ADDENDUM NO. 1 COVER SHEET

08/29/2025

CITY OF ROLLA TAXIWAY A RECONSTRUCTION AND TAXIWAY CONNECTOR REHABILITATION at ROLLA NATIONAL AIRPORT (VIH) VICHY, MO

MoDOT Project # 23-056A-1

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ADDENDUM NO. 1

CITY OF ROLLA TAXIWAY A RECONSTRUCTION AND TAXIWAY CONNECTOR REHABILITATION at ROLLA NATIONAL AIRPORT (VIH) VICHY, MO

MoDOT Project # 23-056A-1

TO: All Plan-holders of Record

The following addendum items supplement, clarify, modify, change, replace, delete from or add to, the requirements of the contract documents for this project. The articles contained in the addendum take precedence over the requirements of the previously published contract documents. Where any article of the contract specifications or any detail of the contract drawings is modified or any paragraph, subparagraph or clause thereof is modified or deleted by the articles contained in this addendum, the unaltered provisions of that article, paragraph, subparagraph or clause shall remain in effect.

PREPARED BY: Woolpert, Inc.

931 Wildwood Drive, Suite 101 Jefferson City, MO 65109

CERTIFIED BY:



Laura Koonce, Project Manager

ADDENDUM BEGINS

PROJECT MANUAL UPDATES

1. Page 8 of 396 – Engineer's Certifications Part 8: FAA Technical Specifications

Revision: Removed specification to Item P-601 Crack Repair.

Justification: Crack repair will now follow the specification outlined in Item P-101, *Preparation and Removal of Existing Pavements*.

Revision: Relocated Items D-705 and D-751 to follow the Item C-110 specification.

Justification: The items were reordered to align with the sequence in which the specifications were attached.

2. Page 11 of 396 – Approximate Quantities of Major Bid Items Table

Revision: Updated quantity for Item P-101b Asphalt Pavement Removal – Partial Depth, Schedule I.

Justification: The revised quantity accounts for the expanded butt joint removal area, extending to the proposed taper limits on Taxiway A.

Revision: Added Item P-101c Joint and Crack Repair to Schedule II.

Justification: Crack repair will be accounted for under new Item P-101c Joint and Crack Repair. This item has been included in case crack repair below mill and fill area is needed. If no crack repair is required, the item will not be performed.

Revision: Corrected quantities for Item P-152a Unclassified Excavation in Schedules II and III.

Justification: The quantity listed under Schedule II was a typo; no earthwork is required for the mill and fill. Additionally, the quantity for Schedule III was previously omitted and has now been included.

Revision: Updated quantity for Item P-208a Aggregate Base Course, 8 Inches in Schedule I.

Justification: The change reflects a reduced overbuild width, resulting from a modification to the depth of the underdrain structure.

Revision: Updated quantity for P-208b Geotextile Fabric in Schedule I.

Justification: The adjustment reflects a reduced overbuild width due to a change in the depth of the underdrain structure.

Revision: Updated quantity for Item P-401a Asphalt Surface Course in Schedules I and II.

Justification: The adjustment reflects an increase in butt joint area along Taxiway A near the apron, and the removal of butt joints at Taxiway B.

Revision: Updated quantity for Item P-603a Bituminous Tack Coat in Schedule I.

Justification: The adjustment accounts for the increased butt joint area along Taxiway A near the apron.

Revision: Updated quantity for Item P-620b Permanent Airport Pavement Marking, Yellow in Schedule I.

Justification: The revision accounts for additional yellow paint needed for runway lead-in lines and taxiway centerlines that will be obliterated or covered during construction.

3. Page 12 of 396 - Approximate Quantities of Major Bid Items Table (Continued)

Revision: Updated quantity for Item D-705b Install 6-Inch Non-Perforated Polyethylene Pipe in Schedule III. *Justification:* The revision accounts for additional outfalls and the increased pipe length needed to reach the appropriate surface elevation for outfall.

Revision: Updated quantity for Item D-751a Install 6-Inch Underdrain Cleanout in Schedule III.

Justification: The revision reflects the replacement of cleanouts with inspection pits.

Revision: Updated quantity for Item D-751b Install 18x18 Inch Inspection Pit in Schedule III.

Justification: The revision reflects the addition of inspection pits that replaced the originally planned cleanouts.

Revision: Added Item T-905a Topsoil.

Justification: Topsoil was not included in the original bid proposal and has now been added.

Revision: Corrected item description for Item L-110a Install 1-2" SCH 40 PVC Conduit, Direct Earth Buried (DBE).

Justification: The abbreviation "DBE" was a typo; the correct abbreviation is "DEB" for Direct Earth Buried.

Revision: Corrected item description for Item L-125c Install L-861T LED Taxiway Edge Light, Complete.

Justification: The next item to come after L-125a should be L-125b. The item labeled as L-125c is a typo.

4. Page 25 of 396 - Sales and Use Taxes

Revision: Updated section regarding the sponsor's tax exemption number.

Justification: The tax exemption number was not included in the original documentation but will be provided after the award.

5. Page 80 of 396 – Schedule I – Taxiway A Reconstruction Bid Proposal Sheet

Revision: Updated quantity for Item P-101b Asphalt Pavement Removal – Partial Depth.

Justification: The revised quantity accounts for the expanded butt joint removal area, extending to the proposed taper limits on Taxiway A.

Revision: Updated quantity for Item P-208a Aggregate Base Course, 8 Inches.

Justification: The change reflects a reduced overbuild width, resulting from a modification to the depth of the underdrain structure.

Revision: Updated quantity for P-208b Geotextile Fabric.

Justification: The adjustment reflects a reduced overbuild width due to a change in the depth of the underdrain structure.

Revision: Updated quantity for Item P-401a Asphalt Surface Course.

Justification: The adjustment reflects an increase in butt joint area along Taxiway A near the apron.

Revision: Updated quantity for Item P-603a Bituminous Tack Coat.

Justification: The adjustment accounts for the increased butt joint area along Taxiway A near the apron.

Revision: Updated quantity for Item P-620b Permanent Airport Pavement Marking, Yellow.

Justification: The revision accounts for additional yellow paint needed for runway lead-in lines and taxiway centerlines that will be obliterated or covered during construction.

Revision: Added Item T-905a Topsoil.

Justification: Topsoil was not included in the original bid proposal and has now been added.

Revision: Corrected item description for Item L-110a Install 1-2" SCH 40 PVC Conduit, Direct Earth Buried (DBE).

Justification: The abbreviation "DBE" was a typo; the correct abbreviation is "DEB" for Direct Earth Buried.

Revision: Corrected item description for Item L-125c Install L-861T LED Taxiway Edge Light, Complete.

Justification: The next item to come after L-125a should be L-125b. The item labeled as L-125c is a typo.

6. Page 81 of 396 - Schedule II - Taxiway B Rehabilitation Bid Proposal Sheet

Revision: Added Item P-101c Joint and Crack Repair.

Justification: Crack repair will be accounted for under new Item P-101c Joint and Crack Repair. This item has been included in case crack repair below mill and fill area is needed. If no crack repair is required, the item will not be performed.

Revision: Updated quantity for Item P-401a Asphalt Surface Course.

Justification: The adjustment reflects the removal of butt joints at Taxiway B.

7. Page 82 of 396 - Schedule III - Taxiway A Underdrains Bid Proposal Sheet

Revision: Updated quantity for Item D-705b Install 6-Inch Non-Perforated Polyethylene Pipe in Schedule III. *Justification:* The revision accounts for additional outfalls and the increased pipe length needed to reach the appropriate surface elevation for outfall.

Revision: Updated quantity for Item D-751a Install 6-Inch Underdrain Cleanout in Schedule III.

Justification: The revision reflects the replacement of cleanouts with inspection pits.

Revision: Updated quantity for Item D-751b Install 18x18 Inch Inspection Pit in Schedule III.

Justification: The revision reflects the addition of inspection pits that replaced the originally planned cleanouts.

8. Page 86 of 396 - Approximate Quantities of Major Bid Items Table

Revision: Updated quantity for Item P-101b Asphalt Pavement Removal – Partial Depth, Schedule I.

Justification: The revised quantity accounts for the expanded butt joint removal area, extending to the proposed taper limits on Taxiway A.

Revision: Added Item P-101c Joint and Crack Repair to Schedule II.

Justification: Crack repair will be accounted for under new Item P-101c Joint and Crack Repair. This item has been included in case crack repair below mill and fill area is needed. If no crack repair is required, the item will not be performed.

Revision: Corrected quantities for Item P-152a Unclassified Excavation in Schedules II and III.

Justification: The quantity listed under Schedule II was a typo; no earthwork is required for the mill and fill. Additionally, the quantity for Schedule III was previously omitted and has now been included.

Revision: Updated quantity for Item P-208a Aggregate Base Course, 8 Inches in Schedule I.

Justification: The change reflects a reduced overbuild width, resulting from a modification to the depth of the underdrain structure.

Revision: Updated quantity for P-208b Geotextile Fabric in Schedule I.

Justification: The adjustment reflects a reduced overbuild width due to a change in the depth of the underdrain structure.

Revision: Updated quantity for Item P-401a Asphalt Surface Course in Schedules I and II.

Justification: The adjustment reflects an increase in butt joint area along Taxiway A near the apron, and the removal of butt joints at Taxiway B.

Revision: Updated quantity for Item P-603a Bituminous Tack Coat in Schedule I.

Justification: The adjustment accounts for the increased butt joint area along Taxiway A near the apron.

9. Page 87 of 396 – Approximate Quantities of Major Bid Items Table

Revision: Updated quantity for Item P-620b Permanent Airport Pavement Marking, Yellow in Schedule I.

Justification: The revision accounts for additional yellow paint needed for runway lead-in lines and taxiway centerlines that will be obliterated or covered during construction.

Revision: Updated quantity for Item D-705b Install 6-Inch Non-Perforated Polyethylene Pipe in Schedule III. *Justification:* The revision accounts for additional outfalls and the increased pipe length needed to reach the appropriate surface elevation for outfall.

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Justification: The revision reflects the replacement of cleanouts with inspection pits.

Revision: Updated quantity for Item D-751b Install 18x18 Inch Inspection Pit in Schedule III.

Justification: The revision reflects the addition of inspection pits that replaced the originally planned

cleanouts.

Revision: Added Item T-905a Topsoil.

Justification: Topsoil was not included in the original bid proposal and has now been added.

10. Page 88 of 396 – Approximate Quantities of Major Bid Items Table

Revision: Corrected item description for Item L-110a Install 1-2" SCH 40 PVC Conduit, Direct Earth Buried

(DBE).

Justification: The abbreviation "DBE" was a typo; the correct abbreviation is "DEB" for Direct Earth Buried.

Revision: Corrected item description for Item L-125c Install L-861T LED Taxiway Edge Light, Complete.

Justification: The next item to come after L-125a should be L-125b. The item labeled as L-125c is a typo.

11. Page 96 of 396 - Warranty Bond Form

Revision: Added sample Warranty Bond Form following page 96.

Justification: The sample was included to serve as a reference guide for preparing the Warranty Bond.

12. Page 172 of 396 – Liquidated Damages

Revision: Updated liquidated damages cost per calendar day for the Construction Manager and Resident

Engineer.

Justification: These costs have been included for clarification.

13. Page 224 of 396 – Construction Safety and Phasing Plan Cover Sheet

Revision: Removed reference to Bid Package No. 2 and added "Issued for Bid" to the title.

Justification: Bid Package No. 2 is not applicable to this document, as no phasing is associated with it.

14. Page 257 of 396 - Table of Contents Technical Specifications

Revision: Added a Table of Contents for the specifications section.

Justification: This addition improves navigation by allowing easier location of technical specifications in sequential order.

15. Page 262 of 396 – Item C-100 Contractor Quality Control Program

Revision: Added payment unit type to the specification.

Justification: The specification previously did not state the unit by which this item is to be paid; this addition clarifies the payment structure.

16. Page 281 of 396 – Item D-705 Pipe Underdrains for Airports

Revision: Removed "(mm pipe)" from the item description under the payment section.

Justification: This is not relevant since the pipe is being measured in linear feet.

17. Page 288 of 396 – Item P-101 Preparation/Removal of Existing Pavements

Revision: Added Specification Item P-101 – Preparation/Removal of Existing Pavements after page 288.

Justification: This specification was not included in the original project manual and is necessary for project completeness and clarity.

18. Page 313 of 396 – Item P-208 Aggregate Base Course

Revision: Removed reference to *Appendix P*.

Justification: The appendix is not applicable to this project manual.

19. Page 315 of 396 - Item P-401 Asphalt Mix Pavement

Revision: Removed the requirement for aircraft gross weights of 60,000 pounds or more from the Coarse Aggregate Material Requirements table.

Justification: The project is designed for aircraft with gross weights under 60,000 pounds, making this requirement unnecessary.

20. Page 319 of 396 - Item P-401 Asphalt Mix Pavement

Revision: Removed the Asphalt Pavement Analyzer (APA) and corresponding note from Table 1. Asphalt Design Criteria.

Justification: The APA is not required for projects involving aircraft with gross weights under 60,000 pounds.

21. Page 341 of 396 – Item P-605 Joint Sealants for Pavements

Revision: Added Specification Item P-605 – Joint Sealants for Pavements after page 341.

Justification: This specification was missing from the original project manual and is necessary for completeness.

22. Page 347 of 396 – Item P-610 Concrete for Miscellaneous Structures

Revision: Removed reference to *Appendix P*.

Justification: The appendix is not applicable to this project manual.

23. Page 350 of 396 - Item P-620 Runway and Taxiway Marking

Revision: Added temporary paint application rate.

Justification: To clarify that the application rate for temporary pavement markings differs from that of permanent markings.

24. Page 364 of 396 - Item T-905 Topsoil

Revision: Updated Section 905-3.4 Placing Topsoil.

Justification: Modified the specified depth for topsoil placement to better align with project requirements.

25. Page 365 of 396 - Item T-905 Topsoil

Revision: Updated Method of Measurement and Basis of Payment sections.

Justification: The method of measurement was revised to be by area instead of volume. The appropriate payment item and measurement detail was added. Additionally, references to topsoil being obtained off-site were removed to reflect the utilization of stockpiling and placement of on-site material.

CONSTRUCTION DRAWING UPDATES

1. Sheet G003 – General Notes (Sheet 3 of 54)

Revision: Updated notes throughout the entire sheet.

Justification: Several notes were outdated or contradictory and have been revised for consistency and accuracy.

2. Sheet G004 – Summary of Approximate Quantities (Sheet 4 of 54)

Revision: Updated quantity for Item P-101b Asphalt Pavement Removal – Partial Depth, Schedule I.

Justification: The revised quantity accounts for the expanded butt joint removal area, extending to the proposed taper limits on Taxiway A.

Revision: Added Item P-101c Joint and Crack Repair to Schedule II.

Justification: Crack repair will be accounted for under new Item P-101c Joint and Crack Repair. This item has been included in case crack repair below mill and fill area is needed. If no crack repair is required, the item will not be performed.

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Justification: The abbreviation "DBE" was a typo; the correct abbreviation is "DEB" for Direct Earth Buried.

Revision: Corrected item description for Item L-125c Install L-861T LED Taxiway Edge Light, Complete.

Justification: The next item to come after L-125a should be L-125b. The item labeled as L-125c is a typo.

Revision: Updated Detail 1 Earthwork Calculations Detail (Excavation).

Justification: Numbered items were clarified as either paid or incidental to Items P-152a and T-905a. Additionally, a note was added to specify the depths for stripped and placed topsoil.

3. Sheet C100 – Demolition Plan Taxiway A (Sheet 20 of 54)

Revision: Extended butt joint limits to align with asphalt pavement construction.

Justification: The previously shown butt joint stopped short of the new taper edge. This update ensures the joint extends to the correct location for proper pavement transition.

Revision: Added temporary removal of markings leading to closed areas.

Justification: All taxilane centerlines and runway lead-in lines leading to closed taxiway areas must be obliterated or covered in accordance with FAA Advisory Circular 150/5370-2G.

4. Sheet C101 – Demolition Plan Taxiway A (Sheet 21 of 54)

Revision: Added temporary removal of markings leading to closed areas.

Justification: All taxilane centerlines and runway lead-in lines leading to closed taxiway areas must be obliterated or covered in accordance with FAA Advisory Circular 150/5370-2G. Additionally, a matchline was added to reference the viewport containing the remainder of the lead-in line for clarity and continuity.

5. Sheet C102 - Demolition Plan Taxiway B (Taxiway Connector) - (Sheet 22 of 54)

Revision: Removed saw cuts and butt joints for Taxiway B.

Justification: This area will undergo a mill and fill process, eliminating the need for butt joints or saw cutting along the taxiway connector.

Revision: Added temporary removal of markings leading to closed areas.

Justification: All taxilane centerlines and runway lead-in lines leading to closed taxiway areas must be obliterated or covered in accordance with FAA Advisory Circular 150/5370-2G.

Revision: Added viewport for paint obliteration/cover of runway lead-in line from Runway 4/22 to Taxiway A.

Justification: A viewport and matchline were added to clearly show the obliteration or covering of the runway lead-in line for construction purposes.

6. Sheet C200 - Geometry Plan Taxiway A (STA. 00+00 - 10+50) - (Sheet 23 of 54)

Revision: Extended butt joint limits to match asphalt pavement construction.

Justification: The butt joint shown previously stopped short of where the new taper edge will be.

7. Sheet C202 - Geometry Plan Taxiway B (Taxiway Connector) - (Sheet 25 of 54)

Revision: Removed butt joints for Taxiway B.

Justification: Since this will be a mill and fill, there is no need for butt joints along the taxiway connector.

8. Sheet C220 – Pavement Typical Sections - (Sheet 26 of 54)

Revision: Slope labels added to detail A Taxiway A Pavement Section (North-South)

Justification: The transverse slope of the pavement section was not called out.

Revision: Updated Cement Treated Subgrade (CTS) item on detail A Taxiway A Pavement Section (North-

South)

Justification: The 18" of CTS was not called out under the exact item to be paid.

Revision: Note added to detail A Taxiway A Pavement Section (North-South)

Justification: This is to clarify the width of overbuild that is needed for the pavement section.

9. Sheet C300 - Grading and Spot Elevation Plan Taxiway A (STA. 00+00 - 05+00) - (Sheet 27 of 54)

Revision: Proposed surface updated to meet FAA standards.

Justification: The surface has been updated to meet TSA/TOFA grading standards per AC 150/5300-13B.

Revision: Added spot elevations every 50 feet.

Justification: Spot elevations are needed every 50 feet at the edge lines and centerlines of Taxiway A.

10. Sheet C301 – Grading and Spot Elevation Plan Taxiway A (STA. 05+00 – 10+00) - (Sheet 28 of 54)

Revision: Proposed surface updated to meet FAA standards.

Justification: The surface has been updated to meet TSA/TOFA grading standards per AC 150/5300-13B.

Revision: Added spot elevations every 50 feet.

Justification: Spot elevations are needed every 50 feet at the edge lines and centerlines of Taxiway A.

11. Sheet C302 - Grading and Spot Elevation Plan Taxiway A (STA. 10+00 - 15+00) - (Sheet 29 of 54)

Revision: Proposed surface updated to meet FAA standards.

Justification: The surface has been updated to meet TSA/TOFA grading standards per AC 150/5300-13B.

Revision: Added spot elevations every 50 feet.

Justification: Spot elevations are needed every 50 feet at the edge lines and centerlines of Taxiway A.

12. Sheet C303 - Grading and Spot Elevation Plan Taxiway A (STA. 15+00 - 19+00) - (Sheet 30 of 54)

Revision: Proposed surface updated to meet FAA standards.

Justification: The surface has been updated to meet TSA/TOFA grading standards per AC 150/5300-13B.

Revision: Added spot elevations every 50 feet.

Justification: Spot elevations are needed every 50 feet at the edge lines and centerlines of Taxiway A.

13. Sheet C401 - Taxiway A Plan and Profile STA. 06+50 - 13+00 - (Sheet 33 of 54)

Revision: Added existing and proposed grade labels to profile stationing.

Justification: These labels were blank on some of the profiles.

14. Sheet C402 - Taxiway A Plan and Profile STA. 13+00 - 19+50 - (Sheet 34 of 54)

Revision: Added existing and proposed grade labels to profile stationing.

Justification: These labels were blank on some of the profiles.

15. Sheet C530 - Underdrain Plan Taxiway A (STA. 00+00 - 05+00) - (Sheet 37 of 54)

Revision: Replaced previous cleanout, CO NO. 11 with inspection pit.

Justification: An inspection pit is needed at this location.

Revision: Added outfall to previous inspection pit, IP NO. 4.

Justification: The inspection pit needed a location to outfall.

Revision: Adjusted inverts elevations for all cleanouts and inspection pits.

Justification: The invert elevations were raised to better meet the existing conditions.

Revision: Renamed all cleanouts and inspection pits.

Justification: The numbering sequence has been updated to reflect the IP and CO location changes.

16. Sheet C531 - Underdrain Plan Taxiway A (STA. 05+00 - 10+00) - (Sheet 38 of 54)

Revision: Replaced previous cleanout, CO NO. 1 with inspection pit.

Justification: An inspection pit is needed at this location. The structure was also shifted north to match the construction phasing.

Revision: Added matchline at STA. 05+00 and updated sheet number for matchline at STA. 10+00.

Justification: The matchline was incorrect on either side of the sheet.

Revision: Adjusted inverts elevations for all cleanouts and inspection pits.

Justification: The invert elevations were raised to better meet the existing conditions. A new outfall was added to previous IP NO. 6.

Revision: Renamed all cleanouts and inspection pits.

Justification: The numbering sequence has been updated to reflect the IP and CO location changes.

17. Sheet C532 - Underdrain Plan Taxiway A (STA. 10+00 - 15+00) - (Sheet 39 of 54)

Revision: Added matchline at STA. 10+00 and updated sheet number for matchline at STA. 15+00.

Justification: The matchline was incorrect on either side of the sheet.

Revision: Replaced previous cleanouts, CO NO. 3, 21, and 22 with inspection pits.

Justification: Inspection pits were needed at these locations.

Revision: Adjusted inverts elevations for all cleanouts and inspection pits.

Justification: The invert elevations were raised to better meet the existing conditions.

Revision: Renamed all cleanouts and inspection pits.

Justification: The numbering sequence has been updated to reflect the IP and CO location changes.

18. Sheet C533 – Underdrain Plan Taxiway A (STA. 15+00 – 19+00) - (Sheet 40 of 54)

Revision: Added matchline at STA. 15+00 and removed matchline at STA. 19+00.

Justification: The matchline was incorrect on either side of the sheet.

Revision: Replaced previous IP NO. 8 with a cleanout.

Justification: This was replaced with a cleanout because it was the start of a line.

Revision: Adjusted inverts elevations for all cleanouts and inspection pits.

Justification: The invert elevations were raised to better meet the existing conditions.

Revision: Renamed all cleanouts and inspection pits.

Justification: The numbering sequence has been updated to reflect the IP and CO location changes.

19. Sheet C550 - Underdrain Details and Notes - (Sheet 41 of 54)

Revision: Updated Detail 1B numbering.

Justification: The numbering was revised to follow a logical sequencing order.

Revision: Updated Detail 2 Underdrain Trench Section (Adjacent to Pavement) Detail

Justification: This was revised to match the adjusted invert elevations.

20. Sheet C700 - Pavement Marking Plan Taxiway A - (Sheet 42 of 54)

Revision: Updated reference to detail on sheet C720.

Justification: Detail 4 was removed because it was the same as detail 1.

Revision: Added yellow paint for taxilane centerline between Taxiway A and the Taxiway Connector.

Justification: This was added to show the repainting of the taxilane centerline which was obliterated/covered for construction.

21. Sheet C701 - Pavement Marking Plan Taxiway A - (Sheet 43 of 54)

Revision: Updated reference to detail on sheet C720.

Justification: Detail 4 was removed because it was the same as detail 1.

Revision: Added yellow paint for runway lead-in line from Runway 4/22 to Taxiway A.

Justification: This was added to show the repainting of the runway lead-in line which was obliterated/covered for construction. A matchline referencing a viewport with the remainder of the lead-in line was also added.

22. Sheet C702 - Pavement Marking Plan Taxiway B Connector - (Sheet 44 of 54)

Revision: Updated reference to detail on sheet C720.

Justification: Detail 4 was removed because it was the same as detail 1.

Revision: Added yellow paint for taxilane centerline between Taxiway A and the Taxiway Connector.

Justification: This was added to show the repainting of the taxilane centerline which was obliterated/covered for construction.

Revision: Added viewport for yellow paint runway lead-in line from Runway 4/22 to Taxiway A.

Justification: A viewport and matchline were added to show the repainting of the runway lead-in line which was obliterated/covered for construction.

Revision: Updated the dimension from Runway 4/22 centerline to the runway holding position.

Justification: The previous distance was not to the runway holding position edge.

23. Sheet C720 - Pavement Marking Details and Notes - (Sheet 45 of 54)

Revision: Added dimensions to black borders for details 1 and 2. *Justification:* This was to call out the width of the black borders.

Revision: Added note to details 1 and 3.

Justification: Needed clarification regarding black borders on asphalt pavement.

Revision: Added black paint to detail 3.

Justification: This is the correct detail. Refer to added note for paint on asphalt pavement.

Revision: Detail 4 removed.

Justification: Detail 4 was removed because it was the same as detail 1.

CLARIFICATIONS / RFI RESPONSES

1. **Question:** Items L-125a and L-125c are not shown in Bid Package No. 1 Page 135 of PDF. P-152a is shown in Bid Package 1 Schedule III but not in contract documents PDF page 141.

Answer: All bid proposal sheets have been updated to include all items.

PRE-BID MEETING AGENDA AND SIGN-IN SHEET

The pre-bid meeting minutes, sign-in sheet, and planholder's list are attached to this addendum.

Questions will be accepted via written format to the Project Manager until 4:00 P.M. (CST) Friday, September 5, 2025.

ADDENDUM ENDS



Federal Provisions State Provisions Local Provisions

PART 6: WAGE RATES

Davis Bacon Wage Rates (or State)

PART 7: SAFETY DOCUMENTS

Construction Safety and Phasing Plan (CSPP)

Construction Safety and Phasing Compliance Document (CSPCD)

PART 8: FAA TECHNICAL SPECIFICATIONS

ITEM C-100 - CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)

ITEM C-102 - TEMPORARY AIR AND WATER POLLUTIONS, SOIL EROSION, AND SILTATION CONTROL

ITEM C-105 – MOBILIZATION

ITEM C-110 - PERCENTAGE OF MATERIAL WITHIN SPECIFICATION LIMIT (PWL)

ITEM D-705 PIPE UNDERDRAINS FOR AIRPORTS

ITEM D-751 MANHOLES, CATCH BASINS, INLETS AND INSPECTION HOLES

ITEM P-101 PREPARATION AND REMOVAL OF EXISTING PAVEMENTS

ITEM P-151 CLEARING AND GRUBBING

ITEM P-152 EXCAVATION, SUBGRADE, AND EMBANKMENT

ITEM P-153 CONTROLLED LOW-STRENGTH MATERIAL (CLSM)

ITEM P-156 CEMENT TREATED SUBGRADE

ITEM P-208 AGGREGATE BASE COURSE

ITEM P-401 ASPHALT MIX PAVEMENT

ITEM P-603 EMULSIFIED ASPHALT TACK COAT

ITEM P-605 JOINT SEALANTS FOR PAVEMENTS

ITEM P-610 CONCRETE FOR MISCELLANEOUS STRUCTURES

ITEM P-620 RUNWAY AND TAXIWAY MARKING

ITEM T-901 SEEDING

ITEM T-905 TOPSOIL



| Item | Item Description | Unit | SCHEDULE I TAXIWAY A RECONSTRUCTIO N Quantity | SCHEDULE II TAXIWAY B REHABILITATI ON Quantity | SCHEDULE III TAXIWAY A UNDERDRAI NS Quantity |
|--------|---|------|---|--|--|
| No. | nem 2000 puon | | Quarterly | Quartity | Quantity |
| C-100a | Contractor's Quality Control Program (CQCP) | LS | 1 | 1 | - |
| C-102a | Temporary Erosion Control | LS | 1 | - | - |
| C-105a | Mobilization | LS | 1 | 1 | 1 |
| P-101a | Pavement Removal - Full Depth | SY | 11,580 | - | - |
| P-101b | Asphalt Pavement Removal - Partial Depth | SY | 400 | 5,180 | - |
| P-101c | Joint and Crack Repair | LF | - | 2500 | - |
| P-152a | Unclassified Excavation | CY | 910 | - | 80 |
| P-156a | Cement Treated Subgrade, 18 Inches | SY | 8430 | - | - |
| P-156b | Cement | TON | 280 | - | - |
| P-208a | Aggregate Base Course, 8 Inches | CY | 2050 | - | - |
| P-208b | Geotextile Fabric | SY | 9130 | - | - |
| P-401a | Asphalt Surface Course | TON | 2090 | 760 | - |
| P-603a | Bituminous Tack Coat | GAL | 1340 | 760 | - |
| P-620a | Temporary Airport Pavement Marking | SF | 3480 | 640 | - |
| P-620b | Permanent Airport Pavement Marking, Yellow | SF | 2320 | 640 | - |
| P-620c | Permanent Airport Pavement Marking, Black | SF | 1440 | - | - |
| P-620d | Pavement Marking Obliteration | SF | - | 580 | - |



| D-705a | Install 6-Inch | LF | - | - | 3900 |
|--------|---------------------|----|--------|---|------|
| | Perforated | | | | |
| | Polyethylene Pipe | | | | |
| D-705b | Install 6-Inch Non- | LF | - | - | 900 |
| | Perforated | | | | |
| | Polyethylene Pipe | | | | |
| D-751a | Install 6-Inch | EA | - | - | 20 |
| | Underdrain | | | | |
| | Cleanout | | | | |
| D-751b | Install 18x18 Inch | EA | - | - | 12 |
| | Inspection Pit | | | | |
| T-901a | Seeding with | AC | 2.5 | - | - |
| | Hydromulch | | | | |
| T-905a | Topsoil | SY | 11,010 | - | - |
| L-108a | Install #8 AWG, L- | LF | 5100 | | - |
| | 824C, 5000 Volt | | | | |
| | Wire | | | | |
| L-108b | Install #6 AWG Bare | LF | 4100 | - | - |
| | Copper | | | | |
| | Counterpoise, | | | | |
| | Including Ground | | | | |
| | Rods | | | | |
| L-110a | Install 1-2" SCH 40 | LF | 3900 | - | - |
| | PVC Conduit, Direct | | | | |
| | Earth Buried (DEB) | | | | |
| L-110b | Install 1-2" SCH 40 | LF | 190 | | |
| | HDPE Conduit, | | | | |
| | Directionally Bored | | | | |
| L-125a | Remove Stake | EA | 33 | - | - |
| | Mounted Taxiway | | | | |
| | Edge Light, | | | | |
| | Complete | | | | |
| L-125b | Install L-861T LED | EA | 55 | - | - |
| | Taxiway Edge Light, | | | | |
| | Complete | | | | |
| | | | | | |

Pre-Bid Conference. A VOLUNTARY pre-bid conference for this project will be held on Tuesday, August 19, 2025 at 9:00 a.m., in the Airport terminal building conference room at the Rolla National Airport, 631 Airport Drive, Vichy, MO 65580.

Bid Conditions. All bidders shall make arrangements with the Rolla National Airport to examine the site to become familiar with all site conditions prior to submitting their bid.

The bidder is required to provide all information as required within the Contract Documents. The bidder is required to bid on all items of every schedule or as otherwise detailed in the Instructions to Bidders.



- b) The Contractor shall provide a one (1) year warranty (4 years for LED fixtures) against defective materials or workmanship in the work covered under the contract effective upon the date of final acceptance by the Sponsor. Final acceptance will be considered as the date of the final acceptance letter or as the date of the final inspection meeting if no letter is prepared.
- c) The Contractor shall provide a warranty bond to cover the one (1) year warranty period (4 years for LED fixtures) as a condition of final acceptance of the project by the Sponsor as a part of the work at no additional cost to the Sponsor.

25) Signing of Agreement

a) When Sponsor issues a Notice of Award to the Successful Bidder, it shall be accompanied by the unexecuted counterparts of the Agreement along with the other Contract Documents as identified in the Agreement. Within 30 days thereafter, Successful Bidder shall execute and deliver the required number of counterparts of the Agreement (and any bonds and insurance documentation required to be delivered by the Contract Documents) to Sponsor. Within ten days thereafter, Sponsor shall deliver one fully executed counterpart of the Agreement to Successful Bidder.

26) Notice to Proceed

a) Work may not start under any awarded contract until a written Notice to Proceed is issued by the Sponsor. The Sponsor may issue the Notice to Proceed any time after the contract is signed and, if required, insurance and bonds have been provided.

27) Sales and Use Taxes

a) Sponsor is exempt from Missouri state sales and use taxes on materials and equipment to be incorporated in the Work. (Exemption No. to be provided after award). Said taxes shall not be included in the Bid.

28) Bid Protests

- a) Bidders are notified, that in accordance with FAA policy, bid protests based on an allegedly defective bid solicitation, shall be in writing and received by the Sponsor prior to the bid opening.
- b) For bid protests based on an alleged improper evaluation of bids, a protest must be received by the Sponsor in writing within 10 days after the Notice of Award to the winning bidder is issued. It is the responsibility of the protesting bidder to keep apprised of when the Notice of Award is issued by calling or emailing the Sponsor for updates.

29) Bidder Questions

a) If a Bidder finds discrepancies in, or omissions from, the Contract Documents, or if he is in doubt as to their meaning, he shall at once notify the Engineer in writing. Such notification must be made at least seven (7) consecutive calendar days prior to the bid date. Neither the Sponsor nor the Engineer will accept telephone calls regarding questions about the Contract Documents. All inquiries must be in writing. All interpretations of the Contract Documents will be issued via addenda to all bidders. All addenda issued will become a part of the Contract. The Sponsor will not be responsible for any other explanation or interpretation of the Contract Documents.

The questions should be delivered to Laura Koonce, Woolpert, Inc., at the Pre-Bid Conference, or emailed to laura.koonce@woolpert.com.

BID PACKAGE NO.1

TAXIWAY A RECONSTRUCTION AND TAXIWAY B REHABILITATION

| | | SCHEDULE I - TAXIWAY A RECONSTRUCTION | 7 | | | |
|----------|--|--|---------|-----------------------|----------------|---------------|
| Item No. | Description | | Units | Estimated Quantity | Unit Price | Total |
| C-100a | Contractions (Onelity Control Promon (OCD) | at the unit price of: dollars | S I SI | | ¥ | ¥ |
| C-1004 | Contractor 5 (wanty control trogram (CCC) | and cents. | GT | | }- | → |
| C-102a | Temporary Erosion Control | te unit price of: | ırs LS | - | \$ ∂: | € |
| | | Centrs. | | | | |
| C-105a | Mobilization | at the unit price of: dollars | ırs I.S | H | €9- | € |
| | | Control of the contro | 0 0 0 0 | | | |
| P-101a | Pavement Removal - Full Depth | at the unit price of: dollars and cents. | rrs SY | 11,580 | ₩. | ⇔ |
| D 1011 | Amphal + Darram cart P am carral Darria Darria | at the unit price of: dollars | ırs cv | 000 | ¥ | ¥ |
| r-101D | Aspuan Favenient Nemoval - Faruai Depui | and cents. | 21 | | + | 0 |
| P-152a | Unclassified Excavation | e unit price of: | urs CY | 910 | \$ ∩ | €\$ |
| | | and | 0 | | | |
| P-156a | Cement Treated Subgrade, 18 Inches | cents. | SX | 8,430 | €7: | ₩. |
| D 1571 | 1 | at the unit price of: dollars | | | 5 | 6 |
| P-150D | Cement | and cents. | ION | 780 | A | ø |
| P-208a | Aggregate Base Course. 8 Inches | at the unit price of:dollars | ırs CY | 2.050 | €. | €. |
| 1 2008 | 178818 Gue Dase Course, o menos | cents. | | | + | } |
| P-208b | Geotextile Fabric | ne unit price of: | ırs SY | 9,130 | €A: | €0 |
| | | cents. | | | | |
| P-401a | Asphalt Surface Course | at the unit price of: dollars | TON | 2,090 | € | ₩ |
| | | Cents. | | | | |
| P-603a | Bituminous Tack Coat | at the unit price of:dollars | ırs GAL | 1,340 | \$ ₽ | €- |
| | | e mit orice of | | | | |
| P-620a | Temporary Airport Pavement Marking | cents. | SE | 3,480 | \$ | \$ |
| P-620b | Permanent Airport Pavement Marking. Yellow | e unit price of: | urs SF | 2.320 | € | € |
| 1 | | and cents. | 5 | | F | F |
| P-620c | Permanent Airport Pavement Marking, Black | at the unit price of:dollars | ırs SF | 1,440 | \$ | € |
| | | e unit price of | | | | |
| T-901a | Seeding with Hydromulch | cents. | AC | 2.50 | \$ | ⇔ |
| T-905a | Tonedi | at the unit price of: dollars | rrs cv | 11 010 | ¥ | ¥ |
| | Todo | and cents. | 4 | | > = | → |
| L-108a | Install #8 AWG, L-824C, 5000 Volt Wire | at the unit price of: dollars | urs LF | 5,100 | \$ | € |
| | | centrs. | | | | |
| L-108b | Install #6 AWG Bare Copper Counterpoise, Including Ground Rods | at the unit price of: dollars and | urs LF | 4,100 | \$ | ₩ |
| | | and towing | 0.00 | | | |
| L-110a | Install 1-2" SCH 40 PVC Conduit, Direct Earth Buried (DEB) | cents. | LF | 3,900 | € ?÷ | \$ |
| L-110b | Install 1-2" SCH 40 HDPE Conduit Directionally Bored | at the unit price of:dollars | rrs 1.F | 190 | €F. | €. |
| | | cents. | | | ÷ | Þ |
| L-125a | Remove Stake Mounted Taxiway Edge Light, Complete | at the unit price of: dollars | ırs EA | 33 | \$ | €4- |
| | | cents. | | | | |
| L-125b | Install L-861T LED Taxiway Edge Light, Complete | at the unit price of: dollars | ırs EA | 55 | ₩. | ₩ |
| | | | | | | |

છ SCHEDULE I TOTAL

Issued for Bid - ADD #1 August 5, 2025

Woolpert, Inc. MoDOT Project No. 23-056A-1

BID PACKAGE NO.1

TAXIWAY A RECONSTRUCTION AND TAXIWAY B REHABILITATION

| | | SCHEDULE II - TAXIWAY B REHABILITATION | | | | |
|----------|---|--|-------|-----------------------|--------------|-----------------|
| Item No. | Description | | Units | Estimated Quantity | Unit Price | Total |
| C-100a | Contractor's Quality Control Program (CQCP) | at the unit price of: dollars and cents. | TS | 1 | \$ | S |
| C-105a | Mobilization | at the unit price of: dollars and cents. | ST | 1 | \$ | S |
| P-101b | Asphalt Pavement Removal - Partial Depth | at the unit price of: dollars and cents. | SY | 5,180 | \$ | ss: |
| P-101c | Joint and Crack Repair | at the unit price of: dollars and cents. | LF | 2,500 | \$ | €47÷ |
| P-401a | Asphalt Surface Course | at the unit price of: dollars and cents. | NOL | 092 | S | \$ |
| P-603a | Bituminous Tack Coat | at the unit price of: dollars and cents. | GAL | 760 | <i>\$</i> 5: | ss: |
| P-620a | Temporary Airport Pavement Marking | at the unit price of: dollars and cents. | SF | 640 | \$ | \$ |
| P-620b | Permanent Airport Pavement Marking, Yellow | at the unit price of: dollars and cents. | SF | 640 | S 7: | ss. |
| P-620d | Pavement Marking Obliteration | at the unit price of: dollars and cents. | SF | 580 | \$ | & >÷ |

SCHEDULE II TOTAL \$

BID PACKAGE NO.1

TAXIWAY A RECONSTRUCTION AND TAXIWAY B REHABILITATION

| | | SCHEDULE III - TAXIWAY A UNDERDRAINS | | | | |
|----------|---|--|-------|-----------------------|--------------|--------------|
| Item No. | Item No. Description | | Units | Estimated Quantity | Unit Price | Total |
| C-105a | Mobilization | at the unit price of: dollars and cents. | TS | 1 | <i>\$</i> > | 69 : |
| P-152a | Unclassified Excavation | at the unit price of: dollars and cents. | CY | 80 | ss | 5 5: |
| D-705a | Install 6-Inch Perforated Polyethylene Pipe | at the unit price of: dollars and cents. | £Ί | 3,900 | \$ > | <i>\$</i> 9≅ |
| D-705b | Install 6-Inch Non-Perforated Polyethylene Pipe | at the unit price of: dollars and cents. | LF | 006 | ss | 5 5: |
| D-751a | Install 6-Inch Underdrain Cleanout | at the unit price of: dollars and cents. | EA | 20 | <i>\$</i> 5: | 6 9÷ |
| D-751b | Install 18x18 Inch Inspection Pit | at the unit price of: dollars and cents. | EA | 12 | <i>\$</i> 5÷ | 69 : |

SCHEDULE III TOTAL \$__



| | | | SCHEDULE I | SCHEDULE II | SCHEDULE III |
|--------|---|------|----------------|----------------|--------------|
| | | | TAXIWAY A | TAXIWAY B | TAXIWAY A |
| | | | RECONSTRUCTION | REHABILITATION | UNDERDRAINS |
| Item | Item | Unit | Quantity | Quantity | Quantity |
| No. | Description | | - | _ | _ |
| C-100a | Contractor's Quality Control Program (CQCP) | LS | 1 | 1 | - |
| C-102a | Temporary Erosion Control | LS | 1 | - | - |
| C-105a | Mobilization | LS | 1 | 1 | 1 |
| P-101a | Pavement Removal - Full Depth | SY | 11,580 | - | - |
| P-101b | Asphalt Pavement Removal - Partial Depth | SY | 400 | 5180 | - |
| P-101c | Joint and Crack Repair | LF | - | 2500 | - |
| P-152a | Unclassified Excavation | CY | 910 | - | 80 |
| P-156a | Cement Treated Subgrade, 18 Inches | SY | 8430 | - | - |
| P-156b | Cement | TON | 280 | - | - |
| P-208a | Aggregate Base Course, 8 Inches | CY | 2050 | - | - |
| P-208b | Geotextile Fabric | SY | 9130 | - | - |
| P-401a | Asphalt Surface Course | TON | 2090 | 760 | - |
| P-603a | Bituminous Tack Coat | GAL | 1340 | 760 | - |



| P-620a | Temporary Airport Pavement Marking | SF | 3480 | 640 | - |
|--------|--|----|--------|-----|------|
| P-620b | Permanent Airport Pavement Marking, Yellow | SF | 2320 | 640 | - |
| P-620c | Permanent Airport Pavement Marking, Black | SF | 1440 | - | - |
| P-620d | Pavement Marking Obliteration | SF | - | 580 | - |
| D-705a | Install 6-Inch Perforated Polyethylene Pipe | LF | - | - | 3900 |
| D-705b | Install 6-Inch Non- Perforated Polyethylene Pipe | LF | - | - | 900 |
| D-751a | Install 6-Inch Underdrain Cleanout | EA | - | - | 20 |
| D-751b | Install 18x18 Inch Inspection Pit | EA | - | - | 12 |
| T-901a | Seeding with Hydromulch | AC | 2.5 | - | - |
| T-905a | Topsoil | SY | 11,010 | - | - |
| L-108a | Install #8 AWG, L-824C, 5000 Volt Wire | LF | 5100 | | - |



| | | | T | 1 |
|----------------|--|--|--|--|
| | LF | 4100 | - | - |
| AWG Bare | | | | |
| Copper | | | | |
| Counterpoise, | | | | |
| Including | | | | |
| Ground Rods | | | | |
| Install 1-2" | LF | 3900 | - | - |
| SCH 40 PVC | | | | |
| Conduit, | | | | |
| Direct Earth | | | | |
| Buried (DEB) | | | | |
| | | | | |
| Install 1-2" | LF | 190 | | |
| SCH 40 HDPE | | | | |
| Conduit, | | | | |
| Directionally | | | | |
| Bored | | | | |
| Remove Stake | EA | 33 | - | - |
| Mounted | | | | |
| Taxiway Edge | | | | |
| Light, | | | | |
| Complete | | | | |
| Install L-861T | EA | 55 | - | - |
| LED Taxiway | | | | |
| =" | | | | |
| | | | | |
| | Counterpoise, Including Ground Rods Install 1-2" SCH 40 PVC Conduit, Direct Earth Buried (DEB) Install 1-2" SCH 40 HDPE Conduit, Directionally Bored Remove Stake Mounted Taxiway Edge Light, Complete Install L-861T | AWG Bare Copper Counterpoise, Including Ground Rods Install 1-2" SCH 40 PVC Conduit, Direct Earth Buried (DEB) Install 1-2" SCH 40 HDPE Conduit, Directionally Bored Remove Stake Mounted Taxiway Edge Light, Complete Install L-861T LED Taxiway Edge Light, | AWG Bare Copper Counterpoise, Including Ground Rods Install 1-2" LF 3900 SCH 40 PVC Conduit, Direct Earth Buried (DEB) Install 1-2" LF 190 SCH 40 HDPE Conduit, Directionally Bored Remove Stake Mounted Taxiway Edge Light, Complete Install L-861T LED Taxiway Edge Light, | AWG Bare Copper Counterpoise, Including Ground Rods Install 1-2" SCH 40 PVC Conduit, Direct Earth Buried (DEB) Install 1-2" SCH 40 HDPE Conduit, Directionally Bored Remove Stake Mounted Taxiway Edge Light, Complete Install L-861T LED Taxiway Edge Light, Scharp Age Service Stake A State Sta |

The amount of money appropriated will be equal to or in excess of the contract amount as forth in the notice(s) to proceed. Change orders requiring additional compensable work to be performed, which cause the aggregate amount payable under the contract to exceed the amount appropriated for the original contract, are prohibited unless the contractor is given written assurance by Sponsor that lawful appropriations to cover costs of the additional work have been made or unless such work is covered under a remedy granting provision of the contract. Notwithstanding anything to the contrary in the Contract Documents the Contractor hereby acknowledges and agrees that Sponsor's performance under the contract is subject to receipt of funds from the FAA and further is subject to annual appropriation by the Sponsor in accordance with a budget adopted by the City of Rolla. Sponsor may issue multiple Notice(s) to Proceed in incremental stages as funding becomes available.

Inasmuch as this Contract is executed pursuant to the laws of the State of Missouri, pertaining to airports and payment of the contract unit price shall be made solely from special account established for this project.

ARTICLE 4: PAYMENT BY SPONSOR. It is hereby further agreed that, at the completion of the work and its acceptance by the Sponsor, all sums due the Contractor by reason of his faithful performance of the work, taking into consideration additions to or deductions from the Contract price by reason of alterations or modifications of the original Contract or by reason of "Extra Work" authorized under this Contract, will be paid the Contractor by the Sponsor after said completion and acceptance.



Warranty Bond Form

| Contractor | Surety |
|---|---|
| Name: [Full formal name of Contractor] | Name: [Full formal name of Surety] |
| Address (principal place of business): | Address (principal place of business): |
| [Address of Contractor's principal place of business] | [Insert address of Surety's principal place of business] |
| | |
| | |
| Owner | Construction Contract |
| Name: [Full formal name of Owner] | Description (name and location): |
| Address (principal place of business): | [Owner's project/contract name, and location of the |
| [Address of Owner's principal place of business] | project] |
| | Contract Price: [Amount from Contract] |
| | Effective Date of Contract: [Date from Contract] |
| | [Land Holm Community |
| | Contract's Date of Substantial [Date from |
| | Completion: Contract] |
| Bond | |
| Bond Amount: [Amount] | Bond Period: Commencing 364 days after Substantial |
| Date of Bond: [Date] | - Completion of the Work under the Construction |
| <u> </u> | Contract, and continuing until [insert number of years, typically either two or three] years after such |
| Modifications to this Bond form: | Substantial Completion. |
| ☐ None ☐ See Paragraph 9 | |
| | reby, subject to the terms set forth herein, do each cause |
| this Warranty Bond to be duly executed by an authorized | Surety |
| Contractor as Principal | Surety |
| (Full formal name of Contractor) | (Full formal name of Surety) (corporate seal) |
| By: | By: |
| (Signature) | (Signature) (Attach Power of Attorney) |
| Name: | Name: |
| (Printed or typed) | (Printed or typed) |
| Title: | Title: |
| | |
| Attest: (Signature) | Attest:(Signature) |
| Name: | Name: |
| (Printed or typed) | (Printed or typed) |
| Title: | T 11 |
| ntie. | Title: |



- 1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract's Correction Period Obligations. The Construction Contract is incorporated herein by reference.
- 2. If the Contractor performs the Correction Period Obligations, the Surety and the Contractor shall have no obligation under this Warranty Bond.
- 3. If Owner gives written notice to Contractor and Surety during the Bond Period of Contractor's obligation under the Correction Period Obligations, and Contractor does not fulfill such obligation, then Surety shall be responsible for fulfillment of such Correction Period Obligations. Surety shall either fulfill the Correction Period Obligations itself, through its agents or contractors, or, in the alternative, Surety may waive the right to fulfill the Correction Period Obligations itself, and reimburse the Owner for all resulting costs incurred by Owner in performing Contractor's Correction Period Obligations, including but not limited to correction, removal, replacement, and repair costs.
- 4. The Surety's liability is limited to the amount of this Warranty Bond. Renewal or continuation of the Warranty Bond will not modify such amount, unless expressly agreed to by Surety in writing.
- 5. The Surety shall have no liability under this Warranty Bond for obligations of the Contractor that are unrelated to the Construction Contract. No right of action will accrue on this Warranty Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.
- 6. Any proceeding, legal or equitable, under this Warranty Bond may be instituted in any court of competent jurisdiction in the location in which the Work or part of the Work is located and must be instituted within two years after the Surety refuses or fails to perform its obligations under this Warranty Bond.
- 7. Written notice to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown in this Warranty Bond.
- 8. Definitions
 - 8.1. Construction Contract—The agreement between the Owner and Contractor identified on the cover page of this Warranty Bond, including all Contract Documents and changes made to the agreement and the Contract Documents.
 - 8.2. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.
 - 8.3. Correction Period Obligations—The duties, responsibilities, commitments, and obligations of the Contractor with respect to correction or replacement of defective Work, as set forth in the Construction Contract's Correction Period clause, EJCDC® C-700, Standard General Conditions of the Construction Contract (2018), Paragraph 15.08, as duly modified.
 - 8.4. Substantial Completion—As defined in the Construction Contract.
 - 8.5. Work—As defined in the Construction Contract.
- 9. Modifications to this Bond are as follows: [Describe modification or enter "None"]



Local laws, ordinances, rules, and regulations, and building and construction codes bearing on the conduct of the work.

LIQUIDATED DAMAGES

Subject to the provisions of the Contract Documents, the Sponsor shall be entitled to liquidated damages as anticipated damages to the Sponsor for failure of the Contractor to complete the work within the specified contract time. Liquidated damages are to serve as compensation for the Sponsor's non-use and incurred costs related to work extending beyond the contract time. The Contractor shall be assessed a liquidated damage for each day that the work remains uncompleted beyond the contract period. Further, each phase of work under the project may have different liquidated damage amounts, as outlined in General Provisions Section 80-08 FAILURE TO COMPLETE ON TIME.

As part of liquidated damages, the Contractor further agrees to pay the Sponsor for the costs associated for the construction manager/Engineer in connection with the failure of the Contractor to complete the work within the specified contract time as follows: \$2,220/calendar day(s) for the construction manager and \$2,520/calendar day(s) for each additional resident engineer plus any incurred expenses (per diem, lodging, etc.). The Contractor also agrees to pay for any services of the Engineer and its subcontractors arising from the failure of the Contractor to furnish materials or equipment in conformance with the Contract Documents necessitating redesign, retesting, or additional review time by the Engineer and their subcontractors or the failure of the Contractor to complete the work within the specified contract time. Such services shall be paid at the standard hourly rates of Engineer and its Subcontractors.

AIRPORT IMPROVEMENT PROGRAM

The work in this contract is included in Airport Improvement Program (AIP) Project Number 23-056A-1 which is being undertaken and accomplished by the Sponsor in accordance with the terms and conditions of a grant agreement between the Sponsor and the United States, under the Airport Improvement Act per Chapter 471 of Title 49 of the United States Code (U.S.C.), as amended by the airport, and the Airway Safety and Capacity Expansion Act of 1987, pursuant to which the United States has agreed to pay a certain percentage of the associated project costs that are determined to be allowable under said Act. The Contractor shall note that the United States is not a party to this contract and no reference in this contract to the FAA or any representative thereof, or to any rights granted to the FAA or any representative thereof, or the United States, by the contract, make the United States a party to this contract.

DBE ADMINISTRATION

1. Eligibility of DBE's:

Those firms currently certified as DBE's by the State Department of Transportation are eligible to participate as DBE's on this contract. A list of these firms can be obtained from the State, the consulting engineer, or the Sponsor. Previous acceptance of a DBE by the FAA, State or Sponsor does not ensure acceptance on this project.

2. Counting DBE Participation Towards DBE Goals:

DBE participation toward attainment of the goal will be computed based on the subcontract prices agreed to between the contractor and subcontractors for the contract items or portions of items being sublet, as shown on the DBE Participation Form and attachments. Credit will only be given for use of DBE's that are certified or accepted according to this specification. DBE participation shall be counted toward meeting the DBE goal in accordance with the following:

Rolla National Airport

Bid Pkg No.1: Taxiway A Reconstruction and Taxiway Connector Rehabilitation

MoDOT Project No: 23-056A-1

Construction Safety and Phasing Plan Issued for Bid - Addendum No. 1

Prepared For:

Rolla National Airport Maries County 631 Airport Road Vichy, MO 65580

Prepared By:



931 Wildwood Drive, Suite 101 Jefferson City, Missouri 65109 (573) 636-3200

August 5, 2025

TABLE OF CONTENTS

TECHNICAL SPECIFICATIONS (CIVIL)

| SECTION | <u>TITLE</u> |
|---------|---|
| C-100 | Contractor Quality Control Program (CQCP) |
| C-102 | Temporary Air and Water Pollution, Soil Erosion, and Siltation Control |
| C-105 | Mobilization |
| C-110 | Method of Estimating Percentage of Material Within Specification Limits (PWL) |
| D-705 | Pipe Underdrains for Airports |
| D-751 | Manholes, Catch Basins, Inlets and Inspection Pits |
| P-101 | Preparation and Removal of Existing Pavements |
| P-151 | Clearing and Grubbing |
| P-152 | Excavation, Subgrade, and Embankment |
| P-153 | Controlled Low-Strength Material (CLSM) |
| P-156 | Cement Treated Subgrade |
| P-208 | Aggregate Base Course |
| P-401 | Asphalt Mix Pavement |
| P-603 | Emulsified Asphalt Tack Coat |
| P-605 | Joint Sealants for Pavements |
| P-610 | Concrete for Miscellaneous Structures |
| P-620 | Runway and Taxiway Marking |
| T-901 | Seeding |
| T-905 | Topsoiling |

TECHNICAL SPECIFICATIONS (ELECTRICAL)

| <u>SECTION</u> | TITLE |
|----------------|--|
| L-108 | Underground Power Cable for Airports |
| L-110 | Airport Underground Electrical Duct Banks and Conduits |
| L-125 | Installation of Airport Lighting Systems |

process into control. The requirements for corrective action shall include both general requirements for operation of the CQCP as a whole, and for individual items of work contained in the technical specifications.

The CQCP shall detail how the results of QC inspections and tests will be used for determining the need for corrective action and shall contain clear rules to gauge when a process is out of control and the type of correction to be taken to regain process control.

When applicable or required by the technical specifications, the Contractor shall establish and use statistical QC charts for individual QC tests. The requirements for corrective action shall be linked to the control charts.

100-11 Inspection and/or observations by the RPR. All items of material and equipment are subject to inspection and/or observation by the RPR at the point of production, manufacture or shipment to determine if the Contractor, producer, manufacturer or shipper maintains an adequate QC system in conformance with the requirements detailed here and the applicable technical specifications and plans. In addition, all items of materials, equipment and work in place shall be subject to inspection and/or observation by the RPR at the site for the same purpose.

Inspection and/or observations by the RPR does not relieve the Contractor of performing QC inspections of either on-site or off-site Contractor's or subcontractor's work.

100-12 Noncompliance.

- **a.** The Resident Project Representative (RPR) will provide written notice to the Contractor of any noncompliance with their CQCP. After receipt of such notice, the Contractor must take corrective action.
- **b.** When QC activities do not comply with either the CQCP or the contract provisions or when the Contractor fails to properly operate and maintain an effective CQCP, and no effective corrective actions have been taken after notification of non-compliance, the RPR will recommend the Owner take the following actions:
 - (1) Order the Contractor to replace ineffective or unqualified QC personnel or subcontractors and/or
 - (2) Order the Contractor to stop operations until appropriate corrective actions are taken.

METHOD OF MEASUREMENT

100-13 Basis of measurement and payment. Contractor Quality Control Program (CQCP) is for the personnel, tests, facilities and documentation required to implement the CQCP. The CQCP will be paid as a lump sum with the following schedule of partial payments:

- **a.** With first pay request, 25% with approval of CQCP and completion of the Quality Control (QC)/Quality Assurance (QA) workshop.
 - **b.** When 25% or more of the original contract is earned, an additional 25%.
 - c. When 50% or more of the original contract is earned, an additional 20%.
 - **d.** When 75% or more of the original contract is earned, an additional 20%
 - **e.** After final inspection and acceptance of project, the final 10%.

BASIS OF PAYMENT

100-14 Payment will be made under:

Item C-100a Contractor Quality Control Program (CQCP) – per lump sum

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| 205 | be measured separately. All fittings shall be included in the footage as typical pipe sections in the pipelir | | |
|---|---|--|--|
| 206 207 | being measured. | | |
| 208 209 | 705-4.2 The quantity of porous backfill shall considered incidental to pipe underdrains, complete. | | |
| 210 211 | 705-4.3 The quantity of filter fabric shall considered incidental to pipe underdrains, complete. | | |
| 212 213 214 | 705-4.4 . The quantity of p | ipe underdrains shall considered incidental to pipe underdrains, complete. | |
| 215 216 | BASIS OF PAYMENT | | |
| 217 218 219 | 705-5.1 Payment will be made at the contract unit price per linear foot (meter) for pipe underdrains of the type, class, and size designated. | | |
| 220 | 705-5.2 POROUS BACKFIL | L . | |
| 221 222 | a. Porous backfill No. 1 shall be considered incidental to pipe underdrains, complete.b. Porous Backfill No. 2 shall be considered incidental to pipe underdrains, complete. | | |
| 223224225 | 705-5.3. FILTER FABRIC. Filter fabric shall be considered incidental to pipe underdrains, complete. | | |
| 226 | 705-5.4 PIPE UNDERDRAII | NS, COMPLETE. Pipe underdrains, complete (including porous backfill and filter | |
| 227 | fabric) shall be made at the contract unit price per linear foot (meter) complete (including porous backf | | |
| 228 229 | and filter fabric. | | |
| 230231232233 | These prices shall be full compensation for furnishing all materials and for all preparation, excavation, are installation of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item. | | |
| 234 235 | Payment will be made under: | | |
| 236 | Item D-705a | Install 6-Inch Perforated Polyethylene Pipe - per linear foot (meter) | |
| 237 | Item D-705b | Install 6-Inch Non-Perforated Polyethylene Pipe - per linear foot (meter) | |
| 238 239 | | | |
| 240241242 | REFER TO APPENDIX P FOR ITEM DESCRIPTIONS. | | |
| 242 243 244 | REFERENCES | | |
| 245 246 247 | The publications listed below form a part of this specification to the extent referenced. The publicatio are referred to within the text by the basic designation only. | | |

ASTM International (ASTM)

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Item P-101 Preparation/Removal of Existing Pavements

DESCRIPTION

101-1 This item shall consist of preparation of existing pavement surfaces for overlay, surface treatments, removal of existing pavement, and other miscellaneous items. The work shall be accomplished in accordance with these specifications and the applicable plans.

EQUIPMENT AND MATERIALS

101-2 All equipment and materials shall be specified here and in the following paragraphs or approved by the Resident Project Representative (RPR). The equipment shall not cause damage to the pavement to remain in place.

CONSTRUCTION

101-3.1 Removal of existing pavement.

The Contractor's removal operation shall be controlled to not damage adjacent pavement structure, and base material, cables, utility ducts, pipelines, or drainage structures which are to remain under the pavement.

a. Concrete pavement removal. Full depth saw cuts shall be made perpendicular to the slab surface. The Contractor shall saw through the full depth of the slab including any dowels at the joint, removing the pavement and installing new dowels as shown on the plans and per the specifications. Where the perimeter of the removal limits is not located on the joint and there are no dowels present, the perimeter shall be saw cut to the full depth of the pavement. The pavement inside the saw cut shall be removed by methods which will not cause distress in the pavement which is to remain in place. If the material is to be wasted on the airport site, it shall be reduced to a maximum size as directed by the RPR. Concrete slabs that are damaged by under breaking shall be repaired or removed and replaced as directed by the RPR.

The edge of existing concrete pavement against which new pavement abuts shall be protected from damage at all times. Spall and underbreak repair shall be in accordance with the plans. Any underlaying material that is to remain in place, shall be recompacted and/or replaced as shown on the plans. Adjacent areas damaged during repair shall be repaired or replaced at the Contractor's expense.

- **b. Asphalt pavement removal.** Asphalt pavement to be removed shall be cut to the full depth of the asphalt pavement around the perimeter of the area to be removed.
- **c.** Repair or removal of Base, Subbase, and/or Subgrade. All failed material including surface, base course, subbase course, and subgrade shall be removed and repaired as shown on the plans or as directed by the RPR. Materials and methods of construction shall comply with the applicable sections of these specifications. Any damage caused by Contractor's removal process shall be repaired at the Contractor's expense.
- 101-3.2 Preparation of joints and cracks prior to overlay/surface treatment. Remove all vegetation and debris from cracks to a minimum depth of 1 inch (25 mm). If extensive vegetation exists, treat the specific area with a concentrated solution of a water-based herbicide approved by the RPR. Fill all cracks greater than 1/4 inch (6 mm) wide) with a crack sealant per ASTM D6690. The crack sealant, preparation, and application shall be compatible with the surface treatment/overlay to be used. To minimize contamination of the asphalt with the crack sealant,

underfill the crack sealant a minimum of 1/8 inch (3 mm), not to exceed ¼ inch (6 mm). Any excess joint or crack sealer shall be removed from the pavement surface.

Wider cracks (over 1-1/2 inch wide (38 mm)), along with soft or sunken spots, indicate that the pavement or the pavement base should be repaired or replaced as stated below.

Cracks and joints may be filled with a mixture of emulsified asphalt and aggregate. The aggregate shall consist of limestone, volcanic ash, sand, or other material that will cure to form a hard substance. The combined gradation shall be as shown in the following table.

Gradation

| Sieve Size | Percent Passing |
|------------------|-----------------|
| No. 4 (4.75 mm) | 100 |
| No. 8 (2.36 mm) | 90-100 |
| No. 16 (1.18 mm) | 65-90 |
| No. 30 (600 μm) | 40-60 |
| Νο. 50 (300 μm) | 25-42 |
| No. 100 (150 μm) | 15-30 |
| No. 200 (75 μm) | 10-20 |

Up to 3% cement can be added to accelerate the set time. The mixture shall not contain more than 20% natural sand without approval in writing from the RPR.

The proportions of asphalt emulsion and aggregate shall be determined in the field and may be varied to facilitate construction requirements. Normally, these proportions will be approximately one part asphalt emulsion to five parts aggregate by volume. The material shall be poured or placed into the joints or cracks and compacted to form a voidless mass. The joint or crack shall be filled to within +0 to -1/8 inches (+0 to -3 mm) of the surface. Any material spilled outside the width of the joint shall be removed from the pavement surface prior to constructing the overlay. Where concrete overlays are to be constructed, only the excess joint material on the pavement surface and vegetation in the joints need to be removed.

101-3.3 Removal of Foreign Substances/contaminates prior to overlay and remarking. Removal of foreign substances/contaminates from existing pavement that will affect the bond of the new treatment shall consist of removal of rubber, fuel spills, oil, crack sealer, at least 90% of paint, and other foreign substances from the surface of the pavement. Areas that require removal are designated on the plans and as directed by the RPR in the field during construction.

High-pressure water, cold milling, rotary grinding, and/or sandblasting may be used. If chemicals are used, they shall comply with the state's environmental protection regulations. Removal methods used shall not cause major damage to the pavement, or to any structure or utility within or adjacent to the work area. Major damage is defined as changing the properties of the pavement, removal of asphalt causing the aggregate to ravel, or removing pavement over 1/8 inch (3 mm) deep. If it is deemed by the RPR that damage to the existing pavement is caused by operational error, such as permitting the application method to dwell in one location for too long, the Contractor shall repair the damaged area without compensation and as directed by the RPR.

Removal of foreign substances shall not proceed until approved by the RPR. Water used for high-pressure water equipment shall be provided by the Contractor at the Contractor's expense. No material shall be deposited on the pavement shoulders. All wastes shall be disposed of in areas indicated in this specification or shown on the plans.

101-3.4 Concrete spall or failed asphaltic concrete pavement repair.

- a. Repair of concrete spalls in areas to be overlaid with asphalt. The Contractor shall repair all spalled concrete as shown on the plans or as directed by the RPR. The perimeter of the repair shall be saw cut a minimum of 2 inches (50 mm) outside the affected area and 2 inches (50 mm) deep. The deteriorated material shall be removed to a depth where the existing material is firm or cannot be easily removed with a geologist pick. The removed area shall be filled with asphalt mixture with aggregate sized appropriately for the depth of the patch. The material shall be compacted with equipment approved by the RPR until the material is dense and no movement or marks are visible. The material shall not be placed in lifts over 4 inches (100 mm) in depth. This method of repair applies only to pavement to be overlaid.
- **b. Asphalt pavement repair.** The Contractor shall repair all spalled concrete as shown on the plans or as directed by the RPR. The failed areas shall be removed as specified in paragraph 101-3.1b. All failed material including surface, base course, subbase course, and subgrade shall be removed. Materials and methods of construction shall comply with the applicable sections of these specifications.
- **101-3.5 Cold milling.** Milling shall be performed with a power-operated milling machine or grinder, capable of producing a uniform finished surface. The milling machine or grinder shall operate without tearing or gouging the underlaying surface. The milling machine or grinder shall be equipped with grade and slope controls, and a positive means of dust control. All millings shall be removed and disposed off Airport property. If the Contractor mills or grinds deeper or wider than the plans specify, the Contractor shall replace the material removed with new material at the Contractor's Expense.
- a. Patching. The milling machine shall be capable of cutting a vertical edge without chipping or spalling the edges of the remaining pavement and it shall have a positive method of controlling the depth of cut. The RPR shall layout the area to be milled with a straightedge in increments of 1-foot (30 cm) widths. The area to be milled shall cover only the failed area. Any excessive area that is milled because the Contractor doesn't have the appropriate milling machine, or areas that are damaged because of his negligence, shall be repaired by the Contractor at the Contractor's Expense.
- **b.** Profiling, grade correction, or surface correction. The milling machine shall have a minimum width of 7 feet and it shall be equipped with electronic grade control devices that will cut the surface to the grade specified. The tolerances shall be maintained within +0 inch and -1/4 inch (+0 mm and -6mm) of the specified grade. The machine must cut vertical edges and have a positive method of dust control. The machine must have the ability to remove the millings or cuttings from the pavement and load them into a truck. All millings shall be removed and disposed of off the airport.
- **c. Clean-up.** The Contractor shall sweep the milled surface daily and immediately after the milling until all residual materials are removed from the pavement surface. Prior to paving, the Contractor shall wet down the milled pavement and thoroughly sweep and/or blow the surface to remove loose residual material. Waste materials shall be collected and removed from the pavement surface and adjacent areas by sweeping or vacuuming. Waste materials shall be removed and disposed off Airport property.
- **101-3.6. Preparation of asphalt pavement surfaces prior to surface treatment.** Existing asphalt pavements to be treated with a surface treatment shall be prepared as follows:
- **a.** Patch asphalt pavement surfaces that have been softened by petroleum derivatives or have failed due to any other cause. Remove damaged pavement to the full depth of the damage and replace with new asphalt pavement similar to that of the existing pavement in accordance with paragraph 101-3.4b.
 - **b.** Repair joints and cracks in accordance with paragraph 101-3.2.
- **c.** Remove oil or grease that has not penetrated the asphalt pavement by scrubbing with a detergent and washing thoroughly with clean water. After cleaning, treat these areas with an oil spot primer.
- **d.** Clean pavement surface immediately prior to placing the surface treatment so that it is free of dust, dirt, grease, vegetation, oil or any type of objectionable surface film.

- **101-3.7 Maintenance**. The Contractor shall perform all maintenance work necessary to keep the pavement in a satisfactory condition until the full section is complete and accepted by the RPR. The surface shall be kept clean and free from foreign material. The pavement shall be properly drained at all times. If cleaning is necessary or if the pavement becomes disturbed, any work repairs necessary shall be performed at the Contractor's expense.
- **101-3.8** Preparation of Joints in Rigid Pavement prior to resealing. Prior to application of sealant material, clean and dry the joints of all scale, dirt, dust, old sealant, curing compound, moisture and other foreign matter. The Contractor shall demonstrate, in the presence of the RPR, that the method used cleans the joint and does not damage the joint.
- **101-3.8.1 Removal of Existing Joint Sealant**. All existing joint sealants will be removed by plowing or use of hand tools. Any remaining sealant and or debris will be removed by use of wire brushes or other tools as necessary. Resaw joints removing no more than 1/16 inch (2 mm) from each joint face. Immediately after sawing, flush out joint with water and other tools as necessary to completely remove the slurry.
- **101-3.8.2 Cleaning prior to sealing**. Immediately before sealing, joints shall be cleaned by removing any remaining laitance and other foreign material. Allow sufficient time to dry out joints prior to sealing. Joint surfaces will be surface-dry prior to installation of sealant.
- 101-3.8.3 Joint sealant. Joint material and installation will be in accordance with Item P-605.
- **101-3.9 Preparation of Cracks in Flexible Pavement prior to sealing.** Prior to application of sealant material, clean and dry the joints of all scale, dirt, dust, old sealant, curing compound, moisture and other foreign matter. The Contractor shall demonstrate, in the presence of the RPR, that the method used cleans the cracks and does not damage the pavement.
- **101-3.9.1 Preparation of Crack**. Widen crack with router or random crack saw by removing a minimum of 1/16 inch (2 mm) from each side of crack. Immediately before sealing, cracks will be blown out with a hot air lance combined with oil and water-free compressed air.
- **101-3.9.2 Removal of Existing Crack Sealant**. Existing sealants will be removed by routing or random crack saw. Following routing or sawing any remaining debris will be removed by use of a hot lance combined with oil and water-free compressed air.
- 101-3.9.3 Crack Sealant. Crack sealant material and installation will be in accordance with Item P-605.
- 101-3.9.4 Removal of Pipe and other Buried Structures.
 - a. Removal of Existing Pipe Material. Not used.
 - b. Removal of Inlets/Manholes. Not used.

METHOD OF MEASUREMENT

- **101-4.1 Pavement removal**. The unit of measurement for pavement removal shall be the number of square yards (square meters) removed by the Contractor. Any pavement removed outside the limits of removal because the pavement was damaged by negligence on the part of the Contractor shall not be included in the measurement for payment. No direct measurement or payment shall be made for saw cutting. Saw cutting shall be incidental to pavement removal. Dowel bar installation shall be incidental to pavement removal.
- 101-4.2 Joint and crack repair. Joint and crack repair shall be considered incidental to pavement removal.
- **101-4.3 Removal of Foreign Substances/contaminates**. The foreign substances/contaminates removal shall be considered incidental to pavement removal.

- **101-4.4 Spalled and failed asphalt pavement repair.** Failed asphalt pavement repair shall be considered incidental to pavement removal.
- **101-4.5 Concrete Spall Repair.** Concrete spall repair is not anticipated but shall be considered incidental to pavement removal. The location and average depth of the patch shall be determined and agreed upon by the RPR and the Contractor.
- **101-4.6 Cold milling.** Cold milling shall be considered incidental to pavement removal. The location and average depth of the cold milling shall be as shown on the plans. If the initial cut does not correct the condition, the Contractor shall re-mill the area and will be paid for the total depth of milling.
- 101-4.7 Removal of Pipe and other Buried Structures. Not required.

BASIS OF PAYMENT

101-5.1 Payment. Payment shall be made at contract unit price for the unit of measurement as specified above. This price shall be full compensation for furnishing all materials and for all preparation, hauling, and placing of the material and for all labor, equipment, tools, and incidentals necessary to complete this item.

| Item P 101a | Pavement Removal - Full Depth - per square yard (square meter) |
|-------------|---|
| Item P 101b | Pavement Removal – Partial Depth - per square yard (square meter) |
| Item P 101c | Joint and Crack Repair - per linear foot (meter) |

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

Advisory Circulars (AC)

AC 150/5380-6 Guidelines and Procedures for Maintenance of Airport Pavements.

ASTM International (ASTM)

ASTM D6690 Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete

and Asphalt Pavements

END OF ITEM P-101

| Payment wil | l be made | under: |
|-------------|-----------|--------|
|-------------|-----------|--------|

| 179 I | tem P-208a | Aggregate Base Course, 8 Inches - | per cubic yard (cubic meter) |
|--------------|------------|-----------------------------------|------------------------------|
|--------------|------------|-----------------------------------|------------------------------|

180 Item P-208b Geotextile Fabric - per square yard (square meter)

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REFERENCES

183 184

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186

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The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

| 187 188 | ASTM C29 | Standard Test Method for Bulk Density ("Unit Weight") and Voids in Aggregate |
|------------|------------|--|
| 189 190 | ASTM C88 | Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate |
| 191 192 | ASTM C117 | Standard Test Method for Materials Finer than 75- μ m (No. 200) Sieve in Mineral Aggregates by Washing |
| 193 194 | ASTM C131 | Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine |
| 195 196 | ASTM C136 | Standard Test Method for Sieve or Screen Analysis of Fine and Coarse Aggregates |
| 197 198 | ASTM C142 | Standard Test Method for Clay Lumps and Friable Particles in Aggregates |
| 199 | ASTM D75 | Standard Practice for Sampling Aggregates |
| 200 201 | ASTM D698 | Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³ (600 kN-m/m³)) |
| 202 203 | ASTM D1556 | Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method |
| 204 205 | ASTM D2167 | Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method |
| 206 207 | ASTM D2487 | Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System) |
| 208 | ASTM D3665 | Standard Practice for Random Sampling of Construction Materials |
| 209 210 | ASTM D4318 | Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils |
| 211 212 | ASTM D4491 | Standard Test Methods for Water Permeability of Geotextiles by Permittivity |
| 213 214 | ASTM D4643 | Standard Test Method for Determination of Water Content of Soil and Rock by Microwave Oven Heating |

Item P-401 Asphalt Mix Pavement

DESCRIPTION

401-1.1 This item shall consist of pavement courses composed of mineral aggregate and asphalt binder mixed in a central mixing plant and placed on a prepared base or stabilized course in accordance with these specifications and shall conform to the lines, grades, thicknesses, and typical cross-sections shown on the plans. Each course shall be constructed to the depth, typical section, and elevation required by the plans and shall be rolled, finished, and approved before the placement of the next course.

MATERIALS

401-2.1 AGGREGATE. Aggregates shall consist of crushed stone, crushed gravel, crushed slag, screenings, natural sand, and mineral filler, as required. The aggregates should have no known history of detrimental pavement staining due to ferrous sulfides, such as pyrite. Coarse aggregate is the material retained on the No. 4 (4.75 mm) sieve. Fine aggregate is the material passing the No. 4 (4.75 mm) sieve.

a. Coarse aggregate. Coarse aggregate shall consist of sound, tough, durable particles, free from films of matter that would prevent thorough coating and bonding with the asphalt material and free from organic matter and other deleterious substances. Coarse aggregate material requirements are given in the table below.

Coarse Aggregate Material Requirements

| Material Test | Requirement | Standard |
|--|---|------------|
| Resistance to Degradation | Loss: 40% maximum | ASTM C131 |
| Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate | Loss after 5 cycles: 12% maximum using Sodium sulfate - or - 18% maximum using magnesium sulfate | ASTM C88 |
| Clay lumps and friable particles | 1.0% maximum | ASTM C142 |
| Percentage of Fractured Particles | For pavements designed for aircraft gross weights less than 60,000 pounds (27200 kg): Minimum 50% by weight of particles with at least two fractured faces and 65% with at least one fractured face ¹ | ASTM D5821 |

146 • Type and amount of Anti-strip agent when used.

147148

Asphalt Pavement Analyzer (APA) results.

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• Date the JMF was developed. Mix designs that are not dated or which are from a prior construction season shall not be accepted.

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Table 1. Asphalt Design Criteria

| Test Property | Value | Test Method |
|---|--|-------------|
| Number of gyrations | 50 | |
| Air voids (%) | 3.5 | ASTM D3203 |
| Percent voids in mineral aggregate (VMA), minimum | See Table 2 | ASTM D6995 |
| Tensile Strength Ratio (TSR) ¹ | not less than 80 at a saturation of 70-80% | ASTM D4867 |

Test specimens for TSR shall be compacted at $7 \pm 1.0 \%$ air voids. In areas subject to freeze-thaw, use freeze-thaw conditioning in lieu of moisture conditioning per ASTM D4867.

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The mineral aggregate shall be of such size that the percentage composition by weight, as determined by laboratory sieves, will conform to the gradation or gradations specified in Table 2 when tested in accordance with ASTM C136 and ASTM C117.

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The gradations in Table 2 represent the limits that shall determine the suitability of aggregate for use from the sources of supply; be well graded from coarse to fine and shall not vary from the low limit on one sieve to the high limit on the adjacent sieve, or vice versa.

162163

Item P-605 Joint Sealants for Pavements

DESCRIPTION

605-1.1 This item shall consist of providing and installing a resilient and adhesive joint sealing material capable of effectively sealing joints in pavement; joints between different types of pavements; and cracks in existing pavement.

MATERIALS

605-2.1 Joint sealants. Joint sealant materials shall meet the requirements of ASTM D6690.

Each lot or batch of sealant shall be delivered to the jobsite in the manufacturer's original sealed container. Each container shall be marked with the manufacturer's name, batch or lot number, the safe heating temperature, and shall be accompanied by the manufacturer's certification stating that the sealant meets the requirements of this specification.

605-2.2 Backer rod. The material furnished shall be a compressible, non-shrinking, non-staining, non-absorbing material that is non-reactive with the joint sealant in accordance with ASTM D5249. The backer-rod material shall be $25\% \pm 5\%$ larger in diameter than the nominal width of the joint.

605-2.3 Bond breaking tapes. Provide a bond breaking tape or separating material that is a flexible, non-shrinkable, non-absorbing, non-staining, and non-reacting adhesive-backed tape. The material shall have a melting point at least 5°F (3°C) greater than the pouring temperature of the sealant being used when tested in accordance with ASTM D789. The bond breaker tape shall be approximately 1/8 inch (3 mm) wider than the nominal width of the joint and shall not bond to the joint sealant.

CONSTRUCTION METHODS

- **605-3.1 Time of application.** Joints shall be sealed as soon after completion of the curing period as feasible and before the pavement is opened to traffic, including construction equipment. The pavement temperature shall be 50°F (10°C) and rising at the time of application of the poured joint sealing material. Do not apply sealant if moisture is observed in the joint.
- **605-3.2 Equipment.** Machines, tools, and equipment used in the performance of the work required by this section shall be approved before the work is started and maintained in satisfactory condition at all times. Submit a list of proposed equipment to be used in performance of construction work including descriptive data, **10** days prior to use on the project.
- **a. Tractor-mounted routing tool**. Provide a routing tool, used for removing old sealant from the joints, of such shape and dimensions and so mounted on the tractor that it will not damage the sides of the joints. The tool shall be designed so that it can be adjusted to remove the old material to varying depths as required. The use of V-shaped tools or rotary impact routing devices will not be permitted. Hand-operated spindle routing devices may be used to clean and enlarge random cracks.
- **b. Concrete saw.** Provide a self-propelled power saw, with water-cooled diamond or abrasive saw blades, for cutting joints to the depths and widths specified.

- **c. Sandblasting equipment.** Sandblasting is not allowed.
- **d. Waterblasting equipment**. The Contractor must demonstrate waterblasting equipment including the pumps, hose, guide and nozzle size, under job conditions, before approval in accordance with paragraph 605-3.3. The Contractor shall demonstrate, in the presence of the RPR, that the method cleans the joint and does not damage the joint.
- **e.** Hand tools. Hand tools may be used, when approved, for removing defective sealant from a crack and repairing or cleaning the crack faces. Hand tools should be carefully evaluated for potential spalling effects prior to approval for use.
- **f. Hot-poured sealing equipment.** The unit applicators used for heating and installing ASTM D6690 joint sealant materials shall be mobile and shall be equipped with a double-boiler, agitator-type kettle with an oil medium in the outer space for heat transfer; a direct-connected pressure-type extruding device with a nozzle shaped for inserting in the joint to be filled; positive temperature devices for controlling the temperature of the transfer oil and sealant; and a recording type thermometer for indicating the temperature of the sealant. The applicator unit shall be designed so that the sealant will circulate through the delivery hose and return to the inner kettle when not in use.
 - g. Cold-applied, single-component sealing equipment. Not applicable.
- **605-3.3 Preparation of joints.** Pavement joints for application of material in this specification must be dry, clean of all scale, dirt, dust, curing compound, and other foreign matter. The Contractor shall demonstrate, in the presence of the RPR, that the method cleans the joint and does not damage the joint.
- **a. Sawing**. All joints shall be sawed in accordance with specifications and plan details. Immediately after sawing the joint, the resulting slurry shall be completely removed from joint and adjacent area by flushing with a jet of water, and by use of other tools as necessary.
- **b. Sealing**. Immediately before sealing, the joints shall be thoroughly cleaned of all remaining laitance, curing compound, filler, protrusions of hardened concrete, old sealant and other foreign material from the sides and upper edges of the joint space to be sealed. Cleaning shall be accomplished by tractor-mounted routing equipment, concrete saw, or waterblaster as specified in paragraph 605-3.2. The newly exposed concrete joint faces and the pavement surface extending a minimum of 1/2 inch (12 mm) from the joint edge shall be sandblasted clean. Sandblasting shall be accomplished in a minimum of two passes. One pass per joint face with the nozzle held at an angle directly toward the joint face and not more than 3 inches (75 mm) from it. After final cleaning and immediately prior to sealing, blow out the joints with compressed air and leave them completely free of debris and water. The joint faces shall be surface dry when the seal is applied.
- **c. Backer Rod.** When the joint opening is of a greater depth than indicated for the sealant depth, plug or seal off the lower portion of the joint opening using a backer rod in accordance with paragraph 605-2.2 to prevent the entrance of the sealant below the specified depth. Take care to ensure that the backer rod is placed at the specified depth and is not stretched or twisted during installation.
- **d. Bond-breaking tape.** Where inserts or filler materials contain bitumen, or the depth of the joint opening does not allow for the use of a backup material, insert a bond-separating tape breaker in accordance with paragraph 605-2.3 to prevent incompatibility with the filler materials and three-sided adhesion of the sealant. Securely bond the tape to the bottom of the joint opening so it will not float up into the new sealant.
- **605-3.4 Installation of sealants.** Joints shall be inspected for proper width, depth, alignment, and preparation, and shall be approved by the RPR before sealing is allowed. Sealants shall be installed in accordance with the following requirements:

Immediately preceding, but not more than 50 feet (15 m) ahead of the joint sealing operations, perform a final cleaning with compressed air. Fill the joints from the bottom up to 1/4 inch (6 mm) $\pm 1/16$ inch (2 mm) below the top of pavement surface; or bottom of groove for grooved pavement. Remove and discard excess or spilled sealant from the pavement by approved methods. Install the sealant in such a manner as to prevent the formation of voids and entrapped air. In no case shall gravity methods or pouring pots be used to install the sealant material. Traffic shall

not be permitted over newly sealed pavement until authorized by the RPR. When a primer is recommended by the manufacturer, apply it evenly to the joint faces in accordance with the manufacturer's instructions. Check the joints frequently to ensure that the newly installed sealant is cured to a tack-free condition within the time specified.

605-3.5 Inspection. The Contractor shall inspect the joint sealant for proper rate of cure and set, bonding to the joint walls, cohesive separation within the sealant, reversion to liquid, entrapped air and voids. Sealants exhibiting any of these deficiencies at any time prior to the final acceptance of the project shall be removed from the joint, wasted, and replaced as specified at no additional cost to the airport.

605-3.6 Clean-up. Upon completion of the project, remove all unused materials from the site and leave the pavement in a clean condition.

METHOD OF MEASUREMENT

605-4.1 Joint sealing material shall be considered incidental to Item P-101.

BASIS OF PAYMENT

605-5.1 Payment for joint sealing material shall be considered incidental to Item P-101. The price shall be full compensation for furnishing all materials, for all preparation, delivering, and placing of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

| ASTM D789 | Standard Test Method for Determination of Relative Viscosity of Polyamide (PA) |
|-------------------------|---|
| ASTM D5249 | Standard Specification for Backer Material for Use with Cold- and Hot-Applied Joint Sealants in Portland-Cement Concrete and Asphalt Joints |
| ASTM D6690 | Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt |
| Advisory Circulars (AC) | |
| AC 150/5340-30 | Design and Installation Details for Airport Visual Aids |

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preparation, delivery, installation, and curing of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

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REFERENCES

233234

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

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ASTM International (ASTM)

| 238 | | |
|-----------------------------------|---------------|---|
| 239 | ASTM A615 | Standard Specification for Deformed and Plain Carbon-Steel Bars for |
| 240 | | Concrete Reinforcement |
| 241 | | |
| 242 | ASTM C31 | Standard Practice for Making and Curing Concrete Test Specimens in the |
| 243 | | Field |
| 244 | | |
| 245 | ASTM C33 | Standard Specification for Concrete Aggregates |
| 246 | | |
| 247 | ASTM C39 | Standard Test Method for Compressive Strength of Cylindrical Concrete |
| 248 | | Specimens |
| 249 | | |
| 250 | ASTM C94 | Standard Specification for Ready-Mixed Concrete |
| 251 | | |
| 252 | ASTM C136 | Standard Test Method for Sieve or Screen Analysis of Fine and Coarse |
| 253 | | Aggregates |
| 254 | | |
| 255 | ASTM C114 | Standard Test Methods for Chemical Analysis of Hydraulic Cement |
| 256 | ACTN 4 C4 2 C | Chandrad Test Marth addies Ciarra Analysis of Ciarra and Coarra Assessation |
| 257 | ASTM C136 | Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates |
| 258259 | ASTM C143 | Standard Tost Mothod for Slump of Hydraulic Coment Concrete |
| 260 | ASTIVI C143 | Standard Test Method for Slump of Hydraulic-Cement Concrete |
| 261 | ASTM C150 | Standard Specification for Portland Cement |
| 262 | ASTIVI CISU | Standard Specification for Fortiand Cement |
| 263 | ASTM C171 | Standard Specification for Sheet Materials for Curing Concrete |
| 264 | 7.51111 C171 | Standard Specification for Sheet Materials for earning concrete |
| 265 | ASTM C231 | Standard Test Method for Air Content of Freshly Mixed Concrete by the |
| 266 | 7.51111 6251 | Pressure Method |
| 267 | | Tressure method |
| 268 | ASTM C260 | Standard Specification for Air-Entraining Admixtures for Concrete |
| 269 | | 6 |
| 270 | ASTM C311 | Standard Test Methods for Sampling and Testing Fly Ash or Natural |
| 271 | | Pozzolans for Use in Portland-Cement Concrete |
| 272 | | |
| 273 | ASTM C494 | Standard Specification for Chemical Admixtures for Concrete |
| 274 | | |
| | | |

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Item P-620 Runway and Taxiway Marking

DESCRIPTION

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620-1.1 This item shall consist of the preparation and painting of numbers, markings, and stripes on the surface of runways, taxiways, and aprons, in accordance with these specifications and at the locations shown on the plans, or as directed by the Resident Project Representative (RPR). The terms "paint" and "marking material" as well as "painting" and "application of markings" are interchangeable throughout this specification.

9 MATERIALS

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620-2.1 MATERIALS ACCEPTANCE. The Contractor shall furnish manufacturer's certified test reports, for materials shipped to the project. The certified test reports shall include a statement that the materials meet the specification requirements. This certification along with a copy of the paint manufacturer's surface preparation; marking materials, including adhesion, flow promoting and/or floatation additive; and application requirements must be submitted and approved by the Resident Project Representative (RPR) prior to the initial application of markings. The reports can be used for material acceptance or the RPR may perform verification testing. The reports shall not be interpreted as a basis for payment. The Contractor shall notify the RPR upon arrival of a shipment of materials to the site. All material shall arrive in sealed containers that are easily quantifiable for inspection by the RPR.

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620-2.2 MARKING MATERIALS.

TABLE 1. MARKING MATERIALS

| | | Glas | s Beads ² | | |
|--|------------------|------------------------|-----------------------------|------------------------|--------------------------------|
| Туре | Color | Fed Std. 595 Number | Application Rate Maximum | Туре | Application Rate Minimum |
| Waterborne Type I | Yellow | 33538 or 33655 | 115 ft²/gal (2.8 m²/l) | Type I, Gradation A | 7 lb/gal (0.85 kg/l) |
| Waterborne Type I | Black | 37038 | 115 ft²/gal (2.8 m²/l) | Not used | Not used |
| Temporary Marking Waterborne Type I | Same as Above | Same as Above | 230 ft²/gal (5.6 m²/l) | Not Used | Not Used |

¹See paragraph 620-2.2a

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² See paragraph 620-2.2b

<u>Item T-905 Topsoil</u> AC 150/5370-10H

Suitable equipment necessary for proper preparation and treatment of the ground surface, stripping of topsoil, and for the handling and placing of all required materials shall be on hand, in good condition, and approved by the RPR before the various operations are started.

905-3.2 PREPARING THE GROUND SURFACE. Immediately prior to dumping and spreading the topsoil on any area, the surface shall be loosened by discs or spike-tooth harrows, or by other means approved by the RPR, to a minimum depth of 2 inches (50 mm) to facilitate bonding of the topsoil to the covered subgrade soil. The surface of the area to be topsoiled shall be cleared of all stones larger than 2 inches (50 mm) in any diameter and all litter or other material which may be detrimental to proper bonding, the rise of capillary moisture, or the proper growth of the desired planting. Limited areas, as shown on the plans, which are too compact to respond to these operations shall receive special scarification.

Grades on the area to be topsoiled, which have been established by others as shown on the plans, shall be maintained in a true and even condition. Where grades have not been established, the areas shall be smooth-graded and the surface left at the prescribed grades in an even and compacted condition to prevent the formation of low places or pockets where water will stand.

905-3.3 OBTAINING TOPSOIL. Prior to the stripping of topsoil from designated areas, any vegetation, briars, stumps and large roots, rubbish or stones found on such areas, which may interfere with subsequent operations, shall be removed using methods approved by the RPR. Heavy sod or other cover, which cannot be incorporated into the topsoil by discing or other means shall be removed.

When suitable topsoil is available on the site, the Contractor shall remove this material from the designated areas and to the depth as directed by the RPR. The topsoil shall be spread on areas already tilled and smooth-graded, or stockpiled in areas approved by the RPR. Any topsoil stockpiled by the Contractor shall be rehandled and placed without additional compensation. Any topsoil that has been stockpiled on the site by others, and is required for topsoil purposes, shall be removed and placed by the Contractor. The sites of all stockpiles and areas adjacent thereto which have been disturbed by the Contractor shall be graded if required and put into a condition acceptable for seeding.

When suitable topsoil is secured off the airport site, the Contractor shall locate and obtain the supply, subject to the approval of the RPR. The Contractor shall notify the RPR sufficiently in advance of operations in order that necessary measurements and tests can be made. The Contractor shall remove the topsoil from approved areas and to the depth as directed. The topsoil shall be hauled to the site of the work and placed for spreading, or spread as required. Any topsoil hauled to the site of the work and stockpiled shall be rehandled and placed without additional compensation.

905-3.4 PLACING TOPSOIL. The topsoil shall be evenly spread on the prepared areas to a uniform depth of **3** inches (50 mm) after compaction, unless otherwise shown on the plans or stated in the special provisions. Spreading shall not be done when the ground or topsoil is frozen, excessively wet, or otherwise in a condition detrimental to the work. Spreading shall be carried on so that turfing operations can proceed with a minimum of soil preparation or tilling.

After spreading, any large, stiff clods and hard lumps shall be broken with a pulverizer or by other effective means, and all stones or rocks (2 inches (50 mm) or more in diameter), roots, litter, or any foreign matter shall be raked up and disposed of by the Contractor. after spreading is completed, the topsoil shall be satisfactorily compacted by rolling with a cultipacker or by other means approved by the

Item T-905 Topsoil AC 150/5370-10H

RPR. The compacted topsoil surface shall conform to the required lines, grades, and cross-sections. Any 81 topsoil or other dirt falling upon pavements as a result of hauling or handling of topsoil shall be 82 83 promptly removed. 84 METHOD OF MEASUREMENT 85 **905-4.1** Topsoil obtained on the site shall be measured by the number of square yards (square meters) of topsoil measured in its original position and stripped or excavated. Topsoil stockpiled by others and 86 removed for topsoil by the Contractor shall be measured by the number of square yards (square meters) 87 of topsoil measured in the stockpile. Topsoil shall be measured by area in square yards (square meters) 88 89 computed by the method of end areas. 90 **BASIS OF PAYMENT** 91 92 93 905-5.1 Payment will be made at the contract unit price per square yard (square meter) for topsoil (obtained on the site). This price shall be full compensation for furnishing all materials and for all 94 95 preparation, placing, and spreading of the materials, and for all labor, equipment, tools, and incidentals 96 necessary to complete the item. 97 98 Payment will be made under: 99 Item T-905a Topsoil - per square yard (square meter) **REFERENCES** 100 The publications listed below form a part of this specification to the extent referenced. The publications 101 102 are referred to within the text by the basic designation only. 103 ASTM International (ASTM) ASTM C117 Materials Finer than 75 μm (No. 200) Sieve in Mineral Aggregates by 104 105 Washing 106 Advisory Circulars (AC)

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107 AC 150/5200-33 Hazardous Wildlife Attractants on or Near Airports

108 FAA/United States Department of Agriculture

Wildlife Hazard Management at Airports, A Manual for Airport Personnel

110 END OF ITEM T-905

- IF DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, OR REPRESENT A SIGNIFICANT DIFFERENCE BETWEEN THE CONTRACTO COMENTS AND FIELD CONDITIONS, THE CONTRACTOR SHALL CONTRACT THE MEMICREM IMMEDIATELY.
- ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARD, UNLESS SPECIFICALLY STATED OTHERWISE.
- WHENEVER, IN THE CONTRACT DOCUMENTS, THE WORDS "PROVIDE". "FURNISH" "NISTALL". FURNISH AND INSTALL" OR SMALL OR SMALL OR SMALL OR SMALL AND ROTALL" OR SMALL AND ROTALL" OR SMALL FURNISH AND LEE BURNETS FOR PROVIDE FOR THE CONSTRUCTION AND COMPLETION IN EVERY DETAIL THE WORK DESCRIBED. IT IS FURTHER INTENDED THAT THE CONTRACTOR SHALL FURNISH ALL LABOR. SUPERVISION, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, SUPPLIES, TESTING, AND INCIDENTALS REQUIRED TO COMPLETE THE WORK IN ACCORDANCE WITH THE DRAWINGS (PLANS), SPECIFICATIONS, AND TERMS OF THE CONTRACT.
- CONTRACTOR SHALL KEEP A SET OF AS-BUILT DRAWINGS ON-SITE AND MAKE AVAILABLE TO THE ENGINEER AT ALL TIMES. AS-BUILT SET SHALL BE SUBMITTED TO THE ENGINEER AT THE COMPLETION OF THE JOB, CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING ALL AS-BUILT INFORMATION DURING THE PROJECT. THE CONTRACTOR SHALL BOT BRING TO THE ENGINEER'S ATTENTION, ANY DISCREPANCIES BETWEEN THE CONTRACTO DOCUMENTS AND ACTUAL FIELD CONDITIONS.
- ALL DAMAGE TO UTILITIES, PAVEMENT, EQUIPMENT, OR STRUCTURES FROM CONSTRUCTION ACTIVITIES SHALL BE IMMEDIATELY REPORTED TO THE RESIDENT ENGINEER THE RESIDENT ENGINEER SHALL DETERMINE WHETHER REPARENT PROPERTY OF REPURSEMENT IS NECESSARY. ALL REPAIR METHODS SHALL BE SUBMITTED TO THE RESIDENT ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INITIATING THE WORK. REPAIRS SHALL BE MADE AT NO ADDITIONAL COST TO THE SPONSOR AND TO THE APPROVAL OF THE REVIEWS TO
- THE CONTRACTOR SHALL PROVIDE WORKMANSHIP AND MATERIALS THAT ARE OF GOOD QUALITY AND COMPLY WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL PROVIDE WORK, EQUIPMENT AND MATERIALS THAT COMPLY WITH FAA RE ELECTRICAL CODE, NATIONAL ELECTRICAL SAFETY CODE, AND ALL LOCAL CODES.
- 9. CONTRACTOR SHALL PROVIDE THE NECESSARY NUMBER OF RADIOS FOR HIS/HER WORKFORCE.
- SWEEPER(S) SHALL BE AVAILABLE AT ALL TIMES TO CLEAN FOREIGN OBJECT DEBRIS (FOD) FROM HAUL ROUTE OR OTHER AREAS ADJACENT TO CONSTRUCTION ACTIVITY. CONTRACTOR SHALL CONSTANTLY MONITOR AIRCRAFT MOVEMENT AREAS FOR FOO AND IMMEDIATELY REMOVE ALL DEBRIS.
- PRIOR TO OPENING OR CLOSING A TAXIWAY, THE CONTRACTOR MUST, THROUGH THE AIRPORT, GIVE NOTICE USING THE NOTICE TO AIRMEN (NOTAM) SYSTEM OF PROPOSED LOCATION, TIME AND DATE OF COMMENCEMENT OF CONSTRUCTION AND THE DURATION OF THE CLOSURE.
- THIS PROJECT WILL GENERATE QUANTITIES OF ASPHALT MILLINGS. THE CONTRACTOR SHALL COORDINATE WITH THE SPONSOR ANDIOR THE ENGINEER FOR PLACEMENT LOCATIONS. THE MILLINGS WILL BE PLACED AND ROLLED IN ANY INCIDENT LOCATIONS DEVINED BY THE SPONSOR ANDIOR THE ENGINEER IN ACCORDANCE WITH TEMP-101. THE PLACEMENT OF MILLINGS SHALL BE CONSIDERED IN DISCIPLIAL TO TEMPS P-101. ALL MILLINGS PLACED WILL RECEIVE A TACK COAT APPLICATION IN ACCORDANCE WITH P-803.
- DESIGNS CONTAINED HEREIN ARE BASED ON SPECIFIED EQUIPMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REDESIGN FOR EQUIPMENT SUBSTITUTIONS TO THE APPROVED SPECIFICATIONS AT NO ADDITIONAL COST TO THE SPONSOR. THE CONTRACTOR SHALL PROVIDE MATERIAL SUBBLITTLES ASAMPLES AND DESIGN DRAWINGS FOR THE ENGINEERS APPROVAL A MINIMUM OF SEVEN (7) DAYS PRIOR TO ORDERING.
- ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF PUBLIC IMPROVEMENTS SHALL MEET OR EXCEED THE STANDARDS AND SHECIFICATIONS SET FORTH IN THE PROJECT MANUAL FOR THIS PROJECT, FAS STANDARDS, AND MISSOURI STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS COMPLICT BETWEEN THESE PLANS AND THE SPECIFICATIONS, OR ANY APPLICABLE STANDARDS, THE HIGHER CUALITY STANDARDS SHE APPLY. ALL WORK SHALL BE INSPECIFICATIONS.
- DIMENSIONING FOR LAYOUTS AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWINGS. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE ENGINEER FOR CLARIFICATION AND RECORD DIMENSIONS ON AS-BUILT DRAWINGS.
- TOPSOIL SHALL BE REMOVED AND STOCKPILED PRIOR TO GRADING OPERATIONS. PAYMENT FOR RE-HANDLING OF TOPSOIL SHALL NOT BE MEASURED FOR PAYMENT.
- CONTRACTOR SHALL HAVE A COPY OF THE CURRENT FAA ADVISORY CIRCULAR AC 150/5340-1 (CURRENT VERSION) ON "STANDARDS FOR ATRIPORT MARKINGS" ON SITE AT ALL TIMES. ANY DISCREPANCY BETWEEN INFORMATION SHOWN ON THE PLAN SHEETS AND THE ADVISORY CIRCULAR SHALL BE COORDINATED WITH THE ENGINEER FOR DIRECTION.

QUALITY CONTROL/QUALITY ASSURANCE

- THE CONTRACTOR SHALL HAVE. A MINIMUM OF COME (1) CLIRRENT COPY OF THE APPROVED PLANS (INCLUDING ANY CHANGE ROBERS SUPPLEMENTIAL AGREEMENTS, FIELD DIRECTINGS ETC.), ONE (1) AURRENT COPY OF THE APPROPRIATE STANDARDS AND SPECIFICATIONS, AND A COPY OF ANY PERMITS AND EXTENSION AGREEMENTS NEEDED FOR THE JOB, ON SITE AT ALL TIMES.

- PRELIMMARY PREMITTING INFORMATION WILL BE SUBMITTED BY THE ENGINEER PROOF TO AWARD OF CONTRACT SPECIFIC TRIVER THAT WILL NEED TO BE COME TEST BY THE CONTRACTOR INCLIDES BY THE ARCH TEST BY THE PROPERTY OF T

SITE ACCESS AND STAGING

- DURING CONSTRUCTION. THE CONTRACTOR SHALL IMMINEZ DISTURBANCES TO ALL CONSTRUCTION AREAS AND ACCESS ROUTES. THE SIGNLUPES EQUIRIENT AND VINITURE RITUS RESERVED IN ANY PANEMENTS, ANY HALL ACCESS ROUSO. RO ANY INFELIOSACETY AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING FACILITIES OR ROADS. REPARES SHALL BE MADE AT NO ADDITIONAL COST TO THE SPONSOR AND TO THE SATISFACTION OF THE ENGINEER HAUL ROUTE BRIDGES SHALL BE CONSTRUCTED AT HAUL ROUTES CROSSING EXISTING ARFIELD PAVEMENT. COSTS ASSOCIATED WITH HAUL BRIDGE CONSTRUCTED AT HAUL ROUTES CROSSING EXISTING ARFIELD PAVEMENT.
- BEFORE ESTABLISHING SITE ACCESS AND HAUL ROUTES, THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER: WHEN POSSIBLE, ACCESS/HAUL ROUTES SHALL UTILIZE EXISTING ROADS. THE CONTRACTOR SHALL MAI JAPPORT SECURITY AT ALL TIME.
- ALL DAMAGE TO UTILITIES, PAVEMENT, EQUIPMENT, OR STRUCTURES FROM CONSTRUCTION ACTIVITIES SHALL BE IMMEDIATELY REPORTED TO THE RESIDENT ENGINEER. THE RESIDENT ENGINEER SHALL DETERMINE WHETHER REPARANTED THE STRUCTURE OF REPURSEMENT IS NECESSARY, ALL REPAIR METHODS SHALL BE SUBMITTED TO THE RESIDENT ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INITIATING THE WORK. REPAIRS SHALL BE MADE AT NO ADDITIONAL COST TO THE SPONSOR AND TO THE APPROVAL OF THE ENGINEER.
- CONTRACTOR SHALL EXAMINE THE EXISTING PAVEMENTS THAT WILL BE USED FOR HAULING OF MATERIAL AND EQUIPMENT, AND DETERMINE THE PAVEMENTS ABILITY TO WITHSTAND CONTRACTOR OPERATIONS WITHOUT CAUSING DAMAGE TO THE PAVEMENT ANY DAMAGE CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR TO THE APPROVAL OF THE ENGINEER AND AT NO ADDITIONAL COST TO THE SPONSOR.
- CONTRACTOR SHALL BE REQUIRED TO PROVIDED NON-POTABLE WATER FOR CONSTRUCTION PURPOSES. CONTRACTOR SHALL BE RESPONSIBLE FOR STORAGE OF NON-PORTABLE WATER. ANY STRUCTURES RECEIVED IN SUPPORT OF WATERING OPERATIONS SHALL MEET FAA FAR PARTY TO LEARANCES FOR ALL AIRCRAFT AND BE APPROPRIATELY LIT AS A HAZARD TO THE FLYING PUBLIC. NON-PORTABLE WATER USED FOR P-152 OR DUST CONTROL SHALL BE INCIDENTAL TO THE PROJECT BID ITEMS.
- ALL AREAS THAT ARE DISTURBED BY CONTRACTOR OPERATIONS, SHALL BE SEEDED PER T-901 SEEDING AND C-102 EROSION CONTROL. SEEDING AND EROSION CONTROL COSTS SHALL BE PAID SEPARATELY TO THEIR RESPECTIVE BID ITEM.
- ALL CONTRACTOR EMPLOYEES SHALL BE REQUIRED TO PARK IN THE CONTRACTORS DESIGNATED STAGING AREA ONLY AND SHALL BE DRIVEN TO THE PROJECT SITE BY DESIGNATED CONSTRUCTION VEHICLES.
- WHENEVER CONSTRUCTION TRAFFIC IS REQUIRED TO CROSS AN ACTIVE RUNWAY, TAXIWAY, TAXILANE, OR INTERRUPT NORMAL TRAFFIC FLOW ON APRONS OR RAMIPS, THE CONTRACTOR SHALL PROVIDE FLAGGERS AT THE CROSSING(S) AS REQUIRED BY THE CONSTRUCTION PHASING DRAWINGS OR AS DIRECTED BY THE ENGINEER OR THE AIRPORT (INCIDENTAL TO ITEM C-105).

- THE EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND SHALL NOT BE SCALED FOR EXACT LOCATION. LOCATION OF EXISTING DUCT BANK, CIRCUITING, UTILITIES AND STRUCTURES SHOWN ON THESE DRAWINGS BASED ON AVAILABLE INFORMATION AND IS NOT WARRANTED TO BE EXACT, NOR IS IT WARRANTED THAT ALL OF THESE ITEMS ARE SHOWN.
- CONTRACTOR SHALL CONTACT AND COORDINATE WITH THE APPROPRIATE UTILITY AGENCIES WHEN WORKING ON OR
 WITHIN THE PROJUMITY OF AN AGENCIES UTILITY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE
 ALLIENTS THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.

- CONTRACTOR SHOULD EXPECT TO ENCOUNTER WATER IN LIGHT CANS, JUNCTION CANS AND STRUCTURES. CONTRACTOR RESPONSIBLE FOR DEWATERING AT NO ADDITIONAL COST TO THE OWNER.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR MAY UTILIZE THE FOLLOWING TOLL FREE TELEPHONE NUMBER PROVIDED BY "MISSOURI ONE CALL SYSTEM INC.": 1-800 LIGHTE. THIS NUMBER IS A PHYLOZBLE ANYWHERE WITHIN IT HE STATE OF

SUBMITTALS

- THE CONTRACTOR SHALL SUBMIT A DETAILED LISTING OF ALL SUBMITTALS (E.G., MIX DESIGNS, MATERIAL CERTIFICATION, AND PRODUCT INFORMATION) AND SHOP DRAWINGS REQUIRED BY THE TECHNICAL SPECIFICATIONS.

TRAFFIC CONTROL

- ALL MATERIALS MUST BE OBTAINED FROM AN UNDESIGNATED SOURCE UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR SPECIFICATIONS.

WORKING NEAR STRUCTURES

- THE STRUCTURES SHOWN OR DEFINED IN THE CONTRACT DOCUMENTS AND PLANS HAS BEEN DESIGNED ONLY FOR LOADS ANTIOPATED ON THE STRUCTURE DURING ITS SERVICE LIFE CONTRACTOR SHALL PROVIDE ALL REQUIRED ENGINEERING AND OTHER MEASURES TO ACHIEVE THE MEANS, METHODS, AND SEQUENCES OF WORK, REQUIRED ENGINEERING WAY INCLUDE, BUT IS NOT LIMITED TO
- LAYOUT DESIGN FOR FORMWORK, SHORING, AND RESHORING DESIGN OF CONCRETE MIXES ERECTION PROCEDURES WHICH ADDRESS STABILITY OF THE FRAME DURING CONSTRUCTION

- WELD PROCEDURES
 DESIGN OF TEMPORARY BRACING OF WALLS FOR WIND, SEISMIC, OR SOIL LOADS
 SURVEYING TO VERIFY CONSTRUCTION TOLERANCES
 EVALUATION OF TEMPORARY CONSTRUCTION LOADS ON STRUCTURE DUE TO EQUIPMENT AND MATERIALS
 STRUCTURAL ENGINEERING TO RESIST ANY OTHER LOADS NOT IDENTIFIED ON DESIGN DRAWINGS.
- STORM PLAN AND PROFILE NOTES

- THE DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND WERE DETERMINED ASSUMING A BURIAL DEPTH OF 2-0°.
 ACTUAL DEPTHS MAY VARY AND SHOULD BE FIELD VERIFIED.
- IN THE EVENT OF ANY CONFLICT WITHIN THESE PLANS, THE INFORMATION IN THE PROFILES SHALL GOVERN OVER THE SPOT ELEVATIONS AND CROSS SECTIONS.

EROSION CONTROL NOTES

- 5. SILT FENCE IS TO BE INSTALLED PRIOR TO START OF CLEARING AND GRUBBING OPERATIONS.
- ANY SEDIMENT TRACKED ONTO PAVED SECTIONS, REGARDLESS OF LOCATION OR QUANTITY, SHALL BE IMMEDIATELY CLEANED.
- ALL DISTURBED GROUND SHALL BE SEEDED AND HYDRAULIC MULCHED WITHIN 14 DAYS AFTER COMPLETION OF FINISHED GRADE.
- LL TEMPORARY EROSION AND SEDIMENT CONTROL MESQUESS SHALL BE REMOVED AND DISPOSED WITHIN 30 DAYS
 AFTER FINAL SITE STABILIZATION IS ACHIEVED, OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED,
 WHICH VEYER OCCURS ERRLIEST, OR AS AUTHORIZED BY THE LOCAL GOVERNING JURISDICTION. TRAPPED SEDIMENT AND
 DISTURBED SOIL AREAS RESULTING FROM THE DISPOSAL OF TEMPORARY MEASURES MUST BE RETURNED TO FINAL
 PLAN GRADES AND PERMANENTLY STABILIZED TO PREVENT FURTHER SOIL EROSION.

- DURING CONSTRUCTION, THE CONTRACTOR SHALL COMPLY WITH FAA ADVISORY CIRCULAR (AC) 150/5370-2 (CURRENT VERSION), "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION".
- ALL VEHICLES AND EQUIPMENT WORKING REQULARLY ON THE PROJECT SITE SHALL BE REQUIRED TO BE EQUIPPED WITT STANDARD FRAM MARKINGS PER FRA ADVISIONEY CIRCULAR \$1905210-5 (CURRENT VERSION) OR BE ESCORTED BY A PROPERTY MARKED VEHICLE. AND RORANGE AND WHITE \$ FOOT BY S FOOT FAS STANDARD VEHICLE FLAG MAY BE USED DURING DAYTIME OPERATIONS OR A FLASHING BEACON MAY BE USED AT ANY TIME. FAILURE TO PROVIDE SUCH MARKINGS OR BEOORT FOR ANY EQUIPMENT INDIFFER THE PROPERTY FER YEAR FULL PRECLUDE THAT EQUIPMENT OF THE CONTRACTOR. BACKUP ALARMS SHALL BE ADJUSTED FOR SURROUNDING NOISE LEVELS. TRITON HARK-ALARM OR APPROVEDE EQUIAL.
- THE CONTRACTOR SHALL PROVIDE THREE TAYIMAY CLUSURE MARKERS (TOM) AND TWO LIGHTED BUNNAY LUSURE MARKERS (ROM, ROWA). ARE PORTABLE, TRALEF MOUNTED, DESEL GENERAD OR POWERED UNITS, CAPABLE OF AS A RECONSTRUCTOR AND A REPORT OF A REPORT O
- ALL VEHICLES AND EQUIPMENT WORKING ON THE SITE SHALL BE EQUIPPED WITH STANDARD FAA MARKINGS PER FAA ADVISORY CIRCULAR 1505210-5 (QUIRRENT VERBICAN) OR BE ESCONTED BY A RROPERLY MARKED VEHICLE ANY VEHICLE ANY VEHICLE OF THE STEEP AND WISE PER MOVED WINE MEDITAL YEAR OF A STEEP AND THE STEEP AND WISE THE STEEP AND WIS
- CONTRACTOR SHALL MAINTAIN AIRPORT PERIMETER SECURITY FOR THE DURATION OF THE PROJECT. ANY REVISIONS TO
 FENCE ALIGNMENT SHALL BE COORDINATED WITH ENGINEER FOR APPROVAL AT LEAST ONE WEEK PRIOR TO
 CONSTRUCTION ALL COSTS SHALL BE INCIDENTAL TO PROJECT BID ITEMS.

- THE CONTRACTOR SHALL COMPLY WITH ALL TERMS AND CONDITIONS OF THE MISSOURI PERMIT FOR STORM WATER DISCHARGE, THE STORM WATER MANAGEMENT PLAN, THE EROSION CONTROL PLAN, AND ALL REQUIREMENTS OF THE LOCAL DRAINAGE AUTHORITY.
- 3. CONTRACTOR SHALL MAINTAIN POSTIVE DUST CONTROL DURING THE ENTIRE PROJECT DURATION. THE METHOD OF DUST CONTROL BEMOUNDS DURING ALL PHASES SHALL BE SUBMITTED FOR APPOVALE YTHE ENGINEER. DUST CONTROL SHALL BE EMPLOYED DURING ANY PROJECT SHUTDOWN PERIODS, WINTER OR OTHERWISE. PAYMENT FOR THIS WORK SHALL BE INCIDENTAL TO THE VARIOUS TERMS OF WORK, AND NO SEPARATE PAYMENT WILL BE MADE.
- 4. ANY EROSION CONTROL FACILITY DAMAGED OR DESTROYED PREMATURELY, BY ANY MEANS, SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR.
- 5. A WATER TRUCK SHALL BE KEPT ON SITE AT ALL TIMES DURING EARTHWORK ACTIVITIES FOR DUST ABATEMENT
- IDE FOR THE CONTRACTOR WHEN DEVELOPING HISHER STORMWATER MANAGEMENT PLAN. FIELD CONDITIONS M MRANT MORE, LESS OR DIFFERENT BIM PINSTALLATION. IT IS THE CONTRACTORS RESPONSIBILITY TO DEVELOP A ORBMATER AND EROSION CONTROL PLAN THAT MEETS ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS SOCIATED WITH THE STORMWATER FERMIT.
- NEGATIVE IMPACTS TO DOWNSTREAM AREAS CAUSED BY GRADING ARE TO BE MONITORED AND CORRECTED BY THE CONTRACTOR. ANY OFF-SITE CLEANUP, DIRECTED BY THE PUBLIC WORKS INSPECTOR, (INCLUDING STREET CLEANING), SHALL BE COMPLETED WITHIN 24-HOURS OF WRITTEN INSTRUCTION, OR RISK CONSTRUCTION STOPPAGE.

- ALL AREAS FOR SEEDING SHALL BE TILLED TO BREAK UP ROOTING RESTRICTIVE LAYERS, HAVE A MINIMUM OF 4" OF TOPSOIL REAPPLIED, AND THEN BE HARROWED, AND ROLLED OR PACKED, TO PREPARE THE REQUIRED FIRM SEED BED

- ALL STATED QUANTITIES ARE CONSIDERED APPROXIMATE. ACTUAL QUANTITIES WILL BE DETERMINED BY THE ENGINEER FROM WORK IN-PLACE.

- IF THE CONTRACTOR CHOOSES TO OVERBUILD PAVEMENT LAYERS BEYOND THE DIMENSIONS SHOWN ON THE PLANS FOR CONSTRUCTABILITY, NO PAYMENT WILL BE MADE FOR THIS ADDITIONAL MATERIAL.

- 7.4. FOR OVERLAY PAVEMENT BITUMINOUS TACK COAT AT 0.15 GALLONS PER SQUARE YARD PER LIFT (UNDILUTED).

- TWO WEEKS PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A PRE-CONSTRUCTION SURVEY VERIFICING EISTINGS LEXATIONS OF ALL PAYMENT AREAS AND OTHER CRITICAL AREAS DETERMINED BY THE ENGINEER. THE SURVEY SHALL BE PERFORMED USING SPECIFIED PROJECT CONTROL AND SHALL BE DEFINED TO THE PROJECT OF THE CANDIDATE OF THE PROJECT OF THE PROJECT OF THE PROJECT OF THE SURVEY WILL BE USED TO DETERMINE IF ANY MODIFICATIONS TO DESIGN GRADES ARE REQUIRED. THIS SURVEY WILL BE USED TO DETERMINE FAM MODIFICATIONS TO DESIGN GRADES ARE REQUIRED. THIS SURVEY WILL BE USED TO DETERMINE OF ANY MODIFICATIONS TO DESIGN GRADES ARE REQUIRED. THIS SURVEY WILL BE USED TO DETERMINE OF THE PROJECT OF THE PRO
- BEFORE AND DURING THE PROJECT, ANY DISCREPANCIES IN EXISTING CONDITIONS DISCOVERED BY THE CONT SHALL BE IMMEDIATELY IDENTIFIED TO THE ENGINEER.
- DAILY FIELD SURVEY NOTES SHALL BE GIVEN TO THE ENGINEER SO THAT PERIODIC CHECKS FOR PLAN GRADES, ALIGNMENTS, AND GRADE TOLERANCES CAN BE REVIEWED.
- 6. THE HORIZONTAL AND VERTICAL COORDINATES ARE BASED ON THE HORIZONTAL DATUM NAD 83 AND VERTICAL DATUM NAV 88.

DESCRIPTION

ISSUE RECORD

CONSTRUCTION STAKING AND LAYOUT

- 1. DRAINAGE SWALES SLOPE STAKES AND FLOW LINE BLUE TOPS AT 50-FOOT (15-M) STATIONS
- 3. SUBBASE AND BASE COURSE BLUE TOPS AT 50-FOOT STATIONS WITH A 50-FOOT OFFSET DISTANCE (MAXIMUM) AND AT THE EDGE OF PAVEMENT.

- 4.4. SHOULDER AND SAFETY AREA BLUE TOPS AT 50-FOOT STATIONS AND AT ALL BREAK POINTS WITH MAXIMUM OF 50-FOOT OFFSETS
- REQUIRED VERIFICATION/AS-BUILT SURVEY SHALL BE PROVIDED ELECTRONICALLY IN AN ENGINEER APPROVED FORMAT AND SHALL INCLUDE POINT NUMBER, NORTHING, EASTING, ELEVATION, AND DESCRIPTION (PNEZD, COMMA DELIMITED EXCHANGE). VERHICATION OF EXISTING CONDITIONS AND SHALL BE SUBMITTED PRIOR TO COMMENCING CONSTRUCTION CONTINUES IN THE AREAS OF THE EXISTING REPRESENTANCE. THIS SUPPLY SHALL BE CONSIDERED INCIDENTAL OF CONSTRUCTION OF THE EXISTING SHALL BE CONSIDERED INCIDENTAL OF CONSTRUCTION OF THE CONSTRUCTION OF THE CONSTRUCTION OF THE CONSTRUCTION OF THE CONTINUES OF
- IN ADDITION TO ALL REQUIRED UTILITY LOCATES, THE CONTRACTOR SHALL BE REQUIRED TO VERIFY THE ELEVATIONS OF ALL UTILITY CROSSINGS BEFORE TO CONSTRUCTION OPERATIONS. FOR EXAMPLE, BEFORE THE CONTRACTOR THE PROPOSED PIPE SHALL BE VERHED AND PROVIDED TO THE ENGINEER. THIS VERIFICATION SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION OPERATIONS AND SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE SHOOKEN WORK IN THE SHALL BE VERY AND THE ALL WAS ADDITIONAL COST TO THE SHOOKEN WORK IN THE SHEEP AREAS SHALL NOT BE ALL UNDED TO COMMENCE UNTIL THESE UTILITY VERIFICATIONS HAVE BEEN SUPPLIED BY THE CONTRACTOR TO THE ENGINEER AND THE ENGINEER HAS PROVIDED ACCEPTANCE, BASED ON A TIMELY REVIEW OF THE VERFICATIONS UNDER THE CONTRACTOR TO THE ENGINEER AND THE ENGINEER HAS PROVIDED ACCEPTANCE, BASED ON A TIMELY REVIEW OF THE VERFICATION SUPPLY.
- 3. AREAS WHERE EXCAVATIONS OR EMBANMMENTS ARE TO BE CONSTRUCTED. THE CONTRACTOR SHALL PROVIDE VERRICATION SURVEY OF THE INITIAL AND FINAL CONDITIONS FOR USE IN THE DETERMINATION OF FINAL EARTHWORK QUANTITIES FOR PAYMENT. THE CONTRACTOR SHALL FURNISH THE INITIAL SURVEY BEFORE CONSTRUCTION OPERATIONS COMMENDE AND THE FINAL SURVEY AFTER CONSTRUCTION OPERATIONS HAVE CONCLUDED TO THE HORIGINEET FOR QUANTITY DETERMINATION. IN PAYMENENT AREAS, THE FINAL SURPRES SHALL BET HE TOP OF APPROVED SURFACES. IF ENGINEET DETERMINES THAT THE SUBMITTED SURVEY IS DEFICIENT IN ACCURATELY OF TAILING SURVEYED SURFACES. THE CONTRACTOR SHALL DEFFORM ADDITIONAL SURVEY FOR EASTISACTION OF THE ENGINEER. ALL SURVEY SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION OPERATIONS AND SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE ENGINEET. THE EXSTING AND PROVIDE THE INITIAL AND FINAL SURVEYS TO THE ENGINEER. THE EXSTING AND PROPOSED DESIGN SURFACES THAT ARE SHOWN IN THE PLANS SHALL BE LEED FOR QUANTITY DETERMINATION.
- ADDITIONAL STAKES OR MARKINGS SHALL BE REQUIRED AT AN INTERVAL TO LICEARLY DEFINE GRADES FOR SUB-GRADE AND ALL MATERNAL LIFTS REQUIRED FOR THE PAVEMENT STRUCTURE INCLUDING ALL SUBBASES, BASES, AND RET THE DESIGN AS REQUIRED BY THE SPECIFICATIONS OR SHOWN ON THE DRAWNINGS WADDITION TO LOCATIONS STATED DESIGN AS REQUIRED BY THE SPECIFICATIONS OR SHOWN ON THE DRAWNINGS WADDITION TO LOCATIONS STATED ABOVE. STAKING FOR LAYOUT AND SURVEY FOR GRADE VERIFICATIONS SHALL BE PROVIDED AT LOCATIONS OF ALL SPOT ELEVATIONS WHEN PROVIDED FOR IT THE PLANE.
- THE ESTABLISHMENT OF SURVEY CONTROL AND/OR REESTABLISHMENT OF SURVEY CONTROL SHALL BE BY A STATE LICENSED LAND SURVEYOR.
- 12. CONTROLS AND STAKES DISTURBED OR SUSPECT OF HAVING BEEN DISTURBED SHALL BE CHECKED AND/OR RESET AS DIRECTED BY THE ENGINEER WITHOUT ADDITIONAL COST TO THE OWNER.

GENERAL DEMOLITION NOTES

- EXISTING SEALANT DAMAGED DURING OBLITERATION OF EXISTING MARKINGS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE SPONSOR.

- ALL PAVEMENT TO BE SAW CUT PRIOR TO FULL DEPTH REMOVAL. PAVEMENT REMOVAL SHALL BE MEASURED AND PAID TO NEAT LINE DIMENSIONING.
- FULL DEPTH CONCRETE OR ASPHALT PAVEMENT REMOVAL INCLUDES THE REMOVAL OF ANY UNDERLYING ASPHALT AND/OR CONCRETE PAVEMENT, BASE AND SUBBASE LAYERS, GEOTEXTILE FABRIC, AND ANY STABILIZED SUBGRADES
- 4. FULL DEPTH AND PARTIAL PAVEMENT REMOVAL SHALL BE PAID FOR BY THE SQUARE YARD REGARDLESS OF DEPTH. PARTIAL DEPTH ANABIES FROM 2" TO 2.5". SEE SHEETS C300-C304 FOR BY THE SQUARE ELEVATIONS. MILLING DEPTH SHALL BE SUCH THAT EXISTING GEOTEXTILE FABRIC SHALL BE REMOVED PRIOR TO PAYING, IF ENCOUNTERED.
- CONTRACTOR MAY ELECT TO MILL ALTERNATE BUTT JOINT WIDTH TO ACCOMMODATE PAVING EQUIPMENT. ADDITIONAL MILLING AREA AND ASPHALT MATERIAL WILL NOT BE DIRECTLY PAID FOR, BUT WILL BE INCIDENTAL TO THE CONSTRUCTION OF THE BUTT JOINT.
- CONTRACTOR SHALL SEAL ALL CRACKS IN EXISTING PAVEMENT AFTER MILLING OPERATIONS HAVE CONCLUDED AND PRIOR TO ASPHALT PAVING. ALL TAXIWAY PAINT IS TO BE REMOVED DURING ROTOMILLING (INCIDENTAL TO ROTOMILLING EXCEPT WHERE SHOWN ON THE PLANS), ANY PAINT DAMAGED OUTSIDE OF REMOVAL LIMITS IS TO BE RESTORED TO ITS ORIGINAL CONDITION AT THE EXPENSE OF THE CONTRACTOR.
- CONTRACTOR SHALL PROVIDE SURVEY DATA TO THE ENGINEER IN ACCORDANCE WITH SECTION 50-07, THAT ENSURES
 THE MINIMUM OVERLAY THICKNESS WILL BE CONSTRUCTED. AREAS THAT ARE DEFICIENT FROM THE MINIMUM OVERLAY
 THICKNESS SHALL BE PARTIALLY MILLED AT THE DIRECTION OF THE ENGINEER TO ENSURE THE MINIMUM MAT THICKNESS
 PER THE TYPICAL SECTION IS ACHIEVED.

PROTECTION OF EXISTING UTILITIES / STRUCTURES / PAVEMENTS

- ANY PAVEMENT DAMAGED DURING REMOVAL OUTSIDE THE PROPOSED REMOVAL LIMITS SHALL BE SQUARED OFF, BY SAW CUTTING, TO THE SATISFACTION OF THE ENGINEER. ALL COSTS ASSOCIATED WITH THE ADDITIONAL REMOVAL AND RECONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR SHALL PROTECT ALL AIRFIELD ELECTRICAL AND LIGHT SYSTEMS AND ANY OTHER UTILITY DURING CONSTRUCTION.
- CONTRACTOR SHALL PROTECT ALL UNDERGROUND AND OVERHEAD UTILITIES AT ALL TIMES UNLESS OTHERWISE NOTED CONTRACTOR SHALL FIELD VERIFY ALL UTILITY LOCATIONS AND DEPTHS PRIOR TO CONSTRUCTION.

- 1. UNLESS OTHERWISE SPECIFIED, ALL TAXIWAY MARKINGS SHALL BE YELLOW IN ACCORD WITH SPECIFICATION P-620.

- PERMANENT APPLICATION OF PAINT WILL BE APPLIED 30 DAYS AFTER THE INITIAL TEMPORARY APPLICATION. RATES O APPLICATION SHALL BE AS SPECIFIED IN SECTION P-620.
- 5. ALL PERMANENT MARKINGS SHALL BE APPLIED DURING DAYLIGHT HOURS ONLY
- GLASS BEADS SHALL BE APPLIED TO ALL TEMPORARY AND PERMANENT PAVEMENT MARKINGS. APPLICATION RATES AND GLASS BEAD TYPE SHALL BE AS SPECIFIED IN ITEM P-620. GLASS BEADS SHALL NOT BE APPLIED TO BLACK PAINT.
- 8. FINAL PAINT LAYOUT WILL BE CONFIRMED BY THE AIRPORT PRIOR TO CONSTRUCTION.
- 9. THE CONTRACTOR SHALL MATCH THE EXISTING PAINT LAYOUT, EXISTING MARKINGS SHALL BE SURVEY VERIFIED PRIOR TO PAVEMENT REMOVAL.
- CONTRACTOR SHALL HAVE A COPY OF THE CURRENT FAA ADVISORY CIRCULAR AC 150/5340-1 (CURRENT VERSIC "STANDARDS FOR AIRPORT MARKINGS" ON SITE AT ALL HIRES, ANY DISCREPANCY DETIVES INFORMATION SHOW THE PLAN SHEETS AND THE ADVISORY CIRCULAR SHALL BE COORDINATED WITH THE ENGINEER FOR DIRECTION.
- 11. IF CONTRACTOR USES STENCILS FOR SURFACE PAINTED HOLD SIGNS, GAPS BETWEEN STENCILS ARE PROHIBITED.
- ANY DISCREPANCIES BETWEEN THESE PLANS AND THE ACTUAL STRIPING PRESENT IN THE FIELD SHALL BE BROUGHT TO THE ATTENTION OF RESIDENT ENGINEER. SURFACE PAINTED HOLD SIGNS SHALL RECEIVE A TEMPORARY APPLICATION AND A PERMANENT APPLICATION 30 DAYS LATER.

OBLITERATION NOTES

- PAINT OBLITERATION SHALL BE ACCOMPLISHED BY WATER OR SAND BLASTING OR ANOTHER APPROVED METHOD TEMPORARY MARKING REMOVAL REQUIRED FOR COORDINATION OF PHASES MAY BE ACCOMPLISHED BY PAINTIN THE EXISTING MARKING WITH BLACK PAINT.
- 2. NO OBLITERATION OF MARKINGS ARE REQUIRED INSIDE PAVEMENT REMOVAL LIMITS.
- CONTRACTOR WILL BE REQUIRED TO OBLITERATE EXISTING MARKINGS (I.E. TAXIWAY LEAD IN-LINES BACK TO THE RUWWAY HOLD BAR) WHICH ARE NOT WITHIN THE LIMITS OF THE PROPOSED CONSTRUCTION. OBLITERATION WILL BE ACCOMPLISED IN ACCORDANCE WITH P-620 OF THE SPECIFICATIONS. ALL EXISTING TAXIWAY MARKINGS WILL BE OBLITERATED USING WATER BLASTING.
- ANY DAMAGE DONE DURING MARKING OBLITERATION OPERATIONS TO PAVEMENTS OR PAVEMENT JOINT/CRACK SEALS SHALL BE REPAIRED BY THE CONTRACTOR, AT HIS EXPENSE, AND TO THE APPROVAL OF THE ENGINEER.
- 5. ALL MARKINGS SHALL BE OBLITERATED PRIOR TO CRACK SEALING.

ISSUED FOR BID

THESE DRAWINGS ARE FOR PURPOSES ONLY. THEY WERE PREPARED BY OR UNDER THE SUPERVISION OF:

2022012014 08/05/202 LAURA K. KOONCE

FOR AND ON BEHALF OF WOOLPERT, INC

⚠ ENTIRE SHEET HAS BEEN REVISED AS PART OF ADDENDUM NO. 1

GENERAL NOTES

G003 SHEET NO.

SHEET NAME

WOOLPERT PROJ. NO. 3 of 54 10016991.00

WOOLPERT

NATIONAL AIRPORT CITY OF ROLLA, MISSOURI

BY DR· NBB L.K.K. 08/05/2025 ISSUED FOR BID CH: C.L.G. APP: L.K.K.

DES: F.Z.D.

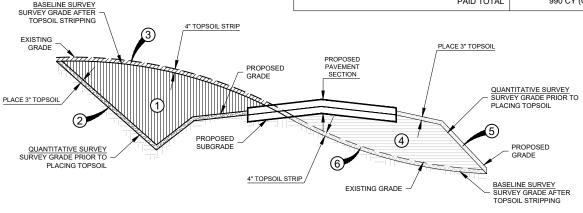
TAXIWAY A RECONSTRUCTION AND TAXIWAY CONNECTOR REHABILITATION

MoDOT PROJ. NO. 23-056A-1

SUMMARY OF APPROXIMATE QUANTITIES

| | | | SCHE | DULE I | SCHE | DULE II | SCHED | OULE III |
|----------|--|-------|----------|----------|----------|----------|----------|----------|
| ITEM NO. | ITEM DESCRIPTION | UNITS | ESTIMATE | AS BUILT | ESTIMATE | AS BUILT | ESTIMATE | AS BUILT |
| C-100a | Contractor's Quality Control Program (CQCP) | LS | 1 | | 1 | | 0 | |
| C-102a | Temporary Erosion Control | LS | 1 | | 0 | | 0 | |
| C-105a | Mobilization | LS | 1 | | 1 | | 1 | |
| P-101a | Pavement Removal - Full Depth | SY | 11,580 | | 0 | | 0 | |
| P-101b | Asphalt Pavement Removal - Partial Depth | SY | 400 | | 5,180 | | 0 | |
| P-101c | Joint and Crack Repair | LF | 0 | | 2,500 | | 0 | |
| P-152a | Unclassified Excavation | CY | 910 | | 0 | | 80 | |
| P-156a | Cement Treated Subgrade, 18 Inches | SY | 8,430 | | 0 | | 0 | |
| P-156b | Cement | TON | 280 | | 0 | | 0 | |
| P-208a | Aggregate Base Course, 8 Inches | CY | 2,050 | | 0 | | 0 | |
| P-208b | Geotextile Fabric | SY | 9,130 | | 0 | | 0 | |
| P-401a | Asphalt Surface Course | TON | 2,090 | | 760 | | 0 | |
| P-603a | Bituminous Tack Coat | GAL | 1,340 | | 760 | | 0 | |
| P-620a | Temporary Airport Pavement Marking | SF | 3,480 | | 640 | | 0 | |
| P-620b | Permanent Airport Pavement Marking, Yellow | SF | 2,320 | | 640 | | 0 | |
| P-620c | Permanent Airport Pavement Marking, Black | SF | 1,440 | | 0 | | 0 | |
| P-620d | Pavement Marking Obliteration | SF | 0 | | 580 | | 0 | |
| D-705a | Install 6-Inch Perforated Polyethylene Pipe | LF | 0 | | 0 | | 3,900 | |
| D-705b | Install 6-Inch Non-Perforated Polyethylene Pipe | LF | 0 | | 0 | | 900 | |
| D-751a | Install 6-Inch Underdrain Cleanout | EA | 0 | | 0 | | 20 | |
| D-751b | Install 18x18 Inch Inspection Pit | EA | 0 | | 0 | | 12 | |
| T-901a | Seeding with Hydromulch | AC | 2.50 | | 0 | | 0 | |
| T-905a | Topsoil | SY | 11,010 | | 0 | | 0 | |
| L-108a | Install #8 AWG, L-824C, 5000 Volt Wire | LF | 5,100 | | 0 | | 0 | |
| L-108b | Install #6 AWG Bare Copper Counterpoise, Including Ground Rods | LF | 4,100 | | 0 | | 0 | |
| L-110a | Install 1-2" SCH 40 PVC Conduit, Direct Earth Buried (DEB) | LF | 3,900 | | 0 | | 0 | |
| L-110b | Install 1-2" SCH 40 HDPE Conduit, Directionally Bored | LF | 190 | | 0 | | 0 | |
| L-125a | Remove Stake Mounted Taxiway Edge Light, Complete | EA | 33 | | 0 | | 0 | |
| L-125b | Install L-861T LED Taxiway Edge Light, Complete | EA | 55 | | 0 | | 0 | |
| | | | | | | | | |

EARTHWORK SUMMARY CUT (CY) FILL (CY) AREA DESCRIPTION SCHEDULE I - TAXIWAY A RECONSTRUCTION TAXIWAY A - SOUTH 520 20 TAXIWAY A - NORTH 390 950 SCHEDULE I SUBTOTAL 910 970 SCHEDULE II - TAXIWAY B REHABILITATION TAXIWAY B SCHEDULE II SUBTOTAL 0 SCHEDULE III - TAXIWAY A UNDERDRAINS UNDERDRAINS SCHEDULE III SUBTOTAL 80 PROJECT TOTAL 990 970 PAID TOTAL 990 CY (CUT)



TOTAL EXCAVATION TOTAL EMBANKMENT (1) EXCAVATION PAID AS P-152a UNCLASSIFIED EXCAVATION EMBANKMENT INCIDENTAL TO P-152a UNCLASSIFIED EXCAVATION TOPSOIL (PLACED) INCIDENTAL TO ITEM T-905a TOPSOIL TOPSOIL (PLACED) INCIDENTAL TO ITEM T-905a TOPSOIL TOPSOIL (STRIPPED) PAID AS T-905a TOPSOIL **∞** 6 TOPSOIL (STRIPPED) PAID AS T-905a TOPSOIL

EARTHWORK CALCULATIONS DETAIL (EXCAVATION)

NOT TO SCALE

NOTE: TOPSOIL ASSUMED TO BE STRIPPED AT 4 INCHES DEEP AND PLACED AT APPROX. 3 INCHES DEEP

ISSUED FOR BID

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LAURA K. KOONCE 2022012014 08/05/2025

4 of 54

⚠ ENTIRE SHEET HAS BEEN REVISED AS PART OF ADDENDUM NO. 1 FOR AND ON BEHALF OF WOOLPERT, INC.

WOOLPERT

NATIONAL AIRPORT CITY OF ROLLA, MISSOURI

| DES:F.Z.D. | ISSUE RECORD | | | | | | |
|-------------|--------------|--------|------------|----------------|--|--|--|
| | NO. | BY | DATE | DESCRIPTION | | | |
| DR: N.B.B. | 1 | L.K.K. | | ISSUED FOR BID | | | |
| CH: C.L.G. | /2\ | L.K.K. | 08/29/2025 | ADDENDUM NO. 1 | | | |
| APP: L.K.K. | | | | | | | |

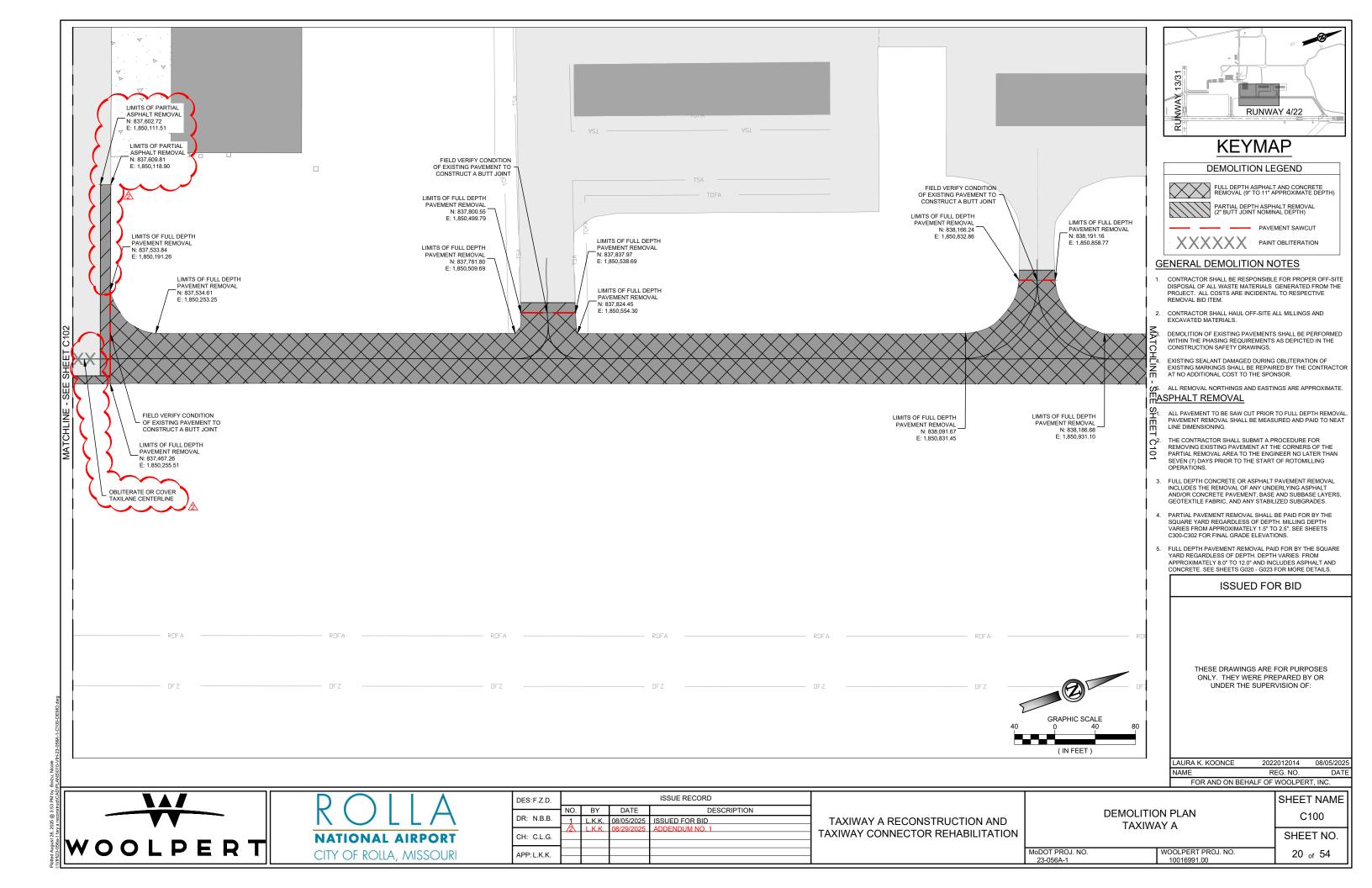
TAXIWAY CONNECTOR REHABILITATION

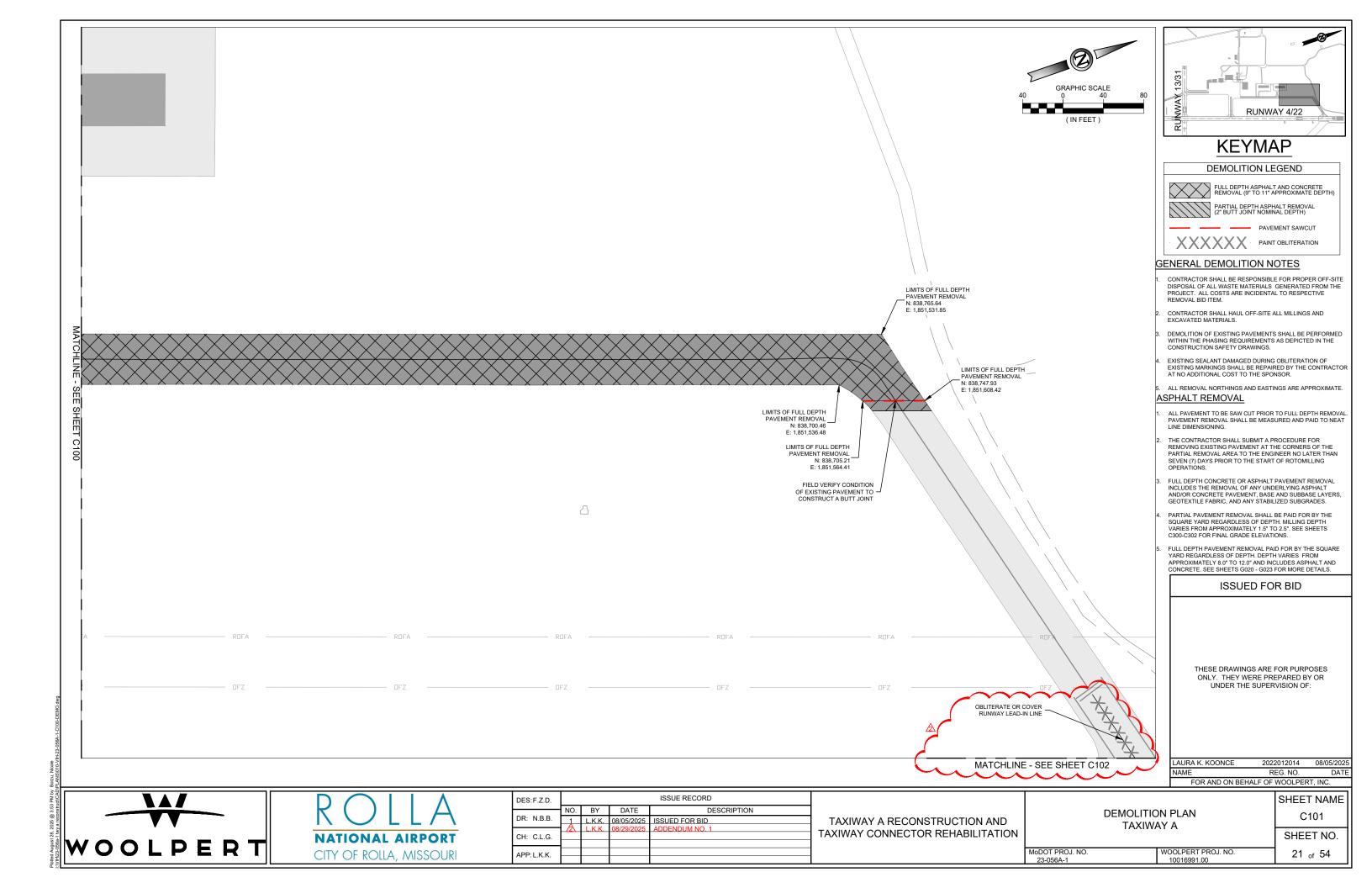
SUMMARY OF APPROXIMATE QUANTITIES

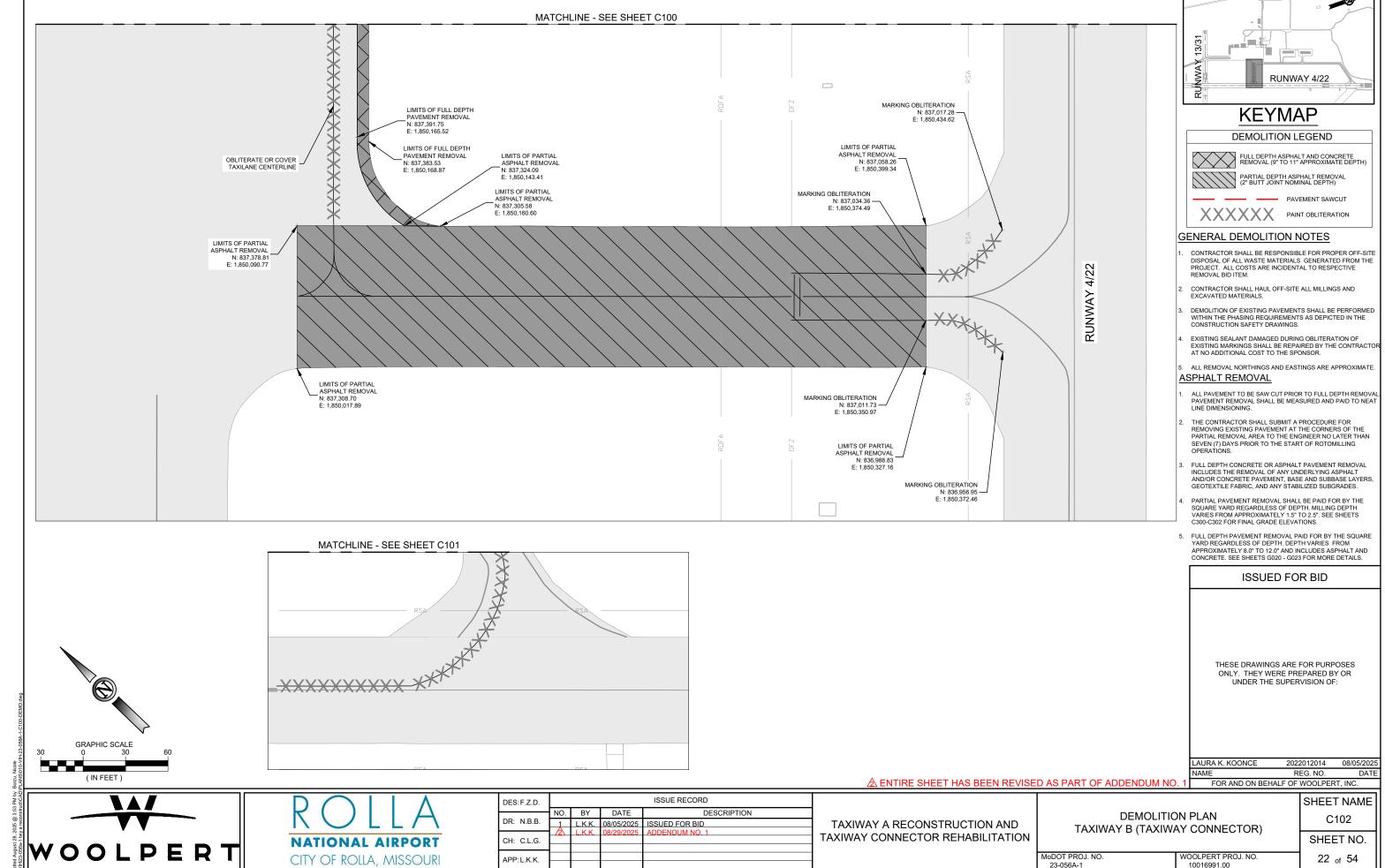
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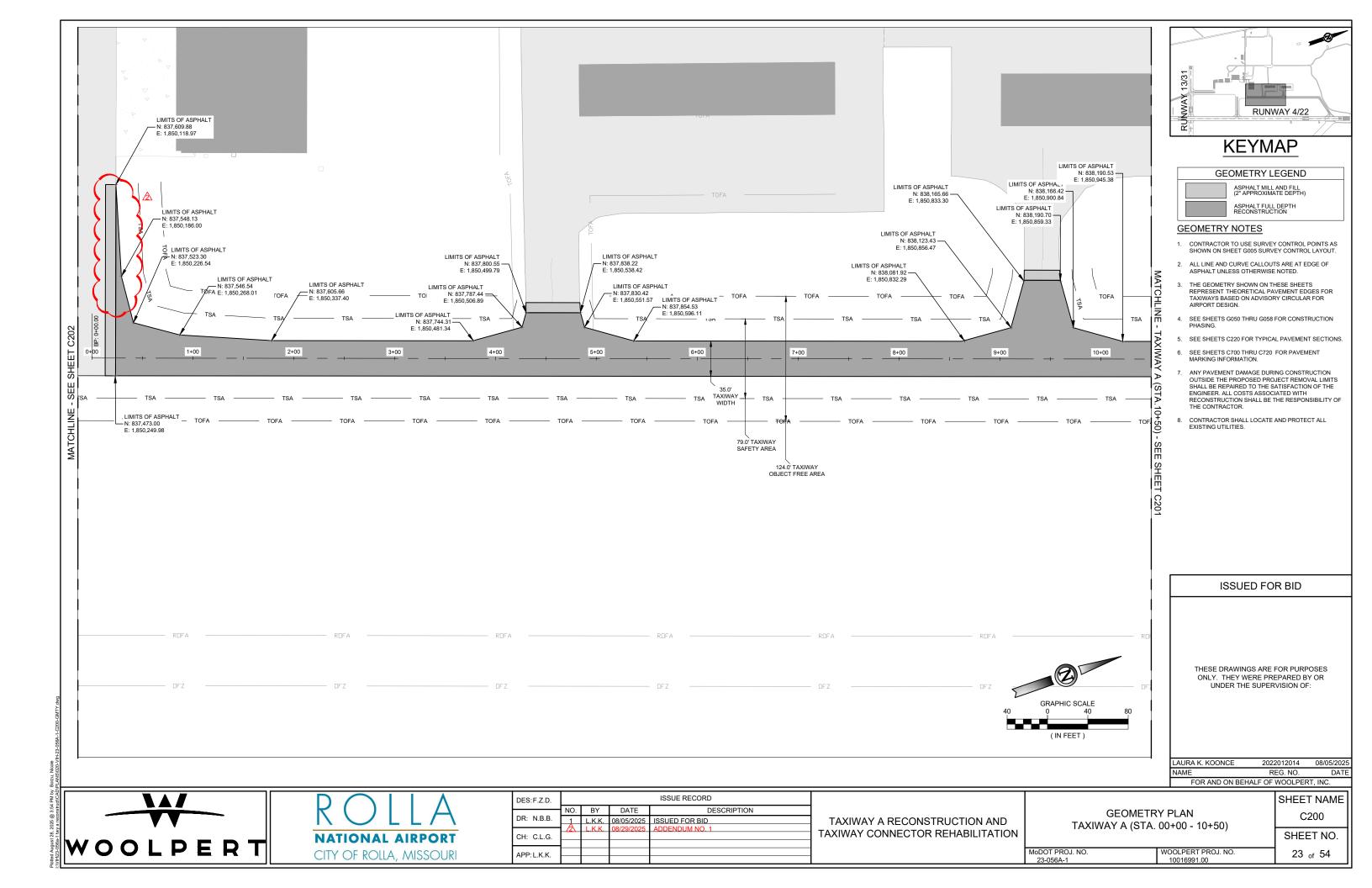
MoDOT PROJ. NO. 23-056A-1 WOOLPERT PROJ. NO. 10016991.00

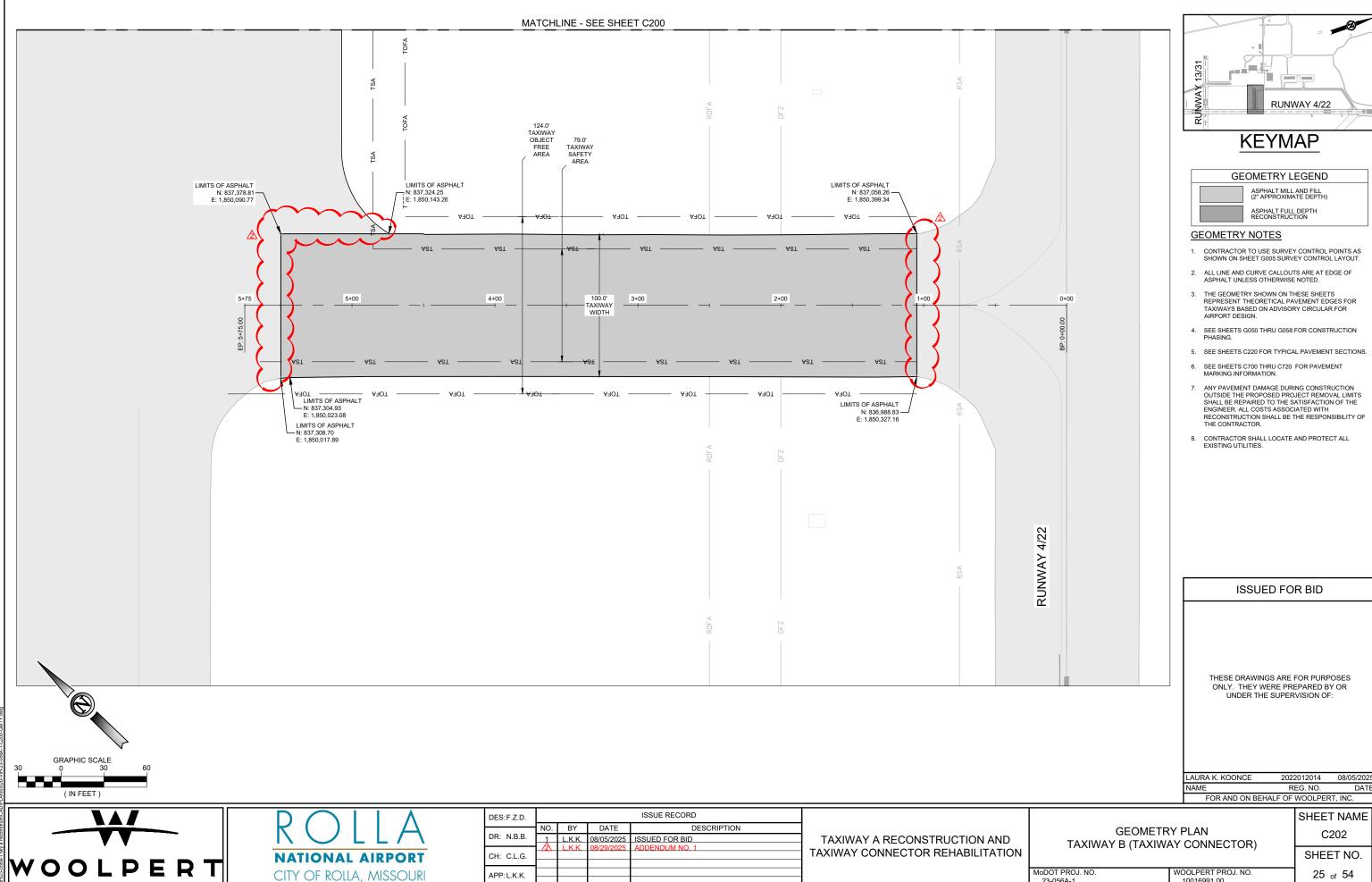
TAXIWAY A RECONSTRUCTION AND









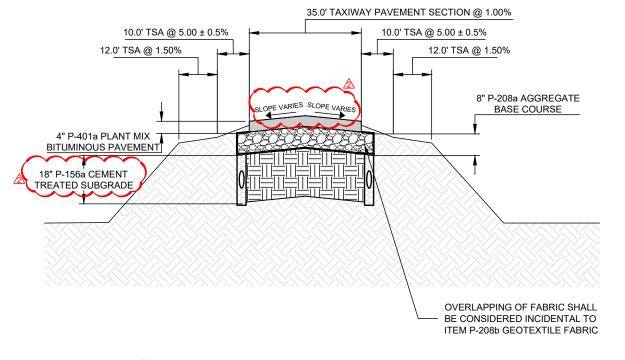


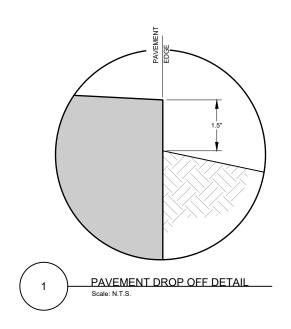


| DES:F.Z.D. | | | | ISSUE RECORD |
|-------------|------------|--------|------------|----------------|
| | NO. | BY | DATE | DESCRIPTION |
| DR: N.B.B. | 1 | L.K.K. | 08/05/2025 | ISSUED FOR BID |
| | <u>/2\</u> | L.K.K. | 08/29/2025 | ADDENDUM NO. 1 |
| CH: C.L.G. | | | | |
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| APP: L.K.K. | | | | |
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SHEET NAME C202

MoDOT PROJ. NO. 23-056A-1 WOOLPERT PROJ. NO. 10016991.00 25 of 54



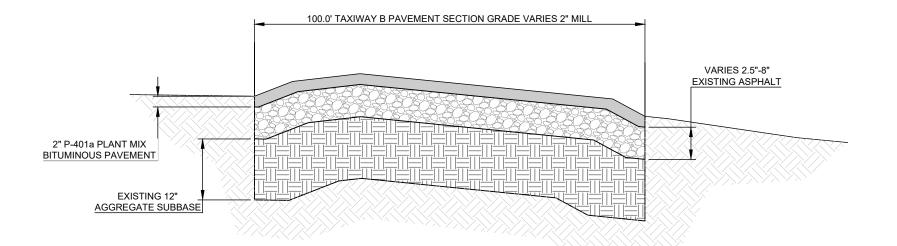


A

TAXIWAY A PAVEMENT SECTION (NORTH - SOUTH)

NTS

NOTE: TAXIWAY A OVERBUILD WIDTH IS 1'



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FOR AND ON BEHALF OF WOOLPERT, INC.

LAURA K. KOONCE 2022012014 08/05/2025

NAME REG. NO. DATE

WOOLPERT

ROLLA

NATIONAL AIRPORT
CITY OF ROLLA, MISSOURI

| DES:F.Z.D. | | | | ISSUE RECORD | |
|-------------|-----|--------|------------|----------------|--|
| | NO. | BY | DATE | DESCRIPTION | |
| DR: N.B.B. | _1 | L.K.K. | | ISSUED FOR BID | |
| CH: C.L.G. | /2\ | L.K.K. | 08/29/2025 | ADDENDUM NO. 1 | |
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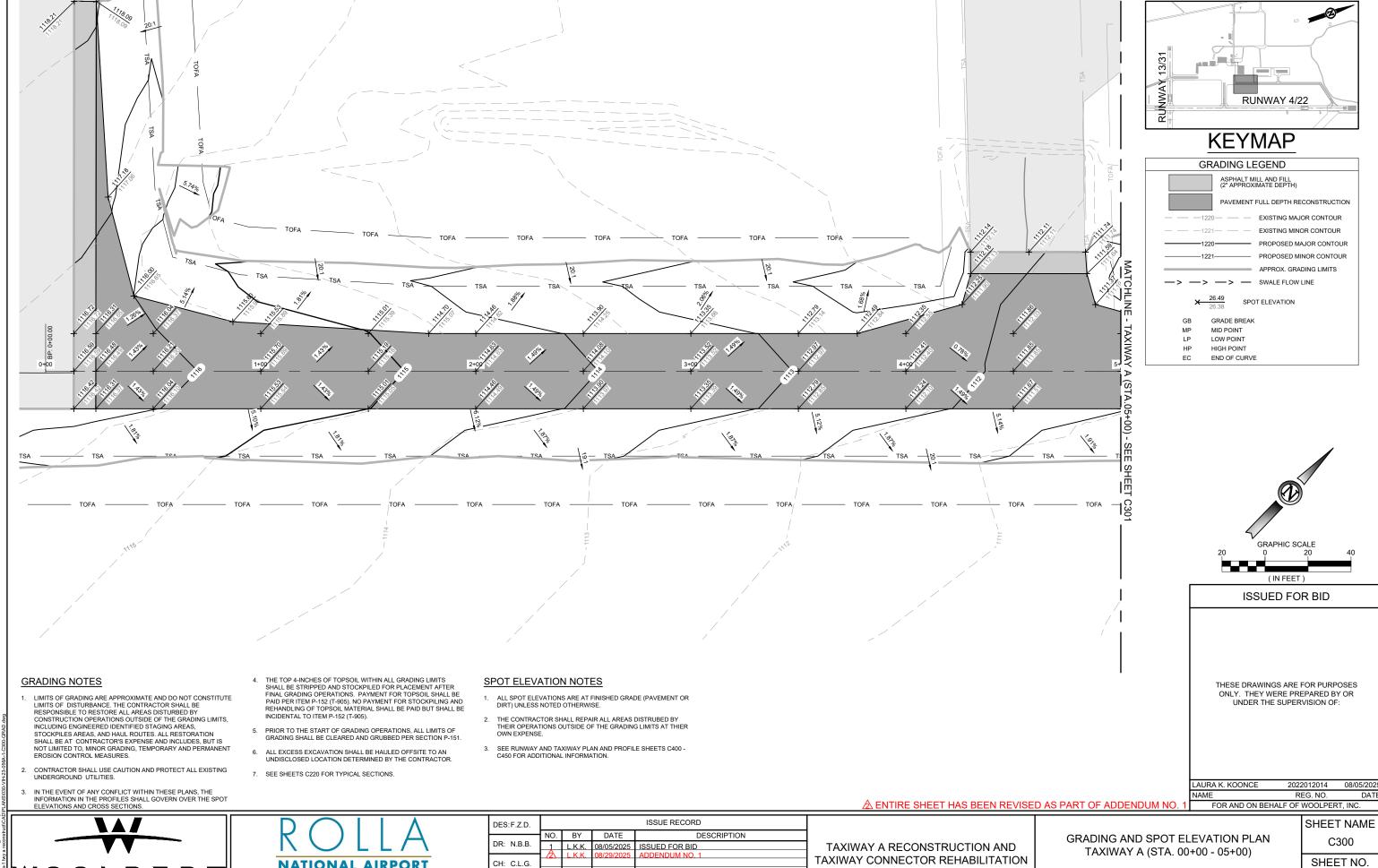
TAXIWAY B PAVEMENT SECTION REAHBILITATION (WEST - EAST)

TAXIWAY A RECONSTRUCTION AND TAXIWAY CONNECTOR REHABILITATION

PAVEMENT TYPICAL SECTIONS

SHEET NAME C220 SHEET NO.

MoDOT PROJ. NO. WOOLPERT PROJ. NO. 26 of 54



C300

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WOOLPERT PROJ. NO. 10016991.00

MoDOT PROJ. NO. 23-056A-1

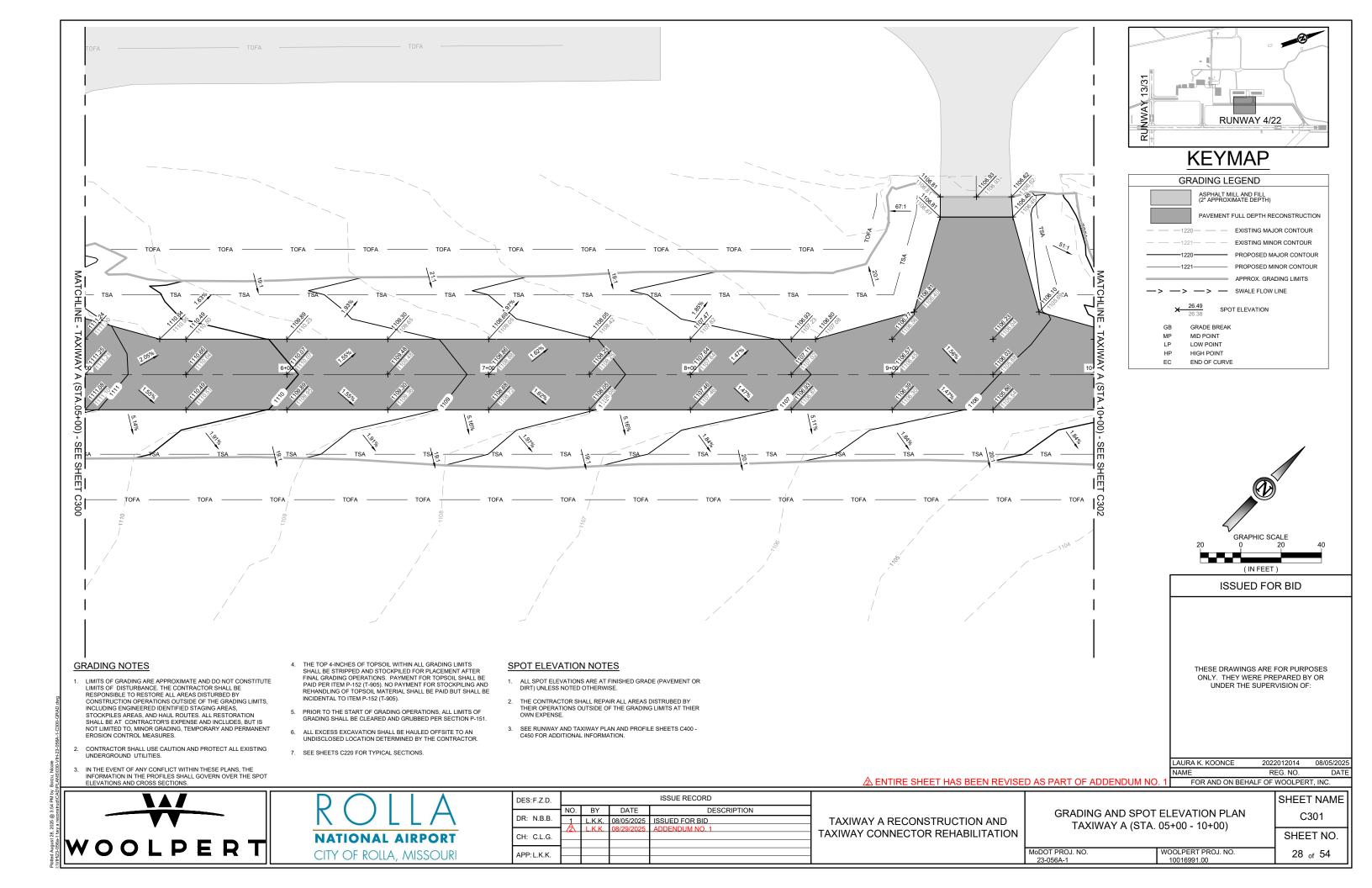
WOOLPERT

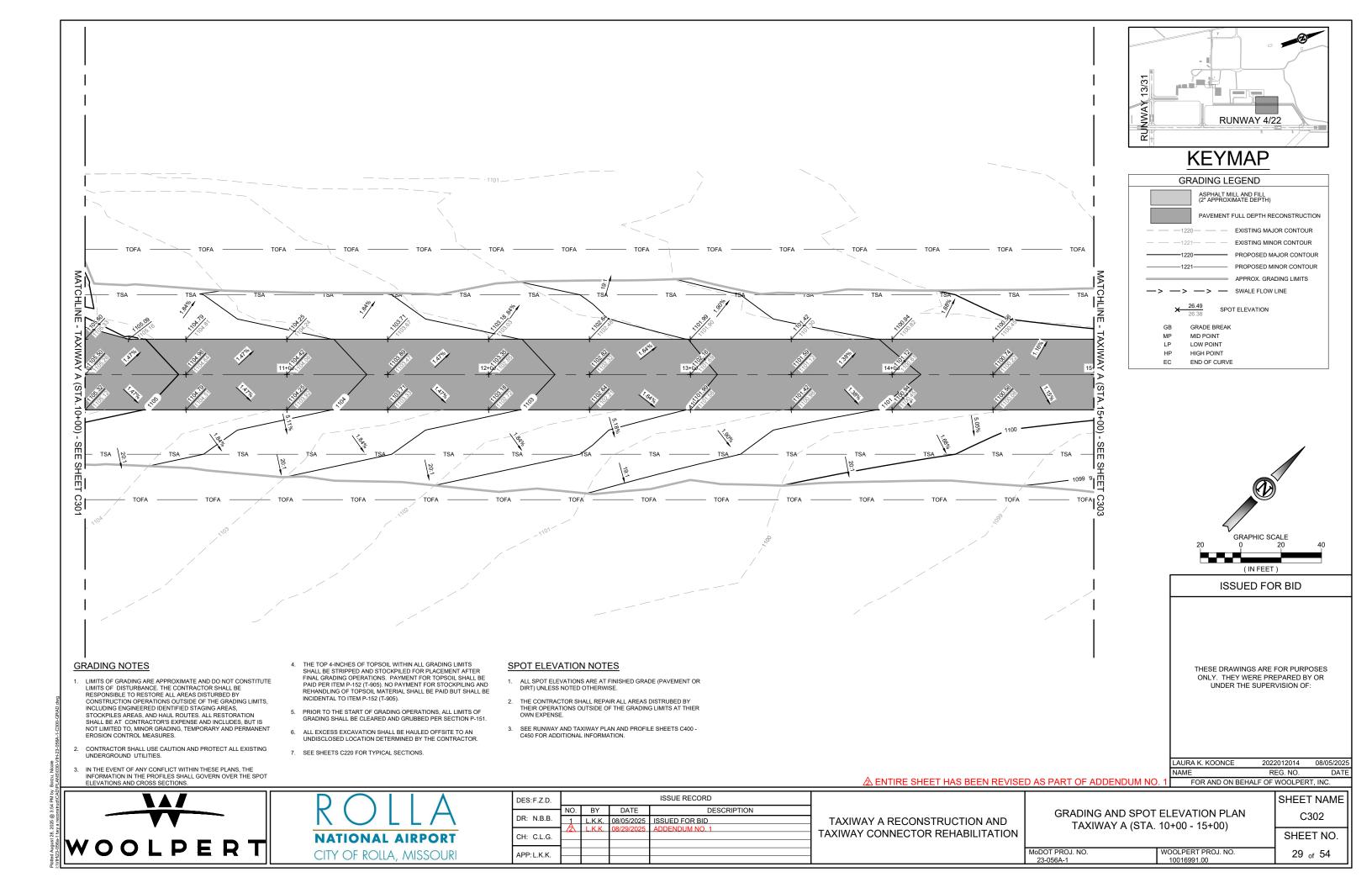
NATIONAL AIRPORT

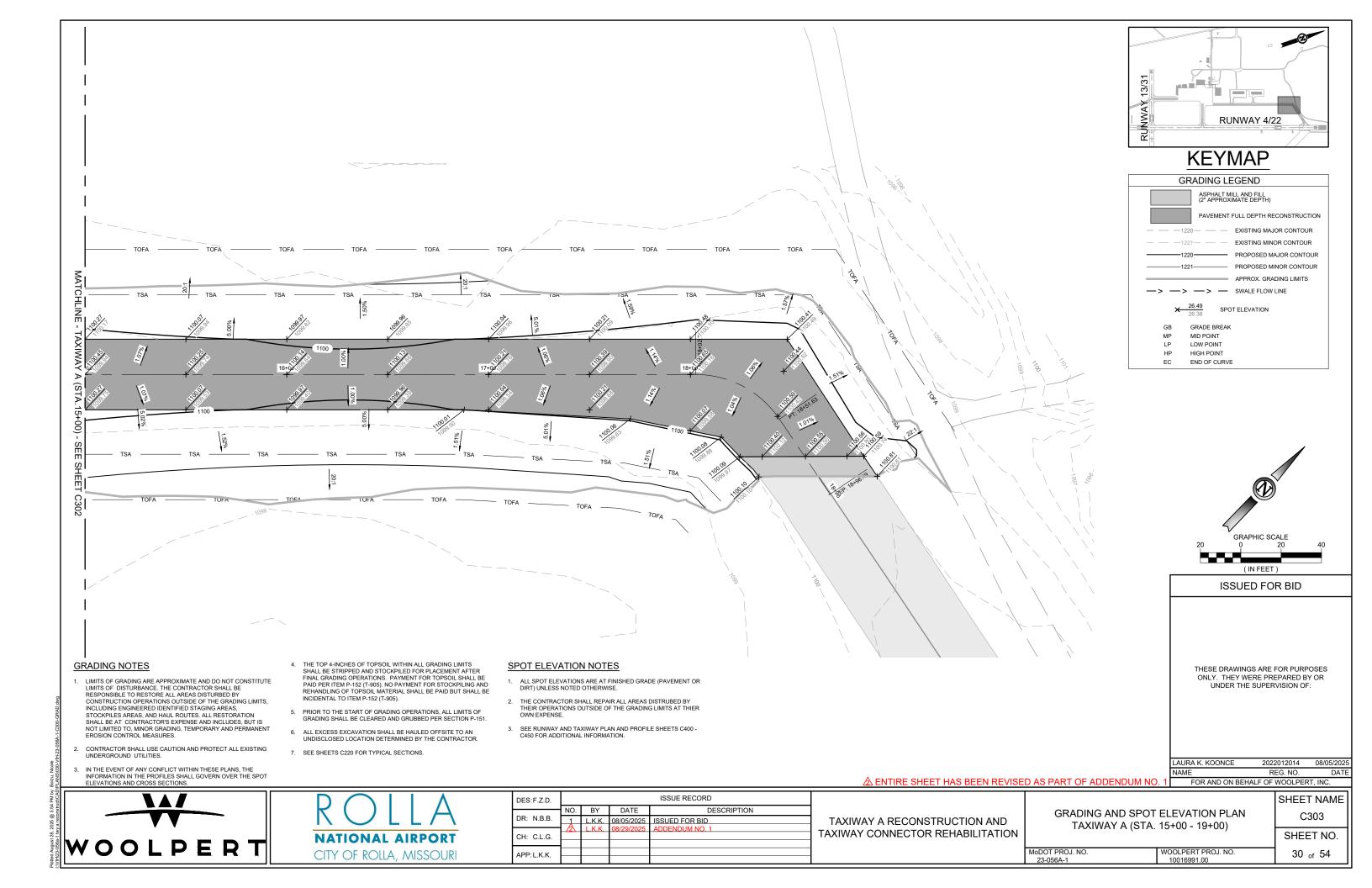
CITY OF ROLLA, MISSOURI

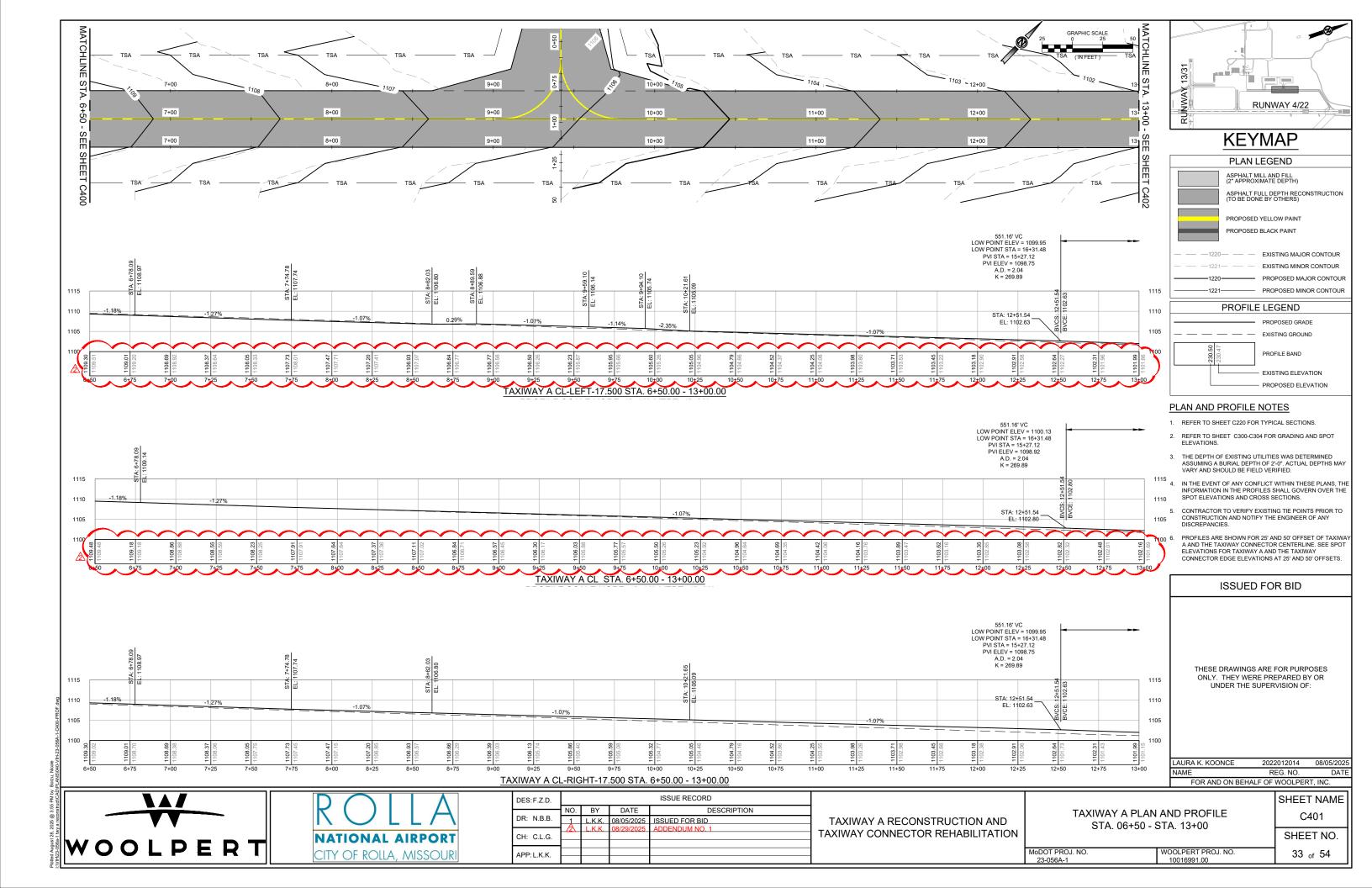
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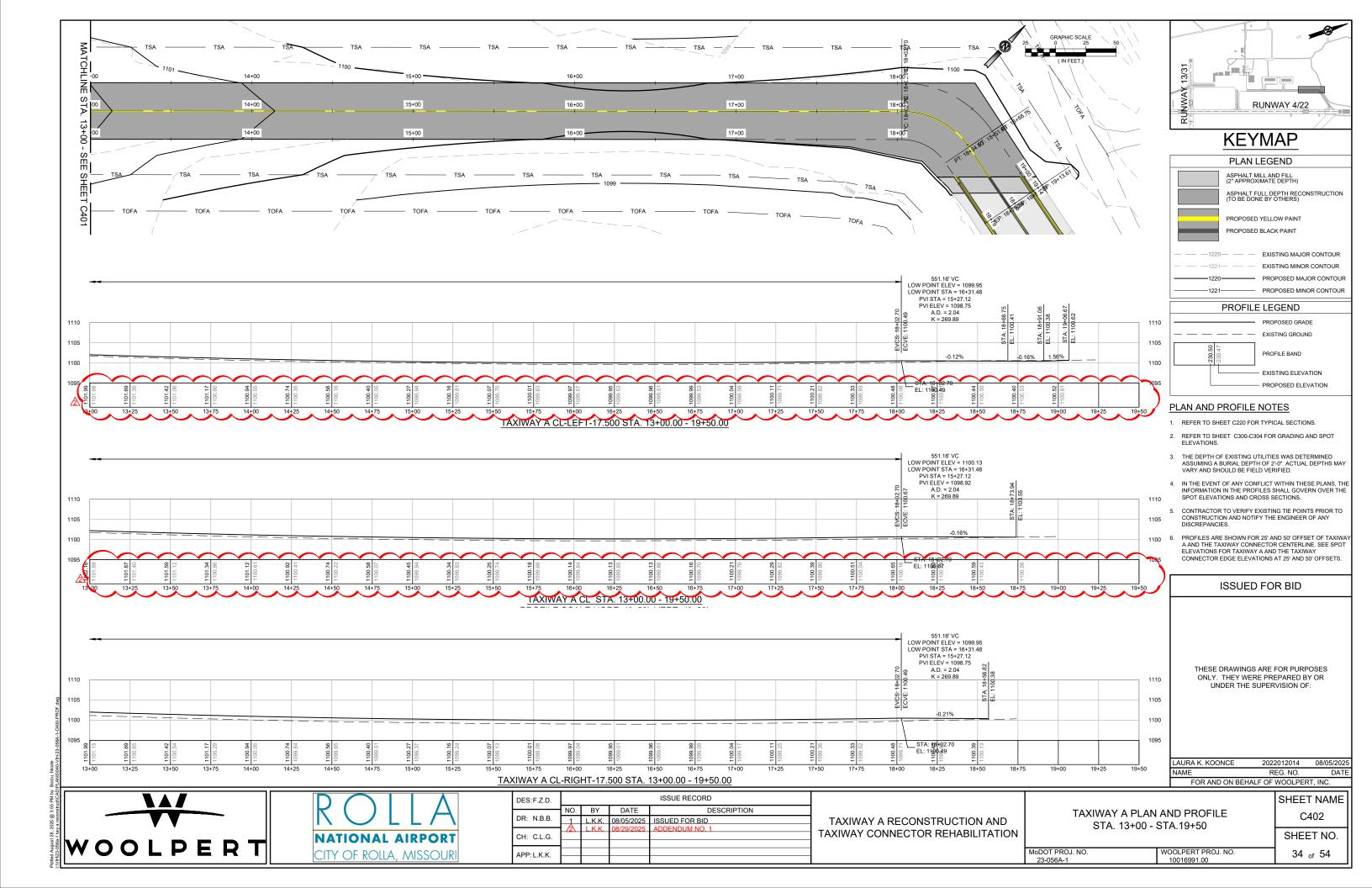
APP: L.K.K.

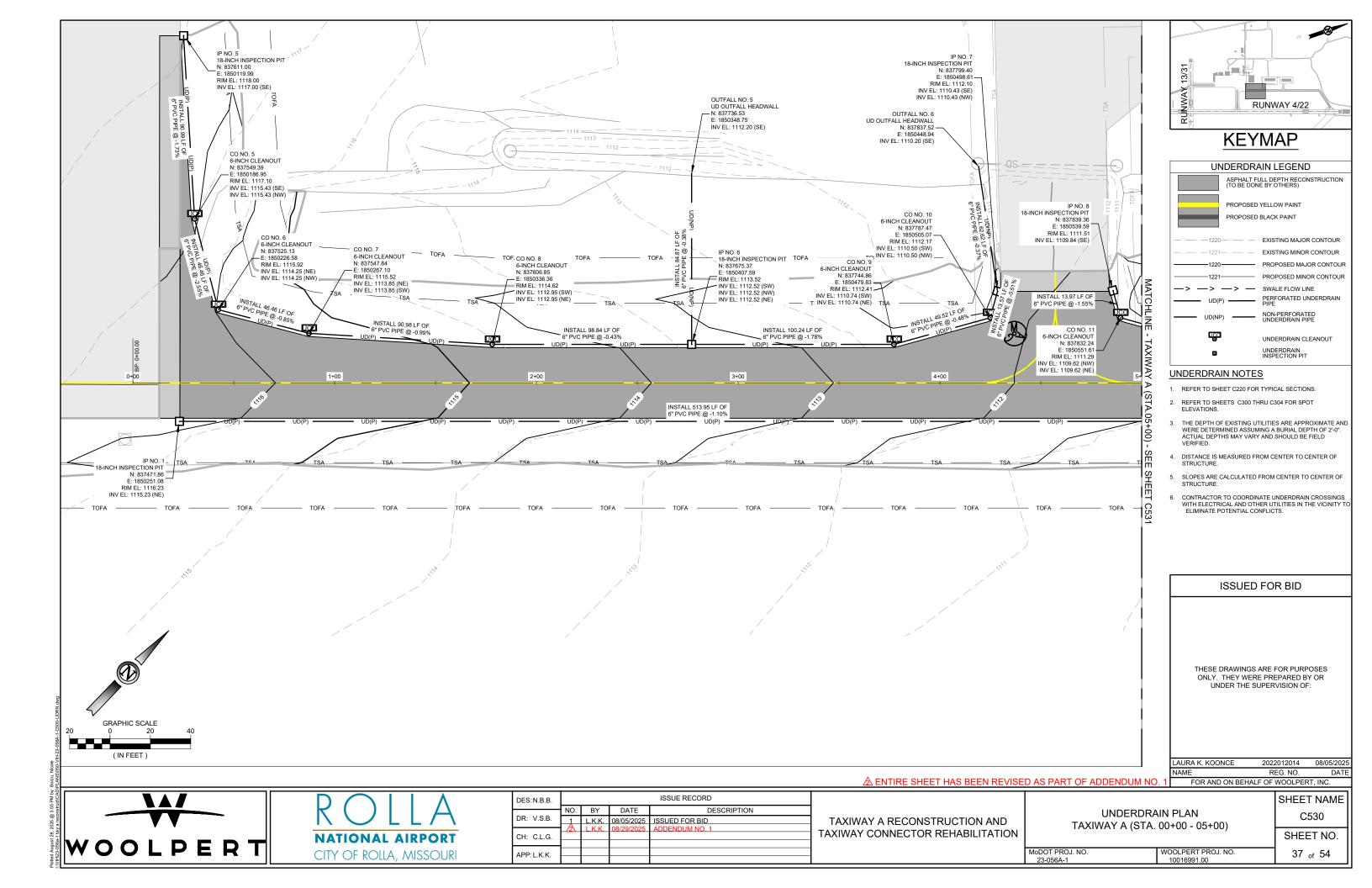


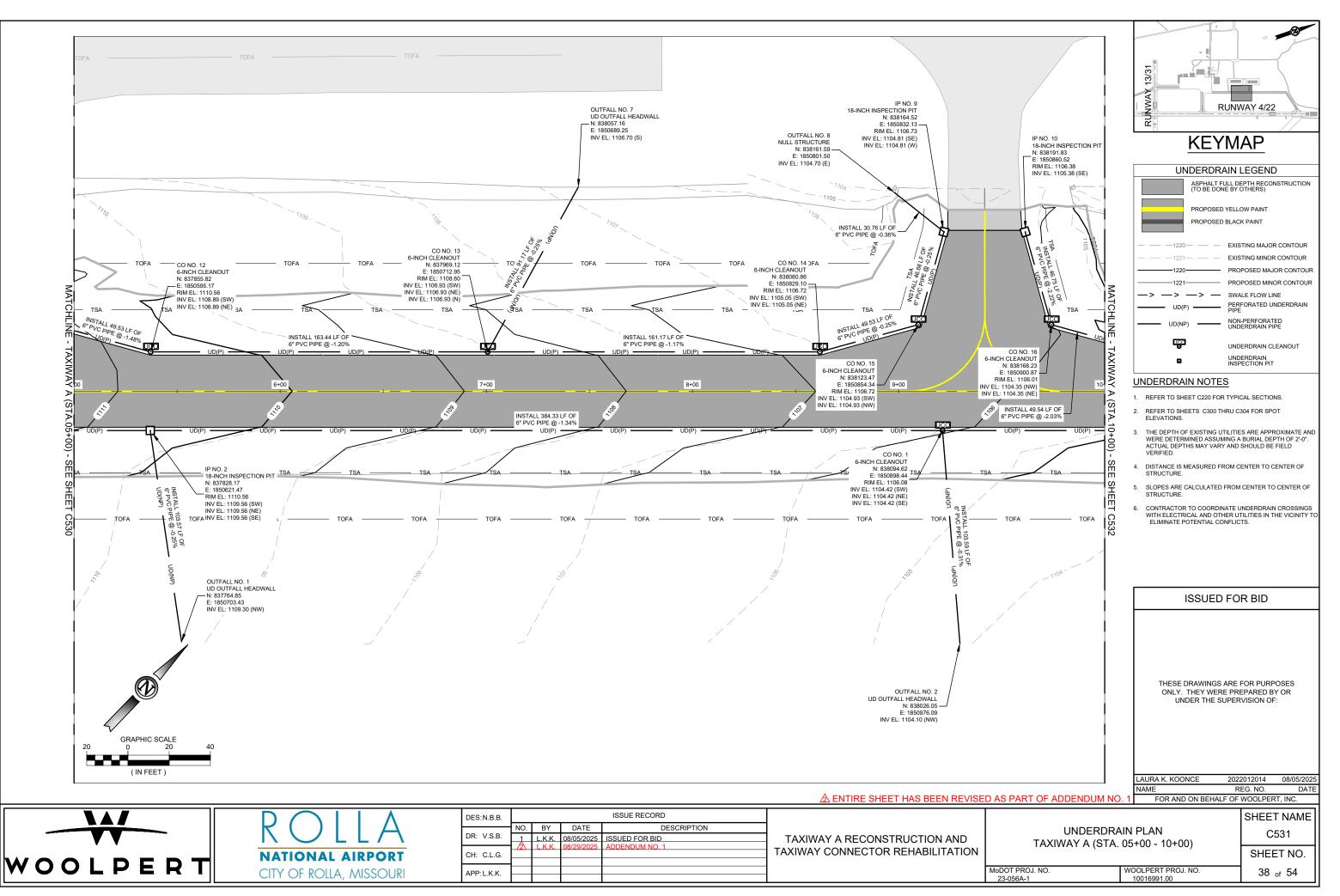




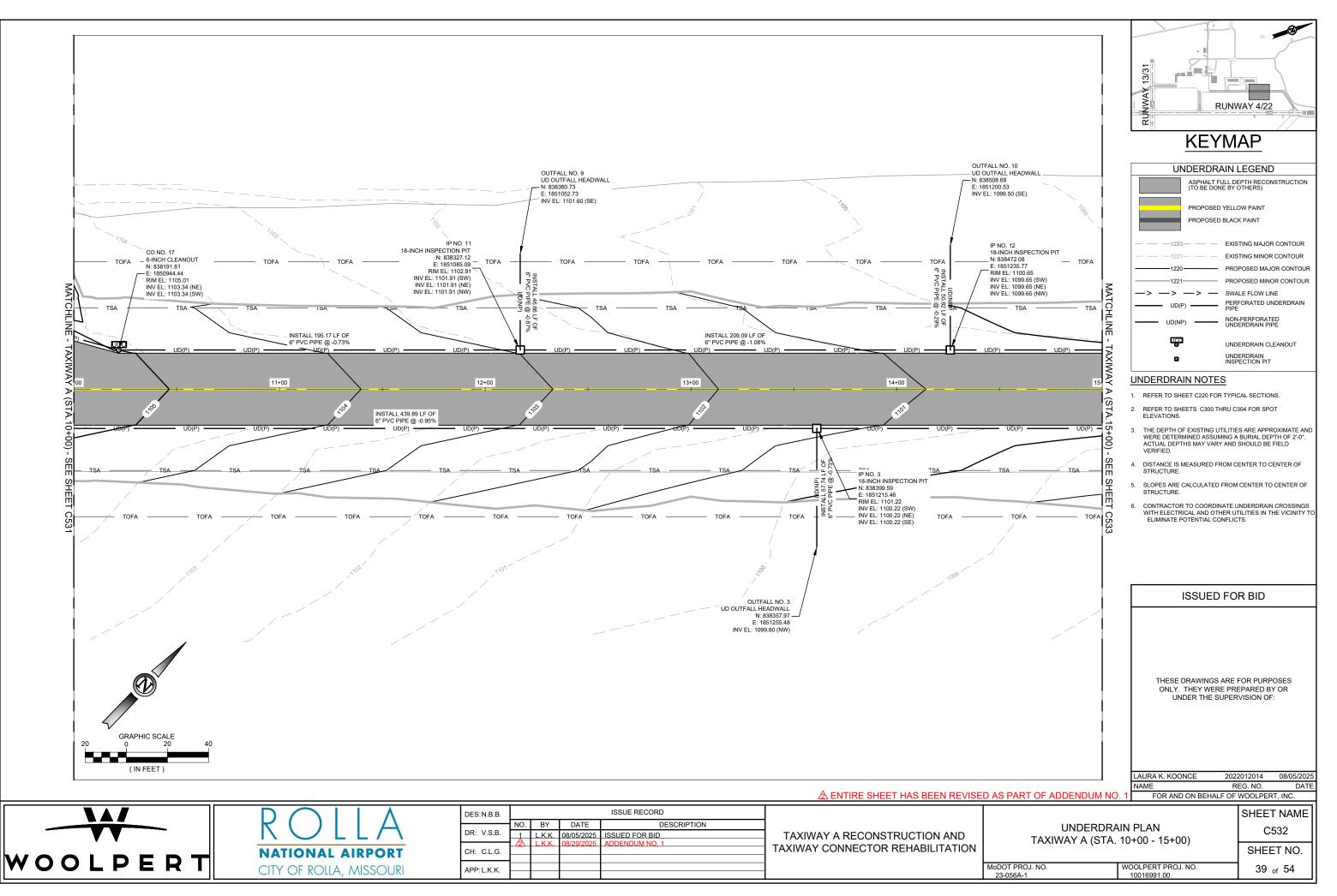




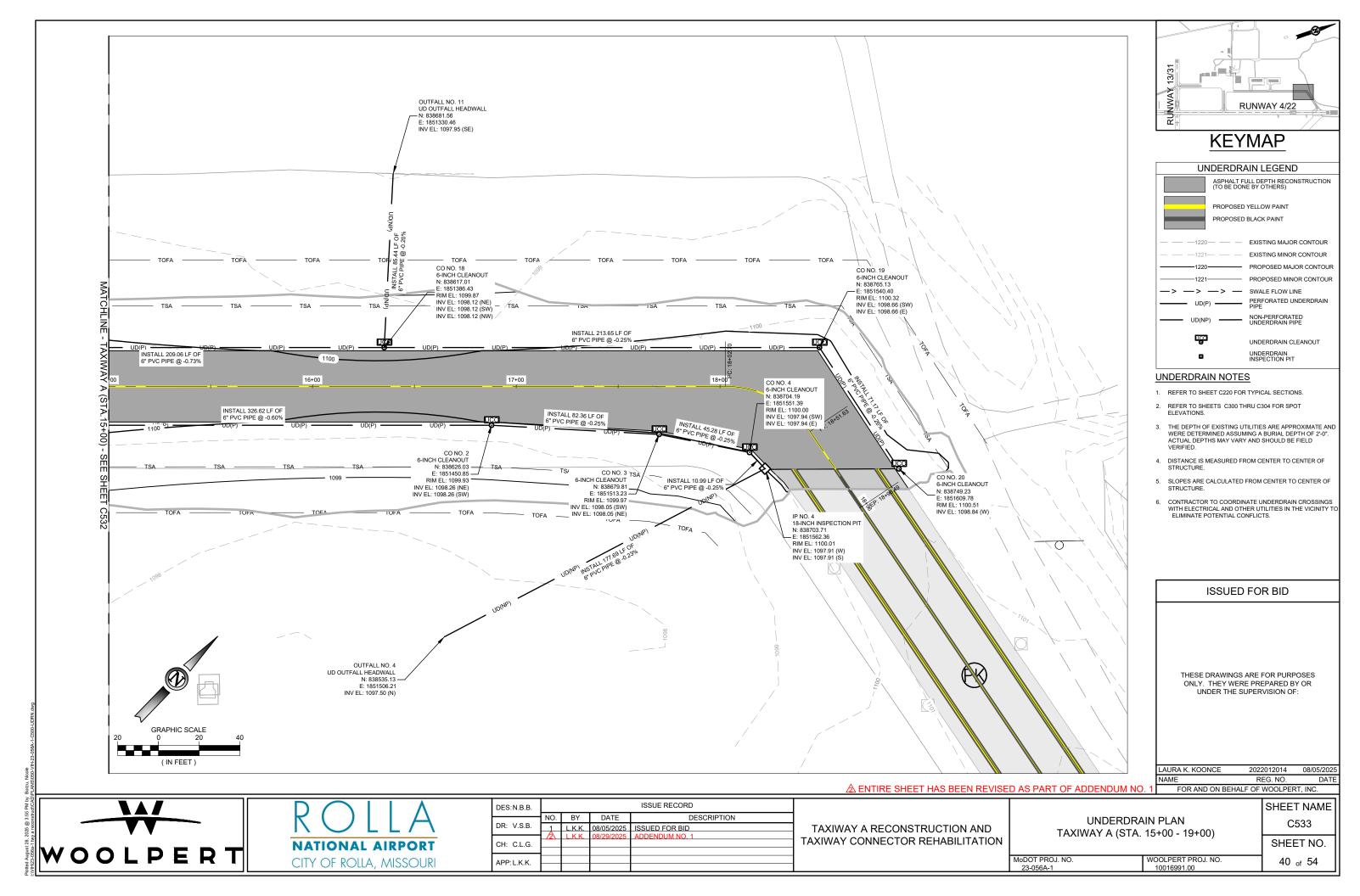


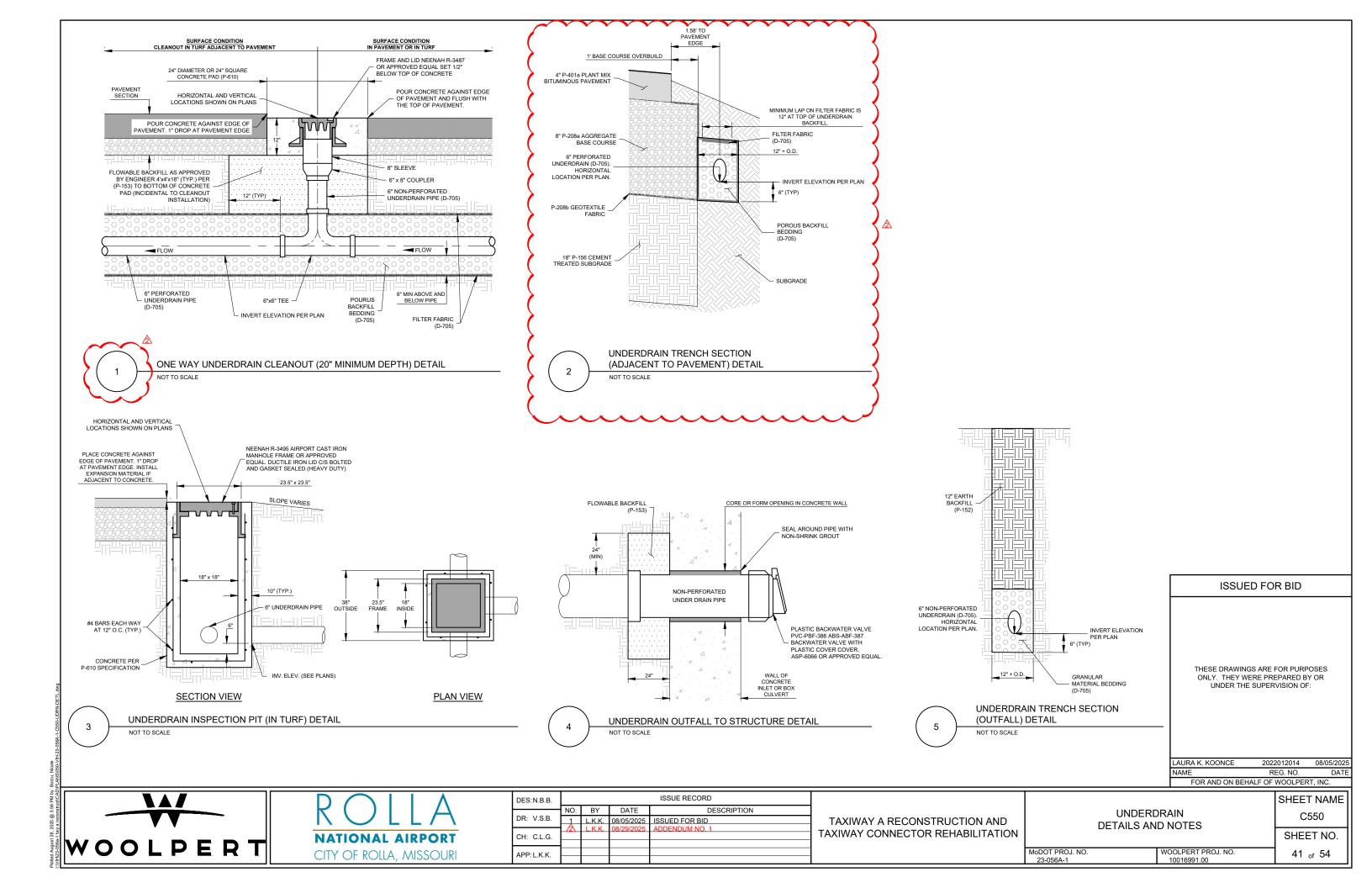


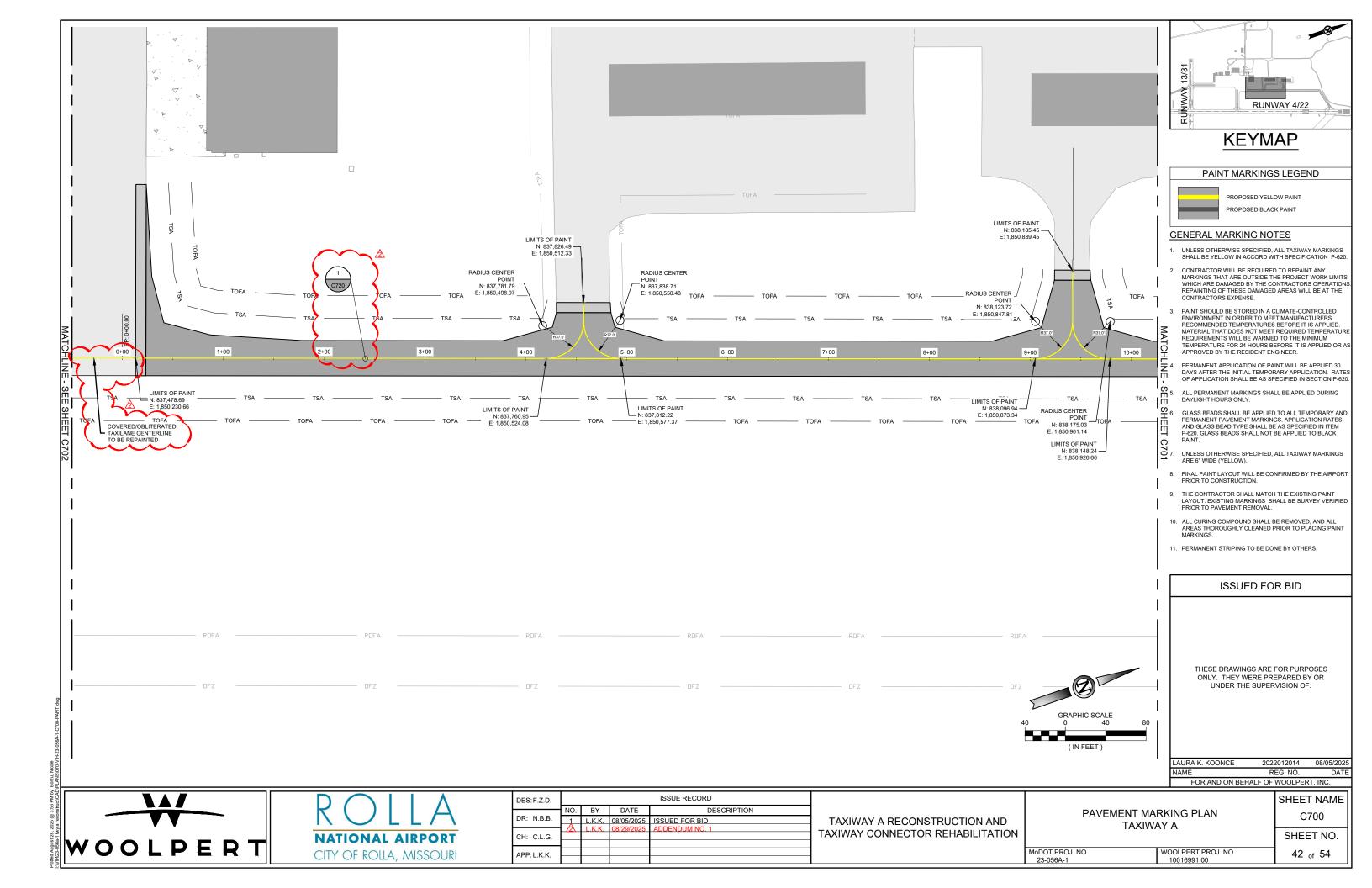
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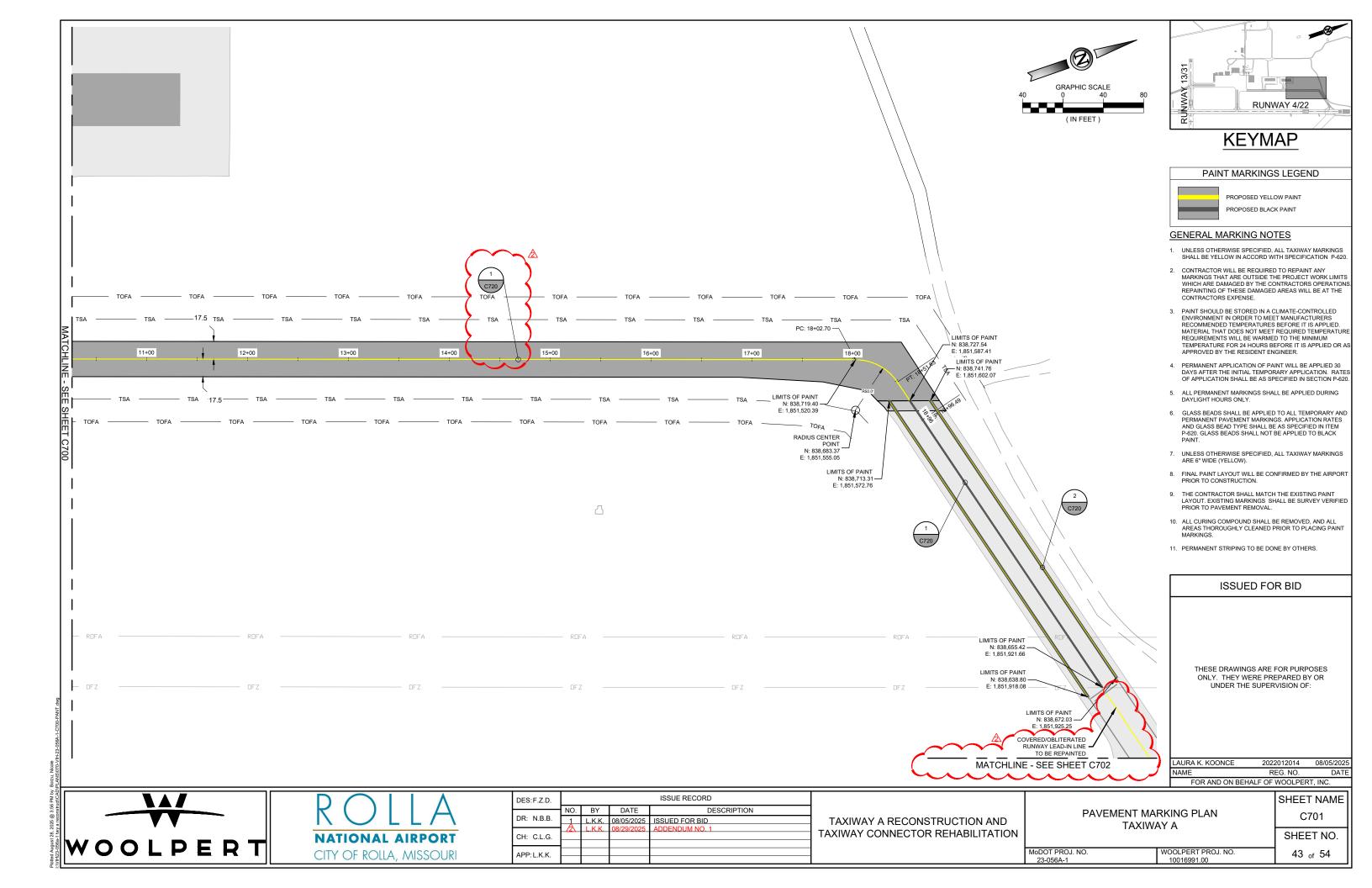


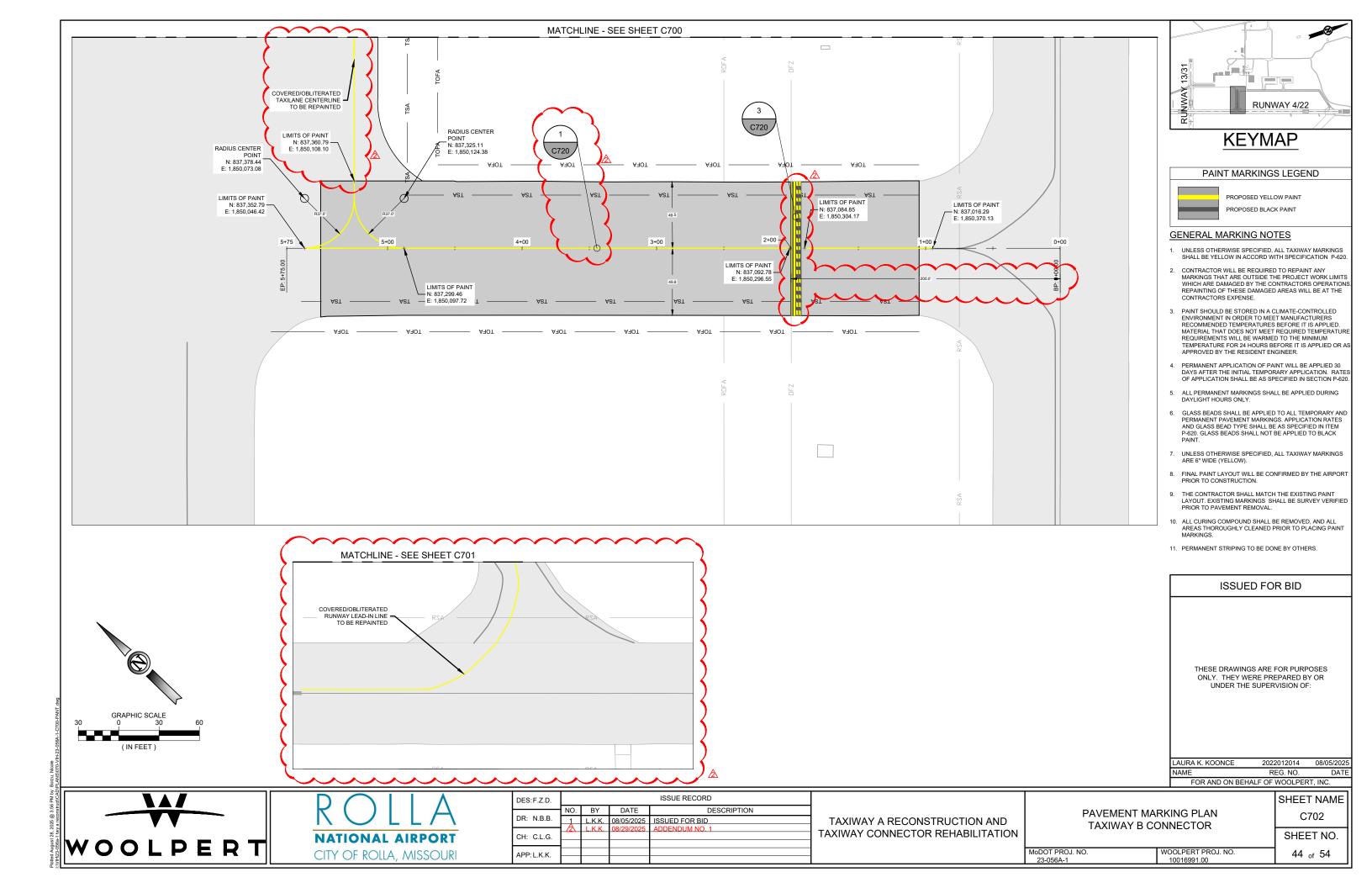
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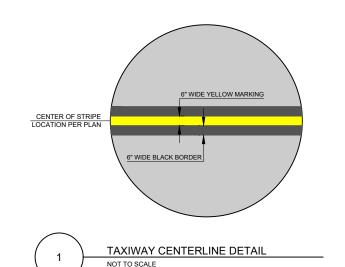




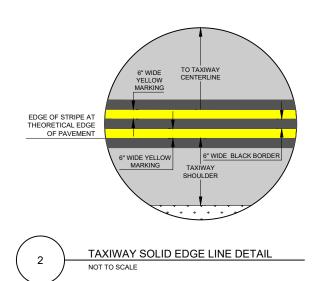


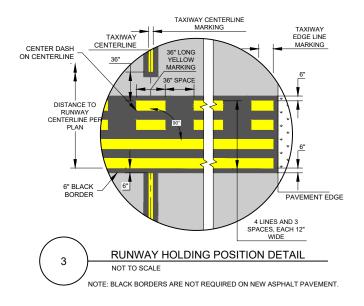






NOTE: BLACK BORDERS ARE NOT REQUIRED ON NEW ASPHALT PAVEMENT.





ISSUED FOR BID

THESE DRAWINGS ARE FOR PURPOSES ONLY. THEY WERE PREPARED BY OR UNDER THE SUPERVISION OF:

 LAURA K. KOONCE
 2022012014
 08/05/2025

 NAME
 REG. NO.
 DATE

 FOR AND ON BEHALF OF WOOLPERT, INC.

⚠ ENTIRE SHEET HAS BEEN REVISED AS PART OF ADDENDUM NO. 1

WOOLPERT

ROLLA NATIONAL AIRPORT CITY OF ROLLA, MISSOURI

| DES:F.Z.D. | | | | ISSUE RECORD | |
|-------------|-----|--------|------------|----------------|---|
| | NO. | BY | DATE | DESCRIPTION | |
| DR: N.B.B. | 1 | L.K.K. | | ISSUED FOR BID | |
| | /2\ | L.K.K. | 08/29/2025 | ADDENDUM NO. 1 | - |
| CH: C.L.G. | | | | | |
| APP·I K K | | | | | |
| AFF. L.N.N. | | | | | |

TAXIWAY A RECONSTRUCTION AND TAXIWAY CONNECTOR REHABILITATION

PAVEMENT MARKING DETAILS AND NOTES SHEET NAME C720 SHEET NO.

MoDOT PROJ. NO. WOOLPERT PROJ. NO. 23-056A-1 10016991.00

45 of 54

Plotted August 28, 2025 @ 3:56 PM by Borzu, N I:\VIHk23-056a-1 twy a reconstruct\CAD\PLANS\(



Meeting Agenda: Pre-Bid Conference – Meeting Minutes

Rolla National Airport (VIH) MoDOT Project No. 23-056A-1

Date: Tuesday, August 19, 2025, 9:00 A.M. (CST)

Location: 631 Airport Drive, Vichy, MO 65580, Airport Terminal Building Conference Room

Attendees: Refer to Sign-In Sheet

Agenda:

1. RECORDING OF ATTENDEES

- A. Recording of attendees, firm represented, address, phone number and email.
- B. Attendance & plan holder's list will be sent to all attendees.

2. PROJECT DESCRIPTION & INTRODUCTIONS

- A. Project Scope of Work.
 - I. Taxiway A Reconstruction and Taxiway Connector Rehabilitation
- B. Airport Sponsor.
 - I. Darrin Bacon, Airport Manager
 - II. Darin Pryor, Director of Public Works
- C. MoDOT Aviation.
 - I. Kimberly Masters, Operations Specialist
- D. Airport Engineering. (Woolpert, Inc.)
 - I. Laura Koonce, Project Manager
 - II. Joe Pestka, Project Director
- E. Project Schedules (Total 57 Calendar Days)
 - I. Schedule I: Taxiway A Reconstruction
 - II. Schedule II: Taxiway B Rehabilitation
 - III. Schedule III: Taxiway A Underdrains

Page 2

F. Major Work Items.

| | Schedule I | | |
|--|--|------------------------------|---|
| Item No. | Description | Units | Quantity |
| C-100a | Contractor's Quality Control Program | LS | 1 |
| C-102a | Temporary Erosion Control | LS | 1 |
| C-105a | Mobilization | LS | 1 |
| P-101a | Pavement Removal – Full Depth | SY | 11,580 |
| P-101b | Pavement Removal – Partial Depth | SY | 280 |
| P-152a | Unclassified Excavation | CY | 910 |
| P-156a | Cement Treated Subgrade, 18 Inches | SY | 8,430 |
| P-156b | Cement | TON | 280 |
| P-208a | Aggregate Base Course, 8 Inches | CY | 2,190 |
| P-208b | Geotextile Fabric | SY | 9,830 |
| P-401a | Asphalt Surface Course | TON | 2,060 |
| P-603a | Bituminous Tack Coat | GAL | 1,310 |
| P-620a | Temporary Airport Pavement Marking | SF | 3,480 |
| P-620b | Permanent Airport Pavement Marking, Yellow | SF | 2,040 |
| P-620c | Permanent Airport Pavement Marking, Black | SF | 1,440 |
| T-901a | Seeding with Hydromulch | AC | 2.50 |
| L-108a | Install #8 AWG, L-824C, 5000 Volt Wire | LF | 5,100 |
| L-108b | Install #6 AWG Bare Copper Counterpoise, Including Ground Rods | LF | 4,100 |
| L-110a | Install 1-2" SCH 40 PVC Conduit, Direct Earth Buried (DEB) | LF | 3,900 |
| L-110b | Install 1-2" SCH 40 HDPE Conduit, Directionally Bored | LF | 190 |
| L-125a | Remove Stake Mounted Taxiway Edge Light, Complete | EA | 33 |
| L-125b | Install L-861T LED Taxiway Edge Light, Complete | EA | 55 |
| | Schedule II | | |
| Item No. | Description | Units | Quantity |
| C-100a | Contractor's Quality Control Program | LS | 1 |
| C-105a | Mobilization | LS | 1 |
| P-101b | Pavement Removal – Partial Depth | SY | |
| | | 31 | 5,180 |
| P-401a | Asphalt Surface Course | TON | 5,180 800 |
| P-401a P-603a | | | • |
| | Asphalt Surface Course | TON | 800 |
| P-603a | Asphalt Surface Course Bituminous Tack Coat | TON GAL | 800 760 |
| P-603a P-620a | Asphalt Surface Course Bituminous Tack Coat Temporary Airport Pavement Marking | TON GAL SF | 800 760 640 |
| P-603a P-620a P-620b | Asphalt Surface Course Bituminous Tack Coat Temporary Airport Pavement Marking Permanent Airport Pavement Marking, Yellow | TON GAL SF SF | 800 760 640 640 |
| P-603a P-620a P-620b | Asphalt Surface Course Bituminous Tack Coat Temporary Airport Pavement Marking Permanent Airport Pavement Marking, Yellow Pavement Marking Obliteration | TON GAL SF SF | 800 760 640 640 |
| P-603a P-620a P-620b P-620d | Asphalt Surface Course Bituminous Tack Coat Temporary Airport Pavement Marking Permanent Airport Pavement Marking, Yellow Pavement Marking Obliteration Schedule III | TON GAL SF SF SF | 800 760 640 640 580 |
| P-603a P-620a P-620b P-620d Item No. | Asphalt Surface Course Bituminous Tack Coat Temporary Airport Pavement Marking Permanent Airport Pavement Marking, Yellow Pavement Marking Obliteration Schedule III Description | TON GAL SF SF SF Units | 800 760 640 640 580 Quantity |
| P-603a P-620a P-620b P-620d Item No. C-100a | Asphalt Surface Course Bituminous Tack Coat Temporary Airport Pavement Marking Permanent Airport Pavement Marking, Yellow Pavement Marking Obliteration Schedule III Description Contractor's Quality Control Program | TON GAL SF SF SF Units LS | 800 760 640 640 580 Quantity |
| P-603a P-620a P-620b P-620d Item No. C-100a C-105a | Asphalt Surface Course Bituminous Tack Coat Temporary Airport Pavement Marking Permanent Airport Pavement Marking, Yellow Pavement Marking Obliteration Schedule III Description Contractor's Quality Control Program Mobilization | TON GAL SF SF SF LS LS | 800 760 640 640 580 Quantity |
| P-603a P-620a P-620b P-620d Item No. C-100a C-105a P-152a | Asphalt Surface Course Bituminous Tack Coat Temporary Airport Pavement Marking Permanent Airport Pavement Marking, Yellow Pavement Marking Obliteration Schedule III Description Contractor's Quality Control Program Mobilization Unclassified Excavation | TON GAL SF SF SF LS LS CY | 800 760 640 640 580 Quantity 1 1 |
| P-603a P-620a P-620b P-620d Item No. C-100a C-105a P-152a D-705a | Asphalt Surface Course Bituminous Tack Coat Temporary Airport Pavement Marking Permanent Airport Pavement Marking, Yellow Pavement Marking Obliteration Schedule III Description Contractor's Quality Control Program Mobilization Unclassified Excavation Install 6-Inch Perforated Polyethylene Pipe | TON GAL SF SF SF LS LS CY LF | 800 760 640 640 580 Quantity 1 1 80 3,900 |

^{*}Will award schedules based on funding availability. May not award Sch II or III depending on funding.

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3. BID OPENING DATE & TIME

A. Date: September 17, 2025, 11:00 A.M. (CST)

B. Opened at: Rolla City Hall

901 North Elm Street, 3rd Floor Conference Room

Rolla, MO 65401

C. Bid security: 5% of bid amount – Section 3: Instructions to Bidders, Paragraph 10 Bid Security and Section 20-10 Bid guarantee.

D. Bid proposal: Part 2: Bidding Documents (complete and submit all Part 2 pages).

E. Bid Hold: 120 Days

4. DBE GOALS

A. 3.00% of Contract Amount.

- B. Acceptable DBE firms are not limited to firms based within the state in which the project is being constructed, however an out-of-state DBE firm must be certified in that state where the project is located before execution of the contract. Only DBE certified firms, in the project state, count toward DBE participation/goals.
- C. DBE certification documents will need to be submitted at the time of bid opening. Failure to include supporting DBE documentation with the bid proposal may result in bid non-responsiveness.
- D. Contractor to ensure that the DBE company is registered on the MRCC website and is certified to perform the type of work specified in the bid.
- E. The DBE information submitted with the bid proposal cannot change during construction unless approved by MoDOT.
- F. The DBE goal will be calculated bason the full bid. Needs to meet 3% prior to bid.

5. QUALIFICATION OF BIDDERS

- A. Qualifications shall be furnished per Section 20-02. Each bidder shall furnish the Owner satisfactory evidence of his or her competency and financial responsibility to perform the proposed work. This includes resumes of key personnel, equipment list, and a list detailing experience on similar construction projects.
- B. Prime contractor is to ensure that the SAM registration is current.
- C. Prime contractor is to have good standing with the secretary of state at least seven (7) days prior to bid opening.

6. CRITICAL CONTRACT DATES

A. Notice of Award: TBD

B. Notice to Proceed: TBD

C. Construction Start: Estimated Spring 2026

D. Project Time: Refer to Section 80-07 and Section 80-08 for more information.

I. Total Project: 57 Calendar Days.

II. Schedule I: 45 Calendar Days.

III. Schedule II: 4 Calendar Days.

IV. Schedule III: 8 Calendar Days.

7. BONDING

- A. Payment Bond: Part 1: General, Notice to Bidders and Part 3: Contract Documents, 100% of Bid
- B. Performance Bond: Part 1: General, Notice to Bidders and Part 3: Contract Documents, 100% of Bid

8. INSURANCE REQUIREMENTS

A. Refer to Part 5: Special Provisions, Local Provisions and Section 70-21.

9. FEDERAL WAGE RATES (DAVIS BACON ACT)

- A. Federal wage rates are required for this project. Refer to Part 6: Wage Rates.
- B. Contractor and all Subcontractors are required to submit certified payrolls.

10. ENGINEER/RESIDENT PROJECT REPRESENTATIVE (RPR) FIELD OFFICE

A. Not required. Refer to Section 60-05 for more information.

11. CONSTRUCTION SAFETY AND PHASING PLAN (CSPP)

- A. Construction Safety and Phasing Plan (CSPP) Refer to Part 7: Safety Documents, Construction Safety and Phasing Plan (CSPP).
- B. The Contractor shall review and adhere to the CSPP prepared by the Engineer.
- C. The Contractor shall submit a Safety Plan Compliance Document (SPCD) [Refer to Part 7: Safety Documents, Construction Safety and Phasing Compliance Document (SPCD)] to the engineer and airport operator for approval PRIOR to the issuance of Notice to Proceed as required by FAA Advisory Circular (AC) 150/5370-2G "Operational Safety on Airports During Construction".
- D. Runway Closure Marker is to be lighted; Taxiway Closure Marker may be tarp or other approved material.

12. ENVIRONMENTAL REQUIREMENTS

- A. Discuss all project specific requirements for environmentally sensitive areas. Discuss protocols for working in and around these sensitive areas. Adherence to these requirements will be strictly enforced.
- B. All changes to haul routes, staging areas, material storage areas, borrow/waste areas, and limits of disturbance will require approval by FAA Environmental.
- C. Woolpert will submit the Stormwater Pollution Prevention Plan and Land Disturbance Permit.

13. LIQUIDATED DAMAGES

- A. Refer to Part 5: Special Provisions, Local Provisions.
- B. As compensation for non-use, the Contractor shall be assessed a liquidated damage of \$750/Calendar Days for each day that the work remains uncompleted beyond the contract period.
- C. As compensation for expenses incurred for unscheduled employment of the Engineer, up to \$750/ Calendar Days for the construction manager plus up to \$750/ Calendar Days for each additional resident engineer plus any incurred expenses (per diem, lodging, etc.) will be charged to the

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Contractor for that time which exceeds the number of Calendar Days allowed in this paragraph. Further, each phase of work under the project has additional liquidated damage clauses, as outlined in Section 80-08 FAILURE TO COMPLETE ON TIME.

14. MATERIALS/SPECIFICATIONS

- A. Contractor to be familiar with FAA Specifications
- B. Local or state specifications will not be allowed.
- C. Contractor to comply with P-156 specification.
- D. Contractors should check the gradations for P-208. Make sure quarries can meet the gradations and all other specification requirements.
- E. P-610 concrete will require ASR testing on the mix design.
- F. P-401 Asphalt Mix Contractor to ensure that the asphalt plant will be able to produce a mix design that meets the specification.

15. MISCELLANEOUS

- A. Airport Security Badging is not required for this project.
- B. Airport Driving The airport will not require driver safety training class for supervising personnel working in the aircraft movement area.
- C. Review Construction Safety Overall Phasing Plan drawing G050 note the Staging Area & Airport Access gate.
- D. Review Construction Safety Individual Phasing Plan sheets G052-G058 the contractor shall install flasher barricades around the perimeter of the construction site bordering the airfield to isolate the contractor from aircraft.
- E. Contractor to provide runway and taxiway closure markers.
- F. Contractor shall stay within project boundaries.
- G. Radios for the project to be provided by Contractor. See Part 7: Safety Documents, Construction Safety and Phasing Plan (CSPP).
- H. State Sales & Use Taxes See Part 1: General, Instruction to Bidders Paragraph 27 and Part 5: Special Provisions, Sales and Use Taxes for clarification will be provided after award.
- Quality Assurance testing will be completed by TSi Geotechnical, Inc. under the direction of the Engineer. The Quality Control testing and Quality Assurance testing shall be completed by separate firms.
- J. Quality Control by Contractor Part 4: FAA AC 150/5370-10H, Section 60 Control of Materials.
- K. Contractor to submit a Contractor Quality Control Program (CQCP). See Section C-100.
- L. Survey requirements. Refer to Section 50-07.
- M. Water availability The Contractor is to provide connections to water. Airport will provide access to water
- N. Questions will only be taken via written format to the Project Manager until September 5, 2025, 4:00 P.M. (CST).

16. ADDENDUM UPDATE

A. Addendum No. 1 to be issued: TBD

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17. QUESTIONS / ANSWERS

Q. Is the CTS mixed with Asphalt Millings?

A. No, the Cement Treated Subgrade is to be mixed with in-situ subgrade material.

Q. Can the Contractor use a MoDOT specification for concrete instead of P-610 if it is under a certain quantity?

A. The P-610 specification is required for quantities over 20 CY. It is anticipated that this project will use more than 20 CY of material. Therefore, it is required that the P-610 specification is used for this project.

Q. Can the edge lights be trenched?

A. The Contractor may use whatever means and methods that they determine will meet the specification requirements.

Q. Where is RPR's testing facility?

A. The QA's AASHTO certified lab is located in Springfield, MO.

Q. Will topsoil be hauled in from offsite?

A. Topsoil will be stripped 4 inches and placed back at approximately 3 inches. Contractor to ensure grass growth after placement per specification.

Q. Will the Contractor be required to take spot elevation on each lift of material?

A. Yes, the contractor is required to meet grade at the top of each material per associated specification.

Q. Will the excess material be hauled onsite or offsite?

A. All excess material will be hauled offsite.

Q. Can the start date be pushed to July?

A. The Contractor may start construction that best fits their schedule. It is recommended that they have all of the materials approved prior to construction to prevent any delays during construction. Please note that there is funding that might potentially expire by the end of July, and a portion of the project will need to be completed prior to that time.

Q. Will there be a cure time if the CTS is placed into two different lifts?

A. The Contractor may use whatever means and methods that they determine will meet the specification requirements.

18. PROJECT SITE TOUR

Pre-Bid Meeting Sign In

| Meeting Date / Location: R | Tuesday, August 19, 2025 Rolla National Airport Terminal Building Conference Room 631 Airport Drive Vichy, MO 65580 | Project Name: | Rolla National Airport (VIH) Taxiway A Reconstruction and Taxiway Connector Rehabilitation Schedule I: Taxiway A Reconstruction Schedule II: Taxiway B Rehabilitation Schedule III: Taxiway A Underdrains |
|--|--|--|---|
| Time: 9 | 9:00 A.M. (CST) | MoDOT Project #: 23-056A-1 | 3-056A-1 |
| Name | Сотрапу | Telephone No. | E-mail |
| Darin Bacon Darin Macon Sissy Brolers Flowers Fowers Sim Macycrs | MoDOT Capital Daving | 573. 658. 9477 573-299-4498 573-247-1017 573-299-4498 573-691-2837 573-691-2837 573-895-6017 | Apryor & rellacity, gov Apryor & rollacity, gov Apryor & rollacity, gov Airporto rollacity, gov Kimborty, Masterse modot. mo. gov |

Plan Holder Report as of 08/14/2025 08:52 AM CDT

VIH Rolla National Airport Taxiway A Reconstruction and Taxiway Connector Rehabilitation

Quest eBidDoc" Number: 9801915

Closing Date: Wed, 09/17/2025 11:00 AM CDT Posting Type: Construction Project Owner Name: City of Rolla Solicitor Name: Woolpert Contact:

Laura Koonce Phone: 573.658.9477 Email: Laura.Koonce@woolpert.com

| Company Name & Address | Contact Name/Email Address | Phone/Fax | Bus. Cert | Bus. Desig | Entry Date | Doc Type | Comments |
|--|---|------------------------------|--------------|--------------|------------|----------|----------|
| ConstructConnect 3825 Edwards Rd, Cincinnati, OH-45209 | Eric Mills content@constructconnect.com | 800-364-2059 866-570-8187 | | Plan Room | 08/07/2025 | eBidDoc | |
| ePlan 1400 Forum Blvd Ste 7B, Columbia, MO-65203 | Eplan Reporter eplan@eplanbidding.com | 5734477130 573-355-5404 | | Plan Room | 08/07/2025 | eBidDoc | |
| Capital Paving 1369 Business Park Rd, Linn Creek, MO-65052 | Jeffrey Creamer jcreamer@capitalpavingmo.com | 573-317-3700 | | Prime Bidder | 08/11/2025 | eBidDoc | |