



November 13, 2024

Andrew Zagars, P.E.
City Engineer
PW-Engineering Division
3201-A S.W.S Young Drive
City of Killeen, Texas 76542-6157

***RE: Featherline Road Reconstruction Project
Killeen, Texas***

Dear Mr. Zagars,

Kimley-Horn and Associates, Inc. (“Kimley-Horn” or the “Engineer”) is pleased to submit this letter agreement (the “Agreement”) to City of Killeen (the “Client” or the “City”) to provide consulting engineering and sub-consultant services for the referenced project.

PROJECT UNDERSTANDING

Kimley-Horn will be responsible for the preliminary design, final design, bidding phase, and ROW acquisition services for the Project. We anticipate the design and bidding duration to be about 24 months. The Project generally consists of completion of roadway, storm drain, sidewalk, water line, illumination and landscape architecture design for reconstruction improvements to Featherline Road from Chaparral Road to Stagecoach Road, and an Intersection Control Evaluation (ICE) Report for the Featherline/Malmaison intersection. Based on City review of ICE Report, the City will authorize design of Featherline/Malmaison traffic control, which is anticipated to be either a roundabout or traffic signal. It is anticipated that ROW acquisition services will be needed for up to 15 parcels.

Engineer will provide the services specifically set forth below.

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SCOPE OF SERVICES

RESPONSIBILITIES OF THE CITY

In conjunction with and in order for the completion of the professional services detailed below, the City of Killeen agrees to complete the following tasks:

- Schedule and hold a Project Kickoff Meeting and assist in developing the project stakeholders list.
- Attend project coordination meetings.
- Provide As-Built plans and design files for previous projects along Featherline Road.
- Provide TIA from adjacent development.
- Provide timely reviews and comments on interim and milestone submittals in order for the consultant team to maintain agreed upon schedules.

SERVICES TO BE PROVIDED BY THE ENGINEER

The Engineer's Services consist of the services specifically described in Sections 1 through 9 including the specific engineering services to be performed through the following consulting disciplines as subcontractors to the Engineer:

- (1) McGray and McGray Land Surveyors, Inc (McGray)– ROW Mapping & Survey
- (2) Altura Solutions, LCC (Altura) – TDLR
- (3) 7Arrows Land Staff, LLC (7Arrows) – ROW Acquisition
- (4) The Rios Group (Rios) – Subsurface Utility Engineering
- (5) Terracon Consultants, Inc (Terracon)- Geotechnical investigation and Pavement Engineering

1. PROJECT ADMINISTRATION AND COORDINATION

The Engineer will:

- 1.1. Assemble a Project team comprised of the City's representatives and the Engineer's representatives. The Engineer will meet with the Project team at a kickoff meeting to set the production schedule and parameters for all subsequent work, to verify the components within which all Project participants must perform, and to identify all parties and significant deadlines involved in the comprehensive schedule strategy. Based on this information, the Engineer will prepare a detailed schedule of its work for the Project addressing each component of the work to be done, indicating the points of involvement of all project participants. The Engineer will maintain the schedule throughout project development.
- 1.2. Perform general administrative duties associated with the Project, to include monitoring/reporting, scheduling, general correspondence, office administration, and invoicing.

- 1.3. The Engineer will prepare and submit monthly status updates with updated schedule and invoices to the City for review and approval. The Engineer will prepare weekly progress updates.
- 1.4. The Engineer will attend one (1) project kickoff meeting with the City. Meeting minutes and agenda will be prepared by the Engineer for the meeting.
- 1.5. The Engineer will perform virtual bi-weekly internal project team coordination meetings estimated at one-half (0.5) hours each for 24 months.
- 1.6. The Engineer will perform virtual bi-weekly coordination Teams meetings with City estimated at one-half (0.5) hours each for 24 months. Meeting minutes and agenda will be prepared by the Engineer for the meeting.

2. ENVIRONMENTAL SERVICES

The environmental documentation consists of compliance with U.S. Army Corps of Engineers (USACE) and coordination with Texas Historical Commission (THC) as follows:

- 2.1. Aquatic Resources Delineation and Preliminary Jurisdictional Analysis
 - Kimley-Horn will locate readily available resource documents and related data for a preliminary review of site conditions and then perform a site visit to evaluate the existence and approximate locations of aquatic resources on the site generally following the USACE 1987 Wetlands Delineation Manual and the applicable USACE Regional Supplement.
 - Kimley-Horn will prepare exhibits showing the boundaries, acreage, and linear footage (if applicable) of aquatic resources identified onsite during the site visit. Appropriate feature data, locations, and extents will be collected with a GPS with sub-meter accuracy as required by the USACE.
 - Kimley-Horn will prepare a report for the project documenting the results of the Aquatic Resources Delineation performed onsite. The report will address the applicable regulatory framework, describe the assessment methodology, limitations, and findings. The report will also include applicable maps/exhibits, site photographs, and data sheets/forms.
 - The Environmental Protection Agency (EPA) and the USACE occasionally issue guidance concerning what they intend to assert jurisdiction over. Changes that impact our strategy or scope will cause additional work and will be addressed as an additional service amendment to this agreement. Observations will be made under the applicable regulatory guidance at the time of the observations.
- 2.2. Endangered Species Act (ESA) Compliance Letter
 - Kimley-Horn will perform a field reconnaissance and a review of readily available databases relevant to Federal listed species. Based on

the findings, Kimley-Horn will draw conclusions relative to a determination regarding endangered species. The fee included as part of this task assumes that the findings will result in a determination of no potential for “Take”.

- Compliance would require one of the following:
 - No potential for “Take” exists, meaning that the project has no potential to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect threatened or endangered species; or
 - An Incidental Take Permit from the Services.
- Kimley-Horn anticipates the ESA submittal to FEMA will include the following:
 - Project Location;
 - Project Description;
 - Listed Species Biological Requirements;
 - Findings Relative to Listed Species.
- Kimley-Horn will submit the statement to FEMA as part of a CLOMR application. If the field observations reveal an outcome other than ‘no potential for Take exists,’ Kimley-Horn can perform a detailed study and produce additional documentation as an additional service.

2.3. Desktop Cultural Resources Review

- Kimley-Horn will engage a professional archeologist subconsultant to perform a desktop cultural resources review. The results of the desktop review will be compiled in a letter report, which can be used to coordinate the field efforts with the USACE Fort Worth District Regulatory Archeologist and/or Texas Historical Commission (THC) if a survey is requested during USACE permit review (if permitting is required). The purpose of the desktop review is to identify and describe existing cultural resources in the project area, discuss the potential for discovering previously unknown cultural resources, and make recommendations about the need for further archeological work so that the project can proceed.
- The archeologist will compile information from records/databases, including (as necessary):
 - Texas Archeological Sites Atlas (TASA);
 - National Register of Historic Places (NRHP);
 - Additional records at the Texas Archeological Research Laboratory (TARL);
 - Natural Resources Conservation Service (NRCS) soil maps;
 - Bureau of Economic Geology geological maps;
 - City, state, or county planning documents (when available);

- o USGS topographic maps;
- o Records available at city and county historical societies; and
- o Published local histories.

A letter report that details the results of the records search and presents a review of the natural environment and cultural history of the project area, along with conclusions and recommendations of findings. This letter will include a discussion of the potential for the proposed project to affect known archeological sites, State Antiquities Landmarks (SALs), or sites listed or potentially eligible for listing on the NRHP. In addition to this discussion, the letter will also address the likelihood that the proposed project will encounter areas with a high potential for containing cultural resources. The report will be submitted to the Client for review.

3. PUBLIC INVOLVEMENT SERVICES

This task consists of public involvement services for support and attendance for up to one (1) open house public meeting.

- 3.1. Prepare and attend for one public meeting (limited to 2 Senior Professional Engineers, 1 Professional Engineer, and 1 Analyst)
- 3.2. Prepare public meeting advertisements consisting of newspaper and social media advertisement.
- 3.3. Prepare a public meeting summary which will consist of information provided at the meeting, public comments, and responses to public comments.
- 3.4. Prepare PublicCoordinate webpage

Deliverables will consist of:

- Public meeting roll plot
- PublicCoordinate webpage
- Public Meeting Advertisement and Letters
- Public Meeting Summary Report

4. SCHEMATIC DESIGN SERVICES

This task consists of design services for the 30% schematic. The Engineer will:

- 4.1. Obtain and review available record drawings, aerial photography, and any site development plans under review by the City.
- 4.2. Perform a site visit to evaluate site and traffic characteristics, topography, utilities, and potential environmental issues.
- 4.3. Develop project design criteria
- 4.4. Prepare up to three (3) alternative typical sections.
- 4.5. Prepare horizontal geometrics for the up to three (3) typical sections.
- 4.6. Prepare one (1) conceptual schematic for the up to three (3) alternatives.

- 4.7. Prepare preliminary OPCC's for the up to three (3) alternatives.
- 4.8. Evaluate and design horizontal alignment for Featherline Road.
- 4.9. Evaluate and design vertical profile utilizing OpenRoads Designer roadway design software.
- 4.10. Prepare preliminary horizontal roadway geometrics to be included on the schematic
- 4.11. Prepare existing and proposed typical sections to be included on the schematic based on preliminary analysis results
- 4.12. Intersection configurations and Geometrics
 - Preliminary intersection geometrics for Featherline Road and Malmaison Road.
 - No geometric updates for Stagecoach and Chaparral are anticipated as part of this project.
- 4.13. Prepare preliminary cross sections at a spacing no less than 100 feet and at driveways and intersections. These cross-sections will show pavement and subgrade, right-of-way limits, side slopes, pavement cross-slopes, curbs, and sidewalks.
- 4.14. Prepare one conceptual Traffic Control Plan roll plot.
- 4.15. Prepare one 30% opinion of probable construction cost (OPCC) for the preferred alternative.
- 4.16. Prepare one 30% Draft Preliminary Design Schematic roll plot of the preferred alternative. The preliminary design schematic will be limited to existing topography and utilities, horizontal alignments, vertical profile design, intersection horizontal alignments and profiles (where applicable), identified easements, roadway typical sections, drainage improvements, existing and proposed right-of-way, existing and proposed pavement edges, proposed sidewalks, and proposed lane striping.
- 4.17. Prepare a preliminary construction contract timeline
- 4.18. The Engineer will perform Quality Control/Quality Assurance on each deliverable.
- 4.19. Attend up to one (1) Design Review meeting with the City for the 30% schematic roll plot. Prepare meeting minutes and distribute to project attendees. Prepare comment responses for comments received during design review submittals.
- 4.20. Prepare one Final 30% Preliminary Design Schematic roll plot addressing City comments

5. FINAL ROADWAY DESIGN

- 5.1. Prepare a Title Sheet, Index of Sheets, and a Project Layout which references survey control benchmarks.
- 5.2. Prepare geometric data sheet
- 5.3. Prepare existing and proposed typical section sheets incorporating any unresolved comments from the Preliminary/Schematic Design Phase.
- 5.4. Develop Removal Plans identifying and quantifying removals at a scale of 1"=50'
- 5.5. Prepare Plan-Profile Sheets for Featherline Road at a scale of 1"=50' horizontal and 1"=5' vertical.
- 5.6. Prepare Plan-Profile Sheets for up to 5 cross streets at scale of 1"=20' horizontal and 1"=2' vertical
- 5.7. Prepare driveway table of proposed driveway grades and driveway details
- 5.8. Prepare miscellaneous details sheet
- 5.9. Prepare traffic control plan to consist of:
 - Construction Phasing and Sequencing
 - Engineered traffic control plan (Assumed three (3) phases)
 - Traffic Control Narrative
 - TCP Typical sections
 - No detailed detour plan is anticipated
- 5.10. Prepare cross sections to final roadway design at a spacing no less than 100 feet and at driveways, cross drainage structures, and intersections.
- 5.11. Calculate quantities and prepare Item Summaries Sheets tabulating project quantities.
- 5.12. Incorporate TxDOT and City standard details as applicable.
- 5.13. Prepare General Notes and a Construction Timeline Estimate
- 5.14. Prepare an opinion of probable construction costs (OPCC) at each milestone deliverable.
- 5.15. The Engineer will attend two (2) plan review meetings (60%, 90%) with the City. Meeting minutes and agenda will be prepared by the Engineer for the meeting.
- 5.16. The Engineer via subconsultant (Altura) will register the project with TDLR, Perform plan review of the project construction documents, and Perform the final inspection of the project upon completion.
- 5.17. The Engineer will prepare the following deliverables during Final Design:
 - PDF of the following 60% Design Plans (11"x17"):
 - o Title Sheet
 - o Index of Sheets
 - o Project Layout
 - o Removal Plans
 - o Roadway Plan-Profile Sheets
 - o Intersection Detail Sheet (Malmaison Road)
 - o Drainage Area Maps

- o Hydrology/hydraulic calculation sheets
 - o Drainage Plan-Profile Sheets
 - o Three (3) hard copies and a PDF of the 60% Opinion of Probable Construction Costs
- PDF of the following 90% Design Plans (11"x17"):
 - o Title Sheet
 - o Index of Sheets
 - o General Notes
 - o Item Summaries
 - o Traffic Control Plans
 - o Project Layout
 - o Removal Plans
 - o Plan-Profile Sheets
 - o Intersection Detail Sheets
 - o Miscellaneous Roadway Details Sheet
 - o Drainage Area Maps
 - o Hydrology/hydraulic calculation sheets
 - o Drainage Plan-Profile Sheets
 - o Miscellaneous Drainage Details Sheet
 - o Illumination Layout Sheets
 - o Signing and Pavement Markings Sheets
 - o SW3P Sheets
 - o Landscape Planting Plans
 - o Landscape/hardscape details
 - o Standards
 - o 90% Opinion of Probable Construction Costs
 - o Construction Timeline
- Final Plans Submittal to contain:
 - o PDF of the Final Design Plans consisting of all sheets from the 90% submittal
 - o PDF of the Final Opinion of Probable Construction Costs
 - o PDF of the Construction Timeline
 - o PDF of Project Manual
 - o CADD files for as-builts

6. DRAINAGE DESIGN SERVICES

Drainage design services consist of preparing PS&E design of the storm drain system along Featherline Road.

The Engineer will:

- 6.1. Data collection: obtain studies, models, terrain, surveys, field reconnaissance, and plans.
- 6.2. Prepare a Preliminary Drainage Report summarizing preliminary drainage

analysis.

- 6.3. Prepare exterior drainage area maps at 1"=500' scale (1 sheets estimate)
- 6.4. Prepare interior drainage area maps at 1"=200' scale (2 sheets estimated)
- 6.5. Calculate run-off to each inlet and produce inlet hydraulic information using City of Killeen and TxDOT Drainage Design Criteria.
- 6.6. Produce storm drain calculations per the design criteria in the TxDOT Hydraulic Manual. Design frequency to be established in coordination with the City.
- 6.7. Provide runoff, inlet and storm drain calculation sheets
- 6.8. Produce plan and profile sheets at 1"=50' scale for the storm sewer system and include limits of trench protection and hydraulic grade line. (5 sheets estimated)
- 6.9. Produce lateral profile sheets for the storm sewer system at 1"=50' scale (5 sheets estimated)
- 6.10. Analyze up to two (2) cross culverts utilizing HEC-RAS.
- 6.11. Prepare up to two (2) culvert layouts.
- 6.12. Prepare up to two (2) culvert hydraulic data sheets.
- 6.13. Prepare a CLOMR request for submittal to the City and FEMA to propose modifications to the floodplain associated with Yowell Creek and the Yowell Creek tributary. The CLOMR request will include the following:
 - CLOMR narrative
 - Pre-Project and Post-Project Floodplain Maps
 - Water Surface Elevation Comparison Tables
 - HEC-RAS Output
 - FEMA Effective Flows
 - FIS Profile
 - FEMA FIRM
 - Annotated FEMA FIRM
 - FEMA MT-2 Forms
 - Digital File
- 6.1. Address and respond to comments as listed below. Additional rounds of comments will be considered additional services. Client will pay all City and FEMA review fees.
 - One round of City comments
 - First round of FEMA comments
 - Second round of FEMA comments

7. TRAFFIC ENGINEERING SERVICES

This task includes an intersection control evaluation, signing and pavement marking design, and illumination design services.

The Engineer will:

- 7.1. Prepare Intersection Control Evaluation (ICE)

- The Engineer will conduct a traffic analysis study to determine appropriate intersection control at the intersection of Featherline Drive and Malmaison Drive. The Engineer will implement Intersection Control Evaluation (ICE) guidelines to evaluate possible alternatives including all-way stop, traffic signal, and mini-roundabout. The Engineer will identify preferred alternative for intersection control.
 - The Engineer will utilize FHWA's SPICE & CAP-X tools and Synchro software to evaluate appropriate intersection control. Intersection capacity analysis shall be considered to address turning lane storage requirements.
 - The Engineer will provide a memo documenting the scenarios evaluated and a recommended intersection layout
- 7.2. Design Continuous Roadway Illumination
- The Engineer will develop illumination plans for continuous lighting along the entire stretch of the project corridor. The Engineer will coordinate with the City to determine if proposed illumination poles need to be installed on one or both sides of the roadway. The Engineer will also coordinate with the City to identify appropriate luminaire type, height of illumination poles, and possible use of aesthetic treatments. The Engineer will use this information to develop a photometric model using AGI32 lighting software to determine that minimum illuminance requirements are satisfied based on criteria in TxDOT's Highway Illumination Manual. The Engineer will conduct electrical and voltage drop calculations to determine wire and conduit sizes, and number and details of electrical services required along the project corridor. The Engineer will coordinate with Oncor to determine locations to draw power and set electrical services.
 - The Engineer will prepare layout sheets showing location of poles, conduits, and wiring. The plans will also include conduit and wiring charts, details on electrical services, and quantity summaries.

8. LANDSCAPE ARCHITECTURE

The Engineer will perform the following services at part of the Landscape Architecture task:

- 8.1 Landscape Design Schematic
- Kimley-Horn will prepare the landscape Schematic Design plans, based on input received during the initial design coordination meeting. The Schematic Design will include a plan rendering (PDF format) with names and images of proposed landscape material. The approved Schematic Design will be used as a basis for construction document preparation.
- 8.2 Landscape Construction Documents
- Following the approval/acceptance of the Schematic Design Plan, Kimley-

Horn will prepare construction documents for the proposed street trees and landscape plantings. Submittals will be provided to the City at 60%, 90% and 100% completion. It is anticipated that the following sheets will comprise the Landscape Architectural Construction Plan Package.

- Planting Plans
 - Kimley-Horn will provide Planting Plans that will include planting bed locations, seed/sod limits, and detail references and notes for the proposed site improvements.
- Site Details
 - Kimley-Horn will prepare detail sheets showing site, landscape elements identified in the Schematic Design package. City standard details will be referenced where applicable.

8.3 Irrigation Plans

Irrigation plans will be prepared upon Client approval of the landscape plans. Irrigation plans shall be submitted to the reviewing agency for initial city review and revised per 2 rounds of reasonable comments. The Irrigation plan will show head layout, pipe sizing, controller/valve locations, calculations, specifications, and standards details. The Client will specify the preferred irrigation equipment brand (Toro, Hunter, Weathermatic, or Rainbird) prior to initiation of the irrigation design. Effort for this task includes plan preparation, submittal to the City and work to address up to two (2) rounds of ordinary and reasonable simultaneous comments from the City and Client. Modifications to the plans resulting from significant site layout changes or additional review comments directed by the City, the Client, or their representatives shall be considered an additional service and will be billed on an hourly basis according to our current rate schedule.

8.4 Submittals and Permitting- Landscape and Irrigation Plans

This task is to capture effort expended by KH for project submittals and responses to jurisdictional review comments beyond the effort otherwise included in our scope of services. Because the extent of the review comments required by the city for plan approval is unknown, we have provided a projected budget for these services, but actual cost will depend on actual effort required. Effort for this task includes plan preparation, submittal to the City and work to address up to two (2) rounds of ordinary and reasonable simultaneous comments from the City and Client. Modifications to the plans resulting from significant site layout changes or additional review comments directed by the City, the Client, or their representatives shall be considered an additional service and will be billed on an hourly basis according to our current rate schedule.

9. ROUNDABOUT DESIGN

This task requires authorization to proceed from the City prior to commencement of work. The Engineer will develop design drawings for one-lane mini-roundabout at Featherline Road and Malmaison Road to coincide with the final plans being developed. The Engineer will prepare:

- 9.1. Horizontal and vertical geometry for proposed roundabout
- 9.2. Intersection detail sheet for roundabout at scale of 1"=20'
- 9.3. Intersection Grading Sheets for roundabout to include contours shown at 1' intervals and at a scale of 1"=20'
- 9.4. Signing and pavement marking plan at limits of roundabout
- 9.5. Storm drain and inlet design at limits of roundabout
- 9.6. Roundabout Traffic Control plan and detour routes. Prepare traffic control plans for up to four (4) phases of construction. It is assumed the roundabout will be built in quarters and that traffic will need to be maintained at all times. If any additional phases are required, the extra design effort necessary to design additional traffic control phases will be considered additional services.
- 9.7. Illumination design at limits of roundabout
- 9.8. Roundabout Hardscape and Paving Details - sidewalks, pavement details, truck apron, central island, and median paving details.

10. TRAFFIC SIGNAL DESIGN

This task requires authorization to proceed from the City prior to commencement of work. The Engineer will develop design drawings for 4-leg traffic signal at Featherline Road and Malmaison Road to coincide with the final plans being developed. The Engineer will prepare:

- 10.1. Existing Conditions sheet to show locations of existing traffic control devices and both underground/overhead utilities at the intersection.
- 10.2. Proposed Signal Layout sheet to show the locations of proposed signal poles, pedestrian poles, signal heads, signal cabinet, wireless communication equipment, electrical conduits, ground boxes, and electrical service. Locations of pedestrian poles, audible pedestrian signal (APS) units, and pedestrian access ramps will be designed in conformance with ADA requirements.
- 10.3. Signal Elevation sheet to show placement of signal heads on mast-arms and vertical clearances.
- 10.4. Conduit Chart and Electrical Wiring sheet to show the type and number of electrical wires in each conduit run and inside poles and mast arms. A new electrical service will be designed to support total electrical load due to the new traffic signal and safety lighting at the intersection. The electrical service will include two separate circuits for traffic signal and illumination. The Engineer will coordinate with the City and local electric service provider to determine location of new electrical service.

- 10.5. Street Name Sign Details sheet to show the dimensions, letter sizes, spacing, and fonts for street name signs mounted to mast arms.
- 10.6. Engineer will calculate yellow clearance and all red interval signal timings, minimum green times, maximum green times, and walk/don't walk times for pedestrian phases. The Engineer will also provide signal phasing with a ring and barrier diagram associated with the signal timings. The signals are assumed to operate actuated-uncoordinated.
- 10.7. The Engineer will use latest TxDOT general notes issued by the Waco District and update appropriately as required for traffic signal.
- 10.8. The Engineer will prepare the following deliverables during Final Design:
 - 60% Design Plans:
 - o Existing Conditions Layout
 - o Proposed Signal Layout
 - o Signal Elevation Views
 - o Estimated Construction Quantities & OPCC
 - 90% Design Plans:
 - o Existing Conditions Layout
 - o Proposed Signal Layout
 - o Signal Elevation Views
 - o Electrical Wiring Tables
 - o Street Name Sign Details
 - o Estimated Construction Quantities & OPCC
 - o City/TxDOT Standard Details
 - Final Plans Submittal to contain:
 - o Address any comments to plan sheets from 90% submittal
 - o Issue signed and sealed plan sheets
 - o Traffic Signal Timing Plans

11. DESIGN SURVEY SERVICES

Design survey services will be performed via a subconsultant (McGray). The survey shall be provided in Microstation (.dgn) format in U.S. survey feet.

- 11.1. Cross sections shall be taken at 50-foot intervals along with break lines as required, to provide a digital topographic design file at 1-foot intervals.
- 11.2. Locate and identify all above ground features within the survey limits including buildings, fences, visible utilities, sidewalks, driveways, handicap ramps, guardrails, signs, manholes, water valves, telecom boxes, utility poles, mailboxes, irrigation heads, water meters, sanitary sewer cleanouts, etc. The outside limits of dense tree and vegetation growth shall be identified.
- 11.3. Trees 8-inches and larger in diameter shall be measured, identified and tagged with a point meter.
- 11.4. Locate and identify types of existing pavement surfaces for streets, alleys,

sidewalks, driveways, etc. Locate and identify existing lane markings and signage in detail [color, width, words, symbols, etc.]. Locate and identify any planters, mailboxes (with type) and other improvements.

- 11.5. Invert elevations and size/type of utility and drainage pipes and culverts shall be identified for all manholes within the project limits.
- 11.6. Locate sufficient monumentation to define the existing right-of-way lines and show them on the final product.
- 11.7. Locate a maximum of two (2) culverts upon completion of construction.

12. ROW ACQUISITION SERVICES

Appraisal and real estate acquisition services will be performed via a subconsultant (7Arrows) for up to 15 parcels. Condemnation Support Services are not included in this scope and will be considered additional services.

- 12.1. Pre-Acquisition Services for up to 15 Parcels
 - Research preliminary ownership and county tax information.
 - Prepare and obtain any Rights of Entry necessary for surveying, geotechnical investigations, and environmental services.
- 12.2. Title Services for up to 15 Parcels
 - Review preliminary title commitment (Schedules A, B & C) or preliminary title search information for all properties.
 - Secure title commitments and updates in accordance with insurance rules and requirements for parcel payment submissions for properties which will be acquired in fee simple and for ROW easements.
 - Secure title insurance for all parcels, insuring acceptable title. Cure all exceptions on Schedule C, when applicable. Written approval by City will be required for any exceptions to coverage.
 - Attend closings and provide closing services in conjunction with Title Company for all tracts.
 - Record all original instruments immediately after closing at the respective County Clerk's Office.
 - Research title and provide Condemnation Title Report to legal counsel for property rights that will be acquired through Eminent Domain. (See item 7 below)
- 12.3. Appraisal Services up to 15 Parcels/Transactions (In Fee and/or Easement Acquisition)
 - Prepare and conduct personal pre-appraisal contact with interest owner(s) for each parcel.
 - Contact property owners or their designated representative to offer opportunity to accompany the appraiser on the appraiser's inspection of subject property. Maintain record of contact in file.
 - Finalize complete appraisal report for each parcel. These reports shall

conform to the City's policies and procedures along with the Uniform Standards of Professional Appraisal Practice.

- All completed appraisals will be administratively reviewed and approved by the City.
- Appraisal fee could be adjusted based on complexity of evaluation within range provided in Fee Schedule.

12.4. Negotiation Services for up to 15 Parcels/Transactions (In Fee and/or Easement Acquisition)

- Analyze appraisal reports and confirm approved value prior to making offer for each parcel.
- Analyze preliminary title report to determine potential title problems and propose methods to cure title deficiencies. (Exhaust all efforts to obtain subordinations of liens, waiver of lienholders and clear any title, if 7Arrows staff cannot cure title through standard practices, the City will be responsible for obtaining legal counsel to remedy any tile deficiencies as required by title or alternatively, may elect to close the easement without a title policy).
- Prepare the initial offer letter and any other documents required or requested by the City in an acceptable form.
- Contact each property owner or owner's designated representative and present the written offer in person where practical. When owners do not wish to have offers delivered in person, they will be mailed via certified mail with return receipt for documentation of delivery/receipt. Maintain follow-up contacts and secure the necessary instruments upon acceptance of the offer for the closing.
- Provide a copy of the appraisal report for the subject property exclusively to the property owner or authorized representative at the time of the offer.
- Respond to property owner inquiries verbally and/or in writing within two business days.
- Prepare a separate negotiator contact report for each parcel file for each contact.
- Maintain parcel files of original documentation related to the purchase of the real property or property interests/acquisition of the Easement or Right of Way.
- Present counteroffers in a form as directed by the City. Transmit any written counteroffer from property owners including supporting documentation, and Agent's recommendation with regard to the counteroffer.
- Prepare second and final offer letter as necessary.

12.5. Acquisition/Closing Services for up to 15 Parcels/Transactions (In Fee and/or Easement Acquisition)

- Prepare check request, review closing documents and facilitate execution of all necessary documents. Attend closings and provide closing services in conjunction with Title Company for all tracts.
- Transport any documents to the City and landowner for signatures.
- Record or cause to be recorded all original instruments immediately after closing at the respective County Clerk's Office.
- Review Title Policy and provide to City for permanent storage.

13. SUBSURFACE UTILITY ENGINEERING

SUE services will be performed via a subconsultant (TRG) for Featherline Road from Chaparral Road to Stagecoach Road from ROW to ROW.

- 13.1. TRG will provide QLB SUE services within the limits of the project.
- 13.2. TRG will provide up to fifteen (15) QLA test holes following a review of the QLB SUE information.

Deliverables will consist of:

- A utility file in CAD format depicting all SUE data documented for the project. The Client will provide TRG with any necessary background files for use in completing the final deliverables.
- A summary sheet of all test hole coordinate data and depth information.
- 8.5" by 11" Test Hole Data Forms for all test hole locations completed. These forms will be signed and sealed by a Professional Engineer and delivered to the client in electronic PDF form.
- 11" by 17" SUE plan sheets depicting all SUE data documented on the project. These plans will be signed and sealed by a Professional Engineer and delivered to the Client in electronic PDF form.
- A Utility Report containing metadata (e.g. scope of work, work limits, dates of performance, survey control, etc).

14. GEOTECHNICAL AND PAVEMENT DESIGN

A geotechnical investigation and roadway pavement design will be performed via a subconsultant (Terracon).

- 14.1. Terracon will perform the following services:
 - Field Exploration
 - o Planned seven (7) 15' borings along the roadway alignment.
 - Laboratory testing
 - o The project engineer will review field data and assign laboratory tests to understand the engineering properties of various soil and rock strata. Exact types and number of tests cannot be defined until completion of field work, but we anticipate the following laboratory testing to be performed:

- Water content
- Unit dry weight
- Atterberg limits
- Grain size analysis
- Swell/consolidation
- Soluble sulfate
- Organic content using UV-Vi method
- Lime series based on pH testing
- Atterberg limit on soil at optimum lime % obtained from pH testing.
- Geotechnical Engineering Report with will provide the following:
 - o Boring logs with field laboratory data
 - o Stratification based on visual soil and rock classification
 - o Groundwater level observed during and after the completion of drilling
 - o Site location and exploration plans
 - o Subsurface exploration procedures
 - o Description of subsurface conditions
 - o Recommended pavement options and design methods for public roadway, based on City of Killeen guidelines and methods
 - o Earthwork recommendations including site/subgrade preparation

Deliverables will include:

- Draft Geotechnical Engineering Report
- Final Geotechnical Engineering Report
- Compass system access

15. WATERLINE DESIGN

It is Engineer's understanding that the scope of the waterline design includes upsizing existing waterline along Featherline from 8-inch to 12-inch. The new waterline will stop at south side of the intersection of Featherline and Stagecoach Road. The existing 8-inch waterline will be abandoned in place.

- 15.1. Provide waterline layout sheet
- 15.2. Prepare standard utility notes
- 15.3. Prepare standard waterline detail sheets
- 15.4. Prepare waterline specifications

The engineer will prepare the following deliverables:

- PDF of the following 60% Design Plans (11"x17"):
 - o Layout sheet
 - o Utility Notes
 - o Waterline Plan and Profile sheets

- o Waterline Detail sheets
- PDF of the following 90% Design Plans (11"x17"):
 - o Layout sheet
 - o Utility Notes
 - o Waterline Plan and Profile sheets
 - o Waterline Detail sheets
- Final Plans Submittal to contain:
 - o PDF of the Final Design Plans consisting of all sheets from the 90% submittal
 - o PDF of Project Manual
 - o CADD files for as-builts
 - o

11. BOUNDARY SURVEY SERVICES

Boundary survey services will be performed via a subconsultant (McGray). The subconsultant will prepare:

- 16.1 Plats and descriptions a maximum of fifteen (15) parcels for R.O.W. acquisition.

12. UTILITY COORDINATION

The Engineer will:

- 12.1. Attend an initial utility coordination meeting with all utility owners within the corridor to notify owners of project and begin coordination of potential conflicts and resolutions.
- 12.2. Attend up to ten (10) coordination meetings with individual utility owners to facilitate additional coordination of utility adjustments, conflict resolutions, and utility agreements.
- 12.3. Determine which utilities will conflict with proposed construction and develop Utility Conflict Matrix.
- 12.4. Update and maintain a utility layout in OpenRoads Designer. This layout shall include all existing utilities which are to remain in place or be abandoned, and all adjusted utilities. This layout will be utilized to monitor the necessity and evaluate alternatives. The engineer will utilize the layout of existing utilities as prepared, and make a determination of the following:
 - Facilities in conflict with the proposed project that are to be relocated.
 - Facilities to be abandoned in place.
 - Facilities to remain in service and in place.

13. TDLR REGISTRATION

TDLR registration will be performed via a subconsultant (Altura). The subconsultant will perform the following services in compliance with Chapter 469 of the Texas Government

Code, State of Texas Architectural Barriers Act. PROWAG will be used as the standard to determine compliance with TDLR Administrative Rule 68.102. The subconsultant will perform the following:

- 18.1 Register the project with TDLR.
- 18.2 Perform plan review of the project construction documents (as provided by the Client.
- 18.3 Perform the final inspection of the project upon completion.

19. BIDDING PHASE

The Engineer will prepare:

- 19.1. Prepare bid documents in accordance with the City of Killen standards
- 19.2. Prepare Project Manual
- 19.3. Attend pre-bid meeting with the City. Assist the City in developing meeting agenda
- 19.4. Receive, record and provide responses to prospective bidder's and suppliers questions. Issue addenda as appropriate to clarify, correct, or change the bidding documents
- 19.5. Assist the City in opening of bids, review and evaluate all bids including bid amount and prepare recommendation letter for award of the contract for construction
- 19.6. Include addenda items in the construction plans and issue "conformed" set of plans for construction

20. AS AUTHORIZED ENVIRONMENTAL

This task requires authorization to proceed from the City prior to commencement of work. It is anticipated, that the USACE may require a site visit to verify conditions in the field following the submittal of the delineation. The Engineer will attend this site visit with the USACE. The USACE may modify the aquatic feature classifications or may request additional information about aquatic features. Kimley-Horn will update the delineation package based on this field site visit and provide the modifications to the USACE. This task includes:

- 20.1 One (1) site visit with USACE.
- 20.2 One (1) set of additional information request from USACE.



The following services are not included in this Agreement at present and are specifically considered to be additional services:

- a. Construction Phase
- b. Condemnation Support
- c. Franchise Utility relocation design
- d. Construction inspection, construction staking, and material testing
- e. Appearing as an expert witness in any litigation for the City.
- f. Formal coordination with the USFWS
- g. Threatened and endangered species presence/absence surveys
- h. Section 6(f) or 4(f) analysis
- i. Historic resources survey or archeological testing, data recovery, or construction-phase monitoring
- j. Geologic Assessment
- k. Hazardous Materials Phase I or II analysis
- l. USACE Pre-Construction Notification or Individual Permit preparation
- m. USACE Nationwide Permit 14

SCHEDULE

We will provide our services as expeditiously as practicable as shown in Exhibit A



FEE AND EXPENSE

Kimley-Horn will perform the tasks noted below on a lump sum (LS) basis. The services in this agreement will be billed as follows. Kimley-Horn will perform the services in either Task 9, 10, or 20 upon authorization from the City.

<u>Base Services</u>			
Task 1	PROJECT ADMIN AND COORD SERVICES	\$	97,200.00 LS
Task 2	ENVIROMENTAL SERVICES	\$	31,960.00 LS
Task 3	PUBLIC INVOLVEMENT SERVICES	\$	31,810.00 LS
Task 4	SCHEMATIC DESIGN SERVICES	\$	158,400.00 LS
Task 5	FINAL ROADWAY DESIGN	\$	290,660.00 LS
Task 6	FINAL DRAINAGE DESIGN	\$	137,290.00 LS
Task 7	TRAFFIC ENGINEERING SERVICES	\$	109,160.00 LS
Task 8	LANDSCAPE ARCHITECTURE SERVICES	\$	69,340.00 LS
Task 11	DESIGN SURVEY SERVICES	\$	94,040.00 LS
Task 12	ROW ACQUISITION SERVIES	\$	254,120.00 LS
Task 13	SUBSURFACE UTILITY ENGINEERING	\$	96,030.00 LS
Task 14	GEOTECHNICAL ENGINEERING SERVICES	\$	44,310.00 LS
Task 15	WATERLINE DESIGN	\$	144,140.00 LS
Task 16	BOUNDARY SURVERYING SERVICES	\$	118,770.00 LS
Task 17	UTILITY COORDINATION	\$	28,090.00 LS
Task 18	TDLR REGISTRATION	\$	4,710.00 LS
Task 19	BIDDING PHASE	\$	24,790.00 LS
	EXPENSES	\$	1,840.00 LS
	FEMA FEES	\$	6,893.00 LS
Base Services Total \$			1,743,553.00 LS

<u>As-Authorized Services</u>			
Task 9	ROUNDBOUT DESIGN	\$	86,820.00 LS
Task 10	TRAFFIC SIGNAL DESIGN	\$	53,740.00 LS
Task 20	AS AUTHORIZED ENVIRONMENTAL	\$	3,500.00 LS

Total (with Task 9) \$	1,830,373.00 LS
Total (with Task 10) \$	1,797,293.00 LS
Total (with Task 9 and 20) \$	1,833,873.00 LS
Total (with Task 10 and 20) \$	1,800,793.00 LS

Maximum Grand Total \$ 1,833,873.00 LS



Kimley-Horn will not exceed the total maximum labor fee shown without authorization from the Client. For hourly not to exceed tasks, labor fee will be billed on an hourly basis according to our then-current rates.

For all tasks, direct reimbursable expenses such as express delivery services, air travel, and other direct expenses will be billed at cost. All permitting, application, and similar project fees will be paid directly by the Client.

Payment will be due within 30 days of your receipt of the invoice.



CLOSURE

Kimley-Horn, in an effort to expedite invoices and reduce paper waste, submits invoices via email in an Adobe PDF format. We can also provide a paper copy via regular mail if requested. Please include the invoice number and Kimley-Horn project number with all payments. Please provide the following information:

Please email all invoices to: _____

Please copy: _____

Fees and times stated in this Agreement are valid for sixty (60) days after the date of this letter.

We appreciate the opportunity to provide these services to you. Please contact us at (512) 418-1771 should you have any questions regarding this agreement.

Sincerely,

A handwritten signature in blue ink, appearing to read "Sam Lundquist".

Sam Lundquist, P.E.
Project Manager
TBPE F-928

A handwritten signature in blue ink, appearing to read "Trey Neal".

Trey Neal, P.E.
Vice President



Attachments: Hourly Rate Schedule
Exhibit A- Schedule

Kimley-Horn and Associates, Inc.

Hourly Labor Rate Schedule

Classification	<i>Rate</i>
Analyst I	\$150 - \$200
Analyst II	\$200 - \$260
Professional	\$260 - \$300
Senior Professional I	\$305 - \$365
Senior Professional II	\$380 - \$440
Senior Technical Support	\$130 - \$320
Technical Support	\$120 - \$190
Support Staff	\$100 - \$170

Effective through June 30, 2025

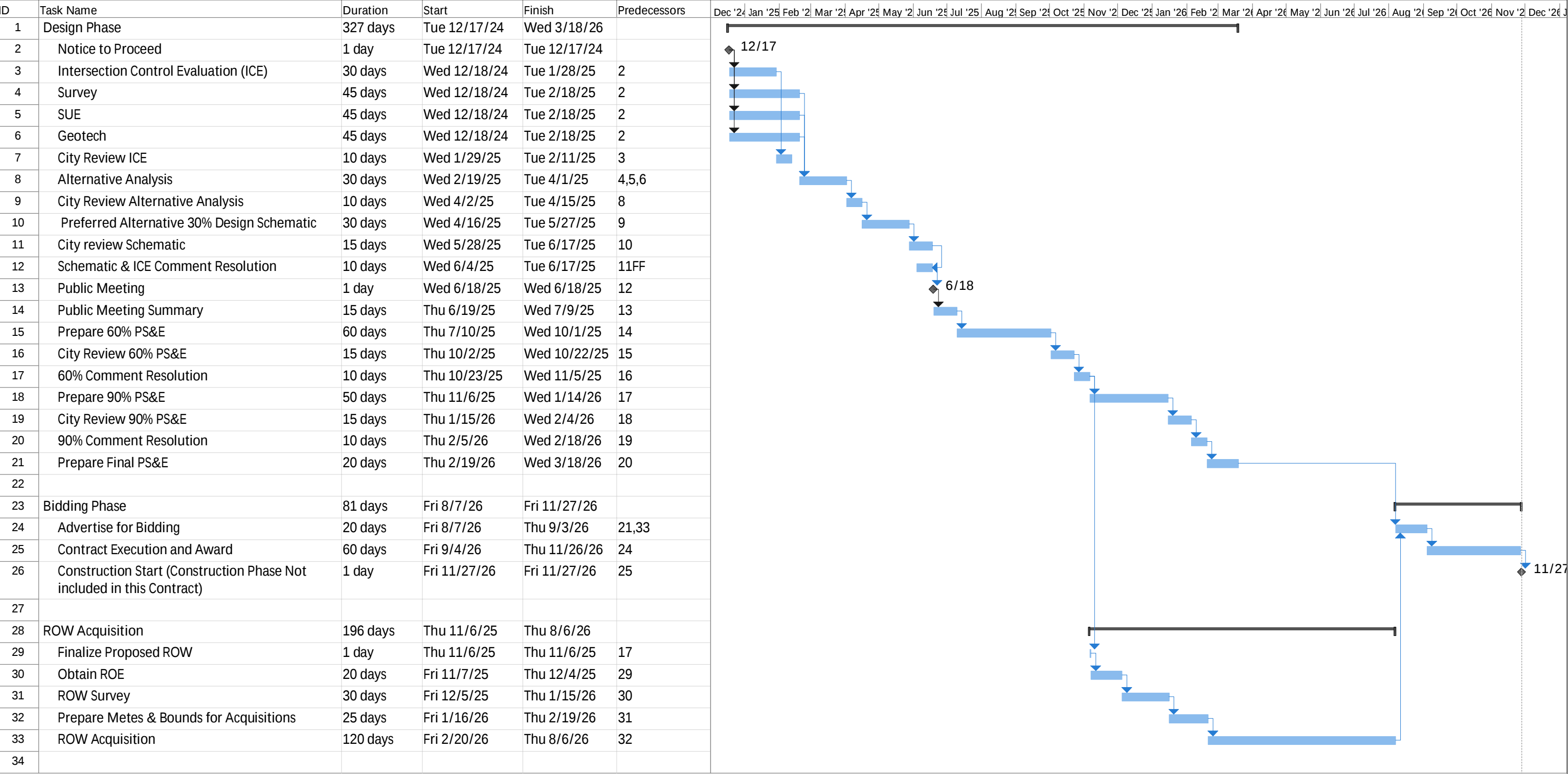
Subject to annual adjustment thereafter

Internal Reimbursable Expenses will be charged at 5% of Labor Billings

External Reimbursable Expenses will be charged at 15% mark-up, or per the Contract

Sub-Consultants will be billed per the Contract

Featherline Road
Project Design Schedule



Project: Featherline Road
Date: Wed 11/13/24

Task

Split

Milestone

Summary

Project Summary

Inactive Task

Inactive Milestone

Inactive Summary

Manual Task

Duration-only

Manual Summary Rollup

Manual Summary

Start-only

Finish-only

External Tasks

External Milestone

Deadline

Progress

Manual Progress

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