

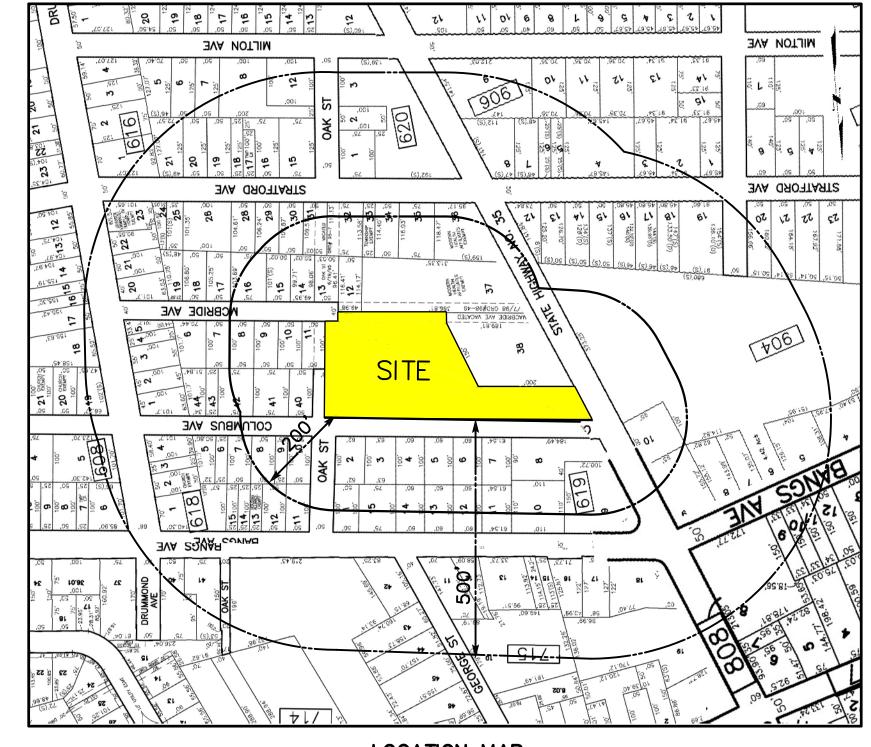
THE BEST SUBDIVISION

FOR PRELIMINARY & FINAL MAJOR SITE PLAN AND SUBDIVISION USE VARIANCE APPLICATION LOT 39 BLOCK 617 TOWNSHIP OF NEPTUNE, MONMOUTH COUNTY, NEW JERSEY

ZONING MAP

PROPERTY OWNERS WITHIN 200'

)Neptune	Buffer Re	eport N	EPTUNE TOWNS Office of the Assessor 25 Neptune Blvd	H1 P			Block 619	live Q	1335 0951 9993	990004 400004	Address 1821 COLUMBUS AVE	Owner TOORSTANFORD M & TYLER, INDIAN	Owner Adibioss 1921 COLUMBUS AVENUE	Owner City/State NEPTUNE, N	Zip felddinnal Code Eoss 07733
			PO Box 1125 Neptune, NJ 37754-1125 732,988,5200				619		1398 0061		1823	ROBINSON, IDAL	18 KENNETH	NEPTUNE, NJ	
lighlighted featu			SIRT WALTER CONTROL OF THE STATE OF THE STAT		Managamentalism ma	vern wordshave	dis.		1395		AVE	population in the	TERRACE		
Block Lat Qualifie	1335-00617000	1824 COLUMB	MUCCHIELLO; FRA	Owner Address NK JOHNSON	Owner Z City/Suite C BLOOMFIELD, 07	Zip Additional ada Lots	619	<i>6</i>			AVE	GUY, ORETT	1718 RICHMOND RD APT 4E	ISLAND, NY	
517 39	000990000-0000	AVE AVE	& MARGUERITE	AVENUE	NJ G	A PARTY	619		0061 0000 0000	90000. 170000- 10	COLUMBUS AVE	GRAHAM, ROBERT L & TRACKY D	1827 COLUMBUS AVE	NEPTUNE, N	07753
ist of adjoining t	eature(s) that i	intersect 200	S foot buffer from Subje	ct Property.			619	B	1365 0061 0000	-333339	440 HIGHWAY 95	MSLANCO, L & CENTARINO, V & K	10E SHELDON AVENUE	NEPTUNE, N	07753
djaining Propertie Flock Let Qualific	新国以开始 《金额》	Address	Owner	Owner Address	Owner 7 Ciry/State C	Zip Addisional inde Lots	619	9		190000	450 HEGHWAY 85	WHITE, GARY E & MARGARET A	118 MECKLENBURG ACADEMY D	CHASE CITY, VA	23924
17 7	1335- 006170000- 000070000- 00000	1812 MC BRIDE AVE	CAPCINI ASSEST STABILIZATION FUND#1	STREET	NEW BRUNSWICK, 08 N	8901	619	10	1335 0061 9001	5- 190000- 1000003-	1982 BANGS AVE	OLEA, IGNACIO	1932 BANGS AVE	NEPTUNE TWP, NJ	07733
517 8	1335- 006170000- 000080000-	1815 MC BRIDE AVE	BLOUNT, RAQUEL C	1815 MC BRIDE AVE	NEPTUNE, NJ 07	7753		11				LUCAS, KAREN E	159E BANGS AVE	: NEPTUNE, N	I 07753
617 9	00000 1335- 006170000- 0000900003-		BARRETRA MARIA & HERNANDEZ MARIA E		NEPTUNE, NJ. 02		619	12				SLATER, MERITA	607 07TH AVENUE	ASBURY PARK, NJ	07712
617 10	1335- 006170000- 000100000-	182: MC BRIDE AVE	YEHUDAHOLDINGS		JACKSON, NJ 08	8527	619	13	000 133 006	00 5- 190 00 0-	1926 BANGS	ANGULO, NEWTON F	1926 BANGS AVENUE	NEPTONE, N	1 027%3
617 11	00000 1335- 006170000-	1825 MC	PEOPLES, KRISTA C/O	1105 MEMORIAL	ASBURY			14	000 133 006	00 5- 190000-	1924 BANGS	OFFISON, WANDA'L	304 WEST END	NEPTUNE, N	J 02793
	00000	BRIDE AVE	CONASTAL BUADLEATING	DRIVE	PARK, NJ			3.3	000 133	5- 190000-	1922 BANCS	ZEGA JACK	516 FIIGHWAY 3	drwr i i	
517 12	00000	DIGUS AVE	COASTAL FIREITAL	Some 5	ASIGNIO, N	Langue Fil		25	000 000 133	550000- 00	130				
617 13	006170000- 000130000- 00000	BRIDE AVE	GARIFINE, NOELLE C/O COASTAL HABITA	200 HIGHWAY 35	SPRING LAKE OF	7762	904	6	900 900 1305	060000- 00 5-	HIGHWAY 35	MONMOUTH BEVERAGE, INC.	437 HIGHWAY 3		7 07753 [1] [5]
617 14	006170000- 000140000- 00000	1812 MC BRIDE AVENUE	BENNETT, BIB: C/O COASTEL HABITAT	1105 MEMORIAL DRIVE	PARK, NJ	07712	904	9	0000 0000 1335		HIGHWAY 35	SC+OR TRADINGLLC			97101
617 15	1335- 006170000- 000150000- 00000	1810 MC BRIDE AVENUE	BROWN, SHALON M & LAMONT D %COASTAI		SPRING LAKE HEIGHTS, NJ	07762	904	10	0090	40000- 100000-	445 HIGHWAY 35	443 & 445 STATE HIGHWAY 35 LLC	779 NORTH DRIVE	BRICK, NJ	08725
617 16	1335- 006170000- 000160000- 00000	1808 MC BRIDE AVE	NEWSOME, MAURICE & SUSAN R CHAPMAN	- AVE	NEPTUNE, NJ	07753									
617 29	1335- 006170000- 000290000-	1815 STRATFORD AVE	PARKER, DINA L	1815 STRATFORD AVENUE	MERICINE, NI	07753									
30	00000 1335- 006170000- 000300000-	1817 STRATFORD	THOMPSON, KARLENI		NEPTUNE, NJ										
	00000 1335- 006170000-	1819		1819 STRAIFORE	NEPTUNE, NJ				Applicar	it seek	ing a Maj	or Sub-civision o	r Site Plan Ap	pproval, is	August 7 th 1991, any required to provide a ries that own land or
617 91	000310003- 00003 1355-	AVE	LOUISIUS, LOUINEL	AVENUE											proposed developme
517 32	006170000- 000320000- 00030	STRATFORD AVE	TUCKER, KEITH	29 INDIANA ROAD	SOMERSET, NJ	08873			Зelo	w is th	e list of P	ublic Utilities wh	iich provide ti	his service	to the Neptune area:
617 33	006170000- 000330000- 00000	1923 STRATFORD AVE	TOWNSHIP OF NEPTUNE	PO BOX 1125		07753					N	ew Jersey- Ameri Attn: Donna S	Saort GIS Sup	ervisor	e.
617 34	1335- 006170000- 000340000- 00000	1825 STRATFORD AVE	GREEN, WILLIE & MARJORIE	1825 STRATFORE AVE	NEPTUNE, NJ	07753							urel Oak Roa es, N.J. 0804		
617 35	1335- 006170000- 000350000- 00000	1827 STRAITFORD AVE	WORTHY, WARREN W	. PO 30X1584	PARK NJ	07712						Legal Depa	Verizon urtment 17 th F		
527 36	1335- 006170000- 000860000-	402 HIGHWAY	MODERN HEALTH AFFILIATES	81 DAVIS AVENCE	NEPTUNE, NJ	07753						540 F	nd Use Matter Broad Street k, N.J. 07102		
617 37	00000 1335- 006170000-	MC BRIDE	MODERN HEALTH	81 DAVIS	NEFTUNE, NJ							New Jersey N			
	000370000- 00000 1335- 006170000-	420 HIGHWAY	AFFILIATES MAGGU PROPERTIES	AVENUE 29 HARVEY	" bridged	Ladris						Atm: Right of 1415 V	of Way Depar Vyckoff Road vp. N.J. 0771	tment	
617 38	000380000- 00000 1335-	HIGHWAY 35 1824	MUCCHELLO ERANA	JONES DRIVE	JACKSON, NJ							Jersey Central Po			
617 - 39	006170000- 000690000- 00000 1335-	COLUMBUS AVE	MUCCHIELLO, FRANK & MARGUERITE	AVENUE	NJ ,	07003						Attn: La 300 Ma	nd Use Matte dison Avenue wn, N.J. 079	rs e	
ii7 40	006170300- 000400300- 00000	1814 COLUMBUS AVE	JEMAL, GREGORY	2814 COLUMBU AVENUE	S NEPTUNE, N)	07753									
517 41 ,	1335- 006170000- 000410000- 00000	1812 COLUMBUS AVE	ROBERSON, KEITH E	1812 COLUMBU AVENUE	S NEPTUNE, NJ	07753						Attn: La: 1501	nth Cablevisiond Use Matte 18th Avenue	rs	
617 42	1335- 006170000- 000420000-	1808 COLUMBU: AVE	S RANDOLPH, MAURIC	E 1808 COLUMBU AVE	S NEPTUNE TWP, NJ	07753						Wall Tv	vp, N.J. 0771	9	
618 7	00000 1335- 006280000- 000070000-	1807 COLUMBU:	S 1807 COLUMBUSILLO	PO BOX 719	ASBURY PARK, NJ	C7712									Notice of Property wi
	000070000- 00000 1335- 006180000-	AVE 1809	MALLORY, STARSHA	1809 COLUMBU		07753			two ha	nared	icet [250"]	Monmouth (County Planni	ing Board	ties shall be given to:
618 8	000380000- 00030 1335-	COLUMBU AVE 1813	MARIE	AVE	Nerione, N	are rom Jeroslov						P.	f Records An O. Box 1255 I, N.J. 07728		
518 9	006180000- 000090000- 00000	COLUMBU AVE	S JENKINS, FREDERICK & PAMELA G	CHAPHAGEN I	NEDTT NE NE	07753							.ew, Notice of	f property a	djacent to a State
619 10	006180000- 000100000- 00000	1815 COLUMBU AVE	J.	WAY	NEPTUNE, NJ	07753					ll be giver	to:	ent of Transpo		
618 11	1335- 006180000- 000170000- 00000	16 OAKST	GREEN, KERRY L & EMILY	407 WESTWOO PLACE	P neptune, nj	07793						C/o Commis P	sioner of Tran O. Box 600 ton, N.J. 986	nsportation	
618 12	1335- 006180000- 000120000-	1920 BANG AVE		L 1920 BANGS AVENUE	NEPTUNE, NJ	07753							ar application	which inv	olves more than 150 a
619 1	00000 1335- 006190000- 000010000-		e rojas, irma	703 MONROE AVENUE	ASBURY PARK NJ	07712									tice must be sent to:
	000010000- 00000 - 1335- 006190000-		LIPSCOMB, M. C. &	1817 COLUMBU	. Berlingen	19190			JH WI	parto		Ocean Grove C		Associatio	
619 2	000020000- 00000 1335-	AVE	dige	AVE	THE TONE, N	07753						54 i	Piuman Avenu P.O. Box 248	ie	
	006290000-	COLUMBU	S LILLARD, EDWARD &	1819 COLUMBI	US NEPTUNE, NJ	07753						Ocean	Grove, N.J. 0	7756	



LOCATION MAP

PLANS PREPARED BY:

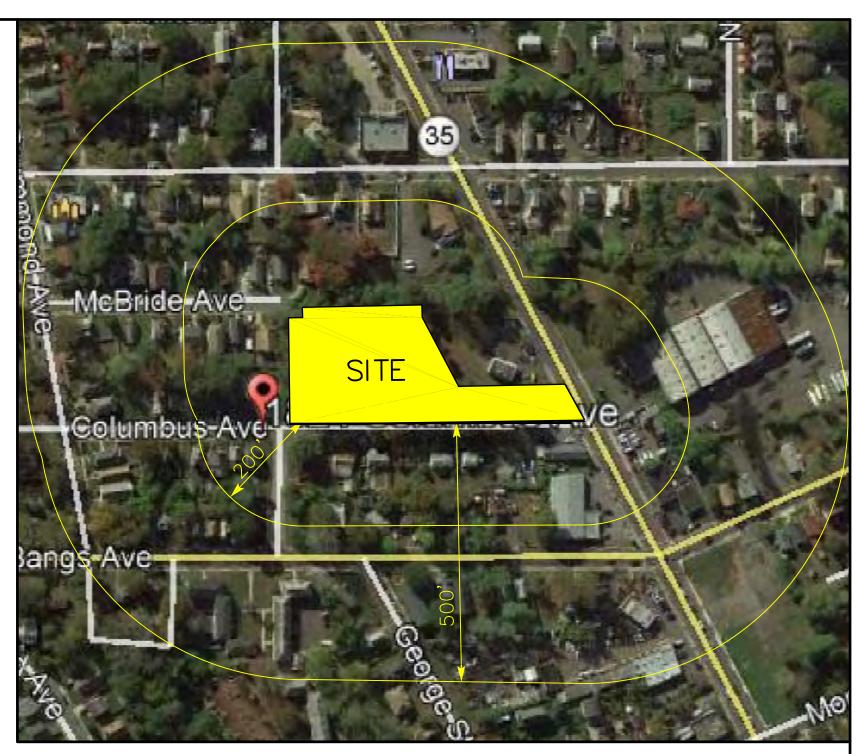
LANDMARK SURVEYING AND ENGINEERING, INC.

813 Main Street - Avon by the Sea, NJ 07717 Phone: (732) 775-8558 - Fax: (732) 775-7848 Email: LANDMARKSE@OPTOMUM.NET



CALL BEFORE YOU DIG

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ALL ATTACHEMENTS AND THAT, BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING AND PREPARING THE INFORMATION, I BELIEVE THAT THE INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR KNOWINGLY SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF A FINE AND IMPRISONMENT.



AERIAL MAP

SCALE 1"=200'

OWNER UNDER CONTRACT/APPLICANT FRANK MUCCHIELLO 432 HIGHWAY 35 103 JOHNSON AVE NEPTUNE, NEW JERSEY 07753 BLOOMFIELD, NEW JERSEY 07003 AM THE OWNER UNDER CONTRACT OF THE PROPERTY AS DESIGNATED AND AM THE OWNER UNDER CONTRACT OF THE PROPERTY AS DESIGNATED AND SHOWN HEREON AND HEREBY CONSENT TO THE FILING OF THIS PLAN WITH SHOWN HEREON AND HEREBY CONSENT TO THE FILING OF THIS PLAN WITH THE BOARD OF THETOWNSHIP OF NEPTUNE THE BOARD OF THETOWNSHIP OF NEPTUNI I AM THE APPLICANT FOR THE PROPERTY AS DESIGNATED AND SHOWN HEREON AND HEREBY CONSENT TO THE FILING NOTARY PUBLIC NOTARY PUBLIC

SHEET INDEX							
SHEET #	DESCRIPTION	DATE	REVISION DATE				
1 of 12	COVER SHEET	09/01/18	01/25/21				
2 of 12	SUBDIVISION PLAN	09/01/18	01/5/21				
3 of 12	GRADING & UTILITY	09/01/18	01/25/21				
4 of 12	DRAINAGE MAPS	09/01/18	01/25/21				
5 of 12	DETAILS	09/01/18	01/25/21				
6 of 12	SOIL EROSION & SEDIMENT CONTROL PLAN	09/01/18	01/25/21				
7 of 12	SOIL EROSION & SEDIMENT CONTROL DETAILS	09/01/18	01/25/21				
8 of 12	SOIL EROSION & SEDIMENT CONTROL NOTES	09/01/18	01/25/21				
9 of 12	LANDSCAPE PLAN	09/01/18	01/25/21				
10 of 12	LANDSCAPE DETAILS	09/01/18	01/25/21				
11 of 12	LOT CONSOLIDATION PLAN	09/01/18	01/5/21				
12 of 12	SURVEY OF PROPERTY	05/26/18	01/5/21				

APPROVED BY THE TOWNSHIP OF NEPTUNE BOARD OF ADJUSTMEN

BOARD CHAIRMAN BOARD SECRETARY **BOARD ENGINEER**

REVISED AS PER ENGINEERS REVIEW LETTERS DATED 12/11/20 & 01/04/21 REVISED AS PER ENGINEERS REVIEW LETTER DATED APRIL 2, 2020 REVISE SHEET INDEX **COVER SHEET FOR**

THE BEST SUBDIVISION

OWNER UNDER CONTRACT/APPLICANT DARRYL JACKSON

432 HIGHWAY 35 NEPTUNE, NEW JERSEY 07753 908-489-9133

OWNER FRANK MUCCHIELLO 103 JOHNSON AVE BLOOMFIELD, NEW JERSEY 07003

USE VARIANCE, SITE PLAN AND SUBDIVISION APPL.

824 COLUMBUS AVE. aka 432 HIGHWAY 35 LOT 39, BLOCK 617 in TOWNSHIP OF NEPTUNE on T.M. SHEET #6 DATED 12/2013, REVISED 11/2014 MONMOUTH COUNTY **NEW JERSEY**

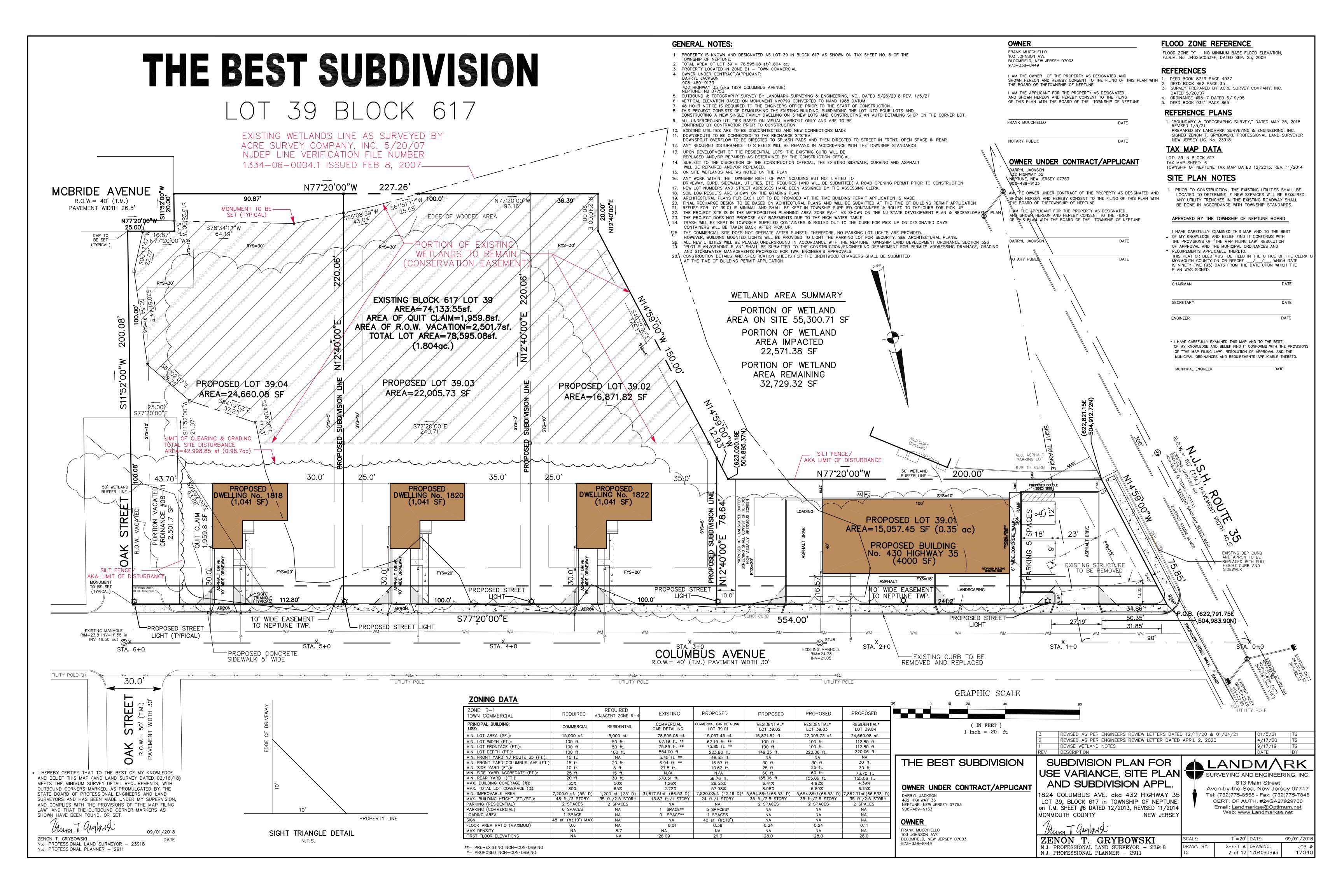
DANIEL W. CARUSO, P.E. N.J. PROFESSIONAL ENGINEER - GE35687 Avon-by-the-Sea, New Jersey 07717 Tel: (732)775-8558 - Fax: (732)775-7848 CERT. OF AUTH. #24GA27929700 Email: Landmarkse@Optimum.net

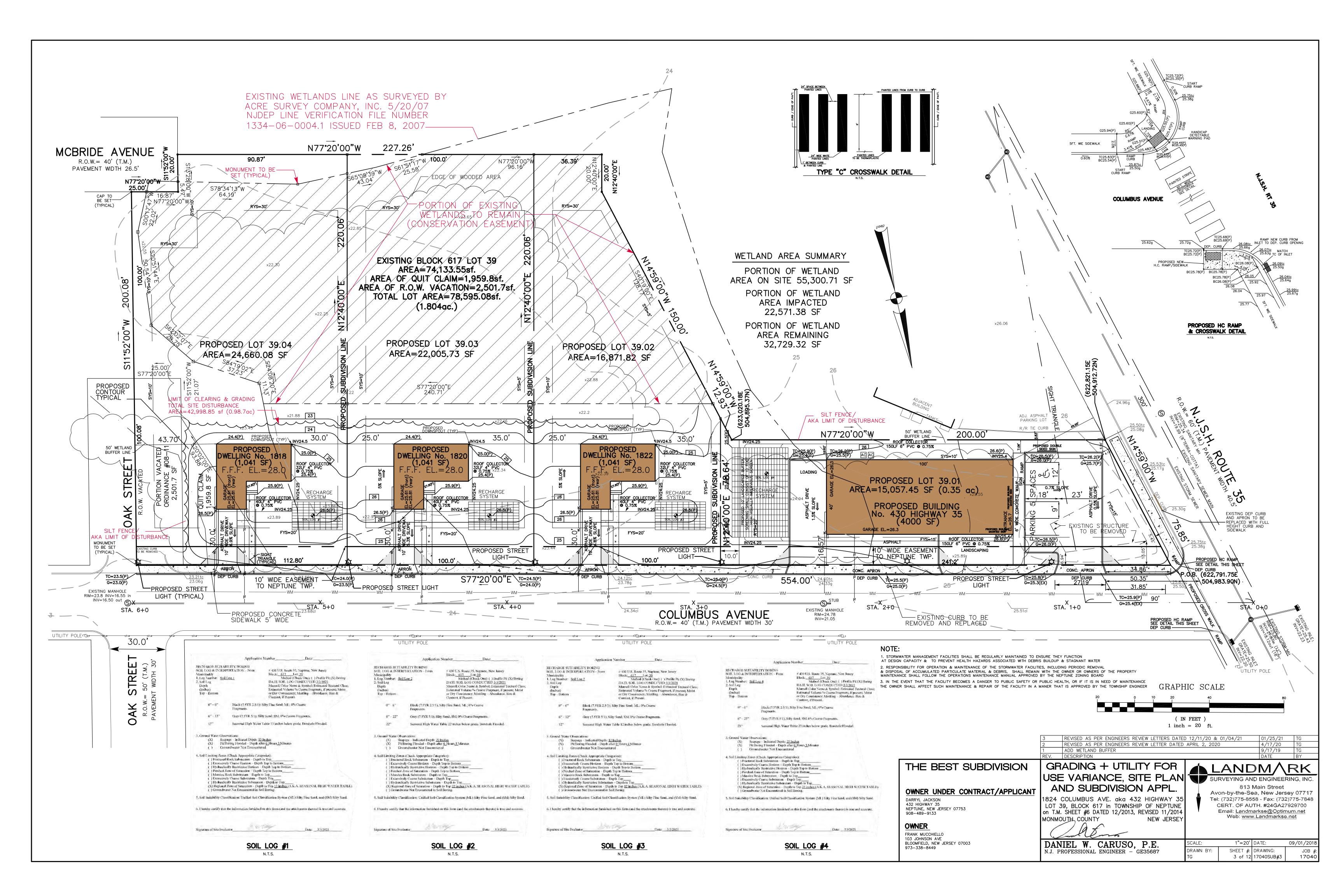
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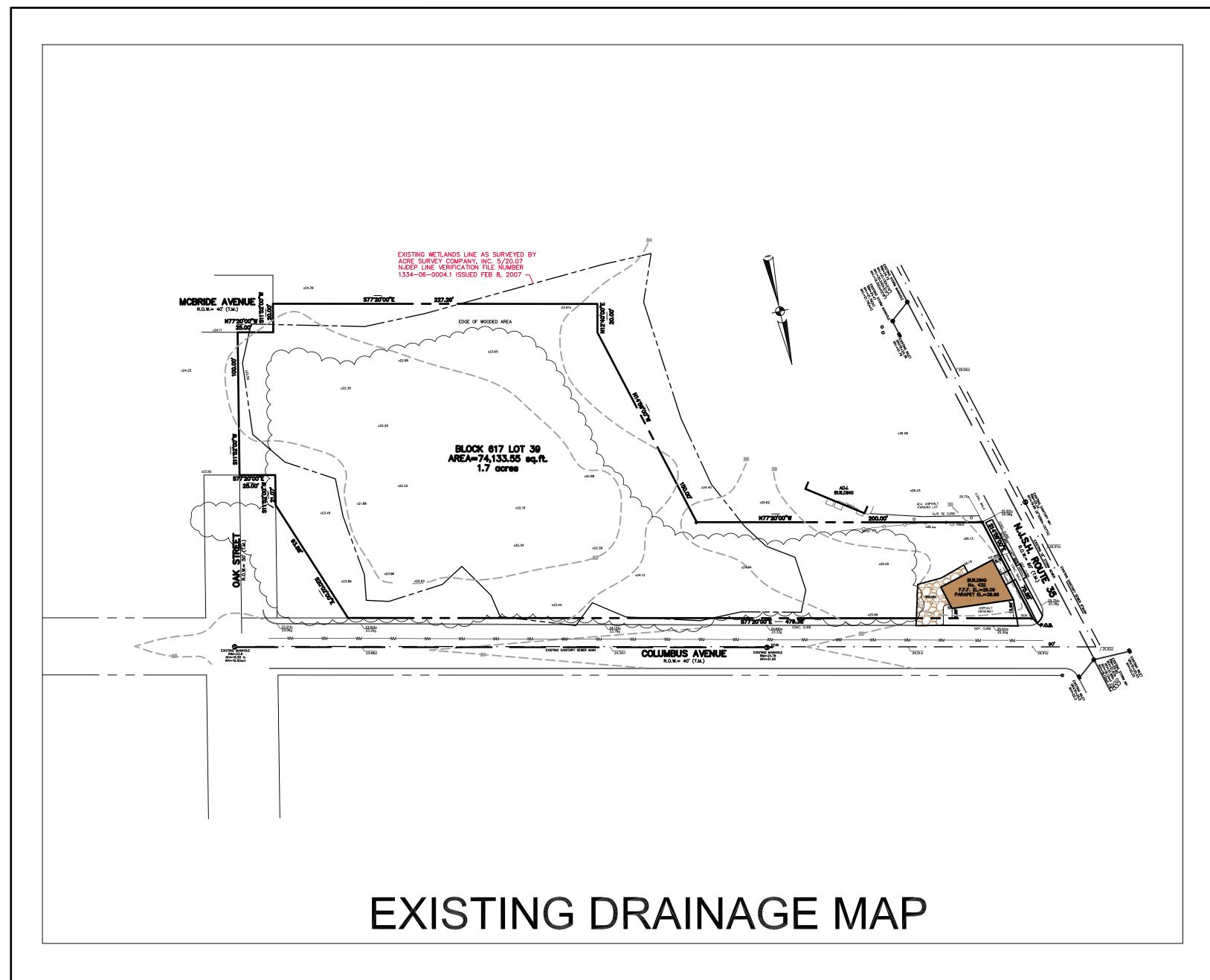
SHEET #: DRAWING: 1 of 12 17040SUB#3

17040

Web: www.Landmarkse.net

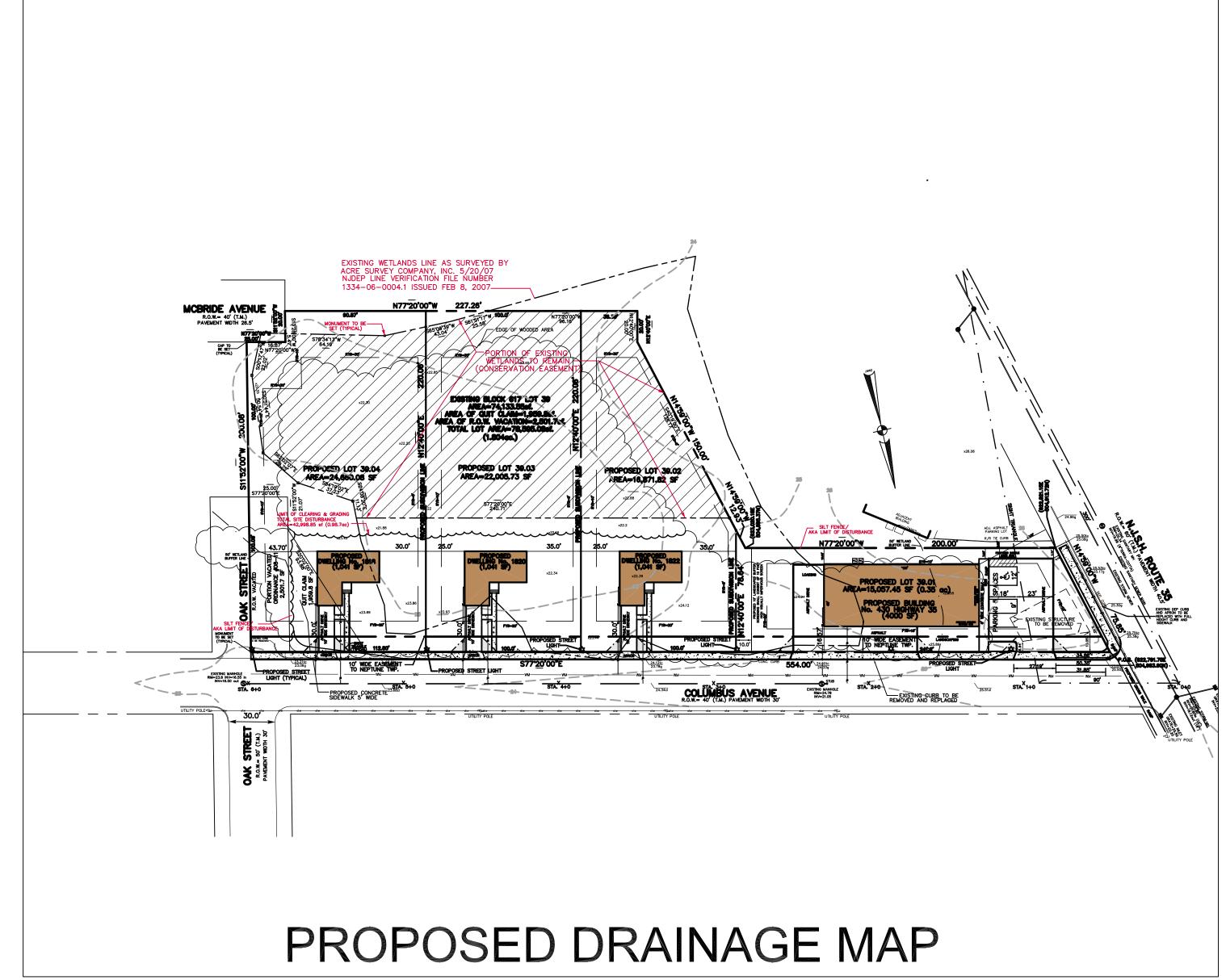






EXISTING DRAINAGE CONDITONS (SOILS GROUP EWB-EVESBORO GROUP "A")

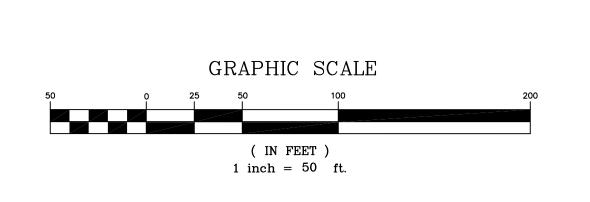
	SURFACE	AREA (SF.)	AREA (AC.)	CN
[_AWN AREA	5,883.90	0.13	61
	BUILDING	991.22	0.02	98
	DRIVEWAY/ WALKWAY	1,941.91	0.04	98
	WOODED	35,031.95	0.80	30
	TOTAL	43,848.98	1.01	



PROPOSED DRAINAGE CONDITONS (SOILS GROUP EWB-EVESBORO GROUP "A")

SURFACE	AREA (SF.)	AREA (AC.)	CN
LAWN AREA	27,333.08	0.63	61
BUILDING	7,246.00	0.17	98
RESIDENTIAL DRIVE & WLAK	4,205.96	0.10	98
WOODED	0	0	30
COMMERCIAL DRIVE & WLAK	5,063.94	0.12	76

43,848.98



THE BEST SUBDIVISION

OWNER UNDER CONTRACT/APPLICANT

DARRYL JACKSON 432 HIGHWAY 35 NEPTUNE, NEW JERSEY 07753 908-489-9133

FRANK MUCCHIELLO 103 JOHNSON AVE BLOOMFIELD, NEW JERSEY 07003 973–338–8449

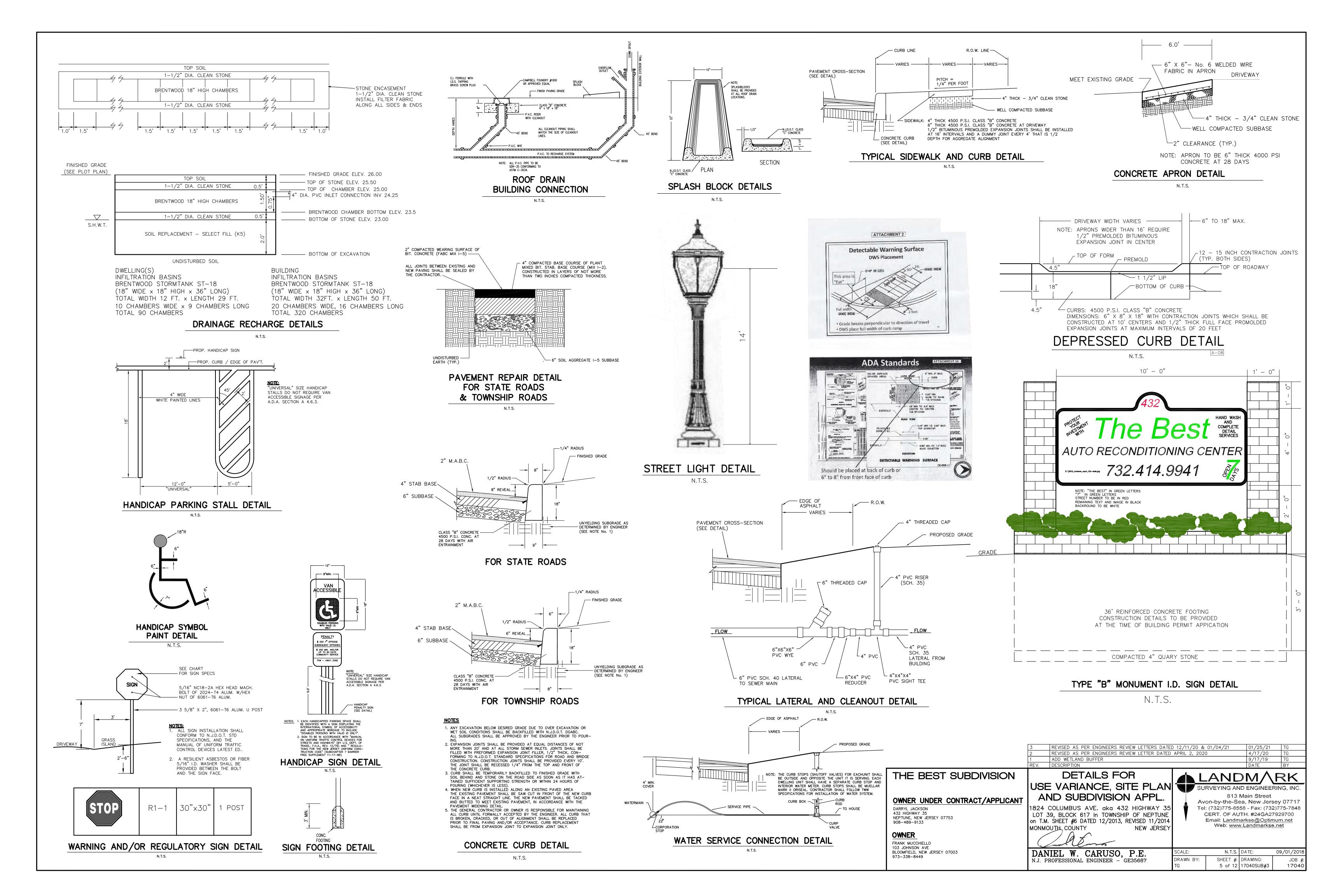
REVISED AS PER ENGINEERS REVIEW LETTERS DATED 12/11/20 & 01/04/21 REVISED AS PER ENGINEERS REVIEW LETTER DATED APRIL 2, 2020 ADD WELAND BUFFER REV. DESCRIPTION DRAINAGE MAPS FOR USE VARIANCE, SITE PLAN SURVEYING AND ENGINEERING, INC. AND SUBDIVISION APPL.

1824 COLUMBUS AVE. aka 432 HIGHWAY 35 LOT 39, BLOCK 617 in TOWNSHIP OF NEPTUNE on T.M. SHEET #6 DATED 12/2013, REVISED 11/2014 MONMOUTH, COUNTY NEW JERSEY

813 Main Street
Avon-by-the-Sea, New Jersey 07717
Tel: (732)775-8558 - Fax: (732)775-7848
CERT. OF AUTH. #24GA27929700
Email: Landmarkse@Optimum.net
Web: www.Landmarkse.net

DANIEL W. CARUSO, P.E. N.J. PROFESSIONAL ENGINEER - GE35687

1"=50' DATE: 09/01/2018 SHEET #: DRAWING: 4 of 12 17040SUB#3 JOB #: **17040** DRAWN BY:



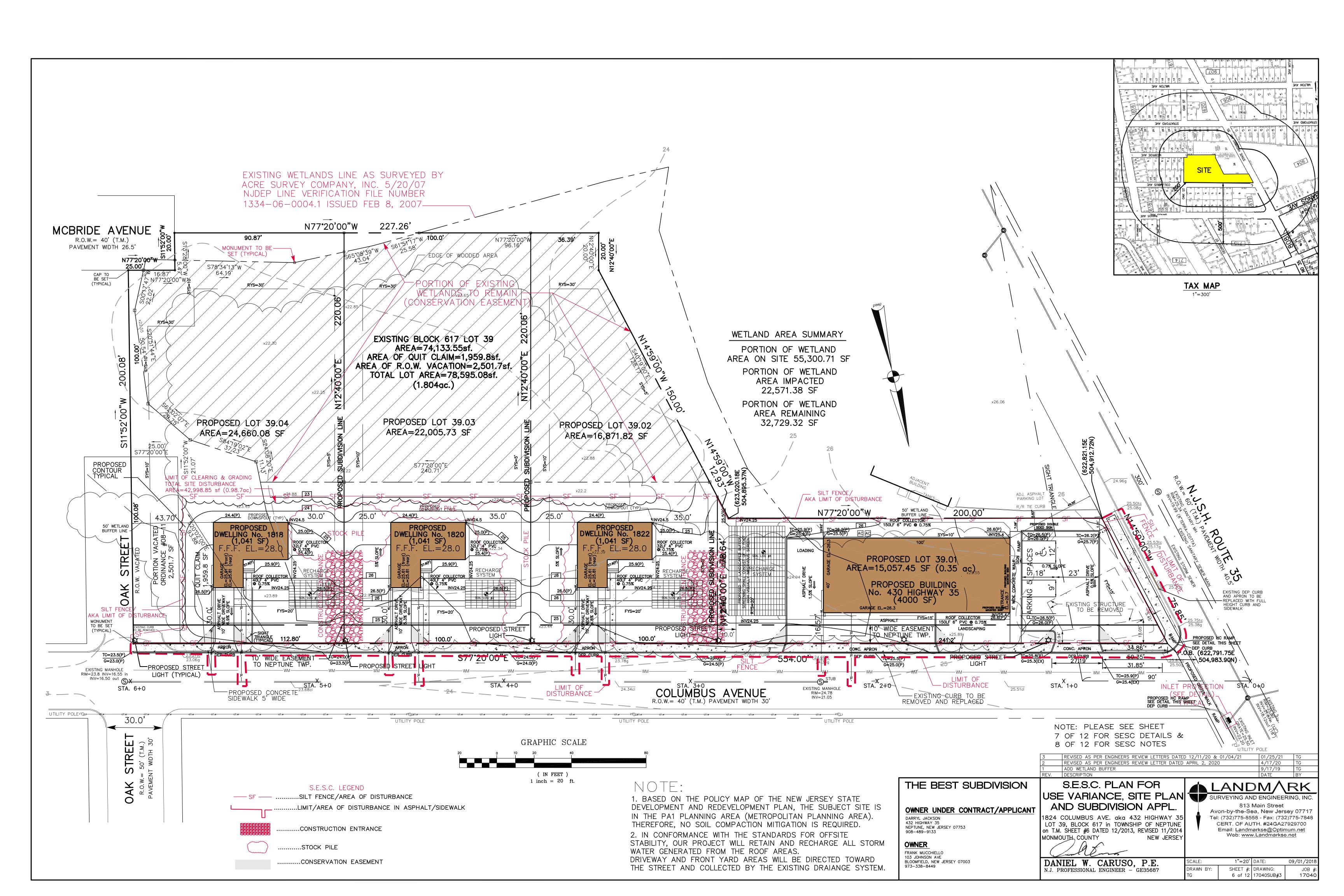
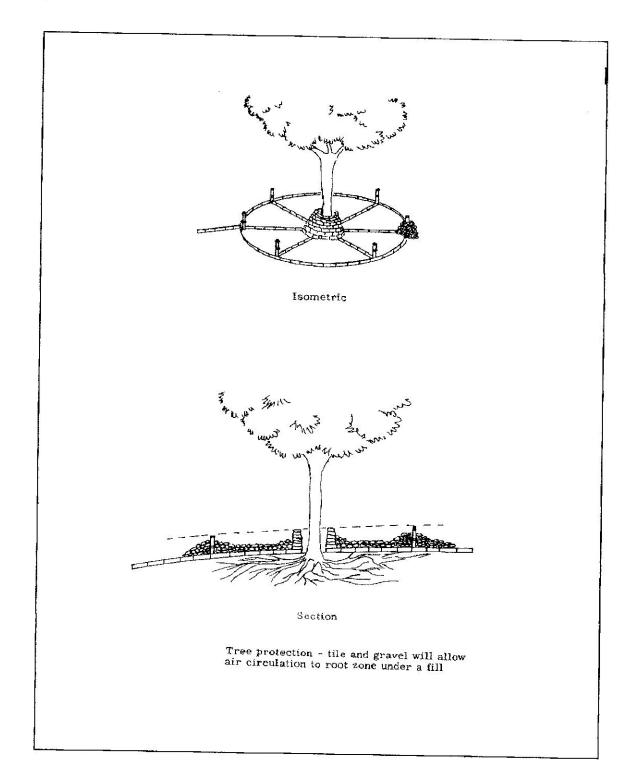


Figure 9-4: Tree Protection in Fill Areas



Standards for Soil Erosion and Sediment Control in New Jersey

Figure 9-3: Root Protection During Construction Guide

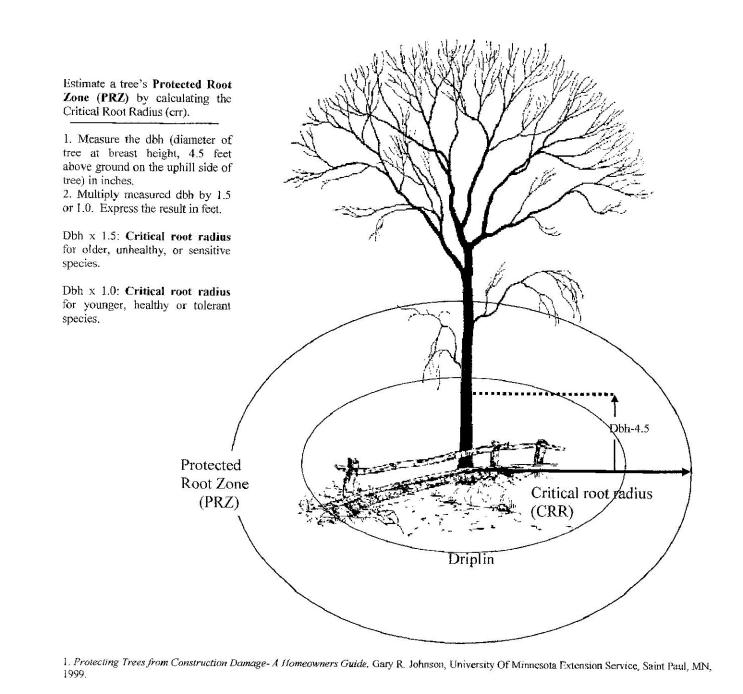
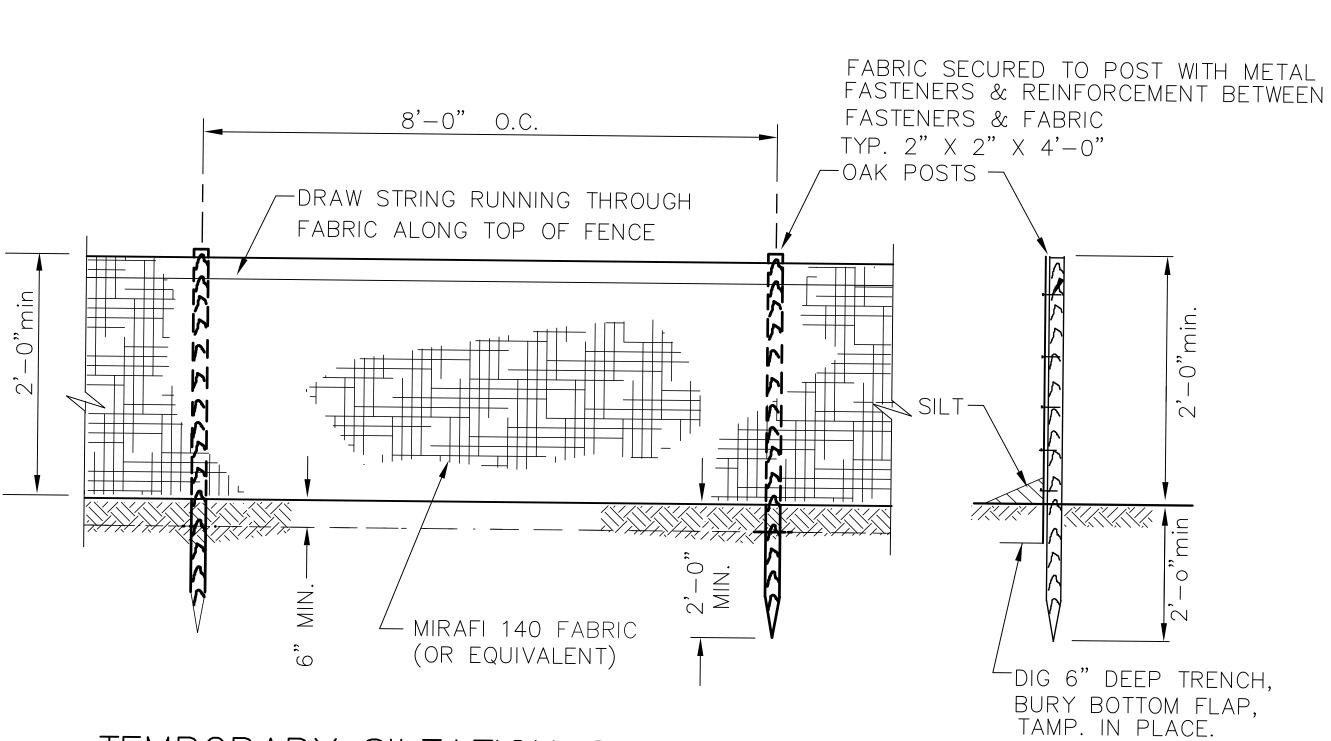


Table 29-1: Lengths of Construction Exits on Sloping Roadbeds

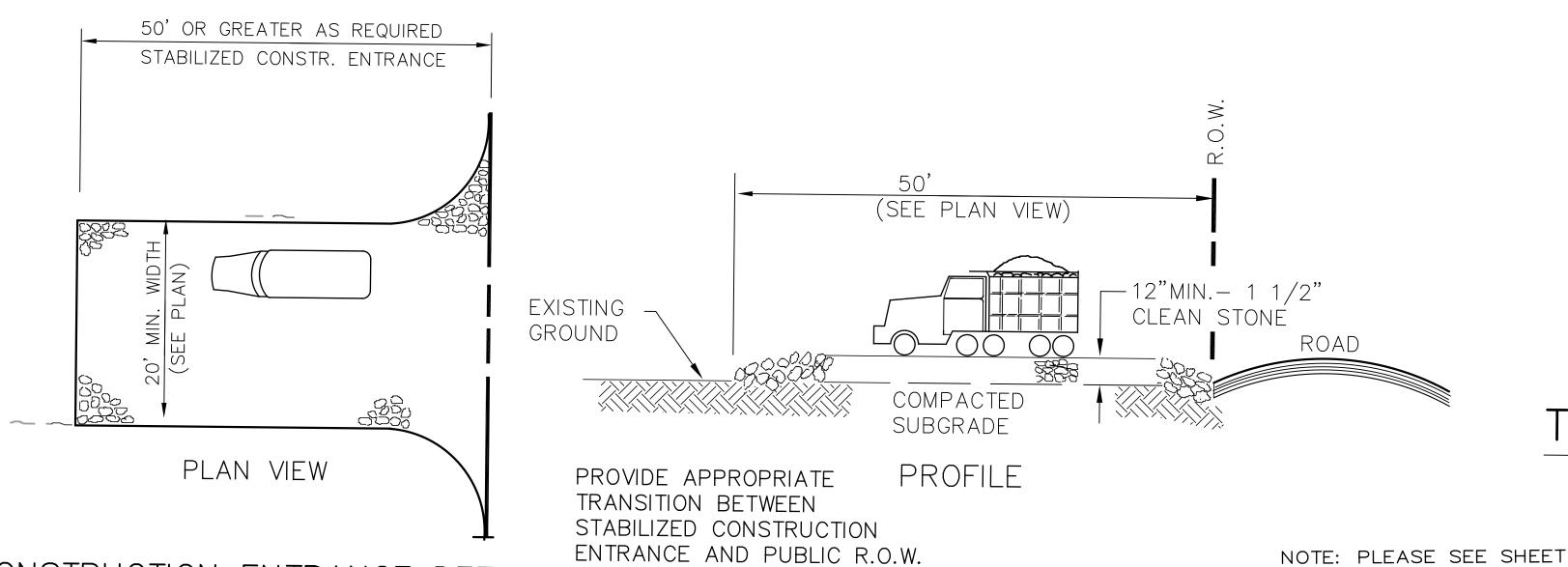
Percent Slope of Roadway	Length of Stone Required				
	Coarse Grained Soils	Fine Grained Soils			
0 to 2%	50 ft	100 ft			
2 to 5%	100 ft	200 ft			
>5%	Entire surface stabilized	with FABC base course ¹			

1. As prescribed by local ordinance or other governing authority

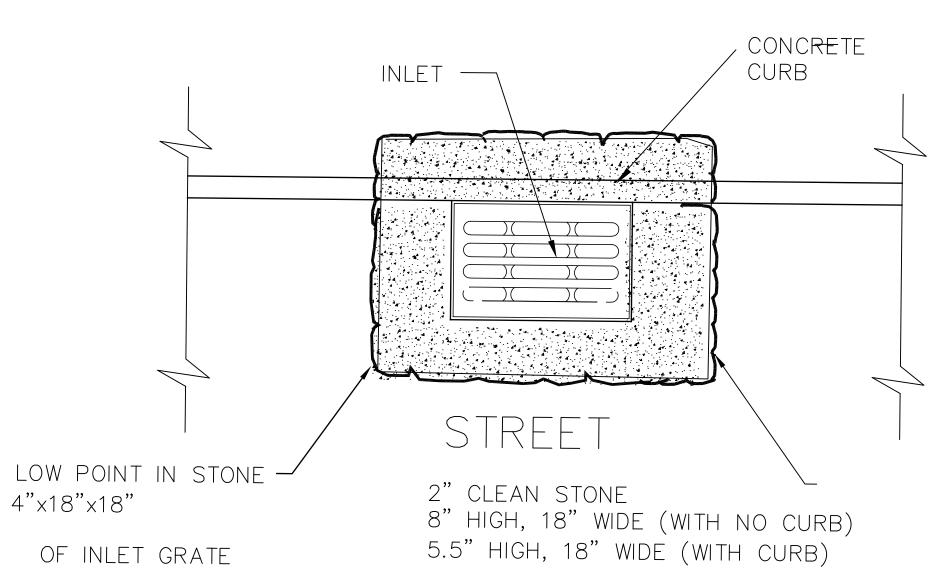


TEMPORARY SILTATION CONTROL FENCE

NOTE: ALL SILT FENCE WILL BE INSPECTED AND REMEDIAL MAINTENANCE PERFORMED BY THE CONTRACTOR

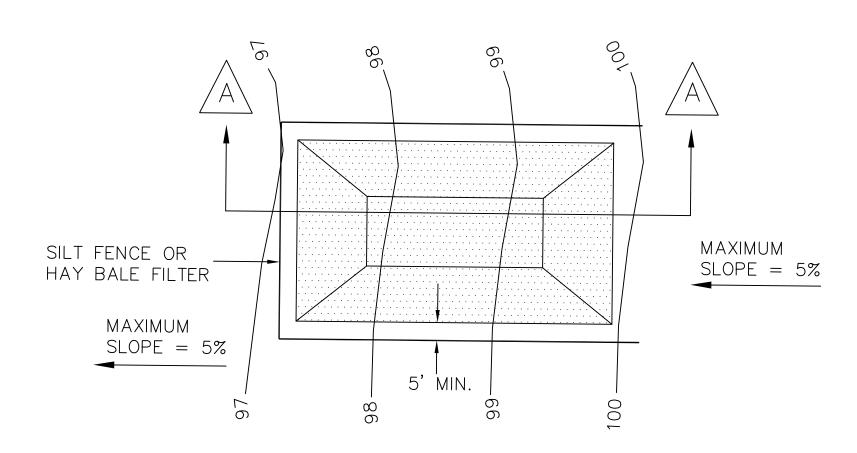


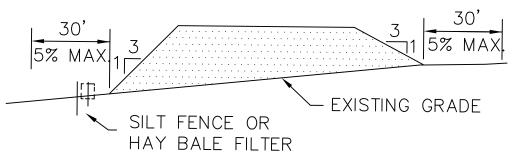
CONSTRUCTION ENTRANCE DETAIL



INLET PROTECTION DETAIL

N.T.S.





NOTES:

- 1. PLACE STOCKPILES AT LOCATIONS AS SHOWN ON THE SOIL EROSION ANS SEDIMENT CONTROL PLAN.
- 2. ALL SIDE SLOPES SHALL BE 3 TO 1 OR FLATTER.
- 3. STOCKPILE SHALL RECEIVE A VEGETATIVE COVER IN ACCORDANCE WITH MINIMUM STABILIZATION REQUIREMENTS.
- 4. SILT FENCE OR HAY BALE FILTER SHALL BE INSTALLED AS DETAILED HEREON.

N.T.S.

TOPSOIL STOCKPILE DETAIL

REVISED AS PER ENGINEERS REVIEW LETTERS DATED 12/11/20 & 01/04/21
REVISED AS PER ENGINEERS REVIEW LETTER DATED APRIL 2, 2020
ADD WETLAND BUFFER

THE BEST SUBDIVISION

OWNER UNDER CONTRACT/APPLICAN DARRYL JACKSON 432 HIGHWAY 35

6 OF 12 FOR SESC PLAN & 8 OF 12 FOR SESC NOTES

OWNER

908-489-9133

FRANK MUCCHIELLO
103 JOHNSON AVE
BLOOMFIELD, NEW JERSEY 07003
973-338-8449

NEPTUNE, NEW JERSEY 07753

S.E.S.C. DETAILS FOR USE VARIANCE, SITE PLAN SURVEYING AND ENGINEERING, INC. AND SUBDIVISION APPL

1824 COLUMBUS AVE. aka 432 HIGHWAY 35 LOT 39, BLOCK 617 in TOWNSHIP OF NEPTUNE on T.M. SHEET #6 DATED 12/2013, REVISED 11/2014 MONMOUTH, COUNTY **NEW JERSEY** 813 Main Street Avon-by-the-Sea, New Jersey 07717 Tel: (732)775-8558 - Fax: (732)775-7848 CERT. OF AUTH. #24GA27929700 Email: <u>Landmarkse@Optimum.net</u> Web: <u>www.Landmarkse.net</u>

DANIEL W. CARUSO, P.E.

N.T.S. DATE:

SHEET #: DRAWING: 7 of 12 17040SUB#3

09/01/2018 JOB #

STANDARD FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION

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

COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING.

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

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

A. PRIOR TO APPLYING LIME, SOIL SHALL BE TESTED AND LIME RATE ADJUSTED ACCORDINGLY UNIFORMLY APPLY GROUND LIMESTONE AND FERTILIZER IN TOPSOIL WHICH HAS BEEN SPREAD AND FIRMED. ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS COOPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES http://njaes.rutgers.edu/county/). FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-10-10 OR FQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN

UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4 INCHES. IF FERTILIZER IS NOT INCORPORATED, APPLY ONE—HALF THE RATE DESCRIBED ABOVE DURING SEEDBED PREPARATION AND REPEA ANOTHER ONE-HALF RATE APPLICATIONN OF THE SAME FERTILIZER WITHIN 3 TO 5 WEEKS AFTER SEEDING B. WORK LIME AND FERTILIZER INTO THE TOPSOIL AS NEARLY PRACTICAL TO DEPTH OF 4 INCHES WITH A

SC SPRING—TOOTH HARROW OR OTHER SUITABLE FOLIPMENT. THE FINAL HARROWING OR DISKING OPERATION. SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.

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

A. SELECT A MIXTURE FROM TABLE 4-3 OR USE A MIXTURE RECOMMENDED BY RUTGERS COOPERATIVE EXTENSION OR NATURAL RESOURCES CONSERVATION SERVICE WHICH IS APPROVED BY THE SOIL CONSERVATION DISTRICT. SEED GERMINATION SHALL HAVE BEEN TESTED WITHIN 12 MONTHS OF THE PLANTING DATE. NO SEED SHALL BE ACCEPTED WITH A GERMINATION TEST DATE MORE THAN 12 MONTHS OLD LINLESS RETESTED.

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

2. WARM-SEASON MIXTURES ARE GRASSES AND LEGUMES WHICH MAXIMIZE GROWTH AT HIGH TEMPERATURES. GENERALLY 85° F AND ABOVE. SEE TABLE 4-3 MIXTURES 1 TO 7. PLANTING RATES FOR WARM-SEASON GRASSES SHALL BE THE AMOUNT OF PURE LIVE SEED (PLS) AS DETERMINED BY GERMINATION TESTING RESULTS. 3. COOL-SEASON MIXTURES ARE GRASSES AND LEGUMES WHICH MAXIMIZE GROWTH AT TEMPERATURES BELOW

85° F. MANY GRASSES BECOME ACTIVE AT 65° F. SEE TABLE 4-3 MIXTURES 8-20. ADJUSTMENT OF PLANTING

RATES TO COMPENSATE FOR THE AMOUNT OF PLS IS NOT REQUIRED FOR COOL SEASON GRASSES.

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

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

D. HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK, OR TRAILER-MOUNTED TANK, WITH AN AGITATION SYSTEM AND A HYDRAULIC PUMP FOR MIXING SEED. WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT-FIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. (ALSO SEE SECTION 4-MULCHING BELOW). HYDROSEFDING IS NOT A PREFERRED SEFDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. WHEN POOR SEED TO SOIL CONTACT OCCURS, THERE IS A REDUCED SEED GERMINATION AND GROWTH.

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

NULUTING N. STRAW OR HAY. UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, TO BE APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,00 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.

APPLICATION-SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT AT LEAST 85% OF THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.

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

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

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

3. CRIMPER (MULCH ANCHORING COULTER TOOL) - A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR SLOPES. STRAW MULCH RATE

MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED. 4. LIQUID MULCH-BINDERS - MAY BE USED TO ANCHOR SALT HAY, HAY OR STRAW MULCH.

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

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

(2) SYNTHETIC RINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIRLE WITH WATER WHEN DILLUTED AND FOLLOW APPLICATION OF MULCH, DRYING AND CURING, SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. BINDER SH

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

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

CO-POLYMERS, TACKIFIERS, FERTILIZERS, AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO A SEEDED AREA AND WATERED, FORM A MULCH MAT. PELLETIZED MULCH SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60 - 75 LBS/1.000 SQUARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL HAS BEEN FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS, SEEDED AREAS WHERE WEED-SEED FREE MULCH IS DESIRED. OR ON SITES WHERE STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIRABLE, APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZED MULCH ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL

C. PELLETIZED MULCH — COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT. WHICH MAY CONTAIN

. IRRIGATION (WHERE FEASIBLE)

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

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

. ESTABLISHING PERMANENT VEGETATIVE STABILIZATION

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

STANDARD SOIL EROSION AND SEDIMENT CONTROL NORES

SEDIMENT CONTROL STANDARDS.

ANCHOR, IN ACCORDANCE WITH STATE STANDARDS.

1. THE FREEHOLD SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY SOIL DISTURBING ACTIVITY.

2. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED. 3. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLANS WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT STATE SOIL EROSION AND

4 N.I.S.A. 4:24-39 FT SEO REQUIRES THAT NO CERTIFICATES OF OCCUPANCY RE ISSUED BEFORE THE DISTRICT DETERMINES THAT A PROJECT OR PORTION THEREOF IS IN FULL COMPLIANCE WITH THE CERTIFIED PLAN AND STANDARDS FOR SOIL FROSION AND SEDIMENT CONTROL IN NEW JERSEY AND A REPORT OF COMPLIANCE HAS BEEN ISSUED. UPON WRITTEN REQUEST FROM THE APPLICANT. THE DISTRICT MAY ISSUE A REPORT OF COMPLIANCE WITH CONDITIONS ON A LOT-BY-LOT OR SECTION-BY-SECTION BASIS, PROVIDED THAT THE PROJECT OR PORTION THEREOF IS IN SATISFACTORY COMPLIANCE WITH THE SEQUENCE OF DEVELOPMENT AND TEMPORARY MEASURES FOR SOIL EROSION AND SEDIMENT CONTROL HAVE REEN IMPLEMENTED. INCLUDING PROVISIONS FOR STABILIZATION AND SITE WORK

5. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN SIXTY (60) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF 2 TO 2 1/2 TONS PER ACRE, ACCORDING TO THE STANDARD FOR STABILIZATION WITH MULCH ONLY.

6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. SOIL STOCKPILES. STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AND A MULCH

7. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS TO STABILIZE STREETS, ROADS, DRIVEWAYS, AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN FIFTEEN (15) DAYS OF PRELIMINARY GRADING.

8. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A PAD OF CLEAN CRUSHED STONE AT POINTS WHERE TRAFFIC WILL BE ACCESSING THE CONSTRUCTION SITE. AFTER INTERIOR ROADWAYS ARE PAVED, INDIVIDUAL LOTS REQUIRE A STABILIZED CONSTRUCTION ACCESS CONSISTING OF ONE INCH TO TWO INCH (1"-2") STONE FOR A MINIMUM LENGTH OF TEN FEET (10') EQUAL TO THE LOT ENTRANCE WIDTH. ALL OTHER ACCESS POINTS SHALL BE BLOCKED OFF.

9. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAYS WILL BE REMOVED IMMEDIATELY. 10. PERMANENT VEGETATION IS TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING.

11. AT THE TIME THAT SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS 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 IT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE

12. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A pH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS/ACRE, (OR 450 LBS/1,000 SQ FT OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12" OF SETTLED SOIL WITH A PH OF 5 OR MORE, OR 24" WHERE

TREES OR SHRUBS ARE TO BE PLANTED. 13. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.

14. UNFILTERED DEWATERING IS NOT PERMITTED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH THE STANDARD FOR DEWATERING.

15. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET. TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED AS REQUIRED BY THE STANDARD FOR DUST CONTROL.

16. STOCKPILE AND STAGING LOCATIONS ESTABLISHED IN THE FIELD SHALL BE PLACED WITHIN THE LIMIT OF DISTURBANCE ACCORDING TO THE CERTIFIED PLAN. STAGING AND STOCKPILES NOT LOCATED WITHIN THE LIMIT OF DISTURBANCE WILL REQUIRE CERTIFICATION OF A REVISED SOIL FROSION AND SEDIMENT CONTROL PLAN. CERTIFICATION OF A NEW SOIL FROSION AND SEDIMENT CONTROL PLAN MAY BE REQUIRED FOR THESE ACTIVITIES IF AN AREA GREATER THAN 5,000 SQUARE FEET IS DISTURBED.

17. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH SOIL EROSION AND SEDIMENT CONTROL NOTE # 6.

18. THE PROPERTY OWNER (UNDER CONTRACT), DARRYL JACKSON, SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.

TABLE 4-3 FOOTNOTES:

1. SEE APPENDIX B FOR DESCRIPTIONS OF TURE GRASS MIXTURES AND CUITIVARS. THE ACTUAL AMOUNT OF WARM-SEASON GRASS MIXTURE USED IN TABLE 3 (SEED MIX 1-7) SHALL BE ADJUSTED TO REFLECT THE AMOUNT OF PLS AS DETERMINED BY GERMINATION TESTING RESULTS. NO ADJUSTMENT IS REQUIRED FOR COOL SEASON GRASSES

2. SEEDING MIXTURES AND/OR RATES NOT LISTED ABOVE MAY BE USED IF RECOMMENDED BY THE LOCAL SOIL CONSERVATION DISTRICT, NATURAL RESOURCES CONSERVATION SERVICE: RECOMMENDATIONS OF RUTGERS COOPERATIVE EXTENSION MAY BE USED IF APPROVED BY THE SOIL CONSERVATION DISTRICT. LEGUMES (WHITE CLOVER, FLATPEA, LESPEDEZA) SHOULD BE MIXED WITH PROPER INNOCULANT PRIOR TO PLANTING.

3. SEEDING RATES SPECIFIED ARE REQUIRED WHEN A REPORT OF COMPLIANCE IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT OF PERMANENT VEGETATION. UP TO 50% REDUCTION IN RATES MAY BE USED WHEN PERMANENT VEGETATION IS ESTABLISHED PRIOR TO A REPORT OF COMPLIANCE INSPECTION. THESE RATES APPLY TO ALL METHODS OF SEEDING. ESTABLISHING PERMANENT VEGETATION MEANS 80% VEGETATIVE COVERAGE OF THE SEEDED AREA AND MOWED ONCE, GRASS SEED MIXTURE CHECKED BY THE STATE SEED ANALYST, NEW JERSEY DEPARTMENT OF AGRICULTURE, TRENTON, NEW JERSEY, WILL ASSURE THE PURCHASER THAT THE MIXTURE OBTAINED IS THE MIXTURE ORDERED, PURSUANT TO THE N.J. STATE SEED LAW, N.J.S.A. 4:8-17.13 et. sea.

O = OPTIMAL PLANTING PERIOD A = ACCEPTABLE PLANTING PERIOD 4. MAINTENANCE LEVEL:

A. INTENSIVE MOWING, (2-4 DAYS), FERTILIZATION, LIME, PEST CONTROL AND IRRIGATION (EXAMPLES -HIGH-MAINTENANCE LAWNS, COMMERCIAL AND RECREATIONAL AREAS, PUBLIC FACILITIES). B. FREQUENT MOWING, (4-7 DAYS), OCCASIONAL FERTILIZATION, LIME AND WEED CONTROL (EXAMPLES -HOME LAWNS, COMMERCIAL SITES, SCHOOL SITES).

C. PERIODIC MOWING (7-14 DAYS), OCCASIONAL FERTILIZATION AND LIME (EXAMPLES - HOME LAWNS, PARKS). D. INFREQUENT OR NO MOWING. FERTILIZATION AND LIME THE FIRST YEAR OF ESTABLISHMENT (EXAMPLES - ROADSIDES, RECREATION AREAS, PUBLIC OPEN SPACES).

5. SUMMER SEFDINGS SHOULD ONLY BE CONDUCTED WHEN THE SITE IS IRRIGATED. MIXES INCLUDING WHITE CLOVER REQUIRE THAT AT LEAST SIX WEEKS OF GROWING SEASON REMAIN AFTER SEEDING TO ENSURE ESTABLISHMENT BEFORE FREEZING CONDITIONS.

PERMANENT VEGETATIVE MIXTURES, PLANTING RATES AND PLANTING DATES SEED MIXTURE PLANTING DATES PI ANTING RFMARKS RATES 0 = Optimal Planting period A = Acceptable Planting period PLANT HARDINESS ZONES (see Figure 4-1) Zone 5b, 6a Zone 6b Zone 7a, 7b COOL SEASON maintenance mixture. SEED MIXTURES B-D Fine Fescue (Blend) White clover can be Hard Fescue removed when used to establish lawns. Chewings fescue Strong Creeping Red Fescue Kentucky bluegrass Perennial ryegrass plus White clover (see note

IMPLEMENTATION OF SOIL EROSION & SEDIMENT CONTROL MEASURES

CONSTRUCTION SCHEDULE PHASE ONE: COMMERCIAL 1. TEMPORARY SILT FENCE AND CONSTRUCTION ENTRANCE TO BE INSTALLED

- PRIOR TO DEMOLITION, TWO (2) DAY DURATION. 2. DEMOLISH AND REMOVE BUILDING. ASPHALT AND WALKS
- ALL EXPOSED SURFACES SHALL BE STABILIZED AS DEFINED IN S.E. & S.C. NOTES 2 AND 3. (THREE DAY DURATION)
- 3. BEGIN CONSTRUCTION OF COMMERCIAL STRUCTURE, DRIVEWAYS, CURBS AND SIDEWALKS (6 MONTH DURATION) 4. GRADE SITE. FIVE (5) DAY DURATION
- 5. GRADE AND SEED SITE. REMOVE CONSTRUCTION ENTRANC
- MAINTAIN SOIL EROSION MEASURES ONGOING FOR A MINIMUM OF THREE MONTHS.
- 6. REMOVE ACCUMULATED SEDIMENT AS REQUIRED DURING DURATION.

PHASE TWO: RESIDENTIAL . TEMPORARY SILT FENCE AND CONSTRUCTION ENTRANCE TO BE INSTALLED

- PRIOR TO SITE GRADING, TWO (2) DAY DURATION. 2. REMOVE TREES AND ROUGH GRADE SITE.
- LL EXPOSED SURFACES SHALL BE STABILIZED AS DEFINED IN S.E. & S.C. NOTES 2 AND 3. (THREE DAY DURATION)
- 3. BEGIN CONSTRUCTION OF RESIDENTIAL STRUCTURE, DRIVEWAYS, CURBS AND SIDEWALKS (9 MONTH DURATION)
- 4. GRADE SITE, FIVE (5) DAY DURATION 5. GRADE AND SEED SITE, REMOVE CONSTRUCTION ENTRANCE.
- MAINTAIN SOIL EROSION MEASURES ONGOING FOR A MINIMUM OF THREE MONTHS. 6. REMOVE ACCUMULATED SEDIMENT AS REQUIRED DURING DURATION.

Pe	Table rmanent Stabilization N	4—2 Mixtures for Various (Jses		
PLANTING MIXTURES BY SOIL DRAINAGE CLASS Application (see Table 4-3)					
		Well to Moderately Well Drained			

REMOVE SILT FENCE.

1. Refer to Soil Surveys for drainage class descriptions. . Refer to Soil Bioengeneering Standard for additional seed mixtures.

Spillways only 4. See Appendix E for description of turf grasses and cultivars.

Residential/commercial lots

STANDARD FOR PERMANENT STABILIZATION WITH SOD METHODS AND MATERIALS

- 1. HIGH QUALITY CULTIVATED SOD IS PREFERRED OVER NATIVE OR PASTURE SOD.
- 2. SOD SHOULD BE FREE OF BROADLEAF WEEDS AND UNDESIRABLE COARSE FINE WEED GRASSES.
- 3. SOD SHOULD BE OF UNIFORM THICKNESS, TYPICALLY 5/8 INCH, PLUS OR MINUS 1/4 INCH, AT TIME OF CUTTING (EXCLUDES TOP GROWTH).
- 4. 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 AND ROLLS OR TORN AND UNEVEN ENDS WILL NOT BE ACCEPTABLE.
- 5. FOR DROUGHTY SITES, A SOD OF TURF-TYPE TALL FESCUE OR TURF-TYPE TALL FESCUE MIXED WITH KENTUCKY BLUEGRASS IS PREFERRED OVER A 100% KENTUCKY BLUEGRASS SOD. ALTHOUGH NOT WIDELY AVAILABLE, A SOD OF FINE FESCUE IS ALSO ACCEPTABLE FOR DROUGHTY SITES.
- 3. ONLY MOIST. FRESH. UNHEATED SOD SHOULD BE USED. SOD SHOULD BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 24 HOURS OR LESS DURING SUMMER MONTHS.

1. SITE PREPARATION

- A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR LIMING, FERTILIZING. INCORPORATION OF ORGANIC MATTER, AND OTHER SOIL PREPARATION PROCEEDURES. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING.
- B. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 6 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES. SEE THE STANDARD FOR TOPSOILING FOR TOPSOIL AND AMENDMENT REQUIREMENTS.
- C. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.

A. PRIOR TO APPLYING LIME, SOIL SHALL BE TESTED AND LIME RATE ADJUSTED ACCORDINGLY B. UNIFORMLY APPLY GROUND LIMESTONE, AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATUIONS SUCH AS OFFERED BY RUTGERS COOPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES (http://njaes.rutgers.edu/county/). FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE ÒR 11 POUNDS PER 1,000 SQUÁRÉ FEET USING 10—10—10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4 INCHES. IF FERTILIZER IS NOT INCORPORATED, APPLY 1/2 THE RATE DESCRIBED ABOVE DURING SEEDBED PREPARATION AND REPEAT ANOTHER 1/2 RATE APPLICATION OF THE SAME FERTILIZER WITHIN 3 TO 5 WEEKS AFTER SEEDING. APPLY LIMESTONE AT THE RATE OF 2 TONS/ACRE UNLESS SOIL TESTING INDICATES OTHERWISE, CALCIUM CARBONATE IS THE EQUIVALENT AND STANDERD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES. TABLE 6-1 A GENERAL GUIDELINE FOR LIMESTONE APPLICATION RATES.

- WORK LIME AND FERTILIZER INTO TOPSOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, TOOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED.
- C. 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 D. INSPECT SITE JUST BEFORE SODDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED AND

3. SOD PLACEMENT

FIRMED IN ACCORDANCE WITH THE ABOVE.

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

B. PLACE SOD STRIPS WITH SNUG, EVEN JOINTS (SEAMS) THAT ARE STAGGERED. OPEN SPACES INVITE EROSION. C. LIGHTLY 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 TO PREVENT VOIDS WHICH WOULD

CAUSE DRYING OF THE ROOTS AND INVASION OF WEEDS. D. 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 INCH LONG BY 3/4 INCH WIDE).

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

F. IMMEDIATELY FOLLOWING INSTALLATION, SOD SHOULD BE WATERED UNTIL WATER PENETRATES THE SOIL LAYER BENEATH SOD TO A DEPTH OF 1 INCH. MAINTAIN OPTIMUM WATER FOR AT LEAST TWO WEEKS.

4 TOPDRESSING — SINCE SOIL ORGANIC MATTER AND SLOW RELEASE NITROGEN FERTILIZER (WATER INSOLUBLE) ARE PRESCRIBED IN SECTIONS 1 AND 2 IN THIS STANDARD, A FOLLOW-UP TOPDRESSING IS NOT MANDATORY, EXCEP WHERE GROSS NITROGEN DEFICIENCY EXISTS IN THE SOIL TO THE EXTENT THAT TURF FAILURE MAY DEVELOP, TOPDRESSING SHALL THEN BE APPLIED, TOPDRESS WITH 10-10-10 OR FOLIVALENT AT 400 POLINDS PER ACRE OR 7 POUNDS PER 1.000 SQUARE FEET EVERY 3 TO 5 WEEKS UNTIL THE GROSS NITROGEN DEFICIENCY IN THE TURF IS

TEMPORARY VEGETATIVE STABILIZATION GRASSES SEEDING RATES DATES AND DEPTH

COOL SEASON GRASSES

1. SEEDING RATE FOR WARM SEASON GRASS. SELECTIONS 5 - 7 SHALL BE ADJUSTED TO REFLECT THE AMOUNT OF PURE LINE SEED (PLS) AS DETERMINED BY A GERMINATION TEST RESULT. NO ADJUSTMENT IS

2. MAY BE PLANTED THROUGHOUT SUMMER IF SOIL MOISTURE IS ADEQUATE OR SEEDED AREA CAN BE IRRIGATED.

SFFDING RATE OPTIMUM SEEDING DATE

Based on Plant Hardiness

OPTIMUM

TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION METHODS AND MATERIALS

1. SITE PREPARATION

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

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

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

IN ACCORDANCE WITH THE ABOVE.

- A. APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS COOPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION DEFICES FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POLINDS PER ACRE OR 11 POLINDS PER 1 000 SQUARE EET OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE.
- . WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON
- THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED. . INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED
- . SOILS HIGH IN SULFIDES OR HAVING A pH OF 4 OR LESS REFER TO STANDARD FOR MANAGEMENT OF HIGH ACID

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

- B. CONVENTIONAL SEEDING. APPLY SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL, TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE TEXTURED SOIL.
- C. HYDROSEFDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK OR TRAILER MOUNTED TANK. WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT FIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. (ALSO SEE SECTION IV MULCHING) HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BYECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. POOR TO SOIL CONTACT OCCURS REDUCING SEED GERMINATION AND GROWTH. HYDROSEEDING MAY BE USED FOR AREAS
- O AFTER SEFUNG FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR,

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

TOO STEEP FOR CONVENTIONAL EQUIPMENT TO TRAVERSE OR TOO OBSTRUCTED WITH ROCKS, STUMPS, ETC.

SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.

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

APPLICATION. SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 95% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1.000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.

BE DONE BY ONE OF THE FOLLOWING METHODS. DEPENDING UPON THE SIZE OF THE AREA. STEEPNESS OF SLOPES. I. PEG AND TWINE. DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET

ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY

IN ALL DIRECTIONS STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH SECURE MULCH TO SOIL SURFACE

BY STRETCHING TWINE BETWEEN PEGS IN A CRISS-CROSS AND SQUARE PATTERN. SECURE TWINE AROUND EACH PEG 2. MULCH NETTINGS. STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTING TO SOIL SURFACE. USE A DEGRADABLE

NETTING IN AREAS TO BE MOWED. RING TOOL). A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULICH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR

WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING

OR ADHESIVE AGENT IS REQUIRED 4. LIQUID MULCH-BINDERS. - MAY BE USED TO ANCHOR HAY OR STRAW MULCH.

PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.

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

B. USE ONE OF THE FOLLOWING:

DUE TO PRESENCE OF WEED SEED.

- (1) ORGANIC AND VEGETABLE BASED BINDERS NATURALLY OCCURRING POWDER BASED. HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIO LOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS STATE
- (2) SYNTHETIC BINDERS HIGH POLYMER SYNTHETIC EMULSION, MIXABLE WITH WATER WHEN DILLUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER, IT SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

NOTE: ALL NAMES GIVEN ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A COMMENDATION OF THESE

PRODUCT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. THIS MULCH SHÀLL NOT BE MIXED IN THE TANK

B. WOOD-FIBER OR PAPER-FIBER MULCH. SHALL BE MADE OF WOOD. PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS, USED AT THE RATE OF 1,500 POUNDS PER ACRE (OR AS RECOMMENDED BY THE

WITH SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL

- C. PELLETIZED MULCH. COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT. WHICH MAY CONTAIN CO-POLYMERS, TACKIFIERS, FERTILIZERS AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO A SEEDED AREA AND WATERED, FORM A MULCH MAT. PELLETIZED MULCH SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60-75 LBS/1,000 SOLIARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL HAS BEEN FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS. SEEDED AREAS WHERE WEED-SEED FREE MULCH IS DESIRED OR ON
- APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZED MULCH ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE.

SITES WHERE STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIREABLE

3. PLANT HARDINESS ZONE (SEE FIGURE 7-1, pg. 7-4). 4. TWICE THE DEPTH FOR SANDY SOILS.

NOTE: PLEASE SEE SHEET

6 OF 12 FOR SESC PLAN &

7 OF 12 FOR SESC DETAILS

REVISED AS PER ENGINEERS REVIEW LETTERS DATED 12/11/20 & 01/04/21 REVISED AS PER ENGINEERS REVIEW LETTER DATED APRIL 2, 2020 ADD WETLAND BUFFER

LANDM/RK

THE BEST SUBDIVISION

OWNER UNDER CONTRACT/APPLICANT

DARRYL JACKSON 432 HIGHWAY 35 NEPTUNE, NEW JERSEY 07753

SEED SELECTIONS

REQUIRED FOR COOL SEASON GRASSES

1. Perennial ryegrass

OWNER

908-489-9133

FRANK MUCCHIELLO 103 JOHNSON AVE BLOOMFIELD, NEW JERSEY 07003 973-338-8449

S.E.S.C. NOTES FOR USE VARIANCE, SITE PLAN SURVEYING AND ENGINEERING, INC. AND SUBDIVISION APPL.

1824 COLUMBUS AVE. aka 432 HIGHWAY 35 LOT 39, BLOCK 617 in TOWNSHIP OF NEPTUNE on T.M. SHEET #6 DATED 12/2013, REVISED 11/2014 MONMOUTH COUNTY

DANIEL W. CARUSO, P.E. N.J. PROFESSIONAL ENGINEER - GE35687

NEW JERSEY

Email: Landmarkse@Optimum.net Web: www.Landmarkse.net

DRAWN BY: SHEET #: DRAWING: 8 of 12 17040SUB#3

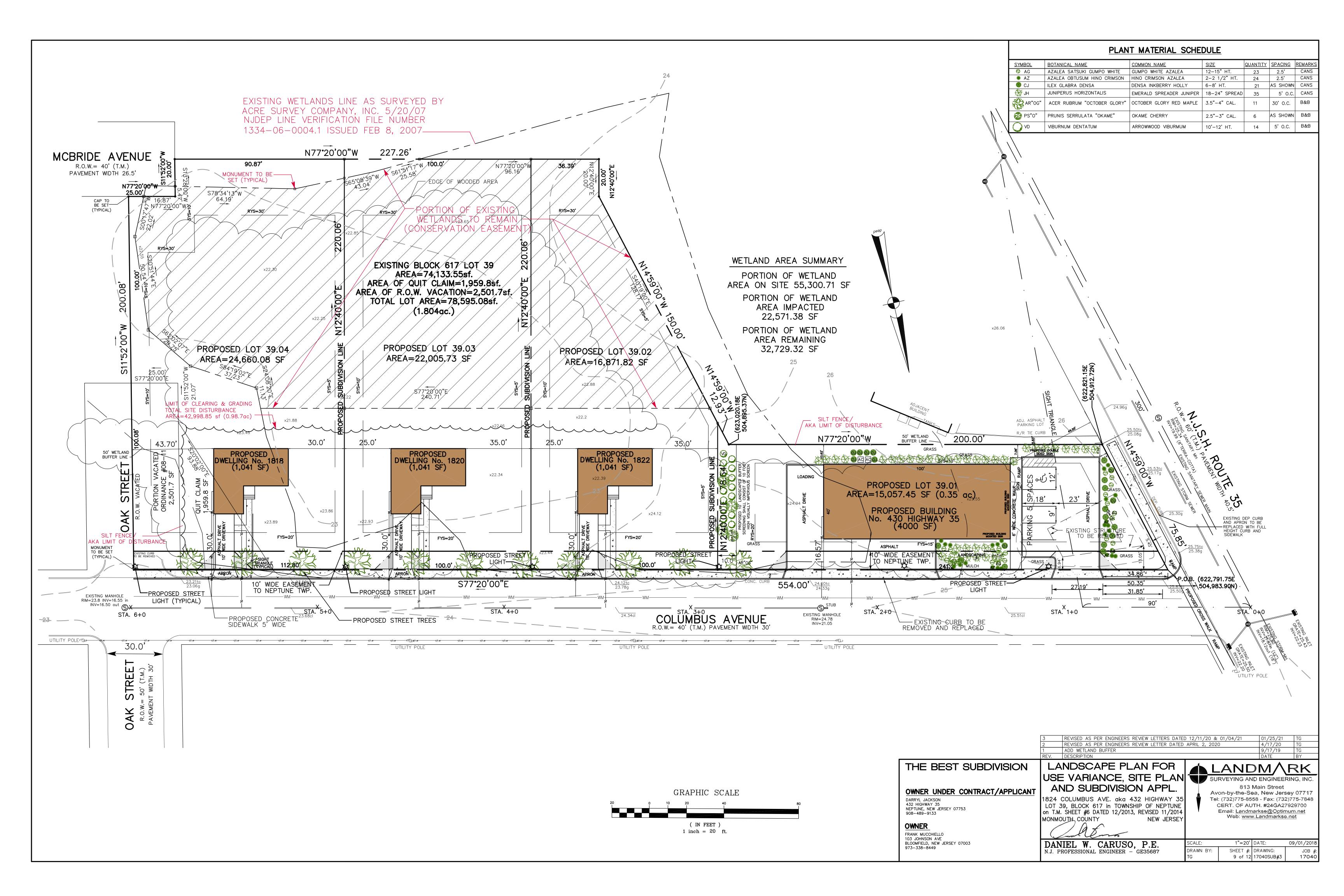
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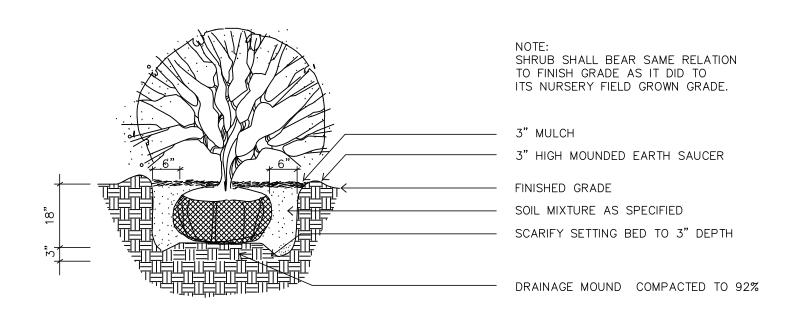
813 Main Street

Avon-by-the-Sea, New Jersey 07717

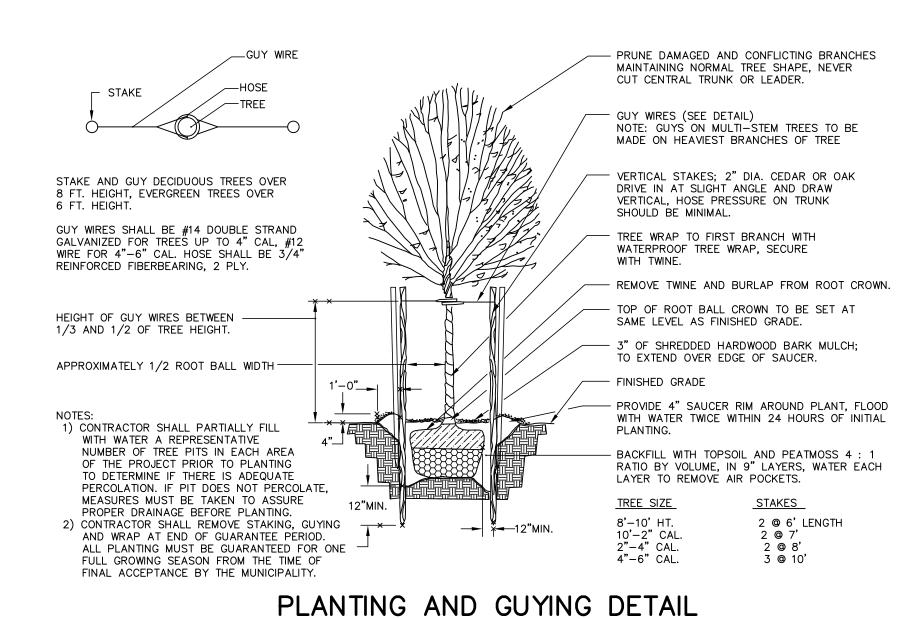
Tel: (732)775-8558 - Fax: (732)775-7848

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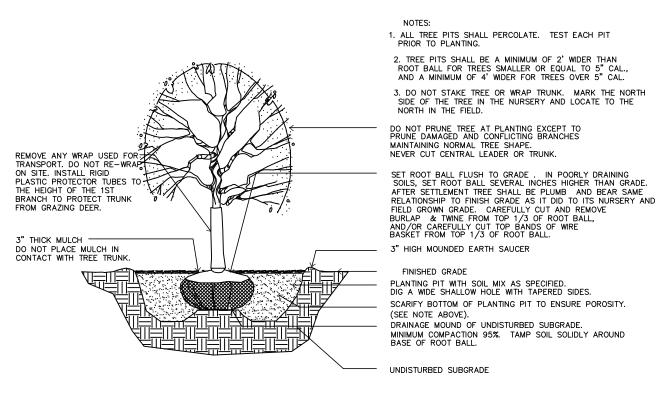




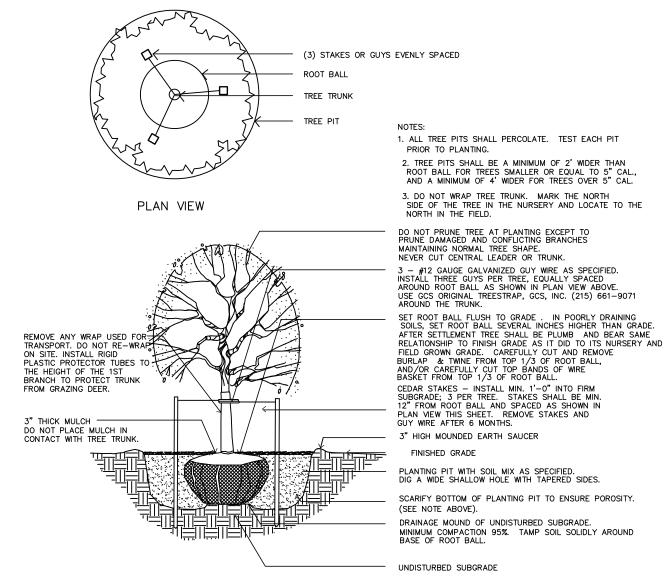
SHRUB PLANTING DETAIL N.T.S.



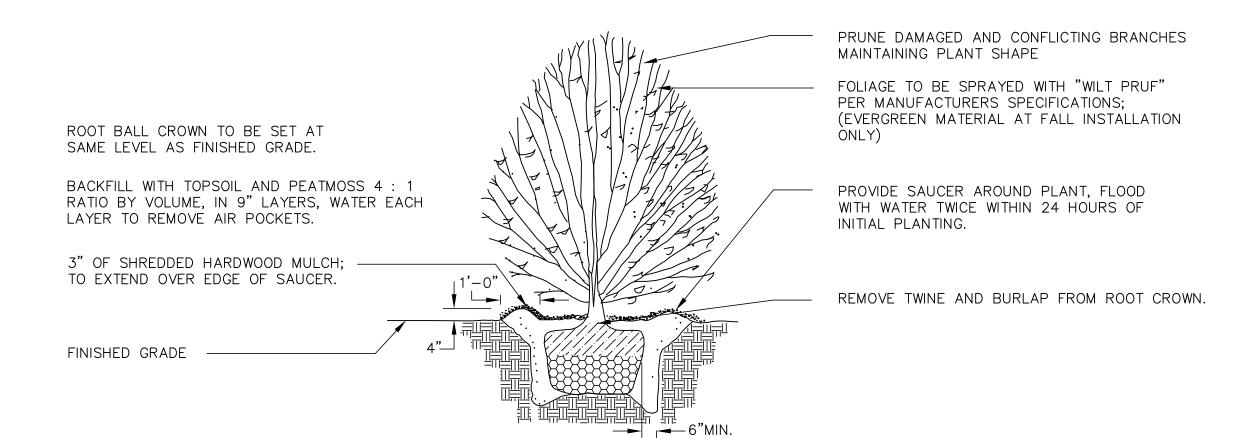
(DECIDUOUS AND EVERGREEN TREES)



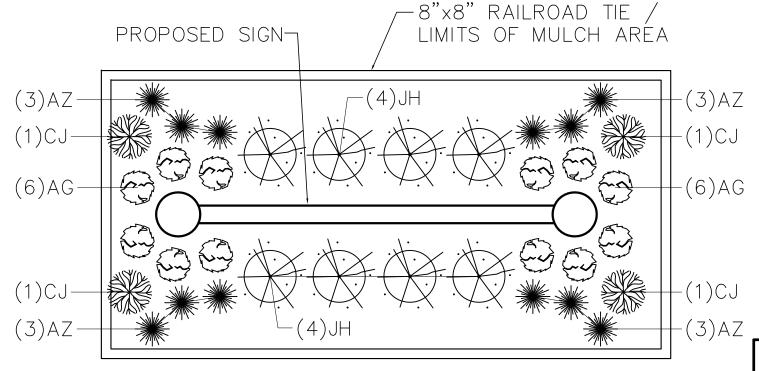
PLANTING DETAIL DECIDUOUS TREES < 4.0" CAL.



PLANTING DETAIL DECIDUOUS TREES >4.0" CAL.







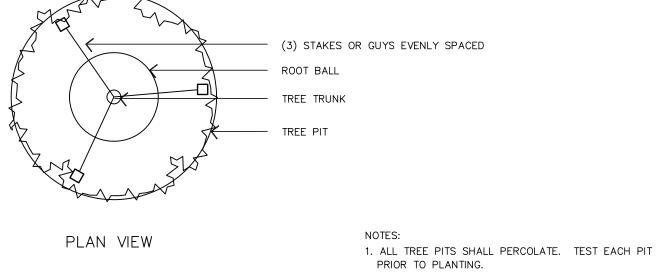
SIGN PLANTING DETAIL N.T.S.

THE BEST SUBDIVISION

OWNER UNDER CONTRACT/APPLICANT

DARRYL JACKSON 432 HIGHWAY 35 NEPTUNE, NEW JERSEY 07753

OWNER FRANK MUCCHIELLO
103 JOHNSON AVE
BLOOMFIELD, NEW JERSEY 07003
973-338-8449



ROOT BALL FOR TREES SMALLER OR EQUAL TO 5" CAL., AND A MINIMUM OF 4' WIDER FOR TREES OVER 5" CAL. 3. DO NOT WRAP TREE TRUNK. MARK THE NORTH SIDE OF THE TREE IN THE NURSERY AND LOCATE TO THE NORTH IN THE FIELD. 3 - #12 GAUGE GALVANIZED GUY WIRE AS SPECIFIED. INSTALL THREE GUYS PER TREE, EQUALLY SPACED AROUND ROOT BALL AS SHOWN IN PLAN VIEW ABOVE. USE GCS ORIGINAL TREESTRAP, GCS, INC. (215) 661-9071 AROUND TREE TRUNK. CEDAR STAKES — INSTALL MIN. 1'—0" INTO FIRM SUBGRADE; 3 PER TREE. STAKES SHALL BE MIN. 12" FROM ROOT BALL AND SPACED AS SHOWN IN PLAN VIEW THIS SHEET. REMOVE STAKES AND GUY WIRE AFTER 6 MONTHS. 3" MULCH MATERIAL BACKFILL WITH PLANTING SOIL AS SPECIFIED 3" HIGH MOUNDED EARTH SAUCER SET ROOT BALL FLUSH TO GRADE . IN POORLY DRAINING SOILS, SET ROOT BALL SEVERAL INCHES HIGHER THAN GRADE. AFTER SETTLEMENT TREE SHALL BE PLUMB AND BEAR SAME RELATIONSHIP TO FINISH GRADE AS IT DID TO ITS NURSERY AND FIELD GROWN GRADE. CAREFULLY CUT AND REMOVE BURLAP & TWINE FROM TOP 1/3 OF ROOT BALL, AND/OR CAREFULLY CUT TOP BANDS OF WIRE BASKET FROM TOP 1/3 OF ROOT BALL. SCARIFY BOTTOM OF PLANTING PIT AS SPECIFIED TO

2. TREE PITS SHALL BE A MINIMUM OF 2' WIDER THAN

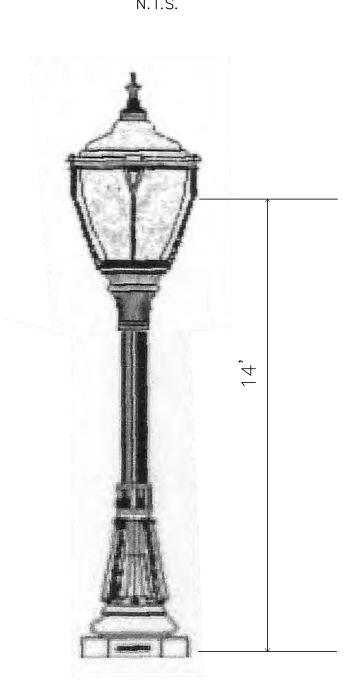
ENSURE POROSITY (SEE NOTE ABOVE).

BASE OF ROOT BALL.

UNDISTURBED SUBGRADE

DRAINAGE MOUND OF UNDISTURBED SUBGRADE, MINIMUM COMPACTION 95%. TAMP SOIL SOLIDLY AROUND

EVERGREEN TREE PLANTING DETAIL



STREET LIGHT DETAIL N.T.S.

LA	NDSCAPE DETAILS FOR LAND	$NA \wedge F$?K
REV.	DESCRIPTION	DATE	BY
1	ADD WETLAND BUFFER	9/17/19	TG
2	REVISED AS PER ENGINEERS REVIEW LETTER DATED APRIL 2, 2020	4/17/20	TG
3	REVISED AS PER ENGINEERS REVIEW LETTERS DATED 12/11/20 & 01/04/21	01/25/21	TG

USE VARIANCE, SITE PLAN SURVEYING AND ENGINEERING, INC. AND SUBDIVISION APPL 824 COLUMBUS AVE. aka 432 HIGHWAY 35

DANIEL W. CARUSO, P.E.

N.J. PROFESSIONAL ENGINEER - GE35687

LOT 39, BLOCK 617 in TOWNSHIP OF NEPTUNE on T.M. SHEET #6 DATED 12/2013, REVISED 11/2014 MONMOUTH, COUNTY NEW JERSEY

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N.T.S. DATE: 09/01/2018 SHEET #: DRAWING: 10 of 12 17040SUB#3

