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Ref. File - I:\CM0166\Z1\pf\files\05-12-04\Juris Water Mass\U tech...

SITE NO
DA104D

KBR
engineered by KBR
Technical Services Inc

GLENN DAVID RAUCHLE
VA REG 037388
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PERMITS OR
CONSTRUCTION
NOV 26, 2003

001

CREEK DA 104D
4' - 10' WIDE OHW
LENGTH OF IMPACT = 233'

WETLAND DA 104B
PEM 0.42 AC
NO IMPACTS
ANTICIPATED

FILL AREA

WETLAND DA 104A
PEM 0.05 AC
NO IMPACTS
ANTICIPATED

FLOW

FOR CONTINUATION SEE DRAWING SK102004A

PLAN

SCALE
0 50' 100'

6-08-2004 10:80.36

dgn:h07

TOP OF FILL
EL = 1914

PROPOSED DITCH

FILL

PROPOSED DITCH

WETLAND DA104B
BOTTOM EL 1887

EXISTING GROUND

OHW EL 1822

CENTER OF
CREEK DA 104D
BOTTOM EL 1817

4' - 10'
OHW

CROSS SECTION

HORIZONTAL SCALE
0 50' 100'

VERTICAL SCALE
0 20' 40'

ADJACENT PROPERTY OWNERS:	PLAN & CROSS SECTION VIEW RAMP B FILL SITE 99	PROPOSED ROAD CROSSING PROJECT
001 HEARTLAND FOREST LAND FUND		CREEK DA 104D COUNTY: BUCHANAN APPLICANT: SHEET OF DATE:

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0121-013-101	SK102004	

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FOR CONTINUATION SEE DRAWING SK102004

SITE NO
DA104D

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PERMITS OR
CONSTRUCTION
NOV 26, 2003

WETLAND DA 104A
PEM 0.05 AC
NO IMPACTS
ANTICIPATED

CREEK DA 104D
4' - 10' WIDE OHW
LENGTH OF IMPACT = 234'

CREEK DA 104C/D
287'

FLOW

FILL AREA

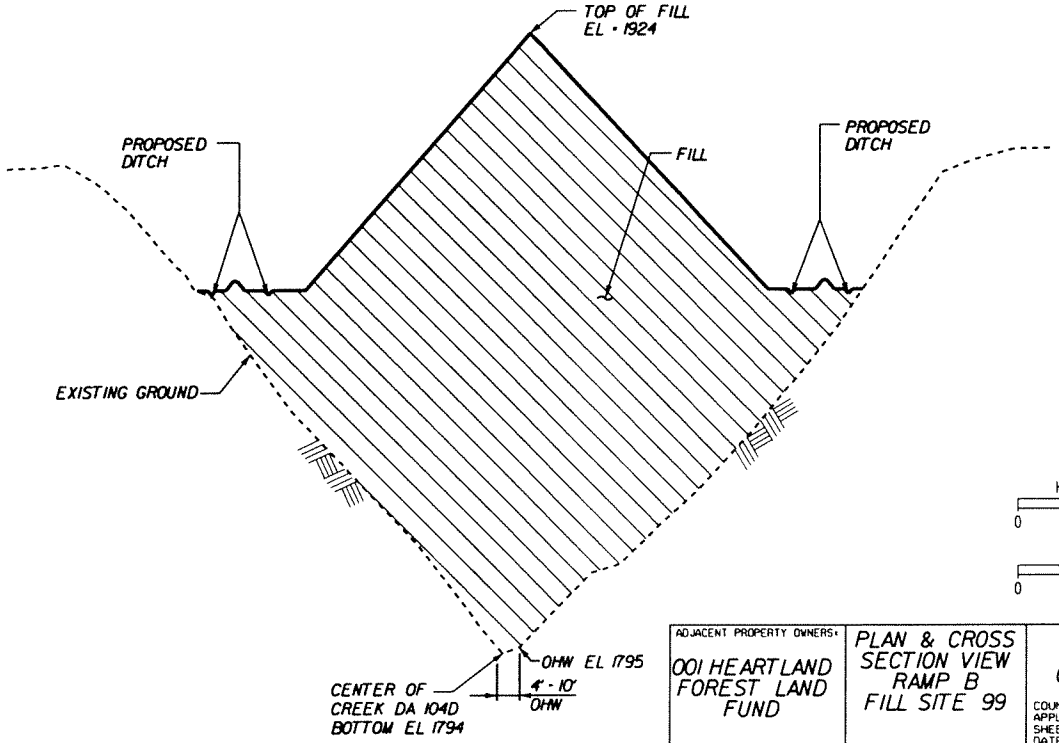
001

CREEK DA 104C
10' - 20' WIDE OHW
LENGTH OF IMPACT = 40'

FOR CONTINUATION SEE DRAWING SK102004B

SCALE
0 50' 100'

PLAN



HORIZONTAL SCALE
0 50' 100'

VERTICAL SCALE
0 20' 40'

CROSS SECTION

ADJACENT PROPERTY OWNERS: 001 HEARTLAND FOREST LAND FUND	PLAN & CROSS SECTION VIEW RAMP B FILL SITE 99	PROPOSED ROAD CROSSING PROJECT: CREEK DA 104D COUNTY: BUCHANAN APPLICANT: SHEET OF DATE:

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0121-013-101	SK102004A	

6-08-2004 10:20:36

bbrhol

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FOR CONTINUATION SEE DRAWING SKI02004A

SITE NO
DAI04C

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Technical Services Inc

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VA REG 037388
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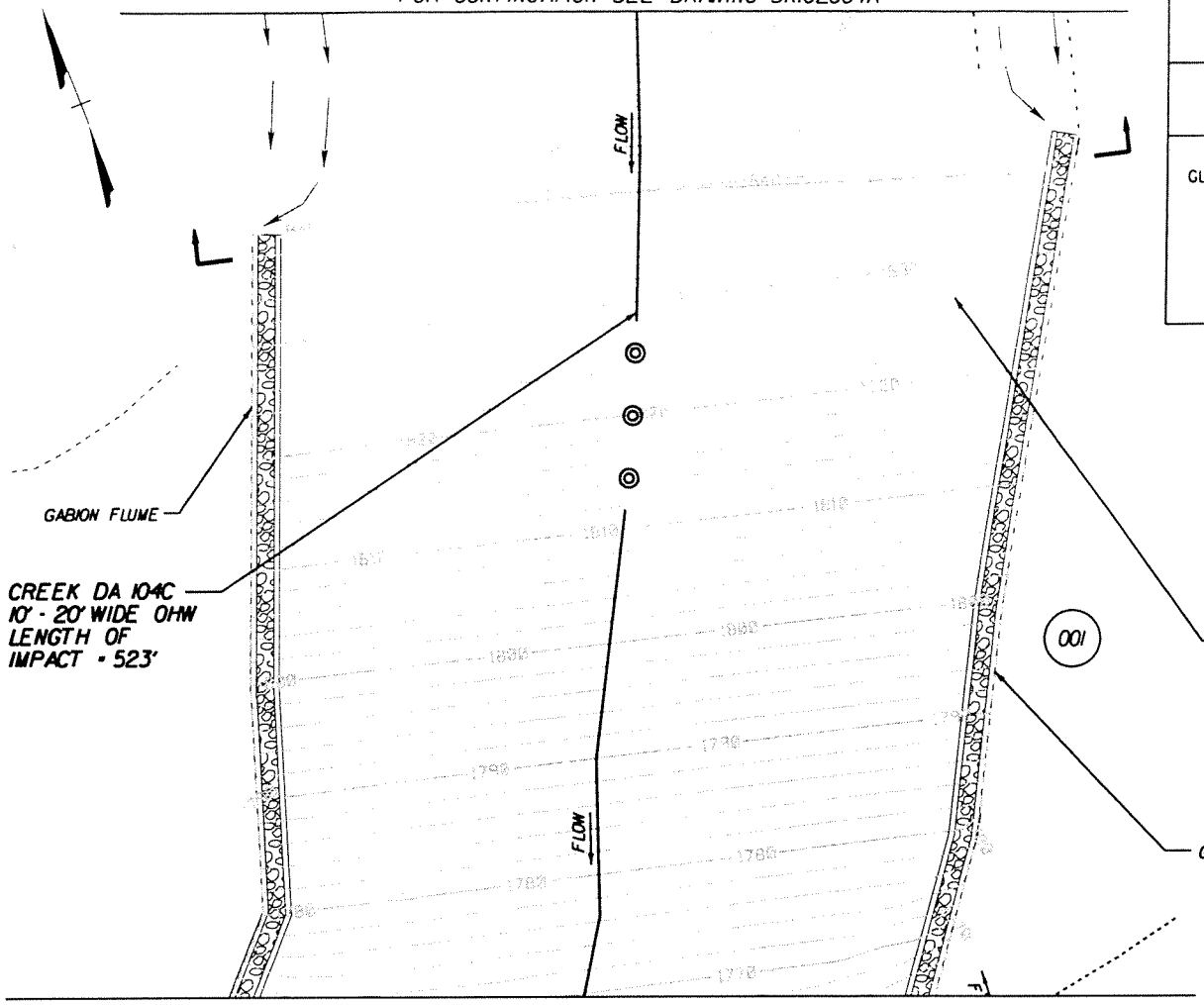
CONSTRUCTION
NOV 26, 2003

6-08-2004 10:22:39

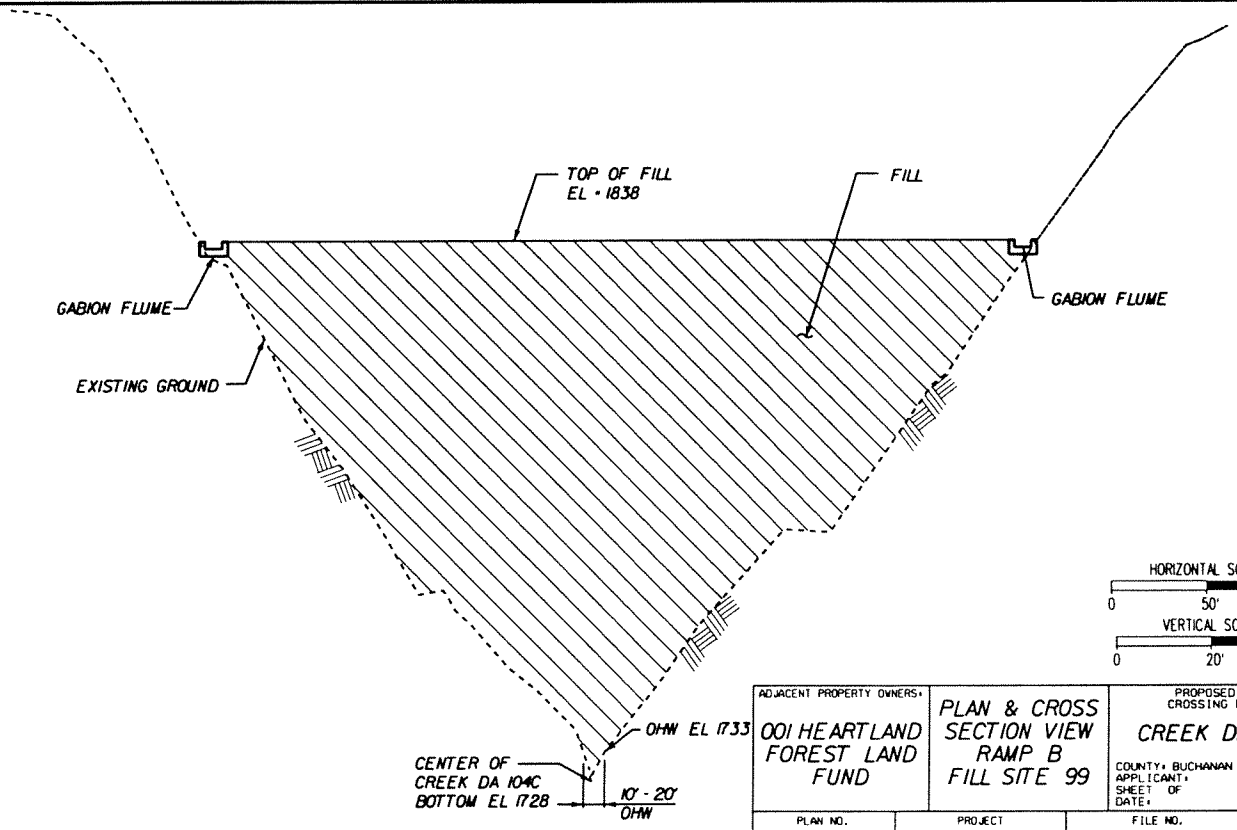
bbrhoff



FOR CONTINUATION SEE DRAWING SKI02004C

PLAN

SCALE
0 50' 100'



CROSS SECTION

HORIZONTAL SCALE
0 50' 100'
VERTICAL SCALE
0 20' 40'

ADJACENT PROPERTY OWNERS:		PROPOSED ROAD CROSSING PROJECT
001 HEARTLAND FOREST LAND FUND	PLAN & CROSS SECTION VIEW RAMP B FILL SITE 99	CREEK DA 104C COUNTY: BUCHANAN APPLICANT: SHEET OF DATE:

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0121-013-101	SKI02004B	

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Ref. File - 3002IA\CADD\DGN\Permits\permit-property.dgn
Ref. File - 3002IA\CADD\DGN\Permits\permitborder.dgn
Ref. File - 3002IA\CADD\DGN\s647126\s647126200.dgn

WETLAND DA 207B

HSMM
ARCHITECTS ENGINEERS PLANNERS

PAUL P. ANDERSON
VA REG 020553
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OR CONSTRUCTION
DEC 15, 2003

STARR BRANCH
2'-12' WIDE OHW

FLOW

FLOW

A

A

WETLAND DA 207B
PEM 0.53 AC

PLAN

037

SCALE
0 50' 100'

ELEV.- 1550

TOP OF FILL

FILL

EXISTING GROUND

WETLAND DA 207B
BOTTOM ELEV.- 1410

WETLAND DA 207B
PEM 0.53 AC

CROSS SECTION "A" - "A"

HORIZONTAL SCALE
0 50' 100'

VERTICAL SCALE
0 20' 40'

ADJACENT PROPERTY OWNERS:
(DP) PENN VIRGINIA RESOURCE PARTNERS, LLC

PLAN & CROSS SECTION VIEW
ROUTE 121
ROAD CROSSING

PROPOSED ROAD CROSSING PROJECT
WETLAND DA 207B
COUNTY:
APPLICANT:
SHEET 1 OF 1
DATE: 10/22/03

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0121-013-101		

5-27-2004 21:34:27
ddavis
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WETLAND
DA 207C

HSMM
ARCHITECTS ENGINEERS PLANNERS

PAUL P. ANDERSON
VA REG 020553
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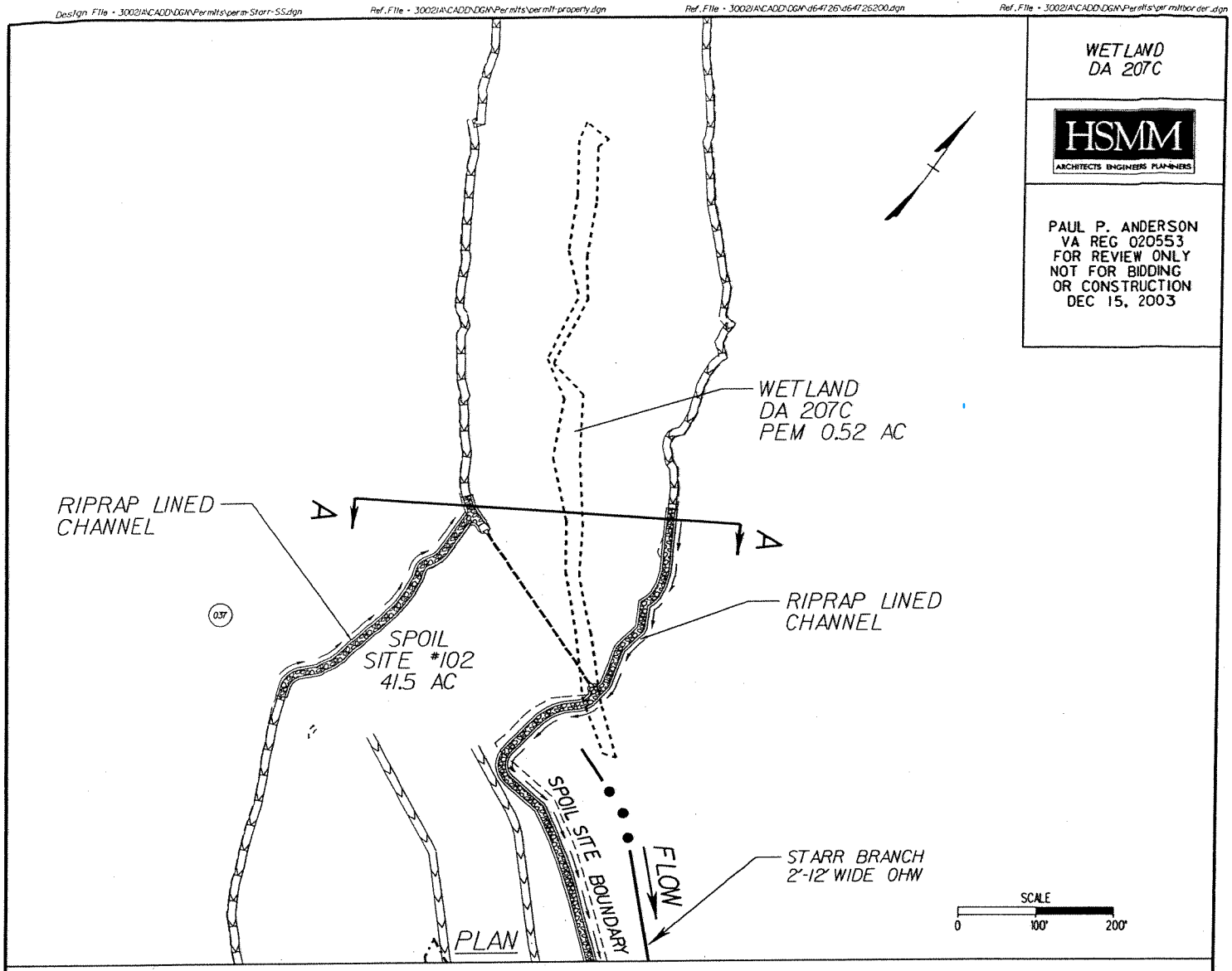
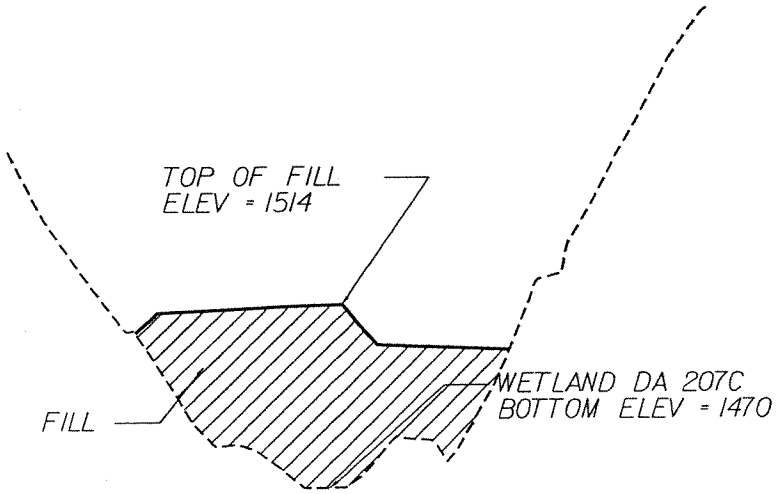
OR CONSTRUCTION
DEC 15, 2003





CROSS SECTION "A" - "A"

ADJACENT PROPERTY OWNERS:
(037) PENN VIRGINIA RESOURCE PARTNERS

ROUTE 121

PROPOSED ROAD CROSSING PROJECT
WETLAND
DA 207C
COUNTY:
APPLICANT:
SHEET 1 OF 1
DATE: 10/22/03

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0121-013-101		

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Ref. File - 30021A\CADD\DGN\64726\64726300.dgn
Ref. File - 30021A\CADD\DGN\64726\64726cr200.dgn

STREAM DA 212

HSMM
ARCHITECTS ENGINEERS PLANNERS

PAUL P. ANDERSON
VA REG 020553
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OR CONSTRUCTION
DEC 15, 2003

CONSTRUCTION LIMITS

℄ ROUTE 121

062

CONSTRUCTION LIMITS

061

FLOW

TRIB. TO BULL CREEK
(CONVICT HOLLOW)

GABION FLUMES

FLOW TO BE
REDIRECTED
TO DITCHES

SURPLUS SPOIL
SITE 103

062

FLOW

STREAM DA 212
5'-12' WIDE OHW
LENGTH OF IMPACT - 675'

065

SCALE
0 150' 300'

PLAN

GABION FLUMES

TOP OF FILL
EL. - 1334

FILL

STREAM DA 212

5'-12'
OHW

EXISTING
GROUND

HORIZONTAL SCALE
0 50' 100'

VERTICAL SCALE
0 20' 40'

CROSS SECTION "A" - "A"

ADJACENT PROPERTY OWNERS:
(061) JAMES R. STILTNER
(062) JAMES R. STILTNER
(065) STEVEN SMITH ET AL

PLAN & CROSS SECTION VIEW
ROUTE 121
ROAD CROSSING

PROPOSED ROAD CROSSING PROJECT
STREAM DA 212
COUNTY:
APPLICANT:
SHEET 1 OF 1
DATE: 10/22/03

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0121-013-101		

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STREAM DA 303A

KBR
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GLENN DAVID RAUCHLE
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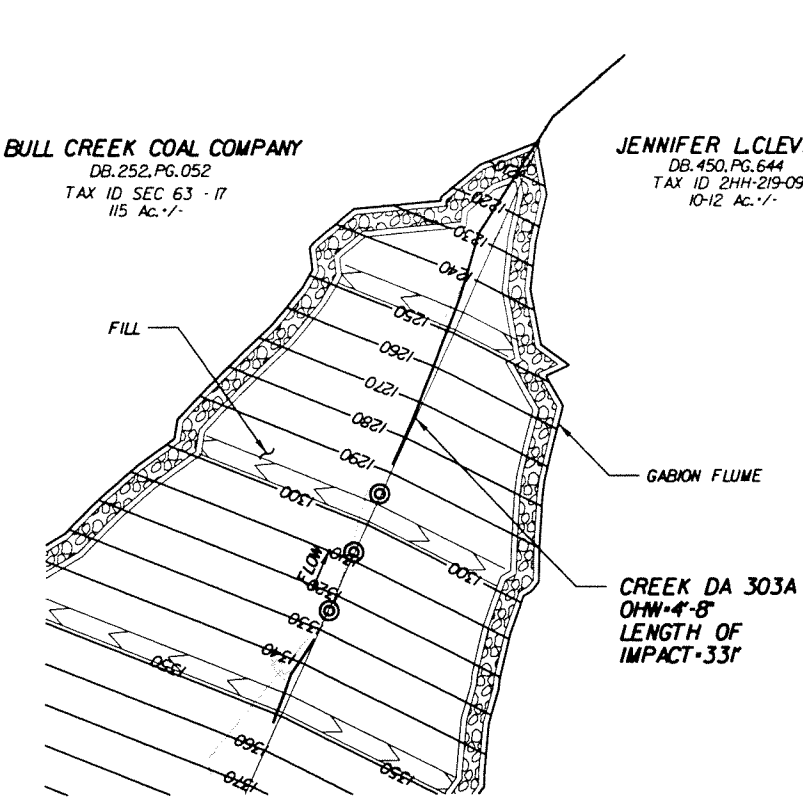
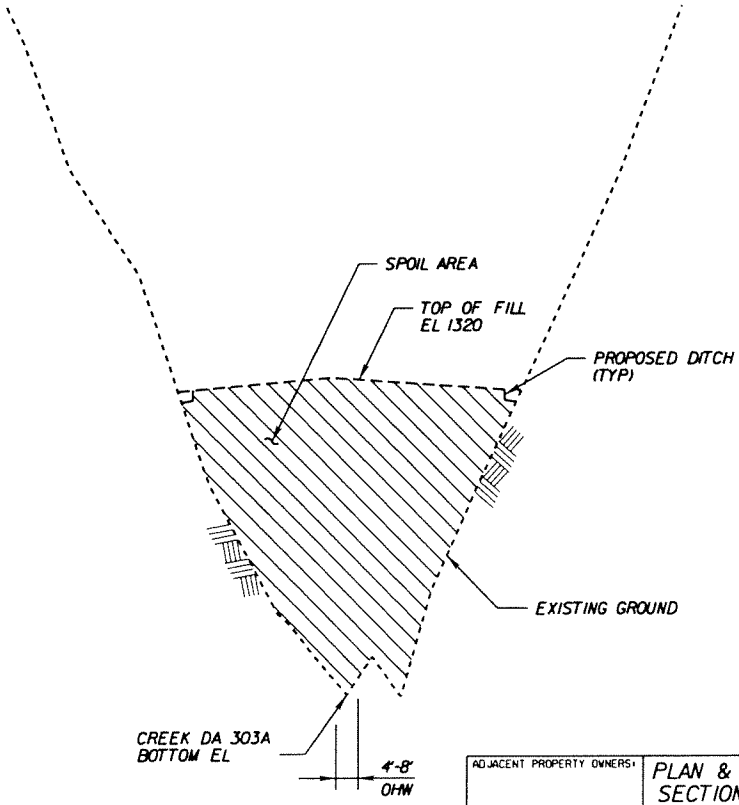
OR CONSTRUCTION
APRIL 13, 2004



PLAN

SCALE
0 50' 100'



CROSS SECTION

HORIZONTAL SCALE
0 50' 100'
VERTICAL SCALE
0 20' 40'

ADJACENT PROPERTY OWNERS:	PLAN & CROSS SECTION VIEW ROUTE 121 ROAD CROSSING	PROPOSED ROAD CROSSING PROJECT: CREEK DA 303A COUNTY: APPLICANT: SHEET 1 OF 1 DATE: 10/31/03

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0121-013-101	SK041204M	

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Ref. File - \\houfile023\hdvl1$\cm0166\MDF\d647263 00.dgn
Ref. File - f:\CM0166\C_KBR\d647263 01.dgn

STREAMS DA 307A, DA 307B AND DA 307C

KBR
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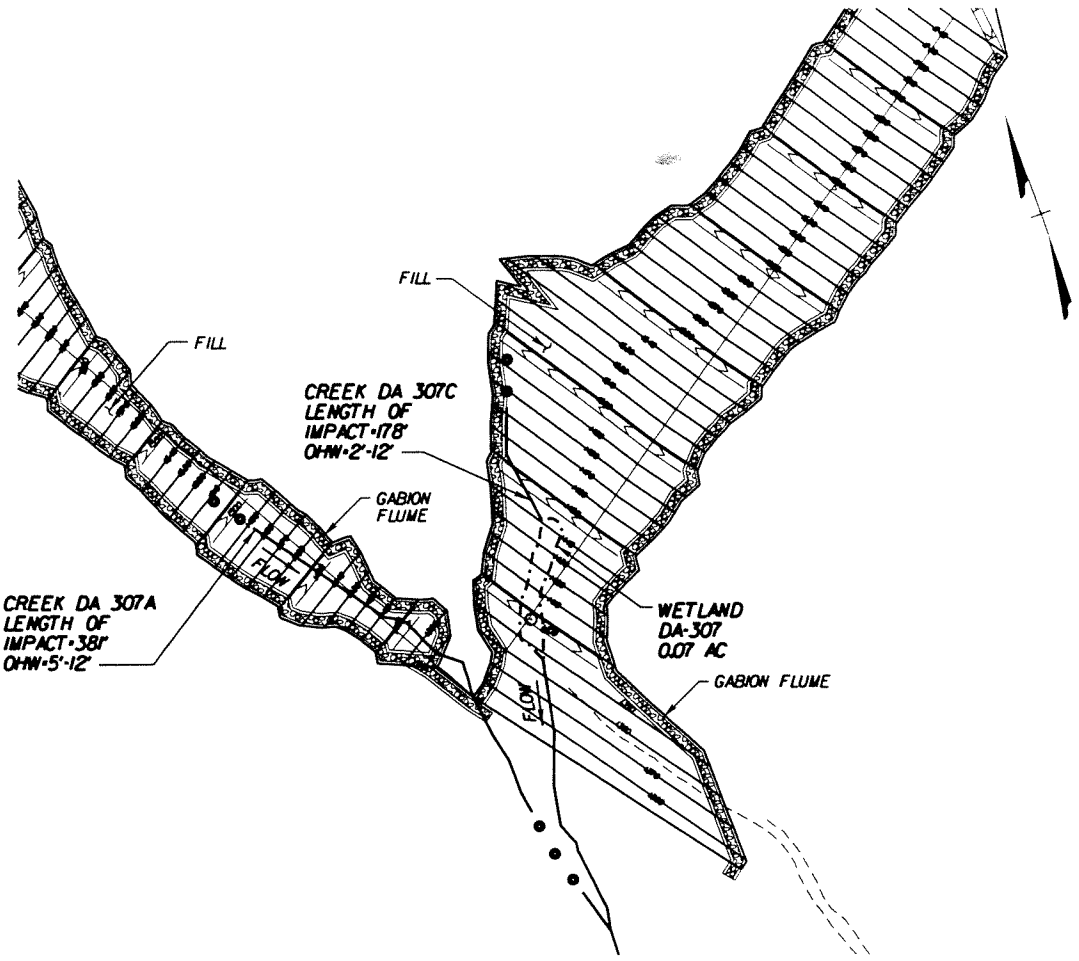
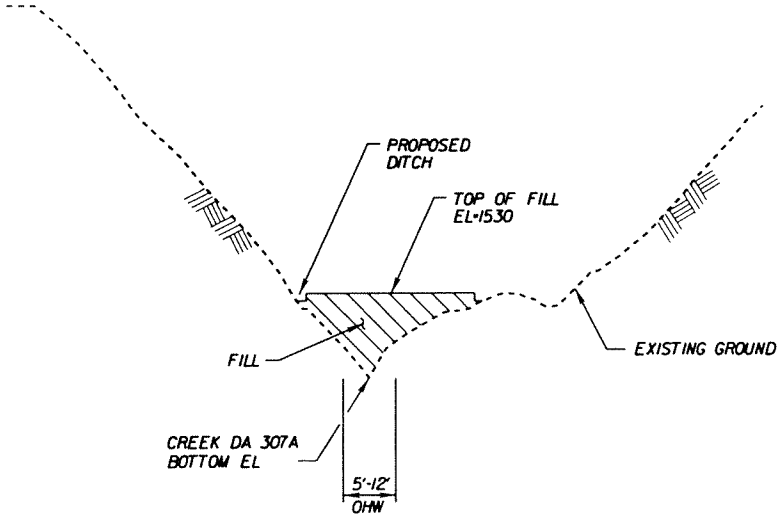
OR CONSTRUCTION
APRIL 13, 2004



PLAN

SCALE
0 100' 200'



CROSS SECTION

HORIZONTAL SCALE
0 100' 200'
VERTICAL SCALE
0 20' 40'

ADJACENT PROPERTY OWNERS:	PLAN & CROSS SECTION VIEW ROUTE 121 ROAD CROSSING	PROPOSED ROAD CROSSING PROJECT CREEK DA 307A, DA 307B & DA 307C COUNTY: APPLICANT: SHEET 1 OF 1 DATE: 10/31/03

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0121-013-101	SK0412040	

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bartlett
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Ref. File : I:\CM0166\C_KBR\COE_Sheet3.dgn

STREAM DA 320C

KBR
Engineered by KBR Technical Services Inc

GLENN DAVID RAUCHLE
VA REG 037388
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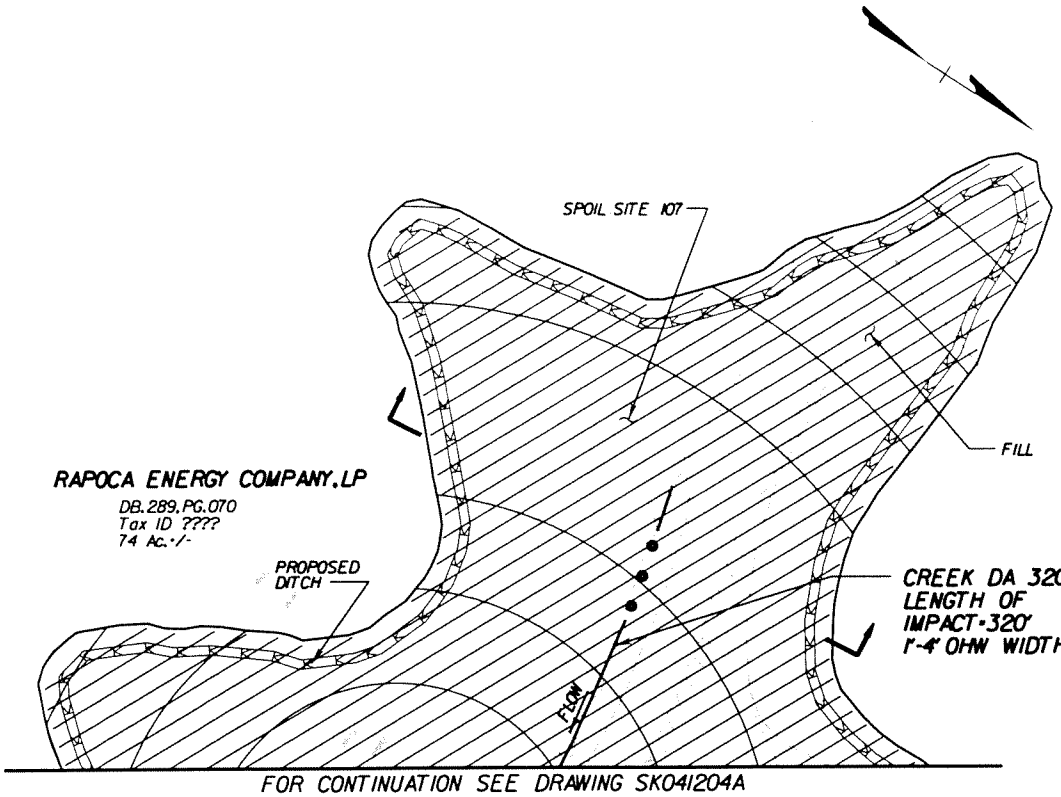
OR CONSTRUCTION
APRIL 13, 2004



FOR CONTINUATION SEE DRAWING SK041204A

PLAN

SCALE
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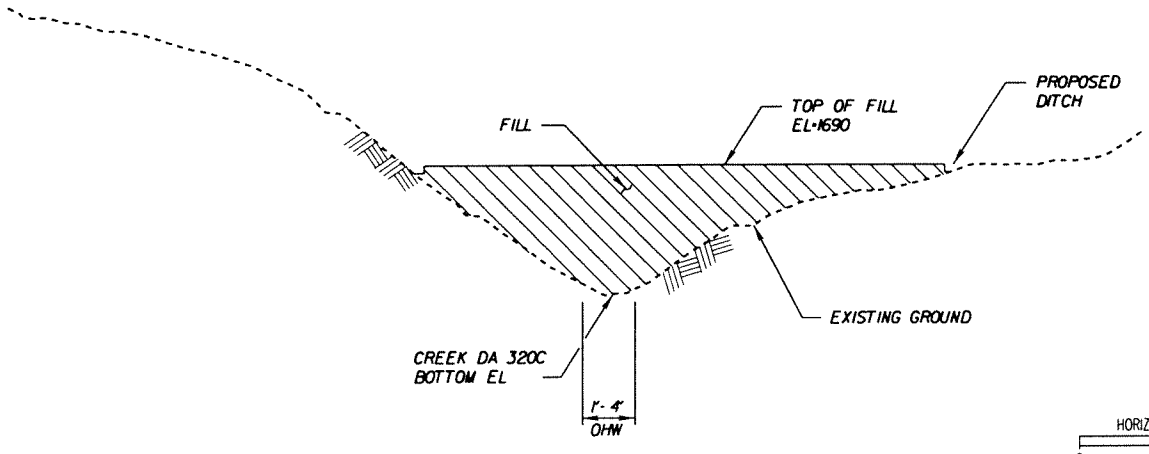

HORIZONTAL SCALE
0 100' 200'

VERTICAL SCALE
0 40' 80'

CROSS SECTION

ADJACENT PROPERTY OWNERS:	PLAN & CROSS SECTION VIEW ROUTE 121 ROAD CROSSING	PROPOSED ROAD CROSSING PROJECT CREEK DA 320C COUNTY: APPLICANT: SHEET 1 OF 1 DATE: 10/31/03

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
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bartlett
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Levels on - 1
Ref. File - \\houfile023\vdivl1$\cm0166\MDF\cf_xb.dgn
Levels on - 1,3,5,17,51,61,63

CREEK DA 320 & DA 320D

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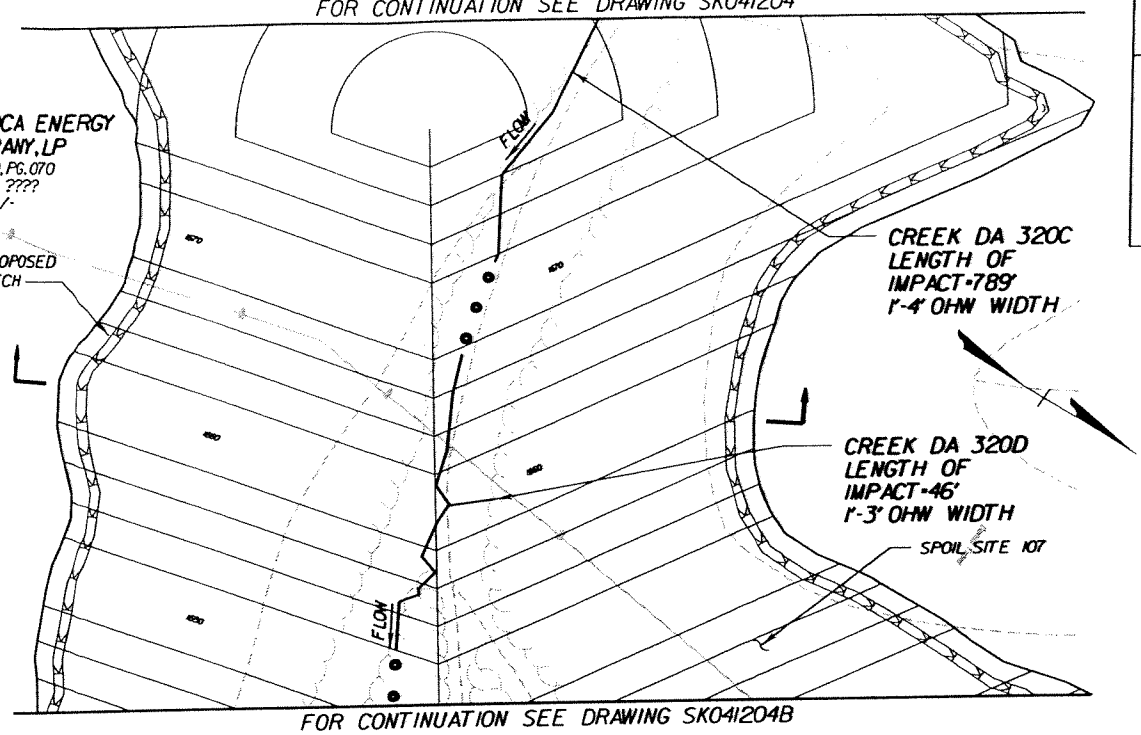
APRIL 13, 2004

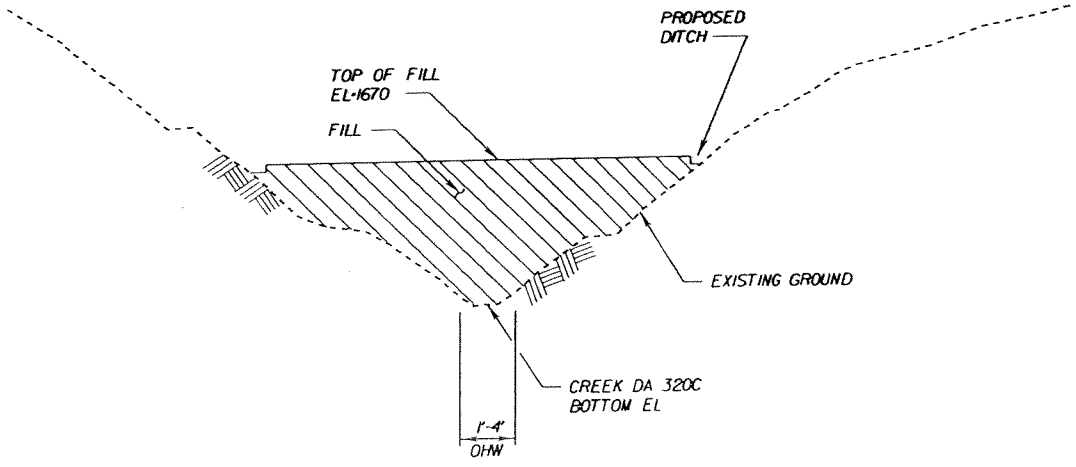
FOR CONTINUATION SEE DRAWING SK041204



FOR CONTINUATION SEE DRAWING SK041204B

PLAN

SCALE
0 100' 200'



HORIZONTAL SCALE
0 100' 200'
VERTICAL SCALE
0 40' 80'

CROSS SECTION

ADJACENT PROPERTY OWNERS	PLAN & CROSS SECTION VIEW ROUTE 121 ROAD CROSSING	PROPOSED ROAD CROSSING PROJECT CREEK DA 320C & DA 320D COUNTY: APPLICANT: SHEET 1 OF 1 DATE: 10/31/03

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0121-013-101	SK041204A	

6-29-2004 1:45:18
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STREAM DA 320 & DA 320A

KBR
Engineered by KBR Technical Services, Inc

GLENN DAVID RAUCHLE
VA REG 037388
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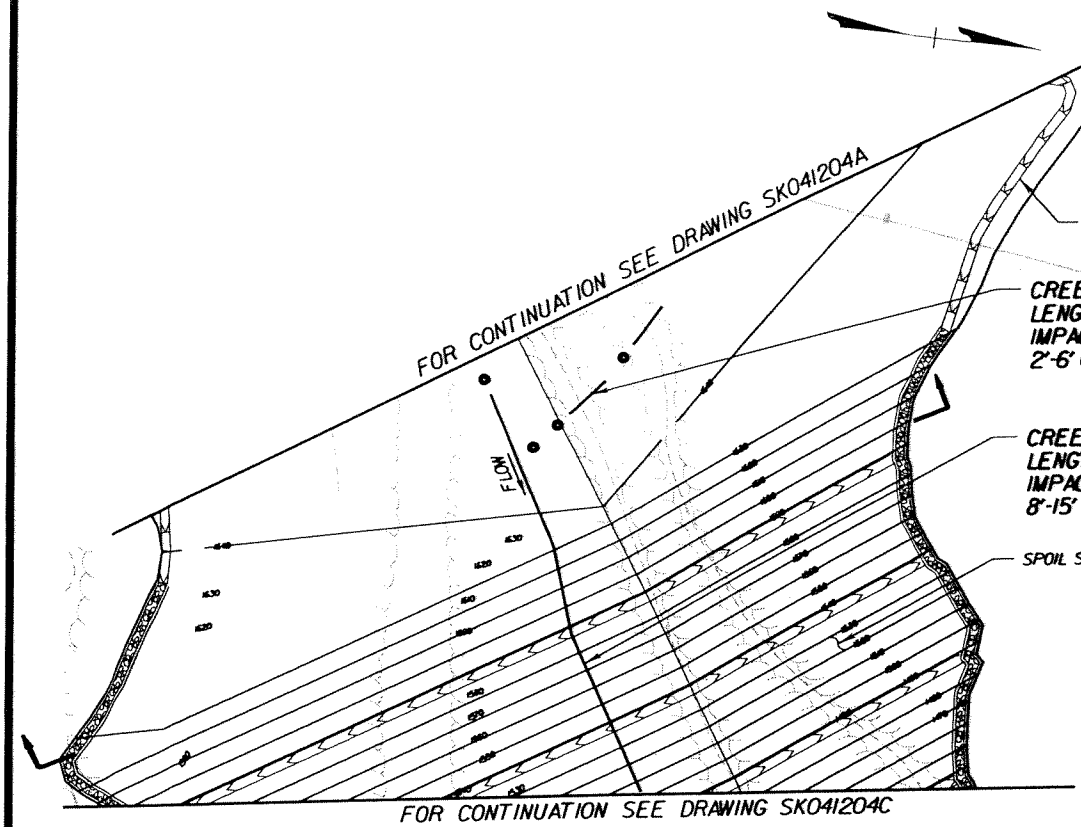
APRIL 13, 2004



PLAN

SCALE
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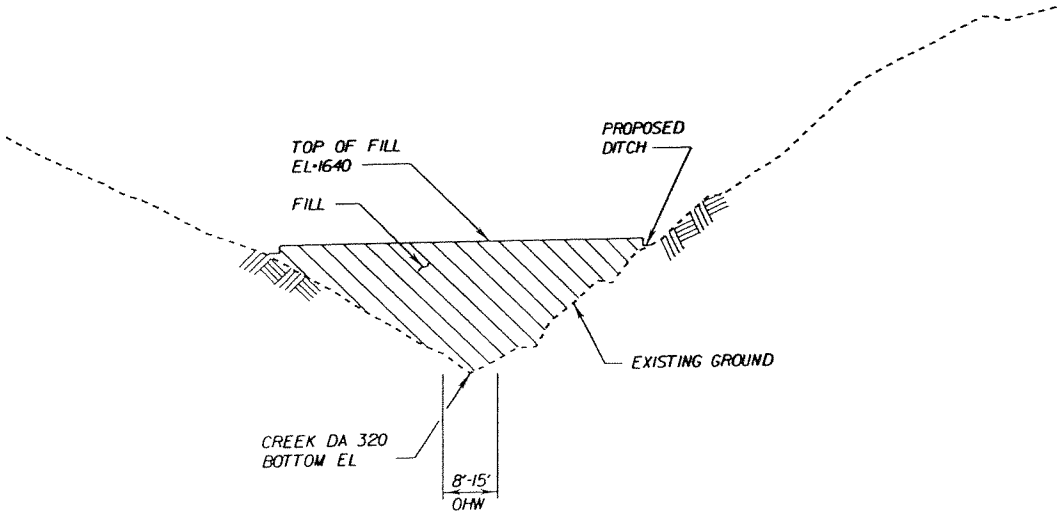

CROSS SECTION

HORIZONTAL SCALE
0 100' 200'
VERTICAL SCALE
0 40' 80'

ADJACENT PROPERTY OWNERS:	PLAN & CROSS SECTION VIEW ROUTE 121 ROAD CROSSING	PROPOSED ROAD CROSSING PROJECT CREEK DA 320 & 320A COUNTY: APPLICANT: SHEET 1 OF 1 DATE: 10/31/03

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
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Levels on - 1 - 63

STREAM DA 320 & 320B

KBR
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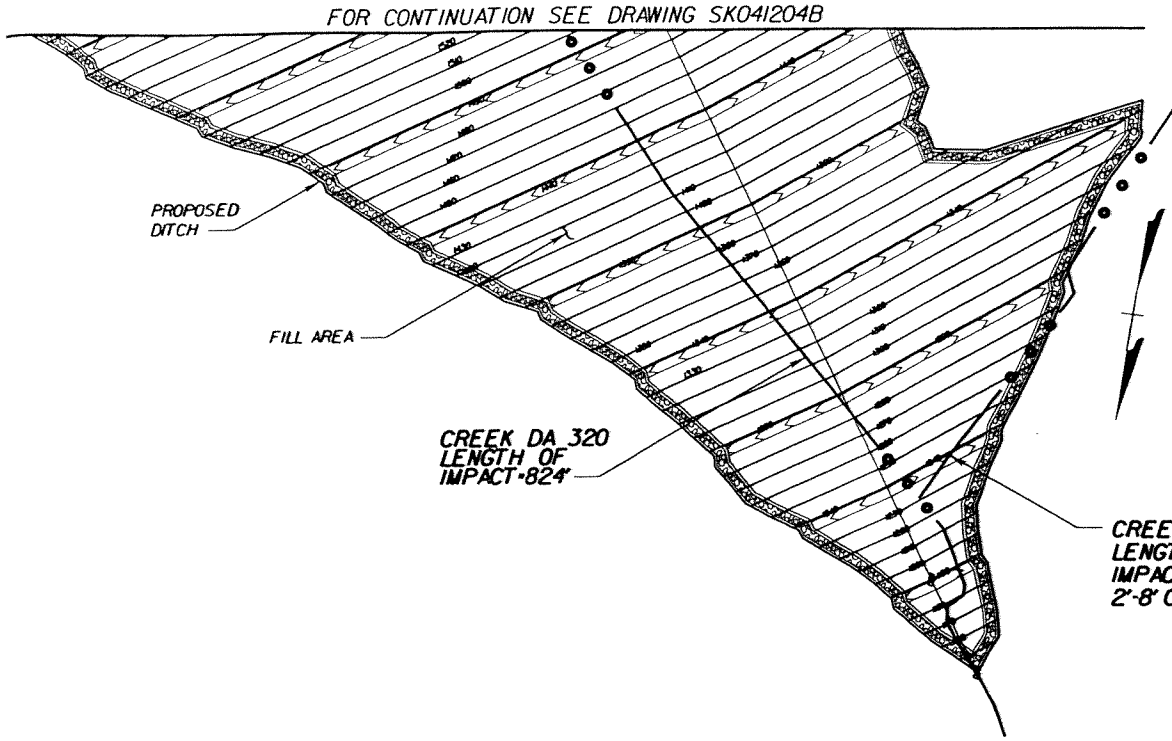
APRIL 13, 2004

FOR CONTINUATION SEE DRAWING SK041204B



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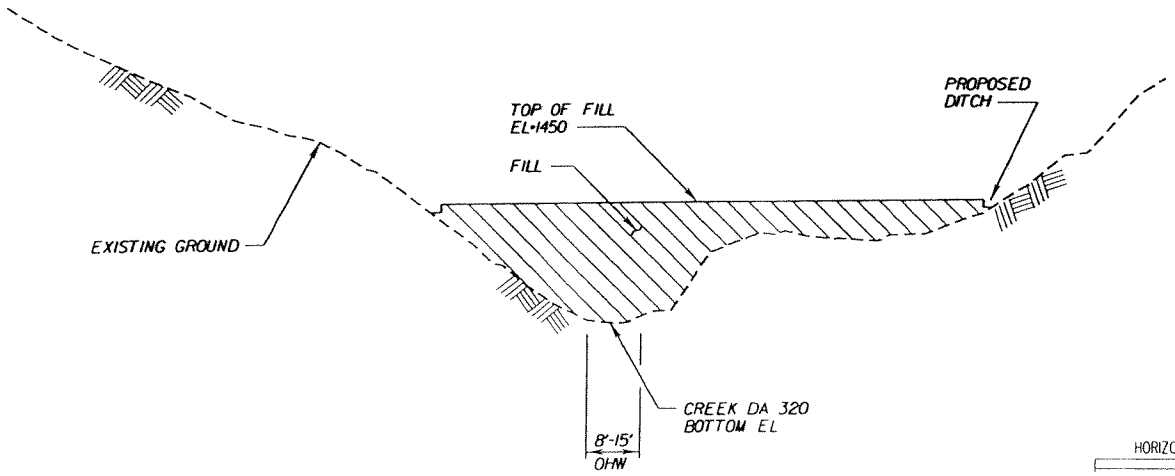

HORIZONTAL SCALE
0 100' 200'
VERTICAL SCALE
0 40' 80'

CROSS SECTION

ADJACENT PROPERTY OWNERS:	PLAN & CROSS SECTION VIEW ROUTE 121 ROAD CROSSING	PROPOSED ROAD CROSSING PROJECT CREEK DA 320 & DA 320B COUNTY: APPLICANT: SHEET 1 OF 1 DATE: 10/31/03

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0121-013-101	SK041204C	

6-29-2004 1:47:04
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