TO: ACHD Commissioners, Director, and Deputy Directors

FROM: Ryan Cutler, Project Manager

DATE: April 12, 2013

SUBJECT: Fairview Ave & Cole Rd
ACHD Project No. 313035
Consultant Agreement Approval
For April 24, 2013 ACHD Commission Meeting

Executive Summary:
Staff is requesting consent and signature of the Professional Services Agreement (PSA) with URS Corporation for the contract amount of $373,536, which requires approval by the Commission. This project will widen the existing intersection at Fairview Ave and Cole Rd to include dual left hand turn lanes and dedicated right hand turn lanes on each leg.

Background:
The Fairview Ave and Cole Rd intersection was originally designed in the early 2000’s to be constructed as a 5x5 intersection, but was put on hold and never completed. URS Corporation was the original consulting firm contracted with ACHD to work on the plans. Based on prior knowledge and experience with this intersection, URS Corporation was able to use some of the information from the original design in the current scope of work to provide cost savings to the district.

In the current Five Year Work Plan (FY13-17) the Fairview Ave and Cole Rd intersection is listed as priority 25 of 160 and has been recommended for design to improve traffic operations and safety. The project will include curb, gutter, sidewalk, bike lanes, and stormwater facilities.

Fiscal Implications:
The project design agreement is for $373,536. A 1st Quarter budget adjustment was completed that moved $150,000 into FY13 to start the design of this project. Design will be completed in FY14 using the existing programmed budget.

Policy Implications:
None

Alternatives:
1) Approve and sign the consultant agreement for design and proceed with the project, or
2) Disapprove 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.

c:  Dorrell Hansen, Capital Projects Supervisor
    File
AGREEMENT TO PROVIDE PROFESSIONAL SERVICES

Fairview Ave and Cole Rd
ACHD Project No. 313035
ACHD GIS # IN213-01

ADA COUNTY HIGHWAY DISTRICT, a body politic and corporate of the State of Idaho, (hereinafter “ACHD”) and URS Energy & Construction, Inc. (hereinafter “Consultant”) hereby enters into this Agreement to perform the professional services required in connection with the professional services, as outlined in the attached Scope of Work ("Project").

AGREEMENT

Consultant agrees to perform the professional services to complete the Scope of Work for an amount not to exceed $373,556.00. Any costs over and above this amount shall be the total responsibility of CONSULTANT.

Consultant shall develop roadway plans for the Project. The plans shall include grading, paving, drainage, right-of-way details, and other information in accordance with the provisions contained within the attached Scope of Work.

Consultant will perform any additional work as desired by ACHD by means of a written Supplemental Agreement signed by a person authorized by ACHD to execute such Supplemental Agreement. Such authorization shall consist of written approval by either the ACHD Director or Board of Commissioners; provided that ACHD Board of Commissioners must approve any Supplemental Agreement that is in excess of thirty-five percent (35%) of the original Agreement amount.

1. THE CONSULTANT, ACTING THROUGH ACHD:

   A. Consultant shall make someone available to attend a utility markers field meeting prior to the beginning of the field survey. Consultant shall contact the ACHD Project Manager if Digline locate marks are not present in the field at the time of the project survey;

   B. Consultant shall pothole at locations where underground utilities are expected to be in conflict, if needed. Consultant shall coordinate potholing of utility lines with the ACHD Project Manager and Utility Coordinator;

   C. Consultant shall, in coordination with ACHD’s Utility Coordinator, make contact with all utility companies having services within the limits of the Project for purposes of coordinating necessary adjustments to utility facilities;

   D. Consultant shall contact other local governmental, irrigation, and drainage entities to obtain their input with regard to any permits, approvals, and related design criteria to be incorporated into the Project plans; and

   E. Consultant shall meet with affected landowners and other interested parties to provide Project briefings and respond to inquiries regarding the Project.

   F. Consultant shall not be responsible for the performance failure of ACHD’s construction contractors. Consultant shall not be responsible for the means and methods used by ACHD’s construction contractors, including any subcontractor or other third-party traffic control and construction site security.

2. TIME OF COMMENCEMENT AND COMPLETION OF CONTRACT

Consultant shall commence work under the terms and conditions of this Agreement within ten (10) calendar days from the date of receiving a "Notice to Proceed" from ACHD and prosecution of the work by the Consultant shall continue diligently thereafter to completion as hereinafter delineated. Consultant shall have the Scope of Work completed on or before 5/1/2014. This date is predicated on Consultant receiving the Notice to Proceed on 4/25/2013. Should Consultant fail to receive said Notice to Proceed on the date specified, the
completion date shall be adjusted to allow for the difference between the proposed Notice to Proceed date and the actual date the Notice to Proceed is given.

ACHD shall have the right to reduce the monies due to Consultant, commencing on the agreed completion date and continuing until all required work is complete, by a sum negotiated between the parties on a case-by-case basis. The Scope of Work shall be considered to be complete when all submittals required under Section 3106 of ACHD’s Policy Manual are made, except for revisions arising from right-of-way acquisition.

Time is of the essence of this Agreement. No waiver by either party of strict and timely performance of the other shall constitute a waiver of any subsequent breach or default.

3. DELAYS AND EXTENSIONS

A. Extensions of time for completion may be granted by ACHD for the following reasons:

(1) Delays in major portions of the work caused by excessive time required to process submittal; delays caused by ACHD or its other consultants/contractors; or additional work order, in writing, by ACHD.

(2) Any delay caused by a Force Majeure Event. A “Force Majeure Event” means an event due to any cause or causes beyond the reasonable control of Consultant.

(3) In the event of a delay as defined in item (1) or (2), the Consultant shall receive an equitable adjustment extending Consultant’s time for performance for such services sufficient to overcome the effects of the delay.

B. Extensions of time will not be granted for the following reasons:

(1) Underestimating complexity of the work by Consultant resulting in failure of Consultant to timely complete this Agreement under the terms and conditions provided herein;

(2) Redoing portions of the project by Consultant that were inadequately performed by Consultant and subsequently rejected by ACHD.

4. TERMINATION

A. ACHD may terminate or abandon this Agreement at any time, with or without cause, upon giving written notice of termination hereof as follows:

(1) Evidence that actual progress is behind the progress indicated in the work schedule given to ACHD by Consultant.

(2) Submission of substandard work by Consultant, its agent, sub-consultants or employees;

(3) Material breach of any of the other terms and conditions of this Agreement by Consultant;

(4) At the convenience of ACHD for any reason;

(5) Lack of adequate funding to complete this Agreement.

Prior to giving notice of termination for cause set forth in paragraphs 1 and 2 above, ACHD shall notify Consultant in writing, of any such deficiencies or default in the performance of the terms and conditions of this Agreement by Consultant, and Consultant shall have ten (10) calendar days after receipt of such notice to correct or remedy such default or begin the corrective measures.

Should Consultant fail to remedy its default or begin the corrective measures within said 10-day period, or for the reasons set forth above, ACHD shall have the option to immediately terminate this Agreement. Upon receipt of notice of termination by ACHD, Consultant shall immediately discontinue all work and services, unless directed otherwise, and shall transfer all documents pertaining to the work and services covered under the terms and conditions of this Agreement to ACHD. Upon receipt by ACHD of said
documents, payment shall be made to Consultant for that work performed to date that has been approved by ACHD.

Should any deficiencies or default occur by Consultant for the reasons set forth above, and result in any damages to ACHD, ACHD shall be entitled to proceed against Consultant for any damages it has sustained as a result of such breach by Consultant.

B. Consultant may terminate the Agreement only for failure to pay or breach of the Agreement by ACHD after the entry of a court order or decision finding a breach.

5. NONAPPROPRIATION.

If ACHD is precluded from committing to make certain future payments due hereunder, this paragraph will apply. ACHD has appropriated the funds necessary to make all payments when due under the Agreement during ACHD’s initial fiscal period during the Agreement term. ACHD agrees that in each succeeding fiscal year during the term of this Agreement, ACHD will take all necessary steps to make a timely appropriation of funds in order to pay the payments due hereunder during that period, subject to the annual appropriations limitation imposed upon ACHD under state law. In the event that despite the best efforts of ACHD, ACHD determines that funds for any amounts under this Agreement will not be available or cannot be obtained during any succeeding fiscal period, ACHD may terminate this Agreement prior to the commencement of such succeeding fiscal period by giving written notice to CONTRACTOR/CONSULTANT/ VENDOR of such determination at least 60 days prior to the first day of such succeeding period for which an appropriation has not been made by ACHD.

6. DISPUTES

Should any dispute arise as to the adequacy of performance, the occurrence of abnormal conditions affecting the work, or the enforcement or interpretation of any provision under this Agreement, such dispute shall be referred to the Director of Ada County Highway District, or his duly authorized representative(s), and a member of senior management of the Consultant for resolution. ACHD and Consultant shall attempt in good faith to settle by negotiation and compromise any dispute arising out of or relating to this Agreement, or the breach thereof (the “Dispute”). If a resolution of the Dispute cannot be mutually agreed upon than either party may file a civil action in Idaho state court to resolve the Dispute.

7. OWNERSHIP OF DOCUMENTS

All material delivered by Consultant in conjunction with the preparation of the plans shall become the property of ACHD without any restrictions or limitations with respect to their further use thereof. All documents or materials prepared for ACHD shall not be distributed by Consultant, sub-consultants, their agents, representatives or employees to any third party without the express written consent of ACHD. Use of these documents on any other project, without written verification or adaptation by Consultant for the specific purpose intended, will be at ACHD’s sole risk and shall be without liability or legal exposure to Consultant. ACHD shall indemnify and hold harmless Consultant from all claims, damages, losses, and expenses, including attorney's fees arising out of or resulting from the said use of such documents.

8. INDEMNITY

Consultant agrees to indemnify, defend, and hold harmless ACHD for damages from any and all claims, demands, or actions as a result or consequence of any and all negligent acts, errors, or omissions by Consultant or Consultant's agents, employees, or sub-consultants arising from the performance of this Agreement.

Consultant, sub-consultants, their agents or employees shall comply with the standards of ACHD in effect at the time ACHD accepts and approves the final plans; and/or the final payment is made by ACHD to Consultant under the terms and conditions of this Agreement. Consultant shall not be held liable for changes or revisions to the drawings or related documents following the acceptance by ACHD of such documents without Consultant's knowledge and consent. Consultant does hereby further indemnify, save, and hold harmless
ACHD, its agents, personal representatives and assigns, from any and all claims for wage payments, withholding, taxes, or other payments or benefits due to sub-consultants of Consultant. This provision shall not be construed to preclude any remedy that ACHD may have in law or equity.

ACHD agrees to indemnify, defend and hold harmless Consultant for damages from any and all claims and demands or actions as a result or consequence of any and all negligent acts by ACHD or ACHD’s employees arising from this Agreement.

Consultant’s period of liability shall remain in effect for as long as any applicable statute of limitations provided by Idaho law allows. The applicable statute of limitations shall not begin to accrue until the contractor’s warranty period of the constructed Project expires.

Any construction contract that utilizes the Consultant's design work shall include both ACHD and the Consultant as additional insureds on the construction contractor's commercial general liability insurance. ACHD and Consultant will also be included as indemnities in the construction contract indemnity article.

9. INSURANCE

Consultant certifies it is an independent business, along with any sub-consultant retained and hired by Consultant, and shall acquire and maintain comprehensive general liability insurance, having a minimum limit of $100,000 per claim and $500,000 aggregate, and errors and omissions coverage having minimum limits of not less than $250,000. Consultant agrees to provide a certificate of insurance certifying to ACHD that such coverage is in force.

Consultant further agrees to maintain and keep required Workers Compensation Insurance, Unemployment Insurance, and all other insurance required to be maintained under the laws of the State of Idaho.

10. INDEPENDENT CONTRACTOR

Consultant is an independent contractor and is not an employee of ACHD. Consultant acknowledges that this Agreement is not an employment contract and that ACHD is only engaging Consultant to render the Professional Services described herein.

11. NOT AN EMPLOYMENT CONTRACT

Consultant acknowledges that this Agreement is not an employment contract and that ACHD is only engaging Consultant to render the Professional Services described herein.

12. ACKNOWLEDGEMENT OF PROFESSIONAL SERVICE

Consultant warrants that the Professional Services rendered under this Agreement require Consultant to have specialized skill and, or technical training. Consultant covenants that Consultant has the requisite specialized skill or, if Consultant gained Consultant’s ability to render such Professional Services through class or training, that Consultant has met all requirements in said class and, or training course(s), and, if required, Consultant is certified under applicable federal and, or state laws to perform said Professional Services.

13. GENERAL COMPLIANCE WITH LAWS

Consultant shall at all times observe and comply with all Federal, State, and local laws and any and all codes, ordinances, and regulations affecting the work in any manner. Consultant agrees that any recourse to legal action pursuant to this Agreement shall be brought in the Fourth District Court of the State of Idaho situated in Boise, Idaho.

14. NONDISCRIMINATION

A. Nondiscrimination:
   Consultant, with regard to the work performed by them during the term of this Agreement, shall not in any
way discriminate against any employee or applicant for employment; subconsultant, subcontractor, or solicitations for subcontract including procurement of materials and equipment; or any other individual or firm providing or proposing services based on race, color, religion, sex, national origin, age or non-job related handicap, or prior military service or current military status.

B. Solicitations for Subcontracts, including Procurement of Materials and Equipment: In all solicitations, either by bidding or negotiation, made by Consultant for work or services performed under subcontract, including procurement of materials and equipment, each potential subconsultant, subcontractor, or supplier shall be made aware by Consultant of the obligations of this Agreement and to the Civil Rights requirements based on race, color, religion, sex, national origin, age or non-job related handicap, or prior military service or current military status.

15. ENDORSEMENT BY ENGINEER

The Professional Engineer in direct charge of the design shall approve and endorse all plans, specifications, cost summaries, and reports with a professional seal, signature and date. In addition, the legal firm name and address shall be clearly stamped or lettered on the tracing of each sheet of the plans. Any licensing or approvals required by the State of Idaho shall be complied with by all Professional Engineers and Surveyors employed by Consultant.

16. MONTHLY PROGRESS REPORTS

Consultant shall submit to ACHD, in conjunction with its payment request, progress reports of work done on the project with activity updates. This report shall be made not more often than once per month or every 4-week period. The report shall also include any and all pertinent information as to delays or lack of performance on the Project. Additional work, for which Consultant contemplates compensation and/or extensions of time, must be reported in such report with an attached explanation. (Extra work data must be submitted with the Progress Report, or it cannot be used for basis of subsequent extension of time or additional compensation by ACHD.)

17. ATTORNEY FEES

In any suit, action or appeal therefrom to resolve the Dispute or to enforce or interpret the provisions of this Agreement, the prevailing party shall be entitled to recover from the non-prevailing party reasonable expenses including, but not limited to, reasonable attorney fees, account fees and other expert fees and costs.

18. PAYMENTS

Payments properly submitted are due within thirty (30) days of the date of receipt of the Consultant’s invoice. In addition to other requirements of this agreement, the Consultant's monthly submittals shall include the following:

   Invoice - Consultant's invoice shall include the following information:

   - ACHD Project Number
   - Original contract value
   - Value of Supplemental Agreements (if any)
   - Value of previous requests for payment
19. STANDARDS OF CARE

Consultant shall perform the Services in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same locale.

Consultant may rely upon and use in the performance of any services information supplied to it by ACHD without independent verification, and Consultant shall not be responsible for defects in its services attributable to its reliance upon or use of such information.

20. ENTIRE AGREEMENT: MODIFICATION

This Agreement constitutes the entire agreement between the parties hereto, and shall supersede all previous proposals, oral or written negotiations, representations, commitments, and all of the communications between the parties. Any modifications to the Agreement must be in writing and executed by both parties.

21. OPINIONS AND ESTIMATES

Any cost opinions or estimates provided by Consultant shall be on a basis of experience and judgment, but since Consultant has no control over market conditions or bidding procedures, Consultant cannot and does not warrant that bids, ultimate construction cost, or project economics will not vary from these opinions or estimates.
Consultant has read, understands and agrees to the requirements and stipulations set forth herein.

<table>
<thead>
<tr>
<th>URS Energy &amp; Construction, Inc.</th>
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<tr>
<td>Signed By:</td>
</tr>
<tr>
<td>Printed Name: Heidi Carter</td>
</tr>
<tr>
<td>Date:</td>
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</tbody>
</table>

URS Energy & Construction, Inc.
STATE OF IDAHO  )
  ) ss.
CITY OF BOISE  )

On this ___ day of _____, 20___, before me, __________________, a Notary Public in and for said State, personally appeared ________________________, known or identified to me to be the _________ of _____________, the corporation [or Partnership, or Limited Liability Company] that executed the instrument or the person who executed the instrument on behalf of said corporation [or Partnership, or Limited Liability Company], and acknowledged to me that such corporation [or Partnership, or Limited Liability Company] executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

__________________________
Notary Public for the State of Idaho
Residing at _______________________
My Commission Expires: ____________________
ADA COUNTY HIGHWAY DISTRICT

Signed By:

Printed Name: Sara Baker

Date:

ADA COUNTY HIGHWAY DISTRICT

STATE OF IDAHO )
 ) ss.
CITY OF BOISE )

On this _____ day of ______, 20___, before me, Stephanie L. Blake, a Notary Public in and for said State, personally appeared Sara Baker, known or identified to me to be an employee of the Ada County Highway District that executed the said instrument, and acknowledged to me that such Highway District executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

Stephanie L. Blake
Notary Public for the State of Idaho
Residing at Boise, Idaho
My Commission Expires: 3/4/2017

The Ada County Highway District (ACHD) is committed to compliance with Title VI of the Civil Rights Act of 1964 and related regulations and directives. ACHD assures that no person shall on the grounds of race, color, national origin, gender, disability or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any ACHD service, program or activity.
Scope of Work:
See attached SOW
SCOPE OF WORK
Fairview Avenue and Cole Road
ACHD Project No. 313035
ACHD GIS No. IN099
April 10, 2013

This project entails widening the Fairview Avenue and Cole Road intersection to provide capacity improvements for the near and long term, including adding lanes. These additional lanes will include dual left turn lanes and dedicated right turn lanes on all approaches. The existing traffic signal will be modified to serve the widened roadway. The approach limits will be approximately 1,000’ from the center of the intersection on the Fairview Avenue approaches and 800’ on the Cole Road approaches.

This project is currently programmed for right-of-way in FY 2015/2016 and construction in FY 2017.

URS, 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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Fairview Avenue and Cole Road Intersection 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


**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 Information 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
Consultant will prepare an agenda and summary of the kick-off meeting. The meeting summary shall include a list of action items that specify who is responsible for each and the date required for each. Consultant will provide an electronic copy of the draft meeting summary and action items no later than three business days after the meeting and will revise and submit final meeting summary based on ACHD comments.

Attend regularly scheduled progress meetings approximately once a month throughout the duration of the project. Provide an electronic copy of the draft meeting summary and action items no later than three business days after the meeting. Revise and submit final meeting summary based on ACHD comments. Provide an electronic copy of summary and action items no later than three business days after each meeting.

Products and Deliverables
- Kick-off Meeting
Fairview Avenue and Cole Road Intersection Scope of Work

- Monthly 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 10 months in duration
- 12 meetings are assumed and 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**

**1.2.1 Invoices/Project Status**

The Consultant will prepare and submit ACHD’s Monthly Project Status Report form with invoices on a monthly basis. At the beginning of the project, URS will provide a table to ACHD showing the total forecasted costs per month for the project.

- With each monthly invoice, URS will submit an earned value report for major tasks only – project management, 30% design, environmental, 75% design, 95% design, 99% design, and 100% design.

**1.2.2 Schedule**

ACHD will provide a template schedule, which URS will modify as needed to reflect the actual scope tasks. The task activity durations and predecessors will be updated in the ACHD schedule template to create the baseline schedule for this project. Once baseline is established, float within the schedule is only available for use with concurrence from all parties to the Professional Services Agreement.

Consultant will provide project schedule updates monthly to address delays or changes. Acceptance of any schedule shall not relieve Consultant of the responsibilities to adjust labor or work schedules and provide sufficient resources to complete the work within the specified time and meet intermediate milestones. It is understood by ACHD and Consultant that float within the project schedule is not for the exclusive use or benefit of either party, but is a resource available to both parties as needed to meet contract milestones, and the contract completion date.

Submit the schedule and schedule updates which include a comparison to the baseline on a monthly basis. Include a written narrative describing the project schedule status, the critical path and any revisions to the schedule. Provide a corrective action plan if off schedule. Schedule updates may be submitted simultaneously with invoicing.
Activity information shall include activity numbers (consistent with this scope numbering system at a high level), activity descriptions, durations, total float, scheduled or actual start and finish dates, and predecessors/successors.

Clearly show the sequence and interdependence of all activities required for complete performance of all items of work under this scope of work and indicate the critical path.

Activities shall include, but not be limited to, all scope of work sections and their respective subsections. Activities will also include key decision points and resolution of critical scope assumptions including agency meetings. If agreed to by both the ACHD and Consultant, some subsections may be deleted from the schedule with the appropriate budget adjustments.

Describe activities and their respective durations such that the work is readily identifiable and the progress on each activity can be readily measured.

**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 Project Manager and invoices@achdidaho.org)

**ACHD Responsibilities**
- Review and approve Schedule, Invoice and Monthly Project Status Report

### 1.3 ACHD Standards

The Consultant shall have a quality control plan that outlines their quality control procedures and shall include at a minimum a comprehensive independent review prior to the responsible engineer sealing and releasing of final plans, specifications, or reports which assures/validates the following at a minimum:
- Conformance with all contract requirements
- Assurance that all materials and equipment specified in such documents for incorporation into the work are suitable for the purpose intended
- The appearance, organization, technical and grammatical accuracy of such documents
- Verification that such documents have been checked by the drafter, design professional, checkers, and reviewers

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, 2009
- Ada County Master Streets Map, 2010
- ACHD Complete Streets Policy
- AASHTO Guide for Flexibility in Highway Design, 2004

### 2.0 PUBLIC INVOLVEMENT

#### 2.1 Outreach

The Consultant will work with ACHD to identify Community Groups, businesses and other stakeholders. Individuals will initially be contacted by the Consultant and interviewed to gather key issues and project information during the 30% design phase. This information-gathering task will include:
- Key issues and concerns.
- Topics the project needs to address as it proceeds.
- Ideas on how best to engage the public, as well as key stakeholders.

An online survey will be prepared by ACHD and launched on the ACHD website. The survey will make the public aware the project is underway and will allow input from the public on how the intersection could be improved. Consultant will prepare the written survey for use on the ACHD website using Survey Monkey. The Consultant will attend two stakeholder meetings during the conceptual design phase of the project. The stakeholder group may include representatives from the City of Boise, businesses, adjacent property owners, and commuters (including motorists, bicyclists, transit riders, and pedestrians). Meeting materials, agenda, presentation, handouts, boards, etc., will be provided by the Consultant. The Consultant will prepare a summary report and meeting summary.

**Products and Deliverables**

- Design-Owner contact meetings and notes
- Identify community groups and key stakeholders
- Meeting materials, presentation, handouts, boards, and other meeting materials as needed
- Agendas for all meetings
- Written survey for posting on ACHD's website via Survey Monkey
- Summary of comments for the online survey
- Draft meeting summary from all meetings
- Final meeting summary from all meetings
ACHD Responsibilities

- ACHD will distribute the invitation letter to stakeholders. The Consultant will also make personal invitations in person or by phone.
- ACHD project manager, ACHD communications coordinator and two members of the Consultant team will attend all stakeholder meetings.
- Two (2) stakeholder meetings two (2) hours long, including a kickoff field trip 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

- Two (2) stakeholder meetings are assumed and may include multiple stakeholders
- Ten (10) Required contacts

2.2 Public Meetings

The Consultant will participate in two (2) public meetings. The Consultant will do the following for Consultant prepared technical displays:

- Draft displays for review
- Revise for pre-PIM meeting
- Review at pre-PIM meeting in small format and revise as needed before finalizing

The Consultant will prepare the summary of the public meetings and a general follow-up letter for all attendees then submit these documents to ACHD for review. ACHD will finalize and mail the follow-up letter.

The Consultant will attend the pre-PIM approximately two weeks prior to the PIM.

First Public Meeting

The first public meeting will be held before finalizing the 30% design. The Consultant will discuss options that have been identified and present the advantages and disadvantages of each. The Consultant will present the preliminary results of the 30% design. This will include traffic forecasts and results of traffic analyses for each option.

Second Public Meeting

The second public meeting will be held near the end of 75% design. The Consultant will present the information obtained to date, including the preferred option for the intersection improvements. A one hour meeting will be held immediately before the public meeting for landowners directly affected by the project.
Fairview Avenue and Cole Road Intersection Scope of Work

Products and Deliverables
- Information as requested for Project Information Sheet
- Information as requested for Project "Commonly Asked Questions and Answers" for Public Information Meetings (PIM)
- Preparation for meetings including pre-PIM
- Meeting materials (agenda, display boards, etc.)
- Set up and take down for meetings
- Meeting Summary including a summary of comments received/submitted

Assumptions
- Two (2) public meetings will be held
- ACHD project manager will attend public meetings
- ACHD will review and approve all meeting notification materials
- ACHD will provide the following meeting materials:
  - 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
- The public meetings are assumed to be four (4) hours long
- Six (6) consultant provided display boards per meeting
- 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 LOCATION SURVEYING AND MAPPING
All survey and topographic information collected for the original efforts on this project will be reviewed, updated, and used to prepare a current topographic base map and digital terrain model (DTM).

3.1 Property Ownership Map
The Consultant will use the Ada County tax map to verify previously located property lines are correct and show them on the project ownership map. The Consultant will not survey each parcel individually. The Consultant will use the said tax map to update and indentify the properties and the property owner names that will be impacted by this project.

3.2 Right of Entry
Using the tax map and the indentified impacted properties, the Consultant will develop a list of the property owners that will need to be contacted. The Consultant will prepare a letter requesting permission to access their property to gather additional design information for this
project design, as necessary. After ACHD approval the Consultant will send this letter to each owner before any survey work or evaluation work is done on the private property.

### 3.3 Project Control

The Consultant will use the survey control previously identified and verify it with the Ada County web page and coordinate with the ACHD survey department to locate the closest established horizontal and vertical survey control monuments for this project. The Consultant will use that established control and if necessary, move in new control monuments closer to the project, then tie the control monuments to the PLSS corners that are adjacent to this project.

The Consultant will set a minimum of three (3) new monuments within the project limits to be used as survey control for the construction phase of this project. The Consultant will gather horizontal and vertical information on these monuments that will be tied to the project design and show that information on a survey control sheet for this project.

### 3.4 Existing Right-of-Way

The Consultant will research highway plans, records of survey, subdivision plats and property deeds to determine if the existing right-of-way (ROW) originally established by URS during previous work for this project is correct. Any updates to the ROW will be shown on the project base mapping.

### 3.5 Topographic Mapping for Base Map

The Consultant will determine how much of the ground survey of the project area completed previously is still valid. The Consultant will locate all topographic features needed to update and complete a current topographic base map of the project limits. The Consultant will show the location of the curb and gutter, sidewalk, fences, buildings, permanent structures, above ground utility structures and manholes, trees, bushes, ditches, edges of pavement, road signs and road access locations and any additional information needed for the design of this project. The Consultant will update the electronic base map that shows all the surveyed topographic information in a format to be compatible with ACHD's CADD System. The Consultant will include on the Base Map the property lines from the Ada County tax map and the location of the existing roadway rights-of-way along with any found property corners and PLSS corners. Prior to performing this update to the originally completed survey work the Consultant will request ACHD contact Digline for a utility locate request within the project limits, asking them to locate, on the ground, all the utilities lines and who they belong to. The utility location and type of utility will be updated and surveyed as needed during the topographic mapping work. The Consultant will include the location of all utilities above and below the ground on the base map.

**Products and Deliverables**

- Right of Entry letters prepared and delivered to ACHD for review and approval. After ACHD approval, the letters shall be delivered to the property owners by the consultant at least three (3) days before survey activities begin.
- Request for Title Reports (include parcel number and name of owner)
Fairview Avenue and Cole Road Intersection Scope of Work

- Existing right-of-way and property ownership base map
- Topography map and survey data for the project
- Aerial Mapping and Photography
- Digital terrain model of existing ground
- Request to ACHD for utility locates
- Topographic mapping and contour base map sufficient for the design of roadway improvements
- Base Map of Existing Utilities (created from maps provided by utility companies and Digline information)
- Right of way/appraisal staking

ACHD Responsibilities

- Review, approve, sign, and deliver the right of entry letter back to the consultant.
- Supply Title Reports within 60 days of request via Prolog Converge
- Request pOTHoling and utility locates, including service lines, from Digline prior to the beginning of the field surveys
- Provide utility facility maps to Consultants and transmit design review drawings to municipalities, utility companies, and irrigation districts
- Provide limited title reports upon request

Assumptions

- The roadway modification and right-of-way mapping limits consist of a corridor approximately 180-feet wide, centered on the section lines. Features will be updated and surveyed beyond the fence lines where feasible and relevant to the project and will be included in right of entry letters.
- The survey control is to be based on the Ada County horizontal and vertical survey control datum, available at www.adaweb.net/devserv/survey/home.html under the section “GPS Control”
- This scope of work assumes 20 parcels may have right-of-way impacts and require legal descriptions.
- All original field notes and computer files shall become the property of ACHD
- This scope of work assumes that pOTHoling for existing utilities will not be required as conflicting utilities will be relocated.
- This scope of work does not include setting property pins or monuments.
- No paper copies of the base map will be provided.

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 Design Criteria and Design Exceptions

Design standards and conditions for a project need to be established as early as possible. Standards for a project include, but are not limited to, design speed, roadway width, horizontal and vertical alignments, grade, clear zone width, design vehicle, minimum vertical clearance, level of service, functional street classification, and traffic volumes.

Design speed for the project shall be the current or projected posted speed limit as approved by ACHD. After design speed is selected, the required stopping sight distance, vertical alignment, maximum grades, clear zone and lane, bike lane, and sidewalk widths can be determined.

Consultant will complete the design criteria form for the project including adjacent roadways, intersections, alternative transportation facilities, etc. The list will address:

- Minimum lane and shoulder width
- Median widths for different types of roadways
- Sight distance
- Minimum horizontal and vertical curves
- Pedestrian and bicycle facilities
- Corridor right of way restrictions
- Drainage design guidelines

Throughout the design identify and prepare potential design exceptions.

- Submit the design exception request with supporting documentation justifying retention of a substandard feature
- All design elements, which do not meet ACHD standards as listed in Section 1.5, require a design exception approved by ACHD
- Address the effects the exception will have on safety and operation of the facility
- Consider the following issues in the analysis:
  - To what degree is a standard being reduced?
  - Will the exception affect other standards?
  - Are features being introduced to mitigate the design deviation?
  - What is the cost savings of the exception?
  - What is the difference in lifecycle cost due to the reduced standard?

Products and Deliverables

- Design Criteria Memo
- Design Exception Requests

ACHD Responsibilities

- Review and Approval of Design Criteria Memo
- Approve Design Exceptions
4.2 Traffic

The purpose of this task is to verify the project need and design requirements such as intersection layouts and lane configurations.

Traffic volumes including the peak hour(s) shall be determined for the current year and for twenty years from the proposed construction year. These projections shall consider current and future land use. Consultant shall coordinate traffic data and results with DKS Associates as they are preparing the Fairview Avenue Corridor Access Management Plan.

4.2.1 Traffic Study

The traffic study shall consider at a minimum current counts and turning movements, accident history, projected future volumes, current and future land development, and an Intelligent Transportation System evaluation.

A traffic report shall be prepared that projects the traffic volumes for twenty years or more beyond the expected construction year. The traffic report will recommend traffic lanes, bike lanes, length of turn lanes, and traffic signal types and locations. It shall also include capacity analysis, storage lengths, and safety analysis as outlined in this section. The anticipated 8-lane by 7-lane intersection configuration (dual left turn lanes on all approaches, three through lanes on the Fairview Avenue approaches with the outside lane being designated as a right turn lane, and two through lanes and one right turn lane on each Cole Road approach) will be evaluated. Up to three (3) alternatives will be evaluated for forecast travel demand:

- Existing
- Interim 7 lane by 7 lane
- Ultimate 8 lane by 7 lane.

Products and Deliverables

- Draft Traffic Report
- Final Traffic Report

ACHD Responsibilities

- Provide existing counts and acquire new counts as ACHD determines necessary.

Assumptions

- ACHD will provide the existing AM and PM peak hour intersection turning movement counts at each major intersection, 24-hour directional counts at each intersection leg and vehicle classifications where possible.
- URS will determine the appropriate construction and design year forecasts for the intersection.
4.2.2 Connectivity Evaluation

Consultant will analyze roadway, bike, and pedestrian connectivity, and what type of gap closures might be appropriate to enhance the network and improve the function of the roadway, pathways, and pedestrian crossing. Consider important organizations and destinations such as schools, parks, hospitals, churches, and future use if possible. Also address recommended improvements in ACHD’s Bicycle and Pedestrian Plan.

4.2.3 Traffic Forecasts

Consultant will meet with ACHD to discuss preliminary model runs based on COMPASS Regional Travel Demand Forecast Model using different lane configurations, and possible speed changes. Summarize the results and present to ACHD for review and discussion.

Meet with ACHD to discuss the outcomes of the model runs and decide which demographics, speeds, and lane configurations to use for further analysis.

URS will develop forecasted Average Daily Traffic (ADT) and PM Peak Hour Traffic on the arterial and collector streets within the study limits for the options. The forecasts will be based on the model results, adjusted to the construction and design years. Using the forecasted ADT, consultant will develop the peak hour intersection turning movement traffic for the key signalized intersections. Both AM and PM peak hours will be evaluated for turning movements. Specific model runs may be requested and future land use should be taken into consideration.

Products and Deliverables
- Preliminary meeting with ACHD
- Construction and design year forecasts for roadway segments and intersections

Assumptions
- The following, one (1) intersection will be included in the analysis
  - Fairview Avenue and Cole Road
- Forecasts will be prepared using the adopted demographics from Communities in Motion.
- Roadways serving areas developing with a different trip generation scenario will require one or more separate model run to develop a reasonable forecast of future traffic flow

4.2.4 Safety

Consultant will analyze and report five years of crash history at the study intersection(s), impacted driveways, and along the intersecting roadways within the project area. Crash rates shall be evaluated compared to similar facilities. Crash trends such as crash types, causes, time of day, trends over time, etc. should be evaluated. The impact of the analyzed improvements on safety should be considered using methodologies and/or factors consistent with the Highway Safety Manual.

Products and Deliverables
- Graphic illustrating recorded crashes analyzed on an aerial
Table(s) and supplemental text in report reporting findings

Assumptions

- Consultant shall coordinate crash data with the ITD Office of Highway Safety

4.2.5 Access Management

Existing access types will be mapped and presented on maps. This will include the location of streets, driveways and medians. Consultant will recommend access management options for project implementation based on the Fairview Avenue Corridor Access Management Plan. The Consultant shall coordinate with the Fairview Avenue Corridor Access Management consultant DKS Associates to ensure that the purpose and objectives of the Access Management Plan are satisfied. Analysis relative to safety, operations, and design should be shared between Consultants to ensure that the data used by both is consistent in methodology and not contradictory in findings ACHD's access management policies will be followed. The Consultant shall research and identify existing cross access agreements and recommend access points that may be appropriate to close, consolidate, eliminate, or otherwise modify. Existing medians will be replaced.

Products and Deliverables

- Recommendation on access control requirements and opportunities for inclusion in Traffic Report

Assumptions

- Existing driveway locations will be evaluated based on ACHD’s current access management policies and plans.

4.3 Hydraulic/Stormwater Design and Report

All project designs must comply with the Clean Water Act, NPDES requirements and ACHD Section 8000 Stormwater policy and Section 8200 Stormwater Design Manual approved January 15, 2011 and interim policy dated February 19, 2013.

4.3.1 Site Evaluation/Feasibility

The general characteristics of a site, such as soil type and slope, are a major factor in selecting appropriate stormwater controls. The following factors should be considered when evaluating the site:

1. Soil types and infiltration characteristics
2. Groundwater depth
3. Slope and geology of the site
4. Proposed drainage area and geometry
5. Proximity to surface water, groundwater and public drinking water supplies
6. Potential surface water discharge points
7. Site-specific factors such as past and proposed land use
Fairview Avenue and Cole Road Intersection Scope of Work

With this information, the technical aspects of storage, discharge control, and water quality management can be assessed. Generally, retention ponds, subsurface infiltration or similar facilities will be selected because of site limitations and discharge restrictions to downstream surface facilities. The Consultant will perform site visit to evaluate existing drainage system. The site visit will involve two (2) people from URS.

4.3.2 Prepare Project Background

The Consultant will prepare a narrative describing the project. This narrative will be included in the Stormwater Report.

4.3.3 Evaluate Existing Drainage Basins

The Consultant will delineate and describe the existing, pre-development drainage basins and how they function hydraulically, including any off-site drainage basins. A pre-development map will be created for the project. This map will be included in the Stormwater Report.

4.3.4 Analyze Drainage Alternatives

The Consultant will analyze possible drainage alternatives while evaluating impacts to right of way and existing drainage structures. A detailed discussion of this analysis will be included in the Stormwater Report.

4.3.5 Evaluate Post Development Drainage Basins

The Consultant shall delineate and describe the proposed post development drainage basins and how they function hydraulically. A post development basin map will be created for the project showing the basin limits and where applicable the proposed storm drainage system including pipes, culverts, inlets, manholes, ditches/swales, and drainage ponds. A detailed summary of this evaluation will be included in the Stormwater Report.

4.3.6 Design Methodology

The Consultant will describe the standards applied and pertinent design methodology used for developing hydrologic and hydraulic calculations for each post development basin. Design assumptions, decisions, and recommendation will be included in the Stormwater Report.

4.3.7 Hydrologic Calculations

The Consultant will perform the hydrologic calculations for each post development basin. Calculations will be included in the Stormwater Report.

4.3.8 Analyze Spread and Capture

The Consultant will analyze the inlet spread and capture of each (on grade and sump condition) inlet structure. This analysis will be summarized in the Stormwater Report.

4.3.9 Minor Structures Evaluation

The purpose of this task is to estimate pipe or culvert sizes for the minor crossings (less than 20 feet) for the preferred roadway option. Previously designed structures will be evaluated with
current information to ensure they are still feasible. A conceptual cost estimate for each minor structure shall be prepared based on recent costs. Investigation of free board will be coordinated with the hydraulics task listed above. Include investigation of free board, access, pathways, wetlands/historical impacts (identify Civilian Conversation Corps bridges), natural waterways, maintenance issues, and structural type.

4.3.10 **Design Pipe and Culvert**
The Consultant will design each pipe and culvert for size and cover.

4.3.11 **Design Drainage Infrastructure**
The Consultant will design the drainage infrastructure to be in compliance with the environmental commitments. This task will include identifying potential seepage bed design needs and locations.

4.3.12 **Preliminary Drainage Report**
The Consultant will prepare the preliminary drainage report compiling the design components listed above.

4.3.13 **Preliminary Drainage Plan**
To depict the findings of the preliminary drainage study discussed above, a roll plot of the 30% drainage design will be prepared as part of the 30% design set for review and comment. Storm sewer networks, culverts, surface collection and discharge facilities ditches/swales will be depicted on the preliminary drainage plans. The following will be included in the preliminary drainage plans:
- Topographic map of existing contours at 2-ft intervals.
- Existing surface water features like wetlands, intermittent and perennial streams, natural/mammade lakes, reservoirs, canals, drainage ditches, etc.
- Existing stormwater and irrigation conveyance systems within the project limits and 200-feet beyond. Note this is not necessarily a full topographic survey beyond the project limits.
- Groundwater elevation shall be shown on the plans and referenced to a nearby benchmark (within 100-feet).

**Products and Deliverables**
- Draft Stormwater Report (including Design Life, Cost Analysis)
- Final Stormwater Report
- Site visit with irrigation districts

**ACHD Responsibilities**
- Review and Comment
- Review and approve all contact with irrigation districts
Fairview Avenue and Cole Road Intersection Scope of Work

Assumptions

- Previous design efforts simply perpetuated the existing storm drainage system. This will not be adequate for the improved intersection.
- The current drainage system carries storm water under Cole Road to the pond at the North Slough north of St. Mark’s. The Nampa and Meridian Irrigation District will not accept storm water runoff beyond what is currently discharging into their system. Existing design flows from the intersection will be determined and maintained in the existing system and all increases in storm water flow will be captured and treated through seepage beds.
- Detailed drawings will not be prepared
- Review comments for preliminary drainage report will be addressed in the final drainage report. The preliminary drainage report will be submitted for review once.

4.4 Irrigation Facilities

The scope of work under this section shall include inventory of existing irrigation systems, review and evaluation of proposed designs completed under the previous efforts on this project, and conducting a site visit with ACHD and the Nampa & Meridian Irrigation District. Consultant shall identify any drains or canals that may be in the project by onsite investigation and evaluating historical information, including but not limited to USGS maps and waterways maps.

The evaluation will address structures or pipes at waterway crossings including drainage and irrigation facilities owned by the Nampa & Meridian Irrigation District. Consultant will verify that previous designs meet 30% design level hydraulic and structure sizing for replacement or widening of irrigation facilities based on the allocated irrigation flows and maximum flows as provided by the Irrigation District. ACHD will contact the Nampa & Meridian Irrigation District at the beginning of the project to obtain their design flows, comments and suggestions on the project. ACHD will coordinate with the Irrigation Districts as the project progresses.

Products and Deliverables

- One (1) site visit with ACHD and irrigation district
- Provide an inventory of existing irrigation systems (include on 30% Design Plans)

ACHD Responsibilities

- Review and approve all contact with irrigation districts.

Assumptions

- Irrigation Districts or owners will provide design flows and maximum flows for their facilities which will be used for design
- An irrigation report will not be required.
- Irrigation facilities will be shown on storm water plans and profile sheets.
4.5 Utility and Agency Coordination

The Consultant will coordinate with the affected utility companies and appropriate agencies.

4.5.1 Requirements for Interagency Agreements

As part of the coordination with the City of Boise and Nampa & Meridian Irrigation District, Consultant will identify potentially needed cooperative agreements to address maintenance of landscaping, waterway crossings, design considerations, and other issues. Consultant will discuss tentative agreements with these agencies in cooperation with ACHD. Consultant will develop exhibits for interagency agreements.

Products and Deliverables

- Exhibits as required for cooperative agreements.

Assumption

- ACHD staff will participate in meetings with all agencies regarding cooperative agreements

4.5.2 Utility

ACHD to contact the utility companies with facilities located in the proposed project corridor of the intended project and request the utility companies to provide ACHD with updated plans of their facilities.

The Consultant will contact Digline and ask for the list of all the utilities within the Project limits. The Consultant will attend a meeting with ACHD and Utility representatives to obtain additional information from the utility owners and address utility concerns.

The Consultant shall include the information of existing facilities on the plans. Additionally, the Consultant shall:

- Review the horizontal field survey, designating subsurface utilities to the extent known by the Consultant, and utility location updates
- Analyze and identify ways to avoid any unnecessary conflicts with the utilities
- Show vertical ties on the plans where vertical information can be verified.
- Verify that all projects involving utility relocations within the right-of-way in environmentally sensitive areas, or outside the right-of-way, are noted in the final environmental document.

Products and Deliverables

- Provide meeting summary from utility coordination meeting
- Include utility locations in base data
- Pothole information at eight (8) locations.
ACHD Responsibilities

- Provide URS assistance in requesting utility companies to provide plans showing what utilities are within project limits and what projects are planned.
- Provide URS with a contact list for the utility companies within the project limits.
- Schedule and facilitate the utility coordination meetings

Assumptions

- The utilities will provide utility plans showing their facilities within the project limits
- The utilities will review and check project base mapping showing the utility locations

4.6 30% Right-of-Way and Total Ownership Map

Develop new right-of-way requirements. Use alignment geometry developed under this section and the limits of additional right-of-way required to include new locations for the utilities. Evaluation and selection of the Preferred Option shall take into account the ROW impacts.

After the completion of the intersection concept design the Consultant will develop the new ROW limits required for this project. The Consultant will compare the new ROW limits with the property ownership map to identify the parcels that ACHD will need to acquire ROW. The Consultant will request Title Reports on these properties to analyze the impact to each property. Consultant will turn over Title reports to ACHD for Right of Way Acquisition. The Ownership Map will show the names of property owners and additional required ROW acres for the project.

Products and Deliverables

- Proposed Right of Way shown on 30% Design roll plots
- Summary of Right-of-way requirements, including: parcel number, landowner name, and new right of way area required
- Cost estimate
- Site visit

ACHD Responsibilities

- ACHD will be responsible for providing the appropriate electronic Ada County GIS ownership maps for use as an initial ownership base map.
- Provide square foot estimates for different property types

Assumptions

- Right of way information will be summarized in tabular form
- Proposed right of way lines will be shown on the 30% design drawings only
- Right-of-way plans will not be developed
- Information provided will not be of sufficient detail to acquire right of way
- Legal descriptions will not be prepared
4.7 Environmental Evaluation

Environmental documentation must use existing studies pertaining to social, economic and environmental impacts of the project activities. Preliminary engineering, surveys, soil surveys, and location decision documentation must be coordinated with the environmental evaluation document.

Consultant shall attempt to identify and involve all interested parties, agencies or jurisdictions early in the 30% design. When appropriate, the agencies shall be involved in data collection, impact assessment and identification of such issues as bikeways, wetlands, and landscaping. The Consultant shall prepare and submit a preliminary environmental evaluation memorandum summarizing the potential environmental resources which may affect the project and identify permits which may be required. The memo shall identify and propose mitigation for each resource along with permitting time and cost.

Further, although no endangered or threatened species concerns are expected, an effects determination for these species will likely be required under the Endangered Species Act (ESA). In addition to the permits listed in Appendix E, the Consultant will analyze any additional requirements that may be specific to the project site. The area of potential impact (API) will be large enough to accommodate minor design changes, reasonable design alternatives, drainage, detours, and utility relocations.

The following environmental field surveys will be performed for the project:
- Cultural resources survey within the API.
- Visual survey within the API to identify any potential biological issues (fish and wildlife, threatened and endangered species, and noxious weeds).

Data from all field surveys will be summarized in the environmental memorandum. A formal report documenting the cultural resource survey will be prepared and an endangered/threatened species effects determination will be prepared. Once approved by ACHD, the cultural resources survey report will be submitted to the Idaho State Historic Preservation Office, and the endangered/threatened species effects determination will be submitted to the U.S. Fish and Wildlife Service as appropriate.

Products and Deliverables
- Draft Cultural Resources Survey Report
- Final Cultural Resources Survey Report
- Draft Endangered/Threatened Species Effects Determination
- Final Endangered/Threatened Species Effects Determination
- Draft Environmental Evaluation Memorandum
- Final Environmental Evaluation Memorandum
Fairview Avenue and Cole Road Intersection Scope of Work

ACHD Responsibilities

- Provide consultant with existing spatial data (Geographic Information Services – GIS) surrounding the project site.
- Provide consultant with existing environmental study reports.

Assumptions

- Consultant will attend kick off meeting and one public involvement meeting
- Consultant will attend two coordination meetings with permitting agencies.
- Consultant will prepare one draft and one final Environmental Evaluation Memorandum.
- Consultant will prepare one set of consolidated review comments from ACHD for one review of the draft Environmental Evaluation Memorandum for consideration in the final document.
- No federal moneys will be used for the project.
- No air quality modeling will be required.
- No species-specific wildlife or plant surveys will be required.
- Two properties have been identified in the project area that may have been former gasoline fueling stations; the current Starbucks located in the southeast corner, and the current Papa Murphy’s located in the northeast corner. Both structures will be avoided and no purchase of this property will occur. Therefore, no Phase I Environmental Site Assessment will be required and potential issues associated with hazardous materials will be identified through the Environmental Evaluation.
- No economic analysis will be performed.
- No noise analysis will be conducted.
- Since there is no federal funding or federal nexus for the project, documentation under Section 106 of the National Historic Preservation Act is not required. As the project progresses, if it is determined that federal involvement is required (such as in the form of a permit), then Section 106 requirements can be addressed as a contingency task to be initiated only at ACHD’s direction.
- Since there is no federal funding or federal nexus for the project, documentation under Section 4(f) of the Department of Transportation Act is not required. As the project progresses, if it is determined that federal involvement is required, then Section 4(f) requirements can be addressed as a contingency task to be initiated only at ACHD’s direction.
- It is assumed there will be no displacements or other impacts to minorities and low income populations. Therefore, there will be no analysis of impacts to minorities and low income populations in the environmental memorandum.
- Consultant will submit the endangered/threatened species effects determination to the U.S. Fish and Wildlife Service as necessary. The consultant will provide a revision for one set of review comments for both reports.
- The Consultant will not be preparing applications for permits or approvals potentially needed. The Consultant could provide these as additional services.
Fairview Avenue and Cole Road Intersection Scope of Work

- It is assumed that a stream alteration permit will not be required as there are no perennial streams within the project area that will be impacted.

4.8 30% Design Submittal

Two conceptual options will initially be identified by Consultant and ACHD. From this initial list, the different features will be evaluated at a screening level and the best options will be determined. The development and screening of the options will consider public input, existing right-of-way from the assessor’s maps, previous agreements, and existing facilities including parallel collectors, connectivity, and potential connectivity.

Consultant and ACHD will screen the initial options at a meeting at ACHD. The initial options will be discussed and attendees will select the option that will be advanced for further evaluation prior to the first public meeting. This conceptual level option will include different typical sections and features.

After the first public meeting, consultant will further evaluate one (1) option that is advanced for further consideration.

30% design plans and typical sections will be prepared for the preferred option. The plans shall include vertical and horizontal alignment and proposed ROW locations. No construction notes will be shown on the plans. The design layout will include the interim and ultimate configuration of the intersection for review.

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

- 30% Plan on Roll Plot (two (2) copies)
- One (1) sheet with typical sections
- Request for design exceptions
- Environmental Evaluation
- 30% Design Cost Estimate on ACHD provided spreadsheet uploaded to Prolog Converge and meeting quality control standard as provided by ACHD

- **30% ROW Required Square Footage (ROW, TE, PE)**
- PDFs of all deliverables uploaded to Prolog Converge
- All native files including CAD files uploaded to Prolog Converge

ACHD Responsibilities

- Transmitting plan sets to project team.
- Perform internal review of all deliverables
- Prepare and submit documents three (3) weeks prior to the review meeting
Fairview Avenue and Cole Road Intersection Scope of Work

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)
- Pavement section designed previously will be used. The widening and improvements of both Cole Road and Fairview Avenue will consist of a full-depth reconstruction utilizing concrete paving.

4.9 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 30% 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 30% 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.

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

This task will begin after approval of the 30% Design is complete and the preferred alternative is selected.

5.1 Roadway 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. Preparing concrete jointing plans will be included in this task.
5.2 Hydraulic/Stormwater Design

The Consultant will complete hydraulic computations, determine preliminary sizes and show and label locations for all drainage structures (pipes, box culverts, bridges, water quality treatment facilities, etc.) on plan and profile sheets.

Complete the 75% hydraulic design for the project, which includes:
- Complete hydraulic computation, determine size and placement of hydraulic structures;
- Complete hydraulic computations including values for total runoff, culvert/ditch capacity, hydraulic gradeline, backwater depth, scour analysis, and any other applicable items. For all major hydraulic structures, submit hydrologic and hydraulic computations.
- Address environmental mitigation issues relating to hydraulics; such measures may include detention and diversion structures, bank and channel stabilization, sediment control, energy dissipation devices, landscaping and seeding.
- Evaluate requirements for no rise certification.
- Revise Stormwater Report
- If applicable, draft Operation & Maintenance manuals for stormwater facilities (templates available from Stormwater Section)

Products and Deliverables
- 75% Stormwater Report (including Design Life, Cost Analysis)
- Plan and profile sheets of the proposed storm sewer network, including proposed storm water ponds.
- Final grading details for grading modifications to existing detention/retention facilities, if needed.
- Drainage design details.

ACHD Responsibilities
- Review and comment
- Verify that the existing storm drain facilities of the intersection have the capacity to include stormwater from this project.
- Verify ultimate drainage concepts are compatible and coordinated between the roadway and intersection needs.

5.3 Storm Water Pollution Prevention Plan (SWPPP)

The Consultant will prepare a 75% SWPPP based on Best Management Practices. The SWPPP will include a narrative and Sediment and Erosion Control plan sheets displaying temporary and permanent erosion and sediment control measures.

Assumptions
- The consultant will complete the SWPPP template as appropriate given readily available project information. If readily available information is not available, the template item will be left for the contractor to complete prior to construction.
Fairview Avenue and Cole Road Intersection Scope of Work

- The contractor will complete any remaining and/or unknown SWPPP items prior to construction under ACHD’s guidance.
- The consultant will not perform any services to verify ACHD’s SWPPP template complies with the 2012 Construction General Permit.
- ACHD and/or the construction contractor will certify (sign) the SWPPP.
- The consultant will not perform any services to verify that plan sheets deemed acceptable by ACHD comply with the EPA’s 2012 Construction General Permit.

Products and Deliverables
- Draft SWPPP based on the template provided with portions left for either ACHD or the contractor to complete.
- Plan sheets noting locations of temporary BMPs, flow directions, limits of disturbance, and nearby waterways and/or wetlands.

ACHD Responsibilities
- Provide the SWPPP template to consultant with applicable sections identified.
- Review and comment on draft SWPPP and temporary BMPs (i.e. plan sheets).
- Ensure the SWPPP is revised, completed, and signed by the contractor prior to construction.

5.4 Irrigation Facilities
Layout and verify size of irrigation structures based on information obtained in the 30% design phase. The minimum information required on a 75% design review plans shall be complete enough to show location and general design features of all existing and planned irrigation facilities. Consultant with ACHD will coordinate with the Irrigation Districts as the project progresses.

5.5 Signal Plans
Design the initial layout of the traffic signals. This will include providing a new signal poles, mast arms, and luminaires as necessary for the proposed roadway widening. This task will include an illumination evaluation to provide adequate lighting in the intersection, at decision points, and pedestrian ramps and crossings.

Prepare drawings using the existing topographic sheet showing:
- Desired traffic lane configuration, including channelization
- Pole location and mast arm length
- Video detection
- Power source location and requirements
- Type and location of signal heads
- Number and type of pedestrian signal heads and pedestrian push buttons
- All paint striping including lane markings, stop bars, crosswalks, islands, etc
- Pertinent notes
Fairview Avenue and Cole Road Intersection Scope of Work

- Traffic signal controller type and location, including any hardware needed for system interconnect
- Intersection street lighting, number, and location based on the illumination evaluation
- Junction box location

ACHD Responsibilities

- Conduct field inspection to verify existing conduit runs and wiring in each conduit
- Determine detection type

5.6 Signing and Striping

Develop signing and striping plans in accordance with the MUTCD and applicable state and local laws and ordinances.

5.7 Intelligent Transportation Systems

Signal interconnect facilities will be designed along Fairview Avenue and Cole Road.

5.8 Temporary Traffic Control/Construction Phasing

Analyze the cost of constructing while keeping open to traffic and submit a technical memorandum summarizing the recommendation. Compare with the cost to motorists or detouring traffic and the impacts. Analyze for construction traffic control needs and detours, including utility relocation needs. Recommend construction schedule (time of year and duration), and incentive provisions. Highlight events and holiday traffic issues. Prepare temporary traffic control, construction staging/phasing plans and the advanced construction signing sheet.

Maintenance of bicycle and pedestrian facilities during construction shall be addressed during the design. If accessible facilities are present prior to construction, the routes must be maintained to ADA Standards during construction or a determination made that such action is cost or time prohibitive or otherwise infeasible.

5.9 Right-of-Way

Develop right-of-way requirements. Use alignment geometry developed for 75% Design that defines the new alignment and the limits of additional right-of-way required.

- Review title reports for easements or other encumbrances. These may reveal the existence and location of water lines, conduits, drainage or irrigation lines, utilities, etc. that must be handled during construction.
- Request from ACHD, land ownership and title report based on assessor parcel number
- Show proposed right of way on 75% plans
- ACHD’s standard ownership table will be prepared as a part of the right-of-way plans.
- ACHD may require legal descriptions be written prior to 99% design to allow for early acquisition.
Fairview Avenue and Cole Road Intersection Scope of Work

- Contact all property owners that have property that will be affected by the project to determine if there are any special considerations for irrigation or other property owner systems that need to be addressed with the design. This includes potable and non-potable water wells, monitoring wells, irrigation supply and return facilities, drainage facilities, sewer and septic systems, special utility considerations and any other structures or areas that need special consideration.

- As early in the design process as possible, the Consultant shall complete those portions of the design that will determine final right-of-way acquisition areas (including temporary and permanent easements). The intent is to accelerate the right-of-way acquisition process where feasible. It is recognized that certain parcels (e.g. intersection corners, special structural design, etc.) may require completion of design later in the process to finalize the right-of-way acquisition; however, for the other less complicated parcels the Consultant is encouraged to submit final right-of-way plans and documents for portions of the project as they are completed. This effort is included in the Consultant’s scope, and no additional compensation will be granted.

5.10 Utility and Agency Coordination

5.10.1 Coordination with Agencies

Continue coordination with affected agencies as design progresses.

The Consultant will attend a meeting with ACHD and Utility representatives to obtain additional information from the utility owners and address utility concerns.

Products and Deliverables

- Meeting notes

Assumption

- ACHD staff will participate in meetings with all agencies regarding cooperative agreements

5.10.2 Coordination with Utilities

Continue coordination with utilities as design progresses.

The Consultant shall include the information of existing facilities on the plans. Additionally, the Consultant shall:
- Review the horizontal field survey, designating subsurface utilities, and utility location updates
- Analyze and adjust the project plans to avoid any unnecessary conflicts with the utilities and railroads
- Identify and mitigate utility conflicts based on facilities installed since concept design or change/progression in design

Ada County Highway District
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Fairview Avenue and Cole Road Intersection Scope of Work

- Show vertical ties on the plans. (Possible vertical conflicts shall be poholed by subsurface excavating techniques to determine location and the vertical depth of the facility.)

Products and Deliverables
- Utility conflict evaluation
- Pothole location map – to be reviewed and approved by ACHD Utility Coordinator prior to potholing commencing.

5.11 75% Cost Estimate

The Engineer must prepare a 75% construction cost estimate via ACHD’s spreadsheet and submit this with the 75% project package. The engineer will adhere to the ISPWC item number process, as well as the Special Provisions (SP), and ACHD’s Standard Special Provisions (SSP) information provided via the ACHD web site. If an item number/description cannot be found, the engineer can request a Special Provisions Request or Modification Form provided via the ACHD web site. Under no circumstances can the engineer submit an altered ISPWC, SP or SSP modification without prior approval. When more than one project number is included in the contractor’s bid proposal, separate estimates shall be prepared for each project number. Each of these estimates shall be further separated into roadway and bridge quantities, if applicable. The estimate shall be based on a combination of the most current bid history as provided/approved by ACHD and engineering judgment.

5.12 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
- Prepare and submit documents three (3) weeks prior to the review meeting

Products and Deliverables
- Title Sheet
- Survey Control Sheet
- Typical Sections (2 sheets)
- Roadway Plan and Profile Sheets (18 sheets)
- Concrete Jointing Plans (2 sheets)
- Stormwater Plan and Profile Sheets (9 sheets)
- Signal Plans (2 sheets)
- Signal Interconnect & Lighting Plans – Including ITS (2 sheets)
- Signing and Striping Sheets (2 sheets)
- General Construction Staging/Phasing Plans/Utility Phasing Plans (1 sheet)
Fairview Avenue and Cole Road Intersection Scope of Work

- Advanced Construction Signing (1 sheets)
- Construction Phasing Plan Sheets (4 sheets)
- Sediment and Erosion Control Plans—or SWPPP (2 sheets)
- 17 sets of 11”x17” 75% design plans (47 sheets)
- 75% Cost Estimate on ACHD provided spreadsheet uploaded to Prolog Converge and meeting quality control standard as provided by ACHD
- **75% ROW Required Square Footage (ROW, TE, PE)**
- PDFs of all deliverables uploaded to Prolog Converge
- All native files including CAD files uploaded to Prolog Converge
- Updated plan view display board from PIM (11”x17” PDF(s))

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)

5.13 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.

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**

Make modifications based on 75% design review comments. Verify adherence to environmental commitments and agreements; prepare quantities and special provisions. The 95% design plans are to be a complete set of plans and specifications to be prepared in their finished condition. The documents shall clearly indicate the required phasing of the work. Drawings and specifications shall clearly indicate what existing systems and utilities will be maintained during construction; how and to what extent existing utilities will be relocated and how existing and/or new utilities will connect to and serve the project.

- The Consultant shall resolve previous review comments and make or coordinate appropriate modifications to the plans.
- Compute and finalize quantities
- Finalize Roadway Design Sheets
  - Finalize all work on roadway plan package including utilities
  - Finalize design for all permit mitigation
- Finalize Signing and Striping Plans
  - Revise sheets according to comments from field review and traffic engineer’s review
  - Review for compliance with MUTCD
- Finalize Signal Plans
- Finalize Traffic Control Plans
  - Set up phasing based on construction activities
  - Detours
  - Flagging
  - Road closure time
  - Nighttime work
  - Specifics for each phase and type of work
- Final right-of-way plans
- Reviews plans to verify Environmental commitments are included.
- Prepare an Engineer's Estimate and identify items with long lead times
- Prepare and verify Special Provisions, and include in the final package
- Special detailed drawings are required to clarify construction details or non-standard items included in the project

**6.1 Roadway Design**

Make revisions based on 75% design review comments. Compute and finalize quantities. Finalize all work on roadway plan package including utilities. Plans to include all construction notes and callouts.

**6.2 Hydraulic/Stormwater Design**

Make modifications based on 75% design review comments. Finalize all work in report and on plans sheets. Plans to include all construction notes and callouts.
6.3 Storm Water Pollution Prevention Plan (SWPPP)
Make modifications based on 75% design review comments. Finalize all work on narrative and plans sheets.

6.4 Irrigation Facilities
Make modifications based on 75% design review comments. Finalize all work on plans sheets.

6.5 Signal Plans
Finalize a complete set of traffic signal plans. Make modifications based on 75% design review comments.
- Finalize traffic signal plan sheets.
- Finalize signal interconnect plans.
- Finalize detailed summary of items, engineer's estimates, additional notes, and special provisions as required.
- Resolve all previous review comments.
- Finalize conduit and wire sizes and number
- Include all construction notes and callouts

6.6 Signing and Striping
The Consultant will finalize the signing and striping plans. Make modifications based on 75% design review comments.
- Finalize signing and striping plans in accordance with the MUTCD and applicable state and local laws and ordinances.
- Resolve all previous review comments

6.7 Intelligent Transportation Systems
Make modifications based on 75% design review comments. Finalize all work on plans sheets.

6.8 Traffic Control
Make modifications based on 75% design review comments. Prepare an advanced construction signing sheet for traffic control beyond the construction limits. Consultant is required to submit traffic control plans detailing the aspects and phases of construction including pedestrian and bicycle facilities.
- Finalize traffic control plans showing striping, signing layout and location, and advanced construction signing sheet(s).
- Finalize construction staging/phasing plans.
- Finalize advanced construction signing sheet
- Include resolution to all review comments.
- Include all construction notes and callouts
6.9 Permits
Appendix E contains a list of permits that generally may be required for ACHD projects. Of these listed permits, it is anticipated that a Section 404 Permit and Section 401 Certification and/or approvals will be needed. The consultant will prepare the Section 404 Permit and the Section 401 Certification and ACHD will submit to the appropriate agencies.

Products and Deliverables
- Section 404 Permit and Section 401 Certification

6.10 Right-of-Way
Make any required modifications based on changes from the 75% design review.

Right-of-Way Parcel numbers shall be shown on all plan sheets for convenient field reference during construction.

The checklist included in Appendix C shall be completed by the Consultant and attached to the ROW plans.

6.11 Utility and Agency Coordination
Make any required modifications based on changes from the 75% design review. Coordinate with utilities, railroad and agencies as needed.

6.12 Specifications
Provide special provisions that modify the Idaho Standards for Public Works Construction (ISPWC) and the Ada County Highway District Supplemental Provisions as needed.

ISPWC and standard special pay/bid items and descriptions are required to be used. If a new special bid item is needed, the pay item must be requested from ACHD.

6.13 Estimate
Based on 75% design review modifications and 95% design, the Engineer will update the estimate of project construction costs via the ACHD spreadsheet and submit this with the 95% project package. The engineer will adhere to the ISPWC item number process, as well as the Special Provisions (SP), and ACHD’s Standard Special Provisions (SSP) information provided via the ACHD web site. If an item number/description cannot be found, the engineer can request a Special Provisions Request or Modification Form provided via the ACHD web site. Under no circumstances can the engineer submit an altered ISPWC, SP or SSP modification without prior approval. When more than one project number is included in the contractor's bid proposal, separate estimates shall be prepared for each project number. Each of these estimates shall be further separated into roadway and bridge quantities, if applicable. The estimate shall be based on a combination of the most current bid history as provided/approved by ACHD and engineering judgment.
6.14 Certification of Compliance with Design Standards
Consulting Engineering firms that are preparing project designs for ACHD (plans and specifications) shall be required to provide Certification of Compliance with Design Standards. Certification that the plans or designs are prepared in substantial conformance with engineering or design standards in effect at the time of preparation shall be given on all designs for construction or improvements to the highways, roads, streets, bridges, drainage facilities, or other public property.

Certification shall be provided for all projects, regardless of size or complexity, and shall be provided on the cover sheet of the project plans or on the front sheet of the project specifications if no plans are involved.

In cases where ACHD grants variances on the project design, the Consultant shall provide a letter detailing the allowed variance(s). The letter shall have a certification as to what variance(s) from the normal design standards were allowed and the justification for said changes. The cover sheet of the plans or specifications shall note the letter detailing the variance(s). The documentation shall become, in all cases, a permanent part of the project package.

6.15 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
- Title Sheet
- Survey Control Sheet
- Typical Sections (2 sheets)
- Roadway Plan and Profile Sheets (18 sheets)
- Concrete Jointing Plans (2 sheets)
- Approach/Driveway Profile Sheets (2 sheets)
- Detail Sheets (2 sheets)
- Stormwater Plan and Profile Sheets, including irrigation plan and profile (9 sheets)
- Signal Plans (2 sheets)
- Signal Interconnect and Lighting Plans (2 sheets)
- Signing and Striping Sheets (2 sheets)
- Temporary Traffic Control Plan (including bicycle, pedestrian, and transit facilities) (4 sheets)
- General Construction Staging/Phasing Plans/Utility Phasing Plans, (1 sheet)
- Advanced Construction Signing (1 sheet)
- Sediment and Erosion Control Plans—or—SWPPP (2 sheets)
- Special Provisions
Fairview Avenue and Cole Road Intersection Scope of Work

- 95% Cost Estimate on ACHD provided spreadsheet uploaded to Prolog Converge and meeting quality control standard as provided by ACHD
  - 95% ROW Required Square Footage (ROW, TE, PE)
- 95% Stormwater Report (including calculations), soils report
- 75% design Plans and estimate with ACHD comments
- 75% Comment/Response Matrix
- 17 sets of 11”x17” 95% design plans (51 sheets)
- PDFs of all deliverables uploaded to Prolog Converge
- All native files including CAD files uploaded to Prolog Converge
- Updated plan view display board from 75% submittal (11”x17” PDF(s))

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)

6.16 95% 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 95% 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 95% Design Review and submit to ACHD.

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.
Fairview Avenue and Cole Road Intersection Scope of Work

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

- Make modifications based on 95% Design review comments.
- All items shown on the right-of-way plans shall be retained on the right-of-way and 99% Design Construction Plans, whether or not the items are negotiated for the owner to construct. Items that are negotiated for the owner to construct, as stated in the right-of-way contract, are to be shown on the plans as "By Owner." These are items such as irrigation ditches or fencing.
- Right-of-way plans are prepared in permanent form on standard 22x34 sheets on reproducible material.
- 99% right-of-way plans submittal shall include a sheet or sheets listing land owners, parcel numbers, takes, easement (both temporary and permanent), along with furnishing one full size set of full color R/W plans, one set full color 11x17 plans. Sets of right-of-way drawings colored to identify each parcel and need.
- A stamped "Legal Description" by Professional Land Surveyor registered in the State of Idaho will be prepared for each requirement.

Products and Deliverables

- One set of 24” x 36” construction plans (51 sheets) signed and sealed by a Professional Engineer registered in the State of Idaho
- Three (3) sets of 11”x17” construction plans (51 sheets)
- PDF of construction plans (51 sheets) signed and sealed by a Professional Engineer registered in the State of Idaho and color right-of-way plans (10 sheets), signed and sealed by a Professional Land Surveyor registered in the State of Idaho
- 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.
- 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.
- 99% Cost Estimate on ACHD provided spreadsheet uploaded to Prolog Converge and meeting quality control standard as provided by ACHD

- **99% ROW Required Square Footage (ROW, TE, PE)**
- 99% Design plans and reports with ACHD comments
- 95% Comment/Response Matrix
- Right-of-Way Plans 95% Design ACHD comments
- All final permits
- PDFs of all deliverables uploaded to Prolog Converge
- All native files including CAD files uploaded to Prolog Converge
- Updated plan view display board from 95% submittal (11”x17” PDF(s))
Fairview Avenue and Cole Road Intersection Scope of Work

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.
- Prepare one bid package that includes all portions of the project.

Products and Deliverables

- Complete Bid Package
  - 100% Plans
  - 100% Specifications
  - 100% Cost Estimate on ACHD provided spreadsheet uploaded to Prolog Converge and meeting quality control standard as provided by ACHD
  - Cross Sections

- PDFs of all deliverables uploaded to Prolog Converge
- All native files including CAD files uploaded to Prolog Converge

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)

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 supplemental as additional services if required.
Log of Revisions:

**02/29/2012**
Deliverables:
- Earned Value Report
- Cost Estimate on ACHD provided spreadsheet uploaded to Prolog Converge 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
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</table>

**Total Man-Hours:**
- **1,152**
- **2,280**
- **2,500**

**Percentages:**
- **10.00%**
- **11.57%**
- **9.03%**
- **10.06%**
- **9.70%**
- **15.39%**
- **15.12%**
- **18.36%**
- **19.09%**

**375 men-days**

**Hours per sheet:**
- **34.52**
A. DIRECT LABOR

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Man-Hours</th>
<th>Hrly Rate</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td>QA/QC</td>
<td>46</td>
<td>$66.82</td>
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<td>Project Manager/Roadway Engi</td>
<td>244</td>
<td>$48.64</td>
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<td>Drainage Engineer</td>
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<td>Traffic Designer</td>
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<td>Environmental</td>
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<td>Designer/EIT</td>
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<td>CADD</td>
<td>590</td>
<td>$30.03</td>
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<td><strong>Total</strong></td>
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<td>$120,433.65</td>
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TOTAL RAW LABOR COST $120,433.65

B. PAYROLL, FRINGE BENEFIT COSTS & OVERHEAD

Total Raw Labor Cost $120,433.65

Approved Overhead Rate 175.00% = $210,758.88

C. NET FEE

Total Raw Labor & Overhead $331,192.53

NET FEE 12% = $39,743.10

D. DIRECT EXPENSE SUMMARY

<table>
<thead>
<tr>
<th>Unit</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Estimated Expense</th>
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</thead>
<tbody>
<tr>
<td>Mounting PIM Graphics</td>
<td>Board</td>
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<td>$50.00</td>
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<tr>
<td>Potholing (Earth Energy Inc.)</td>
<td>Pothole</td>
<td>8</td>
<td>$250.00</td>
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TOTAL ESTIMATED EXPENSE $2,600.00

E. SUBCONSULTANTS

N/A

TOTAL = $373,536