CITY OF TULSA
PUBLIC WORKS
Engineering

DATE:
AUGUST 7, 2025

TO:
Plan Holders
Contractors

FROM:
Jenna Richardson
918-596-9637
jennarichardson@cityoftulsa.org

EMAIL TRANSMITTAL

ADDENDUM NO. 4

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PROJECT NO. 2036W0001Z, 2036A0024Z & TMUA-W 22-37
ARTERIAL STREET RECONSTRUCTION GILCREASE MUSEUM RD. (N. 25th W. AVE.) W. ADMIRAL BLVD. TO W. PINE ST.

Number of pages: 123

All addenda to the contract documents should be denoted on the last page of the Proposal in the space provided.

Thank you,
Contract Administration

CITY OF TULSA

PUBLIC WORKS
Engineering

DATE:
August 7, 2025

ADDENDUM NO. 4
TO
PROJECT NO. 2036W0001Z, 2036A0024Z & TMUA-W 22-37
ARTERIAL STREET RECONSTRUCTION GILCREASE MUSEUM RD. (N. 25th W. AVE.) W. ADMIRAL BLVD. TO W. PINE ST.

This Addendum No. 4 consisting of Eight (8) items, submitted by Poe and Associate, Inc. is hereby made a part of the Contract Documents to the same extent as though it were originally included therein and shall supersede anything contained in the Plans and Specifications with which it might conflict. **All addenda to the contract documents should be denoted on the last page of the Proposal in the space provided.**

This Addendum No. 4 consists of the following:

1. The attached documents list the detailed items that have been modified in Addendum No. 1. These documents shall be inclusive and apply to this project.

All other provisions of the Plans and Specifications shall remain in full force and effect.

CITY OF TULSA

Paul D. Zachary, P.E.
Deputy Director

HAS
HAS/DDH/JR/kt

POE & ASSOCIATES, INC.
4606 S. Garnett Road, Suite 600
Tulsa, OK 74146

CONSULTING ENGINEERS
(918) 665.8800
www.poeandassociates.com

DATE:
AUGUST 6, 2025

ADDENDUM NO. 4
TO
GILCREASE MUSEUM RD.
(N. 25TH W. AVE.)
W. ADMIRAL BLVD TO W. PINE ST.
PROJECT NOS. 2036W001Z, 2036 A0024Z & TMUA-W 22-37

This Addendum No. 4 consists of Eight (8) items, submitted by Poe and Associates, Inc., is hereby made a part of the Contract Documents to the same extent as though it was originally included therein and shall supersede anything contained in the Plans and Specifications with which it might conflict.

This Addendum No. 4 consists of the following:

1. Changing BID RECEIVING: Bids will be received until 8:30 a.m. the 22nd day of August 2025. BID OPENING will be the same day.
2. An additional non-mandatory Pre-Bid meeting will be held August 14th at 9AM. Attendance is optional. The eligible bidder pool was set by attendance at the first pre-bid meeting on July 21st. Attendance to this second Pre-Bid meeting will not extend eligibility to firms that did not attend the first Pre-Bid meeting. Invitations will be sent by email to eligible firms.
3. Provide revised Electronic Bid Form with revised Quantities, Items, and Contract Time corrected to 395 days, correlating with Special Conditions.
   - Corrected INSTRUCTION tab, instruction in cell A15 from number "6" to number "7".
   - Corrected PROPOSAL tab, Basis of Award description to include "STREET LIGHTING"
4. Provide revised Special Provision ID-1-3 Incentive / Disincentive.
5. Provide additional Special Provision: SDBP-1-4 Skeletal or Burial Discovery Procedures.
6. Provide additional Special Provision: SCF-1-17 FOR CONCRETE SURFACE TREATMENTS FOR RETAINING WALLS, SCREEN WALLS, AND COLUMNS (SPECIAL CONCRETE FINISH).
7. Replace Plan Sheets:
   - No. 1 with revised mineral resources note and revised lane construction description.
   - No. 2 with revised Quantity Table:
     - Deleted reference to Pay Note S-10 from Pay Items 14 & 15.
     - Deleted reference to Pay Note SP-1 from Pay Items 14 & 15.
     - Added reference to Pay Note S-18 to Pay Items 15, 17, & 30.
     - Revised Quantity of Pay Item 22 from 73 CY to 95 CY.

- Changed description of Pay Item 31 to 6" CONCRETE SIDEWALK (ADA RAMPS AND TRAIL)
- Revised Quantity of Pay Item 34 from 8 EA to 9 EA.
- Revised Quantity of Pay Item 44 from 9 EA to 10 EA.
- Revised Quantity of Pay Item 49 from 1 EA to 2 EA.
- Revised Quantity of Pay Item 51 from 2 EA to 3 EA.
- Revised Quantity of Pay Item 64 from 2114 LF to 2154 LF.
- Revised Quantity of Pay Item 65 from 406 LF to 413 LF.
- Revised Quantity of Pay Item 68 from 371 LF to 486 LF.
- Revised Quantity of Pay Item 69 from 1182 LF to 1216 LF.
- Revised Quantity of Pay Item 79 from 1147 LF to 1162 LF.
- Revised Quantity of Pay Item 80 from 7 EA to 8 EA.
- Deleted reference to Pay Note R-1 from Pay Items 89, 90, 91, & 92.
- Added reference to Pay Note SP-8 to item 101 Field Office.
- Deleted Pay Item 115: SIGNS 16 AND UP.
- Added reference to new Pay Item Note SP-10 to Bid Item 126.
- Added Pay Items 213 to 217. Pay Item 213 references new Pay Note SP-9.

- No. 3 with Revised Pay Item Notes:
  - Deleted "AND/OR OBSTRUCTIONS" from note E-1.
  - Added Pay Note S-18.
  - Deleted Pay Notes SP-2, SP-3, SP-4, SP-5, SP-6 and SP-7.
  - Added Pay Notes SP-8, SP-9, and SP-10.
- No. 5 with added Pay Item Note 34 and reference to it on Pay Item 207.
- No. 6 with revised Quantity Table, revised Notes to latest City of Tulsa Standard Signalization Notes, and added Pay Item 219.
- No. 7 with revised plan sheet No. 7
  - Updated title from "SUMMARY OF QUANTITIES (LIGHTING)" to "SUMMARY OF PAY QUANTITIES AND NOTES (LIGHTING)"
  - Removed "ODOT Traffic Notes".
  - Removed the following pay items:
  - 804(A) 2200 STRUCTURAL CONCRETE
  - 804(B) 2300 REINFORCING STEEL
  - Updated the following quantities:
  - 802(B) 0324 2" PVC SCH. 40 PLASTIC CONDUIT TRENCHED from 22,250 LF to 7,800 LF.
  - 802(B) 0325 2" PVC SCH. 80 PLASTIC CONDUIT TRENCHED from 6,500 LF to 800 LF.
  - 803(A) 1220 PULL BOX (SIZE II) from 132 to 53.00.
  - 810(A) 8200 SERVICE POLE from 2 TO 1.00.
  - Moved "Lighting Legend" to updated sheet No. 115.
  - Moved "Feeder and Branch Circuit Legend" to updated sheet No. 115.

- Moved “Abbreviations” to updated sheet No. 115.
- Moved “Lighting Installation Plans Keyed Notes Master List” to updated sheet No. 115.
- Combined “Lighting Design General Notes” and “General Construction Notes”, removed unnecessary notes, and moved to new sheet No. 115A.
- Added “Traffic Lighting General Construction Notes”
- Removed “Pay Item Notes” that did not apply to project, including removing references to light poles and pole footings.
- Changed pay item note “L1” from referencing PVC coated GRSC, that is not required in this project, to detail that all conduit under pavement shall be bored Schedule 80 PVC.
- Added pay item note “L5” clarifying pullboxes shall meet the size requirements of a City of Tulsa Size II pullbox.
- Added City of Tulsa and ODOT standards that are required for the project.
- Added “Pull Box Schedule” table.
- Add “Service Pole Schedule” table.

- No. 8 removing callout note “CRACK SEALING AS DIRECTED” from TYPICAL NO. 1.
- Nos. 8 to14 with revised callout note changing “1’-6” TIED CURB AND GUTTER…” to “2’-2” TIED CURB AND GUTTER…” and Trail has revised callout note changing from “4” CONCRETE” to “6” CONCRETE”.
- No. 14 with revised callout note changing “SPECIAL DITCH SEE DETAIL” to “6’ WIDE DITCH, ODOT DC-4 DESIGN 2A, Quantities: 187 LF of CLASS C CONCRETE”. Additional 22 CY of Class C Concrete is added to Bid Item 22.
- No. 19 with revised details
  - Deleted Retaining Wall Detail, Fence Post Detail, and Sleeve-It Detail.
  - Added Tree Protection Detail.
- No. 37 with corrected Trail crosshatching, Sta 112+50 to Sta 114+50, RT.
- No. 47 with added inlet SMD-2, manhole ST44A, and 40 LF of 18” CPP storm drain at south end of Retaining Wall B1. Also added storm drain, 7 LF of 24”CPP connecting to existing inlet ST-24A from ST-24.
- No. 48 with added location and callout note for Bid Items 130 and 131.
- No. 49 with revisions:
  - added 4’ WOODEN GATE, 6’ HIGH at sta 180+00, 50 RT.
  - corrected vertical curve numbers at 178+00.
- No. 51 with added 42 LF of 24” RCP culvert and precast end sections under Temple driveway. Added bid items 214 and 215.
- No. 52 with diversion swale/berm shifted 50’ north and ST-53 shifted 34’ northwest and 48” CPP lengthened by 34’.
- No. 58 with inlet, headwall, and 12” storm drain to be removed behind museum’s rock sign.

- No. 59 with added note for existing storm drain to remain in place for Sliplining at Sta 172+80, 50'RT.
- No. 62 with diversion swale/berm cleared forest area shifted 50' north; total area of clearing is unchanged.
- Nos. 63 to 70 with revised Signing and Striping. Some Trail Signage removed.
- Nos. 71 to 73 with revised Joint Layouts to match striping.
- No. S1 with revised Quantities and Notes.
  - Deleted Pay Item 133 STRUCTURAL STEEL.
  - Added Pay Item 218 PILES FURNISHED.
  - Revised Quantity of Pay Item 141 from 893 LF to 892 LF.
  - Revised Quantity of Pay Item 142 from to 1038 LF to 1039 LF.
  - Added columns to quantity table to show bid item and specification number.
  - Text changes.
- Nos. S2 to S3 with revised Notes.
  - All precast lagging panels are referred to now as LAGGING or LAGGING PANELS instead of PANELS.
  - Form liner instructions are now under CIP wall notes and soldier wall notes rather than under general wall notes.
  - Added new notes for soldier pile wall.
  - Other text clarifications.
- Nos. S4 to S21 with minor detail and text revisions and/or clarifications.
- No. S51 with revised Details and Notes.
  - Removed all references to integral color.
  - Added non-pay quantities of concrete and steel used in decorative wall pay item.
- No. S52 with revised Details and Notes.
- Nos. 81 to 86 with revised Signal Designs and Phasing Diagrams.
- No.104 with revised/ added Phase 1A and 1C.
- No. L1 with: Lighting conduit has been shown per Electrical plans; Trees shifted accordingly; Landscape legend has been updated accordingly.
- No. L2 with: Lighting conduit has been shown per Electrical plans; Trees shifted accordingly; Landscape legend has been updated accordingly.
- No. L3 with: Six (6) Chinese Pistache trees have been removed; Two (2) Regal Prince Oaks have been replaced with Oklahoma Redbuds on the west side of the road near Station 163+00; Landscape legend has been updated; Lighting conduit has been shown per Electrical plans.
- No. L4 with: Two (2) Oklahoma Redbuds and two (2) Chinese Pistache trees have been removed on the east side of Gilcrease Museum Rd. between Stations 165+00 and 166+00; Five (5) Oklahoma Redbuds east of the sidewalk at the southeast corner of the intersection of Gilcrease Museum Rd. and Newton have been shifted to the south and west; Three (3) Oklahoma Redbuds have been removed on the east side of the road at Station 169+00; Lighting conduit has been shown per Electrical plans; Landscape legend has been updated.

- No. L5 with: One (1) Chinese Pistache has been removed on the east side of the road near Station 174+00; Three (3) Oklahoma Redbuds have been added on the west side of the road between Stations 176+00 and 177+00; Lighting conduit has been shown per Electrical plans; Landscape legend has been updated accordingly.
- No. L6 with: Chinese Pistache trees between Stations 181+00 and 183+00 on the west side of the road have shifted; Three (3) Oklahoma Redbuds on the east side of the road have been removed; Lighting conduit has been shown per Electrical plans; Landscape legend has been updated.
- No. L7 with: Assumed root ball sizes have been added to the legend and "Tree Planting, Single Trunk" detail; Planting Backfill reference in Tree Planting detail has been revised to refer to the city of Tulsa specification; Landscape Notes have been revised.
- No. L8 with: "Planting Backfill" line item added; Reference to city of Tulsa specification 832 removed from "Topsoil" line item; Quantities for "Planting Backfill", "Topsoil", and "Solid Slab Sodding" have been updated; Sod quantity units have changed from square yardage to square footage to match city of Tulsa standards; Add Alternate pay quantities have been removed; Language for pay notes P3 & P4 has been revised.
- No. 115 with revised plan sheet No. 115
    - Updated title from "LIGHTING INSTALLATION PLAN 1" to "LIGHTING LEGEND AND GENERAL NOTES"
    - Moved plan views with lighting design to new plan sheet No. 115B.
    - Added relocated "LIGHTING SITE PLAN LEGEND", "POWER & SYSTEM LEGEND", "ABBREVIATIONS", "FEEDER AND BRANCH CIRCUIT LEGEND", and "LIGHTING INSTALLATION PLANS KEYED NOTES MASTER LIST:"
    - Updated legend description for light pole symbol to clarify foundation is not required and light pole shall be installed by others.
    - Updated legend description of pull box from Size I to Size II.
- No. 116 with revised plan sheet No. 116
    - Updated title from "LIGHTING INSTALLATION PLAN 2" to "LIGHTING INSTALLATION PLAN (SHEET 2 OF 2)".
    - Updated design with new conduit routing, pull box locations, and staking locations for coordinating installation of light poles by others.
    - Updated scale of views from 60' scale to 30' scale.
    - Updated plan view extents to cover stations 164+50 to end of project.
    - Updated label for service point from SP-2 to SP-1.
    - Updated "Installation Notes" with clarification on contractor requirements for coordinating with utility and for extents of work required by contractor in preparation for installation of light pole by others.

- Updated lighting legend with updates to light pole and handhole detailed on updated sheet No. 115.

- Added Plan Sheet:
  - No. 115A “LIGHT FIXTURE SCHEDULE (SHEET 1 OF 1)”
  - Added the relocated and combined “Lighting Design General Notes” and “General Construction Notes”, with unnecessary notes removed, and note title updated to “LIGHTING INSTALLATION GENERAL NOTES”.
  - Added “LIGHT FIXTURE SCHEDULE” and “LIGHT POLE STAKING SCHEDULE” tables with coordination information to assist contractor with utility coordination. Light fixtures to be installed by utility.
  - No. 115B “LIGHTING INSTALLATION PLAN (SHEET 1 OF 2)
  - Updated design previously detailed on previous sheet No. 115 with new conduit routing, pull box locations, and staking locations for coordinating installation of light poles by others.
  - Updated design to have electrical infrastructure installation start north of station 146+00, with no electrical or lighting infrastructure installed south of updated location of PB-LP-1.
  - Updated plan view extents to cover from beginning of project to station 164+50.
  - Updated “Installation Notes” with clarification on contractor requirements for coordinating with utility and for extents of work required by contractor in preparation for installation of light pole by others.
  - Updated lighting legend with updates to light pole and handhole detailed on updated sheet No. 115.
- NO. 116A “LIGHTING DETAILS (SHEET 1 OF 2)
  - Added details for the service installation, underground warning tape, and the service point enclosure.
- NO. 116B “LIGHTING DETAILS (SHEET 2 OF 2)”
  - Added details for required service point enclosure labelling and conduit grounding.

8. Attached Clarifications summarizing submitted questions.

All other provisions of the Plans and Specifications shall remain in full force and effect.

Poe and Associates, Inc.

Jared T. Bates, P.E.
Project Manager

CLARIFICATIONS

1. **Special Provision**
   Special Provision ID, Incentive/Disincentive is revised in Addendum 4.
   Please note that this is an "overcome-all" contract. There are no incentive/disincentive values included in the engineer's estimate. Special Provision Incentive/Disincentive numbered paragraph #5 addresses that no time is allotted for weather except as specified.

2. **Relocation of Rock and Subsoil within Osage County**
   - The note on the cover sheet is revised by Addendum 4 to delete "rip-rap, and demolished stone walls". These two items, rip-rap and demolished stone walls, are NOT Mineral Resources and may be exported outside of Osage County and disposed of by the Contractor.
   - By Addendum 4, Bid Item 213, RELOCATION OF ROCK AND SUBSOIL WITHIN OSAGE COUNTY is added with Pay Item Note SP-9:

     THIS PROJECT IS PARTIALLY WITHIN OSAGE COUNTY AND WITHIN THE HISTORICAL BOUNDARIES OF THE OSAGE NATION. GENERALLY, THE AREA NORTH OF EDISON IS WITHIN OSAGE COUNTY. ALL MINERAL RESOURCES OF THE OSAGE NATION, INCLUDING ROCK, SOIL, AND SUBSOIL, MUST BE RETAINED ENTIRELY WITHIN OSAGE COUNTY. IT IS THE CONTRACTOR'S SOLE AND EXCLUSIVE RESPONSIBILITY TO IDENTIFY THE BOUNDARIES OF OSAGE COUNTY AND ENSURE THAT MINERAL RESOURCES ARE RETAINED WITHIN THE GEOGRAPHICAL AREA.

     THE QUANTITY FOR THIS ITEM INCLUDES THE VOLUME OF EXCAVATED ROCK AND SUBSOIL NOT NEEDED ON THE PROJECT SITE. EXCAVATED TOPSOIL IS TO BE RE-USED ON THE SITE AND IS NOT INCLUDED IN THE QUANTITY. THE VOLUME TO BE RELOCATED OFF-SITE DOES NOT INCLUDE ASPHALT, CONCRETE, REMOVED PIPES, RIP-RAP, WALL DEMOLITION DEBRIS, OR OTHER CONSTRUCTION MATERIALS OR WASTE.

     THE CITY OF TULSA IS MAKING THE NECESSARY PAYMENTS TO THE OSAGE NATION/BIA AND IS OBTAINING APPROVAL FOR THE MOVEMENT OF THE MATERIAL WITHIN OSAGE COUNTY. CONTRACTOR WILL IDENTIFY AN APPROPRIATE SITE TO PLACE THE ROCK AND SUBSOIL WITHIN OSAGE COUNTY AND WILL OBTAIN ALL REQUIRED SITE ACCESS PERMISSIONS. CONTRACTOR WILL ALSO OBTAIN ALL REQUIRED STATE, CITY, AND COUNTY PERMITS AND ASSOCIATED STORMWATER POLLUTION PREVENTION PLAN DESIGN AND ELEMENTS FOR THE SITE AND WILL ENSURE THAT PLACEMENT OF THE EXCAVATED ROCK AND SUBSOIL IS IN ACCORDANCE WITH THESE PERMITS AND THE STORMWATER POLLUTION PREVENTION DESIGN. ALL TRANSPORTATION, PLACEMENT, AND SITE STABILIZATION COSTS ARE INCLUDED IN THE CUBIC YARDS BID ITEM AND NO ADDITIONAL PAYMENT WILL BE MADE.

3. **Stormwater Flow Control / Sequencing**
   - The existing cross drain at Sta 152+50 must remain in place until the proposed storm sewer downstream to the south is constructed, or a temporary cross drain or cross swale shall be used to carry the same storm flow at no additional cost to the City.
   - The existing cross drain at Sta 172+80 and the existing storm drain downstream to the east must remain in place and unblocked until the proposed storm sewer (storm drain, north side of W. Newton Street at precast end section to MH-4 to MH-29 to MH-42 to MH-30 to MH-31 to ST-25 and St-26) downstream to the south is constructed which diverts the storm drainage to the northeast corner of the Newton intersection. Retaining Wall C from Sta 171+00 to 178+00 shall not be constructed until the same proposed storm sewer is in place (storm drain, north side of W. Newton Street at daylight point to MH-4 to MH-29 to MH-42 to MH-30 to MH-31 to ST-25 and ST-26) and stormwater flow is effectively being diverted south away from the Gilcrease Hills subdivision.

4. **Waterline /Sequencing**
   Retaining Wall C will need to be constructed and backfilled prior to adjacent waterline construction. The proposed waterline will be relocated at a higher elevation than the existing waterline. Existing waterline can be depressurized as needed during construction of Retaining Wall C. No services are connected to this waterline.

5. **Sequencing Plans**
   The Contractor is allowed to propose alternate phasing if it enables better scheduling and will not significantly disrupt traffic flows from: 1)US-412 to Edison, 2)GMR west on Newton, 3)truck access to the north driveway of Gilcrease Museum from GMR/Pine intersection.

6. **Concrete Integral Color and Concrete Staining**
   Special Provision SCF-1-17 is provided for Concrete Retaining Walls, Decorative Walls, and Gate Columns. Concrete Integral Color is only used on flush pavement median and on sidewalk strips behind curbs and is defined in Pay Item Note S-18.

7. **Utility Relocations**
   In general, most utilities will be relocated by the end of September. Remaining PSO lines to be relocated are two underground connections. Communications lines are being relocated to new PSO pole line. All ONG utilities have been relocated. No significant slowdowns to Roadway or Structural construction are anticipated due to any additional relocation of utilities.

8. **Material-On-Hand**
   Material-On-Hand will be approved for payment.

9. **Pile Lifting Hole**
   It is permissible to “Core Drill” a 1.5” Dia. Lifting Hole in the W27 x 217 Piles for purposes of lifting piles into position for Retaining Walls A, B-1 and D. Contractor shall provide submittal for approval by Structural Engineer (include sketch).

10. **Sidewalk Bid Items**
    Sidewalk quantities in Bid Form are revised in Addendum 4, to match Plan Sheet 2 handwritten quantities.

11. **Burning**
    Burning will be allowed if Contractor can find a suitable location, meet all local ordinance requirements, and use an air curtain burner. If Osage County is under a burn ban, no burning will be allowed. We don't believe a suitable location can be found onsite due to the proximity of residences.

12. **Grounding Conductor**
    Note L2 on Sheet 7 mentioned a separate pay item for grounding conductor. Equipment grounding conductor, if needed, will be installed by the utility and will **not** be the responsibility of the contractor. Note is removed by Addendum 4.

13. **Service Poles**
    For Bid Item No. 212, City of Tulsa specifications shall be used to construct the service poles. All requirements of PSO shall be met.

14. **Privacy Fence**
    - Treated wood or cedar will be accepted. Match existing picket shape of adjacent fence if possible.
    - Steel posts are required, using standard construction practices. Wood posts are not allowed.
    - Screws are required. Nails will not be allowed.
    - One 4' gate is added by Addendum 4 at Sta. 180+00, 50'RT to replace existing gate.

15. **Temporary Fence**
    Pay Item Note SP-10 is added by Addendum 4 stating: "TEMPORARY FENCE SHALL BE A MINIMUM OF 6 FOOT TALL CHAIN-LINK, MOVABLE PANELS. TEMPORARY FENCE SHALL BE DOG PROOF WHERE DOGS ARE PRESENT; ADD NET WIRE AND SANDBAGS AS NEEDED. TEMPORARY FENCE SHALL BE STAKED TO GROUND TO BE FIXED LOCATION WHERE ADJACENT TO RETAINING WALLS A AND C. TEMPORARY FENCE ON TEMPLE PARCEL SHALL HAVE EXISTING ELECTRIC FENCE WIRE RELOCATED TO THE BOTTOM TO DISCOURAGE TEMPLE'S DOG FROM APPROACHING FENCE."

16. **Owner's Field Office / Contractor's Jobsite Office**
    By Addendum 4, added Pay Item Note SP-8 to Field Office pay item stating: "OWNER'S FIELD OFFICE TO INCLUDE A MINIMUM 600 SQUARE FEET OF CONDITIONED SPACE INCLUDING OFFICES, CONFERENCE ROOM, UTILITY CONNECTIONS, INTERNET CONNECTION, AND PORT-A-POTTIES. FIELD OFFICE TO BE PLACED ON VACANT LOT AT 2725 WEST NEWTON STREET. NO TREES SHALL BE REMOVED WITHOUT OWNER PERMISSION. SITE SHALL BE GRAVEL PAVED AT NO ADDITIONAL COST TO OWNER. WHEN PROJECT IS COMPLETED, SITE SHALL BE RETURNED TO EXISTING CONDITION AND SLAB SODDED AT NO ADDITIONAL COST TO OWNER. CONTRACTOR SHALL PROVIDE A JOBSITE OFFICE FOR CONTRACTOR'S USE AND IS ALLOWED TO USE THE SAME SITE IF CONTRACTOR SO CHOOSES. COST OF CONTRACTOR'S JOBSITE OFFICE IS INCLUDED IN MOBILIZATION PER ODOT SPECIFICATIONS."

17. **Precast Concrete Structures**
    Precast RCBs and Junction Boxes are allowed. If used, Contractor shall provide submittals for approval by the Structural Engineer. Precast Concrete Structures will be paid for at the plan quantity of concrete and steel shown on the detail sheets and Drainage Summary Tables.

18. **Geotechnical Reports**
    Link is provided online at https://www.cityoftulsa.org/government/departments/public-works/engineering-services/construction-bids/ to obtain two project geotechnical reports.

19. **Inspector**
    Poe and Associates are engaged as the inspectors.

20. **Anticipated Start Date**
    September 8th is the desired Start Date. Start Date must be by October 1st, 2025.

21. **Work Hours**
    Work seven days a week is authorized for this project.

SPECIAL PROVISION
INCENTIVE / DISINCENTIVE

THE TIMELY OPENING OF A WORLD-CLASS MUSEUM WITH UNPRECEDENTED PUBLIC AND PRIVATE INVESTMENT

The purpose is to establish a partnership with both the Contractor and the City of Tulsa.

The City of Tulsa is committing an additional One Million Two Hundred Thousand Dollars ($1,200,000) to this project as an incentive payment for creativity, production, ingenuity, and ability to implement an overcome-all approach.

The Contractor must commit to developing feasible and flexible work plans that address the issues hindering the completion of this project. The Contractor is to optimize resources and leverage their knowledge of the best approaches to ensure that work continues despite any obstacles. Success will require solution-focused work plans and strategies. Issues should be identified rapidly, and planned work must be modified accordingly to address these challenges. Effective and productive communication is crucial. Accusations, adversarial behaviors, and unproductive actions will not be tolerated in this project from the City of Tulsa or the Contractor.

1. If the Contractor is successful in achieving substantial completion in less than the 395 calendar day contract time, an incentive will be paid. The contractor shall receive an incentive of One Hundred and Twenty Thousand Dollars ($120,000.00) for each and every calendar day, up to a maximum of Ten (10) calendar days. The incentive payment will be assessed from 12:01 A.M. on the day following the day on which the Contractor has achieved substantial completion. The incentive payment will be paid for each calendar day substantial completion was achieved before the expiration of the 395 calendar day contract time.

2. If the contractor fails to substantially complete the project, the contractor agrees to pay the City of Tulsa, not as a penalty, but as a disincentive for Breach of Contract, the sum of Twelve Thousand Dollars ($12,000.00) for each and every calendar day for failure to substantially complete the work within the allowed 395 calendar day contract time.

3. For determining incentive/disincentive payments, substantial completion of the project will be deemed when:

    - the portion of the project site being the museum grounds adjacent to the Gilcrease Museum Road lying west of the west curb of Gilcrease Museum Road from the West Newton Street Intersection to the north project limit at the West Pine Street Intersection, has all work items totally completed, all

punchlist items completed, all inspections completed, all site cleanup completed, all contractor activities ceased, and all equipment and excess materials permanently removed AND

- the remainder of the project site is substantially complete as defined by ODOT 105.17 and ODOT 108.08.

4. The City of Tulsa desires to expedite construction on this Contract to minimize the inconvenience to the traveling public and to reduce the time of construction. This incentive / disincentive provision is established for the Contract. The total incentive payment shall not exceed One Million Two Hundred Thousand Dollars ($1,200,000.00).

5. The Contractor shall take all necessary actions, including proactive planning, resource allocation, and stakeholder coordination, to ensure that such obstacles do not delay the Project or increase its cost, except as otherwise provided in this contract. The Contractor shall be solely responsible for identifying, managing, and mitigating all foreseeable and unforeseeable obstacles that may impact the timely and successful completion of his Project. These include, but are not limited to,
site access limitations or right-of-way issues, adverse weather conditions or natural disasters, utility conflicts or unmarked underground infrastructure, delays in material procurement or supply chain disruptions, labor shortages, strikes, or workforce disputes, equipment breakdowns or unavailability, environmental constraints or permitting delays, coordination with third-part stakeholders, traffic control and public safety requirements, regulatory changes or compliance issues, errors or omissions in design documents, unforeseen subsurface conditions, community relations or public opposition, security risks or vandalism, and health and safety incidents on site.

6. The parties anticipate that delays may be caused by or arise from any number of events during the course of the Contract, including, but not limited to, work performed, work deleted, change orders, supplemental agreements, delays, disruptions, differing site conditions, utility conflicts, design changes or defects, extra work, right of way issues, permitting issues, actions of suppliers, subcontractors or other contractors, actions by third parties, shop drawing approval process delays, expansion of the physical limits of the project to make it functional, weather, weekends, holidays, suspensions of Contractor's operations, or other such events, forces, or factors sometimes experienced in construction work. Such delays or events and their potential impacts on performance by the Contractor are specifically contemplated and acknowledged by the parties in entering into this Contract. For purposes of the calculation and the determination of incentive / disincentive stated above, the Contract Time will not be adjusted for any reason, cause or circumstance whatsoever, regardless of fault, save and except in the instance of a catastrophic event (i.e., declared state of emergency).
Further, any and all costs or impacts whatsoever incurred by the Contractor in accelerating the Contractor's work to overcome all or absorb such delays or events

in an effort to complete the Contract prior to expiration of the Contract Time, regardless of whether the Contractor successfully does so or not, shall be the sole responsibility of the Contractor in every instance.

7. In the event of a catastrophic event (i.e., a declared state of emergency) directly and substantially affecting the Contractor's operations on the Contract, the Contractor and the City shall agree as to the number of calendar days to extend the Contract Time so that such extended Contract Time will be used in calculation of the incentive / disincentive. In the event the Contractor and City are unable to agree to the number of calendar days to extend the Contract Time, the City shall unilaterally determine the number of calendar days to extend the Contract Time reasonably necessary and due solely to such catastrophic event and the Contractor shall have no right whatsoever to contest such determination, save and except that the Contractor establishes that the determination of calendar days by the City was arbitrary or without any reasonable basis.

8. The time required by the Engineer for performing normal inspections, testing and review duties shall be considered as included in the 395 calendar day contract time. Every effort will be made by the Engineer to perform normal inspection testing and review in a manner which will not delay Contractor's work.

9. If the Contractor fails to achieve substantial completion by the expiration of the 395 calendar day contract time, a disincentive will be assessed. The disincentive will be assessed effective at 12:01 A.M. on the day following the expiration of contract time and will continue to be assessed for each day thereafter until substantial completion is achieved. The disincentive assessment will be charged against each progressive estimate until substantial completion is achieved.

10. The effort to complete this project must not adversely impact the timely completion of any other City of Tulsa project.

Skeletal or Burial Discovery Procedures

It is possible that during excavation or utility installation the discovery of human skeletal remains or burial furniture could be discovered. There are strict statutory guidelines that must be followed in the event of discovery. These guidelines are required by law and any disregard to such guidelines is subject to criminal punishment and penalties.

Therefore, we require that any Contractor, subcontractor or employee of the same, immediately upon any such discovery encounter of human skeletal remains or what they believe may be human skeletal remains or burial furniture thought to be associated with human skeletal remains in or on the ground shall immediately cease any activity which may cause further disturbance area, protect the area from any further disturbance, and notify the onsite representative for the City of Tulsa and report the presence and location of such human skeletal remains and or burial furniture to an appropriate law enforcement officer.

Contact Information:

Local Law Enforcement:	**Tulsa Police Department**	**918-596-9222**
	Osage County Sheriff	**918-287-3131**
	Tulsa County Sheriff	**918-596-5601**

Any person who willfully fails to report the presence or discovery of human skeletal remains or what they believe may be human skeletal remains within forty-eight (48) hours to an appropriate law enforcement officer in the county in which the remains are found shall be guilty of a misdemeanor.

Any person who knowingly disturbs human skeletal remains or burial furniture other than a law enforcement officer, registered mortician, a representative of the Office of the Chief Medical Examiner, a professional archaeologist or physical anthropologist, or other officials designated by law in performance of official duties, shall be guilty of a felony.

Anyone other than a law enforcement officer, registered mortician, a representative of the Office of the Chief Medical Examiner, a professional archaeologist or physical anthropologist, or other officials designated by law in performance of official duties, who disturbs or permits disturbance of a burial ground with the intent to obtain human skeletal remains or burial furniture shall be guilty of a felony.

If there are any further questions related to these procedures, please contact a representative from the City of Tulsa for further clarification.

Any person, Contractor, Sub-contractor, or employee who discovers or encounters any human skeletal remains or what they believe may be human skeletal remains or burial furniture thought to be associated with human skeletal remains in or on the ground shall follow these procedures:

1. Notify the City of Tulsa and appropriate Law Enforcement Agency

2. Go to the location of the discovery and secure the area from other disturbances or from public access.

3. Interview the individual who encountered or discovered the burial and document the occurrence in detail on an incident report and in the daily report. Take photographs of the location and document the type of equipment being utilized when the discovery occurred.

4. Refer all requests from media or reporters to the City of Tulsa Communications Director

5. Do not leave the location of the discovery unattended until further direction is received from the Law Enforcement Officer. Discuss with the Law Enforcement Officer what procedures to follow regarding the protection of the area during the working and non-working hours.

6. Document all actions taken, individuals spoken to, and directions received.

Attached are the relative Oklahoma Statutes to the discovery of human skeletal remains or burial furniture for your reference.

Oklahoma Statutes-Regarding Discovery of Human Skeletal Remains or Burial Furniture

Title 21. Crimes and Punishments
Chapter 47

Section 1161 - Unauthorized Removal of Dead Bodies-Penalty
No person shall intentionally remove the dead body of a human being or any part thereof from the initial site where such dead body is located for any purpose, unless such removal is authorized by a district attorney or his authorized representative or medical examiner or his authorized representative, or is not required to be investigated pursuant to the provisions of Section 938 of Title 63 of the Oklahoma Statutes, said authorization by the district attorney or medical examiner shall not be required prior to the removal of said body. A district attorney having jurisdiction may refuse to prosecute a violation of this subsection if the district attorney determines that circumstances existed which would justify such removal or that such removal was not an act of malice or wantonness.

No person shall willfully or with malicious intent violate or cause damage to the casket or burial vault holding the deceased human remains.

Any person convicted of violating any of the provisions of this section shall be guilty of a felony and shall be punished by imprisonment in the State Penitentiary not exceeding five (5) years, or in the county jail not exceeding one (1) year, or by a fine not exceeding Five Thousand Dollars ($5,000.00), or by both such fine and imprisonment.

Section 1168 - Definitions
As used in this section and Sections 13 through 18 of this act:

1. "Human skeletal remains" means the bony portion of a human body which remains after the flesh has decomposed;

2. "Burial grounds" means any place where human skeletal remains are buried;

3. "Burial furniture" means any items intentionally placed with human remains at the time of burial and shall include but not be limited to burial markers, items of

personal adornment, casket and hardware, stone, bone, shell and metal ornaments and elaborately decorated pottery vessels;

4. "State Historic Preservation Officer" means the individual of this title appointed by the Governor and employed by the Oklahoma Historical Society; and

5. "State Archaeologist" means the individual of this title employed by the Oklahoma Archeological Survey.

Section 1168.4 - Duty to Report Discovered Remains-Penalty for Failure to Report-Persons to Notify

All persons who encounter or discover human skeletal remains or what they believe may be human skeletal remains or burial furniture thought to be associated with human burials in or on the ground shall immediately cease any activity which may cause further disturbance and shall report the presence and location of such human skeletal remains to an appropriate law enforcement officer.

Any person who willfully fails to report the presence or discovery of human skeletal remains or what they believe may be human skeletal remains within forty-eight (48) hours to an appropriate law enforcement officer in the county in which the remains are found shall be guilty of a misdemeanor.

Any person who knowingly disturbs human skeletal remains or burial furniture other than a law enforcement officer, registered mortician, a representative of the Office of the Chief Medical Examiner, a professional archaeologist or physical anthropologist, or other officials designated by law in performance of official duties, shall be guilty of a felony.

Anyone other than a law enforcement officer, registered mortician, a representative of the Office of the Chief Medical Examiner, a professional archaeologist or physical anthropologist, or other officials designated by law in performance of official duties, who disturbs or permits disturbance of a burial ground with the intent to obtain human skeletal remains or burial furniture shall be guilty of a felony.

The law enforcement officer, if there is a reason to believe that the skeletal remains may be human, shall promptly notify the landowner and the Chief Medical Examiner. If remains reported under this act are not associated with or suspected of association with any crime, the State Archaeologist and the State Historic Preservation Officer shall be notified within fifteen (15) days. If review by the State Archaeologist and the State Historic Preservation Officer of the human skeletal remains and any burial furniture demonstrates or suggests a direct historical relationship to a tribal group, then the State Archaeologist shall:

1. Notify the State Historic Preservation Officer; and

2. Consult with the tribal leader, designated by the Oklahoma Indian Affairs Commission, within fifteen (15) days regarding any proposed treatment or scientific studies and final disposition of the materials.

Section 1168.5 - Designation of Repository for Unclaimed Remains for Scientific Purposes

If the human skeletal remains and any burial furniture are not directly related to a tribal group or if the remains are not claimed by the consulted entity, the State Archaeologist and the State Historic Preservation Officer with the Director of the Oklahoma Museum of Natural History may designate a repository for curation of such skeletal remains and burial furniture for scientific purposes.

Section 1168.6 - Penalty and Fine
Any person convicted of a misdemeanor pursuant to the provisions of Sections 1168 through 1168.5 of this title shall be punishable by a fine not exceeding Five Hundred Dollars ($500.00), by imprisonment in the county jail not exceeding six (6) months, or by both such fine and imprisonment.

Any person convicted of a felony pursuant to the provisions of Sections 1168 through 1168.5 of this title shall be punishable by a fine not exceeding One Thousand Dollars ($1,000.00), by imprisonment in the State Penitentiary not exceeding two (2) years, or by both such fine and imprisonment.

SPECIAL PROVISIONS
FOR CONCRETE SURFACE TREATMENTS FOR RETAINING WALLS, SCREEN WALLS, AND COLUMNS
(SPECIAL CONCRETE FINISH)

PART 1 GENERAL

1.01 GENERAL

A. Construction of textured and colored formed concrete surfaces using simulated stone masonry molds and color stain system designed to duplicate closely the appearance of natural stone.

B. Construction of textured and colored formed concrete surfaces using simulated wood molds and color stain system designed to duplicate closely the appearance of natural wood.

C. As required by the Engineer, the work shall be in accordance with American Concrete Institute ACI 303R-91, Guide to Cast-In-Place Architectural Concrete, and other appropriate ACI guidelines.

1.02 DESIGN REQUIREMENTS

A. Design and pattern of the concrete surface shall follow the manufacturer's standard drawing. Patterning of simulated stone masonry shall appear natural and non-repeating. Seam lines or match lines caused from two of more molds coming together will not be apparent when viewing final wall.

B. Final coloration of cast stone concrete surface shall accurately simulate the appearance of real stone including the multiple colors, shades, flecking, and veining that is apparent in real stone. It shall also demonstrate the colors that may be apparent from aging, such as staining from oxidation, rusting and/or organic staining from soil and /or vegetation. Note that in Section 1.03, SUBMITTAL and Part 3, EXECUTION, a sample and mockup are required. Upon approval by Field Engineering, mockup shall serve as quality standard for the project.

C. Final coloration of cast wood concrete surface shall simulate the appearance of real wood. Note that in Section 1.03, SUBMITTAL and Part 3, EXECUTION, a sample and mockup are required. Upon approval by Field Engineering, mockup shall serve as quality standard for the project.

1.03 SUBMITTAL

A. Sample Panel: Within 30 days of receiving the general contract, Contractor is required to submit to Field Engineering a 24" x 24" sample of the simulated stone masonry finish and a 24" x 24" sample of the simulated wood finish. Sample is to demonstrate the finish described in Section 1.02, DESIGN REQUIREMENTS. Staining of the 24” x 24” sample is not required. Approval of sample panel is required by Field Engineering.

B. Shop Drawings: Plan, elevation, and details to show overall pattern, joint locations, form tie locations, and end, edge, and other special conditions.

C. Samples: Form ties, sample and description, showing method of separation when forms are removed.

1.04 QUALITY ASSURANCE

A. Manufacturer of simulated stone masonry molds and custom coloring system: Ten (10) years' experience making stone masonry molds and color stains to create formed concrete surfaces to match natural stone shapes, surface textures, and colors.

B. Manufacturer of simulated wood molds and custom coloring system: Ten (10) years' experience making wood molds and color stains to create formed concrete surfaces to match natural wood shapes, surface textures, and colors.

C. PHOTOGRAPHS – Photographs of completed projects must be submitted to Field Engineering as part of Contractor experience. Color photographs of at least three (3) similar formlined projects recently performed by the Contractor (or his Subcontractor) and at least three (3) similar projects recently stained using multiple colors performed by the stain contractor.

D. Pre-Installation Meeting: Schedule a conference with manufacturer representative to assure understanding of simulated stone masonry and simulated wood, molds use, color application, requirements for construction of mockup, and to coordinate the work.

E. Contractor shall prepare the 50 sq. ft. mockup panel and contact manufacturer to complete the staining of the mockup panel, on site.

1.05 PROJECT CONDITIONS

A. Environmental requirements: Apply color stain when ambient temperature is between 50 and 100 degrees F. Consult manufacturer if conditions differ from this requirement.

1.06 SEQUENCING

A. Schedule color stain application with earthwork and back-filling of any wall areas making sure that all simulated stone texture is colored to the minimum distance, 1'-0", below grade. Delay adjacent plantings and trail construction until color application is completed. Coordinate work to permit coloring applications without interference from other trades.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. The specified system is based on the Custom Rock®, St. Paul, Minnesota 55116, phone (651)699-1345, (or approved equal).

2.02 MATERIALS

A. Simulated masonry and wood molds: Reusable and made of high-strength urethane, easily attachable to forms. Molds shall not compress more than 1/4 in. when concrete is poured at rate of 10 vertical feet per hour. Molds shall be removable without causing deterioration of surface or underlying concrete. No formliners made from plastic or other material beside high-strength urethane will be accepted.

B. Pattern:

1. Simulated Stone: The wall mold pattern shall be #11019 Rustic Ashlar by Custom Rock, St. Paul, MN (651) 699-1345, or approved equal.
2. Simulated Wood: The wall mold pattern shall be #16928 6” Ship Lap by Fitzgerald Formliners, Santa Ana, CA (714) 547-6710, or approved equal.

C. Release Agent: Compatible with simulated stone masonry and wood molds and with color stain system to be applied to surface. Consult manufacturer. Absolutely no release agents containing mineral spirits or kerosene should be used.

D. Form ties: Shall be made of either metal or fiberglass. Using metal ties, which result in a portion of the tie permanently embedded in the concrete, shall be designed to separate at least one inch back from finished surface, leaving only a neat hole that can be plugged with patching material. Contractor shall submit the type of form ties to Field Engineering, for approval prior to use in this work,

E. Mortar Joints: Joints shall not be colored.

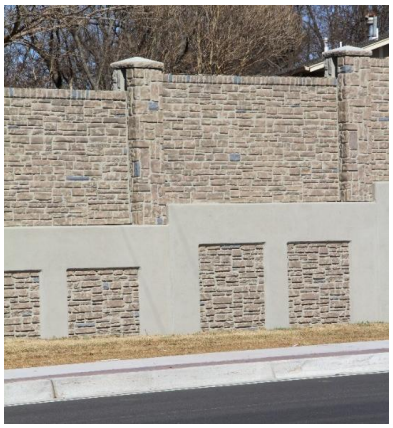
F. Simulated Stone Color Stain: All designated concrete surfaces, as shown in Construction Plans should be stained with H&C Colortop Water-Based Solid Color Concrete Stain, using a minimum of three (3) stain colors and up to five (5). The base color should be applied with an airless sprayer; accent colors should be applied with air spray cup gun and washcoat applied and wiped with a sponge to achieve desired look. Colors to be selected from manufacturer’s color chart, based on color scheme shown in example within this specification.

G. Simulated Wood Color Stain: All designated concrete surfaces, as shown in Construction Plans should be stained with H&C Colortop Water-Based Solid Color Concrete Stain, using one (1) stain color. The mockup panel will be used to determine best application method. Colors to be selected from manufacturer’s color chart, based on color scheme shown in example within this specification.

H. 2’-0” of Screen Wall below Simulated Wood Section Color Stain (no formliner): All designated concrete surfaces, as shown in Construction Plans should be stained with H&C Colortop Water-Based Solid Color Concrete Stain, using one (1) stain color. The mockup panel will be used to determine best application method. Colors to be selected from manufacturer’s color chart, based on color scheme shown in example within this specification.

I. Special stain mix as provided by manufacturer, shall achieve color variations present in the natural stone being simulated for this project, as required by Field Engineering as referenced in Section 1.02 DESIGN REQUIREMENTS. Stain shall create a surface finish that is breathable (allowing water vapor transmission), and that resists deterioration from water, acid, alkali, fungi, sunlight or weathering. Stain mix shall be a water- borne, low V.O.C. material, less than 180 grams/liter.

J. Non-Sacrificial anti-graffiti coating: All designated concrete surfaces, as shown in Construction Plans, shall have a sacrificial anti-graffiti coating applied using Sherwin Williams 2K Waterbased Urethane Anti-Graffiti coating, Part A B65-195 satin and Part B B65V195 satin series (or approved equal).



Stone Color Stain Example for Project

Wood Color Stain Example for Project

PART 3 EXECUTION

3.01 ACCEPTABLE INSTALLERS

A. Formed concrete construction: Five years' experience pouring vertically formed architectural concrete. Installer shall be trained in manufacturer's special techniques in order to achieve realistic surfaces.

B. Color stain system application: Formliner manufacturer or manufacturer's authorized representative.

3.02 CONSTRUCTION

A. C.I.P. Mockup: Build mockup panel on site twenty days before work starts, using same materials, methods and work force that will be used for the project. Field Engineering will determine specific requirements and location, and whether mockup shall be incorporated into the project. The Contractor shall prepare the mockup panel.

1. Size: 50 sq. ft., or larger, if needed to adequately illustrate the pattern and texture selected.
2. Include an area to demonstrate wall mold butt joint and if appropriate, continuation of pattern through expansion joint.
3. After concrete work on mockup is completed and cured for a minimum of 30 days and after surface is determined to be acceptable for coloring, color stain system shall be applied to the mockup by the formliner manufacturer, on site.
4. After coloring is determined to be acceptable by Field Engineering, construction of project may proceed, using mockup as quality standard.
5. As a final step in the mockup, the specified non-sacrificial anti-graffiti coating will be applied to determine its effects on the appearance of the mockup panel.

B. Precast Mockup: Bring mockup lagging panel to site twenty days before work starts, using same materials, methods and work force that will be used for the project. Field Engineering will determine specific requirements and location, and whether mockup shall be incorporated into the project. The Contractor shall prepare the mockup panel.

1. Size: 50 sq. ft., or larger, if needed to adequately illustrate the pattern and texture selected.

2. After surface is determined to be acceptable for coloring, color stain system shall be applied to the mockup by the formliner manufacturer, on site.
3. After coloring is determined to be acceptable by Field Engineering, construction of project may proceed, using mockup as quality standard.
4. As a final step in the mockup, the specified non-sacrificial anti-graffiti coating will be applied to determine its effects on the appearance of the mockup panel.

3.03 SPECIAL TECHNIQUES - FORMING TEXTURED CONCRETE

A. Simulated Stone Masonry and Wood Molds preparation: Clean and make free of buildup prior to each pour. Inspect for blemishes or tears. Repair if needed following manufacturer's recommendations.

B. Simulated Stone Masonry and Wood Molds attachments: Place molds with less than 1/4 inch separation between them. Attach molds to form securely following manufacturer's recommendations.

C. Form release agent: Apply following manufacturers' recommendations.

D. Form stripping and related construction shall avoid creating defects in finished surface.

E. If the pattern selected has molds connecting through the middle of the stones, carefully remove the seam line created by abutting molds. Match the texture and shape of the surrounding stone, avoiding visible seams or mold marks.

F. Place form ties at thinnest points of molds (high points of finished wall). Neatly patch the remaining hole after disengaging the protruding portion of the tie so that it will not be visible after coloring the concrete surface.

G. Where an expansion joint must occur at a point other than at mortar or rustication joints, such as at the face of concrete texture, which is to have the appearance of stone, consult manufacturer for proper treatment of expansion material.

H. To achieve a natural and non-repeating pattern to the simulated stone masonry, a minimum of 2 modules of formliner (in pattern described in 2.02 B) designed to permit 180-degree rotation. The simulated stone pattern shall vary in a random manner in the coursing parameters to prevent noticeable multiple duplicate pattern repetition.

3.04 SPECIAL TECHNIQUES - APPLYING COLOR STAIN SYSTEM.

A. All surfaces that are to be stained shall have cured for a minimum of 30 days.

B. Clean surface prior to application of stain materials to assure that surface is free of latency, dirt, dust, grease, efflorescence, paint, or other foreign material, following manufacturer's instructions for surface preparation. Do not sandblast. Preferred method to remove latency is pressure washing with water, minimum 3000 psi (a rate of three to four gallons per minute), using fan nozzle perpendicular to and at a distance of one or two feet from surface. Completed surface shall be free of blemishes, discoloration, surface voids, and unnatural form marks.

3.05 PROTECTION

A. Where exposed soil or pavement is adjacent which may spatter dirt or soil from rainfall, or where surface may be subject to over spray from other processes, provide temporary cover of completed work.

4.01 BASIS OF PAYMENT

Payment for aesthetic treatment shall be included in the price bid for:

RETAINING WALL, SOLDIER PILE, COMPLETE, IN PLACE (SY) or
RETAINING WALL, C.I.P., COMPLETE, IN PLACE (SY) or
DECORATIVE WALL (LF)

customrock
FORMLINER

www.customrock.com
Custom Rock Formliner 800.637.2447

Pattern #11019
Rustic Ashlar

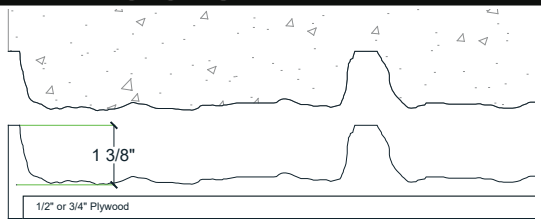
Urethane Formliner

Materials
- Cut-Lite - Single Use +
- Multi-Lite - 6 Reuses +/-
- Hi-Lite - 12 Reuses +/-
- Duraform - 100 Reuses +/-

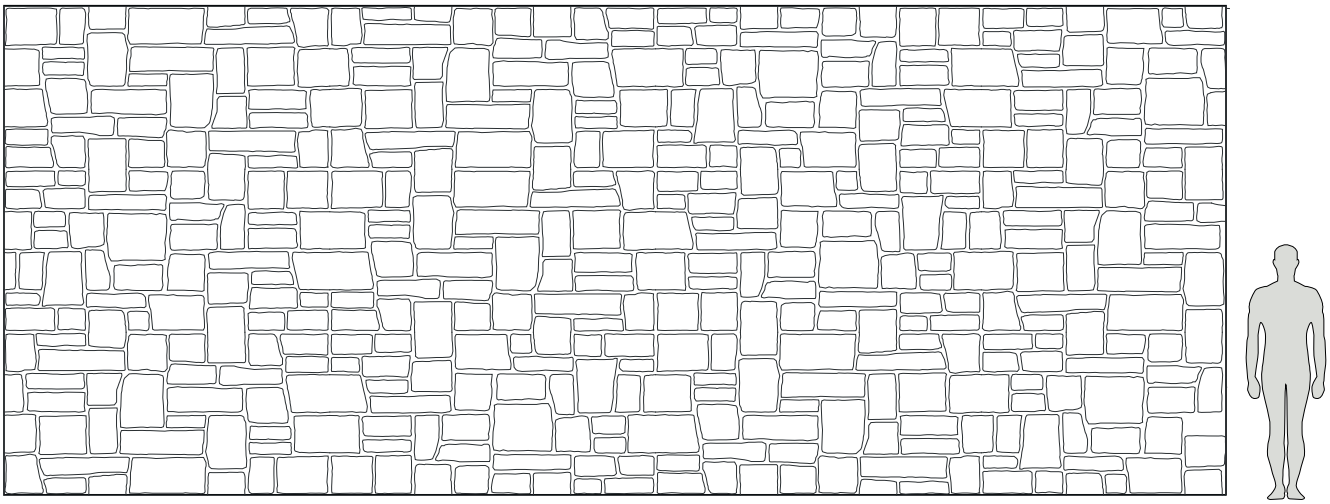
Care and Handling
Keep out of the sunlight and cover when not in use.
Keep away from steam, acids, and certain fuels
For further instructions refer to application guide

Note
We recommend a mockup pour simulating actual job conditions. Refer to application guide for further instructions.

SECTION VIEW



ELEVATION VIEW



SCF-7

customrock FORMLINER

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FORMLINER

www.customrock.com
Custom Rock Formliner 800.637.2447

Pattern Modules

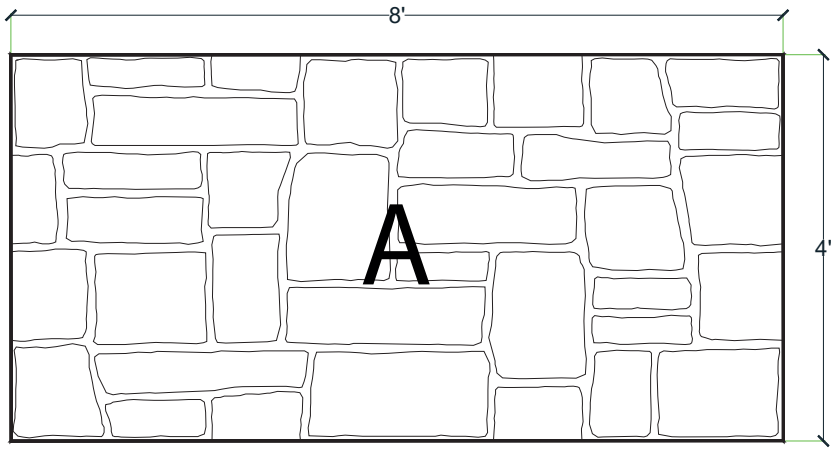
Number of Modules: 2

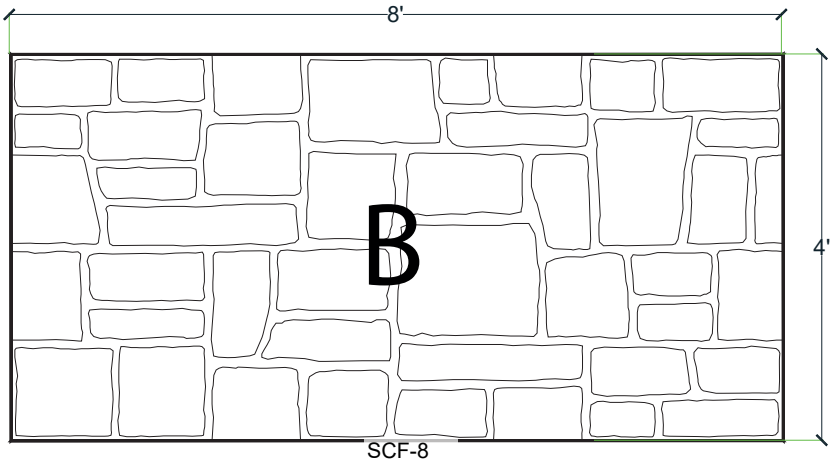
MATCHING:
- ☑ End to End
- ☑ Top to Bottom
- Does Not Match

KEYED:
- Yes
- ☑ No

ROTATE 180 DEGREES:
- ☑ Yes
- No

STAGGERED PATTERN:
- ☑ Yes
- No





SCF-8

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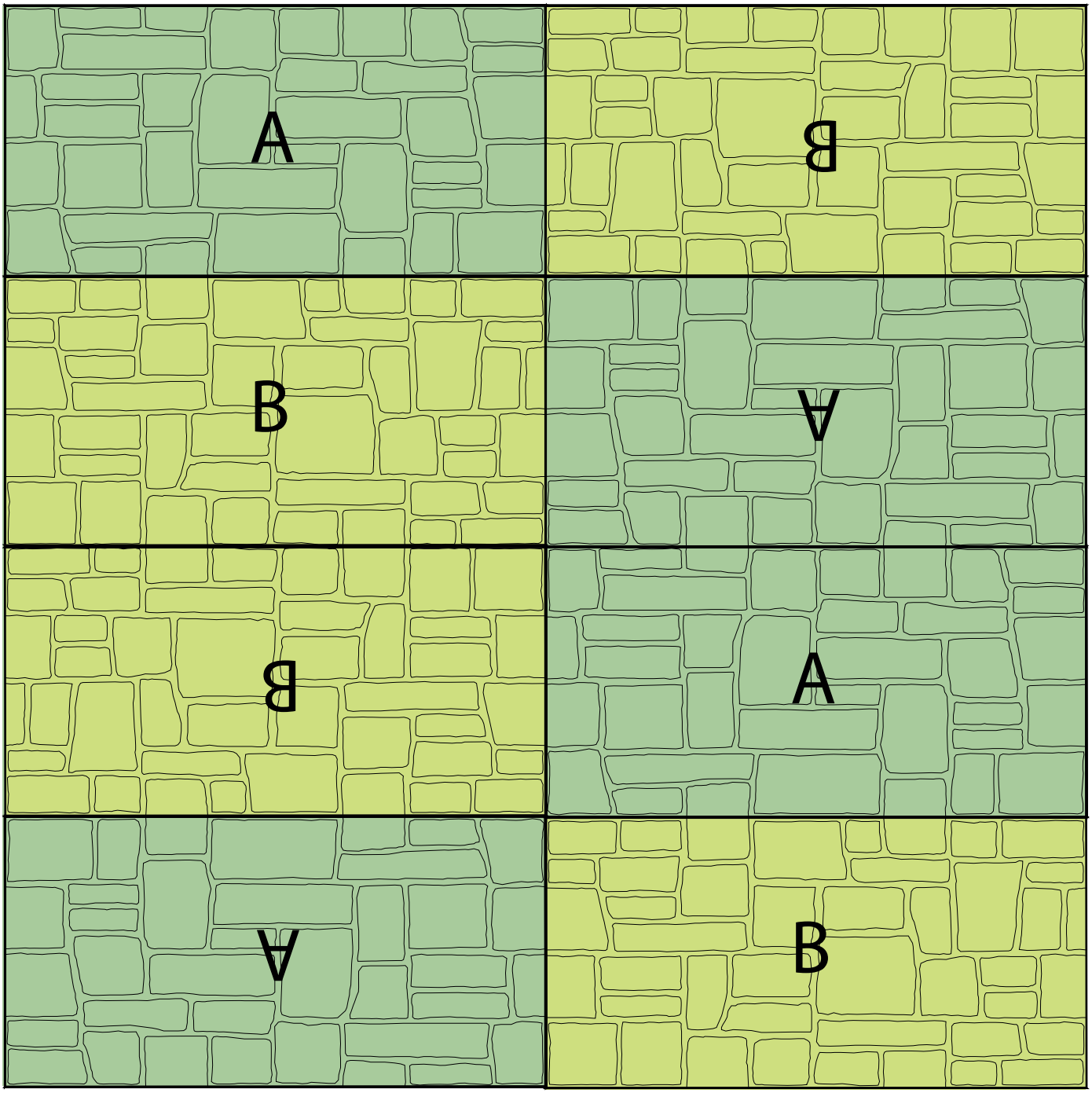
Pattern Layout



customrock FORMLINER

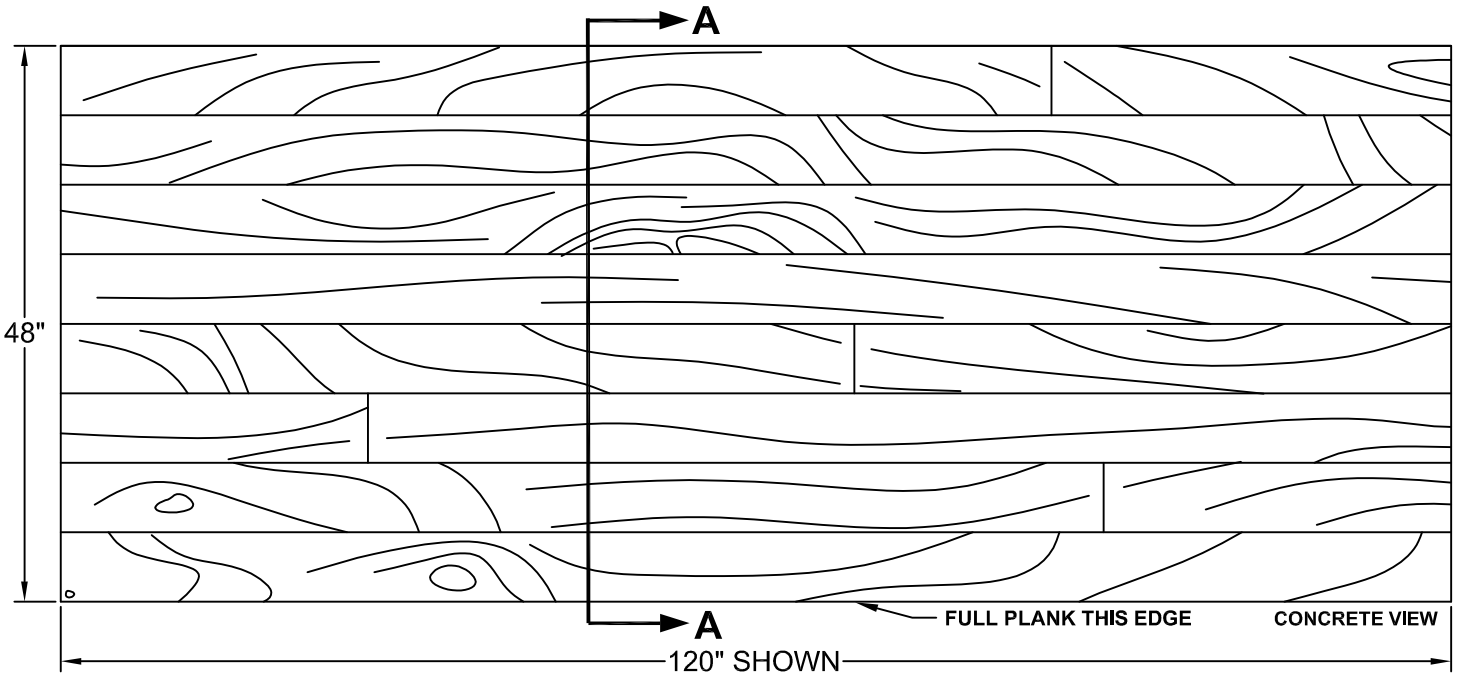
FITZGERALD FORMLINERS
Forming The Future ™

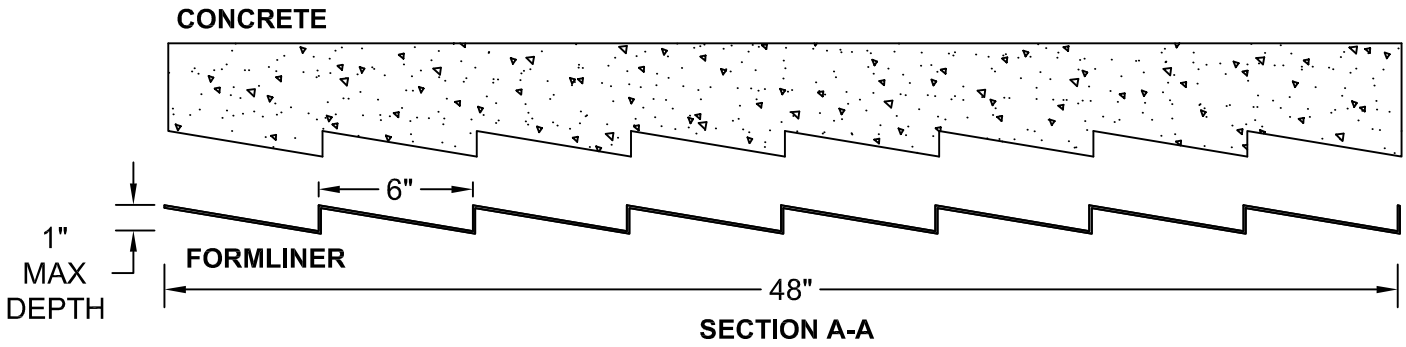
PATTERN 16928
6" Ship Lap
1" Deep Lap With Medium Wood Grain

Vac-U-Form™
Styrene - Single Use.
ABS Plastic - Up to 15 reuses.

Wooden Plank
Part Size: 120" W x 48" H
144" W x 48" H
Max Depth: 1.0"
Board Width: 6.0"
Grain: Medium
Interior Butt Joints

Additional Backing May Be Required





SECTION A-A

FORMLINER DETAIL

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FITZGERALD FORMLINERS
1500 East Chestnut Avenue • Santa Ana, CA 92701 • Fax (714) 245-9715
Ph: (800) 547-7760 • Ph (714) 547-6710 • www.formliners.com

SCF-10

Pattern can be requested in AutoCad format.

H&C® COLORTOP™ WATER-BASED SOLID COLOR CONCRETE STAIN

PRODUCT DESCRIPTION

H&C® COLORTOP™ Water-Based Solid Color Concrete Stain is a water-based stain that provides a long-lasting, durable and decorative finish to interior or exterior concrete, masonry, or asphalt surfaces. Fortified with silicone, this easy-to-apply solid color stain can be tinted to hundreds of colors.

** H&C COLORTOP Water-Based Solid Color Concrete Stain is formerly known as H&C® Concrete Stain Solid Color Water-Based.*

FEATURES & BENEFITS

- Provides a durable finish that extends the life of concrete and masonry surfaces
- Highly resistant to pool chemicals and many other household chemicals for long lasting beauty and protection
- Water-Based formulation allows for easier application and clean-up
- Interior & exterior use
- Satin finish

RECOMMENDED USES

H&C® COLORTOP™ Water-Based Solid Color Concrete Stain is formulated for use on concrete, masonry and asphalt. It can be used on both interior and exterior surfaces including walkways, patios, pool decks, basement floors, and block and stucco walls.

COVERAGE RATES

Substrate*	sq ft/gal
Concrete floors	200-300
Porous concrete	150-250
Concrete block	100-150
Split-faced block	75-125
Fluted block	50-100
Brick (clay)	100-150
Asphalt	200-250

*Coverage will vary depending on the porosity and texture of the substrate.

SURFACE PREPARATION

New Concrete: Allow new concrete to cure at least 28 days. Concrete surfaces should be able to absorb water. To test absorption, spray various sections of the surface to be stained with water. If the water does not absorb rapidly, then acid etch the surface using H&C® CONCRETEREADY® Etching Solution, following label instructions. After proper etching, the surface should feel like 120-grit sandpaper. If not, then etch again. Mechanical abrasion methods may be necessary to achieve proper profile. Do not apply the stain until all surfaces are porous. Allow all surfaces to dry at least 24 hours before staining. Prepared concrete must have a pH of 6 to 10.

*__WARNING:__ Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. To avoid exposure to lead dust, wear proper protective equipment, such as a properly fitted respirator (NIOSH approved) and follow proper containment and cleanup procedures. For more information, call the National Lead Information Center at 1-800-424-LEAD (in U.S.) or contact your local health authority.

Asphalt: Asphalt surfaces must be free of grease, oil, dirt, wax, and other surface contaminates. Scrub with a solvent-free cleaner, following label directions. Do not etch asphalt. Not recommended for use on freshly sealed asphalt. Newly placed or sealed asphalt should be allowed to cure at least 90 days prior application of a water-based top coat.
Repair: For the best repair on vertical and horizontal concrete and masonry surfaces, use H&C CONCRETEREADY Quick Patch and Repair to fill low spots and spalled concrete.

JOBSITE TEST SECTION

Due to the wide variety of substrates, preparation methods, application methods and environments, it is important to create a test sample.

LIMITATIONS

Do not use on wood surfaces.

TOOLS REQUIRED

- Synthetic bristle paint brush
- Synthetic roller cover (3/8 to 1/2-inch nap)
- Airless sprayer 2000 psi; tip .015 to .017 inch
- Eye Protection
- Respiratory Protection
- Gloves

NOTE: Back rolling is recommended after spraying.

APPLICATION INSTRUCTIONS

Apply H&C COLORTOP Water-Based Solid Color Concrete Stain onto dry surfaces only. Moisture content should not exceed 3 lbs/1,000 sq. ft. of surface (ASTM F710). Air, surface and material temperatures must be between 40o and 90o F and at least 5o above the dew point during and for 24 hours after application. Temperatures should be maintained above 40o F for a minimum of 7 days after application to allow for proper curing of the coating. Do not apply H&C COLORTOP Water-Based if rain is expected within 12 hours following application. A minimum of two coats are required.

How to Apply: Apply with a brush, roller, or sprayer. Stir product thoroughly before and during application. When using more than one container, intermix all containers together to ensure color uniformity. Prior to applying the first coat, dry sweep the concrete with a stiff broom or shop vacuum to remove all loose surface contaminants.

First Coat: Apply first coat evenly, working in one direction. Allow to dry at least 2 hours before applying the second coat.

Second Coat: For best coverage, apply the second coat perpendicular to the first coat. Two coats of H&C COLORTOP Water-Based Solid Color Concrete Stain are usually sufficient. However, extremely porous surfaces may require a third coat for a uniform appearance. Allow 2 hours of dry time between coats.

SLIP RESISTANCE

Some surfaces may require a slip/skid-resistant additive for safety. Surfaces may be slippery when wet and proper preventative precautions are recommended. To increase slip/skid resistance, add H&C® SharkGrip® Slip Resistant Additive to the coating when applying. See product data page for detailed instructions. The addition of anti-slip/skid additives will not eliminate the possibility or risk of slipping/skidding or falling.

CLEANUP

Clean tools and any spills or spatters immediately using soap and warm water.

DISPOSAL

Follow your state or local regulations for disposal methods.

PHYSICAL PROPERTIES

Typical Physical Properties and Characteristics

Property	Test Method	Value
Dry Time (@ 77°F, 50% RH)	Dry-to-touch	30 minutes
	Light traffic (foot)	2 hours
	Heavy traffic	72-96 hours
	Recoat	2 hours
	Full cure	7-14 days
Flash Point	ASTM D93, PMCC	499 deg. F.
VOC	EPA Method 24	<224 g/L; 1.87 lb/gal*
Water-Vapor Transmission	ASTM D1653, Method A	5.21 ± 0.12 grains/sq ft/hr
Perm Rating	ASTM D1653	11.2 ± 0.3 grains/(hr ft^2 in Hg)
Accelerated Weathering	ASTM G154 Color change	3,000 hrs., no effect Delta E = 0.35
	ASTM G155	No cracking, delamination or discoloration
Wind-Driven Rain Resistance	Rilem Tube Method #11.4	Zero water penetration after 60 mins. exposure
Salt Spray Resistance	ASTM B117	No film defect after 500 hrs. exposure
Chemical Resistance	• 10% sodium hydroxide • 10% ammonium hydroxide • Mineral spirits (KB value 38)	No softening or color change
Sulfide Staining Resistance	ASTM D1712	No change after 15 mins.
Chloride Ion Penetration	AASHTO T 259/T 260	Reduction of 54% @ 0.0625-0.5"penetration, 83% @ 0.5-1.0"penetration, 36% @ 1.0-1.5"penetration
Impact Resistance (6 inch-pounds direct impact)	Fed. Std. 141A Method 2051 ASTM D2794	No film chipping
Abrasion Resistance	ASTM D968	>2,000 liters of sand
Flexibility (1-inch-diameter mandrel)	ASTM D522 Method B	No cracking or breaking
Scrub-Resistance Testing	ASTM D2486	1,200 cycles, no failure
Adhesion Testing	ASTM 3359 • Method A X-cut tape test • Method B cross-cut tape test	No film loss; Classification 5A Less than 5% removed; Classification 4B
Reflectance of White	ASTM E1331	86% + 3%
Color & Gloss Retention	ASTM G90	Color: Less than 0.30 change Sheen: 0.5 difference @ 60°
Sheen (pigmented & clear)	ASTM D523	Low luster < 35
Volume Solids Pigmented: Solids by Weight Solids by Volume	ASTM D2832	 43% ± 2%* 30% ± 2%*
Weight per Gallon	ASTM D1475	10 lbs.*

**May vary depending on color*

MAINTENANCE

Surfaces treated with H&C COLORTOP Water-Based are easily cleaned using 3 parts water to 1 part H&C CONCRETEREADY Cleaner Degreaser.

ORDERING INFORMATION

Extra White	**Part Number/SMIS**
1 gallon	20.101214/6507-11450
5 gallons	20.101215/6507-11468
Deep Base	**Part Number/SMIS**
1 gallon	20.102214/6507-11633
5 gallons	20.102215/6507-11641
Ultra Deep	**Part Number/SMIS**
1 gallon	20.103214/6507-11690
5 gallons	20.103215/6507-11708

CAUTION

CAUTIONS: CONTAINS CRYSTALLINE SILICA. Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (**NIOSH** approved) or leave the area. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (**NIOSH** approved). Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage.

FIRST AID: In case of eye contact, fl ush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately. **DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE**. Abrading or sanding of the dry fi lm may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure.

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.**

LIMITED WARRANTY

This warranty is only valid when the product is applied and maintained according to product application and maintenance instructions to a properly prepared surface. If the product fails to perform in accordance with applicable product literature **H&C** shall either replace an equivalent quantity of product free of charge or refund the original purchase price. For a replacement or a refund, return the product to the place of purchase accompanied by the original proof of purchase. This warranty shall not apply to any defect, damage or product failure resulting from improper surface preparation, structural defects, environmental damage, failure of a previous product, deterioration or defect in the underlying substrate, or improper application and maintenance of the product. Your exclusive remedy is the replacement of product or refund and does not include labor or costs associated with the application or removal of any product. I**N NO EVENT SHALL H&C BE LIABLE FOR ANY TYPE OF INCIDENTAL, CONSEQUENTIAL, SPECIAL, EXEMPLARY, PUNITIVE, OR INDIRECT DAMAGES WHETHER OR NOT PURCHASER IS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL HAVE THE SAME DURATION AS THE ABOVE EXPRESS WARRANTY.** Some states do not allow limitations on how long an implied warranty lasts or limitations on incidental or consequential damages, so portions of the limitations above might not apply to you. This warranty gives you specific legal rights, and you may have other rights, which vary from state to state.

TECHNICAL SERVICES

The information and recommendations set forth in this product data sheet are based on tests conducted by or on behalf of H&C Products Group and The Sherwin-Williams® Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your H&C® or Sherwin-Williams representative to obtain the most recent product data sheet.

For technical assistance, call 1-800-867-8246 or visit www.hcconcrete.com.

Protective & Marine Coatings

2K WATERBASED ANTI-GRAFFITI COATING

PART A	B65-190	GLOSS SERIES
PART A	B65-195	SATIN SERIES
PART B	B65V190	GLOSS HARDENER
PART B	B65V195	SATIN HARDENER

Revised: January 14, 2025

PRODUCT INFORMATION

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PRODUCT DESCRIPTION

2K WATERBASED ANTI-GRAFFITI COATING is a two component, hydrophobic polyurethane that is <100g/L VOC. It provides excellent graffiti resistance, color and gloss retention.

- Low odor, <100g/L VOC
- Excellent anti-graffiti resistance
- Apply over multiple coating types
- Brush, roll or spray
- Excellent gloss retention
- Clear tint bases (B65T194, Gloss and B65T195, Satin) can be used as clear coats

PRODUCT CHARACTERISTICS

Finish:	Gloss or Satin
Color:	Clear (B65T194, Gloss and B65T195, Satin), White or a wide variety of colors
Mix Ratio:	3:1 by volume
Volume Solids:	51% ± 2%, theoretical
Weight Solids:	57% ± 2%, theoretical
VOC (EPA Method 24):	<100 g/L; 0.85 lb/gal, may vary by color

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**4.0** (100)	**8.0** (200)
Dry mils (microns)	**2.0** (50)	**4.0** (100)
~Coverage sq ft/gal (m^2/L)	**204** (5.0)	**408** (10.0)
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil / 25 microns dft	**816** (20.0)	

Drying Schedule @ 3.0 mils wet (75 microns):

	@ 50°F/10°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	6 hours	3 hours	34 minutes
To handle:	8 hours	6 hours	1 hour
To cure:	21 days	<19.5 hours	1.5 hours

Abrading required prior to recoating or topcoating.

Drying time is temperature, humidity, and film thickness dependent.

Pot Life:	1.5 hours	1.5 hours	1 hour
Sweat-in-time:		None required	

Shelf Life:	Part A: 12 months, unopened Part B: 24 months, unopened Store indoors at 40°F (4.5°C) to 100°F (38°C).
Flash Point:	>230°F (110°C), PMCC, mixed
Clean Up:	Water
Reducer:	R8K10, up to 10% as needed

RECOMMENDED USES

- For use over prepared interior or exterior surfaces requiring protection from graffiti defacing
- For use on:
  - Bridge Abutments
  - Schools
  - Overpasses
  - New Construction
  - Commercial Buildings
  - Transit Stations
  - Railcars
- As a non-sacrifical permanent anti-graffiti coating.
- Acceptable for use in high performance architectural applications.
- Suitable for use in USDA inspected facilities

PERFORMANCE CHARACTERISTICS

GRAFFITI RESISTANCE
ASTM D 6578-00

Marking Substance:	Recommended Cleaners:	Cleanability Levels:
Wax Crayon	Dry cotton cloth / Commercial aqueous detergent	1
Water Based Red Spray Paint	Dry cotton cloth / Citrus cleaner	1
Solvent Based Black Spray Paint	Citrus cleaner / Industrial cleaner	3
Solvent Based Perm. Blue Marker	Citrus cleaner / Industrial cleaner	3
Solvent Based Perm. Red Marker	Citrus cleaner / Industrial cleaner	3

cleanability levels 1-5 are defined as:

Level 1 Graffiti completely removed with dry cotton cloth.
Level 2 Graffiti completely removed with commercial aqueous detergent.
Level 3 Graffiti completely removed with citrus cleaner.
Level 4 Graffiti completely removed with industrial cleaner/Iso-propanol.
Level 5 Graffiti completely removed with MEK.

Test Name	Test Method	Results
Abrasion Resistance	ASTM D4060, CS17 wheel, 1000 cycles, 1Kg load	42.2 mg loss
Accelerated Weathering QUV-A	ASTM D4587, 2,000 hours (White)	>80% gloss retention; <1.5 DE color change
Flexibility	ASTM D522, 180° bend, 1/4" mandrel	Pass
Fluid Resistance	ASTM D1308	Pass, Paint Thinner and Gasoline
Pencil Hardness	ASTM D3363	3H

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Protective & Marine Coatings

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Revised: January 14, 2025

PRODUCT INFORMATION

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RECOMMENDED SYSTEMS

		Dry Film Thickness / ct. Mils	(Microns)
Steel:			
1 ct.	Pro Industrial Pro-Cryl Universal Primer	2.0-4.0	(50-100)
1 ct.	2K Waterbased Anti-Graffiti Coating	2.0-4.0	(50-100)
Steel:			
1 ct.	Pro Industrial Water Based Catalyzed Epoxy	2.0-5.0	(50-125)
1 ct.	2K Waterbased Anti-Graffiti Coating	2.0-4.0	(50-100)
Steel:			
1 ct.	Macropoxy 646	5.0-10.0	(125-250)
1 ct.	2K Waterbased Anti-Graffiti Coating	2.0-4.0	(50-100)
Steel:			
1 ct.	Macropoxy 646	5.0-10.0	(125-250)
1 ct.	Acrolon 218 HS	3.0-6.0	(75-150)
1 ct.	2K Waterbased Anti-Graffiti Coating	2.0-4.0	(50-100)
Concrete/Masonry, rough surface:			
1 ct.	Cement-Plex 875	13.0-25.0	(325-625)
1 ct.	2K Waterbased Anti-Graffiti Coating	2.0-4.0	(50-100)

Other acceptable surfacers are:

Pro Industrial Heavy Duty Block Filler
Kem Cati-Coat HS Epoxy Filler/Sealer

Concrete, smooth:			
1 ct.	Pro Industrial Water Based Catalyzed Epoxy	2.0-5.0	(50-125)
1 ct.	2K Waterbased Anti-Graffiti Coating	2.0-4.0	(50-100)
Concrete, smooth:			
1 ct.	Macropoxy 646	3.0-10.0	(75-250)
1 ct.	Acrolon 218 HS	3.0-6.0	(75-150)
1 ct.	2K Waterbased Anti-Graffiti Coating	2.0-4.0	(50-100)
Concrete, smooth:			
1 ct.	DOT Bridge & Highway Sealer 100	2.0-4.0	(50-100)
1 ct.	2K Waterbased Anti-Graffiti Coating	2.0-4.0	(50-100)

The systems listed above are representative of the product's use, other systems may be appropriate.

DISCLAIMER

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SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Do not use hydrocarbon solvents for cleaning.

Refer to product Application Bulletin for detailed surface preparation information.

Refer to data page of the coating to be topcoated.

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

TINTING

Tint part A with CCE. Tint at 75% strength formula.

GRAFFITI REMOVAL INSTRUCTIONS

Apply graffiti removal material liberally to surface using brush and/or roller. Allow to dwell on surface 5 – 30 mins. Do not allow to dry on surface. Pressure wash utilizing maximum 3000 PSI clean water. Generally pressures of 1000 PSI – 2000 PSI are adequate. However this varies with type of graffiti. Care must be taken to not damage coating system.During dwell cycle agitation of surface with nylon type scrub brush may be required. Repeat as needed. At conclusion of removal rinse surface completely with clean water at low pressure.

APPLICATION CONDITIONS

Temperature: 50°F (10°C) minimum, 120°F (49°C) maximum (air, surface, and material)
At least 5°F (2.8°C) above dew point
Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging:
Part A: 3/4 gallon in 1 gallon container, 3 gallons in 5 gallon container
Part B: 1 quart, 1 gallon

Weight: 9.2 ± 0.2 lb/gl

SAFETY PRECAUTIONS

Refer to the SDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Protective & Marine Coatings

2K WATERBASED ANTI-GRAFFITI COATING

PART A	B65-190	GLOSS SERIES
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PART B	B65V195	SATIN HARDENER

Revised: January 14, 2025

APPLICATION BULLETIN

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SURFACE PREPARATIONS

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Do not use hydrocarbon solvents for cleaning.

Iron & Steel
Minimum surface preparation is Hand Tool Clean per SSPC-SP2. Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1 (recommended preparation is Steam Cleaning). For better performance, use Commercial Blast Cleaning per SSPC-SP6/NACE 3, blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils / 50 microns). Prime any bare steel within 8 hours or before flash rusting occurs. Primer required.

Masonry and Block
For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI 310.2R, CSP 1-3. Surfaces should be thoroughly clean and dry. Concrete and mortar must be cured at least 28 days @ 75°F (24°C). Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement and hardeners. Fill bug holes, air pockets and other voids with Cement-Plex 875. Weathered masonry and soft or porous cement board must be brush blasted or power tool cleaned to remove loosely adhering contamination and to get to a hard, firm surface. Laitance must be removed.

Previously Painted Surfaces
If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, or if this product attacks the previous finish, removal of the previous coating may be necessary. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE
White Metal		Sa 3	Sa 3	SP 5	1
Near White Metal		Sa 2.5	Sa 2.5	SP 10	2
Commercial Blast		Sa 2	Sa 2	SP 6	3
Brush-Off Blast		Sa 1	Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

APPLICATION CONDITIONS

Temperature:	50°F (10°C) minimum, 120°F (49°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Clean Up: .....Water
Reducer: .....R8K10, up to 10% as needed

Airless Spray
Pressure.....2700-3000 psi
Hose.....1/4" ID
Tip .....013"-.017"
Filter .....60 mesh
Reduction.....As needed up to 10% by volume

Conventional Spray
Gun .....DeVilbiss JGA
Fluid Nozzle .....E
Air Nozzle.....765
Atomization Pressure.....45-55 psi
Fluid Pressure.....10-20 psi
Reduction.....As needed up to 10% by volume

Brush
Brush.....Nylon/polyester natural bristle
Reduction.....As needed up to 10% by volume

Roller
Cover .....1/4"-3/8" woven solvent resistant core
Reduction.....As needed up to 10% by volume

If specific application equipment is not listed above, equivalent equipment may be substituted.

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Protective & Marine Coatings

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APPLICATION BULLETIN

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APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mix contents of each component thoroughly using low speed power agitation. Make certain no pigment remains on the bottom of the can. Exercise caution not to whip air into the materials. Then combine three parts by volume of Part A with one part by volume of Part B. Thoroughly agitate the mixture with low speed power agitation. Re-stir before using. No sweat-in-time is required.

If reducer is used, add only after both components have been thoroughly mixed.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**4.0** (100)	**8.0** (200)
Dry mils (microns)	**2.0** (50)	**4.0** (100)
~Coverage sq ft/gal (m^2/L)	**204** (5.0)	**408** (10.0)
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil / 25 microns dft	**816** (20.0)	

Drying Schedule @ 3.0 mils wet (75 microns):

	@ 50°F/10°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	6 hours	3 hours	34 minutes
To handle:	8 hours	6 hours	1 hour
To cure:	21 days	<19.5 hours	1.5 hours
Abrading required prior to recoating or topcoating.			
Drying time is temperature, humidity, and film thickness dependent.			
Pot Life:	1.5 hours	1.5 hours	1 hour
Sweat-in-time:		None required	

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with Mineral Spirits to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using Mineral Spirits.

DISCLAIMER

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PERFORMANCE TIPS

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Do not use hydrocarbon solvents for cleaning.

Excessive reduction of material can affect film build, appearance, and adhesion.

Allow to dry one week before checking adhesion.

Application of a clear coating may change the color apperance of the base coat. Apply a test patch prior to coating entire project.

Abrading required prior to recoating or topcoating.

Refer to Product Information sheet for additional performance characteristics and properties.

SAFETY PRECAUTIONS

Refer to the SDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

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REVISION	BY	DATE
4 ADDENDUM 4 - MODIFIED NOTES	JTB	08/01/2025

LEGEND OF SYMBOLS

- EXISTING MANHOLE
- EXISTING CURB INLET
- PROPOSED CURB INLET
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING WATER METER
- EXISTING GAS VALVE
- GAS METER/GAS RISER
- STREET LIGHT
- POWER POLE
- GUY ANCHOR
- HCR EXISTING HANDICAP RAMP
- TRAFFIC SIGNAL PULLBOX
- E POWER BOX (IN GROUND)
- P POWER RISER
- T TELEPHONE RISER
- SIGN
- MB MAILBOX
- CONTROL POINT
- SOIL BORINGS
- TREE
- GATE

- EXISTING FENCES
- EXISTING GUARD RAIL
- EXISTING ROADS, DRIVEWAYS, PARKING, AND SIDEWALKS
- C.R.L.
- PROPERTY LINE
- RIGHT-OF-WAY LINES-EXISTING
- EXISTING AERIAL POWER LINES
- EXISTING UNDERGROUND POWER LINES
- EXISTING SANITARY SEWERS
- EXISTING WATER LINES
- RCP EXISTING STORM SEWER

DESIGN SPEED 35 MPH
AADT (2021)=3,325
AADT (2041)=4,650

UTILITY CONTACTS

AT&T	ALFORD NICHOLS	(539) 444-1069
COX COMM.	JASON HOLT	(918) 830-7238
ONG	CODY YOST	(918) 352-5745
AEP/PSO	LONNY HICKS	(918) 250-6211
CITY OF TULSA UTILITY COORDINATOR	TONY GLENN	(918) 596-9245
MTTA	ERIC SMITH	(918) 830-0024

CITY OF TULSA, OKLAHOMA

CONSTRUCTION PLANS FOR

ARTERIAL STREET RECONSTRUCTION

GILCREASE MUSEUM RD.
(N. 25TH W. AVE.)
W. ADMIRAL BLVD. TO W. PINE ST.

PROJECT NOS. 2036W0001Z, 2036A0024Z & TWUA-W 22-37

PUBLIC WORKS DEPARTMENT

TULSA, OKLAHOMA

PROJECT AREA

ENTIRE PROJECT IS WITHIN THE CORPORATE AND URBAN LIMITS OF THE CITY OF TULSA

4 4 LANE - 0.45 MILES REHABILITATION
3 LANE - 0.44 MILES WIDENING
2 LANE - 0.58 MILES WIDENING

4 ALL WORK NORTH OF EDISON IS WITHIN OSAGE COUNTY, OSAGE INDIAN NATION. ALL MINERAL RESOURCES OF OSAGE COUNTY SHALL BE RETAINED IN OSAGE COUNTY INCLUDING EARTH, ROCK, AND STONE. NO MINERAL RESOURCES WITHIN OSAGE COUNTY SHALL BE EXPORTED OUTSIDE OSAGE COUNTY.

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5			PAY QUANTITY & NOTES (WATERLINE)
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71	-	77	JOINT LAYOUT PLANS
78			NOT USED
79	-	80	INTERSECTION DETAILS
81	-	87	SIGNAL PLAN SHEETS
88	-	91	PLAN AND PROFILE SHEETS (WATERLINE)
92	-	103	STORM PROFILES
104	-	106	DETOUR SHEETS
107	-	114	SEQUENCE OF CONSTRUCTION SHEETS
115	-	116	LIGHTING SHEETS
S1	-	S73	STRUCTURAL SHEETS
L1	-	L8	LANDSCAPING PLANS
XS1	-	XS71	CROSS SECTIONS

COT STANDARDS

102	601	702	763
126	602	708	764
304	603	712	765
304A	606	706	766
305	607A	707	767
306	608B	725	768
307	610A	727	769A
308	610B	729	769B
309	611A	751	775
311	611C	752	776
313	612	753	790
315	613	754	793
322	614A	755	803
327	614B	761	804
	618	762	805
	621A		
	621B		

ODOT STANDARDS (2019)

BMPR-0	PCES-5-1
TESCA-0	SSCD-4-1
IPD-0	MJB-4-2
RSF-0	SPI-5-2
TSD-0	FPI-4-2
TRFD-0	PBB-1-2
SSS-2-1	FHTMPP-2-1
SMD-4-2	FHTCP-4-1
CSCD-6-2	SBI-5-2
LECS-5-2	RWF3-3-2
LTU-5-1	PUD-4-1
TWD-2-2	DC-4-2
PSMD-2-2	PMD-1-1
PM1-1	PM3-1

ODOT STANDARDS (2009)

RCB-C1-12(2-14)
RCB-C1-6(2-14)

APPROVED BY

CITY ENGINEER _____ DATE _____

DIRECTOR, WATER AND SEWER DEPARTMENT _____ DATE _____

ADVERTISEMENT DATE: _____

PREPARED AND SUBMITTED BY

POE & ASSOCIATES INC.
4606 S. GARNETT RD., STE. 600
TULSA, OK 74146 (918) 665-8800
FAX: (918) 665-6076
CERTIFICATE OF AUTHORIZATION NO. CA 541 P.E., L.S.

JARED T. BATES
REGISTERED P.E. NO. 20681
DATE

LICENSED PROFESSIONAL ENGINEER
JARED T. BATES
20681
OKLAHOMA
8/6/2025

CERTIFICATE OF AUTHORIZATION NO. CA 541 P.E., L.S.

BEFORE YOU DIG OKIE 811 1-800-522-OKIE CALL OKIE

PROJECT NOs. 2036W0001Z, 2036A0024Z & TWUA-W 22-37

I:\21-1009 25th Widening\Plan Sheets\RoadwaySht\21-1009-CoverSheet.dgn

8/4/2025

SUMMARY OF PAVING & DRAINAGE QUANTITIES

ITEM	SPEC. NO.	DESCRIPTION	PAY ITEM NOTES								UNIT	QUANTITY
1	201(A)	CLEARING AND GRUBBING	E-1	E-2							LS	1
2	202(A)	UNCLASSIFIED EXCAVATION	E-3	E-4	R-1						CY	50,055
3	202(C)	ROCK EXCAVATION	R-1								CY	5,000
4	205(A)	TYPE A-SALVAGED TOPSOIL									CY	2,800
5	220	SWPPP DOCUMENTATION AND MANAGEMENT	E-6	E-7	E-8	E-9					LS	1
6	230(A)	SOLID SLAB SODDING	E-10	E-11							SY	16,687
7	303(A)	AGGREGATE BASE, TYPE A	E-5	S-1	S-2						CY	10,195
8	310(B)	SUBGRADE, METHOD B	E-5								SY	26,355
9	325	SEPARATOR FABRIC	E-5	S-3							SY	32,844
10	409	FABRIC REINFORCEMENT (MIRAFI PGM-G4)	S-4								SY	4,247
11	411(C)	SUPERPAVE, TYPE S4 (PG 70-28 OK) INSOLUBLE	S-5	S-6	S-7	S-8					TON	476
12	411(E)	SUPERPAVE, TYPE S6(PG 70-28 OK)	S-5	S-6	S-7	S-8	G-1				TON	178
13	412	COLD MILLING PAVEMENT	S-9								SY	4,247
14	414(B)	DOWEL JOINTED P.C.C. PAVT. (PLACEMENT)	~~S-10~~	S-11	~~SP-1~~	4					SY	21,746
15	414(B)	DOWEL JOINTED P.C.C. PAVT. W/ INT. CLR. & BRICK STAMP (PLACEMENT)	~~S-10~~	S-11	~~SP-1~~	~~S-18~~					SY	1,244
16	414(G)	P.C. CONCRETE PAVEMENT	S-10	S-11	S-12	S-13	~~SP-1~~	4			CY	5,437
17	414(G)	P.C. CONCRETE PAVEMENT W/ INT. CLR. & BRICK STAMP (9")	S-10	S-11	S-12	S-13	~~SP-1~~	~~S-18~~			CY	311
18	501(A)	STRUCTURAL EXCAVATION UNCLASSIFIED									CY	233
19	509(A)	CLASS AA CONCRETE									CY	617
20	509(C)	CLASS A CONCRETE, SMALL STRUCTURES	S-12								CY	45
21	509(C)	CLASS A CONCRETE	S-12	S-13							CY	591
22	509(C)	CLASS C CONCRETE	S-12								CY	95 4
23	511(A)	REINFORCING STEEL									LB	113,188
24	COT 608	GROUND SIGN									SF	506
25	COT 608	1-1/2" SIGN POST									LF	59
26	COT 608	1-3/4" SIGN POST									LF	790
27	COT 608	2" SIGN POST									LF	252
28	609(B)	1'-6" COMBINED CURB AND GUTTER (8" BARRIER)	S-15								LF	11,579
29	610(A)	~~4" CONCRETE SIDEWALK~~	S-12	S-13	S-16	S-17					SY	1,983
30	610(A)	4" CONCRETE SIDEWALK W/ INT. CLR. & BRICK STAMP	S-12	S-13	S-16	S-17	~~S-18~~	4			SY	83
31	610(B)	6" CONCRETE SIDEWALK (ADA RAMPS AND TRAIL) 4	S-12	S-13	S-16	S-17					SY	7,196
32	610(B)	6" CONCRETE DRIVEWAY (H.E.S.)	S-12	S-13	S-16	S-17					SY	118
33	610(I)	TACTILE WARNING DEVICE									SF	7,196
34	611(A)	4' MANHOLE, COMPLETE IN PLACE (STORM)	D-4	D-2	D-3	D-4	D-5				EA	9 4
35	611(A)	5' MANHOLE, COMPLETE IN PLACE (STCRM)	D-1	D-2	D-3	D-4	D-5				EA	9
36	611(A)	6' MANHOLE, COMPLETE IN PLACE (STCRM)	D-1	D-2	D-3	D-4	D-5				EA	25
37	611(A)	8' MANHOLE, COMPLETE IN PLACE (STCRM)	D-1	D-2	D-3	D-4	D-5				EA	6
38	611(B)	ADDITIONAL DEPTH IN (4' I.D.) MANHOLE (STORM SEWER)	D-4								VF	47
39	611(B)	ADDITIONAL DEPTH IN (5' I.D.) MANHOLE (STORM SEWER)	D-4								VF	41
40	611(B)	ADDITIONAL DEPTH IN (6' I.D.) MANHOLE (STORM SEWER)	D 4								VF	124
41	611(B)	ADDITIONAL DEPTH IN (8' I.D.) MANHOLE (STORM SEWER)	D-4								VF	38
42	611(G)	INLET, RCI DESIGN 1048 W/AMH, COMPLETE IN PLACE	D-1	D-2	D-3	D-7	D-8	D-9	D-10		EA	3
43	611(G)	INLET, RCI DESIGN 1096 W/AMH, COMPLETE IN PLACE	D-1	D-2	D-3	D-7	D-8	D-9	D-10		EA	33
44	611(G)	INLET SMD DESIGN 1, COMPLETE IN PLACE	D-2	D-3	D-7	D-8	D-9	D-10			EA	10 4
45	611(G)	INLET SMD DESIGN 2A, COMPLETE IN PLACE	D-2	D-3	D-7	D-8	D-9	D-10			EA	3
46	611(G)	INLET SMD DESIGN 2B, COMPLETE IN PLACE	D-2	D-3	D-7	D-8	D-9	D-10			EA	1
47	611(G)	INLET CICI DESIGN 2(A), COMPLETE IN PLACE	D-2	D-3	D-7	D-8	D-9	D-10	D-11		EA	2
48	611(G)	INLET CICI DESIGN 2(D), COMPLETE IN PLACE	D-2	D-3	D-7	D-8	D-9	D-10	D-11		EA	1
49	611(G)	INLET CICI DESIGN 4(B), COMPLETE IN PLACE	D-2	D-3	D-7	D-8	D-9	D-10	D-11		EA	2 4
50	611(G)	INLET CICI DESIGN 4(D), COMPLETE IN PLACE	D-2	D-3	D-7	D-8	D-9	D-10	D-11		EA	1
51	611(G)	INLET CICI DESIGN 2(A) WITH ACCESS MANHOLE, COMPLETE IN PLACE	D-1	D-2	D-3	D-7	D-8	D-9	D-10	D-11	EA	3 4
52	611(G)	INLET CDI 42" DESIGN NO.5	D-2	D-3	D-7	D-8	D-9	D-10			EA	1
53	611(G)	INLET CDI 48" DESIGN NO.6	D-2	D-3	D-7	D-8	D-9	D-10			EA	1
54	611(G)	INLET TYPE 1 GPI	D-2	D-3	D-7	D-8	D-9	D-10			EA	2
55	611(H)	ADDITIONAL DEPTH IN RCI 1048 W/ MANHOLE	D-10								VF	10
56	611(H)	ADDITIONAL DEPTH IN RCI 1096 W/ MANHOLE	D-10								VF	111
57	611(H)	ADDITIONAL DEPTH IN CICI DESIGN 2	D-10								VF	5
58	611(H)	ADDITIONAL DEPTH IN CICI DESIGN 4	D-10								VF	4
59	611(H)	ADDITIONAL DEPTH IN CICI DESIGN 2A WITH ACCESS MANHOLE	D-10								VF	9
60	611(L)	JUNCTION BOX, COMPLETE IN PLACE	D-1	D-2	D-3						CF	1,350
61	612(C)	INLET ADJUSTED TO GRADE WITH TYPE C GRATES	S-12	R-2	D-2	D-6	D-7	D-9			EA	2
62	612(E)	VALVE BOX ADJUSTED TO GRADE	S-12	R-2	D-6						EA	7
63	613(A)	54" REINFORCED CONCRETE PIPE (RCP), COMPLETE IN PLACE	D-8	D-12	D-13						LF	114
64	613(EE)	18" CORRUGATED POLYPROPYLENE PIPE (CPP), COMPLETE IN PLACE	D-8	D-12	D-13	D-14	D-15				LF	2,154 4
65	613(EE)	24" CORRUGATED POLYPROPYLENE PIPE (CPP), COMPLETE IN PLACE	D-8	D-12	D-13	D-14	D-15				LF	413 4
66	613(EE)	30" CORRUGATED POLYPROPYLENE PIPE (CPP), COMPLETE IN PLACE	D-8	D-12	D-13	D-14	D-15				LF	589
67	613(EE)	36" CORRUGATED POLYPROPYLENE PIPE (CPP), COMPLETE IN PLACE	D-8	D-12	D-13	D-14	D-15				LF	1,200
68	613(EE)	42" CORRUGATED POLYPROPYLENE PIPE (CPP), COMPLETE IN PLACE	D-8	D-12	D-13	D-14	D-15				LF	486 4
69	613(EE)	48" CORRUGATED POLYPROPYLENE PIPE (CPP), COMPLETE IN PLACE	D-8	D-12	D-13	D-14	D-15				LF	1,216 4
70	613(EE)	60" CORRUGATED POLYPROPYLENE PIPE (CPP), COMPLETE IN PLACE	D-8	D-12	D-13	D-14	D-15				LF	385
71	613(L)	18" PREFAB. CULVERT END SEC.									EA	1
72	613(L)	36" PREFAB. CULVERT END SEC.									EA	2
73	619(A)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	R-1	R-2	R-3	R-4	R-5				LS	1
74	619(B)	REMOVAL OF PAVEMENT	R-1	R-2	R-5	R-6					SY	20,423
75	619(B)	REMOVAL OF DRIVEWAY	R-1	R-2	R-5	R-6					SY	555
76	619(B)	REMOVAL OF CURB AND GUTTER	R-1	R-2	R-5	R-6					LF	2,215
77	619(B)	REMOVAL OF SIDEWALK	R-1	R-2	R-5	R-6					SY	486
78	619(B)	REMOVAL OF CURB RAMP	R-1	R-2	R-5	R-6					EA	4
79	619(B)	REMOVAL OF DRAINAGE PIPE	R-1	R-2	R-5	R-6					LF	1,162 4
80	619(B)	REMOVAL OF DRAINAGE INLET	R-1	R-2	R-5	R-6					EA	8 4
81	619(B)	REMOVAL OF MANHOLE	R-1	R-2	R-5	R-6					EA	1
82	619(B)	REMOVAL OF HEADWALL	R-1	R-2	R-5	R-6					EA	8
83	619(B)	REMOVAL OF GUARDRAIL	R-1	R-2	R-5	R-6					LF	533
84	619(B)	REMOVAL OF RIP-RAP	R-1	R-2	R-5	R-6					SY	248
85	619(B)	REMOVAL OF FENCE	R-1	R-2	R-5	R-6					LF	1,915
86	619(B)	REMOVAL OF NEIGHBORHOOD SIGN	R-1	R-2	R-5	R-6					EA	3
87	619(B)	REMOVAL OF FLAGSTONE DRIVEWAY	R-1	R-2	R-5	R-6					SY	67
88	619(B)	REMOVAL OF GATE AND STONE COLUMNS	R-1	R-2	R-5	R-6					EA	1
89	619(B)	REMOVAL OF ROCK WALL	R-1	R-2	R-5	R-6					LF	991
90	619(B)	REMOVAL OF RETAINING WALL	R-1	R-2	R-5	R-6					LF	180
91	619(B)	REMOVAL OF CONCRETE DITCH LINER 4	R-1	R-2	R-5	R-6					LF	200
92	619(B)	REMOVAL OF IRON PIPE	R-1	R-2	R-5	R-6					LF	632
93	624	ORNAMENTAL 72" AMERISTAR FENCE									LF	698
94	624	(PL) WOOD PRIVACY FENCE (6' HIGH)									LF	375
95	624(F)	FENCE-STYLE CLF (4' HIGH, CLASS A, TOP RAIL)									LF	332
96	624(E)	FENCE-STYLE CLF (6' HIGH, VINYL COATED, SMOOTH TOP WIRE)									LF	1,202
97	624(F)	GATE-STYLE CLF (5' HIGH X 12' LONG, VINYL COATED)									EA	2
98	624(H)	(PL) INSTALL ORNAMENTAL GATE SUPPLIED BY OWNER									EA	1
99	624(H)	(PL) GATE - ORNAMENTAL (6' HIGH X 8' LONG, STEEL)									EA	2
100	624(H)	(PL) CONCRETE GATE COLUMNS, COMPLETE, IN PLACE									EA	4
101	640(A)	FIELD OFFICE 4	SP-8								EA	1
102	641	MOBILIZATION	G-2								EA	1
103	642	CONSTRUCTION STAKING LEVEL II	G-3	G-4							EA	1
104	855(A)	TRAFFIC STRIPE(4") (THERMOPLASTIC)	T-3								LF	25,986
105	855(A)	TRAFFIC STRIPE(12") (THERMOPLASTIC)	T-3								LF	100
106	855(A)	TRAFFIC STRIPE(24") (THERMOPLASTIC)	T-3								LF	1,072
107	855(B)	TRAFFIC STRIPE(THERMOPLASTIC)(SYMBOLS, WORDS, ETC)	T-3								EA	25
108	855(B)	TRAFFIC STRIPE(THERMOPLASTIC)(SOLID GREEN FILL)	T-3								SF	150
109	857(C)	REMOVABLE PAVEMENT MARKING TAPE									LF	5,000
110	857(E)	CONSTRUCTION ZONE PAVEMENT MARKERS (FLEX TABS) TYPE 2-2									EA	2,500
111	857(F)	PAVEMENT MARKING REMOVAL									LF	2,000
112	880(A)	ARROW DISPLAY	T-4								SD	1,600
113	880(B)	SIGNS 0.00 TO 6.25 SF	T-2	T-4	T-5						SD	20,000
114	~~880(B)~~	~~SIGNS 6.26 TO 15.99 SF~~	~~T-2~~	~~T-4~~	~~T-5~~						~~SD~~	~~29,000~~
115	~~880(B)~~	~~SIGNS 16.00 AND UP~~	~~T-2~~	~~T-4~~	~~T-5~~						~~SD~~	~~0~~
116	~~880(C)~~	~~BARRICADES (TYPE III)~~	~~T-2~~	~~T-4~~	~~T-5~~						~~SD~~	~~6,000~~
117	880(E)	TYPE "A" WARNING LIGHT	T-5								SD	24,000
118	880(F)	DRUMS	T-2	T-4	T-5						SD	30,000
119	880(G)	TUBE CHANNELIZERS	T-2	T-4							SD	40,000
120	880(I)	FLAGGER	T-6								FD	500
121	882(B)	(PL) REMOTE CONTROLLED CHANGEABLE MESSAGE SIGN	T-4								SD	1,600
122	SPECIAL	PROJECT SIGN (CITY OF TULSA)	T-7								EA	2
123	SPECIAL	URBAN RIGHT-OF-WAY RESTORATION	G-5	G-6	G-7	G-8	G-9	G-10			EA	1
124	SPECIAL	OWNER ALLOWANCE									EA	150,000
125	SPECIAL	SIGNAGE FOR LOCAL BUSINESS ACCESS (BAS-1)	T-4								SD	500
126	SPECIAL	TEMPORARY FENCE 4	SP-10								LF	2,800
127	COT 202	QUICK SET FLOWABLE FILL	G-1	D-8							CY	200
128	COT 334	CONSTRUCTION AS-BUILTS									LS	1
129	COT 335	CONTRACTOR'S QUALITY CONTROL									LS	1
130	SPECIAL	PVC DRAIN BASIN, CONNECT UNDERDRAIN TO 13" HDPE SLIPLINE									EA	1
131	COT 498	SLIPLINE 18" CMP SD WITH SDR 26 HDPE, 13.36" O.D.									LF	110
213	SPECIAL	RELOCATION OF ROCK AND SUBSOIL WITHIN OSAGE COUNTY	SP-9								CY	61,800
214	613(A)	24" REINFORCED CONCRETE PIPE (RCP), COMPLETE IN PLACE	D-8	D-12	D-13						LF	42
215	613(O)	SP. END SECTION OF 24" RCP ROUND									EA	2
216	624	(PL) 4' WIDE GATE, WOOD PRIVACY FENCE (6' HIGH)									EA	1
217	631(A)	(SP)STATIONARY BOLLARD									EA	3

4 ~~SIGNS 6.26 TO 15.99 SF~~ ~~T-2~~ ~~T-4~~ ~~T-5~~ ~~SD~~ ~~29,000~~
~~SIGNS 16.00 AND UP~~ ~~T-2~~ ~~T-4~~ ~~T-5~~ ~~SD~~ ~~0~~
~~BARRICADES (TYPE III)~~ ~~T-2~~ ~~T-4~~ ~~T-5~~ ~~SD~~ ~~6,000~~

NOTE
ITEMS LISTED OR SHOWN ON DRAWINGS AND/OR DESCRIBED IN THE SPECIFICATIONS THAT ARE NOT INCLUDED AS A SEPARATE PAY ITEM QUANTITY SHALL BE CONSIDERED INCIDENTAL AND THE COST SHALL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS. THE PRICE BID FOR ALL WORK SHALL INCLUDE ALL MATERIALS, EQUIPMENT, LABOR, INCIDENTALS, AND ALL OTHER REQUIRED ITEMS TO COMPLETE THE WORK AS SHOWN ON PLANS AND SPECIFICATIONS.

(version: 11/14/2018)

LICENSED PROFESSIONAL ENGINEER
JARED T. BATES
20681
OKLAHOMA
6/20/2025

BEFORE YOU DIG OKIE 811 1-800-522-OKIE CALL OKIE

PAVING & DRAINAGE (1)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

	REVISION	BY	DATE
4	ADDENDUM 4 - ADDED AND MODIFIED PAY ITEMS AND QUANTITIES	JTB	08/01/2025

PLAN SCALE: 1" = N/A
PROFILE SCALE:
HORIZONTAL: 1" = N/A
VERTICAL 1" = N/A

DRAWN		06/2023
DESIGNED		06/2023
SURVEY		
PROJ. MGR.		
LEAD ENGR.		
FIELD MGR.		
RECOMMENDED:		
DESIGN MANAGER		CITY ENGINEER

APPROVED:

FILE: H:\21-1009 DRAWING:21-1009-Pay Quantities-Notes DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75
SHEET 2 OF 268 SHEETS

PAY ITEM NOTES - PAVING & DRAINAGE

(version: 11/14/2018)

E-1 ALL COSTS FOR REMOVING TREES, SHRUBS, STUMPS, POSTS, AND ALL OTHER DEBRIS AND/OR OBSTRUCTIONS NOT COVERED BY A SEPARATE PAY ITEM ARE INCLUDED IN THE PRICE BID. 4

E-2 ALL EXISTING DRAINAGE STRUCTURES SHALL BE CLEANED AND CLEARED OF ALL SEDIMENTATION AND DEBRIS TO THE RIGHT OF WAY. COST OF CLEARING SHALL BE INCLUDED IN THE PRICE BID.

E-3 THE CONTRACTOR SHALL BE PAID FOR UNCLASSIFIED EXCAVATION ON THE BASIS OF PLAN QUANTITY. ANY ADDITIONAL EXCAVATION REQUIRED OR OVERRUN OF PLAN QUANTITY WILL BE PAID FOR ON THE BASIS OF UNIT PRICE BID FOR THE ITEM. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SURVEY TO VERIFY ANY ADDITIONAL QUANTITIES.

E-4 UNCLASSIFIED EXCAVATION INCLUDES REMOVAL OF AGGREGATE BASE AND MODIFIED SUBGRADE UNDER EXISTING PAVEMENT TO BE REPAIRED.

E-5 NOT USED

E-6 THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROL AND MAINTENANCE OF THE STORM WATER DRAINAGE FROM THE CONSTRUCTION SITE. STORM WATER PONDING ON THE CONSTRUCTION SITE THAT IS THE RESULT OF CONSTRUCTION WILL NOT BE ALLOWED. ALL COST ASSOCIATED WITH STORM WATER MANAGEMENT, AS WELL AS REMOVAL OF ALL SILT AND DEBRIS FROM ALL DRAINAGE STRUCTURES, STORM SEWER PIPES AND APPURTENANCES WITHIN THE PROJECT LIMITS AT END OF PROJECT, SHALL BE INCLUDED IN THE UNIT PRICE BID

E-7 EROSION PROTECTION SHALL BE PLACED AS FOLLOWS:
A) AROUND INLETS TO PREVENT INFLOW OF ERODED MATERIAL INTO STORM SEWER SYSTEM;
B) IN LOCATIONS THROUGHOUT PROJECT SITE, AS DETERMINED BY THE ENGINEER, TO PREVENT WASH OF ERODED MATERIAL ONTO ADJACENT PROPERTY;
C) FOR ENTIRE DURATION OF PROJECT, WITH MAINTENANCE AND REPLACEMENTS, AS DIRECTED BY THE ENGINEER;
D) WITH PERIODIC REMOVAL OF SEDIMENT IN ACCORDANCE WITH STORMWATER MANAGEMENT PLAN.
ALL COST FOR ITEMS A-D ABOVE SHALL BE INCLUDED IN UNIT PRICE BID FOR THIS ITEM.

E-8 PRICE BID SHALL INCLUDE MAINTENANCE, SEDIMENT REMOVAL, DISPOSAL, AND REMOVAL OF FILTERS AT PROJECT COMPLETION.

E-9 INCLUDES 47 TYPE 1A FILTERS.

E-10 ESTIMATED QUANTITY IS BASED ON SODDING OF ALL DISTURBED AREAS OUTSIDE THE FINAL PAVING LIMITS AND WITHIN THE FINAL GRADING LIMITS AS INDICATED BY THE TOP-OF-CUT/TOE-OF-SLOPE LINE ON THE PLANS (EXCLUDING SURFACES OF STRUCTURES, FIXTURES AND APPURTENANCES). SOD SHALL BE OF LIKE-KIND TO EXISTING SOD. PRICE BID INCLUDES PLACEMENT AND COMPACTION OF SUITABLE BACKFILL. ANY EXISTING GRASSED AREAS BEYOND THE ABOVE STATED LIMITS THAT ARE DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS SHALL BE RESODDED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S SOLE EXPENSE.

E-11 COST OF WATERING AND FERTILIZING SHALL BE INCLUDED. FERTILIZERS SHALL BE 10-20-10 AND SHALL BE APPLIED AT THE RATE OF 1.5 LBS PER 10 SQ YDS. FERTILIZER SHALL BE APPLIED PER SECTION 230.04H OF ODOT STANDARD SPECIFICATIONS. WATERING SHALL BE APPLIED AS NECESSARY UNTIL VEGETATION IS ESTABLISHED OR UNTIL THE WORK IS ACCEPTED AS COMPLETE.

S-1 TYPE A AGGREGATE BASE WAS ESTIMATED TO BE USED AS THE BASE MATERIAL FOR 90% OF THE PATCHING. QUICK SET FLOWABLE FILL WAS ESTIMATED TO BE USED AS THE BASE MATERIAL FOR 10% OF THE PATCHING. ACTUAL QUANTITIES TO BE DETERMINED BY THE ENGINEER.

S-2 INCLUDES COMPACTION OF AGGREGATE TO 98% AASHTO T180 MODIFIED PROCTOR.

S-3 SEPARATOR FABRIC SHALL BE USED AT ALL PAVEMENT PATCHES AND RECONSTRUCTION SECTIONS. THE SEPARATOR FABRIC SHALL BE CUT AND OVERLAPPED A MINIMUM OF 2 FT AT ALL EDGES OF THE REPAIR.

S-4 FABRIC REINFORCEMENT SHALL BE USED ON OVERLAY AREAS. THE COST OF BITUMINCUS BINDER FOR FABRIC REINFORCEMENT SHALL BE INCLUDED IN THE UNIT COST OF THIS PAY ITEM. THE BITUMINOUS BINDER SHALL MEET ODOT STANDARD SPECIFICATIONS AND THE RECOMMENDATIONS OF THE FABRIC REINFORCEMENT MANUFACTURER.

S-5 THE COST OF TACK COAT, EDGE JOINT SEAL MATERIAL AND SCREENINGS FOR BLOTTING, AND ALL LABOR ASSOCIATED WITH THESE ITEMS, SHALL BE INCLUDED IN ASPHALT CONCRETE.

S-6 ESTIMATED AT 112 LBS PER SQ YD PER 1 INCH THICK.

S-7 ODOT PAY FACTOR FOR AVERAGE LOT DENSITY SHALL NOT BE USED FOR THIS PROJECT. FAILURE TO REACH AVERAGE LOT DENSITY OF 92%-97% WILL RESULT IN REJECTION OF WORK.

S-8 A HIGHER GRADE OF ASPHALT BINDER THAN IS INDICATED ON THE PLANS MAY BE USED, BUT AT NO ADDITIONAL COST TO THE CITY.

NOTE S8 TABLE			
BINDER[2] GRADE	MESALs	ADT[1]	NOTES
PG 64-22 OK	< 3	< 5,000	USE WHEN MORE THAN 4-6 INCHES BELOW THE SURFACE. ALSO USE FOR SHOULDERS, DRIVEWAYS, BELOW PCC, AND TEMPORARY CONSTRUCTION.
PG 70-28 OK	< 10	< 10,000	USE ONLY IN THE TOP 4-6 INCHES FOR DRIVING LANES.
PG 76-28 OK	>= 10	>= 10,000	USE ONLY IN THE TOP 4-6 INCHES FOR DRIVING LANES .
PG 76-28 E	—	—	CONTACT ODOT MATERIALS DIVISION FOR RECOMMENDED USE.
[1] USE ADT ONLY WHEN ESAL COMPUTATIONAL DATA IS NOT AVAILABLE. CALCULATE			
[2] PG 70-28 OK OR PG 76-28 OK MAY BE DESIRABLE IN HIGH VOLUME AREAS WHERE SLOW,			

S-9 THIS ITEM INCLUDES ALL COSTS ASSOCIATED WITH COLD MILLING AND TO PROVIDE BUTT JOINTS AS REQUIRED. NO ADDITIONAL PAYMENT SHALL BE MADE FOR COLD MILLING BEYOND THE AVERAGE DEPTH SHOWN ON THE TYPICAL SECTIONS.

S-10 FOR P.C. CONCRETE TYPICAL SECTIONS, CONTRACTOR MAY SUBSTITUTE INTEGRAL CURB FOR CURB & GUTTER, AND VICE VERSA, ONLY WITH APPROVAL OF THE ENGINEER, WITH NO ADJUSTMENT MADE TO UNIT PRICE OR QUANTITY

S-11 CONCRETE PAVEMENT SHALL BE COMPLETE IN PLACE. NO PARTIAL OR FINAL PAYMENT SHALL BE MADE UNTIL PAVEMENT HAS BEEN SAWED AND SEALED. ANY SECTIONS OF PAVEMENT WITH UNAPPROVED DEVIATIONS FROM THE JOINT LAYOUT PROVIDED IN THE PLANS MAY BE REJECTED AT THE DISCRETION OF THE ENGINEER.

S-12 THE USE OF FLY-ASH IN CONCRETE IS PROHIBITED.

S-13 INCLUDES ALL COST OF SAWED JOINTS AND SEALING OF ALL JOINTS INCLUDING LONGITUDINAL JOINTS.

S-14 NOT USED

S-15 THIS ITEM SHALL BE MEASURED AS THE ACTUAL AMOUNT OF CURB AND/OR GUTTER INSTALLED. NO PAYMENT WILL BE MADE FOR CURB AND/OR GUTTER THROUGH DRIVEWAYS AND INLETS.

S-16 CURB, GUTTER, AND/OR SIDEWALK ASSOCIATED WITH THE DRIVEWAY AND THROUGH THE DRIVEWAY IS INCLUDED IN THE COST OF THE DRIVEWAY.

S-17 ONE SIDEWALK PANEL ON EACH SIDE OF DRIVEWAYS SHALL BE A MINIMUM OF 6" THICK OR MATCH EXISTING DRIVEWAY THICKNESS, WHICHEVER IS GREATER. NO ADDITIONAL PAYMENT SHALL BE MADE FOR THE COST OF THE THICKENED SIDEWALK THROUGH THIS AREA.

4 S-18 STAMPED CONCRETE SIDEWALK/PAVEMENT SHALL BE INSTALLED WITH RUNNING BOND BRICK PATTERN. COLOR SHALL BE INTEGRAL AND MATCH HUE WITH FEDERAL STANDARD AMS-595 #21105 (RED), OR APPROVED EQUAL. PAINTING OF STAMPED CONCRETE IS PROHIBITED AND WILL RESULT IN REJECTION OF WORK PRODUCT. CONTRACTOR SHALL PROVIDE A 1'X1'X4" TEST SQUARE FOR APPROVAL BY ENGINEER PRIOR TO INSTALLATION, WITH ALL COSTS INCLUDED IN UNIT PRICE BID FOR STAMPED CONCRETE SIDEWALK OR STAMPED CONCRETE PAVEMENT.

S-19 NOT USED

S-20 NOT USED

S-21 THIS PAY ITEM INCLUDES THE FOLLOWING:

A. SAW CUTTING
B. REMOVAL OF THE EXISTING CONCRETE AND/OR ASPHALTIC CONCRETE ROADWAY (CY)
C. TYPE S3 ASPHALTIC CONCRETE OR PC CONCRETE COMPLETE AND IN PLACE PER DETAIL
D. SEALING OF EDGES AND TACK COAT

DOES NOT INCLUDE THE FOLLOWING:

A. UNCLASSIFIED EXCAVATION
B. SUBGRADE METHOD B (SY)
C. SEPARATOR FABRIC (SY)
D. AGGREGATE BASE (TYPE A)
E. ASPHALT CONCRETE LEVELING OR SURFACE COURSE

G-1 LOCATIONS TO BE DETERMINED IN THE FIELD AND WORK TO BE PERFORMED AT THE DIRECTION OF THE FIELD ENGINEER. QUANTITY IS ESTIMATED AND MAY BE OMITTED IN ITS ENTIRETY.

G-2 MAXIMUM OVERALL DOLLAR AMOUNT AND SCHEDULE OF PAYMENTS SHALL BE IN ACCORDANCE SECTION 641 OF THE OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, CURRENT EDITION. EXCLUDES MOBILIZATION FOR WATERLINE WORK.

G-3 CONSTRUCTION STAKING SHALL INCLUDE SURVEYING AND THE FURNISHING, PLACING, AND MAINTAINING OF THE CONSTRUCTION LAYOUT STAKES NECESSARY FOR THE PROPER COMPLETION AND INSPECTION OF THE ENTIRE PROJECT.

G-4 THE COST TO REPLACE REMOVED OR DAMAGED SECTION CORNERS AND ALL OTHER PERMANENT RIGHT OF WAY MARKERS SHALL BE INCLUDED IN THE PRICE BID FOR THIS ITEM. NO ADDITIONAL PAYMENT WILL BE MADE.

G-5 CONTRACTOR SHALL REPAIR ANY IRRIGATION SYSTEMS DAMAGED OR REQUIRING RELOCATION DURING THE CONSTRUCTION OF THIS PROJECT TO THE SATISFACTION OF THE PROPERTY OWNER AND CITY ARBORIST. COST SHALL BE INCLUDED IN THE PRICE BID.

G-6 ALL HOUSE NUMBERS SHALL BE REPLACED/ REESTABLISHED THROUGHOUT PROJECT LIMITS. COST TO BE INCLUDED IN URBAN RIGHT OF WAY RESTORATION. CONTRACTOR SHALL REESTABLISH DRAINS, ROOF DRAINS AND OTHER DRAINAGE THROUGH THE CURBS IN ACCORDANCE WITH CITY OF TULSA STANDARD 758. NO NEW CURB OUTLETS SHALL BE CONSTRUCTED WITHOUT APPROVAL OF THE ENGINEER.

G-7 AN INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA) CERTIFIED ARBORIST SHALL OVERSEE ALL PLANTINGS AND/OR REMOVAL OF TREES. CONTACT CITY ARBORIST TO ACCEPT FINAL PLANTINGS.
CONTACT #: 918-596-2548

G-8 TREE GRATES ARE NOT ACCEPTABLE PER CITY ARBORIST. CONCRETE PAVERS ARE TO BE USED AS NECESSARY AROUND TREES.

G-9 CONTRACTOR SHALL COORDINATE WITH HOMEOWNERS TO RESET ALL PAVERS, LANDSCAPE STONE, PRIVATE SIDEWALKS AND FENCES THAT ARE DISTURBED DURING CONSTRUCTION OPERATIONS. ALL MATERIALS, LABOR, AND EQUIPMENT REQUIRED FOR RESETTING OF SUCH ITEMS IS TO BE INCLUDED IN PRICE BID FOR URBAN RIGHT OF WAY RESTORATION.

G-10 PAY ITEM INCLUDES ALL MOWING WITHIN THE RIGHT-OF-WAY AS DIRECTED DURING CONSTRUCTION.

R-1 WASTE MATERIAL TO BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE IN A MANNER APPROVED BY THE ENGINEER.

R-2 ALL SAW CUTTING AND REMOVAL SHALL BE INCLUDED IN THE COST OF THE ITEM TO BE ADJUSTED, REMOVED, REPAIRED, OR REPLACED.

R-3 PAY ITEM INCLUDES REMOVAL OF ALL STRUCTURES AND OBSTRUCTIONS WITHIN PROJECT LIMITS NOT SPECIFIED BY OTHER ITEMS OF WORK.

R-4 INCLUDES SAWING NOT INCLUDED IN OTHER ITEMS OF WORK.

R-5 ITEMS TO BE REMOVED MAY OR MAY NOT BE PRESENT IN ANY SPECIFIED CONDITION.

R-6 SHALL INCLUDE ALL COSTS ASSOCIATED WITH PLUGGING/ PATCHING HOLES IN EXISTING STRUCTURES TO REMAIN.

D-1 THIS ITEM SHALL INCLUDE THE COST OF NEW MANHOLE FRAME AND COVER PER CITY OF TULSA STD NOS. 752, 753, 754, 761, 762, 769A, 769B AND 775.

D-2 THE TOTAL COST FOR RUBBERIZED ASPHALT AND/OR SILICONE AT MANHOLES, VALVE BOXES, INLETS, AND INLET APRONS, SHALL BE INCLUDED.

D-3 NO MASONRY STRUCTURES SHALL BE CONSTRUCTED WITHIN THE RIGHT OF WAY.

D-4 ADDITIONAL DEPTH IN A MANHOLE SHALL BE MEASURED FROM 6FT AS MEASURED FROM THE TOP OF RIM TO THE LOWEST FLOWLINE.

D-5 ALL MANHOLES SHALL BE COMPLETE IN PLACE. THIS PAY ITEM INCLUDES FRAME, COVER, CONCRETE AND ALL OTHER INCIDENTALS REQUIRED FOR PLACEMENT.

D-6 ALL SANITARY AND STORM SEWER MANHOLE CASTINGS AND LIDS THAT ARE LOCATED IN THE STREET AND ARE DISTURBED BY THE CONTRACTOR SHALL BE REPLACED WITH NEW LIDS AND CASTINGS AND THE OLD ONES SHALL BE SALVAGED AND DELIVERED TO THE METAL RECYCLE BINS IN THE STOCKROOM AREA AT SEWER OPERATIONS AND MAINTENANCE, 9319 E. 42ND STREET NORTH, BETWEEN THE HOURS OF 7:30 AM AND 3:00 PM MONDAY THROUGH FRIDAY.

D-7 INCLUDES THE COST REQUIRED TO MAKE CONNECTION AND REMOVAL OF EXISTING INLETS. THE COST OF PC CONCRETE CURB AND GUTTER THROUGH THE INLET, 5' EACH SIDE OF THE INLET, AND THE PC CONCRETE INLET APRON SHALL BE INCLUDED. GRATE AND FLOWLINE ELEVATIONS SHALL MATCH EXISTING CONDITIONS UNLESS OTHERWISE NOTED IN THE PLANS.

D-8 QUICKSET FLOWABLE FILL SHALL BE USED TO BACKFILL AROUND STREET CURB INLETS AND REINFORCED CONCRETE PIPE, AS NEEDED, AT THE DIRECTION OF THE ENGINEER.

D-9 ALL INLETS, COMPLETE IN PLACE, SHALL BE CAST IN PLACE CONCRETE OR PRECAST CONCRETE. THIS PAY ITEM INCLUDES ANY INLET FRAME(S), GRATE(S), HOOD(S) AND CONCRETE REQUIRED FOR COMPLETE INSTALLATION OF STRUCTURE PER THE CONSTRUCTION DOCUMENTS.

D-10 ADDITIONAL DEPTH QUANTITIES SHALL BE MEASURED AND PAID FOR ALL INLETS EXCEEDING STANDARD DEPTH. STANDARD DEPTHS ARE AS FOLLOWS:

A) CAST IRON CURB INLET: 3.71 VF, MEASURED FROM CENTER ELEVATION OF LOWEST CAST IRON CURB TO FLOWLINE OF OUTLET PIPE.
B) RECESSED CURB INLET: 3.00 VF, MEASURED FROM TOP OF SLAB TO FLOWLINE OF OUTLET PIPE.
C) STANDARD DROP INLET: SEE STANDARD DETAILS 770, 771, 772 AND 773 - VARIES BASED ON PIPE SIZE, MEASURED FROM LOWEST ELEVATION OF INFLOW APRON TO FLOWLINE OF OUTLET PIPE.

D-11 CAST IRON CURB INLET CONFIGURATION NAMING CONVENTION PROVIDED IN COT STANDARD NO. 755. SEPARATE DETAILS SHALL BE REFRENCED OR PROVIDED IN THE PLANS FOR NON-CITY-STANDARD INLETS.

STANDARD NAMING: CICI DES G(T) [W/AMH]

G: NUMBER OF GRATES.

T: LETTER(S) CORRESPONDING TO ARRANGEMENT OF CAST IRON HOODS TO BE INSTALLED UPSTREAM OF GRATES.

W/AMH: IF SHOWN, INLET TO BE CONSTRUCTED WITH ATTACHED ACCESS MANHOLE.

D-12 REINFORCED CONCRETE PIPE TO BE CLASS III. ALL REINFORCED CONCRETE PIPE AND MANHOLES TO BE SUPPLIED WITH AN OMNI-FLEX JOINT GASKET OR APPROVED EQUAL. MASTIC JOINT SEALANT SHALL NOT BE ALLOWED.

D-13 THIS PAY ITEM SHALL BE COMPLETE IN PLACE AND SHALL INCLUDE ALL PIPE, STANDARD BEDDING MATERIAL AND TRENCH EXCAVATION, JOINT GASKETS AND ALL OTHER INCIDENTALS. NO ADDITIONAL COST WILL BE MADE. PRIOR TO ACCEPTANCE, INTERIOR OF PIPE SHALL BE INSPECTED FOR DEFECTS USING SELF-PROPELLED MOBILE CLOSED-CIRCUIT CAMERA SYSTEM.

D-14 WHERE CORRUGATED POLYPROPYLENE PIPE CONNECTS TO REINFORCED CONCRETE STRUCTURES, CONTRACTOR SHALL ENSURE CONNECTIONS ARE WATER-TIGHT AND FULLY SEALED AGAINST SOIL INFILTRATION.

D-15 WHERE QUICKSET FLOWABLE FILL IS USED TO BACKFILL AROUND CORRUGATED POLYPROPYLENE PIPE, THE CONTRACTOR SHALL UTILIZE AN ANCHORING SYSTEM APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. ALL COSTS FOR LABOR, EQUIPMENT AND MATERIALS REQUIRED TO IMPLEMENT APPROVED ANCHORING SYSTEM INCLUDED IN PRICE BID FOR CORRUGATED POLYPROPYLENE PIPE.

T-1 NOT USED

T-2 REFLECTORIZED SHEETING ON SIGNS AND BARRICADES SHALL BE OF A CUBIC PRISMATIC TYPE AND SHALL MEET THE SPECIFICATIONS ESTABLISHED FOR ASTM D 4956-01 TYPE IX RETROREFLECTIVE SHEETING. REFLECTORIZED SHEETING ON DRUMS AND TUBE CHANNELIZERS SHALL BE OF A HIGH-INTENSITY TYPE AND SHALL MEET THE SPECIFICATIONS ESTABLISHED FOR ASTM D 4956-01 TYPE III RETROREFLECTIVE SHEETING.

T-3 ALL PLASTIC PAVEMENT MARKINGS SHALL BE: EXTRUDED-APPLIED THERMOPLASTIC (USE ON ASPHALT PAVEMENT AND CONCRETE PAVEMENT). THERMOPLASTIC PAVEMENT MARKINGS SHALL ONLY BE APPLIED WHEN THE SURFACE TEMPERATURE EXCEEDS 55°F FOR ALL OF THE SIX HOURS PRIOR TO INSTALLATION AND MAXIMUM WIND GUSTS ARE BELOW 15 MPH AT THE TIME OF APPLICATION. PRICE BID TO INCLUDE FLEX TABS OR LIKE KIND FOR POST CONSTRUCTION LANE MARKING/SEPARATION. MECHANICALLY APPLIED PREFORMED PLASTIC TAPE ("COLD TAPE") WILL NOT BE ACCEPTED.

T-4 PAYMENT SHALL BE MADE ON A SIGN-DAY BASIS ONLY FOR TRAFFIC CONTROL DEVICES THAT ARE PROPERLY INSTALLED AND IN GOOD WORKING ORDER. COSTS FOR DELIVERY, INSTALLATION, RELOCATION, MAINTENANCE REMOVAL AND REPLACEMENT, AS NEEDED AT THE DISCRETION OF THE ENGINEER, INCLUDED IN UNIT PRICE BID.

T-5 IF WARNING LIGHTS ARE TO BE USED ON TRAFFIC CONTROL DEVICES, TYPE "A" LIGHTS SHALL ONLY BE USED ON DEVICES WARNING OF UNEXPECTED HAZARDS, AND SHALL NOT BE USED FOR DELINEATION OF THE TRAVELED WAY. ONLY TYPE "C" WARNING LIGHTS SHALL BE USED FOR DELINEATION OF THE TRAVELED WAY, AND TYPE 'C" LIGHTS SHALL NOT BE USED FOR ANY OTHER PURPOSE.

T-6 THE PAY ITEM FOR FLAGGER SHALL BE PAID FOR ON A FLAGDAY (F.D.) BASIS. ONE F.D. IS ONE COMPLETE WORKDAY AS PERFORMED BY THE CONTRACTOR SET FORTH IN THE CONTRACT DOCUMENTS AND SPECIFICATIONS.

T-7 PRICE BID FOR THIS ITEM INCLUDES INSTALLATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF PROJECT SIGN.

4 SP-1 NOT USED
SP-2 NOT USED
SP-3 NOT USED
SP-4 NOT USED
SP-5 NOT USED
SP-6 NOT USED
SP-7 NOT USED

SP-8 OWNER'S FIELD OFFICE TO INCLUDE A MINIMUM 600 SQUARE FEET OF CONDITIONED SPACE INCLUDING OFFICES, CONFERENCE ROOM, UTILITY CONNECTIONS, INTERNET CONNECTION, AND PORT-A-POTTIES. FIELD OFFICE TO BE PLACED ON VACANT LOT AT 2725 WEST NEWTON STREET. NO TREES SHALL BE REMOVED WITHOUT OWNER PERMISSION. SITE SHALL BE GRAVEL PAVED AT NO ADDITIONAL COST TO OWNER. WHEN PROJECT IS COMPLETED, SITE SHALL BE RETURNED TO EXISTING CONDITION AND SLAB SODDED AT NO ADDITIONAL COST TO OWNER. CONTRACTOR SHALL PROVIDE A JOBSITE OFFICE FOR CONTRACTOR'S USE AND IS ALLOWED TO USE THE SAME SITE IF CONTRACTOR SO CHOOSES. COST OF CONTRACTOR'S JOBSITE OFFICE IS INCLUDED IN MOBILIZATION PER ODOT SPECIFICATIONS.

SP-9 THIS PROJECT IS PARTIALLY WITHIN OSAGE COUNTY AND WITHIN THE HISTORICAL BOUNDARIES OF THE OSAGE NATION. GENERALLY, THE AREA NORTH OF EDISON IS WITHIN OSAGE COUNTY. ALL MINERAL RESOURCES OF THE OSAGE NATION, INCLUDING ROCK, SOIL, AND SUBSOIL, MUST BE RETAINED ENTIRELY WITHIN OSAGE COUNTY. IT IS THE CONTRACTOR'S SOLE AND EXCLUSIVE RESPONSIBILITY TO IDENTIFY THE BOUNDARIES OF OSAGE COUNTY AND ENSURE THAT MINERAL RESOURCES ARE RETAINED WITHIN THE GEOGRAPHICAL AREA.

THE QUANTITY FOR THIS ITEM INCLUDES THE VOLUME OF EXCAVATED ROCK AND SUBSOIL NOT NEEDED ON THE PROJECT SITE. EXCAVATED TOPSOIL IS TO BE RE-USED ON THE SITE AND IS NOT INCLUDED IN THE QUANTITY. THE VOLUME TO BE RELOCATED OFF-SITE DOES NOT INCLUDE ASPHALT, CONCRETE, REMOVED PIPES, RIP-RAP, WALL DEMOLITION DEBRIS, OR OTHER CONSTRUCTION MATERIALS OR WASTE.

THE CITY OF TULSA IS MAKING THE NECESSARY PAYMENTS TO THE OSAGE NATION/BIA AND IS OBTAINING APPROVAL FOR THE MOVEMENT OF THE MATERIAL WITHIN OSAGE COUNTY. CONTRACTOR WILL IDENTIFY AN APPROPRIATE SITE TO PLACE THE ROCK AND SUBSOIL WITHIN OSAGE COUNTY AND WILL OBTAIN ALL REQUIRED SITE ACCESS PERMISSIONS. CONTRACTOR WILL ALSO OBTAIN ALL REQUIRED STATE, CITY, AND COUNTY PERMITS AND ASSOCIATED STORMWATER POLLUTION PREVENTION PLAN DESIGN AND ELEMENTS FOR THE SITE AND WILL ENSURE THAT PLACEMENT OF THE EXCAVATED ROCK AND SUBSOIL IS IN ACCORDANCE WITH THESE PERMITS AND THE STORMWATER POLLUTION PREVENTION DESIGN. ALL TRANSPORTATION, PLACEMENT, AND SITE STABILIZATION COSTS ARE INCLUDED IN THE CUBIC YARDS BID ITEM AND NO ADDITIONAL PAYMENT WILL BE MADE.

SP-10 TEMPORARY FENCE SHALL BE A MINIMUM OF 6-FOOT TALL CHAIN-LINK MOVABLE PANELS. TEMPORARY FENCE SHALL BE DOG PROOF WHERE DOGS ARE PRESENT; ADD NET WIRE AND SANDBAGS AS NEEDED. TEMPORARY FENCE SHALL BE STAKED TO THE GROUND TO BE FIXED LOCATION WHERE ADJACENT TO RETAINING WALLS "A" AND "C". TEMPORARY FENCE ON TEMPLE PARCEL SHALL HAVE EXISTING ELECTRIC FENCE WIRE RELOCATED TO THE BOTTOM TO DISCOURAGE TEMPLE'S DOG FROM APPROACHING FENCE.

LICENSED PROFESSIONAL ENGINEER — JARED T. BATES — 20681 — OKLAHOMA

6/20/2025

BEFORE YOU DIG — 1-800-522-OKIE — 811 — CALL OKIE

PAVING & DRAINAGE (2)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
4 ADDENDUM 3 - MODIFIED PAY ITEM NOTES	JTB	07/29/2025

PLAN SCALE: 1" = N/A
PROFILE SCALE:
HORIZONTAL: 1" = N/A
VERTICAL 1" = N/A

DRAWN		06/2023	APPROVED:
DESIGNED		06/2023	
SURVEY			
PROJ. MGR.			
LEAD ENGR.			
FIELD MGR.			

RECOMMENDED:
DESIGN MANAGER
CITY ENGINEER

FILE: H:\21-1009 DRAWING: 21-1009-Pay Quantities-Notes DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75
SHEET 3 OF 268 SHEETS

PAY QUANTITY SUMMARY - WATER LINE

ITEM	SPEC. NO.	DESCRIPTION	PAY ITEM NOTES	UNIT	QUANTITY
176	COT 301	RIGHT-OF-WAY CLEARING AND RESTORING, COMPLETE IN PLACE	4,5,6,7,22,32	SY	692
177	COT 302	EXCAVATION AND BACKFILL, UNCLASSIFIED	14	CY	654
178	COT 303	AGGREGATE BASE TYPE A		CY	178
179	COT 304	CONSTRUCITON STAKING		EA	1
180	COT 307(A)	6" DIP, CL 51 POLYETHYLENE WRAPPED, (RJ)	1,2,3,8,9,11,27	LF	150
181	COT 307(A)	10" DIP, CL 51 POLYETHYLENE WRAPPED, (RJ)	1,2,3,8,9,11,27	LF	1,010
182	COT 307(A)	12" DIP, CL 51 POLYETHYLENE WRAPPED, (RJ)	1,2,3,8,9,11,27	LF	305
183	COT 312(A)	6" 22.5° D.I. BEND (RJ)	2,8,12	EA	2
184	COT 312(A)	10" 45° D.I. BEND (RJ)	2,8,12	EA	6
185	COT 312(A)	12" 22.5° D.I. BEND (RJ)	2,8,12	EA	2
186	COT 312(A)	12" 45° D.I. BEND (RJ)	2,8,12	EA	2
187	COT 312(B)	6"x6" D.I. TEE (RJ)	2,8,12	EA	1
188	COT 312(B)	10"x6" D.I. TEE (RJ)	2,8,12	EA	1
189	COT 312(B)	12"x6" D.I. TEE (RJ)	2,8,12	EA	1
190	COT 312(C)	6" D.I. PLUG (RJ)	2,8,12	EA	1
191	COT 312(C)	10" D.I. PLUG (RJ)	2,8,12	EA	2
192	COT 312(C)	12" D.I. PLUG (RJ)	2,8,12	EA	1
193	COT 312(D)	12"X10" D.I. REDUCER (RJ)	2,8,12	EA	1
194	COT 312(E)	6" D.I. SLEEVE (RJ)	2,8,12	EA	1
195	COT 312(E)	10" D.I. SLEEVE (RJ)	2,8,12	EA	1
196	COT 312(E)	12" D.I. SLEEVE (RJ)	2,8	EA	1
197	COT 317	6" GATE VALVE (RJ)	8	EA	3
198	COT 317	10" GATE VALVE (RJ)	8	EA	2
199	COT 317	12" GATE VALVE (RJ)	8	EA	1
200	COT 317(A)	2" AIR RELIEF VALVE & VAULT		EA	1
201	COT 317(B)	3-WAY FIRE HYDRANT, IN PLACE		EA	1
202	COT 317(D)	12" FIRE HYDRANT EXTENSION		EA	1
203	COT 318(A)	VALVE BOX	21	EA	6
204	COT 318(B)	VALVE BOX EXTENSION	21	VF	4
205	COT 325	SODDING AND SEEDING	23	SY	393
206	COT 326	STREET WASH DOWN		LF	6,800
207	COT 329	REMOVE AND REPLACE PAVEMENT (8" APC)	4 30,34	SY	19
208	COT 333(A)	ABANDON 6" WATERLINE		LF	165
209	COT 333(B)	ABANDON 10" WATERLINE		LF	985
210	COT 333(C)	ABANDON 12" WATERLINE		LF	252
211	COT 334	CONSTRUCTION AS-BUILT	24,25,27	EA	1
212	612(G)	FIRE HYDRANT RELOCATION		EA	2
213	SPECIAL	OWNER ALLOWANCE	18	ALLOW	10,000

PAY ITEM NOTES - WATERLINES
version date: 06/05/24

1. TESTING AND CHLORINATION OF WATER MAINS SHALL BE PERFORMED BY THE CITY OF TULSA. TESTING, CHLORINATION, AND FLUSHING SHALL BE DONE IN ACCORDANCE WITH SECTION 109.3 OF THE GENERAL SPECIFICATIONS.

   A. CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY PLUGS WITH ADEQUATE BLOCKING OR RESTRAINTS, PLUS CORPORATION STOPS, AS DIRECTED BY CITY TESTING PERSONNEL. THEN, ONCE TESTING, CHLORINATION AND FLUSHING BY CITY PERSONNEL IS COMPLETED, REMOVE TEMPORARY BLOCKING AND TIE INTO EXISTING SYSTEM USING FITTINGS SWABBED INTERNALLY WITH 2% BLEACH SOLUTION.

   B. TESTING, CHLORINATION, AND FLUSHING OF NEW WATER MAIN SHALL BE PERFORMED BY CITY PERSONNEL ON MAINS WHICH ARE PHYSICALLY DISCONNECTED FROM THE EXISTING WATER SYSTEM. TESTING, CHLORINATION, AND FLUSHING OF NEW WATER MAINS SHALL NOT BE PERFORMED AGAINST VALVES WHICH ARE PHYSICALLY CONNECTED TO THE EXISTING SYSTEM.

   C. ALL COSTS FOR TEMPORARY PLUGS, BLOCKING, RESTRAINING, CORPORATION STOPS, TUBING, THREADED CONNECTIONS, BLEACH, AND OTHER INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PIPE.

2. BURIED BOLTS, HARNESS LUGS, AND COUPLINGS SHALL BE GIVEN TWO COATS OF KOPPER'S BITUMASTIC 300-M (DRY MIL THICKNESS OF 16 MILS) OR EQUAL. COST TO BE INCLUDED IN UNIT PRICE BID FOR PIPE AND FITTINGS.

3. CONTRACTOR TO EXCAVATE ALL UTILITY CROSSINGS AHEAD OF PIPE LAYING SO THAT THE GRADES CAN BE ADJUSTED ON THE PROPOSED WATER MAIN TO AVOID UTILITY CONFLICTS. FAILURE TO DO SO SHALL NOT ENTITLE THE CONTRACTOR TO CLAIM EXTRA COMPENSATION FOR ADJUSTMENTS TO THE PROPOSED WATER MAIN. THE COST FOR EXCAVATING UTILITY CROSSINGS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PIPE.

4. CONTRACTOR SHALL INSURE ALL POLES WHICH ARE AFFECTED BY TRENCHING CONDITIONS ARE BRACED BY OWNERS. PAYMENT SHALL BE INCLUDED IN "RIGHT-OF-WAY CLEARING AND RESTORING". NO ADDITIONAL PAYMENT SHALL BE MADE.

5. ALL HYDRANTS, VALVES AND OTHER FITTINGS FROM ABANDONED WATER MAINS SHALL BE SALVAGED AND DELIVERED TO THE SOUTH YARD AT 2317 S JACKSON AVE. PAYMENT TO BE MADE UNDER RIGHT OF WAY CLEARING AND RESTORING. NO ADDITIONAL PAYMENT SHALL BE MADE.

6. CONTRACTOR SHALL REPAIR ANY IRRIGATION SYSTEMS, ROOF DRAINS, AND FENCING DAMAGED IN THE ZONE OF CONSTRUCTION DURING THE COURSE OF CONSTRUCTION TO SATISFACTION OF THE PROPERTY OWNER. PAYMENT SHALL BE INCLUDED IN RIGHT-OF-WAY CLEARING AND RESTORING. NO ADDITIONAL PAYMENT SHALL BE MADE.

7. COST OF ANY TEMPORARY LIVESTOCK FENCING AND POLES SHALL BE INCLUDED IN COST OF RIGHT OF WAY CLEARING AND RESTORING. NO ADDITIONAL PAYMENT SHALL BE MADE.

PAY ITEM NOTES - WATERLINES (CONTINUED)

8. ALL COSTS FOR COMPONENTS NECESSARY TO RESTRAIN JOINTS FOR PIPE AND FITTINGS DESIGNATED RESTRAINED JOINT ("RJ") SHALL BE INCLUDED IN UNIT PRICE BID FOR PIPE OR FITTINGS.

   A. DUCTILE IRON PIPE RESTRAINED JOINT SYSTEMS: US PIPE TRFLEX, GRIFFIN SNAPLOK, MCWANE THRUSTLOCK, AMERICAN FLEXRING, EBAA MEGALUG, STAR STARGRIP, SMITH-BLAIR CAMLOCK, CLOW TUFGRIP OR EQUAL SHALL BE USED ON THIS PROJECT. SHOULD RJ PIPE BE SPECIFIED THROUGH UNCASED BORES, ONLY USPIPE TRFLEX, GRIFFIN SNAPLOK, MCWANE THRUSTLOCK, OR AMERICAN FLEXRING IS TO BE USED. LOCKING GASKETS NOT PERMITTED.

   B. POLYVINYL CHLORIDE (PVC) RESTRAINED JOINT SYSTEMS: EBAA MEGALUG, STAR STARGRIP OR EQUAL SHALL BE USED ON THIS PROJECT. LOCKING GASKETS NOT PERMITTED; SHOULD RJ PIPE BE SPECIFIED ON BORE, CASING IS REQUIRED.

   C. HIGH DENSITY POLYETHYLENE (HDPE) RESTRAINED JOINT SYSTEMS: EBAA MEGALUG, STAR STARGRIP OR EQUAL SHALL BE USED ON THIS PROJECT.

   NO ADDITIONAL PAYMENT SHALL BE MADE.

9. ALL CUT ENDS AND WHERE SALVAGED FITTINGS HAVE BEEN REMOVED FROM ABANDONED WATER LINES LEFT IN PLACE, SHALL BE PLUGGED WITH 24-IN OF CONCRETE INSIDE THE PIPE. COST OF CONCRETE PLUGGING TO BE INCLUDED IN THE UNIT PRICE BID FOR PIPE. NO ADDITIONAL PAYMENT SHALL BE MADE.

10. NOT USED.

11. DETECTABLE MYLAR MARKING TAPE SHALL BE INSTALLED OVER DUCTILE IRON PIPE AS PER CONST SPEC 307.3 AND 307.4. COST WILL BE INCLUDED IN THE COST OF DUCTILE IRON PIPE.

12. ALL LABOR, MATERIALS, AND EQUIPMENT TO CONNECT PROPOSED WATER MAINS TO EXISTING WATER MAINS ARE INCLUDED IN THE COST OF PIPE. CONTRACTOR TO EXCAVATE ALL EXISTING WATER MAINS AHEAD OF PIPE LAYING SO THAT THE GRADES CAN BE ADJUSTED ACCORDINGLY. FAILURE TO DO SO SHALL NOT ENTITLE THE CONTRACTOR TO CLAIM EXTRA COMPENSATION FOR ADJUSTMENTS TO THE PROPOSED WATER MAIN. THE COST FOR EXCAVATING EXISTING WATER MAINS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR SLEEVES. NO ADDITIONAL PAYMENT SHALL BE MADE.

13. AT THE DIRECTION OF THE ENGINEER, CONTRACTOR SHALL FURNISH A "LICENSED AND BONDED PLUMBER", WHICH SHALL INCLUDE ALL COSTS OF LABOR, TOOLS, PERMIT FEES, AND EQUIPMENT TO REROUTE THE EXISTING CUSTOMER SERVICE ON CUSTOMER PROPERTY TO THE PROPOSED CUSTOMER METER CAN. COST SHALL NOT EXCEED AN ALLOWANCE OF $1000 PER OCCURRENCE. MATERIALS COSTS SHALL BE INCLUDED UNDER THE UNIT PRICE FOR WATER SERVICE CONNECTION AND/OR WATER SERVICE LINE EXTENSION. NO ADDITIONAL PAYMENT SHALL BE MADE.

14. CONTRACTOR IS REMINDED TO BACKFILL ALL TRENCHES EXCAVATED ACROSS ANY EXISTING OR PROPOSED DRIVING OR PARKING SURFACE WITH 1½-IN TYPE A AGGREGATE BASE, PLACED IN 8-INCH MAXIMUM LIFTS AND COMPACTED TO 98% MODIFIED PROCTOR DENSITY. COST TO BE INCLUDED IN THE UNIT PRICE FOR EXCAVATION AND BACKFILL. NO ADDITIONAL PAYMENT SHALL BE MADE.

15. WATER SERVICE CONNECTIONS SHALL INCLUDE COST OF MATERIAL, LABOR, AND EQUIPMENT TO REMOVE AND INSTALL SADDLES, SERVICE CLAMPS, CORPORATION STOPS, BENDS, 3-PART UNIONS, COUPLINGS, SETTERS AND ANY OTHER INCIDENTALS REQUIRED FOR A COMPLETE WATER SERVICE CONNECTION, WITH THE EXCEPTION OF METER CANS, RIMS AND LIDS. NO ADDITIONAL PAYMENT SHALL BE MADE. METER CANS, LIDS AND RIMS SHALL BE PAID AS A SEPARATE BID ITEM.

   A. A SHORT SERVICE SHALL BE ANY SERVICE LINE THAT IS 25-FEET OR LESS IN LENGTH. SHORT SERVICES DO NOT INCLUDE PAVEMENT REPLACEMENT.

   B. LONG SERVICE SHALL BE ANY SERVICE LINE THAT IS GREATER THAN 25-FEET UP TO 80-FEET IN LENGTH. LONG SERVICES INCLUDE PAVEMENT REPLACEMENT AND/ OR COST TO BORE.

   C. SERVICE LINES EXCEEDING THE ABOVE PARAMETERS WILL BE COMPENSATED FOR LINEAR FOOTAGE ABOVE AND BEYOND. COMPENSATION SHALL BE PAID AS "SERVICE LINES, EXTENSION", PER LF

16. SERVICE LINES ON NON-ARTERIALS SHALL BE EITHER COPPER TUBING (TYPE K SOFT ANNEALED CONFORMING TO ASTM B 88) OR PEX TUBING (VIEGA PUREFLOW PEX BLUE 5306 OR UPONOR AQUA PEX 5206 BLUE CONFORMING TO ASTM F876/F877/F2023). PEX TUBING IS NOT PERMITTED WITHIN ARTERIAL RIGHT OF WAY. WHEN CONTRACTOR ELECTS TO USE PEX TUBING:

   A. ¾-INCH WATER SERVICE CONNECTION SHALL USE 1-INCH PEX TUBING MINIMUM

   B. 1-INCH WATER SERVICE CONNECTION SHALL USE 1¼-INCH PEX TUBING MINIMUM

17. NOT USED.

18. THE "OWNER ALLOWANCE" CAN BE USED FOR VARIOUS WORK AND MISCELLANEOUS ITEMS NOT IDENTIFIED IN THE CONTRACT DOCUMENTS WITH THE FOLLOWING PROVISIONS:

   A. THE ALLOWANCE SHALL BE USED FOR THE COST OF MATERIALS, LABOR, INSTALLATION, OVERHEAD, AND PROFIT FOR ADDITIONAL WORK AND MISCELLANEOUS ITEMS THAT ARE NOT IDENTIFIED IN THE CONSTRUCTION DOCUMENTS AND PLANS, AND NOT INCLUDED IN THE BID ITEMS OF THE CONTRACT. EXAMPLES INCLUDE, BUT ARE NOT LIMITED TO:

      I. WATER SERVICE LINES OF UNKNOWN OR UNEXPECTED SIZE.

   B. THE ALLOWANCE SHALL BE USED ONLY AT THE DISCRETION OF THE CITY. ANY ALLOWANCE BALANCE REMAINING AT THE COMPLETION OF THE PROJECT WILL BE CREDITED BACK TO THE CITY ON THE FINAL APPLICATION FOR PAYMENT SUBMITTED BY THE CONTRACTOR.

   C. THE CONTRACTOR SHALL PROVIDE, TO THE CITY, A WRITTEN REQUEST FOR THE USE OF ANY ALLOWANCE, WITH A SCHEDULE OF VALUES, AND ALL ASSOCIATED BACKUP INFORMATION, INCLUDING ANY TIME EXTENSIONS REQUIRED TO PERFORM THE WORK.

   D. THE CONTRACTOR SHALL PROCEED WITH THE WORK INCLUDED IN THE ALLOWANCE ONLY AFTER RECEIVING A WRITTEN ORDER FROM THE ENGINEER AND CITY AUTHORIZING SUCH WORK. PROCEEDING WITH WORK IN THE ALLOWANCE WITHOUT A WRITTEN ORDER FROM THE CITY WILL BE AT THE CONTRACTOR'S EXPENSE.

PAY ITEM NOTES - WATERLINES (CONTINUED)

19. NOT USED.

20. NOT USED.

21. TOP OF VALVE BOX SHALL BE FLUSH WITH FINISHED GRADE.

22. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO A CONDITION EQUAL TO OR BETTER THAN EXISTING CONDITION. LIMITS OF DISTURBANCE SHALL NOT EXCEED 9-FEET CENTERED ON THE WATERLINE. ANY DISTURBANCE OUTSIDE OF THIS AREA SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE. STREETS, DRIVEWAYS AND ASSOCIATED ITEMS SHALL BE PAID FOR UNDER OTHER ITEMS OF WORK.

23. THE CONTRACTOR SHALL RESTORE ALL DISTURBED GRASS AREAS TO A CONDITION EQUAL TO OR BETTER THAN THE EXISTING CONDITION. THE CONTRACTOR SHALL REPLACE THE SOD TO MATCH IN-KIND AND QUALITY. LIMITS OF DISTURBANCE SHALL NOT EXCEED 9-FEET CENTERED ON THE WATERLINE. ANY DISTURBANCE OUTSIDE OF THIS AREA SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE. THIS PAY ITEM INCLUDES ALL MOWING WITHIN THE RIGHT-OF-WAY AS DIRECTED DURING CONSTRUCTION. NETTING SHALL BE REMOVED FROM SOD PRIOR TO PLACEMENT.

24. SPOT ELEVATIONS ON THE MAIN WATER LINE RELATIVE TO FINISHED GRADE SHALL BE PROVIDED AT EACH 100-FT INTERVAL, COMPLETE WITH STATION AND OFFSET. IN ADDITION, ALL VALVES, FITTINGS, FIRE HYDRANTS (TOP OF NUT) AND OTHER MAJOR APPURTENANT ITEMS SHALL BE SHOWN WITH THE PROPER DESCRIPTION, STATION, OFFSET (NORTHING, EASTING) AND ELEVATION PER PLAN SURVEY CONTROL DATUM.

25. SPOT ELEVATIONS ON WATER METER CANS, VAULTS, SHALL BE SHOWN WITH THE PROPER DESCRIPTION (METER TYPE, METER SIZE, METER NUMBER, SERVICE MATERIAL, SERVICE SIZE), STATION, OFFSET (NORTHING, EASTING) AND ELEVATION PER PLAN SURVEY CONTROL DATUM. UPON DISCOVERY OF A LEAD OR GALVANIZED SERVICE LINE, NOTIFICATION SHALL BE MADE TO WATER DISTRIBUTION AND WORK SHALL CEASE UNTIL RELEASED AT WHICH TIME ANY AND ALL SERVICE LINES LOCATED THAT ARE LEAD OR GALVANIZED ARE TO BE REPLACED WITH APPROVED MATERIALS.

26. NOT USED.

27. PRESSURE TESTING AND CHLORINATION OF WATER MAINS SHALL NOT BE PERFORMED UNTIL THE CITY INSPECTOR HAS RECEIVED THE REQUIRED CONSTRUCTION AS-BUILT RECORDS.

28. NOT USED.

29. NOT USED.

30. AGG BASE AND SUBGRADE, PER CITY STANDARD SPECIFICATIONS AND STANDARD DETAILS 701 - 702, SHALL BE PAID UNDER EXCAVATION AND BACKFILL.

31. AGG BASE AND SUBGRADE, PER CITY STANDARD SPECIFICATIONS AND STANDARD DETAILS 703 - 704, SHALL BE PAID UNDER EXCAVATION AND BACKFILL.

32. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROL AND MAINTENANCE OF THE STORM WATER DRAINAGE FROM THE CONSTRUCTION SITE. STORM WATER PONDING ON THE CONSTRUCTION SITE THAT IS THE RESULT OF CONSTRUCTION WILL NOT BE ALLOWED. ALL COST ASSOCIATED WITH STORM WATER MANAGEMENT, AS WELL AS REMOVAL OF ALL SILT AND DEBRIS FROM ALL DRAINAGE STRUCTURES, STORM SEWER PIPES AND APPURTENANCES WITHIN THE PROJECT LIJMITS AT END OF PROJECT, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THIS ITEM.

33. EROSION PROTECTION SHALL BE PLACED AS FOLLOWS:

   A. AROUND INLETS TO PREVENT INFOW OF ERODED MATERIAL INTO STORM SEWER SYSTEM.

   B. IN LOCATIONS THROUGHOUT PROJECT SITE, AS DETERMINED BY THE ENGINEER, TO PREVENT WASH OF ERODED MATERIAL ONTO ADJACENT PROPERTY.

   C. FOR ENTIRE DURATION OF PROJECT, WITH MAINTENANCE AND REPLACEMENTS, AS DIRECTED BY THE ENGINEER;

   D. WITH PERIODIC REMOVAL OF SEDIMENT IN ACORDANCE WITH STORMWATER MANAGEMENT PLAN.

   ALL COSTS FOR ITEMS A-E ABOVE SHALL BE INCLUDED IN UNIT PRICE BID FOR THIS ITEM.

4 34. PAVEMNT REMOVAL AND REPLACEMENT FOR WATER, SANITARY, AND STORMWATER INSTALLATIONS - THIS PAY ITEM SUPERCEDES CITY OF TULSA STANDARD SPECIFICATION SECTION 329.6 WITH RESPECT TO SAW CUTTING AND DOWELS, AND INCLUDES THE FOLLOWING (THESE ITEMS SHALL NOT BE PAID SEPARATELY):

   A. SAW CUTTING
   B. DOWELS
   C. DISPOSAL OF BROKEN PAVEMENT
   D. TEMPORARY SURFACES
   E. ASSOCIATED EXCAVATION
   F. PREPARATION OF SUBGRADE
   G. FORMS OR REINFORCING
   H. REMOVAL OR REPLACEMENT OF GRAVEL
   I. ADDITIONAL SAW CUTTING OR REPLACEMENT OF PAVEMENT DAMAGED BY CONTRACTOR
   J. JOINT SEALER, TACK COATS, OR EDGE SEALING

   THIS PAY ITEM DOES NOT INCLUDE THE FOLLOWING WHICH SHALL BE PAID SEPARATELY IN ACCORDANCE WITH CITY OF TULSA STANDARD SPECIFICATIONS, DETAILS AND DRAWINGS:
   1. CURB AND GUTTER

WATERLINE CONSTRUCTION NOTES

1. THE CITY OF TULSA FIELD ENGINEERING DEPARTMENT SHALL INSPECT ALL TRENCHING, BEDDING, PIPE INSTALLATION, BACKFILL AND COMPACTION.

2. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT STANDARD SPECIFICATIONS AND STANDARD DETAILS, CITY OF TULSA ENGINEERING SERVICES DEPARTMENT.

3. EXISTING SERVICE CONNECTIONS ARE TO BE KEPT IN SERVICE UNTIL CONNECTIONS TO NEW MAIN ARE MADE. ALL SERVICE LINE RECONNECTIONS SHALL BE MADE BY THE CONTRACTOR. SERVICE RECONNECTIONS SHALL BE INSTALLED AS PER CITY OF TULSA STANDARD SPECIFICATIONS AND STANDARD DETAILS.

4. MINIMUM COVER OVER WATERLINES SHALL BE AS NOTED ON PLANS.

5. CONTRACTOR SHALL REPLACE EXISTING GRASS WITH SEED/SOD OF SAME TYPE AND VARIETY OR AS NOTED ON PLANS.

6. CONTRACTOR SHALL BORE EXISTING TREES UNDER DRIP LINE, UNLESS DIRECTED OTHERWISE BY ENGINEER.

7. CONTRACTOR SHALL BORE EXISTING DRIVEWAYS, UNLESS DIRECTED OTHERWISE BY ENGINEER.

8. WATER OPERATIONS SHALL OPERATE ALL VALVES ON TRANSMISSION MAINS (16" AND LARGER). CONTRACTOR SHALL OPERATE ALL VALVES ON DISTRIBUTION MAINS (SMALLER THAN 16") WITH THE COORDINATION OF FIELD ENGINEERING AND WATER OPERATIONS AND IN THE PRESENCE OF A FIELD ENGINEERING INSPECTOR.

   A. ATTEMPTS WILL BE MADE WITH ASSISTANCE FROM THE CONTRACTOR TO NOTIFY ALL AFFECTED CUSTOMERS 48 HOURS IN ADVANCE, PARTICULARLY IF COMMERCIAL OR INDUSTRIAL CUSTOMERS ARE INVOLVED. PRIOR TO SHUTDOWN, FIELD ENGINEERING WILL NOTIFY WATER OPERATIONS, AT 918-596-9488, GIVING AN ESTIMATED DOWNTIME. WATER OPERATIONS WILL NOTIFY THE FIRE DEPARTMENT OF ALL FIRE HYDRANTS OUT OF SERVICE AND WHEN THEY ARE BACK IN SERVICE, BY STREET ADDRESS OR INTERSECTION.

   B. WHERE COMMERCIAL, INDUSTRIAL, OR CRITICAL CUSTOMERS ARE AFFECTED, AND FOR ALL LINES 16" AND LARGER IN SIZE, FIELD ENGINEERING WILL REQUEST WATER OPERATIONS TO SHUT DOWN THE MAIN. THERE WILL BE A MINIMUM OF 48 HOUR NOTICE TO WATER OPERATIONS.

9. CONTRACTOR SHALL PROVIDE AT LEAST 48 HOUR NOTICE TO ALL RESIDENTS OR BUSINESSES AFFECTED BEFORE TURNING OFF ANY WATER. CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING DOOR HANGERS ON AFFECTED HOMES AND BUSINESSES.

10. CONTRACTOR SHALL GIVE THE NOTIFICATION CENTER OF THE OKLAHOMA ONE-CALL SYSTEM, INC, NOTICE OF ANY EXCAVATION NO SOONER THAN TEN DAYS NOR LATER THAN 48 HOURS, EXCLUDING SATURDAYS, SUNDAYS, LEGAL HOLIDAYS PRIOR TO COMMENCEMENT OF WORK, PHONE 1-800-522-6543.

11. LOCAL AND THROUGH TRAFFIC SHALL BE MAINTAINED THROUGH PROJECT AT ALL TIMES. OPEN CUT STREET CROSSINGS REQUIRE AN APPROVED TRAFFIC CONTROL PLAN WITH TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH CURRENT MUTCD REQUIREMENTS.

12. ANY DAMAGE CAUSED BY CONTRACTOR TO ADJACENT TRAFFIC SIGNAL INFRASTRUCTURE SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE TRAFFIC ENGINEER.

13. PRIOR TO PAVEMENT SAWING AND EXCAVATION NEAR SIGNALIZED INTERSECTION, CONTRACTOR SHALL CONTACT ENGINEERING SERVICES, TRAFFIC OPERATIONS, 918-596-9766, FOR SITE SPECIFIC, UNDERGROUND TRAFFIC UTILITY LOCATES.

14. CONSTRUCTION FOR ALL ENGINEERING SERVICES FACILITIES SHALL BE IN COMPLIANCE WITH THE LATEST EDITION OF TITLE 252, DEPARTMENT OF ENVIRONMENTAL QUALITY, CHAPTER 626, PUBLIC WATER SUPPLY CONSTRUCTION STANDARDS, OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ).

15. ALL EXCAVATED MATERIAL NOT REQUIRED IN OTHER AREAS OF THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF BY THE CONTRACTOR IN A MANNER ACCEPTABLE TO THE ENGINEER WITHOUT COST TO THE CITY. THE CONTRACTOR SHALL BE REQUIRED TO OBTAIN AN EARTH CHANGE PERMIT IF ANY EXCESS MATERIAL IS TO BE DISPOSED OF WITHIN THE CITY LIMITS OF TULSA.

16. ANY CHANGES FROM APPROVED PLANS SHALL BE SUBMITTED TO THE CITY OF TULSA FOR WRITTEN APPROVAL PRIOR TO INSTALLATION.

REGISTERED PROFESSIONAL ENGINEER — GREGORY JAMES COKER — 16840 — OKLAHOMA — 6-19-25

BEFORE YOU DIG OKIE 1-800-522-OKIE 811 CALL OKIE

TMUA-W 22-37

PAY QUANITITY & NOTES (WATERLINE)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
4 ADDENDUM 4 - ADDED AND MODIFIED PAY ITEM NOTES	JTB	08/01/2025

PLAN SCALE: NA
PROFILE SCALE:
HORIZONTAL: NA
VERTICAL NA

DRAWN	POE	06/2023	APPROVED:
DESIGNED	POE	06/2023	
SURVEY	MW	3/2022	
PROJ. MGR.			
LEAD ENGR.			
FIELD MGR.			

RECOMMENDED:
DESIGN MANAGER — CITY ENGINEER

FILE: H:\21-1009 DRAWING: 21-1009-WL Pay Quantities-Notes DATE:

ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75

TRAFFIC OPERATIONS GENERAL CONSTRUCTION NOTES

(A) THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE TRAFFIC SIGNAL IN A PROPER WORKING CONDITION DURING CONSTRUCTION AS DIRECTED BY THE TRAFFIC ENGINEER AND FOR FOLLOWING THE REQUIREMENTS OF THE COT SPEC 626 - TRAFFIC SIGNAL CONSTRUCTION AND OPERATION. ALL TRAFFIC MATERIALS SHALL MEET THE REQUIREMENTS OF COT SPEC 627 - PRE-QUALIFICATION FOR TRAFFIC OPERATIONS MATERIALS OR AS DIRECTED BY THE TRAFFIC ENGINEER. CONTRACTORS SHALL MEET THE REQUIREMENTS OF COT SPEC 628 - SIGNAL AND LIGHTING PROJECT CONTRACTOR EXPERIENCE REQUIRED.

(B) THE CONTRACTOR SHALL OBTAIN THE NECESSARY PERMISSION FOR ELECTRICAL INSPECTION ON ALL SIGNAL AND LIGHTING WORK PER COT SPEC 626 - TRAFFIC SIGNAL CONSTRUCTION AND OPERATION.

(C) ALL TRAFFIC MATERIALS REMOVED SHALL BE HANDLED PER COT SPEC 625 - REMOVAL OF TRAFFIC ITEMS.

(D) THIS PROJECT HAS BEEN DESIGNED AND IS TO BE CONSTRUCTED ACCORDING TO THE REQUIREMENTS OF THE 2022 VERSION OF THE CITY OF TULSA TRAFFIC OPERATIONS STANDARDS AND SPECIFICATIONS.

TRAFFIC OPERATIONS PAY ITEM NOTES

COT 602 ALL CONDUIT ENDS SHALL BE REAMED AND BUSHINGS SHALL BE INSTALLED PRIOR TO PULLING ANY WIRES.

COT 603 POLE FOUNDATIONS SHALL BE CONSTRUCTED ACCORDING TO THE APPLICABLE REQUIREMENTS OF ODOT STANDARD SPECIFICATIONS FOR DRILLED SHAFT FOUNDATIONS AS DIRECTED BY THE TRAFFIC ENGINEER.

COT 610 THE CABINET PROVIDED SHALL BE A STRETCH CABINET MEETING THE CABINET AND DOOR HEIGHT SPECIFICATIONS OF A MCCAIN 332S CABINET. ALL OTHER DIMENSIONS SHALL MEET CURRENT COT STANDARDS AND SPECIFICATIONS

THE TRAFFIC SIGNAL CONTROLLER PROVIDED SHALL BE AN ECONOLITE RACK MOUNT COBALT CONTROLLER IN A 332 SIGNAL CABINET OR 332S WHERE A BATTERY BACKUP IS INCLUDED. TRAFFIC SIGNAL CABINETS SHALL BE A 332S EXT RACK PER THE 2025SPEC. THE SIDES OF THE CONTROLLER CABINET SHALL BE PARALLEL TO THE STREETS. THE FRONT DOOR OF THE CABINET SHALL FACE AWAY FROM THE INTERSECTION. THE DOOR HINGES SHALL BE LOCATED ON THE SIDES OF THE CABINET FURTHEST AWAY FROM THE INTERSECTION, SO THE DOORS SWING OPEN AWAY FROM THE INTERSECTION.

CONFLICT MONITOR SHALL BE AN EDI 2018ECLIP OR APPROVED EQUAL. AN ETHERNET PORT SHALL BE PROVIDED ON THE FRONT PANEL. THE ETHERNET PORT SHALL BE ELECTRICALLY ISOLATED FROM THE MMU ELECTRONICS AND SHALL PROVIDE MINIMUM OF 1500 VRMS ISOLATION. THE CONNECTER SHALL BE AN RJ-45 EIGHT PIN CONNECTOR. AN HTML BASED CAPABILITY SHALL BE PROVIDED IN THE MONITOR TO CONFIGURE THE NETWORK PARAMETERS OF THE MMU ETHERNET PORT USING A STANDARD HTML BROWSER. ALL DISPLAY INDICATORS SHALL BE MOUNTED ON THE FRONT PANEL OF THE SIGNAL MONITOR AND SHALL BE WATER CLEAR, T-1 PACKAGE, SUPER BRIGHT TYPE LEDS. ALL FAULT LEDS SHALL BE RED EXCEPT THE PWR INDICATOR WHICH SHALL BE GREEN. A SEPARATE RED, YELLOW AND GREEN INDICATOR SHALL BE PROVIDED FOR EACH CHANNEL.

INCLUDE 2-19" RACK SHELVES, THAT ARE CHATSWORTH PRODUCTS PART NUMBER 10758-701 OR APPROVED EQUAL, IN ADDITION TO WHAT IS OUTLINED IN COT 610 SPECIFICATION. RACKS SHALL BE DESIGNED TO HOLD SMALL PERIPHERAL EQUIPMENT IN A CENTRAL LOCATION. EACH SHELF TYPICALLY HOLDS TWO UNITS AND ALLOWS A CONVENIENT CABLE RUN DOWN THE INSIDE OF THE RACK CHANNEL. RACK SHALL HOLD EQUIPMENT UP TO 17.35"W X 9.82"D AND MADE OF STRONG, LIGHTWEIGHT ALUMINUM THAT CAN SUPPORT UP TO 50 LB.

THE CONTROLLER CABINET DOORS SHALL BE EQUIPPED WITH A CL-TC1 GEN 2 CYBERLOCK CYLINDER AND EITHER A15481RS CCL TRAFFIC CABINET LOCK RH, OR A15481LS CCL TRAFFIC CABINET LOCK LH. THE CONTRACTOR WILL BE REQUIRED TO PURCHASE A CYBERKEY BLUE 3 THAT SHALL BE PROGRAMMED BY TRAFFIC OPERATIONS AT 4015 N HARVARD AVE, TULSA, OK 74115.

THE BATTERY BACKUP SYSTEM SHALL BE ECONOLITE ZX2000-48 SUPER CAPACITOR BATTERY MODULES AND DBLMXU-48 SERIES DOUBLE CONVERSION UPS.

THE CONTRACTOR SHALL DELIVER THE SIGNAL CABINET FULLY WIRED AND READY FOR INSTALLATION TO THE COT TRAFFIC OPERATIONS DIVISION FOR INSPECTION AND APPROVAL PRIOR TO INSTALLATION. COT WILL NOTIFY THE CONTRACTOR OF ANY DEFICIENCIES OR APPROVE THE CABINET WITHIN TWO WEEKS PER COT SPECIFICATION 610 FOR TRAFFIC SIGNAL CONTROLLER CABINET ASSEMBLIES.

COT 613 THE AUDIBLE PUSH BUTTONS PROVIDED SHALL BE POLARA IN2 WITH EITHER A SHELF MOUNT CONTROL UNIT OR A CARD RACK/300 SERIES CONTROL UNIT. PUSH BUTTONS SHALL BE INSTALLED ON POLES SUCH THAT THE PUSH BUTTONS ARE INSTALLED IN ACCORDANCE WITH ADA, PROWAG, AND MUTCD REQUIREMENTS, AND WITHIN 10 INCHES MAXIMUM FROM THE EDGE OF THE LEVEL, ALL-WEATHER SURFACE (SIDEWALK LANDING) AND WITHIN 10 FEET MAXIMUM FROM THE FACE OF THE CURB AT RAMPS. PUSH BUTTONS SHALL BE MOUNTED 42 INCHES ABOVE THE LANDING, ON THE SIDE OF THE POLE CLOSEST TO THE CORRESPONDING CROSSWALK. IF A PUSH BUTTON EXTENDER ARM IS NEEDED, THE EXTENDER ARM SHALL NOT EXCEED 12 INCHES IN LENGTH. WHEN PUSH BUTTONS ARE LOCATED WITHIN 10 FEET OF EACH OTHER, AUDIBLE VOICE MESSAGES SHALL BE USED. THE PUSH BUTTONS SHALL BE FACTORY PROGRAMMED WITH THE FOLLOWING VERBAL MESSAGES:

DURING FLASHING DON'T WALK AND STEADY DON'T WALK:
"WAIT"
DURING EXTENDED PUSH BUTTON PRESS (TWO SECONDS OR LONGER)
"WAIT TO CROSS (STREET NAME A) AT (STREET NAME B)"
DURING WALK:
"(STREET NAME A) - WALK SIGN IS ON TO CROSS (STREET NAME A)"

COT 614 HINGES SHALL BE LOCATED TO THE LEFT SIDE FOR 3-SECTION SIGNAL HEADS AND 4-SECTION SIGNAL HEADS, AND TOWARD THE OUTSIDE EDGES FOR A 5-SECTION SIGNAL HEAD.

"THIS PAY ITEM SHALL INCLUDE (*INSERT #)* OF THE 3-SECTION BACKPLATES, (INSERT #) OF THE 4-SECTION BACKPLATES, AND (*INSERT #)* OF THE 5-SECTION "DOGHOUSE" STYLE BACKPLATES. ALL BACKPLATES PROVIDED ON THIS PROJECT SHALL BE ALUMINUM, WITH A DURABLE, FACTORY-APPLIED, NON-REFLECTIVE BLACK FINISH (POWDER COATED, BAKED ENAMEL, OR OTHER STYLE AS APPROVED BY THE TRAFFIC ENGINEER) WITH LOUVERS IN THE BACKPLATE." A 2 INCH WIDE STRIP OF FLUORESCENT YELLOW RETRO-REFLECTIVE TAPE, TYPE IX, SHALL BE USED AT THE FRONT PERIMETER OF THE BACKPLATES.

THE PEDESTRIAN SIGNAL HEADS PROVIDED SHALL BE EAGLE 16" PEDESTRIAN SIGNAL HEAD OR APPROVED EQUAL. ALL PEDESTRIAN SIGNAL HEADS SHALL BE INSTALLED ON THE POLES SUCH THAT THE SIGNAL HEADS ARE VISIBLE FROM THE CROSSWALK.

COT 617 THE CONTRACTOR SHALL SUPPLY LED LUMINAIRE WITH THE FOLLOWING ATTRIBUTES: 15,700 LUMENS, 120 VOLT, MINIMUM 118 LUMENS PER WATT, GRAY (UNLESS BLACK POLES ARE SPECIFIED), TYPE 3 DISTRIBUTION, 4000 KELVIN, WITH SURGE PROTECTION, 7 PIN RECEPTACLE AND LONG LIFE PHOTOCELL. AMERICAN ELECTRIC LIGHTING # ATBM F MVOLT R3 P7 PCLL OR APPROVED EQUAL.

COT 625 THIS PAY ITEM INCLUDES THE REMOVAL AND DELIVERY OF THE FOLLOWING EQUIPMENT TO THE CITY OF TULSA TRAFFIC OPERATIONS SHOP AT 3801 N HARVARD AVE, WHICH IS TO REMAIN THE PROPERTY OF THE CITY OF TULSA:
TRAFFIC SIGNAL ITEMS INCLUDE; MULTI-SIDED GALVANIZED TRAFFIC SIGNAL POLES, SIGNAL HEADS, PEDESTRIAN HEADS AND PUSH BUTTONS, BACK PLATES, CONTROLLER CABINET ASSEMBLY, CABINET GUARD, UNDAMAGED PULL BOX LIDS, MAST ARM SIGNS, ASTRO-BRACKETS, SPAN WIRE EQUIPMENT AND ANY OTHER TRAFFIC SIGNAL EQUIPMENT REMOVED EXCEPT FOR THE PULL BOXES, CONDUIT AND WIRE WHICH SHALL BECOME THE PROPERTY OF THE CONTRACTOR. THE PRICE BID SHALL INCLUDE THE REMOVAL OF ALL FOOTINGS BELOW GROUND LEVEL OR AS DIRECTED BY THE ENGINEER. FOOTINGS, GREEN ARM POLES, AND ALL OTHER SIGNAL POLES OTHER THAN THE MULTI-SIDED POLES ARE TO BECOME THE PROPERTY OF THE CONTRACTOR.

SUMMARY OF PAY QUANTITIES

TRAFFIC SIGNALS

ITEM	SPEC	DESCRIPTION	NOTES	UNIT	QUANTITY
143	COT 601	PULL BOX (SIZE II)		EA.	6
144	COT 601	PULL BOX (SIZE III)		EA.	1
145	COT 602	1" PVC SCH. 40 PLASTIC CONDUIT TRENCHED	(COT 602)	L.F.	150
146	COT 602	2" PVC SCH. 40 PLASTIC CONDUIT TRENCHED	(COT 602)	L.F.	150
147	COT 602	2" PVC SCH. 40 PLASTIC CONDUIT BORED	(COT 602)	L.F.	50
148	COT 602	3" PVC SCH. 40 PLASTIC CONDUIT TRENCHED	(COT 602)	L.F.	265
149	COT 602	2-3" PVC SCH. 40 PLASTIC CONDUIT BORED	(COT 602)	L.F.	230
150	COT 603	PEDESTRIAN SIGNAL FOOTING	(COT 603)	EA.	10
151	COT 610	TRAFFIC CONTROLLER CABINET ASSEMBLY	(COT 610)	EA.	1
152	COT 611	GREEN #6 THHN ELECTRICAL CONDUCTOR		L.F.	635
153	COT 611	GREEN #12 THHN ELECTRICAL CONDUCTOR		L.F.	635
154	COT 611	2 #14 SHIELDED ELECTRICAL CONDUCTOR		L.F.	465
155	COT 611	4 #14 TRAFFIC SIGNAL ELECTRICAL CABLE		L.F.	360
156	COT 611	7 #14 TRAFFIC SIGNAL ELECTRICAL CABLE		L.F.	640
157	COT 612	CABINET BASE, APRON AND GUARD		EA.	1
158	COT 613	AUDIBLE PEDESTRIAN PUSH BUTTON STATION AND SIGNS	(COT 613)	EA.	16
159	COT 613	AUDIBLE PEDESTRIAN PUSH BUTTON CONFIG/PROGRAMMING DEVICE	(COT 613)	EA.	3
160	COT 613	AUDIBLE PEDESTRIAN PUSH BUTTON CONTROL CARD/UNIT	(COT 613)	EA.	3
161	COT 614	LED ICC PEDESTRIAN HEAD (#33)	(COT 614)	EA.	16
162	COT 617	6' PEDESTRIAN PUSH BUTTON POLE	(COT 617)	EA.	7
163	COT 617	10' PEDESTAL POLE	(COT 617)	EA.	3
164	COT 625	REMOVAL OF TRAFFIC ITEMS	(COT 625)	EA.	1
165	COT 625	TRAFFIC SIGNAL MAINTENANCE		LS	1
166	COT 625	SIGNAL MODIFICATIONS FOR LANE CLOSURES		EA.	1
219	COT 611	20 #14 TRAFFIC SIGNAL ELECTRICAL CABLE		L.F.	640

EXISTING HORIZONTAL UTILITY LOCATIONS AND DEPTHS ARE APPROXIMATE AND MUST BE FIELD VERIFIED PRIOR TO CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER Ryan E. Henderson 27234 OKLAHOMA 6/30/25

BEFORE YOU DIG 811 CALL OKIE

TRAFFIC PAY QUANTITIES AND NOTES

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD./N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z, 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

1111 N LEE AVE
SUITE 236
OKLAHOMA CITY, OK 73103
PHONE: (405) 384-5127
OK C.A. #5860 EXP. 06/30/2025
LEE ENGINEERING

PLAN SCALE 1" = 10'	DRAWN	LEE	6/2025
	DESIGNED	LEE	6/2025
	SURVEY		
PROFILE SCALES:	PROJECT MGR.		
	LEAD ENGR.		
	FIELD MGR.		
HORIZONTAL: N/A	RECOMMENDED:		
VERTICAL: N/A	DESIGN MANAGER		
	CITY ENGINEER		
	FILE:		DATE:
	ATLAS PAGE NO:		SHEET: 6 OF 268

NO.	DATE	REVISION DESCRIPTION
1	8/6/25	ADDENDUM NO. 4

4

PAY QUANTITIES

0330 TRAFFIC LIGHTING

ITEM NO.	CODE NO.	DESCRIPTION		UNIT	QUANTITY
802(B)	0324	2" PVC SCH. 40 PLASTIC CONDUIT TRENCHED	(L3)(L4)	LF	7,800.00
802(B)	0325	2" PVC SCH. 80 PLASTIC CONDUIT TRENCHED	(L1)(L3)(L4)	LF	800.00
803(A)	1220	PULL BOX (SIZE II)	(L5)	EA	53.00
810(A)	8200	SERVICE POLE	(L2)	EA	1.00

TRAFFIC LIGHTING GENERAL CONSTRUCTION NOTES:

(C1) SYMBOLS AND LEGENDS ARE DIAGRAMMATIC ONLY AND LOCATIONS SHALL BE ADJUSTED FOR EXISTING FIELD CONDITIONS, BUT NO MAJOR ALTERATIONS OR RELOCATIONS WILL BE MADE WITHOUT FIRST CONSULTING WITH THE TRAFFIC ENGINEER DIVISION AT (405) 521-2861.

(C2) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE HE MAY INFLICT TO THE EXISTING UNDERGROUND UTILITIES WITHIN THE PROJECT AREA AS A RESULT OF HIS DIGGING, TRENCHING, BORING, ETC.... PRIOR TO DIGGING NEAR THE UTILITIES, THE CONTRACTOR SHALL CALL FOR A LIST OF ALL UNDERGROUND FACILITIES REGISTERED IN THE AREA OF CONSTRUCTION LISTED WITH THE FOLLOWING AGENCIES:
THE "OKIE" NOTIFICATION CENTER 811 OR 1-800-522-6543 OR WWW.CALLOKIE.COM OR THE LOCAL COUNTY CLERK'S OFFICE.

DEPTH OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

(C3) THE PROJECT ENGINEER SHALL BE RESPONSIBLE FOR COORDINATING THE EXISTING PROJECT(S) WITH PROJECT ENGINEER, SO THAT CONSTRUCTION WORK CAN BE MAINTAINED ON ALL PERTAINING PROJECTS.

(C4) PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VISUALLY INSPECT THE PLAN LOCATION OF ALL CONVENTIONAL LIGHT POLES FOR PROPER OVERHEAD WIRE CLEARANCE. THESE CLEARANCES SHALL BE IN ACCORDANCE TO THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) SECTION 1910. THERE SHALL BE A MINIMUM RADII OF 10 FOOT CLEARANCE OF ANY OVERHEAD LINES FROM THE CLOSEST POINT ON THE LIGHT POLE. ANY NEW LIGHT POLES PUT IN CLOSER THAN THIS 10 FOOT MINIMUM SHALL BE RELOCATED AT THE EXPENSE OF THE CONTRACTOR.

PAY ITEM NOTES:

(L1) ALL CONDUIT UNDER PAVEMENT TO BE BORED. COST OF SCHEDULE 80 PVC BORING SHALL BE INCLUDED IN BID PRICE FOR SCHEDULE 80 PVC TRENCHED.

(L2) SERVICE POLE PAY ITEM SHALL INCLUDE PAYMENT FOR ALL ITEMS TO CONSTRUCT IN PLACE EACH RACK OR PEDESTAL AS DESCRIBED HEREIN; ALL MATERIAL AND EQUIPMENT LOCATED PHYSICALLY IN EACH RACK OR PEDESTAL TO BE FURNISHED, INSTALLED, AND TESTED AS DESCRIBED HEREIN (INCLUDING PHOTOELECTRIC CELL MOUNTED IN EACH RACK OR PEDESTAL STRUCTURE) AND SECONDARY ELECTRIC UTILITY CONNECTIONS REQUIRED TO POWER SAID RACK OR PEDESTAL. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY FOR EXTENSIONS TO BE PAID FOR BY OWNER OUTSIDE OF THIS CONTRACT. THE SERVICE POLE PAY ITEM SHALL INCLUDE ARC FLASH ANALYSIS AT EACH LOCATION. PAYMENT OF STRUCTURAL CONCRETE AND REINFORCING STEEL FOR EACH PEDESTAL SHALL BE SUBSIDIARY TO SERVICE POLE PAY ITEM. SEPARATE PAYMENT WILL NOT BE MADE FOR CONCRETE OR STEEL AT THIS LOCATION. ALL ADJUSTMENTS TO PROPOSED ELECTRIC SERVICE SHALL NOT BE MEASURED FOR SEPARATE PAYMENT BUT SHALL BE SUBSIDIARY TO THE SERVICE POLE PAY ITEM.

(L3) ALL WARNING TAPE, CONDUIT CLAMPS, FITTINGS, SWEEPS, TRENCHING, BORING, AND OTHER NECESSARY ITEMS FOR ROUTING CONDUIT AS SHOWN ON PLANS SHALL BE SUBSIDIARY TO CONDUIT PAY ITEM.

(L4) LARGE QUANTITY ELECTRICAL LF ITEMS INCLUDE 10% CONTINGENCY FOR ELEVATION CHANGES, VERTICAL TRANSITION AREAS, AND OTHER INCIDENTAL ITEMS.

(L5) ALL PULLBOXES SHALL BE 17.5" X 30.5" X 24", MATCHING DIMENSION REQUIREMENTS OF THE CITY OF TULSA SIZE II PULLBOX.

THE FOLLOWING STANDARDS WILL BE REQUIRED

COT TRAFFIC LIGHTING (2022 STANDARDS)	ODOT TRAFFIC LIGHTING (2009 STANDARDS)
STD. 601	CCD1-1-00
STD. 602	CCD2-1-00
	PBD1-1-00
	SPD1-1-00

SERVICE POLE SCHEDULE

SERVICE POLE	STATION	OFFSET	SECONDARY VOLTAGE AND NO. PHASE	NO. OF POLES/CONTROLLER	NO. OF BREAKERS
GILCREASE MUSEUM RD	168+31.09	64.10' LT	3 WIRE 480V - 1	20	TEN (10) 20A/2P

PULL BOX SCHEDULE

ID NO.	2" PVC SCH. 40 PLASTIC CONDUIT TRENCHED	2" PVC SCH. 80 PLASTIC CONDUIT TRENCHED	PULL BOX (SIZE II)
	802(B)	802(B)	803(A)
	LF	LF	EA
PB-LP-1	147.17	15.10	1.00
PB-LP-2	147.17	15.10	1.00
PB-LP-3	147.17	15.10	1.00
PB-LP-4	147.17	15.10	1.00
PB-LP-5	147.17	15.10	1.00
PB-LP-6	147.17	15.10	1.00
PB-LP-7	147.17	15.10	1.00
PB-LP-8	147.17	15.10	1.00
PB-LP-9	147.17	15.10	1.00
PB-LP-10	147.17	15.10	1.00
PB-LP-11	147.17	15.10	1.00
PB-LP-12	147.17	15.10	1.00
PB-LP-13	147.17	15.10	1.00
PB-LP-14	147.17	15.10	1.00
PB-LP-15	147.17	15.10	1.00
PB-LP-16	147.17	15.10	1.00
PB-LP-17	147.17	15.10	1.00
PB-LP-18	147.17	15.10	1.00
PB-LP-19	147.17	15.10	1.00
PB-LP-20	147.17	15.10	1.00
PB-LP-21	147.17	15.10	1.00
PB-LP-22	147.17	15.10	1.00
PB-1	147.17	15.10	1.00
PB-2	147.17	15.09	1.00
PB-3	147.17	15.09	1.00
PB-4	147.17	15.09	1.00
PB-5	147.17	15.09	1.00
PB-6	147.17	15.09	1.00
PB-7	147.17	15.09	1.00
PB-8	147.17	15.09	1.00
PB-9	147.17	15.09	1.00
PB-10	147.17	15.09	1.00
PB-11	147.17	15.09	1.00
PB-12	147.17	15.09	1.00
PB-13	147.17	15.09	1.00
PB-14	147.17	15.09	1.00
PB-15	147.17	15.09	1.00
PB-16	147.17	15.09	1.00
PB-17	147.17	15.09	1.00
PB-18	147.17	15.09	1.00
PB-19	147.17	15.09	1.00
PB-20	147.17	15.09	1.00
PB-21	147.17	15.09	1.00
PB-22	147.17	15.09	1.00
PB-23	147.17	15.09	1.00
PB-24	147.17	15.09	1.00
PB-25	147.17	15.09	1.00
PB-26	147.17	15.09	1.00
PB-27	147.17	15.09	1.00
PB-28	147.17	15.09	1.00
PB-29	147.17	15.09	1.00
PB-30	147.17	15.09	1.00
PB-31	147.16	15.09	1.00
TOTAL:	7800.00	800.00	53.00

LICENSED PROFESSIONAL ENGINEER
James K. Schmitt
34062
OKLAHOMA

Digitally Signed 08/04/2025

BEFORE YOU DIG
811
1-800-522-OKIE
CALL OKIE

ADVERTISE DATE:		
REVISION	BY	DATE
4 ADDENDUM 4 - MODIFIED OVERALL DESIGN	JKS	08/04/2025

SUMMARY OF PAY QUANTITIES AND NOTES (LIGHTING)

ARTERIAL REHAB
SHERIDAN RD - 91ST TO 101ST ST
#144017-AJ

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
GARVER
6100 S. YALE AVE, SUITE 1300
TULSA, OKLAHOMA 74136
Phone: (918) 250-5922
Fax: (918) 858-0107

DRAWN			APPROVED:
DESIGNED			
SURVEY			
PROJ. MGR.			
LEAD MGR.			
FIELD MGR.			

PLAN SCALE
1" = 30'
PROFILE SCALE
HORIZONTAL:
1" = 30'
VERTICAL:
1" = 30'

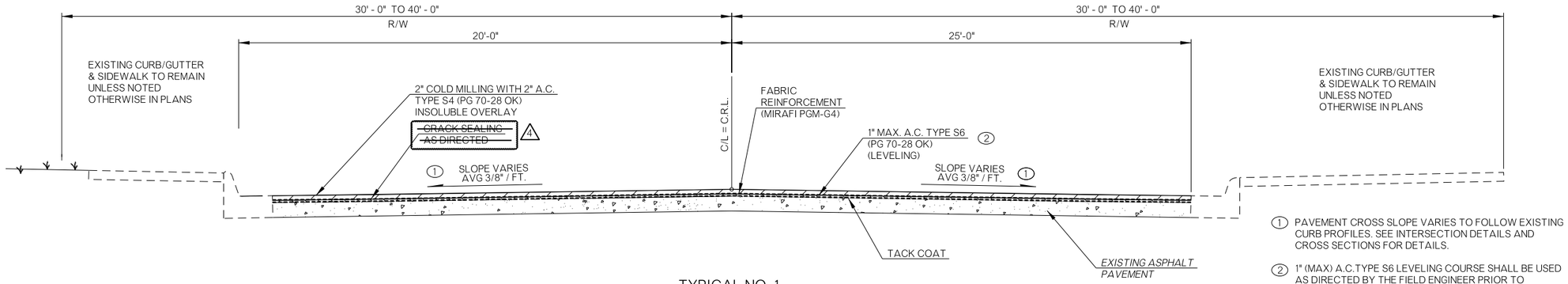
RECOMMENDED:

DESIGN MANAGER | CITY ENGINEER

FILE: | DRAWING: | DATE:

ATLAS PAGE NO. | SHEET 7 OF 268 SHEETS

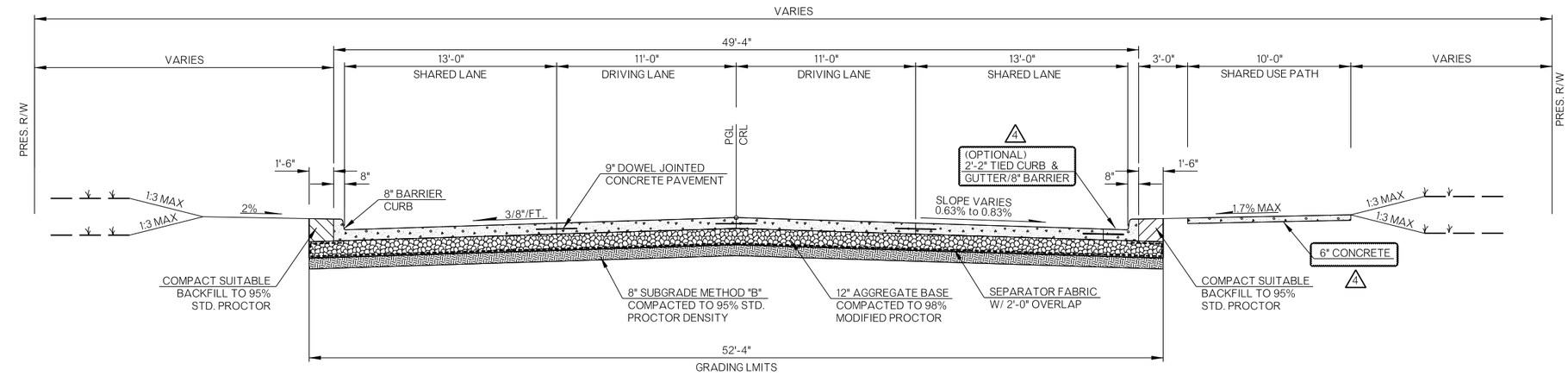
8/4/2025 11:12:43 AM L:\2020\20T27100 - Improve Our Tulsa 2 Program Management\Drawings\N Gilcrease Muesum Rd Drawings\Final Lighting\GMR-SUMMARY OF PAY QUANTITES AND NOTES (LIGHTING).dgn



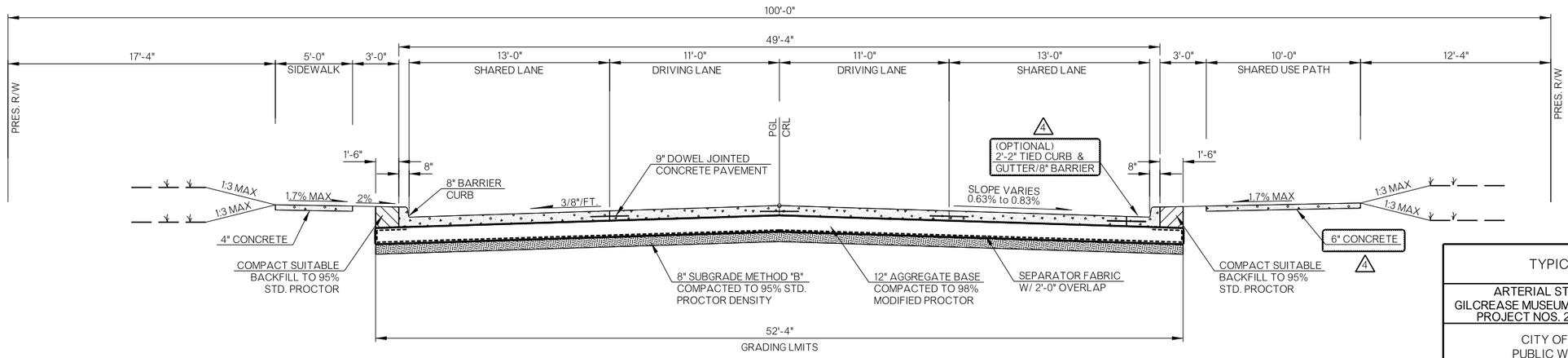
1 PAVEMENT CROSS SLOPE VARIES TO FOLLOW EXISTING CURB PROFILES. SEE INTERSECTION DETAILS AND CROSS SECTIONS FOR DETAILS.

2 1" (MAX) A.C.TYPE S6 LEVELING COURSE SHALL BE USED AS DIRECTED BY THE FIELD ENGINEER PRIOR TO PLACING FABRIC REINFORCEMENT AND MAY BE OMITTED IN ITS ENTIRETY.

TYPICAL NO. 1
STA. 114+92.02 TO STA. 122+52.03



TYPICAL NO. 2
STA. 122+52.03 TO STA. 125+48.34



TYPICAL NO. 3
STA. 126+41.00 TO STA. 128+70.00

REVISION	BY	DATE
4 ADDENDUM 4 - MODIFIED SIDEWALK, CURB AND GUTTER, AND CRACK SEAL NOTE	JTB	08/01/2025

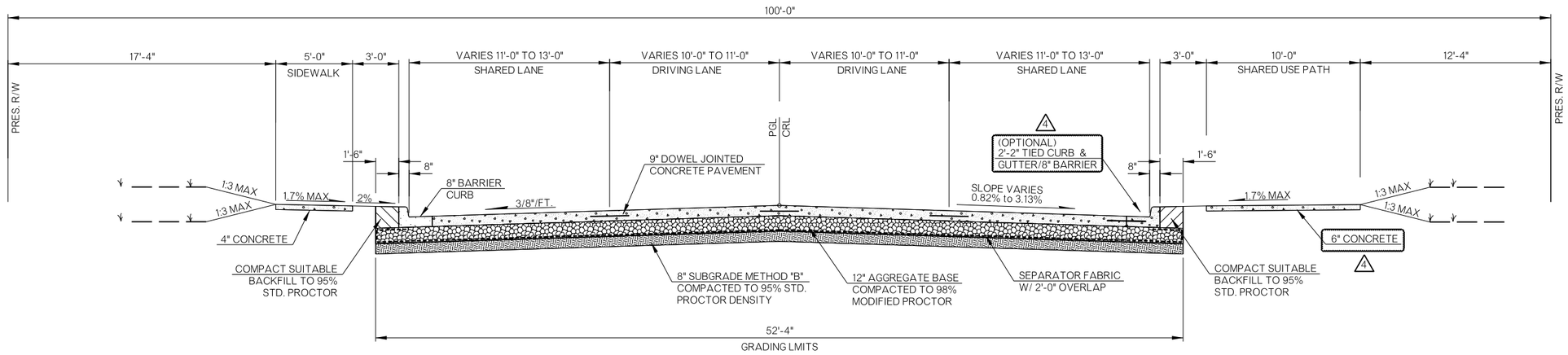
TYPICAL SECTION (1)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

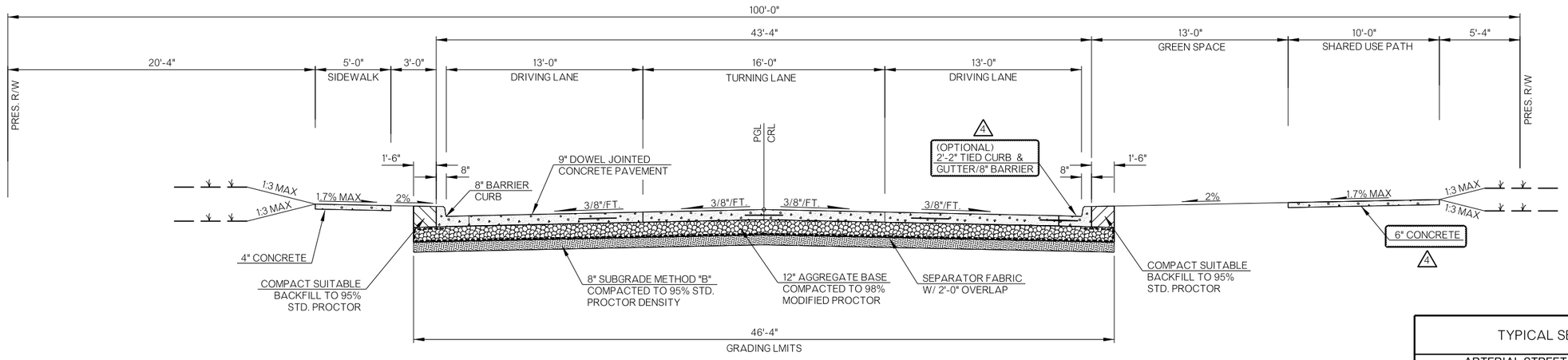
PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

PLAN SCALE: 1" = N/A	DRAWN	POE	06/2023	APPROVED:
	DESIGNED	POE	06/2023	
	SURVEY			
PROFILE SCALE:	PROJ. MGR.			
HORIZONTAL: 1" = N/A	LEAD ENGR.			
	FIELD MGR.			
VERTICAL 1" = N/A	RECOMMENDED:			
	DESIGN MANAGER			CITY ENGINEER
FILE: H:\21-1009	DRAWING: 21-1009-Typical Sections			DATE:
ATLAS PAGE NO:	19, 20, 21, 42, 43, 74, 75			SHEET 8 OF 268 SHEETS



TYPICAL NO. 4

STA. 128+70.00 TO STA. 131+45.00



TYPICAL NO. 5

STA. 131+45.00 TO STA. 139+72.49

LICENSED PROFESSIONAL ENGINEER
JARED T. BATES
20681
OKLAHOMA

6/20/2025

BEFORE YOU DIG
811
1-800-522-OKIE
CALL OKIE

TYPICAL SECTION (2)

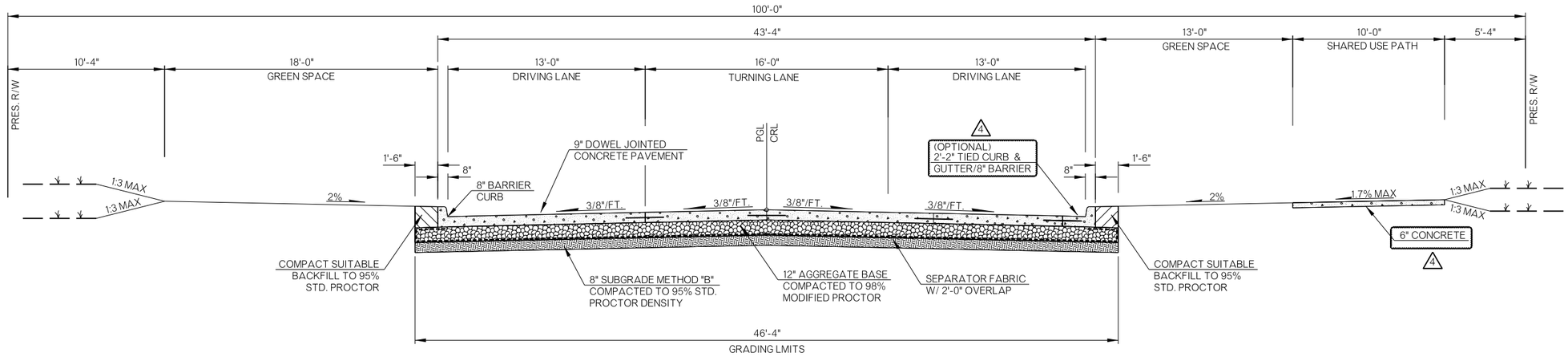
ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

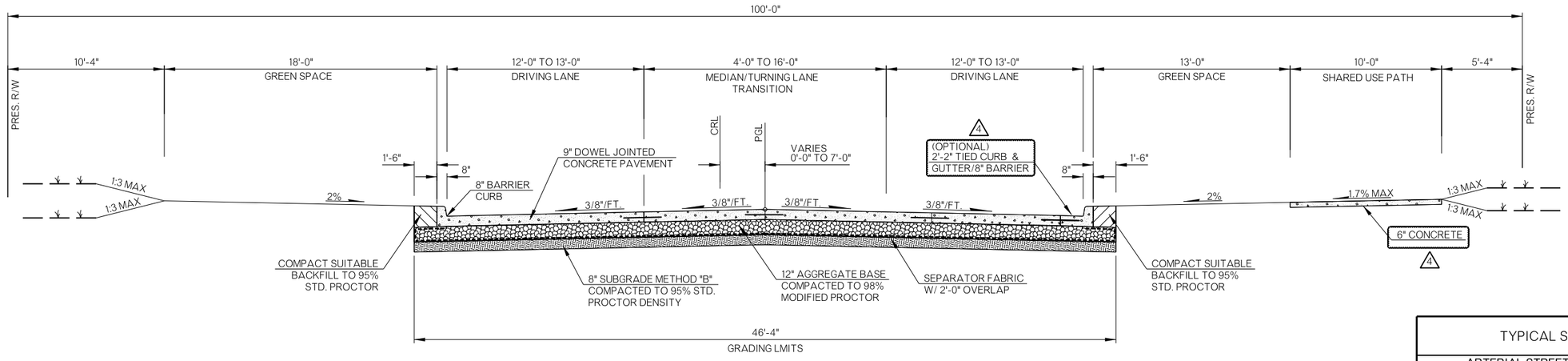
REVISION	BY	DATE
4 ADDENDUM 4 - MODIFIED SIDEWALK AND CURB AND GUTTER	JTB	08/01/2025

PLAN SCALE: 1" = N/A	DRAWN	POE	06/2023	APPROVED:	
	DESIGNED	POE	06/2023		
	SURVEY				
PROFILE SCALE:	PROJ. MGR.				
HORIZONTAL: 1" = N/A	LEAD ENGR.				
	FIELD MGR.				
VERTICAL 1" = N/A	RECOMMENDED:				
	DESIGN MANAGER			CITY ENGINEER	
FILE: H:\21-1009	DRAWING: 21-1009-Typical Sections			DATE:	
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75				SHEET 9 OF 268 SHEETS	



TYPICAL NO. 6

STA. 139+72.49 TO STA. 148+80.00



TYPICAL NO. 6

STA. 148+80.00 TO STA. 151+69.85

LICENSED PROFESSIONAL ENGINEER
JARED T. BATES
20681
OKLAHOMA

6/20/2025

BEFORE YOU DIG
811
1-800-522-OKIE
CALL OKIE

TYPICAL SECTION (3)

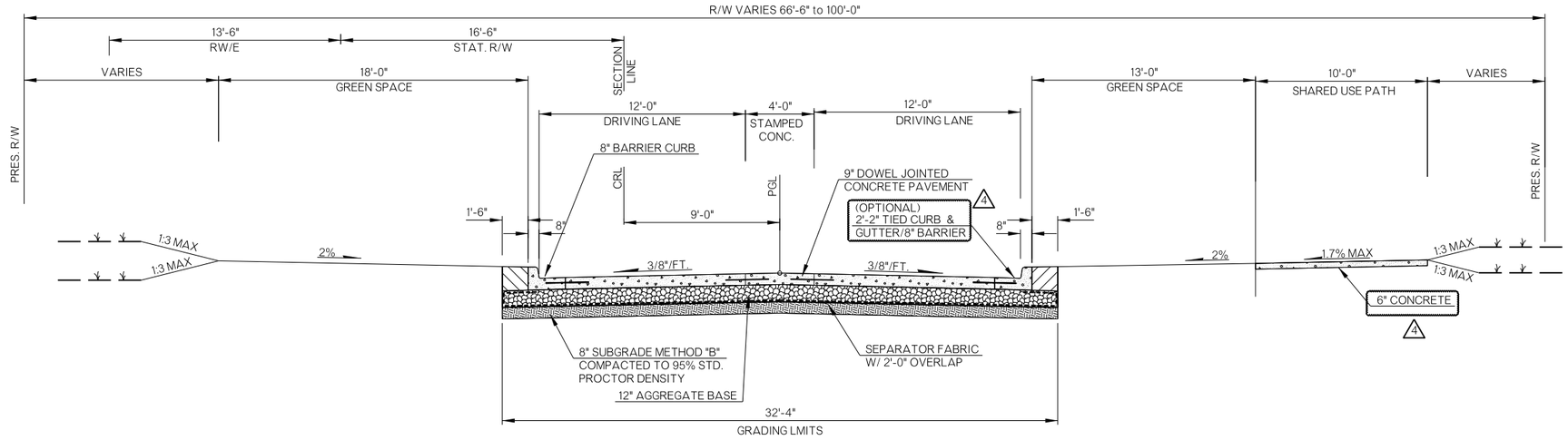
ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

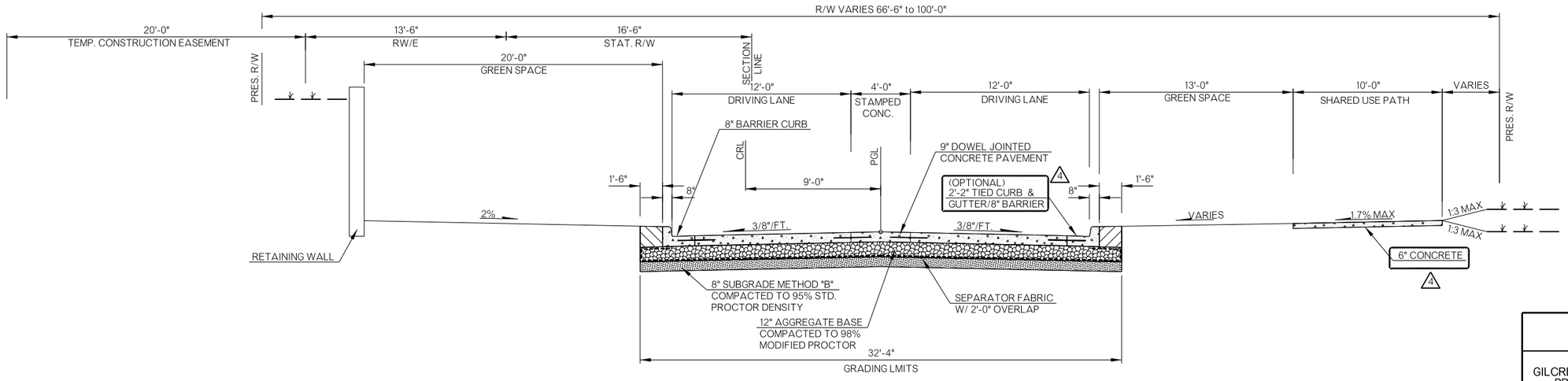
REVISION	BY	DATE
4 ADDENDUM 4 - MODIFIED SIDEWALK AND CURB AND GUTTER	JTB	08/01/2025

PLAN SCALE: 1" = N/A	DRAWN	POE	06/2023	APPROVED:	
	DESIGNED	POE	06/2023		
	SURVEY				
PROFILE SCALE:	PROJ. MGR.				
HORIZONTAL: 1" = N/A	LEAD ENGR.				
	FIELD MGR.				
VERTICAL 1" = N/A	RECOMMENDED:				
	DESIGN MANAGER			CITY ENGINEER	
FILE: H:\21-1009	DRAWING: 21-1009-Typical Sections			DATE:	
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75				SHEET 10 OF 268 SHEETS	



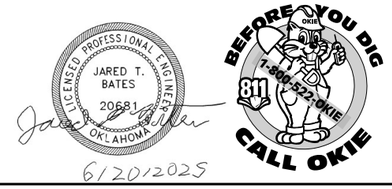
TYPICAL NO. 7

STA. 150+50.69 TO STA. 155+50.00



TYPICAL NO. 8

STA. 155+50.00 TO STA. 164+74.00



TYPICAL SECTION (4)

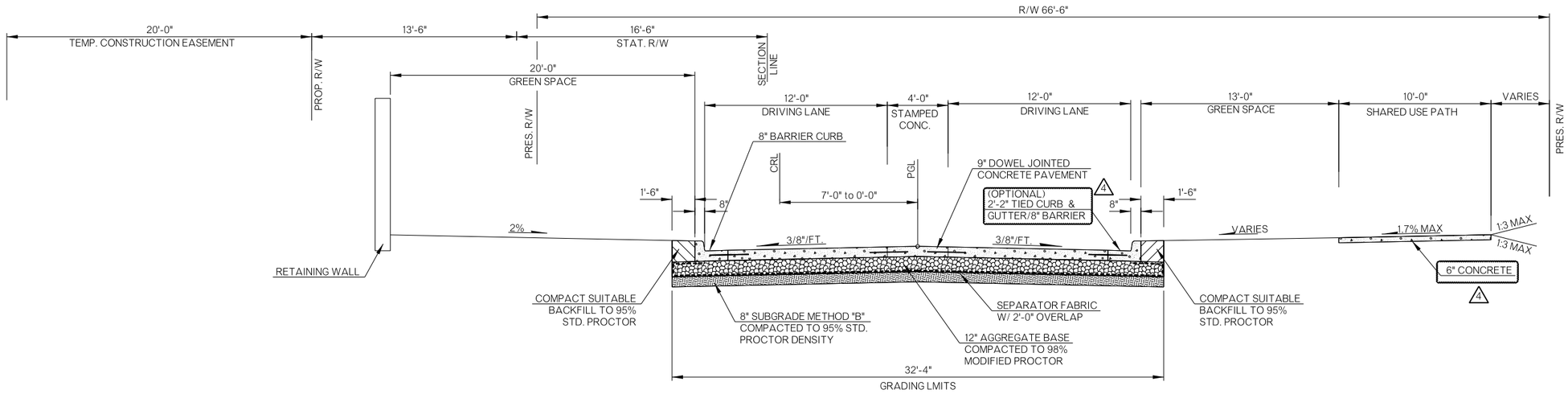
ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

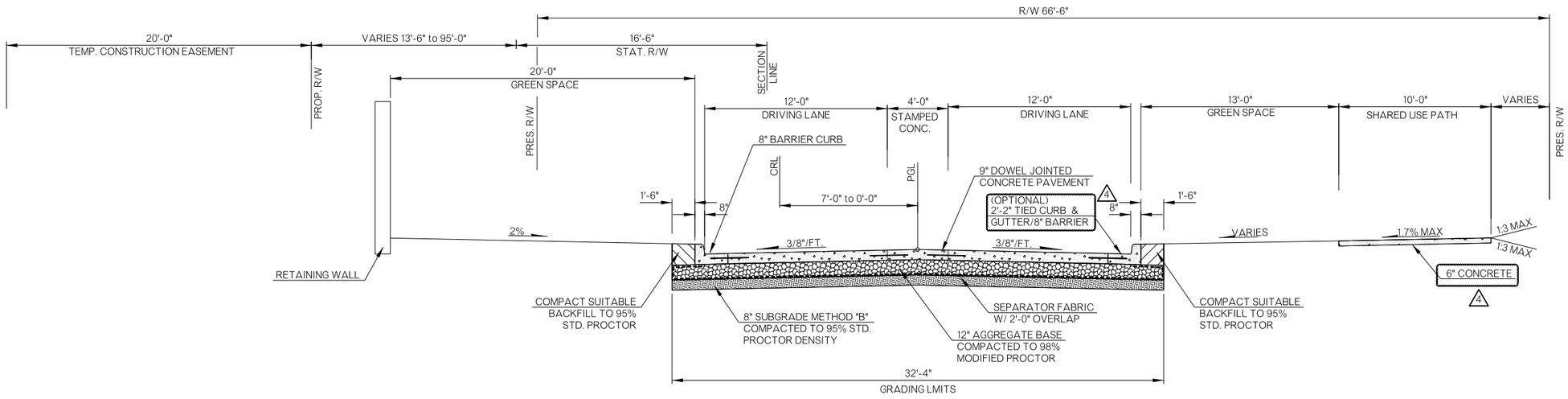
REVISION	BY	DATE
4 ADDENDUM 4 - MODIFIED SIDEWALK AND CURB AND GUTTER	JTB	08/01/2025

PLAN SCALE:	DRAWN	POE	06/2023	APPROVED:	
1" = N/A	DESIGNED	POE	06/2023		
	SURVEY				
PROFILE SCALE:	PROJ. MGR.				
HORIZONTAL: 1" = N/A	LEAD ENGR.				
	FIELD MGR.				
VERTICAL 1" = N/A	RECOMMENDED:				
	DESIGN MANAGER			CITY ENGINEER	
FILE: H:\21-1009	DRAWING: 21-1009-Typical Sections			DATE:	
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75				SHEET 11 OF 268 SHEETS	



TYPICAL NO. 9

STA. 164+70.00 TO STA. 165+92.08



TYPICAL NO. 10

STA. 165+92.08 TO STA. 168+02.95

LICENSED PROFESSIONAL ENGINEER
JARED T. BATES
20681
OKLAHOMA

6/20/2025

BEFORE YOU DIG
811
1-800-522-OKIE
CALL OKIE

TYPICAL SECTION (5)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
4 ADDENDUM 4 - MODIFIED SIDEWALK AND CURB AND GUTTER	JTB	08/01/2025

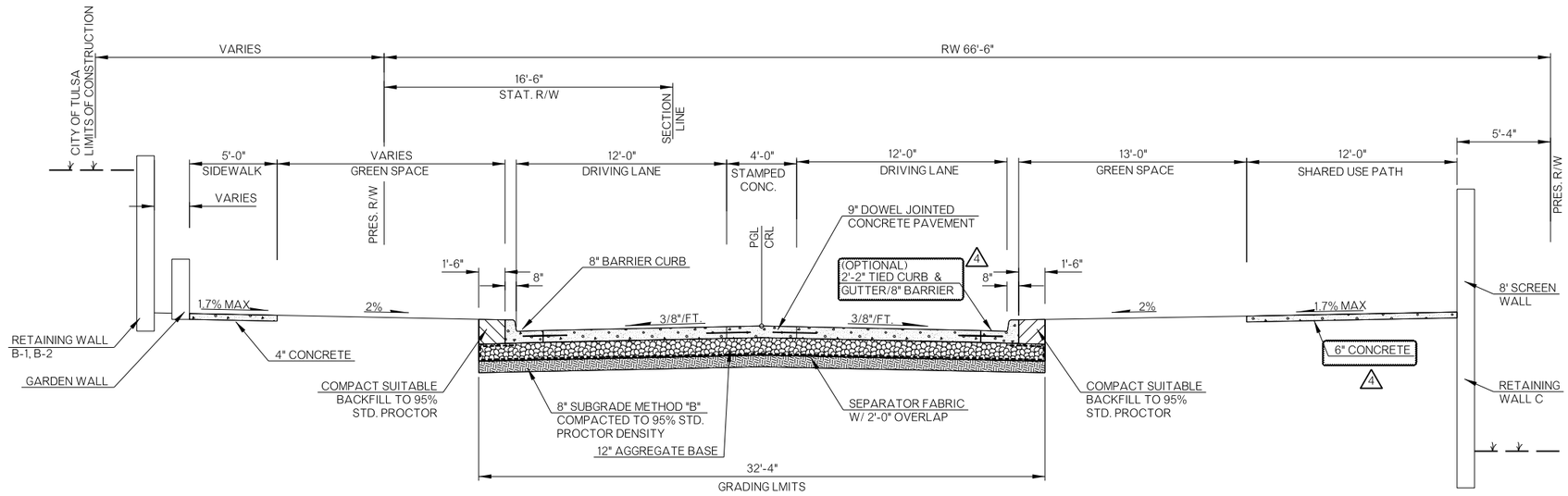
PLAN SCALE: 1" = N/A
PROFILE SCALE:
HORIZONTAL: 1" = N/A
VERTICAL 1" = N/A

DRAWN	POE	06/2023	APPROVED:
DESIGNED	POE	06/2023	
SURVEY			
PROJ. MGR.			
LEAD ENGR.			
FIELD MGR.			

RECOMMENDED:
DESIGN MANAGER
CITY ENGINEER

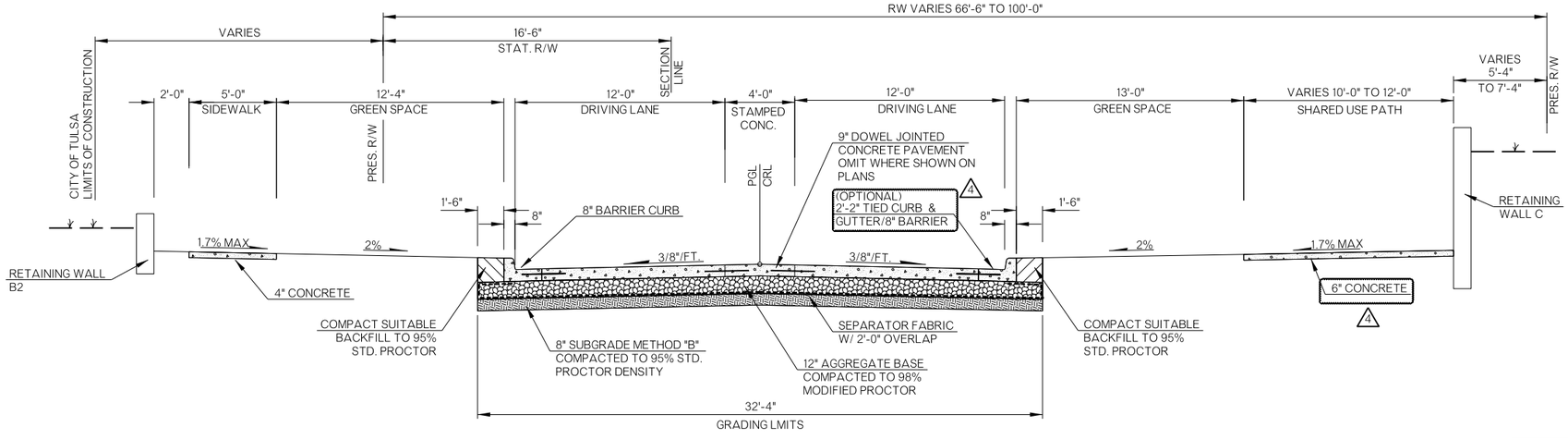
FILE: H:\21-1009 DRAWING: 21-1009-Typical Sections DATE:

ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75



TYPICAL NO. 11

STA. 168+02.95 TO STA. 177+55.00



TYPICAL NO. 12

STA. 177+50.00 TO STA. 182+19.26

TYPICAL SECTION (6)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

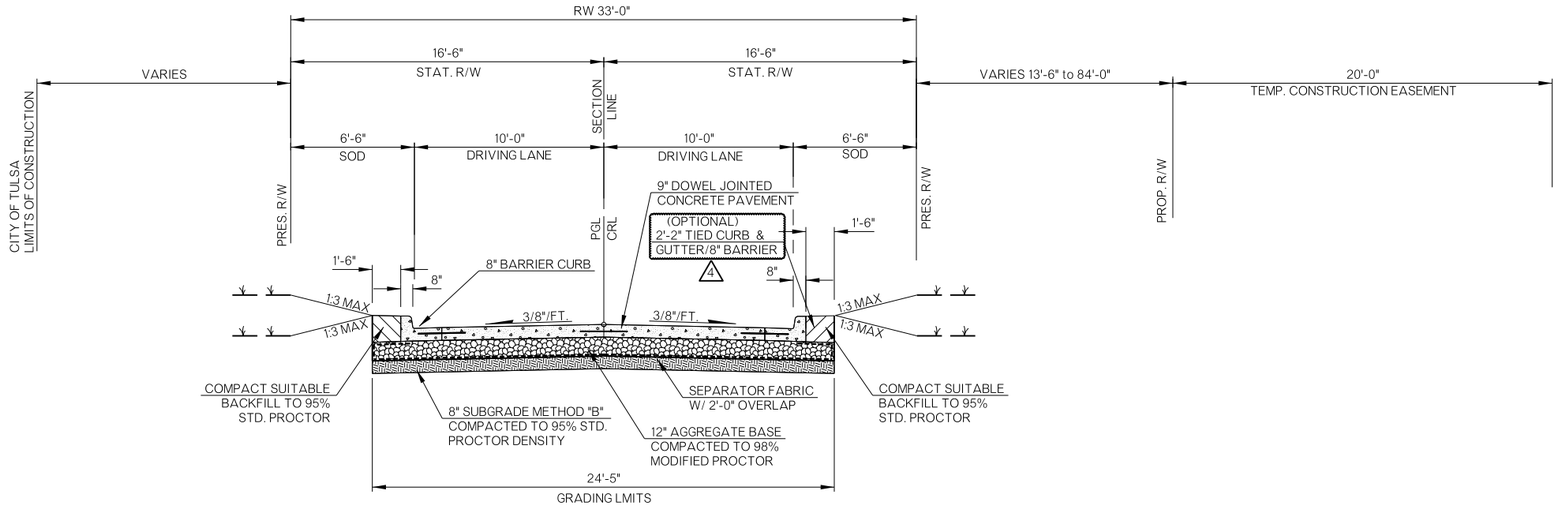
PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
4 ADDENDUM 4 - MODIFIED SIDEWALK AND CURB AND GUTTER	JTB	08/01/2025

PLAN SCALE:	DRAWN	POE	06/2023	APPROVED:	
1" = N/A	DESIGNED	POE	06/2023		
	SURVEY				
PROFILE SCALE:	PROJ. MGR.				
HORIZONTAL: 1" = N/A	LEAD ENGR.				
	FIELD MGR.				
VERTICAL 1" = N/A	RECOMMENDED:				
	DESIGN MANAGER			CITY ENGINEER	
FILE: H:\21-1009	DRAWING: 21-1009-Typical Sections			DATE:	
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75				SHEET 13 OF 268 SHEETS	

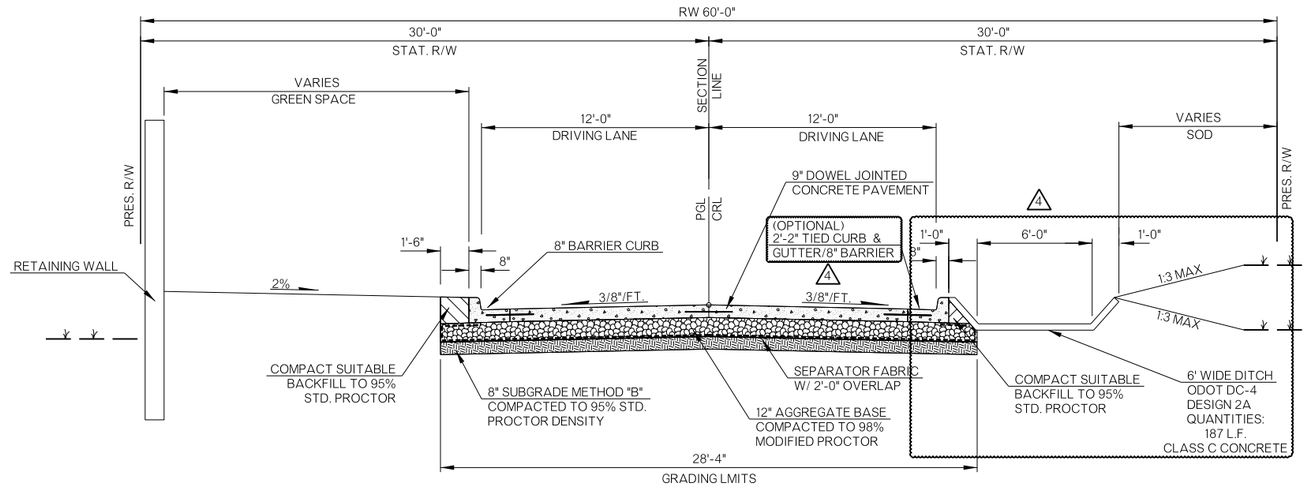
PROFESSIONAL ENGINEER
JARED T. BATES
20681
OKLAHOMA
6/20/2025

BEFORE YOU DIG
811
1-800-522-OKIE
CALL OKIE



TYPICAL NO. 13

NEWTON STA. 28+65.00 TO STA. 29+88.00



TYPICAL NO. 14

NEWTON STA. 30+12.00 TO STA. 32+52.93

ADDENDUM 3 - MODIFIED CURB AND GUTTER

	REVISION	BY	DATE
4	ADDENDUM 4 - MODIFIED CURB AND GUTTER, ADDED ODOT DC-4 DITCH TO TYPICAL SECTION 14	JTB	08/01/2025

JARED T. BATES
20681
LICENSED PROFESSIONAL ENGINEER
OKLAHOMA
6/20/2025

BEFORE YOU DIG
811
1-800-522-OKIE
CALL OKIE

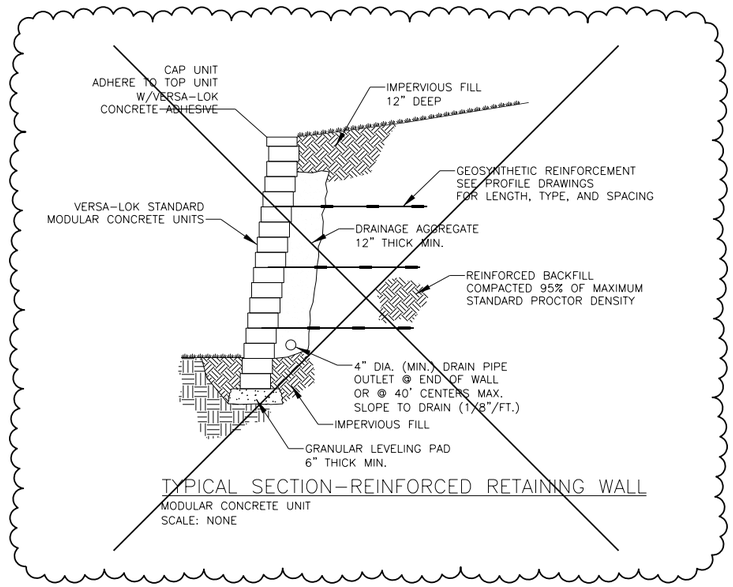
TYPICAL SECTION (7)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

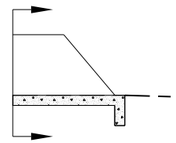
PLAN SCALE:	DRAWN	POE	06/2023	APPROVED:	
1" = N/A	DESIGNED	POE	06/2023		
	SURVEY				
PROFILE SCALE:	PROJ. MGR.				
HORIZONTAL: 1" = N/A	LEAD ENGR.				
	FIELD MGR.				
VERTICAL 1" = N/A	RECOMMENDED: DESIGN MANAGER			CITY ENGINEER	
FILE: H:\21-1009	DRAWING: 21-1009-Typical Sections			DATE:	
ATLAS PAGE NO:	19, 20, 21, 42, 43, 74, 75			SHEET 14 OF 268 SHEETS	



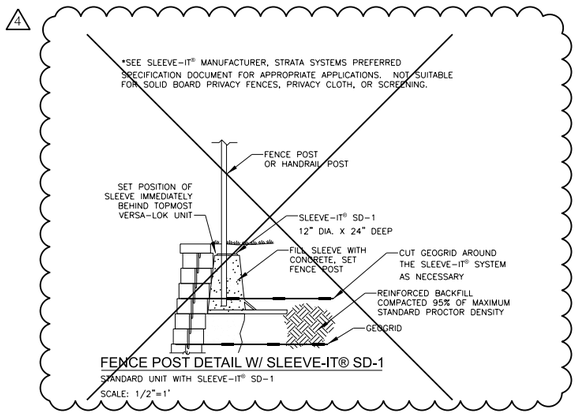
TYPICAL SECTION–REINFORCED RETAINING WALL

MODULAR CONCRETE UNIT
SCALE: NONE

SPECIAL DITCH
SECTION A - A

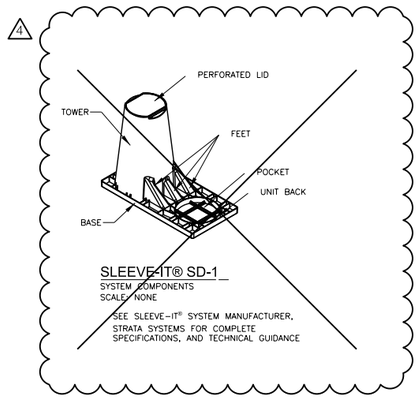


SPECIAL DITCH
DETAIL



FENCE POST DETAIL W/ SLEEVE-IT® SD-1

STANDARD UNIT WITH SLEEVE-IT® SD-1
SCALE: 1/2"=1'



SLEEVE-IT® SD-1

SYSTEM COMPONENTS
SCALE: NONE

SEE SLEEVE-IT® SYSTEM MANUFACTURER, STRATA SYSTEMS FOR COMPLETE SPECIFICATIONS, AND TECHNICAL GUIDANCE

TREE PRESERVATION NOTES

LANDSCAPE ARCHITECT WILL INSPECT AND APPROVE TREE PROTECTION BEFORE WORK BEGINS. EXISTING TREES TO BE PRESERVED WITHIN THE PROJECT LIMITS SHALL BE PROTECTED AGAINST DAMAGE DURING CONSTRUCTION OPERATION.

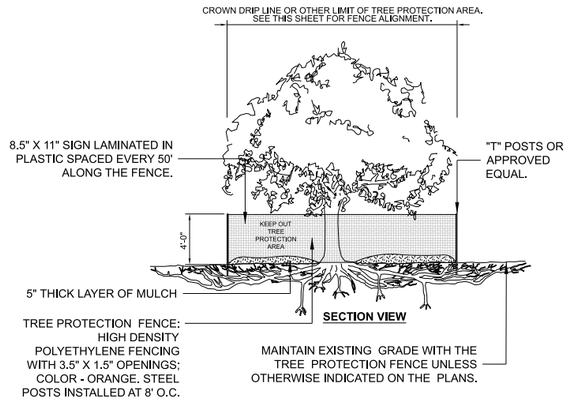
DO NOT STORE EQUIPMENT, MATERIALS, OR VEHICLES UNDER THE TREE CANOPIES.

DO NOT TRENCH UTILITIES THROUGH DRIPLINES WITHOUT LANDSCAPE ARCHITECT'S APPROVAL.

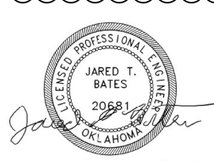
ANY DAMAGE DONE TO EXISTING TREE CROWNS OR ROOT SYSTEMS SHALL BE REPAIRED IMMEDIATELY BY AN APPROVED ARBORIST, ROOTS EXPOSED AND/OR DAMAGED DURING GRADING OPERATIONS SHALL BE CUT OFF CLEANLY INSIDE THE EXPOSED OR DAMAGED AREA AND HAVE TOPSOIL AND MULCH PLACED OVER THE EXPOSED ROOT AREA IMMEDIATELY.

ANY TREES DESIGNATED TO REMAIN SHALL BE PROTECTED AS DESCRIBED HEREIN. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO COMPLY WITH THESE REQUIREMENTS AS STATED.

NO SOIL SHALL BE SPREAD, SPOILED, OR OTHERWISE DISPOSED OF UNDER ANY TREE WITHIN THE DRIPLINE UNLESS OTHERWISE DESIGNATED OR APPROVED.



TREE PROTECTION
DETAIL



6/20/2025

DETAIL SHEET (2)

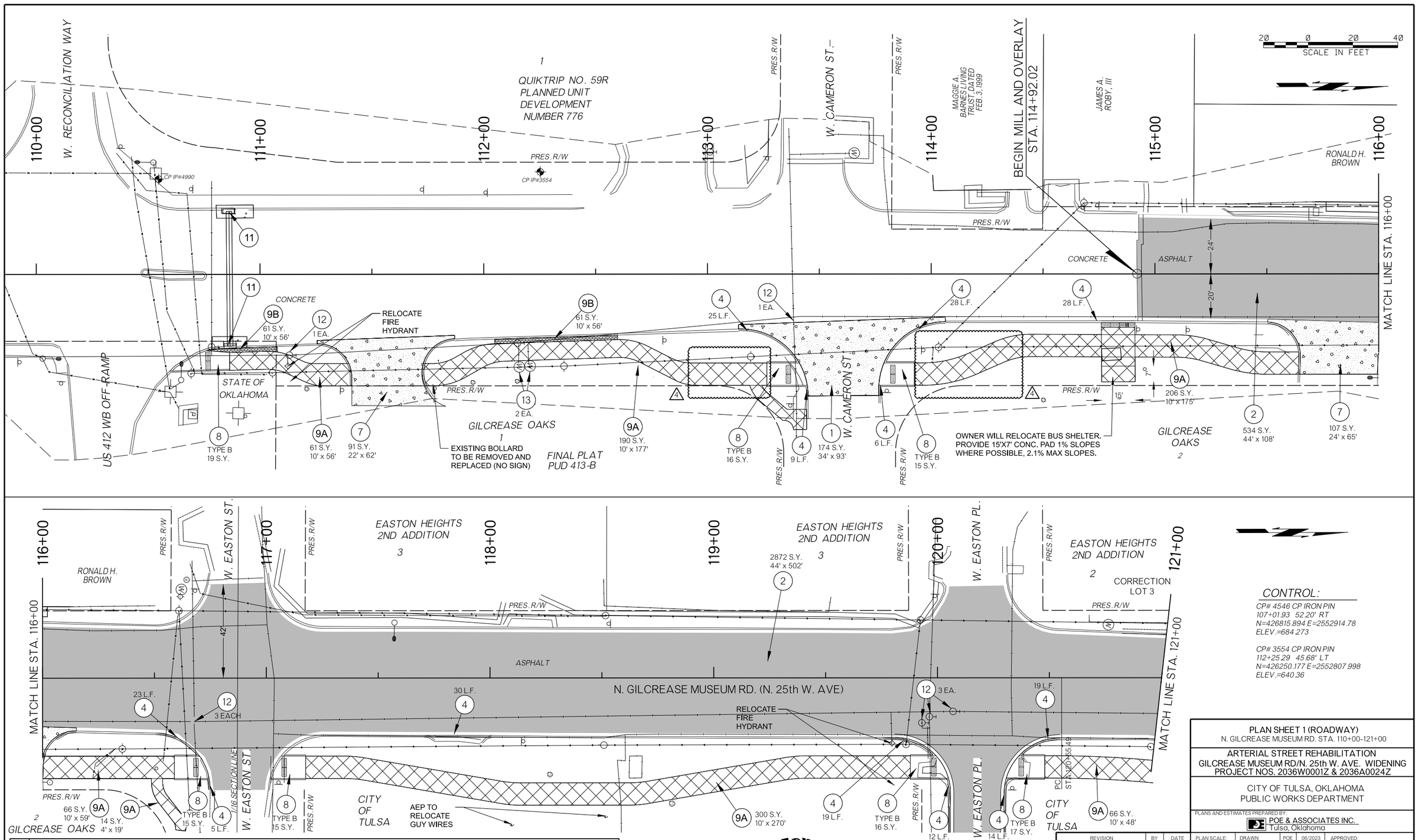
ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
4 ADDENDUM 4 - REMOVED DETAILS; ADDED TREE PROTECTION DETAIL	JTB	08/01/2025

PLAN SCALE: N/A	DRAWN		06/2023	APPROVED:
	DESIGNED		06/2023	
	SURVEY			
PROFILE SCALE:	PROJ. MGR.			
HORIZONTAL: N/A	LEAD ENGR.			
	FIELD MGR.			
VERTICAL N/A	RECOMMENDED: DESIGN MANAGER			CITY ENGINEER
FILE: H:\21-1009	DRAWING:21-1009-Details			DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75				SHEET 19 OF 268 SHEETS



CONTROL:

CP# 4546 CP IRON PIN
107+01.93 52.20' RT
N=426815.894 E=2552914.78
ELEV.=684.273

CP# 3554 CP IRON PIN
112+25.29 45.68' LT
N=426250.177 E=2552807.998
ELEV.=640.36

LEGEND

1 PCC RECONSTRUCTION	6 CONSTRUCT INLET	10 CONSTRUCT JUNCTION BOX	PAVEMENT CONST.
2 MILL & OVERLAY	7 CONSTRUCT DRIVEWAY	11 ADJUST INLET TO GRADE	MILL & OVERLAY
3 TYPE I APC PATCH	8 CONSTRUCT CURB RAMP	12 ADJUST WATER OR GAS VALVETO GRADE	DRIVEWAY CONST.
4 CONSTRUCT CURB & GUTTER	9A CONSTRUCT SIDEWALK	13 ADJUST WATER METER BOX TO GRADE	SIDEWALK
5 CONSTRUCT MANHOLE	9B CONSTRUCT BRICK STAMPED CONCRETE SIDEWALK	14 ADJUST MANHOLE TO GRADE	BRICK STAMPED SIDEWALK

1000 CP IP CONTROL POINT

X-XX PROPOSED STRUCTURE NUMBER

LICENSED PROFESSIONAL ENGINEER — JARED T. BATES — 20681 — OKLAHOMA

6/20/2025

BEFORE YOU DIG OKIE 811 1-800-522-OKIE CALL OKIE

REVISION	BY	DATE
1 ADDENDUM 1 - REISSUED OR CLARITY	JTB	07/23/2025
4 ADDENDUM 4 - MODIFIED SIDEWALK	JTB	08/01/2025

PLAN SCALE: 1" = 20'
PROFILE SCALE:
HORIZONTAL: 1" = 20'
VERTICAL 1" = 5'

DRAWN	POE	06/2023	APPROVED:
DESIGNED	POE	06/2023	
SURVEY	MW	3/2022	
PROJ. MGR.			
LEAD ENGR.			
FIELD MGR.			
RECOMMENDED:			
DESIGN MANAGER			CITY ENGINEER

FILE: H:\21-1009 DRAWING: 21-1009-PNP(1) DATE:

ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75

SHEET 37 OF 268 SHEETS

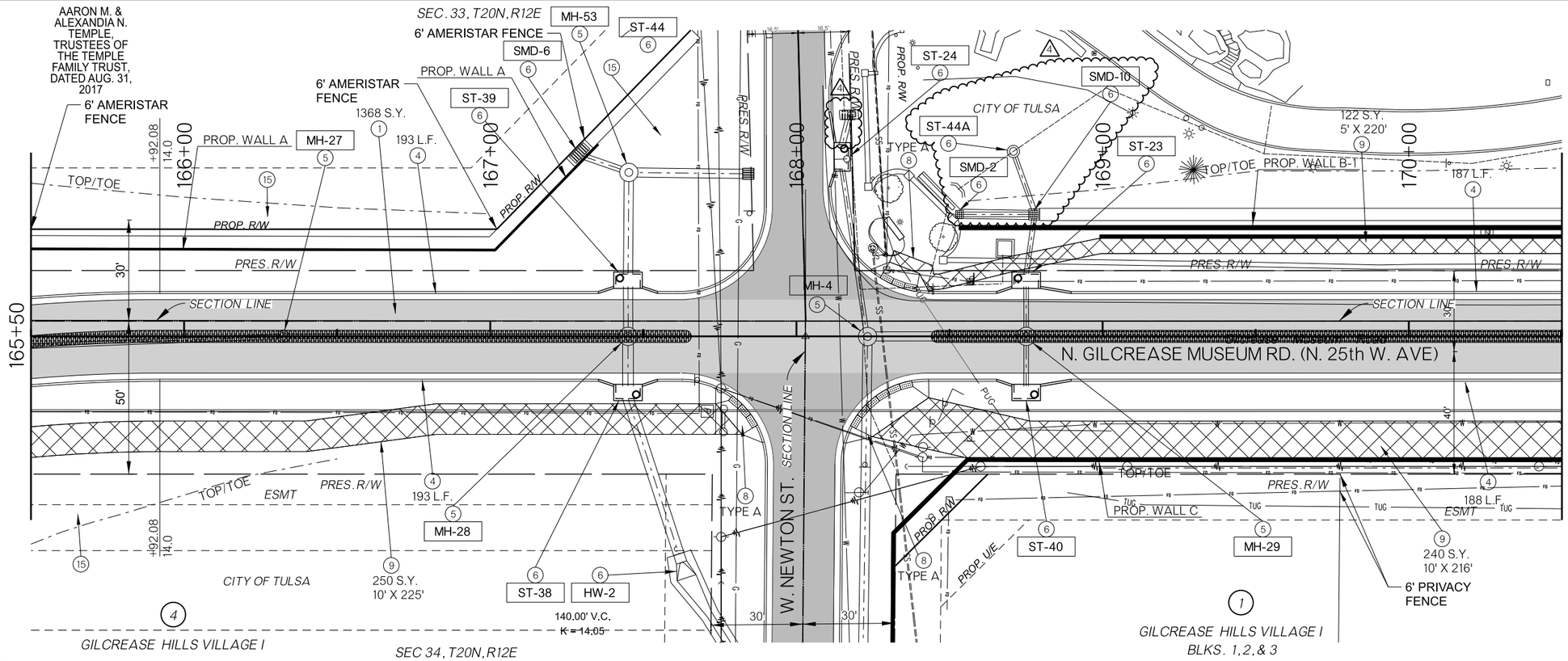
PLAN SHEET 1 (ROADWAY)
N. GILCREASE MUSEUM RD. STA. 110+00-121+00

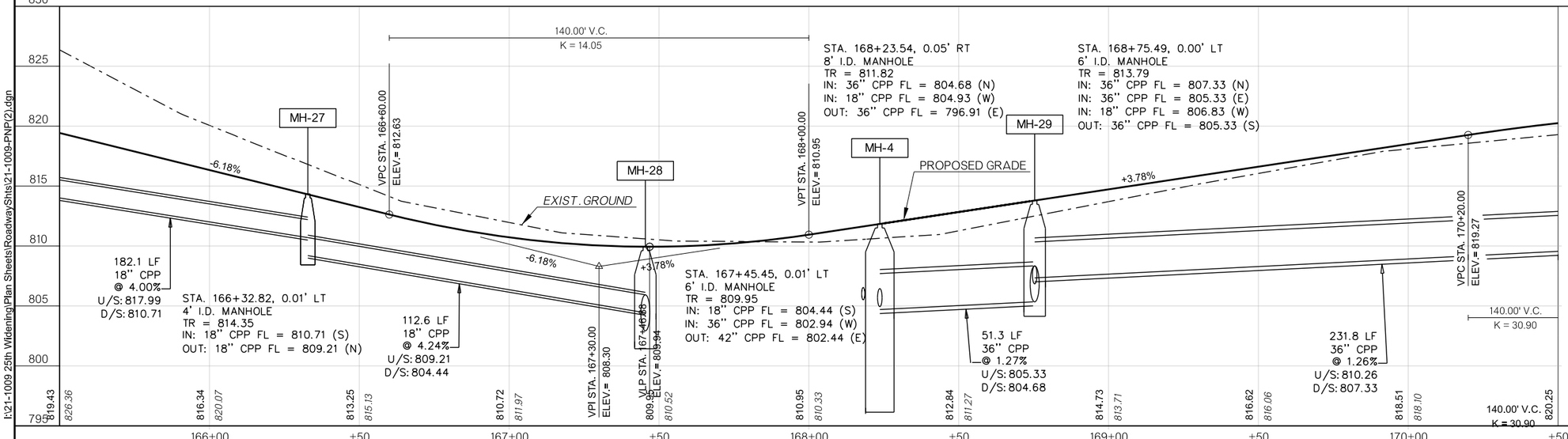
ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

HORIZONTAL SCALE IN FEET
20 0 20 40
5 0 5 10
VERTICAL SCALE IN FEET





LEGEND

(1) PCC RECONSTRUCTION	(6) CONSTRUCT INLET	(10) CONSTRUCT JUNCTION BOX	PAVEMENT CONST.
(2) MILL & OVERLAY	(7) CONSTRUCT DRIVEWAY	(11) ADJUST INLET TO GRADE	MILL & OVERLAY
(3) TYPE I APC PATCH	(8) CONSTRUCT CURB RAMP	(12) ADJUST WATER OR GAS VALVE TO GRADE	DRIVEWAY CONST.
(4) CONSTRUCT CURB & GUTTER	(9A) CONSTRUCT SIDEWALK	(13) ADJUST WATER METER BOX TO GRADE	SIDEWALK
(5) CONSTRUCT MANHOLE	(9B) CONSTRUCT BRICK STAMPED CONCRETE SIDEWALK	(14) ADJUST MANHOLE TO GRADE	BRICK STAMPED SIDEWALK

1000 CP IP CONTROL POINT

X-XX PROPOSED STRUCTURE NUMBER

LICENSED PROFESSIONAL ENGINEER
JARED T. BATES
20681
OKLAHOMA
6/20/2025

BEFORE YOU DIG OKIE 1-800-522-OKIE 811 CALL OKIE

REVISION	BY	DATE
ADDENDUM 1 - REISSUED OR CLARITY	JTB	07/23/2025
ADDENDUM 4 - ADDED STORM DRAINS	JTB	08/01/2025

PLAN & PROFILE (9)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

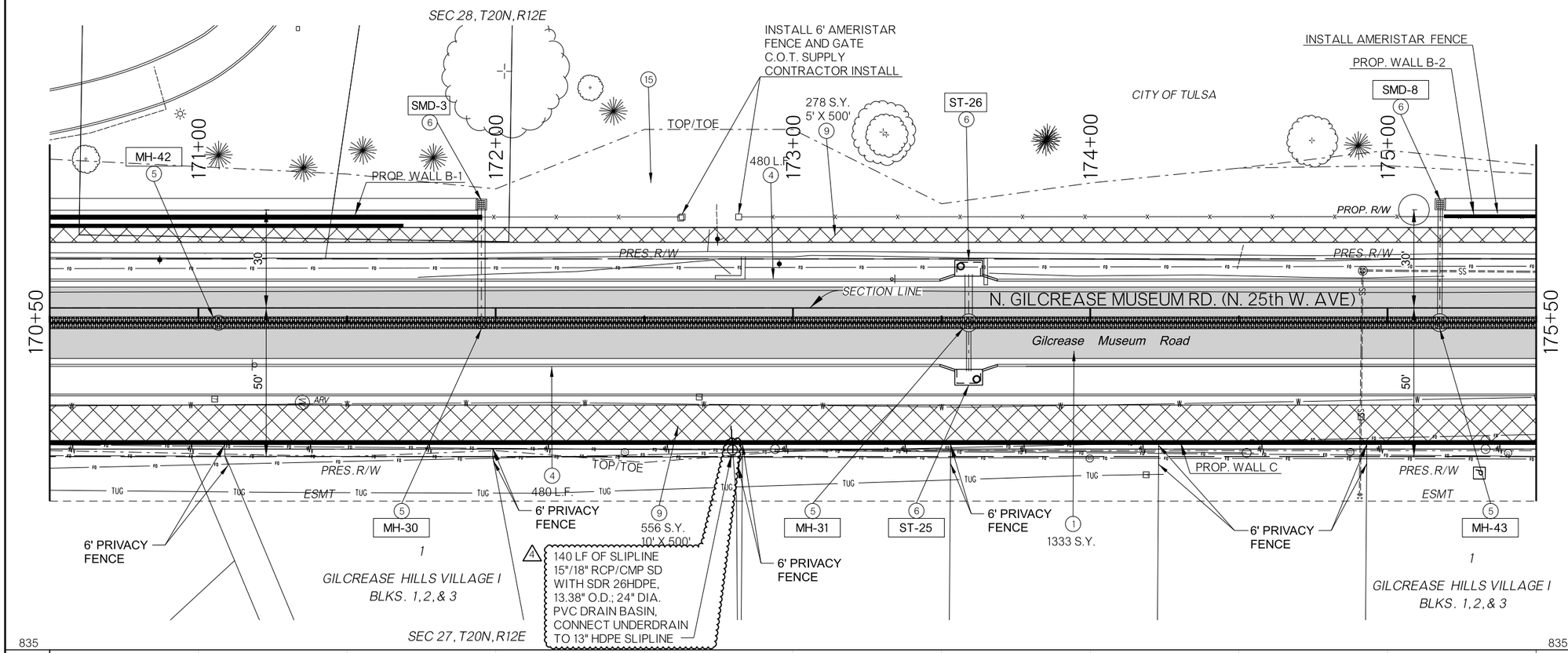
CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

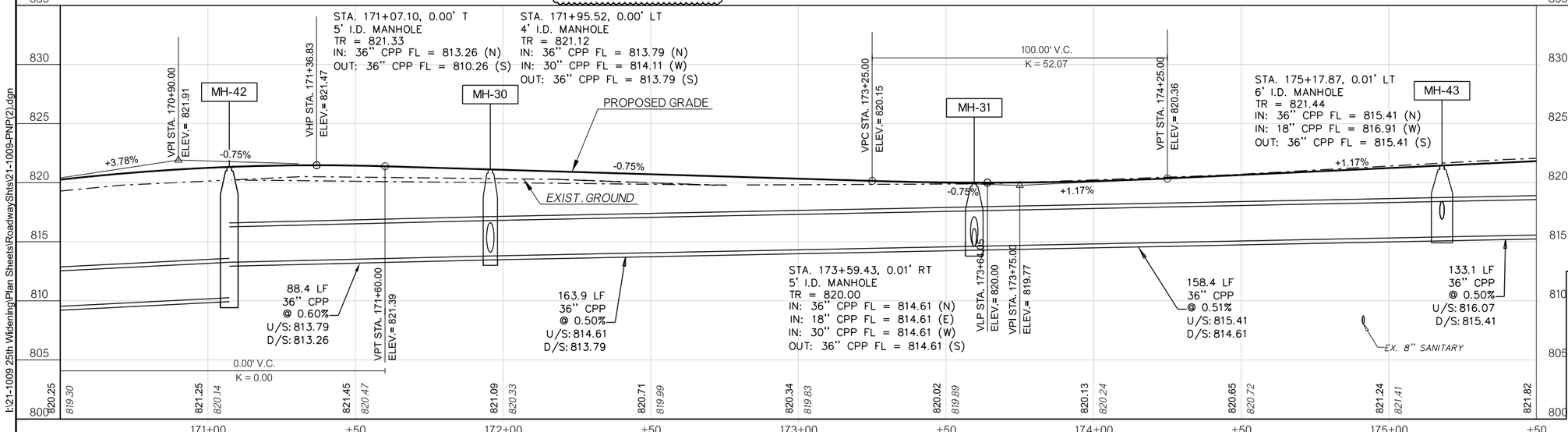
PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

PLAN SCALE: 1" = 20'	DRAWN	POE	04/2023	APPROVED:
	DESIGNED	POE	04/2023	
	SURVEY	MW	3/2022	
PROFILE SCALE:	PROJ. MGR.			
HORIZONTAL: 1" = 20'	LEAD ENGR.			
	FIELD MGR.			
VERTICAL 1" = 5'	RECOMMENDED:			
	DESIGN MANAGER			CITY ENGINEER
FILE: H:\21-1009	DRAWING:			DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75				SHEET 47 OF 268 SHEETS

I:\21-1009 25th Widening\Plan Sheets\RoadwaySht's\21-1009-PNP(2).dgn
8/6/2025

HORIZONTAL SCALE IN FEET
20 0 20 40
5 0 5 10
VERTICAL SCALE IN FEET





CONTROL:

CP# 2578 CP IRON PIN
171+29.22 21.57' RT
N=433228.849 E=2552933.928
ELEV.=821.213

LEGEND

1. PCC RECONSTRUCTION
2. MILL & OVERLAY
3. TYPE I APC PATCH
4. CONSTRUCT CURB & GUTTER
5. CONSTRUCT MANHOLE
6. CONSTRUCT INLET
7. CONSTRUCT DRIVEWAY
8. CONSTRUCT CURB RAMP
9A. CONSTRUCT SIDEWALK
9B. CONSTRUCT BRICK STAMPED CONCRETE SIDEWALK
10. CONSTRUCT JUNCTION BOX
11. ADJUST INLET TO GRADE
12. ADJUST WATER OR GAS VALVE TO GRADE
13. ADJUST WATER METER BOX TO GRADE
14. ADJUST MANHOLE TO GRADE

PAVEMENT CONST.
MILL & OVERLAY
DRIVEWAY CONST.
SIDEWALK
BRICK STAMPED SIDEWALK

1000 CP IP CONTROL POINT
X-XX PROPOSED STRUCTURE NUMBER

LICENSED PROFESSIONAL ENGINEER JARED T. BATES 20681 OKLAHOMA
6/20/2025

BEFORE YOU DIG 811 1-800-522-OKIE CALL OKIE

REVISION	BY	DATE
1 ADDENDUM 1 - REISSUED OR CLARITY	JTB	07/23/2025
4 ADDENDUM 4 - ADDED STORM DRAIN	JTB	08/01/2025

PLAN SCALE: 1" = 20'
PROFILE SCALE: HORIZONTAL: 1" = 20' VERTICAL 1" = 5'

DRAWN	POE	04/2023	APPROVED:
DESIGNED	POE	04/2023	
SURVEY	MW	3/2022	
PROJ. MGR.			
LEAD ENGR.			
FIELD MGR.			

RECOMMENDED: DESIGN MANAGER — CITY ENGINEER

FILE: H:\21-1009 DRAWING: DATE:

ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75

PLAN & PROFILE (10)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

SHEET 48 OF 268 SHEETS

I:\21-1009 25th Widening\Plan Sheets\RoadwayShts\21-1009-PNP(2).dgn
8/4/2025

SEC 28, T20N, R12E

HORIZONTAL SCALE IN FEET
20 0 20 40
5 0 5 10
VERTICAL SCALE IN FEET

CITY OF TULSA

128 S.Y.
5' X 231'

150 S.Y.
25' X 47'

6X4 CONCRETE APRON W/ 2' DEEP CURTAIN WALL, LEVEL WITH EXISTING ROCK AT WEST EDGE

136 S.Y.
5' X 244'

INSTALL 6' AMERISTAR FENCE

SMD-13

ST-27

ST-31

MH-55

176+00

177+00

178+00

179+00

180+00

175+50

180+50

260 L.F.

PROP. WALL B-2

TOP/TOE

WTR. ESMT

WTR. ESMT

PROP. WALL E

232 L.F.

PRES. R/W

PRES. R/W

N. GILCREASE MUSEUM RD. (N. 25th W. AVE)

SECTION LINE

Gilcrease Museum Road

26.44'

40.05'

PRES. R/W

PRES. R/W

ESMT

ESMT

4' WOODEN GATE, 6' HIGH

480 L.F.

PROP. WALL C

TOP/TOE

6' PRIVACY FENCE

MH-32

SMD-4

6' PRIVACY FENCE

6' PRIVACY FENCE

1333 S.Y.

6' PRIVACY FENCE

MH-33

556 S.Y.
10' X 500'

6' PRIVACY FENCE

ST-30

SMD-5

MH-34

6' PRIVACY FENCE

6' PRIVACY FENCE

1

GILCREASE HILLS VILLAGE I
BLKS. 1, 2, & 3

SEC 27, T20N, R12E

STA. 176+50.97, 0.01' LT
5' I.D. MANHOLE
TR = 823.00
IN: 24" CPP FL = 817.07 (N)
IN: 18" CPP FL = 816.07 (E)
OUT: 36" CPP FL = 816.07 (S)

STA. 177+58.30, 0.00' LT
6' I.D. MANHOLE
TR = 824.13
IN: 24" CPP FL = 817.79 (N)
IN: 18" CPP FL = 819.79 (W)
OUT: 24" CPP FL = 817.79 (S)

STA. 178+06.98, 0.00' T
5' I.D. MANHOLE
TR = 824.42
IN: 24" CPP FL = 818.06 (W)
OUT: 24" CPP FL = 818.05 (S)

STA. 179+91.42, 0.00' T
6' I.D. MANHOLE
TR = 823.76
IN: 30" CPP FL = 816.74 (N)
IN: 30" CPP FL = 814.24 (S)
OUT: 30" CPP FL = 814.24 (W)

MH-32

MH-55

MH-33

MH-34

MH-49

PROPOSED GRADE

EXIST. GROUND

EXIST. GROUND

+1.17%

+1.17%

-1.30%

-1.30%

-1.30%

320.00' V.C.
K = 34.35

100.00' V.C.
K = 40.48

VLP STA. 177+97.38
VPT STA. 177+97.38
ELEV.= 824.44

VPC STA. 178+90.00
ELEV.= 823.58

VPC STA. 177+50.00
ELEV.= 824.16

VPT STA. 178+50.00
ELEV.= 824.10

VLP STA. 179+34.65
ELEV.= 823.29

VPI STA. 180+50.00
ELEV.= 821.50

STA. 179+37.36, 0.00' T
6' I.D. MANHOLE
TR = 823.29
IN: 30" CPP FL = 816.82 (E)
IN: 30" CPP FL = 816.82 (W)
OUT: 30" CPP FL = 814.32 (N)

133.1 LF
36" CPP
@ 0.50%
U/S: 816.07
D/S: 815.41

107.3 LF
24" CPP
@ 0.67%
U/S: 817.79
D/S: 817.07

48.7 LF
24" CPP
@ 0.53%
U/S: 818.05
D/S: 817.79

51.8 LF
30" CPP
@ 0.15%
U/S: 814.32
D/S: 814.24

137.8 LF
30" CPP
@ 1.13%
U/S: 818.30
D/S: 816.74

821.82 822.06 | 822.41 822.57 | 822.99 823.07 | 823.58 823.53 | 824.16 824.03 | 824.44 824.36 | 824.10 823.89 | 823.46 823.38 | 823.32 822.83 | 823.91 822.70

176+00 +50 177+00 +50 178+00 +50 179+00 +50 180+00 +50

840 835 830 825 820 815 810 805

CONTROL:

CP# 25 CP "X"
178+15.77 45.78' LT
N=433914.25 E=2552855.731
ELEV.=826.544

CP# 2579 CP IRON PIN
179+52.06 14.67' LT
N=434051.016 E=2552884.685
ELEV.=821.441

LEGEND

1. PCC RECONSTRUCTION
2. MILL & OVERLAY
3. TYPE I APC PATCH
4. CONSTRUCT CURB & GUTTER
5. CONSTRUCT MANHOLE
6. CONSTRUCT INLET
7. CONSTRUCT DRIVEWAY
8. CONSTRUCT CURB RAMP
9A. CONSTRUCT SIDEWALK
9B. CONSTRUCT BRICK STAMPED CONCRETE SIDEWALK
10. CONSTRUCT JUNCTION BOX
11. ADJUST INLET TO GRADE
12. ADJUST WATER OR GAS VALVE TO GRADE
13. ADJUST WATER METER BOX TO GRADE
14. ADJUST MANHOLE TO GRADE

PAVEMENT CONST.
MILL & OVERLAY
DRIVEWAY CONST.
SIDEWALK
BRICK STAMPED SIDEWALK

1000 CP IP CONTROL POINT

X-XX PROPOSED STRUCTURE NUMBER

LICENSED PROFESSIONAL ENGINEER
JARED T. BATES
20681
OKLAHOMA
6/20/2025

BEFORE YOU DIG 811 1-800-522-OKIE CALL OKIE

PLAN & PROFILE (11)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
4 ADDENDUM 4 - ADDED 4' WOODEN GATE 6' HIGH, ADDED VC DATA	JTB	08/01/2025

PLAN SCALE: 1" = 20'	DRAWN	POE	04/2023
	DESIGNED	POE	04/2023
	SURVEY	MW	3/2022
PROFILE SCALE:	PROJ. MGR.		
HORIZONTAL: 1" = 20'	LEAD ENGR.		
	FIELD MGR.		
VERTICAL 1" = 5'	RECOMMENDED: DESIGN MANAGER		CITY ENGINEER
FILE: H:\21-1009	DRAWING:		DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75			SHEET 49 OF 268 SHEETS

APPROVED:

I:\21-1009 25th Widening\Plan Sheets\RoadwayShts\21-1009-PNP(2).dgn
8/4/2025

HORIZONTAL SCALE IN FEET
20 0 20 40
5 0 5 10
VERTICAL SCALE IN FEET

28+00 29+00 31+00 32+00 33+00

285 S.Y. (1)
35 L.F. (4)
9 L.F. (4)
250 L.F. (4)
15 L.F. (4)
117 L.F. (4)
250 L.F. (4)
580 S.Y. (1)

N 432,896.5507
E 2,552,717.5826
N 432,897.5830
E 2,552,783.0755
N 432,899.7027
E 2,552,917.5578
N 432,902.2309
E 2,552,917.5180
N 432,904.0515
E 2,553,170.7833
N 432,904.3874
E 2,553,217.5103

W. NEWTON ST. N89°05'49"E 200.00'
W. NEWTON ST. C.R.L. N89°35'17"E 300.00'

CAUTION!! O.H. POWER LINES IN AREA
CAUTION!! O.H. POWER LINES IN AREA
CAUTION!! O.H. POWER LINES IN AREA

INSTALL 6' AMERISTAR FENCE
INSTALL 33 L.F. 24" RCP W/ PCES END SECTIONS
INSTALL 2-8' LONG x 6' TALL AMERISTAR FENCE
INSTALL 6' AMERISTAR FENCE

STA. 28+65 BEGIN RECONSTRUCTION MATCH EXISTING

STA. 32+52.93 END RECONSTRUCTION MATCH EXISTING

BENCHMARK:

CP# 48, TARGET X
STA. 400+27.27, 44.22' LT
N= 428623.236
E= 2550168.998
ELEV.= 675.447

C.R.L. N. GILCREASE MUSEUM RD. (N. 25th W. AVE)

PVI 28+65.00 ELEV. 819.40
PVC 29+48.00 ELEV. 812.40
PVT 29+78.00 ELEV. 810.87
PVI 29+88.00 ELEV. 810.69
PVI 29+63.00 ELEV. 811.13
PVI 30+12.00 ELEV. 810.75
PVC 30+21.00 ELEV. 810.59
PVI 30+46.00 ELEV. 810.16
PVT 30+71.00 ELEV. 807.78
PVC 31+48.73 ELEV. 800.38
PVI 31+73.73 ELEV. 798.00
PVT 31+98.73 ELEV. 796.42
PVI 32+52.93 ELEV. 793.00

L= 30.00' K= 4.49
L= 50.00' K= 15.61
L= 50.00' K= 6.25

-8.44% -1.76% 1.75% -9.52% -9.52% -6.31%

EX. GAS LINE

825.90 820.84 816.45 816.54 812.23 812.93 810.33 805.43 805.03 805.02 801.68 800.26 798.56 796.34 795.81 793.18 793.12

825 820 815 810 805 800 795 790 785 780 775 770 765 760 755 750 745 740 735 730 725 720 715 710 705 700

28+00 +50 29+00 +50 30+00 +50 31+00 +50 32+00 +50 33+00

LEGEND

1. PCC RECONSTRUCTION
2. MILL & OVERLAY
3. TYPE I APC PATCH
4. CONSTRUCT CURB & GUTTER
5. CONSTRUCT MANHOLE
6. CONSTRUCT INLET
7. CONSTRUCT DRIVEWAY
8. CONSTRUCT CURB RAMP
9A. CONSTRUCT SIDEWALK
9B. CONSTRUCT BRICK STAMPED CONCRETE SIDEWALK
10. CONSTRUCT JUNCTION BOX
11. ADJUST INLET TO GRADE
12. ADJUST WATER OR GAS VALVE TO GRADE
13. ADJUST WATER METER BOX TO GRADE
14. ADJUST MANHOLE TO GRADE

PAVEMENT CONST.
MILL & OVERLAY
DRIVEWAY CONST.
SIDEWALK
BRICK STAMPED SIDEWALK

1000 CP IP CONTROL POINT
X-XX PROPOSED STRUCTURE NUMBER

LICENSED PROFESSIONAL ENGINEER OKLAHOMA JARED T. BATES 20681
6/20/2025

BEFORE YOU DIG 811 1-800-522-OKIE CALL OKIE

REVISION	BY	DATE
ADDENDUM 1 - REISSUED DR CLARITY	JTB	07/23/2025
ADDENDUM 4 - ADDED STORM DRAIN	JTB	08/01/2025

PLAN & PROFILE (01)
W. NEWTON STREET - Sta. 28+65 TO 32+52.93

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

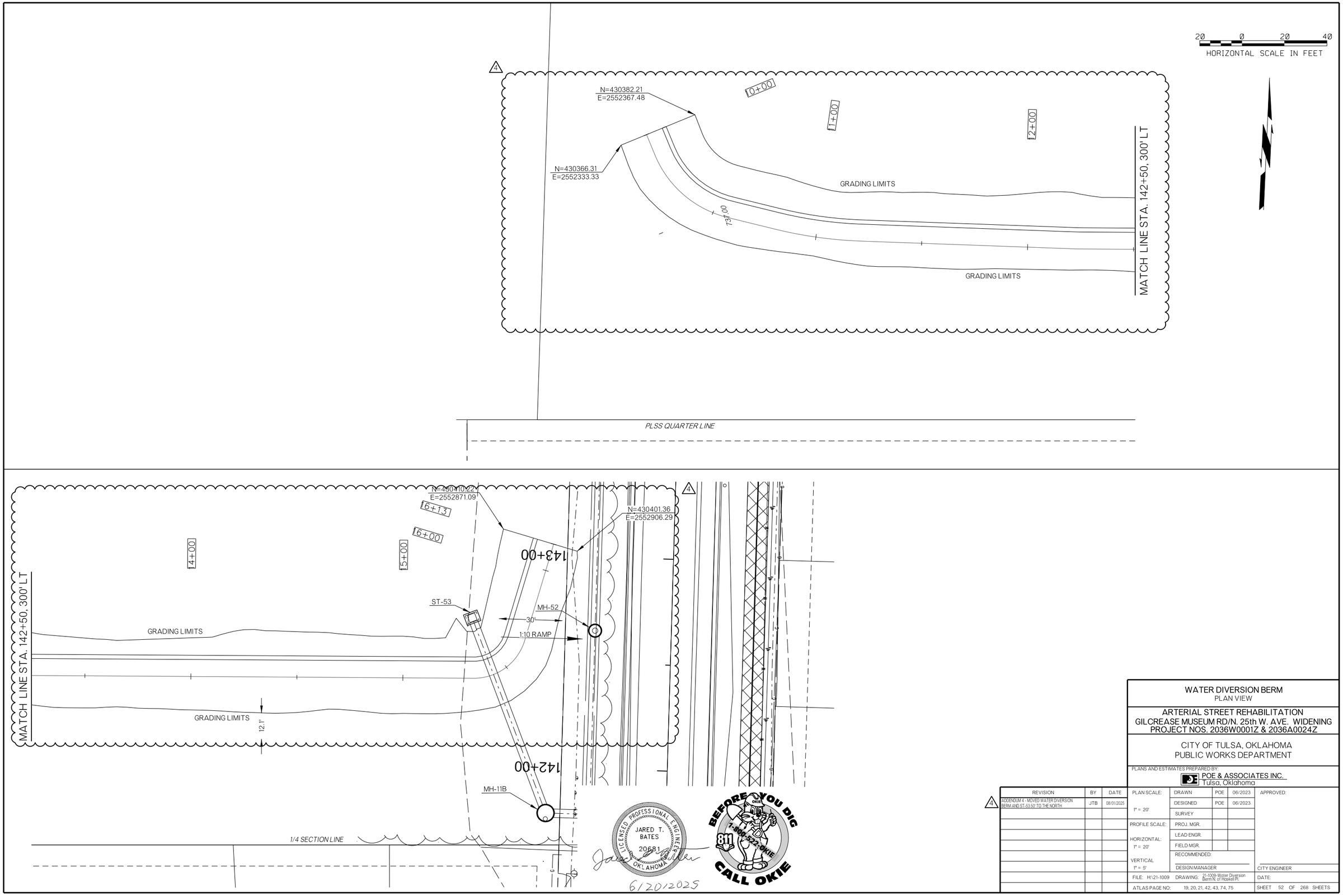
CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

PLAN SCALE: 1" = 20'	DRAWN	POE	04/2023	APPROVED:
	DESIGNED	POE	04/2023	
	SURVEY	MW	3/2022	
PROFILE SCALE: HORIZONTAL: 1" = 20' VERTICAL 1" = 5'	PROJ. MGR.			
	LEAD ENGR.			
	FIELD MGR.			
	RECOMMENDED: DESIGN MANAGER			CITY ENGINEER

FILE: H:\21-1009 DRAWING: 21-1009-PNP-NEWTON DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75 SHEET 51 OF 268 SHEETS

I:\21-1009 25th Widening\Plan Sheets\RoadwayShts\21-1009-PNP-NEWTON.dgn
8/6/2025



WATER DIVERSION BERM
PLAN VIEW

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

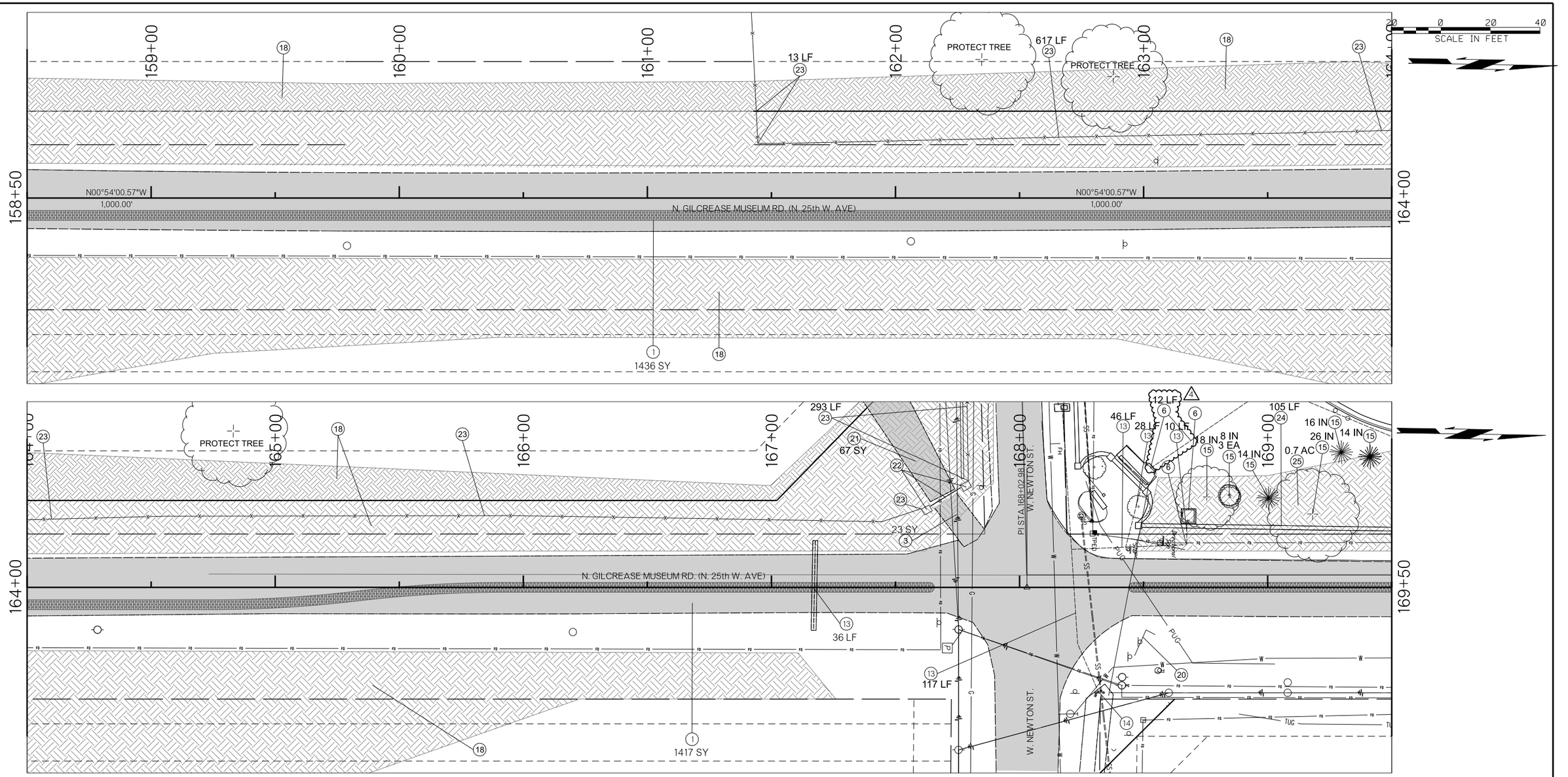
CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
4 ADDENDUM 4 - MOVED WATER DIVERSION BERM AND ST-53.50' TO THE NORTH	JTB	08/01/2025

PLAN SCALE: 1" = 20'	DRAWN	POE	06/2023
	DESIGNED	POE	06/2023
	SURVEY		
PROFILE SCALE:	PROJ. MGR.		
HORIZONTAL: 1" = 20'	LEAD ENGR.		
	FIELD MGR.		
VERTICAL 1" = 5'	RECOMMENDED:		
	DESIGN MANAGER		CITY ENGINEER
FILE: H:\21-1009	DRAWING: 21-1009-Water Diversion Berm N. of Haskell Pl.		DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75			SHEET 52 OF 268 SHEETS

APPROVED:



17 REMOVE RIP-RAP
18 CLEAR FOREST
19 REMOVE FENCE
20 REMOVE NEIGHBORHOOD SIGN; SALVAGE TO CITY
21 SALVAGE FLAGSTONE; STACK ON OWNER'S (TEMPLE'S) PROPERTY
22 SALVAGE GATE AND STONE COLUMN'S; PLACE ON OWNER'S (TEMPLE'S) PROPERTY
23 RELOCATE ELECTRIC FENCING TO TEMPORARY CONSTRUCTION FENCING AND NEW FENCE; REMOVE FENCE
24 REMOVE ROCK WALL
25 CLEAR MUSEUM LAWN; WHERE ENCOUNTERED REMOVE IRRIGATION SYSTEM; MARK LOCATION OF ALL CUT PIPES

LEGEND

1 REMOVE PAVEMENT
2 REMOVE CURB & GUTTER
3 REMOVE DRIVEWAY
4 REMOVE SIDEWALK
5 REMOVE MANHOLE
6 REMOVE INLET/PIPE
7 MILL & OVERLAY
8 PATCHING
9 REMOVE GUARDRAIL
10 REMOVE METAL PIPE
11 REMOVE CURB RAMP
12 REMOVE TRAFFIC ITEM
13 REMOVE CROSS DRAIN
14 REMOVE HEADWALL
15 REMOVE TREE
16 TRIM TREE

SIDEWALK REMOVAL
PAVEMENT REMOVAL
DRIVEWAY REMOVAL
CURB & GUTTER REMOVAL

LICENSED PROFESSIONAL ENGINEER
JARED T. BATES
20681
OKLAHOMA
6/20/2025

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REMOVAL SHEET (6)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
4 ADDENDUM 4 - ADDED INLET AND STORM DRAIN PIPE REMOVAL	JTB	08/01/2025

PLAN SCALE: 1" = 20'
PROFILE SCALE:
HORIZONTAL: 1" = 20'
VERTICAL 1" = 5'

DRAWN	POE	04/2023	APPROVED:
DESIGNED	POE	04/2023	
SURVEY	MW	3/2022	
PROJ. MGR.			
LEAD ENGR.			
FIELD MGR.			

RECOMMENDED:
DESIGN MANAGER — CITY ENGINEER

FILE: H:\21-1009 DRAWING: 21-1009-Removals DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75 SHEET 58 OF 268 SHEETS

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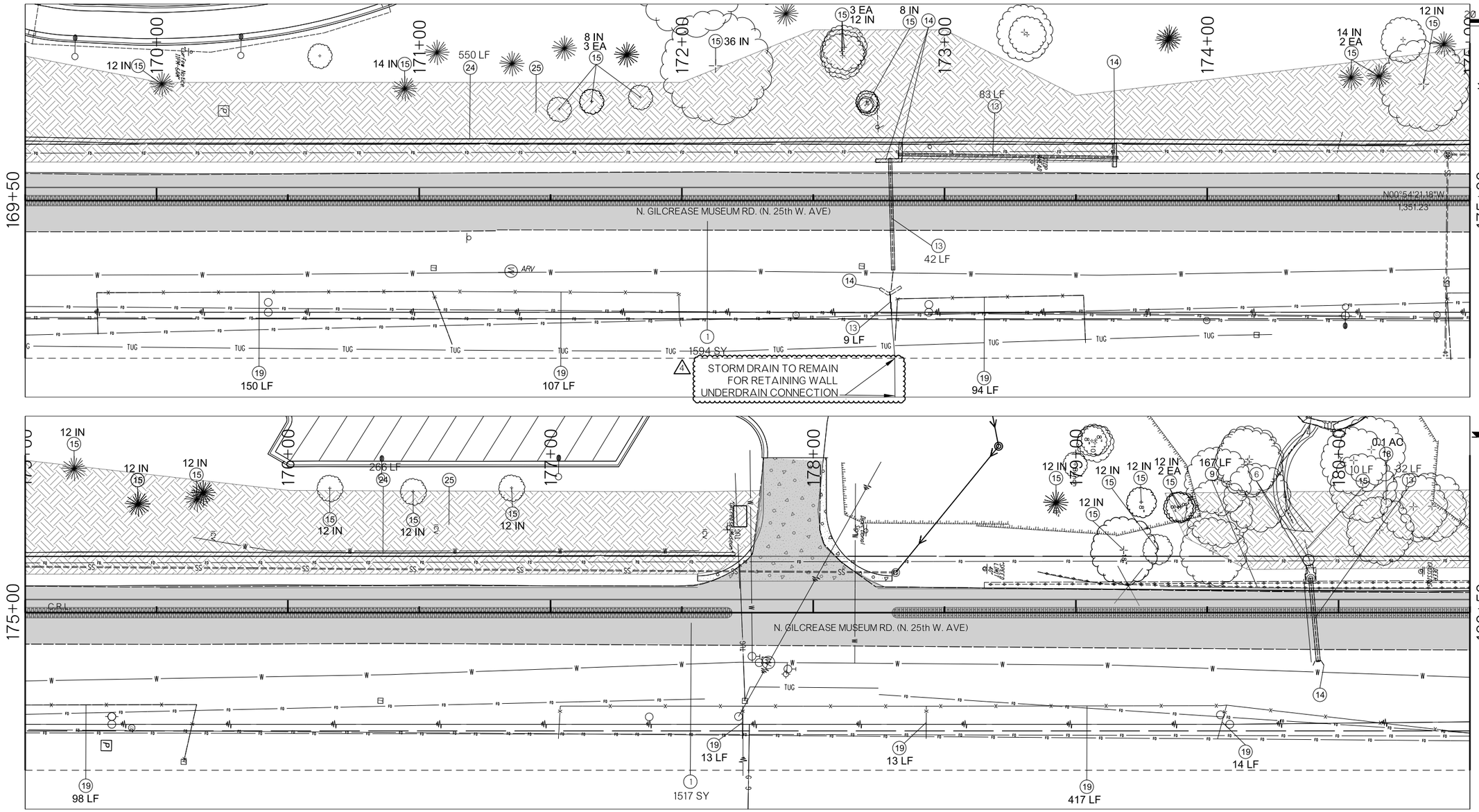
8/6/2025



I:\21-1009 25th Widening\Plan Sheets\RoadwayShits\21-1009-Removals.dgn

8/4/2025

17 REMOVE RIP-RAP
18 CLEAR FOREST
19 REMOVE FENCE
20 REMOVE NEIGHBORHOOD SIGN; SALVAGE TO CITY
21 SALVAGE FLAGSTONE; STACK ON OWNER'S (TEMPLE'S) PROPERTY
22 SALVAGE GATE AND STONE COLUMN'S; PLACE ON OWNER'S (TEMPLE'S) PROPERTY
23 RELOCATE ELECTRIC FENCING TO TEMPORARY CONSTRUCTION FENCING AND NEW FENCE; REMOVE FENCE
24 REMOVE ROCK WALL
25 CLEAR MUSEUM LAWN; WHERE ENCOUNTERED REMOVE IRRIGATION SYSTEM; MARK LOCATION OF ALL CUT PIPES

LEGEND

1 REMOVE PAVEMENT
2 REMOVE CURB & GUTTER
3 REMOVE DRIVEWAY
4 REMOVE SIDEWALK
5 REMOVE MANHOLE
6 REMOVE INLET/PIPE
7 MILL & OVERLAY
8 PATCHING
9 REMOVE GUARDRAIL
10 REMOVE METAL PIPE
11 REMOVE CURB RAMP
12 REMOVE TRAFFIC ITEM
13 REMOVE CROSS DRAIN
14 REMOVE HEADWALL
15 REMOVE TREE
16 TRIM TREE

SIDEWALK REMOVAL
PAVEMENT REMOVAL
DRIVEWAY REMOVAL
CURB & GUTTER REMOVAL

LICENSED PROFESSIONAL ENGINEER
JARED T. BATES
20681
OKLAHOMA
6/20/2025

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REMOVAL SHEET (7)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

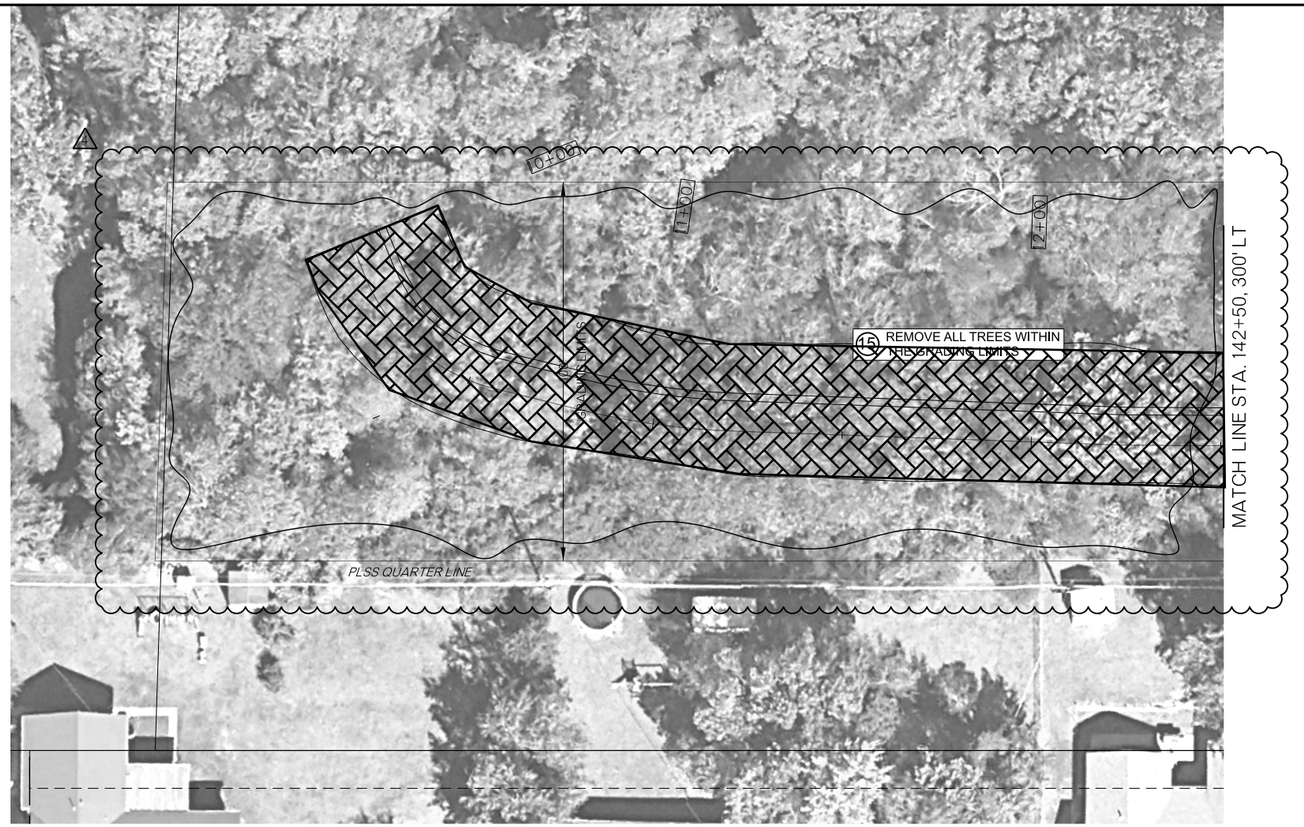
REVISION	BY	DATE
4 ADDENDUM 4 - ADDED STORM DRAIN NOTE	JTB	08/01/2025

PLAN SCALE: 1" = 20'
PROFILE SCALE:
HORIZONTAL: 1" = 20'
VERTICAL 1" = 5'

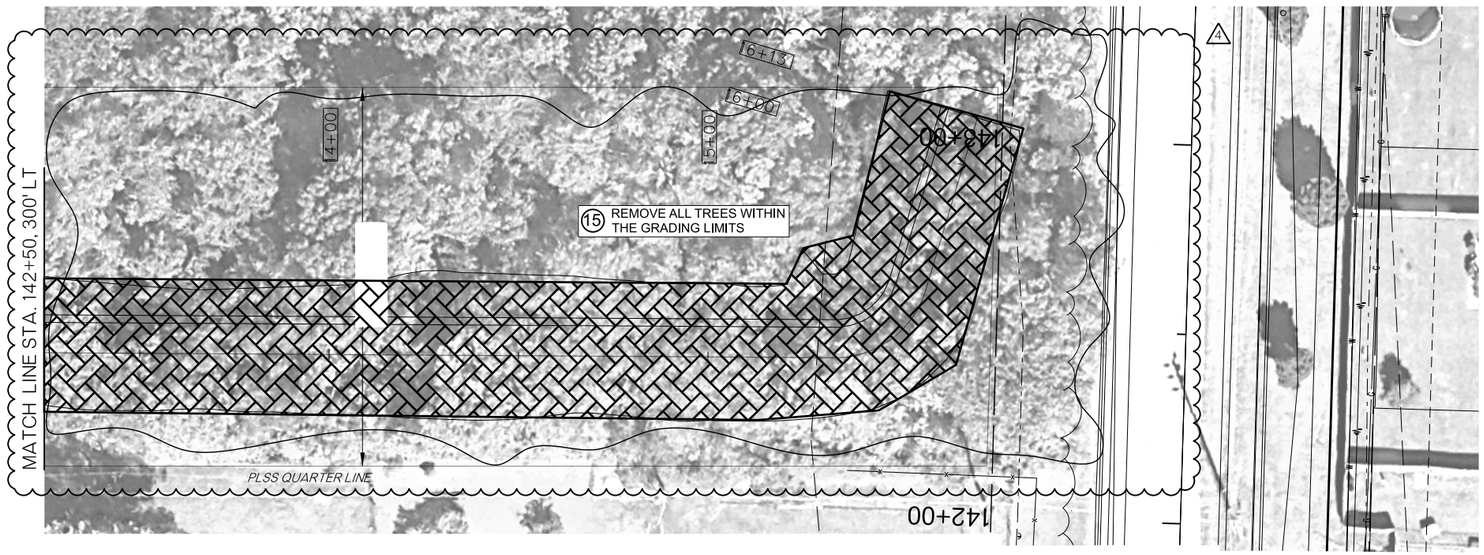
DRAWN	POE	04/2023	APPROVED:
DESIGNED	POE	04/2023	
SURVEY	MW	3/2022	
PROJ. MGR.			
LEAD ENGR.			
FIELD MGR.			

RECOMMENDED:
DESIGN MANAGER
CITY ENGINEER

FILE: H:\21-1009 DRAWING: 21-1009-Removals DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75
SHEET 59 OF 268 SHEETS



20 0 20 40
HORIZONTAL SCALE IN FEET



CLEARING LIMITS

LEGEND

1 REMOVE PAVEMENT	6 REMOVE INLET/PIPE	11 REMOVE CURB RAMP		SIDEWALK REMOVAL	
2 REMOVE CURB & GUTTER	7 MILL & OVERLAY	12 REMOVE TRAFFIC ITEM		PAVEMENT REMOVAL	
3 REMOVE DRIVEWAY	8 PATCHING	13 REMOVE CROSS DRAIN		DRIVEWAY REMOVAL	
4 REMOVE SIDEWALK	9 REMOVE GUARDRAIL	14 REMOVE HEADWALL		CURB & GUTTER REMOVAL	
5 REMOVE MANHOLE	10 REMOVE METAL PIPE	15 REMOVE TREE	16 TRIM TREE		

LICENSED PROFESSIONAL ENGINEER
JARED T. BATES
20681
OKLAHOMA
6/20/2025

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WATER DIVERSION BERM
REMOVAL SHEET

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

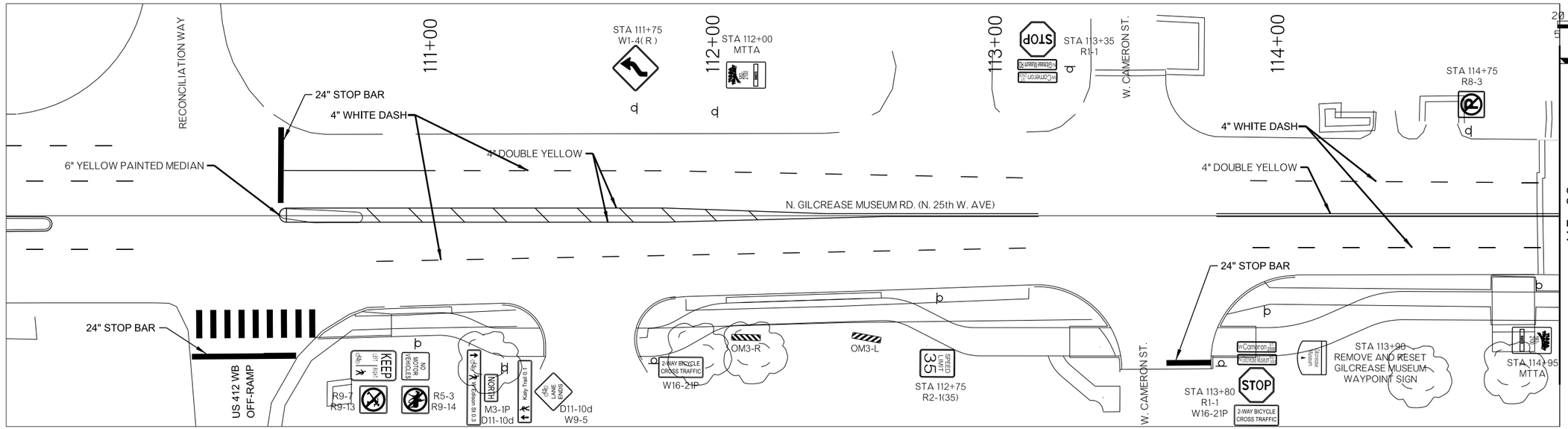
CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
4 ADDENDUM 4 - MOVED WATER DIVERSION BERM 50' TO THE NORTH	JTB	06/01/2025

PLAN SCALE: 1" = 20'	DRAWN	POE	06/2023
	DESIGNED	POE	06/2023
	SURVEY		
PROFILE SCALE:	PROJ. MGR.		
HORIZONTAL: 1" = 20'	LEAD ENGR.		
	FIELD MGR.		
VERTICAL 1" = 5'	RECOMMENDED: DESIGN MANAGER		CITY ENGINEER
FILE: H:\21-1009	DRAWING: 21-1009-Water Diversion Berm-Demo		DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75			SHEET 62 OF 268 SHEETS

APPROVED:



NOTE:
TRAFFIC SIGNING AND STRIPING PLANS ARE FOR BIDDING PURPOSES. FINAL SIGNING AND STRIPING SHEETS WILL BE PROVIDED WITH CONFORMED DRAWINGS.

NOTE:
STRIPING QUANTITY INCLUDES RESTRIPING N. GILCREASE MUSEUM RD. (N. 25th W. AVE) FROM RECONCILIATION WAY, SOUTH, TO CHARLES PAGE BLVD.

LEGEND

12' 28' 12' / 40' CYCLE — 4" BROKEN WHITE LANE LINE

4" SOLID WHITE OR YELLOW LANE LINE

4" DOUBLE SOLID YELLOW CENTERLINE

24" STOP BAR

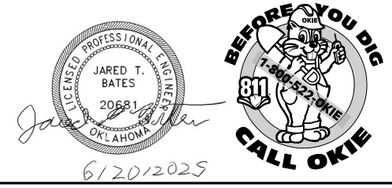
WHITE ARROW

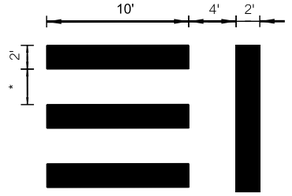
ACCESSIBLE PARKING

SHARED LANE MARKER

BIKE LANE MARKER (GREEN BACKGROUND)

BIKE LANE MARKER (MID-BLOCK)





DIMENSIONS FOR CROSSWALKS & STOP BARS

*NOTE:
CROSSWALK BARS ARE TO BE PLACED IN LINE WITH THE LANE LINES AND AT THE CENTERLINE OF EACH LANE.

SIGNING & STRIPING SHEET (1)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

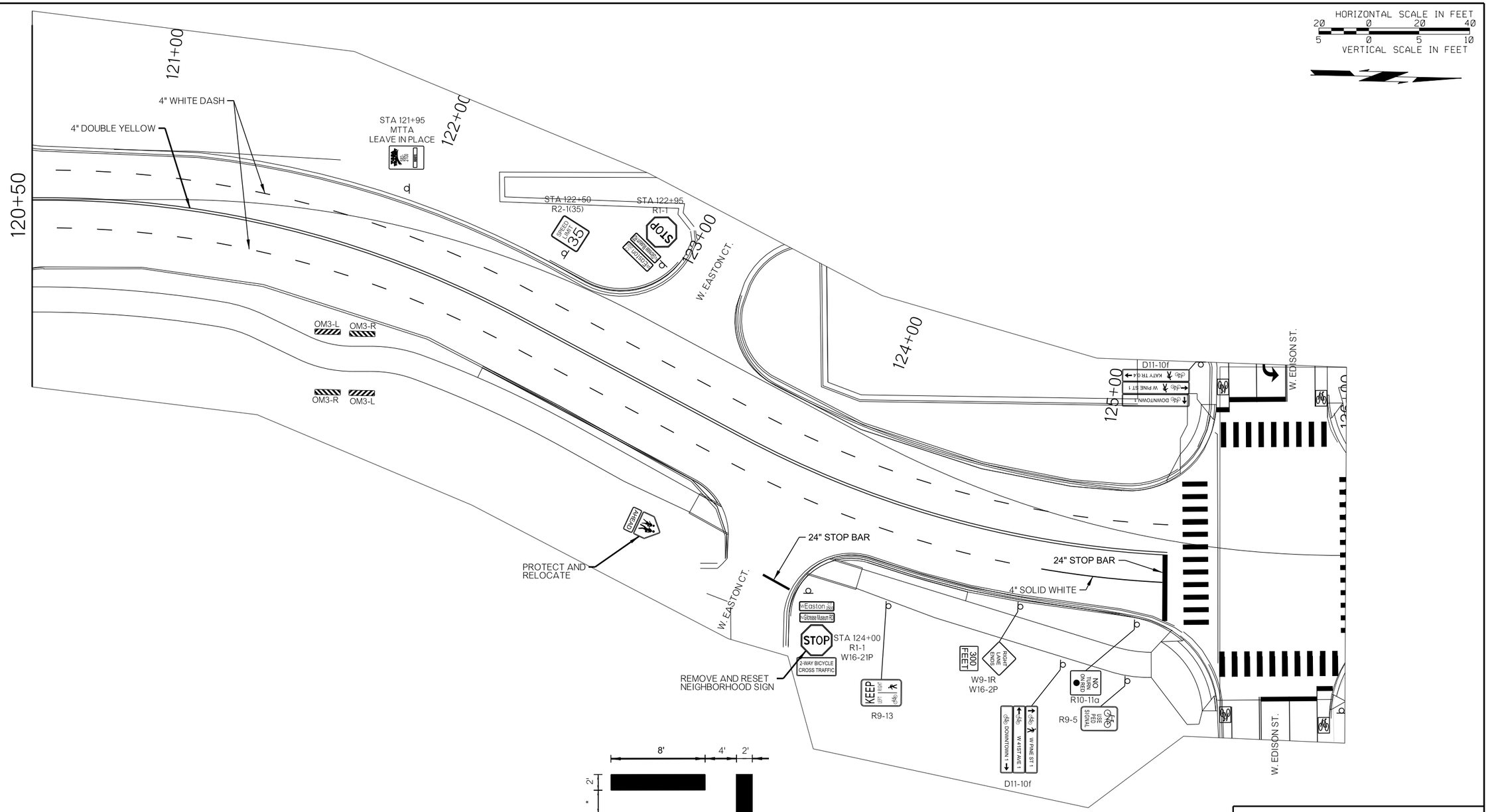
PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
4 ADDENDUM 4 - REVISED PER COMMENTS	JTB	08/01/2025

PLAN SCALE: 1" = 20'	DRAWN	POE	04/2023	APPROVED:
	DESIGNED	POE	04/2023	
	SURVEY	MW	3/2022	
PROFILE SCALE:	PROJ. MGR.			
HORIZONTAL: 1" = 20'	LEAD ENGR.			
	FIELD MGR.			
VERTICAL 1" = 5'	RECOMMENDED: DESIGN MANAGER			CITY ENGINEER

FILE: H:\21-1009 DRAWING: 21-1009-Signing and Striping Plan DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75 SHEET 63 OF 268 SHEETS

I:\21-1009 25th Widening\Plan Sheets\RoadwayShts\21-1009-Signing and Striping Plan.dgn
8/6/2025



NOTE:
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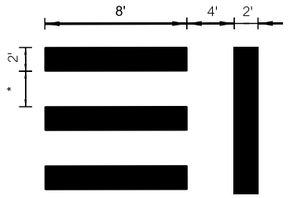

DIMENSIONS FOR
CROSSWALK & STOP BARS

*NOTE:
CROSSWALK BARS ARE TO BE PLACED IN LINE WITH THE LANE LINES AND AT THE CENTERLINE OF EACH LANE.

LEGEND

- 12' 28' 12' / 40' CYCLE — 4" BROKEN WHITE LANE LINE
- 4" SOLID WHITE OR YELLOW LANE LINE
- 4" DOUBLE SOLID YELLOW CENTERLINE
- 24" STOP BAR
- WHITE ARROW
- ACCESSIBLE PARKING
- SHARED LANE MARKER
- BIKE LANE MARKER (GREEN BACKGROUND)
- BIKE LANE MARKER (MID-BLOCK)

LICENSED PROFESSIONAL ENGINEER
JARED T. BATES
20681
OKLAHOMA
6/20/2025

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REVISION	BY	DATE
4 ADDENDUM 4 - REVISED PER COMMENTS	JTB	08/01/2025

SIGNING & STRIPING SHEET (2)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

PLAN SCALE: 1" = 20'	DRAWN	POE	04/2023	APPROVED:
	DESIGNED	POE	04/2023	
	SURVEY	MW	3/2022	
PROFILE SCALE:	PROJ. MGR.			
HORIZONTAL: 1" = 20'	LEAD ENGR.			
	FIELD MGR.			
VERTICAL 1" = 5'	RECOMMENDED: DESIGN MANAGER			CITY ENGINEER
FILE: H:\21-1009	DRAWING: 21-1009-Signing and Striping Plan			DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75				SHEET 64 OF 268 SHEETS

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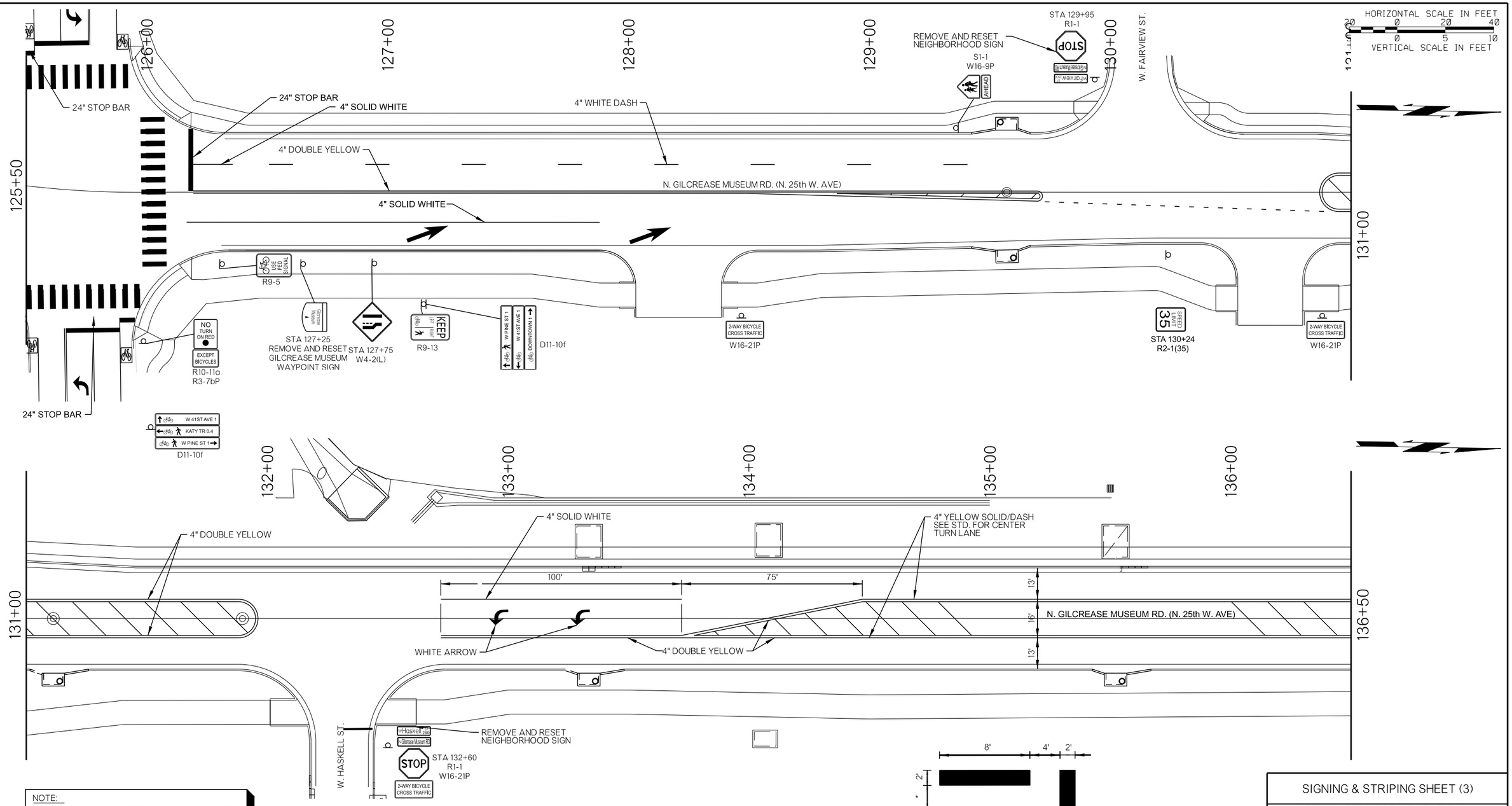
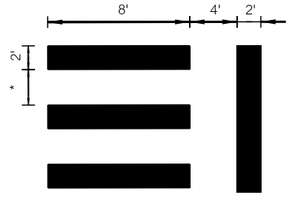
8/6/2025



NOTE:
TRAFFIC SIGNING AND STRIPING PLANS ARE FOR BIDDING PURPOSES. FINAL SIGNING AND STRIPING SHEETS WILL BE PROVIDED WITH CONFORMED DRAWINGS.

LEGEND

- 12' 28' 12' / 40' CYCLE — 4" BROKEN WHITE LANE LINE
- 4" SOLID WHITE OR YELLOW LANE LINE
- 4" DOUBLE SOLID YELLOW CENTERLINE
- 24" STOP BAR
- WHITE ARROW
- ACCESSIBLE PARKING
- SHARED LANE MARKER
- BIKE LANE MARKER (GREEN BACKGROUND)
- BIKE LANE MARKER (MID-BLOCK)



DIMENSIONS FOR CROSSWALKS & STOP BARS

*NOTE:
CROSSWALK BARS ARE TO BE PLACED IN LINE WITH THE LANE LINES AND AT THE CENTERLINE OF EACH LANE.

REVISION	BY	DATE
4 ADDENDUM 4 - REVISED PER COMMENTS	JTB	08/01/2025

SIGNING & STRIPING SHEET (3)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

PLAN SCALE: 1" = 20'	DRAWN	POE	04/2023
	DESIGNED	POE	04/2023
	SURVEY	MW	3/2022
PROFILE SCALE:	PROJ. MGR.		
HORIZONTAL: 1" = 20'	LEAD ENGR.		
	FIELD MGR.		
VERTICAL 1" = 5'	RECOMMENDED: DESIGN MANAGER		CITY ENGINEER
FILE: H:\21-1009	DRAWING: 21-1009-Signing and Striping Plan		DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75			SHEET 65 OF 268 SHEETS

APPROVED:

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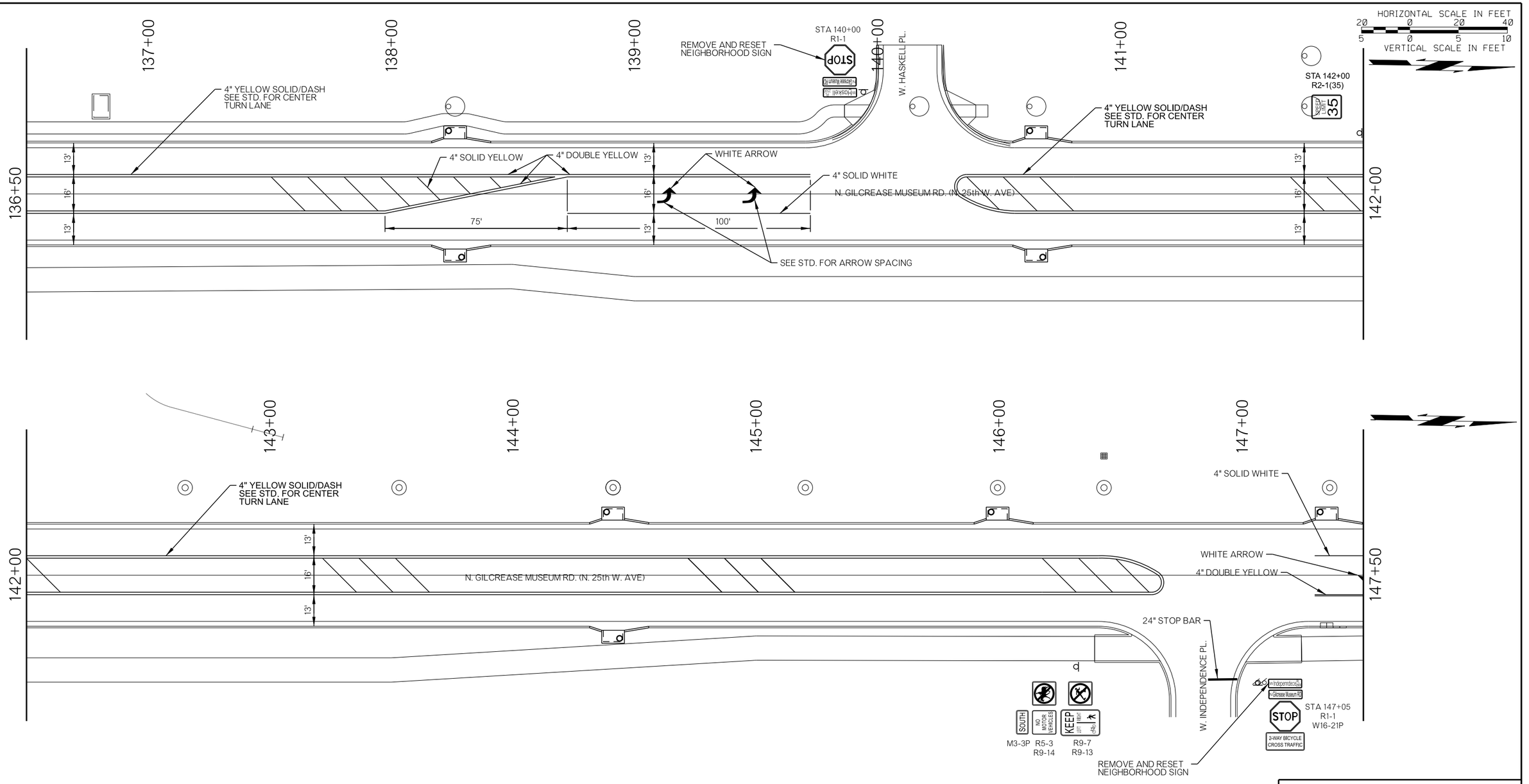
8/6/2025



NOTE:
TRAFFIC SIGNING AND STRIPING PLANS ARE FOR BIDDING PURPOSES. FINAL SIGNING AND STRIPING SHEETS WILL BE PROVIDED WITH CONFORMED DRAWINGS.

LEGEND

- 4" BROKEN WHITE LANE LINE (12' – 28' – 12', 40' CYCLE)
- 4" SOLID WHITE OR YELLOW LANE LINE
- 4" DOUBLE SOLID YELLOW CENTERLINE
- 24" STOP BAR
- WHITE ARROW
- ACCESSIBLE PARKING
- SHARED LANE MARKER
- BIKE LANE MARKER (GREEN BACKGROUND)
- BIKE LANE MARKER (MID-BLOCK)

LICENSED PROFESSIONAL ENGINEER JARED T. BATES 20681 OKLAHOMA
6/20/2025

BEFORE YOU DIG CALL OKIE 811 1-800-522-OKIE

REVISION	BY	DATE
4 ADDENDUM 4 - REVISED PER COMMENTS	JTB	08/01/2025

SIGNING & STRIPING SHEET (4)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

PLAN SCALE: 1" = 20'	DRAWN	POE	04/2023	APPROVED:
	DESIGNED	POE	04/2023	
	SURVEY	MW	3/2022	
PROFILE SCALE:	PROJ. MGR.			
HORIZONTAL: 1" = 20'	LEAD ENGR.			
	FIELD MGR.			
VERTICAL 1" = 5'	RECOMMENDED: DESIGN MANAGER			CITY ENGINEER
FILE: H:\21-1009	DRAWING: 21-1009-Signing and Striping Plan			DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75				SHEET 66 OF 268 SHEETS

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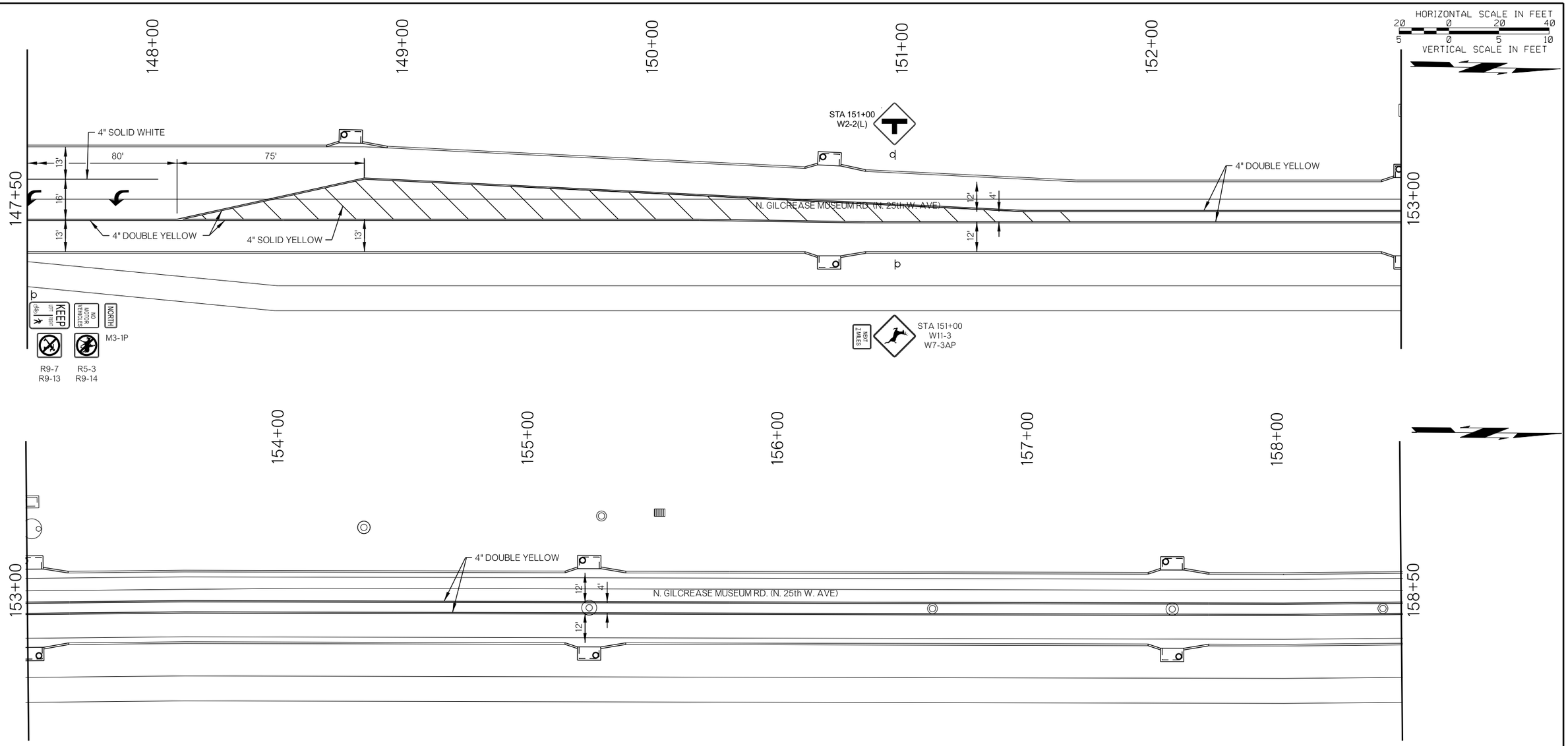
8/6/2025



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8/6/2025

NOTE:
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LEGEND

- 12' 28' 12' / 40' CYCLE — 4" BROKEN WHITE LANE LINE
- 4" SOLID WHITE OR YELLOW LANE LINE
- 4" DOUBLE SOLID YELLOW CENTERLINE
- 24" STOP BAR
- WHITE ARROW
- ACCESSIBLE PARKING
- SHARED LANE MARKER
- BIKE LANE MARKER (GREEN BACKGROUND)
- BIKE LANE MARKER (MID-BLOCK)

LICENSED PROFESSIONAL ENGINEER
JARED T. BATES
20681
OKLAHOMA
6/20/2025

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REVISION	BY	DATE
4 ADDENDUM 4 - REVISED PER COMMENTS	JTB	08/01/2025

SIGNING & STRIPING SHEET (5)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
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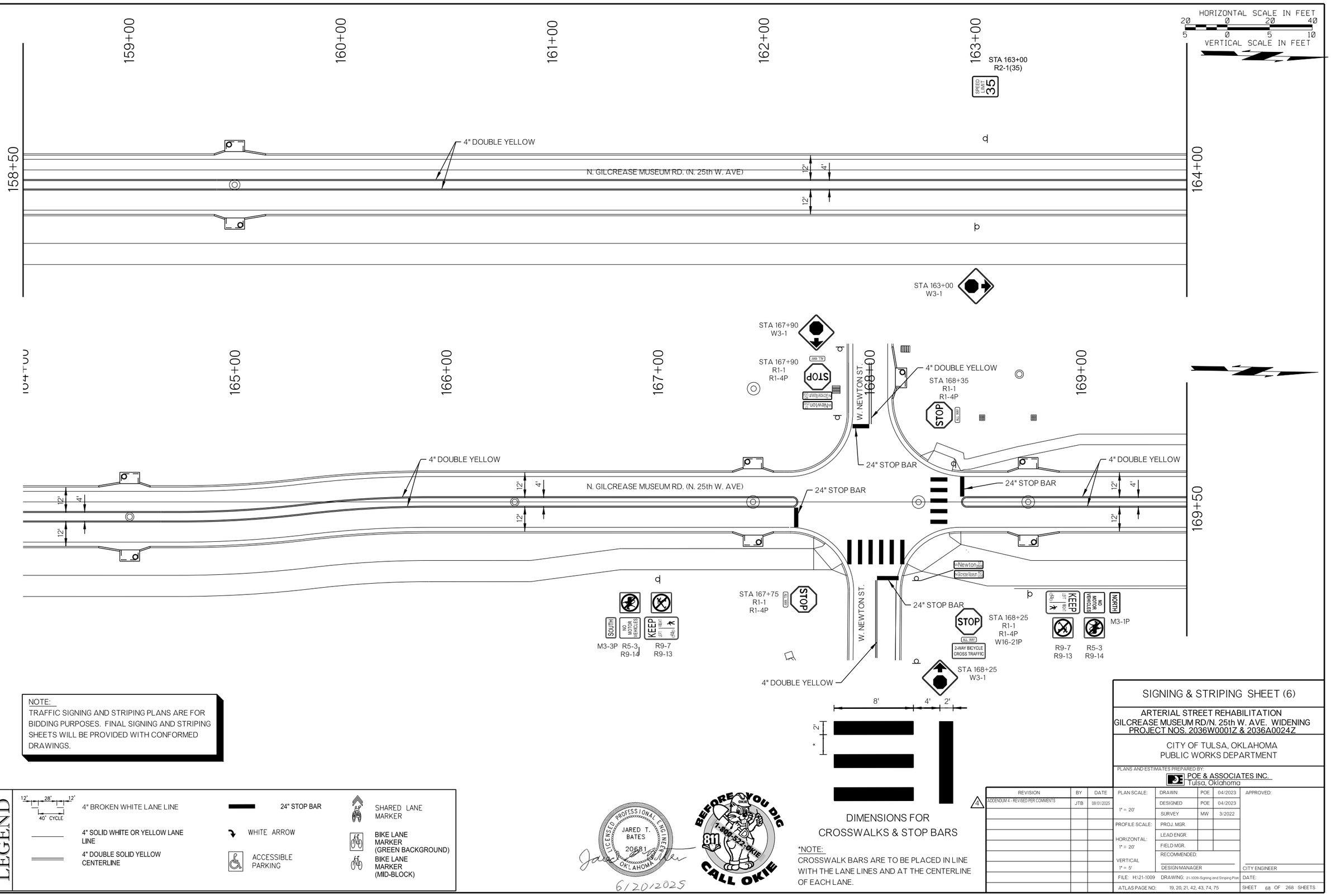

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WHITE ARROW

ACCESSIBLE PARKING

SHARED LANE MARKER

BIKE LANE MARKER (GREEN BACKGROUND)

BIKE LANE MARKER (MID-BLOCK)

LICENSED PROFESSIONAL ENGINEER — JARED T. BATES — 20681 — OKLAHOMA

6/20/2025

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DIMENSIONS FOR CROSSWALKS & STOP BARS

*NOTE:
CROSSWALK BARS ARE TO BE PLACED IN LINE WITH THE LANE LINES AND AT THE CENTERLINE OF EACH LANE.

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SIGNING & STRIPING SHEET (6)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
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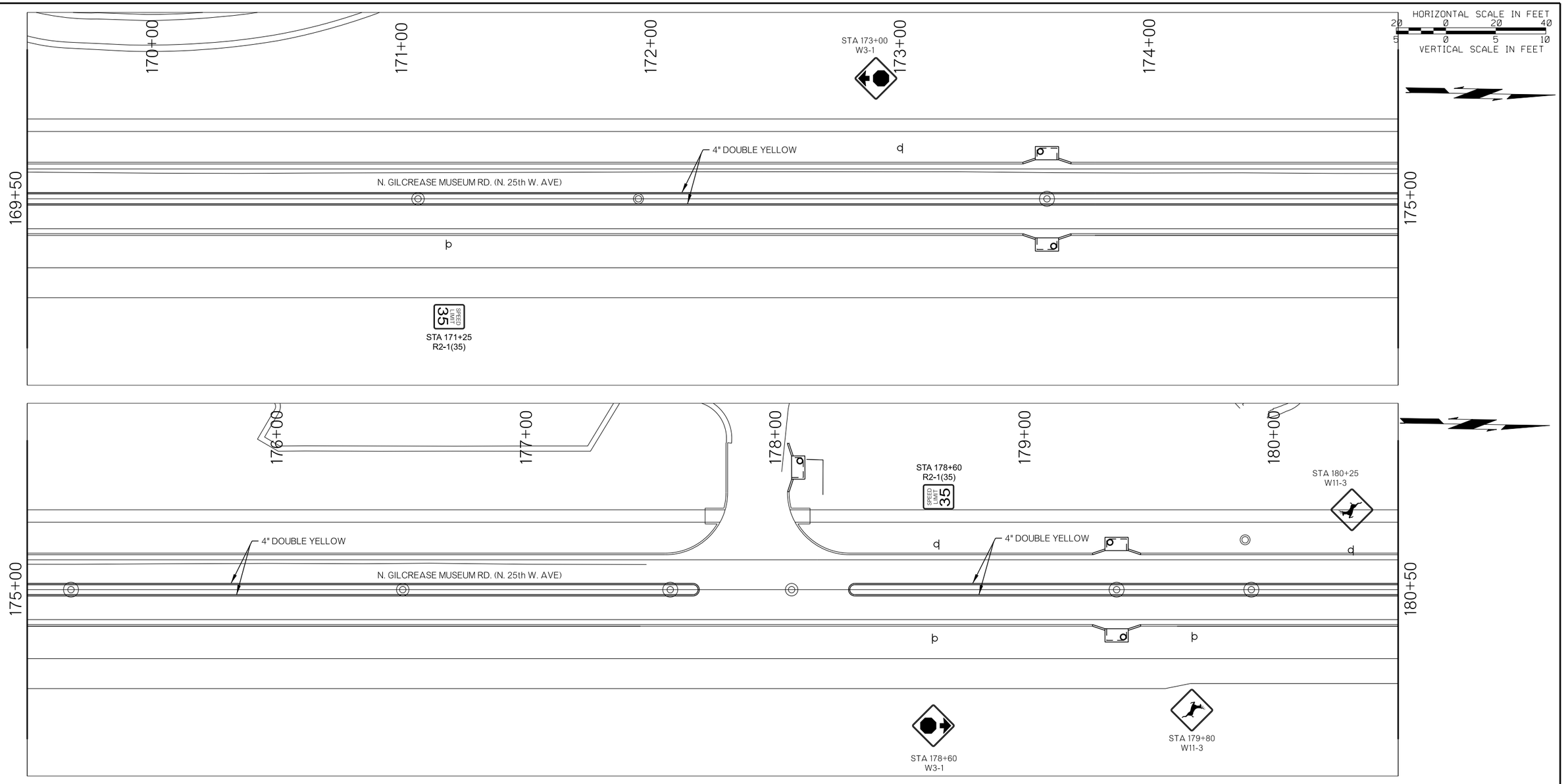

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LICENSED PROFESSIONAL ENGINEER
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20681
OKLAHOMA
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SIGNING & STRIPING SHEET (7)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
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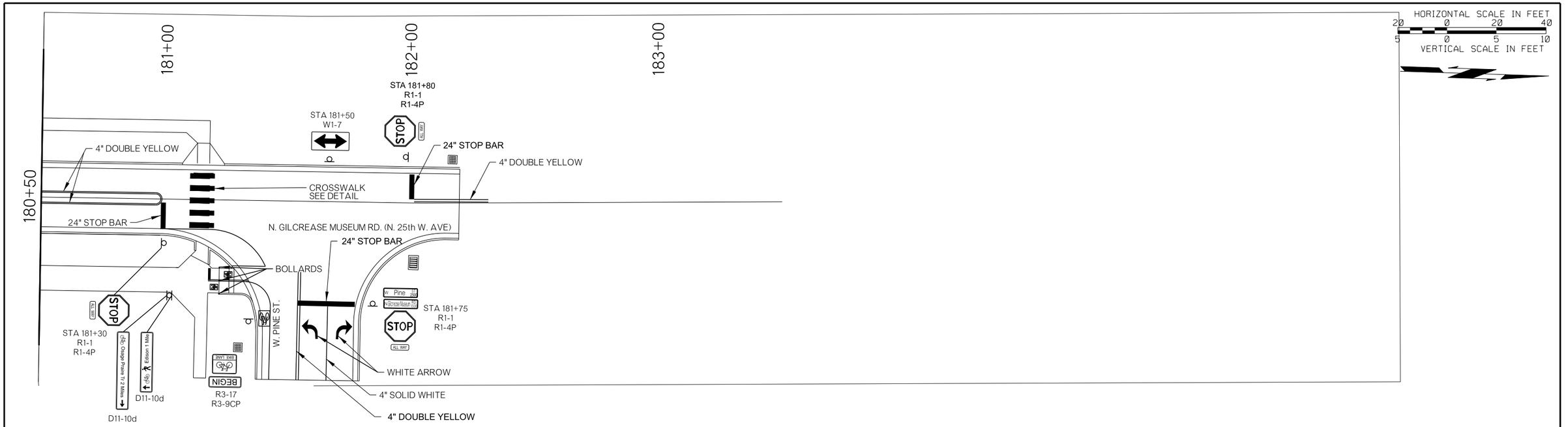

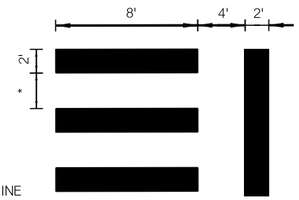

DIMENSIONS FOR
CROSSWALKS & STOP BARS

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JARED T. BATES 20681 LICENSED PROFESSIONAL ENGINEER OKLAHOMA

6/20/2025

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SIGNING & STRIPING SHEET (8)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

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Tulsa, Oklahoma

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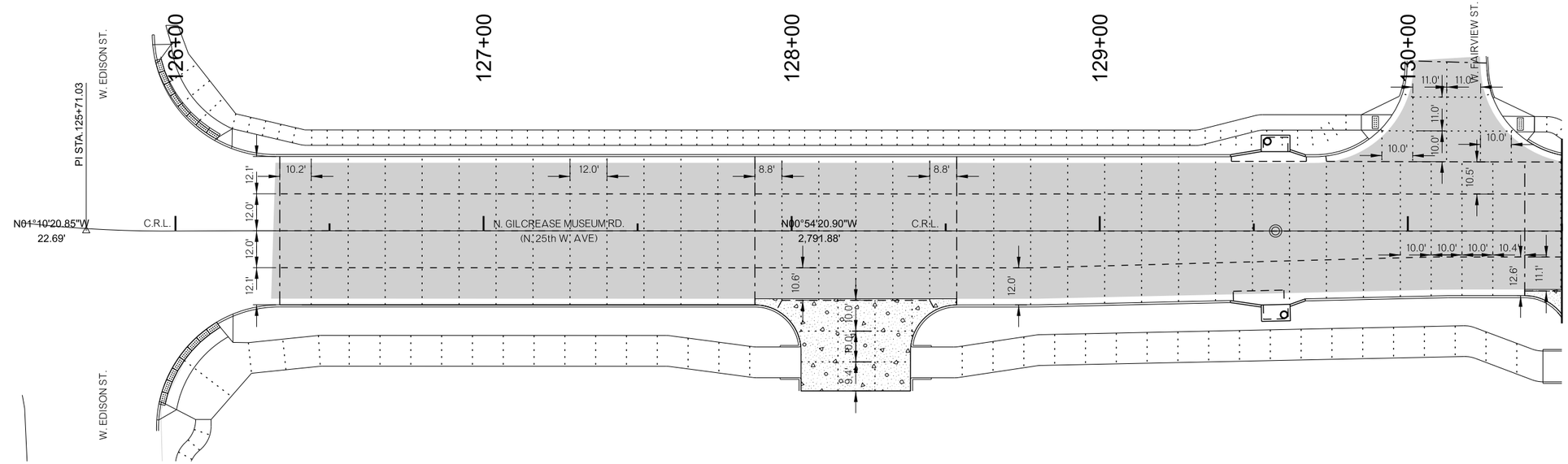
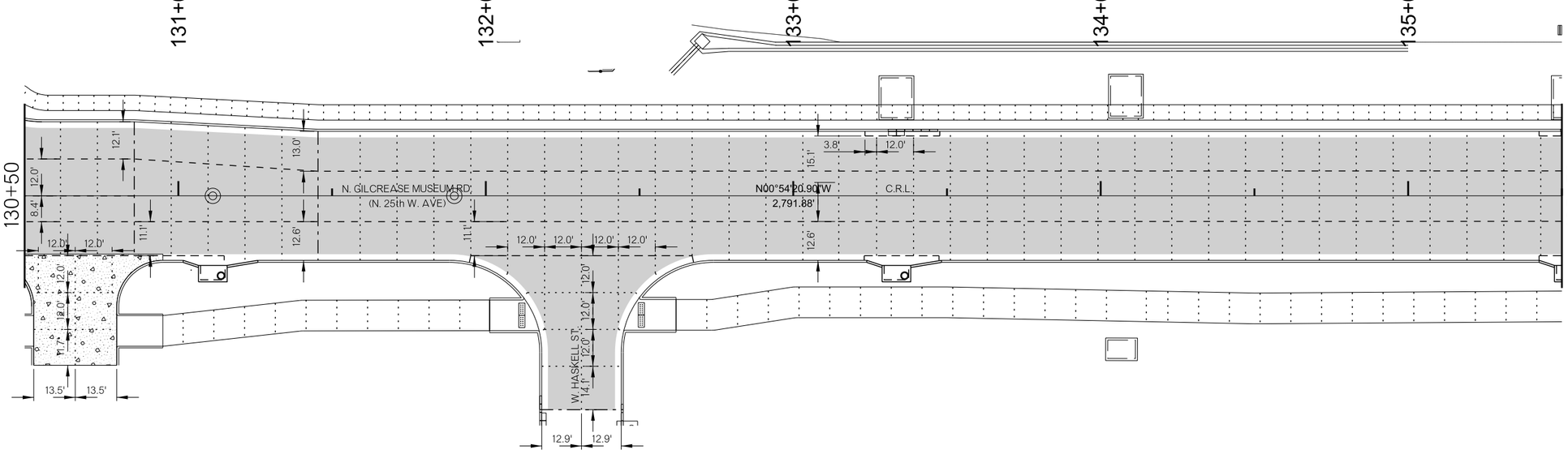
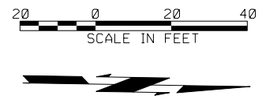
8/6/2025







NOTE:
ALL TRANSVERSE JOINTS ARE
12' UNLESS OTHERWISE NOTES.

LEGEND

- ISOLATION JOINT
- LONGITUDINAL JOINT
- TRANSVERSE JOINT (ODOT LTU-4-0)
- [R] REINFORCED CONCRETE PANEL (STEEL EST. 12LB/SY)

LICENSED PROFESSIONAL ENGINEER
JARED T. BATES
20681
OKLAHOMA
6/20/2025

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JOINT LAYOUT PLAN (1)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
4 ADDENDUM 4 - MODIFIED JOINT LAYOUT	JTB	08/01/2025

PLAN SCALE: 1" = 20'	DRAWN	POE	04/2023	APPROVED:	
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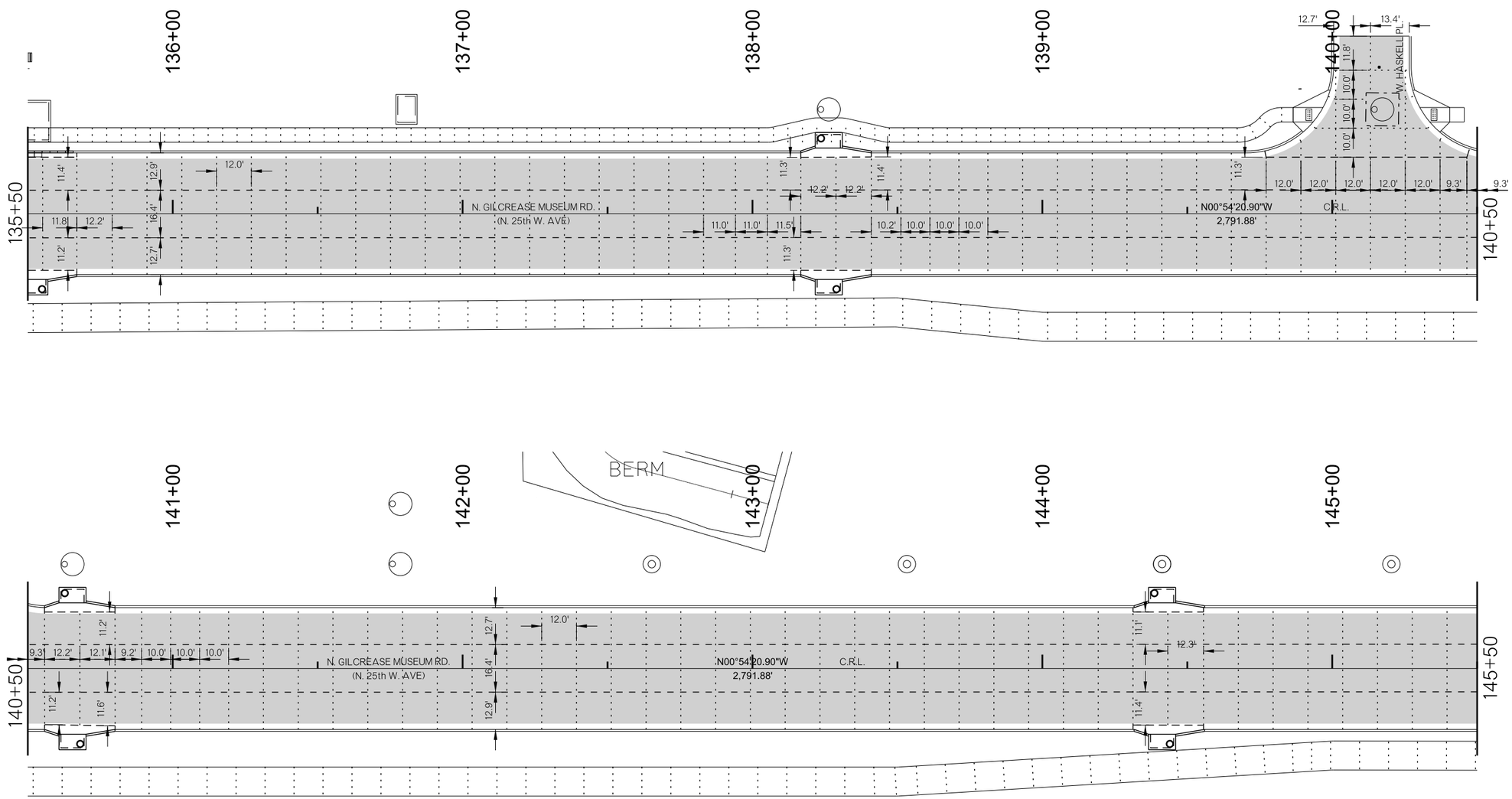

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- LONGITUDINAL JOINT
- TRANSVERSE JOINT (ODOT LTU-4-0)
- [R] REINFORCED CONCRETE PANEL (STEEL EST. 12LB/SY)

LICENSED PROFESSIONAL ENGINEER
JARED T. BATES
20681
OKLAHOMA
6/20/2025

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JOINT LAYOUT PLAN (2)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

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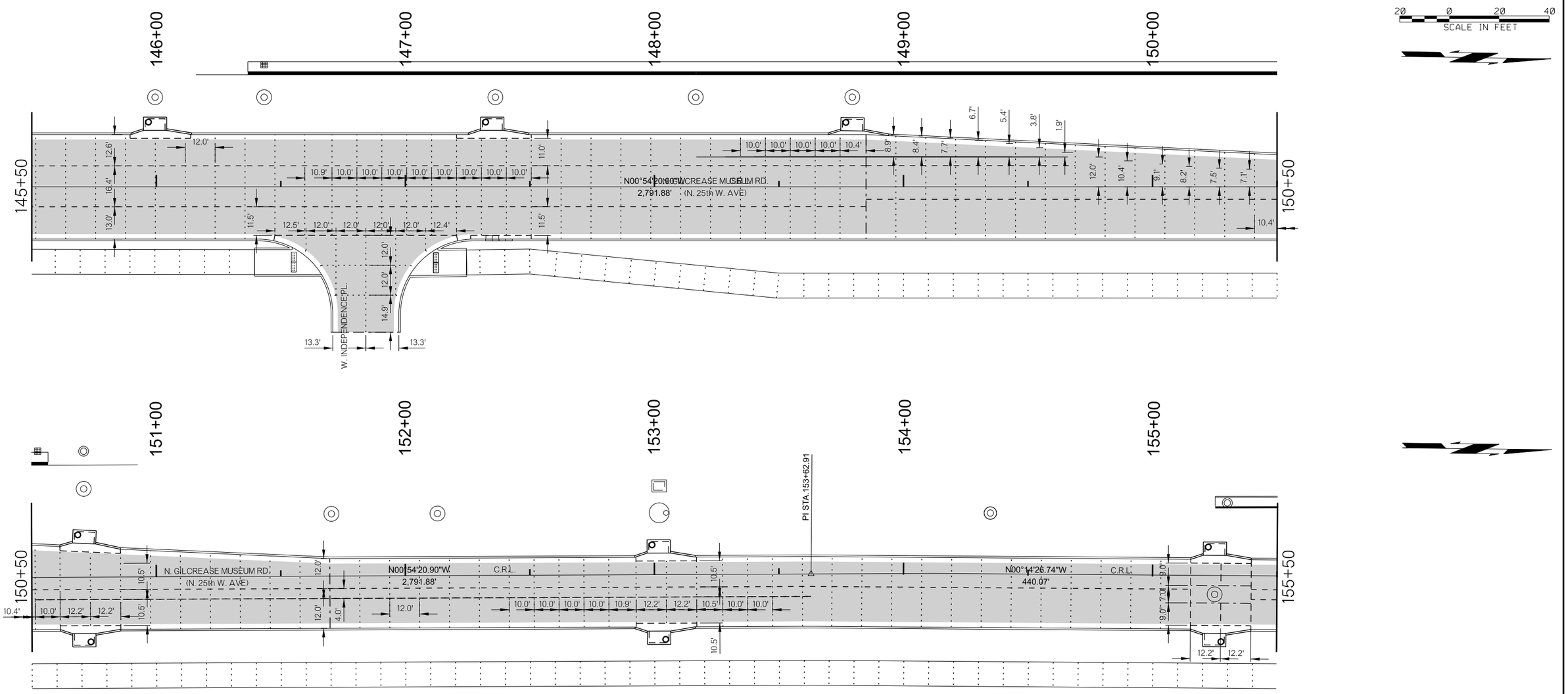

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JARED T. BATES
20681
LICENSED PROFESSIONAL ENGINEER
OKLAHOMA
6/20/2025

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JOINT LAYOUT PLAN (3)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
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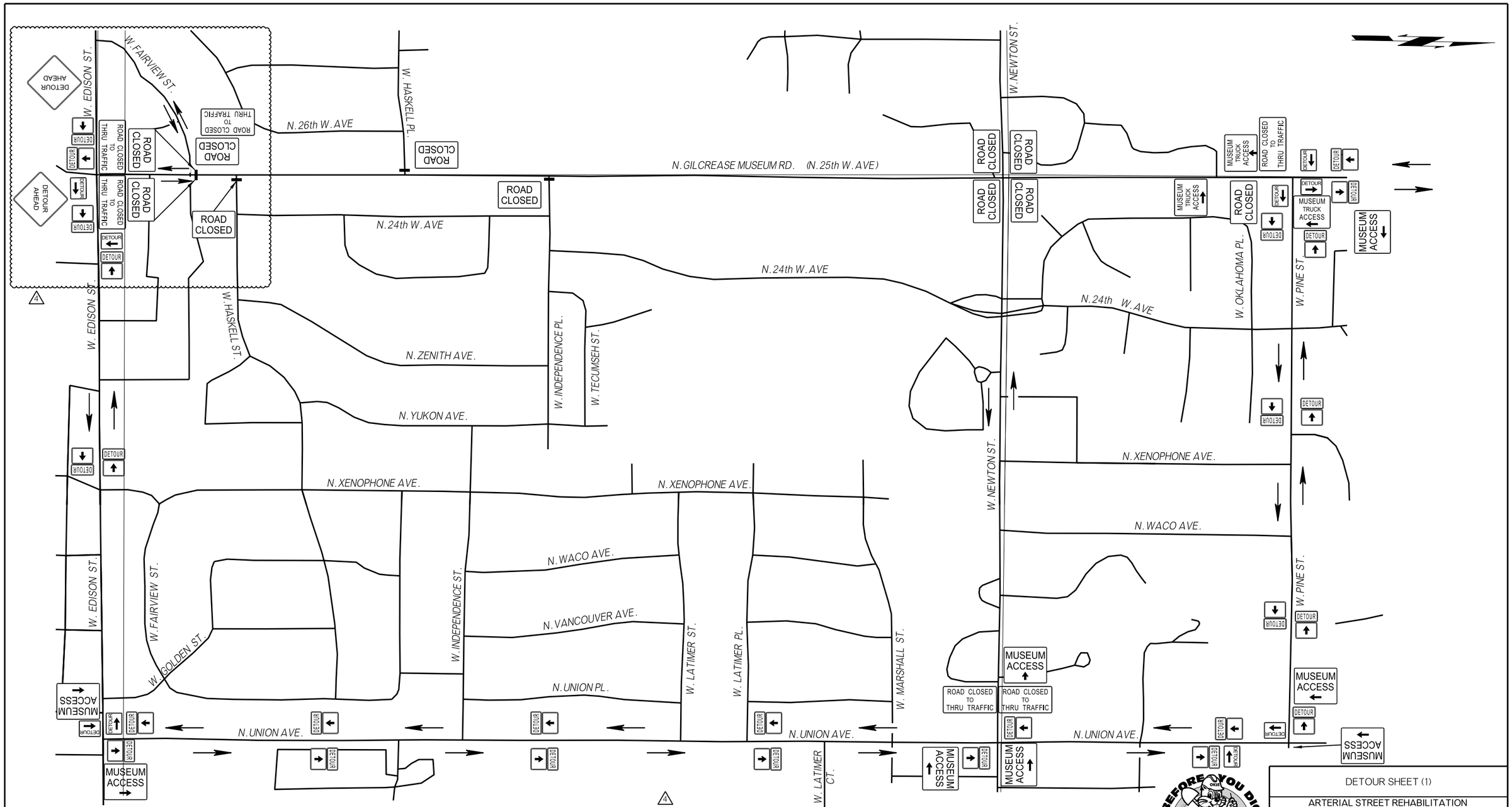

NOTE: PHASE 1A DETOUR
BOTH NORTHBOUND & SOUTHBOUND GILCREASE MUSEUM ROAD TO UTILIZE DETOUR SHOWN. CLOSE GILCREASE MUSEUM ROAD FROM W. EDISON ST. TO W. PINE ST. EXCEPT AS FOLLOWS:

1. SEMI TRUCK ACCESS EXITING SOUTHBOUND ONTO GILCREASE MUSEUM ROAD AT 130+70 RT SHALL BE MAINTAINED AT ALL TIMES.
2. RESIDENTIAL ACCESS TO WEST SIDE OF GILCREASE MUSEUM ROAD ON W. NEWTON STREET SHALL BE MAINTAINED AT ALL TIMES. THIS IS THE ONLY ACCESS FOR THESE RESIDENTS.
3. MUSEUM ACCESS FOR STAFF AND CONSTRUCTION SHALL BE MAINTAINED AT ALL TIMES. SEMI-TRUCK ACCESS SHALL BE MAINTAINED AT ALL TIMES TO THE NORTH DRIVEWAY AT 177+95 LT UNLESS CLOSURE IS COORDINATED WITH MUSEUM STAFF.
4. FULL CLOSURE OF 150 DAYS IS ALLOWED FROM WEST FAIRVIEW STREET TO WEST INDEPENDENCE PLACE IN ORDER TO CONSTRUCT THE RCBS. OUTSIDE OF THE 150 DAYS, LOCAL RESIDENTIAL ACCESS SHALL BE ALLOWED FROM WEST EDISON STREET TO WEST INDEPENDENCE PLACE. SEE PHASE 1C).

NOTE: PHASE 1B DETOUR (MOVE MUSEUM ACCESS SIGNS FROM W. NEWTON ST. TO PINE ST.)
BOTH NORTHBOUND & SOUTHBOUND GILCREASE MUSEUM ROAD TO UTILIZE DETOUR SHOWN. CLOSE GILCREASE MUSEUM ROAD FROM W. EDISON ST. TO W. NEWTON ST. EXCEPT AS FOLLOWS:

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2. RESIDENTIAL ACCESS TO WEST SIDE OF GILCREASE MUSEUM ROAD ON W. NEWTON STREET SHALL BE MAINTAINED AT ALL TIMES. THIS IS THE ONLY ACCESS FOR THESE RESIDENTS. CLOSE NEWTON FROM GILCREASE MUSEUM ROAD TO N. 24TH W. AVE.
3. MUSEUM ACCESS FOR STAFF AND CONSTRUCTION SHALL BE MAINTAINED AT ALL TIMES. SEMI-TRUCK ACCESS SHALL BE MAINTAINED AT ALL TIMES TO THE NORTH DRIVEWAY AT 177+95 LT UNLESS CLOSURE IS COORDINATED WITH MUSEUM STAFF.

4 NOTE: PHASE 1C DETOUR
BOTH NORTHBOUND & SOUTHBOUND GILCREASE MUSEUM ROAD TO UTILIZE DETOUR SHOWN. CLOSE GILCREASE MUSEUM ROAD TO THROUGH TRAFFIC FROM WEST EDISON STREET TO WEST INDEPENDENCE PLACE. OPEN ~~WEST~~ WEST HASKELL STREET, WEST HASKALL PLACE, AND WEST INDEPENDENCE PLACE TO LOCAL ACCESS ONLY - ROAD CLOSED TO THRU TRAFFIC.

JARED T. BATES 20681 LICENSED PROFESSIONAL ENGINEER OKLAHOMA
6/20/2025

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DETOUR SHEET (1)

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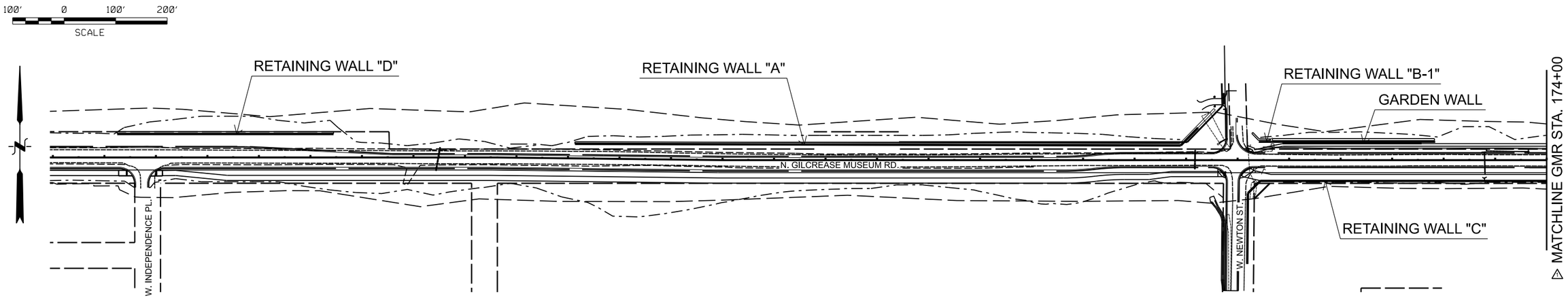

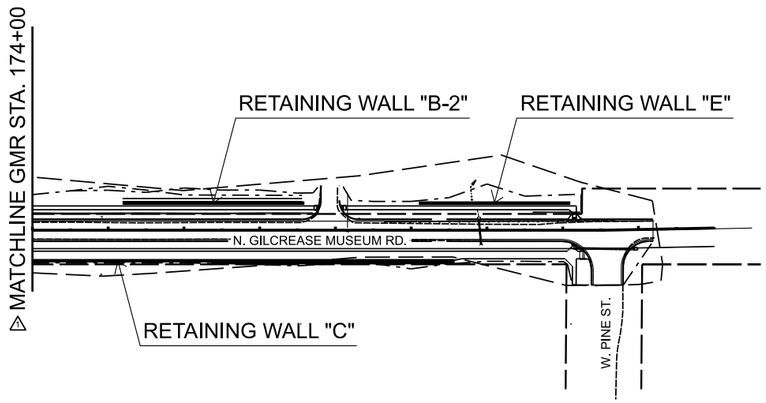

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S9	WALL "B-1" PLAN & ELEVATION
S10	GARDEN WALL PLAN & ELEVATION
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SUMMARY OF RETAINING WALL QUANTITIES

△ △ △ ~~(FOR INFORMATION PURPOSE ONLY)~~

	BID ITEM	SPEC NO.	DESCRIPTION	UNIT	WALL 'A'	WALL 'B-1'	GARDEN WALL	WALL 'B-2'	WALL 'C'	WALL 'D'	WALL 'E'	TOTAL
PAY ITEMS	132	502	TEMPORARY EARTH RETAINAGE	LS	-	-	-	-	-	-	1	1
△	~~133~~	~~506(A)~~	~~STRUCTURAL STEEL~~	~~LB~~	-	-	-	-	-	-	-	-
	134	509(D)	CLASS C CONCRETE	CY	81	23	-	13	18	29	-	164
	135	510(A)	RETAINING WALL, SOLDIER PILE, COMPLETE, IN PLACE	SY	2,166	369	-	-	-	705	-	3,240
	136	510(A)	RETAINING WALL, C.I.P., COMPLETE, IN PLACE	SY	-	58	195	248	1,101	-	347	1,949
	137	510(D)	GRAFFITI TREATMENT	SF	16,564	2,045	1,125	1,388	5,637	5,325	2,690	34,774
	138	510(E)	DECORATIVE WALL	LF	-	-	-	-	978	-	-	978
	139	514(K)	(PL)PILOT HOLES	LF	1,829	356	-	-	-	629	-	2,814
	140	624	ORNAMENTAL 42" AMERISTAR FENCE	LF	-	343	-	240	-	-	200	783
	141	624	ORNAMENTAL 72" AMERISTAR FENCE	LF	△ 606	-	-	-	286	-	-	△ 892
	142	624(E)	FENCE-STYLE CLF (6' HIGH, VINYL COATED)	LF	△ 619	-	-	-	-	420	-	△ 1,039
△	218	514(A)	PILES FURNISHED	LF	3,816	699	-	-	-	1,279	-	5,794
NON-PAY ITEMS (TO BE INCLUDED IN COST PER SY OF "RETAINING WALL")			UNCLASSIFIED BORROW	CY	-	35	105	245	985	-	315	1,685
			SELECT BORROW	CY	1,930	240	-	299	1,460	385	712	5,026
			SUBSTRUCTURE EXCAVATION COMMON	CY	3,600	265	5	295	850	1,180	1,600	7,795
			SUBSTRUCTURE EXCAVATION ROCK	CY	2,570	489	864	144	783	233	193	5,276
			SELECT BACKFILL	CY	-	-	99	-	-	-	-	99
			GRANULAR BACKFILL	CY	3,953	361	-	-	-	882	-	5,196
			CLASS A CONCRETE	CY	-	69	165	298	1,151	-	380	2,063
			PRECAST LAGGING PANEL	SF	18,407	3,101	-	-	-	5,977	-	27,485
			PRECAST COPING	EA	122	27	-	-	-	42	-	191
			PRECAST PILE CAP	EA	123	28	-	-	-	43	-	194
			REINFORCING STEEL	LB	-	6,640	12,870	22,590	150,110	-	29,960	222,170
			6" PERFORATED PIPE UNDERDRAIN ROUND	LF	1,225	343	270	240	1,272	420	200	3,970
			6" NON-PERF.PIPE UNDERDRAIN RND.	LF	10	10	5	5	435	5	10	480
			PIPE UNDERDRAIN COVER MATERIAL	CY	346	85	61	31	258	104	27	912
			1 ½" CONC. SURFACE TREATMENT	SF	18,407	3,619	1,888	2,233	9,957	5,977	3,724	45,805
			CONSTRUCTION STAKING LEVEL II	EA	-	-	-	-	-	-	-	1

WALL LOCATION MAP & SUMMARY OF PAY QUANTITIES

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
△ REVISED TEXT	SH	8/5/25
△ REVISED PAY ITEMS	SH	8/5/25

PLAN SCALE: 1" = N/A
PROFILE SCALE:
HORIZONTAL: 1" = N/A
VERTICAL 1" = N/A

DRAWN | DESIGNED | SURVEY | PROJ. MGR. | LEAD ENGR. | FIELD MGR.
RECOMMENDED: DESIGN MANAGER

APPROVED: CITY ENGINEER

FILE: H:\21-1009 DRAWING:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75
DATE:
SHEET S1 OF SHEETS

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Samantha Heinrich 32024 OKLAHOMA LICENSED PROFESSIONAL ENGINEER

8/6/2025 12:43:52 PM
I:\21-1009 25th Widening\Plan Sheets\BridgeShts\21-1009 Wall Location Map.dgn

DESIGN DATA

DESIGN SPECIFICATIONS:

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION

UNIT STRESSES:

CLASS A CONCRETE	F'c = 3,000 PSI
CLASS AA CONCRETE	F'c = 4,000 PSI
REINFORCING STEEL (GRADE 60)	Fy = 60,000 PSI
STRUCTURAL STEEL M270 (GRADE 50W)	Fy = 50,000 PSI

GENERAL NOTES

SPECIFICATIONS:

⚠ ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH 2019 OKLAHOMA STANDARD SPECIFICATION FOR HIGHWAY CONSTRUCTION EXCEPT AS MODIFIED BY PLANS AND SPECIAL PROVISIONS.

UTILITIES:

(CAUTION) THE LOCATION OF ALL UTILITIES AS SHOWN ARE APPROXIMATE. DUE TO RELOCATION PLANNED OR PRESENTLY UNDER CONSTRUCTION, THERE ARE SOME UTILITIES THAT WILL BE RELOCATED AND NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ALL UTILITIES. NO PAYMENT WILL BE MADE FOR REMOVAL OF ABANDONED UTILITY PIPE LINES THAT INTERFERE WITH CONSTRUCTION. ALL COST TO BE INCLUDED IN OTHER ITEMS.

OKLAHOMA OKIE811 SYSTEM:

IN ACCORDANCE WITH THE OKLAHOMA UNDERGROUND FACILITIES DAMAGE PREVENTION ACT, THE CONTRACTOR SHALL NOTIFY OKIE811 THREE BUSINESS DAYS PRIOR TO BEGINNING EXCAVATION AT OKIE811.ORG.

DESIGN NOTES:

THERE SHALL BE NO SURCHARGE WITHIN 25 FEET OF THE CREST OF THE TEMPORARY EXCAVATION SLOPE DURING CONSTRUCTION OF THE RETAINING WALLS.

CARE SHALL BE TAKEN IN THE DESIGN AND DURING CONSTRUCTION TO DEVELOP AND MAINTAIN RAPID, POSITIVE DRAINAGE AWAY FROM THE RETAINING WALL AREA. WATER SHOULD NOT BE ALLOWED TO POND ADJACENT TO EITHER THE UP SLOPE OR DOWN SLOPE SIDES OF THE RETAINING WALL. PROPER SURFACE DRAINAGE IS NEEDED TO PREVENT WATER FROM FLOWING OVER THE FACE OF THE WALL AND SATURATING EITHER THE FILL BEHIND THE WALL OR THE SUBGRADE SOILS AT THE BASE OF THE WALL.

CONVENTIONAL DE-WATERING METHODS SHOULD BE ADEQUATE FOR TEMPORARY REMOVAL OF ANY GROUNDWATER ENCOUNTERED DURING THE SHALLOW EXCAVATION PROCESS. MORE EXTENSIVE DE-WATERING MAY BE REQUIRED FOR EXCAVATIONS TO REMOVE SOFT SOILS AND/OR IF CONSTRUCTION OCCURS DURING WET PERIODS OF THE YEAR.

PAYMENT:

ALL COST INCURRED DURING CONSTRUCTION OF CONCRETE DITCH SHALL BE INCLUDED IN THE UNIT PRICE BID PER CUBIC YARD OF "CLASS C CONCRETE".

ANTI-GRAFFITI COATING SYSTEM:

AN ANTI-GRAFFITI COATING SYSTEM SHALL BE APPLIED IN ACCORDANCE WITH 737.04 OF THE ODOT STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH THE FEDERAL COLOR CHART AND FEDERAL COLOR NUMBERS PRIOR TO APPLICATION OF THE COATING SYSTEM. THE COLOR CHOSEN BY THE ENGINEER WILL THEN BE APPLIED TO THE COATING SYSTEM.

THE COATING SYSTEM SHALL BE APPLIED TO ALL EXPOSED AREAS OF THE WALL. THIS INCLUDED THE TOP COPING, SIDES, AND ROADWAY FACE OF THE WALL.

THE ANTI-GRAFFITI FINISH AND ALL COSTS ASSOCIATED WITH THIS SHALL BE INCLUDED IN THE BID PER SQUARE FEET OF "GRAFFITI TREATMENT."

PERFORATED PIPE UNDERDRAIN:

THE INSTALLATION OF THE 6" PERFORATED PIPE UNDERDRAIN AND THE COVER MATERIAL SHALL BE PERFORMED ACCORDING TO THE PLANS AND AS SHOWN IN ODOT 2019 ROADWAY STANDARD PUD-4.

PIPE UNDER DRAIN INSTALLATION:

⚠ RETAINING WALL "A" UNDERDRAIN SHALL BE CONNECTED TO APPROXIMATELY 5 LF OF 6" NON-PERFORATED PIPE EXTENDING FROM LAGGING PANEL 1 AND STUBBED INTO DRAINAGE STRUCTURE MH44 AND BE CONNECTED TO APPROXIMATELY 5 L.F. OF 6" NON-PERFORATED PIPE EXTENDING FROM LAGGING PANEL 122 AND STUBBED INTO DRAINAGE STRUCTURE SMD6.

RETAINING WALL "B-1" UNDERDRAIN SHALL BE CONNECTED TO APPROXIMATELY 5 LF OF 6" NON-PERFORATED PIPE EXTENDING FROM C.I.P. PANEL 1 AND STUBBED INTO DRAINAGE STRUCTURE SMD10 AND BE CONNECTED TO APPROXIMATELY 5 L.F. OF 6" NON- PERFORATED PIPE EXTENDING FROM C.I.P. PANEL 3 AND STUBBED INTO DRAINAGE STRUCTURE SMD3.

GARDEN WALL UNDERDRAIN SHALL BE CONNECTED TO APPROXIMATELY 5 LF OF 6" NON-PERFORATED PIPE EXTENDING FROM PANEL 1 AND STUBBED INTO 6" PERFORATED PIPE FROM RETAINING WALL "B-1".

RETAINING WALL "B-2" UNDERDRAIN SHALL BE CONNECTED TO APPROXIMATELY 5 LF OF 6" NON-PERFORATED PIPE EXTENDING FROM PANEL 1 AND STUBBED INTO DRAINAGE STRUCTURE SMD8.

RETAINING WALL "C" UNDERDRAIN SHALL BE CONNECTED TO APPROXIMATELY 5 LF OF 6" NON-PERFORATED PIPE EXTENDING FROM PANEL 1 AND STUBBED INTO DITCH, BE CONNECTED TO APPROXIMATELY 425 L.F. OF 6" NON-PERFORATED PIPE EXTENDING FROM PANEL 24 AND STUBBED INTO DRAINAGE STRUCTURE ST40, AND BE CONNECTED TO APPROXIMATELY 5 L.F. OF 6" NON-PERFORATED PIPE EXTENDING FROM PANEL 51 AND STUBBED INTO DRAINAGE STRUCTURE SMD5.

⚠ RETAINING WALL "D" UNDERDRAIN SHALL BE CONNECTED TO APPROXIMATELY 5 LF OF 6" NON-PERFORATED PIPE EXTENDING FROM LAGGING PANEL 1 AND STUBBED INTO DRAINAGE STRUCTURE SMD11.

RETAINING WALL "E" UNDERDRAIN SHALL DRAIN TO PIPE FROM MH51 (APPROXIMATELY 5 LF OF 5" NON-PERFORATED PIPE EACH SIDE OF R.C.P.).

C.I.P. WALL NOTES

1. ALL CONCRETE EDGES SHALL HAVE A 1" CHAMFER UNLESS OTHERWISE SHOWN OR NOTED. ALL CHAMFER STRIPS SHALL BE SIZED LUMBER.

2. ALL REINFORCING STEEL SHALL HAVE A 2" MINIMUM CLEAR COVER UNLESS OTHERWISE SHOWN.

VERIFICATION OF EXISTING CONDITIONS:

STATION AND OFFSET OF THE END OF WALL "B-1" SHALL MATCH THE EXISTING STONE WALL. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS NECESSARY TO MATCH WALL "B-1" TO THE EXISITING STONE WALL AND SHALL BE SOLELY RESPONSIBLE FOR THE ACCURACY THEREOF. BIDDERS WILL FULLY INFORM THEMSELVES OF THE NATURE OF THE WORK AND CONDITION UNDER WHICH IT WILL BE PERFORMED.

CONCRETE:

CONCRETE FOR RETAINING WALLS SHALL BE CLASS A, F'c = 3,000 PSI MINIMUM STRENGTH AT 28 DAYS.

DESIGN PARAMETERS FOR C.I.P. RETAINING WALLS:

WHERE NEW EMBANKMENT IS NECESSARY, IT SHALL BE PLACED AND COMPACTED IN 6" LIFTS OF LOOSE MATERIALS TO NOT LESS THAN 95% OF THE STANDARD PROCTOR DENSITY. ALL DENSITY TESTS SHALL BE TESTED IN ACCORDANCE TO SECTION 106.03 OF THE 2019 ODOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

FOR FURTHER DESIGN INFORMATION NOT PROVIDED IN THE PLANS OR GEOTECHNICAL REPORT, REFER TO THE 2019 OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

PAYMENT:

⚠ THE PAYMENT FOR C.I.P. RETAINING WALL SHALL BE BASED ON THE SURFACE AREA SHOWN (S.Y.) ON THE PLAN AND PROFILE SHEETS FROM THE TOP OF THE RETAINING WALLS TO TOP OF FOOTING.

⚠ ALL COST INCURRED DURING CONSTRUCTION OF THE C.I.P. RETAINING WALLS SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE YARD OF "RETAINING WALL, C.I.P., COMPLETE, IN PLACE". THE COST SHALL INCLUDE BUT NOT LIMITED TO: EXCAVATION, BACKFILL, BACKFILL MATERIAL, DRAINAGE SYSTEMS AND CONNECTIONS, FILTER FABRICS, PERFORATED AND NON-PERFORATED PIPE, CONCRETE, REINFORCING STEEL, CONCRETE SURFACE FORM LINERS, RAPID CURE JOINTS, FINISH, CONCRETE MOW STRIPS AND WATER STOPS.

⚠ TYPICAL FORM LINER AND CONCRETE FINISH NOTES:

THE EXPOSED CONCRETE SURFACES OF THE RETAINING WALL SYSTEM SHALL HAVE THE FORM LINER SURFACE TREATMENT THAT HAS BEEN PRE-APPROVED BY THE ENGINEER FOR THE AESTHETIC THEME OF THE PROJECT. SEE RETAINING WALL SHEETS FOR DETAILS.

THE CONTRACTOR SHALL SUBMIT THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND PRODUCT DATA FOR THE TEXTURE SURFACE TREATMENTS. SHOP DRAWINGS SHALL INDICATE FORM LINER LAYOUT, RUSTICATION, REVEAL, AND CHAMFER STRIPS. LOCATION OF JOINTS AND FORM TIES SHALL BE INCLUDED. THE CONTRACTOR SHALL PROVIDE THE ENGINEER, FOR HIS APPROVAL, A SAMPLE PANEL OF THE APPROVED FORM LINER SURFACE TREATMENTS. THE SAMPLE PANEL SHALL BE AN 2' x 2' PANEL WITH SURFACE TREATMENTS. FOLLOWING THE APPROVAL OF THE SMALL SAMPLE PANEL, THE CONTRACTOR SHALL PROVIDE ONE FULL SCALE MOCK-UP PANEL OF THE SURFACE TREATMENT USING PROPOSED MATERIALS, METHODS AND WORKMANSHIP. THE PANELS SHALL BE APPROVED BY THE ENGINEER ON THE SITE. THE MOCK-UP PANELS SHALL BE A MINIMUM OF 50 SQUARE FEET IN SIZE, AND MAY BE INCORPORATED INTO THE ACTUAL WALLS.

THE MOCK-UP PANEL SHALL INCORPORATE THE PROPOSED CONCRETE MIX, FORM WORK, TIES, FORM LINER, FORM RELEASE AGENTS, PLACEMENT RATE, FORM PRESSURES, JOINT SEALER, VIBRATING, AND FORM STRIPPING PRACTICES.

THE MOCK-UPS SHALL BE ACCEPTED BY THE ENGINEER PRIOR TO BEGINNING FORM WORK FOR THE PROJECT. THE ACCEPTED MOCK-UPS WILL BE THE STANDARD FOR TECHNICAL AND AESTHETIC MERIT.

FORM WORK SHALL BE DESIGNED BY THE CONTRACTOR TO COMPLY WITH ALL REQUIREMENTS BY THE FORM LINER MANUFACTURER. THIS INCLUDES, ALL REQUIREMENTS OF THE FORM LINER MANUFACTURER FOR HANDLING AND INSTALLATION OF THE FORM LINERS AS WELL AS THE APPLICATION OF RELEASE AGENTS. PLACEMENT OF CONCRETE, VIBRATING OF CONCRETE, AND REMOVAL OF FORMS SHALL BE FOLLOWED. FORM LINER BUTT JOINT SHALL BE CAREFULLY LINED UP TO PROVIDE A SURFACE FREE FROM VISIBLE SEAM LINES.

BEFORE YOU DIG OKIE 811 CALL OKIE

LICENSED PROFESSIONAL ENGINEER SAMANTHA HEINRICH 32024 OKLAHOMA

RETAINING WALL NOTES (1)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
⚠ REVISED TEXT	SH	7/29/25

PLAN SCALE: 1" = N/A	DRAWN	POE	4/2023	APPROVED:
	DESIGNED			
	SURVEY			
PROFILE SCALE:	PROJ. MGR.			
HORIZONTAL: 1" = N/A	LEAD ENGR.			
	FIELD MGR.			
VERTICAL 1" = N/A	RECOMMENDED:			
	DESIGN MANAGER			CITY ENGINEER
FILE: H:\21-1009	DRAWING: 21-1009 Wall Notes			DATE:
ATLAS PAGE NO:				SHEET S2 OF SHEETS

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SOLDIER PILE WALL NOTES

DESIGN NOTES FOR SOLDIER PILE WALL:

⚠ THE SOLDIER PILE WALL SHALL BE COMPRISED OF PRECAST CONCRETE LAGGING. THE LAGGING SYSTEM INCLUDING THE LAGGING PANELS, CONNECTION TO THE PILES, CONNECTION BETWEEN STACKING LAGGING PANELS, AND ALL OTHER DETAILS ASSOCIATED WITH THE LAGGING DESIGN SHALL BE PROVIDED BY AN ODOT APPROVED PRECAST SUPPLIER WHICH MEETS THE REQUIREMENTS OF THE ODOT SPECIFICATIONS.

LAGGING DESIGN IS APPROVED AS SHOWN IN PLANS. THE CONTRACTOR MAY CHOOSE TO PROVIDE ALTERNATE LAGGING DESIGN AT NO ADDITIONAL COST TO THE CITY OF TULSA. FOR ALTERNATE LAGGING DESIGN, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL THE ENGINEERING CALCULATIONS FOR THE SOLDIER PILE WALL LAGGING. THE LAGGING MUST BE DESIGNED FOR 100% OF THE LATERAL LOAD THAT COULD OCCUR DURING THE LIFE OF THE WALL IN ACCORDANCE WITH THE CURRENT EDITION OF THE AASHTO LRFD SPECIFICATIONS. THE CONTRACTOR MUST PROVIDE DETAILED SHOP DRAWINGS AND ERECTION DRAWINGS FOR APPROVAL BY THE ENGINEER PRIOR TO COMMENCEMENT OF WORK, IN ACCORDANCE WIT THE ODOT 2019 STANDARD SPECIFICATION FOR HIGHWAY CONSTRUCTION, SECTION 105.02. ALL DOCUMENTS MUST BE SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF OKLAHOMA.

LIFTING POINTS FOR LAGGING, COPING, AND PILE CAPS SHALL BE DESIGNED BY THE PRECAST CONTRACTOR. LIFTING HOLES SHALL NOT BE PERMITTED.

⚠ THE CONTRACTOR SHALL PROVIDE PRECAST COPING AS SHOWN IN THE PLANS ON TOP OF THE WALL. COPING DESIGN IS APPROVED AS SHOWN IN PLANS. THE CONTRACTOR MAY CHOOSE TO PROVIDE ALTERNATE COPING DESIGN AT NO ADDITIONAL COST TO THE CITY OF TULSA. FOR ALTERNATE COPING DESIGN, THE DETAILS FOR THE COPING TO BE USED SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. THE LAGGING PANELS SHALL EXTEND A MINIMUM OF 3" INTO THE COPING. IF CAST-IN-PLACECOPING IS USED, IT MUST MEET THE AESTHETIC AND ELEVATION REQUIREMENTS APPROVED BY THE ENGINEER.

⚠ THE LAGGING PANELS AS DETAILED ARE DESIGNED FOR PERMAMENT LOADING CONDITIONS. THE LAGGING PANELS AND ANY EMBEDDED COMPONENTS REQUIRED TO FACILITATE THE LIFTING AND HANDLING PROCEDURES OR ANY OTHER TEMPORARY CONSTRUCTION LOADS, MUST BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF OKLAHOMA. SUBMIT DESIGN CALCULATIONS, SHOP AND ERECTION DRAWINGS TO THE BRIDGE ENGINEER FOR APPROVAL. DO NOT BEGIN INSTALLATION UNTIL APPROVAL OF THE DESIGN CALCULATIONS AND DRAWINGS BY THE ENGINEER IS RECEIVED. PRECAST LAGGING PANELS SHALL BE DESIGNED WITHOUT SOIL ARCHING.

THE MINIMUM HEIGHT OF EACH PRECAST LAGGING PANEL SHALL BE 5 FEET. ALL CONNECTIONS OF THE LAGGING SHALL BE PROVIDED IN THE STAMPED CALCULATIONS AND SHOP DRAWINGS. ALL THE CONNECTIONS SHALL BE WATER TIGHT.

THE SOLDIER PILE WALL LAYOUT CONSISTS OF SOME LOCATIONS THAT CHANGE THE ANGLE OF THE WALL. AT THESE LOCATIONS, THE LAGGING SHALL BE DESIGNED TO ACCOMMODATE THESE ANGLES. IF ALTERNATE LAGGING DESIGN IS USED,THE PROVIDED STAMPED CALCULATIONS AND SHOP DRAWINGS SHALL ADDRESS THIS.

THE CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT FOR ADDITIONAL FOUNDATION INFORMATION THAT IS NOT PROVIDED IN THE PLANS.

⚠ SOLDIER PILE WALL CONSTRUCTION:

SUBMIT A CONSTRUCTION PLAN FOR SOLDIER PILE WALL CONSTRUCTION APPROVAL BY THE ENGINEER. PLAN SHOULD INCLUDE PROCEDURES OUTLINGING PILOT HOLE DRILLING, SOLDIER PILE PLACEMENT, PRE-CAST LAGGING PANEL AND COPING ERECTION, AND BACKFILLING OPERATIONS.

GRANULAR BACKFILL WILL BE USED AS SPECIFIED IN THE PLANS FOR BACKFILLING BEHIND THE SOLDIER PILE WALL. MAINTAIN A MINIMUM DISTANCE OF 3'-0" BEHIND WALL FOR ALL HEAVY COMPACTION AND OPERATION EQUIPMENT TO ENSURE SOLDIER PILES AND LAGGING ARE NOT DAMAGED DURING BACKFILL OPERATIONS. COMPACT BACKFILL WITHIN 3'-0" REGION NEAR WALL WITH LIGHTWEIGHT MECHANICAL TAMPER, ROLLER OR VIBRATORY SYSTEM. THE CONTRACTOR WILL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE TO THE WALL AT NO ADDITIONAL COST TO THE CITY OF TULSA.

A REPRESENTATIVE FROM THE PRE-CAST SUPPLIER MUST BE ONSITE DURING INITIAL LAGGING PANEL ERECTION TO DEMONSTRATE PROPER CONSTRUCTION PROCUDURES FOR LAGGING SYSTEM.

THE FINAL TOLERANCE FOR THE LEVELNESS AND PLUMBNESS OF THE SOLDIER PILES AND PRE-CAST ELEMENTS OF THE WALL IS 1/8 INCH PER FOOT.

STRUCTURAL STEEL:

UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS, ALL STRUCTURAL STEEL USED SHALL BE STEEL CONFORMING TO AASHTO M270 (ASTM A709), GRADE 50W.

⚠ CONCRETE:

PROVIDE ALL EXPOSED CONCRETE EDGES WITH A 3/4" CHAMFER UNLESS OTHERWISE SHOWN OR NOTED. USE SIZED LUMBER FOR ALL CHAMFER STRIPS.

PROVIDE FORM LINERS AS DETAILED IN THE PLANS. SUBMIT A 12" x 18" SAMPLE PANEL TO THE BRIDGE ENGINEER FOR APPROVAL. FURNISH SAMPLE PANELS WITH THE APPROPRIATE CONCRETE SURFACE FINISH. PROVIDE FORM LINING MATERIAL OF FULL-SIZED COMERCIAL PANELS AND LINE UP JOINTS AS CLOSE AS PRACTICAL. NO SCRAP OR ODD SIZXED PIECES WILL BE ALLOWED. MAKE PROVISIONS IN THE ADJUSTMENT OF FORMS TO CORRECT ANY DEFORMATIONS. SEAL FORM LINERS AT ALL ENDS, EDGE JOINTS, AND TIE HOLES TO PREVENT DISCOLORATION, SAND STREAKING AND FINS OF CONCRETE SURFACES. OIL ALL CHAMFER STRIPS FOR V-GROOVES TO FACILITATE STRIPPING AS SOON AS FORMS ARE REMOVED. DRESS ANY DISCONTINUITY OF RELIEF PATTERN, PATICULARLY AT PANEL BUTT JOINTS, IN A MANNER APPROVED BY THE ENGINEER. INCLUDE ALL COST OF FORM LINERS, LABOR, MATERIALS, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SPECIFIED IN OTHER ITEMS OF WORK.

PILOT HOLE:

CONSTRUCT 36" DIAMETER PILOT HOLES AT THE DEPTHS AND LOCATIONS SHOWN IN THE PLANS. FILL PILOT HOLES WITH CLASS AA CONCRETE.

PAYMENT:

THE PAYMENT FOR THE PILOT HOLES USED FOR THE SOLDIER PILE WALL, THE CLASS AA CONCRETE FOR FILLING THE PILOT HOLES, AND ALL OTHER COSTS ASSOCIATED WITH THE PILOT HOLES SHALL BE PAID FOR IN THE UNIT PRICE BID PER LINEAR FOOT OF "(PL) PILOT HOLES" ACCORDING TO 514.05(E) OF THE ODOT STANDARD SPECIFICATIONS.

⚠ THE PAYMENT FOR THE ROLLED W-SECTION PILES USED IN THE SOLDIER PILE WALL, THE PLACEMENT OF, AND ALL OTHER COSTS ASSOCIATED SHALL BE PAID FOR IN THE UNIT PRICE BID PER LINEAR FOOT OF "PILES FURNISHED". THE PILES FURNISHED BEING PAID FOR CONSISTS OF STEEL FURNISHED AND THE PLACEMENT OF IT IN THE VERTICAL PLUMB LOCATION SHOWN IN THE PLANS.

THE BACKFILL SHOWN IN THE PLANS SHALL BE PAID FOR IN THE UNIT PRICE BID PER SQUARE YARD OF "RETAINING WALL, SOLDIER PILE, COMPLETE, IN PLACE."

THE PAYMENT FOR THE 6" PERFORATED PIPE UNDERDRAIN, MATERIALS, LABOR, EQUIPMENT, AND ALL OTHER COSTS ASSOCIATED WITH PLACEMENT OF THE UNDERDRAIN SHALL BE PAID FOR IN THE UNIT PRICE BID PER SQUARE YARD OF "RETAINING WALL, SOLDIER PILE, COMPLETE, IN PLACE."

⚠ ALL COST INCURRED DURING CONSTRUCTION OF THE SOLDIER PILE RETAINING WALLS SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE YARD OF "RETAINING WALL, SOLDIER PILE, COMPLETE, IN PLACE." THE COST SHALL INCLUDE BUT NOT LIMITED TO: EXCAVATION, BACKFILL, BACKFILL MATERIAL, DRAINAGE SYSTEMS AND CONNECTIONS, FILTER FABRICS, PERFORATED AND NON-PERFORATED PIPE, PRECAST LAGGING, CONNECTIONS, CONCRETE SURFACES FORM LINERS, COPING, LEVELING PAD, AND ALL OTHER INCIDENTALS REQUIRED TO CONSTRUCT AND DESIGN THE SOLDIER PILE WALL THAT ARE NOT SPECIFIED HERE IN THE PLANS. THE RETAINING WALL QUANTITY IS BASED ON THE SURFACE AREA (S.Y.) SHOWN IN THE PLANS FROM THE TOP OF THE WALL TO THE TOP OF THE LEVELING PAD. NO ADDITIONAL PAYMENTS WILL BE ALLOWED FOR VARYING OF THE LEVELING PAD ELEVATION.

⚠ TYPICAL FORM LINER AND CONCRETE FINISH NOTES:

THE EXPOSED CONCRETE SURFACES OF THE RETAINING WALL SYSTEM SHALL HAVE THE FORM LINER SURFACE TREATMENT THAT HAS BEEN PRE-APPROVED BY THE ENGINEER FOR THE AESTHETIC THEME OF THE PROJECT. SEE RETAINING WALL SHEETS FOR DETAILS.

ORIENT FORM LINER PATTERN HORIZONTALLY TO MATCH LOOK OF ROCK JOINTS IN THE FIELD. NO SCRAP OR ODD SIZED PIECES WILL BE ALLOWED. MAKE PROVISIONS IN THE ADJUSTMENT OF FORMS TO CORRECT ANY DEFORMATION, SEAL FORM LINERS AT ALL ENDS, EDGE JOINTS, AND TIE HOLES TO PREVENT DISCOLORATION, SAND STREAKING FINS ON CONCRETE SUFACES. SUBMIT A 12" x 18" SAMPLE PANEL WITH THE APPROPRIATE CONCRETE SURFACE FINISH TO THE ENGINEER FOR APPROVAL. INCLUDE ALL COST OF FORM LINERS, LABOR, MATERIALS, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS SPECIFIED IN THE UNIT PRICE PER SQUARE YARD OF "RETAINING WALL, SOLDIER PILE, COMPLETE, IN PLACE."

BEFORE YOU DIG OKIE 811 CALL OKIE

SAMANTHA HEINRICH 32024 LICENSED PROFESSIONAL ENGINEER OKLAHOMA

REVISION	BY	DATE
⚠ REVISED TEXT	SH	7/29/25

RETAINING WALL NOTES (2)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

PLAN SCALE: 1" = N/A	DRAWN	POE	4/2023	APPROVED:
	DESIGNED			
	SURVEY			
PROFILE SCALE:	PROJ. MGR.			
HORIZONTAL: 1" = N/A	LEAD ENGR.			
	FIELD MGR.			
VERTICAL 1" = N/A	RECOMMENDED: DESIGN MANAGER			CITY ENGINEER
FILE: H:\21-1009	DRAWING: 21-1009 Wall Notes			DATE:
ATLAS PAGE NO:				SHEET S3 OF SHEETS

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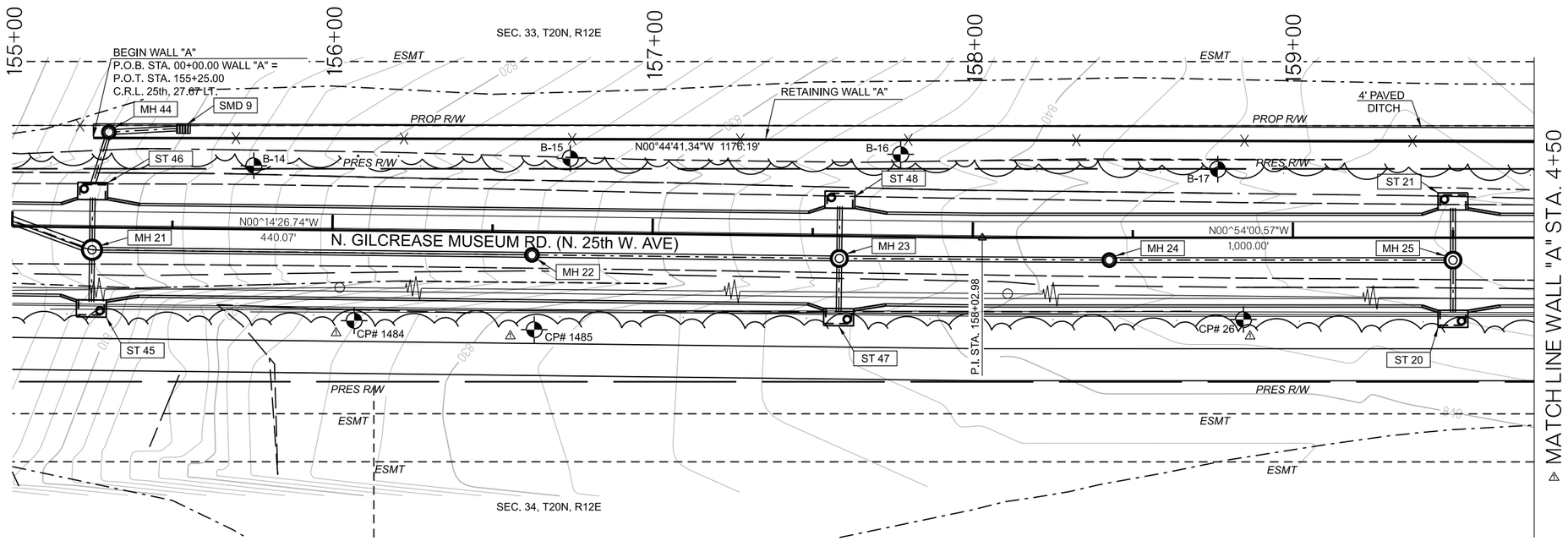
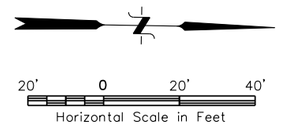
$$datestamp$$





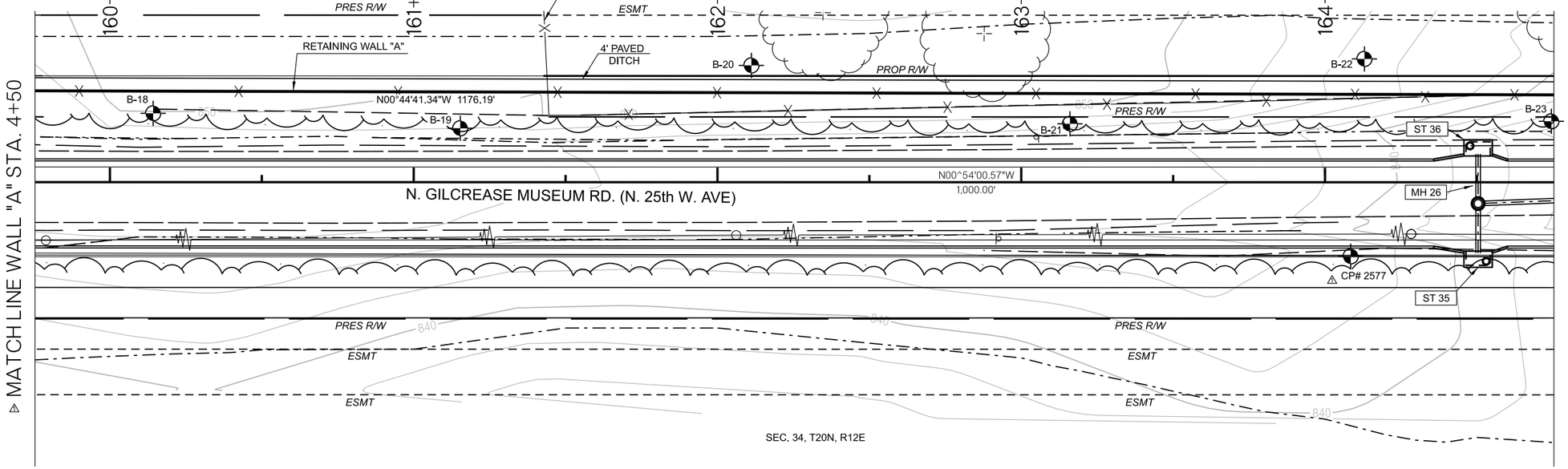
CONTROL:

CP# 26 CP IRON PIN
158+84.56 25.60' RT
N=431984.406 E=2552957.542
ELEV.=842.846

CP# 1484 CP 60d NAIL
156+06.78 28.27' RT
N=431706.351 E=2552962.317
ELEV.=824.813

CP# 1485 CP IP,YELLOW CAP
156+63.03 31.08' RT
N=431762.61 E=2552964.896
ELEV.=830.615

⚠ *CP# 2577 CP IRON PIN*
164+08.44 24.38' RT
N=432508.204 E=2552948.096
ELEV.=844.057



WALL "A" PLAN (1)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
⚠ ADDED TEXT	SH	8/5/25

PLAN SCALE: 1" = N/A
PROFILE SCALE:
HORIZONTAL: 1" = N/A
VERTICAL 1" = N/A

DRAWN | DESIGNED | SURVEY | PROJ. MGR. | LEAD ENGR. | FIELD MGR.
RECOMMENDED: DESIGN MANAGER
APPROVED: CITY ENGINEER

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ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75
SHEET S4 OF SHEETS

BEFORE YOU DIG OKIE 811 CALL OKIE

Samantha Heinrich — LICENSED PROFESSIONAL ENGINEER — SAMANTHA HEINRICH — 32024 — OKLAHOMA

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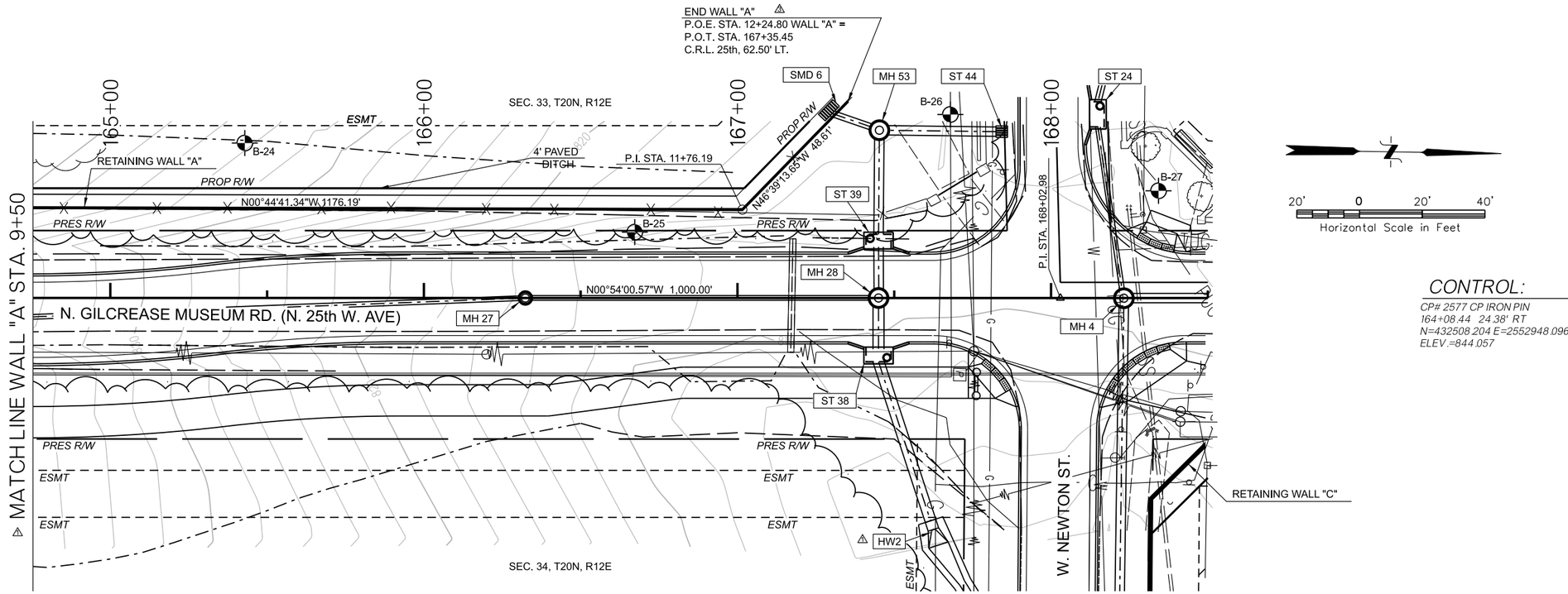
I:\21-1009 25th Widening\Plan Sheets\Bridge Shts\21-1009 WALL A.dgn



CONTROL:

CP# 2577 CP IRON PIN
164+08.44 24.38' RT
N=432508.204 E=2552948.096
ELEV.=844.057

WALL "A" QUANTITIES

ITEM	UNIT	TOTAL
~~STRUCTURAL STEEL~~	~~LB~~	~~828,020~~
CLASS C CONCRETE	CY	81
RETAINING WALL, SOLDIER PILE, COMPLETE, IN PLACE	SY	2,166
GRAFFITI TREATMENT	SF	16,564
(PL)PILOT HOLES	LF	1,829
ORNAMENTAL 72" AMERISTAR FENCE	LF	606
FENCE-STYLE CLF (6' HIGH, VINYL COATED)	LF	619
PILES FURNISHED	LF	3,816

BEFORE YOU DIG 811 OKIE CALL OKIE

LICENSED PROFESSIONAL ENGINEER SAMANTHA HENRICH 32024 OKLAHOMA

REVISION	BY	DATE
ADDED TEXT	SH	8/5/25
REVISED PAY ITEMS	SH	8/5/25
REVISED DATA	SH	8/5/25

PLAN SCALE: 1" = N/A
PROFILE SCALE:
HORIZONTAL: 1" = N/A
VERTICAL 1" = N/A

DRAWN | DESIGNED | SURVEY | PROJ. MGR. | LEAD ENGR. | FIELD MGR.
RECOMMENDED: DESIGN MANAGER
APPROVED: CITY ENGINEER

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DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75
SHEET S5 OF SHEETS

WALL "A" PLAN (2)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

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1224.80'
SOLDIER PILE RET. WALL "A"
122 PILES @ 10' SPACING, 1 PILE @ 14.80'
SEE SCHEDULE FOR WALL ELEVATION AT PILE CENTER

L = 300' L = 400'

TOP OF WALL ELEVATION FORMULA:

FROM X = 100 TO X = 270
Y = 804.45 + 0.1692X - 0.0001444X²

FROM X = 270 TO X = 400
Y = 796.99 + 0.2245X - 0.0002469X²

FROM X = 400 TO X = 645
Y = 830.23 + 0.5832X - 0.00003915X²

WHERE Y = TOP OF WALL ELEVATION
X = HORIZONTAL DISTANCE ALONG WALL IN FT.

BEGIN WALL "A"
P.O.B. STA. 0+00.00
ELEV. = 805.89

P.V.C. STA. 1+00.00
ELEV. 819.92

P.V.I. STA. 2+70.00
ELEV. 843.78

P.C.C. STA. 4+00.00
ELEV. 847.29

MATCHLINE
STA. 4+50.00
ELEV. 848.54

14.03%
2.70%

ESTIMATED ROCK LINE
(FOR EXCAVATION ONLY)

PROP. DITCH ℄

ESTIMATED
FOUNDATION
MATERIAL LINE

PROP. TOP
OF RET "A"

EXIST. GROUND

10'
(TYP.)

2' MIN.

6'-0" CLF
FENCE

PROP. DITCH
ENDS AT SMD 9
TR. 807.65

PROP. FINISHED
GRADE @ FACE

TOP OF
LEVELING PAD

BOTTOM OF PILE

PROP. 18" R.C.P.
℄ ELEV. =791.55

843.0
841.5
836.0
834.5
827.0
825.5
823.0
816.0
813.0
809.5
807.0
799.5
B-17
B-16
B-15
B-14

850
840
830
820
810
800
790
780

0+00 1+00 2+00 3+00 4+00

LEGEND:

(1) PILE NUMBER

(B-1) BORE NUMBER

GIVEN ELEVATIONS:
TOP OF BORE
TOP OF COMPETENT ROCK
BOTTOM OF BORE

SEE GEOTECHINCAL REPORT
FOR FULL BORING LOGS

WALL "A" ELEVATION (1)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
⚠1 ADDED TEXT	SH	8/5/25
⚠2 REVISED TEXT	SH	8/5/25
⚠3 REVISED DETAIL	SH	8/5/25

PLAN SCALE: 1" = N/A
PROFILE SCALE:
HORIZONTAL: 1" = N/A
VERTICAL 1" = N/A

DRAWN | DESIGNED | SURVEY | PROJ. MGR. | LEAD ENGR. | FIELD MGR. | RECOMMENDED: DESIGN MANAGER

APPROVED: CITY ENGINEER

FILE: H:\21-1009 DRAWING:
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ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75
SHEET S6 OF SHEETS

LICENSED PROFESSIONAL ENGINEER SAMANTHA HENRICH 32024 OKLAHOMA

8/5/2025 1:40:33 PM
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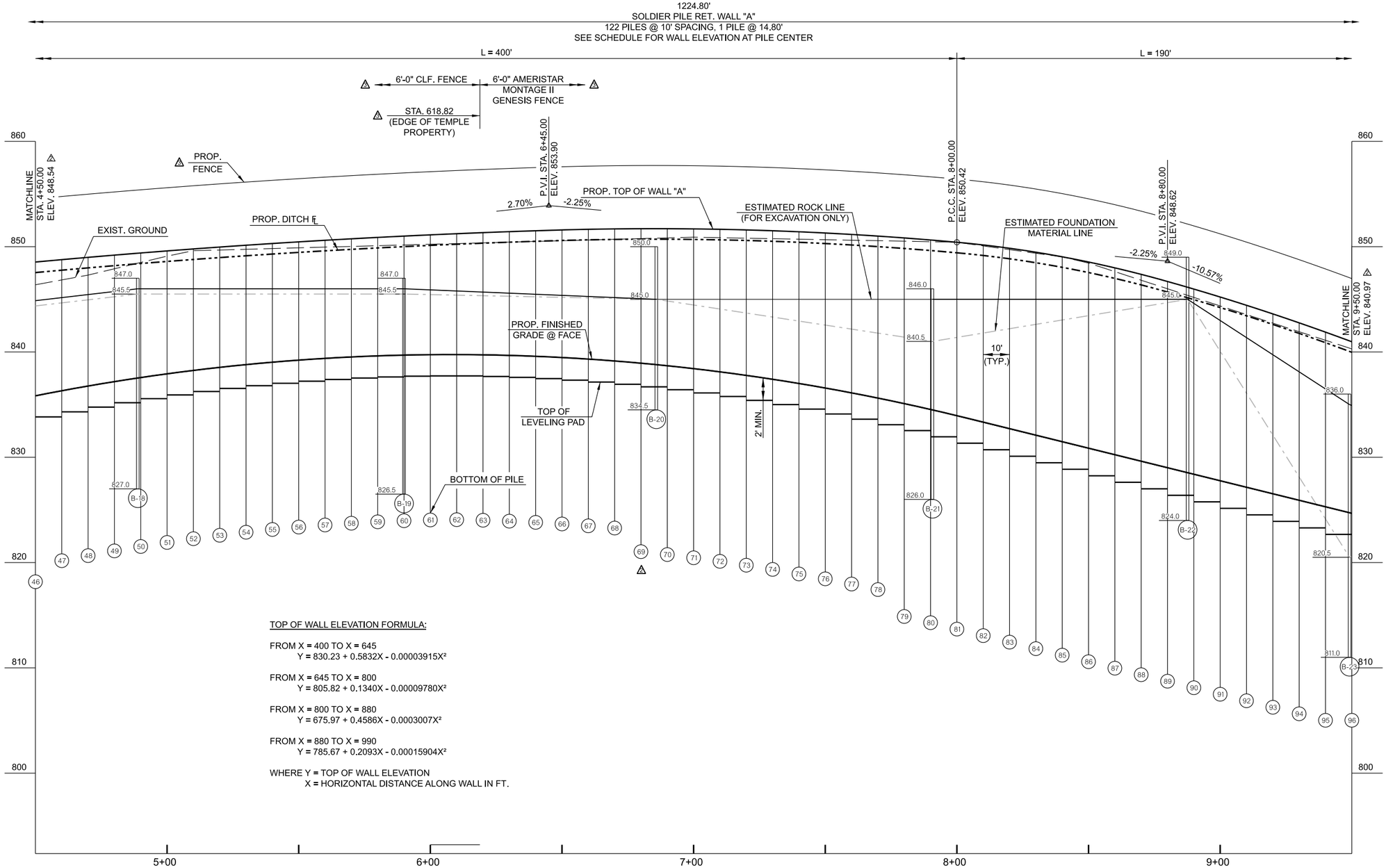

TOP OF WALL ELEVATION FORMULA:

FROM X = 400 TO X = 645
Y = 830.23 + 0.5832X - 0.00003915X²

FROM X = 645 TO X = 800
Y = 805.82 + 0.1340X - 0.00009780X²

FROM X = 800 TO X = 880
Y = 675.97 + 0.4586X - 0.0003007X²

FROM X = 880 TO X = 990
Y = 785.67 + 0.2093X - 0.00015904X²

WHERE Y = TOP OF WALL ELEVATION
X = HORIZONTAL DISTANCE ALONG WALL IN FT.

LEGEND:

(1) PILE NUMBER

(B-1) BORE NUMBER

GIVEN ELEVATIONS:
TOP OF BORE
TOP OF COMPETENT ROCK
BOTTOM OF BORE

SEE GEOTECHINCAL REPORT FOR FULL BORING LOGS

WALL "A" ELEVATION (2)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

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Tulsa, Oklahoma

REVISION	BY	DATE
1 ADDED TEXT	SH	8/5/25
2 REVISED DATA	SH	8/5/25
3 REVISED DETAIL	SH	8/5/25

PLAN SCALE: 1" = N/A
PROFILE SCALE:
HORIZONTAL: 1" = N/A
VERTICAL 1" = N/A

DRAWN | DESIGNED | SURVEY | PROJ. MGR. | LEAD ENGR. | FIELD MGR.
RECOMMENDED: DESIGN MANAGER
APPROVED: CITY ENGINEER

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DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75
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BEFORE YOU DIG OKIE 811 CALL OKIE

LICENSED PROFESSIONAL ENGINEER SAMANTHA HENRICH 32024 OKLAHOMA

8/5/2025 1:42:08 PM
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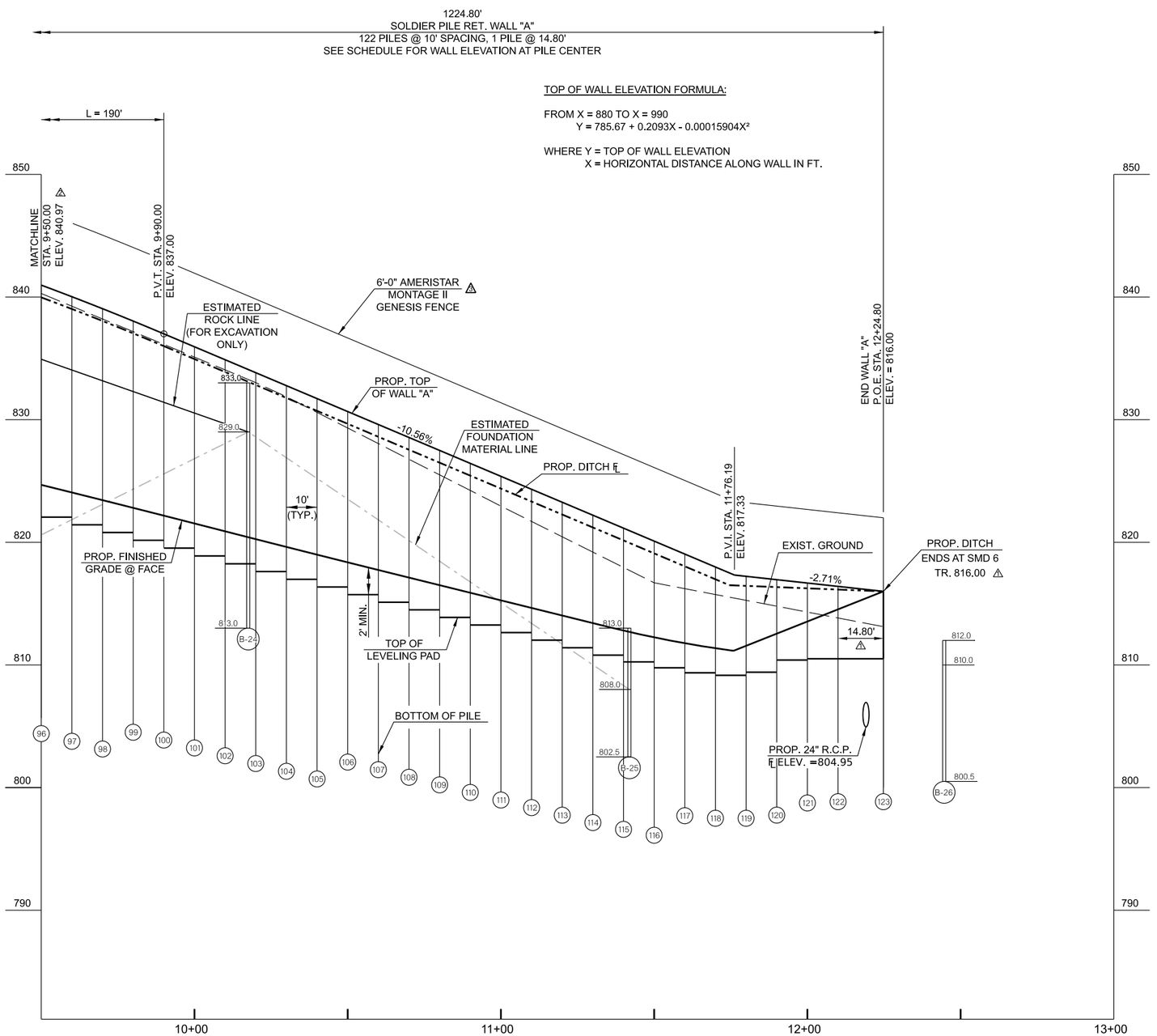

⚠ LEGEND:

(1) PILE NUMBER

(B-1) BORE NUMBER

GIVEN ELEVATIONS:
TOP OF BORE
TOP OF COMPETENT ROCK
BOTTOM OF BORE

SEE GEOTECHINCAL REPORT FOR FULL BORING LOGS

WALL "A" ELEVATION (3)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
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⚠ REVISED TEXT	SH	8/5/25
⚠ REVISED DETAIL	SH	8/5/25

PLAN SCALE: 1" = N/A
PROFILE SCALE:
HORIZONTAL: 1" = N/A
VERTICAL 1" = N/A

DRAWN | DESIGNED | SURVEY | PROJ. MGR. | LEAD ENGR. | FIELD MGR.
RECOMMENDED: DESIGN MANAGER

APPROVED: CITY ENGINEER

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ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75
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BEFORE YOU DIG OKIE 811 CALL OKIE

LICENSED PROFESSIONAL ENGINEER SAMANTHA HENRICH 32024 OKLAHOMA

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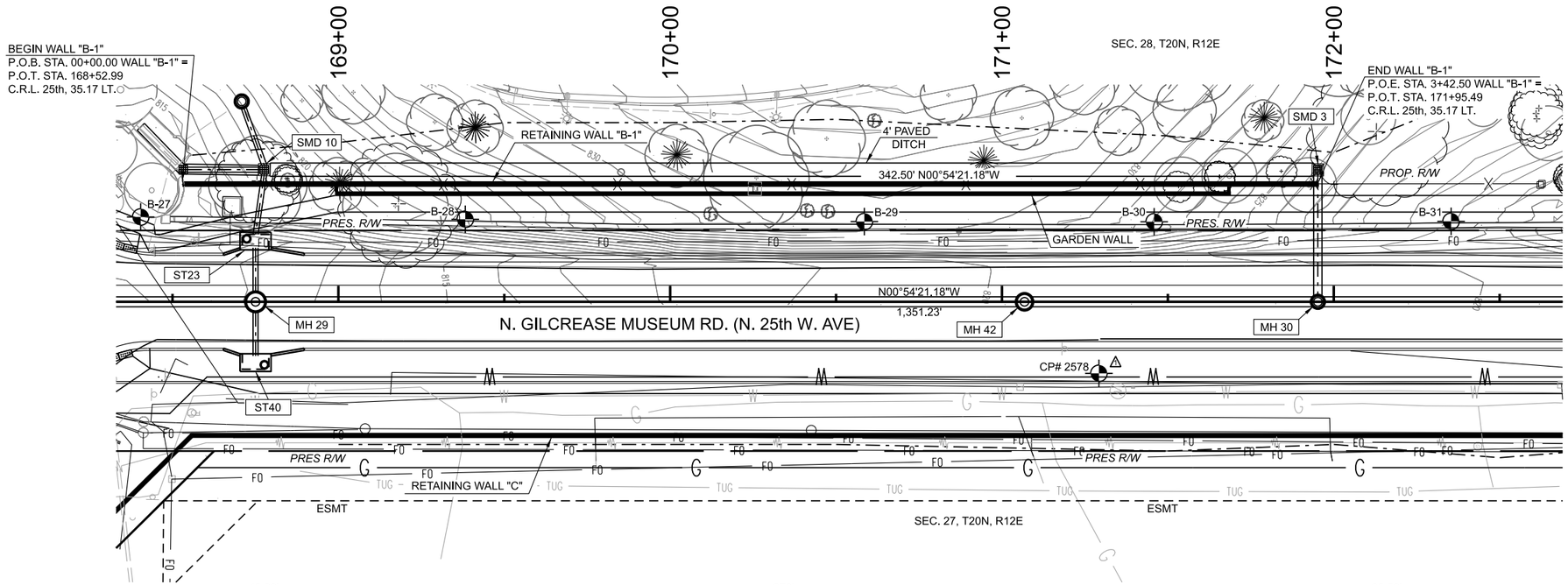
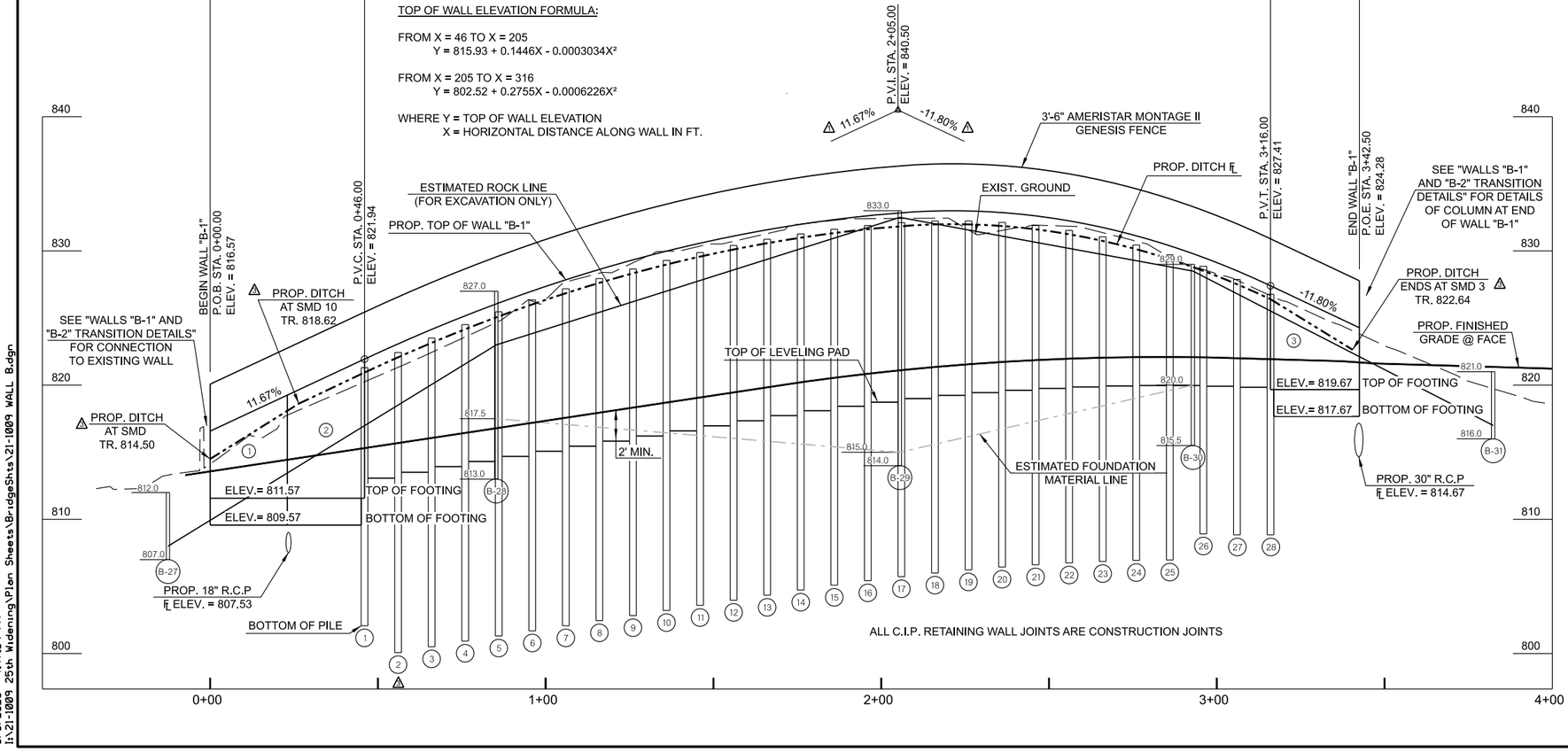


WALL "B-1" QUANTITIES		
ITEM	UNIT	TOTAL
⚠ ~~STRUCTURAL STEEL~~	~~LB~~	~~151,490~~
CLASS C CONCRETE	CY	23
RETAINING WALL, SOLDIER PILE, COMPLETE, IN PLACE	SY	369
RETAINING WALL, C.I.P., COMPLETE, IN PLACE	SY	58
GRAFFITI TREATMENT	SF	2,045
(PL)PILOT HOLES	LF	356
ORNAMENTAL 42" AMERISTAR FENCE	LF	343
⚠ PILES FURNISHED	LF	699



⚠ LEGEND:

(1) PANEL NUMBER

⚠ (1) PILE NUMBER

(B-1) BORE NUMBER

GIVEN ELEVATIONS:
TOP OF BORE
TOP OF COMPETENT ROCK
BOTTOM OF BORE

SEE GEOTECHINCAL REPORT FOR FULL BORING LOGS

CONTROL:

CP# 2578 CP IRON PIN
171+29.22 21.57' RT
N=433228.849 E=2552933.928
ELEV.=821.213

CP# 2577 CP IRON PIN
164+08.44 24.38' RT
N=432508.204 E=2552948.096
ELEV.=844.057

BEFORE YOU DIG OKIE 811 CALL OKIE

LICENSED PROFESSIONAL ENGINEER SHAWN HENRICH 32024 OKLAHOMA

WALL "B-1" PLAN & ELEVATION

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

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⚠ ADDED TEXT	SH	8/5/25
⚠ REVISED PAY ITEM	SH	8/5/25
⚠ REVISED DATA	SH	8/5/25

PLAN SCALE: 1" = N/A
PROFILE SCALE: HORIZONTAL: 1" = N/A VERTICAL 1" = N/A
DRAWN | DESIGNED | SURVEY | PROJ. MGR. | LEAD ENGR. | FIELD MGR.
RECOMMENDED: DESIGN MANAGER
APPROVED: CITY ENGINEER
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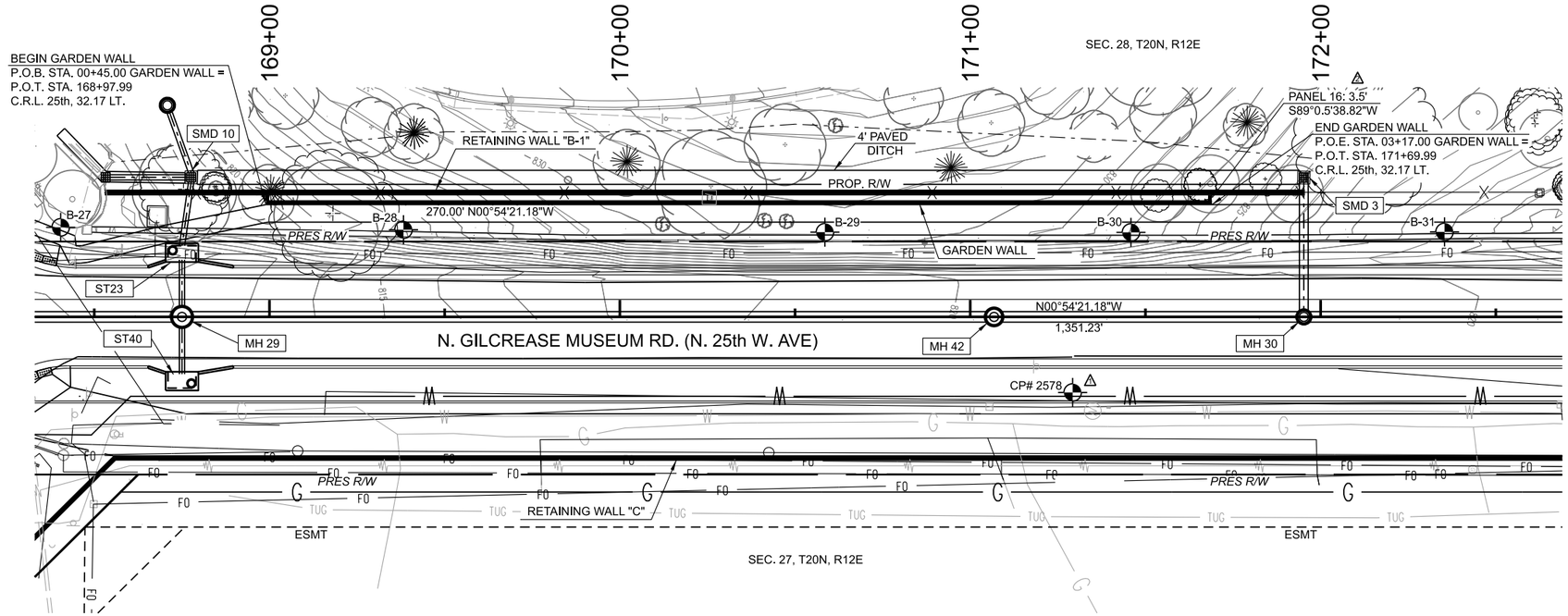
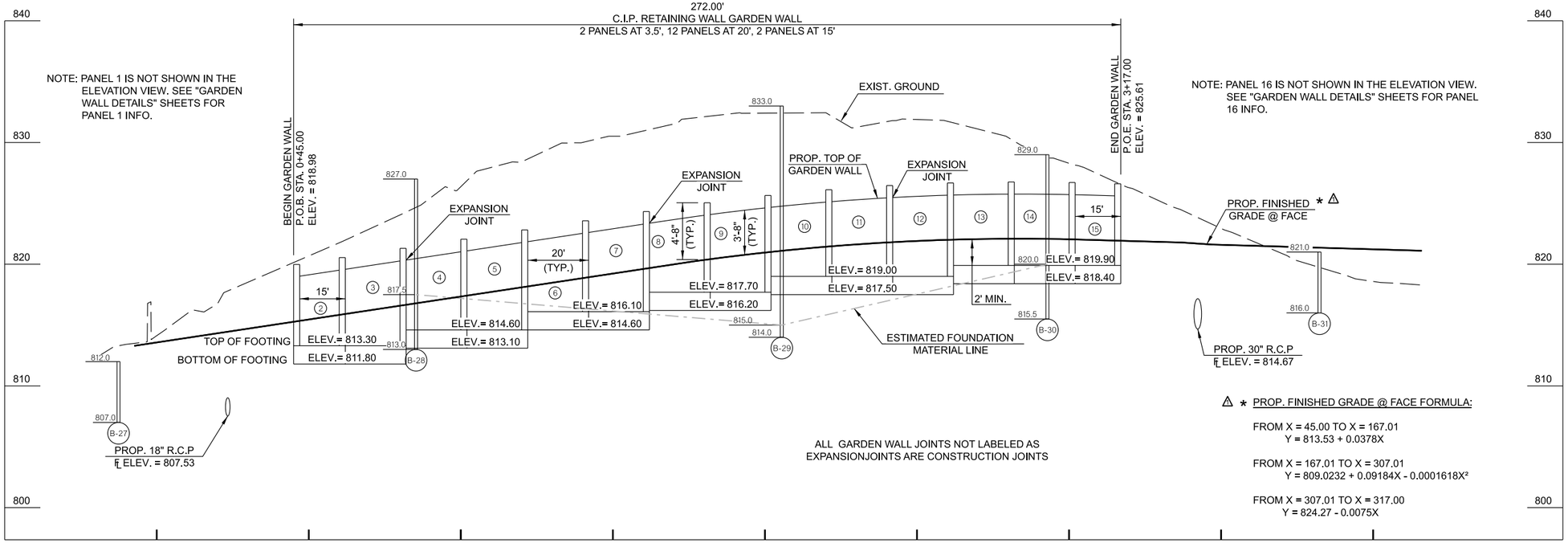


GARDEN WALL QUANTITIES

ITEM	UNIT	TOTAL
RETAINING WALL, C.I.P., COMPLETE, IN PLACE	SY	195
GRAFFITI TREATMENT	SF	1,125



ALL GARDEN WALL JOINTS NOT LABELED AS EXPANSIONJOINTS ARE CONSTRUCTION JOINTS

⚠ * PROP. FINISHED GRADE @ FACE FORMULA:

FROM X = 45.00 TO X = 167.01
Y = 813.53 + 0.0378X

FROM X = 167.01 TO X = 307.01
Y = 809.0232 + 0.09184X - 0.0001618X²

FROM X = 307.01 TO X = 317.00
Y = 824.27 - 0.0075X

CONTROL:

CP# 2578 CP IRON PIN
171+29.22 21.57' RT
N=433228.849 E=2552933.928
ELEV.=821.213

CP# 2577 CP IRON PIN
164+08.44 24.38' RT
N=432508.204 E=2552948.096
ELEV.=844.057

⚠ LEGEND:

(1) PANEL NUMBER

(B-1) BORE NUMBER

GIVEN ELEVATIONS:
TOP OF BORE
TOP OF COMPETENT ROCK
BOTTOM OF BORE

SEE GEOTECHINCAL REPORT FOR FULL BORING LOGS

GARDEN WALL PLAN & ELEVATION

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
⚠ ADDED TEXT	SH	8/5/25
⚠ REVISED DATA	SH	8/5/25

PLAN SCALE: 1" = N/A
PROFILE SCALE:
HORIZONTAL: 1" = N/A
VERTICAL 1" = N/A

DRAWN | DESIGNED | SURVEY | PROJ. MGR. | LEAD ENGR. | FIELD MGR.
RECOMMENDED: DESIGN MANAGER

APPROVED: CITY ENGINEER

FILE: H:\21-1009 DRAWING:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75
DATE:
SHEET S10 OF SHEETS

BEFORE YOU DIG 811 OKIE CALL OKIE

Samantha Henrich LIC. ENGINEER SAMANTHA HENRICH 32024 OKLAHOMA

8/5/2025 4:48:03 PM
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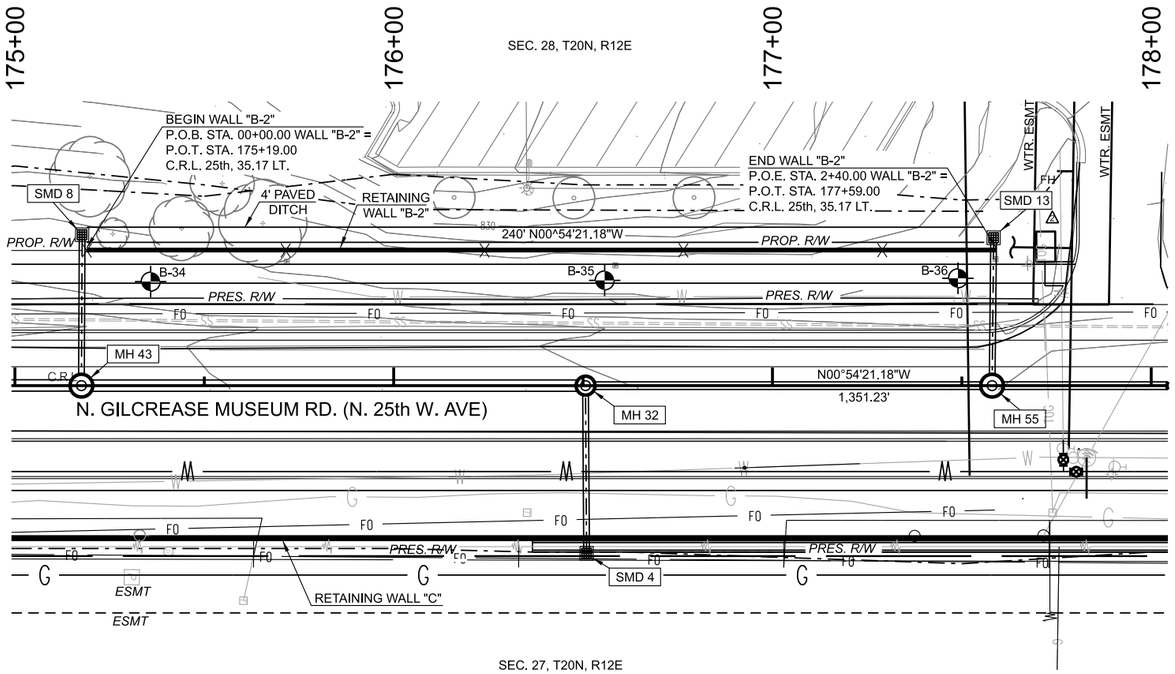
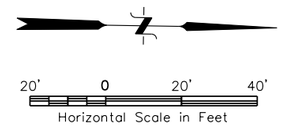




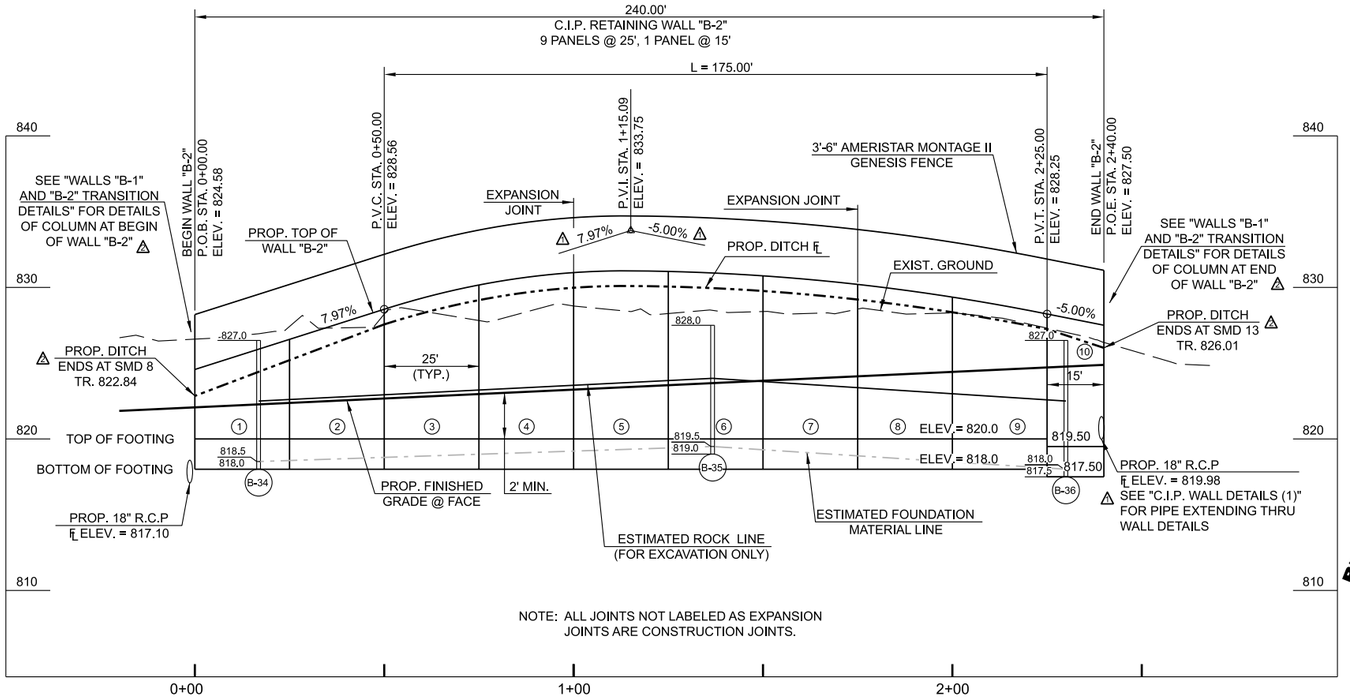
WALL "B-2" QUANTITIES		
ITEM	UNIT	TOTAL
CLASS C CONCRETE	CY	13
RETAINING WALL, C.I.P., COMPLETE, IN PLACE	SY	248
GRAFFITI TREATMENT	SF	1,388
ORNAMENTAL 42" AMERISTAR FENCE	LF	240

TOP OF WALL ELEVATION FORMULA:

FROM X = 50 TO X = 115.09
Y = 823.01 + 0.1423X - 0.0006257X²

FROM X = 115.09 TO X = 225
Y = 828.39 + 0.04878X - 0.0002195X²

WHERE Y = TOP OF WALL ELEVATION
X = HORIZONTAL DISTANCE ALONG WALL IN FT.



NOTE: ALL JOINTS NOT LABELED AS EXPANSION JOINTS ARE CONSTRUCTION JOINTS.

CONTROL:

CP# 2578 CP IRON PIN
171+29.22 21.57' RT
N=433228.849 E=2552933.928
ELEV.=821.213

CP# 25 CP "X"
178+15.77 45.78' LT
N=433914.25 E=2552855.731
ELEV.=826.544

△ LEGEND:

(1) PANEL NUMBER

(B-1) BORE NUMBER

GIVEN ELEVATIONS:
TOP OF BORE
TOP OF COMPETENT ROCK
BOTTOM OF BORE

SEE GEOTECHINCAL REPORT FOR FULL BORING LOGS

WALL "B-2" PLAN & ELEVATION

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
△ ADDED TEXT	SH	8/5/25
△ REVISED DATA	SH	8/5/25

PLAN SCALE: 1" = N/A
PROFILE SCALE:
HORIZONTAL: 1" = N/A
VERTICAL 1" = N/A

DRAWN | DESIGNED | SURVEY | PROJ. MGR. | LEAD ENGR. | FIELD MGR. | RECOMMENDED: DESIGN MANAGER

APPROVED: CITY ENGINEER

FILE: H:\21-1009 DRAWING:
DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75
SHEET S11 OF SHEETS

LICENSED PROFESSIONAL ENGINEER SAMANTHA HEINRICH 32024 OKLAHOMA

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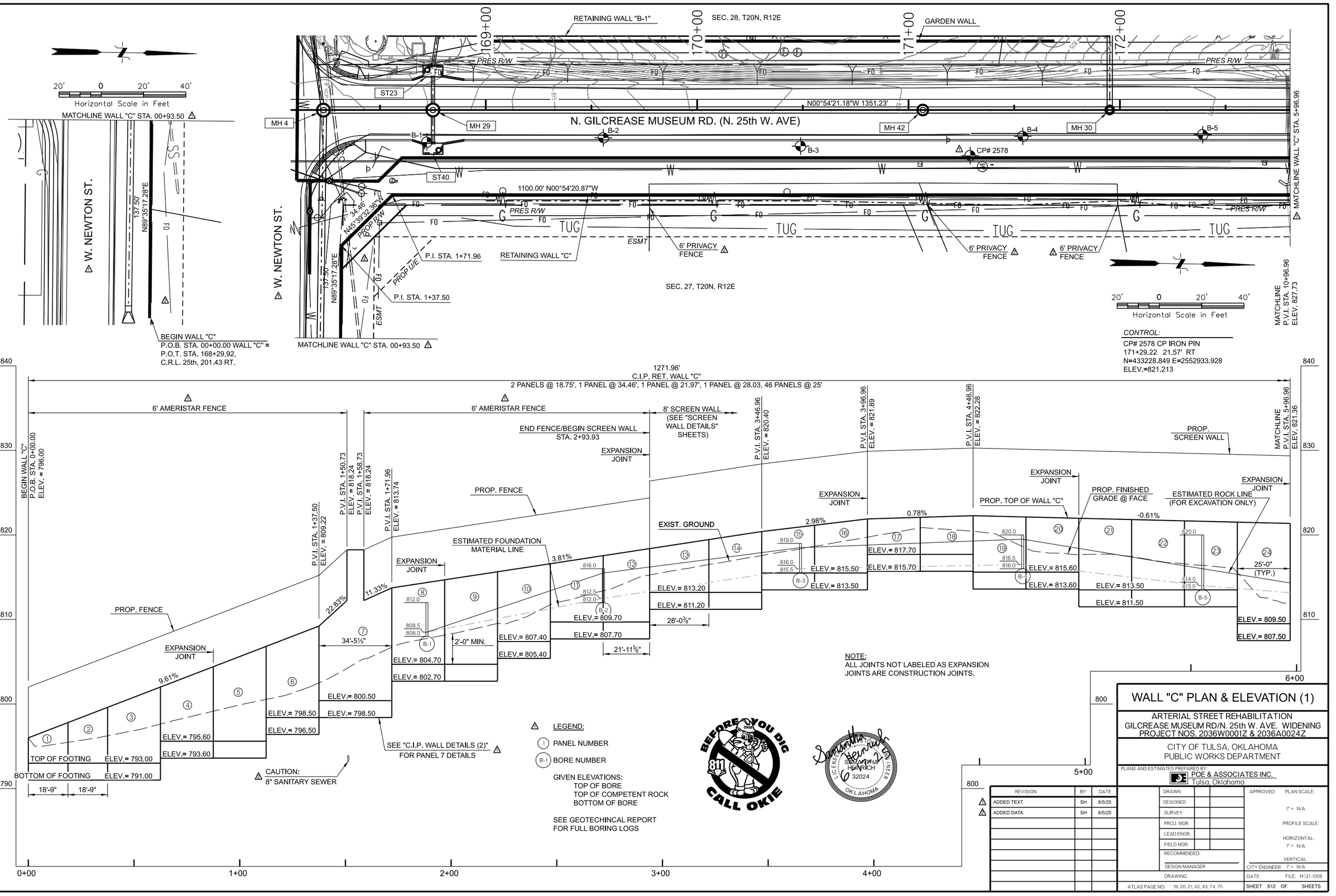

REVISION	BY	DATE
ADDED TEXT	SH	8/5/25
ADDED DATA	SH	8/5/25

WALL "C" PLAN & ELEVATION (1)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

DRAWN	APPROVED:	PLAN SCALE:
DESIGNED		1" = N/A
SURVEY		PROFILE SCALE:
PROJ. MGR.		HORIZONTAL:
LEAD ENGR.		1" = N/A
FIELD MGR.		VERTICAL
RECOMMENDED:	CITY ENGINEER	1" = N/A
DESIGN MANAGER		

DRAWING:
DATE:
FILE: H:\21-1009

ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75

SHEET S12 OF SHEETS

8/5/2025 2:02:29 PM
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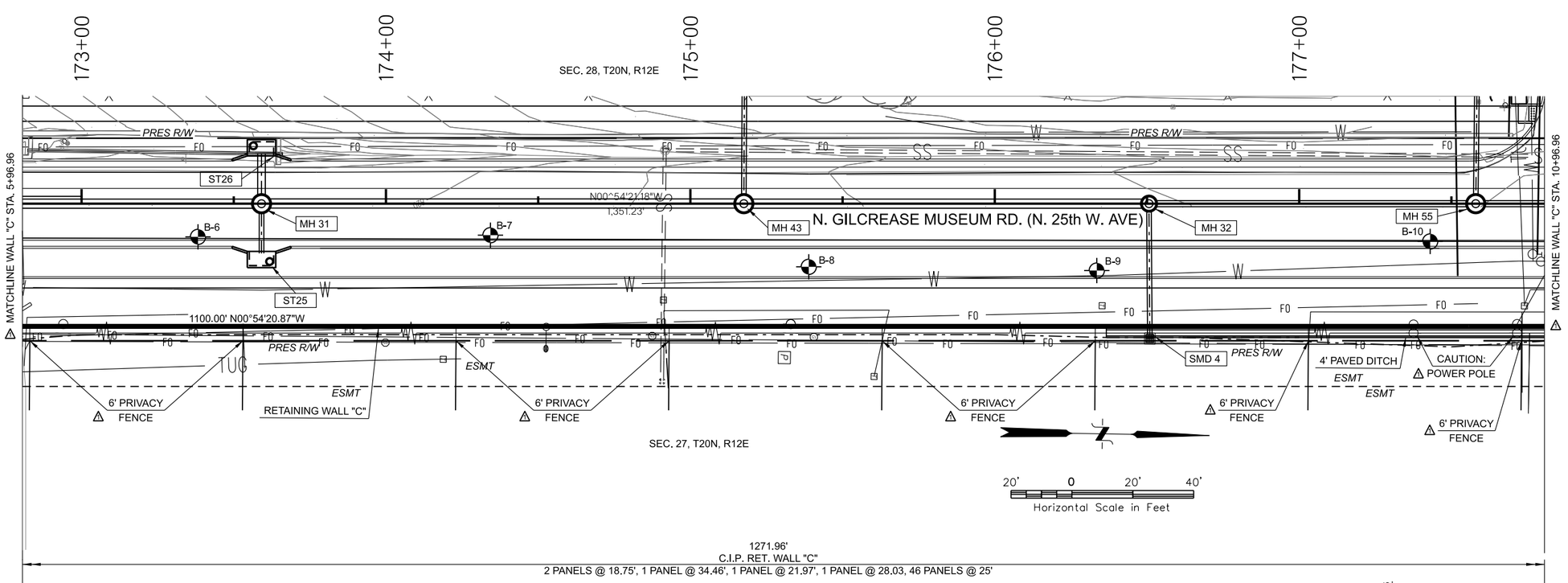

CONTROL:
CP# 25 CP "X"
178+15.77 45.78' LT
N=433914.25 E=2552855.731
ELEV.=826.544

LEGEND:
(1) PANEL NUMBER
(B-1) BORE NUMBER
GIVEN ELEVATIONS:
TOP OF BORE
TOP OF COMPETENT ROCK
BOTTOM OF BORE

SEE GEOTECHINCAL REPORT FOR FULL BORING LOGS

NOTE:
ALL JOINTS NOT LABELED AS EXPANSION JOINTS ARE CONSTRUCTION JOINTS.

WALL "C" PLAN & ELEVATION (2)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
ADDED TEXT	SH	8/5/25

PLAN SCALE: 1" = N/A
PROFILE SCALE:
HORIZONTAL: 1" = N/A
VERTICAL 1" = N/A
DRAWN | DESIGNED | SURVEY | PROJ. MGR. | LEAD ENGR. | FIELD MGR.
RECOMMENDED: DESIGN MANAGER
APPROVED: CITY ENGINEER
FILE: H:\21-1009 DRAWING:
DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75
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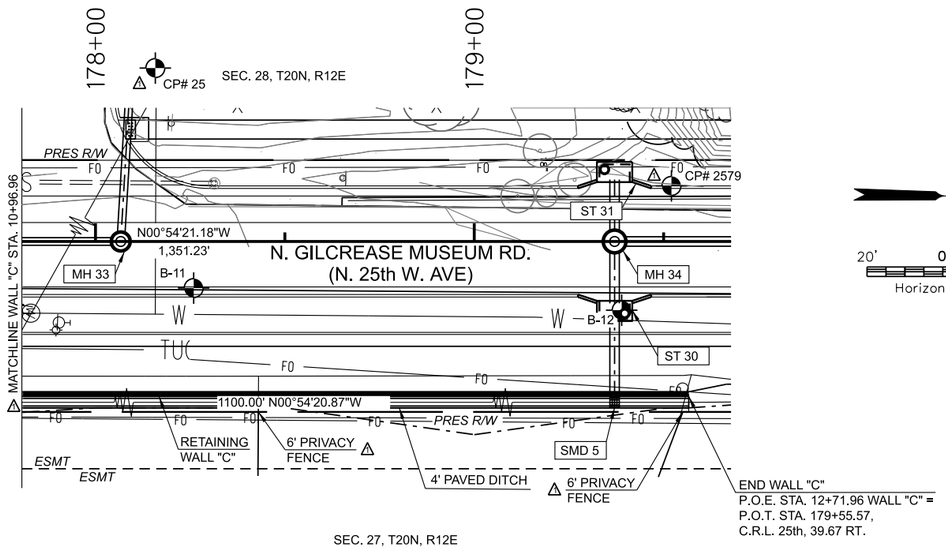

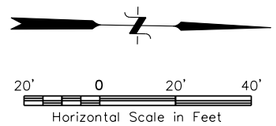

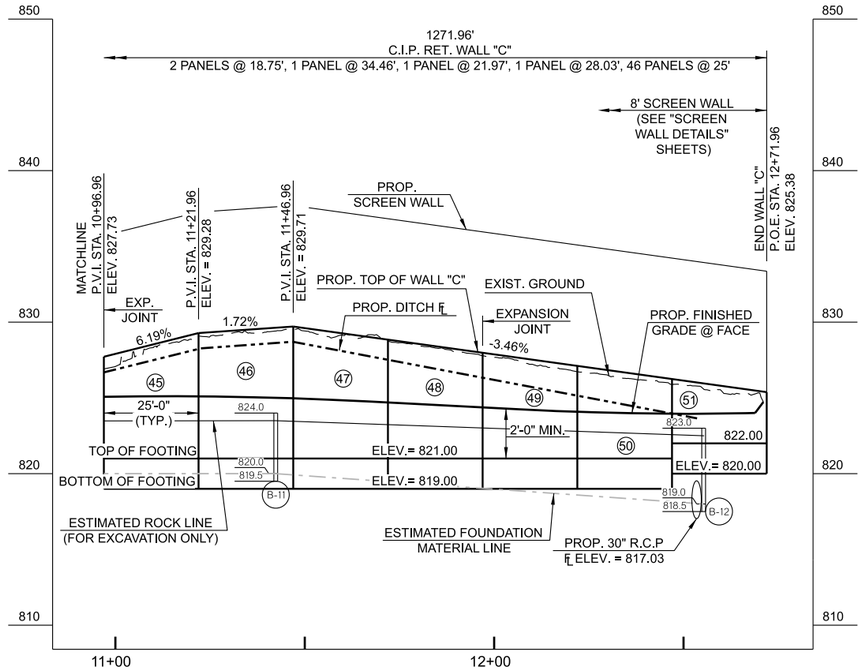

NOTE:
ALL JOINTS NOT LABELED AS EXPANSION JOINTS ARE CONSTRUCTION JOINTS.

WALL "C" QUANTITIES

ITEM	UNIT	TOTAL
CLASS C CONCRETE	CY	18
RETAINING WALL, C.I.P., COMPLETE, IN PLACE	SY	1,101
GRAFFITI TREATMENT	SF	5,637
DECORATIVE WALL	LF	978
ORNAMENTAL 72" AMERISTAR FENCE	LF	286

⚠ LEGEND:

(1) PANEL NUMBER

(B-1) BORE NUMBER

GIVEN ELEVATIONS:
TOP OF BORE
TOP OF COMPETENT ROCK
BOTTOM OF BORE

SEE GEOTECHINCAL REPORT FOR FULL BORING LOGS

CONTROL:

⚠ CP# 25 CP "X"
178+15.77 45.78' LT
N=433914.25 E=2552855.731
ELEV.=826.544

CP# 2579 CP IRON PIN
179+52.06 14.67' LT
N=434051.016 E=2552884.685
ELEV.=821.441

CP# 160 60d NAIL
180+69.20 11.08' LT
N=434168.193 E=2552886.423
ELEV.=823.906

BEFORE YOU DIG OKIE 811 CALL OKIE

SAMANTHA HEINRICH 32024 LICENSED PROFESSIONAL ENGINEER OKLAHOMA

REVISION	BY	DATE
⚠ ADDED TEXT	SH	8/5/25

WALL "C" PLAN & ELEVATION (3)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

PLAN SCALE: 1" = N/A
PROFILE SCALE:
HORIZONTAL: 1" = N/A
VERTICAL 1" = N/A

DRAWN | DESIGNED | SURVEY | PROJ. MGR. | LEAD ENGR. | FIELD MGR. | RECOMMENDED: DESIGN MANAGER

APPROVED: CITY ENGINEER

FILE: H:\21-1009 DRAWING:
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ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75
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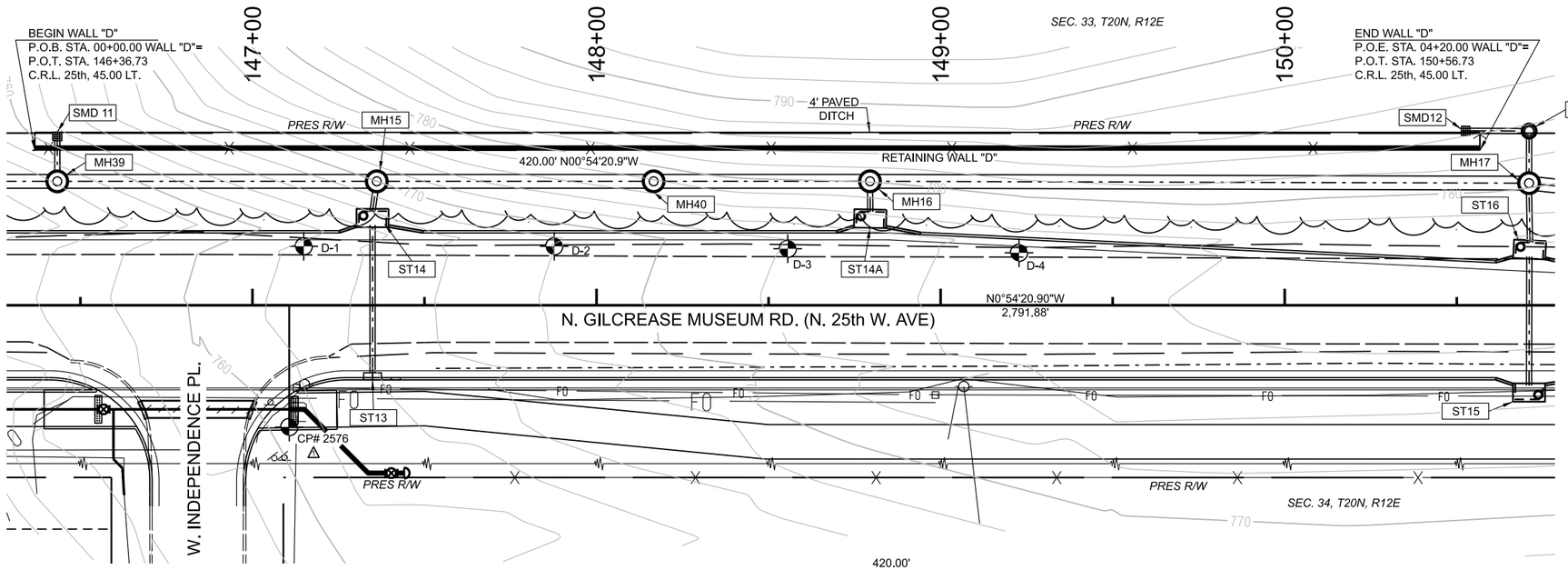
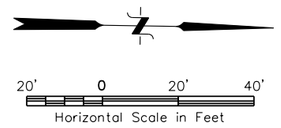
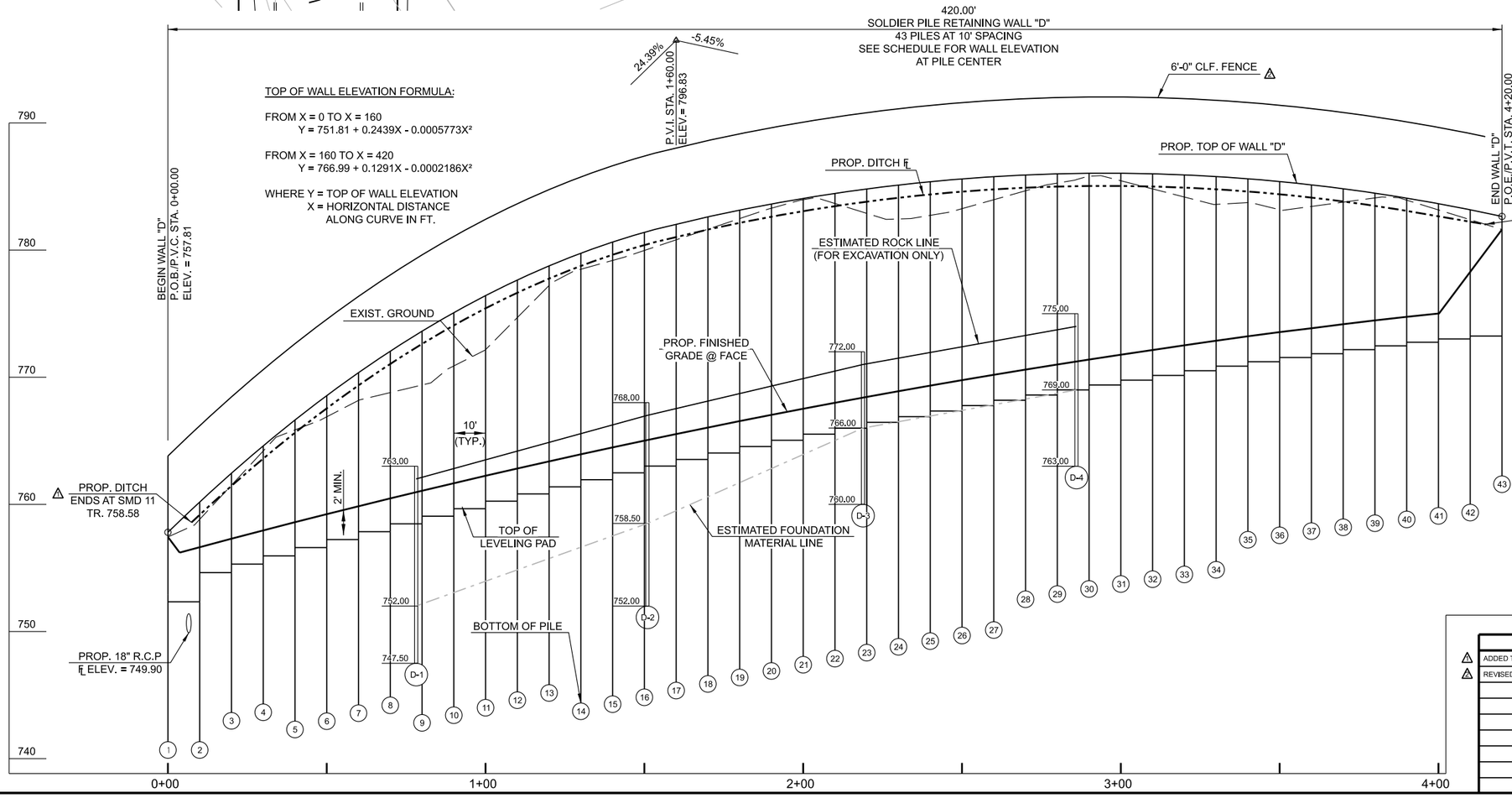




WALL "D" QUANTITIES

ITEM	UNIT	TOTAL
STRUCTURAL STEEL	LB	277,530
CLASS C CONCRETE	CY	29
RETAINING WALL, SOLDIER PILE, COMPLETE, IN PLACE	SY	705
GRAFFITI TREATMENT	SF	5,325
(PL)PILOT HOLES	LF	629
FENCE-STYLE CLF (6' HIGH, VINYL COATED)	LF	420



△ LEGEND:

(1) PILE NUMBER

(B-1) BORE NUMBER

GIVEN ELEVATIONS:
TOP OF BORE
TOP OF COMPETENT ROCK
BOTTOM OF BORE

SEE GEOTECHINCAL REPORT
FOR FULL BORING LOGS

CONTROL:

CP# 2576 CP IRON PIN
147+10.68 35.37' RT
N=430810.774 E=2552980.754
ELEV.=760.769

WALL "D" PLAN & ELEVATION

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
△1 ADDED TEXT	SH	8/5/25
△2 REVISED DETAIL	SH	8/5/25

PLAN SCALE: 1" = N/A
PROFILE SCALE: HORIZONTAL: 1" = N/A VERTICAL 1" = N/A

DRAWN | DESIGNED | SURVEY | PROJ. MGR. | LEAD ENGR. | FIELD MGR. | RECOMMENDED: DESIGN MANAGER

APPROVED: CITY ENGINEER

FILE: H:\21-1009 DRAWING:

DATE:

ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75

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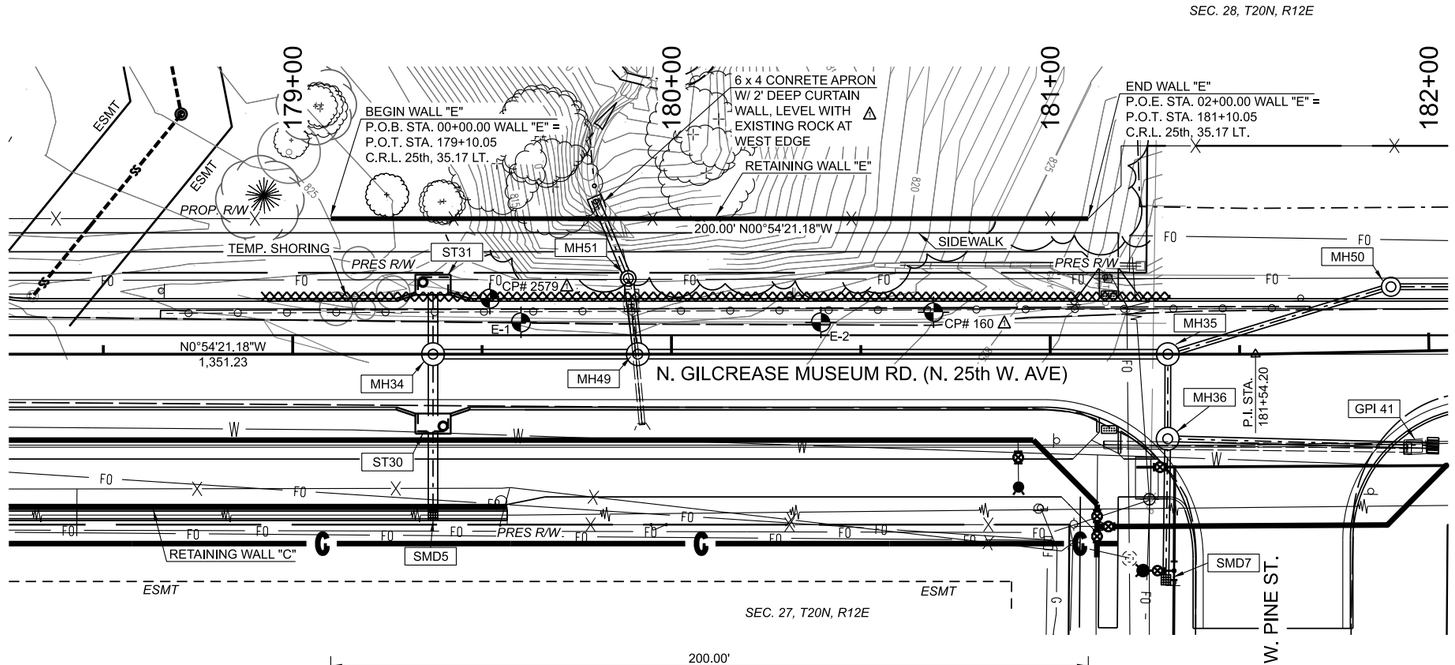
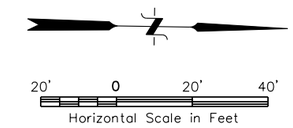




NOTE:
CONTRACTOR SHALL BE RESPONSIBLE FOR GLOBAL STABILITY CALCULATIONS FOR TEMPORARY SHORING.

WALL "E" QUANTITIES

	ITEM	UNIT	TOTAL
⚠ ①	TEMPORARY EARTH RETAINAGE	LS	1
	RETAINING WALL, C.I.P., COMPLETE, IN PLACE	SY	347
	GRAFFITI TREATMENT	SF	2,690
	ORNAMENTAL 42" AMERISTAR FENCE	LF	200

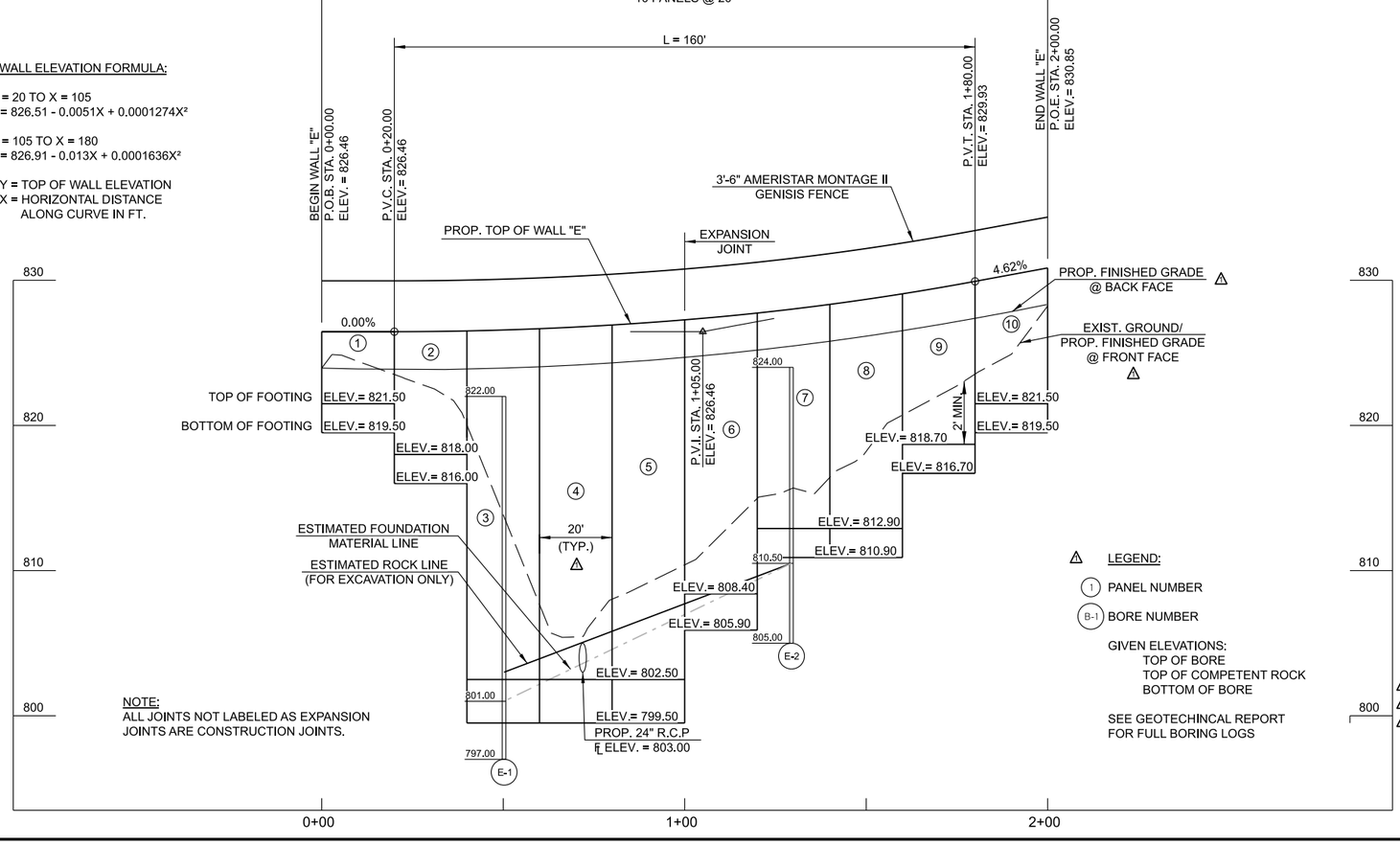
⚠ ① **TEMPORARY EARTH RETAINAGE SHALL BE USED AS NEEDED TO MAINTAIN SEMI-TRUCK ACCESS TO THE MUSEUM NORTH DRIVEWAY AT GMR STA. 177+95 LT**

TOP OF WALL ELEVATION FORMULA:

FROM X = 20 TO X = 105
Y = 826.51 - 0.0051X + 0.0001274X²

FROM X = 105 TO X = 180
Y = 826.91 - 0.013X + 0.0001636X²

WHERE Y = TOP OF WALL ELEVATION
X = HORIZONTAL DISTANCE ALONG CURVE IN FT.



⚠ LEGEND:
① PANEL NUMBER
B-1 BORE NUMBER
GIVEN ELEVATIONS:
TOP OF BORE
TOP OF COMPETENT ROCK
BOTTOM OF BORE

SEE GEOTECHINCAL REPORT FOR FULL BORING LOGS

NOTE:
ALL JOINTS NOT LABELED AS EXPANSION JOINTS ARE CONSTRUCTION JOINTS.

CONTROL:

CP# 2579 CP IRON PIN
179+52.06 14.67' LT ⚠
N=434051.016 E=2552884.685
ELEV.=821.441

CP# 160 CP 60d NAIL
180+69.20 11.08' LT
N=434168.193 E=2552886.423
ELEV.=823.906

WALL "E" PLAN & ELEVATION

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
⚠ ADDED TEXT	SH	8/5/25
⚠ REMOVED TEXT	SH	8/5/25
⚠ REVISED TEXT	SH	8/5/25

PLAN SCALE: 1" = N/A
PROFILE SCALE:
HORIZONTAL: 1" = N/A
VERTICAL 1" = N/A

DRAWN | DESIGNED | SURVEY | PROJ. MGR. | LEAD ENGR. | FIELD MGR.
RECOMMENDED: DESIGN MANAGER
APPROVED: CITY ENGINEER

FILE: H:\21-1009 DRAWING:
DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75
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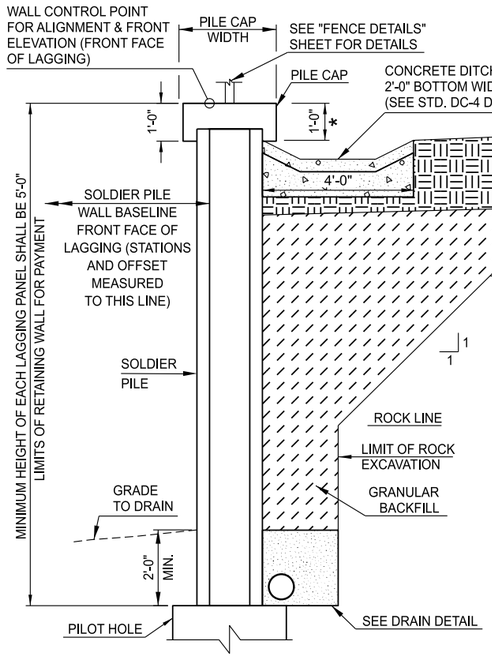
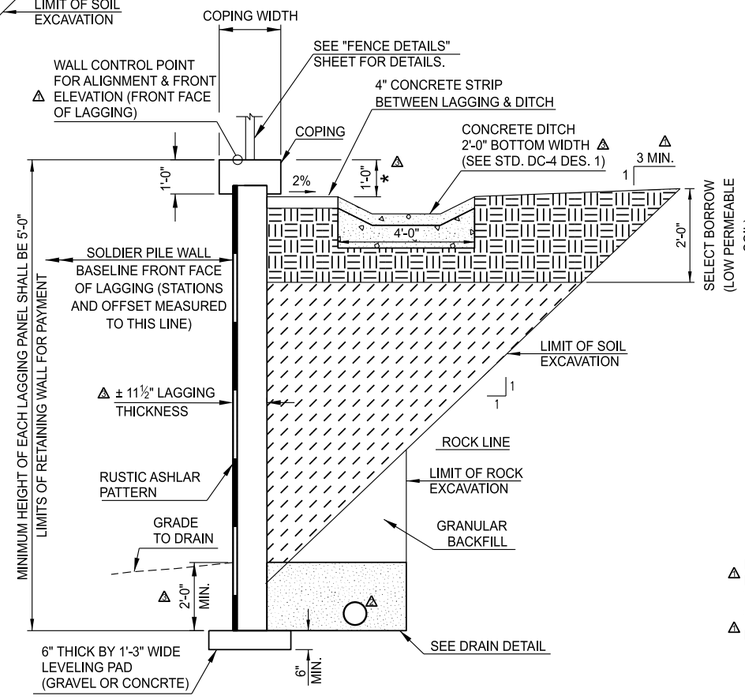
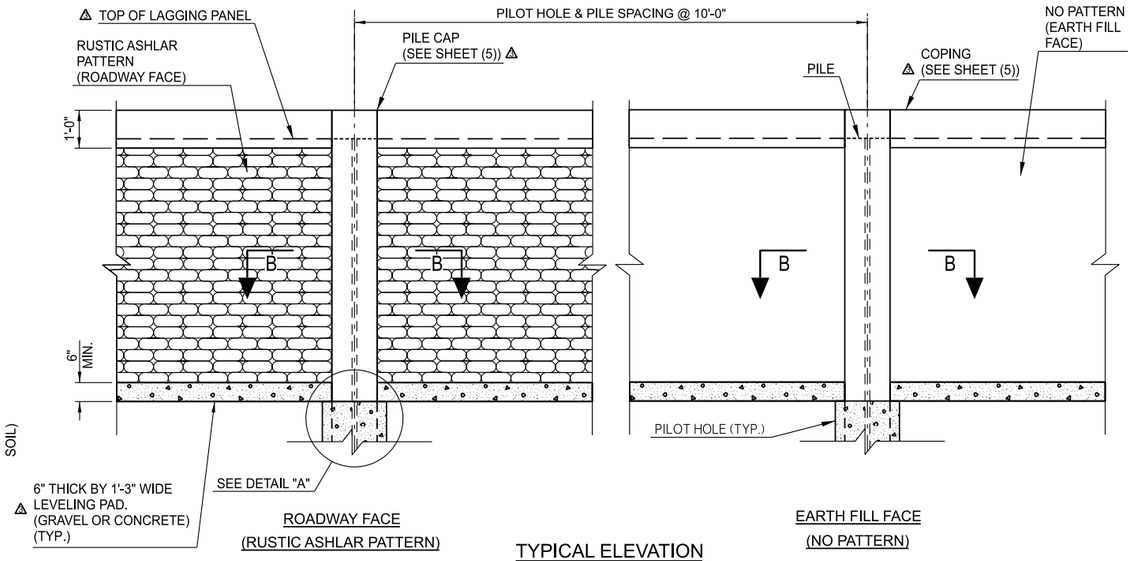


△ WALL SECTION THRU PILE

△ * DITCH SHALL BE 1'-0" BELOW WALL IN ALL LOCATIONS EXCEPT WHERE TRANSITIONING TO TOP OF RIM ELEVATIONS AT SMDS AS SHOWN ON PLAN AND ELEVATION SHEETS



△ WALL SECTION THRU LAGGING



TYPICAL ELEVATION

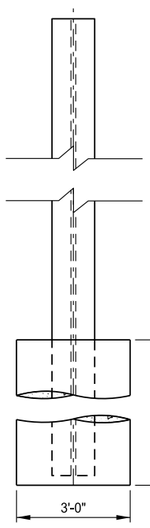
NOTE: THE RUSTIC ASHLAR PATTERN SHALL BE ACHIEVED USING RUSTIC ASHLAR #11019 FORMLINER PATTERN.

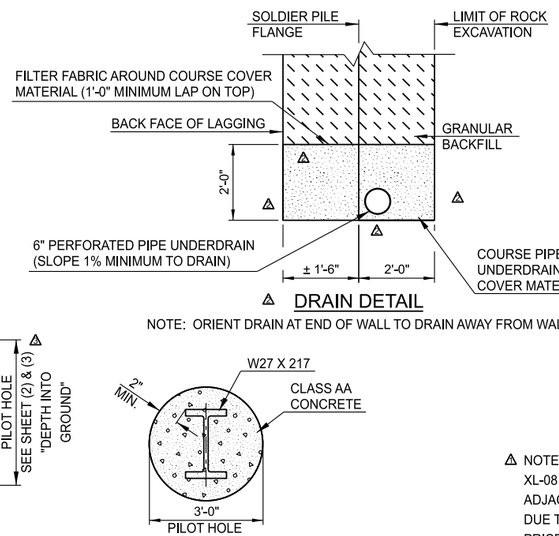
DETAIL "A"

SECTION B-B

△ NOTE: THE JOINTS BETWEEN THE LAGGING PANELS AND PILE SHALL BE A SOLID CONNECTION. A SMOOTH SURFACE MAY BE ALLOWED AT THE EDGE OF LAGGING PANELS TO ACHIEVE THIS SOLID CONNECTION.

△ NOTE: CONTRACTOR SHALL PROVIDE 4" x 4" GREEN TREATED BLOCKING IN UPPER AND LOWER CORNERS OF LAGGING PANELS. BLOCKING SHALL BE CUT TO LENGTH AND GREEN TREATED WOODEN WEDGES SHALL BE USED BETWEEN THE PILE AND THE BLOCKING TO SECURE THE BLOCKING, ADDITIONAL ELASTOMERIC PADS MAY BE REQUIRED FOR LAGGING PANEL ALIGNMENT DUE TO TOLERANCES IN PILE PLACEMENT.



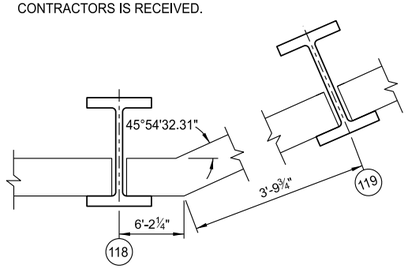


△ DRAIN DETAIL

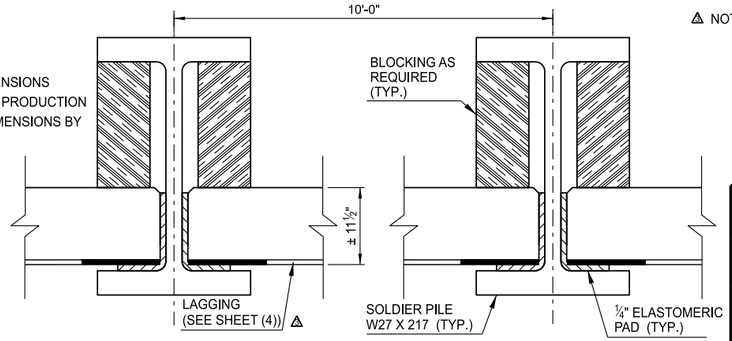
NOTE: ORIENT DRAIN AT END OF WALL TO DRAIN AWAY FROM WALL

SOLDIER PILE & PILOT HOLE SECTION

△ NOTE: CONTRACTOR MUST CONTACT PRECASTER AND VERIFY THE DIMENSIONS IN FIELD FOR LAGGING PANEL A118. PRECASTER WILL NOT BEGIN PRODUCTION OF LAGGING PANEL AND COPING UNTIL CONFIRMATION OF ALL DIMENSIONS BY CONTRACTORS IS RECEIVED.



DETAIL AT WALL "A" TURN



DETAIL "B"

△ NOTE:
XL-08 RUST ACCELERATOR SHALL BE APPLIED TO ALL EXPOSED WEATHERING STEEL SURFACES. ADJACENT CONCRETE AREAS SHALL BE MASKED TO PREVENT DISCOLORATION OF THE CONCRETE DUE TO THE RUST ACCELERATOR. PAYMENT FOR RUST ACCELERATOR SHALL BE INCLUDED IN THE PRICE BID FOR PILES FURNISHED (LF).

BEFORE YOU DIG OKIE 811 CALL OKIE

LICENSED PROFESSIONAL ENGINEER SAMANTHA HEINRICH 32024 OKLAHOMA

REVISION	BY	DATE
△ ADDED TEXT	SH	8/5/25
△ REVISED DETAIL	SH	8/5/25
△ REVISED TEXT	SH	8/5/25
△ ADDED DETAIL	SH	8/5/25

PLAN SCALE: 1" = N/A
PROFILE SCALE:
HORIZONTAL: 1" = N/A
VERTICAL 1" = N/A

	DRAWN	POE	04/2023
	DESIGNED		
	SURVEY		
	PROJ. MGR.		
	LEAD ENGR.		
	FIELD MGR.		

RECOMMENDED:
DESIGN MANAGER
CITY ENGINEER

APPROVED:

FILE: H:\21-1009 DRAWING 21-1009 Wall Solder Pile Details
DATE:
ATLAS PAGE NO:
SHEET S17 OF 268 SHEETS

SOLDIER PILE WALL DETAILS (1)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

8/5/2025 3:16:36 PM
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PILE SCHEDULE △

WALL	PILE NO.	△℄ PILE GMR C.R.L. STATION	△ ℄ PILE GMR C.R.L. LEFT OFFSET	DEPTH INTO GROUND (PILOT HOLE LENGTH)	TOP OF WALL ELEVATION	BOTTOM OF PILE ELEVATION ①	TOP OF PILE ELEVATION	PILE LENGTH
	1	155+25.00	28.65'	13.00'	805.89'	780.87'	805.31'	24.44'
	2	155+35.00	28.74'	13.00'	807.29'	780.87'	806.71'	25.84'
	3	155+45.00	28.83'	13.00'	808.70'	781.76'	808.11'	26.36'
	4	155+55.00	28.92'	13.00'	810.10'	782.67'	809.52'	26.85'
	5	155+65.00	29.00'	13.00'	811.50'	783.60'	810.92'	27.32'
	6	155+75.00	29.09'	13.00'	812.91'	784.55'	812.32'	27.77'
	7	155+85.00	29.18'	15.00'	814.31'	783.50'	813.73'	30.22'
	8	155+95.00	29.27'	15.00'	815.71'	784.46'	815.13'	30.67'
	9	156+05.00	29.36'	15.00'	817.11'	785.41'	816.53'	31.12'
	10	156+15.00	29.44'	15.00'	818.52'	786.35'	817.93'	31.58'
	11	156+25.00	29.53'	15.00'	819.92'	787.32'	819.34'	32.02'
	12	156+35.00	29.62'	15.00'	821.31'	788.27'	820.73'	32.46'
	13	156+45.00	29.71'	15.00'	822.67'	789.22'	822.09'	32.87'
	14	156+55.00	29.80'	17.00'	824.00'	788.17'	823.42'	35.25'
	15	156+65.00	29.88'	17.00'	825.30'	789.13'	824.73'	35.60'
	16	156+75.00	29.97'	17.00'	826.57'	790.08'	826.00'	35.92'
	17	156+85.00	30.06'	17.00'	827.82'	791.03'	827.25'	36.21'
	18	156+95.00	30.15'	17.00'	829.03'	791.98'	828.46'	36.48'
	19	157+05.00	30.24'	17.00'	830.22'	792.94'	829.65'	36.71'
	20	157+15.00	30.32'	17.00'	831.38'	793.89'	830.81'	36.92'
	21	157+25.00	30.41'	17.00'	832.51'	794.84'	831.94'	37.10'
	22	157+35.00	30.50'	17.00'	833.61'	795.79'	833.04'	37.25'
	23	157+45.00	30.59'	17.00'	834.68'	796.75'	834.11'	37.37'
	24	157+55.00	30.68'	17.00'	835.72'	797.70'	835.16'	37.46'
	25	157+65.00	30.76'	17.00'	836.73'	798.65'	836.17'	37.52'
	26	157+75.00	30.85'	17.00'	837.72'	799.60'	837.16'	37.56'
	27	157+85.00	30.94'	17.00'	838.67'	800.56'	838.12'	37.56'
	28	157+95.00	31.03'	17.00'	839.60'	801.52'	839.04'	37.53'
	29	158+05.34	31.09'	17.00'	840.49'	802.47'	839.94'	37.47'
	30	158+15.34	31.06'	17.00'	841.33'	803.45'	840.78'	37.33'
	31	158+25.34	31.04'	17.00'	842.12'	804.41'	841.58'	37.17'
	32	158+35.34	31.01'	17.00'	842.86'	805.36'	842.32'	36.96'
"A"	33	158+45.34	30.98'	17.00'	843.55'	806.30'	843.01'	36.71'
	34	158+55.34	30.95'	17.00'	844.19'	807.22'	843.65'	36.43'
	35	158+65.34	30.93'	17.00'	844.78'	808.11'	844.25'	36.13'
	36	158+75.34	30.90'	17.00'	845.32'	808.97'	844.79'	35.82'
	37	158+85.34	30.87'	17.00'	845.81'	809.80'	845.29'	35.49'
	38	158+95.34	30.84'	17.00'	846.26'	810.59'	845.73'	35.14'
	39	159+05.34	30.82'	15.00'	846.65'	813.36'	846.13'	32.77'
	40	159+15.34	30.79'	15.00'	847.00'	814.09'	846.48'	32.39'
	41	159+25.34	30.76'	15.00'	847.29'	814.79'	846.77'	31.98'
	42	159+35.34	30.74'	15.00'	847.56'	815.46'	847.04'	31.58'
	43	159+45.34	30.71'	15.00'	847.81'	816.10'	847.30'	31.20'
	44	159+55.34	30.68'	15.00'	848.06'	816.70'	847.55'	30.85'
	45	159+65.34	30.66'	15.00'	848.31'	817.28'	847.79'	30.51'
	46	159+75.34	30.63'	15.00'	848.54'	817.82'	848.03'	30.21'
	47	159+85.34	30.60'	13.00'	848.77'	820.33'	848.26'	27.92'
	48	159+95.34	30.57'	13.00'	848.99'	820.82'	848.48'	27.66'
	49	160+05.34	30.55'	13.00'	849.20'	821.26'	848.69'	27.42'
	50	160+15.34	30.52'	13.00'	849.40'	821.68'	848.89'	27.21'
	51	160+25.34	30.49'	13.00'	849.60'	822.07'	849.09'	27.02'
	52	160+35.34	30.47'	13.00'	849.79'	822.42'	849.28'	26.85'
	53	160+45.34	30.44'	13.00'	849.97'	822.75'	849.46'	26.71'
	54	160+55.34	30.41'	13.00'	850.14'	823.04'	849.63'	26.59'
	55	160+65.34	30.39'	13.00'	850.30'	823.30'	849.79'	26.49'
	56	160+75.34	30.36'	13.00'	850.46'	823.53'	849.95'	26.42'
	57	160+85.34	30.33'	13.00'	850.61'	823.73'	850.10'	26.37'
	58	160+95.34	30.30'	13.00'	850.75'	823.89'	850.24'	26.35'
	59	161+05.34	30.28'	13.00'	850.88'	824.03'	850.37'	26.35'
	60	161+15.34	30.25'	13.00'	851.01'	824.13'	850.50'	26.37'
	61	161+25.34	30.22'	13.00'	851.12'	824.20'	850.62'	26.41'
	62	161+35.34	30.20'	13.00'	851.23'	824.23'	850.73'	26.50'
	63	161+45.34	30.17'	13.00'	851.34'	824.18'	850.83'	26.65'
	64	161+55.34	30.14'	13.00'	851.43'	824.09'	850.92'	26.83'
	65	161+65.34	30.11'	13.00'	851.52'	823.98'	851.01'	27.03'

PILE SCHEDULE △

WALL	PILE NO.	△℄ PILE GMR C.R.L. STATION	△ ℄ PILE GMR C.R.L. LEFT OFFSET	DEPTH INTO GROUND (PILOT HOLE LENGTH)	TOP OF WALL ELEVATION	BOTTOM OF PILE ELEVATION ①	TOP OF PILE ELEVATION	PILE LENGTH
	66	161+75.34	30.09'	13.00'	851.59'	823.82'	851.08'	27.26'
	67	161+85.34	30.06'	13.00'	851.65'	823.64'	851.14'	27.50'
	68	161+95.34	30.03'	13.00'	851.68'	823.43'	851.18'	27.75'
	69	162+05.34	30.01'	15.00'	851.70'	821.19'	851.20'	30.02'
	70	162+15.34	29.98'	15.00'	851.70'	820.91'	851.20'	30.29'
	71	162+25.34	29.95'	15.00'	851.68'	820.61'	851.18'	30.58'
	72	162+35.34	29.92'	15.00'	851.65'	820.27'	851.14'	30.87'
	73	162+45.34	29.90'	15.00'	851.59'	819.90'	851.08'	31.18'
	74	162+55.34	29.87'	15.00'	851.51'	819.50'	851.00'	31.50'
	75	162+65.34	29.84'	15.00'	851.41'	819.07'	850.90'	31.83'
	76	162+75.34	29.82'	15.00'	851.29'	818.61'	850.79'	32.18'
	77	162+85.34	29.79'	15.00'	851.16'	818.11'	850.65'	32.54'
	78	162+95.34	29.76'	15.00'	851.00'	817.59'	850.49'	32.90'
	79	163+05.34	29.73'	17.00'	850.82'	815.03'	850.31'	35.28'
	80	163+15.34	29.71'	17.00'	850.63'	814.44'	850.12'	35.67'
	81	163+25.34	29.68'	17.00'	850.42'	813.83'	849.90'	36.07'
	82	163+35.34	29.65'	17.00'	850.16'	813.22'	849.65'	36.43'
	83	163+45.34	29.63'	17.00'	849.85'	812.60'	849.33'	36.73'
	84	163+55.34	29.60'	17.00'	849.47'	811.98'	848.95'	36.97'
	85	163+65.34	29.57'	17.00'	849.04'	811.36'	848.51'	37.15'
	86	163+75.34	29.54'	17.00'	848.54'	810.74'	848.01'	37.27'
	87	163+85.34	29.52'	17.00'	847.99'	810.12'	847.45'	37.33'
	88	163+95.34	29.49'	17.00'	847.37'	809.51'	846.83'	37.33'
	89	164+05.34	29.46'	17.00'	846.70'	808.89'	846.15'	37.26'
	90	164+15.34	29.44'	17.00'	845.97'	808.27'	845.43'	37.16'
	91	164+25.34	29.41'	17.00'	845.22'	807.65'	844.67'	37.02'
	92	164+35.34	29.38'	17.00'	844.43'	807.03'	843.89'	36.85'
	93	164+45.34	29.36'	17.00'	843.62'	806.42'	843.07'	36.65'
"A"	94	164+55.34	29.33'	17.00'	842.77'	805.80'	842.22'	36.42'
	95	164+65.34	29.30'	17.00'	841.89'	805.18'	841.33'	36.16'
	96	164+75.34	29.27'	17.00'	840.97'	804.56'	840.42'	35.86'
	97	164+85.34	29.25'	17.00'	840.03'	803.93'	839.47'	35.54'
	98	164+95.34	29.22'	17.00'	839.05'	803.30'	838.49'	35.19'
	99	165+05.34	29.19'	15.00'	838.04'	804.67'	837.48'	32.81'
	100	165+15.34	29.17'	15.00'	837.00'	804.03'	836.44'	32.41'
	101	165+25.34	29.14'	15.00'	835.95'	803.39'	835.39'	31.99'
	102	165+35.34	29.11'	15.00'	834.89'	802.75'	834.33'	31.58'
	103	165+45.34	29.08'	15.00'	833.84'	802.12'	833.27'	31.15'
	104	165+55.34	29.06'	15.00'	832.78'	801.49'	832.22'	30.73'
	105	165+65.34	29.03'	15.00'	831.72'	800.86'	831.16'	30.30'
	106	165+75.34	29.00'	13.00'	830.67'	802.24'	830.11'	27.87'
	107	165+85.34	28.98'	13.00'	829.61'	801.62'	829.05'	27.43'
	108	165+95.34	28.95'	13.00'	828.56'	801.00'	827.99'	26.99'
	109	166+05.34	28.92'	13.00'	827.50'	800.38'	826.94'	26.55'
	110	166+15.34	28.89'	13.00'	826.44'	799.77'	825.88'	26.12'
	111	166+25.34	28.87'	13.00'	825.39'	799.15'	824.83'	25.68'
	112	166+35.34	28.84'	13.00'	824.33'	798.53'	823.77'	25.24'
	113	166+45.34	28.81'	13.00'	823.28'	797.91'	822.71'	24.80'
	114	166+55.34	28.79'	13.00'	822.22'	797.31'	821.66'	24.35'
	115	166+65.34	28.76'	13.00'	821.16'	796.76'	820.60'	23.84'
	116	166+75.34	28.73'	13.00'	820.11'	796.28'	819.55'	23.27'
	117	166+85.34	28.70'	11.00'	819.05'	797.87'	818.49'	20.62'
	118	166+95.34	28.68'	11.00'	818.00'	797.66'	817.43'	19.77'
	119	167+03.47	31.09'	11.00'	817.23'	797.65'	816.71'	19.06'
	120	167+10.46	38.26'	11.00'	816.96'	797.91'	816.44'	18.53'
	121	167+17.44	45.42'	11.00'	816.68'	798.91'	816.17'	17.26'
	122	167+24.41	52.58'	11.00'	816.41'	799.01'	815.90'	16.89'
	123	167+34.74	63.19'	11.00'	816.00'	799.02'	815.50'	16.48'

△ ① BOTTOM PILE ELEVATION ASSUMES USE OF 6" LEVELING PAD

BEFORE YOU DIG OKIE 811 CALL OKIE

LICENSED PROFESSIONAL ENGINEER SAMANTHA HENRICH 32024 OKLAHOMA

SOLDIER PILE WALL DETAILS (2)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
△ ADDED TEXT	SH	8/5/25

PLAN SCALE: 1" = N/A
PROFILE SCALE:
HORIZONTAL: 1" = N/A
VERTICAL 1" = N/A

DRAWN		06/2023
DESIGNED		06/2023
SURVEY		
PROJ. MGR.		
LEAD ENGR.		
FIELD MGR.		

RECOMMENDED:
DESIGN MANAGER

APPROVED:
CITY ENGINEER
DATE:

FILE: H:\21-1009 DRAWING 21-1009 SOLDIER PILE LISTS
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75
SHEET S18 OF 268 SHEETS

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PILE SCHEDULE △

WALL	PILE NO.	△ ℄ PILE GMR C.R.L. STATION	△ ℄ PILE GMR C.R.L. LEFT OFFSET	DEPTH INTO GROUND (PILOT HOLE LENGTH)	TOP OF WALL ELEVATION	BOTTOM OF PILE ELEVATION ①	TOP OF PILE ELEVATION	PILE LENGTH
"B-1"	1	168+98.99	36.15'	11.00'	821.94'	801.57'	821.37'	19.80'
	2	169+08.99	36.15'	13.00'	823.08'	799.58'	822.51'	22.93'
	3	169+18.99	36.15'	13.00'	824.15'	800.01'	823.59'	23.58'
	4	169+28.99	36.15'	13.00'	825.17'	800.43'	824.61'	24.18'
	5	169+38.99	36.15'	13.00'	826.12'	800.81'	825.57'	24.76'
	6	169+48.99	36.15'	13.00'	827.02'	801.19'	826.46'	25.27'
	7	169+58.99	36.15'	13.00'	827.85'	801.57'	827.30'	25.73'
	8	169+68.99	36.15'	13.00'	828.62'	801.95'	828.08'	26.13'
	9	169+78.99	36.15'	13.00'	829.33'	802.33'	828.79'	26.46'
	10	169+88.99	36.15'	13.00'	829.99'	802.71'	829.45'	26.74'
	11	169+98.99	36.15'	13.00'	830.58'	803.09'	830.04'	26.95'
	12	170+08.99	36.15'	13.00'	831.11'	803.47'	830.57'	27.11'
	13	170+18.99	36.15'	13.00'	831.57'	803.85'	831.05'	27.20'
	14	170+28.99	36.15'	13.00'	831.98'	804.23'	831.45'	27.22'
	15	170+38.99	36.15'	13.00'	832.33'	804.59'	831.81'	27.22'
	16	170+48.99	36.15'	13.00'	832.62'	804.93'	832.10'	27.17'
	17	170+58.99	36.15'	13.00'	832.85'	805.24'	832.34'	27.09'
	18	170+68.99	36.15'	13.00'	832.98'	805.50'	832.47'	26.96'
	19	170+78.99	36.15'	13.00'	832.98'	805.74'	832.47'	26.73'
	20	170+88.99	36.15'	13.00'	832.86'	805.94'	832.34'	26.40'
	21	170+98.99	36.15'	13.00'	832.61'	806.12'	832.09'	25.98'
	22	171+08.99	36.15'	13.00'	832.24'	806.25'	831.71'	25.46'
	23	171+18.99	36.15'	13.00'	831.75'	806.36'	831.21'	24.85'
	24	171+28.99	36.15'	13.00'	831.13'	806.44'	830.58'	24.14'
	25	171+38.99	36.15'	13.00'	830.38'	806.47'	829.83'	23.36'
	26	171+48.99	36.15'	11.00'	829.51'	808.42'	828.96'	20.54'
	27	171+58.99	36.15'	11.00'	828.52'	808.34'	827.96'	19.61'
	28	171+68.99	36.15'	11.00'	827.41'	808.34'	826.83'	18.49'

PILE SCHEDULE △

WALL	PILE NO.	△ ℄ PILE GMR C.R.L. STATION	△ ℄ PILE GMR C.R.L. LEFT OFFSET	DEPTH INTO GROUND (PILOT HOLE LENGTH)	TOP OF WALL ELEVATION	BOTTOM OF PILE ELEVATION ①	TOP OF PILE ELEVATION	PILE LENGTH
"D"	1	146+36.73	45.98'	11.00'	757.81'	740.84'	757.17'	16.33'
	2	146+46.73	45.98'	11.00'	760.19'	740.85'	759.55'	18.71'
	3	146+56.73	45.98'	11.00'	762.46'	743.13'	761.82'	18.69'
	4	146+66.73	45.98'	11.00'	764.61'	743.81'	763.98'	20.17'
	5	146+76.73	45.98'	13.00'	766.64'	742.46'	766.02'	23.57'
	6	146+86.73	45.98'	13.00'	768.56'	743.11'	767.95'	24.84'
	7	146+96.73	45.98'	13.00'	770.37'	743.74'	769.76'	26.02'
	8	147+06.73	45.98'	13.00'	772.05'	744.36'	771.46'	27.09'
	9	147+16.73	45.98'	15.00'	773.63'	742.98'	773.04'	30.06'
	10	147+26.73	45.98'	15.00'	775.09'	743.58'	774.50'	30.92'
	11	147+36.73	45.98'	15.00'	776.43'	744.17'	775.85'	31.68'
	12	147+46.73	45.98'	15.00'	777.65'	744.76'	777.08'	32.32'
	13	147+56.73	45.98'	15.00'	778.77'	745.33'	778.20'	32.87'
	14	147+66.73	45.98'	17.00'	779.76'	743.89'	779.20'	35.31'
	15	147+76.73	45.98'	17.00'	780.64'	744.45'	780.09'	35.64'
	16	147+86.73	45.98'	17.00'	781.41'	745.00'	780.86'	35.87'
	17	147+96.73	45.98'	17.00'	782.06'	745.54'	781.52'	35.97'
	18	148+06.73	45.98'	17.00'	782.62'	746.04'	782.09'	36.05'
	19	148+16.73	45.98'	17.00'	783.15'	746.55'	782.62'	36.07'
	20	148+26.73	45.98'	17.00'	783.63'	747.06'	783.10'	36.04'
	21	148+36.73	45.98'	17.00'	784.07'	747.55'	783.54'	35.99'
	22	148+46.73	45.98'	17.00'	784.46'	748.03'	783.94'	35.91'
	23	148+56.73	45.98'	17.00'	784.82'	748.50'	784.30'	35.79'
	24	148+66.73	45.98'	17.00'	785.12'	748.96'	784.61'	35.64'
	25	148+76.73	45.98'	17.00'	785.39'	749.41'	784.87'	35.46'
	26	148+86.73	45.98'	17.00'	785.61'	749.85'	785.09'	35.24'
	27	148+96.73	45.98'	17.00'	785.78'	750.27'	785.27'	35.00'
	28	149+06.73	45.98'	15.00'	785.92'	752.70'	785.41'	32.71'
	29	149+16.73	45.98'	15.00'	786.01'	753.11'	785.50'	32.39'
	30	149+26.73	45.98'	15.00'	786.05'	753.51'	785.55'	32.04'
	31	149+36.73	45.98'	15.00'	786.05'	753.90'	785.55'	31.65'
	32	149+46.73	45.98'	15.00'	786.01'	754.28'	785.51'	31.22'
	33	149+56.73	45.98'	15.00'	785.92'	754.65'	785.42'	30.76'
	34	149+66.73	45.98'	15.00'	785.79'	755.03'	785.28'	30.26'
	35	149+76.73	45.98'	13.00'	785.62'	757.39'	785.11'	27.72'
	36	149+86.73	45.98'	13.00'	785.40'	757.74'	784.89'	27.15'
	37	149+96.73	45.98'	13.00'	785.14'	758.07'	784.63'	26.56'
	38	150+06.73	45.98'	13.00'	784.84'	758.37'	784.32'	25.95'
	39	150+16.73	45.98'	13.00'	784.49'	758.69'	783.97'	25.28'
	40	150+26.73	45.98'	13.00'	784.10'	758.99'	783.57'	24.59'
	41	150+36.73	45.98'	13.00'	783.66'	759.26'	783.13'	23.87'
	42	150+46.73	45.98'	13.00'	783.18'	759.52'	782.65'	23.13'
	43	150+56.73	45.98'	11.00'	△ 782.65'	761.74'	782.12'	20.38'

△ ① BOTTOM PILE ELEVATION ASSUMES USE OF 6" LEVELING PAD

BEFORE YOU DIG 811 OKIE CALL OKIE

LIC. ENGINEER SAMANTHA HENRICH 32024 OKLAHOMA

REVISION	BY	DATE
△ ADDED TEXT	SH	8/5/25
△ REVISED DATA	SH	8/5/25

SOLDIER PILE WALL DETAILS (3)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

PLAN SCALE: 1" = N/A	DRAWN		06/2023	APPROVED:
	DESIGNED		06/2023	
	SURVEY			
PROFILE SCALE:	PROJ. MGR.			
HORIZONTAL: 1" = N/A	LEAD ENGR.			
	FIELD MGR.			
VERTICAL 1" = N/A	RECOMMENDED: DESIGN MANAGER			CITY ENGINEER
	FILE: H:\21-1009	DRAWING:21-1009 SOLDIER PILE LISTS		DATE:
	ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75			SHEET S19 OF 268 SHEETS

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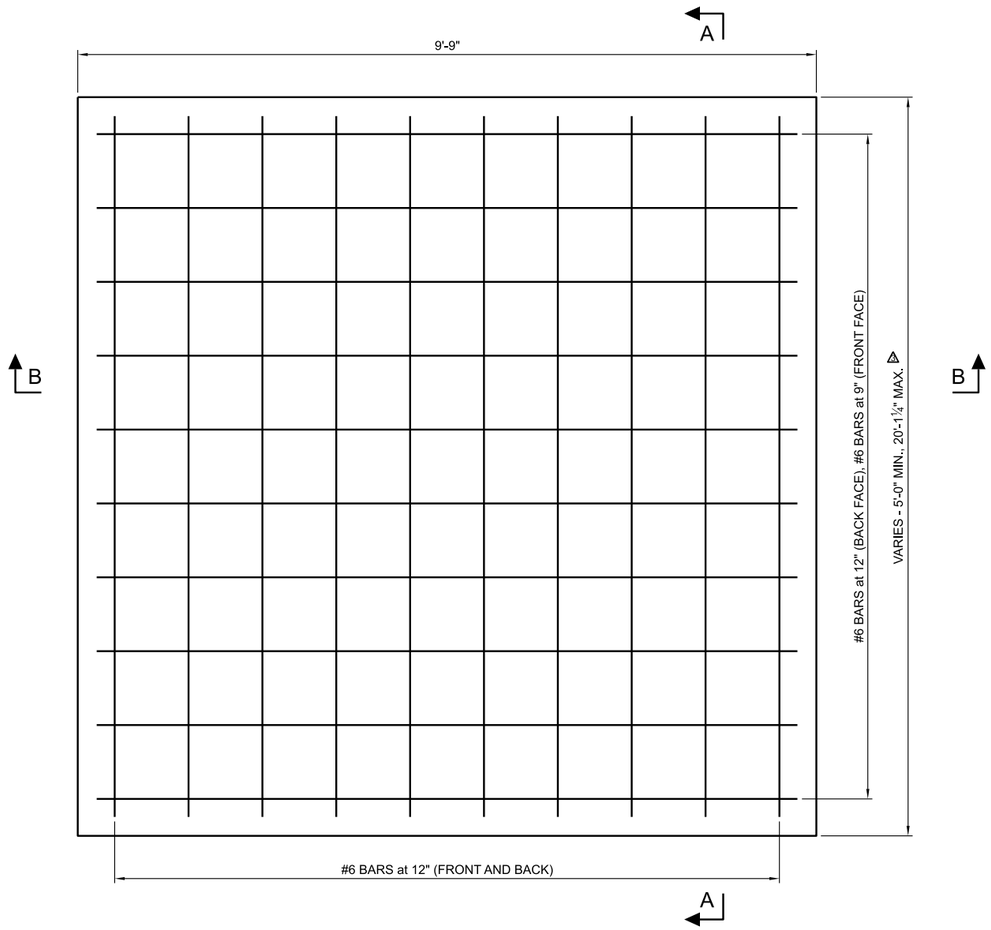
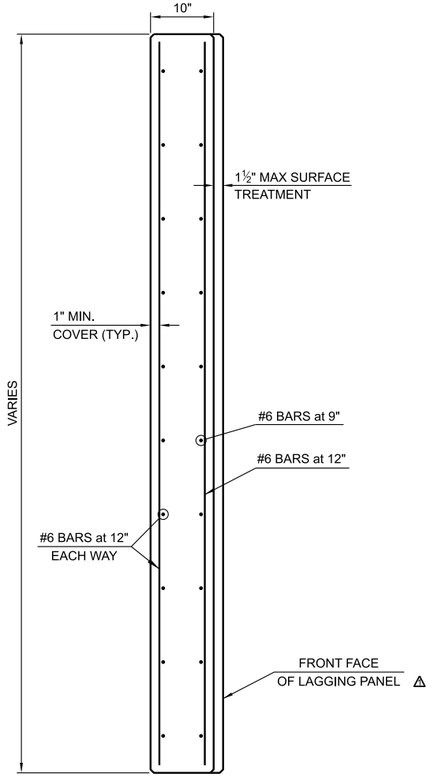


⚠ LAGGING PANEL REINFORCEMENT

(BACK FACE ELEVATION)

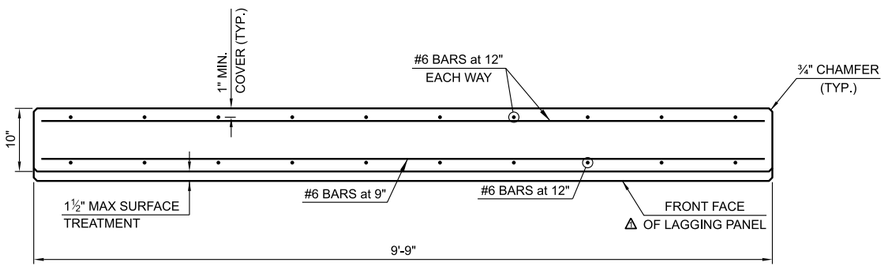
⚠ (PANEL A122 IS SIMILAR BUT W/ 14'-6" INSTEAD OF 9'-9" DIMENSION)



⚠ NOTES:

REINFORCEMENT SHALL MEET THE REQUIREMENTS OF ASTM A615 GRADE 60.

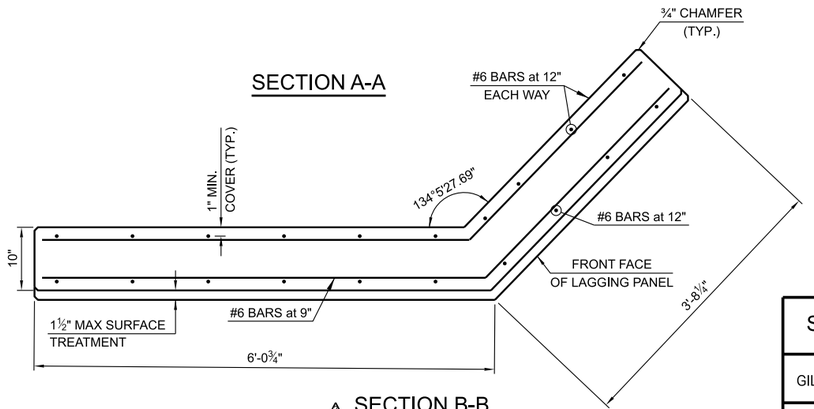
LAGGING CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI AT 28 DAYS.



SECTION B-B

⚠ (ALL OTHER PANELS)

SECTION A-A



⚠ SECTION B-B

(PANEL A118)

SOLDIER PILE WALL DETAILS (4)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
⚠ ADDED TEXT	SH	8/5/25
⚠ ADDED DETAIL	SH	8/5/25
⚠ REVISED TEXT	SH	8/5/25

PLAN SCALE: 1" = N/A
PROFILE SCALE:
HORIZONTAL: 1" = N/A
VERTICAL 1" = N/A

DRAWN | DESIGNED | SURVEY | PROJ. MGR. | LEAD ENGR. | FIELD MGR.

RECOMMENDED: DESIGN MANAGER

APPROVED: CITY ENGINEER

FILE: H:\21-1009 DRAWING:

DATE:

ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75

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LICENSED PROFESSIONAL ENGINEER SAMANTHA HENRICH 32024 OKLAHOMA

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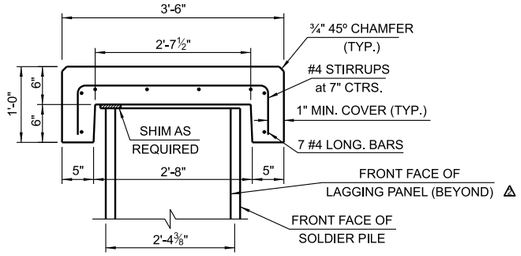
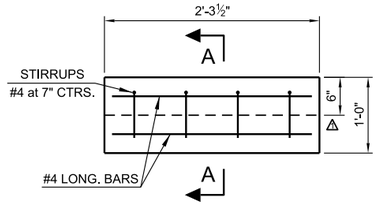


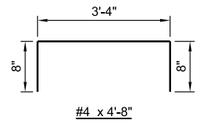
⚠ SECTION A-A

REBAR MAY BE REPLACED WITH EQUIVALENT WELDED WIRE CAGE



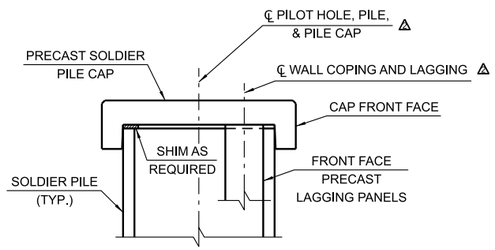
PRECAST PILE CAP - FRONT FACE ELEVATION

(NO FORM LINER)



STIRRUP DETAIL

⚠ ALL BAR BENDS ARE OUT TO OUT



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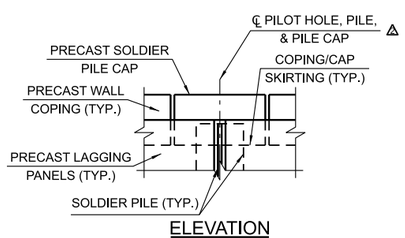
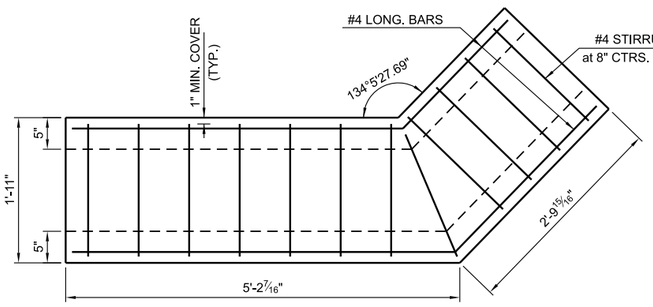


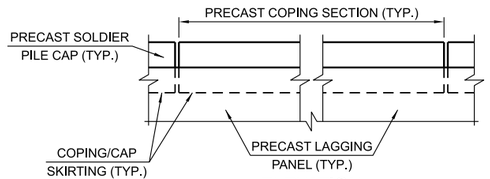
ELEVATION

SOLDIER PILE CAP DETAIL



⚠ PRECAST COPING - COPING AC118 PLAN

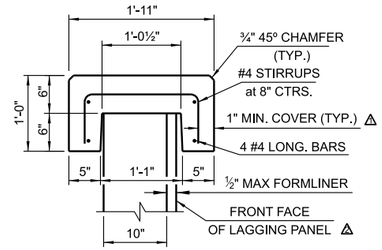
ELEVATION



ELEVATION

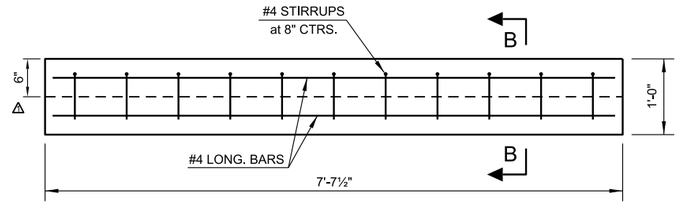
COPING DETAIL

⚠ NOTE:
CONTRACTOR SHALL PROVIDE 4" x 4" GREEN TREATED BLOCKING IN UPPER AND LOWER CORNERS OF LAGGING PANELS. BLOCKING SHALL BE CUT TO LENGTH AND GREEN TREATED WOODEN EDGES SHALL BE USED BETWEEN THE PILE AND THE BLOCKING TO SECURE THE BLOCKING. ADDITIONAL ELASTOMERIC PADS MAY BE REQUIRED FOR LAGGING PANEL ALIGNMENT DUE TO TOLERANCES IN PILE PLACEMENT.



⚠ SECTION B-B

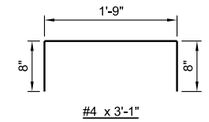
REBAR MAY BE REPLACED WITH EQUIVALENT WELDED WIRE CAGE



PRECAST COPING - FRONT FACE ELEVATION

(NO FORM LINER)

⚠ (COPING AC122 IS SIMILAR BUT W/ 12'-5" INSTEAD OF 7'-7½" DIMENSION)



STIRRUP DETAIL

ALL BAR BENDS ARE OUT TO OUT

⚠

NOTES:

REINFORCEMENT SHALL MEET THE REQUIREMENTS OF ASTM A615 GRADE 60.

⚠ PILE CAP AND COPING CONCRETE SHALL BE CLASS AA AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.

⚠ PILE CAP AND COPING SHALL BE CAST SUCH THAT TOP OF COPING ELEVATIONS AS GIVEN ON WALL PLAN & ELEVATION SHEETS ARE MET.

SOLDIER PILE WALL DETAILS (5)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
⚠ ADDED TEXT	SH	8/5/25
⚠ REVISED TEXT	SH	8/5/25
⚠ DELETED TEXT	SH	8/5/25
⚠ ADDED DETAIL	SH	8/5/25

PLAN SCALE: 1" = N/A
PROFILE SCALE:
HORIZONTAL: 1" = N/A
VERTICAL 1" = N/A

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APPROVED: CITY ENGINEER

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DATE:
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SAMANTHA HEINRICH 32024 LICENSED PROFESSIONAL ENGINEER OKLAHOMA

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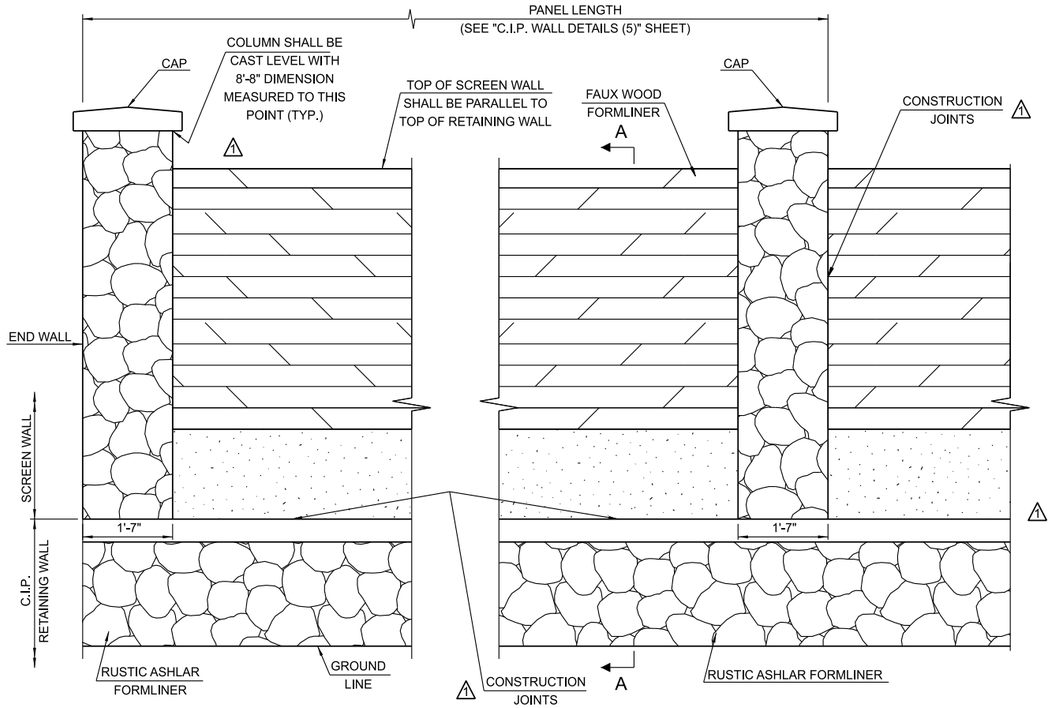
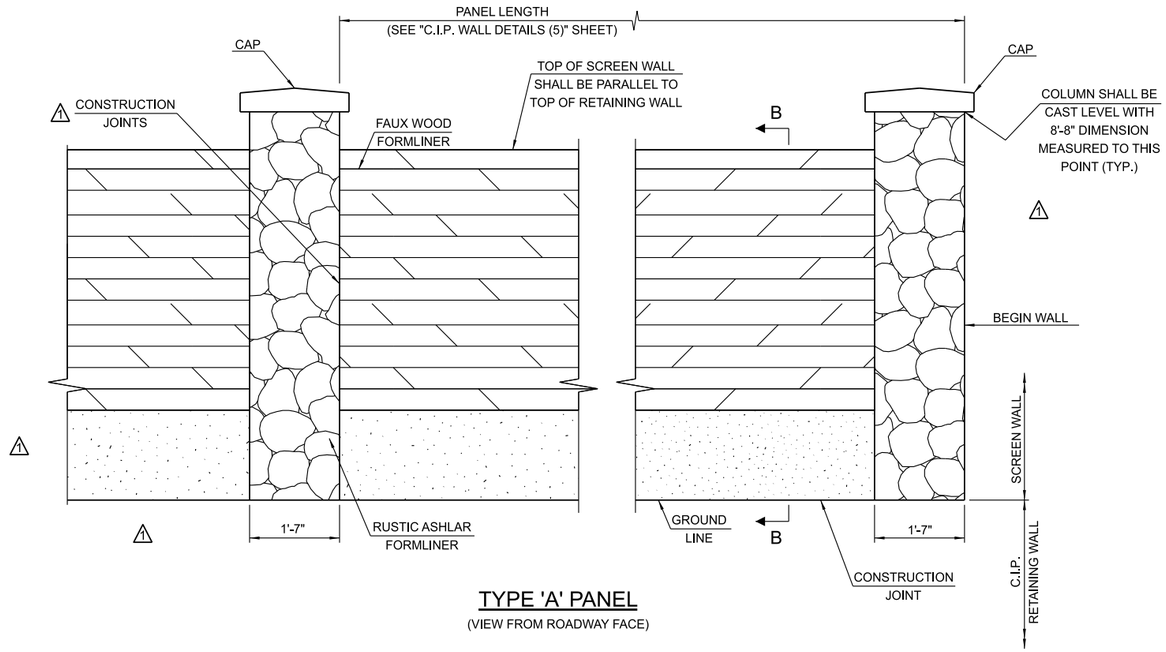


TYPE 'B' PANEL

(VIEW FROM ROADWAY FACE)



TYPE 'A' PANEL

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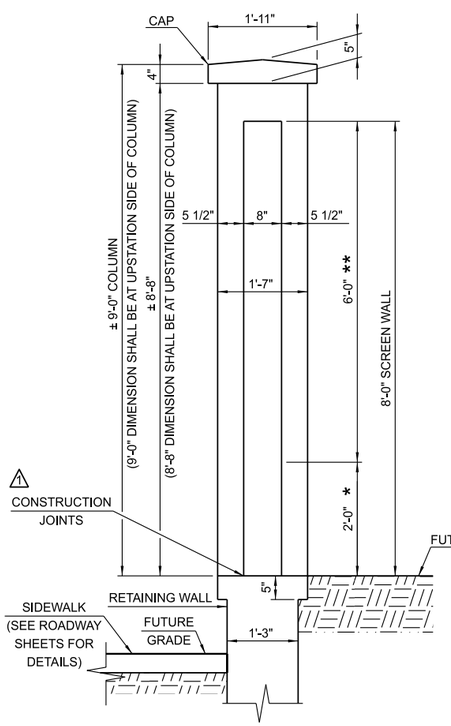
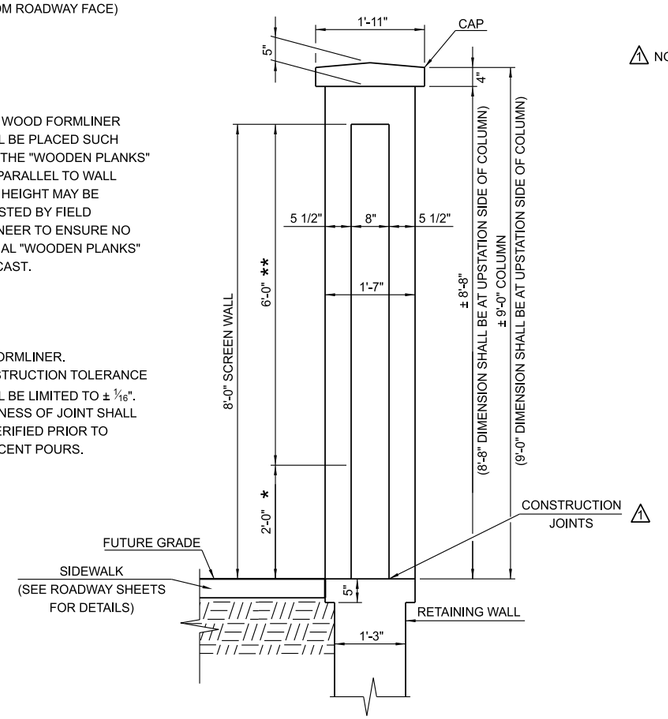


SECTION A-A



SECTION B-B

** FAUX WOOD FORMLINER SHALL BE PLACED SUCH THAT THE "WOODEN PLANKS" RUN PARALLEL TO WALL TOP. HEIGHT MAY BE ADJUSTED BY FIELD ENGINEER TO ENSURE NO PARTIAL "WOODEN PLANKS" ARE CAST.

⚠1 * NO FORMLINER. CONSTRUCTION TOLERANCE SHALL BE LIMITED TO ± 1/16". NEATNESS OF JOINT SHALL BE VERIFIED PRIOR TO ADJACENT POURS.

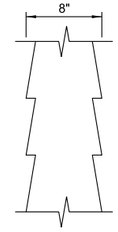
SCREEN WALL ELEVATION

⚠1 NOTE: THE FAUX WOOD PATTERN SHALL BE ACHIEVED USING 6" SHIP LAP #16928 FORMLINER PATTERN.

THE RUSTIC ASHLAR PATTERN SHALL BE ACHIEVED USING RUSTIC ASHLAR #11019 FORMLINER PATTERN.

SCREEN WALL GENERAL NOTES:

1. SCREEN WALL SHALL BE DESIGNED BY THE CONTRACTOR WITH THE AESTHETIC DETAILS AS SHOWN HERE.
2. SCREEN WALL SHALL BE TIED TO THE RETAINING WALL WITH SW1 #5 BAR at 6" CENTERS AS SHOWN ON THE "C.I.P. WALL DETAILS" SHEETS.
3. ALL COSTS FOR SCREEN WALL INCLUDING CONCRETE, REINFORCING STEEL, CONCRETE SURFACE FORM LINERS, EXPANSION JOINTS, DESIGN, AND OTHER INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE PRICE PER LINEAR FOR OF "DECORATIVE WALL".
4. ⚠1 COLUMN CAPS AS SHOWN ON PLANS ARE CAST IN PLACE. CONTRACTOR MAY INSTEAD USE PRE-CAST CAPS AT NO ADDITIONAL COST TO CITY OF TULSA.
5. ⚠2 SCREEN WALL WILL REQUIRE 214.9 CY OF CLASS A CONCRETE AND 169,190 LB OF REINFORCING STEEL TO CONSTRUCT.



FAUX WOOD "PLANK" ORIENTATION

NOTE:
FORMLINERS SHALL BE ORIENTED SUCH THAT THE WIDER END OF EACH "PLANK" IS AT THE "PLANK" BOTTOM TO PREVENT WATER PONDING ON THE FINISHED WALL.

BEFORE YOU DIG OKIE 811 CALL OKIE

STATE OF OKLAHOMA SAMANTHA HENRICH 32024 LICENSED PROFESSIONAL ENGINEER

SCREEN WALL DETAILS (1)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
⚠1 REMOVE INTEGRAL COLOR	SH	7/29/25
⚠2 ADDED NOTE	SH	7/29/25

PLAN SCALE: 1" = N/A
PROFILE SCALE:
HORIZONTAL: 1" = N/A
VERTICAL 1" = N/A

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APPROVED: CITY ENGINEER

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ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75
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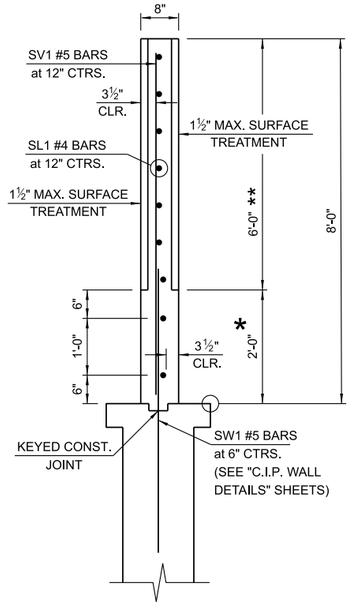
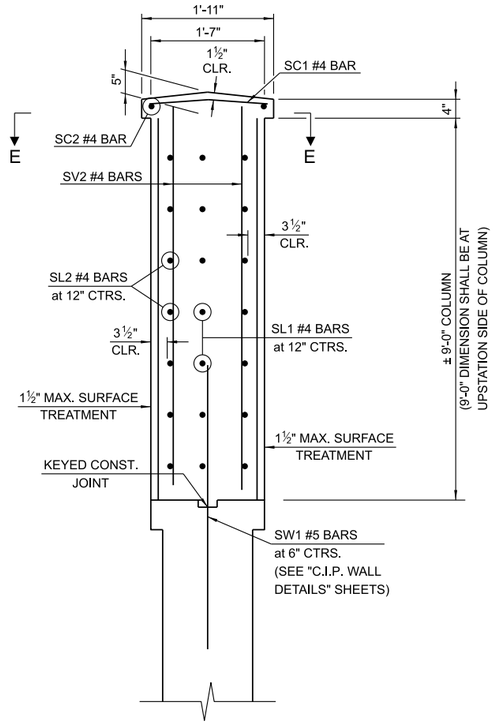


SECTION THRU WALL

** FAUX WOOD FORMLINER SHALL BE PLACED SUCH THAT THE "WOODEN PLANKS" RUN PARALLEL TO WALL TOP. HEIGHT MAY BE ADJUSTED BY FIELD ENGINEER TO ENSURE NO PARTIAL "WOODEN PLANKS" ARE CAST.

* NO FORMLINER. CONSTRUCTION TOLERANCE SHALL BE LIMITED TO ± 1/16". NEATNESS OF JOINT SHALL BE VERIFIED PRIOR TO ADJACENT POURS.



SECTION THRU COLUMN

NOTE:
COLUMN CAP AS SHOWN ON PLANS IS CAST IN PLACE. CONTRACTOR MAY INSTEAD USE A PRECAST CAP AT NO ADDITIONAL COST TO CITY OF TULSA.

BAR LIST - COLUMN
(ONE SHOWN, FORTY REQUIRED)

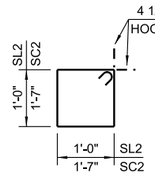
MARK	NO.	SIZE	FORM	SPACING	LENGTH
SC1	1	#4	BENT	AS SHOWN	1'-7"
SC2	1	#4	BENT	AS SHOWN	7'-1"
SL2	9	#4	BENT	12" C/C	4'-9"
SV2	4	#4	STR.	AS SHOWN	8'-10"

BAR LIST - WALL
(ONE SHOWN, THIRTY-NINE REQUIRED)

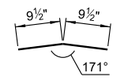
MARK	NO.	SIZE	FORM	SPACING	LENGTH
SL1	9	#4	STR.	12" C/C	①
SV1	②	#5	STR.	12" C/C	7'-10"

① PANEL LENGTH + 2'-0" FOR PANELS ENDING IN CONSTRUCTION JOINT. PANEL LENGTH - 4" FOR PANELS ENDING IN EXPANSION JOINT OR PANEL 51. SEE "CIP WALL DETAIL (5)" FOR PANEL LENGTHS.

② SCREEN WALL ABOVE PANEL 13 SHALL REQUIRE 27 SV1 BARS. SCREEN WALL ABOVE PANEL 51 SHALL REQUIRE 22 SV1 BARS. ALL OTHER SCREEN WALL SHALL REQUIRE 24 SV1 BARS.

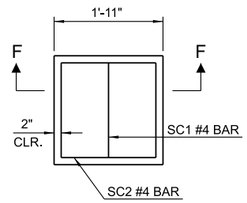


SL2 #4 x 4'-9"
SC2 #4 x 7'-1"



SC1 #4 x 1'-7"

ALL BAR BENDS ARE OUT TO OUT.



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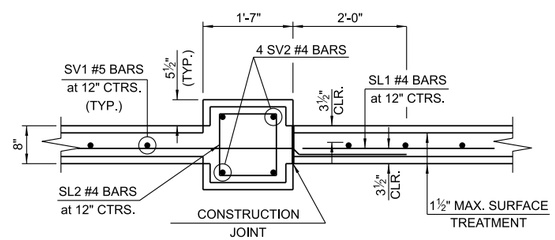
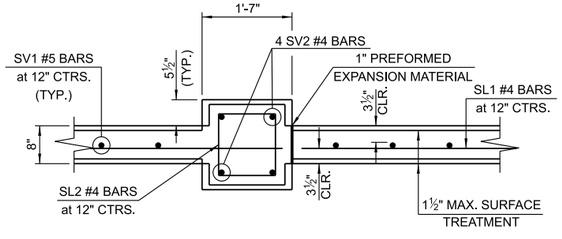
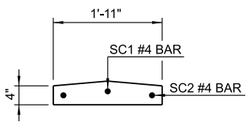


SECTION THRU WALL
(AT CONST. JOINT)



SECTION THRU WALL
(AT EXP. JOINT)



SECTION F-F

SCREEN WALL DETAILS (2)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
ALL DETAILS REPLACED	SH	7/29/25

PLAN SCALE: 1" = N/A
PROFILE SCALE:
HORIZONTAL: 1" = N/A
VERTICAL 1" = N/A
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RECOMMENDED: DESIGN MANAGER
APPROVED: CITY ENGINEER
FILE: H121-1009 DRAWING:
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ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75
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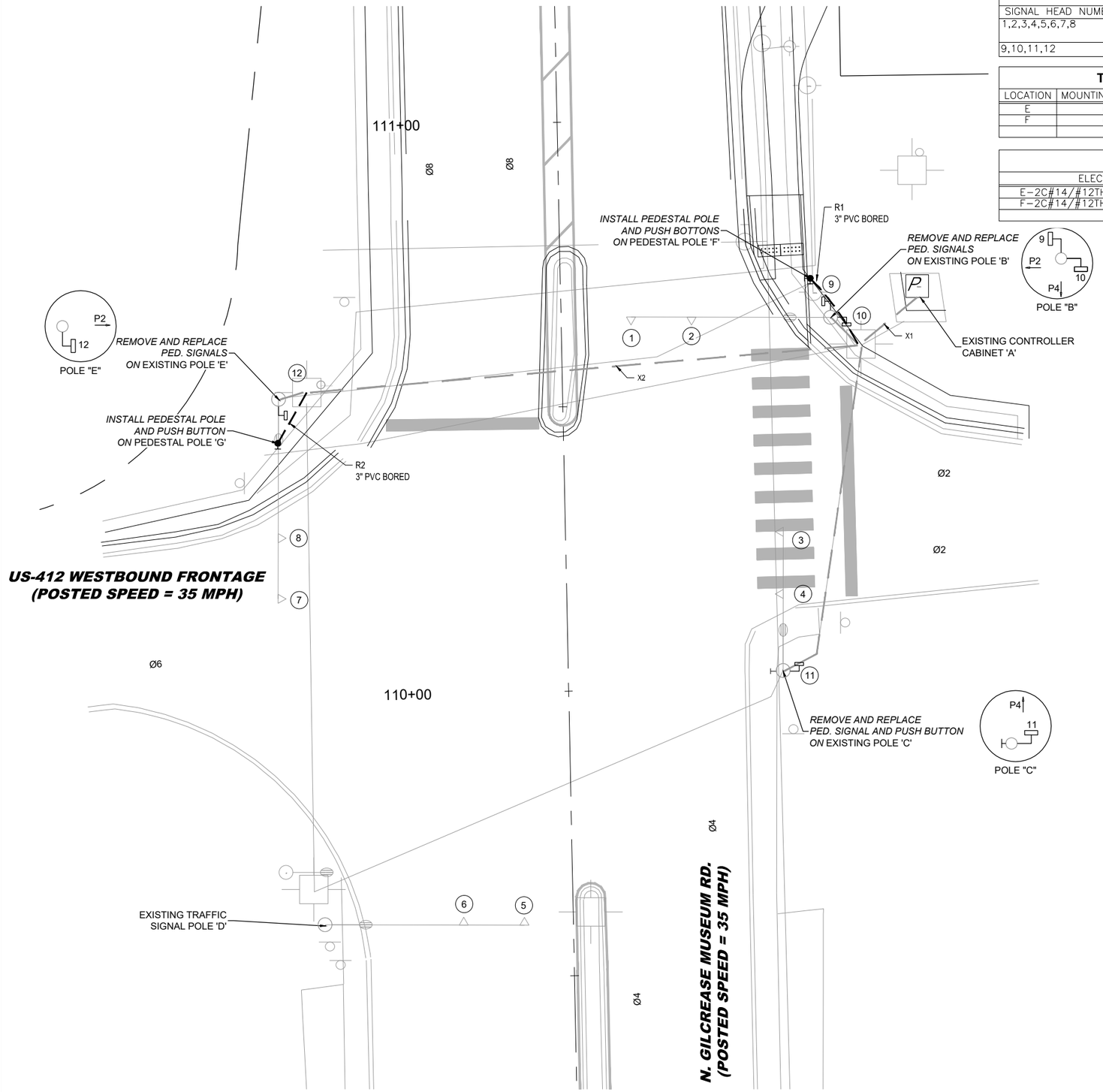


TABLE 1 - SIGNAL HEADS

SIGNAL HEAD NUMBER	NUMBER & TYPE	MOUNTING	VISOR	BACKPLATE
1,2,3,4,5,6,7,8	EXISTING (#36) TO REMAIN	–	–	–
9,10,11,12	4-ONE WAY (#33)	CLAMP	–	–

TABLE 2 - MAST ARMS & POLES

LOCATION	MOUNTING HEIGHT	MAST ARM LENGTHS	FOUNDATION
E	6'	PEDESTRIAN PUSH BUTTON POLE	F-1
F	6'	PEDESTRIAN PUSH BUTTON POLE	F-1

TABLE 3 - CABLE

ELECTRICAL CABLE TO CONTROLLER LOCATION
E-2C#14/#12THHN/#6THHN
F-2C#14/#12THHN/#6THHN

TRAFFIC SIGNAL LEGEND

SYMBOL	DESCRIPTION
	PULL BOX
	CONTROLLER CABINET
R1	PROPOSED CONDUIT RUN
X1	EXISTING CONDUIT RUN
1	SIGNAL HEAD NUMBER
	PED. POLE/PUSH BUTTON/SIGNAL HEAD
ø4	SIGNAL PHASE

NOTES:

1. THE CONTRACTOR SHALL CONTACT THE CITY OF TULSA AND THE UTILITY COMPANIES FOR POSSIBLE UNDERGROUND EXISTING UTILITIES NOT SHOWN ON THE PLANS. THIS SHOULD BE DONE BEFORE TRENCHING OR PUSHING THE ELECTRICAL CONDUITS.
2. CARE SHALL BE TAKEN TO PRESERVE EXISTING TRAFFIC SIGNAL CONDUITS AND LOOP DETECTOR WIRE.
3. THE POLE ENLARGEMENT DETAIL IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE PLACEMENT OF THE PEDESTRIAN PUSH BUTTONS AND SIGNAL HEADS SHALL BE INSTALLED ON THE POLES SUCH THAT THE SIGNAL HEADS ARE VISIBLE FROM THE CROSSWALK AND THE PUSH BUTTONS ARE UNOBSTRUCTED AND ADJACENT TO AND WITHIN 10" MAXIMUM TO A LEVEL, ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR. THE PUSH BUTTONS ARE TO BE MOUNTED ON THE SIDE OF THE POLE CLOSEST TO THE CORRESPONDING CROSSWALK.
4. THE EXISTING TRAFFIC SIGNAL PHASING AND TIMING PLANS SHALL BE MAINTAINED.

SUMMARY OF CONDUIT & CABLES TO CONTROLLER

RUN NO.	NO. OF NEW CONDUITS	3" PVC TRENCHED	#6 THHN BONDING WIRE	#12 THHN PULL WIRE	2C#14
		L.F.	L.F.	L.F.	L.F.
R1	1	15	30	30	30
R2	1	10	25	25	25
	TOTALS	25	55	55	55

SUMMARY OF CABLE INSIDE POLE AND MAST ARM

POLE NO.	2C#14
	L.F.
E	10
F	10
TOTALS	20

EXISTING HORIZONTAL UTILITY LOCATIONS AND DEPTHS ARE APPROXIMATE AND MUST BE FIELD VERIFIED PRIOR TO CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER
Ryan E. Henderson
27234
OKLAHOMA

BEFORE YOU DIG 811 1-800-522-6543 CALL OKIE

0 5 10 20

SIGNAL LAYOUT PLAN
N. GILCREASE MUSEUM RD. &
US-412 W.B. FRTG. RD.

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD./N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z, 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

1111 N LEE AVE
SUITE 236
OKLAHOMA CITY, OK 73103
PHONE: (405) 384-5127
OK C.A. #5860 EXP. 06/30/2025
LEE ENGINEERING

PLAN SCALE			
1" = 10'	DRAWN	LEE	6/2025
	DESIGNED	LEE	6/2025
	SURVEY		
PROFILE SCALES:	PROJECT MGR.		
	LEAD ENGR.		
	FIELD MGR.		
HORIZONTAL: N/A	RECOMMENDED:		
VERTICAL: N/A	DESIGN MANAGER		
	CITY ENGINEER		

NO.	DATE	REVISION DESCRIPTION
1	8/6/25	ADDENDUM NO. 4

FILE:
DATE:
ATLAS PAGE NO:
SHEET: 81 OF 267

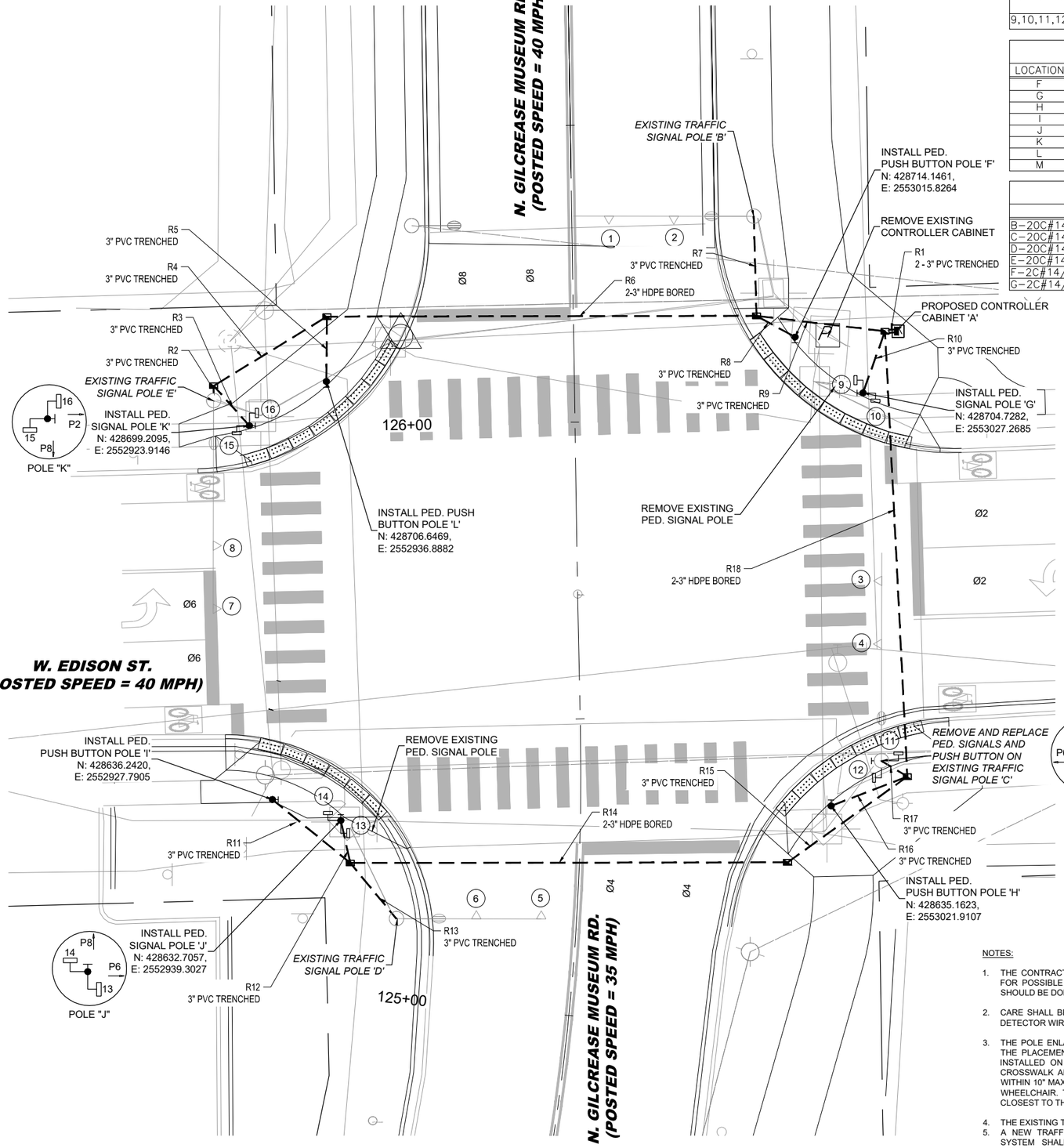


TABLE 1 - SIGNAL HEADS

SIGNAL HEAD NUMBER	NUMBER & TYPE	MOUNTING	VISOR	BACKPLATE
1,2,3,4,5,6,7,8	EXISTING (#36) TO REMAIN	–	–	–
9,10,11,12,13,14,15,16	8-ONE WAY (#33)	CLAMP	–	–

TABLE 2 - MAST ARMS & POLES

LOCATION	MOUNTING HEIGHT	MAST ARM LENGTHS	FOUNDATION
F	6'	PEDESTRIAN PUSH BUTTON POLE	F-1
G	10'	PED. SIGNAL PEDESTAL POLE	F-1
H	6'	PEDESTRIAN PUSH BUTTON POLE	F-1
I	6'	PEDESTRIAN PUSH BUTTON POLE	F-1
J	10'	PED. SIGNAL PEDESTAL POLE	F-1
K	10'	PED. SIGNAL PEDESTAL POLE	F-1
L	6'	PEDESTRIAN PUSH BUTTON POLE	F-1
M	6'	PEDESTRIAN PUSH BUTTON POLE	F-1

TABLE 3 - CABLE

ELECTRICAL CABLE TO CONTROLLER LOCATION	
B-20C#14/7C#14/#12THHN/#6THHN	H-2C#14/#12THHN/#6THHN
C-20C#14/7C#14/#12THHN/#6THHN	I-2C#14/#12THHN/#6THHN
D-20C#14/7C#14/#12THHN/#6THHN	J-2C#14/2-4C#14/#12THHN/#6THHN
E-20C#14/7C#14/#12THHN/#6THHN	K-2C#14/2-4C#14/#12THHN/#6THHN
F-2C#14/#12THHN/#6THHN	L-2C#14/#12THHN/#6THHN
G-2C#14/2-4C#14/#12THHN/#6THHN	M-2C#14/#12THHN/#6THHN

TRAFFIC SIGNAL LEGEND

SYMBOL	DESCRIPTION
	PULL BOX
	CONTROLLER CABINET
R1	PROPOSED CONDUIT RUN
X1	EXISTING CONDUIT RUN
	PROPOSED TRAFFIC SIGNAL POLE WITH MAST ARM, SIGNAL HEADS, AND PUSHBUTTON
1	SIGNAL HEAD NUMBER
ø4	SIGNAL PHASE
	PED. POLE/BUTTON/SIGNAL HEAD

NOTES:

1. THE CONTRACTOR SHALL CONTACT THE CITY OF TULSA AND THE UTILITY COMPANIES FOR POSSIBLE UNDERGROUND EXISTING UTILITIES NOT SHOWN ON THE PLANS. THIS SHOULD BE DONE BEFORE TRENCHING OR PUSHING THE ELECTRICAL CONDUITS.
2. CARE SHALL BE TAKEN TO PRESERVE EXISTING TRAFFIC SIGNAL CONDUITS AND LOOP DETECTOR WIRE.
3. THE POLE ENLARGEMENT DETAIL IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE PLACEMENT OF THE PEDESTRIAN PUSH BUTTONS AND SIGNAL HEADS SHALL BE INSTALLED ON THE POLES SUCH THAT THE SIGNAL HEADS ARE VISIBLE FROM THE CROSSWALK AND THE PUSH BUTTONS ARE UNOBSTRUCTED AND ADJACENT TO AND WITHIN 10" MAXIMUM TO A LEVEL, ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR. THE PUSH BUTTONS ARE TO BE MOUNTED ON THE SIDE OF THE POLE CLOSEST TO THE CORRESPONDING CROSSWALK.
4. THE EXISTING TRAFFIC SIGNAL PHASING AND TIMING PLANS SHALL BE MAINTAINED.
5. A NEW TRAFFIC SIGNAL CONTROLLER CABINET ASSEMBLY WITH BATTERY BACKUP SYSTEM SHALL BE INSTALLED AT THIS INTERSECTION. PLEASE REFER TO COT SPECIFICATION 610 AND PAY ITEM NOTE COT 610 FOR MORE DETAIL.

0 5 10 20

EXISTING HORIZONTAL UTILITY LOCATIONS AND DEPTHS ARE APPROXIMATE AND MUST BE FIELD VERIFIED PRIOR TO CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER Ryan E. Henderson 27234 OKLAHOMA

BEFORE YOU DIG 811 800-522-6543 CALL OKIE

NO.	DATE	REVISION DESCRIPTION
1	8/6/25	ADDENDUM NO. 4

SIGNAL LAYOUT PLAN
N. GILCREASE MUSEUM RD. &
W. EDISON ST.

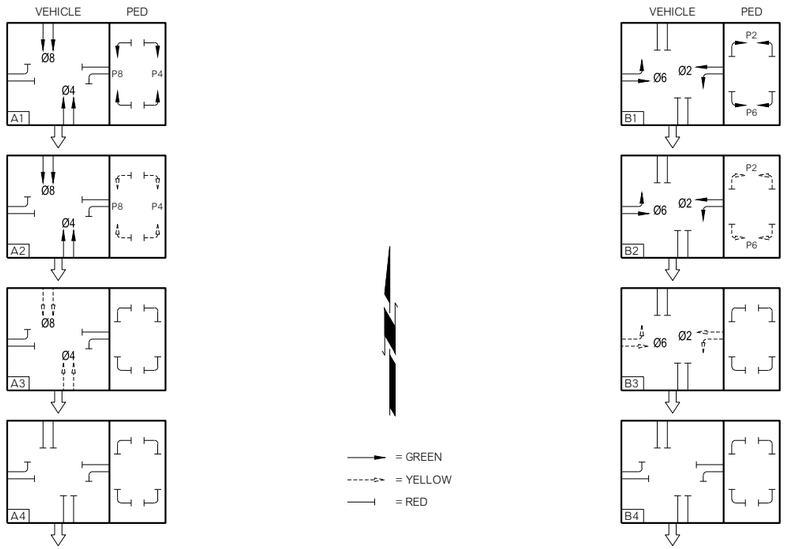
ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD./N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z, 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

1111 N LEE AVE
SUITE 236
OKLAHOMA CITY, OK 73103
PHONE: (405) 384-5127
OK C.A. #5860 EXP. 06/30/2025
LEE ENGINEERING

PLAN SCALE 1" = 10'	DRAWN	LEE	6/2025
	DESIGNED	LEE	6/2025
	SURVEY		
PROFILE SCALES:	PROJECT MGR.		
	LEAD ENGR.		
	FIELD MGR.		
HORIZONTAL: N/A	RECOMMENDED:		
	DESIGN MANAGER		
VERTICAL: N/A			CITY ENGINEER
FILE:			DATE:
ATLAS PAGE NO:			SHEET: 82 OF 267

PHASING DIAGRAM	
PHASE "A"	PHASE "B"
GILCREASE MUSEUM ROAD	EDISON STREET



SEQUENCE CHART

BLOCK NO.	DIRECTION	PHASE 4	6	8	2	P2	P4	P6	P8
		SIGNAL HEAD NUMBERS 1,2	3,4	5,6	7,8	9,16	10,11	12,13	14,15
A1	Ø4 & Ø8 R.O.W., P4 & P8 R.O.W.	G	R	G	R	DW	W	DW	W
A2	Ø4 & Ø8 R.O.W., P4 & P8 CL.	G	R	G	R	DW	FDW	DW	FDW
A3	Ø4 & Ø8 CL.	Y	R	Y	R	DW	DW	DW	DW
A4	ALL RED	R	R	R	R	DW	DW	DW	DW
B1	Ø2 & Ø6 R.O.W., P2 & P6 R.O.W.	R	G	R	G	W	DW	W	DW
B2	Ø2 & Ø6 R.O.W., P2 & P6 CL.	R	G	R	G	FDW	DW	FDW	DW
B3	Ø2 & Ø6 CL.	R	Y	R	Y	DW	DW	DW	DW
B4	ALL RED	R	R	R	R	DW	DW	DW	DW
-	FLASHING OPERATION	FR	FR	FR	FR	OFF	OFF	OFF	OFF

R.O.W. = RIGHT-OF-WAY
PRO = PROTECTED
CL. = CLEAR
FYA = FLASHING YELLOW ARROW
OVL. = OVERLAP PHASE

R = RED
Y = YELLOW
G = GREEN
FR = FLASHING RED

~~G~~ = GREEN ARROW
~~Y~~ = YELLOW ARROW
~~FY~~ = FLASHING YELLOW ARROW
~~R~~ = RED ARROW
~~FR~~ = FLASHING RED ARROW

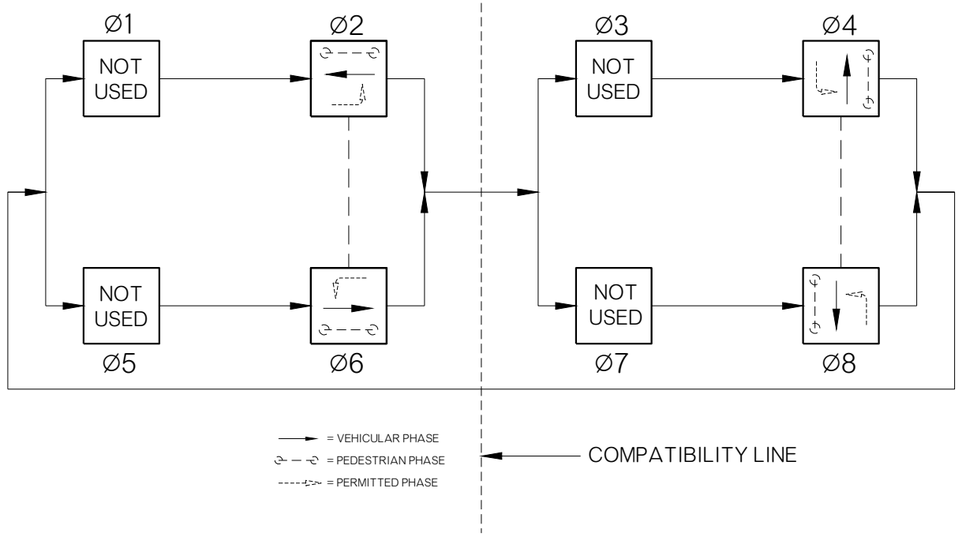
W = WALK
DW = DON'T WALK
FDW = FLASHING DON'T WALK

SUMMARY OF CONDUIT & CABLES TO CONTROLLER

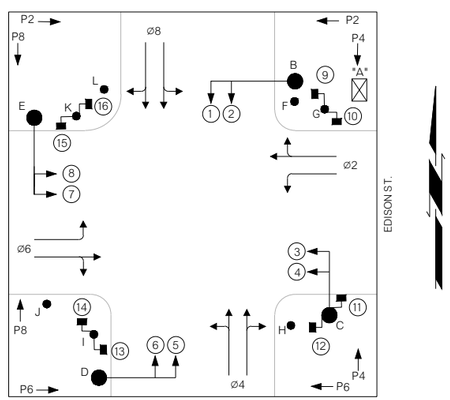
RUN NO.	NO. OF NEW CONDUITS	2-3" HDPE BORED L.F.	3" PVC TRENCHED L.F.	#6 THHN BONDING WIRE L.F.	#12 THHN PULL WIRE L.F.	2C#14 L.F.	4C#14 L.F.	7C#14 L.F.	20C#14 L.F.
R1	2		10	20	20	0	0	80	80
R2	1		5	10	10	20	20	10	10
R3	1		10	15	15	15	30	0	0
R4	1		25	35	35	35	0	35	35
R5	1		10	15	15	15	0	0	0
R6	2	75		85	85	0	0	85	85
R7	1		20	25	25	50	50	25	25
R8	1		10	15	15	15	0	0	0
R9	1		25	35	35	35	70	70	70
R10	1		15	20	20	20	40	0	0
R11	1		20	25	25	25	0	0	0
R12	1		10	15	15	15	30	0	0
R13	1		15	20	20	40	40	20	20
R14	2	75		85	85	0	0	85	85
R15	1		25	35	35	0	0	35	35
R16	1		15	20	20	20	0	0	0
R17	1		10	15	15	15	0	15	15
R18	2	80		90	90	0	0	180	180
	TOTALS	230	240	580	580	320	280	640	640

SUMMARY OF CABLE INSIDE POLE AND MAST ARM

POLE NO.	2C#14 L.F.	4C#14 L.F.
C		20
F	10	
G	10	20
H	10	
I	10	20
J	10	
K	10	20
L	10	
TOTALS	70	80



RING AND BARRIER PHASING DIAGRAM



INTERSECTION PHASE AND SIGNAL HEAD NUMBERS

EXISTING HORIZONTAL UTILITY LOCATIONS AND DEPTHS ARE APPROXIMATE AND MUST BE FIELD VERIFIED PRIOR TO CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER
Ryan E. Henderson
27234
12/31/25
OKLAHOMA

BEFORE YOU DIG 811 1-800-522-6543 CALL OKIE

PHASING DIAGRAM AND SIGNAL SUMMARY
N. GILCREASE MUSEUM RD. &
W. EDISON ST.

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD./N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z, 2036A0024Z

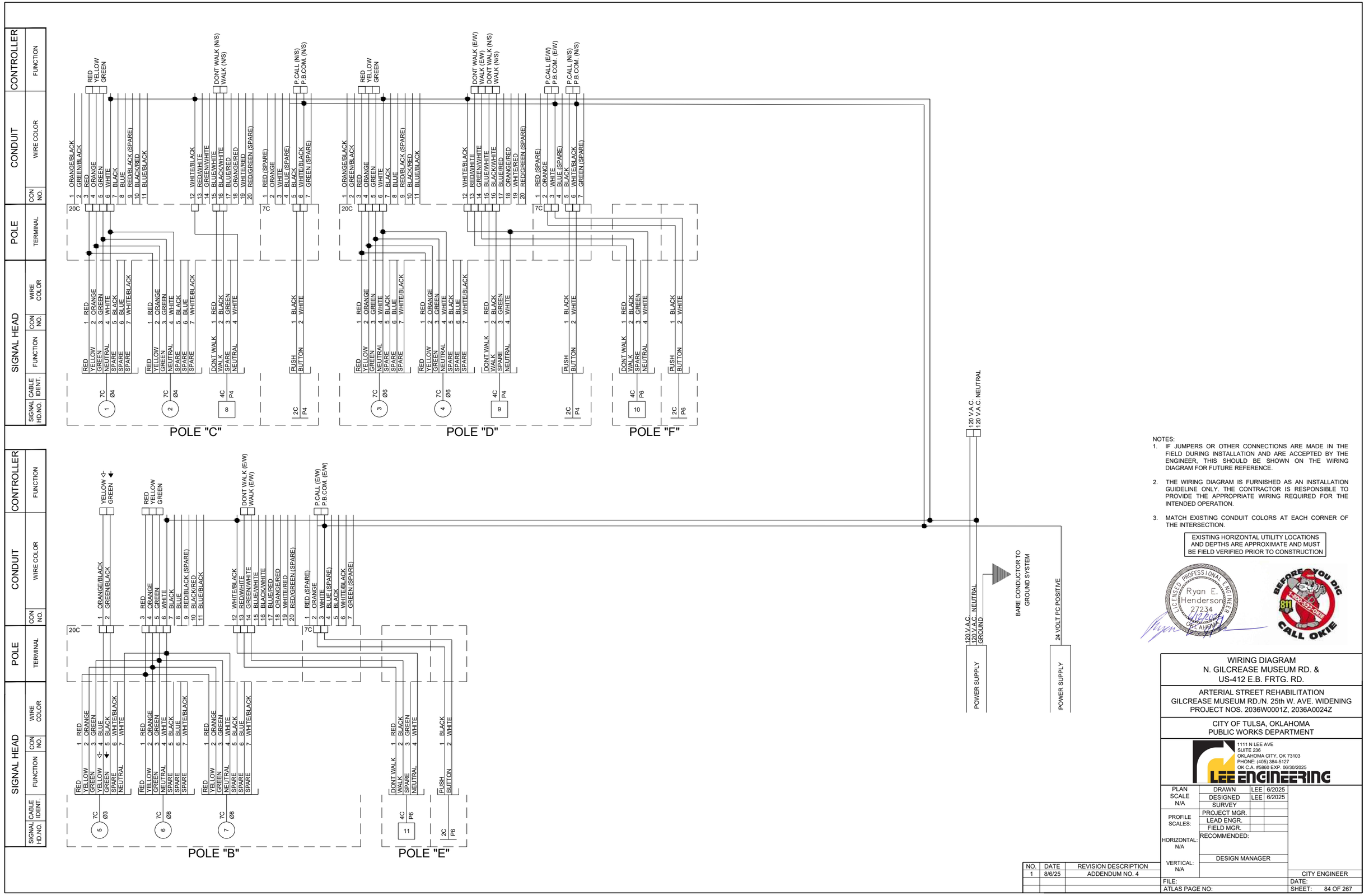
CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

1111 N LEE AVE
SUITE 236
OKLAHOMA CITY, OK 73103
PHONE: (405) 384-5127
OK C.A. #5860 EXP. 06/30/2025
LEE ENGINEERING

PLAN SCALE			
1" = 10'	DRAWN	LEE	6/2025
	DESIGNED	LEE	6/2025
	SURVEY		
PROFILE SCALES:	PROJECT MGR.		
	LEAD ENGR.		
	FIELD MGR.		
HORIZONTAL: N/A	RECOMMENDED:		
VERTICAL: N/A	DESIGN MANAGER		
	CITY ENGINEER		

NO.	DATE	REVISION DESCRIPTION
1	8/6/25	ADDENDUM NO. 4

FILE:
DATE:
ATLAS PAGE NO:
SHEET: 83 OF 267



NOTES:

1. IF JUMPERS OR OTHER CONNECTIONS ARE MADE IN THE FIELD DURING INSTALLATION AND ARE ACCEPTED BY THE ENGINEER, THIS SHOULD BE SHOWN ON THE WIRING DIAGRAM FOR FUTURE REFERENCE.
2. THE WIRING DIAGRAM IS FURNISHED AS AN INSTALLATION GUIDELINE ONLY. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE WIRING REQUIRED FOR THE INTENDED OPERATION.
3. MATCH EXISTING CONDUIT COLORS AT EACH CORNER OF THE INTERSECTION.

EXISTING HORIZONTAL UTILITY LOCATIONS AND DEPTHS ARE APPROXIMATE AND MUST BE FIELD VERIFIED PRIOR TO CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER
Ryan E. Henderson
27234
12/31/25
OKLAHOMA

BEFORE YOU DIG 811 1-800-522-OKIE CALL OKIE

WIRING DIAGRAM
N. GILCREASE MUSEUM RD. & US-412 E.B. FRTG. RD.

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD./N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z, 2036A0024Z

CITY OF TULSA, OKLAHOMA
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PLAN SCALE N/A	DRAWN	LEE	6/2025
	DESIGNED	LEE	6/2025
	SURVEY		
PROFILE SCALES:	PROJECT MGR.		
	LEAD ENGR.		
	FIELD MGR.		
HORIZONTAL: N/A	RECOMMENDED:		
VERTICAL: N/A	DESIGN MANAGER		
	CITY ENGINEER		

NO.	DATE	REVISION DESCRIPTION
1	8/6/25	ADDENDUM NO. 4

FILE:
DATE:
ATLAS PAGE NO:
SHEET: 84 OF 267

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WIRING DIAGRAM
N. GILCREASE MUSEUM RD. &
US-412 W.B. FRTG. RD.

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD./N. 25th W. AVE. WIDENING
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NO.	DATE	REVISION DESCRIPTION
1	8/6/25	ADDENDUM NO. 4

PLAN SCALE N/A	DRAWN	LEE	6/2025
	DESIGNED	LEE	6/2025
	SURVEY		
PROFILE SCALES:	PROJECT MGR.		
	LEAD ENGR.		
	FIELD MGR.		
HORIZONTAL: N/A	RECOMMENDED:		
VERTICAL: N/A	DESIGN MANAGER		
	CITY ENGINEER		
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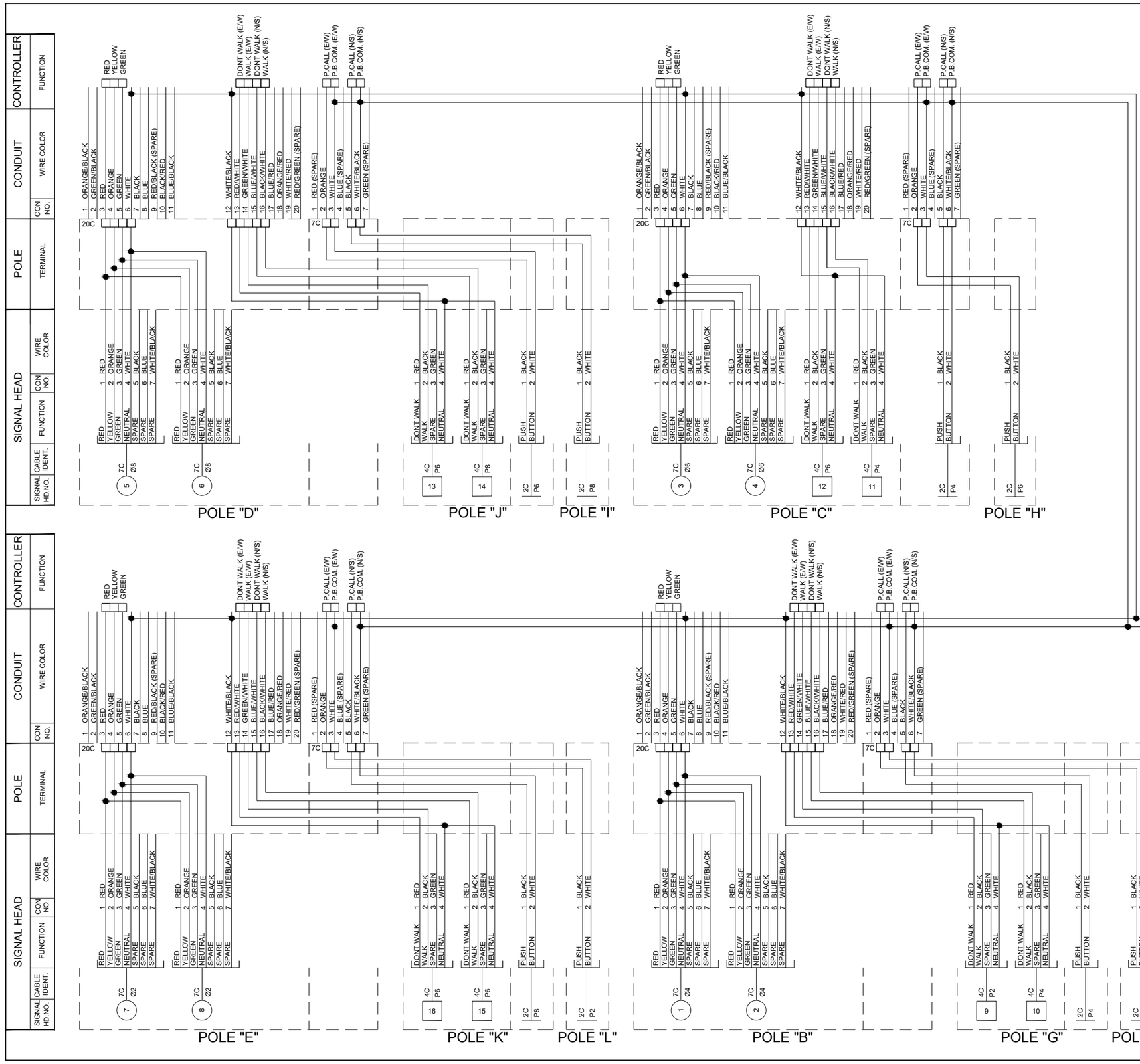
ATLAS PAGE NO:	SHEET: 85 OF 267		



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EXISTING HORIZONTAL UTILITY LOCATIONS AND DEPTHS ARE APPROXIMATE AND MUST BE FIELD VERIFIED PRIOR TO CONSTRUCTION

LICENSED PROFESSIONAL ENGINEER — Ryan E. Henderson 27234 — OKLAHOMA

BEFORE YOU DIG 811 1-800-522-6543 CALL OKIE

WIRING DIAGRAM
N. GILCREASE MUSEUM RD. &
W. EDISON ST.

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD./N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z, 2036A0024Z

CITY OF TULSA, OKLAHOMA
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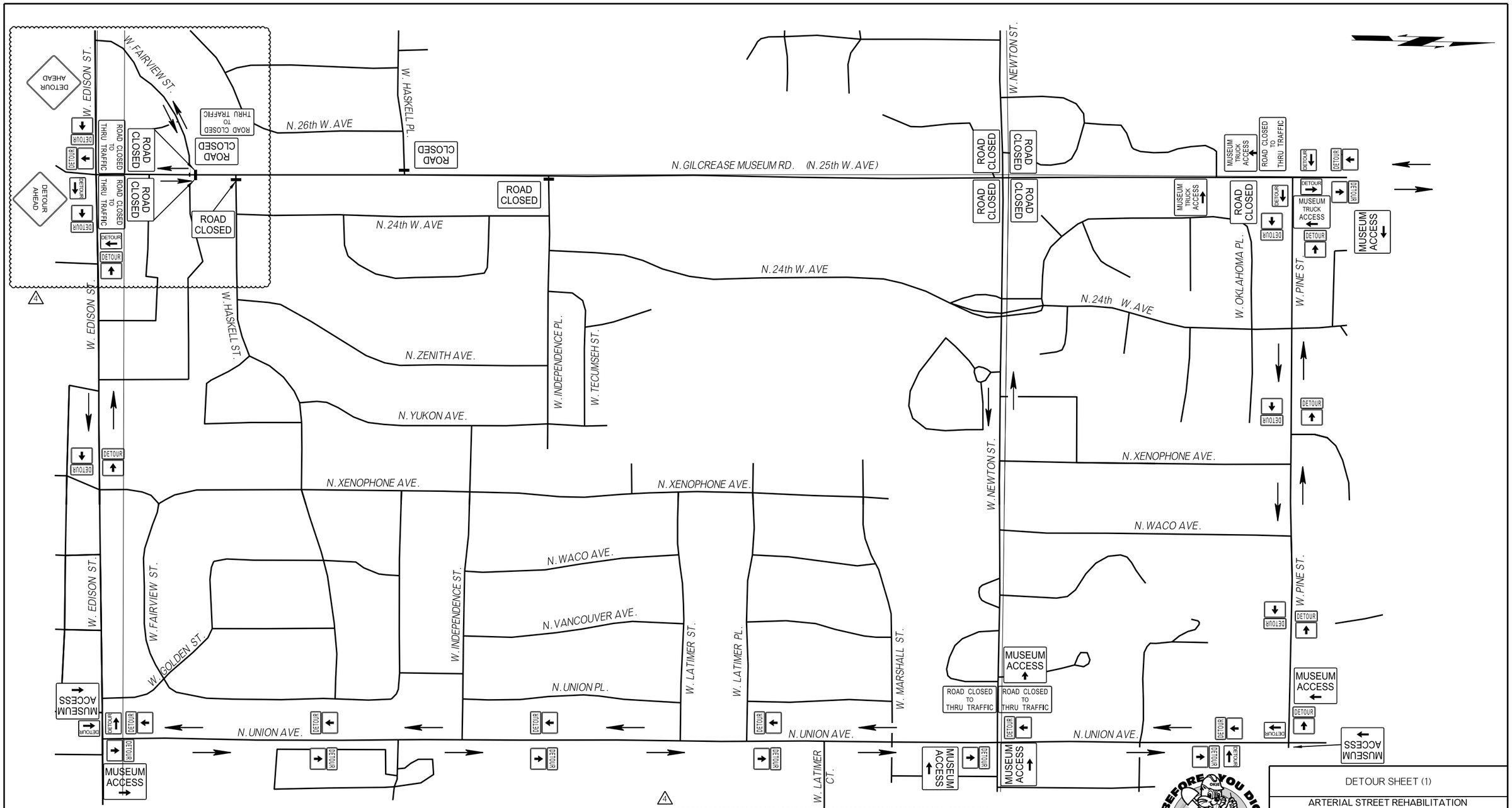
PLAN SCALE N/A	DRAWN	LEE	6/2025
	DESIGNED	LEE	6/2025
	SURVEY		
PROFILE SCALES:	PROJECT MGR.		
	LEAD ENGR.		
	FIELD MGR.		
HORIZONTAL: N/A	RECOMMENDED:		
VERTICAL: N/A	DESIGN MANAGER		
	CITY ENGINEER		

NO.	DATE	REVISION DESCRIPTION
1	8/6/25	ADDENDUM NO. 4

FILE:
DATE:
ATLAS PAGE NO: N/A
SHEET: 86 OF 267



NOTE: PHASE 1A DETOUR
BOTH NORTHBOUND & SOUTHBOUND GILCREASE MUSEUM ROAD TO UTILIZE DETOUR SHOWN. CLOSE GILCREASE MUSEUM ROAD FROM W. EDISON ST. TO W. PINE ST. EXCEPT AS FOLLOWS:

1. SEMI TRUCK ACCESS EXITING SOUTHBOUND ONTO GILCREASE MUSEUM ROAD AT 130+70 RT SHALL BE MAINTAINED AT ALL TIMES.
2. RESIDENTIAL ACCESS TO WEST SIDE OF GILCREASE MUSEUM ROAD ON W. NEWTON STREET SHALL BE MAINTAINED AT ALL TIMES. THIS IS THE ONLY ACCESS FOR THESE RESIDENTS.
3. MUSEUM ACCESS FOR STAFF AND CONSTRUCTION SHALL BE MAINTAINED AT ALL TIMES. SEMI-TRUCK ACCESS SHALL BE MAINTAINED AT ALL TIMES TO THE NORTH DRIVEWAY AT 177+95 LT UNLESS CLOSURE IS COORDINATED WITH MUSEUM STAFF.
4. FULL CLOSURE OF 150 DAYS IS ALLOWED FROM WEST FAIRVIEW STREET TO WEST INDEPENDENCE PLACE IN ORDER TO CONSTRUCT THE RCBS. OUTSIDE OF THE 150 DAYS, LOCAL RESIDENTIAL ACCESS SHALL BE ALLOWED FROM WEST EDISON STREET TO WEST INDEPENDENCE PLACE. SEE PHASE 1C). 4

NOTE: PHASE 1B DETOUR (MOVE MUSEUM ACCESS SIGNS FROM W. NEWTON ST. TO PINE ST.)
BOTH NORTHBOUND & SOUTHBOUND GILCREASE MUSEUM ROAD TO UTILIZE DETOUR SHOWN. CLOSE GILCREASE MUSEUM ROAD FROM W. EDISON ST. TO W. NEWTON ST. EXCEPT AS FOLLOWS:

1. SEMI TRUCK ACCESS EXITING SOUTHBOUND ONTO GILCREASE MUSEUM ROAD AT 130+70 RT SHALL BE MAINTAINED AT ALL TIMES.
2. RESIDENTIAL ACCESS TO WEST SIDE OF GILCREASE MUSEUM ROAD ON W. NEWTON STREET SHALL BE MAINTAINED AT ALL TIMES. THIS IS THE ONLY ACCESS FOR THESE RESIDENTS. CLOSE NEWTON FROM GILCREASE MUSEUM ROAD TO N. 24TH W. AVE.
3. MUSEUM ACCESS FOR STAFF AND CONSTRUCTION SHALL BE MAINTAINED AT ALL TIMES. SEMI-TRUCK ACCESS SHALL BE MAINTAINED AT ALL TIMES TO THE NORTH DRIVEWAY AT 177+95 LT UNLESS CLOSURE IS COORDINATED WITH MUSEUM STAFF.

4

NOTE: PHASE 1C DETOUR
BOTH NORTHBOUND & SOUTHBOUND GILCREASE MUSEUM ROAD TO UTILIZE DETOUR SHOWN. CLOSE GILCREASE MUSEUM ROAD TO THROUGH TRAFFIC FROM WEST EDISON STREET TO WEST INDEPENDENCE PLACE. OPEN WEST HASKELL STREET, WEST HASKELL PLACE, AND WEST INDEPENDENCE PLACE TO LOCAL ACCESS ONLY - ROAD CLOSED TO THRU TRAFFIC.

JARED T. BATES 20681 LICENSED PROFESSIONAL ENGINEER OKLAHOMA
6/20/2025

BEFORE YOU DIG 811 1-800-522-OKIE CALL OKIE

DETOUR SHEET (1)

ARTERIAL STREET REHABILITATION
GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS. 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISION	BY	DATE
4 ADDENDUM 4 - REVISED DETOUR NOTES	JTB	06/01/2025

PLAN SCALE: 1" = N/A	DRAWN	POE	06/2023	APPROVED:
	DESIGNED	POE	06/2023	
	SURVEY	MW	3/2022	
PROFILE SCALE:	PROJ. MGR.			
HORIZONTAL: 1" = N/A	LEAD ENGR.			
	FIELD MGR.			
VERTICAL 1" = N/A	RECOMMENDED: DESIGN MANAGER			CITY ENGINEER
FILE: H:\21-1009	DRAWING: 21-1009-Detour			DATE:
ATLAS PAGE NO:				SHEET 104 OF 268 SHEETS

MATCH LINE STA. 146+20.00

MATCH LINE STA. 152+50.00

CAUTION!! UNDERGROUND LIGHTING CONDUIT IN VICINITY!

CAUTION!! STORM SEWER IN VICINITY!

LOCATION OF RETAINING WALL

CITY OF TULSA

MARK S. & ANGELA M. SWIFT, TRUSTEES OF THE MARK S. SWIFT LIVING TRUST

(2) CR

(2) CR

(4) CR

(3) QRB

BERMUDA SOD (TYP.)

CAUTION!! STORM SEWER IN VICINITY!

(5) CR

147+00

148+00

149+00

150+00

151+00

152+00

LIGHT POLE LOCATION (BY OTHERS)(TYP.)

N. GILCREASE MUSEUM RD.

(3) PC

BERMUDA SOD (TYP.)

(3) CR

(3) CR

(2) PC

BERMUDA SOD (TYP.)

CAUTION!! TELECOMM. LINES IN VICINITY

GILCREASE HILLS HOMEOWNER'S ASSOC.

LIMITS OF DISTURBANCE (TYP.)

CAUTION!! UNDERGROUND LIGHTING CONDUIT IN VICINITY!

50.0'

EX. 8" WATER LINE

EX. TREE TO REMAIN (TYP.)

W. INDEPENDENCE PL.

1"=20'

0 10 20 40

NOTE: SOD ALL AREAS DISTURBED BY CONSTRUCTION.

LANDSCAPE LEGEND (TREE PLANTING NOT INCLUDED IN THIS CONTRACT)

KEY	SYM.	COMMON NAME	BOTANICAL NAME
MEDIUM TREES			
PC		CHINESE PISTACHE	Pistacia chinensis
QRB		REGAL PRINCE® OAK	Quercus robur x bicolor 'Long'
SMALL TREES			
CR		OKLAHOMA REDBUD	Cercis canadensis var. texensis 'Oklahoma'
GROUND COVERS			
		U3 BERMUDA SOD	

PLANTING PLAN (1)

ARTERIAL STREET REHABILITATION GILCREASE MUSEUM RD./N. 25th W. AVE. WIDENING
PROJECT NOS.TMUA-W 22-37, 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISIONS

4 LIGHTING CONDUIT SHOWN AND LEGEND UPDATES

PLAN SCALE: 1" = 20'	DRAWN	PGW	5/2025
	DESIGNED	PGW	5/2025
	SURVEY	MW	3/2022
PROFILE SCALE: N/A	PROJ. MGR.		
	LEAD ENGR.		
HORIZONTAL: N/A	FIELD MGR.		
VERTICAL: N/A	RECOMMENDED: DESIGN MANAGER		

APPROVED: CITY ENGINEER

FILE: H:£21-1009 DRAWING:

DATE:

ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75

SHEET L1 OF 268 SHEETS

BEFORE YOU DIG OKIE ONE CALL CALL OKIE

MATCH LINE STA. 152+50.00

MARK S. & ANGELA M. SWIFT, TRUSTEES OF THE MARK S. SWIFT LIVING TRUST

MARK S. & ANGELA M. SWIFT, REVOCABLE TRUST DATED SEPT. 29, 2020

SID CONWAY

(2) CR

(4) QRB

CAUTION!! STORM SEWER IN VICINITY!

LIGHT POLE LOCATION (BY OTHERS)(TYP.)

BERMUDA SOD (TYP.)

(2) PC

CAUTION!! STORM SEWER IN VICINITY!

(5) CR

LOCATION OF RETAINING WALL

(2) QRB

CAUTION!! UNDERGROUND LIGHTING CONDUIT IN VICINITY!

(3) PC

153+00 154+00 155+00 156+00 157+00 158+00

PI: STA. 158+02.98

PI: STA. 153+62.91

N. GILCREASE MUSEUM RD.

(3) CR

(4) CR

CAUTION!! UNDERGROUND LIGHTING CONDUIT IN VICINITY!

(3) PC

(4) PC

CITY OF TULSA

LIMITS OF DISTURBANCE (TYP.)

BERMUDA SOD (TYP.)

MATCH LINE STA. 158+73.69

LANDSCAPE LEGEND (TREE PLANTING NOT INCLUDED IN THIS CONTRACT)

KEY	SYM.	COMMON NAME	BOTANICAL NAME
MEDIUM TREES			
PC		CHINESE PISTACHE	Pistacia chinensis
QRB		REGAL PRINCE® OAK	Quercus robur x bicolor 'Long'
SMALL TREES			
CR		OKLAHOMA REDBUD	Cercis canadensis var. texensis 'Oklahoma'
GROUND COVERS			
		U3 BERMUDA SOD	

1"=20'

0 10 20 40

NOTE: SOD ALL AREAS DISTURBED BY CONSTRUCTION.

PLANTING PLAN (2)

ARTERIAL STREET REHABILITATION GILCREASE MUSEUM RD./N. 25th W. AVE. WIDENING
PROJECT NOS.TMUA-W 22-37, 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISIONS

4 LIGHTING CONDUIT SHOWN AND LEGEND UPDATES

BEFORE YOU DIG CALL OKIE

PLAN SCALE: 1" = 20'	DRAWN	PGW	5/2025	APPROVED:
	DESIGNED	PGW	5/2025	
	SURVEY	MW	3/2022	
PROFILE SCALE: N/A	PROJ. MGR.			
	LEAD ENGR.			
HORIZONTAL: N/A	FIELD MGR.			
VERTICAL: N/A	RECOMMENDED:			
	DESIGN MANAGER			CITY ENGINEER
FILE: H:\21-1009 DRAWING:				DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75				SHEET L2 OF 268 SHEETS

MATCH LINE STA. 158+73.69

MATCH LINE STA. 164+98.00

PATRICIA MANDRELL

CAUTION!! UNDERGROUND LIGHTING CONDUIT IN VICINITY!

CAUTION!! UNDERGROUND LIGHTING CONDUIT IN VICINITY!

BERMUDA SOD (TYP.)

PAVED STORM DITCH

(5) PC

(4) QRB

(2) CR

(3) PC

159+00 160+00 161+00 162+00 163+00 164+00 165+00

(3) CR

N. GILCREASE MUSEUM RD.

(2) CR

(2) CR

(5) PC

(4) CR

(3) PC

LIGHT POLE LOCATION (BY OTHERS)(TYP.)

LIMITS OF DISTURBANCE (TYP.)

PROP. AEP EASEMENT

GILCREASE HILLS VILLAGE I

4

LANDSCAPE LEGEND (TREE PLANTING NOT INCLUDED IN THIS CONTRACT)

KEY	SYM.	COMMON NAME	BOTANICAL NAME
MEDIUM TREES			
PC		CHINESE PISTACHE	Pistacia chinensis
QRB		REGAL PRINCE® OAK	Quercus robur x bicolor 'Long'
SMALL TREES			
CR		OKLAHOMA REDBUD	Cercis canadensis var. texensis 'Oklahoma'
GROUND COVERS			
		U3 BERMUDA SOD	

1"=20'

0 10 20 40

NOTE: SOD ALL AREAS DISTURBED BY CONSTRUCTION.

PLANTING PLAN (3)

ARTERIAL STREET REHABILITATION GILCREASE MUSEUM RD./N. 25th W. AVE. WIDENING
PROJECT NOS.TMUA-W 22-37, 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

BEFORE YOU DIG CALL OKIE

REVISIONS
4 LIGHTING CONDUIT SHOWN AND LEGEND UPDATES; TREES HAVE BEEN REMOVED AND REPLACED

PLAN SCALE: 1" = 20'	DRAWN	PGW	5/2025	APPROVED:
	DESIGNED	PGW	5/2025	
	SURVEY	MW	3/2022	
PROFILE SCALE: N/A	PROJ. MGR.			
	LEAD ENGR.			
HORIZONTAL: N/A	FIELD MGR.			
VERTICAL: N/A	RECOMMENDED:			
	DESIGN MANAGER			CITY ENGINEER
FILE: H:\21-1009 DRAWING:				DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75				SHEET L3 OF 268 SHEETS

MATCH LINE STA. 164+98.00

MATCH LINE STA. 171+22.42

AARON M. & ALEXANDRIA N. TEMPLE, TRUSTEES OF THE TEMPLE FAMILY TRUST, DATED AUG. 31, 2017

CITY OF TULSA

CITY OF TULSA

GILCREASE HILLS VILLAGE I BLKS. 1,2, & 3

CAUTION!! GAS LINE IN VICINITY

CAUTION!! STORM SEWER IN VICINITY!

CAUTION!! UNDERGROUND LIGHTING CONDUIT IN VICINITY!

CAUTION!! UNDERGROUND ELECTRIC LINE(S) IN VICINITY

CAUTION!! GAS LINE IN VICINITY

CAUTION!! WATER LINE IN VICINITY!

BERMUDA SOD (TYP.)

LIGHT POLE LOCATION (BY OTHERS)(TYP.)

PAVED STORM DITCH

PAVED STORM DITCH

EXISTING 6" WATER LINE

PI: STA. 168+02.98

LIMITS OF DISTURBANCE (TYP.)

3/4" OZARKA STONE MULCH REF. DETAIL B/L7

EX. 10" WATER LINE

BERMUDA SOD (TYP.)

RETAINING WALL (TYP.)

EX. 12" WATER LINE

N GILCREASE MUSEUM RD

W. NEWTON ST.

(1) PC

(3) PC

(3) CR

(5) CR

166+00

167+00

168+00

169+00

170+00

171+00

21

22

1"=20'

0 10 20 40

NOTE: SOD ALL AREAS DISTURBED BY CONSTRUCTION.

4

LANDSCAPE LEGEND (TREE PLANTING NOT INCLUDED IN THIS CONTRACT)

KEY	SYM.	COMMON NAME	BOTANICAL NAME
MEDIUM TREES			
	PC	CHINESE PISTACHE	Pistacia chinensis
SMALL TREES			
	CR	OKLAHOMA REDBUD	Cercis canadensis var. texensis 'Oklahoma'
GROUND COVERS			
		U3 BERMUDA SOD	
		3/4" OZARKA STONE MULCH	

PLANTING PLAN (4)

ARTERIAL STREET REHABILITATION GILCREASE MUSEUM RD/S. 25th W. AVE. WIDENING
PROJECT NOS. 144105, 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISIONS
4 LIGHTING CONDUIT SHOWN; LEGEND UPDATE; SOME TREES HAVE SHIFTED AND REMOVED

PLAN SCALE: 1" = 20'	DRAWN	PGW	5/2025	APPROVED:
	DESIGNED	PGW	5/2025	
	SURVEY	MW	3/2022	
PROFILE SCALE: N/A	PROJ. MGR.			
HORIZONTAL: N/A	LEAD ENGR.			
VERTICAL: N/A	FIELD MGR.			
	RECOMMENDED:			
	DESIGN MANAGER			CITY ENGINEER
FILE: H:\21-1009 DRAWING:				DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75				SHEET L4 OF 267 SHEETS

BEFORE YOU DIG OKIE CALL OKIE

MATCH LINE STA. 171+22.42

MATCH LINE STA. 177+47.60

CITY OF TULSA

N. GILCREASE MUSEUM RD.

3/4" OZARKA STONE MULCH
REF. DETAIL B SHEET L7

LIMITS OF DISTURBANCE (TYP.)

ORNAMENTAL GATE LOCATION

CAUTION!! STORM SEWER IN VICINITY

CAUTION!! UNDERGROUND ELECTRIC LINE(S) IN VICINITY

BERMUDA SOD (TYP.)

PAVED STORM DITCH

CAUTION!! SANITARY SEWER IN VICINITY

RETAINING WALL (TYP.)

EX. 10" WATER LINE

CAUTION!! GAS LINE IN VICINITY

CAUTION!! UNDERGROUND ELECTRIC LINE(S) IN VICINITY

LIGHT POLE LOCATION (BY OTHERS)(TYP.)

CAUTION!! WATER LINE IN VICINITY!

(1) PC, (2) PC, (3) PC, (4) PC, (5) PC

(1) CR, (2) CR, (3) CR, (4) CR, (5) CR

172+00, 173+00, 174+00, 175+00, 176+00, 177+00

19 18 17 16 15 14 13 12 11

GILCREASE HILLS VILLAGE I
BLKS. 1,2, & 3

1"=20'

0 10 20 40

NOTE: SOD ALL AREAS DISTURBED BY CONSTRUCTION.

LANDSCAPE LEGEND (TREE PLANTING NOT INCLUDED IN THIS CONTRACT)

KEY	SYM.	COMMON NAME	BOTANICAL NAME
MEDIUM TREES			
PC		CHINESE PISTACHE	Pistacia chinensis
SMALL TREES			
CR		OKLAHOMA REDBUD	Cercis canadensis var. texensis 'Oklahoma'
GROUND COVERS			
		U3 BERMUDA SOD	
		3/4" OZARKA STONE MULCH	

PLANTING PLAN (5)

ARTERIAL STREET REHABILITATION GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS.TMUA-W 22-37, 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISIONS

4 LIGHTING CONDUIT SHOWN; LEGEND UPDATE; TREES HAVE BEEN ADDED, SHIFTED, AND REMOVED

PLAN SCALE: 1" = 20'	DRAWN	PGW	5/2025	APPROVED:
	DESIGNED	PGW	5/2025	
	SURVEY	MW	3/2022	
PROFILE SCALE: N/A	PROJ. MGR.			
	LEAD ENGR.			
HORIZONTAL: N/A	FIELD MGR.			
VERTICAL: N/A	RECOMMENDED: DESIGN MANAGER			CITY ENGINEER
FILE: H:£21-1009 DRAWING:				DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75				SHEET L5 OF 268 SHEETS

BEFORE YOU DIG 811 OKIE CALL

MATCH LINE STA. 177+47.60

MATCH LINE STA. 183+00.00

CITY OF TULSA

THE FRANCES E. WILLARD HOME,
A CORPORATION

LIMITS OF DISTURBANCE (TYP.)

EX. 6" WATER LINE

BERMUDA SOD (TYP.)

(3) PC

178+00

179+00

180+00

181+00

182+00

183+00

PI: STA. 181+54.20

N.GILCREASE MUSEUM RD.

CAUTION!! STORM SEWER IN VICINITY

W. PINE ST.

50.0'

PAVED STORM DITCH

RETAINING WALL (TYP.)

EX. 10" WATER LINE

LIGHT POLE LOCATION
(BY OTHERS)(TYP.)

GILCREASE HILLS
VILLAGE II

10 9 8 7

3

1"=20'

0 10 20 40

NOTE: SOD ALL AREAS DISTURBED BY CONSTRUCTION.

LANDSCAPE LEGEND (TREE PLANTING NOT INCLUDED IN THIS CONTRACT)

KEY	SYM.	COMMON NAME	BOTANICAL NAME
MEDIUM TREES			
	PC	CHINESE PISTACHE	Pistacia chinensis
GROUND COVERS			
		U3 BERMUDA SOD	

PLANTING PLAN (6)

ARTERIAL STREET REHABILITATION GILCREASE
MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS.TMUA-W 22-37, 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

BEFORE YOU DIG
811
OKLAHOMA ONE-CALL SYSTEM, INC.
CALL OKIE

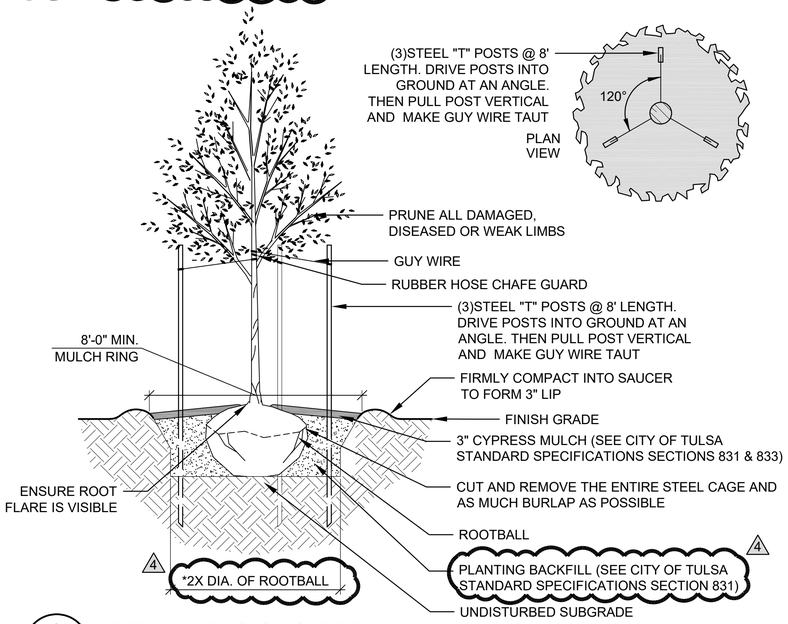
REVISIONS
4 LIGHTING CONDUIT SHOWN; LEGEND UPDATE; TREES HAVE SHIFTED AND BEEN REMOVED

PLAN SCALE: 1" = 20'	DRAWN	PGW	5/2025	APPROVED:
	DESIGNED	PGW	5/2025	
	SURVEY	MW	3/2022	
PROFILE SCALE: N/A	PROJ. MGR.			
	LEAD ENGR.			
HORIZONTAL: N/A	FIELD MGR.			
VERTICAL: N/A	RECOMMENDED:			
	DESIGN MANAGER			CITY ENGINEER
FILE: H:\21-1009 DRAWING:				DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75				SHEET L6 OF 268 SHEETS

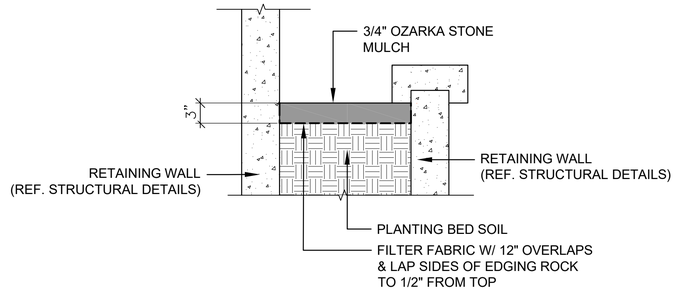
NOTE:
DO NOT PILE MULCH AROUND TRUNK.

4

* SEE LANDSCAPE LEGEND (THIS SHEET) FOR ESTIMATED SIZE OF ROOT BALLS AT TIME OF PLANTING.



A / L7 TREE PLANTING, SINGLE TRUNK
NOT TO SCALE



B / L7 SECTION-DECORATIVE ROCK LANDSCAPE AREA
NOT TO SCALE

4

LANDSCAPE LEGEND (TREE PLANTING NOT INCLUDED IN THIS CONTRACT)

KEY	SYM.	COMMON NAME	BOTANICAL NAME	MIN. SIZE	*ASSUMED ROOT BALL SIZE
MEDIUM TREES					
	PC	CHINESE PISTACHE	Pistacia chinensis	2" CAL. B&B 8' - 10' Ht. x 4' - 6' W	24"
	QRB	REGAL PRINCE® OAK	Quercus robur x bicolor 'Long'	2" CAL. 8' - 10' Ht. x 4' - 6' W	24"
SMALL TREES					
	CR	OKLAHOMA REDBUD	Cercis canadensis var. texensis 'Oklahoma'	1.5" CAL. 6' - 8' Ht. x 3' - 4' W	24"
GROUND COVERS					
		U3 BERMUDA SOD			
		3/4" OZARKA STONE MULCH			

***ROOT BALL SIZES ARE ESTIMATES ONLY FOR BIDDING PURPOSES**

4

LANDSCAPE NOTES

1. THE CONTRACTOR SHALL FOLLOW THE LANDSCAPE PLAN AS CLOSELY AS POSSIBLE. ANY DISCREPANCY IN THE PLAN VS. FIELD CONDITIONS SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT IMMEDIATELY.
2. REFER TO QUANTITIES SHOWN GRAPHICALLY IF DISCREPANCIES EXIST BETWEEN WRITTEN AND GRAPHIC QUANTITIES.
3. THE LANDSCAPE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE EXISTS IN ALL LANDSCAPE AREAS.
4. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE TO PAY FOR, OBTAIN, ALL REQUIRED PERMITS FROM THE CITY OF TULSA TO DO LANDSCAPE IMPROVEMENTS.
5. CONTRACTOR SHALL NOT DEVIATE FROM PLANS AND SPECIFICATIONS WITHOUT PRIOR WRITTEN APPROVAL FROM LANDSCAPE ARCHITECT.
6. FINAL STAKING OF ALL PLANT MATERIAL SHALL BE ACCEPTED BY THE LANDSCAPE ARCHITECT IN ADVANCE OF PLANTING OR TREE PIT PREPARATION.
7. VERIFY LOCATION OF UTILITIES PRIOR TO EXCAVATION FOR TREE PLANTING.
8. ALL TREE LOCATIONS TO BE A MINIMUM LATERAL OFFSET OF 5'-0" FROM ADJACENT UNDERGROUND UTILITIES. IF DISCREPANCIES FROM THIS STANDARD EXIST IN THE FIELD, PLEASE CONTACT THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATION OF THE TREE PITS.

PLANTING DETAILS

ARTERIAL STREET REHABILITATION GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS.TMUA–W 22–37, 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISIONS
1 LANDSCAPE NOTES AND LEGEND HAVE BEEN UPDATED; TREE PLANTING DETAIL REVISED

PLAN SCALE: 1" = 20'	DRAWN	PGW	5/2025	APPROVED:
	DESIGNED	PGW	5/2025	
	SURVEY	MW	3/2022	
PROFILE SCALE: N/A	PROJ. MGR.			
	LEAD ENGR.			
HORIZONTAL: N/A	FIELD MGR.			
VERTICAL: N/A	RECOMMENDED:			
	DESIGN MANAGER			CITY ENGINEER
FILE: H:£21–1009 DRAWING:				DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75				SHEET L7 OF 268 SHEETS

BEFORE YOU DIG 811 CALL OKIE

BASE BID: PAY QUANTITIES

4

ITEM NUM	SPEC NUM	DESCRIPTION	PAY NOTES	UNITS	QUAN.
1	831	PLANTING BACKFILL	P4	EA	155
2	SPECIAL	3/4" OZARKA STONE MULCH	P2	TON	5
3	831	(PL) PLANTING (MATERIALS) - TOPSOIL (FOR SODDING)	P3	CY	1359
4	832	SOLID SLAB SODDING (U3 BERMUDA)	P1, P5, P6	SF	231092

GENERAL CONSTRUCTION NOTES:

ITEMS LISTED OR SHOWN ON DRAWINGS AND/ OR DESCRIBED IN THE SPECIFICATIONS THAT ARE NOT INCLUDED AS A SEPARATE PAY ITEM QUANTITY SHALL BE CONSIDERED INCIDENTAL AND THE COST SHALL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS. THE PRICE BID FOR ALL WORK SHALL INCLUDE ALL MATERIALS, EQUIPMENT, LABOR, INCIDENTALS, AND ALL OTHER REQUIRED ITEMS TO COMPLETE THE WORK AS SHOWN ON PLANS AND SPECIFICATIONS.

PAY NOTES:

P1. INCLUDES AN ADDITIONAL 5% QUANTITY OVER THE PLAN AREA TO ACCOUNT FOR WASTE, TOPOGRAPHIC CHANGE, ETC. ALL DISTURBED AREAS OUTSIDE WHAT IS SHOWN ON THE PLANS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION AT CONTRACTOR'S EXPENSE.

P2. MULCH, BOTH WOOD AND ROCK, SHALL BE FREE FROM DELETERIOUS MATERIALS AND SHALL BE STORED AS TO PREVENT INCLUSION OF FOREIGN MATERIALS.

4

P3. QUANTITY IS CALCULATED AS 2" OF TOPSOIL

P4. BID PRICE SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS TO REMOVE THE EXISTING SOIL FROM TREE PLANTING LOCATIONS AND MIX TOP 6 INCHES OF SOIL WITH COMPOST. COMPOST IS CALCULATED AT **155 BAGS** (3 CF/BAG) OF BACK TO EARTH COMPOST OR APPROVED EQUAL. REFERENCE CITY OF TULSA STANDARD SPECIFICATION 831: "TREES, SHRUBS, AND GROUND COVER". EXCAVATION IS FIGURED FOR 2'-0" DEPTH FROM EXISTING GRADE AND IS CALCULATED AT **144 CY**. THIS PAY ITEM DOES NOT INCLUDE "UNCLASSIFIED EXCAVATION" QUANTITIES AS CALLED FOR IN THE ROADWAY ENGINEERING PLANS. SUCCESSFUL CONTRACTOR TO COORDINATE WITH UP WITH TREES UPON COMPLETION OF PLANTING BACKFILL OPERATIONS. THIS PAY ITEM DOES NOT INCLUDE TREE PLANTING OR, MULCH RING, OR 3'-0" DIAMETER EARTH SAUCER AROUND TREE. TREE PITS ARE NOT TO BE COVERED WITH SOD UPON COMPLETION OF BACKFILL OPERATIONS. PAYMENT WILL BE MEASURED PER TREE PIT LOCATION.

P5. SOLID SLAB SODDING (U3 BERMUDA) PAY ITEM ALSO INCLUDES ALL WATERING AND FERTILIZING UNTIL FINAL ACCEPTANCE.

P6. ESTIMATED QUANTITY IS BASED ON SODDING OF ALL DISTURBED AREAS OUTSIDE THE FINAL PAVING LIMITS AND WITHIN THE FINAL GRADING LIMITS AS INDICATED BY THE "LIMITS OF DISTURBANCE" LINES ON THE PLANS (EXCLUDING SURFACES OF STRUCTURES, FIXTURES AND APPURTENANCES). PRICE BID INCLUDES PLACEMENT AND COMPACTION OF SUITABLE BACKFILL. ANY EXISTING GRASSED AREAS BEYOND THE ABOVE STATED LIMITS THAT ARE DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS SHALL BE RESODDED TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT AT THE CONTRACTOR'S SOLE EXPENSE.

P7. BID PRICE SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS TO INSTALL CYPRESS MULCH. THIS QUANTITY INCLUDES CYPRESS MULCH AT A 3" DEPTH AT ALL PLANTING BED AREAS.

PAY QUANTITIES & PAY NOTES

ARTERIAL STREET REHABILITATION GILCREASE MUSEUM RD/N. 25th W. AVE. WIDENING
PROJECT NOS.TMUA-W 22-37, 2036W0001Z & 2036A0024Z

CITY OF TULSA, OKLAHOMA
PUBLIC WORKS DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
POE & ASSOCIATES INC.
Tulsa, Oklahoma

REVISIONS

4 LINE ITEMS AND PAY NOTES HAVE BEEN REVISED

PLAN SCALE: 1" = 20'	DRAWN	PGW	5/2025	APPROVED:
	DESIGNED	PGW	5/2025	
	SURVEY	MW	3/2022	
PROFILE SCALE: N/A	PROJ. MGR.			
HORIZONTAL: N/A	LEAD ENGR.			
VERTICAL: N/A	FIELD MGR.			
	RECOMMENDED:			
	DESIGN MANAGER			CITY ENGINEER
FILE: H:£21-1009 DRAWING:				DATE:
ATLAS PAGE NO: 19, 20, 21, 42, 43, 74, 75				SHEET L8 OF 268 SHEETS

BEFORE YOU DIG OKIE 811 CALL OKIE

4

LIGHTING SITE PLAN LEGEND

- LIGHT POLE, # INDICATES POLE NUMBER, CONTRACTOR TO STAKE LOCATION, POLE TO BE INSTALLED BY OTHERS
- PB — INSTALL NEW SIZE II ELECTRICAL POLYMER CONCRETE PULL BOX
- INSTALL NEW ELECTRICAL RACK OR PEDESTAL WITH UTILITY METER, MAIN DISCONNECT, POWER PANELS, AND PEC. COORDINATE EXACT VOLTAGES AND SIZES WITH UTILITY, PRIOR TO INSTALLATION
- (#) — # INDICATES KEYED NOTE NUMBER
- INSTALL NEW ELECTRICAL CONDUIT WITH PULLTAPE, TRENCHED (1-WAY 2"C)

POWER & SYSTEM LEGEND

- NON-FUSED DISCONNECT SWITCH, SIZE AS NOTED
- 20 AMP DUPLEX RECEPTACLE, MTD. 18" AFF, WITH #12 GROUND WIRE, "GFCI" INDICATES GROUND FAULT CIRCUIT INTERRUPTER, "WP" INDICATES WEATHERPROOF WHILE-IN-USE ENCLOSURE AND COVER, "TR" INDICATES TAMPER-RESISTANT DEVICE, BOX INDICATES FLOOR OUTLET WITH RECESSED CAST JUNCTION BOX
- GROUND
- 3/4" x 10' COPPER CLAD GROUND ROD
- JUNCTION BOX, 42 CUBIC INCH MINIMUM CAPACITY
- T1 * — TRANSFORMER, IDENTIFIER SHOWN, REFER TO SCHEDULE FOR SIZE
- * — TRANSFORMER, RATINGS AS SHOWN
- 20A/3P — CIRCUIT BREAKER, TRIP RATING SHOWN, 3-POLE UNLESS NOTED OTHERWISE
- 20A — FUSE, CURRENT LIMITING, AMPERE RATING AS SHOWN OR REQUIRED, "BFI" INDICATES "BLOWN FUSE INDICATOR" TYPE
- SPD — SURGE PROTECTIVE DEVICE WITH INDICATING LIGHTS
- WEATHERHEAD

ABBREVIATIONS

PH	PHASE
@	AT
#	NUMBER
A	AMP
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPS INTERRUPTING CAPACITY
AM	AMP-METER
ANN	ANNUNCIATOR
AP	AERIAL PRIMARY
AS	AERIAL SECONDARY
AUX	AUXILIARY
BFI	BLOWN FUSE INDICATOR
BI	BYPASS ISOLATION
BKR	BREAKER
BT	BOOST TRANSFORMER
C	CONDUIT
CAT	CATALOG OR CATEGORY
CB	CIRCUIT BREAKER
CGRS	PVC COATED GALVANIZED RIGID STEEL
CFCI	CONTRACTOR FURNISHED/ CONTRACTOR INSTALLED
CKT	CIRCUIT
CL	CENTERLINE
COM	COMMON
CONT	CONTINUOUS
CP	CONTROL PANEL
CPT	CONTROL POWER TRANSFORMER
CR	CONTROL RELAY
CRI	COLOR RENDERING INDEX
CS	CORD SET
CU	COEFFICIENT OF UTILIZATION
DEB	DIRECT EARTH BURIED
DISC	DISCONNECT
EC	EMPTY OR EMBEDDED CONDUIT
EG	EQUIPMENT GROUND
EL	ELEVATION
EMT	ELECTRICAL METALLIC TUBING
EP	EXISTING POLE
ETM	ELASPED TIME METER
FDS	FUSED DISCONNECT SWITCH
FLA	FULL LOAD AMPACITY
FLR	FLOOR
FMC	FLEXIBLE METALLIC CONDUIT
FT	FEET
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
GRS	GALVANIZED RIGID STEEL
GM	GROUND MOUNT
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTO
HP	HORSEPOWER OR HEAT PUMP
HR	HOUR
IG	ISOLATED GROUND
IGPB	IN-GRADE PULL BOX
ISP	INDIVIDUALLY SHIELDED PAIR
JB	JUNCTION BOX
kVA	KILOVOLT-AMPERE
kVAR	KILOVOLT-AMPERE, REACTIVE
kW	KILOWATT
LA	LIGHTNING ARRESTER
LC	LIGHTING CIRCUIT
LED	LIGHT EMITTING DIODE
LLF	LIGHT LOSS FACTOR
LFMC	LIQUIDTIGHT FLEXIBLE METAL CONDUIT
LIP	LIGHTING INSTALLATION PLAN
LO	LUGS ONLY
LOR	LOCAL-OFF-REMOTE
LRP	LIGHTING REMOVAL PLAN
LV	LOW VOLTAGE
MAX	MAXIMUM
MBM	MEDIAN BARRIER MOUNT
MBPB	MEDIAN BARRIER PULL BOX
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MFR	MANUFACTURER
MIN	MINIMUM
MH	METAL HALIDE
MLO	MAIN LUGS ONLY
MOCP	MAXIMUM OVERCURRENT PROTECTION
MTD	MOUNTED
N	NEUTRAL
NEC	NATIONAL ELECTRICAL CODE
NFDS	NON-FUSED DISCONNECT SWITCH
NL	NIGHT LIGHT
NTS	NOT TO SCALE
OAE	OR APPROVED EQUAL
OC	ON CENTER
ODOT	OKLAHOMA DEPARTMENT OF TRANSPORTATION
OFCI	OWNER FURNISHED/ CONTRACTOR INSTALLED
OH	OVERHEAD
OHP	OVERHEAD PRIMARY
OHS	OVERHEAD SECONDARY
OL	OVERLOAD
OTA	OKLAHOMA TURNPIKE AUTHORITY
PB	PULLBOX
PEC	PHOTO ELECTRIC CELL
PF	POWER FACTOR
PL	PILOT LIGHT
PNL	PANEL
PTT	PUSH-TO-TEST
PVC	SCHEDULE 40 POLYVINYL CONDUIT
RECPT	RECEPTACLE
RM	ROOM
S	SECOND
SA	SURGE ARRESTER
SE	SERVICE ENTRANCE
SHT	SHEET
S/N	SERIAL NUMBER
SN	SOLID NEUTRAL
SP	SERVICE POINT
SS	STAINLESS STEEL
STA	STATION
SW	SWITCH
SWBD	SWITCHBOARD
T	TON
TEL	TELEPHONE
TYP	TYPICAL
TC	TIME CLOCK
TR	TAMPER RESISTANT
UG	UNDER GROUND UNLESS OTHERWISE NOTED
V	VOLT
VA	VOLT-AMP
VM	VOLT-METER
W	WATT OR WIRE
WH	WEATHER HEAD
WM	WATT METER
WP	WEATHERPROOF
W/	WITH
WW	WIREWAY
XMFR	TRANSFORMER
Z	IMPEDANCE

FEEDER AND BRANCH CIRCUIT LEGEND

2 SETS [(3#8 + 1#8N + 1#10EG) 1" GRS]

- CONDUIT TYPE (SEE ABBREVIATIONS) REFER TO SPECIFICATIONS IF NOT SHOWN
- CONDUIT SIZE
- GROUNDING (GROUND) CONDUCTOR, NUMBER AND SIZE
- GROUNDED (NEUTRAL) CONDUCTOR, NUMBER AND SIZE
- PHASE (HOT) CONDUCTOR, NUMBER AND SIZE
- NUMBER OF SETS

LIGHTING INSTALLATION PLANS KEYED NOTES MASTER LIST:

1. CONDUIT RUN SHALL BE TWO 2" CONDUITS.
2. COORDINATE EXACT LOCATION OF UTILITY POLE AND TRANSFORMER WITH UTILITY DURING CONSTRUCTION. FOR CONNECTION, INSTALL NEW CONDUIT RUN, TWO (2) 2" CONDUITS, WITH SECONDARY CONDUCTORS AS NEEDED. THE UTILITY POINT OF CONTACT IS JEFF CONWELL, PSO, PHONE NUMBER, 918-344-9853, EMAIL, JCONWELL@AEP.COM

LICENSED PROFESSIONAL ENGINEER — James K. Schmitt — 34062 — OKLAHOMA

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LIGHTING LEGEND AND GENERAL NOTES

ARTERIAL REHAB
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CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
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6100 S. YALE AVE. SUITE 1300
TULSA, OKLAHOMA 74136
Phone: (918) 250-5922
Fax: (918) 858-0107

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SURVEY		
PROJ. MGR.		
LEAD MGR.		
FIELD MGR.		
RECOMMENDED:		

PLAN SCALE 1" = 30'
PROFILE SCALE HORIZONTAL: 1" = 30'
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LIGHT FIXTURE SCHEDULE									
FIXTURE TYPE	EST. QTY.	MANUFACTURER	CATALOG NO.	DESCRIPTION	IES DIST.	LAMPS	COLOR TEMP.	CRI	WATTAGE
A	22	COOPER LIGHTING	ARCH-L-PA3-240-740-U-T3	ARCHEON-L ROADWAY AND AREA LUMINAIRE	TYPE 3	LED	4000K	70	242

*FOR REFERENCE ONLY, LIGHT FIXURES PROVIDED BY OTHERS. COORDINATE ALL REQUIREMENTS WITH UTILITY.

LIGHTING INSTALLATION GENERAL NOTES:

1. FOLLOWING THE SYSTEM INSTALLATION, PRIOR TO PROJECT CLOSEOUT, THE CONTRACTOR SHALL TAKE IN-FIELD MEASUREMENTS OF ALL THE LIT SURFACES AND SUBMIT TO THE ENGINEER FOR REVIEW. MEASUREMENTS FOR HIGHWAY LIGHTING SHALL BE TAKEN ON A GRID WITH ONE POINT IN THE CENTER OF EACH LANE, AT INTERVALS OF 75'. CONTRACTOR SHALL PLOT ON A FULL-SIZE DRAWING SET EACH MEASUREMENT TAKEN. GRIDS SHALL BE ORIENTED SUCH THAT THEY ARE SYMMETRICAL ABOUT THE ALIGNMENT CENTERLINE.
2. CONTRACTOR SHALL NOTE THAT ALL ELECTRICAL DISTRIBUTION SYSTEM COMPONENTS (CONDUIT, PANELS, PULL BOXES, ETC.) ARE DESIGNED AND SIZED AROUND THE EQUIPMENT SPECIFIED. IF ALTERNATES ARE PROPOSED, IT IS THE CONTRACTOR'S RESPONSIBILITY DURING SUBMITTAL STAGE TO SUBMIT PROOF THAT THE NEW ALTERNATE WILL WORK WITH THE ELECTRICAL INFRASTRUCTURE SPECIFIED HEREIN THESE CONTRACT DOCUMENTS. IF IT WILL NOT SUPPORT THE PROPOSED ALTERNATE, THE CONTRACTOR SHALL SUBMIT WHAT MODIFICATIONS ARE REQUIRED AND THESE WILL BE MADE BY THE CONTRACTOR AT HIS/HER EXPENSE FOLLOWING APPROVAL BY THE ENGINEER.
3. ALL ELECTRICAL WORK AND MATERIAL SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE NFPA 70 (2023) NATIONAL ELECTRIC CODE, NFPA 101 (2018) LIFE SAFETY CODE, NFPA 780 (2020) STANDARD FOR THE INSTALLATION OF LIGHTNING PROTECTION SYSTEMS, STATE ELECTRICAL CODE, LOCAL ELECTRIC CODE, AND ODOT STANDARDS.
4. ALL EXPOSED CONDUIT SHALL BE GALVANIZED RIGID STEEL CONDUIT (GRSC) OF QUANTITY AND SIZE INDICATED.
5. ALL CONDUIT IN BARRIER SHALL BE SCHEDULE 40 PVC CONDUIT.
6. ALL BELOW GRADE CONDUIT IN SOIL SHALL BE SCHEDULE 40 PVC CONDUIT.
7. ALL BELOW GRADE CONDUIT UNDER NEW PAVEMENT SHALL BE SCHEDULE 80 PVC CONDUIT.
8. ALL UNDERGROUND PVC CONDUIT SHALL TRANSITION TO PVC WRAPPED GALVANIZED RIGID STEEL CONDUIT 3' PRIOR TO EMERGENCE ABOVE GRADE.
9. REFER TO ODOT STANDARD DETAIL SHEET CCD1-1-00 FOR CONDUIT INSTALLATION NOTES AND DETAILS.
10. CONNECT ELECTRICAL EQUIPMENT ENCLOSURES, CONCRETE REBAR, GROUND RODS AND STEEL CONDUIT TO RESPECTIVE GROUNDING SYSTEM(S) USING #6 AWG SDBC BONDING JUMPER AND EXOTHERMIC WELDS. COORDINATE ALL REQUIREMENTS WITH UTILITY.
11. GROUNDING SYSTEM(S) SHALL FULLY COMPLY WITH NEC SECTION 250.
12. ALL CONDUIT ROUTING, TRENCHING, EXCAVATION, AND BACKFILL SHALL COMPLY WITH ODOT STANDARD SPECIFICATIONS AND DRAWINGS.
13. CONTRACTOR SHALL INSTALL NUMBER ON SERVICE POINT INDICATING CITY OF TULSA (COT) ID. EACH POLE SHALL RECEIVE COT ID NUMBER AS WELL AS SCHEDULE. SUBMIT WEATHER RESISTANT REFLECTIVE BLACK ON WHITE LABEL FOR REVIEW. COORDINATE WITH CITY OF TULSA FOR POLE NUMBERING SCHEME.
14. ALL EXISTING ELECTRICAL EQUIPMENT AND INFRASTRUCTURE THAT IS TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION.
15. ALL NEW ELECTRICAL EQUIPMENT AND INFRASTRUCTURE SHALL BE CONSTRUCTED AS SPECIFIED IN THE ELECTRICAL DETAILS, ODOT DETAILS, AND ODOT SPECIFICATIONS.
16. CONTRACTOR SHALL COORDINATE WITH UTILITY FOR ALL UTILITY STANDARDS FOR NEW ELECTRIC SERVICE INSTALLATIONS.
17. ELECTRICAL CONDUIT AND PULLBOXES WILL BE ADJUSTED AS NECESSARY TO PREVENT CONFLICT WITH OTHER DISCIPLINES, UTILITIES, AND THE ROADWAY LAYOUT.
18. WHEN ODOT AND COT STANDARDS CONFLICT, CONTRACTOR SHALL MEET THE MORE STRINGENT STANDARD REQUIREMENTS.
19. CONDUIT SHALL BE INSTALLED A MINIMUM OF 5' FROM ALL PROPOSED TREE LOCATIONS. CONDUIT SHALL BE ADJUSTED AS NEEDED TO PROVIDE THIS CLEARANCE.
20. LIGHT POLES SHALL BE INSTALLED A MINIMUM OF 3' FROM ROADWAY EDGE. CONTRACTOR SHALL ADJUST STAKED LOCATIONS AS NEEDED TO MEET THIS CLEARANCE.

LIGHT POLE STAKING SCHEDULE							
ID NO.	ALIGNMENT	STATION	OFFSET	ORIENTATION TRUE NORTH = 0, CW ROTATION	FIXTURE TYPE	FIXTURE MOUNTING HEIGHT	MAST ARM LENGTH
LP-1	GILCREASE MUSEUM RD	146+57.13	24.33' LT	*270	*A	*35'	*2'
LP-2	GILCREASE MUSEUM RD	150+53.38	10.52' LT	*89	*A	*35'	*2'
LP-3	GILCREASE MUSEUM RD	148+68.44	24.58' RT	*88	*A	*35'	*2'
LP-4	GILCREASE MUSEUM RD	148+68.44	24.58' RT	*88	*A	*35'	*2'
LP-5	GILCREASE MUSEUM RD	152+48.48	24.13' RT	*269	*A	*35'	*2'
LP-6	GILCREASE MUSEUM RD	158+66.92	9.82' LT	*91	*A	*35'	*2'
LP-7	GILCREASE MUSEUM RD	162+47.04	10.04' LT	*89	*A	*35'	*2'
LP-8	GILCREASE MUSEUM RD	156+63.88	24.02' RT	*89	*A	*35'	*2'
LP-9	GILCREASE MUSEUM RD	160+63.55	23.85' RT	*270	*A	*35'	*2'
LP-10	GILCREASE MUSEUM RD	166+70.55	16.59' LT	*270	*A	*35'	*2'
LP-11	GILCREASE MUSEUM RD	167+70.51	19.40' LT	*91	*A	*35'	*2'
LP-12	GILCREASE MUSEUM RD	168+89.58	18.66' LT	*42	*A	*35'	*2'
LP-13	GILCREASE MUSEUM RD	172+90.45	18.38' LT	*268	*A	*35'	*2'
LP-14	GILCREASE MUSEUM RD	164+64.61	24.60' RT	*90	*A	*35'	*2'
LP-15	GILCREASE MUSEUM RD	168+18.93	46.18' RT	*270	*A	*35'	*2'
LP-16	GILCREASE MUSEUM RD	170+93.37	17.07' RT	*180	*A	*35'	*2'
LP-17	GILCREASE MUSEUM RD	177+10.19	19.26' LT	*90	*A	*35'	*2'
LP-18	GILCREASE MUSEUM RD	179+45.39	16.81' LT	*88	*A	*35'	*2'
LP-19	GILCREASE MUSEUM RD	181+83.66	16.45' LT	*268	*A	*35'	*2'
LP-20	GILCREASE MUSEUM RD	174+95.16	17.16' RT	*90	*A	*35'	*2'
LP-21	GILCREASE MUSEUM RD	177+98.70	16.96' RT	*270	*A	*35'	*2'
LP-22	GILCREASE MUSEUM RD	180+97.65	16.98' RT	*268	*A	*35'	*2'

*LIGHT FIXTURES AND LIGHT POLES TO BE PROVIDED BY OTHERS.

LICENSED PROFESSIONAL ENGINEER
James K. Schmitt
34062
OKLAHOMA
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LIGHT FIXTURE SCHEDULE (SHEET 1 OF 1)

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CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
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Phone: (918) 250-5922 Fax: (918) 858-0107

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FIELD MGR.			

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PROFILE SCALE HORIZONTAL: 1" = 30' VERTICAL: 1" = 30'
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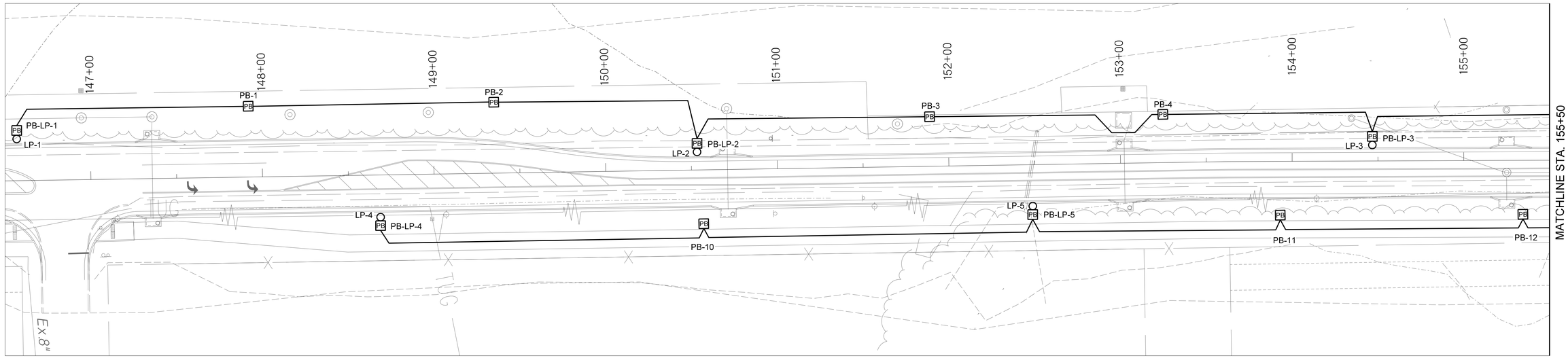

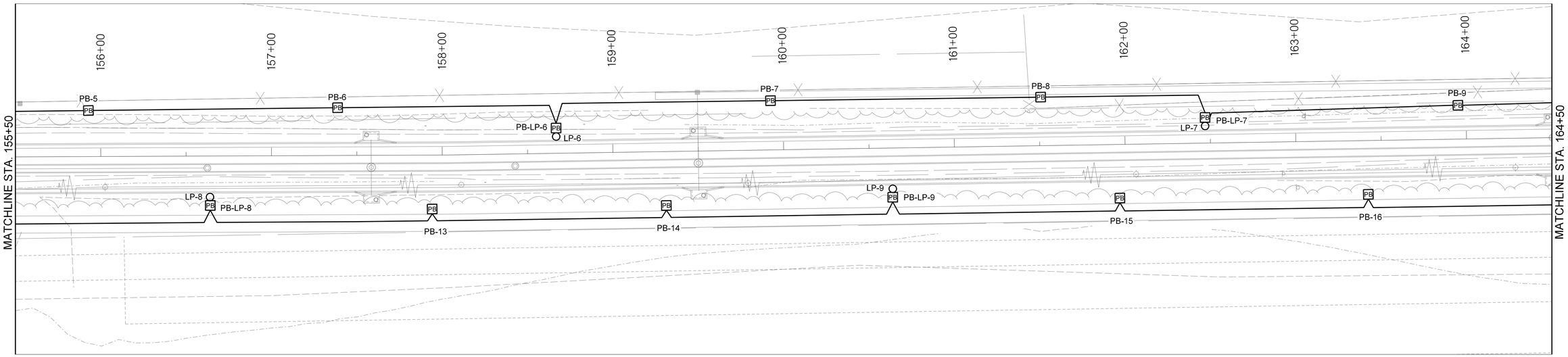

INSTALLATION LEGEND

———	INSTALL NEW ELECTRICAL CONDUIT WITH PULLTAPE, TRENCHED (1-WAY 2"C)
○#	LIGHT POLE, # INDICATES POLE NUMBER, CONTRACTOR TO STAKE LOCATION, POLE TO BE INSTALLED BY OTHERS
	INSTALL NEW ELECTRICAL EQUIPMENT RACK OR PEDESTAL WITH UTILITY METER, MAIN DISCONNECT, POWER PANELS, AND PEC. COORDINATE EXACT VOLTAGES AND SIZES WITH UTILITY, PRIOR TO INSTALLATION
PB	INSTALL NEW SIZE II ELECTRICAL POLYMER CONCRETE PULL BOX

INSTALLATION NOTES:

1. ALL INSTALLATION ITEMS SHALL BE AS DETAILED IN THE LEGEND UNLESS OTHERWISE NOTED.
2. SEE SUMMARY OF QUANTITIES FOR ADDITIONAL INFORMATION.
3. CONTRACTOR SHALL INSTALL 2" CONDUIT FROM EACH NEW "LP" PULLBOX TO THE STAKED "LP" LOCATION TO PROVIDE CONDUIT CONNECTION FOR LIGHT POLE TO BE INSTALLED BY OTHERS. CONDUIT TO INCLUDE PULL TAPE AND SHALL BE STUBBED 6" ABOVE GRADE AND SEALED WATERTIGHT. (TYPICAL)
4. CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS FOR CONDUIT, PULL BOXES, SERVICE POLE, LIGHT POLES AND LIGHT FIXTURES WITH UTILITY.

LIGHTING INSTALLATION PLANS KEYED NOTES MASTER LIST:

(1) CONDUIT RUN SHALL BE TWO 2" CONDUITS.

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0 30 60 90
SCALE

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LIGHTING INSTALLATION PLAN (SHEET 1 OF 2)

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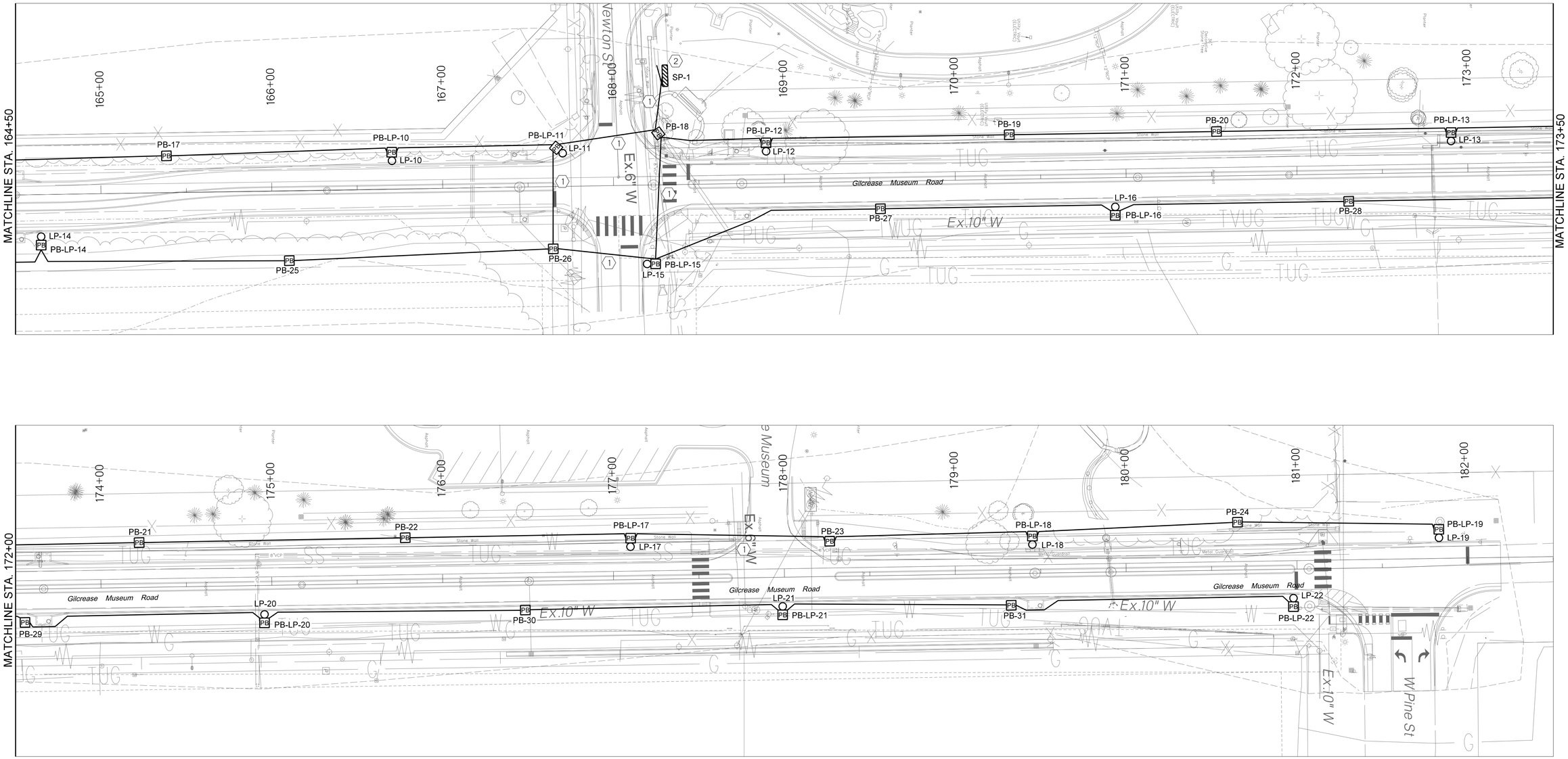

INSTALLATION LEGEND

———	INSTALL NEW ELECTRICAL CONDUIT WITH PULLTAPE, TRENCHED (1-WAY 2"C)
○ #	LIGHT POLE, # INDICATES POLE NUMBER, CONTRACTOR TO STAKE LOCATION, POLE TO BE INSTALLED BY OTHERS
	INSTALL NEW ELECTRICAL EQUIPMENT RACK OR PEDESTAL WITH UTILITY METER, MAIN DISCONNECT, POWER PANELS, AND PEC. COORDINATE EXACT VOLTAGES AND SIZES WITH UTILITY, PRIOR TO INSTALLATION
PB	INSTALL NEW SIZE II ELECTRICAL POLYMER CONCRETE PULL BOX

INSTALLATION NOTES:

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4. CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS FOR CONDUIT, PULL BOXES, SERVICE POLE, LIGHT POLES AND LIGHT FIXTURES WITH UTILITY.

LIGHTING INSTALLATION PLANS KEYED NOTES MASTER LIST:

(1) CONDUIT RUN SHALL BE TWO 2" CONDUITS.

(2) COORDINATE EXACT LOCATION OF UTILITY POLE AND TRANSFORMER WITH UTILITY DURING CONSTRUCTION. FOR CONNECTION, INSTALL NEW CONDUIT RUN, TWO (2) 2" CONDUITS, WITH SECONDARY CONDUCTORS AS NEEDED. THE UTILITY POINT OF CONTACT IS JEFF CONWELL, PSO, PHONE NUMBER, 918-344-9853, EMAIL, JCONWELL@AEP.COM

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0 30 60 90
SCALE

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LIGHTING INSTALLATION PLAN (SHEET 2 OF 2)

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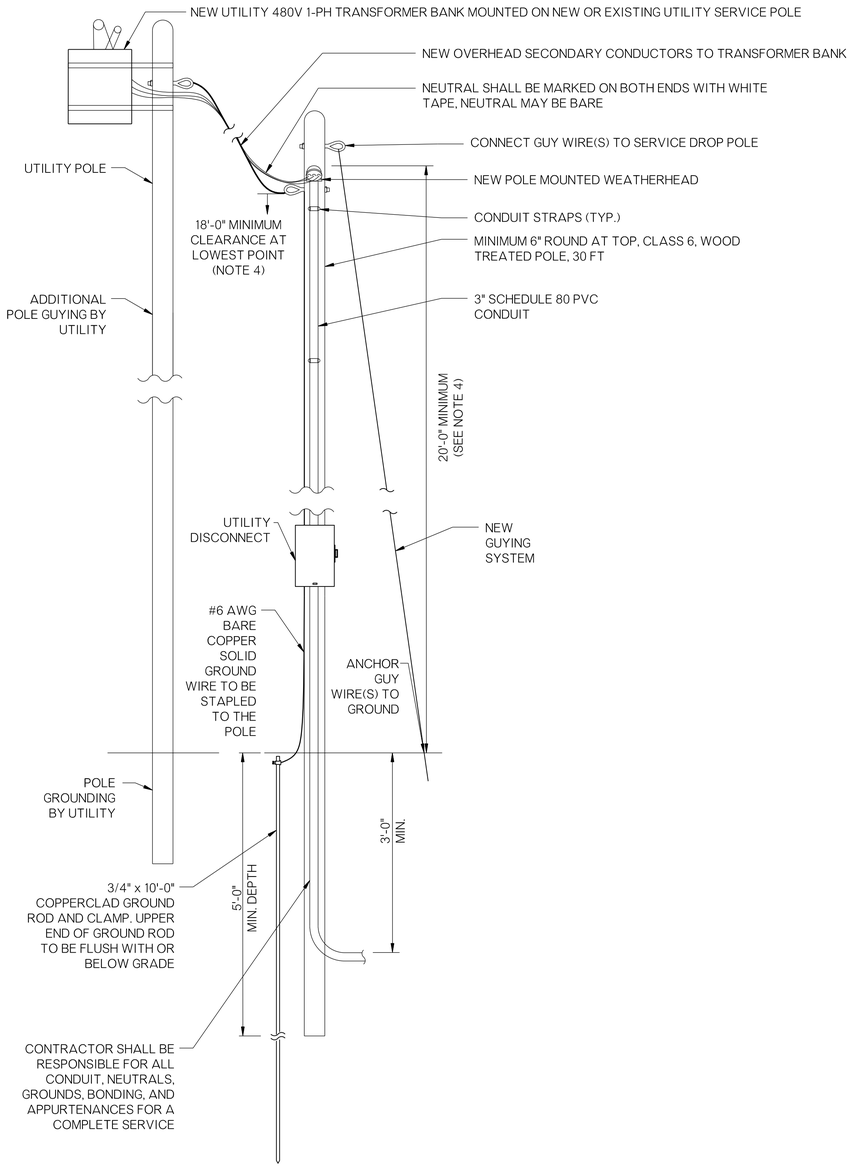
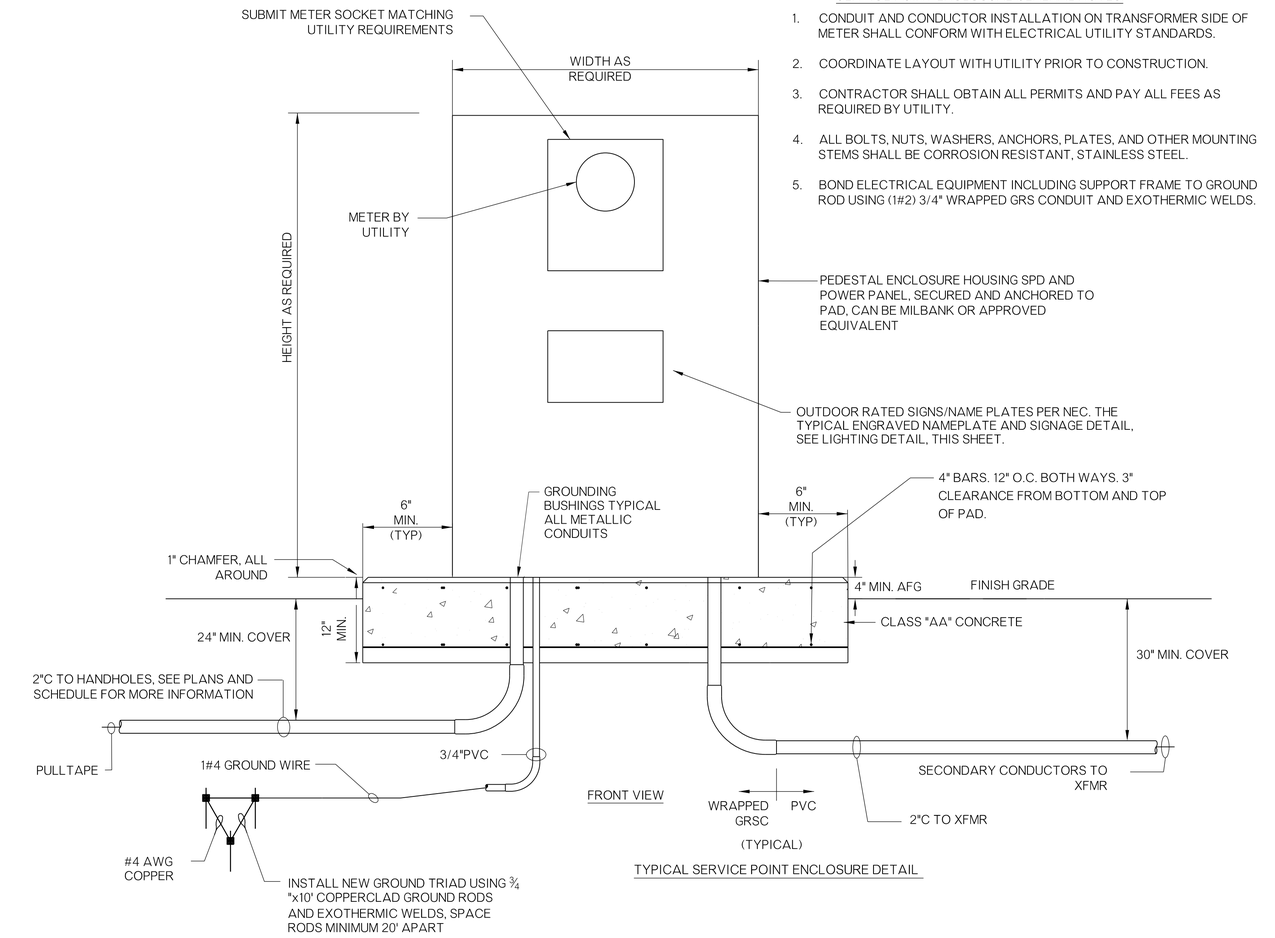


SERVICE NOTES

1. CUSTOMER FACILITIES SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE, POWER UTILITY, AND AUTHORITIES HAVING JURISDICTION.
2. FINAL CONNECTIONS FOR NEW SERVICE WILL BE PERFORMED BY POWER UTILITY.
3. PHYSICAL LOCATION OF POLE INCLUDING GUYING AND BRACING WILL BE APPROVED BY THE UTILITY.
4. ADDITIONAL POLE HEIGHT MAY BE REQUIRED TO MAINTAIN PROPER CLEARANCE.

SERVICE DETAIL



SERVICE POINT ENCLOSURE GENERAL NOTES:

1. CONDUIT AND CONDUCTOR INSTALLATION ON TRANSFORMER SIDE OF METER SHALL CONFORM WITH ELECTRICAL UTILITY STANDARDS.
2. COORDINATE LAYOUT WITH UTILITY PRIOR TO CONSTRUCTION.
3. CONTRACTOR SHALL OBTAIN ALL PERMITS AND PAY ALL FEES AS REQUIRED BY UTILITY.
4. ALL BOLTS, NUTS, WASHERS, ANCHORS, PLATES, AND OTHER MOUNTING STEMS SHALL BE CORROSION RESISTANT, STAINLESS STEEL.
5. BOND ELECTRICAL EQUIPMENT INCLUDING SUPPORT FRAME TO GROUND ROD USING (1#2) 3/4" WRAPPED GRS CONDUIT AND EXOTHERMIC WELDS.

TYPICAL SERVICE POINT ENCLOSURE DETAIL

GENERAL NOTES

1. POWER MARKING TAPES SHALL BE DETECTABLE TYPE CONSTRUCTION WITH RED BACKGROUND AND BLACK LETTERING.
2. TAPE SHALL BE DETECTABLE, DURABLE, HIGHLY VISIBLE, RESISTANT TO ELEMENTS, MEETING AND/OR EXCEEDING ALL INDUSTRY STANDARDS.

UNDERGROUND DETECTABLE WARNING TAPE

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LIGHTING DETAILS (SHEET 1 OF 2)

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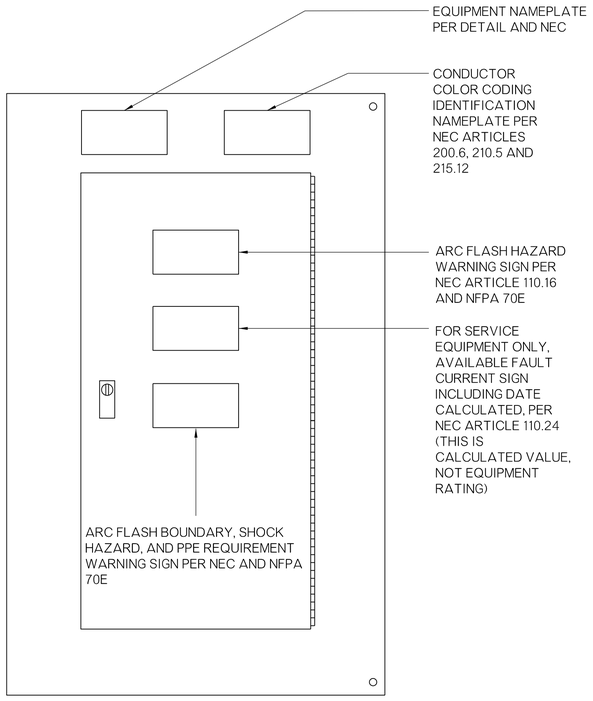
GENERAL NOTES:

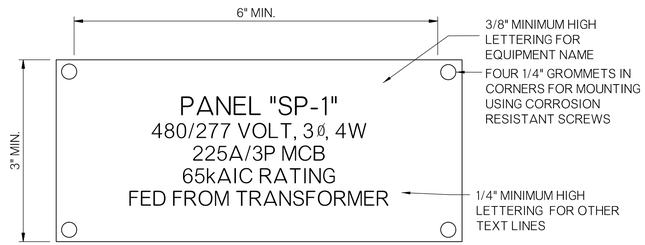
1. INSTALL ALL NAMEPLATES AND WARNING SIGNS IN ACCORDANCE WITH NEC AND NFPA 70E REQUIREMENTS.
2. INSTALL NAMEPLATES AND WARNING SIGNS ON ALL ELECTRICAL EQUIPMENT, INCLUDING BUT NOT LIMITED TO, SWITCHBOARDS, PANELBOARDS, TRANSFORMERS, SWITCHES, CONTROL PANELS AND MOTOR CONTROL CENTERS.
3. EXTERIOR EQUIPMENT SHALL HAVE WEATHER-RESISTANT, NON- FADING NAMEPLATES AND SIGNAGE.

EQUIPMENT NAMEPLATE NOTES

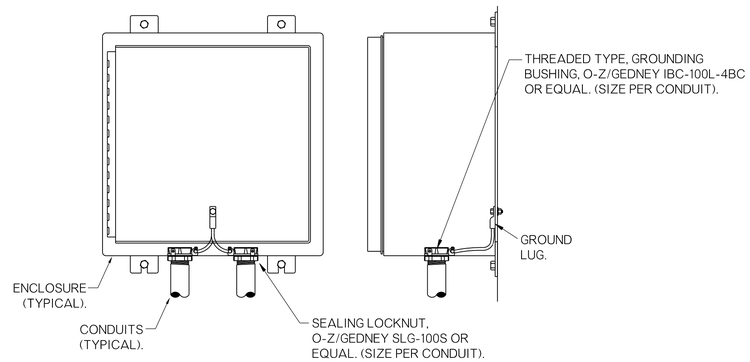
1. INSTALL 2-PLEX ACRYLIC, WHITE ON BLACK CORE, MULTIPLE LINES TEXT, CUSTOM ENGRAVED NAME PLATES.
2. MOUNT WITH STAINLESS STEEL SCREWS.
3. SEAL SCREW HOLES WITH SILICONE RUBBER.
4. NAMEPLATE INFORMATION SHALL INCLUDE:
   A. IDENTIFICATION NAME
   B. VOLTAGE SYSTEM
   C. AMPACITY RATING AND TYPE
   D. EQUIPMENT AIC RATING
   E. FEEDER DESCRIPTION



PANEL FRONT VIEW



TYPICAL ENGRAVED NAMEPLATE AND SIGNAGE DETAIL



NOTES

1. ALL SERVICE, FEEDER, AND BRANCH CIRCUIT CONDUITS SHALL BE GROUNDED ON BOTH ENDS.

CONDUIT GROUNDING DETAIL

LICENSED PROFESSIONAL ENGINEER
James K. Schmitt
34062
OKLAHOMA

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ADVERTISE DATE:		
REVISION	BY	DATE
4 ADDENDUM 4 - MODIFIED OVERALL DESIGN	JKS	08/04/2025

LIGHTING DETAILS (SHEET 2 OF 2)

ARTERIAL REHAB
SHERIDAN RD - 91ST TO 101ST ST
#144017-AJ

CITY OF TULSA, OKLAHOMA
ENGINEERING SERVICES DEPARTMENT

PLANS AND ESTIMATES PREPARED BY:
6100 S. YALE AVE, SUITE 1300 Phone: (918) 250-5922
TULSA, OKLAHOMA 74136 Fax: (918) 858-0107

GARVER

DRAWN			APPROVED:
DESIGNED			
SURVEY			
PROJ. MGR.			
LEAD MGR.			
FIELD MGR.			

PLAN SCALE 1" = 30'
PROFILE SCALE HORIZONTAL: 1" = 30'
VERTICAL: 1" = 30'

RECOMMENDED:

DESIGN MANAGER | CITY ENGINEER

FILE: DRAWING: DATE:

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8/4/2025 11:12:47 AM L:\2020\20127100 - Improve Our Tulsa 2 Program Management\Drawings\N Gilcrease Muesum Rd Drawings\Final Lighting\GMR_LD_2.dgn