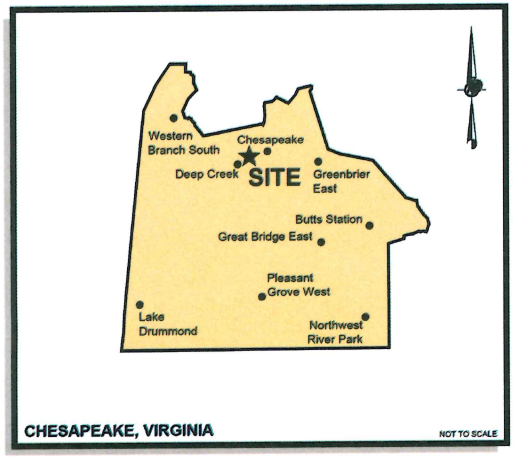
DOMINION
CHESAPEAKE ENERGY CENTER
CLOSURE PLAN
PERMIT NO. 440
CITY OF CHESAPEAKE, VIRGINIA
DECEMBER, 2014

RECEIVED - DEQ
MAR 10 2016
Tidewater Regional Office

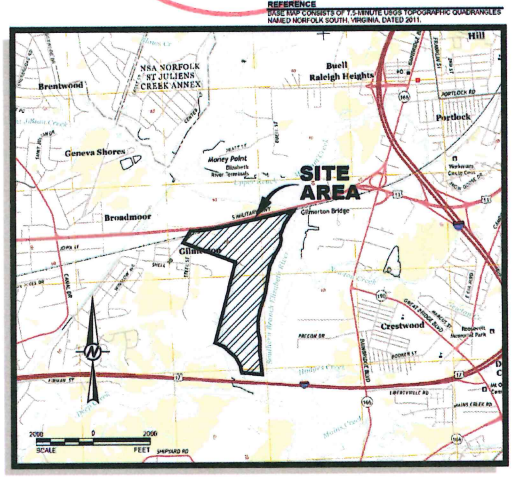


VICINITY MAP

DRAWING INDEX

DRAWING NO.	DRAWING TITLE
1	COVER SHEET
2	EXISTING CONDITIONS
3	LEACHATE COLLECTION SYSTEM
4	LINER GRADES
5	FINAL GRADES AND CROSS-SECTION LOCATIONS
6	CROSS SECTIONS (1 OF 2)
7	CROSS SECTIONS (2 OF 2)
8	STORMWATER MANAGEMENT AND SITE MONITORING PLAN
9	DETAILS (1 OF 4)
10	DETAILS (2 OF 4)
11	DETAILS (3 OF 4)
12	DETAILS (4 OF 4)

REFERENCE
BASE MAP CONSISTS OF 7.5-MINUTE USGS TOPOGRAPHIC QUADRANGLES NAMED NORFOLK SOUTH, VIRGINIA, DATED 2011.



SITE LOCATION MAP

CONTACT INFORMATION

ENGINEER:
GOLDER ASSOCIATES, INC.
MAIN CONTACT: DAN McGRATH, PE.
2108 W. LABURNUM AVE., SUITE 200
RICHMOND, VIRGINIA 23227
PHONE: (804) 358-7900
FAX: (804) 358-2900
EMAIL: DMCGRATH@GOLDER.COM

OWNER / DEVELOPER:
DOMINION-CHESAPEAKE ENERGY CENTER
MAIN CONTACT: JEFF RICHEY
2701 VEPCO STREET
CHESAPEAKE, VA 23323
PHONE: (219) 406-2629

PREPARED BY:

Golder Associates

PREPARED FOR:

Dominion

TOPOGRAPHY SOURCE NOTE

EXISTING TOPOGRAPHY SHOWN IN THIS DRAWING SET IS BASED ON MAP COMPILED BY PHOTO SCIENCE USING PHOTOGRAMMETRIC METHODS. AERIAL PHOTOGRAPHY DATED JULY 10, 2015. GROUND CONTROL SURVEY AND EXISTING CULVERT LOCATIONS PREPARED BY D&M SURVEYORS.

Golder Associates

REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RVW
2	01/02/15	DPM	RESPONSE TO DEQ COMMENTS	ASM	DPM	JRD
3	11/05/15	DPM	RESPONSE TO DEQ COMMENTS	ASM	DPM	JRD
4	12/17/14	DPM	REVISED FINAL GRADES	ATN	DPM	JRD

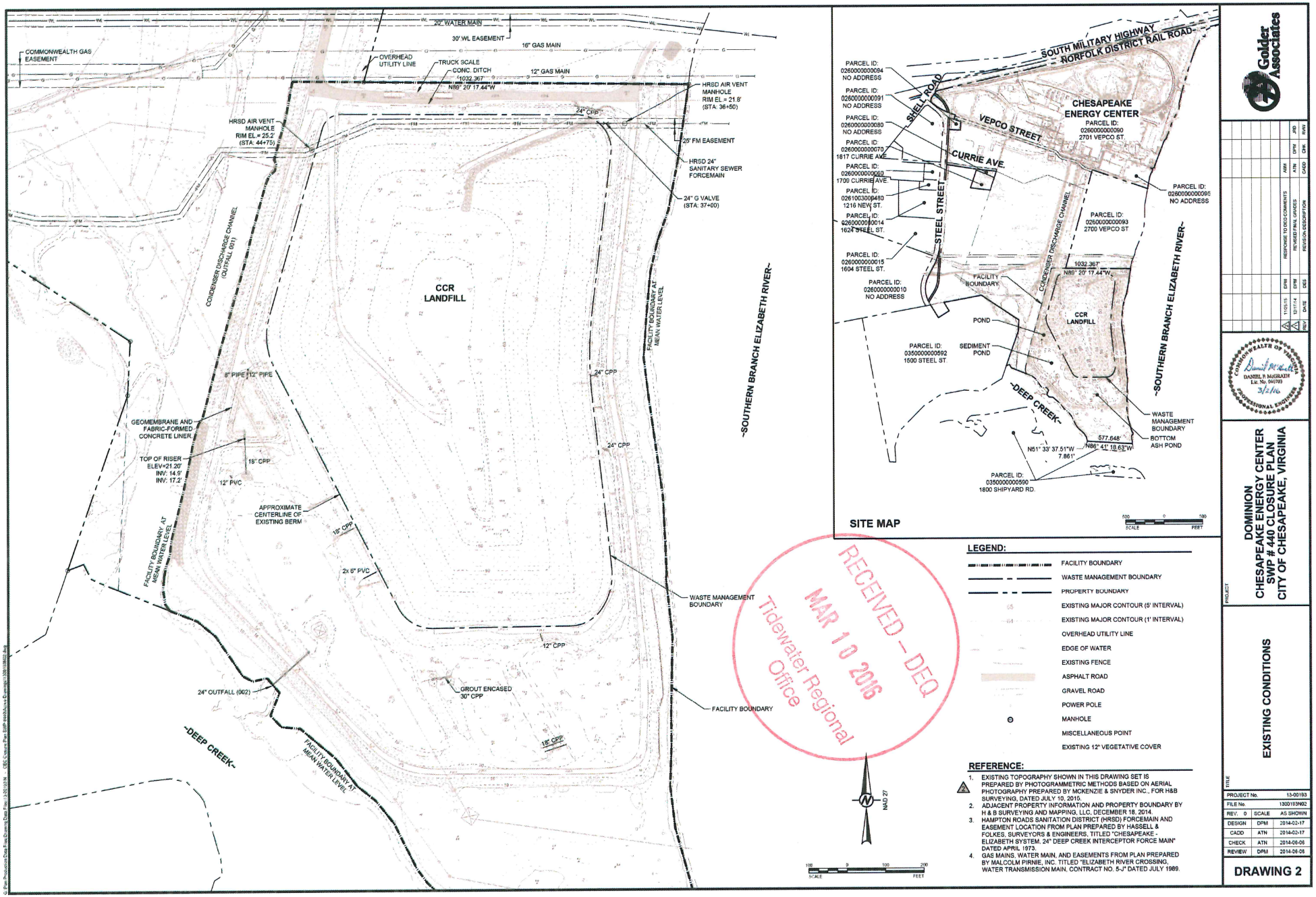
COMMONWEALTH OF VIRGINIA
DANIEL P. McGRATH
Lic. No. 040703
3/2/16
PROFESSIONAL ENGINEER

PROJECT
DOMINION
CHESAPEAKE ENERGY CENTER
SWP # 440 CLOSURE PLAN
CITY OF CHESAPEAKE, VIRGINIA

TITLE
COVER SHEET

PROJECT No.		13-00193
FILE No.		1300193N01
REV. 3	SCALE	AS SHOWN
DESIGN	DPM	2014-02-17
CADD	ATN	2014-02-17
CHECK	ATN	2014-06-06
REVIEW	DPM	2014-06-06

DRAWING 1



SITE MAP

RECEIVED – DEQ
MAR 10 2016
Tidewater Regional Office

LEGEND:

- FACILITY BOUNDARY
- WASTE MANAGEMENT BOUNDARY
- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR (5' INTERVAL)
- EXISTING MAJOR CONTOUR (1' INTERVAL)
- OVERHEAD UTILITY LINE
- EDGE OF WATER
- EXISTING FENCE
- ASPHALT ROAD
- GRAVEL ROAD
- POWER POLE
- MANHOLE
- MISCELLANEOUS POINT
- EXISTING 12" VEGETATIVE COVER

REFERENCE:

1. EXISTING TOPOGRAPHY SHOWN IN THIS DRAWING SET IS PREPARED BY PHOTOGRAMMETRIC METHODS BASED ON AERIAL PHOTOGRAPHY PREPARED BY MCKENZIE & SNYDER INC., FOR H&B SURVEYING, DATED JULY 10, 2015.
2. ADJACENT PROPERTY INFORMATION AND PROPERTY BOUNDARY BY H & B SURVEYING AND MAPPING, LLC, DECEMBER 18, 2014.
3. HAMPTON ROADS SANITATION DISTRICT (HRSD) FORCEMAIN AND EASEMENT LOCATION FROM PLAN PREPARED BY HASSELL & FOLKES, SURVEYORS & ENGINEERS, TITLED "CHESAPEAKE - ELIZABETH SYSTEM, 24" DEEP CREEK INTERCEPTOR FORCE MAIN" DATED APRIL 1973.
4. GAS MAINS, WATER MAIN, AND EASEMENTS FROM PLAN PREPARED BY MALCOLM PIRNIE, INC. TITLED "ELIZABETH RIVER CROSSING, WATER TRANSMISSION MAIN, CONTRACT NO. 5-J" DATED JULY 1989.

NAD 27

SCALE FEET

Golder Associates

REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	APP'D
1	11/25/15	DPM	RESPONSE TO DEQ COMMENTS	ATN	DPM	JRD
0	12/17/14	DPM	REVISED FINAL GRADES	ATN	DPM	RWW

COMMONWEALTH OF VIRGINIA
DANIEL R. McGRATH
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PROJECT
DOMINION
CHESAPEAKE ENERGY CENTER
SWP # 440 CLOSURE PLAN
CITY OF CHESAPEAKE, VIRGINIA

TITLE
EXISTING CONDITIONS

PROJECT No.		13-00193
FILE No.		1300193N02
REV. 0	SCALE	AS SHOWN
DESIGN	DPM	2014-02-17
CADD	ATN	2014-02-17
CHECK	ATN	2014-06-06
REVIEW	DPM	2014-06-06

DRAWING 2

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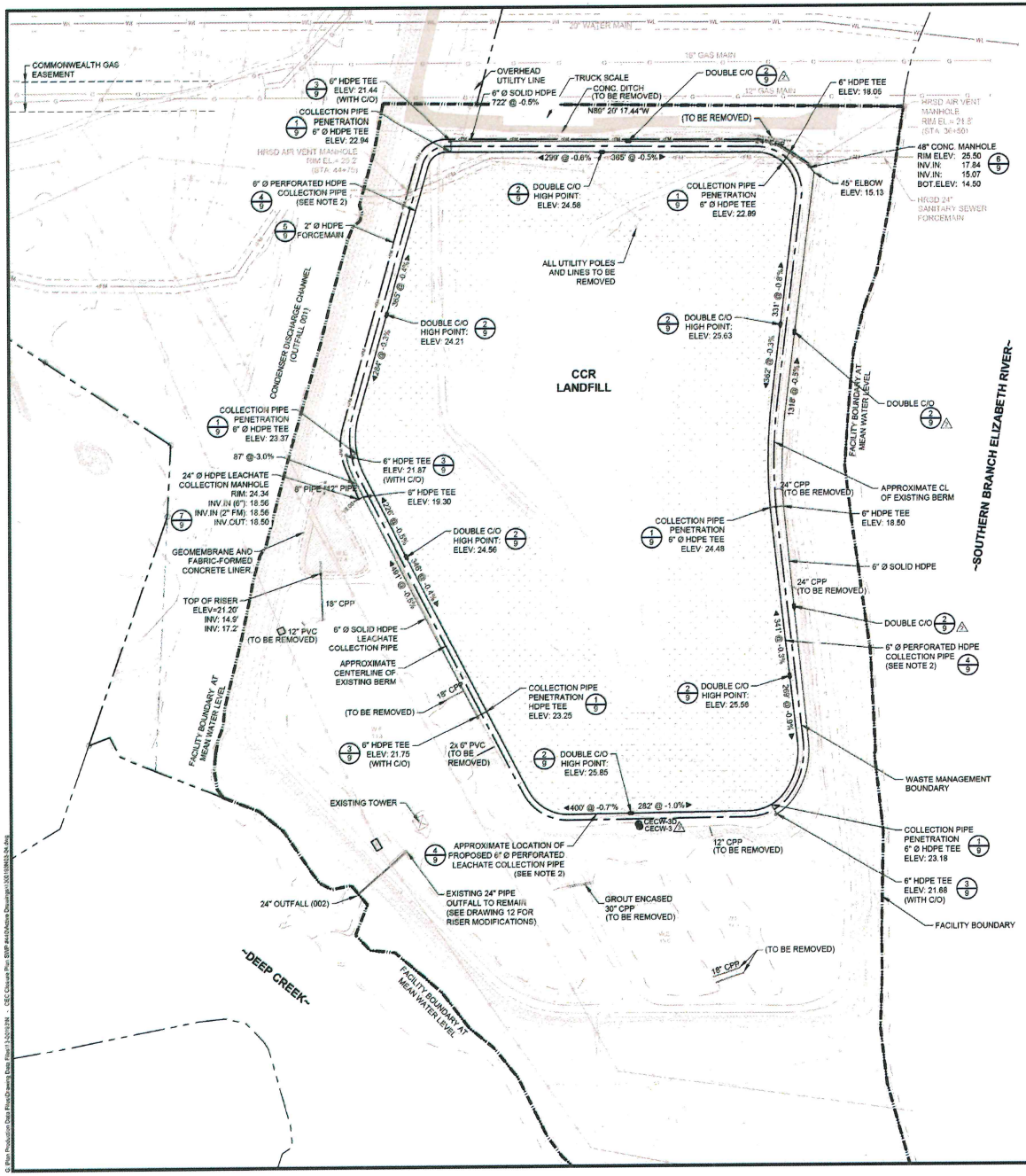

NAD 27

100 0 100 200
SCALE FEET

LEGEND:

- FACILITY BOUNDARY
- WASTE MANAGEMENT BOUNDARY
- PROPERTY BOUNDARY
- 95 EXISTING MAJOR CONTOUR (5' INTERVAL)
- 94 EXISTING MAJOR CONTOUR (1' INTERVAL)
- OVERHEAD UTILITY LINE
- EDGE OF WATER
- EXISTING FENCE
- ASPHALT ROAD
- GRAVEL ROAD
- POWER POLE
- MANHOLE
- MISCELLANEOUS POINT
- EXISTING 12" VEGETATIVE COVER

REFERENCE:

1. EXISTING TOPOGRAPHY SHOWN IN THIS DRAWING SET IS PREPARED BY PHOTOGRAMMETRIC METHODS BASED ON AERIAL PHOTOGRAPHY PREPARED BY MCKENZIE & SNYDER INC., FOR H&B SURVEYING, DATED JULY 10, 2015.
2. 6" Ø PERFORATED PIPE IS TO BE INSTALLED IN THE EXISTING ASH AS SHOWN ON DETAIL 1, DRAWING 9. THE APPROXIMATE LOCATION SHOWN IS FOR DESIGN PURPOSES ONLY. ACTUAL LOCATION IS TO BE FIELD-FIT BASED ON THE TRUE LIMITS OF EXISTING LINER AND LIMITS OF ASH.

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REV	DATE	BY	REVISION DESCRIPTION	CADD	CHK	RVW
0	12/11/14	DPM	REVISED FINAL GRADES	ATN	DPM	JRD
1	1/15/15	DPM	RESPONSE TO DEQ COMMENTS	ATN	DPM	JRD
2	6/25/15	DPM	RESPONSE TO DEQ COMMENTS	ASM	DPM	JRD

COMMONWEALTH OF VIRGINIA
DANIEL P. McGRAITH
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PROJECT
DOMINION
CHESAPEAKE ENERGY CENTER
SWP # 440 CLOSURE PLAN
CITY OF CHESAPEAKE, VIRGINIA

TITLE
LECHATE COLLECTION SYSTEM

PROJECT No.		13-00153
FILE No.		1300193N03-04
REV. 3	SCALE	AS SHOWN
DESIGN	DPM	2014-02-17
CADD	ATN	2014-02-17
CHECK	ATN	2014-06-06
REVIEW	DPM	2014-06-06

DRAWING 3

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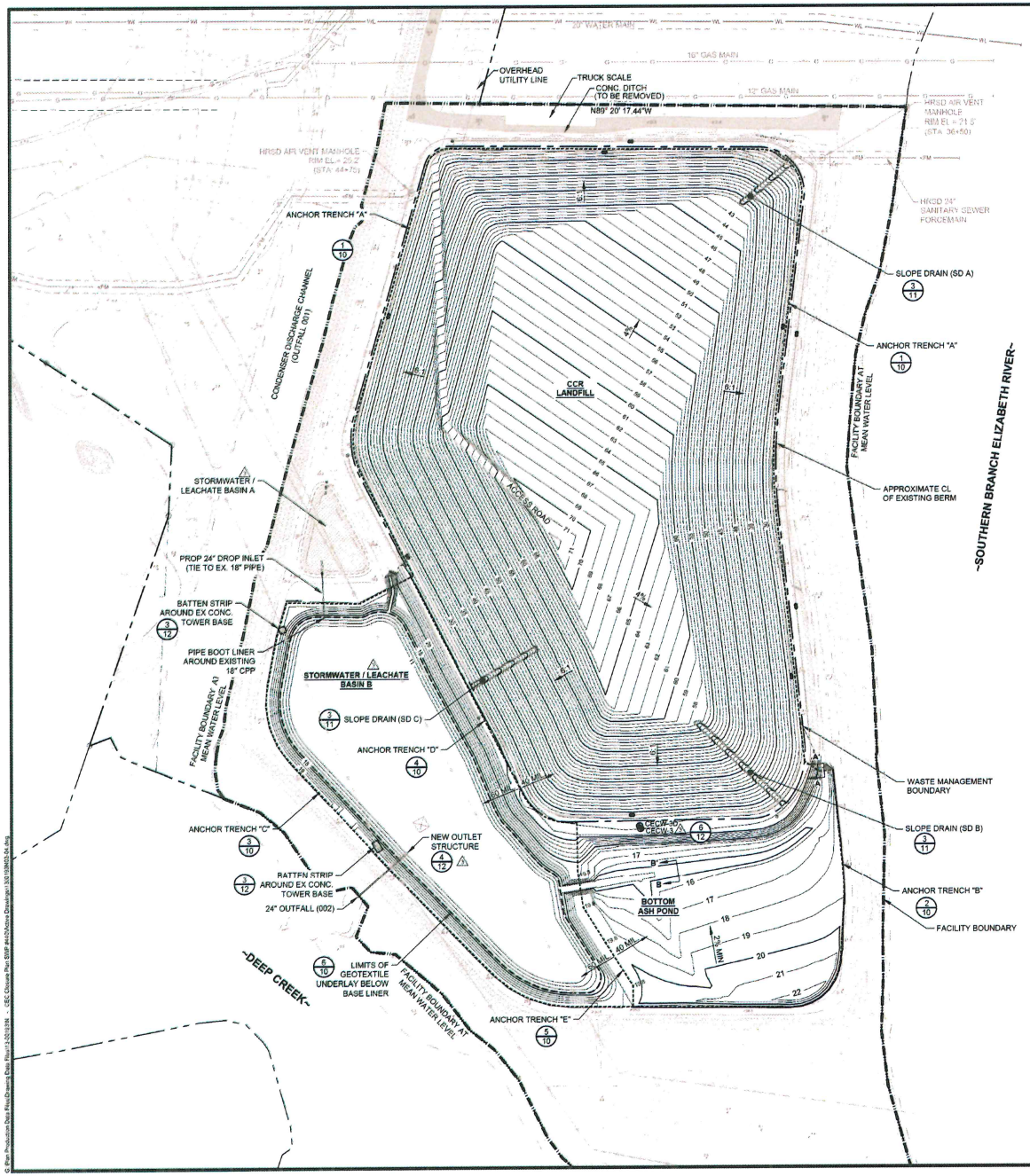
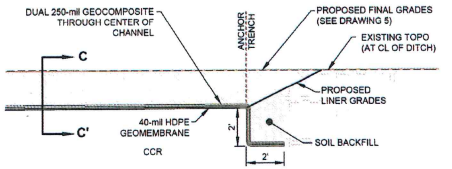


LEGEND:

- FACILITY BOUNDARY
- WASTE MANAGEMENT BOUNDARY
- PROPERTY BOUNDARY
- 65 EXISTING MAJOR CONTOUR (5' INTERVAL)
- 64 EXISTING MAJOR CONTOUR (1' INTERVAL)
- OVERHEAD UTILITY LINE
- EDGE OF WATER
- EXISTING FENCE
- ASPHALT ROAD
- GRAVEL ROAD
- POWER POLE
- MANHOLE
- MISCELLANEOUS POINT
- EXISTING 12" VEGETATIVE COVER

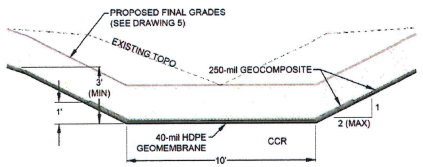
REFERENCE:

1. EXISTING TOPOGRAPHY SHOWN IN THIS DRAWING SET IS PREPARED BY PHOTOGRAMMETRIC METHODS BASED ON AERIAL PHOTOGRAPHY PREPARED BY MCKENZIE & SNYDER INC., FOR H&B SURVEYING, DATED JULY 10, 2015.
2. 6" Ø PERFORATED PIPE IS TO BE INSTALLED IN THE EXISTING ASH AS SHOWN ON DETAIL 1, DRAWING 9. THE APPROXIMATE LOCATION SHOWN IS FOR DESIGN PURPOSES ONLY. ACTUAL LOCATION IS TO BE FIELD-FIT BASED ON THE TRUE LIMITS OF EXISTING LINER AND LIMITS OF ASH.



SECTION A-A'

NOT TO SCALE



SECTION B-B'

NOT TO SCALE

Golder Associates

REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RVW
2	11/25/15	DPM	RESPONSE TO DEQ COMMENTS	ABM	DPM	JRD
1	12/17/14	DPM	REVISED FINAL GRADES	ATN	CHK	RVW

COMMONWEALTH OF VIRGINIA
DANIEL P. McGRATH
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3/2/16
PROFESSIONAL ENGINEER

PROJECT

DOMINION
CHESAPEAKE ENERGY CENTER
SWP # 440 CLOSURE PLAN
CITY OF CHESAPEAKE, VIRGINIA

TITLE

LINER GRADES

PROJECT No.		13-00193
FILE No.		1300193N03-04
REV. 3	SCALE	AS SHOWN
DESIGN	DPM	2014-02-17
CADD	ATN	2014-02-17
CHECK	ATN	2014-06-06
REVIEW	DPM	2014-06-06

DRAWING 4

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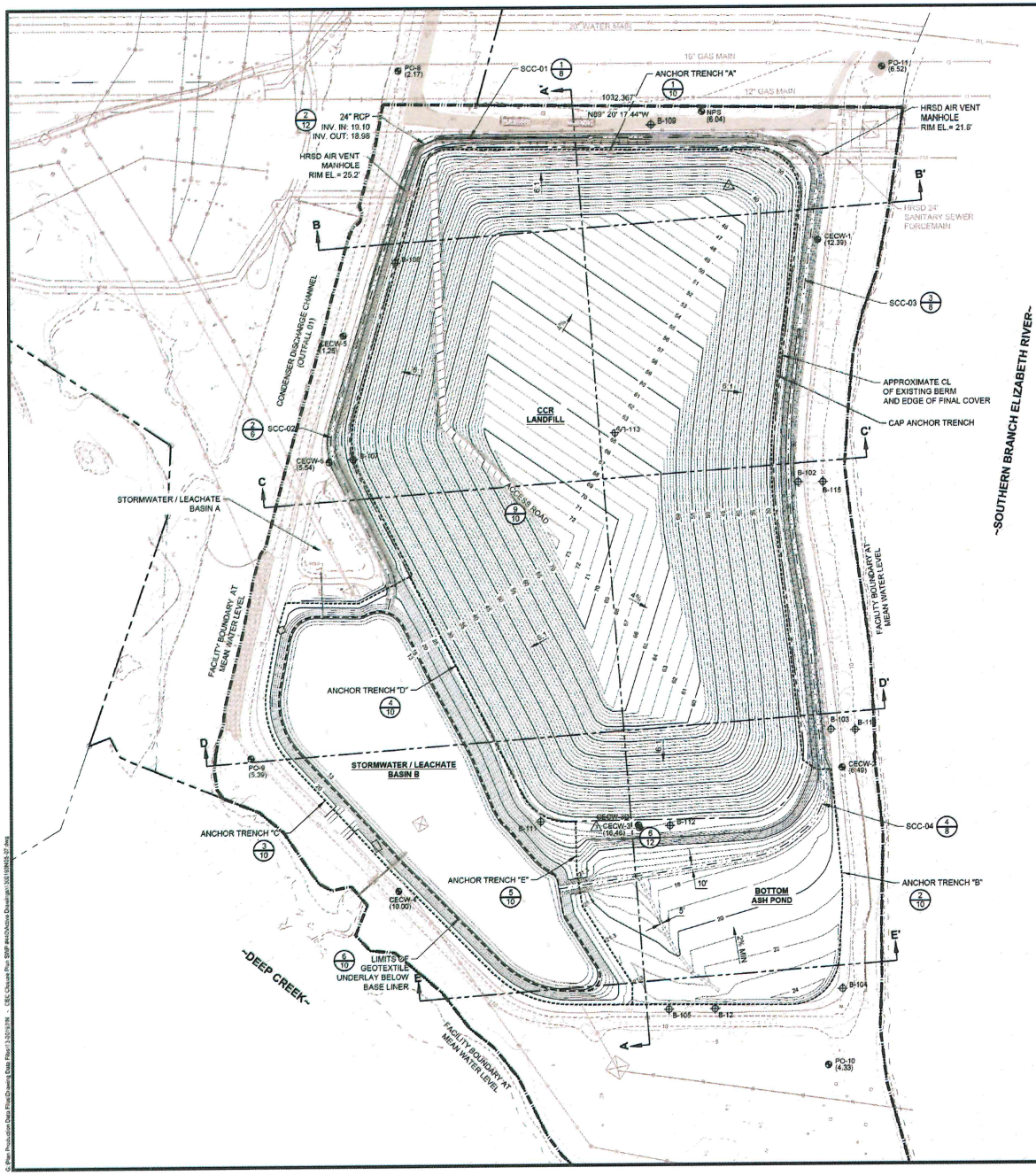

LEGEND:

- FACILITY BOUNDARY
- WASTE MANAGEMENT BOUNDARY
- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR (5' INTERVAL)
- EXISTING MAJOR CONTOUR (1' INTERVAL)
- OVERHEAD UTILITY LINE
- EDGE OF WATER
- EXISTING FENCE
- ASPHALT ROAD
- GRAVEL ROAD
- POWER POLE
- MANHOLE
- MISCELLANEOUS POINT
- EXISTING 12" VEGETATIVE COVER
- GROUNDWATER CONTOUR (REFERENCE NOTE 3)
- CECW-2 (6.46) GROUNDWATER MONITORING WELL (REFERENCE NOTE 3)
  - DENOTES COMPLIANCE WELLS
  - DENOTES PERFORMANCE WELLS
  - DENOTES SENTINEL WELLS
- SW-4 SURFACE WATER MONITORING LOCATION
- MAJOR DRAINAGE AREA

REFERENCE:

1. EXISTING TOPOGRAPHY SHOWN IN THIS DRAWING SET IS PREPARED BY PHOTOGRAMMETRIC METHODS BASED ON AERIAL PHOTOGRAPHY PREPARED BY MCKENZIE & SNYDER INC., FOR H&B SURVEYING, DATED JULY 10, 2015.
2. BORING LOCATIONS AND INFORMATION TAKEN FROM "GEOTECHNICAL ENGINEERING STUDY - ASH FILL EXPANSION" PREPARED BY SCHABEL ENGINEERING ASSOCIATES, INC. DATED OCTOBER 28, 1999.

NOTE
SLOPE DRAINS AND DOWNCHUTE LOCATIONS NOT SHOWN FOR CLARITY. SEE DRAWING 8 FOR LOCATIONS.

Golder Associates

REV.	DATE	DES.	REVISION DESCRIPTION	CADD	CHK	PWW
3	2/17/14	DPM	REVISED FINAL GRADES	ATN	DPM	JRD
2	1/15/15	DPM	RESPONSE TO DEQ COMMENTS	ASM	DPM	JRD
1	01/20/16	DPM	RESPONSE TO DEQ COMMENTS	ASM	DPM	JRD

COMMONWEALTH OF VIRGINIA
DANIEL P. McGRATH
Lic. No. 040703
3/2/16
PROFESSIONAL ENGINEER

PROJECT
DOMINION
CHESAPEAKE ENERGY CENTER
SWP # 440 CLOSURE PLAN
CITY OF CHESAPEAKE, VIRGINIA

TITLE
FINAL GRADES AND CROSS-SECTION LOCATIONS

PROJECT No.		13-00193
FILE No.		1300193N05-07
REV. 3	SCALE	AS SHOWN
DESIGN	DPM	2014-02-17
CADD	ATN	2014-02-17
CHECK	ATN	2014-06-06
REVIEW	DPM	2014-06-06

DRAWING 5

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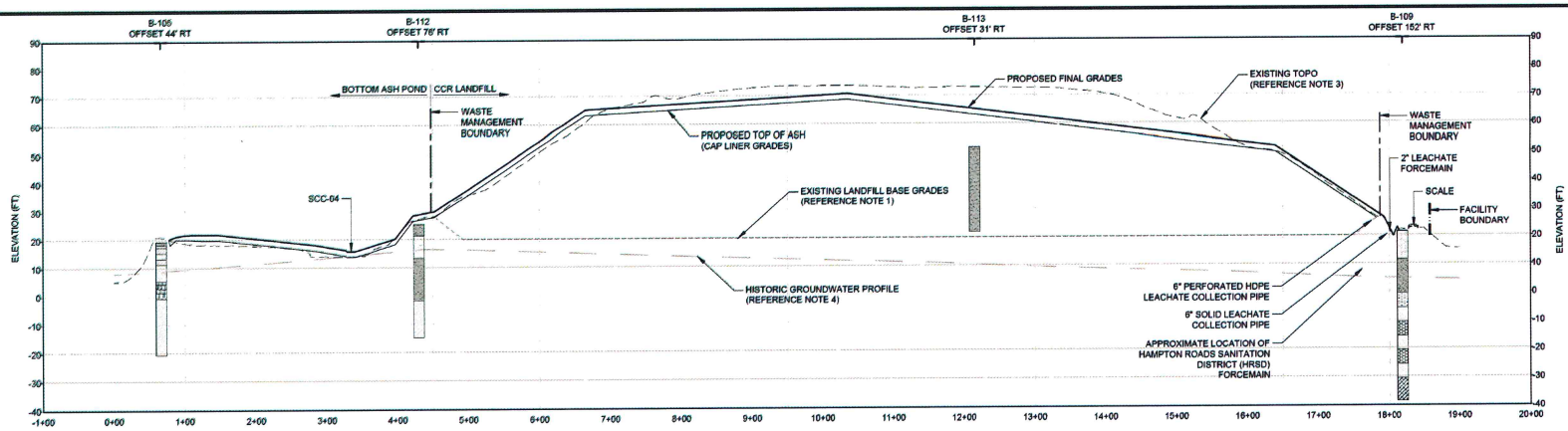
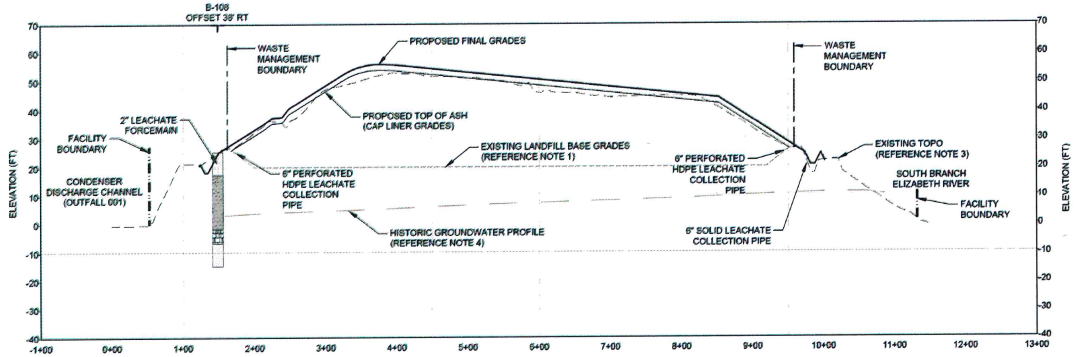
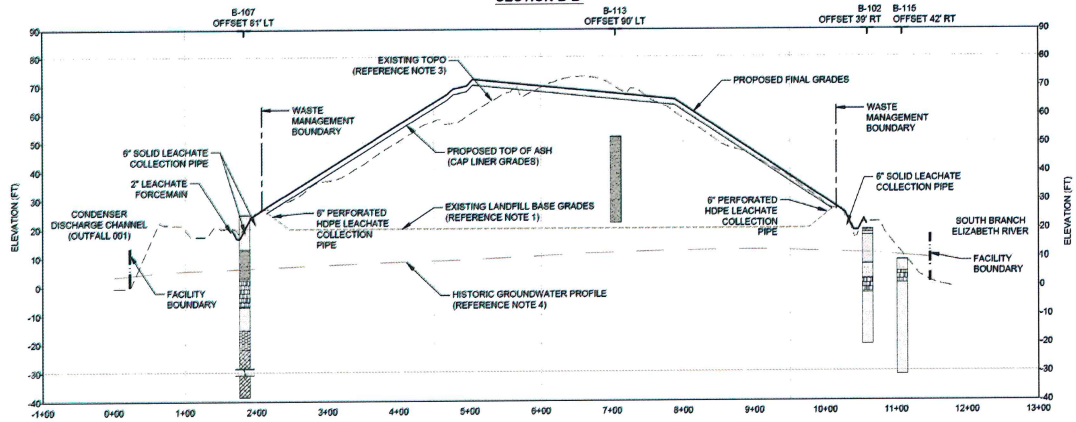


SECTION A-A'



SECTION B-B'



SECTION C-C'

SCALE 20 0 20 FEET

SCALE 80 0 80 160 FEET

REFERENCE:

1. APPROXIMATE LANDFILL BASE GRADES FROM "EROSION AND SEDIMENT CONTROL PLAN, RECLAMATION OF EXISTING ASH POND (OPERATION PLANS), ASH DISPOSAL PROJECT IR 6324.F-27.2, WO 739519, PORTSMOUTH POWER STATION, CHESAPEAKE, VIRGINIA" PREPARED BY GAI CONSULTANTS, INC. DATED 3/30/84.
2. BORING LOCATIONS AND INFORMATION TAKEN FROM "GEOTECHNICAL ENGINEERING STUDY - ASH FILL EXPANSION" PREPARED BY SCHABEL ENGINEERING ASSOCIATES, INC. DATED OCTOBER 28, 1999.
3. EXISTING TOPOGRAPHY SHOWN IN THIS DRAWING SET IS PREPARED BY PHOTOGRAMMETRIC METHODS BASED ON AERIAL PHOTOGRAPHY PREPARED BY MCKENZIE & SNYDER INC., FOR H&B SURVEYING, DATED JULY 10, 2015, AND ALSO FROM GROUND CONTROL SURVEY PREPARED BY D&M SURVEYORS, AUG. 28, 2013.
4. APPROXIMATE GROUNDWATER PROFILE TAKEN FROM "2007 POTENTIOMETRIC SURFACE MAP" PREPARED BY URS CORPORATION DATED JANUARY 2008.

LEGEND:

- A1: BERM CLAY FILL
- A2: BERM SAND FILL
- A3: ASH FILL
- B1: ALLUVIAL SAND W/ CLAY LAYERS
- B2: ALLUVIAL SAND W/ CLAY LAYERS
- C: NORFOLK SAND
- D: NORFOLK CLAY
- E: YORKTOWN SAND

Golder Associates

REV	DATE	REVISION DESCRIPTION	CADD	CHK	RVW
0	03/20/15	RESPONSE TO DEQ COMMENTS	ASM	DPM	JRD
1	11/20/15	RESPONSE TO DEQ COMMENTS	ASM	DPM	JRD
2	3/17/16	REVISED FINAL GRADES	ATN	DPM	JRD

COMMONWEALTH OF VIRGINIA
DANIEL P. McGRATH
Lic. No. 040703
3/2/16
PROFESSIONAL ENGINEER

PROJECT
DOMINION
CHESAPEAKE ENERGY CENTER
SWP # 440 CLOSURE PLAN
CITY OF CHESAPEAKE, VIRGINIA

TITLE
CROSS SECTIONS
(1 OF 2)

PROJECT No.	13-00193
FILE No.	1300193ND5-07
REV. 3	SCALE AS SHOWN
DESIGN	DPM 2014-02-17
CADD	ATN 2014-02-17
CHECK	ATN 2014-06-06
REVIEW	DPM 2014-06-06

DRAWING 6

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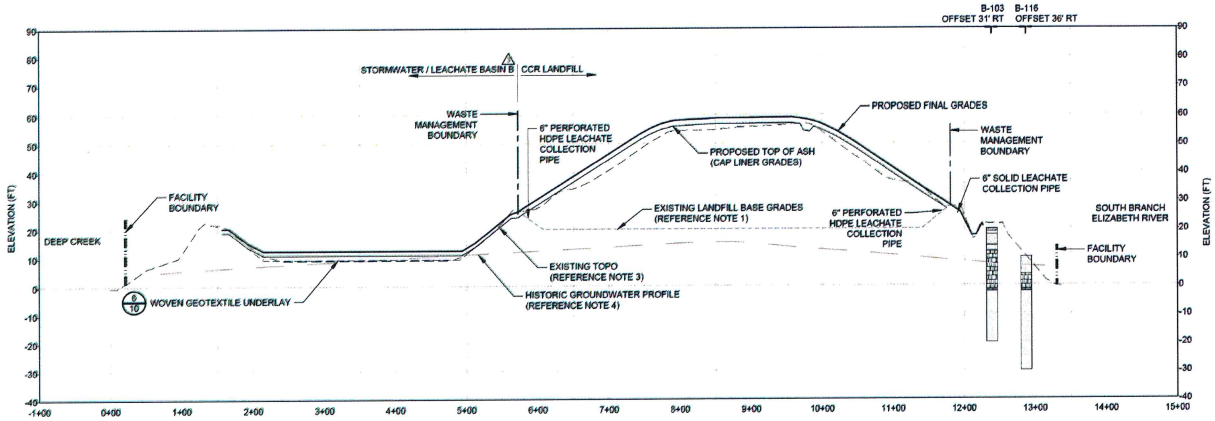
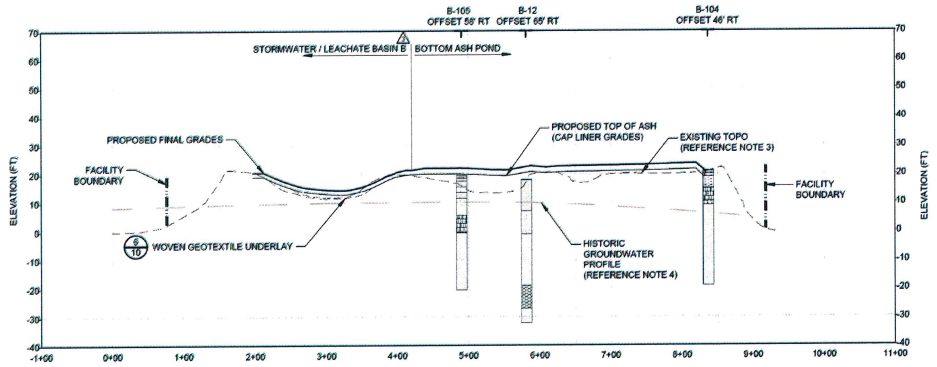


SECTION D-D'



SECTION E-E'

REFERENCE:

1. APPROXIMATE LANDFILL BASE GRADES FROM "EROSION AND SEDIMENT CONTROL PLAN, RECLAMATION OF EXISTING ASH POND (OPERATION PLANS), ASH DISPOSAL PROJECT IR 6324.F-27.2, WO 739519, PORTSMOUTH POWER STATION, CHESAPEAKE, VIRGINIA" PREPARED BY GAI CONSULTANTS, INC. DATED 3/30/84.
2. BORING LOCATIONS AND INFORMATION TAKEN FROM "GEOTECHNICAL ENGINEERING STUDY - ASH FILL EXPANSION" PREPARED BY SCHABEL ENGINEERING ASSOCIATES, INC. DATED OCTOBER 28, 1999.
3. EXISTING TOPOGRAPHY SHOWN IN THIS DRAWING SET IS PREPARED BY PHOTOGRAMMETRIC METHODS BASED ON AERIAL PHOTOGRAPHY PREPARED BY MCKENZIE & SNYDER INC., FOR H&B SURVEYING, DATED JULY 10, 2015, AND ALSO FROM GROUND CONTROL SURVEY PREPARED BY D&M SURVEYORS, AUG. 28, 2013.
4. APPROXIMATE GROUNDWATER PROFILE TAKEN FROM "2007 POTENTIOMETRIC SURFACE MAP" PREPARED BY URS CORPORATION DATED JANUARY 2008.

LEGEND:

- A1: BERM CLAY FILL
- A2: BERM SAND FILL
- A3: ASH FILL
- B1: ALLUVIAL SAND W/ CLAY LAYERS
- B2: ALLUVIAL SAND W/ CLAY LAYERS
- C: NORFOLK SAND
- D: NORFOLK CLAY
- E: YORKTOWN SAND

SCALE 20 0 20 40 FEET

SCALE 80 0 80 160 FEET

REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK
0	07/29/15	DPM	RESPONSE TO DEQ COMMENTS	ASM	DPM
1	11/06/15	DPM	RESPONSE TO DEQ COMMENTS	ASM	DPM
2	02/17/16	DPM	REVISED FINAL GRADES	ATN	DPM
3	03/02/16	DPM		CADD	CHK

Golder Associates

COMMONWEALTH OF VIRGINIA
DANIEL P. McGRATH
Lic. No. 040703
3/2/16
PROFESSIONAL ENGINEER

PROJECT
DOMINION
CHESAPEAKE ENERGY CENTER
SWP # 440 CLOSURE PLAN
CITY OF CHESAPEAKE, VIRGINIA

TITLE
CROSS SECTIONS
(2 OF 2)

PROJECT No.	13-00193
FILE No.	1300193N05-07
REV. 3	SCALE AS SHOWN
DESIGN	DPM 2014-02-17
CADD	ATN 2014-02-17
CHECK	ATN 2014-06-06
REVIEW	DPM 2014-06-06

DRAWING 7

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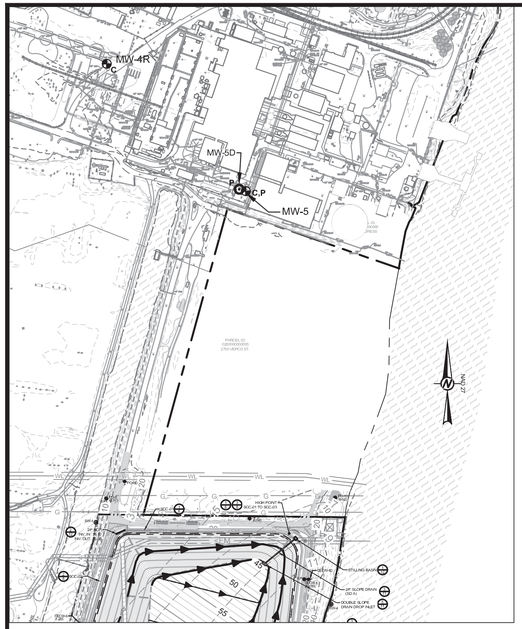


INSET MAP OF MW-4R, MW-5 AND MW-5D

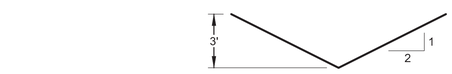
SCALE: 1" = 300'

LEGEND:

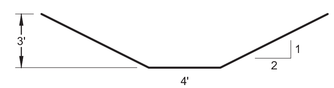
- FACILITY BOUNDARY
- WASTE MANAGEMENT BOUNDARY
- PROPERTY BOUNDARY
- 65 EXISTING MAJOR CONTOUR (5' INTERVAL)
- 64 EXISTING MAJOR CONTOUR (1' INTERVAL)
- EDGE OF WATER
- EXISTING FENCE
- ASPHALT ROAD
- GRAVEL ROAD
- POWER POLE
- MANHOLE
- MISCELLANEOUS POINT
- EXISTING 12" VEGETATIVE COVER
- GROUNDWATER CONTOUR (REFERENCE NOTE 3)
- GROUNDWATER MONITORING WELL (REFERENCE NOTE 3)
  - DENOTES COMPLIANCE WELLS
  - DENOTES PERFORMANCE WELLS
  - DENOTES SENTINEL WELLS
  - DENOTES CORRECTIVE ACTION PLAN (CAP) WELLS
- SW-4 SURFACE WATER MONITORING LOCATION
- MAJOR DRAINAGE AREA

REFERENCE:

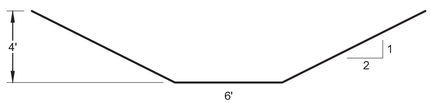
1. EXISTING TOPOGRAPHY SHOWN IN THIS DRAWING SET IS PREPARED BY PHOTOGRAMMETRIC METHODS BASED ON AERIAL PHOTOGRAPHY PREPARED BY MCKENZIE & SNYDER INC., FOR H&B SURVEYING, DATED JULY 10, 2015, AND ALSO FROM GROUND CONTROL SURVEY PREPARED BY D&M SURVEYORS, AUG. 28, 2013.
2. BORING LOCATIONS AND INFORMATION TAKEN FROM "CHESAPEAKE ENERGY CENTER ASH LANDFILL" VDEQ PERMIT NO. 440, PREPARED BY RESOURCE INTERNATIONAL, LTD. DATED FEBRUARY 29, 2000.
3. APPROXIMATE GROUNDWATER PROFILE TAKEN FROM "2007 POTENTIOMETRIC SURFACE MAP" PREPARED BY URS CORPORATION DATED JANUARY 2008.



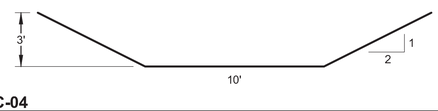
1/8 SCC-01
NOT TO SCALE



2/8 SCC-02
NOT TO SCALE



3/8 SCC-03
NOT TO SCALE



4/8 SCC-04
NOT TO SCALE

Golder Associates

REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK
A	5/24/16	DPM	ADD GW WELL DESIGNATIONS PER LEGEND	DPM	JRD
A	04/15/16	DPM	ADDED GW WELLS PER DEQ COMMENTS	ABM	JRD
A	01/20/16	DPM	RESPONSE TO DEQ COMMENTS	ABM	JRD
A	11/25/15	DPM	RESPONSE TO DEQ COMMENTS	ABM	JRD
A	12/17/14	DPM	REVISED FINAL GRADES	ATN	DPM
0					JRD

COMMONWEALTH OF VIRGINIA
DANIEL P. McGRATH
Lic. No. 040703
PROFESSIONAL ENGINEER
5/23/16

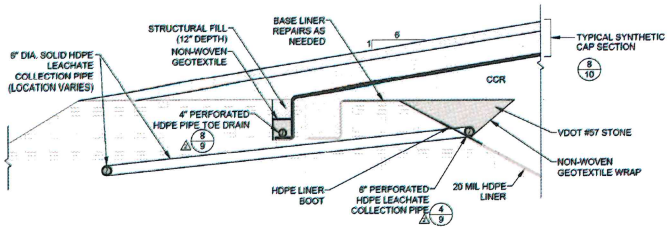
PROJECT
DOMINION
CHESAPEAKE ENERGY CENTER
SWP # 440 CLOSURE PLAN
CITY OF CHESAPEAKE, VIRGINIA

TITLE
STORMWATER MANAGEMENT AND SITE MONITORING PLAN

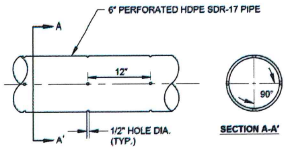
PROJECT No.			13-00193
FILE No.			1300193N08
REV. 5	SCALE		AS SHOWN
DESIGN	DPM		2014-02-17
CADD	ATN		2014-02-17
CHECK	ATN		2014-06-06
REVIEW	DPM		2014-06-06

DRAWING 8

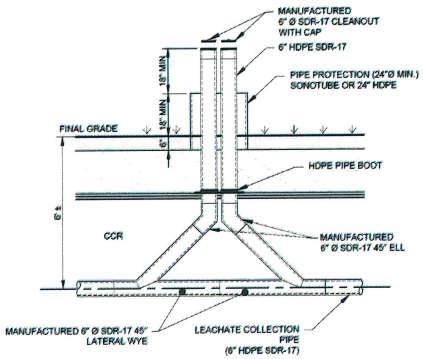
G:\Plan Production Data Files\Drawing Data Files\13-00193N - CEC Closure Plan SWP #440\Active Drawings\1300193N08.dwg



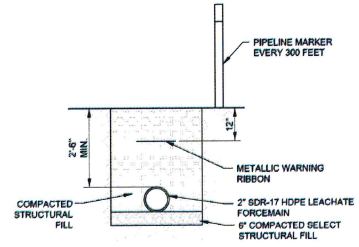
1/9 LEACHATE COLLECTION PIPE PENETRATION DETAIL
NOT TO SCALE



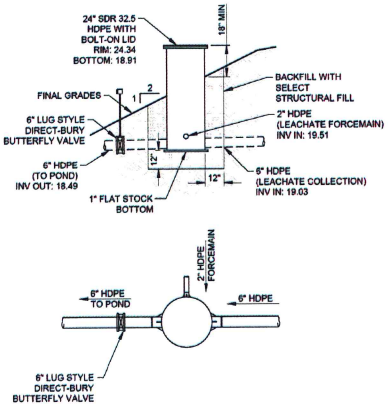
4/9 PERFORATED LEACHATE COLLECTION PIPE
NOT TO SCALE



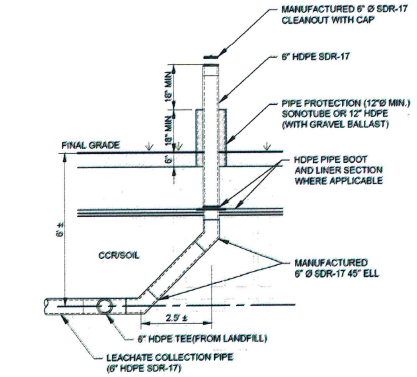
2/9 DOUBLE LEACHATE CLEANOUT
NOT TO SCALE



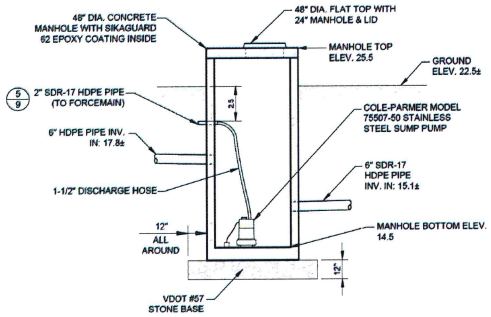
5/9 LEACHATE FORCEMAIN DETAIL
NOT TO SCALE



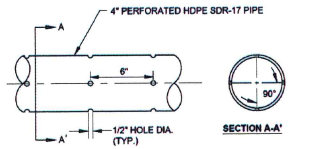
7/9 LEACHATE MANHOLE DETAIL
NOT TO SCALE



3/9 SINGLE LEACHATE CLEANOUT
NOT TO SCALE



6/9 48" LEACHATE LIFT STATION DETAIL
NOT TO SCALE



8/9 PERFORATED CAP TOE DRAIN PIPE
NOT TO SCALE

REV	DATE	REVISION DESCRIPTION	CADD	CHK
1	10/25/13	RESPONSE TO DEQ COMMENTS	ABM	JRD
2	3/27/14	REVISED FINAL GRADES	ATN	DPM
			CADD	CHK

COMMONWEALTH OF VIRGINIA
DANIEL P. McGRATH
Lic. No. 040703
3/2/14
PROFESSIONAL ENGINEER

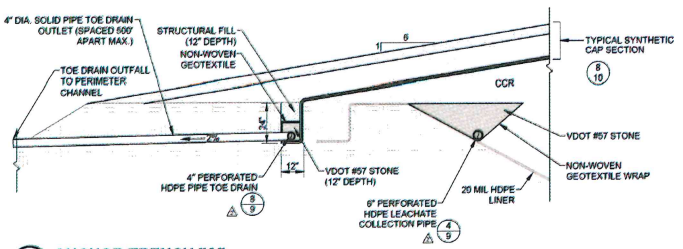
PROJECT
DOMINION
CHESAPEAKE ENERGY CENTER
SWP # 440 CLOSURE PLAN
CITY OF CHESAPEAKE, VIRGINIA

TITLE
DETAILS (1 OF 4)

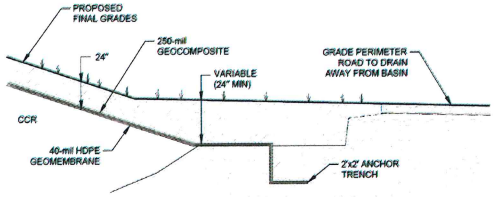
PROJECT No.		13-00193
FILE No.		1300193N09-12
REV. 2	SCALE	AS SHOWN
DESIGN	DPM	2014-02-17
CADD	ATN	2014-02-17
CHECK	ATN	2014-06-06
REVIEW	DPM	2014-06-06

DRAWING 9

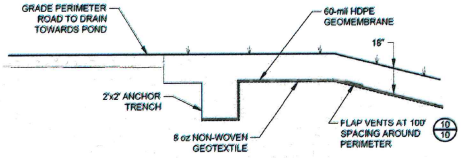
G:\Plan Production Data Files\Drawing Data Files\13-00193N - CEC Closure Plan SWP #440\Active Drawings\1300193N09-13.dwg



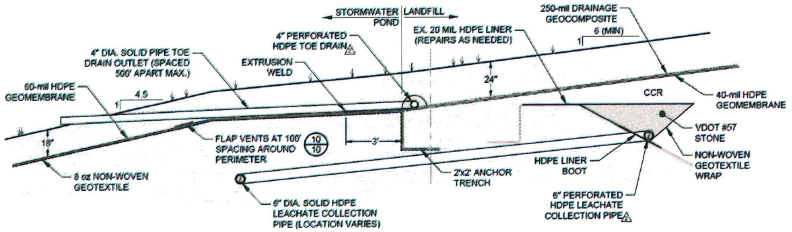
1/10 ANCHOR TRENCH "A"
NOT TO SCALE



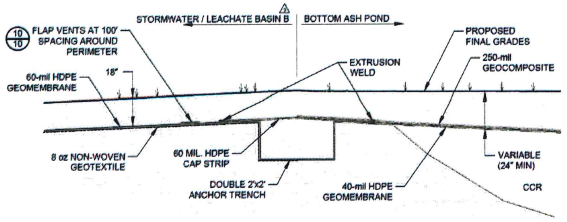
2/10 ANCHOR TRENCH "B"
NOT TO SCALE



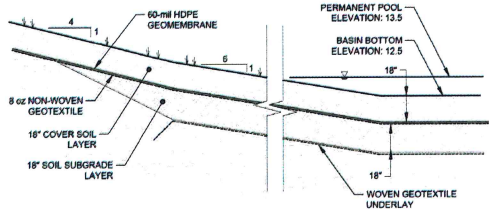
3/10 ANCHOR TRENCH "C"
NOT TO SCALE



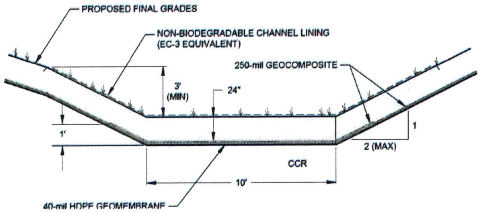
4/10 ANCHOR TRENCH "D"
NOT TO SCALE



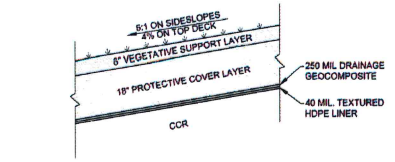
5/10 ANCHOR TRENCH "E"
NOT TO SCALE



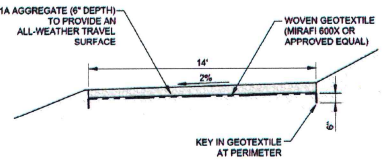
6/10 BASIN B GEOTEXTILE UNDERLAY
NOT TO SCALE



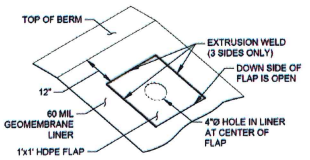
7/10 SCC-04 LINER DETAIL
NOT TO SCALE



8/10 LANDFILL CAP SECTION DETAIL
NOT TO SCALE



9/10 FINAL COVER ROAD DETAIL
NOT TO SCALE



10/10 FLAP VENT
NOT TO SCALE

REV	DATE	REVISION DESCRIPTION	CADD	CHK
0	03/20/13	RESPONSE TO GEO COMMENTS	ASM	DPM
1	11/25/13	RESPONSE TO GEO COMMENTS	ASM	DPM
2	12/17/14	REVISED FINAL GRADES	ATN	DPM
3	06/06/14	REVISION DESCRIPTION	CADD	CHK

COMMONWEALTH OF VIRGINIA
DANIEL P. McGRATH
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3/2/15
PROFESSIONAL ENGINEER

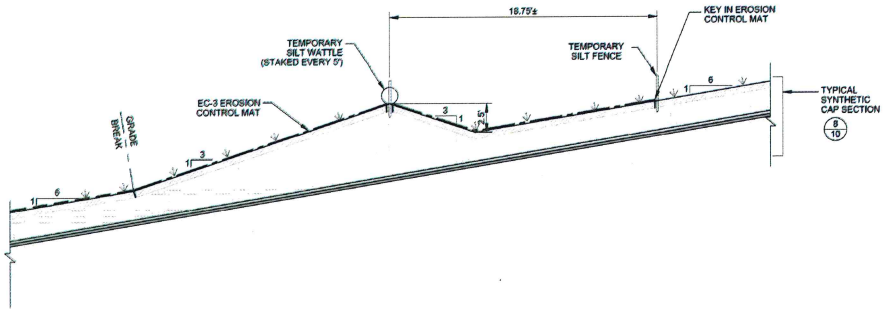
PROJECT
DOMINION
CHESAPEAKE ENERGY CENTER
SWP # 440 CLOSURE PLAN
CITY OF CHESAPEAKE, VIRGINIA

TITLE
DETAILS (2 OF 4)

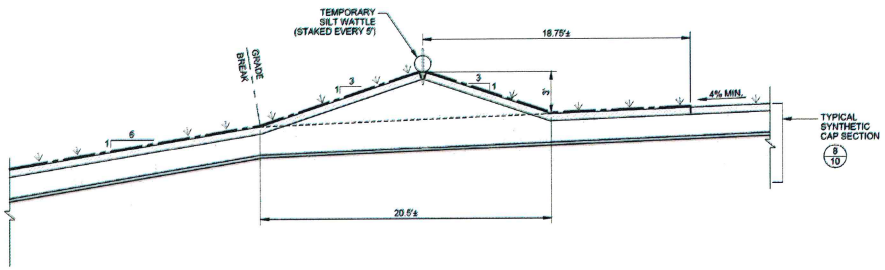
PROJECT No.		13-00193
FILE No.		1300193ND9-12
REV. 3	SCALE	AS SHOWN
DESIGN	DPM	2014-02-17
CADD	ATN	2014-02-17
CHECK	ATN	2014-06-06
REVIEW	DPM	2014-06-06

DRAWING 10

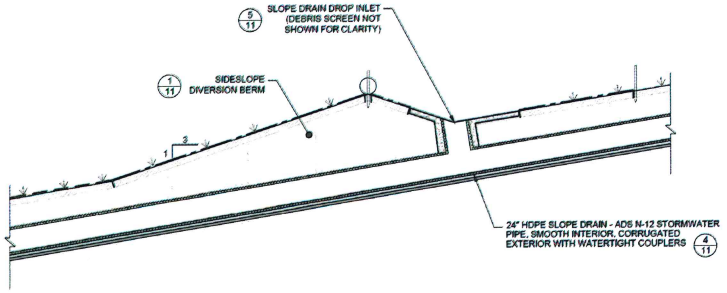
© Plan Production Data Plan/Drawing Data Files/13-00193A - GEC Closure Plan SWP #440/Active Drawings/1300193ND9-13.dwg



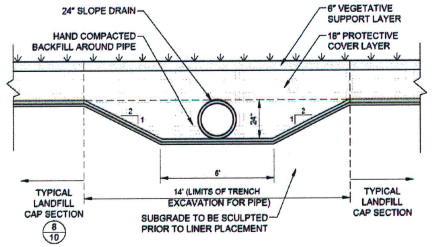
1/11 SIDESLOPE DIVERSION BERM DETAIL
NOT TO SCALE



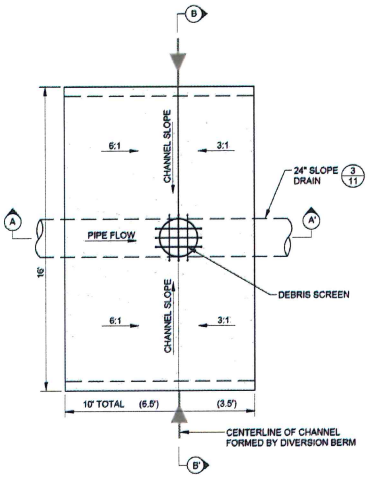
2/11 TOP DECK DIVERSION BERM
NOT TO SCALE



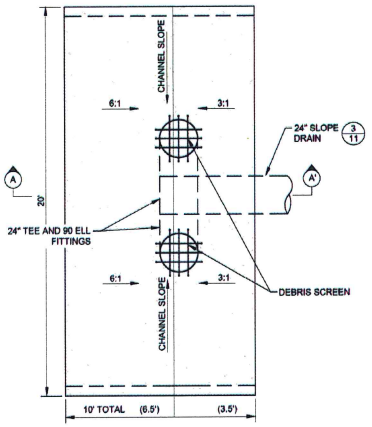
3/11 SLOPE DRAIN DETAIL
NOT TO SCALE



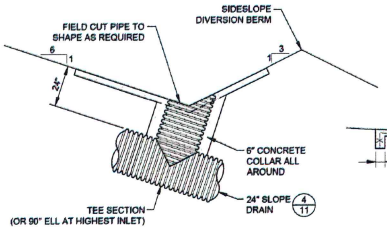
4/11 SLOPE DRAIN CROSS SECTION
NOT TO SCALE



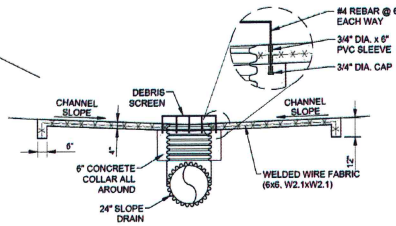
PLAN VIEW - SINGLE



PLAN VIEW - DOUBLE



SECTION A-A'



SECTION B-B'

5/11 SLOPE DRAIN DROP INLET DETAIL
NOT TO SCALE

Golder Associates

REV	DATE	REVISION DESCRIPTION	ORIG	CHK	CADD
2	11/05/15	RESPONSE TO DEQ COMMENTS	DPM	DPM	ATN
1	3/27/14	REVISED FINAL GRADES	DPM	DPM	ATN
0	2/21/14	ISSUED FOR PERMIT	CSD	JED	DMW

COMMONWEALTH OF VIRGINIA
DANIEL P. McGRATH
Lic. No. 040703
3/2/14
PROFESSIONAL ENGINEER

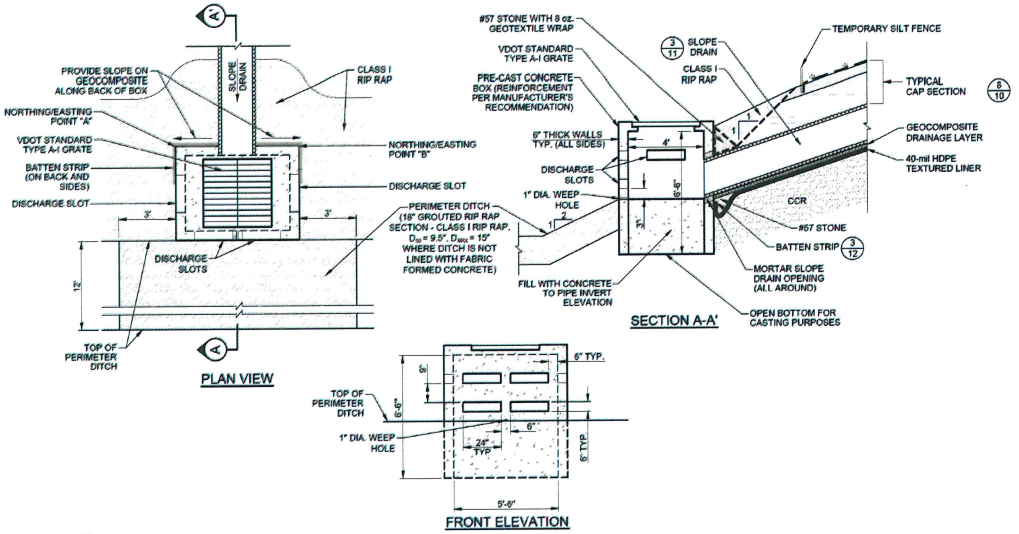
PROJECT
DOMINION
CHESAPEAKE ENERGY CENTER
SWP # 440 CLOSURE PLAN
CITY OF CHESAPEAKE, VIRGINIA

TITLE
DETAILS (3 OF 4)

PROJECT No.		13-00193
FILE No.		13001930D6-12
REV. 2	SCALE	AS SHOWN
DESIGN	DPM	2014-02-17
CADD	ATN	2014-02-17
CHECK	ATN	2014-06-06
REVIEW	DPM	2014-06-06

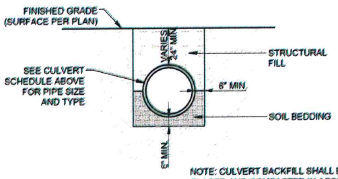
DRAWING 11

G:\Plan Production Data Files\Drawing Data Files\13-00193A - CEC Closure Plan SWP #440\Active Drawings\13001930D6-13.dwg



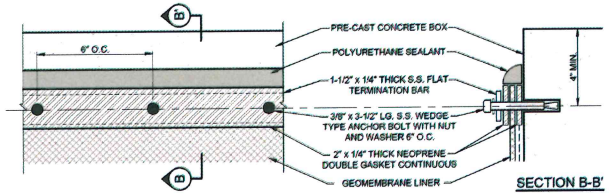
1/12 STILLING BASIN DETAIL
NOT TO SCALE

CULVERT SCHEDULE						
ID	QTY.	TYPE	SIZE	LENGTH	INV. IN	INV. OUT
RC-1	1	CLASS III RCP	24"	20'	19.10	18.98

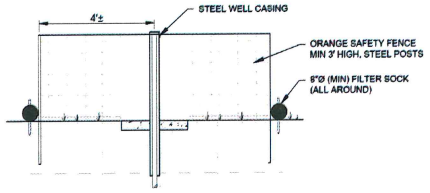


NOTE: CULVERT BACKFILL SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS.

2/12 CULVERT BEDDING DETAIL
NOT TO SCALE

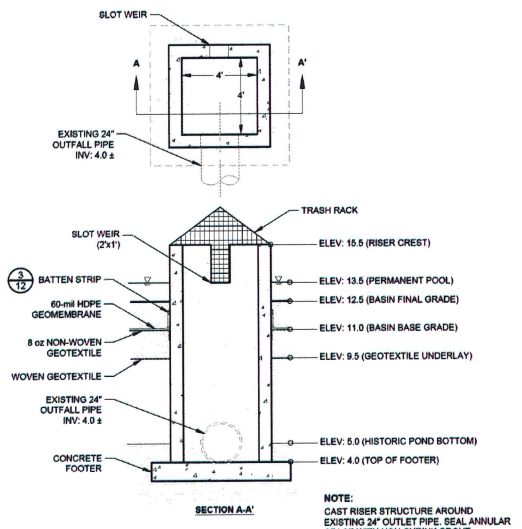


3/12 BATTEN STRIP
NOT TO SCALE



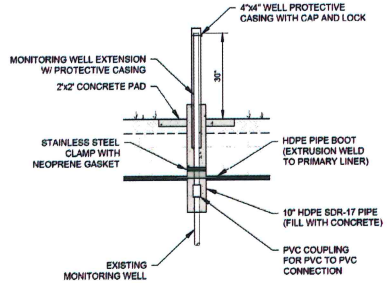
5/12 MONITORING WELL PROTECTION
NOT TO SCALE

NOTE: USE WELL PROTECTION FOR ALL WELLS WITHIN THE CONSTRUCTION AREA OR AS DIRECTED BY THE OWNER. CONTRACTOR IS RESPONSIBLE FOR REPAIRS TO DAMAGED WELLS.



NOTE:
CAST RISER STRUCTURE AROUND EXISTING 24" OUTLET PIPE. SEAL ANNULAR SPACE WITH NON-SHRINK GROUT.

4/12 STORMWATER / LEACHATE BASIN B RISER
NOT TO SCALE



6/12 MONITORING WELL EXTENSION
NOT TO SCALE

WELL EXTENSION NOTES

1. WELL TOP TO BE LOCATED AT 30" ABOVE FINISHED GRADE. ENSURE NEW WELL PIPE TOP IS CUT AT 90 DEGREES.

2. AFTER CONSTRUCTION, RECORD AS-BUILT ELEVATIONS AS FOLLOWS AND PROVIDE TO OWNER:
   A. TOP OF WELL TO NEAREST 0.01'
   B. TOP OF CONCRETE PAD TO NEAREST 0.1'
   C. FINISHED GRADE TO NEAREST 0.1'

Golder Associates

REV	DATE	DESCRIPTION	CADD	CHK
3	2/3/2014	REVISED FINAL GRADES	ATN	DPM
2	11/22/13	RESPONSE TO DEQ COMMENTS	ABM	DPM
1	01/02/14	RESPONSE TO DEQ COMMENTS	ABM	DPM

COMMONWEALTH OF VIRGINIA
DANIEL P. McGRATH
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PROJECT
DOMINION
CHESAPEAKE ENERGY CENTER
SWP # 440 CLOSURE PLAN
CITY OF CHESAPEAKE, VIRGINIA

TITLE
DETAILS (4 OF 4)

PROJECT No.		13-00193
FILE No.		1300193N09-12
REV. 3	SCALE	AS SHOWN
DESIGN	DPM	2014-02-17
CADD	ATN	2014-02-17
CHECK	ATN	2014-06-06
REVIEW	DPM	2014-06-06

DRAWING 12

G:\Proj Production Data Files\Drawing Data Files\13-00193N - GBC Closure Plan SWP #440\Acad Drawings\1300193N09-12.dwg