

May 9, 2019

Wasatch School District  
Francis Harrison, Maintenance Supervisor  
101 East 200 North  
Heber City, Utah 84032

435.654.0280  
[francis.harrison@wasatch.edu](mailto:francis.harrison@wasatch.edu)

**Subject: Heber High School Traffic Impact Study**

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Dear Mr. Harrison:

Thank you for inviting Hales Engineering to submit this proposal to complete a traffic impact study (TIS) for the proposed High School located in Heber City, Utah. The following is an outline of our proposed scope of work and cost estimate to complete this study according to standard traffic impact study guidelines.

### **Scope of Work**

#### **Task 1: Project Kick-off and Site Visit**

Hales Engineering will make one site visit to photograph and record existing geometric conditions (lane geometry, intersection control, speed limits, etc.) at the site and at the surrounding study intersections. Hales Engineering will also participate in a kick-off conference call with you to discuss the project.

#### **Task 2: Data Collection**

Hales Engineering will collect turning movement count (TMC) data during typical weekday morning (7:00 to 9:00 a.m.) and afternoon (2:00 to 4:00 p.m.) peak hours at the following intersections:

- South Field Road (1140 West) / SR-113
- 600 West / SR-113
- 300 North / 600 West
- 400 North / 600 West

Based on the results of the data collection in combination with a review of the project trip generation, the single highest peak hour will be analyzed. Nearby permanent count stations will

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be used to identify the seasonal adjustment factors that will be applied to the raw count data to normalize the counts.

**Task 3: Trip Generation, Distribution and Assignment**

Hales Engineering will perform trip generation for a single site plan to generate weekday and weekend daily and weekday morning and afternoon peak hour trips associated with the proposed development. Trip generation data is calculated based on rates published by the Institute of Transportation Engineers (ITE), *Trip Generation*, 10<sup>th</sup> edition, 2017.

Hales Engineering will distribute and assign project-generated trips for the single controlling peak hour to the project access points and study intersections for existing 2019 and future 2024 conditions.

**Task 4: Existing (2019) Background Analysis**

Hales Engineering will use Synchro / SimTraffic software to evaluate traffic for the controlling morning or afternoon peak hour conditions and identify necessary improvements without the proposed project at the following intersections:

- South Field Road / SR-113
- 600 West / SR-113
- 300 North / 600 West
- 400 North / 600 West

If any existing deficiencies are identified, we will make the appropriate recommendations for City, County, or State improvements to the system to bring it up to an acceptable level of service standard. The cost(s) for these improvements are typically borne by the jurisdictions that control and maintain these roadways.

**Task 5: Existing (2019) Plus Project Analysis**

This analysis will use the Synchro / SimTraffic software to determine the impact of a single site plan for the proposed development superimposed on top of the controlling morning or afternoon peak hour traffic conditions to identify any resulting improvements at the following intersections:

- South Field Road / SR-113
- 600 West / SR-113
- 300 North / 600 West
- 400 North / 600 West
- 1000 West / 600 West
- School Accesses (4) / 1000 West

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If any existing plus project deficiencies are identified, we will make the appropriate recommendations to the system to bring it up to an acceptable level of service standard. The cost(s) for these improvements are typically borne by the developer or are completed in lieu of paying impact fee assessments, or a combination thereof. These negotiations are typically between the developer and the municipality in which they are developing.

**Task 6: Future (2024) Background Analysis**

Hales Engineering will use historical traffic volume data and/or future traffic volume projections to determine future (2024) background volumes. Hales Engineering will use Synchro / SimTraffic software to evaluate traffic for the controlling morning or afternoon peak hour conditions and identify necessary improvements without the proposed project at the following intersections:

- South Field Road / SR-113
- 600 West / SR-113
- 300 North / 600 West
- 400 North / 600 West

If any existing deficiencies are identified, we will make the appropriate recommendations for City, County, or State improvements to the system to bring it up to an acceptable level of service standard. The cost(s) for these improvements are typically borne by the jurisdictions that control and maintain these roadways.

**Task 7: Future (2024) Plus Project Analysis**

This analysis will use the Synchro / SimTraffic software to determine the impact of a single site plan for the proposed development superimposed on top of the controlling morning or afternoon future peak hour traffic conditions to identify any resulting improvements at the following intersections:

- South Field Road / SR-113
- 600 West / SR-113
- 300 North / 600 West
- 400 North / 600 West
- 1000 West / 600 West
- School Accesses (4) / 1000 West

If any existing plus project deficiencies are identified, we will make the appropriate recommendations to the system to bring it up to an acceptable level of service standard. The cost(s) for these improvements are typically borne by the developer or are completed in lieu of paying impact fee assessments, or a combination thereof. These negotiations are typically between the developer and the municipality in which they are developing.

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**Task 8: Internal Circulation Analysis**

Hales Engineering will review the plans for the internal roadways on site to ensure that there is sufficient queue storage in loading areas, that pedestrians have safe walking paths, and that vehicles can travel easily from one place to another. This information will be in addition to the LOS analysis performed in tasks 4 through 7 and will be presented in a separate chapter of the report.

**Task 9: Report Preparation**

Hales Engineering will summarize results of our study in a final report including the necessary text, tables, and figures. Following completion of the report we will submit one (1) electronic version for your use and distribution. The final report will include key findings within our conclusions and recommendations on potential mitigation measures.

**Cost Estimate**

We anticipate that the cost to complete the nine (9) tasks identified in the scope of work will be **\$7,300**.

**Meeting Attendance/Out of Scope Work**

Predicting the number of meetings and time commitments required to move a traffic impact study through the approval process varies from project to project. Therefore, in the best interest of our clients, we have not included any meetings beyond those identified in the scope of work. If additional meetings are necessary, they will be billed separately on a time and materials basis and will be attended by representatives of Hales Engineering only upon prior written or electronic approval given by you or a designated representative.

**Schedule**

We will begin work after we have received the written authorization to proceed. Assuming we receive notice to proceed by Friday, May 17, 2019, we will complete the study by Wednesday, June 5, 2019. This letter will serve as our contract along with the attached Standard Terms and Conditions.



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**Agreement**

If you agree to the terms and conditions of this letter, please countersign below. Invoices for work completed will be submitted monthly for payment. Again, thank you for asking Hales Engineering to prepare this proposal. We look forward to working with you on this project. If you have any questions, please feel free to call.

Sincerely,  
HALES ENGINEERING, LLC

Ryan Hales, PE, PTOE, AICP  
Principal / Owner

Accepted by: \_\_\_\_\_

Signature: \_\_\_\_\_

Representing: \_\_\_\_\_

Date: \_\_\_\_\_

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**STANDARD TERMS AND CONDITIONS**

These STANDARD TERMS AND CONDITIONS apply to, and are made part of, the attached letter agreement ("Agreement") by and between HALES ENGINEERING, LLC, a Utah company, ("Consultant"), and the "Client" referenced in the signature block on the Agreement.

WITNESSETH THAT, in consideration of the premises and covenants hereinafter set forth, the parties agree as follows:

1. **Data to Be Furnished.** All information, data, reports, records and maps with respect to the Project which are available to Client and which Client deems reasonably necessary for the performance of work set forth in the Agreement, shall be furnished to Consultant without charge by Client.

2. **Personnel.** Consultant agrees that it will employ, at its own expense, all personnel necessary to perform the services required by this Agreement and in no event, shall such personnel be the employees of Client. All the services required hereunder shall be performed by Consultant and all personnel engaged therein shall be fully qualified under applicable federal, state and local law to undertake the work performed by them. Consultant assumes full and sole responsibility for the payment of all compensation and expenses of such personnel and for all state and federal income tax, unemployment insurance, Social Security, disability insurance and other applicable withholdings.

3. **Compensation.** Client shall pay Consultant an amount not to exceed the sum noted in the Agreement as consideration for the services described. Consultant shall submit invoices to the Client monthly. Client agrees to pay the invoices within 30 days of receipt. If payment is not received within 60 days, Consultant may, at its sole discretion, elect to stop work until payments are received. In that case, Consultant will notify Client that work has ceased. Client also agrees to pay all costs, including attorney's fees and court costs, incurred by Consultant to collect on past due invoices. If Client fails to make any payment due Consultant for services and expenses within thirty (30) days after receipt of Consultant's statement, the amounts due Consultant will be increased at the rate of 1.5% per month from due date identified on invoice.

4. **Ownership of Documents.** The work papers, drawings, photographs and any other written or graphic material, hereinafter materials, prepared by Consultant for this Project are instruments of the Consultant's service for use solely with respect to this Project and, unless otherwise provided, the Consultant shall be deemed the author of these documents and shall retain all common law, statutory and other reserved rights, including the copyright. The Client shall be permitted to retain copies, including reproducible copies of Consultant's materials for information and reference in connection with the Client's use on the Project. The Client or others shall not use the Consultant's materials on other projects, or for changes to this Project without the express written consent of the Consultant. Submission or distribution of documents to meet official regulatory requirements or for similar purposes in connection with the Project is not to be construed as publication or violation of copyright.

5. **Attorneys' Fees/Arbitration.** If either party brings an action or claim arising out of or in connection with this Agreement, the prevailing party shall be entitled to reasonable and actual attorneys' fees incurred, as well as costs incurred, as well as expert witness fees. All disputes shall be resolved by way of binding Arbitration, which shall take place in Salt Lake City, Utah utilizing a single Arbitrator. Arbitration shall take place under the auspices of either the American Arbitration Association or JAMS, at the election of the party commencing Arbitration. The prevailing party shall also be entitled to be reimbursed for any and all Arbitration expenses incurred.

6. **Limitation of Liability.** Unless Client and Consultant otherwise agree in writing in consideration for an increase in Consultant's fee, Client agrees to limit Consultant's liability to Client to the sum of the Consultant's fee for any loss or damage, including but not limited to special and consequential damages arising out of or in connection with the performance of services or any other cause, including Consultant's professional negligent acts, errors, or omissions, and Client hereby releases and holds harmless Consultant from any liability above such amount.

7. **Modification/Termination.** No waiver, alteration, modification or termination of this Agreement shall be valid unless made in writing. This agreement may be terminated for convenience and without cause by either party upon seven days' written notice.

8. **Governing Law.** This Agreement shall be governed by and constructed in accordance with the laws of the State of Utah.

9. **Entire Agreement.** This Agreement sets forth the entire understanding between the parties as to the subject matter of this Agreement and merges all prior discussions, negotiations, letters of understanding or other promises, whether oral or in writing.