

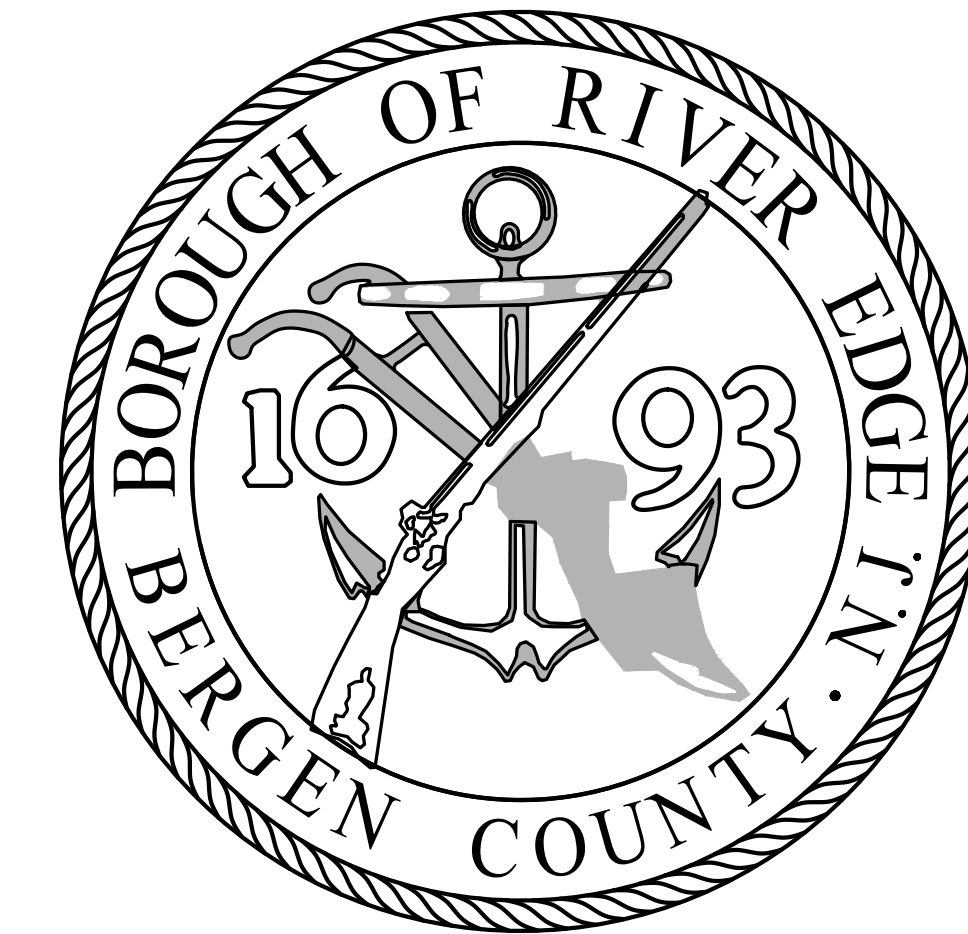
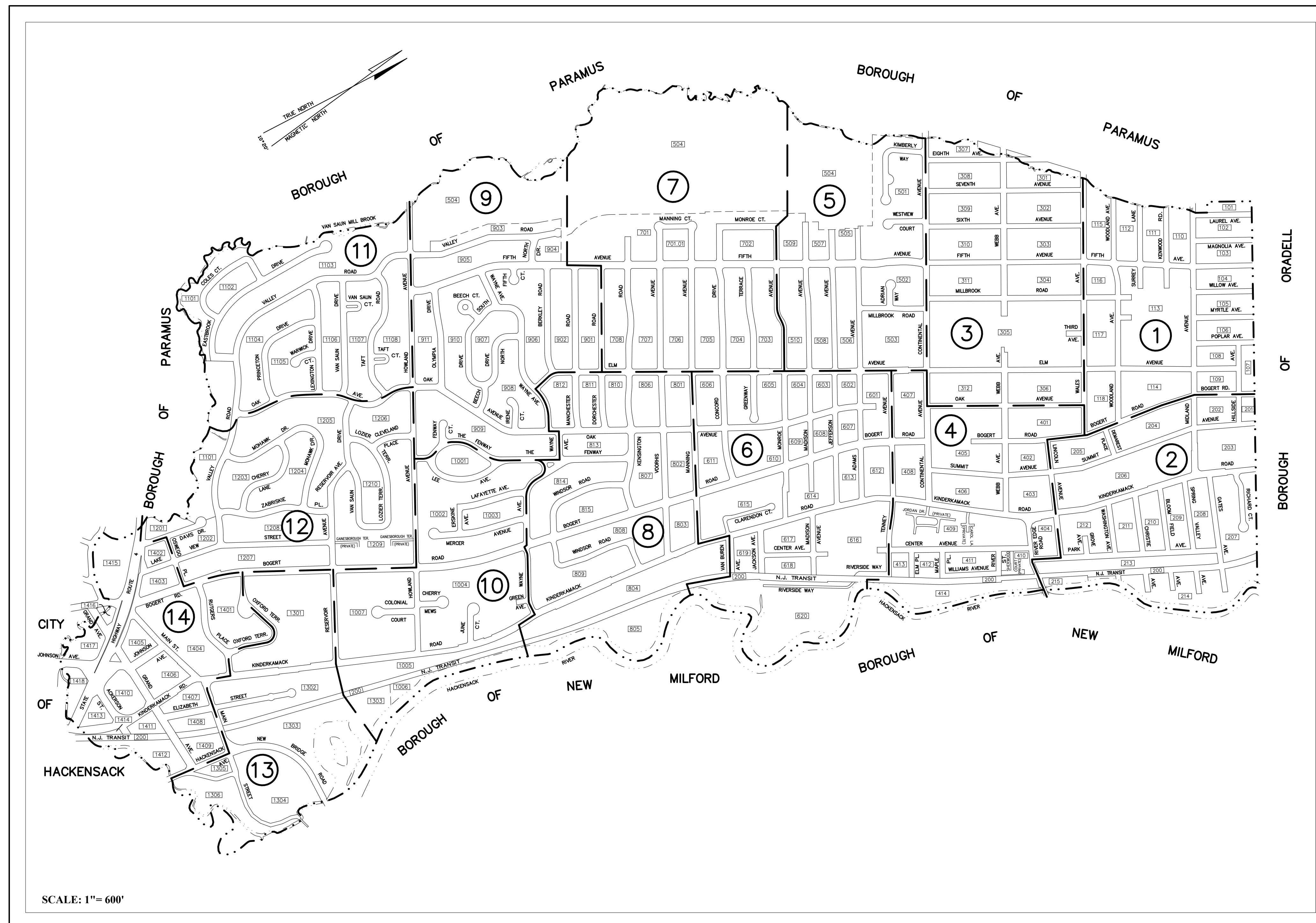
STORM WATER OUTFALL LOCATIONS

MUNICIPAL STORMWATER MAPPING AND INVENTORY

FOR NJDEP/BNPC

BOROUGH OF RIVER EDGE

BERGEN COUNTY, NEW JERSEY



MAYOR
THOMAS PAPALEO

COUNCIL

LISSA MONTISANO-KOEN – COUNCIL PRESIDENT

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DAVID GLASS
MICHELLE KAUFMAN
INDIRA KINSELLA

ADMINISTRATOR
LISSETTE APORTELA

BOROUGH CLERK
ANNE DODD

SCALE: 1" = 600'

DATE	BY	CHKD	DESCRIPTION
09-11-19	SWC	RLC	add "RE" identifier to outfall structure numbering
04-30-19	SWC	RLC	add numbering to outfall structures

PREPARED BY :


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 PROFESSIONAL ENGINEERS • SURVEYORS • PLANNERS
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 TEL (201) 487-0015 FAX (201) 487-5122

BOROUGH OF ORADELL

PARAMUS

LAUREL AVENUE

MAGNOLIA AVENUE

WILLOW AVENUE

MYRTLE AVENUE

POPLAR AVENUE

ELIM AVENUE

BOBERT RD

SUMMIT AVE.

KINDERKAMACK ROAD

RICHARD CT

MIDLAND AVENUE

AVENUE

MIDLAND AVENUE

AVENUE

OUTFALL STRUCTURE No.RE-OS-1-1
15" RCP
NAD 83
N. 768,249.0307
E. 619,215.0435
NGVD 1929 INV. EL. 53.52
NAVD 1988 INV. EL. 52.52

OUTFALL STRUCTURE No.RE-OS-1-2
15" RCP
NAD 83
N. 768,222.3469
E. 619,206.0277
NGVD 1929 INV. EL. 53.08
NAVD 1988 INV. EL. 52.08

OUTFALL STRUCTURE No.RE-OS-1-3
15" RCP
NAD 83
N. 767,986.8200
E. 619,094.9149
NGVD 1929 INV. EL. 51.0
NAVD 1988 INV. EL. 50.0

OUTFALL STRUCTURE No.RE-OS-1-4
36" RCP
NAD 83
N. 767,782.6962
E. 618,944.7987
NGVD 1929 INV. EL. 48.13
NAVD 1988 INV. EL. 57.13

OUTFALL STRUCTURE No.RE-OS-1-5
24" RCP @ CULVERT
NAD 83
N. 767,541.4023
E. 618,646.5127
NGVD 1929 INV. EL. 44.39
NAVD 1988 INV. EL. 43.39

BOROUGH OF

BROOK
MILL
SAUN

KENWOOD AVENUE

AVENUE

SURREY LANE

LANE

WOODLAND LANE

WOODLAND LANE

WOODLAND LANE

WOODLAND LANE

WALES AVENUE

AVENUE

WALES AVENUE

AVENUE

VAN AVENUE

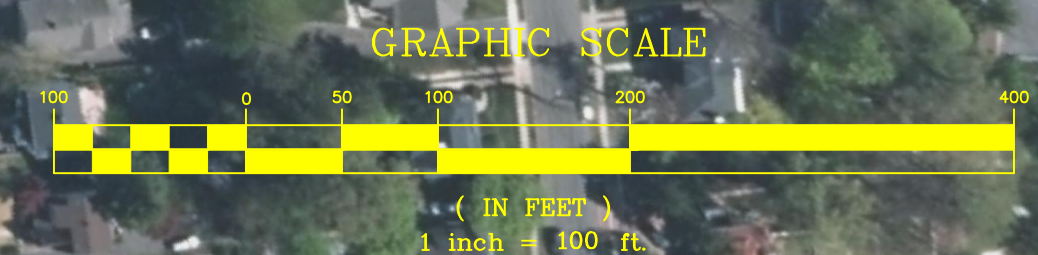
SEVENTH AVENUE

SIXTH AVENUE

SEE SHEET 3

SEE SHEET 4

SEE SHEET 2



DATUM REFERENCE
THIS MAP OF DRAINAGE AND SANITARY SEWER STRUCTURES WAS PREPARED BEFORE THE 2018 NJDEP/BNPC OUTFALL UPDATE.
DATUM SHOWN IS: HORIZONTAL - NAD 83, VERTICAL - NGVD 1929
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<http://www.region2coastal.com/view-flood-maps-data/understanding-vertical-datums/>

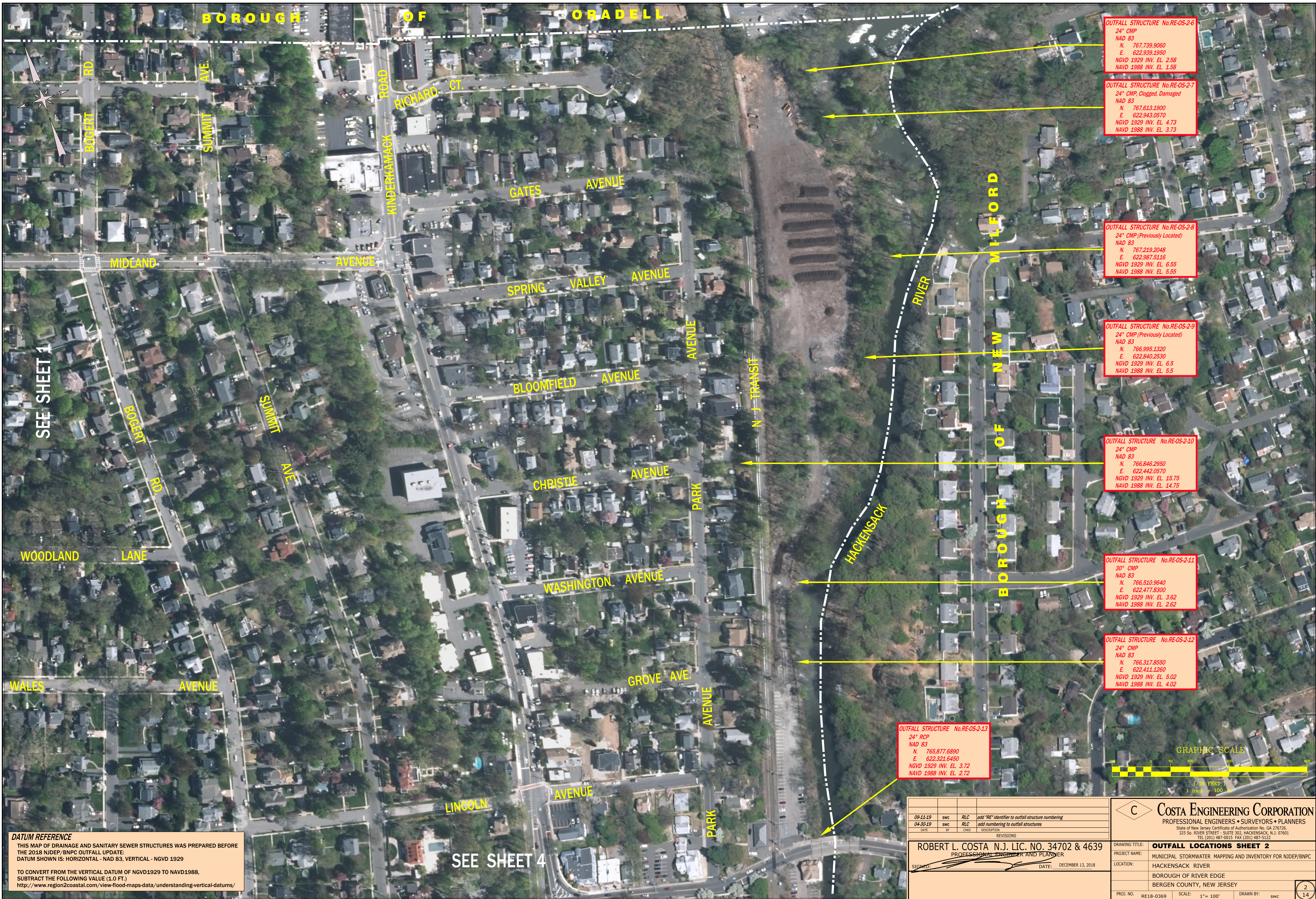
DATE	BY	CHKD	DESCRIPTION
09-11-19	swc	RLC	add "RE" identifier to outfall structure numbering
04-30-19	swc	RLC	add numbering to outfall structures

ROBERT L. COSTA N.J. LIC. NO. 34702 & 4639
PROFESSIONAL ENGINEER AND PLANNER
SIGNED: _____ DATE: DECEMBER 13, 2018

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DRAWING TITLE: **OUTFALL LOCATIONS SHEET 1**
PROJECT NAME: MUNICIPAL STORMWATER MAPPING AND INVENTORY FOR NJDEP/BNPC
LOCATION: VAN SAUN MILL BROOK
BOROUGH OF RIVER EDGE
BERGEN COUNTY, NEW JERSEY

PROJ. NO. RE18-0369 SCALE: 1" = 100' DRAWN BY: swc



OUTFALL STRUCTURE No.RE-OS-2-6
 24" CMP
 NAD 83
 N. 767,739.9060
 E. 622,939.1950
 NGVD 1929 INV. EL. 2.58
 NAVD 1988 INV. EL. 1.58

OUTFALL STRUCTURE No.RE-OS-2-7
 24" CMP, Clogged, Damaged
 NAD 83
 N. 767,613.1900
 E. 622,943.0570
 NGVD 1929 INV. EL. 4.73
 NAVD 1988 INV. EL. 3.73

OUTFALL STRUCTURE No.RE-OS-2-8
 24" CMP (Previously Located)
 NAD 83
 N. 767,219.2048
 E. 622,987.5116
 NGVD 1929 INV. EL. 6.55
 NAVD 1988 INV. EL. 5.55

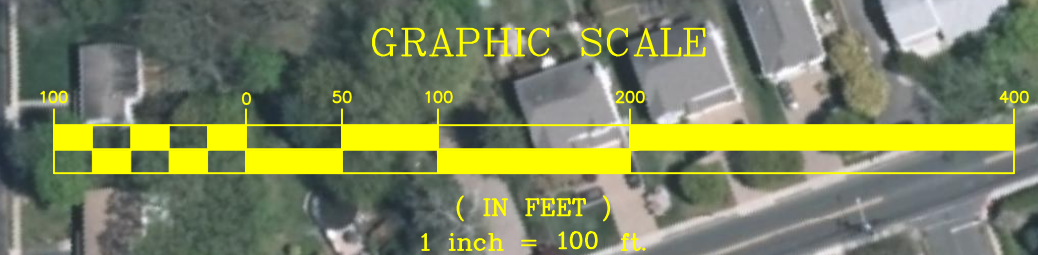
OUTFALL STRUCTURE No.RE-OS-2-9
 24" CMP (Previously Located)
 NAD 83
 N. 766,995.1320
 E. 622,840.2530
 NGVD 1929 INV. EL. 6.5
 NAVD 1988 INV. EL. 5.5

OUTFALL STRUCTURE No.RE-OS-2-10
 24" CMP
 NAD 83
 N. 766,846.2950
 E. 622,442.0570
 NGVD 1929 INV. EL. 15.75
 NAVD 1988 INV. EL. 14.75

OUTFALL STRUCTURE No.RE-OS-2-11
 30" CMP
 NAD 83
 N. 766,510.9640
 E. 622,477.8300
 NGVD 1929 INV. EL. 3.62
 NAVD 1988 INV. EL. 2.62

OUTFALL STRUCTURE No.RE-OS-2-12
 24" CMP
 NAD 83
 N. 766,317.8550
 E. 622,411.1260
 NGVD 1929 INV. EL. 5.02
 NAVD 1988 INV. EL. 4.02

OUTFALL STRUCTURE No.RE-OS-2-13
 24" RCP
 NAD 83
 N. 765,877.6890
 E. 622,321.6450
 NGVD 1929 INV. EL. 3.72
 NAVD 1988 INV. EL. 2.72



DATUM REFERENCE
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<http://www.region2coastal.com/view-flood-maps-data/understanding-vertical-datums/>

SEE SHEET 4

09-11-19	swc	RLC	add "RE" identifier to outfall structure numbering
04-30-19	swc	RLC	add numbering to outfall structures
DATE	BY	CHKD	DESCRIPTION
REVISIONS			
ROBERT L. COSTA N.J. LIC. NO. 34702 & 4639 PROFESSIONAL ENGINEER AND PLANNER			
SIGNED:			DATE: DECEMBER 13, 2018

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DRAWING TITLE: **OUTFALL LOCATIONS SHEET 2**
 PROJECT NAME: MUNICIPAL STORMWATER MAPPING AND INVENTORY FOR NJDEP/BNPC
 LOCATION: HACKENSACK RIVER
 BOROUGH OF RIVER EDGE
 BERGEN COUNTY, NEW JERSEY

PROJ. NO. RE18-0369 SCALE: 1" = 100' DRAWN BY: swc

SEE SHEET 2

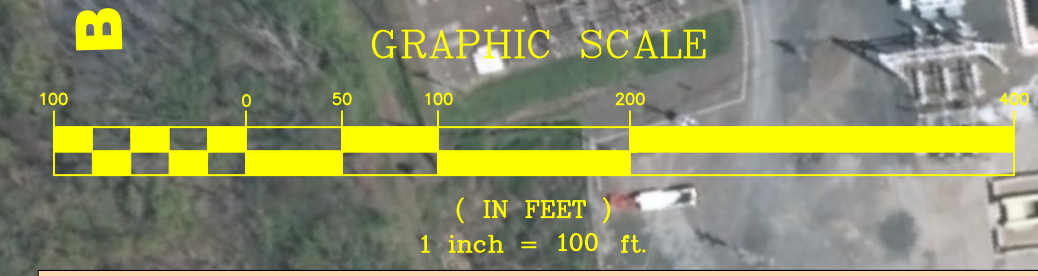
DATUM REFERENCE
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<http://www.region2coastal.com/view-flood-maps-data/understanding-vertical-datums/>

OUTFALL STRUCTURE No.RE-05-2-13
 24" RCP
 NAD 83
 N. 765,877.6890
 E. 622,321.6450
 NGVD 1929 INV. EL. 3.72
 NAVD 1988 INV. EL. 2.72

OUTFALL STRUCTURE No.RE-05-4-20
 12" x 15" CMP
 NAD 83
 N. 765444.5755
 E. 622,047.5611
 NGVD 1929 INV. EL. 17.24
 NAVD 1988 INV. EL. 16.24

OUTFALL STRUCTURE No.RE-05-4-21
 24" RCP
 NAD 83
 N. 764,931.7350
 E. 621,888.1831
 NGVD 1929 INV. EL. 12.78
 NAVD 1988 INV. EL. 11.78

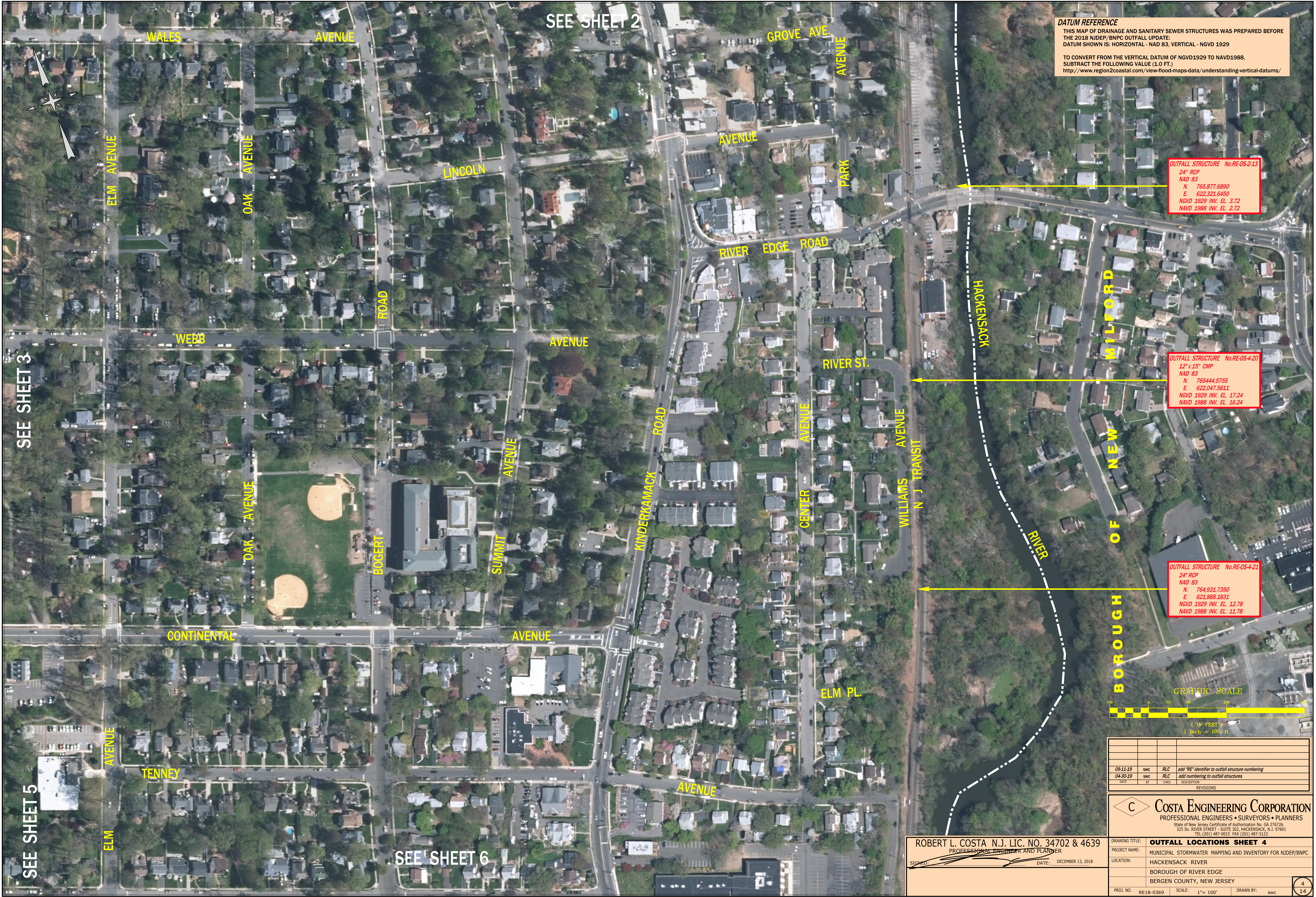


DATE	BY	CHKD	DESCRIPTION
09-11-19	SWC	RLC	add "RE" identifier to outfall structure numbering
04-30-19	SWC	RLC	add numbering to outfall structures

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ROBERT L. COSTA N.J. LIC. NO. 34702 & 4639
 PROFESSIONAL ENGINEER AND PLANNER
 SIGNED: [Signature] DATE: DECEMBER 13, 2018

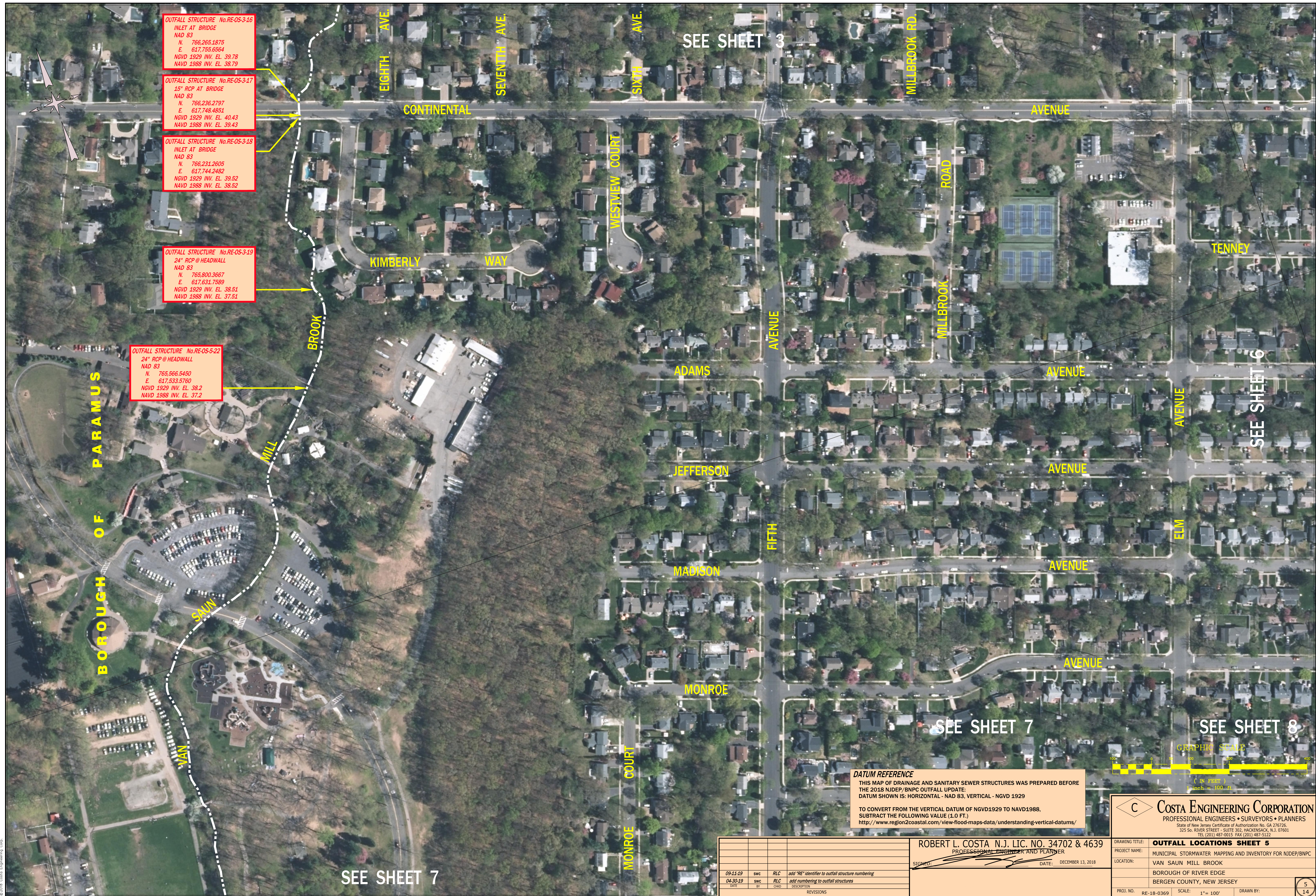
DRAWING TITLE:	OUTFALL LOCATIONS SHEET 4
PROJECT NAME:	MUNICIPAL STORMWATER MAPPING AND INVENTORY FOR NJDEP/BNPC
LOCATION:	HACKENSACK RIVER
	BOROUGH OF RIVER EDGE
	BERGEN COUNTY, NEW JERSEY
PROJ. NO. RE18-0369	SCALE: 1" = 100'
	DRAWN BY: swc



SEE SHEET 3

SEE SHEET 5

SEE SHEET 6



OUTFALL STRUCTURE No. RE-OS-3-16
 INLET AT BRIDGE
 NAD 83
 N. 766,265.1875
 E. 617,765.6564
 NGVD 1929 INV. EL. 39.78
 NAVD 1988 INV. EL. 38.79

OUTFALL STRUCTURE No. RE-OS-3-17
 15" RCP AT BRIDGE
 NAD 83
 N. 766,236.2797
 E. 617,748.4851
 NGVD 1929 INV. EL. 40.43
 NAVD 1988 INV. EL. 39.43

OUTFALL STRUCTURE No. RE-OS-3-18
 INLET AT BRIDGE
 NAD 83
 N. 766,231.2605
 E. 617,744.2482
 NGVD 1929 INV. EL. 39.52
 NAVD 1988 INV. EL. 38.52

OUTFALL STRUCTURE No. RE-OS-3-19
 24" RCP @ HEADWALL
 NAD 83
 N. 765,800.3667
 E. 617,631.7589
 NGVD 1929 INV. EL. 38.51
 NAVD 1988 INV. EL. 37.51

OUTFALL STRUCTURE No. RE-OS-5-22
 24" RCP @ HEADWALL
 NAD 83
 N. 765,566.5450
 E. 617,533.5760
 NGVD 1929 INV. EL. 38.2
 NAVD 1988 INV. EL. 37.2

SEE SHEET 3

SEE SHEET 6

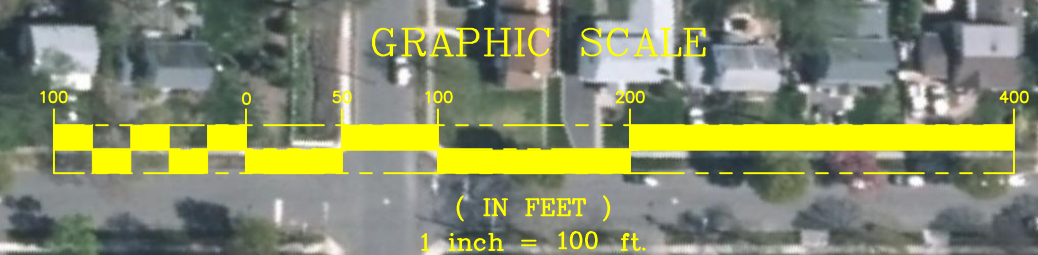
SEE SHEET 7

SEE SHEET 8

SEE SHEET 7

DATUM REFERENCE
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 DATUM SHOWN IS: HORIZONTAL - NAD 83, VERTICAL - NGVD 1929

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DATE	BY	CHKD	DESCRIPTION
09-11-19	swc	RLC	add "RE" identifier to outfall structure numbering
04-30-19	swc	RLC	add numbering to outfall structures

ROBERT L. COSTA N.J. LIC. NO. 34702 & 4639
 PROFESSIONAL ENGINEER AND PLANNER

SIGNATURE: _____ DATE: DECEMBER 13, 2018

DRAWING TITLE: **OUTFALL LOCATIONS SHEET 5**
 PROJECT NAME: MUNICIPAL STORMWATER MAPPING AND INVENTORY FOR NJDEP/BNPC
 LOCATION: VAN SAUN MILL BROOK
 BOROUGH OF RIVER EDGE
 BERGEN COUNTY, NEW JERSEY

PROJ. NO. RE-18-0369 SCALE: 1" = 100' DRAWN BY: _____

SEE SHEET 4

TENNEY AVENUE

AVENUE

CENTER AVE.

ADAMS AVENUE

AVENUE

BOROUGH OF HACKENSACK RIVER

MILFORD

JEFFERSON AVENUE

AVENUE

MADISON AVENUE

AVENUE

MADISON AVENUE

AVENUE

MONROE AVENUE

AVENUE

KANDERAKNACK ROAD

CENTER AVENUE

N J TRANSIT RIVERSIDE WAY

CLARENDON COURT ROAD

VAN BUREN AVE.

ELM AVENUE

CONCORD AVENUE

DRIVE

AVENUE

MANNING AVENUE

SEE SHEET 8

OUTFALL STRUCTURE No.RE-05-6-23
18" RCP
NAD 83
N. 764449.2268
E. 621691.3195
NGVD 1929 INV. EL. 12.44
NAVD 1988 INV. EL. 11.44

OUTFALL STRUCTURE No.RE-05-6-24
15" RCP
NAD 83
N. 764,424.6336
E. 621,677.8204
NGVD 1929 INV. EL. 13.03
NAVD 1988 INV. EL. 12.03

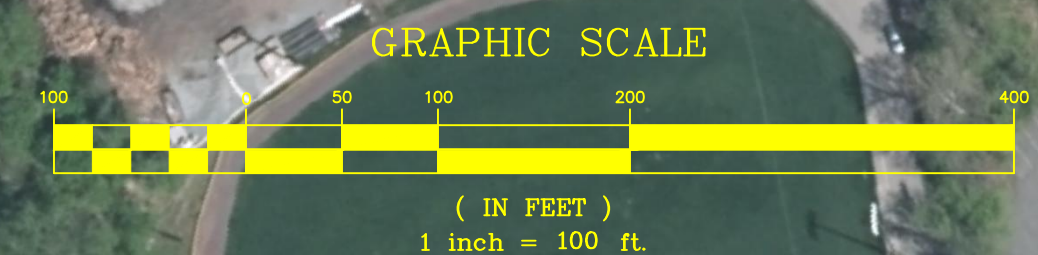
OUTFALL STRUCTURE No.RE-05-6-25
24" RCP
NAD 83
N. 764,078.4533
E. 621,615.1014
NGVD 1929 INV. EL. 6.46
NAVD 1988 INV. EL. 5.46

OUTFALL STRUCTURE No.RE-05-6-26
15" RCP
NAD 83
N. 764,027.9813
E. 621,652.9301
NGVD 1929 INV. EL. 7.16
NAVD 1988 INV. EL. 6.16

OUTFALL STRUCTURE No.RE-05-6-27
24" RCP
NAD 83
N. 763,054.3649
E. 621,492.0109
NGVD 1929 INV. EL. 3.38
NAVD 1988 INV. EL. 2.38

DATUM REFERENCE
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<http://www.region2coastal.com/view-flood-maps-data/understanding-vertical-datums/>



DATE	BY	CHKD	DESCRIPTION
09-11-19	swc	RLC	add "RE" identifier to outfall structure numbering
04-30-19	swc	RLC	add numbering to outfall structures
REVISIONS			

ROBERT L. COSTA N.J. LIC. NO. 34702 & 4639
PROFESSIONAL ENGINEER AND PLANNER

SIGNATURE: _____ DATE: DECEMBER 13, 2018

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DRAWING TITLE: **OUTFALL LOCATIONS SHEET 6**
PROJECT NAME: MUNICIPAL STORMWATER MAPPING AND INVENTORY FOR NJDEP/BNPC
LOCATION: HACKENSACK RIVER
BOROUGH OF RIVER EDGE
BERGEN COUNTY, NEW JERSEY

PROJ. NO. RE18-0369 SCALE: 1" = 100' DRAWN BY: swc

SEE SHEET 5

SEE SHEET 7



SEE SHEET 5

SEE SHEET 6

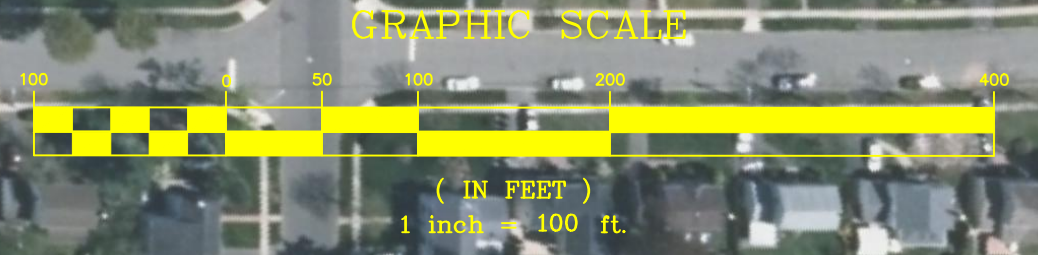
SEE SHEET 8

SEE SHEET 9

THERE ARE NO EXISTING OUTFALL STRUCTURES LOCATED ON THIS SHEET

DATUM REFERENCE
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DATE	BY	CHKD	REVISIONS
09-11-19	swc	RLC	add "RE" identifier to outfall structure numbering
04-30-19	swc	RLC	add numbering to outfall structures

ROBERT L. COSTA N.J. LIC. NO. 34702 & 4639
PROFESSIONAL ENGINEER AND PLANNER
SIGNED: [Signature] DATE: DECEMBER 13, 2018

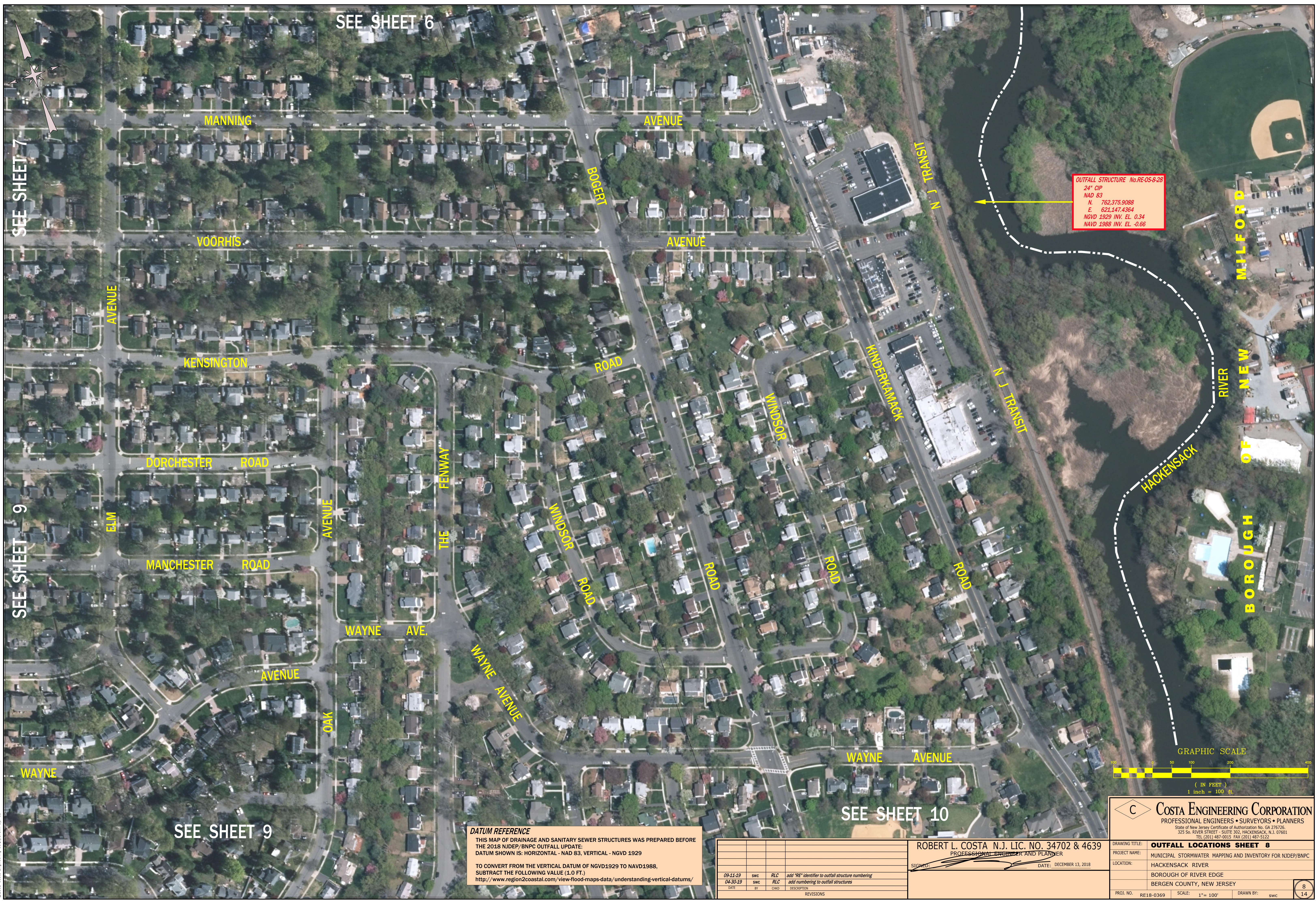
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TEL (201) 487-2015 FAX (201) 487-5122

DRAWING TITLE: **OUTFALL LOCATIONS SHEET 7**
PROJECT NAME: MUNICIPAL STORMWATER MAPPING AND INVENTORY FOR NJDEP/BNPC
LOCATION: VAN SAUN MILL BROOK
BOROUGH OF RIVER EDGE
BERGEN COUNTY, NEW JERSEY

PROJ. NO. RE18-0369 SCALE: 1" = 100' DRAWN BY: swc

7 / 14

SEE SHEET 9



SEE SHEET 6

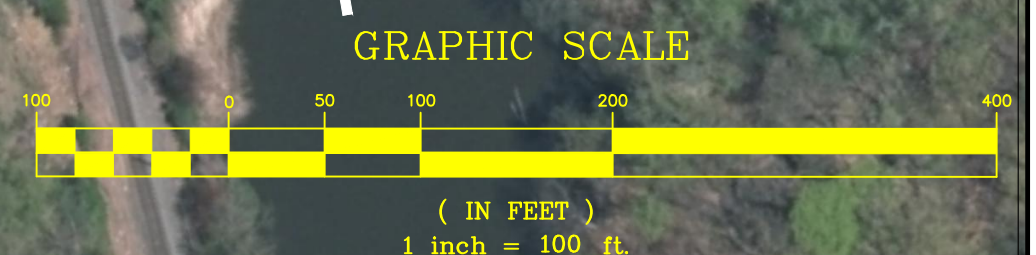
SEE SHEET 7

SEE SHEET 9

SEE SHEET 9

SEE SHEET 10

OUTFALL STRUCTURE No. RE-05-9-28
 24" CIP
 NAD 83
 N. 762,375.9088
 E. 621,147.4364
 NGVD 1929 INV. EL. 0.34
 NAVD 1988 INV. EL. -0.66



DATUM REFERENCE
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DATE	BY	CHKD	DESCRIPTION
09-11-19	swc	RLC	add "RE" identifier to outfall structure numbering
04-30-19	swc	RLC	add numbering to outfall structures
			REVISIONS

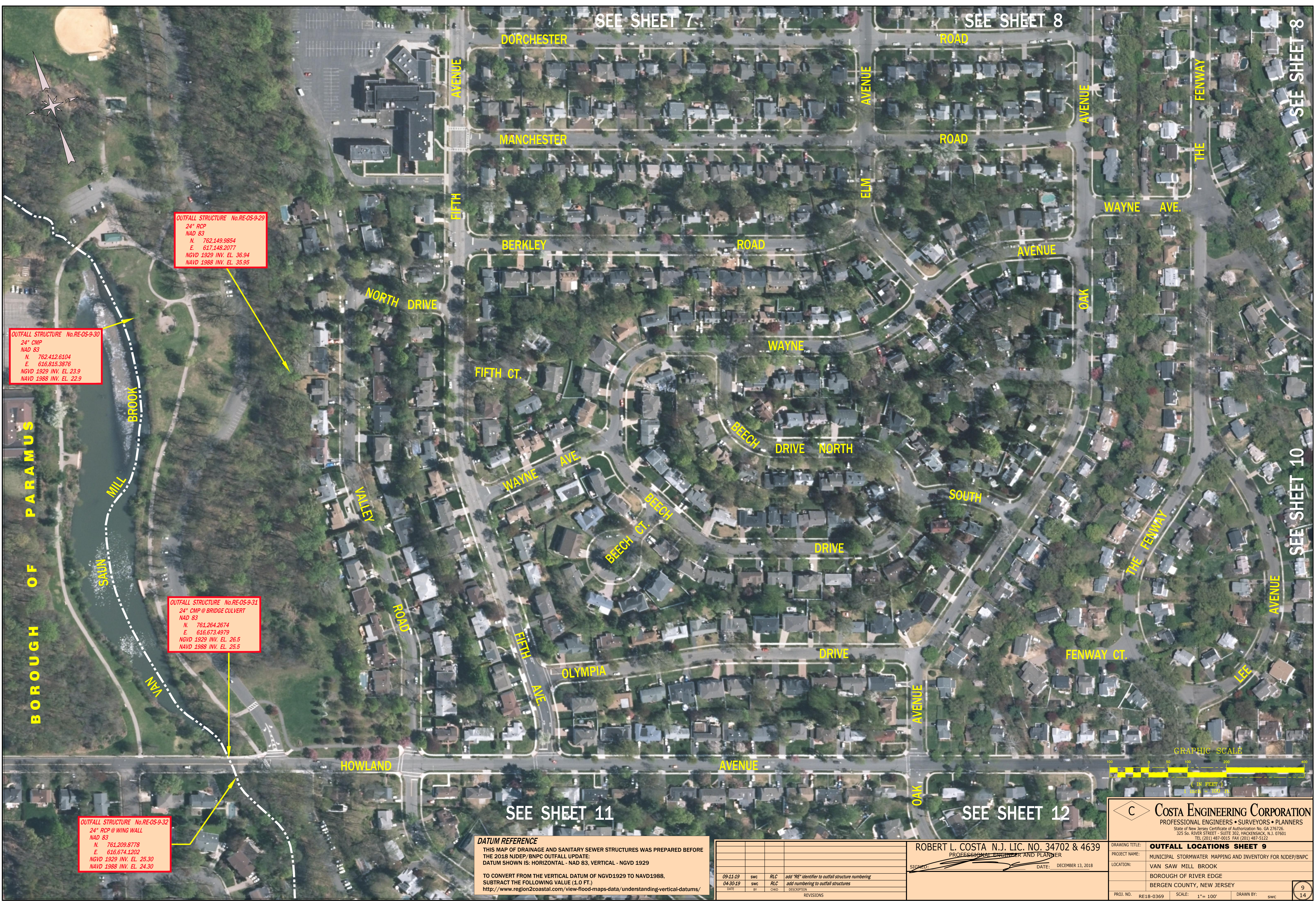
ROBERT L. COSTA, N.J. LIC. NO. 34702 & 4639
 PROFESSIONAL ENGINEER AND PLANNER
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DRAWING TITLE: **OUTFALL LOCATIONS SHEET 8**
 PROJECT NAME: MUNICIPAL STORMWATER MAPPING AND INVENTORY FOR NJDEP/BNPC
 LOCATION: HACKENSACK RIVER
 BOROUGH OF RIVER EDGE
 BERGEN COUNTY, NEW JERSEY

PROJ. NO. RE18-0369 SCALE: 1" = 100' DRAWN BY: swc

8
14



OUTFALL STRUCTURE No. RE-OS-9-29
 24" RCP
 NAD 83
 N. 762,149.9854
 E. 617,148.2077
 NGVD 1929 INV. EL. 36.94
 NAVD 1988 INV. EL. 35.95

OUTFALL STRUCTURE No. RE-OS-9-30
 24" CMP
 NAD 83
 N. 762,412.6104
 E. 616,815.3876
 NGVD 1929 INV. EL. 23.9
 NAVD 1988 INV. EL. 22.9

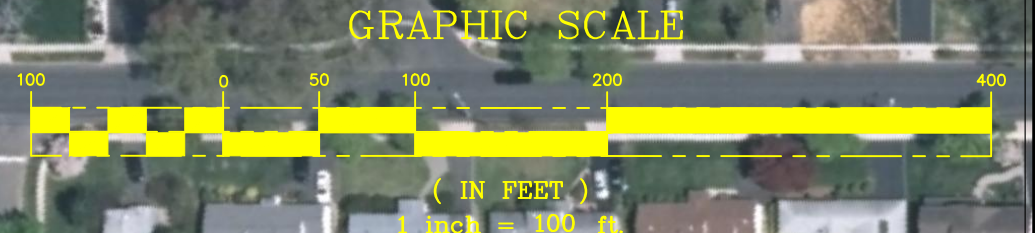
OUTFALL STRUCTURE No. RE-OS-9-31
 24" CMP @ BRIDGE CULVERT
 NAD 83
 N. 761,264.2674
 E. 616,673.4979
 NGVD 1929 INV. EL. 26.5
 NAVD 1988 INV. EL. 25.5

OUTFALL STRUCTURE No. RE-OS-9-32
 24" RCP @ WING WALL
 NAD 83
 N. 761,209.8778
 E. 616,674.1202
 NGVD 1929 INV. EL. 25.30
 NAVD 1988 INV. EL. 24.30

DATUM REFERENCE
 THIS MAP OF DRAINAGE AND SANITARY SEWER STRUCTURES WAS PREPARED BEFORE THE 2018 NJDEP/BNPC OUTFALL UPDATE.
 DATUM SHOWN IS: HORIZONTAL - NAD 83, VERTICAL - NGVD 1929
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<http://www.region2coastal.com/view-flood-maps-data/understanding-vertical-datums/>

DATE	BY	CHKD	DESCRIPTION
09-11-19	swc	RLC	add "RE" identifier to outfall structure numbering
04-30-19	swc	RLC	add numbering to outfall structures

ROBERT L. COSTA N.J. LIC. NO. 34702 & 4639
 PROFESSIONAL ENGINEER AND PLANNER
 SIGNED: _____ DATE: DECEMBER 13, 2018



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 TEL: (201) 487-2015 FAX: (201) 487-5122

DRAWING TITLE: **OUTFALL LOCATIONS SHEET 9**
 PROJECT NAME: MUNICIPAL STORMWATER MAPPING AND INVENTORY FOR NJDEP/BNPC
 LOCATION: VAN SAW MILL BROOK
 BOROUGH OF RIVER EDGE
 BERGEN COUNTY, NEW JERSEY

PROJ. NO. RE18-0369 SCALE: 1" = 100' DRAWN BY: swc

SEE SHEET 8

SEE SHEET 9

SEE SHEET 12

SEE SHEET 13

OUTFALL STRUCTURE No.RE-05-10-33
 18" CMP
 NAD 83
 N. 760,789.4610
 E. 621,072.3220
 NGVD 1929 INV. EL. 5.70
 NAVD 1988 INV. EL. 4.708

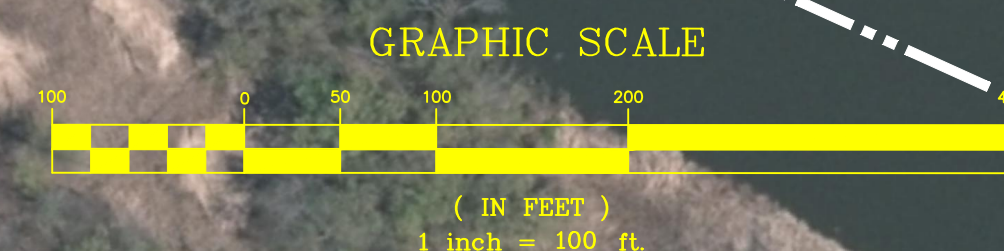
OUTFALL STRUCTURE No.RE-05-10-34
 24" CMP
 NAD 83
 N. 760,786.6910
 E. 621,071.8630
 NGVD 1929 INV. EL. 5.75
 NAVD 1988 INV. EL. 4.75

OUTFALL STRUCTURE No.RE-05-10-35
 18" CMP
 NAD 83
 N. 760,262.7620
 E. 621,037.8900
 NGVD 1929 INV. EL.0.9
 NAVD 1988 INV. EL.-0.1

OUTFALL STRUCTURE No.RE-05-10-36
 24" CIP
 NAD 83
 N. 760,079.8770
 E. 621,020.9260
 NGVD 1929 INV. EL.5.58
 NAVD 1988 INV. EL. 4.58

OUTFALL STRUCTURE No.RE-05-10-37
 15" CIP
 NAD 83
 N. 759,938.6000
 E. 621,016.1310
 NGVD 1929 INV. EL. 5.60
 NAVD 1988 INV. EL. 4.60

OUTFALL STRUCTURE No.RE-05-10-38
 24" RCP
 NAD 83
 N. 759,929.9160
 E. 621,011.3860
 NGVD 1929 INV. EL. 5.21
 NAVD 1988 INV. EL. 4.21



DATE	BY	CHKD	DESCRIPTION
09-11-19	swc	RLC	add 'RE' identifier to outfall structure numbering
04-30-19	swc	RLC	add numbering to outfall structures

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 PROFESSIONAL ENGINEERS • SURVEYORS • PLANNERS
 State of New Jersey Certificate of Authorization No. GA 276726.
 325 So. RIVER STREET • SUITE 302, HACKENSACK, N.J. 07601
 TEL: (201) 487-2015 FAX: (201) 487-5122

ROBERT L. COSTA N.J. LIC. NO. 34702 & 4639
 PROFESSIONAL ENGINEER AND PLANNER
 SIGNED: [Signature] DATE: DECEMBER 13, 2018

PROJECT NAME:	OUTFALL LOCATIONS SHEET 10
LOCATION:	MUNICIPAL STORMWATER MAPPING AND INVENTORY FOR NJDEP/BNPC HACKENSACK RIVER
	BOROUGH OF RIVER EDGE
	BERGEN COUNTY, NEW JERSEY
PROJ. NO.:	RE18-0369
SCALE:	1" = 100'
DRAWN BY:	swc
	10 14

DATUM REFERENCE
 THIS MAP OF DRAINAGE AND SANITARY SEWER STRUCTURES WAS PREPARED BEFORE THE 2018 NJDEP/BNPC OUTFALL UPDATE.
 DATUM SHOWN IS: HORIZONTAL - NAD 83, VERTICAL - NGVD 1929
 TO CONVERT FROM THE VERTICAL DATUM OF NGVD1929 TO NAVD1988, SUBTRACT THE FOLLOWING VALUE (1.0 FT.)
<http://www.region2coastal.com/view-flood-maps-data/understanding-vertical-datums/>

BOROUGH OF PARAMUS

OUTFALL STRUCTURE No.RE-05-11-40
 30" RCP
 NAD 83
 N. 759,964.3930
 E. 616,711.9547
 NGVD 1929 INV. EL. 18.80
 NAVD 1988 INV. EL. 17.80

OUTFALL STRUCTURE No.RE-05-11-39
 24" RCP
 NAD 83
 N. 760,022.3536
 E. 616,709.0706
 NGVD 1929 INV. EL. 18.43
 NAVD 1988 INV. EL. 17.43

OUTFALL STRUCTURE No.RE-05-9-32
 24" RCP @ WING WALL
 NAD 83
 N. 761,209.8778
 E. 616,674.1202
 NGVD 1929 INV. EL. 25.30
 NAVD 1988 INV. EL. 24.30

OUTFALL STRUCTURE No.RE-05-9-31
 24" CMP @ BRIDGE CULVERT
 NAD 83
 N. 761,264.2674
 E. 616,673.4979
 NGVD 1929 INV. EL. 26.5
 NAVD 1988 INV. EL. 25.5

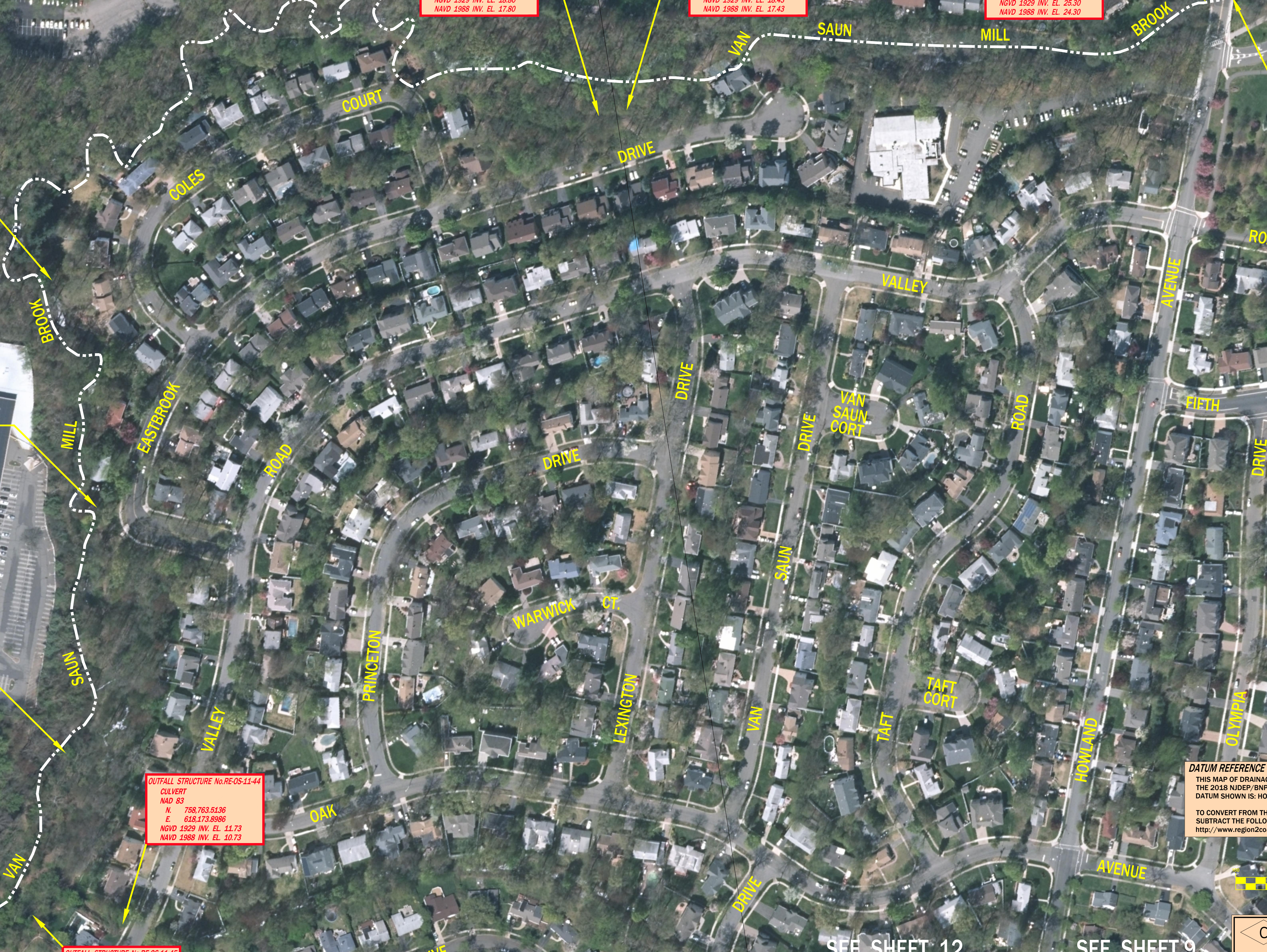
OUTFALL STRUCTURE No.RE-05-11-41
 18" RCP @ HEADWALL
 NAD 83
 N. 758,822.2511
 E. 616,868.8229
 NGVD 1929 INV. EL. 12.48
 NAVD 1988 INV. EL. 11.48

OUTFALL STRUCTURE No.RE-05-11-42
 18" RCP @ HEADWALL
 NAD 83
 N. 758,841.1640
 E. 617,335.8650
 NGVD 1929 INV. EL. 12.11
 NAVD 1988 INV. EL. 11.11

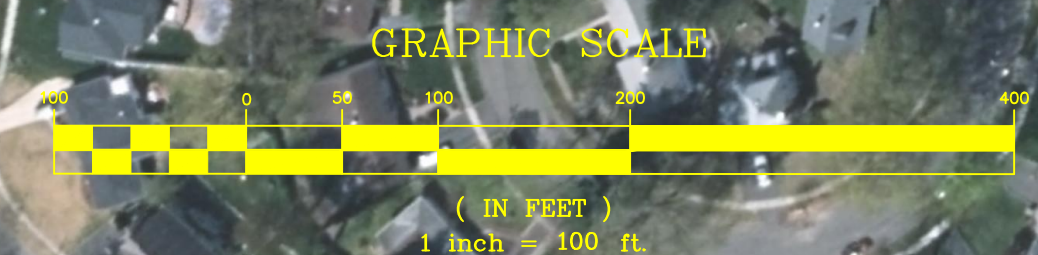
OUTFALL STRUCTURE No.RE-05-11-43
 18" RCP
 NAD 83
 N. 758,702.3197
 E. 617,815.4934
 NGVD 1929 INV. EL. 10.21
 NAVD 1988 INV. EL. 9.21

OUTFALL STRUCTURE No.RE-05-11-44
 CULVERT
 NAD 83
 N. 758,763.5136
 E. 618,173.8986
 NGVD 1929 INV. EL. 11.73
 NAVD 1988 INV. EL. 10.73

OUTFALL STRUCTURE No.RE-05-11-45
 24" RCP
 NAD 83
 N. 758,586.9318
 E. 618,129.7796
 NGVD 1929 INV. EL. 13.58
 NAVD 1988 INV. EL. 12.58



DATUM REFERENCE
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 TO CONVERT FROM THE VERTICAL DATUM OF NGVD1929 TO NAVD1988, SUBTRACT THE FOLLOWING VALUE (1.0 FT.)
<http://www.region2coastal.com/view-flood-maps-data/understanding-vertical-datums/>



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 TEL (201) 481-2015 FAX (201) 481-5122

DATE	BY	CHKD	DESCRIPTION
09-11-19	swc	RLC	add "PRE" identifier to outfall structure numbering
04-30-19	swc	RLC	add numbering to outfall structures

ROBERT L. COSTA N.J. LIC. NO. 34702 & 4639
 PROFESSIONAL ENGINEER AND PLANNER
 SIGNED: [Signature] DATE: DECEMBER 13, 2018

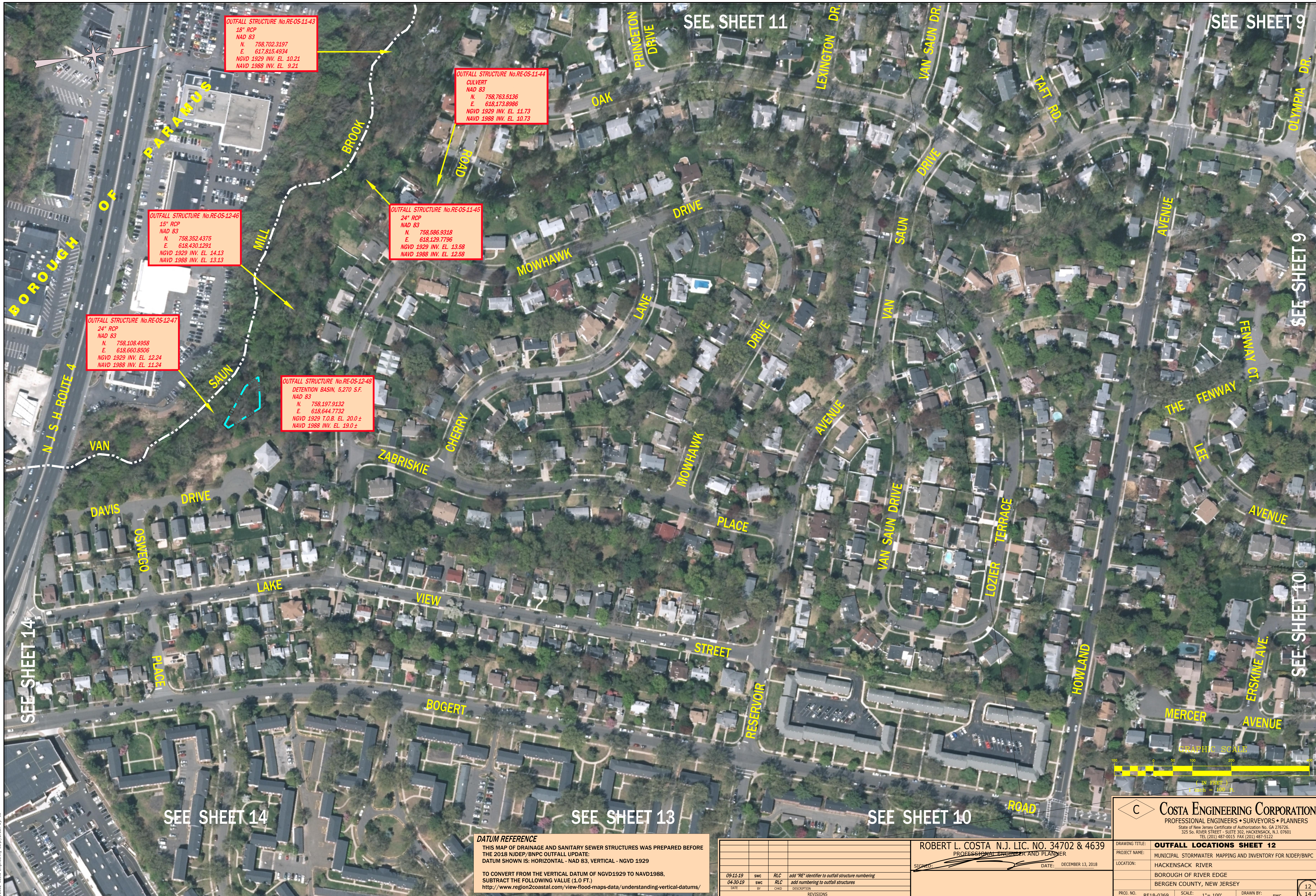
DRAWING TITLE: **OUTFALL LOCATIONS SHEET 11**
 PROJECT NAME: MUNICIPAL STORMWATER MAPPING AND INVENTORY FOR NJDEP/BNPC
 LOCATION: VAN SAUN MILL BROOK
 BOROUGH OF RIVER EDGE
 BERGEN COUNTY, NEW JERSEY
 PROJ. NO. RE18-0369 SCALE: 1"= 100' DRAWN BY: swc

SEE SHEET 9

SEE SHEET 12

SEE SHEET 9

SEE SHEET 12



OUTFALL STRUCTURE No.RE-OS-11-43
 18" RCP
 NAD 83
 N. 758,702.3197
 E. 617,815.4934
 NGVD 1929 INV. EL. 10.21
 NAVD 1988 INV. EL. 9.21

OUTFALL STRUCTURE No.RE-OS-11-44
 CULVERT
 NAD 83
 N. 758,763.5136
 E. 618,173.8986
 NGVD 1929 INV. EL. 11.73
 NAVD 1988 INV. EL. 10.73

OUTFALL STRUCTURE No.RE-OS-12-46
 15" RCP
 NAD 83
 N. 758,352.4375
 E. 618,430.1291
 NGVD 1929 INV. EL. 14.13
 NAVD 1988 INV. EL. 13.13

OUTFALL STRUCTURE No.RE-OS-11-45
 24" RCP
 NAD 83
 N. 758,586.9318
 E. 618,129.7796
 NGVD 1929 INV. EL. 13.58
 NAVD 1988 INV. EL. 12.58

OUTFALL STRUCTURE No.RE-OS-12-47
 24" RCP
 NAD 83
 N. 758,108.4958
 E. 618,660.8506
 NGVD 1929 INV. EL. 12.24
 NAVD 1988 INV. EL. 11.24

OUTFALL STRUCTURE No.RE-OS-12-48
 DETENTION BASIN, 5,270 S.F.
 NAD 83
 N. 758,197.9132
 E. 618,644.7732
 NGVD 1929 T.O.B. EL. 20.0 ±
 NAVD 1988 INV. EL. 19.0 ±

SEE SHEET 11

SEE SHEET 9

SEE SHEET 9

SEE SHEET 10

SEE SHEET 14

SEE SHEET 14

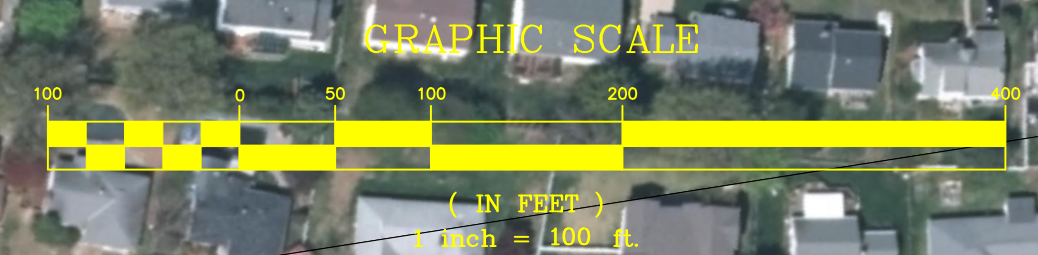
SEE SHEET 13

SEE SHEET 10

DATUM REFERENCE
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<http://www.region2coastal.com/view-flood-maps-data/understanding-vertical-datums/>

DATE	BY	CHKD	DESCRIPTION
09-11-19	SWC	RLC	add "RE" identifier to outfall structure numbering
04-30-19	SWC	RLC	add numbering to outfall structures

ROBERT L. COSTA N.J. LIC. NO. 34702 & 4639
 PROFESSIONAL ENGINEER AND PLANNER
 SIGNED: _____ DATE: DECEMBER 13, 2018



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OUTFALL LOCATIONS SHEET 12

PROJECT NAME: MUNICIPAL STORMWATER MAPPING AND INVENTORY FOR NJDEP/BNPC
 LOCATION: HACKENSACK RIVER
 BOROUGH OF RIVER EDGE
 BERGEN COUNTY, NEW JERSEY

PROJ. NO. RE18-0369 SCALE: 1" = 100' DRAWN BY: swc



OUTFALL STRUCTURE No.RE-OS-10-37
 15" CIP
 NAD 83
 N. 759,938.6000
 E. 621,016.1310
 NGVD 1929 INV. EL. 5.60
 NAVD 1988 INV. EL. 4.60

OUTFALL STRUCTURE No.RE-OS-10-38
 24" RCP
 NAD 83
 N. 759,929.9160
 E. 621,011.3880
 NGVD 1929 INV. EL. 5.21
 NAVD 1988 INV. EL. 4.21

OUTFALL STRUCTURE No.RE-OS-13-51
 24" CMP
 NAD 83
 N. 758,082.4580
 E. 620,402.2326
 NGVD 1929 INV. EL. -0.3
 NAVD 1988 INV. EL. -1.3

OUTFALL STRUCTURE No.RE-OS-13-49
 "E" INLET
 NAD 83
 N. 758,514.9806
 E. 620,852.3225
 NGVD 1929 INV. EL. 6.3
 NAVD 1988 INV. EL. 5.3

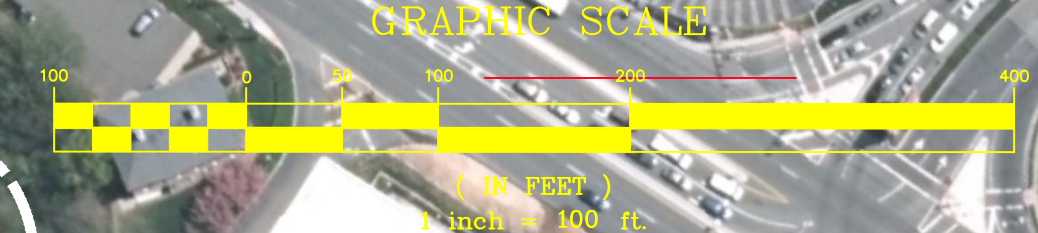
OUTFALL STRUCTURE No.RE-OS-13-50
 24" CMP
 NAD 83
 N. 758,339.7620
 E. 621,208.2140
 NGVD 1929 INV. EL. 1.08
 NAVD 1988 INV. EL. 0.08

OUTFALL STRUCTURE No.RE-OS-13-52
 15" RCP
 NAD 83
 N. 757,148.1902
 E. 621,160.9935
 NGVD 1929 INV. EL. 5.54
 NAVD 1988 INV. EL. 4.54

OUTFALL STRUCTURE No.RE-OS-13-53
 36" RCP @ BRIDGE CULVERT
 NAD 83
 N. 757,143.2
 E. 621,102.4
 INV. EL. NOT OBTAINABLE

OUTFALL STRUCTURE No.RE-OS-13-54
 24" RCP @ BRIDGE CULVERT
 NAD 83
 N. 757,141.4
 E. 621,066.5
 INV. EL. NOT OBTAINABLE

OUTFALL STRUCTURE No.RE-OS-13-55
 24" RCP @ HEADWALL
 NAD 83
 N. 757,138.3854
 E. 621,025.8753
 NGVD 1929 INV. EL. 1.57
 NAVD 1988 INV. EL. 0.57



SEE SHEET 10

SEE SHEET 12

SEE SHEET 14

DATUM REFERENCE
 THIS MAP OF DRAINAGE AND SANITARY SEWER STRUCTURES WAS PREPARED BEFORE THE 2018 NJDEP/BNPC OUTFALL UPDATE.
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DATE	BY	CHKD	DESCRIPTION
09-11-19	swc	RLC	add "RE" identifier to outfall structure numbering
04-30-19	swc	RLC	add numbering to outfall structures
REVISIONS			

ROBERT L. COSTA N.J. LIC. NO. 34702 & 4639
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DRAWING TITLE: **OUTFALL LOCATIONS SHEET 13**
 PROJECT NAME: MUNICIPAL STORMWATER MAPPING AND INVENTORY FOR NJDEP/BNPC
 LOCATION: HACKENSACK RIVER, COLES BROOK
 BOROUGH OF RIVER EDGE
 BERGEN COUNTY, NEW JERSEY

PROJ. NO. RE18-0369 SCALE: 1"= 100' DRAWN BY: swc

SEE SHEET 13

SEE SHEET 12

OUTFALL STRUCTURE No. RE-OS-12-48
 DETENTION BASIN, 5,270 S.F.
 NAD 83
 N. 758,197.9132
 E. 618,644.7732
 NGVD 1929 T.O.B. EL. 20.0 ±
 NAVD 1988 INV. EL. 19.0 ±

OUTFALL STRUCTURE No. RE-OS-12-47
 24" RCP
 NAD 83
 N. 758,108.4958
 E. 618,660.8506
 NGVD 1929 INV. EL. 12.24
 NAVD 1988 INV. EL. 11.24

OUTFALL STRUCTURE No. RE-OS-14-56
 30" RCP @ HEADWALL
 NAD 83
 N. 757,172.8905
 E. 619,275.3364
 NGVD 1929 INV. EL. 5.2
 NAVD 1988 INV. EL. 4.2

OUTFALL STRUCTURE No. RE-OS-14-57
 36" RCP
 NAD 83
 N. 756,486.1054
 E. 620,402.2326
 NGVD 1929 INV. EL. 2.28
 NAVD 1988 INV. EL. 1.28

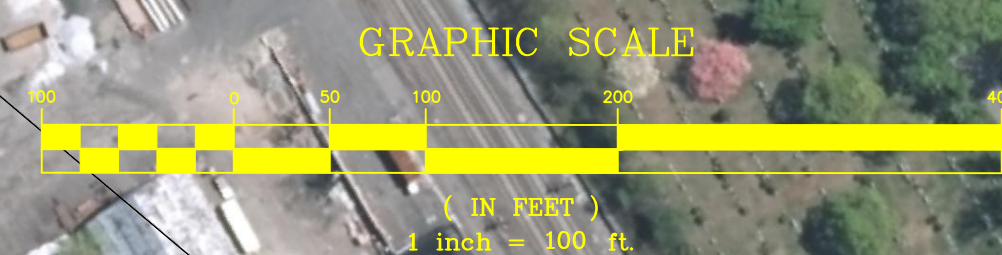
OUTFALL STRUCTURE No. RE-OS-13-52
 15" RCP
 NAD 83
 N. 757,148.1902
 E. 621,160.9935
 NGVD 1929 INV. EL. 5.54
 NAVD 1988 INV. EL. 4.54

OUTFALL STRUCTURE No. RE-OS-13-53
 36" RCP @ BRIDGE CULVERT
 NAD 83
 N. 757,143.2
 E. 621,102.4
 INV. EL. NOT OBTAINABLE

OUTFALL STRUCTURE No. RE-OS-13-54
 24" RCP @ BRIDGE CULVERT
 NAD 83
 N. 757,141.4
 E. 621,066.5
 INV. EL. NOT OBTAINABLE

OUTFALL STRUCTURE No. RE-OS-13-55
 24" RCP @ HEADWALL
 NAD 83
 N. 757,138.3854
 E. 621,025.8753
 NGVD 1929 INV. EL. 1.57
 NAVD 1988 INV. EL. 0.57

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DATE	BY	CHKD	DESCRIPTION
09-11-19	swc	RLC	add "RE" identifier to outfall structure numbering
04-30-19	swc	RLC	add numbering to outfall structures
			REVISIONS

ROBERT L. COSTA N.J. LIC. NO. 34702 & 4639
 PROFESSIONAL ENGINEER AND PLANNER
 SIGNED: _____ DATE: DECEMBER 13, 2018

DRAWING TITLE: **OUTFALL LOCATIONS SHEET 14**
 PROJECT NAME: MUNICIPAL STORMWATER MAPPING AND INVENTORY FOR NJDEP/BNPC
 LOCATION: VAN SAUN MILL BROOK, COLES BROOK
 BOROUGH OF RIVER EDGE
 BERGEN COUNTY, NEW JERSEY
 PROJ. NO. RE18-0369 SCALE: 1" = 100' DRAWN BY: swc