

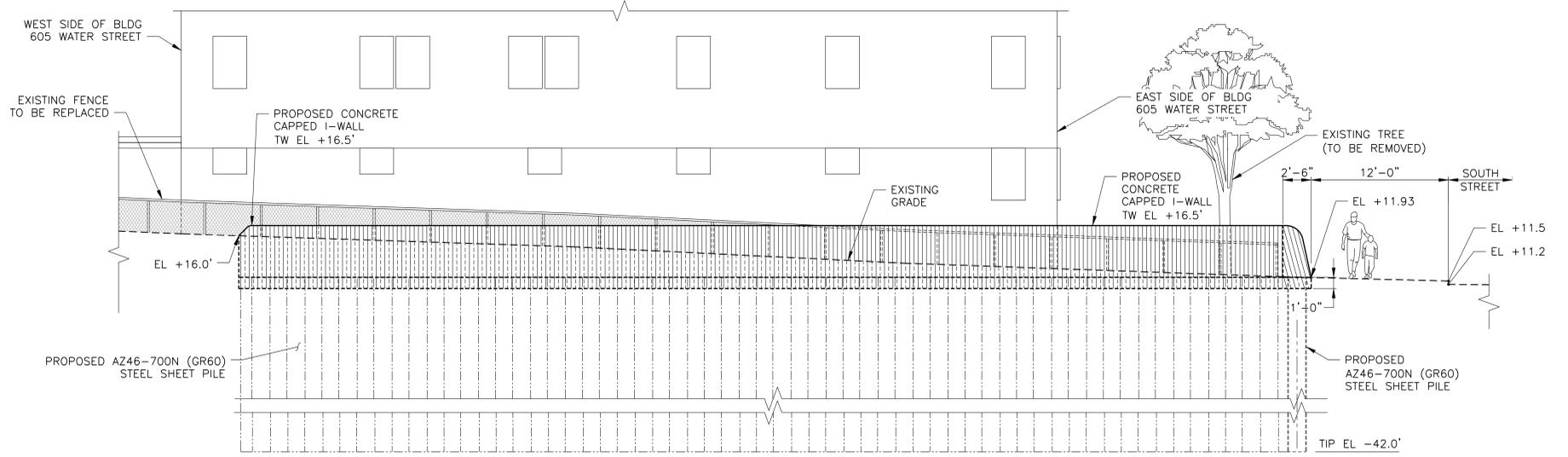
Appendix C1f
Preferred Alternative - Flood Protection
Cross Sections

Appendix C1f
Flood Protection Cross Sections

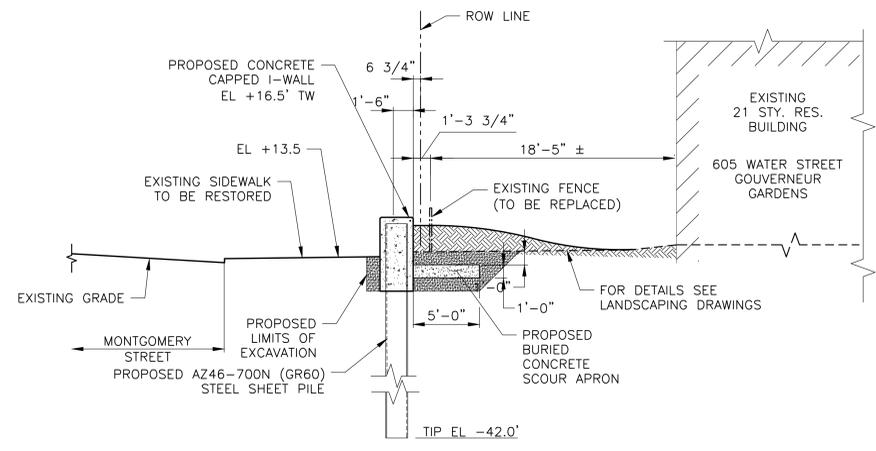
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F602	SANDRESM1-F602-00.DWG	FLOOD PROTECTION CROSS SECTIONS REACH C
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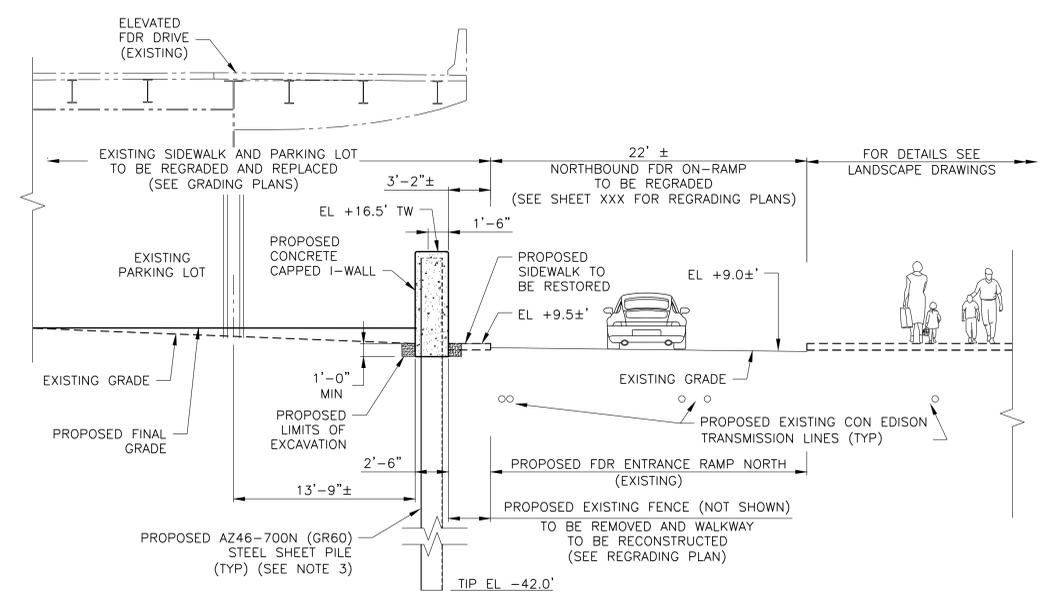
REVISED MASS MAILING # 1 SUBMISSION 7/18/2019



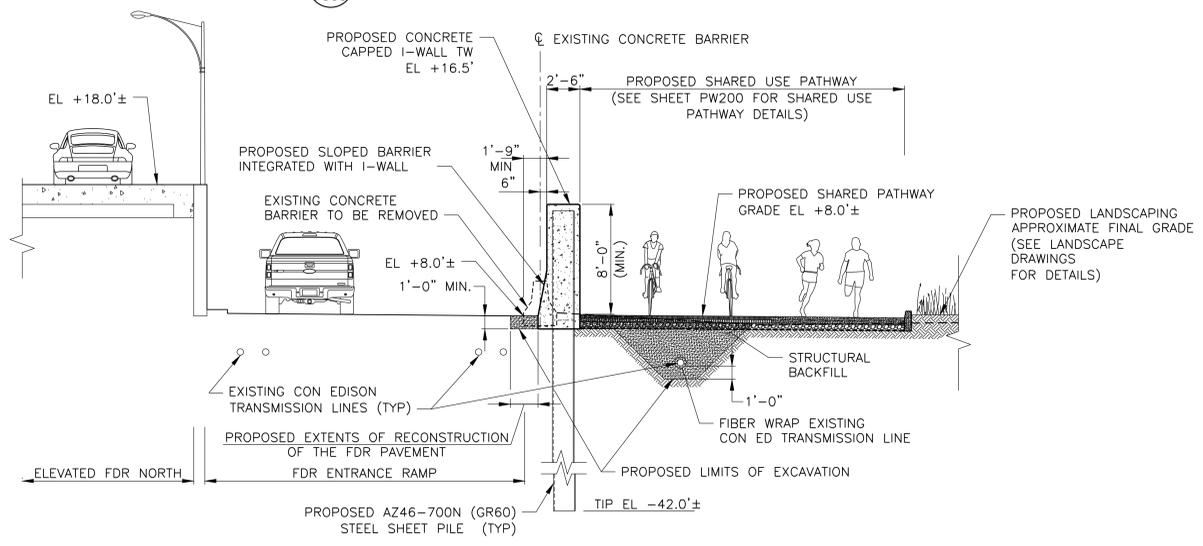
A1 ELEVATION ALONG MONTGOMERY STREET
SCALE: 3/16" = 1'-0"



A2 SECTION AT STA. 9+50
SCALE: 3/16" = 1'-0"



A3 SECTION AT STA. 11+63
SCALE: 3/16" = 1'-0"



A4 SECTION AT STA. 14+65
SCALE: 3/16" = 1'-0"

- NOTES:**
1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
 2. LOCATION OF ELECTRICAL LINES IS APPROXIMATE. IT IS BASED ON CON EDISON'S TRANSMISSION LINE X-REF DRAWING.
 3. ONLY APPROXIMATE CON EDISON TRANSMISSION LINES ARE SHOWN. FOR OTHER UTILITIES IN THE PARK REFER TO THE ELECTRICAL AND PLUMBING PLANS.
 4. OVERHEAD CLEARANCE RESTRICTIONS MIGHT REQUIRE THAT SHEETS BE INSTALLED IN SHORTER SEGMENTS AND BE WELDED TOGETHER.

PRELIMINARY
SUBMITTED DATE: 7/18/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ch2m
CH2M HILL NEW YORK, INC.
NAME OF CONSULTANT

SIGNATURE _____
DATE _____

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

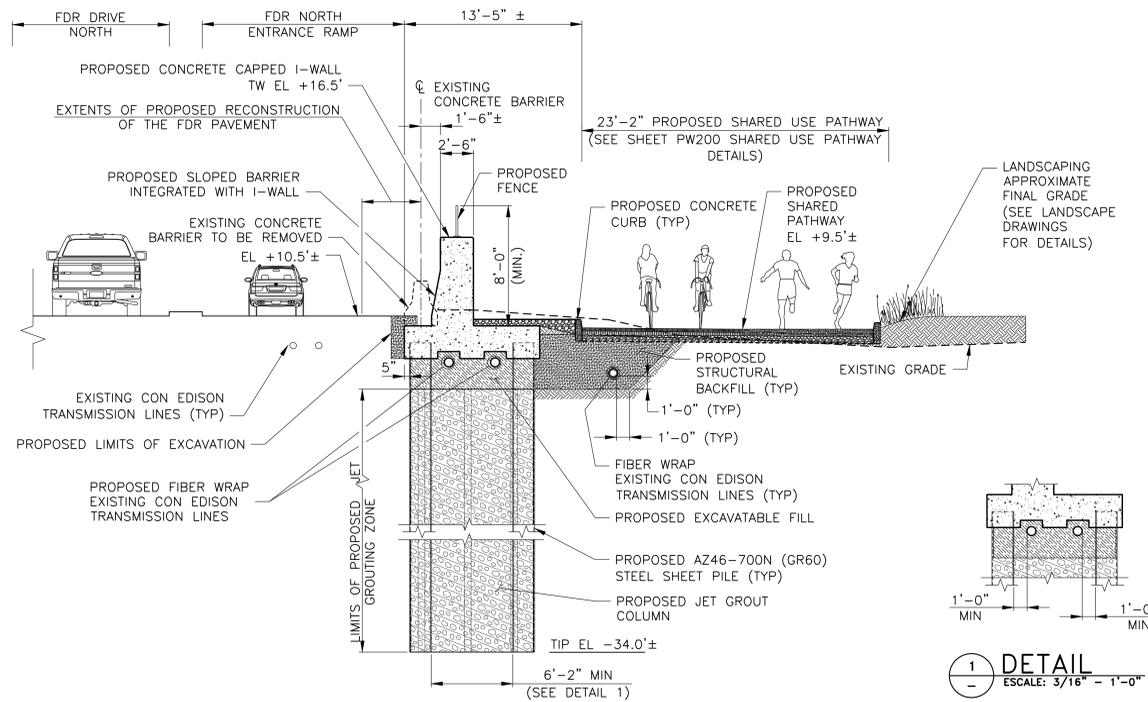
FLOOD PROTECTION
CROSS SECTIONS
REACH A

CH2M DRAWN BY _____
SANDRESM1-F600-00.DWG
CADD FILE

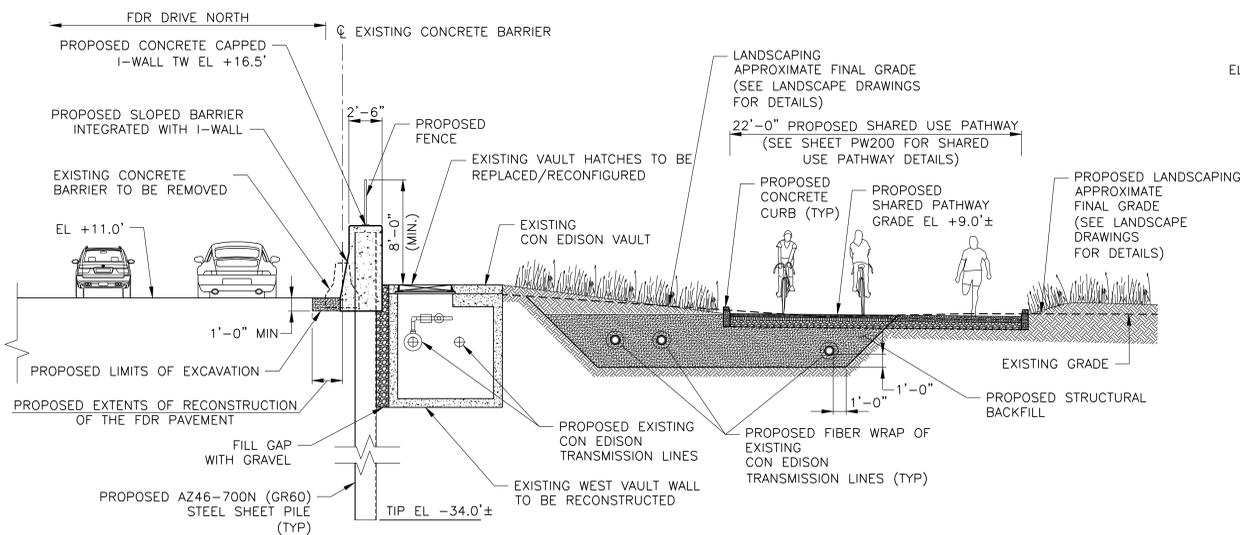
NO.	DATE	DESCRIPTIONS REVISIONS	BY	APPR'D

CAPITAL PROJECT NO. SANDRESM1 7/18/2019 SHEET 438 OF 1594 F600

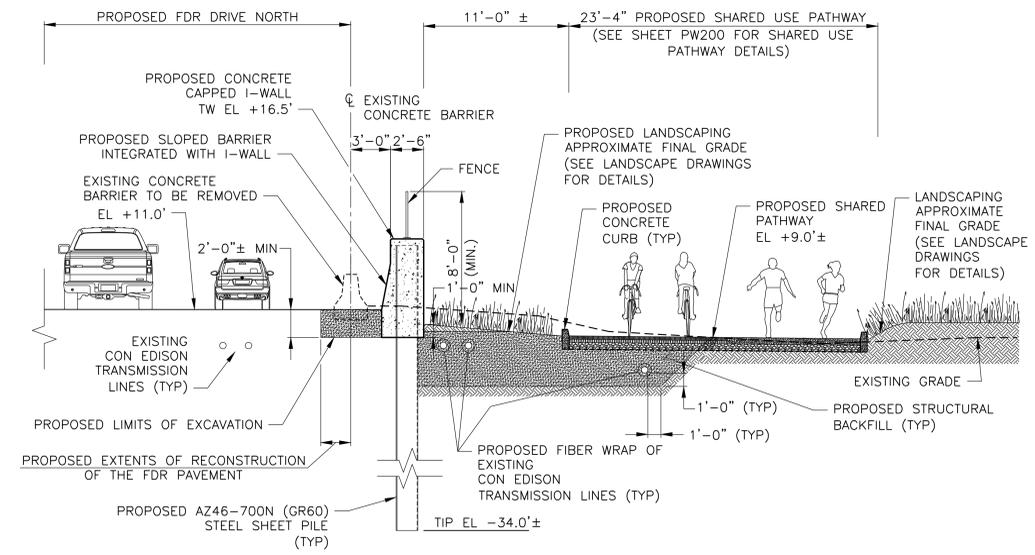
REVISED MASS MAILING # 1 SUBMISSION 7/18/2019



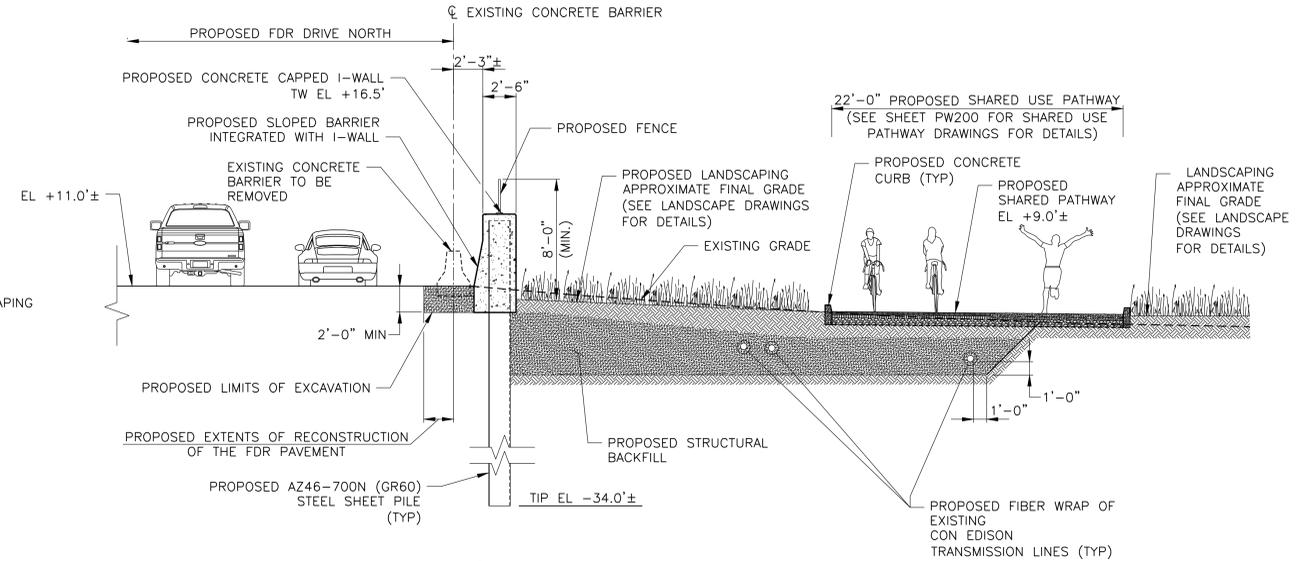
B1
SECTION AT STA. 17+21
SCALE: 3/16" = 1'-0"



B3
SECTION AT STA. 21+55
SCALE: 3/16" = 1'-0"



B2
SECTION AT STA. 18+43
SCALE: 3/16" = 1'-0"



B4
SECTION AT STA. 22+43
SCALE: 3/16" = 1'-0"

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. LOCATION OF ELECTRICAL LINES IS APPROXIMATE. IT IS BASED ON CON EDISON'S TRANSMISSION LINE X-REF DRAWING.
3. ONLY APPROXIMATE CON EDISON TRANSMISSION LINES ARE SHOWN. FOR OTHER UTILITIES IN THE PARK REFER TO THE ELECTRICAL AND PLUMBING PLANS.

PRELIMINARY

SUBMITTED DATE: 7/18/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SUI00 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:



The AKRF-KSE JV

FINAL DESIGN PREPARED BY:



CH2M HILL NEW YORK, INC.
NAME OF CONSULTANT

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DATE

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BUREAU OF DESIGN

FLOOD PROTECTION
CROSS SECTIONS
REACH B

CH2M
DRAWN BY

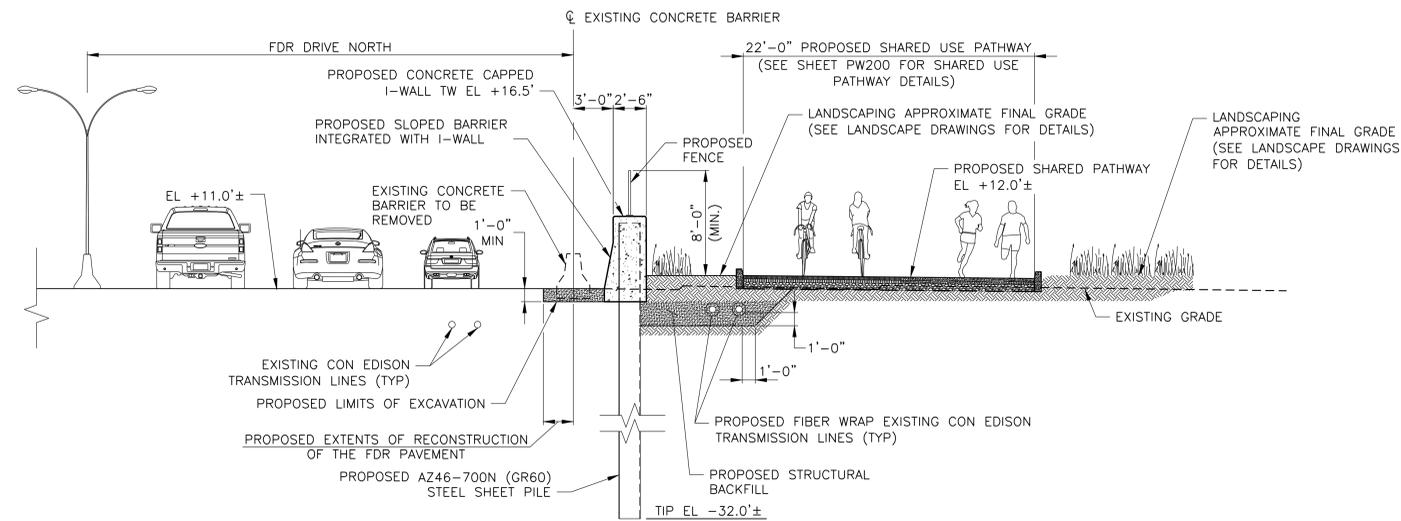
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CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

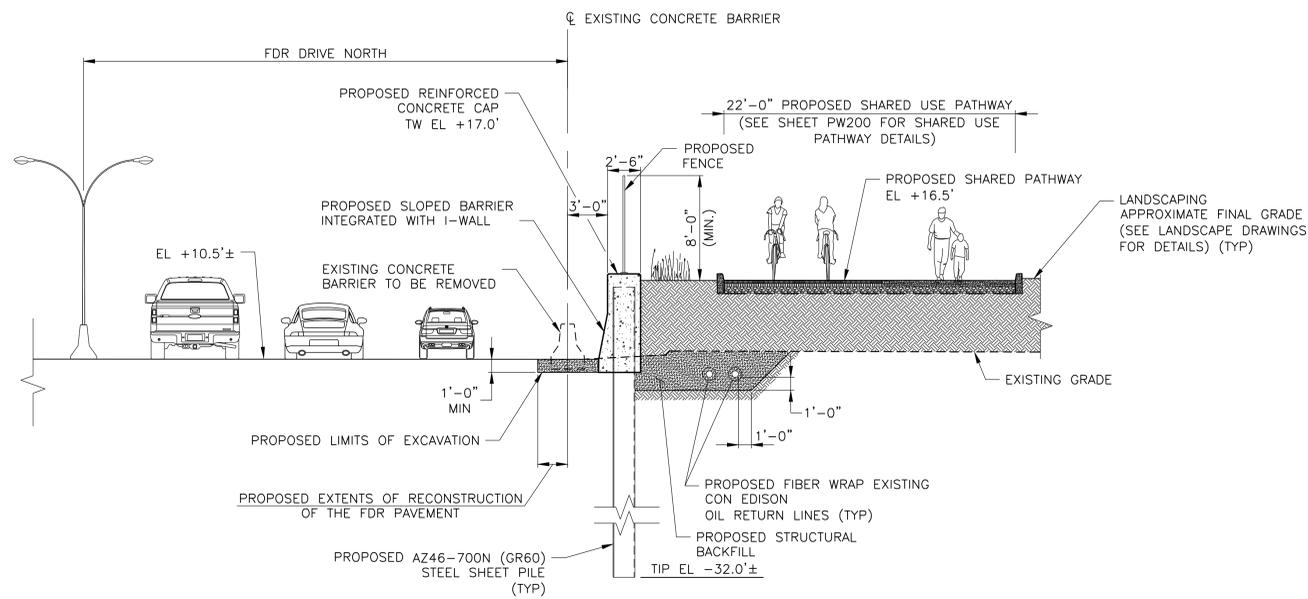
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CAPITAL PROJECT NO. SANDRESM1 7/18/2019 SHEET 439 OF 1594 F601

REVISED MASS MAILING # 1 SUBMISSION 7/18/2019



C1 SECTION AT STA. 25+09
SCALE: 3/16" = 1'-0"



C2 SECTION AT STA. 26+71
SCALE: 3/16" = 1'-0"

NOTES:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.
2. LOCATION OF ELECTRICAL LINES IS APPROXIMATE. IT IS BASED ON CON EDISON'S TRANSMISSION LINE X-REF DRAWING AND TEST PIT DATA NEAR THE AMPHITHEATER.
3. ONLY APPROXIMATE CON EDISON TRANSMISSION LINES ARE SHOWN. FOR OTHER UTILITIES IN THE PARK REFER TO THE ELECTRICAL AND PLUMBING PLANS.

PRELIMINARY

SUBMITTED DATE: 7/18/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:



The AKRF-KSE JV

FINAL DESIGN PREPARED BY:



CH2M HILL NEW YORK, INC.
NAME OF CONSULTANT

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DATE

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DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

FLOOD PROTECTION
CROSS SECTIONS
REACH C

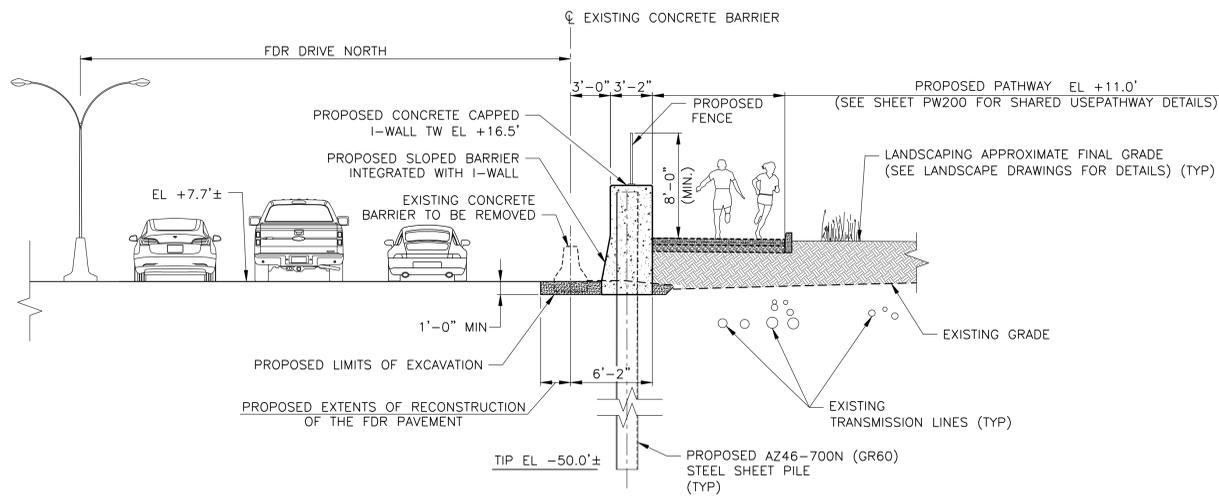
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SANDRESM1-F602-00.DWG
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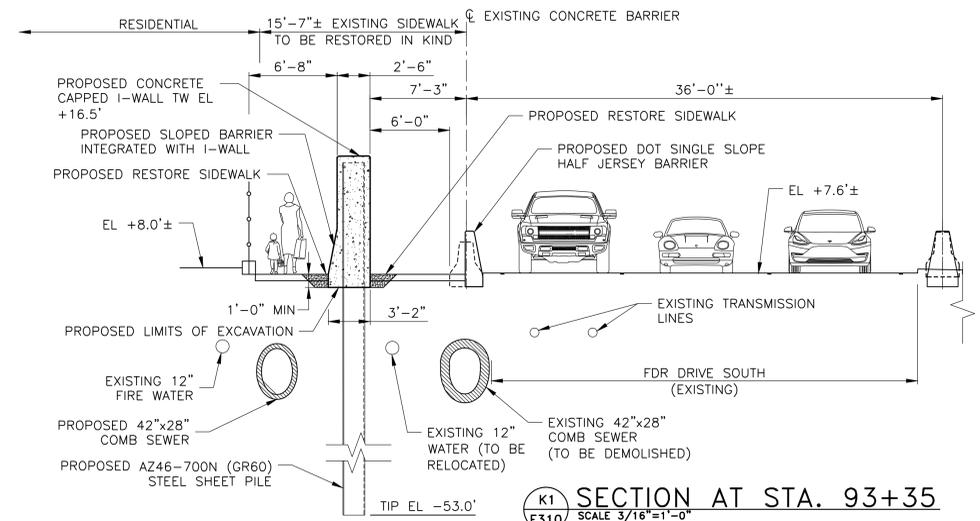
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 7/18/2019 SHEET 440 OF 1594 F602

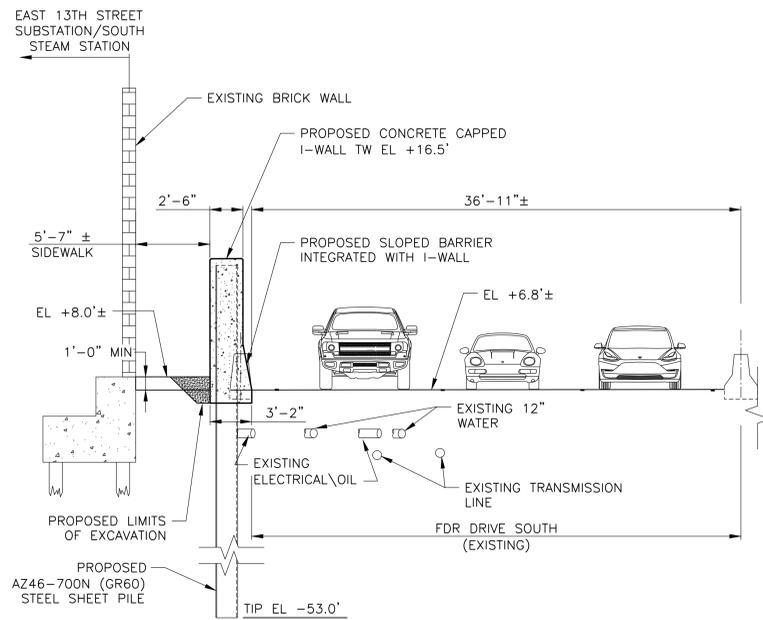
REVISED MASS MAILING # 1 SUBMISSION 7/18/2019



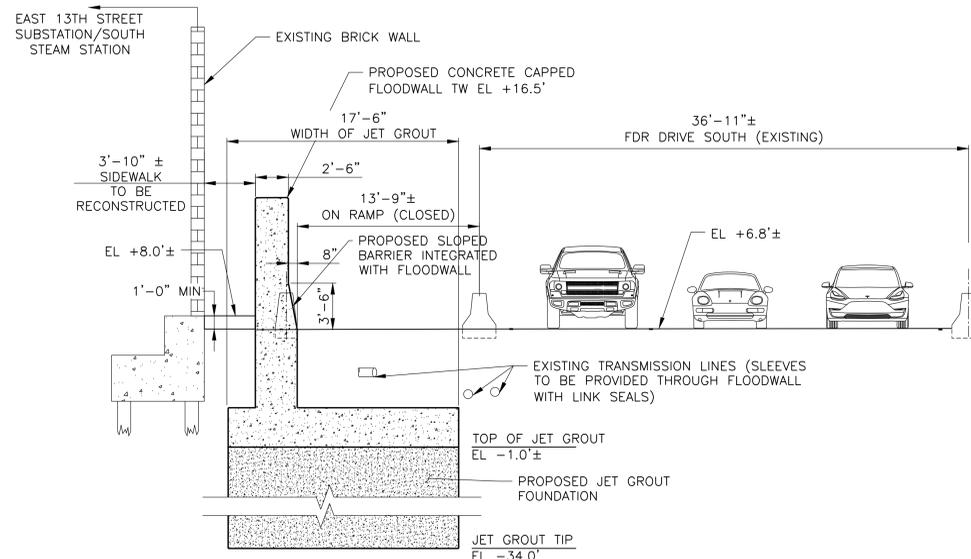
J1 SECTION AT STA. 91+39
SCALE 3/16"=1'-0"



K1 SECTION AT STA. 93+35
SCALE 3/16"=1'-0"



K2 SECTION AT STA. 95+12
SCALE 3/16"=1'-0"



K3 SECTION AT STA. 96+23
SCALE 3/16"=1'-0"

NOTE:
1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.

PRELIMINARY
SUBMITTED DATE: 7/18/2019

NO.	DATE	DESCRIPTIONS REVISIONS	BY	APPR'D

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ch2m
CH2M HILL NEW YORK, INC.
NAME OF CONSULTANT

SIGNATURE _____
DATE _____

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
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BUREAU OF DESIGN

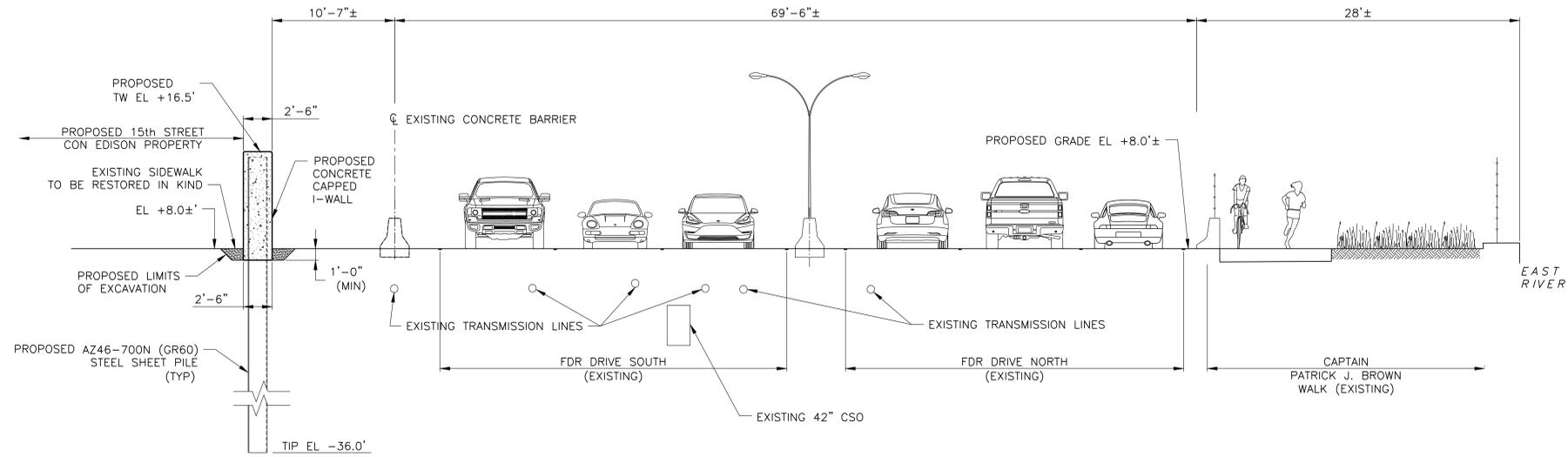
FLOOD PROTECTION
CROSS SECTIONS
REACHES J-K

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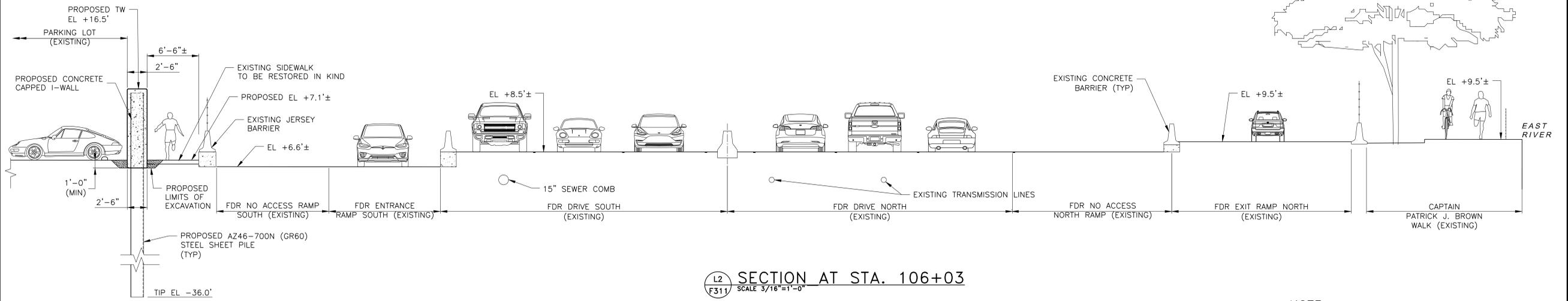
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 7/18/2019 SHEET 443 OF 1594 F610

REVISED MASS MAILING # 1 SUBMISSION 7/18/2019



L1 SECTION AT STA. 100+44
SCALE 3/16"=1'-0"



L2 SECTION AT STA. 106+03
SCALE 3/16"=1'-0"

NOTE:

1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.

PRELIMINARY

SUBMITTED DATE: 7/18/2019

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

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The AKRF-KSE JV

FINAL DESIGN PREPARED BY:



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NAME OF CONSULTANT

SIGNATURE

DATE

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DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

FLOOD PROTECTION
CROSS SECTIONS
REACH L

CH2M
DRAWN BY

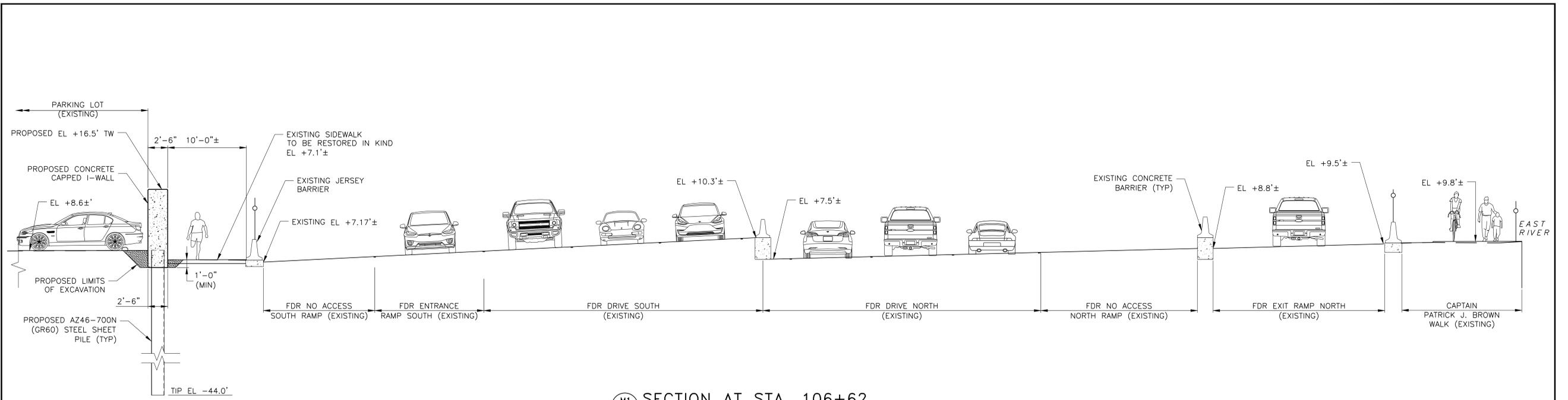
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INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

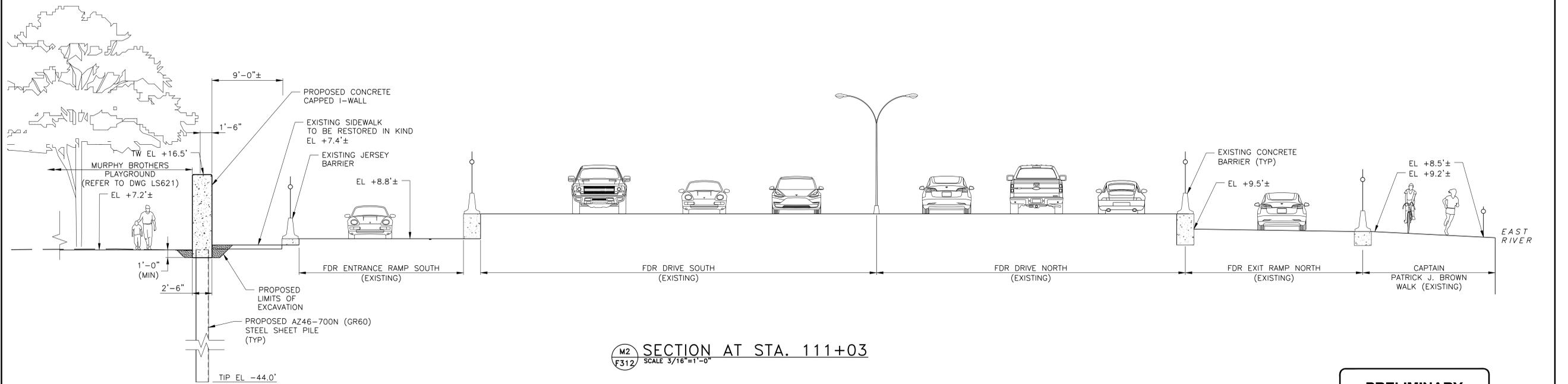
NO.	DATE	DESCRIPTIONS	BY	APPR'D

CAPITAL PROJECT NO. SANDRESM1 7/18/2019 SHEET 444 OF 1594 F611

REVISED MASS MAILING # 1 SUBMISSION 7/18/2019



M1 SECTION AT STA. 106+62
SCALE 3/16"=1'-0"



M2 SECTION AT STA. 111+03
SCALE 3/16"=1'-0"

PRELIMINARY
SUBMITTED DATE: 7/18/2019

NOTE:

- 1. ALL ITEMS CALLED OUT AS EXISTING ARE TO REMAIN UNLESS NOTED OTHERWISE.

NO.	DATE	DESCRIPTIONS REVISIONS	BY	APPR'D

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
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The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ch2m
CH2M HILL NEW YORK, INC.
NAME OF CONSULTANT

SIGNATURE _____
DATE _____

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DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

FLOOD PROTECTION
CROSS SECTIONS
REACH M

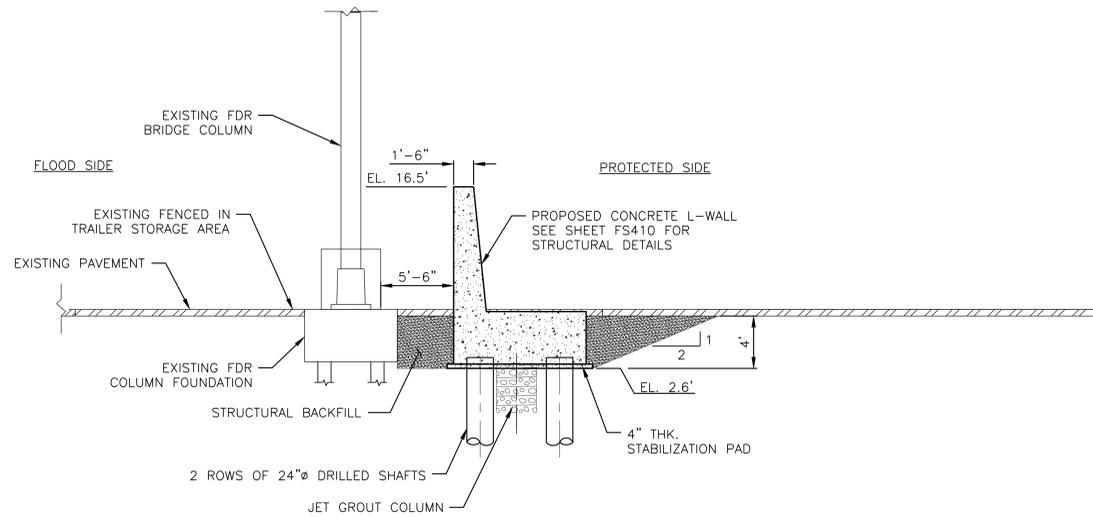
CH2M
DRAWN BY _____

SANDRESM1-F612-00.DWG
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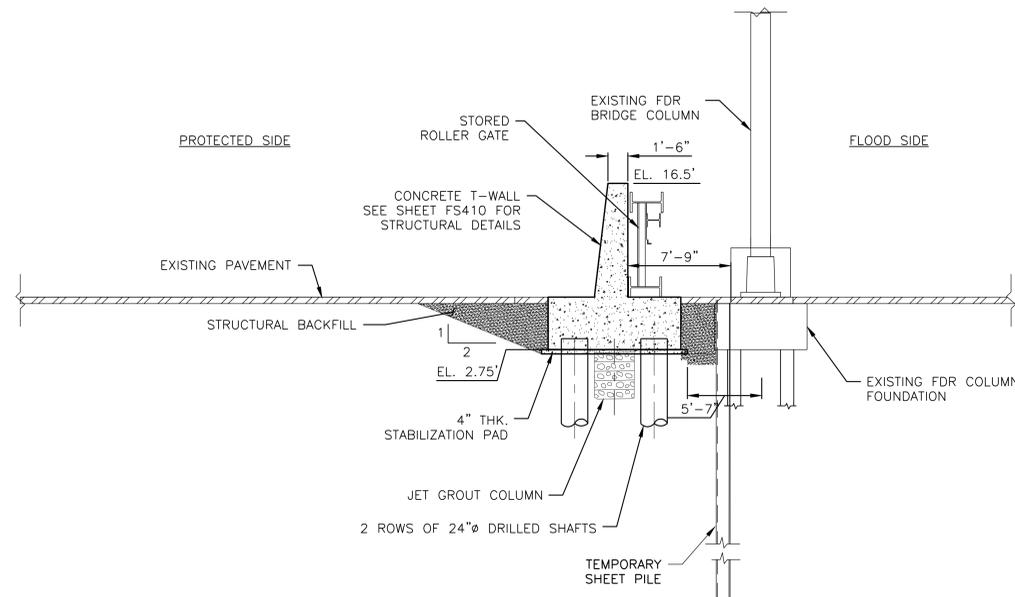
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 7/18/2019 SHEET 445 OF 1594 F612

REVISED MASS MAILING #1 SUBMISSION 7/18/2019



N1 SECTION AT STA. 201+31
F313 SCALE: 3/8" = 1'-0"



N2 SECTION AT STA. 201+53
F313 SCALE: 3/8" = 1'-0"

PRELIMINARY
 SUBMITTED DATE: 7/18/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D

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 INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:
 The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
 ARCADIS OF NEW YORK, INC.
 NAME OF CONSULTANT

SIGNATURE _____
 DATE _____

CITY OF NEW YORK
 DEPARTMENT OF DESIGN + CONSTRUCTION
 DIVISION OF INFRASTRUCTURE
 BUREAU OF DESIGN

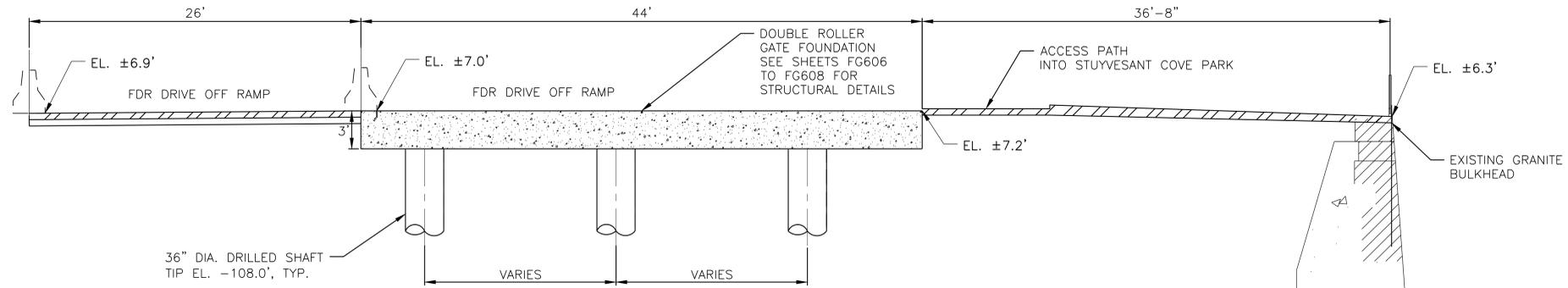
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 CROSS SECTIONS
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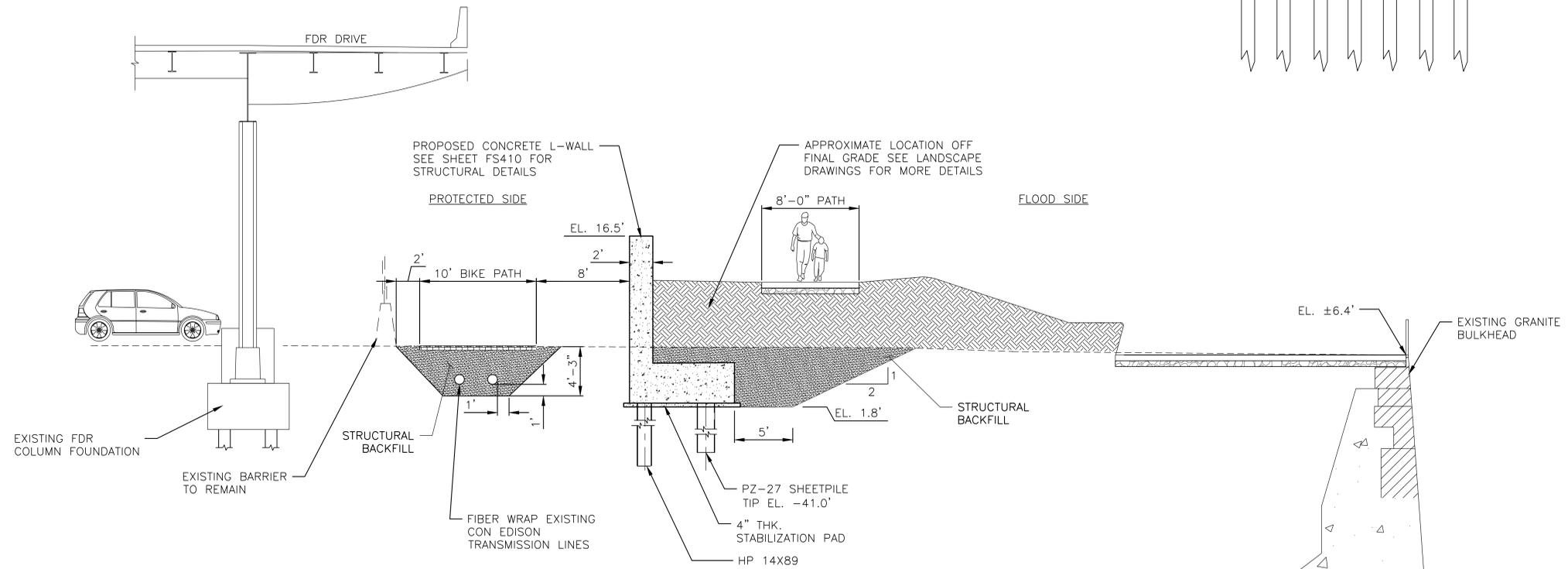
INSTALLATION OF
 EAST SIDE COASTAL RESILIENCY
 BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 7/18/2019 SHEET 446 OF 1594 F613

REVISED MASS MAILING #1 SUBMISSION 7/18/2019



N3
SECTION AT STA. 202+26
SCALE: 3/16" = 1'-0"



N4
SECTION AT STA. 205+45
SCALE: 3/16" = 1'-0"

PRELIMINARY
SUBMITTED DATE: 7/18/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D.

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
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FINAL DESIGN SUBMITTED BY:
AKRF KSE
The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
ARCADIS
ARCADIS OF NEW YORK, INC.
NAME OF CONSULTANT

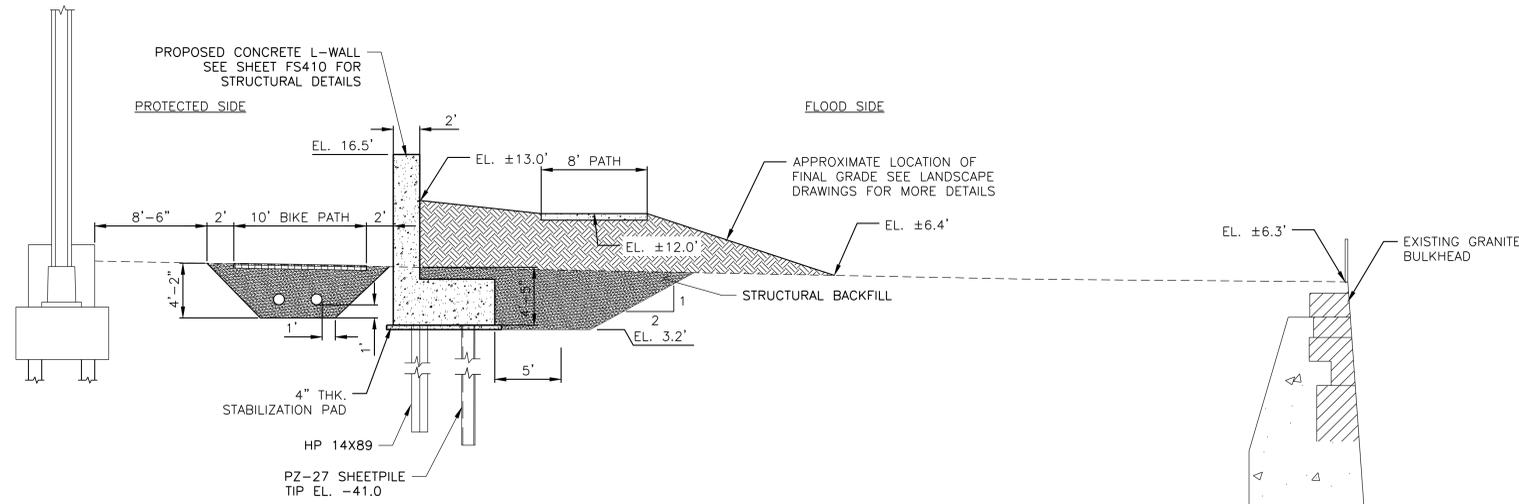
SIGNATURE _____
DATE _____

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

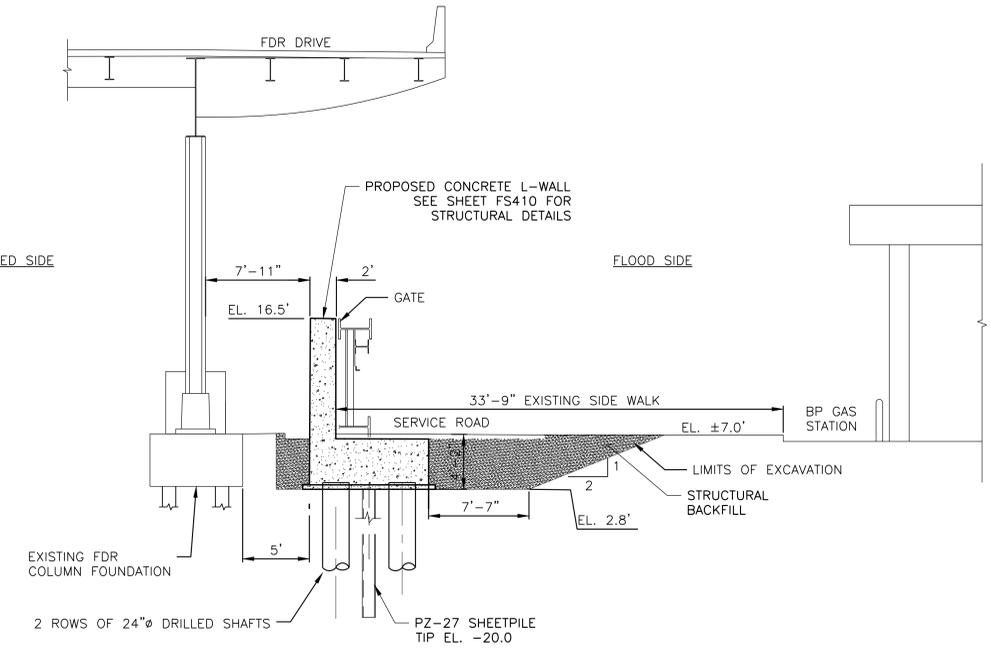
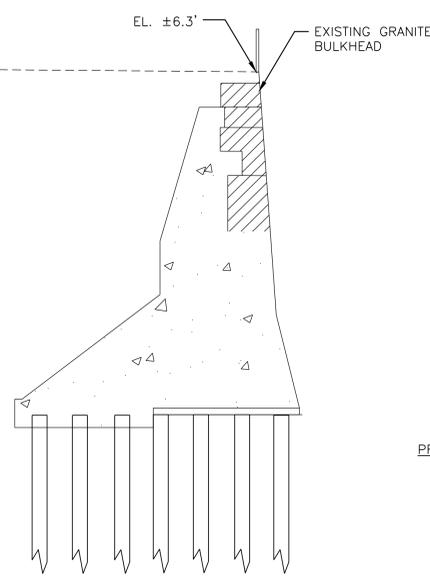
FLOOD PROTECTION
CROSS SECTIONS
REACH N SHEET 2 OF 2
ARCADIS DRAWN BY _____
SANDRESM1-F614-00.DWG
CADD FILE

INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN
CAPITAL PROJECT NO. SANDRESM1 7/18/2019
SHEET 447 OF 1594
F614

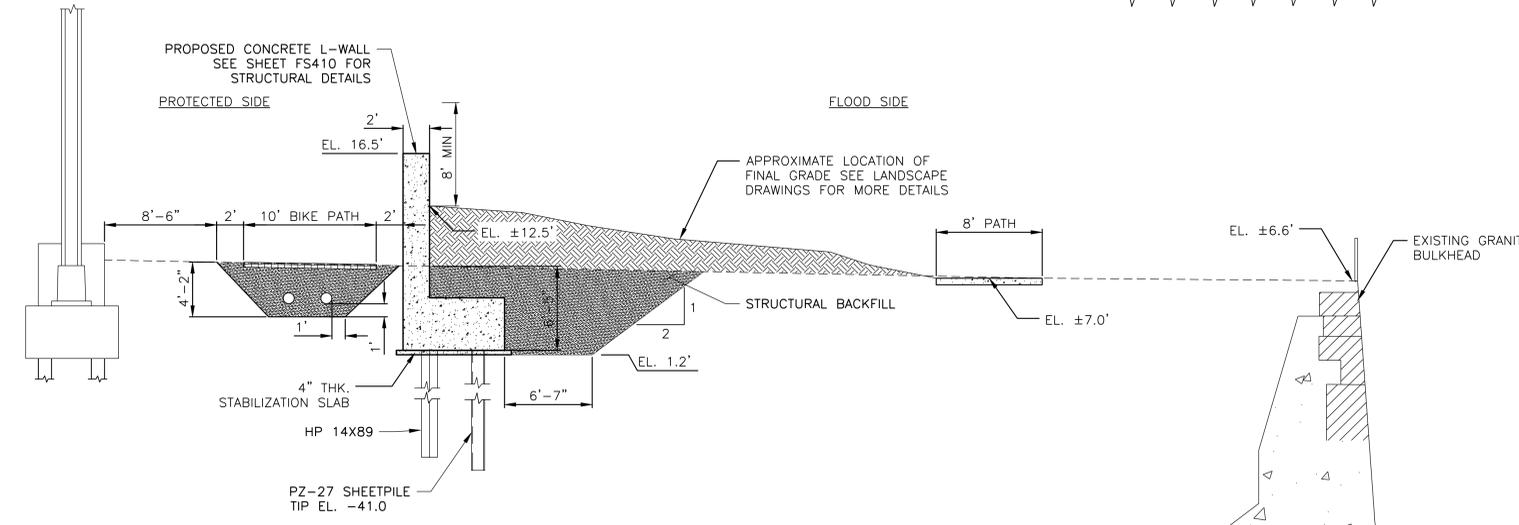
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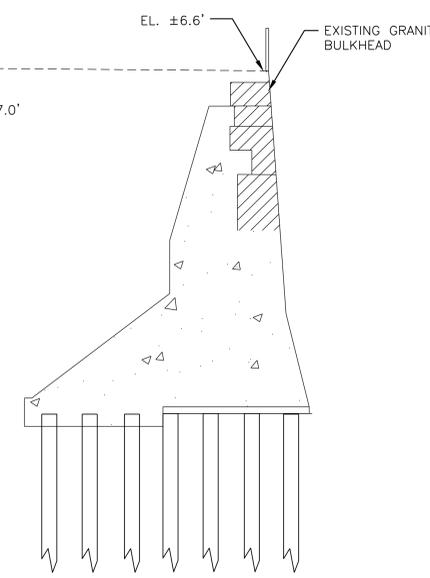
01 SECTION AT STA. 210+16
F314 SCALE: 3/8" = 1'-0"



03 SECTION AT STA. 216+90
F314 SCALE: 3/8" = 1'-0"



02 SECTION AT STA. 213+43
F314 SCALE: 3/8" = 1'-0"



PRELIMINARY
SUBMITTED DATE: 7/18/2019

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INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

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AKRF KSE
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NAME OF CONSULTANT

SIGNATURE _____
DATE _____

CITY OF NEW YORK
DEPARTMENT OF DESIGN + CONSTRUCTION
DIVISION OF INFRASTRUCTURE
BUREAU OF DESIGN

FLOOD PROTECTION
CROSS SECTIONS
REACH 0

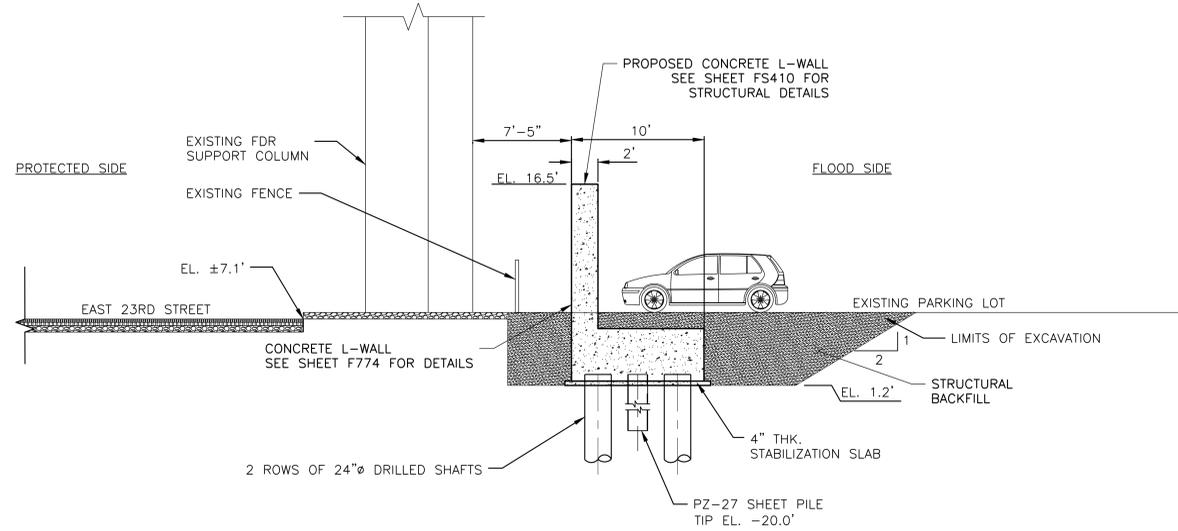
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NO.	DATE	DESCRIPTIONS REVISIONS	BY	APPR'D

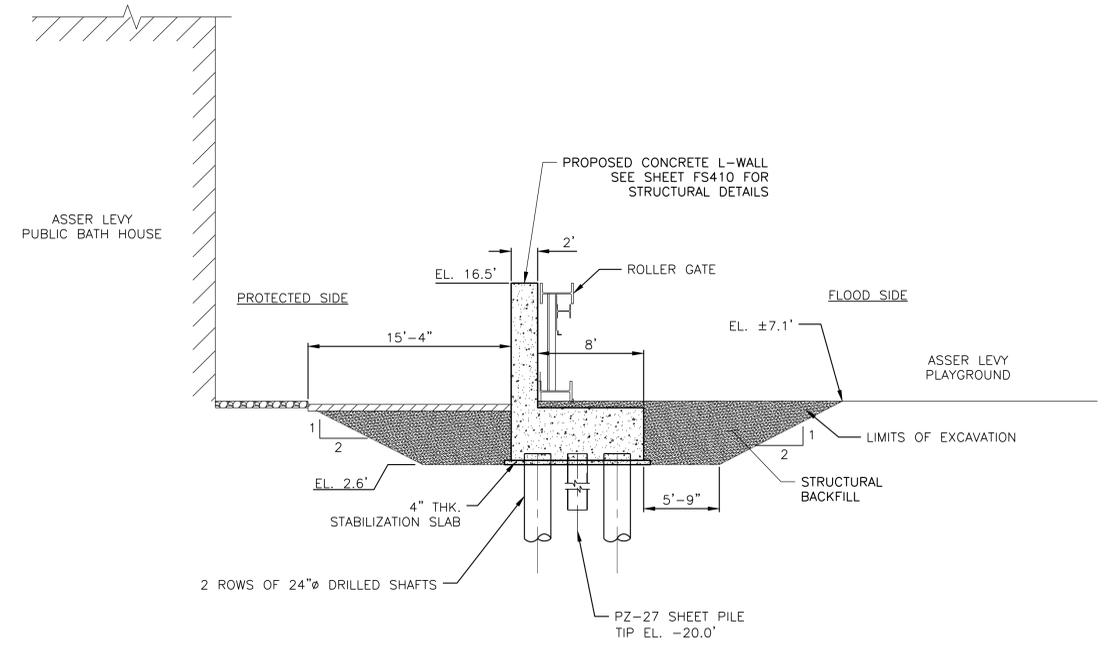
INSTALLATION OF
EAST SIDE COASTAL RESILIENCY
BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 7/18/2019 SHEET 448 OF 1594 F615

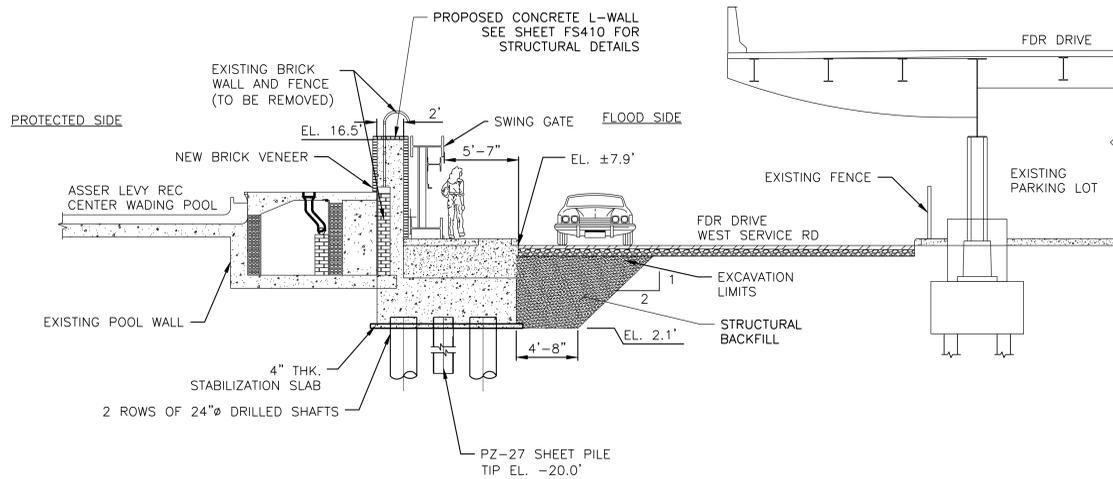
REVISED MASS MAILING #1 SUBMISSION 7/18/2019



Q1 SECTION AT STA. 218+86
 F315 SCALE: 3/8" = 1'-0"



Q3 SECTION AT STA. 222+95
 F315 SCALE: 3/8" = 1'-0"



Q2 SECTION AT STA. 221+06
 F315 SCALE: 3/8" = 1'-0"

PRELIMINARY
 SUBMITTED DATE: 7/18/2019

NO.	DATE	DESCRIPTIONS	BY	APPR'D

TOPOGRAPHIC SURVEY PREPARED BY: FOR SURVEYOR
 INFORMATION SEE SURVEY SET SU100 DRAWINGS SERIES

FINAL DESIGN SUBMITTED BY:
 The AKRF-KSE JV

FINAL DESIGN PREPARED BY:
 ARCADIS OF NEW YORK, INC.
 NAME OF CONSULTANT

SIGNATURE _____
 DATE _____

CITY OF NEW YORK
 DEPARTMENT OF DESIGN + CONSTRUCTION
 DIVISION OF INFRASTRUCTURE
 BUREAU OF DESIGN

FLOOD PROTECTION
 CROSS SECTIONS
 REACH Q

ARCADIS DRAWN BY _____ SANDRESM1-F616-00.DWG
 CADD FILE

INSTALLATION OF
 EAST SIDE COASTAL RESILIENCY
 BOROUGH OF MANHATTAN

CAPITAL PROJECT NO. SANDRESM1 7/18/2019 SHEET 449 OF 1594 F616