

August 29, 2018

Mr. Paul Davis, PE
City Engineer
City of Rochester Hills
1000 Rochester Hills Drive
Rochester Hills, MI 48309

Subject: Professional Engineering Contract Amendment – Auburn Road, Culbertson Ave. to
Dequindre Road - OHM Project No. 0190-17-0020

Dear Mr. Davis:

As discussed, OHM Advisors is submitting an amendment for providing additional services to complete the Professional Engineering Phase of the project for the proposed reconstruction of Auburn Road, Culbertson Ave. to Dequindre Road. The additional services are outlined below and include:

1. The original contract called to design the reconstruction of five sections (blocks) of alley ways as shown in the Auburn Early Preliminary Study Report. Six additional sections were requested to be surveyed and five additional sections were eventually desired to be reconstructed by the City. Three additional sections noted above were surveyed as part of the HRC ROW contract. The total effort of the 3 additional alley surveyed was \$9,000. Five additional alley sections were designed. The total effort of this additional design was \$16,000.
2. The number of Anticipated Project Plan Sheets were significantly increased due to the added complexity of the project. The original sheet count (x) and revised sheet count is noted below:

Title Sheet (1)

Legend Sheet (1)

Note Sheet (1 anticipated, 1 additional sheets were required)

Alignment Sheet (1 anticipated, 2 additional sheets were required)

Miscellaneous Detail Sheet (3 anticipated, 2 were required)

Typical Section Sheet (5 anticipated, 2 additional sheets were required)

Removal Sheets (5 anticipated, 6 additional sheets were required due to the addition of the side street work)

Construction Sheets (5 anticipated, 6 additional sheets were required due to the addition of the side street work)

Profile Sheets (10 anticipated, 1 additional sheets were required due to the addition of the side street work)

Soil Erosion Sheets (5)

Detailed Grading Sheets (5)



MOT/Stage Construction Sheets (10 anticipated, 14 additional sheets were required due to the complexity of staging the work)
Traffic Signal Sheets (6 additional sheets were required due to the need to stage the Culbertson traffic signal and relocate the school speed limit sign)
Pavement Marking and Signing Details (5)
Landscape Design Plans and Details (15 anticipated, 6 additional sheets were required)
City Standards Sanitary and Water Main Details (4 anticipated, 1 additional sheet was required)
OCWRC Details (1)
MDOT Special Details (10)

Estimated Plan Sheet Total – 92 anticipated, 136 sheets now required.

3. Traffic signal head modifications are required to stage the Culbertson traffic signal during construction. This was not anticipated as the intersection of Culbertson was supposed to be removed for a proposed roundabout. Estimated effort is \$2,500.
4. For the original proposal, it had been assumed that federal funding would not be part of this project. Due to the award of federal funding, additional effort was required to prepare a SHPO application to investigate historic properties within the project limits. Estimated effort is \$2,500.
5. No effort was included in the original scope of services for the evaluation of in-line sewer storage and water quality basin at a proposed outlet to the Ireland Drain. Detention has been requested by the City. Detention will be handled in rain garden areas, behind the curb. Additional storm sewers and catch basins are to be incorporated for overflow. Design details are required to be created that will convey water from the roadway to the rain gardens, and from the rain gardens to the storm sewer system. This additional effort is estimated at \$16,000.
6. Several parking lot designs were requested by the City to be added to this project. The largest lot is behind the Johnny Blacks and Total Trailer buildings. An additional parking lot was requested west of the Metro PCS building. Smaller lots were added on the east side of Eastern and in north alley at the City Park. The total design effort estimated for these improvements is \$44,000.
7. A significant amount of additional meetings were required that were not anticipated. While the Progress Meetings were not specifically numbered in the original proposal, bi-weekly meetings were not anticipated, but were found to be desirable to keep progress moving for this project. Six review meetings, and one public meeting were planned. These included a Predesign, Base Plan Review, GI Review, 2 utility meetings and a public meeting. Twelve (12) meetings have already been held with 8 more meetings (GI meeting, 4 more bi-weekly meetings, a public meeting, a second Utility meeting, and a Final Review meeting) are anticipated. The total cost of the 13 additional meetings and the prep work is about \$27,400.
8. The landscaping cost has grown significantly. With that, the design effort has grown. This includes the development of a City park and plaza. The EPE Study and proposal was based off of \$1.4M landscape cost. OHM's latest estimate shows a \$1.9M landscape cost and \$710,000 for the park and plaza cost, for an increase of \$800,000.

Gateway Features: These were first discussed during the initial conceptual streetscape presentations for the streetscape elements and requested by the City for inclusion in the project. These features consist of several gateway and branding elements to be placed along the corridor. The features that have been discussed to date are as follows:



- i. Neighborhood Entry Signage (2) – These two gateway features are to be placed at each end of the corridor in the median. They would act as a “welcome” feature identifying the “Brooklands” subdivision.
- ii. Roundabout Focal Features (2) – These larger gateway features are at the center of each roundabout and serve as focal elements to the corridor. They would be larger in stature and provide a branding opportunity for the neighborhood.
- iii. Street Marker Features (4) – These gateway elements are to be placed in the medians at each street. They will tie in with the other gateway features to aid in identifying the side streets as they will no longer pass through Auburn Road.
- iv. Character Images for each of these features have been shared and discussed with the City, but limited design development has been completed to date.
- v. Plaza: The Plaza was requested to be added by the City at the north approach to Emmons Road from Auburn Road to the northern alley. As this concept developed, this element expanded into more than a simple green space. At the City’s request, the pocket park has expanded to include the following features:
 - a. Overhead accent (string) lighting
 - b. Gathering spaces to include tables, chairs, benches & shade structures
 - c. Rain Gardens and/or other Green Infrastructure measures to compliment those planned along the streetscape corridor
 - d. Accent & seat walls
 - e. Uniquely coordinated decorative concrete accents
 - f. Splash pad with approximately 30 jets of varying heights (to include appropriated drainage measures, plumbing, equipment, and housing for equipment)
- vi. Neighborhood Greenspace: This space is located adjacent to the Plaza described above. This scope addition was requested as an extension of the Plaza as an open greenspace. Elements unique to this space include:
 - a. Landscape plantings
 - b. Tables and chairs
 - c. Benches
 - d. Planning for possible future addition of farmer’s market/food truck area
 - e. Open areas for gathering, games, picnics, etc.
 - d. Parking for the park and plaza

The effort to design items noted in Item 8. is \$100,000.

9. OHM was requested to add a screen fence to the to the alley way separating the residential properties with the alley. This extra work will require more coordination with private site owners for removal of existing fences, brush and trees, as well as detailing the fence in the plans & specs. This extra effort is estimated at \$15,000.
10. Additional renderings were required as the project was being developed. OHM spent an additional 100 hours on the updated renderings for an estimated additional effort of \$12,000.
11. It was decided during design that a roundabout was no longer desired at the intersection of Culbertson. The preliminary design for this location was started, however the detailed design was eliminated. This reduction is estimated to saving \$15,000 in effort. Additionally, the limits of the west end were slightly altered. The road portion will be handled by RCOC, with OHM supply landscaping plans from Hessel to Dequindre. The cost savings on not designing the roadway in this last block is about \$7,000.



12. The total of all increases and decreases as shown above is \$222,400. The new design budget is requested to be revised from \$443,124.86 to \$665,524.86.

Very Truly Yours,
ORCHARD, HILTZ & McCLIMENT, INC.

Rhett Gronewelt, P.E.

Cc: Mark Loch, P.E. OHM Project Manager