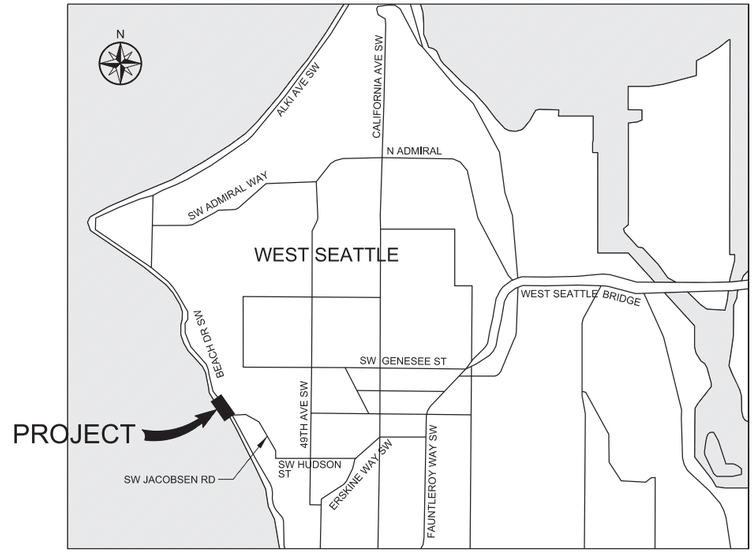
US Army Corps
of Engineers ®
Seattle District

FY19 P2-395621
ALKI COASTAL EROSION CONTROL PROJECT
SECTION 103

SEATTLE, WASHINGTON

PROJECT VICINITY MAP
NTS



PROJECT LOCATION MAP
NTS

SAFETY FIRST

DRAWING INDEX	
SHEET ID	SHEET TITLE
GENERAL	
G-001	TITLE, VICINITY AND LOCATIONS MAPS, AND DRAWING INDEX
GEOTECH	
B-101	LOCATIONS OF EXPLORATIONS
B-301	BORING LOGS 1
B-302	BORING LOGS 2
CIVIL	
C-001	LEGEND, ABBREVIATIONS, AND GENERAL NOTES
C-002	ACCESS AND STAGING AREA
C-003	EXISTING CONDITIONS AND DEMOLITION PLAN 1
C-004	EXISTING CONDITIONS AND DEMOLITION PLAN 2
CS101	PLAN AND PROFILE 1
CS102	PLAN AND PROFILE 2
CS103	PLAN AND PROFILE 3
CG101	GRADING PLAN 1
CG102	GRADING PLAN 2
CG103	GRADING PLAN 3
C-301	TYPICAL WALL SECTION 1
C-302	TYPICAL WALL SECTION 2
C-401	ENLARGED PLAN
C-501	RAILING DETAILS
LANDSCAPE	
L-101	LANDSCAPE PLAN 1
L-102	LANDSCAPE PLAN 2
L-103	LANDSCAPE PLAN 3
L-501	LANDSCAPE DETAILS
STRUCTURAL	
S-001	STRUCTURAL LEGEND, ABBREVIATIONS AND GENERAL NOTES
S-501	STRUCTURAL DETAILS

REFERENCE DRAWINGS	
REF. NO.	TITLE
1	WEST ALASKA STREET OVERFLOW OUTFALL (1 OF 5)
2	WEST ALASKA STREET OVERFLOW OUTFALL (2 OF 5)
3	WEST ALASKA STREET OVERFLOW OUTFALL (3 OF 5)
4	WEST ALASKA STREET OVERFLOW OUTFALL (4 OF 5)
5	WEST ALASKA STREET OVERFLOW OUTFALL (5 OF 5)
6	BEACH DRIVE INTERCEPTOR UNIT NO. 1 (1 OF 8)
7	BEACH DRIVE INTERCEPTOR UNIT NO. 1 (4 OF 8)
8	BEACH DRIVE INTERCEPTOR UNIT NO. 1 (5 OF 8)
9	BEACH DRIVE INTERCEPTOR UNIT NO. 1 (8 OF 8)
10	BEACH DRIVE INTERCEPTOR UNIT NO. 2 (1 OF 12)

IF SHEET MEASURES LESS THAN 22" X 34" IT IS A REDUCED PRINT. REDUCE SCALE ACCORDINGLY.

US Army Corps of Engineers ®
Seattle District

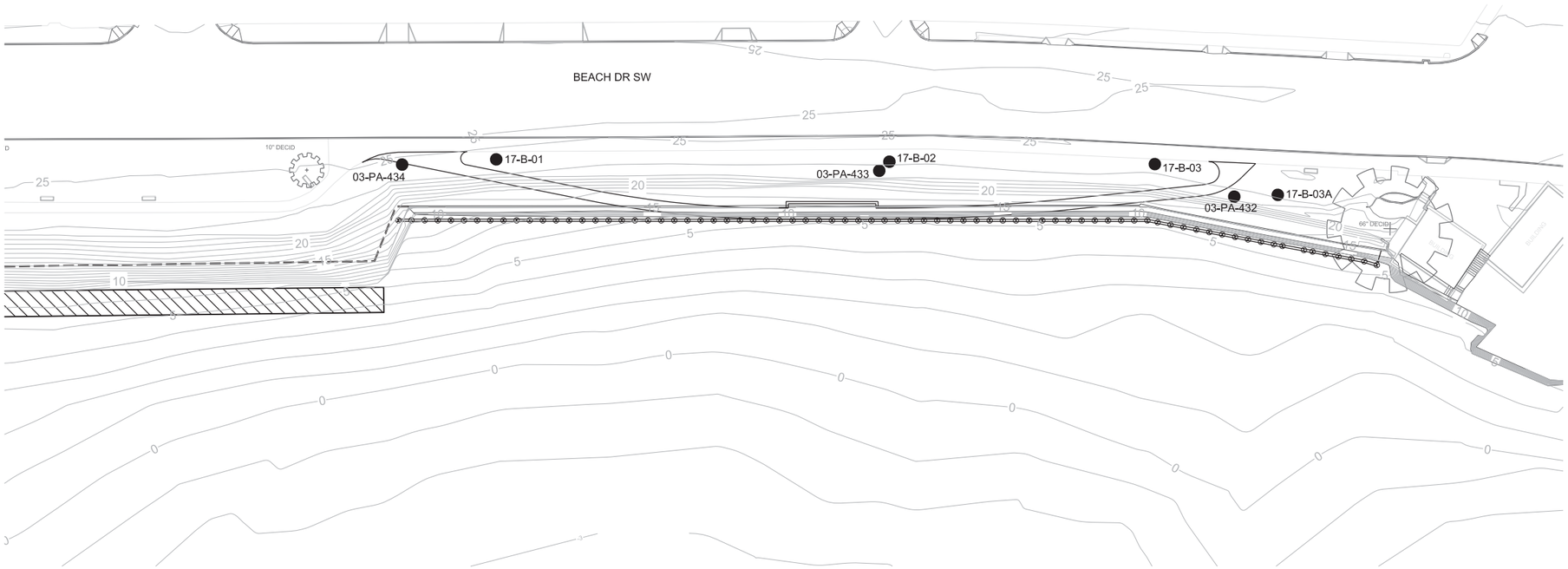
Date: 31 MAY 2019
Solicitation No.: W912DW1980008
File No.: E-12-3-54

Recommended by: GUY L. GREEN, P.E. Chief, Design Branch 05/31/2019 Date
Approved by: JOANN T. WALLS, P.E. Chief, Engineering Div. 05/31/2019 Date
Submitted by: JEFFREY F. DILLON Project Manager 05/31/2019 Date
Reviewed by: ANIL L. NISARGAND, P.E. Chief, Specs. and Tech Review 05/31/2019 Date
U.S. ARMY CORPS OF ENGINEERS SEATTLE DISTRICT SEATTLE, WASHINGTON
Prepared by: KIMBALL L. OHSIEK Chief, Soils Section 05/31/2019 Date

FY19 P2-395621
ALKI COASTAL EROSION CONTROL PROJECT
SECTION 103
SEATTLE, WASHINGTON

TITLE, VICINITY AND LOCATION MAPS, AND DRAWING INDEX

SHEET IDENTIFICATION
G-001



C1 LOCATIONS OF EXPLORATIONS

SCALE: 1" = 30'

0 30' 60'

NOTES:

1. FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES, SEE SHEET C-001.
2. LOCATIONS OF EXPLORATIONS ARE APPROXIMATE; LOCATIONS OF 2018 EXPLORATIONS SUREVYED BY PACE ENGINEERS, INC. ON 29 JUNE 2018. HORIZONTAL DATUM: NAD 83/91 WA STATE PLANE NORTH. VERTICAL DATUM: NAVD88.
3. BORINGS DESIGNATED "17-B-##" WERE COMPLETED JUNE 2018 UTILIZING HOLLOW-STEM AUGER DRILLING METHOD. FOR BORING LOGS SEE SHEET B-301. FOR ADDITIONAL INFORMATION SEE GEOTECHNICAL INVESTIGATION AND TESTING REPORT, 06 AUGUST 2018 INCLUDED IN SPECIFICATIONS PACKAGE.
4. BORINGS DESIGNATED "03-PA-##" WERE COMPLETED AUGUST 2003 UTILIZING B-61 MOBILE POWER AUGER. FOR BORING LOGS SEE SHEET B-302.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

U.S. ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
4735 EAST MARGINAL WAY SOUTH
SEATTLE, WASHINGTON, 98134

DESIGNED BY: M. GONIA
DWN BY: M. GONIA
CKD BY: M. SWENSON
SUBMITTED BY: JEFFREY F. DILLON
SIZE: ANSI D
ISSUE DATE: 31 MAY 2019
SOLICITATION NO.: W912DW19B0008
CONTRACT NO.:
FILE NUMBER: E-12-A-54

FY19 P2-395621 ACEC
ALKI COASTAL EROSION CONTROL
SECTION 103
SEATTLE, WASHINGTON

LOCATION OF EXPLORATIONS

SHEET ID

B-101

File Path: I:\AECDesigns\FY19_P2-395621_ACEC\Con_Docs\CAD_Sheets\Geotechnical\PN395621_ACEC-B-101.dgn
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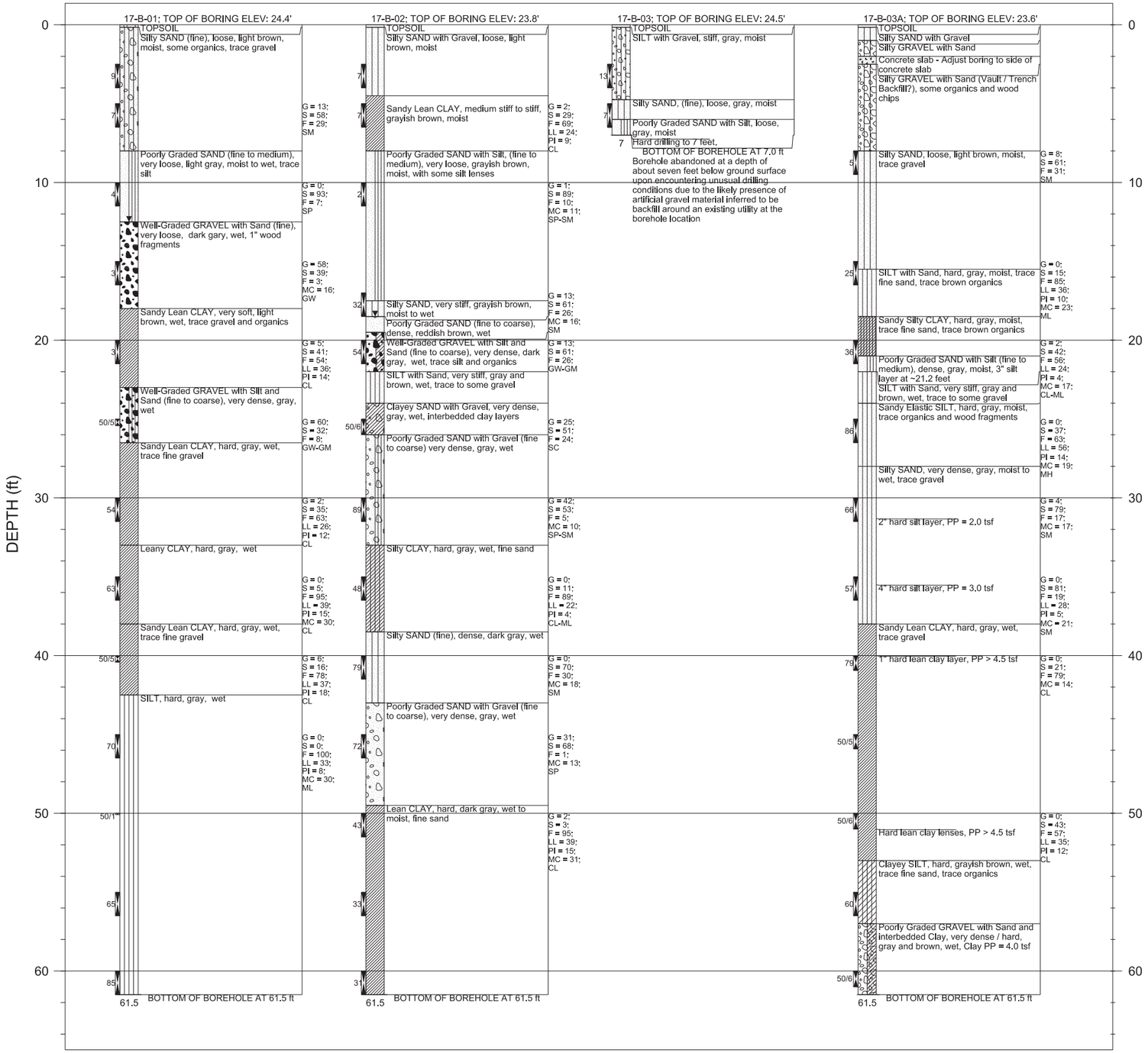
RTA DESIGN SUBMITTAL



A1 BORING LOGS 1

NOT TO SCALE

NOTES:

1. FOR LOCATIONS OF EXPLORATIONS SEE SHEET B-101.
2. BORINGS DESIGNATED "17-B-##" WERE COMPLETED JUNE 2018. FOR ADDITIONAL INFORMATION SEE GEOTECHNICAL INVESTIGATION AND TESTING REPORT, 06 AUGUST 2018 INCLUDED IN SPECIFICATIONS PACKAGE.
3. FIELD CLASSIFICATION BASED ON VISUAL EXAMINATION OF THE SOILS IN GENERAL ACCORDANCE WITH ASTM D2488.
4. SOIL CLASSIFICATION USING LABORATORY TESTS WERE PERFORMED IN GENERAL ACCORDANCE WITH ASTM D2487, UNIFIED SOIL CLASSIFICATION SYSTEM.

LEGEND

- CL - USCS Low Plasticity Clay
- CL-ML - USCS Low Plasticity Silty Clay
- CL-MLS - Sandy Silty Clay (CL-ML)
- CLS - USCS Low Plasticity Sandy Clay
- CONCRETE - Concrete
- GM - USCS Silty Gravel
- GP - USCS Poorly-graded Gravel
- GP-GCS - Poorly Graded Gravel with Clay and Sand (GP-GC)
- GW - USCS Well-graded Gravel
- GW-GCS - Well-Graded Gravel with Clay and Sand (GW-GC)
- GW-GM - USCS Well-graded Gravel with Silt
- ML - USCS Silt
- ML/CL - Clayey Silt (ML/CL)
- ML+S - Silt with Sand (ML)
- MLG - USCS Gravelly Silt
- MLS - USCS Sandy Silt
- SCG - Clayey Sand with Gravel (SC)
- SM - USCS Silty Sand
- SMG - Silty Sand with Gravel (SM)
- SP - USCS Poorly-graded Sand
- SPG - USCS Poorly-graded Gravelly Sand
- SP-SM - USCS Poorly-graded Sand with Silt
- SP-SMG - Poorly Graded Sand with Silt and Gravel (SP-SM)
- TOPSOIL - Topsoil

G % GRAVEL BY WEIGHT
S % SAND BY WEIGHT
F % FINES BY WEIGHT
LL LIQUID LIMIT

PI PLASTICITY INDEX
MC MOISTURE CONTENT
PP POCKET PENETROMETER
86 STANDARD PENETRATION TEST (SPT) BLOW COUNT

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: M. GONIA
DWN BY: M. GONIA
CKD BY: M. SWENSON
SUBMITTED BY: JEFFREY F. DILLON
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ISSUE DATE: 31 MAY 2019
SOLICITATION NO.: W912DW19B0008
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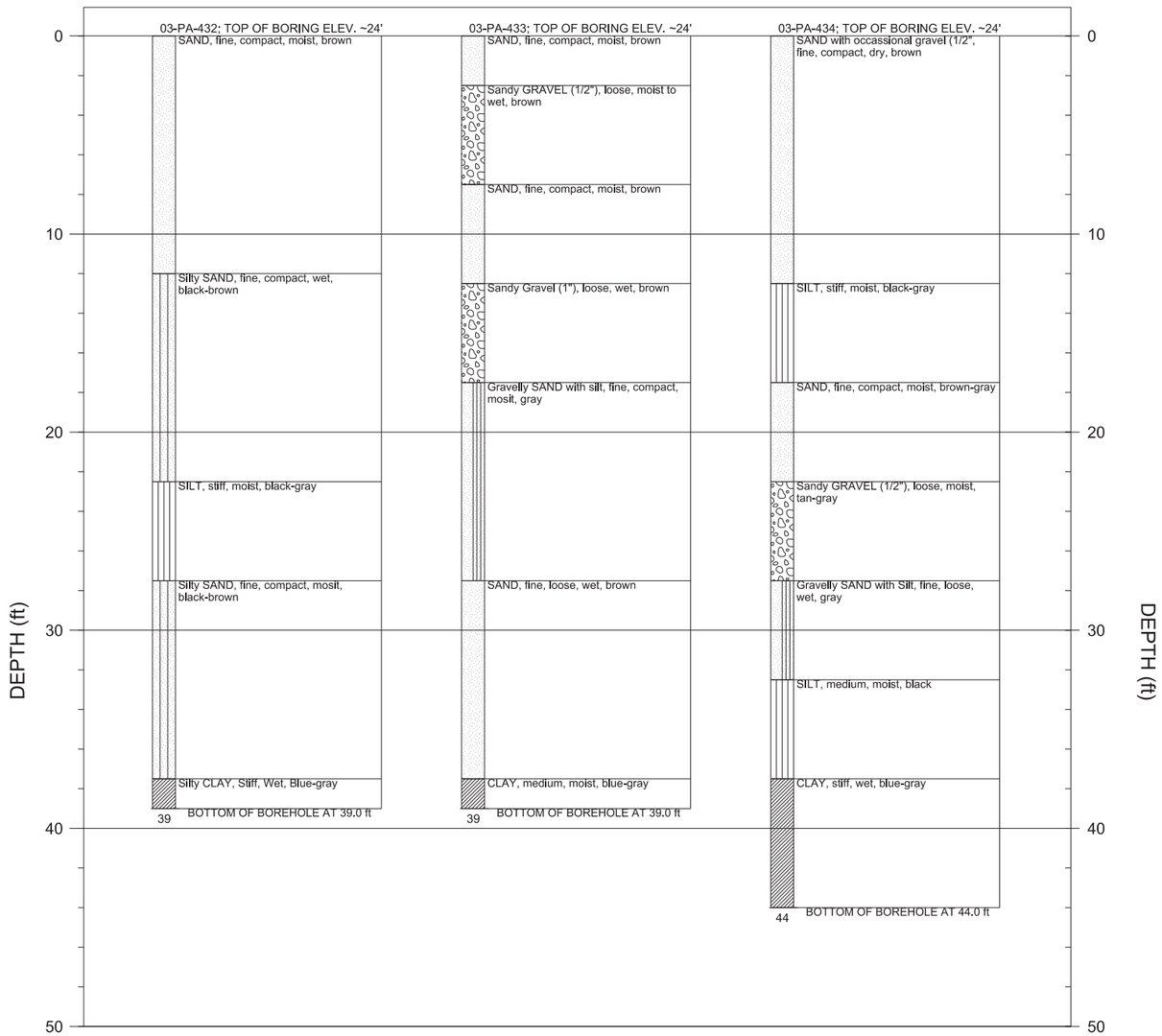
U.S. ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
4735 EAST MARGINAL WAY SOUTH
SEATTLE, WASHINGTON, 98134

FY19 P2-395621 ACEC
ALKI COASTAL EROSION CONTROL
SECTION 103
SEATTLE, WASHINGTON

BORING LOGS

SHEET ID

B-301



B1 BORING LOGS 2

NOT TO SCALE

NOTES:

1. FOR LOCATIONS OF EXPLORATIONS SEE SHEET B-101. TOP OF BORING ELEVATIONS ARE APPROXIMATE. VERTICAL DATUM: NAVD88.
2. BORINGS DESIGNATED "03-PA-##" WERE COMPLETED AUGUST 2003 UTILIZING B-61 MOBILE POWER AUGER.
3. FIELD CLASSIFICATION BASED ON VISUAL EXAMINATION OF THE SOILS IN GENERAL ACCORDANCE WITH ASTM D2488. BLOW COUNTS WERE NOT RECORDED. NO LABORATORY TESTING WAS COMPLETED.

LEGEND

- CL - USCS Low Plasticity Clay
- CL-ML - USCS Low Plasticity Silty Clay
- CL-MLS - Sandy Silty Clay (CL-ML)
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G % GRAVEL BY WEIGHT
S % SAND BY WEIGHT
F % FINES BY WEIGHT
LL LIQUID LIMIT

PI PLASTICITY INDEX
MC MOISTURE CONTENT
PP POCKET PENETROMETER
86 STANDARD PENETRATION TEST (SPT) BLOW COUNT

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

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DWN BY: M. GONIA
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SUBMITTED BY: JEFFREY F. DILLON
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ISSUE DATE: 31 MAY 2019
SOLICITATION NO.: W912DW19B0008
CONTRACT NO.:
FILE NUMBER: E-12-X-54

U.S. ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
4735 EAST MARGINAL WAY SOUTH
SEATTLE, WASHINGTON, 98134

FY19 P2-395621 ACEC
ALKI COASTAL EROSION CONTROL
SECTION 103
SEATTLE, WASHINGTON

BORING LOGS

SHEET ID

B-302

File Path: I:\AECDesigns\FY19_P2-395621_ACEC\Con_Docs\CAD_Sheets\Geotechnical\PN395621_ACEC-B-302.dgn
Plot Date: 2:19:21 PM

RTA DESIGN SUBMITTAL

CIVIL NOTES

LEGEND FOR PLAN SHEETS

EXISTING		PROPOSED
	CENTERLINE	
	MATCHLINE	
	CONSTRUCTION LIMITS	
	HAUL ROUTE	
E	OVERHEAD ELECTRICAL	
EX. 12" WL W	DOMESTIC WATERLINE	
EX. 18" RCP SD	STORM DRAIN LINE	
EX. SS 54" RCP SAN	SANITARY SEWERLINE	
EX. 4" GL G	NATURAL GAS LINE	
20	MAJOR CONTOURS	20
	SPOT ELEVATION	EL 700.50
	FLOW ARROW	2%
	STAGING AREAS	
	RIPRAP TO BE REMOVED	
	CONCRETE	
	GRAVEL	
	RIPRAP	
CB	STORM DRAIN CATCH BASIN	
D	STORM DRAIN MANHOLE	
S	SANITARY MANHOLE	
W	WATER METER	
	WATER VALVE	
	LIGHT POLE	
	GUY ANCHOR	
	SIGN	
	BENCH	
	VEGETATION/TREES	

DRAFTING

A1 / C-304

- DIRECTION OF VIEW
- NUMBER INDICATES SECTION (GRID ROW AND COLUMN)
- PLATE NUMBER WHERE SECTION IS DRAWN

A1 / C-501

- LETTER INDICATES GRID ROW
- NUMBER INDICATES GRID COLUMN
- PLATE NUMBER WHERE DETAIL IS DRAWN

N — NORTH ARROW

0 20 40 — GRAPHIC SCALE (FEET)

UTILITIES CONTACT INFORMATION

COMPANY	PHONE
CALL-BEFORE-YOU-DIG	(800) 424-5555
PUGET SOUND ENERGY	(425) 392-6412
KING COUNTY WASTEWATER TREATMENT DIVISION (MARK LAMPARD)	(206) 477-5414
SEATTLE PUBLIC UTILITIES/ SEATTLE CITY LIGHT	(206) 684-3000

OTHER CONTACT INFORMATION

COMPANY	PHONE
SEATTLE PARKS AND RECREATION (GARRETT FARRELL)	(206) 233-7921
SEATTLE DEPARTMENT OF TRANSPORTATION	(206) 684-7623

CONSTRUCTION NOTES

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD BEFORE STARTING WORK AND SHALL IMMEDIATELY NOTIFY THE CONTRACTING OFFICER REPRESENTATIVE (COR) OF ANY DISCREPANCIES WITH RESPECT TO THE PLANS.
2. BEFORE EXCAVATION OR TRENCHING, CONTRACTOR SHALL SUBMIT A UTILITY LOCATE REQUEST (CALL BEFORE YOU DIG) THROUGH THE STATE OF WASHINGTON UTILITY NOTIFICATION CENTER IN ACCORDANCE WITH STATE OF WASHINGTON LAW: CHAPTER 19.122 RCW - UNDERGROUND UTILITIES. NO EXCAVATION MAY BEGIN UNTIL THE TIME STATED ON THE LOCATE TICKET. THE ONE-CALL PHONE NUMBER FOR UTILITY LOCATES IS: 1-800-424-5555.
3. ANY DAMAGE TO EXISTING SUBSURFACE OR SURFACE FACILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER.
4. THE HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITIES AND IMPROVEMENTS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UTILITIES AND IMPROVEMENTS PRIOR TO EXCAVATION TO AVOID DAMAGE. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING AND PRESERVING THE INTEGRITY OF EXISTING SITE UTILITIES DURING CONSTRUCTION.
5. ALL DISTANCES SHOWN ON THE DRAWINGS AND DESCRIBED IN THE SPECIFICATION SHALL BE INTERPRETED TO REFER TO HORIZONTALLY AND VERTICALLY PROJECTED PLANES, UNLESS OTHERWISE NOTED.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULL RESTORATION OF ALL EXISTING FEATURES DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL CONDITION, UNLESS OTHERWISE INDICATED BY THE CONSTRUCTION DOCUMENTS.

KING COUNTY WASTEWATER TREATMENT DIVISION (WTD) SEWER NOTES (PERTAINING TO EXISTING 54" RCP SANITARY SEWER PIPE)

1. MARK LAMPARD AT KING COUNTY MUST BE CONTACTED AT 206-477-5414 AND AT MARK.LAMPARD@KINGCOUNTY.GOV FIVE (5) WORKING DAYS IN ADVANCE OF THE PRE-CONSTRUCTION CONFERENCE FOR THIS PROJECT.
2. KING COUNTY SHALL BE PROVIDED WITH A COPY OF THE "CONTRACTOR'S UTILITY PROTECTION PLAN" FOR REVIEW AND COMMENT PRIOR TO STARTING WORK OR STAGING ACTIVITIES OVER THE KING COUNTY PIPELINE.
3. MARK LAMPARD AT KING COUNTY MUST BE CONTACTED AT 206-477-5414 THREE (3) WORKING DAYS IN ADVANCE OF CONSTRUCTION ACTIVITY WITHIN 50 FEET OF THE KING COUNTY PIPELINE.
4. A KING COUNTY REPRESENTATIVE SHALL BE ON-SITE DURING CONSTRUCTION OF THE TEMPORARY BEACH ACCESS ROAD, ANY SITE AND/OR GROUND IMPROVEMENTS, AND/OR ANY PROTECTION MEASURES PROPOSED IN THE "CONTRACTOR'S UTILITY PROTECTION PLAN" IN THE VICINITY OF THE KING COUNTY PIPELINE.
5. THE KING COUNTY PIPELINE SHALL BE CCTV INSPECTED TO NASSCO STANDARDS IN THE EXTENTS OF THE PROJECT VICINITY PRIOR TO COMMENCING CONSTRUCTION ACTIVITY AT THE SITE AND PROVIDED TO THE KING COUNTY WTD REPRESENTATIVE ON OR BEFORE THE DAY OF THE PRE-CONSTRUCTION CONFERENCE.
6. THE KING COUNTY PIPELINE SHALL BE CCTV INSPECTED TO NASSCO STANDARDS IN THE EXTENTS OF THE PROJECT VICINITY AFTER CONSTRUCTION OF THE SEAWALL IS COMPLETE AND THE TEMPORARY ACCESS ROAD TO THE BEACH OVER THE KING COUNTY PIPELINE IS NO LONGER IN USE AND HAS BEEN REMOVED. THE POST CONSTRUCTION CCTV SHALL BE PROVIDED TO A KING COUNTY REPRESENTATIVE.
7. KING COUNTY WTD SHALL BE NOTIFIED FIVE (5) WORKING DAYS IN ADVANCE OF THE CCTV INSPECTION WORK. NOTIFY MARK LAMPARD AT 206-477-5414 AND MARK.LAMPARD@KINGCOUNTY.GOV.
8. A KING COUNTY WTD REPRESENTATIVE SHALL BE ON SITE DURING THE CCTV INSPECTIONS.
9. THE KING COUNTY FACILITIES ON AND ADJACENT TO THE PROJECT AREA ARE PERMIT REQUIRED CONFINED SPACES AND ALL APPLICABLE RULES AND REGULATIONS SHALL BE FOLLOWED PRIOR TO AND DURING ANY ENTRY.

ABBREVIATIONS

APPROX	APPROXIMATE	OD	OUTER DIAMETER
BM	BENCH MARK	OHP	OVERHEAD POWER
CB	CATCH BASIN	PCC	PORTLAND CEMENT CONCRETE
COMM	COMMUNICATION	PI	POINT OF INTERSECTION
CONC	CONCRETE	POB	POINT OF BEGINNING
COR	CONTRACTING OFFICER'S REPRESENTATIVE	POE	POINT OF ENDING
		PSI	POUNDS PER SQUARE INCH
DIA, DI	DIAMETER	PVC	POINT OF VERITICAL CURVATURE
E	EAST/EASTING	PVI	POINT OF VERTICAL INTERSECTION
EL	ELEVATION	PVT	POINT OF VERITICAL TANGENCY
EX	EXISTING	R	RADIUS
FG	FINISH GRADE	RCP	REINFORCED CONCRETE PIPE
FT	FEET	S	SLOPE
G	GRADE	SCH	SCHEDULE
H	HORIZONTAL	SE	SOUTHEAST
ID	INNER DIAMETER	SPEC	SPECIFICATION
IE	INVERT ELEVATION	STA	STATION
IN	INCHES	STD	STANDARD
KC	KING COUNTY	TYP	TYPICAL
L	LENGTH	UG	UNDERGROUND
MAX	MAXIMUM	USACE	US ARMY CORPS OF ENGINEERS
MH	MANHOLE	V	VERTICAL
MIN	MINIMUM	W	WEST/WIDTH
N	NORTH/NORTHING	WTD	WASTEWATER TREATMENT DIVISION
NO	NUMBER		
NTS	NOT TO SCALE		

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

U.S. ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
4735 EAST MARGINAL WAY SOUTH
SEATTLE, WASHINGTON, 98134

DESIGNED BY: L. FORD
DWN BY: L. LEJON
CKD BY: J. SKRINDE
SUBMITTED BY: JEFFREY F. DILLON
SIZE: ANSI D
ISSUE DATE: 31 MAY 2019
SOLICITATION NO.: W912DW19B0008
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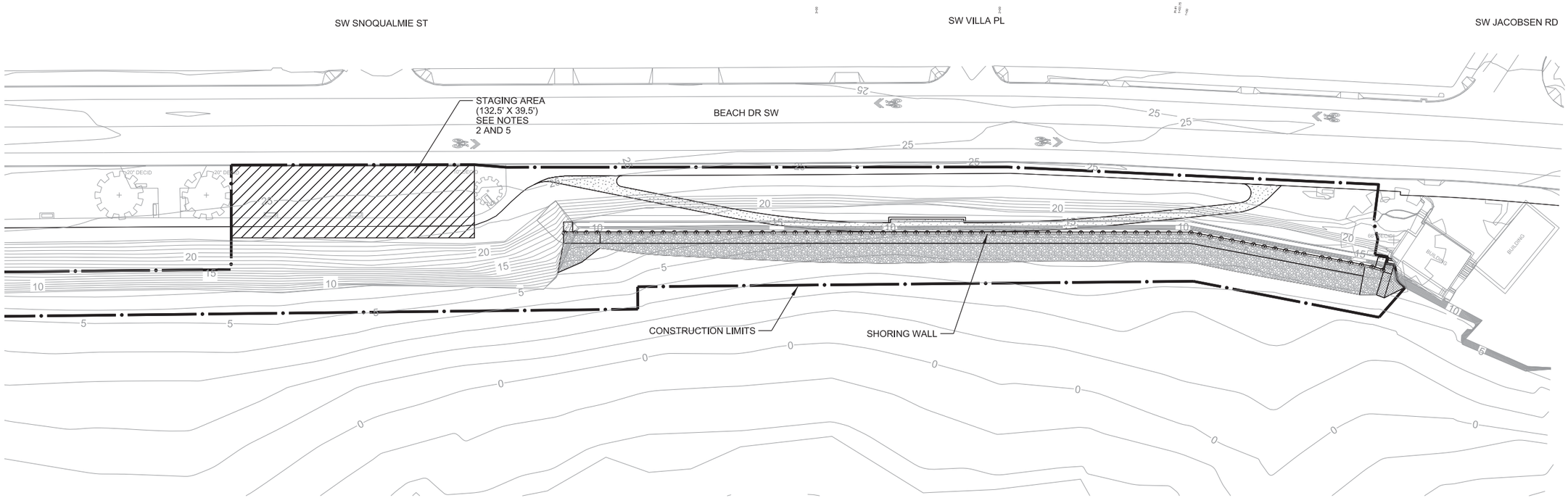
FILE NUMBER: E-12-X-54

FY19 P2-395621 ACEC
ALKI COASTAL EROSION CONTROL
SECTION 103
SEATTLE, WASHINGTON

LEGEND, ABBREVIATIONS, AND GENERAL NOTES

SHEET ID
C-001



D1 ACCESS AND STAGING AREA

SCALE: 1" = 30'

0 30' 60'

NOTES:

1. FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES, SEE SHEET C-001.
2. PURSUANT TO THE SPECIFICATION REQUIREMENTS, THE CONTRACTOR SHALL REMOVE ALL MATERIALS INCLUDING TEMPORARY ACCESS ROAD ROCK AND RESTORE ALL STAGING AREAS USED TO THEIR PRE PROJECT CONDITION.
3. PURSUANT TO THE SPECIFICATION REQUIREMENTS, THE CONTRACTOR SHALL PROVIDE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR REVIEW AND APPROVAL BY THE COR. THE PLAN SHALL CONFORM TO THE WASHINGTON STATE DEPARTMENT OF ECOLOGY SWMMWW AND THE CITY OF SEATTLE DESIGN AND CONSTRUCTION STANDARDS. SEE SPECS 01 57 19 FOR DETAILS.
4. PURSUANT TO THE SPECIFICATION REQUIREMENTS, THE CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN FOR REVIEW AND APPROVAL BY THE COR. SEE SPECIFICATION 01 55 80 FOR DETAILS.
5. SEE SPECIFICATION 01 50 00 FOR CONSTRUCTION SITE PLAN SUBMITTAL REQUIREMENTS.

US Army Corps of Engineers ®

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DESIGNED BY: L. FORD
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FY19 P2-395621 ACEC
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SECTION 103
SEATTLE, WASHINGTON

ACCESS AND STAGING AREA

SHEET ID

C-002

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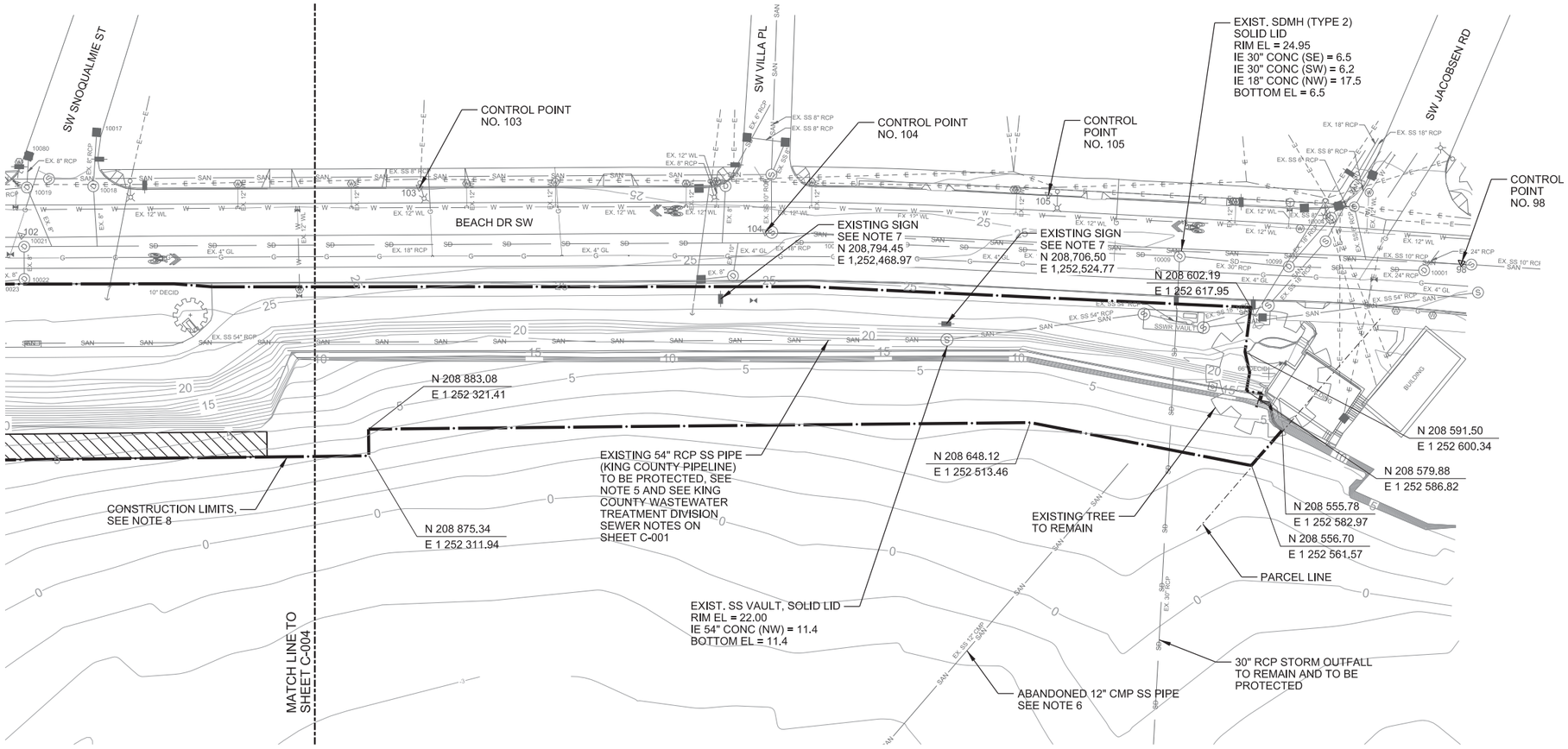
RTA DESIGN SUBMITTAL



C1 EXISTING CONDITIONS AND DEMOLITION PLAN 1

SCALE: 1" = 30'

0 30' 60'

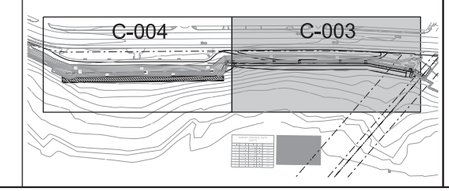
NOTES:

1. FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES, SEE SHEET C-001.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATIONS OF EXISTING TOPOGRAPHY, PARCEL BOUNDARIES AND ALL UTILITIES IN THE FIELD PRIOR TO CLEARING, REMOVAL, OR DISRUPTION OF EXISTING FEATURES.
3. SURVEY WAS PERFORMED IN MAY/JUNE OF 2018 BY DAVID EVANS AND ASSOCIATES, INC. HORIZONTAL CONTROL BASED ON WASHINGTON STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD 83/11. VERTICAL CONTROL BASED ON NAVD88.
4. FOR PROJECT DATUMS, SEE SHEET C-004.
5. PRESERVE AND PROTECT BURIED 54" DIAMETER SEWER PIPE PER SPECIFICATIONS. CONSTRUCTION SHALL NOT COMMENCE WITHOUT APPROVED UTILITY PROTECTION PLAN PER SPECIFICATIONS.
6. IF ABANDONED PIPE ENCOUNTERED DURING CONSTRUCTION, COORDINATE REMOVAL FROM THE PROJECT AREA WITH THE COR.
7. TEMPORARILY REMOVE SIGN AND THEN REPLACE AT SAME LOCATION AFTER FINAL GRADING IS COMPLETE.
8. THE CONTRACTOR SHALL REMAIN WITHIN THE CONSTRUCTION LIMITS SHOWN AT ALL TIMES TO CONSTRUCT THE PROJECT.

SURVEY CONTROL POINTS

PT NO.	NORTHING	EASTING	ELEV. (US FT)
98	208,539.56	1,252,694.30	23.89
103	208,934.14	1,252,422.47	25.07
104	208,797.54	1,252,505.73	24.01
105	208,706.90	1,252,600.15	24.86

KEY PLAN



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EXISTING CONDITIONS AND DEMOLITION PLAN 1

SHEET ID

C-003

File Path: I:\AECDesigns\FY19_P2-395621_ACEC\Con_Docs\CAD_Sheets\Civil\PN395621_ACEC-C-003EXT.dgn
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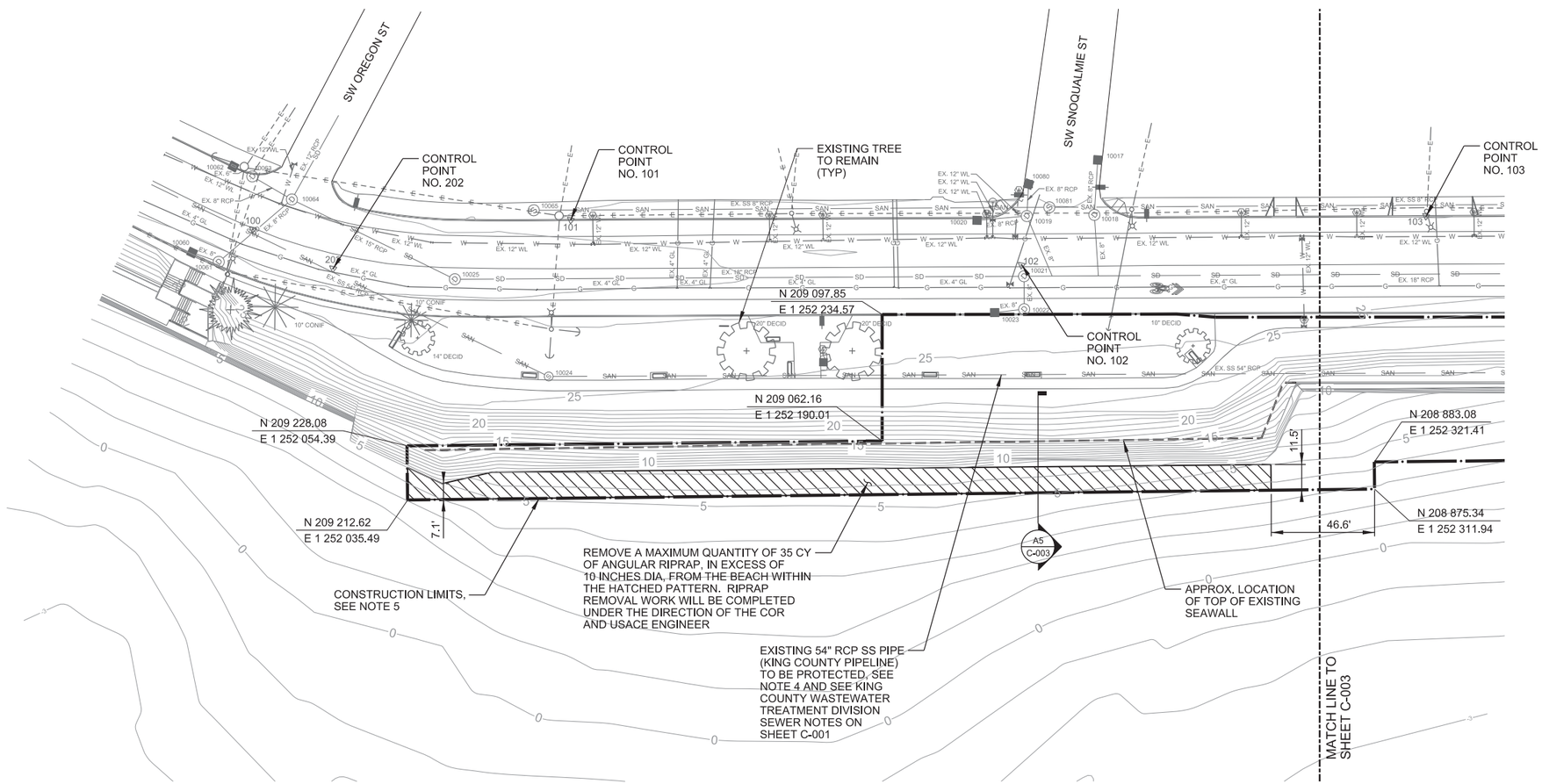
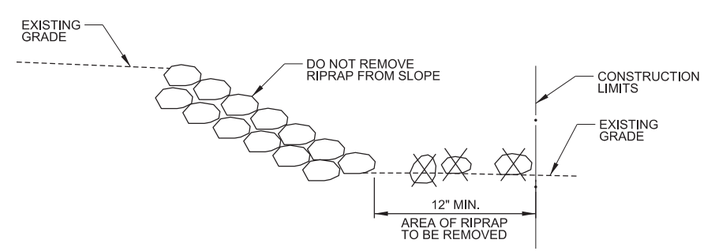
RTA DESIGN SUBMITTAL



C1 EXISTING CONDITIONS AND DEMOLITION PLAN 2

SCALE: 1" = 30'

0 30' 60'



A5 SECTION

NOT TO SCALE

NOTES:

1. FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES, SEE SHEET C-001.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATIONS OF EXISTING TOPOGRAPHY, PARCEL BOUNDARIES, AND ALL UTILITIES IN THE FIELD PRIOR TO CLEARING, REMOVAL, OR DISRUPTION OF EXISTING FEATURES.
3. SURVEY WAS PERFORMED IN MAY/JUNE OF 2018 BY DAVID EVANS AND ASSOCIATES, INC. HORIZONTAL CONTROL BASED ON WASHINGTON STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD 83/11. VERTICAL CONTROL BASED ON NAVD88.
4. PRESERVE AND PROTECT BURIED 54" DIAMETER SEWER PIPE PER SPECIFICATIONS.. CONSTRUCTION SHALL NOT COMMENCE WITHOUT APPROVED UTILITY PROTECTION PLAN PER SPECIFICATIONS.
5. THE CONTRACTOR SHALL REMAIN WITHIN THE CONSTRUCTION LIMITS SHOWN AT ALL TIMES TO CONSTRUCT THE PROJECT.

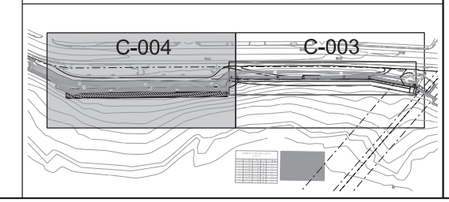
SURVEY CONTROL POINTS

PT NO.	NORTHING	EASTING	ELEV. (US FT)
202	209,304.07	1,252,095.94	25.58
101	209,234.13	1,252,180.09	25.99
102	209,062.76	1,252,291.24	24.95
103	208,934.14	1,252,422.47	25.07

PROJECT DATUMS

DATUM	ELEV. (US FT)
CITY OF SEATTLE PROJECT DATUM	12.5
HIGHEST OBSERVED WATER LEVEL	12.14
MEAN HIGHER HIGH WATER (MHHW)	9.02
MEAN HIGH WATER (MHW)	8.15
MEAN TIDE LEVEL (MTL)	4.32
MEAN LOW WATER (MLW)	0.49
NORTH AMERICAN VERTICAL DATUM (NAVD)	0
MEAN LOWER LOW WATER (MLLW)	-2.34
LOWEST OBSERVED WATER LEVEL	-7.38

KEY PLAN



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: L. FORD
DWN BY: L. LEJON
CKD BY: J. SKRINDE
SUBMITTED BY: JEFFREY F. DILLON
SIZE: ANSI D
ISSUE DATE: 31 MAY 2019
SOLICITATION NO.: W912DW19B0008
CONTRACT NO.:
FILE NUMBER: E-12-X-54

U.S. ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
4735 EAST MARGINAL WAY SOUTH
SEATTLE, WASHINGTON, 98134

FY19 P2-395621 ACEC
ALKI COASTAL EROSION CONTROL
SECTION 103
SEATTLE, WASHINGTON

EXISTING CONDITIONS AND DEMOLITION PLAN 2

SHEET ID

C-004

File Path: I:\AECDesigns\FY19_P2-395621_ACEC\Con_Docs\CAD_Sheets\Civil\PN395621_ACEC-C-004EXT.dgn
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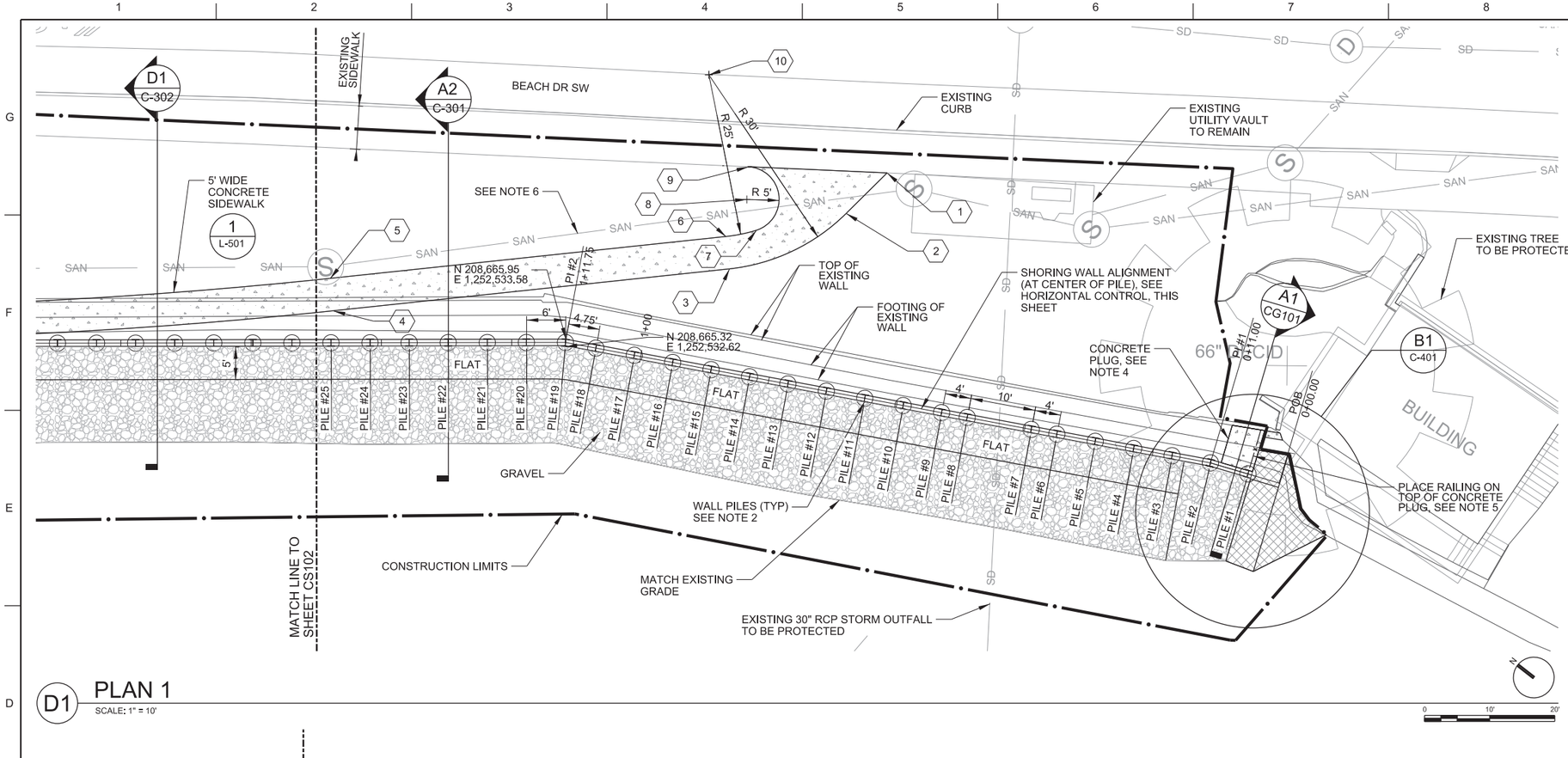
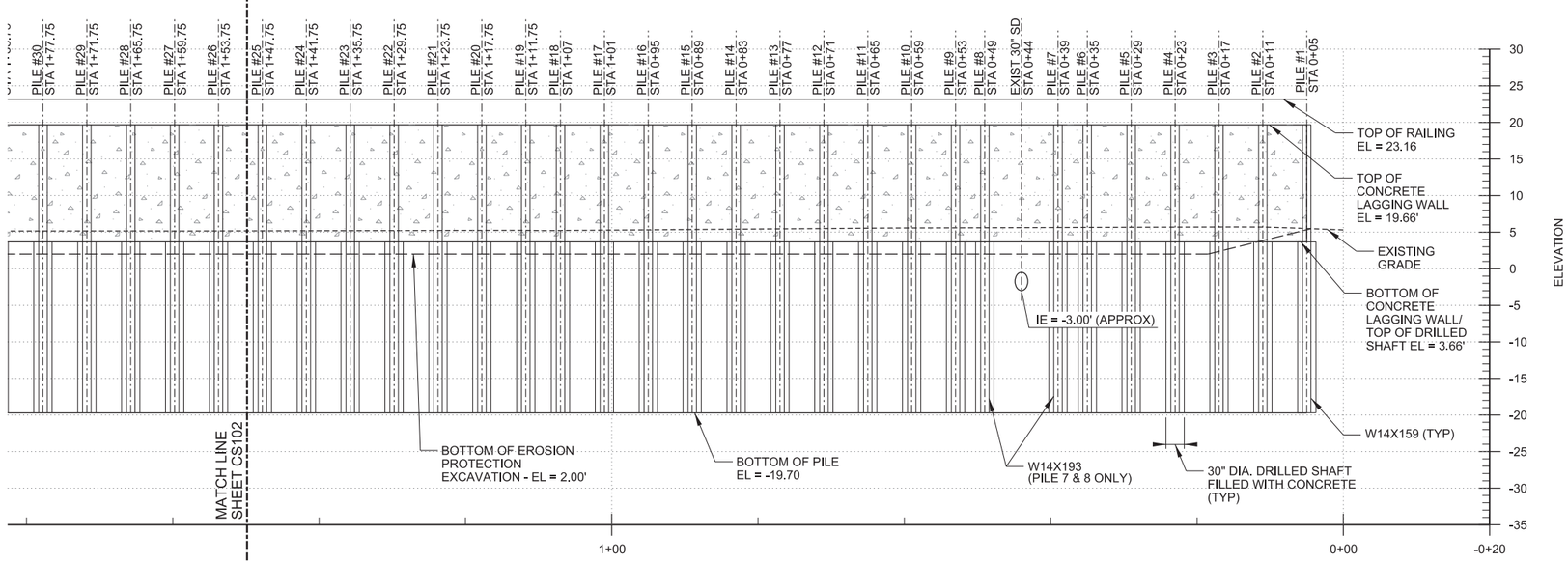


D1 PLAN 1

SCALE: 1" = 10'



A1 PROFILE 1

SCALE: HOR: 1" = 10'
VERT: 1" = 10'

NOTES:

1. FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES, SEE SHEET C-001.
2. PILES SHALL BE 6' O.C., UNLESS SHOWN OTHERWISE. SEE SHEET C-301 FOR PILE COORDINATES. COORDINATES SHOWN AT CENTER OF PILE.
3. FOR SITE FURNISHINGS, SEE LANDSCAPE PLANS.
4. PLACE 5' WIDE CONCRETE PLUG BETWEEN NEW WALL AND EXISTING WALL TO TOP OF EXISTING WALL HEIGHT (APPROX. EL 16.00'). SEE SECTION ON SHEET CS103.
5. SEE C-401 FOR RAILING ON CONCRETE PLUG HORIZONTAL CONTROL.
6. EXISTING 54" RCP SS PIPE TO BE PROTECTED, SEE KING COUNTY WASTEWATER TREATMENT DIVISION NOTES ON SHEET C-001.

SHORING WALL HORIZONTAL ALIGNMENT CONTROL INFORMATION:

POB 0+00.00
NORTHING: 208,566.53
EASTING: 1,252,584.61

PI #1 0+11.00
NORTHING: 208,576.72
EASTING: 1,252,580.47

Tangential Direction: N 22°07'17" W
Tangential Length: 11.00

PI #2 1+11.75
NORTHING: 208,665.66
EASTING: 1,252,533.15

Tangential Direction: N 28°01'01" W
Tangential Length: 100.75

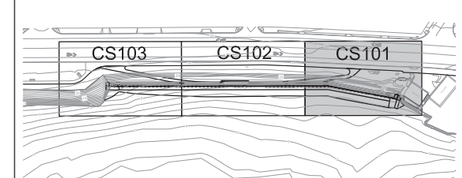
POE 4+98.87
NORTHING: 208,967.86
EASTING: 1,252,291.21

Tangential Direction: N 38°40'50" W
Tangential Length: 387.12

CONCRETE SIDEWALK HORIZONTAL CONTROL

KEY	NORTHING/EASTING	
1	N 208 643.31	E 1 252 584.30
2	N 208 644.33	E 1 252 575.54
3	N 208 653.05	E 1 252 557.67
4	N 208 696.55	E 1 252 514.72
5	N 208 700.06	E 1 252 518.28
6	N 208 656.56	E 1 252 561.22
7	N 208 653.53	E 1 252 564.85
8	N 208 657.65	E 1 252 567.68
9	N 208 660.59	E 1 252 571.72
10	N 208 674.19	E 1 252 579.03

KEY PLAN:



US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: L. FORD
DWN BY: L. LEJON
CKD BY: J. SKRINDE
SUBMITTED BY: JEFFREY F. DILLON
SIZE: ANSI D
ISSUE DATE: 31 MAY 2019
SOLICITATION NO.: W912DW19B0008
CONTRACT NO.:
FILE NUMBER: E-12-A-54

U.S. ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
4735 EAST MARGINAL WAY SOUTH
SEATTLE, WASHINGTON, 98134

FY19 P2-395621 ACEC
ALKI COASTAL EROSION CONTROL
SECTION 103
SEATTLE, WASHINGTON

PLAN AND PROFILE 1

SHEET ID
CS101

File Path: I:\AECDesigns\FY19_P2-395621_ACEC\Con_Docs\CAD_Sheets\Civil\PN395621_ACEC-CS101S01.dgn
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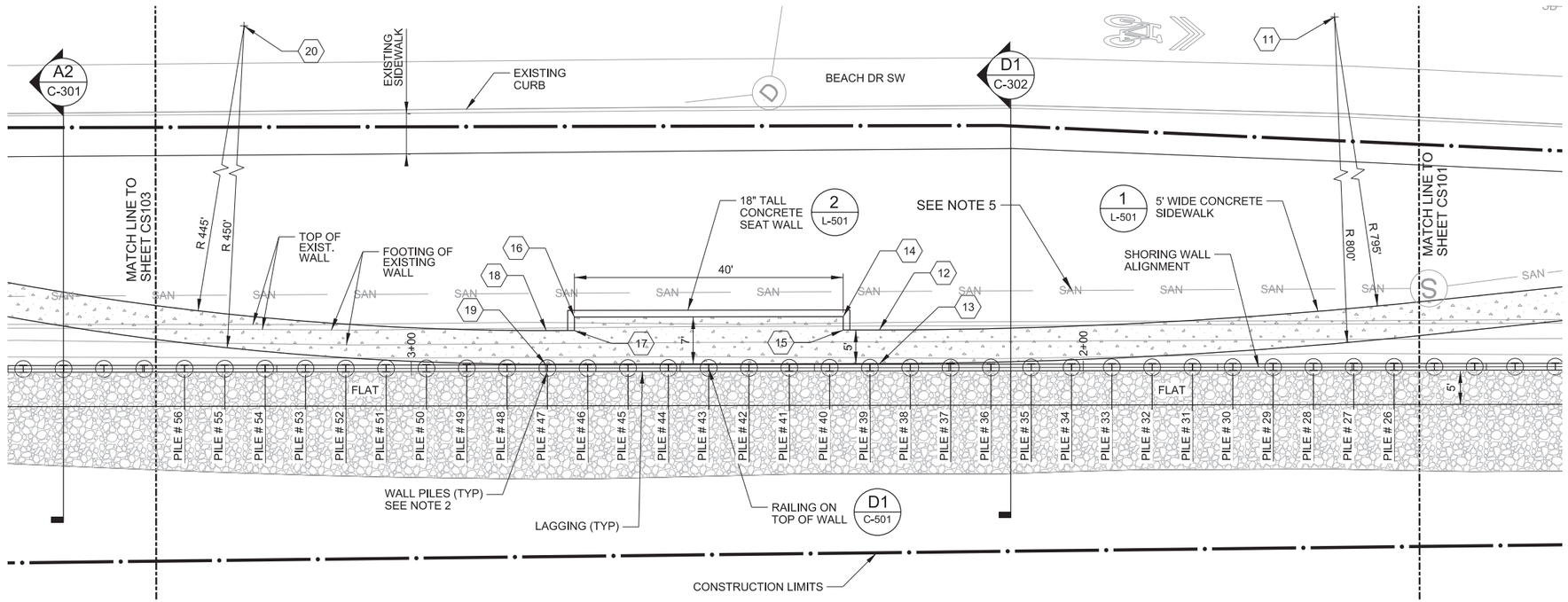
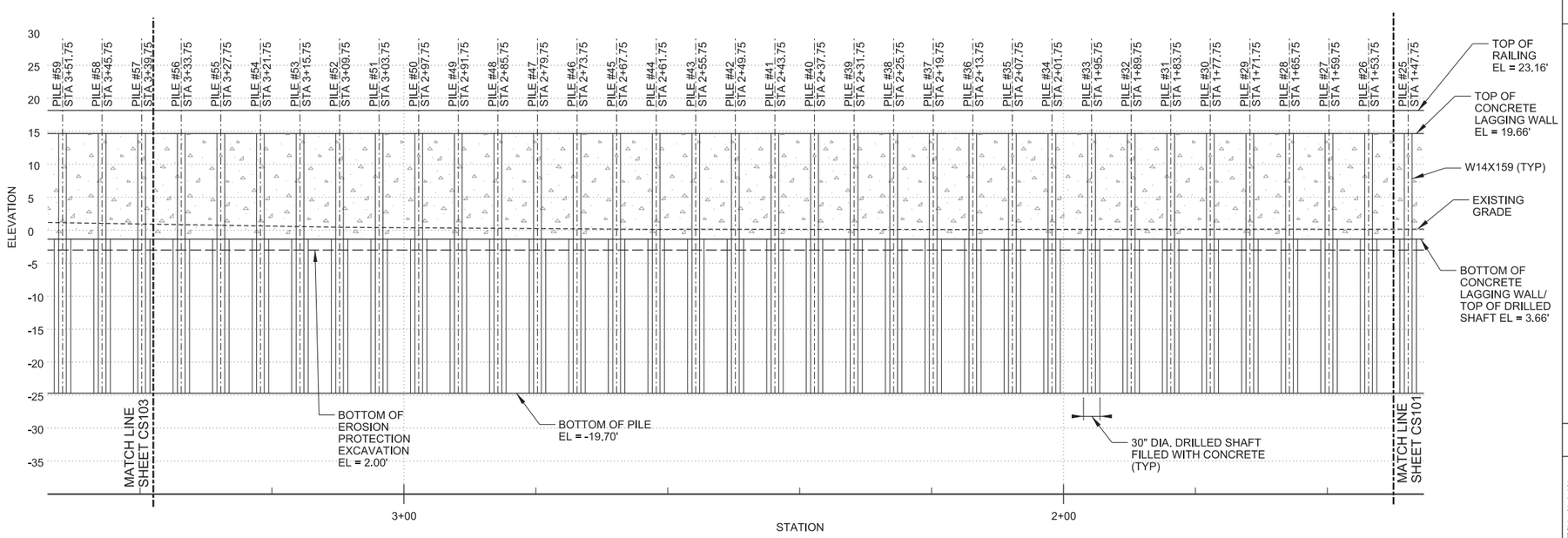
RTA DESIGN SUBMITTAL



D1 PLAN 2

SCALE: 1" = 10'



A1 PROFILE 2

SCALE: HOR: 1" = 10'
VERT: 1" = 10'

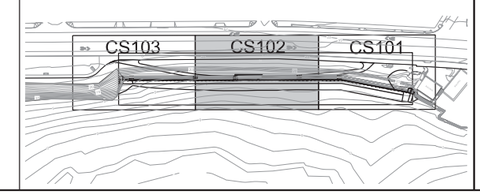
NOTES:

1. FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES, SEE SHEET C-001.
2. PILES SHALL BE 6' O.C., UNLESS SHOWN OTHERWISE. SEE SHEET C-301 FOR PILE COORDINATES. COORDINATES SHOWN AT CENTER OF PILE.
3. FOR SHORING WALL ALIGNMENT HORIZONTAL CONTROL SEE SHEET CS101.
4. FOR SITE FURNISHINGS, SEE LANDSCAPE PLANS.
5. EXISTING 54" RCP SS PIPE TO BE PROTECTED, SEE KING COUNTY WASTEWATER TREATMENT DIVISION SEWER NOTES ON SHEET C-001.

CONCRETE SIDEWALK HORIZONTAL CONTROL

KEY	NORTHING/EASTING	
11	N 209 258.61	E 1 253 084.01
12	N 208 761.75	E 1 252 463.40
13	N 208 758.62	E 1 252 459.50
14	N 208 767.19	E 1 252 461.61
15	N 208 765.95	E 1 252 460.05
16	N 208 798.42	E 1 252 436.61
17	N 208 797.17	E 1 252 435.05
18	N 208 800.44	E 1 252 432.43
19	N 208 797.31	E 1 252 428.52
20	N 209 078.56	E 1 252 779.81

KEY NOTES:



US Army Corps of Engineers ®

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U.S. ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
4735 EAST MARGINAL WAY SOUTH
SEATTLE, WASHINGTON 98134

FY19 P2-395621 ACEC
ALKI COASTAL EROSION CONTROL
SECTION 103
SEATTLE, WASHINGTON

PLAN AND PROFILE 2

SHEET ID
CS102

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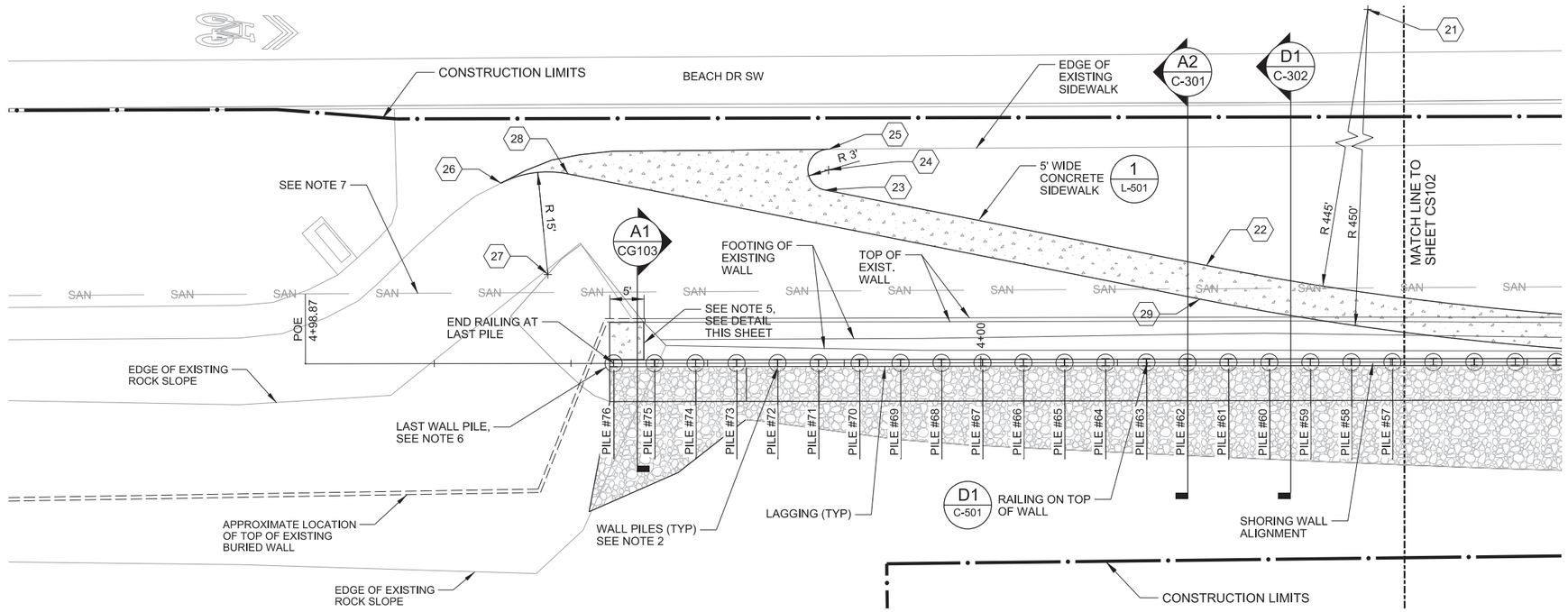
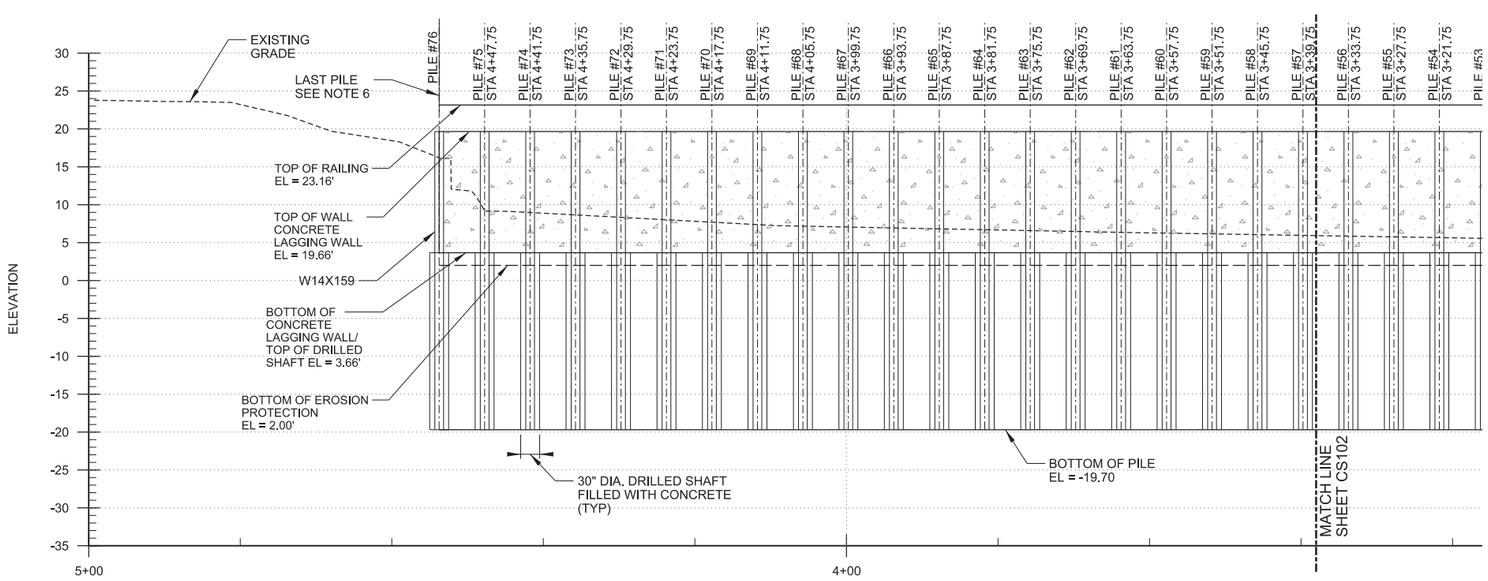


D1 PLAN 3

SCALE: 1" = 10'



A1 PROFILE 3

SCALE: HOR: 1" = 10'
VERT: 1" = 10'

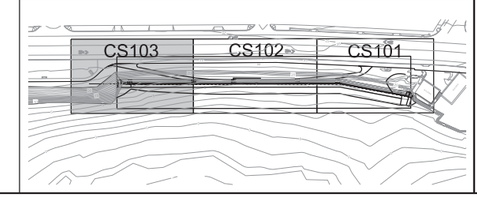
NOTES:

1. FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES, SEE SHEET C-001.
2. PILES SHALL BE 6' O.C., UNLESS SHOWN OTHERWISE. SEE SHEET C-301 FOR PILE COORDINATES. COORDINATES SHOWN AT CENTER OF PILE.
3. FOR SHORING WALL ALIGNMENT HORIZONTAL CONTROL, SEE SHEET CS101.
4. FOR SITE FURNISHINGS, SEE LANDSCAPE PLANS.
5. PLACE 5' WIDE CONCRETE PLUG BETWEEN NEW WALL AND EXISTING WALL TO TOP OF EXISTING WALL HEIGHT (APPROX. EL. 17.00').
6. LAST WALL PILE PLACEMENT TO BE FIELD LOCATED SO THAT THE EDGE OF THE AUGERED HOLE IS WITHIN 12" OF EXISTING BURIED WALL. ORDER LAGGING BASED ON FIELD DIMENSION.
7. EXISTING 54" RCP SS PIPE TO BE PROTECTED. SEE KING COUNTY WASTEWATER TREATMENT DIVISION SEWER NOTES ON SHEET C-001.

CONCRETE SIDEWALK HORIZONTAL CONTROL

KEY	NORTHING/EASTING	
21	N 209,078.56	E 1,252,779.81
22	N 208,873.80	E 1,252,384.72
23	N 208,924.37	E 1,252,358.51
24	N 208,925.75	E 1,252,361.17
25	N 208,927.65	E 1,252,363.50
26	N 208,961.99	E 1,252,329.74
27	N 208,948.32	E 1,252,323.58
28	N 208,955.27	E 1,252,336.86
29	N 208,871.50	E 1,252,380.28

KEY PLAN:



US Army Corps of Engineers ®

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U.S. ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
4735 EAST MARGINAL WAY SOUTH
SEATTLE, WASHINGTON, 98134

FY19 P2-395621 ACEC
ALKI COASTAL EROSION CONTROL
SECTION 103
SEATTLE, WASHINGTON

PLAN AND PROFILE 3

SHEET ID
CS103

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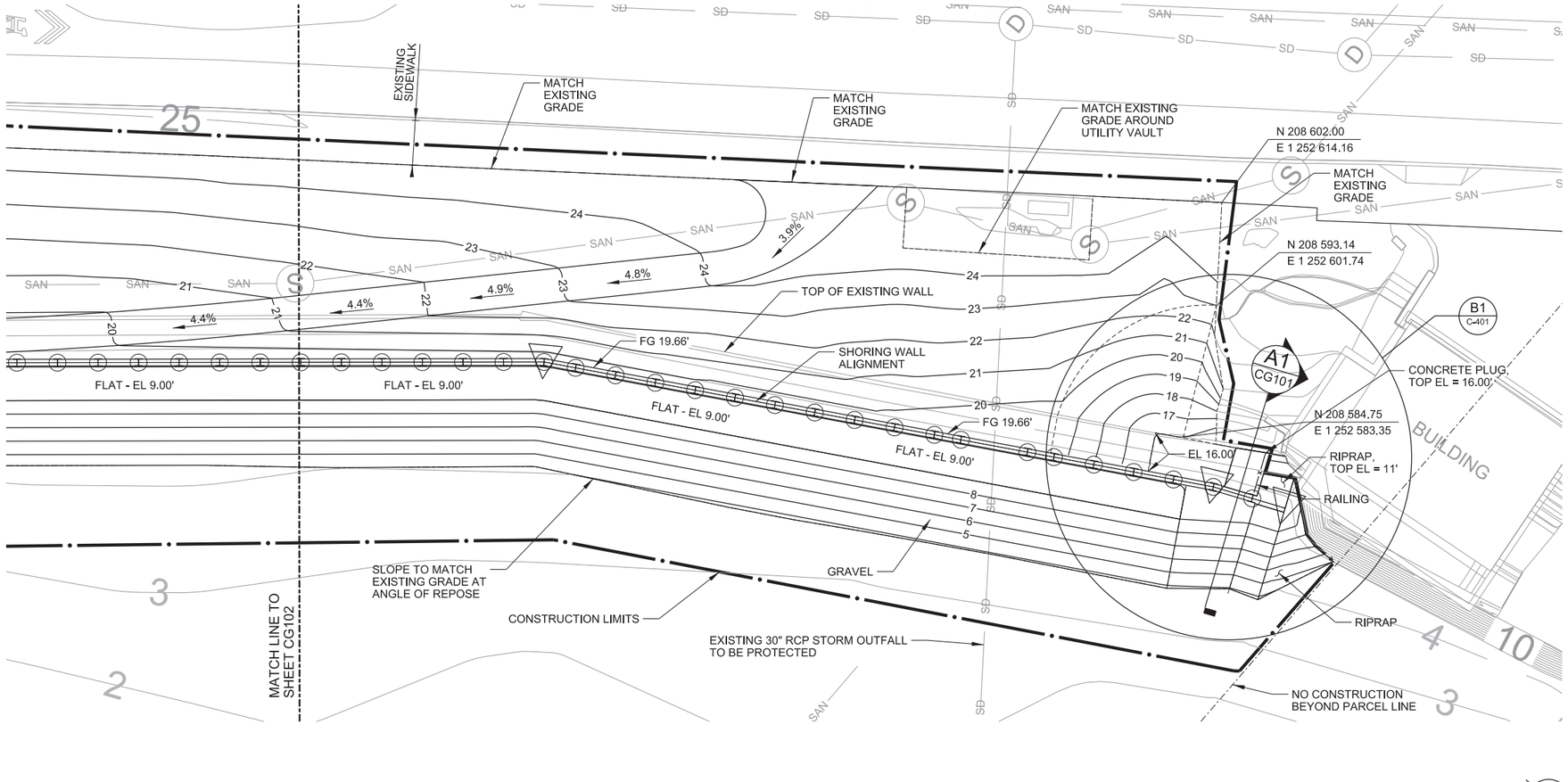
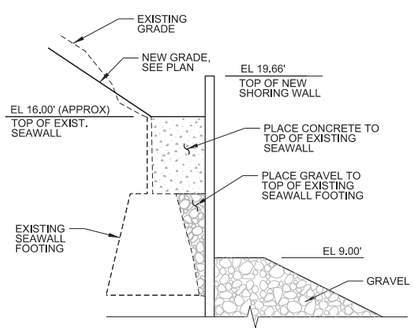


C1 GRADING PLAN 1

SCALE: 1" = 10'



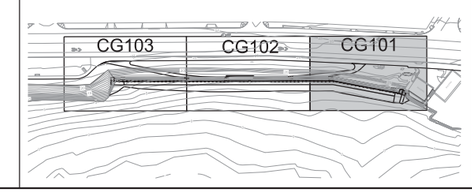
A1 CONCRETE PLUG - SOUTH

NOT TO SCALE

NOTES:

1. FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES, SEE SHEET C-001.
2. FOR SITE FURNISHINGS, SEE LANDSCAPE PLANS.

KEY PLAN:



US Army Corps of Engineers ®

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U.S. ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
4735 EAST MARGINAL WAY SOUTH
SEATTLE, WASHINGTON, 98134

FY19 P2-395621 ACEC
ALKI COASTAL EROSION CONTROL
SECTION 103
SEATTLE, WASHINGTON

GRADING PLAN 1

SHEET ID

CG101

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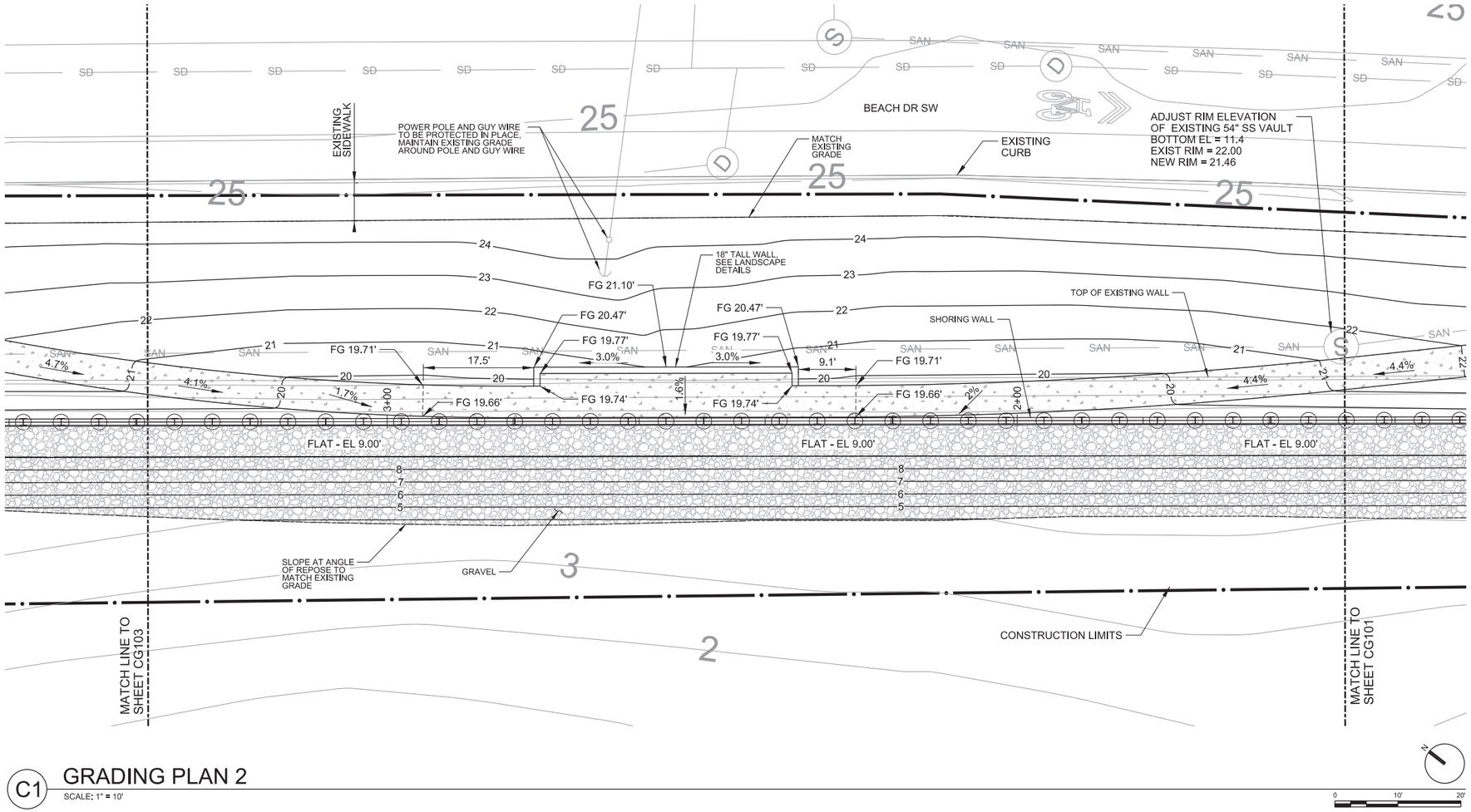


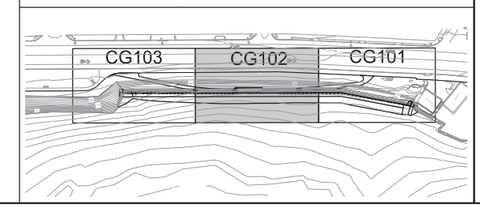
C1 GRADING PLAN 2

SCALE: 1" = 10'

NOTES:

1. FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES, SEE SHEET C-001.
2. FOR SITE FURNISHINGS, SEE LANDSCAPE PLANS.

KEY NOTES:



US Army Corps of Engineers ®

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U.S. ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
4735 EAST MARGINAL WAY SOUTH
SEATTLE, WASHINGTON, 98134

FY19 P2-395621 ACEC
ALKI COASTAL EROSION CONTROL
SECTION 103
SEATTLE, WASHINGTON

GRADING PLAN 2

SHEET ID

CG102

File Path: I:\AECDesigns\FY19_P2-395621_ACEC\Con_Docs\CAD_Sheets\Civil\PN395621_ACEC-CG102G02.dgn
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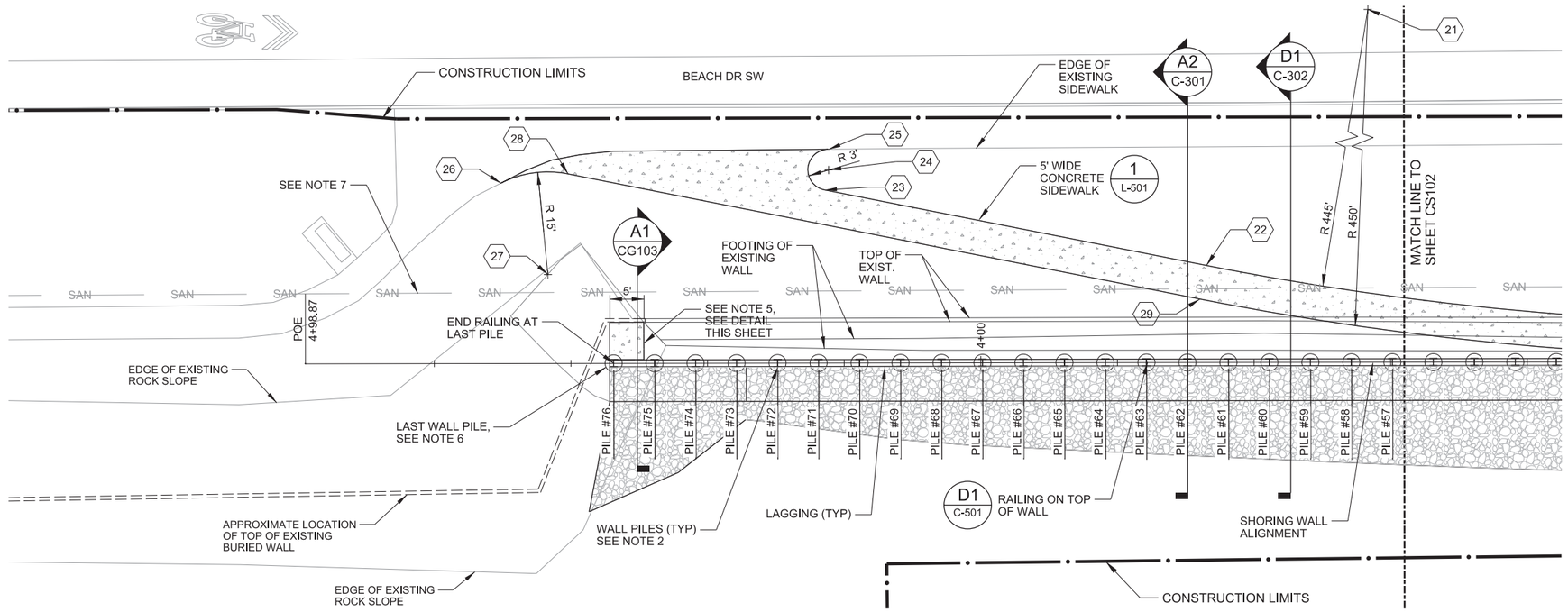
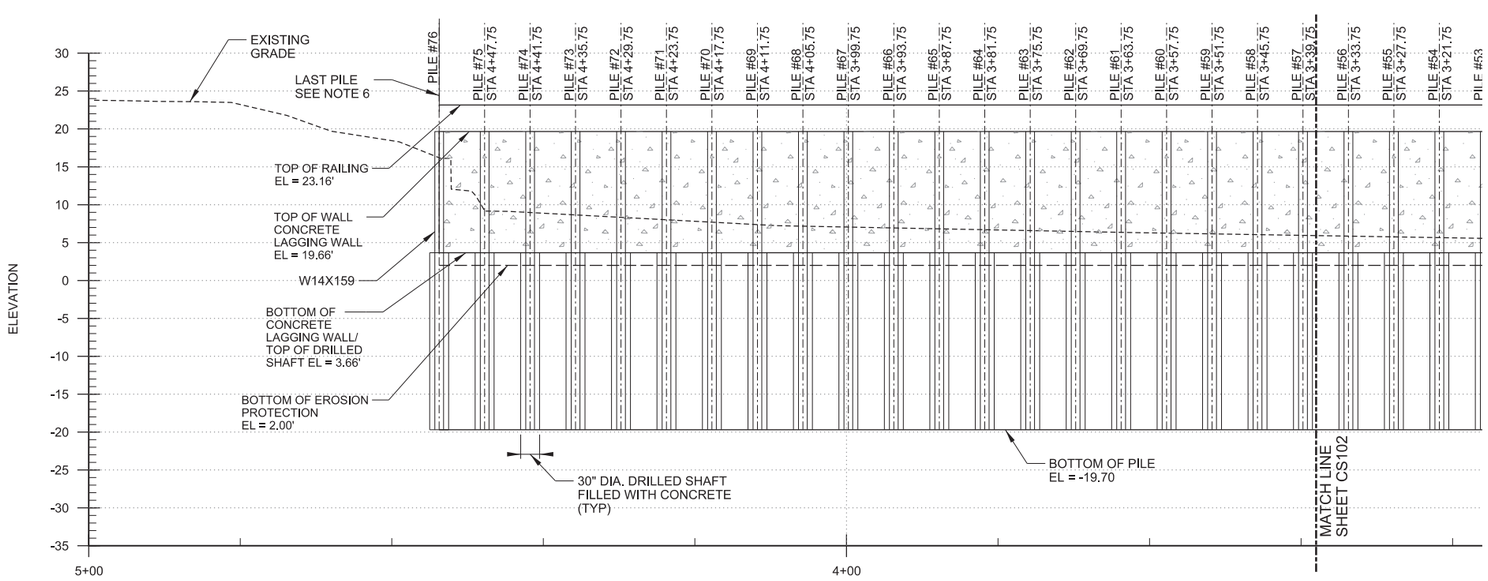
RTA DESIGN SUBMITTAL



D1 PLAN 3

SCALE: 1" = 10'



A1 PROFILE 3

SCALE: HOR: 1" = 10'
VERT: 1" = 10'

NOTES:

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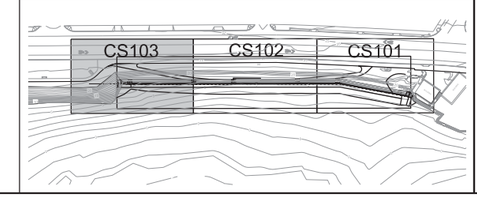
CONCRETE SIDEWALK HORIZONTAL CONTROL

KEY	NORTHING/EASTING	
21	N 209,078.56	E 1,252,779.81
22	N 208,873.80	E 1,252,384.72
23	N 208,924.37	E 1,252,358.51
24	N 208,925.75	E 1,252,361.17
25	N 208,927.65	E 1,252,363.50
26	N 208,961.99	E 1,252,329.74
27	N 208,948.32	E 1,252,323.58
28	N 208,955.27	E 1,252,336.86
29	N 208,871.50	E 1,252,380.28

KEY PLAN:



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4735 EAST MARGINAL WAY SOUTH
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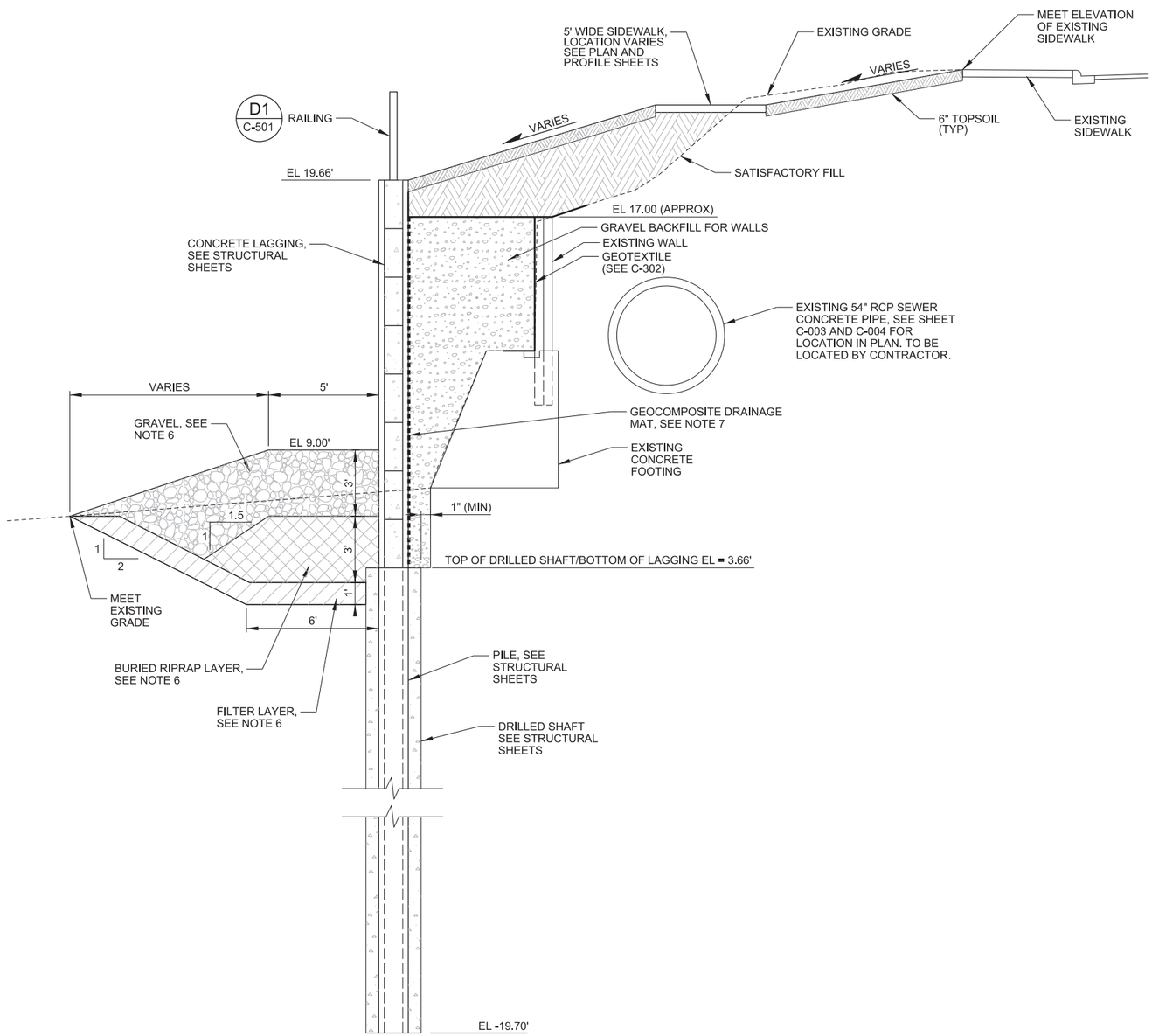
ALKI COASTAL EROSION CONTROL
SECTION 103
SEATTLE, WASHINGTON

PLAN AND PROFILE 3

SHEET ID
CS103

File Path: I:\AECDesigns\FY19_P2-395621_ACEC\Con_Docs\CAD_Sheets\Civil\PN395621_ACEC-CS103S03.dgn
Plot Date: 2:16:38 PM

RTA DESIGN SUBMITTAL



A2 TYPICAL WALL SECTION WITH PILE

NOT TO SCALE

GENERAL NOTES:

1. THE EXCAVATION FOR PLACEMENT OF FILTER AND RIPRAP SHALL NOT BE LEFT OPEN OUTSIDE OF WORK HOURS.
2. THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARY STABILITY OF THE EXISTING WALL DURING CONSTRUCTION. AT A MINIMUM, THE SOLDIER PILE WALL (INCLUDING LAGGING AND BACKFILL) SHALL BE CONSTRUCTED TO ELEVATION 7' (BUT NOT HIGHER THAN ELEVATION 12') PRIOR TO EXCAVATION FOR PLACEMENT OF THE FILTER AND RIPRAP. DURING LAGGING INSTALLATION, LIMIT EXCAVATION TO ONLY THAT NECESSARY TO INSTALL LAGGING. SEE SPECIFICATION SECTION 31 00 00 FOR EXISTING WALL MONITORING REQUIREMENTS DURING CONSTRUCTION.
3. CONSTRUCTION EQUIPMENT SHALL NOT INCUR LOADING WITHIN 20 FEET OF THE EXISTING WALL ALIGNMENT UNTIL THE PERMANENT WALL HAS BEEN CONSTRUCTED.
4. TEMPORARY OR PERMANENT CONSTRUCTION SURCHARGE LOADING WITHIN 20 FEET OF THE PERMANENT WALL SHALL NOT EXCEED 250 psf.
5. PRESERVE AND PROTECT BURIED 54" DIAMETER SEWER PIPE PER SPECIFICATIONS. CONSTRUCTION SHALL NOT COMMENCE WITHOUT APPROVED UTILITY PROTECTION PLAN PER SPECIFICATIONS.
6. SEE SPECIFICATIONS FOR MATERIAL GRADATION.
7. GEOCOMPOSITE DRAINAGE MAT SHALL BE PLACED BETWEEN CONCRETE LAGGING AND GRAVEL BACKFILL FOR WALL, AS SHOWN.

SHORING WALL PILE COORDINATES (COORDINATES ARE AT CENTER OF PILE)

PILE NO.	NORTHING	EASTING	PILE NO.	NORTHING	EASTING
001	208,571.16	1,252,582.73	039	208,759.34	1,252,458.15
002	208,576.73	1,252,580.49	040	208,764.02	1,252,454.40
003	208,582.02	1,252,577.65	041	208,768.71	1,252,450.65
004	208,587.32	1,252,574.84	042	208,773.39	1,252,446.90
005	208,592.61	1,252,572.02	043	208,778.07	1,252,443.15
006	208,597.91	1,252,569.20	044	208,782.76	1,252,439.40
007	208,601.44	1,252,567.32	045	208,787.44	1,252,435.65
008	208,610.27	1,252,562.62	046	208,792.13	1,252,431.90
009	208,613.80	1,252,560.74	047	208,796.81	1,252,428.15
010	208,619.10	1,252,557.93	048	208,801.49	1,252,424.40
011	208,624.39	1,252,555.11	049	208,806.18	1,252,420.65
012	208,629.69	1,252,552.29	050	208,810.86	1,252,416.90
013	208,634.99	1,252,549.47	051	208,815.54	1,252,413.15
014	208,640.28	1,252,546.65	052	208,820.23	1,252,409.40
015	208,645.58	1,252,543.83	053	208,824.91	1,252,405.65
016	208,650.88	1,252,541.01	054	208,829.60	1,252,401.90
017	208,656.17	1,252,538.20	055	208,834.28	1,252,398.15
018	208,661.47	1,252,535.38	056	208,838.96	1,252,394.40
019	208,665.67	1,252,533.16	057	208,843.65	1,252,390.65
020	208,670.34	1,252,529.40	058	208,848.33	1,252,386.90
021	208,675.03	1,252,525.65	059	208,853.02	1,252,383.15
022	208,679.71	1,252,521.90	060	208,857.70	1,252,379.40
023	208,684.40	1,252,518.15	061	208,862.38	1,252,375.65
024	208,689.08	1,252,514.40	062	208,867.07	1,252,371.90
025	208,693.76	1,252,510.65	063	208,871.75	1,252,368.15
026	208,698.45	1,252,506.90	064	208,876.43	1,252,364.40
027	208,703.13	1,252,503.15	065	208,881.12	1,252,360.66
028	208,707.82	1,252,499.40	066	208,885.80	1,252,356.91
029	208,712.50	1,252,495.65	067	208,890.49	1,252,353.16
030	208,717.18	1,252,491.90	068	208,895.17	1,252,349.41
031	208,721.87	1,252,488.15	069	208,899.85	1,252,345.66
032	208,726.55	1,252,484.40	070	208,904.54	1,252,341.91
033	208,731.24	1,252,480.65	071	208,909.22	1,252,338.16
034	208,735.92	1,252,476.90	072	208,913.91	1,252,334.41
035	208,740.60	1,252,473.15	073	208,918.59	1,252,330.66
036	208,745.29	1,252,469.40	074	208,923.27	1,252,326.91
037	208,749.97	1,252,465.65	075	208,927.96	1,252,323.16
038	208,754.65	1,252,461.90	076	208,932.64	1,252,319.41

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: L. FORD
DWN BY: A. ROTHERY
CKD BY: J. SKRINDE
SUBMITTED BY: JEFFREY F. DILLON
SIZE: ANSI D
ISSUE DATE: 31 MAY 2019
SOLICITATION NO.: W912DW19B0008
CONTRACT NO.:
FILE NUMBER: E-12-X-54

U.S. ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
4735 EAST MARGINAL WAY SOUTH
SEATTLE, WASHINGTON, 98134

FY19 P2-395621 ACEC
ALKI COASTAL EROSION CONTROL
SECTION 103
SEATTLE, WASHINGTON

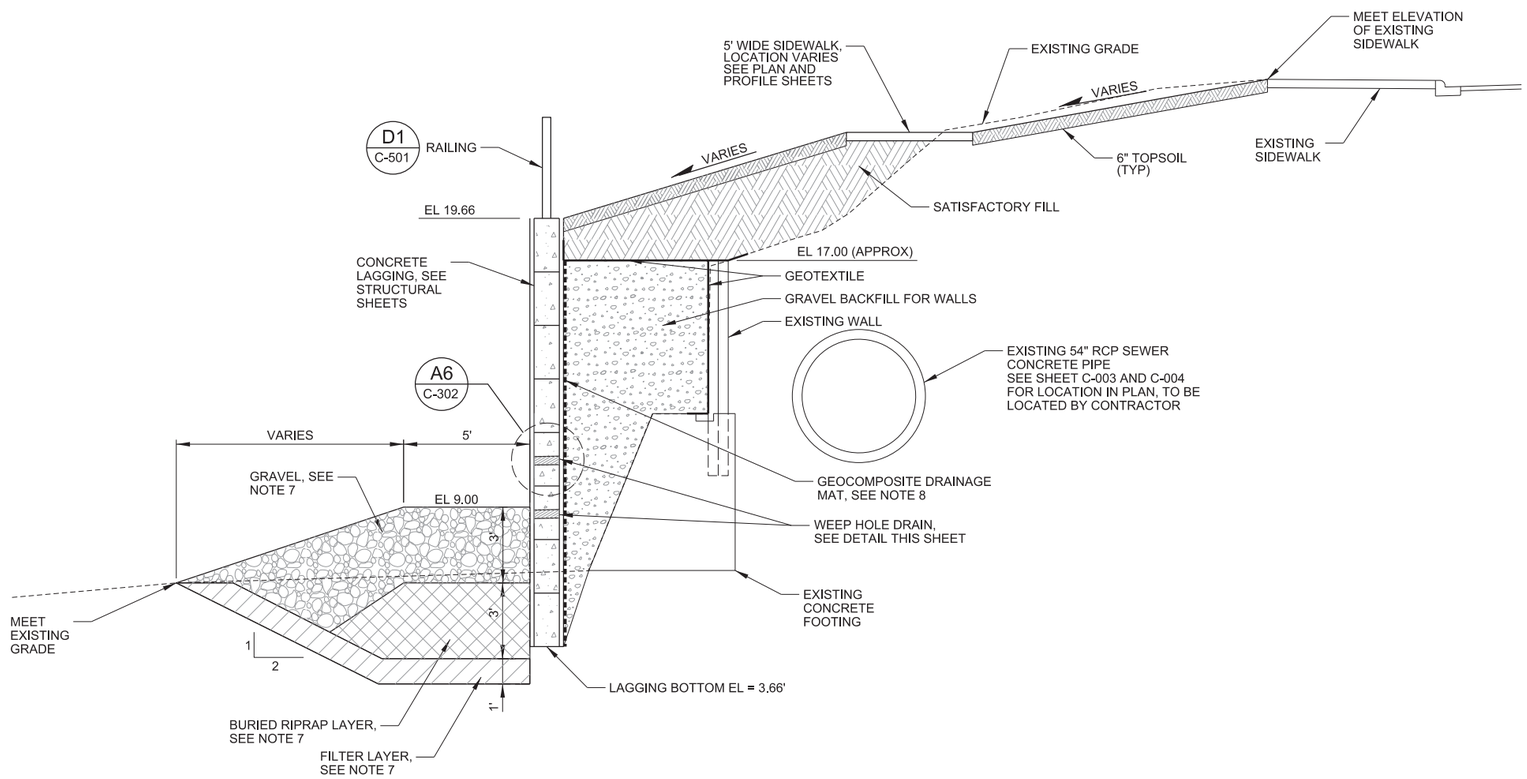
TYPICAL WALL SECTION 1

SHEET ID

C-301

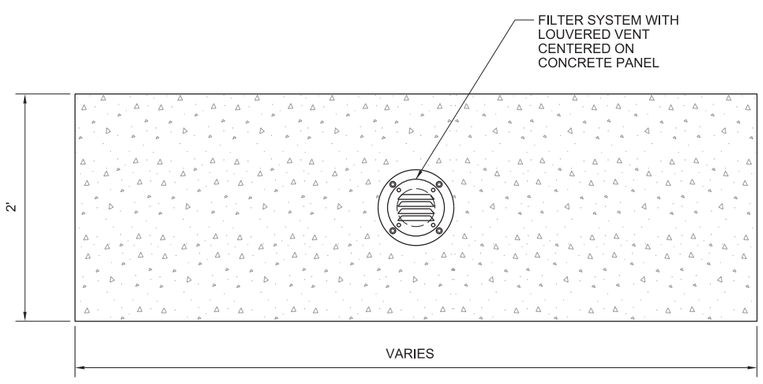
File Path: I:\AECDesigns\FY19_P2-395621_ACEC\Con_Docs\CAD_Sheets\Civil\PN395621_ACEC-C-301X01.dgn
Plot Date: 2:12:28 PM

RTA DESIGN SUBMITTAL



D1 TYPICAL LAGGING SECTION

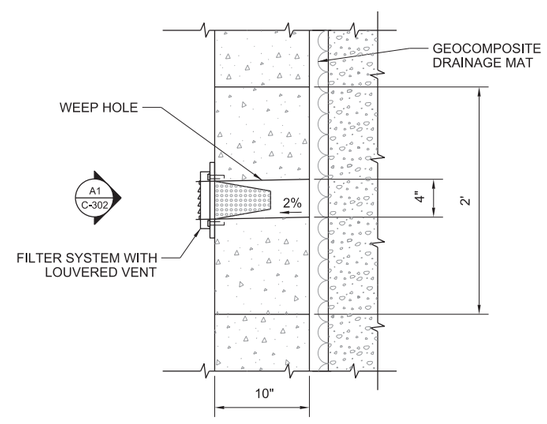
NOT TO SCALE



A1 WEEP HOLE DRAIN ELEVATION

1 1/2" = 1'-0"

0 6" 1' 2'



A6 WEEP HOLE DRAIN SECTION

1 1/2" = 1'-0"

0 6" 1' 2'

GENERAL NOTES:

1. PROVIDE WEEP HOLE DRAINS ON THE THIRD AND FOURTH ROW OF LAGGING FROM THE BOTTOM.
2. DRAINS SHALL BE CENTERED ON THE LAGGING.
3. DRILL 4" DIA WEEP HOLE AT 2% SLOPE (+/- 1%).
4. MOUNT FILTER SYSTEM TO CONCRETE LAGGING PER MANUFACTURER SPECIFICATIONS.
5. FILTER SYSTEM SHALL BE STAINLESS STEEL WITH BACKFLOW PREVENTER. INSTALL JET FILTER SYSTEM: 4" 315 STAINLESS STEEL WITH CHECK VALVE AND LOUVERED VENT OR SIMILAR.
6. EXTEND GEOTEXTILE MINIMUM 12 INCHES BEYOND CORNERS AS SHOWN.
7. SEE SPECIFICATIONS FOR MATERIAL GRADATION.
8. GEOCOMPOSITE DRAINAGE MAT SHALL BE PLACED BETWEEN CONCRETE LAGGING AND GRAVEL BACKFILL FOR WALL, AS SHOWN.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: L. FORD
DWN BY: A. ROTHERY
CKD BY: J. SKRINDE
SUBMITTED BY: JEFFREY F. DILLON
SIZE: ANSI D
ISSUE DATE: 31 MAY 2019
SOLICITATION NO.: W912DW19B0008
CONTRACT NO.:
FILE NUMBER: E-12-X-54

U.S. ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
4735 EAST MARGINAL WAY SOUTH
SEATTLE, WASHINGTON, 98134

FY19 P2-395621 ACEC
ALKI COASTAL EROSION CONTROL
SECTION 103
SEATTLE, WASHINGTON

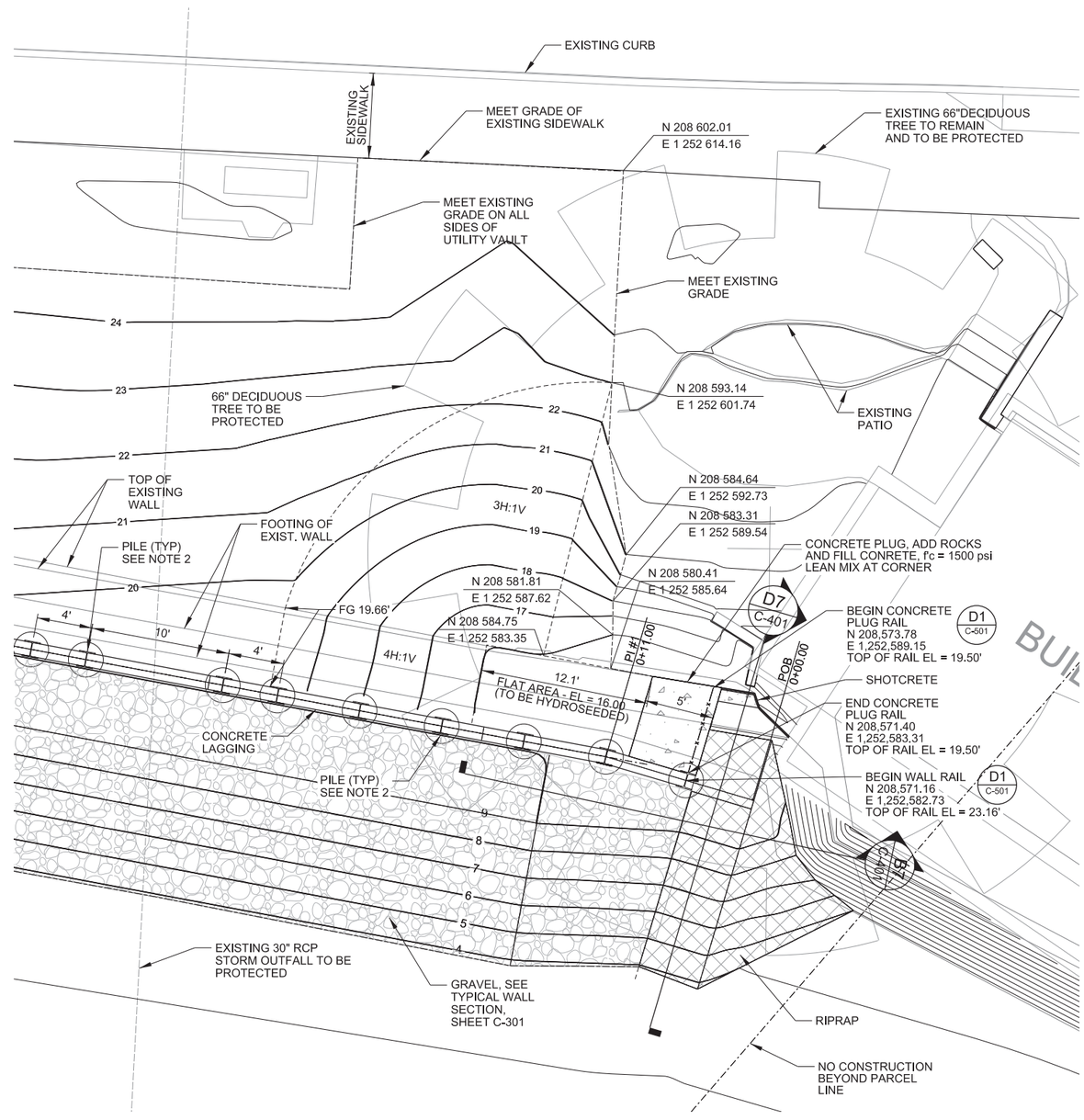
TYPICAL WALL SECTION 2

SHEET ID

C-302

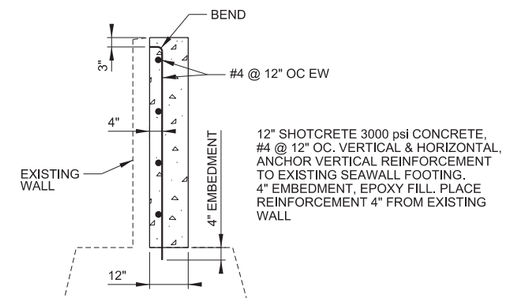
File Path: I:\AECDesigns\FY19_P2-395621_ACEC\Con_Docs\CAD_Sheets\Civil\PN395621_ACEC-C-302X02.dgn
Plot Date: 2:12:54 PM

RTA DESIGN SUBMITTAL



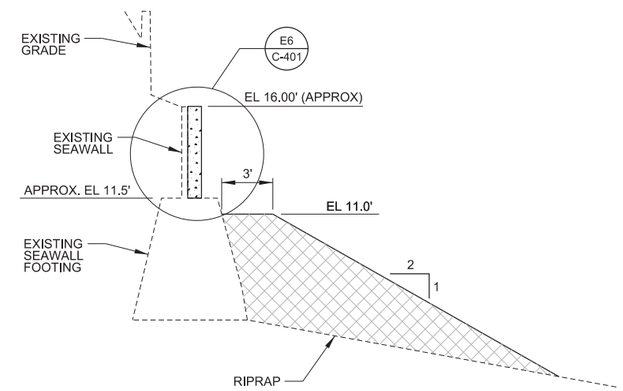
B1 ENLARGED PLAN

SCALE: 1" = 5'



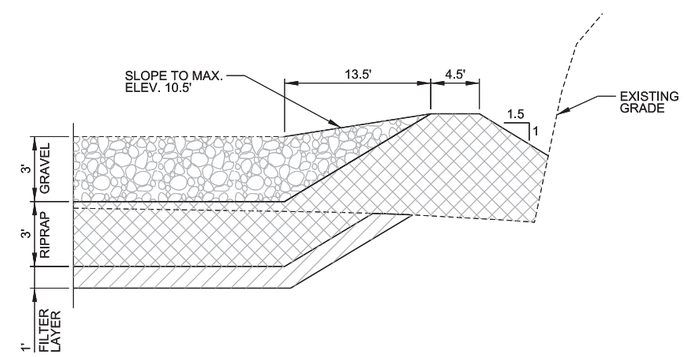
E6 SHOTCRETE REINFORCEMENT

NOT TO SCALE



D7 TYPICAL SECTION

NOT TO SCALE



B7 TYPICAL SECTION

NOT TO SCALE

GENERAL NOTES:

1. FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES, SEE SHEET C-001.
2. PILES SHALL BE 6' O.C., UNLESS SHOWN OTHERWISE.
3. SEE STRUCTURAL SHEETS FOR WALL DESIGN.
4. SEE SHEET C-301, FOR TYPICAL SECTIONS OF WALL.
5. SEE SHEET CS101, FOR SHORING WALL ALIGNMENT HORIZONTAL CONTROL.

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: 31 MAY 2019
SOLICITATION NO.: W912DW19B0008
CONTRACT NO.:
FILE NUMBER: E-12-A-54

DESIGNED BY: L. FORD
DWN BY: L. LEJON
CKD BY: J. SKRINDE
SUBMITTED BY: JEFFREY F. DILLON
SIZE: ANSI D

U.S. ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
4735 EAST MARGINAL WAY SOUTH
SEATTLE, WASHINGTON, 98134

FY19 P2-395621 ACEC
ALKI COASTAL EROSION CONTROL
SECTION 103
SEATTLE, WASHINGTON

ENLARGED PLAN

SHEET ID

C-401

File Path: I:\AECDesigns\FY19_P2-395621_ACEC\Con_Docs\CAD_Sheets\Civil\PN395621_ACEC-C-401P01.dgn
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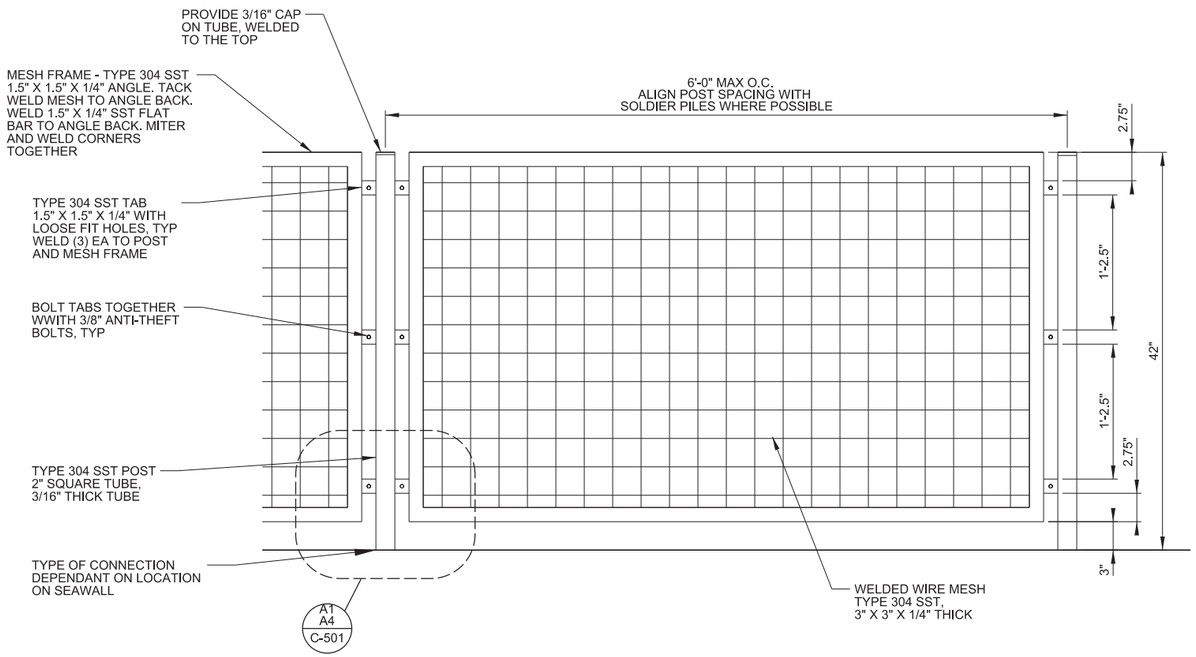
RTA DESIGN SUBMITTAL

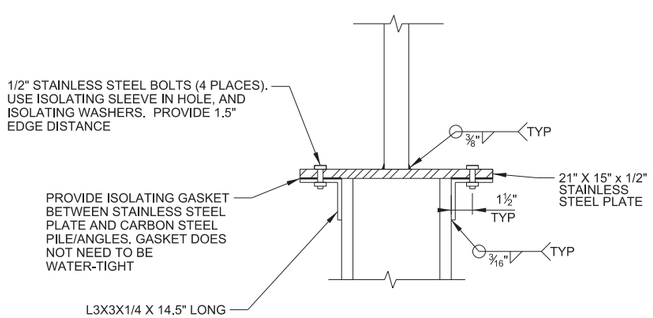
NOTES:

1. ALL POSTS AND BALUSTERS MUST BE PLUMB AND RAILS PARALLEL TO GRADE.
2. PIPE DIAMETERS SHOWN ARE "NOMINAL" DIAMETERS AS GIVEN IN AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL.
3. ATTACH POSTS TO PILES, EXCEPT WHERE SPACING DOES NOT ALLOW.
4. CONTRACTOR TO PROVIDE COMPLETE AND USABLE RAILING SYSTEM. PROVIDE TYPICAL INDUSTRY DETAILS BASED ON SIMILAR RAILING SYSTEMS AS PART OF FABRICATION DRAWINGS FOR APPROVAL.
5. ALL RAILING MATERIALS, INCLUDING BUT NOT LIMITED TO POSTS, BASEPLATE, MESH, FASTENERS, AND ANCHORS SHALL BE A304 STAINLESS STEEL.



D1 RAILING - ELEVATION VIEW

NOT TO SCALE

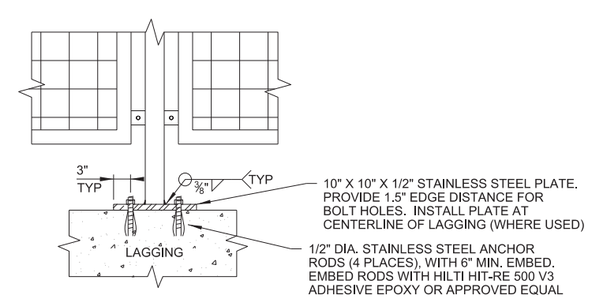


A1 SOLDIER PILE CONNECTION DETAIL

NOT TO SCALE

NOTES:

1. ISOLATION SLEEVES AND WASHERS SHALL BE A STANDARD, OFF-THE-SHELF PRODUCT. GASKET SHALL BE MADE OF A SIMILAR MATERIAL, WITH THE SAME MINIMUM MATERIAL PROPERTIES AS INDICATED BELOW.
2. ISOLATING MATERIAL SHALL HAVE THE FOLLOWING MINIMUM QUALITIES: MINIMUM WASHER COMPRESSION STRENGTH SHALL BE 18,000 psi PER ASTM D695. DIELECTRIC STRENGTH SHALL BE AT LEAST 300 VOLTS/MIL PER ASTM D149. WATER ABSORPTION SHALL BE LESS THAN 1.5% PER ASTM D229.
3. ENSURE THAT ANGLE RECEIVES THE SAME COATING AS THE STEEL PILE, INCLUDING INSIDE OF BOLT HOLES. CONTRACTOR MAY INCREASE ANGLE THICKNESS (AND ASSOCIATED WELDS) AT THEIR OPTION FOR EASE OF HANDLING.



NOTES: 1. THIS DETAIL IS FOR CONNECTING TO THE LAGGING OR CONCRETE PLUG.

A4 CONCRETE CONNECTION DETAIL

NOT TO SCALE

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

U.S. ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
4735 EAST MARGINAL WAY SOUTH
SEATTLE, WASHINGTON, 98134

DESIGNED BY: L. FORD
DWN BY: A. ROTHERY
CKD BY: J. SKRINDE
SUBMITTED BY: JEFFREY F. DILLON
SIZE: ANSI D
ISSUE DATE: 31 MAY 2019
SOLICITATION NO.: W912DW19B0008
CONTRACT NO.:
FILE NUMBER: E-12-A-54

FY19 P2-395621 ACEC
ALKI COASTAL EROSION CONTROL
SECTION 103
SEATTLE, WASHINGTON

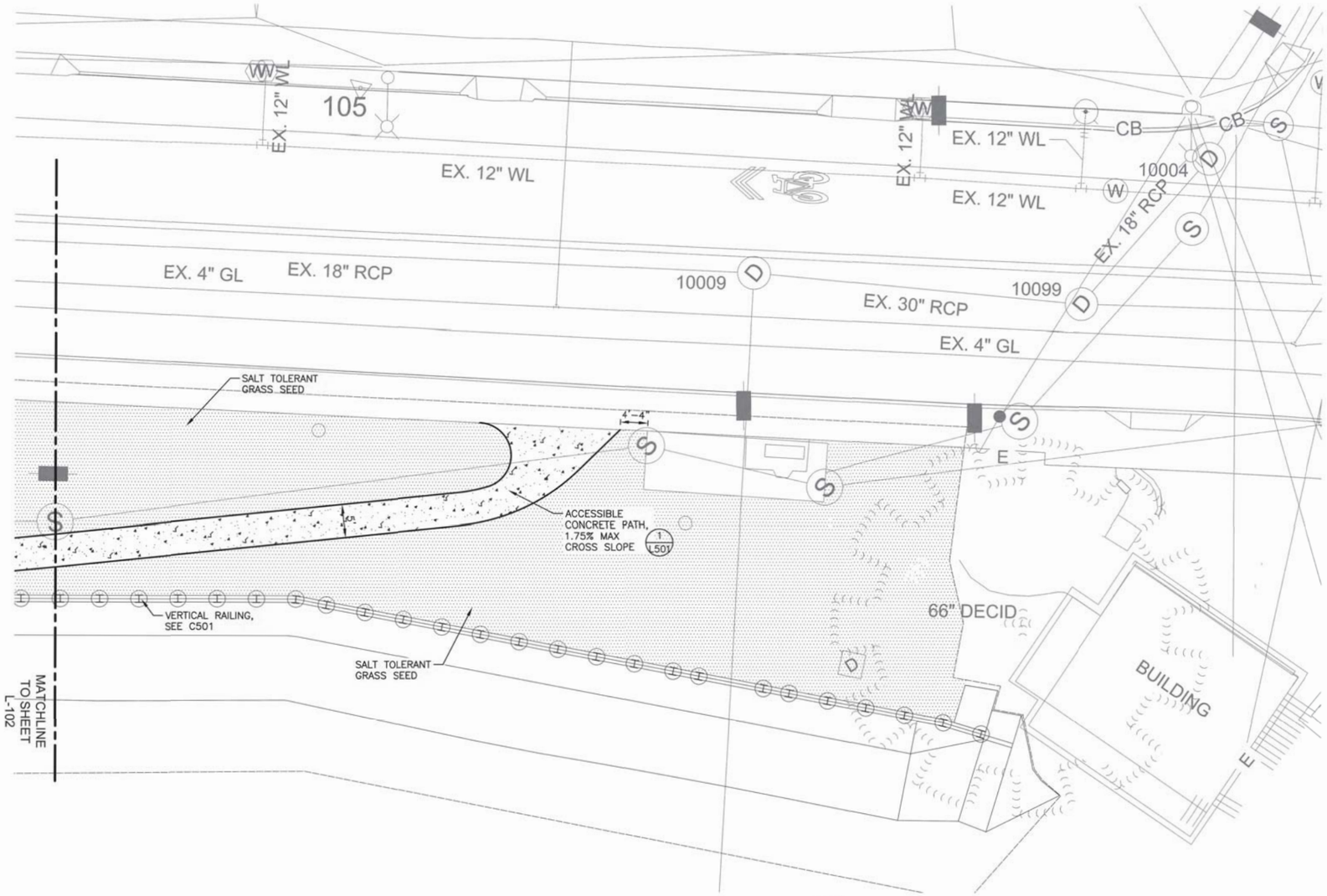
RAILING DETAILS

SHEET ID

C-501

File Path: I:\AECDesigns\FY19_P2-395621_ACEC\Con_Docs\CAD_Sheets\Civil\PN395621_ACEC-C-501DET.dgn
Plot Date: 9:56:49 AM

RTA DESIGN SUBMITTAL



1 LANDSCAPE PLAN 1
SCALE: 1" = 1'-0"

10 05 0 10 20
SCALE IN FEET

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: 15 MARCH 2019
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:

DESIGNED BY: B. CARPENTER
DWN BY: B. CARPENTER
CKD BY: G. FARRELL
SUBMITTED BY: B. CARPENTER
SIZE: ANSI D

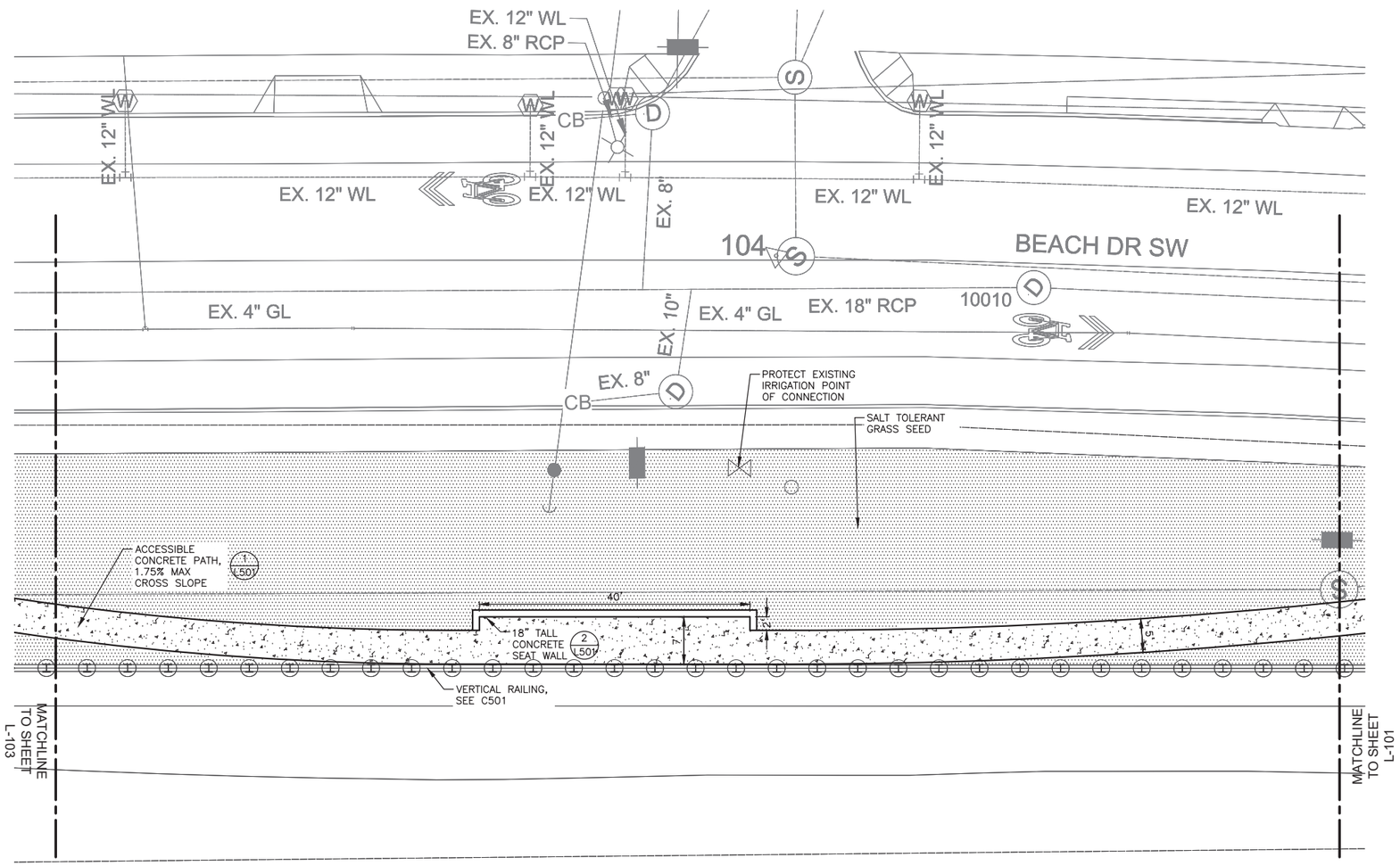
Seattle Parks & Recreation

FY19 P2-395621 ACEC
ALKI COASTAL EROSION CONTROL
SECTION 103
SEATTLE, WASHINGTON

LANDSCAPE PLAN 1

SHEET ID
L-101

95% DESIGN SUBMITTAL



1 LANDSCAPE PLAN 2
SCALE: 1" = 1'-0"

10 05 0 10 20
SCALE IN FEET

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: B. CARPENTER
DWN BY: B. CARPENTER
CKD BY: C. FARRELL
SUBMITTED BY: B. CARPENTER
SIZE: ANSI D
ISSUE DATE: 15 MARCH 2019
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:

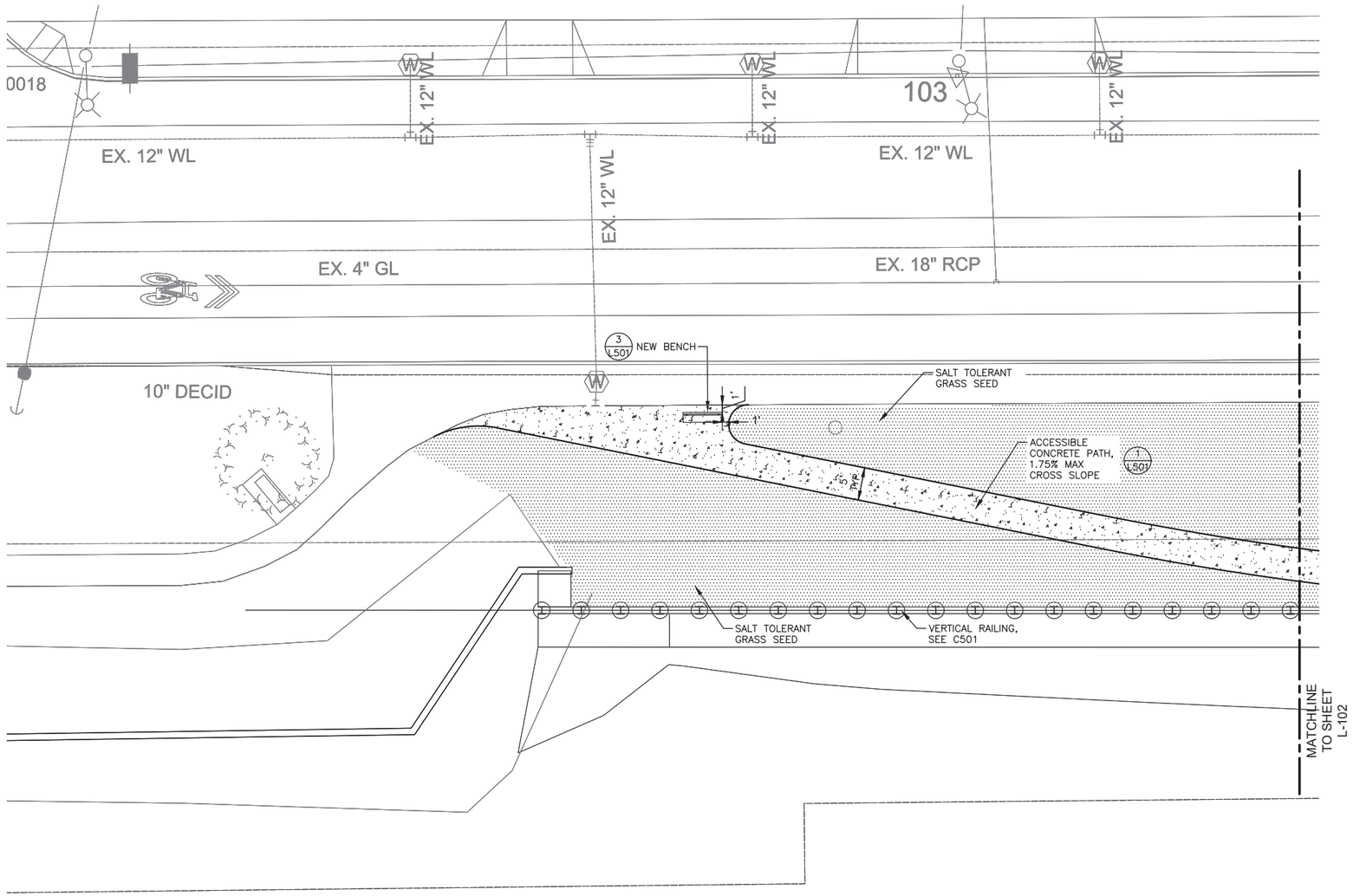
Seattle Parks & Recreation

FY19 P2-395621 ACEC
ALKI COASTAL EROSION CONTROL
SECTION 103
SEATTLE, WASHINGTON

LANDSCAPE PLAN 2

SHEET ID
L-102

95% DESIGN SUBMITTAL



1 LANDSCAPE PLAN 3
SCALE: 1" = 1'-0"

10 05 0 10 20
SCALE IN FEET

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: B. CARPENTER
DWN BY: B. CARPENTER
CKD BY: C. PARRELL
SUBMITTED BY: B. CARPENTER
SIZE: ANSI D
ISSUE DATE: 15 MARCH 2019
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:

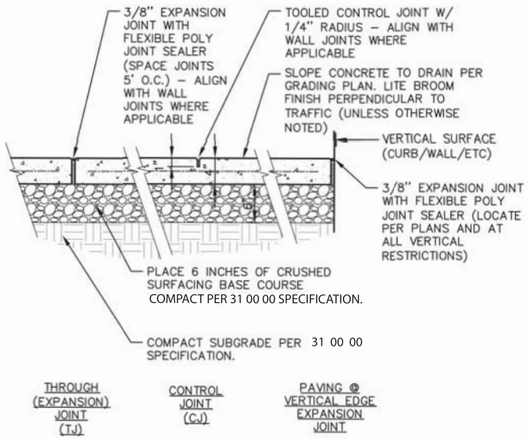
Seattle Parks & Recreation

FY19 P2-395621 ACEC
ALKI COAST TAL EROSION CONTROL
SECTION 103
SEATTLE, WASHINGTON

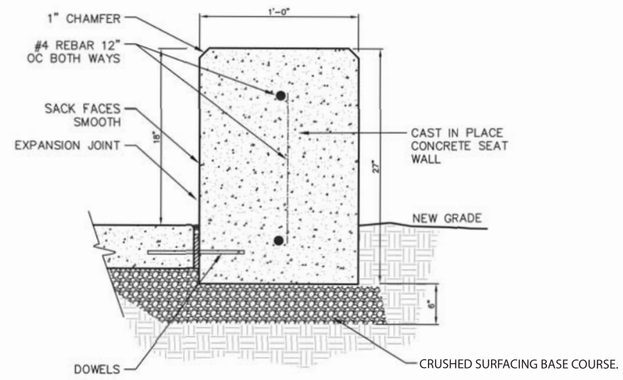
LANDSCAPE PLAN 3

SHEET ID
L-103

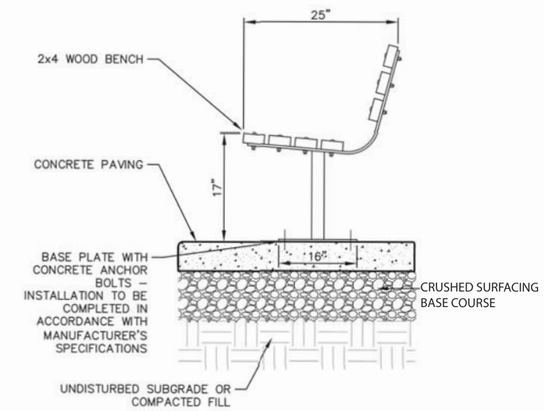
95% DESIGN SUBMITTAL



1 CONCRETE PAVING
NTS



2 CONCRETE SEAT WALL
NTS



3 BENCH
NTS

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

DESIGNED BY: B. CARPENTER
DWN BY: B. CARPENTER
CKD BY: G. FARRELL
SUBMITTED BY: B. CARPENTER
SIZE: ANSI D
ISSUE DATE: 15 MARCH 2019
SOLICITATION NO.:
CONTRACT NO.:
FILE NUMBER:

Seattle Parks & Recreation

FY19 P2-395621 ACEC
ALKI COASTAL EROSION CONTROL
SECTION 103
SEATTLE, WASHINGTON

LANDSCAPE DETAILS

SHEET ID
L-501

95% DESIGN SUBMITTAL

MATERIAL PROPERTIES AND REQUIREMENTS:

1. CONCRETE
   - A. ALL METHODS AND MATERIALS SHALL CONFORM TO THE LATEST EDITION OF ACI BUILDING REQUIREMENTS FOR REINFORCED CONCRETE.
   - B. USE 5000 PSI CONCRETE MIX CONCRETE FOR SOLDIER PILE FILL AND PRECAST LAGGING. USE ASTM C1582/C1282M-11 CORROSION INHIBITOR.
   - C. REINFORCING STEEL: ASTM A775/A775M, GRADE 60 (fy = 60 ksi) EPOXY COATED.
2. STRUCTURAL STEEL
   - A. ALL WELDS TO BE PREFORMED BY A CERTIFIED WABO (WASHINGTON ASSOCIATION OF BUILDING OFFICIALS) WELDERS. WELD PER AWS D.1 USING E70XX ELECTRODES.
   - B. STRUCTURAL STEEL (W-SHAPES): ASTM A690 (fy = 50 ksi) MARINE STEEL.
   - C. OTHER STRUCTURAL STEEL SHAPES AND PLATES: ASTM A36 (fy = 36 ksi).
   - D. HIGH-STRENGTH BOLTS: ASTM F3125, GRADE A325, TYPE 1.
   - E. WELDS: E70XX ELECTRODES PER AWS D1.1.

SHORING NOTES:

1. ALL METHODS AND MATERIALS SHALL CONFORM TO THE CURRENT CITY OF SEATTLE BUILDING REQUIREMENTS.
2. THE CONTRACTOR SHALL VERIFY ALL EXISTING GRADES AS SHOWN ON THE DRAWINGS AND ANY VARIATION WHICH WOULD MODIFY THE RETAINING WALL SYSTEM SHALL BE REPORTED TO THE ENGINEER.
3. SOLDIER PILES SHALL BE PAINTED FOR ADEQUATE CORROSION PROTECTION. SEE SPECIFICATION 09 97 02.
4. LAGGING - USE PRECAST CONCRETE LAGGING. SEE SPECIFICATION 03 45 00.
5. SOLDIER PILES - SEE SPECIFICATION 31 63 29.

DESIGN CRITERIA:

AISC 15TH EDITION
(AMERICAN INSTITUTE OF STEEL CONSTRUCTION)

ACI 318-14
(AMERICAN CONCRETE INSTITUTE)

EM_1110-2-2104 - STRENGTH DESIGN OF REINFORCED CONCRETE
(30 JUNE 1992)

EM_1110-2-2502 - RETAINING AND FLOOD WALLS
(29 SEPTEMBER 1983)

US Army Corps of Engineers ®

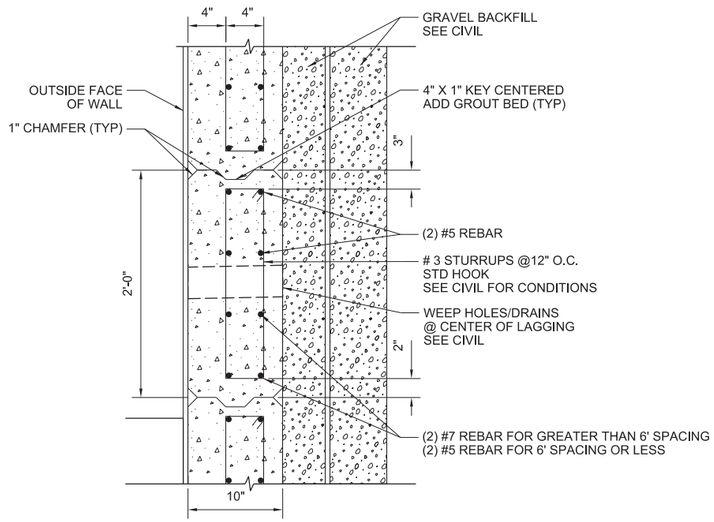
MARK	DESCRIPTION	DATE

DESIGNED BY: F. CHOUERY
DWN BY: F. CHOUERY
CKD BY: G. KHOSROWNIA
SUBMITTED BY: JEFFREY F. DILLON
SIZE: ANSI D
ISSUE DATE: 31 MAY 2019
SOLICITATION NO.: W912DW19B0008
CONTRACT NO.:
FILE NUMBER: E-12-X-54

U.S. ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
4735 EAST MARGINAL WAY SOUTH
SEATTLE, WASHINGTON, 98134

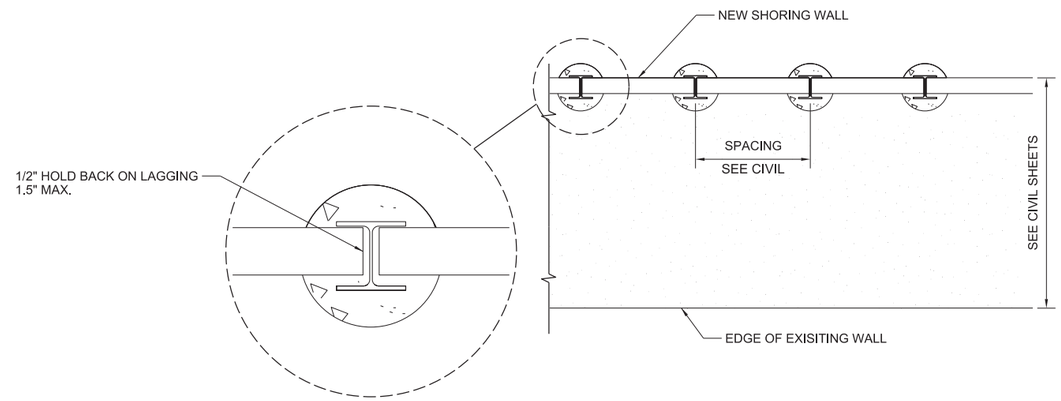
FY19 P2-395621 ACEC
ALKI COASTAL EROSION CONTROL
SECTION 103
SEATTLE, WASHINGTON
STRUCTURAL LEGEND, ABBREVIATIONS AND GENERAL NOTES

SHEET ID
S-001



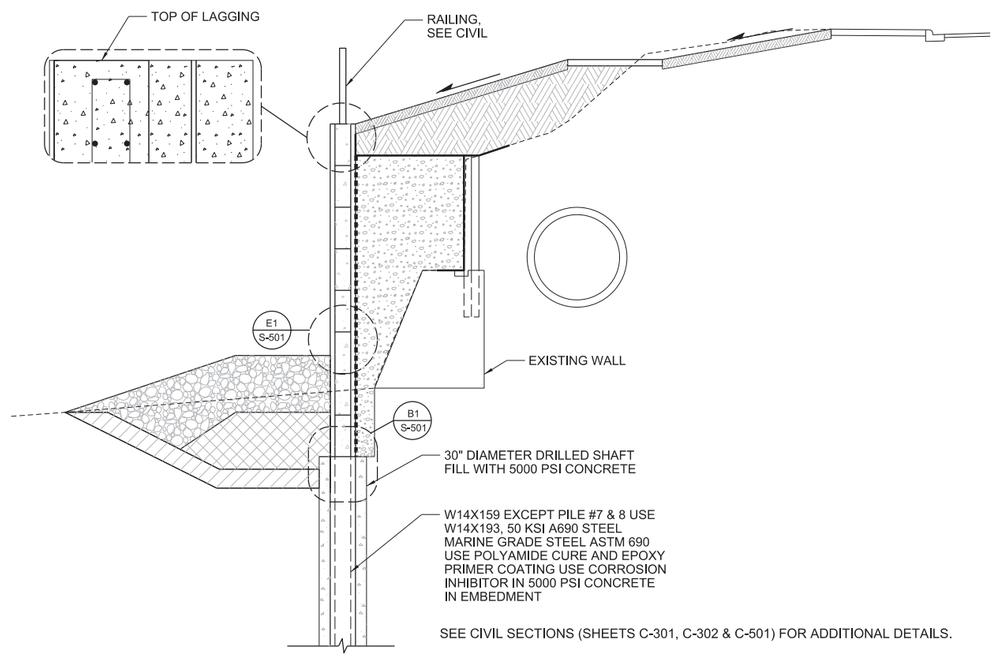
E1 LAGGING DETAIL

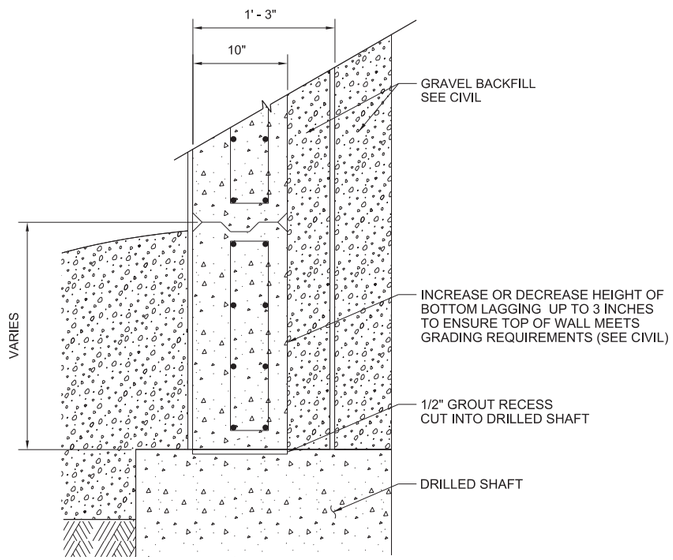
SCALE: 1 1/2" = 1'



E4 PLAN VIEW

SCALE: 1/4" = 1'





B1 LAGGING DETAIL AT BOTTOM

SCALE: 1 1/2" = 1'

A5 SHORING SECTION

NTS

US Army Corps of Engineers ®

MARK	DESCRIPTION	DATE

ISSUE DATE: 31 MAY 2019
SOLICITATION NO.: W912DW19B0008
CONTRACT NO.:
FILE NUMBER: E-12-A-54

DESIGNED BY: F. CHOUERY
DWN BY: F. CHOUERY
CKD BY: G. KHOSROWNIA
SUBMITTED BY: JEFFREY F. DILLON
SIZE: ANSI D

U.S. ARMY CORPS OF ENGINEERS
SEATTLE DISTRICT
4735 EAST MARGINAL WAY SOUTH
SEATTLE, WASHINGTON, 98134

FY19 P2-395621 ACEC
ALKI COASTAL EROSION CONTROL
SECTION 103
SEATTLE, WASHINGTON
STRUCTURAL DETAILS

SHEET ID
S-501

File Path: I:\AECDesigns\FY19_P2-395621_ACEC\Con_Docs\CAD_Sheets\Structural\PN395621_ACEC-S-501DT1.dgn
Plot Date: 2:23:24 PM

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