WETLAND: HOGE-2

HOGE RUN STREAM RELOCATION

WETLAND: HOGE-1 (IMPACT DISCUSSED IN IMPACT No.8, FIGURE 4-1-8)

BOX CULVERT 2

WETLAND: F-52

BEGIN HOGE RUN STREAM RELOCATION

BOX CULVERT 3

SLOPE PAD

HOGE RUN 40632

IMPACT AREA 1

SEDIMENT POND #2

SLOPE PAD

STORAGE SHED / SUPPLY YARD

SLOPE FACILITIES

UPSTREAM END

MATCHLINE - SEE FIGURE 4-1-1 SHEET 2

WETLAND: F-45 (IMPACT DISCUSSED IN IMPACT No.9, FIGURE 4-1-9)

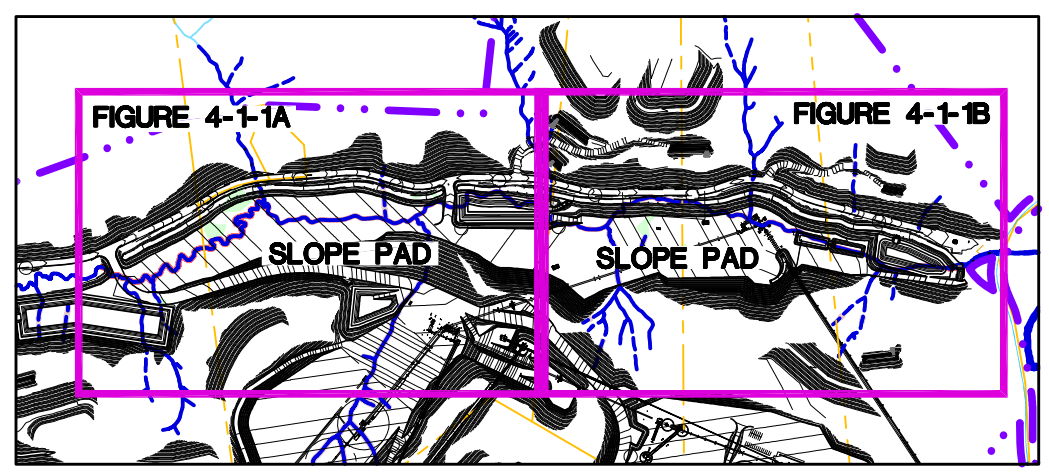
150 0 150

SCALE IN FEET

LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- 1 IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE
- 25' WIDE HOGE RUN STREAM RELOCATION CORRIDOR

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4–9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.



MAP KEY
N.T.S.

PREPARED BY:

Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC

FIGURE 4-1-1A
IMPACT AREA 1
SLOPE ENTRY FACILITIES
HOGE RUN STREAM RELOCATION

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370

SCALE:

ft DATUM: NAD 27 PA-SOUTH

DRAWING NO: 1 OF 38

August 24, 2011 10:56:18 a.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 1.DWG

MATCHLINE - SEE FIGURE 4-1-1 SHEET 1

HOGE RUN 40632

SLOPE PAD

IMPACT AREA 1

SLOPE FACILITIES

WETLANDS: A, B, & C
(IMPACT DISCUSSED IN
IMPACT No.4, FIGURE 4-1-4)

HOGE RUN STREAM
RELOCATION

SEDIMENT
POND #1

END HOGE RUN
STREAM
RELOCATION

DOWNSTREAM END

HOGE RUN
40632

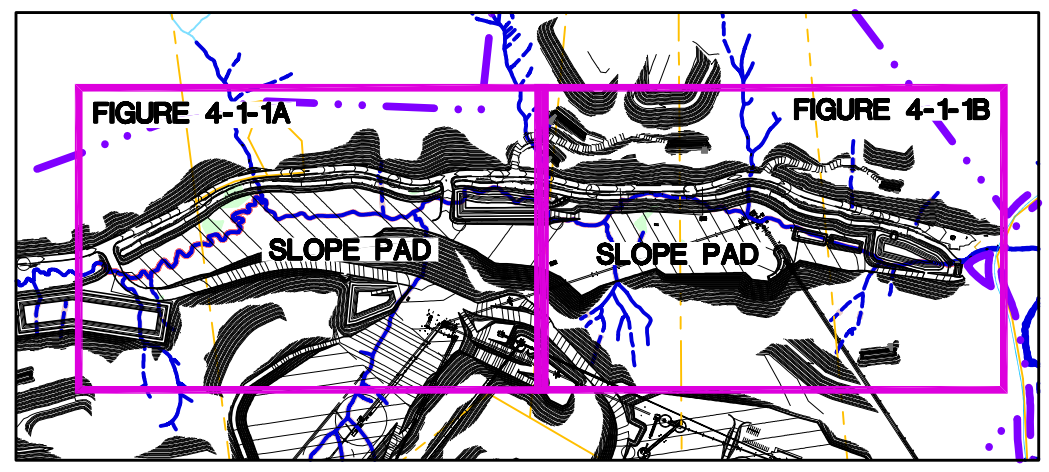
150 0 150

SCALE IN FEET

LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- 1 IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE
- 25' WIDE HOGE RUN STREAM RELOCATION CORRIDOR

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4–9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.



MAP KEY
N.T.S.

PREPARED BY:

Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC

FIGURE 4-1-1B
IMPACT AREA 1
SLOPE ENTRY FACILITIES
HOGE RUN STREAM RELOCATION

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

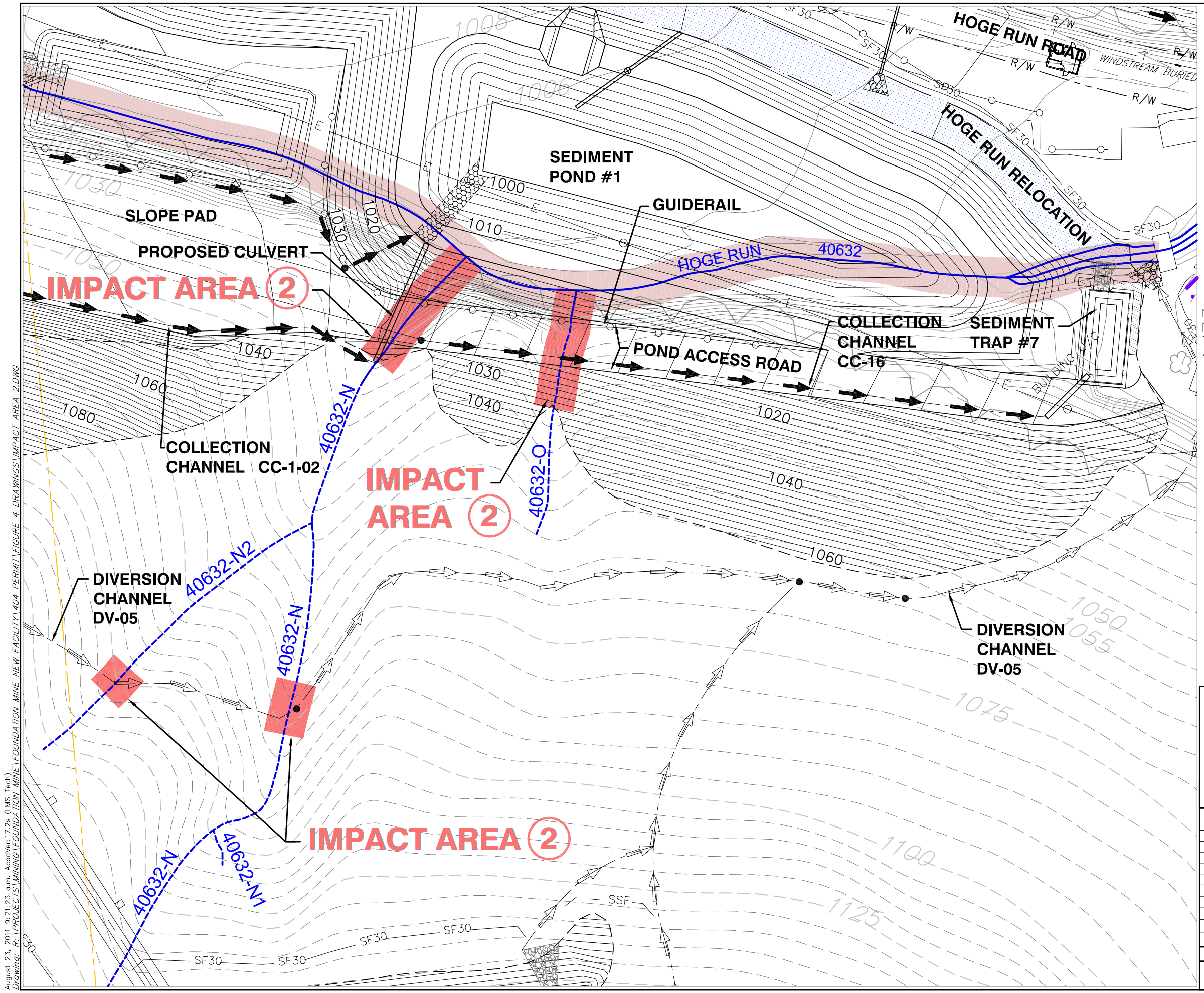
ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370

SCALE:

ft DATUM: NAD 27 PA-SOUTH

DRAWING NO: 2 OF 38

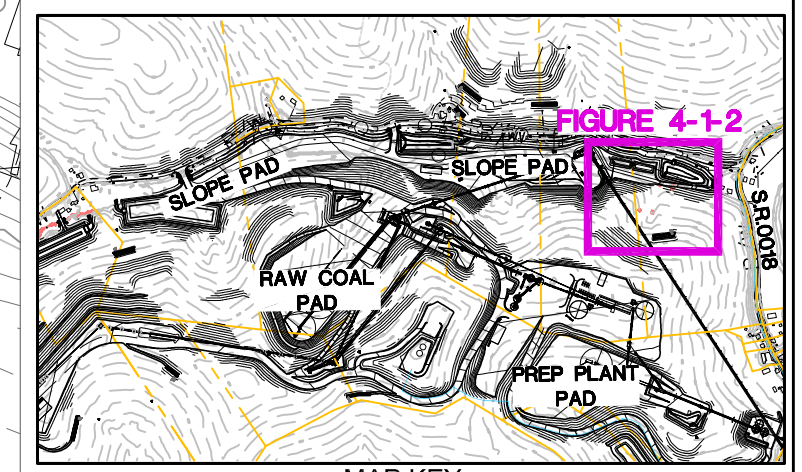
August 24, 2011 10:56:18 a.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 1.DWG



LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4–9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.



MAP KEY
N.T.S.

60 0 60
SCALE IN FEET

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC

FIGURE 4-1-2
IMPACT AREA 2
SLOPE ENTRY FACILITIES

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

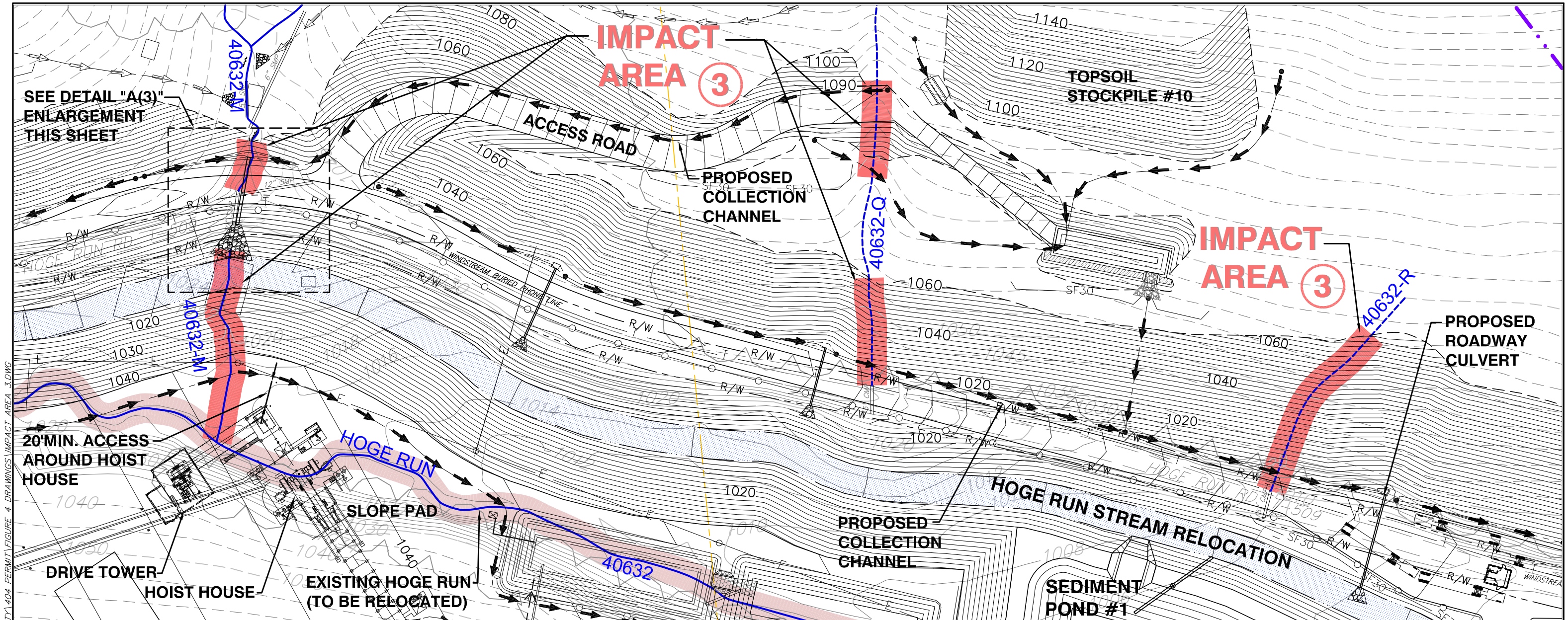
ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370

SCALE:

ft DATUM: NAD 27 PA-SOUTH

DRAWING NO: 3 OF 38

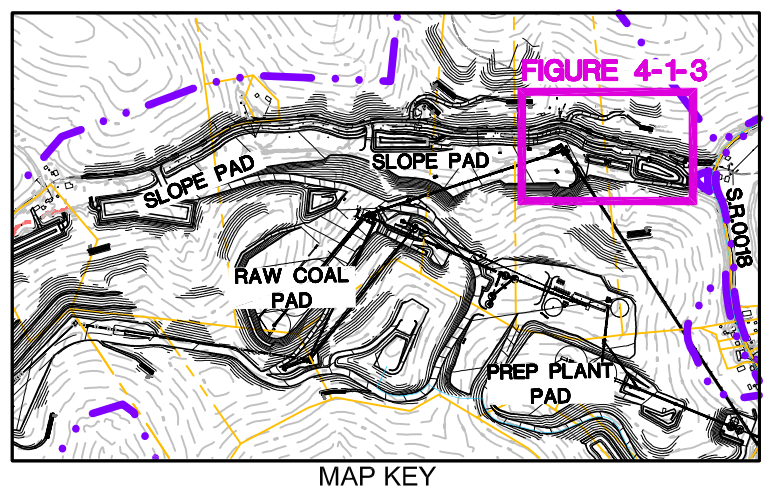
August 23, 2011 9:21:23 a.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 2.DWG



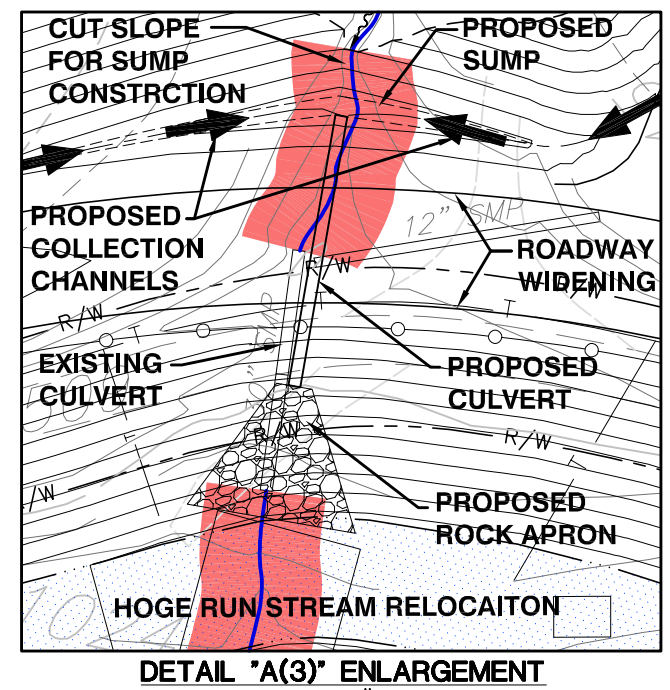
LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4-9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.



MAP KEY
N.T.S.



DETAIL "A(3)" ENLARGEMENT
SCALE: 1"=40'

80 0 80
SCALE IN FEET

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC

FIGURE 4-1-3
IMPACT AREA 3
SLOPE ENTRY FACILITIES

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

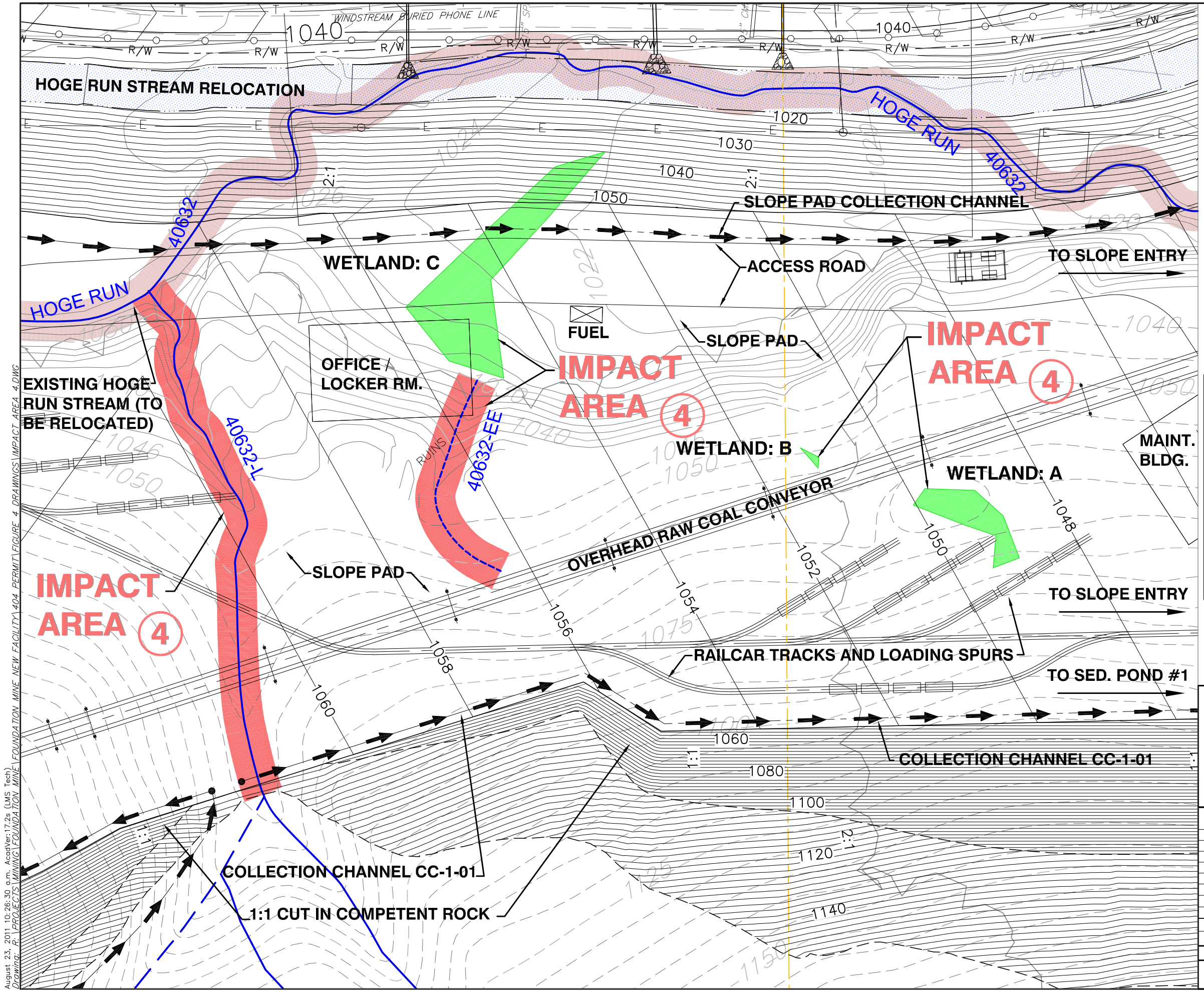
ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370

SCALE:

ft DATUM: NAD 27 PA-SOUTH

DRAWING NO: 4 OF 38

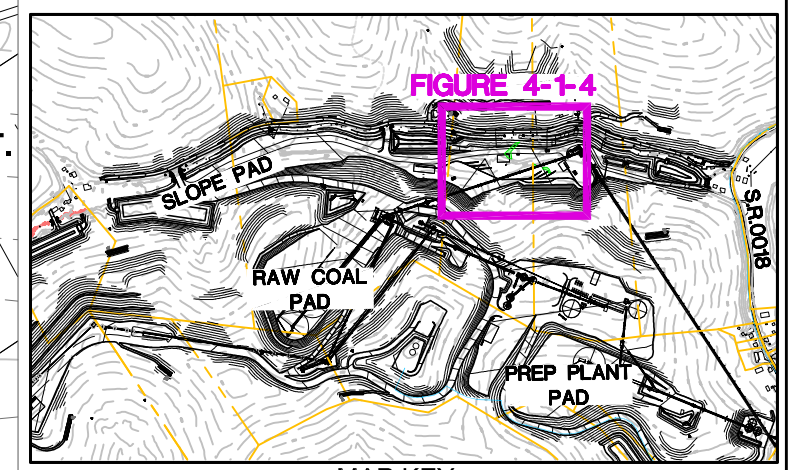
August 23, 2011 10:13:50 a.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 3.DWG



LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4–9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.



MAP KEY
N.T.S.

60 0 60
SCALE IN FEET

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC

FIGURE 4-1-4
IMPACT AREA 4
SLOPE ENTRY FACILITIES

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

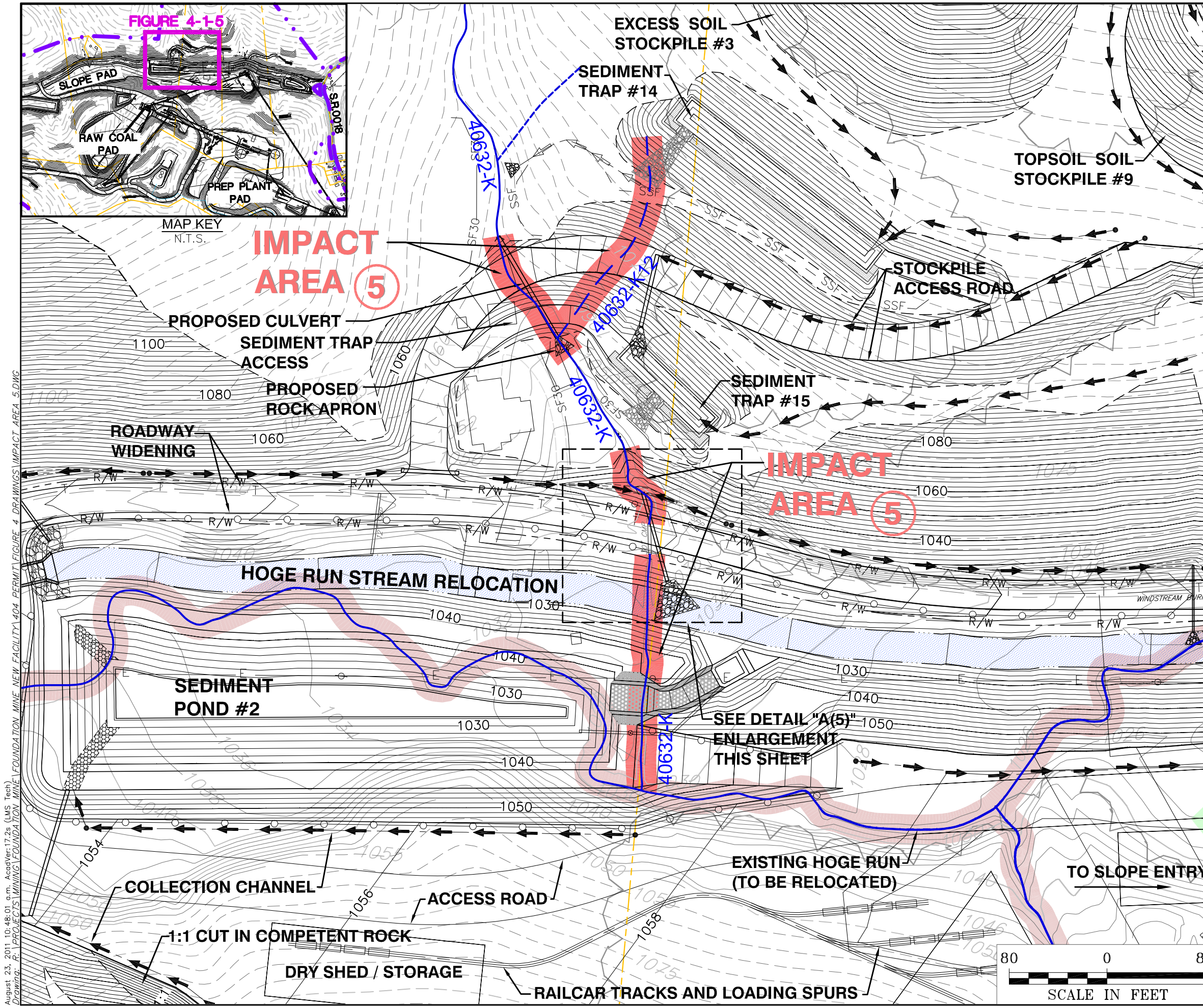
ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370

SCALE:

ft DATUM: NAD 27 PA-SOUTH

DRAWING NO: 5 OF 38

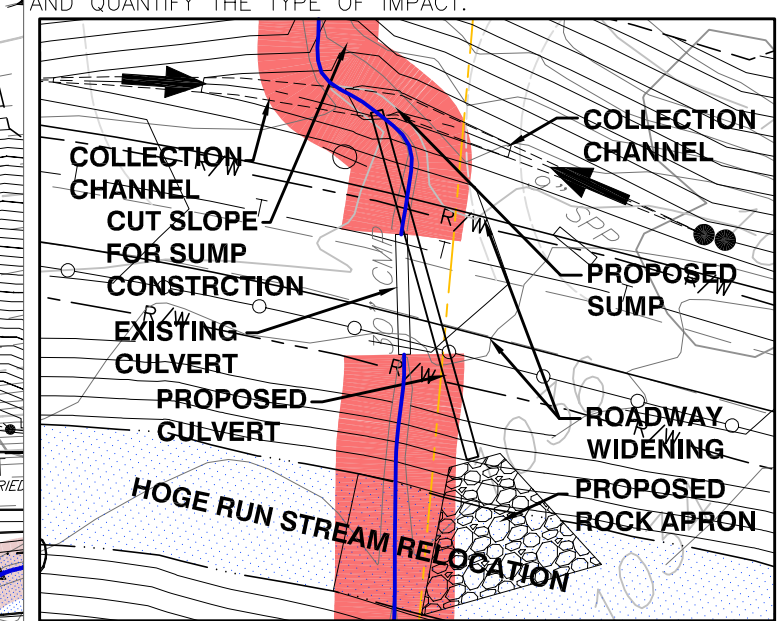
August 23, 2011 10:26:30 a.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 4.DWG



LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4–9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.



DETAIL "A(5)" ENLARGEMENT
SCALE: 1"=40'

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC

FIGURE 4-1-5
IMPACT AREA 5
SLOPE ENTRY FACILITIES

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370
SCALE:
ft DATUM: NAD 27 PA-SOUTH
DRAWING NO: 6 OF 38

August 23, 2011 10:48:01 a.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4_DRAWINGS\IMPACT AREA 5.DWG

HOGE RUN

EXISTING HOGE RUN (TO BE RELOCATED)

SLOPE PAD

TO SLOPE PAD

RAW COAL PAD ACCESS ROAD

SEDIMENT POND #2

SLOPE PAD

RAW COAL PAD ACCESS ROAD

IMPACT AREA 6

IMPACT AREA 6

RAW COAL PAD

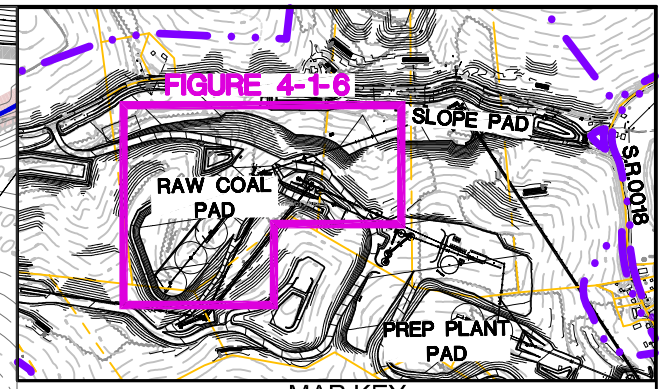
EARTHEN BERM

ROADSIDE COLLECTION CHANNEL

TO PREPARATION PLANT

COLLECTION CHANNEL CC-2-01 (TO SED. POND #2)

40632 40632-J 40632-J14 40632-J13 40632-J12 40632-J11 40632-J10 40632-J 40632-L1 40632-L1a 40632-L1a1 40632-L1b 40632-L1b1 40632-L1b1 40632-L1b 40632-L



MAP KEY
N.T.S.

LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4–9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

150 0 150
SCALE IN FEET

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC

FIGURE 4-1-6
IMPACT AREA 6
RAW COAL PAD AND
ASSOCIATED ACCESS ROADS

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370

SCALE:

ft DATUM: NAD 27 PA-SOUTH

DRAWING NO: 7 OF 38

August 25, 2011 9:15:01 a.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 6.DWG

IMPACT AREA 7

REQUIRED CUT SLOPE FOR ROADWAY IMPROVEMENTS

PROPOSED COLLECTION CHANNEL CC-HR13

PROPOSED ROAD WIDENING

WETLAND: F-52 (IMPACT DISCUSSED IN IMPACT No.1, FIGURE 4-1-1)

PROPOSED CULVERT

PROPOSED CULVERT

EXISTING CULVERT (TO BE REMOVED)

HOGE RUN STREAM RELOCATION

SLOPE PAD ENTRANCE

SLOPE PAD

IMPACT AREA 7

SLOPE PAD

SLOPE PAD ACCESS ROAD

SLOPE PAD COLLECTION CHANNEL

HOGE RUN

EXISTING HOGE RUN STREAM (TO BE RELOCATED)

EXISTING HOGE RUN STREAM (TO BE RELOCATED)

SLOPE PAD COLLECTION CHANNEL

40632-FF

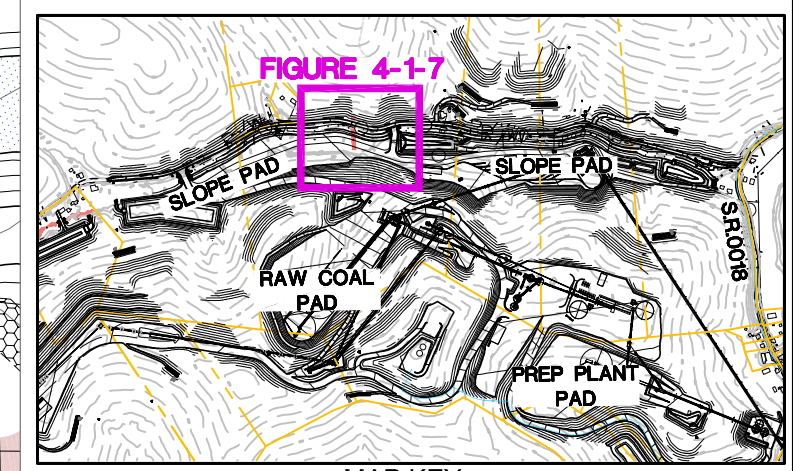
40632

40632-J

LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- 1 IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4–9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.



MAP KEY
N.T.S.

50 0 50
SCALE IN FEET

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC

FIGURE 4-1-7
IMPACT AREA 7
SLOPE ENTRY FACILITIES

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

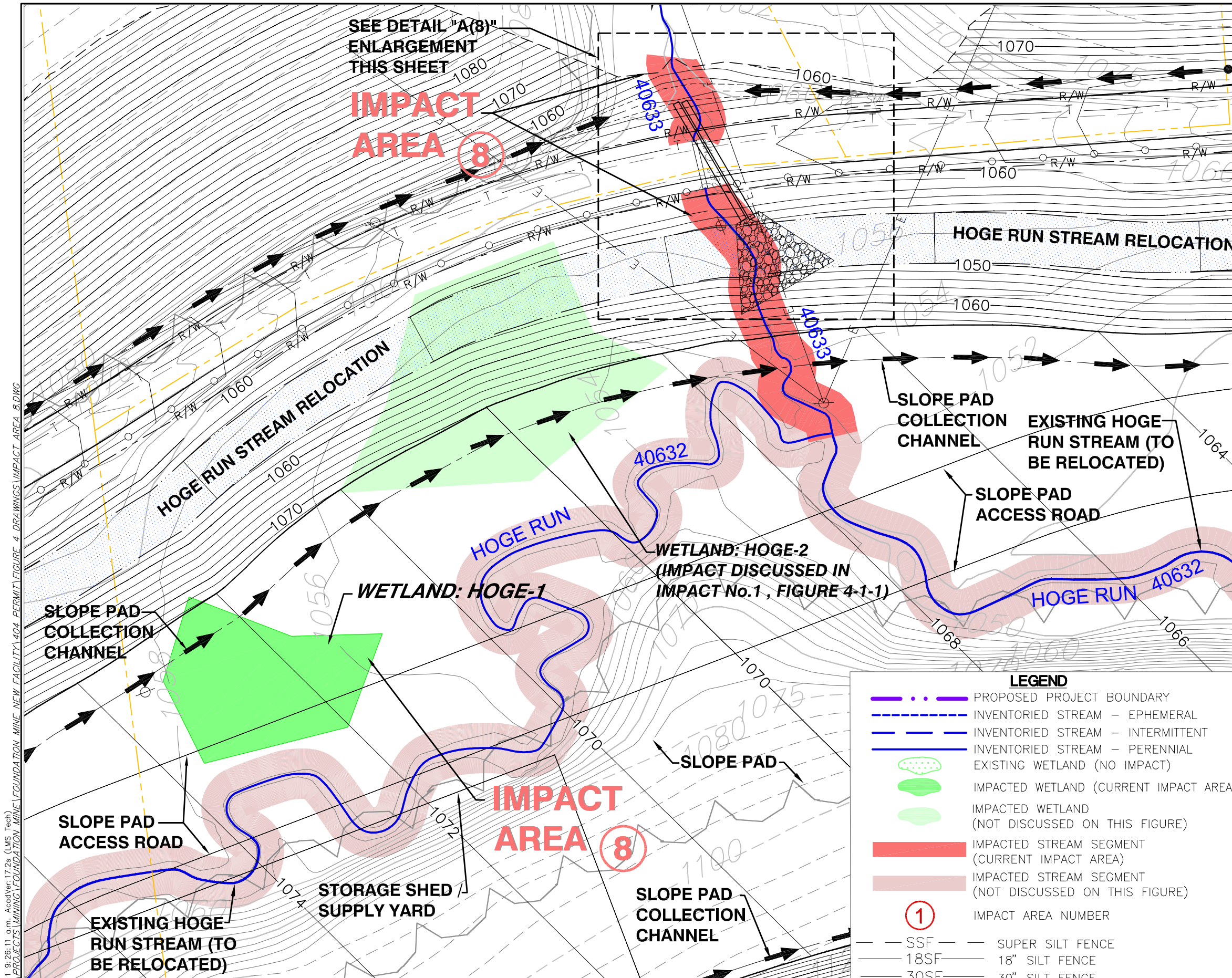
ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370

SCALE:

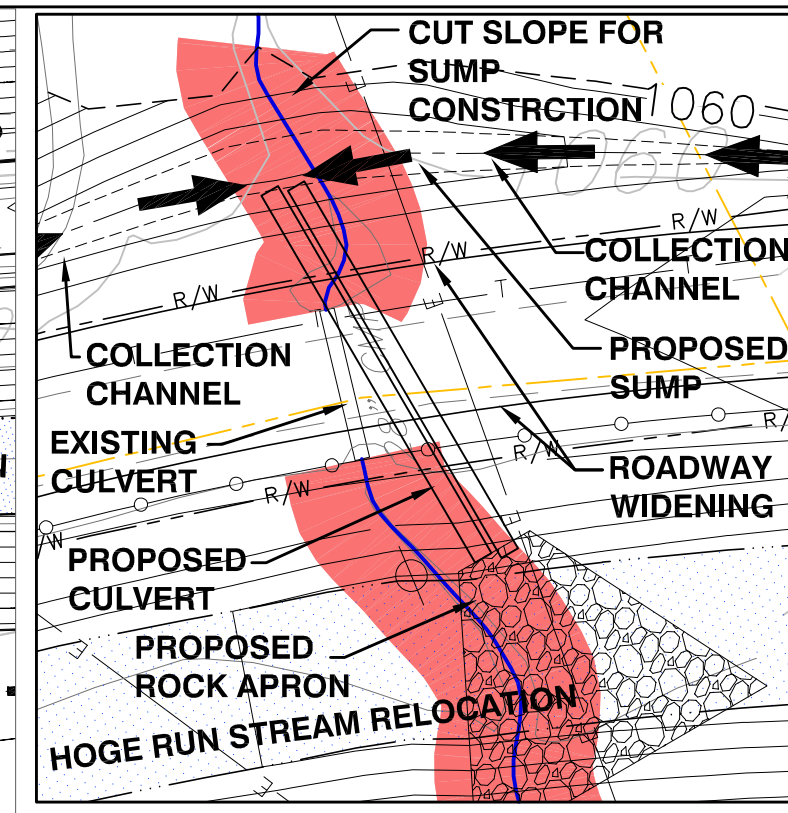
ft DATUM: NAD 27 PA-SOUTH

DRAWING NO: 8 OF 38

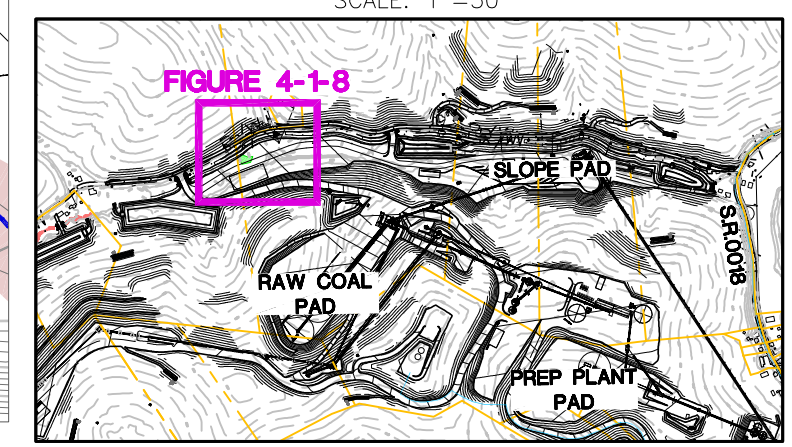
August 18, 2011 1:17:07 p.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 7.DWG



50 0 50
SCALE IN FEET



DETAIL "A(8)" ENLARGEMENT
SCALE: 1"=30'



MAP KEY
N.T.S.

LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- 1 IMPACT AREA NUMBER
- SSF SUPER SILT FENCE
- 18SF 18" SILT FENCE
- 30SF 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4-9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

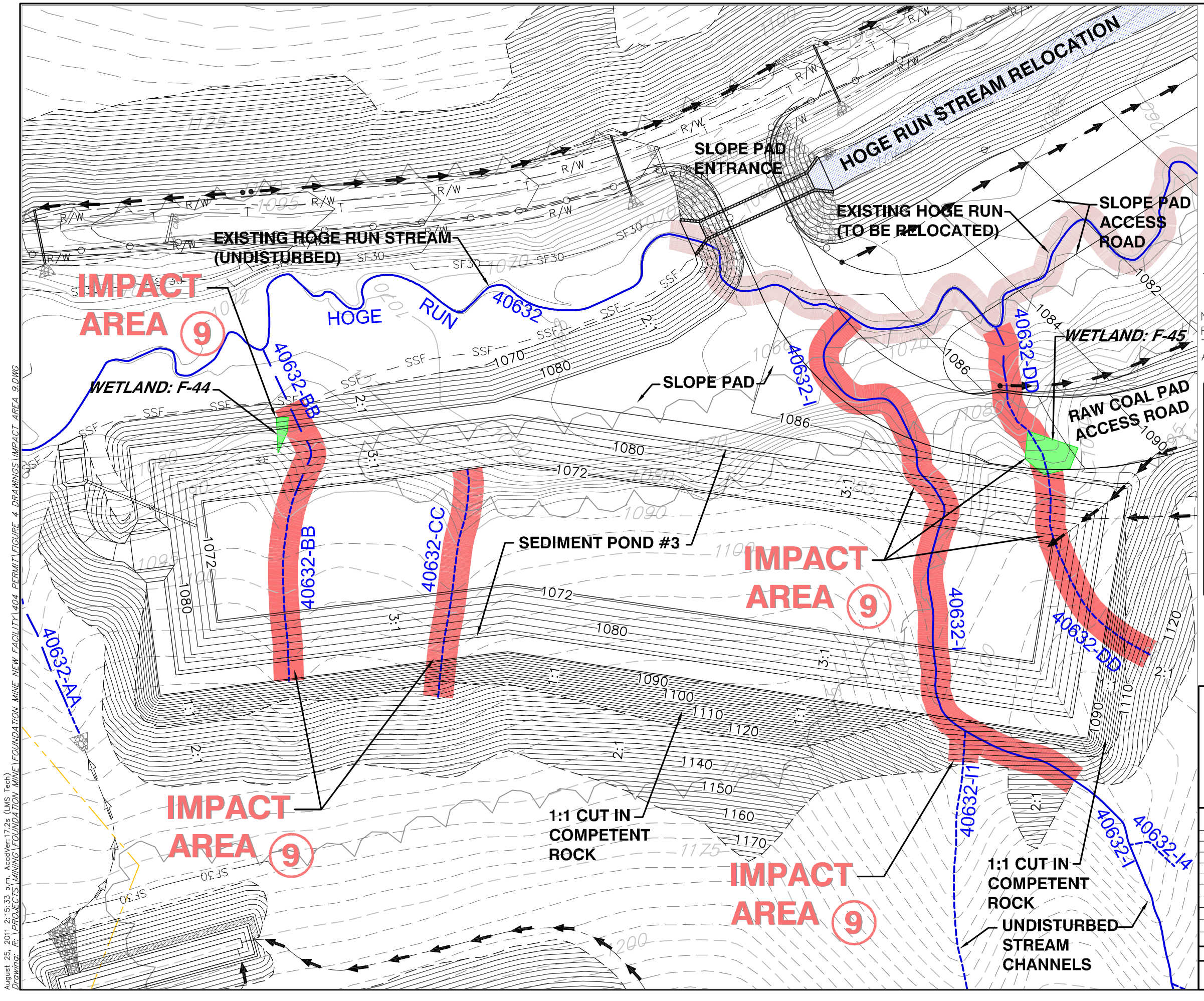
FOUNDATION MINING, LLC

FIGURE 4-1-8
IMPACT AREA 8
SLOPE ENTRY FACILITIES

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370
SCALE:
ft DATUM: NAD 27 PA-SOUTH
DRAWING NO: 9 OF 38

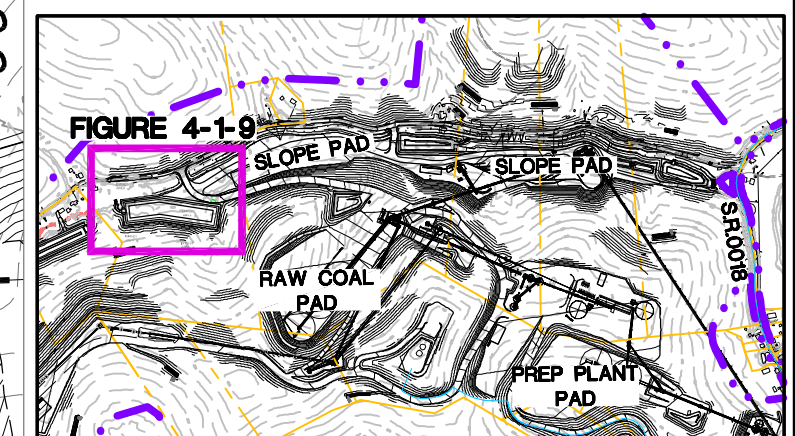
August 25, 2011 9:26:11 a.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 8.DWG



LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4–9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.



MAP KEY
N.T.S.

80 0 80
SCALE IN FEET

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC

FIGURE 4-1-9
IMPACT AREA 9
SLOPE ENTRY FACILITIES
SEDIMENT POND #3

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370
SCALE:
ft DATUM: NAD 27 PA-SOUTH
DRAWING NO: 10 OF 38

August 25, 2011 2:15:33 p.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 9.DWG

EXISTING HOGE RUN STREAM (UNDISTURBED)

FUTURE HOGE RUN STREAM IMPACTS (REFER TO FIGURE 20B)

SEDIMENT POND ACCESS ROAD

PROPOSED CONCRETE BOX CULVERT

IMPACT AREA 10

HOGE RUN

40632

FUTURE HOGE RUN STREAM IMPACTS (REFER TO FIGURE 20B)

SEDIMENT POND #6

40632-AAA

1:1 CUT IN COMPETENT ROCK

SEDIMENT POND #6

IMPACT AREA 10

1:1 CUT IN COMPETENT ROCK

COLLECTION CHANNELS (TYP.)

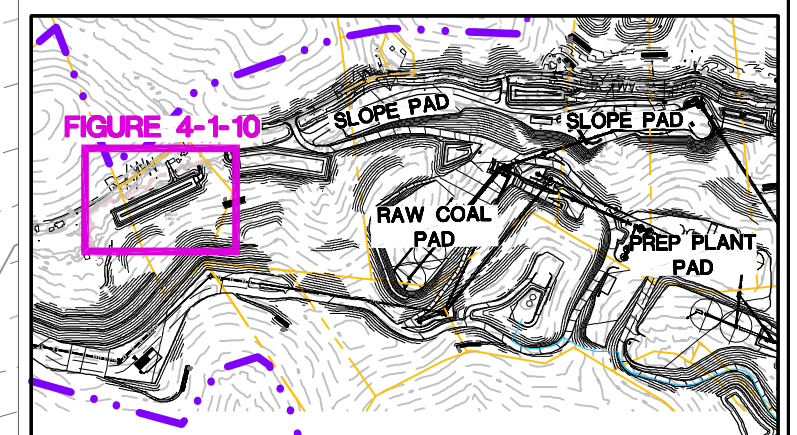
STOCKPILE AREA

REFUSE HAUL ROAD EMBANKMENT

LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4-9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.



MAP KEY
N.T.S.

80 0 80
SCALE IN FEET

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC

FIGURE 4-1-10
IMPACT AREA 10
SEDIMENT POND #6

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

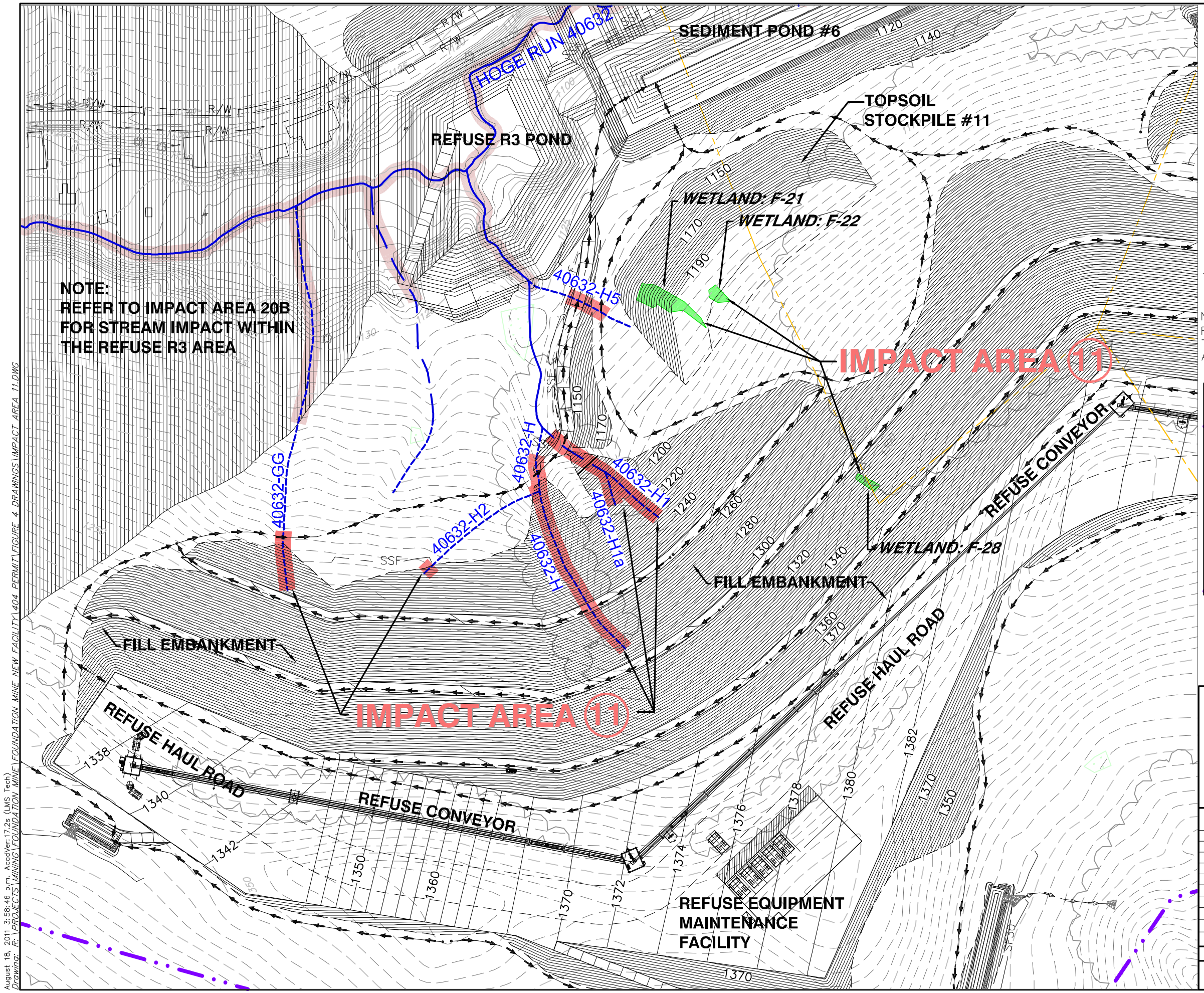
ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370

SCALE:

ft DATUM: NAD 27 PA-SOUTH

DRAWING NO: 11 OF 38

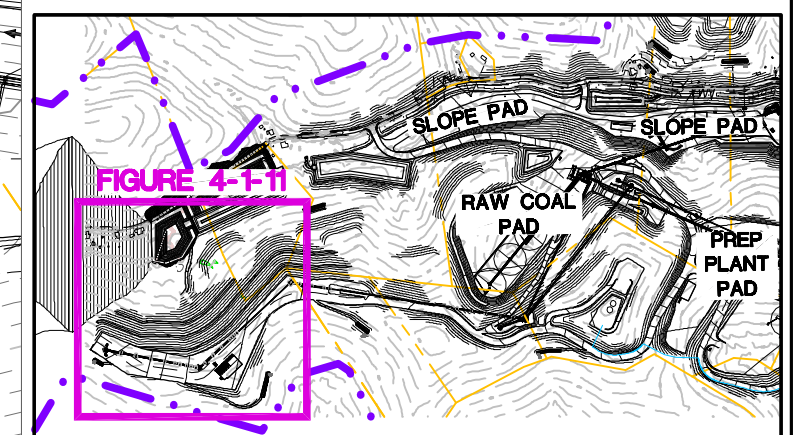
August 18, 2011 2:24:34 p.m. Acad\ver17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 10.DWG



LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- 1 IMPACT AREA NUMBER
- SSF SUPER SILT FENCE
- 18SF 18" SILT FENCE
- 30SF 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4-9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.



MAP KEY
N.T.S.

150 0 150
SCALE IN FEET

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC
FIGURE 4-2
IMPACT AREA No. 11
REFUSE HAUL ROAD AND REFUSE EQUIPMENT MAINTENANCE FACILITY FOR THE COAL REFUSE DISPOSAL AREA R-3
FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

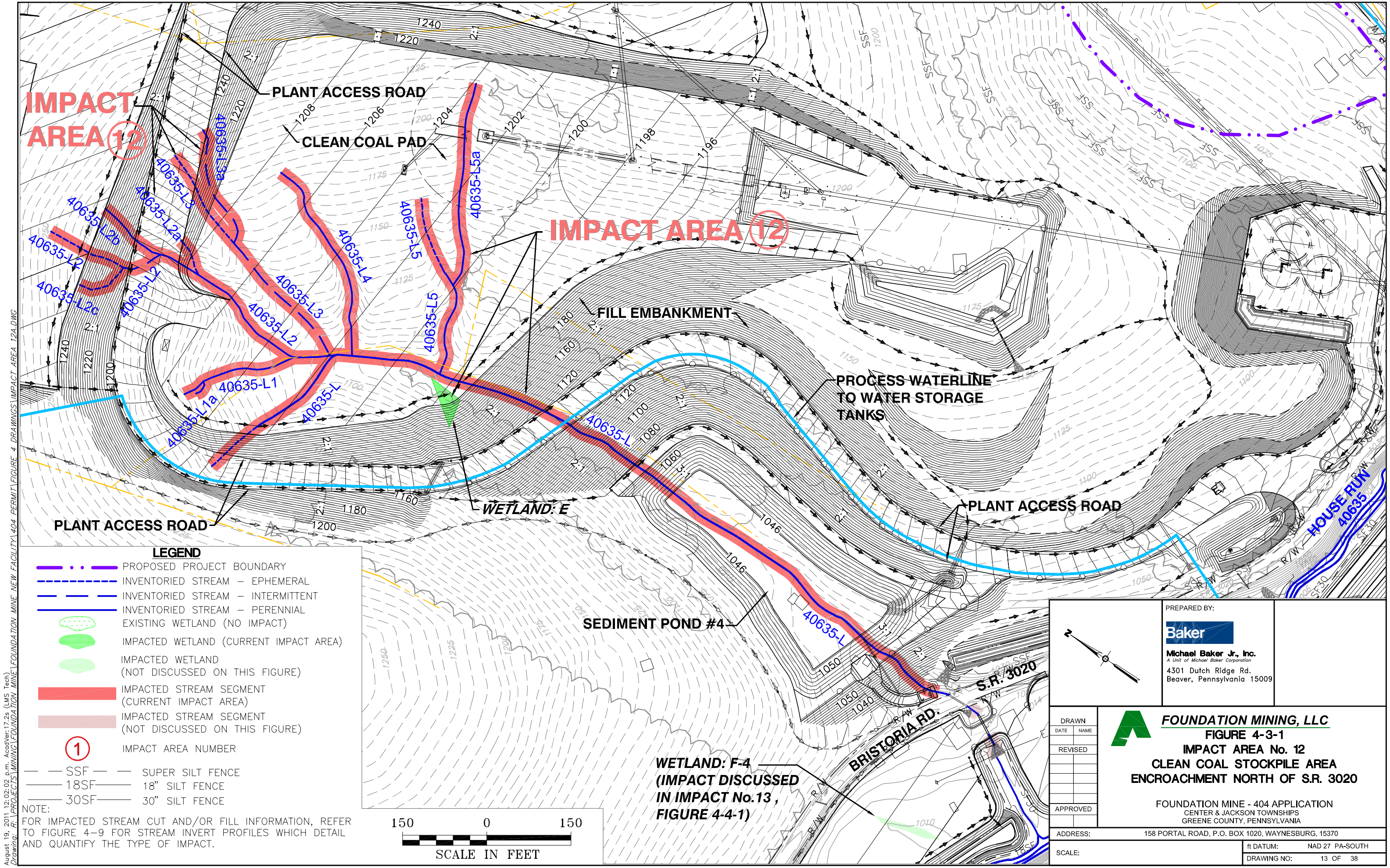
ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370

SCALE:

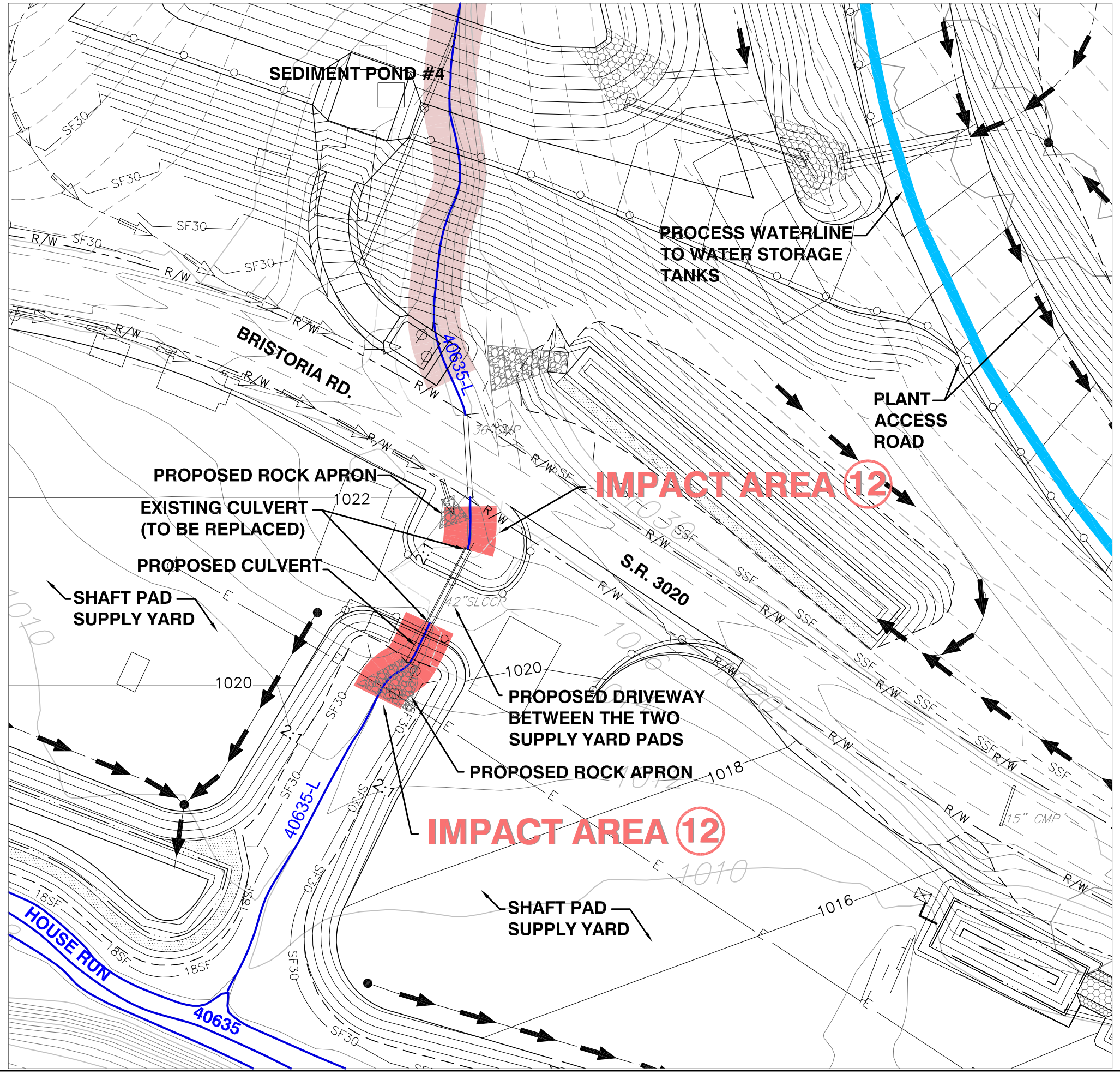
ft DATUM: NAD 27 PA-SOUTH

DRAWING NO: 12 OF 38

August 18, 2011 3:58:46 p.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 11.DWG



August 19, 2011 12:02:02 p.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 12A.DWG



LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4-9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

50 0 50
SCALE IN FEET

N

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

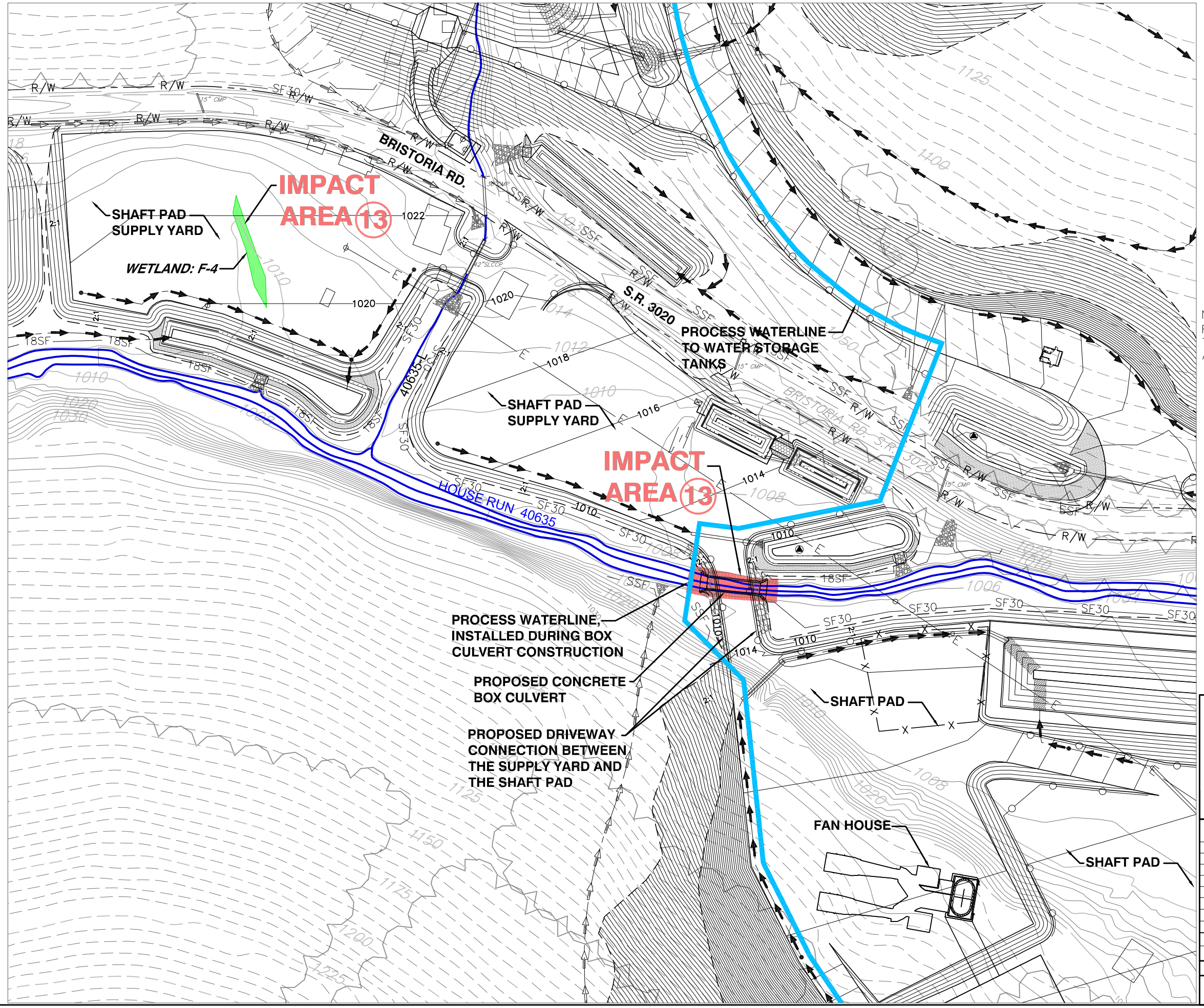
DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC
FIGURE 4-3-2
IMPACT AREA No. 12
CLEAN COAL STOCKPILE AREA
ENCROACHMENT SOUTH OF S.R. 3020

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370
SCALE:
ft DATUM: NAD 27 PA-SOUTH
DRAWING NO: 14 OF 38

August 19, 2011 1:07:59 p.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 12B.DWG



LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4–9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

100 0 100
SCALE IN FEET

N

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC

FIGURE 4-4-1
IMPACT AREA No. 13
PITTSBURGH SHAFT PAD AND SUPPLY YARD

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

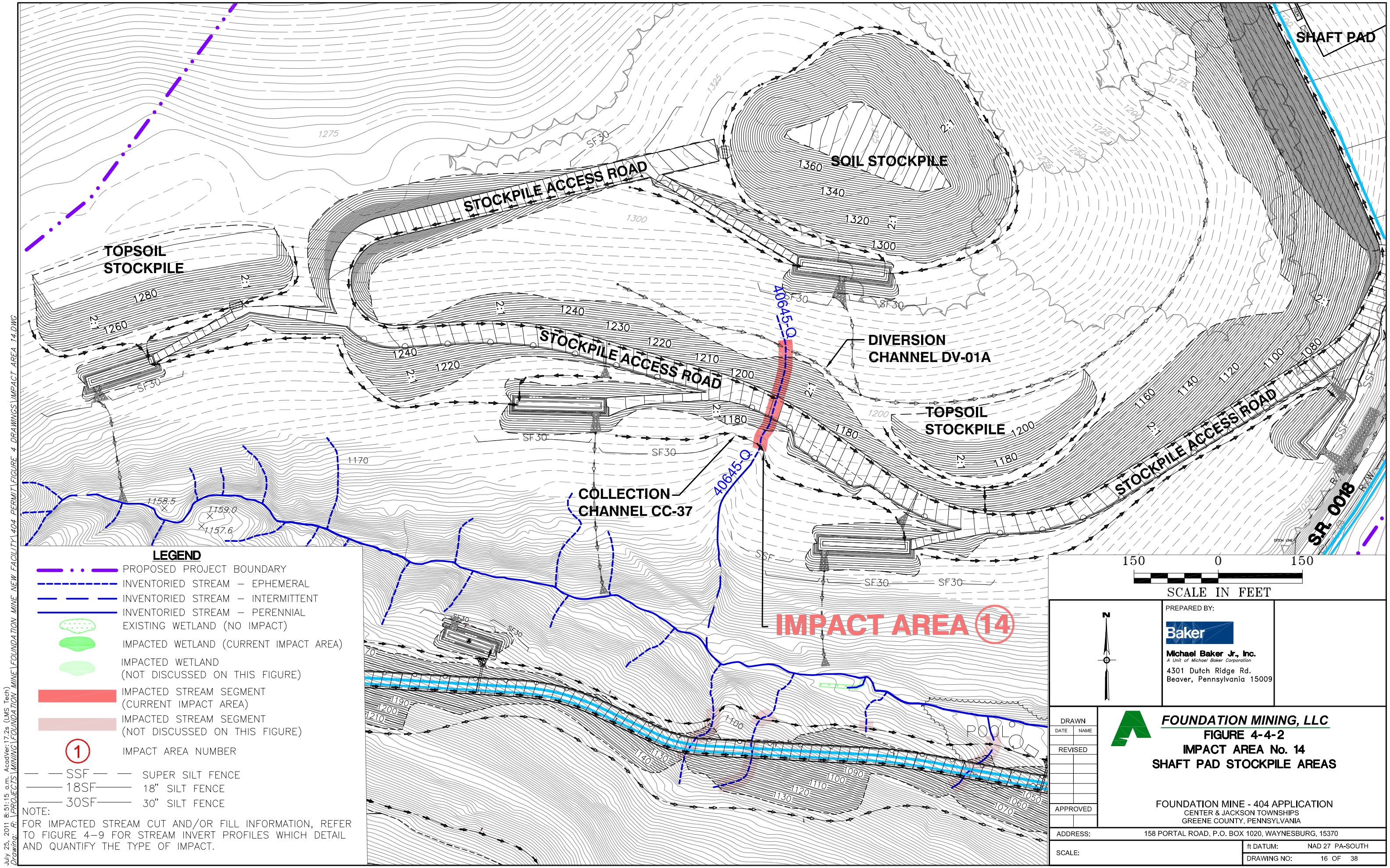
ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370

SCALE:

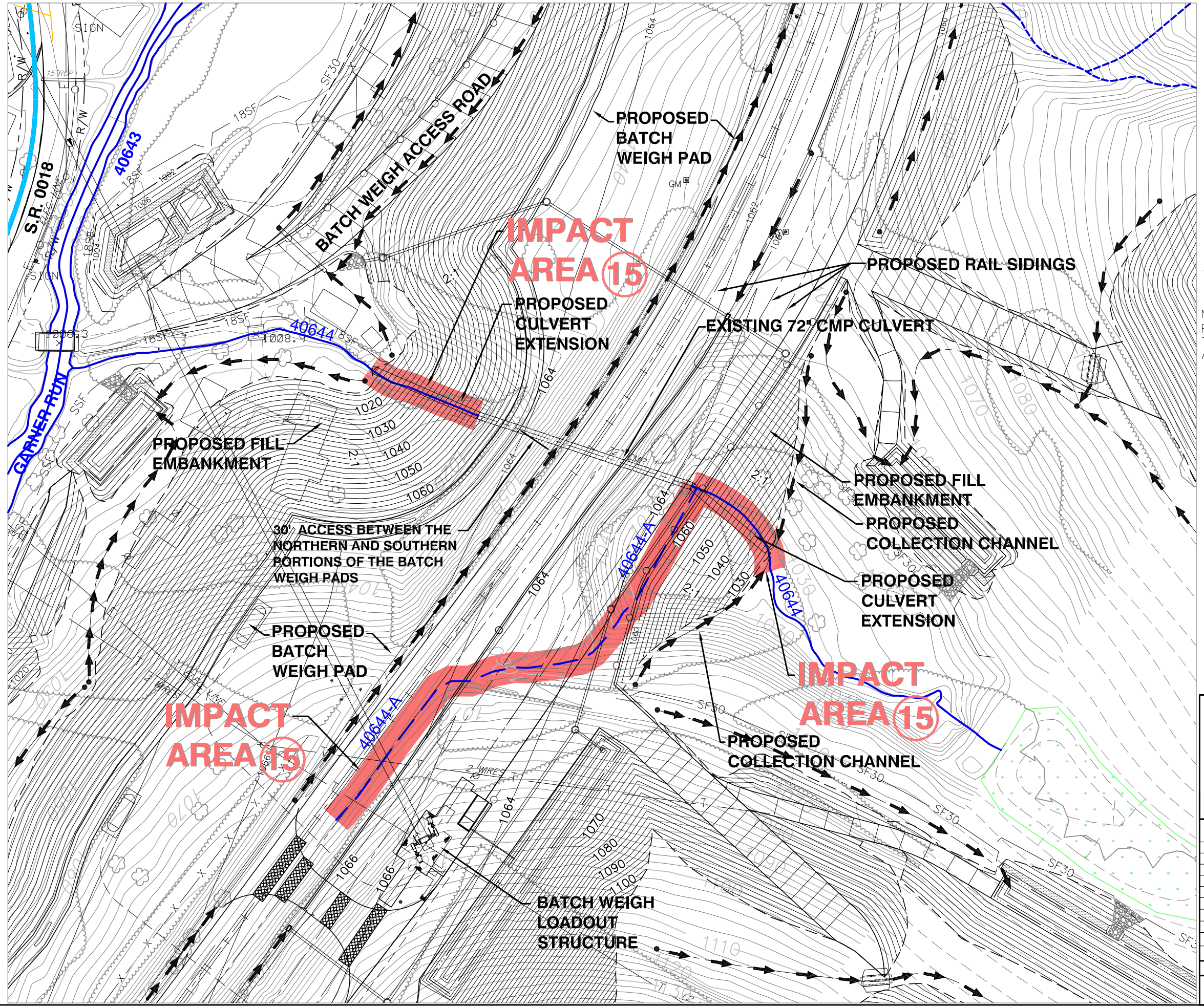
ft DATUM: NAD 27 PA-SOUTH

DRAWING NO: 15 OF 38

August 19, 2011 3:27:50 p.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 13.DWG



July 25, 2011 8:51:15 a.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 14.DWG



LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4-9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

80 0 80
SCALE IN FEET

N

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

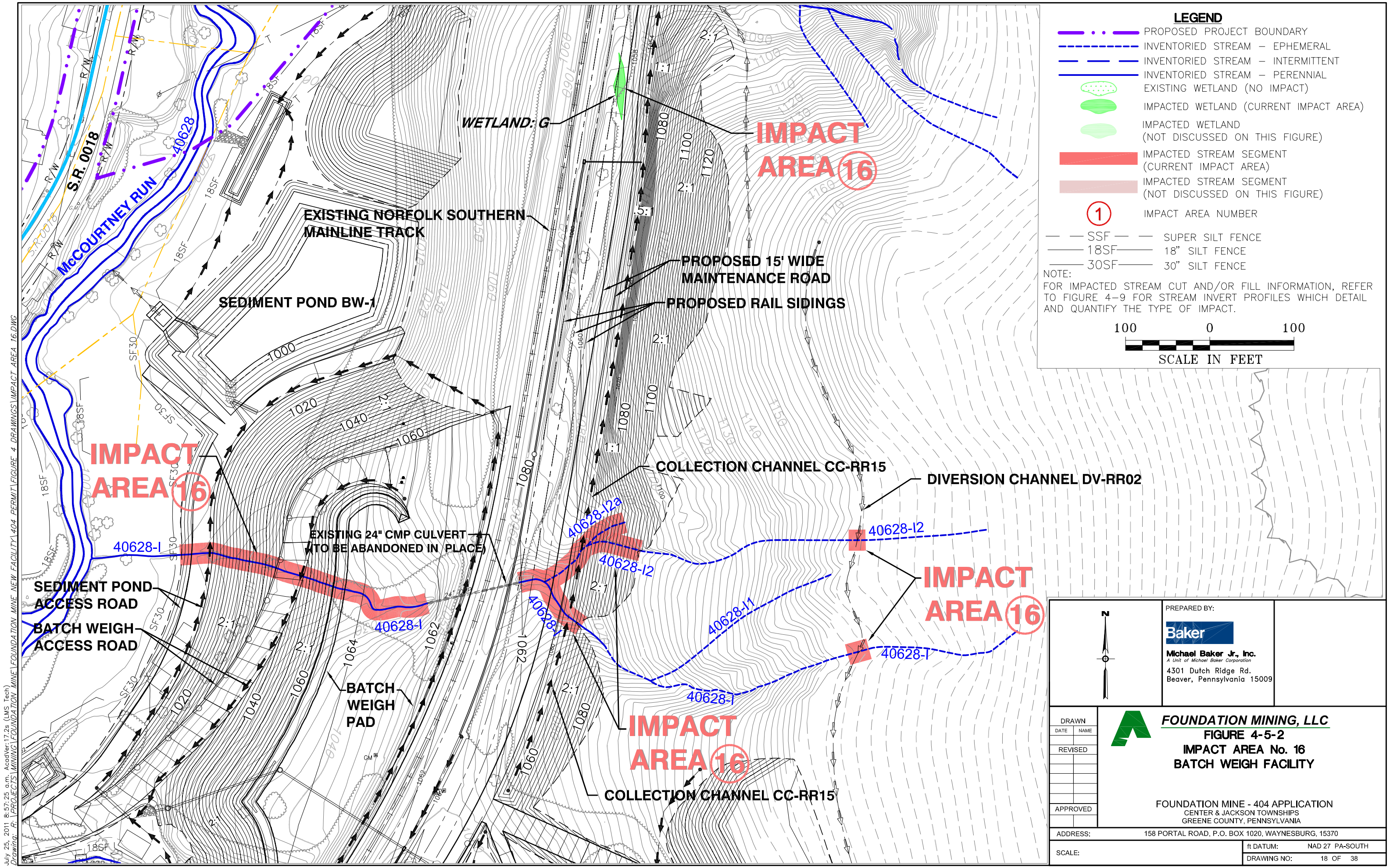
DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC
FIGURE 4-5-1
IMPACT AREA No. 15
BATCH WEIGH FACILITY

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370
SCALE:
ft DATUM: NAD 27 PA-SOUTH
DRAWING NO: 17 OF 38

July 22, 2011 3:36:46 p.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 11.DWG


LEGEND
PROPOSED PROJECT BOUNDARY
INVENTORIED STREAM – EPHEMERAL
INVENTORIED STREAM – INTERMITTENT
INVENTORIED STREAM – PERENNIAL
EXISTING WETLAND (NO IMPACT)
IMPACTED WETLAND (CURRENT IMPACT AREA)
IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
1 IMPACT AREA NUMBER
SSF SUPER SILT FENCE
18SF 18" SILT FENCE
30SF 30" SILT FENCE
NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4-9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.
100 0 100
SCALE IN FEET
WETLAND: G
IMPACT AREA 16
EXISTING NORFOLK SOUTHERN MAINLINE TRACK
PROPOSED 15' WIDE MAINTENANCE ROAD
PROPOSED RAIL SIDINGS
SEDIMENT POND BW-1
S.R. 0018
McCOURTNEY RUN
40628
COLLECTION CHANNEL CC-RR15
DIVERSION CHANNEL DV-RR02
EXISTING 24" CMP CULVERT (TO BE ABANDONED IN PLACE)
40628-I
40628-I2
40628-I2a
40628-I1
SEDIMENT POND ACCESS ROAD
BATCH WEIGH ACCESS ROAD
BATCH WEIGH PAD
N
PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009
DRAWN
DATE NAME
REVISED
APPROVED
FOUNDATION MINING, LLC
FIGURE 4-5-2
IMPACT AREA No. 16
BATCH WEIGH FACILITY
FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA
ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370
SCALE:
ft DATUM: NAD 27 PA-SOUTH
DRAWING NO: 18 OF 38
July 25, 2011 8:57:25 a.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION_MINE\FOUNDATION_MINE_NEW_FACILITY\404_PERMIT\FIGURE_4_DRAWINGS\IMPACT_AREA_16.DWG

MATCHLINE - SEE FIGURE 4-6-1B SHEET 20

TOPSOIL STOCKPLE

WATER SUPPLY IMPOUNDMENT AREA
MAX. WATER ELEV. 1245.0

IMPACT AREA 17

IMPACT AREA 17

IMPACT AREA 17

TEMPORARY SEDIMENT POND W1

IMPOUNDMENT EMBANKMENT

TOPSOIL STOCKPLE

WETLAND: 40649-W1

IMPACT AREA 17

TOPSOIL STOCKPLE

40649 40649-L1 40649-L2 40649-L3 40649-L4 40649-L5 40649-L6 40649-L7 40649-L8 40649-L9 40649-L10 40649-L11 40649-L12 40649-L13 40649-L14 40649-L15 40649-L16 40649-L16a 40649-L16b 40649-L16c 40649-L17 40649-L18 40649-L19 40649-R1 40649-R2 40649-R3 40649-R4 40649-R5 40649-R6 40649-R7 40649-R8 40649-R9 40649-R10 40649-R11 40649-R12 40649-R12a 40649-R13 S.R. 0118

LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4–9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

200 0 200
SCALE IN FEET

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

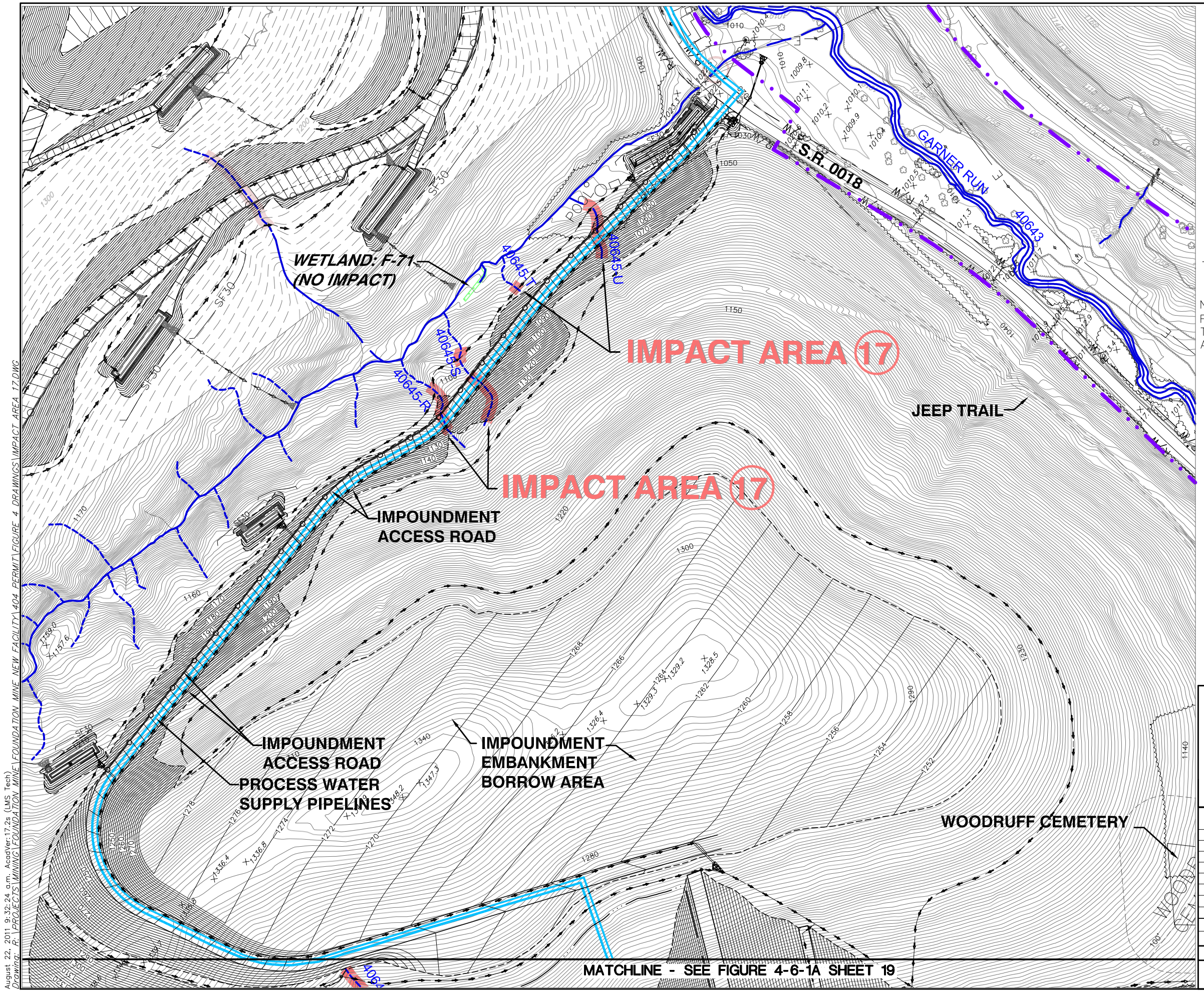
FOUNDATION MINING, LLC

FIGURE 4-6-1A
IMPACT AREA 17
WATER SUPPLY IMPOUNDMENT

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370
SCALE:
ft DATUM: NAD 27 PA-SOUTH
DRAWING NO: 19 OF 38

August 22, 2011 9:32:24 a.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 17.DWG



LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4–9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

200 0 200
SCALE IN FEET

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

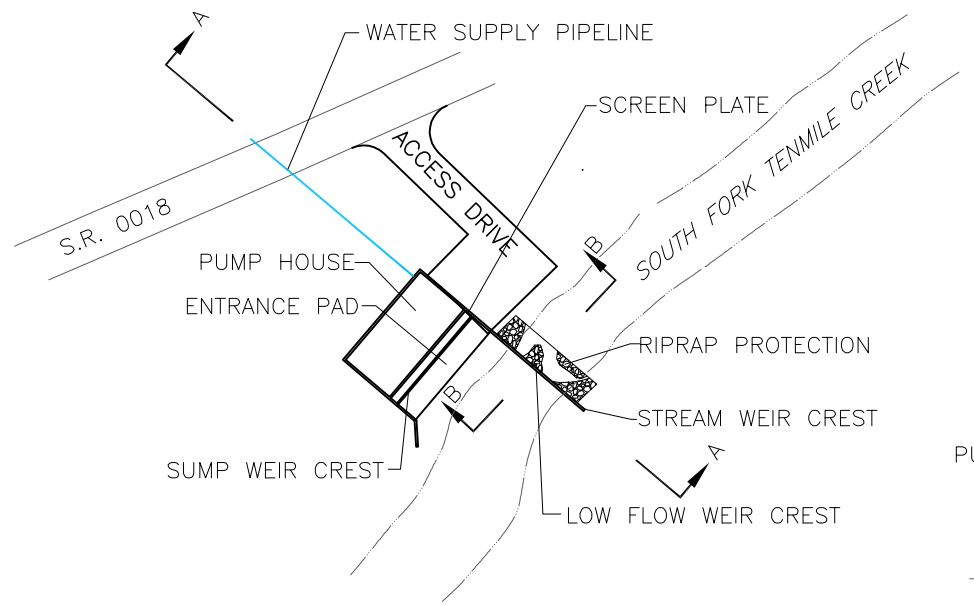
FOUNDATION MINING, LLC

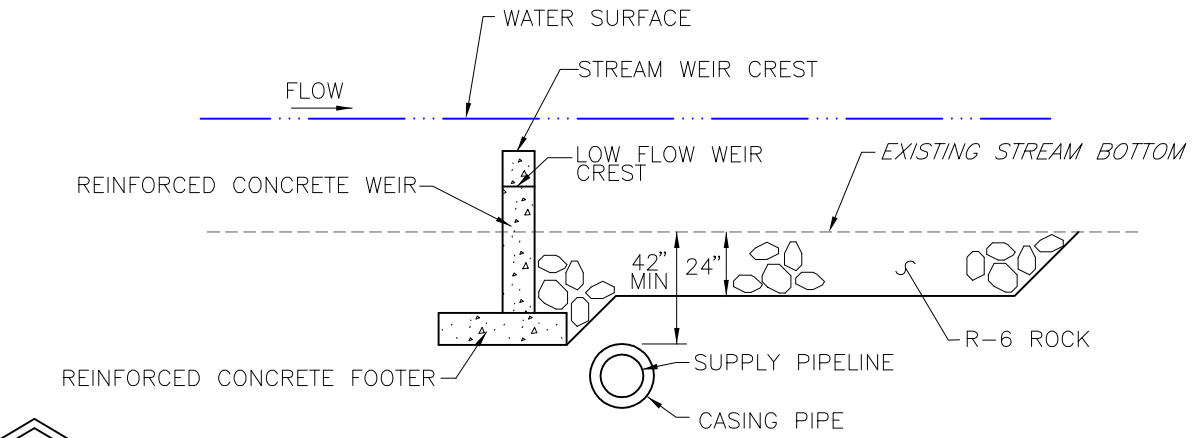
FIGURE 4-6-1B
IMPACT AREA 17
WATER SUPPLY IMPOUNDMENT

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

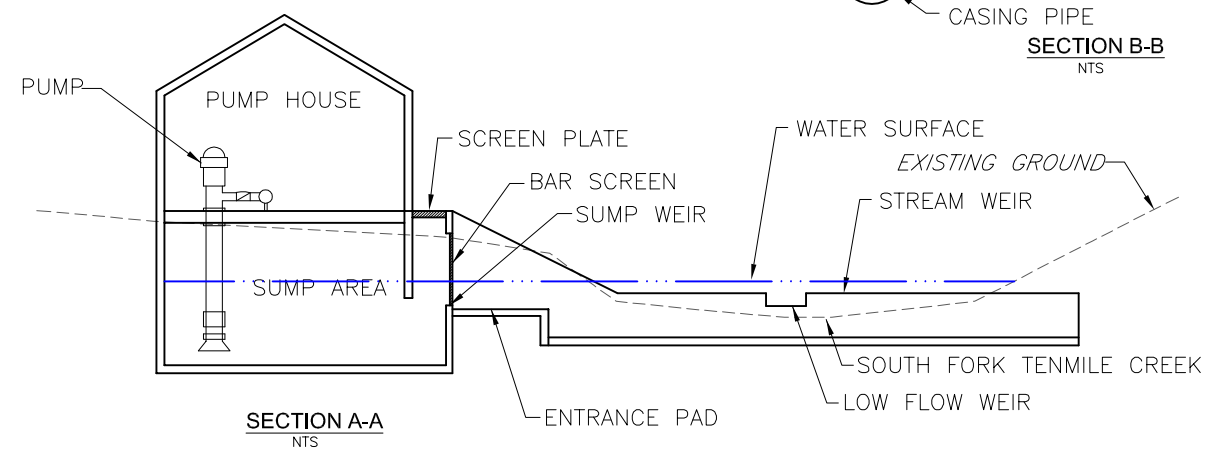
ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370
SCALE:
ft DATUM: NAD 27 PA-SOUTH
DRAWING NO: 20 OF 38

August 22, 2011 9:32:24 a.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 17.DWG



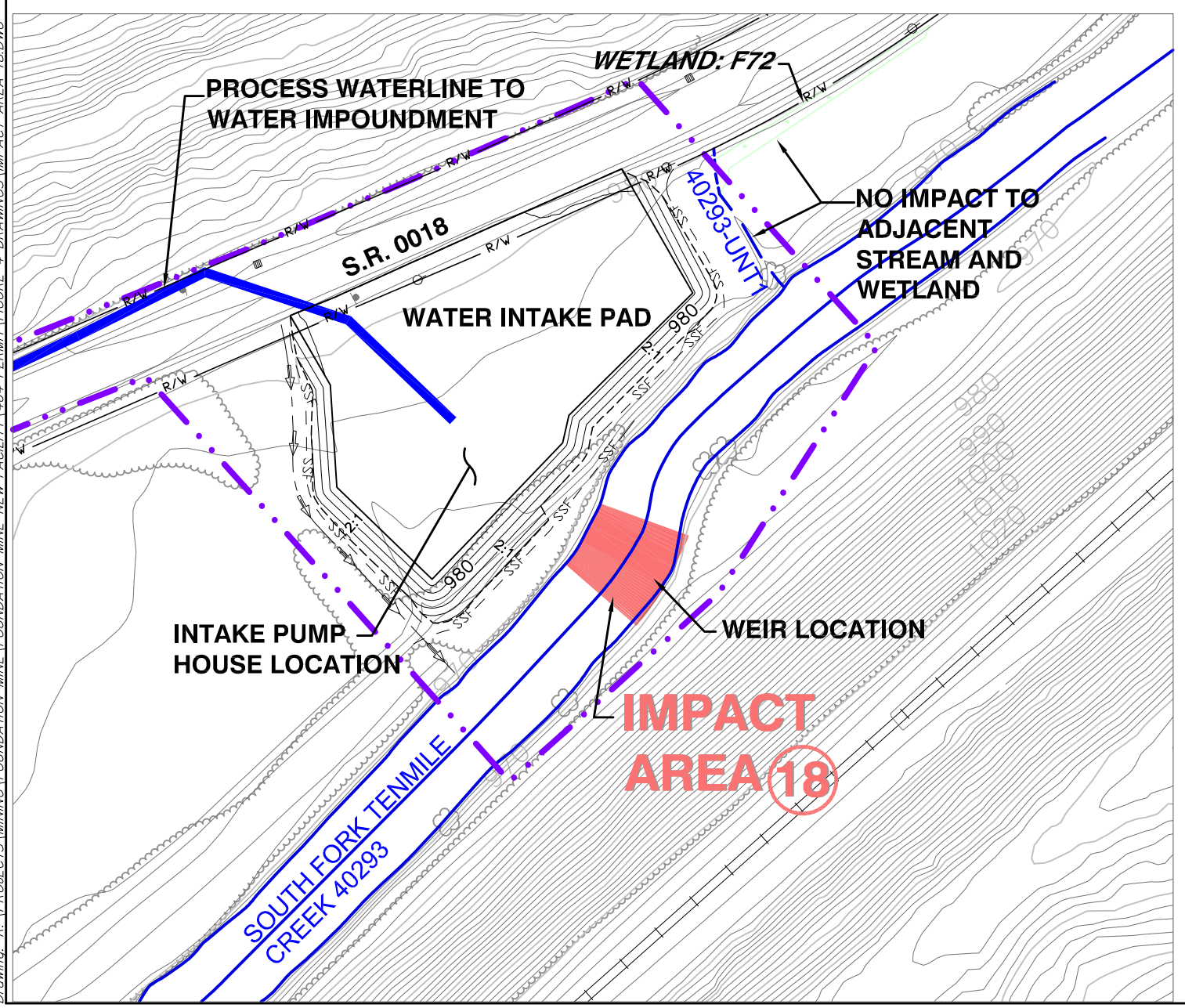


SECTION B-B
NTS



SECTION A-A
NTS

TYPICAL WATER INTAKE FACILITY
NTS



LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4-9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

80 0 80
SCALE IN FEET

N

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

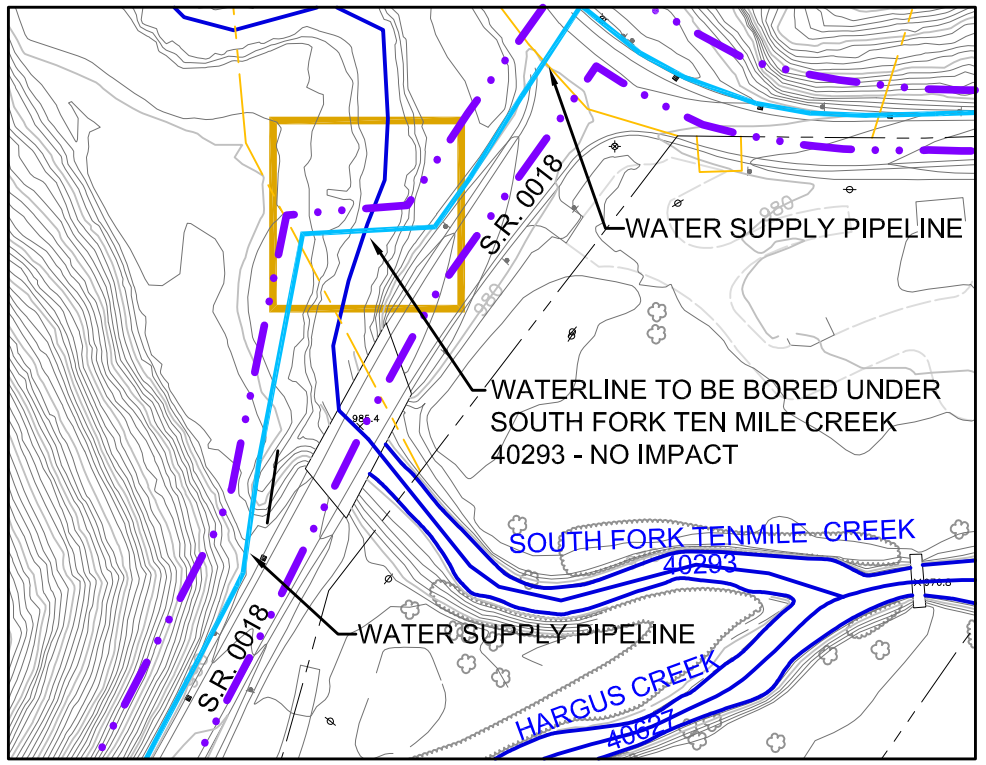
DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC
FIGURE 4-6-2
IMPACT AREA No. 18
WATER INTAKE STRUCTURE
(SOUTH FORK TENMILE CREEK)

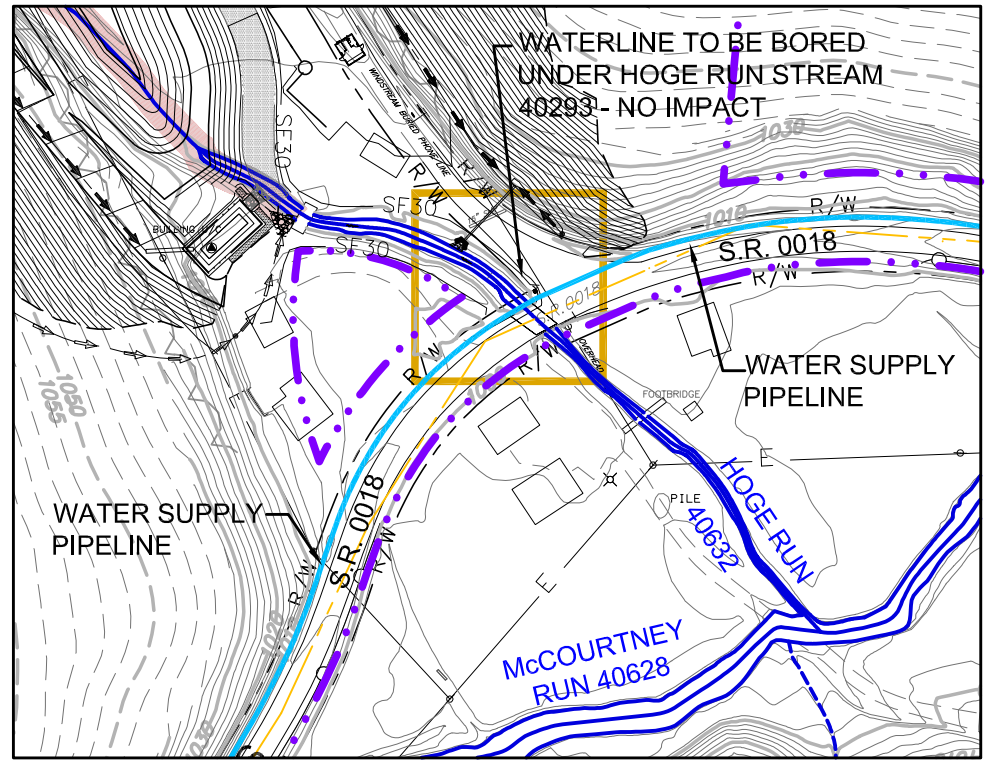
FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370
SCALE:
ft DATUM: NAD 27 PA-SOUTH
DRAWING NO: 21 OF 38

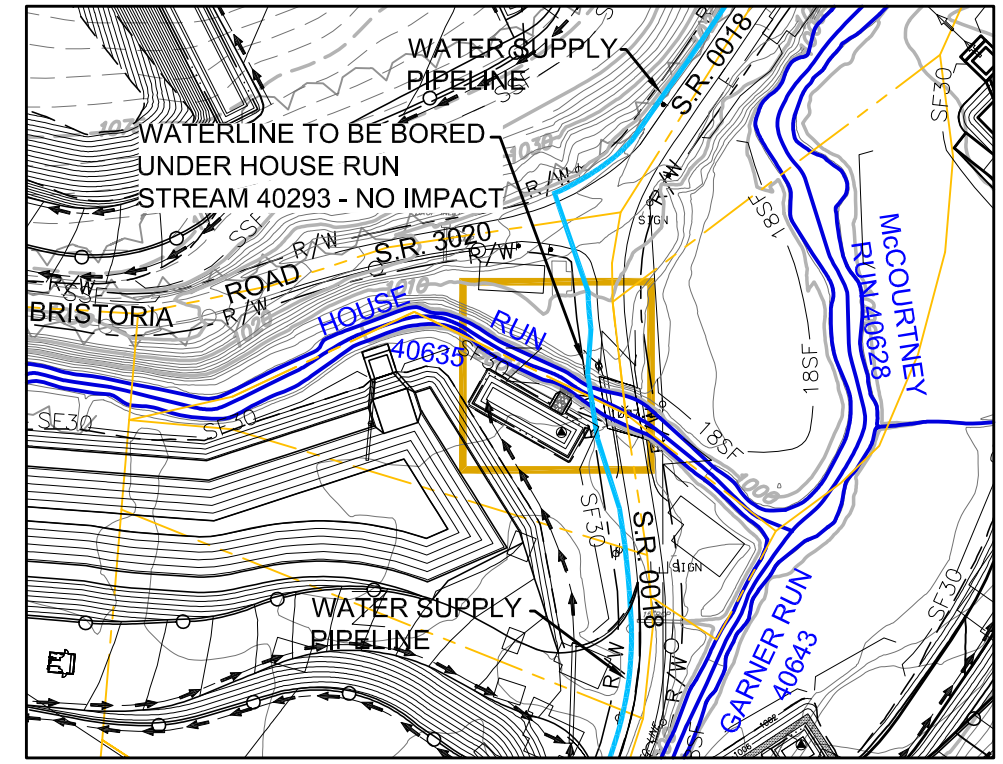
August 22, 2011 10:19:27 a.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 18.DWG



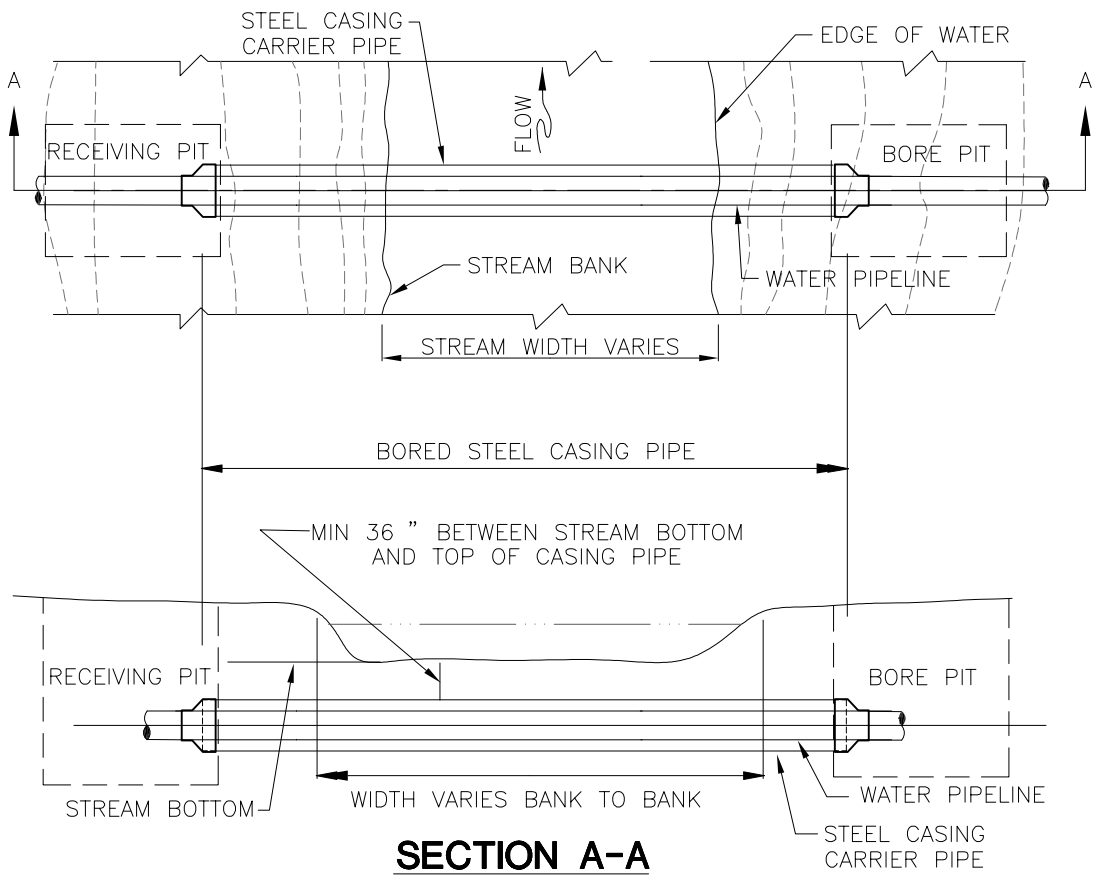
SOUTH FORK TENMILE CREEK



HOGE RUN CREEK



HOUSE RUN CREEK



SECTION A-A

WATER LINE STREAM CROSSING BORE

N.T.S.

LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4–9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

- PROPOSED STREAM CROSSING – BORE METHOD

GENERAL NOTES AND CONDITIONS

1. DURING CONSTRUCTION ACTIVITIES, ALL PUBLIC AND PRIVATE PROPERTY INCLUDING EXISTING VEGETATION, LANDSCAPE FEATURES AND MONUMENTS WITHIN, ALONG AND ADJACENT TO THE WORK AREA, SHALL BE PROTECTED AND PRESERVED TO THE MAXIMUM, DEGREE POSSIBLE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, PRECAUTIONS TAKEN TO MINIMIZE DAMAGE, EROSION, INJURY, OR DESTRUCTION; PREVENT POLLUTION; PROVIDE PROTECTION OF ALL TREES AND OTHER WOODY PLANTS; SPECIAL CARE BEING TAKEN TO PROTECT THE NATURAL VEGETATION AND SURROUNDINGS TO INCLUDE ALL NATURAL DRAINAGEWAYS, PONDS, WETLANDS, STREAMS, WOODS, AND FIELDS; AND STORAGE OF MATERIALS IN SUCH MANNER TO PREVENT LEACHING WHICH WOULD BE INJURIOUS TO SOILS AND PLANTS. PRECAUTIONS SHOULD BE TAKEN TO PREVENT DAMAGE TO PIPES, CONDUITS AND OTHER UNDERGROUND STRUCTURES.

2. THE WATER LINE UNDER THE STREAMBED SHALL BE LOCATED SUCH THAT THERE WILL BE A MINIMUM OF THREE FEET OF COVER BETWEEN THE TOP OF THE STEEL CASING PIPE AND THE LOWEST POINT IN THE NATURAL CONTOUR OF THE STREAMBED.

150 0 150
SCALE IN FEET

N

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

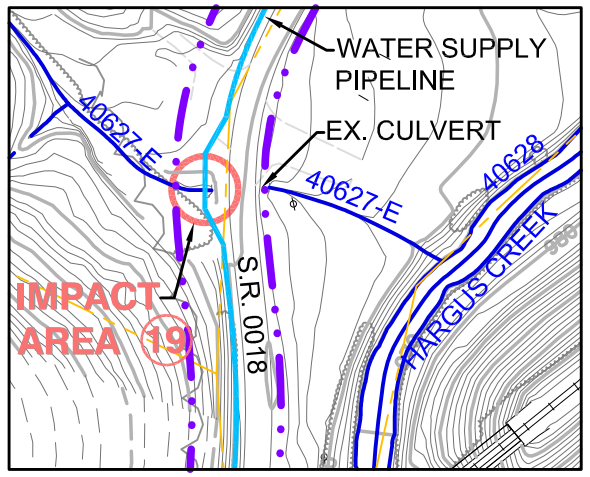
DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC

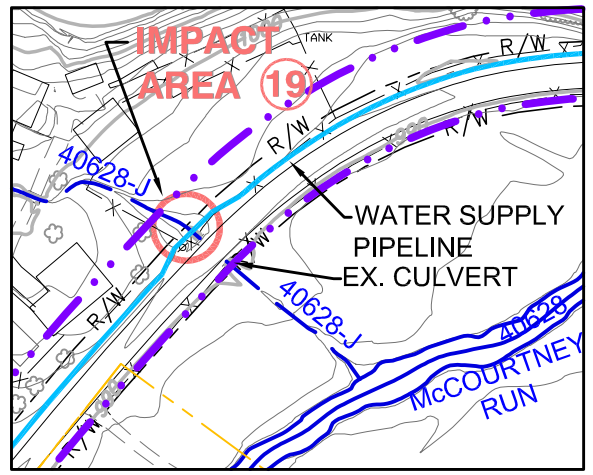
FIGURE 4-6-3A
IMPACT AREA No. 19
WATER PIPELINE BORE
(NON-IMPACT AREAS)
FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370
SCALE:
ft DATUM: NAD 27 PA-SOUTH
DRAWING NO: 22 OF 38

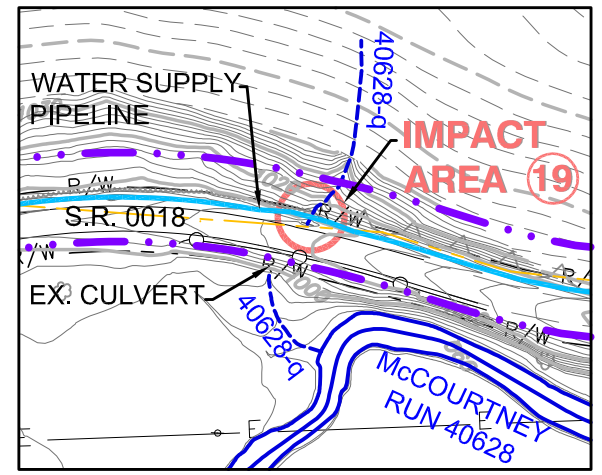
August 22, 2011 10:19:22 a.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 19A-BORE.DWG



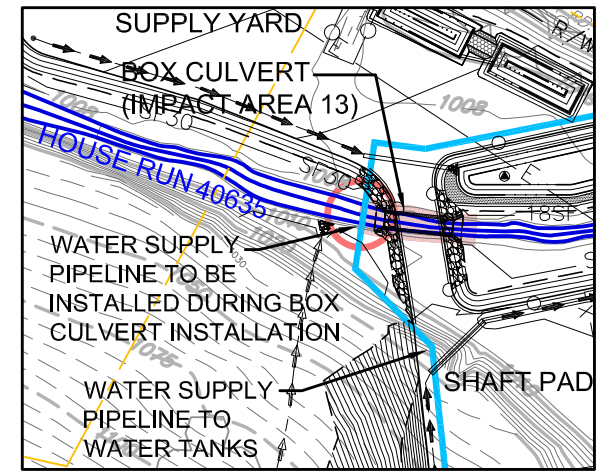
IMPACT 19.a - TRIBUTARY 40627-E



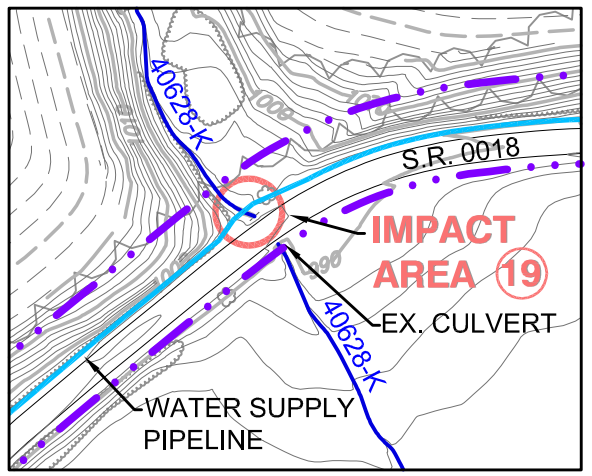
IMPACT 19.d - TRIBUTARY 40628-J



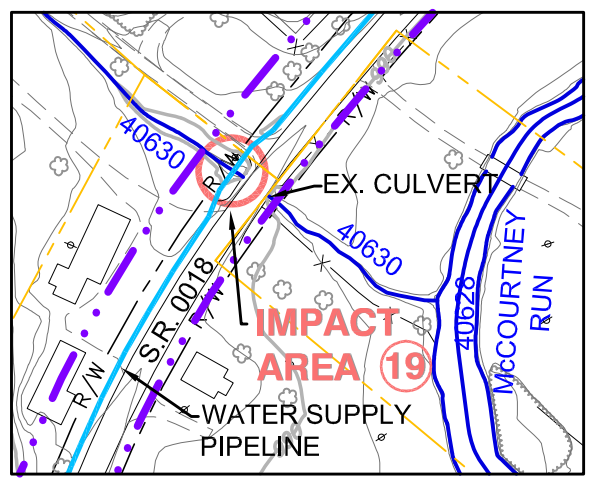
IMPACT 19.g - TRIBUTARY 40628-Q



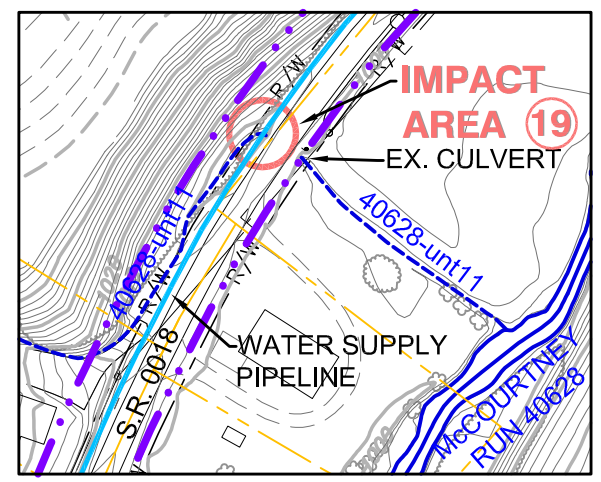
IMPACT 19.i - TRIBUTARY 40635



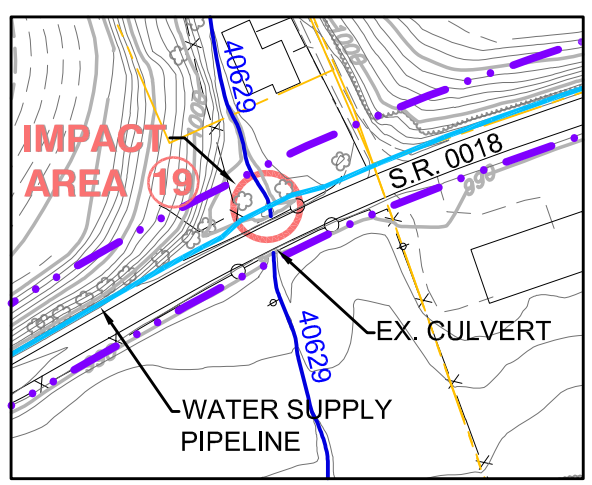
IMPACT 19.b - TRIBUTARY 40628-K



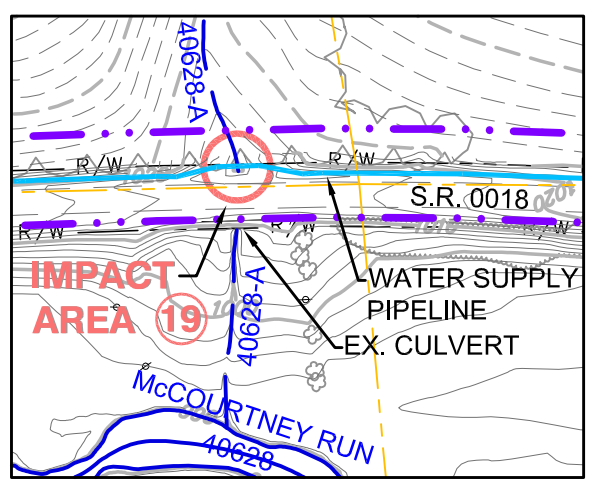
IMPACT 19.e - TRIBUTARY 40630



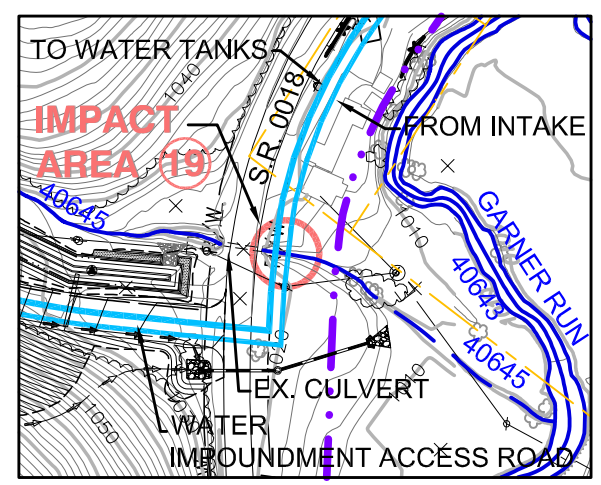
IMPACT 19.h - TRIBUTARY 40628-UNT11



IMPACT 19.c - TRIBUTARY 40629



IMPACT 19.f - TRIBUTARY 40628-A



IMPACT 19.j - TRIBUTARY 40645

LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4–9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

- WATER PIPELINE STREAM CROSSING – TRENCHING METHOD

SEE FIGURE 4–6–3B.2 SHEET 24 FOR STREAM CROSSING DETAILS, GENERAL NOTES AND BYPASS PUMPING DETAIL.

150 0 150
SCALE IN FEET

N

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC

FIGURE 4-6-3B.1
IMPACT AREA No. 19
WATER PIPELINE

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370
SCALE:
ft DATUM: NAD 27 PA-SOUTH
DRAWING NO: 23 OF 38

August 22, 2011 10:19:15 a.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 19B-TRENCH.DWG

GENERAL NOTES AND CONDITIONS

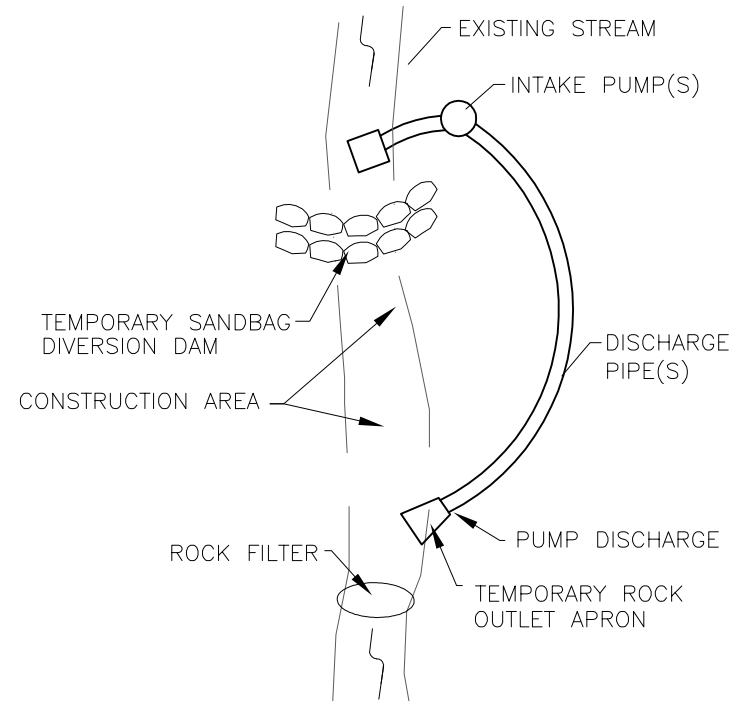
1. DURING CONSTRUCTION ACTIVITIES, ALL PUBLIC AND PRIVATE PROPERTY INCLUDING EXISTING VEGETATION, LANDSCAPE FEATURES AND MONUMENTS WITHIN, ALONG AND ADJACENT TO THE WORK AREA, SHALL BE PROTECTED AND PRESERVED TO THE MAXIMUM DEGREE POSSIBLE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, PRECAUTIONS TAKEN TO MINIMIZE DAMAGE, EROSION, INJURY, OR DESTRUCTION; PREVENT POLLUTION; PROVIDE PROTECTION OF ALL TREES AND OTHER WOODY PLANTS; SPECIAL CARE BEING TAKEN TO PROTECT THE NATURAL VEGETATION AND SURROUNDINGS TO INCLUDE ALL NATURAL DRAINAGEWAYS, PONDS, WETLANDS, STREAMS, WOODS, AND FIELDS; AND STORAGE OF MATERIALS IN SUCH MANNER TO PREVENT LEACHING WHICH WOULD BE INJURIOUS TO SOILS AND PLANTS. PRECAUTIONS SHOULD BE TAKEN TO PREVENT DAMAGE TO PIPES, CONDUITS AND OTHER UNDERGROUND STRUCTURES.

2. THE WATER LINE UNDER THE STREAMBED SHALL BE LOCATED SUCH THAT THERE WILL BE A MINIMUM OF THREE FEET OF COVER BETWEEN THE TOP OF THE STEEL CASING PIPE AND THE LOWEST POINT IN THE NATURAL CONTOUR OF THE STREAMBED.

3. PRIOR TO TRENCH EXCAVATION, STREAM FLOW WILL BE DIVERTED AS REQUIRED IN ACCORDANCE WITH THE DETAIL ON THIS SHEET.

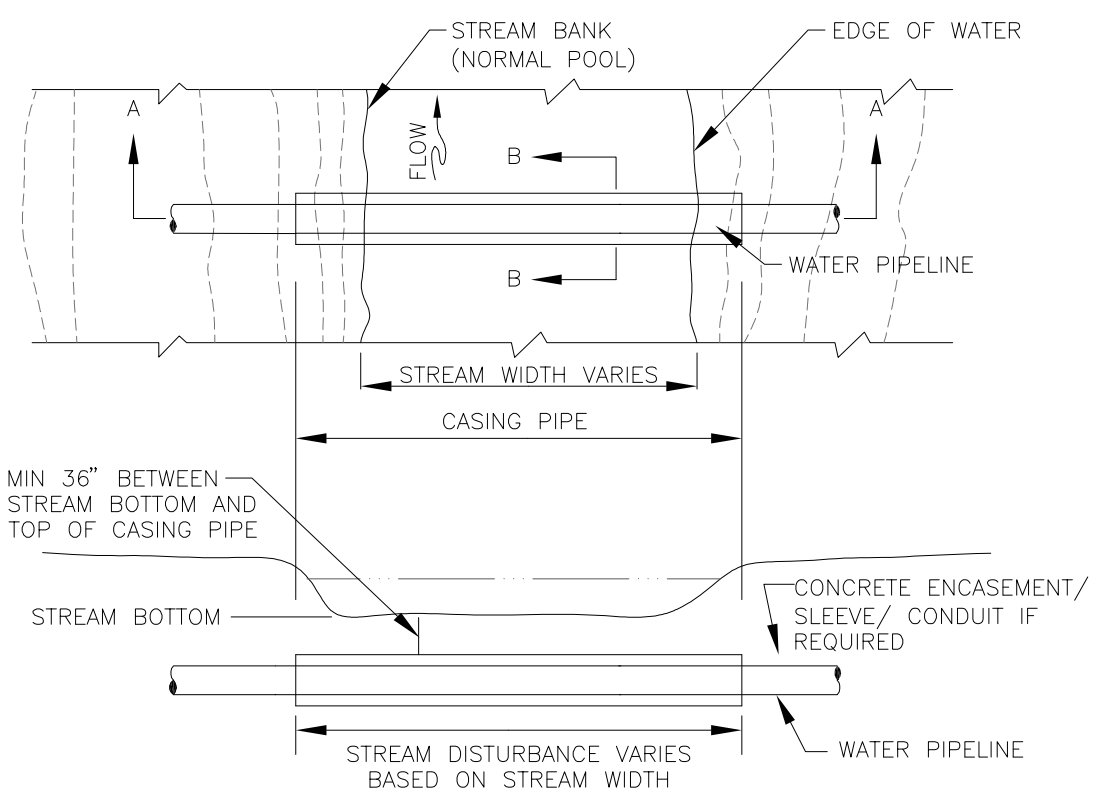
4. TRENCH EXCAVATED WITHIN 100 FEET OF TRIBUTARY. TRENCH IN THESE AREAS SHALL BE THE MINIMUM WIDTH NECESSARY. AS SOON AS THE WATER LINE IS INSTALLED BACKFILL SHALL BE PLACED IN THE TRENCH AND REVEGETATED TO STABILIZE AND RESTORE THE DISTURBED AREA TO ITS ORIGINAL CONDITION AND ELEVATION.

5. ADEQUATE MEASURES SHALL BE USED TO PREVENT SEDIMENT FROM THE TRENCH FROM ENTERING EXISTING STREAMS AND WATERWAYS. ALL SOIL STOCKPILES SHALL BE SURROUNDED BY SILT FENCE.



TEMPORARY PUMP BYPASS

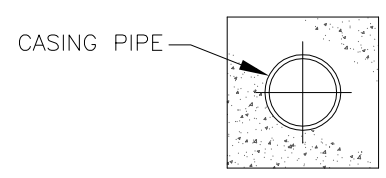
N.T.S.



SECTION A-A

WATER LINE STREAM CROSSING TRENCH

N.T.S.



SECTION B-B CONCRETE ENCASEMENT

ENCASEMENT IN ACCORDANCE WITH ENGINEERING STANDARD

PREPARED BY:

Baker

Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC

FIGURE 4-6-3B.2
IMPACT AREA No. 19
WATER PIPELINE

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

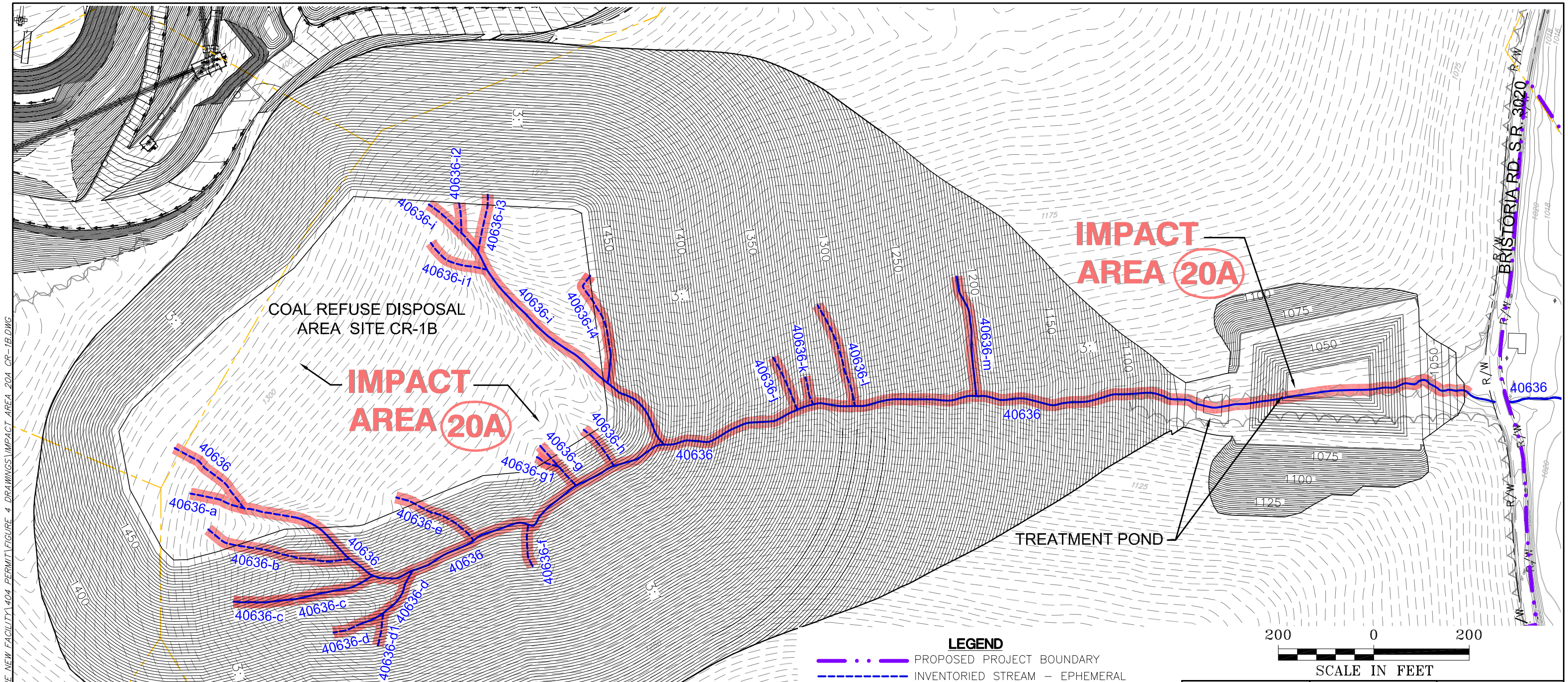
ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370

SCALE:

ft DATUM: NAD 27 PA-SOUTH

DRAWING NO: 24 OF 38

August 22, 2011 10:19:15 a.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 19B-TRENCH.DWG



LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4–9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC

FIGURE 4-7-1
IMPACT AREA 20A
COARSE REFUSE DISPOSAL AREA CR-1B

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370
SCALE:
ft DATUM: NAD 27 PA-SOUTH
DRAWING NO: 25 OF 38

July 25, 2011 1:24:58 p.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 20A CR-1B.DWG

MATCHLINE - SEE FIGURE 4-7-2B

MATCHLINE - SEE FIGURE 4-7-2C

WETLAND: R3-1

IMPACT AREA 20B

WETLAND: R3-2

WETLAND: R3-3

EXISTING CULVERT

COAL REFUSE DISPOSAL AREA R-3

IMPACT AREA 20B

EXISTING CULVERT

HOGE RUN

COAL REFUSE DISPOSAL AREA R-3 EMBANKMENT

IMPACT AREA 20B

WETLAND: F-19

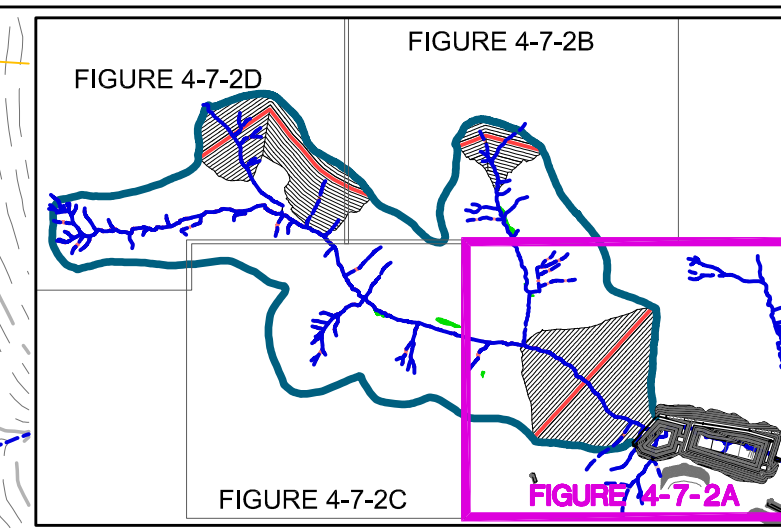
IMPACT AREA 20B

IMPACT AREA 20B

IMPACT AREA 20B

PREVIOUS IMPACT AREAS PRIOR TO REFUSE R3 POND CONSTRUCTION. REFER TO IMPACT AREA 10 ON FIGURE 4-1-10

40632-P
40632-P1a
40632-P1
40632-P1b
40632-P1c
40632-P1
40632-P
40632-PP
40632
40632-HH
40632-H
40632-HH
40632-GG
40632-AAA



MAP KEY
N.T.S.

LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4–9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

250 0 250
SCALE IN FEET

N

PREPARED BY:

Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC

FIGURE 4-7-2A
IMPACT AREA 20B
COAL REFUSE DISPOSAL AREA R-3

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

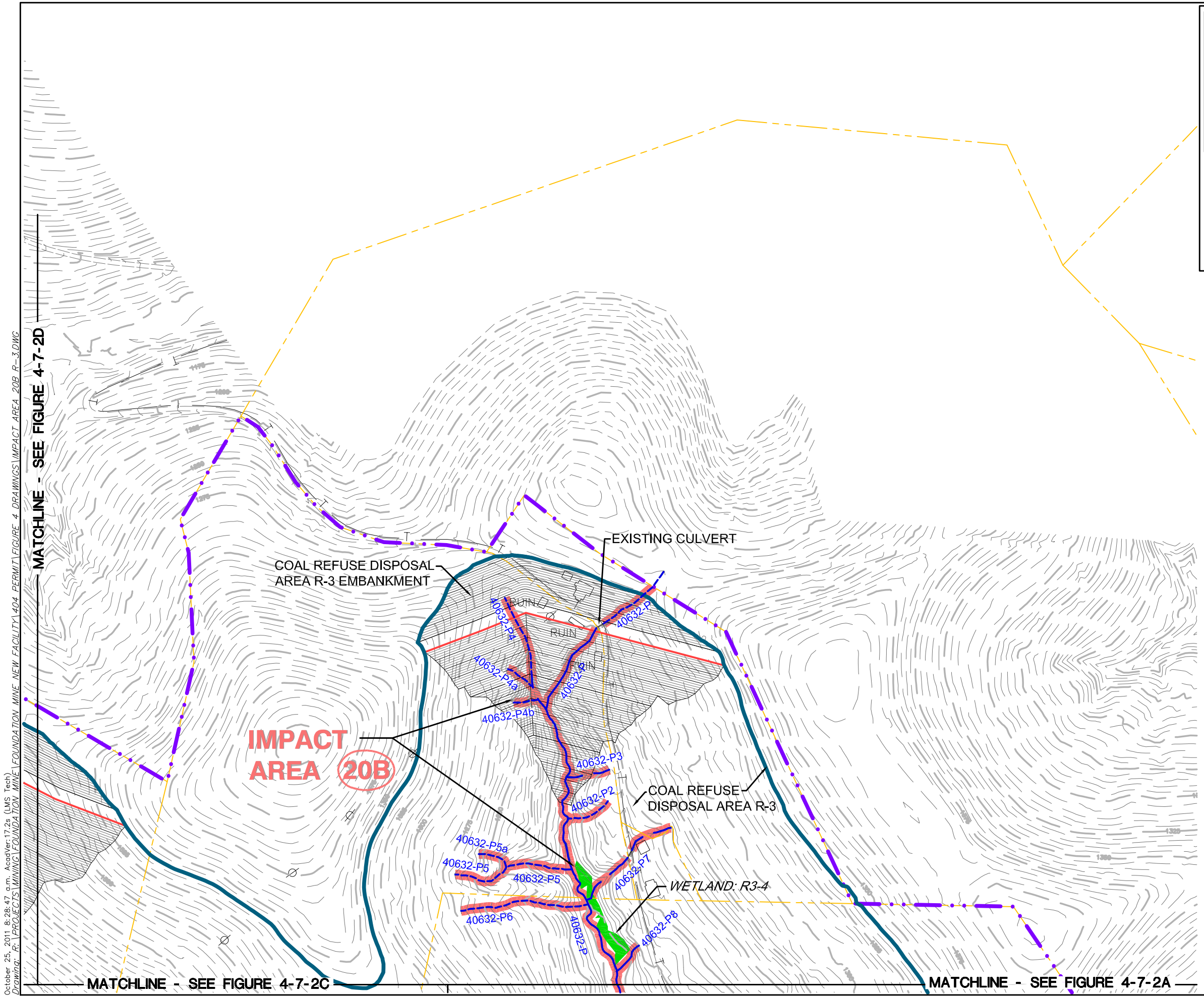
ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370

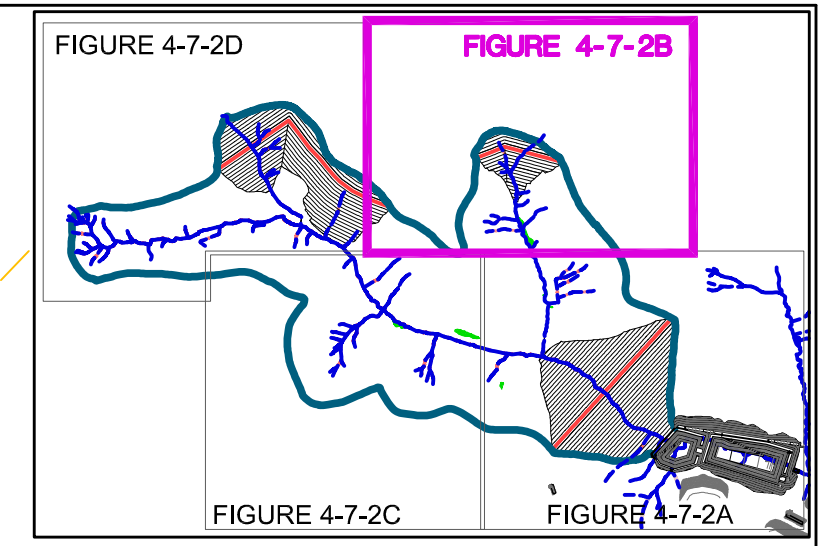
SCALE:

ft DATUM: NAD 27 PA-SOUTH

DRAWING NO: 26 OF 38

October 25, 2011 8:28:47 a.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 20B R-3.DWG





MAP KEY
N.T.S.

LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4–9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

250 0 250
SCALE IN FEET

N

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

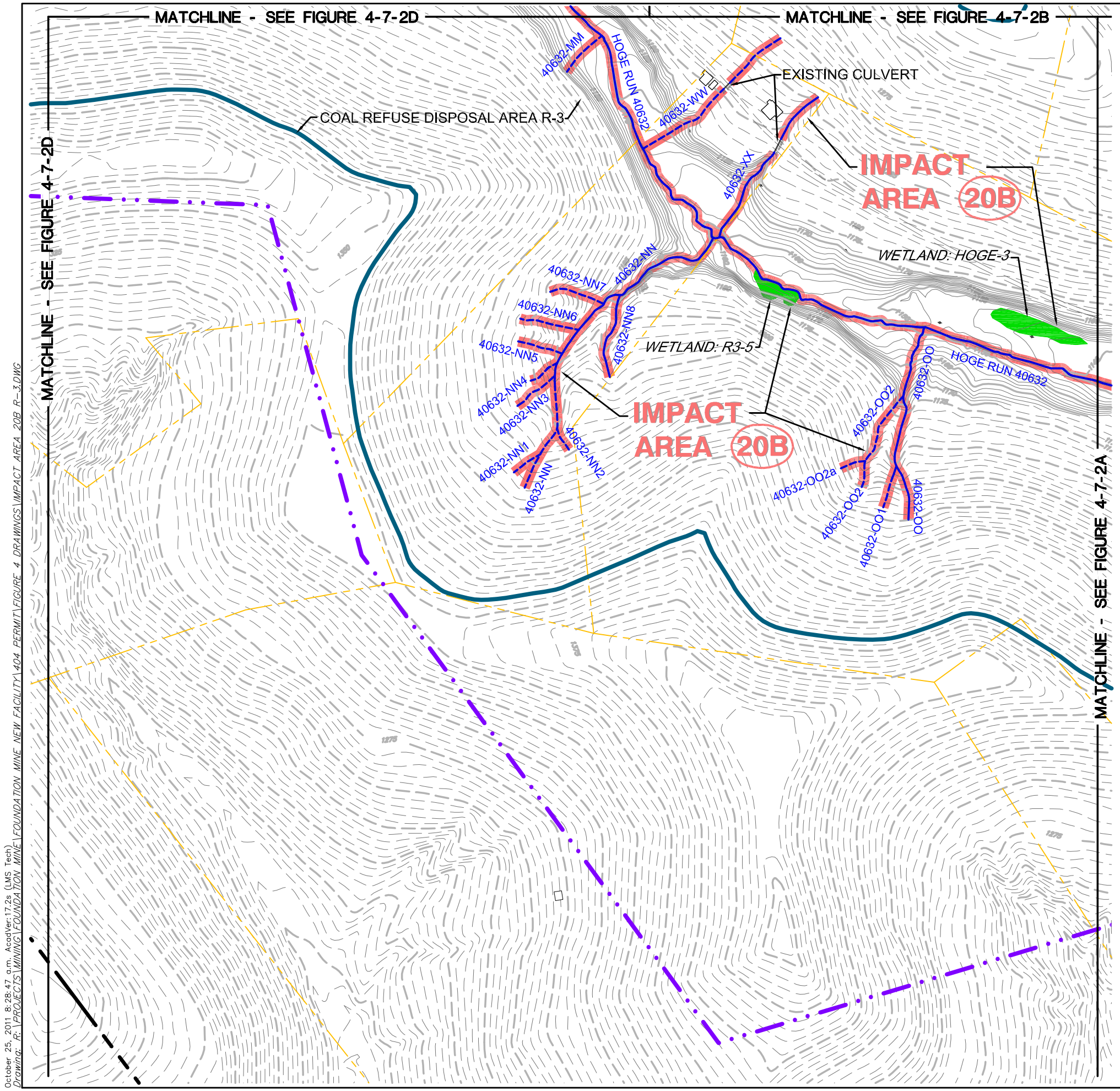
FOUNDATION MINING, LLC

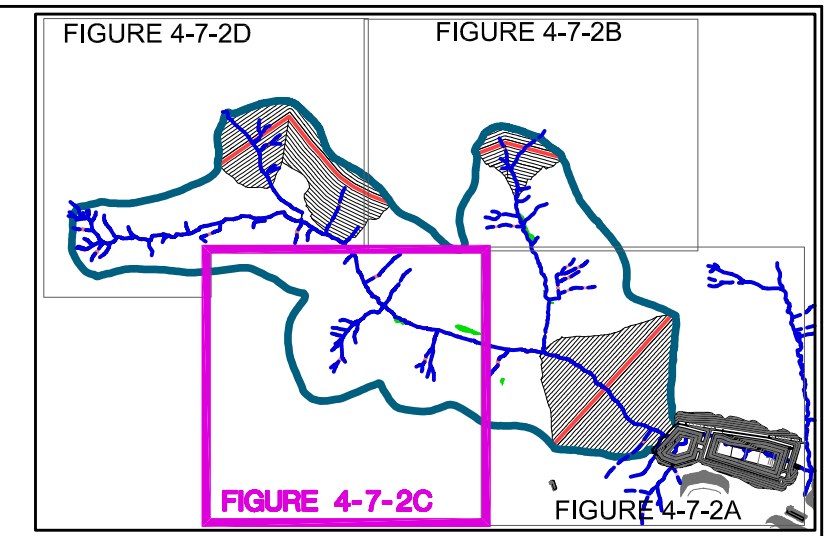
FIGURE 4-7-2B
IMPACT AREA 20B
COAL REFUSE DISPOSAL AREA R-3

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370
SCALE:
ft DATUM: NAD 27 PA-SOUTH
DRAWING NO: 27 OF 38

October 25, 2011 8:28:47 a.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 20B R-3.DWG





MAP KEY
N.T.S.

LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4–9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

250 0 250
SCALE IN FEET

N

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC

FIGURE 4-7-2C
IMPACT AREA 20B
COAL REFUSE DISPOSAL AREA R-3

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

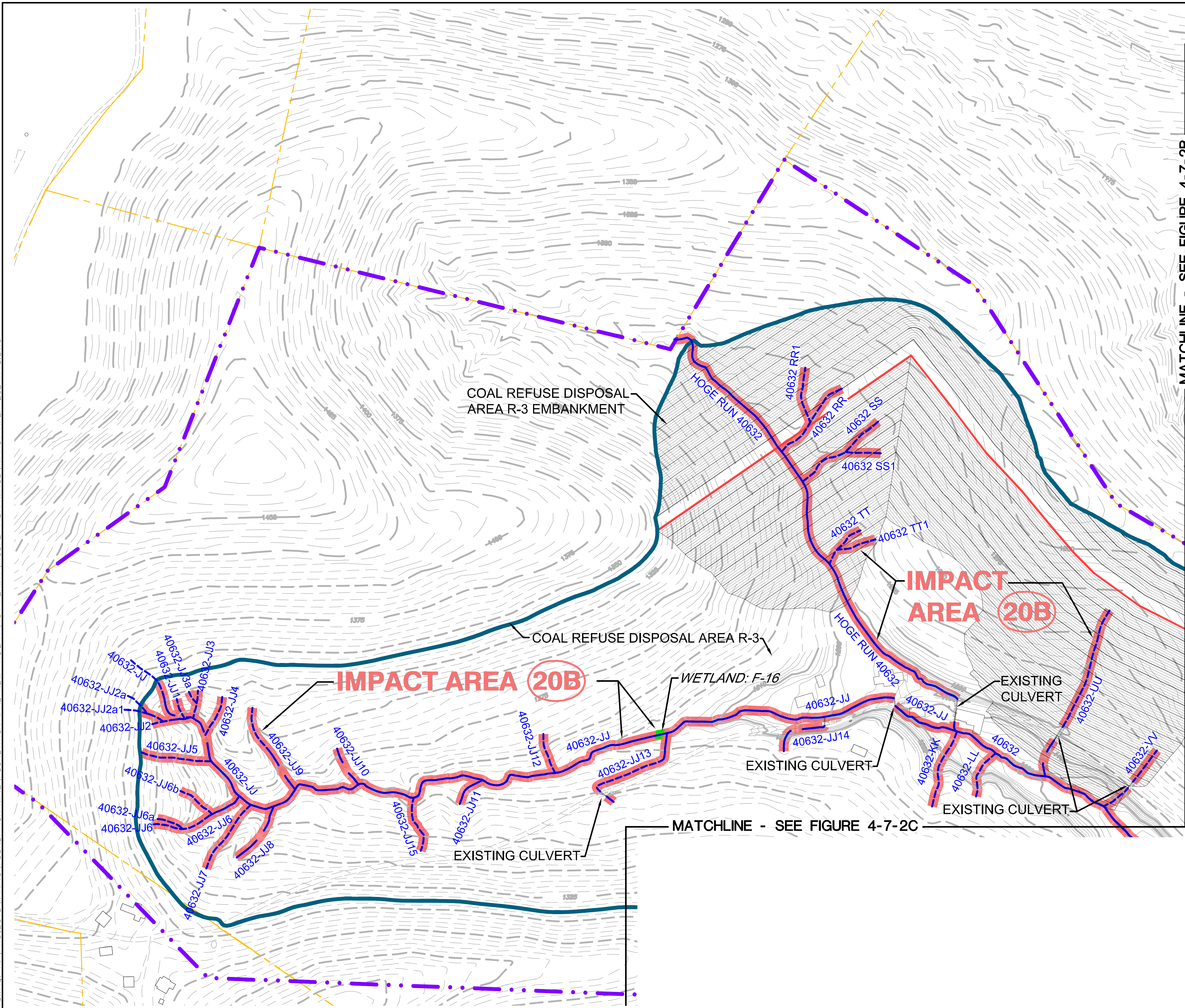
ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370

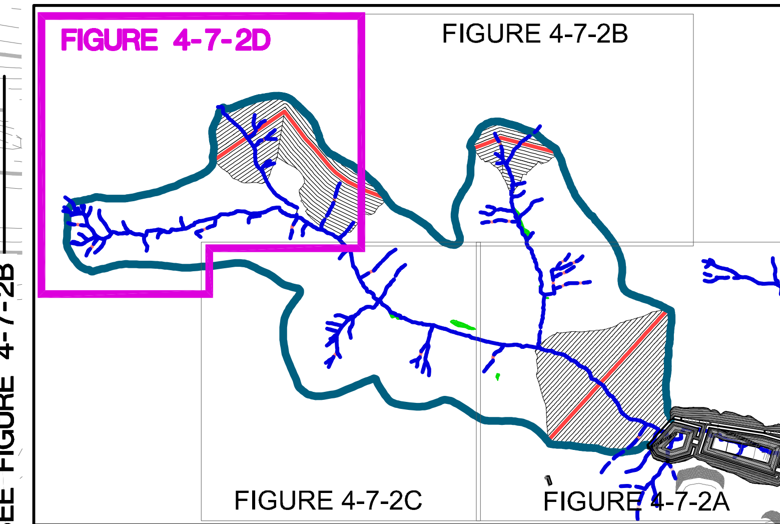
SCALE:

ft DATUM: NAD 27 PA-SOUTH

DRAWING NO: 28 OF 38

October 25, 2011 8:28:47 a.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 20B R-3.DWG





MAP KEY
N.T.S.

LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4-9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

250 0 250
SCALE IN FEET

N

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC

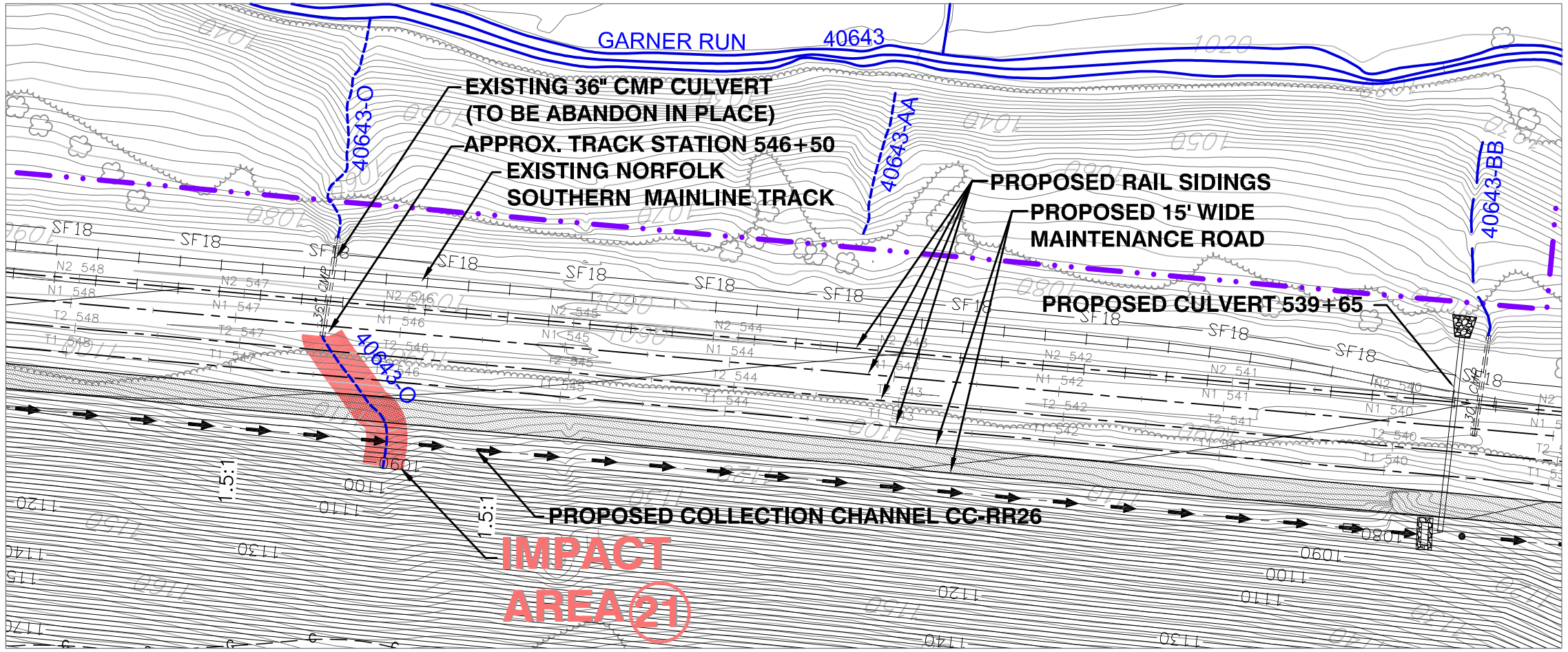
FIGURE 4-7-2D
IMPACT AREA 20B
COAL REFUSE DISPOSAL AREA R-3

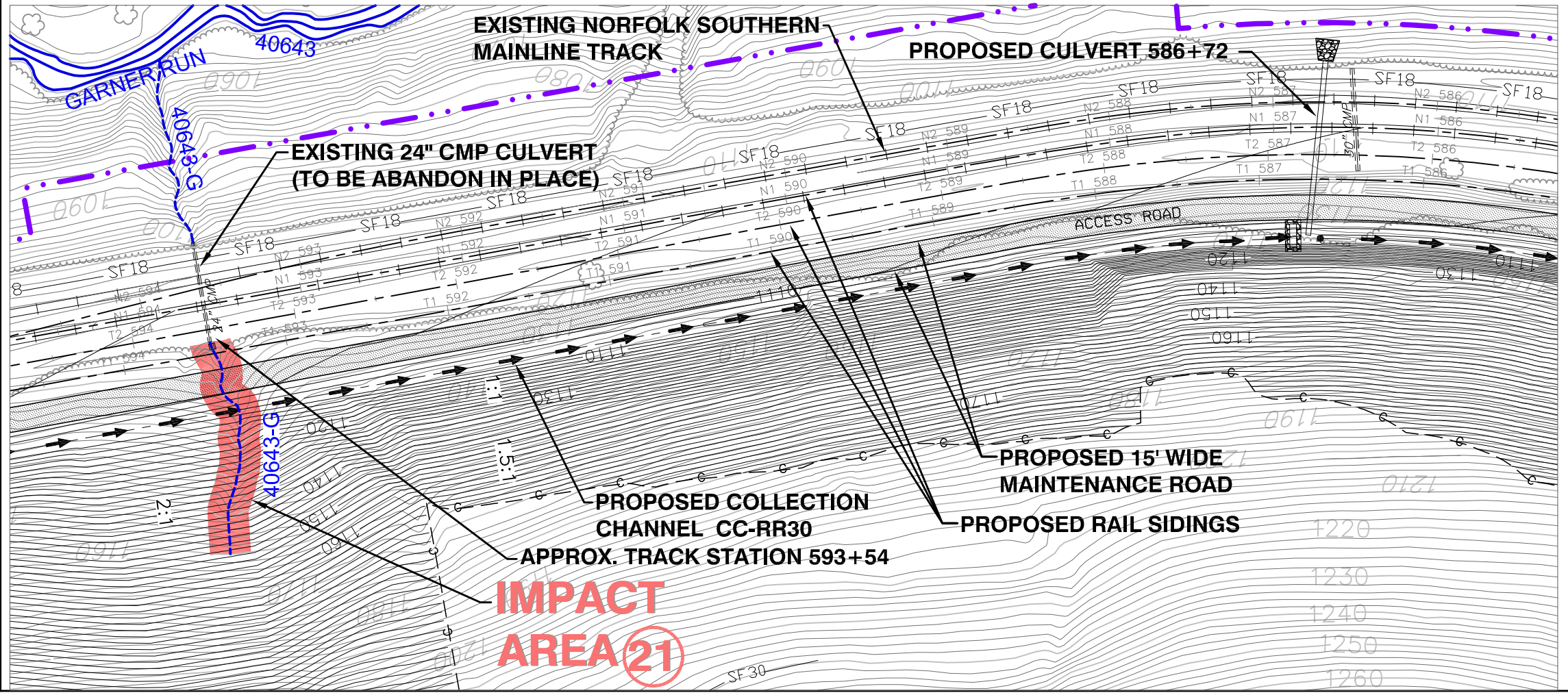
FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370

SCALE:

ft DATUM: NAD 27 PA-SOUTH
DRAWING NO: 29 OF 38





LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4-9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

80 0 80
SCALE IN FEET

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

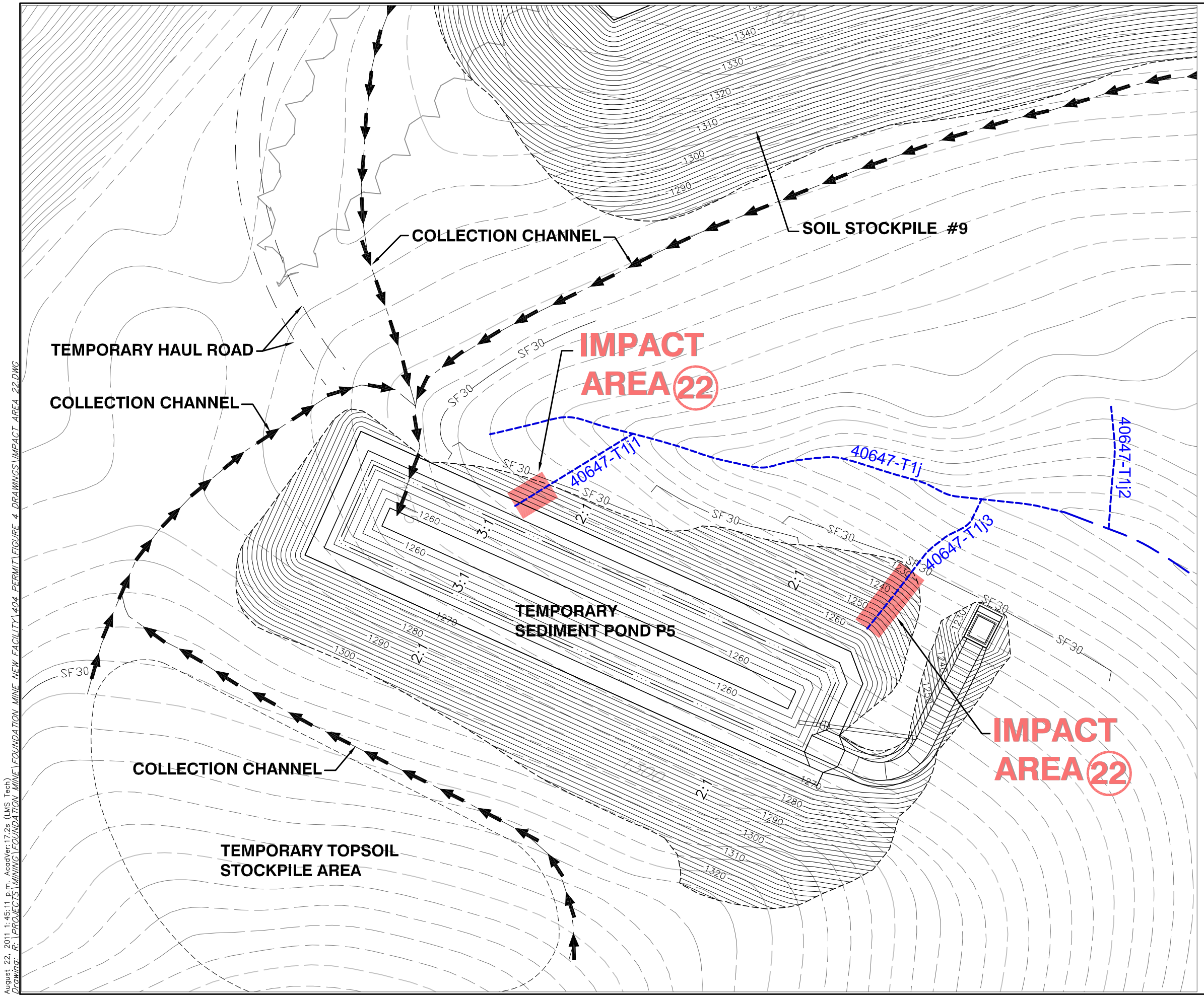
DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC
FIGURE 4-8-1
IMPACT AREA No. 21
RAILROAD TRACK SIDINGS
SOUTH OF THE BATCH WEIGH LOADOUT

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370
SCALE:
ft DATUM: NAD 27 PA-SOUTH
DRAWING NO: 30 OF 38

August 22, 2011 1:32:51 p.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 21.DWG



LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4–9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

80 0 80
SCALE IN FEET

N

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC
FIGURE 4-8-2
IMPACT AREA No. 22
RAILROAD TRACK SIDINGS
SOUTH OF THE BATCH WEIGH LOADOUT

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

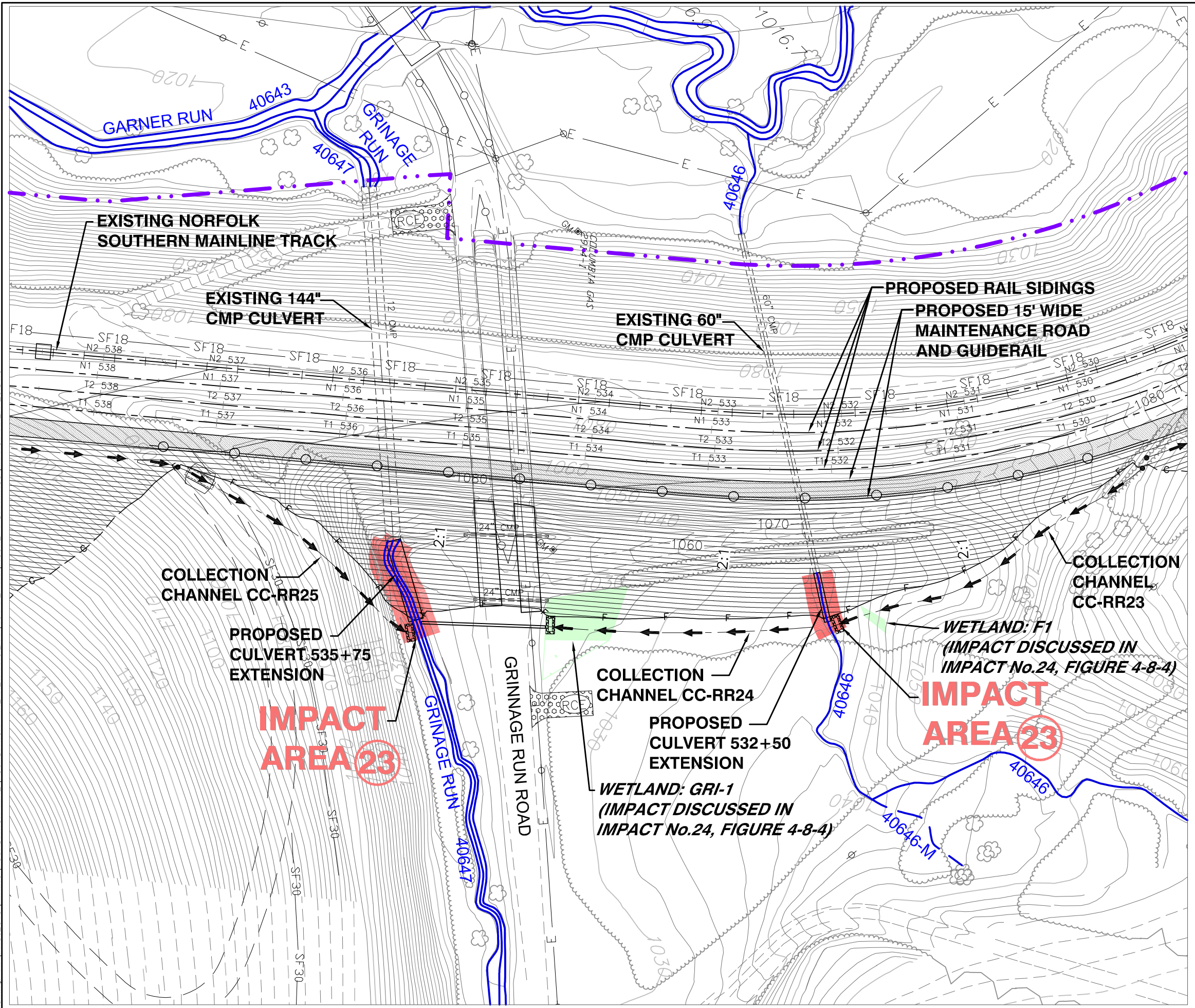
ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370

SCALE:

ft DATUM: NAD 27 PA-SOUTH

DRAWING NO: 31 OF 38

August 22, 2011 1:45:11 p.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 22.DWG



LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4-9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

80 0 80
SCALE IN FEET

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

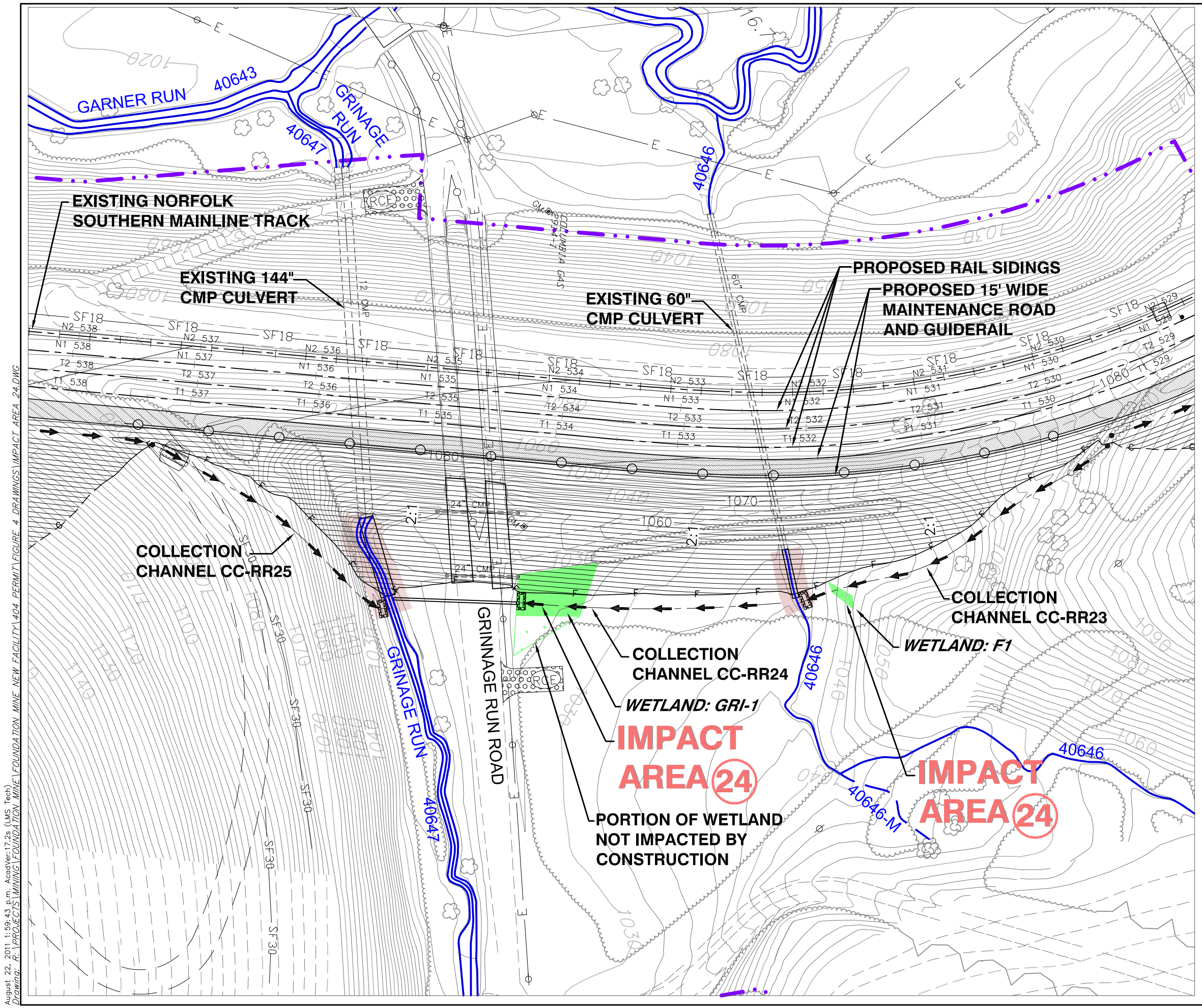
FOUNDATION MINING, LLC

FIGURE 4-8-3
IMPACT AREA No. 23
RAILROAD TRACK SIDINGS
SOUTH OF THE BATCH WEIGH LOADOUT

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370
SCALE:
ft DATUM: NAD 27 PA-SOUTH
DRAWING NO: 32 OF 38

August 22, 2011 1:59:53 p.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 23.DWG



LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4-9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

80 0 80
SCALE IN FEET

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC

FIGURE 4-8-4
IMPACT AREA No. 24
RAILROAD TRACK SIDINGS
SOUTH OF THE BATCH WEIGH LOADOUT

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

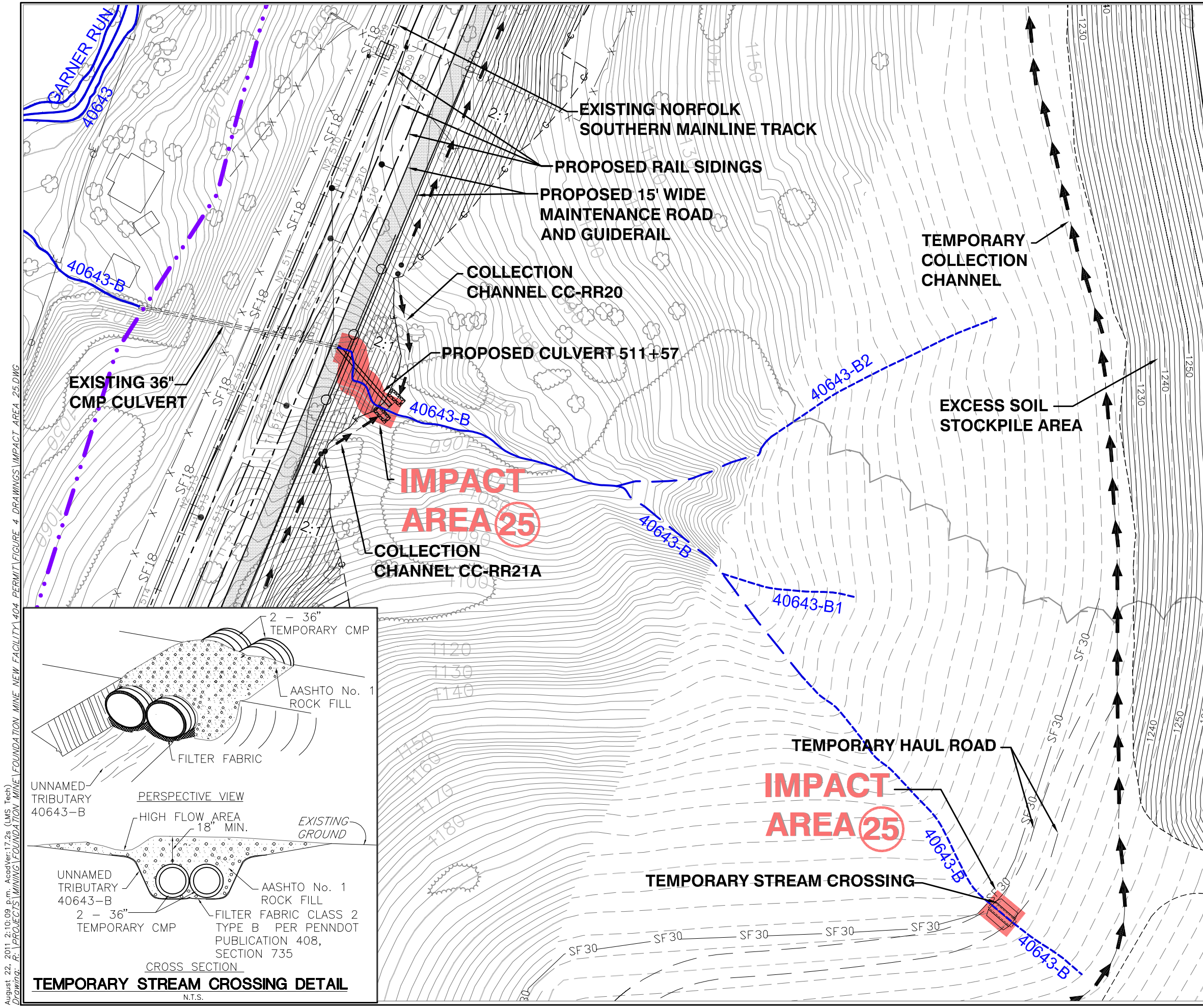
ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370

SCALE:

ft DATUM: NAD 27 PA-SOUTH

DRAWING NO: 33 OF 38

August 22, 2011 1:59:43 p.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 24.DWG



TEMPORARY STREAM CROSSING DETAIL

N.T.S.

LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4–9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

80 0 80
SCALE IN FEET

N

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC

FIGURE 4-8-5
IMPACT AREA No. 25
RAILROAD TRACK SIDINGS
SOUTH OF THE BATCH WEIGH LOADOUT

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

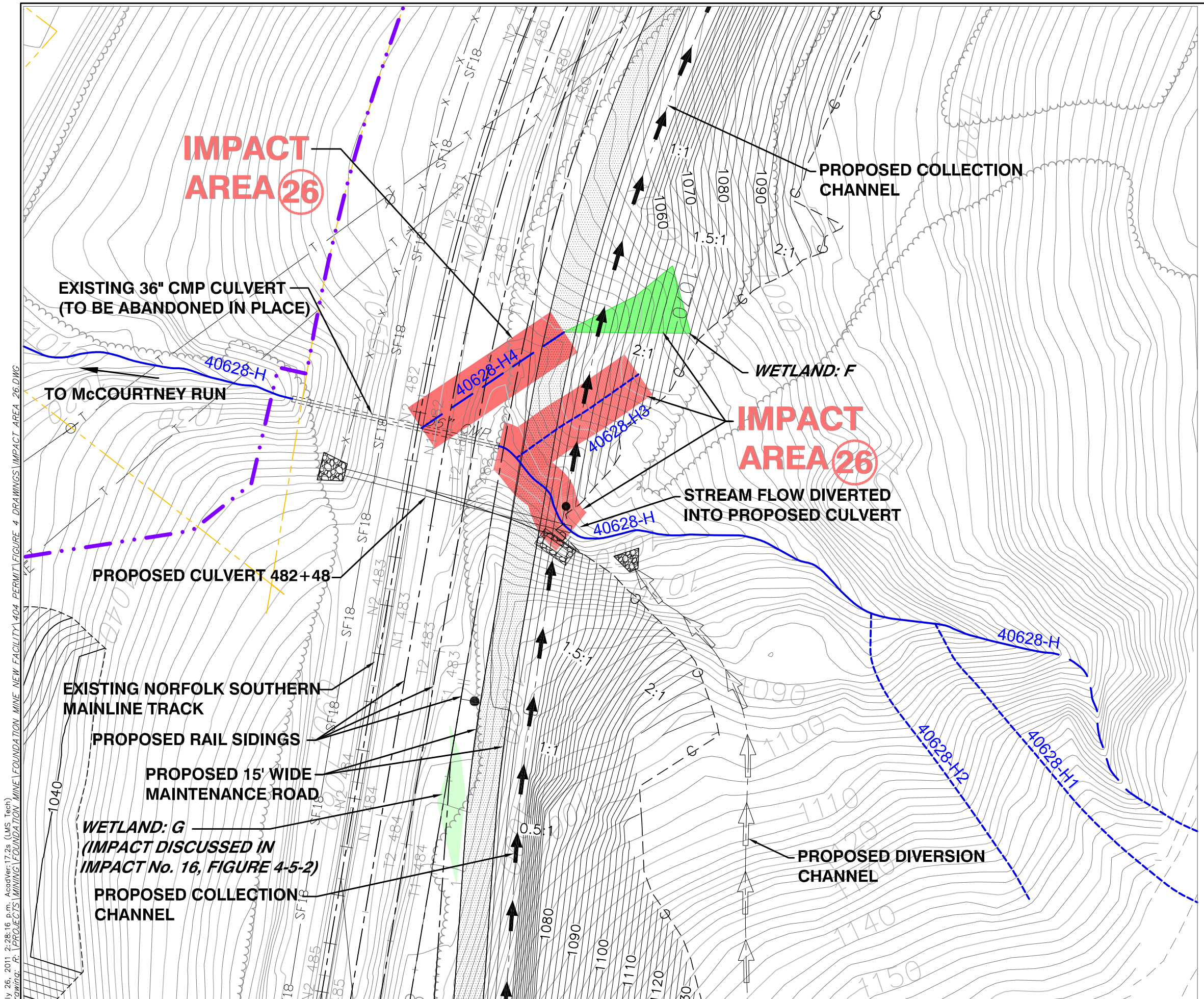
ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370

SCALE:

ft DATUM: NAD 27 PA-SOUTH

DRAWING NO: 34 OF 38

August 22, 2011 2:10:09 p.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 25.DWG



LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4-9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

50 0 50
SCALE IN FEET

N

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC
FIGURE 4-8-6
IMPACT AREA No. 26
RAILROAD TRACK SIDINGS
NORTH OF THE BATCH WEIGH LOADOUT

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370
SCALE:
ft DATUM: NAD 27 PA-SOUTH
DRAWING NO: 35 OF 38

July 26, 2011 2:28:16 p.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 26.DWG

McCOURTNEY RUN 40628

40628-UNT4

40628-UNT6

40631

40631-p

40628-UNT10

EXISTING 30" CMP CULVERT

EXISTING NORFOLK SOUTHERN MAINLINE TRACK

PROPOSED RAIL SIDINGS

EXISTING 30" CMP CULVERT

EXISTING 60" CMP CULVERT

EXISTING 54" CMP CULVERT

CULVERT 445+47 EXTENSION

COLLECTION CHANNEL CC-RR5A

IMPACT AREA 27

COLLECTION CHANNEL CC-RR6

PROPOSED 15' WIDE MAINTENANCE ROAD AND GUIDERAIL

COLLECTION CHANNEL CC-RR7

IMPACT AREA 27

COLLECTION CHANNEL CC-RR8

PROPOSED STORM SEWER (CULVERT) EXTENSION

MANHOLE MH-1

TEMPORARY SEDIMENT POND P1

COLLECTION CHANNEL CC-RR12

CULVERT 453+61 EXTENSION

IMPACT AREA 27

COLLECTION CHANNEL CC-RR10

COLLECTION CHANNEL CC-RR11

COLLECTION CHANNEL CC-RR9

CULVERT 451+10 EXTENSION

IMPACT AREA 27

LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4-9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

100 0 100
SCALE IN FEET

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN
DATE NAME
REVISED
APPROVED

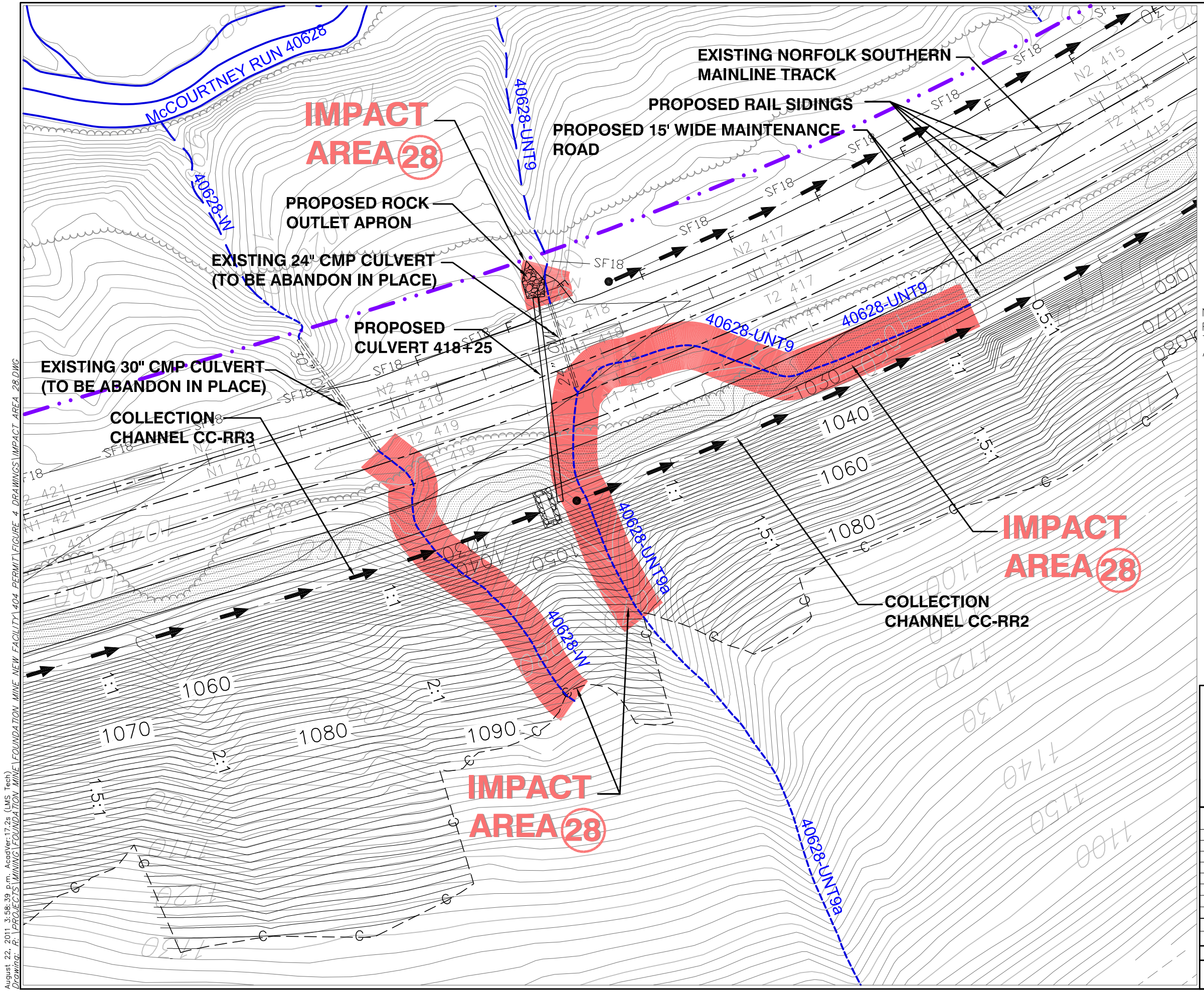
FOUNDATION MINING, LLC

FIGURE 4-8-7
IMPACT AREA 27
RAIL TRACK SIDINGS
NORTH OF THE BATCH WEIGH LOADOUT

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370
SCALE:
ft DATUM: NAD 27 PA-SOUTH
DRAWING NO: 36 OF 38

July 26, 2011 10:36:25 a.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 27.DWG



LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4–9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

50 0 50
SCALE IN FEET

N

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC

FIGURE 4-8-8
IMPACT AREA No. 28
RAILROAD TRACK SIDINGS
NORTH OF THE BATCH WEIGH LOADOUT

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

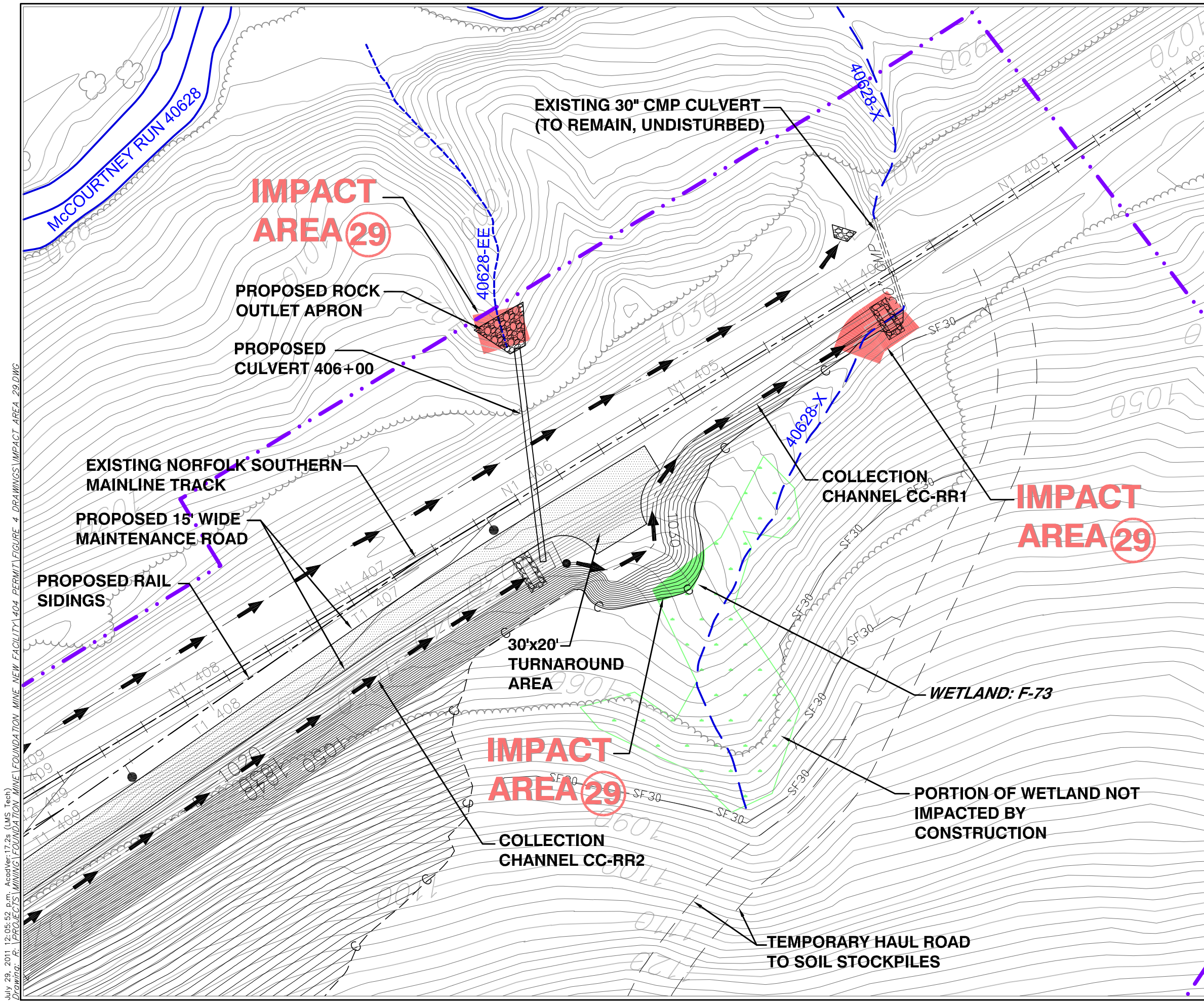
ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370

SCALE:

ft DATUM: NAD 27 PA-SOUTH

DRAWING NO: 37 OF 38

August 22, 2011 3:58:39 p.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 28.DWG



LEGEND

- PROPOSED PROJECT BOUNDARY
- INVENTORIED STREAM – EPHEMERAL
- INVENTORIED STREAM – INTERMITTENT
- INVENTORIED STREAM – PERENNIAL
- EXISTING WETLAND (NO IMPACT)
- IMPACTED WETLAND (CURRENT IMPACT AREA)
- IMPACTED WETLAND (NOT DISCUSSED ON THIS FIGURE)
- IMPACTED STREAM SEGMENT (CURRENT IMPACT AREA)
- IMPACTED STREAM SEGMENT (NOT DISCUSSED ON THIS FIGURE)
- (1) IMPACT AREA NUMBER
- SSF — SUPER SILT FENCE
- 18SF — 18" SILT FENCE
- 30SF — 30" SILT FENCE

NOTE:
FOR IMPACTED STREAM CUT AND/OR FILL INFORMATION, REFER TO FIGURE 4–9 FOR STREAM INVERT PROFILES WHICH DETAIL AND QUANTIFY THE TYPE OF IMPACT.

50 0 50
SCALE IN FEET

N

PREPARED BY:
Baker
Michael Baker Jr., Inc.
A Unit of Michael Baker Corporation
4301 Dutch Ridge Rd.
Beaver, Pennsylvania 15009

DRAWN	
DATE	NAME
REVISED	
APPROVED	

FOUNDATION MINING, LLC
FIGURE 4-8-9
IMPACT AREA No. 29
RAILROAD TRACK SIDINGS
NORTH OF THE BATCH WEIGH LOADOUT

FOUNDATION MINE - 404 APPLICATION
CENTER & JACKSON TOWNSHIPS
GREENE COUNTY, PENNSYLVANIA

ADDRESS: 158 PORTAL ROAD, P.O. BOX 1020, WAYNESBURG, 15370
SCALE:
ft DATUM: NAD 27 PA-SOUTH
DRAWING NO: 38 OF 38

July 29, 2011 12:05:52 p.m. AcadVer:17.2s (LMS Tech)
Drawing: R:\PROJECTS\MINING\FOUNDATION MINE\FOUNDATION MINE NEW FACILITY\404 PERMIT\FIGURE 4 DRAWINGS\IMPACT AREA 29.DWG