

NASSAU COUNTY
DEPARTMENT OF PUBLIC WORKS
 NASSAU COUNTY, NEW YORK

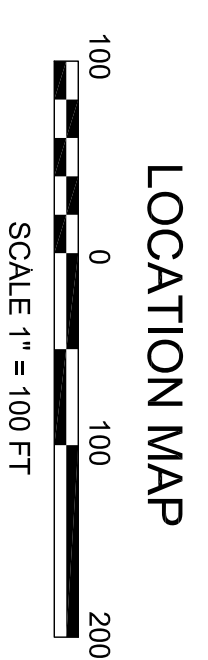
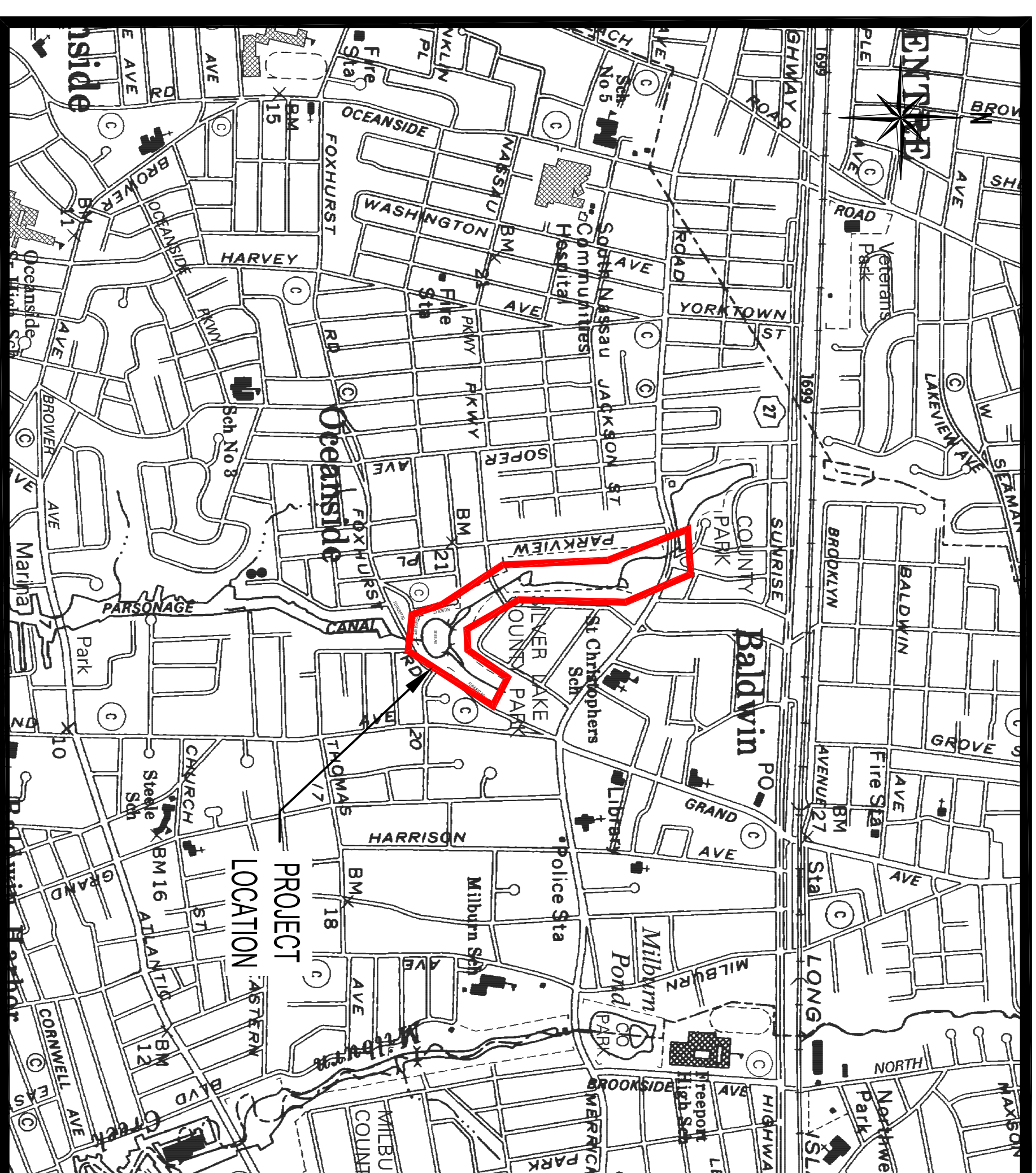


30% PRELIMINARY PLANS FOR
SILVER LAKE PARK
DRAINAGE IMPROVEMENTS

BALDWIN, NY
 DECEMBER 2018

LIST OF DRAWINGS

DRAWING NAME	SHEET NO.
TITLE SHEET	1
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PREPARED AND
 RECOMMENDED BY:

RAY DIBIASE, P.E., - NYSPE Lic. No. 56985
LKMA L. K. McLEAN ASSOCIATES, P.C.
 CONSULTING ENGINEERS 437 SOUTH COUNTRY RD., BROOKHAVEN, NY 11719

DATE: _____

ALL WORK CONTEMPLATED UNDER THIS CONTRACT IS TO BE COVERED BY AND IN CONFORMANCE WITH THE 2008 NYSDOT STANDARD SPECIFICATIONS (U.S. CUSTOMARY UNITS), EXCEPT AS MODIFIED ON THESE PLANS AND IN THE ITEMIZED PROPOSAL.



PHOTO 1



PHOTO 2

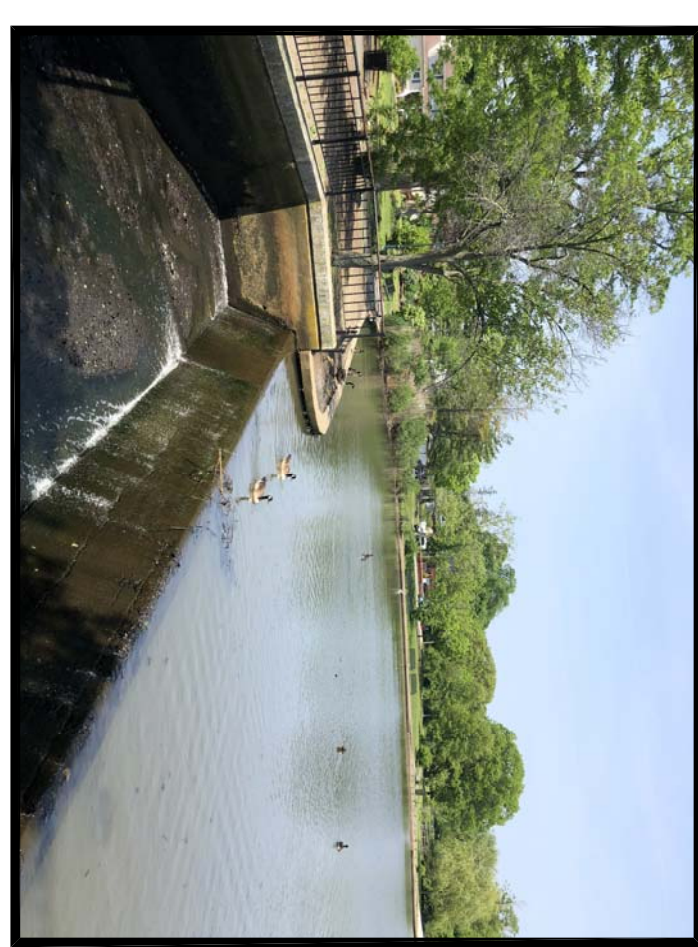


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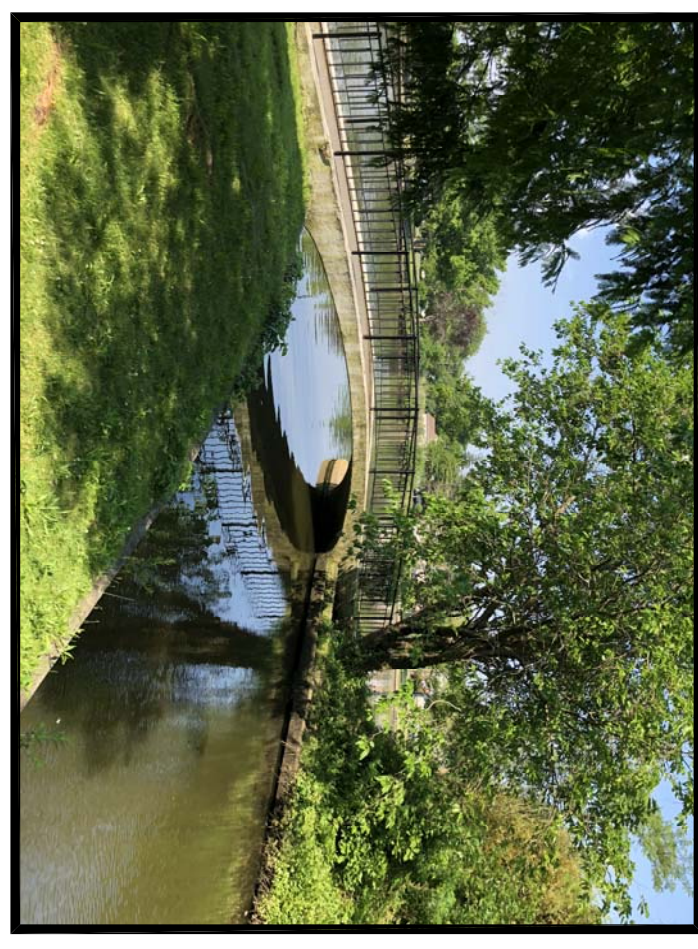


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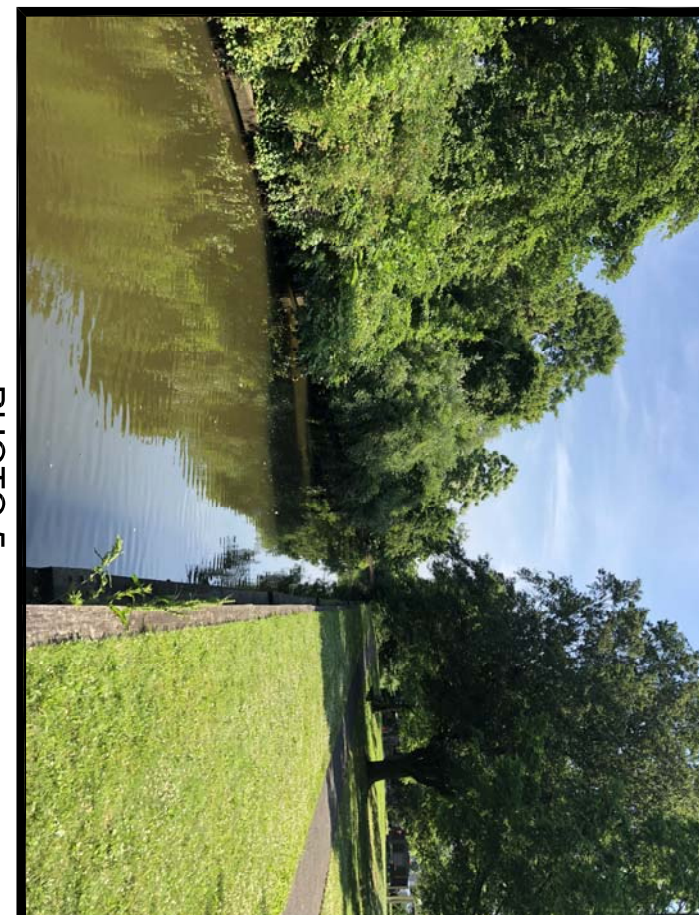


PHOTO 5



PHOTO 6



PHOTO 7



PHOTO 8



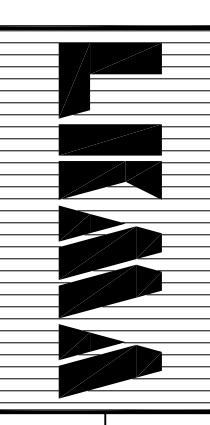
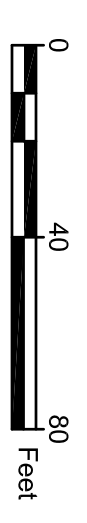
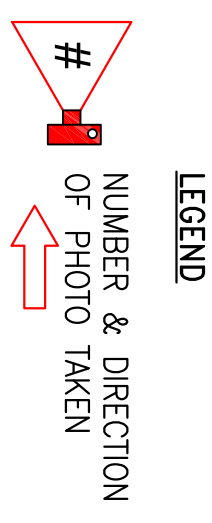
PHOTO 9



PHOTO 10



PHOTO 11



NASSAU COUNTY
 DEPARTMENT OF PUBLIC WORKS
 SILVER LAKE PARK DRAINAGE IMPROVEMENTS
 BALDWIN, NEW YORK
 EXISTING CONDITIONS 1

DATE	BY	DESCRIPTION	APPROV. BY
REVISIONS			

Designed By: RAS	Scale: AS NOTED	Sheet No.:
Drawn By: MC	Date: DECEMBER 2018	EC-1
Approved By: RGD	File No. 18023.000	

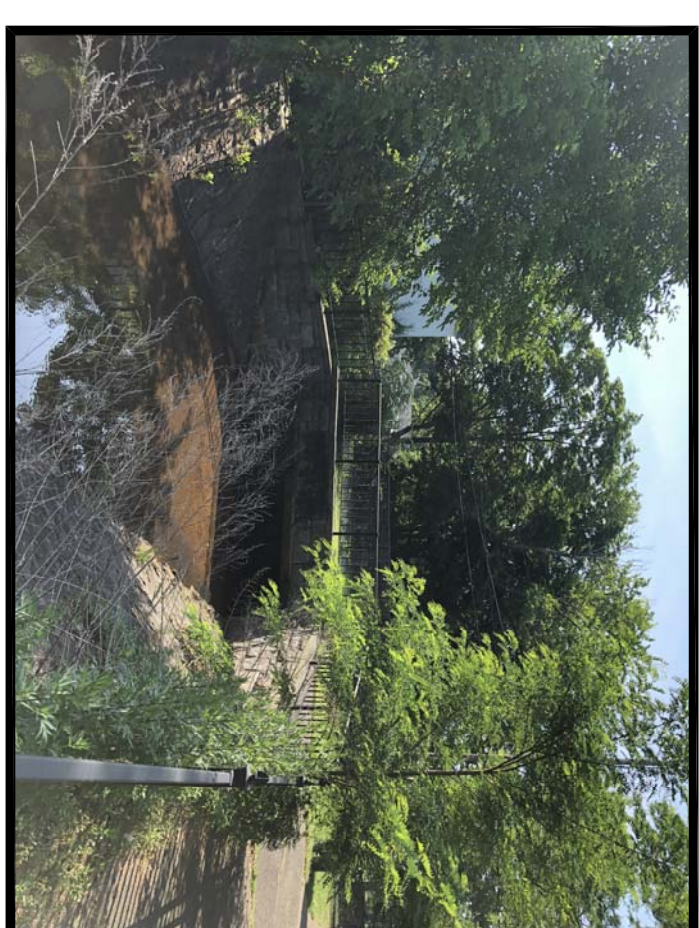


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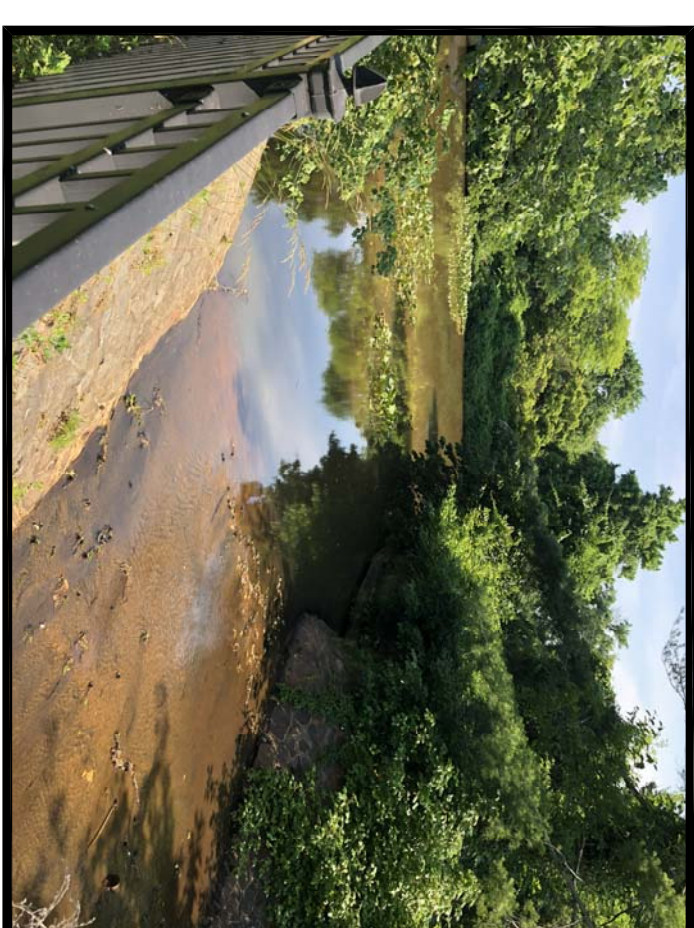


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PHOTO 16

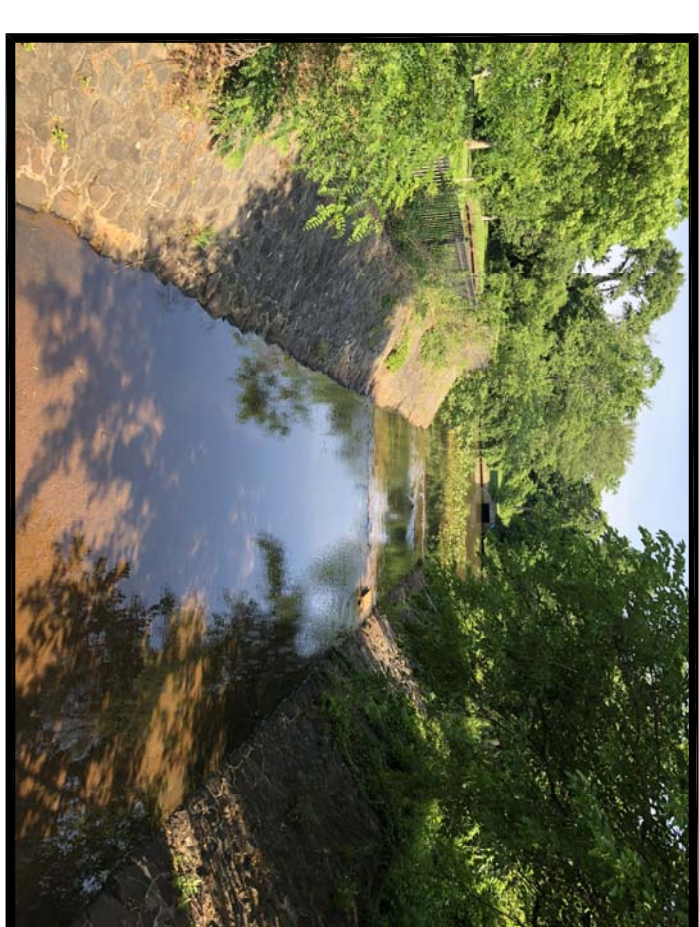


PHOTO 13



PHOTO 15

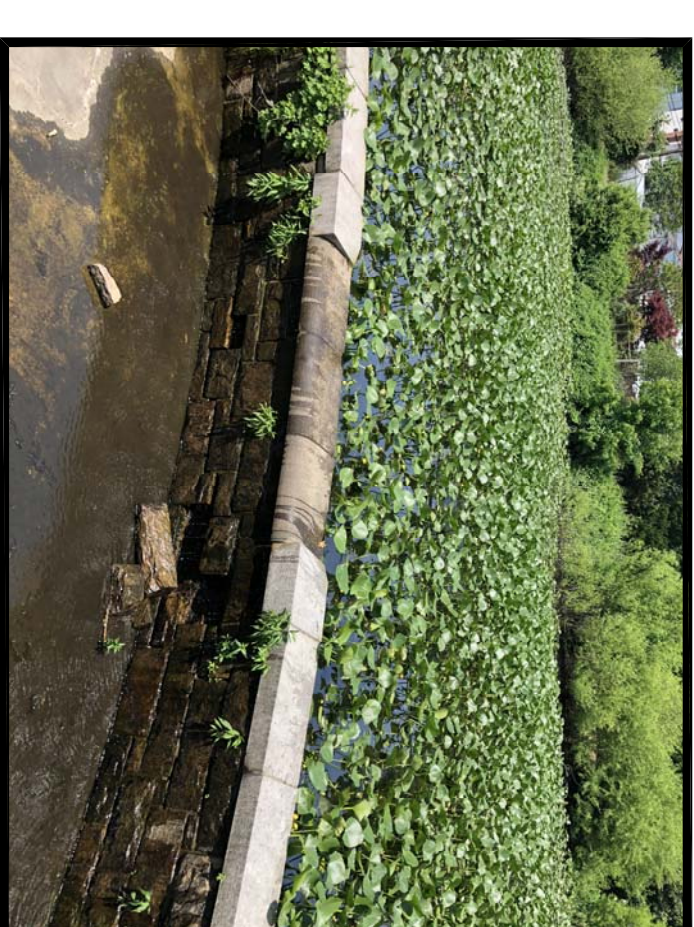


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PHOTO 18

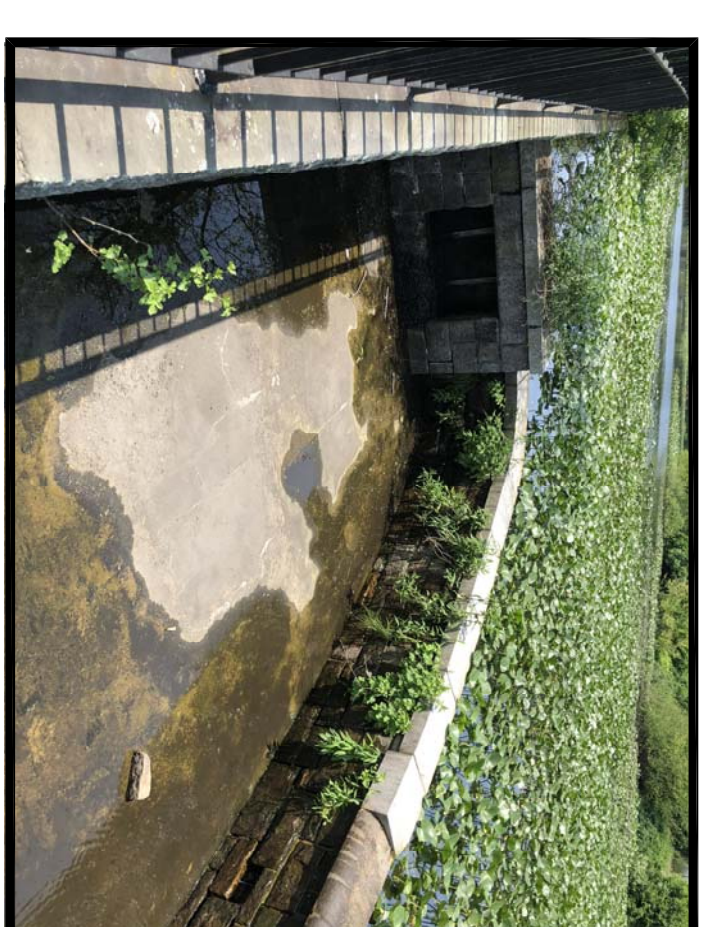
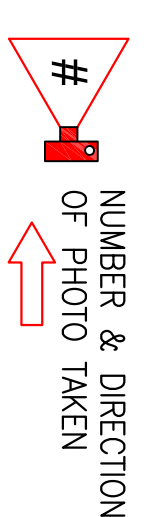
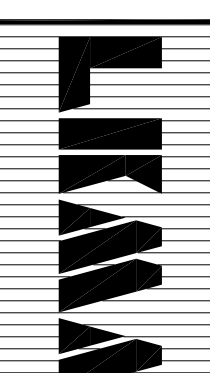
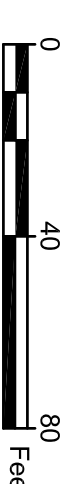


PHOTO 19



LEGEND

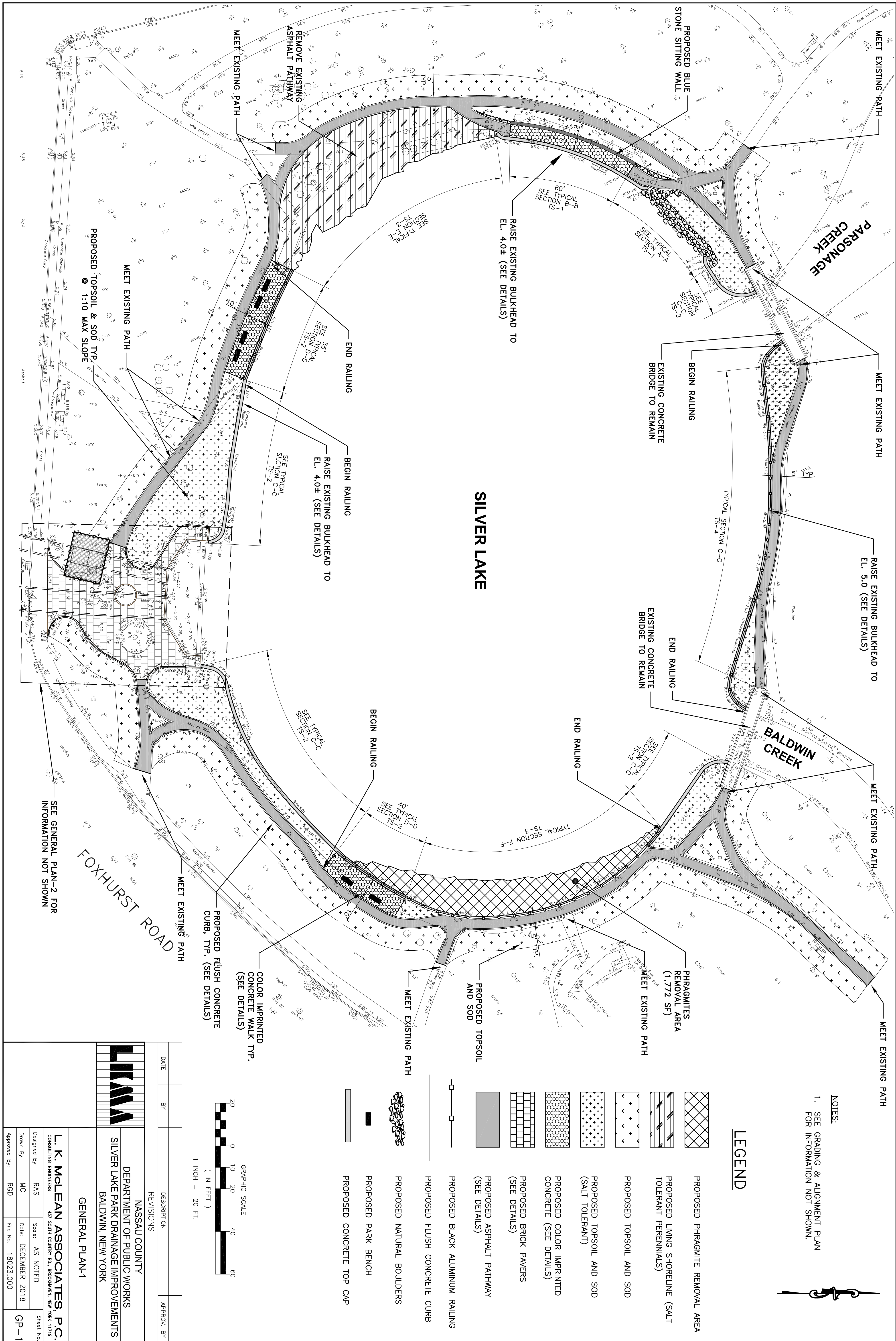
NUMBER & DIRECTION OF PHOTO TAKEN



NASSAU COUNTY
DEPARTMENT OF PUBLIC WORKS
BALDWIN, NEW YORK
EXISTING CONDITIONS 2

L. K. McLEAN ASSOCIATES, P.C.
CONSULTING ENGINEERS
437 SOUTH COUNTRY RD., BROOMHAVEN, NEW YORK 11719
Designed By: RAS Scale: AS NOTED
Drawn By: MC Date: DECEMBER 2018
Approved By: RGD File No. 18023.000

EC-2

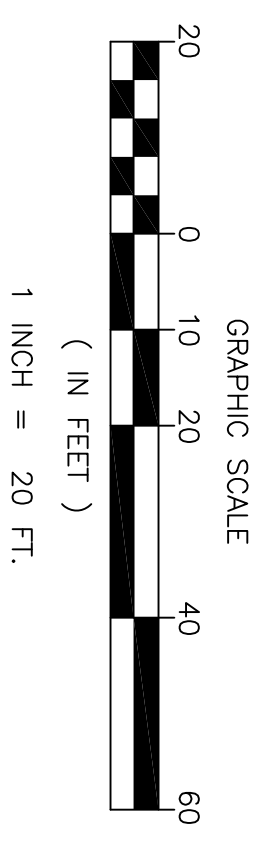


NOTES:
 1. SEE GRADING & ALIGNMENT PLAN FOR INFORMATION NOT SHOWN.



LEGEND

- PROPOSED PHRAGMITE REMOVAL AREA
- PROPOSED LIVING SHORELINE (SALT TOLERANT PERENNIALS)
- PROPOSED TOPSOIL AND SOD
- PROPOSED TOPSOIL AND SOD (SALT TOLERANT)
- PROPOSED COLOR IMPRINTED CONCRETE (SEE DETAILS)
- PROPOSED BRICK PAVERS (SEE DETAILS)
- PROPOSED ASPHALT PATHWAY (SEE DETAILS)
- PROPOSED BLACK ALUMINUM RAILING
- PROPOSED FLUSH CONCRETE CURB
- PROPOSED NATURAL BOULDERS
- PROPOSED PARK BENCH
- PROPOSED CONCRETE TOP CAP



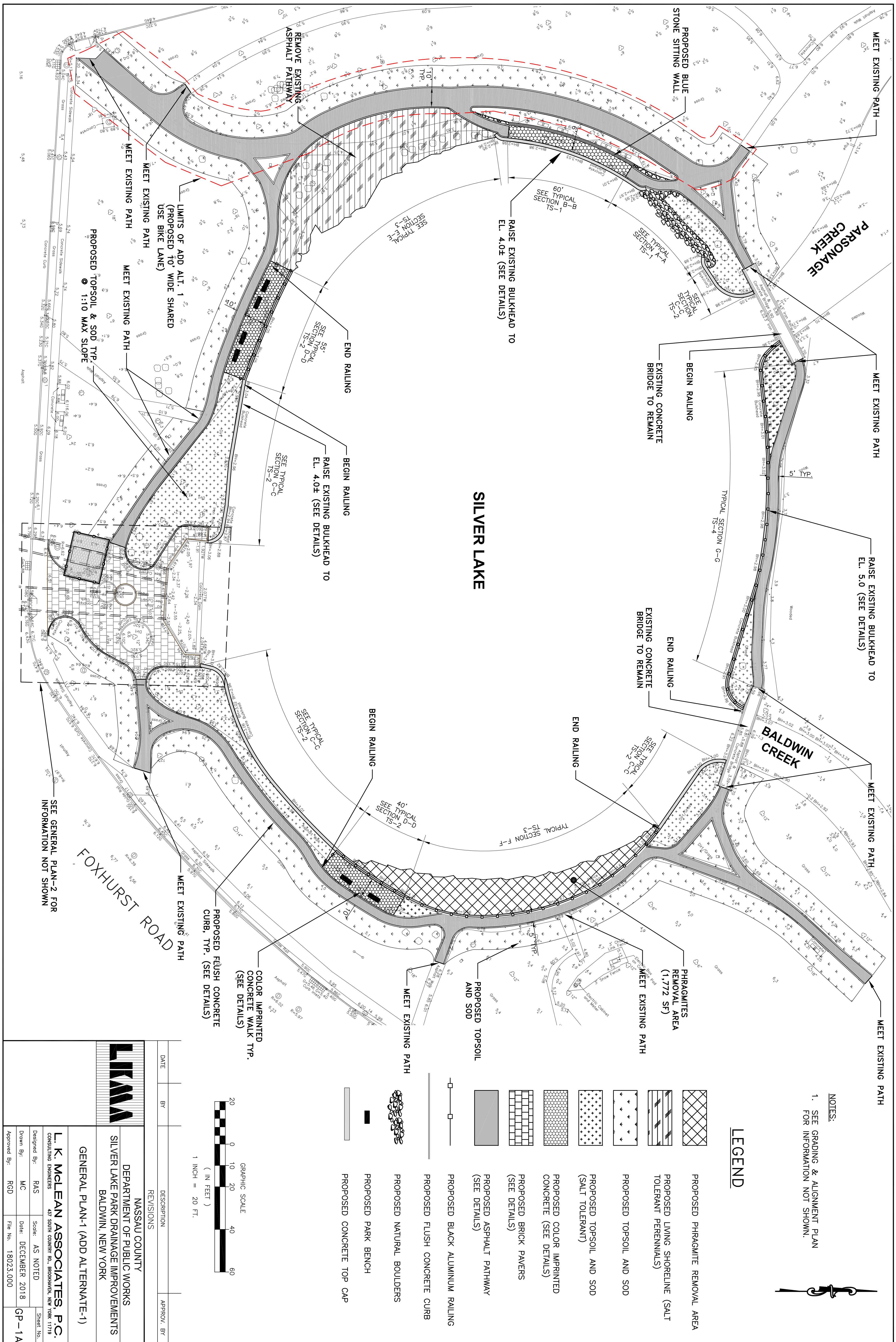
DATE	BY	DESCRIPTION	APPROV. BY
REVISIONS			

LKMA
 DEPARTMENT OF PUBLIC WORKS
 SILVER LAKE PARK DRAINAGE IMPROVEMENTS
 BALDWIN, NEW YORK
 GENERAL PLAN-1

L. K. McLEAN ASSOCIATES, P.C.
 CONSULTING ENGINEERS
 437 SOUTH COUNTRY RD., BROOKHAVEN, NEW YORK 11719

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Drawn By: MC	Date: DECEMBER 2018	GP-1
Approved By: RGD	File No. 18023.000	


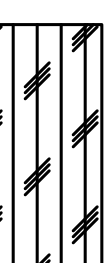
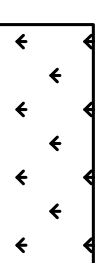
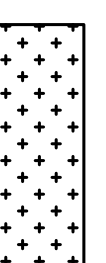
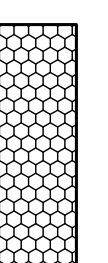
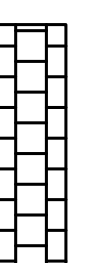

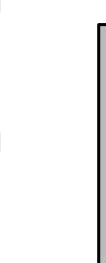
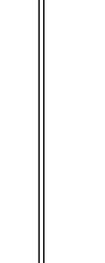


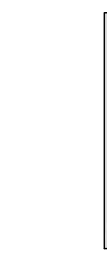
SEE GENERAL PLAN-2 FOR INFORMATION NOT SHOWN

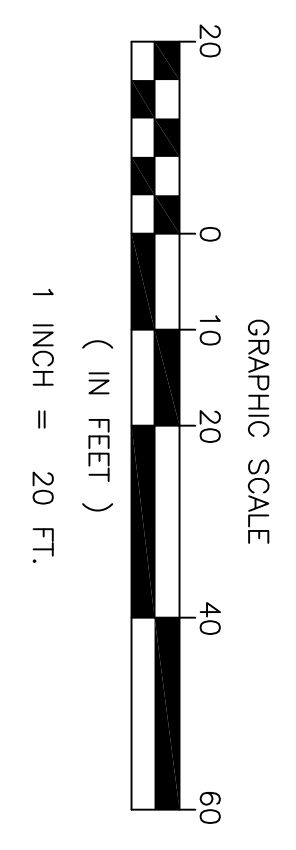


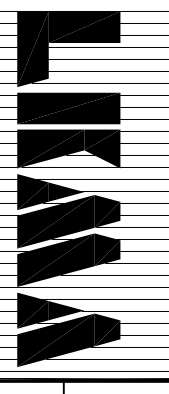
NOTES:
 1. SEE GRADING & ALIGNMENT PLAN FOR INFORMATION NOT SHOWN.



LEGEND

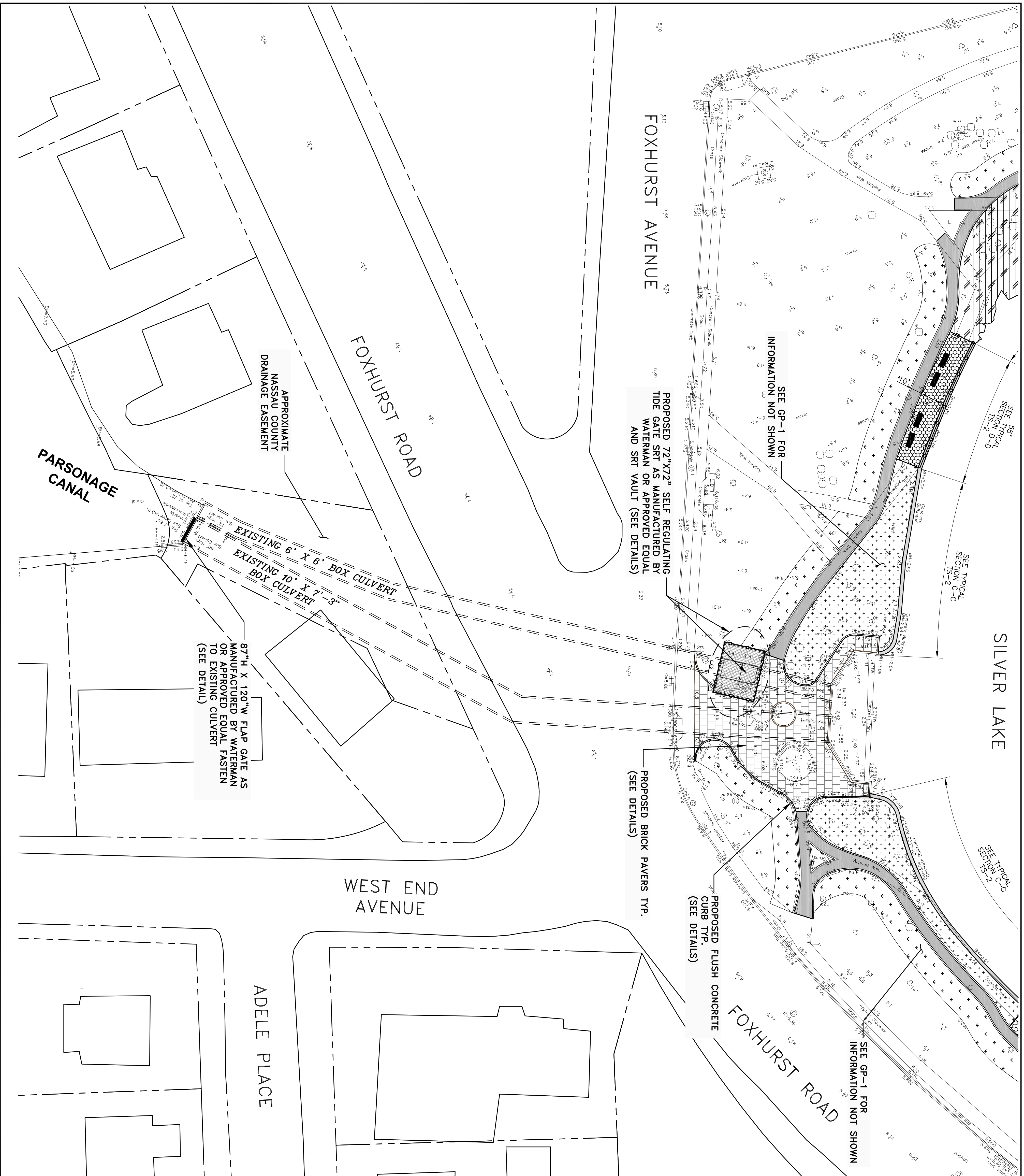
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-  PROPOSED LIVING SHORELINE (SALT TOLERANT PERENNIALS)
-  PROPOSED TOPSOIL AND SOD
-  PROPOSED TOPSOIL AND SOD (SALT TOLERANT)
-  PROPOSED COLOR IMPRINTED CONCRETE (SEE DETAILS)
-  PROPOSED BRICK PAVERS (SEE DETAILS)
-  PROPOSED ASPHALT PATHWAY (SEE DETAILS)
-  PROPOSED BLACK ALUMINUM RAILING
-  PROPOSED FLUSH CONCRETE CURB
-  PROPOSED NATURAL BOULDERS
-  PROPOSED PARK BENCH
-  PROPOSED CONCRETE TOP CAP




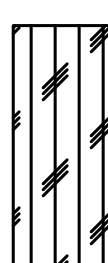
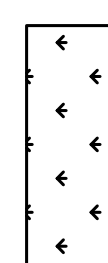
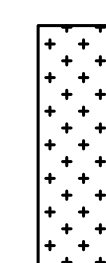
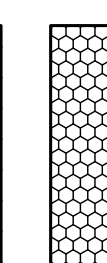
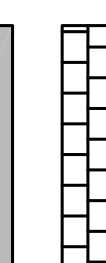

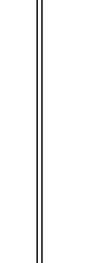
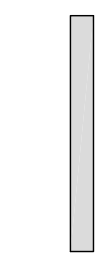
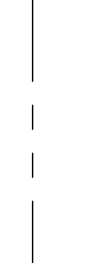


DATE	BY	DESCRIPTION	APPROV. BY
REVISIONS			
			
NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS SILVER LAKE PARK DRAINAGE IMPROVEMENTS BALDWIN, NEW YORK GENERAL PLAN-1 (ADD ALTERNATE-1)			

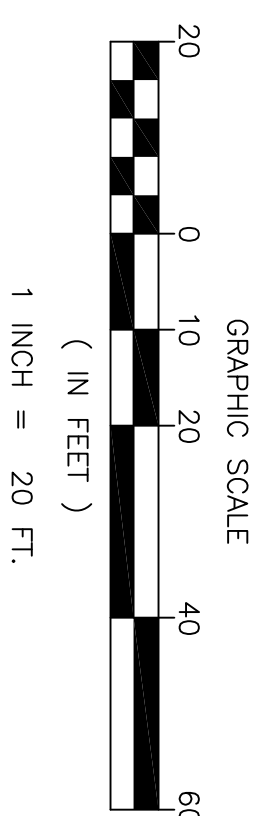
L. K. McLEAN ASSOCIATES, P.C. CONSULTING ENGINEERS 437 SOUTH COUNTRY RD., BROOKHAVEN, NEW YORK 11719		Sheet No. GP-1A
Designed By: RAS Drawn By: MC Approved By: RGD	Date: DECEMBER 2018 Scale: AS NOTED	File No. 18023.000

SEE GENERAL PLAN-2 FOR INFORMATION NOT SHOWN



LEGEND

-  PROPOSED PHRAGMITE REMOVAL AREA
-  PROPOSED LIVING SHORELINE (SALT TOLERANT PERENNIALS)
-  PROPOSED TOPSOIL AND SOD
-  PROPOSED TOPSOIL AND SOD (SALT TOLERANT)
-  PROPOSED COLOR IMPRINTED CONCRETE (SEE DETAILS)
-  PROPOSED BRICK PAVERS (SEE DETAILS)
-  PROPOSED ASPHALT PATHWAY (SEE DETAILS)
-  PROPOSED BLACK ALUMINUM RAILING
-  PROPOSED FLUSH CONCRETE CURB
-  PROPOSED CONCRETE TOP CAP
-  PROPOSED PARK BENCH
-  APPROXIMATE NASSAU COUNTY TAX MAP LINES



DATE	BY	DESCRIPTION	APPROV. BY
REVISIONS			

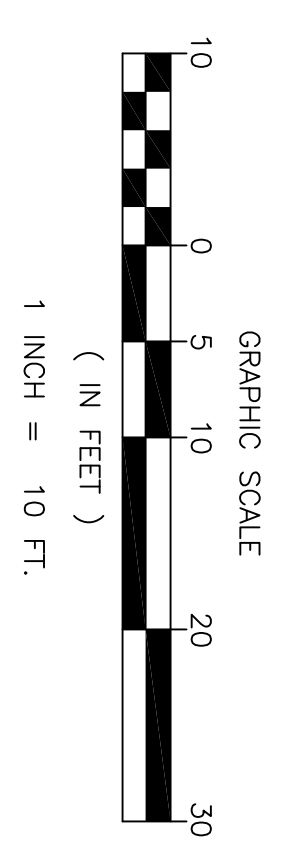
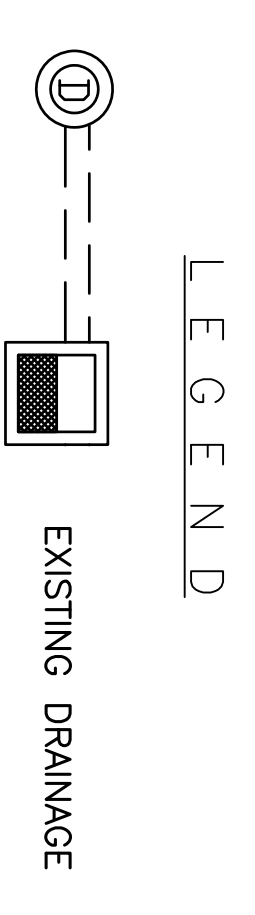
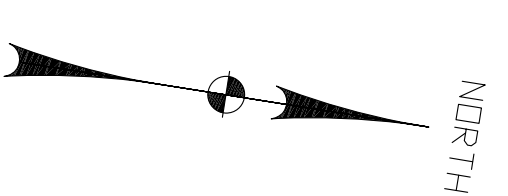
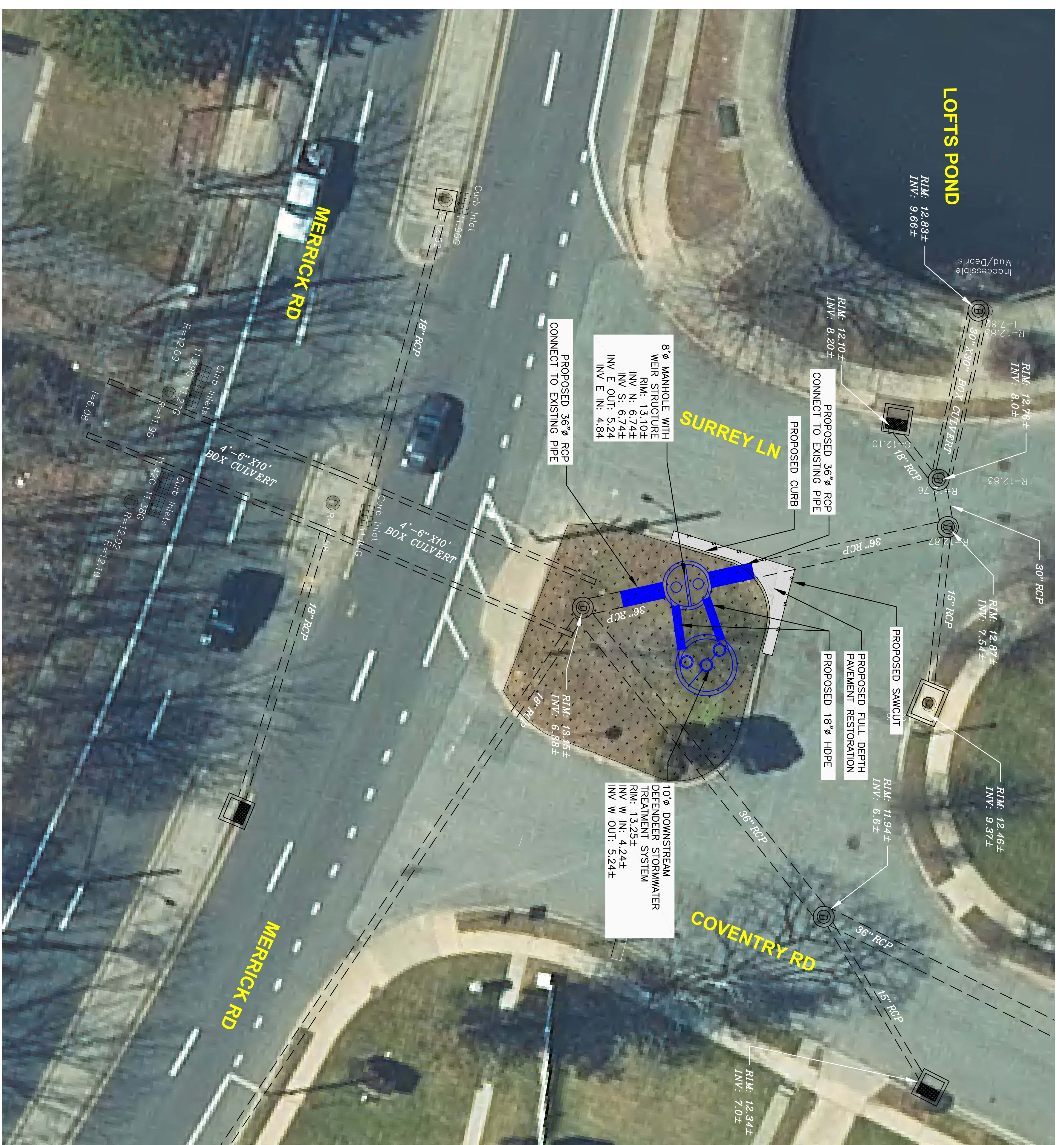
LKMA

NASSAU COUNTY
DEPARTMENT OF PUBLIC WORKS
SILVER LAKE PARK DRAINAGE IMPROVEMENTS
BALDWIN, NEW YORK

GENERAL PLAN-2

L. K. McLEAN ASSOCIATES, P.C.
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437 SOUTH COUNTRY RD., BROOKHAVEN, NEW YORK 11719

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Approved By:	RGD	File No.:	18023.000	



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REVISIONS			

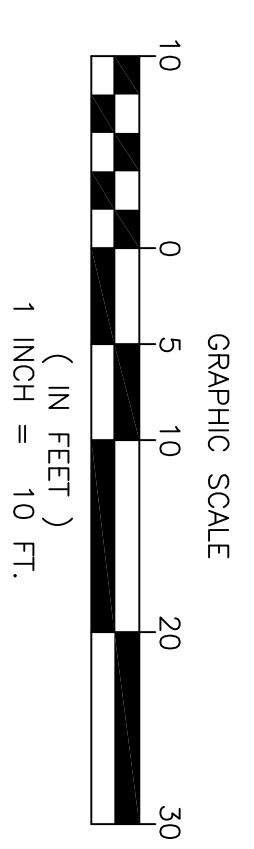
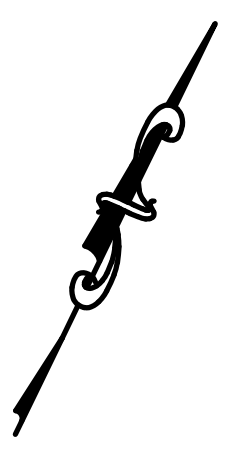
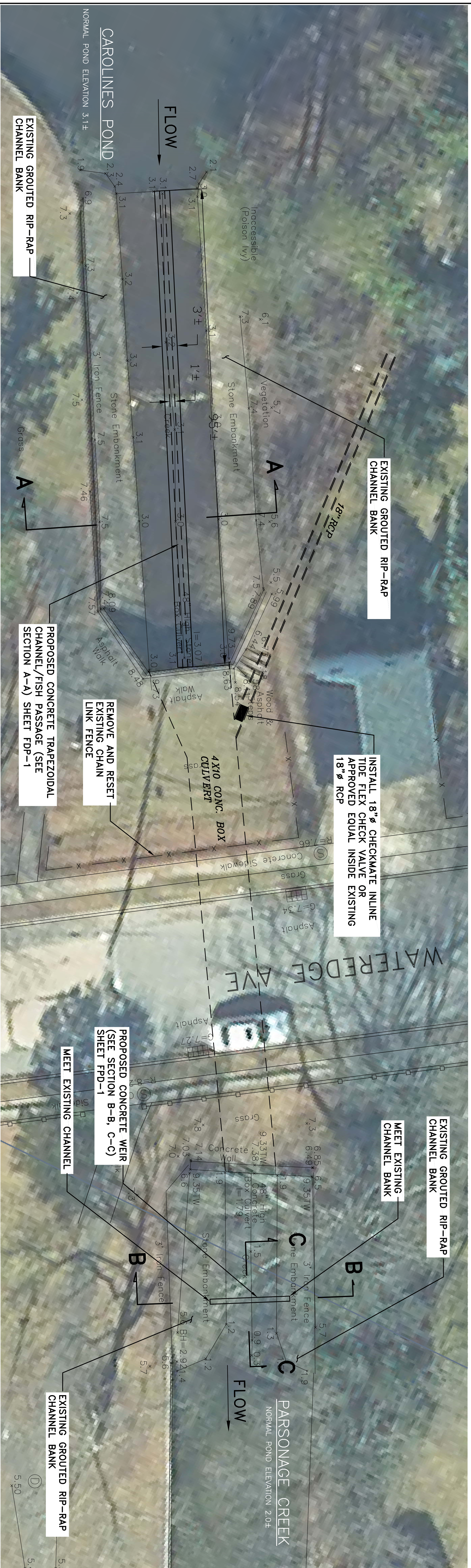
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MASSAU COUNTY
 DEPARTMENT OF PUBLIC WORKS
 SILVER LAKE PARK DRAINAGE IMPROVEMENTS
 BALDWIN, NEW YORK

GENERAL PLAN - 3

L. K. McLEAN ASSOCIATES, P.C.
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 437 SOUTH COUNTRY RD., BROOKHAVEN, NEW YORK 11719

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Drawn By:	MC	Date:	DECEMBER 2018	
Approved By:	RGD	File No.:	18023.000	GP-3

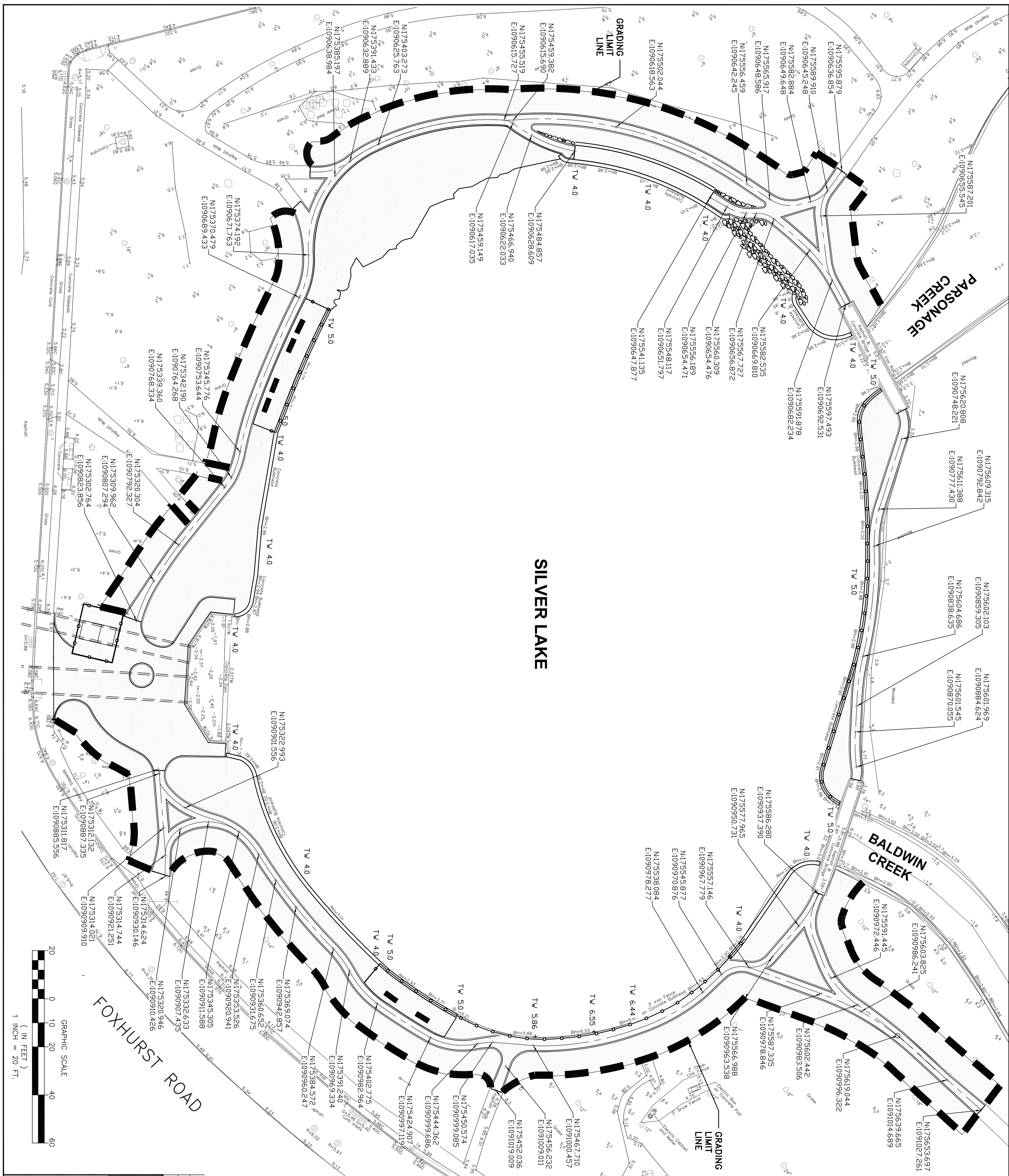


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REVISIONS			

LIKMA










MASSAU COUNTY
DEPARTMENT OF PUBLIC WORKS
SILVER LAKE PARK DRAINAGE IMPROVEMENTS
BALDWIN, NEW YORK
GENERAL PLAN - 4

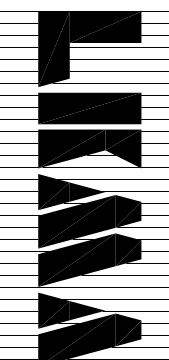
L. K. MCLEAN ASSOCIATES, P.C.		Sheet No.
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Drawn By: MC	Date: DECEMBER 2018	
Approved By: RGD	File No. 18023.000	GP-4



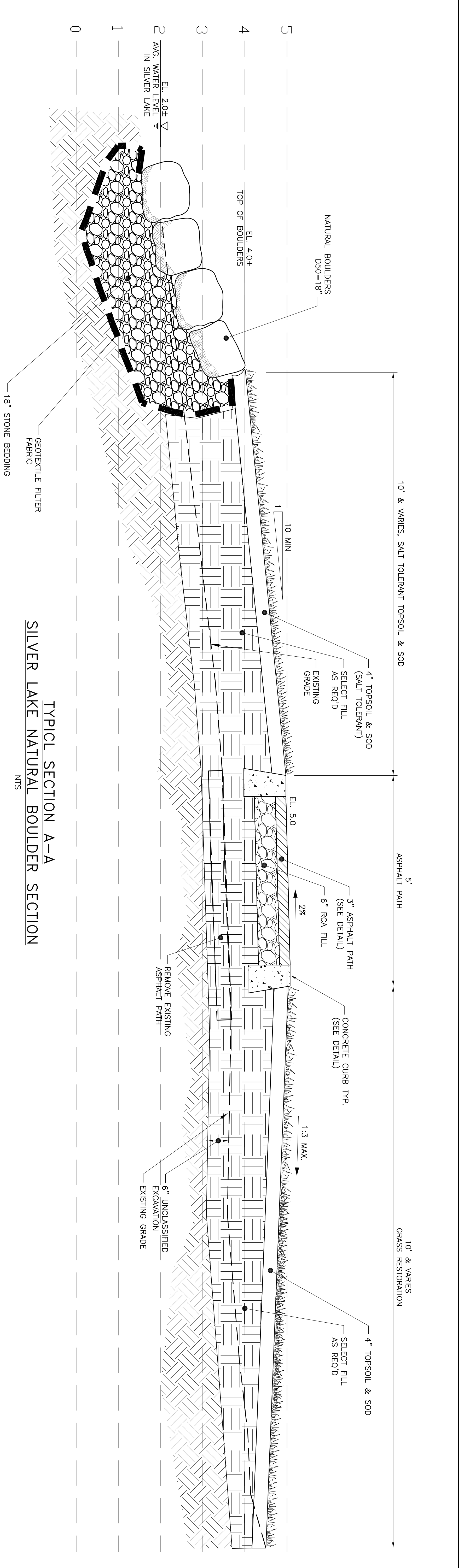
SILVER LAKE

LEGEND

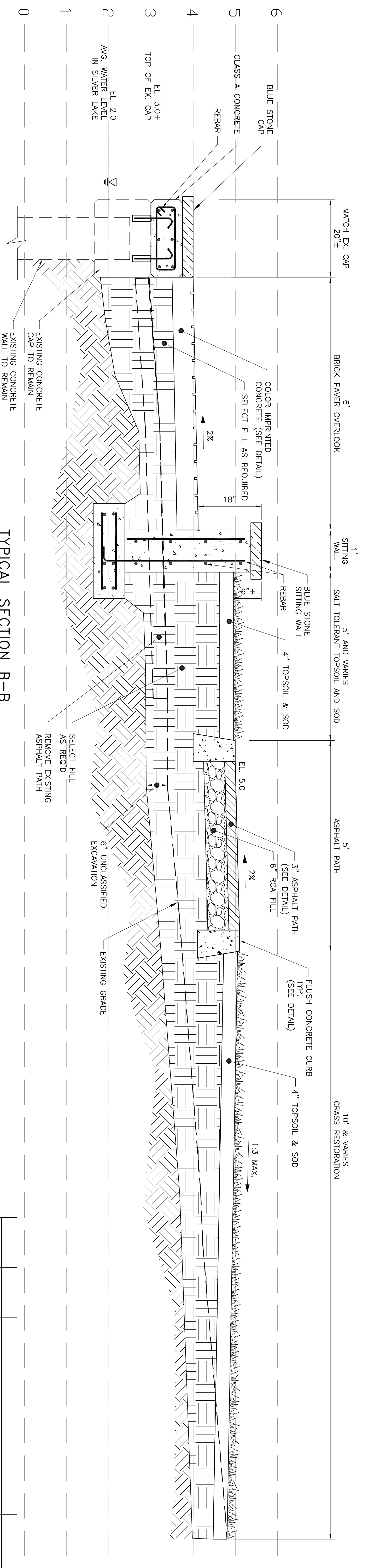
-  N: PROPOSED CENTERLINE
-  E: STAKE OUT POINT
-  PROPOSED PATH CENTERLINE
-  + TW 4.0 TOP OF PROPOSED WALL ELEVATION
-  PROPOSED BLACK ALUMINUM RAILING
-  PROPOSED FLUSH CONCRETE CURB
-  PROPOSED NATURAL BOULDERS
-  PROPOSED PARK BENCH
-  GRADING LIMIT LINE

DATE	BY	DESCRIPTION	APPROV. BY
REVISIONS			
			
MASSAU COUNTY DEPARTMENT OF PUBLIC WORKS SILVER LAKE PARK DRAINAGE IMPROVEMENTS BALDWIN, NEW YORK GRADING AND ALIGNMENT PLAN			

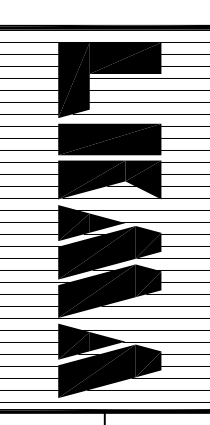
L. K. McLEAN ASSOCIATES, P.C. CONSULTING ENGINEERS 437 SOUTH COUNTRY RD., BROOKHAVEN, NEW YORK 11719		Scale: AS NOTED Date: DECEMBER 2018 File No. 18023.000	Sheet No. GA-1
Designed By: RAS Drawn By: MC Approved By: RGD	Date: DECEMBER 2018	Sheet No.	



TYPICAL SECTION A-A
SILVER LAKE NATURAL BOULDER SECTION
NTS



TYPICAL SECTION B-B
SILVER LAKE CONCRETE CAP SECTION
(AT BLUE STONE SITTING WALL)
NTS



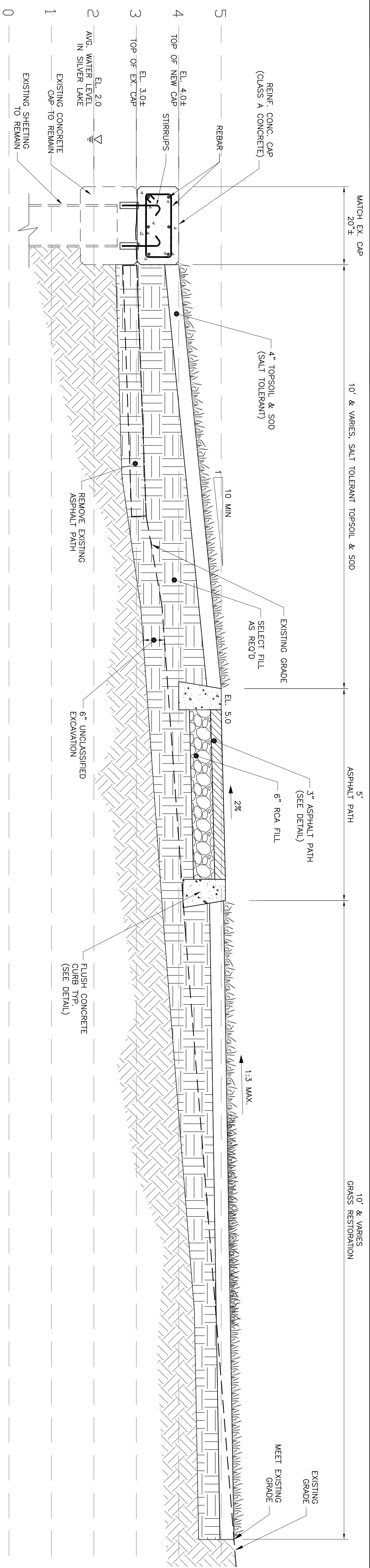
MASSAU COUNTY
DEPARTMENT OF PUBLIC WORKS
SILVER LAKE PARK DRAINAGE IMPROVEMENTS
BALDWIN, NEW YORK

TYPICAL SECTIONS - 1

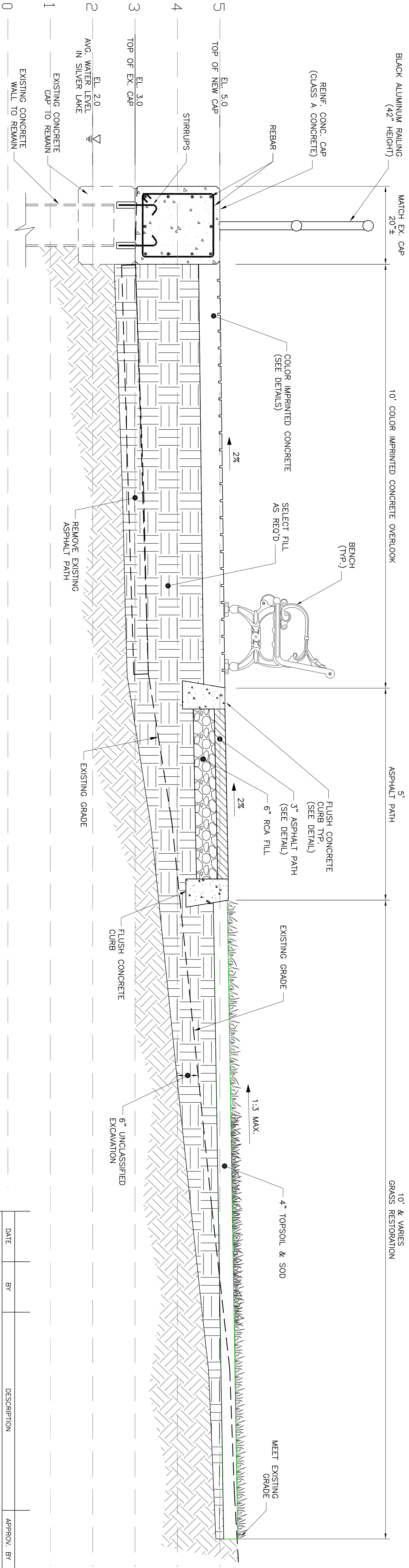
DATE	BY	DESCRIPTION	APPROV. BY
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Designed By:	RAS	Scale:	AS NOTED	Sheet No.
Drawn By:	MC	Date:	DECEMBER 2018	TS-1
Approved By:	RGD	File No.:	18023.000	

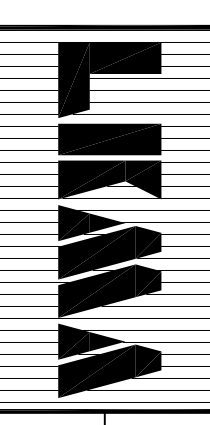
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CONSULTING ENGINEERS
437 SOUTH COUNTRY RD., BROOKHAVEN, NEW YORK 11719



TYPICAL SECTION C-C
SILVER LAKE CONCRETE CAP SECTION
(AT LOW LYING SALT TOLERANT TOPSOIL AND SOD)
NTS



TYPICAL SECTION D-D
SILVER LAKE CONCRETE CAP SECTION
(AT OVERLOOK)
NTS



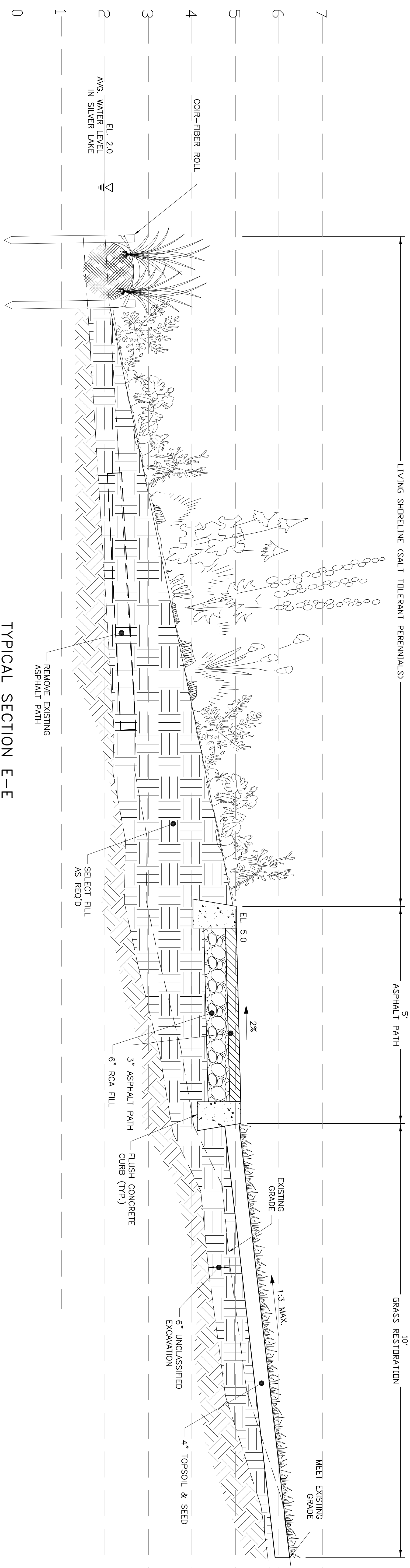
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SILVER LAKE PARK DRAINAGE IMPROVEMENTS
BALDWIN, NEW YORK

TYPICAL SECTIONS - 2

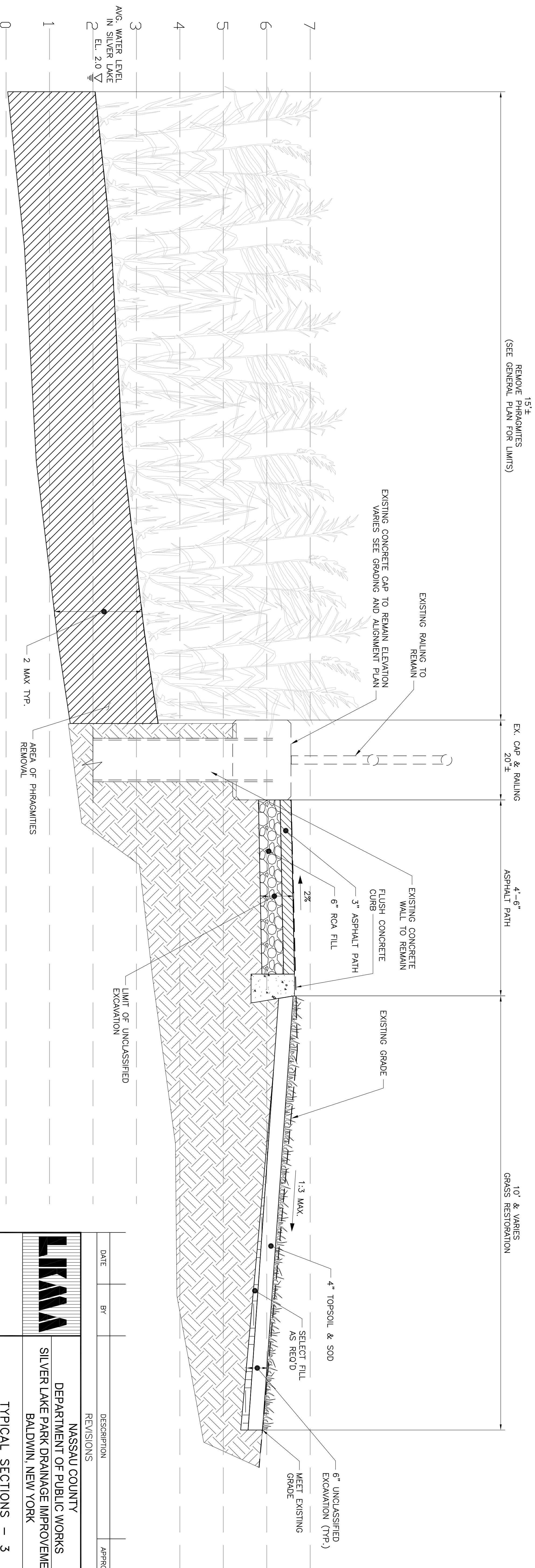
DATE	BY	DESCRIPTION	APPROV. BY
REVISIONS			

Designed By:	RAS	Scale:	AS NOTED	Sheet No.
Drawn By:	MC	Date:	DECEMBER 2018	TS-2
Approved By:	RGD	File No.:	18023.000	

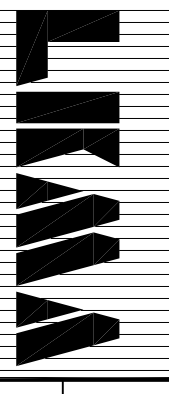
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CONSULTING ENGINEERS	
437 SOUTH COUNTRY RD., BROOKHAVEN, NEW YORK 11719	



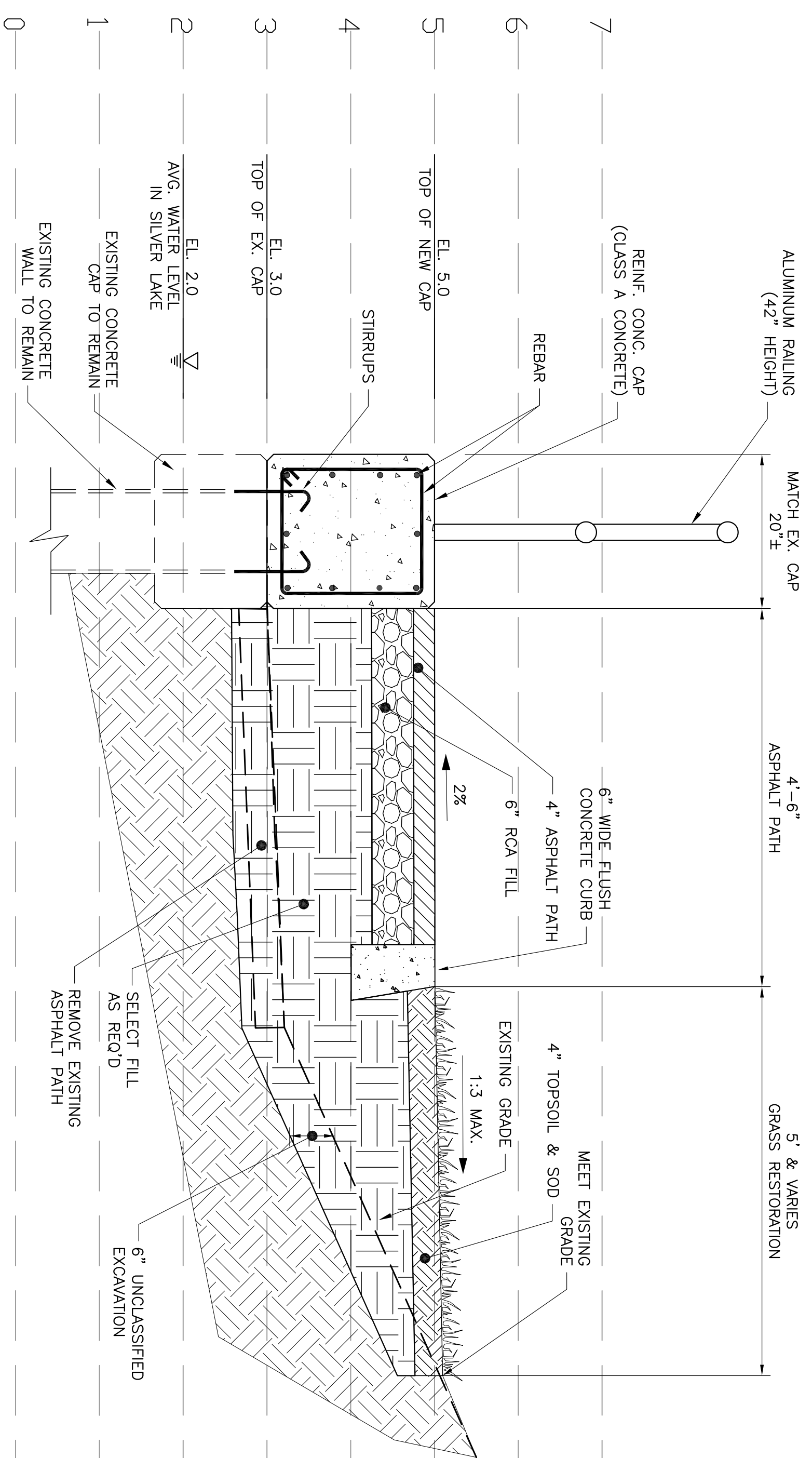
TYPICAL SECTION E-E
 SILVER LAKE LIVING SHORELINE SECTION
 NTS



TYPICAL SECTION F-F
 PHRAGMITES REMOVAL AREA
 NTS

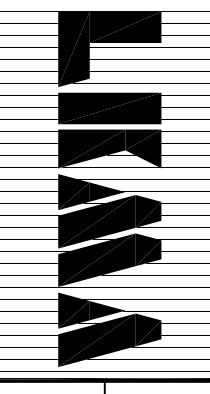
DATE	BY	DESCRIPTION	APPROV. BY
REVISIONS			
			
MASSAU COUNTY DEPARTMENT OF PUBLIC WORKS SILVER LAKE PARK DRAINAGE IMPROVEMENTS BALDWIN, NEW YORK			
TYPICAL SECTIONS - 3			

Designed By:	RAS	Scale:	AS NOTED	Sheet No.:
Drawn By:	MC	Date:	DECEMBER 2018	TS-3
Approved By:	RGD	File No.:	18023.000	



TYPICAL SECTION G-G
SILVER LAKE CONCRETE CAP SECTION
(NORTH SIDE BETWEEN PEDESTRIAN BRIDGES)
NTS

DATE	BY	DESCRIPTION	APPROV. BY
		REVISIONS	

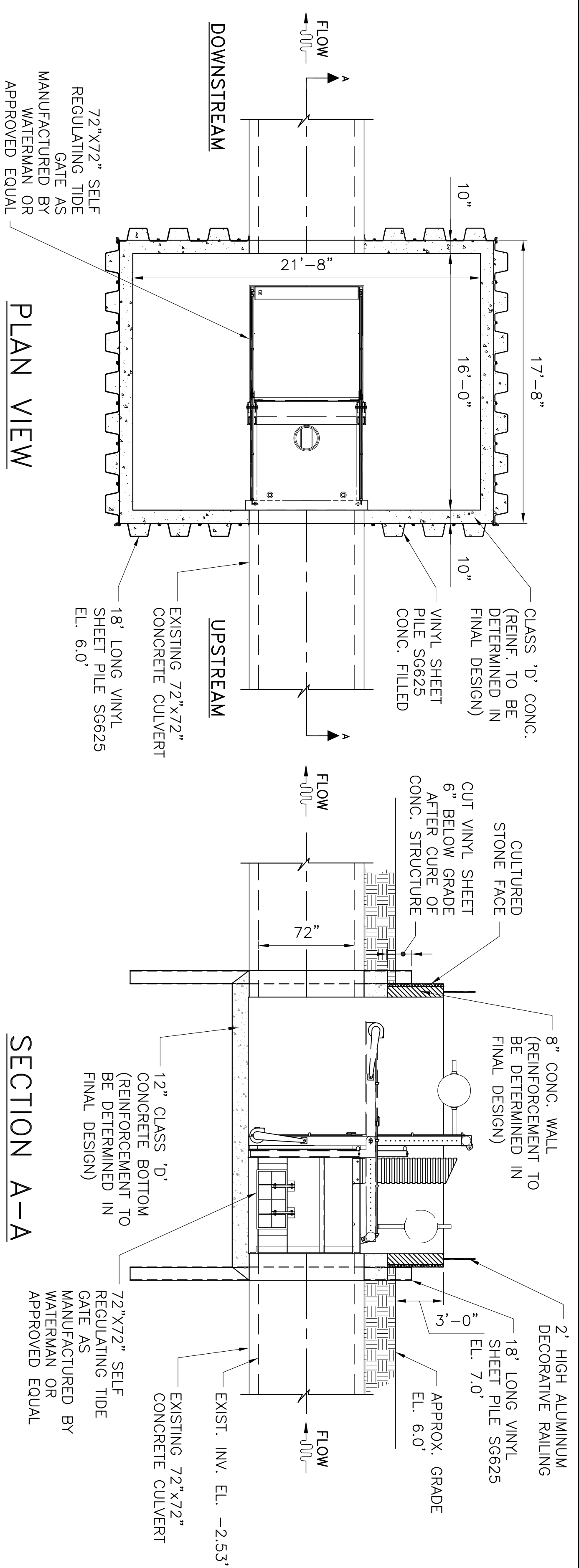


MASSAU COUNTY
DEPARTMENT OF PUBLIC WORKS
SILVER LAKE PARK DRAINAGE IMPROVEMENTS
BALDWIN, NEW YORK

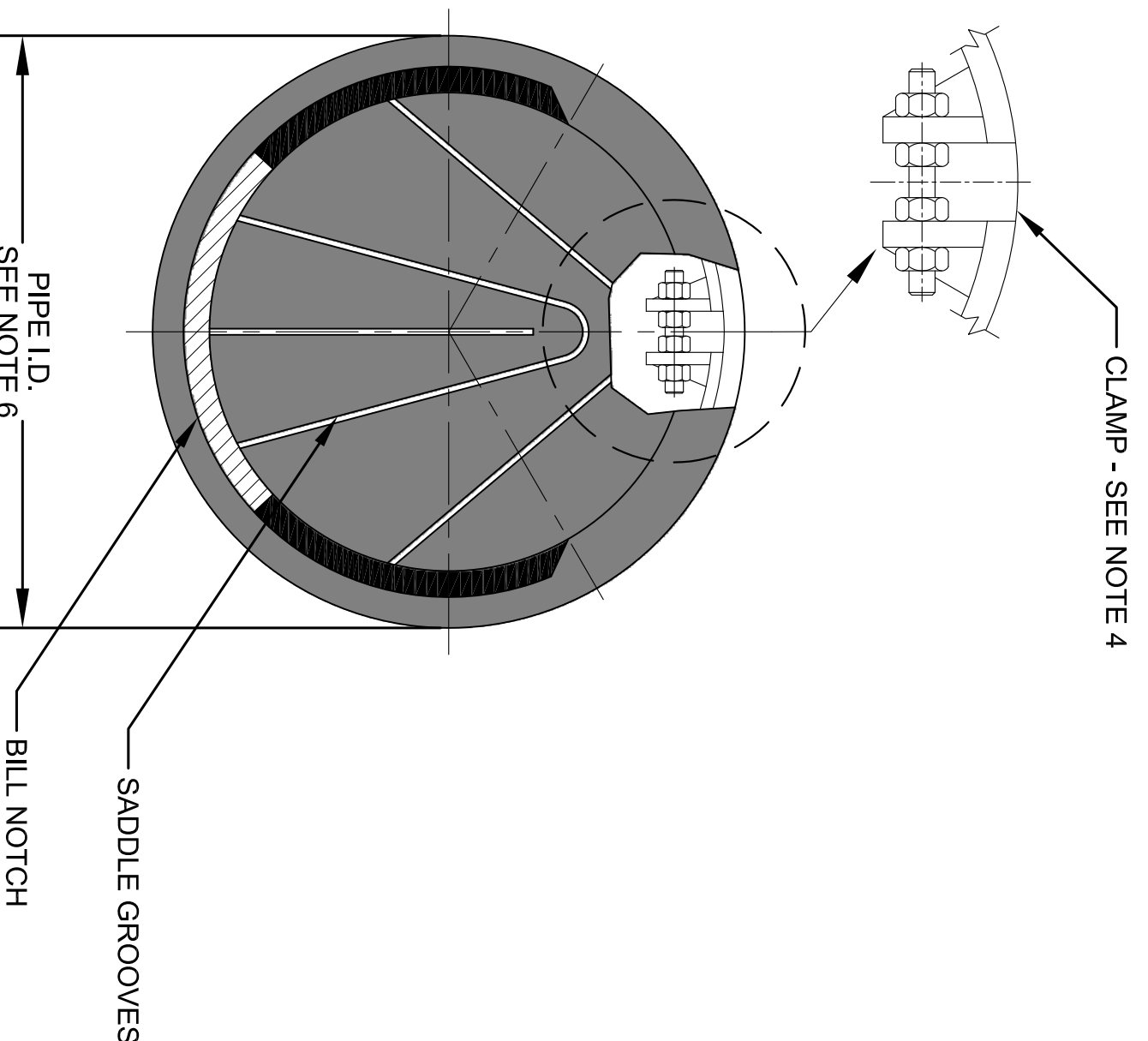
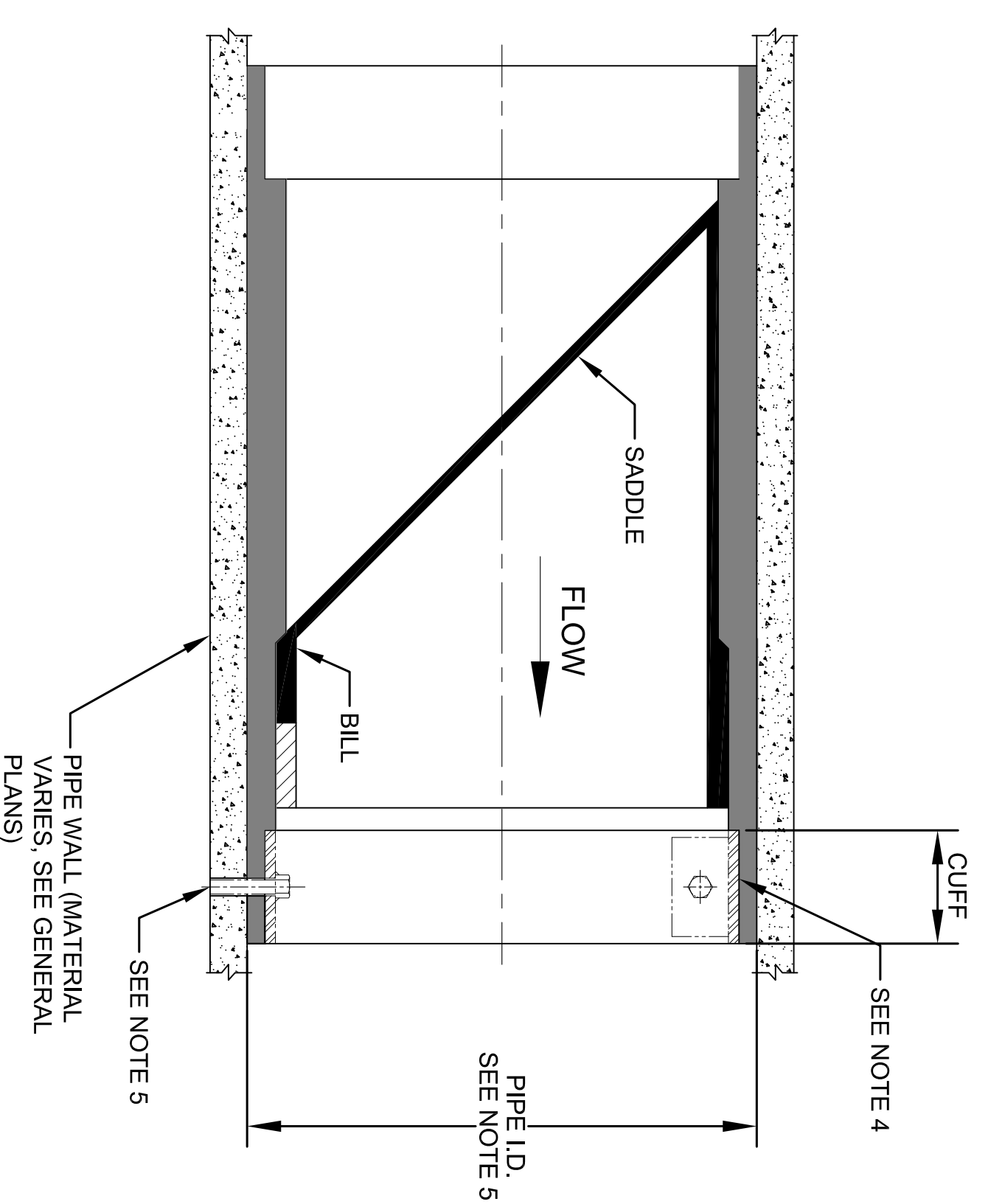
TYPICAL SECTIONS - 4

L. K. McLEAN ASSOCIATES, P.C.
CONSULTING ENGINEERS
437 SOUTH COUNTRY RD., BROOKHAVEN, NEW YORK 11719

Designed By: RAS	Scale: AS NOTED	Sheet No.:
Drawn By: MC	Date: DECEMBER 2018	TS-4
Approved By: RGD	File No. 18023.000	



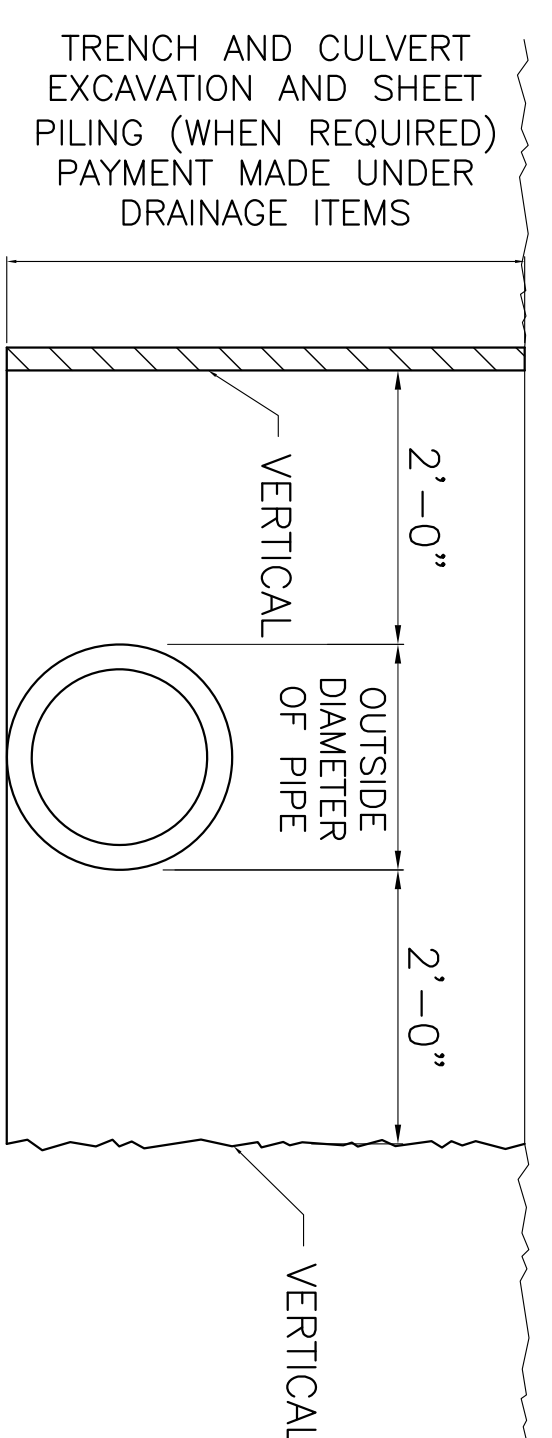
SELF REGULATING TIDE GATE VAULT
N.T.S.



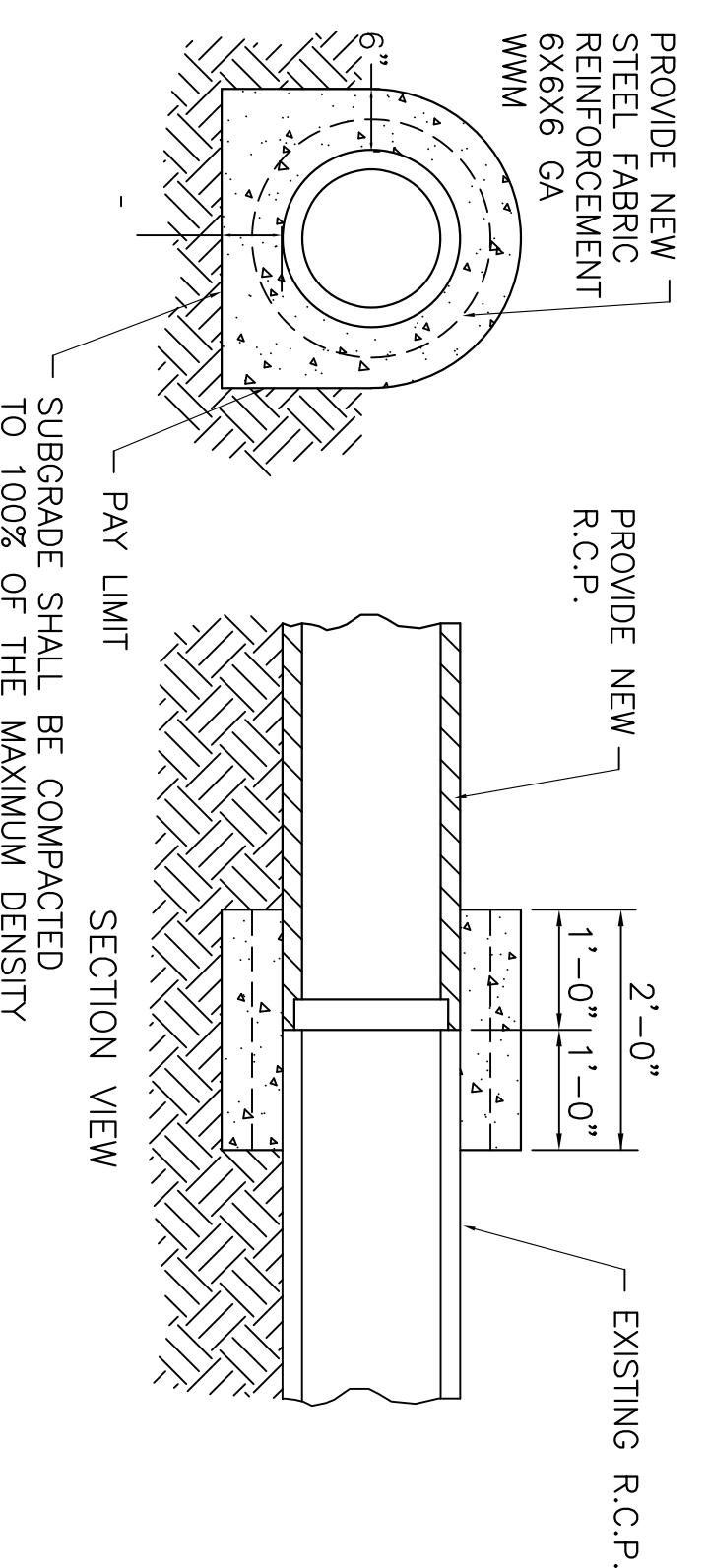
NOTES:

1. DEWATERING NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED AT NO ADDITIONAL CHARGE UNDER THE CHECK VALVE ITEMS.
2. PLUGGING EXISTING DRAINAGE PIPE NECESSARY TO COMPLETE DEWATERING SHALL BE INCLUDED UNDER THE CHECK VALVE ITEMS.
3. EXISTING PIPING MUST BE THOROUGHLY CLEANED BEFORE INSTALLING CHECK VALVES A.O.B.E. COST TO BE INCLUDED UNDER CHECK VALVE ITEM.
4. CHECK VALVE SHALL BE CLAMPED TO EXISTING PIPE IN UPSTREAM OR DOWNSTREAM CUFF DEPENDING ON INSTALLATION ORIENTATION AS PER MANUFACTURERS INSTRUCTIONS. COST TO BE INCLUDED UNDER CHECK VALVE ITEM.
5. CHECK VALVE SHALL BE BOLTED OR PINNED TO EXISTING DRAINAGE PIPE AT 4 PLACES 90° APART A.O.B.E. COST TO BE INCLUDED UNDER CHECK VALVE ITEM.
6. PRIOR TO ORDERING EACH VALVE, THE CONTRACTOR SHALL MEASURE THE INSIDE DIAMETER AND OUTSIDE DIAMETER OF EACH PIPE TO RECEIVE NEW CHECK VALVE. THE CONTRACTOR SHALL IMMEDIATELY BRING DISCREPANCIES BETWEEN FIELD MEASUREMENTS AND THE CONTRACT DRAWINGS TO THE ENGINEERS ATTENTION.

CHECK VALVE DETAIL
ITEM 512-T-CM-10
NOT TO SCALE



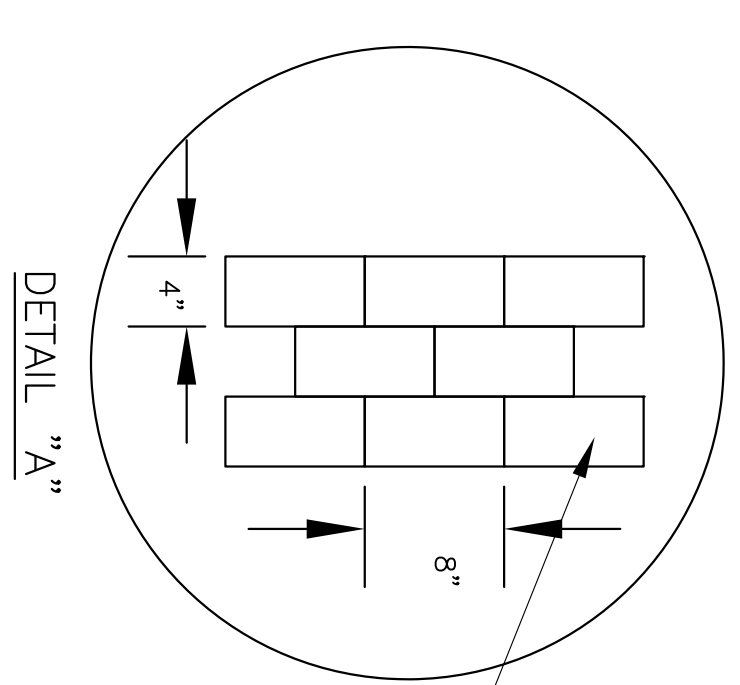
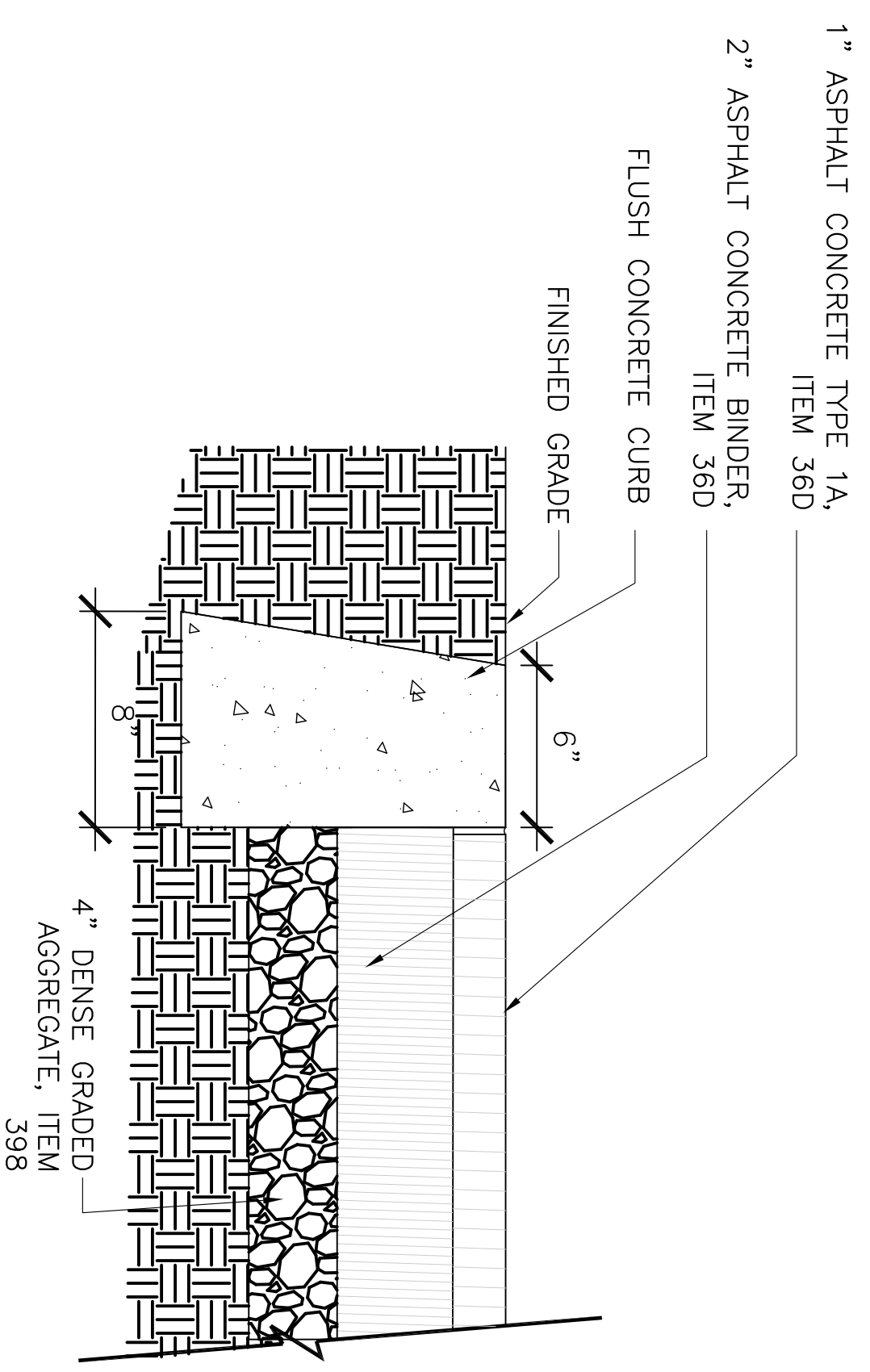
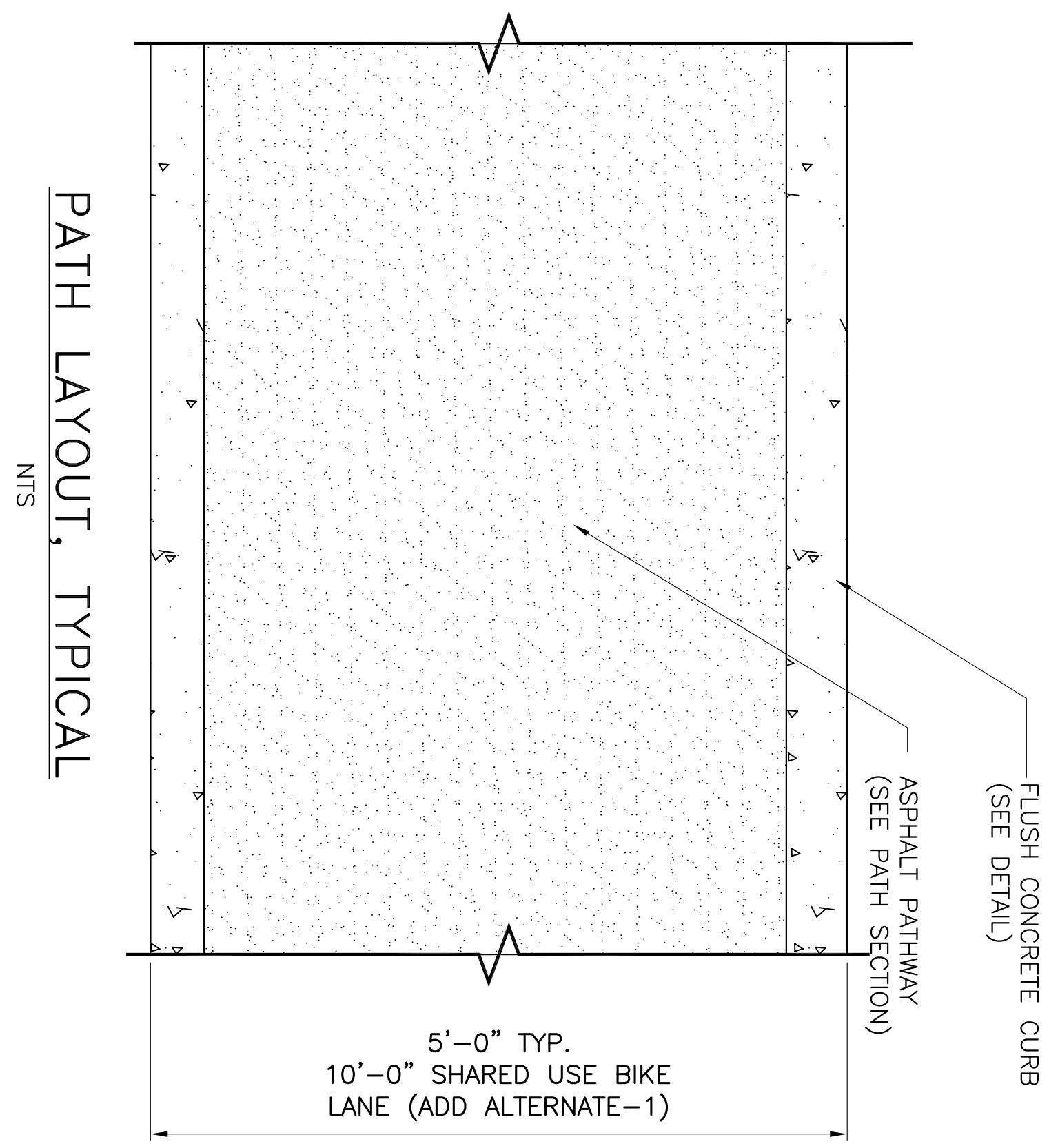
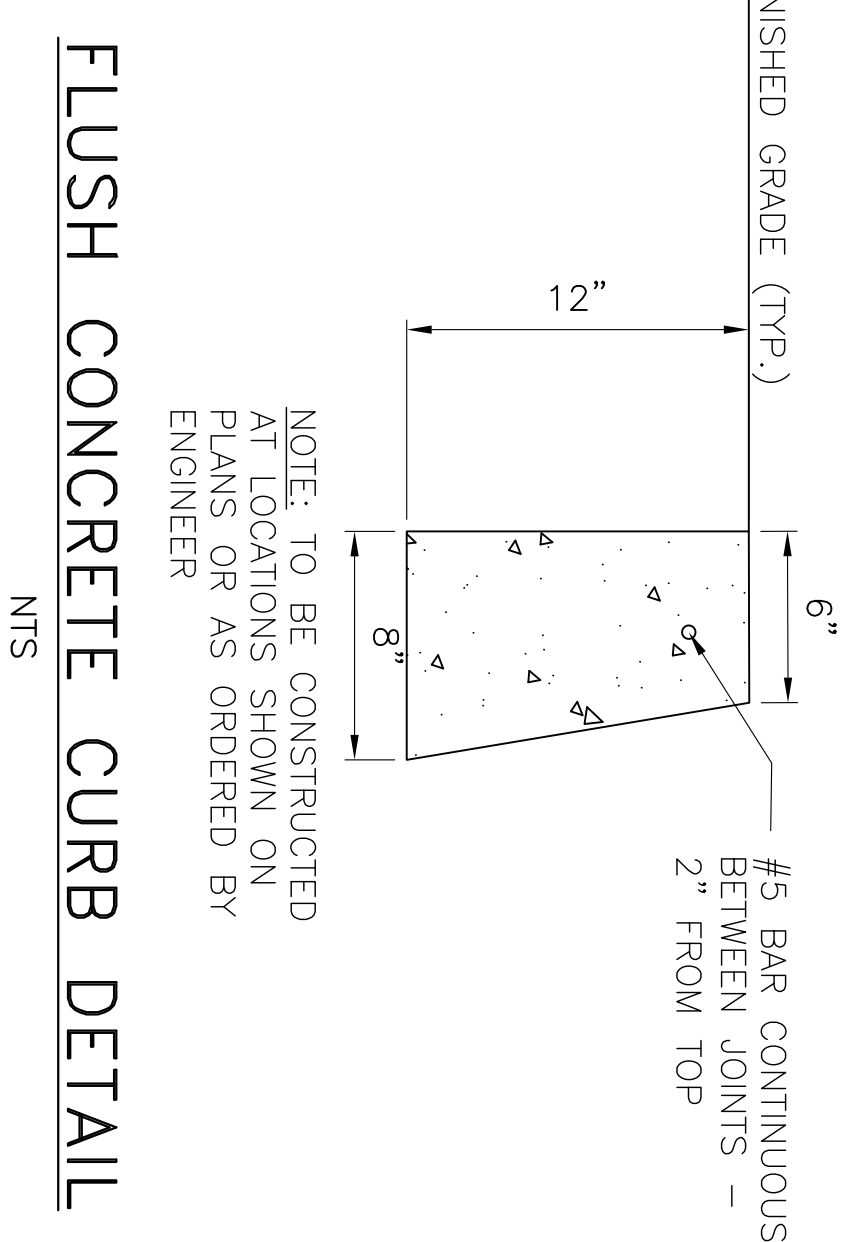
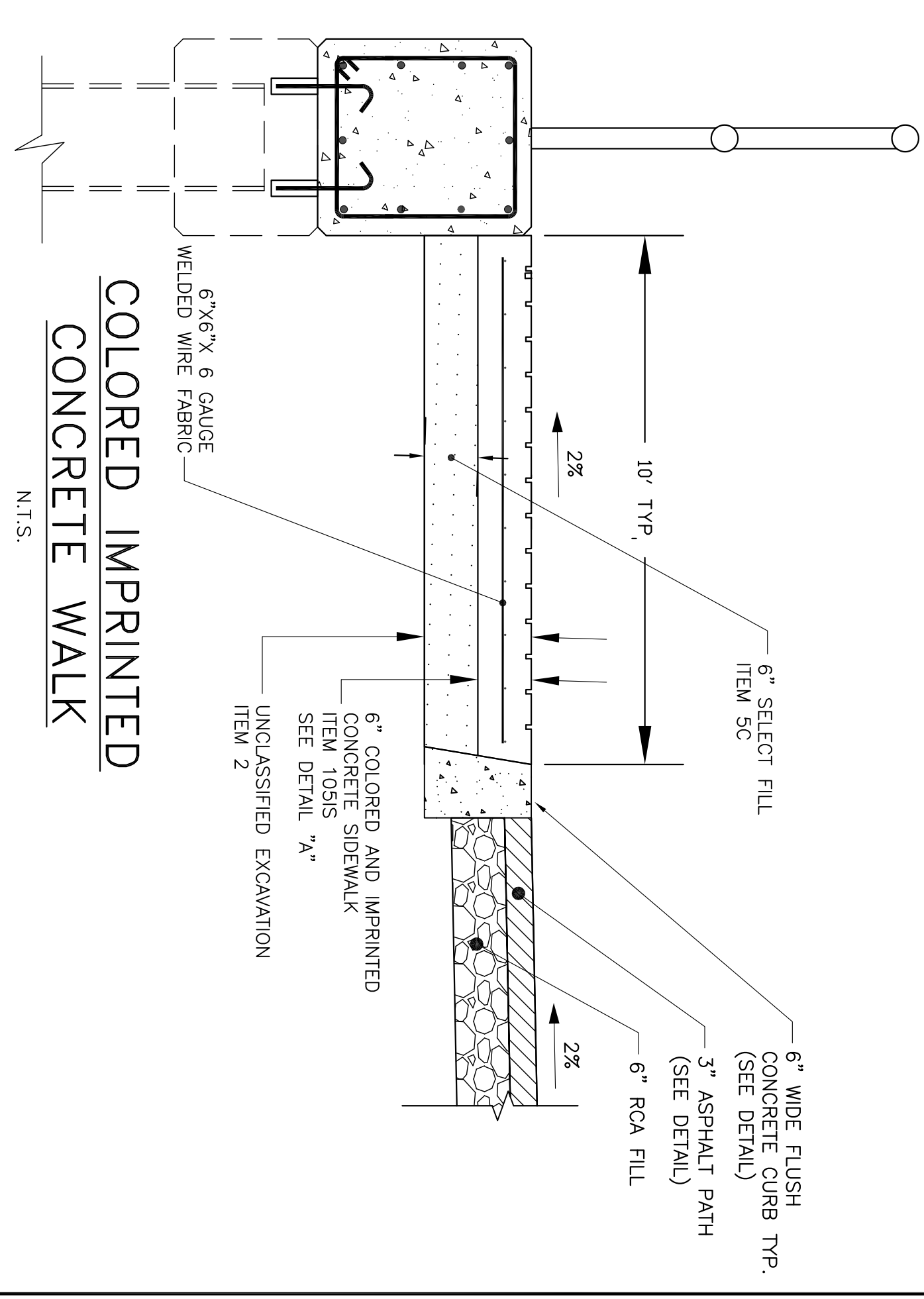
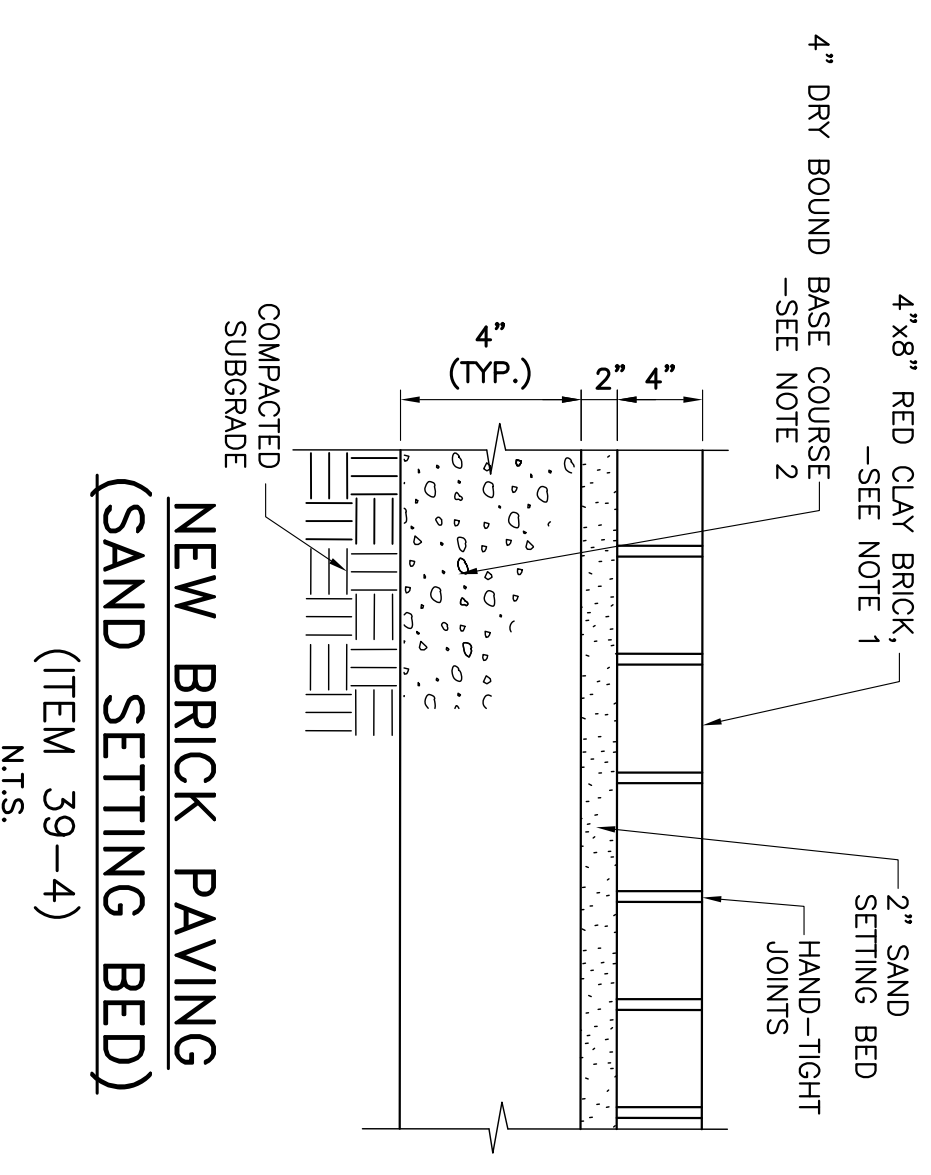
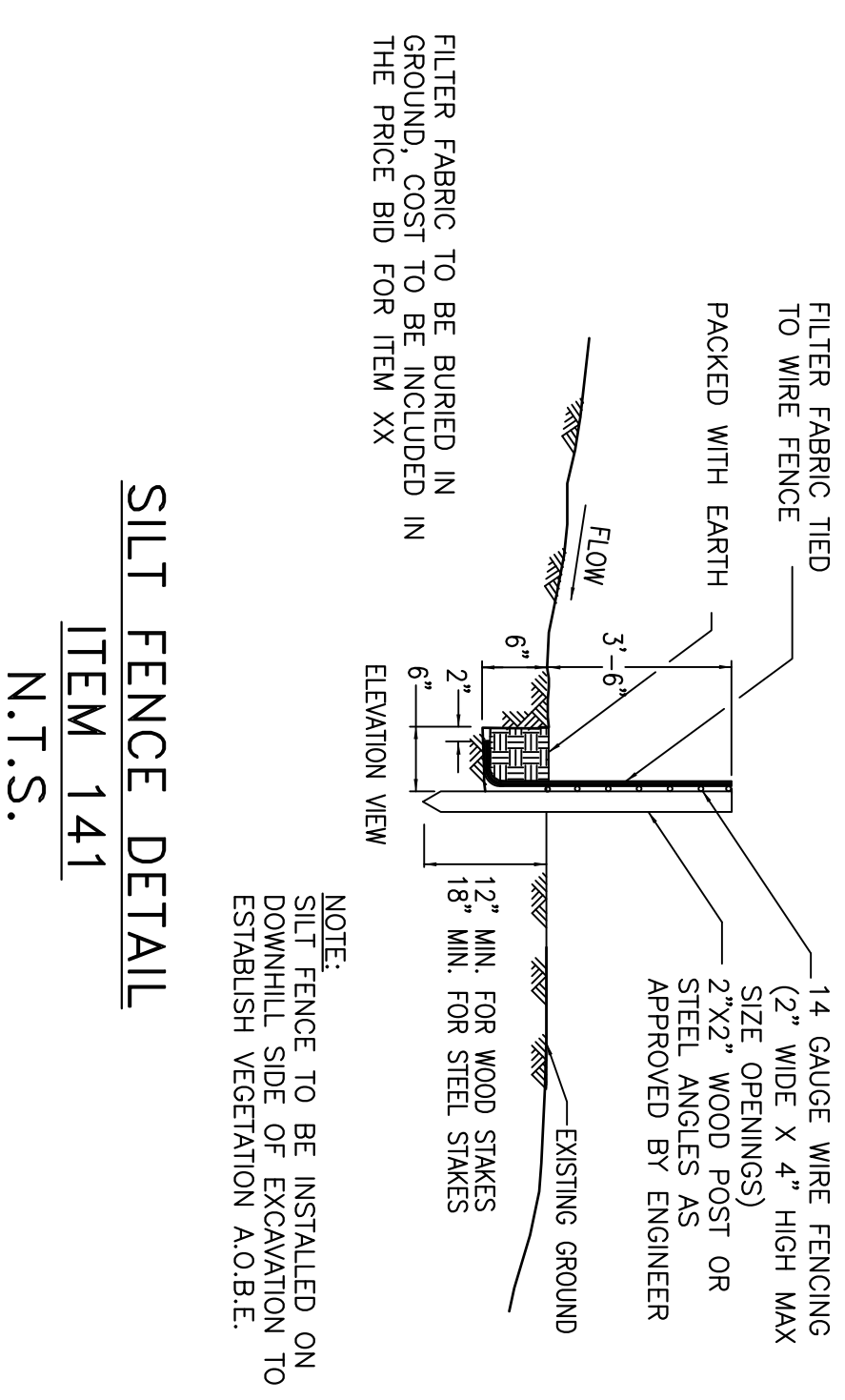
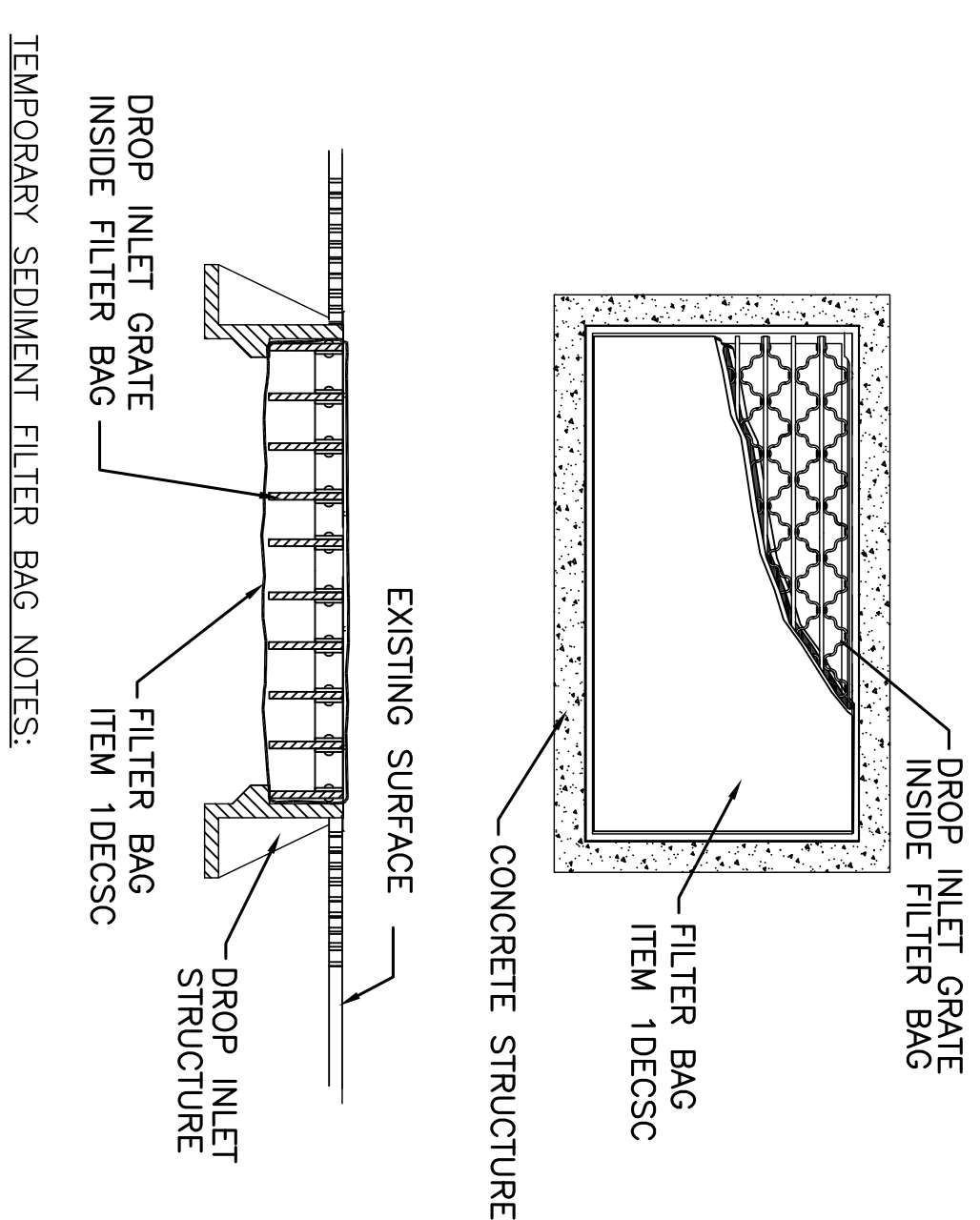
EXCAVATION LIMITS FOR DRAINAGE PIPE LINES
N.T.S.



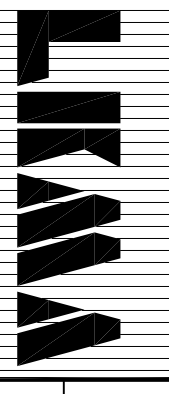
DETAIL FOR EXTENDING AN EXISTING REINFORCED CONCRETE DRAINAGE PIPE RUN (A.O.B.E.)

- NOTES:**
1. CONCRETE SHALL MEET THE REQUIREMENTS OF NASSAU COUNTY ITEM 13A, CATCH BASINS.
 2. REINFORCEMENT SHALL MEET THE REQUIREMENTS OF NASSAU COUNTY ITEM 30.

DATE	BY	DESCRIPTION	APPROV. BY
REVISIONS			
NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS SILVER LAKE PARK DRAINAGE IMPROVEMENTS BALDWIN, NEW YORK MISCELLANEOUS DETAILS - 1			
L. K. McLEAN ASSOCIATES, P.C. CONSULTING ENGINEERS 437 SOUTH COUNTRY DR., BROOKHAVEN, NEW YORK 11719 Designed By: RAS Drawn By: MC Approved By: RGD Scale: AS NOTED Date: DECEMBER 2018 File No. 18023.000 Sheet No. MD-1			

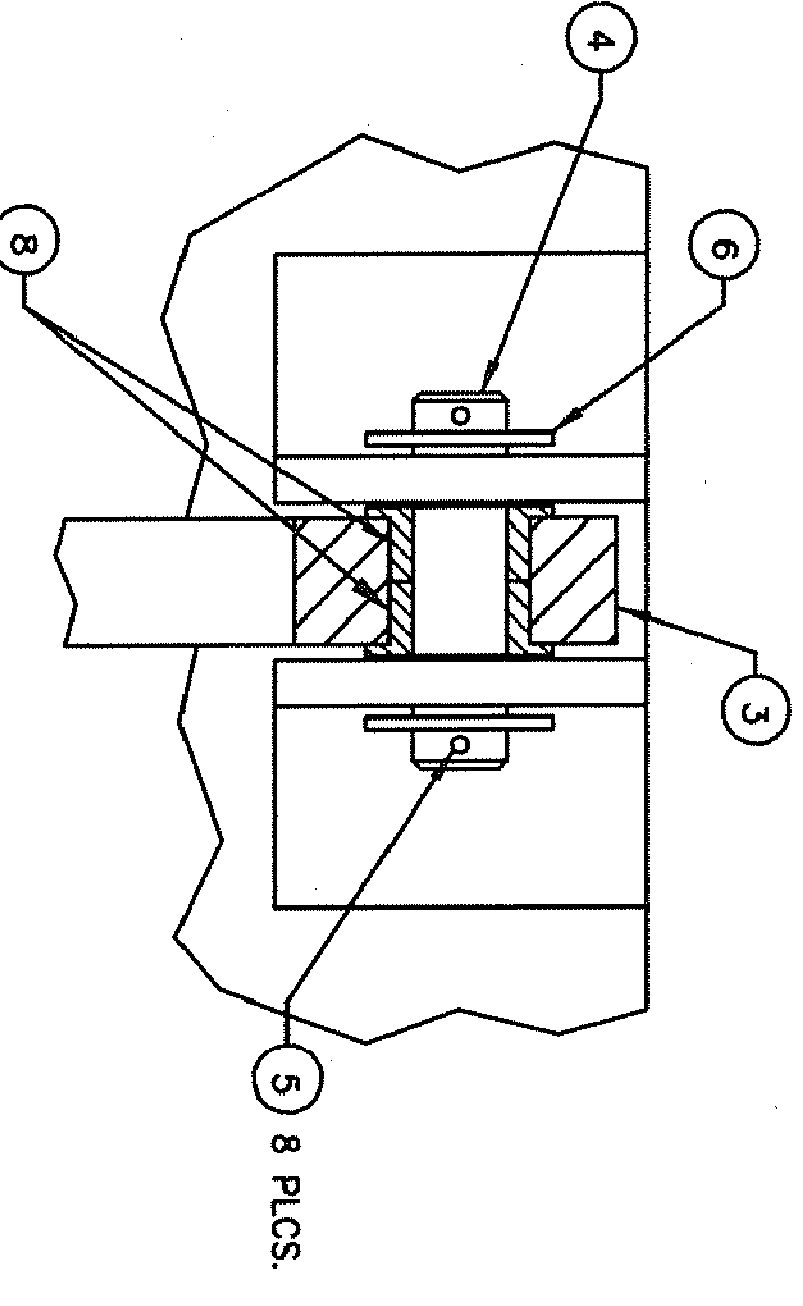
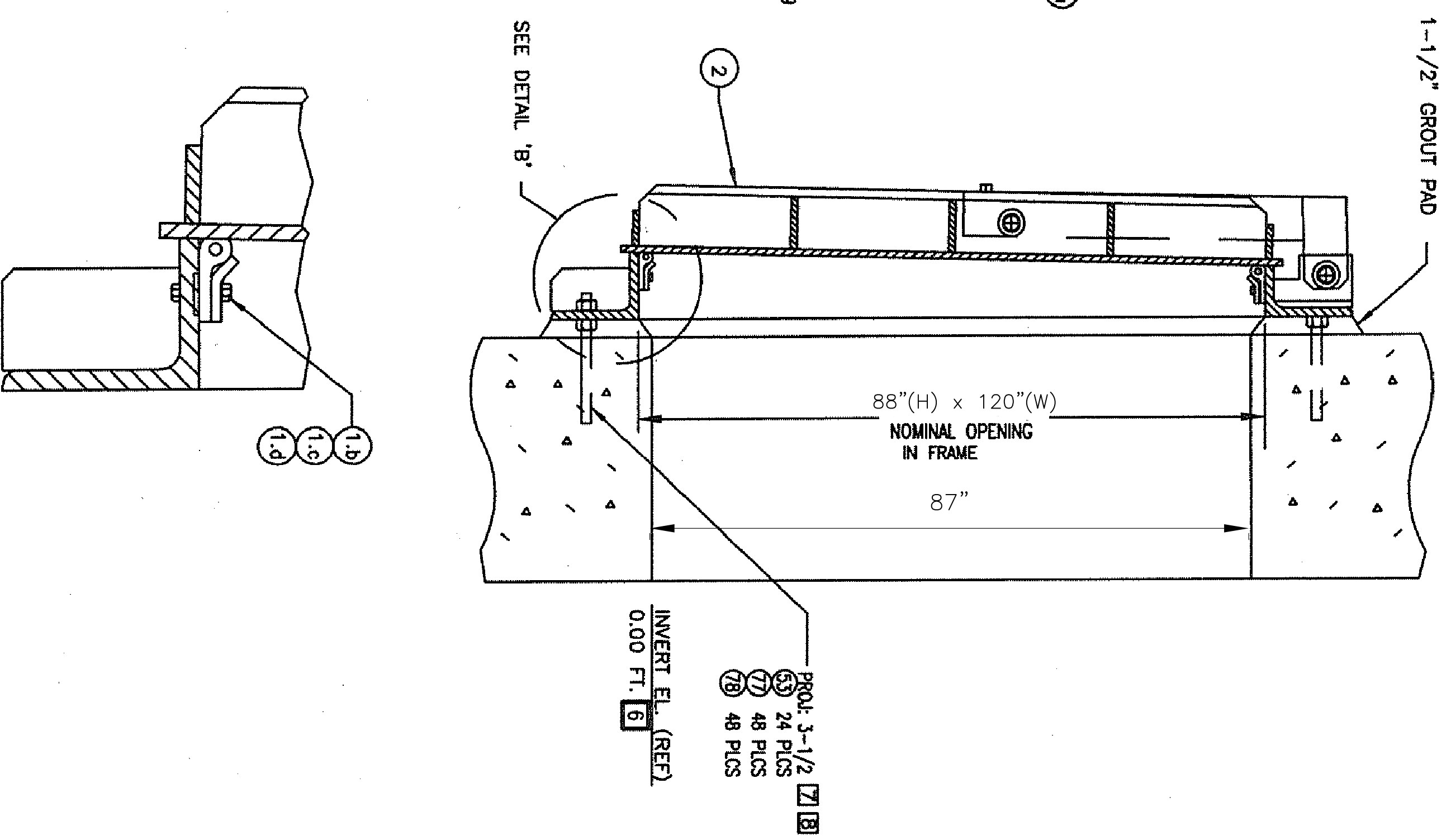
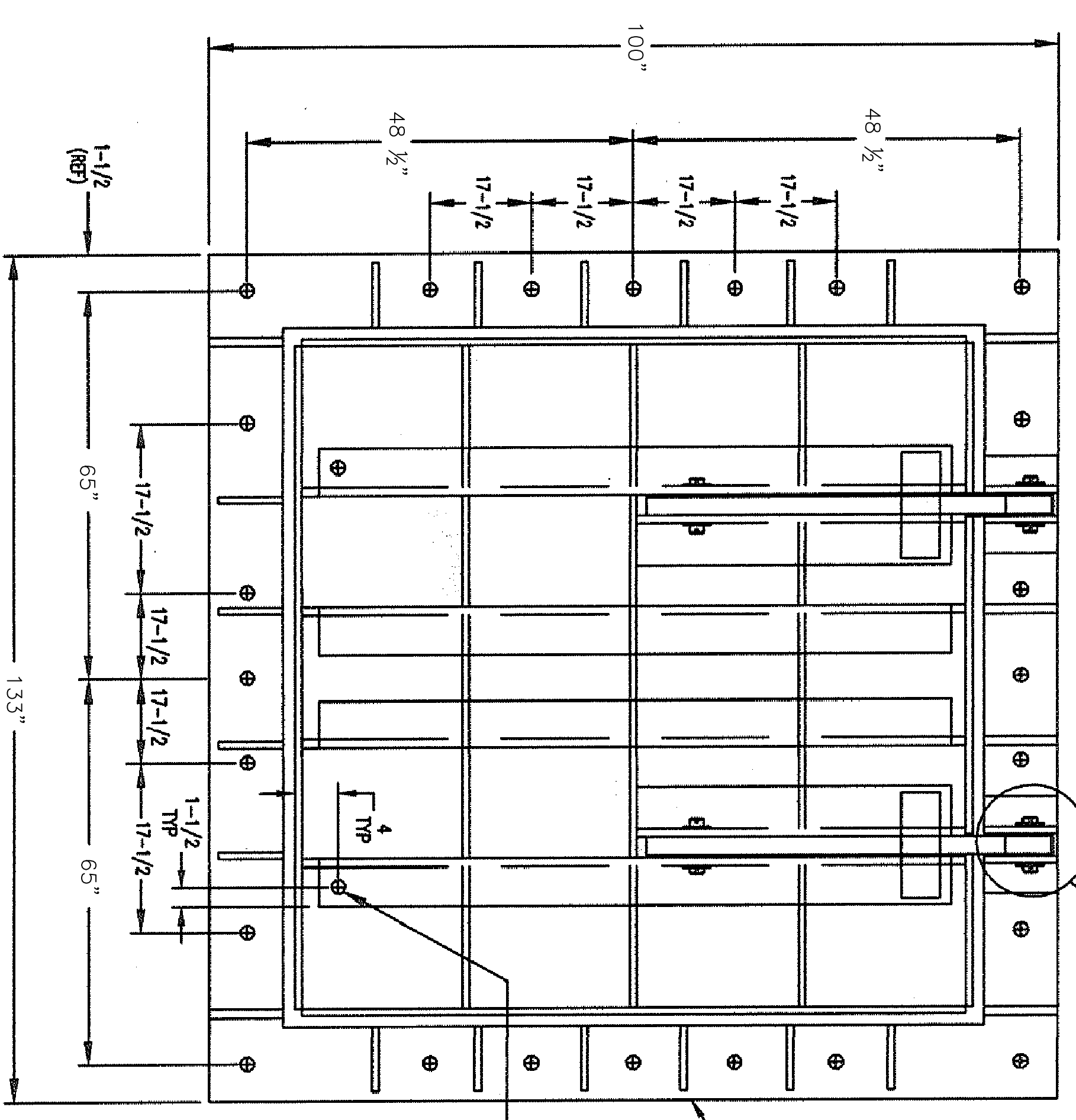


COLORLED AND IMPRINTED CONCRETE WALK, ITEM 103IS PATTERN BOMACRON, RUNNING BOND BRICK OR APPROVED EQUAL COLOR: BOMONITE BRICK RED

DATE	BY	DESCRIPTION	APPROV. BY
REVISIONS			
			
MASSAU COUNTY DEPARTMENT OF PUBLIC WORKS SILVER LAKE PARK DRAINAGE IMPROVEMENTS BALDWIN, NEW YORK			
MISCELLANEOUS DETAILS - 2			

L. K. McLEAN ASSOCIATES, P.C. CONSULTING ENGINEERS 437 SOUTH COUNTRY RD., BROOKHAVEN, NEW YORK 11719		Scale: AS NOTED Date: DECEMBER 2018 File No. 18023.000	Sheet No. MD-2
Designed By: RAS Drawn By: MC Approved By: RGD	Date: DECEMBER 2018 File No. 18023.000	Scale: AS NOTED Date: DECEMBER 2018 File No. 18023.000	Sheet No. MD-2

EMBEDDED DEPTH FOR ALL THREADED STUDS			
DIAMETER	EMBEDDED DEPTH	HOLE DEPTH	HOLE DIA.
3/4"	6-3/4"	7-1/4"	7/8"



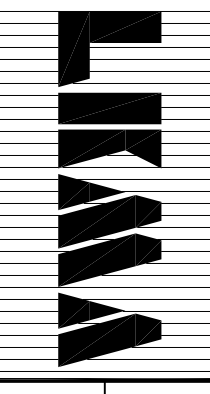
ITEM DESCRIPTION	MATERIAL KEY	FIN KEY	PART NO./OR SIZE (FOR WATERMAN USE ONLY)	QTY / GATE	TOTAL QTY
1. FRAME ASSEMBLY					
a) FRAME WELDMENT	9C	2	REF. 108381 (MOD. SS 304)	1	1
b) J-BULB SEAL	13	2	EXTRUSION 100159	32 FT	4
c) REMAINDER SEAL	9A	2,3	REF. 108235	A/R	4
d) HEX CAP SCREW, WASHER, & NUT	15A	2	1/4 NC x 1-1/4 LG; 1/4 DIA; 1/4 NC	1	2
2. COVER WELDMENT	9A,9C	2	REF. 111265	1	1
3. HINGE ARM	9A	2,3	REF. 108385	2	2
4. COTTER PIN	9A	2,3	104012-7 (1 DIA)	4	4
5. FLAT WASHER	SS 304	2,3	1/8 DIA. X 1-3/4 LG.	8	8
6. BUSHING	35A	2	100692-6A	8	8
7. WASHER	304 STL.	2		24	24
8. ALL THREADED STUD	9A	2,3	3/4 NC X 3-1/2 LG.	48	48
9A. STL SHAPES/STM A-276 T.Y.304/304L D/C	15A	2		48	48
9C. STL PLATE/ASTM A-240 T.Y.304/304L D/C					
13. NEOPRENE RUBBER/ASTM D-2000					
15A. STL STL HDW/ASTM F-593C/D & 594 GRP 1 (TY 304)					
21. UHMW POLYETHYLENE					
35A. PVC PLASTIC PIPE/ASTM D-1785					

87"Hx120"W FLAP GATE
AS MANUFACTURED BY WATERMAN
OR APPROVED EQUAL

DETAIL 'B'

DETAIL 'A'

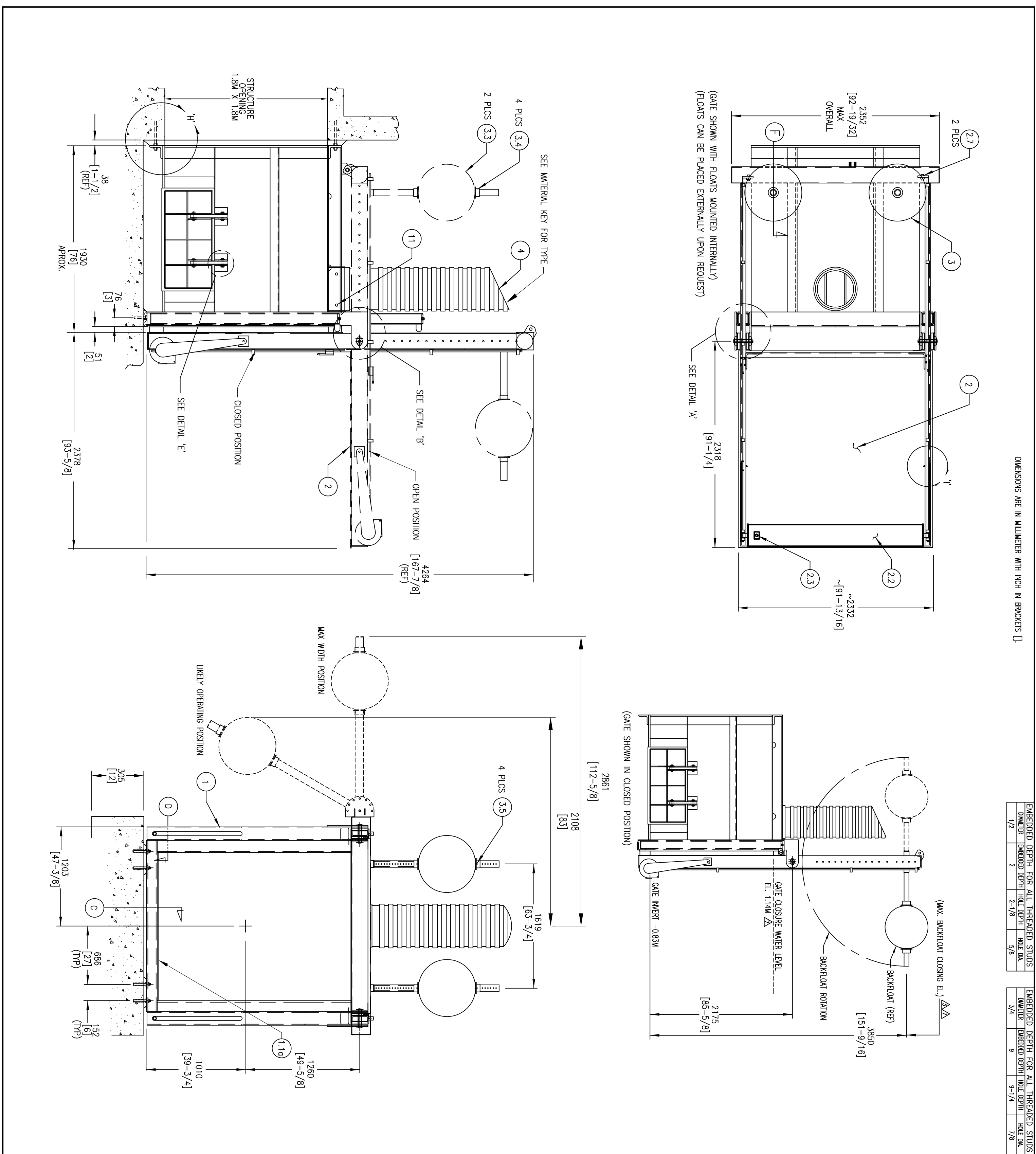
DATE	BY	DESCRIPTION	APPROV. BY
		REVISIONS	



MASSAU COUNTY
DEPARTMENT OF PUBLIC WORKS
SILVER LAKE PARK DRAINAGE IMPROVEMENTS
BALDWIN, NEW YORK

MISCELLANEOUS DETAILS - 3

L. K. McLEAN ASSOCIATES, P.C. CONSULTING ENGINEERS 437 SOUTH COUNTRY RD., BROOKHAVEN, NEW YORK 11719		Sheet No. MD-3
Designed By: RAS Drawn By: MC Approved By: RGD	Scale: AS NOTED Date: DECEMBER 2018 File No. 18023.000	



**72"X72" SELF REGULATING TIDE GATE
 AS MANUFACTURED BY WATERMAN OR
 APPROVED EQUAL**

NTS

ITEM	ITEM DESCRIPTION	MATERIAL KEY	FINISH KEY	PART NO. OR SIZE (FOR WATERMAN USE ONLY)	QTY/ TOTAL QTY
1	FRAME ASSEMBLY	98-17-18	2,3	PER 110078 (MODIFIED FLANGE)	1
1.1	FRAME WELDMENT	159	6	PER 109277	4
1.1a	WEAR PLATE	159	2	PER 109277	2
1.2	WASHER	98	2	PER 106384 (MODIFIED MATERIAL)	2
1.3	WASHER	21	2	PER 106384 (MODIFIED MATERIAL)	2
1.4	PIPE PLUG	98	2	PER 106384 (MODIFIED MATERIAL)	2
1.5	VERTICAL FLOAT ROLLER	354	2,3	1" DIA. SCH. 40 PIPE X 4 LG.	2
1.6	COLLAR	98	2,3	PER 106334 1/2" O.D. X 1/16" THK	2
1.7	COILER	98	2	PER 106445	2
1.8	BUSHING	98	2	1/8" DIA. X 2-1/2" LG.	2
1.9	COILER	98	2	PER 106445	2
1.10	COILER PIN	13	2,3	1/8" NC X 3 LG.	4
1.11	FRONT CASKET	159	2	PER 106445	2
1.12	HEX HEAD BOLT	159	2	5/8" NC X 7/16 LG.	2
1.13	HEX HEAD BOLT	159	2	5/8" NC X 1 LG.	2
1.14	COILER PIN	159	2	PER 106445	2
1.15	HEX NUT	159	2	PER 106445	2
1.16	HEX NUT	159	2	PER 106445	2
1.17	HEX NUT	159	2	PER 106445	2
1.18	HEX NUT	159	2	PER 106445	2
1.19	HEX NUT	159	2	PER 106445	2
1.20	HEX NUT	159	2	PER 106445	2
1.21	HEX NUT	159	2	PER 106445	2
1.22	HEX NUT	159	2	PER 106445	2
1.23	HEX NUT	159	2	PER 106445	2
1.24	HEX NUT	159	2	PER 106445	2
1.25	HEX NUT	159	2	PER 106445	2
1.26	HEX NUT	159	2	PER 106445	2
1.27	HEX NUT	159	2	PER 106445	2
1.28	HEX NUT	159	2	PER 106445	2
1.29	HEX NUT	159	2	PER 106445	2
1.30	HEX NUT	159	2	PER 106445	2
1.31	HEX NUT	159	2	PER 106445	2
1.32	HEX NUT	159	2	PER 106445	2
1.33	HEX NUT	159	2	PER 106445	2
1.34	HEX NUT	159	2	PER 106445	2
1.35	HEX NUT	159	2	PER 106445	2
2	DOOR ASSEMBLY	17	6L	PER 108447	1
2.1	DOOR FRAME	21	6L	PER 108447	2
2.2	DOOR FLOOR ASSEMBLY	17-19-98	6L	PER 108445	2
2.3	PIPE PLUG	98	2	PER 108445	2
2.4	SOCKET HEAD SCREW	98	2	PER 108445	2
2.5	SOCKET HEAD SCREW	159	2	PER 108445	2
2.6	FLOOR RELEASE ROD	159	2,3	PER 108445	2
2.7	HEX HEAD BOLT & HEX NUT	159	2	PER 108445	2
2.8	HEX HEAD BOLT & HEX NUT	159	2	PER 108445	2
2.9	HEX HEAD BOLT, W/LOCK NUT & WASHER	159	2	PER 108445	2
3	BACK FLOAT ASSEMBLY	17	2	PER 108447	2
3.1	BACK FLOAT ASSEMBLY	17-33A	2,3	PER 108447	2
3.2	FLOOR BOLT	17	2,3	PER 108447	2
3.3	FLOOR BOLT	17	2,3	PER 108447	2
3.4	FLOOR STOP	159	2,3	PER 108447	2
3.5	HEX HD BOLT & W/LOCK NUT	159	2	PER 108447	2
3.6	HEX HD BOLT, W/LOCK NUT & WASHER	159	2	PER 108447	2
3.7	HEX HD BOLT, W/LOCK NUT & WASHER	159	2	PER 108447	2
3.8	LOCKWASHER & HEX NUT	21	2	PER 108447	2
4	VACUUM BREAK VENT	17-47-159	2,3	PER 108446 (MODIFIED, LENGTH)	1
5	CENTERING WASHERS	159	2,3	PER 108446 (MODIFIED, LENGTH)	4
6	SPACER WASHER	21	2,3	PER 108446 (MODIFIED, LENGTH)	1
7	COLLAR	98	2,3	PER 108446 (MODIFIED, LENGTH)	2
8	COLLAR	98	2,3	PER 108446 (MODIFIED, LENGTH)	2
9	COLLAR	98	2,3	PER 108446 (MODIFIED, LENGTH)	2
10	COILER PIN	98	2	PER 108446 (MODIFIED, LENGTH)	2
11	HEX HD BOLT, W/LOCK WASHER AND NUT	159	2	PER 108446 (MODIFIED, LENGTH)	4
20	ALL THREADED STUD	98	2	PER 108446 (MODIFIED, LENGTH)	4
21	WASHER	159	2	PER 108446 (MODIFIED, LENGTH)	4
22	WASHER	21	2	PER 108446 (MODIFIED, LENGTH)	4
23	ISOLATION SLEEVE	354	2	PER 108446 (MODIFIED, LENGTH)	4
24	HEX NUT	98	2	PER 108446 (MODIFIED, LENGTH)	4
25	HEX NUT	98	2	PER 108446 (MODIFIED, LENGTH)	4
26	HEX NUT	98	2	PER 108446 (MODIFIED, LENGTH)	4
27	HEX NUT	98	2	PER 108446 (MODIFIED, LENGTH)	4
28	WASHER	21	2,3	PER 108446 (MODIFIED, LENGTH)	4
29	WASHER	21	2,3	PER 108446 (MODIFIED, LENGTH)	4
30	CONCRETE ANCHOR INSERT	304 STL. STL.	2	PER 108446 (MODIFIED, LENGTH)	4
31	CONCRETE ANCHOR INSERT	304 STL. STL.	2	PER 108446 (MODIFIED, LENGTH)	4

NOTES:
 1. INSURE ALL CONCRETE ANCHORS DO NOT COME IN CONTACT WITH REBAR ON ASSTY.
 2. ALL ALUMINUM IN CONTACT WITH CONCRETE/ROUT SHALL BE FIELD PAINTED.
 3. CONTRACTOR/ENGINEER TO VERIFY OR SUPPLY.
 4. UNLESS OTHERWISE SPECIFIED.

REVISIONS:

DATE	BY	DESCRIPTION	APPROV. BY

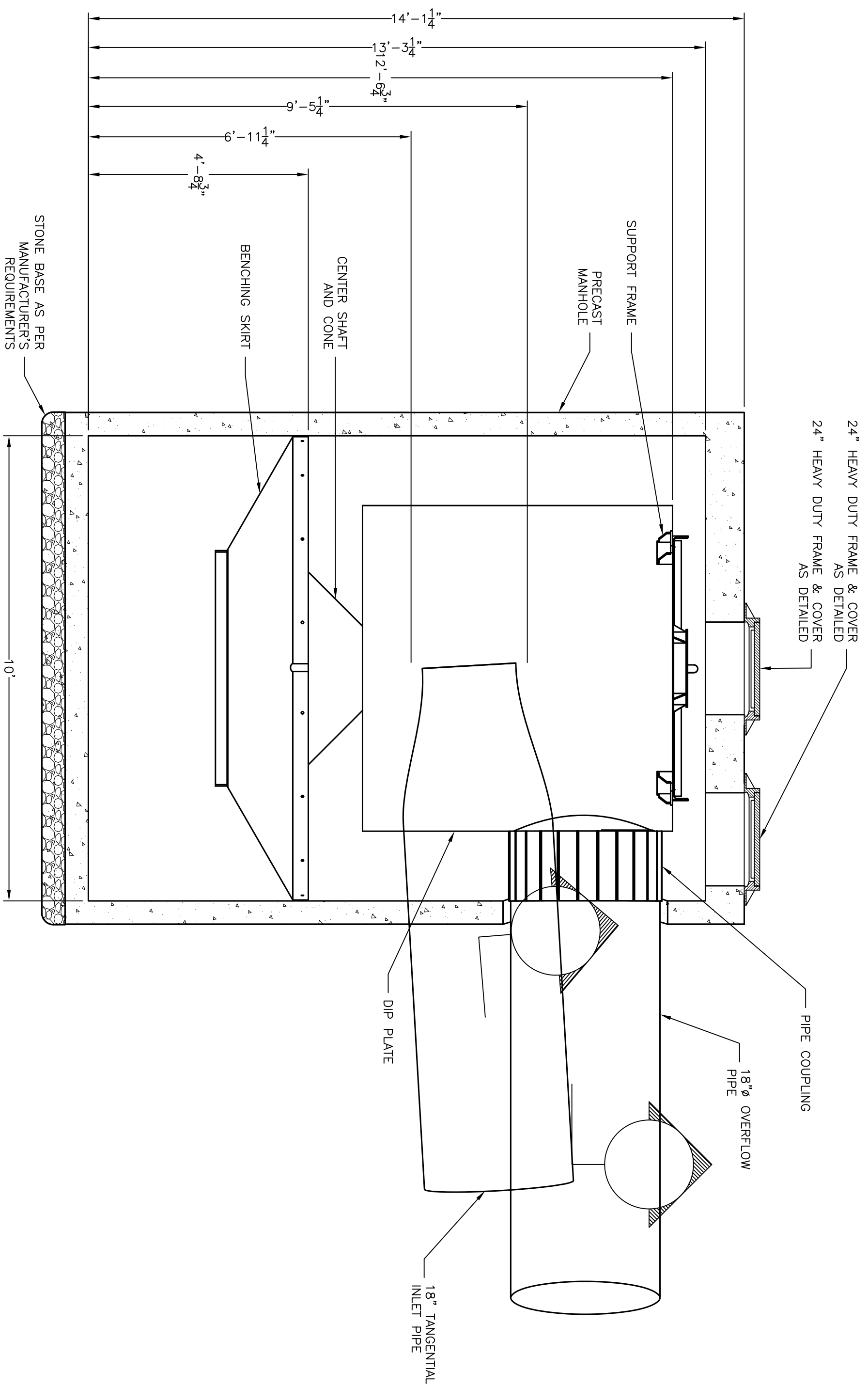
DESIGNED BY: RAS
 DRAWN BY: MC
 CHECKED BY: RAS
 DATE: DECEMBER 2018
 SCALE: AS NOTED
 SHEET NO. MD-4

APPROVED BY: RAS

DEPARTMENT OF PUBLIC WORKS
 SILVER LAKE PARK DRAINAGE IMPROVEMENTS
 BALDWIN, NEW YORK

MISCELLANEOUS DETAILS - 4

WATERMAN EXETER, CALIFORNIA 93221



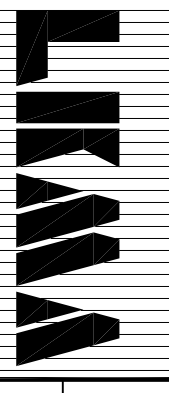
10' Ø HYDRODYNAMIC SEPARATION UNIT SECTION
 AS MANUFACTURED BY HYDRO INTERNATIONAL
 OR APPROVED EQUAL

N.T.S.

- CAPACITIES:
1. PEAK TREATMENT FLOW: 25.0 CFS (708 L/S)
 2. SEDIMENT STORAGE CAPACITY: 8.70 CU. YD. (6,695 CU. M.)
 3. OIL STORAGE CAPACITY: 1050 GAL. (397.5 LITERS)

ADDITIONAL DESIGN INFORMATION:

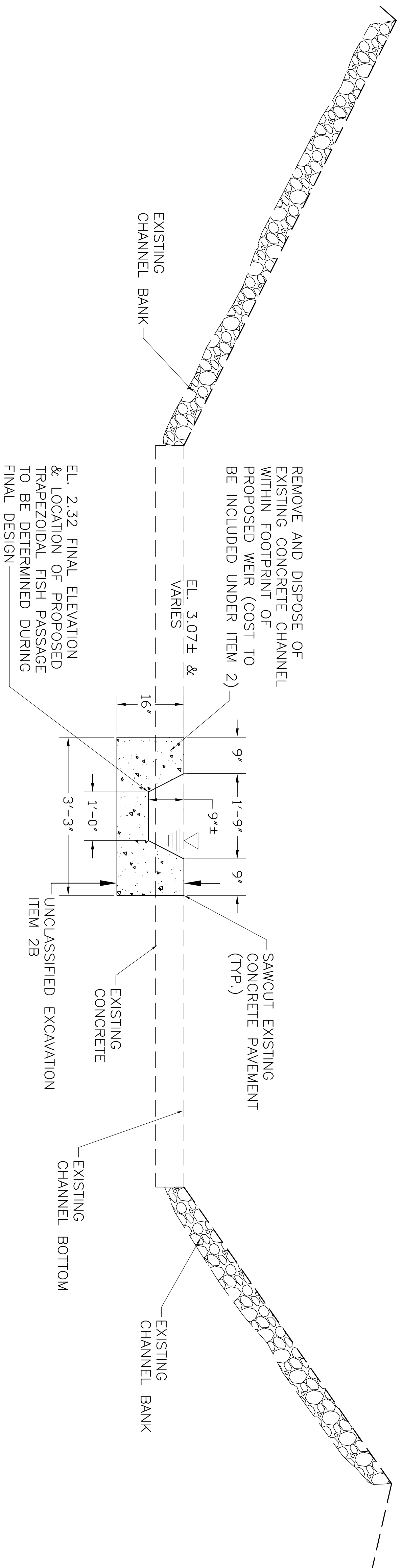
1. THE OUTLET PIPE STUB (NOT SHOWN) IS A ROTO-MOLDED PRODUCT WITH AN I.D. OF 30 IN. THAT CANNOT BE MODIFIED. A 30 IN. OUTLET PIPE SHOULD BE USED IF POSSIBLE. THE ORIENTATION OF THE OUTLET PIPE CAN BE ADJUSTED TO SUIT SITE CONDITIONS.
2. MAXIMUM PIPE SIZE IS 30 IN. THE INLET PIPE INVERT SHOULD BE PLACED ONE INLET PIPE DIAMETER BELOW THE OUTLET PIPE INVERT. THE INLET PIPE SHOULD BE TANGENTIAL TO THE I.D. OF THE MANHOLE. THE ORIENTATION OF THE INLET PIPE CAN BE ADJUSTED TO SUIT SITE CONDITIONS. HEADLOSS WILL INCREASE WITH SMALLER INLET PIPES. HEADLOSS WILL INCREASE WITH A 30 IN. INLET. 15 IN. (381 MM). HEADLOSS WILL INCREASE WITH SMALLER INLET PIPES. HEADLOSS WILL INCREASE WITH A 30 IN. INLET. 15 IN. (381 MM). THE MAIN FLOW PATH AND PROTECTED FROM RE-ENTRANCEMENT BY THE BENCHING SKIRT.
3. DIMENSIONS ARE GENERAL AND INTENDED FOR GUIDANCE ONLY.

DATE	BY	DESCRIPTION	APPROV. BY
REVISIONS			
			
MASSAU COUNTY DEPARTMENT OF PUBLIC WORKS SILVER LAKE PARK DRAINAGE IMPROVEMENTS BALDWIN, NEW YORK			
MISCELLANEOUS DETAILS - 5			

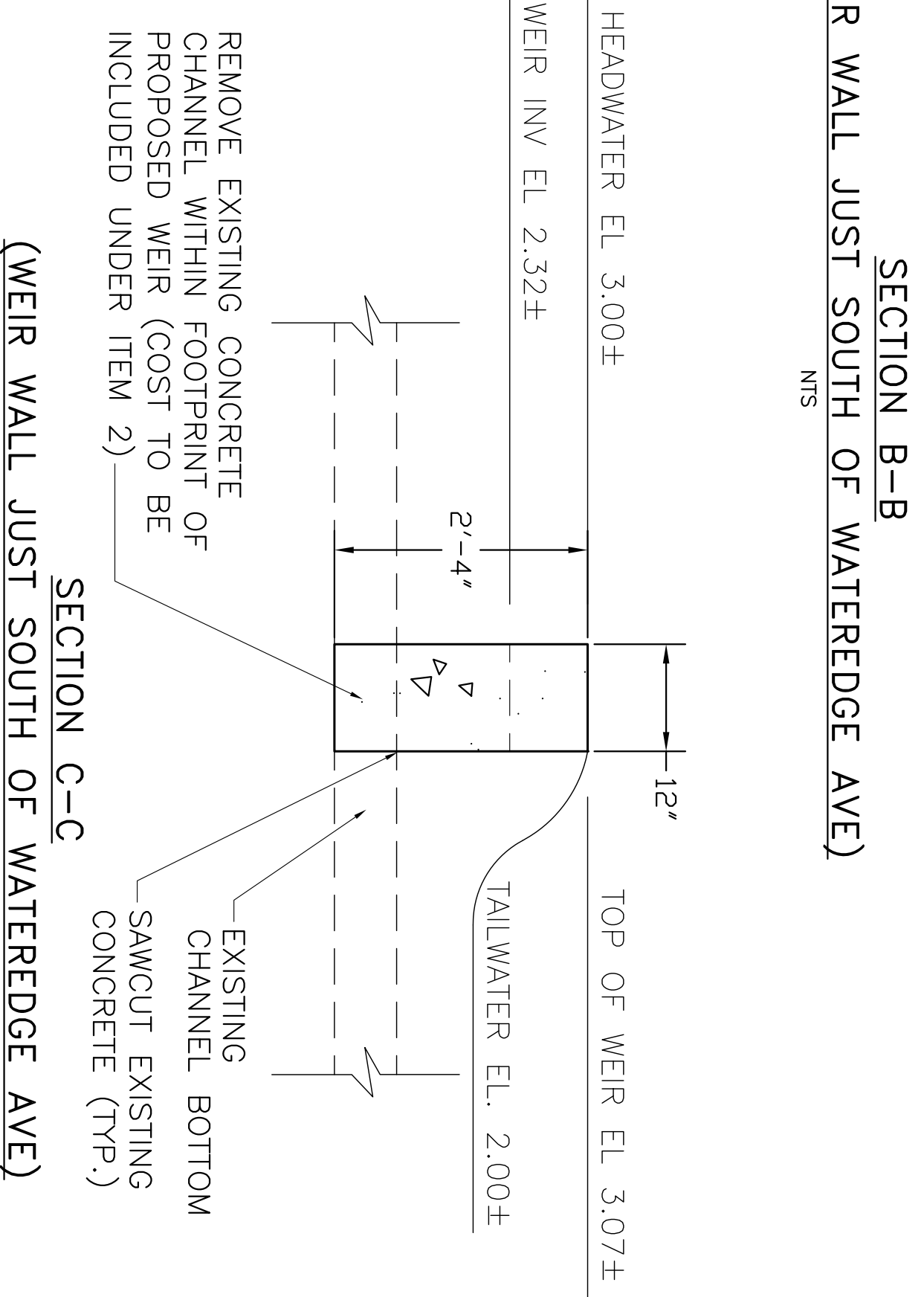
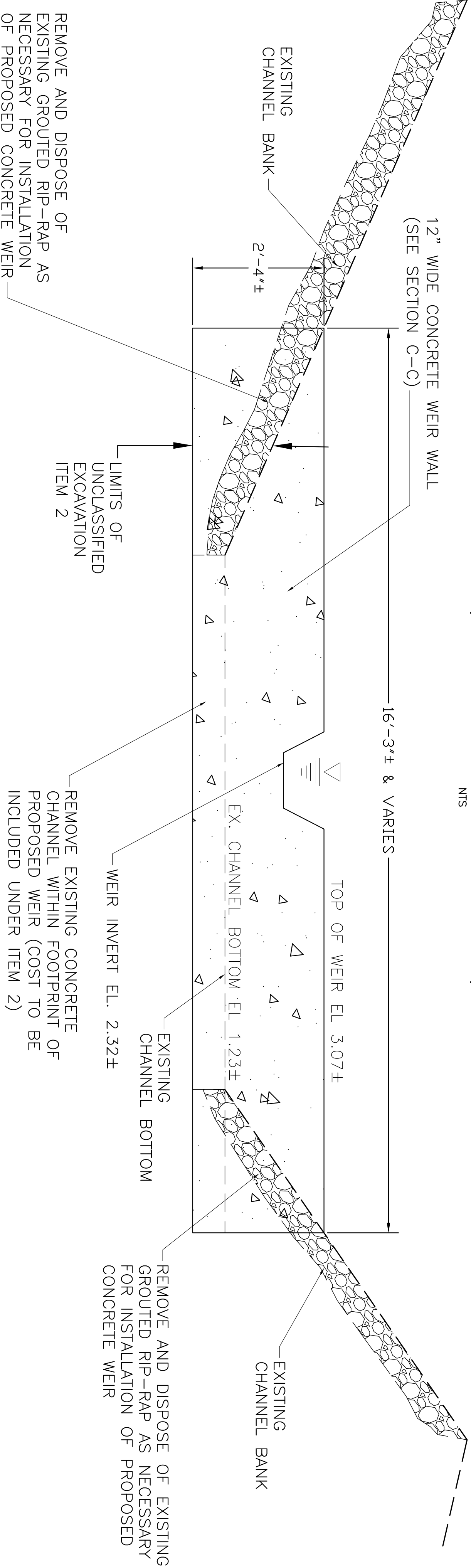
L. K. McLEAN ASSOCIATES, P.C.
 CONSULTING ENGINEERS
 437 SOUTH COUNTRY RD., BROOKHAVEN, NEW YORK 11719

Designed By: RAS Scale: AS NOTED
 Drawn By: MC Date: DECEMBER 2018
 Approved By: RGD File No. 18023.000

Sheet No.
MD-5



- NOTES:
 1. SEE GENERAL PLAN - 4 (GP-4)
 FOR SECTION LOCATIONS.



DATE	BY	DESCRIPTION	APPROV. BY
		REVISIONS	

LIKMA
 MASSAU COUNTY
 DEPARTMENT OF PUBLIC WORKS
 SILVER LAKE PARK DRAINAGE IMPROVEMENTS
 BALDWIN, NEW YORK
 FISH PASSAGE DETAILS

L. K. McLEAN ASSOCIATES, P.C.
 CONSULTING ENGINEERS
 437 SOUTH COUNTRY RD., BROOKHAVEN, NEW YORK 11719

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