EXAMPLE COMMERCIAL REALTY Land Lease or Build to Suit Opportunity



1216 - 1220 Route 130, Robbinsville, Mercer County NJ

PROPERTY DETAILS:

- New Construction 8,000 SF building Ideal for Retail, Medical, Restaurant, or General Office Professionals.
- Build to Suit: \$25.00 PSF NNN
- Land Lease 1+/- Acre of land ideal for Banks, Fast Food, or National/Regional Retailers.
- Land Lease: \$100,000.00 / year NNN
- Current Zoning: Highway Commercial (HC)
- Located on highly traveled Route 130 at the <u>corner lighted intersection</u> of Meadowbrook Road and Route 130 South. Cross Easement Access readily available.
- Directly Across the Street from Springside at Robbinsville, a brand new residential community consisting of: Single Family, Townhouse, and Carriage Houses.
- <u>COME JOIN WAWA!</u> (Currently in the approval process).

Seth Katz, Broker of RecordLegacy Commercial Realty, L.L.C.510 Route 9 North2nd Floorwww.LegacyRealtyNJ.comP: 732.333.6380F: 732.333.6381

All information furnished regarding property for sale, rental, or financing is from sources deemed reliable but no warranty or representation is made as to the accuracy there of and same is submitted subject to errors, omissions, change of price, rental or withdrawal without notice.

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	PROPER	ГҮ ОЙ	VNERS WITH	HIN 200 FT.			
	Batch I	d: 8 150117					
	Identif	ication	Name Street Address City, State Property Location	Zip			
	Block: Lot: Qual:	8 18	KADCO INC 1214 ROUTE 130 ROBBINSVILLE NJ 1214 ROUTE 130	08691			
	Block: Lot: Qual:	8 14	UNITED NJ RAILROAD & CANAL TAX DEPT PO BOX 8499 PHILADELPHIA PA ROUTE 130 REAR	CO 19104			
	Block: Lot: Qual:	8 13.05	SINGH SUKHWINDER ETAL 105 ROSE'S COURT ROBBINSVILLE NJ 105 ROSE'S COURT	08691			
	Block: Lot: Qual:	8 13.02	WALKER'S RUN OWNERS ASSOCI 1621 NORTH OLDEN AVENUE TRENTON NJ MEADOWBROOK ROAD	ATION INC 08638			
	Block: Lot: Qual:	8 13.04	EVANKO KENNETH M & MARYANN 103 ROSE'S COURT ROBBINSVILLE NJ 103 ROSE'S COURT	E D 08691			
	Block: Lot: Qual:	8 13.06	WALL SCOTT CAROLE 107 ROSE'S COURT ROBBINSVILLE NJ 107 ROSE'S COURT	08691			
	Block: Lot: Qual:	10 22.01	PARSEC HOLDINGS LLC 2439 KUSER ROAD HAMILTON, NJ ROUTE 130	08690			
	Block: Lot: Qual:	10 20	UNITED NJ RAILROAD & CANAL TAX DEPT PO BOX 8499 PHILADELPHIA PA MEADOWBROOK ROAD	co 19104			
	Block: Lot: Qual:	10 68 -C0001	BONACORDA GROUP INC 75 SAWMILL ROAD HAMILTON, NJ 324 MEADOWBROOK ROAD	08620			
	Block: Lot: Qual:	10 68.01 -Q0034	7 PLUS ONE PARTNERS C/O NE 1333 BRUNSWICK PIKE SUITE 200 LAWRENCEVILLE NJ	XUS PROP 08648			
	Block: Lot: Qual:	26 6.03	MEADUWBROOK ROAD SHARBELL GORDON, L.L.C. 1 WASHINGTON BLVD STE#9 ROBBINSVILLE NJ ROUTE 130	08691			
	Block: Lot: Qual:	21 27.02	SHARBELL GORDON, L.L.C. 1 WASHINGTON BLVD STE#9 ROBBINSVILLE NJ 207 GORDON ROAD	08691			
	Robber TOWN BEATTHECEN Planning/Zoning/T 2298 Route 33, Ro phone (609) 259-3600	SHI TER OF IT Cargineering Office bbinsville, NJ 08691 1 fax (609) 259-21					
November 13, 2	2017						
I, Ann Bell, Adm following to be Block 8,	inistrative Officer of the Tow a certified tax list of property Lot 15.01,17	nship of Robbins owners within 2	sville, do hereby certify the 200 feet of:				
Located in the T <u>BLOCK</u>	ownship of Robbinsville, Cou <u>LOT</u>	ADDRESS					
	See at	tached list of pro	perty owners. De Board				
	640 So Trento	outh Broad Stree on, NJ 08650	t - Room 420				
	NJDO" PO Bo Trente	Г x 600 on, NJ 08625					
	Donal Real E	d Olivo state Departmer	it	Loglia Mal			
	Jersey 300 M PO Bo Morri	Central Power 8 ladison Ave. x 1911	٤ Light	General Counsel Bell Atlantic – NJ, Inc. 540 Broad St			
	Randy Outsic	v N. Good le Plant Supervis	or Manager	Newark, NJ 07101 James Barbato, PE			
	Cabler 2137 Hamil	vision Hamilton Avenue ton Township, N	e .J. 08619	Regional Manager Aqua New Jersey, Inc. 10 Black Forest Rd.			
	Public Manag 80 Pau Newau	: Service Electric ger – Corporate F rk Plaza, T6B rk, NJ 07102	& Gas Co. Properties	Hamilton, NJ 08691 Robert R. Ericksen, P.E., C A T & T One A T & T Way Room 3B2160	CIM		
	Town Divisi 56 Ro	ship of Robbinsv on of Utilities bbinsville-Allent	ille own Rd.	Bedminster, NJ 07921	er County		
	Kobbi	nsville, N.J. 0869	1	PO Box 00150 Hamilton, NJ 08650-0150			
		INDE	X OF SHEET	rS	-		
SHEET NUMBER		D	DESCRIPTION		LATEST REVISION		
I	COVER SHEET				5/3/18		
2	EXISTING CONDIT	ions plan			3/28/18		
3	DIMENSION PLAN						
4	GRADING PLAN						
5					3/28/18		
6							
7							
, Ω		ים טוע אדנ	FTAII		5/3/10		
0			/ VL				
У					3/28/18		
10	SOIL EROSION AND	SEDIMENT	CONTROL PLAN		3/28/18		
- 2	SOIL EROSION AND	d sediment	CONTROL DETAILS		3/28/18		
13	SOIL MANAGEMEN	T AND PREF	PARATION PLAN		3/28/18		

PRELIMINARY AND FINAL MAJOR SITE PLAN FOR

CONVENIENCE STORE WITH GAS & RETAIL **ROBBINSVILLE MEADOWBROOK, LLC**

BLOCK 8, LOTS 15.01 AND 17 TOWNSHIP OF ROBBINSVILLE **NEW JERSEY** MERCER COUNTY



ZONE LEG
CONS
HC
MU-ARCD
OC-I
R1.5

APPROVED BY THE PLANNING BOARD OF THE TOWNSHIP OF ROBBINSVILLE AT THE REGULAR MEETING OF _____ DATE

3/28/18

3/28/18

CHAIRMAN	[DATE
SECRETARY	D/	ATE
ENGINEER	D	ATE

14

15 - 21

TRUCK CIRCULATION PLAN

CONSTRUCTION DETAILS

KEY & ZONING MAP



END

- CONSERVATION
- HIGHWAY COMMERCIAL
- MIXED-USE/AGE-RESTRICTED CONSERVATION DEVELOPMENT OFFICE COMMERCIAL
- RESIDENTIAL



	GEN
١.	THE SUBJECT PROPERTY ADDRESS IS 1220 US-130, ROBBINSVILLE, NJ 08691 AND IS KNOWN AS LOT(S) 15.01 AND 17 IN BLOCK(S) 8 AS SHOWN ON SHEET(S) 5.02 OF THE OFFICIAL TAX MAP OF THE TOWNSHIP OF ROBBINSVILLE, MERCER COUNTY, NEW JERSEY, REVISED THROUGH 8/4/14.
2.	THE PROPERTY IS LOCATED IN THE HC - HIGHWAY COMMERCIAL ZONE AND CONTAINS A TOTAL TRACT AREA OF 138,038 SF, OR 3.169 ACRES.
3.	OWNER/APPLICANT: ROBBINSVILLE MEADOWBROOK, LLC 4 CAUFIELD PLACE, SUITE 102 NEWTOWN, PA 18940 PHONE: 609-430-3055 FAX: 609-454-3948 EMAIL: RCD@THEDREHERGROUP.COM
4.	THE SUBJECT PROPERTY IS PRESENTLY DEVELOPED WITH A SWIMMING POOL CONTRACTOR STORE ALONG WITH TYPICAL APPURTENANT SITE IMPROVEMENTS SUCH AS POOL LIGHTING, PARKING LOTS, AND FENCING. THE APPLICANT PROPOSES TO DEMOLISH THE EXISTING USE AND CONSTRUCT A COMMERCIAL RETAIL USE WITH GASOLINE FUEL SALES AND ANOTHER SEPARATE RETAIL USE WITH TYPICAL SITE IMPROVEMENTS SUCH AS PARKING LOTS, LIGHTING, AND STORMWATER MANAGEMENT.
5.	BOUNDARY SURVEY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS TAKEN FROM A PLANS ENTITLED: "ALTA/NSPS LAND TITLE SURVEY FOR ROBBINSVILLE MEADOWBROOK, LLC, BLOCK 8, LOTS 15.01 & 7 TOWNSHIP OF ROBBINSVILLE, MERCER COUNTY, NEW JERSEY", DATED 8/26/16, PREPARED BY ERIC V WILDE, P.L.S. LIC. NO. GS43279, OF MASER CONSULTING, P.A.
	THE HORIZONTAL DATUM IS RELATIVE TO THE NEW JERSEY STATE PLANE COORDINATE SYSTEM AND ADJUSTED TO NAD 1983. THE VERTICAL DATUM IS RELATIVE TO N.A.V.D. 1988.
6.	IN ACCORDANCE WITH NJDEP GEOWEB, NO FRESHWATER WETLANDS ARE KNOWN TO EXIST ON THE SITE.
7.	NO 100 YEAR FLOOD PLAINS ARE KNOWN TO EXIST ON THE SITE PER THE FLOOD INSURANCE RATE MAP 34021C0252F FOR MERCER COUNTY, NEW JERSEY, DATED JULY 20, 2016 PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
8.	SOIL TEST PIT LOCATIONS SHOWN HEREON ARE AS SHOWN IN A REPORT ENTITLED "REPORT OF GEOTECHNICAL EXPLORATION FOR PROPOSED RETAIL DEVELOPMENT PREPARED FOR RICHARD DREHER", DATED: 11/16/17, PREPARED BY MASER CONSULTING, P.A.
9.	MATERIALS, WORKMANSHIP, AND CONSTRUCTION FOR THE SITE IMPROVEMENTS SHOWN HEREON SHALL BE IN ACCORDANCE WITH:
	 A. RESIDENTIAL SITE IMPROVEMENT STANDARDS (N.J.A.C. 5:21). B. NEW JERSEY DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", 2007; AS SUPPLEMENTED. C. CURRENT PREVAILING MUNICIPAL, COUNTY, AND/OR STATE AGENCY SPECIFICATIONS STANDARDS, CONDITIONS, AND REQUIREMENTS. D. CURRENT PREVAILING UTILITY COMPANY/AUTHORITY SPECIFICATIONS, STANDARDS, AND REQUIREMENTS. E. CURRENT MANUFACTURER SPECIFICATIONS, STANDARDS, AND REQUIREMENTS.
10.	WATER SERVICE TO BE PROVIDED FROM THE EXISTING WATER MAIN LINE WITHIN MEADOWBROOK ROAD, OWNED AND OPERATED BY AQUA NJ - HAMILTON SQUARE. PROPOSED WATER MAIN EXTENSIONS AND FIRE HYDRANT LOCATIONS ARE SUBJECT TO MUNICIPAL REVIEW AND APPROVAL, ACCORDING TO THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION REGULATIONS, AMERICAN WATERWORKS ASSOCIATION STANDARDS, AND IN THE PINELANDS AREA, THE STANDARDS OF THE PINELANDS COMPREHENSIVE MANAGEMENT PLAN. PIPE MATERIALS SHALL BE CEMENT LINED DUCTILE IRON PIPE, CLASS 52, WITH ASPHALTIC EPOXY TYPE COATING. WATER MAINS SHALL BE INSTALLED TO PROVIDE A MINIMUM 4 FEET OF COVER FROM THE TOP OF PIPE TO THE PROPOSED GRADE.
11.	SANITARY SEWER SERVICE SHALL BE PROVIDED BY GRAVITY CONNECTION TO EXISTING SEWER MAIN WITHIN ROUTE 130, OWNED AN OPERATED BY ROBBINSVILLE TOWNSHIP. PROPOSED SEWER MAIN EXTENSIONS AND MANHOLE LOCATIONS ARE SUBJECT TO MUNICIPAL REVIEW AND APPROVAL, ACCORDING TO NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION REGULATIONS. PIPE MATERIALS SHALL BE PVC SDR-35, EXCEPT AS NOTED OTHERWISE ON THE PLANS. EXCEPT WHERE SHALLOWER DEPTHS ARE PERMITTED BY THE MUNICIPALITY OR UTILITY AUTHORITY, SEWER LINES, INCLUDING FORCE MAINS AND LATERALS, SHALL BE INSTALLED TO PROVIDE A MINIMUM 3 FEET OF COVER FROM THE TOP OF PIPE TO PROPOSED GRADE.
12.	ALL WATER MAINS AND SANITARY OR INDUSTRIAL SEWER LINES SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 10 FEET. IF SUCH LATERAL SEPARATION IS NOT POSSIBLE, THE WATER AND SEWER LINES SHALL BE IN SEPARATE TRENCHES (STEP TRENCHES ARE PROHIBITED) WITH THE TOP OF THE SEWER LINE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN OR WITH SUCH SEPARATION EXPRESSLY APPROVED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION. AT CROSSINGS OF SEWER LINES AND WATER MAINS, THE TOP OF THE SEWER LINES SHALL BE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN (SEWER SERVICE LATERALS ARE NOT SUBJECT TO THIS REOUREMENT).
13.	IF SUCH VERTICAL SEPARATION IS NOT POSSIBLE, THE SEWER LINE SHALL BE OF WATERTIGHT CONSTRUCTION (THAT IS DUCTILE IRON PIPE WITH MECHANICAL RESTRAINT JOINTS), WITH WATERTIGHT JOINTS THAT ARE A MINIMUM OF 10 FEET FROM THE WATER MAIN. CONTRACTOR SHALL USE TRANSITION COUPLING, POWERSEAL MODEL #3501-8AAB OR EQUIVALENT AT DIP/PVC JOINTS.
14.	GAS, ELECTRIC, LIGHTING, CABLE TELEVISION, AND ELECTRICAL SERVICE PLANS, IF REQUIRED, SHALL BE PREPARED BY THE RESPECTIVE UTILITY COMPANIES THAT SERVICE THE AREA PRIOR TO SITE CONSTRUCTION AND SHALL BE INSTALLED PER ORDINANCE REQUIREMENTS.
15.	TELEPHONE, ELECTRIC, AND GAS LINES WILL BE INSTALLED UNDERGROUND. CROSSINGS OF PROPOSED PAVEMENTS WILL BE INSTALLED PRIOR TO THE CONSTRUCTION OF PAVEMENT BASE COURSE.
16.	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 COMPANY/AUTHORITIES.
17.	STORM SEWERS SHALL BE CLASS III (OR HIGHER IF NOTED) REINFORCED CONCRETE PIPE (RCP) WITH "O" RING GASKETS OR INTERNALLY PRELUBRICATED GASKET (TYLOX SUPERSEAL OR EQUIVALENT), I6 GAUGE ALUMINIZED TYPE II COATED CORRUGATED PIPE (CMP), ADS N-12 HIGH DENSITY POLYETHYLENE PIPE (HDPEP), HANCOR SURE-LOK HIGH DENSITY POLYETHYLENE PIPE (HDPEP) OR APPROVED EQUAL AS NOTED. PROPER PIPE COVERAGE SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION. PIPE LENGTHS SHOWN HEREON ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
18.	REFUSE AND RECYCLABLES SHALL BE STORED WITHIN EACH USE UNTIL DESIGNATED PICK UP DAY OR WITHIN OUTSIDE SCREENED TRASH ENCLOSURES AS NOTED ON THE PLANS.
19.	CURBS SHALL BE DEPRESSED FLUSH WITH PAVEMENT, AND HANDICAPPED ACCESSIBLE RAMPS INSTALLED WHERE SIDEWALKS AND CROSSWALKS INTERSECT SAME. DETECTABLE WARNINGS SHALL BE INCLUDED ON HANDICAP ACCESSIBLE RAMPS.
20.	TRAFFIC SIGNAGE AND STRIPING SHALL CORRESPOND TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
21.	THIS IS A SITE DEVELOPMENT PLAN AND UNLESS SPECIFICALLY NOTED ELSEWHERE HERON, IS NOT A SURVEY.
22.	BUILDING FOOTPRINT DIMENSIONS SHOWN HERON ARE APPROXIMATE. FINAL BUILDING FOOTPRINT DIMENSIONS FOR EACH BUILDING SHALL BE FURNISHED ON THE INDIVIDUAL ARCHITECTURAL PLANS AT THE TIME OF APPLICATION FOR A BUILDING PERMIT. ALL STRUCTURES SHALL CONFORM TO THE APPROVED BULK ZONING REFOLINGMENTS
23.	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.
24.	THIS SET OF PLANS HAS BEEN PREPARED FOR THE PURPOSES OF MUNICIPAL AND AGENCY REVIEW AND APPROVAL. THIS SET OF PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL ALL APPROVALS REQUIRED HAVE BEEN OBTAINED, ALL CONDITIONS OF APPROVAL HAVE BEEN SATISFIED AND THE DRAWINGS HAVE BEEN STAMPED "ISSUED FOR CONSTRUCTION". THIS SHALL INCLUDE APPROVAL OF ALL CATALOG CUTS, SHOP DRAWINGS AND/OR DESIGN CALCULATIONS AS REQUIRED BY THE PROIECT OWNER AND/OR MUNICIPAL ENGINFER
25.	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 CONSTRUCTIONS, 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. THE CONTRACTOR SHALL NOTIFY THE UNDER

DESIGNS HEREON INAPPROPRIATE OR INEFFECTIVE. 26. THIS PLAN IS NOT DEPICTING ENVIRONMENTAL CONDITIONS OR A CERTIFICATION/WARRANTY REGARDING THE PRESENCE OR ABSENCE OF ENVIRONMENTALLY IMPACTED SITE CONDITIONS. MASER CONSULTING HAS PERFORMED NO EXPLORATORY OR TESTING SERVICES. INTERPRETATIONS, CONCLUSIONS OR OTHER SITE ENVIRONMENTAL SERVICES RELATED TO THE DETERMINATION OF THE POTENTIAL FOR CHEMICAL, TOXIC, RADIOACTIVE OR OTHER TYPE OF CONTAMINANTS AFFECTING THE PROPERTY AND THE SURROUNDINGS, THE UNDERSIGNED PROFESSIONAL IS NOT OUALIFIED TO DETERMINE THE EXISTENCE OF SAME SHOULD ENVIRONMENTAL CONTAMINATION OR WASTE BE DISCOVERED, THE OWNER AND CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LAWS AND REGULATIONS.

SIGNED PROFESSIONAL IMMEDIATELY IF ANY FIELD CONDITIONS ENCOUNTERED DIFFER

MATERIALLY FROM THOSE REPRESENTED HEREON, SUCH CONDITIONS COULD RENDER THE

- 27. THE PROJECT SHALL BE CONSTRUCTED IN ONE (I) PHASE. 28. THE CONTRACTOR IS RESPONSIBLE FOR PROJECT SAFETY, INCLUDING PROVISION OF ALL APPROPRIATE SAFETY DEVICES AND TRAINING REQUIRED
- 29. PURSUANT TO THE NEW JERSEY ONE CALL LAW, CONTRACTOR SHALL CALL I-800-272-1000 OR 811













PROFILE OF 'B' INLET S-9 - HVV S-5 I" = 30' HORIZ. / I" = 3' VERT.



PROFILE OF OCS S-1 - FES S-0 I" = 30' HORIZ. / I" = 3' VERT.







PROFILE OF 'B' INLET S-99 - MH S-98 I" = 30' HORIZ. / I" = 3' VERT.

PROFILE OF HW S-14 - MH S-12 I" = 30' HORIZ. / I" = 3' VERT.



SCALE : 1" = 30'

HORIZONTAL

of 22

6

- REFER TO SHEET & FOR GENERAL PLANTING NOTES.
- REFER TO SHEET 7 FOR PLANT SCHEDULE(S).
- REFER TO SHEET & FOR LANDSCAPE DETAILS.
- PLANT LOCATIONS INDICATED ON THE LANDSCAPE PLAN ARE APPROXIMATE. PRIOR TO INSTALLATIC PLANT LOCATIONS AND PLANTING BED LIMITS SHALL BE APPROVED IN THE FIELD UNDER THE DIRECT
- THE LANDSCAPE PLAN SHALL TAKE PRECEDENCE OVER THE PLANT SCHEDULE SHOULD ANY PLANT
- LAWN AREAS SHALL BE STABILIZED WITH SOD.

ALL PROPOSED LANDSCAPING WITHIN UTILITY EASEMENTS TO BE MAINTAINED AT A MAXIMUM HEIGHT

IRRIGATION DESIGN TO BE DONE BY OTHERS.

Ϋ́	BOTANICAL NAME Acer rubrum 'Armstrong' Celtis occidentalis Celtis occidentalis Ginkgo biloba 'Princeton Sentry' Nyssa sylvatica Quercus bicolor Quercus bicolor	<u>COMMON NAME</u> Armstrong Red Maple Common Hackberry Common Hackberry Princeton Sentry Ginkgo Sour Gum Swamp White Oak Swamp White Oak	ONT 88888888 888888888888888888888888888	<u>CAL</u> 2 /2-3" 1 /2-2" 2 /2-3" 2 /2-3" 2 /2-3" 1 /2-2" 2 /2-3"	2018- HEIG
Y	<u>BOTANICAL NAME</u> Juniperus chinensis 'Hetzii Columnaris'	<u>COMMON NAME</u> Hetzi Column Juniper	<u>CONT</u> B & B	<u>CAL</u>	<u>HEIG</u> 6'-7
Υ 2 5	BOTANICAL NAME Clethra alnifolia 'September Beauty' Cornus sericea 'Artic Fire' Cornus sericea 'Flaviramea' Hamamelis x intermedia 'Arnold Promise' Hydrangea quercifolia 'Alice' Ilex glabra 'Compacta' Ilex verticillata 'Sparkleberry' Kalmia latifolia 'Elf' Kalmia latifolia 'Dympic Fire' Rhus aromatica 'Gro-Low' Viburnum dentatum	<u>COMMON NAME</u> Summersweet Clethra Artic Fire Dogwood Yellow Twig Dogwood Arnold Promise Hybrid Witch Hazel Alice Oakleaf Hydrangea Compact Inkberry Winterberry Dwarf Mountain Laurel Mountain Laurel Gro-Low Fragrant Sumac Viburnum	<u>୦୦</u> ୩ ଗୁରୁସ୍କର ଗୁରୁସ୍କର୍ଭୁରୁସ୍କର ଗୁରୁସ୍କର ଗୁରୁସ୍କର ଗୁରୁସ୍କର ଅ ଅ ଅ ଅ ଅ ଅ ଅ ଅ ଅ ଅ ଅ ଅ ଅ ଅ ଅ ଅ ଅ ଅ ଅ	<u>SIZE</u> 8-24" 8-24" 24-30" 24-30" 8-24" 24-30" 8-24" 24-30" 8-24" 30-36"	
Y	<u>BOTANICAL NAME</u> Amsonia hubrichtii Aruncus x 'Misty lace' Hemerocallis x 'Happy Returns' Iris sibirica 'White Swirls' Lobelia cardinalis	<u>COMMON NAME</u> Arkansas Blue-star Misty Lace Goatsbeard Happy Returns Daylily White Swirls Siberian Iris Cardinal Flower	<u>CONT</u> 3 gal 2 gal 1 gal 1 gal 1 gal	<u>SIZE</u>	
<u>↑</u> 2 2	BOTANICAL NAME Andropogon gerardii 'Red October' Calamagrostis x acutiflora 'Karl Foerster' Panicum virgatum 'Dallas Blues' TM Panicum virgatum 'North Wind' Pennisetum alopecuroides 'Hameln'	<u>COMMON NAME</u> Big Blue Stem – Red Fall Feather Reed Grass Dallas Blues Switch Grass Northwind Switch Grass Hameln Dwarf Fountain Grass	<u>CONT</u> 5 gal 2 gal 2 gal 2 gal 2 gal	<u>SIZE</u>	
RI	- TREE RECOMMENDED TO BE PL	ANTED IN SPRING			
F(

PARKING AREAS TO BE SCREENED FROM PUBLIC VIEW WITH FOUR TREES AND 50 SHRUBS PER 100 LINEAR FEET OF PARKING PERIMETER.

REQUIRED: 690 FT OF PARKING PERIMETER REQUIRES 28 TREES (1 OF WHICH CAN BE EVERGREEN)

PROVIDED: 9 JUNIPERUS CHINENSIS 'HETZII COLUMNARIS' 3 ACER RUBRUM 'ARMSTRONG'

- 2 CELTIS OCCIDENTALIS 8 GINGKO BILOBA 'PRINCETON SENTRY'
- 3 NYSSA SYLVATICA
- 3 QUERCUS BICOLOR
- 28 TREES
- 399 SHRUBS

A MINIMUM OF 3,546 SQ FT OF PLANTING AREA WITHIN THE PARKING LOT SHALL BE PROVIDED.

TOTAL PROVIDED: 4,000 SQ FT

A MINIMUM OF ONE TREE PER TEN PARKING SPACES SHALL BE PROVIDED.

REQUIRED: 95 PARKING SPACES REQUIRES 10 TREES

PROVIDED: 8 CELTIC OCCIDENTALIS 2 ACER RUBRUM 'ARMSTRONG'

NO MORE THAN 25% OF ALL LANDSCAPE ISLANDS SHALL BE COVERED BY GRASS.

TOTAL GRASS ISLAND COVERAGE: 4%

STREET TREES ARE REQUIRED TO BE PLANTED ALONG PUBLIC AND PRIVATE STREETS AT FORTY

REQUIRED: APPROXIMATELY 780 LINEAR FEET OF FRONTAGE REQUIRES 19 STREET TREES.

PROVIDED: II ACER RUBRUM 'ARMSTRONG' <u>8 GINKGO BILOBA 'PRINCETON SENTRY'</u>

REFORESTATION REQUIREMENTS

142-47 AFFORESTATION AND REFORESTATION J.

CURRENT FOREST COVER ON SITE: APPROX. 14,293 SQ FT (0.33 AC)

REQUIRED 20% AFFORESTATION AREA: $138,038 \times 0.2 = 27,608$ SQ FT (0.63 AC)

EXIST WOODLANDS TO REMAIN: APPROX. 13,381 SQ FT (0.31 AC) = 9.7% OF PREDEVELOPMENT AREA

20% REQUIRED - 9.7% EXIST WOODLANDS = 10.3% (0.33 AC) REQUIRED AFFORESTATION

PER THE ORDINANCE, A TOTAL OF 0.33 ACRES OF AFFORESTATION SHALL BE PROVIDED AT A RATE OF 100 TREES AT 1 1/2-2" CALIPER AND 40 WOOD SHRUBS PER ACRE.

REQUIRED TREES: $0.33 \times 100 = 33$ TREES

PROVIDED: 6 CELTIS OCCIDENTALIS 5 HAMAMELIS X INTERMEDIA 'ARNOLD PROMISE'

3 NYSSA SYLVATICA 7 QUERCUS BICOLOR

16 TREES

12 ILEX GLABRA 'COMPACTA' 3 VIBURNUM DENTATUM

* AS ALLOWED BY ORDINANCE SECTION 142-47 J(2)(d)- 9 TREES AND 17 SHRUBS AROUND THE BASIN HAVE BEEN COUNTED TOWARDS THE AFFORESTATION REQUIREMENTS. ^ DUE TO SITE LAYOUT RESTRICTIONS, THE PLAN IS DEFICIENT BY 17 TREES

PER ORDINANCE REQUIREMENTS, THE PROVIDED TREES AND SHRUBS SHALL BE PLACED IN A PERMANENT FOREST CONSERVATION EASEMENT PRIOR TO THE ISSUANCE OF A CERTIFICATE OF

DN,		Cust	comer w w w	· Loya / . m a eers	C O alty th is er o Pla	N S prouga	Å UL h Clie sulti s	S T I sent Sa Surve	tisfac o m	tion	₹ _^
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## LANDSCAPE NOTES

- 1. THIS PLAN IS TO BE USED FOR LANDSCAPING PURPOSES ONLY.
- 2. CONTRACTOR IS TO EXAMINE ALL ENGINEERING DRAWINGS AND FIELD CONDITIONS FOR SPECIFIC LOCATIONS OF ALL UTILITIES STRUCTURES FTC AND NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY IF ANY DISCREPANCIES OR CONFLICTS ARE DISCOVERED PRIOR TO PLANTING
- 3. IN THE EVENT THAT DISCREPANCIES EXIST BETWEEN THE PLAN AND THE PLANTING SCHEDULE, THE PLAN SHALL SUPERSEDE
- ALL PLANTING MATERIALS AND METHODS SHALL MEET OR EXCEED THE REQUIREMENTS OF THE MUNICIPAL ORDINANCE AND ANSI Z-60.1 (CURRENT VERSION), THE AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMAN, EXCEPT THAT IN THE EVEN OF CONFLICT BETWEEN THE STANDARDS, THE MORE STRINGENT STANDARD SHALL APPLY
- ALL LANDSCAPING SHALL BE PLANTED IN A MANNER THAT WILL NOT INTERFERE WITH UTILITY LINES, SIGHT TRIANGLES, PUBLIC WALKWAYS, STREETS, OR OTHER EXISTING OR PROPOSED STRUCTURES.
- EXCEPT FOR SHADE TREES, ALL PLANT MATERIAL PLANTED WITHIN A REQUIRED SIGHT TRIANGLE OR SIGHT DISTANCE SHALL NOT EXCEED A MATURE HEIGHT OF 30" ABOVE THE ELEVATION OF THE ADJACENT ROADWAY.
- ALL SHADE TREES PLANTED ADJACENT TO PEDESTRIAN WALKWAYS, VEHICLE ACCESSES OR WITHIN A REQUIRED SIGHT TRIANGLE OR SIGHT EASEMENT SHALL BE BRANCHED A MINIMUM OF 7'-0" ABOVE GRADE AND MUST BE APPROPRIATELY PRUNED.
- 8. SEE "SOIL EROSION AND SEDIMENT CONTROL" PLAN FOR THE LOCATION OF ALL TREE PROTECTION FENCING.
- THE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITION CONSIDERED DETRIMENTAL TO THE GROWTH OF THE PROPOSED PLANT MATERIAL.
- ALL DISTURBED AREAS BEYOND THE LIMITS OF THE MULCHED PLANTING BEDS LABELED AS LAWN SHALL BE PERMANENTLY STABILIZED WITH SEED PER THE SOIL EROSION AND SEDIMENT CONTROL PLAN UNLESS SOD IS SPECIFIED ON THE PLAN OR REQUESTED BY THE OWNER.
- PLANTING LOCATIONS SHOWN ARE APPROXIMATE. IN GENERAL, PLANTS ARE TO BE PLANTED AT INTERVALS, WHICH WILL ALLOW THEM TO FULLY DEVELOP INTO CONTINUOUS MASSES OF THE INDIVIDUAL SPECIES. NO PRUNING TO SHAPE OR SHEARING IS REQUIRED OR DESIRABLE.

## PLANT MATERIAL

- NO PLANT SUBSTITUTIONS SHALL BE ALLOWED WITH REGARD TO SIZE, SPECIES, OR NAMED VARIETY WITHOUT PRIOR PERMISSION FROM THE LANDSCAPE ARCHITECT AND APPROVING AUTHORITY
- ALL PLANTS SHALL BE DUG, PACKED, TRANSPORTED AND HANDLED WITH UTMOST CARE TO ENSURE ADEQUATE PROTECTION FROM INJURY AND DESICCATION.
- ALL PLANT MATERIAL SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY, HAVE NORMAL GROWTH HABITS, WELL-DEVELOPED ROOTS AND BRANCHES AND BE FREE FROM DEFECTS AND INJURIES.
- 4. UNLESS OTHERWISE SPECIFIED, ALL TREES SHALL CONTAIN A SINGLE TRUNK OR LEADER.
- QUALITY AND SIZE OF PLANTS. INCLUDING ROOT SIZE, SHALL BE IN ACCORDANCE WITH "AMFRICAN STANDARDS FOR NURSERY STOCK". ANSI Z60.1 (MOST RECENT) AS PUBLISHED BY THE AMERICAN ASSOCIATES OF NURSERYMAN.
- ALL PLANT MATERIAL SHALL BE NURSERY GROWN, FREE FROM DISEASE AND INFESTATION AND BEAR ALL LEGALLY REQUIRED AGRICULTURAL CERTIFICATIONS.
- UPON DELIVERY TO THE SITE, ALL PLANTS SHALL BE TAGGED WITH A DURABLE, WEATHER RESISTANT LABEL THAT INDICATES THE GENUS, SPECIES AND VARIETY OF CULTIVAR.
- PRIOR TO PLANTING, ALL TREES AND SHRUBS SHALL BE PRUNED TO ELIMINATE ALL DEAD, DAMAGED OR CONFLICTING BRANCHES. PRUNING CUTS SHALL BE POSITIONED JUST OUTSIDE THE BRANCH COLLAR AND THE BOTTOM OF THE CUT SHALL BE SLANTED SLIGHTLY AWAY FROM THE
- 9. ALL PLANTS SHALL BE DELIVERED TO THE SITE IN A HEALTHY, GROWING CONDITION WITH ROOTBALLS INTACT.
- ALL PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF 2 YEARS FROM THE DATE OF ACCEPTANCE AT THE END OF THE GUARANTEE PERIOD ALL PLANTS SHALL BE IN A VIGOROUS GROWING CONDITION. ALL PLANTS IN DEAD OR DYING CONDITION SHALL BE REPLACED BY THE CONTRACTOR DURING THE NEXT PLANTING SEASON.
- 11. PLANTS SHALL NOT BE BOUND AT ANY TIME WITH WIRE OR ROPE AS TO DAMAGE THE BARK AND/OR BRANCHES.
- 12. PLANTS CONTAINING SYNTHETIC, NON-BIODEGRADABLE ROOTBALL WRAPS WILL NOT BE ACCEPTED.

- PLANTING NOTES
- 1. SOIL MUST BE FROST FREE, FRIABLE AND NOT MUDDY AT THE TIME OF PLANTING.
- BACKFILL FOR PLANTING SHALL BE COMPOSED OF 70% NATIVE TOPSOIL, 20% SCREENED TOPSOIL AND 10% PEAT MOSS OR ORGANIC COMPOST. TOPSOIL SHALL MEET CURRENT NJDOT SPECIFICATIONS AND SHALL CONTAIN NO ACIDIC MARL. LARGE STONES OR DEBRIS
- BACKFILL FOR PLANTING PITS SHALL BE PLACED IN 6" LAYERS. EACH LIFT IS TO BE THOROUGHLY WATERED AND ALLOWED TO SETTLE
- PLANTS SHALL BE SET TO ULTIMATE FINISHED GRADE SO THAT THEY WILL BE LEFT IN THE SAME RELATIONSHIP TO THE SURROUNDING GROUND AS THEY HAD PRIOR TO BEING DUG. IF EVIDENCE OF POOR DRAINAGE CONDITIONS EXISTS, PLANTS SHALL BE SET SO THAT THE ROOT CROWN IS APPROXIMATELY 3" ABOVE THE SURROUNDING GRADE
- 5. UNDER NO CIRCUMSTANCES SHALL THE ROOT CROWN BE BURRIED.
- 6. ALL PLANT MATERIAL SHALL BE INSTALLED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL PROTECT STOCK NOT PLANTED.
- ALL PLANT MATERIAL SHALL BE FURNISHED AND INSTALLED AS INDICATED. INCLUDING ALL LABOR. MATERIALS, PLANTS, EQUIPMENT, INCIDENTALS AND CLEAN-UP
- 8. B & B PLANTS SHALL BE HANDLED FROM THE ROOT BALL ONLY. PLANTS WITH BROKEN, SPLIT OR DAMAGED ROOTBALLS WILL BE REJECTED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITY MARK OUTS AND COMPLIANCE WITH ALL FEDERAL STATE, OR LOCAL CODES, LAWFUL ORDERS OR REGULATIONS GOVERNING UPON THIS WORK.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION AND MAINTENANCE OF ALL TREE GUYS, STAKES, SUPPORTS AND MULCH RINGS OR BEDS DURING THE CONSTRUCTION AND GUARANTEE PERIOD.
- 11. ALL PLANTS SHALL BE SET PLUMB AND STRAIGHT AND SHALL BE PLACED IN THE CENTER OF THE PLANTING
- THE CORD BINDING ALL B & B PLANTS SHALL BE CUT AND REMOVED, ALONG WITH THE BURLAP, FROM 12. THE UPPER 1/3 OF THE ROOT BALL. ALL WIRE BASKETS SHALL BE REMOVED.
- 13. ALL PROPOSED TREES SHALL BE MULCHED TO THE LIMIT OF THEIR PLANTING PITS. 14. ALL SHRUBS SHALL BE SET IN CONTINUOUS PLANT BEDS RATHER THAN ISOLATED INDIVIDUALS, AND SHALL BE MULCHED. TO THE LIMITS OF THE PLANTING BED. WITH A 3" TO 4" THICK LAYER OF SHREDDED HARDWOOD MULCH, FREE FROM ANY OBJECTIONABLE OR FOREIGN MATERIAL.
- 15. NO MULCH IS TO BE PLACED WITHIN 4" OF TREE TRUNKS. 16. ALL TREES ARE TO BE PLANTED A MINIMUM OF 10 FEET FROM UNDERGROUND UTILITIES.
- MAINTENANCE NOTES ALL GRASS AREAS ARE TO BE MAINTAINED AT A CUT HEIGHT OF 2.5-3". THE CUT SHALL NOT REMOVE MORE THAN 1/3 OF THE GRASS BLADE HEIGHT. LIME FERTILIZER AND OTHER SOIL AMENDMENTS SHALL BE APPLIED AT REGULAR INTERVALS BASED UPON SOIL TESTS AND RECOMMENDATIONS FROM A CERTIFIED SOIL TESTING LAB. ALL APPLICATIONS SHALL BE MADE BY TRAINED AND LICENSED PERSONNEL IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS AND NOTICE.
- ALL PLANTING BEDS SHALL BE EDGED WITH A 3-4" DEEP "V" GROOVE BETWEEN THE BED AND ADJACENT LAWN AREA. ALL MULCH SHALL BE REPLENISHED TO MAINTAIN A 3-4" THICK LAYER UNLESS THE GROUND COVER OR PLANTING HAS COMPLETELY COVERED THE SURFACE OF THE PLANTING BED.
- ALL PLANTING BEDS SHALL BE MAINTAINED FREE OF WEEDS.
- PLANTS SHALL BE PERIODICALLY PRUNED OF DEAD, DAMAGED OR DISEASED BRANCHES. ALL PRUNING SHALL BE PERFORMED IN A MANNER THAT WILL MAINTAIN THE NATURAL GROWTH HABIT OF THE PLANT FLOWERING TREES AND SHRUBS SHALL BE PRUNED AFTER THE FLOWERING SEASON FOR THE RESPECTIVE PI ANT
- ALL PLANTS SHALL BE WATERED IN ACCORDANCE WITH SOUND HORTICULTURAL PRACTICE.
- 6. HERBICIDES AND PESTICIDES SHOULD ONLY BE APPLIED AS NECESSARY TO ADDRESS SPECIFIC PROBLEMS. ALL TREATMENTS SHALL BE PERFORMED BY A TRAINED AND LICENSED APPLICATOR.
- ALL PAVEMENT SHALL BE MAINTAINED FREE OF LITTER, GRASS CLIPPINGS, STAINS, SNOW AND ICE AND OTHER DEBRIS
- 8. ALL DEAD OR UNHEALTHY PLANTS SHALL BE REPLACED AS NECESSARY DURING THE FIRST AVAILABLE GROWING SEASON
- 9. ALL TREE GUYS AND STAKES SHALL BE REMOVED BY THE CONTRACTOR 1-YEAR AFTER FINAL ACCEPTANCE

## STANDARD FOR PERMANENT STABILIZATION WITH SOD

## DEFINITION

ESTABLISHING PERMANENT VEGETATION USING SOD. PURPOSE

TO PERMANENTLY STABILIZE TOPSOIL WITH AN IMMEDIATE AESTHETIC COVERING, THUS ASSURING CONSERVATION OF SOIL AND WATER AND TO ENHANCE THE ENVIRONMENT.

## WATER QUALITY ENHANCEMENT

PROVIDES AN IMMEDIATE, PERMANENT VEGETATIVE COVER TO THE SOIL FROM THE IMPACTS OF WIND OR RAIN AND PREVENTS SOIL AND NUTRIENT LOSSES TO STREAMS AND OTHER STORMWATER CONVEYANCES FROM STORMWATER RUNOFF.

## WHERE APPLICABLE

ON EXPOSED SOILS THAT HAVE A POTENTIAL FOR CAUSING OFF-SITE ENVIRONMENTAL DAMAGE WHERE AN IMMEDIATE, PERMANENT VEGETATIVE COVER IS DESIRED. MOISTURE IS REQUIRED FOR SUCCESS; ACCESS TO IRRIGATION IS ESSENTIAL

## METHODS AND MATERIALS

- CULTIVATED SOD IS PREFERRED OVER NATIVE OR PASTURE SOD. SPECIFY "CERTIFIED SOD," OR OTHER HIGH QUALITY CULTIVATED SOD.
- SOD SHOULD BE FREE OF WEEDS AND UNDESIRABLE COARSE WEEDY GRASSES.
- SOD SHOULD BE UNIFORM THICKNESS, APPROXIMATELY 5/8 INCH, PLUS OR MINUS 1/4 INCH, AT TIME OF CUTTING (EXCLUDES TOP GROWTH).
- SOD SHOULD BE VIGOROUS AND DENSE AND BE ABLE TO RETAIN ITS OWN SHAPE AND WEIGHT WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP FROM THE UPPER 10 PERCENT OF THE STRIP. BROKEN PADS OR TORN AND UNEVEN ENDS WILL NOT BE ACCEPTABLE.
- FOR DROUGHTY SITES A SOD OF TURF-TYPE TALL FESCUE AND BLUEGRASS BLEND IS PREFERRED OVER A STRAIGHT BLUEGRASS SOD.
- ONLY MOIST, FRESH, UNHEATED SOD SHOULD BE USED. SOD SHOULD BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS OR LESS DURING SUMMER MONTHS.
- 1. SITE PREPARATION
  - GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR LIMING, FERTILIZING AND SOIL PREPARATION. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING.
- 2 SOIL PREPARATION
  - 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 USING 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 SOIL TESTING INDICATES OTHERWISE. CALCIUM CARBONATE IS THE EQUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES. TABLE 6-1 IS A GENERAL GUIDELINE FOR LIMESTONE APPLICATION RATES.

- TABLE 6-1
- LIMESTONE APPLICATION RATE BY SOIL TEXTURE SOIL TEXTURE TONS/ACRE CLAY, CLAY LOAM, AND HIGH ORGANIC SOIL SANDY LOAM, LOAM, SILT LOAM LOAMY SAND, SAND
- PULVERIZED DOLOMITIC LIMESTONE IS PREFERRED FOR MOST SOILS SOUTH OF THE NEW **BRUNSWICK-TRENTON LINE** WORK LIME AND FERTILIZER INTO THE TOPSOIL 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, FINE SEEDBED IS PREPARED.
- REMOVE FROM THE SURFACE ALL OBJECTS THAT WOULD PREVENT GOOD SOD TO TOPSOIL CONTACT AND REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS, OR OTHER UNSUITABLE MATERIAL.
- D. INSPECT SITE JUST BEFORE SODDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILED AND FIRMED IN ACCORDANCE WITH THE ABOVE. SOD PLACEMENT
- A. SOD STRIPS SHOULD BE LAID ON THE CONTOUR, NEVER UP AND DOWN THE SLOPE, STARTING AT THE BOTTOM OF THE SLOPE AND WORKING UP. ON STEEP SLOPES, THE USE OF LADDERS WILL FACILITATE THE WORK AND PREVENT DAMAGE TO THE SOD. DURING PERIODS OF HIGH TEMPERATURE, LIGHTLY IRRIGATE THE SOIL IMMEDIATELY PRIOR TO LAYING THE SOD.
- B. PLACE SOD STRIPS WITH SNUG, EVEN JOINTS THAT ARE STAGGERED. OPEN SPACES INVITE
- C. ROLL OR TAMP SOD IMMEDIATELY FOLLOWING PLACEMENT TO INSURE SOLID CONTACT OF ROOT MAT AND SOIL SURFACE. DO NOT OVERLAP SOD. ALL JOINTS SHOULD BE BUTTED TIGHTLY IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE DRYING OF THE ROOTS.
- ON SLOPES GREATER THAN 3 TO 1, SECURE SOD TO SURFACE SOIL WITH WOOD PEGS, WIRE STAPLES BIODEGRADABLE PLASTIC SPIKES, OR SPLIT SHINGLES (8 TO 10 INCHES LONG BY 3/4 INCH WIDE)
- SURFACE WATER CANNOT ALWAYS BE DIVERTED FROM FLOWING OVER THE FACE OF THE SLOPE, BUT A CAPPING STRIP OF HEAVY JUTE OR PLASTIC NETTING, PROPERLY SECURED, ALONG THE CROWN OF THE SLOPE AND EDGES WILL PROVIDE EXTRA PROTECTION AGAINST LIFTING AND UNDERCUTTING OF SOD THE SAME TECHNIQUE CAN BE USED TO ANCHOR SOD IN WATER CARRYING CHANNELS AND OTHER CRITICAL AREAS. WIRE STAPLES MUST BE USED TO ANCHOR NETTING IN CHANNEL WORK.
- IMMEDIATELY FOLLOWING INSTALLATION. SOD SHOULD BE WATERED UNTIL MOISTURE PENETRATES THE SOIL LAYER BENEATH SOD TO A DEPTH OF 1 INCH. MAINTAIN OPTIMUM MOISTURE FOR AT LEAST TWO WEEKS.

TOP DRESSING - SINCE SLOW RELEASE NITROGEN FERTILIZER (WATER SOLUBLE) IS PRESCRIBED IN SECTION 2, "SEEDBED PREPARATION" IN THIS STANDARD, A FOLLOW-UP TOP DRESSING IS NOT MANDATORY, EXCEPT WHERE GROSS NITROGEN DEFICIENCY EXISTS TO THE EXTENT THAT TURF FAILURE MAY DEVELOP, TOP DRESSING SHALL THEN BE APPLIED. TOP DRESS WITH 10-10-0 OR EQUIVALENT AT 400 POUNDS PER ACRE OR 10 POUNDS PER 1,000 SQUARE FEET.

### TREE PROTECTION SPECIFICATIONS 1. THE CONTRACTOR SHALL TAKE PROPER PRECAUTIONS NOT TO DAMAGE ANY EXISTING VEGETATION OR AREA SPECIFICALLY EXCLUDED OR EXCEPTED FROM THE CONTRACT AND WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGE OCCURRING DURING THE COURSE OF WORK UNDER CONSTRUCTION. THE CONTRACTOR SHALL. AT HIS OWN EXPENSE, MAKE ANY AND ALL REPAIRS AS REQUIRED TO RESTORE TO THE ORIGINAL CONDITION ANY AREA OR VEGETATION SO DAMAGED 2. EXISTING TREES AND VEGETATION NOT DESIGNATED FOR REMOVAL SHALL BE LEFT IN PLACE AND PROTECTED FROM EQUIPMENT DAMAGE OR INJURY DURING CONSTRUCTION USING SNOW FENCING PER THE TREE PROTECTION DETAILS. NO MATERIAL SHALL BE STORED OR CONSTRUCTION OPERATION CARRIED ON WITHIN THE CANOPY AREA OF ANY TREE THAT IS TO REMAIN. ALL AREAS REQUIRED FOR SEWER, UTILITY AND SERVICE LINES SHALL BE CLEARED USING AS NARROW A WIDTH AS POSSIBLE FOR THE EXCAVATION, BACKFILL AND INSTALLATION WORK TO PROCEED. PARTICULAR CARE SHALL BE TAKEN IN THE USE OF HEAVY MACHINERY DURING EXCAVATION OPERATIONS TO PREVENT INJURY TO ROOTS AND BRANCHES THE CONTRACTOR MAY PROPOSE ALTERNATE METHODS OF INSTALLING UTILITIES UNDER AN EXISTING ROOT SYSTEM WHEN WORK IS WITHIN THE DRIP LINE OF THE TREE. WHEN THE CONTRACTOR FORESEES CONSTRUCTION OPERATIONS WHERE IMPACT TO ROOTS AND/OR LIMBS CANNOT BE AVOIDED. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE AT LEAST 5 WORKING DAYS IN ADVANCE. LOW LIMBS THAT WILL INTERFERE WITH THE CONTRACTOR'S EQUIPMENT SHALL BE TRIMMED. BEFORE TRIMMING ANY TREES, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF THE PROPOSED METHOD AND THE AMOUNT OF TRIMMING REQUIRED. TRIMMING SHALL BE DONE BY A PROFESSIONAL TREE SERVICE COMPANY IN ACCORDANCE WITH ANSI A-300-LAST EDITION FOR TREE CARE OPERATIONS. LANDSCAPE PLANTING DETAILS NEVER CUT OR PRUNE CENTRAL LEADER OR TRUNK NEVER CUT OR PRUNE CENTRAL LEADER OR TRUNK PRUNE FOR VIGOR, MAINTAIN NATURAL GROWTH HABIT _ SET TREE PLUMB SET TREE PLUMB PRUNE FOR VIGOR, MAINTAIN –NATURAL GROWTH HABIT DRIVE STAKES AT ANGLE AND DRAW TO VERTICAL REMOVE BURLAP AND CORD FROM TOP 1/3 OF ROOTBALL 2" Ø HARDWOOD OR CEDAR STAKES 2 @ 180° (REMOVE AFTER FIRST _DRIVE STAKES AT ANGLE AND FIRST FULL GROWING YEAR) DRAW TO VERTICAL _ #12 WIRE DOUBLE GALV. WIRE -#12 WIRE DOUBLE GALV. WIRE 2" Ø HARDWOOD OR CEDAR STAKES - REINFORCED RUBBER HOSE LOOP 2 @ 180° (REMOVE AFTER FIRST FIRST FULL GROWING YEAR) 4" MULCH LAYER 4" MULCH LAYER FORM SAUCER AROUND FORM SAUCER AROUND PLANTING PIT OR BED PLANTING PIT OR BED PREPARED BACKFILL: AS SPECIFIED PREPARED BACKFILL: AS SPECIFIED PLACE IN LIFTS AS REQ'D. __PLACE IN LIFTS AS REQ'D _REMOVE CORD AND BURLAP AS REQ'D. COMPACTED OR UNDISTURBED SOIL TAMP IN LIFTS TO PREVENT AIR POCKETS, SOAK BACKFILL AFTER PLANTING COMPACTED OR UNDISTURBED BALL OF ALL PLANTS TO BE KEPT MOIST AND SOIL PROTECTED FROM DAMAGE PRIOR TO PLANTING. MULCH SHALL NOT COME IN CONTACT WITH TREE ROOT FLARE DECIDUOUS TREE PLANTING CONIFEROUS TREE PLANTING NTS N.T.S. TEMPORARY TREE PROTECTION DETAILS DRIP I INF OF TRI 2X2 WOOD (5'-0" MIN. METAL POST SNOW FENCE TO FACE OUT ON ALL SIDES -LBS./1000 SQ. FT. 90 SNOW FENCE TO FACE OUT ON ALL SIDES ____ GRADE -POSTS ELEVATION N.T.S. N.T.S. CONVENIENCE STORE LANDSCAPE NOTES . ALL TOPSOIL SHALL BE A MINIMUM 4" IN ALL SOD AREAS AND 8" IN TREE, SHRUB AND 13. ALL PLANTING BEDS AND PITS EXCEPT FOR LANDSCAPE ISLANDS ADJACENT TO THE BUILDING AND GROUND COVER BEDS, INCLUDING PARKING LOT ISLAND BEDS. IT SHALL BE APPROVED BY DESIGNATED AREA AT THE FUEL VENT STACKS, SHALL BE MULCHED WITH DOUBLE GROUND A CONSTRUCTION REPRESENTATIVE, PRIOR TO INSTALLATION. HARDWOOD MULCH AT A MINIMUM DEPTH OF 3". LANDSCAPE ISLANDS ADJACENT TO DESIGNATED AREA AT FUEL STACKS SHALL BE MULCHED WITH 1"- 3" "RIVER STONE" MULCH. FOR PLANTING BEHIND PERPENDICULAR PARKING IS TO BE LOCATED A MINIMUM OF 5' BEHIND LANDSCAPES ADJACENT TO BUILDING, CONTACT PROJECT ENGINEER THE CURB LINE. 14. SEEDBED PREPARATION ALL LANDSCAPE AND GRASS AREAS ARE TO BE HAND RAKED AND LEFT CLEAR OF ALL STONES, ROCK, CONSTRUCTION DEBRIS AND ANY UNSUITABLE MATERIALS. A. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS OR FERTILIZER MAY BE APPLIED AT THE RATE OF 260 POUNDS PER ACRE OR 6 POUNDS PER 1000 SQUARE FEET USING 10 ALL LANDSCAPE AND GRASS AREAS ARE TO BE IRRIGATED BY AUTOMATIC SPRINKLER 20.10 OR FOUIVALENT IN ADDITION, 300 POUNDS 4-1-2 PER ACRE OR EQUIVALENT OF SYSTEM. (SEE IRRIGATION SPECIFICATION.) SLOW RELEASE NITROGEN MAY BE USED IN LIEU OF TOPDRESSING. B. WORK LIME AND FERTILIZER INTO THE SOIL AS PRACTICAL TO A DEPTH OF 4-INCHES WITH A LANDSCAPE CONTRACTOR WILL LOCATE ALL UNDERGROUND UTILITIES PRIOR TO ANY DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR EXCAVATION AND PLANTING INSTALLATION. DISKING OPERATION SHOULD PARALLEL TO THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND ALL AREAS TO BE LANDSCAPED OR COVERED WITH STONE MUST BE TREATED WITH A PRE-COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE. EMERGENCE HERBICIDE (SURFLAN, DACTAL OR APPROVED EQUAL) IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE REGULATIONS AND THE MANUFACTURER'S INSTRUCTIONS. C. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED AND FIRMED AS OUTLINED BELOW LANDSCAPE CONTRACTOR TO SUPPLY AND INSTALL A PERVIOUS WEED BARRIER (DEWIT DUPONT OR APPROVED EQUAL) IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS D. GRASS SEEDING MIXTURE AND APPLICATION RATE WITHIN ALL LANDSCAPES. INCLUDING STONE AND MULCH BEDS. ALL WEED BARRIER WILI BE OVERLAPPED A MINIMUM OF 6" AT ALL SEAMS. AT PLANT LOCATIONS. BARRIER PERCENTAGE OF APPLICATION SHOULD BE CUT IN AN "X" PATTERN SO TO ACCOMMODATE ROOT BALL AND REPLACED MINIMUM GERMINATION TOTAL WEIGHT RATE AFTER PLANT HAS BEEN INSTALLED. "REBEL" TALL FESCUE "YORKTOWN" PERENNIAL RYE 5-7 LBS/1000 S.F. WEED BARRIER SHALL NOT BE VISIBLE IN AREAS DESIGNATED FOR STONE MULCH. WHEN STONE IS CALLED FOR ADJACENT TO CURB OR SIDEWALKS, IT SHALL BE FEATHERED DOWN TO "STREEKER" REDTOP CURB LEVEL FROM A DISTANCE 24" FROM THE CURB. ALL PROPOSED LANDSCAPING TO BE NURSERY GROWN. TYPICAL OF THEIR SPECIES OI E. IN AREAS DESIGNATED AS SOD, FESCUE SOD IS TO BE INSTALLED ON MINIMUM 4" TOPSOIL. VARIETY. THEY ARE TO HAVE NORMAL VIGOROUS ROOT SYSTEMS, FREE FROM DEFECTS AND AREAS TO BE SODDED ARE TO BE PREPARED AS NOTED ABOVE FOR SEEDED AREAS. INFECTIONS AND IN ACCORDANCE WITH ANSI Z60.1 15.PLANT MATERIAL SHALL BE GUARANTEED FOR TWO YEARS FROM THE DATE OF SUBSTANTIAL ALL PROPOSED PLANTINGS SHOULD BE INSTALLED PER STANDARDS OF THE "AMERICAN COMPLETENESS. THE CONTRACTOR SHALL REPLACE PLANTS, DEAD, UNHEALTHY, DYING OR ASSOCIATION OF NURSERYMEN" AND STATE NURSERY/ LANDSCAPE ASSOCIATIONS WITH DAMAGED THROUGH LOSS OF BRANCHES AND/OR FOLIAGE. LAWNS THAT ARE NOT IN GOOD REGARD TO PLANTING. PIT SIZE. BACKFILL MIXTURE. STAKING AND GUYING. CONDITION AT THE END OF THE GUARANTEE PERIOD SHALL BE REPAIRED UNTIL A GOOD LAWN RESULTS. IT IS UNDERSTOOD THAT THE OWNER SHALL ASSUME RESPONSIBILITY FOR WATERING

. ALL PLANTING CONTAINERS AND BASKETS SHALL BE REMOVED DURING PLANTING. ALL PLANTS SHALL BE SET PLUMB AND POSITIONED SO THAT THE TOP OF THE ROOT COLLAR LAYERS AND COMPACT BACKFILL TO ELIMINATE VOIDS. CONTRACTOR SHALL PROVIDE A FOUR-INCH HIGH EARTHEN WATERING SAUCER ALONG THE PERIMETER OF EACH PLANTING PIT. CONTRACTOR SHALL WATER NEWLY PLANTED VEGETATION PRIOR TO MULCHING PLANTING PIT. ALL VOIDS SHALL BE 17. PLANTINGS TO BE SET BACK 10' FROM UNDERGROUND UTILITIES WHERE FEASIBLE FILLED AND SETTLING MITIGATED AS REQUIRED. ALUMINUM EDGING SHALL BE INSTALLED AROUND ALL PLANTING AREAS TO DELINEATE BETWEEN DIFFERENT LANDSCAPE MATERIALS. AFTER INITIAL WATERING AND PRIOR TO MULCHING, CONTRACTOR SHALL APPLY HERBICIDES AND PRE

ROOT BALL

18.AT TIME OF PARKING LOT CONSTRUCTION AND PLANTER INSTALLATION, ALL PLANTER ISLANDS SHALL BE EXCAVATED TO THE FULL WIDTH OF THE PARKING PLANTER ISLAND AND THROUGH THE FULL DEPTH OF COMPACTED SUBGRADE TO REMOVE ALL COMPACTED MATERIAL, OR OTHER MATERIAL EMERGENT HERBICIDES AS REQUIRED TO ELIMINATE ANY WEED SEEDS OR PLANTS PRESENT ON HARMFUL TO PLANT HEALTH, AND BACKFILLED WITH CLEAN PLANTING FILL.

COMPLETENESS.

![](_page_10_Figure_85.jpeg)

![](_page_11_Figure_0.jpeg)

FOOTCANDLE CALCULATION SUMMARY							
LABEL	AVG	MAX	MIN	AVG/MIN	MAX/MIN		
CANOPY	27.06	45	11	2.46	4.09		
CURBLINE US ROUTE	0.05	0.2	0.0	N.A.	N.A.		
DELIVERY	3.94	5.3	3.0	1.31	1.77		
ENTRANCES & EXITS	1.83	3.2	0.5	3.66	6.40		
PAVED	2.26	9.7	0.5	4.52	19.40		
PROPERTY LINE (NON ROW)	0.03	0.2	0.0	N.A.	N.A.		
UNDEFINED	0.57	3.6	0.0	N.A.	N.A.		

MBOL	QTY	LABEL	ARRANGEMENT	LUMENS	LLF	ARR. WATTS	TOTAL WATTS	MANUFACTURER	DESCRIPTION
<b></b>	2	A4	SINGLE	8891	1.000	134	268	CREE, INC.	ARE-EDG-3MB-DA-06-E-UL-WH-700-57K
D	1	A7	SINGLE	2998	1.000	50	50	CREE, INC.	ARE-EDG-3MB-DA-02-E-UL-WH-700-57K
<b></b>	9	B5	SINGLE	6440	1.000	93	837	CREE, INC.	ARE-EDG-4MB-DA-04-E-UL-WH-700-57K
	4	B6	SINGLE	8549	1.000	93	372	Cree Inc.	ARE-EDG-4M-DA-04-E-UL-WH-700-57K
	18	C1	SINGLE	10912	0.980	101	1818	CREE, INC.	CAN-304-SL-RD-06-E-UL-WH-525-57K
$\overline{\odot}$	10	D1	SINGLE	1548	1.000	27.6	276	PHILIPS LIGHTOLIER	C6L1520DW30KCLW/C6L15N1 (CAN LIGHT)
•	2	S1	SINGLE	2011	1.000	46.9	93.8	SCOTT ARCHITECTURAL LIGHTING	WC1 SCOTT ITL61322 S9131 9x20
•	2	S2	SINGLE	1119	1.000	22.6	45.2	SCOTT ARCHITECTURAL LIGHTING	WC2 SCOTT ITL61321 S9130 9x16
	5	W1	SINGLE	4210	0.980	43	215	CREE, INC.	SEC-EDG-3M-WM-04-E-UL-WH-350-57K
	3	W3	SINGLE	4440	0.980	43	129	BETALED, A DIVISION OF RUUD LIGHTING	SEC-EDG-4M-WM-04-E-UL-XX-350-57K

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F	PRELIMINARY AND FINAL MAJOR SITE PLAN FOR ROBBINSVILLE MEADOWBROOK, LLC BLOCK 8 LOTS 15.01 & 17									
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NOTES:

- FOOTCANDLE LEVELS CALCULATED AT GRADE USING PREDICTED LUMEN VALUES AFTER 25K HOURS OF OPERATION

- AREA LIGHT TYPE A7 ON 17 FT. POLE MOUNTED ON 6 IN. CONCRETE BASE - ALL OTHER AREA LIGHTS ON 20 FT. POLES MOUNTED ON 6 IN. CONCRETE BASES - ALL PROPOSED FIXTURES ARE TO BE WHITE

- ALL SITE LIGHTING BASES SHALL BE A MINIMUM OF TWO (2) FEET BEHIND THE CURB

LUMINAIRE LOCATION SUMMARY		
LUM NO.	LABEL	MTG. HT.
1	A4	20.5
2	A4	20.5
3	A7	17.5
4	B5	20.5
5	B5	20.5
6	B5	20.5
7	B5	20.5
8	B5	20.5
9	B5	20.5
10	B5	20.5
11	B5	20.5
12	B5	20.5
13	B6	20.5
14	B6	20.5
15	B6	20.5
16	B6	20.5
17	C1	21.53
18	C1	19.32
19	C1	17.11
20	C1	21.53
21	C1	19.32
22	C1	17.11
23	C1	21.53
24	C1	19.32
25	C1	17.11
26	C1	21.53
27	C1	19.32
28	C1	17.11

![](_page_12_Figure_0.jpeg)

## MERCER COUNTY SOIL CONSERVATION DISTRICT NOTES

### MCNJ-SOIL-NOTE-1010

THE MERCER COUNTY SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED 48 HOURS PRIOR TO STARTING LAND DISTURBANCE ACTIVITY. NOTICE MAY BE MAILED, FAXED OR 14. DURING THE COURSE OF CONSTRUCTION, SOIL COMPACTION MAY OCCUR WITHIN EMAILED TO MCSCD, 508 HUGHES DRIVE, HAMILTON SQUARE, NJ 08690

PHONE: 609-586-9603 FAX: 609-586-1117 EMAIL: MERCERSOIL@AOL.COM

- IF APPLICABLE TO THIS PROJECT, THE OWNER SHOULD BE AWARE OF HIS OR HER OBLIGATION TO FILE FOR A NIPDES CONSTRUCTION ACTIVITY STORMWATER 5G3 PERMIT (NJG0088323) VIA THE NJDEP ONLINE PERMITTING SYSTEM (WWW.NI.GOV/DEP/ONLINE) AND TO MAINTAIN THE ASSOCIATED BEST MANAGEMENT PRACTICES AND STORMWATER POLLUTION PREVENTION PLAN SELF-INSPECTION LOGBOOK ONSITE AT ALL TIMES. THIS PERMIT MUST BE FILED PRIOR TO THE START OF SOIL DISTURBANCE. THE ONLINE APPLICATION PROCESS WILL REQUIRE ENTRY OF AN SCD CERTIFICATION CODE, WHICH IS PROVIDED BY THE SOIL CONSERVATION DISTRICT 16. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID UPON CERTIFICATION OF THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
- THE MERCER COUNTY SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED OF ANY CHANGES IN OWNERSHIP.
- ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN, INCLUDING AN INCREASE IN THE LIMIT OF DISTURBANCE, WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RECERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT STATE SOIL EROSION & SEDIMENT CONTROL STANDARDS.
- A COPY OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON SITE AT ALL TIMES
- ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED PRIOR TO ANY MAIOR SOIL DISTURBANCES. OR IN THEIR PROPER SEQUENCE AS OUTLINED WITHIN THE SEQUENCE OF CONSTRUCTION ON THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NI. IF LANGUAGE CONTAINED WITHIN ANY OTHER PERMIT FOR THIS PROJECT IS MORE RESTRICTIVE THAN (BUT NOT 19. CONTRADICTORY TO) WHAT IS CONTAINED WITHIN THESE NOTES OR ON THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN, THEN THE MORE RESTRICTIVE PERMIT REQUIREMENTS SHALL BE FOLLOWED.
- THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A 11/2" TO 21/2" CLEAN STONE TRACKING PAD AT ALL CONSTRUCTION DRIVEWAYS IMMEDIATELY AFTER INITIAL SITE DISTURBANCE WHETHER IDENTIFIED ON THE CERTIFIED PLAN OR NOT. THE WIDTH SHALL SPAN THE FULL WIDTH OF EGRESS, AND LENGTH SHALL BE 50 FT, OR MORE, DEPENDING ON SITE CONDITIONS AND AS REOUIRED BY THE STANDARD. THIS SHALL INCLUDE INDIVIDUAL LOT ACCESS POINTS WITHIN RESIDENTIAL SUBDIVISIONS. IF THE EGRESS IS TO A COUNTY ROAD, THEN A 20 FT. LONG PAVED TRANSITION SHALL BE PROVIDED BETWEEN THE EDGE OF PAVEMENT AND THE STONE ACCESS PAD.
- A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS IN ORDER TO STABILIZE STREETS, ROADS, DRIVEWAYS AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN 15 DAYS OF PRELIMINARY GRADING, PROVIDED THAT ALL OTHER REQUIREMENTS RELATED TO DETENTION BASINS, SWALES AND THE SEQUENCE OF CONSTRUCTION HAVE BEEN MET.
- ANY STOCKPILES OR DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN 23. FOURTEEN (14) DAYS AND NOT SUBJECT TO CONSTRUCTION ACTIVITY WILL IMMEDIATELY RECEIVE TEMPORARY STABILIZATION. IF THE SEASON PREVENTS ESTABLISHMENT OF A TEMPORARY VEGETATIVE COVER, OR IF THE AREA IS NOT TOPSOILED, THEN THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR 24 EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO STATE STANDARDS. SLOPED AREAS IN EXCESS OF 3H: IV SHALL BE PROVIDED WITH EROSION CONTROL BLANKETS. CRITICAL AREAS SUBJECT TO EROSION (I.E. STEEP SLOPES, ROADWAY EMBANKMENTS, ENVIRONMENTALLY SENSITIVE AREAS) WILL RECEIVE TEMPORARY STABILIZATION IMMEDIATELY AFTER INITIAL DISTURBANCE OR ROUGH GRADING
- ANY STEEP SLOPES (I.E. SLOPES GREATER THAN 3:1) RECEIVING PIPELINE OR UTILITY INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION PROCEEDS
- PERMANENT VEGETATION SHALL BE SEEDED OR SODDED ON ALL EXPOSED AREAS 26. WITHIN TEN (10) DAYS AFTER FINAL GRADING AND TOPSOILING. ALL AGRONOMIC REQUIREMENTS CONTAINED WITHIN THE STANDARDS AND ON THE CERTIFIED PLAN SHALL BE EMPLOYED. MULCH WITH BINDER. IN ACCORDANCE WITH THE STANDARDS. SHALL BE USED ON ALL SEEDED AREAS. SAVE ALL TAGS AND/OR BAGS USED FOR SEED, LIME AND FERTILIZER, AND PROVIDE THEM TO THE DISTRICT INSPECTOR TO VERIFY THAT MIXTURES AND RATES MEET THE STANDARDS.
- 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, THEN NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.

### MITIGATION NOTES FOR ACIDIC SOIL

MCNJ-SOIL-NOTE-1700

- LIMIT THE EXCAVATION AREA AND EXPOSURE TIME WHEN HIGH-ACID PRODUCING SOILS ARE ENCOUNTERED
- TOPSOIL STRIPPED FROM THE SITE SHALL BE STORED SEPARATELY FROM TEMPORARILY STOCKPILED HIGH ACID PRODUCING SOILS.
- 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.
- TEMPORARILY STOCKPILED HIGH ACID-PRODUCING SOIL MATERIAL TO BE STORED MORE THAN 48 HOURS SHOULD BE COVERED WITH PROPERLY ANCHORED, HEAVY GRADE SHEETS OF POLYETHYLENE WHERE POSSIBLE. IF NOT POSSIBLE, STOCKPILES SHALL BE COVERED WITH A MINIMUM OF 3 TO 6 INCHES OF WOOD CHIPS TO MINIMIZE EROSION OF THE STOCKPILE. SILT FENCE SHALL BE INSTALLED AT THE TOE OF THE 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.
- HIGH ACID PRODUCING SOILS WITH A  $_{\rm P}$ H OF 4.0 OR LESS OR CONTAINING IRON SULFIDE (INCLUDING BORROW FROM CUTS OR DREDGED SEDIMENT) SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS PER ACRE (OR 450 POUNDS PER 1,000 SQUARE FEET OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12 INCHES OF SETTLED SOIL WITH A PH OF 5.0 OR MORE EXCEPT AS FOLLOWS:
- 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.
- 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.
- EQUIPMENT USED FOR MOVEMENT OF HIGH ACID-PRODUCING SOILS SHOULD BE CLEANED AT THE END OF EACH DAY TO PREVENT SPREADING OF HIGH ACID-PRODUCING SOIL MATERIALS TO OTHER PARTS OF THE SITE, INTO STREAMS OR STORMWATER CONVEYANCES, AND TO PROTECT MACHINERY FROM ACCELERATED RUSTING.
- NON-VEGETATIVE EROSION CONTROL PRACTICES (STONE TRACKING PADS, STRATEGICALLY PLACED LIMESTONE CHECK DAM, SEDIMENT BARRIER, WOOD CHIPS) SHOULD BE INSTALLED TO LIMIT THE MOVEMENT OF HIGH ACID-PRODUCING SOILS FROM, AROUND, OR OFF THE SITE.
- FOLLOWING BURIAL OR REMOVAL OF HIGH ACID-PRODUCING SOIL, TOPSOILING AND SEEDING OF THE SITE (SEE TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION, PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION, AND TOPSOILING), MONITORING MUST CONTINUE FOR A MINIMUM OF 6 MONTHS TO ENSURE THERE IS ADEQUATE STABILIZATION AND THAT NO HIGH ACID-PRODUCING SOIL PROBLEMS EMERGE. IF PROBLEMS STILL EXIST, THE AFFECTED AREA MUST BE TREATED AS INDICATED ABOVE TO CORRECT THE PROBLEM.

- HAUL ROUTES, STAGING AREAS AND OTHER PROJECT AREAS. IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING, COMPACTED SURFACES SHOULD BE SCARIFIED 6" TO 12" IMMEDIATELY PRIOR TO TOPSOIL APPLICATION. THIS WILL HELP ENSURE 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.).
- PRIOR TO SEEDING, TOPSOIL SHALL BE WORKED TO PREPARE A PROPER SEEDBED. THIS SHALL INCLUDE RAKING OF THE TOPSOIL AND REMOVAL OF DEBRIS AND STONES, ALONG WITH OTHER REQUIREMENTS OF THE STANDARD FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION.
- PRODUCING SOILS, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE BURIED WITH LIMESTONE IN ACCORDANCE WITH THE STANDARD AND BE COVERED WITH A MINIMUM OF 12" OF SOIL HAVING A PH OF 5 OR MORE PRIOR TO TOPSOIL APPLICATION AND SEEDBED PREPARATION. IF THE AREA IS TO RECEIVE TREE OR SHRUB PLANTINGS, OR IS LOCATED ON A SLOPE, THEN THE AREA SHALL BE COVERED WITH A MINIMUM OF 24" OF SOIL HAVING A PH OF 5 OR MORE.
- MULCHING TO THE STANDARDS IS REQUIRED FOR OBTAINING A CONDITIONAL REPORT OF COMPLIANCE. CONDITIONAL ROC'S ARE ONLY ISSUED WHEN THE SEASON PROHIBITS SEEDING. PERMANENT STABILIZATION MUST THEN BE COMPLETED DURING THE OPTIMUM SEEDING SEASON IMMEDIATELY FOLLOWING THE CONDITIONAL ROC, OR THE COMPLETION OF WORK IN A GIVEN AREA.
- HYDROSEEDING 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 THE SEEDING OPERATION. HYDROMULCH SHOULD BE APPLIED AT A MINIMUM RATE OF 1500 LBS. PER ACRE IN SECOND STEP. THE USE OF HYDRO-MULCH, A OPPOSED TO STRAW, IS LIMITED TO OPTIMUM SEEDING DATES AS LISTED IN THE STANDARDS. THE USE OF HYDROMULCH ON SLOPED AREAS IS DISCOURAGED.
- THE CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL ADJACENT ROADS CLEAN DURING LIFE OF THE CONSTRUCTION PROJECT. ALL SEDIMENT WASHED, DROPPED, TRACKED OR SPILLED ONTO PAVED SURFACES SHALL BE IMMEDIATELY REMOVED.
- 20. THE DEVELOPER SHALL BE RESPONSIBLE FOR REMEDIATING ANY EROSION OR SEDIMEN PROBLEMS THAT ARISE AS A RESULT OF ONGOING CONSTRUCTION, AND FOR EMPLOYING ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES AT THE REQUEST OF THE MERCER COUNTY SOIL CONSERVATION DISTRICT.
- CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
- ALL DETENTION / RETENTION BASINS MUST BE FULLY CONSTRUCTED (INCLUSIVE OF ALL STRUCTURAL COMPONENTS AND LINERS) AND PERMANENTLY STABILIZED PRIOR TO PAVING OR PRIOR TO THE ADDITION OF ANY IMPERVIOUS SURFACES. PERMANENT STABILIZATION INCLUDES, BUT MAY NOT BE LIMITED TO: TOPSOIL, SEED, STRAW MULCH AND BINDERS OR EROSION CONTROL BLANKETS ON ALL SEEDING, ALL AGRONOMIC REQUIREMENTS AS SPECIFIED ON THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN, INSTALLATION OF THE OUTFLOW CONTROL STRUCTURES AND DISCHARGE STORM DRAINAGE PIPING, LOW FLOW CHANNELS, CONDUIT OUTLET PROTECTION, EMERGENCY SPILLWAYS, AND LAP RING PROTECTION.
- THE RIDING SURFACE OF ALL UTILITY TRENCHES WITHIN PAVED AREAS SHALL BE 3/4" CLEAN STONE OR BASE PAVEMENT UNTIL SUCH TIME AS FINAL PAVEMENT HAS BEEN INSTALLED. TEMPORARY SOIL RIDING SURFACES ARE PROHIBITED.
- ALL CONSTRUCTION DEWATERING (TRENCHES, EXCAVATIONS, ETC.) MUST BE DONE THROUGH AN INLET OR OUTLET FILTER IN ACCORDANCE WITH THE STANDARD FOR DEWATERING OR AS DEPICTED ON THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN. DISCHARGE LOCATIONS FOR THE DEWATERING OPERATION MUST CONTAIN PERENNIAL VEGETATION OR SIMILAR STABLE SURFACE.
- ALL SWALES OR CHANNELS THAT WILL RECEIVE RUNOFF FROM PAVED SURFACES MUST BE PERMANENTLY STABILIZED PRIOR TO THE INSTALLATION OF PAVEMENT. IF THE SEASON PROHIBITS THE ESTABLISHMENT OF PERMANENT STABILIZATION THE SWALES OR CHANNELS MAY BE TEMPORARILY STABILIZED IN ACCORDANCE WITH THE STANDARDS.
- NISA 4:24-39 ET SEO. REQUIRES THAT NO CERTIFICATE OF OCCUPANCY OR TEMPORAR CERTIFICATE OF OCCUPANCY BE ISSUED BY THE MUNICIPALITY BEFORE THE PROVISIONS OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN HAVE BEEN SATISFIED. THEREFORE, ALL SITE WORK FOR SITE PLANS AND ALL WORK AROUND INDIVIDU. LOTS IN SUBDIVISIONS MUST BE COMPLETED BEFORE THE DISTRICT ISSUES A REPORT OF COMPLIANCE OR CONDITIONAL REPORT OF COMPLIANCE, WHICH MUST BE FORWARDED TO THE MUNICIPALITY PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY OR TEMPORARY CERTIFICATE OF OCCUPANCY, RESPECTIVELY.

MERCER COUNTY SOIL CONSERVATION DISTRICT 508 HUGHES DRIVE HAMILTON SQUARE, N.J. 08690

## DUST CONTROL

MCNJ-SOIL-NOTE-1400

OUST CONTROL METHODS:

05/01/1

- APPLY MULCHES OR VEGETATIVE COVER AS PER NJ SOIL EROSION AND SEDIMENT CONTROL STANDARDS.
- TILL AND 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.
- SPRINKLE THE SITE UNTIL THE SURFACE IS WET.
- ERECT BARRIERS SUCH AS SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY AND SIMILAR MATERIAL TO CONTROL AIR CURRENTS AND SOIL BLOWING.
- APPLY CALCIUM CHLORIDE IN THE FORM OF LOOSE, DRY GRANULES OR FLAKES FINE ENOUGH TO FEED THROUGH COMMONLY USED SPREADERS AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE. NOT SUITABLE ON STEEPER SLOPES NEAR THE STREAMS OR POTENTIALLY ACCUMULATE AROUND PLANTS.
- COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.
- USE SPRAY-ON ADHESIVE ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS, MATERIALS AS FOLLOWS:

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	300				
POLYACRYLAMIDE (PAM) - SPRAY ON POLYACRYLAMIDE (PAM) - DRY SPREAD	APPLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS. MAY ALSO BE USED AS AN ADDITIVE TO SEDIMENT BASINS TO FLOCCULATE AND PRECIPITATE SUSPENDED COLLOIDS. SEE SEDIMENT BASIN STANDARD, P. 26-1						
ACIDULATED SOY BEAN SOAP STICK	NONE	COARSE SPRAY	1200				

05/01/

- STANDARDS.

- PH: 6.0 TO 8.0
- OFF-SITE SOURCE.

- SOIL TEXT CLAY, CLA
- SANDY LO LOAMY S

- 4. SEEDING

05/01/1

- 5. MULCHING

- NOTE

## PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION

MCNJ-SOIL-NOTE-1101

I. TOPSOIL STRIPPING AND STOCKPILING

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

B. A 6-INCH STRIPPING DEPTH IS TYPICAL, BUT MAY VARY DEPENDING ON THE PARTICULAR SOIL STRUCTURE OR PRE-EXISTING USE

C. STOCKPILES SHOULD BE LOCATED SO AS NOT TO OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE, AND SHALL BE DELINEATED ON THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN AND BE CONSTRUCTED IN ACCORDANCE WITH THE TOPSOIL STOCKPILE DETAIL.

D. STOCKPILES SHOULD BE TEMPORARILY STABILIZED ACCORDING TO THE

2. SITE PREPARATION

A. INSTALL EROSION CONTROL MEASURES AND FACILITIES SUCH AS SILT FENCE, DIVERSIONS, SEDIMENT BASINS, AND CHANNEL STABILIZATION.

B. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, TACKING, AND MAINTENANCE. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING, 19-1.

3. SEEDBED PREPARATION

A. TOPSOIL REQUIRED MIN. DEPTH: 5" (UNSETTLED)

ORGANIC MATTER CONTENT: 2.75% MIN.

NITRATE N2: 50 LBS/ACRE (50% WATER INSOLUBLE) PHOSPHOROUS: 100 LBS/ACRE

POTASSIUM: 50 LBS/ACRE

3. THE CONTRACTOR SHOULD BE AWARE OF THE POSSIBILITY, DEPENDING UPON THE SITE CONDITIONS, THAT ALL TOPSOIL MAY HAVE TO BE PROVIDED FROM AN

C. TOPSOIL SHOULD BE HANDLED ONLY WHEN DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE.

D. APPLY A UNIFORM 5 INCHES (UNSETTLED) OF TOPSOIL ON ALL DISTURBED AREAS. 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 AND THE TOP 5 INCHES SHALL CONFORM TO THE TOPSOIL STANDARD AND SHALL BE LIMED ACCORDING TO THE SPECIFICATIONS.

E. IF THE TOPSOIL BECOMES COMPACTED, THE SURFACE MUST BE SCARIFIED 6" TO 12" TO PROVIDE GOOD SEED-TO-SOIL BOND

. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS THOSE OFFERED BY RUTGERS UNIVERSITY COOPERATIVE EXTENSION. IF SOIL TESTING IS NOT FEASIBLE, FERTILIZER (10-20-10) WITH 50% WATER INSOLUBLE NITROGEN SHOULD BE APPLIED AT THE TYPICAL RATE OF 500 LBS/ACRE OR 11 LBS/1.000 SOUARE FEET.

G. APPLY LIMESTONE EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDES (PULVERIZED DOLOMITIC LIMESTONE IS PREFERRED FOR MOST SOILS SOUTH OF THE NEW BRUNSWICK - TRENTON FALL LINE) AS FOLLOWS:

TURE	TONS/ACRE	LBS/1,000 SQ. FT.
AY LOAM, HIGH ORGANIC	3	135
dam,loam, silt loam	2	90
and, sand	I	45

H. WORK LIME AND FERTILIZER INTO THE SOIL TO A DEPTH OF 4 INCHES. THE FINAL HARROWING OR DISC OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A UNIFORM. FINE SEEDBED IS PREPARED

I. REMOVE FROM THE SURFACE ALL STONES 2 INCHES OR LARGER IN ANY DIMENSION, AND OTHER OBJECTIONABLE STONES OR DEBRIS SUCH AS WIRE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS, OR OTHER UNSUITABLE MATERIAL.

A. SELECT A SEED MIXTURE APPROVED BY THE MERCER COUNTY SCD.

B. APPLY SEED UNIFORMLY BY HAND, CYCLONES, DROP SEEDER, DRILL CULTIPACKER, OR HYDROSEEDER*. THE LATTER MAY BE IUSTIFIABLE FOR LARGE. STEEP AREAS WHERE CONVENTIONAL APPLICATIONS ARE NOT FEASIBLE HYDROSEEDING SHALL BE A TWO-STEP PROCESS: MULCH SHALL NOT BE MIXED WITH THE SEED: THE SEED MUST BE APPLIED FIRST TO ASSURE PROPER SEED TO SOIL CONTACT. THE HYDROMULCH IS THEN SPRAYED OVER THE SEEDING, FOR OPTIMUM RESULTS, THE SEED SHOULD BE INCORPORATED INTO THE SOIL TO A DEPTH OF 1/4 TO 1/2 INCH DEPENDING UPON SPECIES.

* THE USE OF HYDRO-MULCH, AS OPPOSED TO STRAW, IS LIMITED TO OPTIMUM SEEDING DATES AS LISTED IN THE STANDARDS.

C. AFTER SEEDING, THE SOIL SHOULD BE PACKED WITH A CORRUGATED ROLLER. WHEN PERFORMED ON THE CONTOUR, ROLLING WILL MINIMIZE SHEET EROSION AND MAXIMIZE WATER CONSERVATION.

A. UNROTTED STRAW, HAY FREE OF SEEDS, OR SALT HAY IS REQUIRED ON ALL SEEDING AT A RATE OF 1.5 TO 2 TONS/ACRE, (70 TO 90 LBS./1,000 SQUARE FEET), EXCEPT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER, THEN THE RATE OF APPLICATION IS 3 TONS PER ACRE.

B. MULCH ANCHORING SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS DUE TO WIND OR WATER. THIS MAY BE DONE ACCORDING TO THE FOLLOWING METHODS:

I. WOOD-FIBER OR PAPER-FIBER MULCH AT THE RATE OF 1,500 LBS/ACRE APPLIED BY THE HYDROSEEDER. USE IS LIMITED TO ONLY THE OPTIMUM SEEDING SEASON 2. SYNTHETIC OR ORGANIC BINDERS 3. PEG AND TWINE, MULCH NETTING, AND MECHANICAL CRIMPING

4. CRIMPING REQUIRES A HIGHER MULCH RATE (3 TONS/ACRE)

I) ONE BALE OF HAY WEIGHS 40-60 LBS DEPENDING ON HOW IT WAS BALED 2) 1,500 GALLON TANK OF HYDROMULCH COVERS 0.5 ACRES

C. 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 OF THE STANDARDS ARE REQUIRED WHEN A <u>REPORT OF COMPLIANCE</u> IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT OF PERMANENT VEGETATION. (UP TO 50% REDUCTION IS APPLICATION RATES MAY BE USED WHEN PERMANENT VEGETATION IS

05/01/1 ESTABLISHED PRIOR TO REQUESTING A REPORT OF COMPLIANCE FROM THE DISTRICT. THESE RATES APPLY TO ALL METHODS OF SEEDING. ESTABLISHING PERMANENT VEGETATION MEANS 80% EVENLY DISTRIBUTED VEGETATIVE COVER {OF THE SEEDED SPECIES} AND MOWED ONCE.

6. TEMPORARY SEEDING MIXES MIX: EARLY SPRING/ LATE SUMMER TO EARLY FAL **100% PERENNIAL RYEGRASS** 

MIX: LATE FALL 100% CEREAL RYE RATE: 112 LBS/ACRE

LAWNS - RATE 200 LBS/ACRE

RATE: 100 LBS/ACRE

MIX: MID-SUMMER 40% PEARL MILLET 40% MILLET (GERMAN OR HUNGARIAN) 20% WEEPING LOVEGRASS RATE: 100 LBS/ACRE

7. RECOMMENDED PERMANENT SEEDING MIXES

OPTIMUM SEEDING DATES: MARCH | TO MAY 15 AND AUGUST 15 TO OCTOBER 15

MERCER CO. SCD PREFERRED MIX FOR LAWNS AND DETENTION BASINS 70% TURF TYPE TALL FESCUE *# 20% PERENNIAL RYEGRASS 10% KENTUCKY BLUEGRASS

MIX: LAWNS - LOW MAINTENANCE, DROUGHTY & HEAVY TRAFFIC 80% TALL FESCUE TURF TYPE (LOW GROWING VARIETIES) *# 10% PERENNIAL RYEGRASS (LOW GROWING VARIETIES)

MIX. SHADE 65% HARD, CHEWINGS, OR CREEPING RED FESCUE * 20% KENTUCKY BLUEGRASS **15% PERENNIAL RYEGRASS** 

MIX. LAWNS - QUALITY SUN AND SHADE 20% PERENNIAL RYEGRASS 30% CHEWINGS FESCUE 35% CREEPING RED FESCUE 15% KENTUCKY BLUEGRASS

MIX: MOIST DETENTION BASIN BOTTOMS 40% FLAT PEA (WITH PROPER INOCULANT) 25% PERENNIAL RYEGRASS 25% TALL FESCUE OR STRONG CREEPING RED FESCUE 10% REDTOP* (USE THE ABOVE MIX FOR INFREQUENT MOWING. FOR A REGULAR MOWING REGIME, SUBSTITUTE ROUGH BLUEGRASS AND/OR TALL FESCUE FOR THE FLAT PEA).

* INCLUDE AT LEAST THREE VARIETIES IN MIX # EXCLUDE K-31

8. CONSERVATION PLANTINGS

MIX: RECLAMATION, EROSION CONTROL & ACID SOILS RATE: 150 LBS/ACRE 40% SWITCHGRASS 25% SERECIA LESPEDEZA OR FLAT PEA 15% TALL FESCUE OR CREEPING RED FESCUE 15% DEERTONGUE 5% BIRDSFOOT TREFOIL

MIX: WILDFLOWER MEADOW

RATE: 50 LBS/ACRE 72% HARD OR SHEEPS FESCUE

22% NORTHEAST/MID-ATLANTIC WILDFLOWER MIXTURE 6% BIRDSFOOT TREFOIL MIX: WILDLIFE HABITAT ENHANCEMENT RATE: 100 LBS/ACRE 40% SWITCHGRASS OR COASTAL PANICGRASS

30% CANADA BLUEGRASS OR SMOOTH BROMEGRASS 10% ORCHARDGRASS 10% WHITE CLOVER **5% JAPANESE MILLET** 

5% BIRDSFOOT TREFOIL

MIX: WATERWAYS & WET BASINS **

RATE: 100 LBS/ACRE 40% SWITCHGRASS 30% CANADA BLUEGRASS OR SMOOTH BROMEGRASS 15% ROUGH BLUEGRASS (SHADE) OR TALL FESCUE (OPEN) 10% ALSIKE CLOVER OR LADINO WHITE CLOVER 10% BIRDSFOOT TREFOIL OR CREEPING FOXTAIL 4% JAPANESE MILLET 1% RED TOP

** SHOULD NOT BE MOWED LESS THAN 6 INCHS

## STABILIZATION WITH

L SITE PREPARATION

A. GRADE AS NEEDED AND FEASIBLE TO P EQUIPMENT FOR SEEDBED PREPARATION MULCH ANCHORING. ALL GRADING SHOUL STANDARDS FOR LAND GRADING.

B. INSTALL NEEDED EROSION CONTROL DIVERSIONS. GRADE STABILIZATION STR MEASURES, SEDIMENT BASINS, AND WATERWA

2. PROTECTIVE MATERIALS

- A. UNROTTEN SMALL-GRAIN STRAW, AT 2.0 UNIFORMLY AT 90 TO 115 POUNDS PER 1,000 S MULCH ANCHORING TOOL, LIQUID MULC OTHER SUITABLE MATERIALS MAY BE USED IF DISTRICT. THE APPROVED RATES ABOVE HAVE THE GROUND COMPLETELY UPON VISUAL IN SEEN BELOW THE MULCH.
- B. SYNTHETIC OR ORGANIC SOIL STABILIZE CONDITIONS AND IN QUANTITIES AS RECOM
- C. WOOD-FIBER OR PAPER-FIBER MULCH HYDR RATES AS RECOMMENDED BY MANUFACTURE
- D. MULCH NETTING, SUCH AS PAPER JUTE, EXC
- E. WOODCHIPS APPLIED UNIFORMLY TO A MINI WOODCHIPS WILL NOT BE USED ON AREAS V THEM INTO AN INLET AND PLUG IT.
- 3. MULCH ANCHORING SHOULD BE PLACEMENT OF HAY OR STRAW MULCH TO THIS MAY BE DONE BY ONE OF THE FOL THE SIZE OF THE AREA AND STEEPNESS OF
- A. PEG AND TWINE DRIVE 8 TO 10 INCH WOOD THE SOIL SURFACE EVERY 4 FEET IN ALL DIREC OR AFTER APPLYING MULCH. SECURE MULC TWINE BETWEEN PEGS IN A CRISS-CROSS AN AROUND EACH PEG WITH TWO OR MORE RO
- B. MULCH NETTING STAPLE PAPER, COTTON, C DEGRADABLE NETTING IN AREAS TO BE MOW ROLLS 4 FEET WIDE AND UP TO 300 FEET LON
- C. CRIMPER MULCH ANCHORING COULTER TO ESPECIALLY DESIGNED TO PUNCH AND ANC THIS PRACTICE AFFORDS MAXIMUM EROSION THE SLOPES UPON WHICH THE TRACTOR CA SHOULD BE ABOUT 3 TO 4 INCHES. ON A SLO BE ON THE CONTOUR.

D. LIQUID MULCH-BINDERS

I. APPLICATIONS SHOULD BE HEAVIER AT MULCH, IN VALLEYS, AND AT CRESTS OF BA UNIFORM IN APPERANCE

2. USE ONE OF THE FOLLOWING:

- a. ORGANIC AND VEGETABLE BASED POWDER BASED, HYDROPHILIC MAT FORMULATES A GEL AND WHEN APPL CURING CONDITIONS WILL FORM M POLYMERS. THE VEGETABLE GEL SHALL NOT RESULT IN A PHYTO-TOXIC EFFEC VEGETABLE BASED GELS SHALL BE CONDITIONS RECOMMENDED BY THE
- b. SYNTHETIC BINDERS HIGH POLYMERS WATER WHEN DILUTED AND FOLLOW AND CURING SHALL NO LONGER BE SHALL BE APPLIED AT RATES AND WEA THE MANUFACTURER AND REMAIN TAC

## SEQUENCE OF CC CONSTRUC

- CLEARING OF ENTRANCE AND LIMIT OF DISTU FENCE AND CONSTRUCTION ENTRANCE PAD (I
- CLEARING, STRIPPING AND STOCKPILING OF
- INCLUDING RETAINING WALLS (3 WEEKS). CONSTRUCTION AND PERMANENT STABILIZATION (3 WEEKS)
- INSTALL STORM DRAINAGE SYSTEM, CONDUIT O
- OTHER UTILITIES. INSTALL INLET PROTECTION (3 CONSTRUCT CURBS AND PLACE PAVEMENT SUBB
- CLEAR AND GRADE BUILDING AREAS AND COI AREAS SHALL BE STABILIZED AS DEFINED IN SOIL
- NOTES. (ONGOING FROM COMMENCEMENT OF
- ESTABLISH FINISH GRADES, DISTRIBUTE 5" OF VEGETATION COVER (2-3 WEEKS)
- PAVE SITE AND COMPLETE FINAL LANDSCAPING REMOVE TEMPORARY ACCESS PROTECTION, S AFTER ALL DISTURBED AREAS HAVE BEEN STABILI

ON WITH MULCH ONLY	CONSTRUCTION SITE WASTE CONTROL COMPONENT OF THE STORMWATER					
MCNI-SOIL-NOTE-1301 05/01/17	POLLUTION PREVENTION PLAN (SPPP) MCNI-SOIL-NOTE-1200 07/01/17	Customer Lovalty through Client Satisfaction				
	I. THE CONSTRUCTION SITE WASTE CONTROL COMPONENT OF THE SPPP CONSISTS OF THE REQUIREMENTS IN 2., 3., AND 4. BELOW. THESE REQUIREMENTS BECAME OPERATIVE	w w w . m a s e r c o n s u l t i n g . c o m Engineers ■ Planners ■ Surveyors Landscape Architects ■ Environmental Scientists				
D FEASIBLE TO PERMIT THE USE OF CONVENTIONAL D PREPARATION SEEDING, MULCH APPLICATION, AND D GRADING SHOULD BE DONE IN ACCORDANCE WITH ADING.	ON MARCH 3, 2004 AND APPLY TO CONSTRUCTION ACTIVITIES THAT COMMENCE ON OR AFTER MARCH 3, 2004. ANY NEW CONSTRUCTION ACTIVITY FOR WHICH AN RFA IS SUBMITTED ON OR AFTER MARCH 3, 2004 OR WHICH RECEIVE AUTOMATIC RENEWAL OF AUTHORIZATION UNDER THIS PERMIT AFTER MARCH 3, 2004 ALSO SHALL COMPLY WITH THESE REQUIREMENTS.	Office Locations: Red Bank, NJ Lehigh Valley, PA Clinton, NJ Exton, PA Hamilton, NJ Philadelphia, PA Egg Harbor, NJ Pittsburgh, PA Montvale, NJ Tampa, FL				
ON CONTROL PRACTICES OR FACILITIES SUCH AS ABILIZATION STRUCTURES, CHANNEL STABILIZATION IS, AND WATERWAYS. SEE STANDARDS II THROUGH 42.	2. MATERIAL MANAGEMENT TO PREVENT OR REDUCE WASTE - ANY PESTICIDES, FERTILIZERS, FUELS, LUBRICANTS, PETROLEUM PRODUCTS, ANTI-FREEZE, PAINTS AND PAINT THINNERS, CLEANING SOLVENTS AND ACIDS, DETERGENTS, CHEMICAL ADDITIVES, AND CONCRETE CURING COMPOUNDS SHALL BE STORED IN CONTAINERS IN A DRY COVERED AREA MANU JEACTURERS' RECOMMENDED APPLICATION RATES USES	<ul> <li>Mt. Arlington, NJ</li> <li>Mt. Laurel, NJ</li> <li>Albany, NY</li> <li>New Windsor, NY</li> <li>Westchester, NY</li> <li>Columbia, MD</li> <li>Charlotte, NC</li> </ul>				
STRAW, AT 2.0 TO 2.5 TONS PER ACRE, IS SPREAD POUNDS PER 1,000 SQUARE FEET AND ANCHORED WITH A DL, LIQUID MULCH BINDERS, OR NETTING TIE DOWN. LS MAY BE USED IF APPROVED BY THE SOIL CONSERVATION	AND METHODS SHALL BE STRICTLY FOLLOWED TO THE EXTENT NECESSARY TO PREVENT OR MINIMIZE THE PRESENCE OF WASTE FROM SUCH MATERIALS IN THE STORMWATER DISCHARGE AUTHORIZED BY THIS PERMIT. (THE PRECEDING SENTENCE DOES NOT APPLY TO ANY MANUFACTURERS' RECOMMENDATIONS ABOUT FERTILIZER OR OTHER MATERIAL THAT CONFLICT WITH THE EROSION AND SEDIMENT CONTROL	State of N.J. Certificate of Authorization: 24GA27986500 Copyright © 2018. Maser Consulting. All Rights Reserved. This drawing and the information contained herein is authorized for use only by the party whom the services were contracted or to whom it is certified. This drawing r not be copied, reused, disclosed, distributed or relied upon for any other purp without the express written consent of Maser Consulting, P.A.				
ATES ABOVE HAVE BEEN MET WHEN THE MULCH COVERS Y UPON VISUAL INSPECTION, I.E. THE SOIL CANNOT BE	<ul> <li>COMPONENT OF THE FACILITY'S SPPP.)</li> <li>3. WASTE HANDLING - THE FOLLOWING REQUIREMENTS APPLY ONLY TO CONSTRUCTION SITE WASTE THAT HAS THE POTENTIAL TO BE TRANSPORTED BY THE STORMWATER DISCHARGE AUTHORIZED BY THIS PERMIT. THE HANDLING AT THE CONSTRUCTION</li> </ul>	PROTECT YOURSELF ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSO PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE				
BER MULCH HYDROSEEDER IN QUANTITIES/APPLICATION	SITE OF WASTE BUILDING MATERIAL AND RUBBLE AND OTHER CONSTRUCTION SITE WASTES, INCLUDING LITTER AND HAZARDOUS AND SANITARY WASTES, SHALL CONFORM WITH THE STATE SOLID WASTE MANAGEMENT ACT, N.J.S.A. 13:1E-1 ET SEQ., AND ITS IMPLEMENTING RULES AT N.J.A.C. 7:26, 7:26A, AND 7:26G; THE NEW JERSEY DESTICIDE CONTROL CODE AT NUA C 7:20; THE STATE LITTER STATUTE (NUS A	FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM				
S PAPER JUTE, EXCELSIOR, COTTON, OR PLASTIC, MAY BE	13:1E-99.3); AND OSHA REQUIREMENTS FOR SANITATION AT 29 C.F.R. 1926 (EXCEPT WHERE SUCH CONFORMANCE IS NOT RELEVANT TO THE STORMWATER DISCHARGE AUTHORIZED BY THIS PERMIT). CONSTRUCTION SITES SHALL HAVE ONE OR MORE DESIGNATED WASTE COLLECTION AREAS ONSITE OR ADJACENT TO THE SITE, AND AN					
FORMLY TO A MINIMUM DEPTH OF 2 INCHES MAY BE USED. I USED ON AREAS WHERE FLOWING WATER COULD WASH PLUG IT.	ADEQUATE NUMBER OF CONTAINERS (WITH LIDS OR COVERS) FOR WASTE. WASTE SHALL BE COLLECTED FROM SUCH CONTAINERS BEFORE THEY OVERFLOW, AND SPILLS AT SUCH CONTAINERS SHALL BE CLEANED UP IMMEDIATELY.					
- SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER STRAW MULCH TO MINIMIZE LOSS BY WIND OR WATER. ONE OF THE FOLLOWING METHODS, DEPENDING UPON ND STEEPNESS OF THE SLOPES.	<ul> <li>A. CONSTRUCTION SITE WASTES INCLUDE BUT ARE NOT LIMITED TO:</li> <li>i. "CONSTRUCTION AND DEMOLITION WASTE," AS DEFINED IN N.J.A.C. 7:26-1.4 AS FOLLOWS: "WASTE BUILDING MATERIAL AND RUBBLE RESULTING FROM CONSTRUCTION, REMODELING, REPAIR, AND DEMOLITION OPERATIONS ON HOUSES, COMMERCIAL BUILDINGS, PAVEMENTS AND OTHER STRUCTURES. THE</li> </ul>					
TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE CH. SECURE MULCH TO SOIL SURFACE BY STRETCHING A CRISS-CROSS AND A SQUARE PATTERN. SECURE TWINE TWO OR MORE ROUND TURNS.	FOLLOWING MATERIALS MAY BE FOUND IN CONSTRUCTION AND DEMOLITION WASTE: TREATED AND UNTREATED WOOD SCRAP; TREE PARTS, TREE STUMPS AND BRUSH; CONCRETE, ASPHALT, BRICKS, BLOCKS AND OTHER MASONRY; PLASTER AND WALLBOARD; ROOFING MATERIALS; CORRUGATED CARDBOARD AND MISCELLANEOUS PAPER; FERROUS AND NON-FERROUS METAL; NON-ASBESTOS BUILDING INSULATION; PLASTIC SCRAP; DIRT; CARPETS AND PADDING; GLASS	Ments				
PAPER, COTTON, OR PLASTIC NETTINGS OVER MULCH. USE AREAS TO BE MOWED. NETTING IS USUALLY AVAILABLE IN P TO 300 FEET LONG.	<ul><li>(WINDOW AND DOOR); AND OTHER MISCELLANEOUS MATERIALS; BUT SHALL NOT INCLUDE OTHER SOLID WASTE TYPES."</li><li>ii. ANY WASTE BUILDING MATERIAL AND RUBBLE RESULTING FROM SUCH OPERATIONS</li></ul>	OWNSHIP CO				
NING COULTER TOOL - A TRACTOR-DRAWN IMPLEMENT PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE. 1AXIMUM EROSION CONTROL, BUT ITS USE IS LIMITED TO THE TRACTOR CAN OPERATE SAFELY. SOIL PENETRATION INCHES. ON A SLOPING LAND, THE OPERATION SHOULD	<ul> <li>THAT IS HAZARDOUS FOR PURPOSES OF N.J.A.C. 7:26G (THE HAZARDOUS WASTE RULES).</li> <li>iii. DISCARDED (INCLUDING SPILLED) PESTICIDES, FERTILIZERS, FUELS, LUBRICANTS, PETROLEUM PRODUCTS, ANTI-FREEZE, PAINTS AND PAINT THINNERS, PAINT CHIPS AND SANDBLASTING GRITS, CLEANING SOLVENTS, ACIDS FOR CLEANING MASONRY SURFACES, DETERGENTS, CHEMICAL ADDITIVES USED FOR SOIL STABILIZATION (E.G., CALCIUM CHLORIDE), AND CONCRETE CURING COMPOUNDS.</li> </ul>	CRIPTION ED PER MCSCD AND TC				
) BE HEAVIER AT EDGES WHERE WIND CATCHES THE D AT CRESTS OF BANKS. REMAINDER OF AREA SHOULD BE E.	iv. OTHER "LITTER," AS DEFINED AT N.J.S.A. 13:1E-215.D AS FOLLOWS: "ANY USED OR UNCONSUMED SUBSTANCE OR WASTE MATERIAL WHICH HAS BEEN DISCARDED WHETHER MADE OF ALUMINUM, GLASS, PLASTIC, RUBBER, PAPER, OR OTHER NATURAL OR SYNTHETIC MATERIAL, OR ANY COMBINATION THEREOF, INCLUDING, BUT NOT LIMITED TO ANY BOTTLE JAB OR CAN OR ANY TOP, CAP OR DETACHABLE	AWN BY DESC				
WING: GETABLE BASED BINDERS - NATURALLY OCCURRING, IYDROPHILIC MATERIALS THAT MIXED WITH WATER AND WHEN APPLIED TO MULCH UNDER SATISFACTORY NS WILL FORM MEMBRANE NETWORKS OF INSOLUBLE ETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND	TAB OF ANY BOTTLE, JAR OR CAN, ANY UNLIGHTED CIGARETTE, CIGAR, MATCH OR ANY FLAMING OR GLOWING MATERIAL OR ANY GARBAGE, TRASH, REFUSE, DEBRIS, RUBBISH, GRASS CLIPPINGS OR OTHER LAWN OR GARDEN WASTE, NEWSPAPERS, MAGAZINES, GLASS, METAL, PLASTIC OR PAPER CONTAINERS OR OTHER PACKAGING OR CONSTRUCTION MATERIAL, BUT DOES NOT INCLUDE THE WASTE OF THE PRIMARY PROCESSES OF MINING OR OTHER EXTRACTION PROCESSES, LOGGING, SAWMILLING, FARMING OR MANUFACTURING."	REV         DATE         DI           -         -         3/28/18         DI           -         -         -         -         -           -         -         -         -         -         -           -         -         -         -         -         -         -           -         -         -         -         -         -         -         -				
GELS SHALL BE APPLIED AT RATES AND WEATHER IMENDED BY THE MANUFACTURER. - HIGH POLYMERS SYNTHETIC EMULSION, MISCIBLE WITH	<ul> <li>v. SANITARY SEWAGE AND SEPTAGE.</li> <li>vi. CONTAMINATED SOILS ENCOUNTERED OR DISCOVERED DURING EARTHMOVING ACTIVITIES OR DURING THE CLEANUP OF A LEAK OR DISCHARGE OF A HAZARDOUS SUBSTANCE.</li> </ul>					
TED AND FOLLOWING APPLICATION TO MULCH, DRYING NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT RATES AND WEATHER CONDITIONS RECOMMENDED BY AND REMAIN TACKY UNTIL GERMINATION OF GRASS.	B. CONCRETE WASHOUT - CONCRETE WASHOUT ONSITE IS PROHIBITED OUTSIDE DESIGNATED AREAS. WASHOUT ACTIVITIES INCLUDE, BUT NOT LIMITED TO, THE WASHING OF TRUCKS, CHUTES, HOSES, MIXERS, HOPPERS, AND TOOLS.					
	<ul> <li>i. DESIGNATED WASHOUT AREAS SHALL BE LINED AND BERMED TO PREVENT DISCHARGES TO SURFACE AND GROUNDWATER.</li> <li>ii. HARDENED CONCRETE FROM THE CONCRETE WASHOUT WASHOUT SHALL BE REMOVED AND PROPERLY DISPOSED OF</li> </ul>					
	<ul><li>iii. THE CONCRETE WASHOUT AREA SHALL BE CLEARLY DESIGNATED WITH A SIGN INDICATING THE AREAS USES.</li></ul>					
CE OF COMMERCIAL	C. SANITARY SEWAGE/SEPTAGE DISPOSAL - DISCHARGES OF RAW SANITARY SEWAGE OR SEPTAGE ONSITE ARE STRICTLY PROHIBITED. ADEQUATE FACILITIES WITH PROPER DISPOSAL SHALL BE PROVIDED AND MAINTAINED ONSITE OR ADJACENT TO THE SITE FOR ALL WORKERS AND OTHER SANITARY NEEDS.	MICHAEL F. GALLAGHE NEW JERSEY PROFESSIONAL ENGINEER - LICENSE NUMBER: GE48719				
MOD: 02/19/18	4. SPILLS; DISCHARGES OF HAZARDOUS SUBSTANCES; FEDERALLY REPORTABLE RELEASES.					
MCNJ-SOIL-NOTE-1500 05/01/17 ID LIMIT OF DISTURBANCE FOR INSTALLATION OF SILT ENTRANCE PAD (I WEEK).	MATERIALS THAT ARE LISTED IN 2. ABOVE AND USED OR APPLIED ONSITE. ALL SPILLS OF SUCH MATERIAL SHALL BE CONTAINED AND CLEANED UP IMMEDIATELY. CLEANED UP MATERIALS SHALL BE PROPERLY DISPOSED OF.	PRELIMINARY AND FINA MAJOR SITE PLAN				
STOCKPILING OF TOPSOIL AND ROUGH GRADING, S (3 WEEKS). INENT STABILIZATION OF STORM WATER BASINS	B. DISCHARGES OF HAZARDOUS SUBSTANCES (AS DEFINED IN N.J.A.C. 7:1E-1.6) IN CONSTRUCTION SITE WASTES ARE SUBJECT TO THE PROVISIONS OF THE SPILL COMPENSATION AND CONTROL ACT, N.J.S.A. 58:10-23.11 ET SEQ., AND OF DEPARTMENT RULES FOR DISCHARGES OF PETROLEUM AND OTHER HAZARDOUS SUBSTANCES AT N.J.A.C. 7:1E. NO DISCHARGE OF HAZARDOUS SUBSTANCES RESULTING FROM AN ONSITE SPILL SHALL BE DEEMED TO BE "PURSUANT TO AND IN	FOR ROBBINSVILLE MEADOWBROOK.				
LET PROTECTION (3 WEEKS) CE PAVEMENT SUBBASE (2 WEEKS).	COMPLIANCE WITH [THIS] PERMIT" WITHIN THE MEANING OF THE SPILL COMPENSATION AND CONTROL ACT AT N.J.S.A. 58:10-23.11C. C. RELEASES IN EXCESS OF REPORTABLE QUANTITIES (RQ) ESTABLISHED UNDER 40 C.F.R.	LLC				
G AREAS AND CONSTRUCT BUILDINGS. ALL DISTURBED AS DEFINED IN SOIL EROSION AND SEDIMENT CONTROL MMENCEMENT OF PROJECT). DISTRIBUTE 5" OF TOPSOIL AND PLACE PERMANENT	NATIONAL RESPONSE CENTER (800 424-8802).	BLOCK 8				
KS) AL LANDSCAPING (I MONTH)		LOTS 15.01 & 17				
HAVE BEEN STABILIZED.		TOWNSHIP OF ROBBINSVILLE MERCER COUNTY NEW JERSEY				
		RED BANK OFFICE Corporate Headquarters 331 Newman Springs Road Suite 203 Red Bank, NJ 07701 Phone: 732.383.1950 Escur 732.383.1950				
		Fax:     /32.383.1984       SCALE:     DATE:       AS SHOWN     12/06/17       PCS     MFG				
		PROJECT NUMBER: DRAWING NAME: 14001855A C-SESC				

SOIL EROSION & SEDIMENT

CONTROL DETAILS

of

22

![](_page_14_Figure_0.jpeg)

![](_page_15_Figure_0.jpeg)

HECKED BY

MFG

![](_page_15_Figure_1.jpeg)

![](_page_16_Figure_0.jpeg)

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the second se

SINGLE WHITE LINE

____

8" PVC

— UP∦ JC305WA WITH GUY-WIRE

EDGE OF PAVEMENT

ARBAGE - US - THEAVY - LOA

MAP REF

EP-13

TRAFFIC SIGNAL

LEFT LANE MUST TURN LEFT SIGN

GARBAGE - US - MEAVY - LONG

![](_page_16_Figure_2.jpeg)

![](_page_16_Figure_3.jpeg)

![](_page_16_Figure_4.jpeg)

![](_page_16_Picture_5.jpeg)

![](_page_16_Figure_6.jpeg)

![](_page_16_Figure_7.jpeg)

SCALE : 1" = 40'

(										
	Cust	omer w w w	· Loya	C O	N S rougi	U L h Clie	T Sant Sa	E N tisfact	tion	<b>R</b>
Engineers  Planners Surveyors Landscape Architects Office Locations:  Red Bank, NJ Clinton, NJ Exton, PA Hamilton, NJ Philadelphia, PA										
<ul> <li>Egg Harbor, NJ</li> <li>Egg Harbor, NJ</li> <li>Montvale, NJ</li> <li>Mt. Arlington, NJ</li> <li>Orlando, FL</li> <li>Mt. Laurel, NJ</li> <li>Albany, NY</li> <li>Sterling, VA</li> <li>New Windsor, NY</li> <li>Norfolk, VA</li> <li>Westchester, NY</li> <li>Albuquerque, NM</li> </ul>										
<ul> <li>Columbia, MD</li> <li>Charlotte, NC</li> <li>State of N.J. Certificate of Authorization: 24GA27986500</li> <li>Copyright © 2018. Maser Consulting. All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Maser Consulting, P.A.</li> </ul>										
Reputer below										
Know what's <b>below.</b> Call before you dig. FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM										
	SHIP COMMENTS									
	CD AND TOWN									
DESCRIPTION	REVISED PER MCS									
DRAWN BY	PCS									
N DATE	3/28/18									
RE	_	•	•	•	•	•	•	•	•	
MICHAEL F. GALLAGHER NEW JERSEY PROFESSIONAL ENGINEER - LICENSE NUMBER: GE48719									ĒR	
F	PRE	ELIN MA	MIN AJC	NA] DR 3	RY SIT	AN E F	ID PLA	FIN N	IAL	-
FOR ROBBINSVILLE										
MEADOWBROOK, LLC										
BLOCK 8 LOTS 15 01 & 17										
TOWNSHIP OF ROBBINSVILLE MERCER COUNTY										
				w ي. 	RE	DB	ANK	OFF	ICE	
					Cor 331 I R Pl	porat Newr S ed Ba none:	te He nan S uite 2 ink, N 732.3	adqua prings 03 IJ 07 883.19	rters Roa 701 950 84	d
SCALE AS SI PROJE	HOW CT NU	MBER:	DATE: I 2/0	6/17 DRA	VING	AWN PC	BY:	CHE	CKED MFG	BY:
SHEET		SSSA CK	CI					N F	۲LA	
SHEET	NUMI	BER:			of		22	2		

![](_page_17_Figure_0.jpeg)

![](_page_18_Figure_0.jpeg)

![](_page_19_Figure_0.jpeg)

	The Report of the						
LED Coun (x10)	t System Watts 120-480V	Total Cu 120V	208V	240V	277V	347V	480
n) spaced 350mA							
02	25	0.21	0.13	0.11	0.10	0.08	0.07
04	46	0.36	0.23	0.21	0.20	0.15	0.12
06	66	0.52	0.31	0.28	0.26	0.20	0.15
08	90	0.75	0.44	0.38	0.34	0.26	0.20
10	110	D.92	0.53	0.47	0.41	0.32	0.24
12	130	1.10	0.63	0.55	0.48	0.38	0.28
14	158	1.32	0.77	0.68	0.62	0.47	0,35
16	179	1.49	0.87	0.77	86.0	0.53	0.39
525mA							
02	37	0.30	0.19	0.17	0.16	0.12	0.10
04	70	0.58	0.34	0.31	0.28	0.21	0.16
06	101	0.84	0.49	0.43	0.38	0.30	0.22
OB	133	1.13	0.66	0.58	0.51	0.39	0.26
10	171	1.43	0.83	0.74	0.66	0.50	0.38
12	202	1.69	0.98	0.86	0.77	0.59	0.44
14	232	1.94	1.12	0.98	0.87	0.68	0.50
16	263	2.21	1.27	1.11	0.97	0.77	0.56
700mA							
02	50	0.41	0.25	0.22	0.20	0.15	0.12
7 04	93	D.78	0.66	0.40	0.36	0.27	0.20
06	134	1.14	0.65	0.57	0.50	0.39	0.29

Ambient	Initial LMF	25K hr Projected ⁸ LMF	50K hr Projected ² LMF	75K hr Calculated ³ LMF	100K hr Calculat LMF
5°C [41°F]	1.04	1.01	0.99	0.98	0.96
10°C (50°F)	1.03	1.00	0.98	0.97	0.95
15°C (59°F)	1.02	0.99	0.97	0.96	0.94
20°C [68°F]	1.01	0.98	0.96	0.95	0.93
25°C (77°F)	1.00	0.97	0.95	0.94	0.92

![](_page_20_Figure_0.jpeg)

![](_page_21_Figure_0.jpeg)

5A\Engineering\C-DTLS.dwg\C-I 9-DETAILS By

![](_page_22_Figure_0.jpeg)

![](_page_23_Figure_0.jpeg)

![](_page_23_Figure_2.jpeg)

![](_page_23_Figure_3.jpeg)

PROFILE

![](_page_23_Figure_5.jpeg)

![](_page_23_Figure_6.jpeg)

![](_page_24_Figure_0.jpeg)

![](_page_24_Figure_2.jpeg)

![](_page_24_Figure_3.jpeg)

![](_page_24_Figure_4.jpeg)

![](_page_24_Figure_5.jpeg)

![](_page_24_Figure_6.jpeg)

![](_page_24_Figure_8.jpeg)

### § 142-23. HC Highway Commercial Zone District.

- A. HC District designated. The HC District is established on the properties within the Township as shown on the map and designated on the Zoning Map, as amended hereby.¹
- B. Purpose and intent.
  - (1) In furtherance of the Master Plan Reexamination and Land Use Element Amendment (herein known as the Master Plan) adopted March 21, 2007, the creation of this HC District is part of a cohesive economic development plan intended to improve the primary commercial corridors within the Township and help to achieve a better balance between residential and commercial development. The Master Plan calls for the creation of a highway commercial district within the area delineated as this zoning district in order to facilitate and stimulate commercial development along Route 130. The Master Plan further recommends appropriate planning designs, uses, and architectural review in order to maximize benefits and minimize negative externalities and impacts.
  - (2) The intent of the HC Zone is to provide commercial uses that serve Township residents as well as residents of the surrounding municipalities. As stated in the 2007 Master Plan Reexamination and Land Use Element, the following types of uses are not the intended types of uses for the HC Zone: new or used sales or rentals of motor vehicles; motels; adult book stores; adult movie theaters; drug paraphernalia stores; junkyards; massage parlors; tarot card readings/fortunetelling establishments; tattoo parlors; and body piercing studios. **[Amended 11-14-2014 by Ord. No. 2014-23]**
- C. Permitted uses:
  - (1) Designed shopping complex: a building or group of abutting buildings designed to be utilized by more than one permitted use where such building or group of abutting buildings is constructed at one time. The area and yard requirements shall be applied to the one building or group of abutting buildings as one structure.
  - (2) Retail stores: automotive-related stores with the parts store being at least 50% of the total square feet.

^{1.} Editor's Note: The Zoning Map is included at the end of this chapter.

- (3) Service activities, such as but not limited to banks, barbershops, beauty salons, tailors, shoe repair, dry cleaners (except no chemical dry cleaning is permitted on the premises), jewelry repair, and legal services.
- (4) Business offices, including but not limited to medical offices and governmental offices.
- (5) Restaurants, including drive-through facilities.
- (6) Indoor and outdoor recreational uses, such as health spas, gyms, tennis and racquetball courts.
- (7) Combination office service and/or retail sales.
- (8) Hotels with a one-hundred-room minimum and a restaurant on the premises.
- D. Accessory uses permitted:
  - (1) Off-street parking. See § 142-41.
  - (2) Fences and walls. See § 142-36.
  - (3) Garages, storage buildings and other customary accessory uses incidental to the principal use.
  - (4) Temporary construction trailers and one sign not exceeding 32 square feet advertising the prime contractor, subcontractor(s), architect, financing institution and similar data for the period of construction beginning with the issuance of a building permit and concluding with the issuance of a certificate of occupancy or one year, whichever is less, provided that the trailer and sign are on the site where construction is taking place and set back at least 15 feet from street and lot lines.
  - (5) Amateur radio antennas and antenna support structure not to exceed 45 feet in height, unless the structure is retractable. The height of a retractable antenna structure shall not exceed 45 feet when the structure is not being used for the transmission and/or reception of amateur radio signals and 65 feet when the structure is fully extended and in use for the transmission and/or reception of amateur radio signals. Satellite dish antennas shall be installed in accordance with the standards specified in § 142-33.1H.
- E. Conditional uses:

- (1) House of worship. See § 142-61M.
- (2) Gas stations with convenience stores of over 2,500 square feet. See § 142-61F.
- F. Area and yard requirements.
  - (1) Minimum lot area: 40,000 square feet.
  - (2) Minimum lot width: 150 feet.
  - (3) Minimum lot frontage: 150 feet.
  - (4) Minimum lot depth: 250 feet.
  - (5) Minimum front yard setback: 35 feet. [Amended 11-14-2014 by Ord. No. 2014-23]
  - (6) Minimum side yard setback: 20 feet.
  - (7) Minimum rear yard setback: 30 feet.
  - (8) Maximum impervious surface ratio: 0.65.
  - (9) Minimum gross floor area: 3,000 square feet.
  - (10)Maximum floor area ratio: 0.25.
  - (11)Minimum parking setbacks: 20 feet, front yard; 10 feet, rear and side yards.
  - (12)Minimum driveway side yard setback: 10 feet.

(13)Maximum building height: 35 feet or three stories.

- G. Nonconforming lots. See § 142-40.
- H. Performance and design standards. The following criteria and guidelines shall be used by all municipal agencies in reviewing applications for site plan approval. They are intended to provide a framework within which the designer of the site development is free to exercise creativity, invention, and innovation. Where a development involves an existing building or site upon which an existing building is located, the existing building shall be repaired, renovated, and restored to comply with this section. Three-dimensional illustrative architectural renderings shall be submitted as part of any site plan application. The renderings may be digital. These color renderings shall be considered part of any approvals granted and shall not be substantially changed.

- (1) Exception. The performance and design standards described in this section shall be used as the Township's presumptive minimum requirements for subdivision and site plan development and as criteria for evaluating the plan and design of such development plans. However, the guidelines and standards are not intended to restrict creativity, and an applicant may request that the performance and design standards be modified or waived. To gain approval of such modification or waiver, the applicant shall demonstrate criteria for variances pursuant to N.J.S.A. 40:55D-70.
- (2) Building massing.
  - (a) Buildings should avoid long, uninterrupted wall or roof planes. Building wall offsets, including both projections and recesses, shall be required in order to provide architectural interest and variety and relieve the visual effect of a single, long wall. Similarly, roofline offsets should be provided along any roof measuring longer than 75 feet in length in order to provide architectural interest and variety to the massing of a building and relieve the negative visual effect of a single, long roof.
  - (b) Larger buildings should reduce the appearance of bulk through recesses, offsets, changes of plane, stepped terraces or other devices which break down and articulate building mass.
- (3) Architecture. Franchise architecture (building design that is trademarked or identified with a particular chain or corporation and is generic in nature) is discouraged. Franchise of national chains are encouraged to follow building design standards provided herein to create a unique building that is compatible with surrounding buildings.
- (4) Facades and exterior walls.
  - (a) Facades should be designed to balance vertical and horizontal elements of composition. In general, facades should present a vertical division into base, middle or shaft and capital or cornice, as well as a pattern of horizontal subdivisions into bays, where appropriate. Separation of a facade into these components helps relate a building to the human scale.
  - (b) Undifferentiated facades, facades where the vertical elements overwhelm the horizontal elements indicative of

changes in level or use, expansive blank walls, or facades with extended horizontal fenestration should not be permitted.

- (c) Facade colors should be low-reflective, subtle, natural or earth-tone colors. Bright reds, oranges, yellows, or other high-intensity colors are not permitted. Neon tubing is not permitted to outline windows, signs, buildings, structures or architectural details.
- (5) Building location and orientation.
  - (a) Spatial relationships between buildings and other structures should be geometrically logical and/or architecturally formal.
  - (b) Buildings should be located to allow for adequate fire and emergency access.
  - (c) In a multiple building development, buildings located on the interior of a site should front towards and relate to one another, both functionally and visually. To the extent possible, multiple building developments should be organized around features, such as courtyards and quadrangles, which encourage pedestrian activity.
- (6) Roofs.
  - (a) The type, shape, pitch, texture and color of a roof should be considered as an integral part of the design of a building and should be architecturally compatible with the style, materials, colors and details of such buildings.
  - (b) Rooflines should be varied with a change in height every 75 linear feet in a building length. Rooflines should be used to add interest to and reduce the massive scale of large buildings.
  - (c) Flat roofs are not permitted on one-story buildings.
  - (d) Mansard roofs are not permitted.
  - (e) Architectural embellishments that add visual interest to roofs, such as dormers, belvederes, masonry, chimneys, cupolas, clock towers and other similar elements, are encouraged, provided that they are architecturally compatible with the building.

- (7) Mechanical screening. All mechanical equipment, whether placed on the ground, roof or other location, should be screened from ground level view with an acceptable material compatible with the architectural scheme of the development.
- (8) Storefronts.
  - (a) Storefronts are an integral part of a building. The building's facade should dictate the storefront's composition in terms of spacing and alignment of buildings and windows. Storefronts should be designed to be compatible with the overall character of the facade, to maximize pedestrian interest, and to maintain a pedestrian scale.
  - (b) Buildings with multiple storefronts should be unified through the use of architecturally compatible styles, colors, details, awnings, signage, and lighting fixtures on all storefronts.
- (9) Pedestrian circulation and walkways.
  - (a) Walkway design ("walkway" shall mean a path provided for pedestrian use through a site) shall promote pedestrian circulation within each site and throughout the district; walkways shall be separate and distinct from motor vehicle circulation and, to the greatest extent possible, provide a pleasant route for users, promote enjoyment of the site and encourage incidental social interaction among pedestrians.
  - (b) Walkways should be constructed of brick, colored/ textured concrete pavers or slabs, or some combination thereof that is compatible with the style, materials, colors, and details of the surrounding buildings as well as with the public sidewalks. The functional, visual and tactile properties of the paving materials should be appropriate to the proposed functions of pedestrian circulation. Walkways should be raised and curbed along buildings and within parking lots, where suitable.
  - (c) Barrier-free walkway systems shall be provided to allow pedestrian access to buildings or uses from parking lots and public sidewalks.

(10)Exterior spaces.

- (a) Outdoor gathering space shall be provided within each development, as appropriate. Gathering space for employees shall be located in the rear of the development and should be sufficiently screened.
- (b) The layout, materials and details used in the treatment of exterior spaces shall be selected to enhance their immediate surroundings. Public and semipublic exterior spaces should be functional and provide amenities for their users, in the form of textured paving, landscaping, lighting, street trees, benches, trash receptacles and other items of street furniture, as appropriate.
- (11)Parking lot and loading area landscaping, buffering and screening.
  - (a) See § 142-41.
  - (b) Landscaped islands and other green space should be consolidated into useful areas and not just narrow strips of grass or plantings.
  - (c) In the HC Zone, site plans shall balance the functional requirements of parking with the provision of pedestrian amenities. Transition areas between parking and commercial uses shall be designed with textured paving, landscaping, and street furniture.
  - (d) Parking lot layout shall take into consideration pedestrian circulation and activities. Pedestrian crosswalks shall be provided, where necessary and appropriate, shall be distinguished by textured paving and shall be integrated into the wider network of walkways. Pavement textures shall be required on pedestrian accessways, and strongly encouraged elsewhere in the parking lot, as surfacing materials or when used as accents.
  - (e) Parking lot layout shall take into consideration adjacent parking areas. An interconnection between parking areas along Route 130 is encouraged.
- (12)Access frontage. Because this zone has frontage along median-divided Route 130, curb cuts must be located with the intention of minimizing the total number of curb cuts. Driveway access should be located in accordance with New Jersey Department of Transportation standards and regulations from any public street intersecting with Route 130.

### (13)Landscaping.

- (a) See § 142-47.
- (b) Landscaping shall be provided as approved by the reviewing board to provide shade, designate entrances, screen parking from roads, buffer utility areas, and provide aesthetic interest throughout the year. [Amended 11-14-2014 by Ord. No. 2014-23]
- (c) Extensive landscaping shall be required in accordance with a plan conceived for each site as a whole. All areas of a site not occupied by buildings, parking lots, other improvements or textured paving shall be intensively landscaped by the planting of grass or other ground cover; masses of shrubs; and trees as part of site plan approval. Landscaping shall be integrated with other functional and ornamental site design elements, where appropriate, such as ground paving materials, paths and walkways, gazebos, fences and walls, street furniture, art and sculpture.
- (d) Protection of existing plantings. Maximum effort shall be made to save existing plantings. No material or temporary soil deposits shall be placed within four feet of shrubs or 10 feet of trees designated to be retained. Protective barriers or tree wells shall be installed around each plant and/or group of plants that are to remain on the site. Snow fences and silt fences are examples of acceptable barriers.
- (e) Slope plantings. Landscaping in the area of cuts and fills and/or terraces shall be sufficient to prevent erosion, and all slopes steeper than one foot vertically to three feet horizontally shall be planted with ground covers appropriate for the purpose and soil conditions, water availability and environment.
- (f) Maintenance. See § 142-47L. Additionally, plantings shall be watered regularly and in a manner appropriate for the specific plant species through the first growing season, and dead or dying plants shall be replaced by the applicant during the next planting season.
- (g) All applications for development shall include plans for water irrigation on all landscaping, buffering and lawn area. The approved irrigation plan shall be constructed,

installed and maintained by the developer and/or subsequent owner.

- (14)Lighting.
  - (a) See § 142-37.
  - (b) All light fixtures and light poles proposed as part of a site plan should be ornamental and compatible with the architectural style of the building. Lighting standards that are not compatible with the architecture design of the building, such as cobra heads or shoeboxes, are not permitted.
  - (c) The lighting plan should take into consideration the hours of operation of the proposed use. The lights should be designed so that they can be reduced or turned off when they are not necessary. A timer may be necessary to regulate the hours.
  - (d) The maximum cutoff angle shall be used to shield light source, glare and unwanted light from adjacent properties and motorists approaching on bounding roads and highways.

(15)Signage. See § 142-48.

(16)LEED. To the extent feasible, development within the HC Zone should follow the guidelines of the U.S. Green Council's Leadership in Energy and Environmental Design (LEED).