

FINAL PLAN SUBMISSION

for

“LONG BROOK I”

on

DIAMOND HILL ROAD (ROUTE 114)

AP 29, LOT 4

in

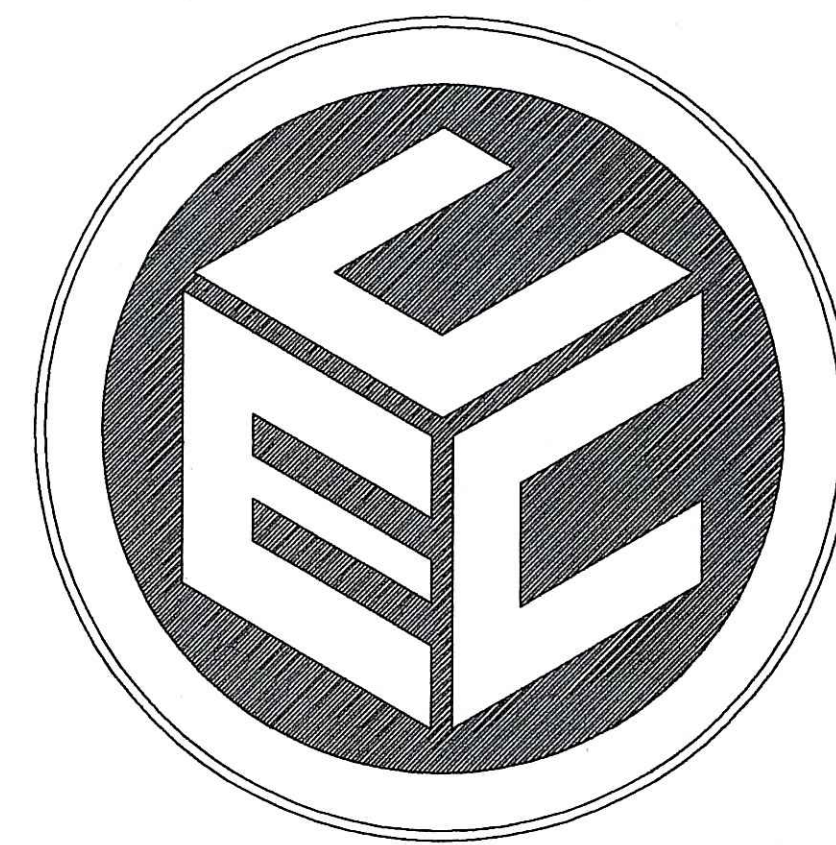
CUMBERLAND, RHODE ISLAND

OWNER/APPLICANT

LONG BROOK, LLC.

P. O. BOX 7008

CUMBERLAND, RHODE ISLAND 02864



COMMONWEALTH

ENGINEERS & CONSULTANTS, INC.

400 SMITH STREET
PROVIDENCE, RI 02908

APRIL 30, 1988

REVISED: JULY 1, 1988

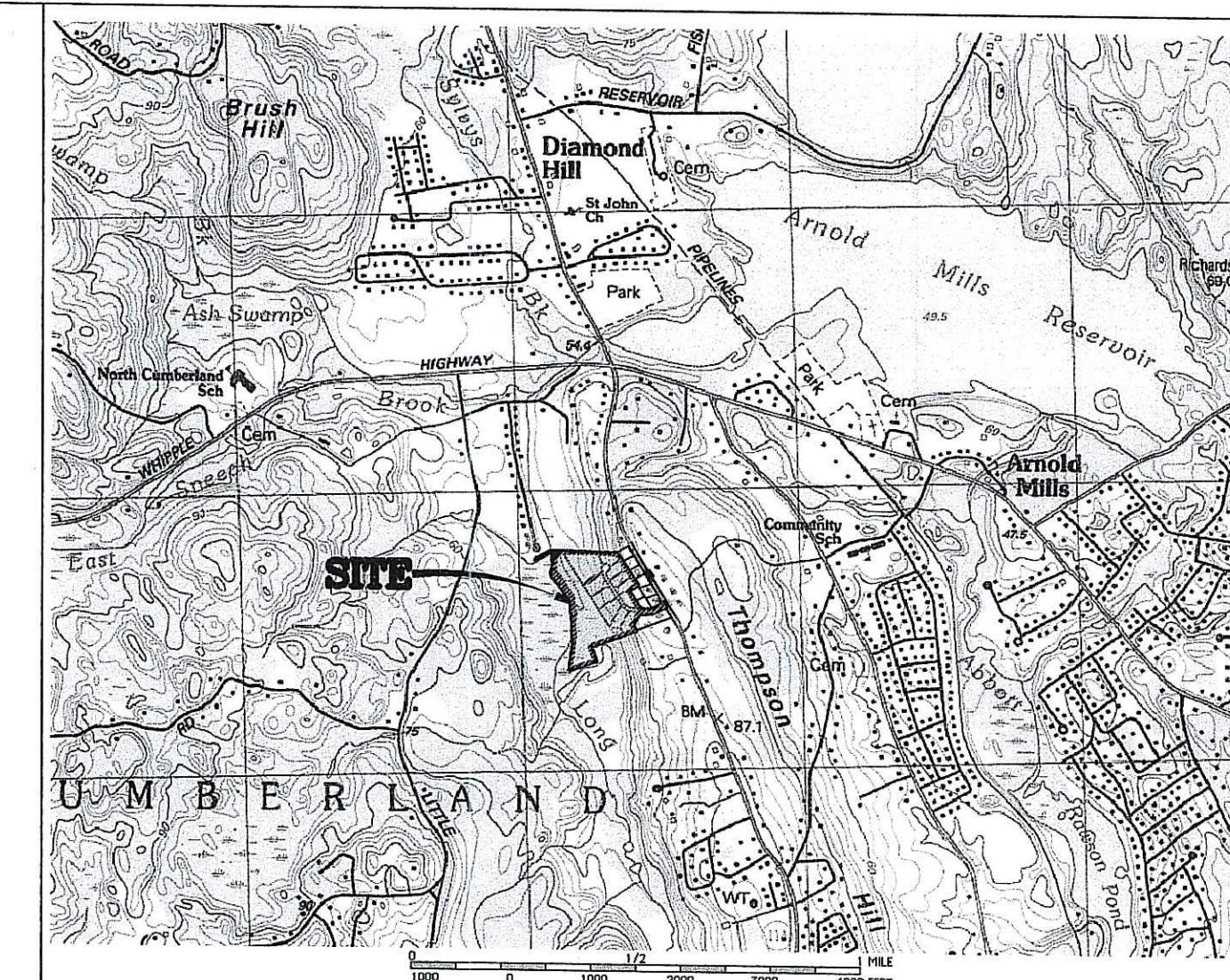
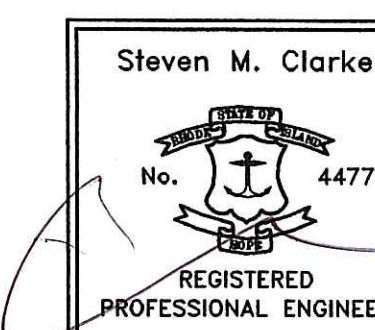
REVISED: AUGUST 30, 1988

REVISED: FEBRUARY 25, 2004

REVISED: DECEMBER 15, 2004

REVISED: APRIL 24, 2009

REVISED: MAY 30, 2012



LOCUS MAP

SCALE: 1"=2000'

LIST OF DRAWINGS

1. TITLE SHEET
2. ABUTTERS PLAN
3. EXISTING CONDITIONS PLAN
4. LOT LAYOUT PLAN - 1
5. LOT LAYOUT PLAN - 2
6. GRADING & UTILITY PLAN
7. PLAN & PROFILE
8. LANDSCAPING
9. EROSION & SEDIMENTATION CONTROL PLAN
10. CONSTRUCTION DETAILS - 1
11. CONSTRUCTION DETAILS - 2
12. CONSTRUCTION DETAILS - 3



ZONING CLASSIFICATIONS: AGRICULTURAL A
A.P. 29, LOT 4

TOTAL AREA WITH CLOSURE LINE=	(969,788.90 SF) 22.232 Ac
ACTUAL TOTAL AREA=	(863,923.18 SF) 19.832 Ac
ACTUAL TOTAL LOT AREA=	(816,311.90 SF) 18.739 Ac (WITHOUT ROADWAY)
NUMBER OF LOTS=	9
TOTAL LENGTH OF ROADWAY=	1,126.16 L.F.
TOTAL AREA OF ROADWAY=	1.10 ACRES
FRONTAGE=	80.00 FEET

SETBACKS

FRONT= 50'
SIDE= 20'
REAR= 30'

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED JUL 26 2012 FILE # 11-0088
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Charles A. Harte

COURT ORDER:

REFERENCE SUPERIOR COURT ORDER: CA. NO.89-0449
BOOK R4, PAGE 85, MARCH 2, 1998.

PROJECT NO. 03010.00

ABUTTER'S LIST (NOW OR FORMERLY)

AP# LOT # NAME & ADDRESS

26	40	EDWARD & SARA JOHNSTON P.O. BOX 7544 CUMBERLAND, RI 02864
26	41	RONALD HEFFERNAN & MEREDITH STRAIGHT 3225 DIAMOND HILL ROAD CUMBERLAND, RI 02864
26	42	BETTY & ORIEL SOLE- COSTA 3191 DIAMOND HILL ROAD CUMBERLAND, RI 02864
26	45	ROBERT & CHRISTINE CLARKE 3171 DIAMOND HILL ROAD CUMBERLAND, RI 02864
26	119	CAROLYN ARNOLD & RUBY BETTS 3145 DIAMOND HILL ROAD CUMBERLAND, RI 02864
26	292	ROBBINS & CAROLYN ARNOLD 3151 DIAMOND HILL ROAD CUMBERLAND, RI 02864
29	4	LONG BROOK I LLC P.O. BOX 1436 WOONSOCKET, RI 02895
29	4	(A PORTION OF) BILLINGTON FARM LLC 295 WASHINGTON HIGHWAY SMITHFIELD, RI 02828
29	7	ALLEN & ELAINE STANFORD 22 ANNA MAC DRIVE CUMBERLAND, RI 02864-2918
29	9	TOWN OF CUMBERLAND 45 BROAD STREET CUMBERLAND, RI 02864
29	21	BRUCE & ANN MARIE GAMACHE P.O. BOX 7133 CUMBERLAND, RI 02864-0893
29	42	WAYNE & DEBBIE WILLIAMS 3100 DIAMOND HILL ROAD CUMBERLAND, RI 02864-2915
29	48	JOHN & LAURIE ADAMS 3280 DIAMOND HILL ROAD CUMBERLAND, RI 02864-2900
29	77	LAWRENCE & SUSAN HOWARD 3170 DIAMOND HILL ROAD CUMBERLAND, RI 02864-2915
29	78	LORI & JOHN DERY 3150 DIAMOND HILL ROAD CUMBERLAND, RI 02864-2915
29	79	RONALD J. HOULE 3162 DIAMOND HILL ROAD CUMBERLAND, RI 02864-2915
29	81	DONALD & ALICE ROSS 3206 DIAMOND HILL ROAD CUMBERLAND, RI 02864-2900
29	82-83	RUTH STRAIGHT, ARTHUR STRAIGHT c/o ROCKLAND TRUST J-MEAD 2036 WASHINGTON STREET HANOVER, MA 02339-1617
29	85	RONALD J. HOULE 3162 DIAMOND HILL ROAD CUMBERLAND, RI 02864-2915
29	95	ROBERT & LUCILLE COURNOYER TRUSTEES P.O. BOX 7173 CUMBERLAND, RI 02864

Office of Water Resources
JUN 19 2012

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF REVISIONS
DATED JUL 26 2012 FILE # 11-0088
NO CHANGES ALLOWED WITHOUT PREVIOUS APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Charles A. Clarke

NOTE:

1. SEE PLANS ENTITLED "CONSTRUCTION PLANS FOR LONGBROOK SUBDIVISION ASSESSOR'S PLAT 29, LOT 9 AND PROTON OF LOT 4, CUMBERLAND, RHODE ISLAND, PREPARED FOR: ROBERT W. AND JUNE CLAMP/ LONGBROOK, L.L.C. REVISED: MARCH 3, 2003 FOR CONFIGURATION OF THE REMAINDER OF LOT 4.

OWNER/APPLICANT:
LONG BROOK, LLC.
P.O. BOX 7008
CUMBERLAND, RHODE ISLAND 02864

Steven M. Clarke
No. 4477
REGISTERED PROFESSIONAL ENGINEER

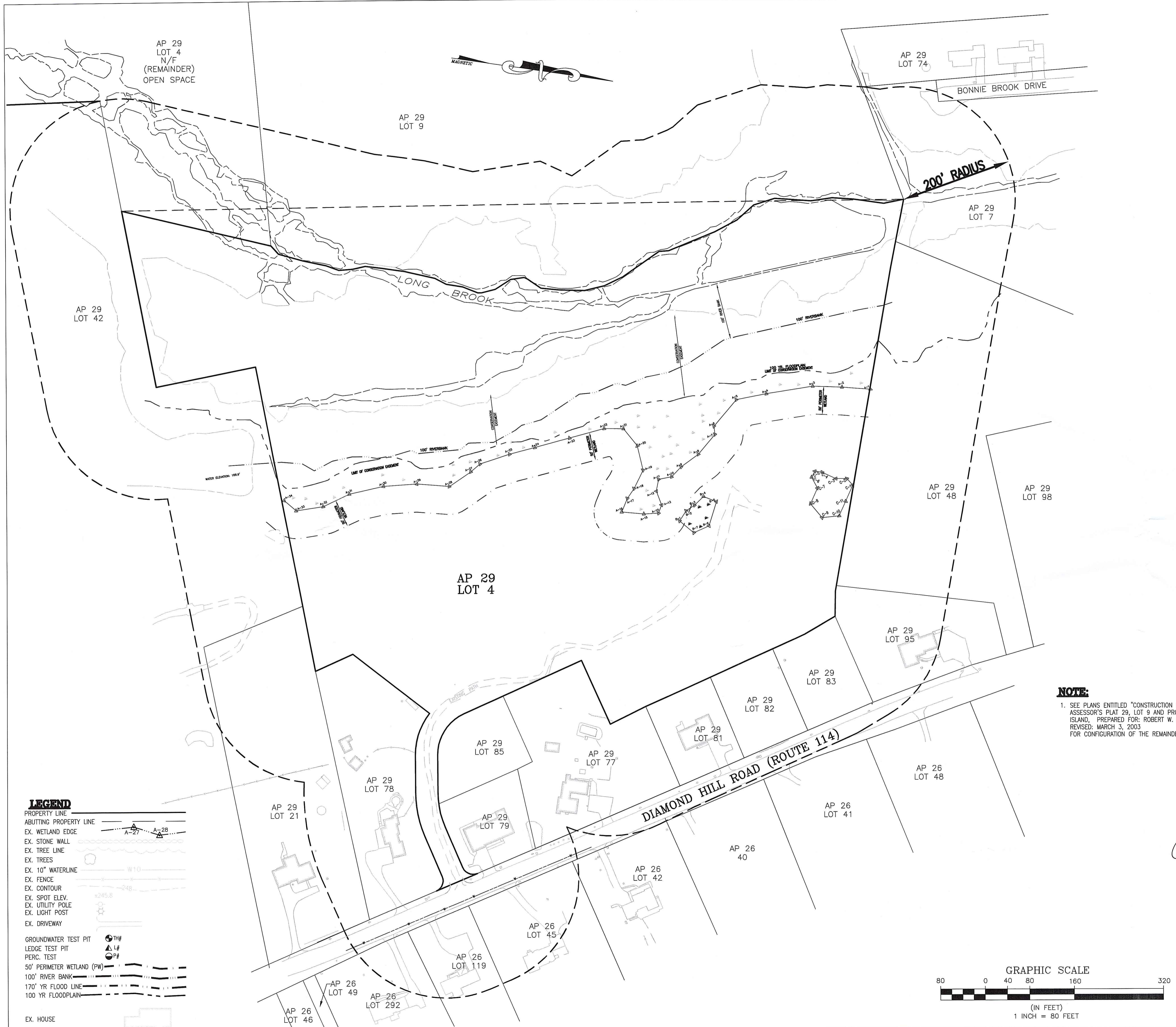
COMMONWEALTH
ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RHODE ISLAND 02908

REVISIONS

No.	DATE	DRWN	CHKD
1	2/25/04	DMS	AJW
2	12/15/04	JAP	AJW
3	4/24/09	JAR	SMC
4	5/30/12	KAB	SMC

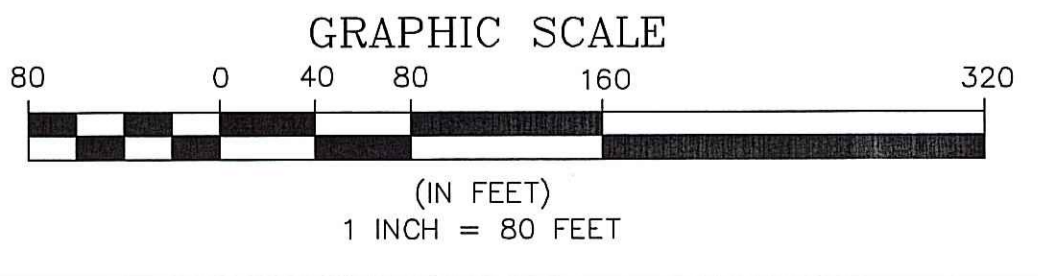
FINAL PLAN SUBMISSION
for
LONG BROOK I
AP 29, LOT 4
in
CUMBERLAND, RHODE ISLAND
ABUTTERS PLAN

SCALE: 1"=80'
SHEET NO: 2 of 12
DRAWN BY: DMS DESIGN BY: LRL/GS CHECKED BY: AJW
DATE: 1/21/04 PROJECT NO.: 03010.00

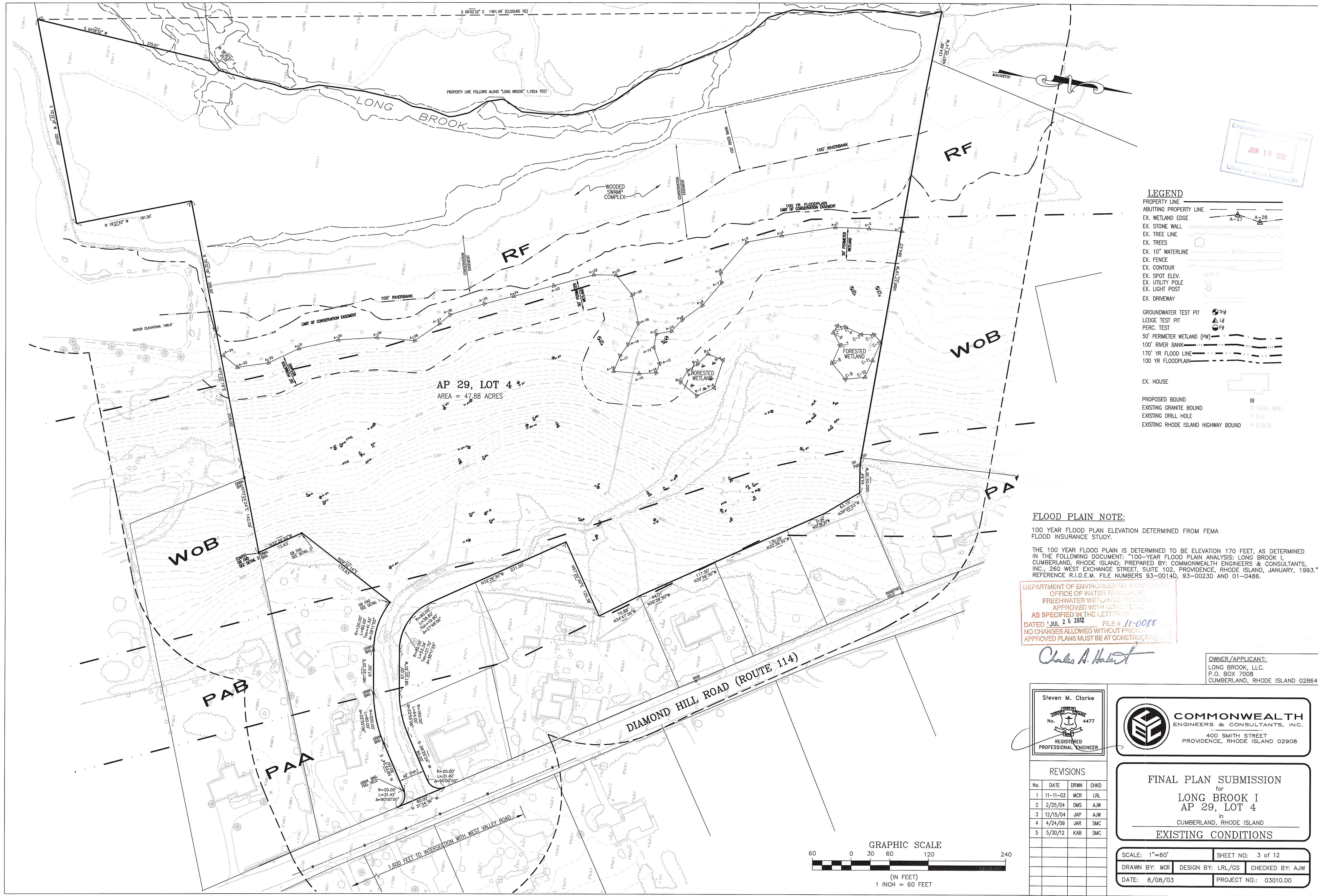


LEGEND

PROPERTY LINE	---
ABUTTING PROPERTY LINE	---
EX. WETLAND EDGE	---
EX. STONE WALL	---
EX. TREE LINE	---
EX. TREES	---
EX. 10" WATERLINE	---
EX. FENCE	---
EX. CONTOUR	---
EX. SPOT ELEV.	---
EX. UTILITY POLE	---
EX. LIGHT POST	---
EX. DRIVEWAY	---
GROUNDWATER TEST PIT	---
LEDGE TEST PIT	---
PERC. TEST	---
50' PERIMETER WETLAND (PW)	---
100' RIVER BANK	---
170' YR FLOOD LINE	---
100 YR FLOODPLAIN	---
EX. HOUSE	---



P:\03010\03010 Long Brook I Subdivision\State\Drawings\Final & SEPTICS 4-7-09\03010-Long Brook-Final & SEPTICS 4-30-12.dwg, 6/15/2012, 11:44:49 AM



Environmental Engineering
 JUN 19 2012
 Office of Water Resources

- LEGEND**
- PROPERTY LINE
 - ABUTTING PROPERTY LINE
 - EX. WETLAND EDGE
 - EX. STONE WALL
 - EX. TREE LINE
 - EX. TREES
 - EX. 10' WATERLINE
 - EX. FENCE
 - EX. CONTOUR
 - EX. SPOT ELEV.
 - EX. UTILITY POLE
 - EX. LIGHT POST
 - EX. DRIVEWAY
 - GROUNDWATER TEST PIT
 - LEDGE TEST PIT
 - PERC. TEST
 - 50' PERIMETER WETLAND (PW)
 - 100' RIVER BANK
 - 170' YR FLOOD LINE
 - 100 YR FLOODPLAIN
 - EX. HOUSE
 - PROPOSED BOUND
 - EXISTING GRANITE BOUND
 - EXISTING DRILL HOLE
 - EXISTING RHODE ISLAND HIGHWAY BOUND

FLOOD PLAIN NOTE:
 100 YEAR FLOOD PLAN ELEVATION DETERMINED FROM FEMA FLOOD INSURANCE STUDY.
 THE 100 YEAR FLOOD PLAN IS DETERMINED TO BE ELEVATION 170 FEET, AS DETERMINED IN THE FOLLOWING DOCUMENT: "100-YEAR FLOOD PLAN ANALYSIS: LONG BROOK I, CUMBERLAND, RHODE ISLAND; PREPARED BY: COMMONWEALTH ENGINEERS & CONSULTANTS, INC., 260 WEST EXCHANGE STREET, SUITE 102, PROVIDENCE, RHODE ISLAND, JANUARY, 1993." REFERENCE R.I.D.E.M. FILE NUMBERS 93-0014D, 93-0023D AND 01-0486.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED JUL 26 2012 FILE # 11-0088
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION

Charles A. Herbert

OWNER/APPLICANT:
 LONG BROOK, LLC.
 P.O. BOX 7008
 CUMBERLAND, RHODE ISLAND 02864

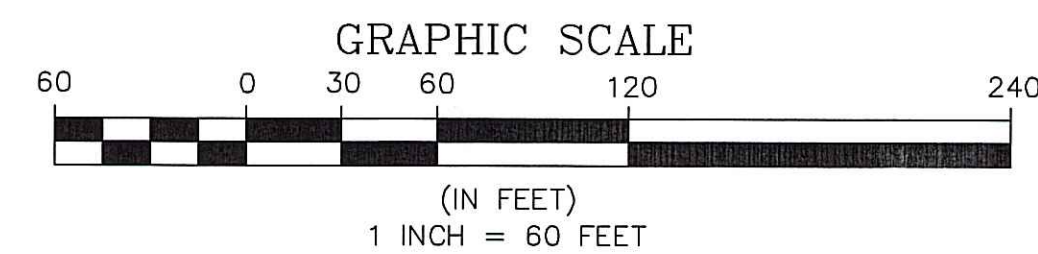
Steven M. Clarke
 No. 4477
 REGISTERED PROFESSIONAL ENGINEER

COMMONWEALTH ENGINEERS & CONSULTANTS, INC.
 400 SMITH STREET
 PROVIDENCE, RHODE ISLAND 02908

REVISIONS

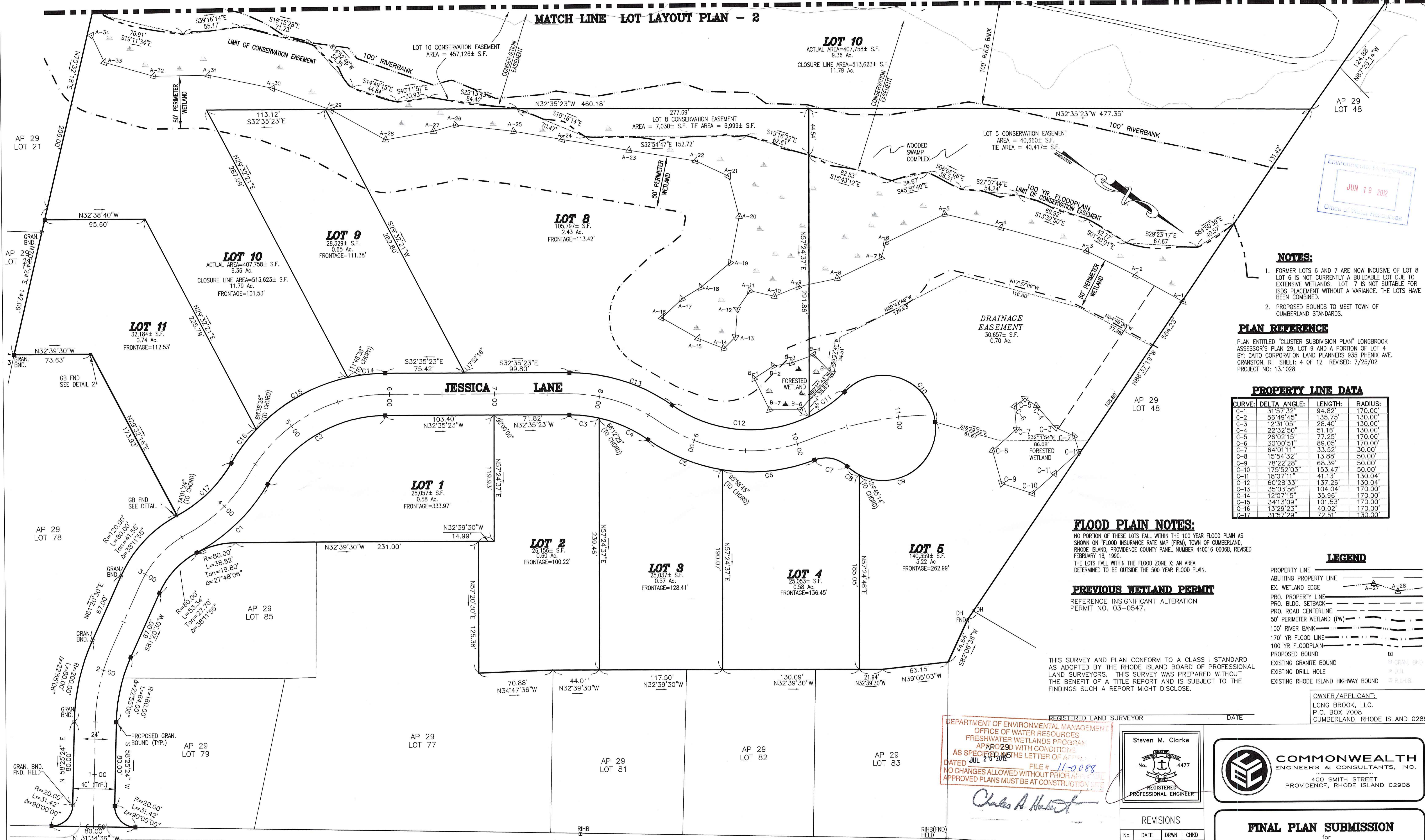
No.	DATE	DRWN	CHKD
1	11-11-03	MCR	LRL
2	2/25/04	DMS	AJW
3	12/15/04	JAP	AJW
4	4/24/09	JAR	SMC
5	5/30/12	KAB	SMC

FINAL PLAN SUBMISSION
 for
LONG BROOK I
AP 29, LOT 4
 in
 CUMBERLAND, RHODE ISLAND
EXISTING CONDITIONS



SCALE: 1"=60' SHEET NO: 3 of 12
 DRAWN BY: MCR DESIGN BY: LRL/GS CHECKED BY: AJW
 DATE: 8/08/03 PROJECT NO.: 03010.00

MATCH LINE LOT LAYOUT PLAN - 2



ENVIRONMENTAL MANAGEMENT
 JUN 19 2012
 Office of Water Resources

NOTES:

- FORMER LOTS 6 AND 7 ARE NOW INCISIVE OF LOT 8. LOT 6 IS NOT CURRENTLY A BUILDABLE LOT DUE TO EXTENSIVE WETLANDS. LOT 7 IS NOT SUITABLE FOR ISDS PLACEMENT WITHOUT A VARIANCE. THE LOTS HAVE BEEN COMBINED.
- PROPOSED BOUNDS TO MEET TOWN OF CUMBERLAND STANDARDS.

PLAN REFERENCE

PLAN ENTITLED "CLUSTER SUBDIVISION PLAN" LONGBROOK ASSESSOR'S PLAN 29, LOT 9 AND A PORTION OF LOT 4 BY: CAITO CORPORATION LAND PLANNERS 935 PHENIX AVE. CRANSTON, RI SHEET: 4 OF 12 REVISED: 7/25/02 PROJECT NO: 13.1028

PROPERTY LINE DATA

CURVE:	DELTA ANGLE:	LENGTH:	RADIUS:
C-1	31°57'32"	94.82'	170.00'
C-2	56°49'45"	135.75'	130.00'
C-3	12°31'05"	28.40'	130.00'
C-4	22°32'50"	51.16'	130.00'
C-5	26°02'15"	77.26'	170.00'
C-6	30°00'51"	89.05'	170.00'
C-7	64°01'11"	33.52'	30.00'
C-8	15°54'32"	13.88'	50.00'
C-9	78°22'28"	68.39'	50.00'
C-10	175°52'03"	153.47'	50.00'
C-11	18°07'11"	41.33'	130.04'
C-12	60°28'33"	137.26'	130.04'
C-13	35°03'56"	104.04'	170.00'
C-14	12°07'15"	35.96'	170.00'
C-15	34°13'09"	101.53'	170.00'
C-16	13°29'23"	40.02'	170.00'
C-17	31°57'29"	72.51'	130.00'

FLOOD PLAIN NOTES:

NO PORTION OF THESE LOTS FALL WITHIN THE 100 YEAR FLOOD PLAN AS SHOWN ON "FLOOD INSURANCE RATE MAP (FIRM), TOWN OF CUMBERLAND, RHODE ISLAND, PROVIDENCE COUNTY PANEL NUMBER 440016 0006B, REVISED FEBRUARY 16, 1990.
 THE LOTS FALL WITHIN THE FLOOD ZONE X; AN AREA DETERMINED TO BE OUTSIDE THE 500 YEAR FLOOD PLAN.

LEGEND

- PROPERTY LINE
- ADJUTING PROPERTY LINE
- EX. WETLAND EDGE
- PRO. PROPERTY LINE
- PRO. BLDG. SETBACK
- PRO. ROAD CENTERLINE
- 50' PERIMETER WETLAND (PW)
- 100' RIVERBANK
- 170' YR FLOOD LINE
- 100 YR FLOODPLAIN
- PROPOSED BOUND
- EXISTING GRANITE BOUND
- EXISTING DRILL HOLE
- EXISTING RHODE ISLAND HIGHWAY BOUND

PREVIOUS WETLAND PERMIT

REFERENCE INSIGNIFICANT ALTERATION PERMIT NO. 03-0547.

THIS SURVEY AND PLAN CONFORM TO A CLASS I STANDARD AS ADOPTED BY THE RHODE ISLAND BOARD OF PROFESSIONAL LAND SURVEYORS. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO THE FINDINGS SUCH A REPORT MIGHT DISCLOSE.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED JUL 2 2012 FILE # 11-0088
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Charles A. Harkin

REGISTERED LAND SURVEYOR
 Steven M. Clarke
 No. 4477
 REGISTERED PROFESSIONAL ENGINEER

COMMONWEALTH ENGINEERS & CONSULTANTS, INC.
 400 SMITH STREET
 PROVIDENCE, RHODE ISLAND 02908

FINAL PLAN SUBMISSION
 for
LONG BROOK I
 AP 29, LOT 4
 in
 CUMBERLAND, RHODE ISLAND
LOT LAYOUT PLAN - 1

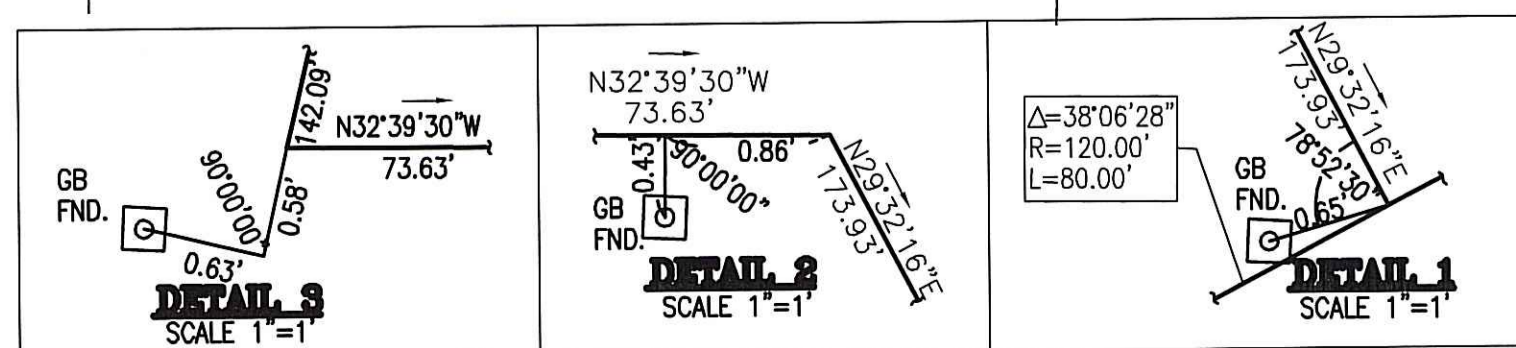
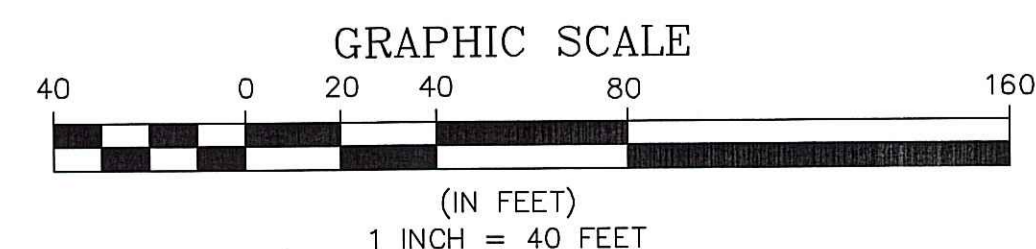
REVISIONS

No.	DATE	DRWN	CHKD
1	11/11/03	MCR	GS
2	2/25/04	DMS	AJW
3	12/15/04	JAP	AJW
4	4/24/09	JAR	SMC
5	5/30/12	KAB	SMC

SCALE: 1"=40'
 SHEET NO: 4 of 12
 DRAWN BY: MCR DESIGN BY: LRL/GS CHECKED BY: AJW
 DATE: 8/08/03 PROJECT NO.: 03010.00

DIAMOND HILL ROAD (ROUTE 114)

RI DEM. SUBDIVISIONS SUITABILITY
 REFERENCE RIDEM SUB. SUIT. APPROVAL #508-135.



RI D.O.T. P.A.P.
 ALL STORMWATER RUNOFF IS DIRECTED AWAY FROM THE HIGHWAY INTO THE SITE. THERE IS NO INCREASE OVER EXISTING CONDITIONS TO THE TOTAL VOLUME OF WATER ENTERING THE STATE DRAINAGE SYSTEM.

NOTES:
 1. SEE SECTION A-A OF DETENTION BASIN DETAIL SHEET 11 OF 12
 2. SEE SECTION B-B OF LEVEL SPREADER ON SHEET 12 OF 12
 JUN 19 2012

LEGEND

- PROPERTY LINE
- ABUTTING PROPERTY LINE
- EX. WETLAND EDGE
- EX. STONE WALL
- EX. TREE LINE
- EX. TREES
- EX. 10' WATERLINE
- EX. FENCE
- EX. CONTOUR
- EX. SPOT ELEV.
- EX. UTILITY POLE
- EX. LIGHT POST
- PRO. PROPERTY LINE
- PRO. BLDG. SETBACK
- PRO. CONTOUR LINE
- PRO. SPOT ELEVATION
- PRO. DRAIN LINE
- PRO. CATCH BASIN
- PRO. DRAIN MANHOLE
- PRO. WATER LINE
- PRO. HYDRANT
- PRO. ROAD EDGE
- PRO. ROAD CENTERLINE
- PRO. RETAINING WALL
- PRO. HOUSE
- PRO. FLARED END SECTION
- PRO. SEPTIC SYSTEM
- GROUNDWATER TEST PIT
- LEDGE TEST PIT
- PERC. TEST
- 50' PERIMETER WETLAND (PW)
- 100' RIVER BANK
- 170' YR FLOOD LINE
- 100 YR FLOODPLAIN
- PRO. UTILITY POLE
- PRO. FENCE
- PRO. GUARDRAIL
- PRO. SIGN
- CUT & MATCH PAVE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED 1 JUL 2012 FILE # 11-0088
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Charles A. Herbert

PREVIOUS WETLAND PERMIT
 REFERENCE INSIGNIFICANT ALTERATION PERMIT NO. 03-0547.

FLOOD PLAIN NOTE:
 100 YEAR FLOOD PLAN ELEVATION DETERMINED FROM FEMA FLOOD INSURANCE STUDY.
 THE 100 YEAR FLOOD PLAIN IS DETERMINED TO BE ELEVATION 170 FEET, AS DETERMINED IN THE FOLLOWING DOCUMENT: "100-YEAR FLOOD PLAIN ANALYSIS: LONG BROOK I CUMBERLAND, RHODE ISLAND; PREPARED BY: COMMONWEALTH ENGINEERS & CONSULTANTS, INC., 260 WEST EXCHANGE STREET, SUITE 102, PROVIDENCE, RHODE ISLAND, JANUARY, 1993." REFERENCE R.I.D.E.M. FILE NUMBERS 93-00140, 93-00230 AND 01-0486.

RI DEM. SUBDIVISIONS SUITABILITY
 REFERENCE RIDEM SUB. SUIT. APPROVAL #S08-135.
 1. UNLESS INDICATED, THERE ARE NO EXISTING OR PROPOSED WELLS, DRAINS OR WATERWAYS WITHIN 200 FEET OF THE PROPOSED SYSTEM.
 2. UNLESS OTHERWISE NOTED, THERE ARE NO PUBLIC WELLS, EXISTING OR PROPOSED, WITHIN 500 FEET OF THE PROPOSED SYSTEM.

OWNER/APPLICANT:
 LONG BROOK, LLC.
 P.O. BOX 7008
 CUMBERLAND, RHODE ISLAND 02864

Steven M. Clarke
 No. 4477
 REGISTERED PROFESSIONAL ENGINEER



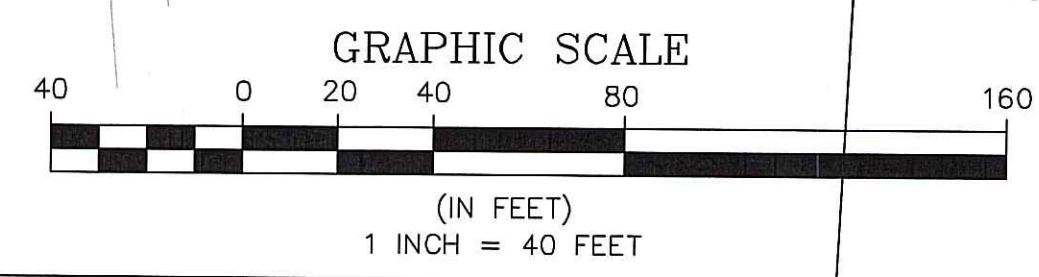
REVISIONS

No.	DATE	DRWN	CHKD
1	11/11/03	MCR	GS
2	2/25/04	DMS	AJW
3	12/15/04	JAP	AJW
4	4/24/09	JAR	SMC
5	5/30/12	KAB	SMC

FINAL PLAN SUBMISSION
 for
LONG BROOK I
 AP 29, LOT 4
 in
 CUMBERLAND, RHODE ISLAND
GRADING & UTILITIES PLAN

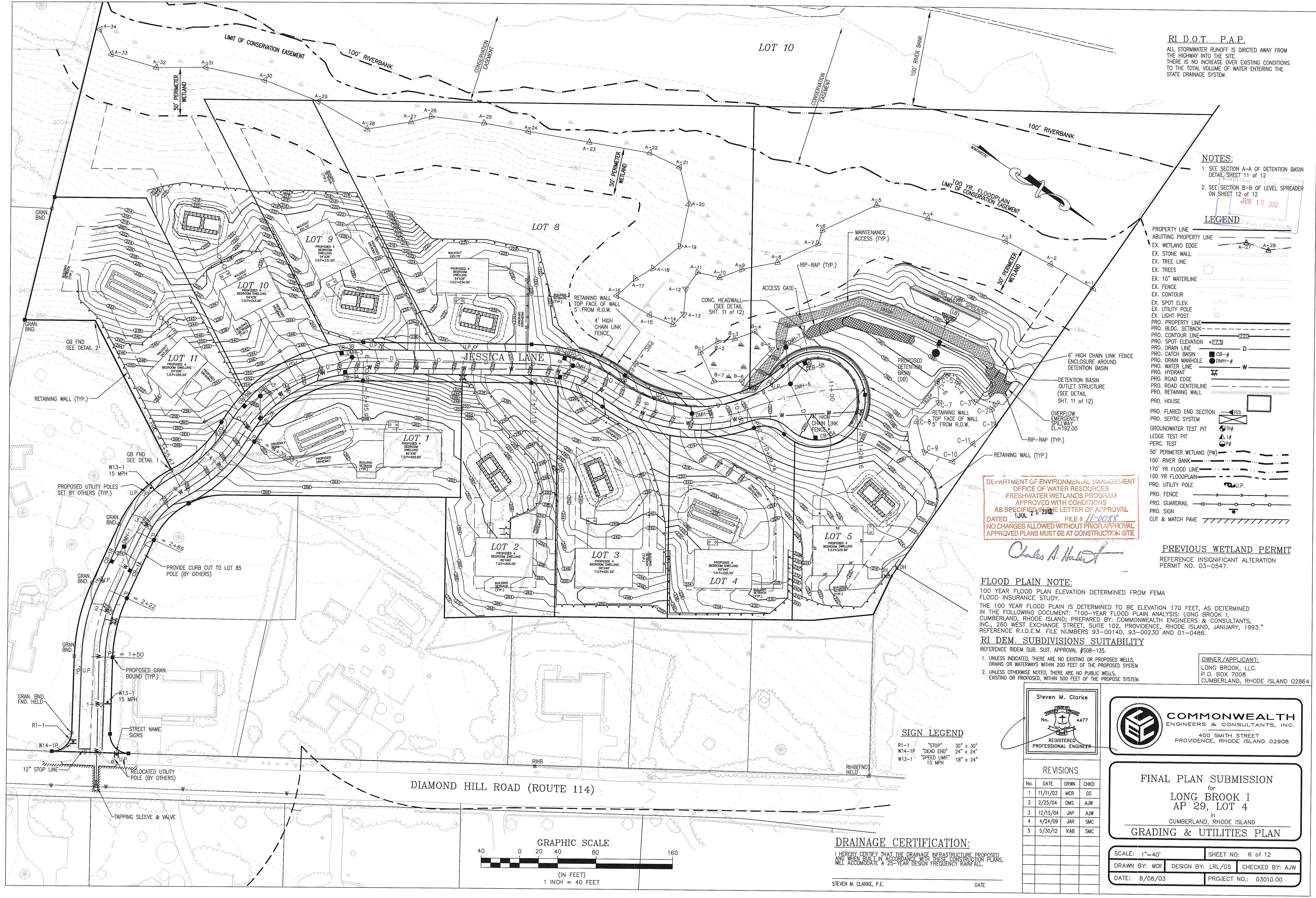
SCALE: 1"=40' SHEET NO: 6 of 12
 DRAWN BY: MCR DESIGN BY: LRL/GS CHECKED BY: AJW
 DATE: 8/08/03 PROJECT NO.: 03010.00

SIGN LEGEND
 R1-1 "STOP" 30" x 30"
 W14-1P "DEAD END" 24" x 24"
 W13-1 "SPEED LIMIT" 18" x 24"
 15 MPH



DRAINAGE CERTIFICATION:
 I HEREBY CERTIFY THAT THE DRAINAGE INFRASTRUCTURE PROPOSED AND WHEN BUILT IN ACCORDANCE WITH THESE CONSTRUCTION PLANS, WILL ACCOMMODATE A 25-YEAR DESIGN FREQUENCY RAINFALL.

STEVEN M. CLARKE, P.E. DATE



P:\03010\03010.dwg Long Brook I Subdivision\Site\Drawings\Final & SEPTICS 4-7-09\03010-006 (BROOK-FINAL) & SEPTICS 5-20-10.dwg 6/15/2012 11:54:22 AM

RI D.O.T. P.A.P.
 ALL STORMWATER RUNOFF IS DIRECTED AWAY FROM THE HIGHWAY INTO THE SITE.
 THERE IS NO INCREASE OVER EXISTING CONDITIONS TO THE TOTAL VOLUME OF WATER ENTERING THE STATE DRAINAGE SYSTEM.

LEGEND

PROPERTY LINE	---
ABUTTING PROPERTY LINE	---
EX. WETLAND EDGE	---
PRO. PROPERTY LINE	---
PRO. BLDG. SETBACK	---
PRO. ROAD CENTERLINE	---
50' PERMETER WETLAND (PW)	---
100' RIVER BANK	---
170' YR FLOOD LINE	---
100 YR FLOODPLAIN	---
PROPOSED BOUND	---
EXISTING GRANITE BOUND	---
EXISTING DRILL HOLE	---
EXISTING RHODE ISLAND HIGHWAY BOUND	---
PROPOSED POLE MOUNTED LIGHT FIXTURE	---

JUN 19 2012
 Office of Water Resources

NOTE
 ALL CATCH BASIN ARE 4' DIAMETER
 UNLESS NOTED OTHERWISE ON PLAN

LIGHTING:
 PROPOSED POLE MOUNTED LOW-LEVEL LIGHT FIXTURE TO BE APPROVED BY CUMBERLAND PUBLIC WORKS AND NARRAGANSETT ELECTRIC.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED JUL 26 2012 FILE # 11-0088
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE
 Charles A. Harbert

OWNER/APPLICANT:
 LONG BROOK, LLC.
 P.O. BOX 7008
 CUMBERLAND, RHODE ISLAND 02864

Steven M. Clarke
 No. 4477
 REGISTERED PROFESSIONAL ENGINEER

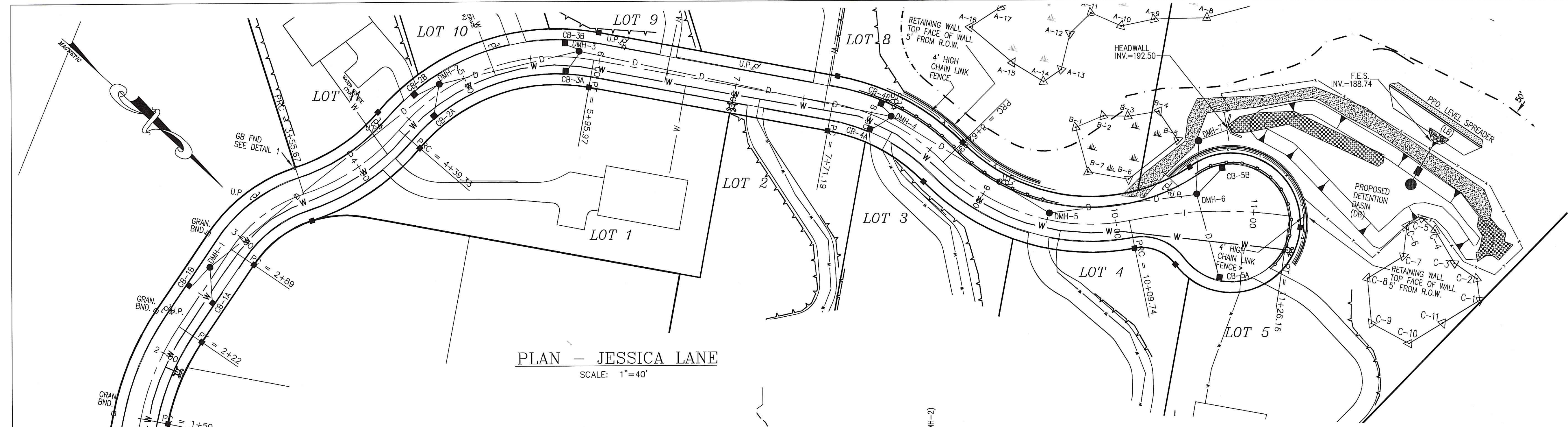
COMMONWEALTH
 ENGINEERS & CONSULTANTS, INC.
 400 SMITH STREET
 PROVIDENCE, RI 02908

REVISIONS

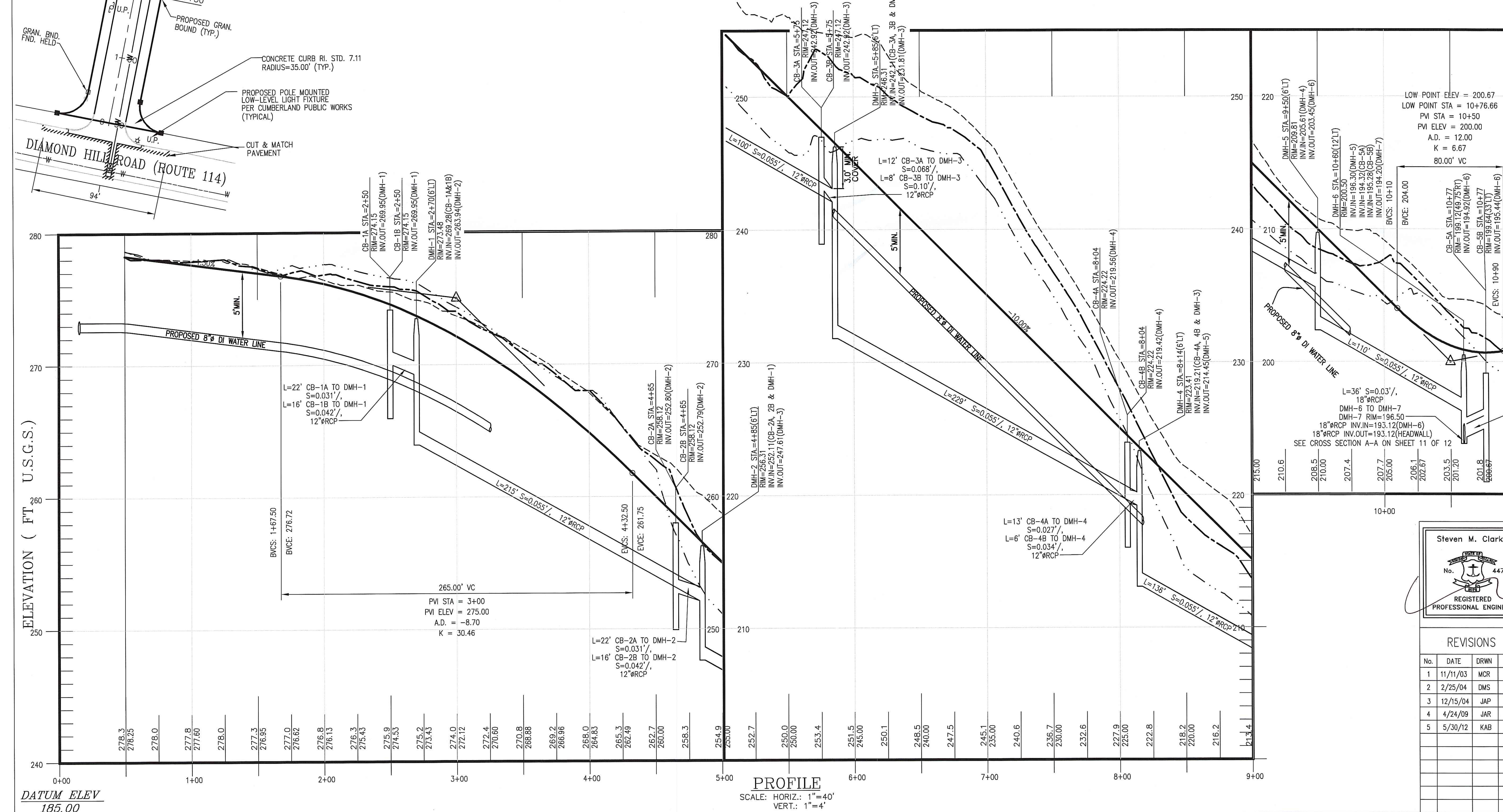
No.	DATE	DRWN	CHKD
1	11/11/03	MCR	GS
2	2/25/04	DMS	AJW
3	12/15/04	JAP	AJW
4	4/24/09	JAR	SMC
5	5/30/12	KAB	SMC

FINAL PLAN SUBMISSION
 for
LONG BROOK I
 AP 29, LOT 4
 in
 CUMBERLAND, RHODE ISLAND
PLAN & PROFILE

SCALE: AS NOTED	SHEET NO: 7 of 12	
DRAWN BY: MCR	DESIGN BY: LRL/GS	CHECKED BY: KK
DATE: 8/08/03	PROJECT NO.: 03010.00	

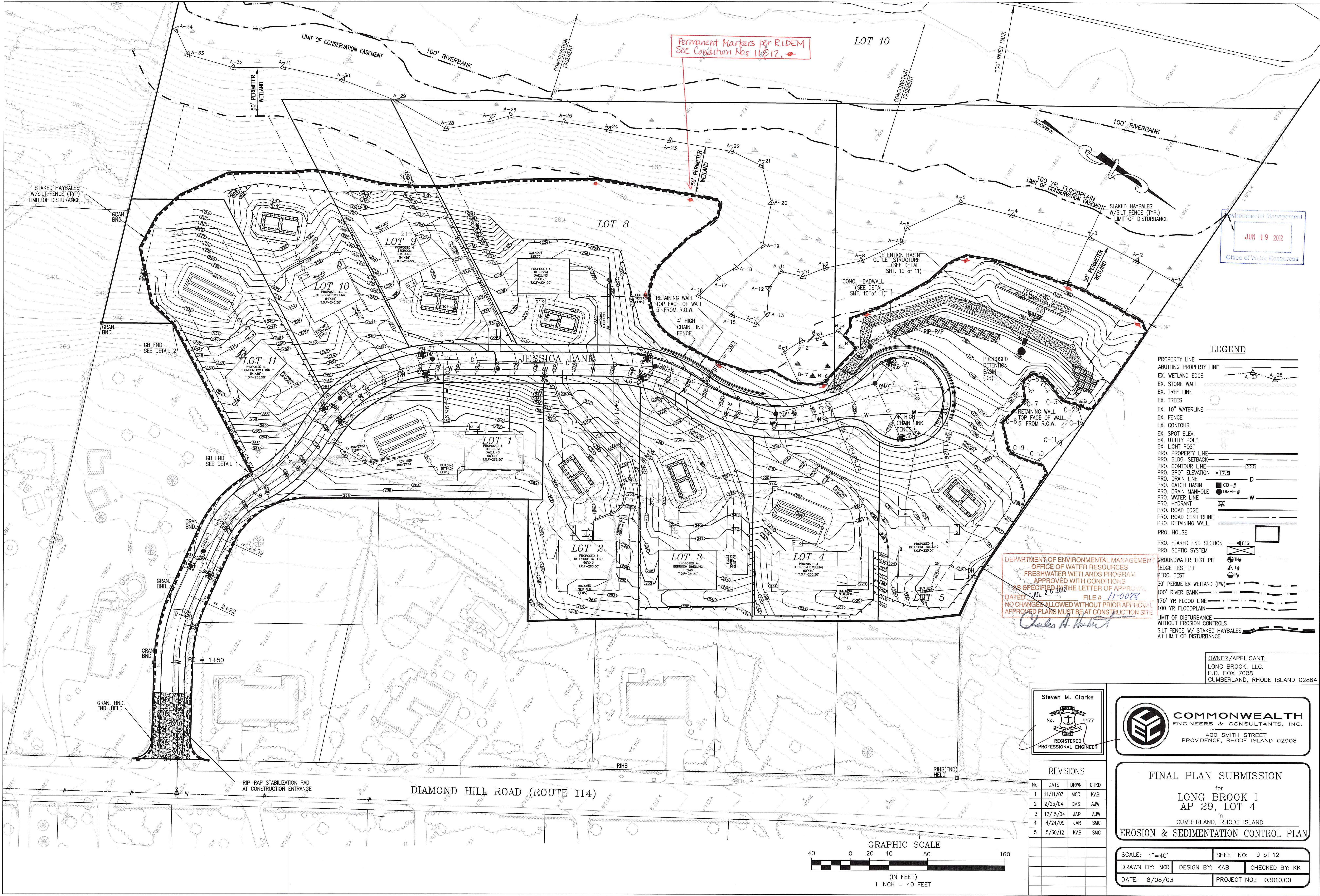


PLAN - JESSICA LANE
 SCALE: 1"=40'

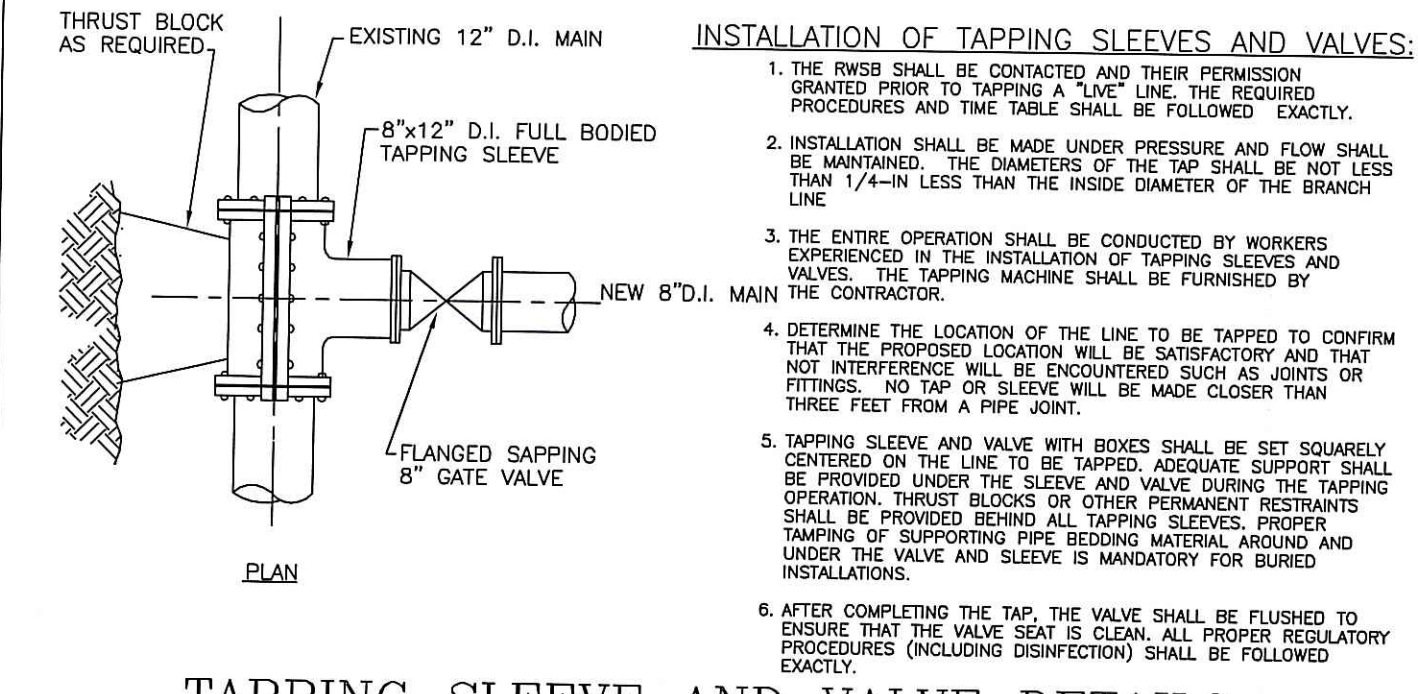


PROFILE
 SCALE: HORIZ.: 1"=40'
 VERT.: 1"=4'

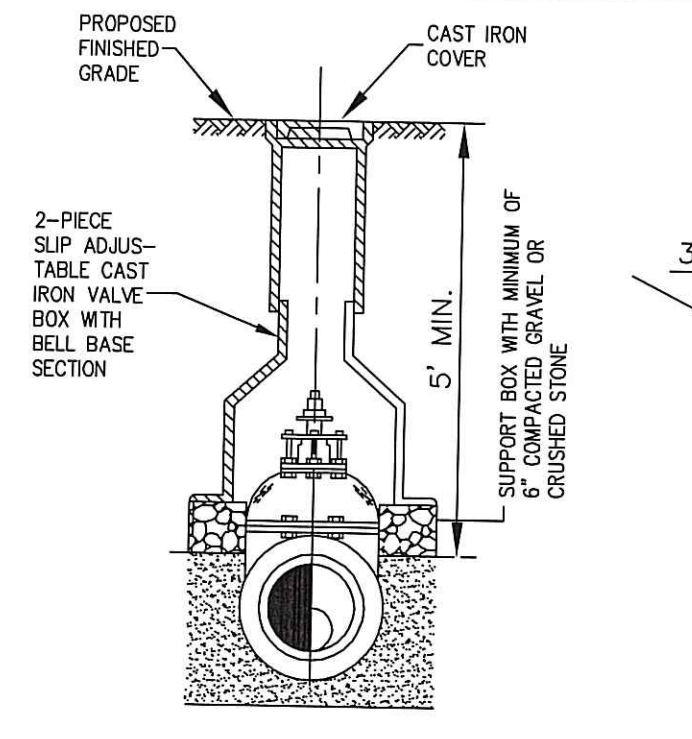
P:\03010\03010.00 Long Brook I Subdivision\DWG\Current\Long Brook I Final.dwg, 6/15/2012 11:53:38 AM



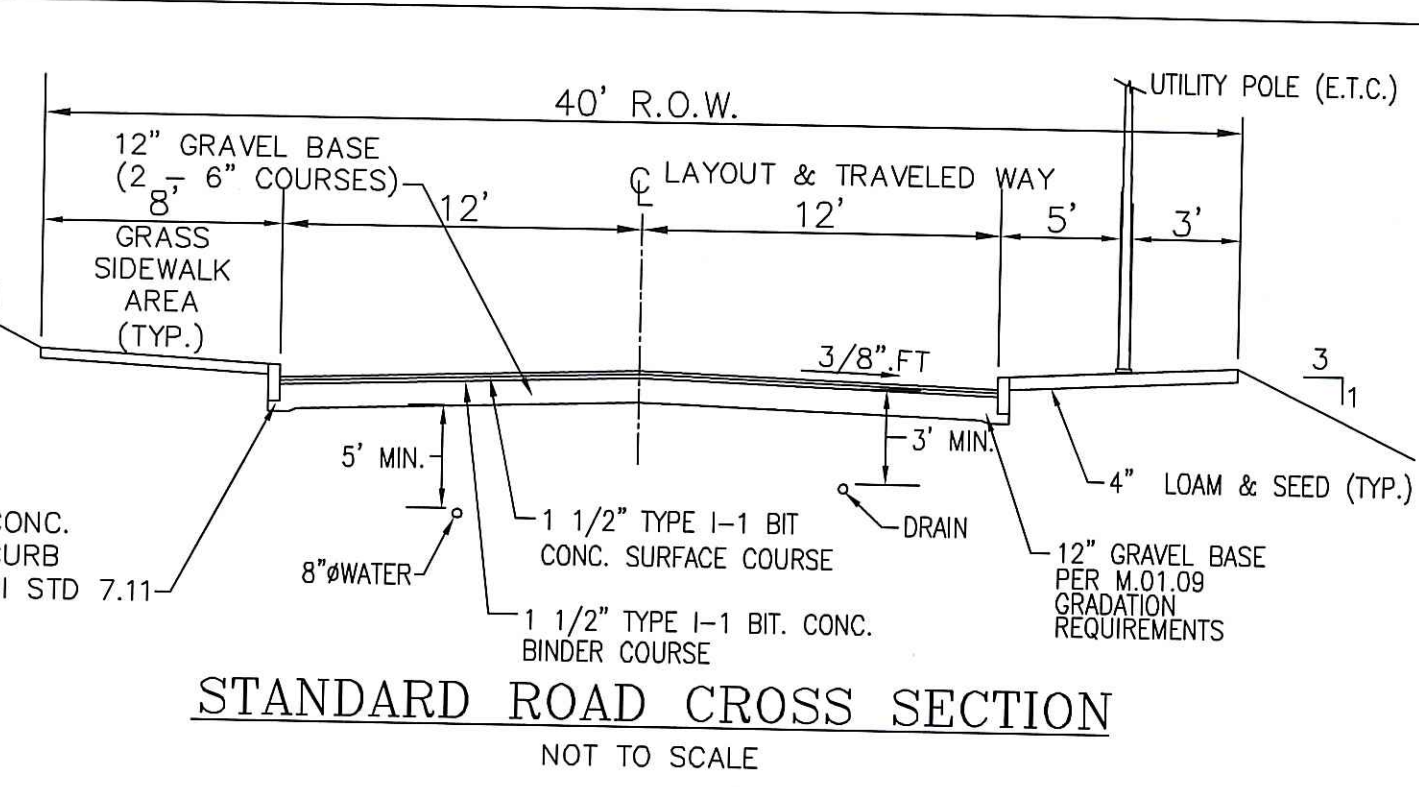
P:\03010\03010.00 Long Brook I Subdivision\Site Drawings\Current Drawings\Final & Septics 5-30-12.dwg, 6/17/2012 12:38:42 PM



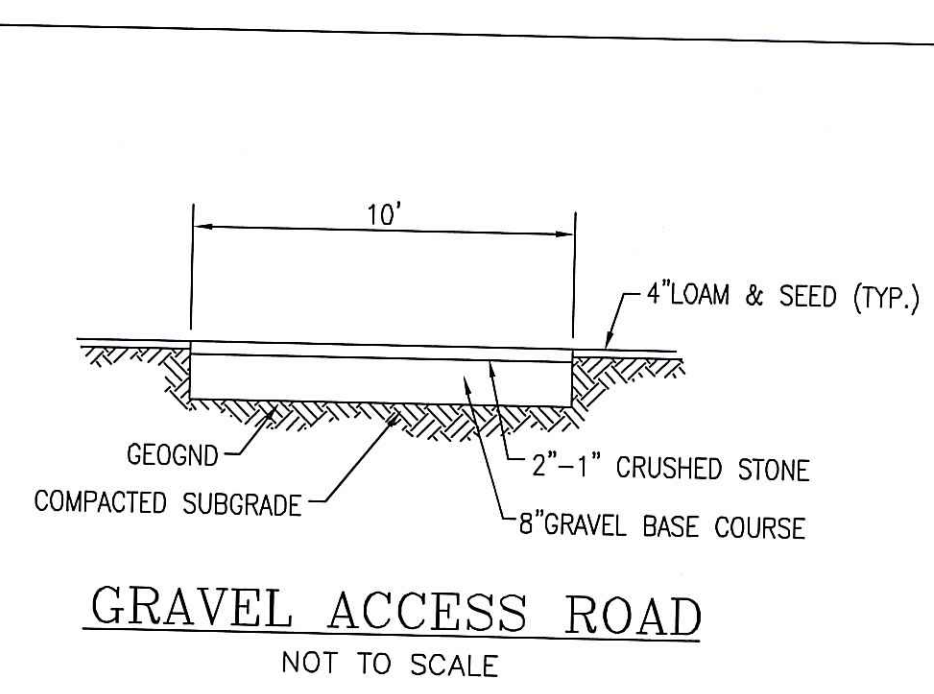
TAPPING SLEEVE AND VALVE DETAILS
NOT TO SCALE



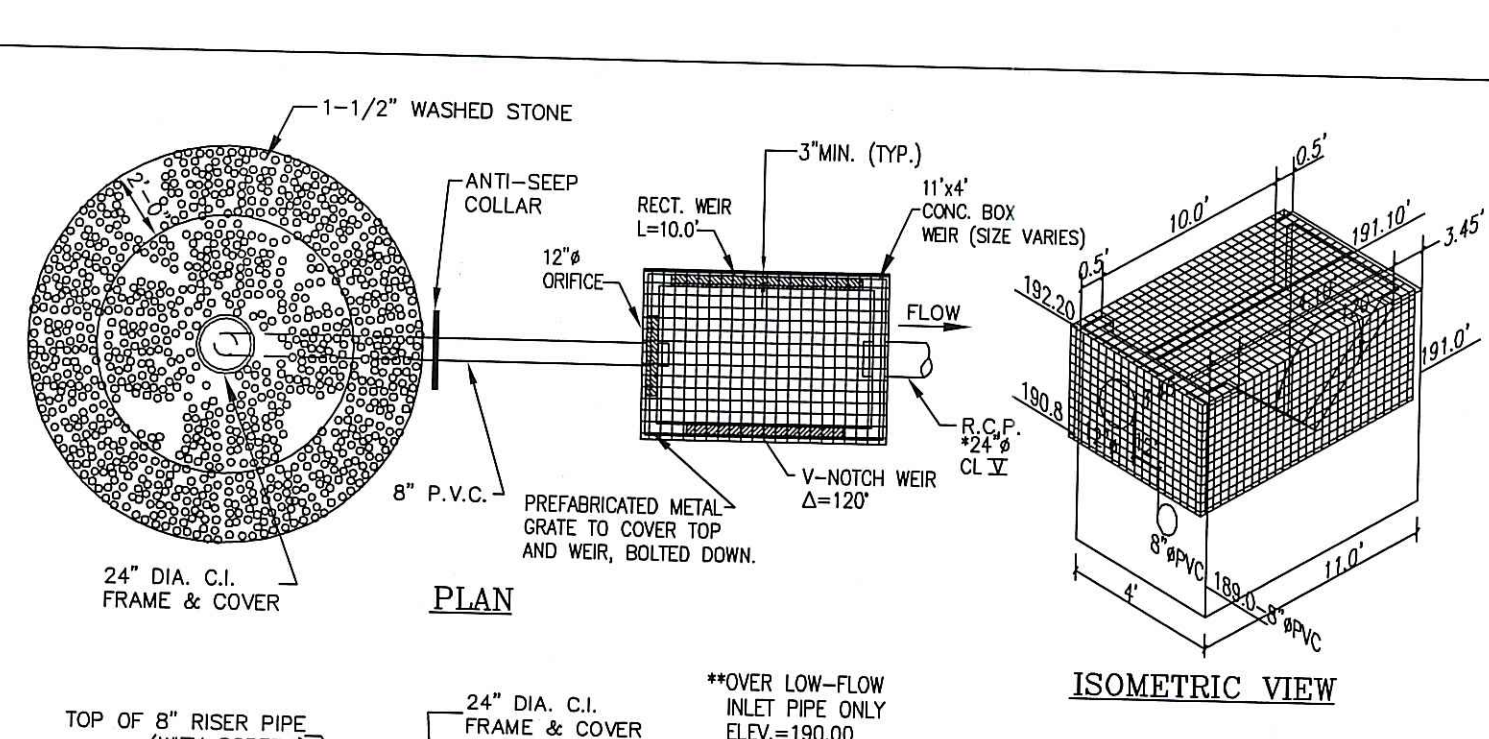
VALVE BOX ASSEMBLY DETAIL
NOT TO SCALE



STANDARD ROAD CROSS SECTION
NOT TO SCALE



GRAVEL ACCESS ROAD
NOT TO SCALE

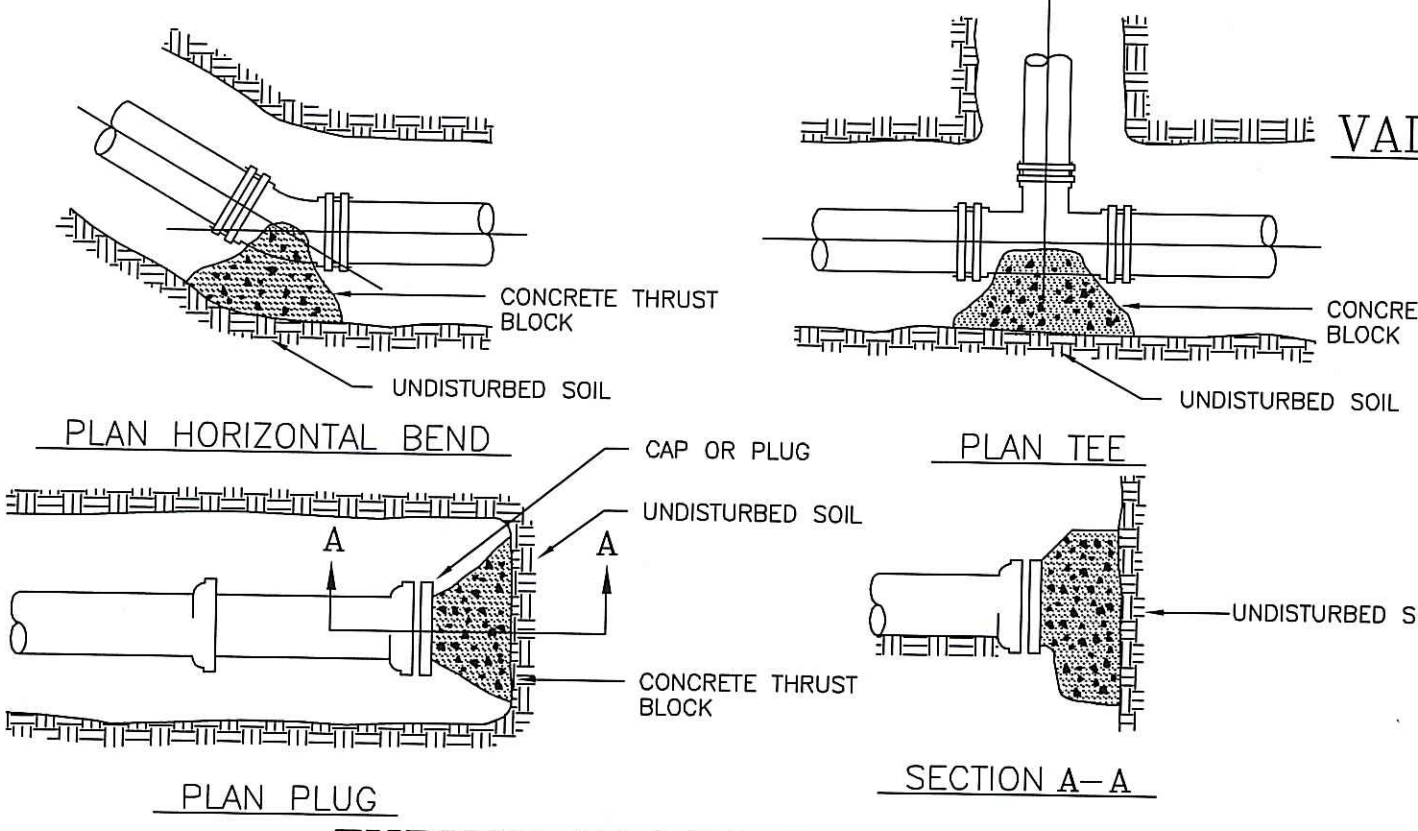


DETENTION BASIN DB OUTLET STRUCTURE
NOT TO SCALE (SHOP DRAWING SUBMITTAL REQUIRED)

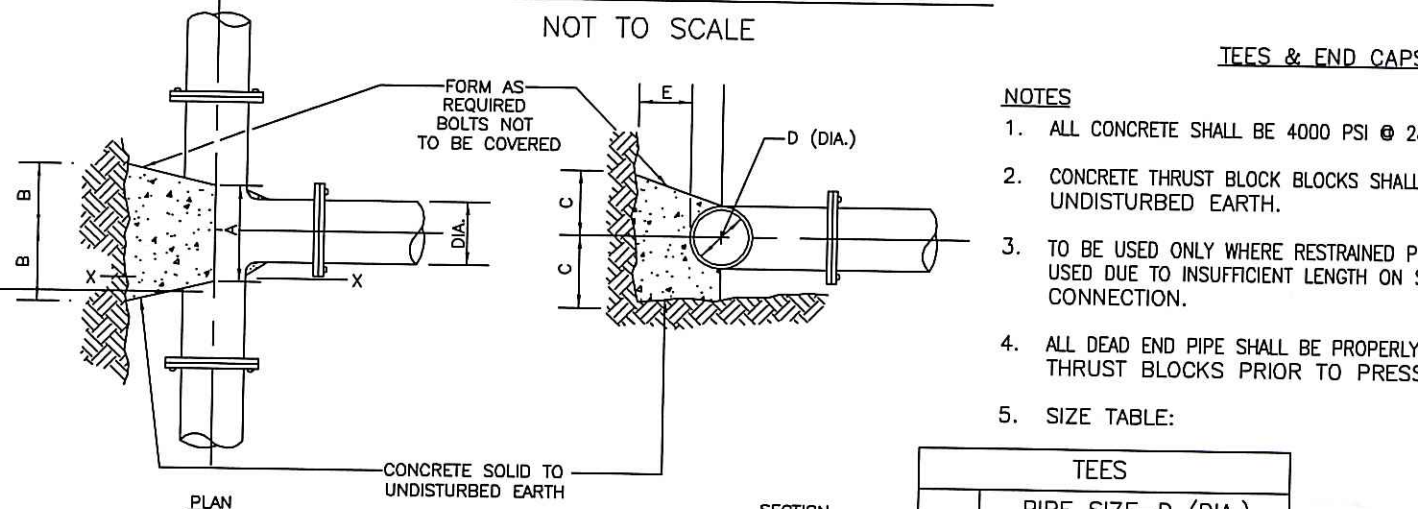
OUTLET STRUCTURE SPECIFICATIONS

(BASIN-A)	ELEV.-A	192.50
ELEV.-B	191.00	
INVERT-C	189.0	
INVERT-D	189.0	
ORIFICE DIA.-E	1.31'	
LENGTH-G	4.0'	
OUTLET DIA.-H	24"	
LENGTH-I	17.5'	
INVOUT ELEV.-J	188.95	
F. END INVERT-M	188.74	
SLOPE-N	0.0123%	
LENGTH WEIR	L=10.0'	
WEIR INV.-L	191.10	

TRASH RACK NOTE:
THE TRASH RACK SHALL NOT BE SET FURTHER TO THE OUTLET STRUCTURE. PROVIDE A MINIMUM OF 3' BETWEEN THE BOX AND SCREEN.



THURST BLOCK DETAILS
NOT TO SCALE



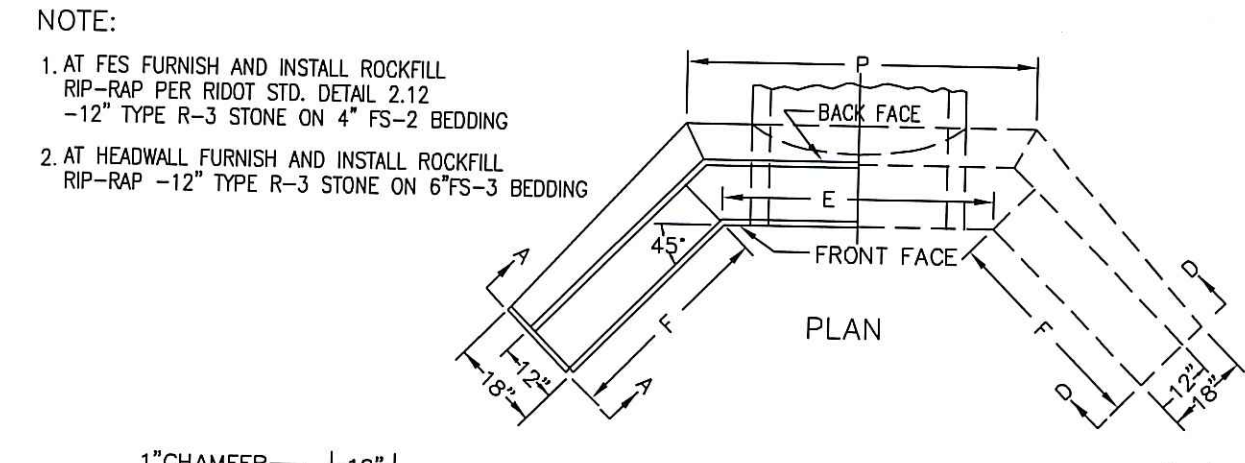
TYPICAL THRUST BLOCK DETAIL
NOT TO SCALE

CONCRETE THRUST BLOCK REQUIREMENTS

FITTING	MINIMUM BEARING AREA "H"x"B"
6-IN. TEE OR CAP	3 SQ. FT.
HYDRANT	3 SQ. FT.

TEES & END CAPS

PIPE SIZE-D (DIA.)	A	B	C	E
6"	8"	10"	10"	8"
8"	10"	12"	12"	10"
12"	16"	18"	18"	16"
20"	24"	28"	28"	24"



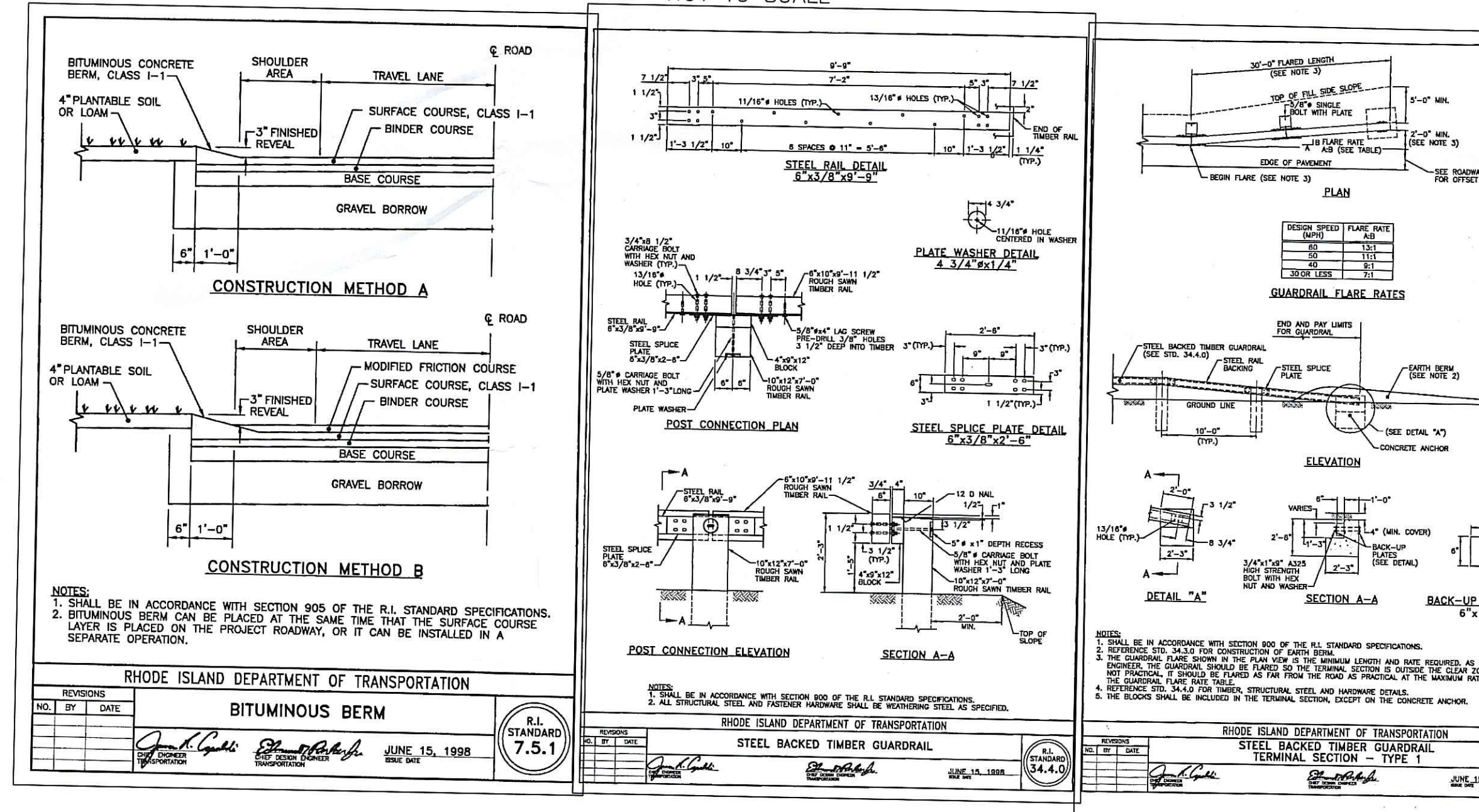
CONCRETE AND WET STONE MASONRY HEADWALL
NOT TO SCALE

NOTE:

- AT FES FURNISH AND INSTALL ROCKFILL RIP-RAP PER RIDOT STD. DETAIL 2.12 -12" TYPE R-3 STONE ON 4" FS-2 BEDDING
- AT HEADWALL FURNISH AND INSTALL ROCKFILL RIP-RAP -12" TYPE R-3 STONE ON 6" FS-3 BEDDING

D	E	F	G	H	J	L	N	P
18"	2'-0"	4'-0"	3'-2"	4'-0"	2'-0"	1'-0"	1'-2"	3'-0"
18"	2'-0"	5'-0"	3'-2"	4'-0"	2'-0"	1'-0"	1'-2"	3'-0"
18"	3'-0"	6'-0"	3'-2"	4'-0"	2'-0"	1'-0"	1'-2"	3'-0"
21"	3'-3"	7'-0"	3'-8"	4'-0"	2'-0"	1'-0"	1'-8"	4'-4"
24"	3'-0"	7'-0"	3'-0"	5'-0"	3'-0"	1'-0"	1'-0"	4'-2"
30"	4'-0"	8'-0"	4'-0"	5'-0"	3'-0"	1'-0"	2'-0"	5'-3"
30"	4'-0"	8'-0"	4'-0"	5'-0"	3'-0"	1'-0"	2'-0"	5'-11"
42"	5'-0"	10'-0"	5'-0"	6'-0"	4'-0"	1'-0"	2'-0"	6'-6"
48"	5'-0"	11'-0"	5'-0"	7'-0"	5'-0"	2'-0"	2'-0"	7'-2"

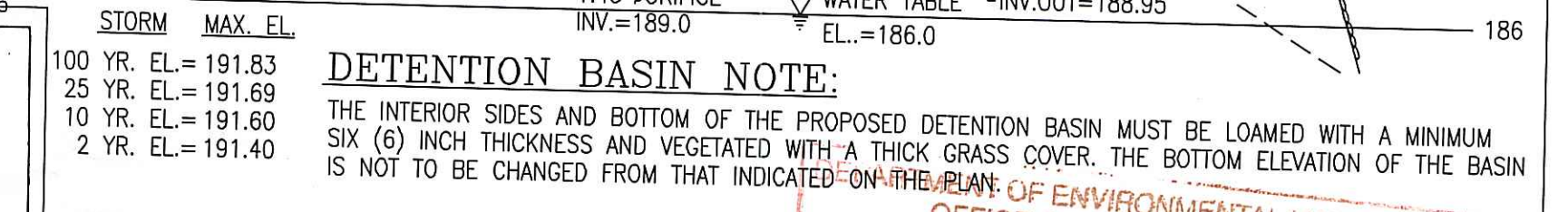
- ALL CONCRETE DIMENSIONS SHOWN ARE MINIMUM
- CONCRETE SHALL BE 4000 P.S.I. MINIMUM
- ALL REINFORCING SHALL BE #5 MINIMUM
- ALL REINFORCING BARS SHALL BE EPOXY COATED
- INDICATED DIMENSIONS ARE MINIMUM UNLESS NOTED OTHERWISE ON PLANS.



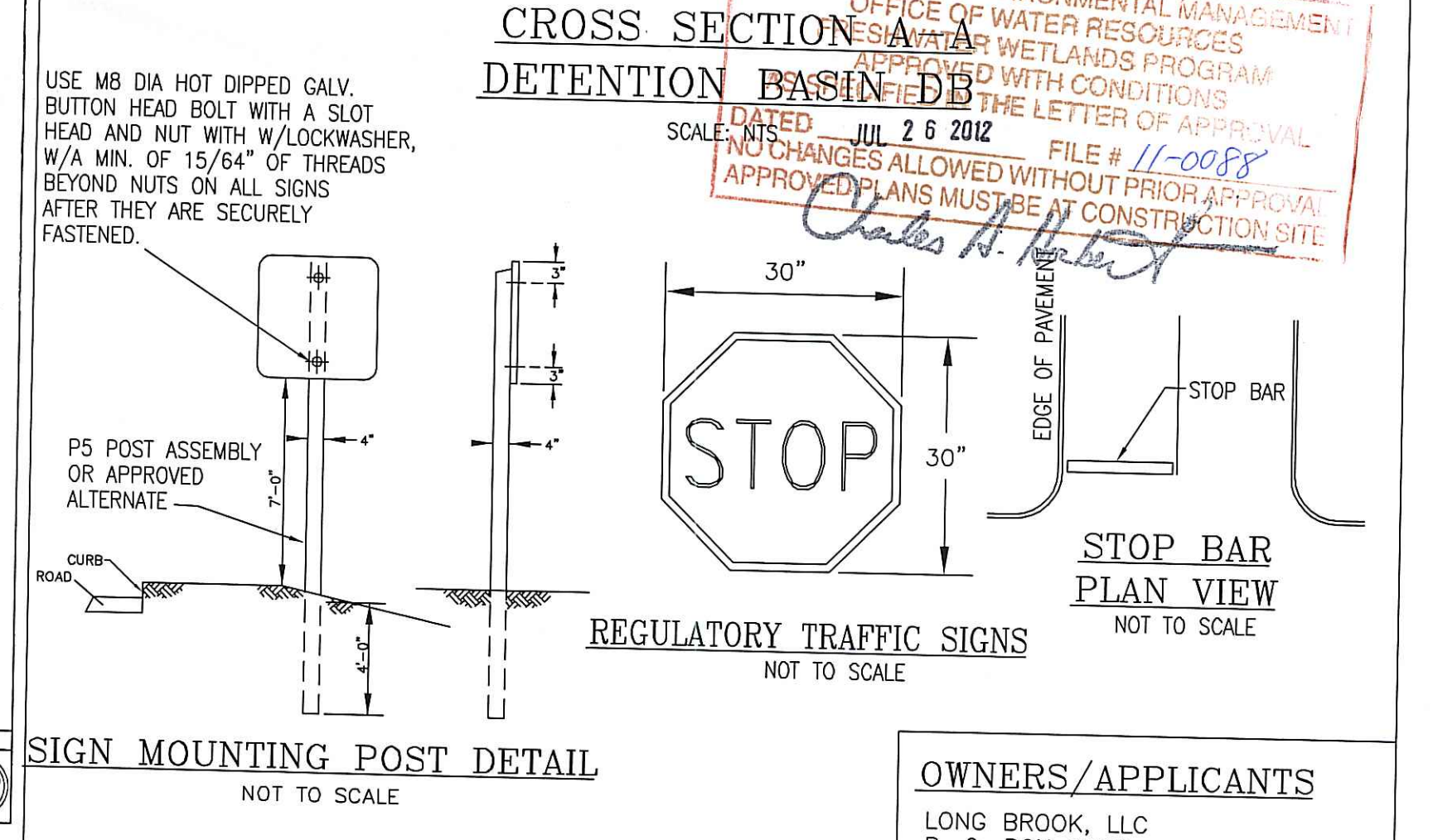
RHODE ISLAND DEPARTMENT OF TRANSPORTATION

BITUMINOUS BERM (R.I. STANDARD 7.5.1) DATE: JUNE 15, 1998

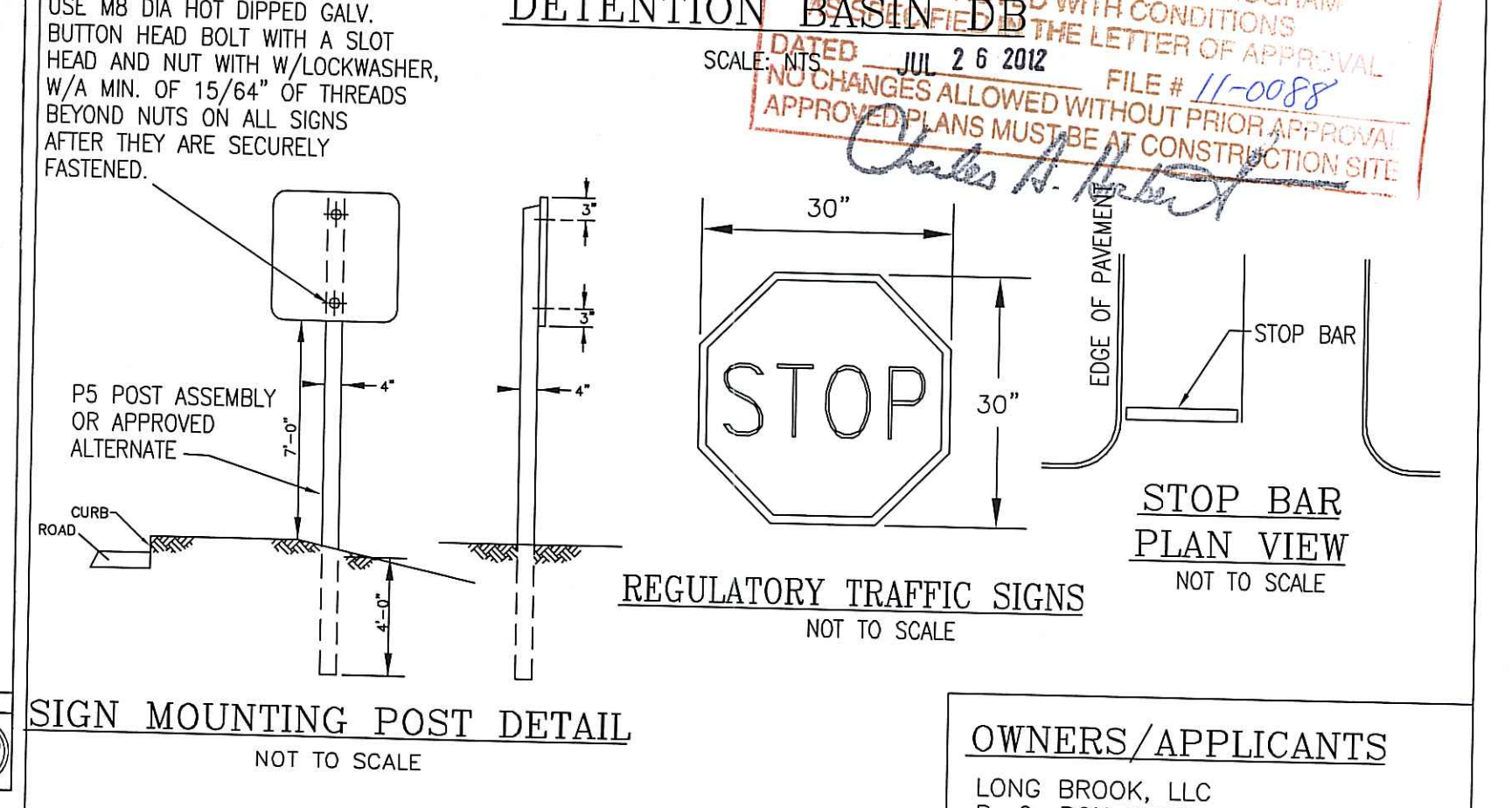
STEEL BACKED TIMBER GUARDRAIL (R.I. STANDARD 34.4.0) DATE: JUNE 15, 1998



DETENTION BASIN NOTE:
THE INTERIOR SIDES AND BOTTOM OF THE PROPOSED DETENTION BASIN MUST BE LOAMED WITH A MINIMUM SIX (6) INCH THICKNESS AND VEGETATED WITH A THICK GRASS COVER. THE BOTTOM ELEVATION OF THE BASIN IS NOT TO BE CHANGED FROM THAT INDICATED ON THE PLAN.

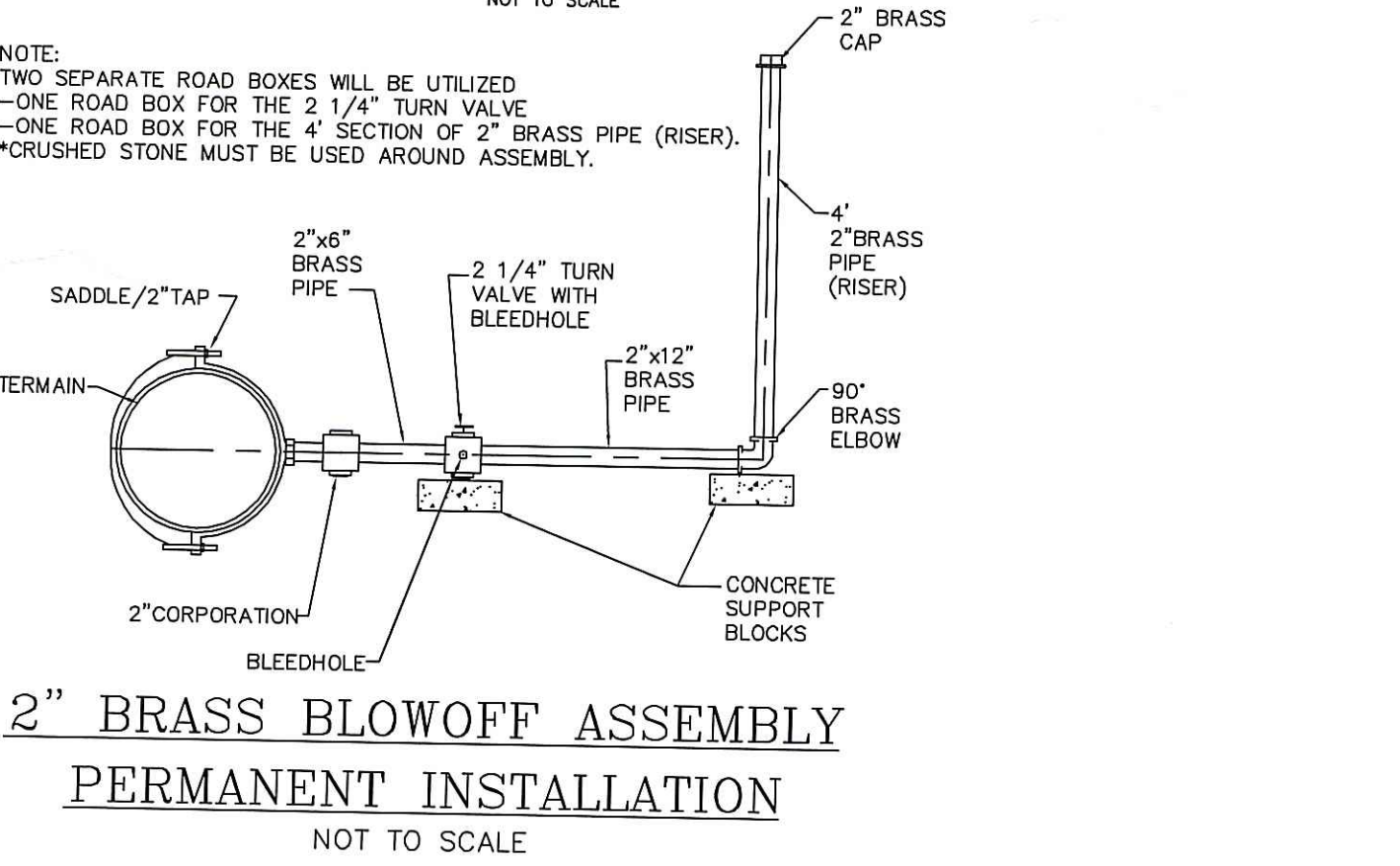


CROSS SECTION A-A DETENTION BASIN DB

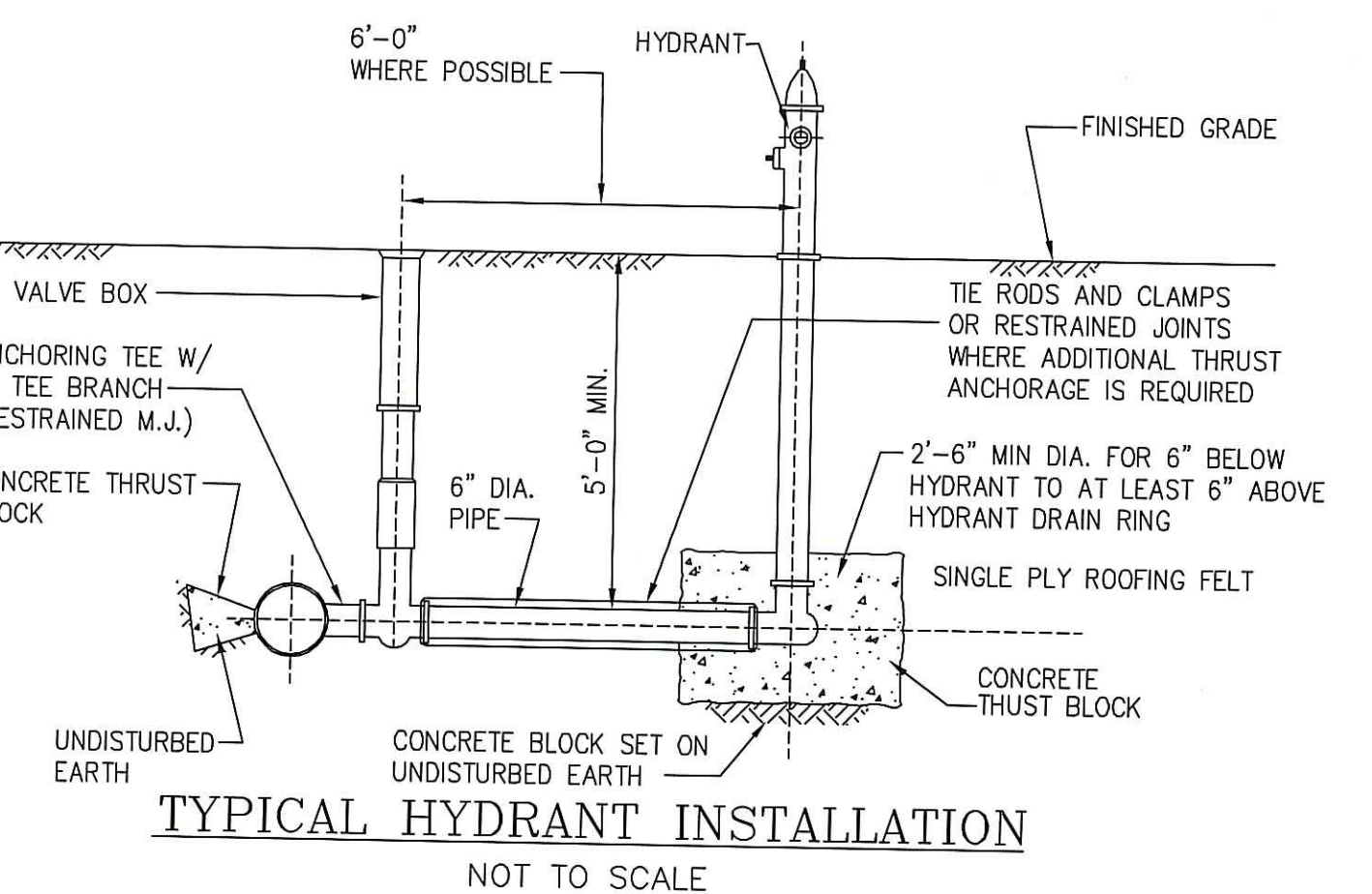


SIGN MOUNTING POST DETAIL
NOT TO SCALE

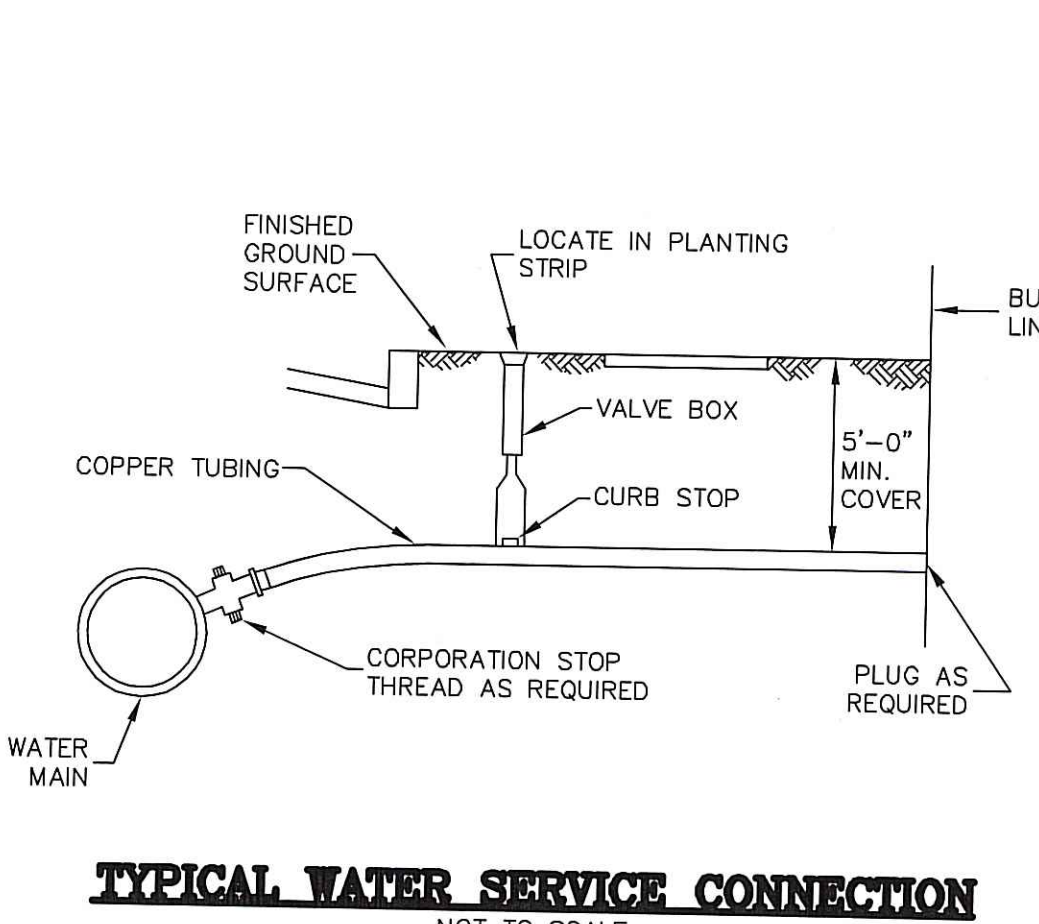
OWNERS/APPLICANTS
LONG BROOK, LLC
P. O. BOX 7008
CUMBERLAND, RHODE ISLAND 02864



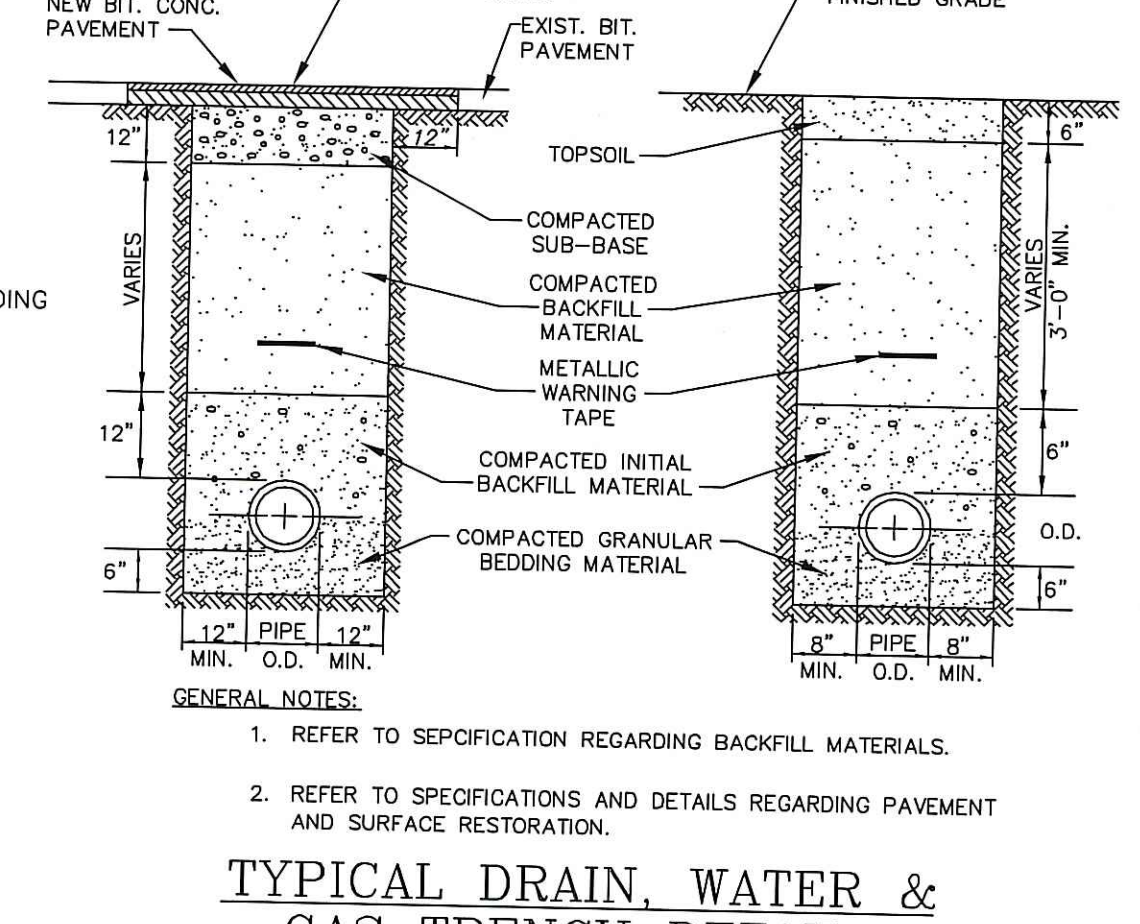
2\"/>



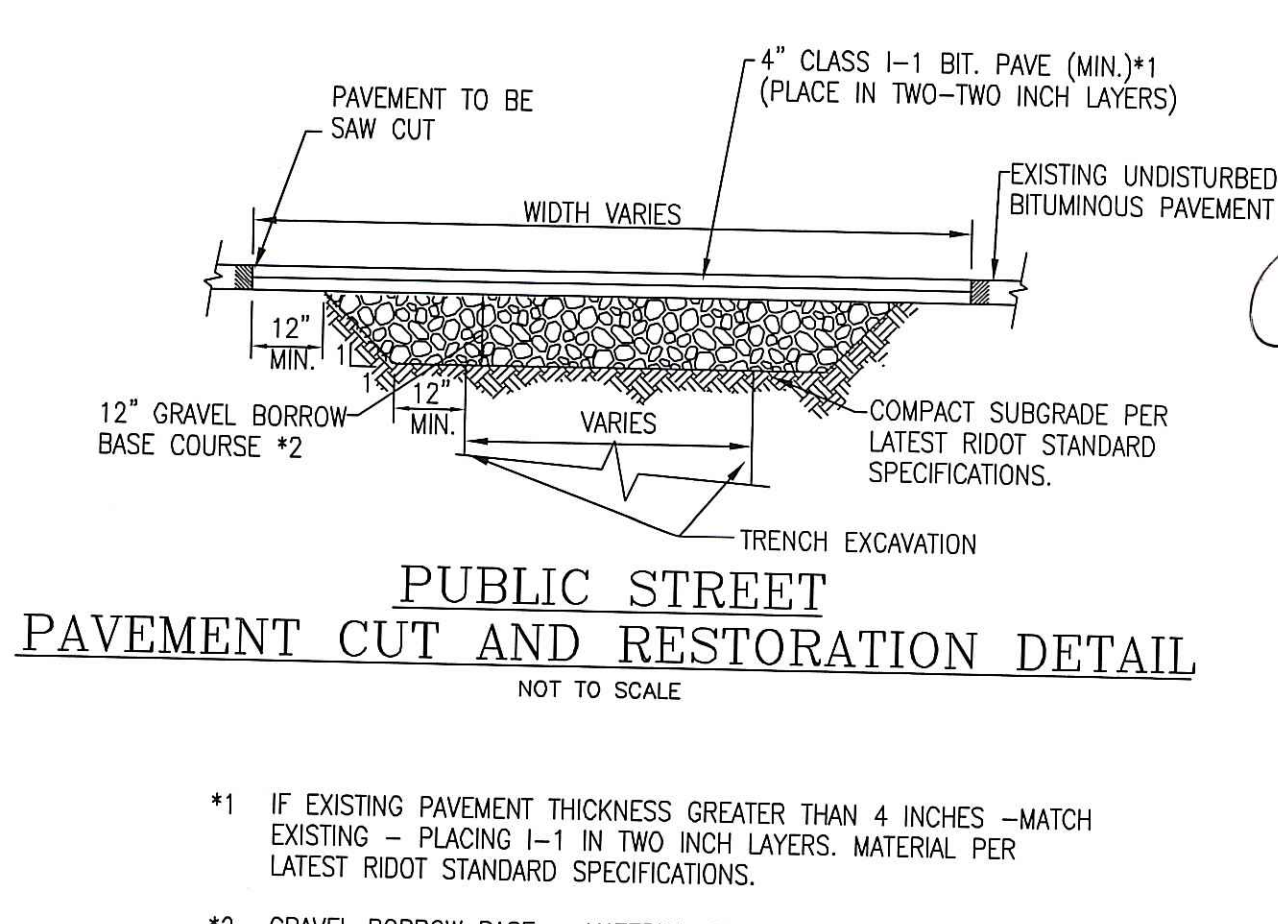
TYPICAL HYDRANT INSTALLATION
NOT TO SCALE



TYPICAL WATER SERVICE CONNECTION
NOT TO SCALE



TYPICAL DRAIN, WATER & GAS TRENCH DETAILS
NOT TO SCALE



PUBLIC STREET PAVEMENT CUT AND RESTORATION DETAIL
NOT TO SCALE

- IF EXISTING PAVEMENT THICKNESS GREATER THAN 4 INCHES -MATCH EXISTING - PLACING 1-1 IN TWO INCH LAYERS. MATERIAL PER LATEST RIDOT STANDARD SPECIFICATIONS.
- GRAVEL BORROW BASE - MATERIAL, PLACEMENT AND COMPACTION PER LATEST RIDOT STANDARD SPECIFICATIONS.

Steven M. Clarke
No. 4477
REGISTERED PROFESSIONAL ENGINEER

COMMONWEALTH ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RHODE ISLAND 02908

REVISIONS

No.	DATE	DRWN	CHKD
1	11/11/03	GS	AJW
2	2/26/04	DMS	AJW
3	10/24/04	DMS	AJW
4	12/15/04	JAP	AJW
5	06/08/11	KAB	KK
6	05/30/12	KAB	SMC

FINAL PLAN SUBMISSION
for
LONG BROOK I
AP 29, LOT 4
in
CUMBERLAND, RHODE ISLAND
CONSTRUCTION DETAILS - 2

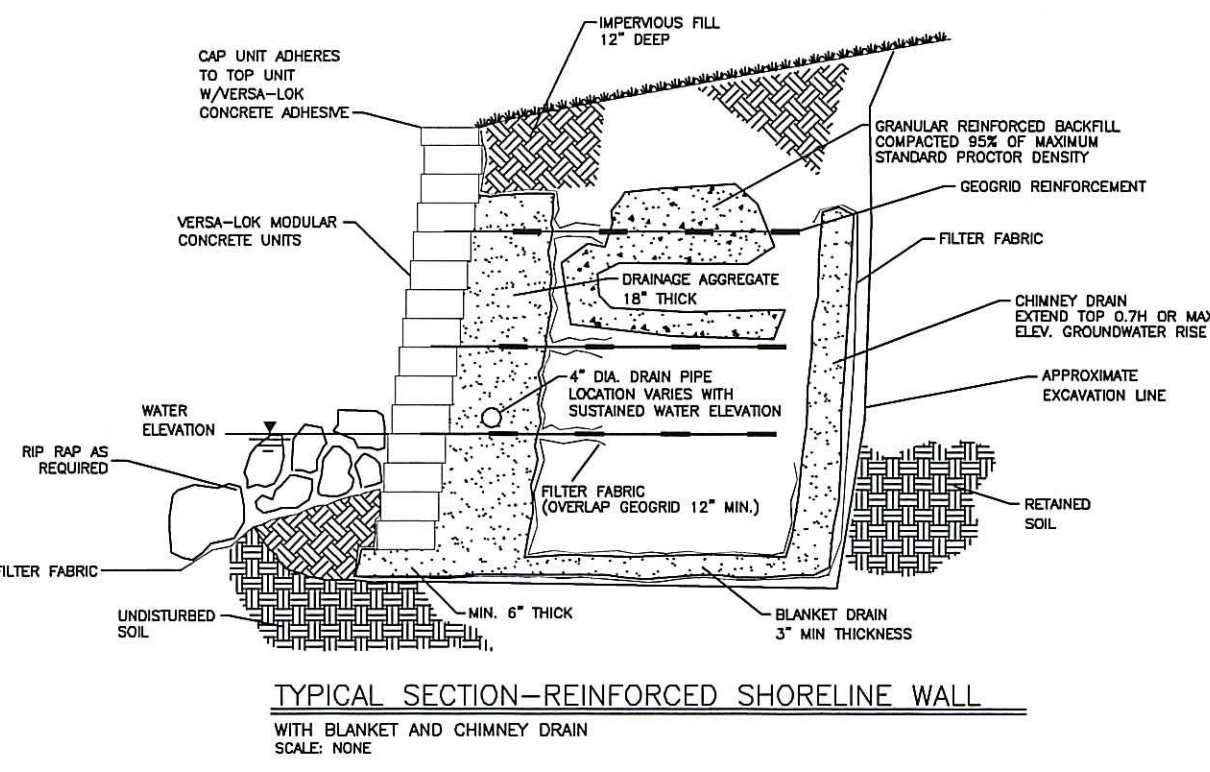
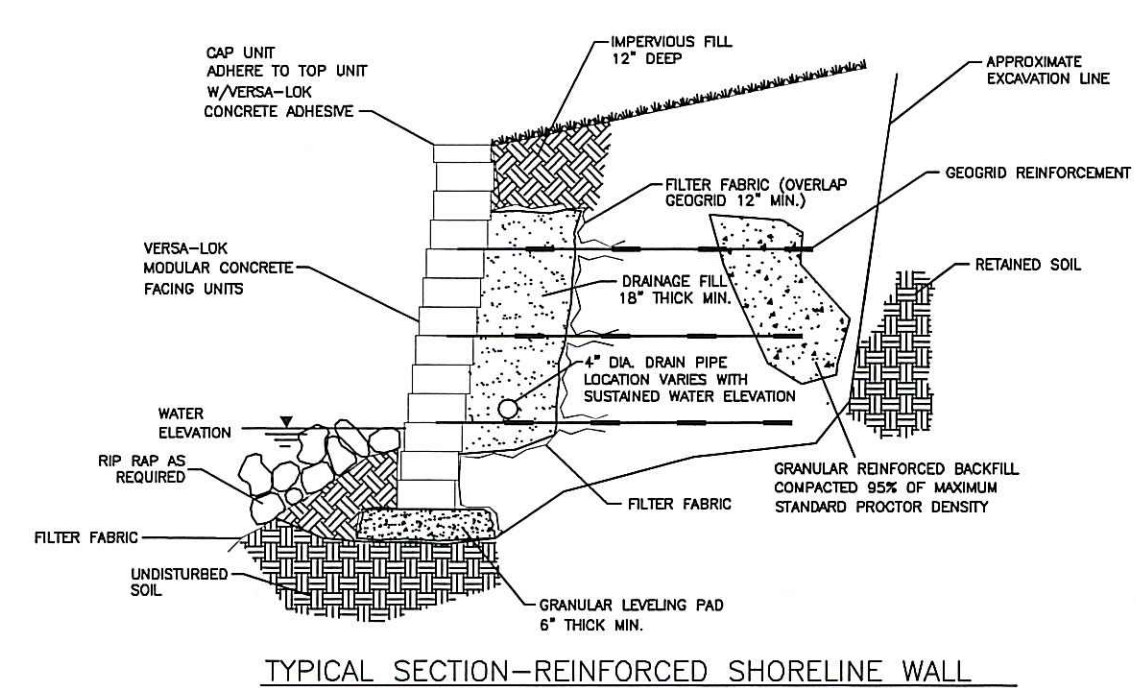
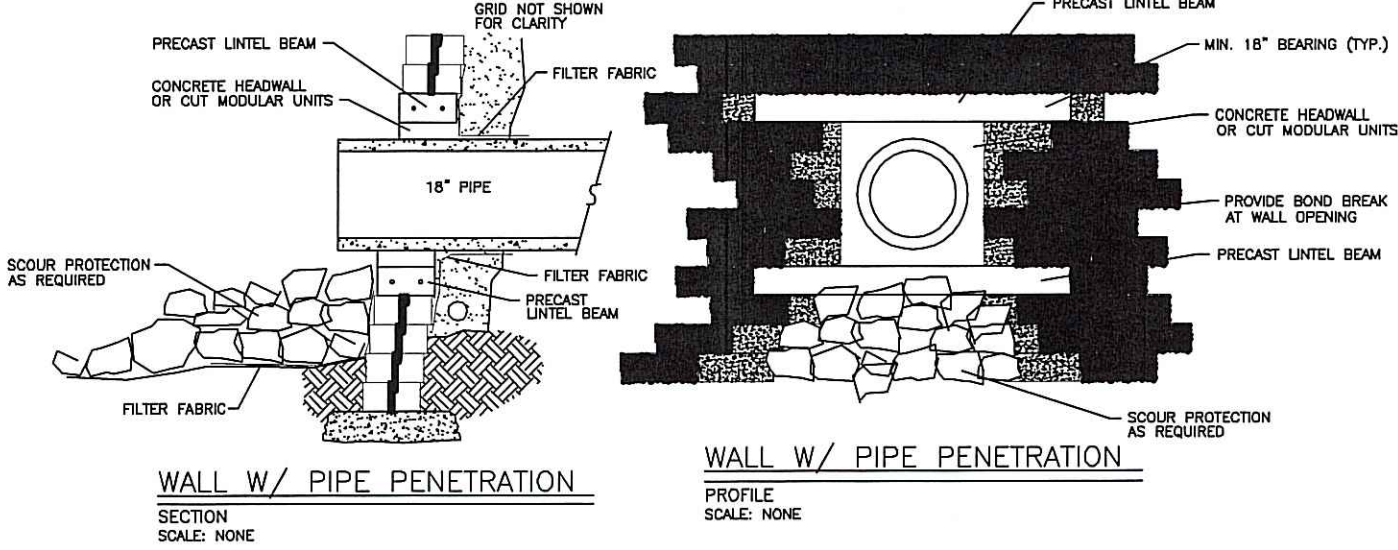
SCALE: AS NOTED SHEET NO: 11 of 12

DRAWN BY: DMS DESIGN BY: GAS CHECKED BY: AJW

DATE: 8/08/03 PROJECT NO.: 03101.00

LINTEL NOTES:

1. FINAL BEAM SIZE, REINFORCEMENT, AND CONFIGURATION TO BE DESIGNED BY PROJECT ENGINEER.
2. LINTEL BEAMS SHALL BE PRECAST WITH MIN. 7 DAYS CURE.
3. HEIGHT OF BEAM SHALL CORRESPOND TO HEIGHT OF MODULAR UNIT(S).
4. PLACE LINTEL ON COURSE ABOVE DRAINAGE PIPE. INSTALL DRAINAGE PIPE PRIOR TO CONSTRUCTION OF WALL ABOVE.
5. PIPE TO EXTEND BEYOND BASE COURSE OF WALL NO LESS THAN 6".
6. GEOTEXTILE FABRIC SHALL BE INSTALLED AROUND PIPE OPENING.
7. LINTEL TO EXTEND MINIMUM 18" EITHER SIDE OF OPENING.

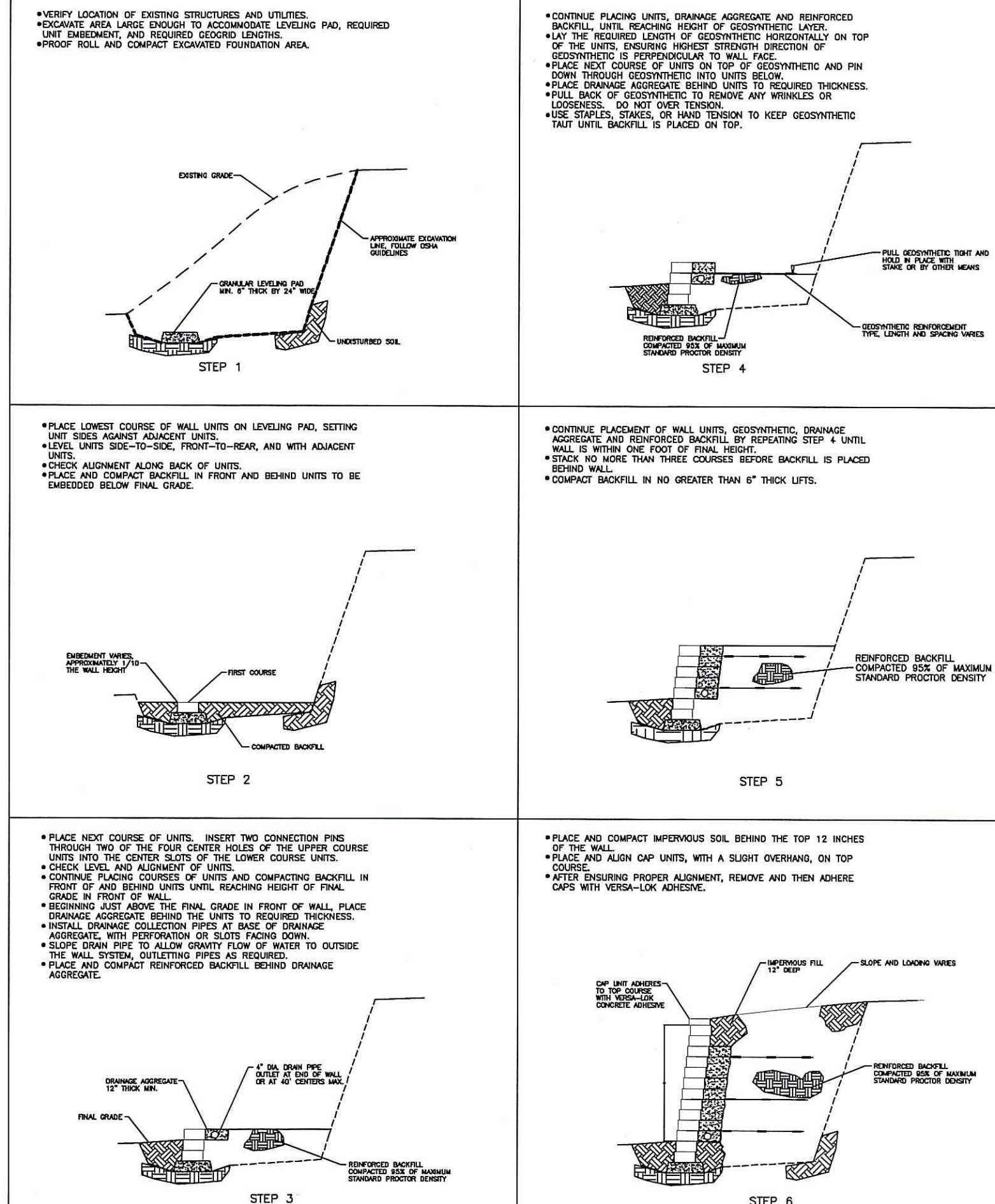


THIS DISK CONTAINS SEVERAL CONSTRUCTION DETAILS WHICH ARE INTENDED AS AN AID IN DESIGNING ATTRACTIVE, DURABLE RETAINING WALLS WITH VERSA-LOK STANDARD UNITS. FINAL DETERMINATION OF THE SUITABILITY OF ANY INFORMATION ON MATERIAL FOR THE USE CONTAINED, AND ITS MANNER OF USE, IS THE SOLE RESPONSIBILITY OF THE USER. A FINAL PROJECT SPECIFIC DESIGN SHOULD BE PREPARED BY A QUALIFIED, LICENSED, PROFESSIONAL ENGINEER.

VERSA-LOK
Retaining Wall Systems
63449 Hwy. 35 South 1, Colquhoun, MN 55125
(612)770-3166 (800)770-4525 fax (612)770-4089

VERSA-LOK DETAILS	SCALE: AS NOTED
RETAINING WALL DETAILS SHEET 6	DRAWN BY: POL
	CHECKED BY:
	DATE: 2/98
	REV. NO.: R13A.DWG

CONSTRUCTION SEQUENCE



INSTALLATION NOTES

- STRIP VEGETATION AND ORGANIC SOIL FROM WALL AND GEOSYNTHETIC ALIGNMENT.
- BENCH CUT ALL EXCAVATED SLOPES.
- DO NOT EXCAVATE BEYOND EXCAVATION LINES SHOWN ON PLAN UNLESS DIRECTED BY SITE SOILS ENGINEER TO REMOVE UNSUITABLE SOIL.
- CONTRACTOR SHALL ENSURE TEMPORARY EXCAVATIONS ARE STABLE AND PROVIDE EXCAVATION SUPPORT IF NEEDED.
- SITE SOILS ENGINEER SHALL VERIFY FOUNDATION SOILS AS BEING COMPETENT PER THE DESIGN PARAMETERS.
- LEVELING PAD SHALL CONSIST OF WELL GRADED ROAD BASE AGGREGATE, 3/4" CRUSHED, ANGULAR GRAVEL WITH SOME FINES.
- CONTRACTOR MAY OPT FOR A LEAN CONCRETE LEVELING PAD. PAD SHALL BE UNREINFORCED LEAN CONCRETE, 200-300 PSI, 3" THICK MAXIMUM.
- DRAINAGE AGGREGATE SHALL CONSIST OF CLEAN ANGULAR GRAVEL, 3/4" DIAMETER WITH LESS THAN 5% FINES.
- DRAINAGE PIPE SHALL BE PERFORATED OR SLOTTED PVC OR CORRUGATED HDPE PIPE.
- REINFORCED BACKFILL SHALL BE FREE OF DEBRIS, ORGANIC SOIL, AND EXPANSIVE SOILS.
- FOR UNITS TO BE EMBEDDED, COMPACT FILL IN FRONT OF UNITS AT THE SAME TIME FILL BEHIND UNITS IS COMPACTED.
- COMPACTION SHALL BE TO 95% OF MAXIMUM STANDARD PROCTOR DENSITY. (ASTM D-698)
- COMPACTION TESTS SHALL BE TAKEN AS THE WALL IS INSTALLED. THE MINIMUM NUMBER OF TESTS SHALL BE DETERMINED BY THE SITE SOILS ENGINEER.
- COMPACTION WITHIN 3FT. OF WALL SHALL BE LIMITED TO HAND OPERATED EQUIPMENT.
- CONTRACTOR SHALL SLOPE SITE GRADES TO DIRECT SURFACE RUNOFF AWAY FROM WALL AT END OF EACH DAY TO AVOID WATER DAMAGING THE WALL WHILE UNDER CONSTRUCTION.
- ANY SURFACE DRAINAGE FEATURES, FINISH GRADING, PAVEMENT, OR TURF SHALL BE INSTALLED IMMEDIATELY AFTER WALL IS COMPLETED.
- FOLLOW APPLICABLE PROVISIONS OF THE WALL UNIT AND GEOSYNTHETIC MANUFACTURER'S INSTALLATION INSTRUCTIONS AND WRITTEN SPECIFICATIONS.
- IF SITE AND SOIL CONDITIONS, WALL GEOMETRY, OR WALL LOADINGS ARE DIFFERENT THAN IN THE DRAWINGS AND THE DESIGN PARAMETERS, THE CONTRACTOR MUST CONTACT DESIGN ENGINEER PRIOR TO PROCEEDING WITH THE CONSTRUCTION OF THE WALL. RESTAMPED SHOP DRAWINGS SUBMITTAL REQUIRED.

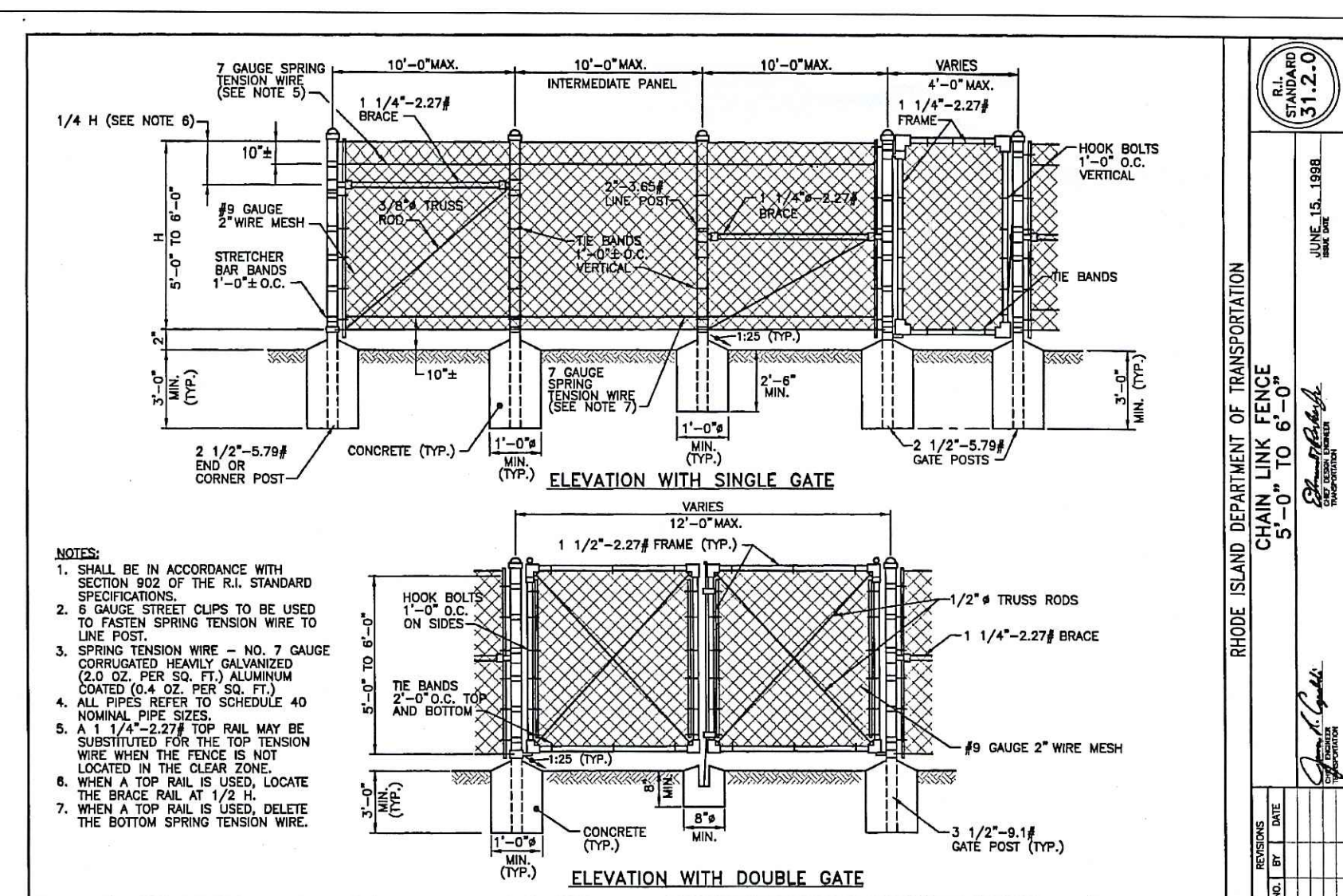
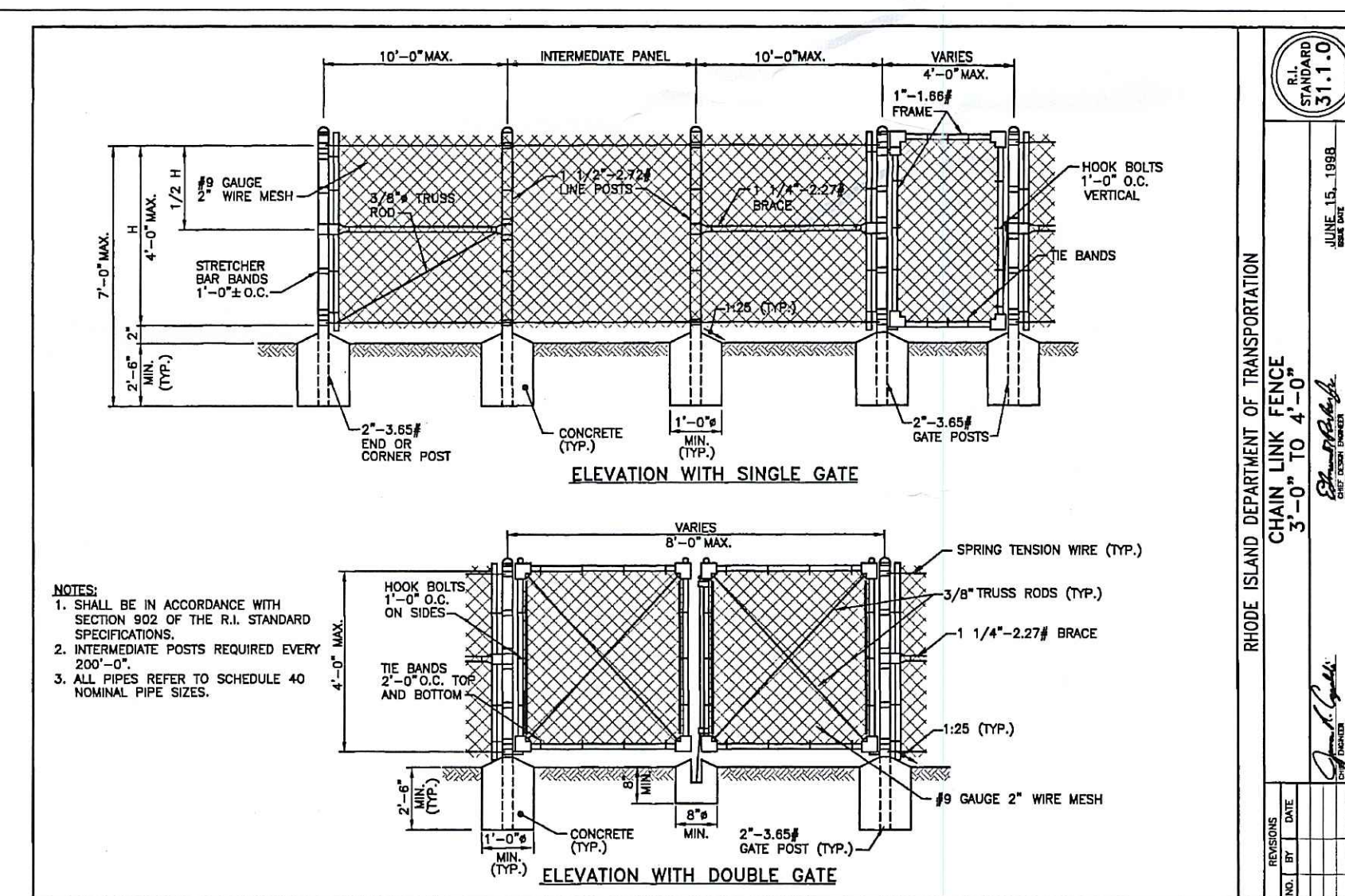
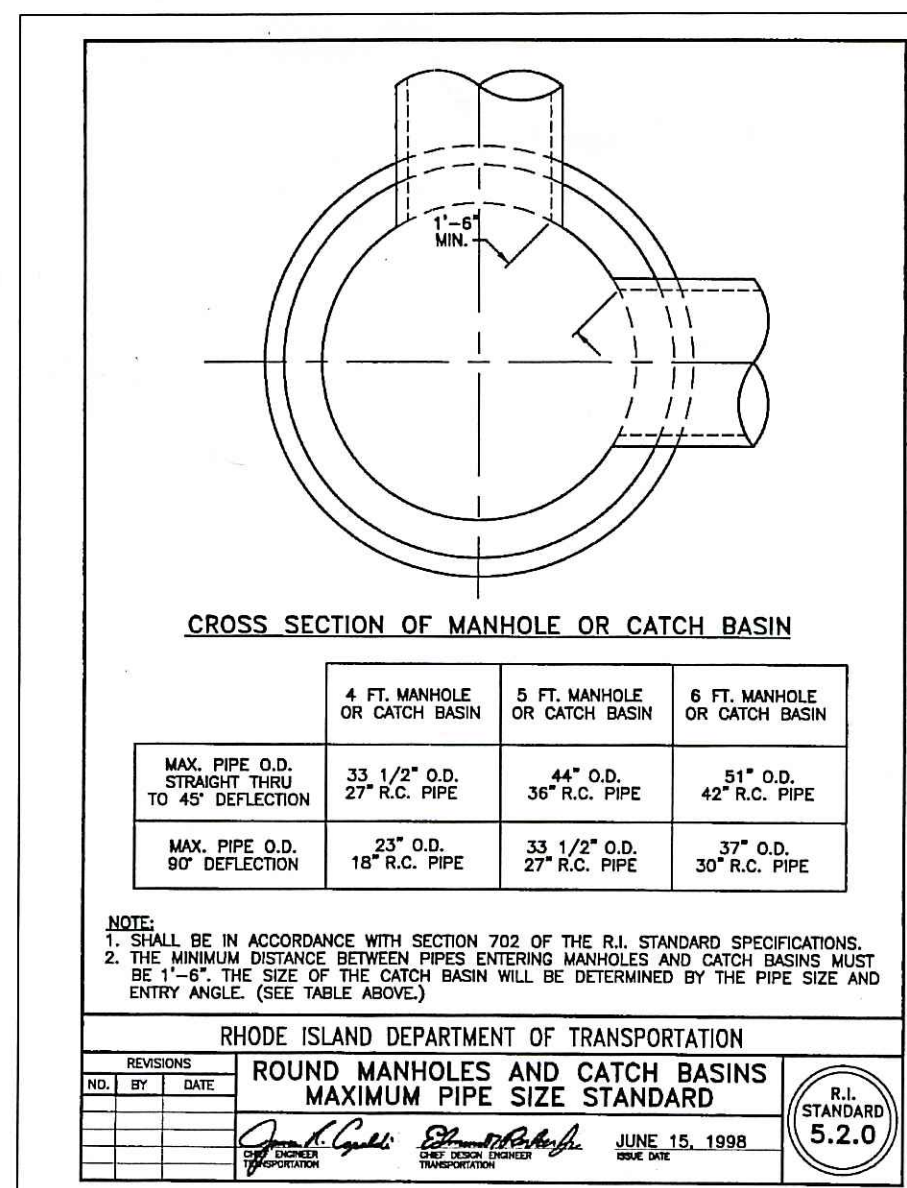
DESIGN PARAMETERS AND PROVISIONS

- THE DESIGN OF THE WALL SYSTEM ASSUMES THE FOLLOWING PARAMETERS:
- | | | |
|---------------------|-----------------|-------------|
| SOIL CONDITIONS | FRICITION ANGLE | UNIT WEIGHT |
| REINFORCED BACKFILL | ----- | ----- |
| RETAINED BACKFILL | ----- | ----- |
| FOUNDATION SOIL | ----- | ----- |
- HYDROSTATIC LOADING = NONE
SURCHARGE LOAD AT TOP OF WALL = -----
ALLOWABLE BEARING CAPACITY = -----
- THE WALL DESIGN ENGINEER ASSUMES NO LIABILITY FOR INTERPRETATION OF SUBSURFACE CONDITIONS, SUITABILITY OF SOIL DESIGN PARAMETERS AND INTERPRETATIONS OF SUBSURFACE GROUNDWATER CONDITIONS.
 - THE OWNER OR OWNER'S REPRESENTATIVE IS RESPONSIBLE FOR ENSURING THE CONDITIONS STATED ABOVE ARE ACCURATE PRIOR TO AND DURING CONSTRUCTION.
 - THE OWNER OR OWNER'S REPRESENTATIVE IS RESPONSIBLE FOR ENSURING THE WALL DESIGN ENGINEER IS CONTACTED IF CONDITIONS VARY.
 - IT IS THE OWNER OR THE OWNER'S REPRESENTATIVE'S RESPONSIBILITY TO ENSURE EXTERNAL STABILITY OF THE WALL, INCLUDING BEARING CAPACITY AND SLOPE STABILITY, IS PROPERLY REVIEWED AND EVALUATED BY A QUALIFIED CIVIL ENGINEER. THE WALL DESIGN SHOWN IN THESE DRAWINGS DOES NOT ADDRESS THE SUFFICIENCY OF THE BEARING CAPACITY NOR THE SLOPE STABILITY OF THE WALL SYSTEM AND SURROUNDING SOIL.

VERSA-LOK
Retaining Wall Systems
63449 Hwy. 35 South 1, Colquhoun, MN 55125
(612)770-3166 (800)770-4525 fax (612)770-4089

ANY PROJECT	DATE	SCALE
DETAILS & NOTES		

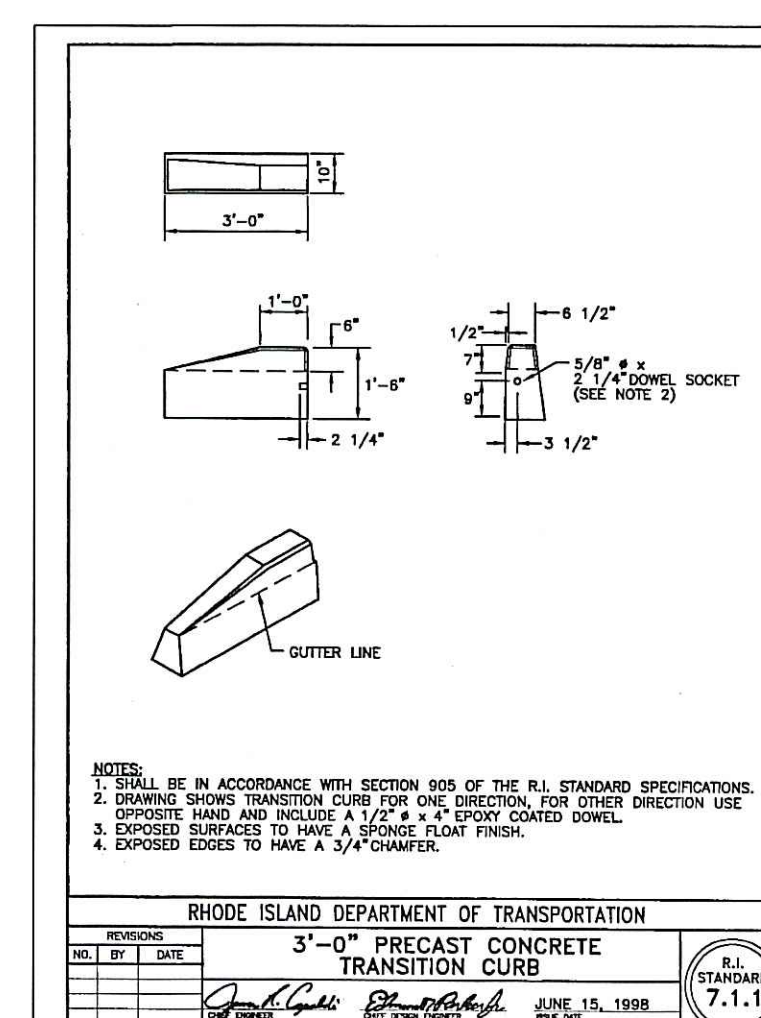
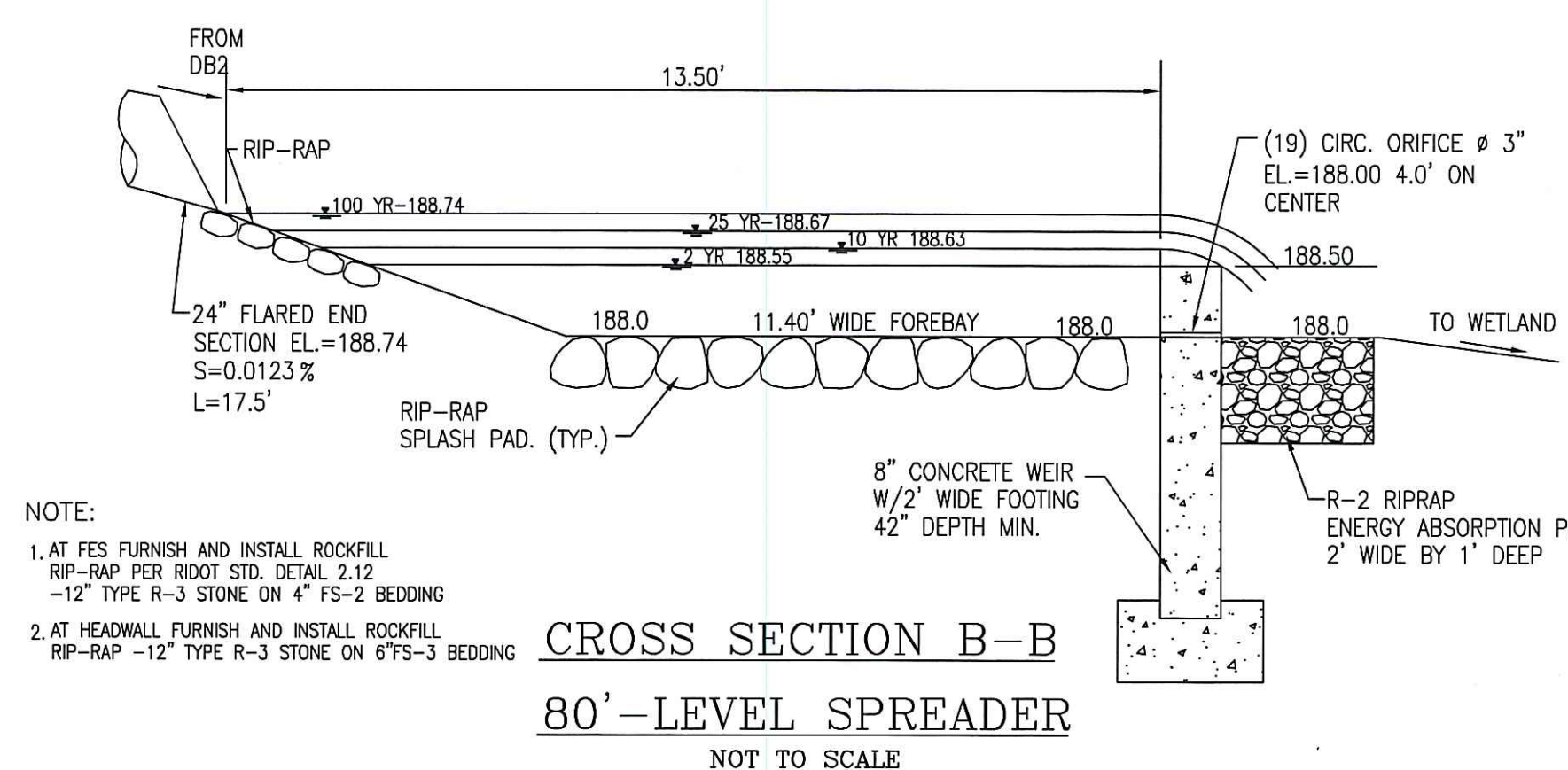
VERSA-LOK OR APPROVED EQUAL TYPE RETAINING WALLS. DETAIL DESIGN AND SHOP DRAWING SUBMISSION REQUIRED. WALL DETAILS AND CALCULATIONS TO BE STAMPED AND SIGNED BY A RHODE ISLAND REGISTERED PROFESSIONAL ENGINEER.



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED JUL 28 2008 FILE # 11-0088
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE
Charles A. Harkin

OWNERS/APPLICANTS

LONG BROOK, LLC
P. O. BOX 7008
CUMBERLAND, RHODE ISLAND 02864



Steven M. Clarke
No. 4477
REGISTERED PROFESSIONAL ENGINEER

REVISIONS

No.	DATE	DRWN	CHKD
1	11/11/03	GS	AJW
2	2/25/04	DMS	AJW
3	12/15/04	JAP	AJW
4	06/08/11	KAB	KK
5	05/30/12	KAB	SMC

COMMONWEALTH
ENGINEERS & CONSULTANTS, INC.
400 SMITH STREET
PROVIDENCE, RHODE ISLAND 02908

FINAL PLAN SUBMISSION
for
LONG BROOK I
AP 29, LOT 4
in
CUMBERLAND, RHODE ISLAND
CONSTRUCTION DETAILS - 3

SCALE: AS NOTED	SHEET NO: 12 of 12
DRAWN BY: DMS	DESIGN BY: GS
DATE: 8/08/03	CHECKED BY: AJW
	PROJECT NO.: 03010.00