PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION

BLOCK 73, LOT 65
WEST MAIN STREET (CR 513) & MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY - NEW JERSEY

LIST OF PROPERTY OWNERS WITHIN 200'

LIST AS PREPARED BY BOROUGH OF ROCKAWAY TAX ASSESSOR, DATED JULY 10, 2020

BLOCK 40, LOT 79.01
MONEE, MADELINE M
6194 SANDERLING DRIVE
LAKELAND, FL 33809

BLOCK 40, LOT 80
ROCKAWAY BOROUGH
1 EAST MAIN STREET
ROCKAWAY, NJ 07866

BLOCK 40, LOT 81
HURST, MARK S/ELLEN K
239 WEST MAIN STREET
ROCKAWAY, NJ 07866

BLOCK 40, LOT 83.01
FARISCHON, MARY
223 WEST MAIN STREET
ROCKAWAY, NJ 07866

BLOCK 40, LOT 83.02
LANZONE, BITO III & BRITTANY
233 WEST MAIN STREET
ROCKAWAY, NJ 07866

BLOCK 40, LOT 84
RICCIO, JOHN/PIETRINA
43 WILLIAM DRIVE
ROCKAWAY, NJ 07866

BLOCK 40, LOT 85
CADENA, REBECCA/GUILLERMO
213 WEST MAIN STREET
ROCKAWAY, NJ 07866

BLOCK 40, LOT 85.01
CAGLIARDI,JUDITH
215 WEST MAIN STREET
ROCKAWAY, NJ 07866

BLOCK 40, LOT 86
BOROUGH OF ROCKAWAY
1 EAST MAIN STREET
ROCKAWAY, NJ 07866

BLOCK 40, LOT 87
DEMAREST, JAY
187 WEST MAIN STREET
ROCKAWAY, NJ 07866

BLOCK 40, LOT 88
BOROUGH OF ROCKAWAY
1 EAST MAIN STREET
ROCKAWAY, NJ 07866

BLOCK 40, LOT 89
SIMARD, MARY
163 WEST MAIN STREET
ROCKAWAY, NJ 07866

BLOCK 40, LOT 89.01
SIMARD,
MARY/SUZETTE/ANDRE/VICTORIA
163 WEST MAIN STREET
ROCKAWAY, NJ 07866

BLOCK 40, LOT 91
SOMMERKORN, RICHARD
10 VISTA DRIVE
BOONTON, NJ 07005

BLOCK 40, LOT 92
DEBSKI 99147 LLC
15 MAGNOLIA AVENUE
DENVILLE, NJ 07834

BLOCK 40, LOT 93
DIRECTIONAL PROPERTIES, LLC
141 WEST MAIN STREET
ROCKAWAY, NJ 07866

BLOCK 40, LOT 94
KARDAM ROCKAWAY WEST, LLC
221 ROUTE 46
ROCKAWAY, NJ 07866

BLOCK 40, LOT 95
JPHB, LLC
26 BROAD STREET
DENVILLE, NJ 07834

BLOCK 71, LOT 21
MANGELS, MICHAEL/JESSICA
15 MOUNT PLEASANT AVENUE
ROCKAWAY, NJ 07866

BLOCK 71, LOT 22
SCHILLER, LINDA
21 MOUNT PLEASANT AVENUE
ROCKAWAY, NJ 07866

BLOCK 71, LOT 23
KIDD, ANTHONY STEWART/NEW, DEBRA
27 MOUNT PLEASANT AVENUE
ROCKAWAY, NJ 07866

BLOCK 71, LOT 24
GORGES, RICHARD/JACQUELINE
33 MOUNT PLEASANT AVENUE
ROCKAWAY, NJ 07866

BLOCK 71, LOT 24.01
CAPPS/TEDESCO, MICHAEL/SUZANNE
30 EASTON AVENUE
ROCKAWAY, NJ 07866

BLOCK 71, LOT 25
MENDOZA, JAVIER ALBERTO
45 MT. PLEASANT AVENUE
ROCKAWAY, NJ 07866

BLOCK 71, LOT 29
GINDER, JANET M
11 EASTON AVENUE
ROCKAWAY, NJ 07866

BLOCK 71, LOT 30
ZINK, DONALD/DEIDRA D.
7 EASTON AVENUE
ROCKAWAY, NJ 07866

BLOCK 71, LOT 31
MERRIAM, AADEN JASPER
1 EASTON AVENUE
ROCKAWAY, NJ 07866

BLOCK 71, LOT 32
VILLAR, NICOLAS
67-69 MOUNT PLEASANT AVENUE
ROCKAWAY, NJ 07866

BLOCK 71, LOT 33
LYNCH, KEVIN P
83 MOUNT PLEASANT AVENUE
ROCKAWAY, NJ 07866

BLOCK 71, LOT 34
VANCE REALTY LLC
21 CONGER STREET
DOVER, NJ 07801

BLOCK 71, LOT 35
DAWKINS, CLIFFORD/TAMARA
34 MARSHALL AVENUE
ROCKAWAY, NJ 07866

BLOCK 71, LOT 45
DI GENNARO, MARK/LINDSAY
29 MARSHALL AVENUE
ROCKAWAY, NJ 07866

BLOCK 71, LOT 46
BINETTI, JOSEPH/DIANE
19 MARSHALL AVENUE
ROCKAWAY, NJ 07866

BLOCK 71, LOT 47
DAVEY, MICHELE/CHRISTOPHER
11 MARSHALL AVENUE
ROCKAWAY, NJ 07866

BLOCK 71, LOT 48
RIMNIUS, JEAN
107 MOUNT PLEASANT AVENUE
ROCKAWAY, NJ 07866

BLOCK 73, LOT 53
GONGORA, ALEXANDRA
242 WEST MAIN STREET
ROCKAWAY, NJ 07866

BLOCK 73, LOT 53.01
ROCK, LLC
248 WEST MAIN STREET, UNIT 1
ROCKAWAY, NJ 07866

BLOCK 73, LOT 53.01
GTWO, LLC
248 WEST MAIN STREET UNIT 2
ROCKAWAY, NJ 07866

BLOCK 73, LOT 53.01
MEHTA, DHARAM/AURELIA
248 WEST MAIN STREET
ROCKAWAY, NJ 07866

BLOCK 73, LOT 57
COLON, KURT/MAUREEN
8 DAVID DRIVE
ROCKAWAY, NJ 07866

BLOCK 73, LOT 59
VOLPI, RICHARD III
11 DAVID DRIVE
ROCKAWAY, NJ 07866

BLOCK 73, LOT 59.01
PETRILLO, ALEXANDER
242 WEST MAIN STREET
ROCKAWAY, NJ 07866

BLOCK 73, LOT 60
REUBEN, STANLEY & ALYSON
7 DAVID DRIVE
ROCKAWAY, NJ 07866

BLOCK 73, LOT 61
YAWORSKY, ALEXANDER & DANUSIA
19 WILLIAM DRIVE
ROCKAWAY, NJ 07866

BLOCK 73, LOT 62
BAKER, HARRY/AMY
15 WILLIAM DRIVE
ROCKAWAY, NJ 07866

BLOCK 73, LOT 63
RUIZ, OMAR & KIMBERLY J
11 WILLIAM DRIVE
ROCKAWAY, NJ 07866

BLOCK 73, LOT 64
GOMEZ/GALVIS, IMGARD/LARY S.
104 MOUNT PLEASANT AVENUE
ROCKAWAY, NJ 07866

BLOCK 73, LOT 64.01
DE SILVA, DILUKS
7 WILLIAM DRIVE
ROCKAWAY, NJ 07866

BLOCK 73, LOT 65
DONATONI, ANTHONY J THIRD TRUS/ETALS
50 LAURELWOOD DRIVE
ROCKAWAY, NJ 07866

BLOCK 73, LOT 66
GROW, SAM PATRICK
60 MOUNT PLEASANT AVENUE
ROCKAWAY, NJ 07866

BLOCK 73, LOT 67
PRICE, JEFFREY P
54 MOUNT PLEASANT AVENUE
ROCKAWAY, NJ 07866

BLOCK 73, LOT 68
RIZZI, ELIZABETH A
48 MOUNT PLEASANT AVENUE
ROCKAWAY, NJ 07866

BLOCK 73, LOT 69
SALGINA, LLC
429 VREELAND AVENUE
BOONTON, NJ 07005

ROCKAWAY BOROUGH MUNICIPAL BUILDING
BOROUGH CLERK
1 EAST MAIN STREET
ROCKAWAY, NJ 07866

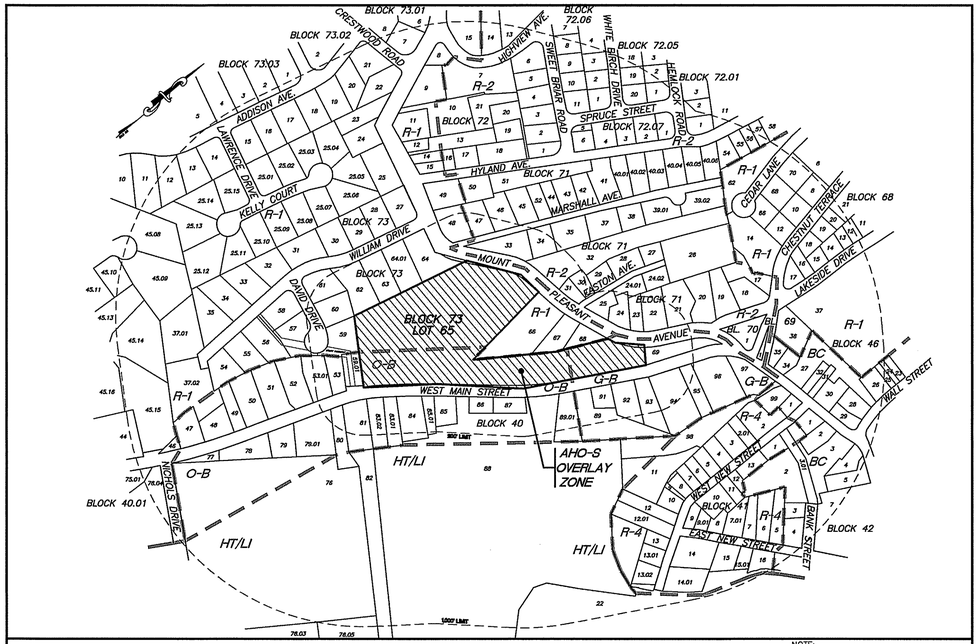
ROCKAWAY VALLEY REGIONAL SEWER AUTHORITY
99 GREENBANK ROAD RD # 1
BOONTON, NJ 07005-9602

JERSEY CENTRAL POWER & LIGHT COMPANY
300 MADISION AVENUE
PO BOX 1911
MORRISTOWN, NJ 07962-1911

NJ NATURAL GAS COMPANY
1415 WYCKOFF ROAD
PO BOX 1464
WALL, NJ 07719

VERIZON
290 W MT PLEASANT RD
BLDG 2, 4TH FLOOR RM
LIVINGSTON, NJ 07039

CABLEVISION
683 ROUTE 10 EAST
RANDOLPH, NJ 07869-3799



KEY MAP
SCALE: 1" = 300'±

NOTE:
INFORMATION SHOWN HEREON TAKEN FROM ROCKAWAY BOROUGH TAX MAP SHEETS 8, 9, 11, 12, 13, AND 14 AND THE ROCKAWAY BOROUGH ZONING MAP. THE SUBJECT PROPERTY IS SHOWN ON TAX MAP SHEET 13.

NOTES AND REFERENCES

1. OWNER: DONATONI, ANTHONY J THIRD TRUST/ETALS
   50 LAURELWOOD DRIVE
   ROCKAWAY, NJ 07866
2. APPLICANT: RPM DEVELOPMENT GROUP
   77 PARK STREET
   MONTCLAIR, NJ 07042
3. THESE PLANS HAVE BEEN PREPARED FOR PRELIMINARY & FINAL SITE PLAN AND MINOR SUBDIVISION APPROVAL FOR PROPERTY KNOWN AS BLOCK 73, LOT 65, LOCATED IN THE BOROUGH OF ROCKAWAY, MORRIS COUNTY, NEW JERSEY. THE APPLICANT REQUESTS APPROVAL TO SUBDIVIDE THE PROPERTY INTO TWO (2) LOTS FOR THE CONSTRUCTION OF A THREE (3) STORY SENIOR APARTMENT BUILDING CONTAINING SIXTY-FOUR (64) DWELLING UNITS ALONG WITH ASSOCIATED SITE IMPROVEMENTS ON ONE LOT. AN EXISTING SINGLE FAMILY DWELLING AND ASSOCIATED SITE IMPROVEMENTS WILL REMAIN ON THE OTHER LOT.
4. THE SUBJECT PROPERTY HAS A NET LOT AREA OF 7.805 ACRES AND IS LOCATED IN THE SENIOR HOUSING (AHO-S) OVERLAY ZONE DISTRICT AND R-1 RESIDENTIAL ZONE DISTRUCT. THE PROPERTY HAS FRONTAGE ALONG WEST MAIN STREET (COUNTY ROUTE 513) & MOUNT PLEASANT AVENUE. THE PROPOSED THREE (3) STORY SENIOR APARTMENT BUILDING WILL BE CONSTRUCTED UNDER THE AHO-S ZONE REQUIREMENTS AND THE EXISTING DWELLING TO REMAIN WILL CONFORM TO THE R-1 ZONE REQUIRMENTS.
5. UNDERGROUND UTILITIES SERVING THE SUBJECT PROPERTY ARE SHOWN BASED UPON SURFACE EVIDENCE AND AVAILABLE RECORD DOCUMENTS. THE LACK OF UNDERGROUND UTILITY INFORMATION DOES NOT DENY THE EXISTENCE OR ABSENCE OF SAME. THE APPROPRIATE UTILITY COMPANY SHOULD BE CONTACTED TO CONFIRM THE EXISTENCE OR ABSENCE OF SAME AND A FIELD MARKOUT OF ALL UTILITIES PRIOR TO CONSTRUCTION. FIELD MARKOUT CAN BE REQUESTED BY CALLING 1-800-242-1000.
6. BOUNDARY & TOPOGRAPHIC INFORMATION BASED ON MAP TITLED "BOUNDARY & TOPOGRAPHIC SURVEY PLAN, BLOCK 73, LOT 65, WEST MAIN STREET (CR 513) & MOUNT PLEASANT AVENUE, BOROUGH OF ROCKAWAY, MORRIS COUNTY, NEW JERSEY," PREPARED BY DYKSTRA WALKER DESIGN GROUP, DATED 3/30/18. HORIZONTAL DATUM IS NAD 1983 AND VERTICAL DATUM IS NAVD 1988.
7. THERE ARE NO FLOODPLAINS OR FLOODWAYS ON THE SUBJECT PROPERTY PER FIRM MAPPING.
8. THERE ARE NO FRESHWATER WETLANDS ON OR WITHIN 150 FT OF THE SUBJECT PROPERTY IN THE OPINION OF DYKSTRA WALKER DESIGN GROUP BASED ON A SITE INSPECTION PERFORMED DURING MARCH OF 2018.
9. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE BOROUGH OF ROCKAWAY, COUNTY OF MORRIS AND OSHA SAFETY STANDARDS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE COMPLIANCE.
10. ALL UTILITY LOCATIONS, GRADES, ELEVATIONS, INVERTS, ETC. SHALL BE CONFIRMED PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE ANY DESIGN ADJUSTMENTS AS MAY BE REQUIRED DUE TO FIELD CONDITIONS.
11. APPLICANT SHALL OBTAIN ALL REQUIRED ROAD OPENING PERMITS FOR WORK TO BE PERFORMED WITHIN THE RIGHT-OF-WAY OF THE PUBLIC ROADS.
12. ALL TRAFFIC SIGNAGE AND STRIPING SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
13. WAIVERS ARE REQUIRED FROM SECTION 170-5 OF THE BOROUGH OF ROCKAWAY LAND USE ORDINANCE FOR STEEP SLOPE DISTURBANCE. REFER TO THE SLOPE MAP FOR DETAILS.
14. A DESIGN WAIVER IS REQUIRED FROM SECTION 171-19 OF THE BOROUGH OF ROCKAWAY LAND USE ORDINANCE FOR DRIVEWAY GRADES OF 5% WITHIN FORTY (40) FEET OF THE CURBLINE WHERE A MAXIMUM GRADE OF TWO (2) PERCENT IS ALLOWED.
15. A DESIGN WAIVER IS REQUIRED FROM SECTION 171-19 OF THE BOROUGH OF ROCKAWAY LAND USE ORDINANCE FOR A MAIN APPROACH WALKWAY SLOPE OF FIVE (5) PERCENT WHERE THE MAXIMUM ALLOWABLE SLOPE IS FOUR (4) PERCENT.

BOROUGH OF ROCKAWAY ZONING REQUIREMENTS

R-1 (RESIDENTIAL) ZONE DISTRICT			
ITEM	REQUIRED	PROPOSED LOT 65.02	CONFORMING
MINIMUM LOT AREA	–	26,313 SF	N/A
MIN. LOT AREA WITHIN 150 FT OF R.O.W.	15,000 SF	25,503 SF	YES
MINIMUM LOT WIDTH AT STREET	75 FT	187 FT	YES
MINIMUM LOT WIDTH AT SETBACK LINE	100 FT	191 FT	YES
MINIMUM FRONT YARD SETBACK	35 FT	103 FT	YES
MINIMUM REAR YARD SETBACK	50 FT	52 FT	YES
MINIMUM SIDE YARD SETBACK	10 FT	20 FT	YES
MAXIMUM IMPERVIOUS COVERAGE	25%	24.7% (6,500 SF)	YES
MAXIMUM BUILDING HEIGHT	35 FT (2.5 STORIES)	< 35 FT (2.5 STORIES)	YES

COVERAGE BREAKDOWN:
PROPOSED CONDITIONS:

DWELLING	955 SF
DRIVEWAY	5,240 SF
CONCRETE PADS	305 SF
TOTAL	6,500 SF

BOROUGH OF ROCKAWAY ZONING REQUIREMENTS

AHO-S (SENIOR HOUSING) ZONE DISTRICT				
ITEM	REQUIRED	EXISTING	PROPOSED LOT 65.01	CONFORMING
MINIMUM LOT AREA	7 ACRES	339,990 SF (7.805 ACRES)	306,213 SF (7.030 ACRES)	YES
MAXIMUM DENSITY	9.5 UNITS/ACRE	N/A	9.1 UNITS/ACRE	YES
MINIMUM LOT WIDTH	300 FT	346.4 FT	> 300 FT	YES
MINIMUM LOT DEPTH	100 FT	372.1 FT	> 100 FT	YES
MINIMUM FRONT YARD SETBACK	50 FT	82.9 FT	66.1 FT	YES
MINIMUM REAR YARD SETBACK	50 FT	368.9 FT	151.2 FT	YES
MINIMUM SIDE YARD SETBACK	50 FT	97.1 FT	149.8 FT	YES
MAXIMUM BUILDING HEIGHT	37 FT/3 STORIES	< 37 FT/3 STORIES	36.98 FT/3 STORIES (1)	YES
MINIMUM STORY HEIGHT	9 FT	N/A	11 FT (SEE ARCH PLANS	YES
MAXIMUM BUILDING COVERAGE	10%	< 1% (955 SF)	7.4% (22,790 SF)(2)	YES
MAXIMUM LOT COVERAGE	30%	4.7% (15,984 SF)	26.9% (82,340 SF)(2)	YES
AMENITY AREAS:				
MINIMUM TOTAL AMENITY AREAS: 150 SF/BEDROOM X 64 BEDROOMS = 9,600 SF	9,600 SF	N/A	9,710 SF (3)	YES
MINIMUM INDOOR AMENITY SPACE	30% (2,880 SF)	N/A	30% (2,910 SF)(3)	YES
MINIMUM OUTDOOR AMENITY SPACE	30% (2,880 SF)	N/A	70% (6,800 SF)(3)	YES
MINIMUM OUTDOOR AMENITY SPACE SEATING (BENCH): 0.5 LF/BEDROOM X 64 BEDROOMS = 32 LF	32 LF	N/A	36 LF	YES
MINIMUM OUTDOOR AMENITY SPACE SETBACK	30 FT (4)	N/A	> 30 FT	YES

(1) BUILDING HEIGHT CALCULATIONS:
AVERAGE GRADE =
$\frac{551.80 + 551.80 + 551.80 + 550.00}{4} = 551.35$

BUILDING HEIGHT = MEAN ROOF HEIGHT – AVERAGE GRADE
FIRST FLOOR ELEVATION = 552.00
DIST. FROM FIRST FLOOR TO MEAN ROOF = 36.33 FEET (PER ARCH.)
MEAN ROOF ELEVATION = 552.00 + 36.33 = 588.33
BUILDING HEIGHT = 588.33 – 551.35 = **36.98 FEET**

(2) COVERAGE BREAKDOWN:
PROPOSED CONDITIONS: LOT 65.01

BUILDING	22,790 SF
PAVEMENT	43,680 SF
SIDEWALKS	7,730 SF
COURTYARD	3,200 SF
TRASH ENCLOSURE	390 SF
PROPOSED WALLS	4,550 SF
TOTAL	82,340 SF

(3) AMENITY SPACE BREAKDOWN:

INTERIOR AMENITY SPACE (PER ARCH)	2,910 SF
OUTDOOR AMENITY SPACE:	
COURTYARD (ACTIVE)	3,200 SF
WALKING PATH (PASSIVE)	3,600 SF
TOTAL	9,710 SF

(4) WALKING PATHS ARE EXEMPT FROM SETBACK AND SCREENING REQUIREMENTS

PARKING REQUIREMENTS

ITEM	REQUIRED	PROVIDED
MINIMUM NUMBER OF PARKING SPACES: SENIOR HOUSING, APARTMENT: ONE PER UNIT: 1 SPACE/UNIT x 64 UNITS = 64 SP.	78 SPACES	78 SPACES
ONE PER EMPLOYEE PER SHIFT: 1 SPACE/EMP. x 1 EMP. = 1 SP.		
VISITOR PARKING: 1 SPACES/5 UNITS X 64 UNITS = 13 SP.		
MAXIMUM NUMBER OF PARKING SPACES IN FRONT YARD SETBACK: 30% OF REQUIRED SPACES = 0.30 X 78 SPACES = 23 SPACES	23 SPACES	22 SPACES
MINIMUM SPACE SIZE	9 FT x 18 FT (1)	9 FT x 18 FT
MINIMUM AISLE WIDTH (90° SPACES)	24 FT	24 FT
MINIMUM AISLE WIDTH (45° SPACES)	15 FT	20 FT
MINIMUM DISTANCE FROM PARKING TO PROPERTY LINE	10 FT	10 FT
MINIMUM NUMBER OF HANDICAP PARKING SPACES (FOR 51-100 PARKING SPACES)	4 SPACES	4 SPACES (VAN ACCESSIBLE)
MINIMUM NUMBER OF OVERSIZED PARKING SPACES	1 SPACE	2 SPACES
MINIMUM OVERSIZED PARKING SPACE SIZE	8 FT x 40 FT	10 FT x 60 FT

(1) FOR SPACES FRONTING ON A CURB OR PLANTING ISLAND WITH A TWO (2) FOOT CLEAR AREA BEHIND THE CURB OR ISLAND.

SIGN REQUIREMENTS

ITEM	ALLOWED	PROPOSED
FACADE SIGNS:		
MAXIMUM NUMBER OF SIGNS	1 SIGN	1 SIGN
MAXIMUM SIGN AREA	20 SF	< 20 SF
GROUND SIGNS:		
MAXIMUM NUMBER OF SIGNS	2 SIGNS	1 SIGN
MAXIMUM SIGN AREA	20 SF	< 20 SF
MAXIMUM MOUNTING HEIGHT	6 FT	< 6 FT
MINIMUM SETBACK TO FRONT PROPERTY LINE	1 FT	15 FT
MINIMUM SETBACK TO CURB LINE	10 FT	30 FT
MINIMUM SETBACK TO SIDE/REAR PROPERTY LINE	10 FT	> 10 FT

SHEET INDEX

SHEET	DESCRIPTION
1	TITLE SHEET
2	BOUNDARY & TOPOGRAPHIC SURVEY PLAN
3	MINOR SUBDIVISION PLAN
4	SITE LAYOUT PLAN
5–6	GRADING PLAN 'A' & 'B'
7–8	UTILITY PLAN 'A' & 'B'
9	LIGHTING PLAN
10	LANDSCAPING PLAN
11	SOIL EROSION & SEDIMENT CONTROL PLAN
12	SLOPE MAP
13	SIGHT DISTANCE PLAN & PROFILE
14	CURB RETURN PROFILES
15	TRUCK MANEUVERING PLAN
16	TREE LOCATION PLAN
17	EXISTING DRAINAGE AREA MAP
18	PROPOSED DRAINAGE AREA MAP
19	PROPOSED INLET DRAINAGE AREA MAP
20–24	CONSTRUCTION NOTES AND DETAILS

PLANNING BOARD APPROVAL

APPROVED BY THE PLANNING BOARD OF THE BOROUGH OF ROCKAWAY, MORRIS COUNTY, NEW JERSEY

PLANNING BOARD CHAIRPERSON DATE

PLANNING BOARD SECRETARY DATE

BOROUGH ENGINEER DATE

GRAPHIC SCALE
300 0 150 300 600 1,200
(IN FEET)
1 inch = 300 ft.

DATE	REVISION

DYKSTRA WALKER
DESIGN GROUP P.A.
PROFESSIONAL ENGINEERS, PLANNERS & SURVEYORS
21 BOWLING GREEN PARKWAY, SUITE 204 · LAKE HOPATCONG, NJ 07849
PHONE (973) 663-6540 · FAX (973) 663-0042
WWW.DYKSTRAWALKER.COM

KENNETH D. DYKSTRA
PROFESSIONAL ENGINEER AND LAND SURVEYOR N.J. LIC. No. 24GB03297200

TITLE SHEET

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION
BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

SCALE: 1" = 300'
JOB NO.: 04197
DRAWN BY: TJB
CHECKED BY: KJR
DATE: 7/14/20
SHEET NO. 1 OF 24

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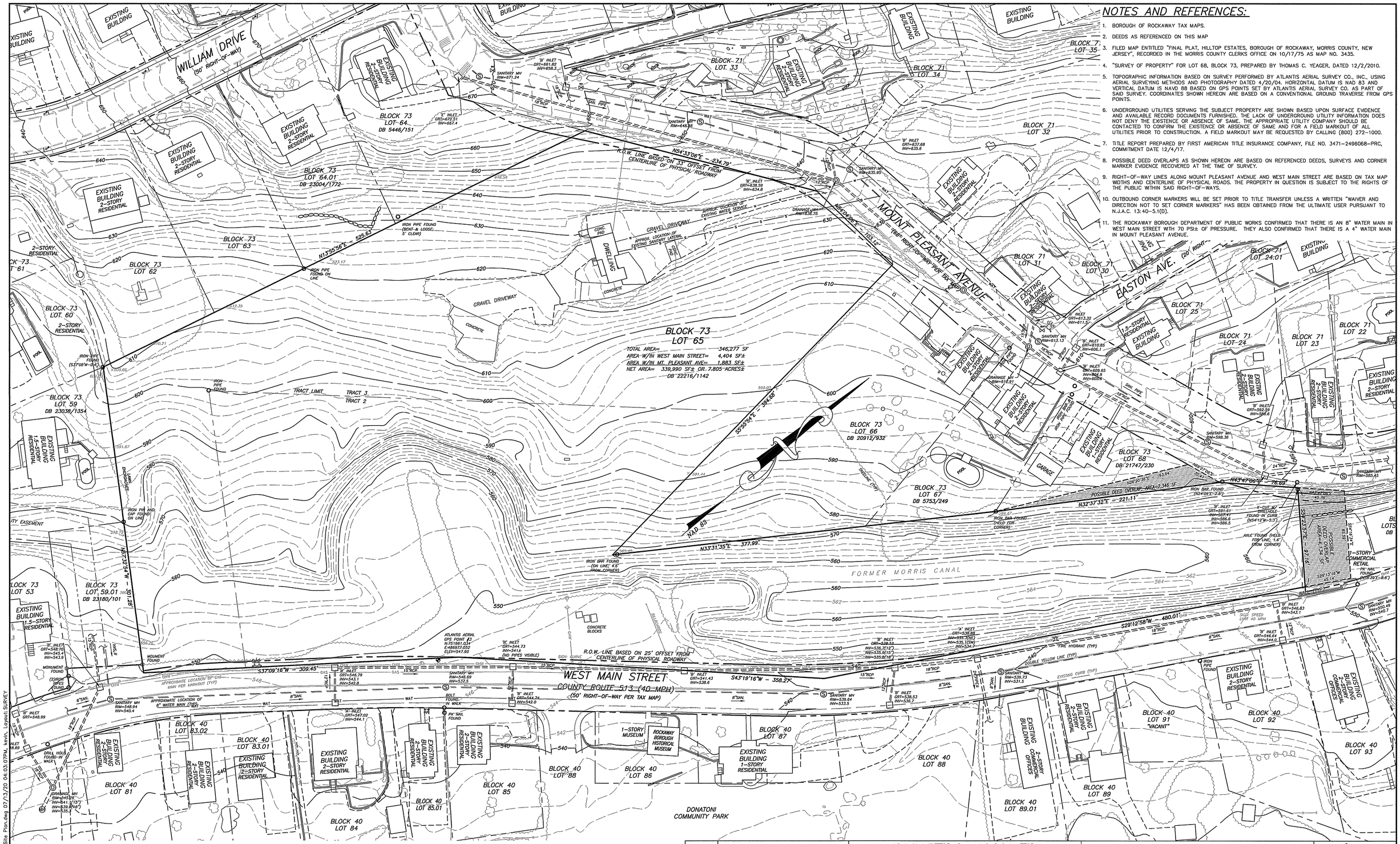

NOTES AND REFERENCES:

1. BOROUGH OF ROCKAWAY TAX MAPS.
2. DEEDS AS REFERENCED ON THIS MAP
3. FILED MAP ENTITLED "FINAL PLAT, HILLTOP ESTATES, BOROUGH OF ROCKAWAY, MORRIS COUNTY, NEW JERSEY", RECORDED IN THE MORRIS COUNTY CLERKS OFFICE ON 10/17/75 AS MAP NO. 3435.
4. "SURVEY OF PROPERTY" FOR LOT 68, BLOCK 73, PREPARED BY THOMAS C. YEAGER, DATED 12/2/2010.
5. TOPOGRAPHIC INFORMATION BASED ON SURVEY PERFORMED BY ATLANTIS AERIAL SURVEY CO., INC., USING AERIAL SURVEYING METHODS AND PHOTOGRAPHY DATED 4/20/04. HORIZONTAL DATUM IS NAD 83 AND VERTICAL DATUM IS NAVD 88 BASED ON GPS POINTS SET BY ATLANTIS AERIAL SURVEY CO. AS PART OF SAID SURVEY. COORDINATES SHOWN HEREON ARE BASED ON A CONVENTIONAL GROUND TRAVERSE FROM GPS POINTS.
6. UNDERGROUND UTILITIES SERVING THE SUBJECT PROPERTY ARE SHOWN BASED UPON SURFACE EVIDENCE AND AVAILABLE RECORD DOCUMENTS FURNISHED. THE LACK OF UNDERGROUND UTILITY INFORMATION DOES NOT DENY THE EXISTENCE OR ABSENCE OF SAME. THE APPROPRIATE UTILITY COMPANY SHOULD BE CONTACTED TO CONFIRM THE EXISTENCE OR ABSENCE OF SAME AND FOR A FIELD MARKOUT OF ALL UTILITIES PRIOR TO CONSTRUCTION. A FIELD MARKOUT MAY BE REQUESTED BY CALLING (800) 272-1000.
7. TITLE REPORT PREPARED BY FIRST AMERICAN TITLE INSURANCE COMPANY, FILE NO. 3471-2495068-PRC, COMMITMENT DATE 12/4/17.
8. POSSIBLE DEED OVERLAPS AS SHOWN HEREON ARE BASED ON REFERENCED DEEDS, SURVEYS AND CORNER MARKER EVIDENCE RECOVERED AT THE TIME OF SURVEY.
9. RIGHT-OF-WAY LINES ALONG MOUNT PLEASANT AVENUE AND WEST MAIN STREET ARE BASED ON TAX MAP WIDTHS AND CENTERLINE OF PHYSICAL ROADS. THE PROPERTY IN QUESTION IS SUBJECT TO THE RIGHTS OF THE PUBLIC WITHIN SAID RIGHT-OF-WAYS.
10. OUTBOUND CORNER MARKERS WILL BE SET PRIOR TO TITLE TRANSFER UNLESS A WRITTEN "WAIVER AND DIRECTION NOT TO SET CORNER MARKERS" HAS BEEN OBTAINED FROM THE ULTIMATE USER PURSUANT TO N.J.A.C. 13:40-5.1(D).
11. THE ROCKAWAY BOROUGH DEPARTMENT OF PUBLIC WORKS CONFIRMED THAT THERE IS AN 8" WATER MAIN IN WEST MAIN STREET WITH 70 PSI± OF PRESSURE. THEY ALSO CONFIRMED THAT THERE IS A 4" WATER MAIN IN MOUNT PLEASANT AVENUE.

DATE	REVISION
5/18/18	INCORPORATED INTO SITE PLAN

DYKSTRA WALKER
DESIGN GROUP P.A.
PROFESSIONAL ENGINEERS, PLANNERS & SURVEYORS
21 BOWLING GREEN PARKWAY, SUITE 204 · LAKE HOPATCONG, NJ 07849
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KENNETH D. DYKSTRA
PROFESSIONAL ENGINEER AND LAND SURVEYOR N.J. LIC. No. 24GB03297200

BOUNDARY & TOPOGRAPHIC SURVEY PLAN

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION

BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

SCALE:	1" = 40'
JOB NO.:	04197
DRAWN BY:	TJB
CHECKED BY:	KDD
DATE:	3/30/18
SHEET NO.	2 OF 24

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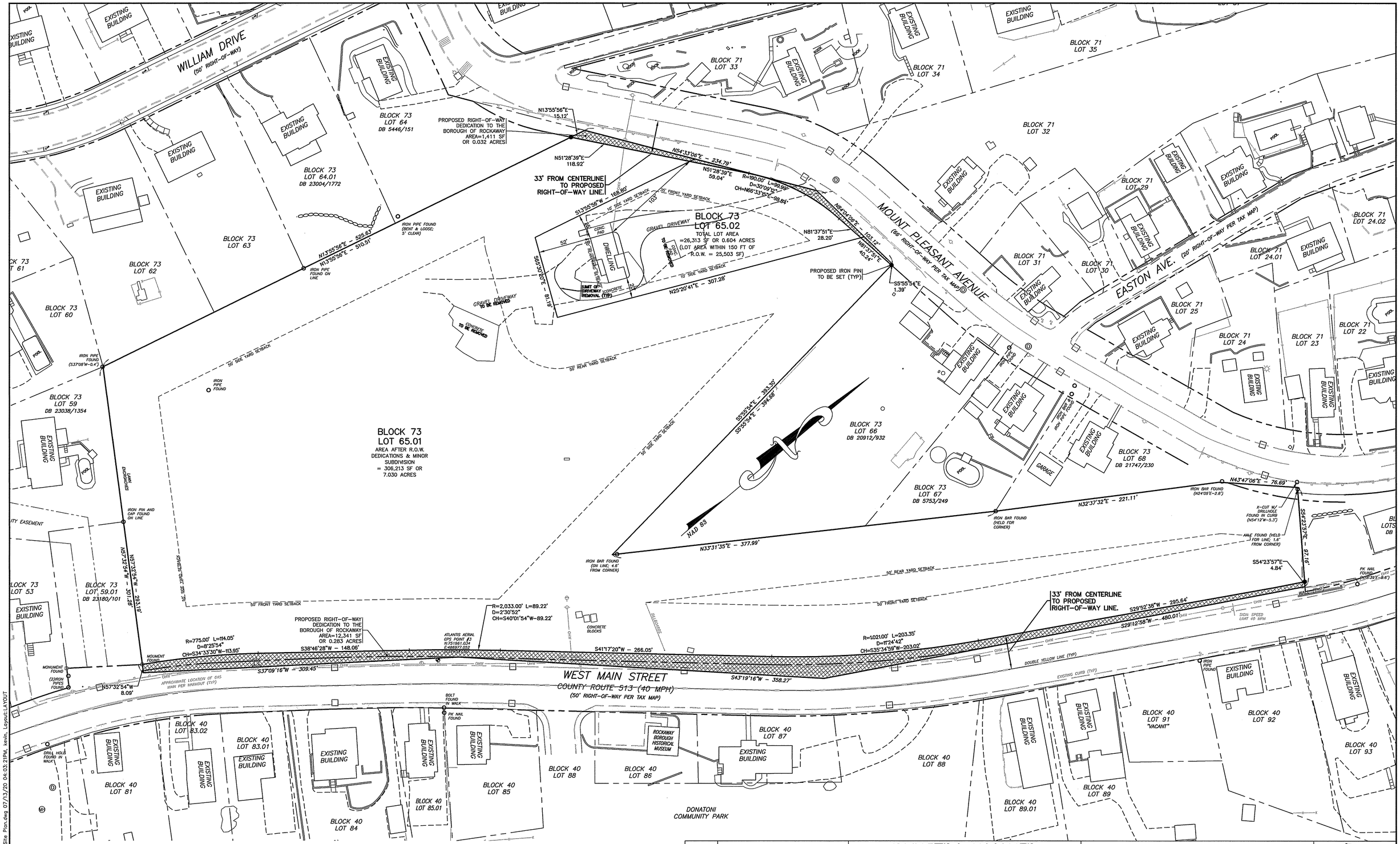

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

DATE	REVISION

DYKSTRA WALKER
DESIGN DW GROUP PA
PROFESSIONAL ENGINEERS, PLANNERS & SURVEYORS
21 BOWLING GREEN PARKWAY, SUITE 204 · LAKE HOPATCONG, NJ 07849
PHONE (973) 663-6540 · FAX (973) 663-0042
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KENNETH D. DYKSTRA
PROFESSIONAL ENGINEER AND LAND SURVEYOR N.J. LIC. No. 24GB03297200

MINOR SUBDIVISION PLAN

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION

BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

SCALE:	1" = 40'
JOB NO.:	04197
DRAWN BY:	TJB
CHECKED BY:	KJR
DATE:	7/14/20
SHEET NO.	3 OF 24

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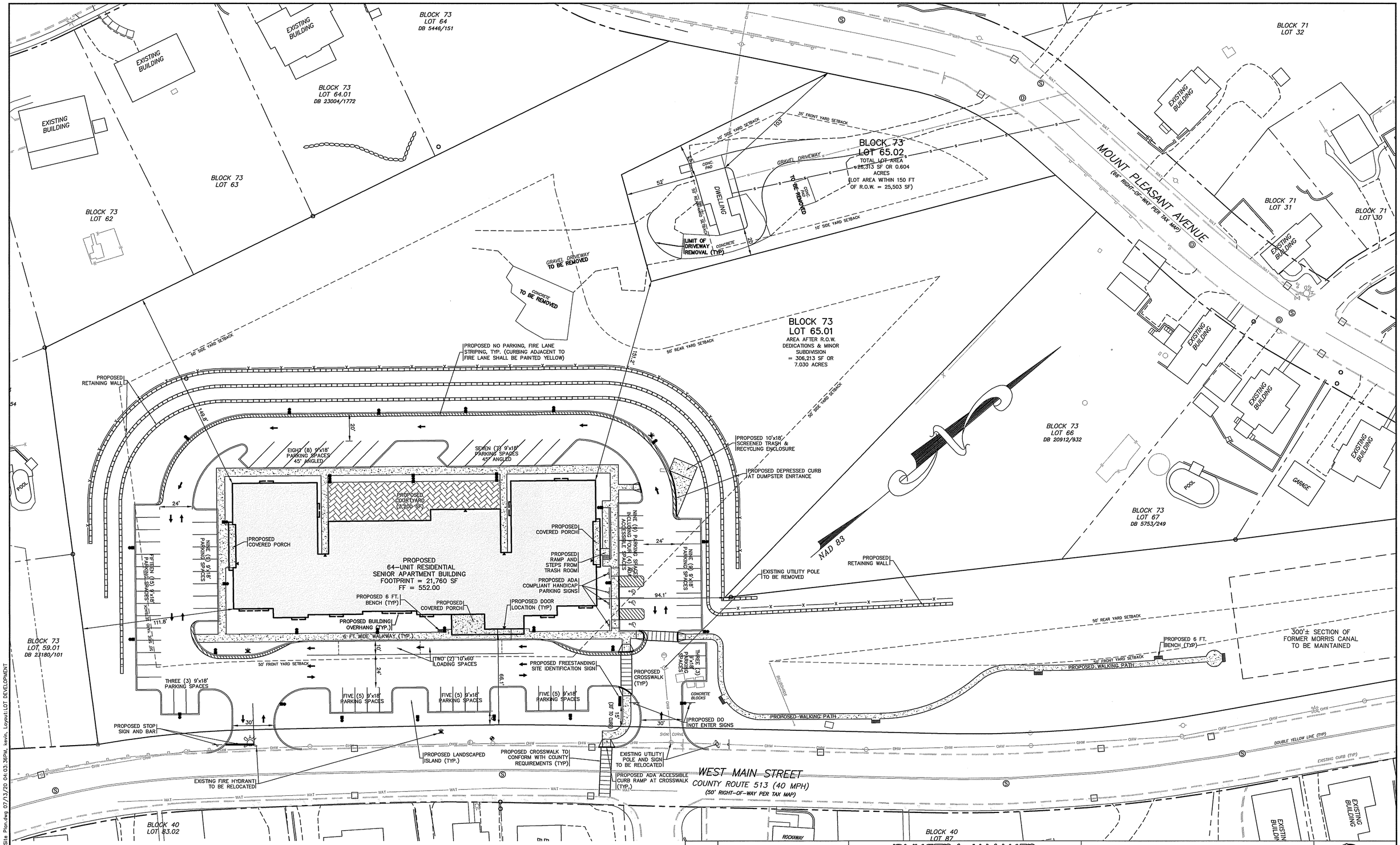

RETAINING WALL NOTE:
ALL PROPOSED RETAINING WALLS TO BE DESIGNED BY QUALIFIED STRUCTURAL ENGINEER IN COLLABORATION WITH SITE DESIGN ENGINEER THE FINAL DESIGN OF WHICH SHALL BE SUBMITTED TO THE BOROUGH ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

DATE	REVISION

DYKSTRA WALKER DESIGN GROUP P.A.
PROFESSIONAL ENGINEERS, PLANNERS & SURVEYORS
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SITE LAYOUT PLAN

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION
BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

SCALE:	1" = 30'
JOB NO.:	04197
DRAWN BY:	TJB
CHECKED BY:	KJR
DATE:	7/14/20
SHEET NO.	4 OF 24

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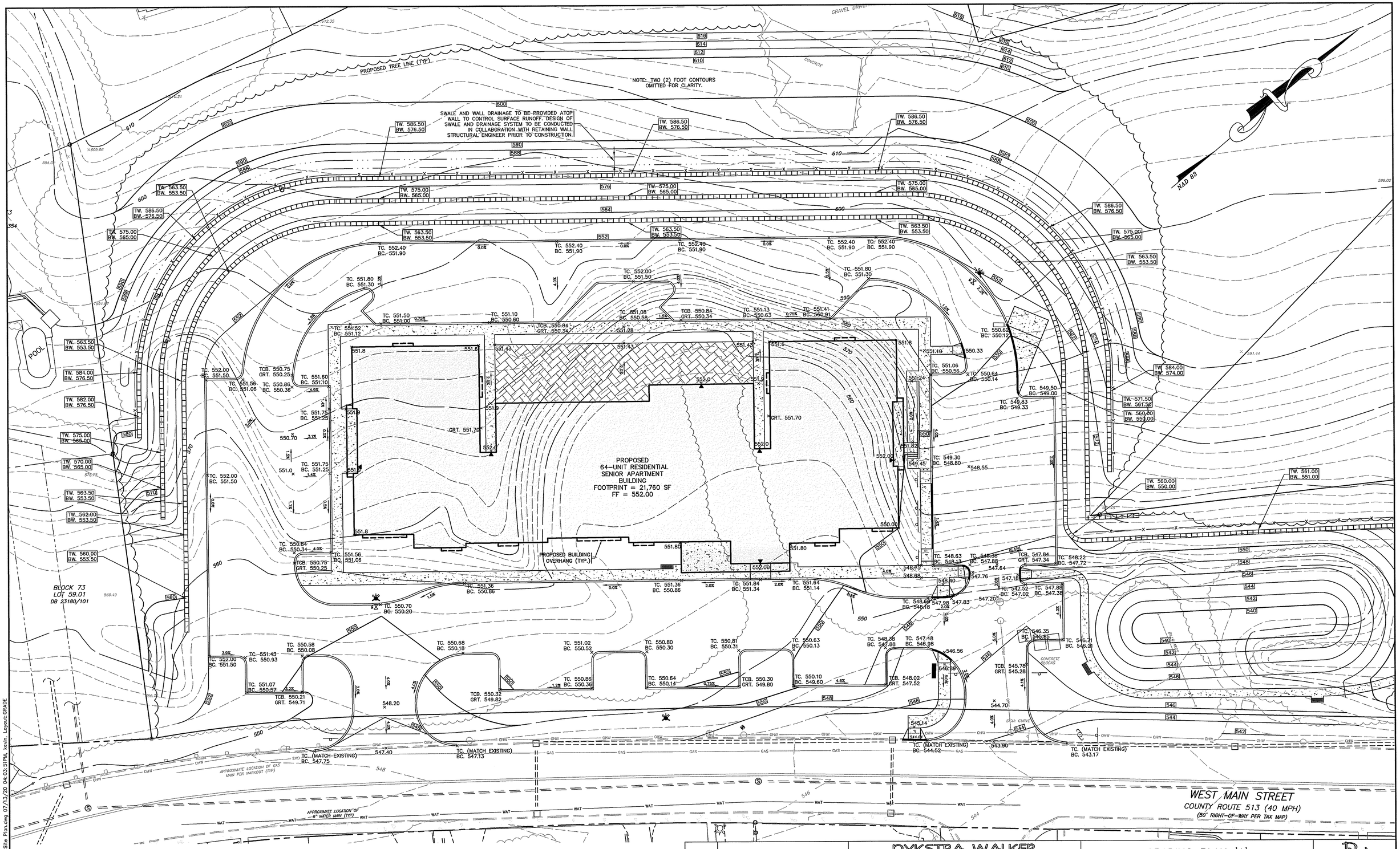

RETAINING WALL NOTE:
ALL PROPOSED RETAINING WALLS TO BE DESIGNED BY QUALIFIED STRUCTURAL ENGINEER IN COLLABORATION WITH SITE DESIGN ENGINEER THE FINAL DESIGN OF WHICH SHALL BE SUBMITTED TO THE BOROUGH ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

DATE	REVISION

DYKSTRA WALKER DESIGN GROUP PA
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GRADING PLAN 'A'

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION
BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

SCALE:	1" = 20'
JOB NO.:	04197
DRAWN BY:	TJB
CHECKED BY:	KJR
DATE:	7/14/20
SHEET NO.	5 OF 24

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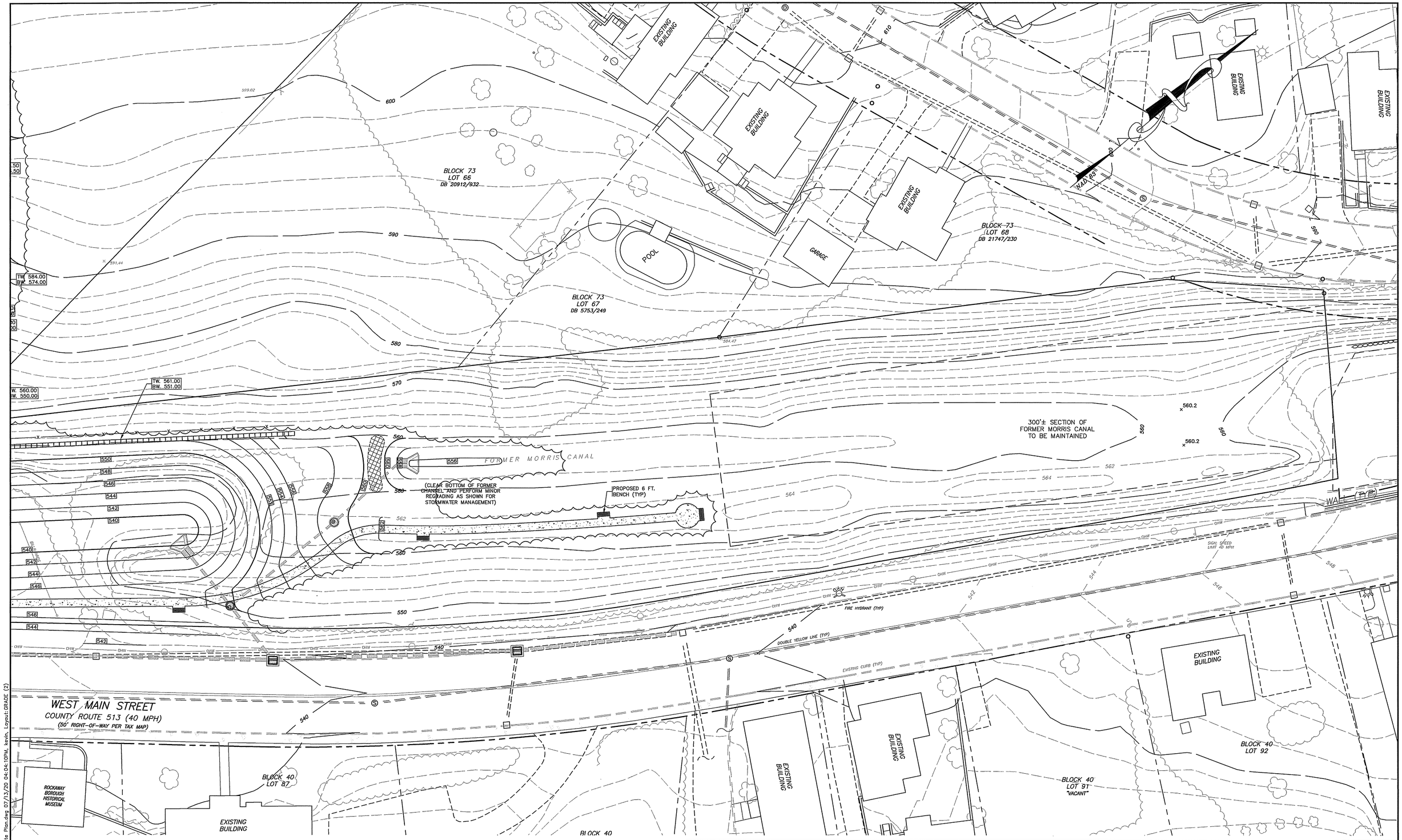

RETAINING WALL NOTE:
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GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

DATE	REVISION

DYKSTRA WALKER
DESIGN DW GROUP PA
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GRADING PLAN 'B'

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION

BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

SCALE:	1" = 20'
JOB NO.:	04197
DRAWN BY:	TJB
CHECKED BY:	KJR
DATE:	7/14/20
SHEET NO.	6 OF 24

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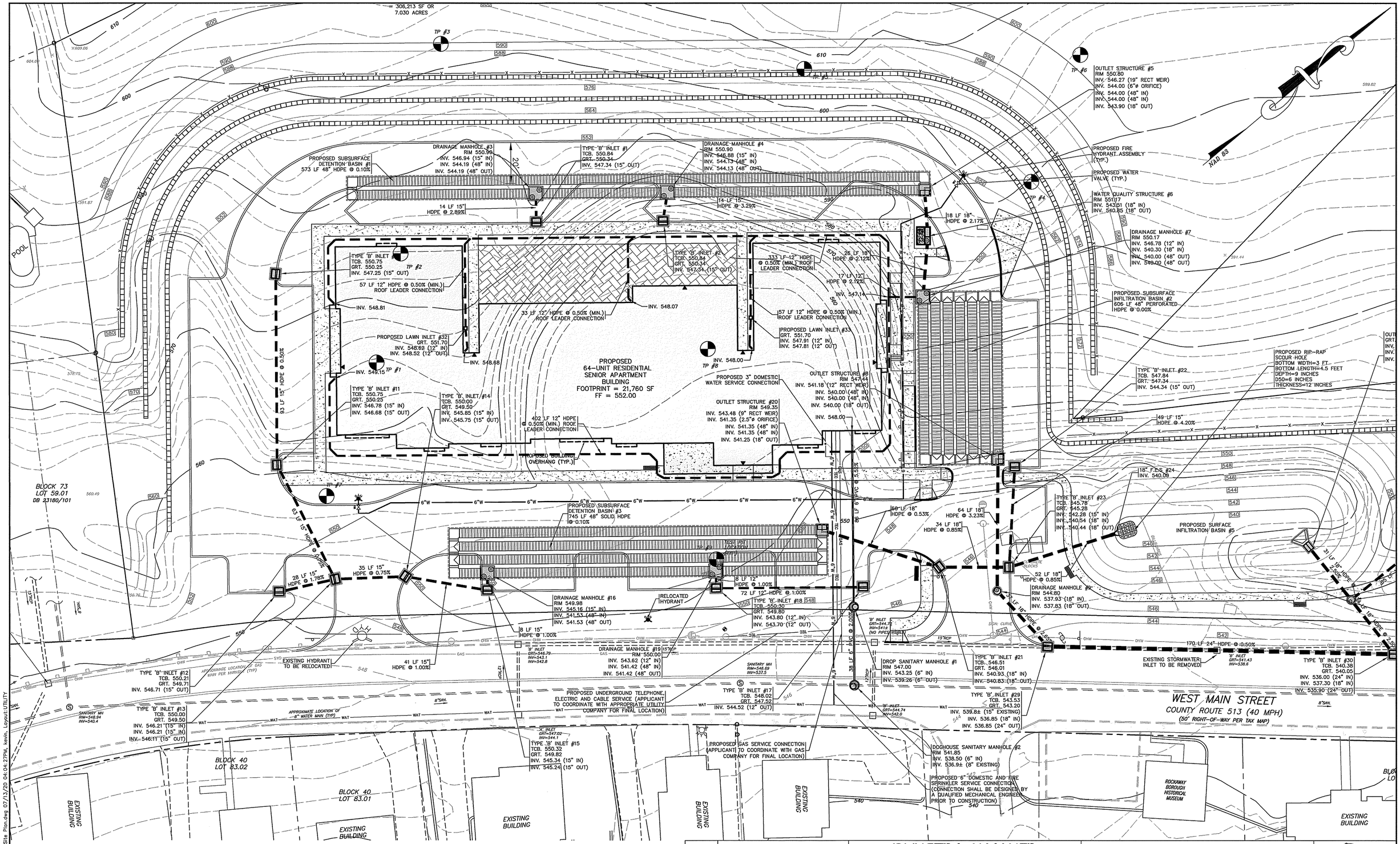

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

DATE	REVISION

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UTILITY PLAN 'A'

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION
BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

SCALE:	1" = 20'
JOB NO.:	04197
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DATE:	7/14/20
SHEET NO.	7 OF 24

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SOIL TESTING RESULTS

THE TEST PITS WERE EXCAVATED ON JANUARY 3, 2018 BY FEBBI EXCAVATING USING A TRACK MACHINE AND THE TESTING WAS WITNESSED BY MICHAEL FISHER, PE OF DYKSTRA WALKER DESIGN GROUP.

TEST PIT #1:
0" – 10" 10YR2/2 LOAM (TOPSOIL)
10" – 60" 10YR5/6 LOAM, 5% GRAVEL, 5% COBBLE, SUBANGULAR BLOCKY, FRIABLE
60" – 128" 10YR5/6 SANDY LOAM, 5% GRAVEL, 5% COBBLE, 15% STONE, SUBANGULAR BLOCKY, FRIABLE

ROOTS TO: 18"
ESHWT > 128"

TEST PIT #2:
0" – 8" 10YR2/2 LOAM (TOPSOIL)
8" – 60" 10YR5/6 LOAM, 5% GRAVEL, 5% COBBLE, SUBANGULAR BLOCKY, FRIABLE
60" – 128" 10YR4/6 SANDY LOAM, 5% GRAVEL, 5% COBBLE, 15% STONE, SUBANGULAR BLOCKY, FRIABLE

ROOTS TO: 24"
ESHWT > 128"

TEST PIT #3:
0" – 12" 10YR2/2 LOAM (TOPSOIL)
12" – 55" 10YR4/6 SILT LOAM, 5% GRAVEL, 5% COBBLE, SUBANGULAR BLOCKY, FRIABLE
55" – 120" 10YR5/6 LOAMY SAND, 5% GRAVEL, 5% COBBLE, 5% STONE, SUBANGULAR BLOCKY, FRIABLE

ROOTS TO: 24"
ESHWT > 120"

TEST PIT #4:
0" – 10" 10YR2/2 LOAM (TOPSOIL)
10" – 64" 10YR4/6 SANDY LOAM, 5% GRAVEL, 10% STONE, SUBANGULAR BLOCKY, FRIABLE
64" – 120" 10YR6/4 SANDY LOAM, 5% GRAVEL, 5% COBBLE, GRANULAR, (DRY) LOOSE

ROOTS TO: 32"
ESHWT > 120"

TEST PIT #5:
0" – 15" 10YR2/2 LOAM (TOPSOIL)
15" – 58" 10YR5/6 SANDY LOAM, 5% GRAVEL, SUBANGULAR BLOCKY, FRIABLE
58" – 144" 10YR4/6 SANDY LOAM, 5% GRAVEL, 5% STONE, GRANULAR, (DRY) LOOSE

ROOTS TO: 32"
ESHWT > 144"

TEST PIT #6:
0" – 24" 10YR2/2 LOAM (TOPSOIL)
24" – 60" 10YR5/6 SANDY LOAM, 5% GRAVEL, 5% COBBLE, SUBANGULAR BLOCKY, FRIABLE
60" – 120" 10YR3/6 LOAMY SAND, 5% GRAVEL, 5% COBBLE, 5% STONE, GRANULAR, (DRY) LOOSE

ROOTS TO: 24"
ESHWT > 120"

TEST PIT #7:
0" – 12" 10YR2/2 LOAM (TOPSOIL)
12" – 48" 10YR3/6 SANDY LOAM, 5% GRAVEL, SUBANGULAR BLOCKY, FRIABLE
48" – 128" 10YR3/4 LOAM, 10% GRAVEL, 5% COBBLE, 5% STONE, SUBANGULAR BLOCKY, FRIABLE

ROOTS TO: 15"
ESHWT > 128"

TEST PIT #8:
0" – 6" 10YR2/2 LOAM (TOPSOIL)
6" – 80" 10YR3/6 SANDY LOAM, 15% GRAVEL, SUBANGULAR BLOCKY, FRIABLE
80" – 120" 10YR3/4 LOAM, 5% GRAVEL, 5% COBBLE, 20% STONE, SUBANGULAR BLOCKY, FRIABLE

NO ROOTS (LAWN)
ESHWT > 120"

TEST PIT #9:
0" – 6" 10YR2/2 LOAM (TOPSOIL)
6" – 125" 10YR4/4 SANDY LOAM, 5% GRAVEL, 5% COBBLE, 5% STONE, SUBANGULAR BLOCKY, FRIABLE

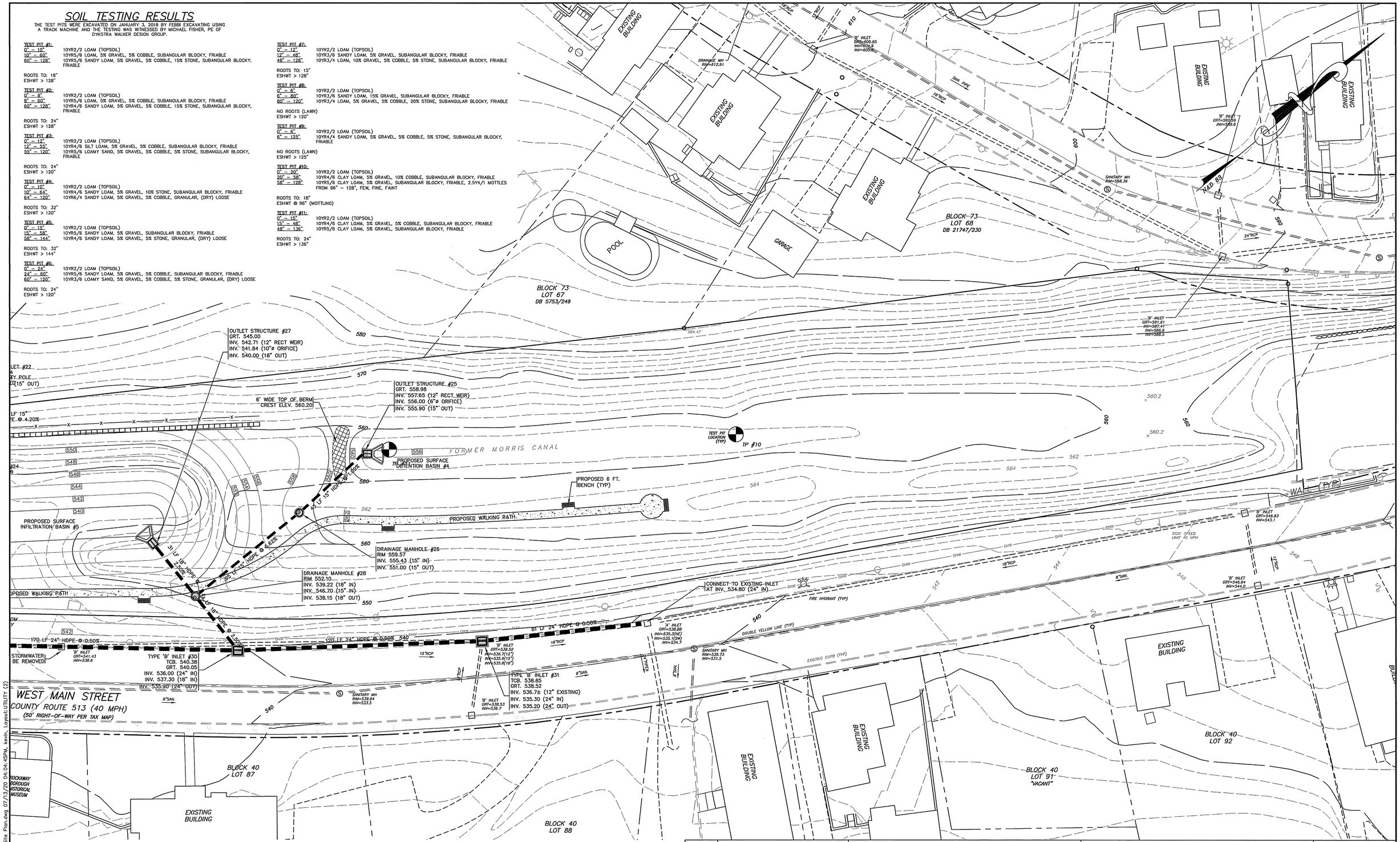
NO ROOTS (LAWN)
ESHWT > 125"

TEST PIT #10:
0" – 20" 10YR2/2 LOAM (TOPSOIL)
20" – 58" 10YR4/6 CLAY LOAM, 5% GRAVEL, 10% COBBLE, SUBANGULAR BLOCKY, FRIABLE
58" – 128" 10YR5/6 CLAY LOAM, 5% GRAVEL, SUBANGULAR BLOCKY, FRIABLE, 2.5Y4/1 MOTTLES FROM 96" – 128", FEW, FINE, FAINT

ROOTS TO: 18"
ESHWT @ 96" (MOTTLING)

TEST PIT #11:
0" – 19" 10YR2/2 LOAM (TOPSOIL)
15" – 48" 10YR4/6 CLAY LOAM, 5% GRAVEL, 5% COBBLE, SUBANGULAR BLOCKY, FRIABLE
48" – 136" 10YR5/6 CLAY LOAM, 5% GRAVEL, SUBANGULAR BLOCKY, FRIABLE

ROOTS TO: 24"
ESHWT > 136"



GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

DATE	REVISION

DYKSTRA WALKER DESIGN GROUP PA

PROFESSIONAL ENGINEERS, PLANNERS & SURVEYORS
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UTILITY PLAN 'B'

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION
BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

SCALE: 1" = 20'
JOB NO.: 04197
DRAWN BY: TJB
CHECKED BY: KJR
DATE: 7/14/20
SHEET NO. 8 OF 24

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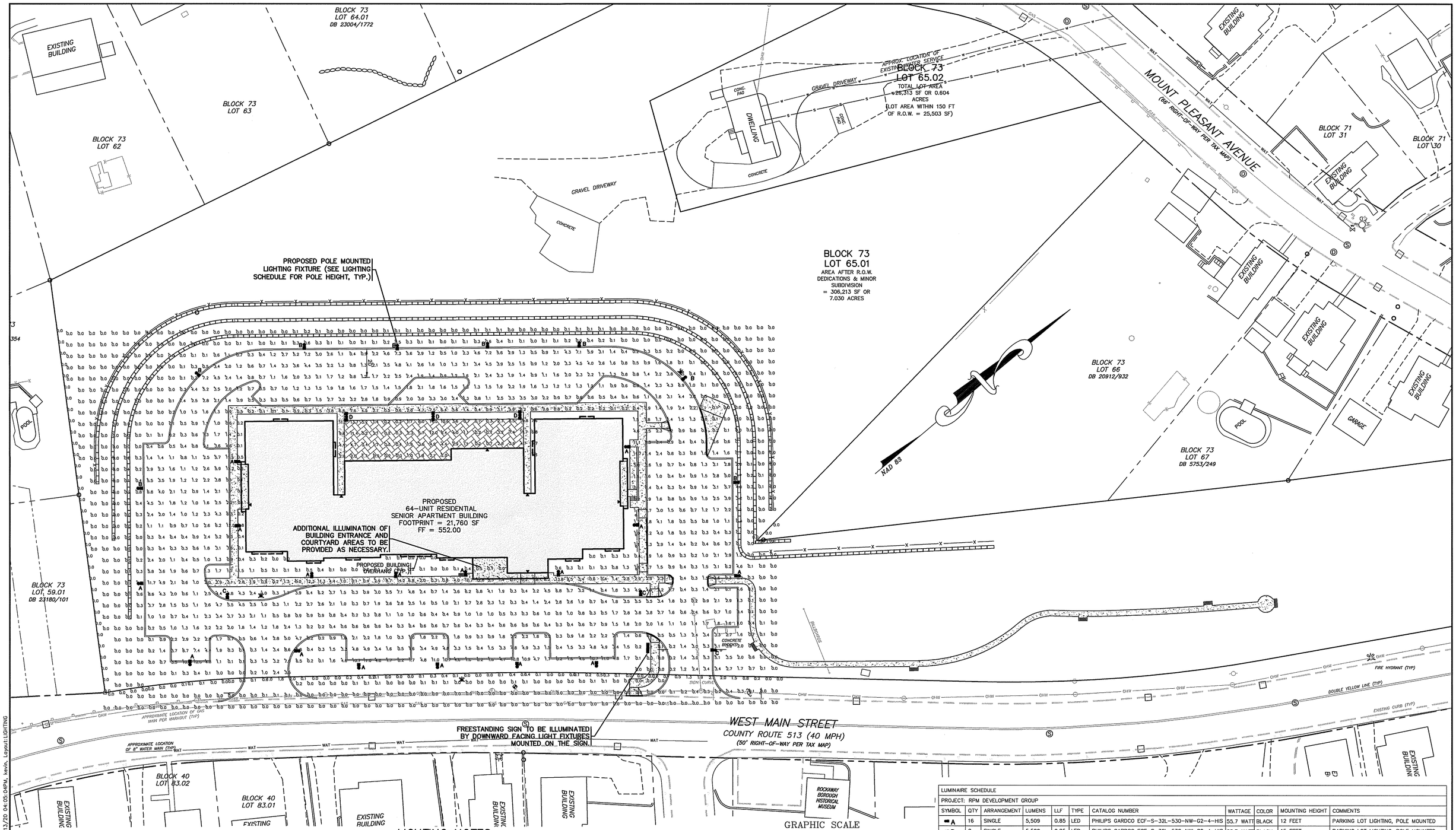

LIGHTING NOTES

1. THE POLE MOUNTED LIGHT FIXTURES TO BE LED AND MOUNTED 12-15 FEET IN HEIGHT AS NOTED.
2. LIGHTING TO BE TIME CLOCK OPERATED FROM DUSK TO A TIME AGREED UPON BY THE BOARD.
3. WIRING FOR SITE LIGHTS SHALL BE RUN IN UNDERGROUND 1" MIN. DIAMETER PVC CONDUIT AND AT LEAST 16" BELOW GRADE.
4. ALL SITE ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL CODES AND ORDINANCES.
5. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO INSTALL UNDERGROUND FACILITIES IN SUCH A MANNER THAT THEY DO NOT CONFLICT WITH OTHER UNDERGROUND UTILITIES.
6. ALL WIRING AND CONDUIT REQUIRED TO PROVIDE ELECTRIC SERVICE TO PROPOSED FIXTURES SHALL BE INCLUDED IN LIGHTING BID. CONTRACTOR SHALL COORDINATE THE LAYOUT AND ELECTRICAL SERVICE TO THE PROPOSED FIXTURES WITH THE OWNER OR THE OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.
7. ALL LIGHT POLES AND FIXTURES SHALL BE DARK BRONZE OR BLACK.
8. THESE CALCULATIONS WERE MADE USING ACCEPTED PROCEDURES OF THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA. VARIATIONS IN LAMP OUTPUT, BALLAST OUTPUT, LINE VOLTAGE, DIRT DEPRECIATION, AND OTHER FACTORS MAY AFFECT ACTUAL RESULTS. UNLESS OTHERWISE STATED, ALL RESULTS ARE MAINTAINED VALUES, USING ACCEPTED LIGHT LOSS FACTORS (LLF).

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

LUMINAIRE SCHEDULE

PROJECT: RPM DEVELOPMENT GROUP

SYMBOL	QTY	ARRANGEMENT	LUMENS	LLF	TYPE	CATALOG NUMBER	WATTAGE	COLOR	MOUNTING HEIGHT	COMMENTS
A	16	SINGLE	5,509	0.85	LED	PHILIPS GARDCO ECF-S-32L-530-NW-G2-4-HIS	55.7 WATT	BLACK	12 FEET	PARKING LOT LIGHTING, POLE MOUNTED
B	8	SINGLE	5,509	0.85	LED	PHILIPS GARDCO ECF-S-32L-530-NW-G2-4-HIS	55.7 WATT	BLACK	15 FEET	PARKING LOT LIGHTING, POLE MOUNTED
C	3	SINGLE	5,509	0.85	LED	PHILIPS GARDCO ECF-S-32L-530-NW-G2-5W	55.7 WATT	BLACK	12 FEET	PARKING LOT LIGHTING, POLE MOUNTED
D	3	DOUBLE	11,018	0.85	LED	PHILIPS GARDCO ECF-S-32L-530-NW-G2-4-HIS	111.4 WATT	BLACK	12 FEET	PARKING LOT LIGHTING, POLE MOUNTED

DATE	REVISION

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LIGHTING PLAN

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION

BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

SCALE: 1" = 30'
JOB NO.: 04197
DRAWN BY: TJB
CHECKED BY: KJR
DATE: 7/14/20
SHEET NO. 9 OF 24

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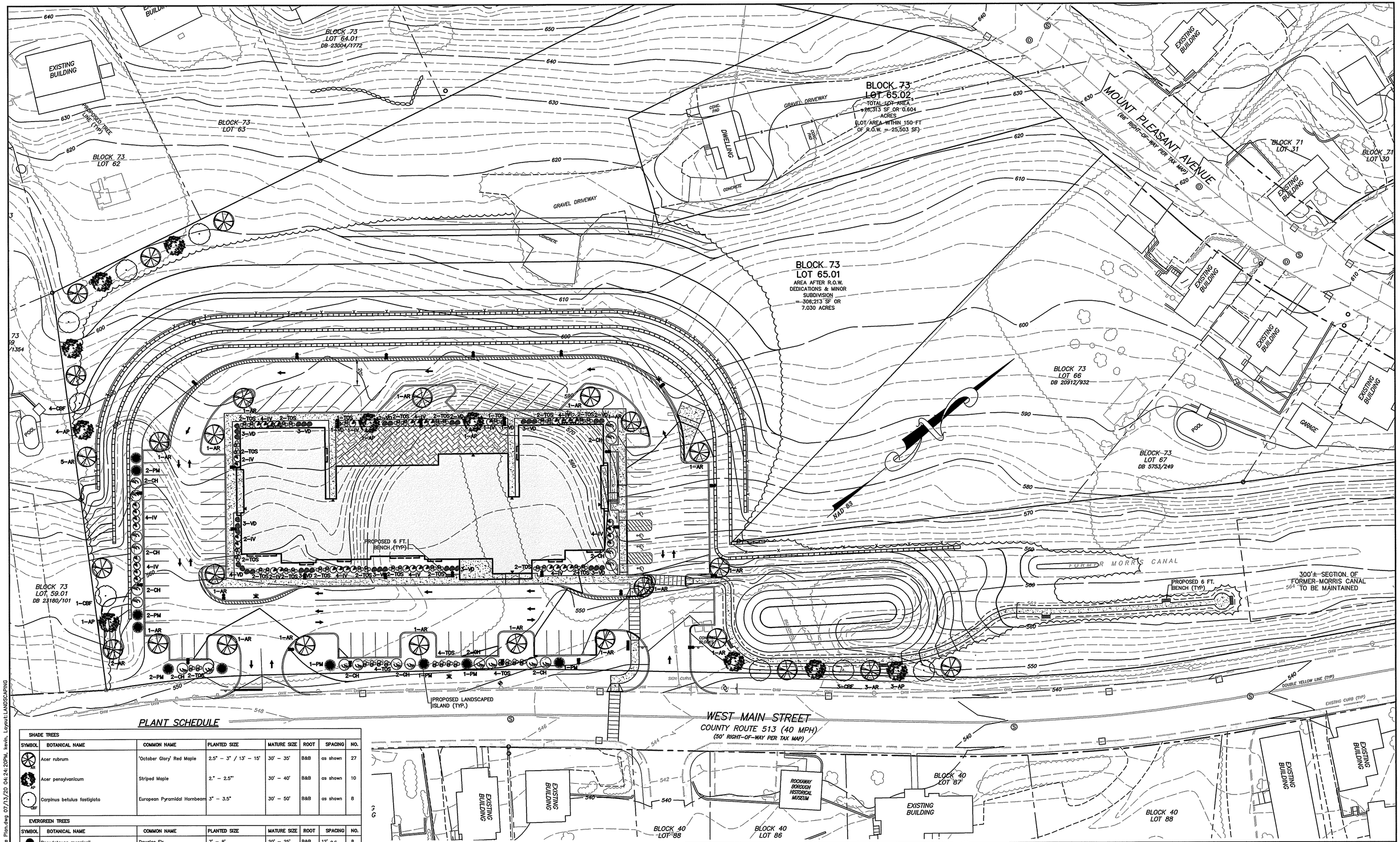

PLANT SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	PLANTED SIZE	MATURE SIZE	ROOT	SPACING	NO.
SHADE TREES							
AR	Acer rubrum	'October Glory' Red Maple	2.5" – 3" / 13' – 15'	30' – 35'	B&B	as shown	27
AP	Acer pensylvanicum	Striped Maple	2." – 2.5"'	30' – 40'	B&B	as shown	10
CBF	Carpinus betulus fastigiata	European Pyramidal Hornbeam	3" – 3.5"	30' – 50'	B&B	as shown	8
EVERGREEN TREES							
SYMBOL	BOTANICAL NAME	COMMON NAME	PLANTED SIZE	MATURE SIZE	ROOT	SPACING	NO.
PM	Pseudotsuga menziesii	Douglas Fir	7' – 8'	20' – 25'	B&B	12' o.c.	8
SHRUBS							
SYMBOL	BOTANICAL NAME	COMMON NAME	PLANTED SIZE	MATURE SIZE	ROOT	SPACING	NO.
CH	Cephalotaxus harringtonia	Japanese Plum Yew	3 Gal.	5' – 10'	#3 can	5' o.c.	20
IV	Itea virginica 'Henry's Garnet'	Henry's Garnet Sweetspire	2 Gal.	4' – 6'	#2 can	5' o.c.	44
TOS	Thuja occidentlis 'Smaragd'	Emerald Green Arborvitae	3' – 4'	12' – 15'	B&B	as shown	48
VD	Viburnum dentatum	Arrowwood Viburnum	3 Gal.	6' – 8'	#3 can	8' o.c.	36

THE ABOVE TABLE IS A PRELIMINARY LIST OF PLANTINGS PROPOSED FOR THE SITE. APPLICANT MAY ADJUST LANDSCAPE DESIGN PRIOR TO CONSTRUCTION, PROVIDED ANY CHANGES ARE APPROVED BY THE BOROUGH. ADDITIONAL TREES MAY BE PLANTED ON SITE IF FEASIBLE TO SATISFY TREE CONSERVATION AND PROTECTION ORDINANCE.

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

DATE	REVISION

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LANDSCAPING PLAN

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION

BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

SCALE:	1" = 30'
JOB NO.:	04197
DRAWN BY:	TJB
CHECKED BY:	KJR
DATE:	7/14/20
SHEET NO.	10 OF 24

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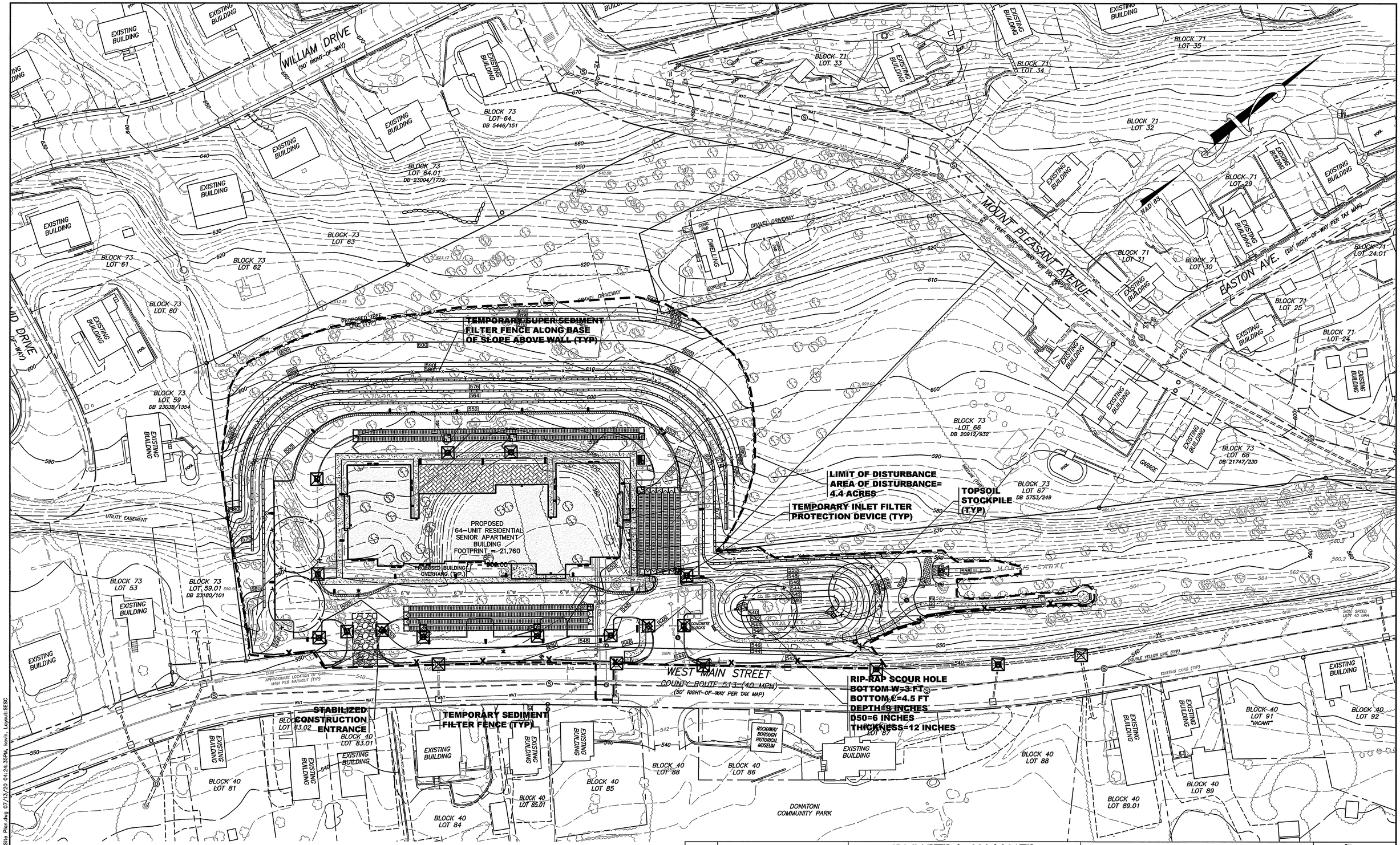

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

DATE	REVISION

DYKSTRA WALKER DESIGN GROUP PA

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SOIL EROSION & SEDIMENT CONTROL PLAN

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION
BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

SCALE:	1" = 40'
JOB NO.:	04197
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DATE:	7/14/20
SHEET NO.	11 OF 24

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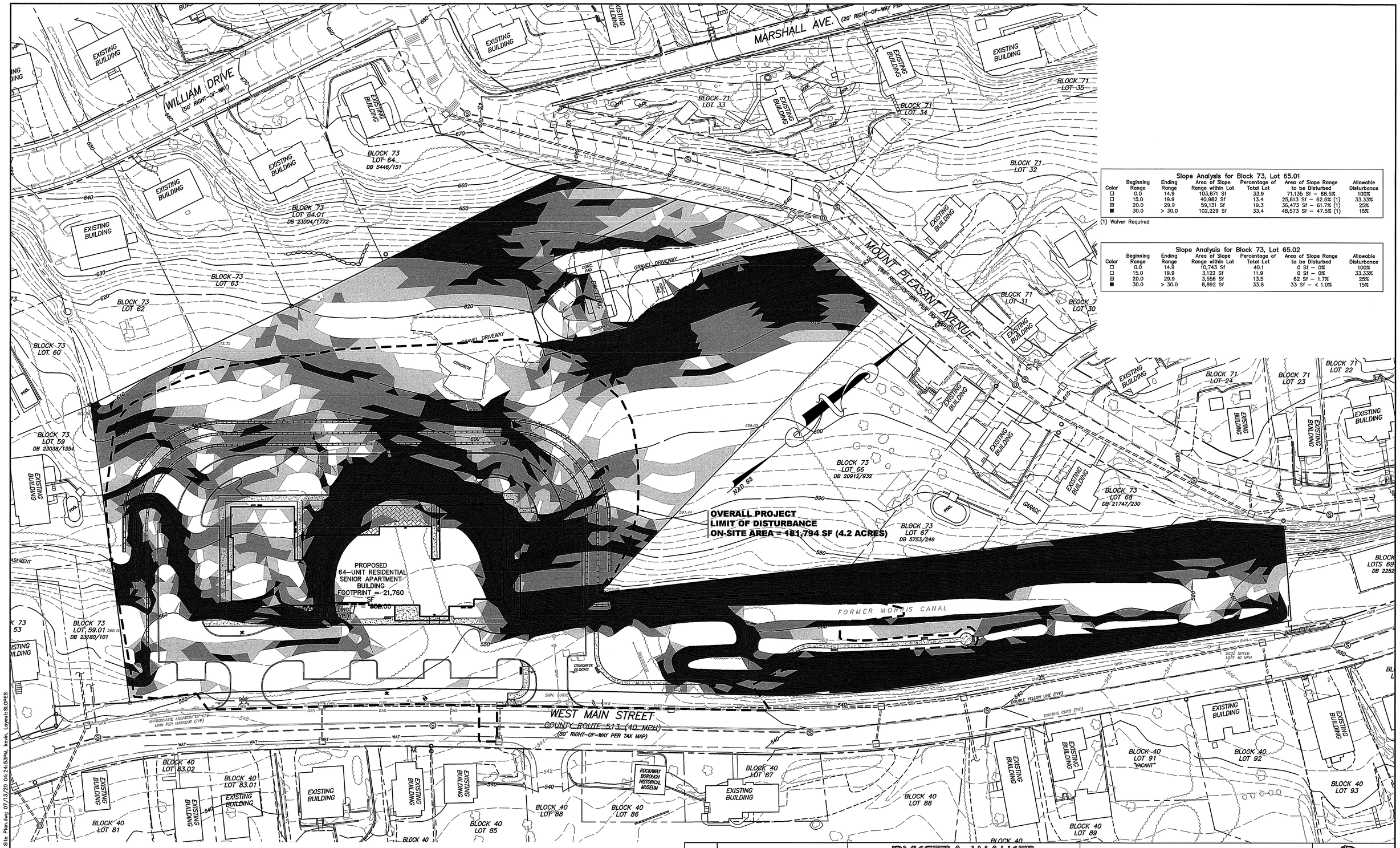

Slope Analysis for Block 73, Lot 65.01

Color	Beginning Range	Ending Range	Area of Slope Range within Lot	Percentage of Total Lot	Area of Slope Range to be Disturbed	Allowable Disturbance
□	0.0	14.9	103,871 Sf	33.9	71,135 Sf – 68.5%	100%
□	15.0	19.9	40,982 Sf	13.4	25,613 Sf – 62.5% (1)	33.33%
▨	20.0	29.9	59,131 Sf	19.3	36,473 Sf – 61.7% (1)	25%
■	30.0	> 30.0	102,229 Sf	33.4	48,573 Sf – 47.5% (1)	15%

(1) Waiver Required

Slope Analysis for Block 73, Lot 65.02

Color	Beginning Range	Ending Range	Area of Slope Range within Lot	Percentage of Total Lot	Area of Slope Range to be Disturbed	Allowable Disturbance
□	0.0	14.9	10,743 Sf	40.1	0 Sf – 0%	100%
□	15.0	19.9	3,122 Sf	11.9	0 Sf – 0%	33.33%
▨	20.0	29.9	3,556 Sf	13.5	62 Sf – 1.7%	25%
■	30.0	> 30.0	8,892 Sf	33.8	33 Sf – < 1.0%	15%

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

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SLOPE MAP

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION

BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

SCALE:	1" = 40'
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CHECKED BY:	KJR
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SHEET NO.	12 OF 24

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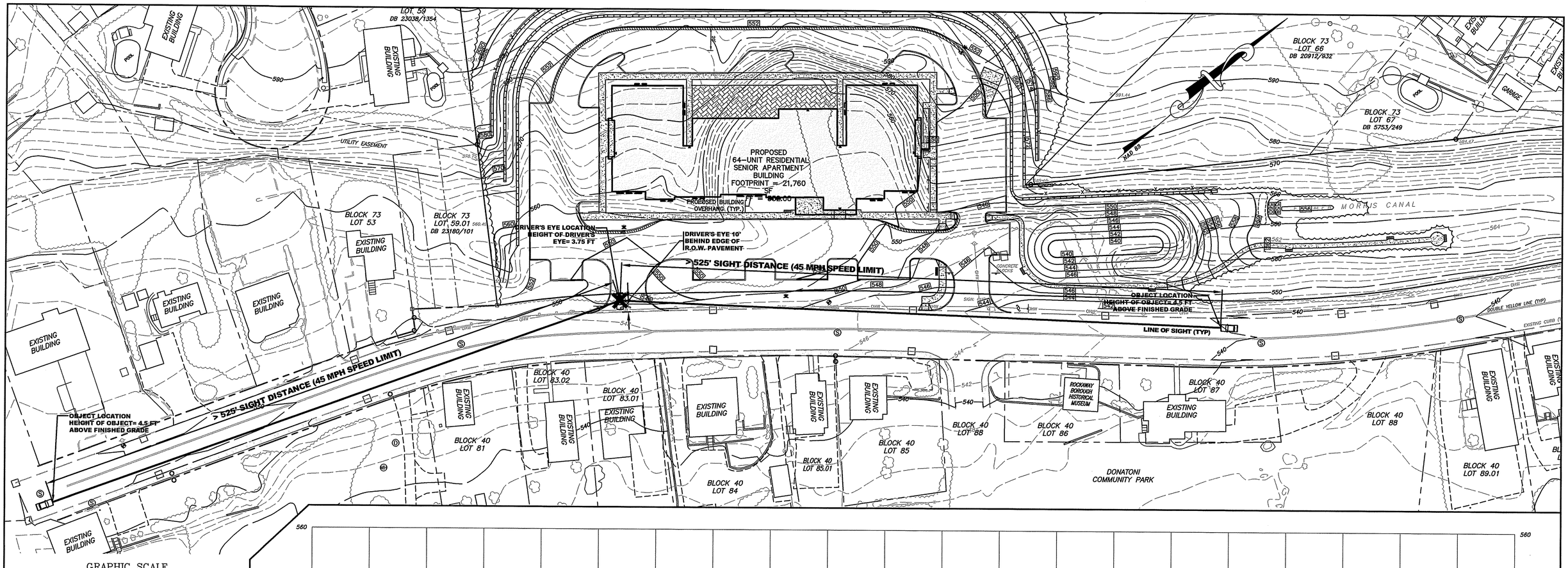
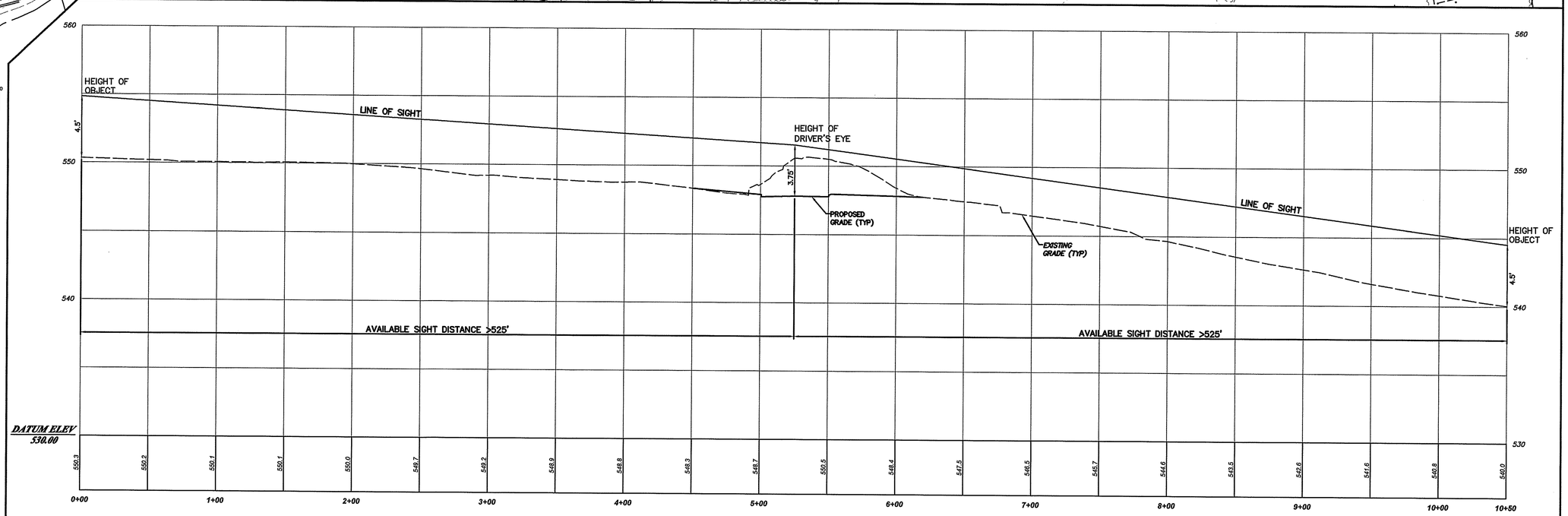


GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.



GRAPHIC SCALE

(IN FEET)
1 inch = 4 ft. (VERTICAL)
1 inch = 40 ft. (HORIZONTAL)

DATE	REVISION

DYKSTRA WALKER
DESIGN GROUP PA
PROFESSIONAL ENGINEERS, PLANNERS & SURVEYORS
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KENNETH D. DYKSTRA
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SIGHT DISTANCE PLAN & PROFILE

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION
BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

SCALE:	1" = 40'
JOB NO.:	04197
DRAWN BY:	TJB
CHECKED BY:	KJR
DATE:	7/14/20
SHEET NO.	13 OF 24

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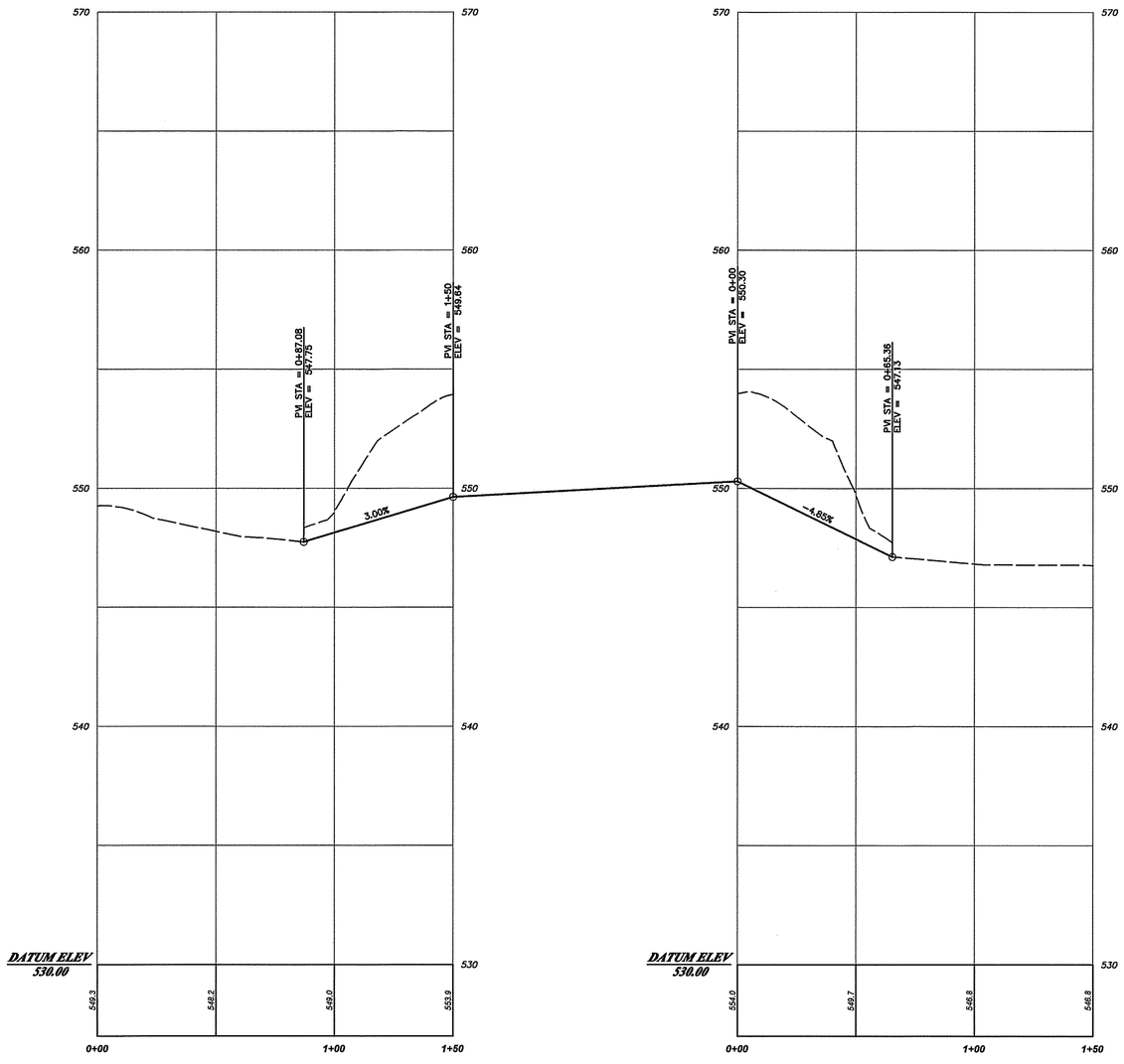
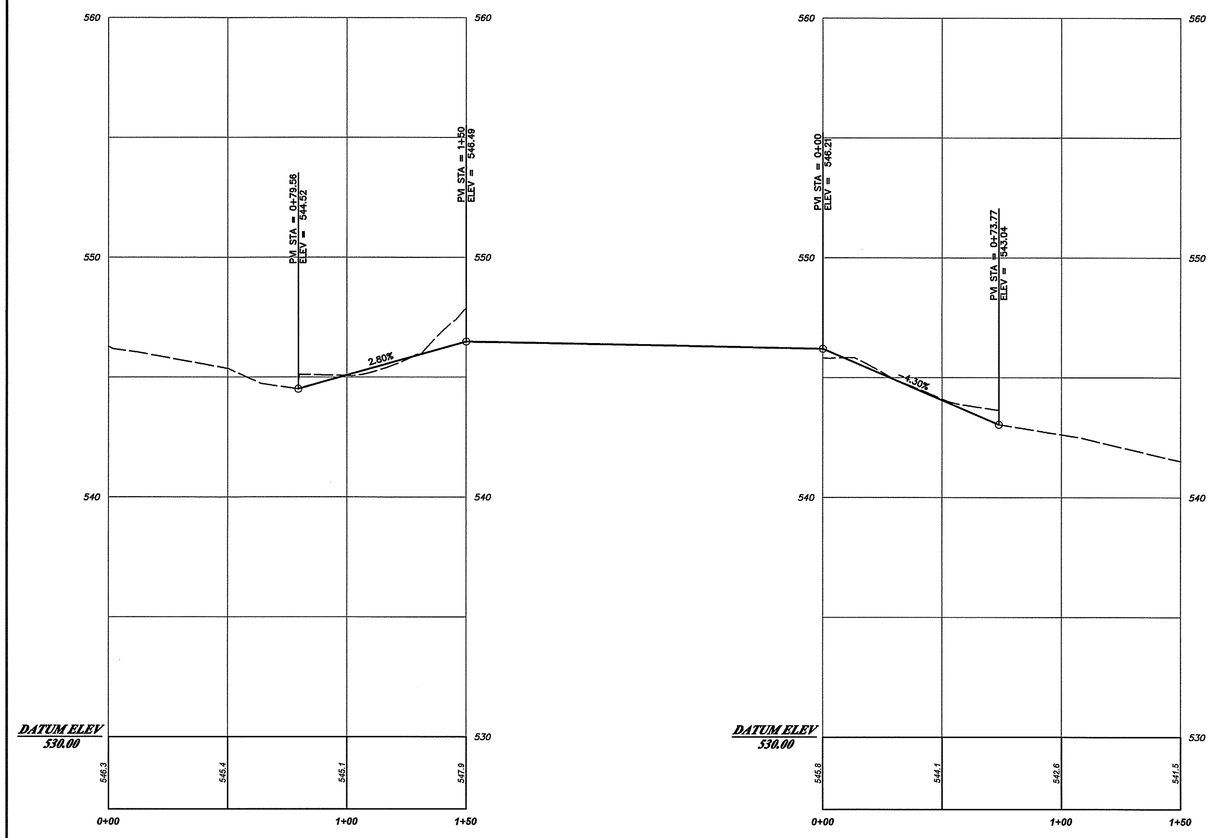
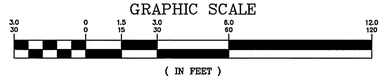


PROPOSED SOUTHERN DRIVEWAY
ENTRANCE/EXIT CURB RETURN PROFILES
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'



PROPOSED NORTHERN DRIVEWAY
ENTRANCE CURB RETURN PROFILES
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

GRAPHIC SCALE



(IN FEET)
1 inch = 3 ft. (VERTICAL)
1 inch = 30 ft. (HORIZONTAL)

DATE	REVISION

DYKSTRA WALKER
DESIGN GROUP P.A.
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CURB RETURN PROFILES

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION
BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

SCALE:	AS NOTED
JOB NO.:	04197
DRAWN BY:	TJB
CHECKED BY:	KJR
DATE:	7/14/20
SHEET NO.	14 OF 24

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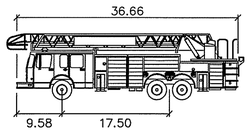
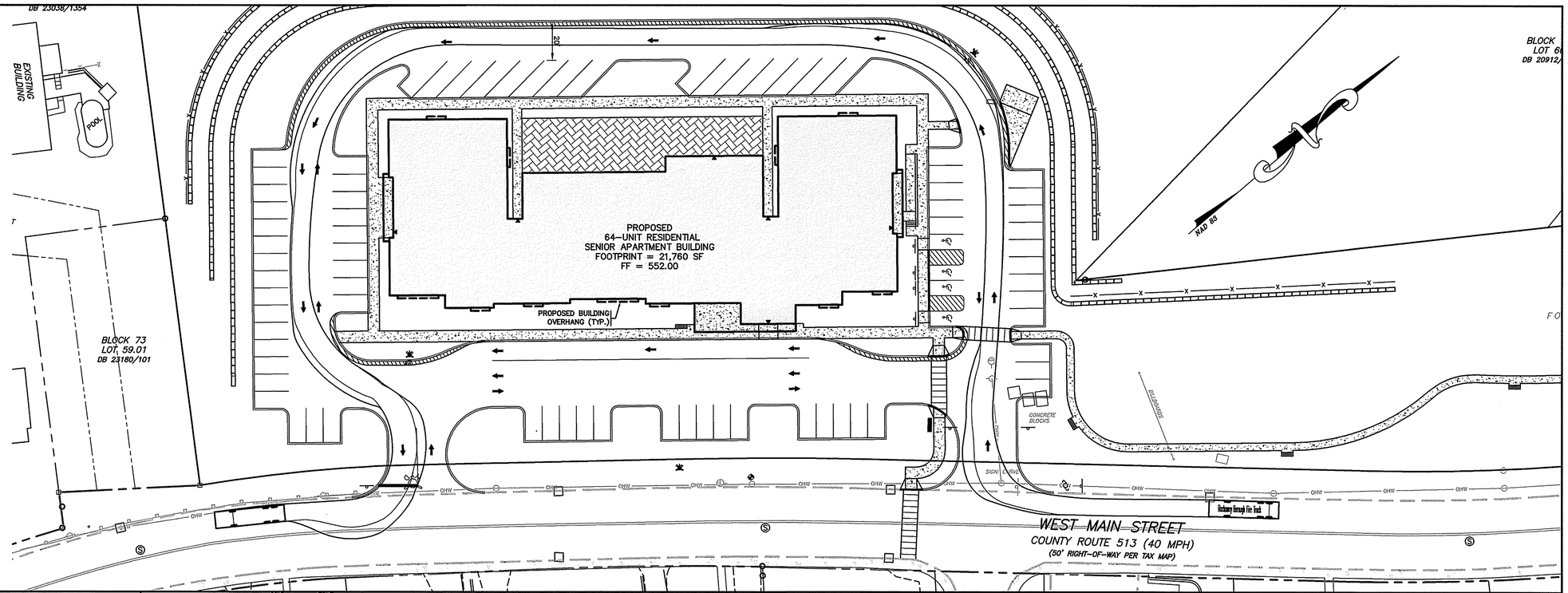


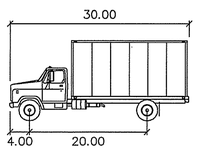
ROCKAWAY BOROUGH TRUCK

WIDTH	: 8.66 FT
TRACK	: 8.66 FT
LOCK TO LOCK TIME	: 6.0
STEERING ANGLE	: 45.0

ROCKAWAY BOROUGH FIRE TRUCK MANEUVERING PLAN

SCALE: 1" = 40'



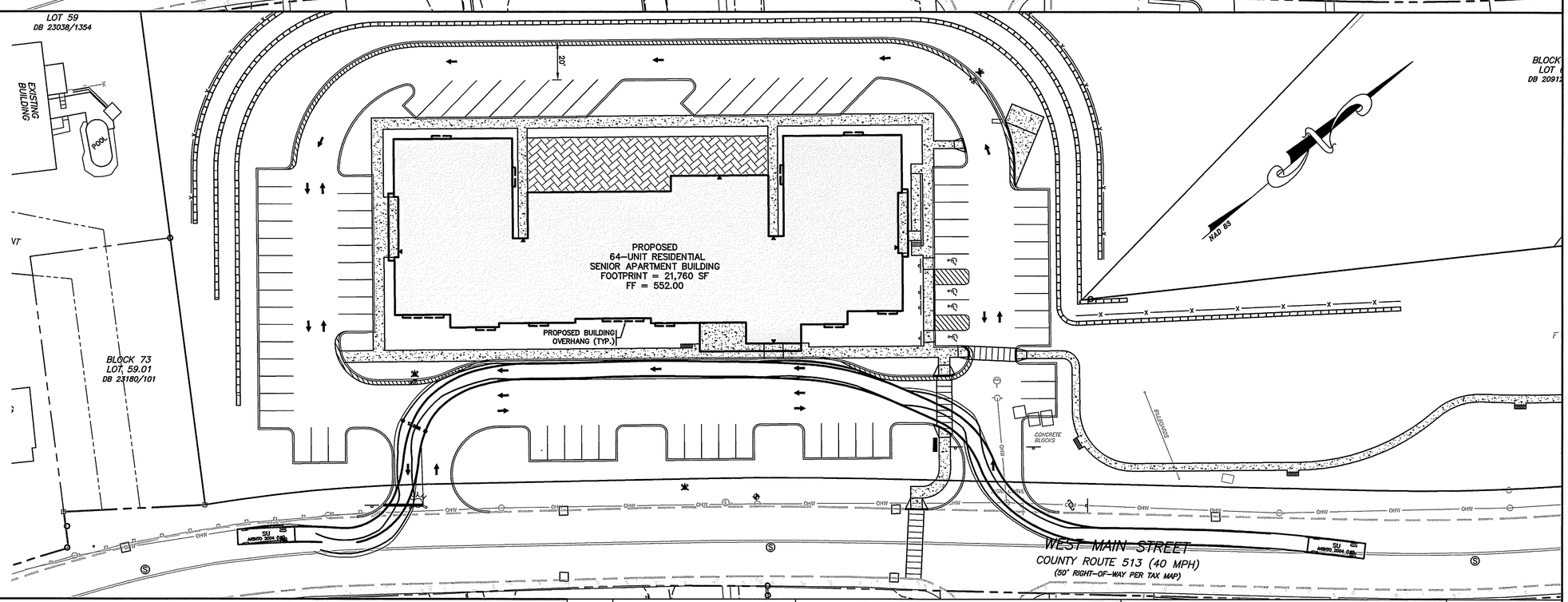


SU

WIDTH	: 8.00 FT
TRACK	: 8.00 FT
LOCK TO LOCK TIME	: 6.0
STEERING ANGLE	: 31.8

30 FT BOX TRUCK MANEUVERING PLAN

SCALE: 1" = 40'



GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

DATE	REVISION

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TRUCK MANEUVERING PLAN

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION
BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

SCALE:	1" = 30'
JOB NO.:	04197
DRAWN BY:	TJB
CHECKED BY:	KJR
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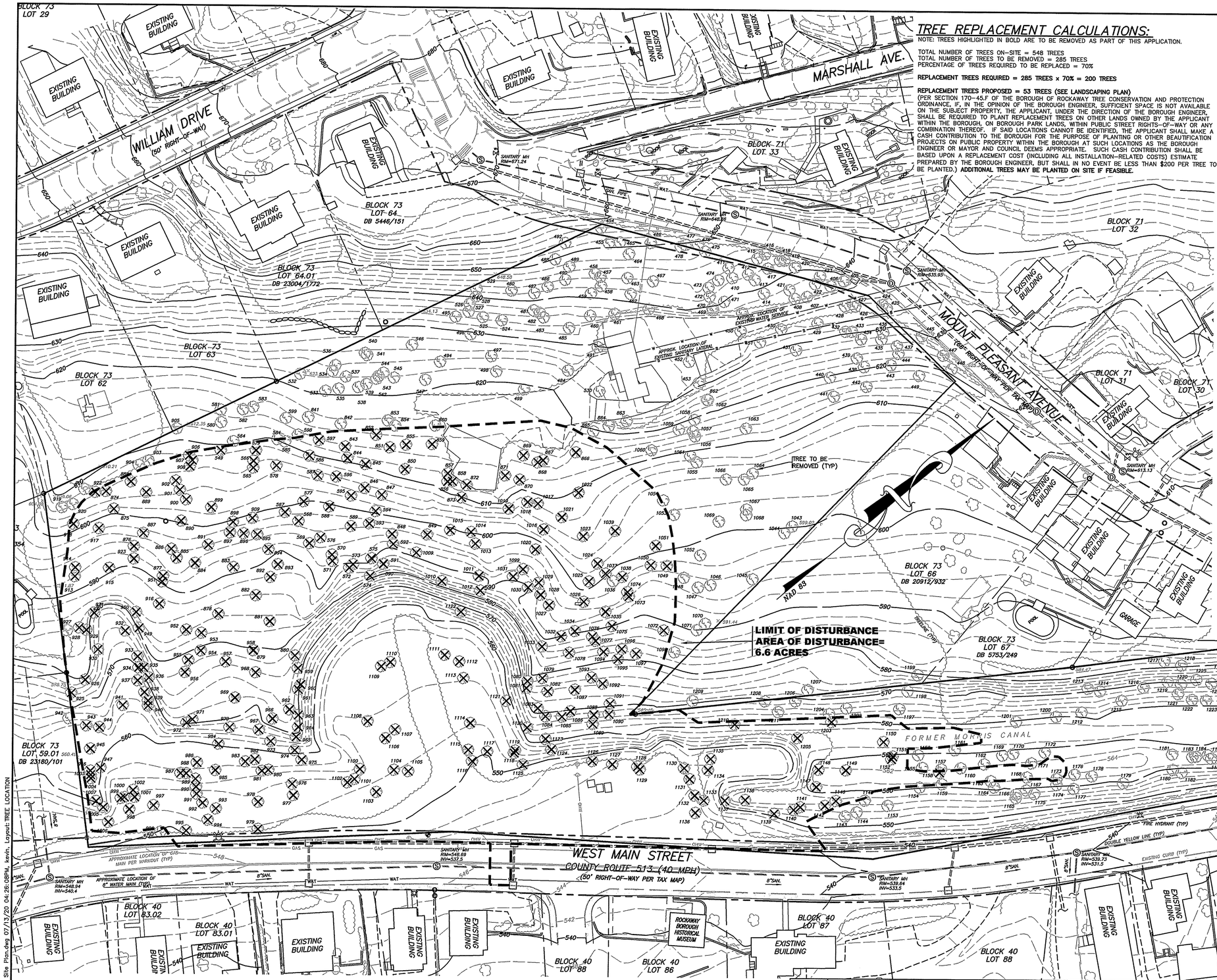
SHEET NO.	15 OF 24

J:\acad\PROJ\04\04197\dwg\Prelim Site Plan.dwg, 07/13/20 04:25:51PM, kevin, Layout: TRUCK TURN



TREE REPLACEMENT CALCULATIONS:

NOTE: TREES HIGHLIGHTED IN BOLD ARE TO BE REMOVED AS PART OF THIS APPLICATION.

TOTAL NUMBER OF TREES ON-SITE = 548
TOTAL NUMBER OF TREES TO BE REMOVED = 285 TREES
PERCENTAGE OF TREES REQUIRED TO BE REPLACED = 70%

REPLACEMENT TREES REQUIRED = 285 TREES x 70% = 200 TREES

REPLACEMENT TREES PROPOSED = 53 TREES (SEE LANDSCAPING PLAN)
(PER SECTION 170-45.F OF THE BOROUGH OF ROCKAWAY TREE CONSERVATION AND PROTECTION ORDINANCE, IF, IN THE OPINION OF THE BOROUGH ENGINEER, SUFFICIENT SPACE IS NOT AVAILABLE ON THE SUBJECT PROPERTY, THE APPLICANT, UNDER THE DIRECTION OF THE BOROUGH ENGINEER, SHALL BE REQUIRED TO PLANT REPLACEMENT TREES ON OTHER LANDS OWNED BY THE APPLICANT WITHIN THE BOROUGH, ON BOROUGH PARK LANDS, WITHIN PUBLIC STREET RIGHTS-OF-WAY OR ANY COMBINATION THEREOF. IF SAID LOCATIONS CANNOT BE IDENTIFIED, THE APPLICANT SHALL MAKE A CASH CONTRIBUTION TO THE BOROUGH FOR THE PURPOSE OF PLANTING OR OTHER BEAUTIFICATION PROJECTS ON PUBLIC PROPERTY WITHIN THE BOROUGH AT SUCH LOCATIONS AS THE BOROUGH ENGINEER OR MAYOR AND COUNCIL DEEMS APPROPRIATE. SUCH CASH CONTRIBUTION SHALL BE BASED UPON A REPLACEMENT COST (INCLUDING ALL INSTALLATION-RELATED COSTS) ESTIMATE PREPARED BY THE BOROUGH ENGINEER, BUT SHALL IN NO EVENT BE LESS THAN $200 PER TREE TO BE PLANTED.) **ADDITIONAL TREES MAY BE PLANTED ON SITE IF FEASIBLE.**

TREES 8" OR GREATER IN DIAMETER

405	18" DOGWOOD	533	19" OAK	890	29" OAK	995	11" MAPLE	1099	17" OAK	1204	13" ASH
406	14" DOGWOOD	534	15" OAK	891	8" POPLAR	996	13" OAK TRIPLE	1100	13" BEECH DOUBLE	1205	9" MAPLE
407	27" OAK	535	15" OAK	892	11" BEECH DOUBLE	997	8" MAPLE	1101	9" LOCUST	1206	30" MAPLE
408	17" OAK	536	27" ASH	893	21" OAK	998	8" OAK	1102	11" LOCUST	1207	9" MAPLE
409	15" OAK	537	13" OAK	894	9" BEECH	999	15" ASH	1103	13" ASH DOUBLE	1208	27" OAK
410	15" OAK	538	17" OAK	895	9" OAK	1000	8" ASH	1104	18" LOCUST	1209	10" OAK
411	17" OAK	539	13" OAK	896	13" BEECH	1001	11" ASH	1105	11" OAK	1210	9" MAPLE
412	10" OAK DOUBLE	540	13" OAK	897	11" BEECH DOUBLE	1002	13" BEECH	1106	9" OAK	1211	9" MAPLE
413	13" OAK	541	13" OAK	898	11" BEECH	1003	23" ASH	1107	9" LOCUST	1212	13" MAPLE DOUBLE
414	13" OAK	542	19" OAK	899	11" OAK	1004	17" ASH	1108	9" ASH	1213	13" MAPLE
415	23" DOGWOOD	543	8" MAPLE	900	8" BEECH TRIPLE	1005	11" MAPLE	1109	11" LOCUST	1214	15" MAPLE
416	8" OAK	544	15" OAK	901	13" OAK	1006	13" OAK	1110	9" BEECH	1215	13" MAPLE DOUBLE
417	11" OAK	545	13" OAK DOUBLE	902	8" OAK	1007	15" OAK	1111	11" LOCUST	1216	16" MAPLE
418	8" MAPLE	546	9" MAPLE	903	8" OAK	1009	9" BEECH	1112	9" LOCUST	1217	21" LOCUST
419	11" OAK	547	15" OAK	904	8" BEECH	1010	11" BEECH	1113	9" LOCUST	1218	23" MAPLE
420	19" MAPLE	549	15" OAK TRIPLE	905	23" OAK DOUBLE	1011	13" BEECH	1114	9" LOCUST	1219	13" MAPLE
421	9" OAK	564	13" OAK	906	13" OAK	1012	11" BEECH	1115	10" LOCUST	1220	9" MAPLE
422	11" MAPLE	565	11" OAK	907	8" OAK	1013	9" OAK	1116	8" OAK	1221	22" LOCUST
423	8" MAPLE	566	8" MAPLE	908	8" OAK DOUBLE	1014	17" MAPLE	1117	13" OAK	1222	17" MAPLE
424	8" MAPLE	567	15" OAK	909	22" OAK	1015	22" OAK	1118	9" OAK	1223	16" ASH
425	13" MAPLE	568	15" BEECH	913	17" OAK	1016	23" OAK	1119	9" OAK	1224	9" MAPLE
426	15" OAK	569	23" OAK	914	30" OAK	1017	15" OAK	1120	13" OAK	1225	9" MAPLE DOUBLE
427	13" OAK	570	9" BEECH	915	33" OAK	1018	9" BEECH	1121	18" OAK	1226	13" LOCUST
428	11" MAPLE	571	8" BEECH	916	11" BEECH	1019	17" OAK	1122	11" OAK	1227	15" MAPLE
429	11" MAPLE	572	8" BEECH	917	17" OAK	1020	27" OAK	1123	11" OAK	1228	13" ASH
430	8" MAPLE	573	8" BEECH	918	15" OAK DOUBLE	1021	15" OAK	1124	9" OAK	1229	14" LOCUST
431	27" MAPLE	574	8" BEECH	919	8" BEECH	1022	13" OAK	1125	9" OAK	1230	13" MAPLE
432	9" MAPLE	575	8" BEECH	920	13" BEECH DOUBLE	1023	16" OAK	1126	9" OAK	1231	15" LOCUST
433	13" POPLAR	576	13" BEECH	921	13" OAK	1024	9" BEECH	1127	11" ASH	1232	14" MAPLE
434	29" OAK	577	15" OAK	922	15" OAK	1025	13" OAK	1128	13" MAPLE	1233	12" MAPLE
435	15" POPLAR	578	8" OAK DOUBLE	923	21" OAK	1026	11" OAK	1129	13" OAK	1234	15" LOCUST
436	11" MAPLE	579	9" OAK	925	27" OAK	1027	11" BEECH DOUBLE	1130	11" OAK	1235	11" ASH DOUBLE
437	9" MAPLE	580	15" OAK	926	15" OAK	1028	13" OAK	1131	11" OAK	1236	10" LOCUST
438	8" MAPLE	581	8" MAPLE	927	18" POPLAR	1029	11" OAK	1132	13" OAK	1237	15" MAPLE DOUBLE
439	11" MAPLE	582	15" OAK	928	17" OAK	1030	13" OAK	1133	9" OAK	1238	11" LOCUST
440	8" MAPLE	583	17" OAK DOUBLE	929	13" OAK	1031	23" OAK	1134	9" MAPLE	1239	15" MAPLE TRIPLE
441	8" HICKORY	584	15" OAK	930	11" OAK	1032	9" BEECH	1135	23" OAK	1240	15" MAPLE
442	8" HICKORY	585	13" OAK	931	8" BEECH	1033	23" OAK	1136	13" OAK	1241	13" LOCUST
443	11" MAPLE	586	9" OAK	932	11" BEECH	1034	11" OAK	1137	9" OAK	1242	14" MAPLE DOUBLE
444	9" MAPLE	587	15" OAK	933	11" BEECH	1035	22" OAK	1138	11" MAPLE TRIPLE	1243	15" LOCUST
445	15" HICKORY	588	15" OAK	934	11" BEECH	1036	16" OAK	1139	15" OAK	1244	12" MAPLE
447	25" OAK	589	15" OAK	935	11" MAPLE	1037	13" MAPLE	1140	13" OAK	1245	16" LOCUST
448	8" CHERRY	590	9" BEECH	936	9" MAPLE DOUBLE	1038	9" OAK	1141	13" BEECH DOUBLE	1246	15" LOCUST
449	8" OAK	591	9" BEECH	937	13" MAPLE	1039	23" OAK	1142	9" BEECH	1247	13" MAPLE TRIPLE
450	15" OAK	592	8" BEECH	938	11" MAPLE DOUBLE	1043	23" OAK	1143	15" OAK	1248	15" LOCUST
451	9" MAPLE	593	19" OAK	939	11" MAPLE	1044	9" OAK	1144	12" OAK	1249	13" OAK
452	19" OAK	594	17" OAK DOUBLE	940	11" BEECH	1045	11" OAK	1145	20" OAK	1250	9" OAK
453	11" POPLAR	595	24" OAK	941	13" BEECH	1046	17" OAK	1146	15" OAK	1251	15" LOCUST
454	13" OAK	596	15" OAK	942	15" MAPLE	1047	19" OAK	1147	15" OAK	1252	16" LOCUST
455	15" OAK	597	15" OAK	943	13" MAPLE DOUBLE	1048	17" OAK	1148	17" OAK	1253	17" LOCUST
456	9" BEECH	598	15" OAK DOUBLE	944	13" OAK	1049	11" BEECH	1149	17" OAK	1254	13" MAPLE
457	17" OAK	599	13" OAK	945	9" MAPLE DOUBLE	1050	15" OAK	1150	15" MAPLE	1255	11" MAPLE
458	15" OAK	841	9" OAK	946	25" ASH	1051	17" OAK	1151	11" BEECH	1256	15" ASH
459	15" OAK	842	8" MAPLE	947	13" ASH	1052	31" OAK	1152	10" BEECH		
460	9" BEECH	843	13" OAK	949	11" BEECH	1053	13" ASH	1153	9" OAK		
461	8" BEECH	844	17" OAK	950	11" BEECH	1054	17" OAK	1154	9" BEECH		
462	47" OAK	845	8" OAK	951	9" BEECH	1055	17" MAPLE	1155	23" OAK		
463	15" BEECH TRIPLE	846	19" OAK	952	11" OAK	1056	15" OAK	1156	13" BEECH		
464	17" OAK	847	13" OAK	953	17" BEECH	1057	11" MAPLE	1157	13" OAK		
465	17" MAPLE	848	9" BEECH	954	8" MAPLE	1058	9" OAK	1158	11" OAK		
466	33" OAK	849	8" BEECH	955	8" OAK	1059	9" MAPLE	1159	11" OAK		
467	11" OAK	850	13" OAK	956	21" BEECH DOUBLE	1060	9" MAPLE	1160	11" OAK		
468	11" BEECH	851	8" MAPLE	957	9" OAK	1061	13" OAK	1161	9" MAPLE		
469	18" MAPLE	852	11" OAK	958	25" OAK	1062	13" MAPLE	1162	13" OAK		
470	8" MAPLE	853	9" OAK	959	8" BEECH	1063	11" MAPLE	1163	11" BEECH		
471	13" OAK	854	11" OAK	960	8" BEECH	1064	23" MAPLE	1164	9" BEECH		
472	15" OAK	855	13" OAK	961	8" BEECH	1065	11" MAPLE	1165	9" OAK		
473	15" OAK	856	15" BEECH DOUBLE	962	8" BEECH	1066	11" MAPLE	1166	11" BEECH		
474	9" OAK	857	29" OAK	963	11" LOCUST	1067	15" OAK	1167	13" OAK		
475	13" MAPLE	858	11" OAK	964	11" LOCUST	1068	17" POPLAR	1168	11" OAK		
476	15" OAK	859	11" OAK	965	11" BEECH	1069	11" OAK	1169	13" OAK		
477	8" MAPLE	860	23" OAK TRIPLE	966	11" BEECH	1070	13" POPLAR	1170	13" OAK		
478	8" OAK	862	15" MAPLE	967	27" OAK	1071	15" OAK	1171	15" OAK DOUBLE		
480	15" OAK	863	9" BEECH	968	8" BEECH	1072	19" OAK	1172	13" ASH		
481	9" OAK	864	33" OAK	969	8" BEECH	1073	16" OAK	1173	15" ASH		
482	13" OAK	865	8" MAPLE	970	25" OAK	1074	13" OAK	1174	17" OAK		
483	25" OAK	866	27" OAK	973	8" BEECH	1075	11" OAK	1175	9" OAK		
484	39" OAK	867	25" OAK	972	23" OAK	1076	9" OAK	1176	11" OAK		
485	13" OAK	868	11" OAK	973	8" MAPLE	1077	14" OAK	1177	17" MAPLE		
486	9" BEECH	869	20" OAK	974	8" OAK TRIPLE	1078	10" BEECH	1178	13" ASH		
487	9" BEECH	870	11" OAK	975	11" LOCUST	1079	14" OAK	1179	9" MAPLE		
488	8" BEECH	871	11" OAK	976	8" LOCUST	1080	15" OAK	1180	13" ASH		
489	17" BEECH	872	23" OAK	977	8" MAPLE	1081	9" OAK	1181	9" MAPLE		
490	19" OAK	873	11" OAK	978	13" MAPLE	1082	11" OAK	1182	11" OAK		
491	19" BEECH	874	37" OAK	979	15" OAK	1083	11" OAK	1183	17" ASH		
492	23" OAK	875	11" BEECH	980	8" ASH	1084	9" OAK	1184	15" ASH		
494	17" OAK	876	8" BEECH	981	8" MAPLE	1085	30" OAK	1185	15" ASH		
495	17" OAK	877	15" OAK	982	11" LOCUST	1086	11" BEECH	1186	15" ASH		
496	15" BEECH DOUBLE	878	15" OAK	983	8" MAPLE	1087	10" OAK	1187	15" OAK		
497	15" OAK	879	27" OAK	984	11" BEECH	1088	10" OAK	1188	11" OAK		
498	15" POPLAR	880	8" BEECH	985	8" MAPLE	1089	13" OAK	1189	17" ASH		
499	23" OAK	881	15" BEECH	986	9" ASH	1090	15" OAK	1190	23" ASH		
524	8" ASH	882	15" OAK	987	8" MAPLE	1091	11" BEECH	1191	15" OAK		
525	21" OAK	883	37" OAK	988	13" LOCUST	1092	10" OAK	1197	27" ASH		
526	15" OAK	884	15" BEECH	989	11" OAK	1093	12" BEECH	1198	17" ASH		
527	8" ASH	885	21" OAK	990	11" ASH	1094	9" OAK	1199	19" OAK		
528	8" OAK	886	13" OAK	991	11" MAPLE	1095	13" OAK	1200	15" MAPLE DOUBLE		
529	20" OAK	887	11" POPLAR	992	13" LOCUST	1096	13" OAK	1201	15" ASH		
530	35" OAK	888	23" OAK	993	8" MAPLE DOUBLE	1097	15" ASH	1202	13" MAPLE		
532	15" OAK	889	11" BEECH	994	13" MAPLE	1098	17" OAK	1203	12" MAPLE		

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

DATE	REVISION

DYKSTRA WALKER
DESIGN GROUP P.A.
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KENNETH D. DYKSTRA
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TREE LOCATION PLAN

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION
BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

SCALE: 1" = 40'
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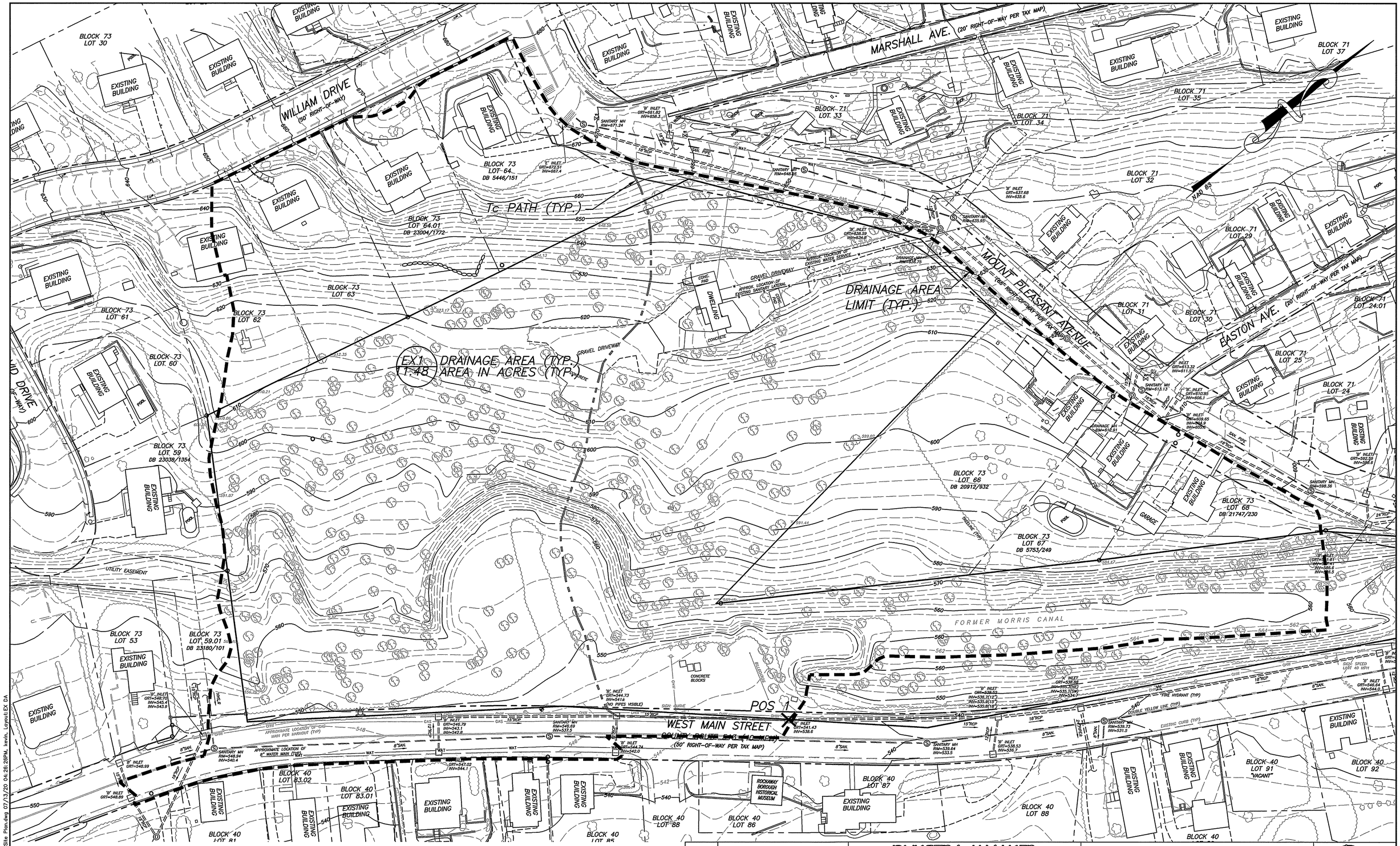
SHEET NO. 16 OF 24

J:\acad\PROJ\04\04197\dwg\Prelim Site Plan.dwg 07/13/20 04:26:08PM, kevin, Layout: TREE LOCATION



GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

DATE	REVISION

DYKSTRA WALKER DESIGN GROUP P.A.
PROFESSIONAL ENGINEERS, PLANNERS & SURVEYORS
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EXISTING DRAINAGE AREA MAP

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION
BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

SCALE:	1" = 40'
JOB NO.:	04197
DRAWN BY:	TJB
CHECKED BY:	KJR
DATE:	7/14/20
SHEET NO.	17 OF 24

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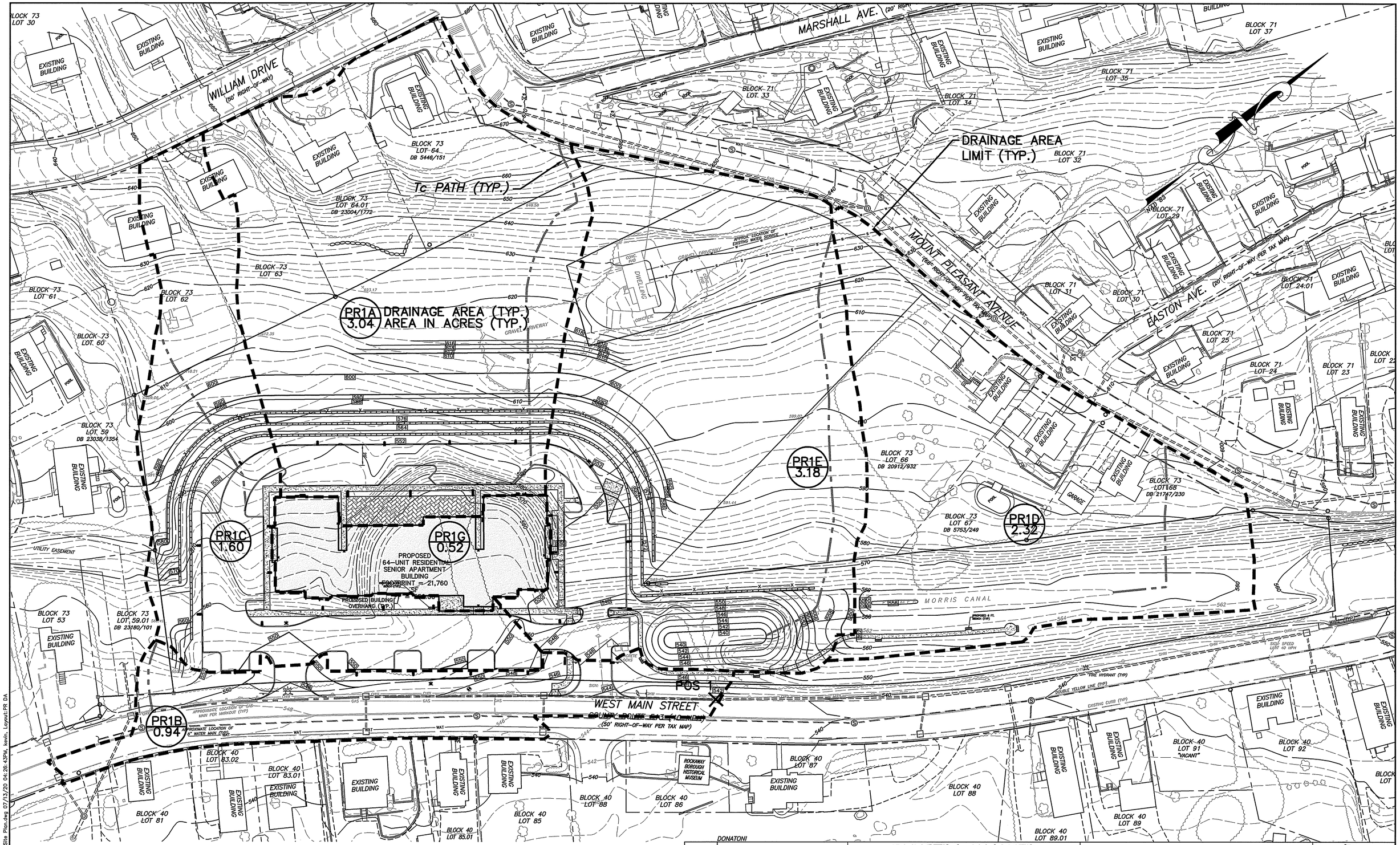

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PROPOSED DRAINAGE AREA MAP

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION
BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

SCALE:	1" = 40'
JOB NO.:	04197
DRAWN BY:	TJB
CHECKED BY:	KJR
DATE:	7/14/20
SHEET NO.	18 OF 24

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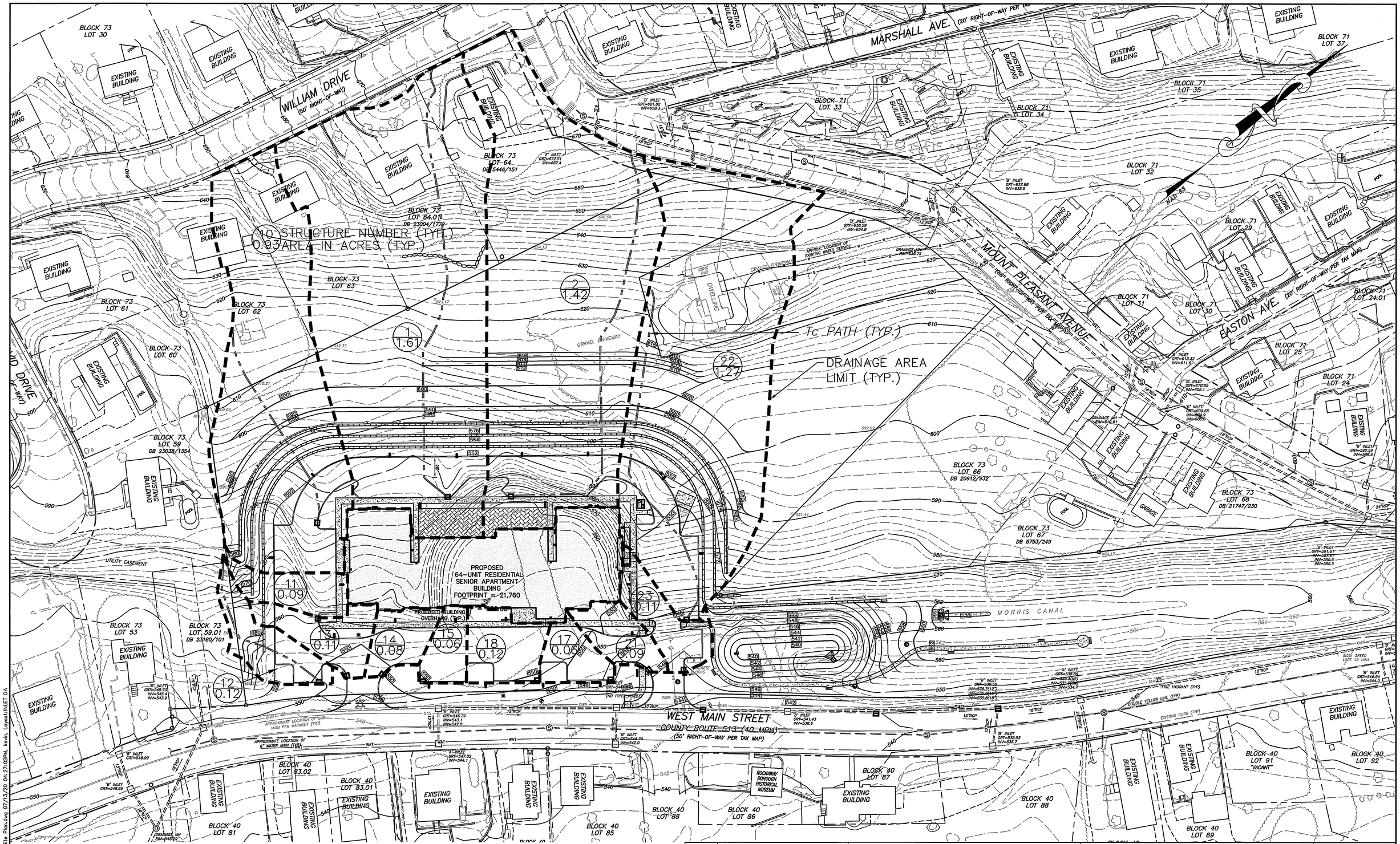

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

DATE	REVISION

DYKSTRA WALKER DESIGN GROUP PA
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PROPOSED INLET DRAINAGE AREA MAP

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION

BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

SCALE:	1" = 40'
JOB NO.:	04197
DRAWN BY:	TJB
CHECKED BY:	KJR
DATE:	7/14/20
SHEET NO.	19 OF 24

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MORRIS COUNTY SOIL CONSERVATION DISTRICT
SOIL EROSION AND SEDIMENT CONTROL NOTES:

1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSTALLED IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY, AND WILL BE IN PLACE PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
2. ANY DISTURBED AREA THAT WILL BE LEFT EXPOSED FOR MORE THAN THIRTY (30) DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PROHIBITS TEMPORARY SEEDING. THE DISTURBED AREAS WILL BE MULCHED WITH STRAW OR HAY AND TACKED IN ACCORDANCE WITH THE NEW JERSEY STANDARDS. SEE NOTE 21 BELOW.
3. PERMANENT VEGETATION IS TO BE ESTABLISHED ON EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING. MULCH IS TO BE USED FOR PROTECTION UNTIL VEGETATION IS ESTABLISHED. SEE NOTE 22 BELOW.
4. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS (STEEP SLOPES, SANDY SOILS, WET CONDITIONS) SUBJECT TO EROSION WILL RECEIVE A TEMPORARY SEEDING IN ACCORDANCE WITH NOTE 21 BELOW.
5. TEMPORARY DIVERSION BERMS ARE TO BE INSTALLED ON ALL CLEARED ROADWAYS AND EASEMENT AREAS. SEE THE DIVERSION DETAIL.
6. PERMANENT SEEDING AND STABILIZATION TO BE IN ACCORDANCE WITH THE "STANDARDS FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION COVER". SPECIFIED RATES AND LOCATIONS SHALL BE ON THE APPROVED SOIL EROSION AND SEDIMENT CONTROL PLAN.
7. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SO THAT ALL STORMWATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.
8. ALL SEDIMENTATION STRUCTURES (SILT FENCE, INLET FILTERS, AND SEDIMENT BASINS) WILL BE INSPECTED AND MAINTAINED DAILY.
9. STOCKPILES SHALL NOT BE LOCATED WITHIN 50' OF A FLOODPLAIN, SLOPE, DRAINAGE FACILITY, OR ROADWAY. ALL STOCKPILES BASES SHALL HAVE A SILT FENCE PROPERLY ENTRENCHED AT THE TOE OF SLOPE.
10. A STABILIZED CONSTRUCTION ACCESS WILL BE INSTALLED, WHENEVER AN EARTHEN ROAD INTERSECTS WITH A PAVED ROAD. SEE THE STABILIZED CONSTRUCTION ACCESS DETAIL AND CHART FOR DIMENSIONS.
11. ALL NEW ROADWAYS WILL BE TREATED WITH SUITABLE SUBBASE UPON ESTABLISHMENT OF FINAL GRADE ELEVATIONS.
12. PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.
13. BEFORE DISCHARGE POINTS BECOME OPERATIONAL. ALL STORM DRAINAGE OUTLETS WILL BE STABILIZED AS REQUIRED.
14. ALL DEWATERING OPERATIONS MUST BE DISCHARGED DIRECTLY INTO A SEDIMENT FILTER AREA. THE FILTER SHOULD BE COMPOSED OF A FABRIC OR APPROVED MATERIAL. SEE THE DEWATERING DETAIL.
15. ALL SEDIMENT BASINS WILL BE CLEANED WHEN THE CAPACITY HAS BEEN REDUCED BY 50%. A CLEAN OUT ELEVATION WILL BE IDENTIFIED ON THE PLAN AND A MARKER INSTALLED ON THE SITE.
16. DURING AND AFTER CONSTRUCTION, THE APPLICANT WILL BE RESPONSIBLE FOR THE MAINTENANCE AND UPKEEP OF THE DRAINAGE STRUCTURES, VEGETATION COVER, AND ANY OTHER MEASURES DEEMED APPROPRIATE BY THE DISTRICT. SAID RESPONSIBILITY WILL END WHEN COMPLETED WORK IS APPROVED BY THE MORRIS COUNTY SOIL CONSERVATION DISTRICT.
17. ALL TREES OUTSIDE THE DISTURBANCE LIMIT INDICATED ON THE SUBJECT PLAN OR THOSE TREES WITHIN THE DISTURBANCE AREA WHICH ARE DESIGNATED TO REMAIN AFTER CONSTRUCTION ARE TO BE PROTECTED WITH TREE PROTECTION DEVICES. SEE THE TREE PROTECTION DETAIL.
18. THE MORRIS COUNTY SOIL CONSERVATION DISTRICT MAY REQUEST ADDITIONAL MEASURES TO MINIMIZE ON SITE OR OFF SITE EROSION PROBLEMS DURING CONSTRUCTION.
19. THE MORRIS COUNTY SOIL CONSERVATION DISTRICT MUST BE NOTIFIED, IN WRITING, AT LEAST 72 HOURS PRIOR TO ANY LAND DISTURBANCE, AND A PRE-CONSTRUCTION MEETING HELD.
20. CONTRACTOR TO SET UP A MEETING WITH THE INSPECTOR FOR PERIODIC INSPECTIONS OF THE TEMPORARY SEDIMENT BASIN PRIOR TO AND DURING ITS CONSTRUCTION.
21. *TOPSOIL STOCKPILE PROTECTION*
    a) APPLY GROUND LIMESTONE AT A RATE OF 90 LBS PER 1000 SQ. FT.
    b) APPLY FERTILIZER (10-20-10) AT A RATE OF 11 LBS. PER 1000 SQ. FT.
    c) APPLY PERENNIAL RYEGRASS SEED AT 1 LB. PER 1000 SQ. FT. AND ANNUAL RYEGRASS AT 1 LB. PER 1000 SQ. FT.
    d) MULCH STOCKPILE WITH STRAW OR HAY AT A RATE OF 90 LBS. PER 1000 SQ. FT.
    e) APPLY A LIQUID MULCH BINDER OR TACK TO STRAW OR HAY MULCH.
    f) PROPERLY ENTRENCH A SILT FENCE AT THE BOTTOM OF THE STOCKPILE.

22. TEMPORARY STABILIZATION SPECIFICATIONS

a) APPLY GROUND LIMESTONE AT A RATE OF 90 LBS PER 1000 SQ. FT.
b) APPLY FERTILIZER (10-20-10) AT A RATE OF 11 LBS. PER 1000 SQ. FT.
c) APPLY PERENNIAL RYEGRASS SEED AT 1 LB. PER 1000 SQ. FT. AND ANNUAL RYEGRASS AT 1 LB. PER 1000 SQ. FT.
d) MULCH STOCKPILE WITH STRAW OR HAY AT A RATE OF 90 LBS. PER 1000 SQ. FT.
e) APPLY A LIQUID MULCH BINDER OR TACK TO STRAW OR HAY MULCH.

23. PERMANENT STABILIZATION SPECIFICATIONS

a) APPLY TOPSOIL TO A DEPTH OF 5 INCHES (UNSETTLED).
b) APPLY GROUND LIMESTONE AT A RATE OF 90 LBS PER 1000 SQ. FT. AND WORK FOUR INCHES INTO SOIL.
c) APPLY FERTILIZER (10-20-10) AT A OF RATE 11 LBS. PER 1000 SQ. FT.
d) APPLY HARD FESCUE SEED AT 2.7 LBS. PER 1000 SQ. FT. AND CREEPING RED FESCUE SEED AT 0.7 LBS PER 1000 SQ. FT. AND PERENNIAL RYEGRASS SEED AT 0.25 LBS PER 1000 SQ. FT.
e) MULCH STOCKPILE WITH STRAW OR HAY AT A RATE OF 90 LBS. PER 1000 SQ. FT.
f) APPLY A LIQUID MULCH BINDER OR TACK TO STRAW OR HAY MULCH.

***NOTE: 72 HOURS PRIOR TO ANY SOIL DISTURBANCE, NOTICE IN WRITING, SHALL BE GIVEN TO THE MORRIS COUNTY SOIL CONSERVATION DISTRICT AND A PRE-CONSTRUCTION MEETING HELD.**

SEQUENCE OF CONSTRUCTION

1) INSTALL EROSION CONTROL MEASURES INCLUDING SILT FENCE, ETC AS NOTED ON PLAN. DURATION = 5 DAYS.
2) CLEAR AND GRUB PROPERTY. DURATION = 10 DAYS.
3) STRIP AND STOCKPILE TOPSOIL, INSTALL SILT FENCE AROUND STOCKPILES, PERFORM TEMPORARY STABILIZATION OF STOCKPILES. DURATION = 3 DAYS.
4) INSTALL DRAINAGE FACILITIES WITH TEMPORARY INLET PROTECTION AND OTHER UTILITY CONNECTIONS. SUBSURFACE INFILTRATION BASINS AND WATER QUALITY STRUCTURES TO REMAIN OFF-LINE UNTIL SITE IS STABILIZED. DURATION = 60 DAYS.
5) ROUGH GRADE SITE AND CONSTRUCT RETAINING WALLS, CURBING AND PAVEMENT SUBBASE. DURATION = 60 DAYS.
6) CONSTRUCT BUILDING AND OTHER REMAINING SITE IMPROVEMENTS. DURATION = 220 DAYS.
7) INSTALL PERMANENT STABILIZATION. DURATION = 10 DAYS.
8) REMOVE TEMPORARY SOIL EROSION MEASURES AFTER PERMANENT STABILIZATION IS ESTABLISHED AND APPROVED BY SOIL CONSERVATION DISTRICT. DURATION = 5 DAYS.

TOTAL DURATION = 373 DAYS.

STANDARD FOR DUST CONTROL

DEFINITION

THE CONTROL OF DUST ON CONSTRUCTION SITES AND ROADS.

PURPOSE

TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, REDUCED ON-SITE AND OFF-SITE DAMAGE AND HEALTH HAZARDS, AND IMPROVE TRAFFIC SAFETY.

CONDITION WHERE PRACTICE APPLIES

THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO DUST BLOWING AND MOVEMENT SHERE ON-SITE DAMAGE IS LIKELY WITHOUT TREATMENT. CONSULT WITH LOCAL MUNICIPAL ORDINANCES ON ANY RESTRICTIONS.

WATER QUALITY ENHANCEMENT

SEDIMENTS DEPOSITED AS "DUST" ARE OFTEN FINE COLLOIDAL MATERIAL WHICH IS EXTREMELY DIFFICULT TO REMOVE FROM WATER ONCE IT BECOMES SUSPENDED. USE OF THIS STANDARD WILL HELP TO CONTROL THE GENERATION OF DUST FROM CONSTRUCTION SITES AND SUBSEQUENT BLOWING AND DEPOSITION INTO LOCAL SURFACE WATER RESOURCES.

PLANNING CRITERIA

THE FOLLOWING METHODS SHOULD BE CONSIDERED FOR CONTROLLING DUST:

MULCHES – SEE STANDARD OF STABILIZATION WITH MULCHES ONLY, PG. 5-1

VEGETATIVE COVER – SEE STANDARD FOR: TEMPORARY VEGETATIVE COVER, PG. 7-1, PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION PG. 4-1, AND PERMANENT STABILIZATION WITH SOD, PG. 6-1.

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

TABLE 16-1: DUST CONTROL MATERIALS

MATERIAL	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS/ ACRE
ANIONIC ASPHALT EMULSION	7:1	COARSE SPRAY	1200
LATEX EMULSION	12.5:1	FINE SPRAY	235
RESIN IN WATER	4:1	FINE SPRAY	300
POLYACRYLAMIDE (PAM) – SPRAY ON	APPLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS. MAY ALSO BE USED AS AN ADDITIVE TO SEDIMENT BASINS TO FLOCCULATE AND PRECIPITATE SUSPENDED COLLOIDS. SEE SEDIMENT BASIN STANDARD, P. 16-1.		
POLYACRYLAMIDE (PAM) – DRY SPREAD			
ACIDULATED SOY BEAN SOAP STICK	NONE	COARSE SPRAY	1200

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 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 WATES, 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.

SOIL DE-COMPACTION AND TESTING REQUIREMENTS

A. SOIL COMPACTION TESTING REQUIREMENTS

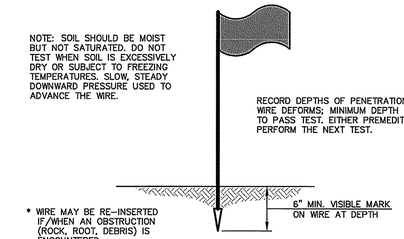
1. SUBGRADE SOILS PRIOR TO THE APPLICATION OF TOPSOIL (SEE PERMANENT SEEDING AND STABILIZATION NOTES FOR TOPSOIL REQUIREMENTS) SHALL BE FREE OF EXCESSIVE COMPACTION TO A DEPTH OF 6.0 INCHES TO ENHANCE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
2. AREAS OF THE SITE WHICH ARE SUBJECT TO COMPACTION TESTING AND/OR MITIGATION ARE GRAPHICALLY DENOTED ON THE CERTIFIED SOIL EROSION CONTROL PLAN.
3. COMPACTION TESTING LOCATIONS ARE DENOTED ON THE PLAN. A COPY OF THE PLAN OR PORTION OF THE PLAN SHALL BE USED TO MARK LOCATIONS OF TESTS, AND ATTACHED TO THE COMPACTION MITIGATION VERIFICATION FORM, AVAILABLE FROM THE LOCAL SOIL CONSERVATION DISTRICT. THIS FORM MUST BE FILLED OUT AND SUBMITTED PRIOR TO RECEIVING A CERTIFICATE OF COMPLIANCE FROM THE DISTRICT.
4. IN THE EVENT THAT TESTING INDICATES COMPACTION IN EXCESS OF THE MAXIMUM THRESHOLDS INDICATED FOR THE SIMPLIFIED TESTING METHODS (SEE DETAILS BELOW), THE CONTRACTOR/OWNER SHALL HAVE THE OPTION TO PERFORM EITHER (1) COMPACTION MITIGATION OVER THE ENTIRE MITIGATION AREA DENOTED ON THE PLAN (EXCLUDING EXEMPT AREAS), OR (2) PERFORM ADDITIONAL, MORE DETAILED TESTING TO ESTABLISH THE LIMITS OF EXCESSIVE COMPACTION WHEREUPON ONLY THE EXCESSIVELY COMPACTED AREAS WOULD REQUIRE COMPACTION MITIGATION. ADDITIONAL DETAILED TESTING SHALL BE PERFORMED BY A TRAINED, LICENSED PROFESSIONAL.

B. COMPACTION TESTING METHODS

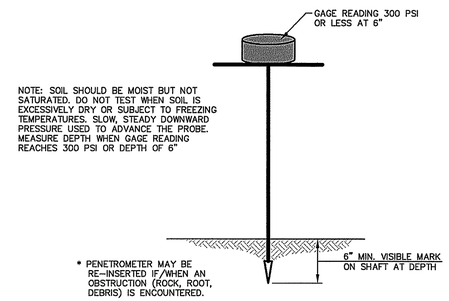
1. PROBING WIRE TEST (SEE DETAIL)
2. HAND-HELD PENETROMETER TEST (SEE DETAIL)
3. TUBE BULK DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED
4. NUCLEAR DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED)
5. NOTE: ADDITIONAL TESTING METHODS WHICH CONFORM TO ASTM STANDARDS AND SPECIFICATIONS, AND WHICH PRODUCE A DRY WEIGHT, SOIL BULK DENSITY MEASUREMENT MAY BE ALLOWED SUBJECT TO DISTRICT APPROVAL.
6. DETAILED REQUIREMENTS FOR EACH COMPACTION TESTING METHOD CAN BE FOUND IN SECTION 19 "STANDARD FOR LAND GRADING" OF THE NJ STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION.
7. SOIL COMPACTION TESTING IS NOT REQUIRED IF/WHEN SUBSOIL COMPACTION REMEDIATION (SCARIFICATION/TILLAGE (6" MINIMUM DEPTH) OR SIMILAR) IS PROPOSED AS PART OF THE SEQUENCE OF CONSTRUCTION.

C. PROCEDURES FOR SOIL COMPACTION MITIGATION

1. PROCEDURES SHALL BE USED TO MITIGATE EXCESSIVE SOIL COMPACTION PRIOR TO PLACEMENT OF TOPSOIL AND ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
2. RESTORATION OF COMPACTED SOILS SHALL BE THROUGH DEEP SCARIFICATION/TILLAGE (6" MINIMUM DEPTH) WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.). IN THE ALTERNATIVE, ANOTHER METHOD AS SPECIFIED BY A NEW JERSEY LICENSED PROFESSIONAL ENGINEER MAYBE SUBSTITUTED SUBJECT TO DISTRICT APPROVAL.



PROBING WIRE TEST
15.5 GA. STEEL WIRE (SURVEY FLAG)
NOT TO SCALE



HANDHELD SOIL PENETROMETER TEST
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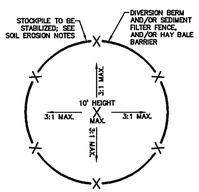

TOPSOIL STOCKPILE DETAIL
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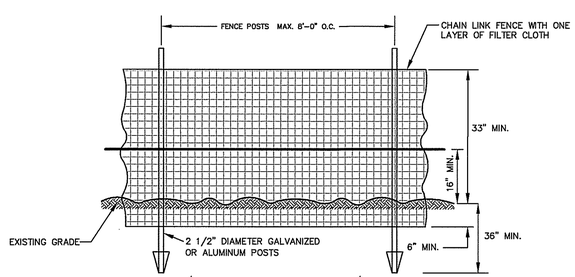
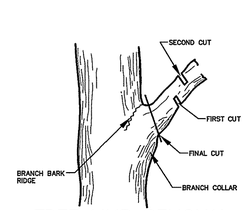
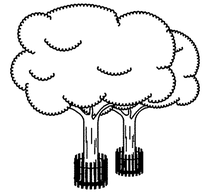




TREE LIMB REMOVAL



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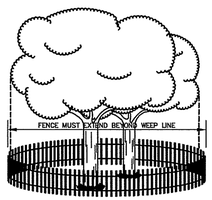

CORRECT FENCING

TREE PROTECTION
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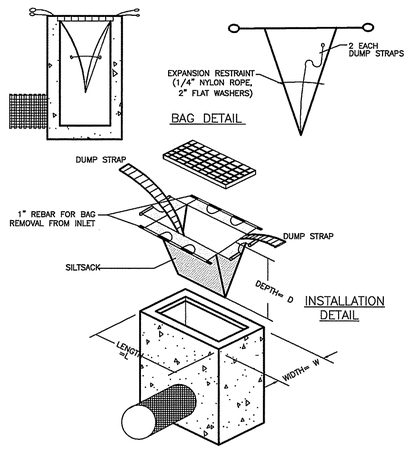
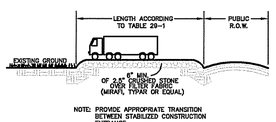


DETAIL OF TEMPORARY STORM SEWER INLET PROTECTION
NOT TO SCALE



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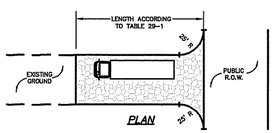
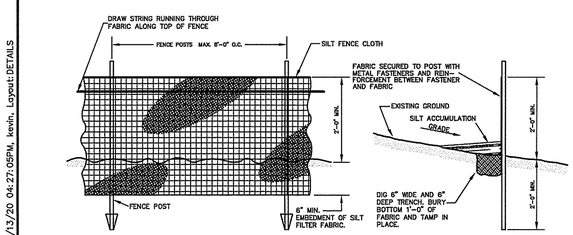


PLAN

TABLE 29-1

PERCENTAGE SLOPE OF ROADWAY	LENGTH REQUIRED	
	COARSE GRAINED SOILS	FINE GRAINED SOILS
0-2%	50 FT	100 FT
2-5%	100 FT	200 FT
> 5%	ENTIRE SURFACE STABILIZED WITH F.A.B.C. AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER GOVERNING BODY.	

STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

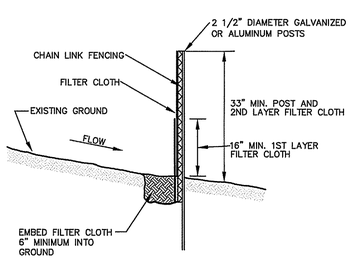


REQUIREMENTS FOR SILT FENCE

NOTES:

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".
2) A METAL FENCE WITH 6" OR SMALLER OPENINGS AND AT LEAST 2' 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 MANUFACTURER, SHALL BE BURIED AT LEAST 6" DEEP IN THE GROUND. THE FABRIC SHALL EXTEND AT LEAST 2' ABOVE THE GROUND. THE FABRIC MUST BE SECURELY FASTENED TO THE POSTS USING A SYSTEM CONSISTING OF METAL FASTENERS (NAILS OF 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 FABRIC SHALL INCORPORATE A DRAWSTRING IN THE TOP PORTION OF THE FENCE FOR ADDED STRENGTH.

SEDIMENT FILTER FENCE
NOT TO SCALE



SUPER SILT FENCE
NOT TO SCALE

DATE	REVISION

DYKSTRA WALKER DESIGN DW GROUP P.A.
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CONSTRUCTION NOTES AND DETAILS

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION
BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

SCALE: AS NOTED
JOB NO.: 04197
DRAWN BY: TJB
CHECKED BY: KJR
DATE: 7/14/20
SHEET NO. 20 OF 24

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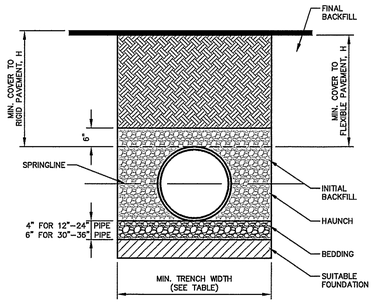


RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS

	SURFACE LIVE LOAD CONDITION	
PIPE DIAM.	H–25	HEAVY CONSTRUCTION (75T AXLE LOAD)*
12"–48"	12"	48"
54"–60"	24"	60"

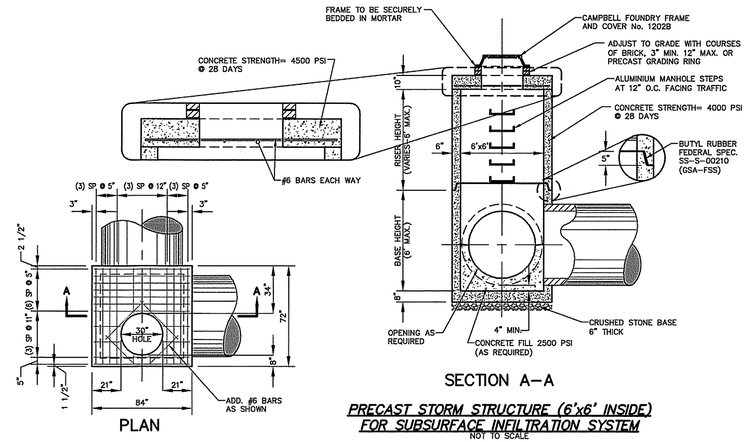
*VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER

NOTES:

1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION.
2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" FOR 4"–24"; 6" FOR 30"–60".
5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 8" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
6. MINIMUM COVER: MINIMUM COVER, H, IN NON–TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"–60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF PAVEMENT OR TO TOP OF RIGID PAVEMENT.

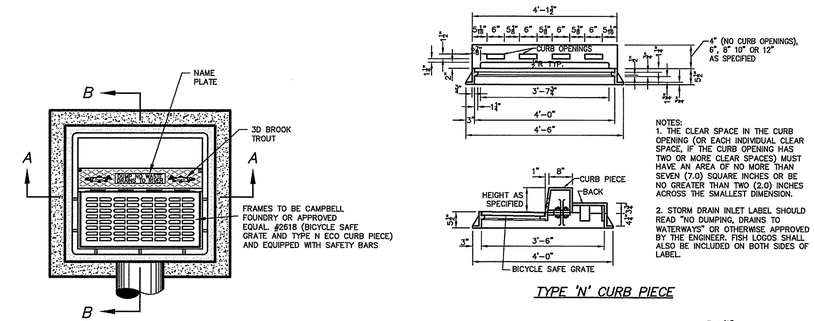
HDPE PIPE BEDDING DETAIL

NOT TO SCALE



PRECAST STORM STRUCTURE (6'x6' INSIDE) FOR SUBSURFACE INFILTRATION SYSTEM

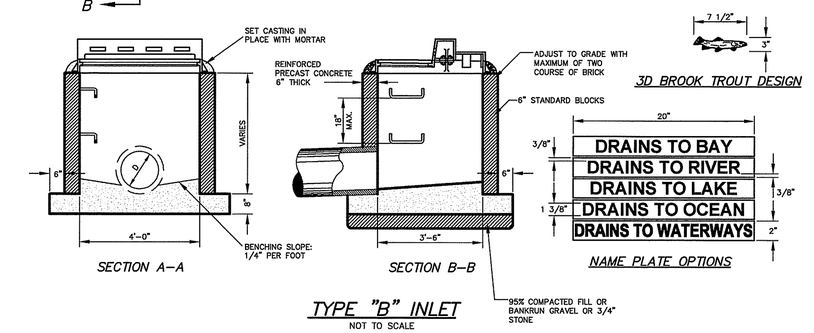
NOT TO SCALE



NOTES:

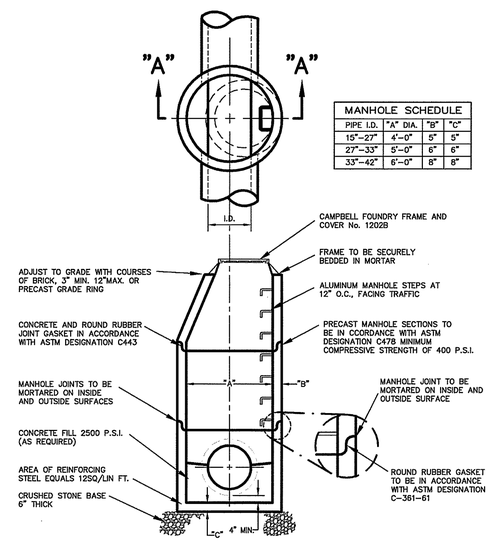
1. THE CLEAR SPACE IN THE CURB OPENING (OR EACH INDIVIDUAL CLEAR SPACE, IF THE CURB OPENING HAS TWO OR MORE CLEAR SPACES) MUST HAVE AN AREA OF NO MORE THAN SEVEN (7.0) SQUARE INCHES OR BE NO GREATER THAN TWO (2.0) INCHES ACROSS THE SMALLEST DIMENSION.
2. STORM DRAIN INLET LABEL SHOULD READ "NO DUMPING, DRAINS TO WATERWAYS" OR OTHERWISE APPROVED BY THE ENGINEER. FISH LOGOS SHALL ALSO BE INCLUDED ON BOTH SIDES OF LABEL.

TYPE 'N' CURB PIECE



TYPE "B" INLET

NOT TO SCALE

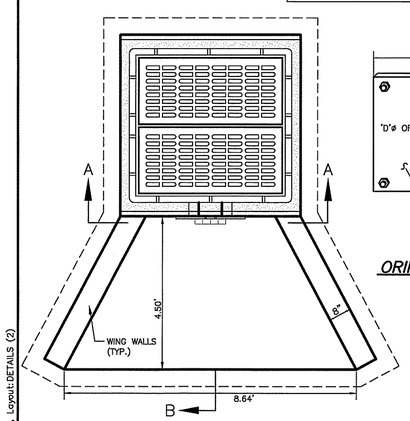


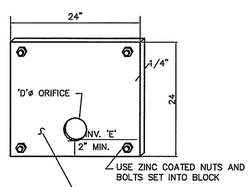
MANHOLE SCHEDULE			
PIPE I.D.	"A" DIA.	"B"	"C"
15"–27"	4'–0"	5"	5"
27"–33"	5'–0"	6"	6"
33"–42"	6'–0"	8"	8"

PRECAST STORM DRAINAGE MANHOLE

NOT TO SCALE

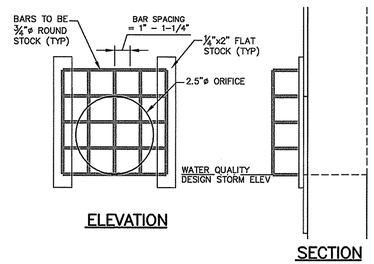
	OUTLET STRUCTURES	
	#25	#27
GRATE ELEVATION "A"	558.98	545.00
RECTANGULAR WEIR WIDTH "B"	12"	12"
WEIR CREST ELEVATION "C"	557.65	542.71
ORIFICE DIAMETER "D"	6"	10"
ORIFICE INVERT ELEVATION "E"	556.00	541.84
HDPE OUTLET PIPE DIAMETER "G"	15"	18"
HDPE OUTLET PIPE INVERT ELEVATION "H"	555.90	540.00





ORIFICE STEEL PLATE DETAIL

N.T.S.



TRASH RACK AT ORIFICE

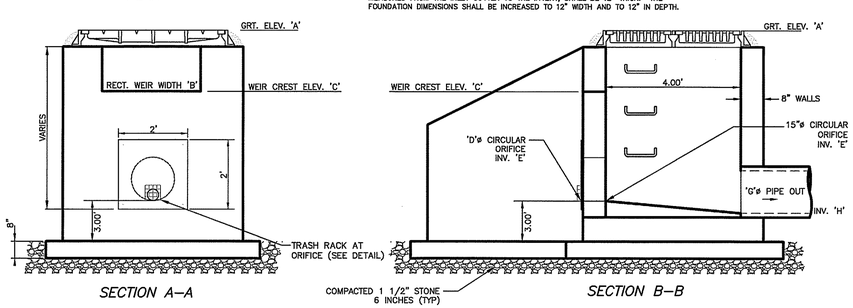
N.T.S.

TRASH RACK NOTES:

1. TRASH RACKS SHALL BE INSTALLED AT ALL INTAKE LOCATIONS OF THE OUTLET STRUCTURE (WEIR, ORIFICE, ETC.).
2. PARALLEL BARS BELOW THE WATER QUALITY DESIGN ELEVATION SHALL BE 1" ON–CENTER.
3. PARALLEL BARS ABOVE THE WATER QUALITY DESIGN ELEVATION SHALL BE NO GREATER THAN ⅓ THE WIDTH OF THE WEIR, AND ½ THE DIAMETER OF THE ORIFICE. IN NO CASE SHALL THE SPACING BE LESS THAN 1" OR GREATER THAN 6".
4. TRASH RACK SHALL BE CONSTRUCTED OF RIGID, CORROSION–RESISTANT MATERIAL.
5. TRASH RACK SHALL BE ABLE TO WITHSTAND A PERPENDICULAR LIVE LOAD OF 300 LBS/FT². SHOP DRAWINGS SHALL BE PROVIDED TO DESIGN ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.

OUTLET STRUCTURE NOTES:

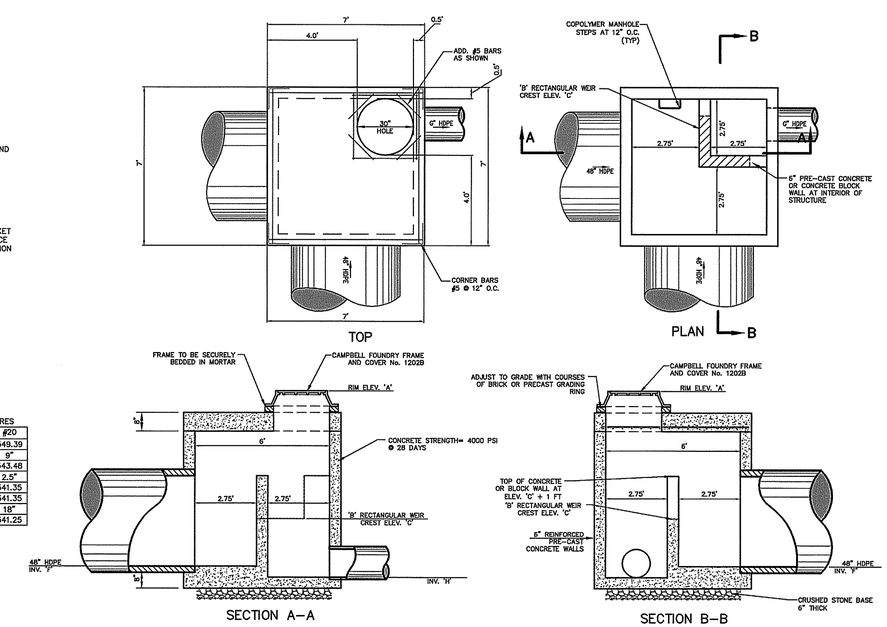
1. FOOTING TO BE NJDOT CLASS "B" CONCRETE.
2. INVERT TO BE NJDOT CLASS "B" CONCRETE.
3. IF WALL CONSTRUCTION IS OTHER THAN CONCRETE, THE WALLS SHALL BE PLASTERED BOTH INSIDE AND OUTSIDE WITH 1/2" THICK CEMENT PLASTER.
4. FRAME AND GRATE TO BE No.3425 AS MANUFACTURED BY CAMPBELL FOUNDRY CO. OR APPROVED EQUAL.
5. PROVIDE ALUMINUM LADDER RUNGS @ 12" CENTER TO CENTER.
6. WHEN ADDITIONAL DEPTH IS SCHEDULE WALLS BELOW THE DEPTH OF 8'–0" MEASURED FROM THE INLET GUTTER TO THE INVERT, SHALL BE 12" THICK. THE FOUNDATION DIMENSIONS SHALL BE INCREASED TO 12" WIDTH AND TO 12" IN DEPTH.



SURFACE BASIN OUTLET STRUCTURE

NOT TO SCALE

	OUTLET STRUCTURES		
	#5	#8	#20
RIM ELEVATION "A"	550.80	547.44	549.39
RECTANGULAR WEIR WIDTH "B"	19"	12"	9"
WEIR CREST ELEVATION "C"	546.27	541.18	543.48
ORIFICE DIAMETER "D"	6"	N/A	2.5"
ORIFICE INVERT ELEVATION "E"	544.00	N/A	541.35
48" HDPE BASIN PIPE INVERT ELEVATION "F"	544.00	540.00	541.35
HDPE OUTLET PIPE DIAMETER "G"	18"	18"	18"
HDPE OUTLET PIPE INVERT ELEVATION "H"	543.90	540.00	541.25



SUBSURFACE BASIN OUTLET STRUCTURE

NOT TO SCALE

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CONSTRUCTION NOTES AND DETAILS

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION
BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

SCALE:	AS NOTED
JOB NO.:	04197
DRAWN BY:	TJB
CHECKED BY:	KJR
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SHEET NO.	21 of 24

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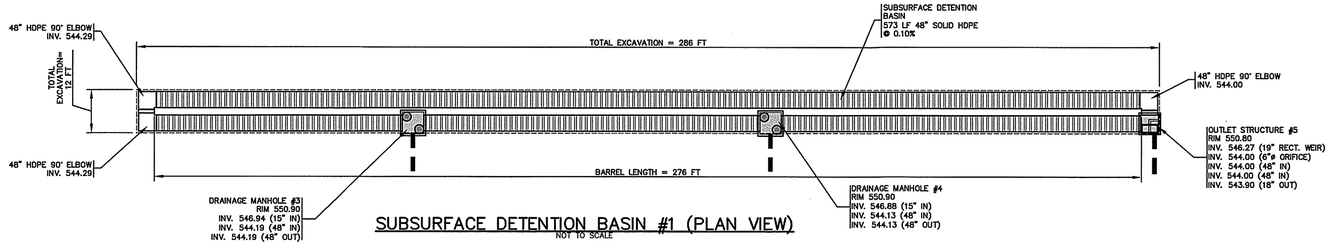
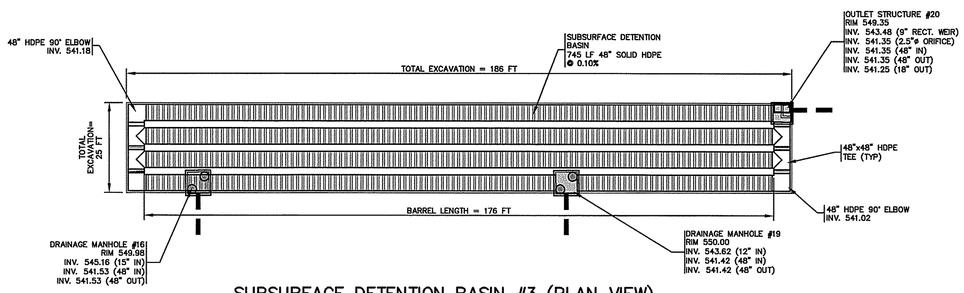


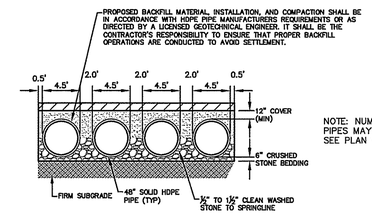
SUBSURFACE DETENTION BASIN #1 (PLAN VIEW)

NOT TO SCALE



SUBSURFACE DETENTION BASIN #3 (PLAN VIEW)

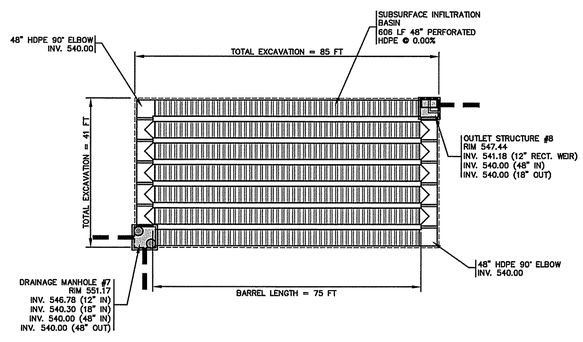
NOT TO SCALE



NOTE: NUMBER OF PIPES MAY VARY. SEE PLAN VIEW.

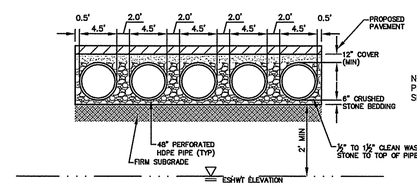
SECTION A–A THROUGH SUBSURFACE DETENTION BASINS

NOT TO SCALE



SUBSURFACE INFILTRATION BASIN #2 (PLAN VIEW)

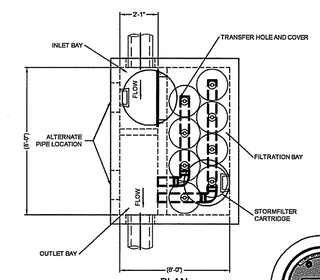
NO TO SCALE



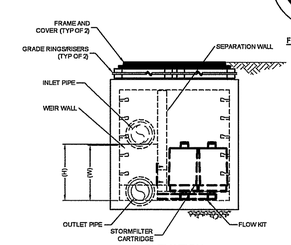
NOTE: NUMBER OF PIPES MAY VARY. SEE PLAN VIEW.

SECTION A–A THROUGH SUBSURFACE INFILTRATION BASINS

NOT TO SCALE



PLAN



ELEVATION

FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

STORMFILTER DESIGN NOTES

- THE 8' x 6' PEAK DIVERSION STORMFILTER TREATMENT CAPACITY VARIES BY CARTRIDGE COUNT AND LOCALLY APPROVED SURFACE AREA SPECIFIC FLOW RATE. PEAK CONVEYANCE CAPACITY TO BE DETERMINED BY ENGINEER OF RECORD.
- THE PEAK DIVERSION STORMFILTER IS AVAILABLE IN A LEFT INLET (AS SHOWN) OR RIGHT INLET CONFIGURATION.
- ALL PARTS AND INTERNAL ASSEMBLY PROVIDED BY CONTECH UNLESS OTHERWISE NOTED.

CARTRIDGE SELECTION

CARTRIDGE HEIGHT	27"			18"			LOW DROP		
RECOMMENDED HYDRAULIC DROP (H)	3.05'			2.3'			1.8'		
HEIGHT OF WEIR (W)	3.00'			2.25'			1.75'		
SPECIFIC FLOW RATE (gpm/sf)	2 gpm/sf	1.67* gpm/sf	1 gpm/sf	2 gpm/sf	1.67* gpm/sf	1 gpm/sf	2 gpm/sf	1.67* gpm/sf	1 gpm/sf
CARTRIDGE FLOW RATE (gpm)	22.5	18.79	11.25	15	12.53	7.5	10	8.35	5

* 1.67 gpm/sf SPECIFIC FLOW RATE IS APPROVED WITH PHOSPHOSORB® (PSORB) MEDIA ONLY

PERFORMANCE SPECIFICATION
FILTER CARTRIDGES SHALL BE MEDIA-FILLED, PASSIVE, SIPHON ACTUATED, RADIAL FLOW, AND SELF CLEANING. RADIAL MEDIA DEPTH SHALL BE 7-INCHES. FILTER MEDIA CONTACT TIME SHALL BE AT LEAST 38 SECONDS.
SPECIFIC FLOW RATE SHALL BE 2 GPM/SF (MAXIMUM). SPECIFIC FLOW RATE IS THE MEASURE OF THE FLOW (GPM) DIVIDED BY THE MEDIA SURFACE CONTACT AREA (SF). MEDIA VOLUMETRIC FLOW RATE SHALL BE 6 GPM/CF OF MEDIA (MAXIMUM).

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH REPRESENTATIVE. www.ContechES.com
4. STORMFILTER WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
5. STRUCTURE SHALL MEET AASHTO #### LOAD RATING, ASSUMING EARTH COVER OF 0' - 5' AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMFILTER STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL SECTIONS AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH OUTLET PIPE INVERT WITH OUTLET BAY FLOOR.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.
F. CONTRACTOR TO REMOVE THE TRANSFER HOLE COVER WHEN THE SYSTEM IS BROUGHT ONLINE.

WATER QUALITY STRUCTURE #6

NOT TO SCALE

DATE	REVISION

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SCALE: AS NOTED
JOB NO.: 04197
DRAWN BY: TJB
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DATE: 7/14/20
SHEET NO. 22 OF 24

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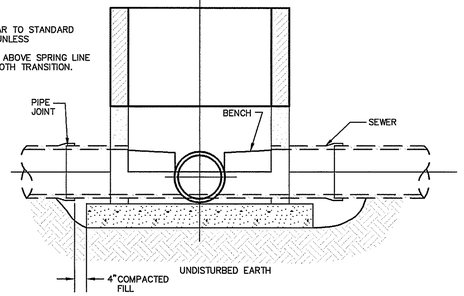
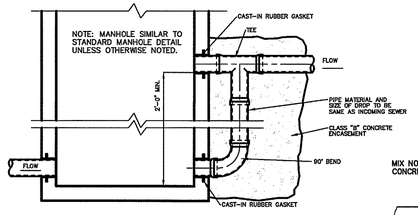
NOTES:
1. MANHOLE SIMILAR TO STANDARD MANHOLE DETAIL UNLESS OTHERWISE NOTED.
2. REMOVE SEWER ABOVE SPRING LINE AND PROVIDE SMOOTH TRANSITION.



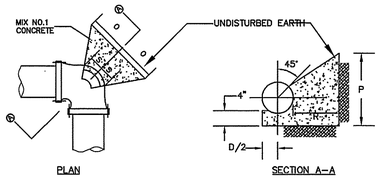
DOGHOUSE MANHOLE
NOT TO SCALE



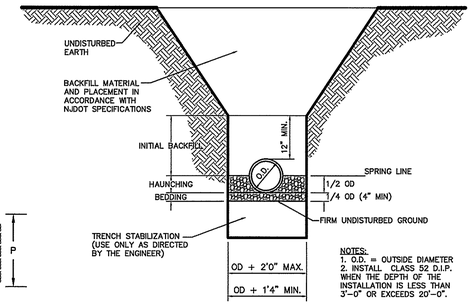
TYPICAL DROP MANHOLE SECTION
NOT TO SCALE

DIA.	Q	P	R	S
6"	1'-2"	1'-2"	1'-8"	5"
8"	1'-7"	1'-6"	1'-8"	6"
10"	1'-8"	2'-1"	1'-8"	6"
12"	2'-0"	2'-6"	1'-11"	7"
14"	2'-8"	2'-6"	1'-11"	9"
16"	2'-10"	3'-0"	2'-2"	10"
18"	3'-1"	3'-6"	2'-6"	1'-0"
20"	3'-6"	3'-10"	2'-10"	1'-0"
24"	4'-8"	4'-0"	3'-0"	1'-0"
30"	5'-9"	5'-0"	3'-10"	1'-2"
36"	6'-10"	6'-0"	4'-10"	1'-2"

AREA OF BEARING = 2xOxP

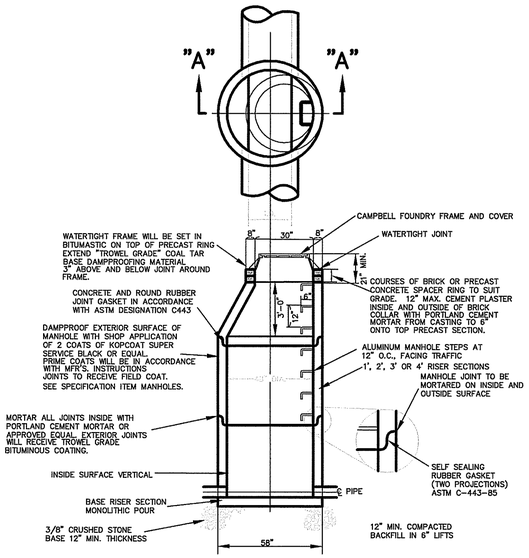


THRUST BLOCK FOR 1/4 BENDS N.T.S.



NOTES:
1. O.D. = OUTSIDE DIAMETER
2. INSTALL CLASS 52 D.I.P. WHEN THE DEPTH OF THE INSTALLATION IS LESS THAN 3'-0" OR EXCEEDS 20'-0".

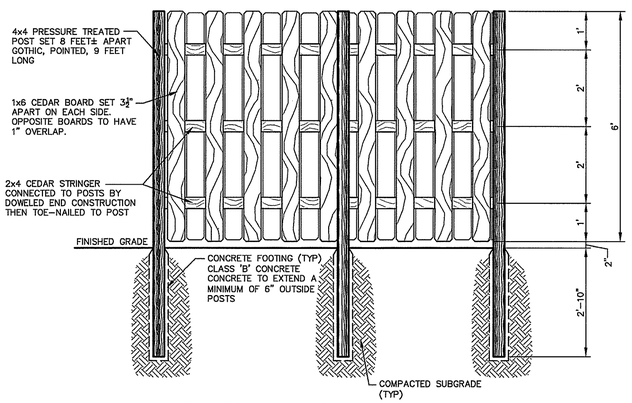
TYPICAL SANITARY SEWER TRENCH DETAIL
NOT TO SCALE



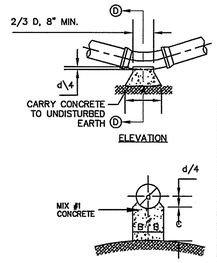
PRECAST SANITARY SEWER MANHOLE
Not To Scale

STANDARD MANHOLE

1. DAMPROOFING MATERIAL WILL BE TROWEL GRADE, COAL TAR BASE.
2. PRECAST MANHOLES ARE TO CONFORM TO THE REQUIREMENTS OF PRECAST REINFORCED CONCRETE MANHOLE SECTIONS ASTM DESIGNATION C-478.
3. BENCH AND CHANNEL WILL BE CONSTRUCTED IN FIELD USING CONCRETE BRICK AND MORTAR. EDGE OF BENCH WILL BE LEVEL WITH TOP OF PIPE.
4. ALL PIPE OPEN JOINTS ARE TO BE FLEXIBLE COMPRESSION JOINTS. A CEMENT MORTAR JOINT WILL BE PERMITTED WHEN THE CONTRACTOR IS REQUIRED TO CONNECT TO AN EXISTING MANHOLE WHERE A STUB HAS NOT BEEN PROVIDED.
5. DROP MANHOLE CONNECTIONS ARE TO BE DROP CONNECTIONS.
6. WHERE DETAILS ARE NOT SHOWN ON DROP MANHOLE, SHALLOW MANHOLE OR WATERTIGHT MANHOLE, REFER TO STANDARD MANHOLE FOR DETAILS.
7. MANHOLE FRAMES AND COVERS ARE TO BE SET AT THE SAME ELEVATION AS THE ADJACENT PAVEMENT. WITH TOP OF PIPE.
8. DROP MANHOLE WILL BE PROVIDED WHEN THE DIFFERENCE IN ELEVATION BETWEEN THE INLET AND THE OUTLET IS 2'-0" OR GREATER.

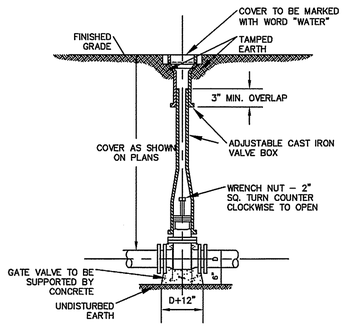


BOARD-ON-BOARD FENCE DETAIL
NOT TO SCALE



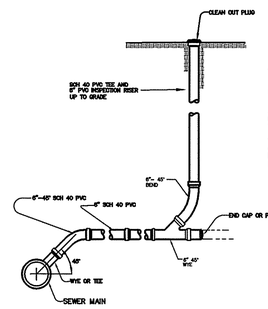
BEND		* BUTTRESSES FOR VERTICAL BENDS SIZE 6"	8"	10"	12"	16"	20"	24"
1/64 (5-5/8°)	A						1'-8"	2'-0"
	B						10"	1'-0"
	C						10"	1'-0"
1/32 (11-1/4°)	A	5"	6"	1'-0"	1'-2"	1'-7"	2'-0"	2'-5"
	B	5"	6"	7"	7"	9"	11"	1'-2"
	C	5"	6"	7"	7"	9"	11"	1'-2"
1/16 (22-1/2°)	A	11"	1'-2"	1'-8"	1'-10"	2'-5"	3'-0"	3'-7"
	B	5"	6"	7"	8"	11"	1'-2"	1'-5"
	C	5"	6"	8"	8"	9"	10"	1'-0"
1/8 (45°)	A	1'-5"	1'-10"	2'-4"	2'-10"	3'-9"	4'-8"	5'-7"
	B	7"	8"	10"	11"	1'-3"	1'-7"	1'-11"
	C	7"	8"	10"	11"	1'-3"	1'-7"	1'-11"

BUTTRESSES FOR VERTICAL BENDS
N.T.S.



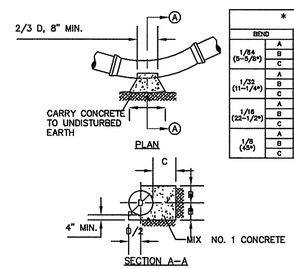
2" DIA. THRU 12" DIA.	LARGER THAN 12" DIA.
"AWWA" NON-RISING STEM GATE VALVE, MUELLER CO. OR EQ. WITH MECHANICAL JOINT ENDS. 200 P.S.I. WORKING PRESSURE	"AWWA" BUTTERFLY VALVE, MUELLER CO. OR EQ. WITH MECHANICAL JOINT ENDS. 150 P.S.I. WORKING PRESSURE

GATE VALVE & BOX DETAIL
N.T.S.



ELEVATION

TYPICAL HOUSE CONNECTION
NOT TO SCALE

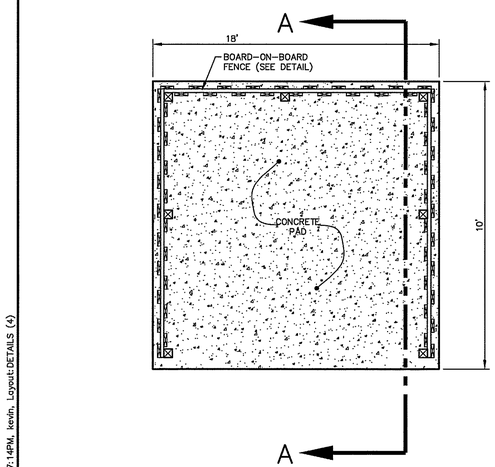


BEND		* MINIMUM DIMENSIONS OF BUTTRESS FOR HORIZONTAL BENDS 6"	8"	10"	12"	16"	20"	24"
1/64 (5-5/8°)	A						1'-8"	2'-0"
	B						10"	1'-0"
	C						10"	1'-0"
1/32 (11-1/4°)	A	6"	8"	1'-0"	1'-2"	1'-7"	2'-0"	2'-5"
	B	7"	8"	9"	10"	1'-0"	1'-2"	1'-4"
	C	8"	8"	8"	8"	10"	10"	1'-0"
1/16 (22-1/2°)	A	11"	1'-2"	1'-8"	1'-10"	2'-5"	3'-0"	3'-7"
	B	7"	8"	9"	10"	1'-1"	1'-2"	1'-9"
	C	8"	9"	10"	11"	1'-2"	1'-4"	1'-8"
1/8 (45°)	A	1'-5"	1'-10"	2'-4"	2'-10"	3'-9"	4'-8"	5'-7"
	B	7"	8"	10"	11"	1'-3"	1'-7"	1'-11"
	C	8"	9"	10"	11"	1'-3"	1'-7"	1'-9"

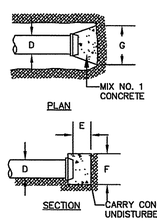
AREA OF BEARING = Ax2B

BUTTRESS FOR HORIZ. BENDS
N.T.S.

NOTE:
ANCHORAGE AND BUTTRESS DIM. ARE BASED ON A STATIC WATER PRESSURE OF 150 P.S.I. AND A MINIMUM SOIL BEARING PRESSURE OF 3000 P.S.F. WHEN ACTUAL FIELD CONDITIONS ARE DIFFERENT THE AREA OF BEARING SHALL BE INCREASED AS DETERMINED BY THE ENGINEER.



DUMSTER ENCLOSURE DETAIL
NOT TO SCALE

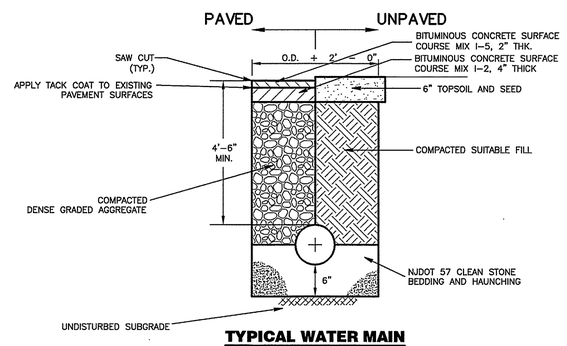


	MINIMUM DIM. OF BUTTRESS FOR CAPS AND PLUGS SIZE 6"	8"	10"	12"
D	6"	8"	10"	12"
E	7"	9"	11"	13"
F	1'-1"	1'-5"	1'-9"	2'-3"
G	1'-7"	2'-2"	2'-8"	2'-9"

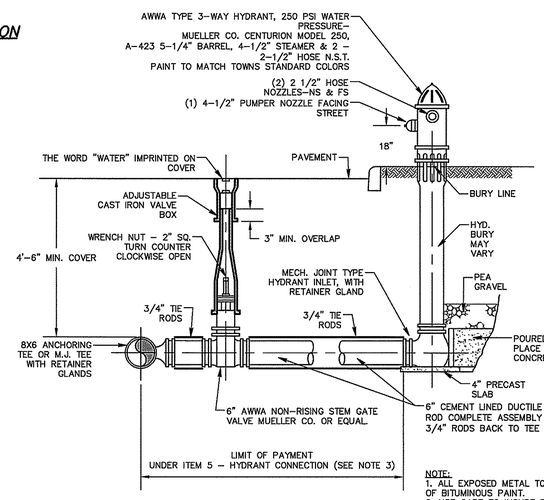
AREA OF BEARING= FxG

BUTTRESS FOR CAPS AND PLUGS
N.T.S.

NOTE:
1. ALL THRUST BLOCKS TO BE POURED IN FULL CONTACT WITH UNDISTURBED MATERIAL.
2. THRUST BLOCKS ARE TO BE PLACED WHERE SHOWN ON THE DRAWING OR AS DIRECTED BY THE ENGINEER.
3. CONTRACTOR SHALL CAREFULLY FORM THRUST BLOCKS SO THAT CONCRETE DOES NOT COME IN CONTACT WITH FLANGES AND BOLTS UNLESS NECESSARY AT VERTICAL BENDS.
4. TIE RODS REQUIRED AT THRUST BLOCKED FITTINGS AS SPECIFIED BUT NOT SHOWN.
5. ALL FITTINGS SHALL BE RESTRAINED.

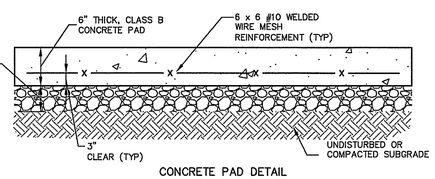


TYPICAL WATER MAIN TRENCH DETAILS
N.T.S.



NOTE:
1. ALL EXPOSED METAL TO RECEIVE TWO COATS OF BITUMINOUS PAINT.
2. USE CARE TO INSURE THAT DRAIN HOLE IS NOT PLUGGED.
3. REINSTALL EXISTING HYDRANT UNLESS DIRECTED BY ENGINEER TO FURNISH AND INSTALL NEW HYDRANT ASSEMBLY (ITEM 6).

TYPICAL HYDRANT INSTALLATION
N.T.S.



CONCRETE PAD DETAIL
SECTION A-A
N.T.S.

DATE	REVISION

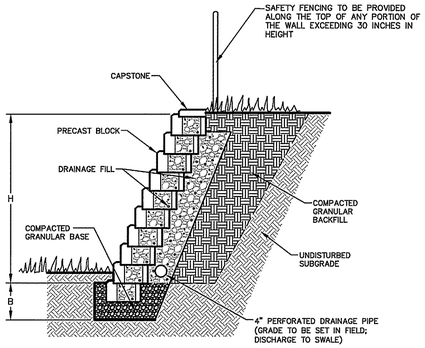
DYKSTRA WALKER DESIGN PA
PROFESSIONAL ENGINEERS, PLANNERS & SURVEYORS
21 BOWLING GREEN PARKWAY, SUITE 204 · LAKE HOPATCONG, NJ 07849
PHONE (973) 663-6540 · FAX (973) 663-0042
WWW.DYKSTRAWALKER.COM
KENNETH D. DYKSTRA
PROFESSIONAL ENGINEER AND LAND SURVEYOR N.J. LIC. No. 24GB03297200

CONSTRUCTION NOTES AND DETAILS

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION
BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

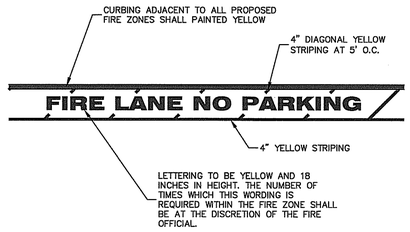
SCALE:	AS NOTED
JOB NO.:	04197
DRAWN BY:	TJB
CHECKED BY:	KJR
DATE:	7/14/20
SHEET NO.	23 OF 24

J:\cadd\PROJ\04\04197\dwg\Prelim Site Plan.dwg 07/13/20 04:27:14PM, kevin, Layout:DETAILS (4)

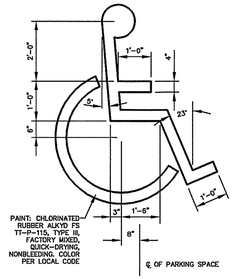


NOTES:
1. WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. HEIGHT OF WALL SHALL BE AS SHOWN ON THE GRADING PLAN. THE NUMBER OF COURSES OF BLOCK SHALL BE AS DETERMINED IN THE FIELD.
3. SHOP DRAWINGS AND PROPOSED MANUFACTURER SHALL BE SUBMITTED FOR REVIEW.

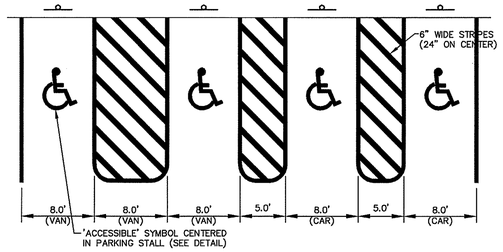
RETAINING WALL DETAIL
NOT TO SCALE



FIRE LANE STRIPING DETAIL
NOT TO SCALE

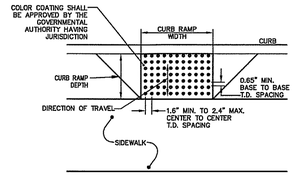


ACCESSIBLE PARKING SPACE
N.T.S.

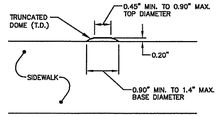


(HEAD TO HEAD VAN & CAR SPACES)

ADA PARKING STALL STRIPING (NJ)
NOT TO SCALE



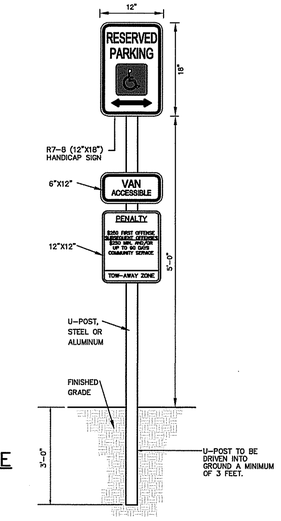
PLAN VIEW



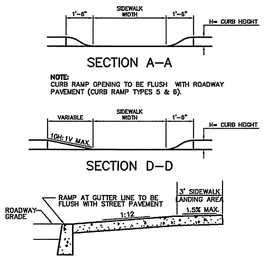
ELEVATION

NOTES:
1. DETECTABLE WARNING SURFACES SHALL BE PROVIDED AT ALL CURB RAMPS.
2. DETECTABLE WARNING SURFACES SHALL BE COLOR COATED AS REQUIRED BY THE GOVERNMENTAL AUTHORITY HAVING JURISDICTION AND PROVIDE 70% COLOR CONTRAST AGAINST RAMP MATERIAL.
3. DETECTABLE WARNING SURFACE SHALL BE EITHER SURFACE MOUNT OR CAST-IN-PLACE AS REQUIRED BY GOVERNMENTAL AUTHORITY HAVING JURISDICTION.

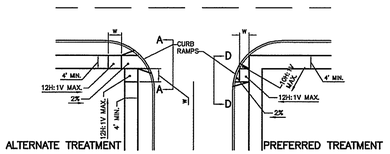
DETECTABLE WARNING SURFACE
NOT TO SCALE



ACCESSIBLE PARKING SIGN
N.T.S.

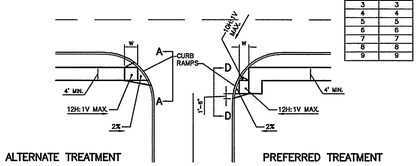


SECTION THROUGH CURB RAMPS 1 THROUGH 6



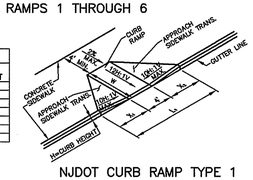
NJDOT CURB RAMP TYPE 6
(CROSSING PARALLEL TO HIGHWAY ONLY)

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



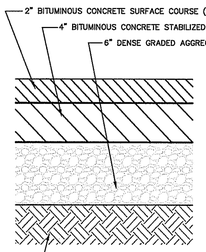
NJDOT CURB RAMP TYPE 5
(CROSSING PARALLEL TO HIGHWAY ONLY)

CURB RAMP TYPE 1			
H INCHES	X_1 FEET	L_1 FEET	W FEET
3	2.5	9.0	3
4	3.3	10.6	4
5	4.2	12.4	5
6	5.0	14.0	6
7	5.8	15.6	7
8	6.7	17.4	8
9	7.5	19.0	9



NJDOT CURB RAMP TYPE 1

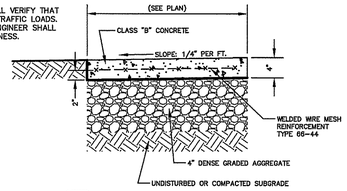
PUBLIC SIDEWALK CURB RAMPS
N.T.S.



COMPACTED SUBGRADE TO 95% DENSITY– CONTRACTOR SHALL VERIFY THAT SUBGRADE IS SUFFICIENTLY FIRM TO SUPPORT ANTICIPATED TRAFFIC LOADS. IF SOIL IS CLAY, CLAY LOAM, SILT OR SIMILAR SOIL TYPE, ENGINEER SHALL BE CONSULTED FOR POSSIBLE INCREASE IN PAVEMENT THICKNESS.

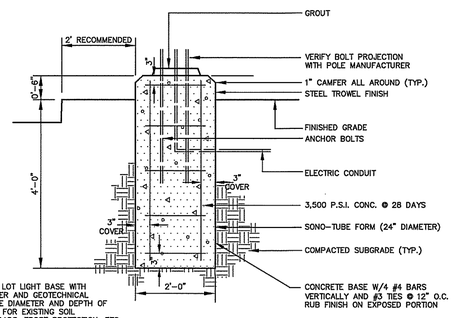
PAVEMENT SECTION
NOT TO SCALE

STOP BAR DETAIL
N.T.S.



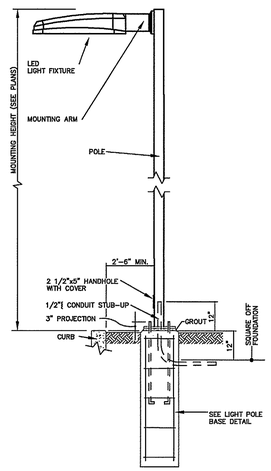
NOTES:
1. CURB AND SIDEWALK CONCRETE TO BE N.J.D.O.T. CLASS "B" AIR-ENTRAINED.
2. PROVIDE PREFORMED BITUMINOUS FIBER EXPANSION JOINTS, 1/2" THICK AT 16'0" MAX. INTERVALS. PROVIDE DUMMY JOINTS (FORMED) MIDWAY BETWEEN EXPANSION JOINTS.

CONCRETE SIDEWALK
NOT TO SCALE



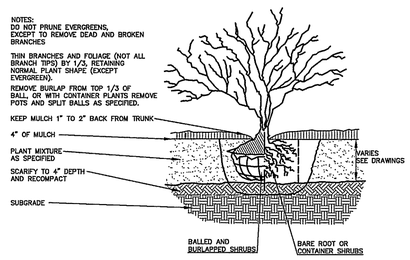
NOTE: CONFIRM DESIGN OF LOT LIGHT BASE WITH STRUCTURAL ENGINEER AND GEOTECHNICAL ENGINEER, TO INSURE DIAMETER AND DEPTH OF BASE ARE SUITABLE FOR EXISTING SOIL CONDITIONS, WIND LOADS, FROST PROTECTION, ETC.

POLE MOUNTED LIGHT POLE BASE DETAIL
NOT TO SCALE

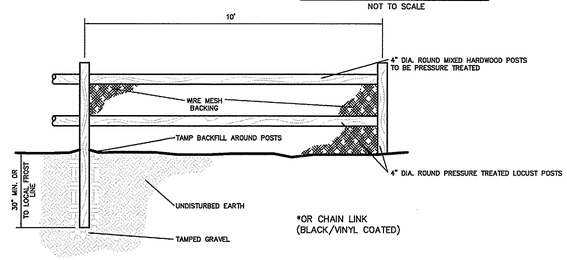


ELEVATION
N.T.S.

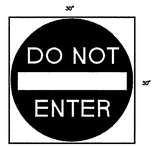
TYPICAL POLE-MONTED LIGHT FIXTURE DETAIL



SHRUB PLANTING DETAIL
N.T.S.



SPLIT RAIL*/SAFETY FENCING DETAIL
N.T.S.

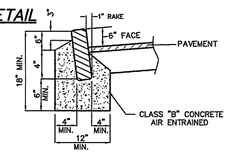


30" x 30"

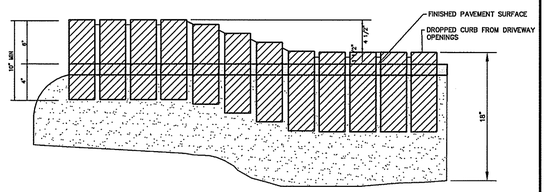
R5-1 DO NOT ENTER SIGN DETAIL
NOT TO SCALE

30" x 30"

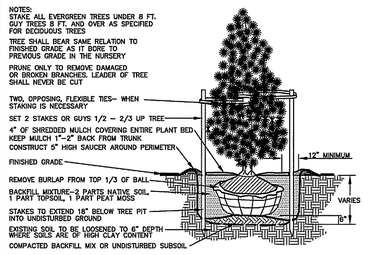
R1-1 STOP SIGN DETAIL
NOT TO SCALE



GRANITE BLOCK CURB
NOT TO SCALE

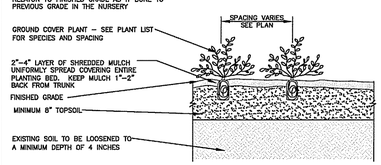


GRANITE BLOCK DEPRESSED CURB
NOT TO SCALE

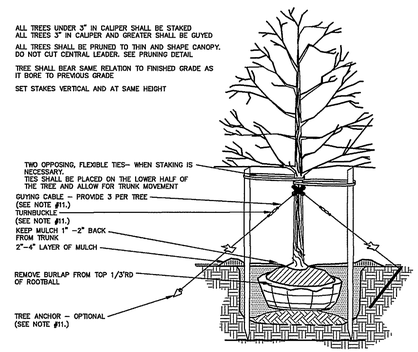


NOTES:
STAKE ALL EVERGREEN TREES UNDER 8 FT. GUY TREES 8 FT. AND OVER AS SPECIFIED FOR DECIDUOUS TREES
TREE SHALL BEAR SAME RELATION TO FINISHED GRADE AS IT BORE TO PREVIOUS GRADE IN THE NURSERY
PRUNE ONLY TO REMOVE DAMAGED OR BROKEN BRANCHES. LEADER OF TREE SHALL NEVER BE CUT
TWO, OPPOSING, FLEXIBLE TIES– WHEN STAKING IS NECESSARY
SET 2 STAKES OR GUYS 1/2 – 2/3 UP TREE
4" OF SHREDDED MULCH COVERING ENTIRE PLANT BED. KEEP MULCH 1"-2" BACK FROM TRUNK
CONSTRUCT 5" HIGH SAUCER AROUND PERIMETER
FINISHED GRADE
REMOVE BURLAP FROM TOP 1/3 OF BALL
BACKFILL MIXTURE–2 PARTS NATIVE SOIL, 1 PART TOPSOIL, 1 PART PEAT MOSS
STAKES TO EXTEND 18" BELOW TREE PIT INTO UNDISTURBED GROUND
EXISTING SOIL TO BE LOOSENED TO 6" DEPTH WHERE SOILS ARE OF HIGH CLAY CONTENT
COMPACTED BACKFILL MIX OR UNDISTURBED SUBSOIL

EVERGREEN TREE PLANTING DETAIL
N.T.S.



GROUNDCOVER PLANTING DETAIL
N.T.S.



TREE STAKING DETAIL
N.T.S.

NOTES:

1. TREES SHALL BE PLACED TWO FEET FROM FACE OF CURB WITH SIDEWALKS AND EIGHT FEET WHERE NO SIDEWALKS EXIST OR ARE PROPOSED.
2. PLANTING DISTANCE BETWEEN TREES SHALL BE 50 FEET MAXIMUM EXCEPT THAT SOME FLOWERING TREES MAY BE PLANTED A MAXIMUM DISTANCE OF 30 FEET APART.
3. NO SHADE TREES TO BE PLACED IN SIGHT TRIANGLE EASEMENTS OR WITHIN 25 FEET OF THE INTERSECTION OF TWO STREETS.
4. MINIMUM CALIPER OF TREES SHALL BE 2.5 INCHES MEASURED 1 FOOT ABOVE GROUND.
5. MINIMUM HEIGHT OF TREES SHALL BE 11 FEET, EXCEPT FLOWERING TREES SHALL NOT BE LESS THAN 6 FEET.
6. ALL TREES SHALL BE BALLED AND BURLAPPED; SHALL BE OF NURSERY STOCK; SHALL BE OF SYMMETRICAL GROWTH; SHALL BE FREE OF DISEASE, INSECTS, AND MECHANICAL INJURY; SHALL BE STRAIGHT OF STEM WITH A WELL BALANCED TOP; SHALL BE OF VIGOROUS GROWTH; AND SHALL HAVE A WELL DEVELOPED ROOT SYSTEM. THE TRUNKS OF THE SHADE TREES (EXCEPT FLOWERING TREES) ARE TO BE FREE BRANCHES TO A HEIGHT OF AT LEAST 7 FEET FROM THE GROUND AND THE FIRST BRANCH SHALL NOT BE OVER 9 FEET FROM THE GROUND.
7. THE PLANTING HOLE SHALL BE ONE FOOT IN DIAMETER GREATER THAN THE ROOT BALL AND 6 INCHES DEEPER.
8. THE SOIL FOR BACKFILLING SHALL BE A MIXTURE OF THREE PARTS LOAMY SOIL AND TWO PARTS COARSE SAND AND ONE PART HUMUS.
9. AFTER BACKFILLING THE SURFACE OF THE PLANTING HOLE SHALL BE MULCHED WITH WOOD CHIPS, HAY, STRAW OR OTHER SUITABLE MATERIAL.
10. WHEN NECESSARY, EACH TREE SHALL BE STAKED WITH STAKES OF LOCUST, CEDAR OR OAK 2" X 2" X 6' TO 8', FASTENING AND SUPPORT SHALL BE BY MEANS OF TAPE ONE AND ONE HALF INCHES TO TWO INCHES WIDE.
11. WHEN STAKING IS NECCESSARY, TREES SHALL BE STAKED WITH TWO, OPPSING FLEXIBLE TIES AS SHOWN. ONLY UNDER EXTREME WINDY CONDITIONS, GUYING CABLE, TURNBUCKLE AND IF NECESSARY TREE ANCHOR STAKING SYSTEM SHALL BE USED.

DATE	REVISION

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CONSTRUCTION NOTES AND DETAILS

PRELIMINARY & FINAL SITE PLAN/MINOR SUBDIVISION
BLOCK 73, LOT 65 (TAX MAP #13)
WEST MAIN STREET (CR 513) &
MOUNT PLEASANT AVENUE
BOROUGH OF ROCKAWAY
MORRIS COUNTY NEW JERSEY

SCALE:	AS NOTED
JOB NO.:	04197
DRAWN BY:	TJB
CHECKED BY:	KJR
DATE:	7/14/20
SHEET NO.	24 OF 24

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