11/16/2017

TO: ACHD Commissioners, ACHD Director, ACHD Deputy Directors

FROM: David Rader, Project Manager

SUBJECT: Ten Mile Rd, Ustick Rd to McMillan Rd ACHD Project No. 518001 Consultant Agreement Approval Consent Agenda Item: December, 6th 2017 Commission Meeting

Executive Summary
Staff is requesting consent and signature of the Professional Services Agreement with Civil Survey for a contract amount of $501,930.75, an amount which requires approval by the Commission. This project will design the widening of Ten Mile Road to 5 lanes between Ustick Road and McMillan Road, the replacement of bridges #2044 and #1103, and the installation of Pedestrian Hybrid Beacons at Tesino Drive and the Five Mile Creek Pathway.

Facts & Findings
Ten Mile road is within the limits of both the City of Meridian and Ada County. Ten Mile Road between Ustick Road and McMillan Road is a two lane road with bridge crossings at the Creason Lateral and Five Mile Creek. The road is classified as a residential mobility arterial, and is being widened to 5 lanes in accordance with the 2016 Capital Improvements Plan.

Fiscal Implications
There is $496,000 in the FY18 budget for the design of this project. The negotiated design costs including roadway design, bridge design, traffic signal design, geotechnical investigation, surveying, and contingencies will amount to $501,930.75. A separate contract in the amount of $108,073.25 for surveying and geotechnical investigation was executed so the work could be completed before winter.

- Roadway Design $314,121.50
- Traffic Signal Design $36,470
- Bridge Design $43,266
- Geotechnical Investigation $34,964.25
- Survey $73,109
Policy Implications
This project was approved as part of the FY18 Budget and the 2018-2022 Integrated Five Year Work Plan, adopted by the Commission on September 27, 2017.

Alternatives
1. Approve and sign the consultant agreement for design and proceed with the project.
2. Do not approve the consultant agreement for design and provide staff with further direction.

Recommendation
Staff recommends Alternative 1: Approve and sign the consultant agreement for design and proceed with the project.

cc: Project File
    Dyan Bevins
    Ricardo Calderon
    Christine Race
SCOPE OF WORK
Ten Mile Road, Ustick to McMillan
ACHD Project No. 518001
ACHD GIS No. RD202-32
November 20, 2017

This project includes preparation of plans and specifications to reconstruct approximately 4,800 feet of Ten Mile Road from the Ustick Road intersection north to the intersection of McMillan Road. Both the Ustick and McMillan Road intersections have previously been improved and widened. Neither intersection is included in this project.

The project will widen Ten Mile Road from two lanes to five lanes with curb/gutter/sidewalk and bike lanes in accordance with the 2016 CIP. Five-foot detached sidewalks will be constructed on each side of the street. New pedestrian hybrid beacons will be installed at both the Tesino Drive intersection and just south of Vicenza Way, where the Five Mile Creek pathway intersects Ten Mile Road. The project will also include the replacement of bridge #2044 over Five Mile Creek with a stiff leg concrete structure and the replacement of bridge #1103 over the Creason Lateral with a shallow box structure.

Ten Mile Road is identified as a Residential Arterial.

This project is currently programmed for right-of-way in FY 2019 and construction in FY 2021.

Civil Survey Consultants, herein called the Consultant, will design the project and supply documentation in accordance with this scope of work, the current version of the ISPWC specifications with the current ISPWC updates as amended by ACHD adopted supplements, including the ACHD Supplemental Traffic Provisions.
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Ten Mile Road, Ustick to McMillan
Scope of Work

General
Consistent with professional standard of care, Consultant shall provide management, coordination and direction to project team and sub-consultants to complete project deliverables on time and within budget.

Definitions and Acronyms

404 Permit – Section 404 of the Clean Water Act which addresses permits for dredged or fill material in Waters of the US, administered by the U.S. Army Corps of Engineers
AASHTO – American Association of State Highway and Transportation Officials
ACHD – Ada County Highway District
ADT – Average Daily Traffic count
Agreement Administrator – The ACHD Project manager is responsible for administering the contract and overseeing the design.
CAC – Community Advisory Committee
CAD – Computer Aided Design
COMPASS – Community Planning Association of SW Idaho
CPM – Critical Path Method
CSS – Context Sensitive Solutions
FHWA – Federal Highway Administration
EPA – Environmental Protection Agency
GIS – Geographic Information System
GSI – Green Stormwater Infrastructure
ITD - Idaho Transportation Department
Man-Hour – Hour(s) of time required for an individual to complete an itemized task designated by the project scope of work. Personnel functions shall be rounded up to the nearest Man-Hour.
MOU – Memorandum of Understanding
NEPA – National Environmental Policy Act
PIM – Public Involvement Meeting
PMG – Project Management Guide
PSA – Professional Service Agreement, or Professional Agreement. This is a written agreement or contract between ACHD and the Prime Consultant
Prime Consultant – The firm contracting with ACHD, for the performance of work prescribed in the contract.
Project Manager – (Also abbreviated as “PM”). The ACHD point of contact for the project.
ROW – Right of Way
SHPO – State Historic Preservation Office
Study Area – The expanded area of influence generated by the project area.
Sub-Consultant – Who the prime Consultant sublets part(s) of the design contract.
SOW – Scope of Work
SWPPP – Storm Water Pollution Prevention Plan

Implied Terms
In order to avoid confusing repetition of expressions in this Scope of Work, it is provided that whenever anything is to be required, directed, specified, authorized, furnished, given, designated, permitted, reserved, approved, disapproved, accepted, or rejected, it shall be understood as if the expression were followed by the words “by the Project Manager” or “to the Project Manager.”

Whenever anything is to be performed, designed, computed, calculated, analyzed, determined, evaluated, surveyed, obtained, established, contacted, estimated, investigated, prepared, developed, delivered, collected, and/or recorded, it shall be understood as if the expression were followed by the words “by the Consultant (either prime or sub)” or “to the Consultant (either prime or sub).”

Coordination of Scope of Work
The Scope of Work and Professional Services Agreement are essential parts of the project, and a requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete package.

Checkpoints or milestones have been established at various stages that require approval of specific project information. These checkpoints are:

30% Design Review
75% Design Review
95% Design Review
99% Design (Right-of-Way Plans)
100% Bid Documents

1.0 GENERAL PROVISIONS

1.1 Progress Meetings

Products and Deliverables
- Kick-off Meeting
- Progress Meetings and Agendas
- Draft Meeting Summary
- Final Meeting Summary
ACHD Responsibilities

- Schedule and provide facility for progress meetings
- Review and approve summary and action items

Assumptions

- The project is expected to be twelve (12) months in duration
- Six (6) progress meetings during the duration of the project. Additional meetings must be approved by ACHD
- ACHD will review and approve summary within one week
- Action items will be completed by due date

1.2 Project Administration

Products and Deliverables

- Time-scaled logic diagram (Gantt Chart), updated monthly and submitted with monthly invoicing
- Monthly Project Status Report (updated monthly and included with invoice)
- Earned Value Report
- Invoice (PDF emailed to invoices@achdidaho.org)

ACHD Responsibilities

- Review and approve Schedule, Invoice and Monthly Project Status Report

Assumptions

1.3 ACHD Standards

All projects shall follow the ACHD Policy Manual. Refer to section 3004 ROADWAY DESIGN STANDARDS. Where both minimum and desirable values are provided, every reasonable effort shall be made to achieve the desirable standards. Any design exception must be approved by ACHD in writing. The roadway widths adopted by ACHD and identified on the Master Street Map shall serve as the basis for beginning evaluation. If the proposed width or other standard is less than ACHD standards, it must be documented, justified, and approved by ACHD.

Additionally, the following standards shall be used:

- ACHD Livable Street Design Guide
- Ada County Master Streets Map
- ACHD Complete Streets Policy
- AASHTO Guide for Flexibility in Highway Design
Ten Mile Road, Ustick to McMillan
Scope of Work

- Roundabout Application Guidelines for Ada County
- ACHD CAD Standards
- Green Stormwater Infrastructure (GSI) Guidance Manual

2.0 PUBLIC INVOLVEMENT

2.1 Outreach

Products and Deliverables
- Design-Owner contact meetings and notes
- Identify community groups and key stakeholders
- Technical or special topic meetings
- Exhibits for website
- Meeting materials, presentation, handouts, boards, and other meeting materials as needed
- Agendas for all meetings
- Draft meeting summary from all meetings
- Final meeting summary from all meetings

ACHD Responsibilities
- Zero (0) CAC meetings are assumed for costing purposes.
- ACHD will be responsible for costs associated with the rental of meeting rooms, tables, chairs, and any refreshments.
- ACHD will be responsible for printing and postage of notification materials and follow-up letters.

Assumptions
- Six (6) contact meetings are assumed and may include multiple stakeholders

2.2 Public Meetings

Products and Deliverables
- Information as requested for Project Information Sheet
- Preparation for meetings including pre-PIM
- Meeting materials (display boards, etc.)
- Plan view display board converted to 11”x17” PDF(s)
- Set up and take down for meetings
- Meeting Summary including a summary of comments received/submitted
Assumptions

- Two (2) public meetings will be held. One meeting will be held at the 30% design level. The second meeting will be held at the 75% design level.
- ACHD project manager will attend public meetings
- ACHD will write and design all meeting notification materials
- ACHD will provide the following meeting materials: << written boards, sign in sheets, handouts>>
- ACHD will provide sandwich boards
- ACHD will recruit staff from ACHD to support public meetings
- ACHD will advertise meetings
- Two (2) Consultant representatives will attend the public meetings and Pre-PIM meetings
- The public meetings are assumed to be three (3) hours long
- Two (2) consultant provided display boards and color roll plots of the project for the first meeting at 30% completion. Two (2) consultant provided display boards and color roll plots will be provided for the second meeting at 75% completion.
- ACHD will be responsible for securing the meeting facilities
- ACHD will be responsible for costs associated with the rental of meeting rooms, tables, chairs, and any refreshments
- ACHD will be responsible for printing and postage of notification materials and follow-up letters

3.0 SURVEYING & MAPPING – Included in Previous SOW

4.0 30% DESIGN

The minimum information required on a 30% design review plans shall show existing facilities/features (including utilities) and location and general design features of planned facilities including existing and proposed right of way. This includes but is not limited to line and grade and other related items that will affect project design. These plans should be 30% complete at minimum.

4.1 Geotechnical Investigation – Included in Previous SOW

4.2 Hydraulic/Stormwater Design

All project designs must comply with the Clean Water Act, NPDES requirements and the currently approved ACHD Section 8000 Stormwater policy and Section 8200 Stormwater Design Manual. All projects should use the GSI Guidance Manual to determine the feasibility of GSI for the project area.
Ten Mile Road, Ustick to McMillan  
Scope of Work

Products and Deliverables
- Draft Stormwater Report
- Final Stormwater Report
- Site visit with irrigation districts

ACHD Responsibilities
- Review and Comment
- Review and approve all contact with irrigation districts

Assumptions
- Detailed drawings will not be prepared

4.3 Bridge Alternate Study

Products and Deliverables
- Contact reports for meetings with Irrigation Districts
- Bridge Alternate Study – Not Required

ACHD Responsibilities
- Review and Comment

Assumptions
- Bridge #2044 over Five Mile Creek will be replaced with a stiff-leg structure
- Detailed drawings will not be prepared
- One (1) meeting with irrigation district
- A HEC RAS model will be prepared for the bridge crossing on Five Mile Creek to determine the impact replacing the structure will have on the floodplain/floodway and establish solutions if a “Net Rise” occurs
- One (1) meeting with City of Meridian
- A Flood Plain Development Permit and No-Rise Certification will be required by the City of Meridian.

4.4 Traffic – Not included in this Project

4.5 30% Design Submittal
This task includes performing an internal review of all deliverables and preparing the submittal documents. The Consultant will deliver one paper and one PDF copy.
Products and Deliverables

- All deliverables will be uploaded to ACHD’s PWA site
  - PWA File Folder: 13 30 Percent Design-CPD20/Design Submittal-CPD20.20
- Roll Plot (1 sheet with typical section)
  - Including utilities in color (use ITD standards) – At Utility Coordinator’s Direction
- Request for design exceptions
- 30% Cost Estimate on ACHD provided spreadsheet
- 30% Cost Estimate entered into B2W per ACHD User Guide
- 30% ROW Required Square Footage (ROW, TE, PE) in Excel
- PDFs of all deliverables
- All native files including CAD files (insert and bind all x-refs into one CAD file)

ACHD Responsibilities

- Transmitting plan sets to project team.
- Perform internal review of all deliverables

Assumptions

- The engineer will adhere to the ISPWC item number process, as well as the Special Provisions (SP), and ACHD’s Standard Special Provisions (SSP)
- Both the Ten Mile/Ustick and Ten Mile/McMillan intersections are built-out, with no changes proposed for this project. Therefore, the alignment of Ten Mile Road is basically defined. Only one concept, with roadway centered on existing centerline/section-line is proposed for this project.

4.6 Review Meeting

Products and Deliverables

- Review Meeting Notes
- Maintain Comment/Response Matrix

ACHD Responsibilities

- Schedule and Host Meeting
- Provide Comments – One (1) week prior to the meeting

Assumptions

- ACHD will complete the review within two (2) weeks of receiving the 30% Design Submittal
5.0 75% DESIGN
The minimum information required on a 75% design review plans shall show existing facilities/features and location and general design features of planned facilities. This includes but is not limited to line and grade and other related items that will affect project design. These plans should be at 75% complete at minimum.

Products and Deliverables
- Utility conflict evaluation
- Potholing. This scope of work assumes twenty (40) potholes will be required. Additional potholing will be provided as a supplemental service.
- Pothole location map – to be reviewed and approved by ACHD Utility Coordinator prior to potholing commencing.

5.1 75% Design Submittal
This task includes performing an internal review of all deliverables and preparing the submittal documents. Deliverable shall be in PDF format.

ACHD Responsibilities
- Transmitting plan sets to irrigation districts, utility companies, and local agencies.
- Perform internal review of all deliverables

Products and Deliverables
- All deliverables will be uploaded to ACHD’s PWA site
  - PWA File Folder: 14 75 Percent Design-CPD90/Preliminary Design Submittal-CPD90.10
- Title Sheet
- Typical Sections (1 sheet)
- Roadway Plan and Profile Sheets – Including stormwater/irrigation profiles and pothole information (12 sheets)
  - Include measurement on roadway plans from structure to new ROW line if less than 20’
- Removal Plans (12 sheets)
- Structural Plans
  - Preliminary situation and layout, stiff-leg structure, footings, wing and head walls over Five Mile Creek (6 sheets – S&L, Bridge Plan/Elev., Details, Wingwalls (2 sheets), Reinforcing Details)
  - Preliminary situation and layout, shallow box structure, wing and head walls over Creason Lateral (2 sheets)
- Signal Plans (4 sheets)
Ten Mile Road, Ustick to McMillan
Scope of Work

- New PHB at Tesino Drive (2 sheets)
- New PHB at Five Mile Creek Pathway
- Consult with Utility Coordinator regarding power supply
- Signal Interconnect & Lighting Plans – Including ITS (6 sheets)
  - Consult with Utility Coordinator regarding power supply
- Signing and Striping Sheets (6 sheets)
- General Construction Staging/Phasing Plans/Utility Phasing Plans (6 sheets)
- Advanced Construction Signing (2 sheets)
- Two (2) sets of 11”x17” 75% design plans (58 sheets)
- 75% Color Utility Plans (use ITD standards) *(Not Required)*
- 75% Cost Estimate on ACHD provided spreadsheet
- 75% Cost Estimate entered into B2W per ACHD User Guide
- Cultural/Historic/Threatened & Endangered Species Memo
- 75% ROW Required Square Footage (ROW, TE, PE) by Parcel (ROW Requirements Table) – on plans and Excel
- List including property ID, existing fence type, height & top elevation and proposed fence type, height & top elevation.
- PDFs of all deliverables – PDF plans need to be to scale at 11x17.
- All native files including CAD files (insert and bind all x-refs into one CAD file)

Assumptions

- The engineer will adhere to the ISPWC item number process, as well as the Special Provisions (SP), and ACHD’s Standard Special Provisions (SSP)
- Separate Removal sheets will be prepared for this project
- The Cultural/Historic/Threatened & Endangered Species Memo is for Steps 1-3 of EPA Appendix E-Historic Property Screening Process. If further work is required following consultation with SHPO, the additional work will be scoped at that time.

5.2 75% Review Meeting

ACHD will provide comments and the review plan sets to the Consultant prior to the meeting. The Consultant shall compile comments on the Comment/Response Matrix and send draft to Project Manager prior to the meeting. The Consultant will attend the 75% Design Review meeting to discuss review comments. ACHD will make final decisions for conflicting review comments. Consultant will complete the Comment/Response Matrix after the 75% Design Review and submit to ACHD.

The Consultant will attend a plan-in-hand field review meeting and prepare notes summarizing field review comments and decisions made.
Ten Mile Road, Ustick to McMillan
Scope of Work

Products and Deliverables
- Review Meeting Notes
- Maintain Comment/Response Matrix
- Plan-in-Hand Field Review Meeting Notes

ACHD Responsibilities
- Schedule and Host plan in hand meeting
- Schedule and Host Meeting
- Provide Comments – One (1) week prior to the meeting

Assumptions
- ACHD will complete the review within two weeks of receiving the 75% Design Submittal

6.0 95% DESIGN

6.1 95% Design Submittal
This task includes performing an internal review of all deliverables and preparing the submittal documents. Deliverable shall be in PDF or electronic format. ACHD will be responsible for transmitting plan sets to irrigation districts, utility companies, and local agencies.

Products and Deliverables
- All deliverables will be uploaded to ACHD’s PWA site
  - PWA File Folder: 15 95 Percent Design-CPD50/Draft Final Design Submittal-CPD50.10
- Title Sheet
- Typical Sections (1 sheet)
- Roadway Plan and Profile Sheets (12 sheets)
- Removal Sheets (12 sheets)
- Approach/Driveway Profile Sheets (2 sheets)
- Detail Sheets (4 sheets)
- Stormwater Plan and Profile Sheets (4 sheets)
  - Including pond revegetation as outlined in the Stormwater Management Pond Revegetation Guidance Manual
- Irrigation Profiles (shown on P/P sheets)
- Structure Plans
  - Five Mile Creek (6 sheets)
  - Creason Lateral (2 sheets)
- Signal Plans (6 sheets)
  - New PHB at Tesino Drive (2 sheets)
Ten Mile Road, Ustick to McMillan
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- New PHB at Five Mile Creek Pathway (2 sheets)
- PHB Detail Sheets (2 sheets)
- Consult with Utility Coordinator regarding power supply

- Signal Interconnect and Lighting Plans (6 sheets)
  - Interconnect and Lighting Detail Sheet (1 sheet)
  - Consult with Utility Coordinator regarding power supply

- Signing and Striping Sheets (6 sheets)
- General Construction Staging/Phasing Plans/Utility Phasing Plans (6 sheets)
- Advanced Construction Signing (2 sheets)
- Sediment and Erosion Control Plans —or— SWPPP (1 sheet)
- 95% Color Utility Plans (use ITD standards) *(Not Required)*
- Special Provisions
- 95% Cost Estimate on ACHD provided spreadsheet
- 95% Cost Estimate entered into B2W per ACHD User Guide
- 95% Color ROW Plans (31 Sheets)
  - Include measurement from structure to new ROW line if less than 20’
- 95% ROW Required Square Footage (ROW, TE, PE) by Parcel (ROW Requirements Table) — on plans and Excel
- List including property ID, existing fence type, height & top elevation and proposed fence type, height & top elevation.
- List on the plans, in table form, all monuments found within the project limits, identifying Station and Offset from control line and monument type found (I.C. 55-1613).
- List on the plans, in table form, all calibration points, including northing, easting, elevation and monument type.
- Show on the plan sheets, the locations of TBM’s and provide TBM information (Station, Offset, Northing, Easting, Elevation and monument type).
- 95% Stormwater Report (including calculations & Runoff Reduction Feasibility Analysis Documentation From as required)
- 75% design Plans and estimate with ACHD comments
- 75% Comment/Response Matrix
- Two (2) sets of 11”x17” 95% design plans (80 sheets)
- PDFs of all deliverables – PDF plans need to be to scale at 11x17.
- All native files including CAD (insert and bind all x-refs into one CAD file)

Assumptions
The engineer will adhere to the ISPWC item number process, as well as the Special Provisions (SP), and ACHD’s Standard Special Provisions (SSP)
6.2 95% Review Meeting

Products and Deliverables
- Review Meeting notes
- Maintain Comment/Response Matrix

ACHD Responsibilities
- Schedule and Host Meeting
- Provide Comments – One (1) week prior to the meeting

Assumptions
- ACHD will complete the review within two weeks of receiving the 95% Design Submittal

7.0 99% DESIGN

The Consultant will incorporate comments from the 95% Design review meeting into the 99% Design submittal documents and perform an internal review. The plans will be finalized for right-of-way acquisition and legal descriptions will be written.

The consultant will provide support during right of way acquisition and make changes to construction and right of way plans as requested by ACHD Project Manager.

7.1 Finalize Plans for Right-of-Way Acquisition

Products and Deliverables
- All deliverables will be uploaded to ACHD’s PWA site
  - *PWA File Folder: 16 99 Percent Designl-CPD65*
- One (1) set of 11”x17” construction plans (80 sheets) signed and sealed by a Professional Engineer registered in the State of Idaho
- Two (2) sets of 11”x17”color right-of-way plans (31 sheets), signed and sealed by a Professional Land Surveyor registered in the State of Idaho; *attach signing and striping plans to ROW plans.*
  - Parcels which have acquisition(s), ROW plans shall show the station and offset of each angle point of the acquisition, including angle points along the existing ROW and at the intersections with property lines of the affected property.
- 99% ROW Required Square Footage (ROW, TE, PE) by Parcel (ROW Requirements Table) – on plans and Excel
  - Include column for subproject numbers in ROW table if applicable.
- PDF of construction plans (77 sheets) signed and sealed by a Professional Engineer registered in the State of Idaho – PDF plans need to be to scale at 11x17.
Ten Mile Road, Ustick to McMillan
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- PDF of color right-of-way plans (31 sheets), signed and sealed by a Professional Land Surveyor registered in the State of Idaho – PDF plans need to be to scale at 11x17.
- One PDF set of legal descriptions with exhibits for takes and permanent easements, signed and sealed by a Professional Land Surveyor registered in the State of Idaho.
- ACHD ROW Checklist
- One PDF set of cross sections to include elevation changes at each driveway.
- PDF Special Provisions, signed and sealed by a Professional Engineer registered in the State of Idaho.
- Completed “ACHD Supplied SWPPP Information”
- List including property ID, existing fence type, height & top elevation and proposed fence type, height & top elevation.
- List on the plans, in table form, all monuments found within the project limits, identifying Station and Offset from control line and monument type found (I.C. 55-1613).
- List on the plans, in table form, all calibration points, including northing, easting, elevation and monument type.
- Show on the plan sheets, the locations of TBM’s and provide TBM information (Station, Offset, Northing, Easting, Elevation and monument type).
- 99% Cost Estimate on ACHD provided spreadsheet
- 99% Cost Estimate entered into B2W per ACHD User Guide
- 95% Design plans and reports with ACHD comments
- 95% Comment/Response Matrix
- 95% Right-of-Way Plans with ACHD comments
- All final permits (404 Joint Application for Permit)
- PDFs of all deliverables
- All native files including CAD (insert and bind all x-refs into one CAD file)

ACHD Responsibilities

Assumptions

- The engineer will adhere to the ISPWC item number process, as well as the Special Provisions (SP), and ACHD’s Standard Special Provisions (SSP)

8.0 100% BID DOCUMENTS
The Consultant will incorporate changes made during right-of-way negotiations into the plans.

Products and Deliverables

- All deliverables will be uploaded to ACHD’s PWA site
  - PWA File Folder: 17 100 Percent Design-CPD55/100 Percent Plans-CPD55.10
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- 100% Plans (22” x 34”) – PDF, signed and sealed by a Professional Engineer registered in the State of Idaho
- 100% Specifications – PDF, signed and sealed by a Professional Engineer registered in the State of Idaho
  - Review utility contact information and durations with Utility Coordinator prior to submittal
  - Include a description of work to be completed by the utility company under contact information
- 100% Cost Estimate on ACHD provided spreadsheet
- 100% Cost Estimate entered into B2W per ACHD User Guide
- Completed “ACHD Supplied SWPPP Information”
- Cross Sections – PDF
- Shallow Injection Well Inventory Forms (for any subsurface drainage feature)
- Other <<LIST HERE>>
- Vectorized PDF of 100% Plans – PDF plans need to be to scale at 22x34.
- All native files including CAD (insert and bind all x-refs into one CAD file)

ACHD Responsibilities

Assumptions

- 100% Bid Documents are not included in this contract and will be included in a separate contract when required
- The engineer will adhere to the ISPWC item number process, as well as the Special Provisions (SP), and ACHD’s Standard Special Provisions (SSP)

9.0 CONSTRUCTION ENGINEERING
This task addresses engineering support during the construction phases of the project and the record of survey which occurs after construction is complete. ACHD will utilize the engineer on a time and materials basis. This work is not included in this contract and will be included in a separate contract if required.
Log of Revisions:

02/29/2012
Deliverables:
- Earned Value Report
- Cost Estimate on ACHD provided spreadsheet uploaded to ACHD’s PWA site and meeting quality control standard as provided by ACHD
- ROW Cost Estimate (ROW, PE, TE)
- PDFs and 11”x17” for 30% - 99%
- PDFs, 11”x17”, and full size for 100% documents
- CAD files with each deliverable
- PIM quality exhibit (11”x17” PDF) updated and submitted with each deliverable
- 75% and after – Utility Phasing Plans
- At 75% Design - Utility conflict evaluation
- At 75% Design - Pothole location map – to be reviewed and approved by ACHD Utility Coordinator prior to potholing commencing.

05/14/2012
- Changed task numbers to match ITD’s

11/16/12
- Deleted ROW plans and legal descriptions from 95% submittal
- Clarification of ROW deliverables at 30%, 75%, 95% & 99%
- Added record of survey to 9.0 Construction Engineering

06/12/13
- Clarification of ROW deliverables at 75%, 95% & 99%
- Changed task numbers to be sequential
- Added color utility plans to 30%, 75% & 95% submittals

8/15/13
- Added more detail to CAD file submittal

9/23/13
- Added signing and striping sheets to ROW plans at 99% submittal

01/22/14
- Added Shallow Injection Well Inventory Form to 100% deliverables

06/25/14
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Scope of Work

- Uploads to PWA site and location under deliverables

07/09/14
- Revisions to 100% SPs related to Utilities

10/02/14
- Square footage of existing pavement area within project limits
  [This was added at the request of Planning so they can track dollars related to improving the existing pavement – PM will provide this number to the Pavement Management Engineer.]

01/16/15

02/02/15
- Added pothole surveying under 3.0. Added potholing under 5.0. Added support during ROW under 7.0.

03/10/15
- Added deliverable to 75%, 95% & 99% - list by parcel of existing and proposed fences.

08/13/15
- Added ROW plans (back in) to 95% submittal

09/30/15
- Added ROW Checklist to 99% submittal

10/28/15
- Added Completed “ACHD Supplied SWPPP Information” to 99% and 100% submittals

11/06/15
- Added Cultural/Historic Memo [OPTIONAL-Required for all projects needed a 404 Permit or NPDES CGP] to 30% and 75% submittals {Only one required}

01/26/16
- Miscellaneous clarifications

07/13/16
- Clarifications on 100% submittal
- Miscellaneous clarifications/cleanup
08/01/16
- Revisions to Chapter 3.0 Location Surveying and Mapping, 6.0 95% Design, and 7.0 99% Design provided by Design & Survey group to provide detail and clarify requirements.

08/24/16
- Added an excel version of the ROW Requirements Table to the deliverables

09/12/16
- Added *Cost Estimate entered into B2W per ACHD User Guide* for all deliverables
SCOPE OF WORK

Ten Mile Road, Ustick to McMillan
ACHD Project Nos. 518001.002 and 518001.003
November 20, 2017

This project includes preparation of plans and specifications to reconstruct approximately 4,800 feet of Ten Mile Road from the Ustick Road intersection north to the intersection of McMillan Road. Both the Ustick and McMillan Road intersections have previously been improved and widened. Neither intersection is included in this project.

The project will widen Ten Mile Road from two lanes to five lanes with curb/gutter/sidewalk and bike lanes in accordance with the 2016 CIP. Five-foot detached sidewalks will be constructed on each side of the street. New pedestrian hybrid beacons will be installed at both the Tesino Drive intersection and just south of Vicenza Way, where the Five Mile Creek pathway intersects Ten Mile Road. The project will also include the replacement of bridge #2044 over Five Mile Creek with a stiff leg concrete structure and the replacement of bridge #1103 over the Creason Lateral with a shallow box structure.

Linder Road is identified as a Residential Arterial.

This project is currently programmed for right-of-way in FY 2019 and construction in FY 2021.

Elite Edge Engineers, herein called the Sub-Consultant, will design the project and supply documentation in accordance with this scope of work, the current version of the ISPWC specifications with the current ISPWC updates as amended by ACHD adopted supplements, including the ACHD Supplemental Traffic Provisions.
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General
Consistent with professional standard of care, Consultant shall provide management, coordination and direction to project team and sub-consultants to complete project deliverables on time and within budget.

Definitions and Acronyms

**404 Permit** – Section 404 of the Clean Water Act which addresses permits for dredged or fill material in Waters of the US, administered by the U.S. Army Corps of Engineers

**AASHTO** – American Association of State Highway and Transportation Officials

**ACHD** – Ada County Highway District

**ADT** – Average Daily Traffic count

**Agreement Administrator** – The ACHD Project manager is responsible for administering the contract and overseeing the design.

**CAC** – Community Advisory Committee

**CAD** – Computer Aided Design

**COMPASS** – Community Planning Association of SW Idaho

**CPM** – Critical Path Method

**CSS** – Context Sensitive Solutions

**FHWA** – Federal Highway Administration

**EPA** – Environmental Protection Agency

**GIS** – Geographic Information System

**GSI** – Green Stormwater Infrastructure


**ITD** - Idaho Transportation Department

**Man-Hour** – Hour(s) of time required for an individual to complete an itemized task designated by the project scope of work. Personnel functions shall be rounded up to the nearest Man-Hour.

**MOU** – Memorandum of Understanding

**NEPA** – National Environmental Policy Act

**PIM** – Public Involvement Meeting

**PMG** – Project Management Guide

**PSA** – Professional Service Agreement, or Professional Agreement. This is a written agreement or contract between ACHD and the Prime Consultant

**Prime Consultant** – The firm contracting with ACHD, for the performance of work prescribed in the contract.

**Project Manager** – (Also abbreviated as “PM”). The ACHD point of contact for the project.

**ROW** – Right of Way

**SHPO** – State Historic Preservation Office

**Study Area** – The expanded area of influence generated by the project area.

**Sub-Consultant** – Who the prime Consultant sublets part(s) of the design contract.

**SOW** – Scope of Work
SWPPP – Storm Water Pollution Prevention Plan

**Implied Terms**
In order to avoid confusing repetition of expressions in this Scope of Work, it is provided that whenever anything is to be required, directed, specified, authorized, furnished, given, designated, permitted, reserved, approved, disapproved, accepted, or rejected, it shall be understood as if the expression were followed by the words “by the Project Manager” or “to the Project Manager”.

Whenever anything is to be performed, designed, computed, calculated, analyzed, determined, evaluated, surveyed, obtained, established, contacted, estimated, investigated, prepared, developed, delivered, collected, and/or recorded, it shall be understood as if the expression were followed by the words “by the Consultant (either prime or sub)” or “to the Consultant (either prime or sub).”

**Coordination of Scope of Work**
The Scope of Work and Professional Services Agreement are essential parts of the project, and a requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete package.

Checkpoints or milestones have been established at various stages that require approval of specific project information. These checkpoints are:

30% Design Review
75% Design Review
95% Design Review
99% Design (Right-of-Way Plans)
100% Bid Documents

**1.0 GENERAL PROVISIONS**

**1.1 Progress Meetings**

**Products and Deliverables**
- Kick-off Meeting
- Progress Meetings

**Assumptions**
- The project is expected to be twelve (12) months in duration
- Two (2) progress meetings during the duration of the project. Additional meetings must be approved by Civil Survey Consultants.
- Action items will be completed by due date
1.2 Project Administration

Products and Deliverables
- Invoice (PDF emailed to invoices@achdidaho.org)

1.3 ACHD Standards

All projects shall follow the ACHD Policy Manual. Refer to section 3004 ROADWAY DESIGN STANDARDS. Where both minimum and desirable values are provided, every reasonable effort shall be made to achieve the desirable standards. Any design exception must be approved by ACHD in writing. The roadway widths adopted by ACHD and identified on the Master Street Map shall serve as the basis for beginning evaluation. If the proposed width or other standard is less than ACHD standards, it must be documented, justified, and approved by ACHD.

Additionally, the following standards shall be used:
- ACHD Livable Street Design Guide
- Ada County Master Streets Map
- ACHD Complete Streets Policy
- AASHTO Guide for Flexibility in Highway Design
- Roundabout Application Guidelines for Ada County
- ACHD CAD Standards
- Green Stormwater Infrastructure (GSI) Guidance Manual

2.0 PUBLIC INVOLVEMENT (NOT INCLUDED)

3.0 SURVEYING & MAPPING (NOT INCLUDED)

4.0 30% DESIGN

The minimum information required on a 30% design review plans shall show existing facilities/features (including utilities) and location and general design features of planned facilities including existing and proposed right of way. This includes but is not limited to line and grade and other related items that will affect project design. These plans should be 30% complete at minimum.
Ten Mile Road, Ustick to McMillan
Scope of Work

4.1 Geotechnical Investigation – Not Included

4.2 Hydraulic/Stormwater Design – Not Included

4.3 Bridge Alternate Study

Products and Deliverables
• Bridge Alternate Study – Not Required

Assumptions
• Bridge #2044 over Five Mile Creek will be replaced with a stiff-leg structure
• Detailed drawings will not be prepared
• One (1) meeting with irrigation district
• Review results of floodplain/floodway analysis

4.4 Traffic – Not included

4.5 30% Design Submittal – Not Included

4.6 Review Meeting – Not Included

5.0 75% DESIGN
The minimum information required on a 75% design review plans shall show existing facilities/features and location and general design features of planned facilities. This includes but is not limited to line and grade and other related items that will affect project design. These plans should be at 75% complete at minimum.

5.1 75% Design Submittal
This task includes performing an internal review of all deliverables and preparing the submittal documents. Deliverable shall be in PDF format.

Civil Survey Consultants Responsibilities
• Transmitting plan sets to ACHD.
• Perform internal review of all deliverables

Products and Deliverables
• Structural Plans
  o Preliminary situation and layout, stiff-leg structure, footings, wing and head walls over Five Mile Creek (6 sheets – S&L, Bridge Plan/Elev., Details, Wingwalls (2 sheets), Reinforcing Details)
Ten Mile Road, Ustick to McMillan
Scope of Work

- Preliminary situation and layout, shallow box structure, wing and head walls over Creason Lateral (2 sheets)
  - 75% Cost Estimate for structure items on ACHD provided spreadsheet
  - PDFs of all deliverables – PDF plans need to be to scale at 11x17.
  - All native files including CAD files (insert and bind all x-refs into one CAD file)

Assumptions
- The engineer will adhere to the ISPWC item number process, as well as the Special Provisions (SP), and ACHD’s Standard Special Provisions (SSP)

5.2 75% Review Meeting

Civil Survey Consultants will provide comments and the review plan sets to the Sub-Consultant prior to the meeting. The Sub-Consultant shall compile comments related to the structure plans or estimate on the Comment/Response Matrix and send draft to Civil Survey Consultants prior to the meeting. The Sub-Consultant will attend the 75% Design Review meeting to discuss review comments. ACHD will make final decisions for conflicting review comments. Sub-Consultant will complete the Comment/Response Matrix for the structure comments after the 75% Design Review and submit to Civil Survey Consultants.

The Sub-Consultant will attend a plan-in-hand field review meeting.

Products and Deliverables
- Provide input to Comment/Response Matrix

Assumptions
- ACHD will complete the review within two weeks of receiving the 75% Design Submittal

6.0 95% DESIGN

6.1 95% Design Submittal

This task includes performing an internal review of all deliverables and preparing the submittal documents. Deliverable shall be in PDF or electronic format. ACHD will be responsible for transmitting plan sets to irrigation districts, utility companies, and local agencies.

Products and Deliverables
- Structure Plans
  - Five Mile Creek (6 sheets)
  - Creason Lateral (2 sheets)
- 95% Cost Estimate for structure items on ACHD provided spreadsheet
- 95% Special Provisions for structural bid items
• PDFs of all deliverables – PDF plans need to be to scale at 11x17.
• All native files including CAD (insert and bind all x-refs into one CAD file)

Assumptions
The engineer will adhere to the ISPWC item number process, as well as the Special Provisions (SP), and ACHD’s Standard Special Provisions (SSP)

6.2 95% Review Meeting

Products and Deliverables
• Provide input to Comment/Response Matrix

Assumptions
• ACHD will complete the review within two weeks of receiving the 95% Design Submittal

7.0 99% DESIGN

The Sub-Consultant will incorporate comments from the 95% Design review meeting into the 99% Design submittal documents and perform an internal review. The plans will be finalized for right-of-way acquisition and legal descriptions will be written.

The sub-consultant will provide support during right of way acquisition and make changes to construction plans as requested by Civil Survey Consultants Project Manager.

7.1 Finalize Plans for Right-of-Way Acquisition

Products and Deliverables
• One (1) set of 11”x17” construction plans (8 sheets) signed and sealed by a Professional Engineer registered in the State of Idaho
• PDF of construction plans (8 sheets) signed and sealed by a Professional Engineer registered in the State of Idaho – PDF plans need to be to scale at 11x17.
• 99% Cost Estimate for structural bid items on ACHD provided spreadsheet
• 99% Special Provisions for structural bid items
• PDFs of all deliverables
• All native files including CAD (insert and bind all x-refs into one CAD file)

Assumptions
• The engineer will adhere to the ISPWC item number process, as well as the Special Provisions (SP), and ACHD’s Standard Special Provisions (SSP)
8.0 100% BID DOCUMENTS (NOT INCLUDED)

This task addresses engineering and design support to incorporate changes made during right-of-way negotiations into the plans. This work is not included in this contract and will be included in a supplemental as additional services, or as a separate contract.

Assumptions

- 100% Bid Documents are not included in this contract and will be included in a separate contract when required
- The engineer will adhere to the ISPWC item number process, as well as the Special Provisions (SP), and ACHD’s Standard Special Provisions (SSP)

9.0 CONSTRUCTION ENGINEERING (NOT INCLUDED)

This task addresses engineering support during the construction phases of the project and the record of survey which occurs after construction is complete. ACHD will utilize the engineer on a time and materials basis. This work is not included in this contract and will be included in a separate contract if required.
November 20, 2017

Mr. Matt Hart, P.E.
Project Manager
Civil Survey Consultants, Inc. (CSC)
2893 S. Meridian Rd.
Meridian, ID 83642

Subject: Scope of Work to Design the PHB Traffic Signals, Traffic Signal Interconnect, Illumination, Signing & Striping and Traffic Control (Advanced and Phasing)

Dear Matt:

Please find below our Scope of Work and fee proposal for our professional services. Thank you for the opportunity and we look forward to working together on this project. Please review this information and contact our office with any questions.

The following represents Precision Engineering’s understanding of the tasks required to execute this Scope of Work (Task numbering correlates with the numbering identified in the Standard ACHD Scope of Work):

SCOPE OF WORK

TASK 1.1 - PROJECT MANAGEMENT
Coordination and Meetings: In addition to the regularly scheduled Kick-off, 75% and 95% design review meetings we have assumed two (2) additional meetings. We will meet with on an as-needed basis to discuss project status and any outstanding issues, and coordinate regarding data requests and project procedures.

Project Management: We will prepare and submit monthly invoices to be provided to CSC to be included in the project monthly invoices to ACHD. We will provide general project oversight and administration. The deliverable for this task is:

- Invoice (PDF emailed to Project Manager)

TASK 5 – 75% DESIGN

Infield Equipment Inventory
Precision will conduct an infield signal equipment inventory to determine the existing traffic signal interconnect and street lighting equipment installed in the existing controller cabinets; and to field verify existing junction boxes and conduit that can be utilized to intercept the proposed conduit near Ustick and McMillan.

Pedestrian Hybrid Beacon (PHB) Design
Precision will develop the design and initial layout for two (2) PHBs along Ten Mile Road within the project limits: One at Tesino Drive and the second located at Vicenza Way. Plans will be drafted showing new combination signal and luminaire poles with PHB signal heads, controller, pedestrian signal heads and AGPS push button assemblies, LED luminaires, mast arm signs and other items as necessary.
Traffic Signal Interconnect Design
Precision will provide the design to install traffic signal interconnect design along Ten Mile Road from Ustick Road to McMillan Road. This will include the conduit and cabling layout and splice/termination details.

Corridor Illumination Design
Precision will determine the required light pole locations within the project limits to achieve the design illuminance level using AGI32. The design illuminance level will be based on ACHD and City of Meridian Standards and AASHTO guidelines. This task also includes determining the lighting circuitry and calculating voltage drops for the roadway lighting. Illumination design and bid items will be included on the traffic signal interconnect plans. Our scope assumes the cabling will be installed in underground conduit and power will be obtained from existing traffic signal service pedestals located at intersections of Ustick, McMillan and proposed PHB pedestals.

Signing and Striping Plans
Precision will develop the signing and striping design and plan sheets for the proposed widening of Ten Mile Road.

Traffic Control Plans (Advances Construction Signing and Phasing Plans)
Precision will Develop the advanced construction signing and construction phasing plans sheets for the proposed widening of Ten Mile Road.

Cost Estimate
Precision will calculate the estimated quantities and prepare an engineer’s construction cost estimate for the traffic items. The unit costs will be based on ACHD Average Bid Unit Pricing.

Internal Review and Prepare 75% Design Review Submittal
Precision will perform an internal review of the traffic related items 75% review package (plans and construction cost estimate) prior to submitting for 75% Design Review. We will perform revisions from the internal review and prepare the plans and construction cost estimate for the formal 75% Design Review submittal.

75% Design Deliverables:
PDF set of 22"x34" and 11"x17" plan sets to be provided to CSC for final submission to ACHD, hard copies will not be provided.

75% Design Review Submittal (24 total Plan Sheets):
Tesino Drive PHB Signal Plan Sheets (2 Sheets)
Vicenza Way PHB Signal Plan Sheets (2 Sheets)
Interconnect and Illumination Plan Sheets (6 Sheets)
Signing and Striping Plans (Sheets 6)
Advanced Construction Signing Sheets (2 Sheets)
Construction Staging/Phasing Plans (Sheets 6)
75% ACHD Cost Estimate Spreadsheet in Excel format
75% Native Cad files

75% Design Review Meeting
Precision Engineering will attend the 75% Design Review Meeting and summarize traffic item review comments obtained from the meeting and plan marked-ups.
TASK 6 – 95% DESIGN
Precision will revise the design and plan sheets as necessary to address the 75% Design Review comments, prepare the additional detail sheets and special provision; and prepare the 95% documents for submittal.

95% Design Deliverables:
PDF set of 22"x34" and 11"x17" plan sets to be provided to CSC for final submission to ACHD, hard copies will not be provided.

95% Design Review Submittal (27 total Plan Sheets):
Tesino Drive PHB Signal Plan Sheets (2 Sheets)
Vicenza Way PHB Signal Plan Sheets (2 Sheets)
Tesino and Vicenza PHB Signal Detail Sheets (2 Sheets)
Interconnect and Illumination Plan Sheets (6 Sheets)
Interconnect and Illumination Detail Sheet (1 Sheet)
Signing and Striping Plans (Sheets 6)
Advanced Construction Signing Sheets (2 Sheets)
Construction Staging/Phasing Plans (Sheets 6)
ACHD Cost Estimate Spreadsheet in Excel format
Traffic related Special Provisions and Use Tax Table
95% ACHD Cost Estimate Spreadsheet in Excel format
75% Design Review Comment Matrix
95% Native Cad files

95% Design Review Meeting
Precision Engineering will attend the 95% Design Review Meeting and summarize traffic item review comments obtained from the meeting and plan marked-ups.

TASK 7 – 99% DESIGN
Precision will revise the design, traffic plan sheets, special provisions and estimate as necessary to address the 95% Design Review comments and prepare the 99% documents for submittal.

99% Design Deliverables:
PDF set of 22"x34" and 11"x17" plan sets to be provided to CSC for final submission to ACHD, hard copies will not be provided.

99% Design Review Submittal (27 total Plan Sheets):
Stamped & Signed Tesino Drive PHB Signal Plan Sheets (2 Sheets)
Stamped & Signed Vicenza Way PHB Signal Plan Sheets (2 Sheets)
Stamped & Signed Tesino and Vicenza PHB Signal Detail Sheets (2 Sheets)
Stamped & Signed Interconnect and Illumination Plan Sheets (6 Sheets)
Stamped & Signed Interconnect and Illumination Detail Sheet (1 Sheet)
Stamped & Signed Signing and Striping Plans (Sheets 6)
Stamped & Signed Advanced Construction Signing Sheets (2 Sheets)
Construction Staging/Phasing Plans (Sheets 6)
Set of Traffic related Special Provisions and Use Tax Table
99% ACHD Cost Estimate Spreadsheet in Excel format
95% Design Review Comment Matrix
All native files including CAD (insert and bind all x-refs into one CAD file) files provided to CSC for inclusion to ACHD.

Assumptions
All items will conform to ACHD design and traffic signal equipment standards. Street light LED fixtures will be mounted on the signal poles at Edna Street, where the allowable clearances are maintained from overhead power lines. The design will include provisions for the OptiCom emergency vehicle detection system, which will be furnished by the Meridian Fire Department for Contractor installation.

Our scope of work is limited to the traffic signal, traffic signal interconnect and intersection illumination design signing and striping plans and traffic control.

CSC will furnish CAD files of the existing topography, which will include existing above- and below-ground utilities. CSC will also furnish CAD files of the proposed roadway improvements, which will include the proposed utility relocations (if any) and proposed lane configurations. CSC will perform all utility coordination, except for the coordination of the power service drop for the traffic signal and illumination design. CSC roadway plan sheets will include any trenching (asphalt repair) or sidewalk repair bid items required for the traffic signal, interconnect or illumination improvements, locations of repair items will be provided to CSC by Precision.

It is assumed CSC will compile the project Special Provisions and Engineer's Cost Estimate in ACHD and B2W format. Precision to provide Special Provisions to the traffic items included in this scope of work along with the corresponding Engineer's Cost Estimate in Excel format, for inclusion in ACHD's final Specs and Estimate.

Scheduled Milestones
Our scheduled milestones will correspond directly with CSC's project schedule.

Again, thank you for the opportunity it is always greatly appreciated.

Sincerely,

Joel Grounds, P.E., PTOE
Principal Engineer
SCOPE OF WORK

Ten Mile Road, Ustick Rd/McMillan Road
Cultural Resources Screening

October 23, 2017

The Ada County Highway District (ACHD) has proposed a project to widen 4,800 feet of Ten Mile Road from the Ustick Road intersection north to the intersection of McMillan Road. Both the Ustick and McMillan Road intersections have been previously improved and widened. Neither intersections is included in this project.

The project will widen Ten Mile Road from two lanes to five lanes with curb/gutter/sidewalk and bike lanes in accordance with the 2016 CIP. Five-foot detached sidewalks will be constructed on each side of the street. New pedestrian hybrid beacons will be installed at both the Tesino Drive intersection and just south of Vicenza Way, where the Five Mile Creek pathway intersects Ten Mile Road. The project will also include the replacement of bridge #2044 over Five Mile Creek with a stiff leg concrete structure and the replacement of bridge #1103 over the Creason Lateral with a shallow box structure.

It is possible that the project may require installation of storm water controls and issuance of a Construction General Permit (CGP) as required by the Environmental Protection Agency (EPA). Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account the effects of Federal undertakings, such as the issuance of this permit, on historic properties that are either listed, or eligible for listing, to the National Register of Historic Places.

To address any issues relating to historic properties in connection with the issuance of this permit, EPA has developed the screening process that enables construction operators to appropriately consider the potential impacts, if any, of their installation of storm water controls on historic properties and to determine whether actions can be taken, if applicable, to mitigate any such impacts. Although the coverages of individual construction sites under this permit does not constitute separate Federal undertakings, the screening process in this appendix provides an appropriate site-specific means of addressing historic property issues in connection with EPA’s issuance of the permit. The screen process is outlined in Appendix E – Historic Property Screen Process of the CGP.

Cultural Resources Screening Process
**Step 1** – Determine if there will be ground-disturbance. The screening process is initiated if ground-disturbance will occur with the project. If ground disturbance occurs, TAG Historical Research and Consulting (TAG) will undertake Steps 2 and 3 as outlined in the EPA in Appendix E – Historic Property Screen Process from the CGP.

**Step 2** – Identify prior surveys or evaluations conducted on the site.

This step consists of a literature review at Idaho State Historic Preservation (SHPO) offices to identify previous investigations in the project area and, if needed, additional research in the records of the Ada County Assessor records to determine construction dates for properties in the project area. If properties over 50 years of age are identified during the county records search, a reconnaissance-level, survey will be undertaken to identify potentially eligible NRHP properties. No documentation of historic properties will occur with this step.

If no historic resources are identified, TAG will complete a memo report summarizing all cultural resource work, including the literature review and reconnaissance-level survey. This memo report will satisfy the requirements as listed in EPA–Appendix E.

**Step 3** - If historic resources potentially eligible to the NRHP are located during Step 2, TAG will draft a memo report providing a list of potentially eligible sites within the project area and evaluate the project effects on the identified resources.

**Deliverables**

- Memo report documenting findings

**Assumptions**

This scope of work is for Steps 1-3 of EPA Appendix E-Historic Property Screening Process. If further work is required following consultation with SHPO, the additional work will be scoped at that time.

**Additional Services**

The following items are additional services available if required. A scope of work and level of effort will be defined if and when these services are identified as required for this project.

- An intensive-level survey which includes formal documentation of historic resources.

  Archaeological and Historic Resources Survey Report (AHSR) prepared according to the standards of the Idaho SHPO as revised December 2015. The AHSR identifies field methods survey results, and provides recommendations of project effects. After client and SHPO review, the AHSR will be revised if needed,
**Project Personnel**

Barbara Perry Bauer (MA, Public History) qualifies as a preservation professional under 36 CFR61, Appendix A of the Code of Federal Regulations. With more than twenty-five years of experience as a field historian, she is a principal in TAG and specializes in cultural resource documentation, community and local history, and historic preservation. She has been a project manager on numerous cultural resources inventory surveys for Section 106 compliance.

Elizabeth Jacox (BA, History) has worked in the history field since 1981 and has been a research associate with TAG since 1995. She has served as project manager for historic site surveys in Twin Falls County, Nampa, Pocatello and Weiser and has participated in research and historic building surveys for several transportation projects. She qualifies as a preservation professional under 36 CFR61, Appendix A, of the Code of Federal Regulations.

**EQUAL EMPLOYMENT OPPORTUNITY STATEMENT**

*TAG Historical Research and Consulting (abn /The Arrowrock Group, Inc.)* does not discriminate against any worker, employee, application subcontractor, or any member of the public because of race, color, gender, age, national origin, or handicap/disability, nor otherwise commits unfair employment practices.

*TAG Historical Research and Consulting (abn /The Arrowrock Group, Inc.)* agrees to comply with all federal, state and local equal opportunity requirements.
Est. Man Hours

Screening Step 2 – Literature Review, county records research and reconnaissance-level survey

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*Hourly rate is a loaded rate and includes overhead.*
## Ada County Highway District

### Two Mile Road - Ustick Rd to McMillan Rd

#### ACHD Project No. 518001; GIS No. RD202-32 - Roadway

ACHD Project No. 518001.001; GIS No. RD202-32.01 - Aquinas Drive PHB

ACHD Project No. 518001.002; GIS No. RD202-32.02 - Five Mile Creek Pathway PHB

ACHD Project No. 518001.003; GIS No. RD202-32.03 - Replace Bridge #2044 over Five Mile Creek

ACHD Project No. 518001.004; GIS No. RD202-32.04 - Replace Bridge #1103 over Creason Lateral

Civil Survey Consultants

---

### Design Services Man-Hour and Fee Estimate - Revised November 15, 2017

<table>
<thead>
<tr>
<th>Task Description</th>
<th>Total Hours</th>
<th>Rate</th>
<th>Total $</th>
</tr>
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<tbody>
<tr>
<td>Survey Crew</td>
<td>0</td>
<td>165.00 $</td>
<td>- $</td>
</tr>
<tr>
<td>Design/Survey Technician</td>
<td>430</td>
<td>100.00 $</td>
<td>43,000.00 $</td>
</tr>
<tr>
<td>Design Engineer</td>
<td>712</td>
<td>115.00 $</td>
<td>81,880.00 $</td>
</tr>
<tr>
<td>Project Engineer</td>
<td>715</td>
<td>132.00 $</td>
<td>94,380.00 $</td>
</tr>
<tr>
<td>Chief Of Surveys</td>
<td>132</td>
<td>145.00 $</td>
<td>19,140.00 $</td>
</tr>
<tr>
<td>Signal/Traffic Design (Precision Engineering)</td>
<td>68,650.00</td>
<td></td>
<td>68,650.00 $</td>
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<tr>
<td>Misc. Printing Cost</td>
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### Labor Subtotal

2,139 hours

260,150.00 $

### Direct Subtotal

133,707.50 $

### Total Estimated Design Fees

393,857.50 $

### Field No. & Sub-Number

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<th>Total $</th>
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<td>Misc. Printing Cost</td>
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**Total Hours:** 2,139 hours

**Total $:** 260,150.00 $

**Field No. & Sub-Number:**

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**Total Hours:** 2,139 hours

**Total $:** 260,150.00 $

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<td>200.00 $</td>
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</table>

**Total Hours:** 2,139 hours

**Total $:** 260,150.00 $

### Invoices

6 12

### Earned Value Reports

6 6

### Monthly Project Status Reports

6 6

### Project Coordination with ACHD PM and Sub-Consultants

24 24 48

### Progress Meetings (6 Meetings, as needed)

12 12

---

### Task Description | Project No. | Classification Hours | Rate | Total $ |
<table>
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<tr>
<th></th>
<th></th>
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<tbody>
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<td>Misc. Printing Cost</td>
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<td>200.00 $</td>
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</table>

**Total Hours:** 2,139 hours

**Total $:** 260,150.00 $

### Project Manager

150 145.00 $             21,750.00 $
A. SUMMARY ESTIMATED MAN-DAY COSTS*

<table>
<thead>
<tr>
<th>Man-Hours</th>
<th>Hourly Rate</th>
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<tr>
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<tr>
<td>6</td>
<td>13 @</td>
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<td><strong>TOTAL</strong></td>
<td><strong>338</strong></td>
<td><strong>$42,277.50</strong></td>
</tr>
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B. PAYROLL, FRINGE BENEFIT COSTS & OVERHEAD

TOTAL RAW LABOR COST

\[ \text{TOTAL RAW LABOR COST} \times \text{APPROVED MULTIPLIER} = \text{NET FEES} \]

\[ 42,277.50 \times 0.000 = 0.00 \]

C. NET FEES

TOTAL RAW LABOR & OVERHEAD

\[ \text{TOTAL RAW LABOR & OVERHEAD} \times \text{NET FEE} \]

\[ 42,277.50 \times 0\% = 0.00 \]

D. OUT-OF-POCKET EXPENSE SUMMARY

<table>
<thead>
<tr>
<th>Estimated Amount</th>
<th>Unit Cost</th>
<th>Estimated Expense</th>
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</thead>
<tbody>
<tr>
<td>1 PRINTING</td>
<td>48 @</td>
<td>$0.50</td>
</tr>
<tr>
<td>2 TRAVEL</td>
<td>175 @</td>
<td>$0.540</td>
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<td>3 PER DIEM</td>
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<tr>
<td>4 @</td>
<td>@</td>
<td>$0.00</td>
</tr>
<tr>
<td>5 @</td>
<td>@</td>
<td>$0.00</td>
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<tr>
<td>6 @</td>
<td>@</td>
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<td>7 @</td>
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E. SUBCONSULTANTS*

<table>
<thead>
<tr>
<th>Estimated Amount</th>
<th>Unit Cost</th>
<th>Estimated Expense</th>
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<tbody>
<tr>
<td>1</td>
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<td>7</td>
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<td><strong>TOTAL</strong></td>
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TOTAL (A-E) $42,396

* See attached Subconsultant’s Summary
** Per the “FEDERAL PER DIEM RATES”
## Fee Est Ten Mile-Ustick to McMillan 11_20_17.xls\EEE Costs

### Labor (Loaded Rate)

<table>
<thead>
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<th>Task</th>
<th>Principle Engineer</th>
<th>Senior Engineer</th>
<th>Staff Engineer</th>
<th>Staff Engineer</th>
<th>CAD</th>
<th>Admin</th>
<th>Total Hours</th>
<th>Elite Edge Engineers Labor Cost</th>
<th>Printing</th>
<th>Travel</th>
<th>Per Diem</th>
<th>Total Expenses</th>
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<tr>
<td><strong>1.0 PROJECT ADMINISTRATION</strong></td>
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<td>10</td>
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</tr>
<tr>
<td>a. Site Visit with irrigation district</td>
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<tr>
<td>a. Site Visit with irrigation district</td>
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<td><strong>4.5 30% Design Submittal - NOT INCLUDED</strong></td>
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### Expenses

- **Printing**: $0
- **Travel**: $0
- **Per Diem**: $0
- **Total Expenses**: $0

### Total

- **Elite Edge Engineers Labor Cost**: $2,930
- **Printing**: $0
- **Travel**: $0
- **Per Diem**: $0
- **Total Expenses**: $2,930

---

**Notes**

- All tasks include a 12% contingency.
- All fees are subject to a 20% markup.

**Contact**

ELITE EDGE ENGINEERS
208.429.1960
F 208.429.1999

---

The above table and text are self-contained and do not require any external references or images.

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**Fee Est Ten Mile-Ustick to McMillan 11_20_17.xls\EEE Costs**

Page 1

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Ten Mile - Ustick to McMillan
Project Nos. 518001.002 & 518001.003
November 20, 2017
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**Total Fee**

$42,396
## BUDGET

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## BUDGET

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| TOTAL BUDGET   | $ | 68,650.00 |