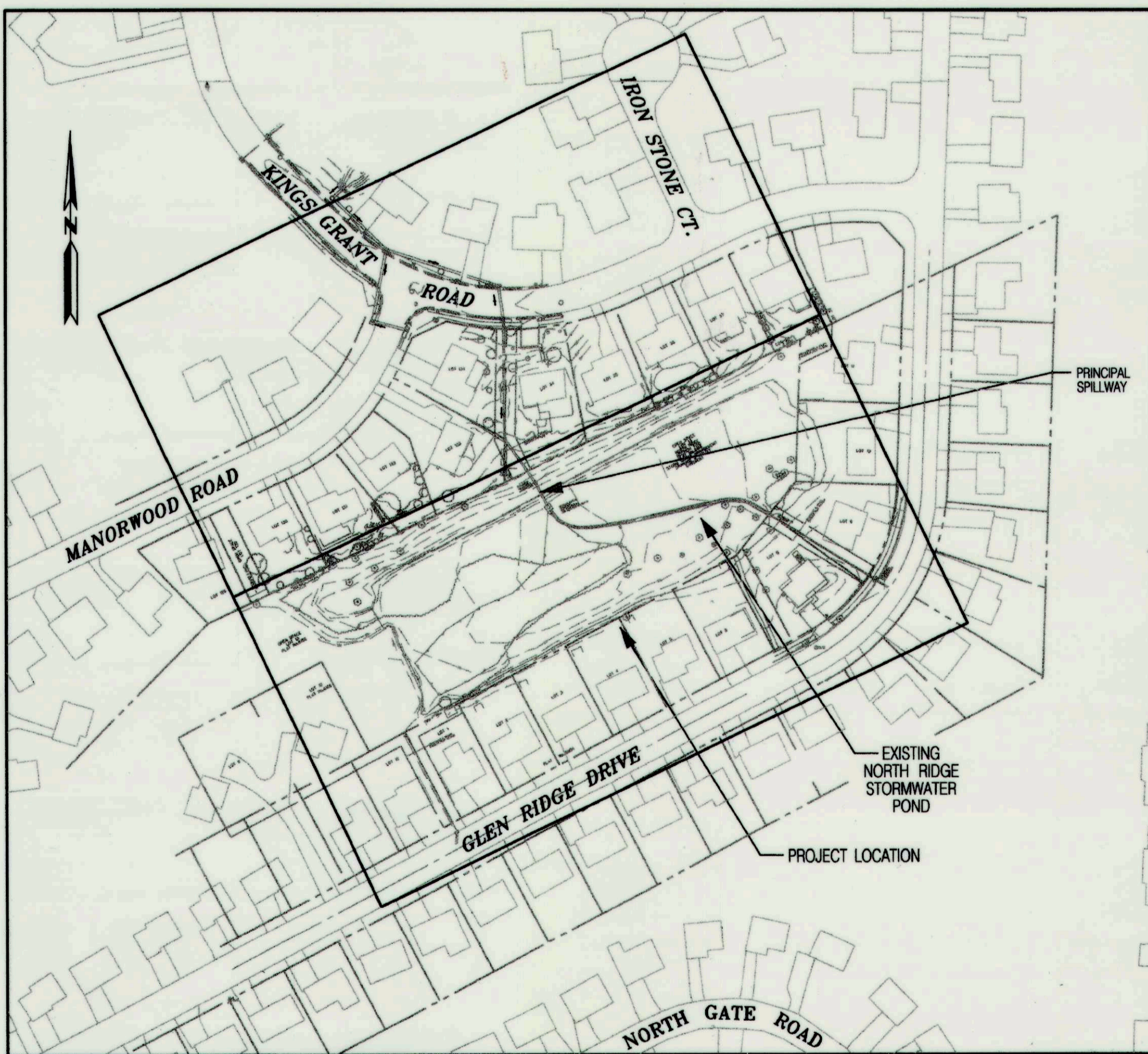


INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	STORMWATER MANAGEMENT GRADING PLAN
3	DOWNSTREAM STORMWATER DRAINAGE PLAN
4	STORMWATER MANAGEMENT PROFILES-1
5	STORMWATER MANAGEMENT PROFILES-2
6	STORMWATER MANAGEMENT DETAILS
7	STORMWATER MANAGEMENT NOTES & DETAILS
8	EROSION & SEDIMENT CONTROL & PLANTING PLAN-1
9	EROSION & SEDIMENT CONTROL PLAN-2
10	EROSION & SEDIMENT CONTROL & PLANTING DETAILS
11	EROSION & SEDIMENT CONTROL NOTES

LEGEND

LIMIT OF DISTURBANCE	---	L-OD
EXISTING MAJOR CONTOURS	---	380
EXISTING MINOR CONTOURS	---	
PROPOSED CONTOURS	---	387
EXISTING WOODSLINE	---	
PROPERTY LINE	---	
EASEMENT BOUNDARY	---	
EXISTING STORM DRAIN	---	SD
EXISTING STORM DRAIN INLET	---	
EXISTING STORM DRAIN MANHOLE	---	
EXISTING UTILITY POLE	---	
EXISTING SEWER LINE	---	S
EXISTING SEWER MANHOLE	---	SS
EXISTING EDGE OF PAVEMENT	---	
EXISTING RIPRAP	---	
PROPOSED RIPRAP	---	
SANDBAG DAM	---	
PUMP AROUND AND HOSES	---	
SUMP PIT	---	SP
FILTER BAG	---	FB
SILT FENCE	---	SF
ORANGE SAFETY FENCE	---	OSF
STABILIZED CONSTRUCTION ENTRANCE	---	
EXISTING WATERS OF THE U.S.	---	WUS
EXISTING 50' STREAM BUFFER	---	SB
EXISTING WETLAND BOUNDARY	---	
EXISTING 25' WETLAND BUFFER	---	WB



SITE LOCATION
SCALE: 1" = 100'

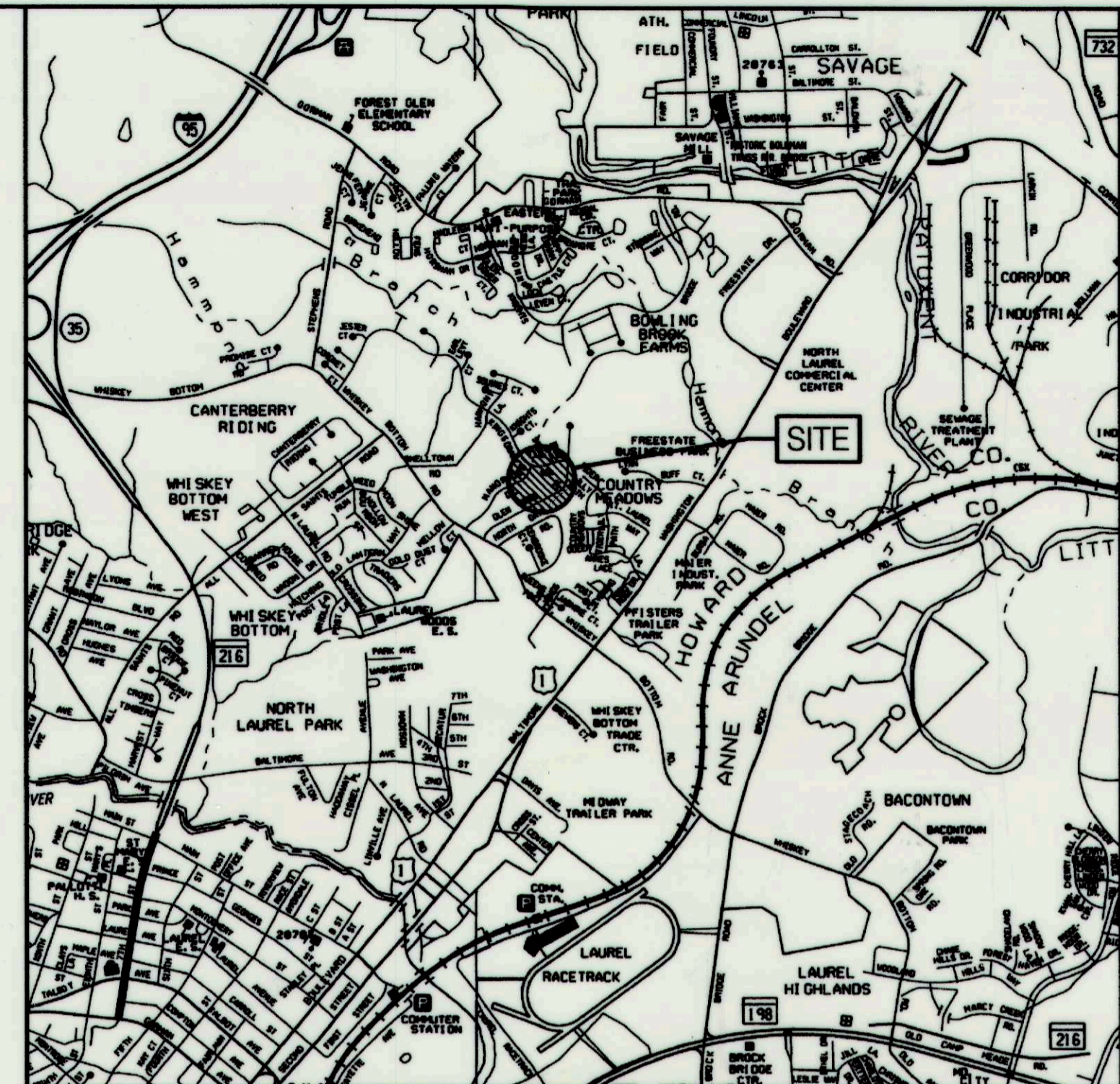
NORTH RIDGE POND REPAIR

HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
CAPITAL PROJECT D-1159

SPECIAL CONTRACTOR NOTES

- PROJECT SITE IS NOT LOCATED WITHIN THE 100-YEAR FLOODPLAIN.
- CONTRACTOR SHALL NOT STORE EQUIPMENT, MATERIALS AND/OR SUPPLIES BEYOND THE LIMIT OF DISTURBANCE SHOWN ON THE PLANS.
- UPON COMPLETION OF THE WORK, BUT PRIOR TO DE-MOBILIZATION, THE CONTRACTOR SHALL REMOVE ALL REMNANTS OF CONSTRUCTION MATERIALS FROM THE SITE. THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO A CONDITION EQUAL TO OR BETTER THAN THE PRE-CONSTRUCTION CONDITIONS.
- PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES, PHOTOGRAPHS OF THE PROPOSED WORK AREA AND ACCESS SHALL BE TAKEN.



VICINITY MAP
SCALE: 1" = 2000'

GENERAL INFORMATION

- EXISTING FACILITY WAS CONSTRUCTED UNDER HOWARD COUNTY, MARYLAND STORMWATER MANAGEMENT PLAN F-84-50, DATED 08-31-1983, AS ACCEPTED BY HOWARD SOIL CONSERVATION DISTRICT.
- THERE ARE NO KNOWN BURIAL GROUNDS OR CEMETERY SITES LOCATED ON THE PROJECT SITE.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY AND SPECIFICATIONS, AS APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS, BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 24 HOURS IN ADVANCE OF ANY WORK BEING DONE.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- THE COORDINATES SHOWN HEREON ARE BASED ON HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM.
- WATER IS PUBLIC.
- SEWER IS PUBLIC.
- EXISTING UTILITIES ARE BASED ON MISS UTILITY MARKOUT JUNE 4, 2013 AND FIELD SURVEYS. CONTRACTOR TO VERIFY INFORMATION TO HIS/HER OWN SATISFACTION.
- KCI PERFORMED A SITE VISIT ON MAY 15, 2013 TO VERIFY THE PRESENCE OF WETLANDS AND "WATERS OF THE U.S." AT THE SITE.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH ONE FOOT CONTOUR INTERVALS IN THE NAVD88 VERTICAL DATUM PREPARED BY KCE ENGINEERING, INC. IN JUNE 2013.
- THE EXISTING TOPOGRAPHY ON THE RESIDENTIAL LOTS ADJACENT TO (NORTH OF) THE POND EMBANKMENT AND THE DOWNSTREAM STORMWATER SYSTEM WAS PERFORMED BY KCI TECHNOLOGIES, INC. IN OCTOBER 2014 UNDER AN EXTRA WORK ORDER TO THE PROJECT CONTRACT.
- NO TRAFFIC STUDY IS REQUIRED FOR THIS PROJECT.
- OBSTRUCTIONS SHOWN ON THIS DRAWING ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY AND KCI TECHNOLOGIES, INC. DOES NOT WARRANT OR GUARANTEE THE CORRECTNESS OR COMPLETENESS OF THE INFORMATION GIVEN.
- SHOULD THE CONTRACTOR DISCOVER ANY DISCREPANCIES BETWEEN THE PLANS AND THE FIELD CONDITIONS, THE CONTRACTOR MUST NOTIFY HIS OWN SATISFACTION. SHOULD THE CONTRACTOR MAKE FIELD CORRECTIONS OR ADJUSTMENTS WITHOUT NOTIFYING THE ENGINEER, THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR THOSE CHANGES.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO THE CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE PROPOSED NORTH RIDGE FACILITY WILL BE A DRY STORMWATER DETENTION POND UPON CONSTRUCTION OF PROPOSED IMPROVEMENTS AND TO BE EXEMPT FROM MD-378 BY MEETING THE FOLLOWING CRITERIA: THE POND HAVING LESS THAN FOUR (4) FEET OF EMBANKMENT (MD 378 EXEMPTION CRITERIA #1, PAGE 1).

EP-14-005 AS-BUILT 11-09-2015

HOWARD COUNTY SURVEY CONTROL

DESIGNATION	NORTHING	EASTING	ELEVATION
47HB	531895.773	1356076.279	296.805
47H2	529706.422	1355445.336	256.068

PERMIT INFORMATION CHART

SUBDIVISION NAME NORTH RIDGE		SECTION/AREA SECTION 2		PARCEL# 13
PCT# 6166	ORD# 6	ZONING RSC	TAX MAP NO. 6	ELECT. DIST. 6
WATER CODE PUBLIC		SEWER CODE PUBLIC		

DEPARTMENT OF RECREATION AND PARKS, HOWARD COUNTY, MD

John B. Boyd 4/22/15
DIRECTOR OF RECREATION AND PARKS DATE

DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MD

Sam De 4/23/15
DIRECTOR OF PUBLIC WORKS DATE

Mark S. Richmond 4/21/15
CHIEF, BUREAU OF ENVIRONMENTAL SERVICES DATE

Mark S. Richmond 4/21/15
CHIEF, STORMWATER MANAGEMENT DIVISION DATE

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION AND SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION."

Raymond J. Krahe P.E. 28634 04/16/2015
SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) P.E. NO. DATE

RAYMOND J. KRAHE P.E. CFM

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I/SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

Mark S. Richmond 4/21/15
SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) DATE

Mark S. Richmond

AS-BUILT CERTIFICATION

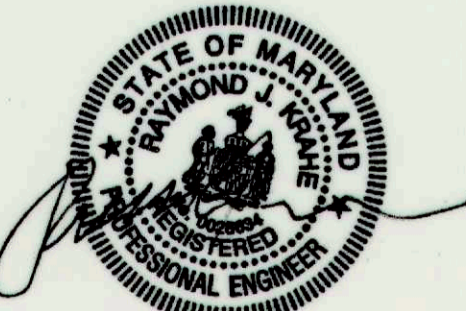
I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

John K. Roberts 11/09/2015
SIGNATURE PE NO. DATE

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

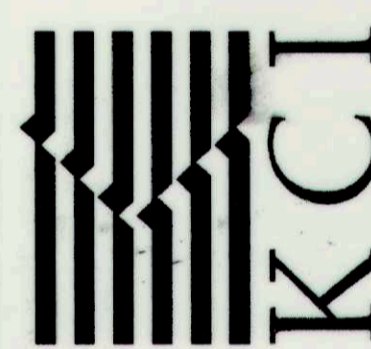
John K. Roberts 4/23/15
HOWARD SCD DATE



PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 28634 EXPIRATION DATE: 2017-03-26

NO.	REVISIONS DESCRIPTION	DATE

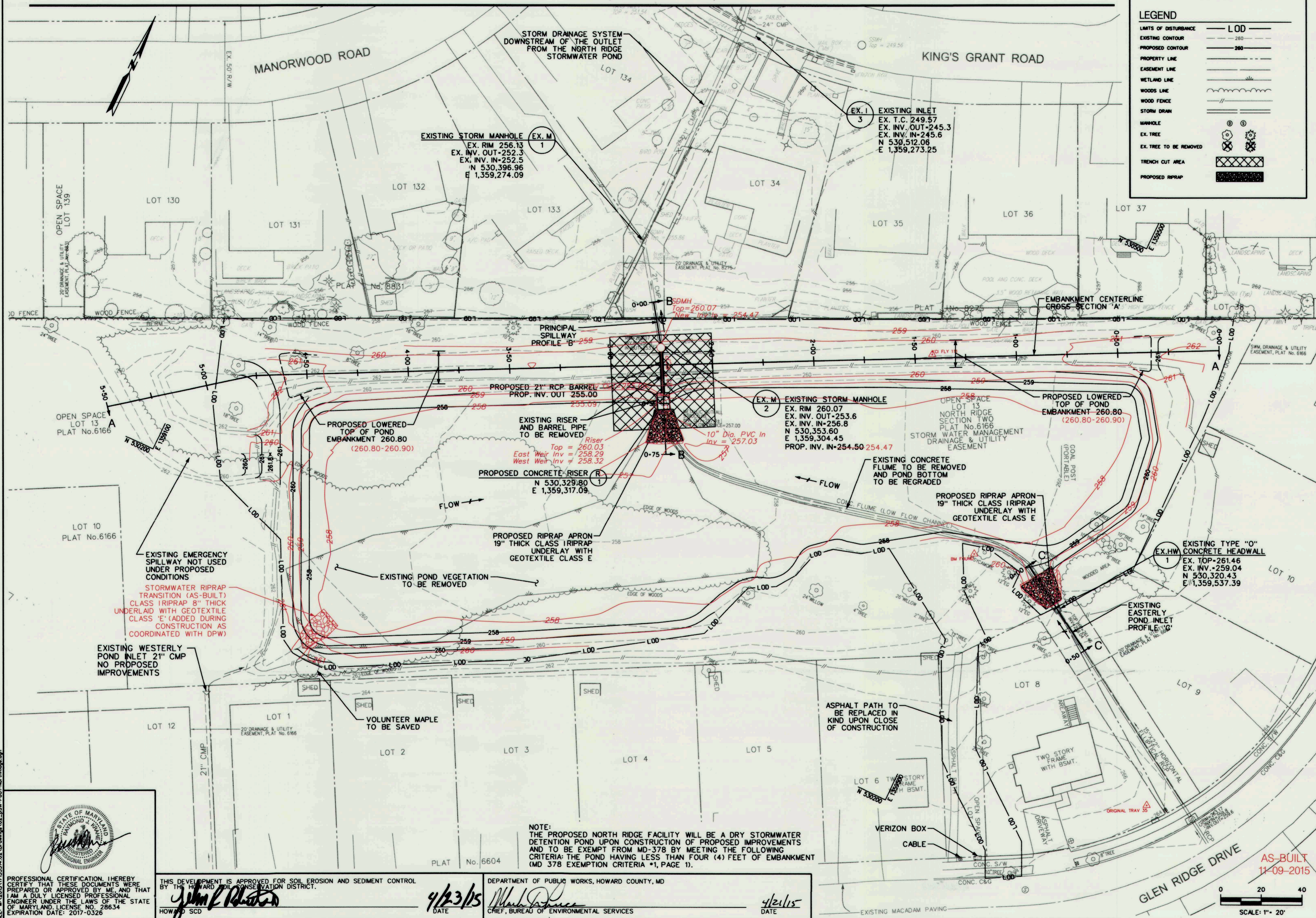
936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818
WWW.KCI.COM



NORTH RIDGE
STORMWATER POND REPAIR
CAPITAL PROJECT D-1159
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
STORMWATER MANAGEMENT DIVISION
691 COLUMBIA GATEWAY DRIVE

TITLE SHEET
AS-BUILT

SCALE:	AS SHOWN
DATE:	FEBRUARY 2015
PROJECT NO.:	17133314.02
CAPITAL PROJECT NO.:	D-1159
PERMIT ISSUE:	
CONSTRUCTION ISSUE:	
SHEET NO.:	1 OF 11



LEGEND

LIMITS OF DISTURBANCE	---	LOD
EXISTING CONTOUR	---	260
PROPOSED CONTOUR	---	260
PROPERTY LINE	---	
EASEMENT LINE	---	
WETLAND LINE	---	
WOODS LINE	---	
WOOD FENCE	---	
STORM DRAIN	---	
MANHOLE	⊙	
EX. TREE	⊗	
EX. TREE TO BE REMOVED	⊗	
TRENCH CUT AREA	▨	
PROPOSED RIPRAP	▩	

NO.	REVISIONS DESCRIPTION	DATE

936 RIDGEBROOK ROAD
 SPARKS, MARYLAND 21152
 TELEPHONE: (410) 316-7800
 FAX: (410) 316-7818
 www.kci.com

KCI
 TECHNOLOGIES

**NORTH RIDGE
 STORMWATER POND REPAIR**

CAPITAL PROJECT D-1159
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 STORMWATER MANAGEMENT DIVISION
 676 COLUMBIA GATEWAY DRIVE
 COLUMBIA, MD 21046

**STORMWATER
 GRADING - 1
 AS-BUILT**

SCALE: 1" = 20'
 DATE: FEBRUARY 2015
 KCI JOB NO.: 17133314.02
 CAPITAL PROJECT NO.: D-1159
 PERMIT ISSUE:
 CONSTRUCTION ISSUE:

AS-BUILT
 11-09-2015

SCALE: 1" = 20'

SHEET NO.: 2 OF 11

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 28634 EXPIRATION DATE: 2017-0326

John P. [Signature]
 HOWARD SCD

THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

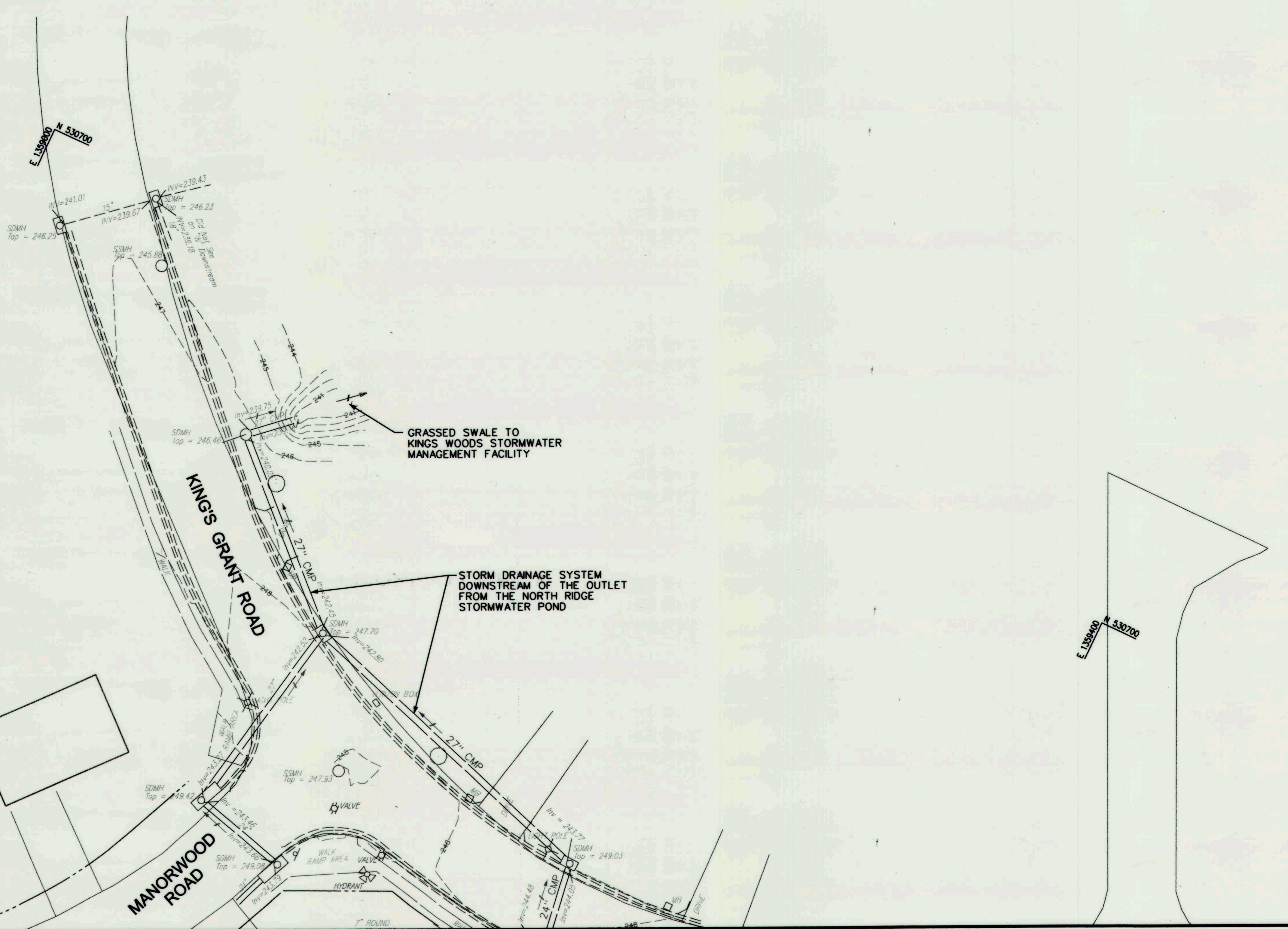
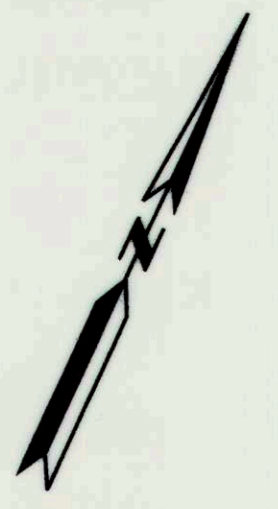
DATE: 9/23/15

NOTE: THE PROPOSED NORTH RIDGE FACILITY WILL BE A DRY STORMWATER DETENTION POND UPON CONSTRUCTION OF PROPOSED IMPROVEMENTS AND TO BE EXEMPT FROM MD-378 BY MEETING THE FOLLOWING CRITERIA: THE POND HAVING LESS THAN FOUR (4) FEET OF EMBANKMENT (MD 378 EXEMPTION CRITERIA *1, PAGE 1).

DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MD
 CHIEF, BUREAU OF ENVIRONMENTAL SERVICES

DATE: 9/21/15

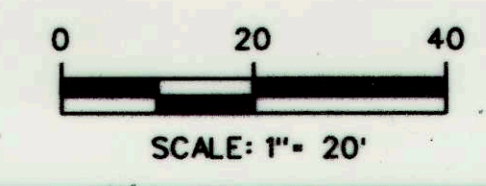
KCI FILE: MA \ 2013 \ 17133314.02 \



MATCHLINE (SEE SHEET 2 OF 11)

LEGEND

- LIMITS OF DISTURBANCE — LOD —
- EXISTING CONTOUR — 260 —
- PROPOSED CONTOUR — 260 —
- PROPERTY LINE — — — — —
- EASEMENT LINE — — — — —
- WETLAND LINE — — — — —
- WOODS LINE — — — — —
- WOOD FENCE — — — — —
- STORM DRAIN — — — — —
- MANHOLE — (M) —
- EX. TREE — (T) —
- EX. TREE TO BE REMOVED — (T) with cross —
- TRENCH CUT AREA — [Cross-hatched box] —
- PROPOSED CURB — [Solid black box] —



PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 28634 EXPIRATION DATE: 2017-0326

[Signature]

THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY CONSERVATION DISTRICT.

4/23/15
DATE
Howard SCD

DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MD

[Signature]
CHIEF, BUREAU OF ENVIRONMENTAL SERVICES

4/21/15
DATE

NO.	REVISIONS DESCRIPTION	DATE

936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818
www.kci.com

KCI
TECHNOLOGIES

NORTH RIDGE
STORMWATER POND REPAIR
CAPITAL PROJECT D-1159
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
STORMWATER MANAGEMENT DIVISION
6751 COLUMBIA GATEWAY DRIVE
COLUMBIA, MD 21046

SCALE: 1" = 20'

DATE: FEBRUARY 2015

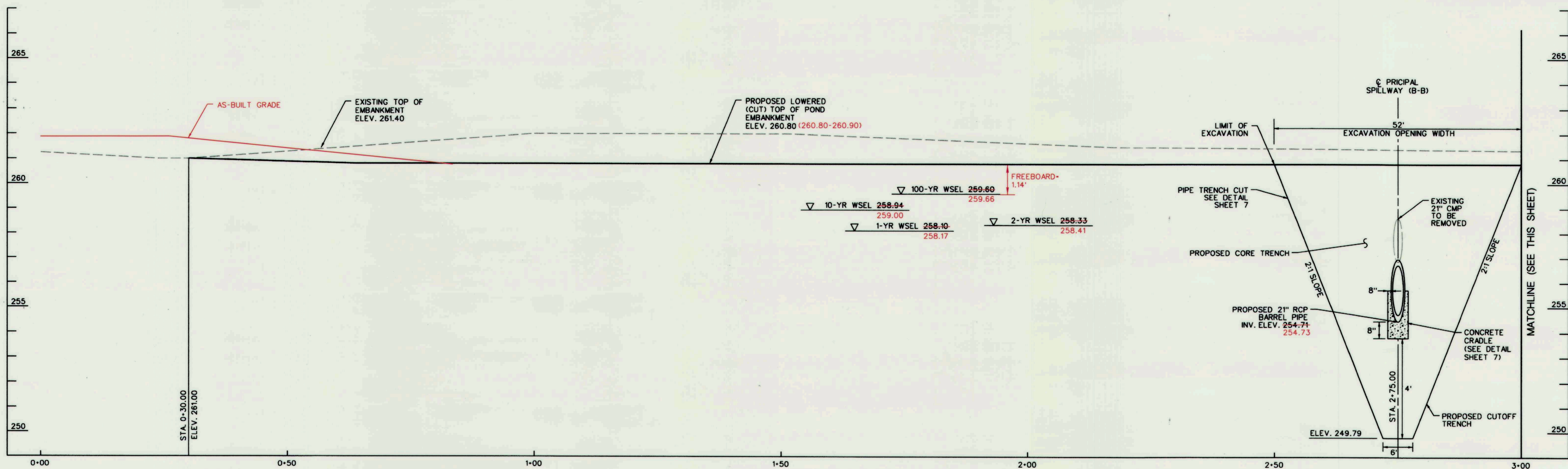
KCI JOB NO.: 17133314.02

CAPITAL PROJECT NO.: D-1159

PERMIT ISSUE:

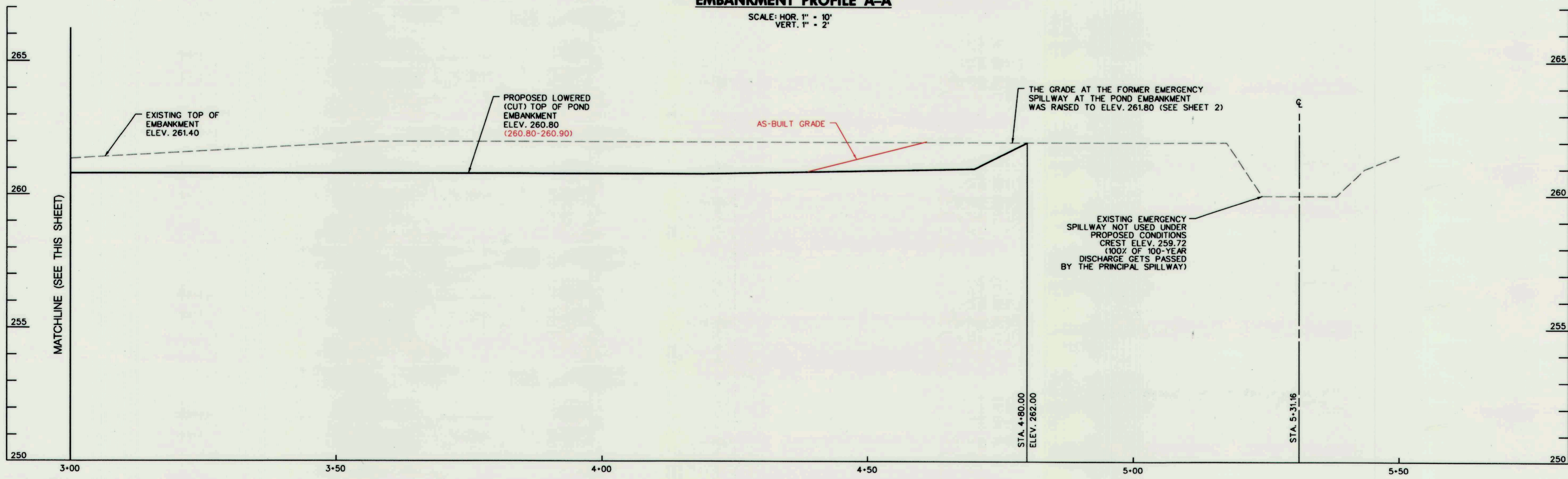
CONSTRUCTION ISSUE:

SHEET NO.: 3 OF 11



EMBankment Profile A-A

SCALE: HOR. 1" = 10'
VERT. 1" = 2'

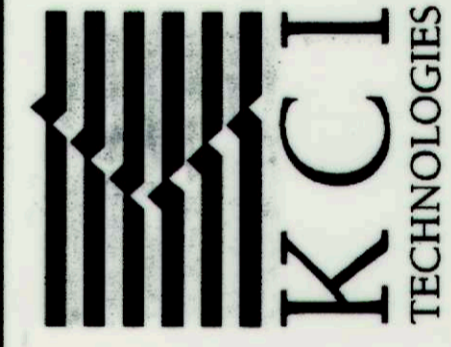


EMBankment Profile A-A CONTINUED

SCALE: HOR. 1" = 10'
VERT. 1" = 2'

NO.	REVISIONS DESCRIPTION	DATE

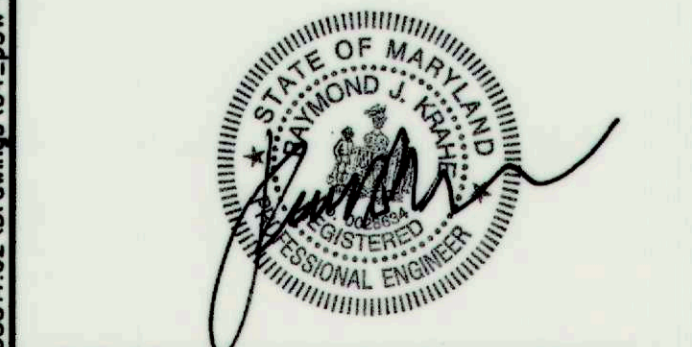
936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
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WWW.KCI.COM



**NORTH RIDGE
STORMWATER POND REPAIR**
CAPITAL PROJECT D-1159
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
STORMWATER MANAGEMENT DIVISION
6751 COLUMBIA GATEWAY DRIVE
COLUMBIA, MD 21046

**STORMWATER
MANAGEMENT
PROFILES-1
AS-BUILT**

SCALE:	AS SHOWN
DATE:	FEBRUARY 2015
REG. JOB NO.:	17133314.02
CAPITAL PROJECT NO.:	D-1159
PERMIT ISSUE:	
CONSTRUCTION ISSUE:	



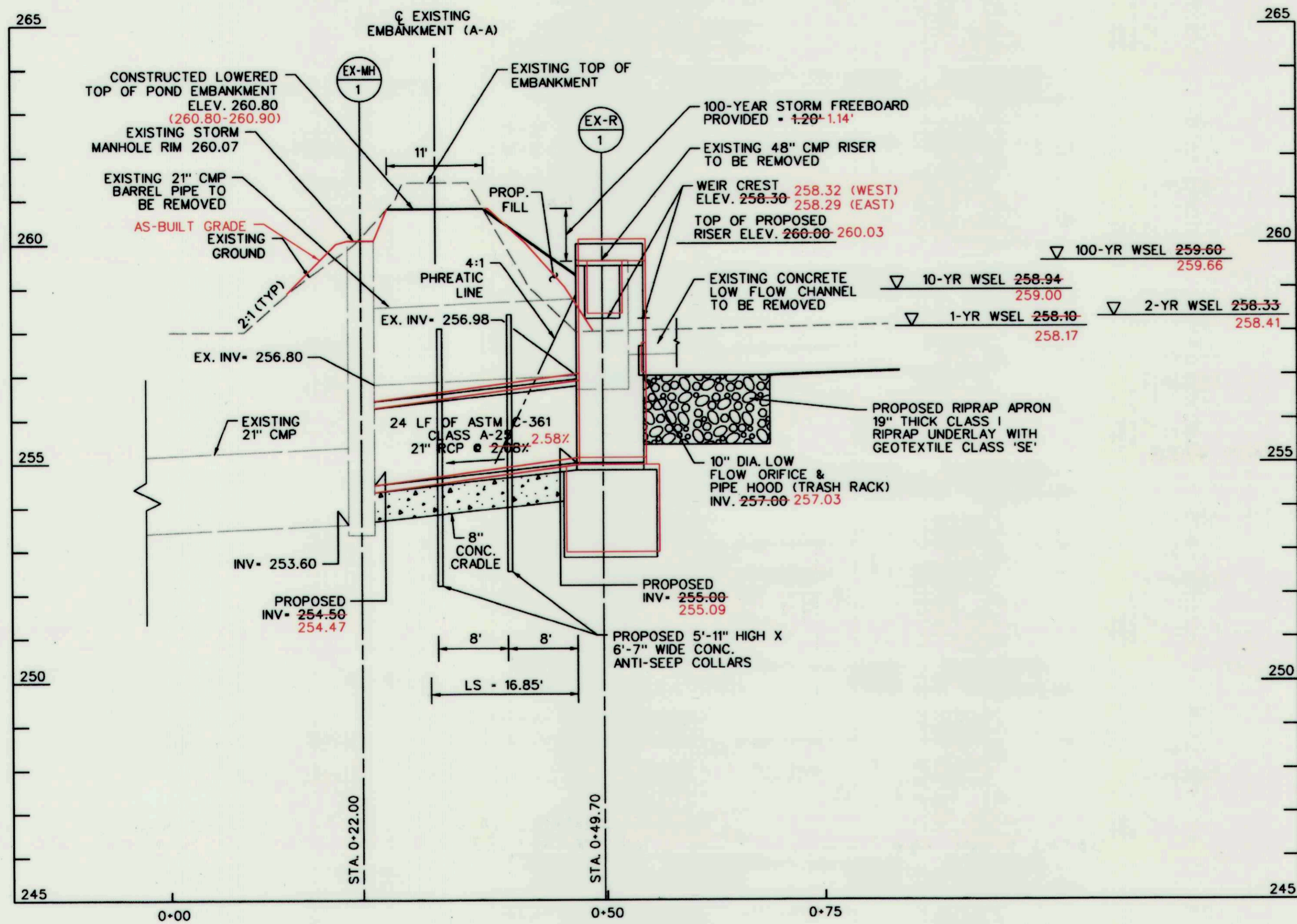
PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 28634 EXPIRATION DATE: 2017-03-26

THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John K. [Signature]
HOWARD SCD

DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MD
M. [Signature]
CHIEF, BUREAU OF ENVIRONMENTAL SERVICES

NOTE:
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AS-BUILT
11-09-2015



PRINCIPAL SPILLWAY PROFILE B-B
 SCALE: HOR. 1" = 10'
 VERT. 1" = 2'

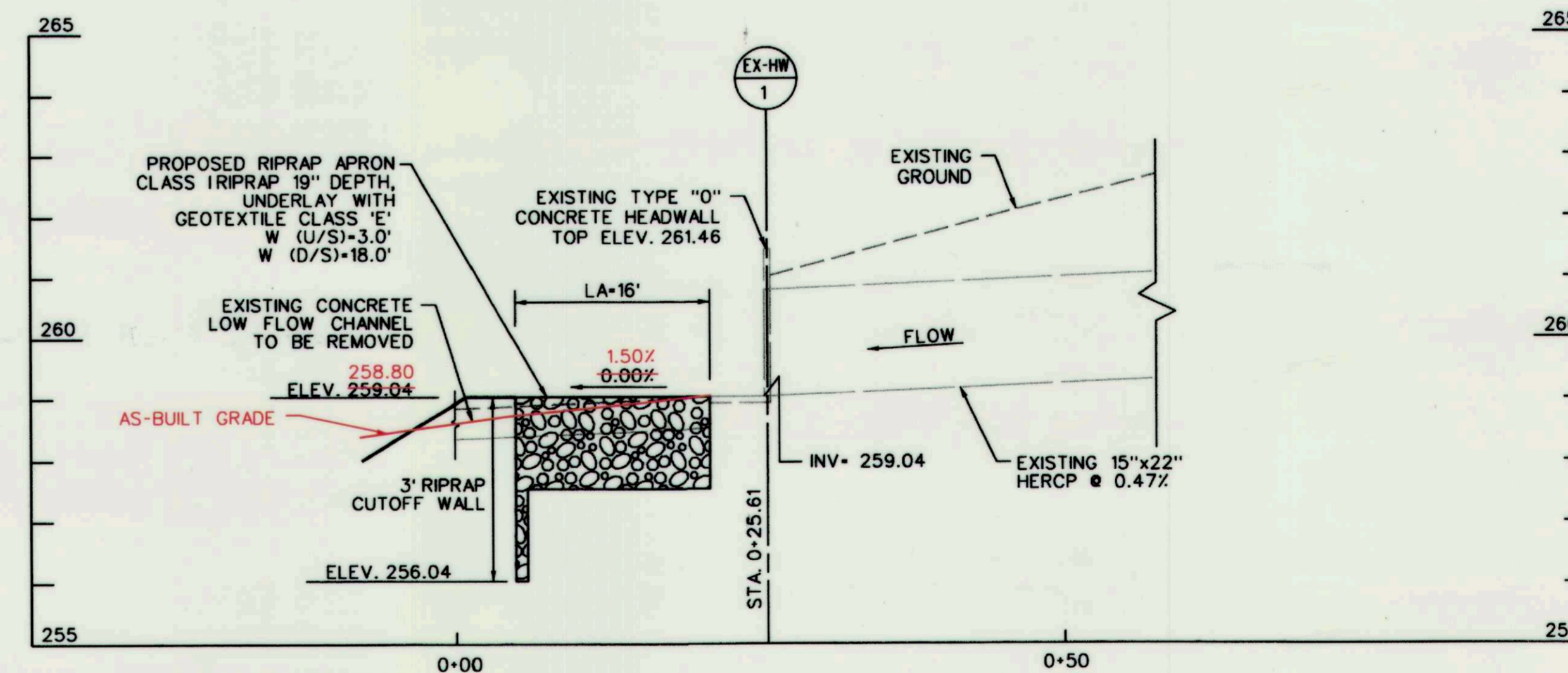
	DISCHARGE (CFS)	STORAGE (AC-FT)	WATER SURFACE ELEVATION (FT)
1-YEAR	2.5 2.7	0.526 0.511	258.10 258.17
2-YEAR	3.5 3.8	0.728 0.718	258.33 258.41
10-YEAR	14.1 14.8	1.298 1.227	258.94 259.00
100-YEAR	17.1 17.2	1.990 1.929	259.60 259.66

STRUCTURE TABLE

ID	STANDARD	TOP ELEV.	INVERT IN	INVERT OUT
R-1	CONCRETE RISER	260.03 260.00	257.00 255.09	255.00 254.47

PIPE SCHEDULE

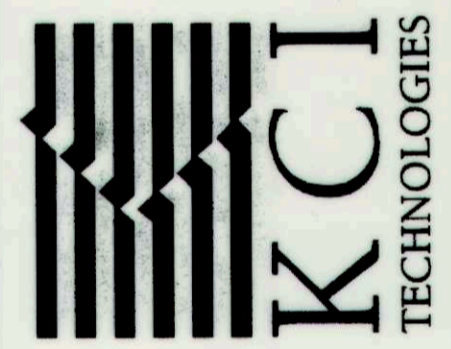
FROM	TO	SIZE	TYPE	INVERT IN	INVERT OUT	LENGTH
R-1	EX-MH-1	21"	ASTM 361 A-25	255.00 255.09	254.50 254.47	24'



EAST POND INLET PROFILE C-C
 SCALE: HOR. 1" = 10'
 VERT. 1" = 2'

NO.	REVISIONS DESCRIPTION	DATE

936 RIDGEBROOK ROAD
 SPARKS, MARYLAND 21152
 TELEPHONE: (410) 316-7800
 FAX: (410) 316-7818
 www.kci.com



NORTH RIDGE STORMWATER POND REPAIR
 CAPITAL PROJECT D-1159
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 STORMWATER MANAGEMENT DIVISION
 6751 COLUMBIA GATEWAY DRIVE
 COLUMBIA, MD 21048

STORMWATER MANAGEMENT PROFILES-2 AS-BUILT

SCALE:	AS SHOWN
DATE:	FEBRUARY 2015
KCI JOB NO.:	17133314.02
CAPITAL PROJECT NO.:	D-1159
PERMIT ISSUE:	
CONSTRUCTION ISSUE:	

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 28634 EXPIRATION DATE: 2017-03-26

John L. Kauter
 JOHN L. KAUTER
 PROFESSIONAL ENGINEER

THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY CONSERVATION DISTRICT.

John L. Kauter
 JOHN L. KAUTER
 PROFESSIONAL ENGINEER

9/23/15
 DATE

DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MD

Mark D. Luca
 MARK D. LUCA
 CHIEF, BUREAU OF ENVIRONMENTAL SERVICES

4/24/15
 DATE

NOTE:
 THE PROPOSED NORTH RIDGE FACILITY WILL BE A DRY STORMWATER DETENTION POND UPON CONSTRUCTION OF PROPOSED IMPROVEMENTS AND TO BE EXEMPT FROM MD-378 BY MEETING THE FOLLOWING CRITERIA: THE POND HAVING LESS THAN FOUR (4) FEET OF EMBANKMENT (MD 378 EXEMPTION CRITERIA #1, PAGE 1).

AS-BUILT
 11-09-2015

NO.	REVISIONS DESCRIPTION	DATE

936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
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WWW.KCI.COM

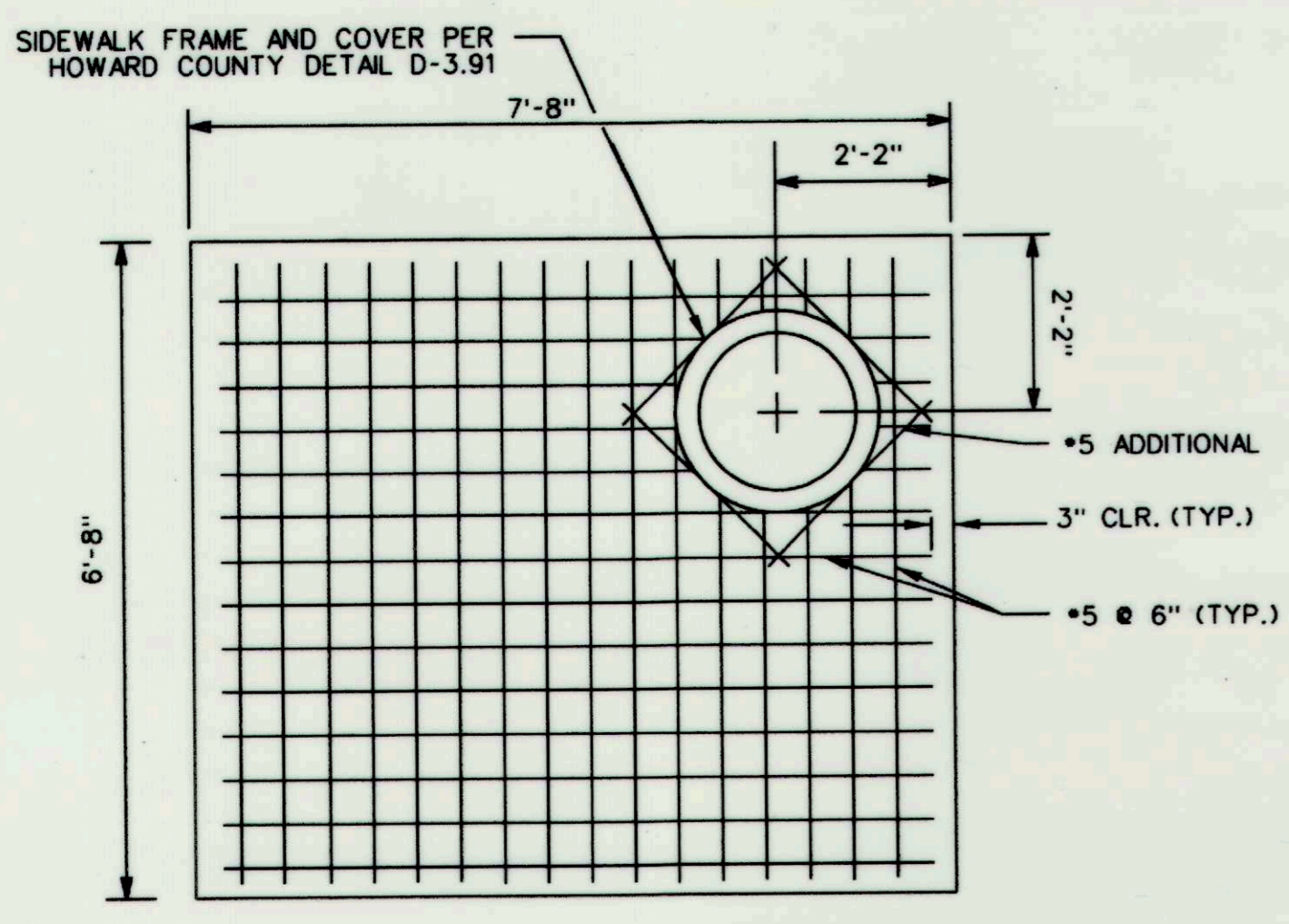


**NORTH RIDGE
STORMWATER POND REPAIR**
CAPITAL PROJECT D-1159
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
STORMWATER MANAGEMENT DIVISION
6781 COLUMBIA GATEWAY DRIVE
COLUMBIA, MD 21046

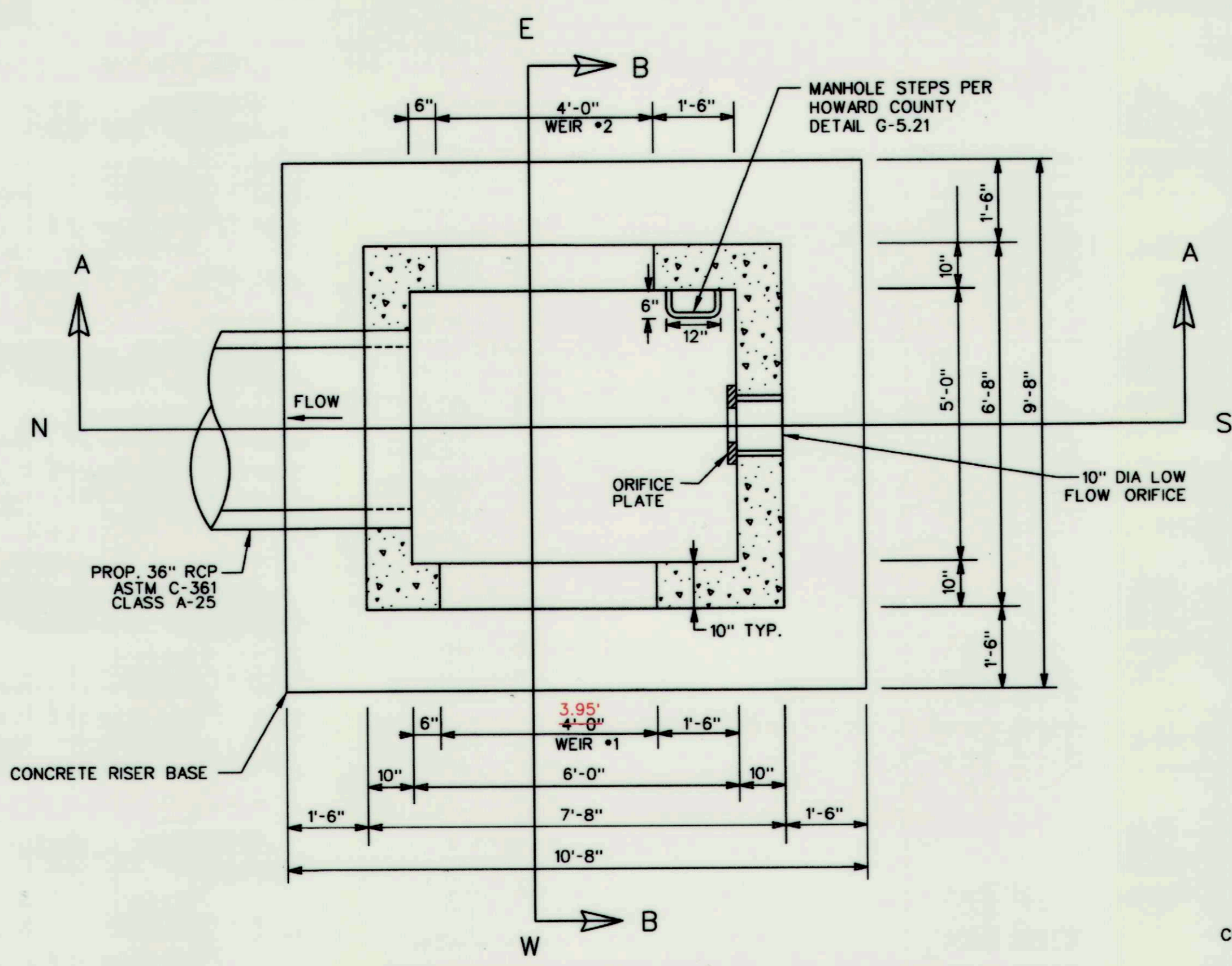
**STORMWATER
MANAGEMENT
DETAILS
AS-BUILT**

SCALE:	AS SHOWN
DATE:	FEBRUARY 2015
KCI JOB NO.:	17133314.02
CAPITAL PROJECT NO.:	D-1159
PERMIT ISSUE:	
CONSTRUCTION ISSUE:	

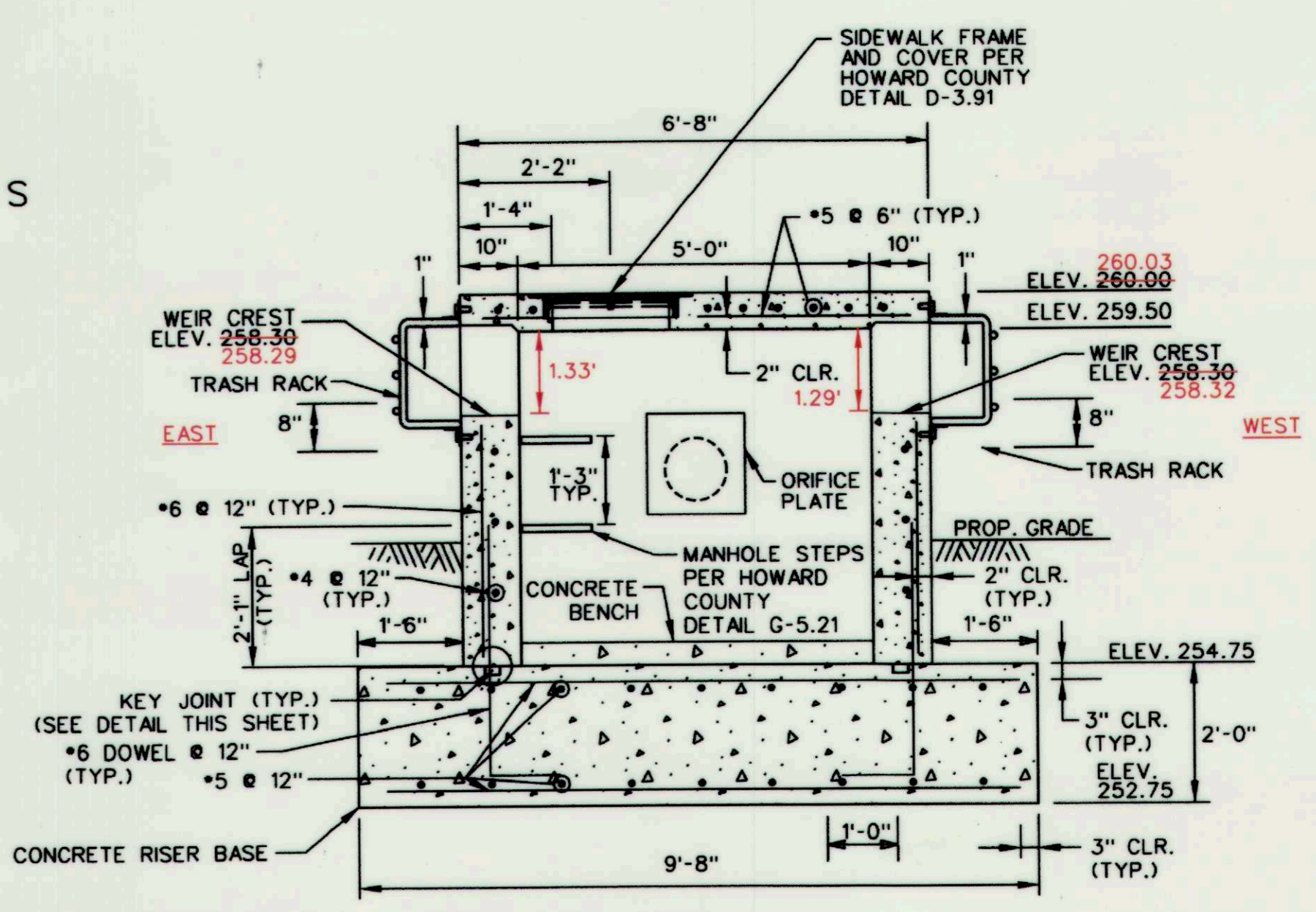
AS-BUILT
11-09-2015
SHEET NO.: 6 OF 11



TOP SLAB DETAIL
SCALE: NOT TO SCALE

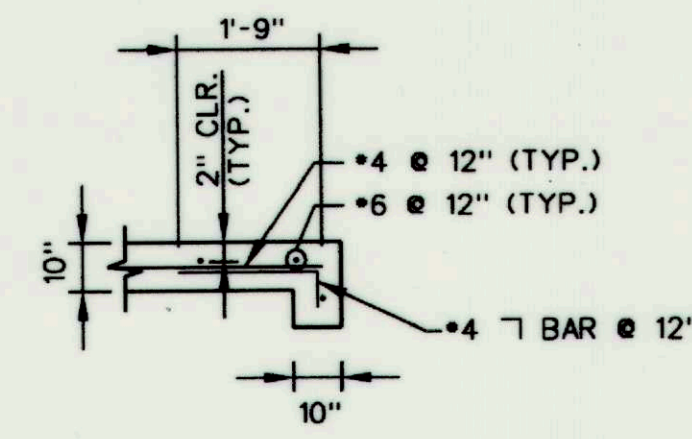


RISER PLAN VIEW
SCALE: 1" = 2'

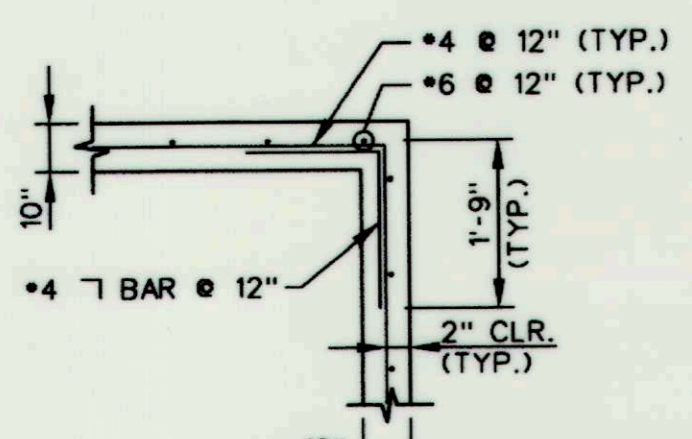


RISER CROSS SECTION B-B
SCALE: 1" = 2'

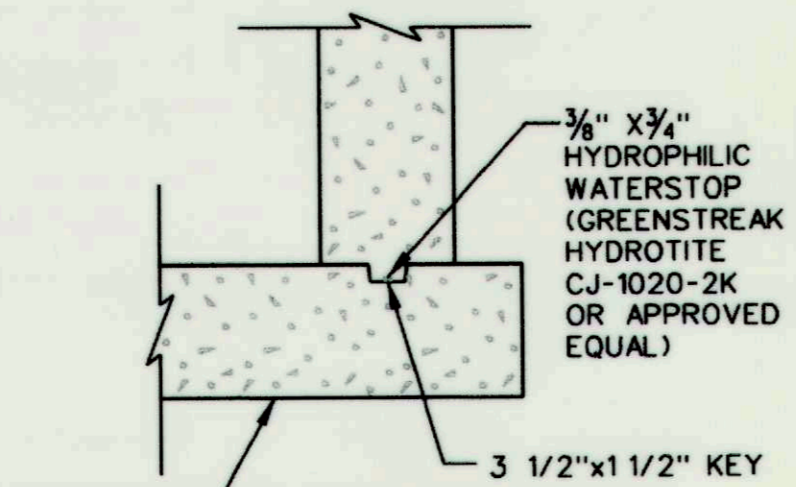
- RISER STRUCTURAL NOTES:**
1. CONCRETE UNLESS OTHERWISE NOTED SHALL BE MIX. NO. 6 (4500 PSI).
 2. REINFORCING STEEL SHALL CONFORM TO A 615, GRADE 60.
 3. MINIMUM COVER FOR ANY BAR SHALL BE 2" UNLESS OTHERWISE NOTED.



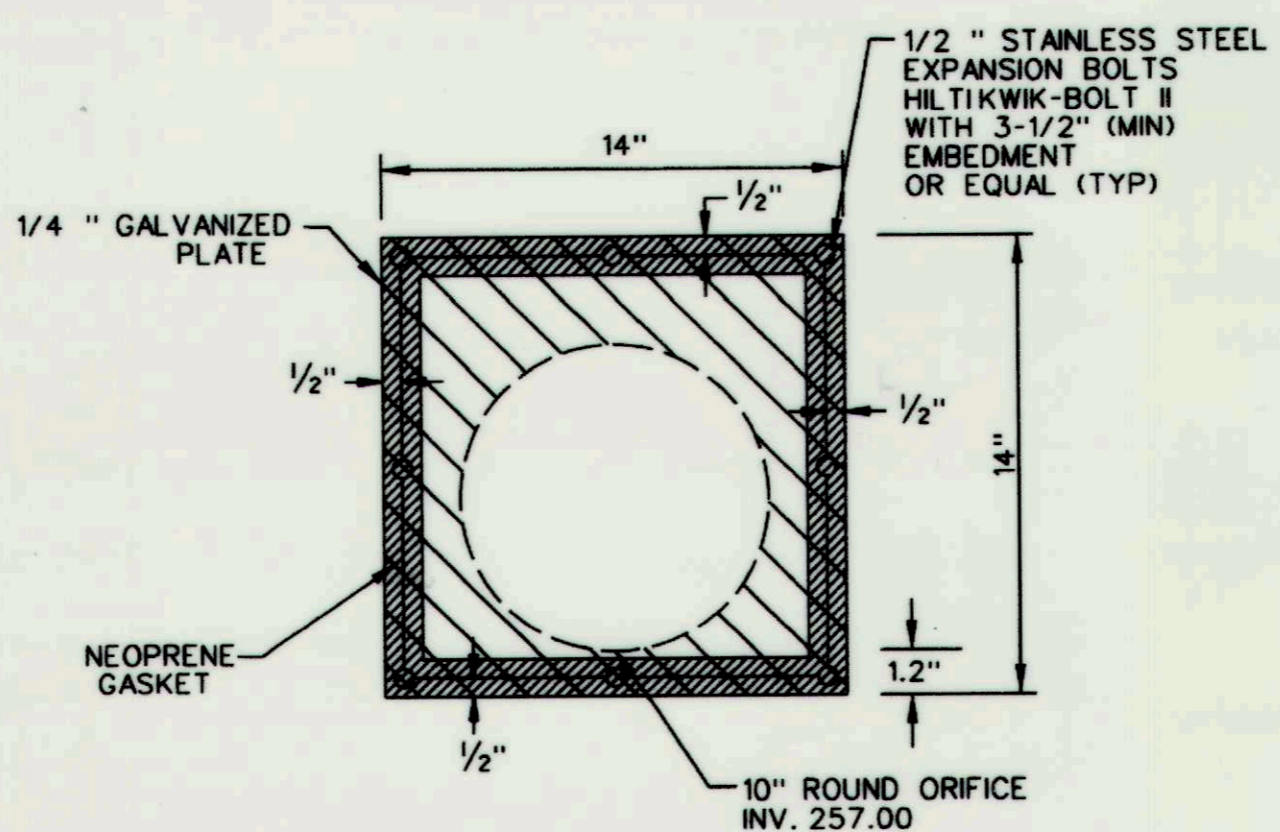
**TYPICAL CORNER DETAIL
ABOVE WEIRS**
SCALE: NOT TO SCALE



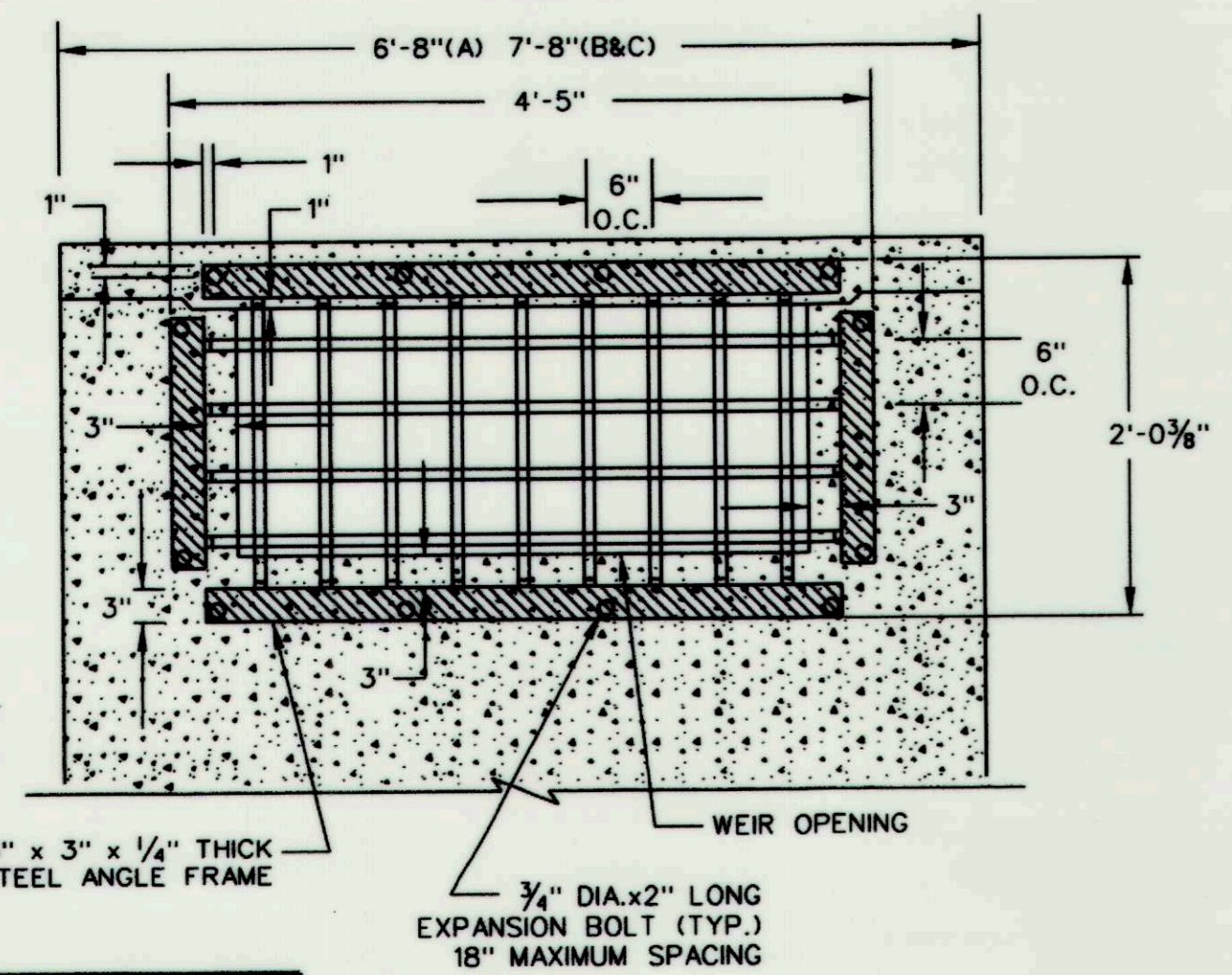
**TYPICAL CORNER DETAIL
BELOW WEIRS**
SCALE: NOT TO SCALE



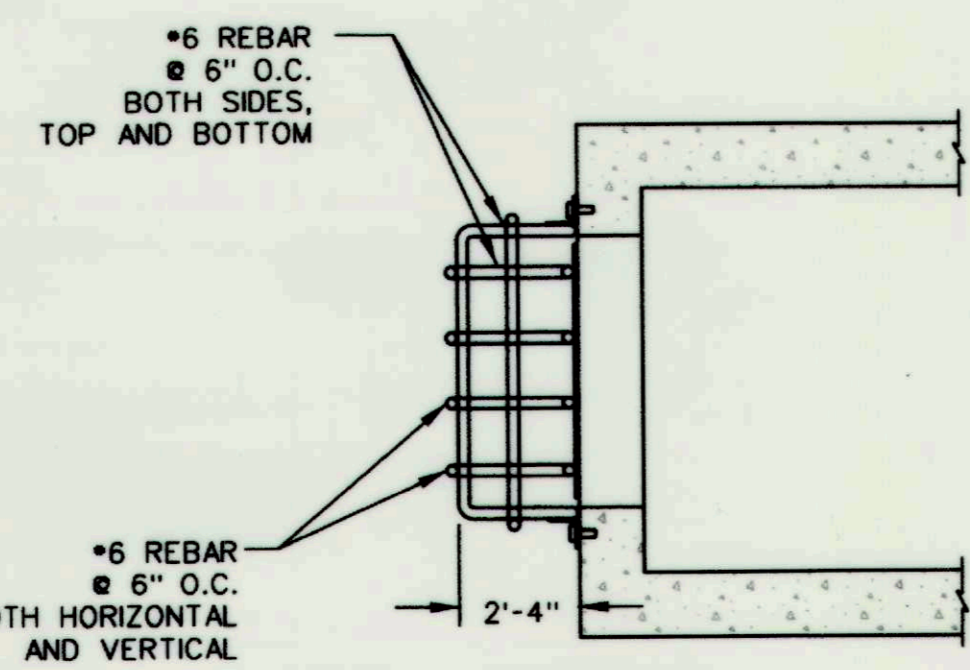
KEY JOINT DETAIL
SCALE: NOT TO SCALE



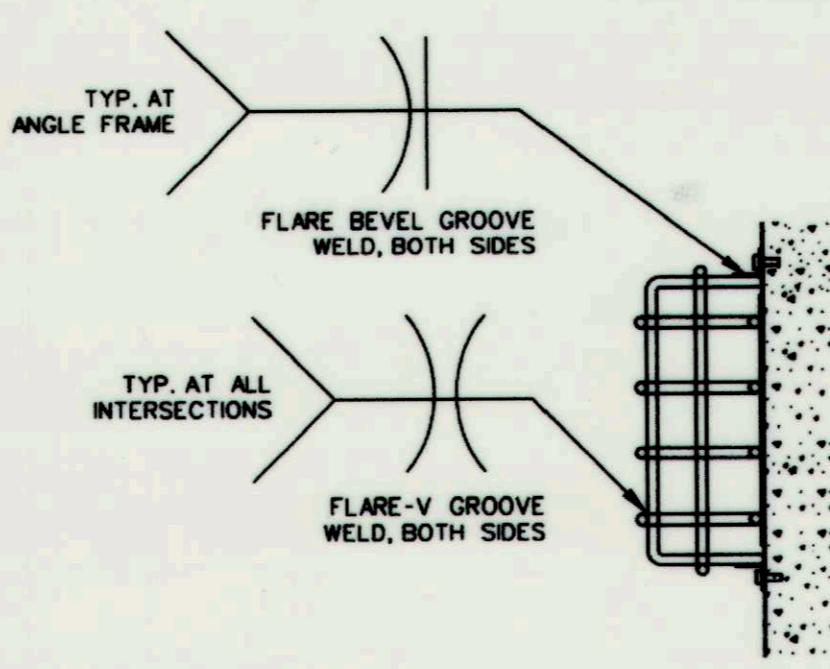
RISER ORIFICE PLATE DETAIL
SCALE: NOT TO SCALE



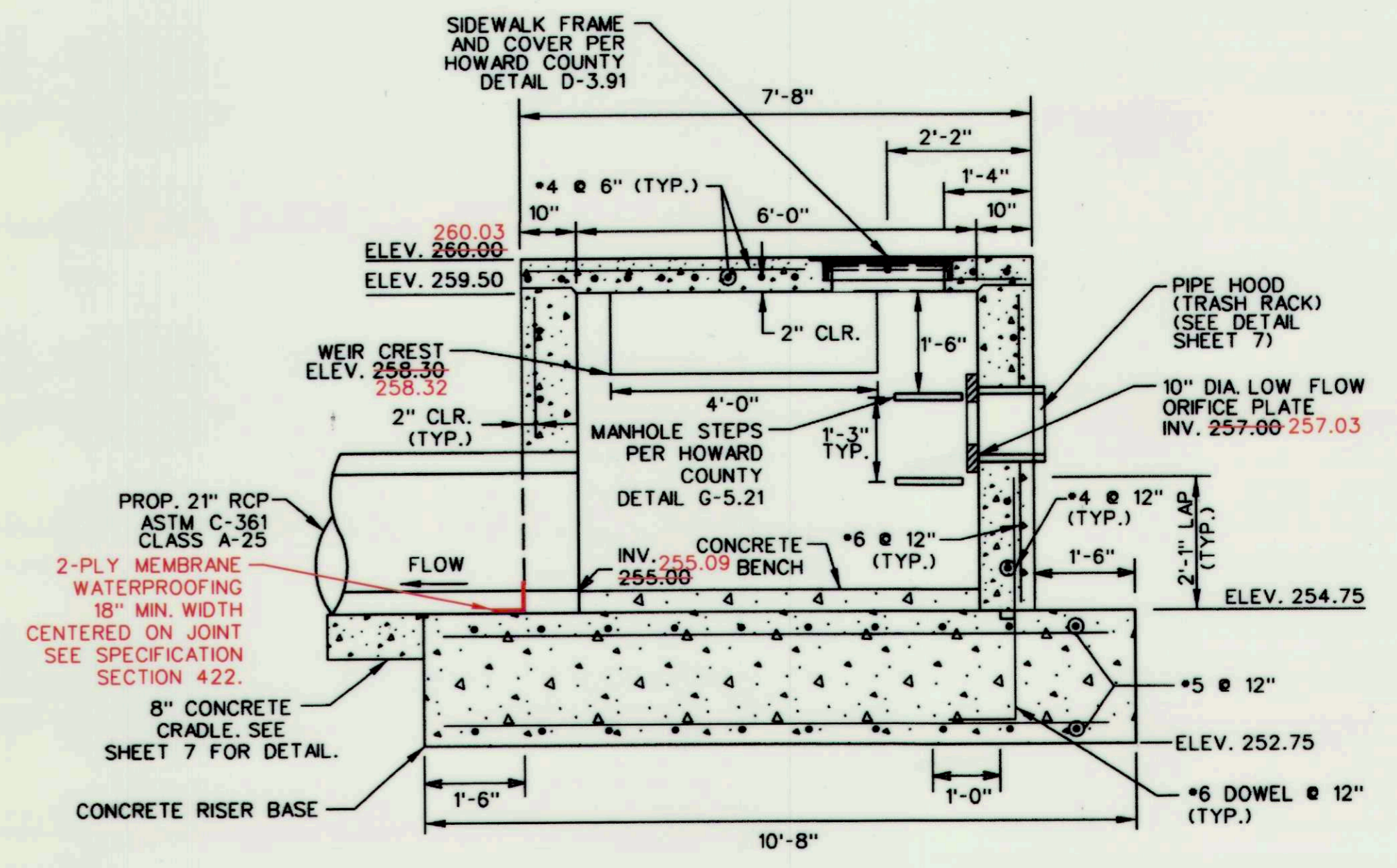
**TRASH RACK A, B, C
FRONT VIEW**
SCALE: NOT TO SCALE



**TRASH RACK
SIDE VIEW**
SCALE: NOT TO SCALE

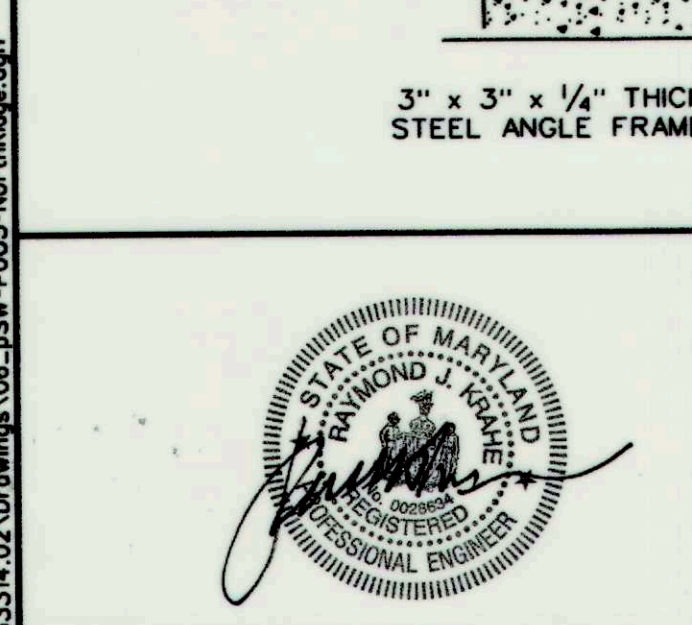


WELDING DETAIL
SCALE: NOT TO SCALE



RISER CROSS SECTION A-A
SCALE: 1" = 2'

- NOTES:**
1. ENTIRE TRASH RACK ASSEMBLY SHALL BE SHOP FABRICATED AND HOT-DIPPED GALVANIZED PER ASTM A-123 AFTER FABRICATION.
 2. STEEL SHALL CONFORM TO ASTM A-36.
 3. TRASH RACK SHALL BE CENTERED OVER EACH OPENING.
 4. REBAR SHALL BE WELDABLE STEEL CONFORMING TO ASTM A-706.
 5. THE PROPOSED NORTH RIDGE FACILITY WILL BE A DRY STORMWATER DETENTION POND UPON COMPLETION OF PROPOSED IMPROVEMENTS AND TO BE EXEMPT FROM MD-378 BY MEETING THE FOLLOWING CRITERIA: THE POND HAVING LESS THAN FOUR (4) FEET OF EMBANKMENT (MD 378 EXEMPTION CRITERIA #1, PAGE 1).



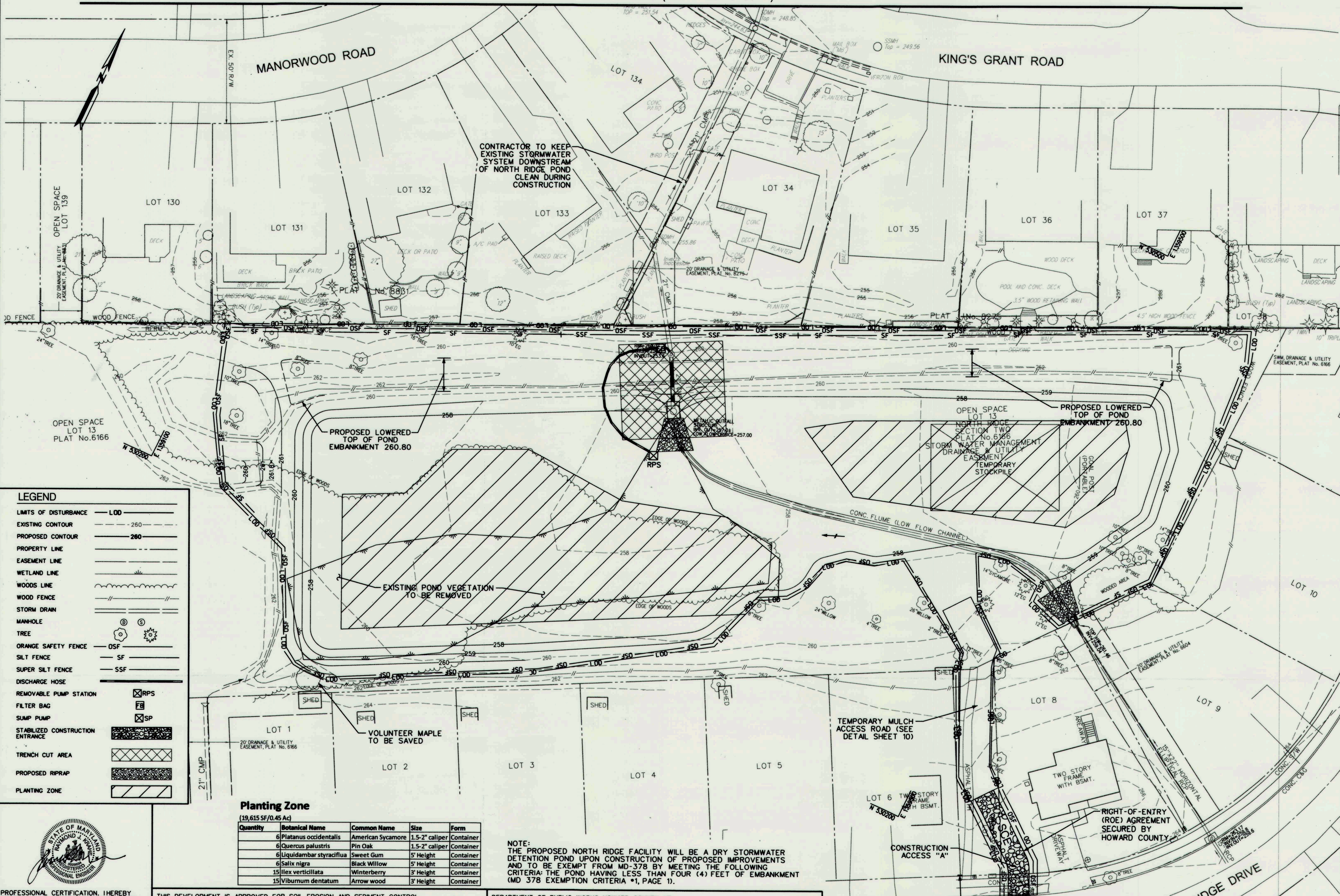
PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 28634 EXPIRATION DATE: 2017-0326

THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY CONSERVATION DISTRICT.
John L. Burton
HOWARD SCD

DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MD
DATE: 4/23/15
DATE: 4/21/15
CHIEF, BUREAU OF ENVIRONMENTAL SERVICES

MANORWOOD ROAD

KING'S GRANT ROAD



CONTRACTOR TO KEEP EXISTING STORMWATER SYSTEM DOWNSTREAM OF NORTH RIDGE POND CLEAN DURING CONSTRUCTION

PROPOSED LOWERED TOP OF POND EMBANKMENT 260.80

PROPOSED LOWERED TOP OF POND EMBANKMENT 260.80

EXISTING POND VEGETATION TO BE REMOVED

VOLUNTEER MAPLE TO BE SAVED

TEMPORARY MULCH ACCESS ROAD (SEE DETAIL SHEET 10)

RIGHT-OF-ENTRY (ROE) AGREEMENT SECURED BY HOWARD COUNTY

LEGEND

- LIMITS OF DISTURBANCE — LOD
- EXISTING CONTOUR — 260
- PROPOSED CONTOUR — 260
- PROPERTY LINE —
- EASEMENT LINE —
- WETLAND LINE —
- WOODS LINE —
- WOOD FENCE —
- STORM DRAIN —
- MANHOLE —
- TREE —
- ORANGE SAFETY FENCE — OSF
- SILT FENCE — SF
- SUPER SILT FENCE — SSF
- DISCHARGE HOSE —
- REMOVABLE PUMP STATION — RPS
- FILTER BAG — FB
- SUMP PUMP — SP
- STABILIZED CONSTRUCTION ENTRANCE —
- TRENCH CUT AREA —
- PROPOSED RIPRAP —
- PLANTING ZONE —

Planting Zone
(19,615 SF/0.45 Ac)

Quantity	Botanical Name	Common Name	Size	Form
6	Platanus occidentalis	American Sycamore	1.5-2" caliper	Container
6	Quercus palustris	Pin Oak	1.5-2" caliper	Container
6	Liquidambar styraciflua	Sweet Gum	5' Height	Container
6	Salix nigra	Black Willow	5' Height	Container
15	Ilex verticillata	Winterberry	3' Height	Container
15	Viburnum dentatum	Arrow wood	3' Height	Container

NOTE:
THE PROPOSED NORTH RIDGE FACILITY WILL BE A DRY STORMWATER DETENTION POND UPON CONSTRUCTION OF PROPOSED IMPROVEMENTS AND TO BE EXEMPT FROM MD-37B BY MEETING THE FOLLOWING CRITERIA: THE POND HAVING LESS THAN FOUR (4) FEET OF EMBANKMENT (MD 37B EXEMPTION CRITERIA *1, PAGE 1).

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 28634 EXPIRATION DATE: 2017-03-26

John K. Britton
HOWARD SCD

THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY CONSERVATION DISTRICT.

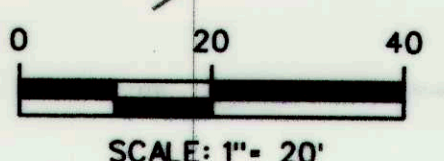
John K. Britton
DATE 4/23/15

DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MD

Michael D. Price
DATE 4/21/15
CHIEF, BUREAU OF ENVIRONMENTAL SERVICES

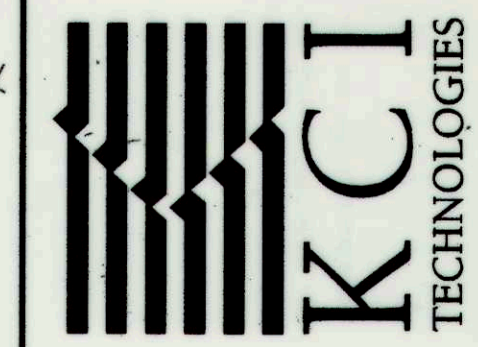
CONTRACTOR TO AFFIX SIGN "WALKWAY NOT TO BE USED" EXISTING MACADAM PAVING

CONTRACTOR SHALL PROVIDE RAMP OVER CURB AND SIDEWALK AND REPAIR ANY DAMAGE OCCURRING DURING CONSTRUCTION OPERATIONS



NO.	REVISIONS DESCRIPTION	DATE

936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818
www.kci.com



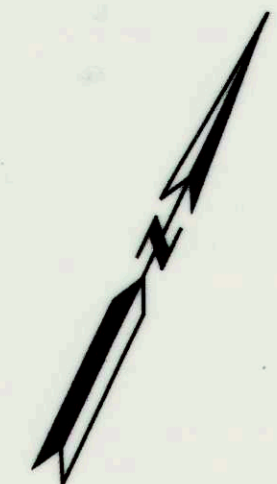
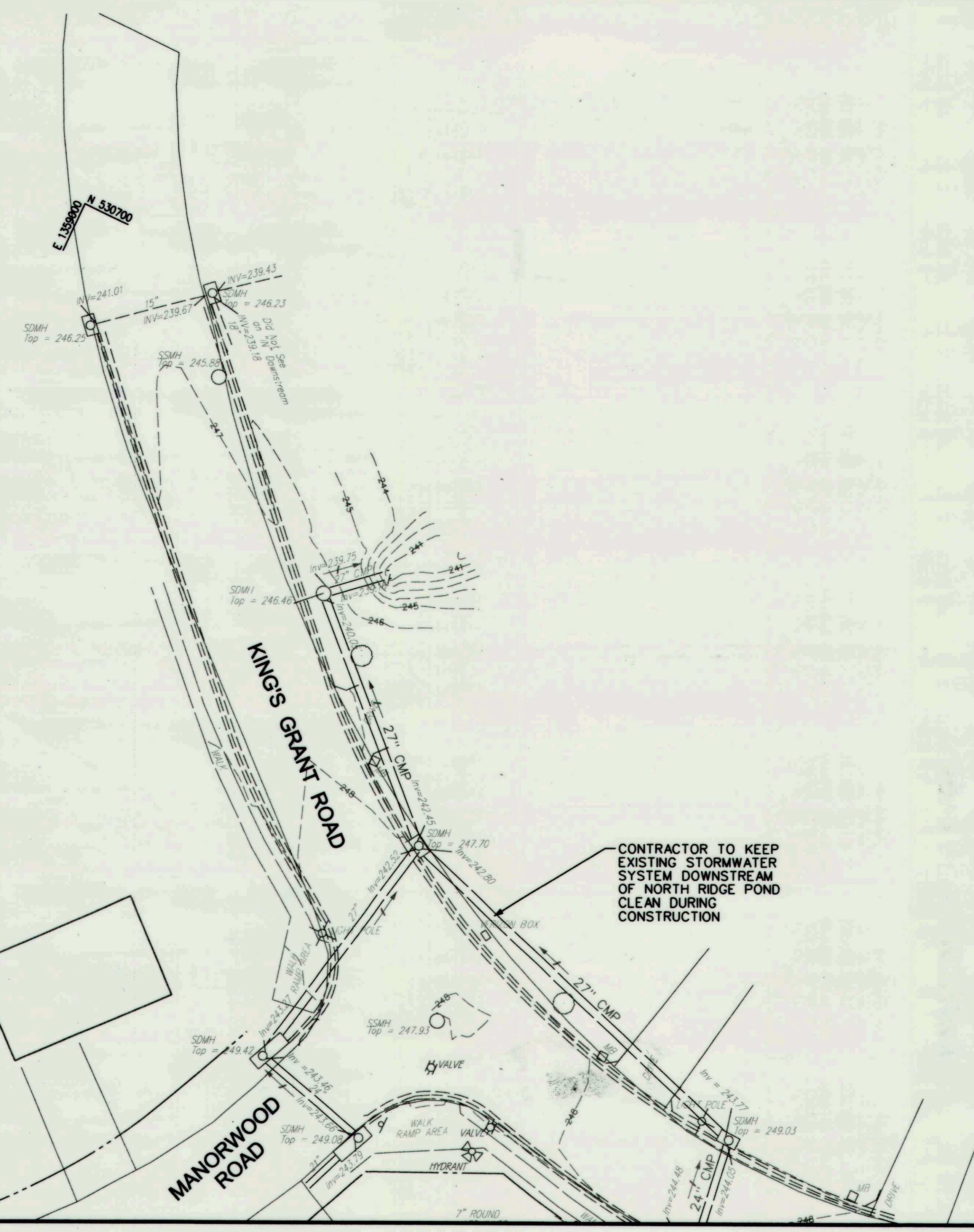
NORTH RIDGE STORMWATER POND REPAIR
CAPITAL PROJECT D-1159
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
STORMWATER MANAGEMENT DIVISION
6781 COLUMBIA GATEWAY DRIVE
COLUMBIA, MD 21046

EROSION & SEDIMENT CONTROL & PLANTING PLAN-1

SCALE:	1" = 20'
DATE:	FEBRUARY 2015
KCI JOB NO.:	17133314.02
CAPITAL PROJECT NO.:	D-1159
PERMIT ISSUE:	
CONSTRUCTION ISSUE:	

SHEET NO.: 8 OF 11

LEGEND			
LIMITS OF DISTURBANCE	— LOD —	SILT FENCE	— SF —
EXISTING CONTOUR	- - - - -260 - - - - -	SUPER SILT FENCE	— SSF —
PROPOSED CONTOUR	— 260 —	DISCHARGE HOSE	— — — — —
PROPERTY LINE	- - - - -	REMOVABLE PUMP STATION	☒ RPS
EASEMENT LINE	- - - - -	FILTER BAG	☒ FB
WETLAND LINE	- - - - -	SUMP PUMP	☒ SP
WOODS LINE	- - - - -	STABILIZED CONSTRUCTION ENTRANCE	▨
WOOD FENCE	- - - - -	TRENCH CUT AREA	▨
STORM DRAIN	- - - - -	PROPOSED RIPRAP	▨
MANHOLE	⊕ ⊙		
TREE	⊙ ⊕		
ORANGE SAFETY FENCE	— OSF —		



MATCHLINE (SEE SHEET 8 OF 11)

CONTRACTOR TO KEEP EXISTING STORMWATER SYSTEM DOWNSTREAM OF NORTH RIDGE POND CLEAN DURING CONSTRUCTION

NO.	REVISIONS DESCRIPTION	DATE

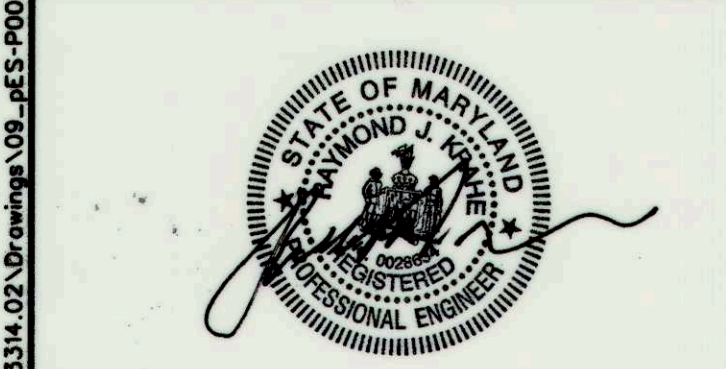
936 RIDGEBROOK ROAD
 SPARKS, MARYLAND 21152
 TELEPHONE: (410) 316-7800
 FAX: (410) 316-7818
 www.kci.com



**NORTH RIDGE
 STORMWATER POND REPAIR**
 CAPITAL PROJECT D-1159
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 STORMWATER MANAGEMENT DIVISION
 9751 COLUMBIA GATEWAY DRIVE
 COLUMBIA, MD 21046

**EROSION
 &
 SEDIMENT
 CONTROL
 PLAN-2**

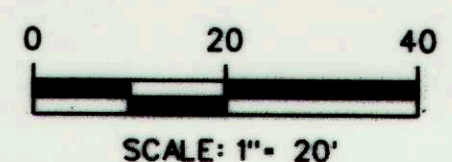
SCALE:	1" = 20'
DATE:	FEBRUARY 2015
KCI JOB NO.:	17133314.02
CAPITAL PROJECT NO.:	D-1159
PERMIT ISSUE:	
CONSTRUCTION ISSUE:	



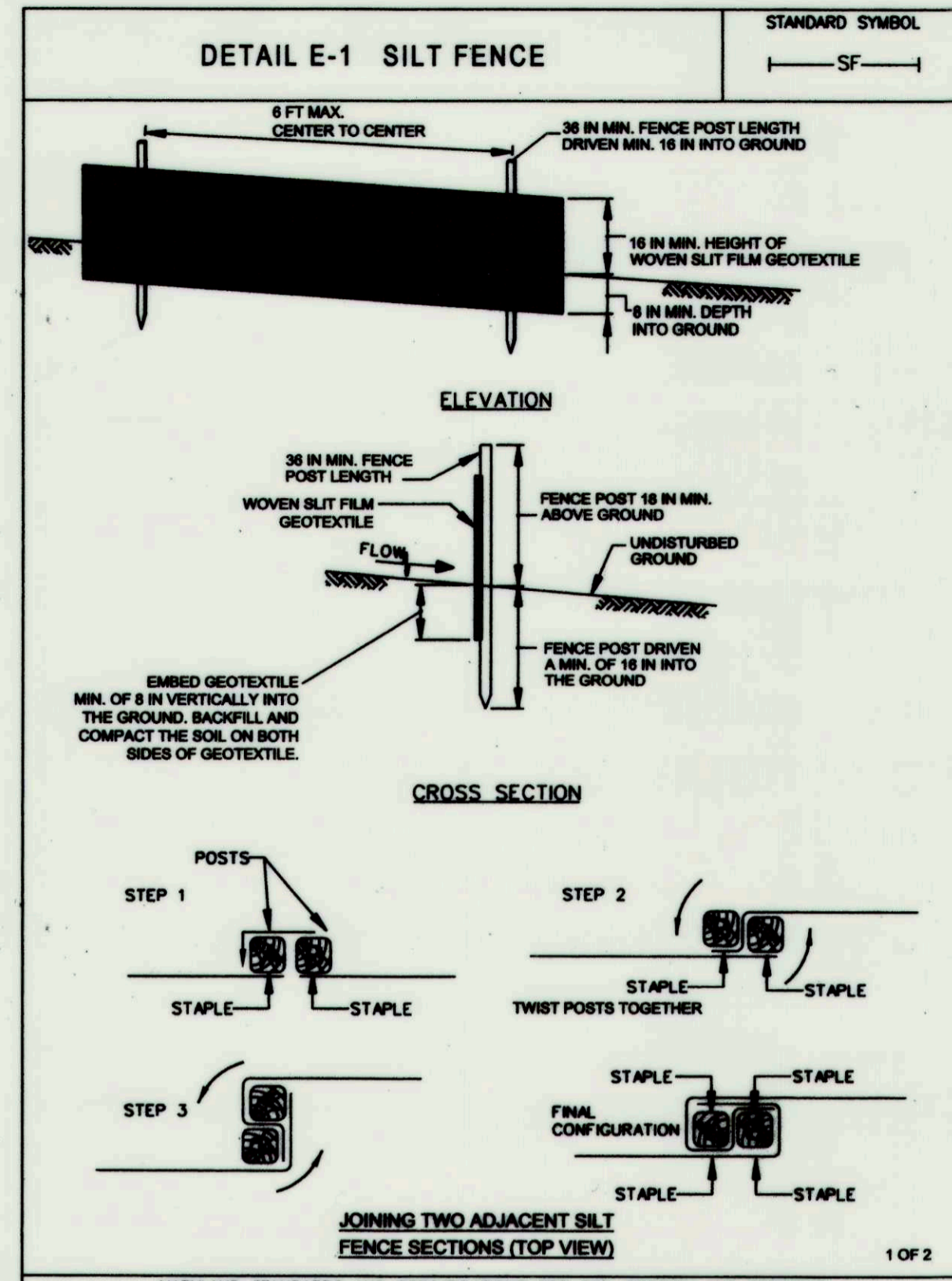
PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 28634 EXPIRATION DATE: 2017-0326

THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY CONSERVATION DISTRICT.
 9/23/15
 HOWARD SCD

DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MD
 4/21/15
 CHIEF, BUREAU OF ENVIRONMENTAL SERVICES



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DETAIL E-1 SILT FENCE STANDARD SYMBOL SF

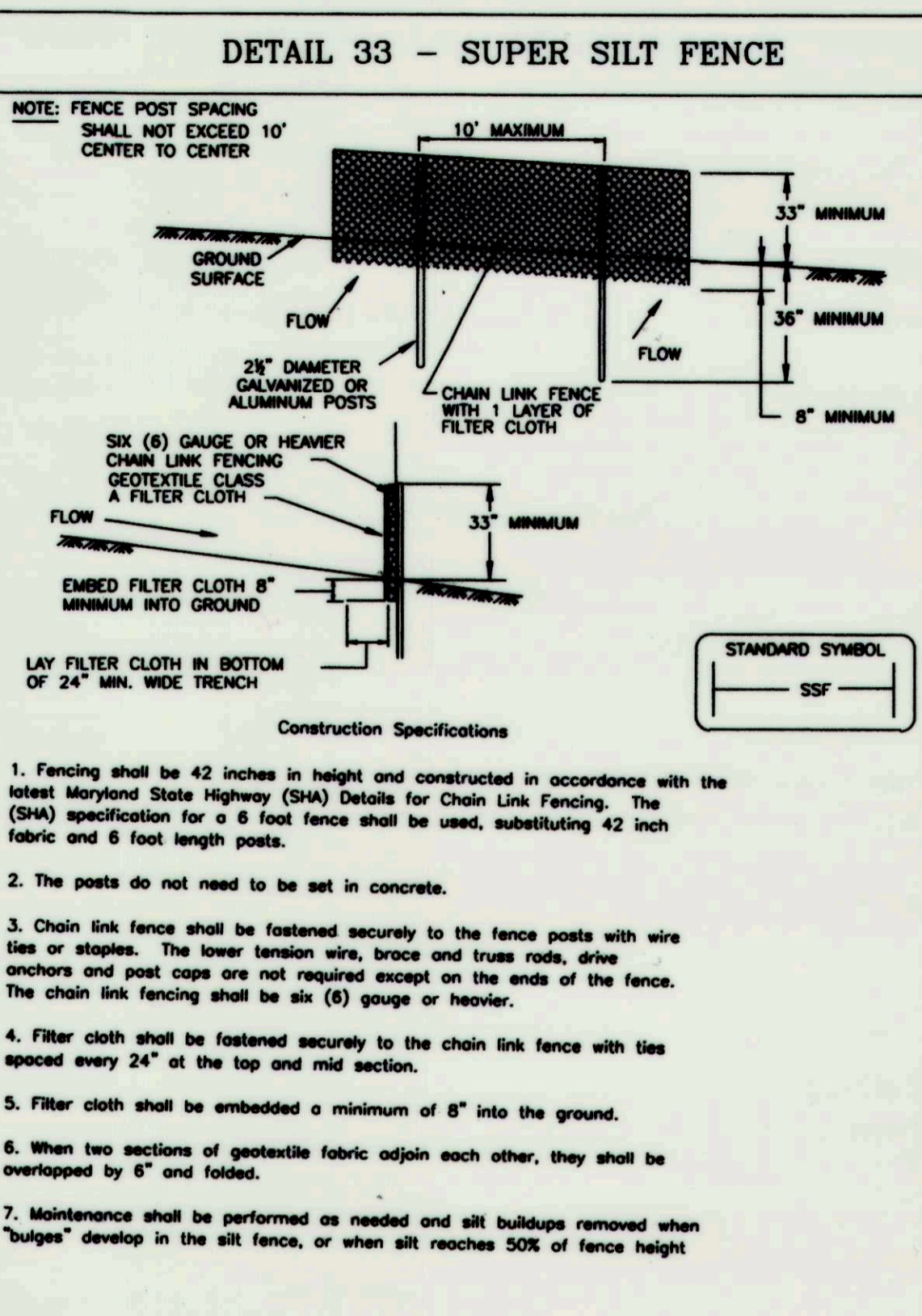
CONSTRUCTION SPECIFICATIONS

- USE WOOD POSTS $1\frac{1}{2}$ x $1\frac{1}{2}$ x $\frac{1}{2}$ INCH MINIMUM SQUARE CUT OF SOUND QUALITY HARDWOOD. AS AN ALTERNATIVE TO WOODEN POST USE STANDARD "T" OR "U" SECTION STEEL POSTS WEIGHING NOT LESS THAN 1 POUND PER LINEAR FOOT.
- USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART.
- USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION.
- PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
- EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND, BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.
- WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL.
- EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE.
- REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN, IF UNDERMINING OCCURS, REINSTALL FENCE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



DETAIL 33 - SUPER SILT FENCE STANDARD SYMBOL SSF

CONSTRUCTION SPECIFICATIONS

- Fencing shall be 42 inches in height and constructed in accordance with the latest Maryland State Highway (SHA) Details for Chain Link Fencing. The (SHA) specification for a 6 foot fence shall be used, substituting 42 inch fabric and 6 foot length posts.
- The posts do not need to be set in concrete.
- Chain link fence shall be fastened securely to the fence posts with wire ties or staples. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence. The chain link fencing shall be six (6) gauge or heavier.
- Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
- Filter cloth shall be embedded a minimum of 8" into the ground.
- When two sections of geotextile fabric adjoin each other, they shall be overlapped by 6" and folded.
- Maintenance shall be performed as needed and silt buildup removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE MODIFIED

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

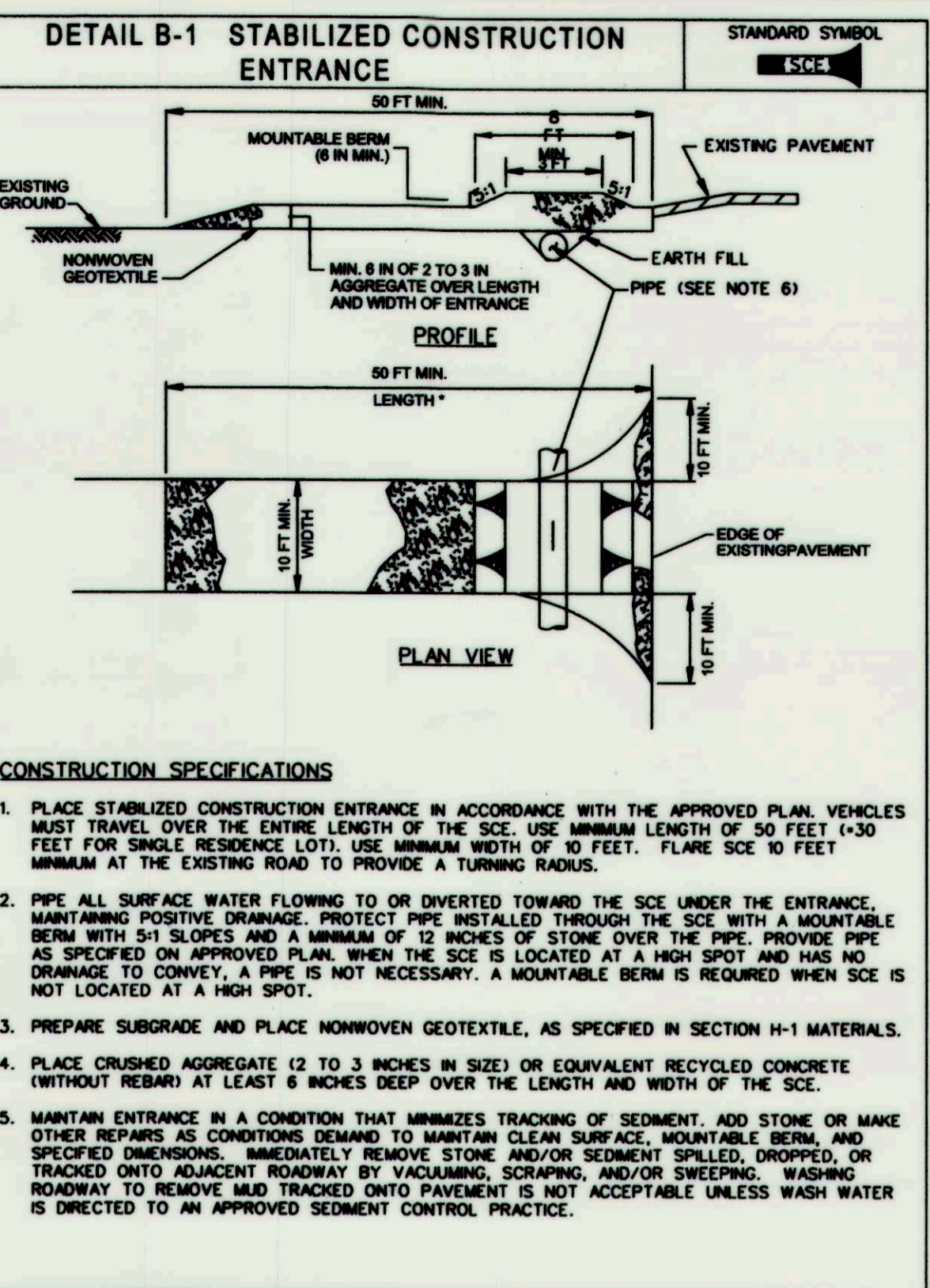
SUPER SILT FENCE

Design Criteria

Slope	Slope Steepness	Slope Length (maximum)	Silt Fence Length (maximum)
0 - 10%	0 - 10:1	Unlimited	Unlimited
10 - 20%	10:1 - 5:1	200 feet	1,500 feet
20 - 33%	5:1 - 3:1	100 feet	1,000 feet
33 - 50%	3:1 - 2:1	100 feet	500 feet
50% +	2:1 +	50 feet	250 feet

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



DETAIL B-1 STABILIZED CONSTRUCTION ENTRANCE STANDARD SYMBOL SCE

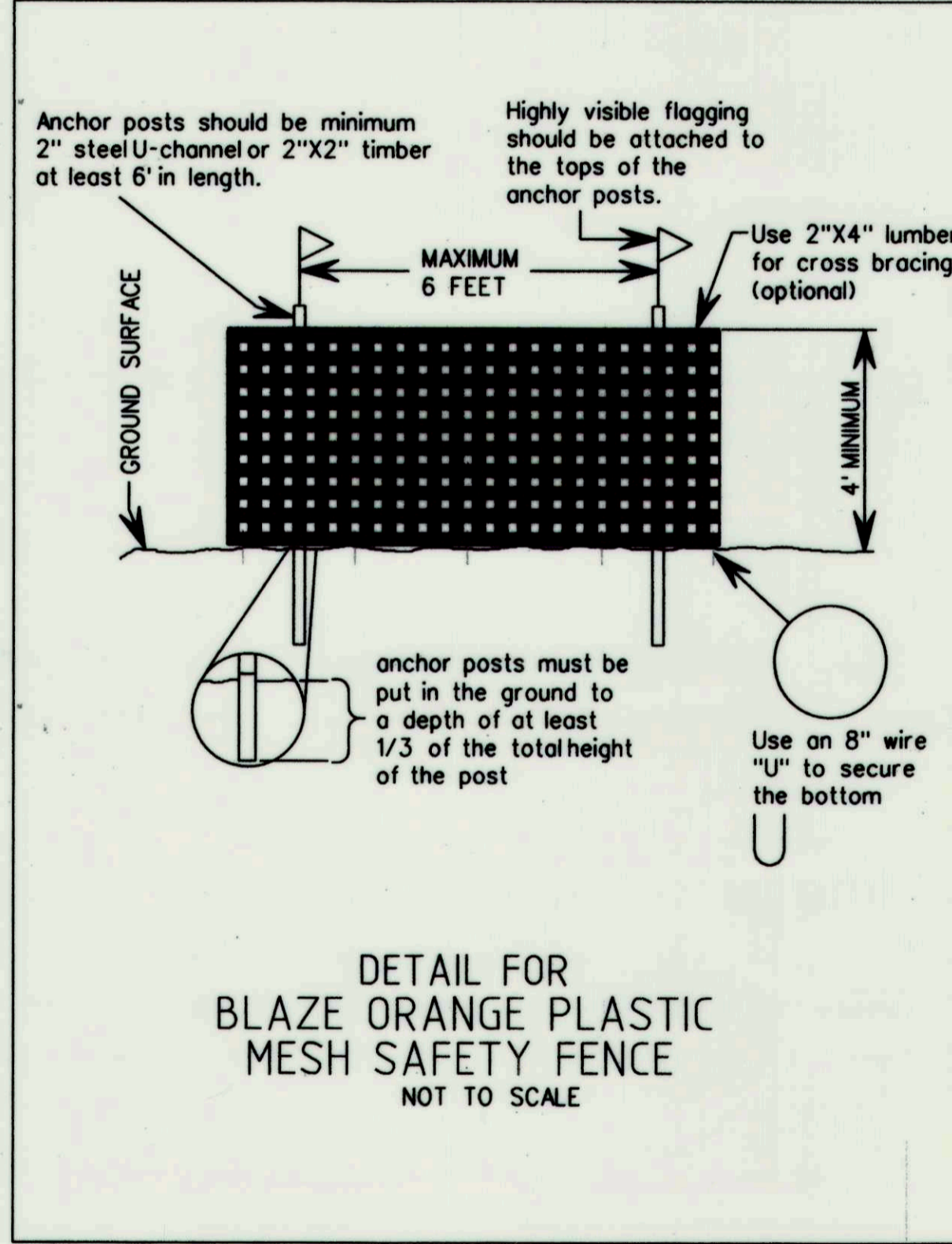
CONSTRUCTION SPECIFICATIONS

- PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (+30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE TO FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
- PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE. MAINTAIN POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
- PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
- PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
- MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE. MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRUBBING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



DETAIL FOR BLAZE ORANGE PLASTIC MESH SAFETY FENCE NOT TO SCALE

Anchor posts should be minimum 2" steel U-channel or 2"x2" timber at least 6' in length.

Highly visible flagging should be attached to the tops of the anchor posts.

Use 2"x4" lumber for cross bracing (optional)

Use an 8" wire "U" to secure the bottom

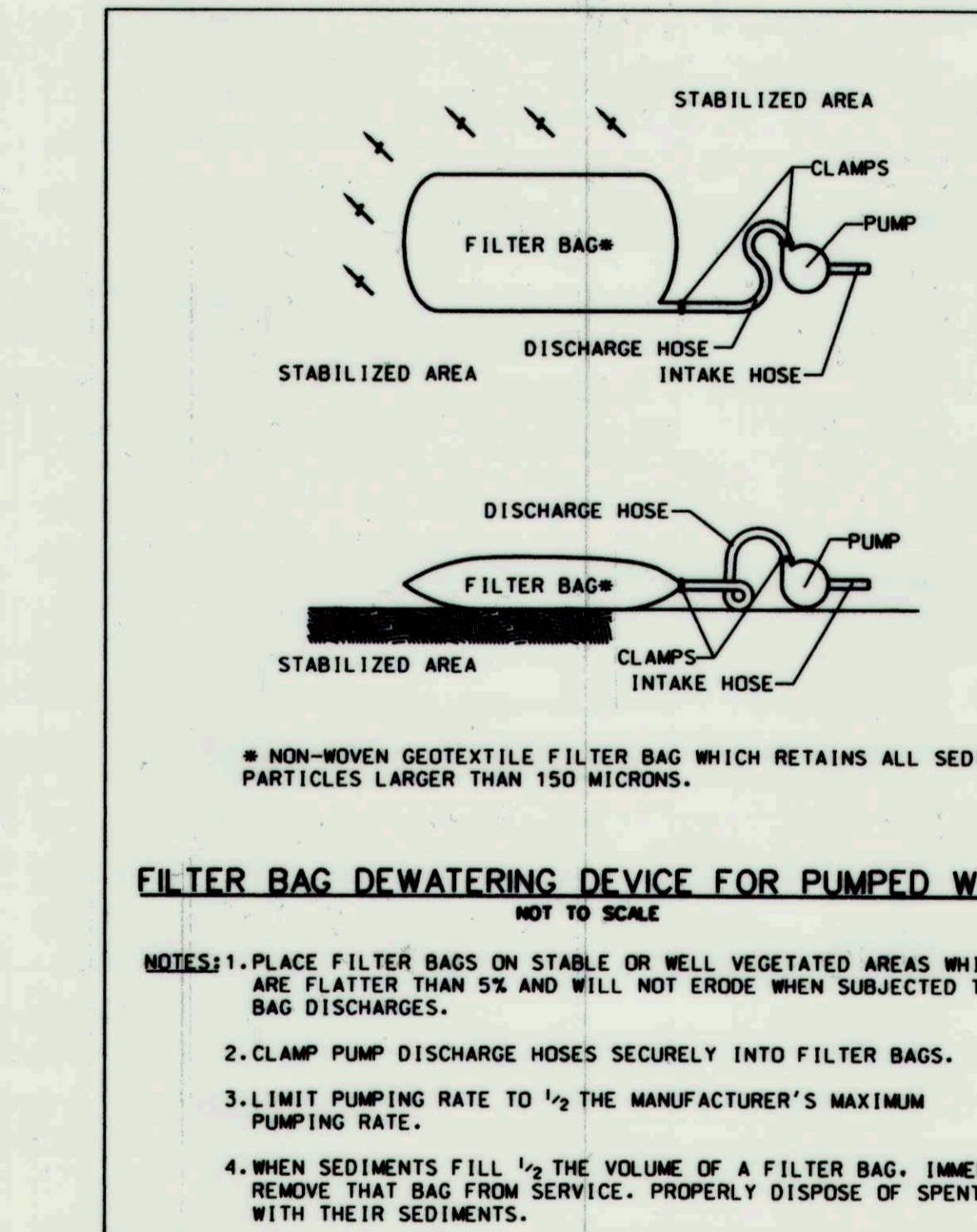
anchor posts must be put in the ground to a depth of at least 1/3 of the total height of the post

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 28634 EXPIRATION DATE: 2017-03-26

THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

John K. Roberts
HOWARD SCD

4/23/15
DATE



FILTER BAG DEWATERING DEVICE FOR PUMPED WATER NOT TO SCALE

FILTER BAG SPECIFICATIONS

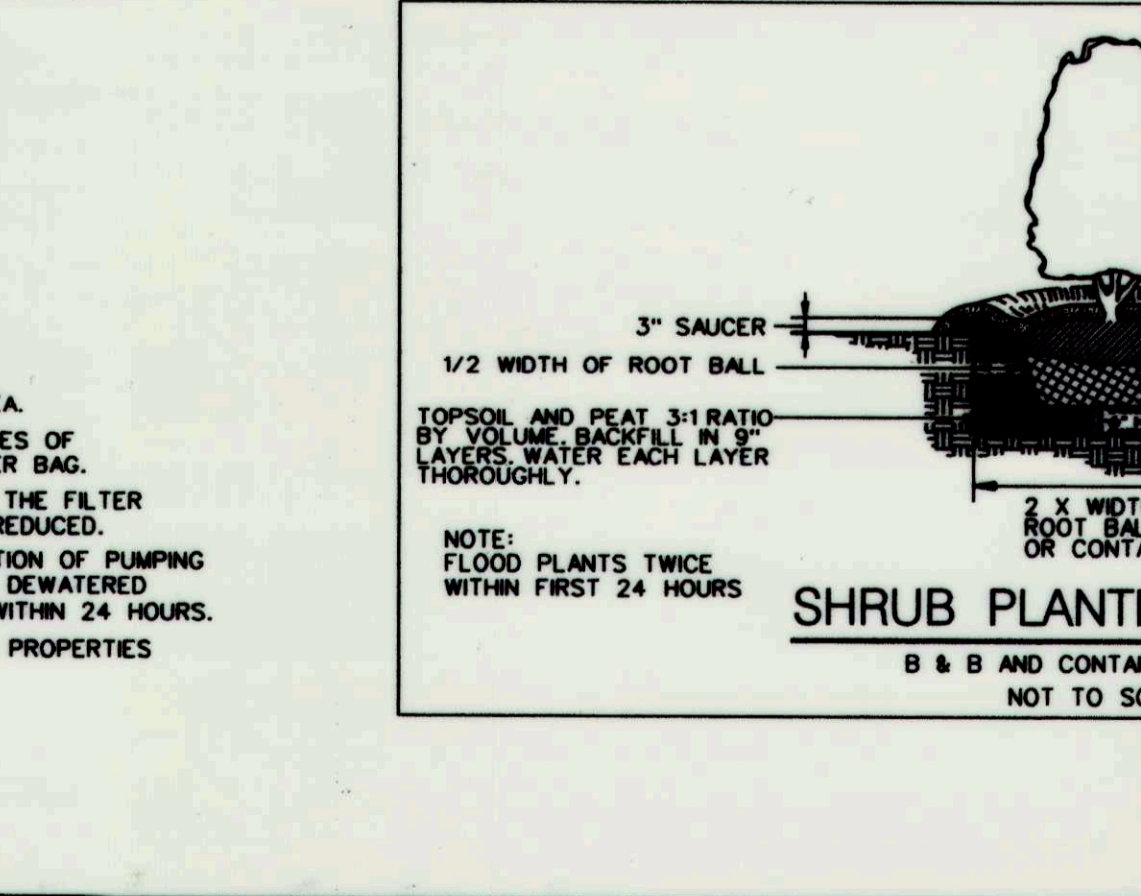
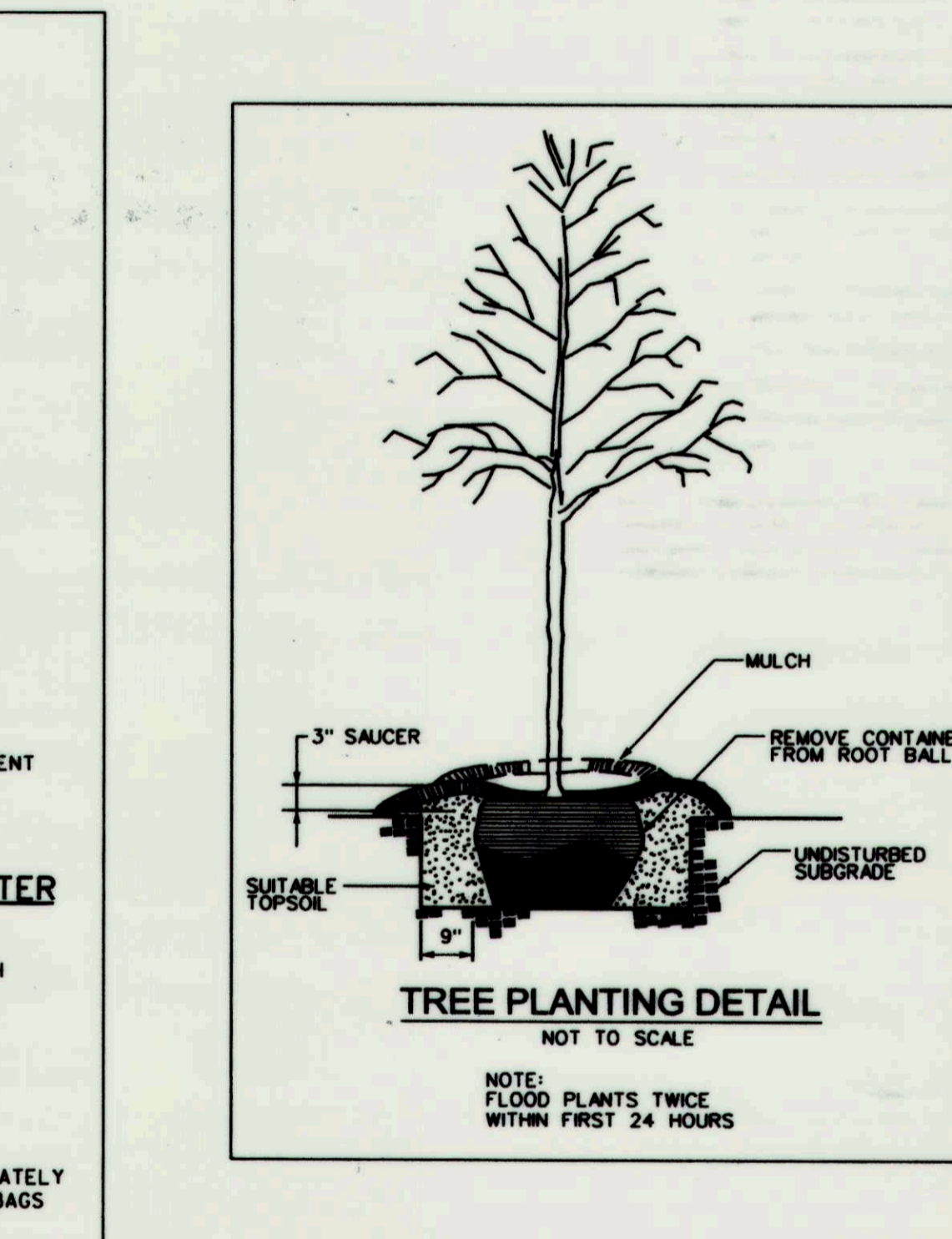
- FILTER BAG SHALL BE MADE OF NON-WOVEN GEOTEXTILE WITH A MINIMUM SURFACE AREA OF 225 SQUARE FEET PER SIDE.
- ALL STRUCTURAL SEAMS SHALL BE SEWN WITH A DOUBLE STITCH USING A DOUBLE NEEDLE MACHINE WITH HIGH STRENGTH THREAD. SEAM STRENGTH SHALL WITHSTAND 100 LB-IN USING ASTM D-4884 TEST METHOD.
- FILTER BAG SHALL HAVE A NOZZLE LARGE ENOUGH TO ACCOMMODATE A FOUR(4) INCH DIAMETER PUMP DISCHARGE HOSE.
- NOZZLE SHALL BE SEALED TIGHTLY AROUND THE PUMP DISCHARGE HOSE WITH A STRAP OR SIMILAR DEVICE TO PREVENT UNFILTERED WATER FROM ESCAPING.
- FILTER BAG SHALL BE PLACED ON A LEVEL OR GENTLY SLOPING (5% MAXIMUM) AREA.
- FILTER BAG SHALL BE PLACED UPON A BASE OF STRAW BALES OR THREE (3) INCHES OF CLEAN STONE TO PROMOTE DEWATERING THROUGH BOTTOM SURFACE OF THE FILTER BAG.
- PUMPING RATES SHALL BE CONTROLLED TO PREVENT EXCESSIVE PRESSURE WITHIN THE FILTER BAG. AS THE BAG BECOMES FILLED WITH SEDIMENT THE PUMPING RATE SHALL BE REDUCED.
- THE FILTER BAG SHALL BE DEWATERED, REMOVED AND DISPOSED OF UPON COMPLETION OF PUMPING OPERATIONS OR AFTER IT HAS REACHED CAPACITY, WHICHEVER OCCURS FIRST. THE DEWATERED SEDIMENT FROM THE BAG SHALL BE SPREAD IN AN UPLAND AREA AND STABILIZED WITHIN 24 HOURS.
- THE GEOTEXTILE FABRIC SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS WITH PROPERTIES DETERMINED IN ACCORDANCE WITH THE FOLLOWING PROCEDURES:

WEIGHT	10 OZ/YD	ASTM D-3776
GRAB TENSILE	210 LBS.	ASTM D-4632
PUNCTURE	150 LBS.	ASTM D-4833
FLOW RATE	70 GAL/MIN/FT2	ASTM D-4491
PERMITIVITY (SEC)	1.3	ASTM D-4991
UV RESISTANCE	70%	ASTM D-4355
APPARENT OPENING SIZE (AOS)	40-80	ASTM D-4751

DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY, MD

Michael D. Jones
CHIEF, BUREAU OF ENVIRONMENTAL SERVICES

4/21/15
DATE

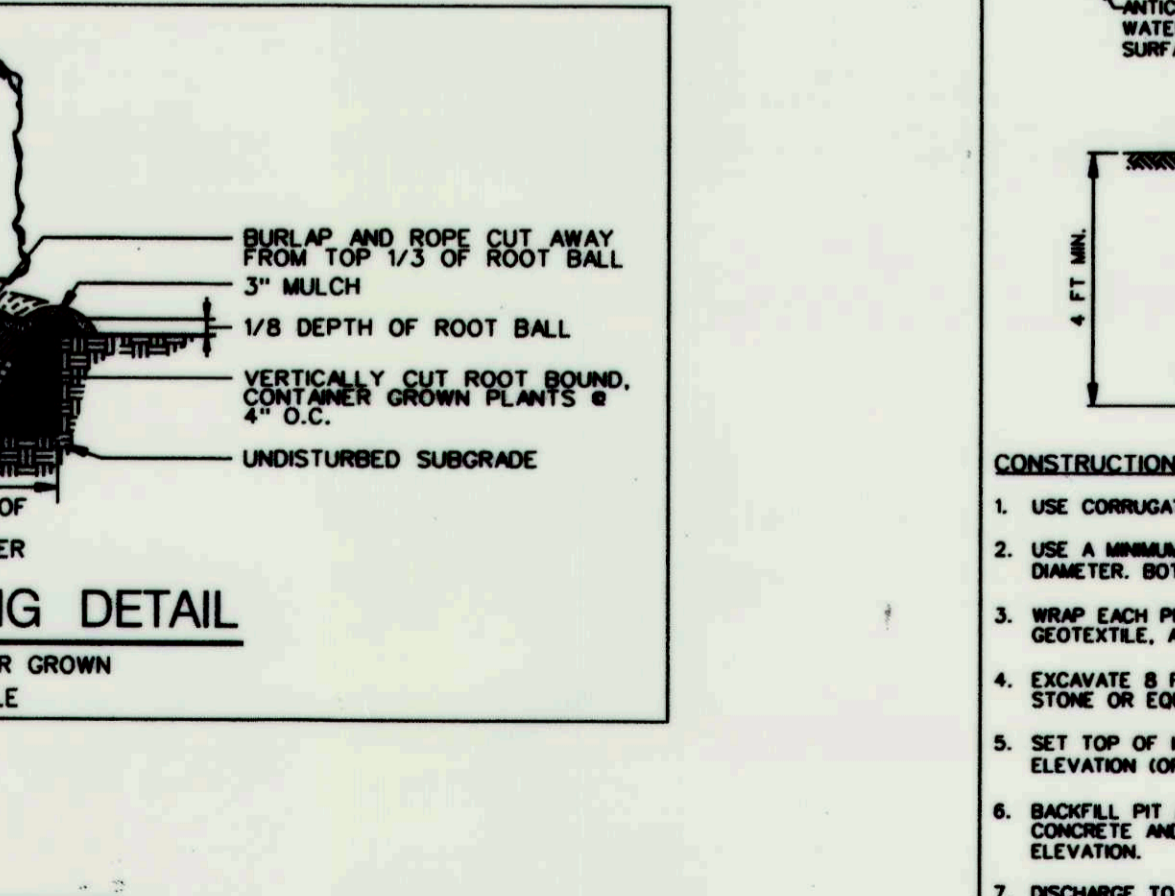
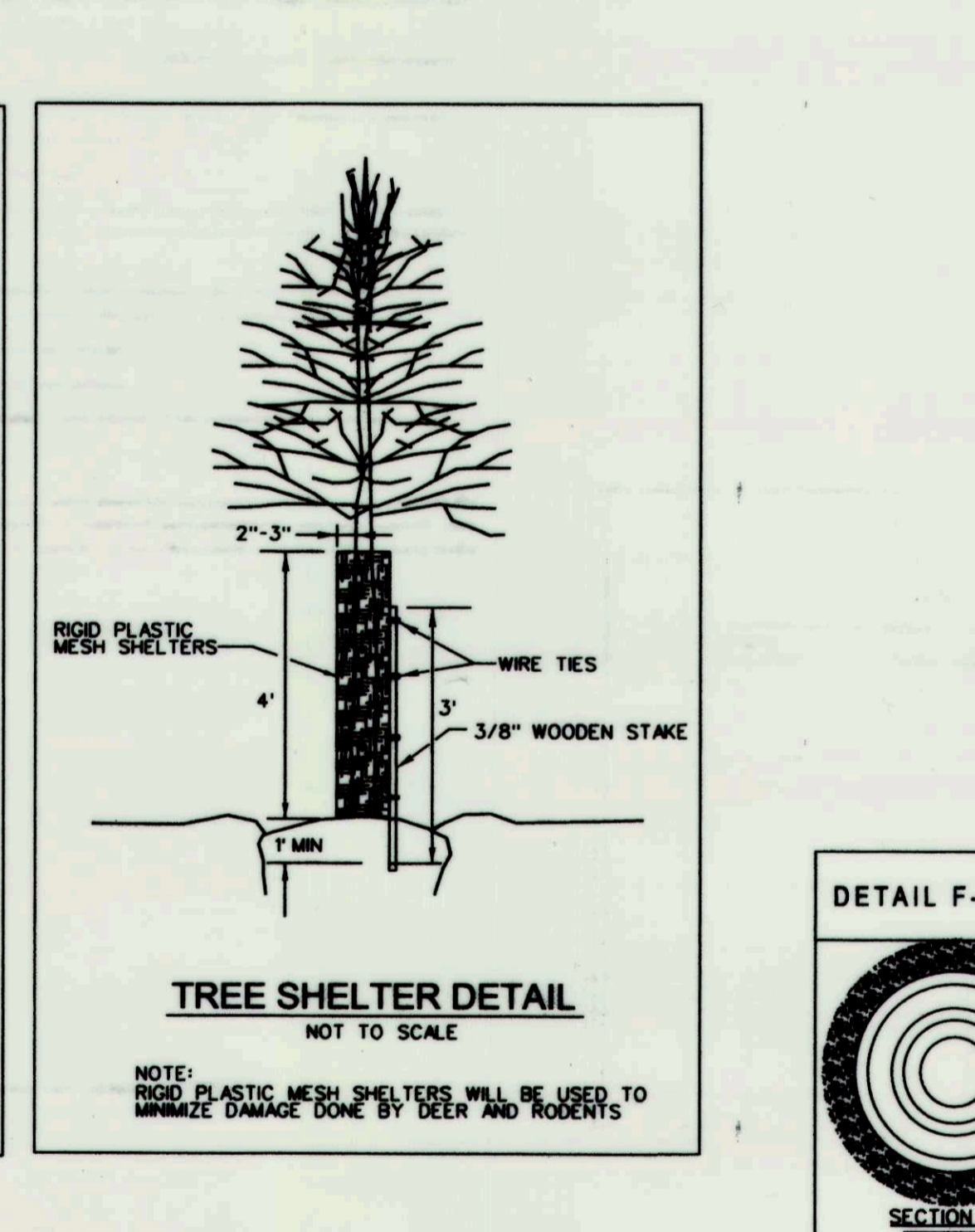


TREE PLANTING DETAIL NOT TO SCALE

NOTE: FLOOD PLANTS TWICE WITHIN FIRST 24 HOURS

SHRUB PLANTING DETAIL NOT TO SCALE

NOTE: FLOOD PLANTS TWICE WITHIN FIRST 24 HOURS

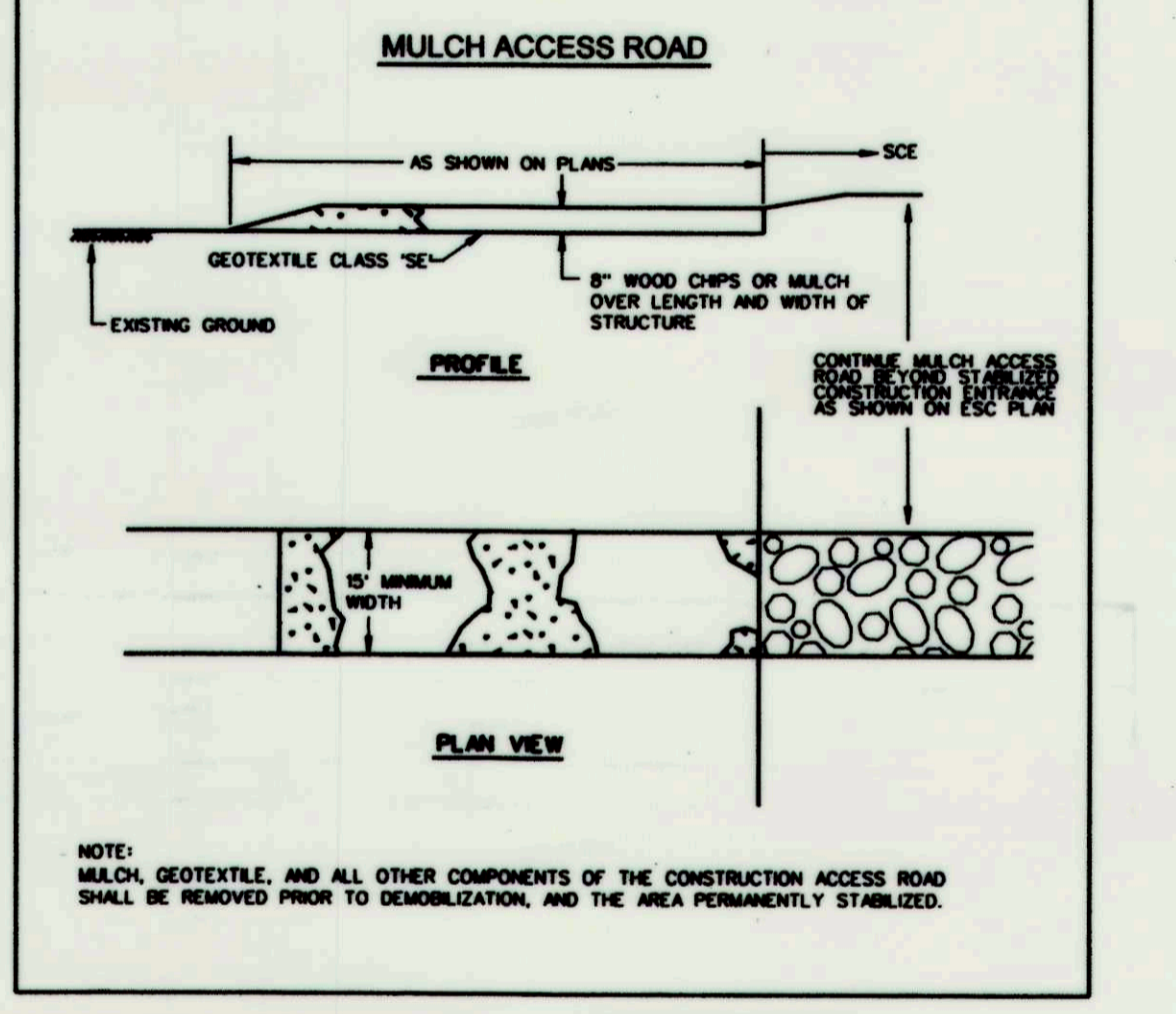


TREE SHELTER DETAIL NOT TO SCALE

NOTE: RIGID PLASTIC MESH SHELTERS WILL BE USED TO MINIMIZE DAMAGE DONE BY DEER AND RODENTS

MULCH ACCESS ROAD

NOTE: MULCH, GEOTEXTILE, AND ALL OTHER COMPONENTS OF THE CONSTRUCTION ACCESS ROAD SHALL BE REMOVED PRIOR TO DEMOBILIZATION, AND THE AREA PERMANENTLY STABILIZED.



DETAIL F-1 REMOVABLE PUMPING STATION STANDARD SYMBOL RPS

CONSTRUCTION SPECIFICATIONS

- USE CORRUGATED METAL OR PLASTIC PIPE WITH 1 INCH DIAMETER PERFORATIONS 6 INCHES ON CENTER.
- USE A MINIMUM 12 INCH DIAMETER INNER PIPE WITH AN OUTER PIPE A MINIMUM 6 INCHES LARGER IN DIAMETER. BOTTOM OF EACH PIPE MUST BE CAPPED WITH WATER TIGHT SEAL.
- WRAP EACH PIPE WITH 1/2 INCH GALVANIZED HARDWARE CLOTH. ON INNER PIPE WRAP NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE HARDWARE CLOTH.
- EXCAVATE 8 FEET X 8 FEET X 4 FEET DEEP PIT FOR PIPE PLACEMENT. PLACE CLEANED 3/4 INCH STONE OR EQUIVALENT RECYCLED CONCRETE, 6 INCHES IN DEPTH PRIOR TO PIPE PLACEMENT.
- SET TOP OF INNER AND OUTER PIPES MINIMUM 12 INCHES ABOVE ANTICIPATED WATER SURFACE ELEVATION (OR RISER CREST ELEVATION WHEN DEWATERING A BASIN).
- BACKFILL PIT AROUND THE OUTER PIPE WITH TO 3/4 INCH CLEAN STONE OR EQUIVALENT RECYCLED CONCRETE AND EXTEND STONE A MINIMUM OF 6 INCHES ABOVE ANTICIPATED WATER SURFACE ELEVATION.
- DISCHARGE TO A STABLE AREA AT A NONEROSIVE RATE.
- A REMOVABLE PUMPING STATION REQUIRES FREQUENT MAINTENANCE. IF SYSTEM CLOGS, PULL OUT INNER PIPE AND REPLACE GEOTEXTILE. KEEP POINT OF DISCHARGE FREE OF GROUND.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

NO.	REVISIONS DESCRIPTION	DATE

KCI FILE: MA-2013-17133314.02

936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818
www.kci.com

KCI TECHNOLOGIES

NORTH RIDGE STORMWATER POND REPAIR

CAPITAL PROJECT D-1159

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
STORMWATER MANAGEMENT DIVISION
6781 COLUMBIA GATEWAY DRIVE
COLUMBIA, MD 21046

EROSION & SEDIMENT CONTROL & PLANTING DETAILS

SCALE: AS SHOWN

DATE: FEBRUARY 2015

KCI JOB NO.: 17133314.02

CAPITAL PROJECT NO.: D-1159

PERMIT ISSUE:

CONSTRUCTION ISSUE:

SHEET NO.: 10 OF 11

