

MATCHLINE - SEE SHEET 7

FILE: H:\P13058\DWG13058_DESIGN REVISED.DWG - 7/28/2016

ST. LOUIS
720 Olive, Suite 1860
St. Louis, MO 63101
tel: 314-588-6381

BELLEVILLE
20 E. Main Street
Belleville, IL 62220
tel: 618-416-4888

COLLINSVILLE
100 Lanier Court, Suite 1
Collinsville, IL 62234
tel: 618-345-2200

www.atesassociates.com



REVISIONS:
09-06-2013

DIVISION OF SOIL CONSERVATION
IOWA DEPARTMENT OF AGRICULTURE
AND LAND STEWARDSHIP
HENRY A. WALLACE BUILDING
502 E. 9th STREET, DES MOINES, IOWA 50319
(515)281-4246



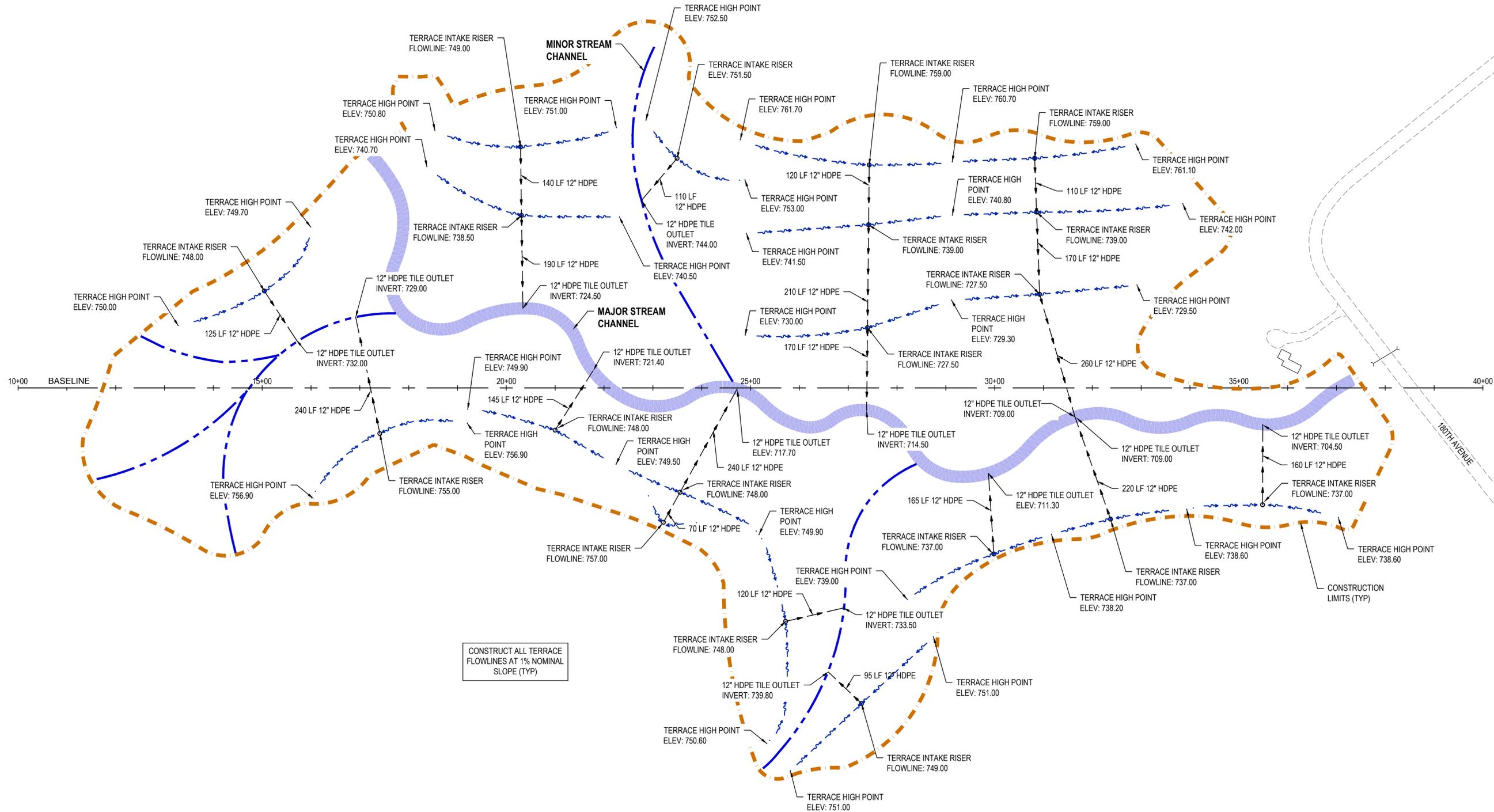
DESIGN BY: TGV
CHKD. BY: AJG
ISSUED:

DRAWN BY: SW3

**LARKIN
AML RECLAMATION PROJECT**

CUT / FILL PLAN

SHEET
8 OF **18**



DESIGN BY: TGV DRAWN BY: SW3 CHECKED BY: AJG ISSUED: 09-06-2013 REVISED: FILE: H:\P\13058\DWG\13058_DESIGN REVISED.DWG - 7/28/2016

LARKIN
AML RECLAMATION PROJECT
DRAINAGE AND TERRACE PLAN

CONSTRUCTION LIMITS (TYP)

100TH AVENUE

10+00 BASELINE 15+00 20+00 25+00 30+00 35+00 40+00

MINOR STREAM CHANNEL

MAJOR STREAM CHANNEL

TERRACE HIGH POINT ELEV: 750.80

TERRACE INTAKE RISER FLOWLINE: 749.00

140 LF 12" HDPE

12" HDPE TILE OUTLET INVERT: 729.00

TERRACE HIGH POINT ELEV: 751.00

TERRACE INTAKE RISER ELEV: 751.50

TERRACE HIGH POINT ELEV: 761.70

TERRACE INTAKE RISER FLOWLINE: 759.00

TERRACE HIGH POINT ELEV: 760.70

TERRACE INTAKE RISER FLOWLINE: 759.00

TERRACE HIGH POINT ELEV: 761.10

TERRACE HIGH POINT ELEV: 740.70

TERRACE INTAKE RISER FLOWLINE: 739.00

TERRACE HIGH POINT ELEV: 742.00

TERRACE INTAKE RISER FLOWLINE: 739.00

TERRACE HIGH POINT ELEV: 749.70

TERRACE INTAKE RISER FLOWLINE: 748.00

125 LF 12" HDPE

12" HDPE TILE OUTLET INVERT: 732.00

TERRACE HIGH POINT ELEV: 750.00

190 LF 12" HDPE

12" HDPE TILE OUTLET INVERT: 724.50

TERRACE HIGH POINT ELEV: 740.50

110 LF 12" HDPE

12" HDPE TILE OUTLET INVERT: 744.00

TERRACE HIGH POINT ELEV: 741.50

TERRACE INTAKE RISER FLOWLINE: 739.00

TERRACE HIGH POINT ELEV: 740.80

110 LF 12" HDPE

TERRACE INTAKE RISER FLOWLINE: 739.00

170 LF 12" HDPE

TERRACE HIGH POINT ELEV: 729.50

210 LF 12" HDPE

TERRACE INTAKE RISER FLOWLINE: 727.50

TERRACE HIGH POINT ELEV: 729.30

TERRACE INTAKE RISER FLOWLINE: 727.50

TERRACE HIGH POINT ELEV: 729.50

170 LF 12" HDPE

260 LF 12" HDPE

12" HDPE TILE OUTLET INVERT: 709.00

TERRACE INTAKE RISER FLOWLINE: 727.50

TERRACE HIGH POINT ELEV: 729.50

12" HDPE TILE OUTLET INVERT: 714.50

12" HDPE TILE OUTLET INVERT: 709.00

12" HDPE TILE OUTLET INVERT: 704.50

160 LF 12" HDPE

12" HDPE TILE OUTLET INVERT: 704.50

TERRACE INTAKE RISER FLOWLINE: 737.00

TERRACE HIGH POINT ELEV: 756.90

TERRACE INTAKE RISER FLOWLINE: 755.00

TERRACE HIGH POINT ELEV: 749.90

240 LF 12" HDPE

TERRACE INTAKE RISER FLOWLINE: 748.00

TERRACE HIGH POINT ELEV: 749.90

240 LF 12" HDPE

TERRACE INTAKE RISER FLOWLINE: 748.00

TERRACE HIGH POINT ELEV: 749.50

70 LF 12" HDPE

TERRACE INTAKE RISER FLOWLINE: 748.00

TERRACE HIGH POINT ELEV: 749.90

165 LF 12" HDPE

12" HDPE TILE OUTLET ELEV: 711.30

220 LF 12" HDPE

TERRACE INTAKE RISER FLOWLINE: 737.00

TERRACE HIGH POINT ELEV: 738.60

TERRACE INTAKE RISER FLOWLINE: 737.00

TERRACE HIGH POINT ELEV: 738.20

TERRACE HIGH POINT ELEV: 738.60

12" HDPE TILE OUTLET INVERT: 733.50

95 LF 12" HDPE

TERRACE HIGH POINT ELEV: 751.00

TERRACE INTAKE RISER FLOWLINE: 749.00

TERRACE HIGH POINT ELEV: 750.60

TERRACE INTAKE RISER FLOWLINE: 748.00

120 LF 12" HDPE

TERRACE HIGH POINT ELEV: 739.00

12" HDPE TILE OUTLET INVERT: 739.80

TERRACE INTAKE RISER FLOWLINE: 748.00

TERRACE HIGH POINT ELEV: 751.00

TERRACE INTAKE RISER FLOWLINE: 749.00

TERRACE HIGH POINT ELEV: 751.00

CHOKESBERRY ASSOCIATES
 Engineering & Architecture

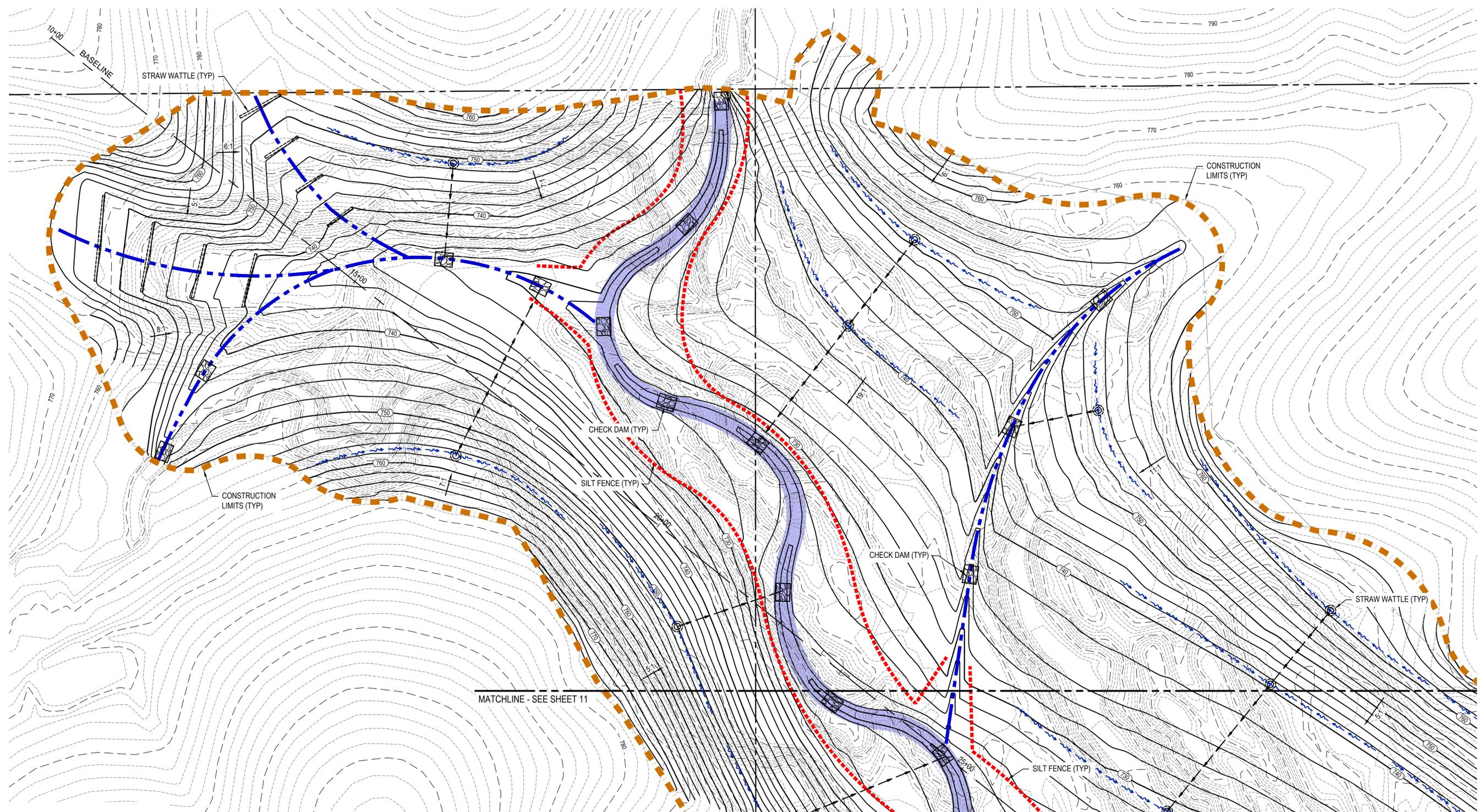
ST. LOUIS
 720 Olive, Suite 1860
 St. Louis, MO 63101
 tel: 314-588-6381

BELLEVILLE
 20 E. Main Street
 Belleville, IL 62220
 tel: 618-416-4686

COLLINSVILLE
 100 Lanier Court, Suite 1
 Collinsville, IL 62234
 tel: 618-346-2200
 www.chokesberry.com

DIVISION OF SOIL CONSERVATION
 IOWA DEPARTMENT OF AGRICULTURE
 AND LAND STEWARDSHIP
 HENRY A. WALLACE BUILDING
 502 E. 9th STREET, DES MOINES, IOWA 50319
 (515)281-4246

IOWA DEPARTMENT OF AGRICULTURE AND LAND STEWARDSHIP



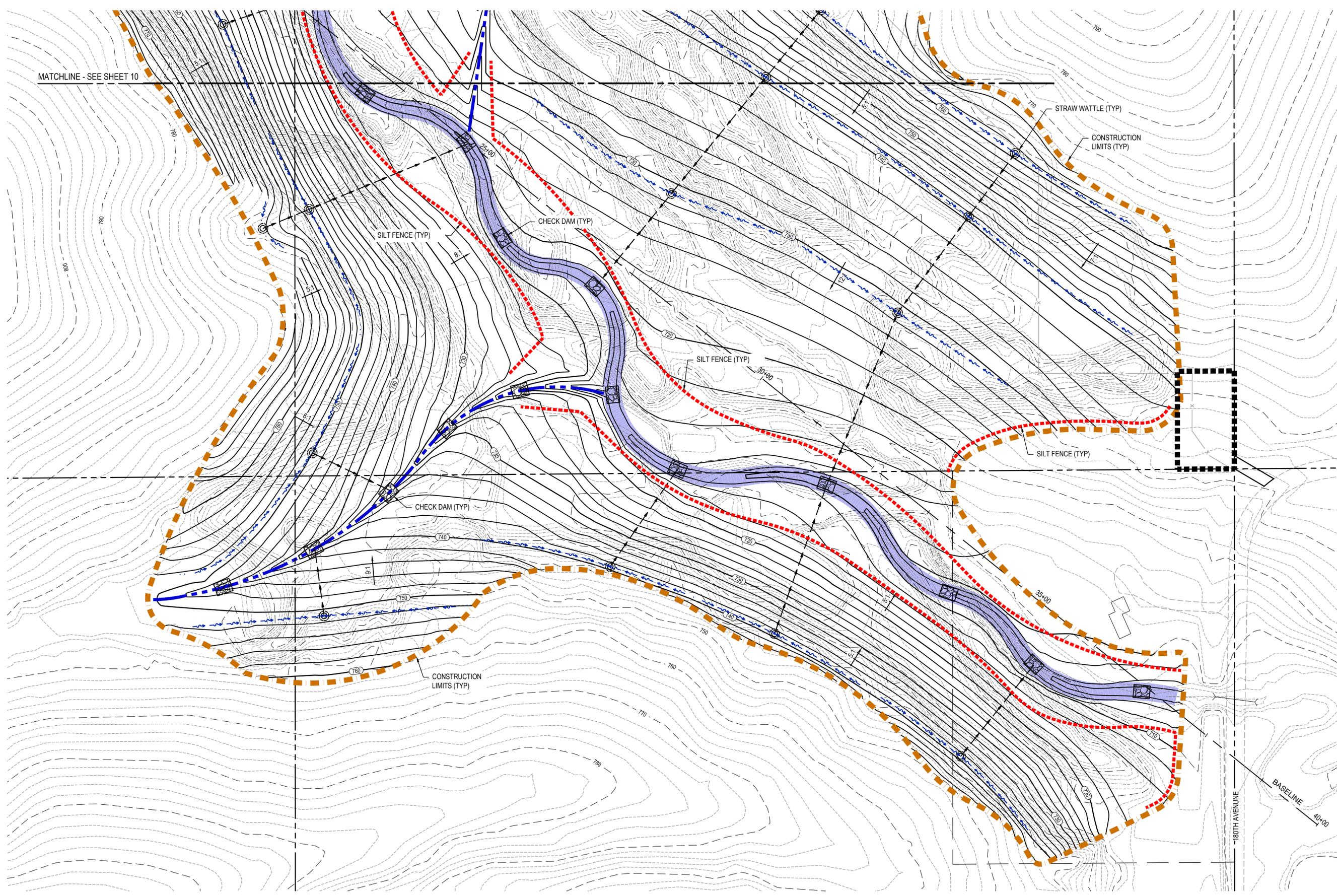
SWPPP NOTES

1. IN THE EVENT OF CONFLICT BETWEEN THESE REQUIREMENTS AND WATER POLLUTION CONTROL LAWS, RULES, AND REGULATIONS OF OTHER FEDERAL, STATE OR LOCAL AGENCIES, THE MORE RESTRICTIVE LAWS, RULES OR REGULATIONS SHALL APPLY.
2. CONSTRUCTION AND DEMOLITION WASTE MUST BE DISPOSED OF AT A PERMITTED SANITARY LANDFILL. NO CONSTRUCTION MATERIAL WASTE OR UNUSED MATERIALS SHALL BE BURNED, DUMPED, BURIED OR DISCHARGED AT THE SITE.
3. SANITARY WASTE GENERATED ON SITE SHALL BE TREATED AND DISPOSED OF ACCORDING TO FEDERAL, STATE, AND LOCAL REQUIREMENTS.
4. ON-SITE GRAVEL ENTRANCE SHALL SERVE AS VEHICLE TRACKING CONTROL. TRACKING ON THESE AREAS AS WELL AS ANY TRACKING THAT OCCURS OFF-SITE SHALL BE REMOVED DAILY.
5. WATER SHALL BE APPLIED TO THE SURFACE OF DISTURBED AREAS AS NECESSARY TO CONTROL DUST.
6. ALL EROSION CONTROL MEASURES TO REMAIN SHALL BE MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
7. THE CONTRACTOR IS RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF ALL MEASURES IDENTIFIED IN THE SWPPP AND AS REQUIRED BY ALL LAWS AND REGULATIONS.
8. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE ON PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED WITH THE EXCEPTION OF SNOW OR FROZEN GROUND CONDITIONS.
9. STRAW WATTLES SHALL BE PLACED AROUND EACH TERRACE INTAKE RISER AS SHOWN ON THE CONSTRUCTION DETAILS.
10. CONTROL MEASURES SHALL BE PROPERLY SELECTED, INSTALLED AND MAINTAINED.
11. MAINTENANCE SHALL BE PERFORMED PRIOR TO THE NEXT ANTICIPATED STORM EVENT.
12. REMOVE SEDIMENT FROM SEDIMENT TRAPS AND SILT FENCES WHEN DESIGN CAPACITY IS REDUCED BY 50% OR MORE.
13. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORM WATER SHALL BE PREVENTED FROM BECOMING A POLLUTANT SOURCE. (E.G. SCREENING OUTFALLS, PICKUP DAILY, ETC.)
14. A COPY OF THE SWPPP SHALL BE RETAINED ON SITE. PLANS SHALL BE KEPT IN A CONSTRUCTION TRAILER OR OTHER WEATHER PROTECTED ENCLOSURE SUCH AS A MAILBOX. A SIGN / NOTICE SHALL BE POSTED BY THE CONTRACTOR CONTAINING A COPY OF THE COMPLETE NOI AND LOCATION OF THE SWPPP.
15. THE CONTRACTOR SHALL NOTIFY THE DIVISION, IOWA DNR AND LOCAL POLICE DEPARTMENT OF ANY HAZARDOUS CONDITIONS AS SOON AS POSSIBLE BUT NOT MORE THAN SIX (6) HOURS AFTER THE ONSET OF HAZARDOUS CONDITIONS. HAZARDOUS CONDITIONS ARE DEFINED AS ANY SITUATION INVOLVING THE ACTUAL, IMMINENT, OR PROBABLE SPILLAGE, LEAKAGE, OR RELEASE OF A HAZARDOUS SUBSTANCE ONTO THE LAND, INTO THE WATER OF THE STATE, OR INTO THE ATMOSPHERE WHICH CREATES AN IMMEDIATE OR POTENTIAL DANGER TO PUBLIC HEALTH OR SAFETY OR TO THE ENVIRONMENT.
16. THE CONTRACTOR IS RESPONSIBLE FOR INSPECTIONS ONCE EVERY SEVEN (7) DAYS AND WITHIN TWENTY-FOUR (24) HOURS FROM THE END OF A STORM PRODUCING 0.5 INCHES OR GREATER RAINFALL.
17. INSPECTIONS SHALL BE CONDUCTED BY QUALIFIED PERSONNEL.
18. INSPECTIONS SHALL INCLUDE:
 - A. AREAS DISTURBED BY CONSTRUCTION ACTIVITY OR USED FOR STORAGE OF MATERIALS WHICH ARE EXPOSED TO PRECIPITATION, SHALL BE OBSERVED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM.
 - B. POLLUTION CONTROL MEASURES SHALL BE OBSERVED TO ENSURE PROPER OPERATION.
 - C. ACCESSIBLE DRAINAGE LOCATIONS SHALL BE OBSERVED TO DETERMINE EFFECTIVENESS IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS.
 - D. LOCATIONS WHERE VEHICLES ENTER / EXIT THE SITE SHALL BE OBSERVED FOR EVIDENCE OF OFF-SITE TRACKING.
19. SITE INSPECTION REPORTS SHALL INCLUDE:
 - A. DATE
 - B. NAME AND QUALIFICATIONS OF INSPECTOR
 - C. WEATHER INFORMATION
 - D. LOCATION OF SEDIMENT / POLLUTANT DISCHARGE
 - E. BMP(S) REQUIRING MAINTENANCE
 - F. BMP(S) THAT HAVE FAILED
 - G. BMP(S) THAT ARE NEEDED
 - H. CORRECTIVE ACTION REQUIRED, INCLUDING CHANGES / UPDATES TO SWPPP AND SCHEDULE / DATES
20. INSPECTION REPORTS SHALL BE PROPERLY SIGNED AND CERTIFIED.
21. SWPPP SHALL BE UPDATED / MODIFIED TO REFLECT CHANGES AT THE SITE AFFECTING DISCHARGE, OR WHERE INSPECTIONS IDENTIFY SWPPP / BMP(S) AS INEFFECTIVE. UPDATES TO THE SWPPP REGARDING MODIFICATIONS TO BMP(S) SHALL BE MADE WITHIN SEVEN (7) DAYS OF SUCH INSPECTIONS.
22. COPIES OF INSPECTION REPORTS SHALL BE RETAINED AS PART OF THE SWPPP FOR THREE (3) YEARS FROM THE DATE PERMIT COVERAGE TERMINATES.
23. THE CONTRACTOR SHALL RESPOND TO DNR INSPECTOR COMMENTS WITHIN 3 HOURS. RESPONSES SHALL BE RECORDED IN THE SWPPP BOOK.
24. THE SWPPP BOOK SHALL INCLUDE SIGNED CONTRACT CERTIFICATIONS STATEMENTS PREPARED BY THE ENGINEER AND SIGNED BY THE CONTRACTOR AND ALL SUBCONTRACTORS.
25. THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION SCHEDULE AT THE PRE-CONSTRUCTION MEETING. A COPY OF THIS SCHEDULE SHALL BE INCLUDED IN THE SWPPP BOOK.
26. THE CONTRACTOR SHALL DEVELOP WRITTEN, SPILL AND WASTE MANAGEMENT PROTOCOLS. A COPY OF THIS DOCUMENT SHALL BE INCLUDED IN THE SWPPP BOOK.
27. THE CONTRACTOR WILL NOT BE REQUIRED TO STRIP AND SALVAGE TOPSOIL ON THIS PROJECT. SOIL SHALL BE AMENDED ACCORDING TO SECTION 2400 OF THE CONSTRUCTION SPECIFICATIONS.

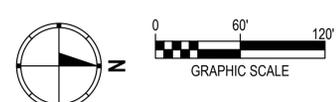


DESIGN BY: TGV	DRAWN BY: SW3	CHKD. BY: AJG	ISSUED: 09-06-2013	REVISED:	FILE: H:\P\13058\DWG\13058_DESIGN REVISED.DWG - 7/28/2016
LARKIN AML RECLAMATION PROJECT					
SWPPP					
SHEET 10 OF 18					
DIVISION OF SOIL CONSERVATION IOWA DEPARTMENT OF AGRICULTURE AND LAND STEWARDSHIP HENRY A. WALLACE BUILDING 502 E. 9th STREET, DES MOINES, IOWA 50319 (515)281-4246					
COLLINSVILLE 100 Lanier Court, Suite 1 Collinsville, IL 62224 tel: 618.345.2200 www.oatesassociates.com					
BELLEVILLE 720 Olive, Suite 1860 St. Louis, MO 63101 tel: 314.588.6381					

MATCHLINE - SEE SHEET 10



NOTE:
SEE SHEET 10 FOR STORM WATER
POLLUTION PREVENTION PLAN NOTES



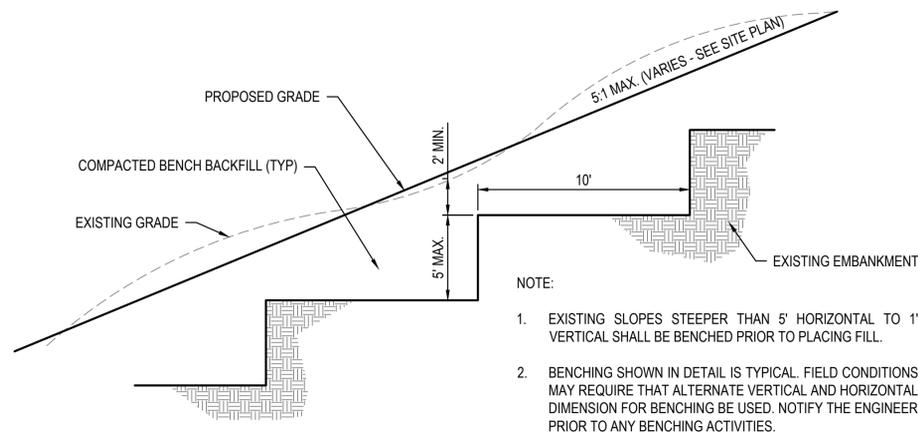
DESIGN BY: TGV DRAWN BY: SW3 CHKD. BY: AJG ISSUED: 09-06-2013 REVISED: FILE: H:\P\13058\DWG\13058_DESIGN REVISED.DWG - 7/28/2016

**LARKIN
AML RECLAMATION PROJECT**

SWPPP


 DIVISION OF SOIL CONSERVATION
 IOWA DEPARTMENT OF AGRICULTURE
 AND LAND STEWARDSHIP
 HENRY A. WALLACE BUILDING
 502 E. 9th STREET, DES MOINES, IOWA 50319
 (515)281-4246

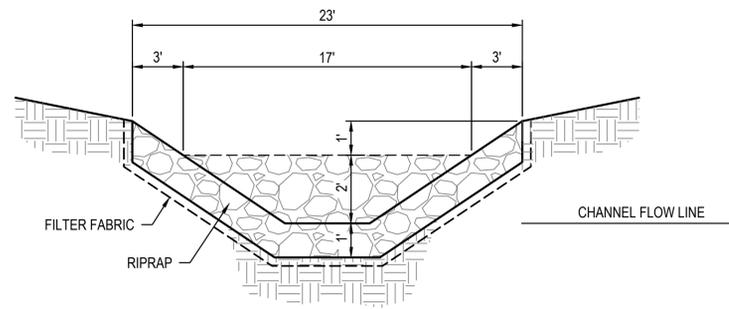

OATES ASSOCIATES
 Engineering + Architecture
 COLLINSVILLE
 100 Lanier Court, Suite 1
 Collinsville, IL 62234
 tel 618.346.2200
 www.oatesassociates.com
 BELLEVILLE
 720 Olive, Suite 1660
 St. Louis, MO 63101
 tel 314.588.6361



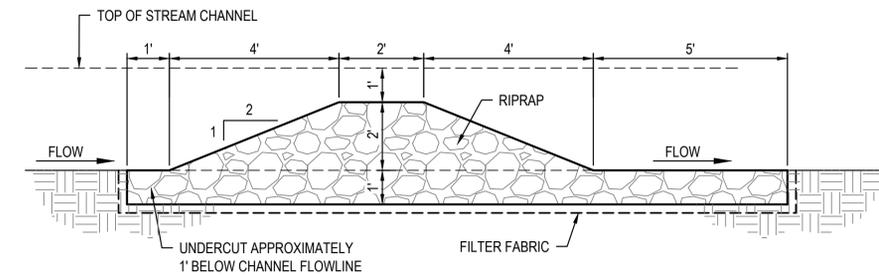
TYPICAL BENCHING DETAIL

SCALE: NO SCALE

NOTE:
APPLY THIS DETAIL ALONG EXISTING HIGHWALL



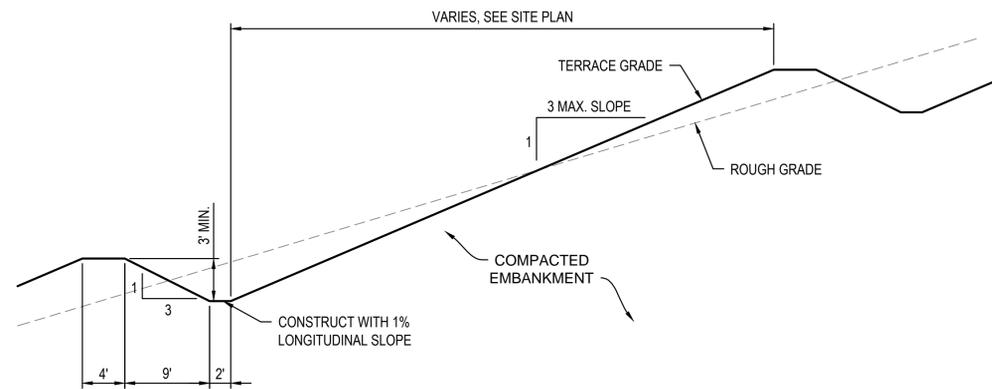
SECTION VIEW



PROFILE VIEW

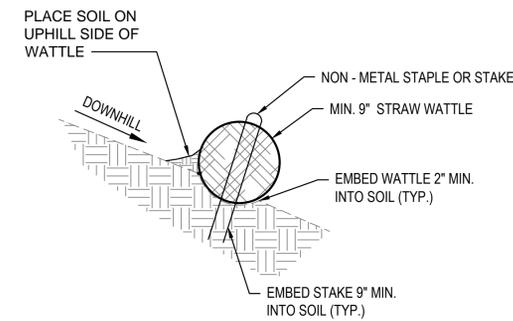
CHECK DAM DETAIL

SCALE: NO SCALE



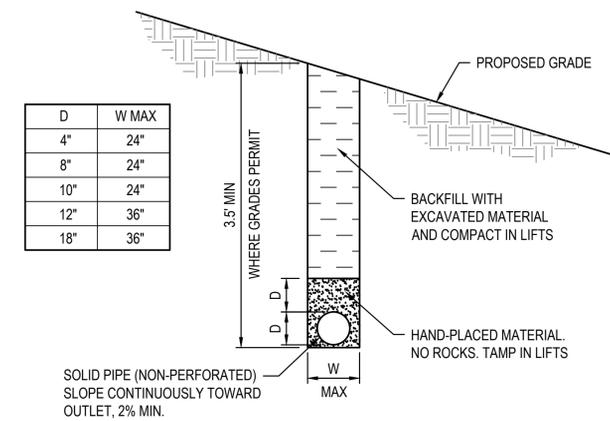
TERRACE

SCALE: NO SCALE



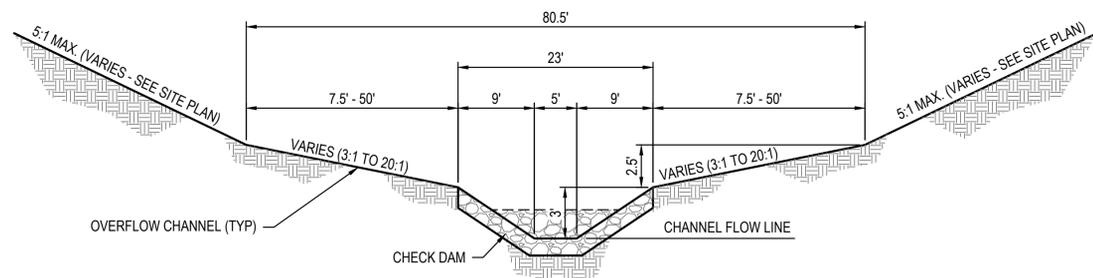
STRAW WATTLE INSTALLATION DETAIL

SCALE: NO SCALE



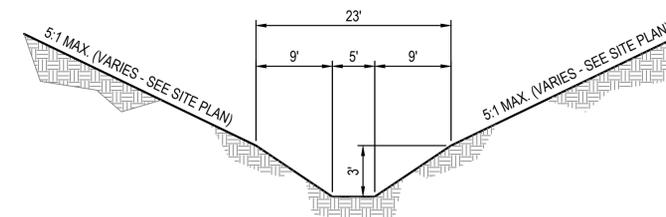
PIPE - CROSS SECTION

SCALE: NO SCALE



CONSTRUCTED MAIN STREAM CHANNEL

SCALE: NO SCALE



CONSTRUCTED MINOR STREAM CHANNEL

SCALE: NO SCALE

FILE: H:\P\13058\DWG\13058_DESIGN REVISED.DWG - 7/28/2016

ST. LOUIS
720 Olive, Suite 1660
St. Louis, MO 63101
tel 314.588.6381

BELLEVILLE
20 E. Main Street
Belleville, IL 62220
tel 618.416.4686

COLLINSVILLE
100 Lanier Court, Suite 1
Collinsville, IL 62234
tel 618.345.2200



CHKD. BY: AJG ISSUED: 09-06-2013 REVISED:

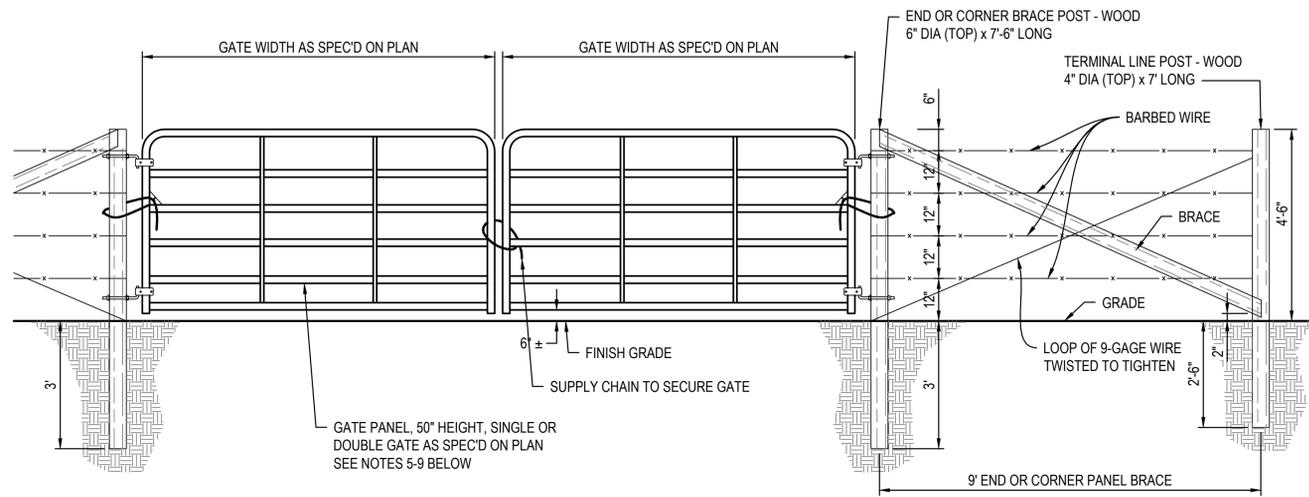
DIVISION OF SOIL CONSERVATION
IOWA DEPARTMENT OF AGRICULTURE
AND LAND STEWARDSHIP
HENRY A. WALLACE BUILDING
502 E. 9th STREET, DES MOINES, IOWA 50319
(515)281-4246



DESIGN BY: TGV DRAWN BY: SW/3

**LARKIN
AML RECLAMATION PROJECT**

DETAILS



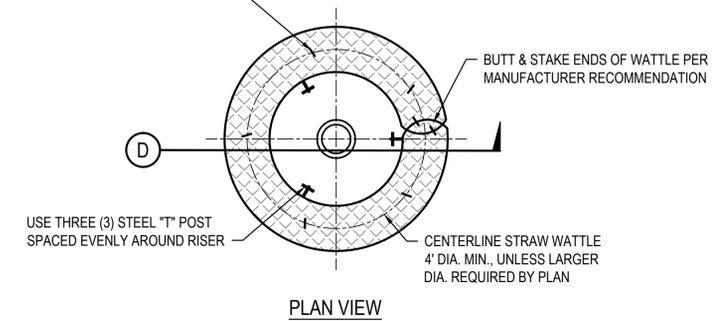
DOUBLE GATE DETAIL

SCALE: NO SCALE

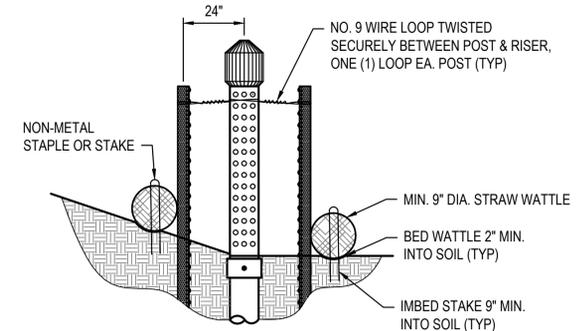
GATE DETAIL NOTES:

- BRACE END POST TO FIRST INTERIOR POST WITH STEEL BRACE AND BRACING WIRE. SIMILAR DETAIL AT ALL REQUIRED CORNER POSTS AND GTE POST ASSEMBLIES.
- IN LIEU OF EXCAVATING, POSTS MAY BE SET BY DRIVING. IN EITHER EVENT, CLEAR UTILITIES PRIOR TO INSTALLING FENCE POSTS.
- UNLESS OTHERWISE NOTED, MIN. GATE PANEL LENGTH FOR SINGLE GATES IS 12 FEET. TWO (2) 12-FOOT PANELS SHALL BE INSTALLED FOR DOUBLE GATES.
- WHERE SPECIFIED CLEAR WIDTH FOR DOUBLE GATES IS LESS THAN 24', ALLOW GATE PANELS TO OVERLAP.
- SECURE DOUBLE GATES TOGETHER AT ENDS OPPOSITE HINGES.
- ALL GATES SHALL BE BUILT FROM TWO (2) INCH DIAMETER STEEL TUBE AND SHOP PAINTED. USE MOUNTING HARDWARE AND HINGES RECOMMENDED BY GATE MANUFACTURER.
- PAYMENT IS BY LUMP SUM FOR EACH GATE ASSEMBLY INSTALLED. DOUBLE GATES, WHERE SPECIFIED, ARE PAID FOR AS ONE (1) UNIT. BRACE PANELS AS SHOWN ON EACH END OF GATE ARE PAID PER LINEAL FOOT AS FENCING.

SECURE WATTLE WITH SUITABLE NON-METAL STAPLES OR STAKES @ MIN. 5 LOCATIONS, EVENLY SPACED ABOUT CIRCLE (TYP)



PLAN VIEW



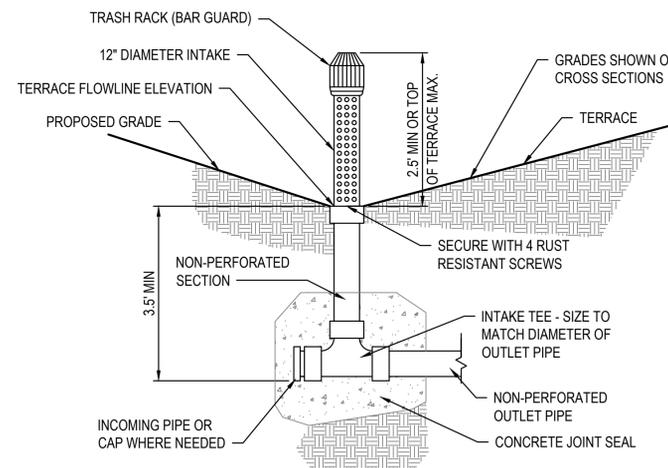
SECTION "D"

NOTES:

- FILTER SOCK FILLED WITH WOOD CHIPS OR COMPOST MAY BE USED IN LIEU OF STRAW WATTLE. IF USED, SECURE FILTER SOCK IN PLACE PER MANUFACTURER'S RECOMMENDATION.
- COST OF STEEL 'T' POSTS AND NO. 9 WIRE ARE INCIDENTAL TO THE COST OF RISER INSTALLATION.

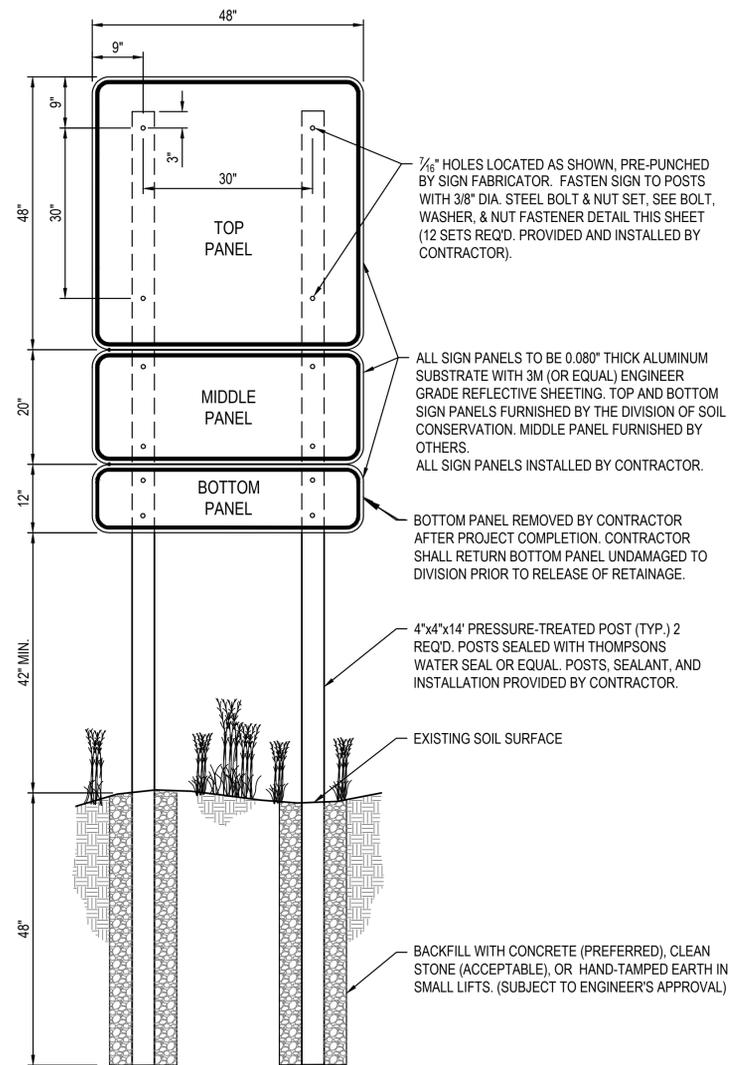
TERRACE INTAKE RISER PROTECTION

SCALE: NO SCALE



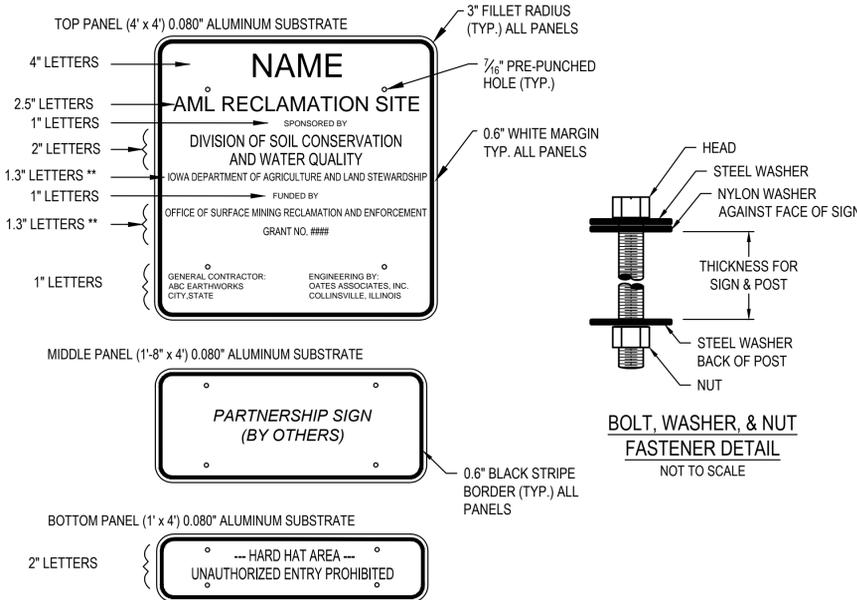
TERRACE INTAKE RISER

SCALE: NO SCALE



AML SIGN DETAIL

SCALE: NO SCALE



BOLT, WASHER, & NUT FASTENER DETAIL

NOT TO SCALE

** LETTER WIDTH = 75% OF THE LETTER HEIGHT

SIGNAGE NOTES:

- DIVISION WILL FURNISH TOP AND BOTTOM SIGN PANELS. MIDDLE PANEL PROVIDED BY OTHERS. CONTRACTOR IS RESPONSIBLE FOR PROVIDING POSTS, HARDWARE, AND INSTALLATION FOR ALL PANELS.
- ALL EXPOSED WOOD SHALL BE SEALED WITH THOMPSONS WATER SEAL OR EQUAL MEETING ASTM D-4446-08.
- ALL STEEL HARDWARE PIECES SHALL BE GALVANIZED OR RUST RESISTANT.
- NYLON AND STEEL WASHERS SHALL BE USED AS SHOWN ON THE BOLT, WASHER, NUT FASTENER DETAIL ABOVE.
- CLEAR UTILITIES WITH IOWA ONE-CALL (800) 292-8989 BEFORE EXCAVATING FOR POSTS.
- SECURE ENGINEERS APPROVAL FOR SIGN LOCATION BEFORE INSTALLATION.
- COSTS FOR POSTS, HARDWARE, WOOD SEALANT AND SIGN INSTALLATION SHALL BE INCIDENTAL TO MOBILIZATION.
- CONTRACTOR SHALL INSTALL SIGN POSTS USING A PLYWOOD OR OTHER SUITABLE TEMPLATE TO MAINTAIN ACCURATE POST SPACING AND ALIGNMENT DURING BACKFILLING OF THE POST HOLES. TO AVOID BENDING OF THE SIGN PANELS, POSTS SHALL NOT BE INSTALLED OR BACKFILLED WITH SIGN PANELS ATTACHED.
- ONE (1) PROJECT SIGN IS REQUIRED, LOCATED AS SHOWN ON PLANS.

FILE: H:\P\13058\DWG\13058_DESIGN REVISED.DWG - 7/28/2016

REVISED: 09-06-2013
ISSUED: 09-06-2013
CHKD. BY: AJG
DRAWN BY: SW3

DESIGN BY: TGV

ST. LOUIS
720 Olive, Suite 1660
St. Louis, MO 63101
tel 314-588-6381

BELLEVILLE
20 E. Main Street
Belleville, IL 62220
tel 618-416-4686

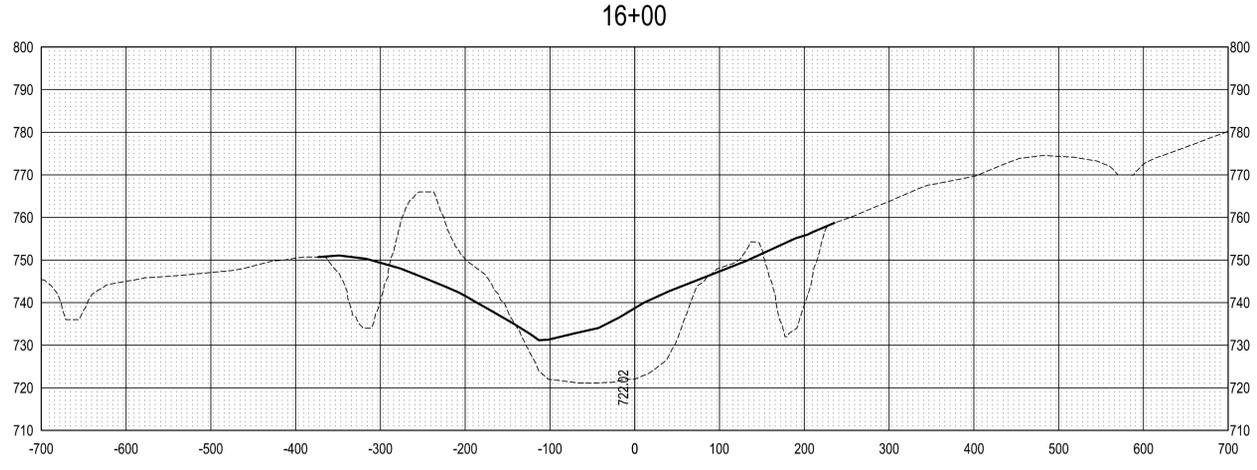
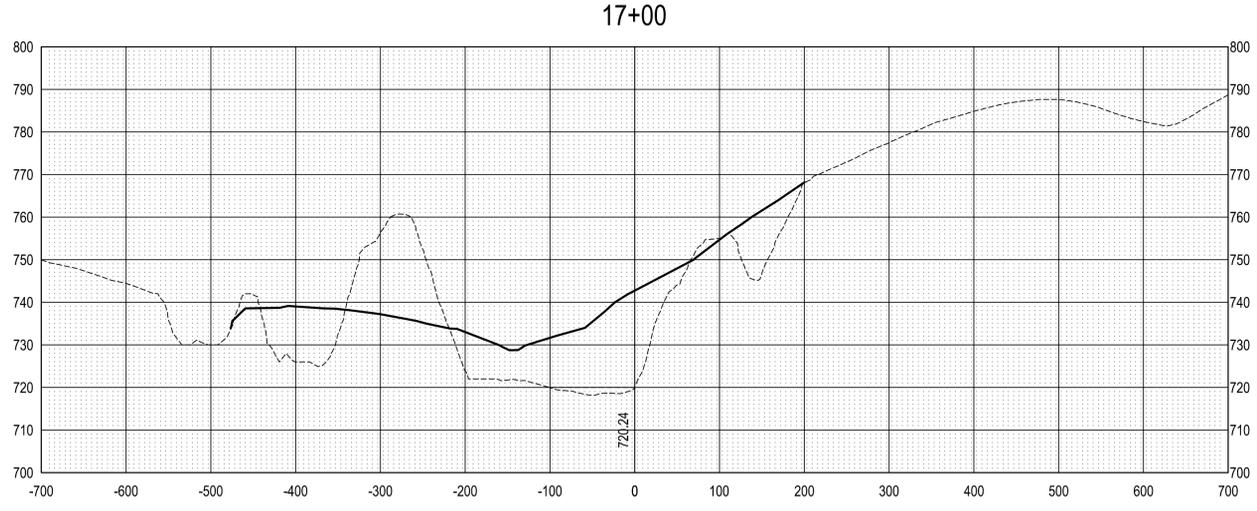
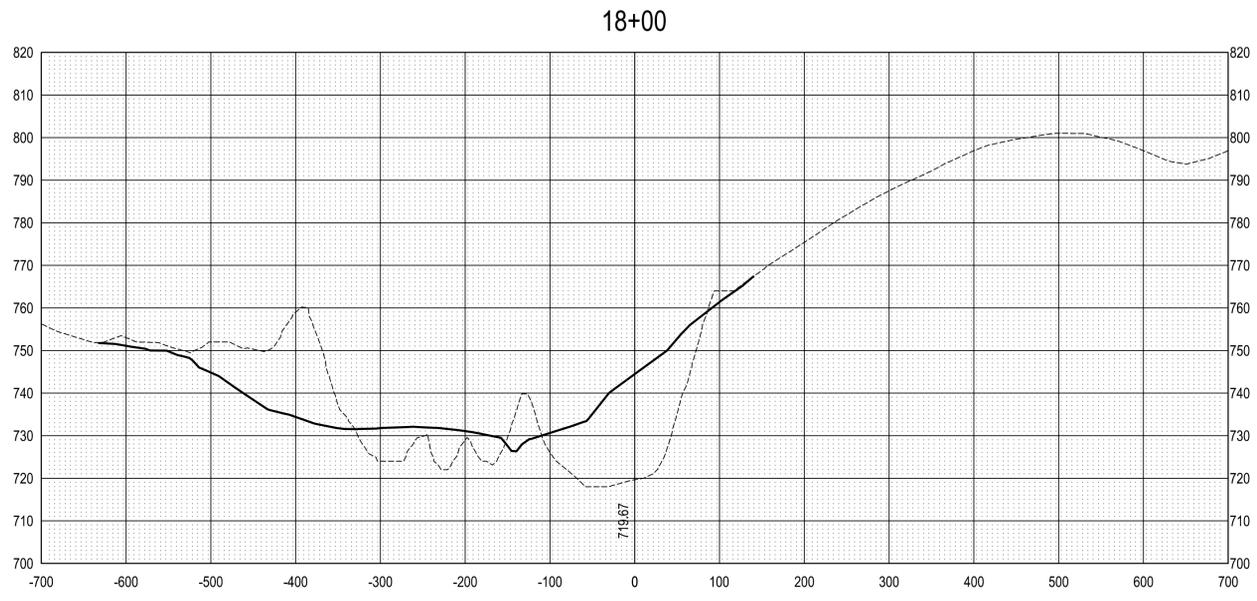
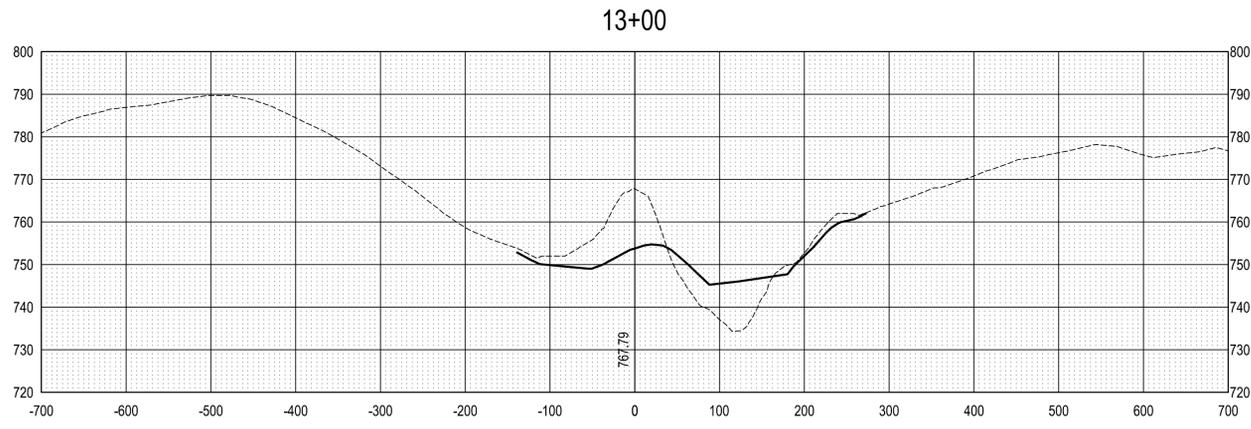
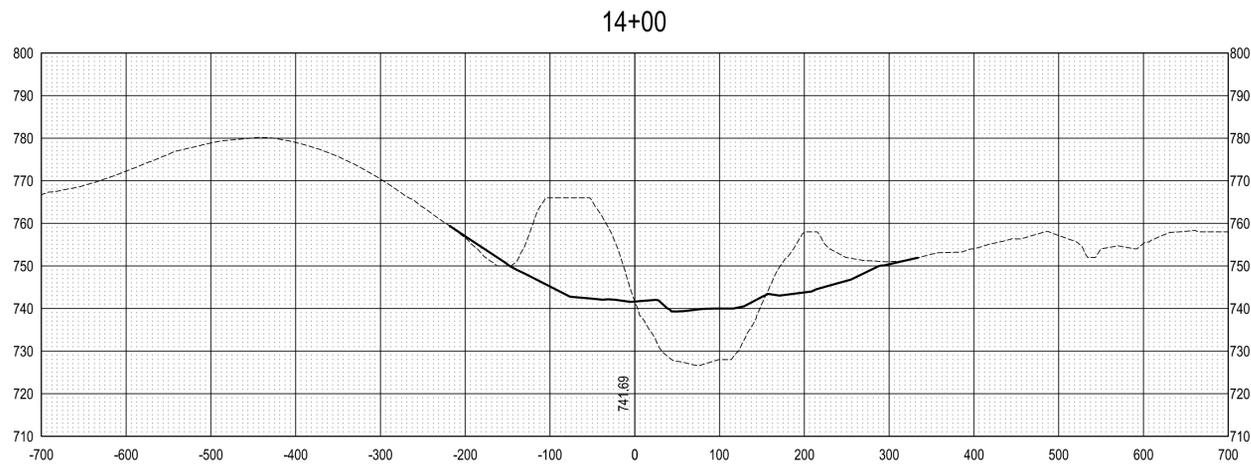
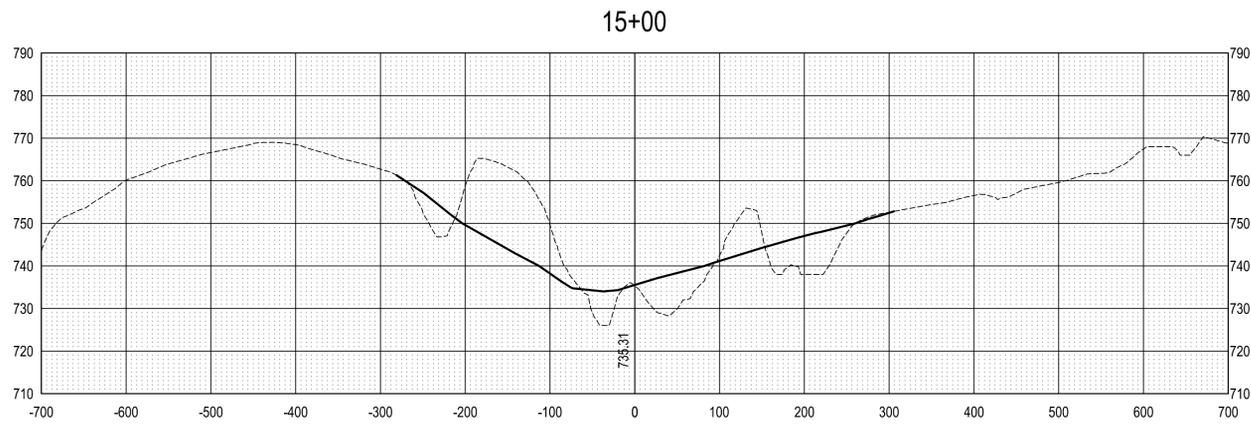
COLLINSVILLE
100 Lanier Court, Suite 1
Collinsville, IL 62234
tel 618-346-2200



DIVISION OF SOIL CONSERVATION
IOWA DEPARTMENT OF AGRICULTURE
AND LAND STEWARDSHIP
HENRY A. WALLACE BUILDING
502 E. 9th STREET, DES MOINES, IOWA 50319
(515)281-4246



LARKIN
AML RECLAMATION PROJECT



FILE: H:\P\13058\DWG\13058_DESIGN REVISED.DWG - 7/28/2016

CHKD. BY: AJG ISSUED: 09-06-2013 REVISED:

DESIGN BY: TGV DRAWN BY: SW3

ST. LOUIS
720 Olive, Suite 1660
St. Louis, MO 63101
tel 314.588.6381

BELLEVILLE
20 E. Main Street
Belleville, IL 62220
tel 618.416.4888

COLLINSVILLE
100 Lanier Court, Suite 1
Collinsville, IL 62234
tel 618.346.2200

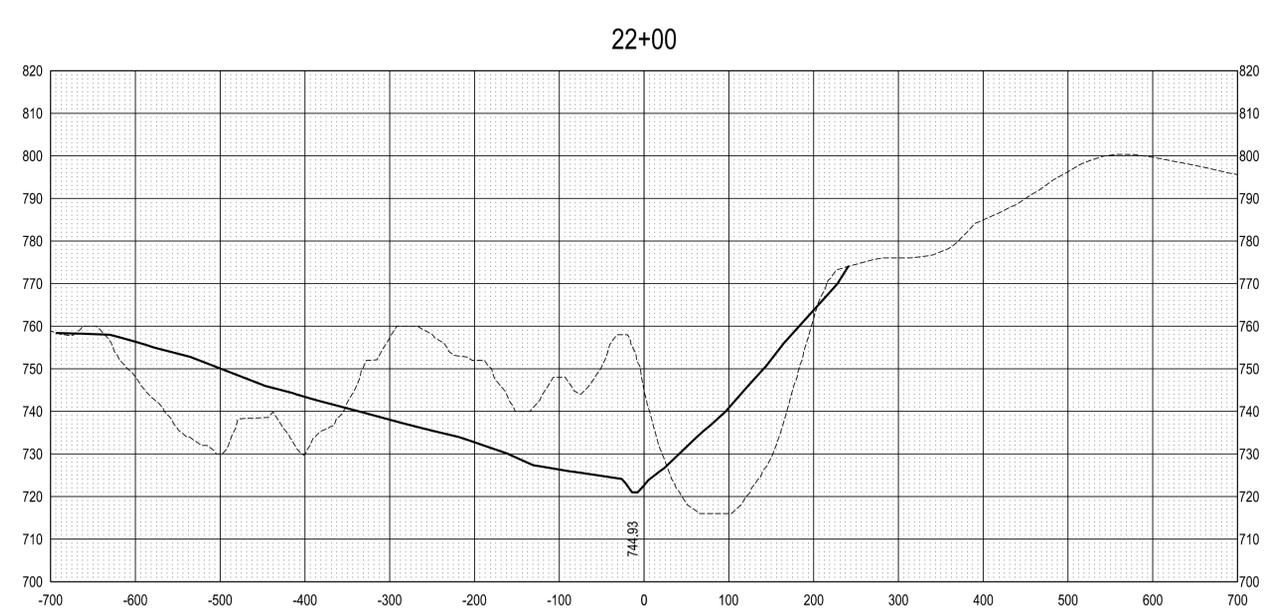
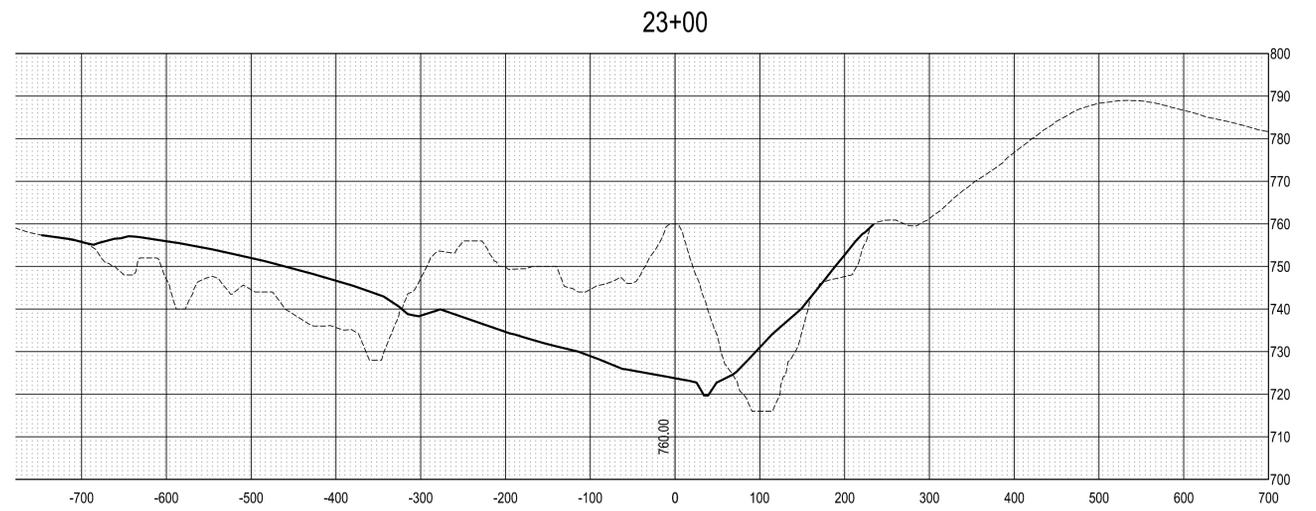
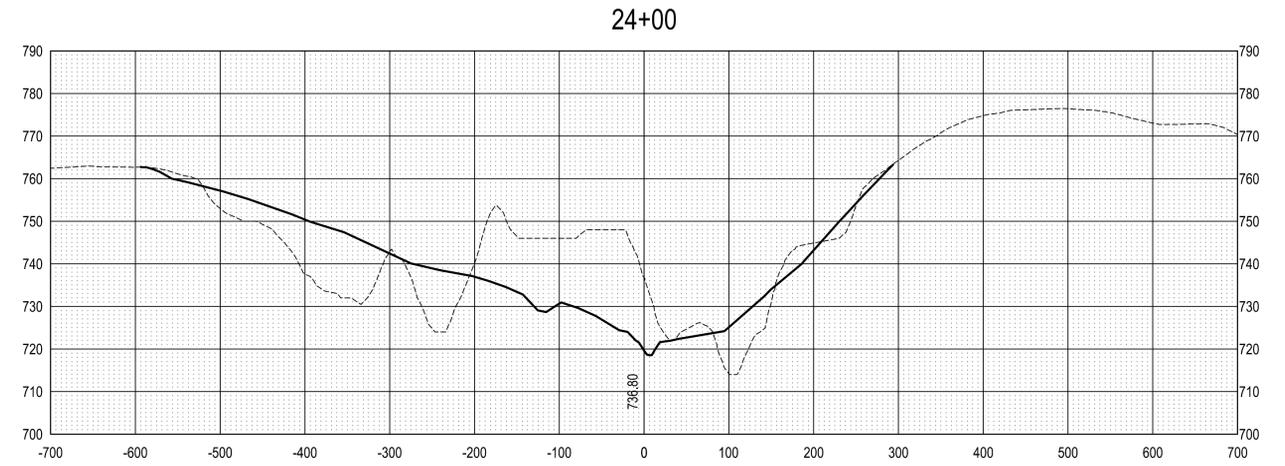
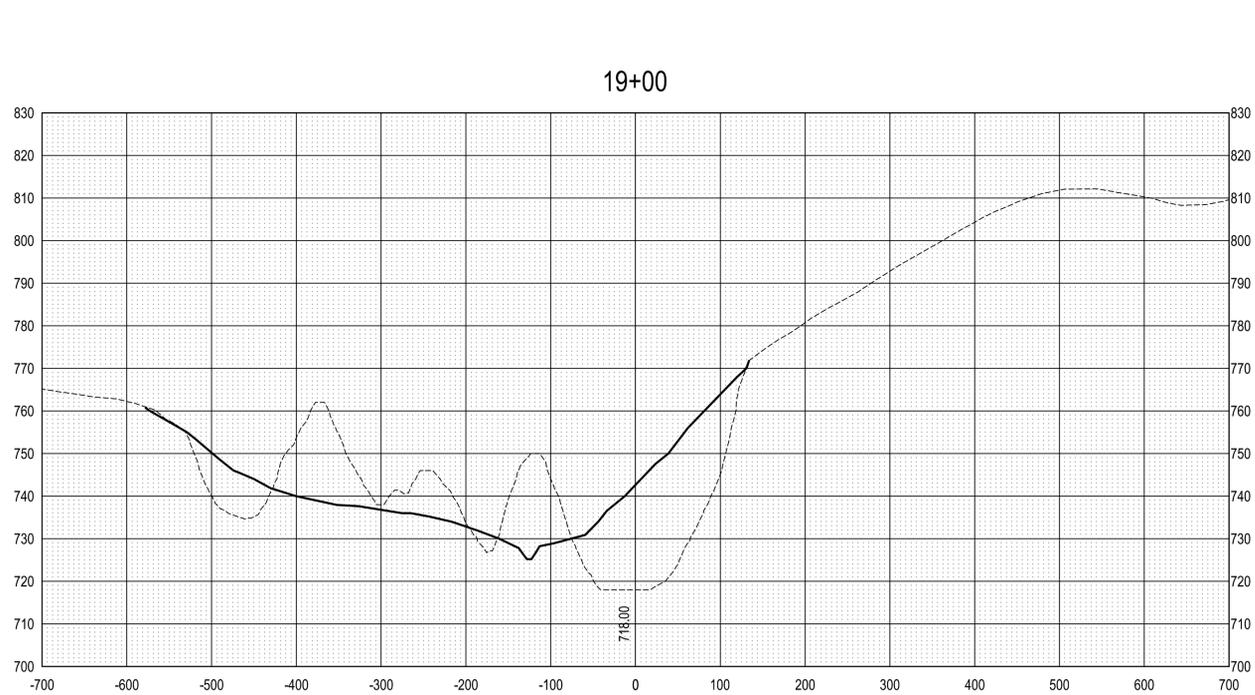
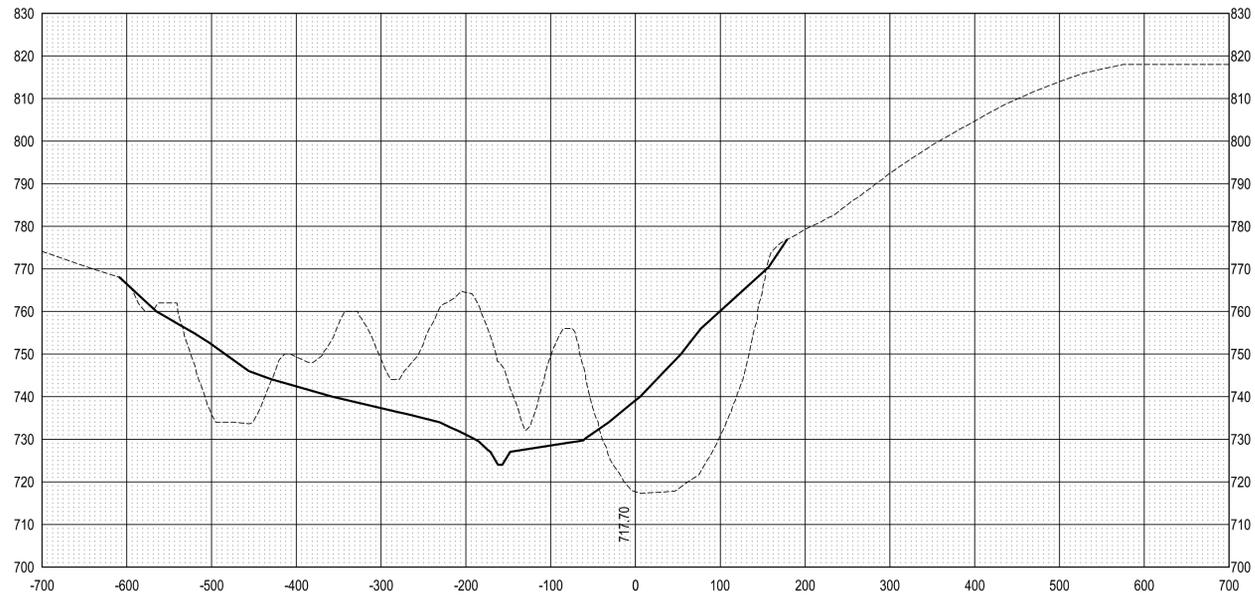
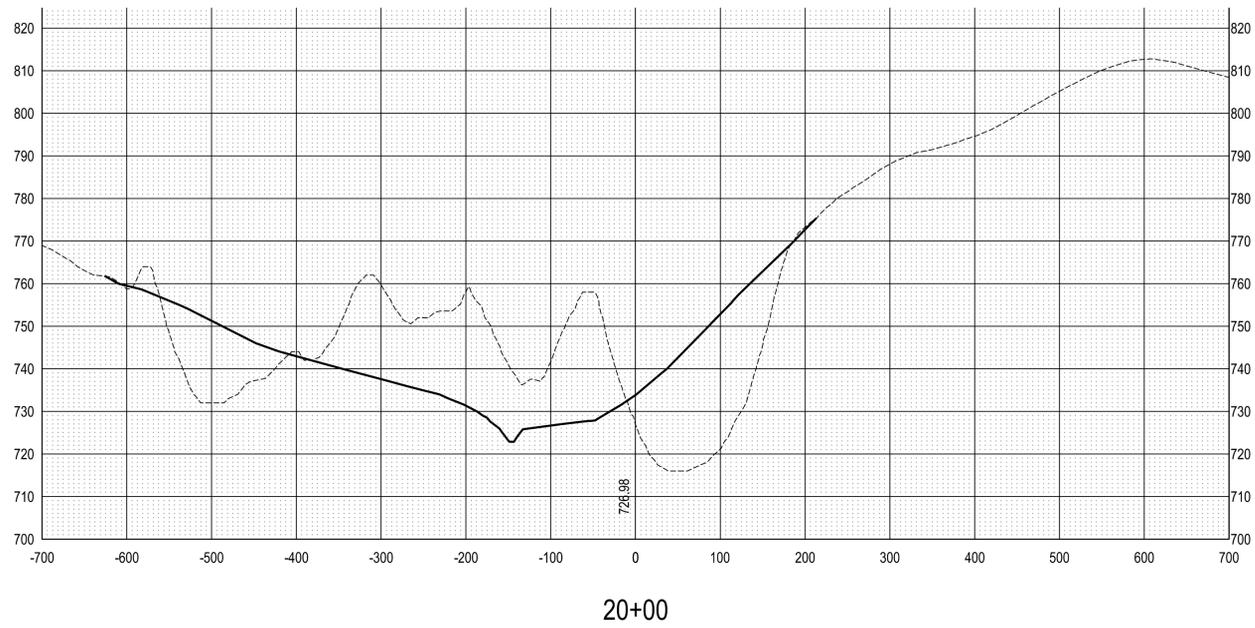


DIVISION OF SOIL CONSERVATION
IOWA DEPARTMENT OF AGRICULTURE
AND LAND STEWARDSHIP
HENRY A. WALLACE BUILDING
502 E. 9th STREET, DES MOINES, IOWA 50319
(515)281-4246



LARKIN
AML RECLAMATION PROJECT

CROSS SECTIONS



FILE: H:\P\13058\DWG\13058_DESIGN REVISED.DWG - 7/28/2016

ST. LOUIS
720 Olive, Suite 1860
St. Louis, MO 63101
tel 314-588-6381

BELLEVILLE
20 E. Main Street
Belleville, IL 62220
tel 618-416-4888

COLLINSVILLE
100 Lanier Court, Suite 1
Collinsville, IL 62234
tel 618-345-2200



CHKD. BY: AJG

DESIGN BY: TGV

SHEET

ISSUED: 09-06-2013

REVISD:

DRAWN BY: SW3

OF 18

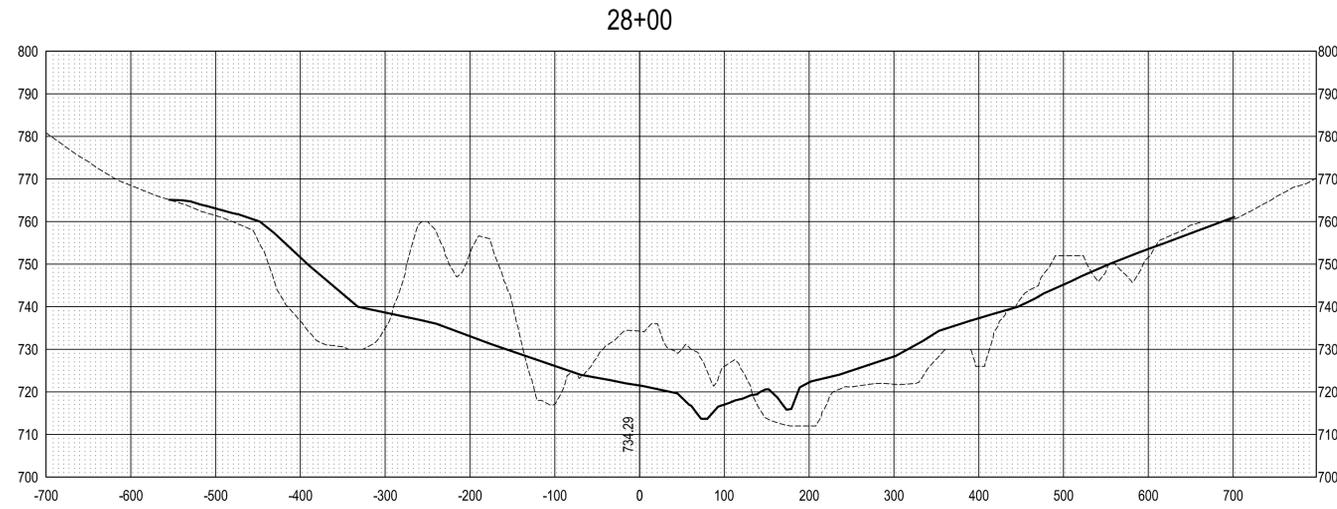
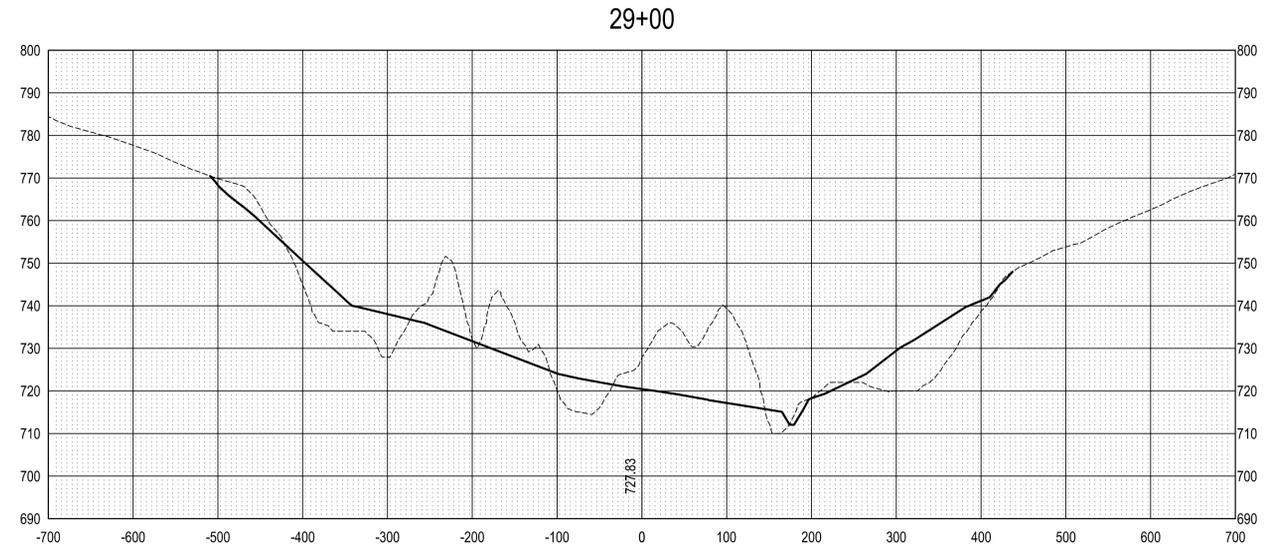
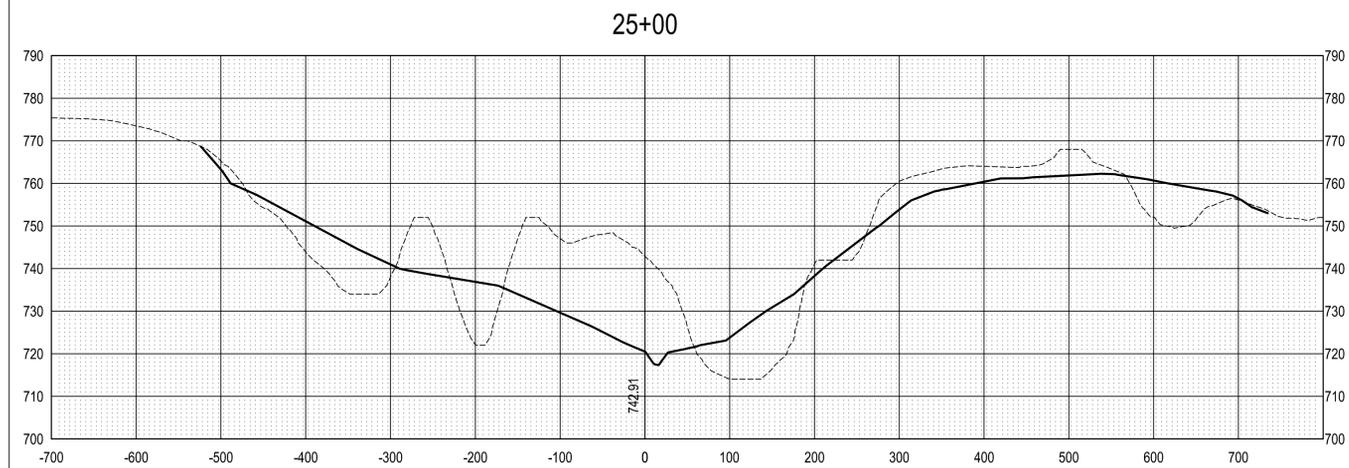
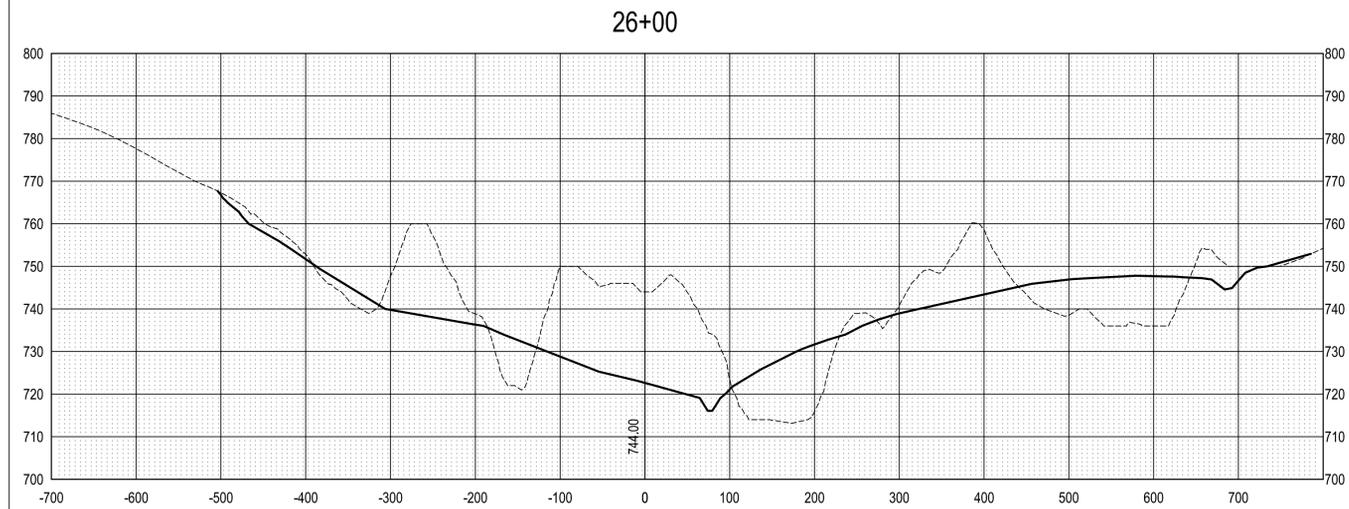
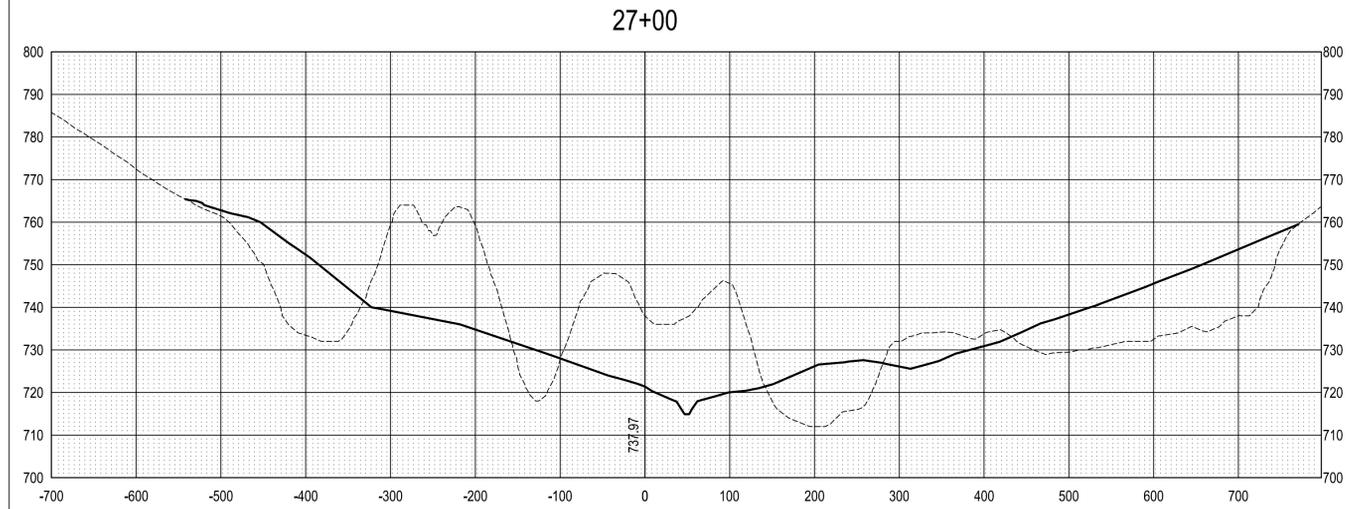
DIVISION OF SOIL CONSERVATION
IOWA DEPARTMENT OF AGRICULTURE
AND LAND STEWARDSHIP
HENRY A. WALLACE BUILDING
502 E. 9th STREET, DES MOINES, IOWA 50319
(515)281-4246



LARKIN
AML RECLAMATION PROJECT

CROSS SECTIONS

15 OF 18



FILE: H:\P\13058\DWG\13058_DESIGN REVISED.DWG - 7/28/2016

REVISED: 09-06-2013

ISSUED: 09-06-2013

DESIGN BY: TGV

ST. LOUIS
720 Olive, Suite 1660
St. Louis, MO 63101
tel: 314-588-6381

DIVISION OF SOIL CONSERVATION
IOWA DEPARTMENT OF AGRICULTURE
AND LAND STEWARDSHIP
HENRY A. WALLACE BUILDING
502 E. 9th STREET, DES MOINES, IOWA 50319
(515)281-4246

CHKD. BY: AJG

SHEET
16 OF 18

COLLINSVILLE
100 Lanier Court, Suite 1
Collinsville, IL 62220
tel: 618-346-2200
www.atesassociates.com

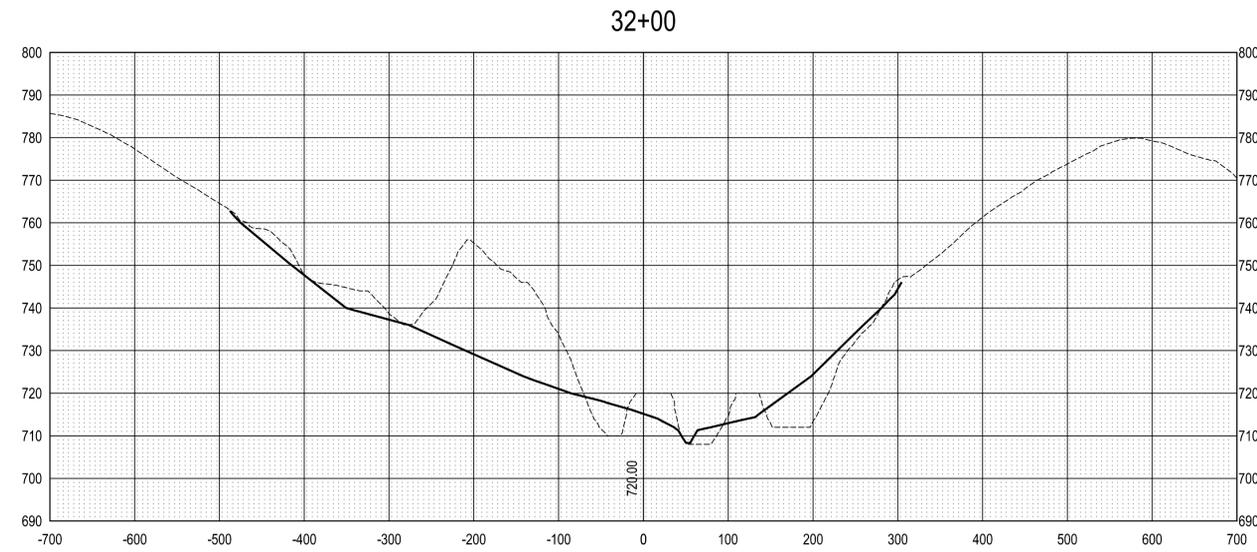
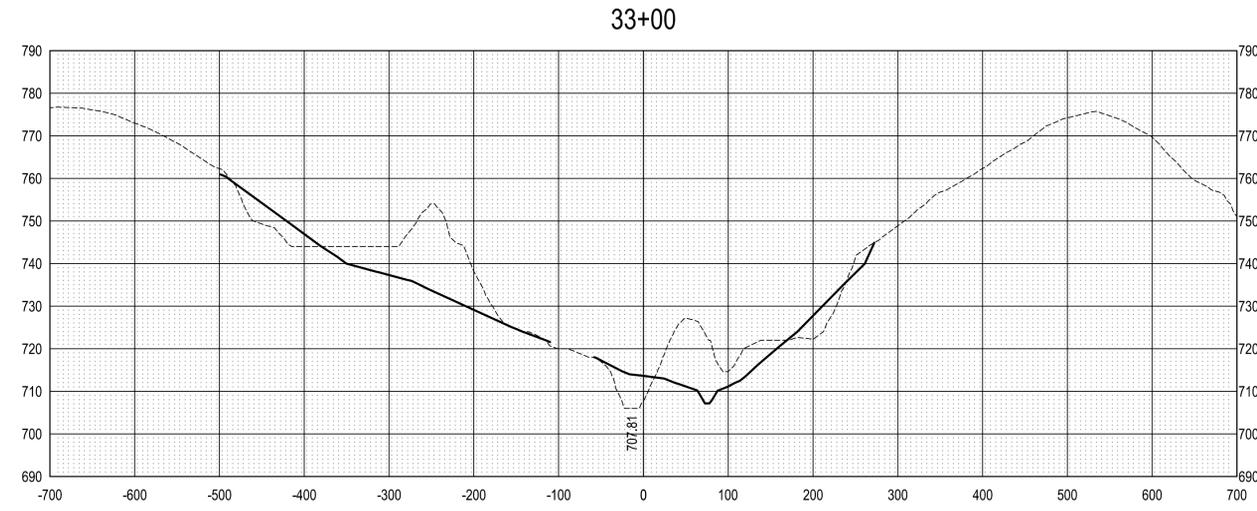
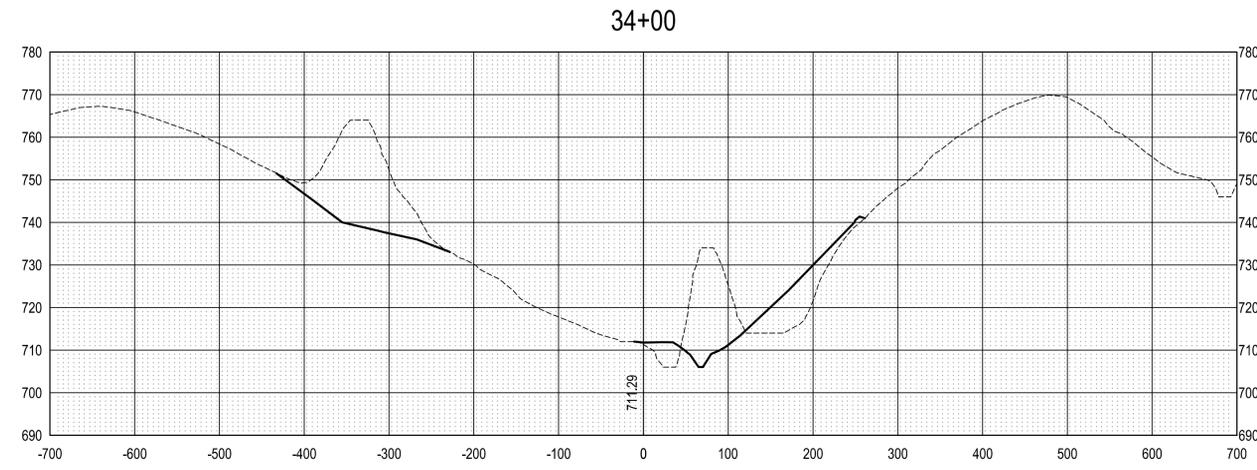
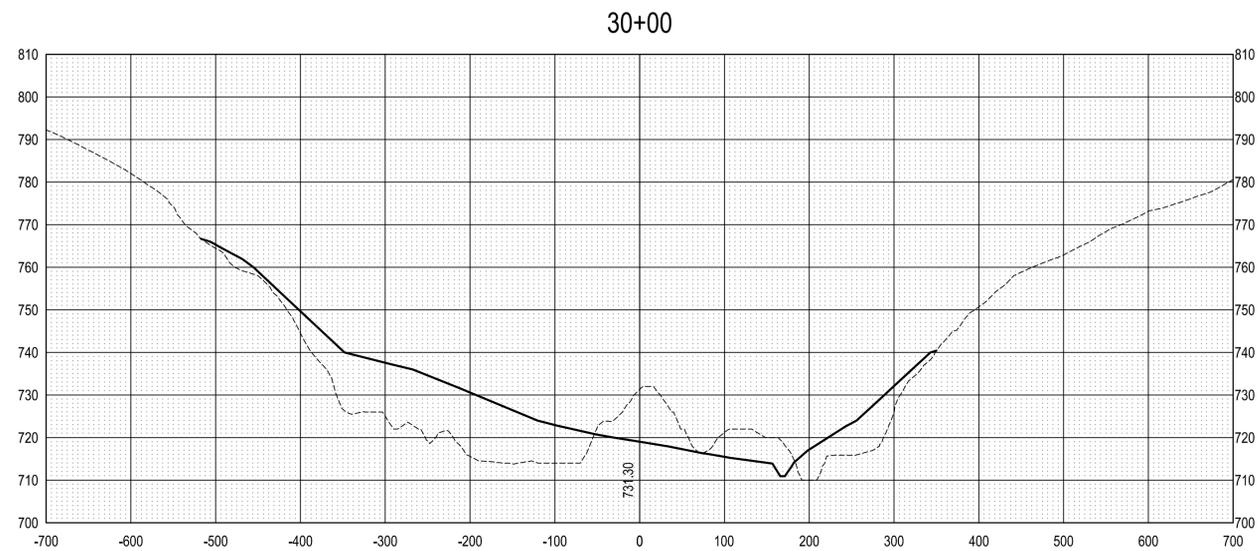
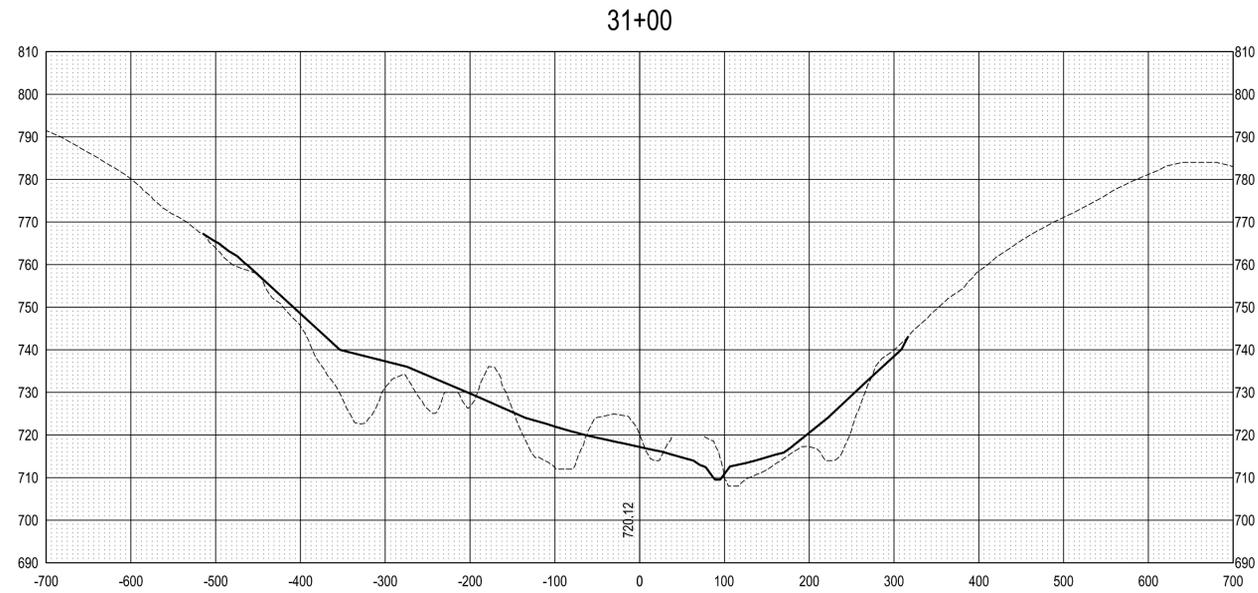


ATES ASSOCIATES
Engineering + Architecture



**LARKIN
AML RECLAMATION PROJECT**

CROSS SECTIONS



FILE: H:\P\13058\DWG\13058_DESIGN REVISED.DWG - 7/28/2016

ST. LOUIS
720 Olive, Suite 1660
St. Louis, MO 63101
tel 314.588.6381

BELLEVILLE
20 E. Main Street
Belleville, IL 62220
tel 618.416.4686

COLLINSVILLE
100 Lanier Court, Suite 1
Collinsville, IL 62234
tel 618.346.2200



DIVISION OF SOIL CONSERVATION
IOWA DEPARTMENT OF AGRICULTURE
AND LAND STEWARDSHIP
HENRY A. WALLACE BUILDING
502 E. 9th STREET, DES MOINES, IOWA 50319
(515)281-4246



REVISED:

ISSUED: 09-06-2013

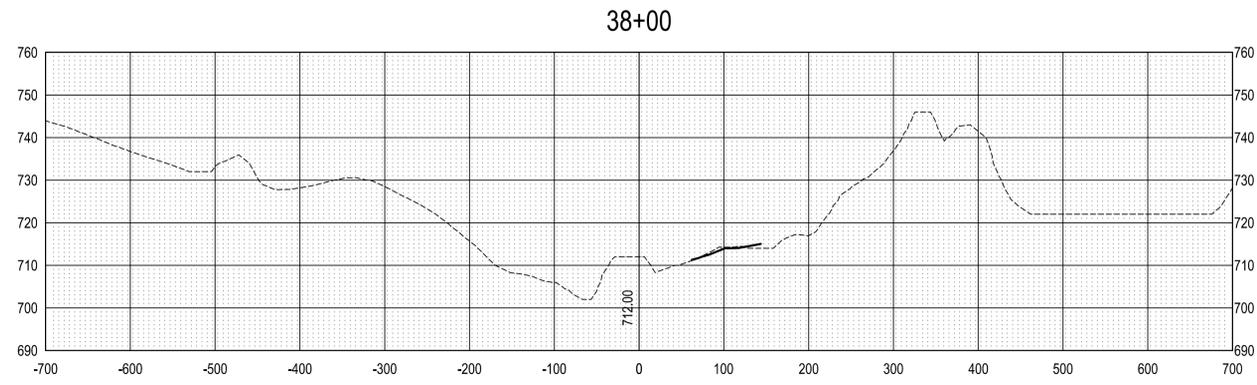
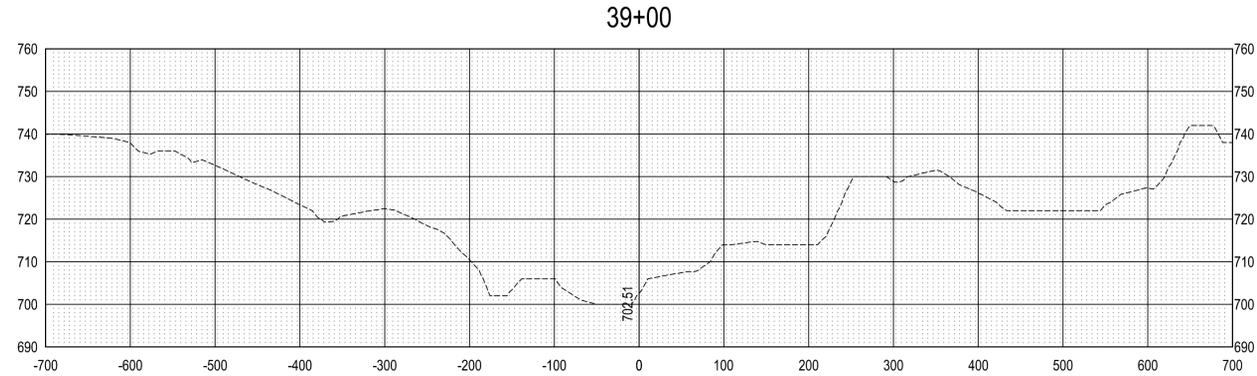
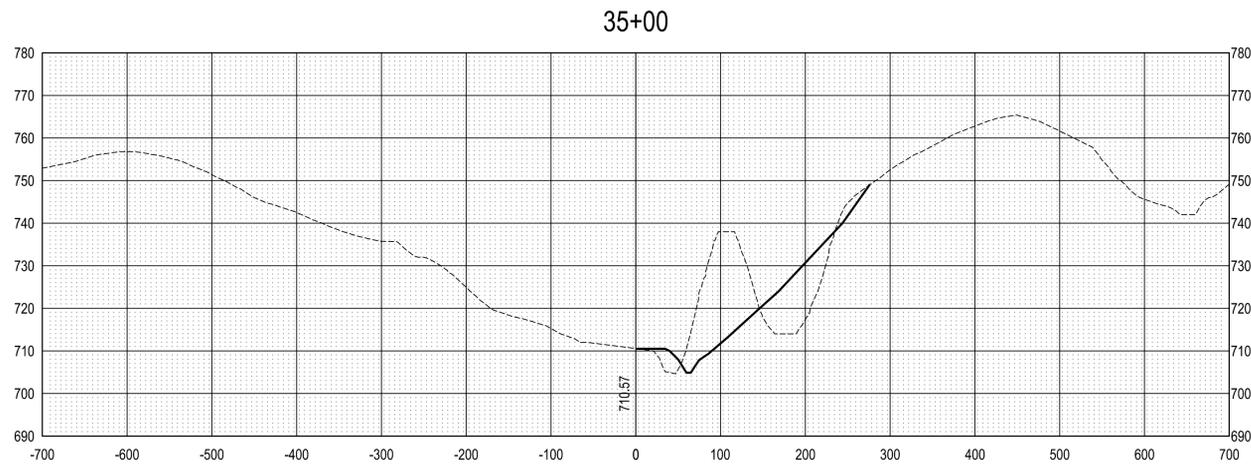
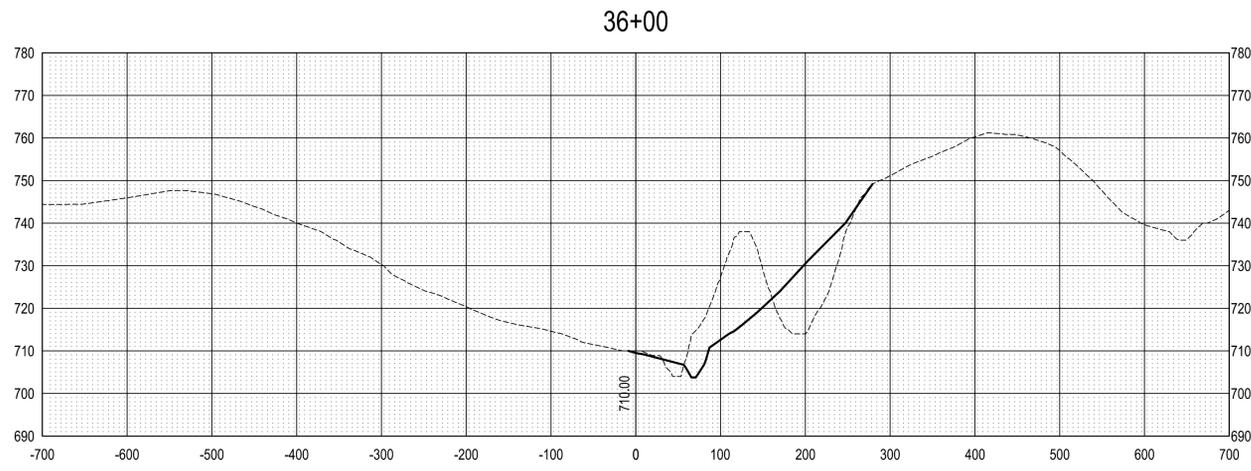
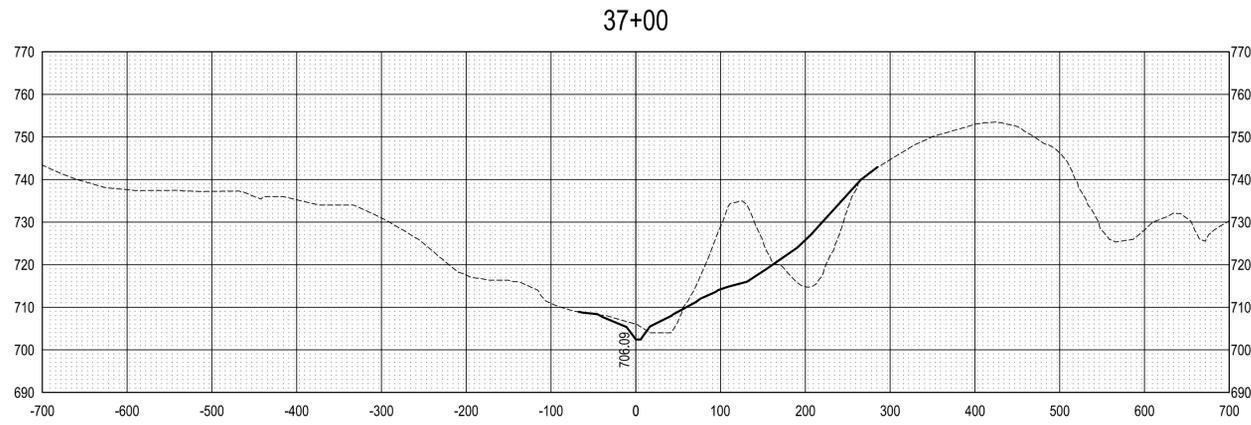
CHKD. BY: AJG

DRAWN BY: SW3

DESIGN BY: TGV

LARKIN
AML RECLAMATION PROJECT

CROSS SECTIONS



FILE: H:\P13058\DWG13058_DESIGN REVISED.DWG - 7/28/2016

REVISED: 09-06-2013

CHKD. BY: AJG

DESIGN BY: TGV

DRAWN BY: SW3

ST. LOUIS
720 Olive, Suite 1660
St. Louis, MO 63101
tel: 314-588-6381

BELLEVILLE
20 E. Main Street
Belleville, IL 62220
tel: 618-416-4686

COLLINSVILLE
100 Lanier Court, Suite 1
Collinsville, IL 62234
tel: 618-346-2200



DIVISION OF SOIL CONSERVATION
IOWA DEPARTMENT OF AGRICULTURE
AND LAND STEWARDSHIP
HENRY A. WALLACE BUILDING
502 E. 9th STREET, DES MOINES, IOWA 50319
(515)281-4246



LARKIN
AML RECLAMATION PROJECT

CROSS SECTIONS