



CERTIFICATE OF AUTHENTICITY

THIS IS TO CERTIFY THAT THE FOLLOWING ELECTRONIC RECORDS ARE TRUE AND ACCURATE REPRODUCTIONS OF THE ORIGINAL RECORDS OF JAMES CITY COUNTY GENERAL SERVICES DEPARTMENT- STORMWATER DIVISION; WERE SCANNED IN THE REGULAR COURSE OF BUSINESS PURSUANT TO GUIDELINES ESTABLISHED BY THE LIBRARY OF VIRGINIA AND ARCHIVES; AND HAVE BEEN VERIFIED IN THE CUSTODY OF THE INDIVIDUAL LISTED BELOW.

BMP NUMBER: CC-019

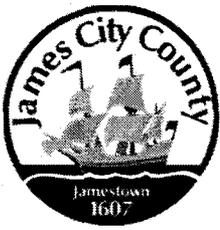
DATE VERIFIED: March 21, 2012

QUALITY ASSURANCE TECHNICIAN:

Leah Hardenbergh

Leah Hardenbergh

LOCATION: WILLIAMSBURG, VIRGINIA



Stormwater Division

MEMORANDUM

DATE: March 11, 2010
TO: Michael J. Gillis, Virginia Correctional Enterprises Document Management Services
FROM: Jo Anna Ripley, Stormwater
PO: 270712
RE: Files Approved for Scanning

General File ID or BMP ID: CC019

PIN: 5010100010

Subdivision, Tract, Business or Owner

Name (if known): Kingsmill
Property Description: Common Area

Site Address:

(For internal use only)

Box 12

Drawer: 7

Agreements: (in file as of scan date)

N

Book or Doc#:

Page:

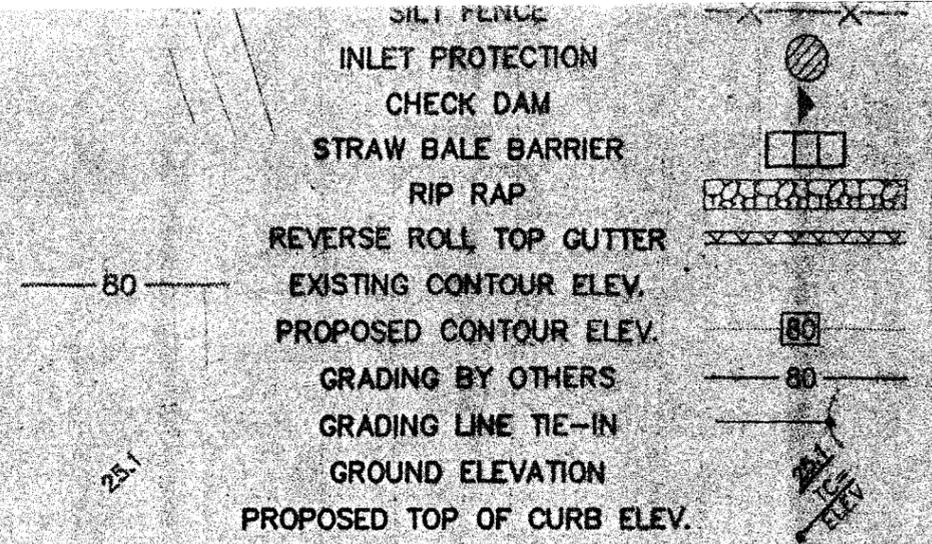
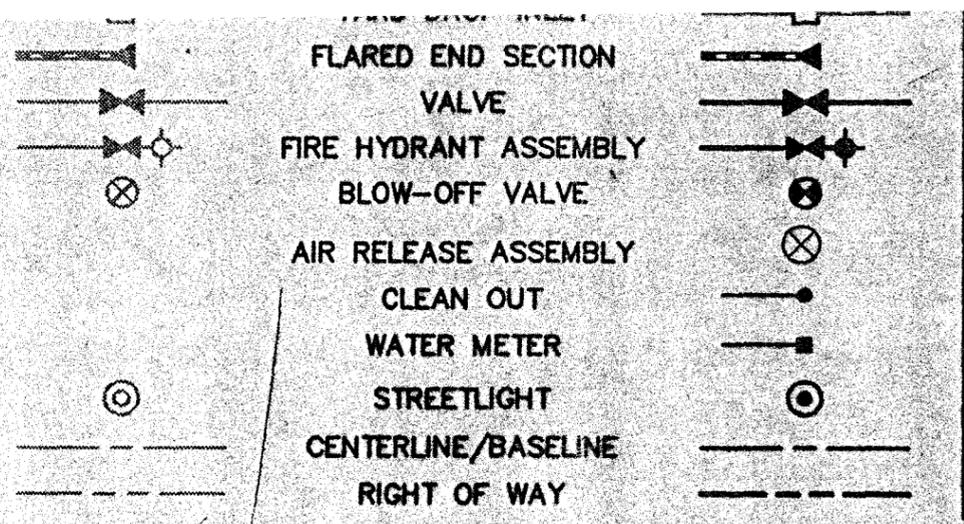
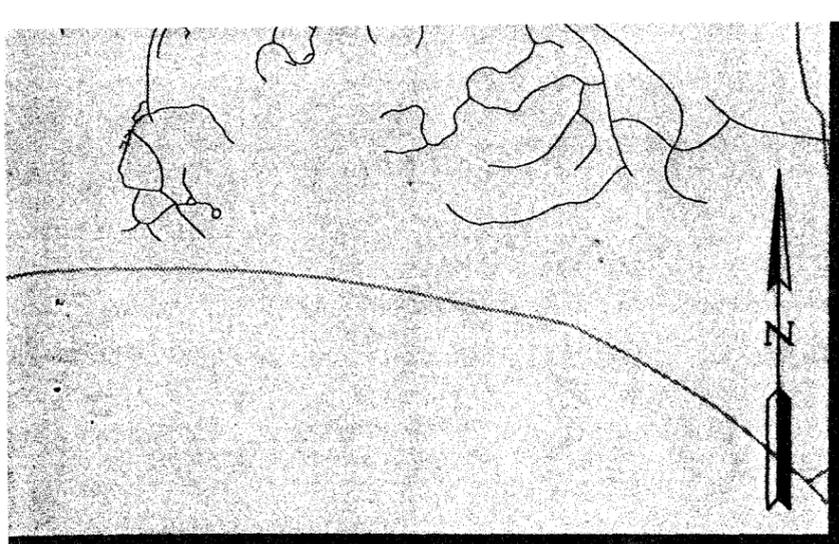
Comments
Private Dam

CC019

Contents for Stormwater Management Facilities As-built Files

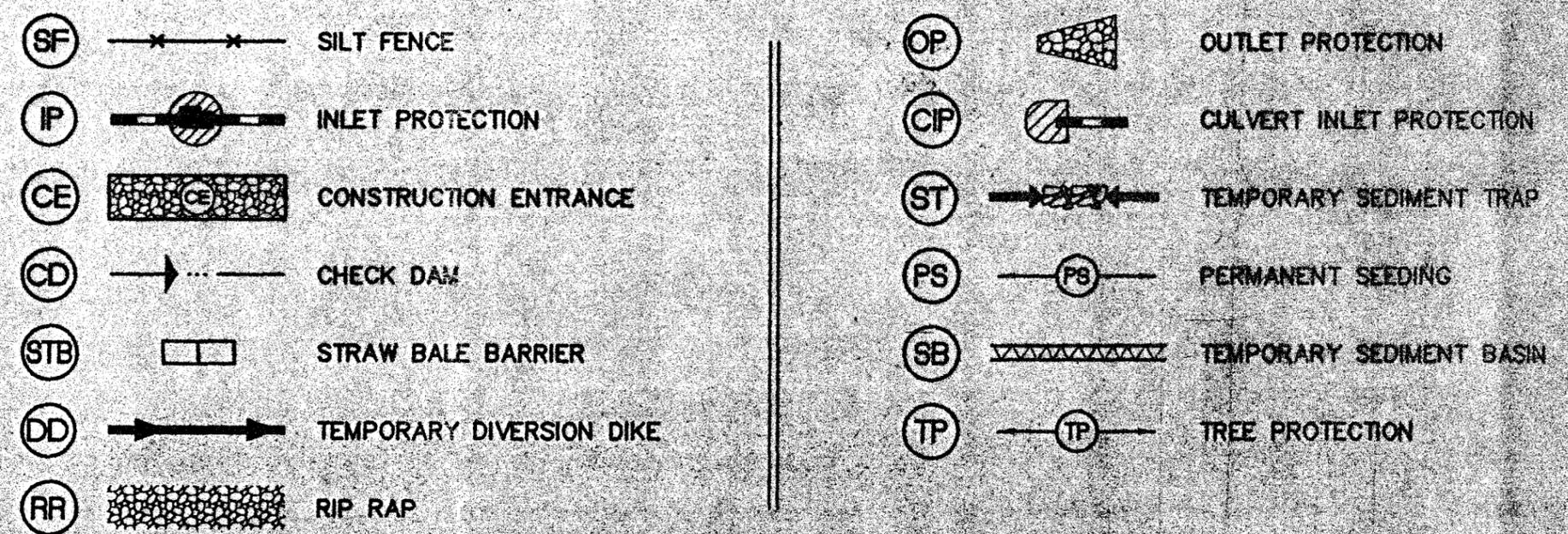
Each file is to contain:

- ① As-built plan
2. Completed construction certification
3. Construction Plan
4. Design Calculations
5. Watershed Map
6. Maintenance Agreement
7. Correspondence with owners
8. Inspection Records
9. Enforcement Actions



SCALE 1"=2000')

EROSION AND SEDIMENTATION CONTROL LEGEND



*CC 019
KINGSMILL DAM
(PRIVATE)
REFER TO MYLAR*

DRAWING
01
0000
0, 7753-12

3 Olde Towne Road, Suite 1
Williamsburg, Virginia 23188
(757) 253-0040
Fax (757) 220-8994

DETENTION/BMP FACILITY CERTIFICATION

I CERTIFY THAT TO THE BEST OF MY JUDGMENT, KNOWLEDGE, AND BELIEF, THE STRUCTURE WAS CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.

 _____ VA PROFESSIONAL ENGINEER	August 3, 2001 _____ DATE	_____ VA LICENSE NUMBER
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COVER SHEET

GENERAL NOTES

THE PROJECT WILL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE PROVISIONS OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) ROAD AND BRIDGE SPECIFICATIONS, JANUARY 1994 EDITION, EXCEPT FOR REFERENCES TO MEASUREMENT AND PAYMENT WHICH WILL BE OMITTED OR AS NOTED HEREIN.

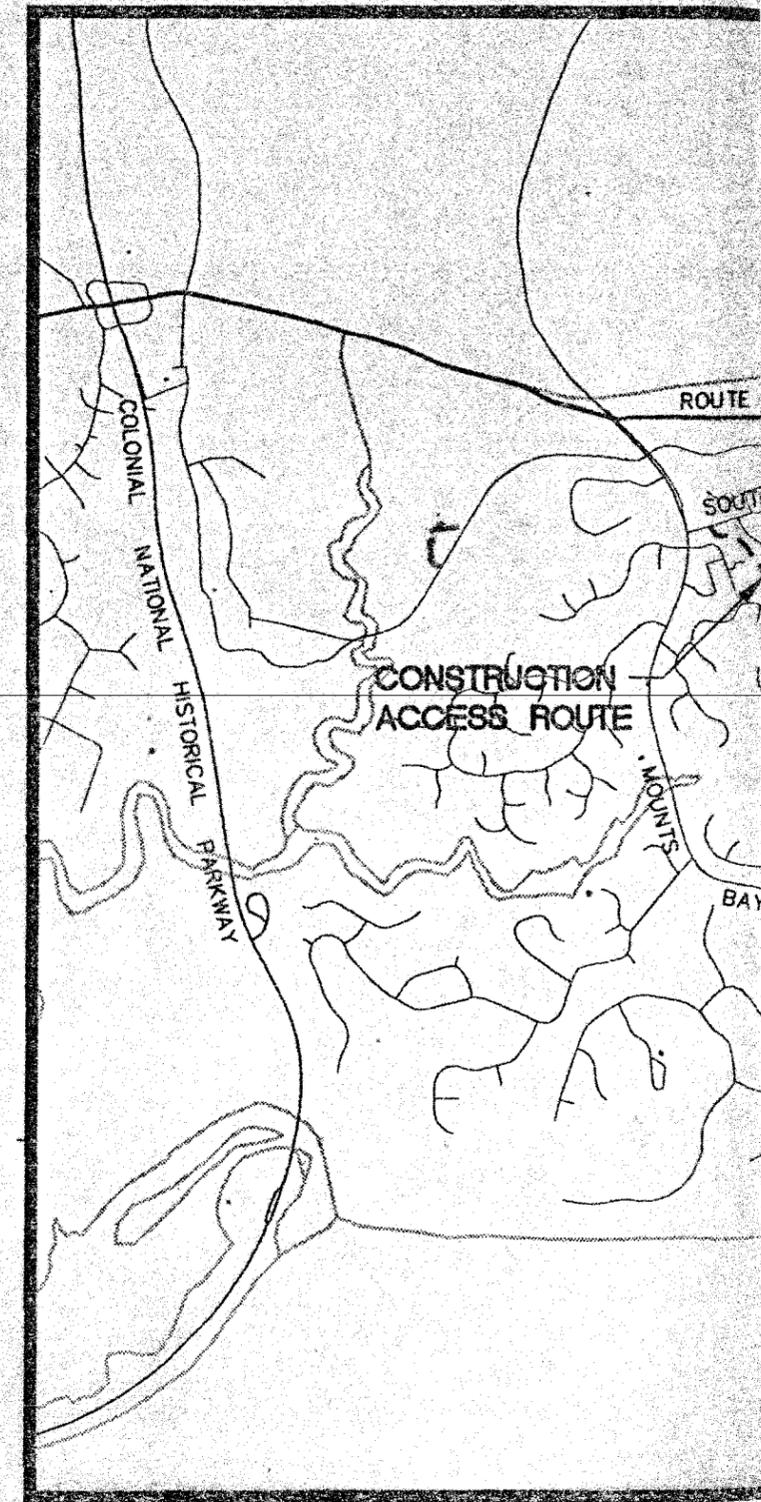
PRIOR TO INSTALLATION, SUBMIT TO THE ENGINEER FOR APPROVAL ALL MATERIALS PROPOSED FOR USE ON THIS PROJECT. APPROVAL DOES NOT RELIEVE THE CONTRACTOR FROM HIS OBLIGATION AND RESPONSIBILITY FOR CONSTRUCTING THE PROJECT IN ACCORDANCE WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND ORDERS OF ANY PUBLIC BODY HAVING JURISDICTION. ERECT AND MAINTAIN, AS REQUIRED BY THE CONDITIONS AND PROGRESS OF THE WORK, ALL NECESSARY SAFEGUARDS FOR SAFETY AND PROTECTION.

THE ABSENCE OF THE ENGINEER OR A REPRESENTATIVE FROM K.C.S.A. AT THE JOB SITE DOES NOT, IN ANY WAY, RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO PERFORM THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, ADDENDA AND WRITTEN AUTHORIZED PLAN REVISIONS.

THIS PROJECT IS A LUMP SUM CONTRACT. FOR BIDDING PURPOSES, THE FOLLOWING ESTIMATES OF MAJOR MATERIALS REQUIRED AND NOT SPECIFICALLY QUANTIFIED ON THE DRAWINGS ARE AS FOLLOWS:

DEMOLITION OF 6" CONCRETE SPILLWAY	470	SQUARE YARDS
STONE FILLED GABIONS	535	CUBIC YARDS
GROUTED RIP-RAP	211	CUBIC YARDS
UNGROUTED RIP-RAP	11	CUBIC YARDS
4" HDPE PERFORATED DRAIN PIPE	474	LINEAR FEET
FILTER FABRIC	537	SQUARE YARDS
EROSION CONTROL MATTING	670	SQUARE YARDS
SEEDING	760	SQUARE YARDS

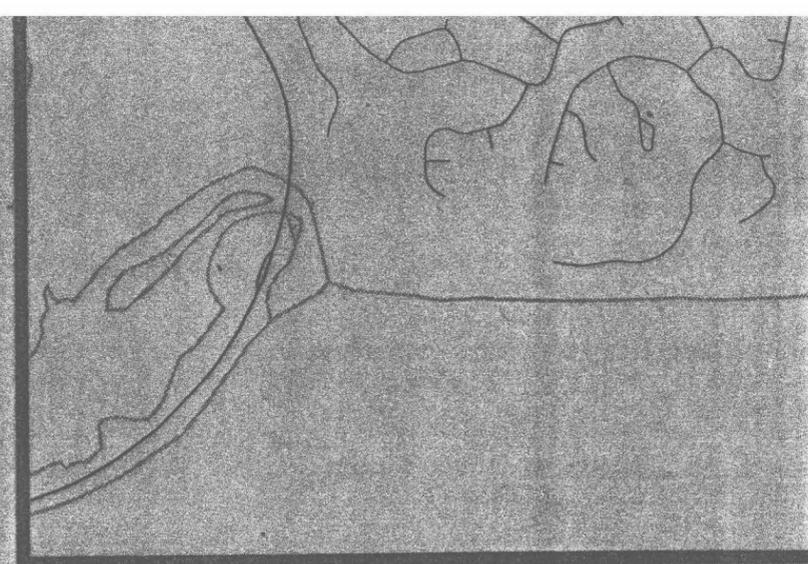
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FOR THIS PROJECT.
6. EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "MISS UTILITY" (1-800-552-7001) FOR EXISTING UTILITY LOCATIONS PRIOR TO COMMENCING CONSTRUCTION.
7. COMPLY WITH ALL PROVISIONS OF THE VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT (SECTION 56-265.14 ET. SEQ. CODE OF VIRGINIA, 1950, AS AMENDED). CONTRACTOR HEREBY AGREES TO HOLD K.C.S.A. HARMLESS AGAINST ANY LOSS, DAMAGE, OR CLAIM OF ANY NATURE WHATSOEVER ARISING FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH THE REQUIREMENTS OF SAID ACT.
8. TO FACILITATE REPAIR OF THE SPILLWAY AND DAM, THE LAKE LEVEL WILL BE LOWERED FOR THE DURATION OF CONSTRUCTION. COORDINATE WITH K.C.S.A. CONSTRUCTION DIVISION, A MINIMUM OF 7 CALENDAR DAYS PRIOR TO BEGINNING WORK, TO ALLOW THE LAKE TO DRAIN SUFFICIENTLY TO COMPLETE THE WORK. MAINTENANCE OF THE LAKE LEVEL DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR.
9. ACCESS TO THE SITE IS PERMITTED ALONG THE PAVED PATH EXTENDING FROM SOUTHALL ROAD, NEAR THE INTERSECTION WITH MOUNTS BAY ROAD, TO THE DAM SITE. A STONE CONSTRUCTION ENTRANCE CONFORMING TO SECTION 3.02 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK WILL BE REQUIRED WHERE THE ACCESS ROUTE LEAVES THE PAVED SURFACE TO MINIMIZE SEDIMENT TRANSPORT ONTO THE PATH. WHERE SEDIMENT IS TRANSPORTED ONTO THE PAVED SURFACE, THE PATH SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY AND THE SEDIMENT REMOVED TO A SUITABLE DISPOSAL AREA. REMOVE THE CONSTRUCTION ENTRANCE UPON COMPLETION OF CONSTRUCTION AND RESTORE THE AREA TO THE ORIGINAL CONDITION. DAMAGE TO THE PAVED PATH SHALL BE REPAIRED TO THE SATISFACTION OF K.C.S.A AND THE ENGINEER.
10. ADJACENT TO THE PROPOSED SPILLWAY LIES THE RUINS OF JOHNSTON'S MILL, A HISTORIC PRESERVATION SITE. IN NO WAY SHALL THE CONTRACTOR DISTURB THE RUINS OF THE MILL THROUGHOUT THE COURSE OF CONSTRUCTION. SPECIAL CARE SHALL BE TAKEN WHEN WORKING IN THE PROXIMITY OF THE RUINS TO AVOID DISTURBANCE. INSTALL SAFETY FENCING AROUND THE MILL RUIN TO DELINEATE THE AREA AND PROVIDE A VISIBLE DETERRENT THROUGHOUT THE COURSE OF CONSTRUCTION.
11. THE CONTRACTOR SHALL ENDEAVOR TO MINIMIZE THE CLEARING REQUIRED AND MAKE EVERY EFFORT TO SAVE TREES AND SHRUBBERY IN THESE AREAS. CONFINE CLEARING TO THE LIMITS INDICATED. REPAIR DAMAGE OUTSIDE OF THESE LIMITS RESULTING FROM CONTRACTOR'S OPERATIONS TO THE SATISFACTION OF THE OWNER AND THE ENGINEER. CLEARLY MARK AREAS THAT ARE NOT TO BE DISTURBED BY FENCING, FLAGS, SIGNS, ETC.
12. RIP RAP SHALL BE CLASS I DRY RIP RAP CONFORMING TO SECTION 414 OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS. UNGROUTED RIP RAP WILL BE PLACED ON GEOTEXTILE BEDDING MATERIAL AND GROUTED RIP RAP WILL BE PLACED DIRECTLY ON THOROUGHLY COMPACTED GROUND. GROUTED RIP RAP SHALL CONFORM TO SECTION 414.03.D OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS, EXCEPT THAT THE TOP 3 INCHES SHALL NOT CONTAIN GROUT AND THE RIP RAP SHALL BE ALLOWED TO PROTRUDE FROM THE GROUT SURFACE TO THE FINISHED GRADE. BLENDING OF CLASS AI DRY RIP RAP WITH THE CLASS I DRY RIP RAP WILL BE REQUIRED FOR THE GROUTED RIP RAP TO MINIMIZE VOIDS PRIOR TO GROUTING. THE MINIMUM COMPRESSIVE STRENGTH OF THE GROUT SHALL BE 2,000 PSI AT 28 DAYS AND SHALL BE VERIFIED BY SUBMITTAL OF THE GROUT MIX TO THE ENGINEER PRIOR TO PLACEMENT.
13. GABIONS SHALL CONFORM TO, AND BE INSTALLED IN ACCORDANCE WITH SECTION 610 OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS. STONE FILL FOR THE GABIONS SHALL MATCH THE COLOR AND MINERAL COMPOSITION OF THE RIP RAP PROPOSED FOR THE SPILLWAY BED. GROUT THE GABIONS PLACED



VICINITY MAP

TO FACILITATE REPAIR OF THE SPILLWAY AND THE LAKE LEVEL WILL BE LOWERED FOR THE DURATION OF CONSTRUCTION. COORDINATE WITH THE CONSTRUCTION DIVISION, A MINIMUM OF 7 CALENDAR DAYS PRIOR TO BEGINNING WORK, TO ALLOW THE LAKE TO DRAIN SUFFICIENTLY TO COMPLETE THE WORK. MAINTENANCE OF THE LAKE LEVEL DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR.

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14. DEMOLITION OF THE EXISTING 6 INCH THICK CONCRETE SPILLWAY IS REQUIRED. BROKEN CONCRETE FROM THE DEMOLITION OF THE SPILLWAY MAY BE PERMITTED IN THE UNDERLYING COURSES OF THE GROUTED RIP RAP PROVIDED THAT NO PORTION OF THE BROKEN CONCRETE IS EXPOSED AFTER GROUTING. CONCRETE SLABS FROM THE SPILLWAY TO BE USED IN THE GROUTED RIP RAP SHALL BE BROKEN INTO PIECES NO LARGER THAN 18 INCHES MEASURED ALONG ANY DIMENSION. BROKEN CONCRETE IS NOT PERMITTED FOR USE AS GABION FILL.
15. STRIP SUITABLE TOPSOIL FROM THE SITE WHERE EXCAVATION OR GRADING IS INDICATED AND STOCKPILE THE MATERIAL SEPARATELY FROM OTHER EXCAVATED MATERIAL. STOCKPILES SHALL BE STABILIZED AND PROTECTED WITH SEDIMENT TRAPPING MEASURES. REPLACE A MINIMUM OF 4 INCHES OF TOPSOIL ON GRADED OR BARE DISTURBED AREAS TO PROMOTE NATIVE VEGETATION GROWTH.
16. SUFFICIENT BACKFILL OF APPROPRIATE CONSISTENCY EXISTS ON THE SITE TO ACHIEVE THE FINISHED GRADES INDICATED. THIS MATERIAL WILL BE CONSIDERED UNCLASSIFIED AND NO TESTING OTHER THAN FOR COMPACTION WILL BE REQUIRED BEFORE USE AS BACKFILL UNLESS OTHERWISE NOTED. EXCESSIVE FILL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER. BACKFILL PLACED BEHIND THE GABIONS AND BETWEEN SOIL REINFORCING MATS SHALL BE COMPACTED, IN MAXIMUM 8 INCH LIFTS, TO 95% OF THE ASTM D 1557 MAXIMUM DENSITY.
17. EXCAVATED MATERIAL CONTAINING VEGETATION, DEBRIS, DECAYED VEGETABLE MATTER, SOB, MULCH AND RUBBISH OR IS EXCESSIVELY SOFT OR WET IS CONSIDERED UNSUITABLE MATERIAL FOR USE AS BACKFILL OR AS A BASE FOR THE GABION WALLS OR THE SPILLWAY. IN AREAS WHERE EXCAVATION IS REQUIRED TO REMOVE UNSUITABLE MATERIAL BELOW THE ELEVATION OF THE BASE OF THE GROUTED RIP RAP SPILLWAY, BROKEN CONCRETE FROM THE DEMOLITION OF THE EXISTING SPILLWAY OR RIP RAP SHALL BE USED TO REPLACE THE UNSUITABLE MATERIAL. UNDER THE GABION WALLS, REPLACE UNSUITABLE MATERIAL WITH SUITABLE BACKFILL COMPACTED IN MAXIMUM 6 INCH LIFTS TO 95% OF THE ASTM D 1557 MAXIMUM DENSITY.
18. GENERAL GRADING SHALL BE DONE TO GRADES SHOWN ON THE PLANS. WHERE FILL IS REQUIRED AND FINISHED GRADES ARE NOT INDICATED ON THE PLANS, THE DISTURBED AREA SHALL BE BROUGHT TO THE APPROXIMATE ORIGINAL GRADES. ALL GRADED AREAS SHALL BE LEFT CLEAN AND SMOOTH WITH THE SLOPES NEATLY TRIMMED. IN NO CASE SHALL LOW AREAS THAT DO NOT DRAIN BE CREATED AS A RESULT OF THE CONSTRUCTION.
19. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY STABILIZATION SHALL BE PLACED ON AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR MORE THAN 30 DAYS.
20. SEEDING, FERTILIZING AND APPLICATION OF LIME WILL BE IN ACCORDANCE WITH SECTION 603 OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS AND RECOMMENDATIONS IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION. SEEDING IS REQUIRED ON ALL EXPOSED FACES OF THE DAM AND AREAS DISTURBED BY CONSTRUCTION ACTIVITIES. OVERSEEDING IS REQUIRED OVER THE ENTIRE SURFACE OF THE DAM AND WHERE DIRECTED BY THE ENGINEER. OVERSEED WILL BE AT A MINIMUM RATE OF 50 LBS./AC. THE MINIMUM REGULAR SEEDING RATE IS 150 LBS./AC.
21. EROSION CONTROL MATTING WILL BE REQUIRED ON ALL SLOPES STEEPER THAN 3:1. INSTALLATION WILL BE IN ACCORDANCE WITH SECTION 606 OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS. MATERIALS WILL CONSIST OF SOIL RETENTION MATS OR SOIL STABILIZATION MATS AS INDICATED IN SECTION 245 SPECIFICATIONS, SUBJECT TO APPROVAL FROM THE ENGINEER. JUTE MESH IS NOT ACCEPTABLE.



VICINITY MAP (APPENDIX A)



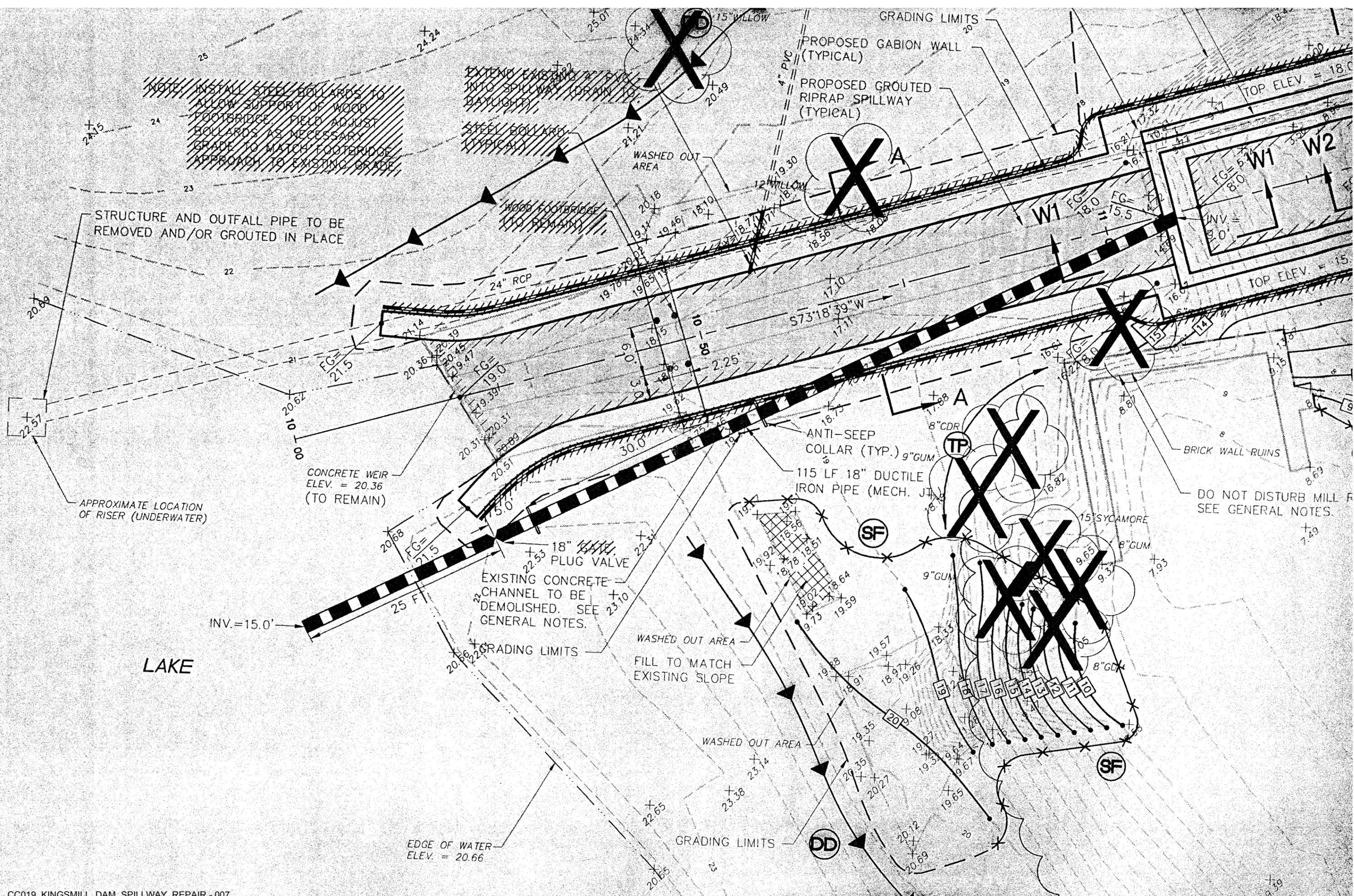
RECORDED

7

APP

AES PROJECT





NOTE: INSTALL STEEL BOLLARDS TO ALLOW SUPPORT OF WOOD FOOTBRIDGE FIELD ADJUST BOLLARDS AS NECESSARY GRADE TO MATCH FOOTBRIDGE APPROACH TO EXISTING GRADE

STRUCTURE AND OUTFALL PIPE TO BE REMOVED AND/OR GROUTED IN PLACE

APPROXIMATE LOCATION OF RISER (UNDERWATER)

CONCRETE WEIR ELEV. = 20.36 (TO REMAIN)

LAKE

EDGE OF WATER ELEV. = 20.66

ANTI-SEEP COLLAR (TYP.) 9" GUM
115 LF 18" DUCTILE IRON PIPE (MECH. JT.)

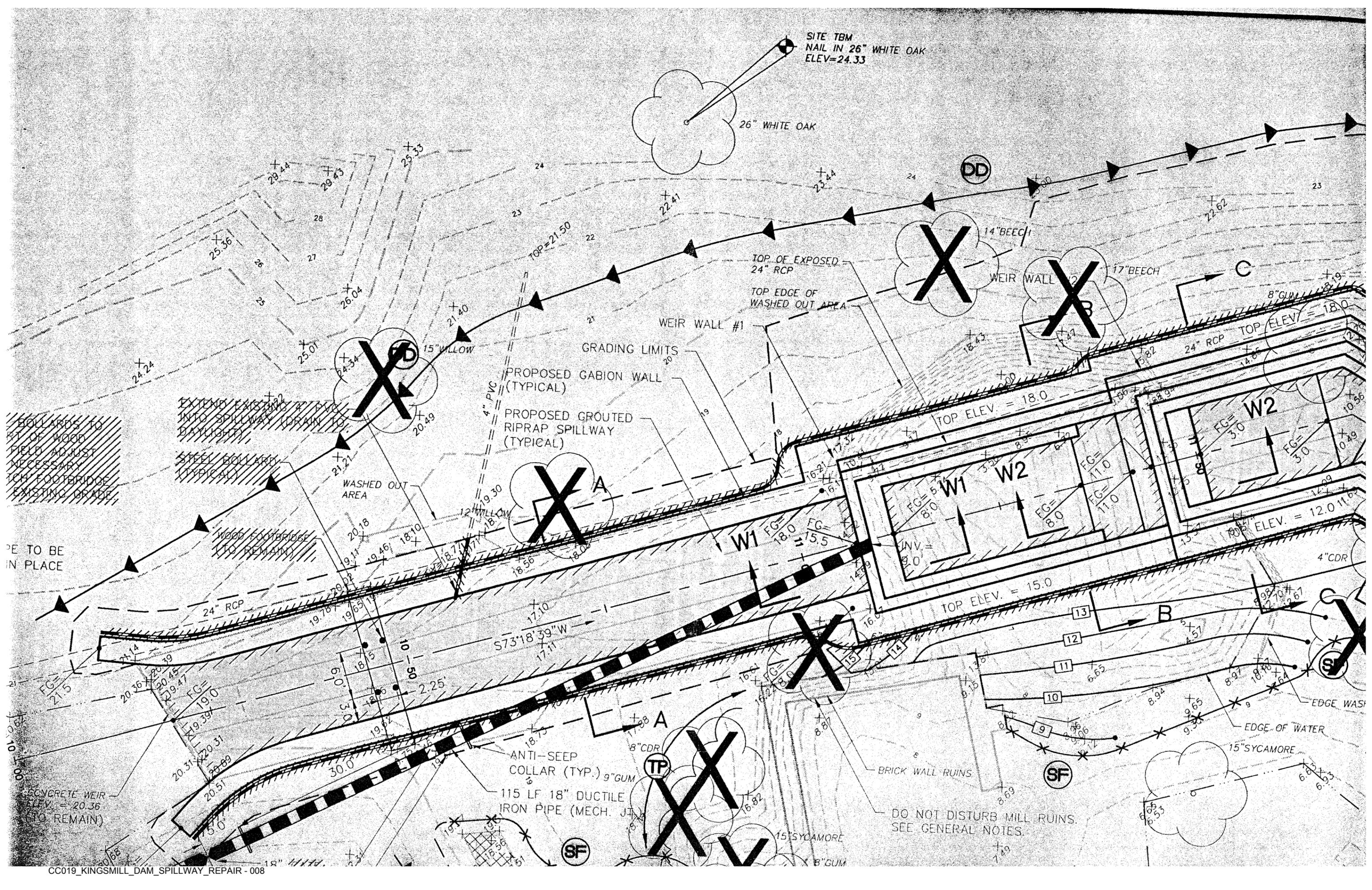
8" CDR TP

EXISTING CONCRETE CHANNEL TO BE DEMOLISHED. SEE GENERAL NOTES.

DO NOT DISTURB MILL SEE GENERAL NOTES.

SITE TBM
NAIL IN 26" WHITE OAK
ELEV=24.33

26" WHITE OAK



BOLLARDS TO
RT. OF WEIR
FIELD ADJUST
NECESSARY
1CH FOOTBRIDGE
EXISTING GRADE

EXTEND EXISTING 4\"/>

WOOD FOOTBRIDGE
(TO REMAIN)

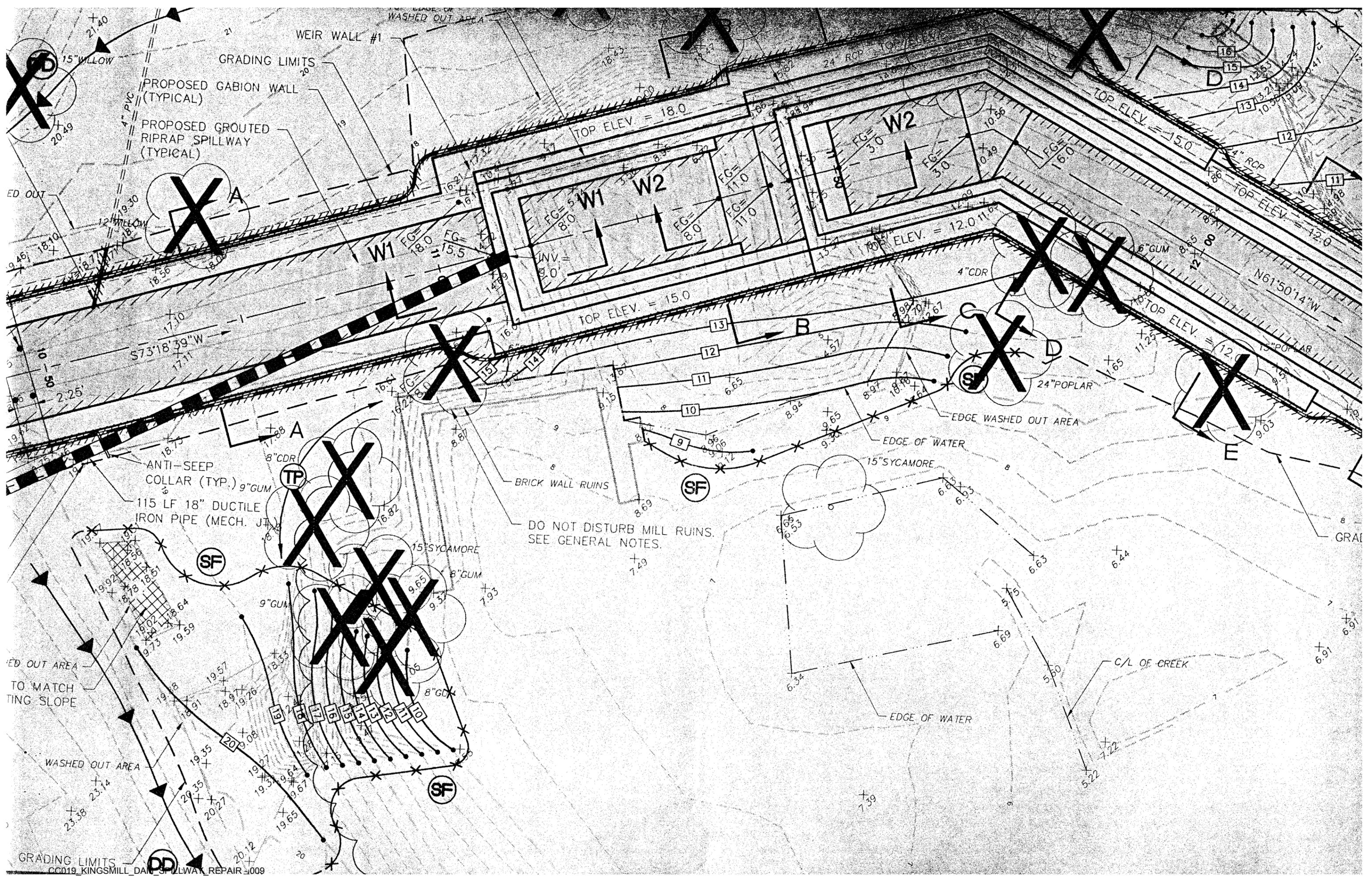
TO BE
IN PLACE

CONCRETE WEIR
ELEV. = 20.36
(TO REMAIN)

ANTI-SEEP
COLLAR (TYP.) 9\"/>

115 LF 18\"/>

DO NOT DISTURB MILL RUINS.
SEE GENERAL NOTES.



15" WILLOW

WEIR WALL #1

GRADING LIMITS

PROPOSED GABION WALL (TYPICAL)

PROPOSED GROUTED RIPRAP SPILLWAY (TYPICAL)

TOP ELEV. = 18.0

TOP ELEV. = 15.0

TOP ELEV. = 15.0

TOP ELEV. = 12.0

TOP ELEV. = 12.0

S73°18'39"W

ANTI-SEEP COLLAR (TYP.) 9"GUM

115 LF 18" DUCTILE IRON PIPE (MECH. JT)

DO NOT DISTURB MILL RUINS. SEE GENERAL NOTES.

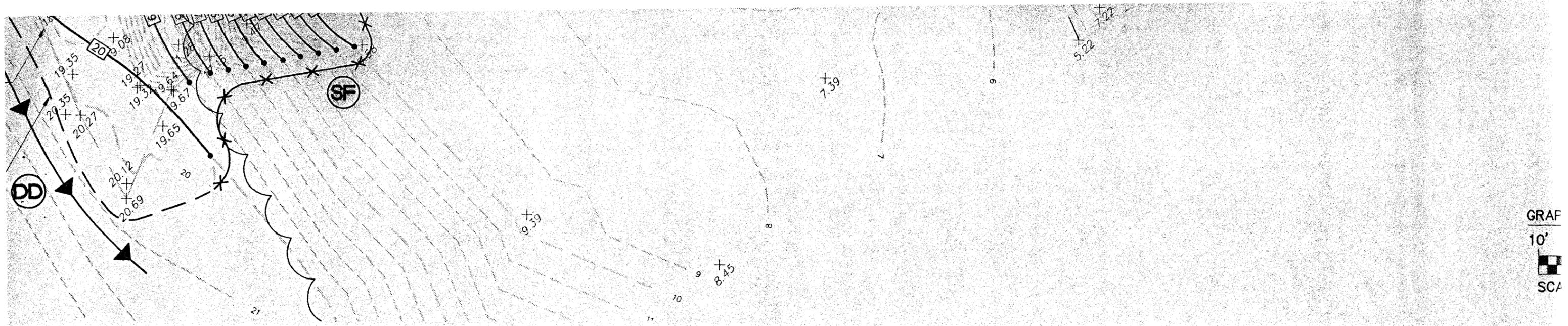
EDGE OF WATER

15" SYCAMORE

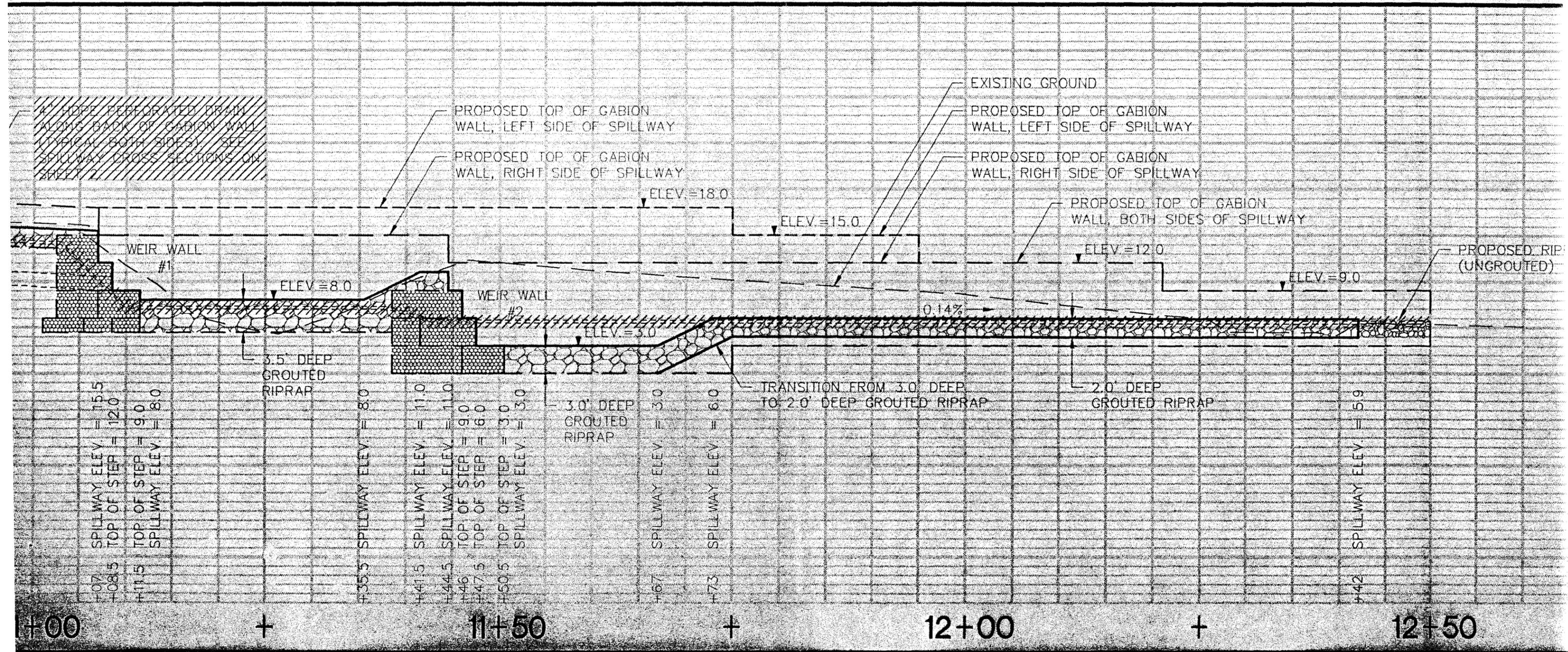
C/L OF CREEK

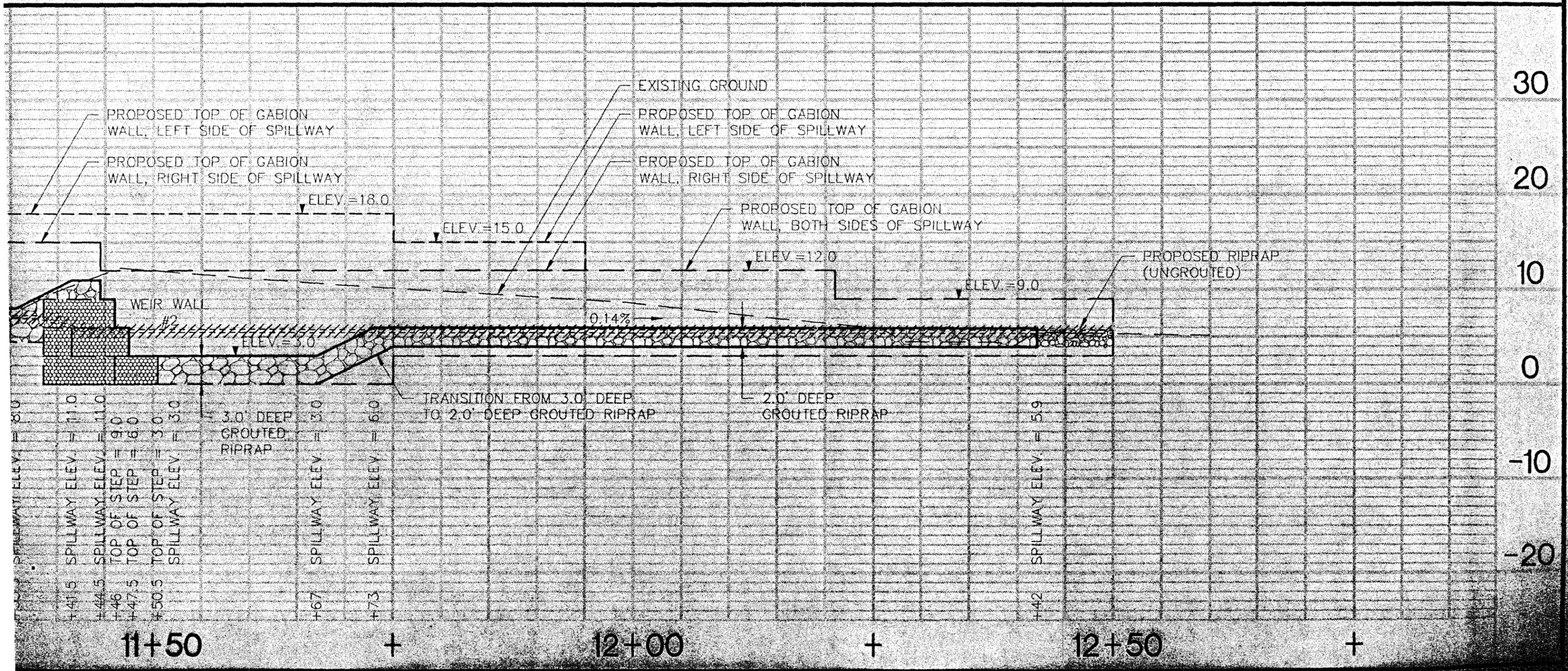
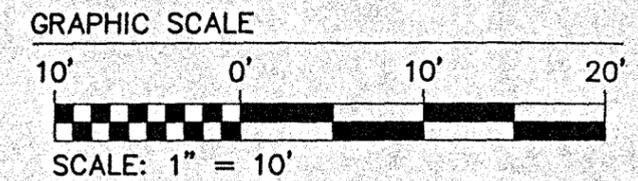
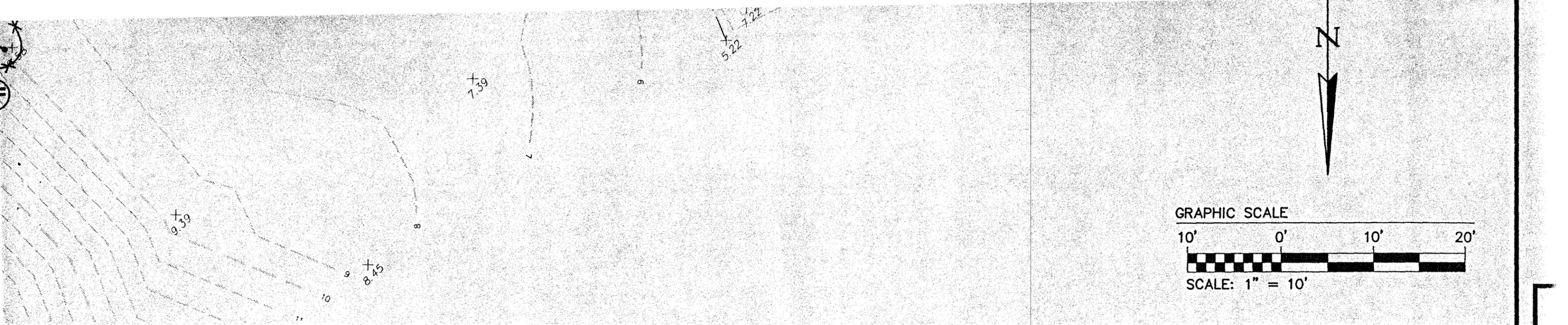
EDGE OF WATER

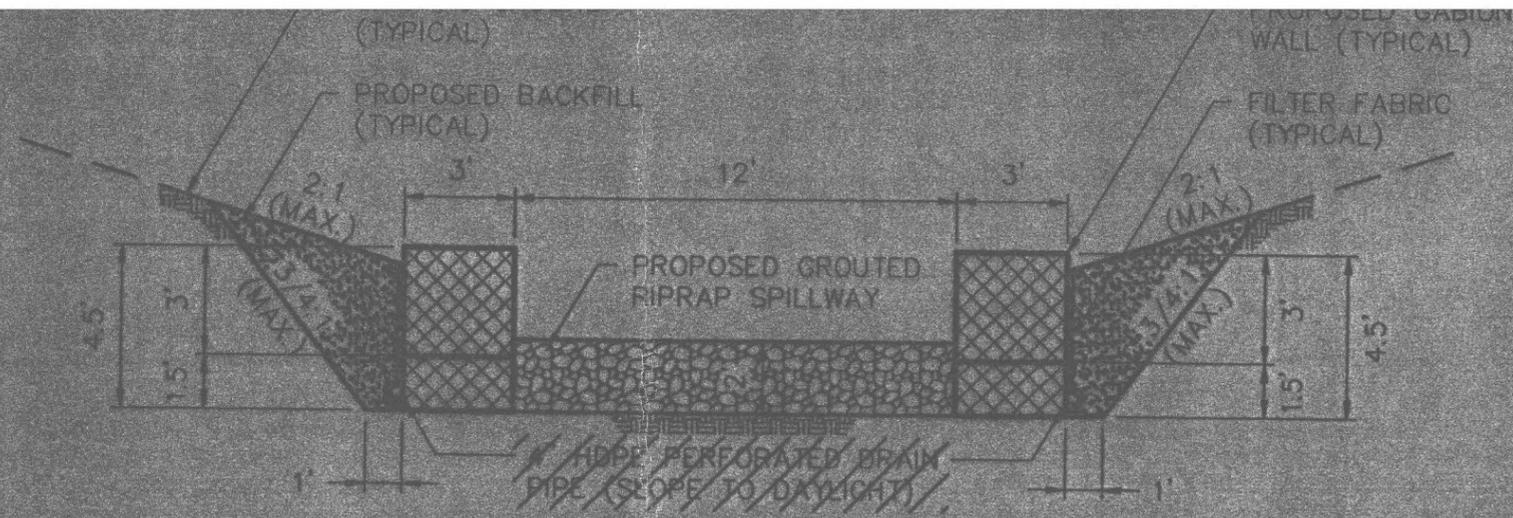
GRADING LIMITS
CC019_KINGSMILL_DAM_SPILLWAY_REPAIR_009



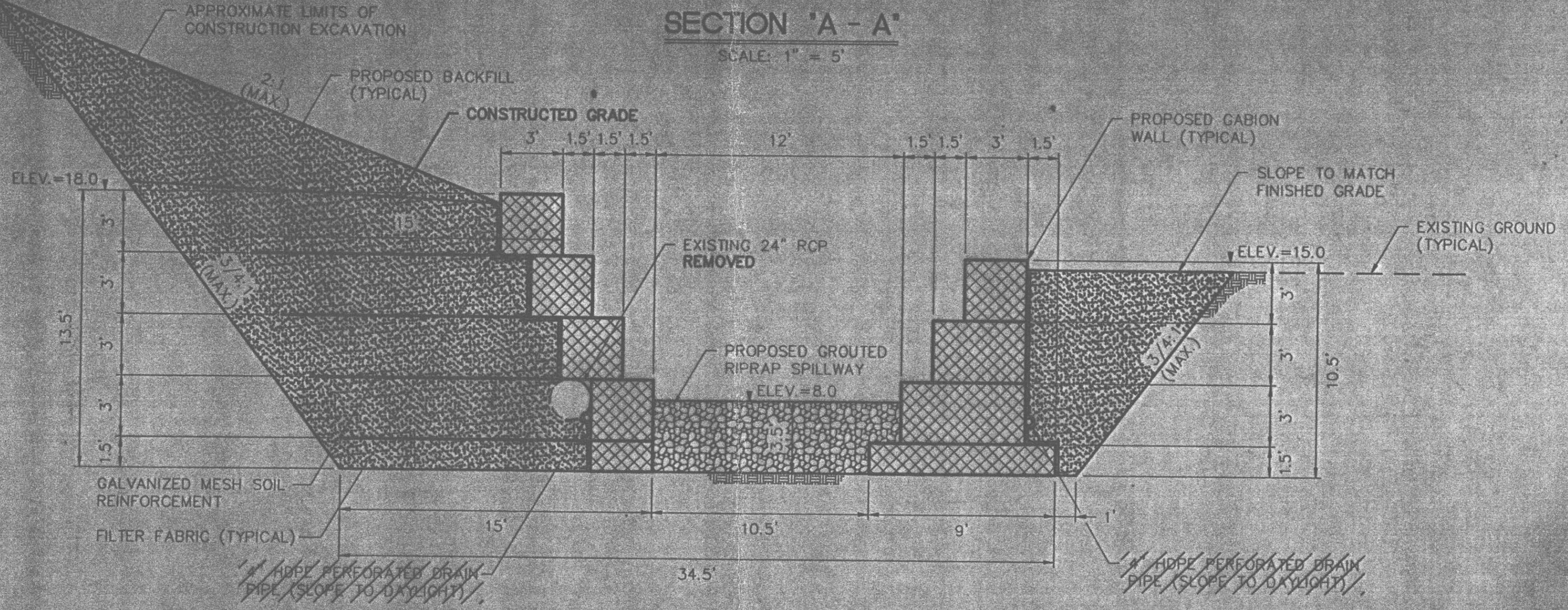
GRAPH
10'
SCALE



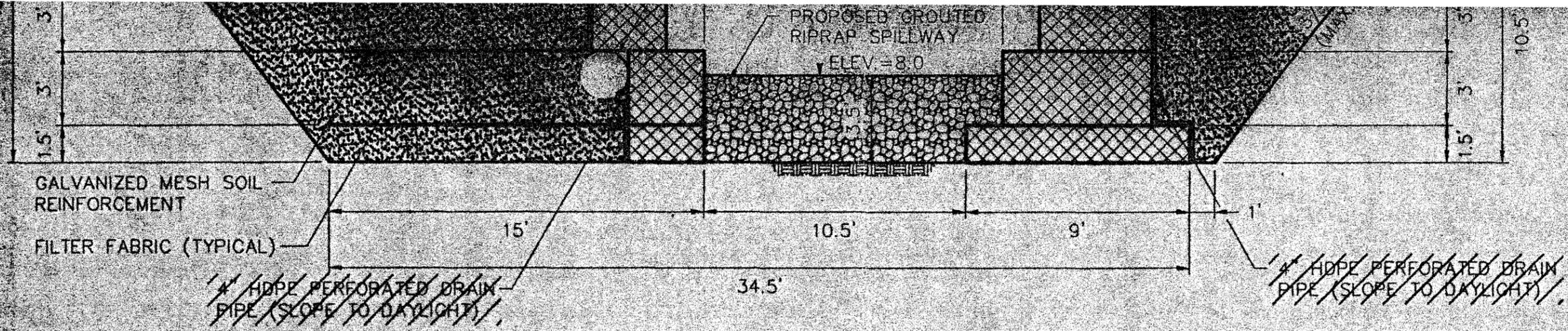




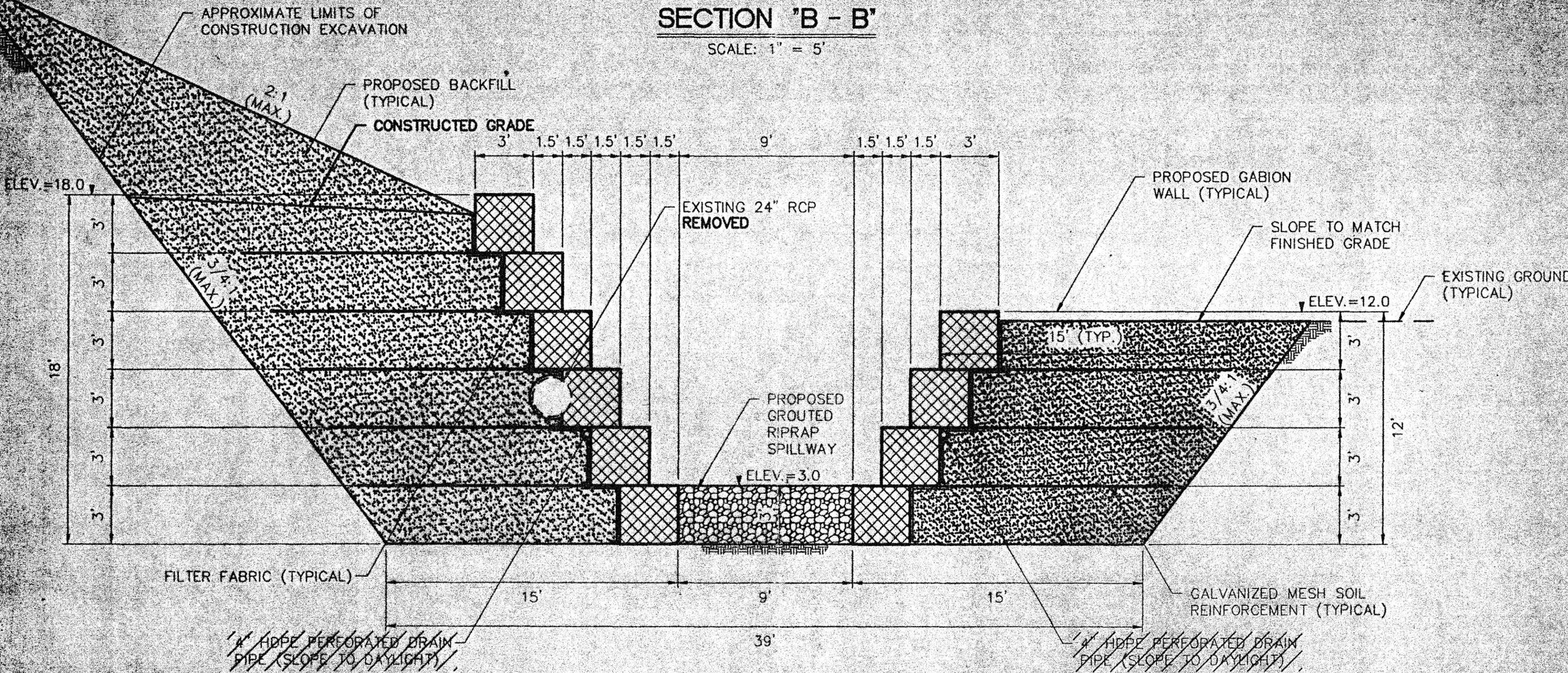
SECTION 'A - A'
SCALE: 1" = 5'



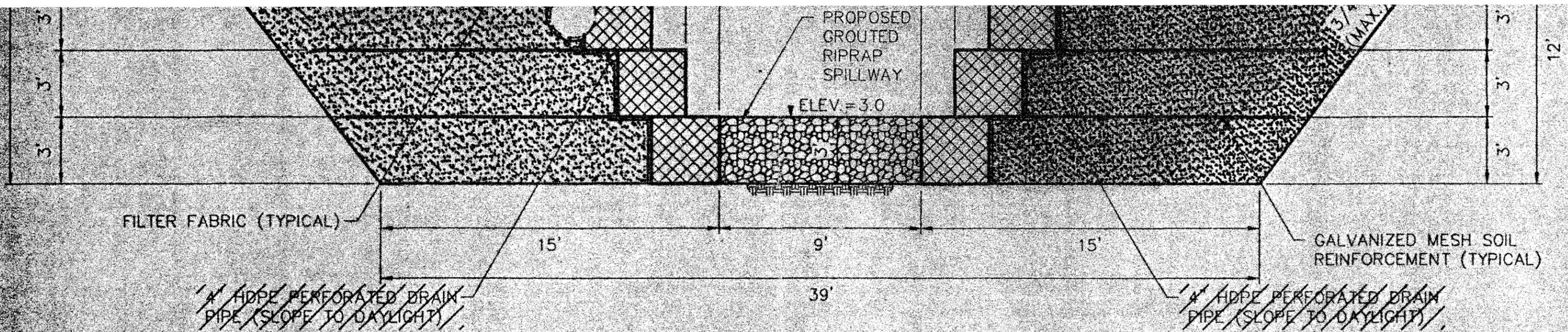
SECTION 'B - B'
SCALE: 1" = 5'



SECTION "B - B"
SCALE: 1" = 5'

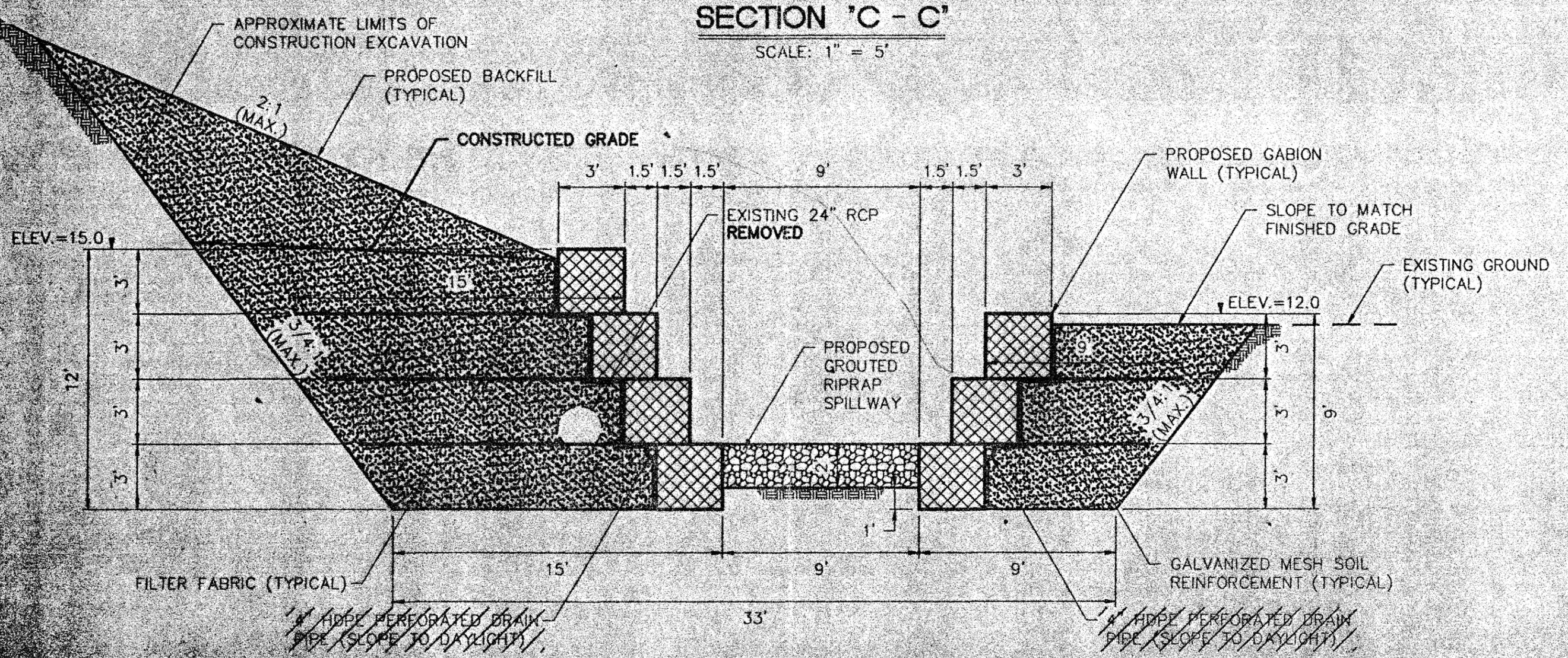


SECTION "C - C"
SCALE: 1" = 5'



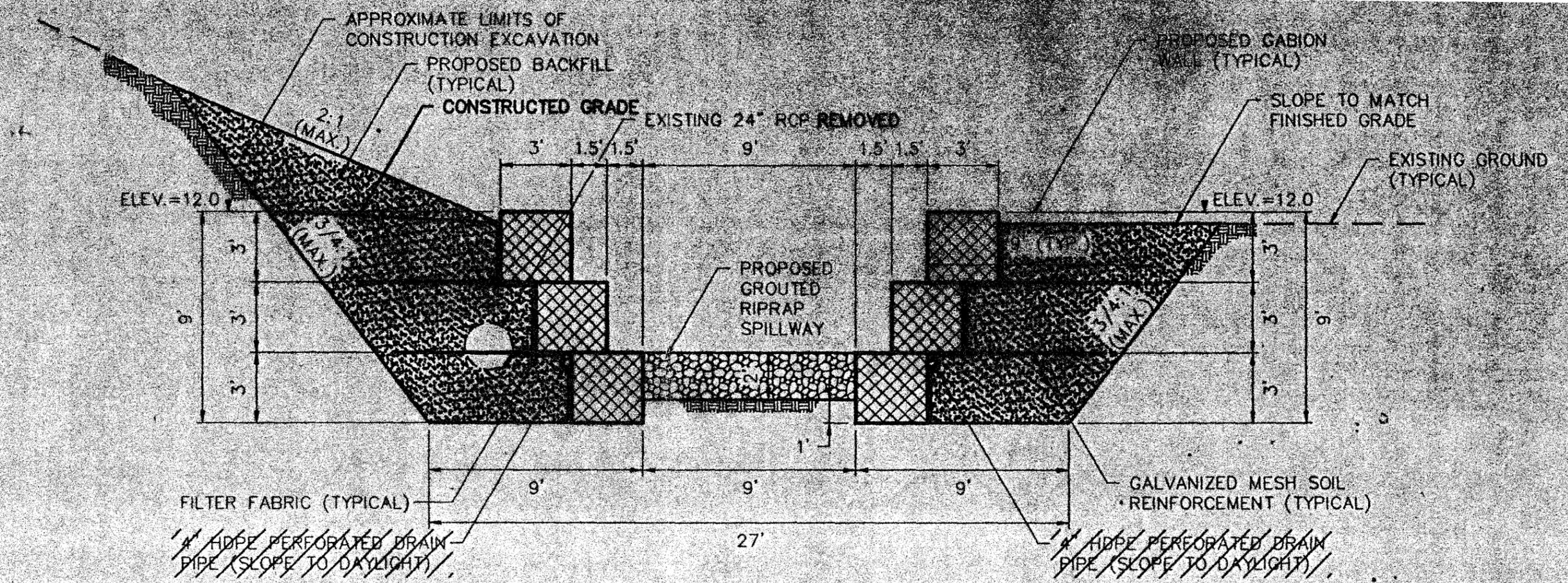
SECTION "C - C"

SCALE: 1" = 5'



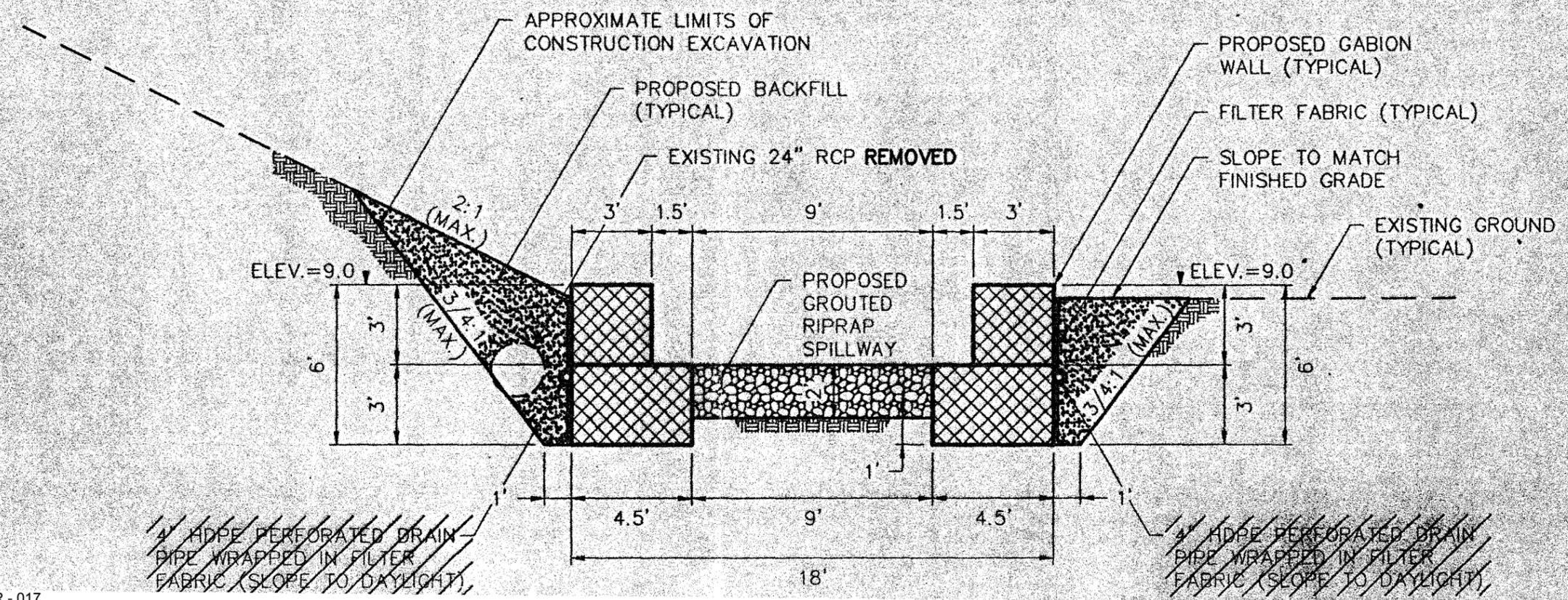
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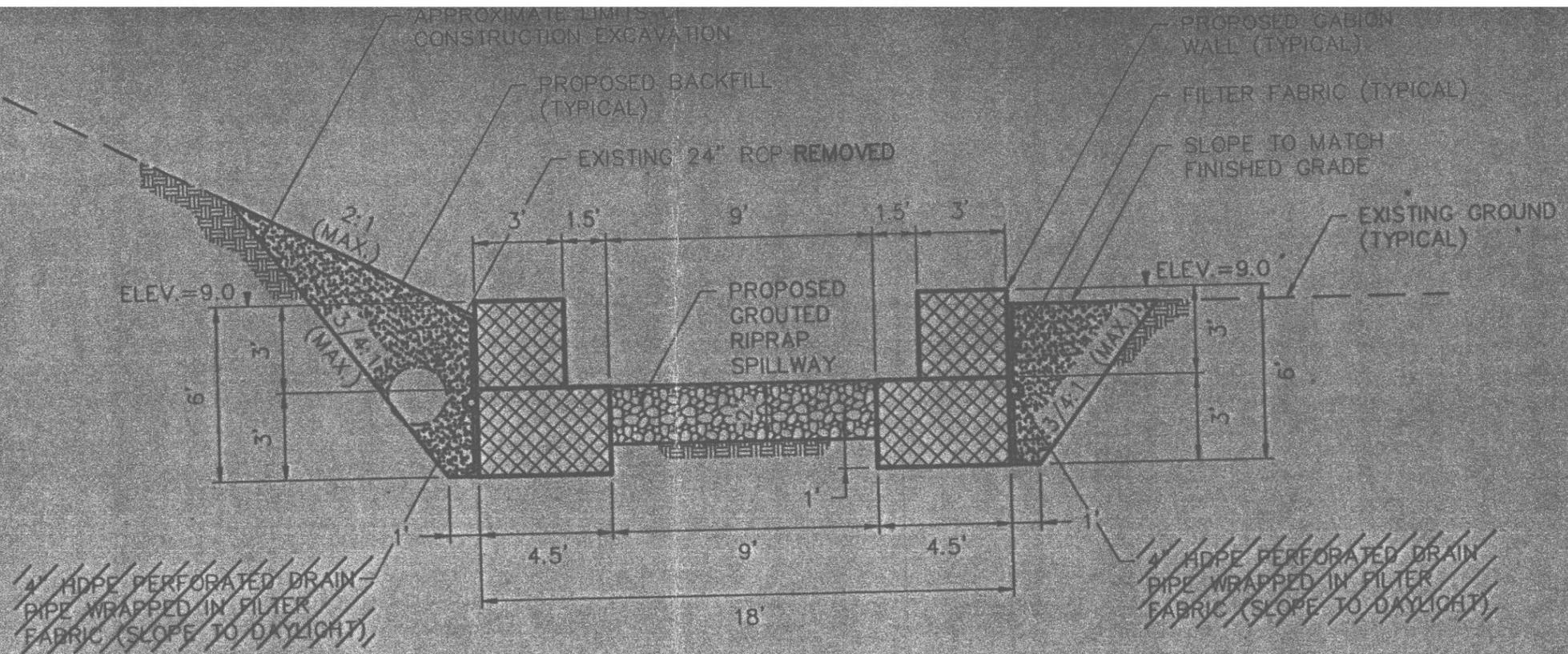


SECTION "E - E"

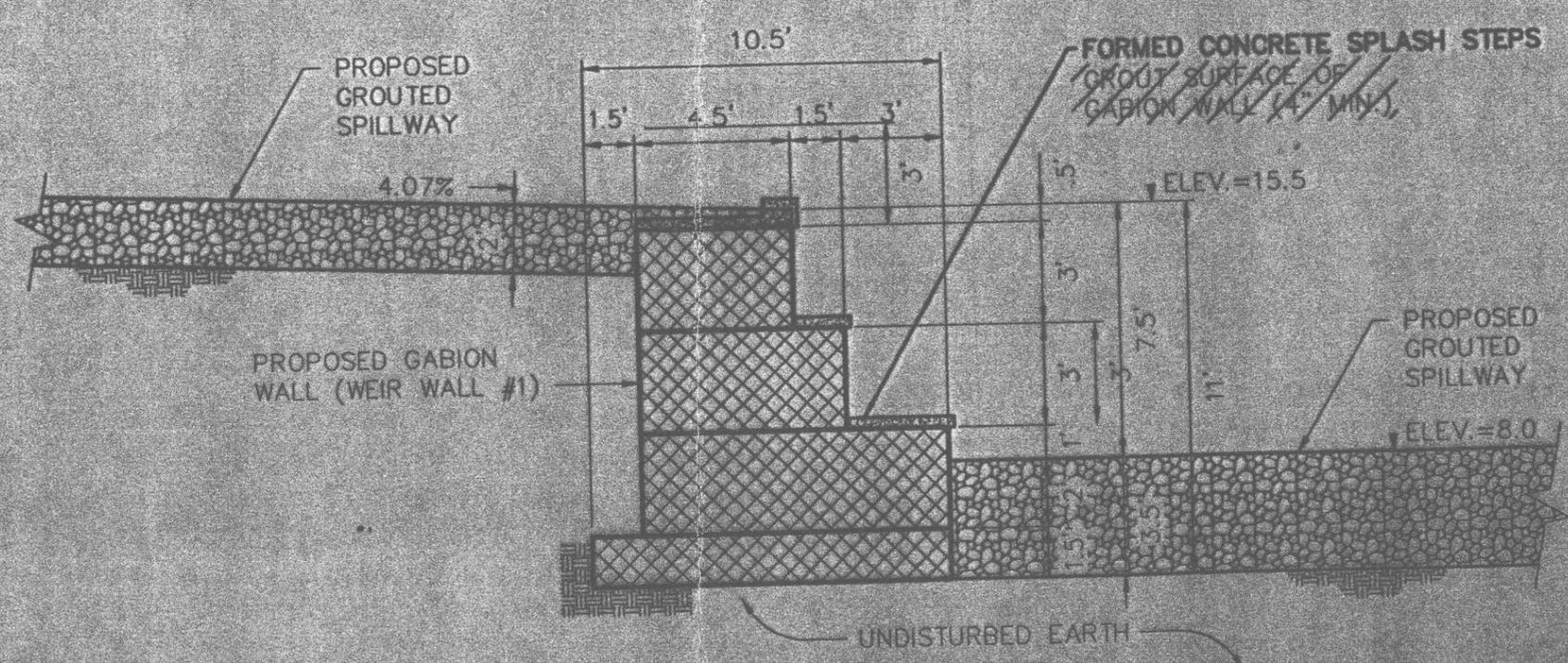
SCALE: 1" = 5'



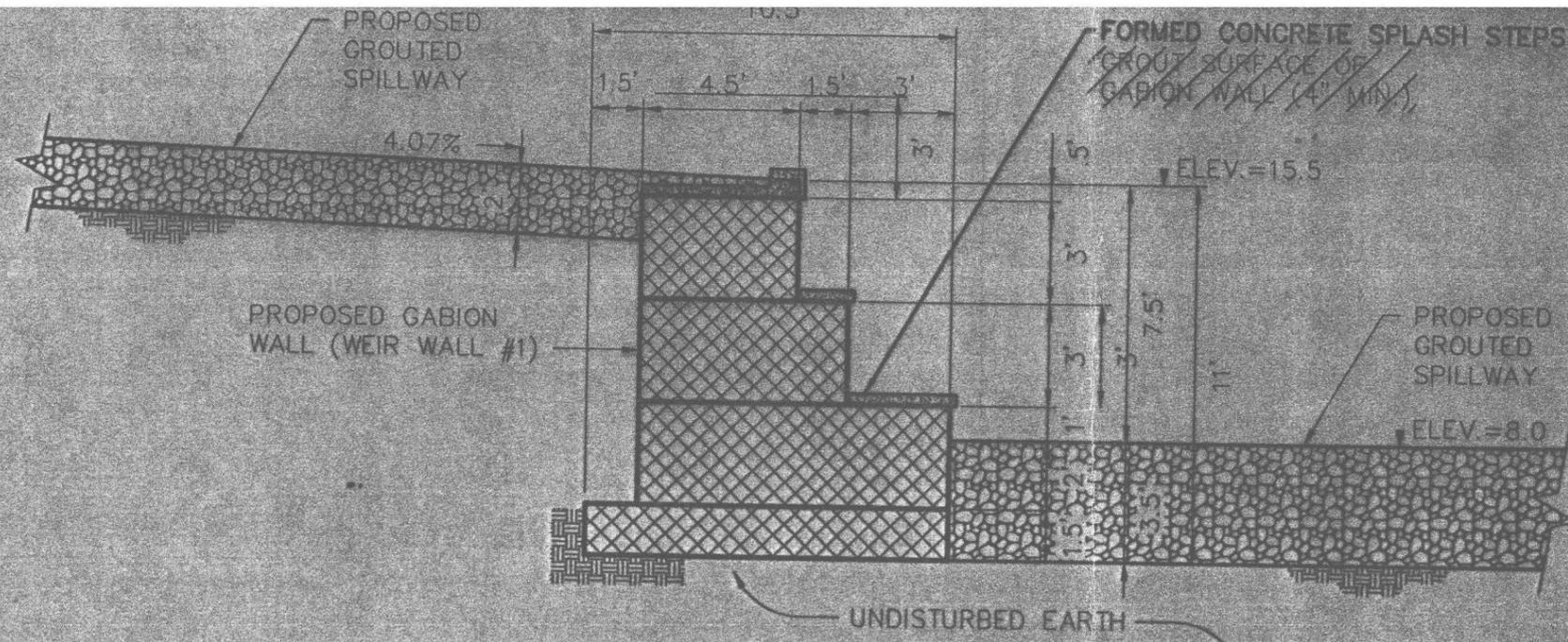
EXISTING GROUND (TYPICAL)



SECTION "F - F"
SCALE: 1" = 5'

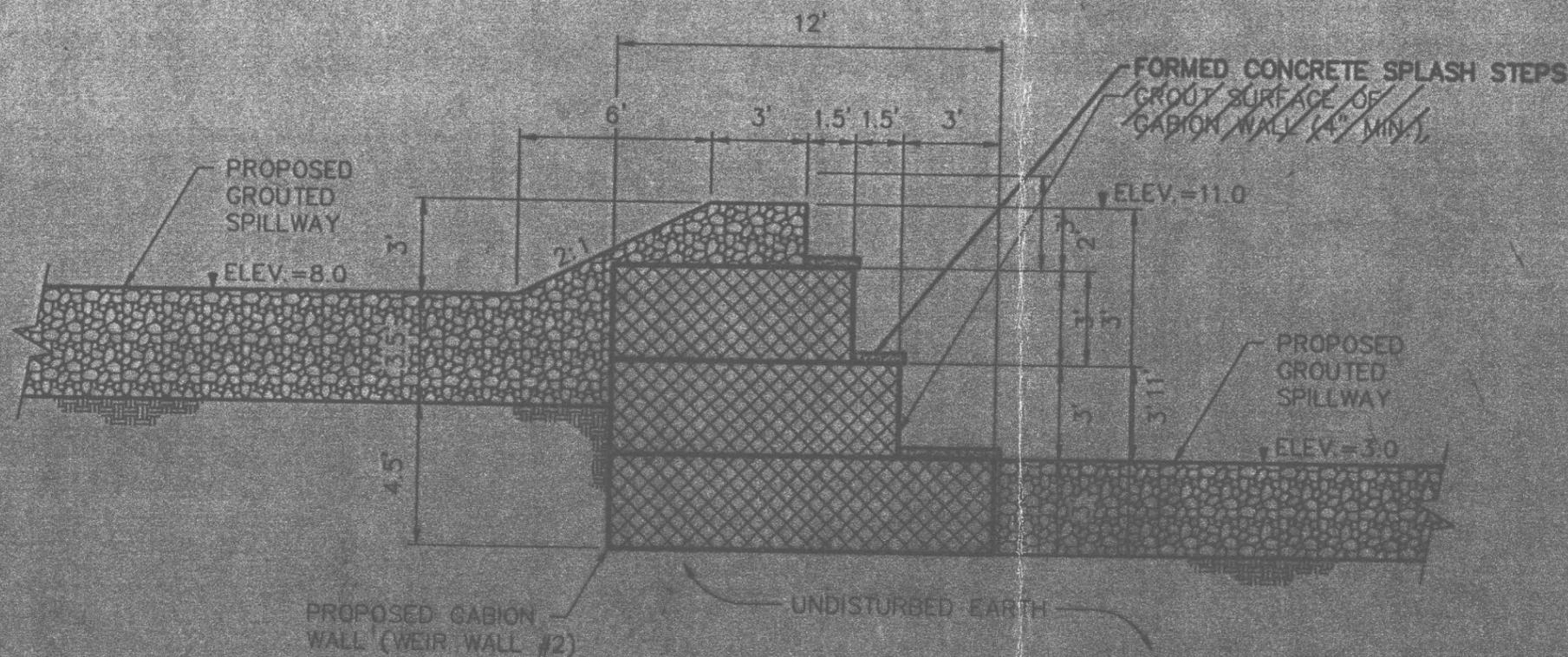


SECTION "W1 - W1"
WEIR WALL 1



SECTION "W1 - W1"
WEIR WALL 1

SCALE: 1" = 5'



SECTION "W2 - W2"
WEIR WALL 2

SCALE: 1" = 5'



CONSULTING ENGINEERS

SPILLWAY AND WEIR CROSS SECTIONS
KINGSMILL COMMUNITY SERVICES ASSOCIATION

KINGSMILL POND SPILLWAY AND DAM REPAIR

VIRGINIA

JAMES CITY COUNTY

Designed ABS	Drawn BJJ
Scale 1" = 5'	Date APRIL 2000
Project No. 7753-00	

WATERSHED	CC	MAINTENANCE PLAN	No	CTRL STRUC DESC	Gabion
BMP ID NO	019	SITE AREA acre	22.88	CTRL STRUC SIZE inches	
PLAN NO		LAND USE	Res Planned Com	OTLT BARRL DESC	
TAX PARCEL		old BMP TYP		OTLT BARRL SIZE inch	
PIN NO	510100010	JCC BMP CODE			
CONSTRUCTION DATE		POINT VALUE		EMERG SPILLWAY	Yes
PROJECT NAME	Kingsmill Pond-Private Dam			DESIGN HW ELEV	
FACILITY LOCATION	End Macauley Rd @ 13th Hole River Course			PERM POOL ELE	
CITY-STATE	Williamsburg, Va. 23185	SVC DRAIN AREA acres		2-YR OUTFLOW cfs	0.00
CURRENT OWNER	Kingsmill Community Services Assoc.			10-YR OUTFLOW cfs	0.00
OWNER ADDRESS	P.O. Box 348			REC DRAWING	Yes
OWNER ADDRESS 2		SERVICE AREA DESCRI		CONSTR CERTI	No
CITY-STATE-ZIP CODE	Williamsburg, Va. 23187	IMPERV AREA acres	0.00	LAST INSP DATE	3/27/2001
OWNER PHONE		RECV STREAM		INTERNAL RATING	3
MAINT AGREEMENT	No	EXT DET-WQ-CTRL	No	MISC/COMMENTS	Spillway & Dam plan 4/11/00, completed 3/2001.
EMERG ACTION PLAN	No	WTR QUAL VOL acre-ft			
		CHAN PROT CTRL	No		
		CHAN PROT VOL acre-ft			
		SW/FLOOD CONTROL	No		
		GEOTECH REPORT	No		

[Get Last BMP No](#)

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WATERSHED	CC	MAINTENANCE PLAN	No	CTRL STRUC DESC	Gabion
BMP ID NO	019	SITE AREA acre	22.88	CTRL STRUC SIZE inches	
PLAN NO		LAND USE	Res Planned Com	OTLT BARRL DESC	
TAX PARCEL		old BMP TYP		OTLT BARRL SIZE inch	
PIN NO	510100010	JCC BMP CODE			
CONSTRUCTION DATE		POINT VALUE		EMERG SPILLWAY	Yes
PROJECT NAME	Kingsmill Pond-Private Dam			DESIGN HW ELEV	
FACILITY LOCATION	End Macauley Rd @ 13th Hole River Course			PERM POOL ELEV	
CITY-STATE	Williamsburg, Va. 23185	SVC DRAIN AREA acres	900	2-YR OUTFLOW cfs	0.00
CURRENT OWNER	Kingsmill Community Services Assoc.			10-YR OUTFLOW cfs	0.00
OWNER ADDRESS	P.O. Box 348			REC DRAWING	Yes
OWNER ADDRESS 2		SERVICE AREA DESCRI		CONSTR CERTIF	No
CITY-STATE-ZIP CODE	Williamsburg, Va. 23187	IMPERV AREA acres	0.00	LAST INSP DATE	3/27/2001
OWNER PHONE		RECV STREAM		INTERNAL RATING	3
MAINT AGREEMENT	No	EXT DET-WQ-CTRL	No	MISC/COMMENTS	
EMERG ACTION PLAN	No	WTR QUAL VOL acre-ft		Spillway & Dam plan 4/11/00, completed 3/2001.	
		CHAN PROT CTRL	No		
		CHAN PROT VOL acre-ft			
		SW/FLOOD CONTROL	No		
		GEOTECH REPORT	No		

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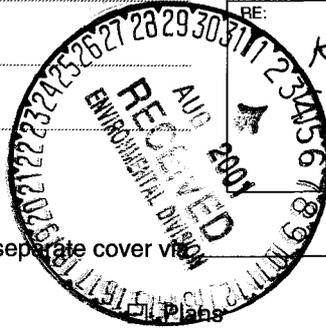


CC019

(757) 253-0040
 FAX (757) 220-8994

DATE 8/3/01	JOB NO. 7253-12
ATTENTION SCOTT THOMAS	
RE: KINGSMILL POND SPILLWAY & DAM REPAIR	

TO JCC ENVIRONMENTAL
DIVISION



WE ARE SENDING YOU Attached Under separate cover via _____ the following items:

- Shop drawings
- Prints
- Plans
- Samples
- Specifications
- Copy of letter
- Change order
- MYLAR

COPIES	DATE	NO.	DESCRIPTION
1	7/25/01	4	AS-BUILTS

THESE ARE TRANSMITTED as checked below:

- For approval
- Approved as submitted
- Resubmit _____ copies for approval
- For your use
- Approved as noted
- Submit _____ copies for distribution
- As requested
- Returned for corrections
- Return _____ corrected prints
- For review and comment
- _____
- FOR BIDS DUE _____
- PRINTS RETURNED AFTER LOAN TO US

REMARKS

REFER TO BMP ID No. ~~JR045~~ 2001.

COPY TO BILL PENNOCK, ACSA SIGNED: [Signature]



CC019





Stormwater Division

MEMORANDUM

DATE: July 28, 2014
TO: Michael J. Gillis, Virginia Correctional Enterprises Document Management Services
FROM: Jacob Smith, Stormwater Intern
PO: 110426
RE: Files Approved for Scanning

NAME PDF/SCANNED FILE:		KINGSMILL SOUTHALL ROAD DRAINAGE	
BMP ID OR GEN FILE NUMBER:	CC019	OWNER NAME:	CONTRADICTORY
PIN:	CONTRADICTORY	SITE ADDRESS:	20 WHITTAKERS MILL (BEHIND PARCEL) ALSO KNOWN AS KINGSMILL POND
		LEGAL DESCRIPTION:	CONTRADICTORY

MAINTENANCE AGREEMENT IN FILE:	YES	BOOK/PAGE OR DOCUMENT NO.:	183/698 - 702	OTHER DESCRIPTION:	N/A
---------------------------------------	-----	-----------------------------------	---------------	---------------------------	-----

BOX NO.:	2	COMMENTS:	DECLARATION INSPECTION MAINTENANCE
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**James City County Engineering and Resource
Protection Division
Stormwater Management/BMP Record Drawing and
Construction Certification Review Tracking Form**

Project Name: Kingsmill - Southall Road Drainage

County Plan No. (List any amendments): E&S-014-11

Stormwater Management Facility Type: _____

BMP Phase #: I II III

Information Package Submittal Date: 2/19/2013

Completeness Check:

Record Drawing Date/By: 2/15/13 MATTHEW H. Connolly

Construction Certification Date/By: 2/19/13 Kevin Stalard

RD/CC Standard Forms (Ensure that all forms for the BMP type are included)

Insp/Maint Agreement # / Date: 120005209 2/5/2012

BMP Maintenance Plan Location: NA

Special Considerations: _____

Standard E&SC Notes on Approved Plan Requiring RD/CC or County comment in plan review

Location (sheet #): C-5 #21

County BMP ID Code #: CC-019

Log into Division's "As-Built Tracking Log"

Obtain basic site information (GPIN, Owner, Address, etc.)

Log into Access Database (BMP ID #, Plan No., GPIN, Project Name, etc.)

Copy from Active Project File (correspondence, H&H, design computations, etc.).

Create As-Built File using Project File information (File label, folder, copy plan/details/design information, etc.).

Inspector Review of RD/CC (consult with Chief Engineer prior to completion of comments).

Record Drawing Review against Approved Plan prior to Field Inspection.

Final Site Inspection (FI) Performed Date: _____

Record Drawing (RD) Review Date: _____

Construction Certification (CC) Review Date: _____

Actions:

No comments.

Comments. Letter Forwarded. Date: 2/1/2013

Record Drawing (RD)

Construction Certification (CC)

Construction-Related (CR)

Site Issues (SI)

Other : _____

Resubmittal (# and date): _____

Re-inspection (if necessary): _____

Drainage System Information Acceptable (RD/CC/System Info). Ok for bond release.

Complete "Surety Request Form".

Final Inspection of active file copying any relevant information to "As-Built" file.

On County BMP Inventory (Phase I, II or III).

Copy Final Inspection Report into County BMP Inspection Program file.

Provide Digital Photographs of BMP and save into County BMP Inventory.

Request mylar/reproducible from As-Built plan preparer.

Complete "As-built Tracking Log".

Last check of BMP Access Database (County BMP Inventory).

Add BMP to JCC Hydrology & Hydraulic database (optional).

Add BMP to Municipal BMP list (if a County-owned facility)

Add BMP to PRIDE BMP ratings database.

Final Sign-Off

Inspector: [Signature]

Date: 2/3/2013

Chief Engineer: _____

Date: _____

*** See separate checklist, if needed.



TRANSMITTAL SHEET

ENGINEERING & RESOURCE PROTECTION → STORMWATER

Project: Kingsmill Southall Road Drainage

County Plan No.: E and S -014-11

Assigned BMP No.: None storm channel

BMP Type:

Information Enclosed:

- X Record Drawings (Asbuilts)
- X Construction Certification
- X Computations
- X Other: Approved Plan
- X Declaration of Covenants

Name: Greg Johnson

Date: 10/07/2013

Signature: _____

A handwritten signature in black ink, appearing to read "Greg Johnson", written over a horizontal line.



COUNTY OF JAMES CITY, VIRGINIA

COPY

DECLARATION OF COVENANTS
INSPECTION/MAINTENANCE OF DRAINAGE SYSTEM

Please type or print legibly in black ink. Covenantor(s) should submit this form to the JCC Engineering and Resource Protection Division, 101-E Mounts Bay Road, Williamsburg, VA 23185.

THIS DECLARATION OF COVENANTS, made this 28th day of February, 2012, between Kingsmill Community Service Association (KCSA), and all successors in interest, ("COVENANTOR(S)"), owner(s) of the following property:

Parcel Identification Number(s): 5010300012A
Legal Description(s): 1.49 acres of common area at the corner of Southall and Macaulay Rds

Project or Subdivision Name: Southall Quarter Kingsmill
Document/Instrument No(s): _____
or Deed Book 183, Page No. 698-702
and the County of James City, Virginia ("COUNTY.")

WITNESSETH:

I (We), the COVENANTOR(S), with full authority to execute deeds, mortgages, other covenants, and all rights, titles and interests in the property described above, do hereby covenant with the COUNTY as follows:

1. The COVENANTOR(S) shall provide maintenance for the drainage system including any runoff control facilities, conveyance systems and associated easements, hereinafter referred to as the "SYSTEM," located on and serving the above-described property to ensure that the SYSTEM is and remains in proper working condition in accordance with approved design standards, and with the law and applicable executive regulations. The SYSTEM shall not include any elements located within any Virginia Department of Transportation rights-of-way.
2. If necessary, the COVENANTOR(S) shall levy regular or special assessments against all present or subsequent owners of property served by the SYSTEM to ensure that the SYSTEM is properly maintained.
3. The COVENANTOR(S) shall provide and maintain perpetual access from public right-of-ways to the SYSTEM for the COUNTY, its agent and its contractor.
4. The COVENANTOR(S) shall grant the COUNTY, its agent and its contractor a right of entry to the SYSTEM for the purpose of inspecting, monitoring, operating, installing, constructing, reconstructing, maintaining or repairing the SYSTEM.
5. If, after reasonable notice by the COUNTY, the COVENANTOR(S) shall fail to maintain the SYSTEM in accordance with the approved design standards and with the law and applicable executive regulations, the COUNTY may perform all necessary repair or maintenance work, and the COUNTY may assess the COVENANTOR(S) and/or all property served by the SYSTEM for the cost of the work and any applicable penalties.

Prepared by (Name, Address & Phone):
Susan Sickal 757-603-6015
Kingsmill Community Service Association
P.O. Box 348
Williamsburg, VA 23187

Return to:
JCC Attorney's Office
101-C Mount's Bay Road
Williamsburg, VA 23185
(757) 253-6612

Instrument No. 120005209
Recorded on: March 5, 2012

6. The COVENANTOR(S) shall indemnify and save the COUNTY harmless from any and all claims for damages to persons or property arising from the installation, construction, maintenance, repair, operation or use of the SYSTEM.

7. The COVENANTOR(s) shall promptly notify the COUNTY when the COVENANTOR(S) legally transfers any of the COVENANTOR(S) responsibilities for the SYSTEM. The COVENANTOR(S) shall supply the COUNTY with a copy of any document of transfer, executed by both parties.

8. The covenants contained herein shall run with the land and shall bind the COVENANTOR(S) and the COVENANTOR(S)' heirs, executors, administrators, successors and assignees, and shall bind all present and subsequent owners of property served by the SYSTEM.

9. This COVENANT shall be recorded in the County Land Records.

IN WITNESS WHEREOF, the COVENANTOR(S) has executed this DECLARATION OF COVENANTS as of the date first above written.

COVENANTOR(S)

Thomas E. Cucuel

Signature

Thomas E. Cucuel, President KCSA

Print Name and Title

ACKNOWLEDGMENT

COMMONWEALTH OF VIRGINIA
CITY/COUNTY OF James City Count., to wit:

I hereby certify that on this 29 day of February, 20 12, before the subscribed, a Notary Public for the Commonwealth of Virginia, personally appeared Thomas E. Cucuel and did acknowledge the foregoing instrument to be his/her Act.

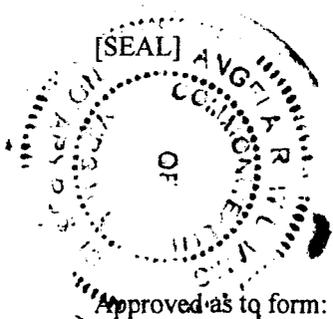
IN WITNESS WHEREOF, I have hereunto set my hand and official seal this 29th day of February, 2012.

Stella R. Williams

Notary Public

Notary Registration Number: 4214150

My Commission expires: 10/31/12



Approved as to form:

Thomas E. Cucuel
County Attorney

FEB 19 2013



Stormwater Management/BMP Facilities Record Drawing and Construction Certification Forms

RECEIVED

(Note: In accordance with the requirements of the Chesapeake Bay Preservation Ordinance, Chapter 23, Section 23-10(4), BMP's shall be designed and constructed in accordance with the manual entitled James City County Guidelines for Design and Construction of Stormwater Management BMP's. Erosion and sediment control policy and approved plans generally require that at the completion of the project and prior to release of surety, an "as-built" plan prepared by a registered Professional Engineer or Certified Land Surveyor must be provided for the drainage system for the project, including any Best Management Practice (BMP) facilities. In addition, for BMP facilities involving the construction of an impounding structure or dam embankment, certification is required by a Professional Engineer who has inspected the structure during its construction. Currently there are over 20 water quality type BMP's accepted by the County.)

Section 1 - Site Information:

Project Name: Kingsmill on the James
Structure/BMP Name: Drainage As-Built for Southall Road Channel Maintenance
Project Location: Channel & Slope Stabilization with Gabion Baskets (C019)
BMP Location: Southall Road
County Plan No.: Southall Road between Macaulay Rd + Holdsworth Rd
County Plan No.: E+S-014-11

Project Type: Residential Business Office Commercial Institutional Industrial Public Roadway Other
Tax Map/Parcel No.: 5010300012A
BMP ID Code (if known): Gabion Baskets
Zoning District: R4
Land Use: Residential
Site Area (sf or acres): 1.49 ac

Brief Description of Stormwater Management/BMP Facility: Channel & Slope Stabilization with Gabion Baskets

Nearest Visible Landmark to SWM/BMP Facility: Intx Southall Road w/ Macaulay & Holdsworth

Nearest Vertical Ground Control (if known):

JCC Geodetic Ground Control USGS Temporary Arbitrary Other

Station Number or Name: JCC GIS Information
Datum or Reference Elevation: _____
Control Description: Contours from JCC GIS
Control Location from Subject Facility: _____

**Stormwater Management/BMP Facilities
Record Drawing and Construction Certification Forms**

Section 2 - Stormwater Management/BMP Facility Construction Information:

Pre-Construction Meeting Held for Construction of SWM/BMP Facility: Yes No Unknown
Approx. Construction Start Date for SWM/BMP Facility: 2/12
Facility Monitored by County Representative during Construction: Yes No Unknown
Name of Site Work Contractor Who Constructed Facility: _____
Name of Professional Firm Who Routinely Monitored Construction: Cornerstone Design Group
Date of Completion for SWM/BMP Facility: 4/12
Date of Record Drawing/Construction Certification Submittal: 4/18/12

(Note: Record Drawing and Construction Certifications are required within thirty (30) days of the completion of Stormwater Management and/or BMP facility construction. Record Drawings and Construction Certifications must be reviewed and approved by the James City County Engineering and Resource Protection Division prior to final inspection, acceptance and bond or surety release.)

Section 3 - Owner/Designer/Contractor Information:

Owner/Developer: *(Note: Site Owner or Applicant responsible for development of the project.)*

Name: KCSA
Mailing Address: PO Box 348
Williamsburg, VA 23187
Business Phone: 208-0964 Fax: 603-6005
Contact Person: Jim Kirkland Title: Recreation Manager

Design Professional: *(Note: Professional Engineer or Certified Land Surveyor responsible for the design and preparation of plans and specifications for the Stormwater Management / BMP facility.)*

Firm Name: Cornerstone Design Group
Mailing Address: 1311 Jamestown Rd, Ste 102
Williamsburg, Va 23185
Business Phone: 564-8898
Fax: 564-8897
Responsible Plan Preparer: Steven Stafford
Title: President
Plan Name: Southall Rd Channel Maintenance & Slope Stabilization
Firm's Project No. 2010-05158
Plan Date: 8/19/11
Sheet No.'s Applicable to SWM/BMP Facility: C1 / C2 / C3 / C4 / C5

BMP Contractor: *(Note: Site Work Contractor directly responsible for construction of the Stormwater Management/BMP facility.)*

Firm Name: Mid-Atlantic Enterprises, Inc.
Mailing Address: 3737 Strawberry Pegasus Road
Williamsburg, Va. 23188
Business Phone: 903-6275

**Stormwater Management/BMP Facilities
Record Drawing and Construction Certification Forms**

Fax: 645-2536
Contact Person: David Banglat
Site Foreman/Supervisor: _____
Specialty Subcontractors and Purpose (for BMP Construction Only): _____

Section 4 - Professional Certifications:

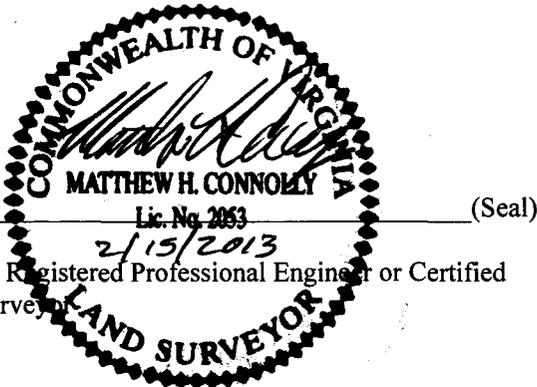
Certifying Professionals: *(Note: A Registered Professional Engineer or Certified Land Surveyor is responsible for preparation of a Record Drawing, sometimes referred to as an As-Built plan, for the drainage system for the project including any Stormwater Management/BMP Facilities. A Registered Professional Engineer is responsible for the inspection, monitoring and certification of Stormwater Management / BMP facilities during its construction.)*

Record Drawing and Construction Certifications for Stormwater Management/BMP Facilities

Record Drawing Certification

Firm Name: LANDTECH RESOURCES, INC.
Mailing Address: 205 E BULLIFANTS BLVD
WILLIAMSBURG, VA 23188
Business Phone: 757-565-1677
Fax: 757-565-0782
Name: MATTHEW H. CONNOLLY
Title: PRESIDENT
Signature: *Matthew H. Connolly*
Date: 2/15/2013

I hereby certify to the best of my knowledge and belief that this record drawing represents the actual condition of the Stormwater Management/BMP facility. The facility appears to conform to the provisions of the approved design plan, specifications design, and stormwater management plan, except as specifically noted.

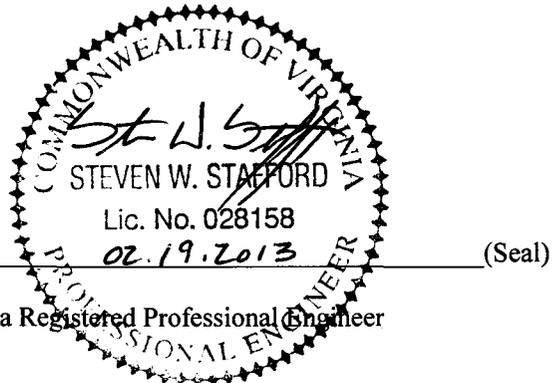


Virginia Registered Professional Engineer or Certified Land Surveyor

Construction Certification

Firm Name: CORNERSTONE DESIGN GROUP, INC
Mailing Address: 1311 JAMESTOWN ROAD, STE. 102
WILLIAMSBURG, VA 23188
Business Phone: 1.757.564.8898
Fax: 1.757.564.8897
Name: STEVEN W. STAFFORD
Title: PRESIDENT
Signature: *St. W. Stafford*
Date: 02.19.2013

I hereby certify to the best of my knowledge and belief that this Stormwater Management/BMP facility was monitored and constructed in accordance with the provisions of the approved plan, specifications, and stormwater management plan, except as specifically noted.



Virginia Registered Professional Engineer

Section 5 - Record Drawing and Construction Certification Requirements and Instructions:

- Pre-Construction Meeting - Provides an opportunity to review SWM/BMP facility construction, maintenance and operation plans and addresses any questions regarding construction and/or monitoring of the structure. The design engineer, certifying professionals (if different), Owner/Applicant, Contractor and County representative(s) are encouraged to attend the preconstruction meeting. Advanced notice to the Engineering and Resource Protection Division is requested. Usually, this requirement can be met simultaneously with Erosion and Sediment Control preconstruction meetings held for the project.
- A fully completed ***STORMWATER MANAGEMENT / BMP FACILITIES, RECORD DRAWING and CONSTRUCTION CERTIFICATION FORM*** and ***RECORD DRAWING CHECKLIST***. All applicable sections shall be completed in their entirety and certification statements signed and sealed by the registered professional responsible for individual record drawing and/or construction certification.
- The Record Drawing shall be prepared by a Registered Professional Engineer or Certified Land Surveyor for the drainage system of the project including any Best Management Practices.
- Construction Certification - Construction of Stormwater Management / BMP facilities which contain impoundments, embankments and related engineered appurtenances including subgrade preparation, compacted soils, structural fills, liners, geosynthetics, filters, seepage controls, cutoffs, toe drains, hydraulic flow control structures, etc. shall be visually observed and monitored by a Registered Professional Engineer or his/her authorized representative. The Engineer must certify that the structure, embankment and associated appurtenances were built in accordance with the approved design plan, specifications and stormwater management plan and standard accepted construction practice and shall submit a written certification and/or drawings to the Engineering and Resource Protection Division as required. Soil and compaction test reports, concrete test reports, inspection reports, logs and other required construction material or installation documentation may be required by the Engineering and Resource Protection Division to substantiate the certification, if specifically requested. The Engineer shall have the authority and responsibility to make minor changes to the approved plan, in coordination with the assigned County inspector, in order to compensate for unsafe or unusual conditions encountered during construction such as those related to bedrock, soils, groundwater, topography, etc. as long as changes do not adversely affect the integrity of the structure(s). Major changes to the approved design plan or structure must be reviewed and approved by the original design professional and the James City County Environmental Division.
- Record Drawing and Construction Certifications are required within **thirty (30) days** of the completion of Stormwater Management / BMP facility construction. Submittals must be reviewed and accepted by James City County Engineering and Resource Protection Division prior to final inspection, acceptance and bond/surety release.

Dual Purpose Facilities - Completion of construction also includes an interim stage for Stormwater Management / BMP facilities which serve dual purpose as temporary sediment basins during construction and as permanent stormwater management / BMP facilities following construction, once development and stabilization are substantially complete. For these dual purpose facilities, construction certification is required once the temporary sediment basin phase of construction is complete. Final record drawing and construction certification of additional permanent components is required once permanent facility construction is complete.

Interim Construction Certification is required for those dual purpose embankment-type facilities that are generally ten (10) feet or greater in dam height (*) and may not be converted, modified or begin function as a permanent SWM / BMP structure for a period generally ranging from six (6) to eighteen (18) months or more from issuance of a Land Disturbance permit for construction.

Interim or final record drawing and construction certifications are not required for temporary sediment basins which are designed and constructed in accordance with current minimum standards and specifications for temporary sediment basins per the Virginia Erosion and Sediment Control Handbook (VESCH); have a temporary service life of less than eighteen (18) months; and will be removed completely once associated disturbed areas are stabilized, unless a distinct hazard to the public's health, safety and welfare is determined by the Engineering and Resource Protection Division due to the size or presence of the structure or due to evidence of improper construction.

(*Note: Dam Height as referenced above is generally defined as the vertical distance from the natural bed of the stream or waterway at the downstream toe of the embankment to the top of the embankment structure in accordance with 4VAC50-20-30, Virginia Impoundment Structure Regulations and the Virginia Dam Safety Program.)

- Record Drawings shall provide, at a minimum, all information as shown within these requirements and the attached **RECORD DRAWING CHECKLIST** specific to the type of SWM/BMP facility being constructed. Other additional record data may be formally requested by the James City County Engineering and Resource Protection Division. *(Note: Refer to the current edition of the James City County Guidelines for Design and Construction of Stormwater Management BMP's manual for a complete list of acceptable BMP's. Currently there are over 20 acceptable water quality type BMP's accepted by the County.)*
- Record Drawings shall consist of blue/black line prints and a reproducible (mylar, sepia, diazo, etc.) set of the approved stormwater management plan including applicable plan views, profiles, sections, details, maintenance plans, etc. as related to the subject SWM / BMP facility. The set shall indicate "**RECORD DRAWING**" in large text in the lower right hand corner of each sheet with record elevations, dimensions and data drawn in a clearly annotated format and/or boxed beside design values. Approved design plan values, dimensions and data shall not be removed or erased. Drawing sheet revision blocks shall be modified as required to indicate record drawing status. Elevations to the nearest 0.1' are sufficiently accurate except where higher accuracy is needed to show positive drainage. Certification statements as shown in Section 4 of the Record Drawing and Construction Certification Form, *or similar forms thereof*, and professional signatures and seals, with dates matching that of the record drawing status in the revision or title block, are also required on all associated record drawing plans, prints or reproducibles.
- Submission Requirements - Initial and subsequent submissions for review shall consist of a minimum of one (1) blue/black line set for record drawings and one copy of the construction certification documents with appropriate transmittal. Under certain circumstances, it is understood that the record drawing and construction certification submissions may be performed by different professional firms. Therefore, record drawing submission may be in advance of construction certification or vice versa. Upon approval and prior to release of bond/surety, final submission shall include one (1) reproducible set of the record drawings, one (1) blue/black line set of the record drawings and one (1) copy of the construction certification. Also for current and/or future incorporation into the County BMP database and GIS system,

it is requested that the record drawings also be submitted to the Engineering and Resource Protection Division on a diskette or CD-ROM in an acceptable electronic file format such as *.dxf, *.dwg, etc. or in a standard scanned and readable format. The electronic file requirement can be discussed and coordinated with Engineering and Resource Protection Division staff at the time of final submission.

**STORMWATER MANAGEMENT/BMP FACILITIES
RECORD DRAWING CHECKLIST**

(Key for Checklist is as follows: XX Acceptable N/A Not Applicable Inc Incomplete)

I. Methods and Presentation: *(Required for all Stormwater Management/BMP facilities.)*

- XX 1. All constructed facilities meet approved design plans, unless otherwise shown. Record information or deviations from approved design plan shown in clearly annotated format and/or boxed beside design values.
- XX 2. Elevations to the nearest 0.1' unless higher accuracy is needed to show positive drainage.
- Inc 3. All plan sheets labeled with "RECORD DRAWING" in large text in lower right hand corner. (Approved County Plan Number and BMP ID Code can be included if known).
- XX 4. All plan sheet revision blocks modified to indicate date and record drawing status.
- XX 5. All plan sheets have certification statements and certifying professional's signature and seal.

II. Minimum Standards: *(Required for all Stormwater Management / BMP facilities, as applicable.)*

- XX 1. All requirements of Section I (Methods and Presentation) apply to this section.
- XX 2. Plan Views: Show general location, arrangement and dimensions. Location and alignment shall generally match approved design plans.
- XX 3. Profile or elevations along top or berm of the facility. At a minimum, elevations are required at each end, at intervals not to exceed 50 feet and where low spots may be present. Top of embankment or berm elevations must be no less than design elevation plus any settlement allowances.
- XX 4. Top widths, berm widths, and embankment side slopes.
- XX 5. Show length, width and depth of facility or grading, contours or spot elevations as required to verify permanent pool and design storage volumes were met or were reasonably close to the approved design. Evaluation of as-built grading, contours, spot elevations, or cross-sections, may be necessary by the professional to ensure approved design configurations, depths and volumes were closely maintained. If grading or elevations are significantly different from the approved plan, the Engineering and Resource Protection Division shall be contacted immediately to determine whether the variation is acceptable or whether further evidence will be required. Facilities which do not closely resemble approved plan grades, elevations or configurations may require regrading by the Contractor; check volumetric computations; and/or a check hydraulic routing to ensure approved design water surface elevations, discharges or freeboard were closely maintained.

- XX 6. Cross-section of the embankment through the principal spillway or outlet barrel. Must extend at least 100 ft. downstream of the pipe outlet or to recorded site property line, whichever is closer. Proper correlation is required between principal spillway (control structure) crest, emergency spillway crest, orifice, and weirs and the top of the dam or facility. All elevations and dimensions must reasonably match the design plan or be sequentially relative to each other and the facility must reflect the required design storage volume(s) and/or design depth.
- NA 7. Profile or elevations along the entire centerline of the emergency spillway. Emergency spillway may be steeper, but no flatter or narrower than design.
- XX 8. Elevation of the principal spillway crest or outlet crest of the structure.
- NA 9. Primary control structure (riser) diameter or dimensions, height, type of material and base size. Indicate provisions for access that are present such as steps, ladders, etc.
- XX 10. Dimensions, locations and elevations of outlet orifices, weirs, slots and drains.
- NA 11. Type and size of anti-vortex and trash rack device. Height, diameter, dimensions, bar spacings (if applicable) and elevations relative to the principal spillway crest. Indicate if lockable hatch is present or not.
- NA 12. Type, location, size, and number of anti-seep collars or documentation of other methods utilized for seepage control. **May need to obtain this information during construction.**
- NA 13. Top of impervious core embankment, core trench limits and elevation of cut-off trench bottom. **May need to obtain this information during construction.**
- NA 14. Elevation of the principal spillway barrel (outlet pipe) inlet and outlet invert.
- NA 15. Outlet barrel diameter, length, slope, type, and thickness class of material and type of flared end sections, headwall or endwall.
- XX 16. Outfall protection dimension, type and depth of rock and if underlain filter fabric is present.
- XX 17. BMP interior and periphery landscaping zones conform with arrangements and requirements of the approved design plan.
- NA 18. Maintenance plan taken from approved design plan transposed onto record drawing set.
- NA 19. Fencing location and type, if applicable to facility.
- XX 20. BMP vicinity properly cleaned of stockpiles and construction debris.
- XX 21. No visual signs of erosion or channel degradation immediately downstream of facility.
- XX 22. Any other information formally requested by the Environmental Division specific to the constructed SWM/BMP facility.

STORMWATER MANAGEMENT/BMP FACILITIES
RECORD DRAWING CHECKLIST

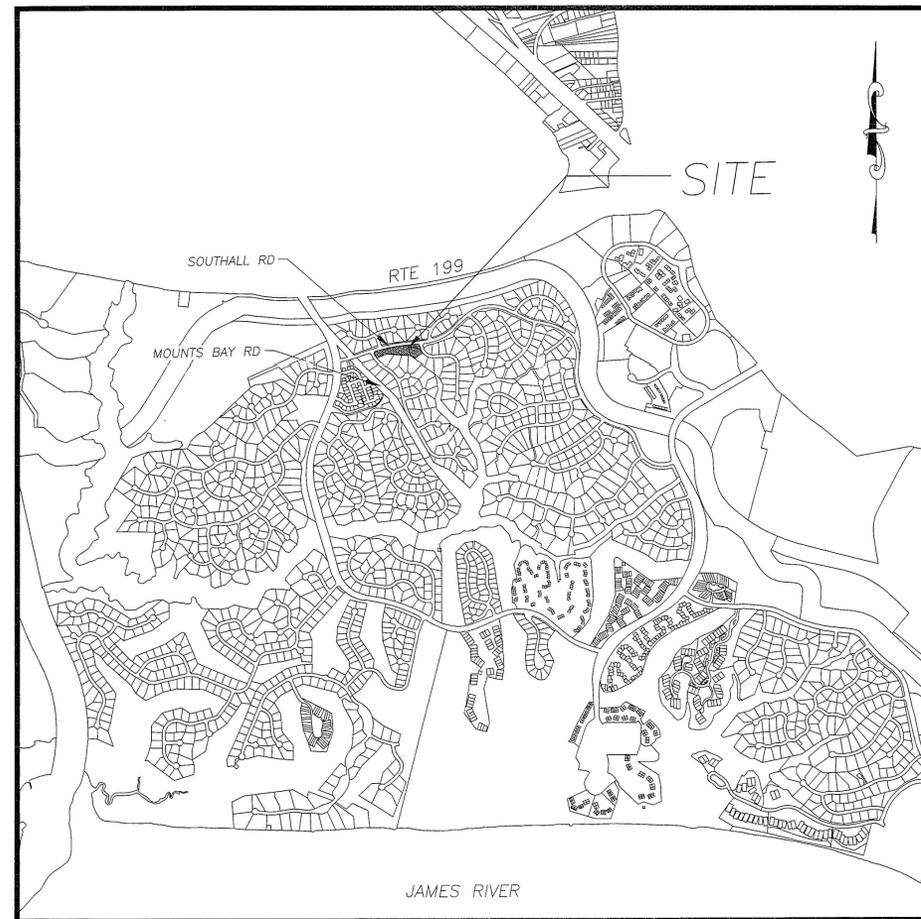
(Key for Checklist is as follows: XX Acceptable N/A Not Applicable Inc Incomplete)

VIII. Group F - Extended Dry Detention (Includes F-1 Timber Walls; and F-2 Dry Extended Detention with Forebay)

- XX F1. All requirements of Section II, Minimum Standards, apply to Group F facilities.
- XX F2. Basin bottom has positive slope and drainage from all basin inflow points to the riser (or outflow) location.
- XX F3. ~~Timber wall~~ ^{Gabron Basket} BMP used in intermittent stream only. (ie. Prohibited in perennial streams.)
- XX F4. Forebay provided approximately 20 ft. upstream of the facility. Forebays generally 4 to 6 feet in depth.
- NA F5. A reverse slope pipe, vertical stand pipe or mini-barrel and riser was provided to prevent clogging.
- NA F6. Principal spillway and outlet barrel provided consisting of reinforced concrete pipe with O-Ring gaskets for watertight joint construction.
- NA F7. Mini-barrel and riser, if used, contains a removable trash rack to reduce clogging.
- NA F8. Low flow orifice, if used, has a minimum diameter of three (3) inches or two (2) inches if internal orifice control was utilized and a small, cage type external trash rack.
- NA F9. Timbers properly reinforced or concrete footing provided if soil conditions were prohibitive.
- NA F10. Timber wall cross members extended to a minimum depth of two (2) feet below ground elevation.
- NA F11. Protection against erosion and scour from the low flow orifice and weir-flow trajectory provided.
- NA F12. Stilling basin or standard outlet protection provided at principal spillway outlet.
- XX F13. Adequate, direct access provided to the facility. Access corridor to facility is at least ten (10) feet wide; slope is less than twenty (20) percent and appropriate stabilization provided for equipment and vehicle use. Access extends to forebay, standpipe and timber wall, as applicable.
- XX F14. No visual signs of undercutting of timber walls or clogging of the low orifice were present.
- XX F15. No visual signs of erosion or channel degradation immediately downstream of facility.
- XX F16. No visible signs of accumulated silt/sediment were present in the facility following construction or alternately, accumulated silt/sediment was properly removed and no adverse affects to the function of the facility are anticipated.

Kingsmill On The James

DRAINAGE AS-BUILT FOR SOUTHALL ROAD CHANNEL MAINTENANCE & SLOPE STABILIZATION DESIGN / BUILD PROJECT



VICINITY MAP
SCALE: N.T.S.

SITE INFORMATION

PARCEL ID - 5010300012A
 - 5010300011A
 - 5010300100
 TOTAL AREA: 6,293 S.F. / 0.145 Ac.
 ZONING DISTRICT: R4
 DISTURBED AREA: 0.145± ACRES
 SITE IS PARTLY WOODED AS SHOWN.

GENERAL NOTES:

- 1) A TITLE REPORT HAS NOT BEEN FURNISHED TO THIS FIRM.
- 2) THIS FIRM MADE NO ATTEMPT TO VERIFY UNDERGROUND UTILITIES EXCEPT THOSE SHOWN.
- 3) TOPOGRAPHIC DATA AS SHOWN IS BASED ON A CURRENT FIELD SURVEY.
- 4) ELEVATIONS SHOWN ARE RELATIVE TO THE APPROVED SITE PLAN (NAVD 88).
- 5) (D) = DESIGN INFORMATION / (A) = AS-BUILT INFORMATION
- 6) PROPERTY LINES ARE SHOWN PER APPROVED SITE PLAN.

RECORD DRAWING CERTIFICATION:

I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE THAT THIS RECORD DRAWING REPRESENTS THE ACTUAL CONDITION OF THE STORMWATER MANAGEMENT / BMP FACILITY. THE FACILITY APPEARS TO CONFORM WITH THE PROVISIONS OF THE APPROVED DESIGN PLAN, SPECIFICATIONS AND STORMWATER MANAGEMENT PLAN, EXCEPT AS SPECIFICALLY NOTED.

Matthew H. Connolly
 MATTHEW H. CONNOLLY, LIC NO. 2053
 04/18/12
 DATE

Kingsmill On The James

DRAINAGE AS-BUILT FOR
 SOUTHALL ROAD CHANNEL MAINTENANCE
 & SLOPE STABILIZATION
 DESIGN / BUILD PROJECT

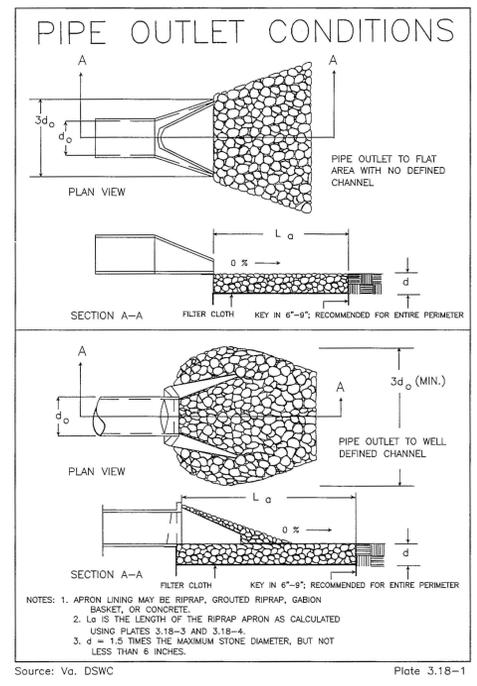
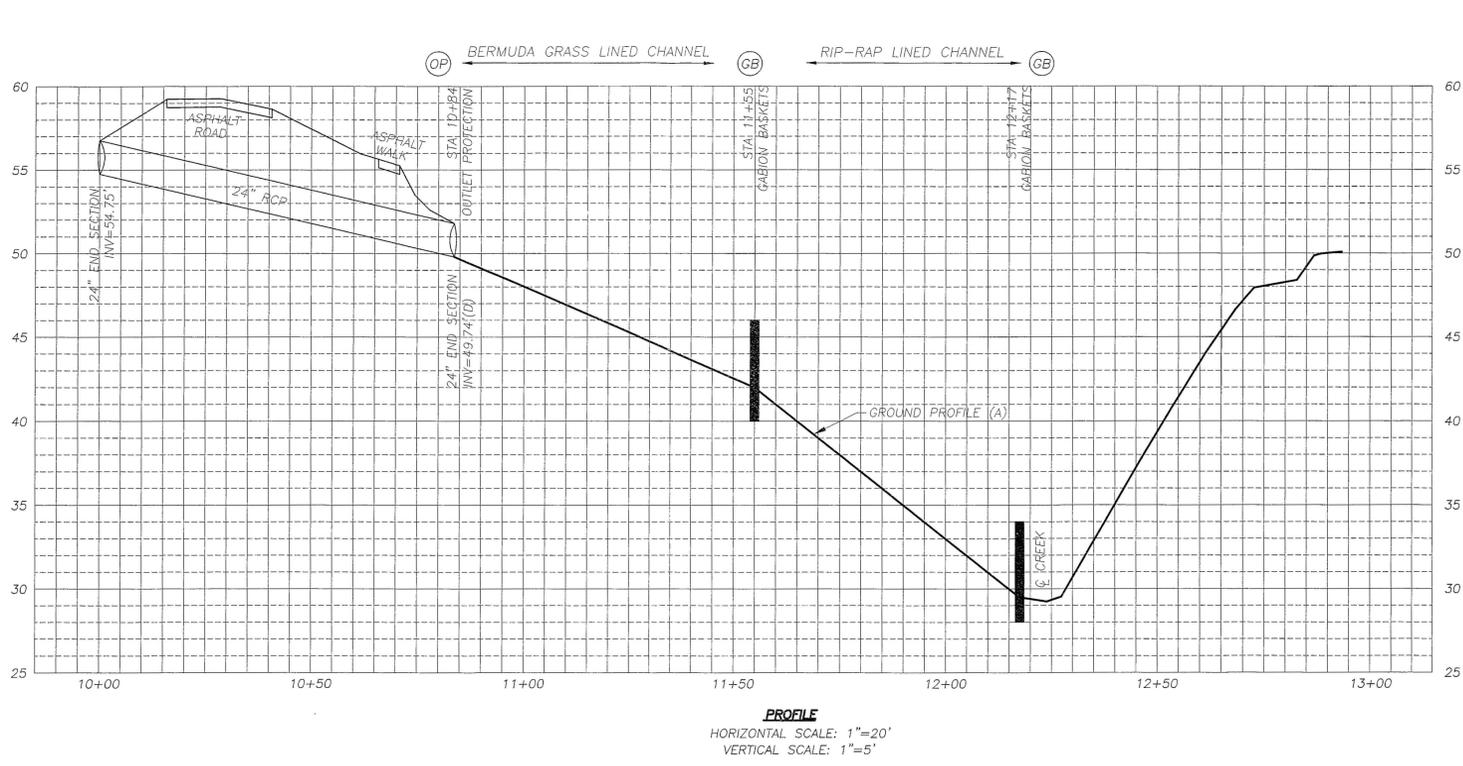
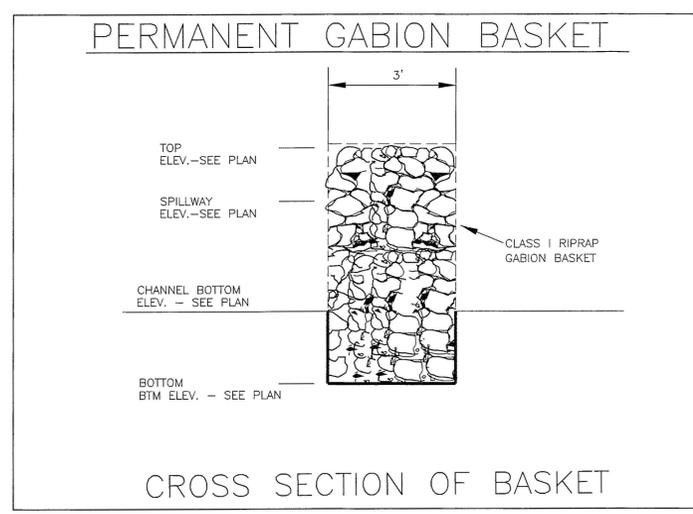
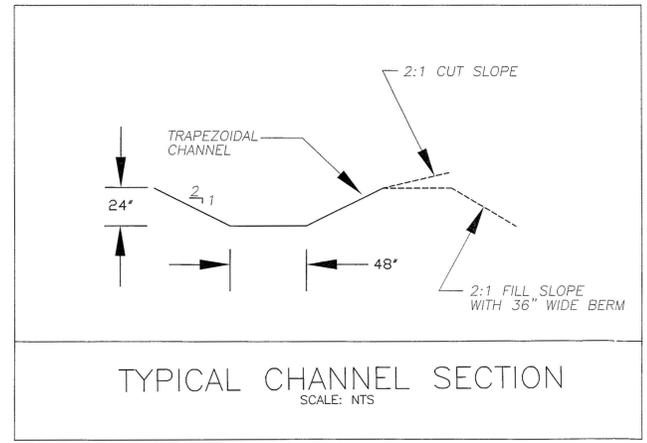
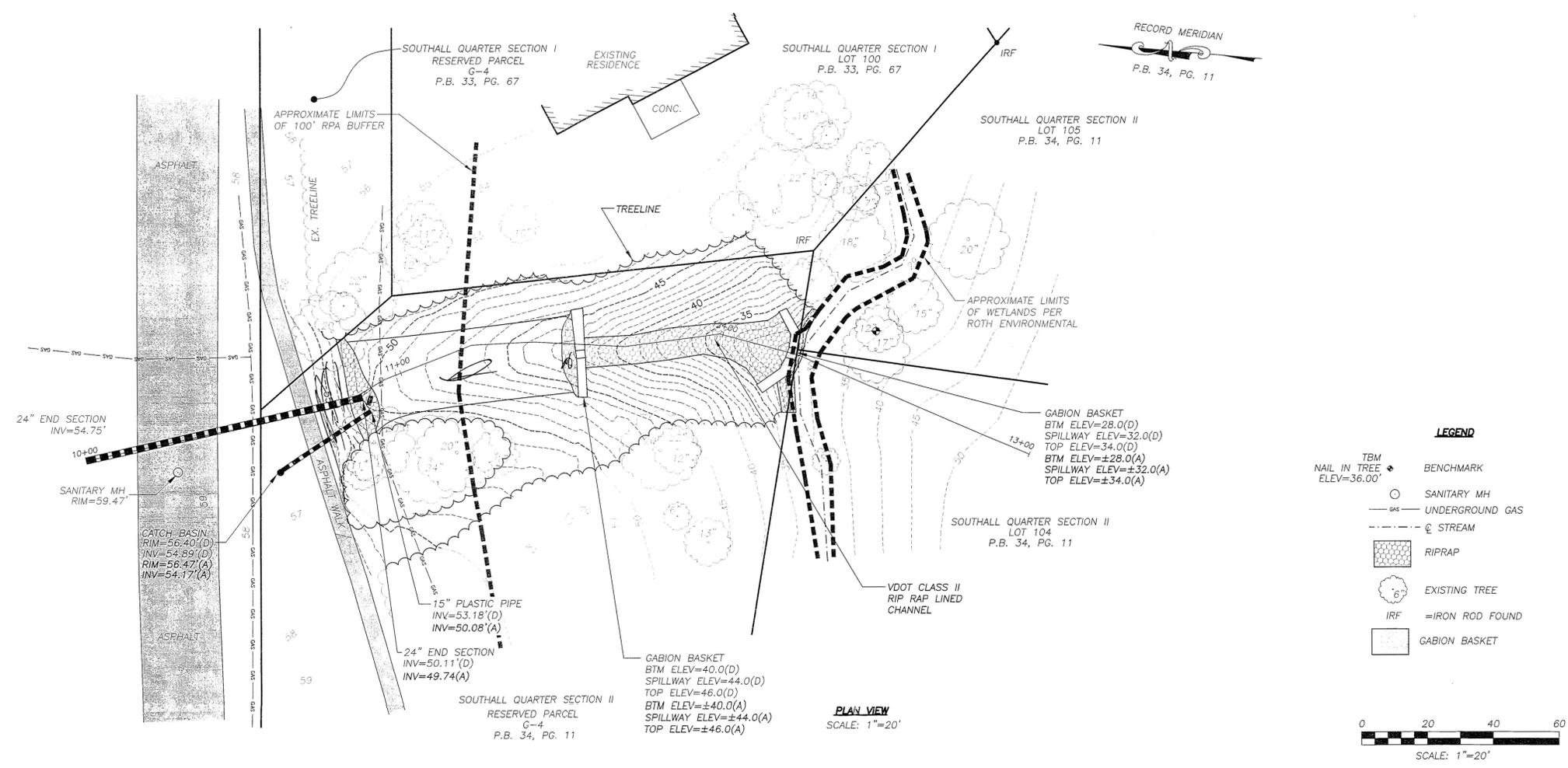
JAMES CITY COUNTY VIRGINIA

NO. DATE REVISION / COMMENT / NOTE



LandTech Resources, Inc.
 Surveying • GPS • Engineering
 205 Bullfants Blvd., Ste. E, Williamsburg, VA 23188
 Phone: (757) 565-1677 Fax: (757) 565-0782
 web: landtechresources.com

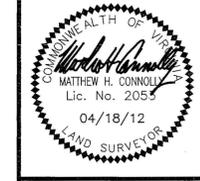
SCALE: 1" = 20'
 DATE: 04/18/12
 JOB: 11-306
 DRAWN BY: DMS
 SHEET: 1 OF 2



RECORD DRAWING CERTIFICATION:
 I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE THAT THIS RECORD DRAWING REPRESENTS THE ACTUAL CONDITION OF THE STORMWATER MANAGEMENT / BMP FACILITY. THE FACILITY APPEARS TO CONFORM WITH THE PROVISIONS OF THE APPROVED DESIGN PLAN, SPECIFICATIONS AND STORMWATER MANAGEMENT PLAN, EXCEPT AS SPECIFICALLY NOTED.

Matthew H. Conolly
 MATTHEW H. CONOLLY, LIC NO. 2053
 DATE: 04/18/12

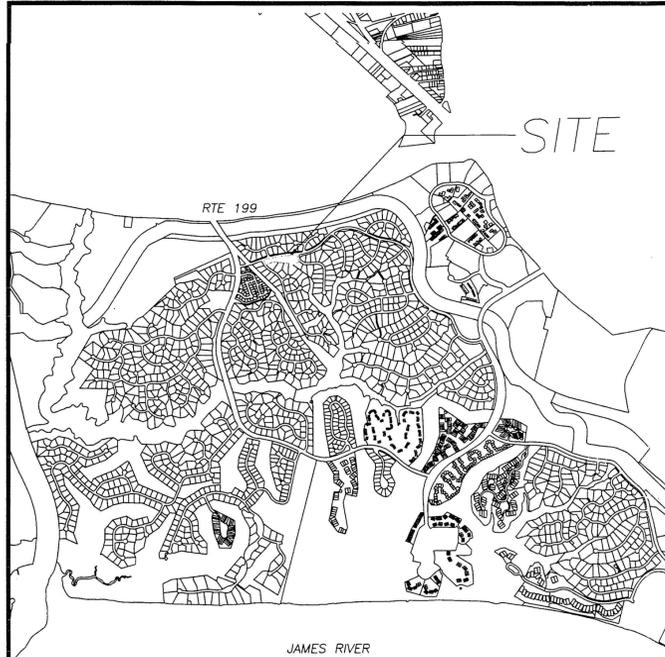
NO.	DATE	REVISION / COMMENT / NOTE



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 Phone: (757) 565-1677 Fax: (757) 565-0782
 web: landtechresources.com

Kingsmill On The James

SOUTHALL ROAD CHANNEL MAINTENANCE & SLOPE STABILIZATION DESIGN / BUILD PROJECT



SITE INFORMATION

PARCEL ID - 5010300012A
- 5010300011A
- 5010300100

TOTAL AREA: 7,153 S.F./0.164 Ac.

ZONING DISTRICT: R4

DISTURBED AREA: 0.22± ACRES

EXISTING SITE IS PARTLY WOODED AS SHOWN.

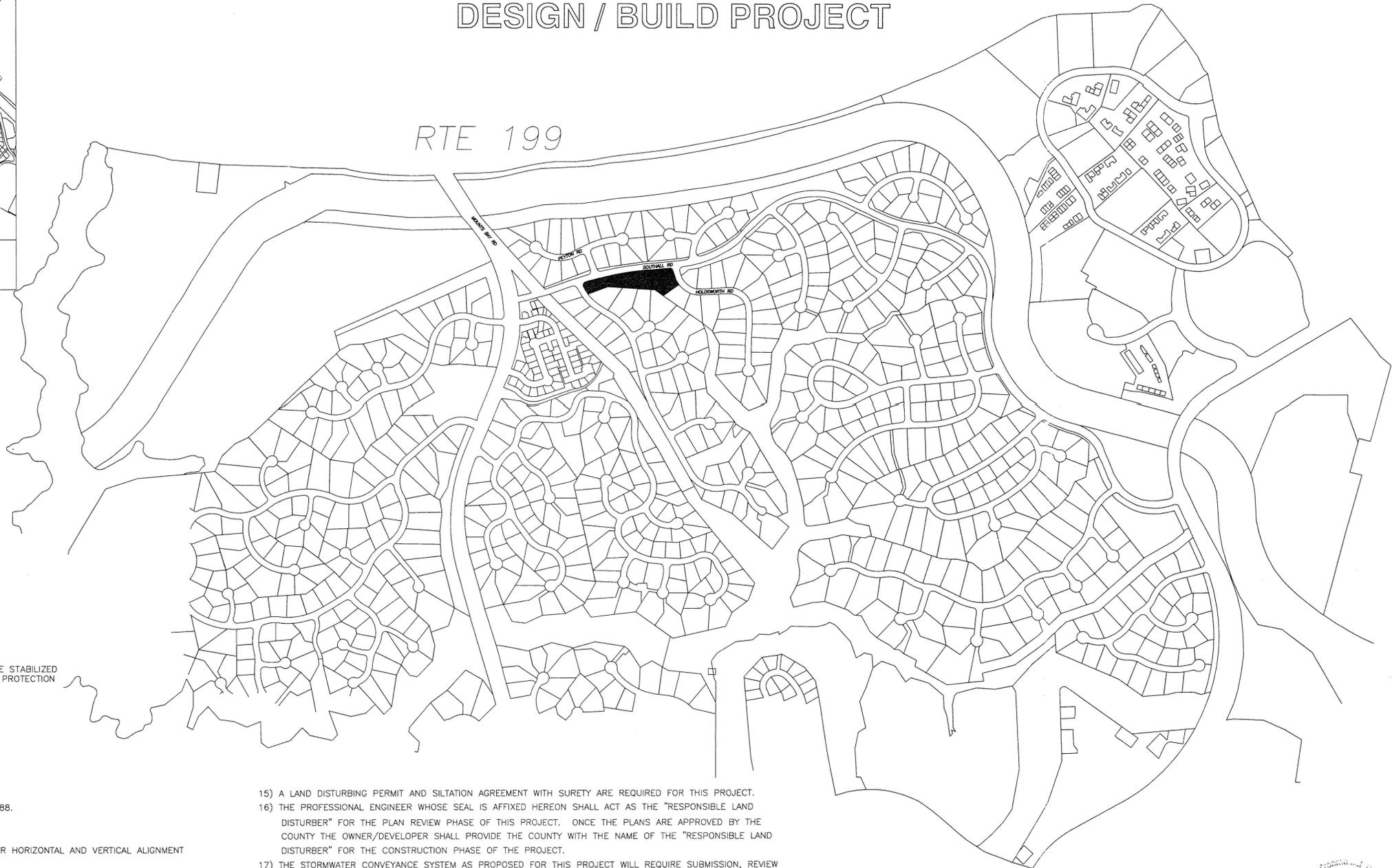
PROPOSED SEQUENCE OF CONSTRUCTION (TO BE VERIFIED BY CONTRACTOR):

- 1) CONTACT THE JCC ENGINEERING & RESOURCE MANAGEMENT DIVISION INSPECTOR 24 HOURS PRIOR TO ARRANGE A PRE-CONSTRUCTION MEETING.
- 2) INSTALL TEMPORARY E&S MEASURES IN ACCORDANCE WITH VESCH, LATEST EDITION.
- 3) CLEAR, GRUB & DISPOSE OF DESIGNATED TREES TO BE REMOVED.
- 4) EXECUTE EARTHWORK AND ROUGH / FINAL GRADING OPERATIONS.
- 5) INSTALL PYRAMAT HPTRM AND EROSION CONTROL MATS.
- 6) STABILIZE THE DISTURBED AREAS WITH A QUICK GERMINATING GRASS
- 7) ALL TEMPORARY E&S MEASURES WILL BE REMOVED AFTER ALL DISTURBED AREAS ARE STABILIZED AND AFTER RECEIVING APPROVAL TO DO SO BY THE JCC ENGINEERING & RESOURCE PROTECTION DIVISION.

GENERAL NOTES

- 1) A TITLE REPORT HAS NOT BEEN FURNISHED TO THIS FIRM.
- 2) THIS FIRM MADE NO ATTEMPT TO LOCATE ALL UNDERGROUND UTILITIES.
- 3) ELEVATIONS AS SHOWN HEREON ARE IN FEET AND ARE CLOSELY RELATED TO NAVD 88.
- 4) TOPOGRAPHIC, UTILITY, & TREE LOCATIONS ARE SHOWN AS LOCATED BY LANDTECH RESOURCES, INC.
- 5) CONTRACTOR IS REQUIRED TO HIRE A LICENSED LAND SURVEYOR TO ENSURE PROPER HORIZONTAL AND VERTICAL ALIGNMENT OF THE CHANNEL LANDTECH RESOURCES, INC.
- 6) CONTRACTOR IS TO COMPLY WITH ALL LOCAL BUILDING AND ENVIRONMENTAL CODES AND REGULATIONS.
- 7) PYRAMAT HIGH PERFORMANCE TURF REINFORCEMENT MAT (HPTRMs) AND ALL ASSOCIATED PRODUCTS ARE TO BE DELIVERED, STORED, HANDLED & STORED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND INSTALLATION INSTRUCTIONS.
- 8) BACKFILL MUST BE COMPACTED TO 90% STANDARD PROCTOR.
- 9) GROUND WATER MAY BE PRESENT WITHIN THE SOIL DUE TO SURFACE INFILTRATION OR WATER TABLE FLUCTUATION.
- 10) THE MAIN EROSION AND SEDIMENT CONTROL FOR THE PROJECT WILL BE SILT FENCE. THIS WILL BE INSTALLED PRIOR TO ANY LAND DISTURBANCE.
- 11) THE CONTRACTOR WILL MAINTAIN ALL DRAINAGE, EROSION AND SEDIMENT CONTROLS UNTIL THE DISTURBED AREAS ARE 75% STABILIZED.
- 12) CONTRACTOR IS TO REVEGETATE ALL DENUDED AREAS WITH STANDARD EC-3, TYPE A, SOIL STABILIZATION MAT, OR APPROVED EQUIVALENT.
- 13) CONTRACTOR IS TO LINE CHANNELS WITH PYRAMAT HPTRM AS DEPICTED IN THE TYPICAL CHANNEL DETAIL.
- 14) THE HOMEOWNER'S ASSOCIATION WILL BE RESPONSIBLE FOR OBTAINING ANY / ALL TEMPORARY CONSTRUCTION EASEMENTS.

- 15) A LAND DISTURBING PERMIT AND SILTATION AGREEMENT WITH SURETY ARE REQUIRED FOR THIS PROJECT.
- 16) THE PROFESSIONAL ENGINEER WHOSE SEAL IS AFFIXED HEREON SHALL ACT AS THE "RESPONSIBLE LAND DISTURBER" FOR THE PLAN REVIEW PHASE OF THIS PROJECT. ONCE THE PLANS ARE APPROVED BY THE COUNTY THE OWNER/DEVELOPER SHALL PROVIDE THE COUNTY WITH THE NAME OF THE "RESPONSIBLE LAND DISTURBER" FOR THE CONSTRUCTION PHASE OF THE PROJECT.
- 17) THE STORMWATER CONVEYANCE SYSTEM AS PROPOSED FOR THIS PROJECT WILL REQUIRE SUBMISSION, REVIEW AND APPROVAL OF A RECORD DRAWING (AS-BUILT) AND CONSTRUCTION CERTIFICATION PRIOR TO RELEASE OF THE POSTED BOND/SURETY. CONTRACTOR SHALL ENSURE THAT THESE ACTIVITIES ARE ADEQUATELY COORDINATED AND PERFORMED BEFORE, DURING AND FOLLOWING CONSTRUCTION IN ACCORDANCE WITH CURRENT COUNTY GUIDELINES.
- 18) THE OWNER WILL BE REQUIRED TO OBTAIN A VSMP PERMIT FROM THE VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION IF THE DISTURBED AREA IS GREATER THAN 2,500 SF. THIS PERMIT WILL REQUIRE A STORMWATER POLLUTION PREVENTION PLAN.
- 19) PER SOIL SURVEY OF JAMES CITY AND YORK COUNTIES AND THE CITY OF WILLIAMSBURG VIRGINIA THE ONSITE SOIL APPEARS TO BE EMPORIA COMPLEX (15E) WITH A SEVERE EROSION HAZARD AND EROSION FACTORS OF $K=0.20-0.28$ AND $T=4$.
- 20) THE SITE APPEARS TO BE IN FLOOD ZONE "X" PER FEMA MAP #51095C0210C, DATED 9/28/07.



Proj No: 2010-05158

Date: 08.19.2011

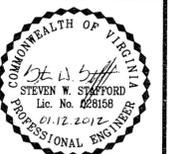
Drawn By: SWS

Sheet No: C1

CORNERSTONE DESIGN GROUP
Consulting Engineers
www.cdgrva.com

1311 Jamestown Road, Suite 102
Williamsburg, Virginia 23185
Phone: 1.757.564.8998
Fax: 1.757.564.8897

NO.	DATE	REVISION / COMMENT / NOTE
1	1/10/12	REV PER JCC LTR DTD 10/12/11



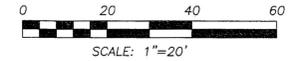
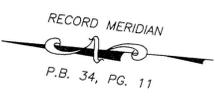
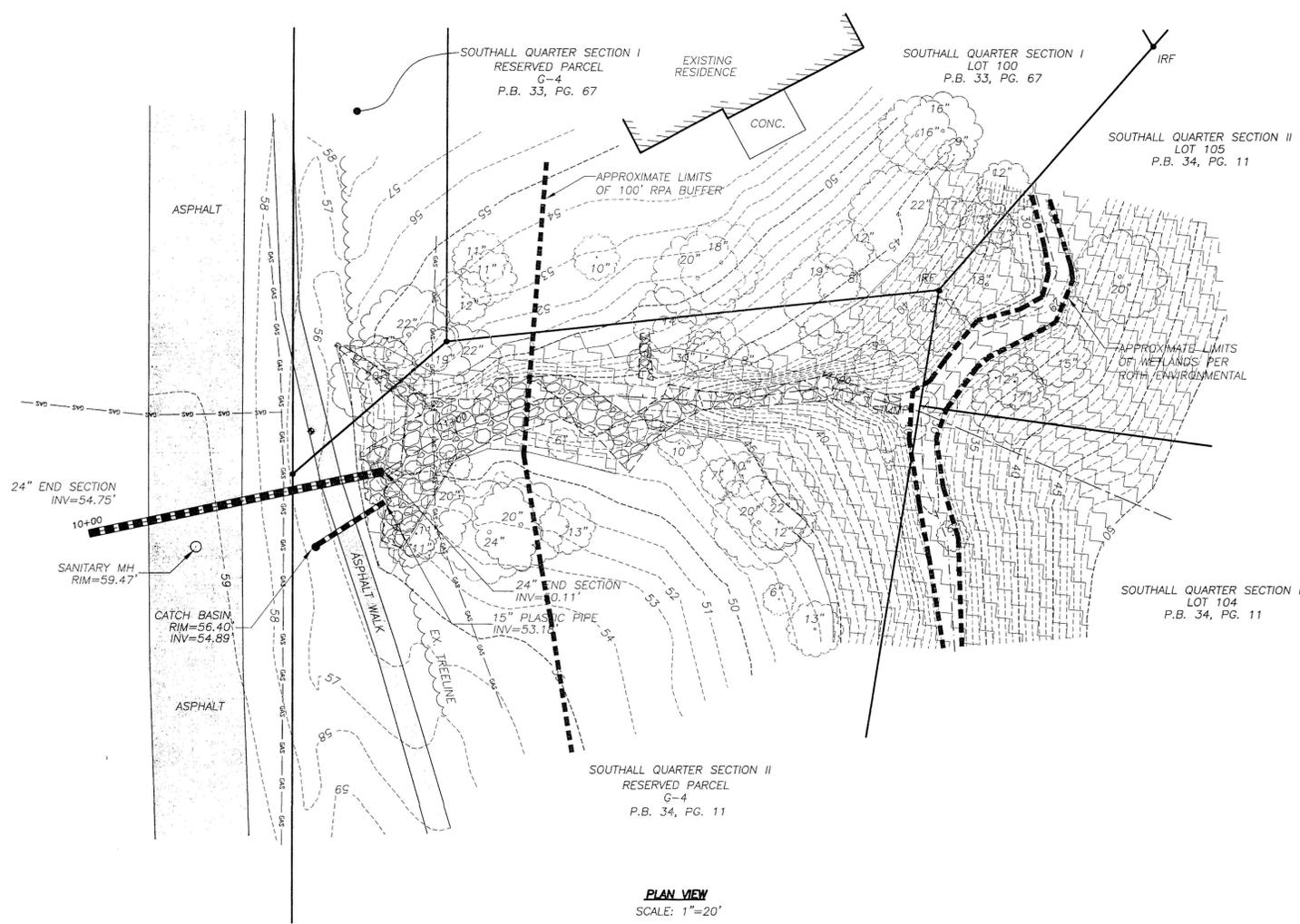
Kingsmill On The James
SOUTHALL ROAD CHANNEL MAINTENANCE
& SLOPE STABILIZATION PROJECT

RECEIVED
JAN 13 2012

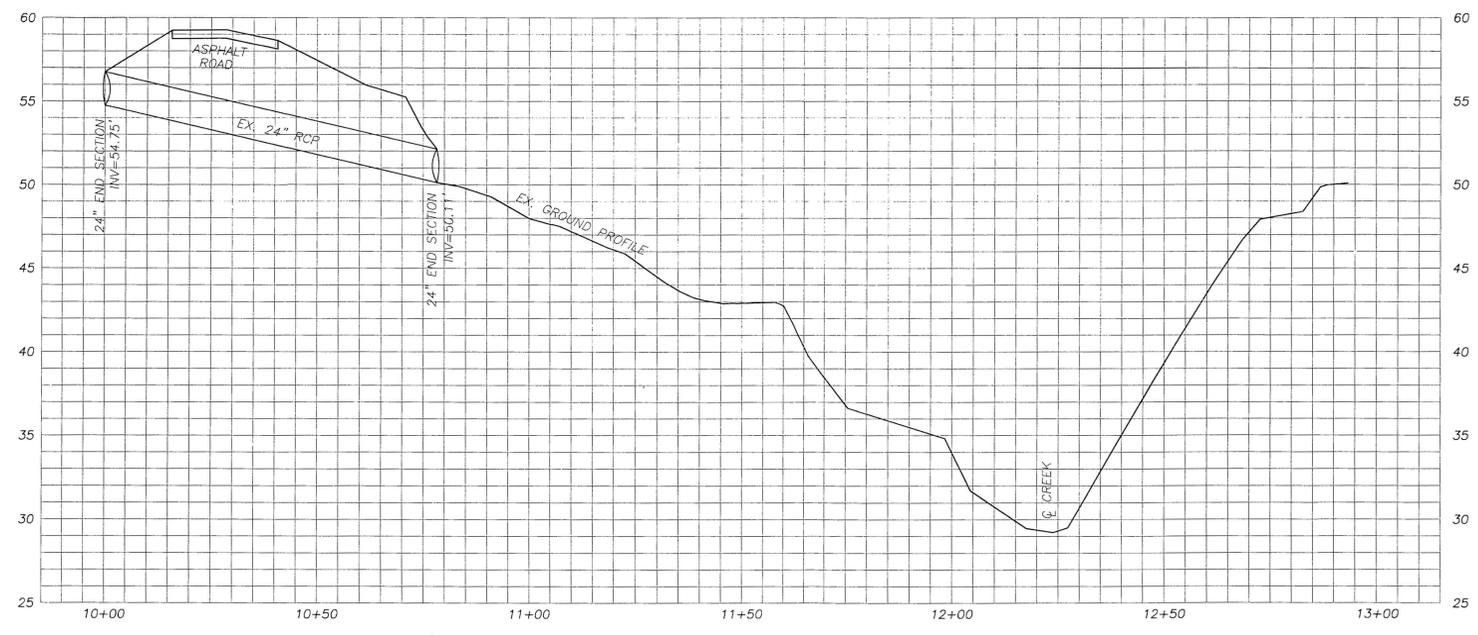
C1

BEFORE DIGGING CALL "MISS UTILITY"
OF VIRGINIA AT 1-800-552-7001

COVER SHEET



PLAN VIEW
 SCALE: 1"=20'



PROFILE
 HORIZONTAL SCALE: 1"=20'
 VERTICAL SCALE: 1"=5'

- LEGEND**
- TBM SURVEY NAIL ELEV=56.46' BENCHMARK
 - SANITARY MH
 - GAS UNDERGROUND GAS
 - SS UNDERGROUND SEWER
 - - - C STREAM
 - [Symbol] EXISTING RIPRAP
 - [Symbol] EXISTING TREE (APPROX. DIAMETER)
 - IRF = IRON ROD FOUND
 - [Symbol] 25% OR GREATER SLOPE

- NOTES:**
1. UNDERGROUND UTILITIES SHOWN ARE AS MARKED IN THE FIELD BY OTHERS.
 2. ELEVATIONS SHOWN HEREON ARE IN FEET AND ARE RELATIVE TO THE JCC GIS.
 3. PROPERTY LINES ARE SHOWN PER NOTED REFERENCES.

NO.	DATE	REVISION / COMMENT / NOTE
1	1/10/12	REV PER JCC LTR DTD 10/12/11



Kingsmill On The James
 BOULEVARD, ROAD CHANNEL MAINTENANCE
 IMPROVEMENT / BUILD PROJECT

C2

DEMOLITION NOTES:

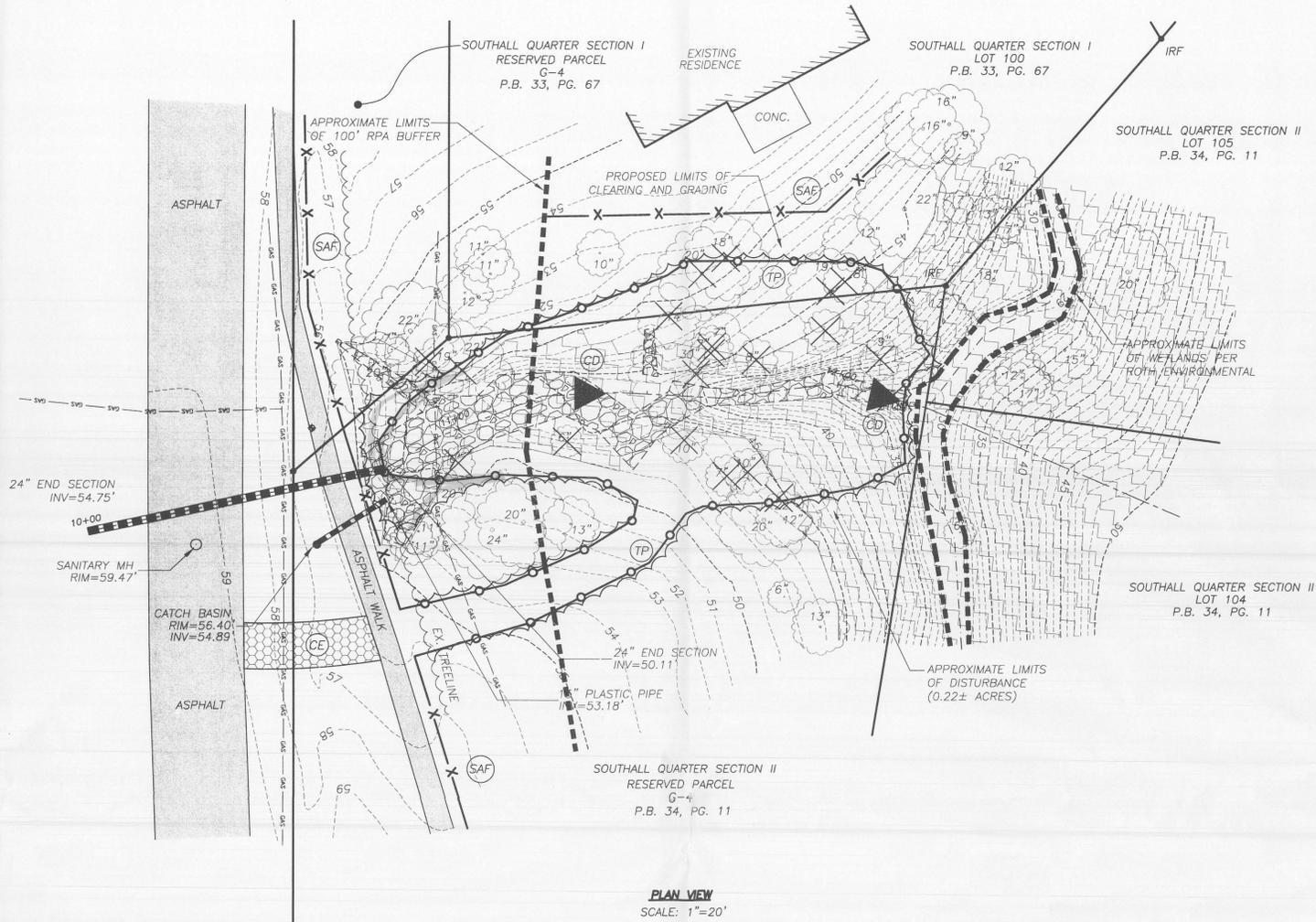
- UNLESS OTHERWISE INDICATED, DEMOLITION WASTE BECOMES PROPERTY OF CONTRACTOR.
- PROPERTY OWNER(S) WILL OCCUPY PORTIONS OF SITE IMMEDIATELY ADJACENT TO SELECTIVE DEMOLITION AREA. CONDUCT WORK SUCH THAT OWNER(S) OPERATIONS WILL NOT BE DISRUPTED.
- MAINTAIN EXISTING UTILITIES AND PROTECT THEM AGAINST DAMAGE DURING DEMOLITION AND CONSTRUCTION PROCESS.
- TRANSPORT DEMOLISHED MATERIALS OFF OWNER(S) PROPERTY AND LEGALLY DISPOSE OF THEM. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE FOR PERIODS LONGER THAN 72-HOURS.
- IF ANY UNANTICIPATED ELEMENTS THAT CONFLICT WITH INTENDED FUNCTION OR DESIGN ARE ENCOUNTERED, CONTACT CORNERSTONE DESIGN GROUP IMMEDIATELY.

ITEMS TO BE REMOVED:

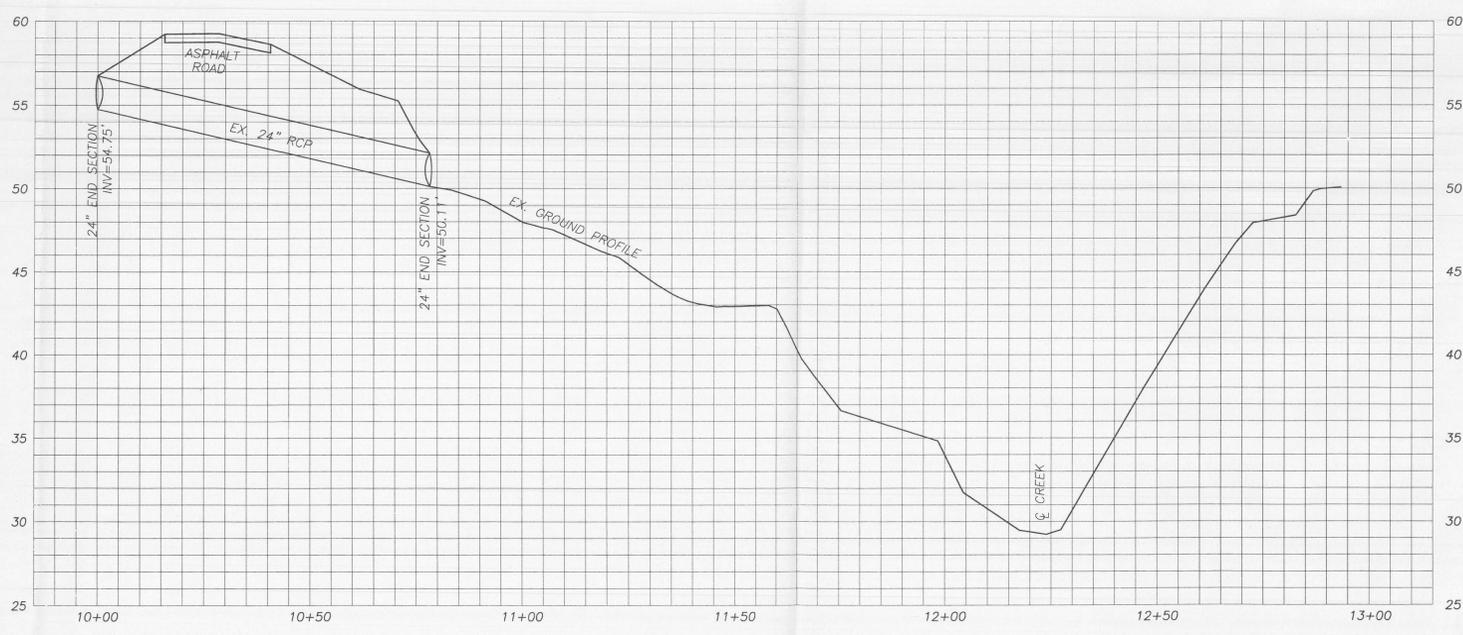
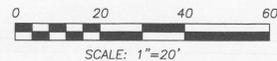
- REMOVE TREES WHICH ARE LABELED TO BE REMOVED.
- REMOVE RIPRAP MATERIALS.

LEGEND

TITLE	SYMBOL	KEY	NO.
SAFETY FENCE	X	SAF	3.01
CONSTRUCTION ENTRANCE	[Pattern]	CE	3.02
OUTLET PROTECTION	[Pattern]	OP	3.18
ROCK CHECK DAM	▶	CD	3.20
PERMANENT SEEDING	← PS →	PS	3.32
SOIL STABILIZATION BLANKETS & MATTING	[Pattern]	B/M	3.36
TREE PRESERVATION AND PROTECTION	○	TP	3.38



PERMANENT STABILIZATION
 ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH PERMANENT SEEDING IMMEDIATELY FOLLOWING FINISH GRADING. SEEDING SHALL BE DONE WITH KENTUCKY 31 TALL FESCUE ACCORDING TO STD. & SPEC. 3.32, "PERMANENT SEEDING", OF THE VESCH. EROSION BLANKETS WILL BE INSTALLED OVER FILL SLOPES WHICH HAVE BEEN BROUGHT TO FINAL GRADE AND HAVE BEEN SEEDED TO PROTECT THE SLOPES FROM RILL AND GULLY EROSION TO ALLOW THE SEED TO GERMINATE PROPERLY. MULCH (STRAW OR FIBER) WILL BE USED ON RELATIVELY FLAT AREAS. IN ALL SEEDING OPERATIONS, SEED, FERTILIZER, AND LIME WILL BE APPLIED PRIOR TO MULCHING. SOIL STABILIZATION MATTING TO BE VESCH TYPICAL TREATMENT-1 (JUTE MESH).



LEGEND

TBM SURVEY NAIL, ELEV=56.46'	BENCHMARK
○	SANITARY MH
— GAS —	UNDERGROUND GAS
— SS —	UNDERGROUND SEWER
- - - C	STREAM
[Pattern]	EXISTING RIPRAP
○	EXISTING TREE
IRF	=IRON ROD FOUND
⊗	EXISTING TREE TO BE REMOVED
[Pattern]	25% OR GREATER SLOPE

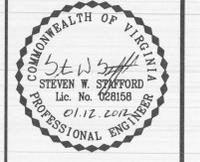
- NOTES:**
- UNDERGROUND UTILITIES SHOWN ARE AS MARKED IN THE FIELD BY OTHERS.
 - ELEVATIONS SHOWN HEREON ARE IN FEET AND ARE RELATIVE TO THE JCC GIS.
 - PROPERTY LINES ARE SHOWN PER NOTED REFERENCES.

BEFORE DIGGING CALL "MISS UTILITY" OF VIRGINIA AT 1-800-552-7001 DEMOLITION PLAN

Proj No: 2010-05158
 Date: 08.19.2011
 Drawn By: SWS
 Sheet No: C3

CORNERSTONE DESIGN GROUP
 Consulting Engineers
 www.cdgrva.com
 1311 Jamestown Road, Suite 102
 Williamsburg, Virginia 23185
 Phone: 1.757.564.8898
 Fax: 1.757.564.8897

NO.	DATE	REVISION / COMMENT / NOTE
1	1/10/12	REV PER JCC LTR DTD 10/12/11



Kingsmill On The James
 SOUTHALL ROAD CHANNEL BANK STABILIZATION & SLOPE STABILIZATION DESIGN / FIELD PRODUCT

C3

GENERAL EROSION AND SEDIMENT CONTROL NOTES

JAMES CITY COUNTY ENVIRONMENTAL DIVISION

REVISED 10/1/09

THE PURPOSE OF THE EROSION CONTROL MEASURES SHOWN ON THESE PLANS SHALL BE TO PRECLUDE THE TRANSPORT OF ALL WATERBORNE SEDIMENTS RESULTING FROM CONSTRUCTION ACTIVITIES FROM ENTERING ONTO ADJACENT PROPERTIES OR STATE WATERS. IF FIELD INSPECTION REVEALS THE INADEQUACY OF THE PLAN TO CONFINE SEDIMENTS TO THE PROJECT SITE ALL APPROPRIATE MODIFICATIONS WILL BE MADE TO CORRECT ANY PLAN DEFICIENCIES. IN ADDITION TO THESE NOTES, ALL PROVISIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS WILL APPLY TO THIS PROJECT.

1. ALL THE PROVISIONS OF VIRGINIA EROSION AND SEDIMENT CONTROL LAW AND REGULATIONS, MINIMUM STANDARDS, HANDBOOKS, AND TECHNICAL BULLETINS AS PUBLISHED BY THE VIRGINIA SOIL AND WATER CONSERVATION BOARD AND/OR THE VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION, DIVISION OF SOIL AND WATER CONSERVATION SHALL APPLY TO THE PROJECT.

2. MINIMUM STANDARDS #1 THROUGH #19 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS (4VAC50-30-40) SHALL APPLY TO THE PROJECT.

3. THE OWNER OR APPLICANT SHALL BE RESPONSIBLE TO REGISTER FOR COVERAGE UNDER THE GENERAL PERMIT FOR DISCHARGE OF STORMWATER FROM CONSTRUCTION ACTIVITIES, IN ACCORDANCE WITH CURRENT REQUIREMENTS OF THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSM) AND THE VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION.

4. THE OWNER OR APPLICANT SHALL PROVIDE THE NAME OF AN INDIVIDUAL HOLDING A VALID RESPONSIBLE LAND DISTURBER (RLD) CERTIFICATE OF COMPETENCE WHO WILL BE RESPONSIBLE FOR THE LAND-DISTURBING ACTIVITY PRIOR TO ENGAGING IN THE LAND-DISTURBING ACTIVITY. THIS WILL BE NECESSARY PRIOR TO ISSUANCE OF A LAND-DISTURBING PERMIT FOR THE PROJECT. THE RLD IS REQUIRED TO ATTEND THE PRECONSTRUCTION CONFERENCE FOR THE PROJECT.

5. THE CONTRACTOR IS RESPONSIBLE TO CONTACT MISS UTILITY (DIAL 811 IN VA OR 1-800-552-7001) PRIOR TO ANY UTILITY OR SITE WORK EXCAVATIONS.

6. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PLANNED, DESIGNED, IMPLEMENTED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH). THE CONTRACTOR SHALL MAINTAIN, INSPECT AND REPAIR ALL EROSION AND SEDIMENT CONTROL MEASURES AS NEEDED THROUGHOUT THE LIFE OF THE PROJECT TO ENSURE CONTINUED ACCEPTABLE PERFORMANCE.

7. A PRECONSTRUCTION CONFERENCE (MEETING) SHALL BE HELD ON SITE BETWEEN THE COUNTY ENVIRONMENTAL DIVISION, THE OWNER-APPLICANT, THE RESPONSIBLE LAND-DISTURBER (RLD), THE CONTRACTOR AND OTHER RESPONSIBLE AGENCIES, AS APPLICABLE, PRIOR TO ISSUANCE OF A LAND-DISTURBING PERMIT. THE OWNER OR APPLICANT IS REQUIRED TO COORDINATE SCHEDULING OF THE PRECONSTRUCTION CONFERENCE BETWEEN ALL APPLICABLE PARTIES. THE CONTRACTOR SHALL SUBMIT A SEQUENCE OF CONSTRUCTION TO THE COUNTY ENVIRONMENTAL DIVISION FOR REVIEW AND APPROVAL PRIOR TO THE PRECONSTRUCTION MEETING.

8. ALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.

9. ADDITIONAL SAFETY FENCE OR DUST CONTROL MEASURES, IN ACCORDANCE WITH THE PROVISIONS OF MINIMUM STANDARDS & SPEC. 3.01 AND 3.39 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH), MAY BE REQUIRED TO BE IMPLEMENTED IN ADDITION TO THAT SHOWN ON THE APPROVED PLAN IN ORDER TO ENSURE ADEQUATE PROTECTION OF THE HEALTH, SAFETY AND WELFARE OF THE PUBLIC OR IF SITE CONDITIONS CHANGE, BECOME APPARENT OR ALTER SIGNIFICANTLY FOLLOWING THE DATE OF PLAN APPROVAL.

10. EROSION AND SEDIMENT CONTROL MEASURES MAY REQUIRE MINOR FIELD ADJUSTMENTS AT OR FOLLOWING TIME OF CONSTRUCTION TO ENSURE THEIR INTENDED PURPOSE IS ACCOMPLISHED, TO ENSURE ADEQUATE PROTECTION OF THE HEALTH, SAFETY AND WELFARE OF THE PUBLIC, OR IF SITE CONDITIONS CHANGE, BECOME APPARENT OR ALTER SIGNIFICANTLY FOLLOWING THE DATE OF PLAN APPROVAL. COUNTY ENVIRONMENTAL DIVISION APPROVAL SHALL BE REQUIRED FOR ANY DEVIATION OF EROSION AND SEDIMENT CONTROL MEASURES FROM THE APPROVED PLAN.

11. OFF-SITE WASTE OR BORROW AREAS SHALL BE APPROVED BY THE COUNTY ENVIRONMENTAL DIVISION PRIOR TO THE IMPORT OF ANY BORROW OR EXPORT OF ANY WASTE TO OR FROM THE PROJECT SITE.

12. CULVERT AND STORM DRAIN INLET PROTECTIONS, IN ACCORDANCE WITH THE PROVISIONS OF MINIMUM STANDARDS & SPEC. 3.07 AND 3.08 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH), MAY BE REMOVED AT THE DISCRETION OF THE ASSIGNED COUNTY ENVIRONMENTAL DIVISION INSPECTOR SHOULD PLACEMENT OF THE MEASURE RESULT IN EXCESSIVE ROAD FLOODING OR TRAFFIC HAZARD OR RESULT IN THE REDIRECTION OF DRAINAGE ONTO OR TOWARD EXISTING LOTS, DRIVEWAYS OR STRUCTURES. DECISIONS SHALL BE MADE ON A CASE-BY-CASE BASIS BASED IN FIELD SITUATIONS ENCOUNTERED.

13. DRAINAGE FACILITIES SHALL BE INSTALLED AND FUNCTIONAL WITHIN 30 DAYS FOLLOWING COMPLETION OF ROUGH GRADING AT ANY POINT WITHIN THE PROJECT.

14. NO MORE THAN 300 FEET OF TRENCH MAY BE OPEN AT ONE TIME FOR UNDERGROUND UTILITY LINES, INCLUDING STORM WATER CONVEYANCES. ALL OTHER PROVISIONS OF MINIMUM STANDARD #16 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS APPLY.

15. IF DISTURBED AREA STABILIZATION IS TO BE ACCOMPLISHED DURING THE MONTHS OF DECEMBER, JANUARY OR FEBRUARY, STABILIZATION SHALL CONSIST OF MULCHING IN ACCORDANCE WITH MINIMUM STANDARD & SPEC. 3.35 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH). SEEDING WILL THEN TAKE PLACE AS SOON AS THE SEASON PERMITS.

16. THE TERM SEEDING, FINAL VEGETATIVE COVER OR STABILIZATION ON THE APPROVED PLAN SHALL MEAN THE SUCCESSFUL GERMINATION AND ESTABLISHMENT OF A STABLE GRASS COVER FROM A PROPERLY PREPARED SEEDBED, IN ACCORDANCE WITH MINIMUM STANDARDS & SPECS. 3.29 THROUGH 3.37 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH), AS APPLICABLE. IRRIGATION, IF NECESSARY, SHALL COMPLY WITH ALL APPLICABLE OUTDOOR WATER USE RESTRICTIONS OF THE JAMES CITY SERVICE AUTHORITY.

17. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL NOT BE REMOVED UNTIL ALL DISTURBED AREAS ARE STABILIZED. REMOVAL SHALL NOT OCCUR WITHOUT AUTHORIZATION BY THE COUNTY ENVIRONMENTAL DIVISION. DISTURBANCES ASSOCIATED WITH THE REMOVAL OF TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROPERLY STABILIZED.

18. NO SEDIMENT TRAP OR SEDIMENT BASIN SHALL BE REMOVED UNTIL A) AT LEAST 75 PERCENT OF THE SINGLE-FAMILY LOTS WITHIN THE DRAINAGE AREA TO THE TRAP OR BASIN HAVE BEEN SOLD TO A THIRD PARTY FOR THE CONSTRUCTION OF HOMES (UNRELATED TO THE DEVELOPER, AND/OR, B) 60 PERCENT OF THE SINGLE-FAMILY LOTS WITHIN THE DRAINAGE AREA TO THE TRAP OR BASIN ARE COMPLETED AND STABILIZED. A BULK SALE OF THE LOTS TO ANOTHER BUILDER DOES NOT SATISFY THIS PROVISION. SEDIMENT TRAPS AND SEDIMENT BASINS SHALL NOT BE REMOVED WITHOUT AUTHORIZATION OF THE COUNTY ENVIRONMENTAL DIVISION.

19. APPLICABLE PROVISIONS OF THE COUNTY BMP MANUAL (JAMES CITY COUNTY GUIDELINES FOR DESIGN AND CONSTRUCTION OF STORMWATER MANAGEMENT BMPs) AND THE VIRGINIA STORMWATER MANAGEMENT HANDBOOK (VSMH) APPLY TO THE PROJECT.

20. DESIGN AND CONSTRUCTION OF PRIVATE-TYPE SITE DRAINAGE SYSTEMS OUTSIDE VDOT RIGHTS-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT VERSION OF THE JAMES CITY COUNTY ENVIRONMENTAL DIVISION, STORMWATER DRAINAGE CONVEYANCE SYSTEMS, (NON-BMP RELATED), GENERAL DESIGN AND CONSTRUCTION GUIDELINES.

21. RECORD DRAWINGS (AS-BUILTS) AND CONSTRUCTION CERTIFICATIONS ARE REQUIRED FOR ALL STORMWATER FACILITIES INCLUDING STORMWATER MANAGEMENT/BMP FACILITIES AND STORM DRAINAGE CONVEYANCE SYSTEMS. RECORD DRAWINGS AND CONSTRUCTION CERTIFICATIONS MUST MEET ESTABLISHED PROGRAM REQUIREMENTS OF BOTH THE COUNTY ENVIRONMENTAL AND STORMWATER DIVISIONS.

22. ALL STORMWATER FACILITIES INCLUDING BMPs, STORM DRAINAGE PIPES, STORMWATER CONVEYANCES, INLETS, MANHOLES, OUTFALLS AND ROADSIDE AND OTHER OPEN CHANNELS SHALL BE INSPECTED BY THE COUNTY STORMWATER DIVISION AND GEOTECHNICAL ENGINEER IN ADVANCE IN ACCORDANCE WITH ESTABLISHED COUNTY STORMWATER DIVISION PROGRAM REQUIREMENTS.

TABLE 3.32-D
SITE SPECIFIC SEEDING MIXTURES FOR COASTAL PLAIN AREA

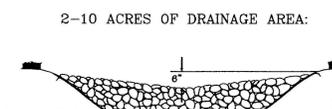
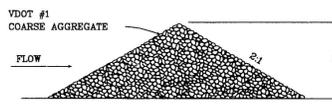
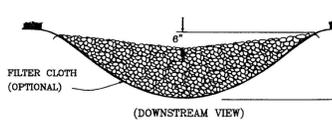
MIXTURE	TOTAL LBS. PER ACRE
MINIMUM CARE LAWN - COMMERCIAL OR RESIDENTIAL - KENTUCKY 31 ER TURF-TYPE TALL FESCUE - COMMON BERMUDAGRASS ***	125-200 LBS. 75 LBS.
HIGH-MAINTENANCE LAWN - KENTUCKY 31 ER TURF-TYPE TALL FESCUE - HYBRID BERMUDAGRASS (SEED) ***	40 LBS. (UNHULLED) 30 LBS. (HULLED)
GENERAL SLOPE (3:1 OR LESS) - KENTUCKY 31 FESCUE - RED TOP GRASS - SEASONAL NURSE CROP *	128 LBS. 2 LBS. 20 LBS. 150 LBS.
LDV MAINTENANCE SLOPE (STEEPER THAN 3:1) - KENTUCKY 31 TALL FESCUE - COMMON BERMUDAGRASS *** - RED TOP GRASS - SEASONAL NURSE CROP * - SERICHA LESPEDEZA ***	93-108 LBS. 9-15 LBS. 20 LBS. 20 LBS. 150 LBS.

* USE SEASONAL NURSE CROP IN ACCORDANCE WITH SEEDING DATES AS STATED BELOW:
FEBRUARY, MARCH THROUGH APRIL ANNUAL RYE
MAY 1ST THROUGH AUGUST FXTAL MILLET
SEPTEMBER, OCTOBER THROUGH NOVEMBER 15TH ANNUAL RYE
NOVEMBER 16TH THROUGH JANUARY WINTER RYE

** MAY THROUGH OCTOBER, USE HULLED SEED. ALL OTHER SEEDING PERIODS, USE UNHULLED SEED. WEEPING LOVEGRASS MAY BE ADDED TO ANY SLOPE OR LDV MAINTENANCE MIX DURING WARM SEEDING PERIODS; ADD 10-20 LBS./ACRE IN MIXES.

TEMPORARY ROCK CHECK DAM

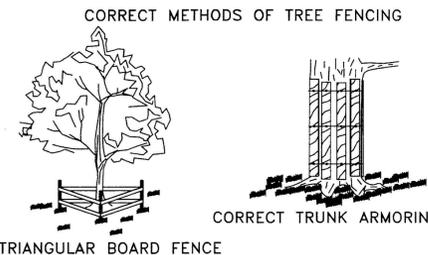
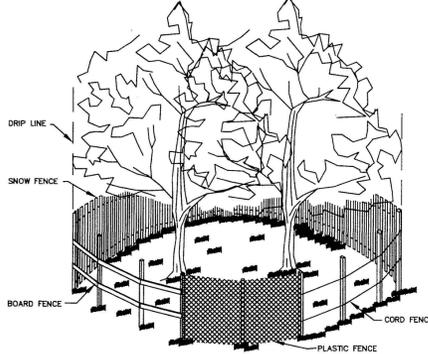
2 ACRES OR LESS OF DRAINAGE AREA:



*** USE SEASONAL NURSE CROP IN ACCORDANCE WITH SEEDING DATES AS STATED BELOW:
FEBRUARY, MARCH THROUGH APRIL ANNUAL RYE
MAY 1ST THROUGH AUGUST FXTAL MILLET
SEPTEMBER, OCTOBER THROUGH NOVEMBER 15TH ANNUAL RYE
NOVEMBER 16TH THROUGH JANUARY WINTER RYE

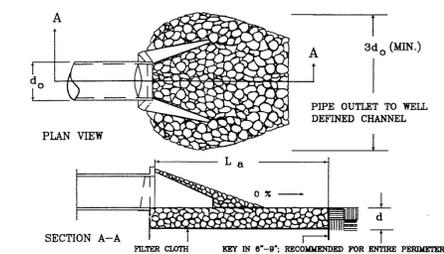
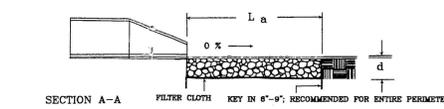
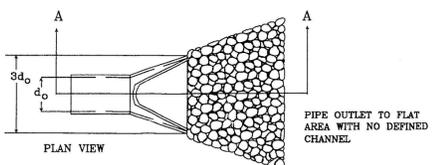
** MAY THROUGH OCTOBER, USE HULLED SEED. ALL OTHER SEEDING PERIODS, USE UNHULLED SEED. WEEPING LOVEGRASS MAY BE ADDED TO ANY SLOPE OR LDV MAINTENANCE MIX DURING WARM SEEDING PERIODS; ADD 10-20 LBS./ACRE IN MIXES.

FENCING AND ARMORING



Source: Va. DSWC Plate 3.38-2

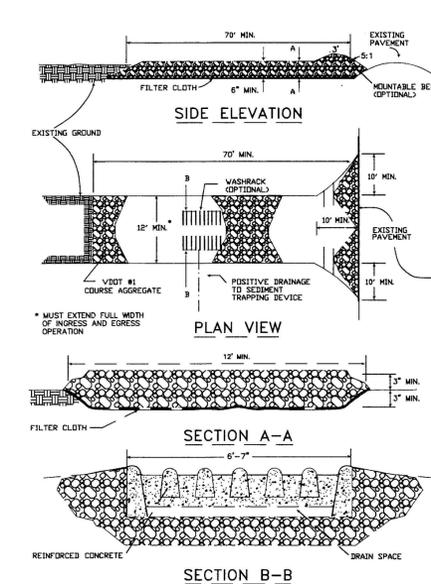
PIPE OUTLET CONDITIONS



NOTES: 1. APRON LINING MAY BE RIPRAP, GROUTED RIPRAP, GABION BASKET, OR CONCRETE.
2. L_a IS THE LENGTH OF THE RIPRAP APRON AS CALCULATED USING PLATES 3.18-3 AND 3.18-4.
3. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER, BUT NOT LESS THAN 6 INCHES.

Source: Va. DSWC Plate 3.18-1

STONE CONSTRUCTION ENTRANCE



Source: ADAPTED FROM 1983 Maryland Standards for Soil Erosion and Sediment Control, and Va. DSWC

SAFETY FENCE

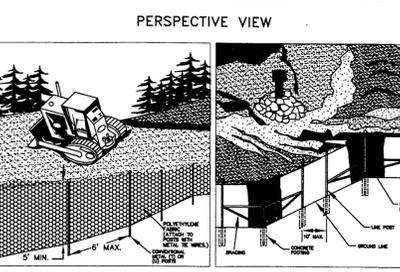
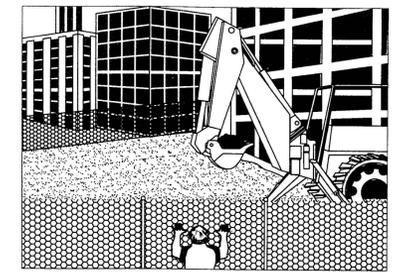
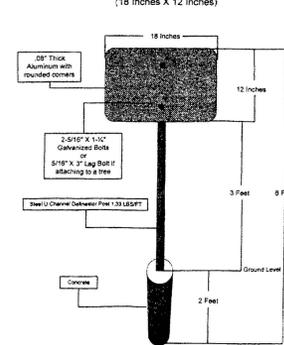


PLATE 3.1-1

James City County RPA/CONSERVATION EASEMENT SIGN INSTALLATION GUIDELINES



JCC RPA/CONSERVATION EASEMENT SIGN GUIDELINES

- SIGNS AND POSTS SHALL BE OF MATERIAL THAT IS DURABLE, WEATHERPROOF AND ABLE TO WITHSTAND VANDALISM.
- SIGNS SHALL BE 12" HIGH X 18" WIDE OR 4" HIGH X 8" WIDE DEPENDING ON LOCATION, SITE, AND SPECIFIC SUBMITTALS ARE REQUIRED.
- SIGNS SHALL CONTAIN COUNTY STANDARD MESSAGE AND LETTERING; MESSAGES SHALL BE WATERPROOF, EASEMENT, AND RPA SPECIFIC.
- SIGN BLANKS SHALL BE 0.04" THICK ALUMINUM WITH ROUNDED CORNERS (R34°).
- BLANKS SHALL BE SPRAY PAINTED BOTH SIDES WITH GREEN ACRYLIC AUTOMOTIVE ENAMEL PAINT (ONE SIDE).
- JCC STD MESSAGE SHALL BE PAINTED WITH WHITE ENAMEL INK.
- SIGNS SHALL BE DRILLED WITH 5/8" HOLES TOP AND BOTTOM.
- POSTS SHALL BE STEEL U CHANNEL DELINEATOR POSTS WEIGHING 1.33 LBS./FT.
- POSTS SHALL BE PAINTED WITH GREEN ACRYLIC AUTOMOTIVE ENAMEL PAINT (ONE SIDE OR GALVANIZED).
- POSTS SHALL BE PUNCHED W/3/8" HOLES ON 1" CENTERS FULL LENGTH.
- SIGN MOUNTING HEIGHT SHALL BE 1 FT TO 4 FT ABOVE GROUND DEPENDING ON LOCATION, SITE SPECIFIC HORIZONTAL SIGN LOCATIONS AND PLACEMENT SHALL BE IN ACCORDANCE WITH APPROVED PLAN. SUBMITTALS ARE REQUIRED.
- POSTS SHALL BE DRIVEN INTO THE GROUND 2 FT.
- SIGNS SHALL BE ATTACHED TO POSTS WITH 1/4" X 1-1/2" GALVANIZED BOLTS.
- SIGNS MAY BE MOUNTED ON TREES NOT LESS THAN 12" IN DIAMETER USING 3/4" X 3" GALVANIZED LAG SCREWS.

DEVIATIONS FROM THESE GUIDELINES MAY BE REQUESTED IN WRITING TO THE DEPARTMENT OF DEVELOPMENT MANAGEMENT.

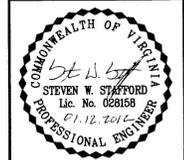
SUGGESTED RPA SIGN RESOURCES:

WRIGHT SIGN SHOP 8208 Shalom Industrial Park Tosco, Va. 22188 757-566-8129 757-566-8636 (Fax)	THE SIGN SHOP 75-A Blue Crab Rd. Newport News, Va. 23606 757-873-1157 757-873-6131 (Fax)
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Date: 08.19.2011
Drawn By: SWS
Sheet No: C5

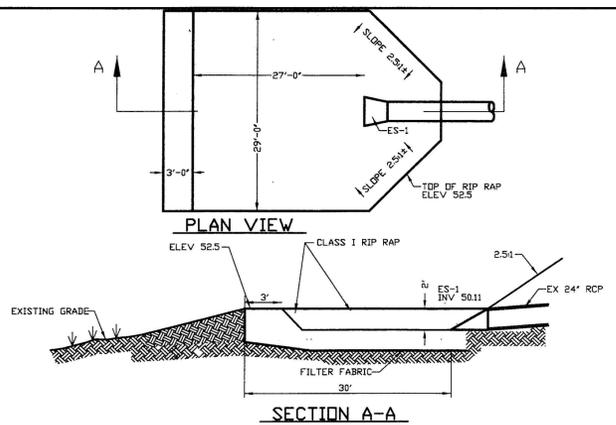
CORNERSTONE DESIGN GROUP
Consulting Engineers
www.cdgva.com
Phone: 1.757.564.8898
Fax: 1.757.564.8897
1311 Jarmestown Road, Suite 102
Williamsburg, Virginia 23185

NO.	DATE	REVISION / COMMENT / NOTE
1	1/10/12	REV PER JCC LTR DTD 10/19/11



Kingsmill On The James
SOUTHWESTERN POWER CORPORATION
SOUTH COASTAL PLANT
EROSION AND SEDIMENT CONTROL
DESIGN / FIELD PROJECT

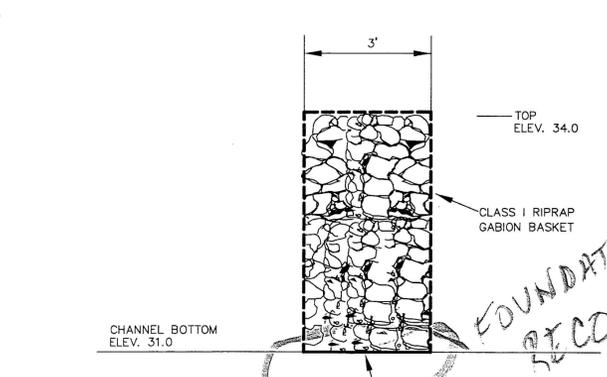
C5



NOTE: RIP RAP BOTTOM AND SIDES TO BE A MINIMUM 26" THICK. NOT TO SCALE

OUTFALL RIP-RAP APRON

PERMANENT GABION BASKET



BASKET TO BE EMBEDDED 6" INTO BOTTOM OF CHANNEL AND 12" INTO SIDE OF CHANNEL.

CROSS SECTION OF BASKET

FOUNDATION
PT. COMMENTED?

DETAIL SHEET