

90% PLANS FOR CONSTRUCTION

LATERAL EXPANSION (CELL 4)

ASH STACKING

KINGSTON FOSSIL PLANT

HARRIMAN, ROANE COUNTY, TENNESSEE

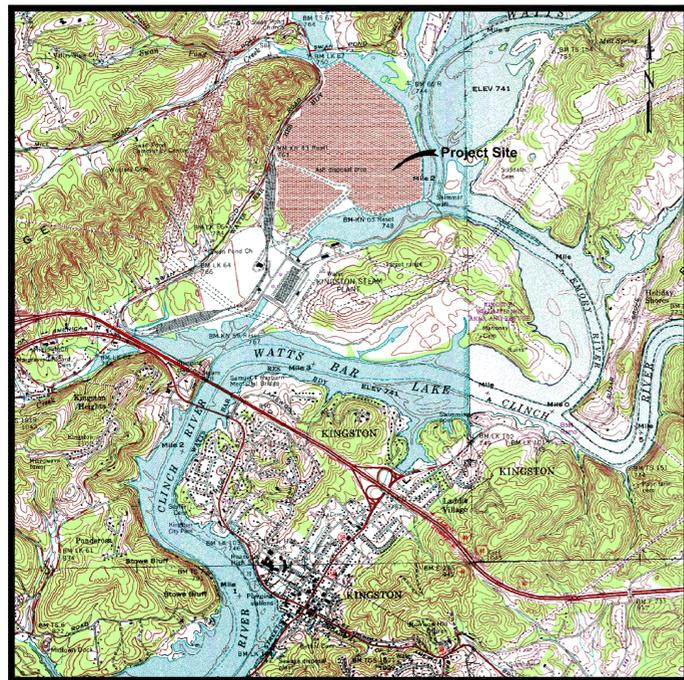
PREPARED FOR

TENNESSEE VALLEY AUTHORITY

PREPARED BY



Stantec Consulting
 Services Inc.
 1409 N. Forbes Rd.
 Lexington, Kentucky
 40511-2050
 Tel. 859.422.3000
 Fax 859.422.3100
 www.stantec.com



VICINITY MAP
 1000 0 2000 4000 FEET
 GRAPHIC SCALE

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ISSUED FOR REVIEW
NOT FOR CONSTRUCTION

FOR SUPPORTING DESIGN CALCULATIONS SEE FPGKIFFESCDX00030020110001		<table border="1"> <tr><td>R</td><td>0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>ISSUED FOR REVIEW</td><td>DATE</td><td>ISSN</td><td>DRWN</td><td>CHKD</td><td>SUPV</td><td>RVID</td><td>APPR</td><td>ISSD</td><td>PROJECT ID</td><td>AS CONCT</td><td>REV</td><td>DATE</td><td>ISSN</td><td>DRWN</td><td>CHKD</td><td>SUPV</td><td>RVID</td><td>APPR</td><td>ISSD</td><td>PROJECT ID</td><td>AS CONCT</td></tr> <tr><td></td><td>04/01/11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>										R	0																				ISSUED FOR REVIEW	DATE	ISSN	DRWN	CHKD	SUPV	RVID	APPR	ISSD	PROJECT ID	AS CONCT	REV	DATE	ISSN	DRWN	CHKD	SUPV	RVID	APPR	ISSD	PROJECT ID	AS CONCT		04/01/11																					
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Stantec Consulting Services Inc. 1409 N. Forbes Rd. Lexington, Kentucky 40511-2050 Tel. 859.422.3000 Fax 859.422.3100 www.stantec.com		DESIGNED BY: K.D. LINDQUIST DRAWN BY: P.J. BOND CHECKED BY: D.E. HERRON SUPERVISED BY: M.J. STEELE REVIEWED BY: V.J. DOTSON APPROVED BY: M.S. TURBOW ISSUED BY: J.C. KAMMETER																																																																											
KINGSTON FOSSIL PLANT TENNESSEE VALLEY AUTHORITY FOSSIL AND HYDRO ENGINEERING		AUTOCAD R 2000 DATE: 04/01/11 36 C 10W431-01 R 0																																																																											

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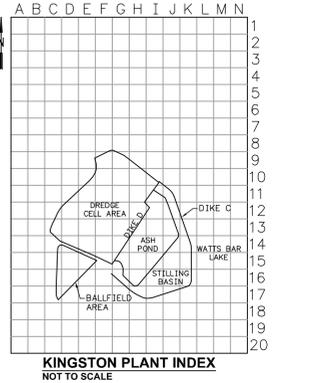
BASELINE CURVE DATA

P.I. STA. = 752+00.00 NORTHING = 556,318.49 EASTING = 2,441,567.36 $\Delta = 115^{\circ}12'22''$ $D = 144.19'26''$ $T = 41.53'$ $L = 82.77'$ $R = 400.00'$ $E = 2.15'$ P.C. STA. = 751+58.46 P.T. STA. = 752+41.23	P.I. STA. = 758+04.00 NORTHING = 556,865.71 EASTING = 2,441,823.75 $\Delta = 97^{\circ}02'40''$ $D = 57.17'45''$ $T = 113.12'$ $L = 169.37'$ $R = 100.00'$ $E = 50.98'$ P.C. STA. = 756+90.88 P.T. STA. = 758+60.26
P.I. STA. = 760+69.64 NORTHING = 556,694.09 EASTING = 2,442,096.80 $\Delta = 36^{\circ}47'44''$ $D = 57.17'45''$ $T = 33.26'$ $L = 64.22'$ $R = 100.00'$ $E = 5.39'$ P.C. STA. = 760+36.38 P.T. STA. = 761+00.60	P.I. STA. = 787+08.21 NORTHING = 555,555.30 EASTING = 2,441,076.32 $\Delta = 45^{\circ}12'33''$ $D = 57.17'45''$ $T = 41.64'$ $L = 78.90'$ $R = 100.00'$ $E = 8.32'$ P.C. STA. = 786+66.57 P.T. STA. = 787+45.47
P.I. STA. = 792+14.21 NORTHING = 556,614.37 EASTING = 2,441,996.47 $\Delta = 36^{\circ}47'38''$ $D = 57.17'45''$ $T = 33.26'$ $L = 64.22'$ $R = 100.00'$ $E = 5.39'$ P.C. STA. = 791+80.95 P.T. STA. = 792+45.17	P.I. STA. = 803+45.64 NORTHING = 555,546.18 EASTING = 2,442,370.53 $\Delta = 52^{\circ}56'19''$ $D = 57.17'45''$ $T = 49.79'$ $L = 92.40'$ $R = 100.00'$ $E = 11.71'$ P.C. STA. = 802+95.85 P.T. STA. = 803+88.24
P.I. STA. = 811+08.25 NORTHING = 554,955.54 EASTING = 2,441,878.99 $\Delta = 82^{\circ}37'33''$ $D = 57.17'45''$ $T = 144.21'$ $L = 87.89'$ $R = 100.00'$ $E = 33.14'$ P.C. STA. = 810+20.36 P.T. STA. = 811+64.57	

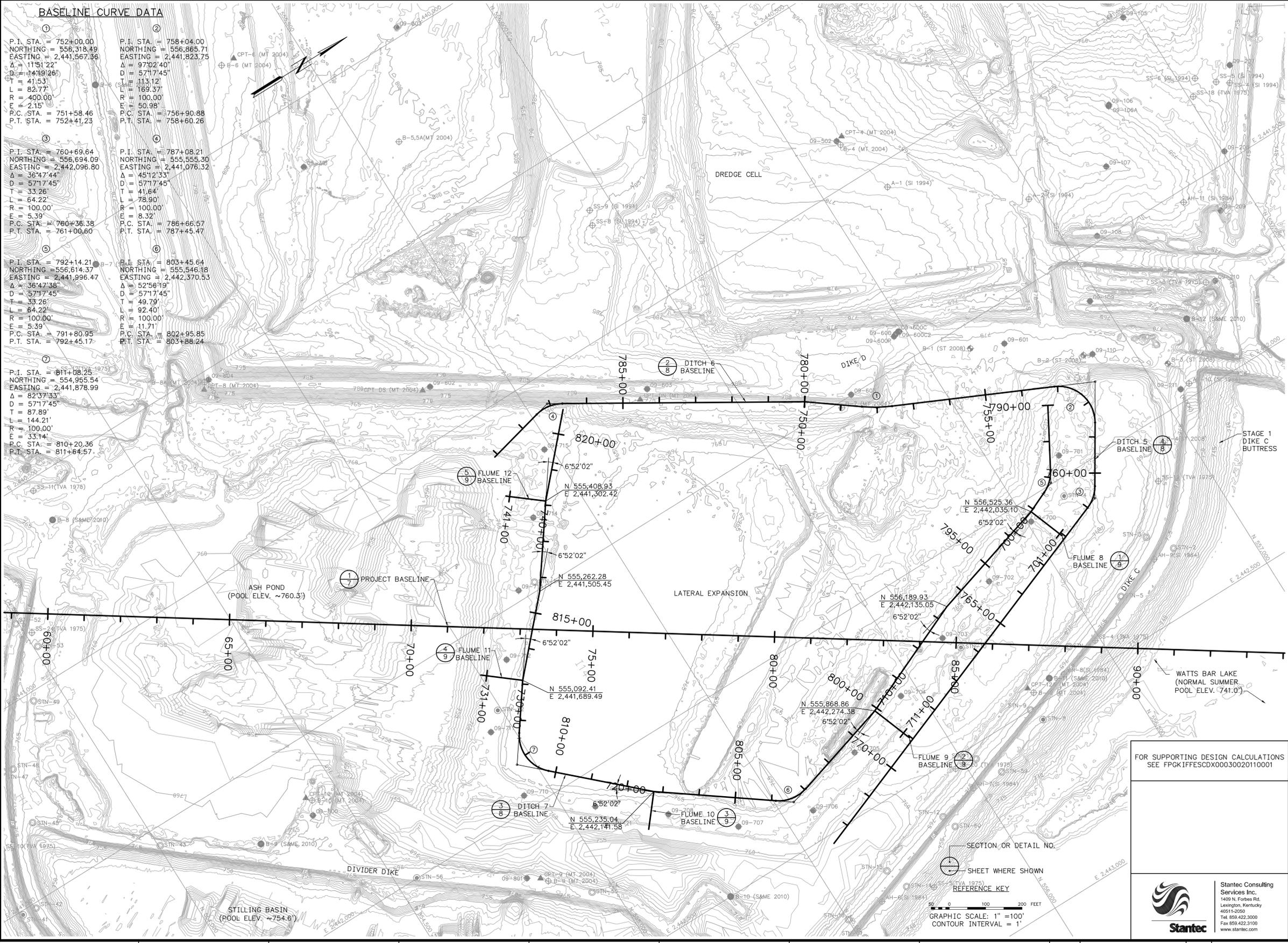
NOTES:
 1. TOPOGRAPHIC MAPPING WAS GENERATED FROM A LIDAR SURVEY PERFORMED ON JANUARY 24, 2011 BY TUCK MAPPING SOLUTIONS, INC. AND SUPPLEMENTED WITH A HYDROGRAPHIC SURVEY PERFORMED ON FEBRUARY 7, 2011 BY THE TENNESSEE VALLEY AUTHORITY.
 2. EXISTING INSTRUMENTATION LOCATIONS ARE SHOWN ON SHEET 10W431-06.

SURVEY CONTROL NOTE:
 A GLOBAL POSITIONING SYSTEM (GPS) BASE STATION HAS BEEN ESTABLISHED AND TRANSFORMATION PARAMETERS DETERMINED BY TVA USING SELECTED SURVEY CONTROL MONUMENTS. CONTACT WITH TVA SURVEYING DEPARTMENT (423)751-8416 OR (423)751-2571 SHALL BE MADE BEFORE ANY SURVEY OR CONSTRUCTION WORK IS COMMENCED. BASE STATION FREQUENCIES AND TRANSFORMATION PARAMETERS WILL BE PROVIDED TO THE CONTRACTOR FOR USE IN CONSTRUCTION ACTIVITIES AT THE SITE. PREVIOUSLY USED OR ESTABLISHED CONTROL POINTS AND MONUMENTS SHALL NOT BE USED BY THE CONTRACTOR WITHOUT PRIOR APPROVAL BY TVA SURVEYING DEPARTMENT.

- LEGEND**
- EXISTING BORING
 - SOIL BORING WITH UNDISTURBED (SHELBY) TUBE SAMPLES AND/OR STANDARD PENETRATION TESTS
 - SOIL BORING WITH UNDISTURBED (SHELBY) TUBE SAMPLES AND/OR STANDARD PENETRATION TESTS AND ROCK CORE
 - ⊕ SOIL BORING - PRE-FAILURE
 - ⊕ MONITORING WELL
 - ▲ CONE PENETROMETER TEST (CPT)
 - (MT 2005) (DRILLING COMPANY YEAR)
 - NR NO RECORD OF ORIGIN (BORING LOG) AT THIS TIME
 - MT MACTEC ENGINEERING AND CONSULTANTS, INC.
 - SI SINGLETON LABORATORIES
 - ST STANTEC CONSULTING SERVICES
 - LAW LAW ENGINEERING
 - S&ME SOILS & MATERIALS ENGINEERING
 - TVA TENNESSEE VALLEY AUTHORITY



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 NOT FOR CONSTRUCTION**



FOR SUPPORTING DESIGN CALCULATIONS
 SEE FPGKIFFSCDX00030020110001

REV	NO.	DATE	ISSUED FOR REVIEW										

SCALE: 1"=100'
 EXCEPT AS NOTED

YARD
 LATERAL EXPANSION (CELL 4) - RDP-0114-A
 ASH STACKING
 EXISTING CONDITIONS AND
 BASELINE LAYOUT

DESIGNED BY: K.B. LINDQUIST
 DRAWN BY: P.J. BOND
 CHECKED BY: D.E. HERRON
 SUPERVISED BY: M.J. STEELE
 REVIEWED BY: M.S. TURNBOW
 APPROVED BY: J.C. KAMMEYER

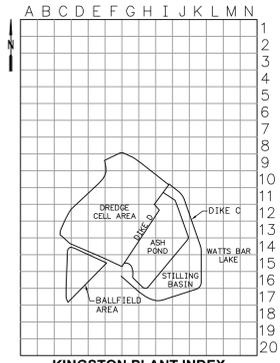
**KINGSTON FOSSIL PLANT
 TENNESSEE VALLEY AUTHORITY
 FOSSIL AND HYDRO ENGINEERING**

AUTOCAD R 2000 DATE 04/01/11 36 C 10W431-03 R 0



- NOTES:**
1. TOPOGRAPHIC MAPPING WAS GENERATED FROM A LIDAR SURVEY PERFORMED ON JANUARY 24, 2011 BY TUCK MAPPING SOLUTIONS, INC. AND SUPPLEMENTED WITH A HYDROGRAPHIC SURVEY PERFORMED ON FEBRUARY 7, 2011 BY THE TENNESSEE VALLEY AUTHORITY.
 2. INSTALL/EXTEND INSTRUMENTATION AS DIRECTED BY THE QC MANAGER AND REFERENCED IN THE QC PLAN.
 3. THE LATERAL EXPANSION SUBGRADE PLAN HAS AN AREA OF 34.7 ACRES, CUT VOLUME OF 26,000 CUBIC YARDS AND FILL VOLUME OF 145,000 CUBIC YARDS.

SURVEY CONTROL NOTE:
 A GLOBAL POSITIONING SYSTEM (GPS) BASE STATION HAS BEEN ESTABLISHED AND TRANSFORMATION PARAMETERS DETERMINED BY TVA USING SELECTED SURVEY CONTROL MONUMENTS. CONTACT WITH TVA SURVEYING DEPARTMENT (423)751-8416 OR (423)751-2571 SHALL BE MADE BEFORE ANY SURVEY OR CONSTRUCTION WORK IS COMMENCED. BASE STATION FREQUENCIES AND TRANSFORMATION PARAMETERS WILL BE PROVIDED TO THE CONTRACTOR FOR USE IN CONSTRUCTION ACTIVITIES AT THE SITE. PREVIOUSLY USED OR ESTABLISHED CONTROL POINTS AND MONUMENTS SHALL NOT BE USED BY THE CONTRACTOR WITHOUT PRIOR APPROVAL BY TVA SURVEYING DEPARTMENT.



**ISSUED FOR REVIEW
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FOR SUPPORTING DESIGN CALCULATIONS
 SEE FPGKIFFESCDX00030020110001

REV. NO.	DATE	ISSN	DRWN	CHWD	SUPV	RWVD	APPR	ISSD	PROJECT ID	AS CONST	REV. BY
R 0	04/01/11	KDL	PJB	DEH	MJS		MST	JCK			

SCALE: 1"=100' EXCEPT AS NOTED

YARD
 LATERAL EXPANSION (CELL 4) - RDP-0114-A
 ASH STACKING
 SUBGRADE PLAN

DESIGNED BY: K.B. LINDQUIST	DRAWN BY: P.J. BOND	CHECKED BY: D.E. HERRON	SUPERVISED BY: M.J. STEELE	REVIEWED BY: -	APPROVED BY: M.S. TURNBOW	ISSUED BY: J.C. KAMMETER
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Kingston Fossil Plant
 TENNESSEE VALLEY AUTHORITY
 FOSSIL AND HYDRO ENGINEERING

AUTOCAD R 2000 DATE 04/01/11 36 C 10W431-04 R 0



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GRAPHIC SCALE: 1" = 100'
 CONTOUR INTERVAL = 1'

STANTEC 0
 TASK COMPLETED BY: REV NO.

PLOT FACTOR: 100
 W_TVA C.A.D. DRAWING DO NOT ALTER MANUALLY

A

B

C

D

E

F

G

H

NOTES:

- TOPOGRAPHIC MAPPING WAS GENERATED FROM A LIDAR SURVEY PERFORMED ON JANUARY 24, 2011 BY TUCK MAPPING SOLUTIONS, INC., MERGED WITH THE SUBGRADE PLAN AND SUPPLEMENTED WITH A HYDROGRAPHIC SURVEY PERFORMED ON FEBRUARY 7, 2011 BY THE TENNESSEE VALLEY AUTHORITY.
- INSTALL/EXTEND INSTRUMENTATION AS DIRECTED BY THE QC MANAGER AND REFERENCED IN THE QC PLAN.

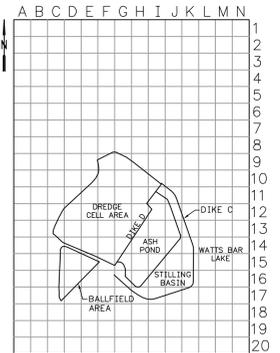
SURVEY CONTROL NOTE:

A GLOBAL POSITIONING SYSTEM (GPS) BASE STATION HAS BEEN ESTABLISHED AND TRANSFORMATION PARAMETERS DETERMINED BY TVA USING SELECTED SURVEY CONTROL MONUMENTS. CONTACT WITH TVA SURVEYING DEPARTMENT (423)751-8416 OR (423)751-2571 SHALL BE MADE BEFORE ANY SURVEY OR CONSTRUCTION WORK IS COMMENCED. BASE STATION FREQUENCIES AND TRANSFORMATION PARAMETERS WILL BE PROVIDED TO THE CONTRACTOR FOR USE IN CONSTRUCTION ACTIVITIES AT THE SITE. PREVIOUSLY USED OR ESTABLISHED CONTROL POINTS AND MONUMENTS SHALL NOT BE USED BY THE CONTRACTOR WITHOUT PRIOR APPROVAL BY TVA SURVEYING DEPARTMENT.

LEGEND

- PIEZOMETER (EXISTING)
- SLOPE INCLINOMETER (EXISTING)
- SETTLEMENT PLATE (EXISTING)
- PIEZOMETER (PROPOSED)
- SLOPE INCLINOMETER (PROPOSED)
- SETTLEMENT PLATE (PROPOSED)

FOR INSTRUMENTATION INSTALLATION DETAILS SEE SHEET 10W431-22.



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FOR SUPPORTING DESIGN CALCULATIONS SEE FPGKIFFESCDX00030020110001

REV	NO.	DATE	DSN	DRWN	CHKD	SVBY	RWD	APPR	ISSD	PROJECT	AS CONT	REV

SCALE: 1"=100' EXCEPT AS NOTED

YARD LATERAL EXPANSION (CELL 4) - RDP-0114-A
ASH STACKING INSTRUMENTATION PLAN

DESIGNED BY: K.D. LINDQUIST
DRAWN BY: P.J. BOND
CHECKED BY: D.E. HERRON
SUPERVISED BY: M.J. STEELE
REVIEWED BY: M.S. TURNBOW
APPROVED BY: J.C. KAMMEYER
ISSUED BY:

KINGSTON FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R 2000 DATE 04/01/11 36 C 10W431-06 R 0

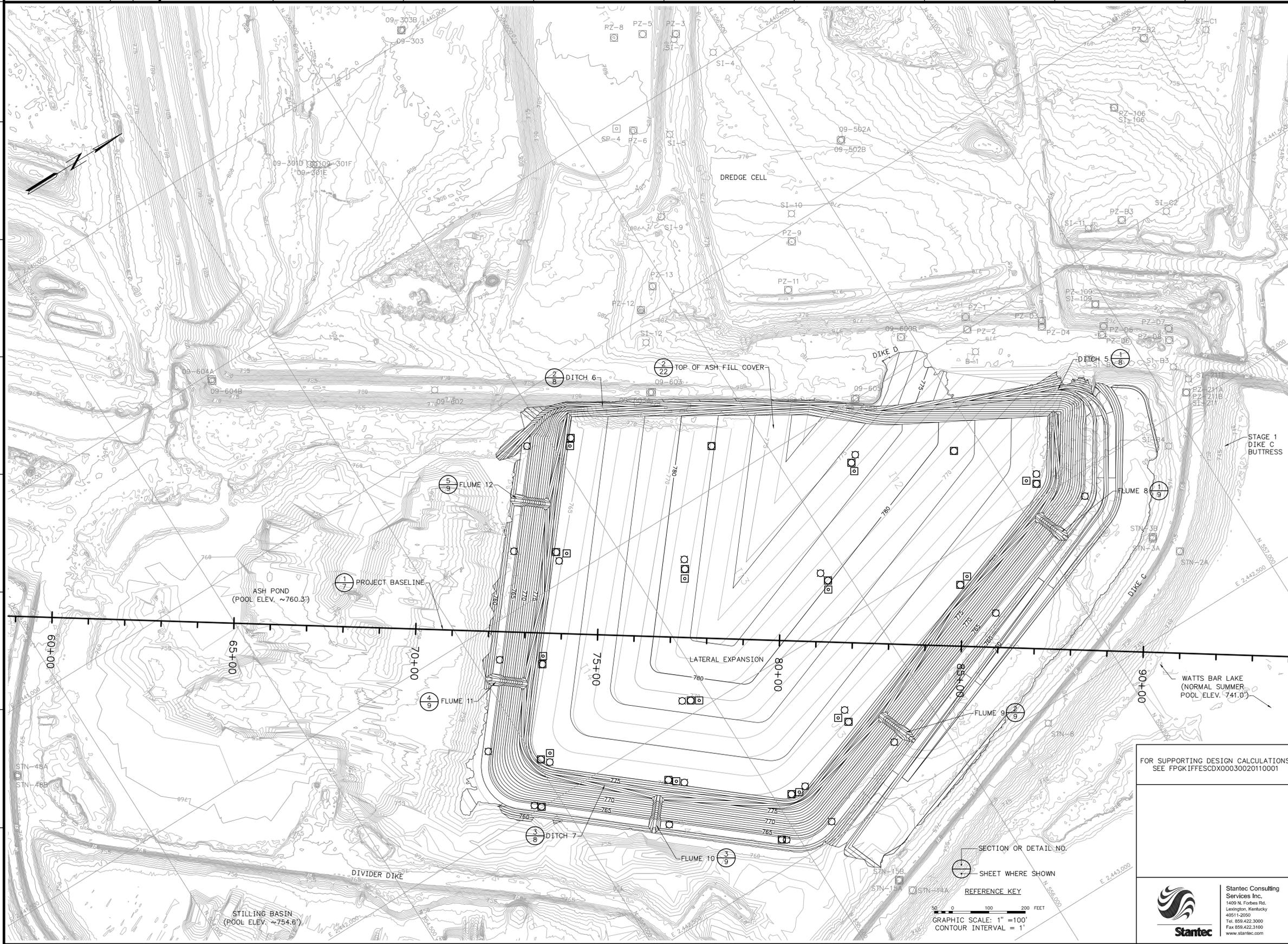
PLOT FACTOR: 100 W_TVA C.A.D. DRAWING DO NOT ALTER MANUALLY

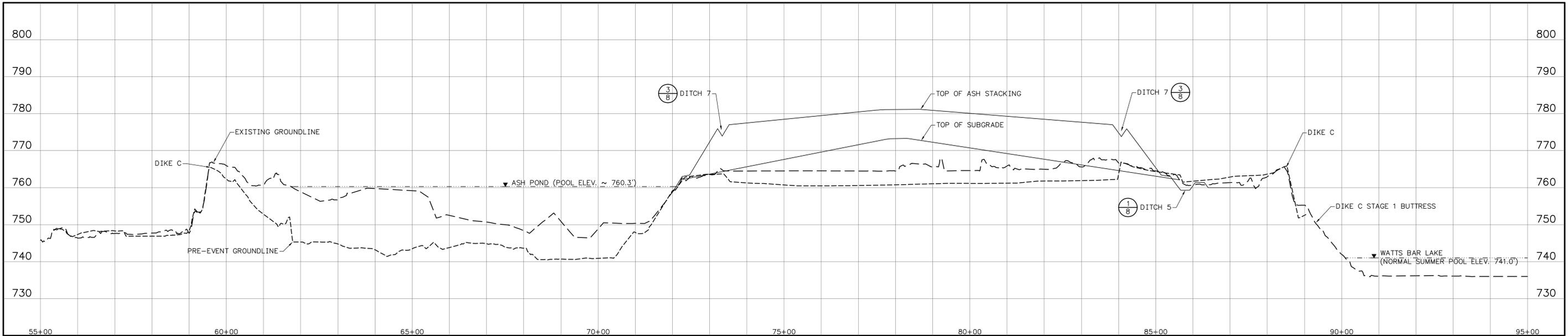


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GRAPHIC SCALE: 1" = 100'
CONTOUR INTERVAL = 1'

STANTEC 0
TASK COMPLETED BY: REV NO.





1 PROFILE - PROJECT BASELINE
 SCALE: 1"=100' (HORIZONTAL)
 1"=10' (VERTICAL)

NOTE:
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REV	DATE	DSN	DRN	CHKD	SUPV	RVD	APPD	ISSD	PROJECT	AS CONST	REV
01	04/01/11	KDL	PJB	DEH	MJS	-	MST	JCK	-	-	01
SCALE: AS SHOWN EXCEPT AS NOTED											
YARD LATERAL EXPANSION (CELL 4) - RDP-0114-A											
ASH STACKING											
PROFILE - PROJECT BASELINE											
DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:					
K.D. LINDQUIST	P.J. BOND	D.E. HERRON	M.J. STEELE	-	M.S. TURNBOW	J.C. KAMMEYER					
KINGSTON FOSSIL PLANT TENNESSEE VALLEY AUTHORITY FOSSIL AND HYDRO ENGINEERING											
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04/01/11											

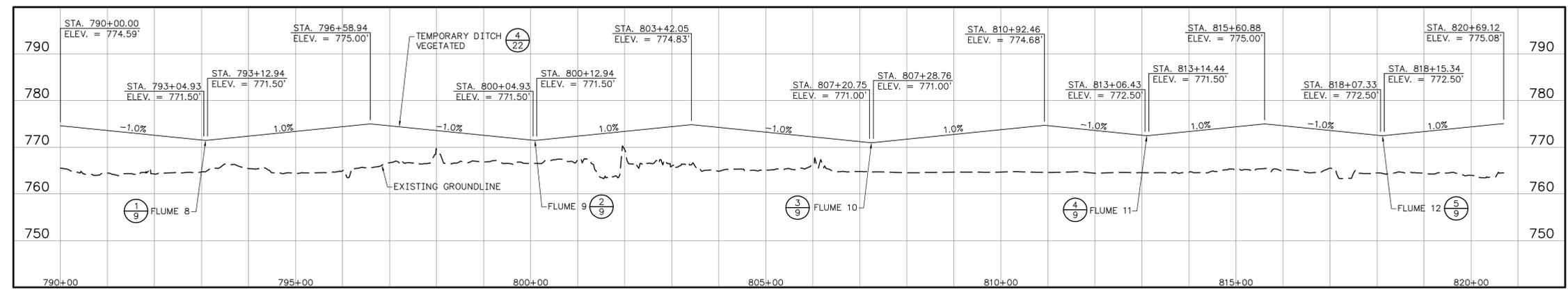


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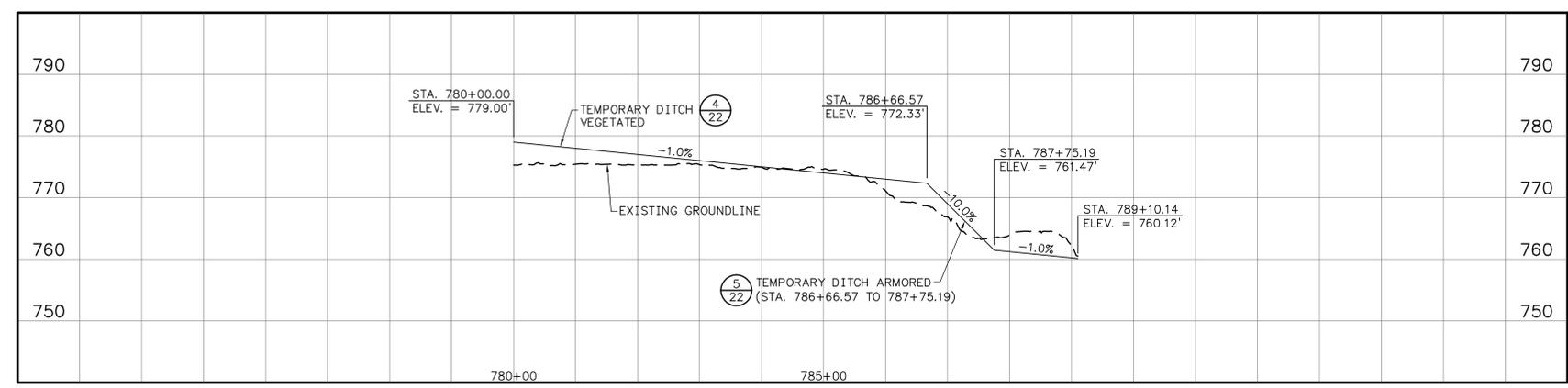
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 SHEET WHERE SHOWN
 REFERENCE KEY

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TASK COMPLETED BY:	REV NO.

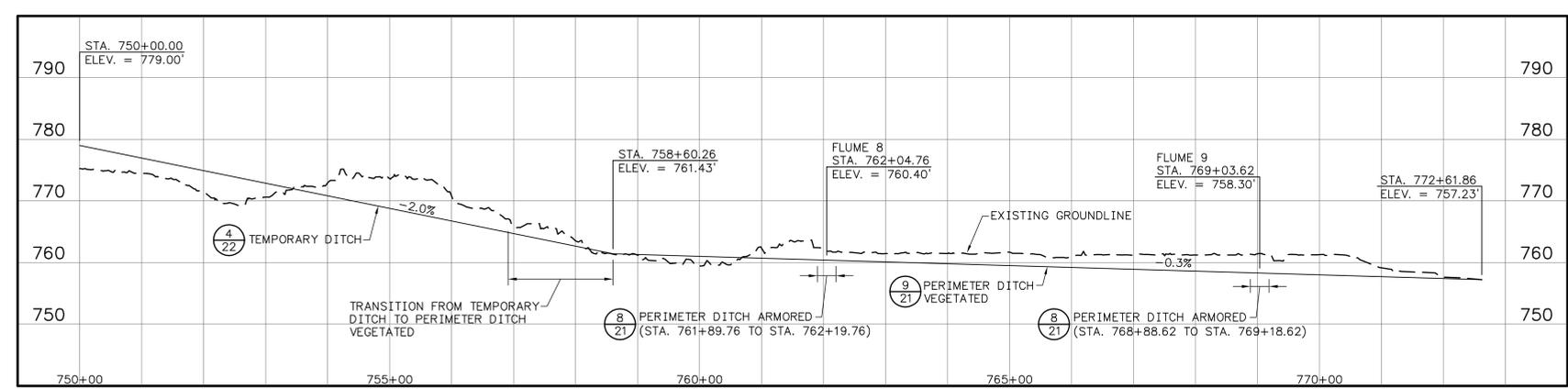
PLOT DATE: 03/27/2011 10:58:34 AM
 USER: SAMS.BRYAN
 V:\10W431\ACTIVE\10W431\PROJECT\ENVIRONMENTAL\DRAWINGS\01\10W431-07-R0.DWG



3
8 PROFILE - DITCH 7
SCALE: 1"=100' (HORIZONTAL) 8/10/11/11
1"=10' (VERTICAL)



2
8 PROFILE - DITCH 6
SCALE: 1"=100' (HORIZONTAL) 8/10/11/11
1"=10' (VERTICAL)



1
8 PROFILE - DITCH 5
SCALE: 1"=100' (HORIZONTAL) 8/10/11/11
1"=10' (VERTICAL)

NOTE:
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ASH STACKING PROFILES - DITCHES																																			
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KINGSTON FOSSIL PLANT TENNESSEE VALLEY AUTHORITY FOSSIL AND HYDRO ENGINEERING																																			
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SECTION OR DETAIL NO.
SHEET WHERE SHOWN
REFERENCE KEY

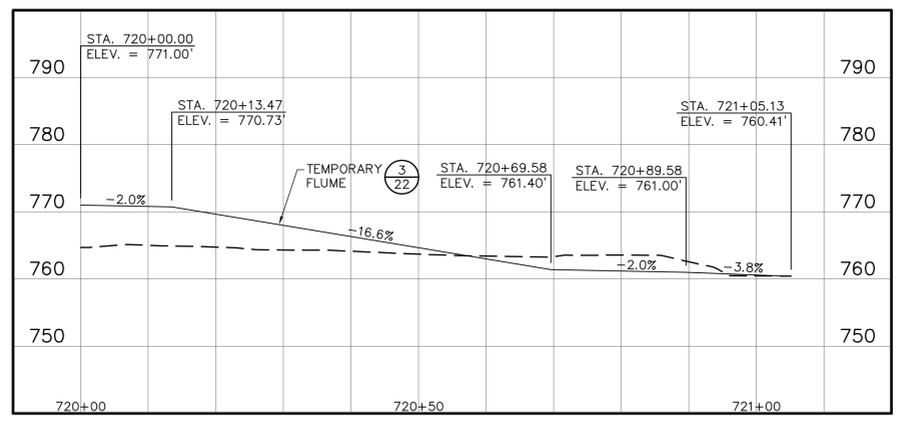


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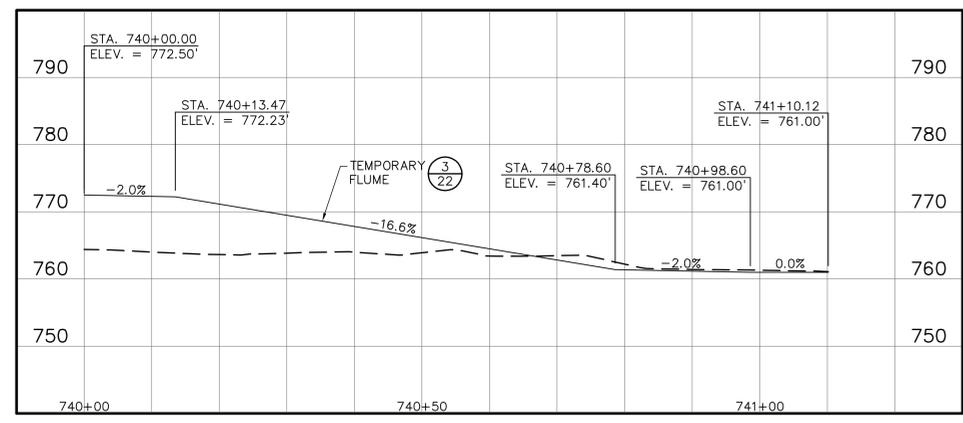
STANTEC 0
TASK COMPLETED BY: REV NO.

PLOT FACTOR: 10
W_TVA
C.A.D. DRAWING
DO NOT ALTER MANUALLY

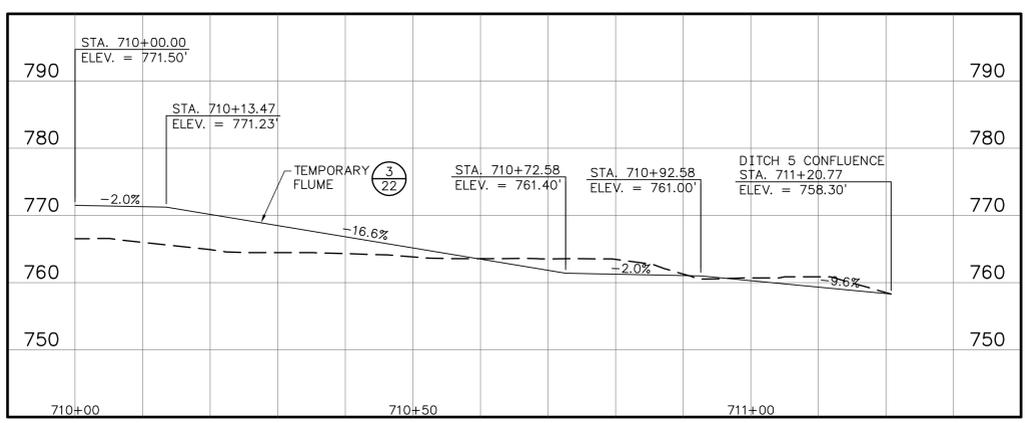
A
B
C
D
E
F
G
H



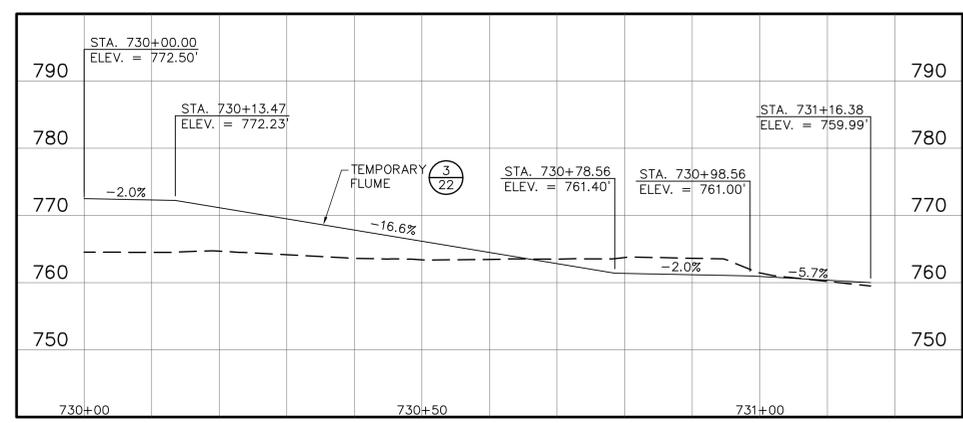
3
9 PROFILE - FLUME 10
SCALE: 1"=10'



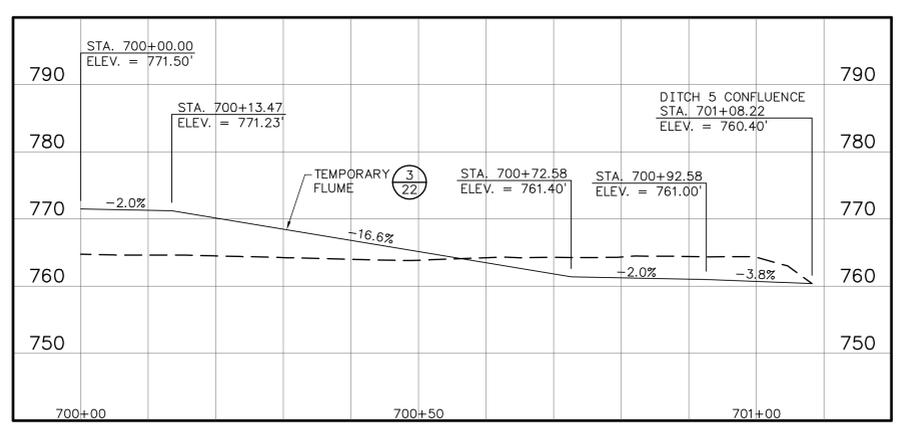
5
9 PROFILE - FLUME 12
SCALE: 1"=10'



2
9 PROFILE - FLUME 9
SCALE: 1"=10'



4
9 PROFILE - FLUME 11
SCALE: 1"=10'



1
9 PROFILE - FLUME 8
SCALE: 1"=10'

NOTE:
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DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:																																									
K.D. LINDQUIST	P.J. BOND	D.E. HERRON	M.J. STEELE	-	M.S. TURNBOW	J.C. KAMMEYER																																									
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TASK COMPLETED BY:	REV NO.

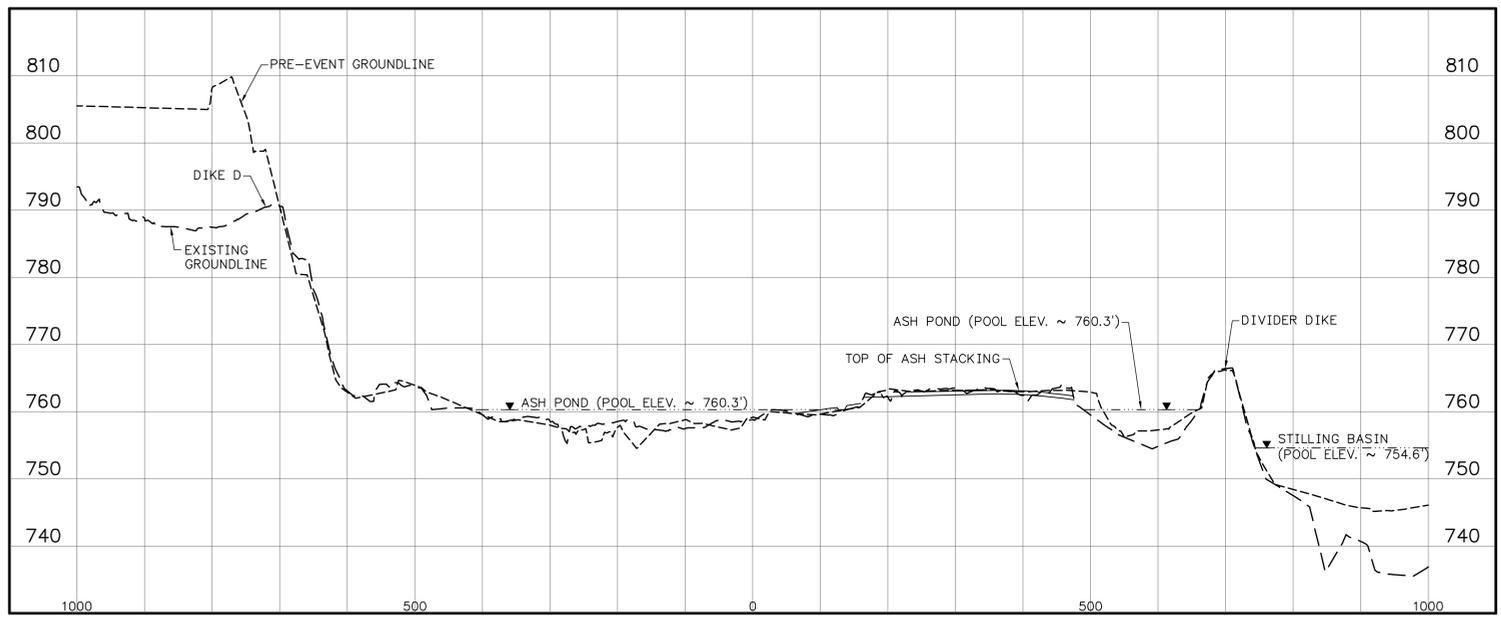
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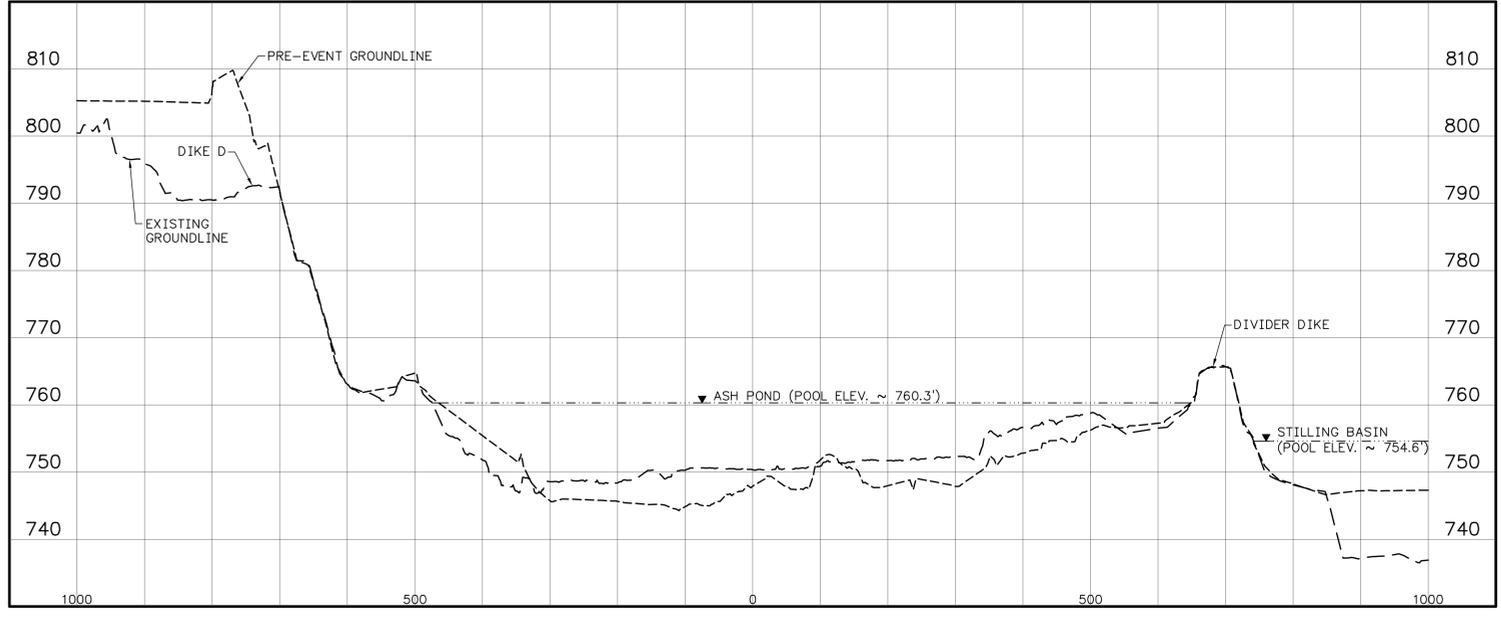
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1"=10' (VERTICAL)

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SECTION - STA. 71+00
SCALE: 1"=100' (HORIZONTAL)
1"=10' (VERTICAL)

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SHEET WHERE SHOWN
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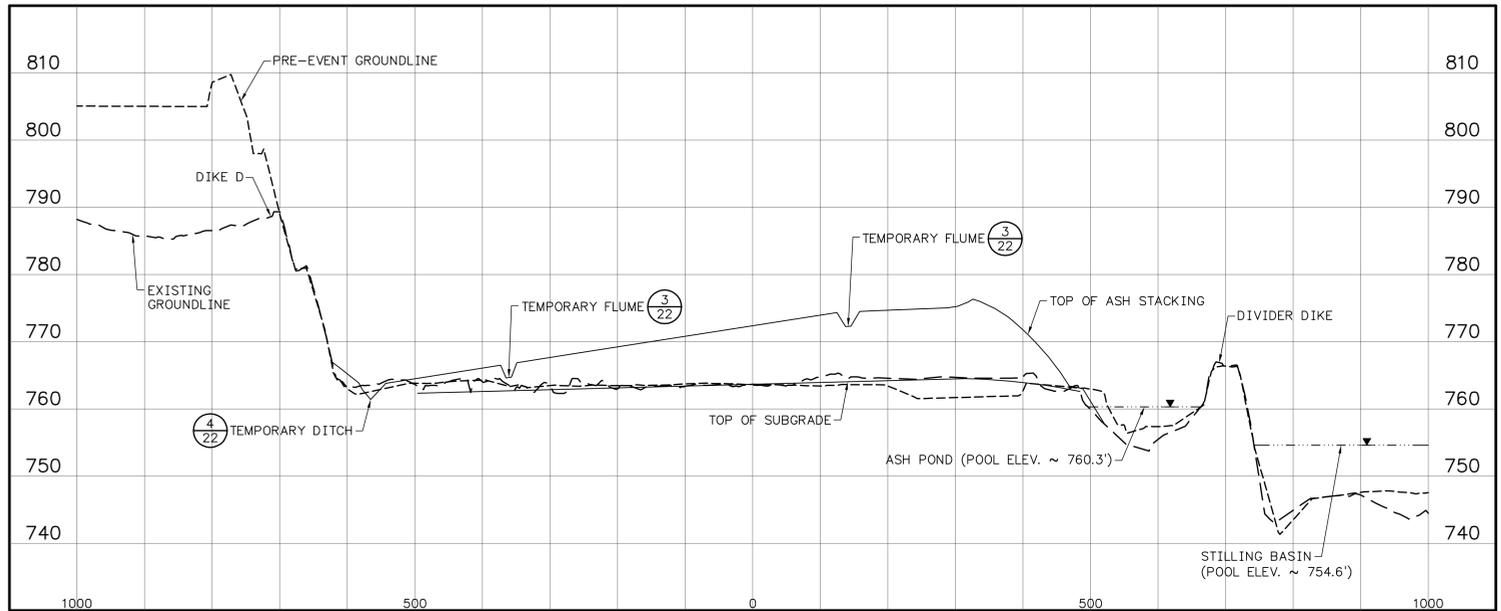
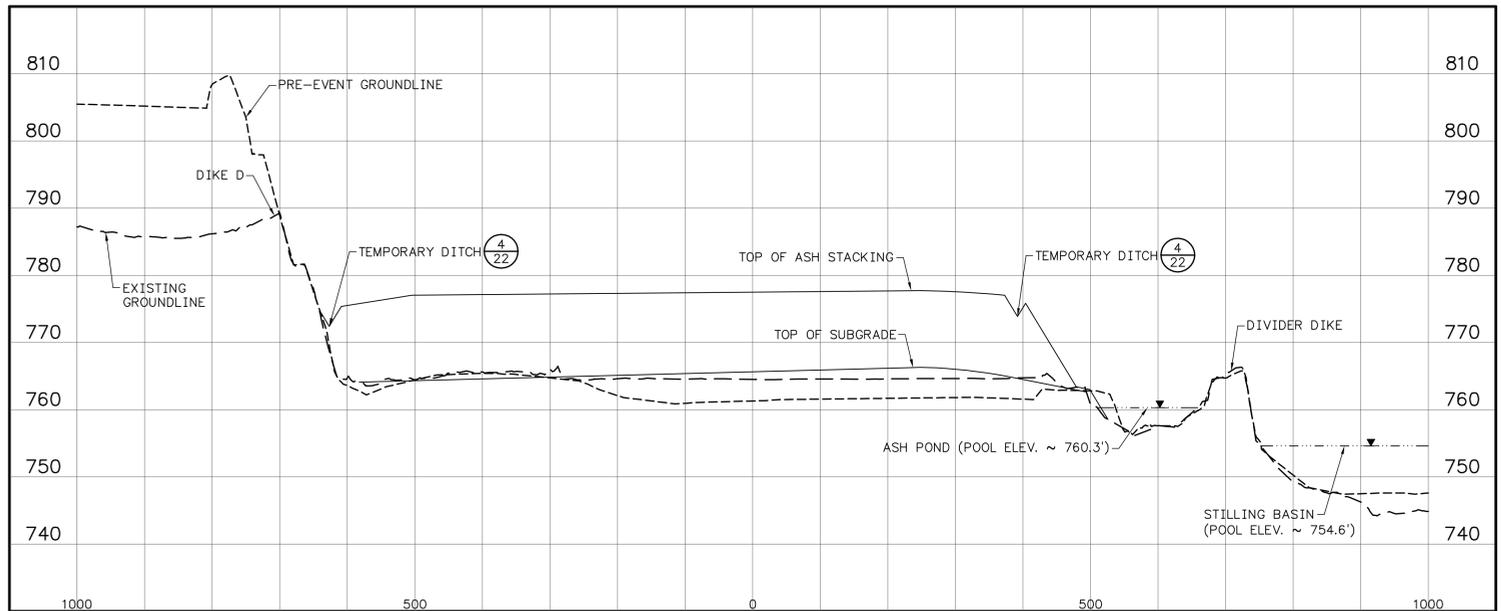


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TASK COMPLETED BY: REV NO.

PLOT FACTOR: 10
W_TVA
C.A.D. DRAWING
DO NOT ALTER MANUALLY

PLOT DATE: 03/29/2011 USER: CLINKENBERG, ADAM
 PLOT USER: TUCK MAPPING SOLUTIONS, INC.



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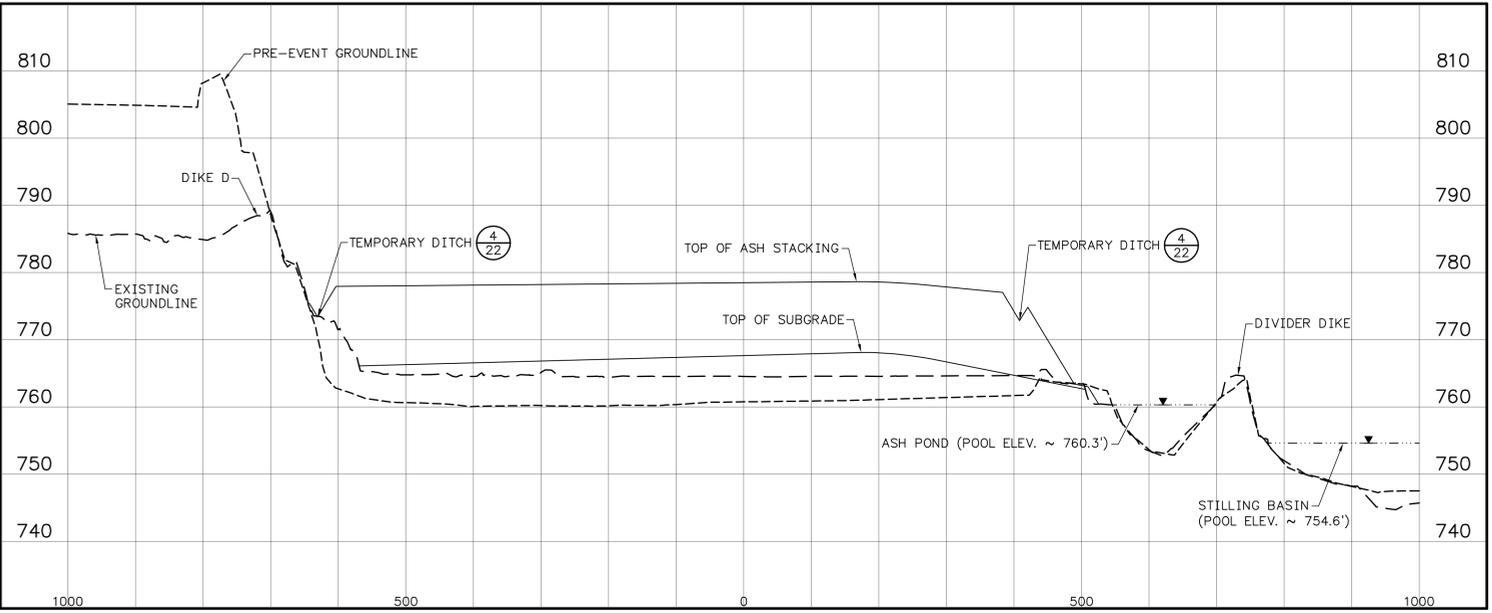
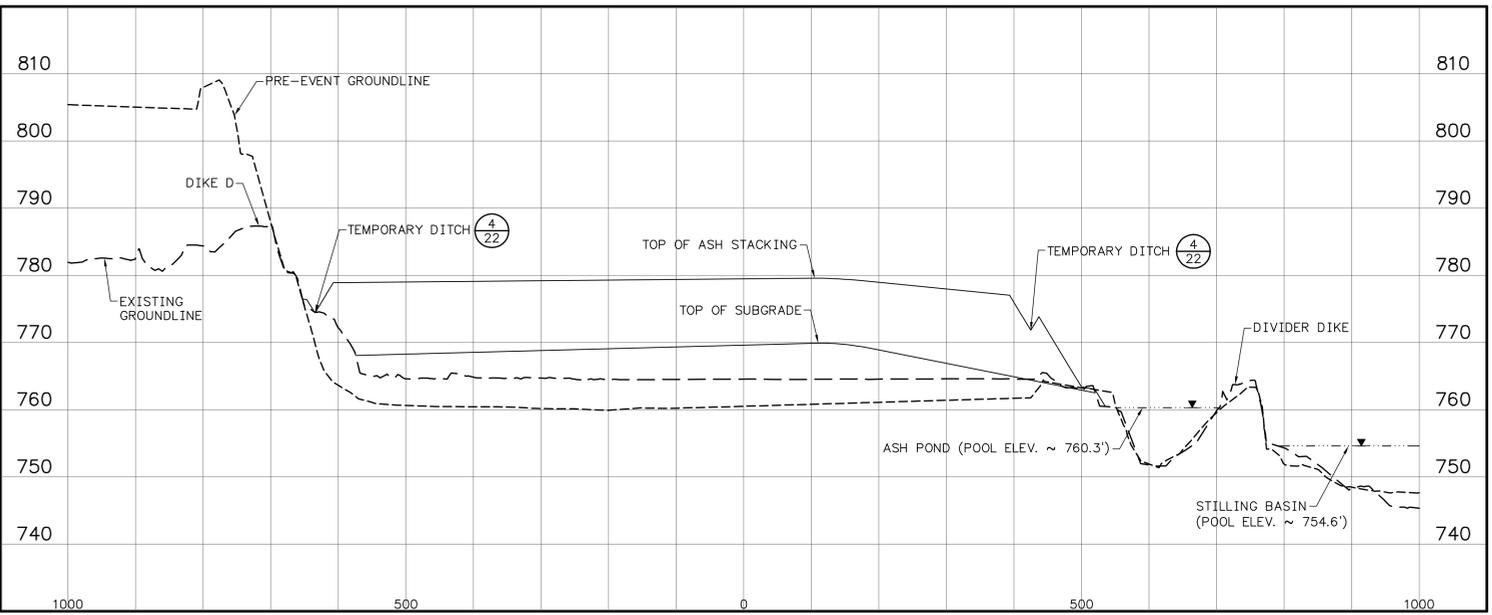


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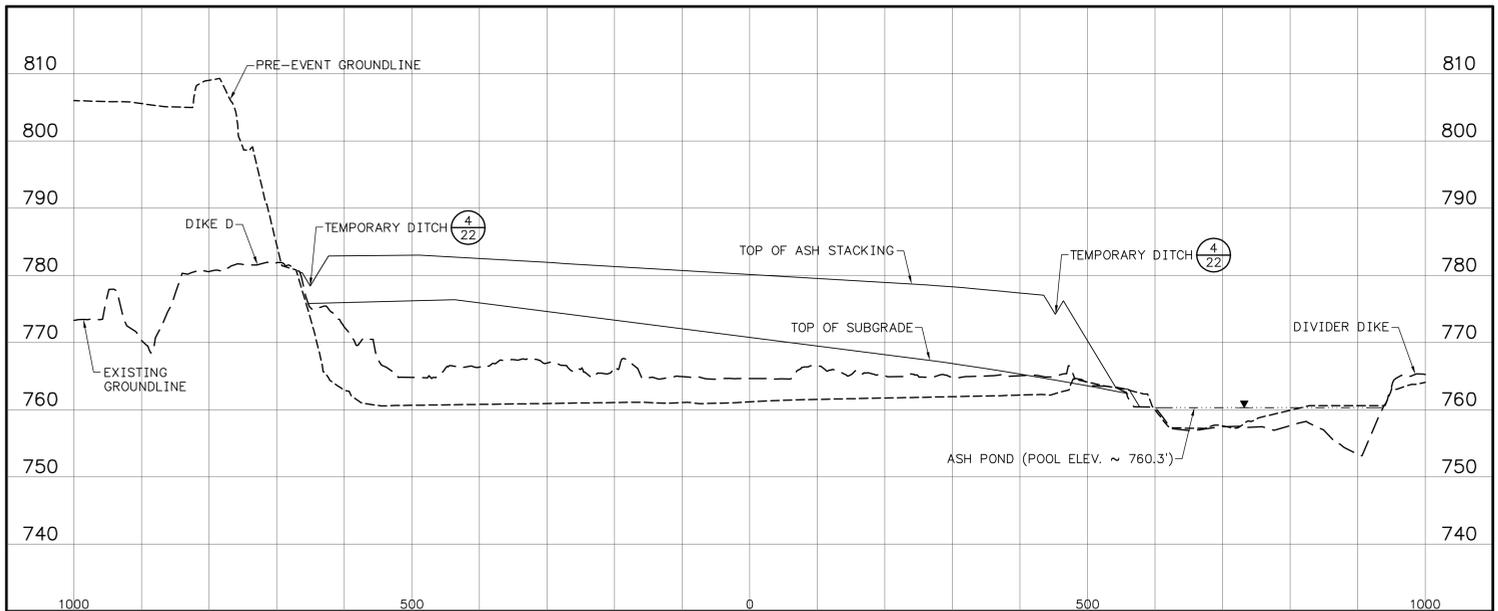
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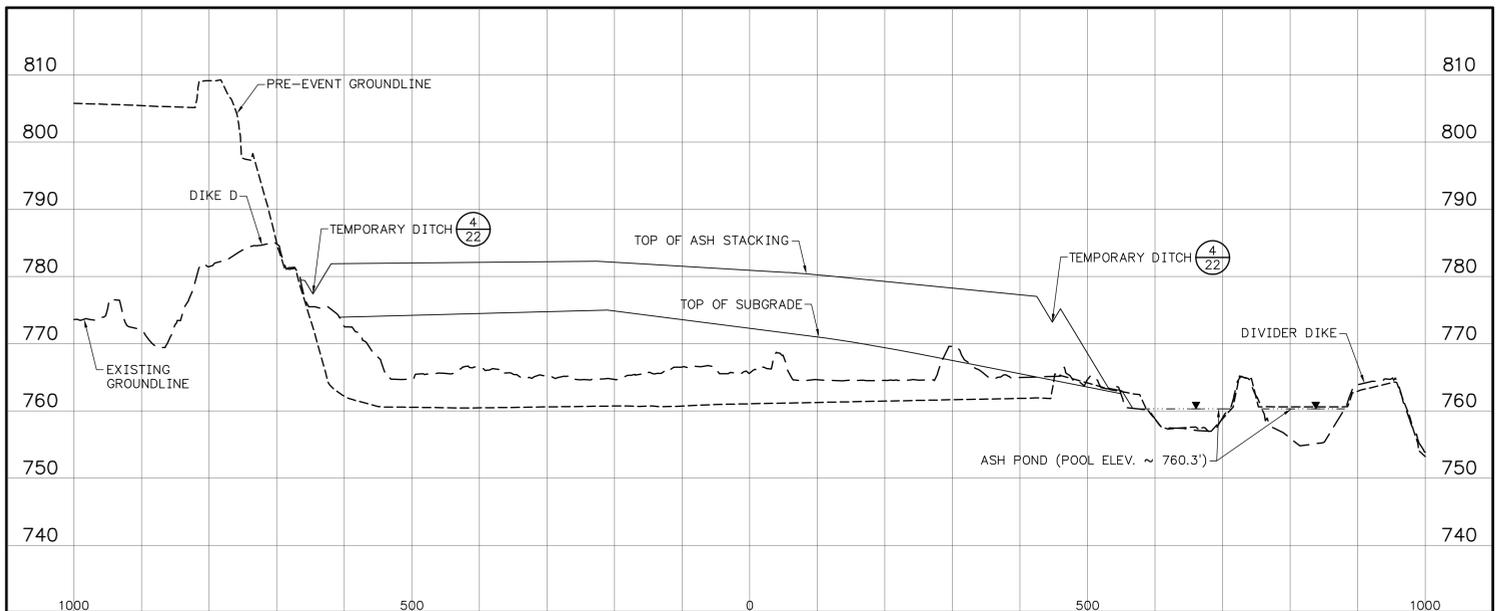
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SECTION - STA. 80+00
SCALE: 1"=100' (HORIZONTAL)
1"=10' (VERTICAL)



SECTION - STA. 79+00
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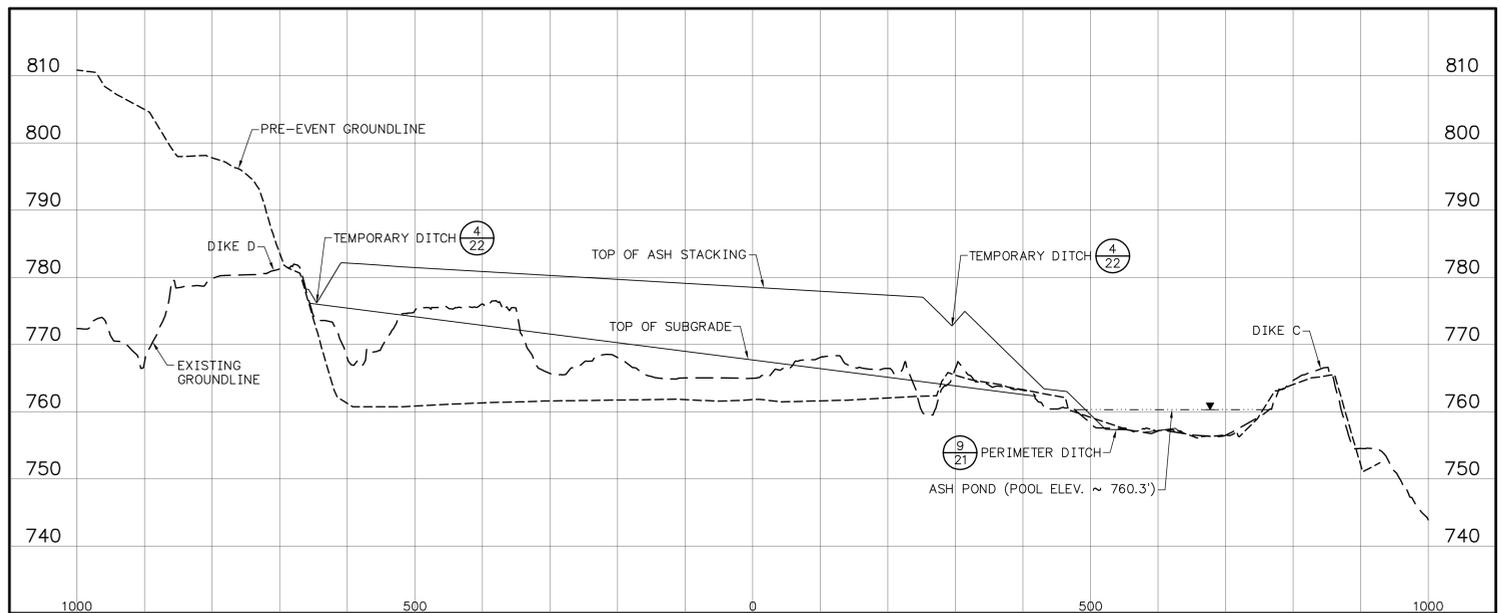
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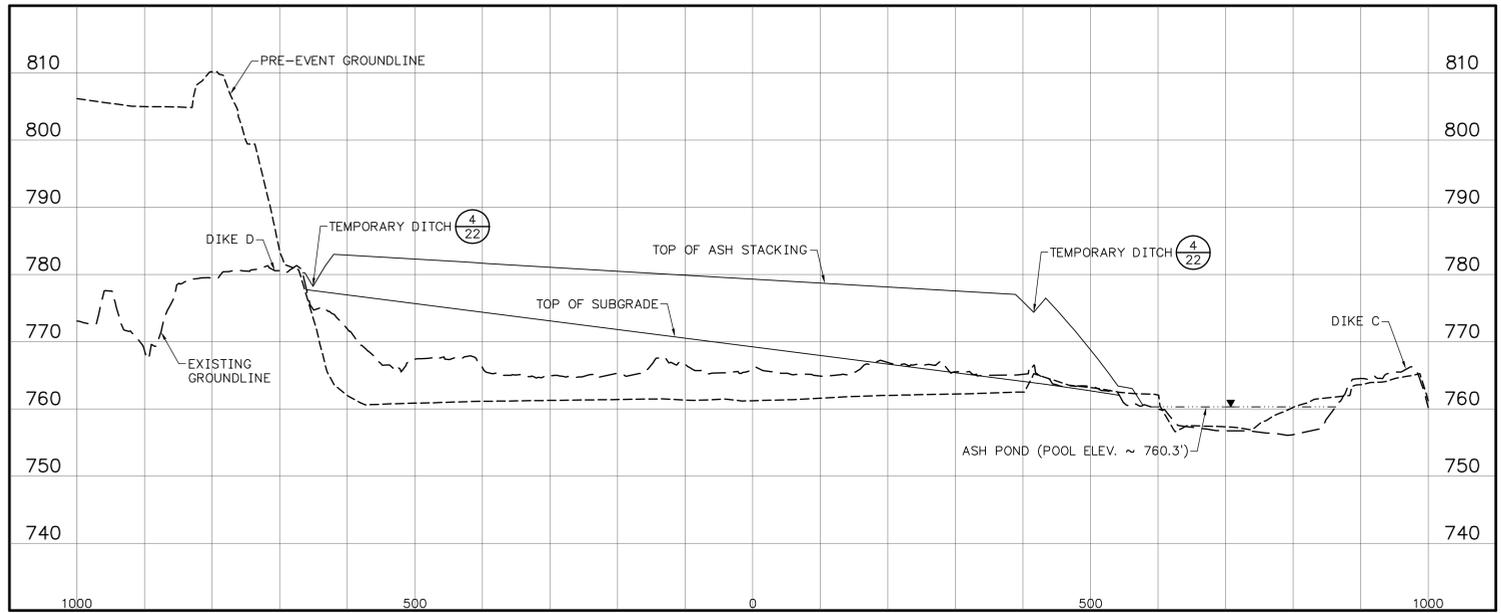


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PLOT FACTOR: 10 W_TVA
 C.A.D. DRAWING DO NOT ALTER MANUALLY

PLOT DATE: 03/29/2011 USER: CLINKMERRILL ADAM
 PLOT USER: TUCK MAPPING SOLUTIONS INC.

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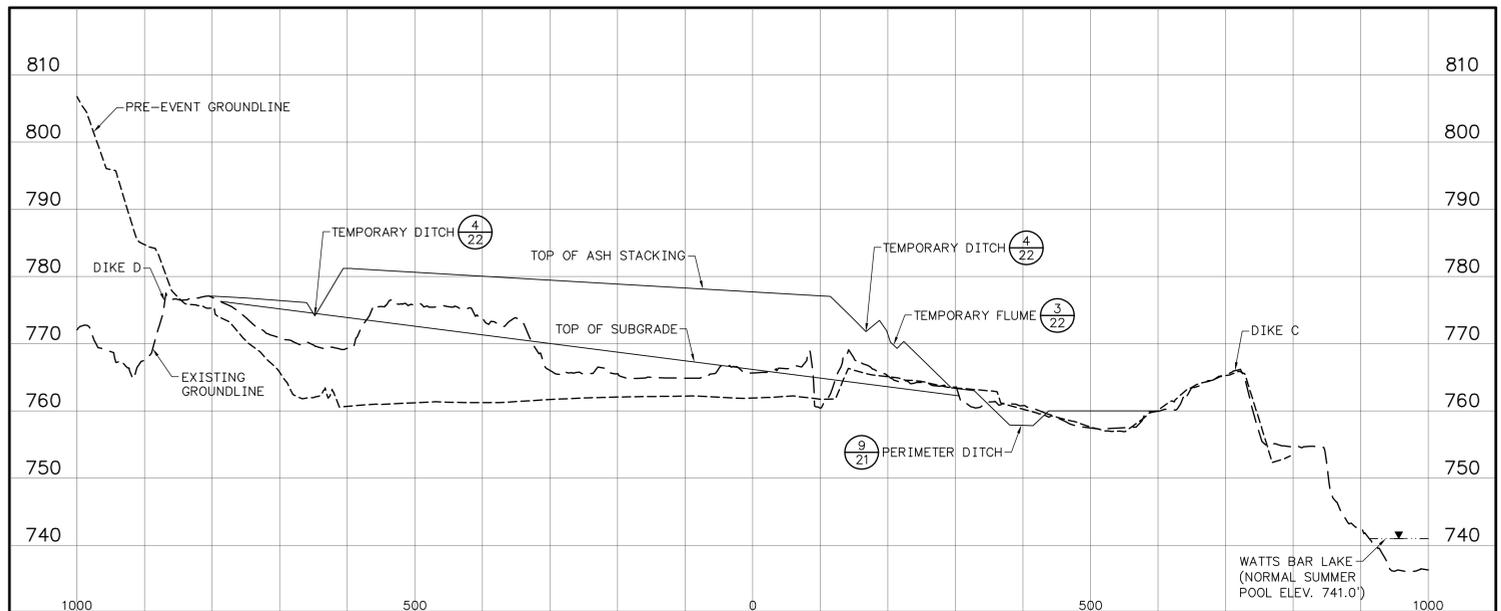
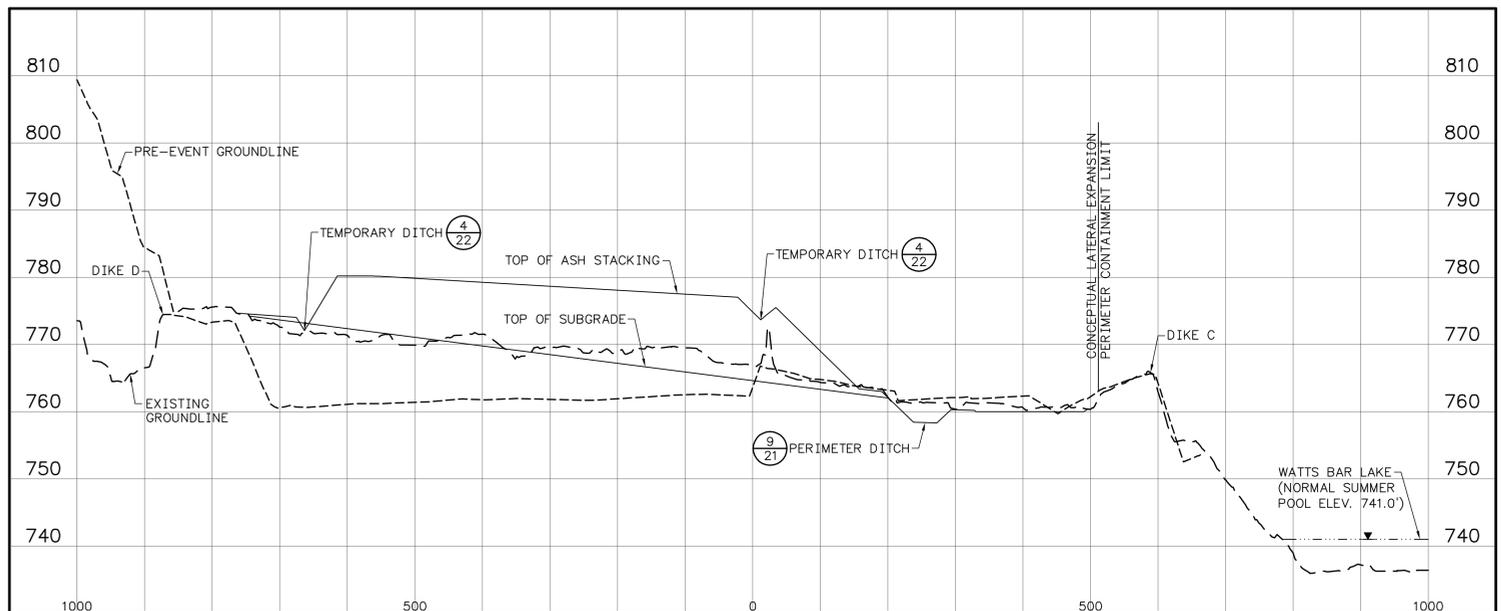
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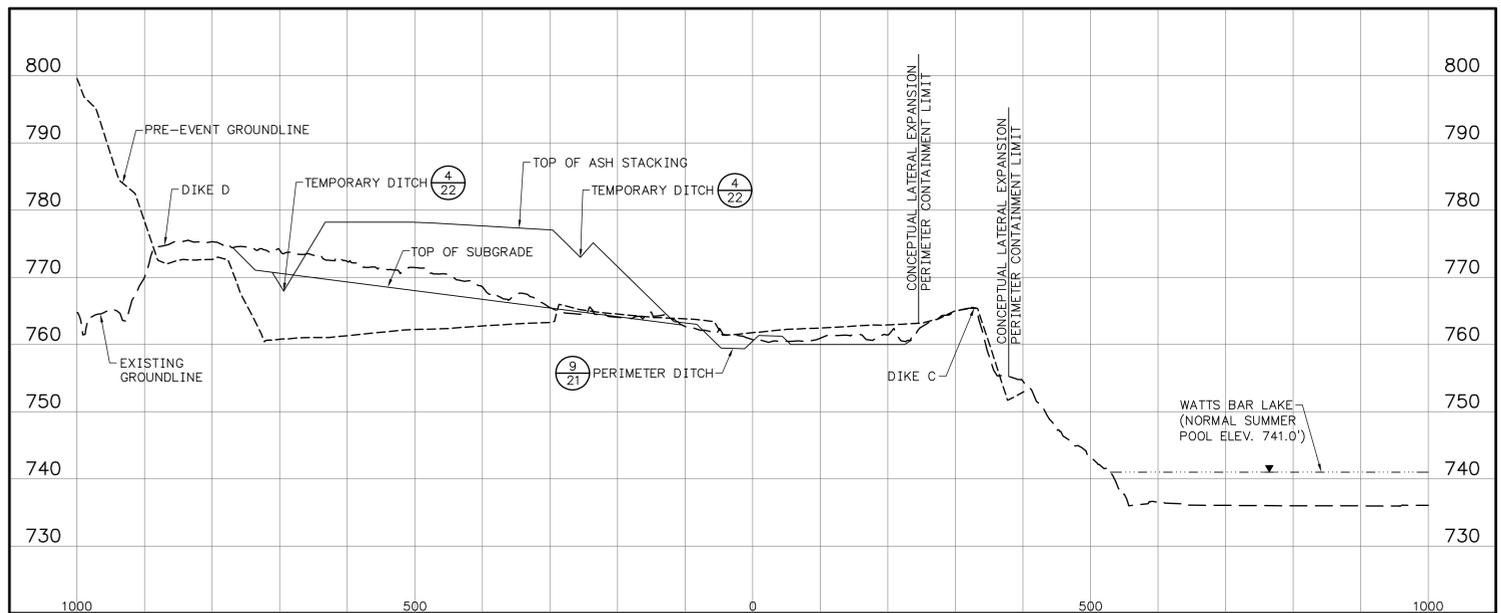
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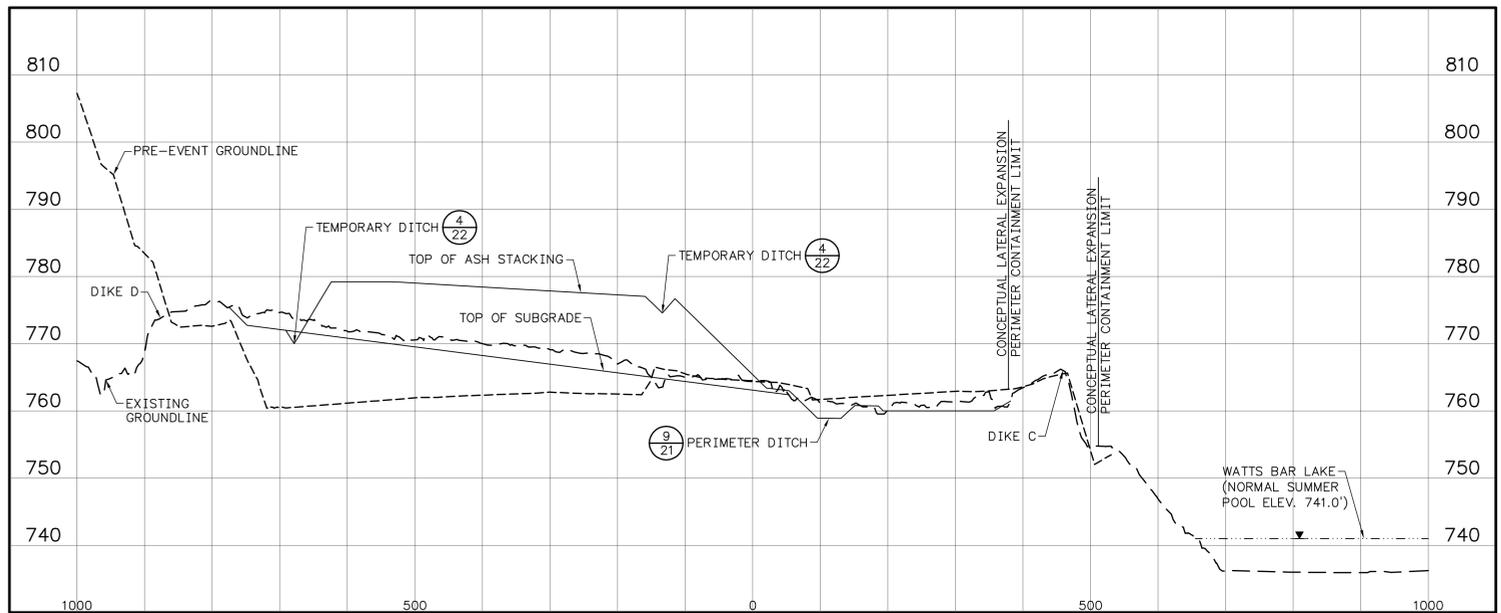
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SECTION - STA. 86+00
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SECTION OR DETAIL NO.
SHEET WHERE SHOWN
REFERENCE KEY



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Lexington, Kentucky 40511-2050
Tel: 859.422.3000
Fax: 859.422.3100
www.stantec.com

STANTEC 0
TASK COMPLETED BY: REV. NO.

PLOT FACTOR: 10 W_TVA
C.A.D. DRAWING DO NOT ALTER MANUALLY

PLOT DATE: 03/20/2011 USER: CLINKMEYER, ADAM FILENAME: \\F:\PROJECTS\2011\10W431-17\10W431-17-001.dwg

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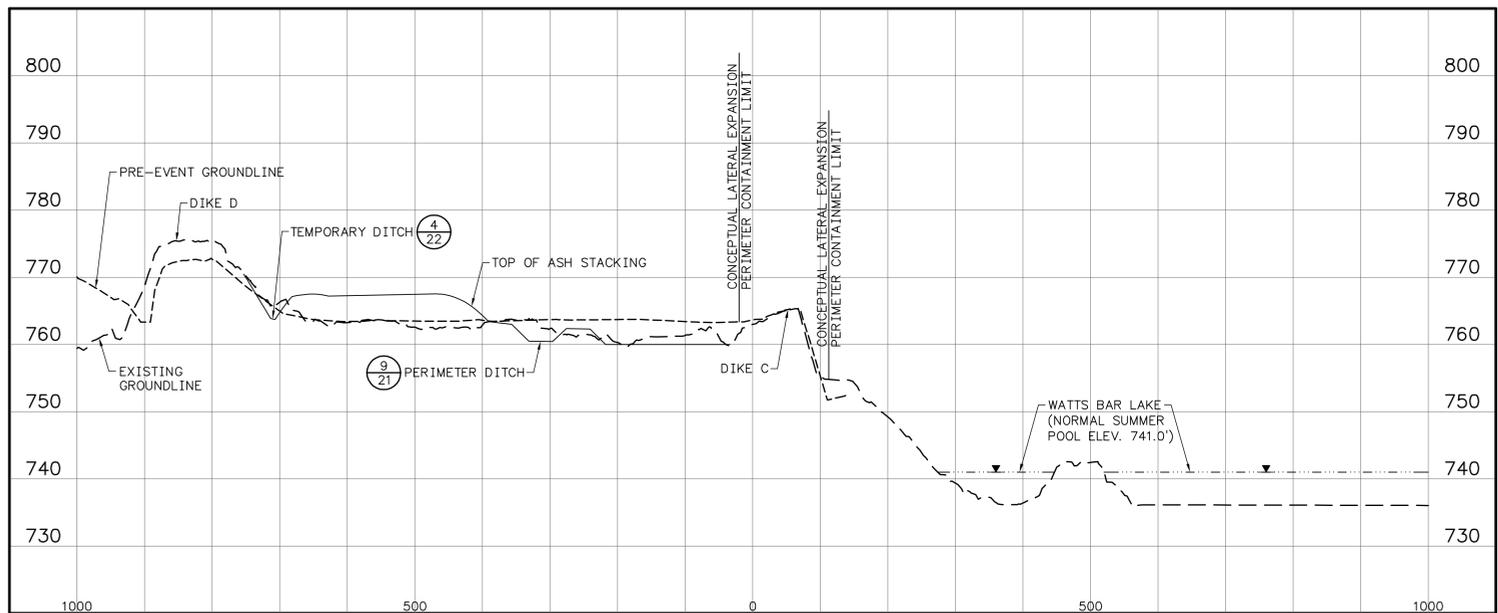
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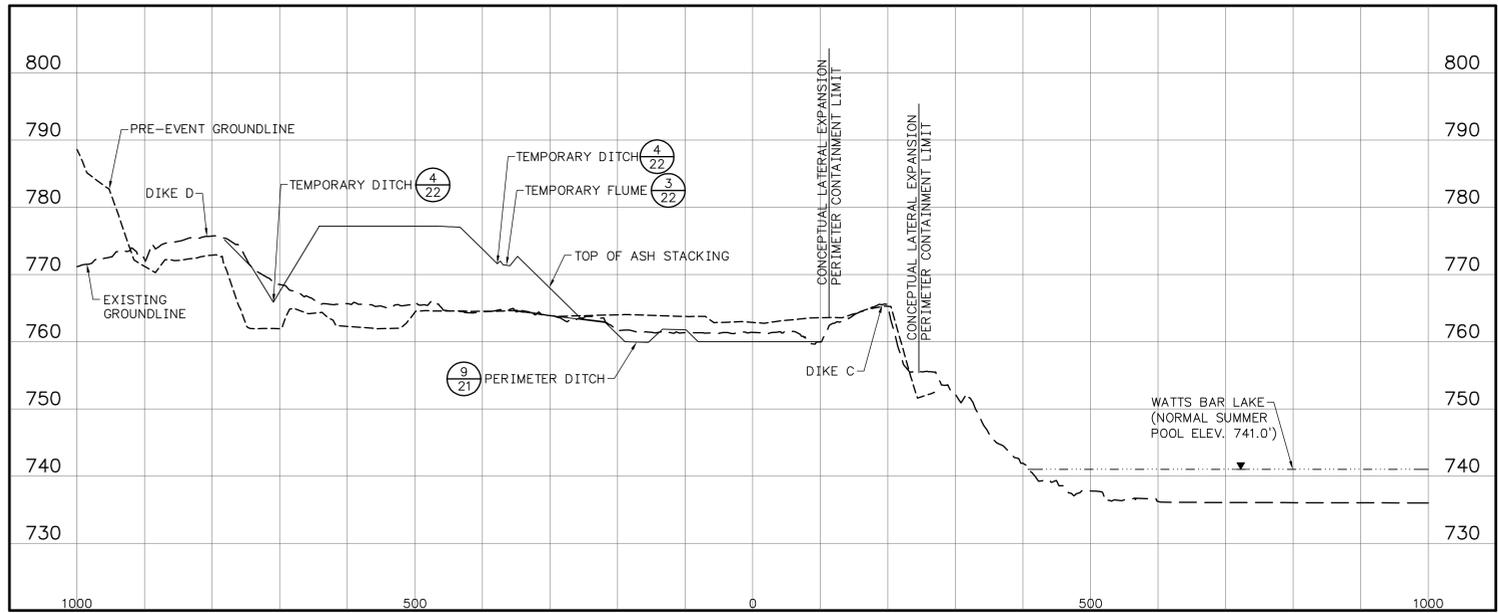
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SECTION - STA. 88+00
 SCALE: 1"=100' (HORIZONTAL)
 1"=10' (VERTICAL)



SECTION - STA. 87+00
 SCALE: 1"=100' (HORIZONTAL)
 1"=10' (VERTICAL)

NOTE:
 TOPOGRAPHIC MAPPING WAS GENERATED FROM A LIDAR SURVEY PERFORMED ON JANUARY 24, 2011 BY TUCK MAPPING SOLUTIONS, INC. AND SUPPLEMENTED WITH A HYDROGRAPHIC SURVEY PERFORMED ON FEBRUARY 7, 2011 BY THE TENNESSEE VALLEY AUTHORITY.

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PLOT FACTOR: 10 W_TVA
 C.A.D. DRAWING DO NOT ALTER MANUALLY

PLOT DATE: 03/29/2011 USER: CLINKMERRIDG ADAM
 PLOT USER: JEFFREY VANDERKAM PLOT USER: JEFFREY VANDERKAM

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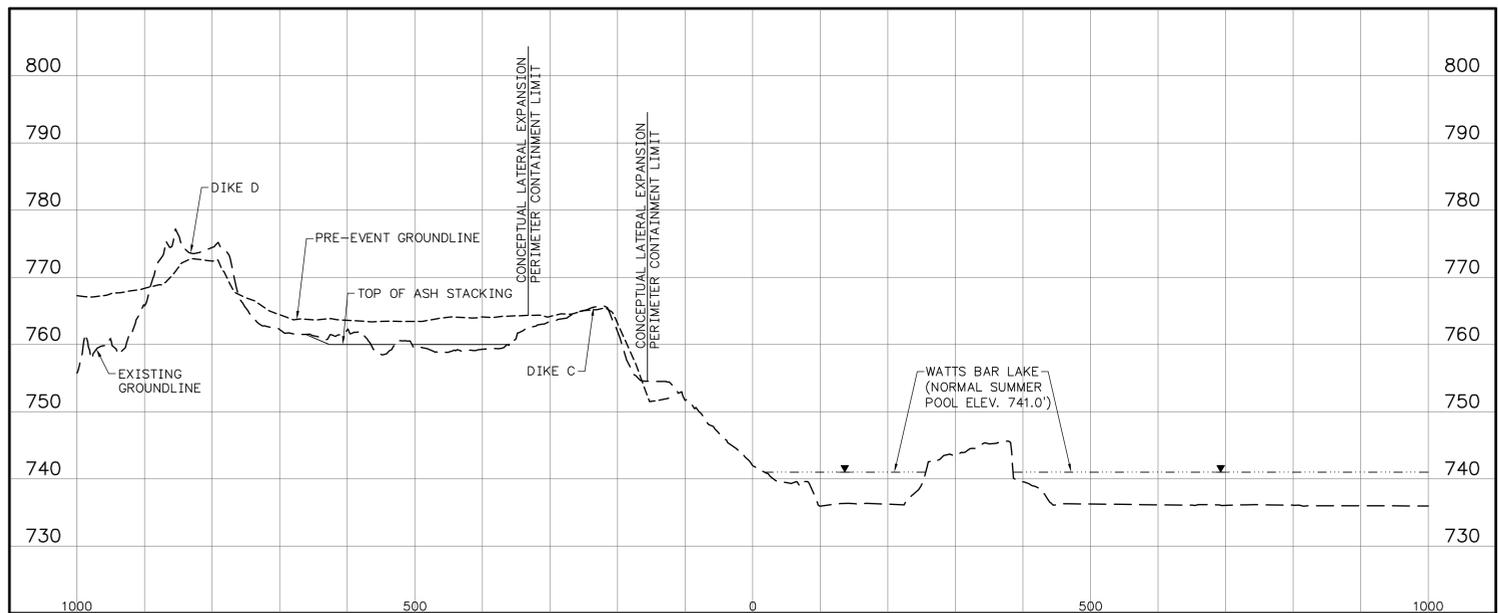
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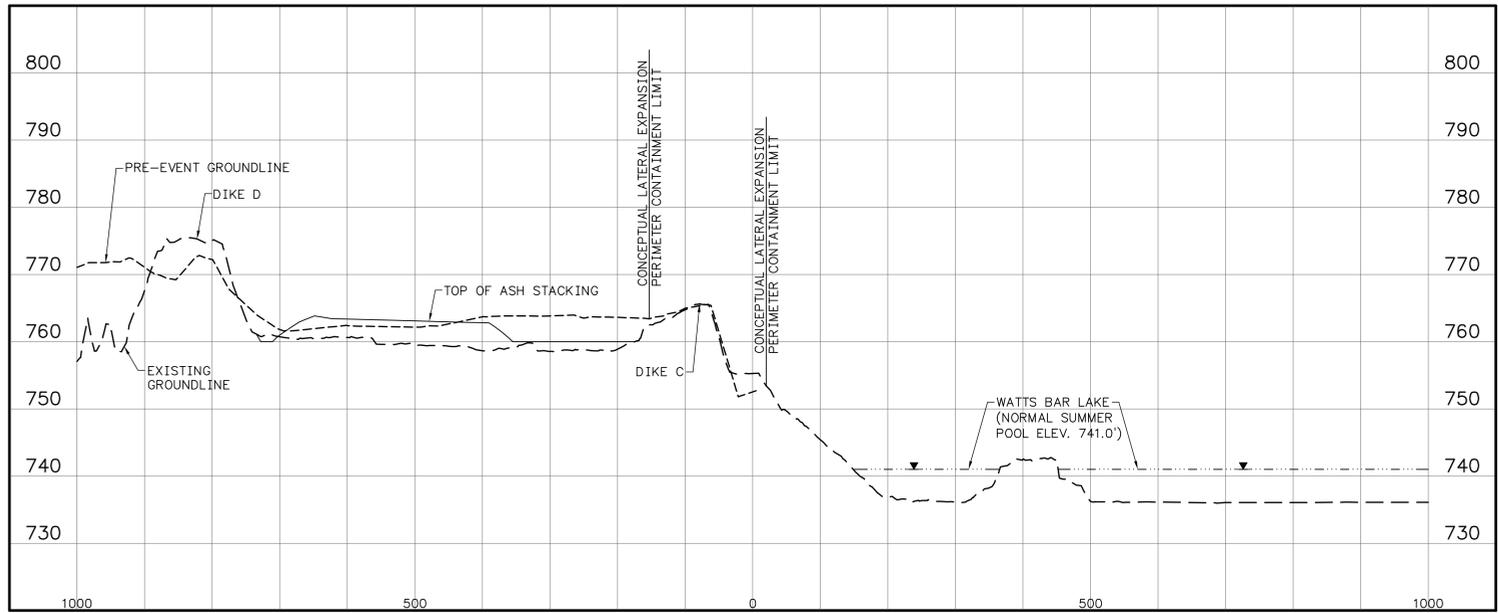
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SECTION - STA. 90+00
SCALE: 1"=100' (HORIZONTAL)
1"=10' (VERTICAL)



SECTION - STA. 89+00
SCALE: 1"=100' (HORIZONTAL)
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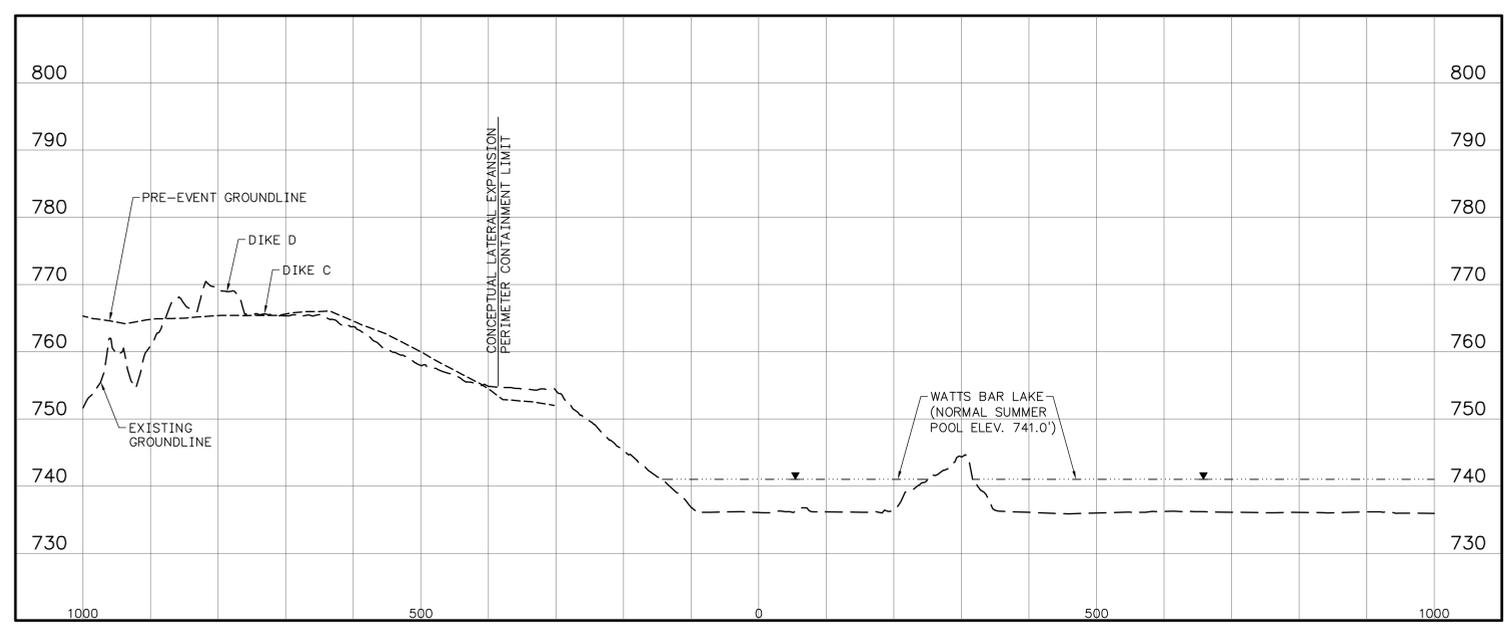
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W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

PLOT DATE: 03/29/2011 USER: CLINKMERRIS ADAM FILENAME: C:\WORKSPACE\PROJECTS\10W431-19\10W431-19-001.dwg

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SECTION - STA. 91+00
SCALE: 1"=100' (HORIZONTAL)
1"=10' (VERTICAL)

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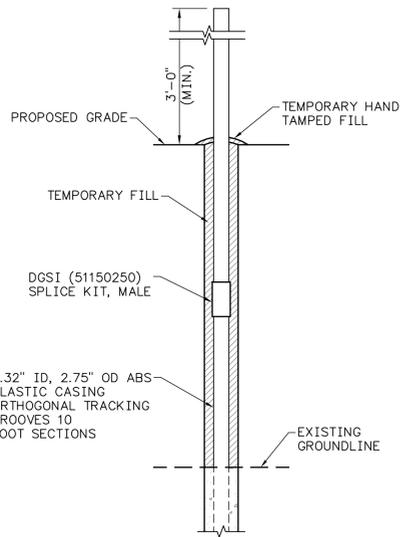
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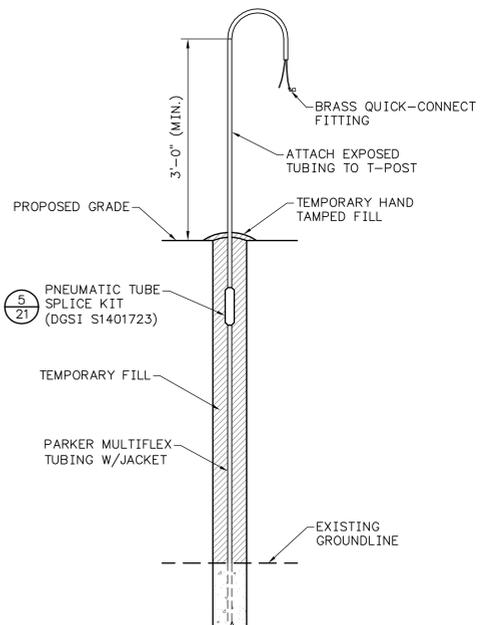
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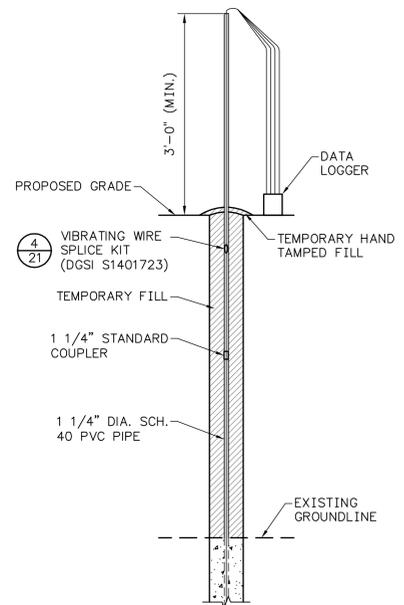
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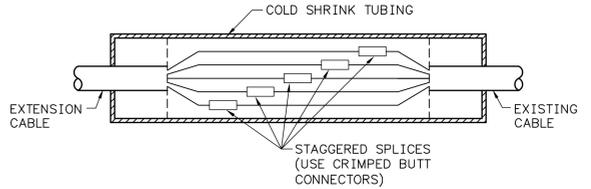
1
21
DETAIL - SLOPE INCLINOMETER EXTENSION
SCALE: 1"=1'-0"



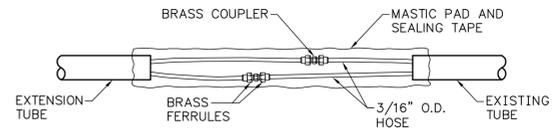
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DETAIL - PNEUMATIC PIEZOMETER EXTENSION
SCALE: 1"=1'-0"



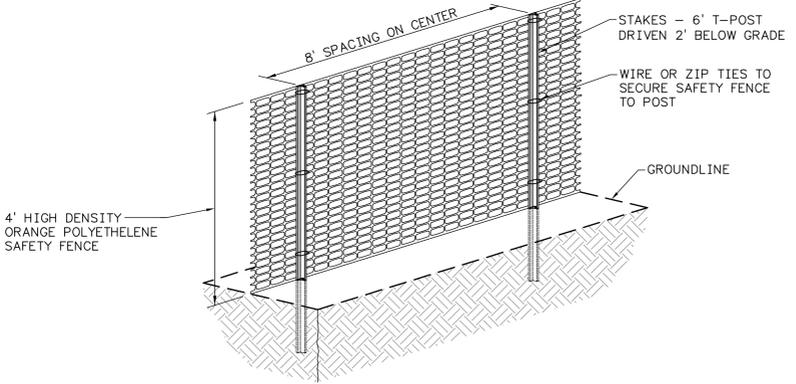
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21
DETAIL - VIBRATING WIRE PIEZOMETER EXTENSION
SCALE: 1"=1'-0"



4
21
DETAIL - VIBRATING WIRE SPLICE KIT
NOT TO SCALE



5
21
DETAIL - PNEUMATIC TUBE SPLICE KIT
NOT TO SCALE

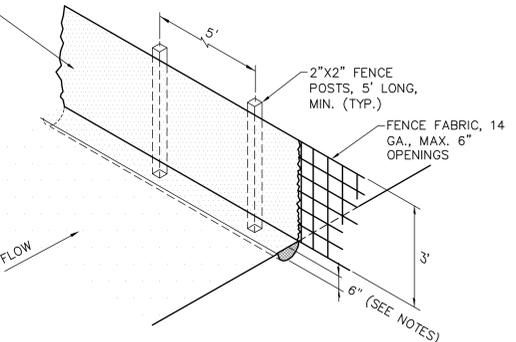


- NOTES:**
1. PLACE SAFETY FENCE AROUND INSTRUMENTATION TO WARN EQUIPMENT OPERATORS. MOVE FENCE AS INSTRUMENTS ARE EXTENDED.
 2. ATTACH SAFETY FENCE TO T-POSTS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
 3. USE WARNING SIGNS AS APPROPRIATE.
 4. REMOVE FENCE AT PROJECT COMPLETION AND DISPOSE OF IN A LEGAL MANNER.

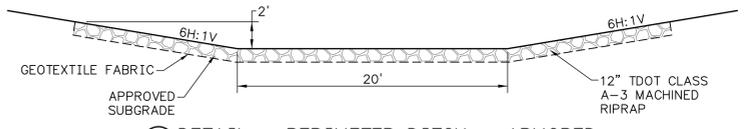
6
21
DETAIL - SAFETY FENCE
NOT TO SCALE

GEOTEXTILE FABRIC SHALL BE ATTACHED TO FENCE USING STAPLES, HOORINGS OR OTHER METHODS APPROVED BY THE QC MANAGER (SEE NOTES).

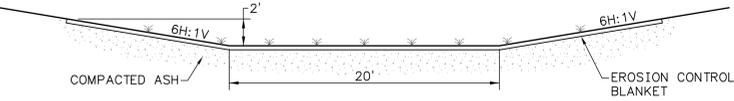
- NOTES:**
1. THE BOTTOM 12 INCHES OF THE FABRIC SHALL BE BURIED IN A 6-INCH TRENCH CUT INTO THE GROUND OR COVERED BY 6 INCHES OF FILL MATERIAL TO PREVENT SEDIMENT FROM ESCAPING UNDER THE FENCE. ALL EARTHWORK SHALL BE ON THE UPSTREAM SIDE OF THE FENCE.
 2. GEOTEXTILE FABRIC SHALL MEET THE FOLLOWING SPECIFICATIONS: GRAB STRENGTH (ASTM D 4632) - 90 LBS. MIN., WIDTH - 4' MIN., APPARENT OPENING SIZE (ASTM D4751) NO. 20. ULTRAVIOLET DEGRADATION (ASTM D 4355) 70% STRENGTH RETAINED. ELONGATION AT 45LB (ASTM D 4632).



7
21
DETAIL - SILT FENCE
NOT TO SCALE



8
21
DETAIL - PERIMETER DITCH - ARMORED
SCALE: 1"=5'



9
21
DETAIL - PERIMETER DITCH - VEGETATED
SCALE: 1"=5'

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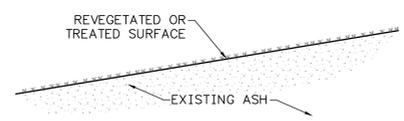
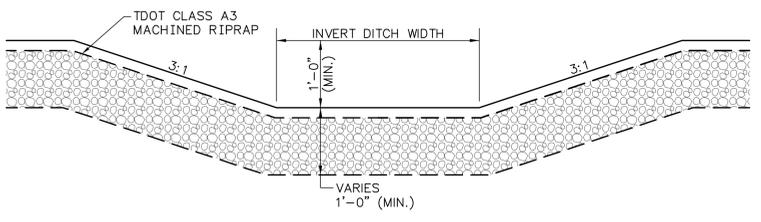
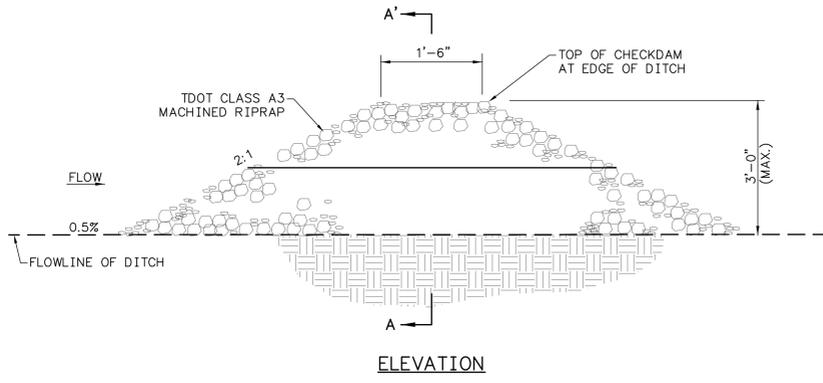
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PLOT FACTOR: 1
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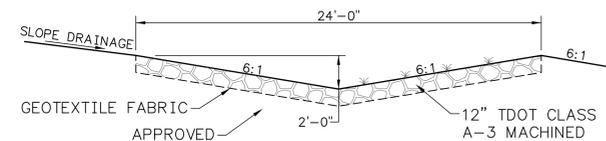
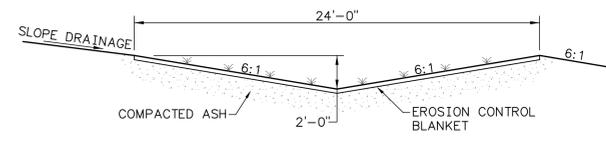
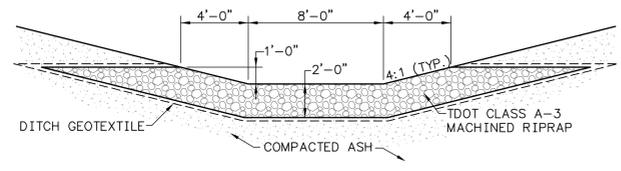
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NOTES:
 1. FOR SHORT TERM AND MEDIUM TERM REQUIREMENTS, SEE PROJECT SPECIFICATION SECTION 02936.
 2. THE LONG TERM COVER SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFIED REQUIREMENTS IN SECTION 02936 OR APPROVED EQUIVALENT.

1
22
DETAIL - ROCK SILT CHECK
SCALE: 1"=1'-0"

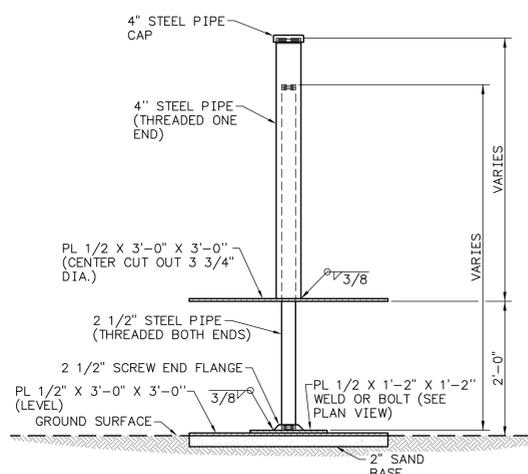
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22
DETAIL - TOP OF ASH FILL COVER
NOT TO SCALE



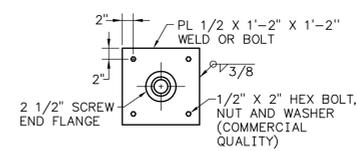
3
22
DETAIL - TEMPORARY FLUME
SCALE: 1/4"=1'-0"

4
22
DETAIL - TEMPORARY DITCH - VEGETATED
SCALE: 1/4"=1'-0"

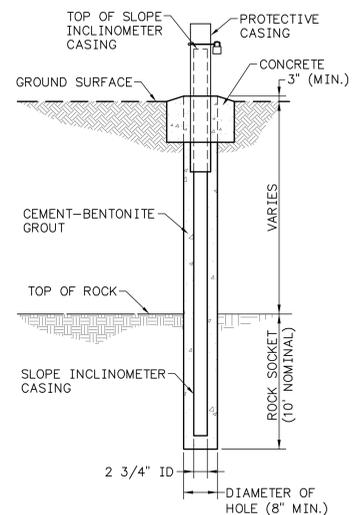
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22
DETAIL - TEMPORARY DITCH - ARMORED
SCALE: 1/4"=1'-0"



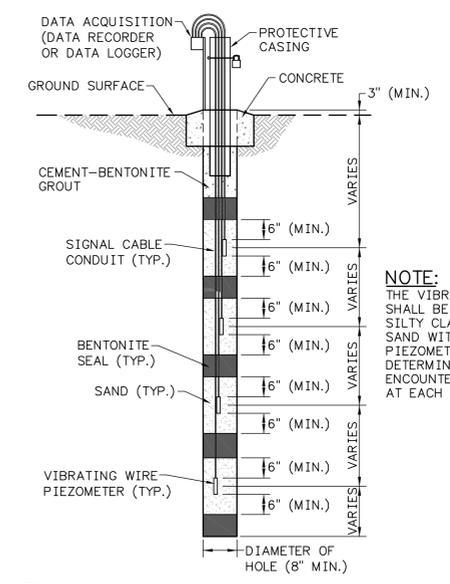
NOTES:
 1. ADDITIONAL PIPE SHALL BE FURNISHED IN 5'-3" SECTIONS (DUE TO COMMERCIAL PIPE LENGTHS OF 21'-0") THREADED ON BOTH ENDS.
 2. PIPE SIZES ARE GIVEN IN NOMINAL DIAMETERS.



7
22
DETAIL - SETTLEMENT PLATFORM INSTALLATION
NOT TO SCALE



8
22
DETAIL - SLOPE INCLINOMETER INSTALLATION
NOT TO SCALE



6
22
DETAIL - VIBRATING WIRE PIEZOMETER INSTALLATION
NOT TO SCALE

NOTE:
 THE VIBRATING WIRE PIEZOMETERS SHALL BE SET IN THE ASH MATERIALS, SILTY CLAY AND CLAYEY TO SILTY SAND WITH GRAVEL LAYERS. PIEZOMETER TIP ELEVATIONS SHALL BE DETERMINED IN THE FIELD BASED ON ENCOUNTERED SUBSURFACE CONDITIONS AT EACH INSTRUMENT LOCATION.

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 NOT FOR CONSTRUCTION**

FOR SUPPORTING DESIGN CALCULATIONS SEE FPGKIFFESCDX00030020110001		<table border="1"> <tr> <th>REV NO.</th> <th>DATE</th> <th>ISSN</th> <th>DRWN</th> <th>CHKD</th> <th>SUPV</th> <th>RWVD</th> <th>APPR</th> <th>ISSD</th> <th>PROJECT ID</th> <th>AS CONST</th> <th>REV</th> </tr> <tr> <td>0</td> <td>04/01/11</td> <td>KDL</td> <td>PJB</td> <td>DEH</td> <td>MJS</td> <td></td> <td>MST</td> <td>JCK</td> <td></td> <td></td> <td></td> </tr> </table>										REV NO.	DATE	ISSN	DRWN	CHKD	SUPV	RWVD	APPR	ISSD	PROJECT ID	AS CONST	REV	0	04/01/11	KDL	PJB	DEH	MJS		MST	JCK			
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SCALE: AS SHOWN		EXCEPT AS NOTED																																	
YARD LATERAL EXPANSION (CELL 4) - RDP-0114-A																																			
ASH STACKING DETAILS																																			
DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:																													
K.B. LINDQUIST	P.J. BOND	D.E. HERRON	M.J. STEELE		M.S. TURNBOW	J.C. KAMMEYER																													
KINGSTON FOSSIL PLANT TENNESSEE VALLEY AUTHORITY FOSSIL AND HYDRO ENGINEERING																																			
AUTOCAD R 2000	DATE 04/01/11	36	C	10W431-22				R 0																											



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SECTION OR DETAIL NO.
 SHEET WHERE SHOWN
 REFERENCE KEY

STANTEC	0
TASK COMPLETED BY:	REV NO.