



May 13, 2011

Mr. Karl Wetherholt, City Engineer
City of Gahanna
200 South Hamilton Road
Gahanna, OH 43230

RE: Revised Fee Proposal: FRA-SRTS-Gahanna Infrastructure, PID# 88483

Dear Mr. Wetherholt,

Orchard, Hiltz & McCliment, Inc. (OHM) is grateful for the opportunity to submit this revised fee proposal, scope and schedule for the Safe Routes to School Improvements.

Per conversations with the City, field review and information in the RFQ this fee proposal does not include the following services:

- Right of way plan preparation
- Geotechnical services/investigations
- Right of way acquisition and appraisal services
- Detailed environmental field studies
- Purpose and Need preparation and all other environmental services have been stricken or more to "if authorized" per ODOT's request.

Also, enclosed is a disposition of comments that addresses the comments discussed during our last meeting with Mike Andrako and recently received from ODOT.

If you have questions or comments regarding any of the information enclosed please contact me to discuss.

We look forward to working together.

Sincerely,

A handwritten signature in cursive script, appearing to read "Bryan Newell".

Bryan Newell, AICP
Project Manager

**FRA-SRTS-Gahanna Infrastructure
Scope of Work Narrative
ODOT Minor PDP Steps 1 to 10
PID# 88483
OHM
May 13, 2011**

Project Narrative

OHM will perform the work outlined below to facilitate the completion of the infrastructure improvements for the City of Gahanna Safe Routes to School (SRTS) project located in Gahanna, Ohio. This project consists of various sidewalk and pathway improvements adjacent to four schools in the City to improve the safety and accessibility of children as they walk and/or bike to/from school. This work will include completion of Steps 1 through 10 of Ohio Department of Transportation's (ODOT's) 10-Step Project Development Process for a Minor Project.

OHM will utilize and follow ODOT's current standard documents and procedures in the performance of this scope of services. The following standard documents shall be incorporated by reference into the scope of services for the Project:

- Location and Design Manual – Volume 1 – Roadway Design
- Location and Design Manual – Volume 2 – Drainage Design
- Location and Design Manual – Volume 3 – Highway Plans
- Ohio Manual of Uniform Traffic Control Devices (OMUTCD)
- ODOT Construction and Materials Specifications – Current (including Supplemental Specifications, Supplements to the Specifications, and Proposal Notes)
- ODOT Standard Construction Drawings (including roadway, bridges, hydraulics, and traffic control)
- Right of Way Plan Manual
- Traffic Control Design Information Manual
- Ohio Department of Transportation Utilities Manual
- Code of Federal Regulations (CFR 49, Parts 23 and 24)
- Ohio Department of Transportation, Office of Real Estate Policy and Procedures Manual
- All pertinent sections of the Ohio Revised Code
- ODOT Environmental Process Manual
- ODOT Project Development Process Manual

Step 1 Develop Purpose and Need

Task 1.1 Kick-off meeting

Time for 2 people from OHM to prep and attend kick-off meeting with City and ODOT. Costs for this meeting assumes a 2-3 hour meeting and drive time.

Task 1.2 Define Study Area

The Study Area has been largely defined during the SRTS Study (grant application and cost estimating process). Additional aerial photographs might be necessary in addition to what was obtained during the SRTS Study.

Task 1.3 Stakeholder Involvement and PIP

Much of the early stakeholder coordination occurred during the SRTS Study. Representatives from each school and the City of Gahanna (including police and fire) participated in the Study. As a part of this task, early discussion with property owners will begin as they will become the stakeholders for this contract. A public involvement plan will be developed to outline when they will be engaged and to what level. It will also outline the roles and responsibilities associated with that involvement/contact as well as the details for a public meeting to be held in Step 4.

The plan will be a 1-2 page document outlining the roles of the consultant and City. Both will engage the schools to send home advertisements for the meeting. Direct mail will be utilized for residents along Shull and Heil.

Task 1.5 Technical Studies

1.5.2 Technical Studies

This task includes data collection and analyses that did not occur during the SRTS Study. Specific to each location, this task includes field data collection, topographical survey data, and a review of historical data/previous studies, including the SRTS Study and plan as-builts. The following field data will be important to gather: topography, pavement markings, sidewalk/pavement/curb condition, drainage patterns, traffic signal information, drainage structure conditions, misc. measurements, photos, etc...for design purposes.

Task 1.10 Project Management

This task includes time for internal meetings, ODOT quarterly meetings, updates to the City and general management time.

Step 2 – Determine Scope, Schedule, and Budget

Task 2.1 Alternative Identification and Evaluation

In areas where engineering analysis presents multiple solutions, OHM will document the conceptual alternatives and present the City with a matrix of advantages and disadvantages. We will meet with the City and ODOT to discuss the alternatives.

Task 2.2 Develop Schedule and Budget

This task involves developing probable cost estimates for the conceptual alternatives.

Task 2.3 Concurrence Point #1

This task involves supplying engineering detail for the CE document.

Task 2.4 Prepare Cost Estimate and Revise Milestone Dates

This task includes updating/revising and internal review of the construction, right-of-way, and utility cost reimbursement estimates.

Task 2.5 Project Management

This task includes time for internal meetings, ODOT quarterly meetings, updates to the City and general management time.

Step 3 – Perform Environmental Analysis and Preliminary Engineering

OHM will prepare various elements of the Minor Project Preliminary Engineering Study but not an actual PES. Then OHM will meet with the City to discuss the trade-offs of the analyzed alternatives. The purpose of the PES is to perform sufficient design work to determine an accurate design scope, project development schedule and budget for construction, utility reimbursement and right of way acquisition; as well as to provide construction limits from which to base environmental clearances.

Task 3.2 Preliminary Engineering and Constructability Review

Task 3.2.1 Survey

This task includes hours in the office to clean up the base mapping information gathered in the field.

Task 3.2.2 Develop Typical Sections

As a part of the Preliminary Engineering Study (PES), OHM will develop the typical sections for the following locations: path re-alignment at Venetian Way, Beecher Rd, the on-site walking path at Middle School West, Meadow Green Circle at Landover, Rocky Fork Blvd, Shull Ave, and Heil Dr. We anticipate up to 4 sheets of sections (2 sections per sheet) may be needed to properly depict the wide variety of proposed fixes, as well as showing areas with potential right-of-way and utility conflicts.

Task 3.2.3 Determine Proposed Horizontal Alignment

As a part of the PES, OHM will develop the proposed horizontal alignment for each location. The horizontal alignment will provide a reference for the location of each proposed fix. Alignments will be created at the roadway or sidewalk centerline, where applicable, at the following locations (10 total): path re-alignment at Venetian Way, Beecher Rd, the on-site walking path at Middle School West, Stygler Rd at Coronation Ave, Chapelfield Dr, Meadow Green Circle at Landover, Meadow Green Circle sidewalk extension, Rocky Fork Blvd, Shull Ave, and Heil Dr. The proposed alignments will be depicted on plan and profile sheets (15 sheets are estimated). The 20mph flashing signs, bike racks, and No Turn on Red blank out signs will be dimensioned off of existing features without an alignment.

It is anticipated that alternative sidewalk alignments will need to be analyzed at the following locations: path re-alignment at Venetian Way, Beecher Rd, Meadow Green Circle at Landover, Meadow Green Circle sidewalk extension, Shull Ave, and Heil Dr. The desire to minimize or eliminate right-of-way impacts will dictate each sidewalk alternative.

Task 3.2.4 Determine Proposed Vertical Profile

As a part of the PES, OHM will develop the proposed vertical sidewalk profile and/or preliminary sidewalk spot elevations for the following locations: path re-alignment at Venetian Way, Beecher Rd, the on-site walking path at Middle School West, Stygler Rd at Coronation Ave, Chapelfield Dr, Meadow Green Circle at Landover, Meadow Green Circle sidewalk extension, Rocky Fork Blvd, Shull Ave, and Heil Dr. The proposed profiles will be depicted on plan and profile sheets (15 sheets are estimated).

Task 3.2.6 Analyze Drive locations – potential concerns

An access management analysis is not a relevant consideration for this project. However, as a part of this task, OHM will analyze driveway profiles and/or details to determine impacts due to sidewalk construction. At Shull Ave, a few houses north of Granville, there are some paved parallel parking areas. OHM will investigate if the sidewalk can fit within this area or if these parking areas will need

to be permanently removed and the ROW implications to this. ROW might be an issue. The 2010 Gahanna water work project from Carpenter to Granville might have already accounted for this issue. Much of this effort will be associated with meeting with the property owners and discussing options for the parallel parking as well as detailing the new drive profiles and layouts.

Task 3.2.9 Determine Geologic & Hydro Geologic Conditions/Hazards

OHM will evaluate existing soil information provided by others and request additional soil exploration if necessary. OHM will make preliminary design recommendations based on geologic reports and boring information prepared by others.

Task 3.2.10 Determine Pavement Build-up and subsurface drainage requirements

Based upon geotechnical and traffic information provided to us by others, OHM will perform the pavement design calculations for the client preferred pavement type and will generate typical sections for inclusion in the construction plans.

Task 3.2.11 Drainage Design Criteria Forms (LD-35)

OHM will prepare the ODOT LD-35 form based on the drainage criteria for this project.

Task 3.2.12 LD-33 Form Criteria (Contact County Engineer)

OHM will prepare the ODOT LD-33 form and contact the Franklin County Engineer. OHM will communicate the drainage plan to the County Engineer and will be available to provide support for County Engineer's approval of drainage plan.

Task 3.2.13 Analyze Conceptual Storm Sewer

OHM will perform conceptual layout and design of the storm sewer system at the following locations: Beecher Rd, Shull Ave, and Heil Dr. An outlet will be identified for the storm water. If applicable, drainage structures (manholes and catch basins) will be located preliminarily along the roadway and the alignment of the trunk line will be established. Generation of a drainage area map and minimal capacity calculations will be performed at this time to determine an approximate size for the trunk line. LID and "green" design principals will be investigated and implemented as applicable to the corridor. Aesthetics will also be considered in conjunction with these "green" design methods.

Task 3.2.14 Determine Channel Relocations & Sections

OHM will evaluate any existing roadside channels within the project limits and determine if the sections need relocating, or enclosure. This applies at the following locations: path re-alignment at Venetian Way, the on-site walking path at Middle School West, Meadow Green Circle sidewalk extension, Shull Ave, and Heil Dr.

Task 3.2.15 Perform preliminary hydraulic analysis

OHM will perform an analysis to size the storm sewer system and identify any clearance issues.

Task 3.2.16 Prepare cross sections with preliminary flow line information

OHM will create cross sections for the following locations: path re-alignment at Venetian Way, Beecher Rd, the on-site walking path at Middle School West, Chapelfield Dr, Meadow Green Circle at Landover, Meadow Green Circle sidewalk extension, Shull Ave, and Heil Dr. Cross sections will be cut every 50' for the length of the mainline roadway or sidewalk. Cross sections will depict not only existing and proposed ground surfaces, but will also show underground utilities as provided from record drawings. Existing R/w lines will be added based on the tax map information collected.

Task 3.2.21 Determine potential locations for retaining walls & retaining wall justifications

OHM will determine potential locations for all retaining walls on this project.

Task 3.2.23 Preliminary Pavement markings

OHM will develop and depict on construction drawings the proposed pavement markings for the following locations: Stygler Rd at Coronation Ave, Meadow Green Circle at Landover, Rocky Fork Blvd, Shull Ave, and Heil Dr.

Task 3.2.26 Obtain tax map and overlay property lines, tax id and ownerships on base map

OHM will acquire the necessary information and add to the base mapping.

Task 3.2.27 Identify Construction Limits

OHM will, based upon the proposed vertical and horizontal alignments, and the existing topography, develop from the cross sections, the construction limits for the project and associated proposed driveways and intersections with existing roadways. The construction limits will be depicted on the plan and profile sheets that will be generated and included with the PES submittal. Proposed Right of Way limits will also be depicted on the plan and profile sheets so that estimated Right of Way impacts can be summarized in the Preliminary Engineering Report.

Task 3.2.28 Utility Coordination

OHM will contact utility companies to locate and verify their underground facilities, including depths. OHM Existing utilities will also be depicted on the plan and profile sheets so any potential impacts can be summarized in the Preliminary Engineering Report.

Task 3.2.32 Constructability Review

OHM will review the plans for constructability.

Task 3.2.33 Title Sheet

OHM will prepare a project Title Sheet.

Task 3.2.34 Identify any Design Exceptions (writing to be "if authorized")

OHM will identify any potential design exceptions and submit findings to the City and ODOT.

Task 3.6 Update Cost Estimate and Revise Milestone Dates

The construction, right-of-way, and utility cost reimbursement estimates will be updated.

Task 3.7 Project Management

This task includes time for internal meetings, ODOT quarterly meetings, Meeting with the City to discuss alternatives and general management time.

Step 4 – Prepare Environmental Clearance and Develop Stage 1 Design

Task 4.2 Stage 1 Detailed Design

OHM will develop Stage 1 plans to carry forward the ideas and decisions evaluated and approved during the PES. For a Stage 1 design submittal, OHM will follow the requirements of ODOT's *Location and Design Manual*, Volume 3, Section 1400. Some exceptions apply. Detailed drainage design and intersection/sidewalk details (with grades) will be major components of Stage 1 plans. Also during Stage 1 design, OHM will review the project's schedule and budget and make appropriate changes if necessary. In addition to refining the elements included in the PES, Stage 1 plans will include the following:

- Schematic plans (8 sheets)
- Drainage (culvert and/or storm sewer) detail sheets (6 sheets)
- Intersection/Sidewalk details w/ grades
- Pavement marking plans
- Preliminary plans for "No Turn on Red" and 20mph School Zone flashing sign
- Preliminary plans for bike racks

Task 4.3.2 Public Meeting

This task includes time for a public meeting, creation of readable and understandable displays beyond black and white plan sheets, attendance of 2-3 staff at meeting, comment collection and responses and meeting summary.

Task 4.6 Environmental Commitments Summary

Time to review subconsultant work and coordinate with City and ODOT.

Task 4.8 Update Cost Estimate and Revise Milestone Dates

The construction, right-of-way, and utility cost reimbursement estimates will be updated.

Task 4.9 Project Management

This task includes time for internal meetings, ODOT quarterly meetings, updates to the City and general management time.

Step 5 – Stage 2 Detailed Plans

Task 5.1 Stage 2 Detailed Plans

OHM will develop Stage 2 plans to the point where plan preparation, design, and detailing are substantially complete. For a Stage 2 design submittal, OHM will follow the requirements of ODOT's *Location and Design Manual*, Volume 3, Section 1400. Some exceptions apply, notably the inclusion of final pay quantities for roadway. The primary purpose of Stage 2 design is to detail and draft the ideas and concepts set forth in the Preliminary Engineering and the Stage 1 design. Also during Stage 2 design, OHM will review the project's schedule and budget and make appropriate changes if necessary. In addition to refining the elements included in the Stage 1 design, Stage 2 plans will include the following:

- Removal items shown on plans
- Quantity balloons (no quantities or subsummaries at this time)
- Pavement details/elevation tables
- Signing and pavement marking
- Maintenance of traffic details

Task 5.2 Second Constructability Review

A constructability review will be conducted concurrent with the Stage 2 review. This review is intended to cover the following areas: right-of-way, environmental, geotechnical, utilities, site plan and profile, drainage, maintenance of traffic, construction completion date, construction project phasing and access, assessment of the feasibility of the design details with particular emphasis on construction methods, maintenance of traffic phasing details, etc, and overall bid-ability and build-ability of the project.

Task 5.5 Cost Estimates

OHM will update the construction, right-of-way acquisition, and utility reimbursement cost estimates.

Task 5.6 Project Management

This task includes time for internal meetings, ODOT quarterly meetings, updates to the City and general management time.

Step 6 - Complete Right of Way Plan and Begin Acquisition

Not included in this proposal.

Step 7 – Develop Stage 3 Plans**Task 7.1 Stage 3 Detailed Design Plans**

OHM will develop Stage 3 Detailed Design Plans. This will represent a complete plan, although changes still might be made due to revisions to existing conditions. The principal work items in Stage 3 include the addition of quantities to the plans and a final cost estimate and resolution of the Stage 2 comments. The plans will be reviewed to confirm their compliance with all Environmental Commitments and mitigation plans.

Task 7.2 Cost Estimate

OHM will update the construction cost estimate.

Task 7.3 Project Management

This task includes time for internal meetings, ODOT quarterly meetings, updates to the City and general management time.

Step 8 – Prepare Final Plan Package**Task 8.1 Final Plan Package**

The Final Plan Package will be prepared that presents the design information for bidding and construction meeting the requirements of ODOT *Location and Design Manual*, Volume 3, Section 1500. In addition, this task includes compiling design documentation and sending requested information to the City as requested.

Task 8.2 Cost Estimate

OHM will update the construction cost estimate.

Task 8.3 Project Management

This task includes time for internal meetings, ODOT quarterly meetings, updates to the City and general management time.

Step 9 – Award Contract**Task 9.1 Pre-Bid Questions**

The OHM Project Manager and key design staff will attend the Pre-bid meeting in order to assist the City with responding to Contractor questions. OHM will also be available to respond to Contractor questions during the bid process, and will assist the City with development of Addenda as needed.

PROJECT SCHEDULE

The OHM project team has committed the resources to complete Steps 1-10 of this project within 12 months of authorization by the City of Gahanna. The attached schedule assumes a June 1, 2011 authorization. The schedule will be adjusted if the authorization occurs earlier or later.

If authorized

Task 1.7 Secondary Source Documentation

This task includes time for QA/QC of data collected and documentation provided by subconsultant.

SUMMARY OF STEPS

	A	C	D	E	F	G	H	I	J	K
1	ENGINEERING AND TECHNICAL SERVICE COST PRICE PROPOSAL									
2	AND LABOR RATES FOR									
3	FRA-SRTS-Gahanna Infrastructure									
4	PDM 88483									
5	Minor PDP									
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7	CONSULTANT: OHM									
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10	PROJECT DESCRIPTION: Gahanna SRTS									
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