AMENDED PRELIMINARY MAJOR SUBDIVISION

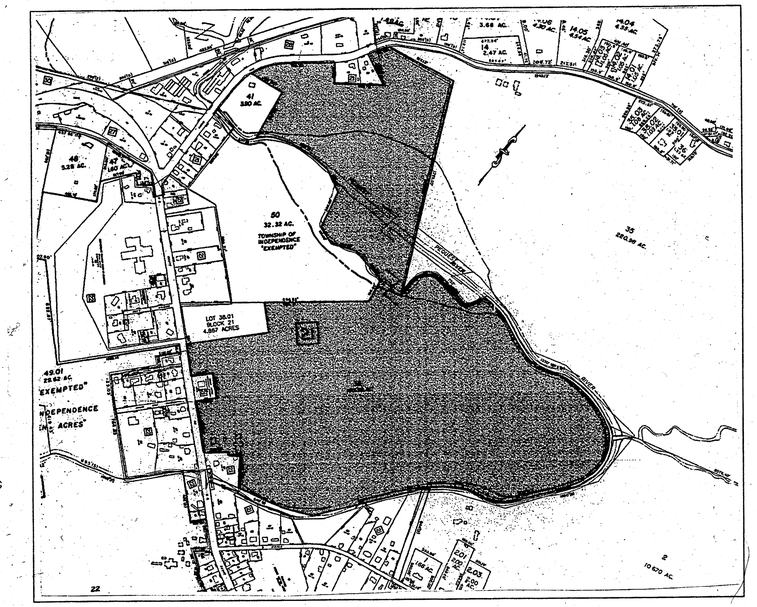
GREAT MEADOWS I

LOT 38 BLOCK 21

TOWNSHIP OF INDEPENDENCE, WARREN COUNTY, NJ

PROPERTY OWNERS WITHIN 200 FT

BLOCK	LOT	PROPERTY OWNER	PROPERTY LOCATION
17	13	VIENNA METHODIST CHURCH C/O GEORGE ULMER PO BOX 21 VIENNA, NJ 07880	232 ROUTE 46
17	21	GRAWAL INC PO BOX 68 VIENNA, NJ 07880	16 WATER ST
17	22	SIEBANS, LARRY T 526 TOWNSBURY RD GREAT MEADOWS, NJ 07838	18 WATER ST
17	23	FRANKENFIELD, DOROTHY i & ROBERT W PO BOX 86 VIENNA, NJ 07880	20 WATER ST
21	2	BADUINI, LOUIS J & ANNE M PO BOX 427 VIENNA, NJ 07880	31A WATER ST
21	35	MILLER, WILLIAM III & KAREN 36 ALPHANO RD GREAT MEADOWS, NJ 07838	36 ALPHANO RD
21	39	WYLIE, BRUCE P & NANCY PO BOX 251 GRETA MEADOWS, NJ 07838	26 ALPHANO RD
21	40	HAAR, DAVID & PATRICIA 24 ALPHANO RD GREAT MEADOWS, NJ 07838	24 ALPHANO RD
21	41	CHMIELEWSKI, MARK 12 ALPHANO RD GREAT MEADOWS, NJ 07838	12 ALPHANO RD
21	50	TOWNSHIP OF INDEPENDENCE PO BOX 164 GREAT MEADOWS, NJ 07838	286-B ROUTE 46
21	55	RAFALKO, PAMELA S & RICHARD R 278 ROUTE 46 GREAT MEADOWS, NJ 07838	278 ROUTE 46
21	56	VIENNA UNITED METHODIST CHURCH C/O GEORGE ULMER PO BOX 21 VIENNA, NJ 07880	266 ROUTE 46
21	57	KOLBA, NANCY A 258 ROUTE 46 GREAT MEADOWS, NJ 07838	258 ROUTE 46
21	65	BRANDT, JASMINE & WALTER J PO BOX 425 VIENNA, NJ 07880	3 WATER ST
21	67	HAWKINS, RICHARD L & PATRICIA A PO BOX 384 VIENNA, NJ 07880	7 WATER ST
21	68	HAWKINS, RICHARD L & PATRICIA A PO BOX 384 VIENNA, NJ 07880	11 WATER ST
21	69	GOMEZ, GAIL PO BOX 413 VIENNA, NJ 07880	19 WATER ST
21	17	NOLAN, RICHARD D & KATHLEEN M PO BOX 7 VIENNA, NJ 07880	23 WATER ST
21	72	ELY, RAYMOND E PO BOX 412, 25 WATER ST VIENNA, NJ 07880	25 WATER ST
22	25	MERKEL, RUDOLPH V & CAROL A 259 ROUTE 46 GREAT MEADOWS, NJ 07838	259 ROUTE 46
22	27	RJ36, LLC 88 CEMETERY RD PO BOX 95 VIENNA, NJ 07880	261 ROUTE 46
22	29	PACHOLER, KATHRYN A 265 US HIGHWAY 46 GREAT MEADOWS, NJ 07838	265 ROUTE 46
22	30	KOWALICK, BRUCE PO BOX 141 VIENNA, NJ 07880	267 ROUTE 46
22	35	GRIECO, PATRICIA A & JEAN M 269 ROUTE 46 GREAT MEADOWS, NJ 07838	269 ROUTE 46
22	36	VAN DOREN, WILLIAM & JENNIFER 271 ROUTE 46 GREAT MEADOWS, NJ 07838	271 ROUTE 46
22	37	SARGENT, ROY S SR & JEAN M PO BOX 95 VIENNA, NJ 07880	275 ROUTE 46
22	43	FIRST HOPE BANK PO BOX 296 HOPE, NJ 07844	277 ROUTE 46
22	45	GREAT MEADOWS REGIONAL BD OF ED PO BOX 74 GREAT MEADOWS, NJ 07838	281 ROUTE 46
22	49.01	TOWNSHIP OF INDEPENDENCE PO BOX 164 GREAT MEADOWS, NJ 07838	CEMETERY RD / EAST REAR PAVILION/REC AREA
28	8	GEROLA, LUCILLE L 17 ALPHANO RD GREAT MEADOWS, NJ 07838	17 ALPHANO RD
28	9	DEITER, JOHN J & SHERYL L 23 ALPHANO RD GREAT MEADOWS, NJ 07838	23 ALPHANO RD
28	9.01	GROVER, JAMES E & JACQUELINE E 25 ALPHANO RD GREAT MEADOWS, NJ 07838	25 ALPHANO RD
28	11	MATTHEW GUBELMANN & FLORENCE S NOBLE 29 ALPHANO RD GREAT MEADOWS, NJ 07838	29 ALPHANO RD
28	12	MAYHAN, FLORENCE 31 ALPHANO RD GREAT MEADOWS, NJ 07838	31 ALPHANO RD



AREA MAP

SCALE: 1"=100'

UTILITY COMPANIES:

GPU ENERGY
ATTN: CORPORATE SECRETARY
GENERAL HEADQUATERS
MADISON AVE & PUNCH BOWL RD
MORRISTOWN, NJ 07960

VERIZON
ATTN: CORPORATE SECRETARY
540 BROAD ST
NEWARK, NJ 07101

INDEPENDENCE MUA
ATTN: CHAIRPERSOPN
INDEPENDENCE MUNICIPAL BUILDING
PO BOX 164
GREAT MEADOWS, NJ 07838

COMCAST CABLE
ATTN: GENERAL MANAGER
RD 2 BOX 39
PORT MURRAY, NJ 07865

WARREN COUNTY PLANNING BOARD
WAYNE DUMAONT JR ADMIN BUILDING
165 COUNTY ROUTE 519 SOUTH
BELVIDERE, NJ 07823

ELIZABETHTOWN GAS CO.
ATTN: CORPORATE SECREATRY
1 ELIZABETHTOWN PLAZA
UNION, NJ 07083

UNITED TELEPHONE
ATTN: CORPORAE SECRETARY
160 CENTER ST
CLINTON, NJ 08809

HACKETTSTOWN MUA
ATTN: EXECUTIVE DIRECTOR
424 HURLEY DR
HACKETTSTOWN, NJ 07840

NEW JERSEY DOT
200 STIERLI CT
MT. ARLINGTON, NJ 07856

R 4 ZONE REQUIREMENTS

	REQUIRED	EXISTING	LOT 1	LOT 2	LOT 3	LOT 4	REMAINING LOT 38
LOT AREA	4 ACRES	156.15 Ac	5.02 ACRES	7.36 ACRES	15.17 ACRES	5.31 ACRES	122.5 ACRES
MIN. LOT WIDTH AT SETBACK LINE	350 FT	> 350 FT	424.82 FT	378.05 FT	358.93 FT	432.27 FT	280.59 FT * & 457.62 FT
FRONT YARD	100 FT	N/A	100 FT	100 FT	100 FT	100 FT	100 FT
REAR YARD	75 FT	N/A	75 FT	75 FT	75 FT	75 FT	75 FT
SIDE YARD	50 FT	N/A	50 FT	50 FT	50 FT	50 FT	50 FT
BUILDING HEIGHT	35 FT	N/A	35 FT	35 FT	35 FT	35 FT	35 FT
MIN UNIT FLOOR AREA	2,000 SF	N/A	2,000 SF (min)	2,000 SF (min)	2,000 SF (min)	2,000 SF (min)	2,000 SF (min)
MAX. LOT COVERAGE	10%	0.02 %	10%	10%	10%	10%	0.1%
GROSS DENSITY (UNIT/Ac)	0.25	N/A	0.25	0.25	0.25	0.25	N/A

*... DENOTES EXISTING NON-CONFORMANCE

SUBDIVISION IS IN COMPLIANCE WITH ORDINANCE SECTION 255-49B (1)(r)

APPROVALS

PLANNING BOARD CHAIRMAN DATE

PLANNING BOARD SECRETARY DATE

TOWNSHIP ENGINEER DATE

OWNER/APPLICANT

PIO COSTA ENTERPRISES
1275 BLOOMFIELD AVE
FAIRFIELD, NJ 07004

INDEX

COVER SHEET 1
EXISTING CONDITIONS MAP 2
EXISTING CONDITIONS – OVERALL SITE 3
PRELIMINARY SUBDIVISION PLAT – OVERALL SITE 4
PRELIMINARY SUBDIVISION PLAT 5
GRADING PLAN 6
UTILITY PLAN 7
STREET TREE PLAN 8
CONSTRAINTS MAP..... 9
SOIL EROSION & SEDIMENT CONTROL 10
ROADWAY PROFILES 11
CROSS SECTION LAYOUT PLAN 12
ROADWAY CROSS SECTIONS 13-14
SOIL EROSION DETAILS 15
CONSTRUCTION DETAILS 16

JAN 31, 2014	AS PER COMPLETENESS REVIEW
DATE	REVISION

COVER SHEET

GREAT MEADOWS I

BLOCK 21 LOT 38

TOWNSHIP of INDEPENDENCE WARREN COUNTY, NJ

Matarazzo Engineering, LLC
engineers surveyors planners
575 Route 46 West Fairfield, NJ 07004
Tel (973)808-8779 Fax (973)808-8789
Certificate of Authorization 24GA28051000

DATE AUGUST 12, 2013

FRANK MATARAZZO professional engineer & land surveyor NJ Lic No 37513
CHARLES J. CARBONE professional engineer NJ Lic No 32367

SCALE	DRN BY	CHK BY	FILE No	DRAWING	SHT
1"= 50'	CJC	FM	111281	111281-SUB	1 OF 16

NOTES:

1. EXISTING CONDITIONS AND TOPOGRAPHIC INFORMATION HEREON ARE BASED ON A MAP ENTITLED "TOPOGRAPHIC SURVEY OF TAX LOT 38 – BLOCK 21, LOCATED IN THE TOWNSHIP OF INDEPENDENCE, WARREN COUNTY, NJ. SHEETS 1/2 AND 2/2, PREPARED BY JAMES P. DEADY, NJPLS LIC NO 22413, DATED 03/29/05, AND SUPPLEMENTAL TOPOGRAPHIC INFORMATION ALONG EXISTING DRIVEWAY BASED ON A FIELD SURVEY PERFORMED BY SCHOOR DePALMA, INC APRIL 2006. EXISTING TOPOGRAPHIC FEATURES ALONG ALPHANO ROAD WERE PROVIDED BY JAMES P. DEADY IN ELECTRONIC FORMAT ON 04/04/2008.
2. INFORMATION REFERED TO IN NOTE 1 ABOVE, SUPPLIED TO MATARAZZO ENGINEERING IN ELECTRONIC FORMAT.
3. ADDITIONAL FIELD TOPOGRAPHY PERFORMED BY MATARAZZO ENGINEERING, LLC JULY 2012.
4. VERTICAL DATUM IS NGVD 1929
5. WETLANDS LINE SHOWN HEREON AS PER NJDEP FRESHWATER WETLANDS LETTERT OF INTERPRETATION / LINE VERIFICATION FILE NO. 2112-06-0007.1

DATE	REVISION
JAN 31, 2014	AS PER COMPLETENESS REVIEW

EXISTING CONDITIONS MAP

GREAT MEADOWS I

BLOCK 21 LOT 38

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1"= 50'	CJC	FM	111281	111281-SUB	SHT 2 OF 16

GRAPHIC SCALE

0 200 400 600 800

JAN 31, 2014	AS PER COMPLETENESS REVIEW
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EXISTING CONDITIONS MAP – OVERALL SITE

GREAT MEADOWS I

BLOCK 21 LOT 38

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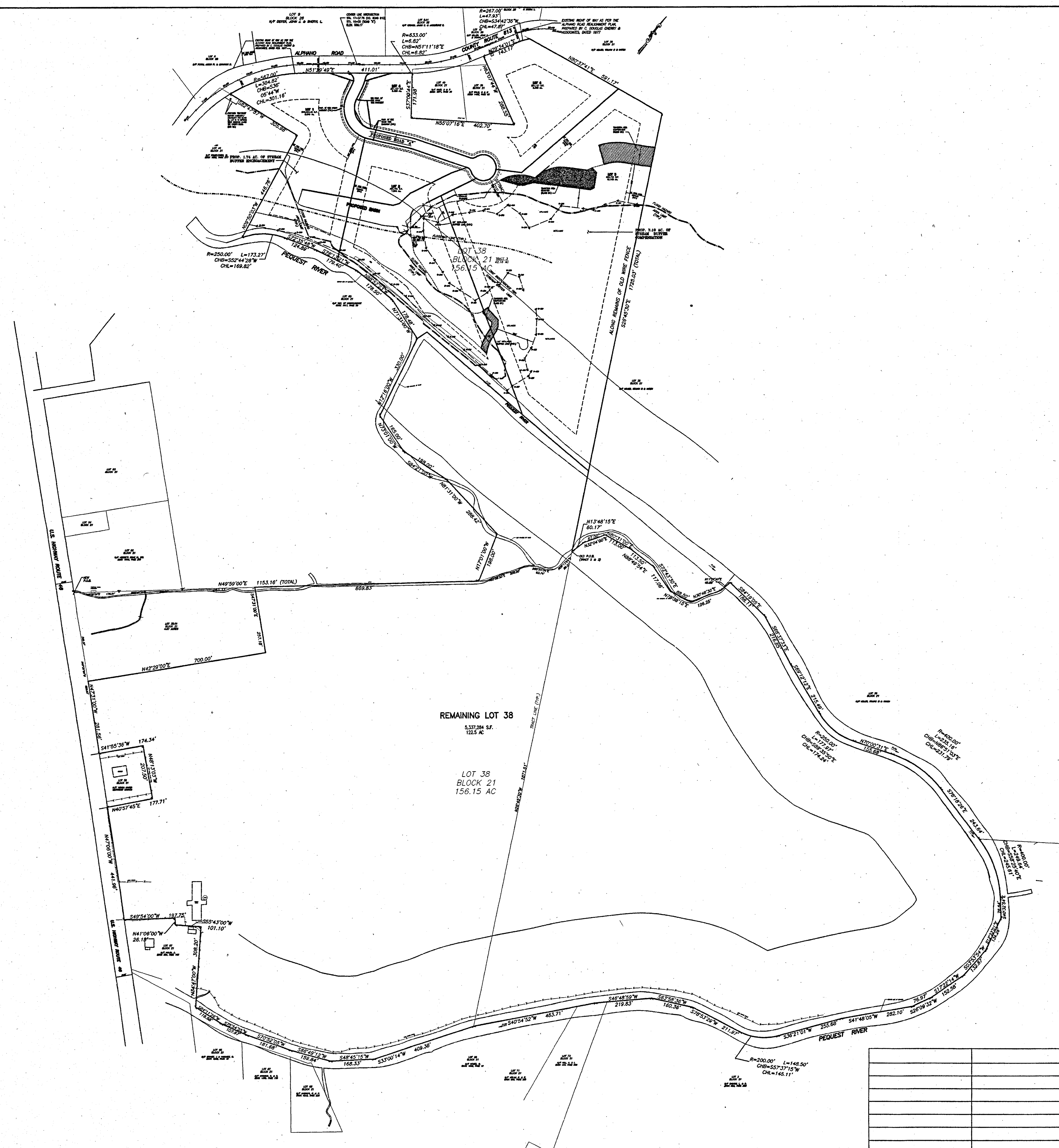
1"= 200'	CJC	FM	111281	111281-SUB	SHT 3 OF 16



JAN 31, 2014	AS PER COMPLETENESS REVIEW
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SUBDIVISION MAP – OVERALL SITE

GREAT MEADOWS I

BLOCK 21 LOT 38

TOWNSHIP of INDEPENDENCE WARREN COUNTY, NJ

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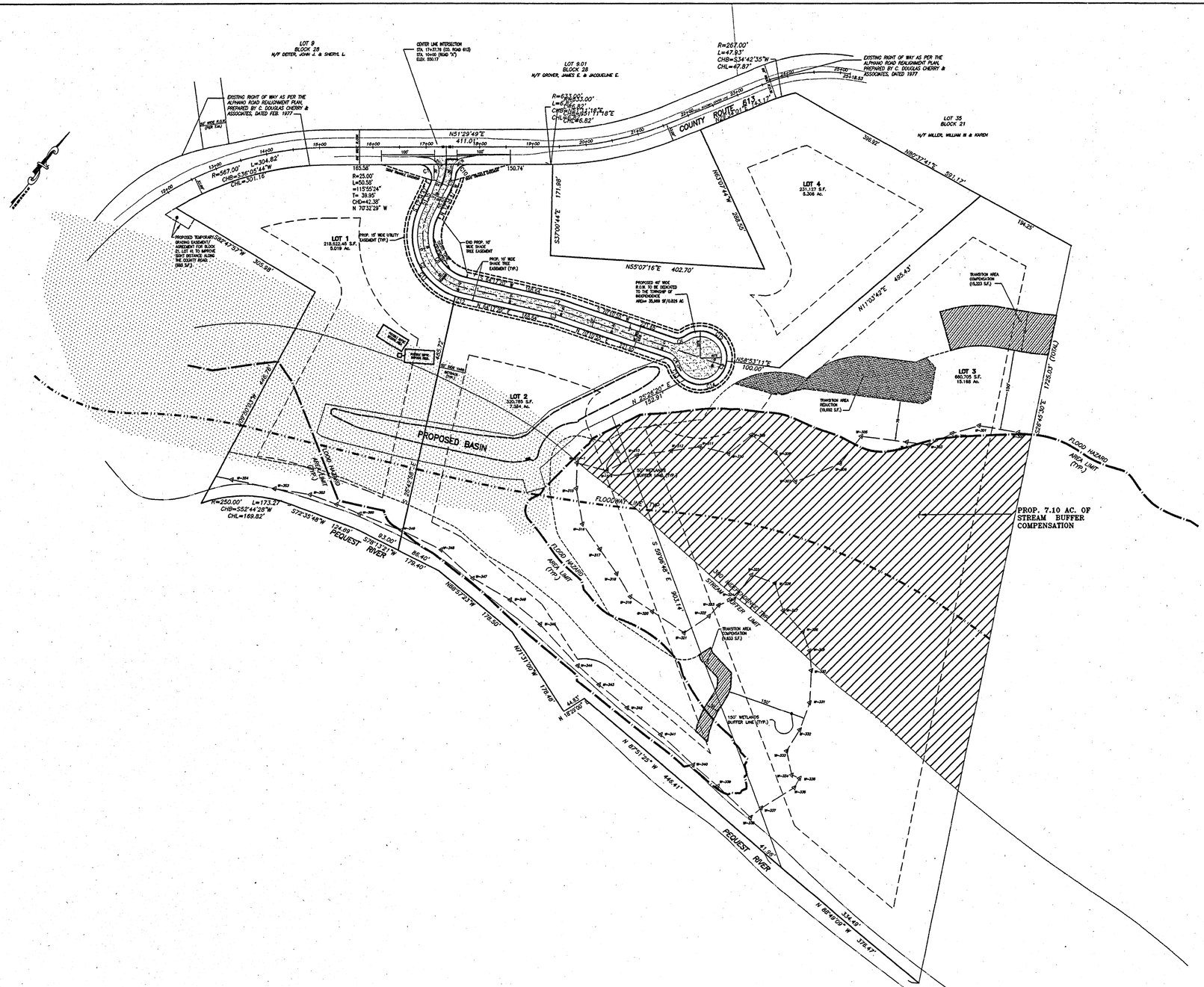

CURVE #	RADIUS	LENGTH	DELTA	TANGENT	CHORD	CHD BEARING
C1	25.0	50.58'	115°55'24"	39.95'	42.38'	N 70°32'29" W
C2	120.0'	216.00'	103°07'53"	151.22'	188.00	N 64°08'43" W
C3	100.00	10.29'	5°53'35"	5.15'	10.28'	N 67°14'07" E
C4	25.00'	23.18'	53°07'48"	12.50'	22.36'	N 83°15'11" W
C5	50.0	249.81'	286°15'37"	37.50'	60.00'	S 19°49'05" E
C6	25.00'	23.18'	53°07'48"	12.50'	22.36'	N 47°37'01" E
C7	140.00	14.40'	5°53'35"	7.21'	14.39'	N 67°14'07" E
C8	80.00'	144.00'	103°07'53"	100.81'	125.33	S 64°08'43" E
C9	120.00	31.05'	14°49'31"	15.61'	30.96'	S 19°59'32" E
C10	25.00'	34.43'	78°54'07"	20.57'	31.77'	N 12°02'46" E
C11	120.00	202.11'	96°30'08"	134.45'	179.06	N 60°49'51" W
C12	120.00	13.89'	6°37'45"	6.95'	13.88'	S 67°36'13" W
C13	50.00'	32.62'	37°22'49"	16.91'	32.05'	N 75°22'42" W
C14	50.00'	102.14'	117°02'38"	81.66'	85.28'	S 27°24'35" W
C15	50.00'	115.05'	131°50'10"	111.87'	91.30'	N 82°58'11" E

GRAPHIC SCALE
0 100 200 300 400

PRELIMINARY SUBDIVISION PLAT
GREAT MEADOWS I
BLOCK 21 LOT 38
TOWNSHIP of INDEPENDENCE WARREN COUNTY, NJ

JAN 31, 2014	AS PER COMPLETENESS REVIEW
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1"= 100'	CJC	FM	111281	111281-SUB	5 OF 16

DATE	REVISION
JAN 31, 2014	AS PER COMPLETENESS REVIEW

GRADING PLAN

GREAT MEADOWS I

BLOCK 21 LOT 38

TOWNSHIP of INDEPENDENCE WARREN COUNTY, NJ

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1"= 50'	CJC	FM	111281	111281-SUB	


PROVIDE STREET LIGHT AT INTERSECTION AS PER TOWNSHIP STANDARDS. (30' FROM CO. RD 613 CENTER LINE AND 5' OFF FROM PROP. CURB RETURN, MIN.)
REMOVE 50' OF CENTER LINE STRIPE & REMOVE 50' OF EDGE LINE STRIPE AT CO. ROAD 613. (25' FROM CENTER LINE INTERSECTION IN BOTH DIRECTIONS)
PROVIDE 20' TAPER FROM END OF CURB RETURN TO EXIST. EDGE OF PAV'T (BOTH SIDES)
R=633.00'
L=6.82'
CHB=N51°11'18"E
CHL=6.82'
N51°29'49"E
411.01'
17+00
18+00
19+00
20+00
21+00
22+00
PHYSICAL ROADWAY CENTER LINE
COUNTY ROUTE 613
N29°34'01"E 143.17'
33.00'
100'
100'
50'
PROP. "STOP" SIGN
150.74'
SIGHT TRIANGLE EASEMENT
SIGHT TRIANGLE EASEMENT
PROP. 24" "STREET" SIGN
PROP. 24" WIDE WITHE "STOP" BAR
PROVIDE 24' WIDE ROAD, 70' LONG MIN. FROM CENTER LINE OF CO. ROUTE 613
PROVIDE 50' LONG, 4" WIDE, DOUBLE YELLOW STRIPE
PROP. 25' ROAD TAPER
END PROP. 10' WIDE SHADE TREE EASEMENT
' WIDE UTILITY T (TYP.)
PROP. 10' WIDE SHADE TREE EASEMENT (TYP.)
PROP. "NO PARKING" SIGN (TYP.)
S 12°34'47" E 51.35'
N 12°34'47" W 55.65'
C1
C10
C8
C2
C11
C12
C7
C3
C15
C14
S 64°17'20" W 168.64'
N 64°17'20" E 168.64'
S 70°10'55" W 221.65'
N 70°10'55" E 221.65'
PROPOSED SWALE
PROPOSED SWALE
40' WIDE R.O.W.
S37°00'44"E 171.98'
N55°07'16"E 402.70'
N63°07'44"W 288.55'
LOT 35
BLOCK 21
N/F MILLER, WILLIAM III & KAREN
396.92'
N80°37'41"E 591.17'
194.25'
LOT 4
231,127 S.F.
5.306 Ac.
PROPOSED 40' WIDE R.O.W. TO BE DEDICATED TO THE TOWNSHIP OF INDEPENDENCE
AREA= 35,969 SF/0.826 AC
POSSIBLE SEPTIC RESERVE AREA
POSSIBLE SEPTIC DISPOSAL FIELD.
CB# 1
INLET TYPE "E"
STA 17+40 (29'L)
TG 526.0
INV 523.25 (15")
INV 522.50 (24")
F.E.S. #1
INV 525.00
F.E.S. #2
INV 525.00
8 LF 18" HDPE
F.E.S. #3
INV 525.00
CB# 2
INLET TYPE "E"
STA 17+40 (29'R)
TG 526.0
INV 523.25 (15")
INV 522.00 (24")
INV 520.98 (36")
F.E.S. #4
INV 520.00
FES #5
INV 520.8
50'R
40'R
N58°53'11"E
100.00'
N11°03'42"E 495.43'
TRANSITION AREA COMPENSATION (15,223 S.F.)
LOT 3
660,705 S.F.
15.168 Ac.
TRANSITION AREA REDUCTION (19,692 S.F.)
S26°45'30"E 1725.03' (TOTAL)
150'
75
POSSIBLE SEPTIC RESERVE AREA
POSSIBLE SEPTIC DISPOSAL FIELD.
PROP. RESIDENTIAL LAMPPOST STYLE LIGHT, TYP. (SEE GENERAL NOTES #22)
50' SIDE YARD SETBACK (TYP.)
485.72'
LOT 2
320,785 S.F.
7.364 Ac.
N 25°26'20" 152.91'
TOP OF BERM EL 523.0
PROPOSED BASIN
TOP OF BERM EL 523.0
S 25°42'58" E
RIPRAP APRON
L=27'
W= 36'
d50=3"
T=6"
EMERGENCY SPILLWAY EL 517.75 118 FT LONG
RIPRAP
T=8"
d50=4"
50'
50' WETLANDS BUFFER LINE (TYP.)
FES #10
TS 519.95
INV OUT 517.75
OUTLET STRUCTURE OS #1 DOUBLE "E" INLET
TOP OF STRUCTURE 521.00
16-FOOT WEIR EL 521.00
INV OUT 518.45
35 LF @2.00% 24" RCP
PROP. ANTISEEP COLLAR (TYP)
SCOUR HOLE #10
Total Length = 18'
Total Width = 16'
L= 6'
W= 4'
d50=8"
T=16"
FLOODWAY LINE (TYP.)
FLOOD HAZARD AREA LIMIT (TYP.)
FLOOD HAZARD AREA LIMIT (TYP.)
W-300
W-301
W-303
W-304
W-305
W-306
W-307
W-308
W-309
W-310
W-311
W-312
W-313
W-314
W-315
W-316
W-317
W-318
W-319
W-320
W-321
W-322
W-323
W-324
W-325
W-326
W-327
W-328
W-329
W-330
W-331
W-342
W-343
W-344
W-345
W-346
W-347
W-348
W-349
PROP. 7.10 AC. OF STREAM BUFFER COMPENSATION
S 59°06'48" E 903.14'
300' INDEPENDENCE TWP. STREAM BUFFER LIMIT
TRANSITION AREA COMPENSATION (4,633 S.F.)
150'
150' WETLANDS
25
93.00'
13'21"W
VER
86.40'
179.40'
N88°57'23"W 178.50'
N71°31'00"W 178.48'
44.83'
18°29'00" E
JAN 31, 2014
AS PER COMPLETENESS REVIEW
DATE
REVISION
UTILITY PLAN
GREAT MEADOWS I
BLOCK 21 LOT 38
TOWNSHIP of INDEPENDENCE
WARREN COUNTY, NJ
Matarazzo Engineering, LLC
engineers surveyors planners
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Fairfield, NJ 07004
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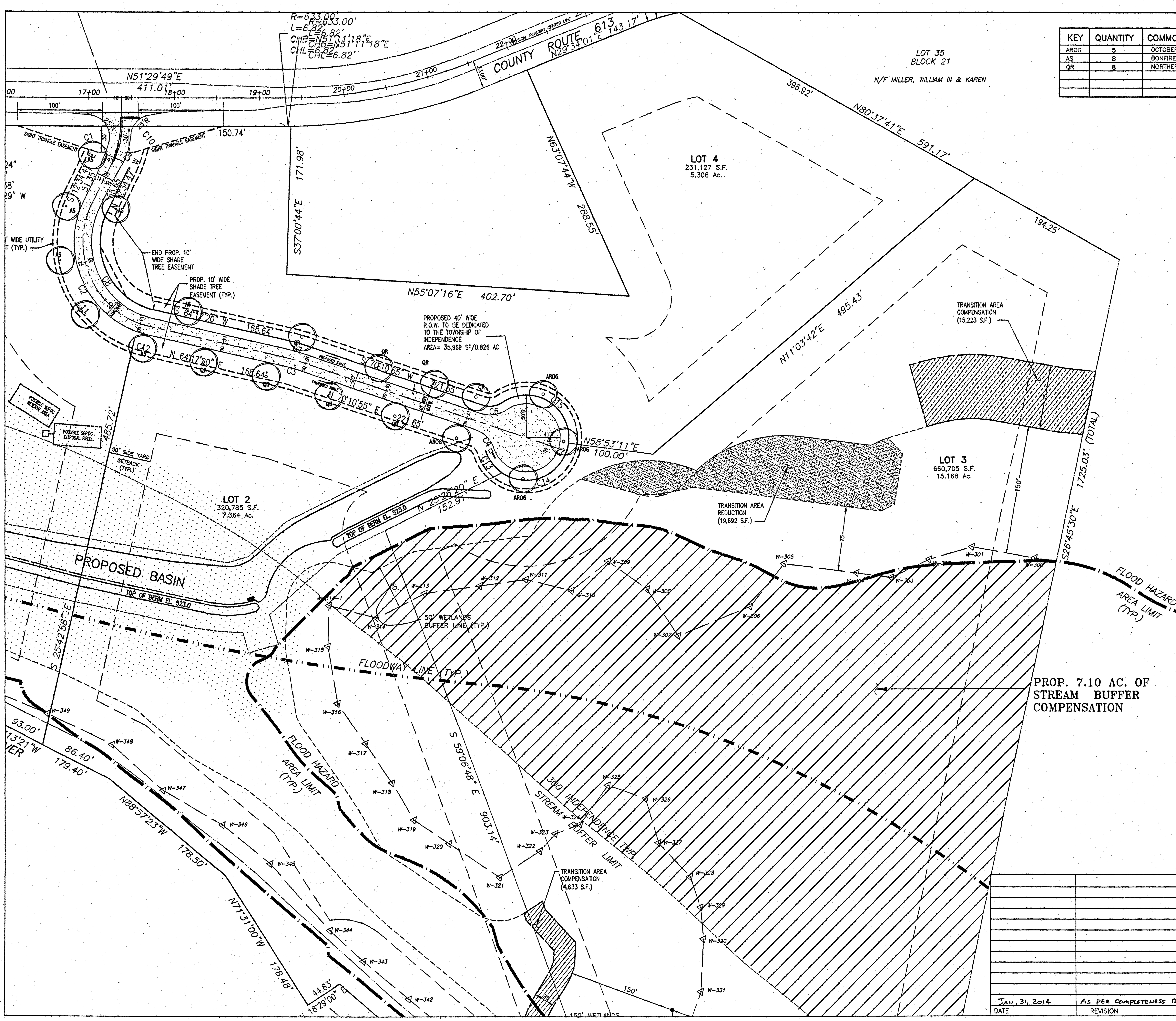
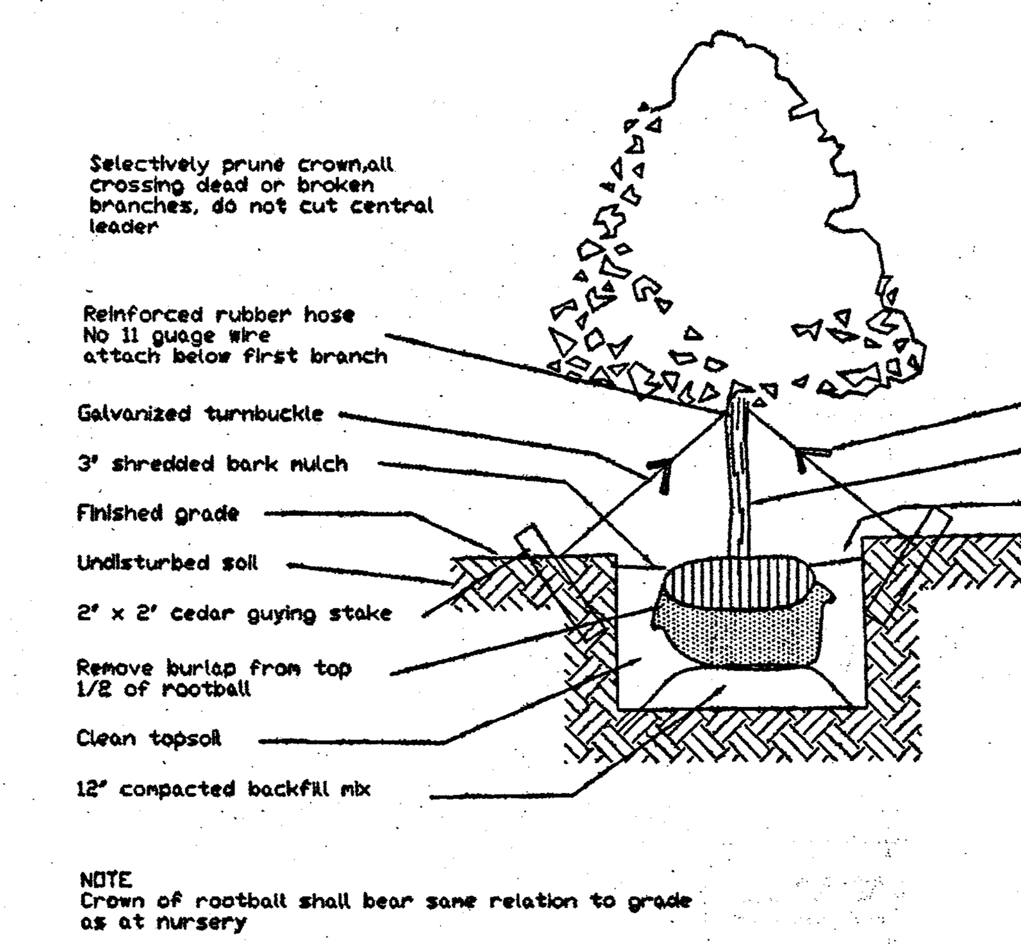
CHARLES J. CARBONE professional engineer NJ Lic No 32367
SCALE 1"= 50'
DRN BY CJC
CHK BY FM
FILE No 111281
DRAWING 111281-SUB
SHT 7 OF 16

KEY	QUANTITY	COMMON NAME	BOTANICAL NAME	SIZE
AROG	5	OCTOBER GLORY RED MAPLE	ACER RUBRUM "OCTOBER GLORY"	2-1/2" to 3" CAL
AS	8	BONFIRE SUGAR MAPLE	ACER SACCHARUM "BONFIRE"	2-1/2" to 3" CAL
QR	8	NORTHERN RED OAK	QUERCUS RUBRA	2-1/2" to 3" CAL





DECIDUOUS PLANTING DETAIL

DATE	REVISION
JAN. 31, 2014	AS PER COMPLETENESS REVIEW

PROPOSED STREET TREE PLAN
GREAT MEADOWS I
BLOCK 21 LOT 38
TOWNSHIP of INDEPENDENCE WARREN COUNTY, NJ

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	RANGE BEG.		RANGE END	PERCENT	AREA (SF/AC)
▨	15.00	.	24.99	10.25	154,717 / 3.55
▨	25.00	.	29.99	2.14	32,399 / 0.74
▨	30.00	.	PLUS	8.58	129,564 / 2.97

INDIVIDUAL LOT DENSITY CALCULATION

PROPOSED LOT 1

TYPE OF LAND	AREA		DENSITY AJUSTMENT FACTOR		DEVELOPABLE LAND AREA
30% OR GREATER SLOPE AREA	18,263 SF	x	0.30	=	5,478.9 SF
25% - 29.99% SLOPE AREA	4,416 SF	x	0.50	=	2,208.0 SF
15% - 24.99% SLOPE AREA	33,765 SF	x	0.80	=	27,012 SF
WETLAND AREA	0	x	0	=	0
TRANSITIONAL WETLAND AREA	0	x	0.50	=	0
FLOOD HAZARD AREA	46,836 SF	x	0	=	0
LAND WITHOUT CONSTRAINTS	116,000 SF	x	1.00	=	116,000 SF
					150,698.9 SF (3.46 AC)

PROPOSED LOT 2

TYPE OF LAND	AREA		DENSITY AJUSTMENT FACTOR		DEVELOPABLE LAND AREA
30% OR GREATER SLOPE AREA	1,039 SF	x	0.30	=	311.7 SF
25% - 29.99% SLOPE AREA	0 SF	x	0.50	=	0
15% - 24.99% SLOPE AREA	4,209 SF	x	0.80	=	3,367 SF
WETLAND AREA	0	x	0	=	0
TRANSITIONAL WETLAND AREA	58,884 SF	x	0.50	=	29,442 SF
FLOOD HAZARD AREA	98,137 SF	x	0	=	0
LAND WITHOUT CONSTRAINTS	158,516 SF	x	1.00	=	158,516 SF
					191,636.7 SF (4.4 AC)

PROPOSED LOT 3

TYPE OF LAND	AREA		DENSITY AJUSTMENT FACTOR		DEVELOPABLE LAND AREA
30% OR GREATER SLOPE AREA	16,281 SF	x	0.30	=	4,884.3 SF
25% - 29.99% SLOPE AREA	5,169 SF	x	0.50	=	2,584.5 SF
15% - 24.99% SLOPE AREA	37,071 SF	x	0.80	=	29,656.8 SF
WETLAND AREA	0	x	0	=	0
TRANSITIONAL WETLAND AREA	71,648 SF	x	0.50	=	35,824 SF
FLOOD HAZARD AREA	478,291 SF	x	0	=	0
LAND WITHOUT CONSTRAINTS	52,245 SF	x	1.00	=	52,245 SF
					125,191.6 SF (2.87 AC)

PROPOSED LOT 4

TYPE OF LAND	AREA		DENSITY AJUSTMENT FACTOR		DEVELOPABLE LAND AREA
30% OR GREATER SLOPE AREA	60,298 SF	x	0.30	=	18,089.4 SF
25% - 29.99% SLOPE AREA	17,190 SF	x	0.50	=	8,595 SF
15% - 24.99% SLOPE AREA	62,938 SF	x	0.80	=	50,350.4 SF
WETLAND AREA	0	x	0	=	0
TRANSITIONAL WETLAND AREA	0	x	0.50	=	0
FLOOD HAZARD AREA	0	x	0	=	0
LAND WITHOUT CONSTRAINTS	90,701 SF	x	1.00	=	90,701 SF
					167,735 SF (3.85 AC)

DATE	REVISION
JAN 31, 2014	AS PER COMPLETENESS REVIEW

CONSTRAINTS MAP
GREAT MEADOWS I
BLOCK 21 LOT 38

TOWNSHIP of INDEPENDENCE WARREN COUNTY, NJ

Matarazzo Engineering, LLC
engineers surveyors planners
575 Route 46 West Fairfield, NJ 07004
Tel (973)808-8779 Fax (973)808-8789
Certificate of Authorization 24GA28051000

[illegible] DATE AUGUST 12, 2013

FRANK MATARAZZO professional engineer & land surveyor NJ Lic No 37513
CHARLES J. CARBONE professional engineer NJ Lic No 32367

SCALE	DRN BY	CHK BY	FILE No	DRAWING	
1"= 50'	CJC	FM	111281	111281-SUB	SHT 9 OF 16

SOIL EROSION & SEDIMENT CONTROL PLAN

GREAT MEADOWS I

BLOCK 21 LOT 38

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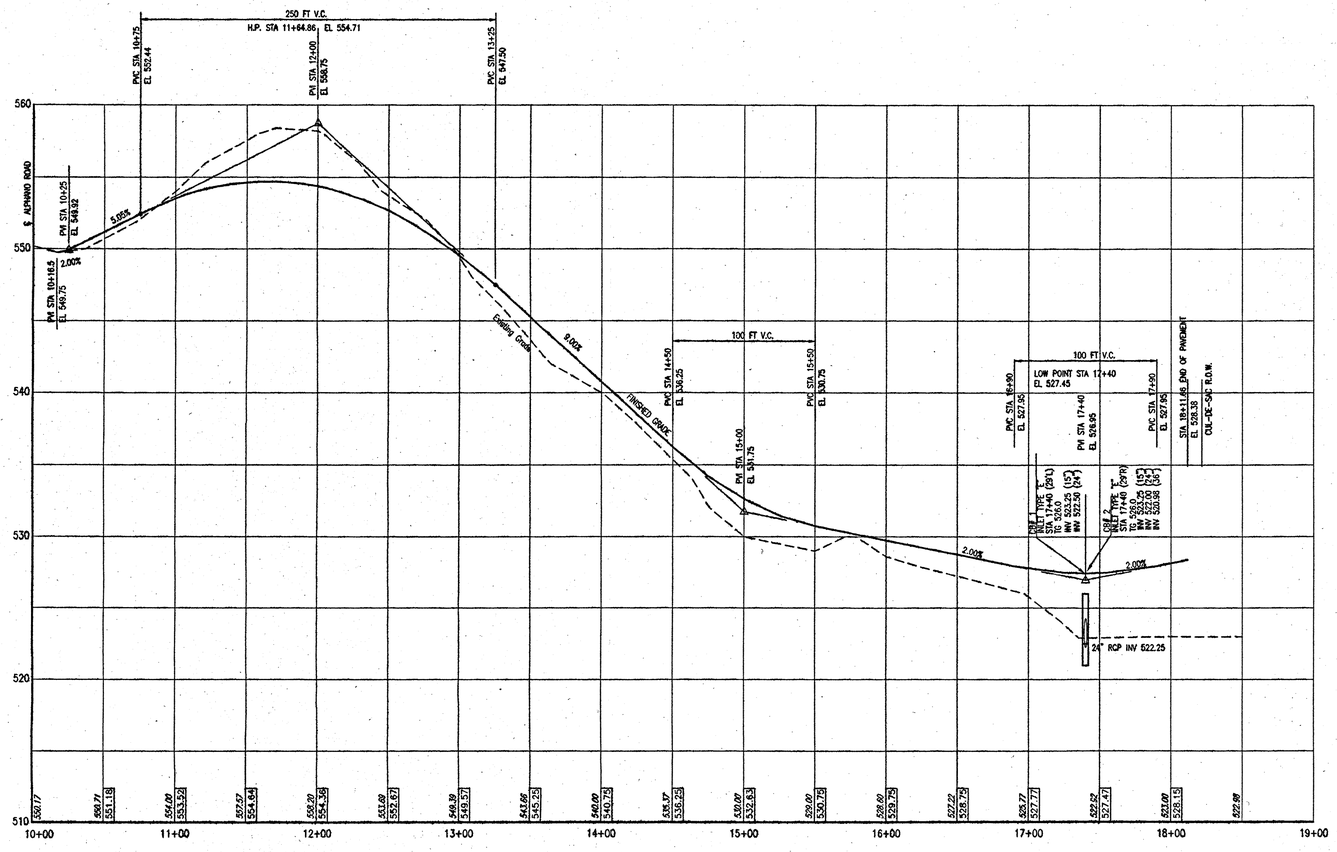
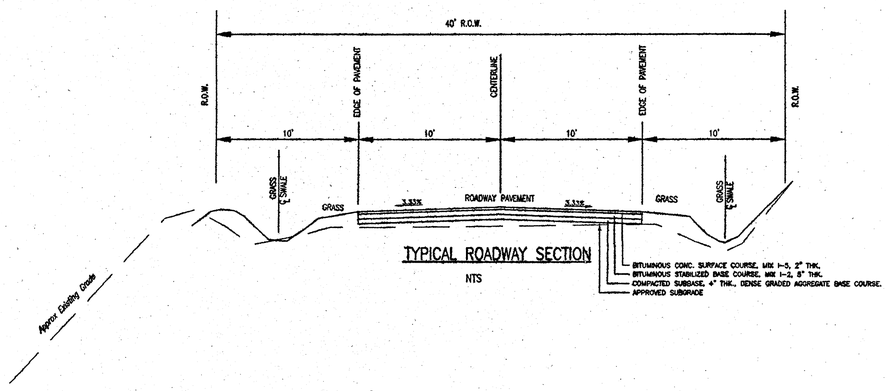


PROPOSED ROADWAY CENTERLINE PROFILE

SCALE:
HORIZ: 1"=50'
VERT: 1"=5'



TYPICAL ROADWAY SECTION

NTS

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PROFILES
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CROSS SECTION LAYOUT PLAN

GREAT MEADOWS I

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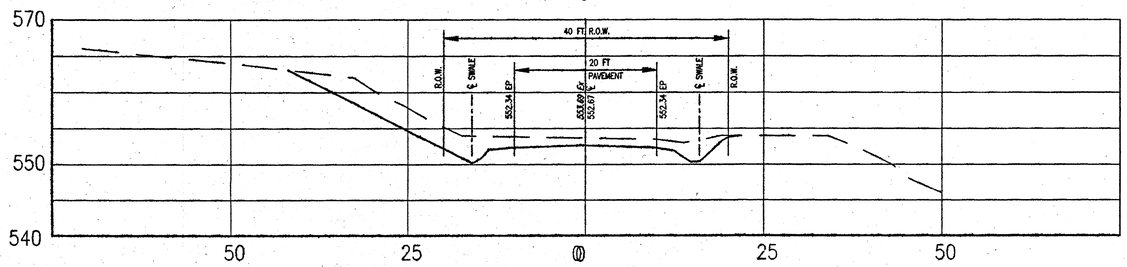

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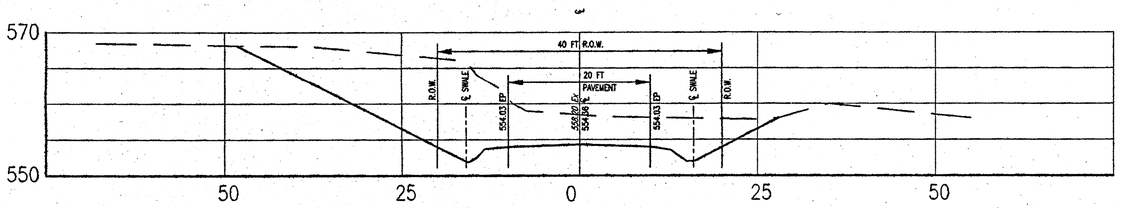

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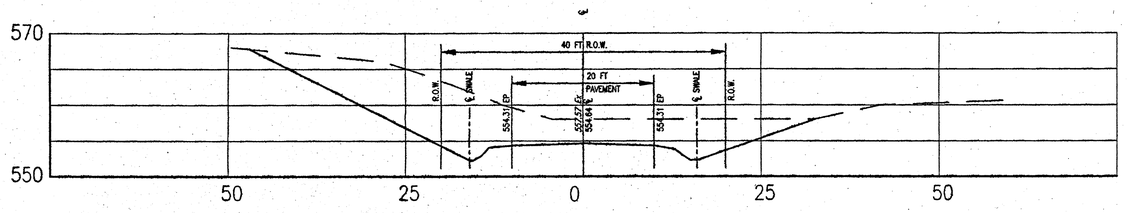

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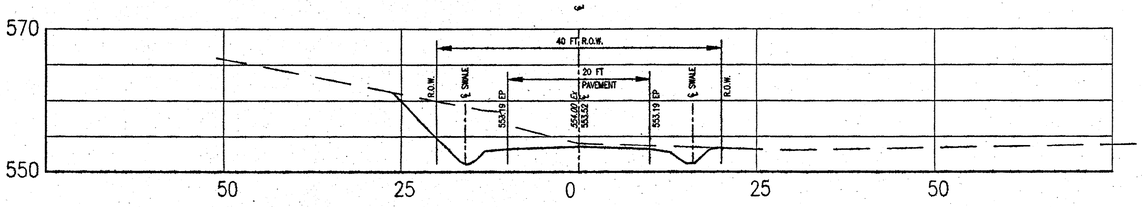

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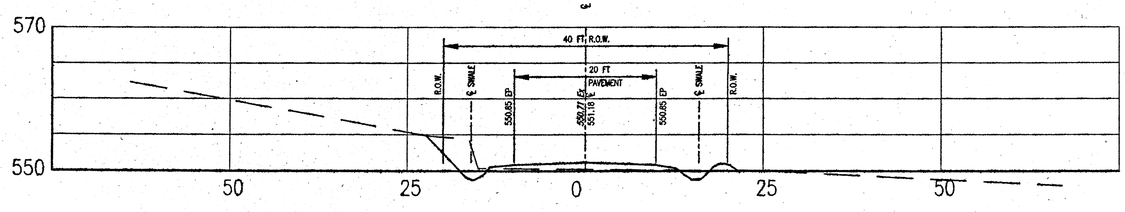

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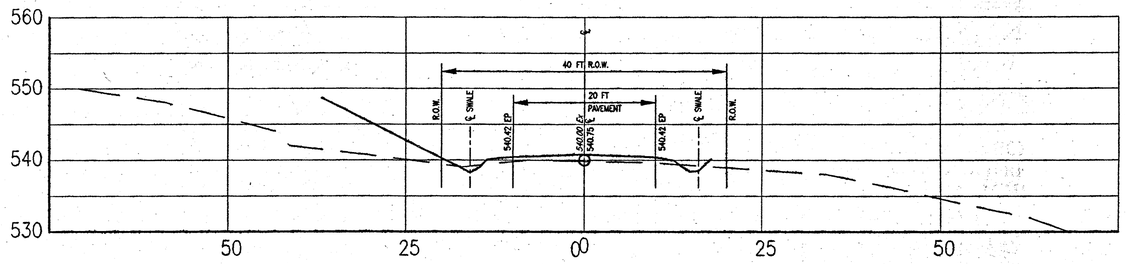

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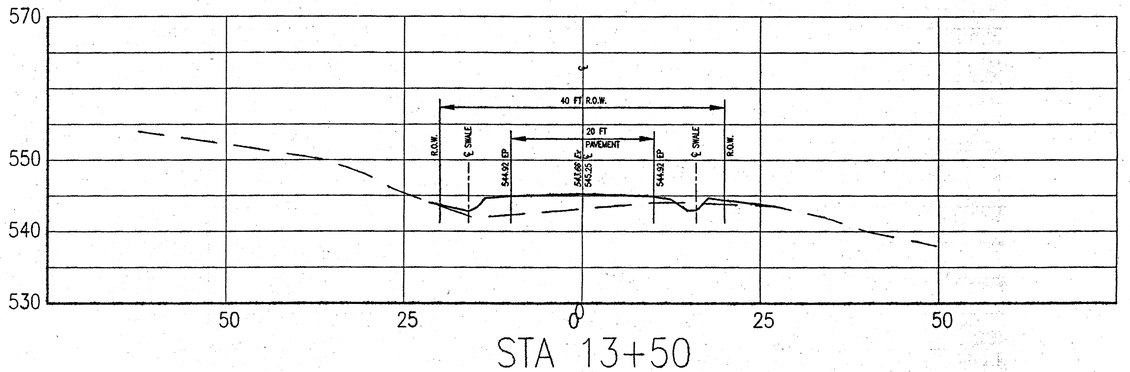

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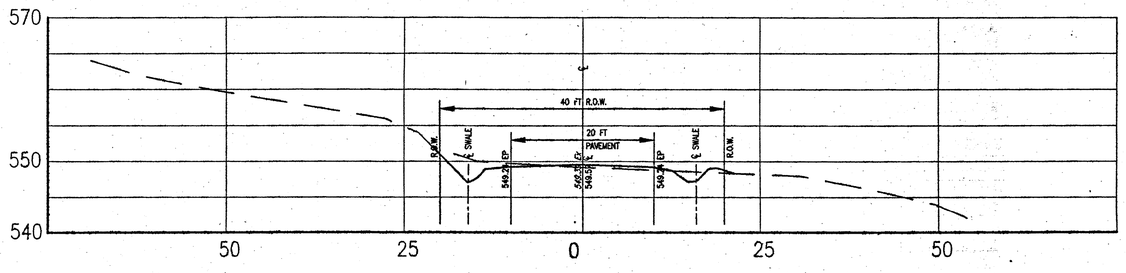

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ROADWAY CROSS SECTIONS

GREAT MEADOWS I

BLOCK 21 LOT 38

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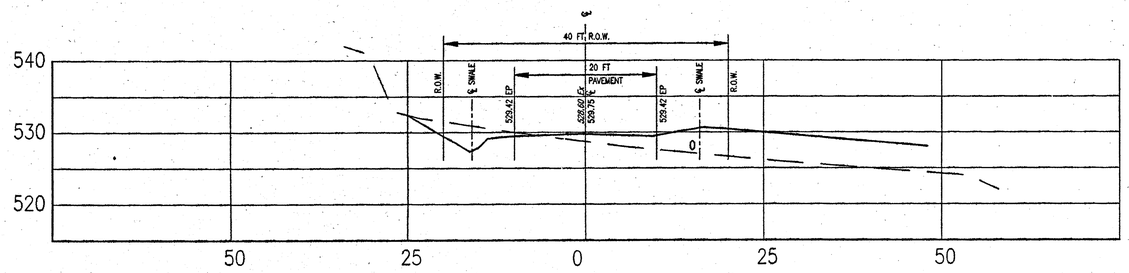

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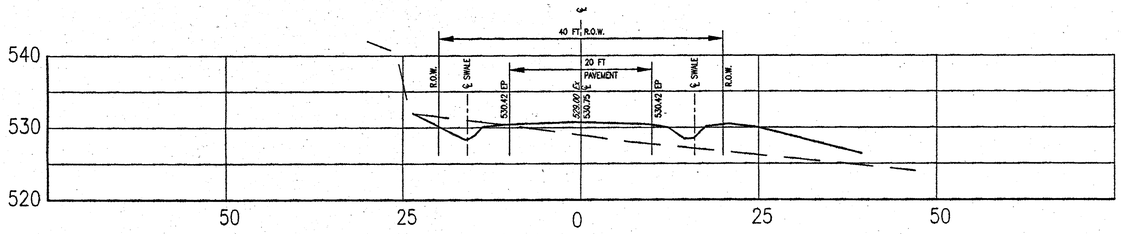

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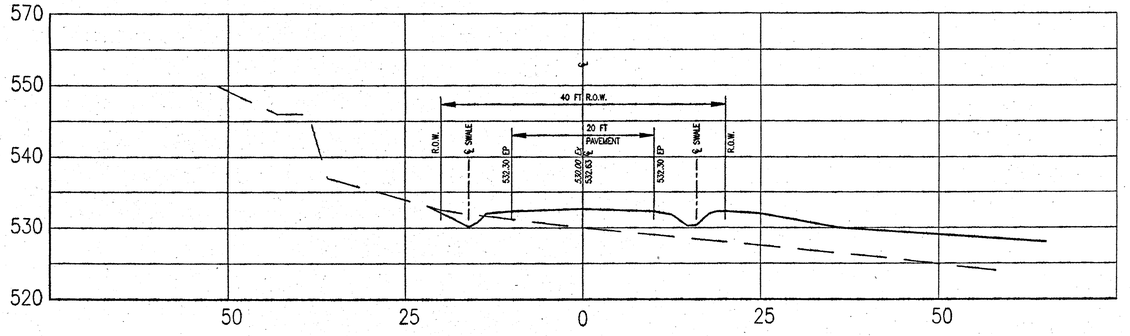

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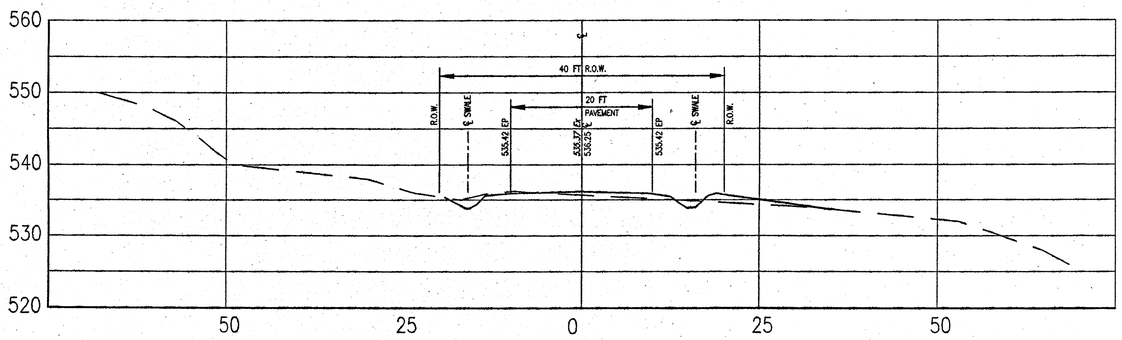

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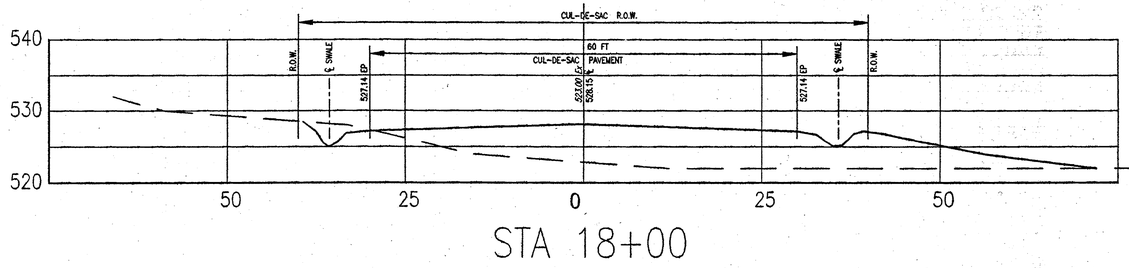

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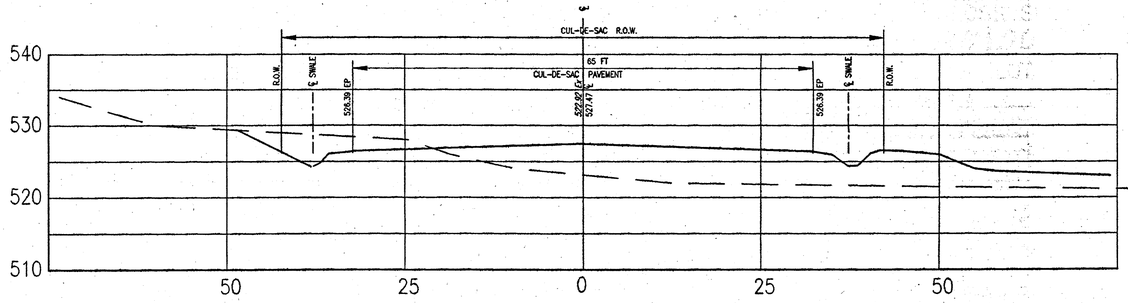

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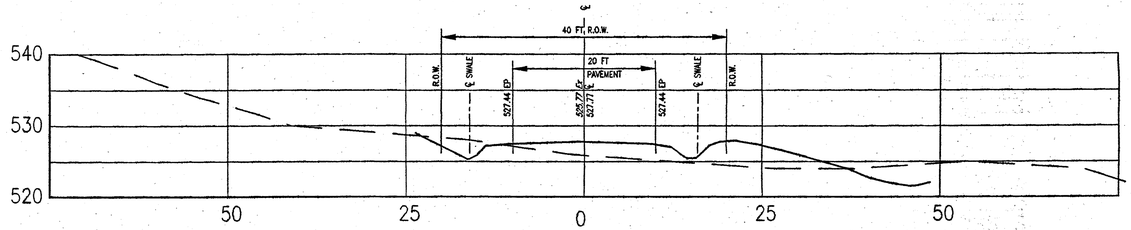

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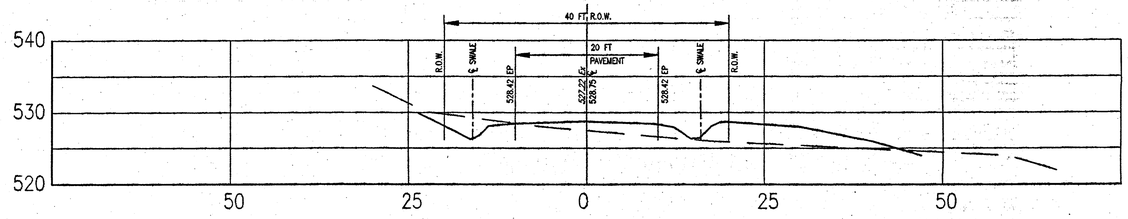

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ROADWAY CROSS SECTIONS

GREAT MEADOWS I

BLOCK 21 LOT 38

TOWNSHIP of INDEPENDENCE WARREN COUNTY, NJ

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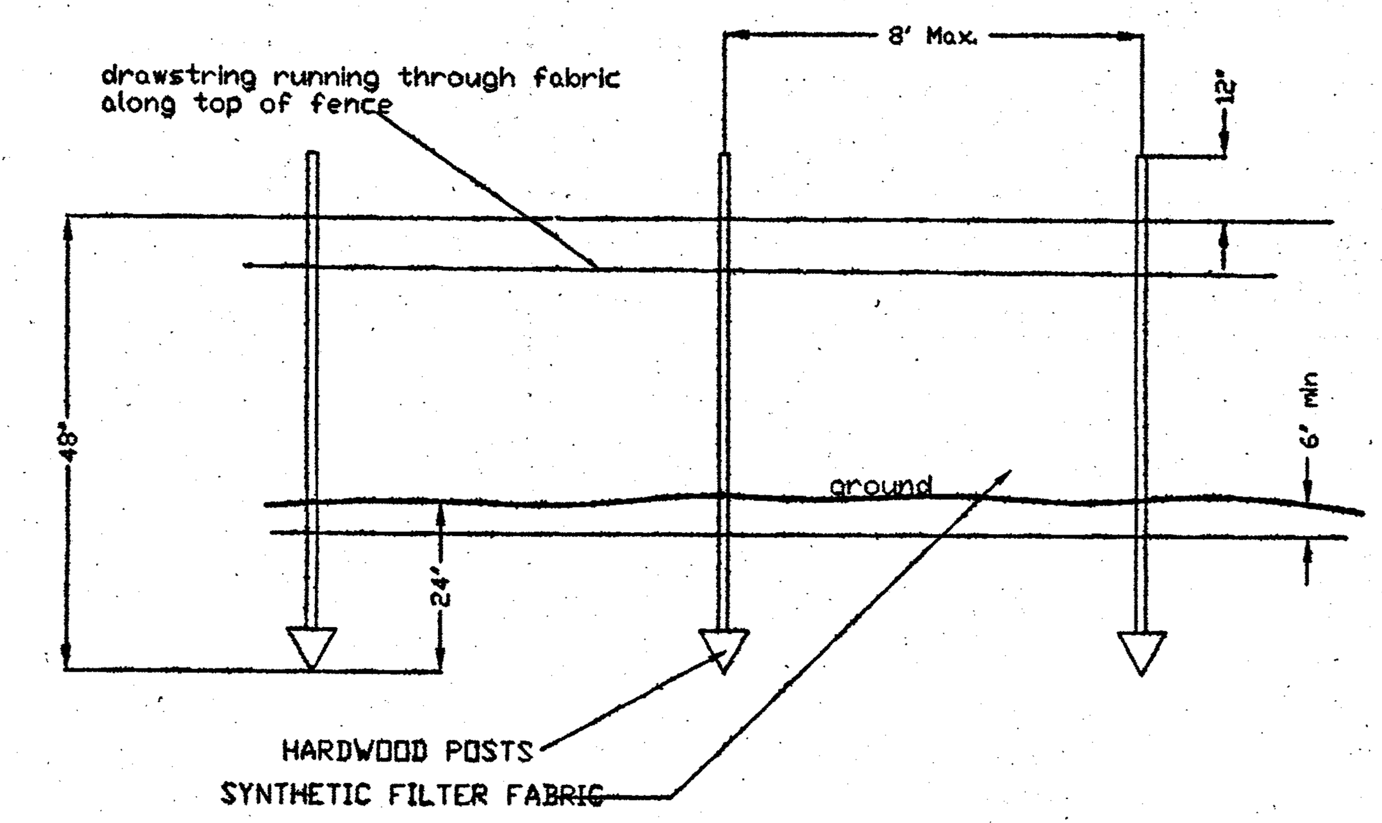
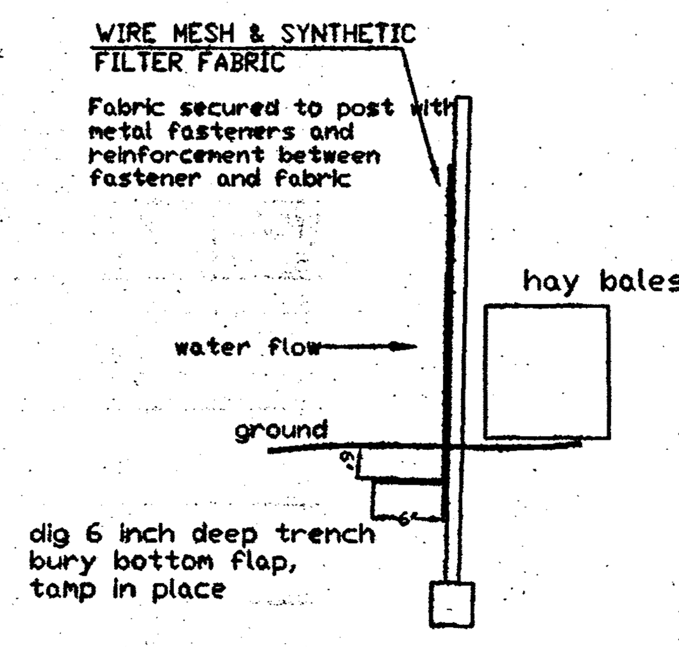
WARREN COUNTY SOIL CONSERVATION DISTRICT
SOIL EROSION AND SEDIMENT CONTROL
GENERAL NOTED

1. The District shall be represented at the project preconstruction meeting with the township engineer, contractors, and utility representatives. If the township engineer does not schedule a preconstruction meeting, it is the responsibilty of the the owner/applicant to schedule one before any land disturbance. Two weeks notice must be given for scheduling preconstruction meetings.
2. Failure of the aforementioned plan shall not relieve the applicant of any of its responsibilities relevant to the appropriate statutes. Additional erosion and sediment control measures may be required as deemed necessary by the District in the event of any unforeseen problems incurred during construction.
3. Any changes of approved plans shall require an additional submittal to the District including appropriate re-review fees.
4. A 72 hour Start of Land Disturbance Notification shall be given.
5. In that N.J.S.A. 4-24-39 et seq requires that no Certificate of Occupancy be issued by the municipality before provisions of the certified plan for soil erosion and sediment control have been complied with for permanent measures. All site work relative to approved plans and all work around individual lots in subdivisions will be completed before the District issues a Certificate of Compliance. Two weeks notice must be given to the District to schedule inspection for Certificate of Compliance release.
6. Final stabilization of all land disturbances associated with the underground utilities, irrespective of phasing, is the ultimate responsibility of the owner.
7. A cash bond of not less than $2,500. (Per disturbed acre or part thereof, or a lot) will be posted with the Warren County Soil Conservation District during the non growing season (November 15 - April 15) if a Certificate of Compliance is needed and soil erosion and sediment control measures for permannent stabilization are not completed.
8. Sediment tracked onto public right-of-ways shall be swept at the end of each working day.
9. No building permits will be released until all soil erosion and sediment control measures as shown on approved plans are installed.
10. Dust to be controlled with water, calcium chloride or other method approved by the Soil Conservation District.
11. Tracking pad to be kept clean and repaired as necessary.
12. Soil Erosion and Sediment Control measures shall be in accordance with Standards for Soil Erosion and Sediment Control in New Jersey, July 1999.
13. See Detail Sheets fro Additional Soil and Sediment Control Details.

CONSTRUCTION SEQUENCE FOR SOIL EROSION CONTROL

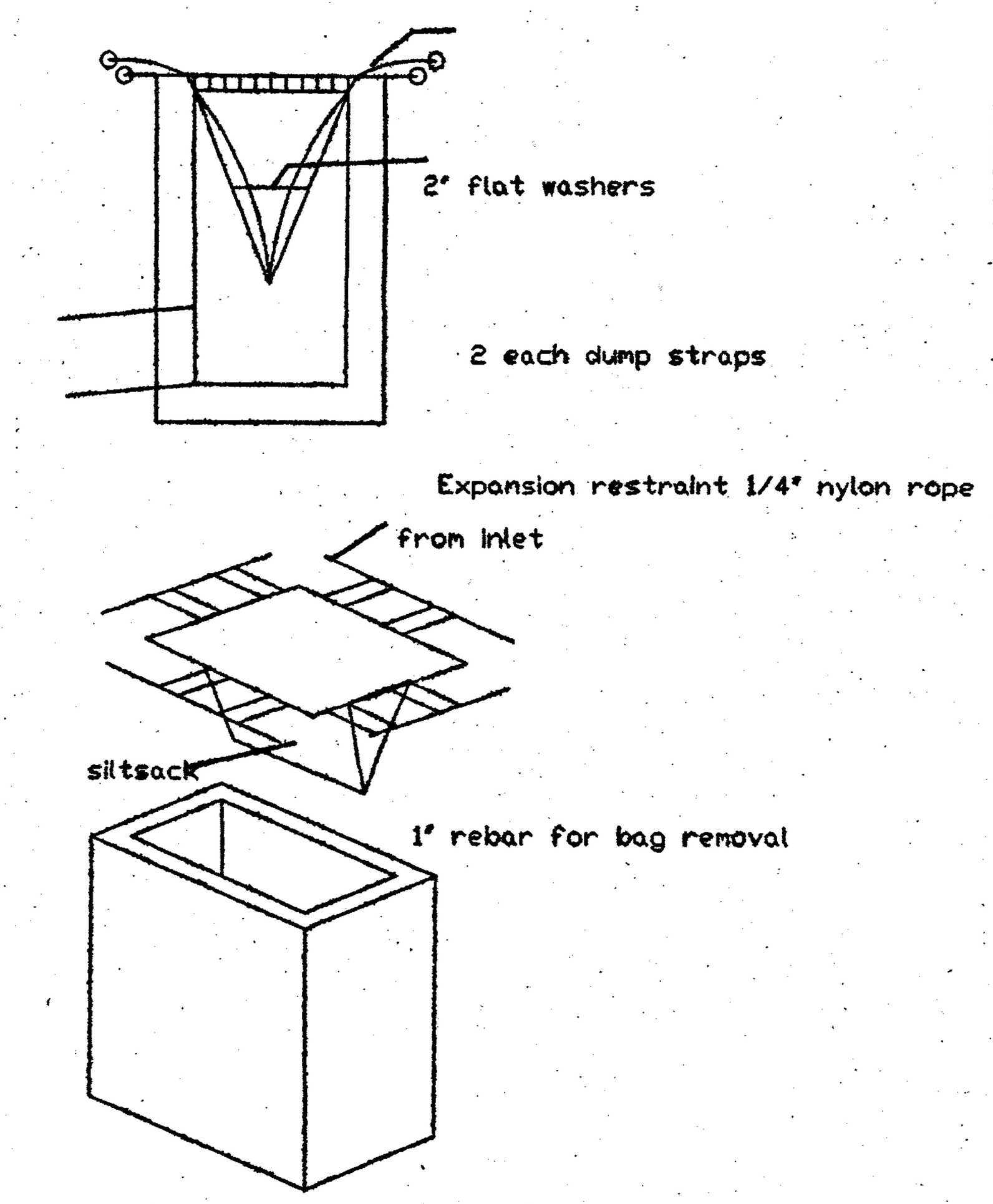
1. Place silt fence	1 day
2. Establish stone wheel cleaning blanket and construction entrance	1 day
3. Grade Site	2 months
4. Install Utilities	2 months
5. Install roadway subbase	2 weeks
6. Construct drainage swales	1 week
7. Install roadway base course	1 day
8. Install roadway surface course	1 day
9. Stabilize exposed areas	3 days
10. Remove soil erosion measures	1 day





1. Fence posts shall be spaced 8 feet center to center or closer. They shall extend at least 2 feet into the ground and extend at least 2 feet above ground. Posts shall be constructed of hardwood with a minimum diameter thickness of 1 1/2 inches.
2. A metal fence with 6 inch or smaller openings and at least 2 feet high may be utilized, fastened to the fence posts, to provide reinforcement and support to the geotextile fabric where space for other practices is limited and heavy sediment loading is expected.
3. A geotextile fabric, recommended for such use by the maunufacturer, shall be buried at least 6 inches deep in the ground. The fabric shall extend at least 2 feet above the ground. The fabric must be securely fastened to the posts using a system consisting of metal fasteners (nails or staples) and a high strength reinforcement material (nylon webbing, grommets, washers, etc.) placed between the fastener and the geotextile fabric. The fastening system shall resist tearing away from the post. The incorporate a drawstring in the top portion of the fence for added strength.

FILTER FABRIC DETAIL



Installation notes for SILTSACK
1. Remove drain grate and insert siltsack
2. Replace grate to hold siltsack in position
3. Remove filled siltsack with front end loader or other equipment
4. Clean and reuse or discard and replace with new siltsack

INLET FILTER DETAIL

DUST CONTROL MEASURES
Mulches - See Standard for Stabilization with Mulches Only (page 5-1)
Vegetative Cover - See Standard for Temporary Vegetative Cover (page 7-1), Permanent Vegetative Cover for Soil Stabilization (page 4-1), and Permanent Stabilization with Sod (page 6-1)
Spray On Adhesives - On mineral soils (not effective on muck soils) Keep traffic off these areas.

Tillage - To roughen surface and bring clods to the surface. This is a temporary emergency measure which should be used before soil blowing starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12 inches apart, and spring-toothed harrows are examples of equipment which may produce the desired effect.

Sprinkling - Site is sprinkled until the surface is wet.

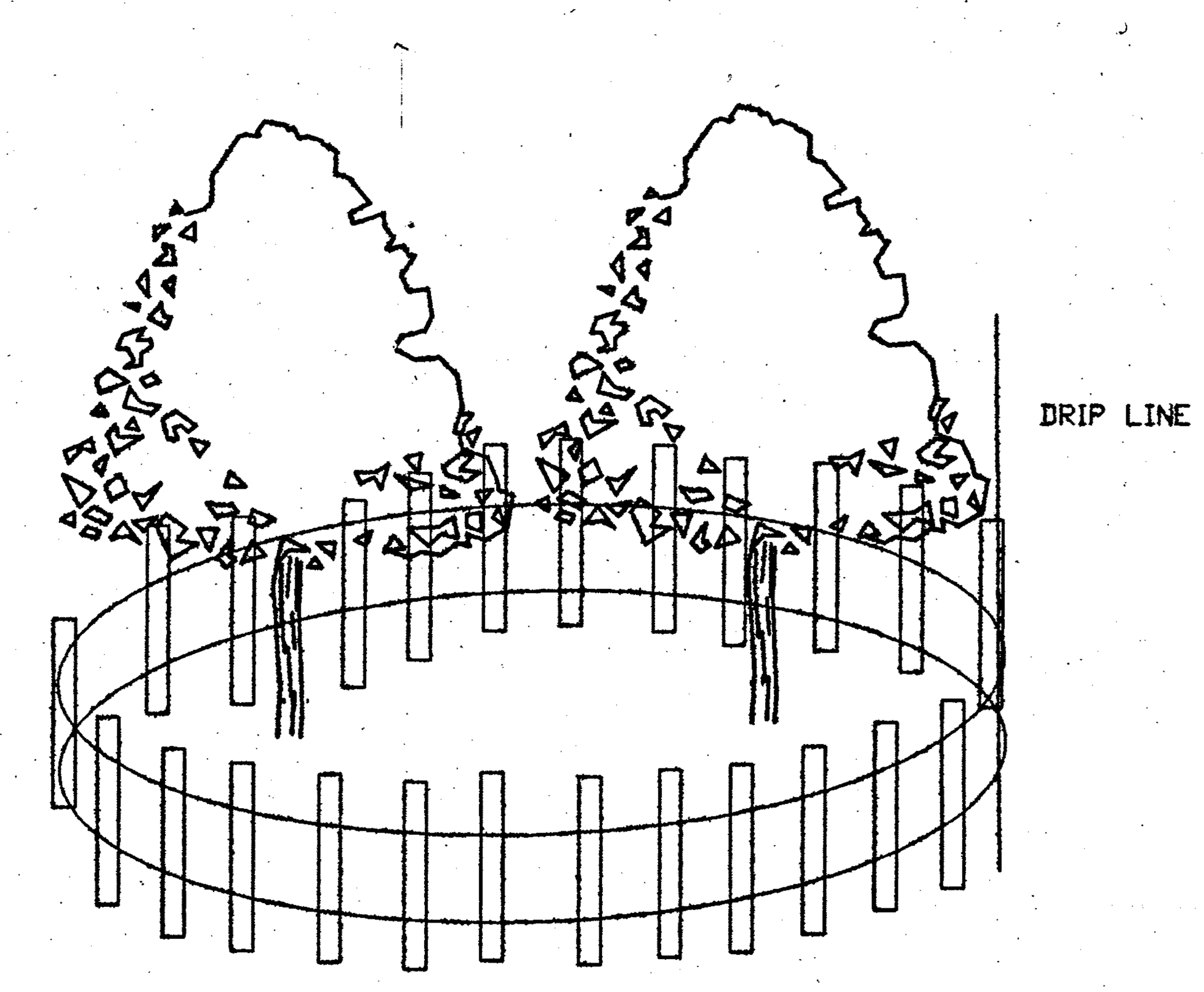
Barriers - Solid board fences, snow fences, burlap fences, crate walls, bales of hay, and similar material can be used to control air currents and soil blowing.

Calcium Chloride - Shall be in the form of loose, dry 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. If used on steeper slopes, then use other practices to prevent washing into streams, or accumulation around plants.

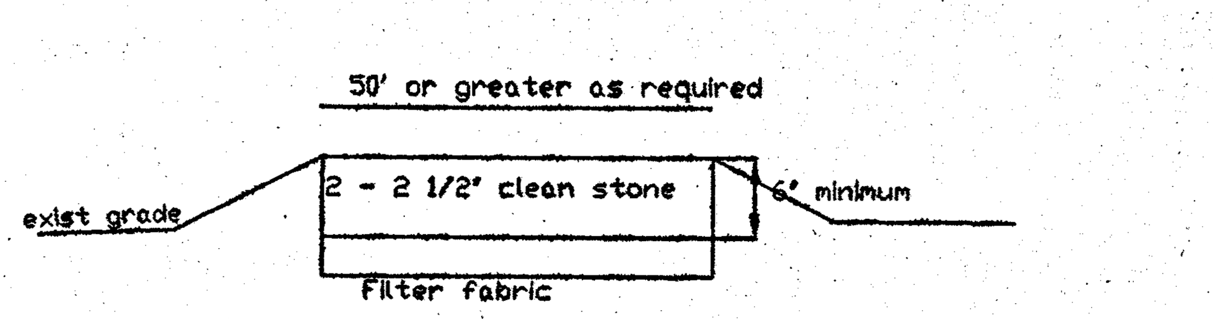
Stone - Cover surface with crushed stone or coarse gravel.

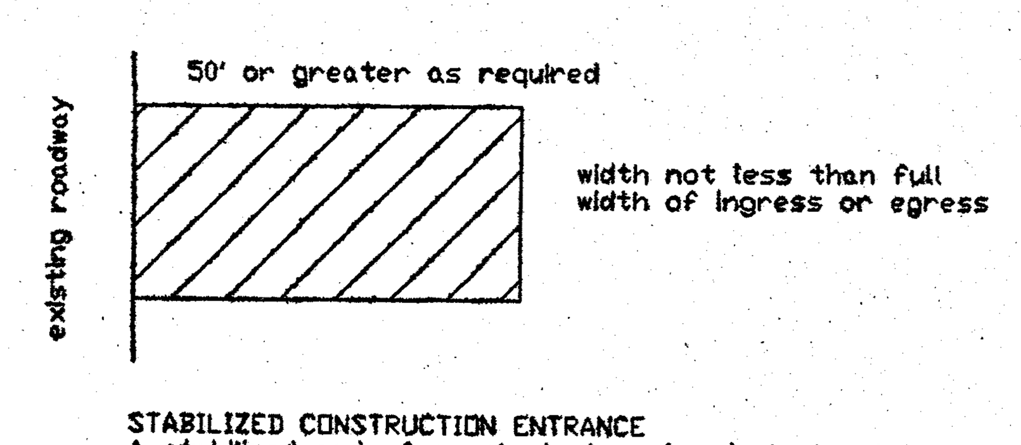
DUST CONTROL MATERIALS

MATERIAL	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS/ACRE
Anionic asphalt emulsion	7:1	Coarse Spray	1200
Latex emulsion	12.5:1	Fine Spray	235
Resin in water	4:1	Fine Spray	300
Polyacrylamide (PAM) spray 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.		
Acidulated Soy Bean Soap Stick	None	Coarse Spray	1200



TREE PROTECTION





STABILIZED CONSTRUCTION ENTRANCE
A stabilized pad of crushed stone located at points where traffic will be entering or leaving a construction site

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	

Where a stabilized construction exit traverses between two buildings, it shall be stoned the entire length of the right-of-way. Mountable stone berms placed across the width of the exit may also be required at the transition point between paved and non-paved areas to trap sediments which are carried by stormwater flowing along the curbline.

Individual lot entrance and egress - After interior roads are paved, individual lot ingress/egress points may require a stabilized construction entrance consisting of no. 3 stone (1" to 2") to prevent or minimize tracking of sediments. Width of the stone ingress/egress shall be equal to lot entrance and shall be a minimum of ten feet in length. If space is limited, vehicle tires may be washed with clean water before entering a paved area. A wash station must be located such that wash water will not flow onto paved roadways or into unprotected storm drainage systems.

When the construction access exits onto a major roadway, a paved transition area may be installed between the major roadway and the stoned entrance to prevent loose stones from being transported out onto the roadway by heavy equipment entering or leaving the site.

MAINTENANCE
The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto roadways. This may require periodic top dressing with additional stone or additional length as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed, or tracked onto roadways (public or private) or other impervious surfaces must be removed immediately.

Where accumulation of dust/sediment is inadequately cleaned or removed by conventional methods, a power broom or street sweeper will be required to clean paved or impervious surfaces. All other access points which are not stabilized shall be blocked off.

THIS PLAN TO BE USED FOR SOIL EROSION

DATE	REVISION
JAN 31, 2014	AS PER COMPLETENESS REVIEW

SOIL EROSION DETAILS
GREAT MEADOWS I
BLOCK 21 LOT 38
TOWNSHIP of INDEPENDENCE WARREN COUNTY, NJ

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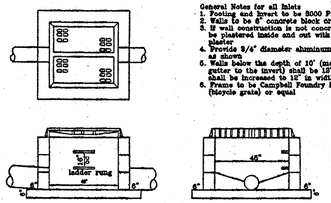
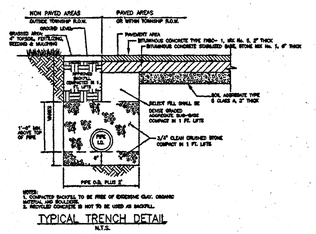


General Notes for all Inlets
1. Footing and Invert to be 3000 P.S.I. concrete
2. Walls to be 8" concrete block or precast concrete
3. If wall construction is not concrete, the walls shall be plastered inside and out with 1/2" thick cement plaster
4. Provide 3/4" diameter aluminum ladder rungs as shown
5. Walls below the depth of 10' (measured from the inlet gutter to the invert) shall be 12" thick and the foundation shall be increased to 12" in width and 12" in depth
6. Frame to be Campbell Foundry Pattern No. 3405 (bicycle grate) or equal

INLET TYPE E

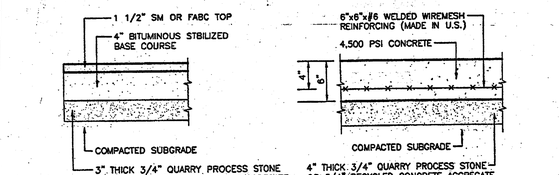


TYPICAL TRENCH DETAIL
N.T.S.

STOP SIGN DETAIL
R1-1
30"X30"

12"x18"
R7-1

NO PARKING SIGN DETAIL



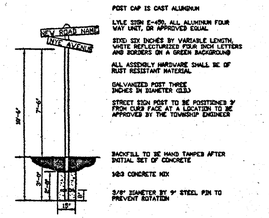
BITUMINOUS CONCRETE DRIVEWAY AND PARKING AREA DETAIL

NOTES:
1. ALL DRIVEWAYS MIN. OF 12'-0" WIDE PAVING DIMENSIONS ARE AFTER COMPACTION
2. TRANSVERSE AND LONGITUDINAL EXTENSION JOINTS TO BE PROVIDED AT 12'-0" INTERVALS & FALSE JOINTS @ 4'-0" O.C.

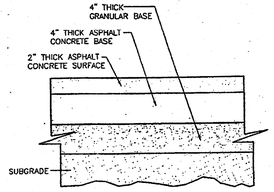
REINFORCED CONCRETE DRIVEWAY

NOTE:
1/2" EXPANSION JOINT EVERY 12'-0"
AND FALSE JOINT EVERY 4'-0"

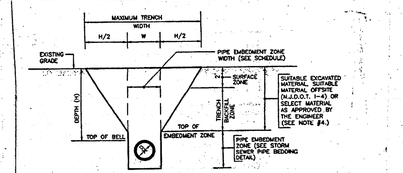
DRIVEWAY AND SIDEWALK DETAILS
NOT TO SCALE



DETAIL OF STANDARD STREET SIGN
NTS



TYPICAL PAVEMENT SECTION
NOT TO SCALE



TRENCH DETAIL
NOT TO SCALE

PIPE EMBEDMENT ZONE WIDTH SCHEDULE FOR PIPE MATERIAL OTHER THAN HDPE

INSIDE DIA. OF PIPE (D)	4", 6" 8", 10", 12"	14", 15", 18"	18"	20", 21"	24"	27"	30"
EMBEDMENT ZONE WIDTH (W)	3'- 6"	3'- 9"	4'- 0"	4'- 3"	4'- 6"	5'- 0"	5'- 3"
INSIDE DIA. OF PIPE (D)	36"	42"	48"	54"	60"	66"	72"	78"
EMBEDMENT ZONE WIDTH (W)	5'- 9"	6'- 3"	6'- 9"	7'- 3"	7'- 9"	8'- 3"	8'- 9"	9'- 3"

TRENCH EXCAVATION AND BACKFILL NOTES

1. THE MAXIMUM DRY DENSITIES SHALL BE DETERMINED IN ACCORDANCE WITH ASTM DESIGNATION D1557. THE MINIMUM PERCENTAGE OF COMPACTION TO BE ACHIEVED BY THE CONTRACTOR IN THE VARIOUS ZONES IS AS FOLLOWS:

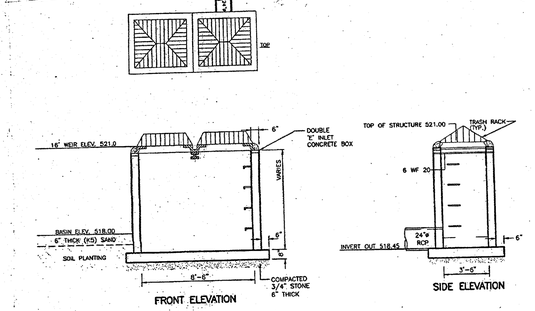
	PIPE MATERIAL	LOCATION	INITIAL COMPACTION
SURFACE ZONE	ALL	ALL	93%
TRENCH BACKFILL ZONE			90%
PIPE EMBEDMENT ZONE			95%

THE MINIMUM COMPACTION IN EMBANKMENTS SHALL BE 90%

2. THE PIPE EMBEDMENT ZONE WIDTH AND THE MAXIMUM TRENCH WIDTH SHALL NOT EXCEED THE PERMISSABLE WIDTHS SHOWN. IF THE PERMISSABLE WIDTH IS EXCEEDED, THE PIPE SHALL BE INSTALLED IN A HIGHER CLASS BEDDING THAN SHOWN ON THIS DRAWING OR THE SPECIFIED PIPE SHALL BE REPLACED WITH PIPE OF GREATER CRUSHING STRENGTH OR BOTH, TO ACHIEVE SUITABLE CONDITIONS.

3. SUITABLE MATERIAL FROM EXCAVATION SHALL BE FREE FROM OBJECTIONABLE QUANTITIES OF ORGANIC MATTER, CLAY, TREES, STUMPS, FROZEN MATERIAL, RUBBLE, CINDERS, ROOTS, AND OTHER MATERIALS CONSIDERED DELETERIOUS BY THE ENGINEER AND SHALL NOT HAVE FINES IN EXCESS OF 10 PERCENT PASSING THE NO. 200 SIEVE NOR STONE OR GRAVEL LARGER THAN 3 INCHES.

4. TRENCH BACKFILL WITHIN THE PROPOSED RIGHT OF WAY SHALL BE NJDOT SOIL AGGREGATE - I-5 OR DGA AS REQUIRED BY THE TOWNSHIP ENGINEER.

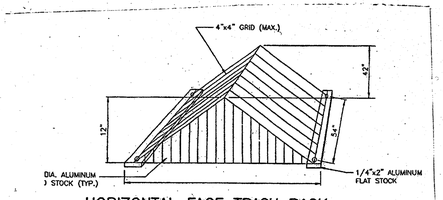


FRONT ELEVATION

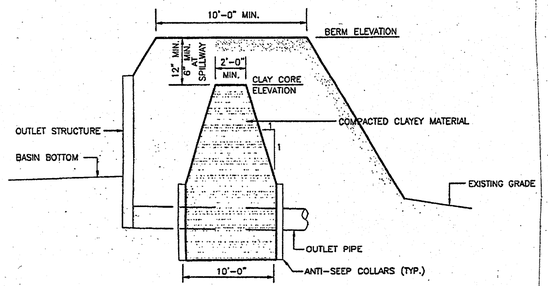
SIDE ELEVATION

GENERAL NOTES
1. NATURAL SOIL OR REPLACEMENT SOIL BELOW 6-INCH SAND LAYER MUST HAVE A MINIMUM PERCOLABILITY RATE OF 1-INCH PER HOUR.
2. BOTTOM SAND LAYER MUST CONSIST OF #3 SAND WITH A MAXIMUM OF 15% FINES AND A MINIMUM PERMEABILITY RATE OF 20 INCHES PER HOUR.
3. BASIN CONSTRUCTION MUST NOT COMPACT SOILS BELOW BASIN BOTTOM.
4. SEE NEW JERSEY STORMWATER BEST MANAGEMENT PRACTICES MANUAL REVISED 2004.

OUTLET STRUCTURE # DETENTION BASIN
N.T.S.



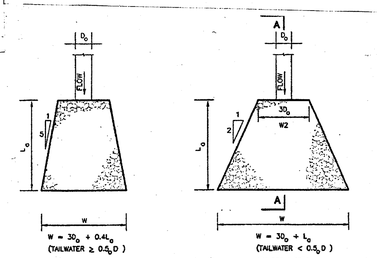
HORIZONTAL FACE TRASH RACK
N.T.S.



CLAY CORE-TYPICAL SECTION AT OUTLET PIPE

NOTES:
1. THE BERM SHALL BE TESTED FOR STRUCTURAL SOUNDNESS MEETING THE REQUIREMENTS SET FORTH BY THE MUNICIPAL ENGINEERS' OFFICE.
2. THE MINIMUM TOP WIDTH OF THE DETENTION/RETENTION BASIN BERM SHALL AS NOTED. A CUTOFF TRENCH (KEY-WAY) OF IMPERVIOUS MATERIAL SHALL BE PROVIDED UNDER ALL EMBANKMENTS THAT REQUIRE FILL MATERIAL. THE CUTOFF TRENCH SHALL BE SIZED AS NOTED.
3. ALL DETENTION/RETENTION BASIN EMBANKMENTS SHALL BE PLACED IN MAXIMUM OF EIGHT (8) INCH LIFTS AND COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DRY DENSITY AS ESTABLISHED BY ASTM D-1557.

CLAY CORE DETAIL FOR DRY BASINS (TYP.)
NOT TO SCALE



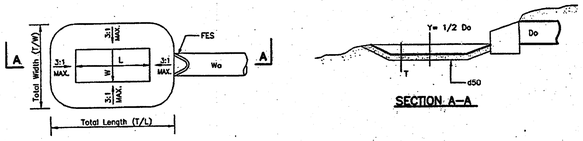
SECTION A-A

NOTES:
1. THE STONES SHALL BE OF DURABLE ROCK PREFERABLY TRAP ROCK WEIGHING NOT LESS THAN 50 LBS., AND NOT MORE THAN 150 LBS. EACH AND SHALL BE REASONABLY GRADED. 60% SHALL WEIGH MORE THAN 100 LBS. EACH, AN ALLOWANCE OF 10% BY WEIGHT OF QUARRY SPALLS (WEIGHING LESS THAN 50 LBS. WILL BE PERMITTED)
2. THE STONES SHALL BE PLACED WITH THEIR LONGEST AXIS PERPENDICULAR TO THE SLOPE AND IN CLOSE CONTACT AND SHALL BE FIRMLY BEDDED IN THE SLOPE. OPEN SPACES BETWEEN STONES SHALL BE FILLED WITH SPALLS FIRMLY RAMMED IN PLACE. THE LARGER STONES SHALL BE USED IN THE LOWER COURSES. THE FINISHED SURFACE SHALL BE EVEN AND TO THE REQUIRED LINE.
3. RIP-RAP DESIGN SHALL BE IN ACCORDANCE WITH THE NEW JERSEY SOIL EROSION & SEDIMENT CONTROL DESIGN STANDARDS.

RIP-RAP DETAIL
NOT TO SCALE

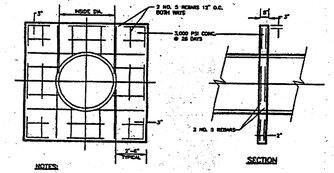
STRUCT. No.	W	W2	L_o	d50	T
FES #8	36'	9'	27'	3"	6"

STRUCT. No.	T/L	T/W	L	W	Y	d50	T
FES #10	18'	15'	6'	4'	2'	8"	16"



SECTION A-A

PREFORMED SCOUR HOLE
NOT TO SCALE



SECTION

NOTES:
1. PRIOR TO CONSTRUCTION OF COLLAR, THE OUTSIDE OF THE PIPE SHALL BE CLEANED.
2. ALL REINFORCING STEEL SHALL BE GRADE 40.
3. THE ANTI SEEP COLLAR SHALL BE PLACED AT THE POINTS WHERE THE PIPE ENTERS AND EXITS THE CLAY CORE. SEE PLAN FOR LOCATION.
4. ALL DIMENSIONS APPLY FOR R.C.P., H.E.R.C.P., CONCRETE BOX CULVERTS, ETC.

ANTI-SEEP COLLAR
N.T.S.

CONSTRUCTION DETAILS
GREAT MEADOWS I
BLOCK 21 LOT 38
TOWNSHIP of INDEPENDENCE WARREN COUNTY, NJ

Matarazzo Engineering, LLC
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575 Route 46 West Fairfield, NJ 07004
Tel (973)808-8779 Fax (973)808-8789
Certificate of Authorization 24GA28051000

DATE	REVISION
JAN 31, 2014	AS PER COMPLETENESS REVIEW

DATE AUGUST 12, 2013

FRANK MATARAZZO professional engineer & land surveyor NJ Lic No 37513
CHARLES J. CARBONE professional engineer NJ Lic No 32367

SCALE	DRN BY	CHK BY	FILE No	DRAWING	SHT 16 OF 16
1"= 50'	CJC	FM	111281	111281-SUB	