

QUANTITIES				
ITEM NUMBER	DESCRIPTION	UNIT	ESTIMATED QUANTITY	AS BUILT QUANTITY
AR108156	1/C #6 5 KV UG CABLE IN UD	L.F.	450	
AR108158	1/C #8 5 KV UG CABLE IN UD	L.F.	3205	
AR108258	2/C #8 5 KV UG CABLE IN UD	L.F.	380	
AR110314	4" STEEL DUCT JACKED	L.F.	158	
AR110502	2-WAY CONCRETE ENCASED DUCT	L.F.	56	
AR110610	ELECTRICAL HANDHOLE	EA.	2	
AR125410	MTL-STAKE MOUNTED	EA.	28	
AR125415	MTL-BASE MOUNTED	EA.	6	
AR125443	TAXI GUIDANCE SIGN 3 CHAR.	EA.	3	
AR125446	TAXI GUIDANCE SIGN 6 CHAR.	EA.	1	
AR125902	REMOVE BASE MOUNTED LIGHT	EA.	1	
AR125942	ADJUST BASE MOUNTED LIGHT	EA.	2	
AR150510	ENGINEER'S FIELD OFFICE	L.S.	1	
AR152410	UNCLASSIFIED EXCAVATION	C.Y.	557	
AR152440	BORROW EXCAVATION	C.Y.	15100	
AR155540	BY-PRODUCT LIME	TON	274	
AR155612	SOIL PROCESSING	S.Y.	8432	
AR156510	SILT FENCE	L.F.	100	
AR201610	BITUMINOUS BASE COURSE	TON	3122	
AR201630	BITUMINOUS BASE TEST SECTION	EA.	1	
AR209510	CRUSHED AGGREGASE BASE COURSE	TON	5762	
AR401610	BITUMINOUS SURFACE COURSE	TON	1865	
AR402620	POROUS FRICTION COURSE 5/8"	S.Y.	8109	
AR602510	BITUMINOUS PRIME COAT	GAL.	2838	
AR603510	BITUMINOUS TACK COAT	GAL.	1622	
AR620520	PAVEMENT MARKING - WATERBORNE	S.F.	2469	
AR620525	PAVEMENT MARKING - BLACK BORDER	S.F.	400	
AR901510	SEEDING	ACRE	3.3	
AR908510	MULCHING	ACRE	3.3	

CONSTRUCT WEST PARALLEL TAXIWAY TO RUNWAY 2/20, PHASE 1 (TAXIWAY E & E1) AT WILLIAMSON COUNTY REGIONAL AIRPORT MARION - HERRIN, WILLIAMSON COUNTY, ILLINOIS

DATE : 3/12/2008

ILLINOIS PROJECT No. MWA-3562
A.I.P. PROJECT No. 3-17-0065-

INDEX OF SHEETS

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2. SAFETY PLAN
3. EROSION CONTROL PLAN
4. TYPICAL SECTIONS
5. TAXIWAY E PLAN & PROFILE
6. TAXIWAY E1 P&P & INTERSECTION STAKING
7. MARKING PLAN
- 8.-12. CROSS SECTIONS
13. ELECTRICAL PLAN
14. ELECTRICAL DETAILS
15. ELECTRICAL NOTES

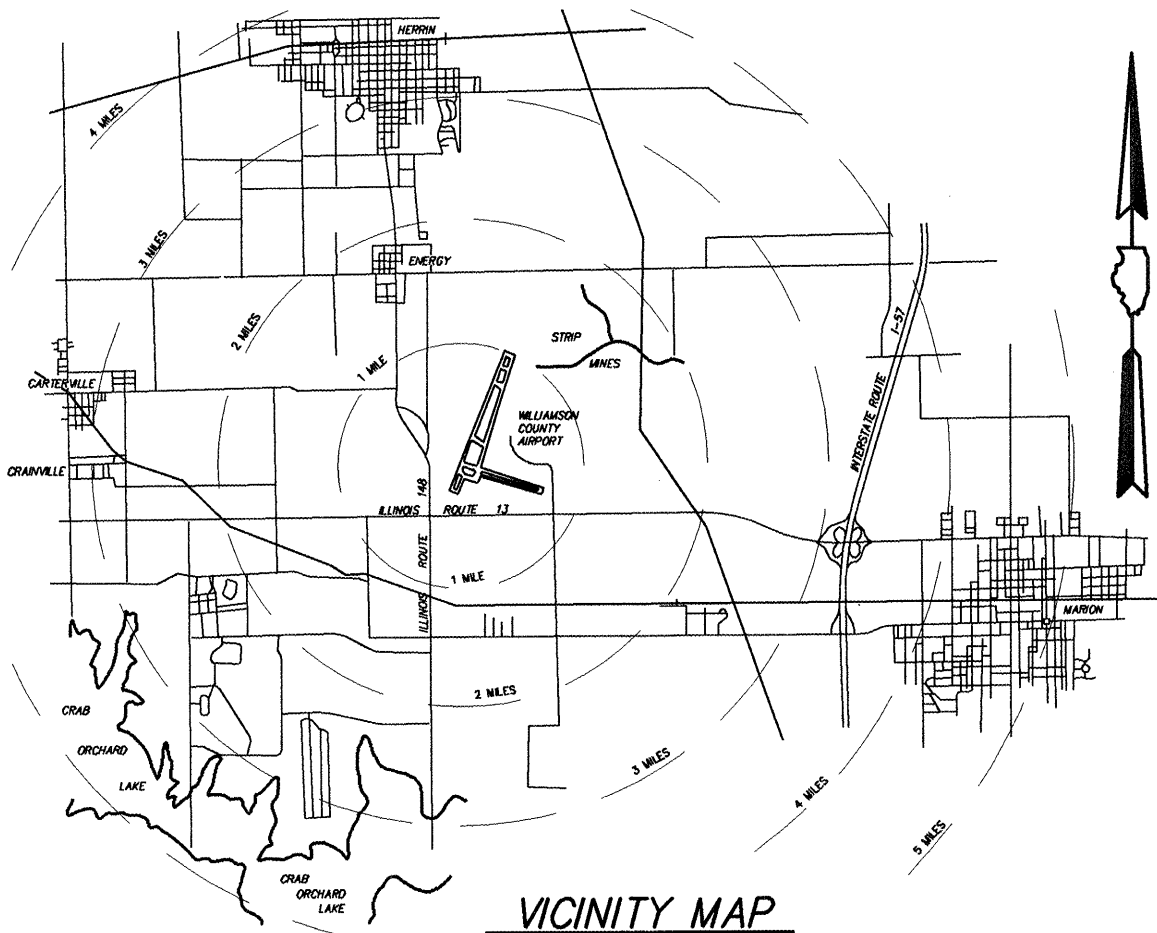
RECURRING SPECIAL PROVISIONS

The following RECURRING SPECIAL PROVISIONS indicated by an "X" are Applicable to this contract and are included by reference:

Check Sheet No.	Item No.	Page No.
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	2 AR106000 Apron Lighting	160
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	31 AR805000 Silicone Joint Sealing Filler	326

NOTE REGARDING SPECIAL PROVISIONS

THIS PROJECT HAS NO SPECIAL PROVISIONS. ALL WORK SHALL COMPLY WITH THE STANDARD SPECIFICATIONS FOR CONSTRUCTION ON AIRPORTS (JANUARY 1985) AS AMENDED BY THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS.



LATITUDE 37° 45' 15"
LONGITUDE 89° 00' 45"
ELEVATION 471.00

BOARD MEMBERS

- CHAIRMAN : CARL PLANINC
- MEMBERS : BERNARD A. PAUL
DARREN PULLEY
RICHARD PISONI
- SECRETARY : CRAIG PILLATSCH
- AIRPORT MANAGER : DOUGLAS KIMMEL



EXPIRES : NOVEMBER 30, 2009

PLANS PREPARED BY:

CLARIDA & ZIEGLER ENGINEERING COMPANY
P.O. Box 937, 308 South Court Street
Marion, Illinois 62959

REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS
NO. 053881

SUBMITTED *W. Brian Ziegler* ENGINEER

DATE: 4/14/08

WILLIAMSON COUNTY AIRPORT AUTHORITY

APPROVED *Carl Planinc* CHAIRMAN

DATE: APRIL 14, 2008

APPROVED *Craig Pillatsch* SECRETARY

DATE: APRIL 14, 2008

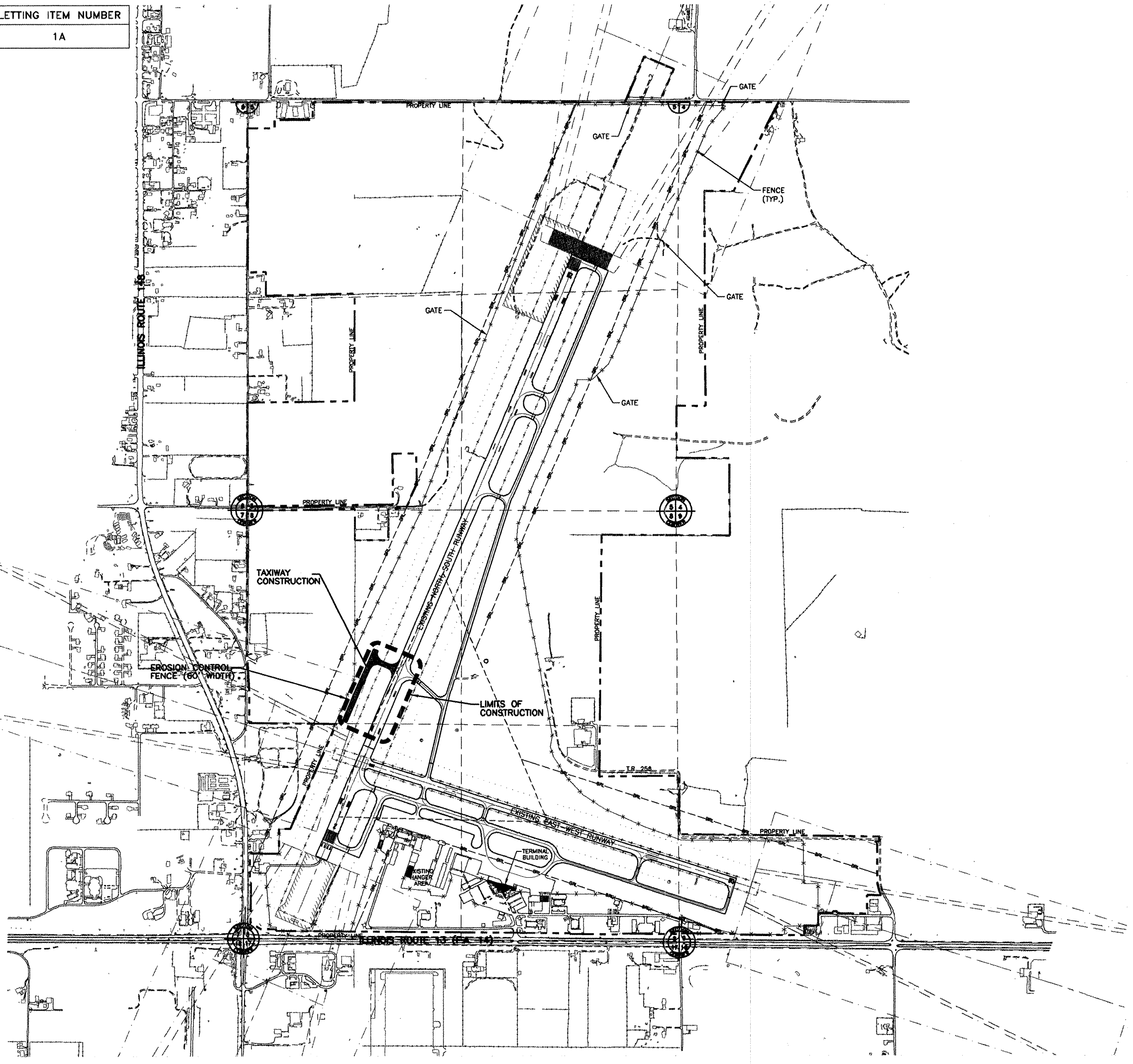
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LETTING ITEM NUMBER
1A

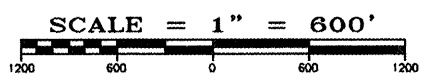
LETTING CONTRACT NUMBER
W1053

TOTAL SHEETS: 15

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SCALE : 1" = 600'



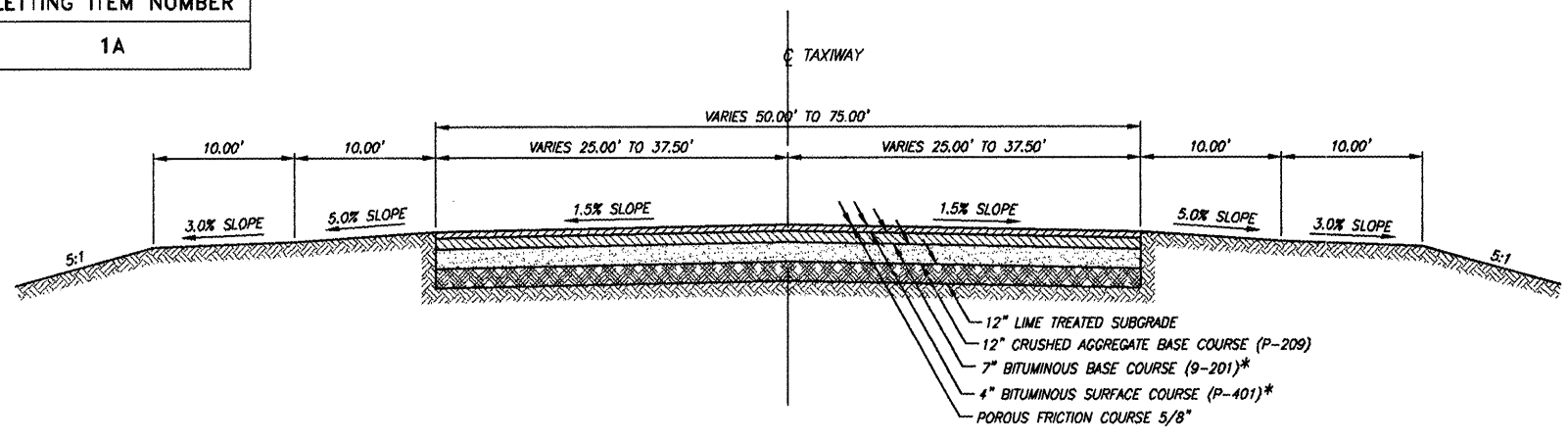
ILLINOIS PROJECT NO. MWA-3562
PROJECT NO. 3-17-0065-

STATE OF ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-004515	
© 2008 ALL RIGHTS RESERVED	
CLARIDA & ZIEGLER ENGINEERING CO.	
308 South Court St, P.O. Box 937 Marion, Illinois 62959 Phone - (618)993-6411, Fax - (618)993-6750	
EROSION CONTROL PLAN CONSTRUCTION OF TAXIWAY E & E1 PHASE I WILLIAMSON COUNTY REGIONAL AIRPORT MARION - HERRIN, ILLINOIS	
Date	3/12/08 DR. By TDE CK'D By CM
Scale	1"=600' Job No. 07141 Sheet No. 03 of 15

LETTING ITEM NUMBER
1A

LETTING CONTRACT NUMBER
WI053

TOTAL SHEETS: 15

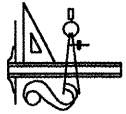


TYPICAL SECTION - TAXIWAY EXTENSION

TAXIWAY E = 50' WIDE
TAXIWAY E1 = 50' WIDE & VARIES

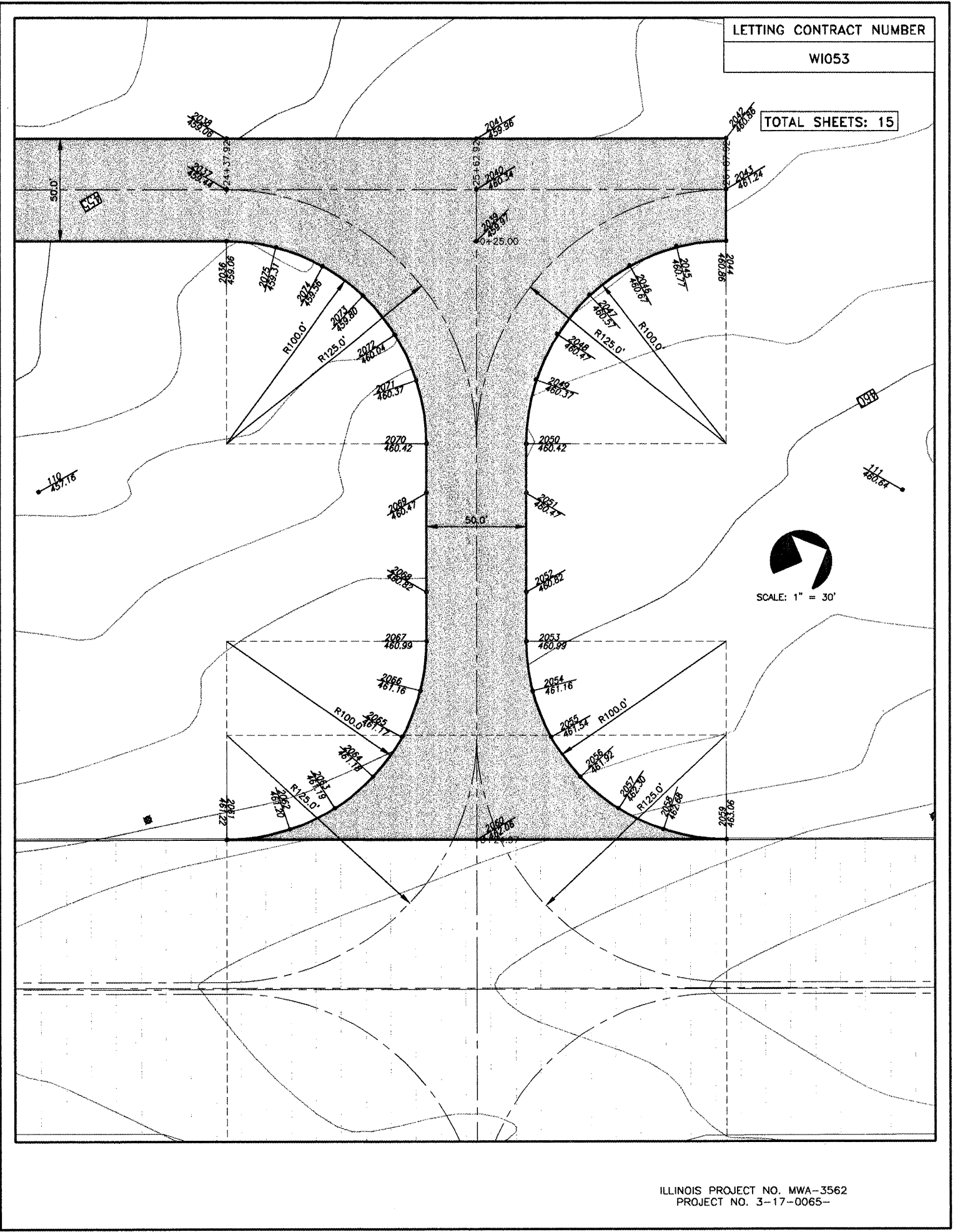
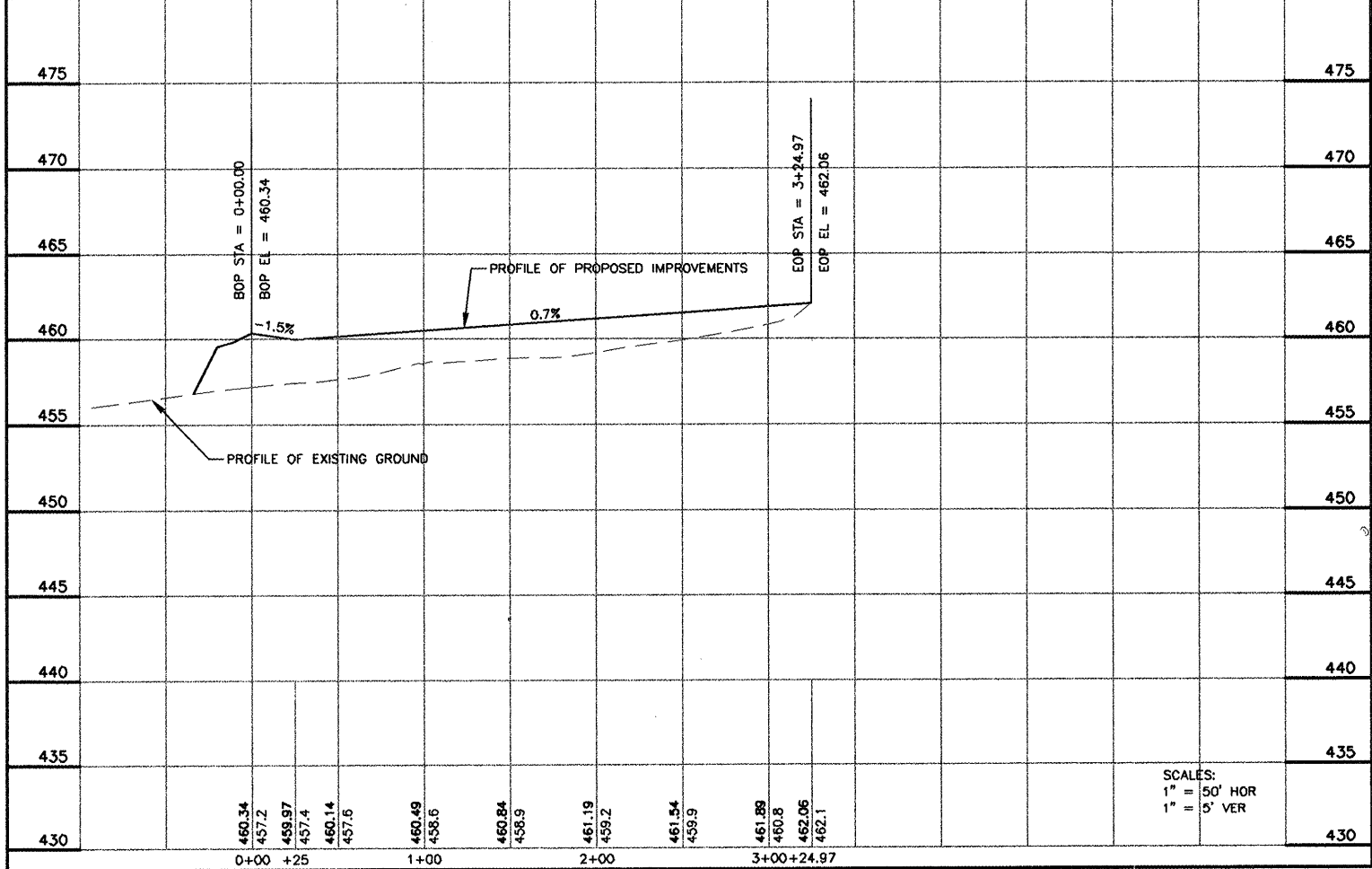
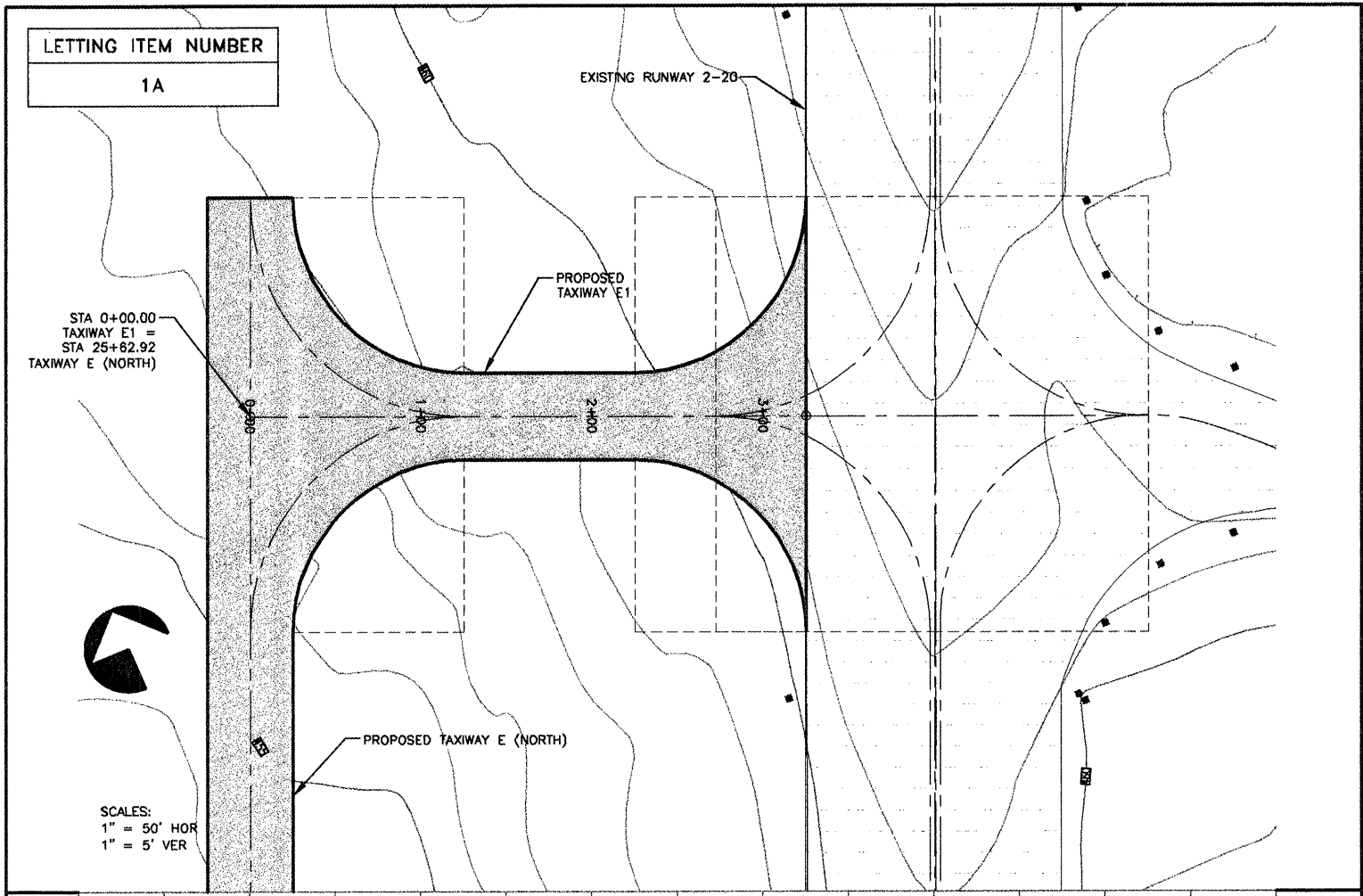
*NOTE: BIT. BASE CSE. AND SURFACE CSE. SHALL USE MARSHALL DESIGN CRITERIA OVER 60,000# 75 BLOWS

ILLINOIS PROJECT NO. MWA-3562
PROJECT NO. 3-17-0065-

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TYPICAL SECTIONS CONSTRUCTION OF TAXIWAY E & E1 PHASE I WILLIAMSON COUNTY REGIONAL AIRPORT MARION - HERRIN, ILLINOIS	
Date <u>3/12/08</u>	DR. By <u>TDE</u> CK'D By <u>CM</u>
Scale <u>AS SHOWN</u>	Job No. <u>07141</u> Sheet No. <u>04</u> of <u>15</u>

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P:\Airport\07141 West Taxiway Ph \PLANS\06 P&P INTERSECTIONS.dwg, 4/14/2008 8:37:33 AM, 1:2

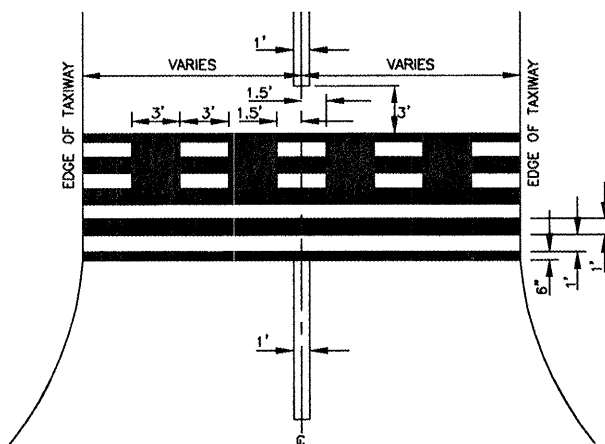
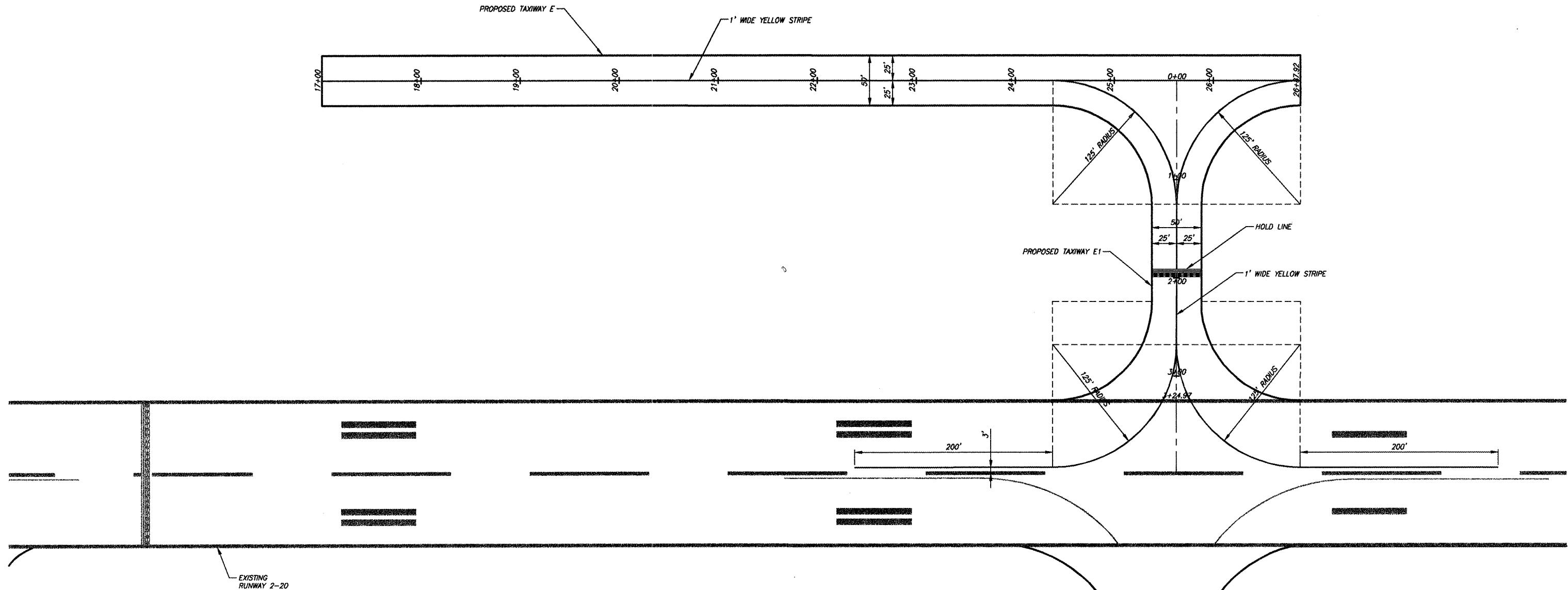
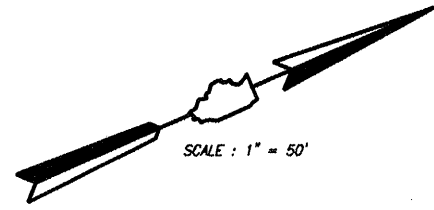


CONSTRUCTION OF TAXIWAY E & E1 PHASE I - TAXIWAY E1 P&P AND INTERSECTION STAKING

LETTING ITEM NUMBER
1A

LETTING CONTRACT NUMBER
WI053

TOTAL SHEETS: 15



PAINT QUANTITIES	
YELLOW	2,463 SQ. FT.
BLACK	400 SQ. FT.

ILLINOIS PROJECT NO. MWA-3562
PROJECT NO. 3-17-0065-

REVISIONS	
DATE	NO.

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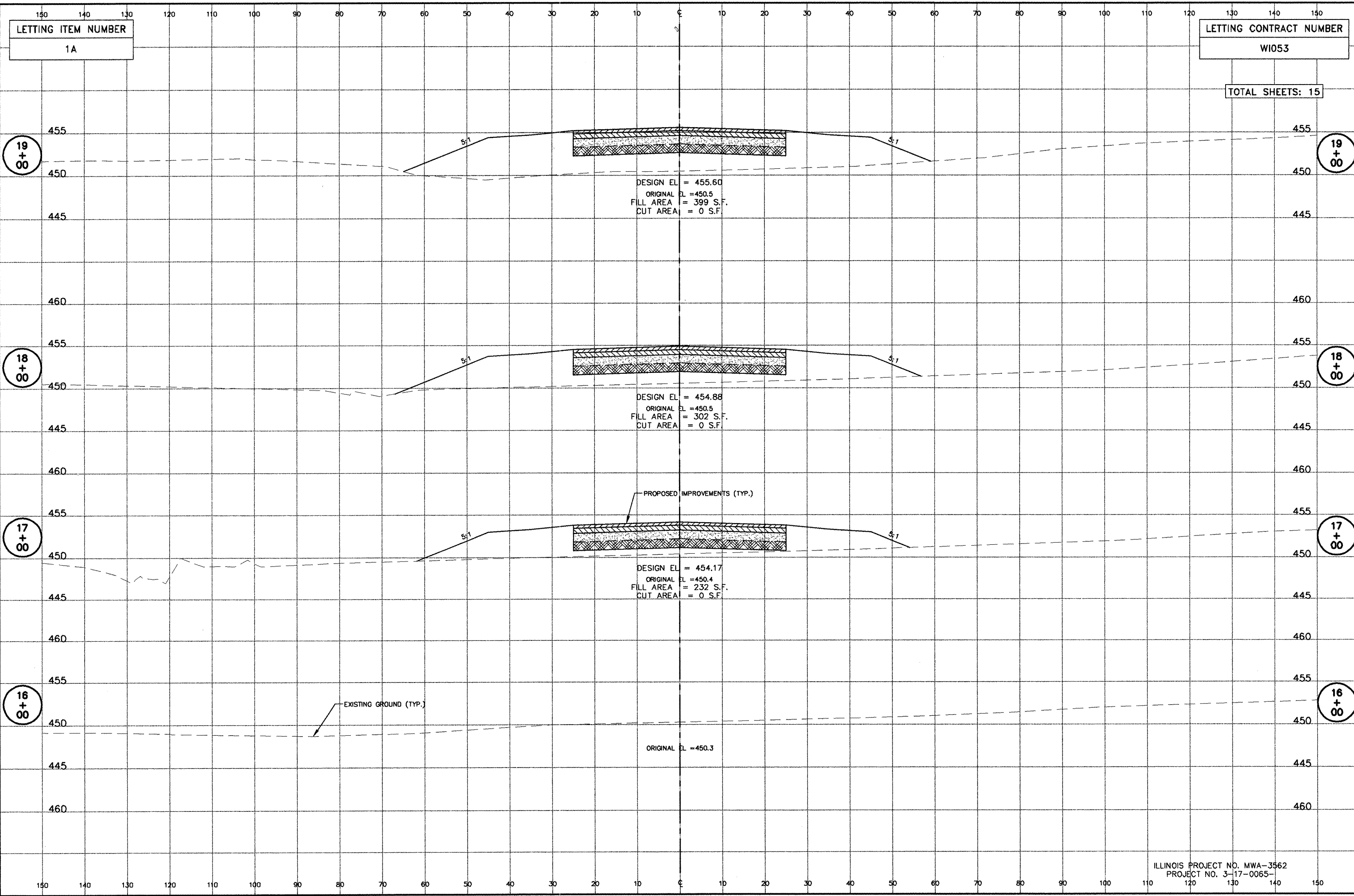
CLARIDA & ZIEGLER ENGINEERING CO.
308 South Court St, P.O. Box 937
Marion, Illinois 62959
Phone - (618)993-6411, Fax - (618)993-6750

PAVEMENT MARKING PLAN
CONSTRUCTION OF TAXIWAY E & E1 PHASE I
WILLIAMSON COUNTY REGIONAL AIRPORT
MARION - HERRIN, ILLINOIS

Date 3/12/08 DR. By TDE CKD By CM
Scale 1" = 50' Job No. 07141 Sheet No. 07 of 15

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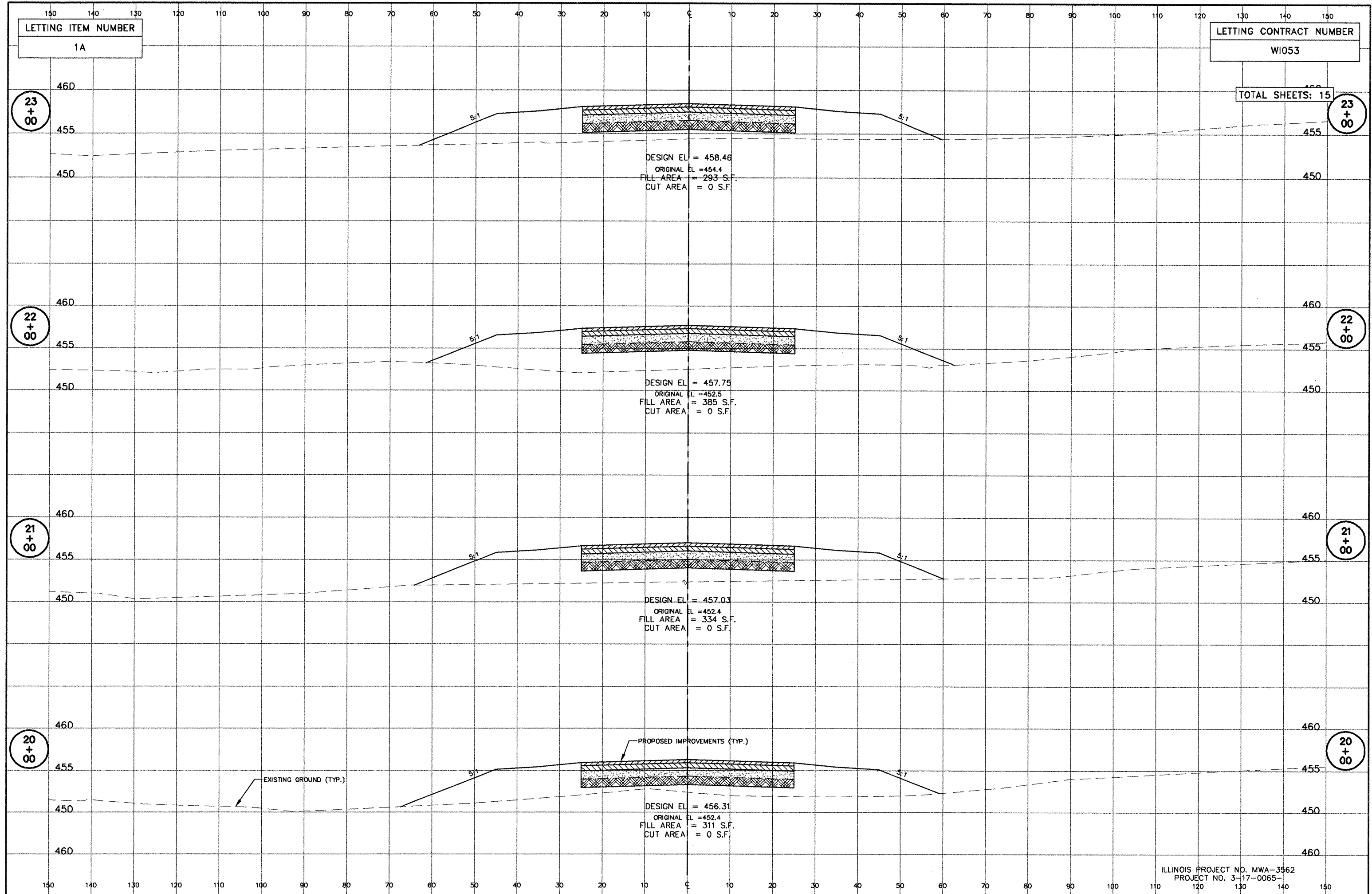


CONSTRUCTION OF TAXIWAY E & E1 PHASE I - CROSS SECTIONS OF TAXIWAY E - STATION 16+00 TO 19+00

ILLINOIS PROJECT NO. MWA-3562
PROJECT NO. 3-17-0065

JOB NO. 07141
SH 08 OF 15

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LETTING ITEM NUMBER
1A

LETTING CONTRACT NUMBER
WI053

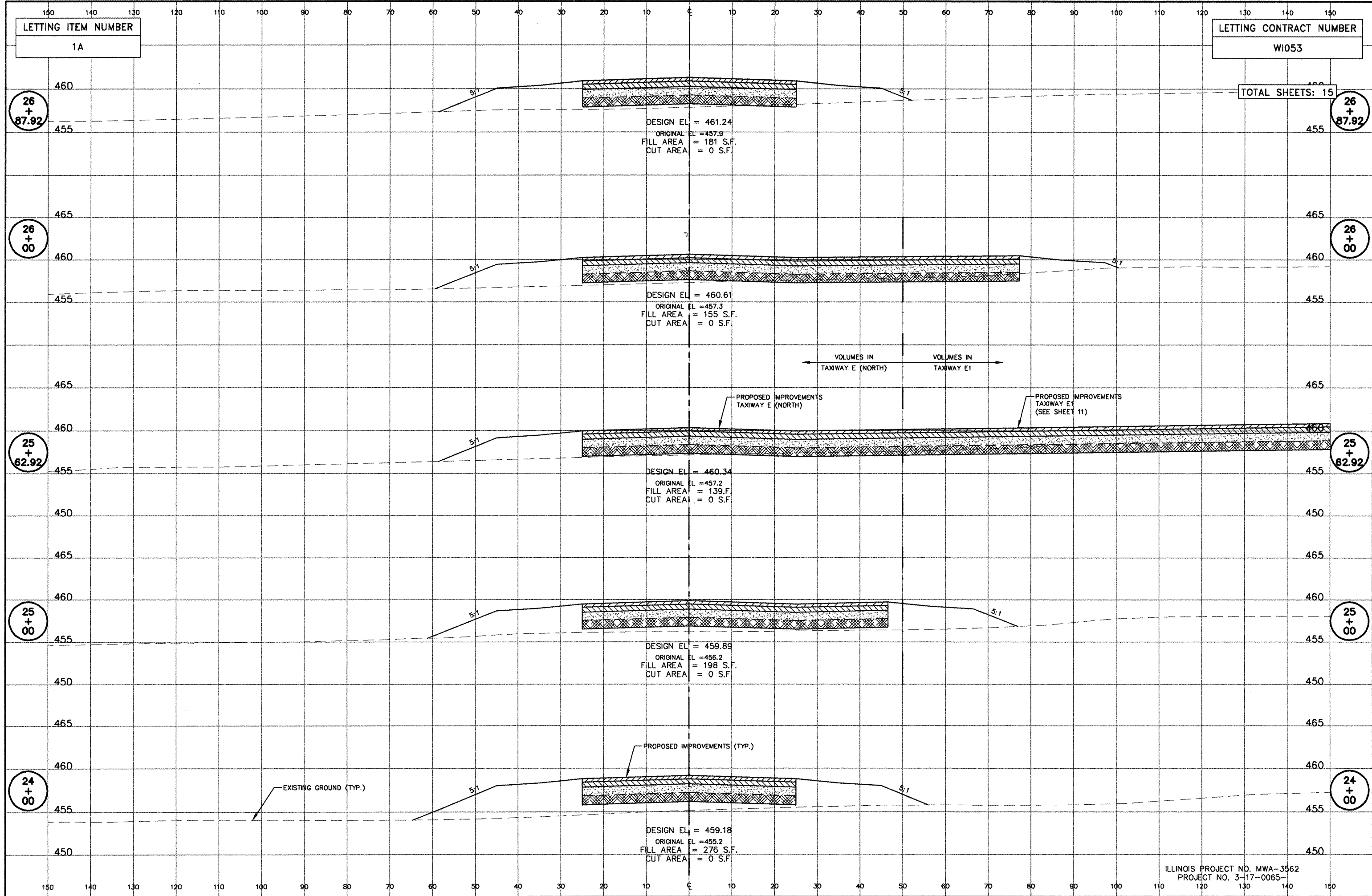
TOTAL SHEETS: 15

ILLINOIS PROJECT NO. MWA-3562
PROJECT NO. 3-17-0065-

CONSTRUCTION OF TAXIWAY E & E1 PHASE I- CROSS SECTIONS OF TAXIWAY E - STATION 20+00 TO 23+00

JOB NO. 07141
SH 09 OF 15

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LETTING ITEM NUMBER
1A

LETTING CONTRACT NUMBER
W1053

TOTAL SHEETS: 15

26 + 87.92

26 + 87.92

26 + 00

26 + 00

25 + 62.92

25 + 62.92

25 + 00

25 + 00

24 + 00

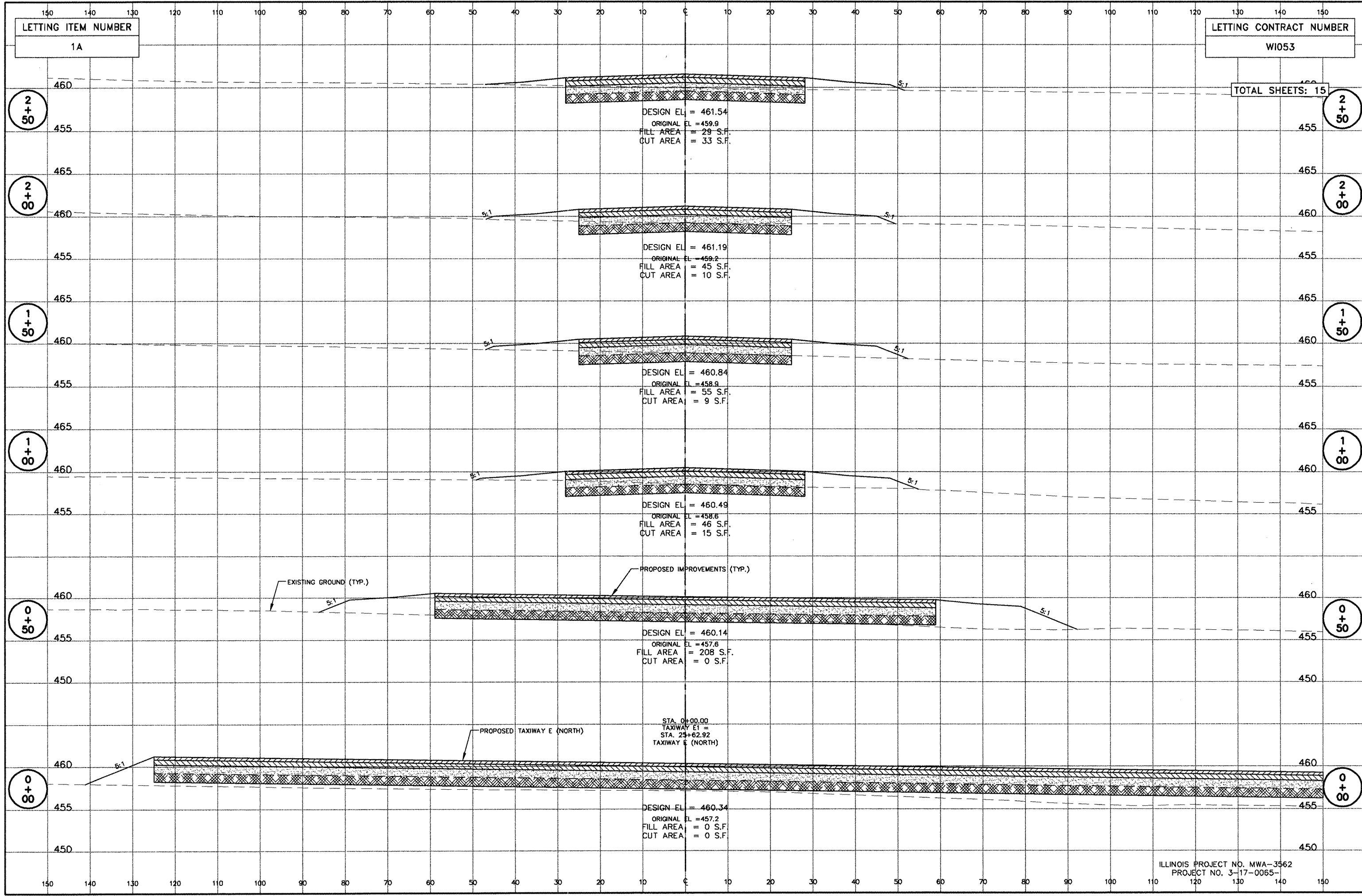
24 + 00

ILLINOIS PROJECT NO. MWA-3562
PROJECT NO. 3-17-0065-

CONSTRUCTION OF TAXIWAY E & E1 PHASE I - CROSS SECTIONS OF TAXIWAY E - STATION 24+00 TO 26+87.92

JOB NO. 07141
SH 10 OF 15

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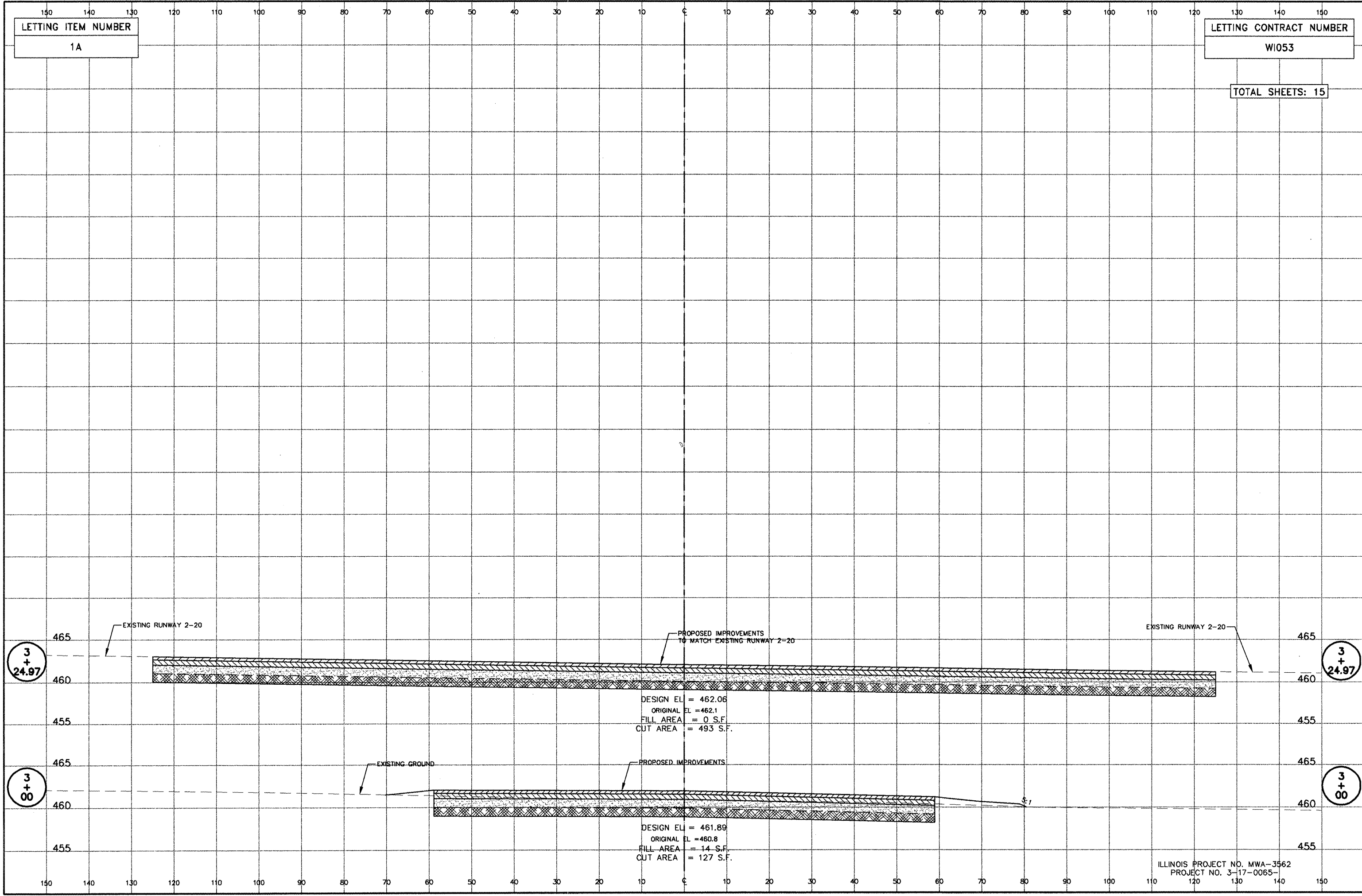


CONSTRUCTION OF TAXIWAY E & E1 PHASE I - CROSS SECTIONS OF TAXIWAY E1 - STATION 0+00 TO 2+50

ILLINOIS PROJECT NO. MWA-3562
PROJECT NO. 3-17-0065-

JOB NO. 07141
SH 11 OF 15

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LETTING ITEM NUMBER
1A

LETTING CONTRACT NUMBER
W1053

TOTAL SHEETS: 15

3
+
24.97

3
+
24.97

3
+
00

3
+
00

DESIGN EL = 462.06
ORIGINAL EL = 462.1
FILL AREA = 0 S.F.
CUT AREA = 493 S.F.

DESIGN EL = 461.89
ORIGINAL EL = 460.8
FILL AREA = 14 S.F.
CUT AREA = 127 S.F.

ILLINOIS PROJECT NO. MWA-3562
PROJECT NO. 3-17-0065-

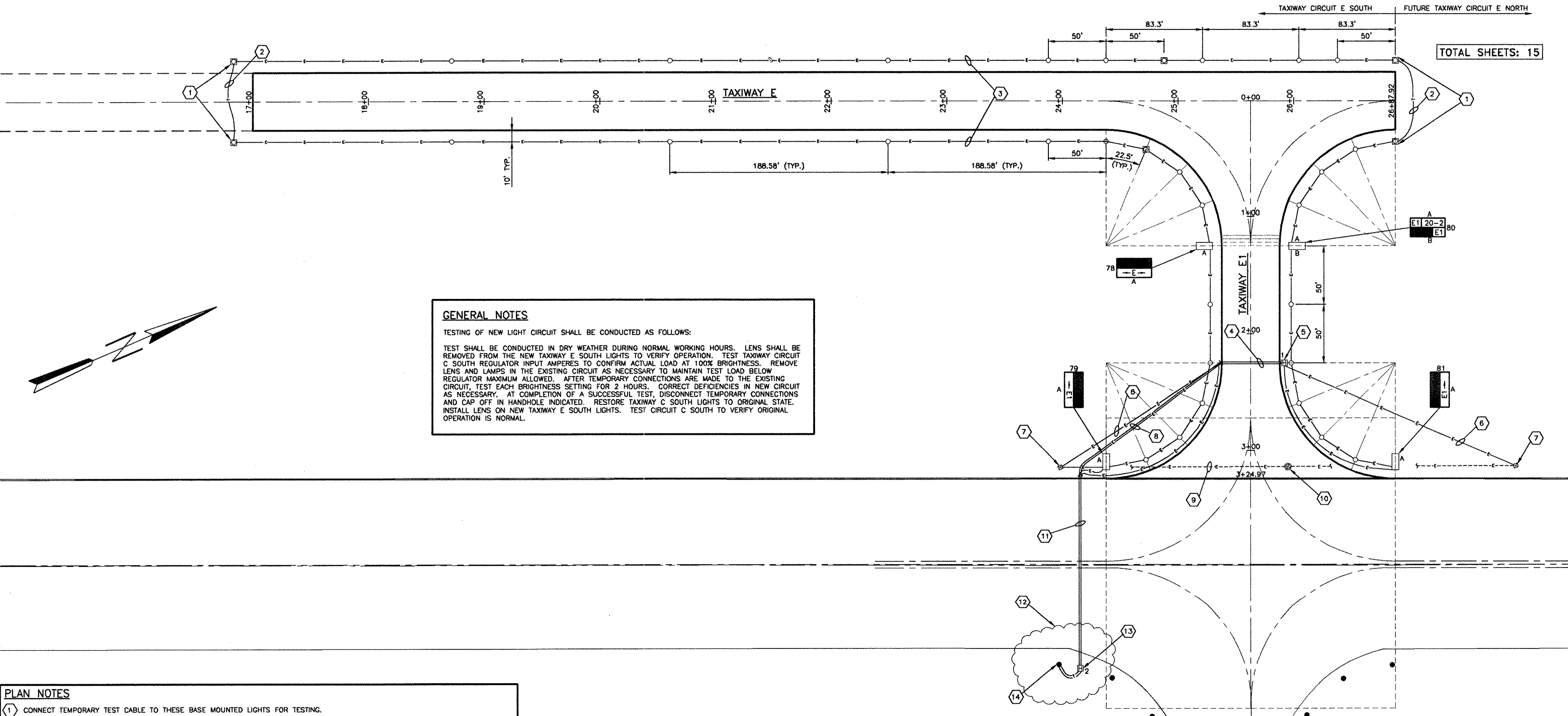
CONSTRUCTION OF TAXIWAY E & E1 PHASE I - CROSS SECTIONS OF TAXIWAY E1 - STATION 3+00 TO 3+24.97

JOB NO. 07141
SH 12 OF 15

LETTING ITEM NUMBER
1A

LETTING CONTRACT NUMBER
W1053

TOTAL SHEETS: 15



GENERAL NOTES
TESTING OF NEW LIGHT CIRCUIT SHALL BE CONDUCTED AS FOLLOWS:
TEST SHALL BE CONDUCTED IN DRY WEATHER DURING NORMAL WORKING HOURS. LENS SHALL BE REMOVED FROM THE NEW TAXIWAY E SOUTH LIGHTS TO VERIFY OPERATION. TEST TAXIWAY CIRCUIT C SOUTH REGULATOR INPUT AMPERES TO CONFIRM ACTUAL LOAD AT 100% BRIGHTNESS. REMOVE LENS AND LAMPS IN THE EXISTING CIRCUIT AS NECESSARY TO MAINTAIN TEST LOAD BELOW REGULATOR MAXIMUM ALLOWED. AFTER TEMPORARY CONNECTIONS ARE MADE TO THE EXISTING CIRCUIT, TEST EACH BRIGHTNESS SETTING FOR 2 HOURS. CORRECT DEFICIENCIES IN NEW CIRCUIT AS NECESSARY. AT COMPLETION OF A SUCCESSFUL TEST, DISCONNECT TEMPORARY CONNECTIONS AND CAP OFF IN HANDHOLE INDICATED. RESTORE TAXIWAY C SOUTH LIGHTS TO ORIGINAL STATE. INSTALL LENS ON NEW TAXIWAY E SOUTH LIGHTS. TEST CIRCUIT C SOUTH TO VERIFY ORIGINAL OPERATION IS NORMAL.

PLAN NOTES

- CONNECT TEMPORARY TEST CABLE TO THESE BASE MOUNTED LIGHTS FOR TESTING.
- 1/C, #8, 5 KV TYPE C CABLE ROUTED ON SURFACE FOR TEMPORARY TEST CONNECTION BETWEEN LIGHTS SHOWN. REMOVE AFTER TEST COMPLETED.
- 1/C, #8, 5 KV TYPE C CABLE IN UNIT DUCT - TYPICAL FOR ALL PERMANENT TAXIWAY WIRING.
- 56 L.F. OF TWO-WAY 4" CONCRETE-ENCASED PVC, SCHEDULE 40 DUCT.
- TERMINATE TAXIWAY E NORTH CABLE IN THE HANDHOLE AND CAP-OFF FOR FUTURE USE.
- 1/C, #6, 5 KV TYPE C CABLE IN UNIT DUCT.
- CONNECT PROPOSED CABLE TO EXISTING HIGH INTENSITY RUNWAY 2-20 LIGHT AT THIS FIXTURE. REMOVE EXISTING WIRE FROM BASE. PER NOTE 9.
- 2/C, #8, 5 KV TYPE C CABLE IN UNIT DUCT FOR FUTURE TAXIWAY E NORTH CIRCUIT. INSTALL THIS CABLE BETWEEN HANDHOLE 1 AND HANDHOLE 2.
- DISCONNECT AND REMOVE EXISTING RUNWAY 2-20 LIGHTING CABLE PORTION INSIDE LIGHT BASES. REMAINDER OF UNDERGROUND SHALL BE ABANDONED IN PLACE.
- DISCONNECT AND REMOVE EXISTING HIGH INTENSITY RUNWAY LIGHT AND BASE. DELIVER TO AIRPORT MAINTENANCE DEPT.
- 158 L.F. OF ONE-WAY 4" STEEL DUCT DIRECT-BORED UNDER EXISTING PAVEMENT.
- LOCATE EXISTING UNDERGROUND CABLE IN THIS AREA AND AVOID DAMAGE TO SAME.
- TERMINATE TAXIWAY E SOUTH AND E NORTH CABLE PAIRS IN THIS HANDHOLE AND CAP-OFF FOR FUTURE USE AFTER TEMPORARY TESTING OF CIRCUIT E SOUTH.
- CONNECT TEMPORARY TEST CABLE TO EXISTING CIRCUIT C SOUTH TAXIWAY LIGHT FIXTURE SHOWN. AT CONCLUSION OF TEST REMOVE CABLE BACK TO HANDHOLE 2 AND REPLACE C SOUTH LAMPS REMOVED.

SIGN SCHEDULE LEGEND

R = WHITE LTR/RED BACKGROUND - HOLDING SIGN
Y = BLACK LTR/YELLOW BACKGROUND - DIRECTION OR DESTINATION SIGN
L = YELLOW LTR/BLACK BACKGROUND - TAXIWAY LOCATION SIGN
A = SIGN FACE A
B = SIGN FACE B - IF NOT SHOWN, THIS FACE SHALL REMAIN BLANK

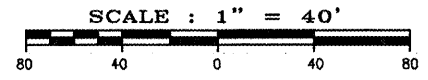
SIGN NOTES

- ALL ARROWS ARE HORIZONTAL
- ALL SIGNS SHALL BE TYPE L858, SIZE 1, STYLE 2, CLASS 1.

SIGN SCHEDULE				
SIGN NO.	SIDE	R/Y/L/W	LEGEND	REMARKS
78	A	Y	→ E →	
79	A	Y	→ E1 →	
80	A	L/R	E1 20-2	
	B	L	E1	
81	A	Y	→ E1 →	

LEGEND

- ⊗ EXISTING HIRL - TO BE REMOVED
- ⊗ EXISTING HIRL - TO BE ADJUSTED AS NOTED
- EXISTING MITL
- PROPOSED MITL - STAKE MOUNTED
- PROPOSED MITL - BASE MOUNTED
- PROPOSED TAXI GUIDANCE SIGN - "A", "B" DESIGNATE LEGENDS PER SCHEDULE
- ⊠ PROPOSED HANDHOLE
- PROPOSED DUCT
- - - PROPOSED UNDERGROUND ELECTRICAL
- - - EXISTING UNDERGROUND ELECTRICAL



ILLINOIS PROJECT NO. MWA-3562
PROJECT NO. 3-17-0065-

STATE OF ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-004515

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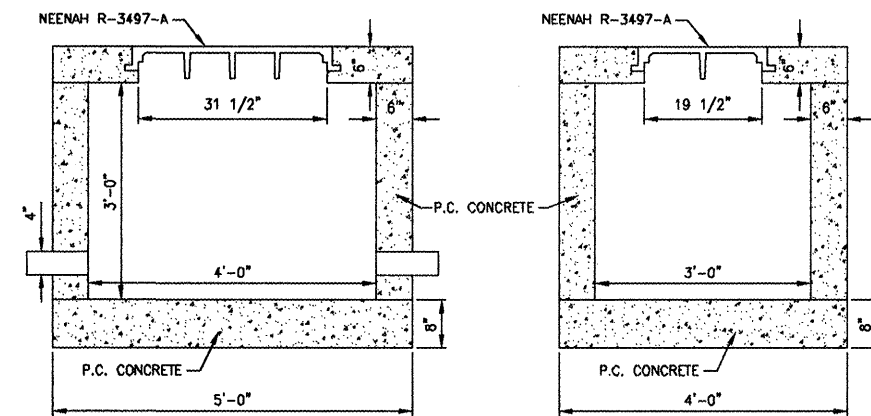
ELECTRICAL PLAN
CONSTRUCTION OF TAXIWAY E & E1 PHASE I
WILLIAMSON COUNTY REGIONAL AIRPORT
MARION - HERRIN, ILLINOIS

Date 3/12/08 DR. By TDE CK'D By CM
Scale 1"=40' Job No. 07141 Sheet No. 13 of 15

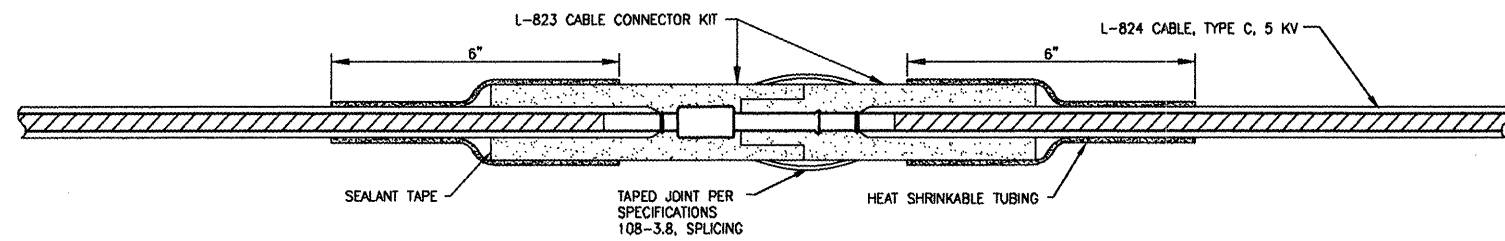
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CABLE SPlicing NOTES:

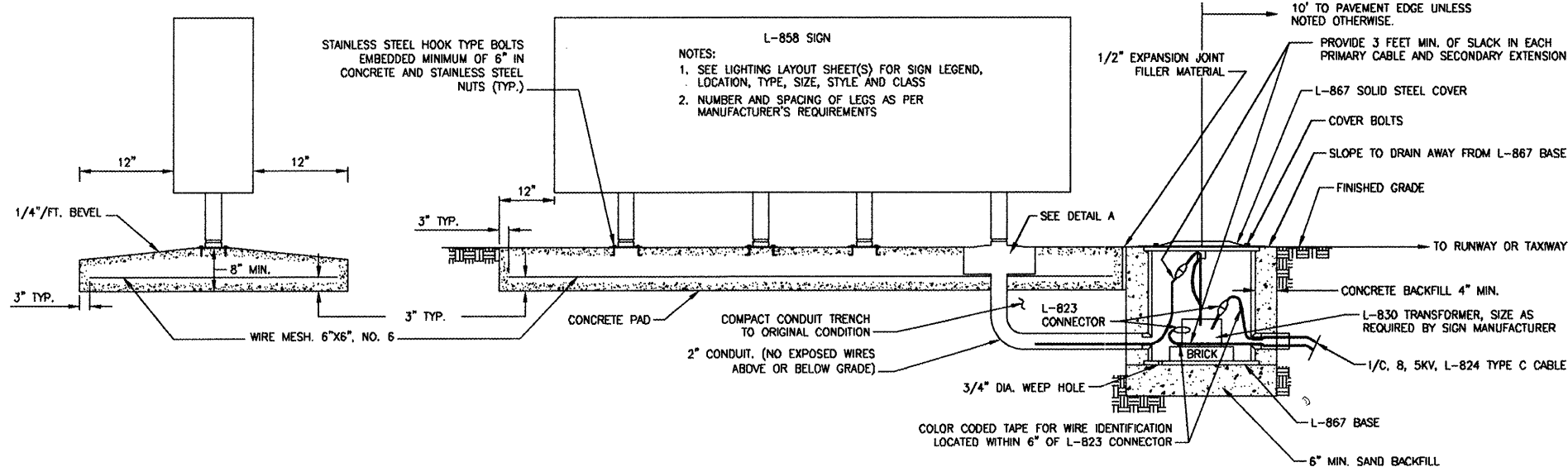
1. HEAT-SHRINKABLE TUBING WILL NOT BE REQUIRED FOR ISOLATION TRANSFORMER PRIMARY CONNECTORS WHICH ARE MOLDED ON TO THE CABLE LEADS AT THE FACTORY.
2. THE SEALANT TAPE AROUND THE CONNECTOR SHALL BE WATER INSOLUBLE, MAINTAINING ELASTICITY OVER WIDE RANGE OF TEMPERATURE, AND SHALL BE RAYCHEM NO. 5-1011 OR APPROVED EQUAL.
3. HEAT-SHRINKABLE TUBING SHALL HAVE MINIMUM EXPANDED I.D. OF 1.200", MAXIMUM RECOVERED I.D. OF .300", MINIMUM EXPANDED WALL THICKNESS OF .04", NOMINAL RECOVERED WALL THICKNESS OF 0.17", A MASTIC WATER SEALANT COATING APPLIED ON THE INSIDE, AND SHALL BE RAYCHEM NO. WCS-300-6-S OR APPROVED EQUAL.
4. MINIMUM LENGTH OF THE HEAT-SHRINKABLE TUBING SHALL BE 6".
5. CLEAN THE CABLE INSULATION BEFORE APPLYING THE TUBING WITH A SOLVENT SPECIFIED BY THE TUBING MANUFACTURER.
6. TO HEAT THE TUBING, USE PROPANE TORCH, OR ELECTRIC HEATER RECOMMENDED BY THE TUBING MANUFACTURER.
7. BEGIN HEATING THE TUBING AT THE CENTER, GO COMPLETELY AROUND, THEN MOVE TOWARD THE ENDS.
8. CONTINUE HEATING THE TUBING UNTIL IT SHRINKS COMPLETELY AND THE SEALANT IS BEING SQUEEZED OUT AT BOTH ENDS.
9. IF THERE IS ANY NOTICEABLE HEAT DAMAGE TO THE CABLE OR THE TUBING, THE CONNECTION, INCLUDING THE DAMAGED PORTION, WILL BE REMOVED AND ANOTHER CONNECTION MADE.
10. ALLOW THE CONNECTION TO COOL BEFORE HANDLING.
11. INSTALL THE CONNECTIONS WITHOUT BENDING THEM.



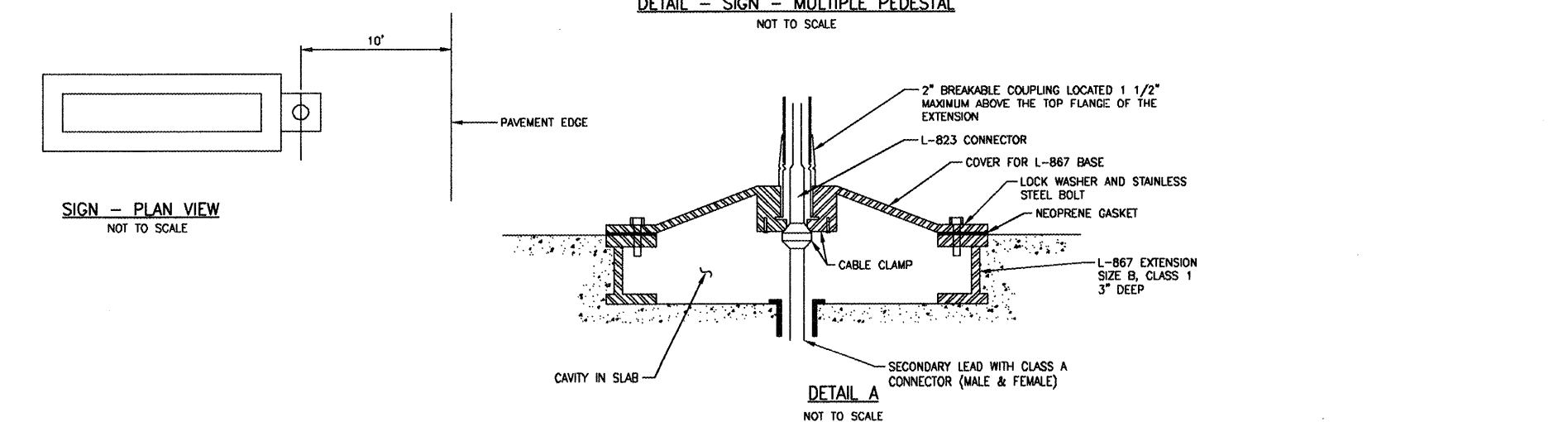
ELECTRICAL HANDHOLE DETAIL
NOT TO SCALE



DETAIL - CABLE SPlicing
NOT TO SCALE

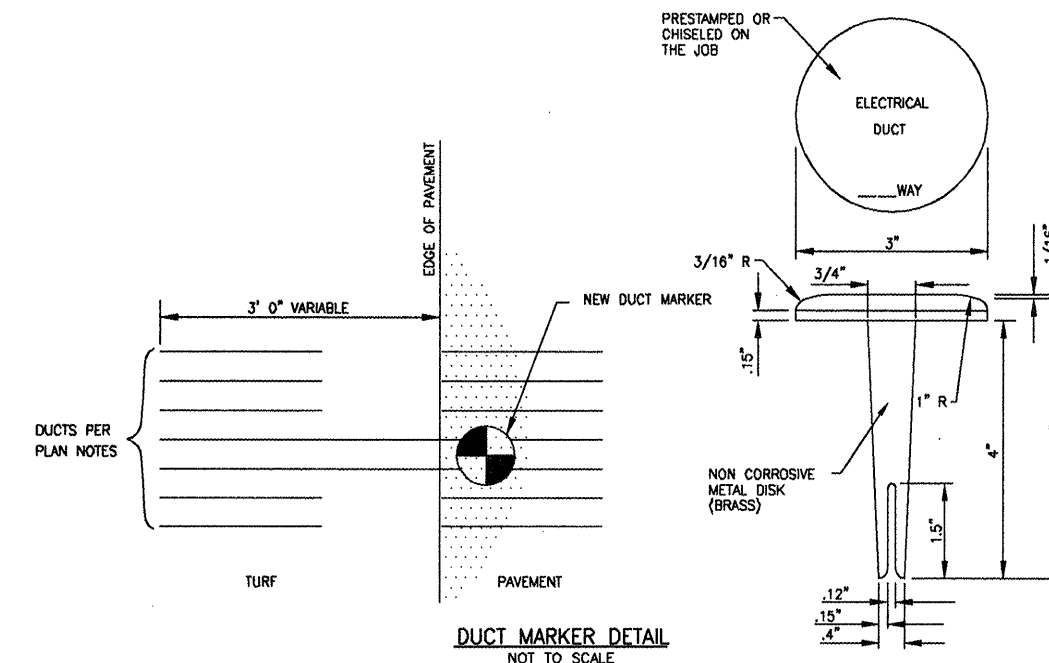


DETAIL - SIGN - MULTIPLE PEDESTAL
NOT TO SCALE

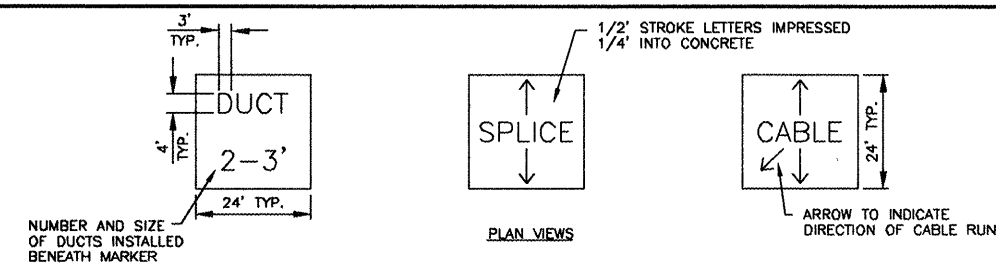


SIGN - PLAN VIEW
NOT TO SCALE

DETAIL A
NOT TO SCALE



DUCT MARKER DETAIL
NOT TO SCALE



CABLE AND DUCT MARKERS
NOT TO SCALE

- NOTES**
1. MARKERS SHALL BE PLACED AS SPECIFIED IN ITEMS 108, 109 & 125 OF THE SPECIFICATIONS.
 2. COST OF CONCRETE MARKERS IS INCIDENTAL TO THE ASSOCIATED ITEMS OF DUCT OR CABLE.
 3. EDGE EXPOSED CONCRETE WITH A 1/4" RADIUS TOOL.
 4. WHERE ADDITIONAL SPACE TO FIT THE LEGEND IS REQUIRED, SOME OF THE FOLLOWING METHODS SHALL BE EMPLOYED.
 - A. REDUCE LETTER SIZE TO 3" HIGH, 2" WIDE.
 - B. INCREASE THE MARKER SIZE TO 30" X 30" MAX.
 - C. PROVIDE ADDITIONAL MARKERS PLACED SIDE BY SIDE.

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ELECTRICAL DETAILS
CONSTRUCTION OF TAXIWAY E & E1 PHASE I
WILLIAMSON COUNTY REGIONAL AIRPORT
MARION - HERRIN, ILLINOIS

REVISIONS	DATE	NO.

Date: 3/12/08 DR. By: TDE CK'D By: CM
Scale: N.T.S. Job No. 07141 Sheet No. 14 of 15

GENERAL ELECTRICAL NOTES

- THE ELECTRICAL INSTALLATION, AS A MINIMUM, SHALL MEET THE NATIONAL ELECTRICAL CODE AND LOCAL REGULATIONS.
- COLOR CODE ALL PHASE WIRING BY THE USE OF COLORED WIRE INSULATION AND/OR COLORED TAPE. WHERE TAPE IS USED, THE WIRE INSULATION SHALL BE BLACK. BLACK AND RED SHALL BE USED FOR SINGLE PHASE, THREE WIRE SYSTEMS, AND BLACK, RED AND BLUE SHALL BE USED FOR THREE PHASE SYSTEMS. NEUTRAL CONDUCTORS SIZE NO. 6 AWG OR SMALLER SHALL BE IDENTIFIED BY A CONTINUOUS WHITE OR NATURAL GRAY OUTER FINISH ALONG ITS ENTIRE LENGTH. NEUTRAL CONDUCTORS SIZE LARGER THAN NO. 6 SHALL BE IDENTIFIED EITHER BY A CONTINUOUS WHITE OR NATURAL GRAY OUTER FINISH ALONG ITS ENTIRE LENGTH OR BY THE USE OF WHITE TAPE AT ITS TERMINATIONS AND INSIDE ACCESSIBLE ENCLOSURES.
- ALL BRANCH CIRCUIT CONDUCTORS CONNECTED TO A PARTICULAR PHASE SHALL BE IDENTIFIED WITH THE SAME COLOR. THE COLOR CODING SHALL BE EXTENDED TO THE POINT OF UTILIZATION.
- NEATLY LACE WIRING IN DISTRIBUTION PANELS, SWITCHES AND JUNCTION/PULL BOXES.
- SCHEDULE 40 RIGID STEEL CONDUIT (RMC) SHALL BE USED THROUGHOUT THE INSTALLATION UNLESS OTHERWISE SPECIFIED.
- ALL STEEL CONDUITS, FITTINGS, NUTS, BOLTS, ETC., SHALL BE GALVANIZED.
- USE INSULATED CONDUIT BUSHINGS AT EACH CONDUIT TERMINATION.
- USE DOUBLE LOCK NUTS AT EACH CONDUIT TERMINATION.
- UNLESS OTHERWISE NOTED, ALL UNDERGROUND FIELD POWER MULTIPLE AND SERIES CIRCUIT CONDUCTORS SHALL BE FAA APPROVED L-824, TYPE, INSULATION, VOLTAGE AND SIZE SHALL BE AS SPECIFIED.
- THE JOINT OF THE PRIMARY L-823 PRIMARY CONNECTORS SHALL BE WRAPPED 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 THE JOINT. HEAT-SHRINK TUBING SHALL BE APPLIED WHERE CABLE ENTERS BACK OF CONNECTOR, SEE DETAIL DWG., SHEET 14.
- THE ID OF THE PRIMARY L-823 FIELD ATTACHED CONNECTORS SHALL MATCH THE CABLE OD TO PROVIDE A WATERTIGHT CABLE ENTRANCE.
- ALL POWER CIRCUIT CONDUCTORS SHALL BE COPPER, ALUMINUM SHALL NOT BE ACCEPTED. THIS INCLUDES WIRE, CABLE, BUSSES, TERMINALS, SWITCH/PANEL COMPONENTS, ETC.
- CABLE/SPLICE/DUCT MARKERS SHALL BE PRECAST CONCRETE OF SIZE SHOWN. LETTERS/NUMBERS FOR THE LEGEND TO BE IMPRESSED INTO TOPS OF THE MARKERS SHALL BE PREASSEMBLED AND SECURED IN MOLD BEFORE CONCRETE IS POURED. LEGEND INSCRIBED BY HAND IN WET CONCRETE SHALL NOT BE ACCEPTABLE.
- THE CONTRACTOR SHALL ASCERTAIN THAT ALL LIGHTING SYSTEM COMPONENTS FURNISHED BY HIM (INCLUDING FAA APPROVED EQUIPMENT) ARE COMPATIBLE IN ALL RESPECTS WITH EACH OTHER AND REMAINDER OF THE NEW/EXISTING SYSTEM. ANY NONCOMPATIBLE COMPONENTS FURNISHED BY THIS CONTRACTOR SHALL BE REPLACED BY HIM AT NO ADDITIONAL COST TO THE AIRPORT SPONSOR WITH A SIMILAR UNIT, APPROVED BY THE ENGINEER (DIFFERENT MODEL OF DIFFERENT MANUFACTURER) THAT IS COMPATIBLE WITH THE REMAINDER OF THE AIRPORT LIGHTING SYSTEM.
- IN CASE THE CONTRACTOR SELECTS TO FURNISH AND INSTALL AIRPORT LIGHTING EQUIPMENT REQUIRING ADDITIONAL WIRING, TRANSFORMERS, ADAPTERS, MOUNTINGS, ETC., TO THOSE SHOWN ON THE DRAWINGS AND/OR LISTED IN THE SPECIFICATIONS, ANY COST FOR THESE ITEMS SHALL BE INCIDENTAL TO THE EQUIPMENT COST.
- THE CONTRACTOR INSTALLED EQUIPMENT (INCLUDING FAA APPROVED) SHALL NOT GENERATE ANY ELECTRO-MAGNETIC INTERFERENCE IN THE EXISTING AND/OR NEW COMMUNICATIONS, WEATHER, AND AIR TRAFFIC CONTROL EQUIPMENT. ANY EQUIPMENT GENERATING SUCH INTERFERENCE SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST BY EQUIPMENT MEETING THE APPLICABLE SPECIFICATIONS AND NOT GENERATING ANY INTERFERENCE.
- WHERE EXISTING FIELD LIGHTS ARE TO BE REMOVED, THE AREA SHALL BE BACKFILLED WITH EARTH TO THE ORIGINAL GRADE, COMPACTED AND SEEDED. CONCRETE BASES SHALL BECOME CONTRACTOR SALVAGE AND SHALL BE REMOVED FROM THE PREMISES ENTIRELY. LIGHTS SHALL BE DELIVERED TO OWNER.
- WHERE PROPOSED LIGHTS OR SIGNS ARE SHOWN IN THE SAME LOCATION AS EXISTING LIGHTS OR SIGNS, CONTRACTOR SHALL REMOVE THE EXISTING WIRING TO AT LEAST ONE FOOT AWAY FROM PROPOSED WIRING.
- CONTRACTOR SHALL LOCATE EXISTING UNDERGROUND CIRCUITS WITH A PORTABLE CABLE LOCATOR WHERE POSSIBLE TO AVOID DAMAGE TO EXISTING CIRCUITS TO BE RETAINED. EXCAVATION REQUIRED IN CONGESTED AREAS CONTAINING OTHER CIRCUITS SHALL BE DONE BY HAND. ANY SUCH WIRING DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED IMMEDIATELY AFTER DISCOVERY AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED. ALL UNDERGROUND SPLICES SHALL BE INSPECTED BY THE ENGINEER PRIOR TO BACKFILLING TRENCHES.
- SHOP DRAWINGS SHALL BE REQUIRED FOR THE FOLLOWING ITEMS:
CABLE IN UNIT DUCT, FIELD LIGHTS, LAMPS, SPLICE CANS, FIELD LIGHT MODIFICATIONS, AND CABLE CONNECTORS.
- A MINIMUM OF FOUR HOURS SHALL BE PROVIDED FOR TRAINING AIRPORT MAINTENANCE PERSONNEL ON THE PROPOSED AIRFIELD LIGHTING SYSTEMS.

ADDITIONAL ITEM 108 SPECIAL PROVISION:

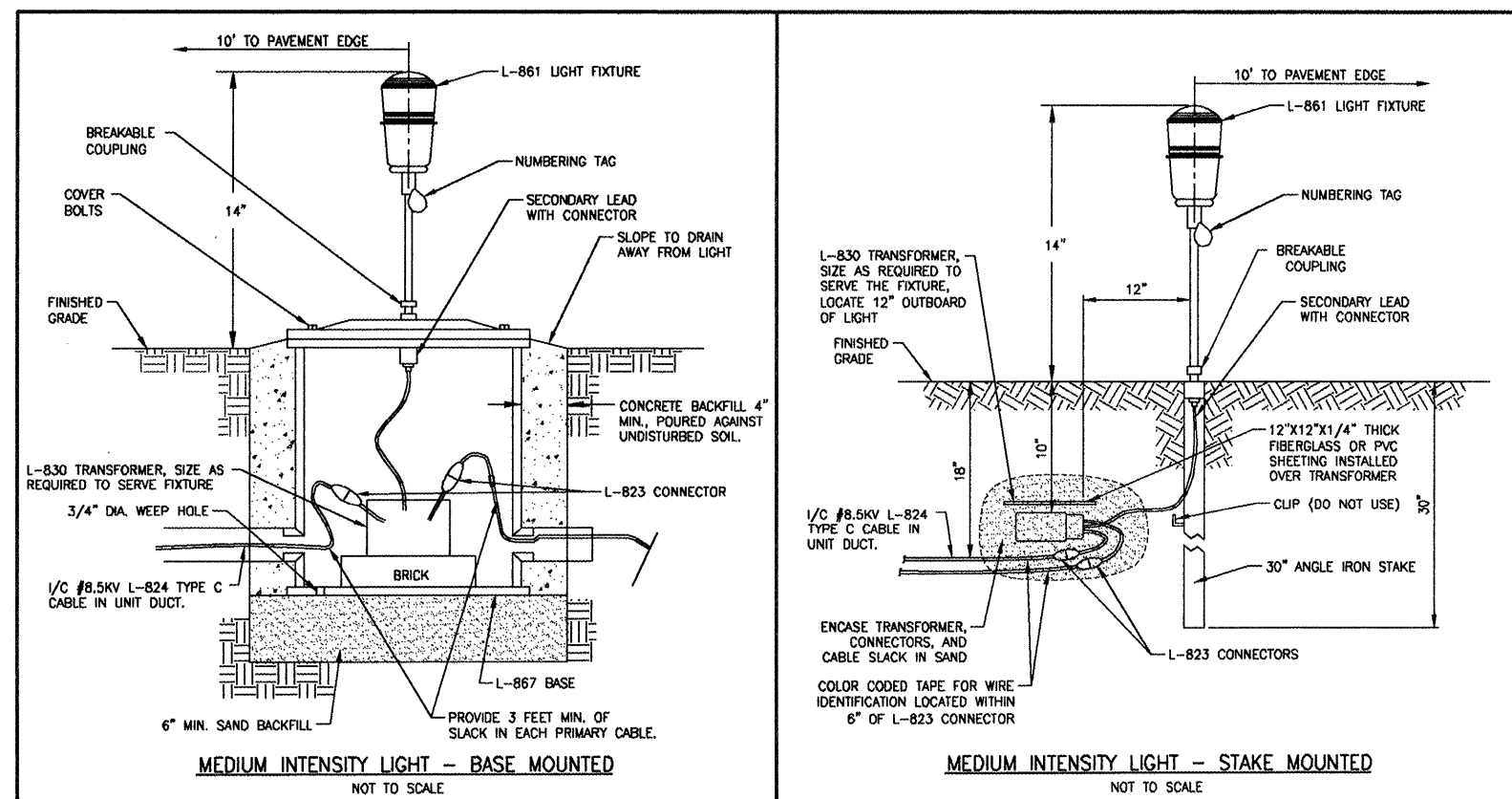
- CABLE TESTING SHALL BE PERFORMED WITH A 5000 VOLT DC MEGOHM METER.
- A WRITTEN REPORT OF THE CABLE TESTING RESULTS LISTING THE SEGMENTS TESTED AND THE VALUES MEASURED SHALL BE SUBMITTED TO THE ENGINEER WITHIN 24 HOURS OF THE TEST.

ADDITIONAL ITEM 125 SPECIAL PROVISIONS:

- TAXIWAY EDGE LIGHTS SHALL BE FAA TYPE L-861T, OMNIDIRECTIONAL BLUE LENS, MEDIUM INTENSITY WITH 30 WATT LAMPS, BASE MOUNTED WITH AN OVERALL HEIGHT NOT TO EXCEED 14", AND CONNECTED FOR 6.8 AMPERES APPLICATION.
- PROPOSED TAXIWAY GUIDANCE, INTERSECTION, LOCATION, AND DESTINATION SIGNS; AND MODIFICATIONS TO EXISTING SIGNS SHALL CONFORM TO THE FOLLOWING:
 - PROPOSED GUIDANCE, HOLDING, LOCATION, OR DESTINATION SIGNS SHALL BE SIZE 1, 18 INCH SIGN FACE WITH 12 INCH LEGEND, STYLE 2, POWERED FROM 4.8 TO 6.6 AMP SERIES LIGHTING CIRCUIT; CLASS 1, FOR OPERATION TO -20 DEGREE C., MEDIUM INTENSITY, BASE MOUNTED WITH LEGENDS AS SHOWN ON THE PLANS. SIGNS SHALL BE DOUBLE FACE WITH ALL OR A PORTION OF ONE FACE BLANKED OUT. HOLDING SIGNS SHALL DISPLAY LOCATION LEGENDS ON THE BACK SIDE. SIGNS ARE ORIENTED ON THE PLANS AS THEY SHOULD BE INSTALLED.
 - FOR SIZE 1, STYLE 2 OPERATION, SIGNS SHALL BE LIGHTED WITH QUARTZ LAMPS. MAXIMUM VOLT/AMPERE LOADING, AND MINIMUM POWER FACTOR FOR THESE SIGNS, INCLUDING ISOLATION TRANSFORMERS, SHALL BE AS FOLLOWS. DOCUMENTATION VERIFYING THESE VALUES SHALL BE PROVIDED ALONG WITH ORIGINAL PRODUCT SHOP DRAWINGS.

MAXIMUM SIGN LENGTH	V.A. LOAD	POWER FACTOR
2.5'	68	.88
5.0'	77	.98
7.5'	114	.88
10.0'	140	.87
 - PROPOSED TAXIWAY GUIDANCE LEGENDS SHALL BE TYPE L-858Y, INFORMATION SIGNS WITH BLACK LEGEND ON A YELLOW BACKGROUND.
 - PROPOSED TAXIWAY LOCATION LEGENDS SHALL BE TYPE L-858L WITH YELLOW LEGEND ON BLACK BACKGROUND.
 - PROPOSED HOLDING LEGENDS SHALL BE TYPE L-858R WITH WHITE LEGEND ON RED BACKGROUND.

- REMOVE CERTAIN EXISTING TAXIWAY LIGHTS, GUIDANCE SIGNS, BASES, AND TRANSFORMERS WHERE SHOWN ON THE PLANS. BACKFILLING AND RESTORATION OF EXISTING LOCATIONS SHALL BE INCLUDED IN THIS ITEM.
- PRIOR TO INSTALLING THE PROPOSED LIGHT FIXTURES, THE CONTRACTOR WILL APPLY AN OXIDE INHIBITING, ANTI-SEIZING COMPOUND TO ALL SCREWS, NUTS, BREAKABLE COUPLING AND ALL PLACES WHERE METAL COMES INTO CONTACT WITH METAL. THE ANTI-SEIZE COMPOUND WILL BE AS MANUFACTURED BY I.T.I. BRAND NAME "CONTAX" OR AN APPROVED EQUAL.
- ALL L-867 BASE PLATE MOUNTING BOLTS AND STAKE MOUNTING BOLTS SHALL BE STAINLESS STEEL.



ILLINOIS PROJECT NO. MWA-3562
PROJECT NO. 3-17-0065-

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