

ST. CLAIR COUNTY, ILLINOIS
CONSTRUCTION PLANS
FOR



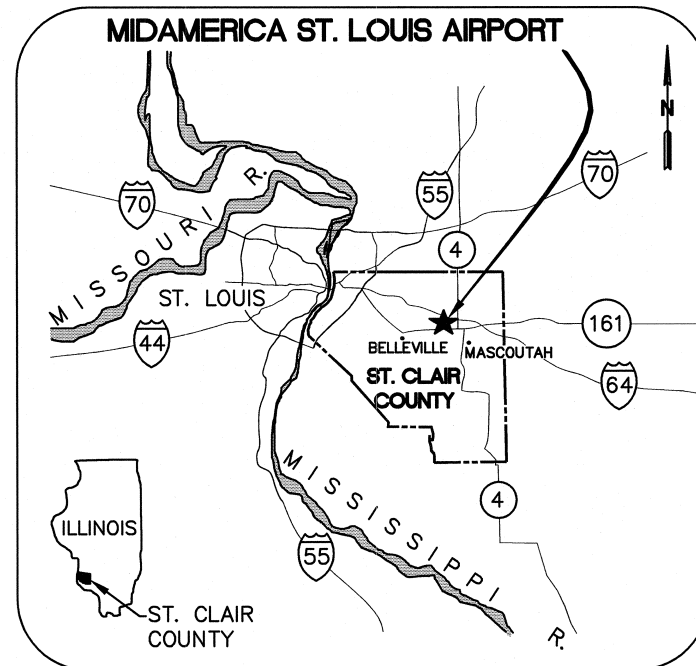
ILLINOIS PROJECT BLV - 4061
A. I. P. PROJECT 3-17-0146-XX

MIKE APRON EXPANSION - CONTRACT 1

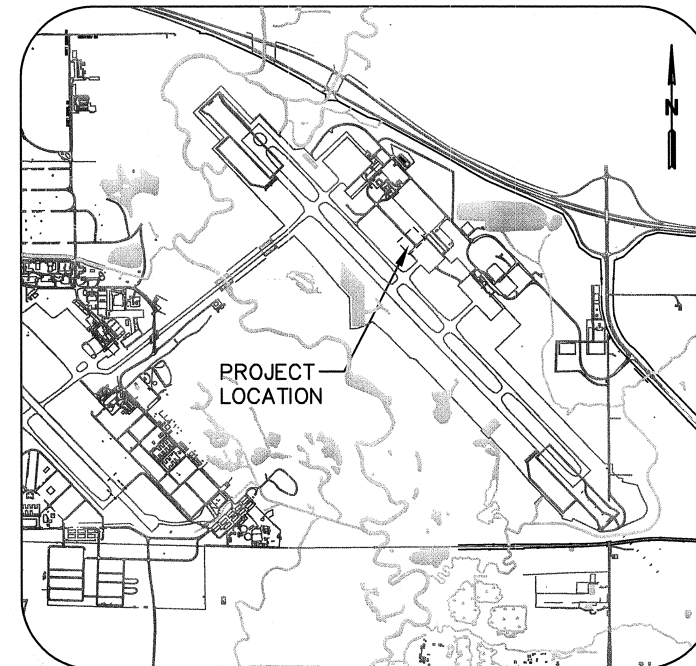
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JANUARY 14, 2011



LOCATION MAP



SITE PLAN

811 Know what's below. Call before you dig.
 J.U.L.I.E. JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS
 www.illinois1call.com

THE LOCATION, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ON THE PLANS IS NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ACTUAL LOCATIONS OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES OF HIS OPERATIONAL PLANS, OBTAIN FROM RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION AND THE ONE-CALL NOTICE SYSTEM. THE ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY SUCH UTILITY OR SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.

CALL J.U.L.I.E. FOR UTILITY INFORMATION AT 811.

CALL J.U.L.I.E.
 BEFORE EXCAVATING
 1-800-892-0123

ST. CLAIR COUNTY
 MASCOUTAH TOWNSHIP

TOWNSHIP: 1 NORTH TOWNSHIP: 1 NORTH
 RANGE: 7 WEST RANGE: 6 WEST
 SECTION(S): 1, 12 SECTION(S): 7

ST. CLAIR COUNTY
PUBLIC BUILDING COMMISSION
AIRPORT SPONSOR

APPROVED *[Signature]*
 CHAIRMAN, PUBLIC BUILDING COMMISSION

DATE 1/13/11

1/14/11

 Brian W. Zankie
 Exp. 11/30/11

ONE MEMORIAL DRIVE, SUITE 500
 ST. LOUIS, MO 63102
 (314) 436-5500

CMT
CRAWFORD MURPHY & TILLY, INC.
 CONSULTING ENGINEERS

- AURORA, IL ■ CHICAGO, IL ■ COLUMBUS, OH
- EDWARDSVILLE, IL ■ INDIANAPOLIS, IN ■ PEORIA, IL
- ROCKFORD, IL ■ SPRINGFIELD, IL ■ ST. LOUIS, MO

SUBMITTED BY *Brian W. Zankie*

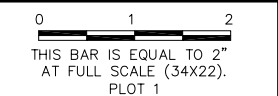
DATE January 14, 2011

CMT JOB NUMBER 10098-01

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ITEM	DESCRIPTION	UNIT	QUANTITY
AR108108	1/C #8 5 KV UG CABLE	LF	976
AR108602	3/C #2 600 V UG CABLE	LF	332
AR108606	3/C #6 600 V UG CABLE	LF	64
AR108706	1/C #6 COUNTERPOISE	LF	1,014
AR110202	2" PVC DUCT, DIRECT BURY	LF	674
AR110501	1-WAY CONC. ENCASED DUCT	LF	305
AR110502	2-WAY CONCRETE ENCASED DUCT	LF	295
AR110503	3-WAY CONCRETE ENCASED DUCT	LF	38
AR110610	ELECTRICAL HANDHOLE	EA	2
AR125415	MITL-BASE MOUNTED	EA	4
AR125565	SPLICE CAN	EA	1
AR125962	RELOCATE BASE MOUNTED LIGHT	EA	3
AR150510	ENGINEER'S FIELD OFFICE	LS	1
AR150520	MOBILIZATION	LS	1
AR152410	UNCLASSIFIED EXCAVATION	CY	8,640
AR155540	BY-PRODUCT LIME	TON	381
AR155612	SOIL PROCESSING-12"	SY	15,108
AR156510	SILT FENCE	LF	1,500
AR156511	DITCH CHECK	EA	6
AR156531	EROSION CONTROL BLANKET	SY	2,310
AR209609	CRUSHED AGG. BASE COURSE- 9"	SY	16,355
AR209611	CRUSHED AGGREGATE BASE COURSE- 11"	SY	469
AR302611	ASPHALT TREATED PERMEABLE SUBBASE	SY	14,621
AR302630	ATPS TEST SECTION	EA	1
AR401610	BITUMINOUS SURFACE COURSE	TON	220
AR401650	BITUMINOUS PAVEMENT MILLING	SY	2,317
AR403610	BITUMINOUS BASE COURSE	TON	220
AR501509	9" PCC PAVEMENT	SY	1,000
AR501516	16" PCC PAVEMENT	SY	13,333
AR501530	PCC TEST BATCH	EA	1
AR602510	BITUMINOUS PRIME COAT	GAL	6,309
AR603510	BITUMINOUS TACK COAT	GAL	239
AR620520	PAVEMENT MARKING-WATERBORNE	SF	1,433
AR620525	PAVEMENT MARKING-BLACK BORDER	SF	1,883
AR701524	24" RCP, CLASS IV	LF	559
AR701530	30" RCP, CLASS IV	LF	415
AR701900	REMOVE PIPE	LF	68
AR705526	6" PERFORATED UNDERDRAIN W/SOCK	LF	1,578
AR705635	UNDERDRAIN COLLECTION STRUCTURE	EA	8
AR705640	UNDERDRAIN CLEANOUT	EA	8
AR751540	MANHOLE 4'	EA	2
AR752424	PRECAST REINFORCED CONC. FES 24"	EA	2
AR752430	PRECAST REINFORCED CONC. FES 30"	EA	1
AR752900	REMOVE END SECTION	EA	2
AR770508	8" SANITARY SEWER	LF	132
AR770515	15" SANITARY SEWER	LF	341
AR770704	SANITARY MANHOLE 4'	EA	1
AR801971	4' X 20' TRENCH DRAIN	EA	1
AR801972	8" VALVE & ACTUATOR	EA	1
AR801973	CONTROL SWITCHES	LS	1
AR801974	REMOVE FUMIGATION FACILITY	LS	1
AR801975	REINSTALL FUMIGATION FACILITY	LS	1
AR801976	AIRCRAFT NOSE TETHER ANCHOR	EA	2
AR801977	TYPE TC - 2-#12, 1-#12 GND, 600V	LF	495
AR801978	TYPE TC - 7-#14, 600V	LF	495
AR901510	SEEDING	AC	7.1
AR904510	SODDING	SY	500
AR908510	MULCHING	AC	7.1


REVISIONS		
NUMBER	BY	DATE



**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
(314) 436-5500



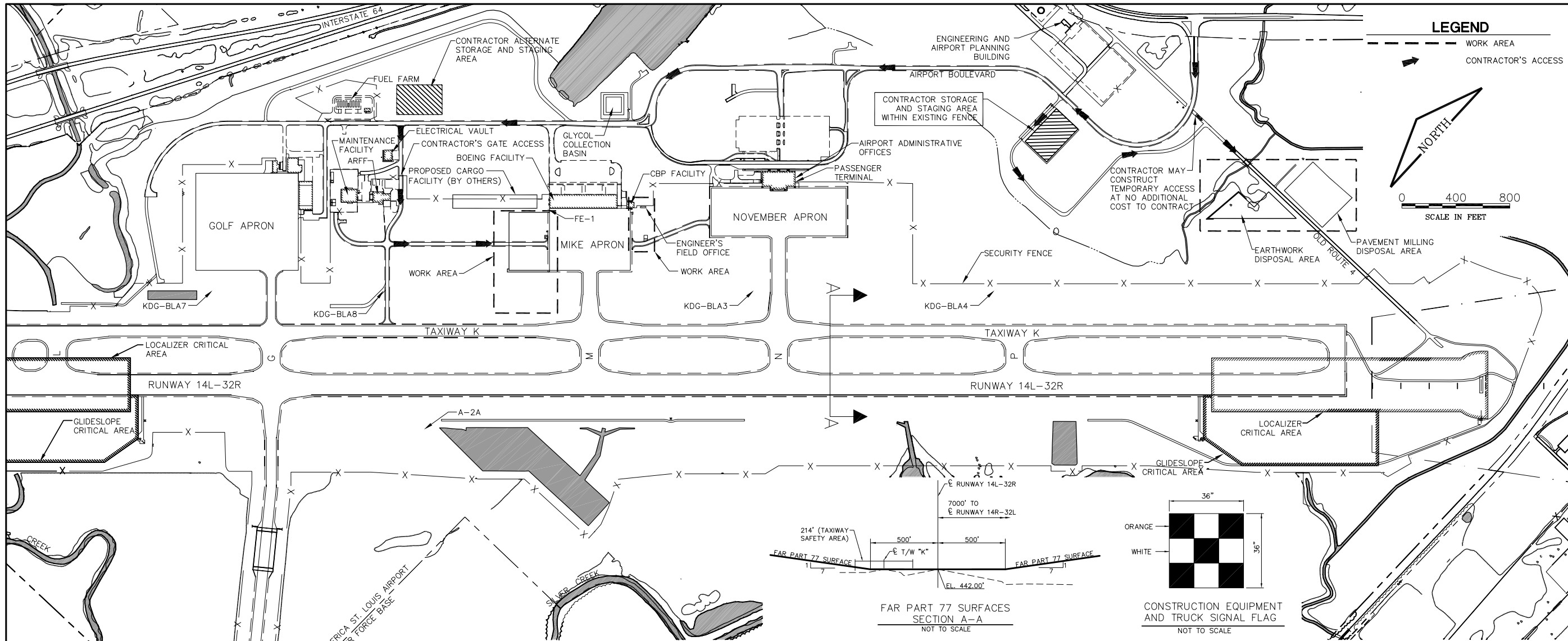
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**IL PROJECT: BLV-4061
AIP PROJ. 3-17-0146-XX**

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DRAWN BY: ASA
CHECKED BY: MJD/CET
APPROVED BY: BWG
DATE: JANUARY 14, 2011
JOB No: 10098-01

**SUMMARY OF
QUANTITIES**



REVISIONS		
NUMBER	BY	DATE

**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

GENERAL NOTES

- CONTRACTOR'S ACCESS TO THE SITE SHALL BE AS SHOWN ON THIS SHEET AND THE CONSTRUCTION ACTIVITY PLAN.
- IT WILL BE NECESSARY FOR THE CONTRACTOR TO MAKE HIS OWN FIELD INVESTIGATION TO DETERMINE THE EXACT LOCATION OF THE UNDERGROUND UTILITIES AT CRITICAL POINTS. THE LOCATION OF UNDERGROUND UTILITIES AS INDICATED ON THE PLANS HAS BEEN OBTAINED FROM EXISTING RECORDS. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY IN RESPECT TO THE ACCURACY, COMPLETENESS OR SUFFICIENCY OF THE INFORMATION.

BEFORE INITIATING ANY DIGGING OR DRILLING ON THE AIRPORT PROPERTY, THE CONTRACTOR SHALL CALL J.U.L.I.E. AND CONTACT THE LOCAL FAA OFFICE TO ARRANGE FOR UTILITY LOCATES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY EDGE LIGHTS, CABLES OR OTHER UTILITIES DAMAGED BY HIS OPERATIONS, TO THE SATISFACTION OF THE OWNER.
- AT ANY TIME THE CONTRACTOR IS WORKING WITHIN THE AIRPORT OPERATIONS AREA (A.O.A.), THE CONTRACTOR WILL BE REQUIRED TO BE IN RADIO CONTACT WITH THE AIR TRAFFIC CONTROL TOWER (ATCT). THE OWNER WILL FURNISH AIRPORT RADIOS.
- THE CONTRACTOR SHALL FURNISH, ERECT, AND MAINTAIN MARKINGS AND ASSOCIATED LIGHTING OF OPEN TRENCHES, EXCAVATIONS, TEMPORARY STOCKPILES, AND HIS/HER CONSTRUCTION EQUIPMENT IN CONFORMANCE WITH FAA AC 150/5370-2E: OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION.
- ALL CONSTRUCTION EQUIPMENT SHALL BE FLAGGED AND/OR LIGHTED IN ACCORDANCE WITH FAA ADVISORY CIRCULAR 150/5370-2E AND 150/5210-5C AT ALL TIMES WHILE OPERATING ON AIRPORT PROPERTY. THE MAXIMUM EQUIPMENT HEIGHT IS 25'.
- FOR ANY EQUIPMENT USED BY THE CONTRACTOR WITH A HEIGHT GREATER THAN 25', THE CONTRACTOR SHALL PROVIDE TO THE AIRPORT THE TYPE OF EQUIPMENT, TOTAL HEIGHT, AND LOCATION WHERE THE EQUIPMENT WILL BE USED. THE AIRPORT WILL SUBMIT FAA FORM 7460-1 TO THE FAA FOR AN AIRSPACE STUDY. NO EQUIPMENT WITH A HEIGHT GREATER THAN 25' SHALL BE USED UNTIL A DETERMINATION FROM FAA IS RECEIVED.
- ALL PAVEMENTS, DRIVES OR ANY OTHER AREAS UTILIZED BY THE CONTRACTOR FOR HAUL ROADS OR STORAGE AREAS SHALL BE MAINTAINED AND REPAIRED TO THE SAME CONDITION OR BETTER THAN THEY WERE PRIOR TO BEGINNING CONSTRUCTION. NO ADDITIONAL COMPENSATION WILL BE MADE TO THE CONTRACTOR FOR THIS WORK.
- BROKEN CONCRETE, BROKEN ASPHALT, AND OTHER MISCELLANEOUS DEBRIS SHALL BE DISPOSED OF OFF AIRPORT PROPERTY, UNLESS OTHERWISE SPECIFIED.
- ALL RUNWAYS, TAXIWAYS AND APRONS SHALL BE KEPT OPEN TO AIRCRAFT TRAFFIC DURING CONSTRUCTION EXCEPT AS NOTED ON THE CONSTRUCTION ACTIVITY PLAN. THE APRON AND HANGAR AREAS SHALL REMAIN OPEN TO TRAFFIC AT ALL TIMES.
- THE CONTRACTOR SHALL GIVE A MINIMUM OF 72 HOURS NOTICE TO AIRPORT OPERATIONS PRIOR TO CLOSING ANY PAVEMENTS SO THAT PROPER NOTAMS MAY BE ISSUED BY THE AIRPORT.
- VEHICLES AND EQUIPMENT SHALL NOT BE ALLOWED WITHIN AREAS 200' FROM AN ACTIVE RUNWAY CENTERLINE AND 129' FROM AN ACTIVE TAXIWAY CENTERLINE EXCEPT AS NOTED ON THE CONSTRUCTION ACTIVITY PLAN.
- WHEN THE CONTRACTOR IS NOT WORKING, EQUIPMENT SHALL BE STORED AT THE STAGING AREA OR WITHIN THE WORK AREA LIMITS (SEE NOTE 14).
- THE CONTRACTOR WILL BE PERMITTED TO STORE EQUIPMENT AND MATERIALS ONLY AT THE LOCATIONS SHOWN. PARKED EQUIPMENT AND MATERIAL STOCKPILES SHALL NOT PENETRATE SURFACES DEFINED BY F.A.R. TITLE 14 PART 77 - OBJECTS AFFECTING NAVIGABLE AIRSPACE. SEE SECTION A-A.
- ALL CONSTRUCTION TRAFFIC OPERATING ON, OR CROSSING RUNWAYS, TAXIWAYS AND APRONS OPEN TO AIRCRAFT TRAFFIC SHALL BE UNDER CONTROL BY A FLAGMAN OR ESCORT IN RADIO CONTACT WITH THE ATCT. THE CONTRACTOR SHALL PROVIDE HIS OWN FLAGMEN.
- IF, DURING CONSTRUCTION, AN EMERGENCY IS DECLARED BY THE AIRPORT, THE CONTRACTOR SHALL IMMEDIATELY CLEAR THE PAVEMENT OF ALL VEHICLES, PERSONNEL AND EQUIPMENT.
- REFER TO THE CONSTRUCTION ACTIVITY PLAN AND THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS CONCERNING COORDINATION OF CONSTRUCTION ACTIVITIES.
- WHEN CONFLICTS ARISE BETWEEN CONSTRUCTION ACTIVITIES AND AIRCRAFT OPERATIONS AND SAFETY, AIRCRAFT OPERATIONS AND SAFETY SHALL TAKE PRECEDENCE AND SHALL GOVERN. FINAL AUTHORITY IN THE APPROVAL OF CONSTRUCTION SEQUENCING LIES WITH THE AIRPORT.
- THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL CONSTRUCTION AREAS AND HAUL ROUTES WHICH WILL BE OPENED TO AIR TRAFFIC TO THE SATISFACTION OF AIRPORT OPERATIONS OR THE ENGINEER. A POWER BROOM AND OPERATOR SHALL BE ON SITE AT ALL TIMES WHEN ACTIVE PAVEMENTS ARE UTILIZED FOR CONSTRUCTION TRAFFIC.
- ALL CONSTRUCTION TRAFFIC SHALL IMMEDIATELY YIELD TO ONCOMING AIRCRAFT AT ALL TIMES.
- NONCOMPLIANCE BY THE CONTRACTOR WITH AIRPORT RULES AND REGULATIONS OR FAILURE TO COMPLY WITH THE CONTRACTOR'S APPROVED SAFETY PLAN MAY RESULT IN FINES AS ALLOWED BY LAW.
- THE CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO MINIMIZE DUST TO THE SATISFACTION OF THE AIRPORT OR ENGINEER. THIS INCLUDES DUST CREATED FROM PCC JOINT SAWING. AT A MINIMUM, A WATER TRUCK SHALL BE AVAILABLE. ALL COSTS ASSOCIATED WITH DUST CONTROL SHALL BE INCIDENTAL TO THE CONTRACT.
- ALL VEHICLE AND EQUIPMENT OPERATORS USED BY THE CONTRACTOR SHALL BE PROPERLY TRAINED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL REMAIN CLEAR OF THE ILS CRITICAL AREAS AND OTHER NAVAIDS FACILITIES AT ALL TIMES DURING ILS CONDITIONS.
- THE CONTRACTOR SHALL NOTIFY THE AIRCRAFT RESCUE AND FIRE FIGHTING (ARFF) FACILITY IF CONSTRUCTION ACTIVITY WILL REQUIRE THE BLOCKAGE OF EMERGENCY ACCESS TO THE AIRPORT.
- IN THE EVENT OF AN EMERGENCY, THE CONTRACTOR SHALL CALL 911.
- THE CONTRACTOR SHALL NOTIFY AIRPORT OPERATIONS OR THE ENGINEER IF ANY WILDLIFE IS SEEN ENTERING THE AIRPORT.
- THE CONTRACTOR SHALL DISPOSE OF ALL TRASH IN APPROVED CONTAINERS AND PICK UP ANY FOREIGN OBJECT DEBRIS (FOD) SEEN ON THE AIRFIELD PAVEMENTS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- THE CONTRACTOR SHALL SECURE ALL LOOSE ITEMS FROM VEHICLES PRIOR TO DRIVING ON AIRFIELD PAVEMENTS.
- THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS OF THE CONSTRUCTION ACTIVITY PLAN SHEETS. IF THE CONTRACTOR PROPOSES CHANGES TO THE CONSTRUCTION ACTIVITY PLAN, THE CONTRACTOR SHALL SUBMIT TO THE AIRPORT AND THE ENGINEER A DETAILED SAFETY PLAN THAT IS IN ACCORDANCE WITH FAA AC 150/5370-2E. THE SAFETY PLAN SHALL AT A MINIMUM ADDRESS ALL 26 ITEMS LISTED IN SECTION 2-2 OF FAA AC 150/5370-2E.
- ALL CONTRACTOR PERSONNEL INCLUDING SUBCONTRACTORS SHALL FOLLOW ALL AIRPORT SAFETY AND SECURITY REQUIREMENTS.

MAXIMUM HEIGHT OF EQUIPMENT = 25'

SURVEY MONUMENTS

DESIGNATION	DESCRIPTION	NORTH	EAST	STATION*	OFFSET	ELEV.
FE-1	CHISELED 'X' ON FIRE HYD.	686167.04	2395777.86			445.995
A-2A	ALUM. TABLET	685705.94	2393962.24	131+70.07	330.12 RT	434.42
KDG-BLA3	ALUM. TABLET	684648.28	2396395.23	156+14.84	700.00 LT	440.04
KDG-BLA4	ALUM. TABLET	683356.50	2397627.81	174+00.33	700.00 LT	434.56
KDG-BLA5	BRASS TABLET	687532.99	2393623.66	116+00.00	700.00 LT	445.59
KDG-BLA8	BRASS TABLET	686634.16	2394500.37	128+70.00	700.00 LT	443.54

*@ RUNWAY 14L/32R STATIONS

ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
(314) 436-5500

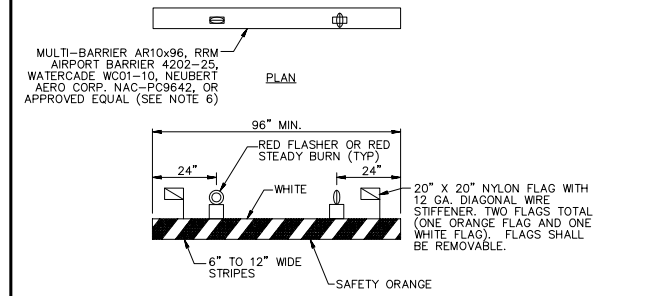
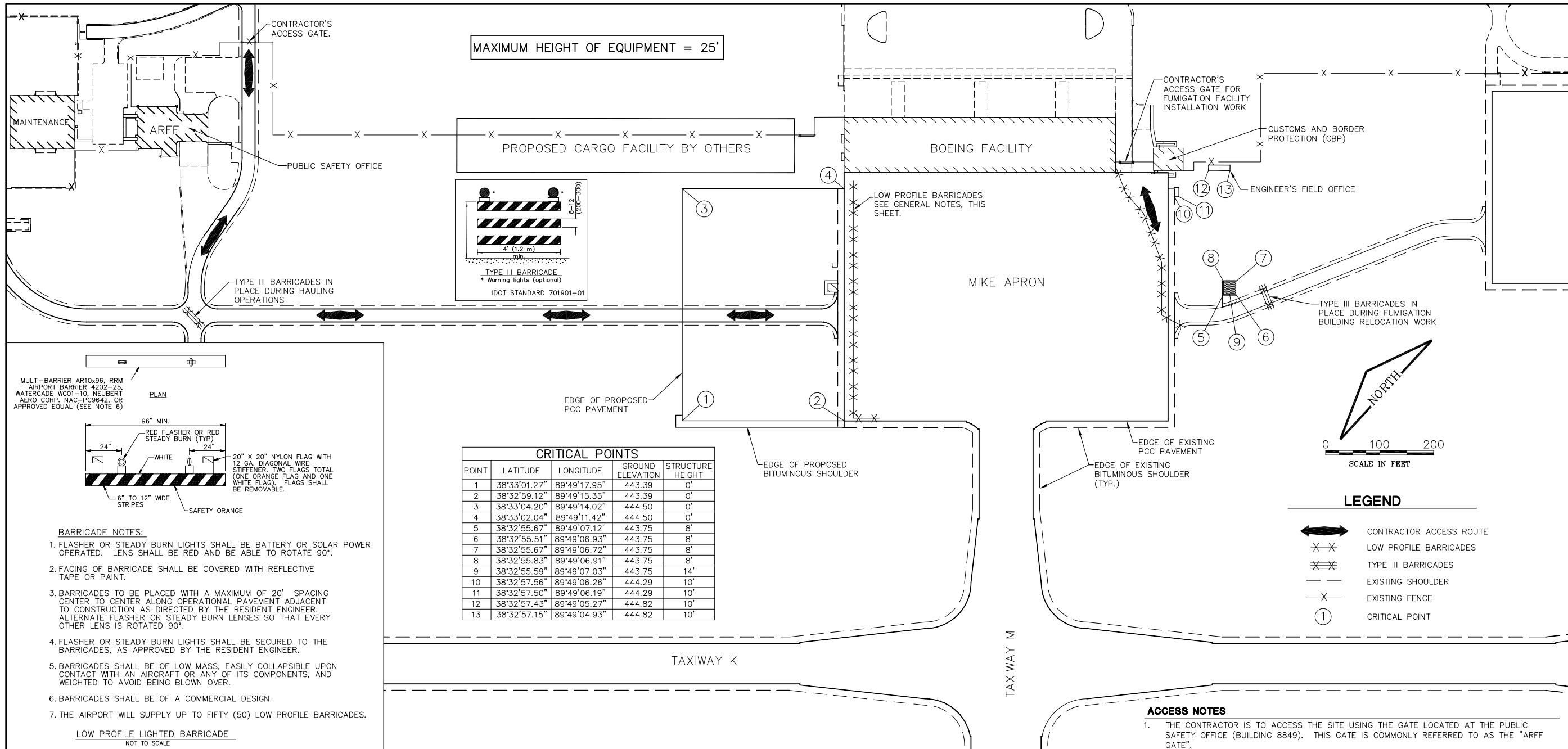
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**IL PROJECT: BLV-4061
AIP PROJ. 3-17-0146-XX**

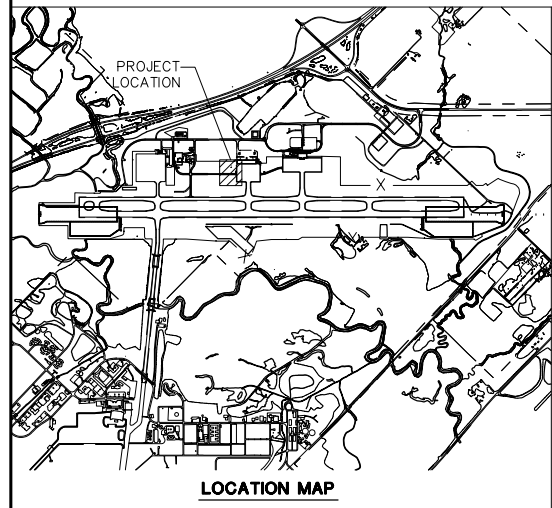
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DESIGN BY: LEW
DRAWN BY: ASA
CHECKED BY: MJD/CET
APPROVED BY: BWG
DATE: JANUARY 14, 2011
JOB No: 10098-01

SITE PLAN

SHEET 3 OF 53 SHEETS



- BARRICADE NOTES:**
- FLASHER OR STEADY BURN LIGHTS SHALL BE BATTERY OR SOLAR POWER OPERATED. LENS SHALL BE RED AND BE ABLE TO ROTATE 90°.
 - FACING OF BARRICADE SHALL BE COVERED WITH REFLECTIVE TAPE OR PAINT.
 - BARRICADES TO BE PLACED WITH A MAXIMUM OF 20' SPACING CENTER TO CENTER ALONG OPERATIONAL PAVEMENT ADJACENT TO CONSTRUCTION AS DIRECTED BY THE RESIDENT ENGINEER. ALTERNATE FLASHER OR STEADY BURN LENSES SO THAT EVERY OTHER LENS IS ROTATED 90°.
 - FLASHER OR STEADY BURN LIGHTS SHALL BE SECURED TO THE BARRICADES, AS APPROVED BY THE RESIDENT ENGINEER.
 - BARRICADES SHALL BE OF LOW MASS, EASILY COLLAPSIBLE UPON CONTACT WITH AN AIRCRAFT OR ANY OF ITS COMPONENTS, AND WEIGHTED TO AVOID BEING BLOWN OVER.
 - BARRICADES SHALL BE OF A COMMERCIAL DESIGN.
 - THE AIRPORT WILL SUPPLY UP TO FIFTY (50) LOW PROFILE BARRICADES.



SEQUENCE OF CONSTRUCTION NOTES
GENERAL NOTES

- PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL ATTEND A PRECONSTRUCTION CONFERENCE WITH THE AIRPORT, ENGINEER, AND ILLINOIS DIVISION OF AERONAUTICS (IDA). THE COST OF PREPARING FOR AND ATTENDING THE PRECONSTRUCTION CONFERENCE SHALL BE INCIDENTAL TO THE CONTRACT.
- ON OR BEFORE THE PRECONSTRUCTION CONFERENCE, THE CONTRACTOR SHALL SUBMIT A PROPOSED SCHEDULE FOR THE PROJECT. THE SCHEDULE SHALL INCLUDE A START AND COMPLETION DATE FOR EACH ITEM OF WORK. THE SCHEDULE SHALL BE UPDATED ON A WEEKLY BASIS. ALL COSTS ASSOCIATED WITH THE SCHEDULE SHALL BE INCIDENTAL TO THE CONTRACT.
- DURING CONSTRUCTION THE CONTRACTOR SHALL ATTEND A WEEKLY COORDINATION MEETING WITH THE AIRPORT STAFF AND ENGINEER. ALL COSTS ASSOCIATED WITH ATTENDING THE WEEKLY MEETING SHALL BE INCIDENTAL TO THE CONTRACT.
- THE CONTRACTOR SHALL KEEP A RECORD OF THE NAMES OF ALL EMPLOYEES ENTERING THE JOB SITE ON A DAILY BASIS. A RECORD OF EACH SUBCONTRACTOR ENTERING THE JOB SITE SHALL ALSO BE KEPT BY THE CONTRACTOR.
- THE CONTRACTOR SHALL PROVIDE A 24 HOUR EMERGENCY CONTACT PERSON AND PHONE NUMBER.
- PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL PROVIDE A LIST OF SUBCONTRACTORS AND MATERIAL SUPPLIERS.
- PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL SIGN THE SWPPP CERTIFICATION STATEMENT.
- WORK INSIDE 200' OF AN ACTIVE RUNWAY CENTERLINE SHALL BE PERFORMED IN ACCORDANCE WITH FAA AC 150/5370-2E, SECTION 3-2.

- WORK INSIDE 129' OF AN ACTIVE TAXIWAY CENTERLINE SHALL BE PERFORMED IN ACCORDANCE WITH FAA AC 150/5370-2E, SECTION 3-3. THIS SHALL INCLUDE CLEARING THE AREA OF PERSONNEL AND EQUIPMENT FOR EACH PASSING AIRCRAFT.
- BARRICADES SHALL BE PLACED AT THE LOCATIONS SHOWN ON THIS SHEET OR AS DIRECTED BY THE ENGINEER. THE AIRPORT WILL SUPPLY UP TO FIFTY (50) LOW PROFILE LIGHTED BARRICADES FOR USE DURING THE PROJECT. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF THE BARRICADES INCLUDING BATTERY REPLACEMENT FOR THE LIGHTS. IF ADDITIONAL LOW PROFILE BARRICADES ARE NEEDED, THE CONTRACTOR SHALL SUPPLY THE ADDITIONAL LOW PROFILE BARRICADES AT NO ADDITIONAL COST TO THE CONTRACT. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR WILL RETAIN POSSESSION OF ANY ADDITIONAL BARRICADES SUPPLIED BY THE CONTRACTOR. THE BARRICADES SUPPLIED BY THE AIRPORT SHALL REMAIN PROPERTY OF THE AIRPORT AND SHALL BE RETURNED IN LIKE CONDITION WITH AN ALLOWANCE FOR NORMAL WEAR AND TEAR AS DETERMINED BY THE ENGINEER. ANY DAMAGED BARRICADES SHALL BE REPLACED BY THE CONTRACTOR WITH NEW BARRICADES OF SIMILAR TYPE AND DESIGN AT NO ADDITIONAL COST TO THE CONTRACT.
- CONSTRUCTION OF A CARGO FACILITY LOCATED ADJACENT TO THE MIKE APRON WORK AREA WILL BE ONGOING DURING THE MIKE APRON EXPANSION WORK. THE MIKE APRON EXPANSION CONTRACTOR SHALL FAMILIARIZE HIS/HERSELF WITH THE CARGO FACILITY WORK AND SHALL COORDINATE HIS/HER CONSTRUCTION OPERATIONS WITH THE AIRPORT AND THE CARGO FACILITY CONTRACTOR. ANY DISPUTE BETWEEN CONTRACTORS IN REGARDS TO SEQUENCE OF CONSTRUCTION OR CONCURRENT WORK IN OVERLAPPING PROJECTS AREAS SHALL BE SETTLED BY THE AIRPORT.
- SCOTT AIR FORCE BASE (SAFB) IS ANTICIPATING A PROJECT TO REHABILITATE RUNWAY 14R-32L DURING THE 2011 CONSTRUCTION SEASON. THIS WILL REQUIRE THE CLOSURE OF RUNWAY 14R-32L RESULTING IN INCREASED AIRCRAFT OPERATIONS ON RUNWAY 14L-32R AND TAXIWAY K. THE MIKE APRON EXPANSION CONTRACTOR SHALL FAMILIARIZE HIS/HERSELF WITH THE SAFB WORK AND SHALL COORDINATE HIS/HER CONSTRUCTION OPERATIONS WITH THE AIRPORT AND THE SAFB CONTRACTOR.
- TOTAL CONTRACT TIME SHALL BE 130 CALENDAR DAYS.

ACCESS NOTES

- THE CONTRACTOR IS TO ACCESS THE SITE USING THE GATE LOCATED AT THE PUBLIC SAFETY OFFICE (BUILDING 8849). THIS GATE IS COMMONLY REFERRED TO AS THE "ARFF GATE".
- THE STORAGE AND STAGING AREA WILL BE IN THE AREA ACROSS FROM THE DEPARTMENT OF ENGINEERING AND PLANNING (BUILDING 9768).
- ALL WORK WITHIN A CONTROLLED OR SECURE AREA SHALL BE SUBJECT TO AIRPORT SECURITY REGULATIONS. ANY VIOLATION OF AIRPORT SECURITY RULES IS GROUNDS FOR IMMEDIATE TERMINATION OF CONTRACT AND RELEVANT FINES.
- CERTAIN CONTRACTOR EMPLOYEES SHALL OBTAIN A MIDAMERICA ST. LOUIS AIRPORT ACCESS MEDIA IDENTIFICATION BADGE. THIS CONSISTS OF FILLING OUT ALL NECESSARY PAPERWORK, FINGERPRINTING, ATTENDING AND PASSING A 2-HOUR TRAINING CLASS CONCERNING SAFETY AND SECURITY AT THE AIRPORT. CONTRACTOR EMPLOYEES MUST MEET CERTAIN BACKGROUND CHECK CRITERIA AND THE CONTRACTOR MUST MAKE CERTAIN CERTIFICATION ABOUT EACH EMPLOYEE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINGERPRINTING COSTS (CURRENTLY \$75.00 PER INDIVIDUAL). ALL COSTS ASSOCIATED WITH OBTAINING THE IDENTIFICATION BADGE SHALL BE BORNE BY THE CONTRACTOR.
- ALL CONTRACTOR EMPLOYEES WHO ARE DESIGNATED AS DRIVERS FOR THE CONTRACTOR WITHIN THE AIRFIELD OPERATIONS AREA (AOA) SHALL ALSO ATTEND AND PASS THE MIDAMERICA ST. LOUIS AIRPORT DRIVERS TRAINING PROGRAM. THE DURATION IS APPROXIMATELY TWO HOURS. ONLY THOSE INDIVIDUALS WHO RECEIVE THIS DESIGNATION WILL BE PERMITTED TO OPERATE VEHICLES OR EQUIPMENT ON MIDAMERICA ST. LOUIS AIRPORT (BLV). ALL COSTS ASSOCIATED WITH THE DRIVER TRAINING PROGRAM SHALL BE BORNE BY THE CONTRACTOR.
- DRIVERS OF TRUCKS CONTAINING MATERIAL DELIVERIES (AGGREGATE, CONCRETE, ETC.) NEED NOT OBTAIN AN AIRPORT MEDIA ID BADGE BUT SHALL BE REQUIRED TO SUBMIT THEIR NAME, DRIVER'S LICENSE NUMBER, TRUCK LICENSE PLATE NUMBER AND NAME OF TRUCKING COMPANY TO THE PRIME CONTRACTOR PRIOR TO ENTERING THE JOBSITE. WHILE INSIDE THE AOA, THE TRUCK DRIVERS SHALL BE ESCORTED BY THE CONTRACTOR.
- CONTRACTOR WORK CREWS MUST MAINTAIN RADIO CONTACT WITH THE AIR TRAFFIC CONTROL TOWER AT ALL TIMES. MIDAMERICA ST. LOUIS AIRPORT SHALL SUPPLY THE CONTRACTOR WITH APPROPRIATE RADIO(S).
- THE STORAGE AND STAGING AREA WILL BE ACROSS FROM THE ENGINEERING AND PLANNING BUILDING. THIS AREA IS ENCLOSED BY A FENCE AND IS OUTSIDE THE AOA FENCE. AN ALTERNATE LOCATION WILL BE SOUTHEAST (SOUTH) OF THE FUEL FARM ON THE NORTHEAST (EAST) SIDE OF THE PUBLIC ACCESS ROAD. THIS AREA IS OUTSIDE OF THE AOA FENCE AND HAS NO FENCING AROUND IT.
- ACCESS TO THE EARTHWORK DISPOSAL AREA SHALL BE AS SHOWN ON THE SITE PLAN.

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22). PLOT 1

**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
(314) 436-5500

GMT
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CONSULTING ENGINEERS

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**IL PROJECT: BLV-4061
AIP PROJ. 3-17-0146-XX**

FILE: 04_CAP.dwg

DESIGN BY: LEW

DRAWN BY: ASA

CHECKED BY: MJD/CET

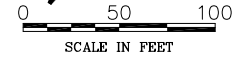
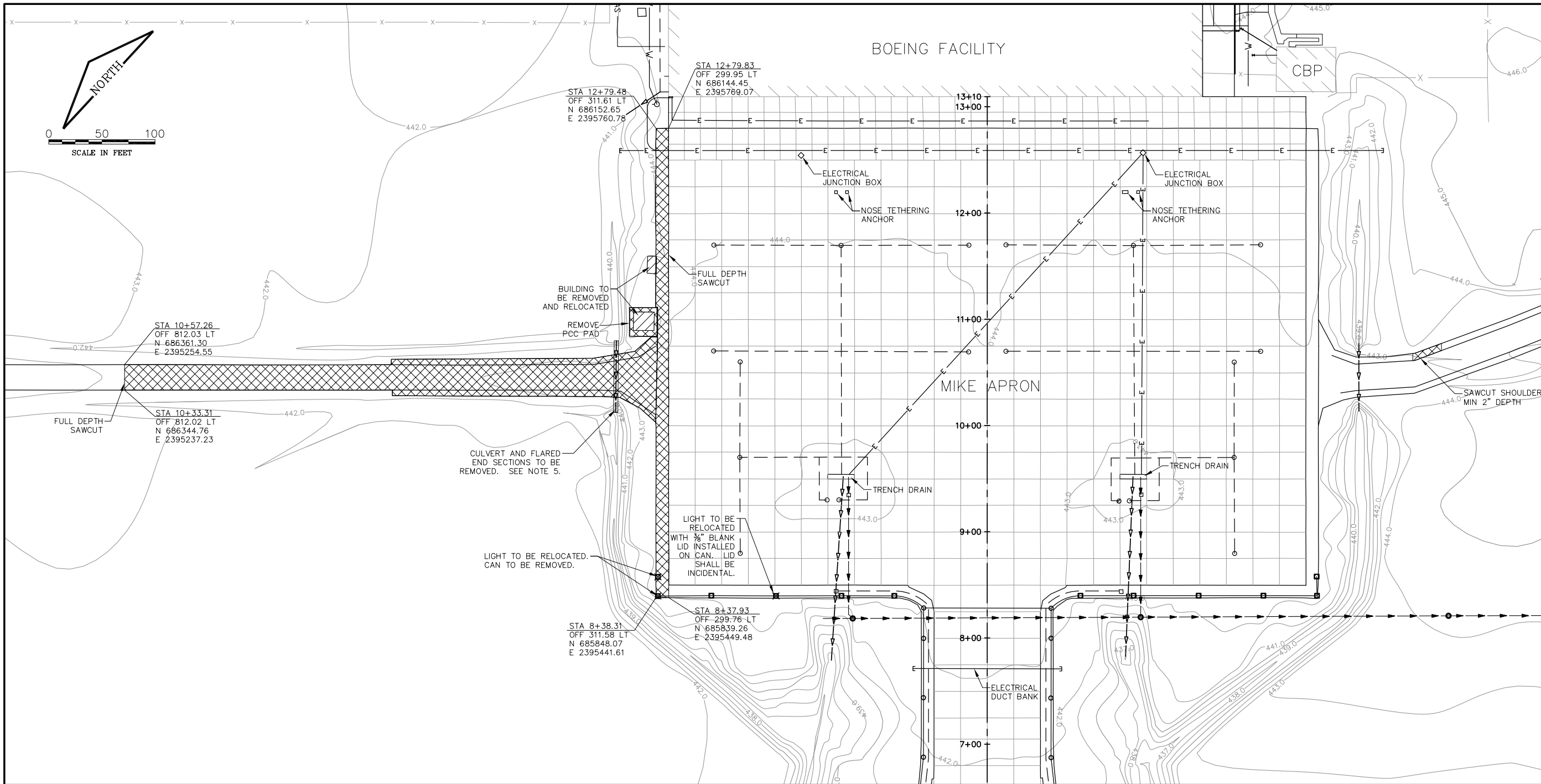
APPROVED BY: BWG

DATE: JANUARY 14, 2011

JOB No: 10098-01

**CONSTRUCTION
ACTIVITY PLAN**

SHEET 4 OF 53 SHEETS



REVISIONS		
NUMBER	BY	DATE

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ST. CLAIR COUNTY, ILLINOIS**

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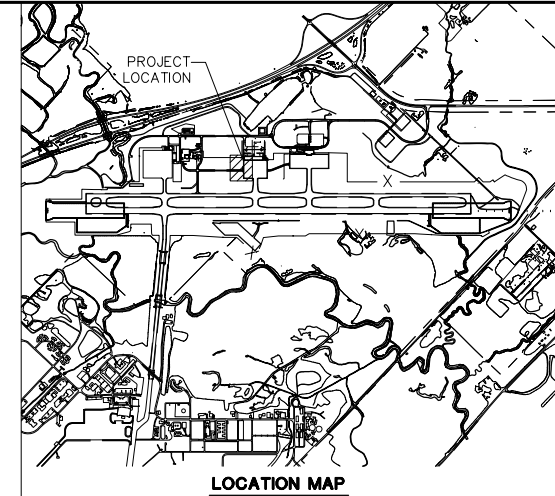
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**IL PROJECT: BLV-4061
AIP PROJ. 3-17-0146-XX**

LEGEND

—E—	EXISTING ELECTRIC LINE
—V—V—	EXISTING STORM SEWER
—G—G—	EXISTING GLYCOL DISPOSAL
—U—U—	EXISTING UNDERDRAIN
□	EXISTING LED TAXIWAY EDGE LIGHT
○	EXISTING INCANDESCENT TAXIWAY EDGE LIGHT
▨	DEMOLITION AREA: PAVEMENT
▩	DEMOLITION AREA: STRUCTURES

- DEMOLITION NOTES**
1. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY.
 2. CONTRACTOR SHALL PROTECT PORTLAND CEMENT CONCRETE AND ASPHALT PAVEMENT AND SHOULDER PAVEMENTS THAT ARE OUTSIDE THE DEMOLITION AREA ADJACENT TO SPECIFIED PAVEMENT REMOVAL. CONTRACTOR SHALL REPAIR ANY DAMAGE TO ADJACENT PAVEMENT AT HIS/HER OWN EXPENSE AS DIRECTED BY THE ENGINEER.
 3. EXISTING ELECTRICAL ITEMS SHOWN TO BE REMOVED SHALL NOT BE REMOVED IF THE ITEMS ARE REQUIRED FOR THE OPERATION OF EXISTING EQUIPMENT. THE ENGINEER SHALL BE NOTIFIED IF SUCH ITEMS ARE ENCOUNTERED.
 4. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY "JUMPER" CONNECTIONS TO KEEP ALL CIRCUITS ADJACENT TO ACTIVE PAVEMENTS OPERATING BETWEEN DEMOLITION AND CONSTRUCTION OF NEW EDGE LIGHTING SYSTEMS.
 5. THE 24" REINFORCED CONCRETE PIPE (RCP) AND FLARED END SECTIONS (FES) TO BE REMOVED MAY BE REUSED FOR THE RCP AND FES INSTALLATIONS UNDER THE SERVICE ROAD IF THE EXISTING RCP SEGMENTS AND END SECTIONS ARE MAINTAINED IN A CONDITION THAT SATISFIES THE APPLICABLE SPECIFICATION. ANY REUSED PIPE SEGMENTS OR END SECTIONS WILL BE PAID FOR UNDER THE RESPECTIVE NEW PIPE OR END SECTION PAY ITEM.
 6. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES SHOWN ON EROSION CONTROL PHASE 1 ARE TO BE INSTALLED.



FILE: 05_DEMO.dwg

DESIGN BY: LEW

DRAWN BY: ASA

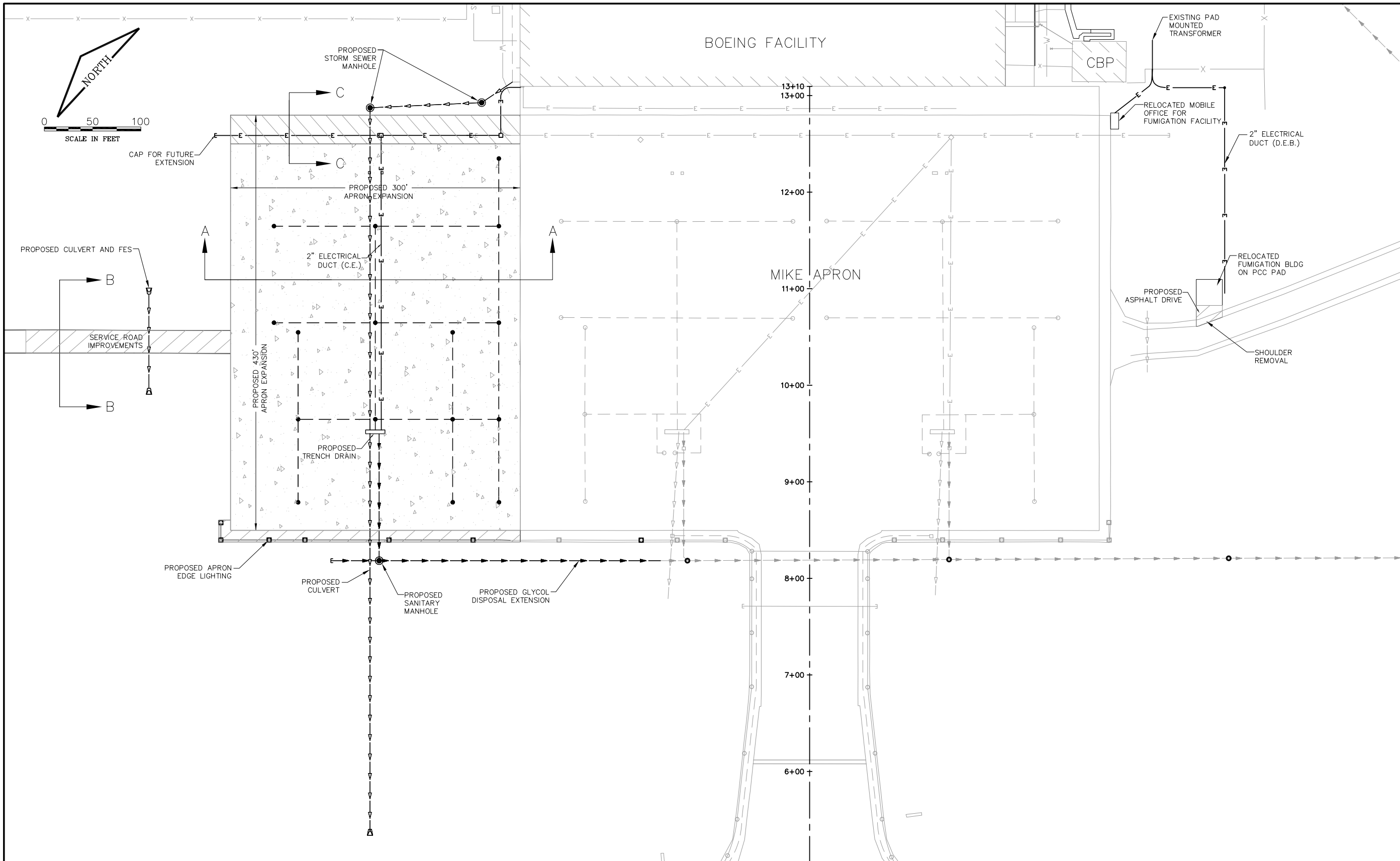
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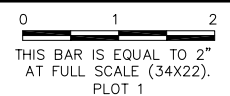
DATE: JANUARY 14, 2011

JOB No: 10098-01

**DEMOLITION
PLAN**



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ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

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**IL PROJECT: BLV-4061
AIP PROJ. 3-17-0146-XX**

FILE: 06_PROP_IMPROVE.dwg
 DESIGN BY: LEW
 DRAWN BY: ASA
 CHECKED BY: MJD/CET
 APPROVED BY: BWG
 DATE: JANUARY 14, 2011
 JOB No: 10098-01

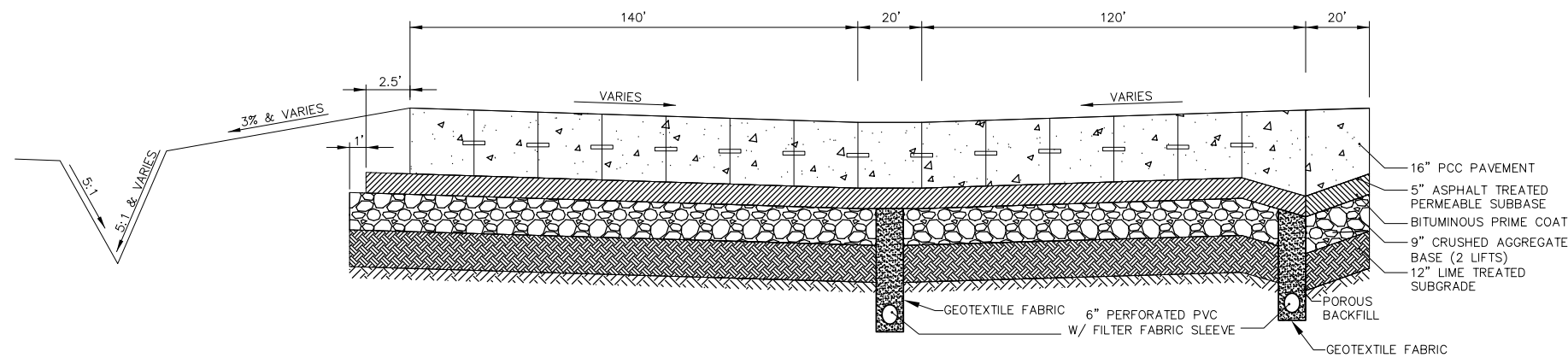
PROPOSED IMPROVEMENTS

LEGEND

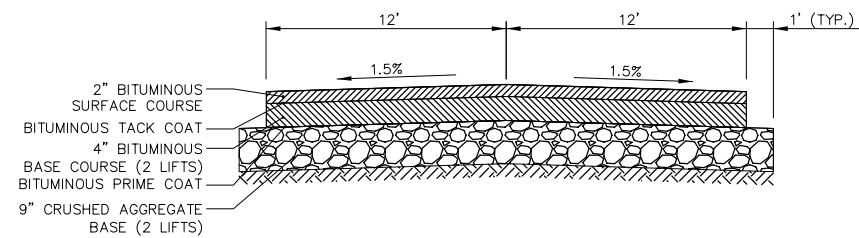
	EXISTING STORM SEWER		EXISTING ELECTRIC LINE
	EXISTING GLYCOL DISPOSAL		PROPOSED ELECTRIC LINE
	EXISTING UNDERDRAIN		PROPOSED 16" PCC PVMT
	PROPOSED STORM SEWER		PROPOSED 9" PCC PVMT
	PROPOSED GLYCOL DISPOSAL		PROPOSED BITUMINOUS PVMT
	PROPOSED UNDERDRAIN		

NOTES

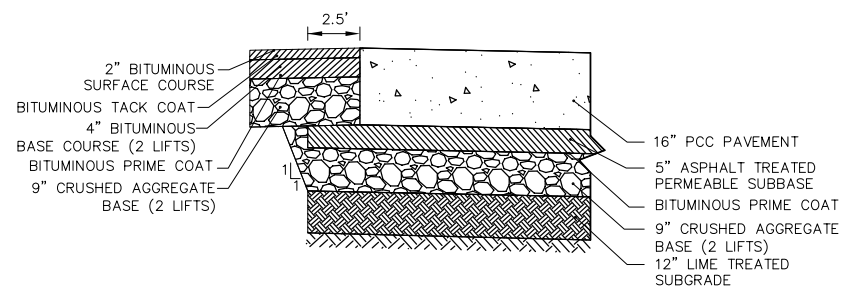
SEE DEMOLITION PLAN FOR ADDITIONAL IMPROVEMENTS.



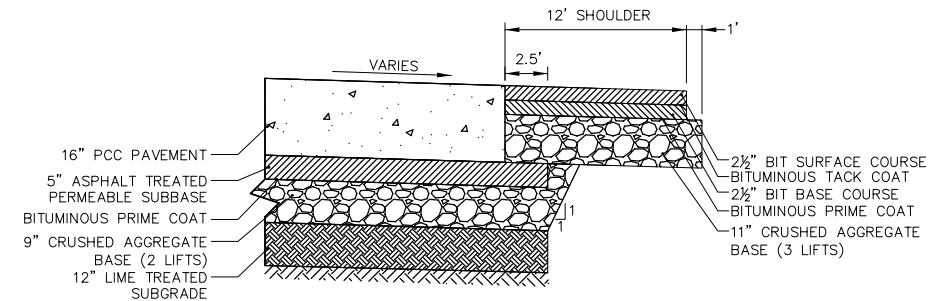
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NOT TO SCALE



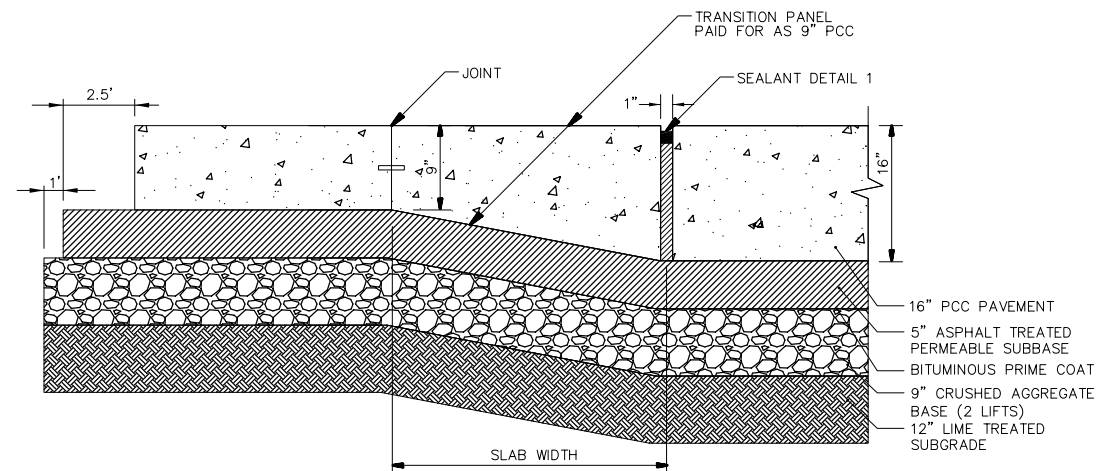
(B) SERVICE ROAD TYPICAL SECTION
NOT TO SCALE



TYPICAL SECTION AT SERVICE ROAD
AT CONNECTION TO APRON
NOT TO SCALE



TYPICAL SECTION AT SHOULDER
NOT TO SCALE



(C) THICKENED EDGE AT 9" PCC
NOT TO SCALE

REVISIONS		
NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2"
AT FULL SCALE (34X22).
PLOT 1

**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

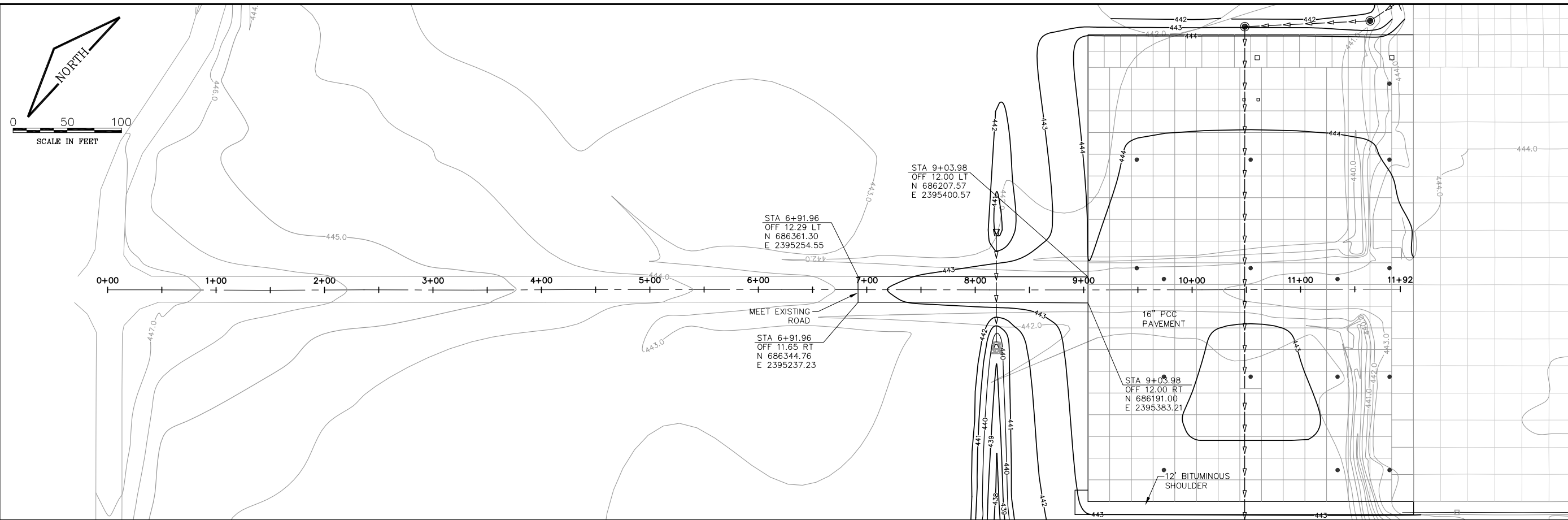
MIKE APRON EXPANSION - CONTRACT 1

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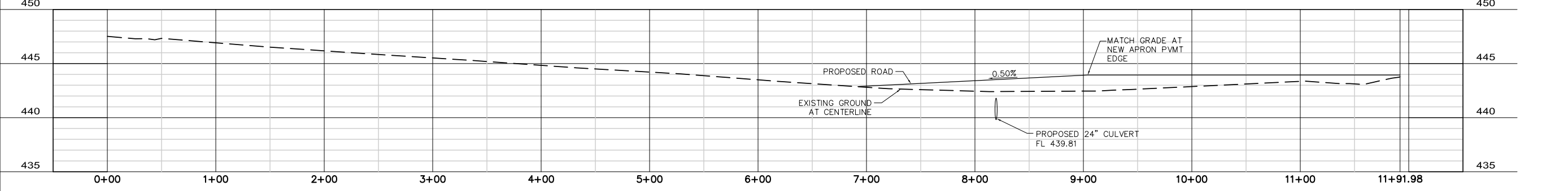
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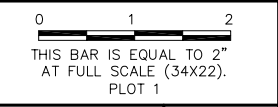
FILE: 07_TYP_SECT.dwg
 DESIGN BY: LEW
 DRAWN BY: ASA
 CHECKED BY: MJD/CET
 APPROVED BY: BWG
 DATE: JANUARY 14, 2011
 JOB No: 10098-01



SERVICE ROAD PROFILE



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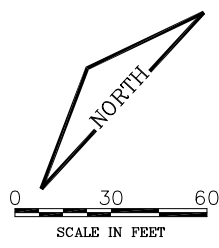
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CHECKED BY: MJD/CET
APPROVED BY: BWG
DATE: JANUARY 14, 2011

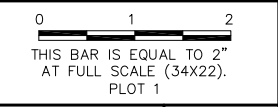
JOB No: 10098-01
**SERVICE ROAD
PLAN AND
PROFILE**



BOEING FACILITY

13+10
13+00

REVISIONS		
NUMBER	BY	DATE



**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

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AIP PROJ. 3-17-0146-XX**

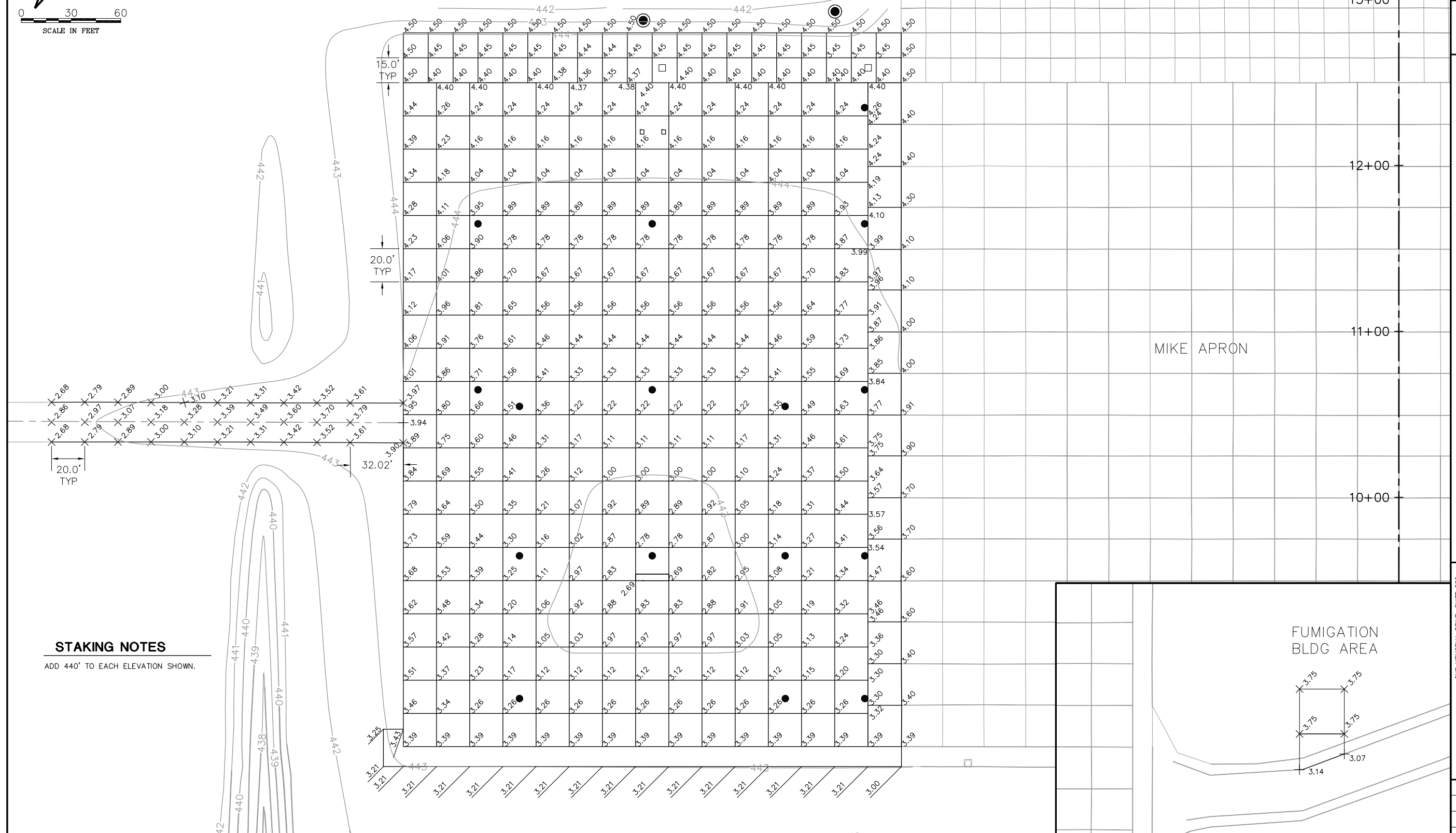
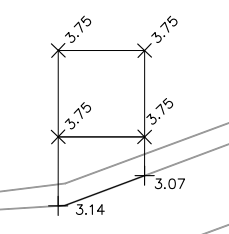
STAKING NOTES
ADD 440' TO EACH ELEVATION SHOWN.

MIKE APRON

11+00

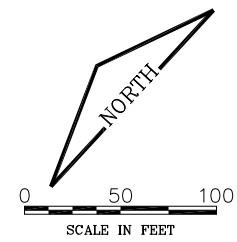
10+00

FUMIGATION
BLDG AREA



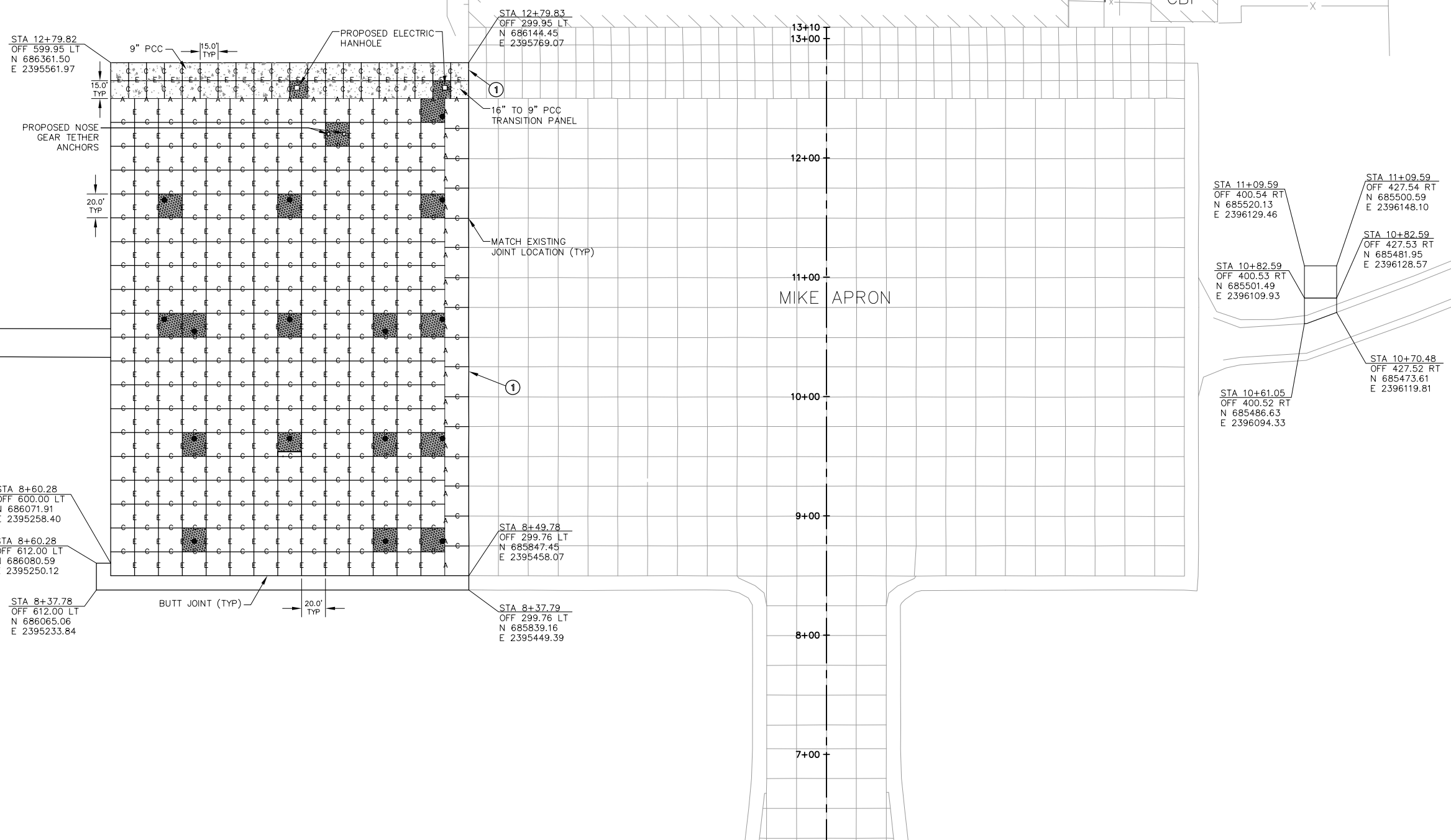
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DESIGN BY: LEW
DRAWN BY: ASA
CHECKED BY: MJD/CET
APPROVED BY: BWG
DATE: JANUARY 14, 2011
JOB No: 10098-01

STAKING PLAN

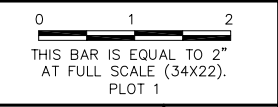


BOEING FACILITY

CBP



REVISIONS		
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**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

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**IL PROJECT: BLV-4061
AIP PROJ. 3-17-0146-XX**

FILE: 10_JOINTING.dwg

DESIGN BY: LEW

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CHECKED BY: MJD/CET

APPROVED BY: BWG

DATE: JANUARY 14, 2011

JOB No: 10098-01

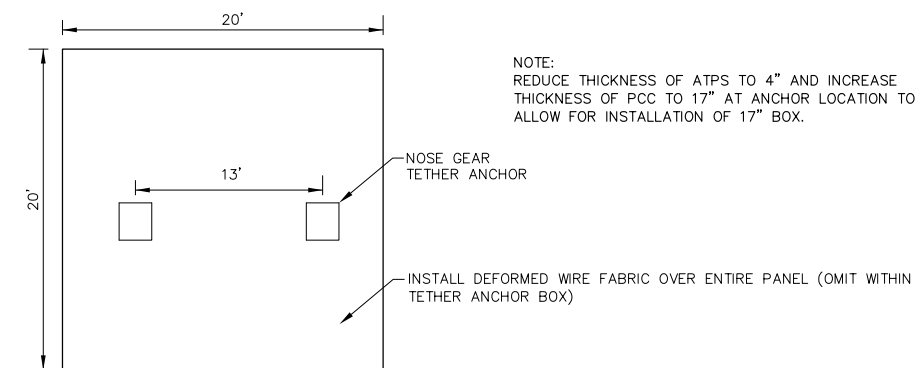
JOINTING PLAN

LEGEND

- A— TYPE A EXPANSION JOINT
- e— TYPE C DOWELED CONTRACTION JOINT
- E— TYPE E DOWELED CONSTRUCTION JOINT
- 9" PCC PAVEMENT
- REINFORCED CONCRETE PANEL
- PROPOSED CLEANOUT OR COLLECTION STRUCTURE

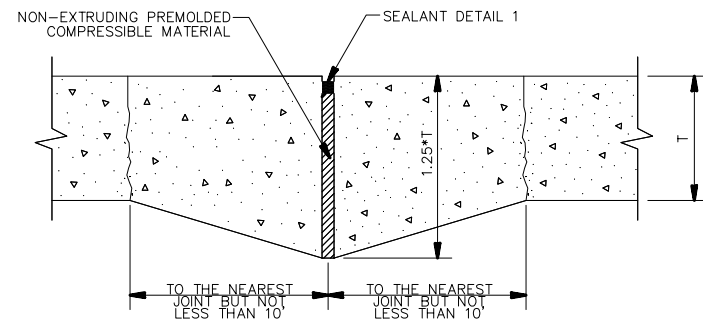
JOINTING KEYNOTES

- ① DRILL AND BOND DOWEL BARS INTO EXISTING PAVEMENT PRIOR TO PLACEMENT OF NEW PCC



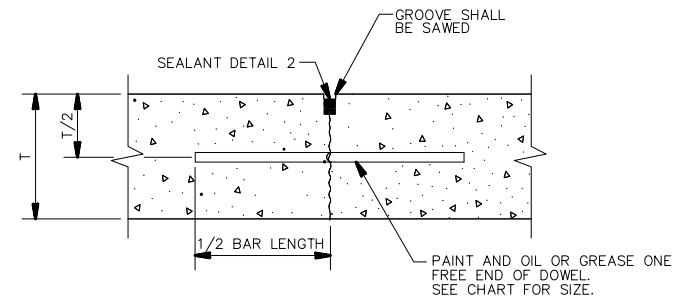
TETHER ANCHOR PAVING DETAIL
N.T.S.

EXPANSION JOINTS



TYPE A - THICKENED EDGE
NOT TO SCALE

CONTRACTION JOINTS



TYPE C - DOWELED
NOT TO SCALE

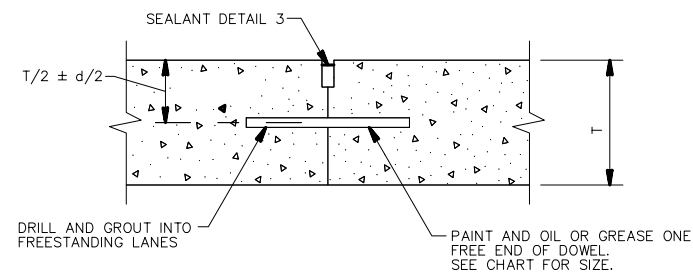
JOINTING NOTES

- ALL EDGES OF NEW SLABS, FREE STANDING OR CLOSURE, SHALL BE EDGED WITH AN APPROVED TOOL HAVING A RADIUS OF 1/4" TO FACILITATE SAWING OF THE SEALANT RESERVOIR.
- THE INITIAL SAW CUT FOR ALL TRANSVERSE CONTRACTION JOINTS SHALL BE SAWED AS SOON AS POSSIBLE AFTER PLACEMENT OF THE PAVEMENT.
- ALL DOWEL BARS IN TRANSVERSE JOINTS SHALL BE SECURELY HELD IN PLACE BY MEANS OF A DOWEL BAR ASSEMBLY WHICH WILL INSURE THAT THEY REMAIN PARALLEL TO THE PAVEMENT LANES. SHOP DRAWING SUBMITTAL OF THE DOWEL BAR ASSEMBLIES SHALL BE MADE PRIOR TO INSTALLATION.
- ALL REINFORCEMENT AND/OR FABRIC SHALL BE SECURELY HELD IN PLACE BY SUPPORT PINS OR OTHER APPROVED METHODS TO PREVENT SHIFTING DURING & AFTER CONCRETE PLACEMENT.
- TYPE E DOWELED CONSTRUCTION JOINT SHALL BE INSTALLED FOR ALL LONGITUDINAL JOINTS AND WHERE PAVING OPERATIONS ARE DELAYED OR STOPPED.

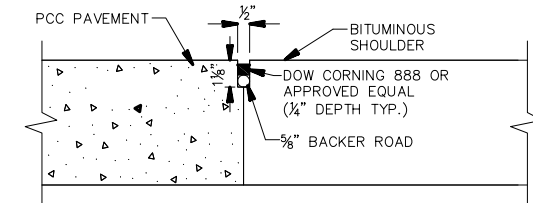
REVISIONS		
NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2"
AT FULL SCALE (34X22).
PLOT 1

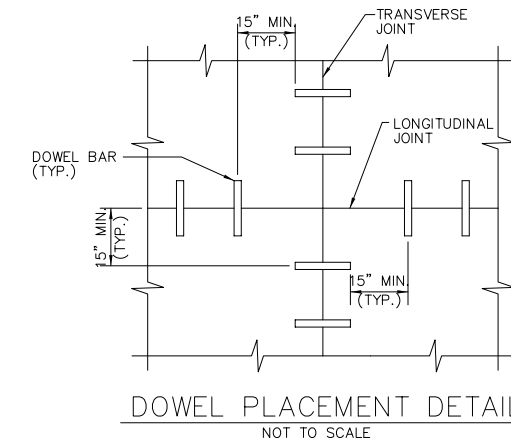
CONSTRUCTION JOINTS



TYPE E - DOWELED
NOT TO SCALE



BUTT JOINT DETAIL AT SHOULDER
NOT TO SCALE



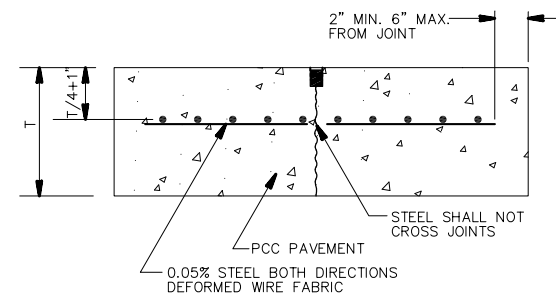
DOWEL PLACEMENT DETAIL
NOT TO SCALE

DOWEL BAR SIZES

THICKNESS OF SLAB	DIAMETER	LENGTH	SPACING
6-7 IN	3/4 IN	18 IN	12 IN
8-12 IN	1 IN	19 IN	12 IN
13-16 IN	1-1/4 IN	20 IN	15 IN
17-20 IN	1-1/2 IN (1)	20 IN	18 IN
21-24 IN	2 IN (1)	24 IN	18 IN

(1) DOWELS NOTED MAY BE A SOLID BAR OR HIGH-STRENGTH PIPE. HIGH STRENGTH PIPE DOWELS MUST BE PLUGGED ON EACH END WITH A TIGHT-FITTING PLASTIC CAP OR WITH BITUMINOUS OR MORTAR MIX.

REINFORCED PANELS

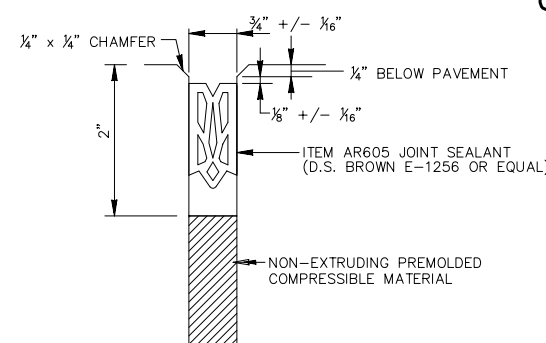


ODD SHAPED PANEL REINFORCEMENT

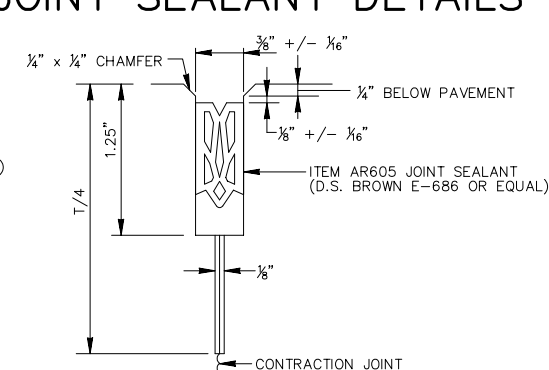
NOT TO SCALE

THICKNESS	SUGGESTED MINIMUM FABRIC SIZE
4"	6 x 6 - W1.2 x W1.2 OR 4 x 4 - W0.9 x W0.9
6"	6 x 6 - W2.1 x W2.1 OR 4 x 4 - W1.2 x W1.2
8"	6 x 6 - W2.5 x W2.5 OR 4 x 4 - W2.1 x W2.1
10"	6 x 6 - W3.5 x W3.5 OR 4 x 4 - W2.1 x W2.1
12"	6 x 6 - W4 x W4 OR 4 x 4 - W2.5 x W2.5
14"	6 x 6 - W4.5 x W4.5 OR 4 x 4 - W3 x W3
16"	6 x 6 - W5 x W5 OR 4 x 4 - W3.5 x W3.5

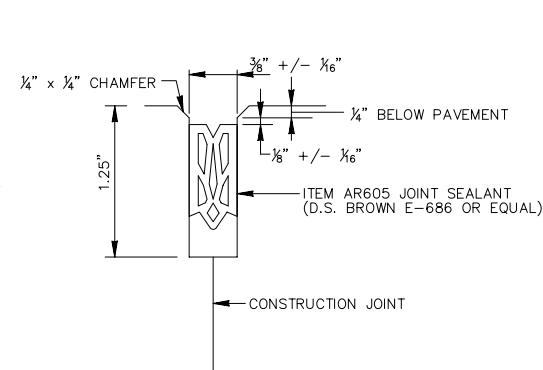
JOINT SEALANT DETAILS



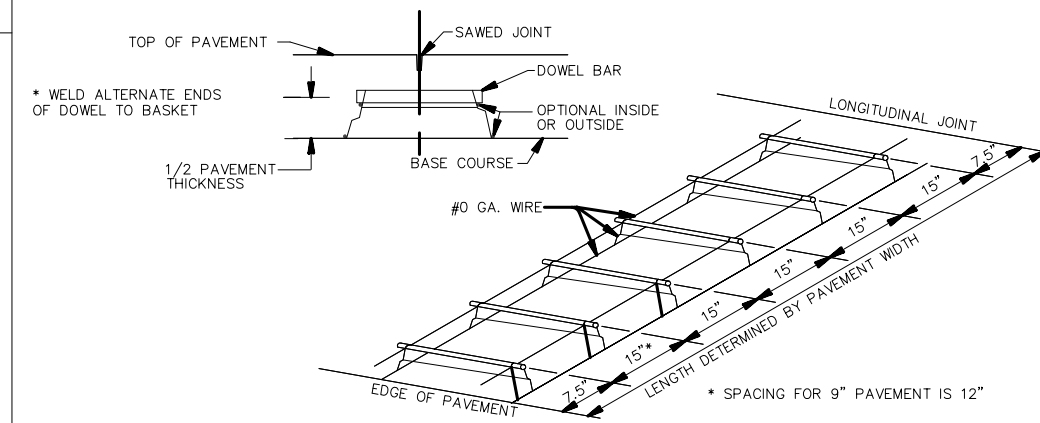
JOINT SEALANT DETAIL 1
NOT TO SCALE



JOINT SEALANT DETAIL 2
NOT TO SCALE

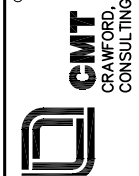


JOINT SEALANT DETAIL 3
NOT TO SCALE



DOWEL BAR ASSEMBLY
NOT TO SCALE

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AIP PROJ: 3-17-0146-XX

FILE: 11_JOINT_DETAILS.dwg

DESIGN BY: LEW

DRAWN BY: ASA

CHECKED BY: MJD/CET

APPROVED BY: BWG

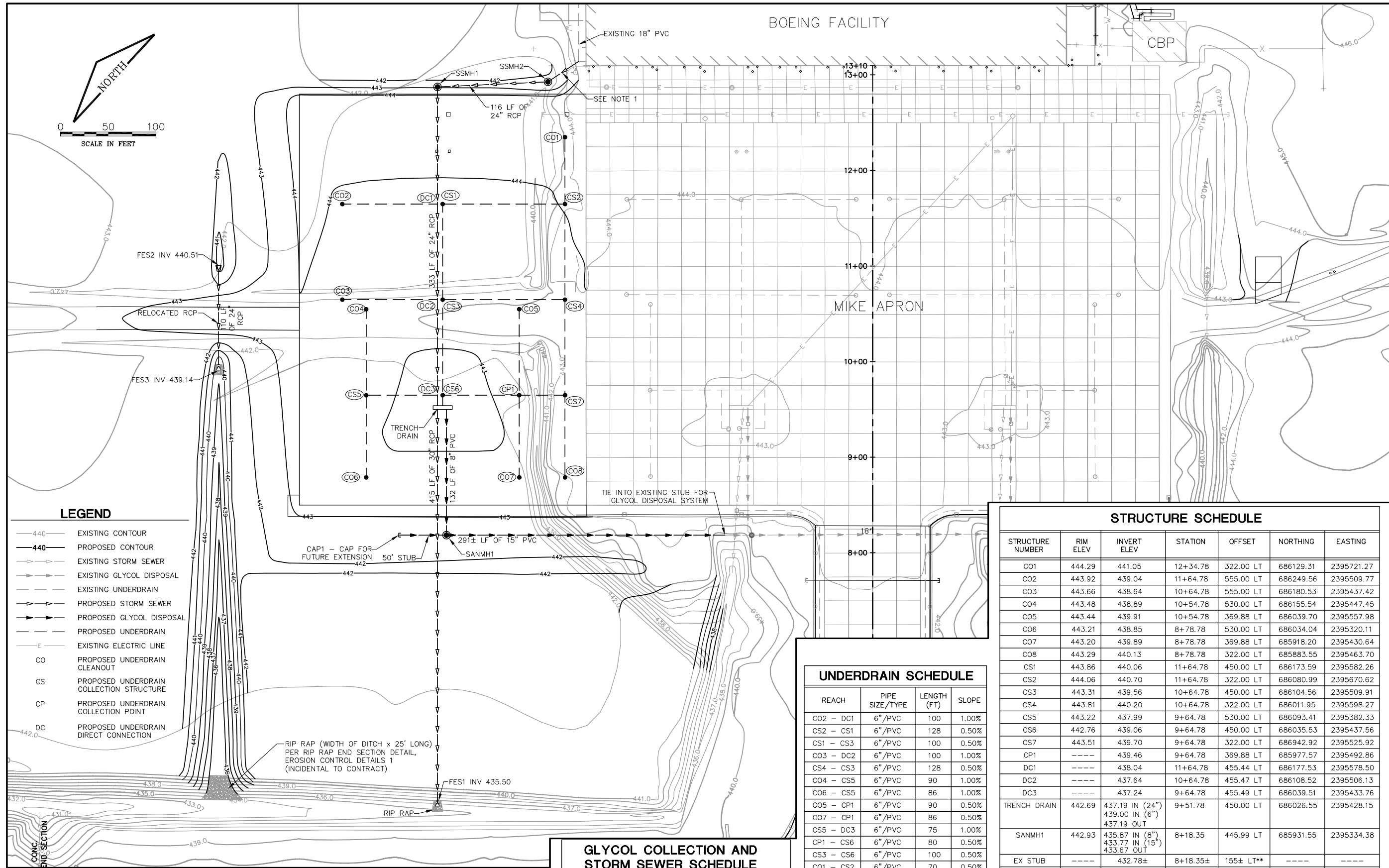
DATE: JANUARY 14, 2011

JOB No: 10098-01

JOINTING
DETAILS

MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS

MIKE APRON EXPANSION - CONTRACT 1



LEGEND

- 440 — EXISTING CONTOUR
- 440 — PROPOSED CONTOUR
- ▽ — EXISTING STORM SEWER
- ▽ — EXISTING GLYCOL DISPOSAL
- ▽ — EXISTING UNDERDRAIN
- ▽ — PROPOSED STORM SEWER
- ▽ — PROPOSED GLYCOL DISPOSAL
- ▽ — PROPOSED UNDERDRAIN
- E — EXISTING ELECTRIC LINE
- CO — PROPOSED UNDERDRAIN CLEANOUT
- CS — PROPOSED UNDERDRAIN COLLECTION STRUCTURE
- CP — PROPOSED UNDERDRAIN COLLECTION POINT
- DC — PROPOSED UNDERDRAIN DIRECT CONNECTION

NOTES:

1. REMOVE APPROX 38 LF OF 24" PVC BETWEEN CONNECTION WITH 18" PVC AND EXISTING OUTLET. REPLACE PIPE BEGINNING AT CONNECTION POINT WITH 18" PVC TO ELEVATION AND SLOPE SHOWN ON PLANS. THE CONTRACTOR MAY REUSE THE EXISTING PIPE IF IN GOOD CONDITION AS DETERMINED BY THE ENGINEER. THIS WORK SHALL BE INCIDENTAL TO STORM SEWER MANHOLE INSTALLATION.
2. COLLECTION POINTS CONSIST OF A 4-WAY PVC FITTING AND SHALL BE CONSIDERED INCIDENTAL TO THE UNDERDRAIN WORK.
3. DIRECT CONNECTIONS SHALL BE CONSIDERED INCIDENTAL TO THE UNDER DRAIN WORK.

GLYCOL COLLECTION AND STORM SEWER SCHEDULE

REACH	PIPE SIZE/TYPE	LENGTH (FT)	SLOPE
TRENCH DRAIN - SANMH1	8"/PVC	132	1.00%
SANMH1 - EXISTING STUB	15"/PVC	291	0.31%
TRENCH DRAIN - FES1	30"/RCP	415	0.41%
FES2 - FES3	24"/RCP	110	1.25%
SSMH2 - SSMH1	24"/RCP	116	0.97%
SSMH1 - TRENCH DRAIN	24"/RCP	333	0.40%
CAP1 - SANMH1	15"/PVC	50	0.30%
18" PVC - SSMH2	24"/PVC	38	4.66%

UNDERDRAIN SCHEDULE

REACH	PIPE SIZE/TYPE	LENGTH (FT)	SLOPE
CO2 - DC1	6"/PVC	100	1.00%
CS2 - CS1	6"/PVC	128	0.50%
CS1 - CS3	6"/PVC	100	0.50%
CO3 - DC2	6"/PVC	100	1.00%
CS4 - CS3	6"/PVC	128	0.50%
CO4 - CS5	6"/PVC	90	1.00%
CO6 - CS5	6"/PVC	86	1.00%
CO5 - CP1	6"/PVC	90	0.50%
CO7 - CP1	6"/PVC	86	0.50%
CS5 - DC3	6"/PVC	75	1.00%
CP1 - CS6	6"/PVC	80	0.50%
CS3 - CS6	6"/PVC	100	0.50%
CO1 - CS2	6"/PVC	70	0.50%
CS2 - CS4	6"/PVC	100	0.50%
CS4 - CS7	6"/PVC	100	0.50%
CS7 - CP1	6"/PVC	48	0.50%
CO8 - CS7	6"/PVC	86	0.50%
CS6 - TRENCH DRAIN	6"/PVC (NON-PERF)*	11	0.50%

*NOTE: PROVIDE 6" DUCTILE IRON PIPE (DIP) PENETRATION AT TRENCH DRAIN WALL. COST OF DIP PENETRATION AND 11 LF OF NON-PERFORATED PVC SHALL BE INCLUDED UNDER ITEM AR705526 - 6" PERFORATED UNDERDRAIN W/SOCK.

STRUCTURE SCHEDULE

STRUCTURE NUMBER	RIM ELEV	INVERT ELEV	STATION	OFFSET	NORTHING	EASTING
CO1	444.29	441.05	12+34.78	322.00 LT	686129.31	2395721.27
CO2	443.92	439.04	11+64.78	555.00 LT	686249.56	2395509.77
CO3	443.66	438.64	10+64.78	555.00 LT	686180.53	2395437.42
CO4	443.48	438.89	10+54.78	530.00 LT	686155.54	2395447.45
CO5	443.44	439.91	10+54.78	369.88 LT	686039.70	2395557.98
CO6	443.21	438.85	8+78.78	530.00 LT	686034.04	2395320.11
CO7	443.20	439.89	8+78.78	369.88 LT	685918.20	2395430.64
CO8	443.29	440.13	8+78.78	322.00 LT	685883.55	2395463.70
CS1	443.86	440.06	11+64.78	450.00 LT	686173.59	2395582.26
CS2	444.06	440.70	11+64.78	322.00 LT	686080.99	2395670.62
CS3	443.31	439.56	10+64.78	450.00 LT	686104.56	2395509.91
CS4	443.81	440.20	10+64.78	322.00 LT	686011.95	2395598.27
CS5	443.22	437.99	9+64.78	530.00 LT	686093.41	2395382.33
CS6	442.76	439.06	9+64.78	450.00 LT	686035.53	2395437.56
CS7	443.51	439.70	9+64.78	322.00 LT	686942.92	2395525.92
CP1	----	439.46	9+64.78	369.88 LT	685977.57	2395492.86
DC1	----	438.04	11+64.78	455.44 LT	686177.53	2395578.50
DC2	----	437.64	10+64.78	455.47 LT	686108.52	2395506.13
DC3	----	437.24	9+64.78	455.49 LT	686039.51	2395433.76
TRENCH DRAIN	442.69	437.19 IN (24") 439.00 IN (6") 437.19 OUT	9+51.78	450.00 LT	686026.55	2395428.15
SANMH1	442.93	435.87 IN (8") 433.77 IN (15") 433.67 OUT	8+18.35	445.99 LT	685931.55	2395334.38
EX STUB	----	432.78±	8+18.35±	155± LT**	----	----
SSMH1	444.55	438.62 IN 438.52 OUT	12+87.32	455.41 LT	686262.10	2395667.18
FES1	----	435.50	5+33.98	455.49 LT	685742.11	2395122.08
FES2	----	440.51	11+00.65	684.50 LT	686298.98	2395373.98
FES3	----	439.14	9+90.64	684.49 LT	686223.05	2395294.39
SSMH2	444.57	440.23 IN 439.75 OUT	12+92.69	339.83 LT	686182.19	2395750.85
CAP1	----	433.92	8+18.35	495.99 LT	685967.72	2395299.86

**NOTE: FIELD VERIFY LOCATION OF EXISTING SEWER STUB

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22). PLOT 1

**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
(314) 436-5500

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**IL PROJECT: BLV-4061
AIP PROJ. 3-17-0146-XX**

FILE: 12_GRADING.dwg

DESIGN BY: LEW

DRAWN BY: ASA

CHECKED BY: MJD/CET

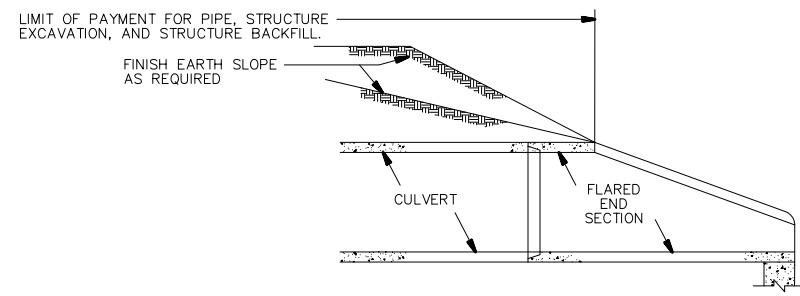
APPROVED BY: BWG

DATE: JANUARY 14, 2011

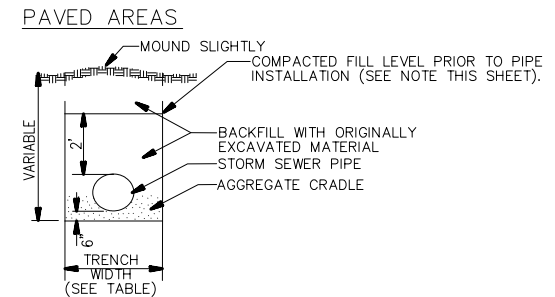
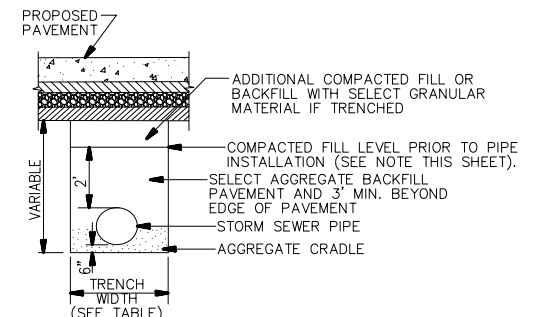
JOB No: 10098-01

GRADING AND DRAINAGE PLAN

SHEET 12 OF 53 SHEETS



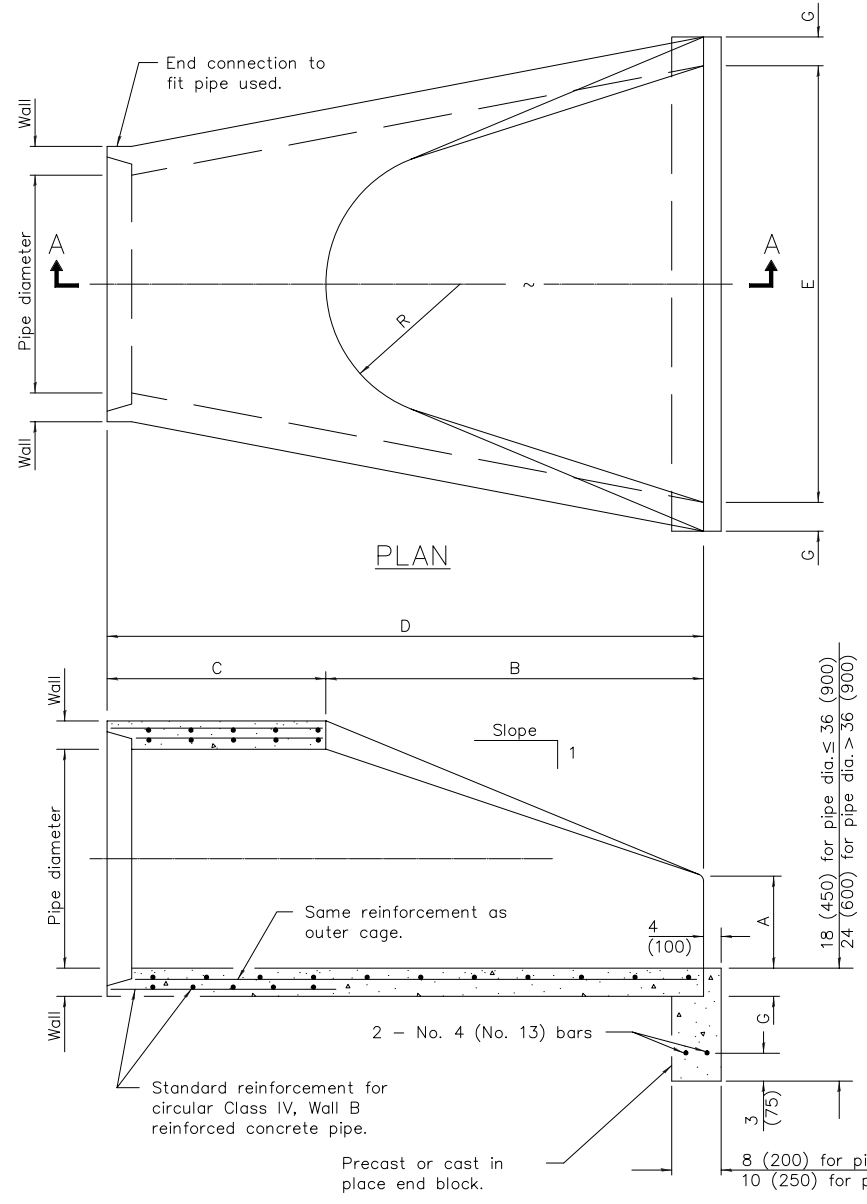
INSTALLATION DETAILS



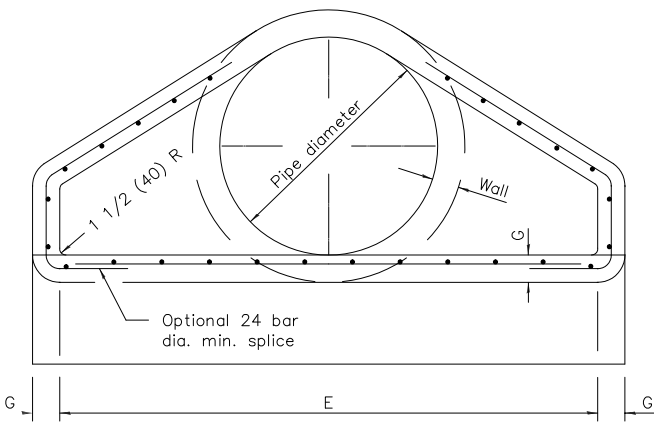
NOTE: CONTRACTOR SHALL COMPACT FILL 2' ABOVE PROPOSED TOP OF PIPE ELEVATION PRIOR TO EXCAVATION OF PIPE TRENCH. BACKFILL PAVED AREAS WITH SELECT GRANULAR MATERIAL 2' ABOVE THE TOP OF PIPE. BACKFILL NON-PAVED AREAS WITH ORIGINALLY EXCAVATED FILL.

STORM SEWER TRENCH DETAILS
N.T.S.

INSIDE DIAMETER OF SEWER (INCHES)	MAXIMUM TRENCH WIDTH
6	3'-2"
8	3'-2"
10	3'-2"
12	3'-4"
15	3'-6"
18	3'-10"
21	4'-4"
24	4'-8"
27	4'-11"
30	5'-3"
33	6'-0"
36	6'-4"
42	6'-11"
48	7'-6"
54	8'-7"
60	9'-2"
66	9'-9"
72	10'-4"
78	10'-11"
84	11'-6"
90	12'-1"
96	12'-8"
102	13'-3"
108	13'-10"



SECTION A-A



END VIEW

GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).
All dimensions are in inches (millimeters) unless otherwise shown.

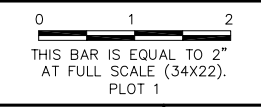
PIPE DIA.	APPROX. QTY. lbs. (kg)	WALL	A	B	C	D	E	G	R	APPROX. SLOPE
12 (300)	530 (240)	2 (51)	4 (102)	24 (610)	4'-0 7/8" (1.241 m)	6'-0 7/8" (1.851 m)	24 (610)	2 (51)	9 (229)	1:2.4
15 (375)	740 (335)	2 1/4 (64)	6 (152)	27 (686)	3'-10" (1.168 m)	6'-1" (1.854 m)	30 (762)	2 1/4 (64)	11 (280)	1:2.4
18 (450)	990 (450)	2 1/2 (64)	9 (229)	27 (686)	3'-10" (1.168 m)	6'-1" (1.854 m)	36 (914)	2 1/2 (64)	12 (305)	1:2.4
21 (525)	1280 (580)	2 3/4 (70)	9 (229)	35 (889)	3'-10" (1.168 m)	6'-1" (1.854 m)	36 (914)	2 3/4 (70)	13 (330)	1:2.4
24 (600)	1520 (690)	3 (76)	9 1/2 (241)	33 (843)	3'-7 1/2" (1.105 m)	6'-1 1/2" (1.867 m)	30 (762)	3 (76)	14 (356)	1:2.5
27 (675)	1930 (875)	3 1/4 (83)	10 1/2 (267)	33 (843)	4'-0" (1.219 m)	6'-1 1/2" (1.867 m)	30 (762)	3 1/4 (83)	14 1/2 (368)	1:2.4
30 (750)	2190 (995)	3 1/2 (89)	12 (305)	33 (843)	4'-6" (1.375 m)	6'-1 3/4" (1.874 m)	30 (762)	3 1/2 (89)	15 (381)	1:2.5
33 (825)	3200 (1450)	3 3/4 (95)	13 1/2 (343)	33 (843)	4'-10 1/2" (1.486 m)	6'-1 3/4" (1.874 m)	30 (762)	3 3/4 (95)	17 1/2 (445)	1:2.5
36 (900)	4100 (1860)	4 (102)	15 (381)	33 (843)	5'-3" (1.6 m)	6'-1 3/4" (1.874 m)	30 (762)	4 (102)	20 (508)	1:2.5
42 (1050)	5380 (2440)	4 1/2 (114)	21 (533)	33 (843)	5'-3" (1.6 m)	6'-2" (1.829 m)	30 (762)	4 1/2 (114)	22 (559)	1:2.5
48 (1200)	6550 (2970)	5 (127)	24 (610)	33 (843)	6'-0" (1.829 m)	6'-2" (1.829 m)	30 (762)	5 (127)	22 (559)	1:2.5
54 (1350)	8240 (3740)	5 1/2 (140)	27 (686)	33 (843)	5'-5" (1.651 m)	6'-4" (1.930 m)	30 (762)	5 1/2 (140)	24 (610)	1:2.0
60 (1500)	8730 (3960)	6 (152)	35 (889)	33 (843)	5'-0" (1.524 m)	6'-3" (1.930 m)	30 (762)	6 (152)	24 (610)	1:1.9
66 (1650)	10710 (4860)	6 1/2 (165)	30 (762)	33 (843)	6'-0" (1.829 m)	6'-3" (1.930 m)	30 (762)	6 1/2 (165)	24 (610)	1:1.7
72 (1800)	12520 (5680)	7 (178)	36 (914)	33 (843)	6'-6" (1.981 m)	6'-3" (1.930 m)	30 (762)	7 (178)	24 (610)	1:1.8
78 (1950)	14770 (6700)	7 1/2 (191)	36 (914)	33 (843)	7'-6" (2.286 m)	6'-3" (1.930 m)	30 (762)	7 1/2 (191)	24 (610)	1:1.8
84 (2100)	18160 (8240)	8 (203)	36 (914)	33 (843)	7'-6 1/2" (2.299 m)	6'-3" (1.930 m)	30 (762)	8 (203)	24 (610)	1:1.6

* Radius as furnished by manufacturer

PRECAST REINFORCED CONCRETE FLARED END SECTION
STANDARD 542301-03

REVISIONS

NUMBER	BY	DATE



MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS

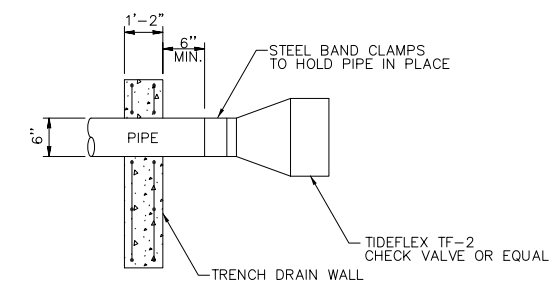
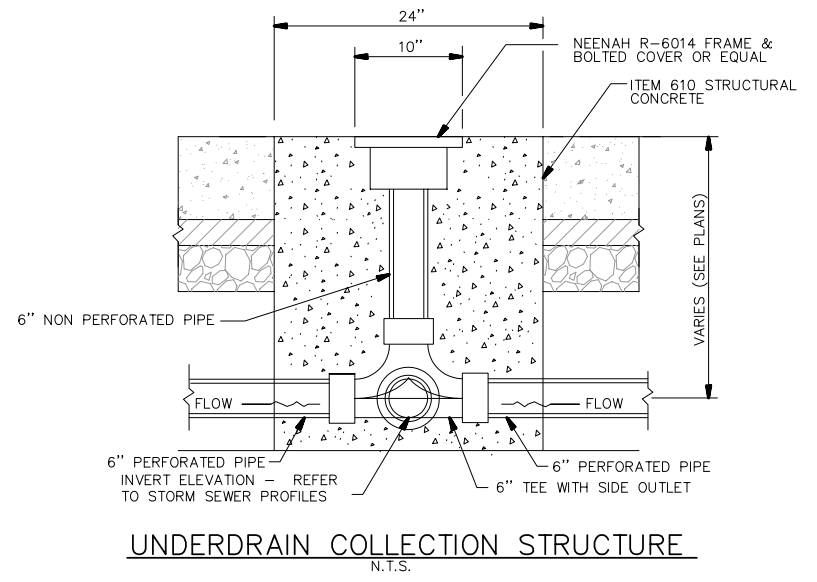
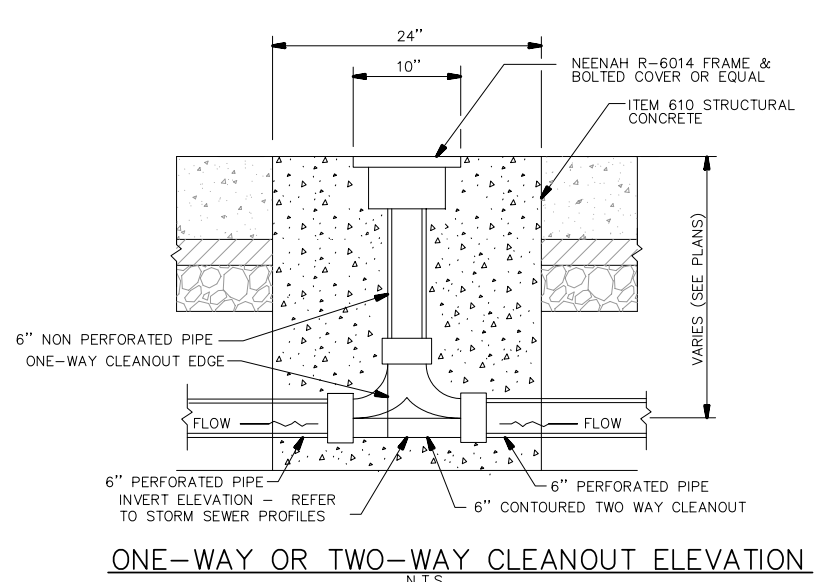
MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
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IL PROJECT: BLV-4061
AIP PROJ: 3-17-0146-XX

FILE: 13-15_DRAINAGE_DETAILS.dwg
DESIGN BY: LEW
DRAWN BY: ASA
CHECKED BY: MJD/CET
APPROVED BY: BWG
DATE: JANUARY 14, 2011
JOB No: 10098-01

DRAINAGE DETAILS 1

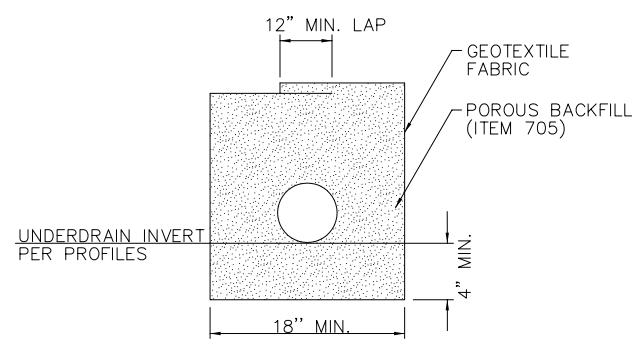


UNDERDRAIN BACKFLOW DETAIL
N.T.S.

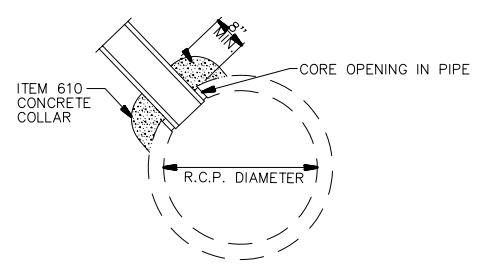
NOTE: CHECK VALVE SHALL BE INCIDENTAL TO UNDERDRAIN WORK.

- UNDERDRAIN CLEANOUT NOTES**
- SEQUENCE OF CONSTRUCTION/PLACEMENT OF CLEANOUTS SHALL BE AS FOLLOWS:
 - PAVE ASPHALT
 - CORE THROUGH ASPHALT
 - SET CLEANOUT WITH PCC COLLAR
 - PAVE CONCRETE APRON
 - FINISHED GRADE OF CLEANOUTS AND COLLECTION STRUCTURES SHALL BE AT OR JUST BELOW PCC PAVEMENT SURFACE ELEVATION. ANY STRUCTURE EXTENDING ABOVE THE FINISHED PCC PAVEMENT ELEVATION SHALL BE ADJUSTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.

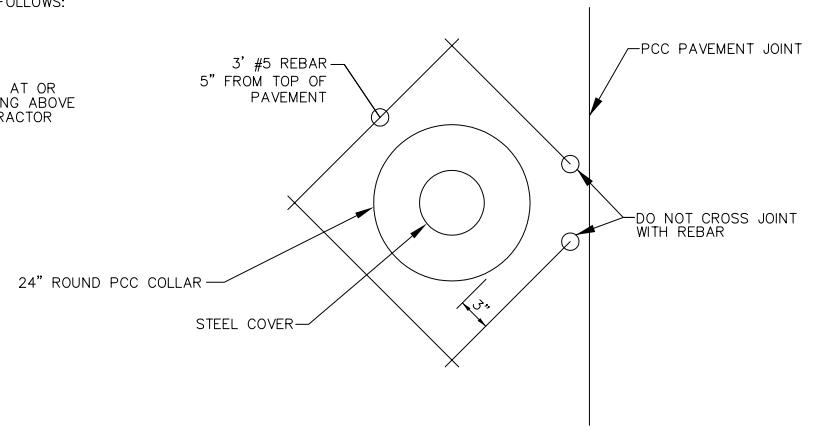
- UNDERDRAIN COLLECTION STRUCTURE NOTES**
- SEQUENCE OF CONSTRUCTION/PLACEMENT OF CLEANOUTS SHALL BE AS FOLLOWS:
 - PAVE ASPHALT
 - CORE THROUGH ASPHALT
 - SET CLEANOUT WITH PCC COLLAR
 - PAVE CONCRETE APRON
 - FINISHED GRADE OF CLEANOUTS AND COLLECTION STRUCTURES SHALL BE AT OR JUST BELOW PCC PAVEMENT SURFACE ELEVATION. ANY STRUCTURE EXTENDING ABOVE THE FINISHED PCC PAVEMENT ELEVATION SHALL BE ADJUSTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.



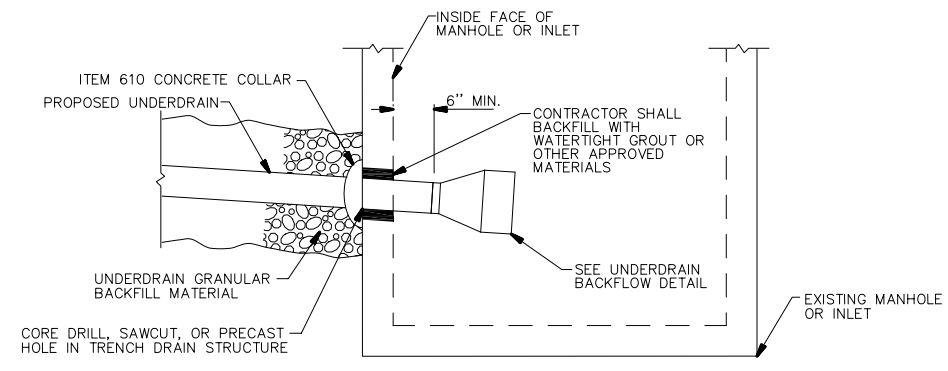
UNDERDRAIN TRENCH DETAIL
N.T.S.



UNDERRAIN DIRECT CONNECTION AT RCP
N.T.S.



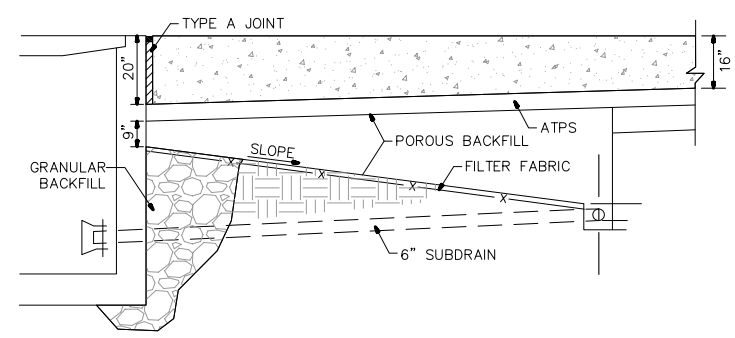
UNDERDRAIN PLAN VIEW
N.T.S.



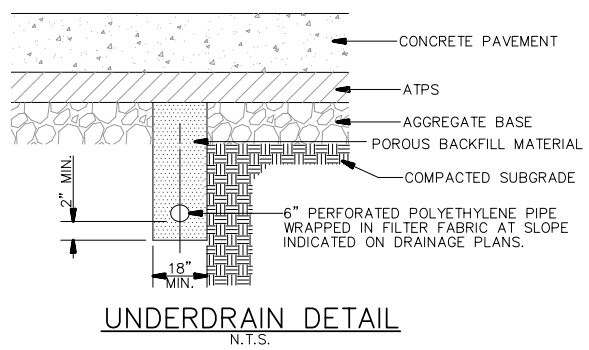
NOTES:
CONTRACTOR SHALL BACKFILL WITH WATERTIGHT GROUT OR OTHER APPROVED MATERIALS

DIRECT CONNECTION DETAIL
N.T.S.

- DIRECT CONNECTION NOTES**
- HOLE IN STRUCTURE SHALL BE AT LEAST 1" WIDER THAN UD PIPE.
 - FILL SPACE BETWEEN UNDERDRAIN AND STRUCTURE WITH NON-SHRINK GROUT OR ITEM 610 PCC COLLAR.

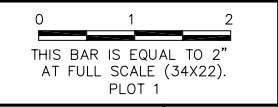


SUBDRAIN DETAIL AT TRENCH DRAIN
N.T.S.



UNDERDRAIN DETAIL
N.T.S.

REVISIONS		
NUMBER	BY	DATE



**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

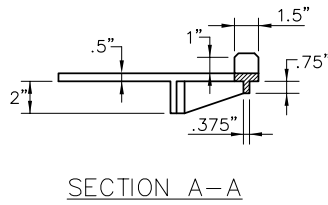
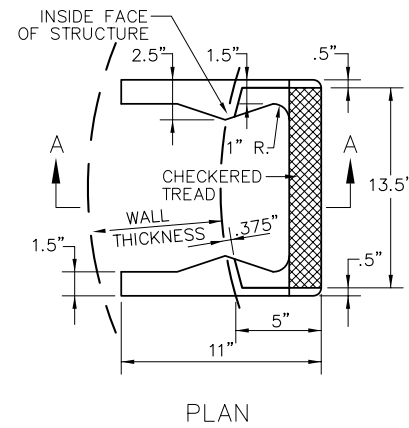
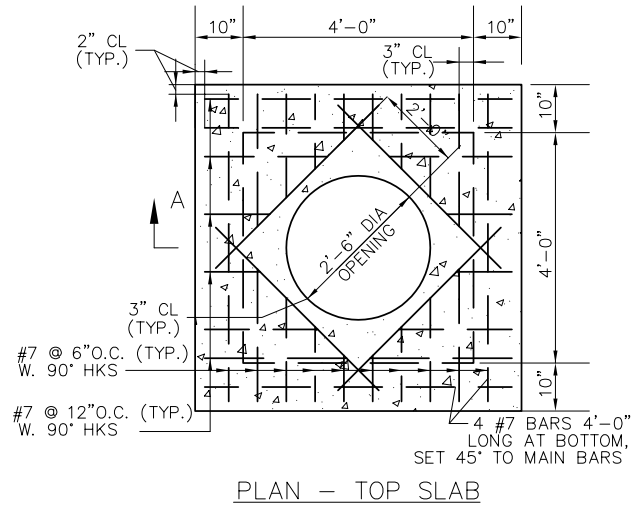
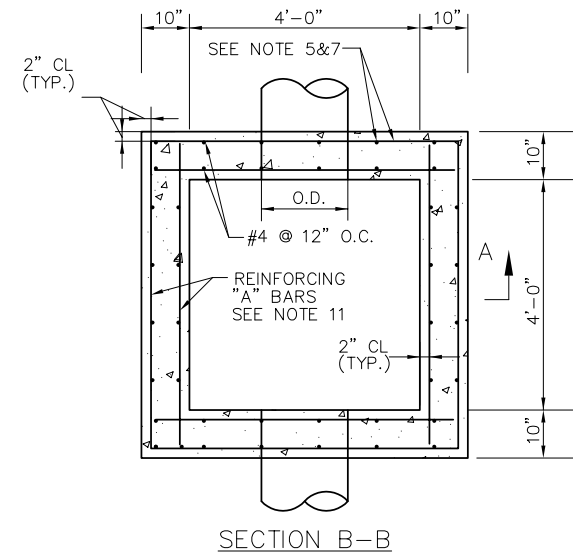
MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
 ST. LOUIS, MO 63102
 (314) 436-5500

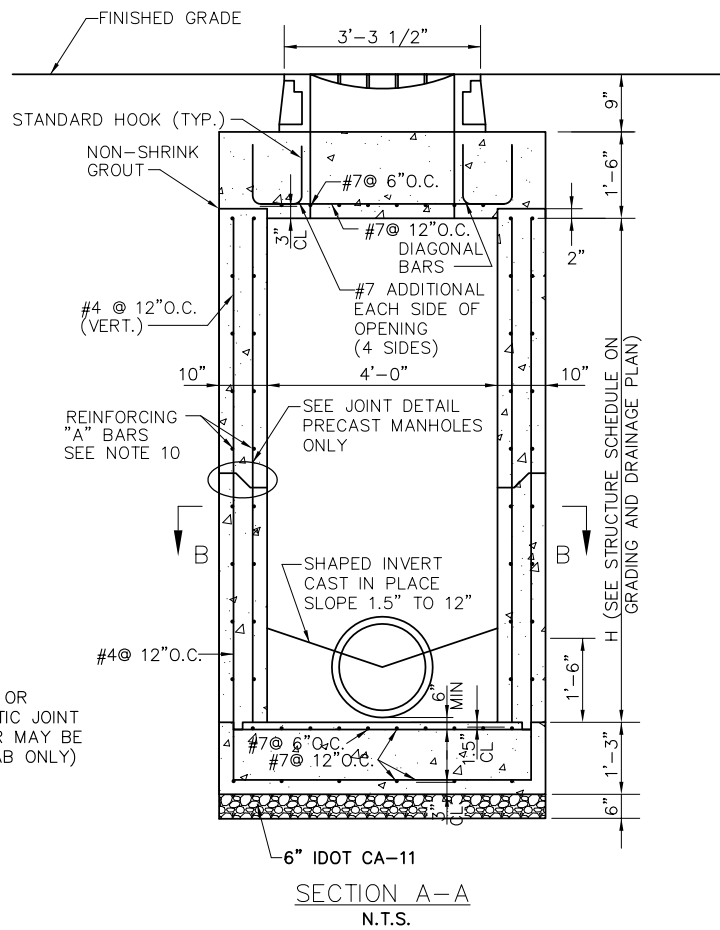
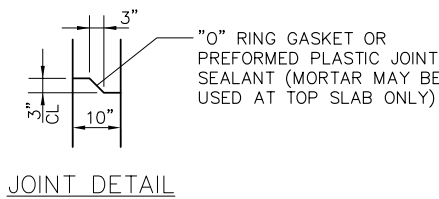
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FILE: 13-15_DRAINAGE_DETAILS.dwg
 DESIGN BY: LEW
 DRAWN BY: ASA
 CHECKED BY: MJD/CET
 APPROVED BY: BWG
 DATE: JANUARY 14, 2011
 JOB No: 10098-01

**DRAINAGE
DETAILS 2**



CAST IRON STEPS
N.T.S.



STORM SEWER MANHOLE
N.T.S.

NOTES:

1. FRAME WITH COVER SHALL BE NEENAH R-3492-A WITH LEGEND "STORM."
2. ALL MANHOLE COVERS SHALL BE BOLTED TO THE FRAME.
3. OPENINGS IN THE WALLS FOR THE PIPE SHALL BE CAST-IN OR CUT CLEANLY WITHOUT PERCUSSION TO A MAXIMUM DIAMETER OF O.D. ±3". THE SPACE BETWEEN PIPE AND WALL SHALL THEN BE SEALED WITH MORTAR OR OTHER APPROVED METHOD.
4. WHERE A PIPE PASSES THROUGH A WALL 2 ADDITIONAL "A" BARS SHALL BE PLACED ABOVE, BELOW, AND TO EACH SIDE OF THE OPENING. VERTICAL "A" BARS SHALL EXTEND A MINIMUM OF 2'-0" ABOVE AND BELOW THE EDGES OF THE OPENING. THE ADDITIONAL REINFORCING SHALL BE PLACED AT BOTH THE INSIDE AND OUTSIDE LAYER OF REINFORCING.
5. WHEN LIFTING THE PRE-CAST MANHOLE, A BAR SHALL BE PLACED HORIZONTALLY THROUGH THE LIFTING HOLES, PROVIDED AT THE TIME OF MANUFACTURE, THE LIFTING DEVICES SHALL BE PLACED ONLY ON THAT BAR. THE BAR AND HOLES SHALL BE APPROVED BY THE ENGINEER. THE LIFTING HOLES SHALL BE FILLED WITH GROUT AFTER THE MANHOLE IS IN POSITION.
6. SPLICE LENGTHS REQUIRED FOR REINFORCING BARS: #4 BAR, 1'-4"; #5 BAR, 1'-8"; #6 BAR, 2'-0"; #7 BAR, 2'-6".
7. JOINT AND WATERSTOP ARE AN OPTION FOR CAST-IN PLACE MANHOLES ONLY. PRE-CAST MANHOLES SHALL NOT BE JOINTED AT THIS LOCATION.
8. CONCRETE STRENGTH AT 28 DAYS SHALL BE A MINIMUM OF 4,000 PSI FOR CAST-IN PLACE MANHOLES, 5,000 PSI FOR PRECAST MANHOLES.
9. REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60.
10. REINFORCING "A" BARS SHALL BE #5 @ 12".
11. CAST IRON STEPS SHALL BE NEENAH R-1982-1 FOR STRAIGHT WALLS, OR APPROVED EQUAL.
12. MANHOLE TO BE CONSTRUCTED OF STRUCTURAL P.C. CONCRETE. THE CONTRACT UNIT PRICE PER MANHOLE SHALL INCLUDE THE FRAME, GRATES, AND STEPS IN PLACE AND COMPLETE PER UNIT.
13. THE CONTRACTOR IS REQUIRED TO SUBMIT MANUFACTURER'S SHOP DRAWING SHOWING DETAILS AND DESIGN CALCULATIONS FOR APPROVAL PRIOR TO INSTALLATION. (SEE SPECS - ITEM 751) SHOP DRAWINGS SHALL BE SEALED BY A REGISTERED PROFESSIONAL STRUCTURAL ENGINEER.
14. THIS MANHOLE FRAME REQUIRES AIRPORT LOADING TO CONFORM WITH AC 150/5320-6E. THIS IS 50,000 LBS PER TIRE LOAD SPREAD OVER 235 SQUARE INCHES. CASTINGS ARE TO SUPPORT 100,000 LBS WHEEL LOADS WITH 250 PSI TIRE PRESSURE. ALL OTHER INLETS, FRAMES, AND GRATES SHALL BE DESIGNED TO WITHSTAND AASHTO HS20-44 HIGHWAY LOADING.

REVISIONS		
NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2"
AT FULL SCALE (34X22).
PLOT 1

**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
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**IL PROJECT: BLV-4061
AIP PROJ. 3-17-0146-XX**

FILE: 13-15_DRAINAGE_DETAILS.dwg

DESIGN BY: LEW

DRAWN BY: ASA

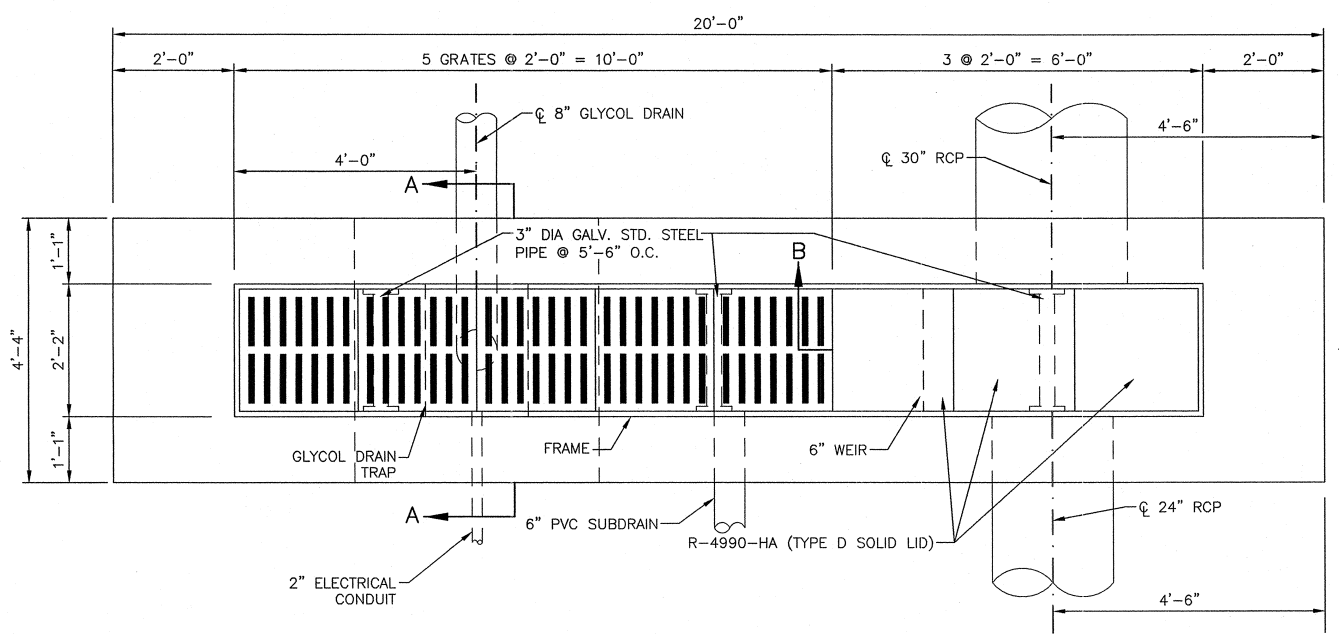
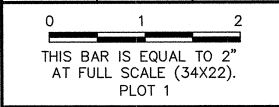
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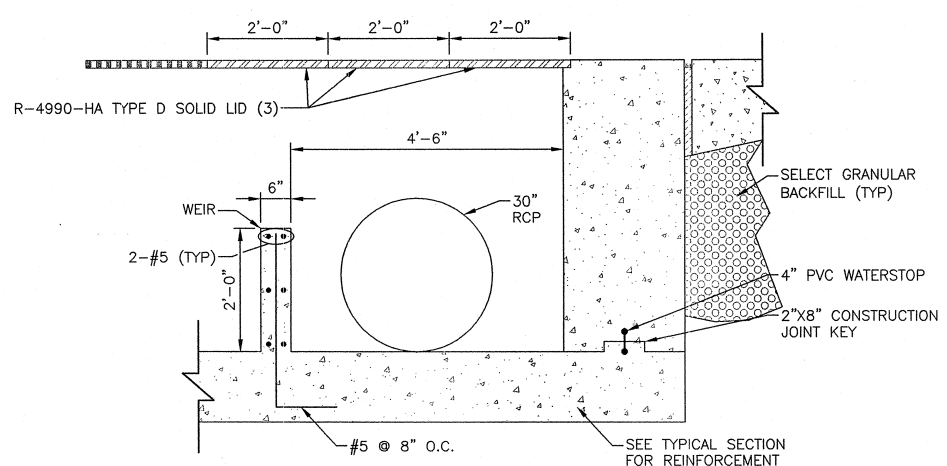
DATE: JANUARY 14, 2011

JOB No: 10098-01

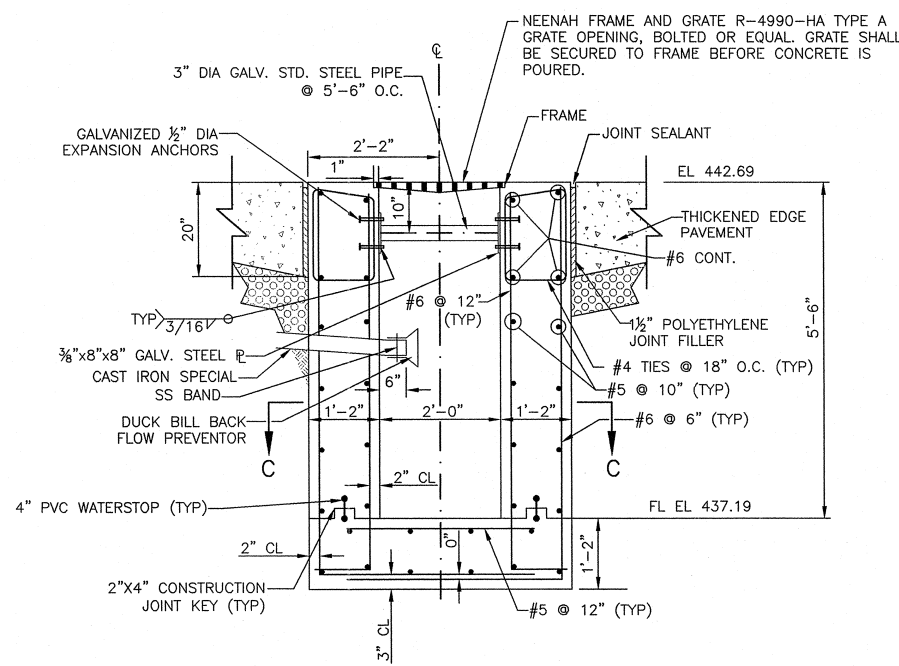
REVISIONS		
NUMBER	BY	DATE



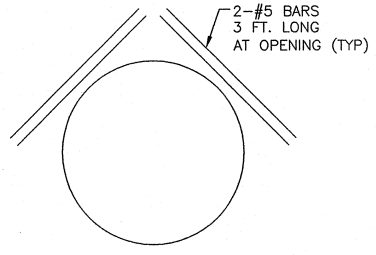
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N.T.S.



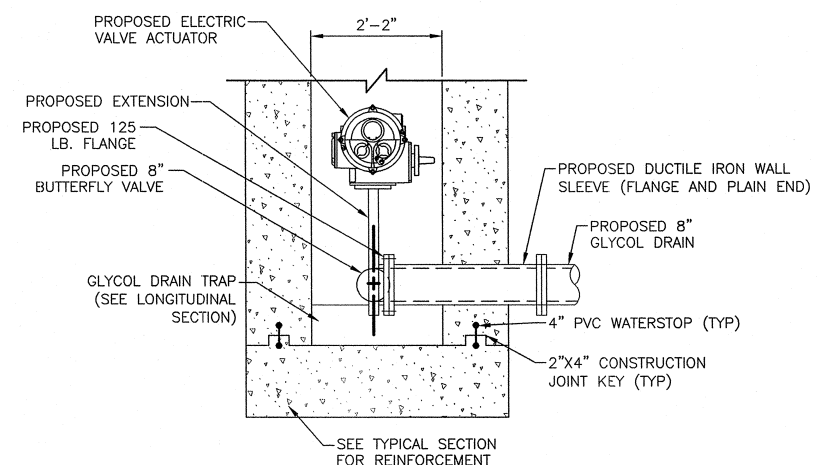
PART SECTION B-B
N.T.S.



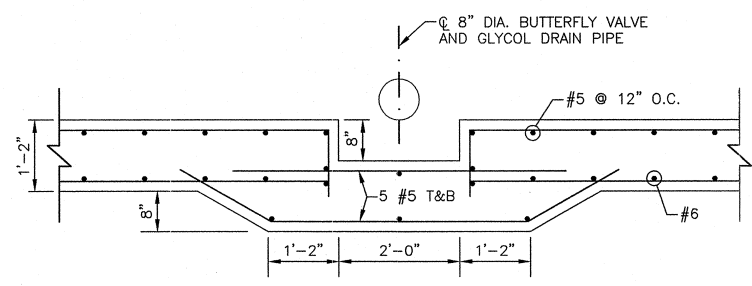
20' TRENCH DRAIN TYPICAL SECTION
N.T.S.



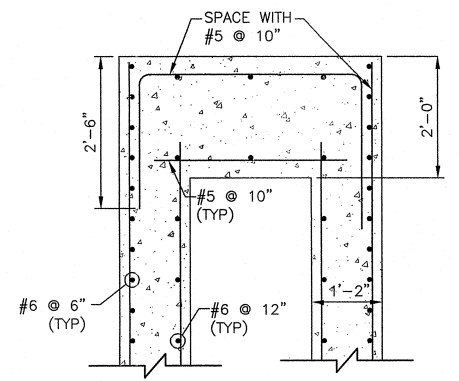
TYPICAL PIPE PENETRATION DETAIL
N.T.S.



PART SECTION A-A
N.T.S.



PART LONGITUDINAL SECTION THROUGH GLYCOL DRAIN TRAP
N.T.S.



PART SECTION C-C
N.T.S.

- NOTES:
1. CAST IN PLACE CONCRETE SHALL HAVE A MINIMUM 14 DAY COMPRESSIVE STRENGTH OF 3500 PSI.
 2. ALL REINFORCEMENT SHALL BE ASTM A615 GRADE 60.
 3. REINFORCING BARS SHALL BE CUT AND/OR FIELD BENT AT ALL PIPE OPENINGS TO MAINTAIN 1" CLEARANCE FROM PIPES.
 4. MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 1 1/2" UNLESS OTHERWISE SHOWN.
 5. ALL CONCRETE, REINFORCING STEEL, EXCAVATION, BACKFILL, DUCTILE IRON FRAME AND GRATE, STEEL PIPES AND PLATES, ANCHORS, WATERSTOPS, JOINT FILLER AND JOINT SEALANT NECESSARY TO CONSTRUCT THE TRENCH DRAIN SHALL BE INCLUDED IN THE COST OF 4'x20' TRENCH DRAIN (EACH).
 6. FIELD VERIFY ALL SIZES AND LOCATIONS PRIOR TO CONSTRUCTION/INSTALLATION OF STRUCTURES AND PIPES.

**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
 ST. LOUIS, MO 63102
 (314) 436-5500

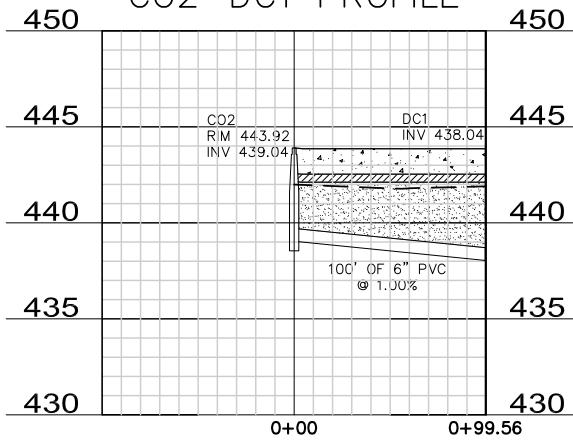
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FILE: 16_TRENCH_DRAIN_DETAILS.dwg
 DESIGN BY: JMW
 DRAWN BY: AJK
 CHECKED BY: REB
 APPROVED BY: REB
 DATE: JANUARY 14, 2011
 JOB No: 10098-01

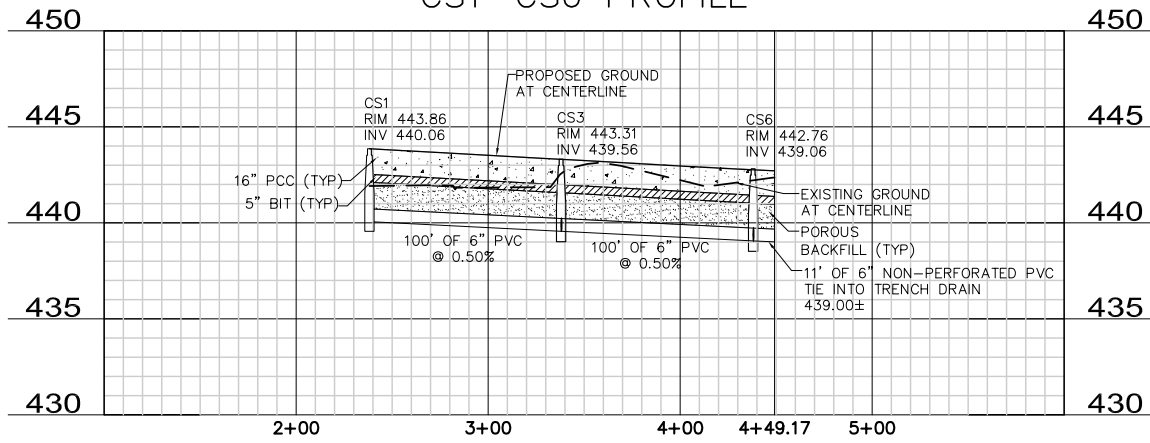
**TRENCH DRAIN
DETAILS**
 SHEET 16 OF 53 SHEETS



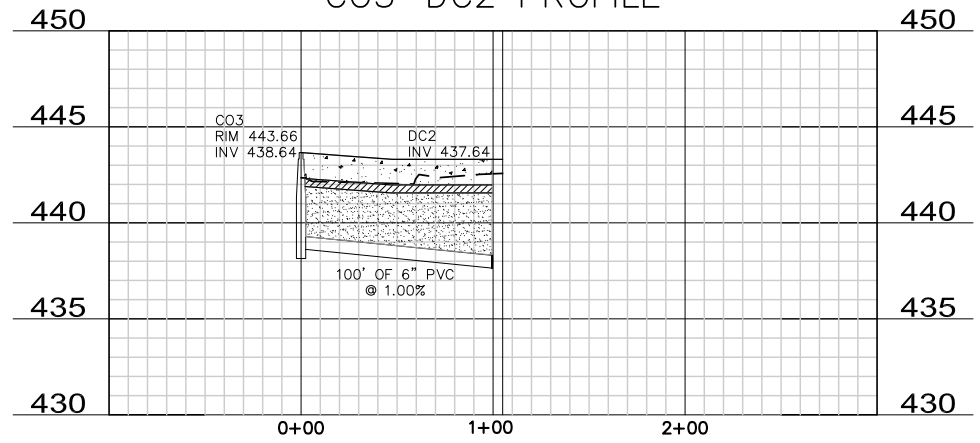
C02-DC1 PROFILE



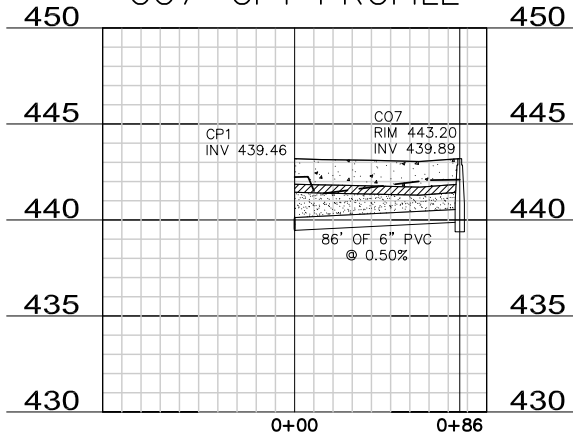
CS1-CS6 PROFILE



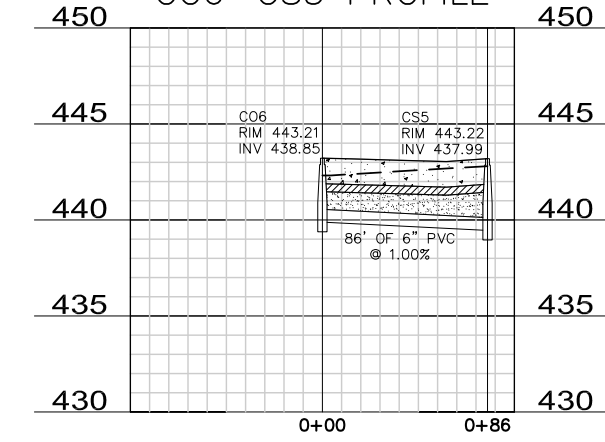
C03-DC2 PROFILE



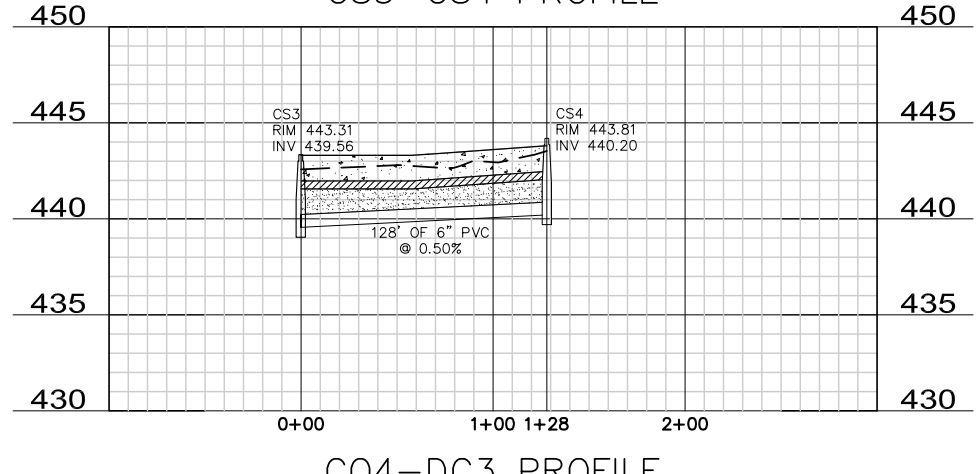
C07-CP1 PROFILE



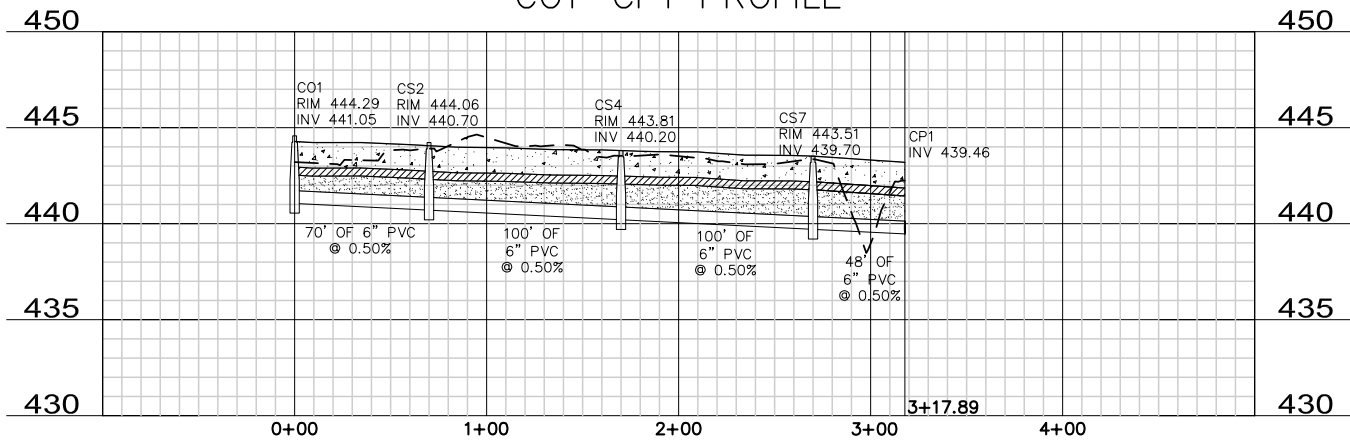
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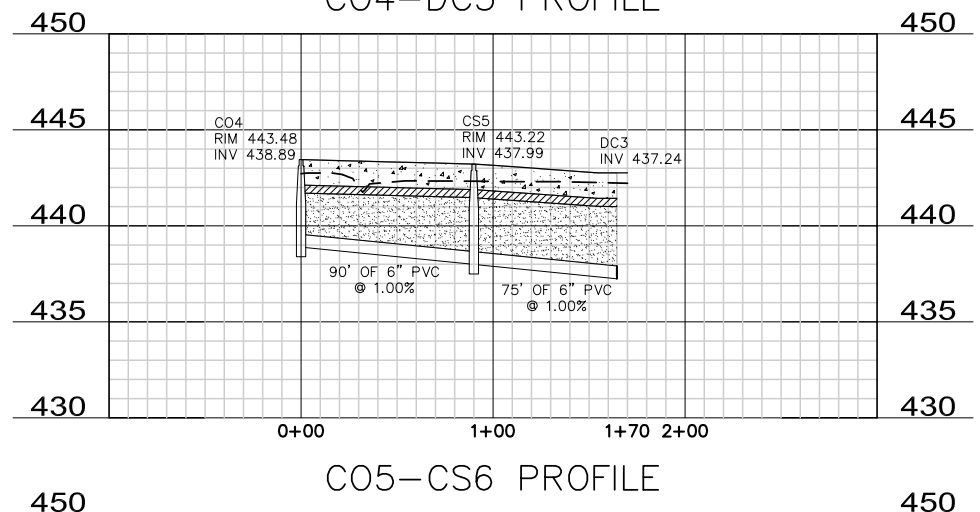
CS3-CS4 PROFILE



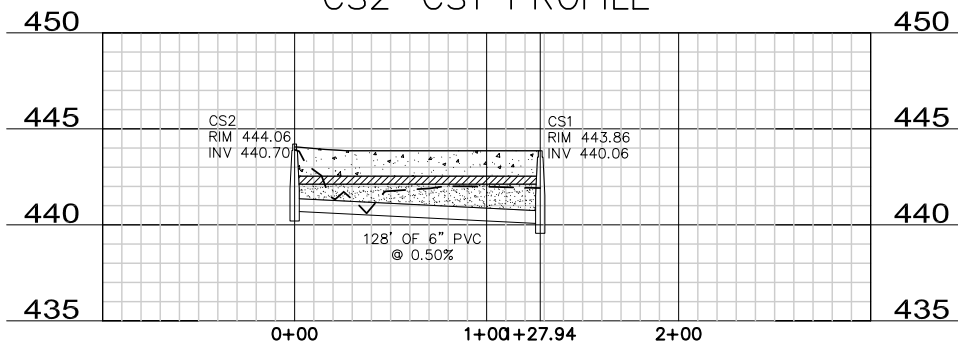
C01-CP1 PROFILE



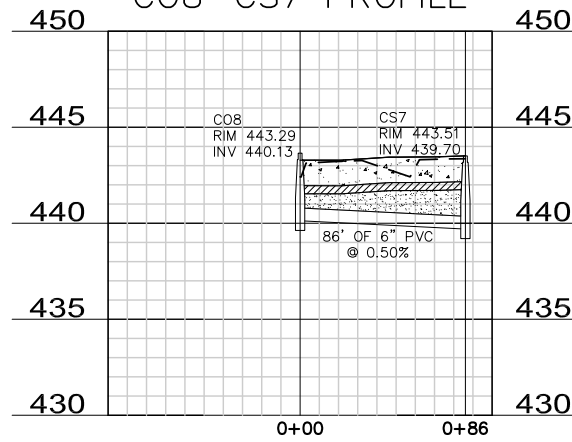
C04-DC3 PROFILE



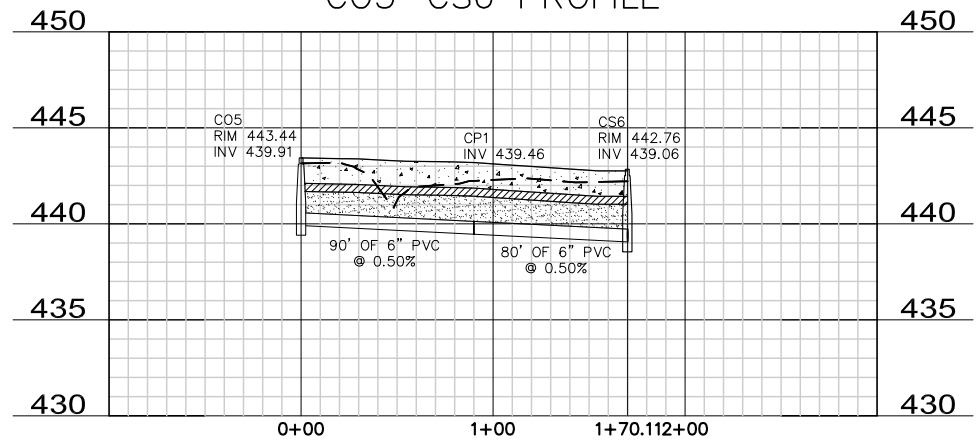
CS2-CS1 PROFILE



C08-CS7 PROFILE



C05-CS6 PROFILE



REVISIONS		
NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).
PLOT 1

**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
(314) 436-5500

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**IL PROJECT: BLV-4061
AIP PROJ. 3-17-0146-XX**

FILE: 17-18_PROFILES.dwg
 DESIGN BY: LEW
 DRAWN BY: ASA
 CHECKED BY: MJD/CET
 APPROVED BY: BWG
 DATE: JANUARY 14, 2011
 JOB No: 10098-01

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2"
AT FULL SCALE (34X22).
PLOT 1

**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

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FILE: 17-18_PROFILES.dwg

DESIGN BY: LEW

DRAWN BY: ASA

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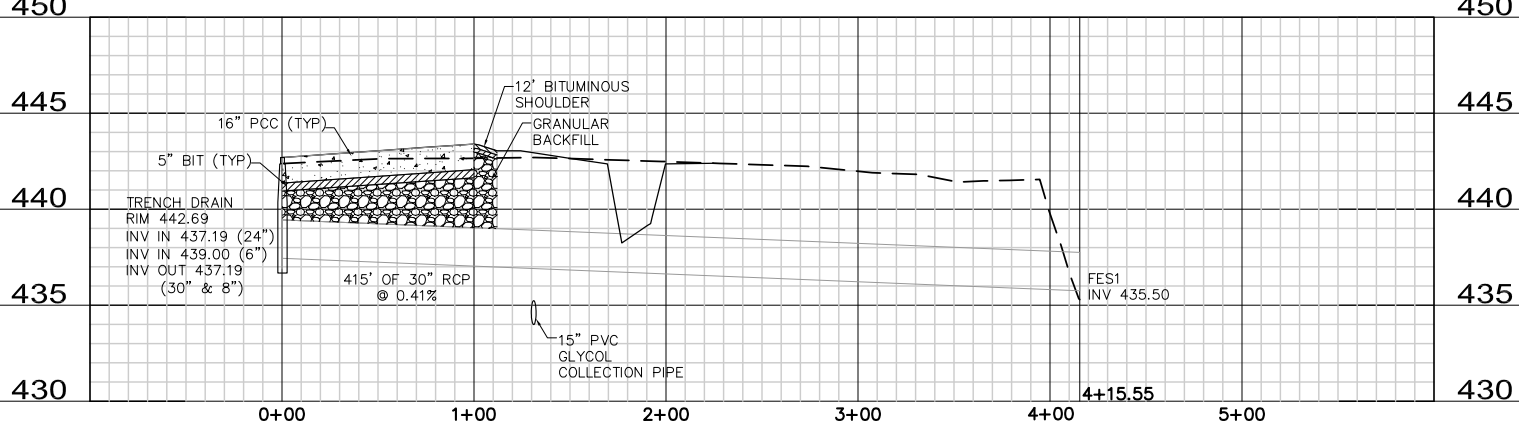
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JOB No: 10098-01

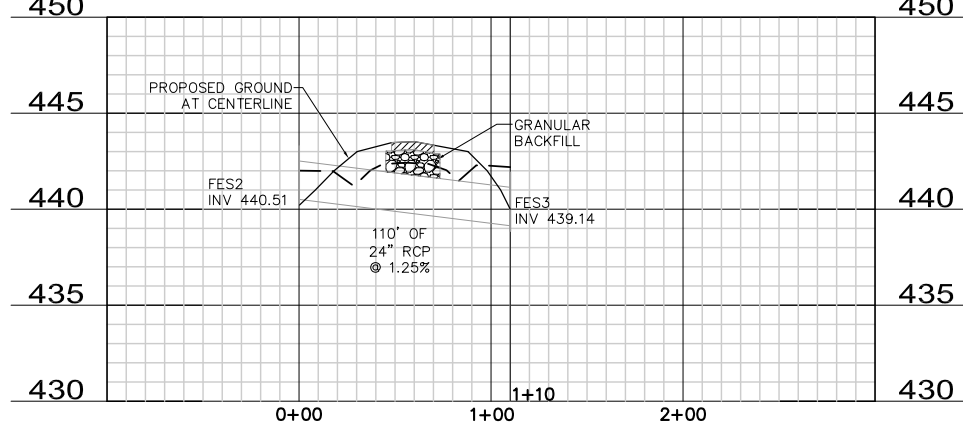
**STORM SEWER
PROFILES**

SHEET 18 OF 53 SHEETS

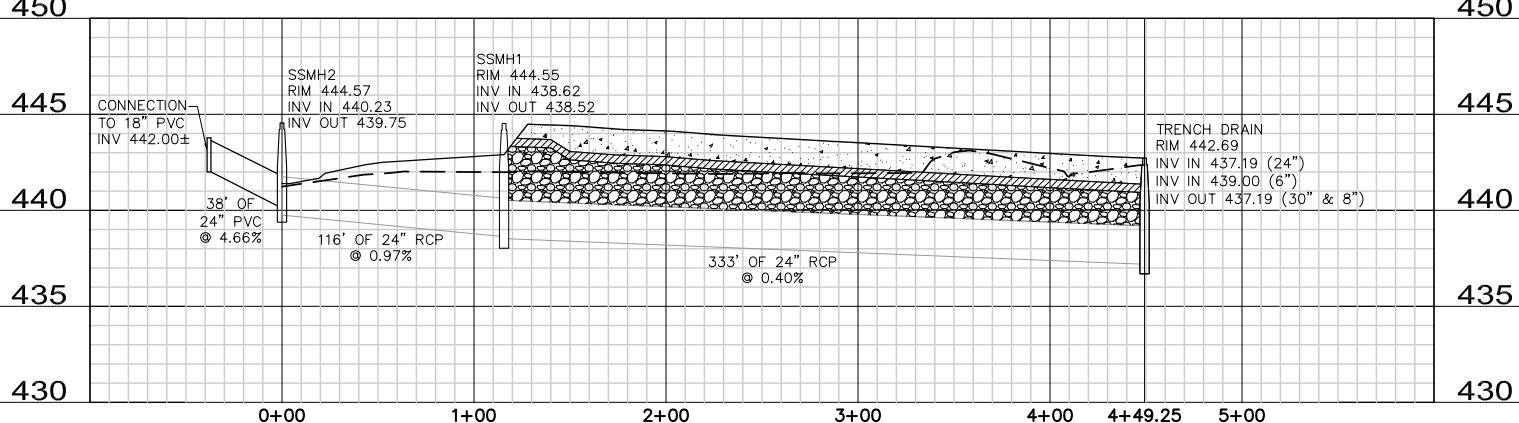
TRENCH DRAIN OUTLET PROFILE



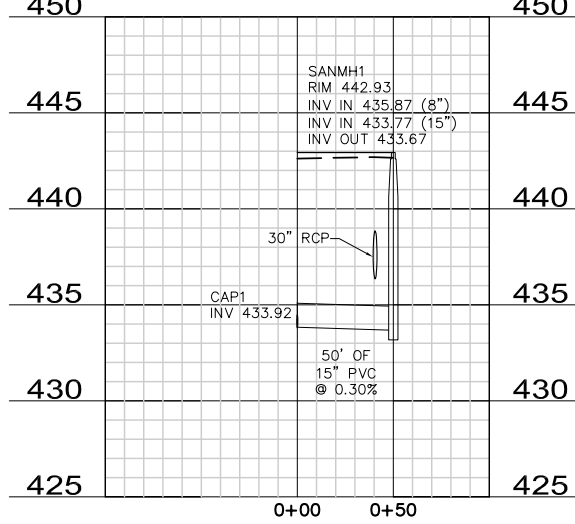
SERVICE ROAD CULVERT PROFILE



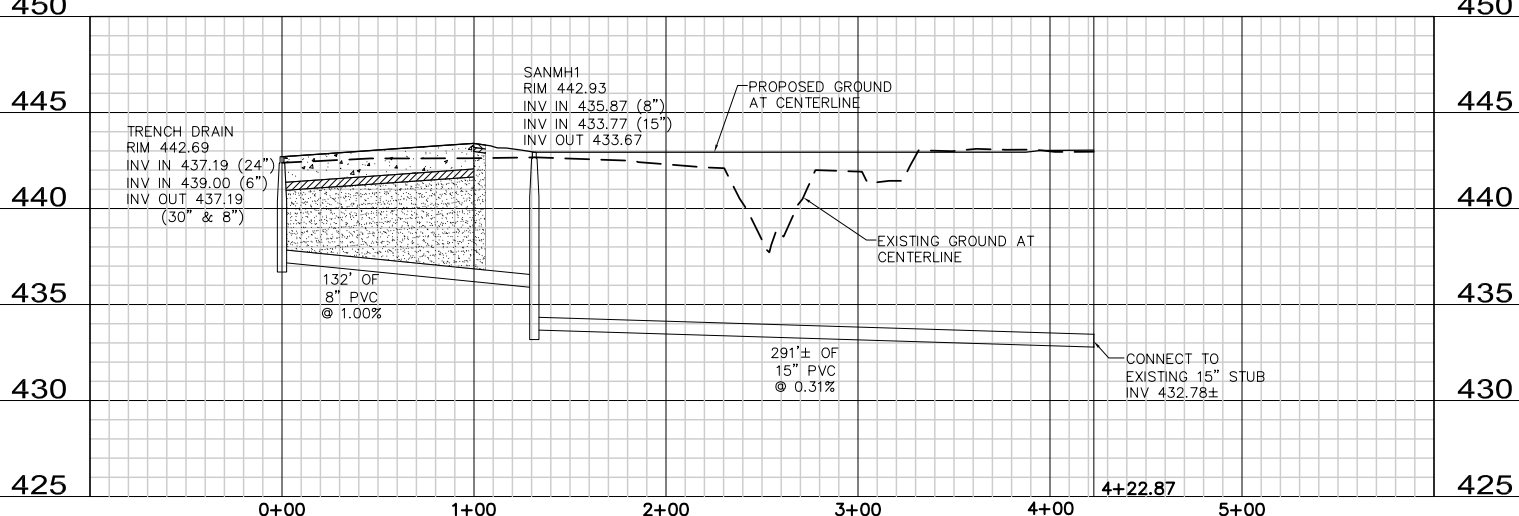
SSMH2 - TRENCH DRAIN PROFILE



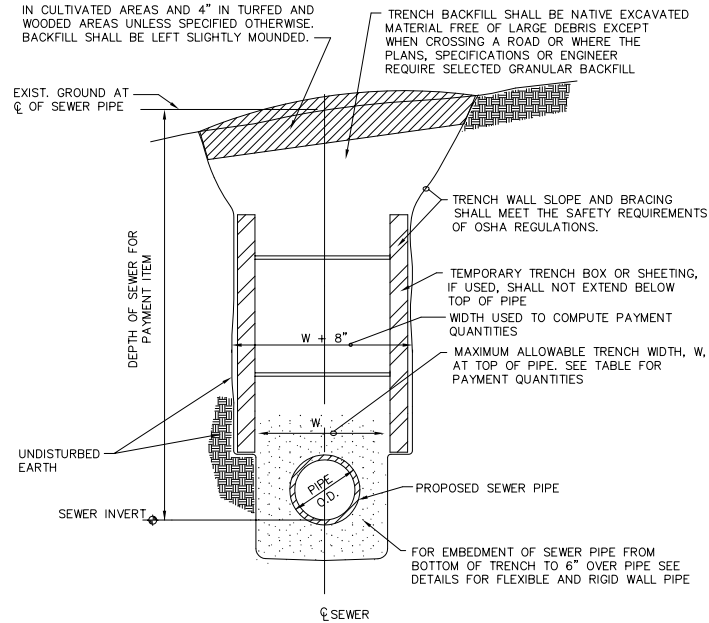
CAP1 - SANMH1 PROFILE



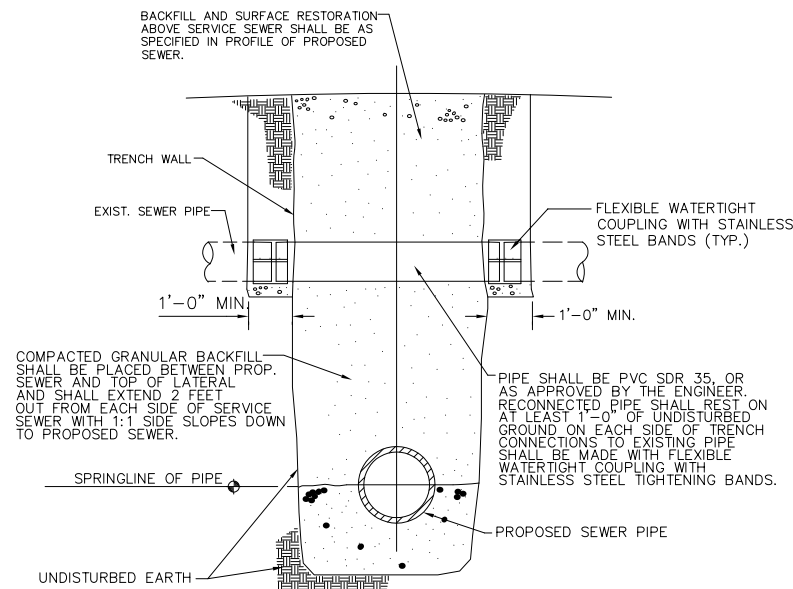
GLYCOL COLLECTION LINE PROFILE



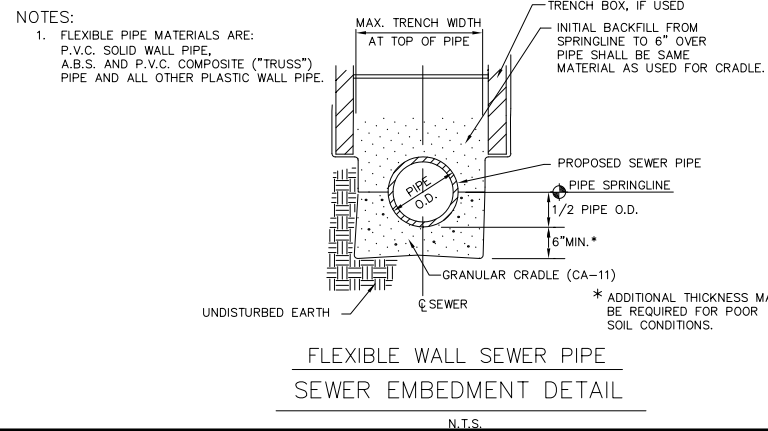
IN CULTIVATED AREAS AND AREAS DESIGNATED IN PLANS, SPECIFICATIONS OR BY ENGINEER, TOPSOIL SHALL BE STRIPPED AND STOCKPILED SEPARATELY. STRIPPING THICKNESS SHALL BE 12" IN CULTIVATED AREAS AND 4" IN TURFED AND WOODED AREAS UNLESS SPECIFIED OTHERWISE. BACKFILL SHALL BE LEFT SLIGHTLY MOUNDED.



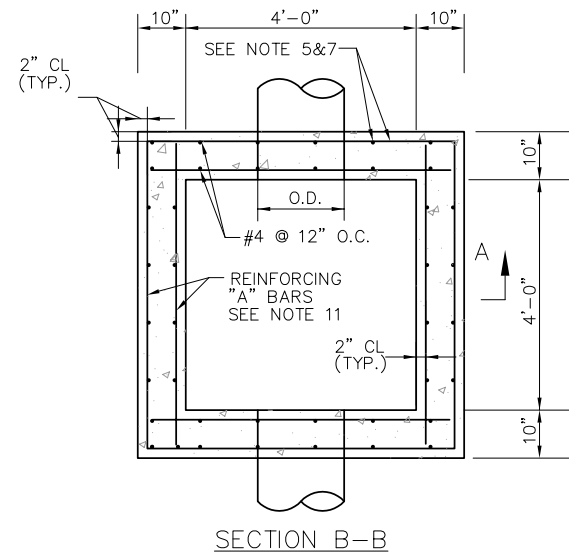
TYPICAL SEWER INSTALLATION
N.T.S.



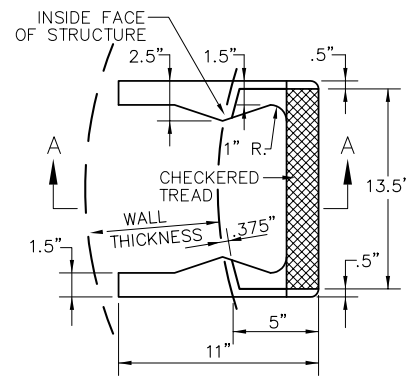
*RECONNECTION OF SERVICE SEWER, FIELD TILE, OR LATERAL PIPE ACROSS TRENCH
N.T.S.



FLEXIBLE WALL SEWER PIPE
SEWER EMBEDMENT DETAIL
N.T.S.



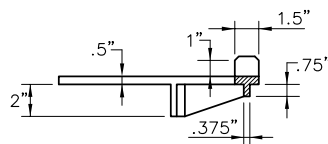
SECTION B-B



PLAN

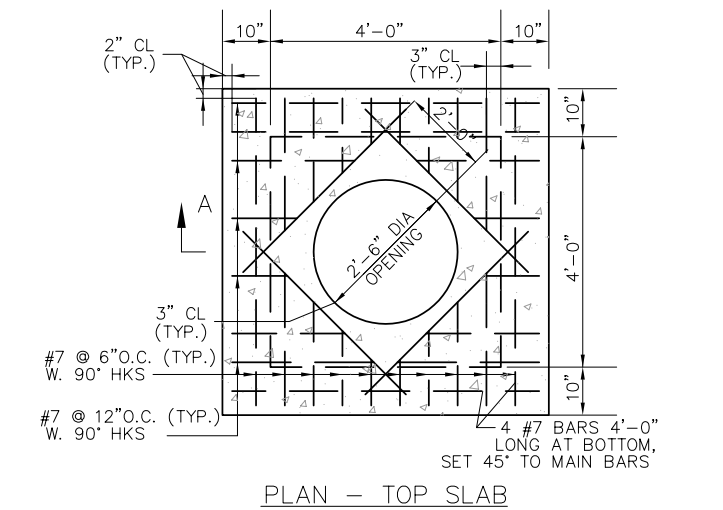
SECTION A-A

CAST IRON STEPS
N.T.S.

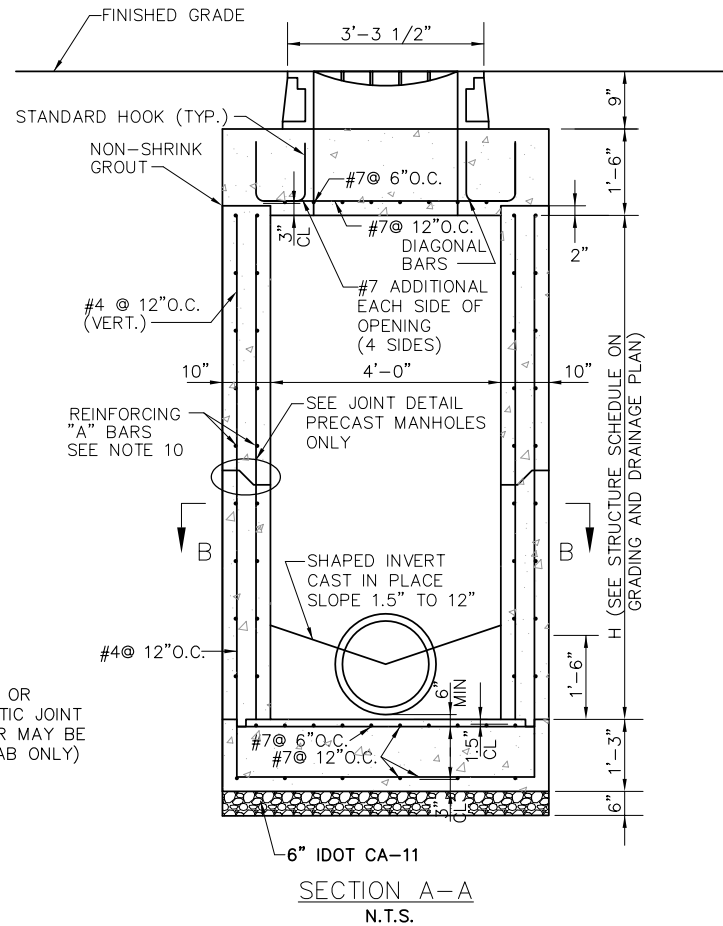


JOINT DETAIL

"O" RING GASKET OR PREFORMED PLASTIC JOINT SEALANT (MORTAR MAY BE USED AT TOP SLAB ONLY)



PLAN - TOP SLAB



SECTION A-A
N.T.S.

MANHOLE
N.T.S.

NOTES:

- FRAME WITH COVER SHALL BE NEENAH R-3492-A WITH LEGEND "ADF.W." SHALL BE GASKET SEALED FOR WATERTIGHT APPLICATION.
- ALL MANHOLE COVERS SHALL BE BOLTED TO THE FRAME.
- OPENINGS IN THE WALLS FOR THE PIPE SHALL BE CAST-IN OR CUT CLEANLY WITHOUT PERCUSSION TO A MAXIMUM DIAMETER OF O.D. ±3". THE SPACE BETWEEN PIPE AND WALL SHALL THEN BE SEALED WITH AN ELASTOMERIC SEAL, OR OTHER APPROVED METHOD.
- WHERE A PIPE PASSES THROUGH A WALL 2 ADDITIONAL "A" BARS SHALL BE PLACED ABOVE, BELOW, AND TO EACH SIDE OF THE OPENING. VERTICAL "A" BARS SHALL EXTEND A MINIMUM OF 2'-0" ABOVE AND BELOW THE EDGES OF THE OPENING. THE ADDITIONAL REINFORCING SHALL BE PLACED AT BOTH THE INSIDE AND OUTSIDE LAYER OF REINFORCING.
- WHEN LIFTING THE PRE-CAST MANHOLE, A BAR SHALL BE PLACED HORIZONTALLY THROUGH THE LIFTING HOLES, PROVIDED AT THE TIME OF MANUFACTURE, THE LIFTING DEVICES SHALL BE PLACED ONLY ON THAT BAR. THE BAR AND HOLES SHALL BE APPROVED BY THE ENGINEER. THE LIFTING HOLES SHALL BE FILLED WITH GROUT AFTER THE MANHOLE IS IN POSITION.
- SPLICE LENGTHS REQUIRED FOR REINFORCING BARS: #4 BAR, 1'-4"; #5 BAR, 1'-8"; #6 BAR, 2'-0"; #7 BAR, 2'-6".
- JOINT AND WATERSTOP ARE AN OPTION FOR CAST-IN PLACE MANHOLES ONLY. PRE-CAST MANHOLES SHALL NOT BE JOINTED AT THIS LOCATION.
- CONCRETE STRENGTH AT 28 DAYS SHALL BE A MINIMUM OF 4,000 PSI FOR CAST-IN PLACE MANHOLES, 5,000 PSI FOR PRECAST MANHOLES.
- REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60.
- REINFORCING "A" BARS SHALL BE #5 @ 12".
- PLASTIC MAGNETIC 3" WIDE DETECTABLE TAPE REQUIRED ABOVE ALL CONDUITS, DUCTS AND DUCTBANKS NOT INSTALLED UNDER PAVEMENT.
- THE BACKFILL ABOVE THE CONDUIT SHALL BE AS DEFINED IN SPECIFICATION SECTION 110.
- CAST IRON STEPS SHALL BE NEENAH R-1982-1 FOR STRAIGHT WALLS, OR APPROVED EQUAL.
- MANHOLE TO BE CONSTRUCTED OF STRUCTURAL P.C. CONCRETE. THE CONTRACT UNIT PRICE PER INLET SHALL INCLUDE THE FRAME, GRATES, AND STEPS IN PLACE AND COMPLETE PER UNIT.
- THE CONTRACTOR IS REQUIRED TO SUBMIT MANUFACTURER'S SHOP DRAWING SHOWING DETAILS AND DESIGN CALCULATIONS FOR APPROVAL PRIOR TO INSTALLATION. (SEE SPECS - ITEM 770700) SHOP DRAWINGS SHALL BE SEALED BY A REGISTERED PROFESSIONAL STRUCTURAL ENGINEER.
- THIS MANHOLE FRAME REQUIRES AIRPORT LOADING TO CONFORM WITH AC 150/5320-6E. THIS IS 50,000 LBS PER TIRE LOAD SPREAD OVER 235 SQUARE INCHES. CASTINGS ARE TO SUPPORT 100,000 LBS WHEEL LOADS WITH 250 PSI TIRE PRESSURE. ALL OTHER INLETS, FRAMES, AND GRATES SHALL BE DESIGNED TO WITHSTAND AASHTO HS20-44 HIGHWAY LOADING.
- TESTING OF MANHOLES. ALL MANHOLES IN THE SYSTEM SHALL BE TESTED AS DETAILED IN THE SPECIFICATIONS.

SANITARY SEWER DETAILS
(SND1)

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2"
AT FULL SCALE (34X22).
PLOT 1

MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS

MIKE APRON EXPANSION - CONTRACT 1

IL PROJECT: BLV-4061
AIP PROJ: 3-17-0146-XX

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FILE: 19_GLYCOL_MH_DETAILS.dwg

DESIGN BY: LEW

DRAWN BY: ASA

CHECKED BY: MJD/CET

APPROVED BY: BWG

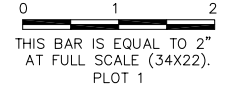
DATE: JANUARY 14, 2011

JOB No: 10098-01

GLYCOL
COLLECTION
DETAILS 1

SHEET 19 OF 53 SHEETS

REVISIONS		
NUMBER	BY	DATE



**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
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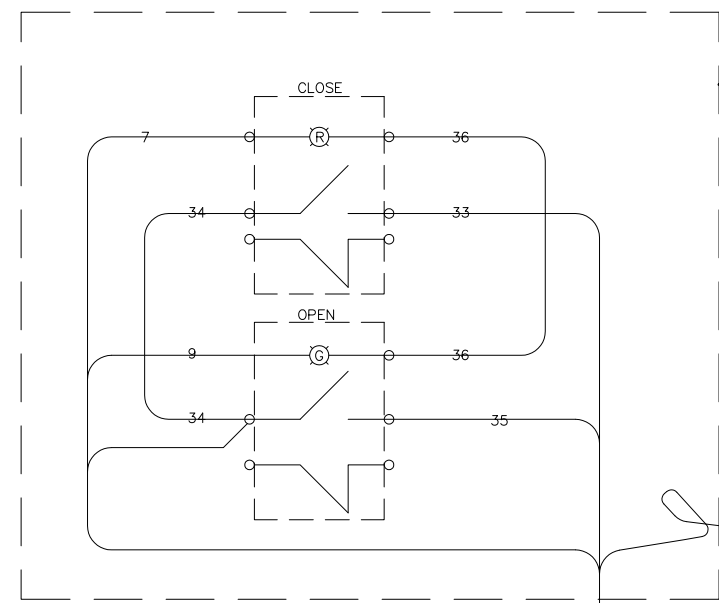
**IL PROJECT: BLV-4061
AIP PROJ. 3-17-0146-XX**

FILE: 20_GLYCOL_CONTROL_DETAILS_.dwg

DESIGN BY: LEW
DRAWN BY: ASA
CHECKED BY: MJD/CET
APPROVED BY: BWG
DATE: JANUARY 14, 2011
JOB No: 10098-01

**GLYCOL CONTROL
DETAILS 1**

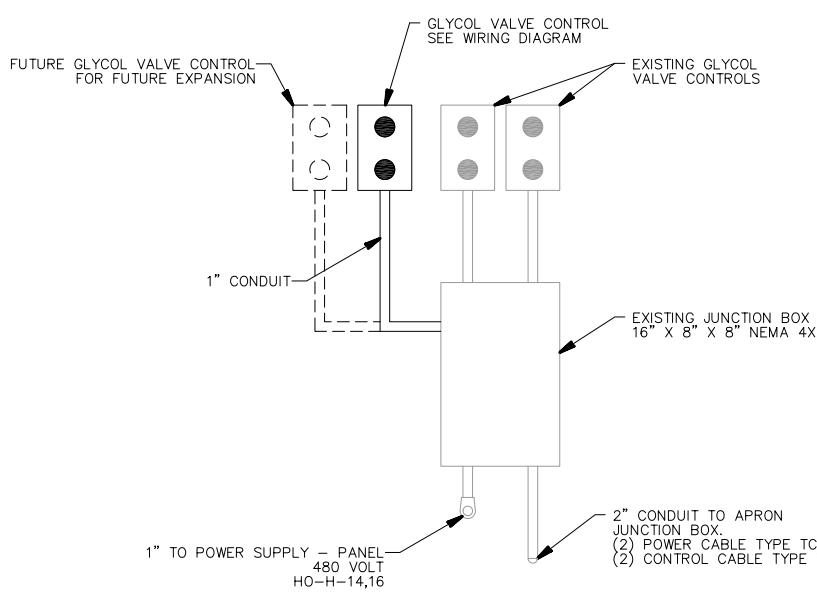
SHEET 20 OF 53 SHEETS



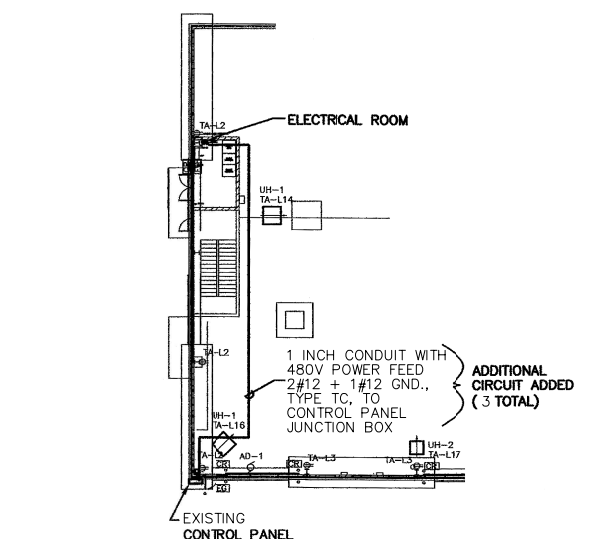
CONTROL STATION BILL OF MATERIALS				
ITEM NO.	QTY	UNIT	DESCRIPTION	PART NUMBER
1	1	EA	DIECAST NEMA 4/13 BOX	AB-800T-2TZ
2	1	EA	MOMENTARY PUSHBUTTON GREEN ILLUMINATED - GUARDED	AB-800T-QAH24G
3	1	EA	MOMENTARY PUSHBUTTON RED ILLUMINATED - GUARDED	AB-800T-QAH24R
4	1	EA	LEGEND PLATE "OPEN"	AB-800T-X531
5	1	EA	LEGEND PLATE "CLOSED"	AB-800T-X502

TERMINATE ROTORK TERMINAL NO'S INDICATED.

CONTROL STATION WIRING DIAGRAM
N.T.S.

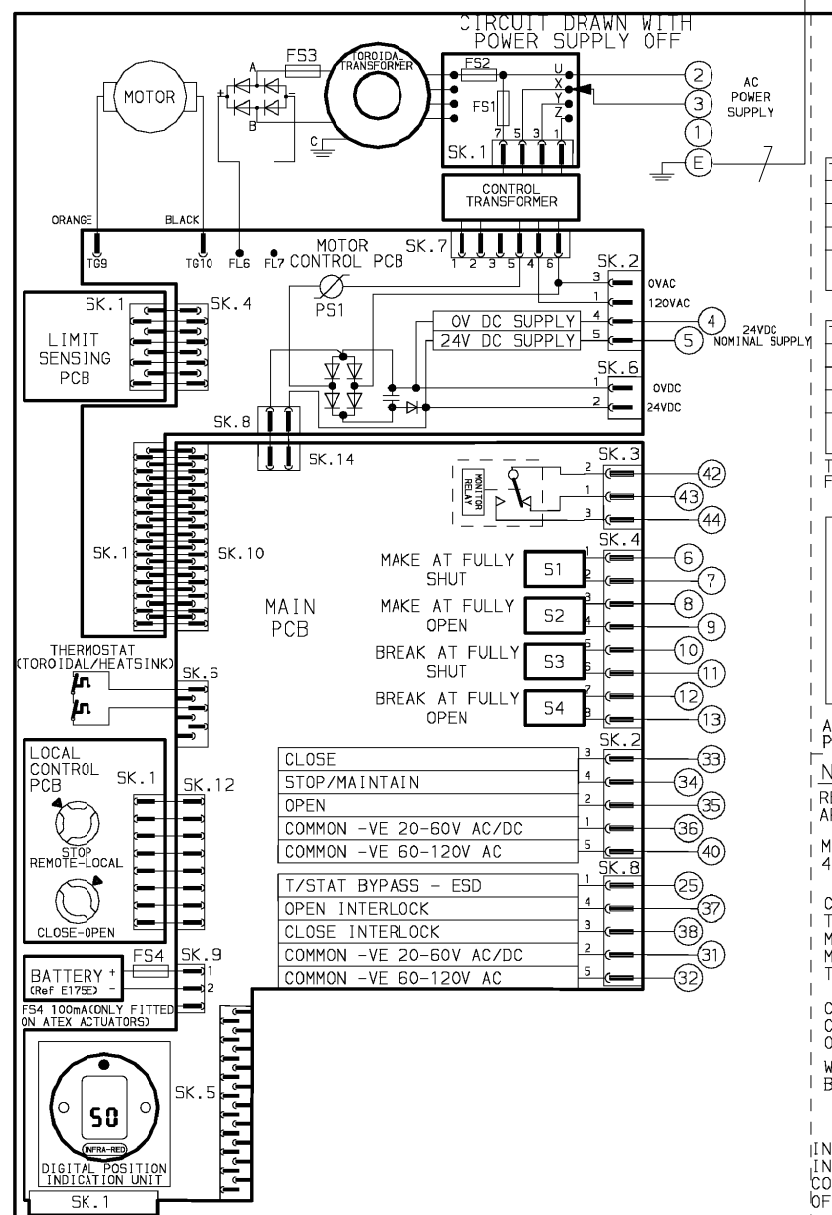
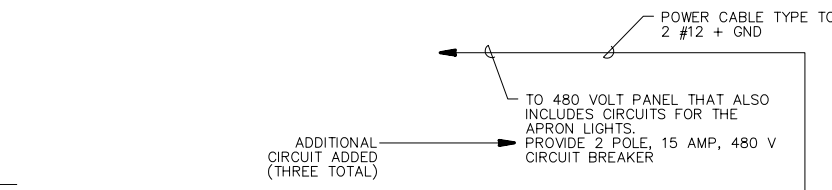


CONTROL PANEL DETAIL
N.T.S.



PARTIAL BOEING FACILITY FLOOR PLAN
N.T.S.

- NOTES:**
- 1" CONDUIT POWER FEED IS LOCATED ON NORTHWALL ALONG TOP OF MASONRY WALL.
 - AT THE TIME OF THE DESIGN EXISTING CONDITIONS INSIDE THE BOEING FACILITY WERE CHANGING DUE TO BUILDING RENOVATIONS. THE CONTRACTOR MAY BE REQUIRED TO TIE THE NEW CIRCUIT INTO A DIFFERENT PANELBOARD FROM WHAT IS SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING THE NEW CIRCUIT REGARDLESS OF THE ELECTRICAL CONDITIONS FOUND AT THE TIME OF INSTALLATION AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR EXTRA LABOR OR MATERIALS REQUIRED TO COMPLETE THIS WORK DUE TO ENCOUNTERED CONDITIONS.



FOR TYPICAL REMOTE CONTROL DETAILS SEE DOCUMENT RWS300

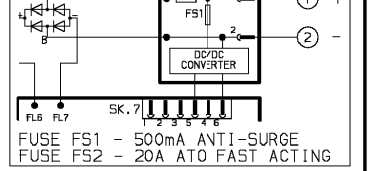
TRANSFORMER TAPPING OPTIONS

TYPE 1			TYPE 2		
TAP	NOM	RANGE	TAP	NOM	RANGE
X	100	80-120	X	200	160-240
Y	110	88-132	Y	230	184-276
Z	120	96-144	Z	270	216-324

TYPE 3			TYPE 4		
TAP	NOM	RANGE	TAP	NOM	RANGE
X	380	304-456	X	480	384-576
Y	400	320-480	Y	575	460-690
Z	415	332-498	Z	690	552-828

TRANSFORMER TYPES 1, 2, 3 & 4 - FUSE FS3 - 20A ATO FAST ACTING

TYPE 5 24VDC



FUSE FS1 - 500mA ANTI-SURGE
FUSE FS2 - 20A ATO FAST ACTING

ALL TRANSFORMER TYPES - PS1 SELF RESETTING FUSE

NOTE
REFER TO PUBLICATION E175E FOR APPROVED FUSES FS1, FS2 AND FS3.

MAX EXTERNAL LOAD ON TERMINALS 4 & 5 TO BE 5W.

CONTROL SIGNAL THRESHOLD VOLTAGES TO BE MINIMUM "ON" 20V AC/DC
MAXIMUM "OFF" = 3V
MINIMUM CONTROL SIGNAL DURATION TO BE 300ms.

CURRENT DRAWN FROM EACH REMOTE CONTROL SIGNAL IS 5mA ON 24V DC OR 12mA ON 120V AC

WIRES ARE IDENTIFIED AT EACH END BY TERMINAL No. OR TAG No.

INDICATION CONTACTS S1-S4 ARE SHOWN IN THEIR DEFAULT CONFIGURATION. CONTACTS MAY BE CONFIGURED FOR ANY OF THE FUNCTIONS DESCRIBED IN E175E

No	DATE	REVISION DETAILS
02	090903 P.J.W	MTR CONNECTION NOTE REMOVED CHECKED T.H

www.rotork.com

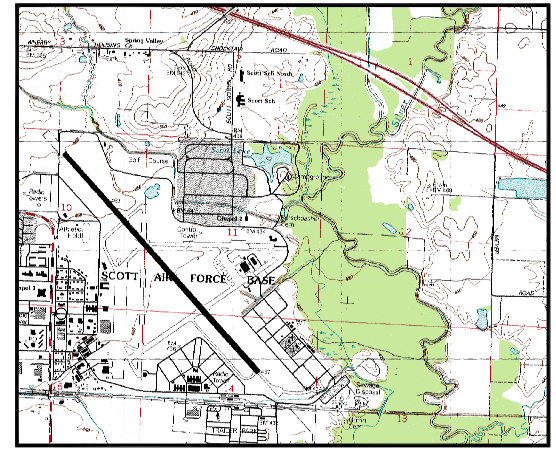
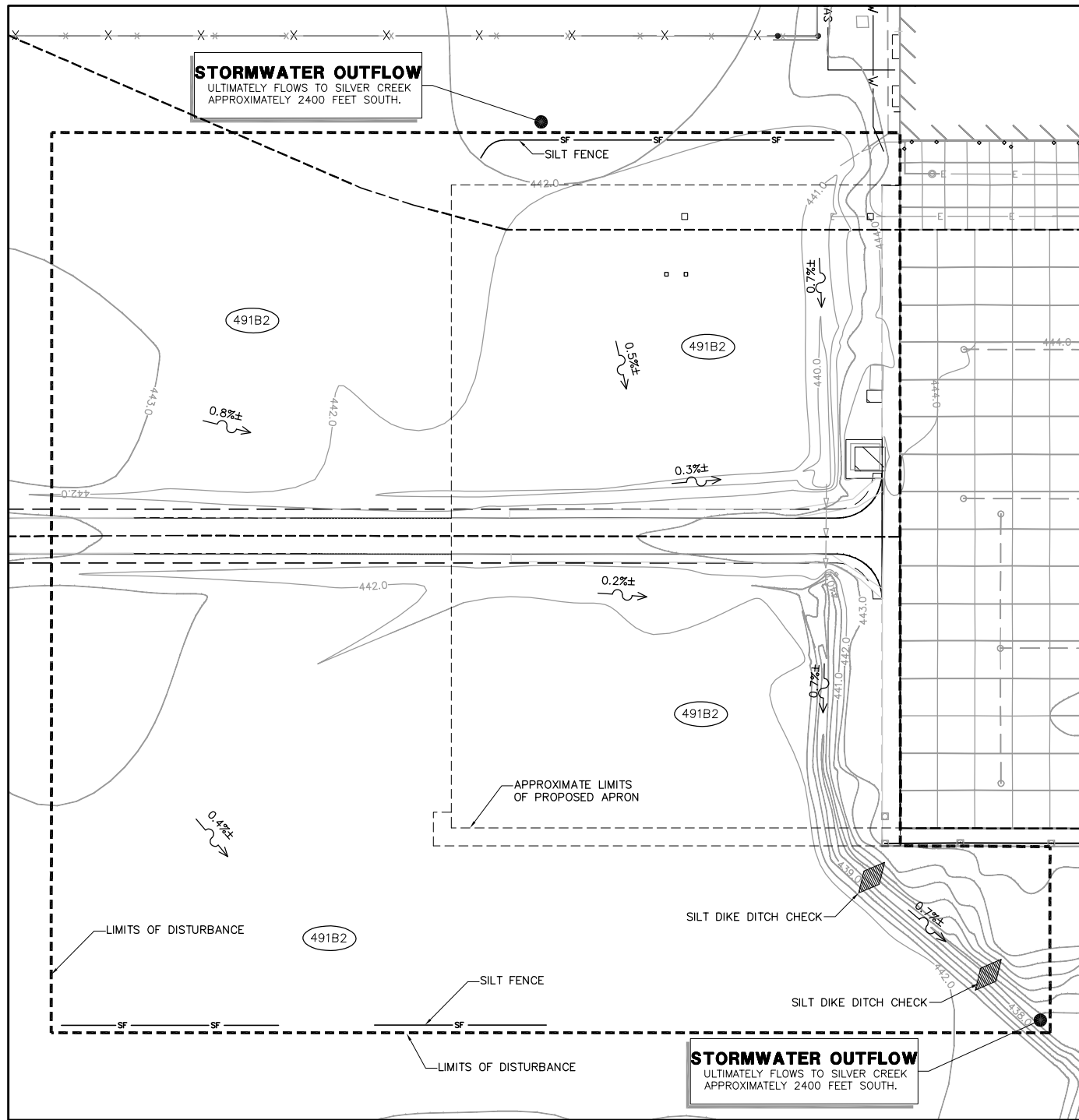
ROTORK CONTROLS LTD
BATH, BA1 3JQ
ENGLAND
Tel: 01225-733200

ROTORK CONTROLS INC
ROCHESTER
NY 14624, USA
Tel: 585-328-1550

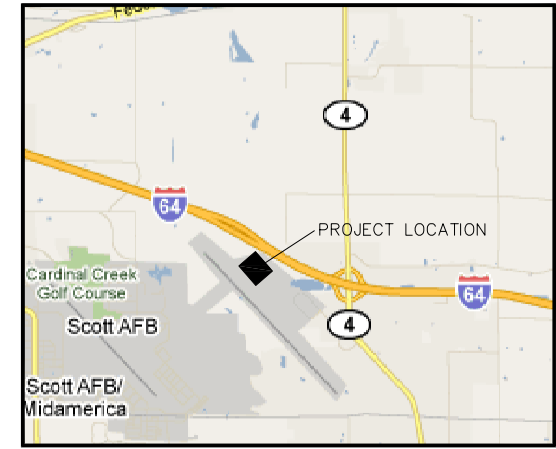
CONFIG BY PJW
DATE 160703
CHECKED TH
BASE WD 6000-000
JOB No -
M.I.No -

IQT BASIC

CIRCUIT DIAGRAM No -REV
6000-000-02
B1 C1 B2 C2



USGS QUADRANGLE MAP
1" = 3000'



LOCATION MAP
1" = 5000'

STAGE 1 SEQUENCE OF CONSTRUCTION

1. INSPECT/MODIFY CHECK DAMS AND SILT DIKES AS NEEDED
2. COMPLETE ANY CLEARING & GRUBBING
3. INSPECT/STABILIZE/SUPPLEMENT ALL BMP'S
4. COMPLETE REMAINING WORK

LEGEND

- 440 — EXISTING CONTOUR
- ▽ — ▽ — ▽ — EXISTING STORM SEWER
- ▽ — ▽ — ▽ — EXISTING GLYCOL DISPOSAL
- ▽ — ▽ — ▽ — EXISTING UNDERDRAIN
- ▽ — ▽ — ▽ — PROPOSED STORM SEWER
- ▽ — ▽ — ▽ — PROPOSED GLYCOL DISPOSAL
- ▽ — ▽ — ▽ — PROPOSED UNDERDRAIN
- E — EXISTING ELECTRIC LINE
- SF — SILT FENCE, SEE EROSION CONTROL DETAILS 1
- - - - - LIMITS OF DISTURBANCE
- - - - - WATERSHED DELINEATION
- 491B2 ○ USDA SCS SOIL NUMBER (RUMA SILT LOAM) RUNOFF "C" VALUE ≈ 0.30
- ▧ SILT DIKE DITCH CHECK, SEE EROSION CONTROL DETAILS 1
- ↘ SLOPE ARROW

GENERAL EROSION & SEDIMENT CONTROL NOTES

- A. THE STORMWATER POLLUTION PREVENTION PLAN IS COMPRISED OF THESE DRAWINGS ("SITE MAPS"), THE STANDARD DETAILS, ATTACHMENTS INCLUDED IN SPECIFICATIONS, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
- B. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORMWATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORMWATER POLLUTION PREVENTION PLAN AND THE STATE OF ILLINOIS NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
- C. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
- D. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL FOR PRACTICE, AS APPLICABLE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
- E. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
- F. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
- G. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
- H. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED. ENSURE VEHICLE TIRES ARE CLEANED OFF BEFORE EXITING SITE.
- I. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
- J. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
- K. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. CONTAINERS TO BE EMPTIED AND REMOVED REGULARLY. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- L. ALL STORMWATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN, AND IN THE STORMWATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
- M. ALL DENUDED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE (UNLESS CONSTRUCTION ACTIVITY WILL RESUME ON THAT PORTION OF THE SITE WITHIN 14 DAYS), MUST BE STABILIZED TEMPORARILY WITH THE USE OF FAST-GERMINATING ANNUAL GRASSES/GRAIN VARIETIES, STRAW/HAY MULCH, WOOD CELLULOSE FIBERS, TACKIFIERS, NETTING OR BLANKETS AS SHOWN ON THE SITE MAP.
- N. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.
- O. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION EXITS IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
- P. ALL MATERIALS SPILLED, DROPPED, WASHED, OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
- Q. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DITCH AND DOWNSTREAM DETENTION BASIN ALONG WITH ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
- R. ON-SITE & OFF-SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH THE GENERAL PERMIT REQUIREMENTS.
- S. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
- T. DUE TO GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION.
- U. SEE SITE PLAN FOR PERMANENT AND TEMPORARY SIGNAGE.
- V. GENERAL CONTRACTOR IS TO DESIGNATE/IDENTIFY AREAS ON THE SITE MAPS, INSIDE OF THE LIMITS OF DISTURBANCE, FOR WASTE DISPOSAL AND DELIVERY AND MATERIAL STORAGE.
- W. REFER TO THE SWPPP FOR REPORTABLE SPILL QUANTITIES OF PETROLEUM PRODUCTS AND/OR HAZARDOUS WASTES.

BMP MAINTENANCE NOTES

ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED DAILY BY THE GENERAL CONTRACTOR'S SITE SUPERINTENDENT AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.
2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEDED AS NEEDED.
3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
4. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION EXITS AS CONDITIONS DEMAND.
5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
6. PRIOR TO LEAVING THE SITE, ALL VEHICLES SHALL BE CLEANED OF DEBRIS. ANY DEBRIS AND/OR SEDIMENT REACHING THE PUBLIC STREET SHALL BE CLEANED IMMEDIATELY BY A METHOD OTHER THAN FLUSHING.

SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE

NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE

CONSTRUCTION SEQUENCE	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
TEMPORARY CONSTRUCTION EXITS																								
TEMPORARY CONTROL MEASURES																								
SEDIMENT CONTROL BASINS																								
STRIP & STOCKPILE TOPSOIL																								
ROUGH GRADE																								
STORM FACILITIES																								
SITE CONSTRUCTION																								
PERMANENT CONTROL STRUCTURES																								
FOUNDATION / BUILDING CONSTRUCTION																								
FINISH GRADING																								
LANDSCAPING/SEED/FINAL STABILIZATION																								

1) CONTRACTOR SHALL UPDATE THE TABLE BY SHADING OR DATING THE APPLICABLE ACTIVITIES AS PROJECT PROGRESSES.
2) TIME SCHEDULE MUST COINCIDE WITH SEQUENCE OF CONSTRUCTION.

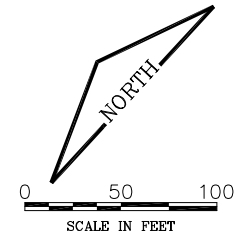
OWNER:
ST. CLAIR COUNTY PUBLIC
BUILDING COMMISSION
#10 PUBLIC SQUARE
BELLEVILLE, IL 62222
618-277-6600

SITE OPERATOR/GENERAL CONTRACTOR:

SUPERINTENDENT:

ACREAGE SUMMARY

TOTAL DISTURBED AREA = 9 AC



REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2"
AT FULL SCALE (34X22).
PLOT 1

**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
(314) 436-5500

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**IL PROJECT: BLV-4061
AIP PROJ: 3-17-0146-XX**

FILE: 21_EROSION_1.dwg

DESIGN BY: LEW

DRAWN BY: ASA

CHECKED BY: MJD/CET

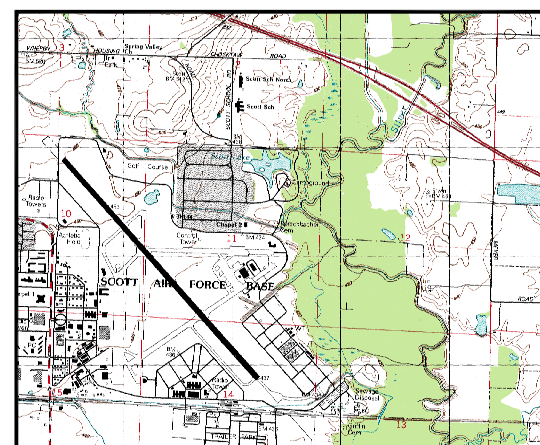
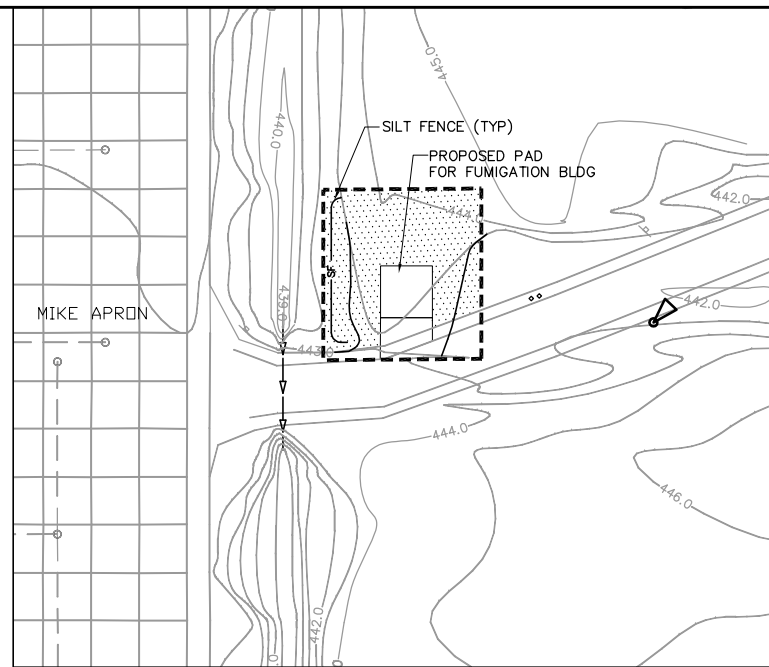
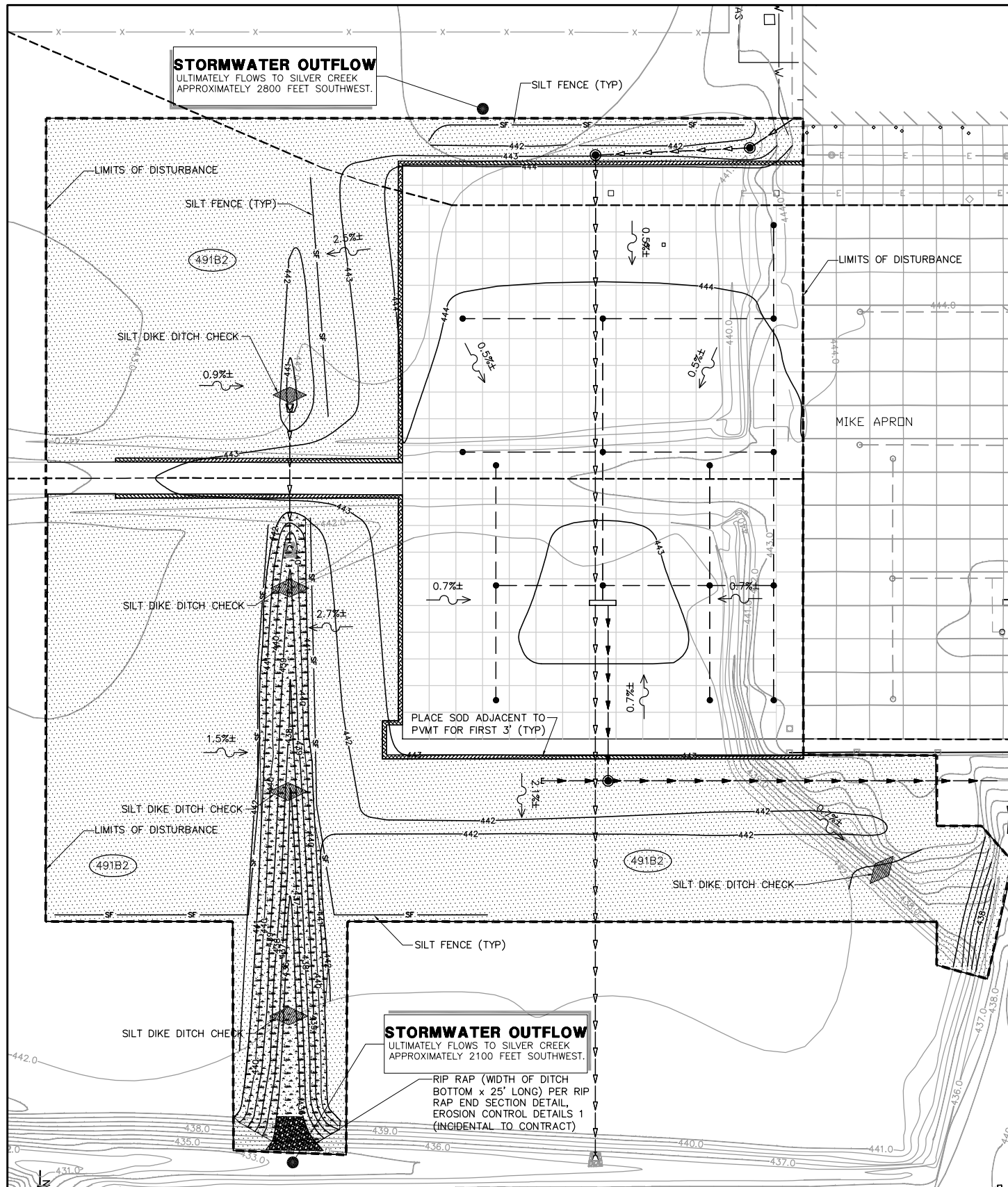
APPROVED BY: BWG

DATE: JANUARY 14, 2011

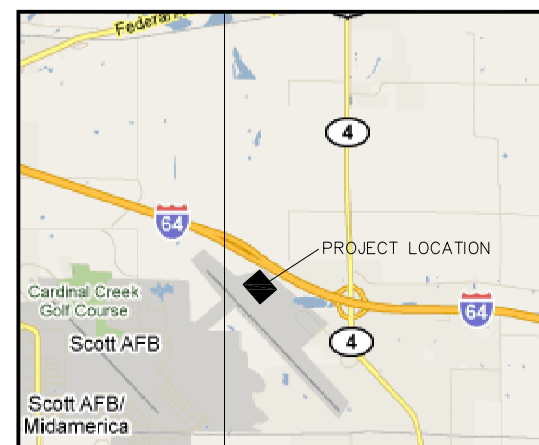
JOB No: 10098-01

**EROSION CONTROL
PLAN
PHASE 1**

SHEET 21 OF 53 SHEETS



USGS QUADRANGLE MAP
1" = 3000'



LOCATION MAP
1" = 5000'

- LEGEND**
- 440— EXISTING CONTOUR
 - 440— PROPOSED CONTOUR
 - >>>— EXISTING STORM SEWER
 - >>>— EXISTING GLYCOL DISPOSAL
 - >>>— EXISTING UNDERDRAIN
 - >>>— PROPOSED STORM SEWER
 - >>>— PROPOSED GLYCOL DISPOSAL
 - >>>— PROPOSED UNDERDRAIN
 - E— EXISTING ELECTRIC LINE
 - SF— SILT FENCE, SEE EROSION CONTROL DETAILS 1
 - LIMITS OF DISTURBANCE
 - WATERSHED DELINEATION
 - (491B2) USDA SCS SOIL NUMBER (RUMA SILT LOAM) RUNOFF "C" VALUE ≈ 0.30
 - ▨ SILT DIKE DITCH CHECK, SEE EROSION CONTROL DETAILS 1
 - ▨ AREA TO BE SEEDED
 - ▨ AREA TO RECEIVE SODDING
 - ▨ EROSION CONTROL BLANKET, SEE EROSION CONTROL DETAILS 2
 - ↘ SLOPE ARROW

- BMP MAINTENANCE NOTES**
- ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED DAILY BY THE GENERAL CONTRACTOR'S SITE SUPERINTENDENT AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:
1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.
 2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEED AS NEEDED.
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 4. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION EXITS AS CONDITIONS DEMAND.
 5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
 6. PRIOR TO LEAVING THE SITE, ALL VEHICLES SHALL BE CLEANED OF DEBRIS. ANY DEBRIS AND/OR SEDIMENT REACHING THE PUBLIC STREET SHALL BE CLEANED IMMEDIATELY BY A METHOD OTHER THAN FLUSHING.

- STAGE 2 SEQUENCE OF CONSTRUCTION**
1. INSPECT/MODIFY CHECK DAMS AND SILT DIKES AS NEEDED
 2. COMPLETE ANY CLEARING & GRUBBING
 3. INSPECT/STABILIZE/SUPPLEMENT ALL BMPs
 4. COMPLETE REMAINING WORK
- PHASE 2 NOTES**
1. STOCKPILE AREA ALSO TO BE SEEDED AND MULCHED.
 2. SEE EROSION CONTROL PLAN PHASE 1 FOR GENERAL EROSION & SEDIMENT CONTROL NOTES (TO REMAIN IMPLEMENTED THROUGHOUT PHASE 2).
 3. CONTRACTOR IS RESPONSIBLE FOR ALL SITE MAINTENANCE UNTIL THE SITE IS TURNED OVER. THIS INCLUDES MOWING WHERE VEGETATION HAS BEGUN TO GROW BEFORE SUBSTANTIAL COMPLETION.

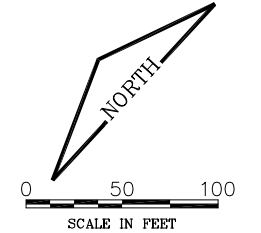
OWNER:
ST. CLAIR COUNTY PUBLIC
BUILDING COMMISSION
#10 PUBLIC SQUARE
BELLEVILLE, IL 62222
618-277-6600

SITE OPERATOR/GENERAL CONTRACTOR:

SUPERINTENDENT:

ACREAGE SUMMARY

TOTAL DISTURBED AREA = 9 AC



SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE

NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE

CONSTRUCTION SEQUENCE	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
TEMPORARY CONSTRUCTION EXITS																								
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FOUNDATION / BUILDING CONSTRUCTION																								
FINISH GRADING																								
LANDSCAPING/SEED/FINAL STABILIZATION																								

1) CONTRACTOR SHALL UPDATE THE TABLE BY SHADING OR DATING THE APPLICABLE ACTIVITIES AS PROJECT PROGRESSES.
2) TIME SCHEDULE MUST COINCIDE WITH SEQUENCE OF CONSTRUCTION.

PHASE 2 EROSION AND SEDIMENTATION CONTROL PLAN / SITE MAP

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2'
AT FULL SCALE (34X22).
PLOT 1

**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
(314) 436-5500

CMT
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**IL PROJECT: BLV-4061
AIP PROJ: 3-17-0146-XX**

FILE: 22_EROSION_2.dwg

DESIGN BY: LEW

DRAWN BY: ASA

CHECKED BY: MJD/CET

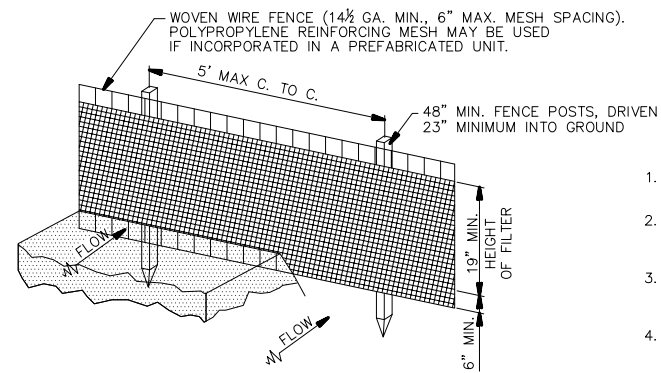
APPROVED BY: BWG

DATE: JANUARY 14, 2011

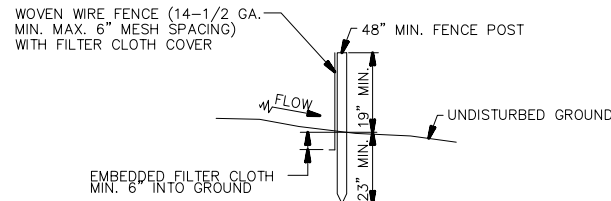
JOB No: 10098-01

**EROSION CONTROL PLAN
PHASE 2**

SHEET 22 OF 53 SHEETS



PERSPECTIVE VIEW



SECTION

SILT FENCE DETAIL

N.T.S.

NOTES:

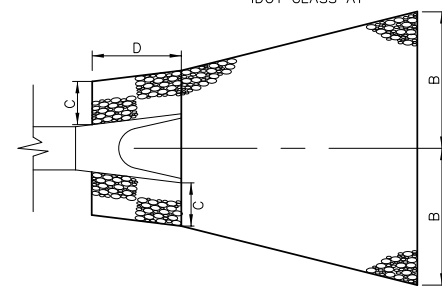
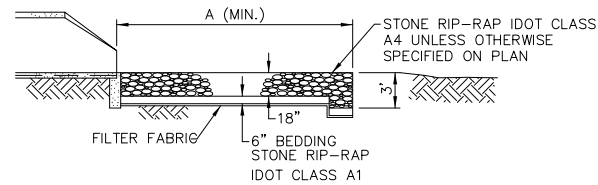
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6" MIN. AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE. MAINTENANCE, WHICH INCLUDES THE REPLACEMENT OF DAMAGED FENCE SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE EROSION CONTROL FENCE.

POSTS: STEEL, EITHER T OR U TYPE OR 2" HARDWOOD

FENCE: WOVEN WIRE, 14-1/2 GA. 6" MAX MESH OPENING POLYPROPYLENE MESH, IF INCORPORATED IN PREFAB UNIT.

FILTER CLOTH: FILTER X, MIRAF1100X, STABILINKA T140N OR EQUAL

PREFABRICATED UNIT: GEOFAB ENVIROFENCE, GSI SILT FENCE WITH REINFORCING MESH OR EQUAL.



PLAN VIEW

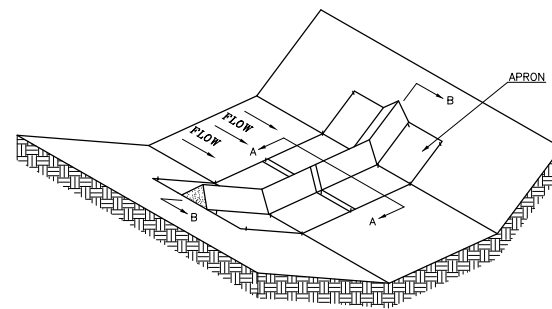
RIP RAP AT END SECTIONS

N.T.S.

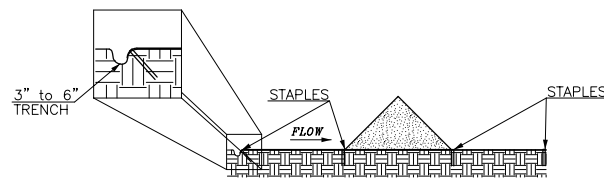
INSIDE DIAMETER STORM SEWER (IN.)	MIN. DIMENSION (FT)			
	A	B	C	D
12" thru 24"	15	4	1.5	4
27" thru 30"	18	5	2.0	6
36" thru 48"	22	6	2.5	8
54" thru 60"	25	7	3.0	10

MAINTENANCE NOTES:

1. INSPECT RIP RAP AFTER STORM EVENTS FOR STONE DISPLACEMENT AND FOR EROSION AT THE SIDES AND ENDS OF THE APRON.
2. TAKE NEEDED REPAIRS IMMEDIATELY; USE APPROPRIATE SIZE STONE, AND DO NOT PLACE THEM ABOVE FINISHED GRADE.
3. THE ENGINEER SHALL DETERMINE THE FINAL RIP-RAP CONFIGURATION IN THE FIELD.
4. COST OF RIP-RAP SHALL BE INCIDENTAL TO FLARED END SECTION WORK.

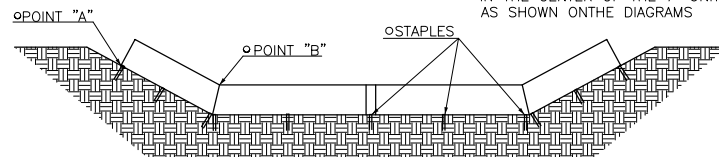


SILT DIKE UNIT CUT SECTION



DETAIL A-A

STAPLES SHALL BE PLACED WHERE THE UNITS OVERLAP AND IN THE CENTER OF THE 7' UNIT AS SHOWN ON THE DIAGRAMS



DIKE SECTION DETAIL B-B

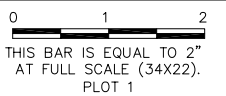
POINT "A" MUST BE HIGHER THAN POINT "B" TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.

SILT DIKE DITCH CHECK

N.T.S.

REVISIONS

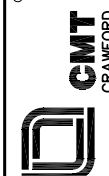
NUMBER	BY	DATE



MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
(314) 436-5500



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IL PROJECT: BLV-4061
AIP PROJ: 3-17-0146-XX

FILE: 23-24_EC_DETAILS.dwg

DESIGN BY: LEW

DRAWN BY: ASA

CHECKED BY: MJD/CET

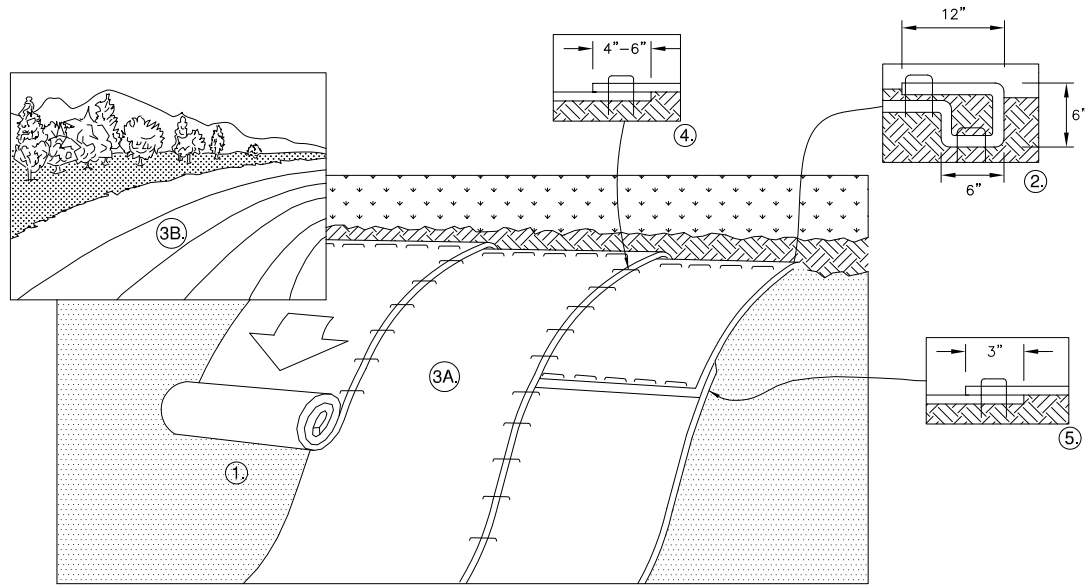
APPROVED BY: BWG

DATE: JANUARY 14, 2011

JOB No: 10098-01

EROSION
CONTROL
DETAILS 1

SHEET 23 OF 53 SHEETS



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS PER MANUFACTURES RECOMMENDATION.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH MINIMUM 6" OVERLAP. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.
6. PLACE STAPLES/STAKES PER MANUFACTURE RECOMMENDATION FOR THE APPROPRIATE SLOPE BEING APPLIED.

NOTES:

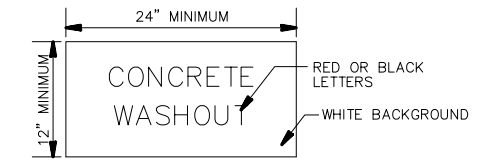
1. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

EROSION CONTROL BLANKET

N.T.S.

CONCRETE WASHOUT AREA NOTES:

1. IF THE CONTRACTOR CHOOSES TO WASHOUT THE CHUTE OF ANY CONCRETE TRUCK, AN APPROVED WASHOUT AREA SHALL BE CONSTRUCTED NEAR THE CONTRACTOR'S STAGING AREA.
2. THE WASHOUT AREA SHALL CONSIST OF A TEMPORARY PIT THAT IS LARGE ENOUGH TO CONTAIN ALL LIQUID AND WASTE CONCRETE MATERIALS FROM WASHOUT.
3. THE WASHOUT PIT SHALL BE LINED WITH 10 MIL POLYETHYLENE TO CONTROL SEEPAGE. THE LINING SHALL BE SEAMLESS WITH NO HOLES OR PUNCTURES.
4. ONLY WASHOUT OF CHUTES WILL BE PERMITTED ONSITE. TRUCK DRUMS AND BEDS SHALL BE WASHED OUT OFFSITE AT AN APPROVED LOCATION.
5. A SIGN SHALL BE POSTED AT THE WASHOUT LOCATION. SEE DETAIL THIS SHEET.
6. PRIOR TO FINAL COMPLETION OF THE PROJECT THE CONTRACTOR SHALL REMOVE THE WASHOUT PIT, GRADE THE AREA BACK TO ITS ORIGINAL GROUND LINE, AND RESTORE ANY DISTURBED TURF TO THE SATISFACTION OF THE ENGINEER.
7. ALL COSTS ASSOCIATED WITH CONSTRUCTING, MAINTAINING, REMOVING, AND RESTORING THE TEMPORARY WASHOUT PIT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.



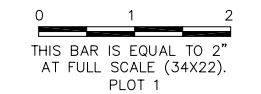
CONCRETE WASHOUT SIGN

N.T.S.

NOTES:


1. LETTERS SHALL BE A MINIMUM OF 2" WIDE AND 3" TALL.
2. SIGN SHALL BE CONSTRUCTED OF A RIGID MATERIAL SUCH AS METAL, PLYWOOD, OR OUTDOOR SIGN BOARD.
3. SIGN SHALL BE PLACED IN A VISIBLE LOCATION NEAR THE APPROVED WASHOUT AREA.

REVISIONS		
NUMBER	BY	DATE



**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1


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 CONSULTING ENGINEERS
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ONE MEMORIAL DRIVE, SUITE 500
 ST. LOUIS, MO 63102
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IL PROJECT: BLV-4061
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FILE: 23-24_EC_DETAILS.dwg

DESIGN BY: LEW

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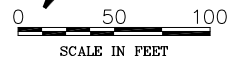
CHECKED BY: MJD/CET

APPROVED BY: BWG

DATE: JANUARY 14, 2011

JOB No: 10098-01

EROSION CONTROL DETAILS 2



30'-9"
TO CENTER
OF MARKING

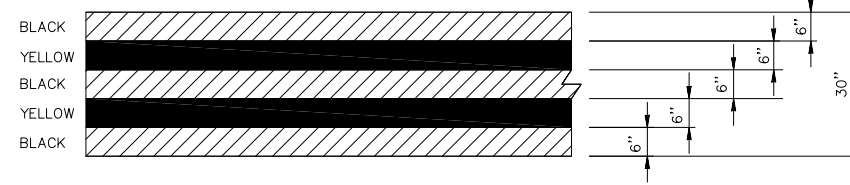
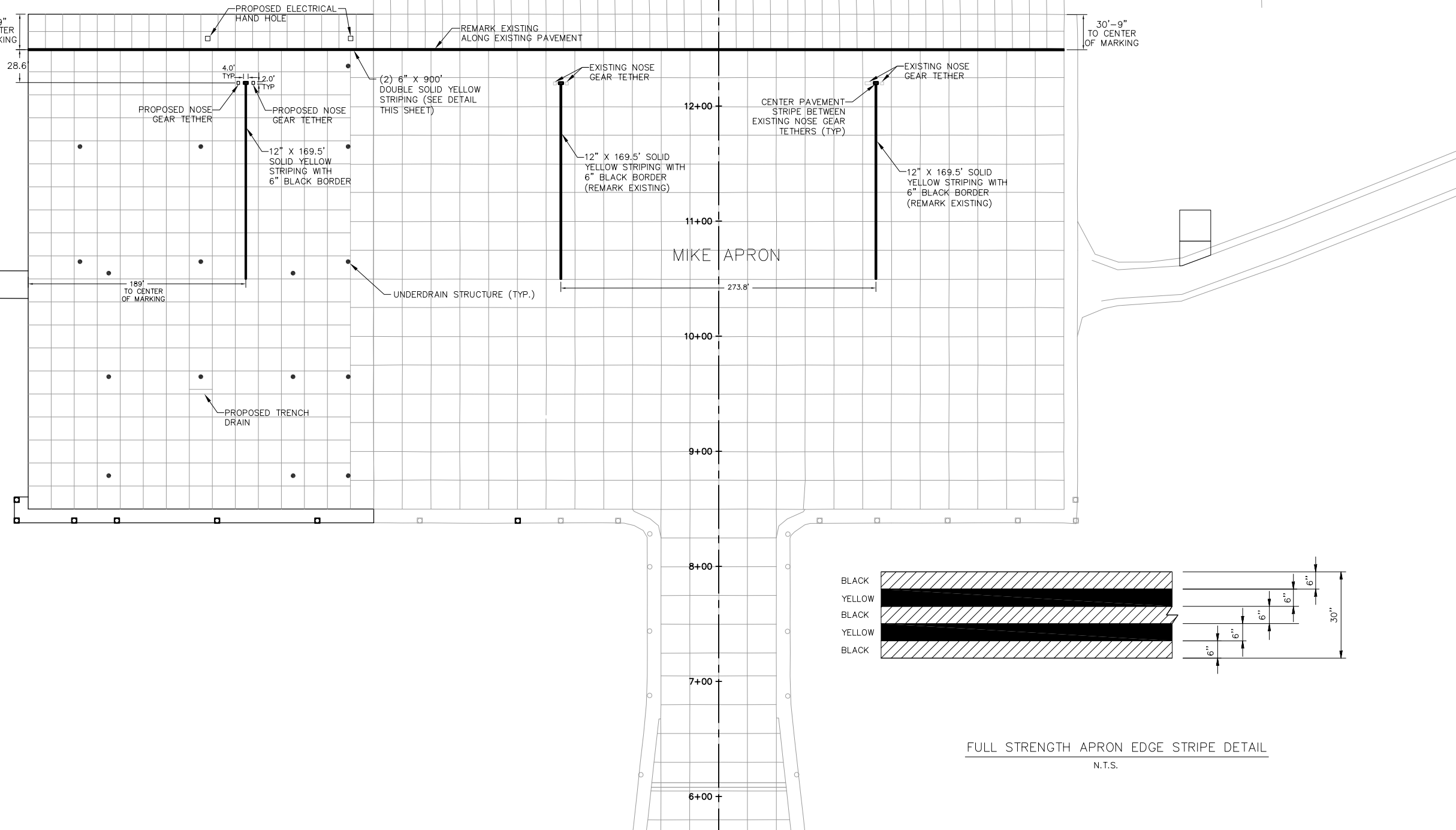
28.6'

189'
TO CENTER
OF MARKING

189'
TO CENTER
OF MARKING

BOEING FACILITY

MIKE APRON



FULL STRENGTH APRON EDGE STRIPE DETAIL
N.T.S.

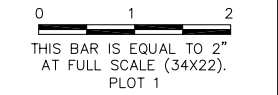
LEGEND

- PROPOSED PAVEMENT MARKING
- EXISTING LIGHTING
- PROPOSED LIGHTING
- PROPOSED CLEANOUT

NOTE: ALL YELLOW MARKINGS SHALL RECEIVE GLASS BEADS.

REVISIONS

NUMBER	BY	DATE



**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
(314) 436-5500



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CONSULTING ENGINEERS

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PROFESSIONAL ENGINEERING - 184-00613

**IL PROJECT: BLV-4061
AIP PROJ: 3-17-0146-XX**

FILE: 25_MARKING.dwg

DESIGN BY: LEW

DRAWN BY: ASA

CHECKED BY: MJD/CET

APPROVED BY: BWG

DATE: JANUARY 14, 2011

JOB No: 10098-01

**PAVEMENT
MARKING PLAN**

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2"
AT FULL SCALE (34X22).
PLOT 1

MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
(314) 436-5500

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IL PROJECT: BLV-4061
AIP PROJ. 3-17-0146-XX

FILE: 26-27_TETHER_DETAILS.dwg

DESIGN BY: LEW

DRAWN BY: ASA

CHECKED BY: MJD/CET

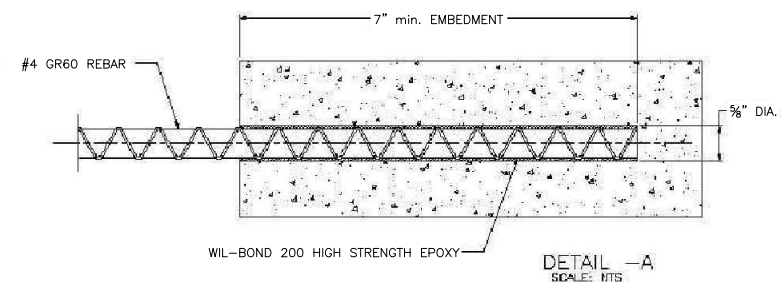
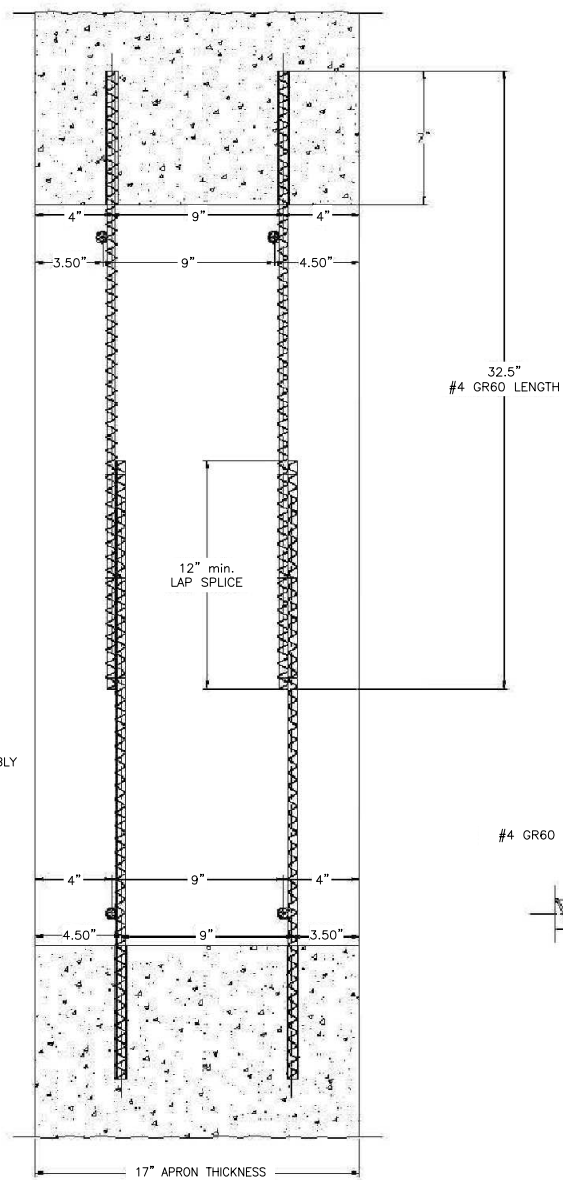
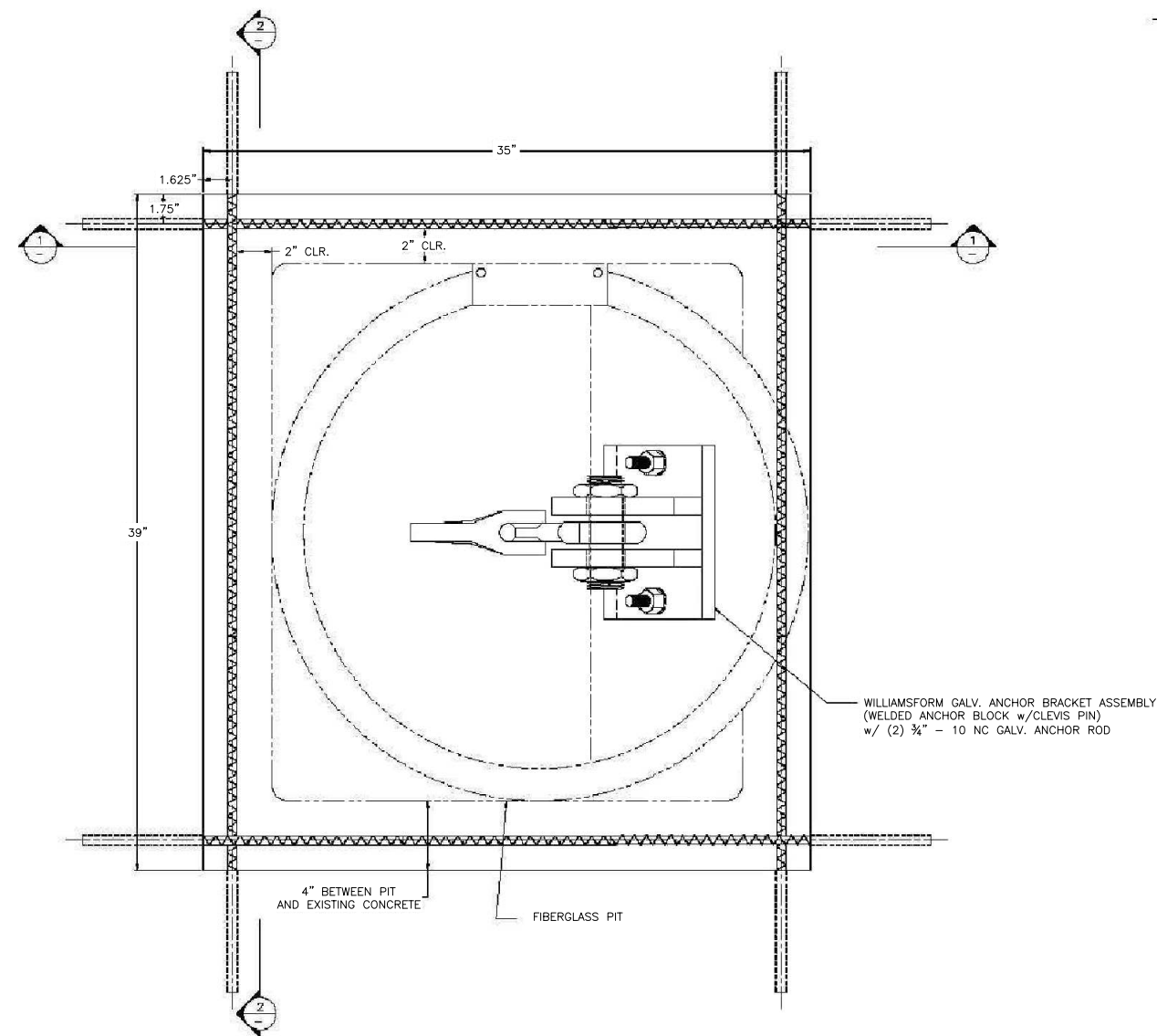
APPROVED BY: BWG

DATE: JANUARY 14, 2011

JOB No: 10098-01

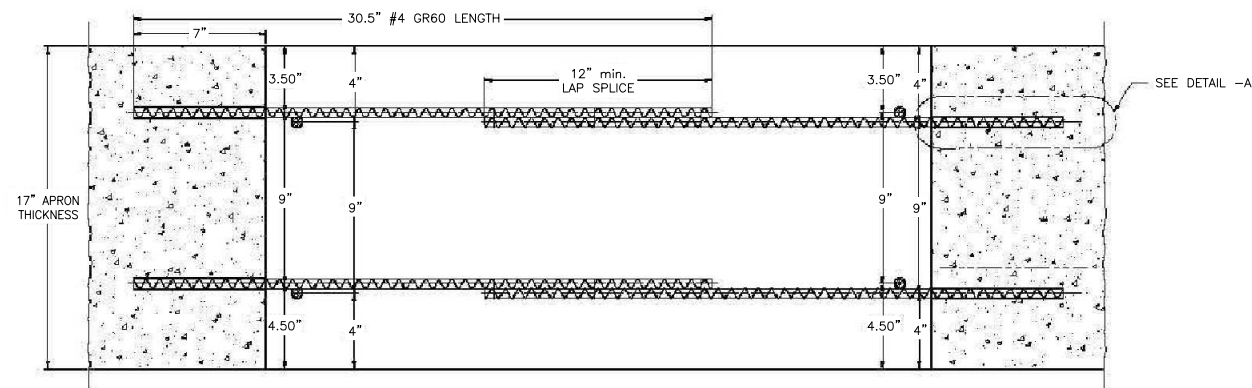
NOSE GEAR
TETHER DETAIL 1

SHEET 26 OF 53 SHEETS



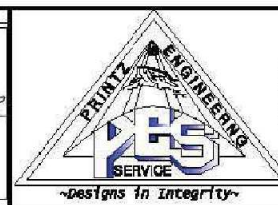
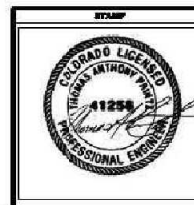
DRILL 5/8\"/>

CONTRACTOR SHALL CERTIFY IN WRITING THAT ALL MATERIALS USED CONFORM TO THE BUY AMERICAN REQUIREMENTS. IF ALL MATERIALS DO NOT CONFORM TO BUY AMERICAN, A WAIVER SHALL BE SUBMITTED BY THE CONTRACTOR OR AN ALTERNATE PRODUCT SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.



SECTION -1

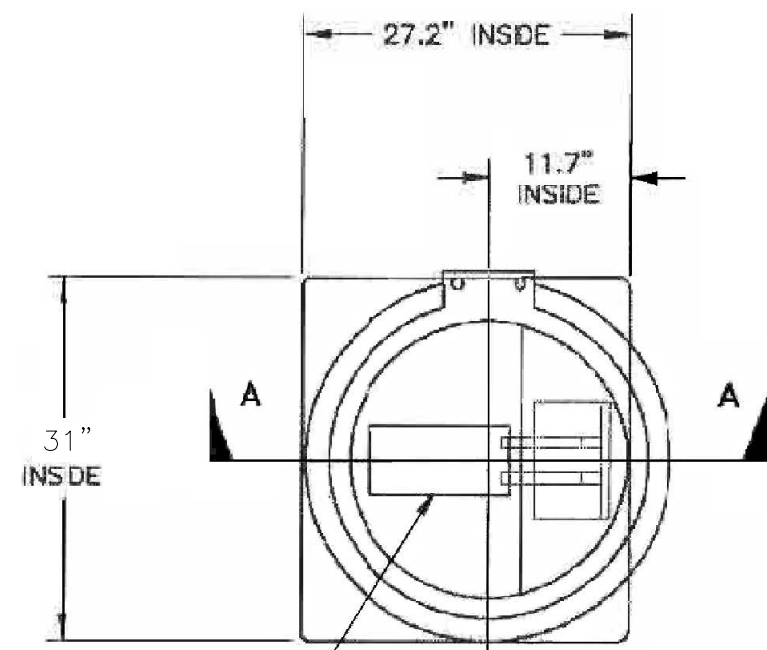
SECTION -2



1710 Cuprite Court
Castle Rock, CO 80108
phone and fax:
720-733-9864

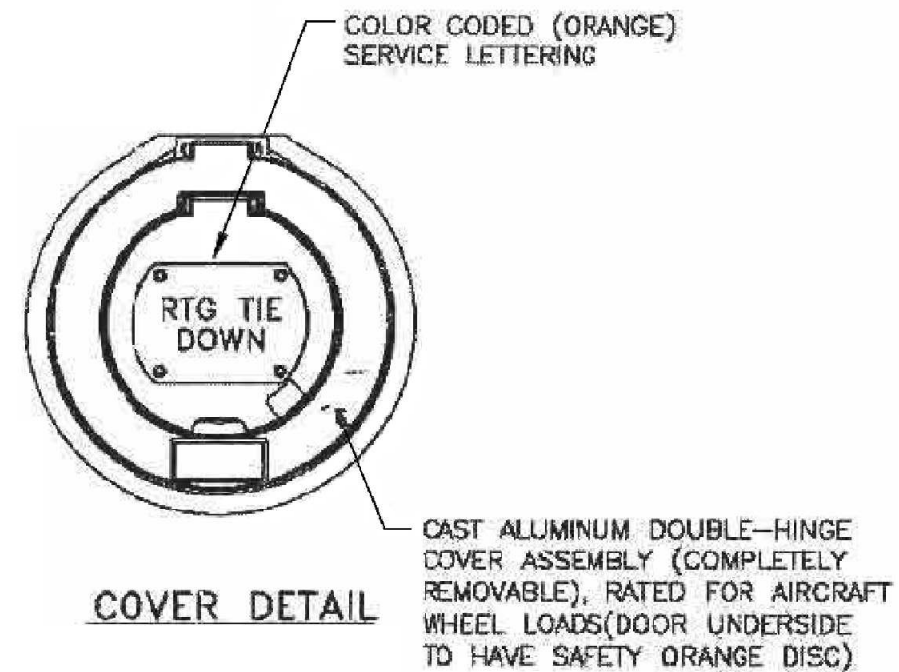
DESIGN BY:	TOM PRINTZ PE
SCALE:	1/4
DATE:	11-11-08
DESIGN BY:	CAG
SHEET TITLE	
	AE11

CUSTOMER:	AVIATION EQUIPMENT INT'L INC.
PROJECT:	AE1 NLG TETHER
LOCATION:	



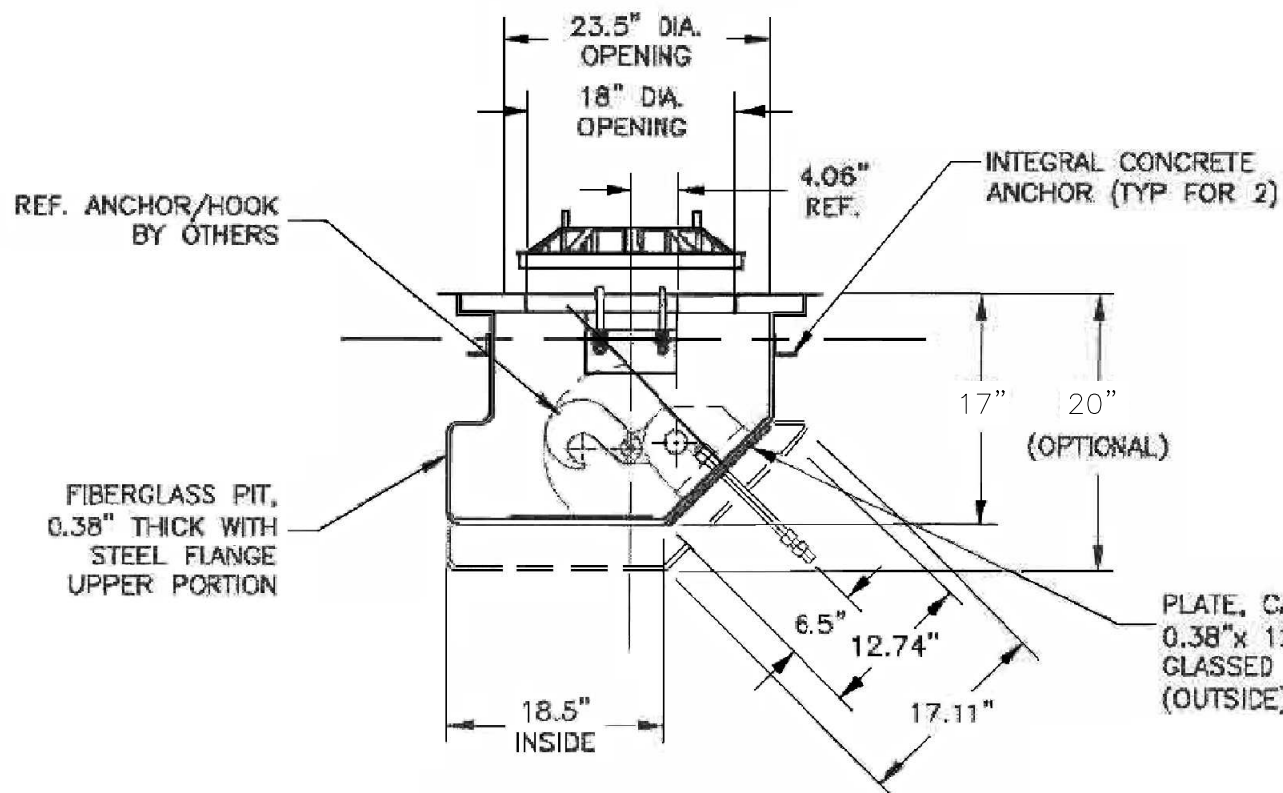
PLATE, CARBON STEEL
0.25\"/>

PLAN VIEW



COVER DETAIL

CAST ALUMINUM DOUBLE-HINGE COVER ASSEMBLY (COMPLETELY REMOVABLE), RATED FOR AIRCRAFT WHEEL LOADS (DOOR UNDERSIDE TO HAVE SAFETY ORANGE DISC)



SECTION A-A

PLATE, CARBON STEEL
0.38\"/>

APPROVED _____ SIGNATURE _____
 _____ PRINTED NAME _____
 COMPANY _____
 DATE _____

CONTRACTOR SHALL CERTIFY IN WRITING THAT ALL MATERIALS USED CONFORM TO THE BUY AMERICAN REQUIREMENTS. IF ALL MATERIALS DO NOT CONFORM TO BUY AMERICAN, A WAIVER SHALL BE SUBMITTED BY THE CONTRACTOR OR AN ALTERNATE PRODUCT SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.

NOTE:

- UNLESS OTHERWISE SPECIFIED, DIMENSIONAL TOLERANCE IS $\pm 0.5"$
- CONTRACTOR TO VERIFY REQUIREMENT FOR ABOVE-GRADE CROWN ON APRON OR IN HANGAR WITH RESPECT TO CONCRETE JOINT LAYOUT, JACKING POINTS AND OTHER OPERATIONS.
- CONTRACTOR TO VERIFY COVER SERVICE LETTERING.

AVIATION EQUIPMENT INT'L INC.
T: (949) 364 0119 F: (949) 364 1847
Email: dgrant@aeintl.com

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES.
BRACKETS [] ARE MILLIMETERS.
THREE PLACE DIMENSIONS ARE ± 0.015 .
TWO PLACE DIMENSIONS ARE ± 0.3 .
ONE PLACE DIMENSIONS ARE ± 0.5 .
ANGULAR DIMENSIONS ARE $\pm 0.5^\circ$.

MODEL: 14920-105

PROJECT: P-26532 Laguna Niguel-CA

DWG/FILE NAME: = File #

JOB NO.:

LOT I.D.:

DATE: 12/5/07

QTY: 12

SCALE: N.T.S.

DRAWN BY: J.Le

SHT 1 OF 1

PREFABRICATED TIE-DOWN
FIT ASSEMBLY WITH
DOUBLE-HINGE COVER

REVISIONS		
NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2"
AT FULL SCALE (34X22).
PLOT 1

MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
(314) 436-5500

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IL PROJECT: BLV-4061
AIP PROJ: 3-17-0146-XX

FILE: 26-27_TETHER_DETAILS.dwg

DESIGN BY: LEW

DRAWN BY: ASA

CHECKED BY: MJD/CET

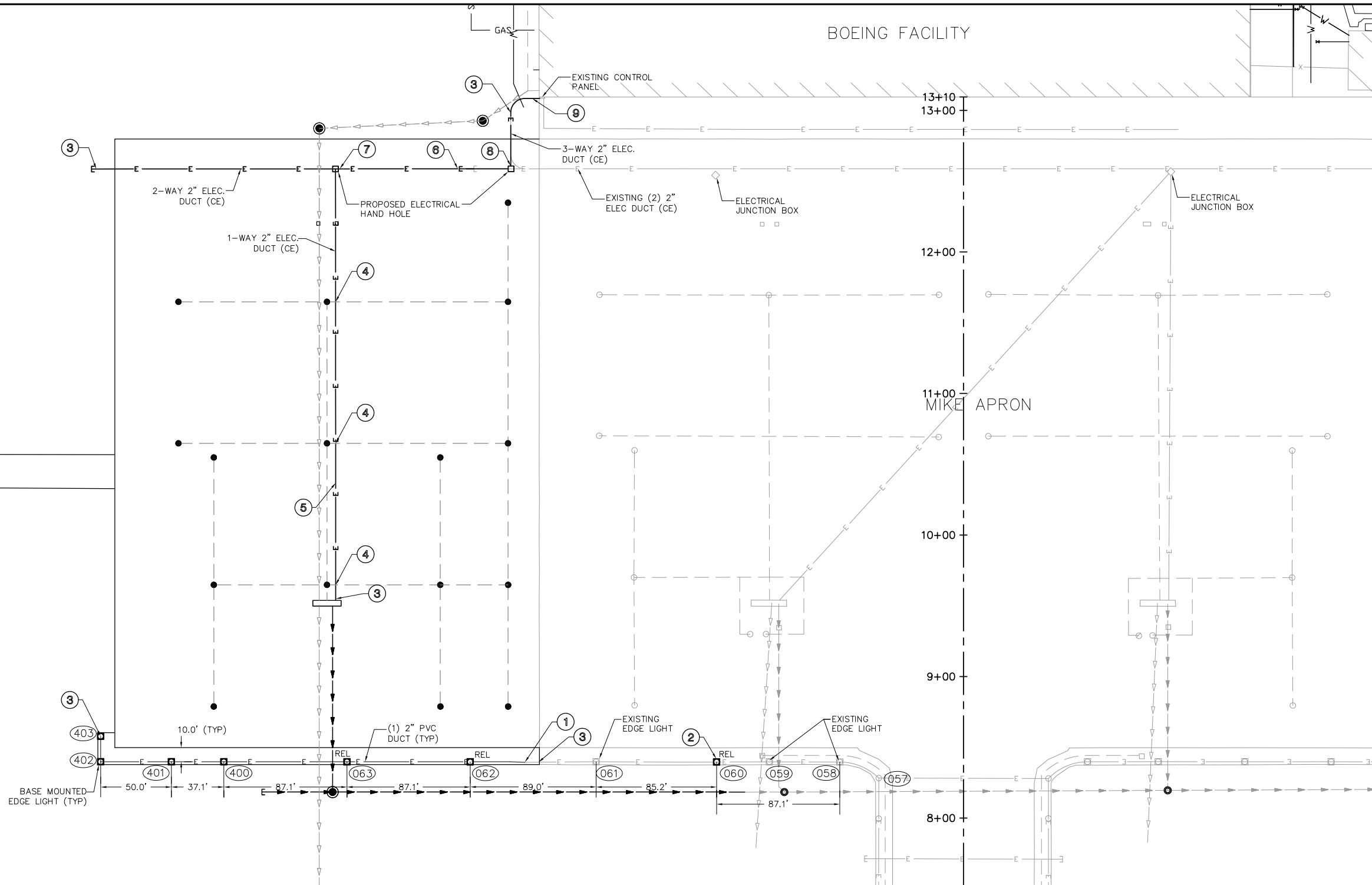
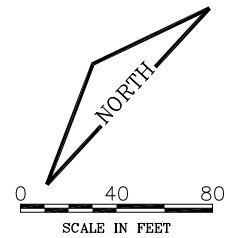
APPROVED BY: BWG

DATE: JANUARY 14, 2011

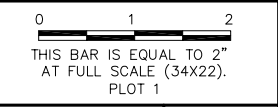
JOB No: 10098-01

NOSE GEAR
TETHER DETAIL 2

SHEET 27 OF 53 SHEETS



REVISIONS		
NUMBER	BY	DATE



**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
(314) 436-5500

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**IL PROJECT: BLV-4061
AIP PROJ. 3-17-0146-XX**

FILE: 28_ELECTRICAL_LAYOUT.dwg

DESIGN BY: LEW

DRAWN BY: ASA

CHECKED BY: MJD/CET

APPROVED BY: BWG

DATE: JANUARY 14, 2011

JOB No: 10098-01

**ELECTRICAL
LAYOUT PLAN**

SHEET 28 OF 53 SHEETS

LEGEND

- E— EXISTING ELECTRIC LINE
- E— PROPOSED ELECTRIC LINE
- >>> STORM SEWER
- >>> GLYCOL DISPOSAL
- U— UNDERDRAIN
- EXISTING LED TAXIWAY EDGE LIGHT
- EXISTING INCANDESCENT TAXIWAY EDGE LIGHT
- ◻ PROPOSED LED TAXIWAY EDGE LIGHT
- ④ LIGHT SCHEDULE NUMBER
- REL RELOCATED LIGHT FIXTURE

KEYNOTES

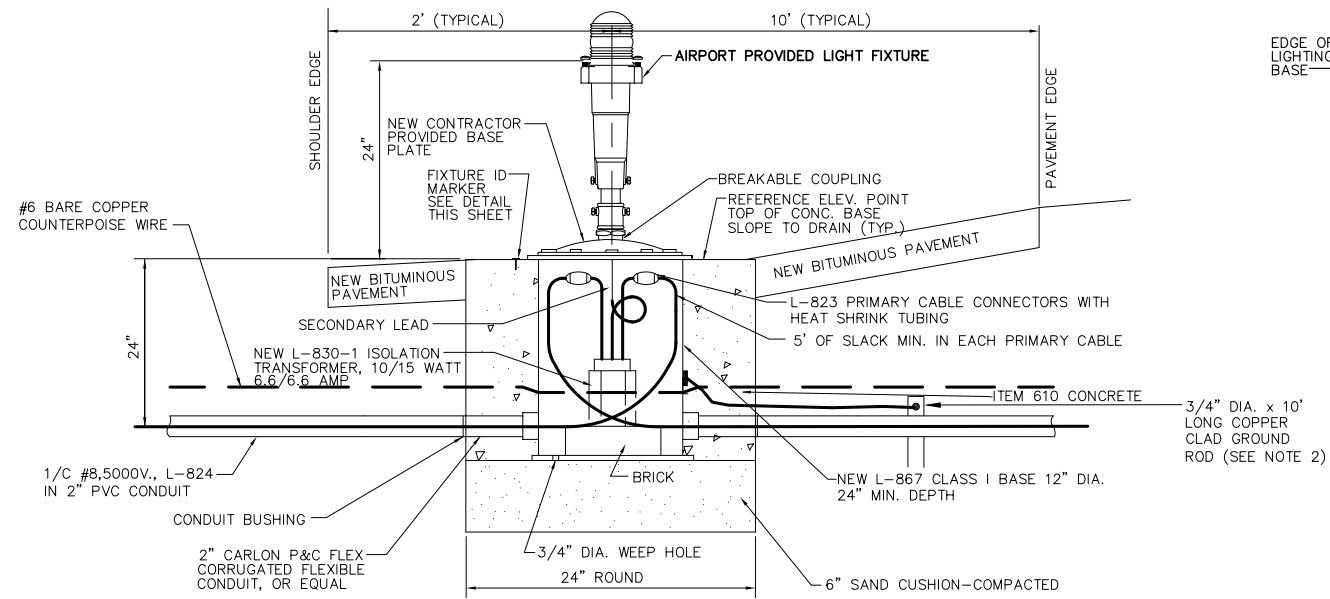
- ① TIE INTO EXISTING CONDUIT. LOCATE EXISTING LIGHTING CABLE IN CONDUIT.
- ② CORE CAN FOR NEW LIGHT BASE INTO EXISTING PAVEMENT AND CONDUIT.
- ③ TERMINATE COUNTERPOISE WIRE WITH 3/4" X 10' COPPER CLAD GROUND ROD. GROUND ROD SHALL BE INCIDENTAL TO COUNTERPOISE WIRE.
- ④ ELECTRICAL DUCT TO BE PLACED BELOW PROPOSED UNDERDRAIN. ELECTRICAL DUCT SHALL BE FLEXED/LOWERED AT CROSSING LOCATIONS TO ENSURE PROPER CLEARANCE ABOVE FOR UNDERDRAIN.
- ⑤ 1-WAY 2" ELECTRICAL DUCT (C.E.) WITH POWER CABLE TYPE TC (TWO #12, ONE #12 GROUND) AND CONTROL CABLE TYPE TC (SEVEN #14). ALL CABLES SHALL BE 600V RATED.
- ⑥ 2-WAY 2" ELECTRICAL DUCT (C.E.) WITH POWER CABLE TYPE TC (TWO #12, ONE #12 GROUND) AND CONTROL CABLE TYPE TC (SEVEN #14). ALL CABLES SHALL BE 600V RATED. LEAVE ONE 2" ELECTRICAL DUCT EMPTY FOR FUTURE USE.
- ⑦ ROUTE COUNTERPOISE OUTSIDE HANDHOLE AND INSTALL GROUND ROD.
- ⑧ DISCONNECT EXISTING POWER AND CONTROL CABLES AND PULL WIRE FROM CONTROL BOX. REMOVE EXISTING 1-WAY 2" ELEC. DUCT (CE). INSTALL HANDHOLE AND CONNECT (CE) DUCTS INTO HANDHOLE. RECONNECT EXISTING POWER AND CONTROL CABLES. REMOVAL OF EXISTING DUCT SHALL BE INCIDENTAL TO THE ELECTRICAL WORK.
- ⑨ INSTALL THREE NEW 2" GRS CONDUITS FROM DUCT BANK TO CONTROL BOX (INCIDENTAL TO ELECTRICAL WORK).

LIGHTING SCHEDULE

LIGHT NUMBER	STATION	OFFSET	NORTHING	EASTING
TAXKEDG-403	8+57.78	609.99 LT	686077.42	2395249.69
TAXKEDG-402	8+39.78	609.99 LT	686065.00	2395236.67
TAXKEDG-401	8+39.76	559.99 LT	686028.81	2395271.17
TAXKEDG-400	8+39.75	522.92 LT	686001.98	2395296.75
TAXKEDG-063	8+39.72	435.82 LT	685938.94	2395356.86
TAXKEDG-062	8+39.68	348.72 LT	685875.90	2395416.96
TAXKEDG-060	8+39.63	174.52 LT	685749.82	2395537.17

NOTE:

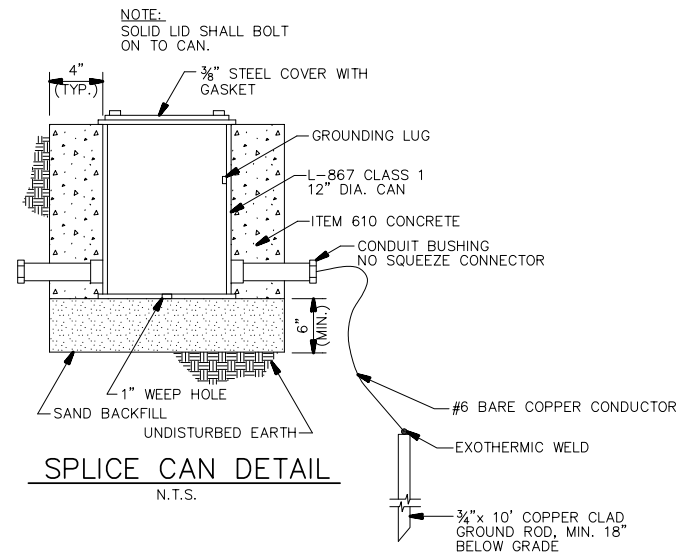
FOR THE PROPOSED BASE MOUNTED MEDIUM INTENSITY TAXIWAY LIGHTS THE AIRPORT WILL PROVIDE NEW LIGHT FIXTURES TO THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE ALL OTHER COMPONENTS OF THE COMPLETED LIGHT INCLUDING THE BASE CAN, ISOLATION TRANSFORMER, BASE PLATE, L-823 CONNECTORS, AND ALL OTHER INCIDENTALS NECESSARY TO COMPLETE THE ITEM. SEE SHEET ELECTRICAL DETAILS 1 AND SPECIFICATION ITEM 125 FOR MORE INFORMATION.



BASE MOUNTED MEDIUM INTENSITY LED LIGHTS

N.T.S.

1. INSTALL 2" FLEXIBLE CONDUIT BETWEEN CAN AND PVC CONDUIT UNDER PAVED SHOULDER.
2. INSTALL 1/C #6 AWG BARE COPPER GROUND JUMPER CONNECTED TO GROUND LUG OUTSIDE BASE CAN AND EXOTHERMICALLY WELD TO TO GROUND ROD.
3. NEW TAXIWAY EDGE LIGHT WILL BE PROVIDED BY THE AIRPORT FOR INSTALLATION BY THE CONTRACTOR. THE LIGHT PROVIDED BY THE AIRPORT WILL BE CROUSE-HINDS (8615-T2-B-066-24) WITHOUT ARTIC KIT.
4. COPPER CLAD GROUND ROD SHALL BE LOCATED OPPOSITE COUNTERPOISE WIRE WITH RESPECT TO CAN AND THE TWO SEPARATED BY MIN. OF 12". COUNTERPOISE WIRE SHALL NOT BE BONDED TO CAN.
5. INSTALL LIGHT AFTER COMPLETION OF NEW BITUMINOUS SHOULDER PAVEMENT BY CORING THROUGH PAVEMENT.
6. CONTRACTOR MAY INSTALL AN ADJUSTABLE TWO PIECE CAN AND INSTALL THE BOTTOM HALF PRIOR TO PAVING THE BITUMINOUS SHOULDER. IF THIS METHOD IS USED, THE TOP HALF SHALL BE INSTALLED BY CORING THROUGH THE BITUMINOUS PAVEMENT TO EXPOSE THE BOTTOM HALF.

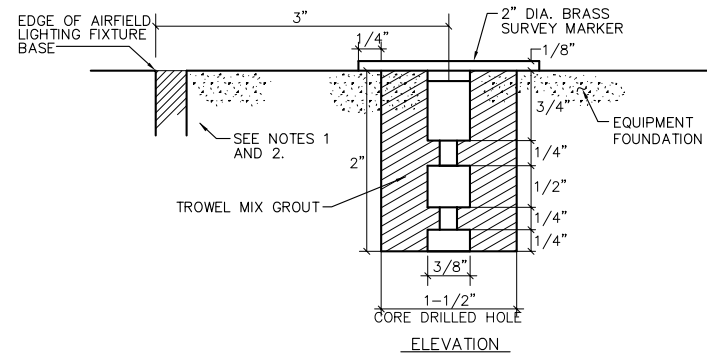


SPLICE CAN DETAIL

N.T.S.

NOTE:

FOR USE WHEN EXISTING CABLE IS CUT AND SPLICED. SPLICES SHALL BE MADE INSIDE A NEW SPLICE CAN. COST OF SPLICE CAN WHEN USED TO REPAIR A CUT CABLE IS INCIDENTAL TO THE CONTRACT. ALSO FOR USE FOR THE INSTALLATION OF THE FUMIGATION FACILITY AS SHOWN ON THE FUMIGATION BLDG PLAN SHEET.



AIRFIELD LIGHTING FIXTURE IDENTIFICATION MARKER

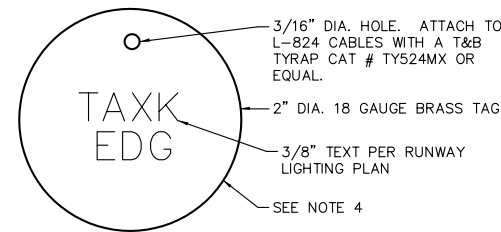
N.T.S.

3/8" TEXT PER RUNWAY LIGHTING PLAN



TOP VIEW AIRFIELD LIGHTING FIXTURE IDENTIFICATION MARKER

N.T.S.



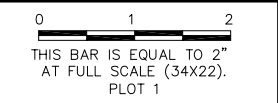
L-824 CABLE IDENTIFICATION TAG

N.T.S.

NOTES:

1. FOR IDENTIFICATION NUMBERS, SEE ELECTRICAL LAYOUT PLAN. CONTRACTOR SHALL VERIFY NUMBERING WITH AIRPORT PRIOR TO ORDERING MARKERS.
2. ALL AIRFIELD LIGHTING EQUIPMENT SHALL BE IDENTIFIED WITH A BRASS SURVEY MARKER. ITEMS REQUIRING ID MARKERS ARE:
JUNCTION BOXES
MANHOLES
TAXIWAY LIGHTS
3. L-823 CONNECTORS SHALL BE INSTALLED ON ALL CABLES, IN EACH MANHOLE, BASE CANS, OR OTHER ACCESSIBLE LOCATIONS. L-823 CONNECTORS SHALL BE INSTALLED SO A PORTION OF THE LOOP CAN BE BYPASSED.
4. ALL AIRFIELD LIGHTING CIRCUITS SHALL BE IDENTIFIED WITH A BRASS TAG WITH ITS RESPECTIVE CIRCUIT/LOOP NUMBER AT ALL ACCESSIBLE LOCATIONS. ATTACH THE ID TAG TO BOTH CABLES 12" FROM THE L-823 CONNECTORS.

REVISIONS		
NUMBER	BY	DATE



**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

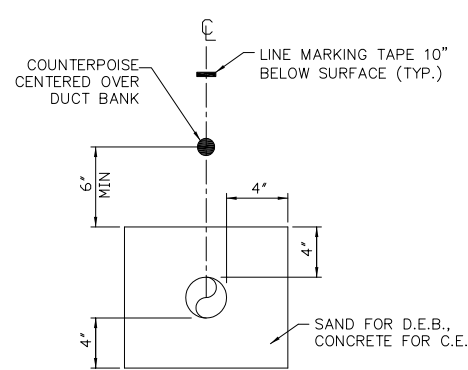
ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
(314) 436-5500

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CONSULTING ENGINEERS
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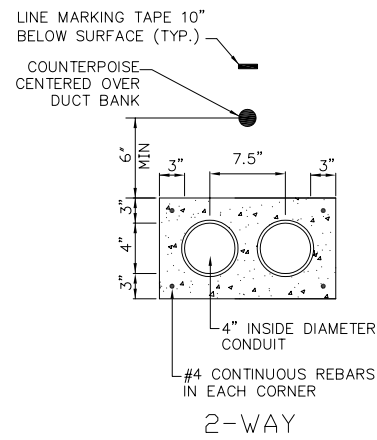
**IL PROJECT: BLV-4061
AIP PROJ: 3-17-0146-XX**

FILE: 29-32_ELECTRICAL_DETAILS.dwg
DESIGN BY: LEW
DRAWN BY: ASA
CHECKED BY: MJD/CET
APPROVED BY: BWG
DATE: JANUARY 14, 2011
JOB No: 10098-01

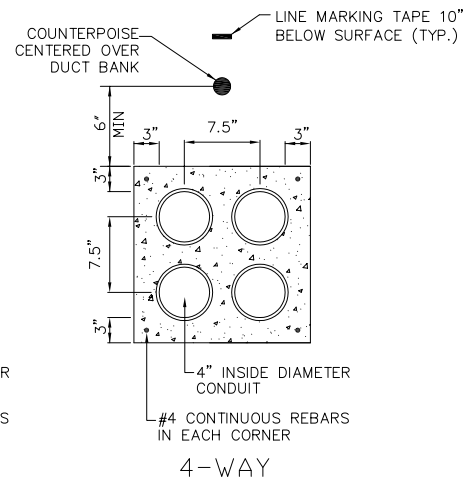
**ELECTRICAL
DETAILS 1**



**2' PVC (DEB) OR
2' PVC (CE) DETAIL**
NOT TO SCALE



2-WAY

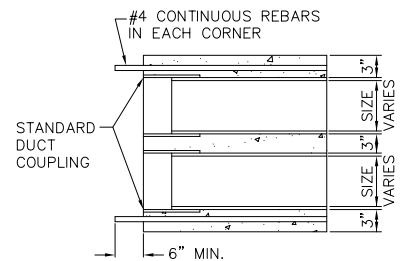


4-WAY

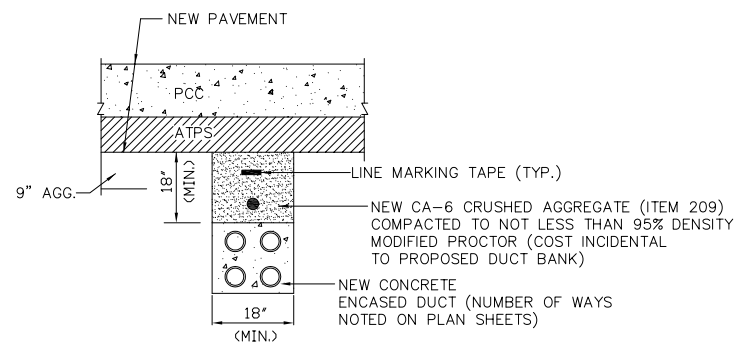
CONCRETE ENCASED DUCT BANKS
NOT TO SCALE

NOTES:

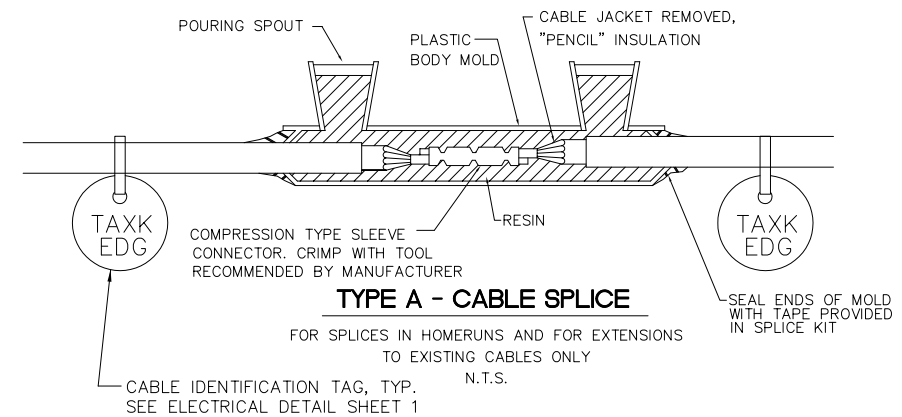
- DIMENSIONS ARE MINIMUM.
- CONCRETE SHALL CONFORM TO ITEM 610.
- ALL CONDUIT SHALL BE SCHEDULE 40 PVC.
- TOP OF CONCRETE ENCASEMENT IN TURF AREAS SHALL NOT BE LESS THAN 24" BELOW FINISHED GRADE.



**CONCRETE ENCASED DUCT
END DETAIL**
NO SCALE



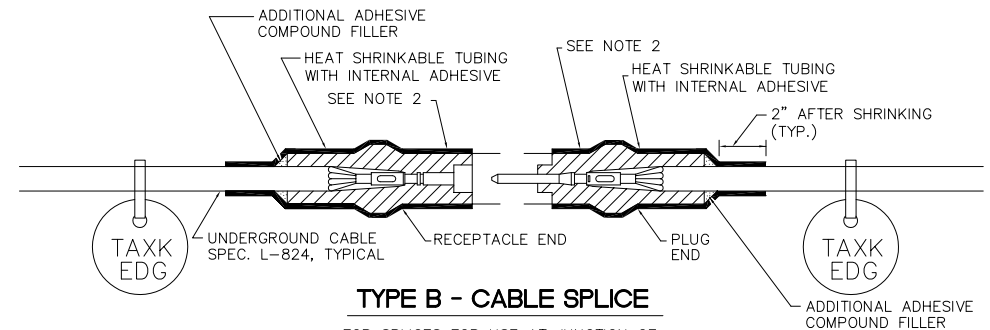
CONCRETE ENCASED DUCT BACKFILL
NOT TO SCALE



TYPE A - CABLE SPLICE

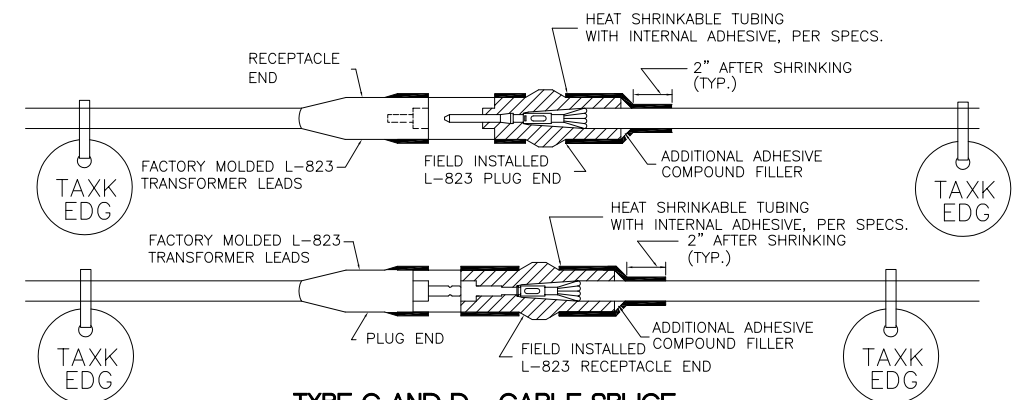
FOR SPLICES IN HOMERUNS AND FOR EXTENSIONS TO EXISTING CABLES ONLY
N.T.S.

CABLE IDENTIFICATION TAG, TYP. SEE ELECTRICAL DETAIL SHEET 1



TYPE B - CABLE SPLICE

FOR SPLICES FOR USE AT JUNCTION OF HOMERUN WITH LOOP CIRCUIT
N.T.S.



TYPE C AND D - CABLE SPLICE

FOR SPLICES AT RUNWAY/TAXIWAY LIGHTS AND SIGNS
N.T.S.

NOTES:

- INSIDE DIAMETER OF CONNECTOR SHALL PROPERLY MATCH THE OUTSIDE DIAMETER OF CABLE.
- WRAP WITH AT LEAST ONE LAYER OF RUBBER OR SYNTHETIC RUBBER TAPE AND ONE LAYER OF PLASTIC TAPE, ONE-HALF LAPPED, EXTENDING AT LEAST 1-1/2 INCHES ON EACH SIDE OF JOINT.
- THE COST OF FURNISHING AND INSTALLING ALL SPLICE MATERIALS SHALL BE INCIDENTAL TO THE ASSOCIATED CABLE ITEMS.
- THE CONTRACTOR SHALL HAVE A MINIMUM OF TWO (2) TYPE A SPLICE KITS ON THE JOB SITE AT ALL TIMES FOR EMERGENCY REPAIRS.

REVISIONS		
NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).
PLOT 1

**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
(314) 436-5500

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**IL PROJECT: BLV-4061
AIP PROJ. 3-17-0146-XX**

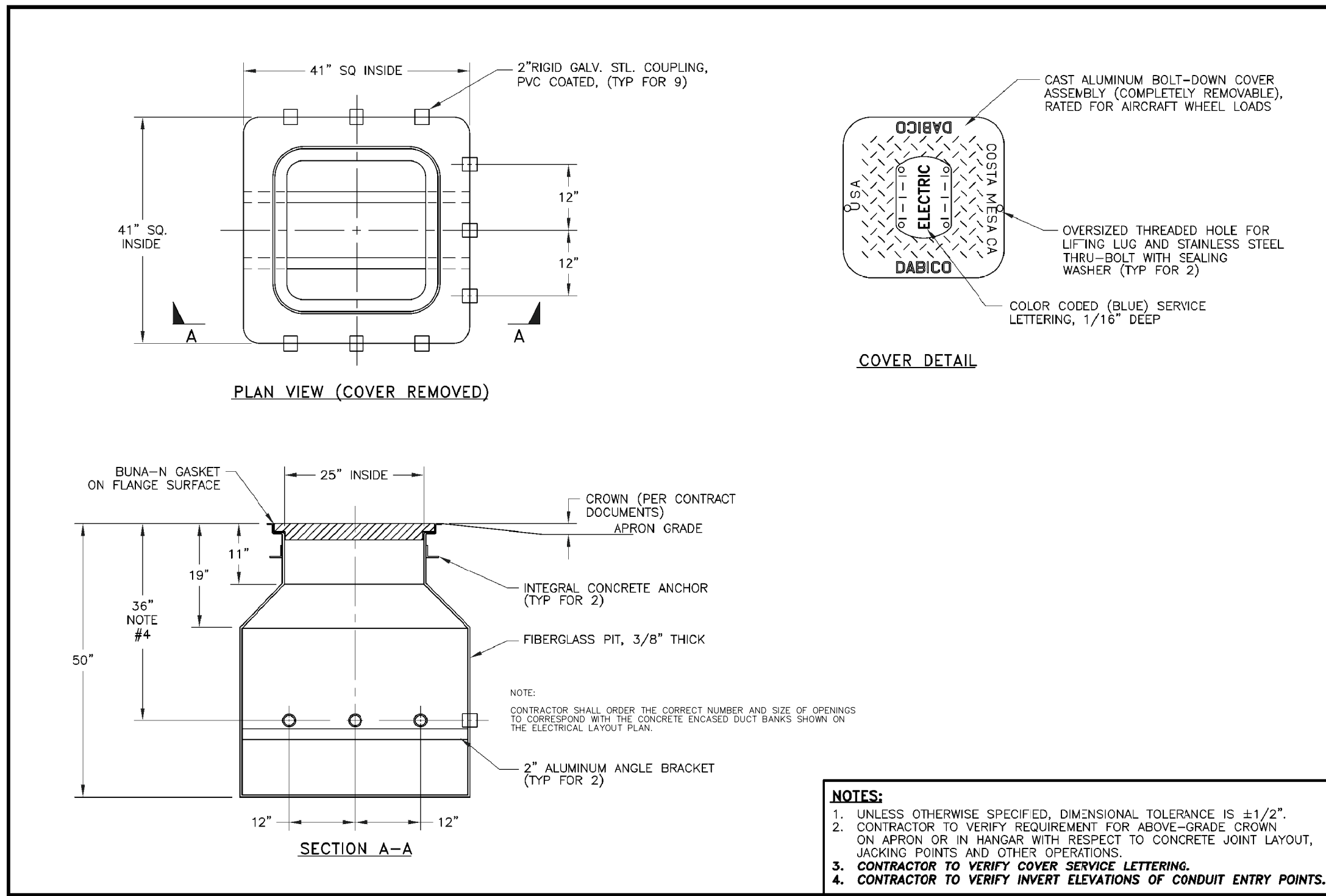
FILE: 29-32_ELECTRICAL_DETAILS.dwg

DESIGN BY: LEW
DRAWN BY: ASA
CHECKED BY: MJD/CET
APPROVED BY: BWG
DATE: JANUARY 14, 2011
JOB No: 10098-01

**ELECTRICAL
DETAILS 2**

NOTE:

ELECTRICAL HANDHOLE SHALL BE AS SHOWN ON THIS SHEET OR AN APPROVED EQUAL.



DABICO INC.
AIRPORT UTILITY SYSTEMS SOLUTIONS
 2995 AIRWAY AVE., COSTA MESA, CALIFORNIA 92626 U.S.A.
 TEL: (714) 545-7900 FAX: (714) 545-7676

UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN INCHES.
 BRACKETS [-] ARE MILLIMETERS.
 THREE PLACE DIMENSIONS ARE ± 0.15 .
 TWO PLACE DIMENSIONS ARE ± 0.3 .
 ONE PLACE DIMENSIONS ARE ± 5 .
 ANGULAR DIMENSIONS ARE $\pm 5'$.

MODEL: DAB-25/41/41BD-PBE--(9)2-50D	PREFABRICATED ELECTRICAL PULL BOX PIT ASSY. (EMPTY) W/ BOLT-DOWN COVER	
PROJECT: BWI AIRPORT-BALTIMORE, MD		
DWG/FILE NAME: 02091#2		
JOB NO.: 02091	LOT I.D.: 2	DATE: 7/30/02
QTY: 2	SCALE: N.T.S.	DRAWN BY: J.Le
SHT 1 OF 1		

REVISIONS		
NUMBER	BY	DATE

0 1 2
 THIS BAR IS EQUAL TO 2"
 AT FULL SCALE (34X22).
 PLOT 1

**MIDAMERICA ST. LOUIS AIRPORT
 ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
 ST. LOUIS, MO 63102
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DESIGN BY: LEW

DRAWN BY: ASA

CHECKED BY: MJD/CET

APPROVED BY: BWG

DATE: JANUARY 14, 2011

JOB No: 10098-01

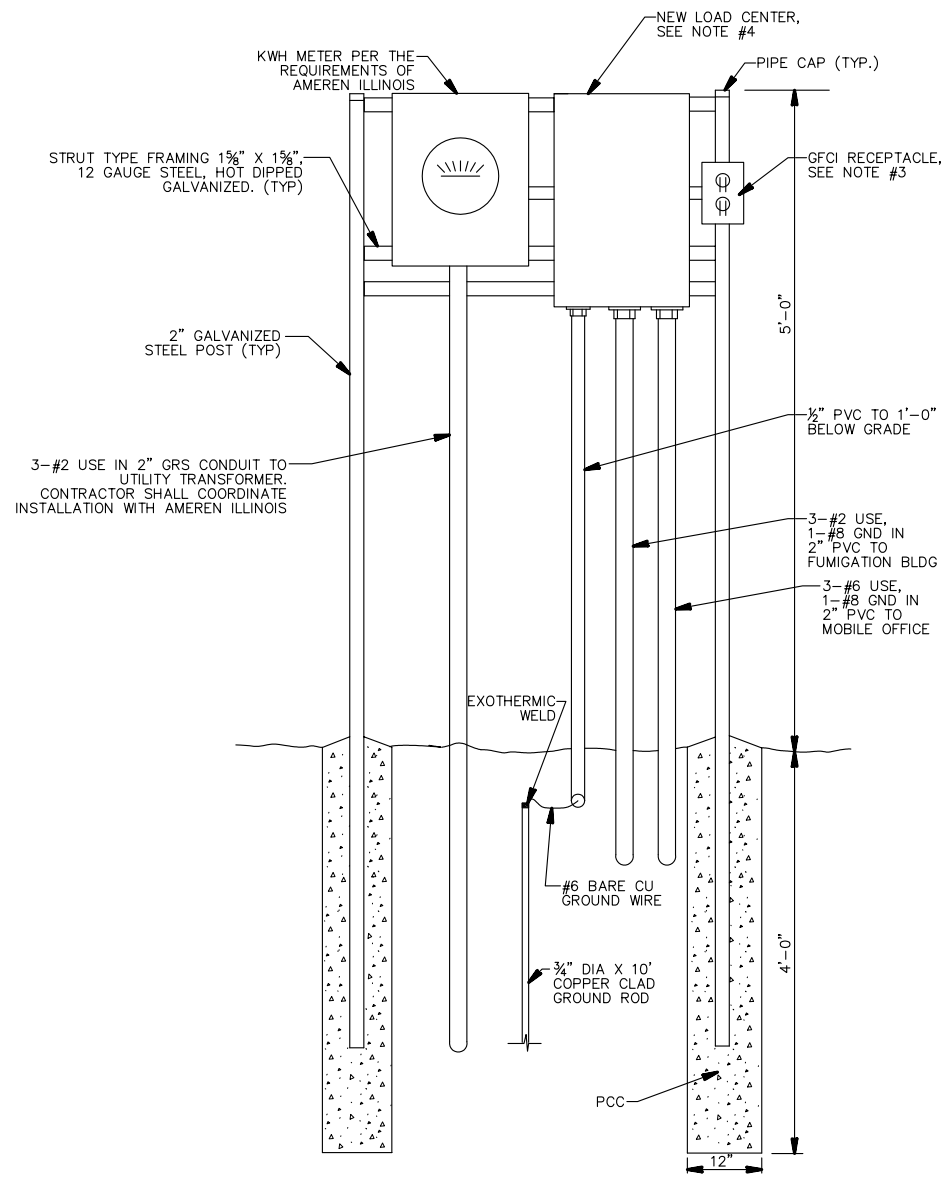
**ELECTRICAL
 DETAILS 3**

SHEET 31 OF 53 SHEETS

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2"
AT FULL SCALE (34X22).
PLOT 1

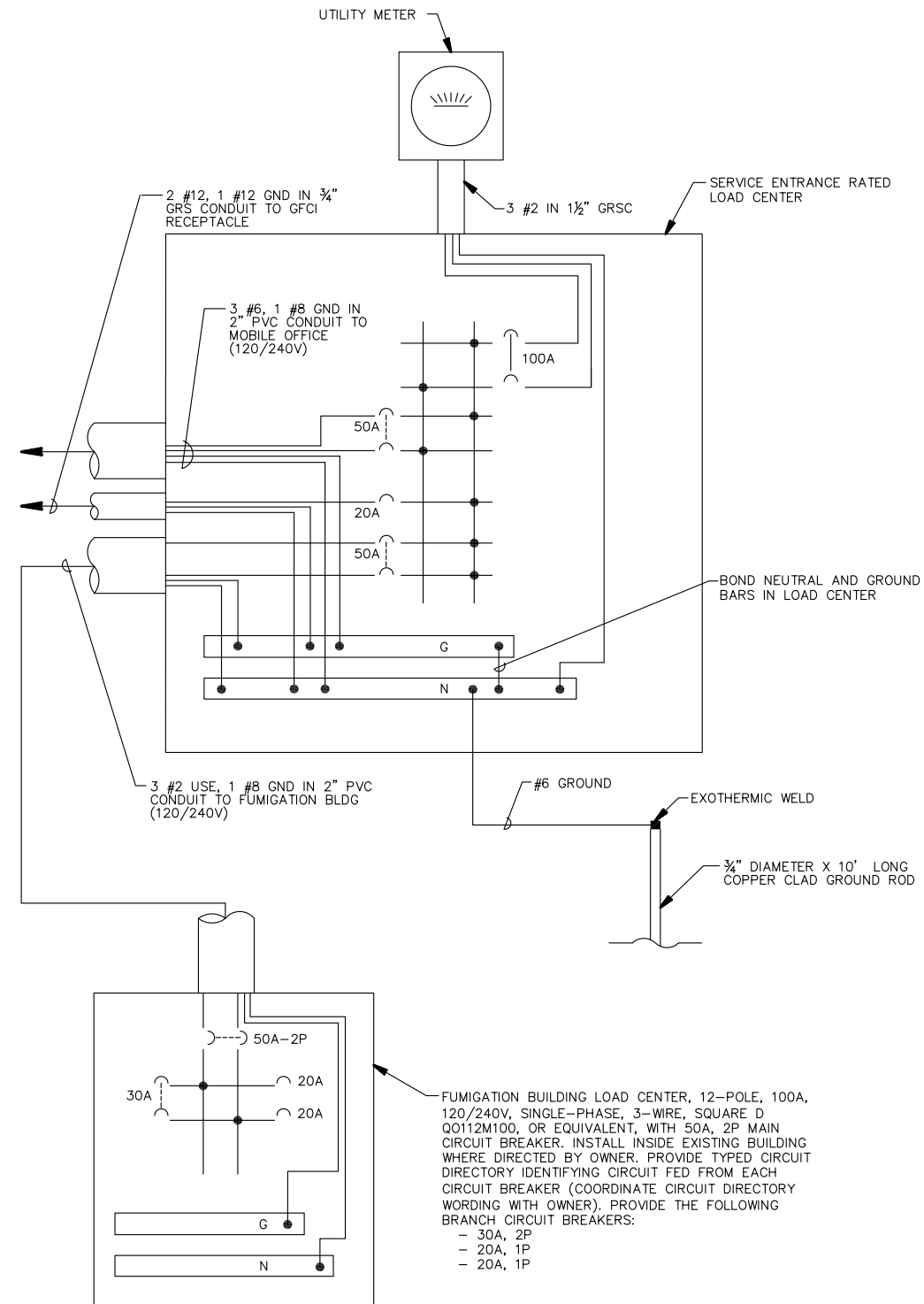


KWH METER AND LOAD CENTER DETAIL

N.T.S.

NOTES:

- CONTRACTOR SHALL PROVIDE ELECTRICAL CONDUITS IN ACCORDANCE WITH ITEM 110.
- CONCRETE SHALL MEET REQUIREMENTS OF ITEM 610.
- CONTRACTOR SHALL FURNISH AND INSTALL A SPECIFICATION GRADE WEATHER-RESISTANT AND CORROSION-RESISTANT GFCI NEMA 5-20R RECEPTACLE, PASS & SEYMOUR CAT. # 2095DSWRBK, MOUNTED IN FS DEVICE BOX, WITH AN EXTRA-DEEP, SUNLIGHT RESISTANT, PADLOCKABLE, POLYCARBONATE CONSTRUCTION WEATHERPROOF COVER WHICH COMPLIES WITH NEC ARTICLE 406.9B1 (UNITS SHALL REMAIN RAIN TIGHT WHETHER OR NOT A PLUG AND CORD IS INSERTED) TAYMAC MM740C-B, OR EQUIVALENT.
- CONTRACTOR SHALL FURNISH AND INSTALL A UL LISTED SERVICE ENTRANCE RATED LOAD CENTER, 100A, 120/240V, SINGLE-PHASE, 3-WIRE, IN NEMA 3R ENCLOSURE, WITH 100A-2P MAIN CIRCUIT BREAKER, SQUARE D TYPE NQ, OR EQUIVALENT. SEE DETAIL THIS SHEET FOR BRANCH CIRCUIT BREAKERS.
- KWH METER BASE, LOAD CENTER AND OTHER ELECTRICAL EQUIPMENT SHALL MEET THE "BUY AMERICAN" REQUIREMENT.



FUMIGATION BUILDING LOAD CENTER, 12-POLE, 100A, 120/240V, SINGLE-PHASE, 3-WIRE, SQUARE D QO12M100, OR EQUIVALENT, WITH 50A, 2P MAIN CIRCUIT BREAKER. INSTALL INSIDE EXISTING BUILDING WHERE DIRECTED BY OWNER. PROVIDE TYPED CIRCUIT DIRECTORY IDENTIFYING CIRCUIT FED FROM EACH CIRCUIT BREAKER (COORDINATE CIRCUIT DIRECTORY WORDING WITH OWNER). PROVIDE THE FOLLOWING BRANCH CIRCUIT BREAKERS:

- 30A, 2P
- 20A, 1P
- 20A, 1P

MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 63102
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IL PROJECT: BLV-4061
AIP PROJ: 3-17-0146-XX

FILE: 29-32_ELECTRICAL_DETAILS.dwg

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DRAWN BY: ASA

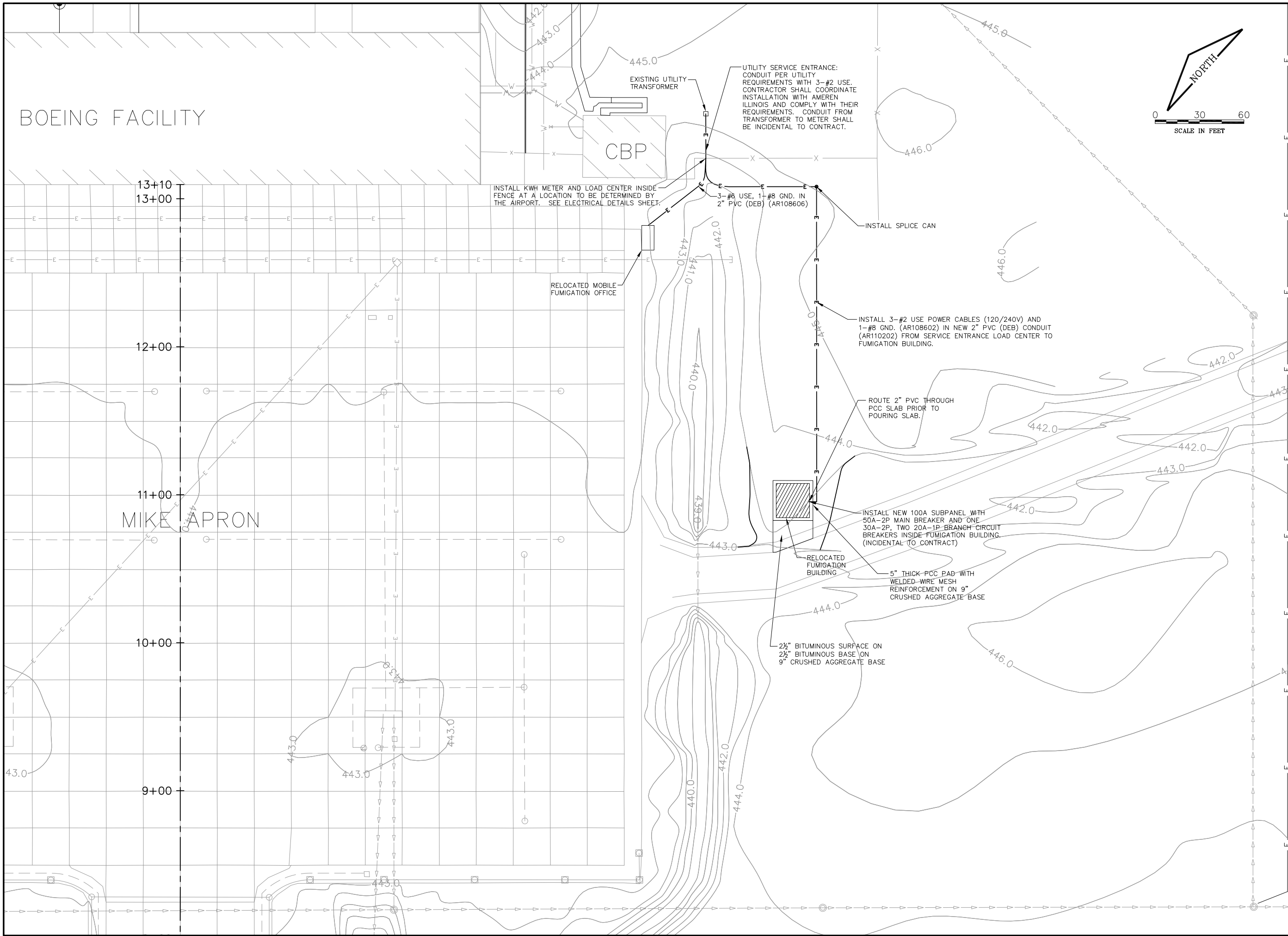
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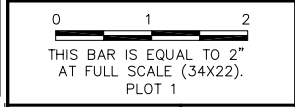
DATE: JANUARY 14, 2011

JOB No: 10098-01

ELECTRICAL
DETAILS 4



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**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

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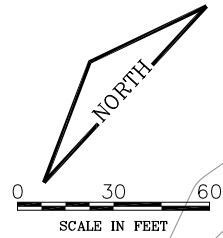
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(314) 436-5500

**IL PROJECT: BLV-4061
AIP PROJ. 3-17-0146-XX**

FILE: 33_FUMIGATION.dwg
DESIGN BY: LEW
DRAWN BY: ASA
CHECKED BY: MJD/CET
APPROVED BY: BWG
DATE: JANUARY 14, 2011
JOB No: 10098-01

**FUMIGATION BLDG
PLAN**

SHEET 33 OF 53 SHEETS



REVISIONS		
NUMBER	BY	DATE

0 1 2
 THIS BAR IS EQUAL TO 2"
 AT FULL SCALE (34X22).
 PLOT 1



N 682548.61
 E 2399404.18

N 682390.34
 E 2399560.93

N 682389.39
 E 2399405.16

N 682578.88
 E 2399108.60

N 682106.04
 E 2399560.16

LEGEND

— SF — SILT FENCE

GENERAL NOTES

1. MAXIMUM SLOPE SHALL NOT EXCEED 4:1
2. MAXIMUM FILL ELEVATION SHALL NOT EXCEED 439.00
3. MAINTAIN EXISTING DRAINAGE PATTERNS
4. PLACEMENT OF SOIL IN DISPOSAL AREAS SHALL NOT BE SUBJECT TO COMPACTION REQUIREMENTS IN ITEM 152. HOWEVER, CONTRACTOR SHALL PLACE SOIL IN 8" LIFTS AND SHALL ROUTE EQUIPMENT OVER EACH LIFT TO ATTAIN COMPACTION.
5. FILL HAS BEEN ADDED SINCE THE EXISTING CONTOUR LINES WERE CREATED. ACTUAL FIELD CONDITIONS MAY VARY FROM WHAT IS SHOWN.
6. STRAW MAY BE SUBSTITUTED FOR THE MULCHING OF THE EARTHWORK DISPOSAL AREA.

**EROSION CONTROL QUANTITIES
 (THIS SHEET ONLY)**

ITEM	DESCRIPTION	UNIT	QUANTITY
AR156510	SILT FENCE	LF	447
AR901510	SEEDING	AC	1.7
AR908510	MULCHING	AC	1.7

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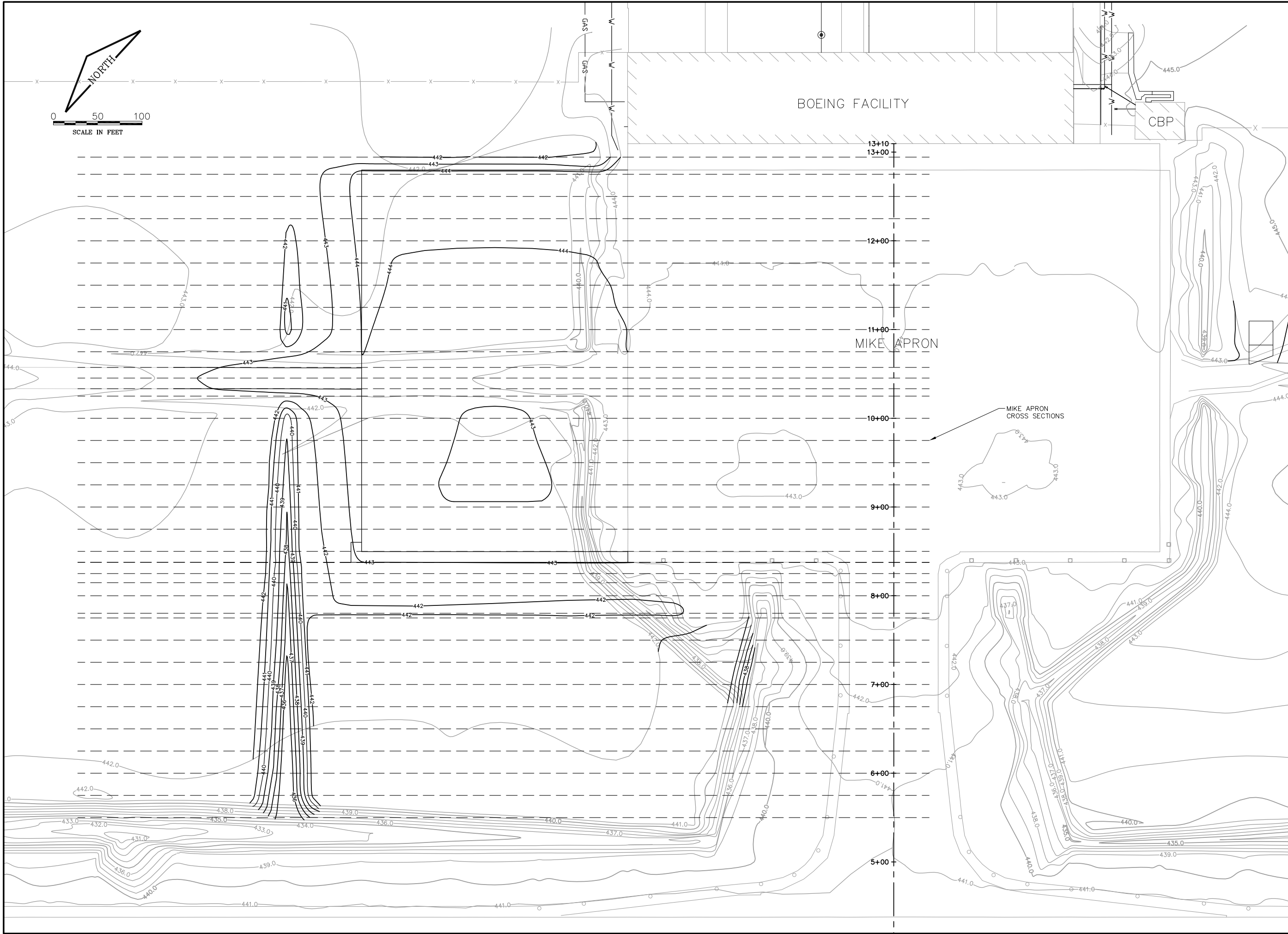
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 AIP PROJ. 3-17-0146-XX**

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 ST. CLAIR COUNTY, ILLINOIS**

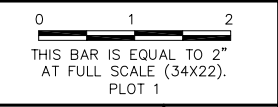
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FILE: 34_EARTHWORK.dwg
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 DRAWN BY: ASA
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 APPROVED BY: BWG
 DATE: JANUARY 14, 2011
 JOB No: 10098-01

**EARTHWORK
 DISPOSAL AREA**



REVISIONS		
NUMBER	BY	DATE



**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

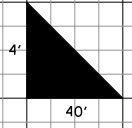
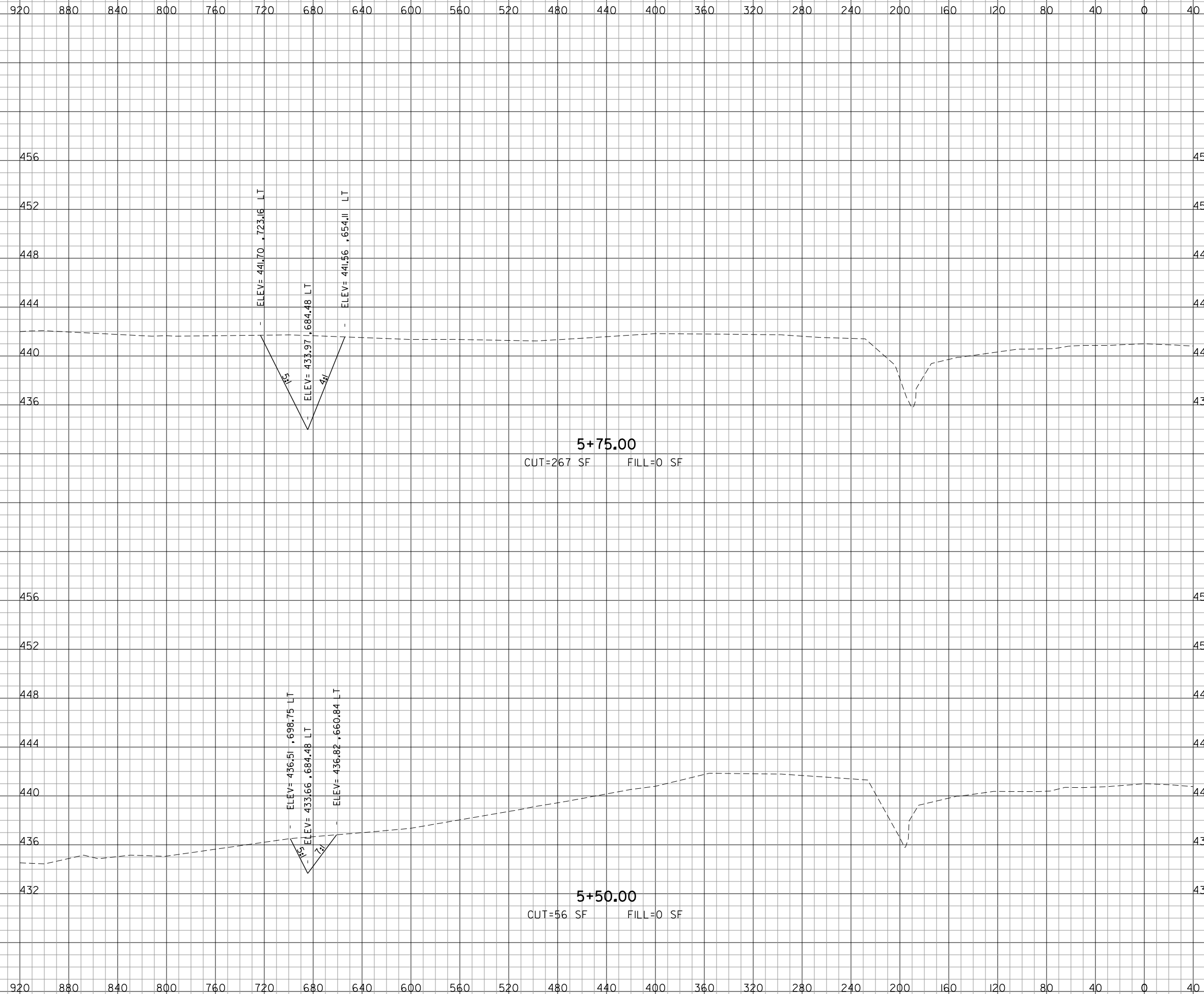
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JOB No: 10098-01

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REVISIONS		
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0 1 2
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PLOT 1

**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

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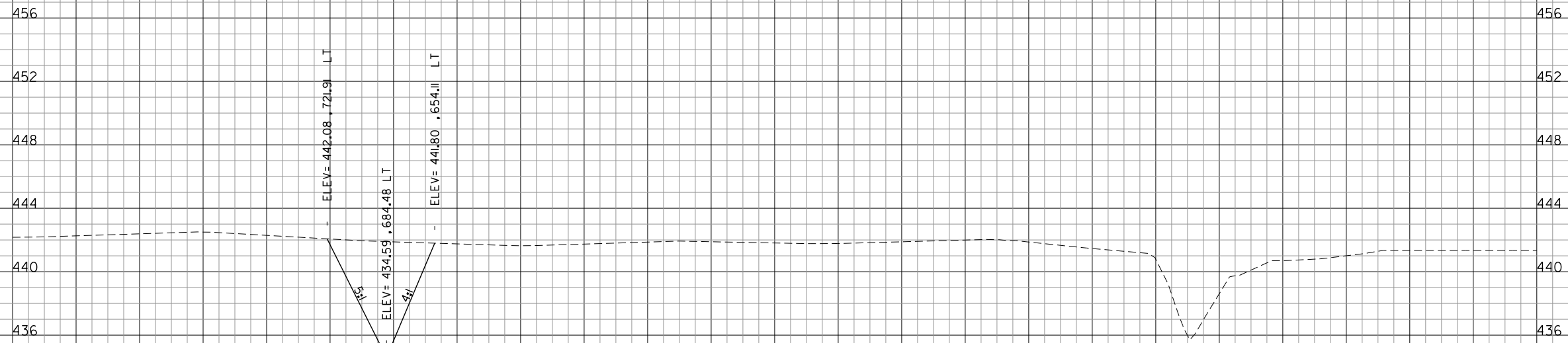
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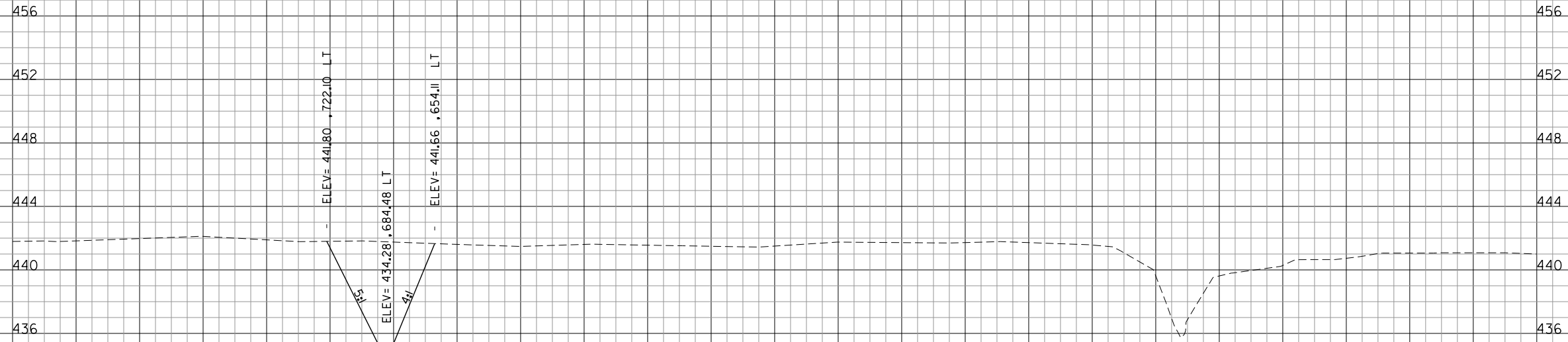
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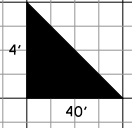


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 CUT=247 SF FILL=0 SF



6+00.00
 CUT=256 SF FILL=0 SF

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REVISIONS		
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0 1 2
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 PLOT 1

**MIDAMERICA ST. LOUIS AIRPORT
 ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
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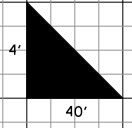
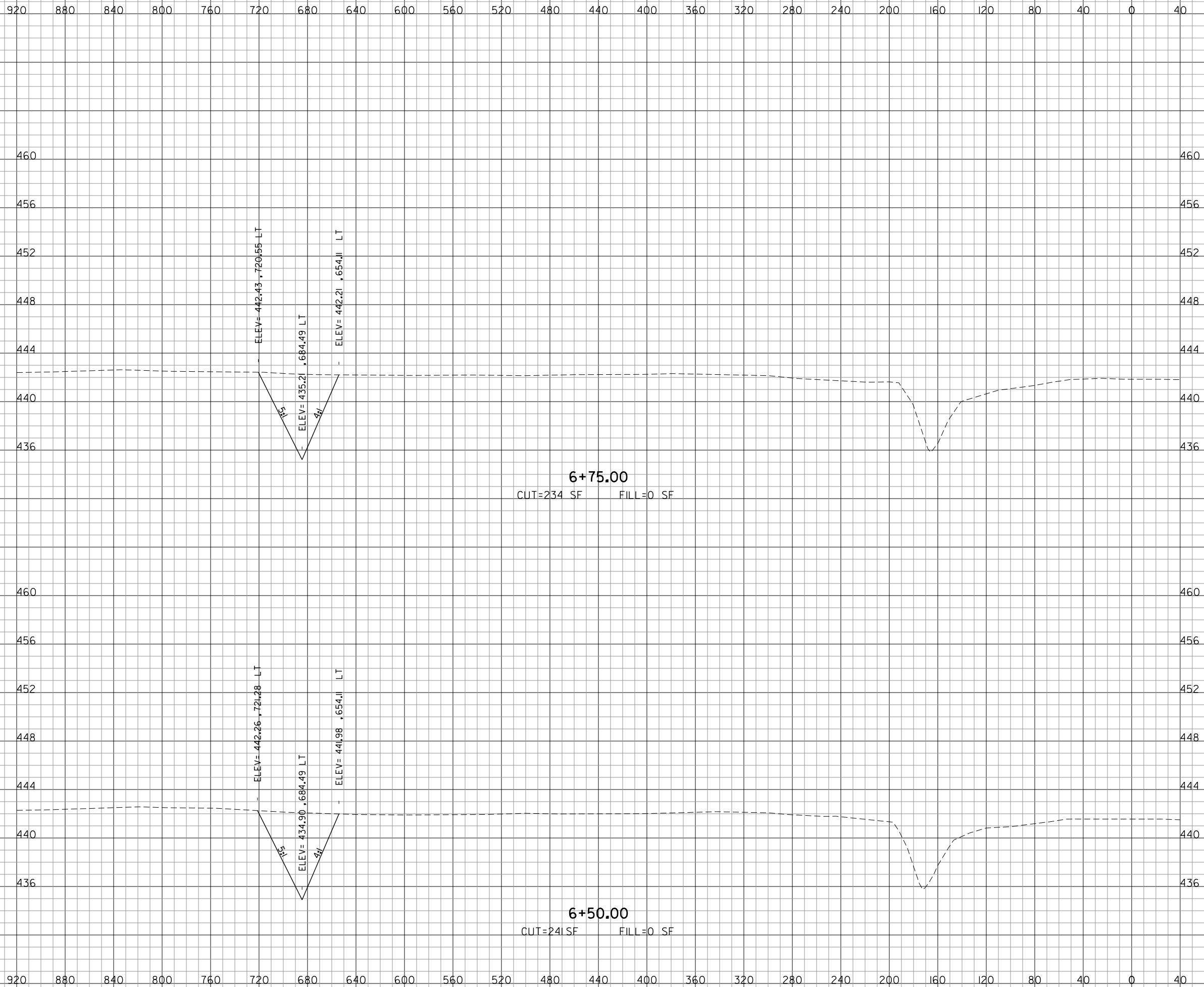
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 PLOT 1

**MIDAMERICA ST. LOUIS AIRPORT
 ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
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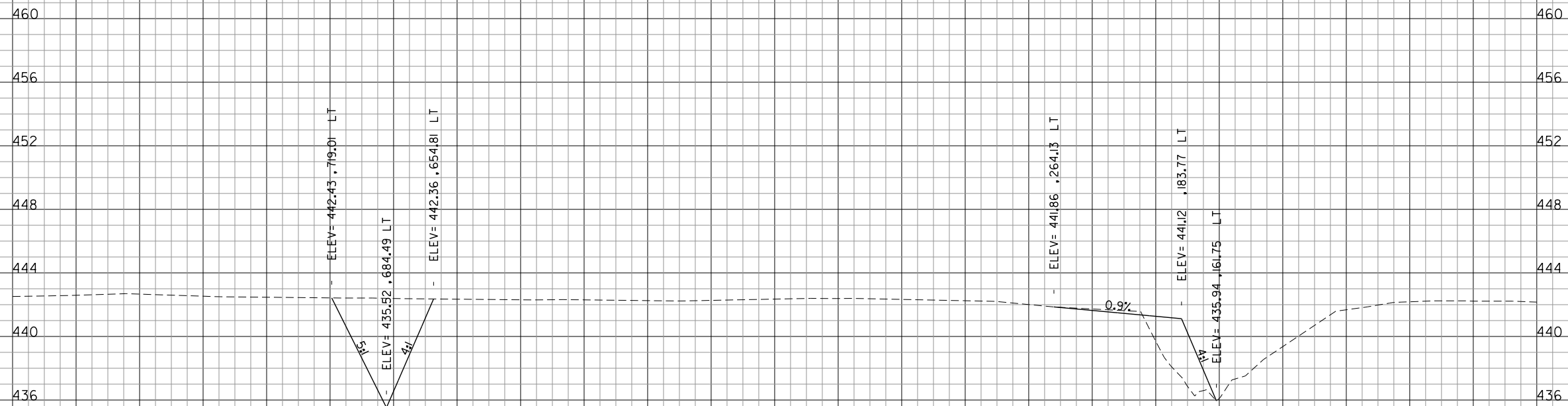
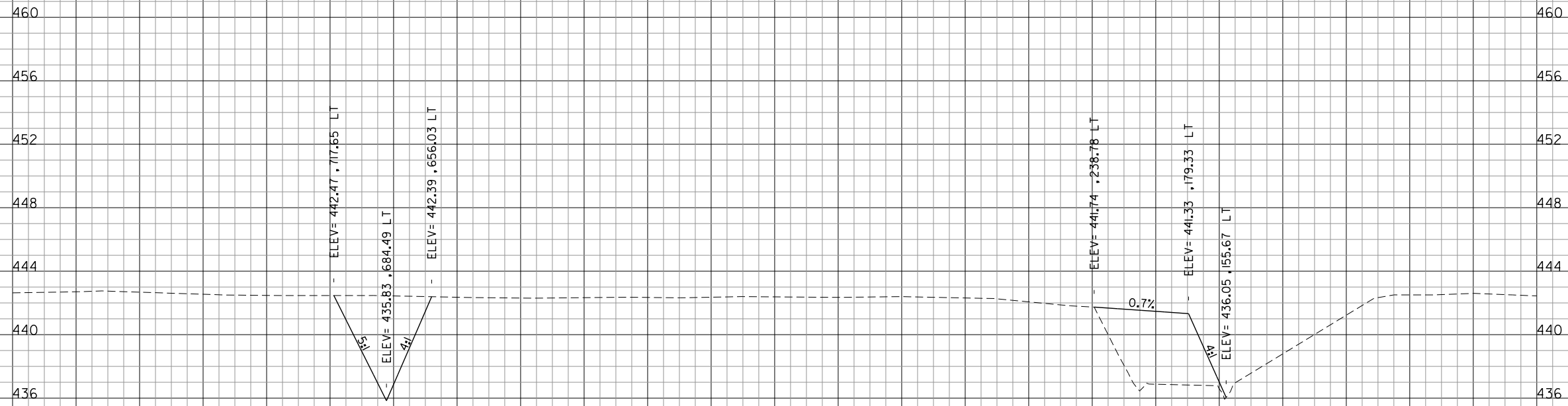
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 DATE: JANUARY 14, 2011
 JOB No: 10098-01

**MIKE APRON EXPANSION
 CROSS SECTIONS
 SHEET 3 OF 18**

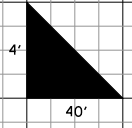
SHEET 38 OF 53 SHEETS

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**MIDAMERICA ST. LOUIS AIRPORT
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MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
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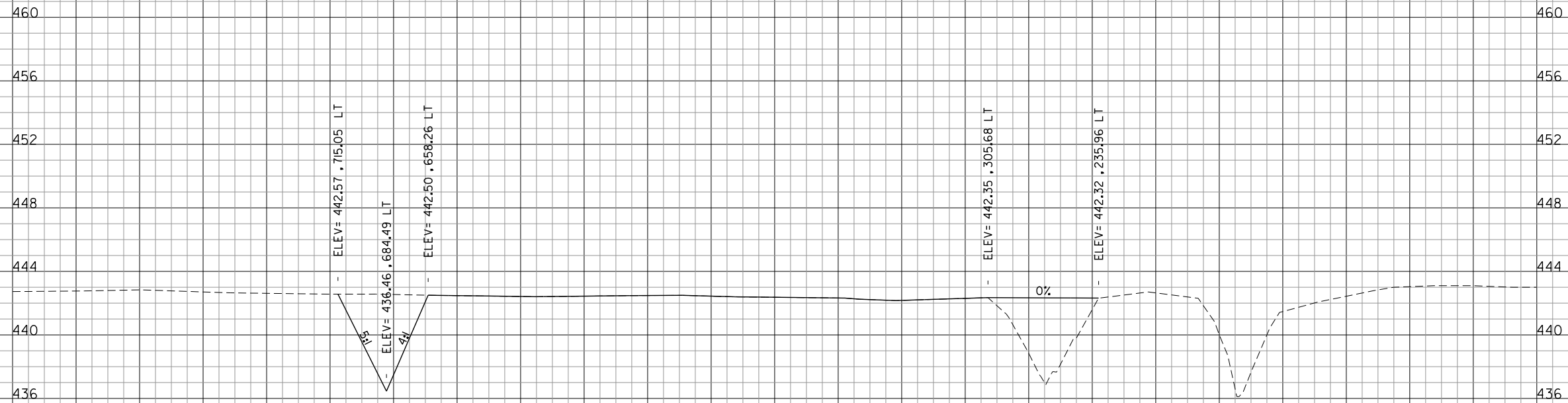
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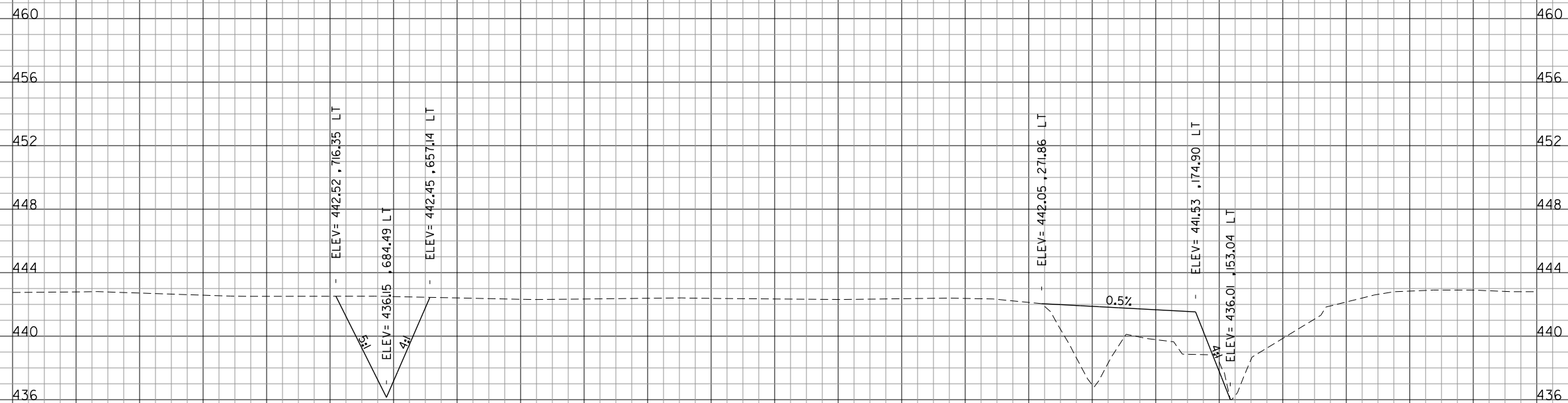
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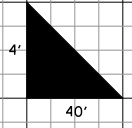


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7+50.00
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REVISIONS		
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0 1 2
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**MIDAMERICA ST. LOUIS AIRPORT
 ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

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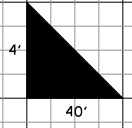
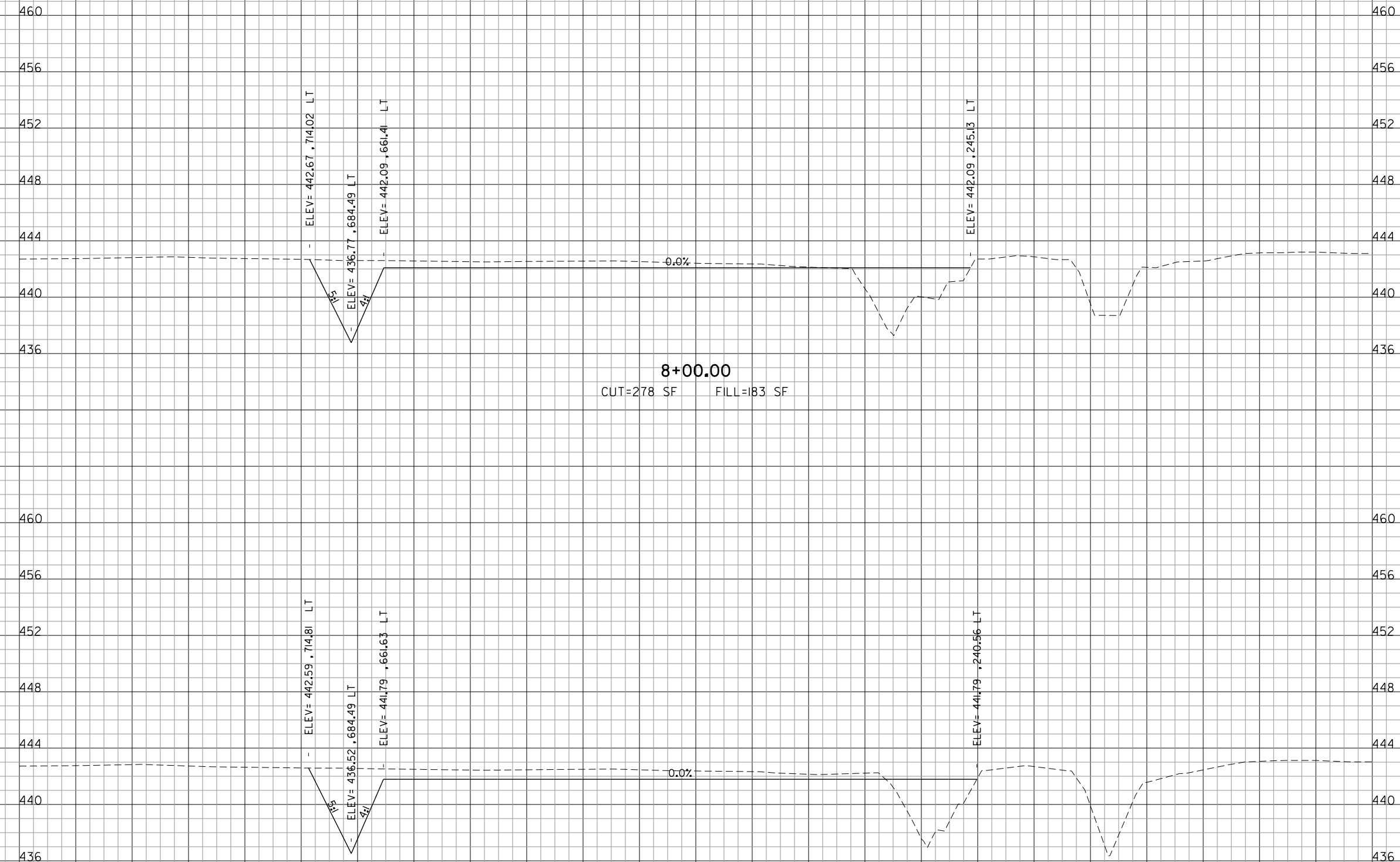
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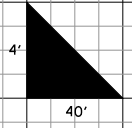
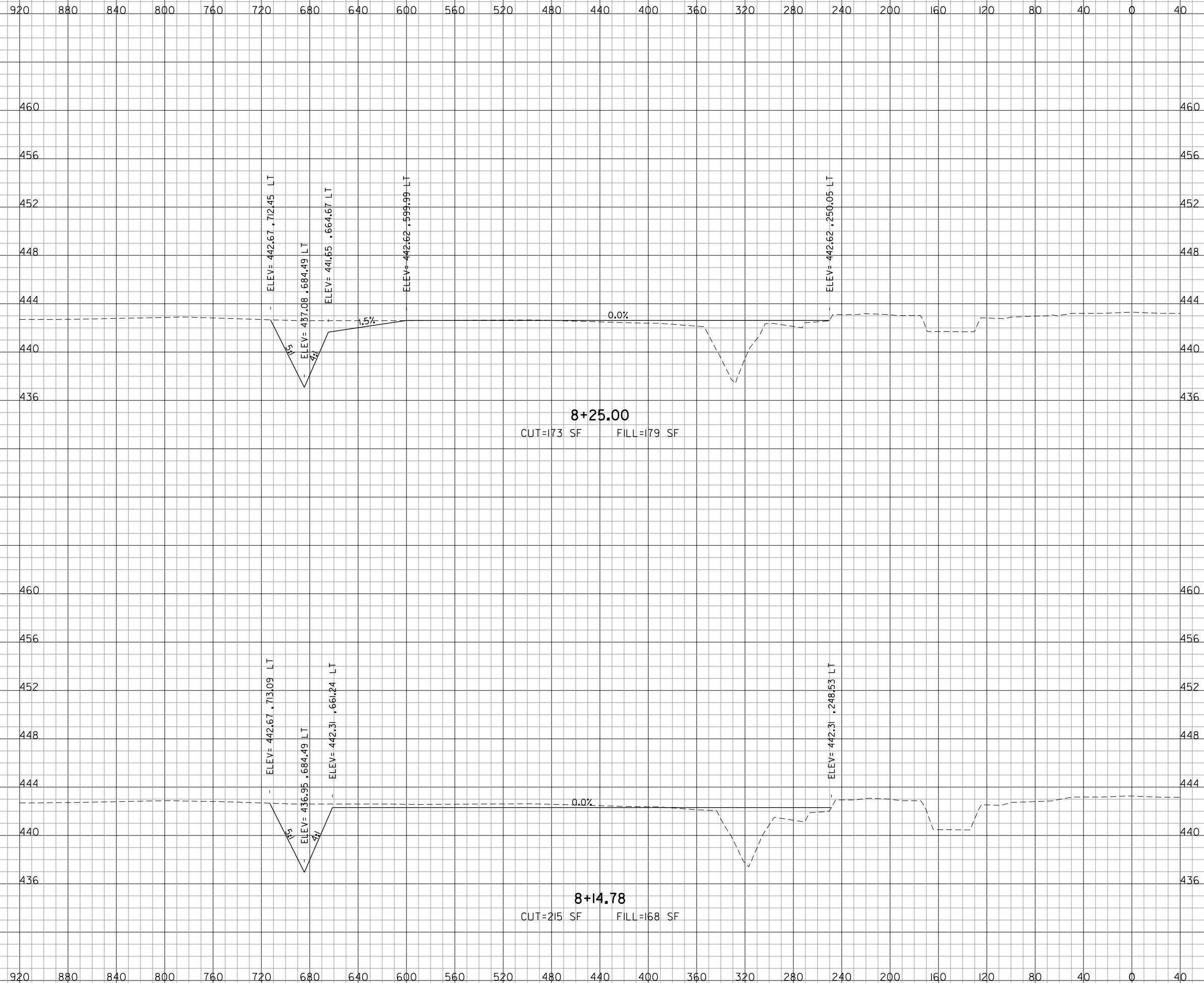
DATE: JANUARY 14, 2011

JOB No: 10098-01

**MIKE APRON EXPANSION
CROSS SECTIONS
SHEET 6 OF 18**

SHEET 41 OF 53 SHEETS

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REVISIONS		
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0 1 2
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JOB No: 10098-01

**MIKE APRON EXPANSION
CROSS SECTIONS
SHEET 7 OF 18**

SHEET 42 OF 53 SHEETS

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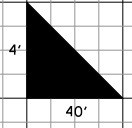
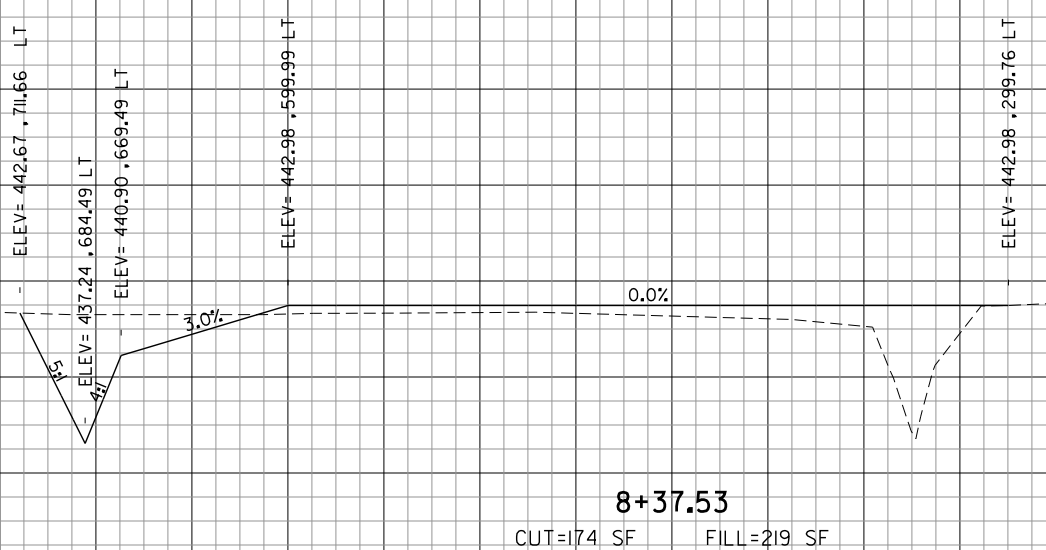
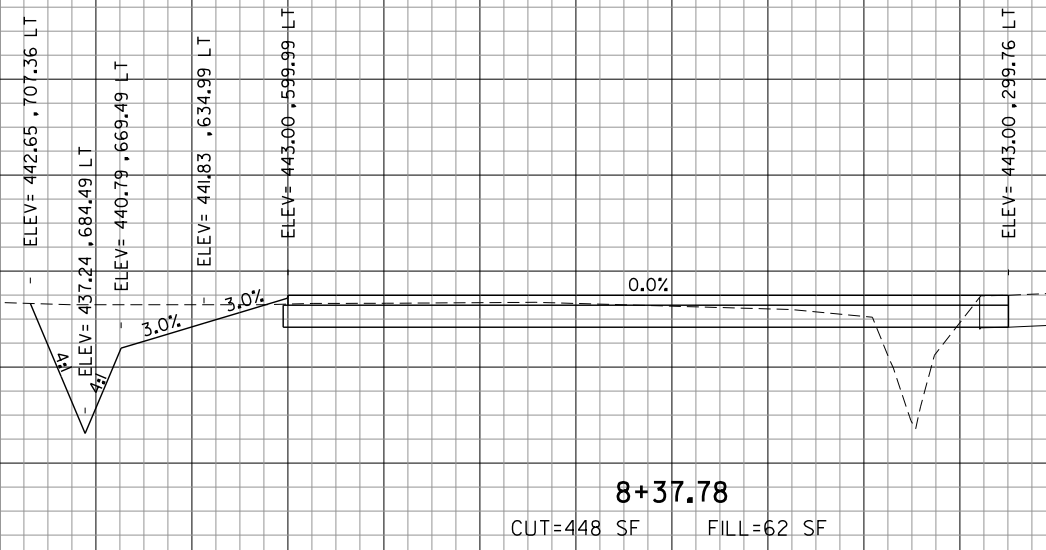
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MIKE APRON EXPANSION - CONTRACT 1

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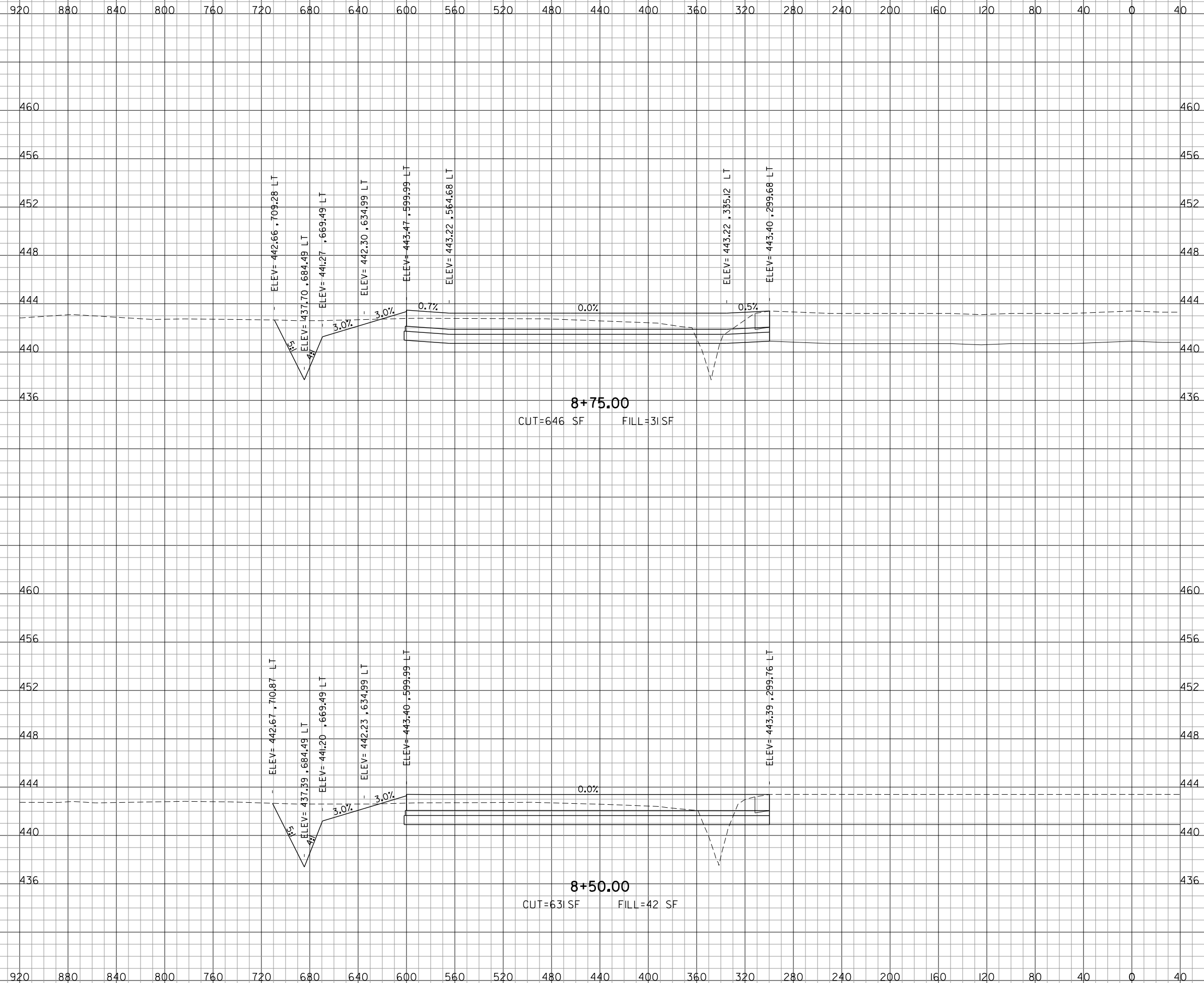
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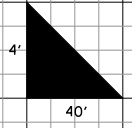
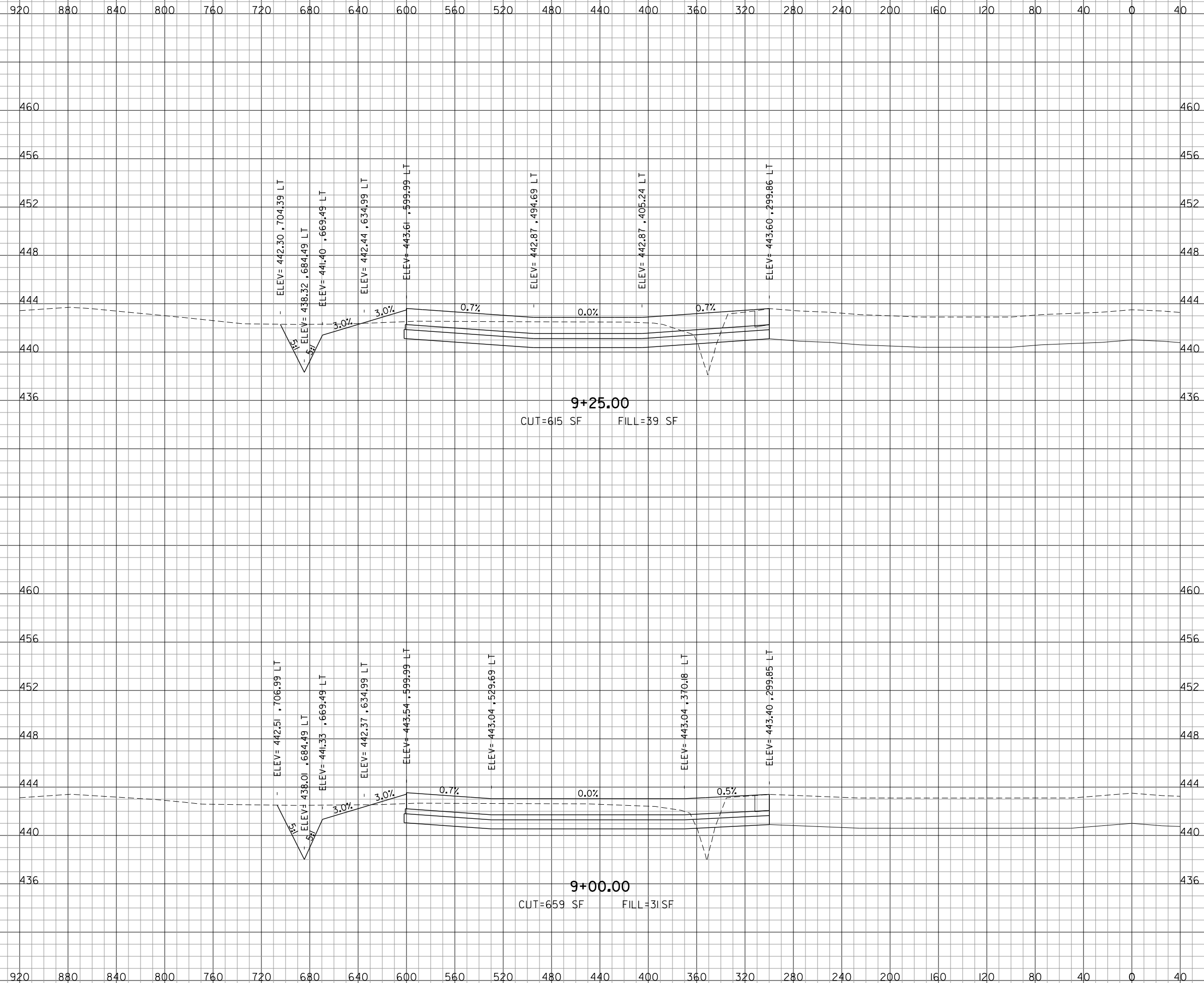
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JOB No: 10098-01

**MIKE APRON EXPANSION
CROSS SECTIONS
SHEET 9 OF 18**

SHEET 44 OF 53 SHEETS

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0 1 2
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 ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

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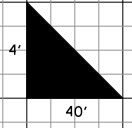
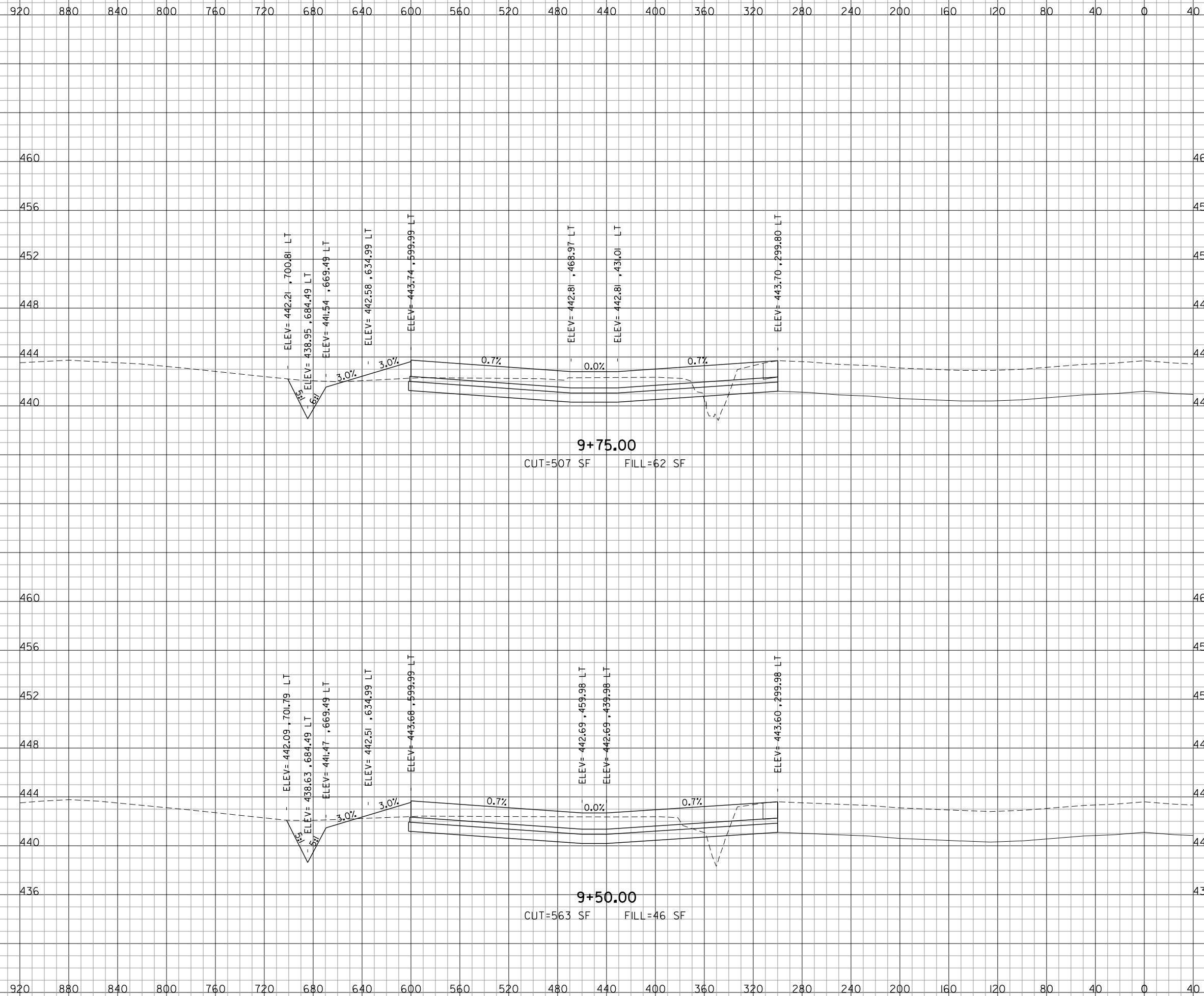
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JOB No: 10098-01

**MIKE APRON EXPANSION
 CROSS SECTIONS
 SHEET 10 OF 18**

SHEET 45 OF 53 SHEETS

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REVISIONS		
NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2"
AT FULL SCALE (34X22).
PLOT 1

**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 6302
314-236-9500

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CONSULTING ENGINEERS

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**IL PROJECT: BLV-4061
AIP PROJ: 3-17-0146-XX**

FILE: 36-53.XS_Mike.dgn

DESIGN BY: LEW

DRAWN BY: LEW

CHECKED BY: CET

APPROVED BY: BWG

DATE: JANUARY 14, 2011

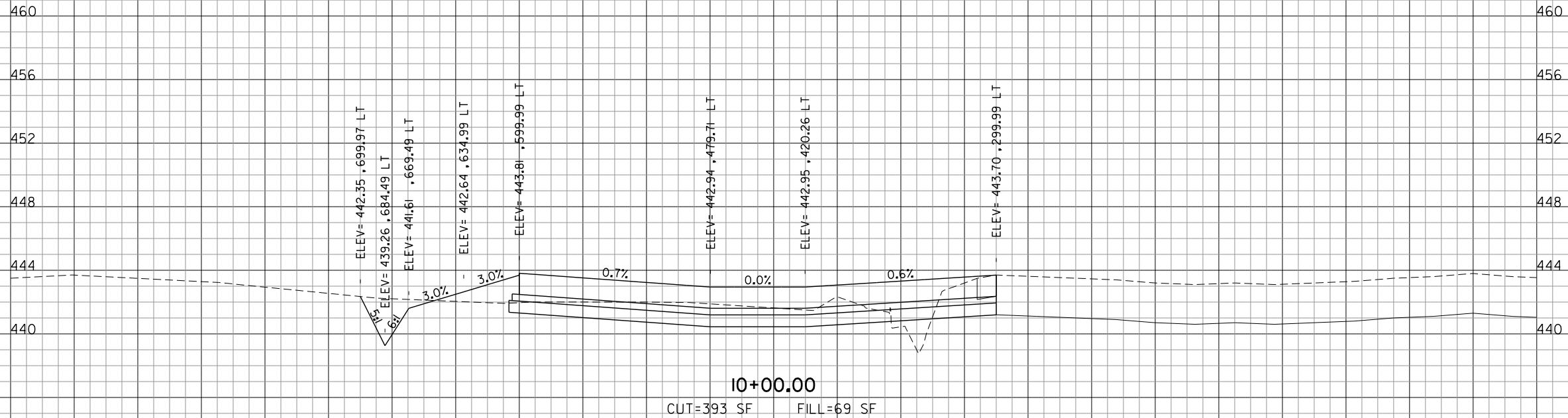
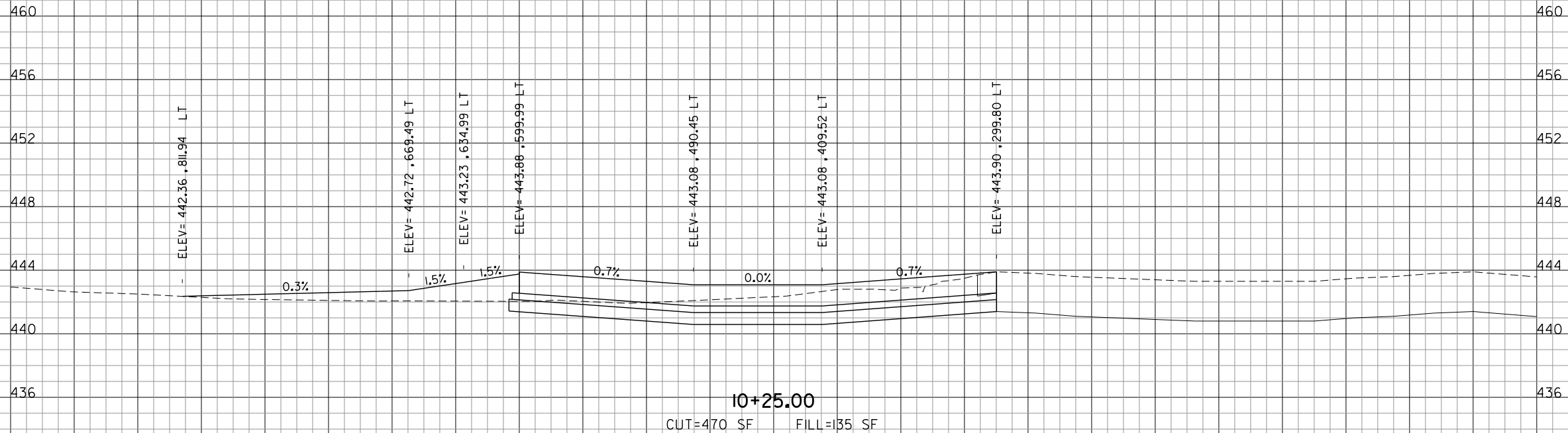
JOB No: 10098-01

**MIKE APRON EXPANSION
CROSS SECTIONS
SHEET 11 OF 18**

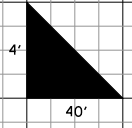
SHEET 46 OF 53 SHEETS

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920 880 840 800 760 720 680 640 600 560 520 480 440 400 360 320 280 240 200 160 120 80 40 0 40



REVISIONS		
NUMBER	BY	DATE

0 1 2
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PLOT 1

**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 6302
(314) 236-9500

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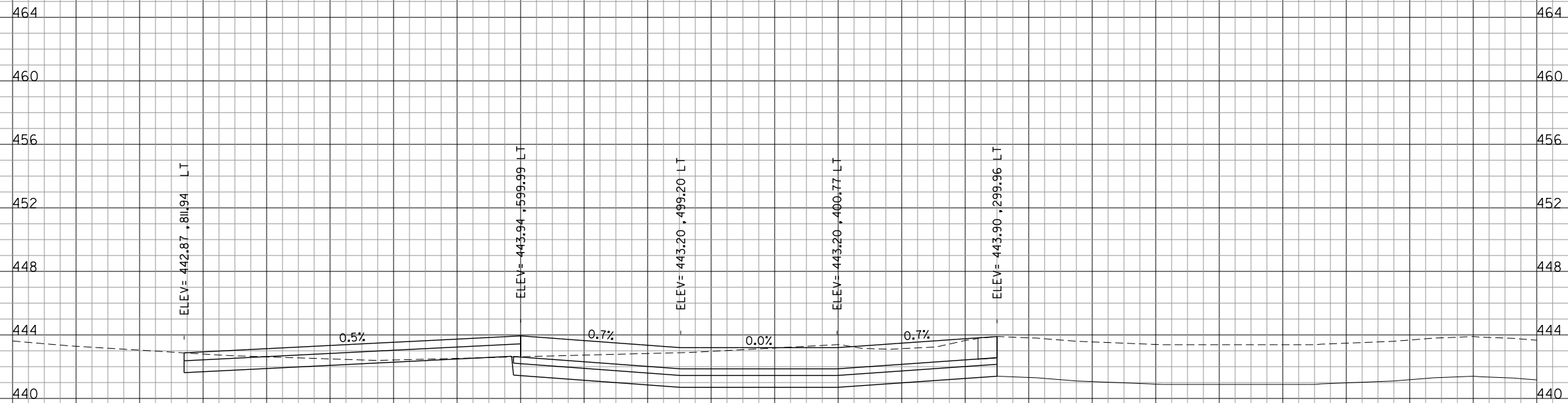
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**IL PROJECT: BLV-4061
AIP PROJ: 3-17-0146-XX**

FILE: 36-53.XS_Mike.dgn
DESIGN BY: LEW
DRAWN BY: LEW
CHECKED BY: CET
APPROVED BY: BWG
DATE: JANUARY 14, 2011
JOB No: 10098-01
MIKE APRON EXPANSION CROSS SECTIONS SHEET 12 OF 18
SHEET 47 OF 53 SHEETS

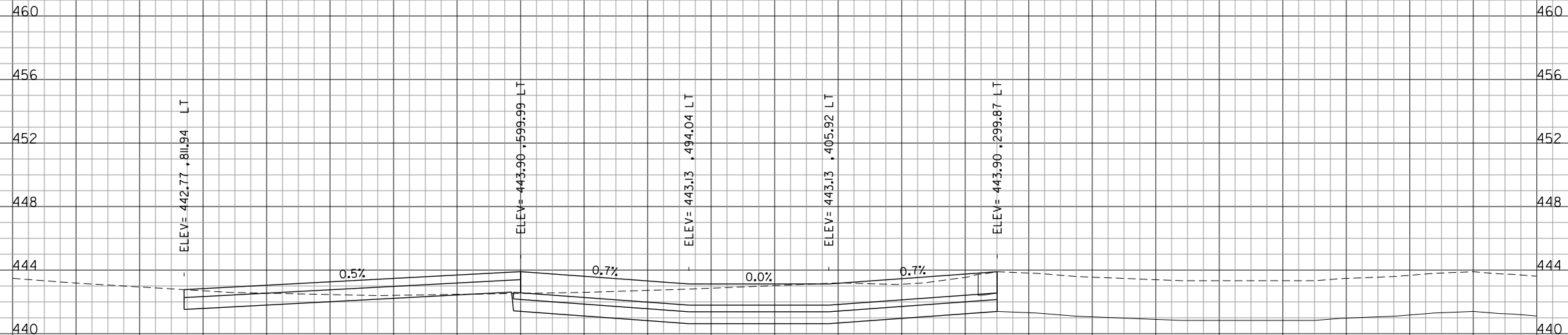
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K:\MidAmericaAp\1009801 Mike_Apron\Draw\Sheets\36-53_XS_Mike.dgn

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10+45.35

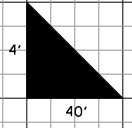
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10+33.35

CUT=707 SF FILL=1 SF

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REVISIONS		
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THIS BAR IS EQUAL TO 2"
AT FULL SCALE (34X22).
PLOT 1

**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 6302
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**IL PROJECT: BLV-4061
AIP PROJ: 3-17-0146-XX**

FILE: 36-53.XS_Mike.dgn

DESIGN BY: LEW

DRAWN BY: LEW

CHECKED BY: CET

APPROVED BY: BWG

DATE: JANUARY 14, 2011

JOB No: 10098-01

**MIKE APRON EXPANSION
CROSS SECTIONS
SHEET 13 OF 18**

SHEET 48 OF 53 SHEETS

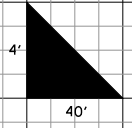
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460 456 452 448 444 440 436

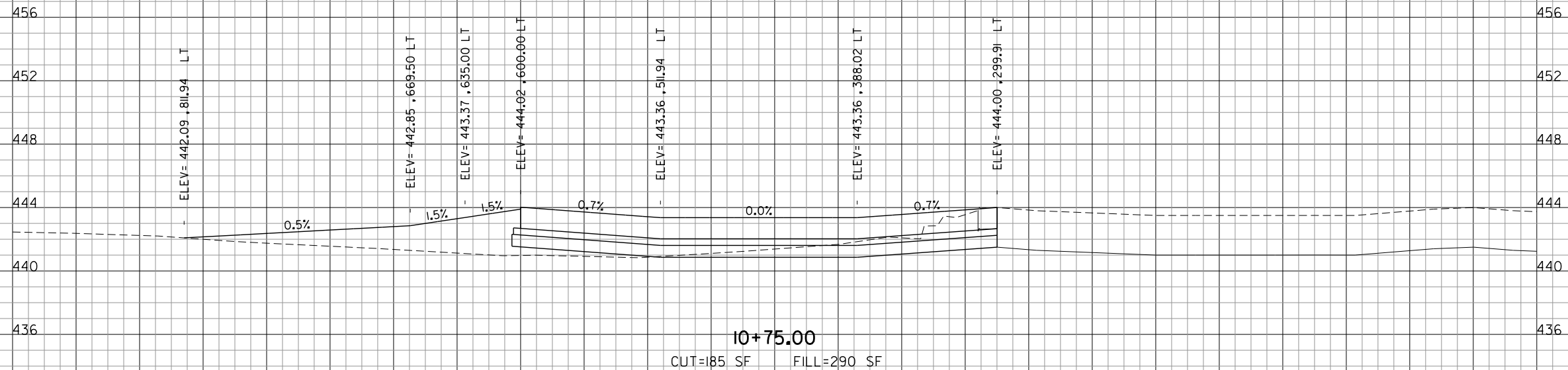
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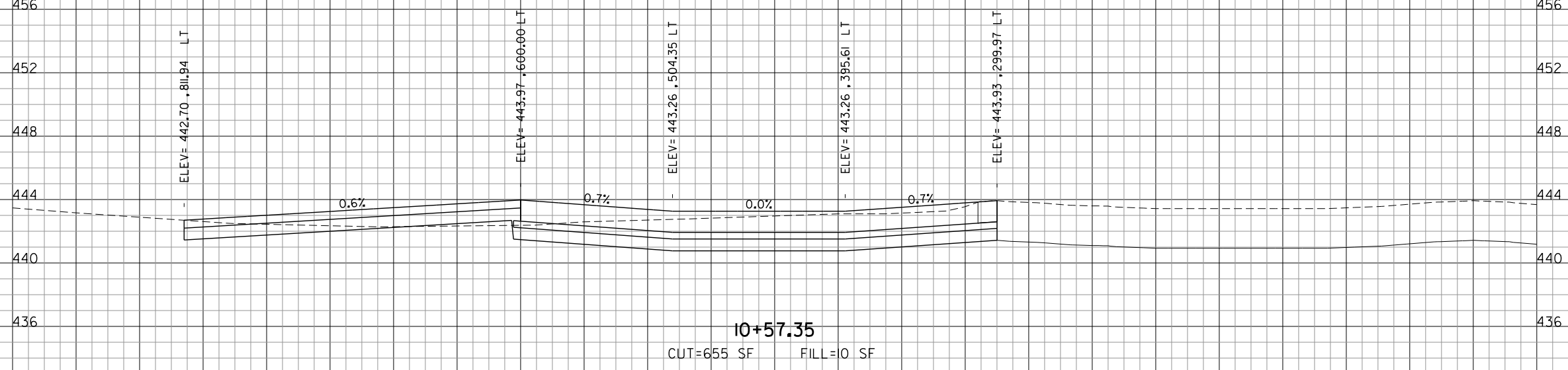


REVISIONS		
NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2"
AT FULL SCALE (34X22).
PLOT 1



10+75.00
CUT=185 SF FILL=290 SF



10+57.35
CUT=655 SF FILL=0 SF

**MIDAMERICA ST. LOUIS AIRPORT
ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
ST. LOUIS, MO 6302
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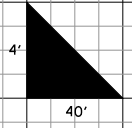
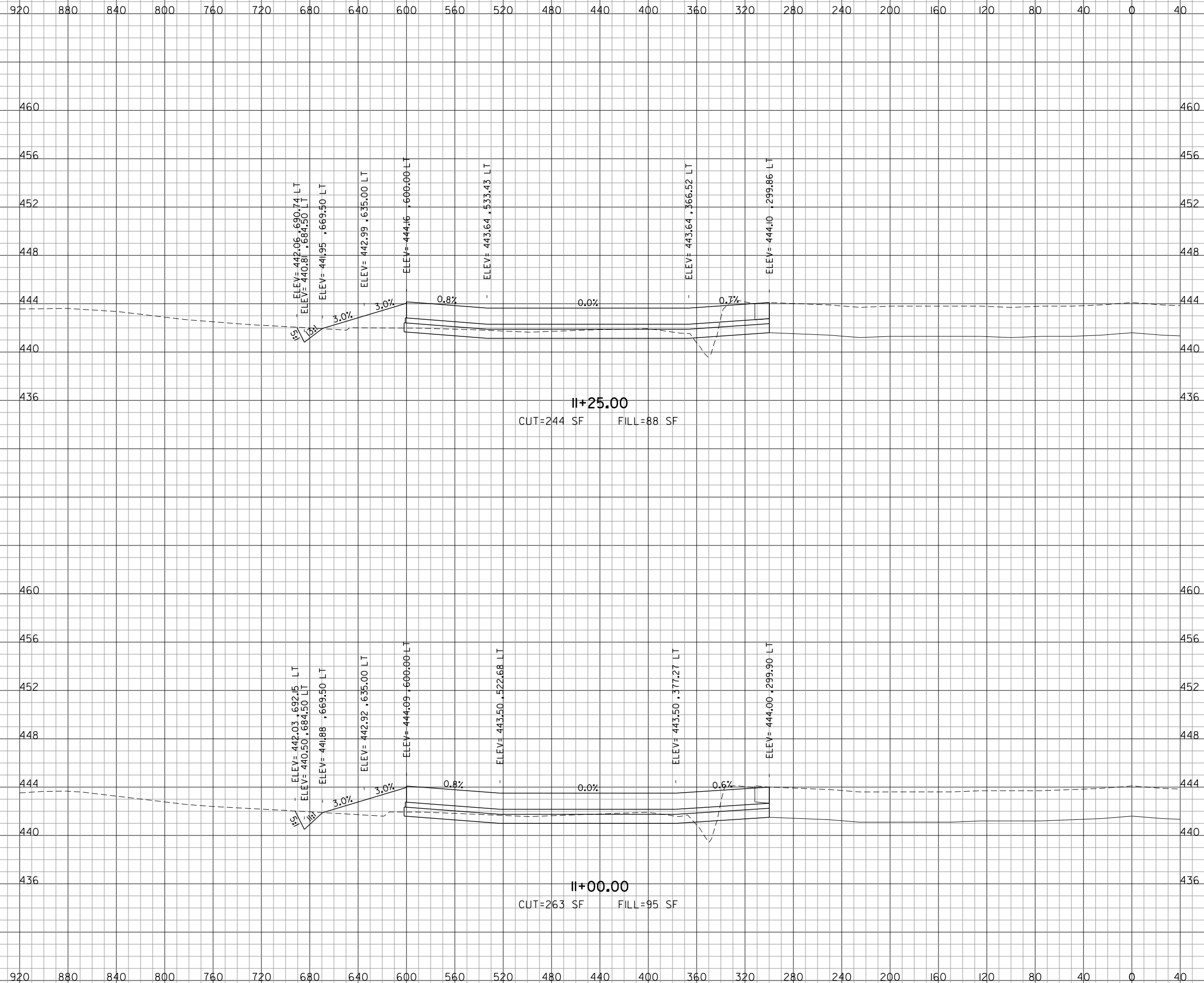
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AIP PROJ: 3-17-0146-XX**

FILE: 36-53_XS_Mike.dgn

DESIGN BY: LEW
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CHECKED BY: CET
APPROVED BY: BWG
DATE: JANUARY 14, 2011
JOB No: 10098-01

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REVISIONS		
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ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
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DESIGN BY: LEW

DRAWN BY: LEW

CHECKED BY: CET

APPROVED BY: BWG

DATE: JANUARY 14, 2011

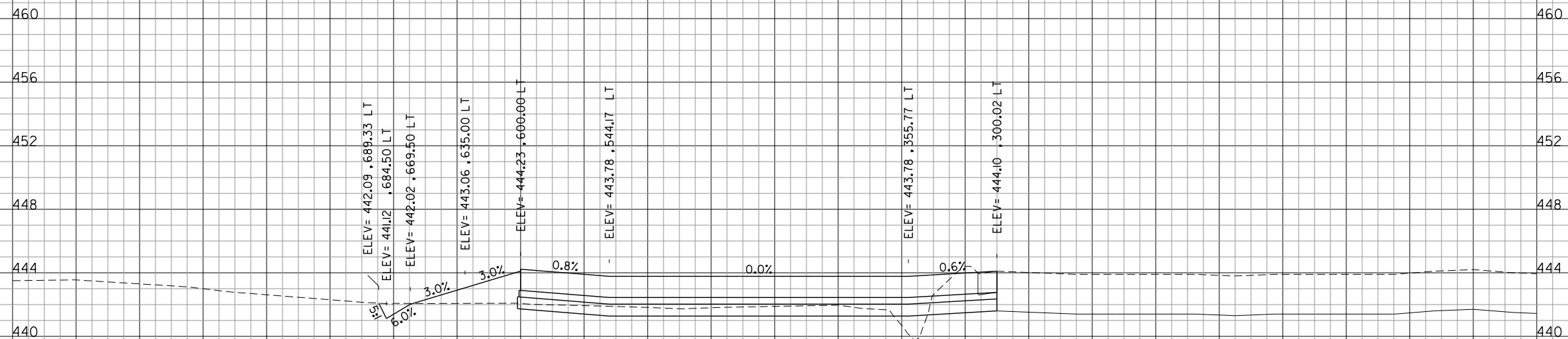
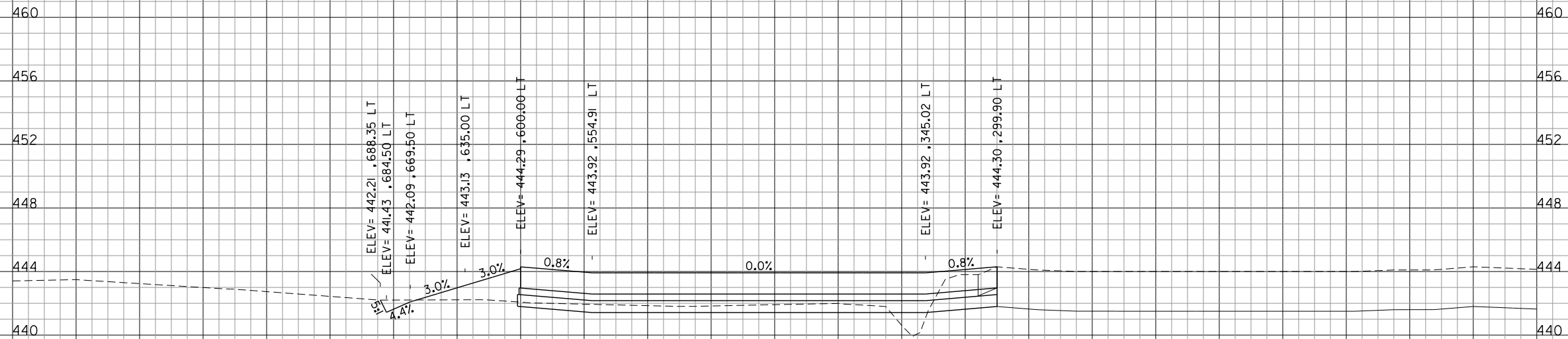
JOB No: 10098-01

**MIKE APRON EXPANSION
CROSS SECTIONS
SHEET 15 OF 18**

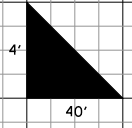
SHEET 50 OF 53 SHEETS

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K:\MidAmericaAp\1009801 Mike_Apron\Draw\Sheets\36-53_XS_Mike.dgn

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920 880 840 800 760 720 680 640 600 560 520 480 440 400 360 320 280 240 200 160 120 80 40 0 40



REVISIONS		
NUMBER	BY	DATE

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PLOT 1

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ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
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**IL PROJECT: BLV-4061
AIP PROJ: 3-17-0146-XX**

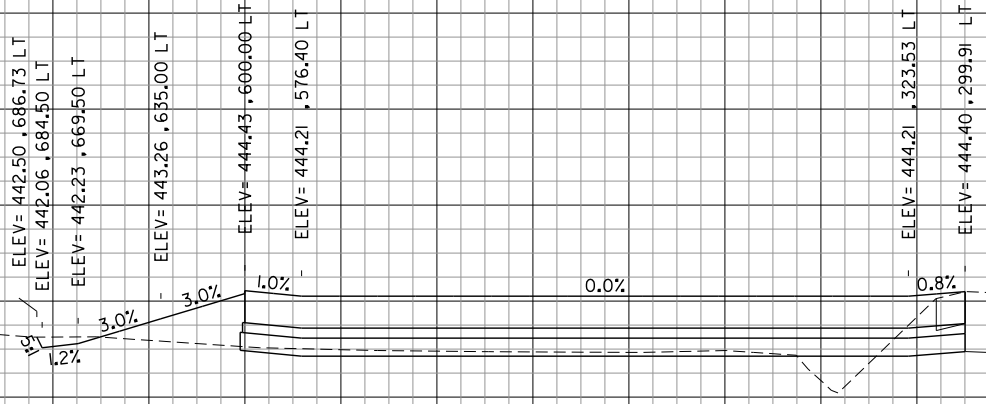
FILE: 36-53.XS_Mike.dgn
DESIGN BY: LEW
DRAWN BY: LEW
CHECKED BY: CET
APPROVED BY: BWG
DATE: JANUARY 14, 2011
JOB No: 10098-01
MIKE APRON EXPANSION CROSS SECTIONS SHEET 16 OF 18
SHEET 51 OF 53 SHEETS

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456
452
448
444
440

460
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452
448
444
440



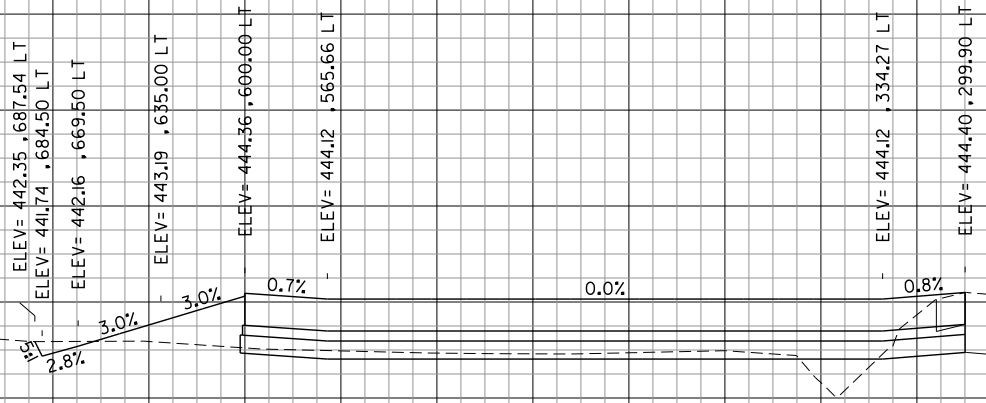
12+25.00

CUT=96 SF FILL=92 SF

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460
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452
448
444
440

460
456
452
448
444
440



12+00.00

CUT=113 SF FILL=90 SF

920 880 840 800 760 720 680 640 600 560 520 480 440 400 360 320 280 240 200 160 120 80 40 0 40

REVISIONS		
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0 1 2
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ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

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FILE: 36-53.XS_Mike.dgn

DESIGN BY: LEW

DRAWN BY: LEW

CHECKED BY: CET

APPROVED BY: BWG

DATE: JANUARY 14, 2011

JOB No: 10098-01

**MIKE APRON EXPANSION
CROSS SECTIONS
SHEET 17 OF 18**

SHEET 52 OF 53 SHEETS

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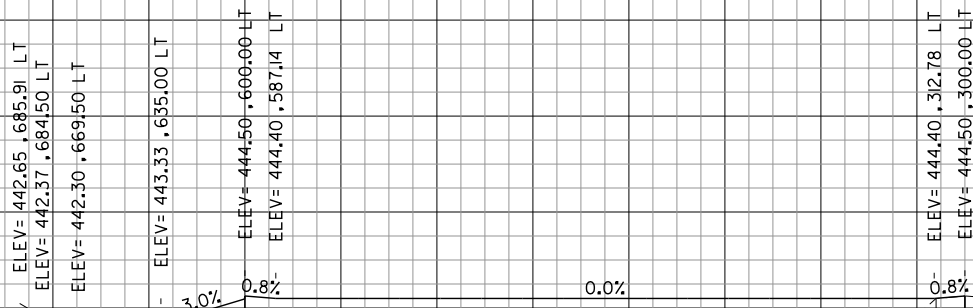
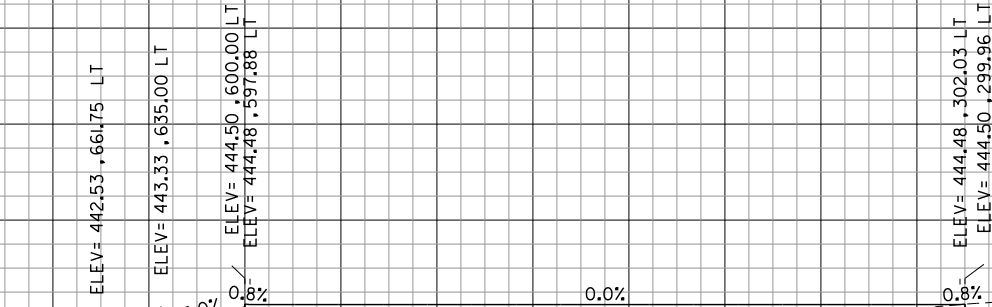
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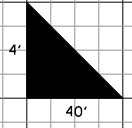
460
456
452
448
444
440

12+75.00
CUT=61 SF FILL=99 SF

12+50.00
CUT=63 SF FILL=102 SF



920 880 840 800 760 720 680 640 600 560 520 480 440 400 360 320 280 240 200 160 120 80 40 0 40



REVISIONS

NUMBER	BY	DATE

0 1 2
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PLOT 1

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ST. CLAIR COUNTY, ILLINOIS**

MIKE APRON EXPANSION - CONTRACT 1

ONE MEMORIAL DRIVE, SUITE 500
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FILE: 36-53_XS_Mike.dgn

DESIGN BY: LEW

DRAWN BY: LEW

CHECKED BY: CET

APPROVED BY: BWG

DATE: JANUARY 14, 2011

JOB No: 10098-01

**MIKE APRON EXPANSION
CROSS SECTIONS
SHEET 18 OF 18**

SHEET 53 OF 53 SHEETS