

CONSTRUCTION PLANS - ISSUED JANUARY 12, 2018

RECONSTRUCT T-HANGAR TAXIWAY PAVEMENT WITH PCC AND CORRECT DRAINAGE ISSUES ADJACENT TO THE SOUTH END OF THE MAIN RAMP

ST. LOUIS REGIONAL AIRPORT AUTHORITY
ST. LOUIS REGIONAL AIRPORT (ALN)
EAST ALTON, MADISON COUNTY, ILLINOIS

IDA PROJECT NO. : ALN-4587
SBG PROJECT NO. : 3-17-SBGP-139

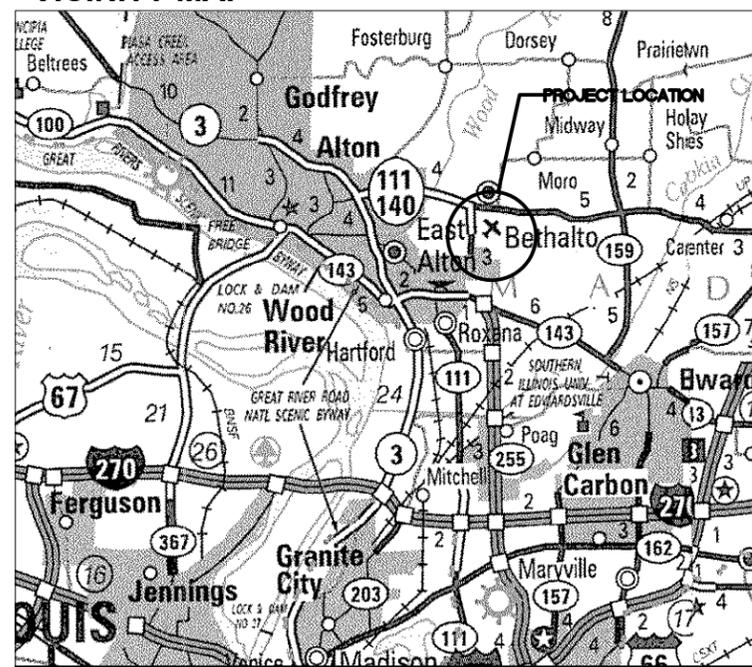
SCOPE OF WORK:

THIS PROJECT CONSISTS OF RECONSTRUCTING THE T-HANGAR TAXIWAY PAVEMENT NEAR THE SOUTHEAST AREA OF THE MAIN RAMP. THIS PROJECT WILL INCLUDE BITUMINOUS PAVEMENT REMOVAL, CONSTRUCTION OF NEW PCC PAVEMENT, AND DRAINAGE IMPROVEMENTS.

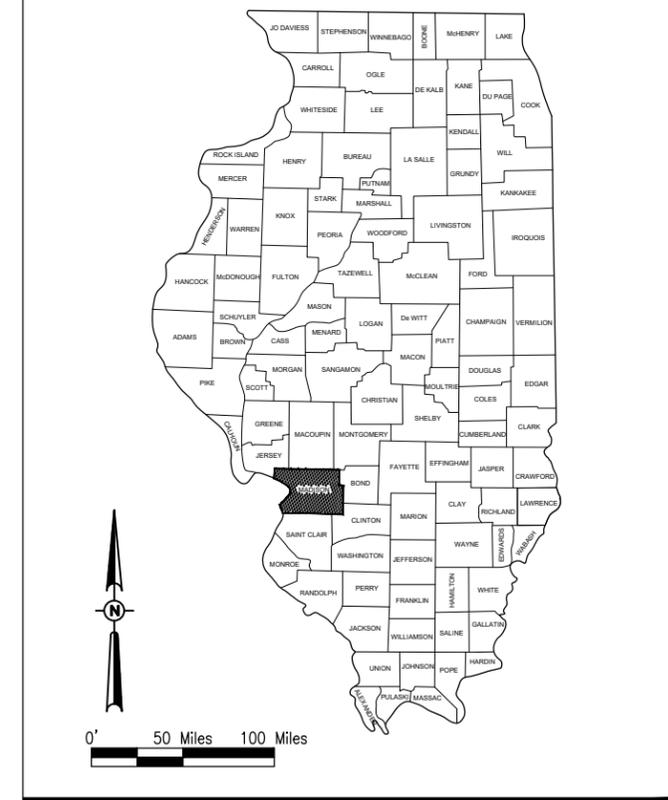
NOTICE TO CONTRACTORS AND BIDDERS

THESE CONSTRUCTION PLANS RELY UPON THE SPECIAL PROVISIONS AND THE SPECIFICATIONS TO PROVIDE FOR A COMPLETE DESCRIPTION OF THE WORK AND CONSTRUCTION REQUIREMENTS. THE PLANS SHALL ONLY BE USED IN COMBINATION WITH ALL CONTRACT DOCUMENTS.

VICINITY MAP



LOCATION MAP



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No.	Issue/Description	Sheets Changed	Date	By

EXP. 11-30-19

1-11-18

Barry S. Stolz, P.E.
Project Manager

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David C. Miller
David C. Miller
Director of Aviation
1/10/18
Date



RECONSTRUCT
T-HANGAR TAXIWAY
PAVEMENT WITH PCC
AND CORRECT DRAINAGE
ISSUES ADJACENT TO
THE SOUTH END OF THE
MAIN RAMP

IDA No: ALN-4587

Contract No. SR091

NO.	DATE	DESCRIPTION		
		DES	DWN	REV

ISSUE: JANUARY 12, 2018

PROJECT NO: 17A0014

CAD FILE: G-004-SFY.DWG

DESIGN BY: JRH 12/04/2017

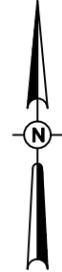
DRAWN BY: JRH 12/04/2017

REVIEWED BY: BSS 01/10/18

SHEET TITLE

PROPOSED SAFETY
PLAN

REGIONAL GROUND FREQUENCY = 120.20



0' 100' 200' 400'
HALF SIZE SCALE: 1" = 400'
FULL SIZE SCALE: 1" = 200'

LEGEND

- EXISTING IMPROVEMENTS
- PROPOSED IMPROVEMENTS
- EXISTING BUILDINGS
- PROPOSED HAUL ROUTE
- PROPOSED EQUIPMENT PARKING/STAGING AREA
- EXISTING FENCE
- PROPOSED BARRICADES
- CONSTRUCTION SIGN

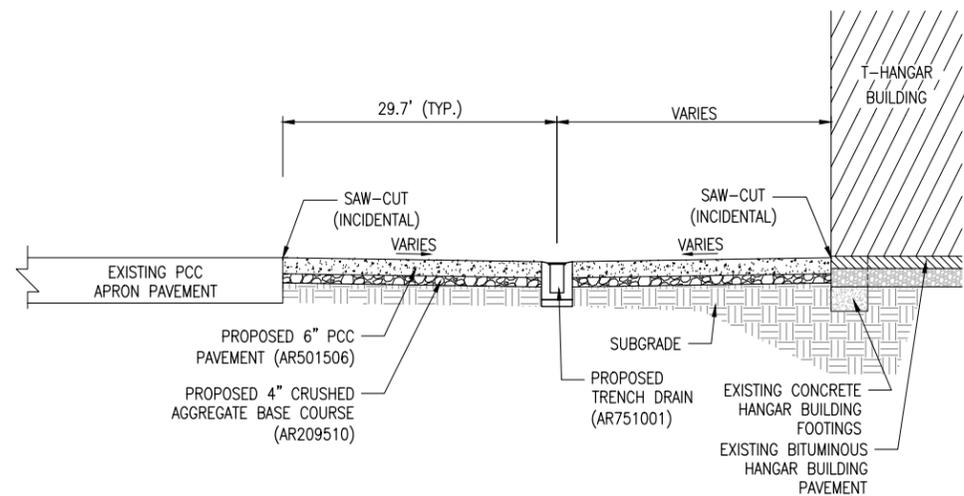
SAFETY PLAN NOTES

- CONTRACTOR SHALL PROTECT T-HANGAR BUILDINGS, DOORS, FLOORS AND CONTENTS AT ALL TIMES DURING CONSTRUCTION.
- AIRPORT SECURITY SHALL BE MAINTAINED THROUGHOUT THE PROJECT. THE CONTRACTOR SHALL BE RESTRICTED TO THE DESIGNATED WORK AREAS. THE CONTRACTOR SHALL ENSURE THAT ACCESS POINTS USED BY CONSTRUCTION VEHICLES AND PERSONNEL ARE MONITORED WHEN OPEN AND LOCKED WHEN NOT IN USE TO PREVENT UNAUTHORIZED ACCESS TO THE AIRPORT MOVEMENT AREA.
- BARRICADES SHALL BE IN PLACE PRIOR TO BEGINNING CONSTRUCTION.
- AT THE COMPLETION OF ALL CONSTRUCTION, THE HAUL ROUTE AND CONSTRUCTION EQUIPMENT PARKING AREA SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS PER THE SPECIFICATIONS.
- THE COSTS FOR PROVISION, PLACEMENT, MAINTENANCE AND REMOVAL OF BARRICADES AND ALL ASSOCIATED INCIDENTALS SHALL BE PAID FOR UNDER ITEM AR150520 MOBILIZATION.
- THE COSTS FOR CONSTRUCTION, MAINTENANCE OF ACCESS GATE, HAUL ROUTE AND EQUIPMENT STAGING AREA, TEMPORARY SIGNAGE AND ALL ASSOCIATED INCIDENTALS SHALL BE PAID FOR UNDER ITEM AR150540 HAUL ROUTE.

SAFETY PLAN COMPLIANCE DOCUMENT

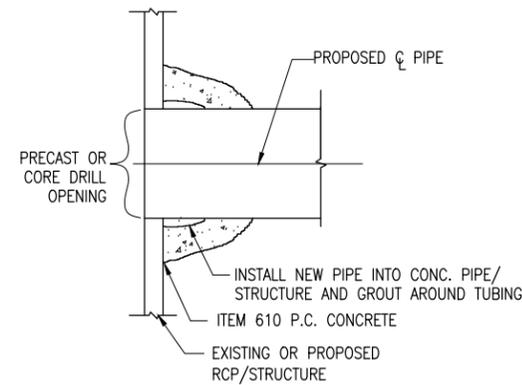
PRIOR TO THE ISSUANCE OF A CONSTRUCTION NOTICE-TO-PROCEED (NTP), THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING AND SUBMITTING A SAFETY PLAN COMPLIANCE DOCUMENT IN ACCORDANCE WITH FAA ADVISORY CIRCULAR 150/5370-2G, PARAGRAPH 2.4.2, OR EQUIVALENT SECTION IN SUBSEQUENT/CURRENT ISSUE. THE AIRPORT DIRECTOR SHALL APPROVE THIS DOCUMENT AND SUBMIT TO THE DIVISION OF AERONAUTICS FOR APPROVAL PRIOR TO THE NTP ISSUANCE.

CRITICAL POINT DATA					
DESCRIPTION	LATITUDE	LONGITUDE	GROUND ELEV.	EQUIP. HEIGHT	EQUIP. ELEV.
CRITICAL POINT 1	N038°53'23.98"	W090°03'14.54"	540.0'	25'	565.0'
CRITICAL POINT 2	N038°53'16.55"	W090°03'16.81"	544.0'	25'	569.0'



TYPICAL SECTION - PROPOSED T-HANGAR TAXIWAY
NOT TO SCALE

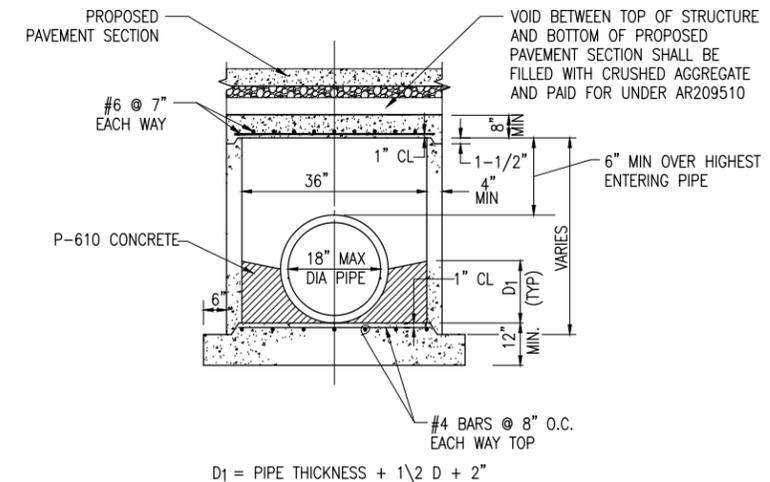
NOTE
CONTRACTOR MAY ELECT TO ADJUST CONSTRUCTION LIMITS TO 1 FOOT OUTSIDE OF THE HANGAR DOORS TO FACILITATE CONSTRUCTION WITH NO ADDITIONAL COST TO THE CONTRACT.



CONCRETE COLLAR AND GROUT CONNECTION

NOT TO SCALE

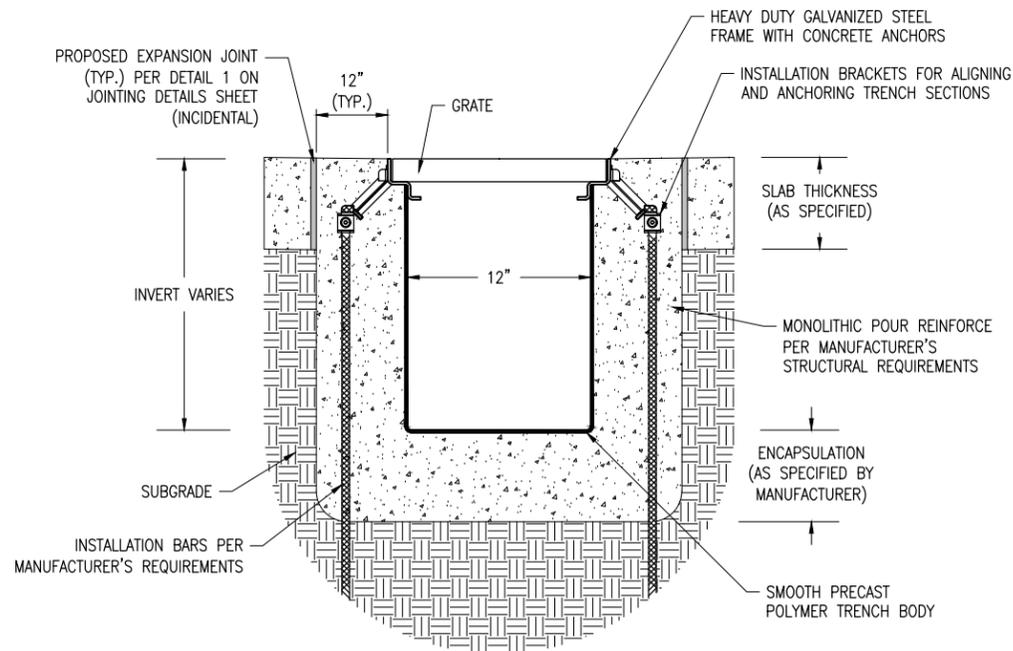
NOTE: CONNECTION IS INCIDENTAL TO PIPE.



SPECIAL JUNCTION STRUCTURE

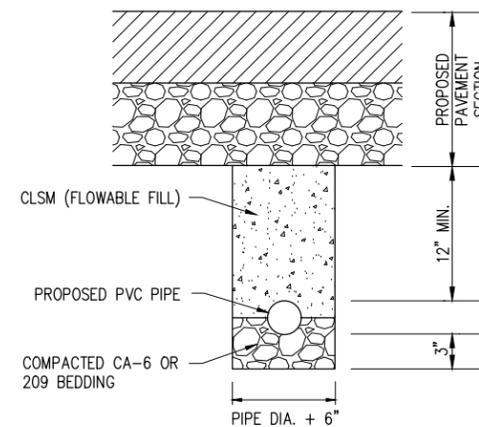
NOT TO SCALE

$D_1 = \text{PIPE THICKNESS} + 1\frac{1}{2} D + 2"$



TRENCH DRAIN TYPICAL SECTION A-A
NOT TO SCALE

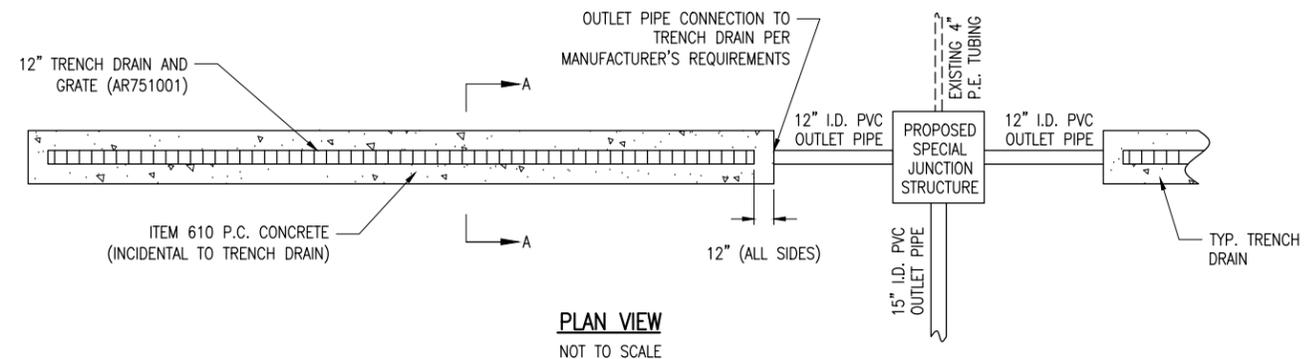
- NOTES**
- STANDARD SLOPE IS 1.0% UNLESS OTHERWISE SPECIFIED
 - REINFORCE ACCORDING TO MANUFACTURER'S STRUCTURAL REQUIREMENTS
 - TRENCH DRAIN MUST BE 1/8" BELOW FINISHED CONCRETE GRADE



PIPE TRENCH DETAIL
NOT TO SCALE

PIPE TRENCH NOTES:

- COST OF ALL WORK ASSOCIATED WITH THIS DETAIL SHALL BE INCLUDED IN COST OF PAY ITEM FOR RESPECTIVE PIPE.
- CLSM (CONTROLLED LOW STRENGTH MATERIAL) SHALL MEET ALL REQUIREMENTS IN IDOT APPROVED DESIGN AS SET FORTH IN THE CURRENT IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.



PLAN VIEW
NOT TO SCALE

TRENCH DRAIN NOTES:

- FOR TRENCH DRAIN LOCATION AND INVERT ELEVATIONS, SEE CONSTRUCTION PLAN.
- TRENCH DRAIN ACCESSORIES, TO INCLUDE BUT NOT LIMITED TO, CHANNEL FRAMES, COUPLERS, AND ADAPTERS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND INCIDENTAL TO TRENCH DRAIN.

RECONSTRUCT
T-HANGAR TAXIWAY
PAVEMENT WITH PCC
AND CORRECT DRAINAGE
ISSUES ADJACENT TO
THE SOUTH END OF THE
MAIN RAMP

IDA No: ALN-4587

Contract No. SR091

NO.	DATE	DESCRIPTION		
		DES	DWN	REV

ISSUE: JANUARY 12, 2018
PROJECT NO: 17A0014
CAD FILE: C-302-TYP.DWG
DESIGN BY: JRH 12/07/2017
DRAWN BY: JRH 12/07/2017
REVIEWED BY: BSS 01/10/18

SHEET TITLE

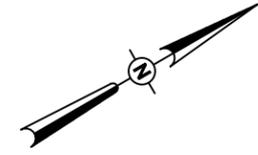
TYPICAL SECTIONS

NOTES

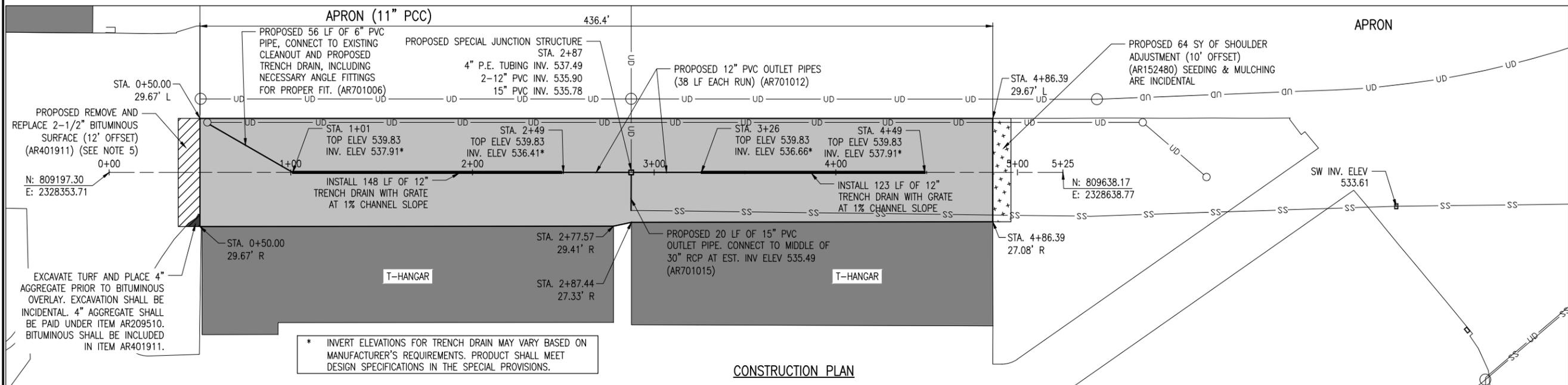
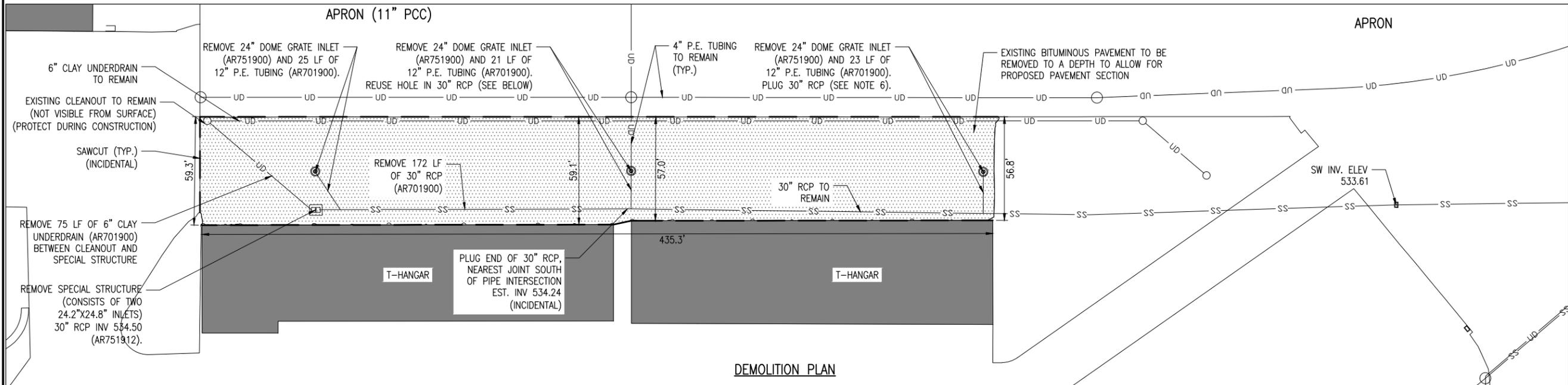
- EXISTING T-HANGAR TAXIWAY PAVEMENT SECTION IS APPROX. 2-3/8" ASPHALT ON 10" CRUSHED AGGREGATE. DEPTH OF PAVEMENT REMOVAL SHALL ACCOMMODATE PROPOSED PAVEMENT DEPTH/ELEVATIONS.
- PROPOSED T-HANGAR TAXIWAY PAVEMENT SECTION IS 6" PCC ON 4" CRUSHED AGGREGATE.
- CONTRACTOR SHALL PROTECT T-HANGAR BUILDINGS, DOORS, FLOORS AND CONTENTS AT ALL TIMES DURING CONSTRUCTION.
- CONTRACTOR MAY ELECT TO ADJUST CONSTRUCTION LIMITS TO 1 FOOT OUTSIDE OF THE HANGAR DOORS TO FACILITATE CONSTRUCTION AT NO ADDITIONAL COST TO THE CONTRACT.
- DURING THE BITUMINOUS SURFACE REMOVAL AND REPLACEMENT WORK, THE CONTRACTOR SHALL PROTECT THE PROPOSED PCC PAVEMENT AREA AND EXISTING PAVEMENT TO REMAIN. THE INTENT OF THIS WORK ITEM IS TO REMOVE A SUFFICIENT DEPTH OF PAVEMENT IN ORDER TO PAVE A 2-1/2" DEPTH OF BITUMINOUS SURFACE TO PROPOSED GRADES. IF FOR ANY REASON THE CONTRACTOR REMOVES A GREATER DEPTH, NO ADDITIONAL COMPENSATION WILL BE ALLOWED TO PAVE BACK TO THE PROPOSED GRADES.
- THE COST OF PLUGGING HOLE IN 30" RCP FROM 12" P.E. TUBING REMOVAL WILL BE INCIDENTAL TO ITEM AR701900 - REMOVE PIPE.
- VOIDS LEFT BY REMOVAL OF STRUCTURES AND PIPES WILL BE BACKFILLED TO A DEPTH TO ALLOW FOR PROPOSED PAVEMENT SECTION USING CRUSHED AGGREGATE TO BE PAID UNDER ITEM AR209510.
- EXISTING UNDERDRAINS TO BE ENCOUNTERED WITHIN THE PROJECT AREA MAY CONTAIN SOME AMOUNT OF WATER. THIS HAS NOT BEEN ABLE TO BE VERIFIED AND IS THEREFORE UNKNOWN. THE CONTRACTOR IS EXPECTED TO ANTICIPATE THIS CONDITION AND VERIFY DURING CONSTRUCTION. METHODS OF ALLEVIATING AND CONTROLLING WATER WITHIN THE PROJECT AREA SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE INCLUDED WITHIN THEIR BID AS INCIDENTAL TO OTHER ITEMS.

LEGEND

- EXISTING IMPROVEMENTS
- EXISTING BUILDINGS
- PROPOSED PAVEMENT REMOVAL
- PROPOSED PAVEMENT
- PROPOSED TRENCH DRAIN
- PROPOSED REMOVE AND REPLACE BITUMINOUS SURFACE
- PROPOSED SHOULDER ADJUSTMENT
- PROPOSED SAWCUT
- SS — EXISTING STORM SEWER
- UD — EXISTING UNDERDRAIN
- EXISTING CLEANOUT
- EXISTING INLET



0' 15' 30' 60'
 HALF SIZE SCALE: 1" = 60'
 FULL SIZE SCALE: 1" = 30'



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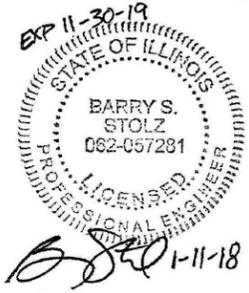
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Illinois Licensed
 Professional Service Corporation
 #184-001084



ST. LOUIS REGIONAL AIRPORT AUTHORITY

ST. LOUIS REGIONAL AIRPORT
 8 TERMINAL DRIVE
 EAST ALTON, ILLINOIS 62024



RECONSTRUCT T-HANGAR TAXIWAY PAVEMENT WITH PCC AND CORRECT DRAINAGE ISSUES ADJACENT TO THE SOUTH END OF THE MAIN RAMP

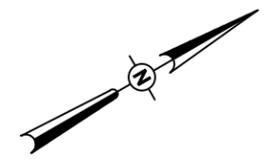
IDA No: ALN-4587
 Contract No. SR091

JOINTING NOTES

- ALL JOINT EDGES SHALL BE SAWCUT TO PRODUCE THE 1/4" CHAMFER.
- ALL LONGITUDINAL AND TRANSVERSE CONTRACTION JOINTS SHALL BE SAWED.
- ALL DOWEL BARS SHALL BE SECURELY HELD IN PLACE BY MEANS OF A DOWEL BAR ASSEMBLY WHICH WILL ENSURE THAT THEY WILL REMAIN PARALLEL TO THE SURFACE OF THE PAVEMENT AND TO THE CENTERLINES OF THE PAVEMENT LANES. THE DOWEL BAR ASSEMBLIES SHALL BE APPROVED BY THE RESIDENT ENGINEER/TECHNICIAN PRIOR TO INSTALLATION.
- DOWEL BARS FOR 6 IN. THICK PAVEMENT SHALL BE 3/4 IN. DIAMETER, 18 IN. LONG AT 12 IN. SPACING.
- DOWELS IN TRANSVERSE CONTRACTION AND LONGITUDINAL CONSTRUCTION JOINTS SHALL BE COATED WITH A RUSTPROOFING COMPOUND AND HALF THE LENGTH GREASED WITH A HEAVY GREASE.
- ALLOWABLE TOLERANCES FOR GROOVE DEPTH WILL BE ±1/8" FOR CONSTRUCTION JOINTS AND ±1/4" FOR CONTRACTION JOINTS.
- THE CONTRACTOR IS REQUIRED TO DRILL AND EPOXY THE PROPOSED DOWELS IN ACCORDANCE WITH THE DETAILS AND SPECIFICATIONS. THE EPOXY MATERIAL MUST BE APPROVED BY THE DIVISION OF AERONAUTICS PRIOR TO USE.
- THE COST OF ALL DOWEL BARS, SAWING AND SEALING SHALL BE INCLUDED IN THE COST OF THE 501 PCC PAVEMENT.
- WHEN CONSTRUCTING "FILL-IN" PAVEMENT LANES THE CONTRACTOR SHALL USE BELTING OR OTHER PROTECTIVE MATERIAL FOR THE PAVING MACHINE TO TRAVEL ON AND WILL PROTECT THE TRANSVERSE JOINTS.
- JOINT SEALANT SHALL BE AS SPECIFIED IN THE STANDARD SPECIFICATIONS ITEM 605.
- CURING COMPOUND SHALL BE AS SPECIFIED IN THE STANDARD SPECIFICATIONS ITEM 501-2.9 AND SHALL BE APPROVED PRIOR TO THE PAVING OPERATION BY THE RESIDENT ENGINEER/TECHNICIAN.
- ALL NON-ALIGNED EDGES WILL BE SAWED FULL DEPTH.

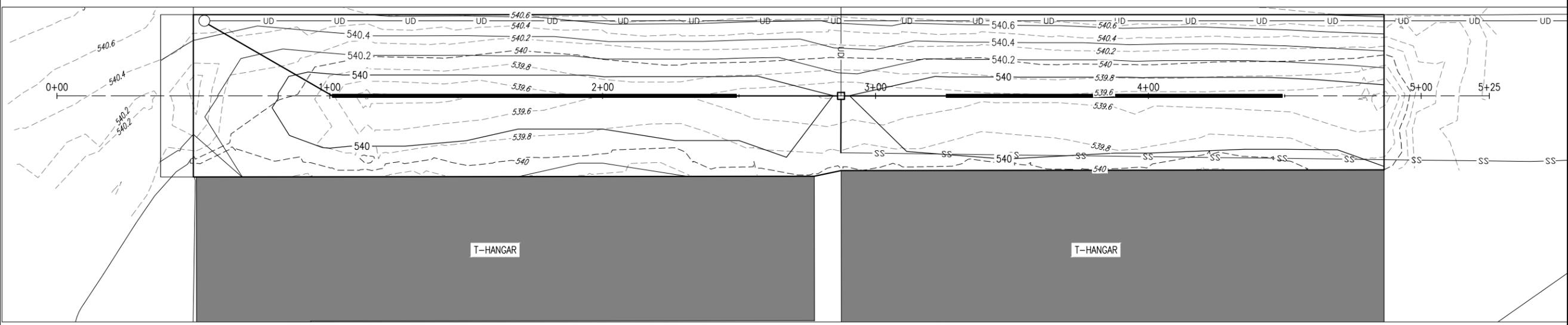
LEGEND

- EXISTING IMPROVEMENTS
- EXISTING BUILDINGS
- PROPOSED PCC PAVEMENT
- ISOLATION JOINT (TYPE A)
- MODIFIED ISOLATION JOINT (TYPE A)
- DOWELED CONTRACTION JOINT (TYPE C)
- DOWELED CONSTRUCTION JOINT (TYPE E)
- DUMMY CONTRACTION JOINT (TYPE D)
- PROPOSED REINFORCED PANEL
- PROPOSED PAVEMENT SPOT ELEVATION

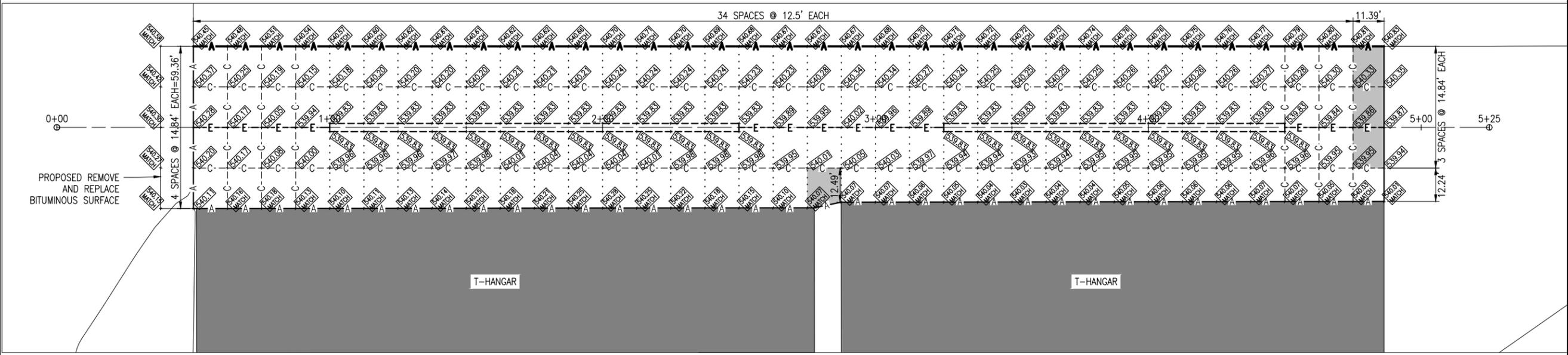


0' 10' 20' 40'
 HALF SIZE SCALE: 1" = 40'
 FULL SIZE SCALE: 1" = 20'

NOTE:
 CONTRACTOR MAY PROPOSE ALTERNATIVE PAVING/JOINTING PLAN FOR ENGINEER'S REVIEW AND APPROVAL FOLLOWING AWARD.



CONTOUR PLAN



JOINTING/STAKING PLAN



Offices Nationwide
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 Springfield, IL 62703
 phone: 217-788-2450
 fax: 217-788-2503

Illinois Licensed
 Professional Service Corporation
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ST. LOUIS REGIONAL AIRPORT AUTHORITY
 ST. LOUIS REGIONAL AIRPORT
 8 TERMINAL DRIVE
 EAST ALTON, ILLINOIS 62024



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Contract No. SR091

NO.	DATE	DESCRIPTION		
		DES	DWN	REV

ISSUE: JANUARY 12, 2018
 PROJECT NO: 17A0014
 CAD FILE: C-161-JNT.DWG
 DESIGN BY: JRH 12/11/2017
 DRAWN BY: JRH 12/11/2017
 REVIEWED BY: BSS 01/10/18

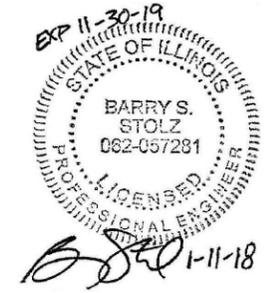
PROPOSED JOINTING AND STAKING PLAN

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ST. LOUIS REGIONAL
AIRPORT AUTHORITY

ST. LOUIS REGIONAL AIRPORT
8 TERMINAL DRIVE
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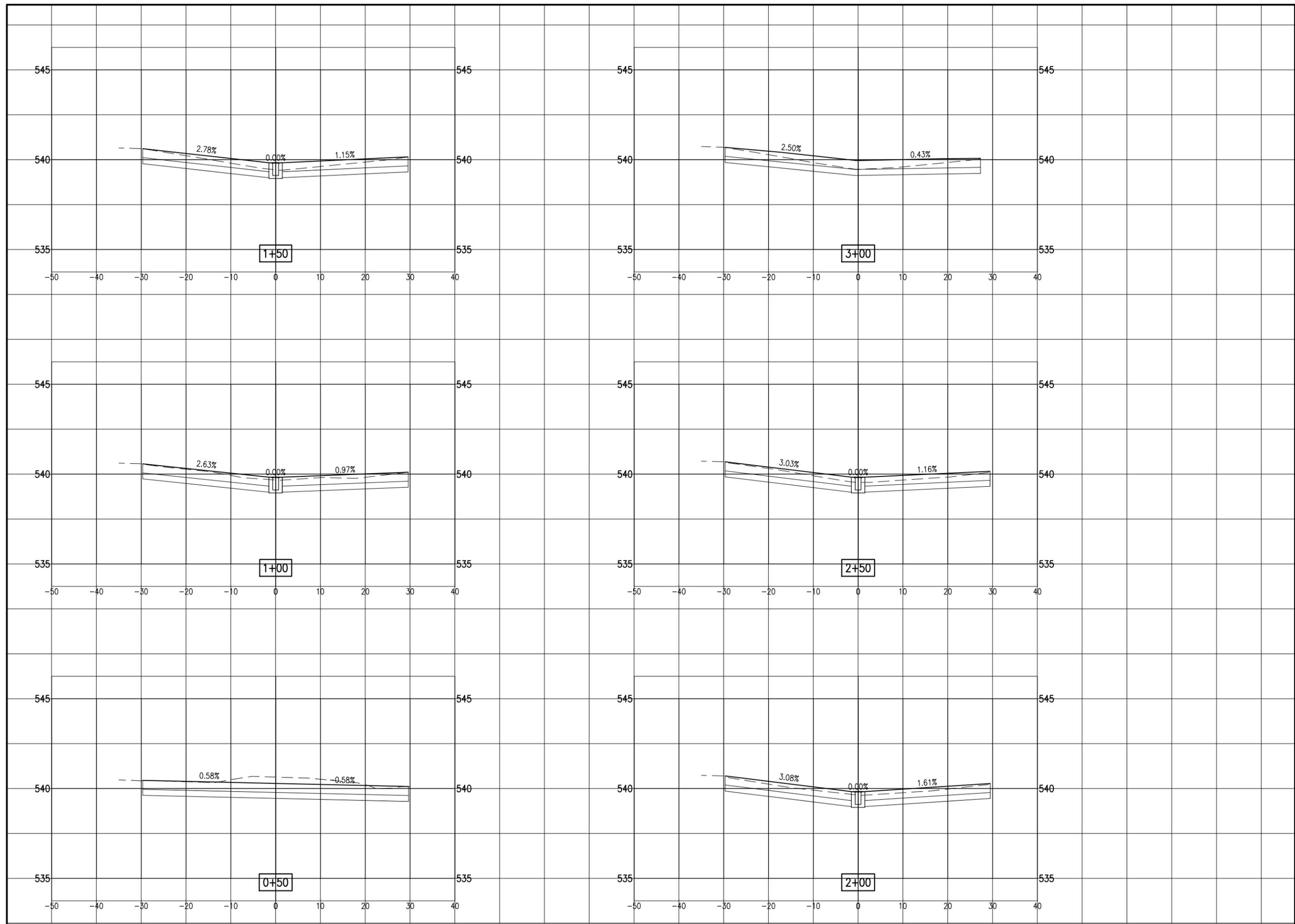
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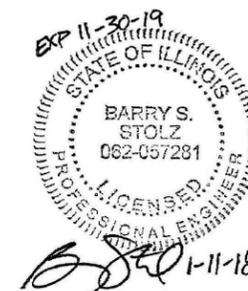
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PROJECT NO: 17A0014
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DRAWN BY: JRH 12/20/2017
REVIEWED BY: BSS 01/10/18

SHEET TITLE

PROPOSED CROSS
SECTIONS STA. 0+50
TO STA. 3+00



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RECONSTRUCT
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CAD FILE: C-301-XS.DWG

DESIGN BY: JRH 12/20/2017

DRAWN BY: JRH 12/20/2017

REVIEWED BY: BSS 01/10/18

SHEET TITLE

PROPOSED CROSS
SECTIONS STA. 3+50
TO STA. 4+86

