Preliminary/Final Site Plan

WITH USE VARIANCE

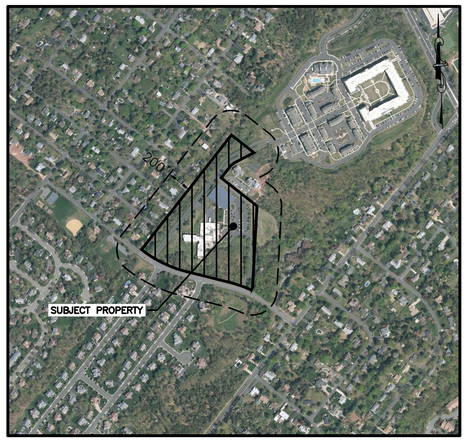
PARKER AT SOMERSET CHILD CARE FACILITY

Tax Map Sheet 85

Block 424.01, Lots 39.08

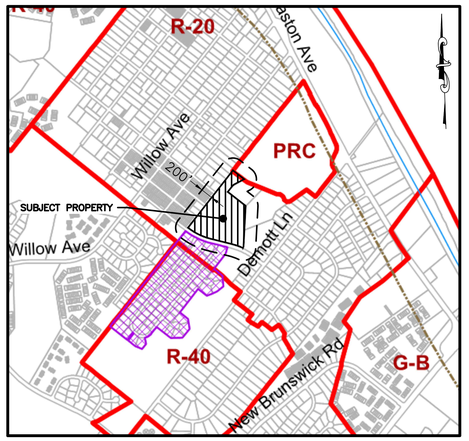
Franklin Township, Somerset County, New Jersey

SHEET INDEX		
SHT. NO.	DRAWING	DESCRIPTION
01	CVR-1	COVER SHEET
02	LEG-1	LEGEND & GENERAL NOTES
03	EXC-1	EXISTING CONDITIONS PLAN
04	CSP-OVR	OVERALL PLAN
05	CSP-1	SITE LAYOUT / GRADING / SOIL EROSION PLAN
06	SED-1	SOIL EROSION AND SEDIMENT CONTROL NOTES
07	SED-2	SOIL EROSION AND SEDIMENT CONTROL DETAILS
08	L.3	COURTYARD LANDSCAPE PLAN



Key Map

SCALE: 1" = 500'



Zoning Map

SCALE: 1" = 1,000'

Zoning Requirements

CURRENT ZONING: R-20 RESIDENCE ZONE
EXISTING/PROPOSED USE: NURSING FACILITY (ENC)(V)(3) / CHILD CARE FACILITY (V)(1)

REQUIREMENT	REQUIRED	EXISTING (LOT 39.08)	PROPOSED (LOT 39.08)
MINIMUM LOT AREA (CORNER LOT)	26,000 SF	620,481 SF (14.244 AC.)	NO CHANGE
MINIMUM LOT FRONTAGE (CORNER LOT)	130 FEET	907 FEET	NO CHANGE
MIN. FRONT YARD SETBACK	35 FEET	134.2 FEET	NO CHANGE
MIN. SIDE YARD SETBACK (SINGLE)	15 FEET	47.7 FEET	NO CHANGE
MIN. SIDE YARD SETBACK (COMBINED)	30 FEET	244.8 FEET	NO CHANGE
MIN. REAR YARD SETBACK	50 FEET	190.8 FEET	NO CHANGE
ACCESSORY BUILDING SIDE YARD	15 FEET	N/A	N/A
ACCESSORY BUILDING REAR YARD	25 FEET	N/A	N/A
GARDEN SHED SIDE/REAR YARD	5 FEET	N/A	N/A
MAXIMUM BUILDING HEIGHT	35 FEET (2.5 STORIES)	48 FEET (V)(4) (3 STORIES)	NO CHANGE
MAXIMUM LOT COVERAGE (ALL BUILDINGS)	15%	10.22% (63,416 S.F.)	NO CHANGE
MAXIMUM IMPERVIOUS COVERAGE (ALL IMPERVIOUS)	25%	38.28% (V)(5) (237,544 S.F.)	38.44% (V)(2) (238,486 S.F.)
FLOOR AREA RATIO (F.A.R.)	N/A	0.217	NO CHANGE

(ENC) – EXISTING NON-CONFORMITY
(V) – VARIANCE

(1) "D" VARIANCE REQUIRED FOR MODIFICATION OF AN EXISTING NON-PERMITTED USE. CHAPTER 112 SCHEDULE 1 PERMITTED USES.

(2) "C" VARIANCE REQUIRED FOR EXCEEDING MAXIMUM IMPERVIOUS LOT COVERAGE PERMITTED. CHAPTER 112, SCHEDULE 2 LOTS AND YARDS REQUIREMENT

(3) PER RESOLUTION NO. ZBA-18-0001 DATED 06/07/2018, EXISTING "D" VARIANCE APPROVED FOR INTENSIFICATION OF AN EXISTING NON-PERMITTED USE. CHAPTER 112 SCHEDULE 1 PERMITTED USES.

(4) PER RESOLUTION NO. ZBA-18-0001 DATED 06/07/2018, EXISTING "D" VARIANCE APPROVED FOR PRIOR BUILDING REQUIRED FOR HEIGHT BEING 10% MORE THAN MAXIMUM ALLOWED. CHAPTER 112 SCHEDULE 3 HEIGHT, COVERAGE AND BUILDING REQUIREMENT.
HEIGHT TO PARAPET IS 42.5 FEET
HEIGHT TO TOP OF MECHANICAL SCREEN ON ROOF IS 48'

(5) PER RESOLUTION NO. ZBA-18-0001 DATED 06/07/2018, EXISTING "C" VARIANCE APPROVED FOR EXCEEDING MAXIMUM IMPERVIOUS LOT COVERAGE PERMITTED. CHAPTER 112, SCHEDULE 2 LOTS AND YARDS REQUIREMENT

Parking Summary

EXISTING/PROPOSED USE: NURSING FACILITY (3) CHILD CARE FACILITY (1)

REQUIRED TOTAL NUMBER OF PARKING SPACES, EXISTING CONDITIONS (ORD. 112-45) = 96 SPACES
(120 BEDS X 0.5 + 36 STAFF X 1 = 96)

REQUIRED NUMBER OF HANDICAP ACCESSIBLE PARKING SPACES, EXISTING CONDITIONS (ADA) = 6 SPACES

TOTAL NUMBER OF EXISTING STANDARD PARKING SPACES = 173 SPACES

TOTAL NUMBER OF EXISTING HANDICAP ACCESSIBLE PARKING SPACES = 14 SPACES

NURSING FACILITY: REQUIRED TOTAL NUMBER OF PARKING SPACES, PROPOSED CONDITIONS (ORD. 112-45) = 96 SPACES
(120 BEDS X 0.5 + 36 STAFF X 1 = 96)

CHILD CARE FACILITY: REQUIRED TOTAL NUMBER OF PARKING SPACES, PROPOSED CONDITIONS (ORD. 112-45) = 4 SPACES
(7 STAFF X 0.5 = 4)

REQUIRED TOTAL NUMBER OF PARKING SPACES PROPOSED CONDITIONS = 100 SPACES

REQUIRED TOTAL NUMBER OF HANDICAP ACCESSIBLE PARKING SPACES, PROPOSED CONDITIONS (ADA) = 6 SPACES

TOTAL NUMBER OF PROPOSED STANDARD PARKING SPACES = 173 SPACES

TOTAL NUMBER OF PROPOSED HANDICAP ACCESSIBLE PARKING SPACES = 14 SPACES

(1) THOUGH NOT PERMITTED IN THE R-20 ZONE, NURSING HOMES ARE PERMITTED AS A CONDITIONAL USE IN THE G-B (GENERAL BUSINESS) ZONE. NURSING HOMES IN THE G-B ZONE HAVE A PARKING REQUIREMENT OF 1 SPACE PER 2 BEDS AND 1 SPACE PER EMPLOYEE (MINIMUM OF 10), PER ORDINANCE CHAPTER 112-45. 30 EMPLOYEES ARE ASSUMED TO BE ON SITE AT ANY GIVEN SHIFT. ASSISTED LIVING FACILITIES HAVE A PARKING REQUIREMENT OF 0.50 PARKING SPACES PER ROOM, PER SECTION 5:21-4.14 OF THE RESIDENTIAL SITE IMPROVEMENT STANDARDS (RSIS).

(2) ACCORDING TO CHAPTER 112 – SCHEDULE 4 PARKING REQUIREMENTS, EDUCATIONAL INSTITUTIONS WHETHER PUBLIC OR PRIVATE HAVE A PARKING REQUIREMENT OF 1 SPACE FOR EACH 2 EMPLOYEES. THERE WILL BE A MAXIMUM OF 7 EMPLOYEES (1 SUPERVISOR + 6 CLASSROOM STAFF / 1:5 MAX RATIO OF STAFF TO KIDS) AT ANY ONE GIVEN TIME.

APPROVED BY THE ZONING BOARD OF ADJUSTMENT:

ZONING BOARD CHAIRMAN DATE

ZONING BOARD SECRETARY DATE

DESIGN TEAM

Site Design

T & M Associates
11 Tindall Road
Middletown, NJ 07748
Phone: (732)-671-6400

Architect & Landscape Architect

Spiezle Architectural Group, Inc.
1395 Yardville-Hamilton Square Road, Suite 2A
Hamilton, NJ 08691
Phone: (866)-974-7666

OWNER/APPLICANT

PARKER MEMORIAL HOMES
15 Dellwood Lane
Somerset, NEW JERSEY 08873
Phone: (732)-545-4200

ATTORNEY

BOB SMITH & ASSOCIATES
216 STELTON ROAD, SUITE B-1
PISCATAWAY, NEW JERSEY 08854
Phone: (732)-752-3100

SOMERSET COUNTY
ACCEPTANCE STAMP

These plans are not accepted for construction unless this block is stamped "Accepted as submitted" by a staff member of the Somerset County Engineering Division. Bids for construction should not be based on these plans until the plans are accepted by the County"

Acceptance of these plans expire two(2) years from the stamped date.

CALL 811 BEFORE YOU DIG 811 SAFE DIGGING PARTNER

PROJECT INFORMATION:
PATH: P:\PROJECTS\PARK\00047\Plans\
FILE NAME: PARK00047_SHT01_CVR.dwg
LAST PLOTTED: Mar 15, 2020 - 3:48PM
LAST SAVED BY: BKnauf

REVISIONS			
NO.	DATE	BY	CHKD

NICHOLAS C. ROTONDA
VICE PRESIDENT

05-15-2020
LICENSED PROFESSIONAL ENGINEER
STATE OF NJ LICENSE No. 34434

FRANCIS E. PARKER MEMORIAL HOMES

PARKER AT SOMERSET CHILD CARE FACILITY

BLOCK 424.01, LOT 39.08 FRANKLIN TOWNSHIP SOMERSET COUNTY, NEW JERSEY

PRELIMINARY / FINAL SITE PLAN

COVER SHEET

T AND M
YOUR GOALS. OUR MISSION.
11 TINDALL ROAD
MIDDLETOWN, NJ 07748
TEL 732-671-6400
FAX 732-671-7365
www.tandmassociates.com
NEW JERSEY BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS
CERTIFICATE OF AUTHORIZATION 24GA27987500

OFFICES LOCATED IN:
CALIFORNIA, INDIANA, KENTUCKY, MASSACHUSETTS, MICHIGAN, NEW JERSEY, OHIO AND PENNSYLVANIA

DESIGNED BY	JBF
CHECKED BY	NCR
DRAWN BY	BJK
DATE	05-15-2020
SCALE	AS SHOWN
PROJ. NO.	PARK-00047
DRAWING	CVR-1
SHEET	01 OF 07

PROPOSED	EXISTING
TRACT BOUNDARY	
PROPERTY/LOT LINE	
RIGHT-OF-WAY	
TITLE CENTERLINE	
PROJECT BASELINE	12+00 13+00
MUNICIPAL BOUNDARY LINE	
ZONING LINE	
NO ACCESS LINE	
EASEMENT LINE	
DEED TRACT LINE	
FORMER DEED TRACT LINE	
PIERHEAD LINE	
R.O.W. ACQUISITION LINE	
EASEMENT ACQUISITION LINE	
BUILDING SETBACK LINE	
BUILDING OVERHANG	
INTERMEDIATE CONTOURS	102
INDEX CONTOURS	100
EDGE OF PAVEMENT	
CURB	
EDGE OF GRAVEL	
CHAIN LINK FENCE LINE	
VINYL FENCE LINE	
WIRE FENCE LINE	X X
WOOD FENCE LINE	
GUIDE RAIL LINE	
GUIDE RAIL LINE	
EDGE OF WOODS / TREES	
RAILROAD TRACK	
OVERHEAD ELECTRICAL LINE	OHU OHU
ELECTRICAL LINE	E E
COMMUNICATIONS LINE	CATV CATV
WATER LINE	W W
IRRIGATION LINE	IR IR
NATURAL GAS LINE	G G
SANITARY SEWER LINE	S S
SANITARY SEWER LATERAL	SL SL
STORM SEWER LINE	
ROOF DRAIN	
TELEPHONE LINE	T T
TELEPHONE CONDUIT LINE	TC TC
UNKNOWN UG UTILITY LINE	UGU UGU
SOIL TYPE LINE	
WETLANDS DELINEATION LINE	
WETLANDS BUFFER LINE	
FLOOD HAZARD LINE	
500 YEAR FLOOD HAZARD LINE	
CAFRA BUFFER	
EDGE OF WATER	
DRAINAGE CHANNEL CENTERLINE	
BOTTOM OF DITCH	
DRAINAGE CHANNEL LIMIT	
TOP OF DRAINAGE CHANNEL	
SLOPES	TOE (F) TOP (C) TOE (F) TOP (C)
LIMIT OF DISTURBANCE	
SEDIMENT CONTROL FENCE	
SILT FENCE	SF SF
SILT FENCE 18"	SF18 SF18
SILT FENCE 30'	SF30 SF30
HAY BALES	HB HB
SUPER SILT FENCE	SSF SSF
SILT SOCK 8"	SOXX8 SOXX8
SILT SOCK 12"	SOXX12 SOXX12
SILT SOCK 18"	SOXX18 SOXX18
SILT SOCK 24"	SOXX24 SOXX24
TREE PROTECTION	
TURBIDITY CURTAIN	

EXISTING	
BUILDINGS/DWELLINGS	
Mon. Fnd □	CONCRETE MONUMENT ■
Pin Fnd ○	IRON PIN ⊙
BM	BENCHMARK
Elec. Box □	ELECTRICAL BOX □
UP-#	UTILITY POLE ●—
Elec. MH	ELECTRICAL MANHOLE ●
GA	UTILITY POLE GUY ANCHOR
LP	LIGHT POLE ✸
Junction Box	JUNCTION BOX J.B.
Traffic Control Box	TRAFFIC CONTROL BOX T.C.B.
CATV Box	COMMUNICATIONS BOX ■
Hyd.	FIRE HYDRANT
WV ○	WATER VALVE ●
WSV ○	WATER SERVICE VALVE ●
WM □	WATER METER ▫
MW	MONITORING WELL
G ○	NATURAL GAS VALVE ●
GM ○	NATURAL GAS METER ●
San. MH	SANITARY SEWER MANHOLE ●
CO ○	SANITARY SEWER CLEANOUT ●
Storm MH	STORM SEWER MANHOLE ●
'B' Inlet	STORM SEWER INLET ■
'A' Inlet	▬
	STORM SEWER HEADWALL/WINGWALL
Tele MH	TELEPHONE MANHOLE ●
Tel Box □	TELEPHONE BOX □
Sign	STREET SIGN
M.B.	MAILBOX ▯
(Size)	TREE
Bush	BUSH OR BRUSH
Hedges	HEDGEROW
SB-#	SOIL BORING LOCATION
	HANDICAP PARKING SPACE SYMBOL
	HANDICAP RAMP TRUNCATED DOMES
	RESET EXISTING CASTING
	RECONSTRUCT EXISTING INLET
	CONVERT INLET TO MANHOLE
	TEST PIT LOCATION
	PROBING LOCATION
	TREE TO BE REMOVED T.B.R.
	BENCH MARK CALLOUT BM ##
	GUIDE RAIL ANCHORAGE
	HEAVY DUTY PAVEMENT
	LIGHT DUTY PAVEMENT
	PAVEMENT
	POROUS PAVEMENT
	CONCRETE
	HEAVY DUTY CONCRETE
	GRAVEL
	WETLANDS
	RIPRAP
	EROSION CONTROL BLANKET
	TURF REINFORCEMENT MATTING

PROJECT INFORMATION:
FILE PATH: S:\PROJECTS\PARK\00047\Plans\
FILE NAME: PARK00047_SHT02_LEG.dwg
LAST SAVED: Tuesday, May 12, 2020 - TIME: 13 May 2020, 6:36PM
LAST SAVE BY: BHosul

GENERAL NOTES:

1) THESE GENERAL NOTES APPLY TO ALL SHEETS IN THIS SET OF PLANS.
2) 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 ALL CONDITIONS OF APPROVAL HAVE BEEN SATISFIED ON THE DRAWINGS AND EACH DRAWING HAS BEEN REVISED TO INDICATE "ISSUED FOR CONSTRUCTION".
3) THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING EXISTING SITE CONDITIONS PRIOR TO BIDDING. ALL ITEMS AND STRUCTURES THAT INTERFERES WITH THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE REMOVED.
4) THE CONTRACTOR SHALL NOTIFY THE UNDERSIGNED PROFESSIONAL IMMEDIATELY IF ANY FIELD CONDITIONS ENCOUNTERED DIFFER MATERIALLY FROM THOSE REPRESENTED HEREON.
5) ALL OFFSITE DISTURBANCE MUST BE RESTORED TO ORIGINAL CONDITION.
6) THE CONTRACTOR MUST PROVIDE A SCHEDULE OF CONSTRUCTION FOR REVIEW AND APPROVAL BEFORE START OF CONSTRUCTION.
7) NO SOIL CAN BE IMPORTED TO OR REMOVED FROM THE SITE UNTIL A SOIL IMPORTATION OR EXPORTATION PERMIT HAS BEEN OBTAINED FROM THE TOWNSHIP AS REQUIRED BY ORDINANCE. SOIL REMOVAL SHALL BE IN ACCORDANCE WITH SECTION 112-8N OF THE ORDINANCE.
8) AN AS-BUILT PLAN PREPARED BY A LICENSE LAND SURVEYOR IS TO BE SUBMITTED TO THE TOWNSHIP PRIOR TO ANY CERTIFICATE OF COCCUPANCY INSPECTION AND RELEASE OF PERFORMANCE BONDS.
9) ALL PLANT RELOCATIONS/SUBSTITUTIONS SHALL BE SUBMITTED TO THE TOWNSHIP FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
10) DATUM REFERS TO THE NORTH AMERICAN VERTICAL DATUM.

APPLICABLE STANDARDS

11) 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", AS CURRENTLY AMENDED;
    ii) CURRENT, PREVAILING MUNICIPAL AND/OR COUNTY SPECIFICATIONS, STANDARDS, AND REQUIREMENTS.
    iii) CURRENT, PREVAILING UTILITY COMPANY/AUTHORITY SPECIFICATIONS, STANDARDS AND REQUIREMENTS.
    iv) STORMWATER MANAGEMENT STRUCTURES TO CONFORM TO NJDEP BEST MANAGEMENT PRACTICES MANUAL DATED FEBRUARY 2004.
    v) CURRENT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS.
12) ALL PROPOSED WORK IS TO CONFORM TO THE LATEST EDITION OF THE NEW JERSEY UNIFORM CONSTRUCTION CODE AT THE TIME OF CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO THE BUILDING CODE AND THE NEW JERSEY BARRIER FREE CODE FOR ADA CONFORMANCE.

EXISTING UTILITIES

13) 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.
14) CONTRACTOR TO CALL FOR A UTILITY MARK-OUT PRIOR TO THE START OF CONSTRUCTION. FOR AREAS NOT MARKED OUT BY THE UTILITY COMPANIES, THE CONTRACTOR SHALL ENGAGE THE SERVICES OF AN UNDERGROUND UTILITY LOCATING SERVICE TO CLEARLY LOCATE UTILITIES.
15) THE CONTRACTOR SHALL VERIFY THE LOCATION, GRATE, AND INVERT ELEVATION OF ALL EXISTING UTILITY STRUCTURES.
16) ALL UTILITY POLE RELOCATIONS AS SHOWN ON THESE PLANS TO BE COORDINATED BY THE CONTRACTOR.
17) THE CONTRACTOR SHALL RAISE/ADJUST ALL EXISTING UTILITY VALVE COVERS, FRAMES, GRATES, ETC., WITHIN THE CONSTRUCTION AREA TO THE PROPOSED GRADE.

EROSION CONTROL

18) CONTRACTOR IS RESPONSIBLE INSTALLING AND MAINTAINING ALL EROSION CONTROL MEASURES IN ACCORDANCE WITH RELEVANT SOIL CONSERVATION DISTRICT GUIDELINES AND EROSION CONTROL MEASURES PRESENTED IN THIS OF SET OF PLANS.
19) ALL DISTURBED AREAS NOT RECEIVING IMPERVIOUS SURFACE OR LANDSCAPING SHALL BE RESTORED IN ACCORDANCE WITH THE LANDSCAPING/SOIL EROSION AND SEDIMENT CONTROL SEEDING SPECIFICATIONS.

DEMOLITIONS

20) CERTIFICATION FROM THE RESPECTIVE UTILITY AGENCIES SHALL BE OBTAINED PRIOR TO DEMOLITION STATING THAT ALL UTILITIES SERVING THE BUILDING TO BE RAZED HAS BEEN PROPERLY SHUT OFF AND/OR REMOVED OR BOTH.
21) CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING DISCONNECTIONS OF UTILITIES WITH THE REPRESENTATIVE LOCAL UTILITY COMPANY.
22) WHERE CONCRETE CURB OR SIDEWALK IS TO BE REMOVED, CONTRACTOR SHALL REMOVE TO THE NEAREST JOINT, UNLESS SPECIFIED OTHERWISE

GRADES

23) SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATION SET FORTH BY THE GEOTECHNICAL ENGINEER. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL SOFT, YIELDING, OR UNSUITABLE MATERIALS AND REPLACING WITH SUITABLE MATERIALS AS APPROVED BY THE ENGINEER. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO 95% MODIFIED PROCTOR MAXIMUM DENSITY. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL NOT EXCEED 2% ABOVE OR 3% BELOW OPTIMUM.
24) ELEVATIONS SHOWN IN THESE PLANS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
25) CONTOURS AND SPOT ELEVATIONS INDICATE FINISHED GRADE.
26) "TC" INDICATES TOP OF CURB ELEVATION, AND "BC" INDICATES BOTTOM OF CURB OR GUTTER ELEVATION.
27) ALL WALKWAYS SHALL BE CONSTRUCTED WITH A MAXIMUM 2% CROSS SLOPE
28) ALL HANDICAP PARKING SPACES AND ACCESS AISLES SHALL BE CONSTRUCTED WITH A MAXIMUM 2% GRADE IN ANY DIRECTION

MISC SITE WORK

30) THE SUITABILITY OF EXCAVATED MATERIAL FOR USE AS BACKFILL SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER.
31) SUB BASE MATERIAL FOR SIDEWALKS, CURBS AND PAVED SURFACES SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUB BASE BE DEEMED UNSUITABLE, SUB BASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL AND COMPACTED TO 95% MODIFIED PROCTOR DENSITY.
32) ELECTRIC, TELEPHONE, CATV AND ALL OTHER WIRE SERVED UTILITY EXTENSIONS AND SERVICES SHALL BE INSTALLED UNDERGROUND WITH STANDARDS ESTABLISHED BY THE SERVICING UTILITY COMPANY.
33) STANDARD PARKING SPACES ARE TO BE STRIPED IN WHITE LINES.
34) HANDICAP PARKING SPACES ARE TO BE STRIPED IN BLUE LINES.
35) ALL EASEMENTS FOR PUBLIC PURPOSES SHALL BE DEDICATED TO THE TOWNSHIP, UNLESS OTHERWISE NOTED.
36) ALL BUILDING FOOTPRINT DIMENSIONS SHOWN HEREON ARE APPROXIMATE. PLEASE REFER TO ARCHITECTURAL DRAWINGS FOR BUILDING'S DIMENSIONAL INFORMATION.
37) APPLICABLE CODE AND ORDINANCES:
    1. WATER MAINS: 48 INCHES TO TOP OF PIPE BARREL OR 6 INCHES BELOW THE FROST LINE (ESTABLISHED BY THE LOCAL BUILDING OFFICIAL), WHICHEVER IS DEEPER.
    2. SANITARY SEWER: DEPTH, ELEVATIONS AND GRADES AS INDICATED ON DRAWINGS.
    3. STORM SEWER: DEPTHS, ELEVATIONS, AND GRADES AS SHOWN ON DRAWINGS.
    4. ELECTRICAL CONDUITS: 24 INCHES MINIMUM TO TOP OF CONDUIT OR AS REQUIRED BY NEC 300-5, NEC 710-36 CODES, OR THE LOCAL UTILITY COMPANY REQUIREMENTS, WHICHEVER IS DEEPER.
    5. TV CONDUITS: 18 INCHES MINIMUM TO TOP OF CONDUIT OR AS REQUIRED BY THE LOCAL UTILITY COMPANY, WHICHEVER IS DEEPER.
    6. TELEPHONE CONDUITS: 18 INCHES MINIMUM TO TOP OF CONDUIT OR AS REQUIRED BY THE UTILITY COMPANY, WHICHEVER IS DEEPER.
    7. GAS MAINS AND SERVICE: 30 INCHES MINIMUM TO TOP OF PIPE, OR AS REQUIRED BY THE UTILITY COMPANY, WHICHEVER IS DEEPER.

FILL MATERIAL IMPORT

38) CLEAN SOIL BROUGHT TO THE SITE FOR FILL MUST MEET FOLLOWING CRITERIA
    i) CERTIFIED TO BE BELOW NJDEP SOIL REMEDIATION STANDARDS INCLUDING THE RESIDENTIAL AND NON-RESIDENTIAL DIRECT CONTACT AND THE IMPACT TO GROUNDWATER CRITERIA
    ii) CERTIFICATION TO BE BASED ON THE FOLLOWING SAMPLING AND ANALYSIS
        (1) THE ANALYTICAL PARAMETERS REQUIRED FOR THESE SAMPLES ARE FULL TARGET COMPOUND LIST/TARGET ANALYTE LIST (TCL/TAL)+30 AND EXTRACTABLE PETROLEUM COMPOUNDS (EPH). ADDITIONALLY, IF THE TOTAL CHROMIUM IS DETECTED ABOVE 20 PPM, THE SAMPLES NEED TO BE ANALYZED FOR HEXAVALENT CHROMIUM.
        (2) SAMPLING FREQUENCY SHALL BE ONE DISCRETE SAMPLE FOR EVERY 20 YARDS OF FILL FOR THE FIRST 100 YARS AND 1 ADDITIONAL DISCRETE SAMPLE FOR EACH 100 YARDS. WHERE DONOR OF THE CLEAN FILL CAN DEMONSTRATE THAT THEIR SAMPLING OF CLEAN FILL COMPLIES WITH THE DEFAULT VALUES IN TABLE 2 OF THE NJDEP GUIDANCE DOCUMENT "FILL MATERIAL GUIDANCE FOR SRP SITES", APRIL 2015 VERSION 3.0, THEY MAY PRESENT THAT IN LIEU OF THE ABOVE SAMPLING FREQUENCY.
39) CLEAN SAND, GRAVEL OR ROCK BROUGHT TO THE SITE FOR FILL FROM A LICENSED QUARRY/MINE MUST THE MEET FOLLOWING CRITERIA:
    i) EXCAVATED FROM UNDISTURBED GEOLOGIC FORMATIONS;
    ii) OBTAINED FROM A LICENSED QUARRY/MINE;
    iii) NOT LOCATED ON OR IMPACTED BY OTHER CONTAMINANT SOURCES;
    iv) NOT COMMINGLED WITH ANY OTHER MATERIAL;
    v) NOT KNOWN OR SUSPECTED OF BEING CONTAMINATED;
    vi) NOT ADVERSELY IMPACTED BY DISCHARGES OF HAZARDOUS MATERIALS OR CHEMICAL APPLICATION;
    vii) NOT AFFECTED BY CONDITIONS OR PROCESSES THAT WOULD RESULT IN THE INTRODUCTION OF CONTAMINANTS INTO THE LICENSED QUARRY/MINE MATERIAL IN CONCENTRATIONS ABOVE REGULATORY CONCERN; AND
    viii) NOT AFFECTED BY CONDITIONS OR PROCESSES THAT WOULD INCREASE THE CONCENTRATIONS OF CONTAMINANTS ALREADY PRESENT IN THE LICENSED QUARRY/MINE MATERIAL TO CONCENTRATIONS ABOVE REGULATORY CONCERN.
    ix) A COPY OF THE QUARRY/MINE LICENSE/PERMIT MUST BE PROVIDED, AND A CERTIFICATION FROM THE LICENSED QUARRY/MINE IS REQUIRED WHICH SHOULD INDICATE THE SOURCE OF THE DELIVERED LICENSED QUARRY/MINE MATERIAL AND STATE THAT THE LICENSED QUARRY/MINE MATERIAL HAS NOT BEEN SUBJECT TO A DISCHARGED HAZARDOUS SUBSTANCE AT ANY TIME.

REFERENCE MAPS:

40) REFER TO PLAN ENTITLED, "PRELIMINARY/FINAL SITE PLAN WITH USE VARIANCE, PARKER AT SOMERSET, TAX MAP SHEET 85, BLOCK 424.01, LOT 39.08, FRANKLIN TOWNSHIP, SOMERSET COUNTY, NEW JERSEY", PREPARED BY T&M ASSOCIATES, DATED JANUARY 15, 2018, LAST REVISED JULY 25, 2019.
41) REFER TO SURVEY ENTITLED, "THE FRANCIS E. PARKER MEMORIAL HOME, INC., MCCARRICK SITE, BOUNDARY AND TOPOGRAPHIC SURVEY, BLOCK 424.01, LOT 39.08, FRANKLIN TOWNSHIP, SOMERSET COUNTY, NEW JERSEY, ALTA/ACSM (2011) LAND TITLE SURVEY", PREPARED BY T&M ASSOCIATES, DATED JANUARY 19, 2016.

200' PROPERTY OWNERS LIST

BLOCK-LOTS: 426-16,17,18,19,20&21
BUSH, LINDA ANN
31 FIFTEENTH STREET
SOMERSET NJ 08873
RE: 31 FIFTEENTH ST

BLOCK-LOT: 426-13,14,&15
ROBINSON, MICHELLE
37 FIFTEENTH ST
SOMERSET NJ 08873
RE: 37 FIFTEENTH ST

BLOCK-LOT: 426-22,23,24,25,26,&27
BUSH, WARREN R & JOANNE C TRUSTEES
32 FOURTEENTH ST
SOMERSET NJ 08873
RE: 32 FOURTEENTH ST

BLOCK-LOT: 426-29
SUCHAK, DAVID & SANDRA
40 FOURTEENTH STREET
SOMERSET NJ 08873
RE: 40 FOURTEENTH ST

BLOCK-LOT: 431-16.01
OSINUBI, ADEWOLE OLUFOLAMI ET TRUST
33 FOURTEENTH STREET
SOMERSET NJ 08873
RE: 33 FOURTEENTH ST

BLOCK-LOT: 431-14&15
CARIAGA, JOVENCIO & LYDIA
37 FOURTEENTH ST
SOMERSET NJ 08873
RE: 37 FOURTEENTH ST

BLOCK-LOT: 431-22.01
RIVERA, ROSA & SEPULVEDA, DOROTEO
516 TILLMAN STREET
HILLSIDE, NJ 07205
RE: 40 THIRTEENTH ST

BLOCK-LOT: 431-28&29
ROSEMOND, DARREN & NADINE PRINCE
42 THIRTEENTH ST
SOMERSET NJ 08873
RE: 42 THIRTEENTH ST

BLOCK-LOT: 432-16,17,18,19,20,&21
WILLIAMS, SHARON
18 MANNING ST
EDISON, NJ 08817
RE: 33 THIRTEENTH ST

BLOCK-LOT: 432-14&15
TIERNO, DOMINICK J. & MARY BETH
41 THIRTEENTH ST
SOMERSET NJ 08873
RE: 41 THIRTEENTH ST

BLOCK-LOT: 432-22.01
GARCIA, ABEL RAY, GONZALEZ, SONIA
32 TWELFTH ST
SOMERSET NJ 08873
RE: 32 TWELFTH ST

BLOCK-LOT: 442-1.03
MICHELL, MICHAEL D. & NANCY
31 TWELFTH ST
SOMERSET NJ 08873
RE: 32 TWELFTH ST

BLOCK-LOT: 432-25,26,27,28&29
BOLLERS, MOLLIE
38 TWELFTH ST
SOMERSET NJ 08873
RE: 38 TWELFTH ST

BLOCK-LOT: 442-1.02
YANG, CHAORAN & PAN, YETING
37 TWELFTH STREET
SOMERSET NJ 08873
RE: 37 TWELFTH ST

BLOCK-LOT: 442-2
GROSSO, ALAN M. & JANET
102 HOLLYWOOD AVE
SOMERSET NJ 08873
RE: 102 HOLLYWOOD AVE

BLOCK-LOT: 442-3
SMITH, DUANE & MARY
96 HOLLYWOOD AVE
SOMERSET NJ 08873
RE: 96 HOLLYWOOD AVE

BLOCK-LOT: 442-4
LUND, GARY A. & LOUISE M.
92 HOLLYWOOD AVE
SOMERSET NJ 08873
RE: 92 HOLLYWOOD AVE

BLOCK-LOT: 442-5
RENE, PATRICIA
90 HOLLYWOOD AVE
SOMERSET NJ 08873
RE: 90 HOLLYWOOD AVE

BLOCK-LOT: 442-6
BUNSCO, DENNIS M & LINDA MARIE
84 HOLLYWOOD AVE
SOMERSET NJ 08873
RE: 84 HOLLYWOOD AVE

BLOCK-LOT: 425.02-30
TOWNSHIP OF FRANKLIN
475 DEMOTT LA
SOMERSET NJ 08873
RE: 36 FIFTEENTH ST

BLOCK-LOT: 424.08-327
PATEL, UDAY & RINKU
2 RUE CHAGALL
SOMERSET NJ 08873
RE: 2 RUE CHAGALL

BLOCK-LOT: 424.18-9
SHANNON, RODNEY & KIM
1 RUE CHAGALL
SOMERSET NJ 08873
RE: 1 RUE CHAGALL

BLOCK-LOT: 424.18-10
TENJERLA, SRINIVAS N. & SAILAJA
61 RUE CHAGALL
SOMERSET NJ 08873
RE: 61 RUE CHAGALL

BLOCK-LOT: 424.08-367
YANG, ROBERT & AGATHA
68 RUE CHAGALL
SOMERSET NJ 08873
RE: 68 RUE CHAGALL

BLOCK-LOT: 424.08-368
TOWNSHIP OF FRANKLIN
475 DEMOTT LA
SOMERSET NJ 08873
RE: 107 DEMOTT LA

BLOCK-LOT: 424.01-39.04
DIOCESE OF METUCHEN
PO BOX 191
METUCHEN NJ 08840
RE: 5 DELLWOOD LA

BLOCK-LOT: 424.01-48
RODENBERG, KATHERINE L.
67 DEMOTT LA
SOMERSET NJ 08873
RE: 67 DEMOTT LA

BLOCK-LOT: 424.01-47
LINDO, OSCAR
63 DEMOTT LANE
SOMERSET NJ 08873
RE: 63 DEMOTT LA

BLOCK-LOT: 424.01-46
MANGIONE, LOUIS A. JR & JACQUELINE
59 DEMOTT LANE
SOMERSET NJ 08873
RE: 59 DEMOTT LA

BLOCK-LOT: 424.01-45
PELESKO, RAYMOND & JUDITH A.
55 DEMOTT LA
SOMERSET NJ 08873
RE: 55 DEMOTT LA

BLOCK-LOT: 424.01-44
BUDA, DANIEL
51 DEMOTT LANE
SOMERSET NJ 08873
RE: 51 DEMOTT LA

BLOCK-LOT: 424.01-43
MURILLO, MALYN
47 DEMOTT LA
SOMERSET NJ 08873
RE: 47 DEMOTT LA

BLOCK-LOT: 424.01-42
BIONDI, RALPH J & MICHELLE
43 DEMOTT LA
SOMERSET NJ 08873
RE: 43 DEMOTT LA

BLOCK-LOT: 424.01-41
TATUM, HERBERT L & ANTOINETTE M
39 DEMOTT LA
SOMERSET NJ 08873
RE: 39 DEMOTT LA

BLOCK-LOT: 424.01-39.07
AVALONBAY COMMUNITIES, INC%TAX DEPT.
671 N. GLEBE RD-STE 800
ARLINGTON, VA 22203
RE: 1350 EASTON AVE

BLOCK-LOT: 424.01-39.09
CENTER FOR GREAT EXPECT% PEG WRIGHT
19 DELLWOOD LA
SOMERSET NJ 08873
RE: 19 DELLWOOD LA

NO.	DATE	REVISIONS	BY	CHKD

NICHOLAS C. ROTONDA
VICE PRESIDENT

05-15-2020
LICENSED PROFESSIONAL ENGINEER
STATE OF NJ LICENSE No. 34434

FRANCIS E. PARKER MEMORIAL HOMES

PARKER AT SOMERSET CHILD CARE FACILITY

BLOCK 424.01, LOT 39.08, FRANKLIN TOWNSHIP, SOMERSET COUNTY, NEW JERSEY

PRELIMINARY / FINAL SITE PLAN

LEGEND & GENERAL NOTES

T&M ASSOCIATES
YOUR GOALS. OUR MISSION.
11 TINDALL ROAD
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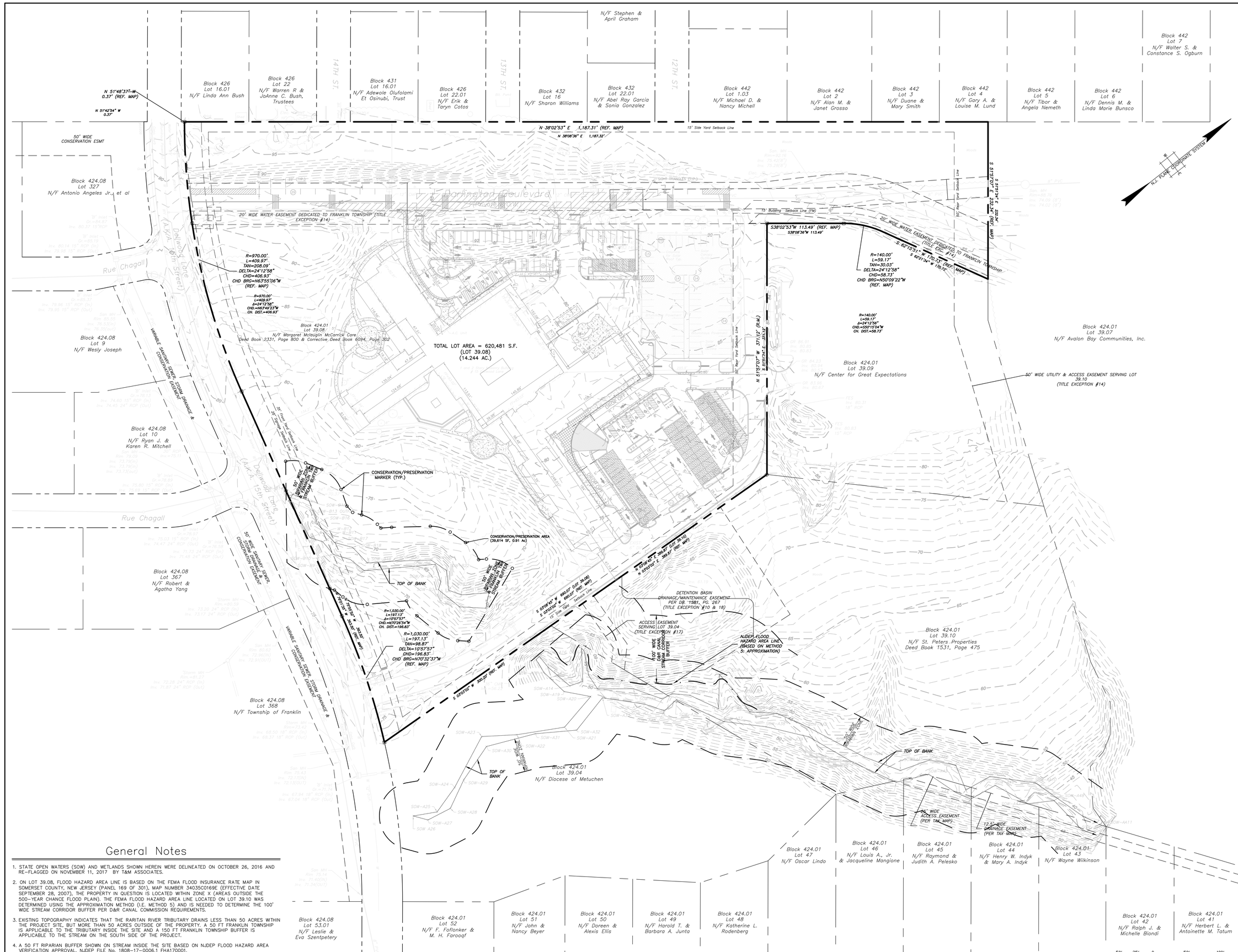
DESIGNED BY	JBF
CHECKED BY	NCR
DRAWN BY	BJK
DATE	05-15-2020
SCALE	N.T.S.
PROJ. NO.	PARK-00047
DRAWING	LEG-1
SHEET	02 OF 07



General Notes

1. STATE OPEN WATERS (SOW) AND WETLANDS SHOWN HEREIN WERE DELINEATED ON OCTOBER 26, 2016 AND RE-FLAGGED ON NOVEMBER 11, 2017 BY T&M ASSOCIATES.
2. ON LOT 39.08, FLOOD HAZARD AREA LINE IS BASED ON THE FEMA FLOOD INSURANCE RATE MAP IN SOMERSET COUNTY, NEW JERSEY (PANEL 169 OF 301), MAP NUMBER 34035C0169E (EFFECTIVE DATE SEPTEMBER 28, 2007), THE PROPERTY IN QUESTION IS LOCATED WITHIN ZONE X (AREAS OUTSIDE THE 500-YEAR CHANCE FLOOD PLAIN). THE FEMA FLOOD HAZARD AREA LINE LOCATED ON LOT 39.10 WAS DETERMINED USING THE APPROXIMATION METHOD (I.E. METHOD 5) AND IS NEEDED TO DETERMINE THE 100' WIDE STREAM CORRIDOR BUFFER PER D&R CANAL COMMISSION REQUIREMENTS.
3. EXISTING TOPOGRAPHY INDICATES THAT THE RARITAN RIVER TRIBUTARY DRAINS LESS THAN 50 ACRES WITHIN THE PROJECT SITE, BUT MORE THAN 50 ACRES OUTSIDE OF THE PROPERTY. A 50 FT FRANKLIN TOWNSHIP IS APPLICABLE TO THE TRIBUTARY INSIDE THE SITE AND A 150 FT FRANKLIN TOWNSHIP BUFFER IS APPLICABLE TO THE STREAM ON THE SOUTH SIDE OF THE PROJECT.
4. A 50 FT RIPARIAN BUFFER SHOWN ON STREAM INSIDE THE SITE BASED ON NJDEP FLOOD HAZARD AREA VERIFICATION APPROVAL, NJDEP FILE No. 1808-17-0006.1 FHA170001.
5. PORTION OF SITE CONDITION UNDER CONSTRUCTION

NO.	DATE	REVISIONS	BY	CHKD

NICHOLAS C. ROTONDA
VICE PRESIDENT

05-15-2020
LICENSED PROFESSIONAL ENGINEER
STATE OF NJ LICENSE No. 34434

FRANCIS E. PARKER MEMORIAL HOMES

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BLOCK 424.01, LOT 39.08, FRANKLIN TOWNSHIP, SOMERSET COUNTY, NEW JERSEY

PRELIMINARY / FINAL SITE PLAN

EXISTING CONDITIONS PLAN

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DESIGNED BY	JBF
CHECKED BY	NCR
DRAWN BY	BJK
DATE	05-15-2020
SCALE	AS SHOWN
PROJ. NO.	PARK-00047
DRAWING	EXC-1
SHEET	03 OF 07

PROJECT INFORMATION:
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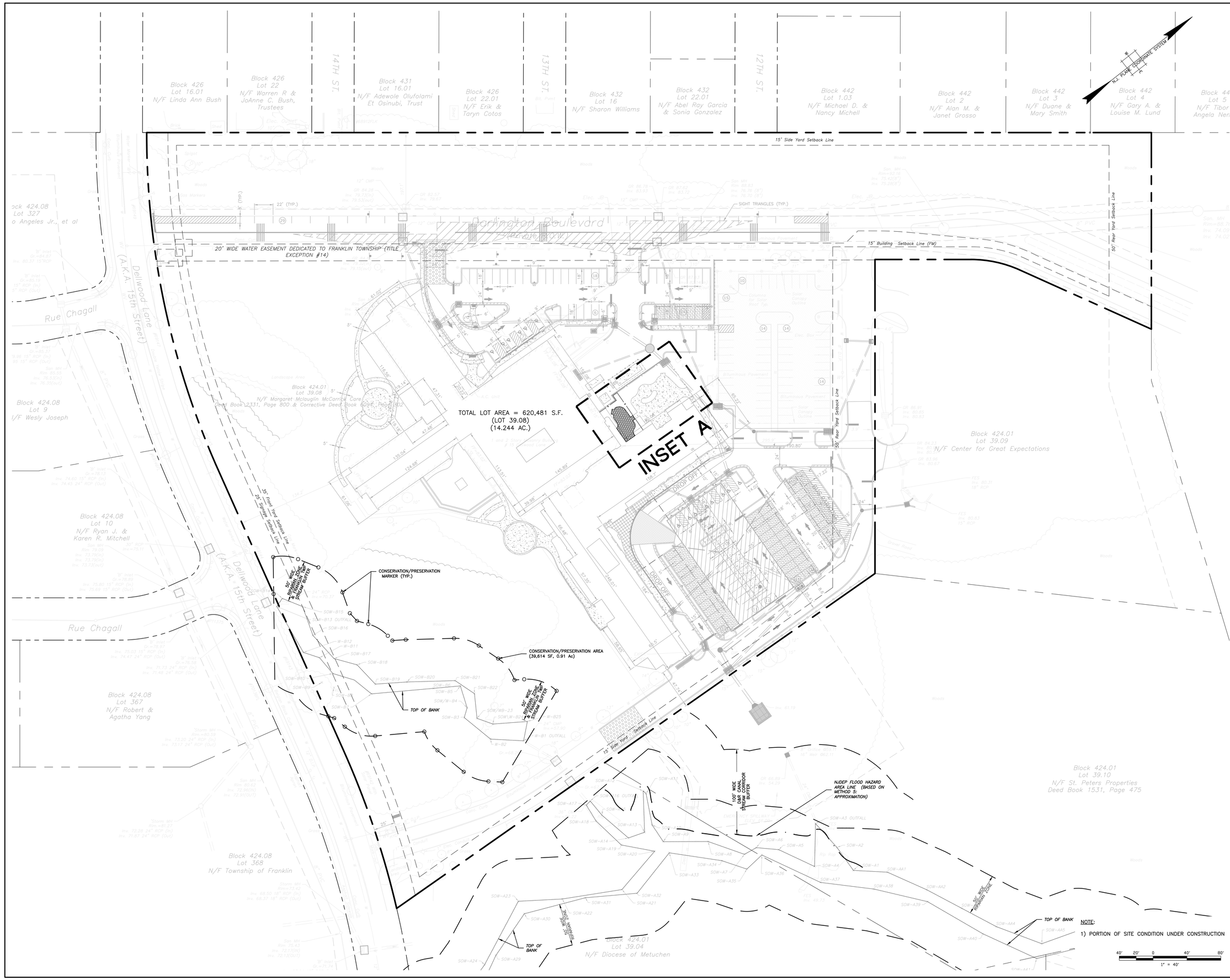

NO.	DATE	REVISIONS	BY	CHKD

NICHOLAS C. ROTONDA
VICE PRESIDENT

05-15-2020
LICENSED PROFESSIONAL ENGINEER
STATE OF NJ LICENSE No. 34434

FRANCIS E. PARKER MEMORIAL HOMES

PARKER AT SOMERSET CHILD CARE FACILITY

BLOCK 424.01, LOT 39.08, FRANKLIN TOWNSHIP, SOMERSET COUNTY, NEW JERSEY

PRELIMINARY / FINAL SITE PLAN

OVERALL PLAN

T&M AND ASSOCIATES
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DESIGNED BY	JBF
CHECKED BY	NCR
DRAWN BY	BJK
DATE	05-15-2020
SCALE	AS SHOWN
PROJ. NO.	PARK-00047
DRAWING	CSP-OVR
SHEET	04 OF 07

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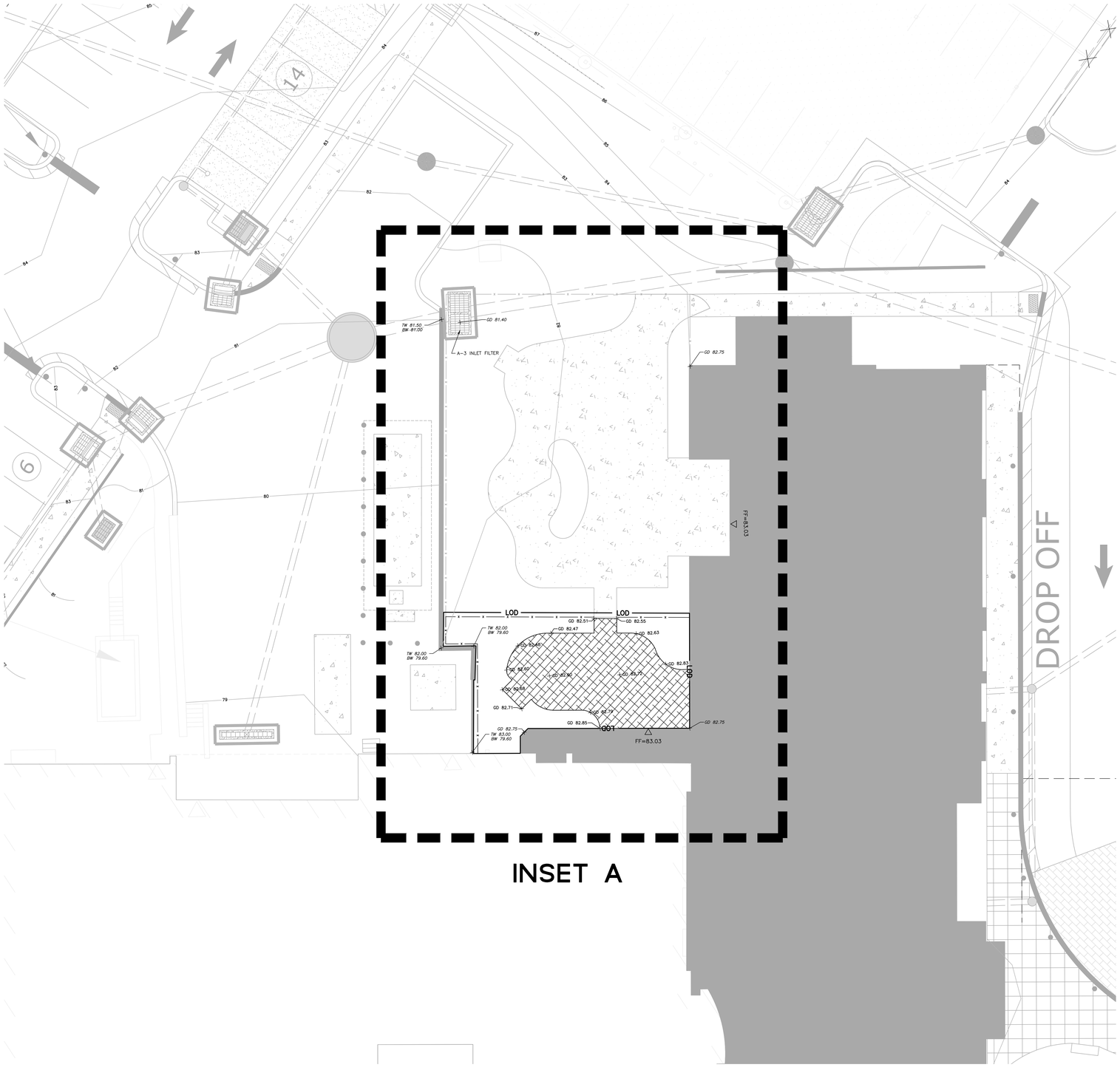

N.J. PLANE COORDINATE SYSTEM

LEGEND

RUBBER SAFETY SURFACE LIMITS

NOTE:

1) PORTION OF SITE CONDITION UNDER CONSTRUCTION

10' 5' 0 10' 20'
1" = 10'

NO.	DATE	REVISIONS	BY	CHKD

NICHOLAS C. ROTONDA
VICE PRESIDENT

05-15-2020
LICENSED PROFESSIONAL ENGINEER
STATE OF NJ LICENSE No. 34434

FRANCIS E. PARKER MEMORIAL HOMES

PARKER AT SOMERSET CHILD CARE FACILITY

BLOCK 424.01, LOT 39.08, FRANKLIN TOWNSHIP, SOMERSET COUNTY, NEW JERSEY

PRELIMINARY / FINAL SITE PLAN
SITE LAYOUT, GRADING & SOIL EROSION PLAN

T&M ASSOCIATES
YOUR GOALS. OUR MISSION.
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DESIGNED BY	JBF
CHECKED BY	NCR
DRAWN BY	BJK
DATE	05-15-2020
SCALE	AS SHOWN
PROJ. NO.	PARK-00047
DRAWING	CSP-1
SHEET	05 OF 07

PROJECT INFORMATION:
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LAST PLOTTED: [DATE] 15 May 2020, 3:47PM
LAST SAVE BY: BKreuf

SOMERSET—UNION COUNTY
BASIN COMPACTION NOTES

1. Immediately prior to seeding, the surface should be scarified 6" to 12" inches where there has been soil compaction. This practice is permissible only where there is no danger to underground utilities (cables, irrigation systems, etc.).

2. Inspect site just before seeding. If traffic has left the soil compacted, the area must be retiled and firmed in accordance with above.

3. Immediately prior to topsoiling, the surface should be scarified 6" to 12" inches where there has been soil compaction. This will help insure a good bond between the topsoil and subsoil. This practice is permissible only where there is no danger to underground utilities (cables, irrigation systems, etc.).

4. Soil compaction resulting from land grading activities can impact the infiltration rate of the soil. Restoration of compacted soils through deep tillage (6" to 12") and the addition of organic matter may be required in planned pervious areas to enhance the infiltration rate of the disturbed soil. This practice is permissible only where there is no danger to underground utilities (cable, irrigation systems, etc.).

5. To prevent compaction of the subsoil which will reduce its infiltration capacity, basins should be excavated with light earth moving equipment, preferably with tracks or over-sized tires rather than the normal rubber tires,. Once the final construction phase is reached, the floor of the basin shall be deeply tilled with a rotary tiller or disc harrow and smoothed over with a leveling drag or equivalent grading equipment.

6. For basins, annual tilling operations maintain infiltration capacity. These tilled areas should be re-vegetated immediately to prevent erosion. Deep tilling can be used to breakup clogged surface layers followed by regarding and leveling. Sand or organic matter can be tilled into the basin floor to promote a restored infiltration capacity. Sediment removal procedures should not be undertaken until the basin is thoroughly dry. The top layer should be removed by light equipment to prevent compaction. The remaining soil can be retiled and disturbed vegetation replanted.

STANDARD FOR TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION

Definition
Establishment of temporary vegetative cover on soils exposed for periods of two to 6 months which are not being graded, not under active construction or not scheduled for permanent seeding within 60 days.

Purpose
To temporarily stabilize the soil and reduce damage from wind and water erosion until permanent stabilization is accomplished.

Water Quality Enhancement
Provides temporary protection against the impacts of wind and rain, slows the overland movement of stormwater runoff, increases infiltration and retains soil and nutrients on site, protecting streams or other stormwater conveyances.

Where Applicable
On exposed soils that have the potential for causing off—site environmental damage.

Methods and Materials

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 Standards for Land Grading, p. 19—1, Standards for Soil Erosion and Sediment Control in New Jersey (S.S.E.SC.N.J).
B. Install needed erosion control practices or facilities such as diversions, grade stabilization structures, channel stabilization measures, sediment basins, and waterways. See Standard 11 through 42 (S.S.E.S.C.N.J.).
C. Immediately prior to seeding, the surface should be scarified 6" to 12" where there has been soil composition. This practice is permissible only where there is no danger to underground utilities (cables, irrigation systems, etc.).

II. Seedbed Preparation
A. Apply ground limestone and fertilizer according to soil test recommendations such as those offered by Rutgers Cooperative 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. Apply limestone at the rate of 2 tons/acre unless a soil test indicated otherwise. Calcium carbonate is the equivalent and standard for measuring the ability of liming materials to neutralize soil acidity and supply calcium and magnesium to grasses and legumes. The table below is a general guideline for limestone application.

TABLE: LIMESTONE* APPLICATION RATE BY SOIL TEXTURE		
SOIL TEXTURE	TONS/ACRE	LBS./1,000 SQ. FT.
Clay, clay loam, and high organic soil	3	135
Sandy loam, loam, silt loam	2	90
Loamy sand, sand	1	45
* — Pulverized dolomitic limestone is preferred for most soils south of the New Brunswick—Trenton line.		

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 discing operation should be on the general contour,
C. Inspect seedbed just before seeding. If traffic has left the soil compacted, the area must be retilled as above.
D. Soils high on sulfides or having a pH of 4 or less refer to Standard for Management of High Acid Producing Soils, pg. 1—1 of the Standards for Soil Erosion and Sediment Control in New Jersey. discing operation should be on the general contour. Continue tillage until a reasonably uniform seedbed is prepared.

III. Seeding
A. Select seed from recommendations in table.

TABLE: TEMPORARY VEGETATIVE STABILIZATION GRASSES, SEEDING RATES, DATES AND DEPTH						
SEED TYPES	SEEDING RATES (1)		OPTIMUM SEEDING DATE (2)			OPTIMUM SEED DEPTH (4)
	(POUNDS)		Based on Plant Hardiness Zone (3)			(inches)
	Per Acre	Per 1,000 Sq.Ft.	ZONE 5b & 6a	ZONE 6b	ZONE 7a & 7b	
COOL SEASON GRASSES						
Perennial Ryegrass	100	1.0	3/15—6/1	3/15/2015	2/15—5/1	0.5
			8/9—9/15	8/15—10/1	8/15—10/15	
Spring Oats	86	2.0	3/15—6/1	3/1—5/15	2/15—5/1	1.0
			8/1—9/15	8/15—10/1	8/15—10/15	
Winter Berley	96	2.2	8/1—9/15	8/15—10/1	8/15—10/15	1.0
Winter Cereal Rye	112	2.8	8/1—11/1	8/1—11/15	8/1—12/15	1.0
WARM SEASON GRASSES						
Pearl Millet	20	0.5	6/1—8/1	5/15—8/15	5/1—9/1	1.0
Millet (German or Hungarian)	30	0.7	6/1—8/1	5/15—8/15	5/1—9/1	1.0
Weeping Lovegrass	5	5.0	6/1—8/1	5/15—8/15	5/1—9/1	1.0
(1) — Seeding rate for warm season grass, shall be adjusted to reflect the amount of Pure Line Seed (PLS) as determined by a germination test result. No adjustment is required for cool season grasses.						
(2) — May be planted throughout summer if soil moisture is adequate or can be irrigated						
(3) — Plant Hardiness Zone (see below)						
Zone 5b (—10 to —15) Portions of Sussex and Warren Counties						
Zone 6a (—5 to —10) Portions of Sussex, Warren, Passaic, Morris, Somerset and Hunterdon counties.						
Zone 6b (0 to —5) Portions of Bergen, Camden, Essex and Gloucester, Hunterdon, Mercer, Middlesex, Hudson, Monmouth, Ocean, Burlington, Morris, Passaic, Somerset, Union, Atlantic, Cumberland, and Cape May counties.						
Zone 7a (5 to 0) Portions of Camden, Gloucester, Salem, Cumberland, Cape May, Atlantic, Burlington, Ocean, and Monmouth counties.						
Zone 7b (10 to 5) Portions of Cape May, Atlantic, Ocean and Monmouth counties.						
(4) — Twice the depth for sandy soils						

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 course 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. 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 may 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 seeding emergence. This is the preferred method. When performing on the contour sheet erosion method. When performed on the contour, sheet erosion will be minimized and water conservation on site will be maximized.

IV. Mulching
Mulching is required on all seeding. Mulch will insure against erosion pbefore grass is established and will promote aster and earlier establishment. (The existence of vegetation sufficient to control soil erosion shall be deemed in compliance with this mulching requirement.

A. Straw or Hay. Unrotted small grain straw, hay free of seeds, or salt hay 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 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 uniformly by hand 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 should 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 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 square pattern. Secure twine around each peg with two 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 traversed by a tractor, which must operate on the contour of slopes. Straw mulch rate must be 3 tons per acre. No tackifying or or adhesive agent is require.

4. Liquid Mulch—Binders — May be used to anchor salt hay or straw mulches.

a. 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.

b. Use one of the following:

(1) Emulsified asphalt — (SS—1, CSS—1, CMS—2, MS—2, RS—1, RS—2, CRS—1, and CRS—2). Apply 0.04 gal./sq. yd. or 194 gal./acre on flat slopes less than 8 feet high. On slopes 8 feet or more high, use 0.075 gal./sq. yd. or 363 gal./acre. These materials may be difficult to apply uniformly and will discolor surfaces.

(2) 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 conditions as recommended as recommended by the manufacturer to anchor materials. Many new products are available, some of which may need further evaluation for use in this state.

(3) 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 may be applied at rates recommended by the manufacturer and remain tacky until germination of grass.

B. Wood—fiber or paper—fiber mulch. Shall be made from wood, plant fibers or paper containing no growth or germination inhibiting materials, used at the rate of 1,500 pounds per acre (or as recommended by the product manufacturer) and may be applied by a hydroseeder. This mulch shall not be mixed in the tank with the 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.

STANDARD FOR STABILIZATION WITH MULCH ONLY

Definition
Stabilizing exposed soils with non—vegetative material.

Purpose
To protect exposed soil surfaces from erosion damage and to reduce offsite environmental damage.

Water Quality Enhancement
Provides temporary mechanical protection against wind or rainfall induced soil erosion until permanent vegetative cover may be established.

Where Applicable
This practice is applicable to areas subject to erosion, where the season and other conditions may not be suitable for growing an erosion resistant cover or where stabilization is needed for a short period until more suitable protection can be applied.

Method and Materials

1. Site Preparation

A. Grade as needed and feasible to permit the use of conventional equipment 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.

2. Protective Materials

A. Unrotted small—grain straw, or salt hay 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 Conversation District.

B. Asphalt emulsions recommended at the rate of 600 to 1,200 gallons per acre. This is suitable for a limited period of time where travel by people, animals, or machines is not a problem.

C. Synthetic or organic soil stabilizers may be used under suitable conditions and in quantities as recommended by the manufacturer.

D. 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.

E. Mulch netting, such as paper jute, excelsior, cotton, or plastic, may be used.

F. Woodchips applied uniformly to a minimum depth of 2 inches may be used. Woodchips will not be used on areas where flowing water could wash them into an inlet and plug it.

G. Gravel, crush 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, depending upon the size of the area and steepness of slopes.

A. Peg and Drive — Drive 8 to 10 inch peg to within 2 to 3 inches of the soil surface every 4 feet in all directions. Stakes may be driven before of after applying mulch. Secure mulch to soil surface by stretching twine between pegs in a cris—cross and square pattern. Secure twine around each peg with two or more round turns.

B. Mulch nettings — Staple paper, cotton, mad plastic nettings over mulch. Use a degradable netting in areas to be mowed. Netting is usually available in rolls 4 feet wide and 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. Application should be heavier at edge 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 material that mixed with water formulates a gel and when applied to mulch under satisfactory curing conditions will form membrane networks of insoluble polymers. The vegetable gel shall be physiologically harmless and not result in a phytotoxic effect of impede growth of turfgrass. Vegetable based gels shall be applied at rates and weather conditions recommend 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.

DUST CONTROL NOTES

THE FOLLOWING METHODS SHOULD BE CONSIDERED FOR CONTROLLING DUST:

MULCHES — SEE STANDARD FOR STABILIZATION WITH MULCHES ONLY (SEE THIS SHEET).

VEGETATIVE COVER — SEE STANDARD FOR TEMPORARY VEGETATIVE COVER, PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION, AND PERMANENT STABILIZATION WITH SOD. (SEE THIS SHEET).

SPRAY—ON ADHESIVES — ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS.

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

SPRINKLING — SITE IS SPRINKLED UNTIL THE SURFACE IS WET.

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

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

STONE — COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

TABLE 16—1: DUST CONTROL MATERIALS			
MATERIAL	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS/ACRE
ANIONIC ASPHALT EMULSION	7:1	COARSE SPRAY	1200
LATEX EMULSION	12.5:1	FINE SPRAY	235
RESIN IN WATER	4:1	FINE SPRAY	235
POLYACRYLAMIDE (PAM) — SPRAY ON	APPLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS. MAY ALSO BE USED AS AN ADDITIVE TO SEDIMENT BASINS TO FLOCCULATE AND PRECIPITATE SUSPENDED COLLOIDS.		
POLYACRYLAMIDE (PAM) — DRY ON			
ACIDULATED SOY BEAN SOAP STICK	NONE	COARSE SPRAY	1200

STANDARD FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION

Definition
Establishment of permanent vegetative cover on exposed soils where perennial vegetation is needed for long term protection.

Purpose
To permanently stabilize the soil, assuring conservation of soil and water, and to enhance the environment.

Water Quality Enhancement
Slows the overland movement of stormwater runoff, increases infiltration and retains soil and nutrients on site, protecting streams or other stormwater conveyances.

Where Applicable
On exposed soils that have a potential for causing off—site environmental damage.

Methods and Materials
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 in accordance with Standards for Land Grading, p. 19—1, Standards for Soil Erosion and Sediment Control in New Jersey.
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, Standards for Soil Erosion and Sediment Control in New Jersey.
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.).

II. Seedbed Preparation
A. Apply ground limestone and fertilizer according to soil test recommendations such as those offered by Rutgers Cooperative 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. Apply limestone in accordance with the table below and the results of soil testing. Calcium carbonate is the equivalent and standard for measuring the ability of liming materials to neutralize soil acidity and supply calcium and magnesium to grasses and legumes. Table below is a general guideline for limestone application rates.

TABLE: LIMESTONE* APPLICATION RATE BY SOIL TEXTURE		
SOIL TEXTURE	TONS/ACRE	LBS./1,000 SQ. FT.
Clay, clay loam, and high organic soil	3	135
Sandy loam, loam, silt loam	2	90
Loamy sand, sand	1	45
* — Pulverized dolomitic limestone is preferred for most soils south of the New Brunswick—Trenton line.		

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 discing operation should be on the general contour. Continue tillage until a reasonably uniform seedbed is prepared.

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.). D. 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 preparation. See standard for Management of High Acid Producing Soils.

III. Seeding
A. Seed mix shall be as follows:

SEED MIXTURE #G			
KIND OF SEED	MINIMUM % PURITY	MINIMUM % GERMINATION	APPLICATION RATE POUNDS/ACRE
'REBEL' JR. TALL FESECUE	95	80	60
'BARON' KENTUCKY BLUEGRASS	95	85	50
'PALMER 2' PERENNIAL RYEGRASS	95	85	30
'JAMESTOWN 2' CHEWING FESCUSE	95	85	60
TOTAL			200

SEED MIXTURE #15			
KIND OF SEED	MINIMUM % PURITY	MINIMUM % GERMINATION	APPLICATION RATE POUNDS/ACRE
HARD FESECUE	90	90	120
'BROOKLAWN' KENTUCKY BLUEGRASS	90	90	40
MANHATTAN 4' PERENNIAL RYEGRASS	95	75	40
TOTAL			200
Optimal Seeding Dates — March 1 to May 15 and August 15 to October 15			

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 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. 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. 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 seeding emergence. This is the preferred method. When performed on the contour, sheet erosion will be minimized and water conservation on the site will be maximized.

IV. 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, or salt hay 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 liquid mulch (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 uniformly by hand 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 should 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 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 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 salt hay or straw mulches. a. 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. b. Use one of the following:

(1) Emulsified asphalt — (SS—1, CSS—1, CMS—2, MS—2, RS—1, RS—2, CRS—1, and CRS—2). Apply 0.04 gal./sq. yd. or 194 gal./acre on flat slopes less than 8 feet high. On slopes 8 feet or more high, use 0.075 gal./sq. yd. or 363 gal./acre. These materials may be difficult to apply uniformly and will discolor surfaces.

(2) 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 by the manufacturer to anchor mulch materials. Many new products are available, some of which may need further evaluation for use in this state.

(3) 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.

B. Wood—fiber or paper—fiber mulch. Shall be made from wood, plant fibers or paper containing no growth or germination inhibiting materials, used at the rate of 1,500 pounds per acre (or as recommended by the product manufacturer) and may be applied by a hydroseeder. This mulch shall not be mixed in the tank with the 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, from 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 per 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.

V. Irrigation (where feasible)
If soil moisture is deficient, and mulch is not used, supply new seedings with adequate water (a minimum of 1/4 inch 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.

VI. Topdressing
Since slow release nitrogen fertilizer (water insoluble is prescribed in Section II.A. Seedbed preparation in this standard, no follow—up of topdressing is mandatory. An exception may be made where gross nitrogen deficiency exists to the extent that turf failure may develop. In that instance, topdress with 10—10—10 or equivalent at 400 pounds per 1,000 square feet.

VII. 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 rate is 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. This rate applies to all methods of seeding. Establishing permanent vegetation means 80% vegetative cover (of the seeded species) and mowed once.

SOMERSET—UNION SOIL CONSERVATION DISTRICT SOIL EROSION AND SEDIMENT CONTROL NOTES

1. The Somerset—Union Soil Conservation District shall be notified in writing 48 hours in advance of any land disturbing activity.

2. All Soil Erosion and Sediment Control practices shall be installed prior to any major soil disturbances, or in their proper sequence and maintained until permanent protection is established.

3. Any Disturbed areas that will be left exposed more than 30 Days and not subject to construction traffic, will immediately receive a temporary seeding. If the season prevents the establishment of a temporary cover, the disturbed areas will be mulched with straw, or equivalent material, at a rate of two (2) tons per acre, according to NJ State Standards

4. Permanent Vegetation shall be seeded or sodded on all exposed areas within ten (10) days after final grading. Mulch will be used for protection until seeding is established

5. All work shall be done in accordance with the NJ State Standards for Soil Erosion and Sediment Control in New Jersey.

6. A sub—base course will be applied immediately following rough grading and installation of improvements in order to stabilize streets, roads, driveways and parking areas. In areas where no utilities are present, the sub—base shall be installed within 15 days or preliminary grading.

7. Immediately following initial disturbance or rough grading all critical areas subject to erosion (i.e.: steep slopes, roadway embankments) will receive a temporary seeding in combination with straw mulch or a suitable equivalent, at a rate of two (2) tons per acre, according to the NJ State Standards.

8. Any steep slopes receiving pipeline installation will be backfilled and stabilized daily, as the installation proceeds (i.e.: slopes greater that 3:1)

9. Traffic control Standards require the installation of a 50'x30'x6"pad of 1 1/2" or 2" stone, at all construction driveways, immediately after initial site disturbance.

10. At the time when the site preparation for permanent vegetative stabilization is going to be accomplished, any soil that will not provide a suitable environment to support adequate vegetative ground cover, shall be removed or treated in such a way that will permanently adjust the soil conditions and render it suitable for vegetative ground cover. If the removal or treatment of the soil will not provide suitable conditions, non—vegetative means of permanent ground stabilization will have to be employed.

11. In that NJSA 4:24—39 et seq., requires that no Certificate of Occupancy be issued before the provisions of the Certified Plan for Soil Erosion and Sediment Control have been complied with for permanent measures, all site work for site plans and all work around individual lots in subdivisions, will have to be completed prior to the District issuing a Report of Compliance for the issuance of a Certificate of Occupancy by the Municipality.

12. Conduit Outlet Protection must be installed at all required outfalls prior to the drainage system becoming operational.

13. Any changes to the Certified Soil Erosion and Sediment Control Plan will require the submission of revised Soil Erosion and Sediment Control Plans to the District for re—certification. The revised plans must meet all current NJ State Soil Erosion & Sediment Control Standards.

14. The Somerset—Union Soil Conservation District shall be notified of any changes in ownership.

15. Mulching to the NJ Standards is required for obtaining a Conditional Report of Compliance. Conditionals are only issued when the season prohibits seeding.

16. Contractor is responsible for keeping all adjacent roads clean during life of construction project.

17. The developer shall be responsible for remediating any erosion or sediment problems that arise as a result of ongoing construction at the request of the Somerset—Union Soil Conservation District.

18. Hydro seeding is a two— step process. The first step includes seed, fertilizer, lime, etc., along with minimal amounts of mulch to promote consistency, good seed to soil contact, and give a visual indication of coverage. Upon completion of seeding operation, hydro—mulch should be applied at a rate of 1500 lbs. per acre in second step. The use of hydro—mulch, as opposed to straw, is limited to optimum seeding dates as listed in the NJ Standards.

19. Unfiltered dewatering is not permitted. Necessary precautions must be taken during all dewatering operations to minimize soil transfer. Any dewatering methods used must be in accordance with the Standard for Dewatering.

Revised 5/15/15

CONSTRUCTION SEQUENCE			
No.	START (DAY)	DURATION (DAYS)	TASK
1	—30	0	Notify Delaware & Raritan Canal Commission 30 days prior to start of construction.
2	—3	0	Notify IN WRITING Somerset—Union County Soil Conservation District 72 hours prior to any land disturbance.
3	1	1	Install soil erosion control measures as shown on soil erosion and sediment control plans. Install temporary skimmer discharge system.
4	1	15	Rough grade site to be developed, stockpiling any excess topsoil and other material into separate, temporary stockpiles to be surrounded by silt fence. If stockpiles or other disturbed areas are to be left in a disturbed state for more than 30 days and will not be subject to construction traffic, they shall receive temporary seeding immediately. If season prevents establishment of a temporary cover, disturbed areas shall be mulched with straw or equivalent material at a rate of 2 tons per acre and install permanent stabilizaion in basin.
5	1	45	Construct underground detention basin and porous pavement areas. Construct existing detention basin improvements. Install temporary sediment riser. Excavate and fill where shown on the plans.
6	15	120	Fine grade proposed parking lots and building pad.
7	30	15	Construct building.
8	25	15	Install stormwater runoff collection systems beginning with downstream—most structures.
9	25	1	Install inlet protection at each drainage structure.
10	35	15	Install remaining utilities: sanitary sewer, water, gas, electric/telephone/cable and lighting. Coordinate with utility companies.
11	50	10	Install curbs in parking lots.
12	65	5	Lay subbase in parking lots and aisles.
13	75	10	Lay base over stabilized subbase.
14	85	5	Stabilize all disturbed areas.
15	90	5	Overseed bare areas.
16	95	5	Install permanent stabilization where required. De—silt basin and remove sediment riser after vegetation is established
17	100	5	Construct sidewalks.
18	100	15	Lay surface course over base course.
19	100	30	Install children playground area.
20	115	30	Install permanent landscaping and sidewalk furniture.
21		2	Remove all erosion control measures when permanent vegetation is established
Note: The detention basin shall be cleaned periodically of all accumulated sediment and debris for the duration of the construction sequence, and until all permanent soil stabilization procedures have been completed to prevent the transmission of site—generated sediment to downstream storm sewer facilities and discharge locations.			

NO.	DATE	REVISIONS	BY	CHKD

NICHOLAS C. ROTONDA
VICE PRESIDENT

05-15-2020
LICENSED PROFESSIONAL ENGINEER
STATE OF NJ LICENSE No. 34434

FRANCIS E. PARKER MEMORIAL HOMES

PARKER AT SOMERSET CHILD CARE FACILITY
BLOCK 424.01, LOT 39.08, FRANKLIN TOWNSHIP, SOMERSET COUNTY, NEW JERSEY

PRELIMINARY / FINAL SITE PLAN
SOIL EROSION AND SEDIMENT CONTROL NOTES

YOUR GOALS. OUR MISSION.
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DESIGNED BY JBF	DRAWING SED-1
CHECKED BY NCR	
DRAWN BY BJK	SHEET 06 OF 07
DATE 05-15-2020	
SCALE AS SHOWN	
PROJ. NO. PARK-00047	

PROJECT INFORMATION:
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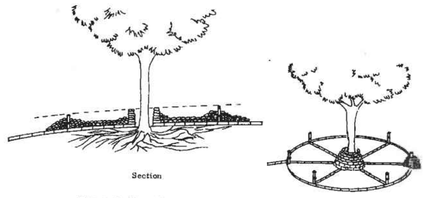
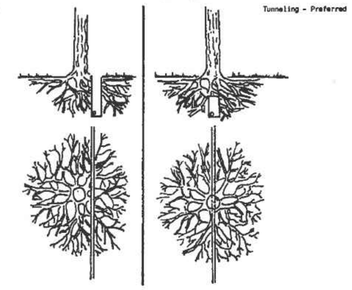
LAST SAVED DATE AND TIME: 11 May 2020, 5:50PM
LAST SAVE BY: BKnauf



Section

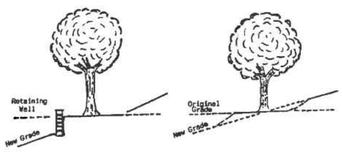
Isometric

Tree protection - tile and gravel will allow air circulation to root zone under a fill



Utilities should be tunneled beneath tree roots. The drawings on the left show trenching that would probably kill the tree. The drawings on the right show how tunneling under the tree will preserve many of the important feeder roots.

A retaining wall protects a tree from a lowered grade



Estimate a tree's **Protected Root Zone (PRZ)** by calculating the Critical Root Radius (crr).

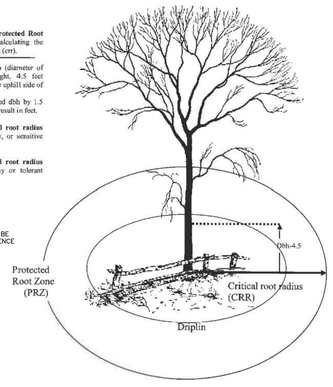
1. Measure the dbh (diameter of tree at breast height, 4.5 feet above ground on the uphill side of tree) in inches.
2. Multiply measured dbh by 1.5 or 1.0. Express the result in feet.

Dbh x 1.5: **Critical root radius** for older, unhealthy, or sensitive species.

Dbh x 1.0: **Critical root radius** for younger, healthy or tolerant species.

NOTE:

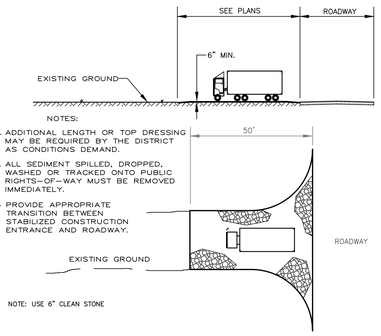
TREE PROTECTION TO BE COMPOSED OF SILT FENCE (SEE DETAIL)



TREE PROTECTION DETAIL

NOT TO SCALE

NOTE: CONTRACTOR TO IDENTIFY PRZ LIMITS PRIOR TO THE START OF CONSTRUCTION



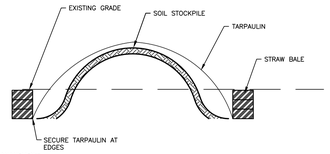
NOTES:

1. ADDITIONAL LENGTH OR TOP DRESSING MAY BE REQUIRED BY THE DISTRICT AS CONDITIONS DEMAND.
2. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
3. PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED CONSTRUCTION ENTRANCE AND ROADWAY.

NOTE: USE 6" CLEAN STONE

STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE



STOCKPILE MANAGEMENT:

STOCKPILE MANAGEMENT PROCEDURES AND PRACTICES ARE DESIGNED TO REDUCE OR ELIMINATE AIR AND STORM-WATER POLLUTION FROM SOIL, STOCKPILES SUPPLEMENT IN ALL PROJECTS THAT STOCKPILE SOIL AND OTHER MATERIALS.

GENERAL

1. LOCATE STOCKPILES A MINIMUM OF 50 FEET AWAY FROM CONCENTRATED FLOWS OF STORM-WATER, DRAINAGE COURSES AND INLETS.
2. PROTECT ALL STOCKPILES FROM STORM-WATER RUN-ON USING A TEMPORARY PERIMETER SEDIMENT BARRIER. SEE STOCKPILE DETAIL.

PROTECTION OF STOCKPILES

1. ALL STOCKPILES SHOULD BE PROTECTED WITH A TARPAULIN COVER.

MAINTENANCE

1. INSPECT AND VERIFY THAT BMP'S (BEST MANAGEMENT PRACTICES) ARE IN PLACE PRIOR TO THE COMMENCEMENT OF ASSOCIATED ACTIVITIES. WHILE ACTIVITIES ASSOCIATED WITH THE BMP ARE UNDERWAY, INSPECT WEEKLY TO VERIFY CONTINUED BMP IMPLEMENTATION.
2. REPAIR AND/OR REPLACE PERIMETER CONTROLS AND COVERS AS NEEDED TO KEEP THEM FUNCTIONING PROPERLY.

STOCKPILE CONTROL DETAIL

NOT TO SCALE

STANDARD FOR DEWATERING

DEFINITION

The removal and discharge of sediment-laden water from an excavated area, construction site or sediment basin.

PURPOSE

To properly remove suspended sediments and water from areas through filtration and/or settlement prior to discharging water to a receiving water course or body.

CONDITIONS WHERE PRACTICE APPLIES

During construction excavated facilities need to be dewatered to facilitate or complete the construction process. The water pumped out of the excavated areas contain sediments that must be removed prior to the discharging to receiving bodies of water. This standard does not address the removal of ground water through well points etc. This standard describes the following practices for the removal of sediment-laden waters from excavation areas: removable pumping stations, sump pits, portable sedimentation tanks and silt control bags

WATER QUALITY ENHANCEMENT

Water discharged from excavated areas on construction sites may be a significant contributor of sediment to surface waters during construction. Water must be removed and disposed of in order for construction to move forward. Typically, water is pumped or containment berms are breached and sediment laden waters are permitted to flow uncontrolled into surface waters such as streams or lakes. By employing practices described in this standard, the majority of sediment suspended in water may easily be removed prior to leaving the site. Filters and materials described herein are readily available and are easy to install and maintain.

DESIGN CRITERIA

1. Sediment Tank/Silt Control Bags are containers through which sediment laden water is pumped to trap and retain the sediment. A sediment tank or a silt control bag is to be used on sites where excavations are deep, and space is limited and where direct discharge of sediment laden water to steam and storm drainage systems is to be avoided.

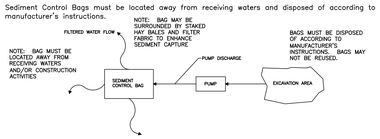
Construction Specifications

A. Location. Containers(tanks or bags) shall be located for ease of clean-out and disposal of the trapped sediment and to minimize interference with construction activities and pedestrian traffic. Bags shall no be placed directly into receiving waters.

B. Tank size. The following formula should be used in determining the storage volume of the tank: 1 cubic foot of storage for each gallon per minute of pump discharge capacity. typical tank configuration is shown on Detail 14-3. Tanks may be connected in series to increase effectiveness.

C. Tanks consist of two concentric circular pipes (CMP), attached to a watertight baseplate. The inner CMP is perforated with 1" holes on 6" centers and is wrapped with geotextile and hardware cloth. Pumped water is discharged into the inner CMP where it flows through the geotextile into the space between the two CMPs. A discharge line is attached to the outer CMP and draws filtered water from the annulus between the two concentric CMPs. The discharge line may be connected to another tank where it drains to the inner CMP of the second tank. This series connection may be continued indefinitely.

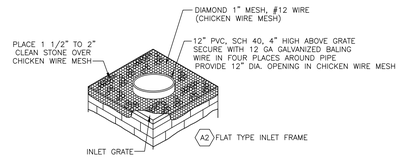
D. Sediment Control Bags must be located away from receiving waters and disposed of according to manufacturer's instructions.

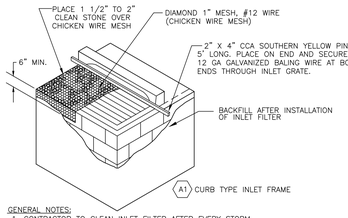


SEDIMENT CONTROL BAG FOR DEWATERING

NOT TO SCALE

NOTE: USE ONLY IF & WHERE DIRECTED





GENERAL NOTES:

1. CONTRACTOR TO CLEAN INLET FILTER AFTER EVERY STORM.
2. FILTER FABRIC, WOOD PIECE OR PVC PIPE TO BE REMOVED AFTER PAVING OR FINAL GRADING AND ESTABLISHMENT OF VEGETATION.
3. FILTER FABRIC SHALL BE MIRAFI 140N, OR APPROVED EQUAL.

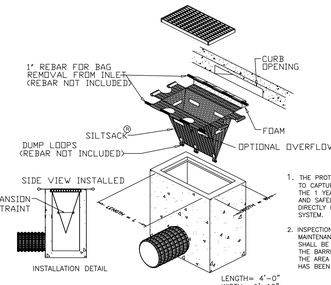
PLAN SYMBOL

A1 CURB TYPE INLET FRAME

A2 FLAT TYPE INLET FRAME

INLET FILTER

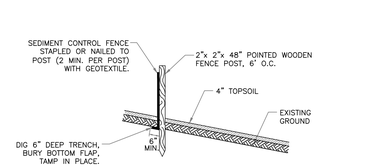
NOT TO SCALE



1. THE PROTECT DEVICE WILL BE DESIGNED TO CAPTURE OR FILTER RUNOFF FROM THE 1 YEAR, 24 HOUR STORM EVENT AND SAFELY CONVEY HIGHER FLOWS DIRECTLY INTO THE STORM SEWER SYSTEM.
2. INSPECTIONS SHALL BE FREQUENT MAINTENANCE, REPAIR, AND REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED. THE BARRIER SHALL BE REMOVED WHEN THE AREA DRAINING TOWARDS THE INLET HAS BEEN STABILIZED.

A3 - INLET FILTER

NOT TO SCALE



FRONT ELEVATION

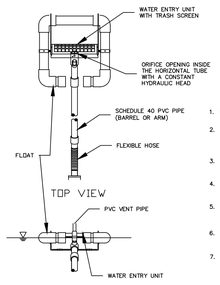
SIDE ELEVATION

PLAN SYMBOL

SF SILT FENCE

SILT FENCE DETAIL

NOT TO SCALE

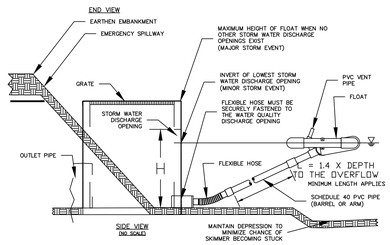


NOTE: USE FAIRCLOTH SKIMMER OR APPROVED EQUAL. TO BE INSTALLED ON LOWEST ORIFICE OPENING ON OUTLET CONTROL STRUCTURE

J. W. FAIRCLOTH & SON INC.
WWW.FAIRCLOTHSKIMMER.COM
TELEPHONE: (919) 732-1244
FAX: (919) 732-1266
EMAIL: WARREN@FAIRCLOTHSKIMMER.COM

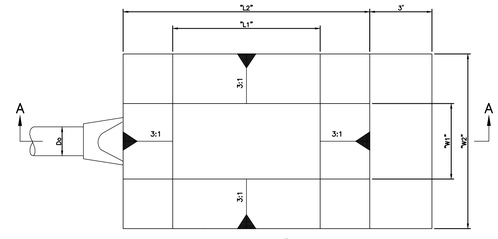
GENERAL NOTES

1. PROPER DESIGN MUST BE COMPLETED TO MINIMIZE PIPING AROUND DISCHARGE PIPE.
2. PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE POND DRAINS IN CORRECT AMOUNT OF TIME. MODIFICATIONS MAY BE REQUIRED IF FIELD CONDITIONS WARRANT A CHANGE.
3. EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
4. EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND EROSION PROTECTION INSTALLED.
5. EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.
6. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.
7. EIGHT SIZES OF SKIMMERS ARE AVAILABLE, REFER TO THE FLOW SHEET, CUT SHEET, AND INSTRUCTIONS ON WEB SITE FOR EACH SIZE.

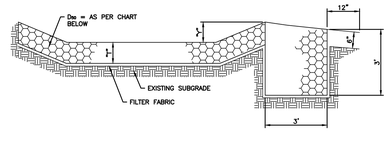


SKIMMER DISCHARGE SYSTEM WITH OUTLET STRUCTURE

NOT TO SCALE



PLAN



SECTION A-A

PREFORMED SCOUR HOLE DIMENSIONS

OUTLET NO.	OUTLET DIA. D_O	BOTTOM LENGTH L1	OVERALL LENGTH L2	(FL) BOTTOM WIDTH W1	(FL) OVERALL WIDTH W2	(FL) DEPTH Y	T (RENO MATTRESS)	d50 (RENO MATTRESS)
HEADWALL #1	36"	9'	18'	6'	15'	1.5'	38"	38"

NOTE:
PREFORMED SCOUR HOLES CAN BE CONSTRUCTED OF RENO MATTRESSES, OR RIPRAP, SEE PREFORMED SCOUR HOLE CHART FOR REQUIRED THICKNESS AND MEDIAN STONE SIZE FOR EACH. RENO MATTRESS TO BE PVC COATED, GALVANIZED MATTRESSES FILLED WITH 3" to 4" ANGULAR BLOCK SHAPED ROCK BASKETS. TO BE TIGHTLY WIRED TOGETHER. GABIONS CAN BE SUBSTITUTED FOR RENO MATTRESSES IF THE PREFORMED SCOUR HOLE THICKNESS DICTATES.

TYPICAL PREFORMED SCOUR HOLE DETAIL

NOT TO SCALE

NOT TO SCALE

NO.	DATE	REVISIONS	BY	CHKD

NICHOLAS C. ROTONDA
VICE PRESIDENT

05-15-2020
LICENSED PROFESSIONAL ENGINEER
STATE OF NJ LICENSE No. 34434

FRANCIS E. PARKER MEMORIAL HOMES

PARKER AT SOMERSET CHILD CARE FACILITY

BLOCK 424.01, LOT 39.08, FRANKLIN TOWNSHIP, SOMERSET COUNTY, NEW JERSEY

PRELIMINARY / FINAL SITE PLAN

SOIL EROSION AND SEDIMENT CONTROL DETAILS

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YOUR GOALS. OUR MISSION.
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DESIGNED BY	JBF
CHECKED BY	NCR
DRAWN BY	BJK
DATE	05-15-2020
SCALE	AS SHOWN
PROJ. NO.	PARK-00047

DRAWING SED-2

SHEET 07 OF 07

PROJECT INFORMATION:
FILE PATH: G:\Projects\PARK\DGN\PT Plans\
FILE NAME: PARK-00047-SED-2.dwg
LAST SAVED DATE AND TIME: 11 May 2020, 5:50PM
LAST SAVE BY: BKraut