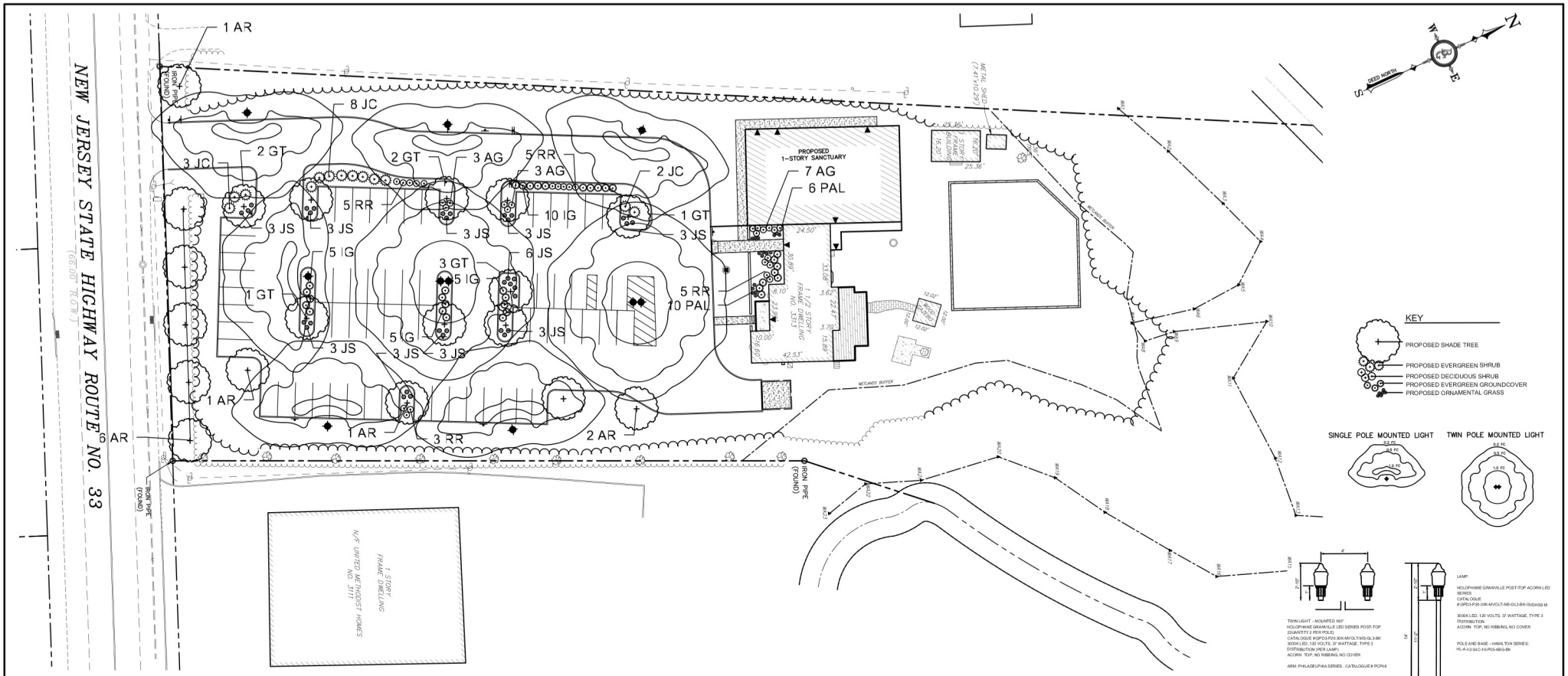
REV.	DATE	DRAWN BY	DESCRIPTION

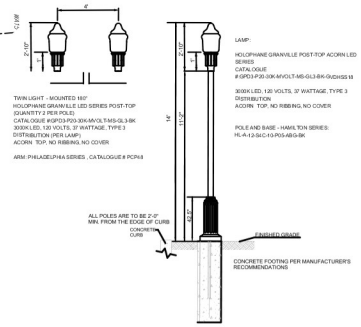
BESRICK G. PLUMMER
PROFESSIONAL ENGINEER
NEW JERSEY LIC. NO. 39534

B&G Engineering LLC
State of N.J. Certificate of Authorization: 24GA28168000
30 BERNARD DRIVE
EWING, N.J. 08628
Phone (732) 598-6616
Fax (609) 671-0715

PRELIMINARY & FINAL SITE PLAN
SOIL EROSION AND SEDIMENT CONTROL DETAILS
FOR
GALILEE EGLISE ADVENTISTE, INC.
PROPOSED CHURCH
LOT 4, BLOCK 3301
NEPTUNE TOWNSHIP MONMOUTH COUNTY NEW JERSEY

JOB NUMBER: 1943A	DATE: DEC. 5, 2022
SCALE: 1" = 20'	LATEST REVISION:
DESIGN BY: BP	CHECKED BY: BP
SHEET NUMBER: 10 of 13	

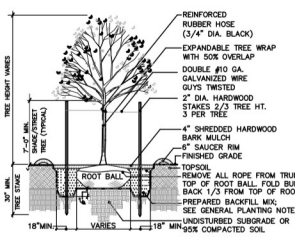




LIGHT FIXTURE DETAIL
BY ACUITY BRAND - HOLOPHANE OR APPROVED EQUAL

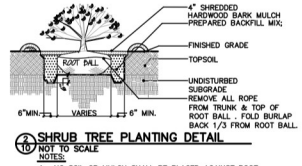
GENERAL PLANTING NOTES

1. THIS PLAN SHALL BE USED FOR LANDSCAPE PLANTING PURPOSES ONLY. EXAMINE ALL ENGINEERING DRAWINGS AND FIELD CONDITIONS FOR SPECIFIC LOCATIONS OF UTILITIES, AND STRUCTURES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR LOCATION CONFLICTS PRIOR TO TO PLANTING INSTALLATION.
2. THE CONTRACTOR IS RESPONSIBLE TO LOCATE AND VERIFY LOCATION OF ALL UTILITIES ON SITE PRIOR TO CONSTRUCTION.
3. ALL PLANT MATERIAL SHALL CONFORM TO THE STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN OR THE PLANT MATERIAL WILL BE UNACCEPTABLE. ALL PLANT MATERIAL SHALL BE TRUE TO SPECIES, VARIETY, SIZE AND BE CERTIFIED DISEASE AND INSECT FREE. THE OWNER AND/OR THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO APPROVE ALL PLANT MATERIAL ON SITE PRIOR TO INSTALLATION.
4. NO PLANT SUBSTITUTIONS SHALL BE PERMITTED WITH REGARD TO SIZE, SPECIES, OR VARIETY WITHOUT WRITTEN PERMISSION OF THE LANDSCAPE ARCHITECT OR TOWNSHIP OFFICIALS. WRITTEN PROOF OF PLANT MATERIAL UNAVAILABILITY MUST BE DOCUMENTED.
5. THE LOCATION OF ALL PLANT MATERIAL INDICATED ON THE LANDSCAPE PLANS ARE APPROXIMATE. THE FINAL LOCATION OF ALL PLANT MATERIAL AND PLANTING BED LINES SHALL BE DETERMINED IN THE FIELD UNDER THE DIRECTION OF THE ENGINEER. NO SHADE TREE, STREET TREE, ORNAMENTAL FLOWERING TREE OR EVERGREEN TREE SHALL BE PLANTED CLOSER THAN 10' FROM ANY SIDEWALK, DRIVEWAY, CURB OR UTILITY LOCATION UNLESS SPECIFICALLY DIMENSIONED ON THE LANDSCAPE PLAN.
6. ALL STREET TREES AND SHADE TREES PLANTED NEAR PEDESTRIAN OR VEHICULAR ACCESS SHOULD NOT BE BRANCHED LOWER THAN 7'-0" ABOVE GRADE. ALL PLANT MATERIAL LOCATED WITHIN SIGHT TRIANGLE EASEMENTS SHALL NOT EXCEED A MATURE HEIGHT OF 30" ABOVE THE ELEVATION OF THE ADJACENT CURB. ALL STREET TREES PLANTED IN SIGHT TRIANGLE EASEMENTS SHALL BE PRUNED TO NOT HAVE BRANCHES BELOW 8'-0".
7. THE PLANTING PLAN SHALL TAKE PRECEDENCE OVER THE PLANT SCHEDULE SHOULD ANY PLANT QUANTITY DISCREPANCIES OCCUR.
8. ALL PLANT MATERIAL SHALL BE PROPERLY GUYED, STAKED, WRAPPED AND PLANTED IN CONFORMANCE WITH THE TYPICAL PLANTING DETAILS. GUY WIRES SHALL BE ATTACHED TO THE TREE AT A HEIGHT OF TWO-THIRDS THE HEIGHT OF THE TREE AND SHOULD BE LOCATED AT POINTS SO AS NOT TO SPLIT THE TRUNKS OF MULTI-STEMMED TREES. PROVIDE THREE TREE STAKES PER TREE UNLESS NOTED OTHERWISE. INSTALL ALL PLANT MATERIAL ON UNDISTURBED GRADE. PROVIDE BURLAP WRAPPING WITH A 50% OVERLAP. CUT AND REMOVE BURLAP FROM TOP ONE-THIRD OF THE ROOT BALL.
9. BRANCHES OF EXISTING DECIDUOUS TREES SHALL BE PRUNED BACK BY NO MORE THAN ONE QUARTER (1/4) TO BALANCE THE TOP GROWTH WITH ROOTS AND TO PRESERVE THEIR CHARACTER AND SHAPE. THE CENTRAL LEADER OF TREE SHALL NOT BE PRUNED.
10. PROVIDE PLANTING PITS AS INDICATED ON PLANTING DETAILS. BACKFILL PLANTING PITS WITH ONE PART EACH OF TOPSOIL, PEAT MOSS AND PARENT MATERIAL. IF WET SOIL CONDITIONS EXIST THEN PLANTING PITS SHALL BE BE EXCAVATED AN ADDITIONAL 12" AND FILLED WITH CRUSHED STONE.
11. ALL PLANT MATERIAL SHALL SHALL BEAR THE SAME RELATION TO FINISHED GRADE AS IT BORE TO EXISTING GRADE AT NURSERY.
12. NEWLY INSTALLED PLANT MATERIAL SHALL BE WATERED AT THE TIME OF INSTALLATION. REGULAR WATERING SHALL BE PROVIDED TO ENSURE THE ESTABLISHMENT, GROWTH AND SURVIVAL OF ALL PLANTS.
13. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR ONE YEAR AFTER THE DATE OF FINAL ACCEPTANCE, ANY PLANT MATERIAL THAT DIES WITHIN THAT TIME PERIOD SHALL BE REMOVED, INCLUDING THE STUMP, AND REPLACED BY A TREE OF SIMILAR SIZE AND SPECIES AT THE EXPENSE OF THE DEVELOPER.
14. ALL PLANTING BEDS SHALL RECEIVE 4" MIN OF SHREDDED HARDWOOD BARK.
15. ALL SHRUB MASSES SHALL BE PLANTED IN CONTINUOUS MULCHED BEDS.
16. ALL EXISTING TREES AND SHRUBS TO BE PRESERVED ON SITE SHALL BE PROTECTED AGAINST CONSTRUCTION DAMAGE BY SNOW FENCING. ALL FENCING SHALL BE PLACED OUTSIDE THE INDIVIDUAL TREE CANOPY. ALL TREES TO REMAIN SHALL BE IDENTIFIED IN THE FIELD PRIOR TO COMMENCEMENT OF CONSTRUCTION, TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION, GRADING OR CLEARING. ALL EXISTING VEGETATION BEING PRESERVED AND LOCATED AT THE EDGE OF THE NEW TREELINE, SHALL BE PRUNED AND TRIMMED TO REMOVE ALL DEAD, DISEASED, OR DAMAGED BRANCHES.
17. ALL PLANTING DEBRIS (WIRE, TWINE, RUBBER HOSE, BACKFILL ETC.) SHALL BE REMOVED FROM THE SITE AFTER PLANTING IS COMPLETE. PROPERTY IS TO BE LEFT IN A NEAT ORDERLY CONDITION IN ACCORDANCE WITH ACCEPTED PLANTING PRACTICES.
18. EXISTING TOSOIL SHALL BE STOCKPILED AND REUSED IN THE FINISHED LANDSCAPE. ALL ROCKS 1/2 INCH OR LARGER IN ANY DIMENSION SHALL BE REMOVED. THE ROCK CONTENT OF THE TOPSOIL SHALL BE MAINTAINED AT NO GREATER THAN 20 PERCENT BY VOLUME.



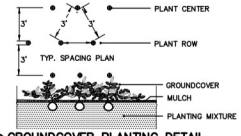
1 SHADE TREE PLANTING DETAIL
10 NOT TO SCALE

NOTES:
1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.

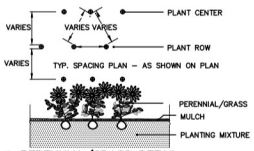


2 SHRUB TREE PLANTING DETAIL
10 NOT TO SCALE

NOTES:
1. NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
2. PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.



3 GROUNDCOVER PLANTING DETAIL
10 NOT TO SCALE



4 PERENNIAL/GRASS DETAIL
10 NOT TO SCALE

PLANT SCHEDULE

KEY	QTY	BOTANICAL NAME	COMMON NAME	HGT.	CAL.	SIZE	NOTES
TREES							
AR	11	ACER RUBRUM	RED MAPLE	12-14'	3-3.5"	B&B	STRAIGHT LEADER/FULL HEAD
GT	9	GLEDITSIA TRIACANTHOS INERMIS	THORNLESS HONEY LOCUST	12-14'	3-3.5"	B&B	STRAIGHT LEADER/FULL HEAD
SHRUBS							
IG	25	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY HOLLY	30-36"		3 GAL.	WELL BRANCHED
JC	13	JUNIPERUS CHINENSIS 'SEA GREEN'	SEA GREEN JUNIPER	30-36"		5 GAL.	WELL BRANCHED
RR	18	ROSA RADRAZZ 'DOUBLE KNOCKOUT'	DOUBLE KNOCKOUT ROSE	30-36"		3 GAL.	WELL BRANCHED
AG	13	ABELIA 'GRANDIFLORA' ROSE CREEK'	ROSE CREEK GLOSSY ABELIA	30-36"		3 GAL.	WELL BRANCHED
GRASSES / GROUNDCOVER							
JS	33	JUNIPERUS SQUAMATA 'BLUE STAR'	BLUE STAR JUNIPER	18-24"		2 GAL.	3 FT. O.C. SPACING
PAL	16	PENNISETUM ALOPECUROIDES 'LITTLE BUNNY'	LITTLE BUNNY FOUNTAIN GRASS	18-24"		1 GAL.	2 FT. O.C. SPACING

REV.	DATE	DRAWN BY	DESCRIPTION

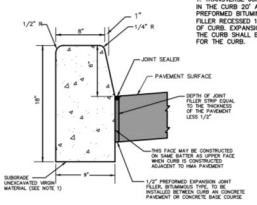
BESRICK G. PLUMMER
PROFESSIONAL ENGINEER
NEW JERSEY LIC. NO. 39534

B&G Engineering LLC
State of N.J. Certificate of Authorization: 24GA28168000
30 BERNARD DRIVE
EWING, N.J. 08628
Phone (732) 388-8616
Fax (609) 671-0715

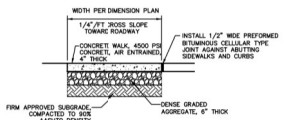
PRELIMINARY & FINAL SITE PLAN
LANDSCAPE AND LIGHTING PLAN AND DETAILS
FOR
GALILEE EGLISE ADVENTISTE, INC.
PROPOSED CHURCH
LOT 4, BLOCK 3301
NEPTUNE TOWNSHIP MONMOUTH COUNTY NEW JERSEY

JOB NUMBER: 1943A
DATE: DEC. 5, 2022
SCALE: 1" = 20"
LATEST REVISION:
DESIGN BY: BP
CHECKED BY: BP
SHEET NUMBER: 11 of 13

NOTES:
1. TRANSVERSE JOINTS 1/2" WIDE SHALL BE INSTALLED IN THE CURB 20' APART AND SHALL BE FILLED WITH PREFORMED BITUMINOUS-IMPREGNATED FIBER JOINT FILLER RECESSED 1/4" IN FROM FRONT FACE AND TOP OF CURB. EXPANSION JOINTS THRU AND ADJACENT TO THE CURB SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE CURB.

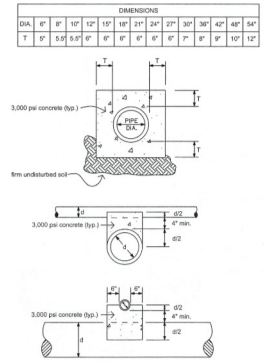


CONCRETE VERTICAL CURB DETAIL
N.T.S.

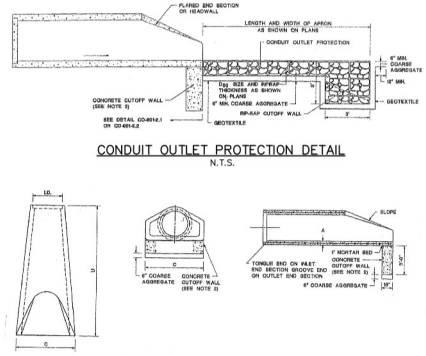


THE FORMS AND DIVIDERS SHALL BE OF STEEL OR WOOD AND OF SUFFICIENT STRENGTH TO RESIST SPRINGING OUT OF SHAPE, AS PER SPECIFICATION. WALK SHALL BE OF MONOLITHIC CONSTRUCTION FOUR (4) INCHES THICK. TRANSVERSE SURFACE GROOVES MUST BE PROVIDED AT RIGHT ANGLES TO THE SIDEWALK AND AT INTERVALS EQUAL TO THE WIDTH OF THE SIDEWALK. AFTER THE CONCRETE IS PLACED IT SHALL BE TAMPED SCREENED AND FINISHED TO TRUE GRADE. AID SURFACE. THE FINISH SHALL BE MADE WITH A WOOD FLOAT, FOLLOWED BY A BRUSHING WITH A WET SOFT HAIR BRUSH TO A NEAT WORKMANLIKE SURFAC. TRANSVERSE EXPANSION JOINTS 1/2 INCH WIDE SHALL BE PROVIDED AT INTERVALS NO GREATER THAN 20 FEET AND FILLED WITH PREFORMED BITUMINOUS CELLULAR TYPE JOINT FILLER. LONGITUDINAL JOINTS 1/2 INCH WIDE SHAL BE PROVIDED BETWEEN CURBS AND ABUTTING SIDEWALKS AND SHALL BE RILED WITH PREFORMED BITUMINOUS CELLULAR JOINT FILLER.

CONCRETE SIDEWALK DETAIL (NO CURB)
N.T.S.



CONCRETE ENCASEMENT DETAIL
N.T.S.



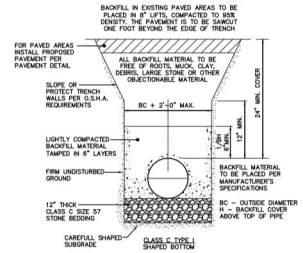
DIMENSIONS (INCHES)

I.D.	12	15	18	21	24	30	36	42	48	54	60
A	2	2½	2½	2½	3	3½	3½	4	4½	5	5½	6
U	72	72	72	72	72	72	72	96	96	96	96	96
C	29	34.5	41	47.5	54	65.5	67	80	87	94	101	108

NOTES:
1. MINOR VARIATIONS TO THE ABOVE DIMENSIONS ARE ACCEPTABLE WITH THE EXCEPTION OF THE INSIDE DIAMETER DIMENSION.
2. A 1INCH THICK MORTAR BED AND A 6 INCH DEEP LAYER OF COARSE AGGREGATE ARE REQUIRED WHEN A PRECAST CONCRETE CUTOFF WALL IS USED.
3. NO SEPARATE PAYMENT WILL BE MADE FOR THE CONCRETE CUTOFF WALL. THE COST OF THE CONCRETE CUTOFF WALL SHALL BE INCLUDED IN THE COST OF THE END SECTION.
4. THE WIDTH OF THE CONCRETE CUTOFF WALL SHALL BE EQUAL TO THE MAXIMUM WIDTH OF THE END SECTION AS INDICATED ON THE DETAIL BY DIMENSION "C". HOWEVER, IF THE ACTUAL MAXIMUM WIDTH EXCEEDS THE CHART VALUE OF "C", THE WIDTH OF THE CONCRETE CUTOFF WALL SHALL EQUAL THE ACTUAL MAXIMUM WIDTH OF THE END SECTION.

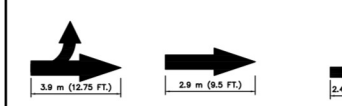
CONCRETE FLARED END SECTION DETAIL

CONDUIT OUTLET PROTECTION DETAIL
N.T.S.



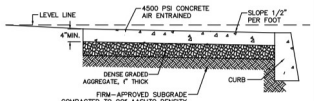
NOTE:
ALL TRENCHING OPERATIONS SHALL CONFORM TO THE LATEST O.S.H.A. REQUIREMENTS.

CONCRETE PIPE BEDDING DETAIL
N.T.S.



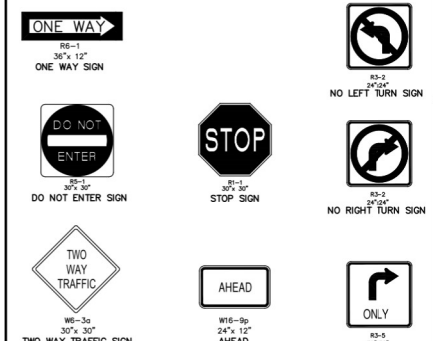
TURN AND THROUGH LANE–USE ARROW
THROUGH LANE–USE ARROW
TURN LANE–USE ARROW

PAVEMENT MARKING DETAILS
N.T.S.

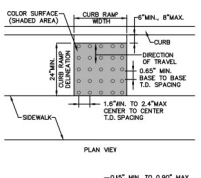


THE FORMS AND DIVIDERS SHALL BE OF STEEL OR WOOD AND OF SUFFICIENT STRENGTH TO RESIST SPRINGING OUT OF SHAPE, AS PER PECIFICATIONS. WALK SHALL BE OF MONOLITHIC CONSTRUCTION FOUR (4) INCHES THICK. TRANSVERSE SURFACE GROOVES MUST BE PROVIDED FOR AT RIGHT ANGLES TO THE SIDEWALK AND AT INTERVALS EQUAL TO WIDTH OF SIDEWALK. AFTER THE CONCRETE IS PLACED IT SHALL BE TAMPED SCREENED AND FINISHED TO TRUE GRADE. AID SURFACE. THE FINISH SHALL BE MADE WITH A WOOD FLOAT, FOLLOWED BY A BRUSHING WITH A WET SOFT HAIR BRUSH TO A NEAT WORKMANLIKE SURFACE. TRANSVERSE EXPANSION JOINTS 1/2 INCH WIDE SHALL BE PROVIDED AT INTERVALS OF NOT LESS THAN 20 FEET AND FILLED WITH PREFORMED BITUMINOUS CELLULAR TYPE JOINT FILLER. LONGITUDINAL JOINTS 1/2 INCH WIDE SHALL BE PROVIDED BETWEEN CURBS AND ABUTTING SIDEWALKS AND SHALL BE FILLED WITH PREFORMED BITUMINOUS TYPE FILLER. DRIVEWAY APRON AND SIDEWALK AT DRIVEWAY SHALL BE MADE WITH EXPANSION JOINTS ON EITHER SIDE OF IT. (6 INCHES THICK. APRON AT GUTTER LINE SHAL BE ONE AND ONE HALF (1 1/2) INCHES HIGHER THAN EXISTING PAVEMENT.

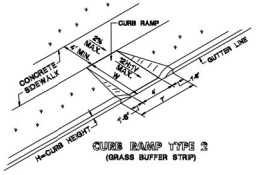
CONCRETE SIDEWALK DETAIL
N.T.S.



TRAFFIC SIGN DETAILS
N.T.S.



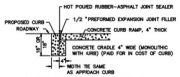
DETECTABLE WAINING SURFACE



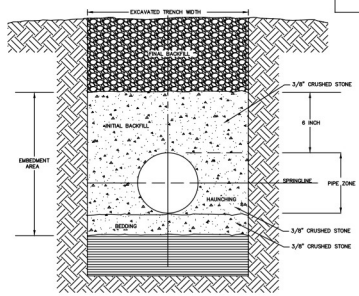
CURB RAMP TYPE 2, 3 OR 4 H INCHES	W FEET
3	3
4	4
5	5
6	6
7	7
8	8
9	9

GENERAL NOTES:
1. LANDING AREA, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP SHALL BE KEPT CLEAR OF OBSTRUCTIONS.
2. DIMENSIONS SHOWN IN TABLES ARE FOR RELATIVELY FLAT SIDEWALK AREAS. CARE SHOULD BE TAKEN WHEN DETERMINING CURB RAMP SIZE BASED ON CURB HEIGHT (H) WHERE ELEVATION OF CURB AND SIDEWALK VARY DRASTICALLY IN AREA OF PROPOSED CURB RAMP.
3. CURB (DROPPED CURB) GUTTERLINE TO BE FLUSH WITH ROADWAY PAVEMENT A MINIMUM OF 4 FEET AT ALL CURB RAMPS.
4. FOR CURB RAMP TYPES 5 AND 6, IF A GRASS BUFFER DOES NOT EXIST, SLOPE CURB TO EQUAL SLOPE OF ADJACENT CURB RAMP.
5. SIDEWALK AND CURB RAMP WITHIN AREA ENCLOSED BY HEAVY LINES TO BE PAID FOR AS CONCRETE SIDEWALK OF THE APPROPRIATE ADJACENT THICKNESS.
6. CURB AND HEADER WITHIN AREA ENCLOSED BY HEAVY LINES TO BE PAID FOR AS VERTICAL CURB OR SLOPING CURB OF THE APPROPRIATE ADJACENT SIZE AND KIND.
7. WHERE THE DISTANCE FROM THE GUTTER LINE TO THE OUTSIDE EDGE OF SIDEWALK IS 6 FEET OR LESS, CURB RAMP TYPE 7 SHOULD BE USED, INSTEAD OF CURB RAMP TYPES 1 THROUGH 4.
8. CROSSWALKS AND STOP LINES MAY BE MARKED OR UNMARKED, SEE PLANS.
9. PREFERRED AND ALTERNATE TREATMENTS SHOULD NOT BE INTERMIXED WITHIN THE SAME INTERSECTION.
10. DIMENSIONS SHOWN IN TABLES ARE FOR 3 INCH TO 9 INCH CURB HEIGHTS. WHERE THE CURB HEIGHTS ARE OTHER THAN WHAT IS PROVIDED IN THE TABLES, THE DIMENSIONS OF THE RAMPS WILL HAVE TO BE CALCULATED BASED ON CROSS SLOPES SHOWN.

HANDICAP ACCESSIBLE RAMP DETAILS
N.T.S.



DROPPED CURB AND CRADLE



UNDERGROUND INSTALLATION OF PLASTIC PIPE

PLASTIC PIPE SHOULD ALWAYS BE BURIED IN STRICT ACCORDANCE WITH THE ASTM STANDARD RELEVANT TO THE TYPE OF PLASTIC PIPING SYSTEM BEING INSTALLED. THOSE STANDARDS ARE:

ASTM D2321 STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY–FLOW APPLICATIONS.

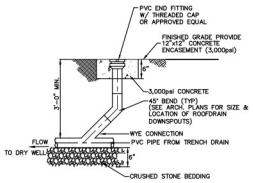
ASTM D2774 STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PRESSURE PIPING.

NOTE: IN ADDITION TO THESE STANDARDS, PIPE SHOULD ALWAYS BE INSTALLED IN ACCORDANCE WITH ALL LOCAL CODE REQUIREMENTS.

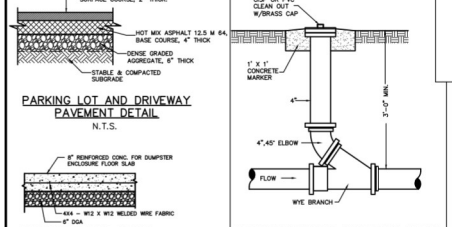
RECOMMENDATIONS FOR UNDERGROUND INSTALLATION OF PLASTIC DRAINAGE PIPE:

1. THE MINIMUM WIDTH OF THE TRENCH SHOULD BE THE PIPE OD (OUTSIDE DIAMETER) PLUS 16 INCHES OR THE PIPE OUTSIDE DIAMETER TIMES 1.25 PLUS 12 INCHES. THIS WILL ALLOW ADEQUATE ROOM FOR JOINING THE PIPE, SHAKING THE PIPE IN THE TRENCH TO ALLOW FOR EXPANSION AND CONTRACTION WHERE APPROPRIATE, AND SPACE FOR BACKFILLING AND COMPACTION OF BACKFILL. THE SPACE BETWEEN THE PIPE AND TRENCH WALL MUST BE WIDER THAN THE COMPACTION EQUIPMENT USED TO COMPACT THE BACKFILL.
2. PROVIDE A MINIMUM OF 4 INCHES OF FIRM, STABLE AND UNIFORM BEDDING MATERIAL IN THE TRENCH BOTTOM. IF ROCK OR UNYIELDING MATERIAL IS ENCOUNTERED, A MINIMUM OF 6 INCHES OF BEDDING SHALL BE USED. BLOCKING SHOULD NOT BE USED TO CHANGE PIPE GRADE OR TO INTERMITTENTLY SUPPORT PIPE OVER LOW SECTIONS IN THE TRENCH.
3. THE PIPE SHOULD BE SURROUNDED WITH AN AGGREGATE MATERIAL WHICH CAN BE EASILY WORKED AROUND THE SIDES OF THE PIPE. BACKFILLING SHOULD BE PERFORMED IN LAYERS OF 6 INCHES WITH EACH LAYER BEING SUFFICIENTLY COMPACTED TO 85% TO 95% COMPACTION.
4. A MECHANICAL TAMPER IS RECOMMENDED FOR COMPACTING SAND AND GRAVEL. THESE MATERIALS CONTAIN FINE GRAINS, SUCH AS SILT AND CLAY. IF A TAMPER IS NOT AVAILABLE, COMPACTING SHOULD BE DONE BY HAND.
5. THE TRENCH SHOULD BE COMPLETELY FILLED. THE BACKFILL SHOULD BE PLACED AND SPREAD IN UNIFORM LAYERS TO PREVENT ANY UNFILLED SPACES OR VOIDS. LARGE ROCKS, STONES, FROZEN CLODS, OR OTHER LARGE DEBRIS SHOULD BE REMOVED. STONE BACKFILL SHALL PASS THROUGH AN 1–1/2" SIEVE. ROCK SIZE SHOULD BE ABOUT ONE–TENTH OF THE PIPE OUTSIDE DIAMETER. HEAVY TAMPERS OR ROLLING EQUIPMENT SHOULD ONLY BE USED TO CONSOLIDATE THE FINAL BACKFILL.
6. TO PREVENT DAMAGE TO THE PIPE AND DISTURBANCE TO PIPE EMBEDMENT, A MINIMUM DEPTH OF BACKFILL ABOVE THE PIPE SHOULD BE MAINTAINED. PIPE SHOULD ALWAYS BE INSTALLED BELOW THE FROST LEVEL. TYPICALLY, IT IS NOT ADVISABLE TO ALLOW VEHICULAR TRAFFIC OR HEAVY CONSTRUCTION EQUIPMENT TO TRAVERSE THE PIPE TRENCH.

PVC PIPE BEDDING DETAIL
N.T.S.



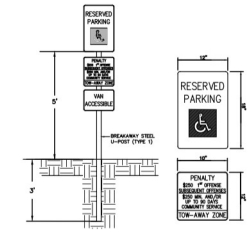
STORM WATER CLEANOUT DETAIL
N.T.S.



PARKING LOT AND DRIVEWAY PAVEMENT DETAIL
N.T.S.

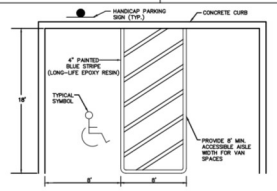
CONCRETE SLAB DETAIL AT DUMPSTER ENCLOSURE
N.T.S.

SANITARY SEWER CLEANOUT DETAIL
N.T.S.

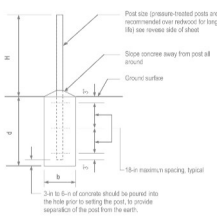


HANDICAPPED PARKING SPACE SIGN DETAILS
N.T.S.

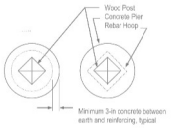
NOTE:
1. THIS DETAIL REPRESENTS THE STANDARD DETAIL FOR HANDICAP SIGN INSTALLATION, IF NEW SIGNS NEED TO BE INSTALLED, DUE TO DAMAGE TO EXISTING SIGNS.



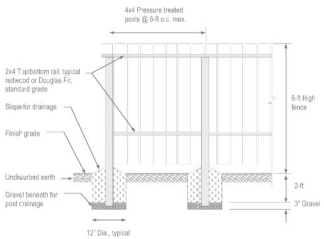
HANDICAPPED PARKING STALL DETAIL
N.T.S.



H = Height of fence above grade (feet)
S = Spacing of fence posts (center-to-center, feet)
b = Diameter of round concrete pier hole (inches)
d = Required depth of concrete pier (feet and inches)
P = Post size, wood, cedar or redwood (nominal inches)



FENCE POST AND FOUNDATION DETAILS
N.T.S.



NOTES:
- Wood posts shall be of naturally durable or preservative-treated wood (CBC 2304.11.2.7). Wood posts shall be No. 2 foundation-grade redwood, or pressure-treated Douglas fir-larch No. 2 or better.
- Preservative treatment must be applied to the ends of wood posts buried in the ground.
- Set posts/pipes in 12-inch diameter concrete footing extending at least 24 inches into undisturbed natural ground or properly compacted fill. Footings should be placed over 3 inches of loose gravel. Wood posts should extend through concrete footings to gravel below.
- Use galvanized nails or screws at all wood-to-wood connections.

6' HIGH WOOD FENCE DETAIL AT DUMPSTER LOCATION
N.T.S.

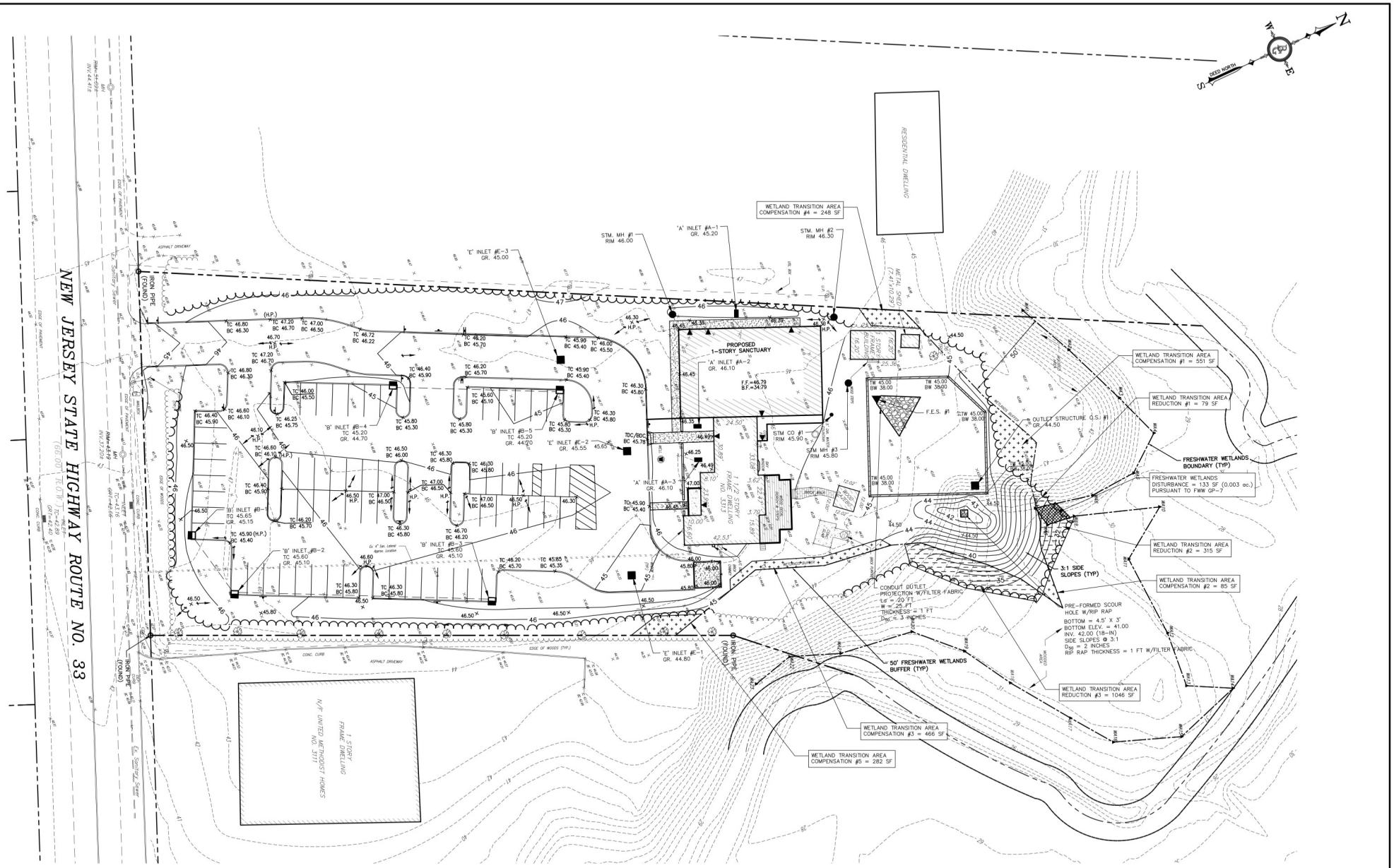
REV.	DATE	DRAWN BY	DESCRIPTION

BESRICK G. PLUMMER
PROFESSIONAL ENGINEER
NEW JERSEY LIC. NO. 39534

B&G Engineering LLC
30 BERNARD DRIVE
EWING, N.J. 08628
Phone (732) 588-6616
Fax (609) 671-0715
State of N.J. Certificate of Authorization: 24GA28168000

PRELIMINARY & FINAL SITE PLAN
CONSTRUCTION DETAILS
FOR
GALILEE EGLISE ADVENTISTE, INC.
PROPOSED CHURCH
LOT 4, BLOCK 3301
NEPTUNE TOWNSHIP MONMOUTH COUNTY NEW JERSEY

JOB NUMBER: 1943A
DATE: DEC. 5, 2022
SCALE: AS SHOWN
LATEST REVISION:
DESIGN BY: BP
CHECKED BY: BP
SHEET NUMBER: 12 of 13



FRESHWATER WETLANDS DISTURBANCE

WETLANDS SWALE DISTURBANCE (PURSUANT TO FWW GP-7) = 133 SF (0.003 ac.)

FRESHWATER WETLANDS TRANSITION AREA AVERAGING PLAN

EXISTING FRESHWATER WETLANDS TRANSITION AREA	=	24,830 SF
PROPOSED TRANSITION AREA REDUCTION	=	1,442 SF
PROPOSED TRANSITION AREA COMPENSATION	=	1,632 SF
PROPOSED TRANSITION AREA TOTAL	=	25,020 SF

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

REV.	DATE	DRAWN BY	DESCRIPTION

BESRICK G. PLUMMER
PROFESSIONAL ENGINEER
NEW JERSEY LIC. NO. 39534

B&G Engineering LLC
State of N.J. Certificate of Authorization: 24GA28168000

30 BERNARD DRIVE
EWING, N.J. 08628
Phone (732) 588-8616
Fax (609) 671-0715

PRELIMINARY & FINAL SITE PLAN

NJDEP PERMIT PLAN

FOR

GALILEE EGLISE ADVENTISTE, INC.
PROPOSED CHURCH
LOT 4, BLOCK 3301

NEPTUNE TOWNSHIP MONMOUTH COUNTY NEW JERSEY

JOB NUMBER: 1943A	DATE: DEC. 5, 2022
SCALE: 1" = 20'	LATEST REVISION:
DESIGN BY: BP	CHECKED BY: BP
SHEET NUMBER: 13 of 13	