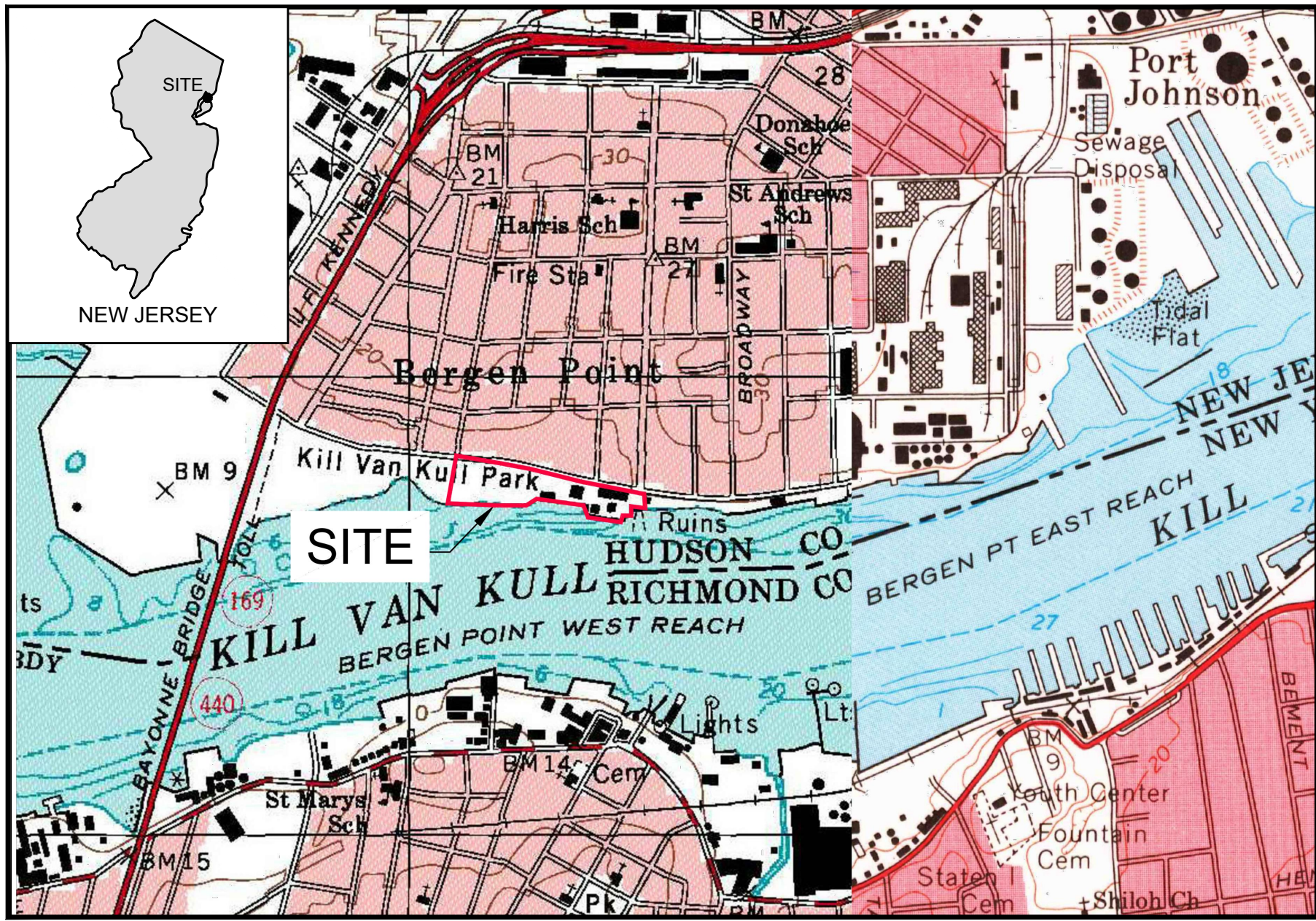


Appendix E

Proposed Remedial Action Site Plan



SITE LOCATION MAP



SITE VICINITY MAP

APTIM DRAWING NUMBER	SHEET REFERENCE NUMBER	DESCRIPTION
631230830-T1	T-1	TITLE SHEET
631230830-E1	C-1	LAYOUT CONTROL PLAN
631230830-E1-1	C-2	INTERIM GRADING AND DRAINAGE PLAN
631230830-E1-2	C-3	SOIL EROSION AND SEDIMENT CONTROL PLAN
631230830-E1-3	C-4	SESCP DETAILS AND NOTES
631230830-E3-1	C-5	PLAN DETAILS AND NOTES 1 OF 2
631230830-E3-2	C-6	PLAN DETAILS AND NOTES 2 OF 2
631230830-E4	C-7	PROPOSED REVETMENT REHABILITATION EXISTING CONDITIONS
631230830-E4-1	C-8	PROPOSED REVETMENT REHABILITATION PLAN VIEW
631230830-E4-2	C-9	PROPOSED REVETMENT REHABILITATION PROFILES
631230830-E4-3	C-10	PROPOSED REVETMENT REHABILITATION CONSTRUCTION DETAILS

SITE PLAN

PPG , SITE 174

WEST 1ST STREET, BAYONNE, HUDSON COUNTY, NEW JERSEY

PREPARED FOR

PPG INDUSTRIES, INC.
PITTSBURGH, PA

REV	DESCRIPTION / ISSUE	DATE	DWG	CHK	APPR
1	ADDED SHEET C-2A	5/07/19	A.Y.	J.F.	J.F.
2	REVISED SHEET INDEX. C-3A BECAME C-2, OLD C-2 REMOVED	5/17/19	A.Y.	J.F.	J.F.
3	100% DESIGN DRAWINGS, UPDATED SHEETS C-2 & C-5	7/31/19	A.Y.	J.F.	J.F.

NJ Certificate of Authorization No.24GA28072700		DESIGNED BY: ---	
James C. Findley Professional Engineer N.J.Lic. No.24GE04328800		DRAWN BY: A.Yanavicius	
Date: 8/30/19		CHECKED BY: J. Findley	
Signature		DATE: 3/20/19	SCALE: AS SHOWN
		DRAWING NO. 631230830-T1	SHEET NO. T-1

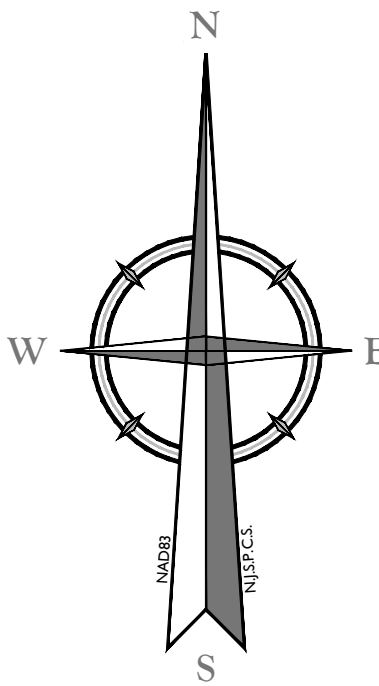
Aptim Environmental & Infrastructure, LLC
200 Horizon Center
Trenton, New Jersey 08691

TITLE SHEET

DENNIS P. COLLINS PARK - SECTION II

PPG HCC - SITE 174

WEST 1ST STREET BAYONNE, NEW JERSEY



RESTORATION DETAILS REGARDING FUTURE PARK AMENITIES ASSOCIATED WITH THE HUDSON RIVER WATERFRONT WALKWAY (WALKWAY, BENCHES, TRASH RECEPTACLES, LIGHTING, ETC.) WILL BE DEVELOPED BY THE CITY OF BAYONNE DURING THE GENERATION OF DETAILED PARK RESTORATION DRAWINGS FOLLOWING THE REMEDIATION OF THE SITE IN ACCORDANCE WITH THE HUDSON RIVER WATERFRONT CONSERVANCY WALKWAY PLAN AND DESIGN GUIDELINES (1984) AND THE HUDSON RIVER WATERFRONT WALKWAY DESIGN STANDARDS (1988).

1. EXISTING SHORELINE FENCE WILL BE REPLACED IN-KIND. SLIGHT FILL ADJUSTMENTS TO LOCATION MAY BE MADE TO ACCOMMODATE REVEINMENT WORK.
2. EXISTING GRASS AND TOPSOIL SHALL BE REMOVED WITHIN THE L.O.D., DISPOSED OF PER NIDEP REGULATIONS. AREAS NOT COVERED BY OTHER PLAN FEATURES SHALL RECEIVE NEW TOPSOIL, FERTILIZER, SEED AND MULCH.
3. EXISTING ASPHALT CAN BE MILLED AND REUSED AS DGA, IF THE MILLINGS ARE DETERMINED TO CONTAIN UNDESIRABLE MATERIAL.
4. ALL MEMORIAL TREES AND BENCHES SHALL BE REMOVED, STORED AND PRESERVED IN ACCORDANCE WITH NIDEP PRESERVATIVE REMEDY GUIDELINES.
5. ALL TREES OTHER THAN MEMORIAL TREES WITHIN THE L.O.D. SHALL BE REMOVED. STUMPS SHALL BE GRINDED OR PULPED AT THE DIRECTION OF THE ENGINEER.

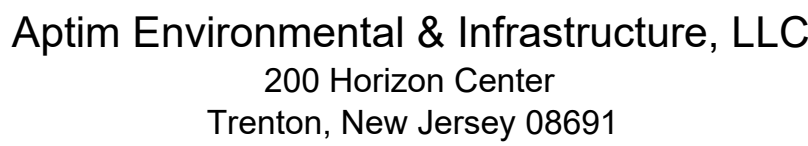
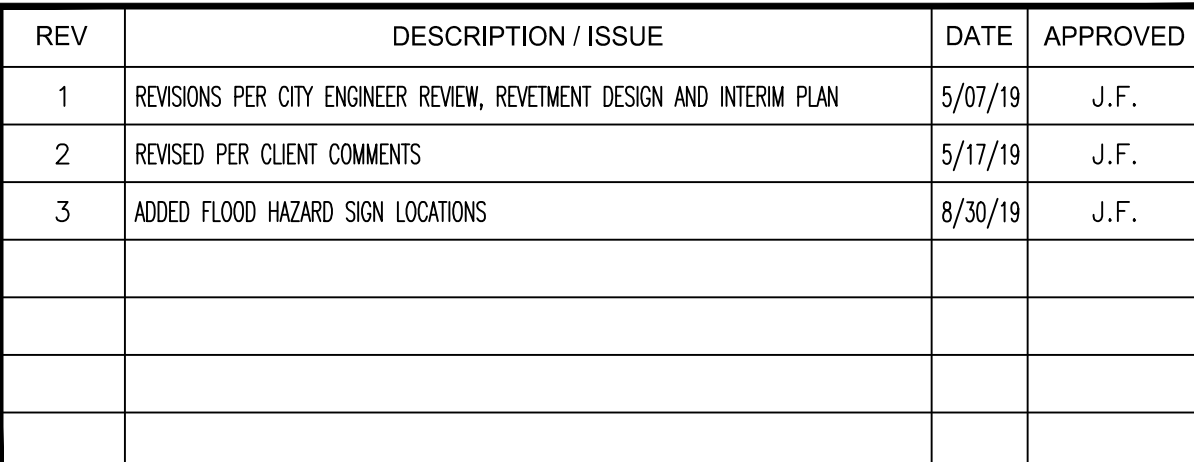
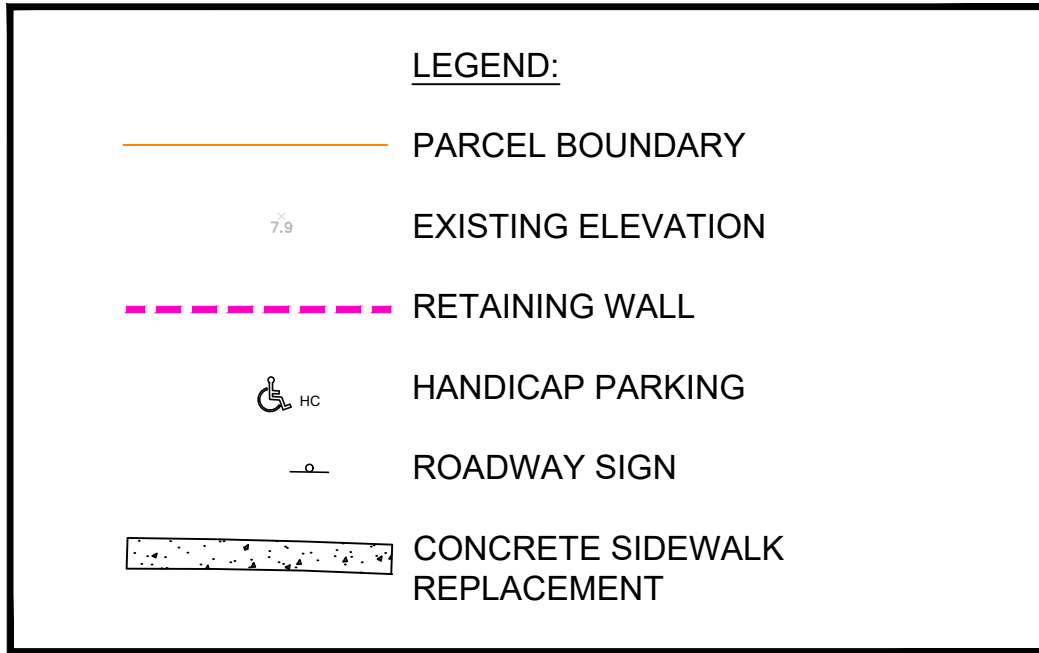
PLAN ENTITLED, "IRM ACTIVITY AREAS AND PROPOSED PARK IMPROVEMENTS, SITE 174 DENNIS P. COLLINS PARK, WEST 1ST STREET, BAYONNE, NEW JERSEY, DATED 3/17/16, PREPARED BY CBSI.

CITY ENTITLED, "IMPROVEMENTS TO COLLINS PARK, TOPOGRAPHIC SURVEY, SHEETS 1 THRU 3 OF 3, CITY OF BAYONNE, HUDSON COUNTY, NEW JERSEY.

PLAN ENTITLED, "FINAL AS-BUILT PLAN FOR EXTRACT, LLC, IRM SITE 174 DENNIS P. COLLINS PARK, WEST FIRST STREET, CITY OF BAYONNE, HUDSON COUNTY, NEW JERSEY" PREPARED BY MASER CONSULTING, INC. DATED 1/16/16.

PLAN ENTITLED, "EXISTING TOPOGRAPHIC SURVEY FOR EXTRACT, LLC, IRM SITE 174 DENNIS P. COLLINS PARK, WEST FIRST STREET, CITY OF BAYONNE, HUDSON COUNTY, NEW JERSEY" PREPARED BY MASER CONSULTING, P.A. DATED 6/20/18.

HORIZONTAL DATUM NAD83, VERTICAL DATUM NAVD83.



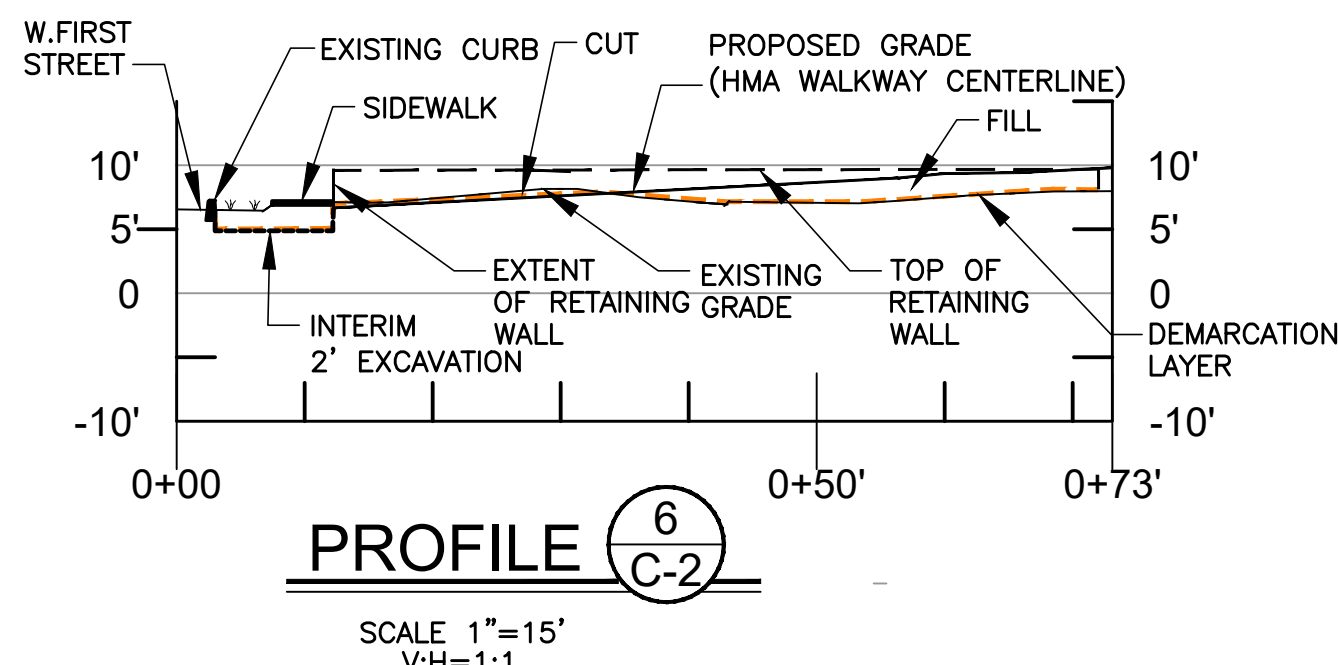
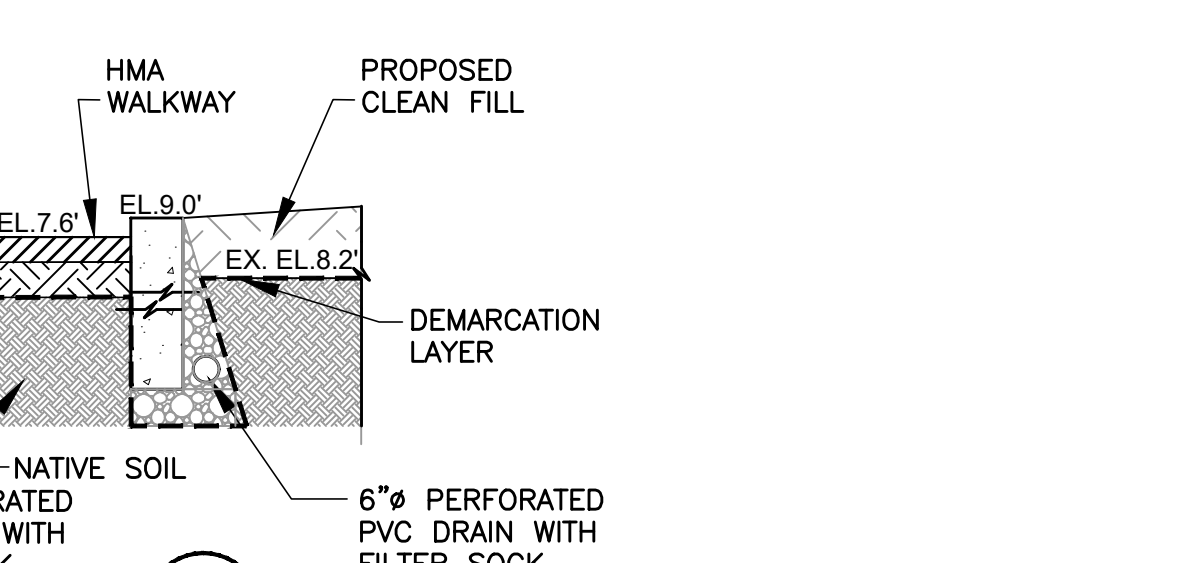
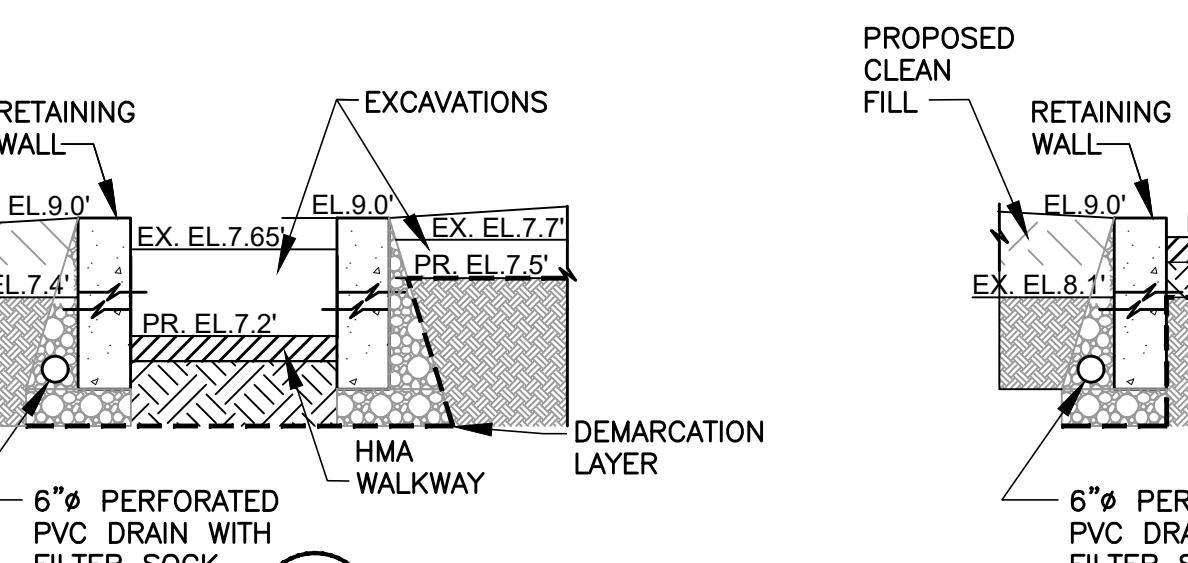
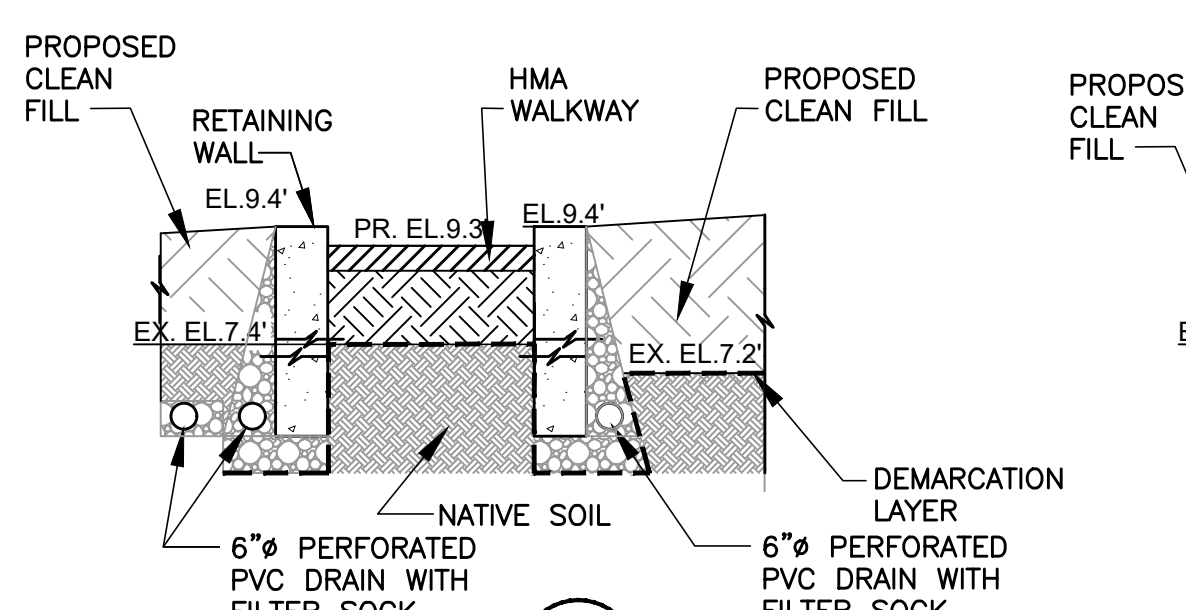
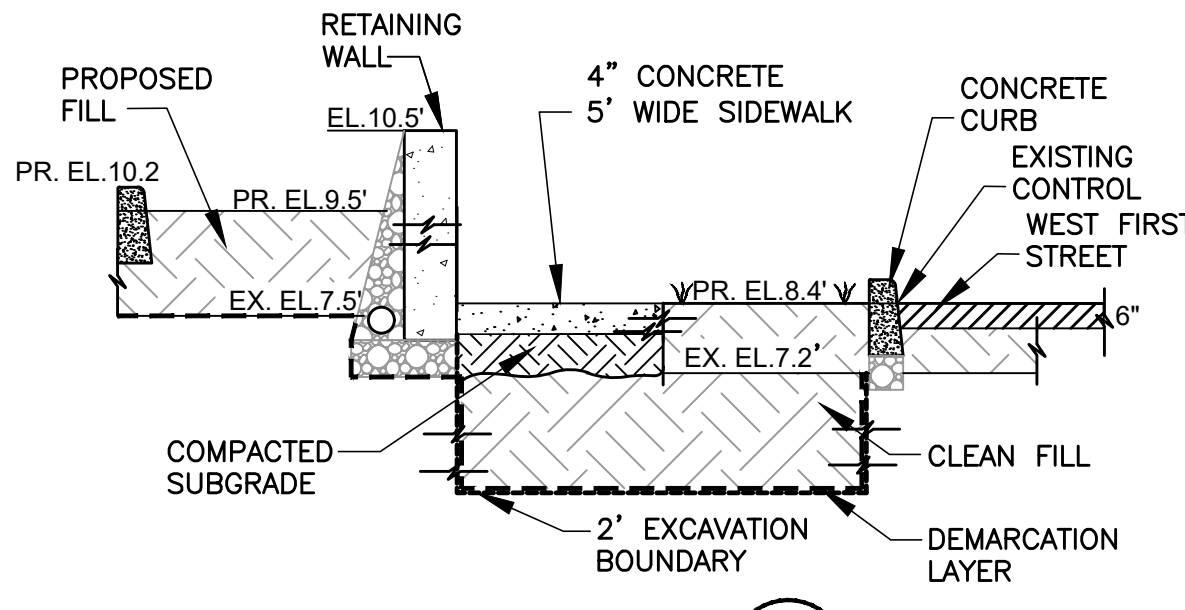
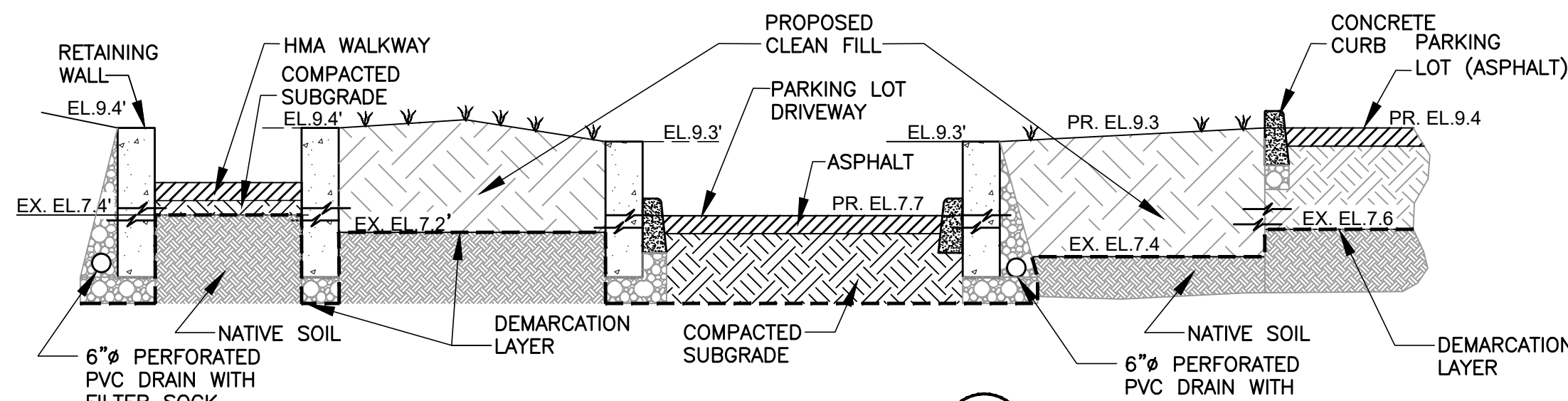
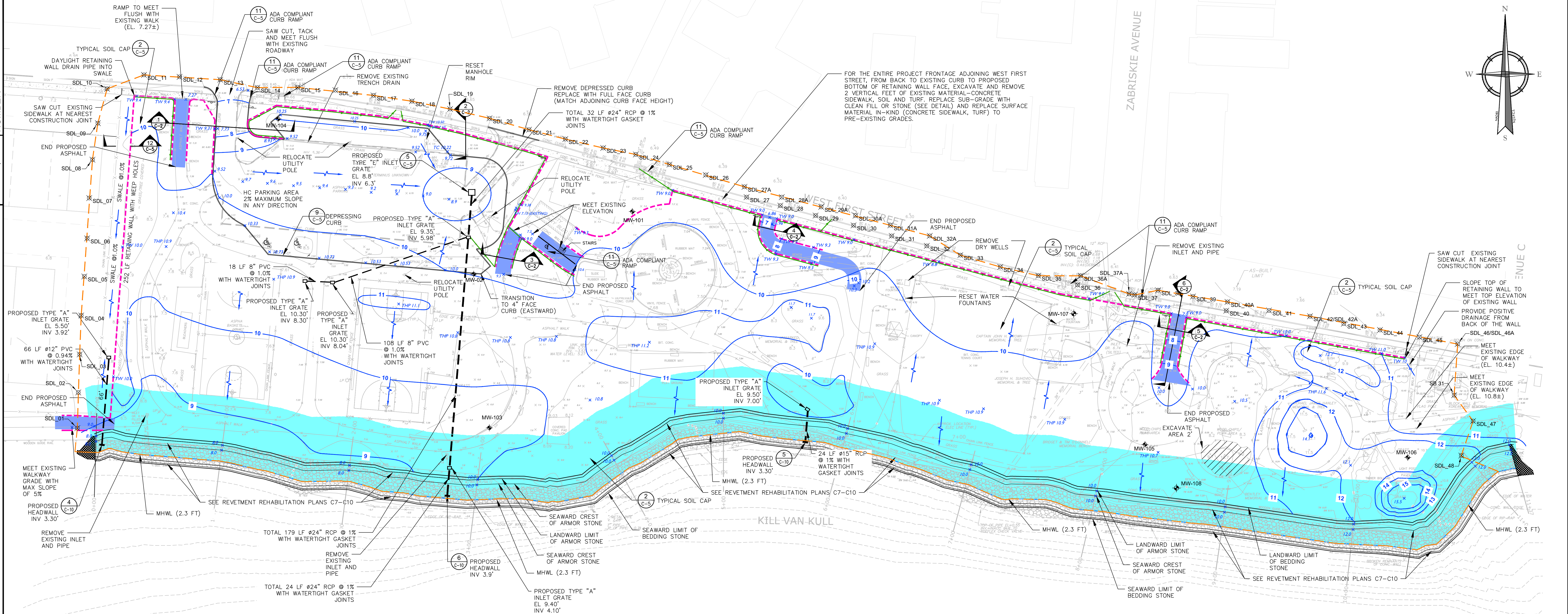
DESIGNED BY: --	LAYOUT CONTROL PLAN DENNIS P. COLLINS PARK - SECTION II PPG HCC - SITE 174 WEST 1ST STREET BAYONNE, NEW JERSEY		
DRAWN BY: A. Y.			
CHECKED BY: J. Findley			
APPROVED BY: J. Findley			
DATE: 3/20/19	SCALE: AS SHOWN	DRAWING NO. 631230830-E1	SHEET NO. C-1

NJ Certificate of Authorization No.24GA28072700

James C. Findley
Professional Engineer
N.J.Lic. No.24GE04328800

 Date: 8/30/19

Signature _____



GENERAL NOTES:

- HORIZONTAL DATUM NAD83, VERTICAL DATUM NAVD83.
- UNLESS OTHERWISE NOTED ON THESE PLANS, ALL EXISTING MONITORING WELL CASINGS AND UTILITY RIM/GRATES SHALL BE RAISED TO FINAL PARK BUILT OUT ELEVATIONS AND MADE SAFE AND NON-TRIPPING HAZARD WITH THIS INTERIM GRADING.
- THE SITE IS LOCATED IN FLOOD ZONE AE (100-YEAR BASE FLOOD ELEVATION 12 FT. NAVD83), BASED ON FEMA FLOOD INSURANCE RATE MAP FOR HUDSON COUNTY, NEW JERSEY MAP NUMBER 34017C0046, REVISED PRELIMINARY DATED JANUARY 30, 2015.
- THE SITE IS LOCATED IN THE NEW JERSEY FLOOD HAZARD AREA DESIGN FLOOD ELEVATION 13 FT. NAVD83 BASED ON METHOD 1 CALCULATION (I.E. FEMA 100-YEAR BASE FLOOD ELEVATION PLUS 1.0 FT.).
- SCREENED PARK FEATURES ARE EXISTING CONDITIONS.

MAP REFERENCE:

PLAN ENTITLED, 'IRM ACTIVITY AREAS AND PROPOSED PARK IMPROVEMENTS, SITE 174, DENNIS P. COLLINS PARK, WEST 1ST STREET, BAYONNE, NEW JERSEY, DATED 3/17/16, PREPARED BY CH&L.

PLAN ENTITLED, 'IMPROVEMENTS TO COLLINS PARK, TOPOGRAPHIC SURVEY, SHEETS 1 THRU 3 OF 3, CITY OF BAYONNE, HUDSON COUNTY, NEW JERSEY.

PLAN ENTITLED, 'FINAL ASBUILT PLAN FOR ENTACT, LLC, IRM SITE 174 DENNIS P. COLLINS PARK, WEST 1ST STREET, CITY OF BAYONNE, HUDSON COUNTY, NEW JERSEY' PREPARED BY MASER CONSULTING, P.A., DATED 10/4/16.

PLAN ENTITLED, 'EXISTING TOPOGRAPHIC SURVEY FOR ENTACT, LLC, IRM SITE 174 DENNIS P. COLLINS PARK, WEST 1ST STREET, CITY OF BAYONNE, HUDSON COUNTY, NEW JERSEY' PREPARED BY MASER CONSULTING, P.A., DATED 6/20/18.

LEGEND:

- PROJECT AREA (AOC) BOUNDARY
- EXISTING ELEVATION
- PROPOSED INTERIM ELEVATION
- TEMPORARY HIGH POINT GRADE
- PROPOSED INTERIM ELEVATION CONTOUR
- LANDWARD CREST OF ARMOR STONE (SEE SHEET C7-C10)
- DRAINAGE FLOW DIRECTION
- RIPARIAN ZONE
- MEAN HIGH WATER LINE (MHWL)
- PROPOSED RETAINING WALL WITH PERFORATED DRAIN PIPE
- PROPOSED RETAINING WALL WITH WEEP HOLES
- PROPOSED REINFORCED CONCRETE PIPE
- PROPOSED STORM INLET TYPE "A"
- PROPOSED STORM INLET TYPE "E"
- ASPHALT WALK TO BE CONSTRUCTED DURING THE INTERIM CONSTRUCTION
- MONITORING WELL
- PERIMETER SOIL BORING

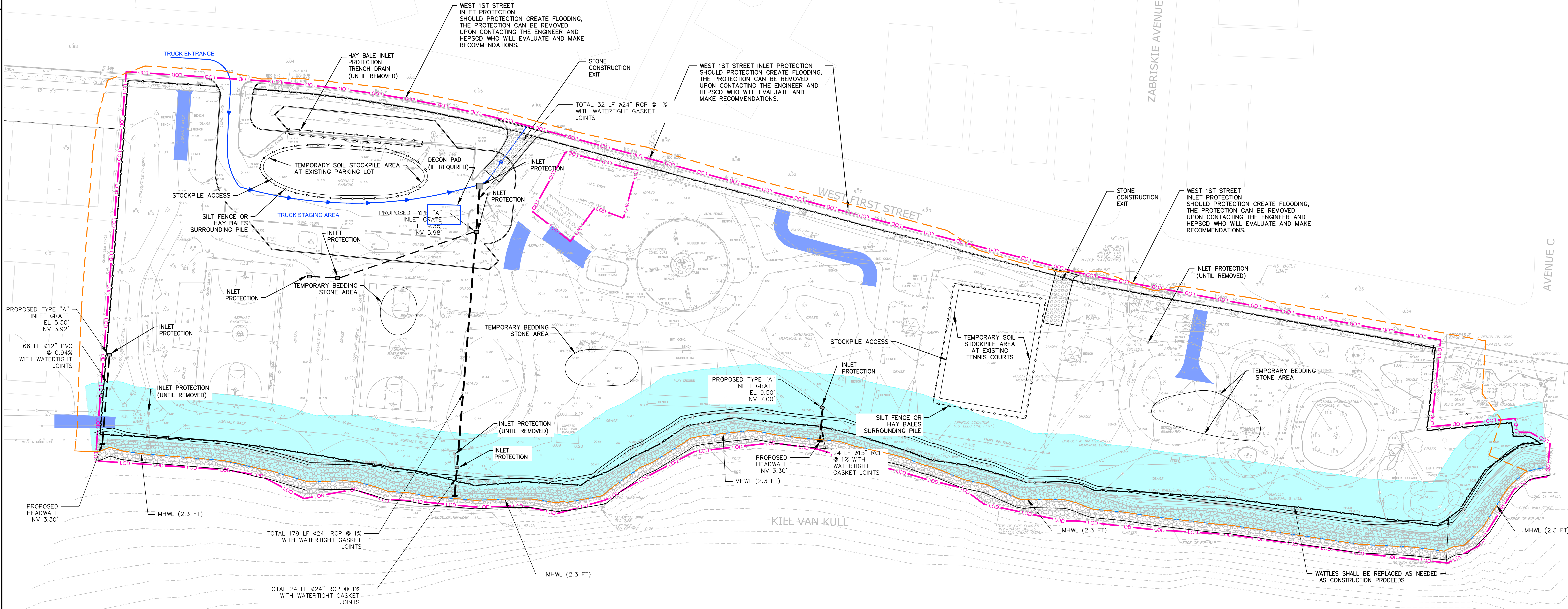
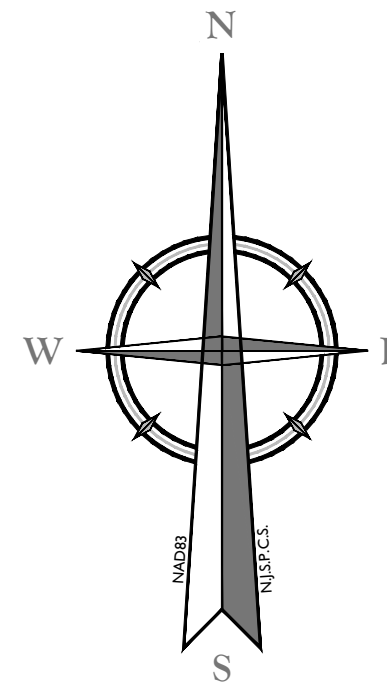


REV	DESCRIPTION / ISSUE	DATE	APPROVED
1	CREATED INTERIM GRADING AND DRAINAGE PLAN C-2A	5/07/19	J.F.
2	CHANGED SHEET 2A TO C-2	5/17/19	J.F.
3	ADDED SECTIONS, SECTION DETAILS & PROFILE, PROFILE DETAIL	7/26/19	J.F.
4	ADDED PERIMETER SOIL BORINGS & PROJECT AREA BOUNDARY	7/30/19	J.F.

APTIM
Aptim Environmental & Infrastructure, LLC
200 Horizon Center
Trenton, New Jersey 08691

DESIGNED BY: A.Y.	DRAWN BY: J. Findley	CHECKED BY: J. Findley	DATE: 4/26/19	SCALE: AS SHOWN	DRAWING NO. 631230830-E1-2	SHEET NO. C-2
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NJ Certificate of Authorization No.24GA28072700
James C. Findley
Professional Engineer
NJ Lic. No.24GE04328800
Date: 8/30/19
Signature



GENERAL NOTES:

- THE SITE IS LOCATED IN FLOOD ZONE AE (100-YEAR BASE FLOOD ELEVATION 12 FT. NAVD88), BASED ON FEMA FLOOD INSURANCE RATE MAP FOR HUDSON COUNTY, NEW JERSEY MAP NUMBER 3407C0094E, REVISED PRELIMINARY DATED JANUARY 30, 2015.
- THE SITE IS LOCATED IN THE NEW JERSEY FLOOD HAZARD AREA DESIGN FLOOD ELEVATION 13 FT. NAVD88 BASED ON METHOD 1 CALCULATION (I.E., FEMA 100-YEAR BASE FLOOD ELEVATION PLUS 1.0 FT).
- MEAN HIGH WATER ELEVATION (+2.30 FT NAVD88), MEAN LOW WATER ELEVATION (2.68 FT NAVD88), AND SPRING HIGH WATER ELEVATION (+4.06 FT NAVD88) REPORTED FROM NOAA STATION 8519483 BERGEN POINT, WEST BEACH, NY.
- COFFER DAMS WILL BE USED AT WATER EDGE OF KILL VAN KULL.
- IT IS ANTICIPATED THAT WORK WILL BE DONE IN THREE PHASES. (SEE PHASING SHEET 1 OF 3). EACH DEMARKATION LINE BETWEEN PHASES SHALL HAVE WATTLES AND/OR SILT FENCE INSTALLED ALONG THE SAME FULL LENGTH LINE DURING THAT PHASES CONSTRUCTION AND SHALL BE MAINTAINED AND NOT REMOVED UNTIL APPROVED BY THE SOIL CONSERVATION DISTRICT.

MAP REFERENCE:

PLAN ENTITLED, "IRM ACTIVITY AREAS AND PROPOSED PARK IMPROVEMENTS, SITE 174, DENNIS P. COLLINS PARK, WEST 1ST STREET, BAYONNE, NEW JERSEY, DATED 3/17/16, PREPARED BY CR&L.

PLAN ENTITLED, "IMPROVEMENTS TO COLLINS PARK, TOPOGRAPHIC SURVEY, SHEETS 1 THRU 3 OF 3, CITY OF BAYONNE, HUDSON COUNTY, NEW JERSEY, PREPARED BY MASER CONSULTING, P.A., DATED 10/4/16.

SUPPLEMENTAL EXISTING TOPOGRAPHIC LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER CONSULTING P.A. ON JUNE 6, 8, 11 & 21, 2018.

HORIZONTAL DATUM: NAD83, VERTICAL DATUM: NAVD88.

NOTE:

LIMITS OF DISTURBANCE (LOD) = 5.43 ACRES.

LEGEND:

- LOD LIMIT OF DISTURBANCE
- RIPARIAN ZONE
- MEAN HIGH WATER WATER LINE (NAVD88)
- EMBANKMENT STABILIZATION AREA
- TRUCK ROUTE AND DIRECTION OF TRAVEL
- EROSION/SEDIMENT CONTROL (STRAW WATTLES)
- EROSION/SEDIMENT CONTROL (HAY BALES)
- INLET PROTECTION
- ASPHALT WALK TO BE CONSTRUCTED DURING THE INTERIM CONSTRUCTION



GENERAL LEGEND			
TRVERSE LINE, CENTER LINE OR BASELINE	TELEPHONE MANHOLE	U/G ELECTRIC LINE	TRAFFIC SIGNAL POLE
RIGHT OF WAY LINE	UNMARKED MANHOLE	OVERHEAD WIRE	POLE MOUNTED LIGHT
PROPERTY LINE	SANITARY MANHOLE	UTILITY POLE	GUY WIRE
EDGE OF PAVEMENT	DRAINAGE MANHOLE	WATER MAIN	TRANSFORMER
CURB LINE	MAJOR CONTOUR	SAN. SEWER MAIN	FIRE DEPT. CONNECTION
DEPRESSED CURB	MINOR CONTOUR	STORM PIPE	FIRE HYDRANT
CHAIN FENCE	SPOT ELEVATION	WETLAND MARKER	WATER VALVE
MUNICIPAL BOUNDARY	TOP OF CURB ELEV.	TREE	GAS VALVE
TRELLIS	BOTTOM OF CURB ELEV.	ROADWAY SIGNS	SANITARY CLEANOUT
ELECTRICAL MANHOLE	U/G CABLE TV LINE	TRAFFIC FLOW	CONCRETE MONUMENT
WATER MANHOLE	U/G FIBER OPTIC LINE	MAILBOX	CAPPED REBAR/IRON PIPE
ABBREVIATIONS			
D.C. = DEPRESSED CURB	BOL = BOLLARD	FF = FINISH FLOOR	DPR = DEPRESSED
BC = BOTTOM OF CURB	GR = GRATE	UV = UNKNOWN VALVE	CL = CENTERLINE
TC = TOP OF CURB	MB = MAILBOX	MH = MANHOLE	P.M. = PARKING METER
		MHW = MEAN HIGH WATERLINE	BW = BOTTOM WALL
		MLW = MEAN LOW WATERLINE	
		TW = TOP OF WALL	

REV	DESCRIPTION / ISSUE	DATE	APPROVED
1	REVISED PER INTERIM GRADING PLAN	5/07/19	J.F.
2	REVISED PER CLIENT COMMENTS	5/17/19	J.F.
3	ADDED NOTE WITH LOD AREA	7/25/19	J.F.

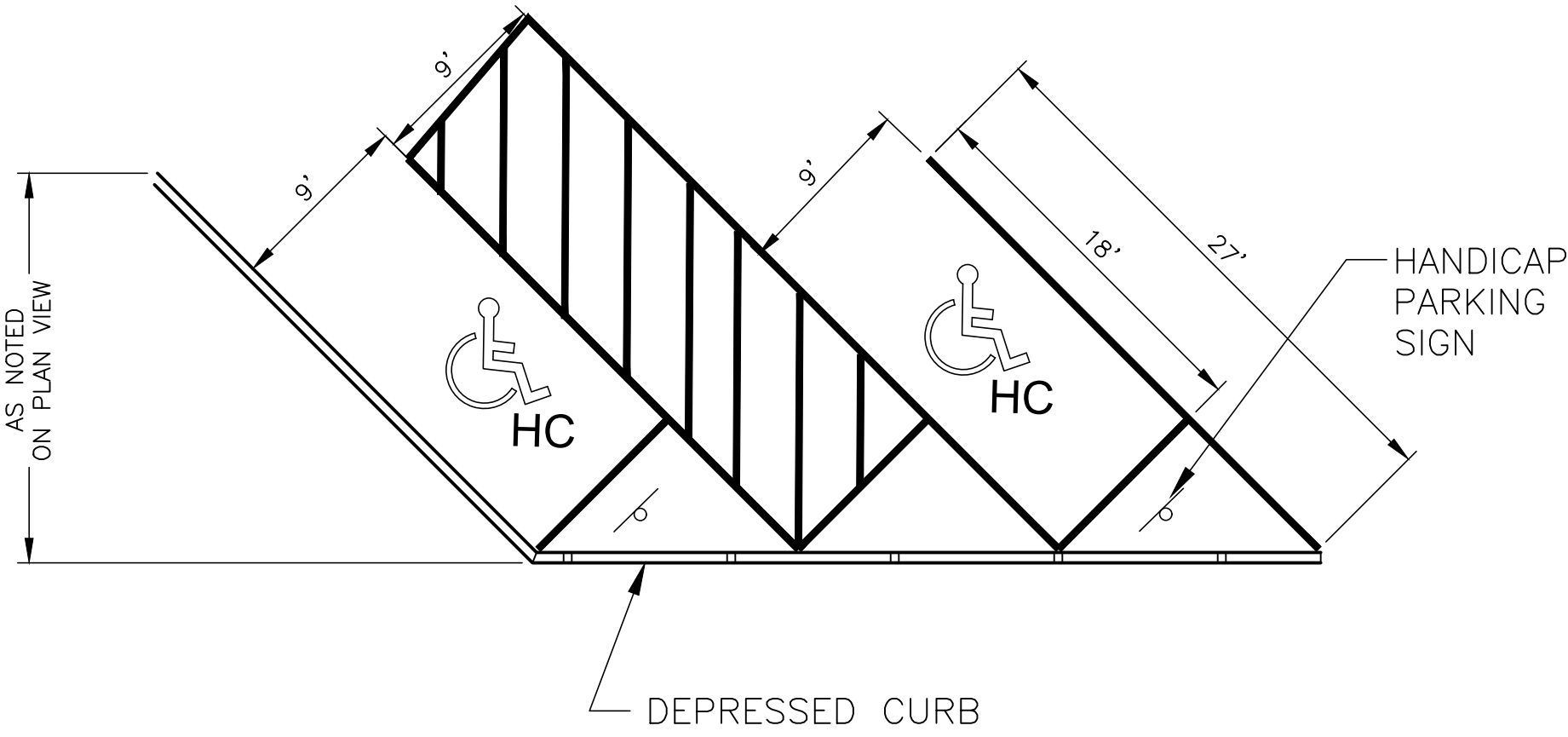
Aptim Environmental & Infrastructure, LLC
200 Horizon Center
Trenton, New Jersey 08691

NJ Certificate of Authorization No.24GA28072700

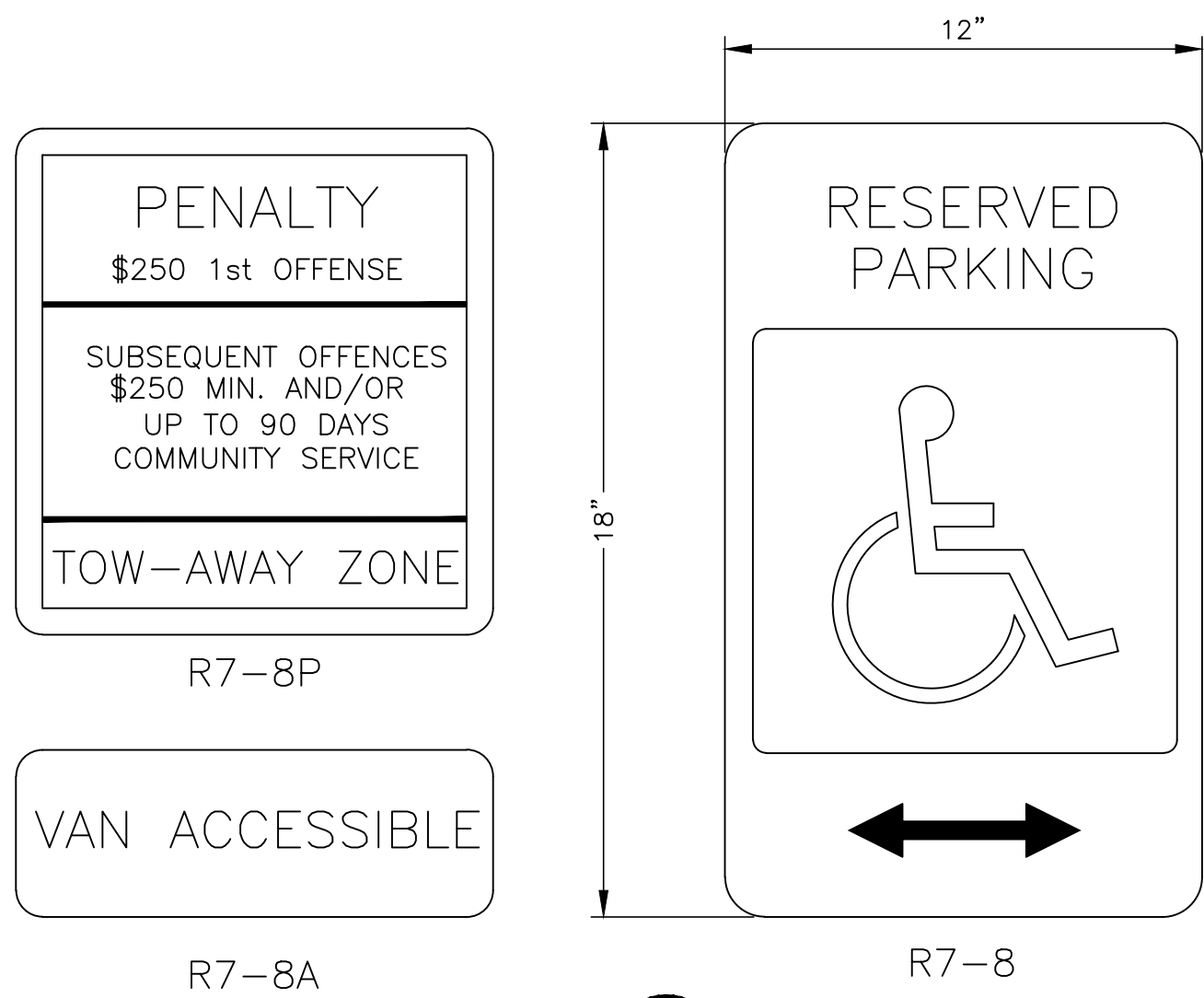
James C. Findley
Professional Engineer
N.J.Lic. No.24GE04328800

Signature: Date: 8/30/19

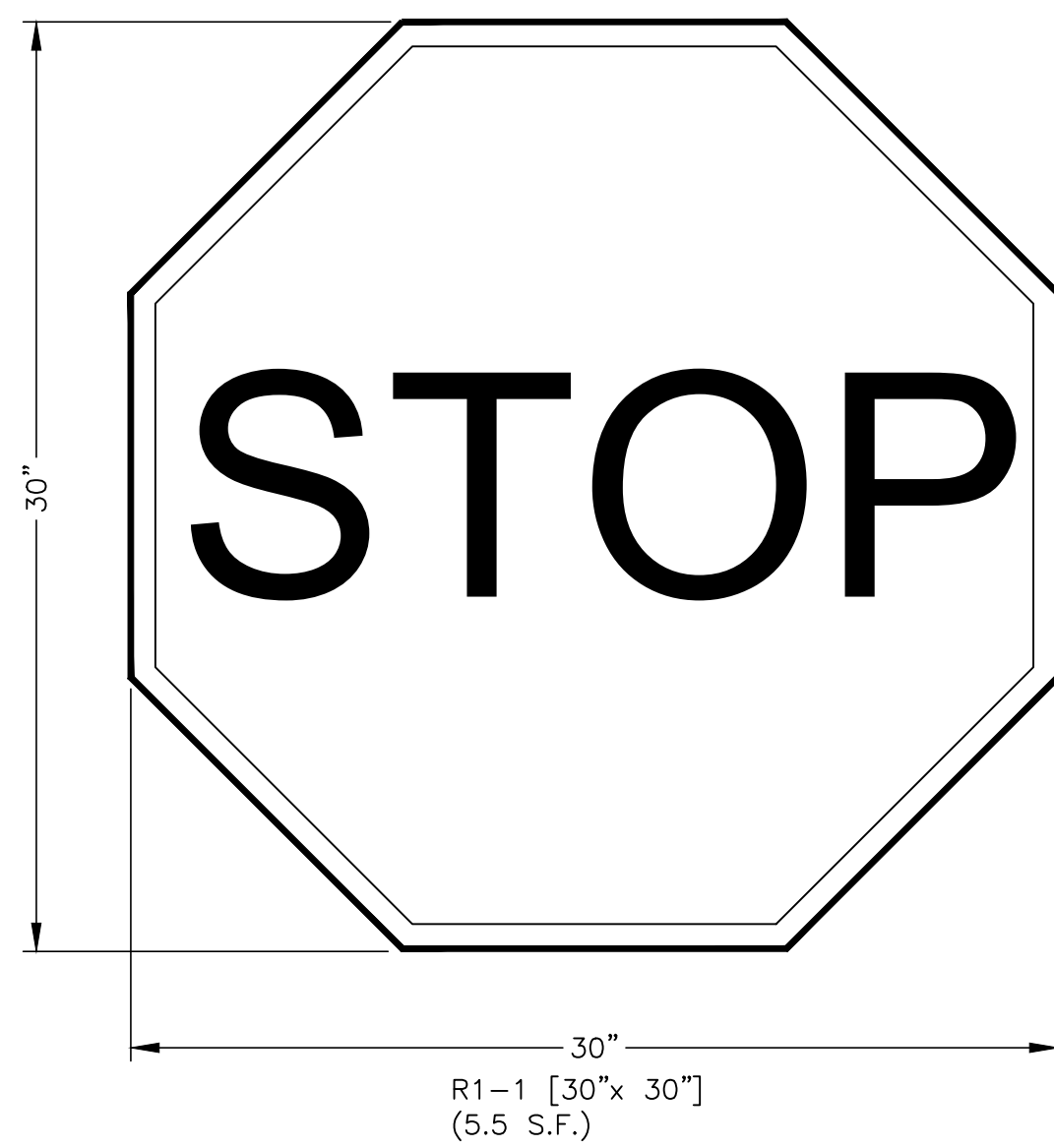
DESIGNED BY: --		SOIL EROSION AND SEDIMENT CONTROL PLAN DENNIS P. COLLINS PARK - SECTION II PPG HCC - SITE 174 WEST 1ST STREET BAYONNE, NEW JERSEY			
DRAWN BY: A.Y.					
CHECKED BY: J. Findley					
APPROVED BY: J. Findley					
DATE: 3/20/19		SCALE: AS SHOWN		DRAWING NO. 631230830-E1	
				SHEET NO. C-3	



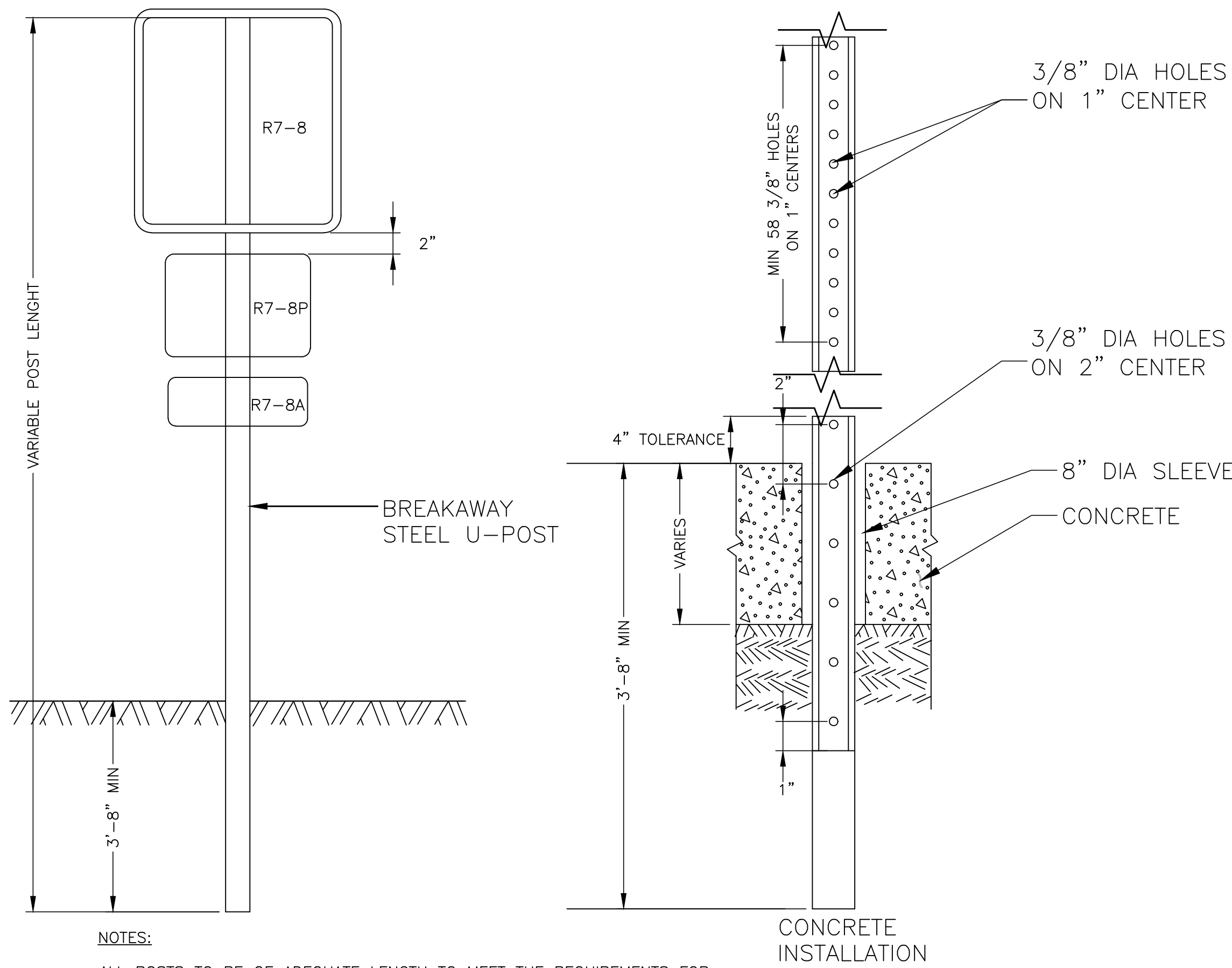
DETAIL 13
C-1
HANDICAP PARKING
"NOT TO SCALE"



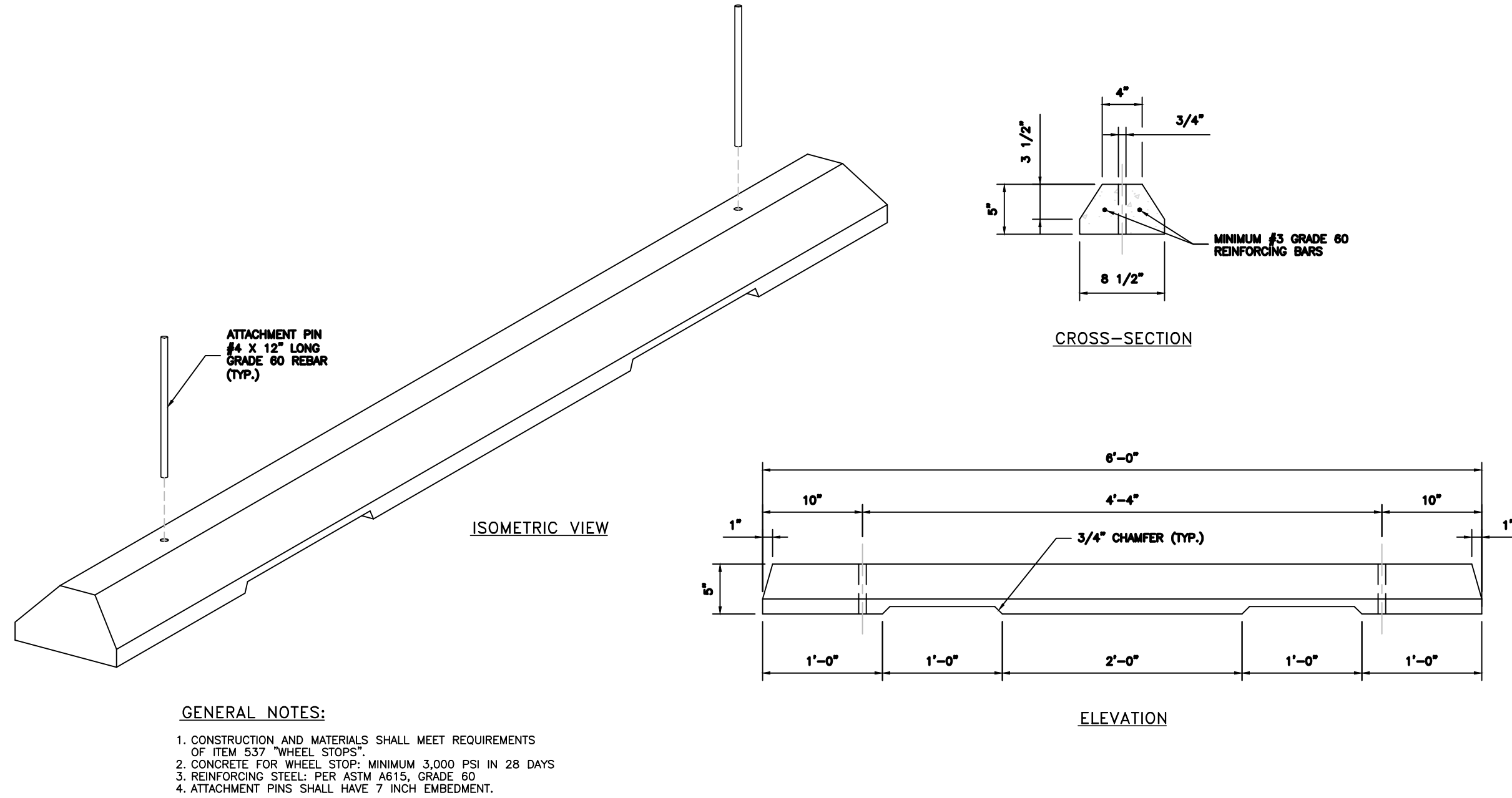
DETAIL 14
C-1
HANDICAP SIGN
"NOT TO SCALE"



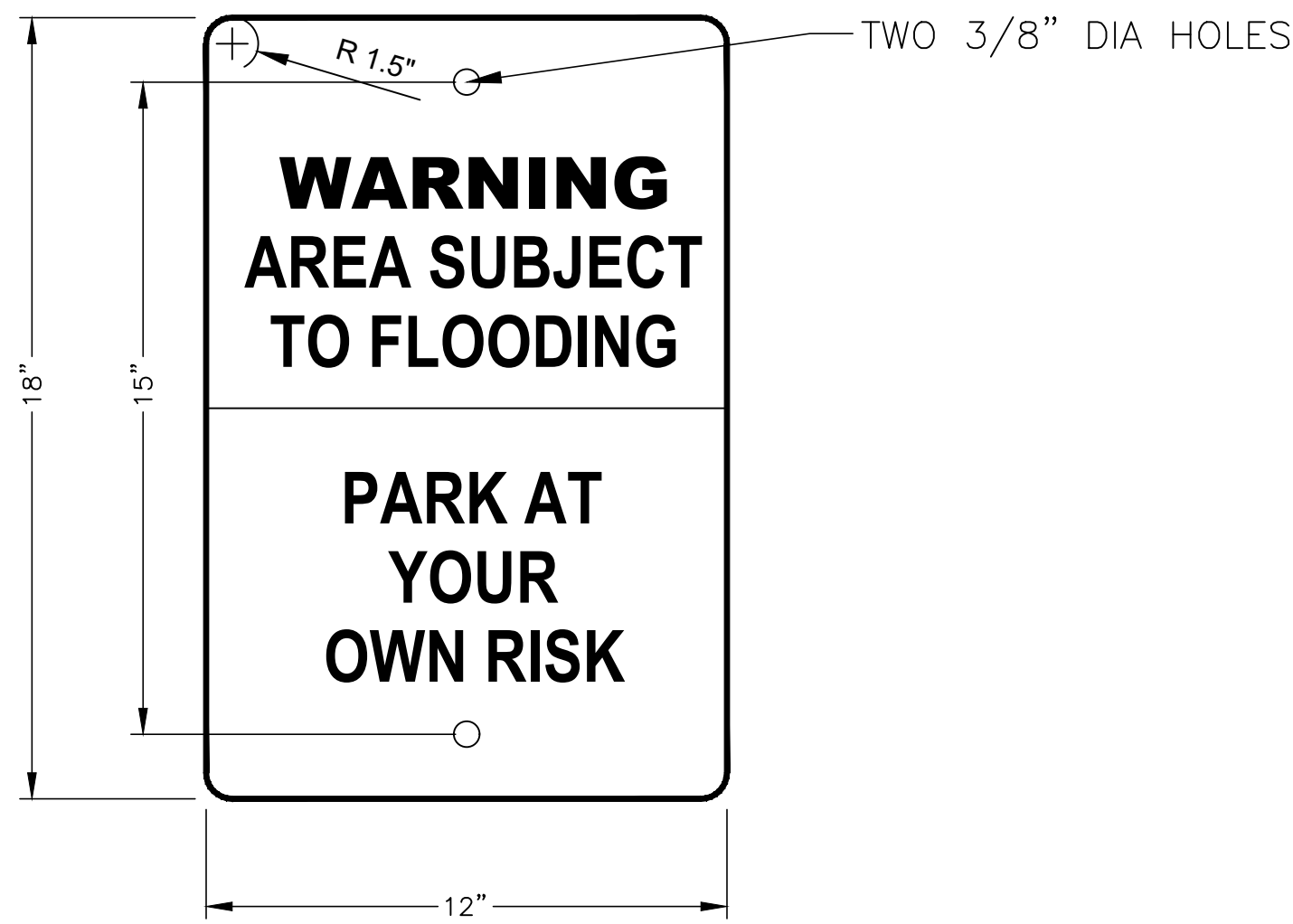
DETAIL 15
C-1
STOP SIGN
"NOT TO SCALE"



DETAIL 16
C-1
STEEL "U" POST DETAIL
"NOT TO SCALE"



DETAIL 17
C-1
CONCRETE WHEEL STOP
"NOT TO SCALE"



NOTE:
SEE "U" POST DETAIL FOR SIGN POST.

DETAIL 18
C-1
FLOOD HAZARD SIGN
"NOT TO SCALE"

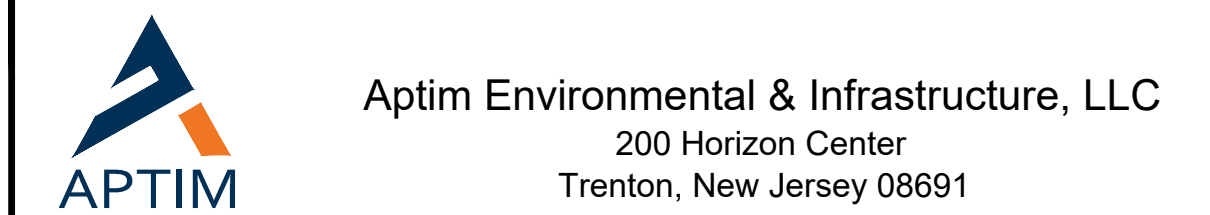
GENERAL UTILITY NOTES:

1. THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES SHOWN HEREON ARE APPROXIMATE ONLY. NO GUARANTEE IS HEREIN MADE OR IMPLIED THAT ALL UNDERGROUND UTILITIES ARE SHOWN. IT WILL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY THE TYPE, SIZE AND LOCATION OF EXISTING UTILITIES PRIOR TO STARTING THE WORK. THIS VERIFICATION MAY INCLUDE PERFORMING TEST PITS OR OTHER SUBSURFACE EXPLORATION TO DETERMINE THE LOCATION OF EXISTING UTILITIES AT ALL CRITICAL POINTS INCLUDING CROSSING POINTS OF ALL OTHER UTILITIES. SHOULD ANY CONFLICTS OCCUR, THE ENGINEER IS AVAILABLE FOR A FEE, TO MAKE SUCH ADJUSTMENTS TO THE ORIGINAL DESIGN, AS REQUIRED TO MEET FIELD CONDITIONS ENCOUNTERED. CONTRACTOR IS ADVISED TO CALL 1-800-272-1000 PRIOR TO CONSTRUCTION.
2. ALL UTILITIES TO BE INSTALLED IN STRICT ACCORDANCE WITH THE RULES, REGULATIONS, AND SPECIFICATIONS OF THE GOVERNMENT AGENCIES AND UTILITY COMPANIES HAVING JURISDICTION THEREOVER.
3. ALL EXISTING UTILITY VALVE BOX COVERS, MANHOLE FRAMES AND COVERS, UTILITY JUNCTION BOX COVERS AND INLET FRAMES AND GRATES SHALL BE RESET TO PROPOSED GRADE AS REQUIRED.
4. ALL EXISTING UTILITIES WHICH PROJECT ABOVE GRADE, SUCH AS UTILITY POLES, WHICH INTERFERE WITH PROPOSED IMPROVEMENTS SHALL BE RELOCATED AS REQUIRED. ANY EXISTING UTILITIES TO BE RELOCATED SHALL BE DESIGNED AND APPROVED BY THE GOVERNMENTAL AGENCIES AND UTILITY COMPANY HAVING JURISDICTION THEREOVER.
5. STORM SEWER LENGTHS INDICATED ON PLANS REPRESENT LENGTHS FROM CENTERLINE OF STRUCTURE TO CENTERLINE OF STRUCTURE.
6. UNLESS OTHERWISE NOTED, PIPE USED FOR STORM DRAIN CONSTRUCTION IS TO BE REINFORCED CONCRETE, CLASS III, WALL "B" (A.S.T.M. C-76) WITH GASKET JOINTS WITH 12" COVER, LESS THAT 12" OF COVER THE RCP SHALL BE CLASS V. ALL PRECAST CONCRETE STRUCTURES SHALL CONTAIN REINFORCING STEEL AND BE DESIGNED FOR HS-20 LOADING.
7. ALL SUBSURFACE DRAINS ENCOUNTERED DURING CONSTRUCTION SHALL BE EXTENDED AND CONNECTED TO THE NEAREST STORM DRAIN STRUCTURE.
8. ALL INLETS SUBJECT TO BICYCLE TRAFFIC SHALL HAVE SUITABLE SAFE GRATE DESIGN FOR SUCH TRAFFIC.
9. ALL EXISTING UTILITIES (SEWER, WATER, GAS, ETC.) NOT TO BE USED SHALL BE PROPERLY ABANDONED UNDER SUPERVISION OF THE RESPECTIVE UTILITY COMPANY REPRESENTATIVE.
10. ELECTRIC, TELEPHONE, CATV, AND ALL OTHER WIRE SERVED UTILITY EXTENTIONS AND SERVICES SHALL BE INSTALLED UNDERGROUND WITH STANDARDS ESTABLISHED BY THE SERVICING UTILITY COMPANY AND APPROVED BY THE MUNICIPAL ENGINEER.
11. ALL AREAS WHERE NATURAL VEGETATUION AND/OR SPECIMAN TREES ARE TO REMAIN SHALL BE PROTECTED BY THE ERECTION AND FENCING AND NO DISTURBANCE SHALL OCCUR PRIOR TO INSPECTION BY THE MUNICIPAL ENGINEER AND ISSUANCE OF WRITTEN AUTHORIZATION TO PROCEED WITH CONSTRUCTION. THESE PROTECTIVE MEASURES SHALL NOT TO BE ALTERED OR REMOVED WITHOUT THE APPROVAL BY THE MUNICIPAL ENGINEER.

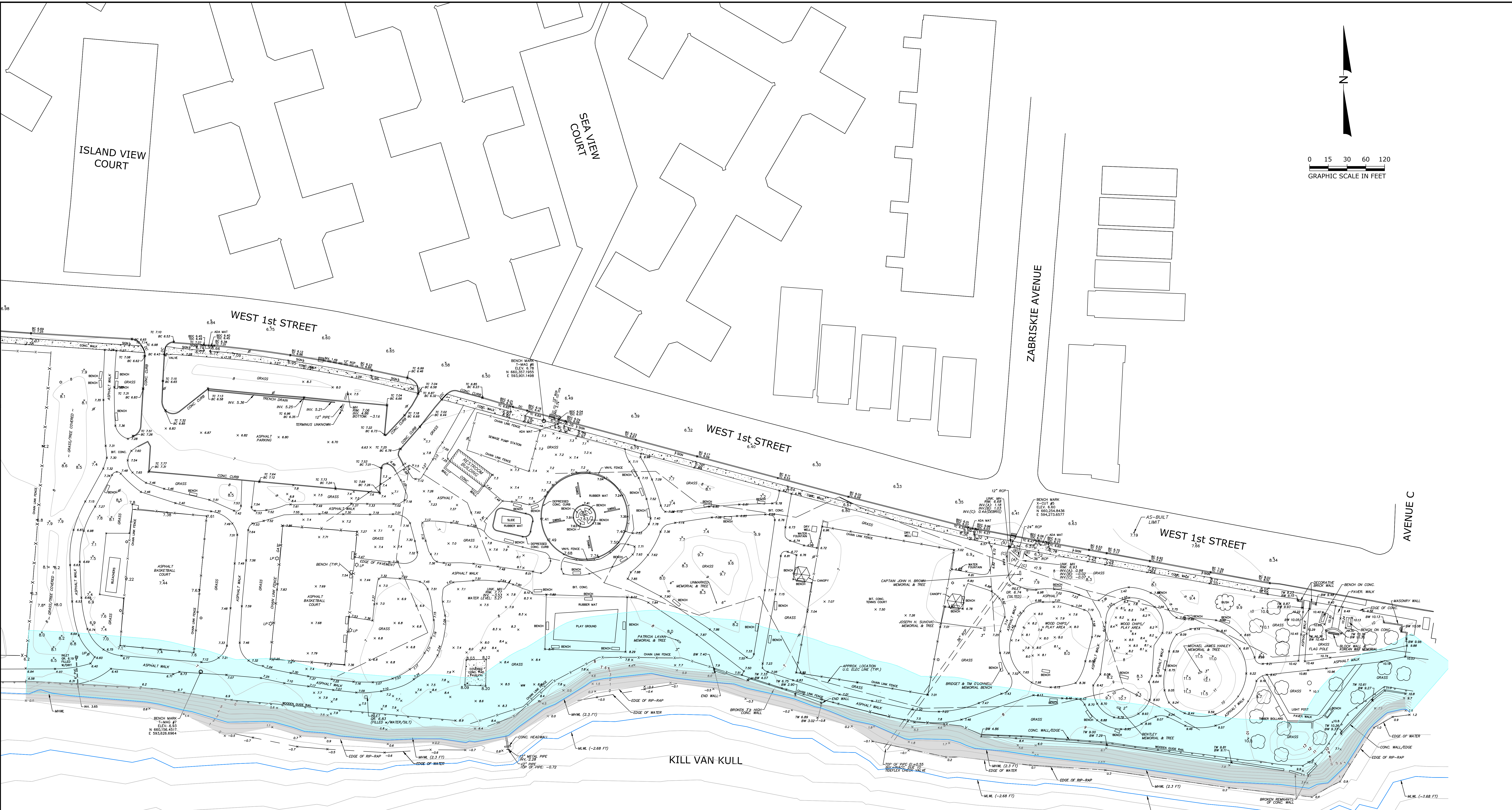
GENERAL NOTES:

1. UNLESS OTHERWISE NOTED ALL MATERIALS AND METHODS OF CONSTRUCTION USED FOR SITE IMPROVEMENTS SHALL CONFORM TO THE REQUIREMENTS AS SPECIFIED IN THE NEW JERSEY DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1989, AS AMENDED TO DATE.
2. ALL TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND /OR THE UNIFORM CONSTRUCTION CODE.
3. ALL HANDICAP RAMPS & LANDING AREAS ON SITE SHALL MEET ADA REQUIREMENTS.

REV	DESCRIPTION / ISSUE	DATE	DWG	CHK	APPR
1	NO REVISIONS TO THE SHEET	5/07/19	A.Y.	J.F.	J.F.
2	REVISED GENERAL NOTES	5/17/19	A.Y.	J.F.	J.F.
3	REMOVED HEADWALL & FENCE POST DETAILS	8/14/19	A.Y.	J.F.	J.F.



NJ Certificate of Authorization No.24GA28072700	DESIGNED BY: ---	PLAN DETAILS AND NOTES 2 OF 2 DENNIS P. COLLINS PARK - SECTION II PPG HCC - SITE 174 WEST 1ST STREET BAYONNE, NEW JERSEY			
James C. Findley Professional Engineer N.J.Lic. No.24GE04328800	DRAWN BY: A.Y.				
Signature	CHECKED BY: J. Findley				
Date: 8/30/19	APPROVED BY: J. Findley				
DATE: 3/20/19	SCALE: AS SHOWN	DRAWING NO. 631230830-E3	SHEET NO. C-6		



GENERAL NOTES:

1. THE SOLE PURPOSE OF THIS PLAN IS TO SHOW EXISTING TOPOGRAPHIC CONDITIONS WITHIN THE PROPOSED CAPPING AREAS ON THE PROJECT SITE.
2. SUPPLEMENTAL EXISTING TOPOGRAPHIC LOCATIONS AND ELEVATIONS WERE OBTAINED BY MASER CONSULTING P.A. ON JUNE 6, 8, 11 & 23, 2018.
3. HORIZONTAL DATUM NAD83, VERTICAL DATUM NAVD88.
4. ALL OTHER TOPOGRAPHIC CONDITIONS SHOWN HEREON REFER TO MAP REFERENCES.
5. CONTOURS BELOW 0.0' NAVD INTERPOLATED FROM NOAA NAUTICAL CHART - 12333 KILL VAN KULL AND NORTHERN PART OF ARTHUR KILL. SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY PRIOR TO CONSTRUCTION.
6. THE SITE IS LOCATED IN FLOOD ZONE AE (100-YEAR BASE FLOOD ELEVATION 12 FT. NAVD88), BASED ON FEMA FLOOD INSURANCE RATE MAP FOR HUDSON COUNTY, NEW JERSEY MAP NUMBER 34017C0094E, REVISED PRELIMINARY DATED JANUARY 30, 2015.
7. THE SITE IS LOCATED IN THE NEW JERSEY FLOOD HAZARD AREA DESIGN FLOOD ELEVATION 13 FT. NAVD88 BASED ON METHOD 1 CALCULATION (I.E., FEMA 100-YEAR BASE FLOOD ELEVATION PLUS 1.0 FT).
8. MEAN HIGH WATER ELEVATION (+2.30 FT NAVD88), MEAN LOW WATER ELEVATION (-2.68 FT NAVD88), AND SPRING HIGH WATER ELEVATION (+4.06 FT NAVD88) REPORTED FROM NOAA STATION 8519483 BERGEN POINT, WEST REACH, NY.

MAP REFERENCE:

PLAN ENTITLED, "IRM ACTIVITY AREAS AND PROPOSED PARK IMPROVEMENTS, SITE 174, DENNIS P. COLLINS PARK, WEST 1ST STREET, BAYONNE, NEW JERSEY, DATED 3/17/16, PREPARED BY CB&I.

PLAN ENTITLED, "IMPROVEMENTS TO COLLINS PARK, TOPOGRAPHIC SURVEY, SHEETS 1 THRU 3 OF 3, CITY OF BAYONNE, HUDSON COUNTY, NEW JERSEY.

PLAN ENTITLED, "FINAL AS-BUILT PLAN FOR ENTACT, LLC, IRM SITE 174 DENNIS P. COLLINS PARK, WEST FIRST STREET, CITY OF BAYONNE, HUDSON COUNTY, NEW JERSEY" PREPARED BY MASER CONSULTING, P.A. DATED 10/4/16.

LEGEND:

- RIPIARIAN ZONE
- MEAN HIGH & LOW WATER LINES (NAVD88)
- EXTENT OF EXISTING RETVEMENT

LEGEND

TRAVERSE LINE, CENTER
LINE OF BASELINE
RIGHT OF WAY LINE
PROPERTY LINE
EDGE OF PAVEMENT
CURB LINE
DEPRESSED CURB
CHAIN FENCE
WETLAND LINE
MUNICIPAL BOUNDARY
TREELINE
ELECTRICAL MANHOLE
WATER MANHOLE

TELEPHONE MANHOLE
UNMARKED MANHOLE
SANITARY MANHOLE
DRAINAGE MANHOLE
MAJOR CONTOUR
MINOR CONTOUR
SPOT ELEVATION
TOP OF CURB ELEV.
BOTTOM OF CURB ELEV.
U/G CABLE TV LINE
U/G FIBER OPTIC LINE
U/G TELEPHONE LINE

U/G ELECTRIC LINE
OVERHEAD WIRE
WATER MAIN
GAS MAIN
SAN. SEWER MAIN
STORM PIPE
WETLAND MARKER
TREE
ROADWAY SIGNS
TRAFFIC FLOW
MAILBOX

TRAFFIC SIGNAL POLE
POLE MOUNTED LIGHT
UTILITY POLE
GUY WIRE
TRANSFORMER
FIRE DEPT. CONNECTION
WATER VALVE
GAS VALVE
SANITARY CLEAOUT
CONCRETE MONUMENT
CAPPED REBAR/IRON PIPE

STORM INLET TYPE 'A'
STORM INLET TYPE 'B'
STM. DRL. INLET TYPE 'W'
STORM INLET TYPE 'E'
STM. DRL. INLET TYPE 'C'
FLARED END SECTION
HEADWALL

D.C. = DEPRESSED CURB
BC = BOTTOM OF CURB
TC = TOP OF CURB

BOL = BOLLARD
OFF = GRATE
MFB = MAILBOX

FF = FINISH FLOOR
UV = UNKNOWN VALVE
CL = CENTERLINE
PM = PARKING METER

DEP = DEPRESSED
CL = CENTERLINE
PM = PARKING METER

MHW = MEAN HIGH WATERLINE
MLW = MEAN LOW WATERLINE
TW = TOP OF WALL

BW = BOTTOM WALL

ABBREVIATIONS

SURVEY SHOWN FOR REFERENCE ONLY

NJ Certificate of Authorization No.24GA02872700

James C. Findley
Professional Engineer
N.J. Lic. No.24GE04328800

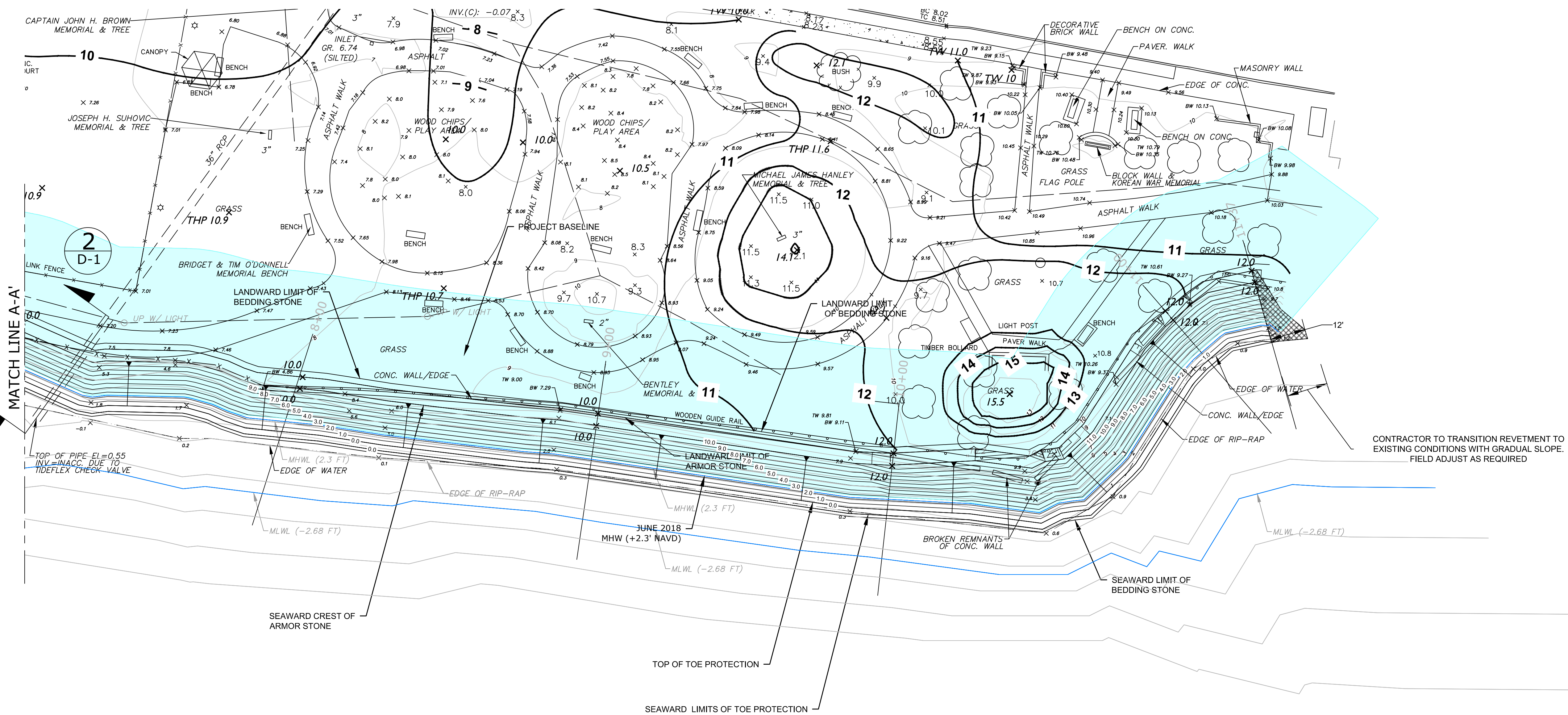
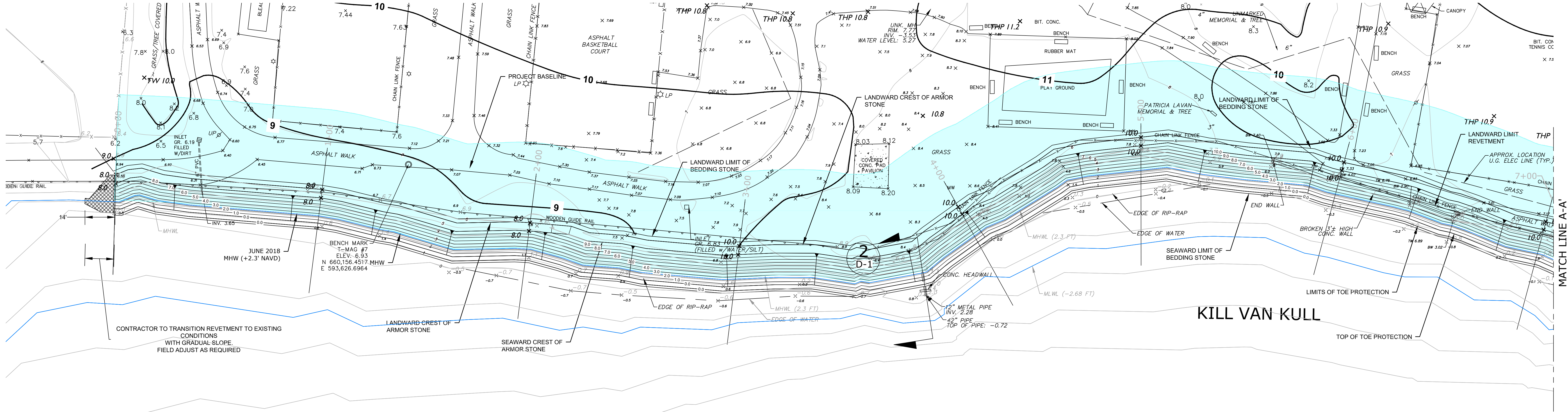
Signature: *James C. Findley* Date: 8/30/19

REV	DESCRIPTION / ISSUE	DATE	APPROVED
1	NO REVISIONS TO THE SHEET	5/07/19	J.F.
2	ADDED EXISTING RETVEMENT TO THE LEGEND	5/17/19	J.F.

APTIM
Aptim Environmental & Infrastructure, LLC
200 Horizon Center
Trenton, New Jersey 08691

**PROPOSED RETVEMENT
REHABILITATION
EXISTING CONDITIONS**
DENNIS P. COLLINS PARK - SECTION II
PPG HCC - SITE 174
WEST 1ST STREET BAYONNE, NEW JERSEY

DESIGNED BY:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:	SCALE:	DRAWING NO.	SHEET NO.
J.R.	J.R.	A.M.B.	J. Findley	3/20/19	AS SHOWN	631230830-E4	C-7

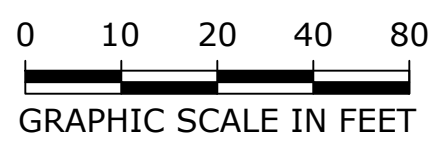


LEGEND:	
	EXISTING ELEVATION (FT, NAVD88)
	EXISTING ELEVATION CONTOUR (FT, NAVD88)
	PROPOSED REVELTMENT OVERLAY CONTOUR (FT, NAVD88)
	PROPOSED ELEVATION (FT, NAVD88)
	PROPOSED ELEVATION CONTOUR (FT, NAVD88)
	RIPARIAN ZONE
	MEAN HIGH & LOW WATER LINES (NAVD88)

GENERAL NOTES:

- THE SITE IS LOCATED IN FLOOD ZONE AE (100-YEAR BASE FLOOD ELEVATION 12 FT. NAVD88), BASED ON FEMA FLOOD INSURANCE RATE MAP FOR HUDSON COUNTY, NEW JERSEY MAP NUMBER 34017C0094E, REVISED PRELIMINARY DATED JANUARY 30, 2015.
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- MEAN HIGH WATER ELEVATION (+2.30 FT NAVD88), MEAN LOW WATER ELEVATION (-2.68 FT NAVD88), AND SPRING HIGH WATER ELEVATION (+4.06 FT NAVD88) REPORTED FROM NOAA STATION 8519483 BERGEN POINT, WEST REACH, NY.

PROFILE LOCATIONS			
STATION	EASTING	NORTHING	AZ.
STA. 0+00	593488.2	660169.2	181°
STA. 1+00	593588	660163.1	187°
STA. 2+00	593687.3	660150.9	187°
STA. 3+00	593786.5	660138.7	187°
STA. 4+00	593881.7	660147.5	151°
STA. 5+00	593974.7	660174.8	179°
STA. 6+00	594073.5	660166	195°
STA. 7+00	594170	660140	195°
STA. 8+00	594267.6	660122.4	193°
STA. 9+00	594366.7	660113.2	188°
STA. 10+00	594465.8	660099.9	186°
STA. 11+00	594548.9	660139.1	139°
STA. 11+37	594582.3	660154	163°

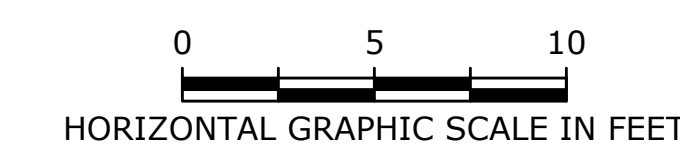


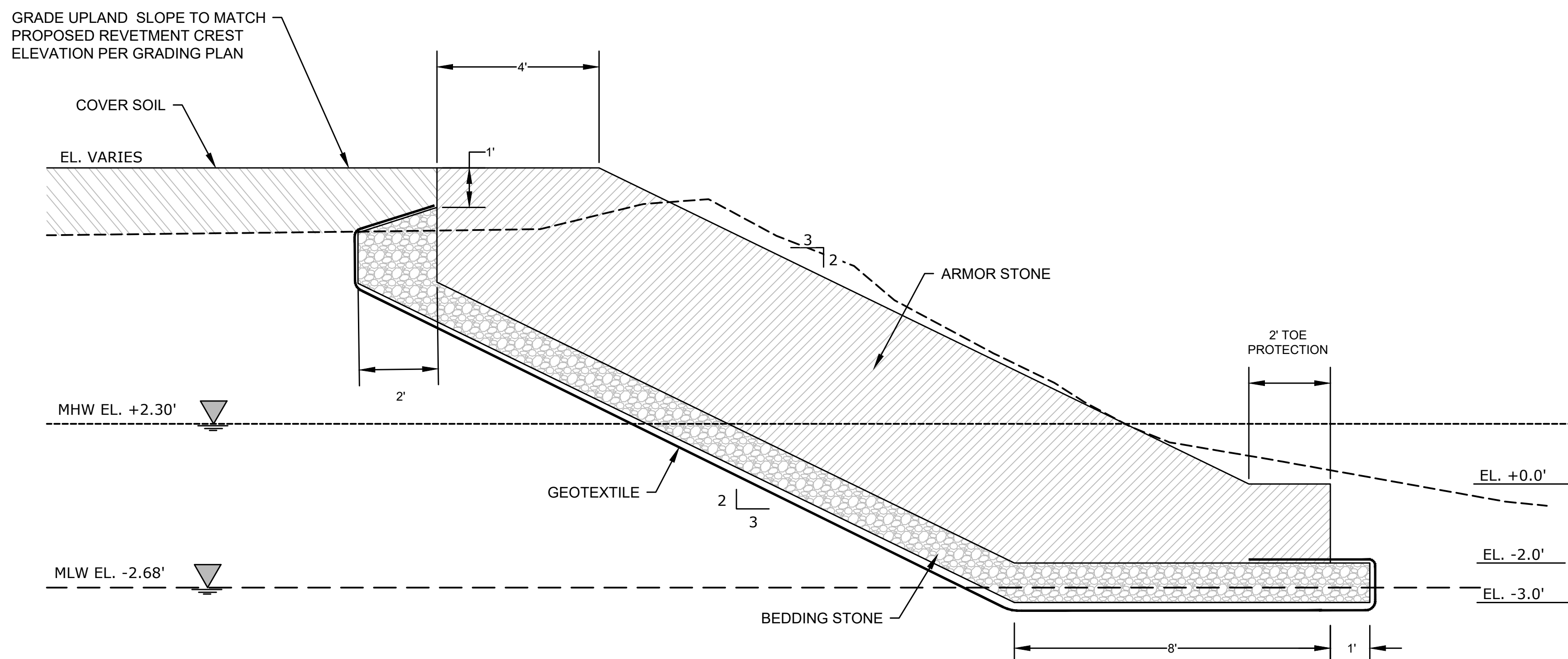
Aptim Environmental & Infrastructure, LLC
200 Horizon Center
Trenton, New Jersey 08691

NJ Certificate of Authorization No. 24GA28072700
DESIGNED BY:
J.R.
DRAWN BY:
J.R.
CHECKED BY:
A.M.B.
APPROVED BY:
J. Findley
Date: 8/30/19
Signature

PROPOSED REVELTMENT
REHABILITATION
PLAN VIEW
DENNIS P. COLLINS PARK - SECTION II
PPG HCC - SITE 174
WEST 1ST STREET BAYONNE, NEW JERSEY
DATE: 3/20/19
SCALE: AS SHOWN
DRAWING NO. 631230830-PV
SHEET NO. C-8

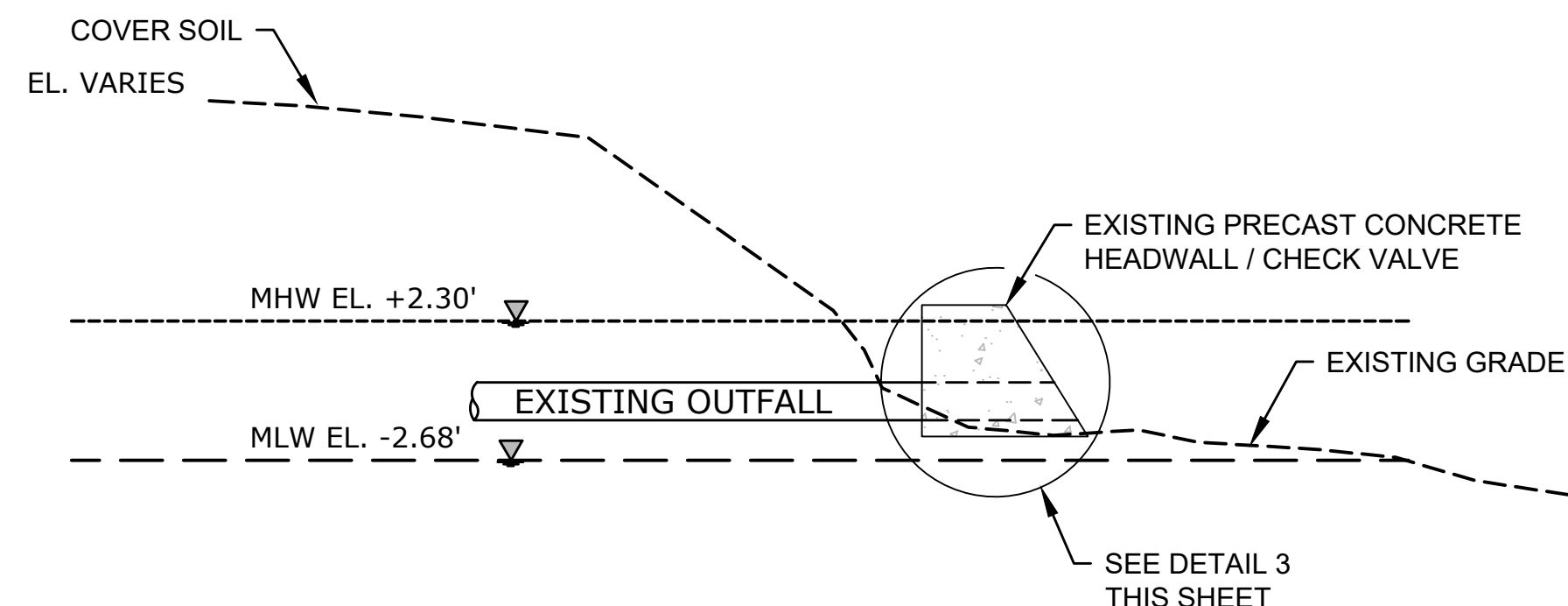
REV	DESCRIPTION / ISSUE	DATE	DWG	CHK	APPR
1	REVISED DESIGN GRADE CONTOURS	5/07/19	A.Y.	J.F.	J.F.
2	REPLACED DESIGN GRADE CONTOURS WITH INERM GRADING CONTOURS	3/17/19	A.Y.	J.F.	J.F.





1 TYPICAL REVETMENT SECTION VIEW
SCALE N.T.S.

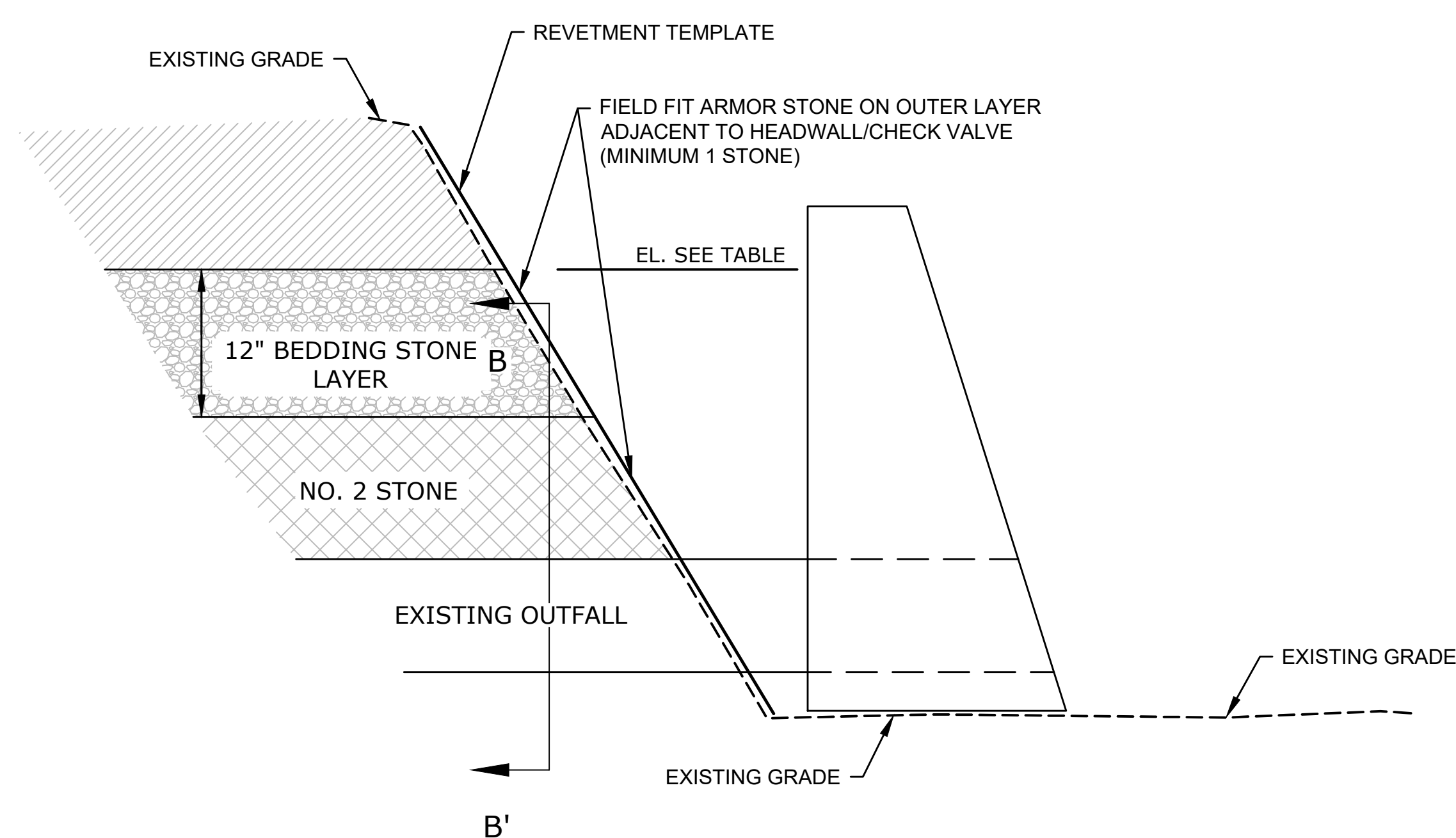
- NOTES:
1. TYPICAL LAYOUT SHOWN. REFER TO SHEET C-9 FOR CONSTRUCTION TEMPLATE ELEVATIONS AND RANGES AT EACH STATION.
 2. ARMOR STONE W= 0.5 - 0.9 TONS WITH 50% GREATER THAN 0.7 TONS (165 PCF MINIMUM). REUSED STONE TO BE PLACED ON INNER LAYER. BEDDING STONE D50=6".
 3. EXCAVATE EXISTING REVETMENT AS NECESSARY TO PLACE GEOTEXTILE, BEDDING STONE, AND ARMOR STONE TO ACHIEVE THE SPECIFIED CONSTRUCTION TEMPLATE.
 4. EXCAVATED MATERIAL TO BE STORED OR DISPOSED OF PER TECHNICAL SPECIFICATIONS.
 5. VERTICAL TOLERANCES ARE ±6" TO THE DESIGN SURFACE. HORIZONTAL TOLERANCES ARE ± 1 FOOT; LOCATION OF THE MEAN HIGH WATER LINE SHALL BE MAINTAINED.
 6. EXTEND GEOTEXTILE FABRIC MIN. 2 FOOT UNDER TOE PROTECTION.



2 TYPICAL EXISTING OUTFALL SECTION VIEW
SCALE N.T.S.

NOTES (DETAILS 2 & 3):

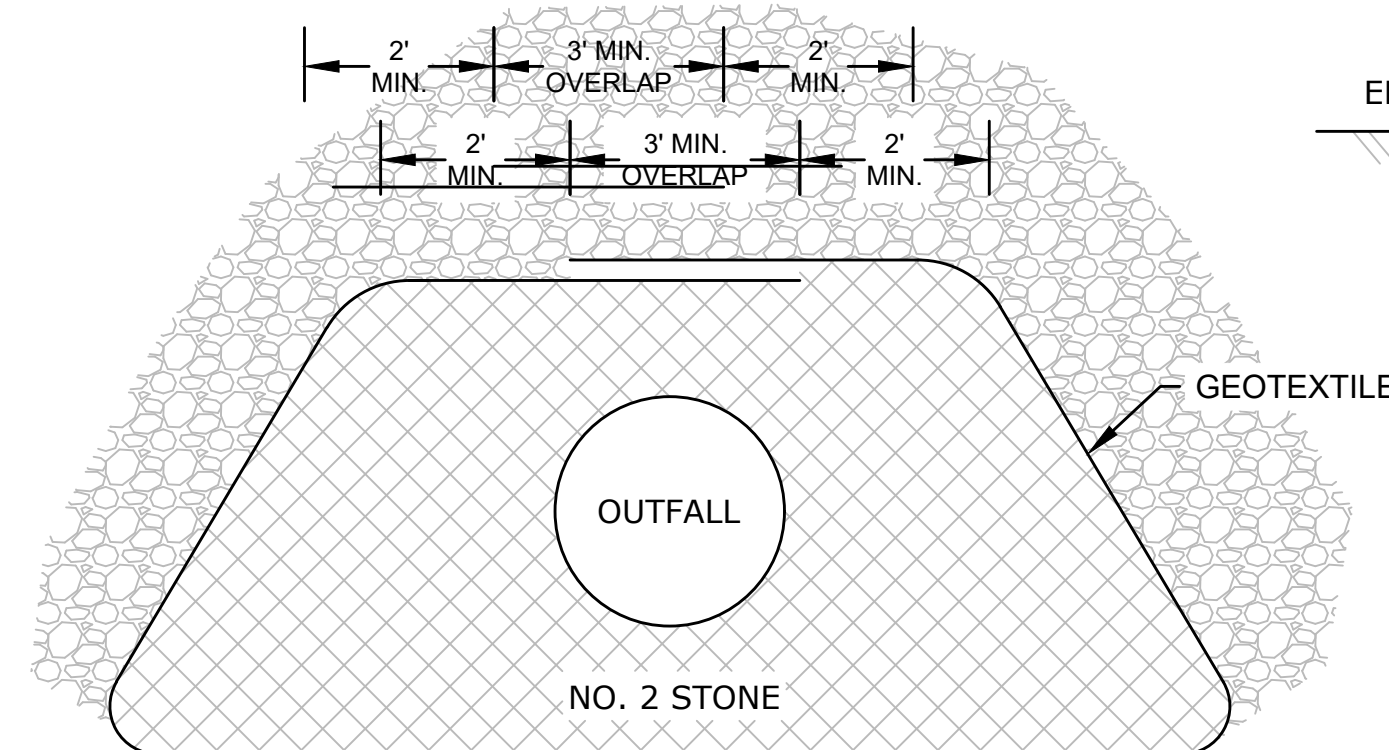
1. CONTRACTOR SHALL MINIMIZE DAMAGE TO EXISTING OUTFALL.
2. PROTECTIVE BEDDING STONE AND NO. 2 STONE SHALL EXTEND MIN. 2' EACH SIDE OF OUTFALL.
3. EXCAVATE TO 2 FEET EACH SIDE OF EXISTING OUTFALL.



3 TYPICAL EXISTING OUTFALL BACKFILL
DETAIL
SCALE N.T.S.

TABLE 1

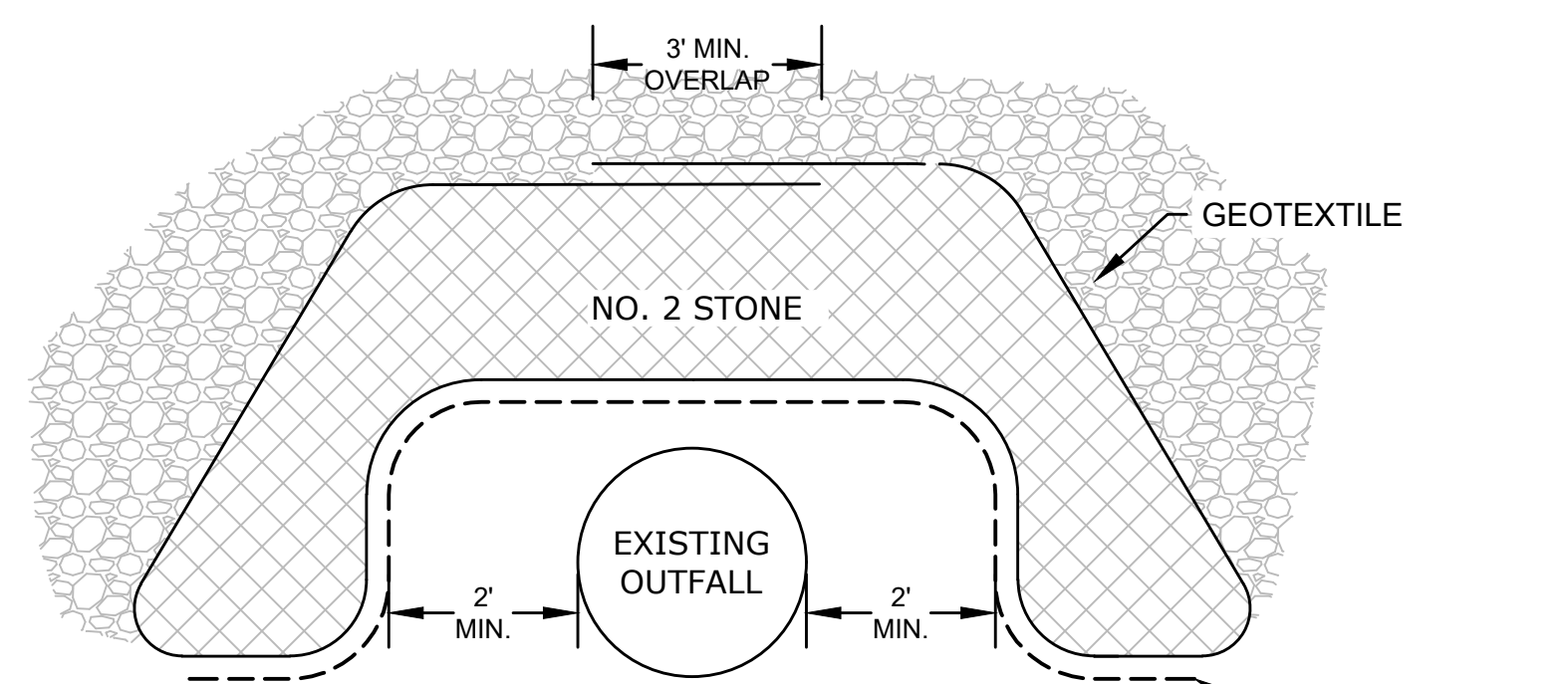
TOP OF BEDDING LAYER	
APPROXIMATE STATION	ELEVATION
3+75	+2.0'
7+25	+4.0'



NOTE:

1. WRAP NO. 2 STONE LAYER WITH GEOTEXTILE PRIOR TO COVERING WITH BEDDING STONE

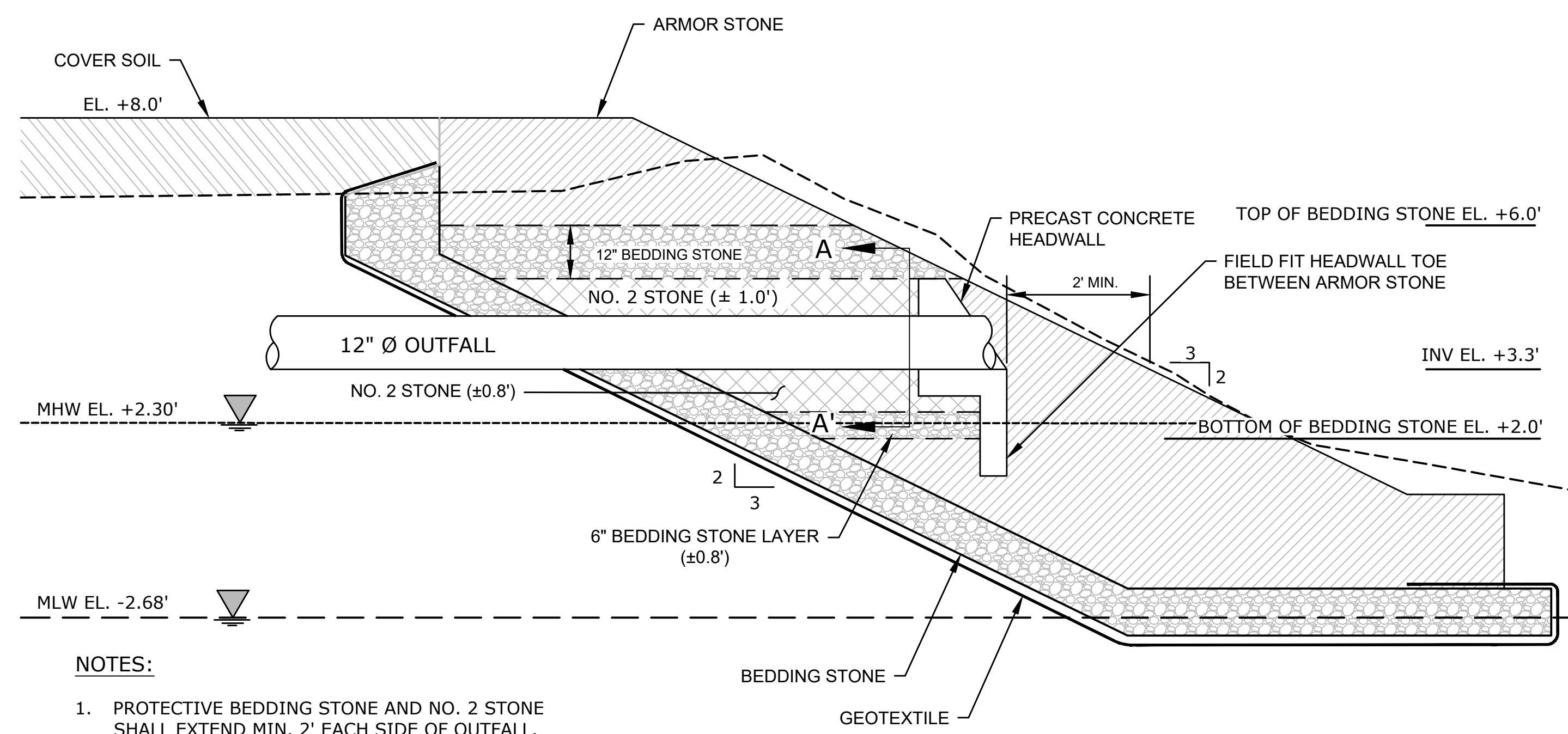
TYPICAL OUTFALL SECTION A-A'
SCALE N.T.S.



NOTE:

1. WRAP NO. 2 STONE LAYER WITH GEOTEXTILE PRIOR TO COVERING WITH BEDDING STONE

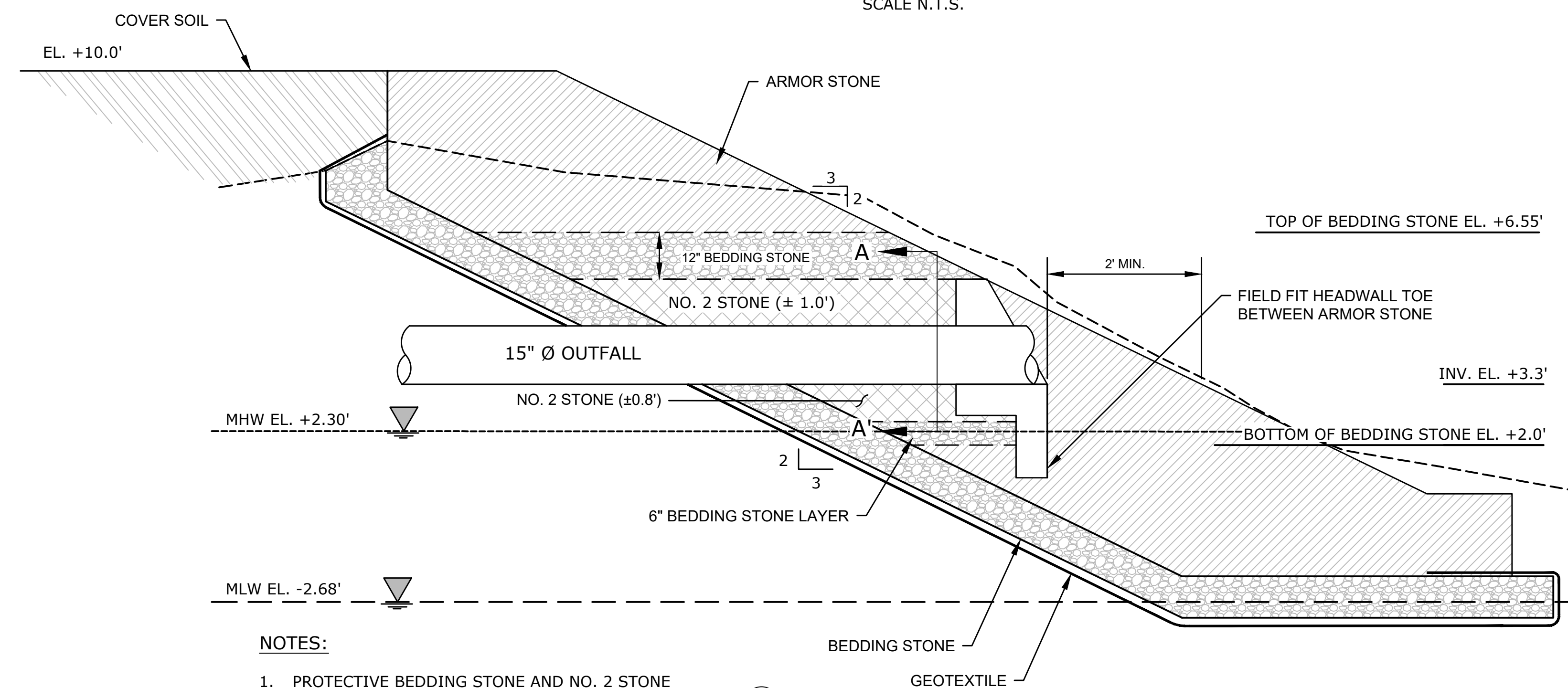
TYPICAL EXISTING OUTFALL SECTION B-B'
SCALE N.T.S.



4 12" OUTFALL DETAIL
SCALE N.T.S.

NOTES:

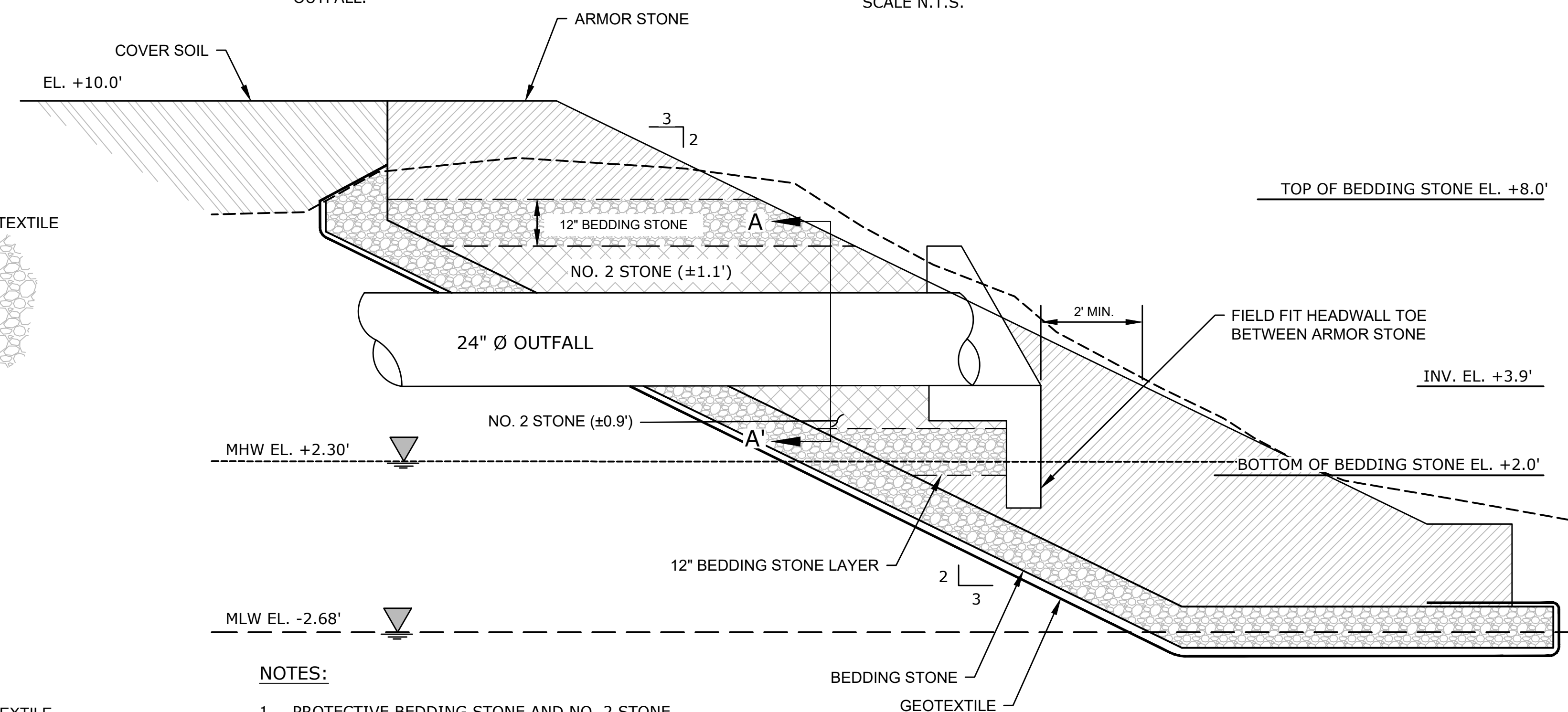
1. PROTECTIVE BEDDING STONE AND NO. 2 STONE SHALL EXTEND MIN. 2' EACH SIDE OF OUTFALL.
2. OMIT ARMOR STONE DIRECTLY WATERWARD OF OUTFALL.



5 15" OUTFALL DETAIL
SCALE N.T.S.

NOTES:

1. PROTECTIVE BEDDING STONE AND NO. 2 STONE SHALL EXTEND MIN. 2' EACH SIDE OF OUTFALL.
2. OMIT ARMOR STONE DIRECTLY WATERWARD OF OUTFALL.



6 24" OUTFALL DETAIL
SCALE N.T.S.

NOTES:

1. PROTECTIVE BEDDING STONE AND NO. 2 STONE SHALL EXTEND MIN. 2' EACH SIDE OF OUTFALL.
2. OMIT ARMOR STONE DIRECTLY WATERWARD OF OUTFALL.

LEGEND:

- ARMOR STONE
- BEDDING STONE
- NO. 2 STONE

REV	DESCRIPTION / ISSUE	DATE	DWG	CHK	APPR
1	NO REVISIONS TO THE SHEET	5/17/19	A.Y.	J.F.	J.F.
2	REPLACE ALL DETAILS	5/17/19	A.Y.	J.F.	J.F.

APTIM

Aptim Environmental & Infrastructure, LLC
200 Horizon Center
Trenton, New Jersey 08691

DESIGNED BY:
J.R.

DRAWN BY:
J.R.

CHECKED BY:
A.M.B.

APPROVED BY:
J. Findley

PROPOSED REVETMENT
REHABILITATION
CONSTRUCTION DETAILS
DENNIS P. COLLINS PARK PPG HCC - SITE 174
WEST 1ST STREET BAYONNE, NEW JERSEY

NJ Certificate of Authorization No 24GA28072700

James C. Findley
Professional Engineer
N.J. Lic. No. 24GE04328800

Date: 8/30/19

DATE: 8/6/19

SCALE: AS SHOWN

DRAWING NO. 631230830-E4

SHEET NO. C-10