RECEIVED FEB 1 3 2023

# CITY OF MIDDLEBURG HEIGHTS, OHIO

Resolution No. 2023-17

Introduced By: Mayor Matthew Castelli

Move for suspension of Charter Section 4.10 (5 day delivery requirement) & Council Rule 3 (24 hour agenda requirement).

## A RESOLUTION AUTHORIZING THE MAYOR AND FINANCE DIRECTOR TO ENTER INTO AN AGREEMENT WITH OSBORN ENGINEERING FOR THE SMITH ROAD RE-ALIGNMENT, STORMSEWER AND RESURFACING IMPROVEMENT PROJECT

WHEREAS, by resolution 2014-55, the City entered into an agreement with Osborn Engineering for professional design services the rehabilitation of Smith Road between Pearl Road and Sheldon Road in the City of Middleburg Heights; and

WHEREAS, Osborn Engineering has submitted a proposal for professional engineering design services for the Smith Road Re-Alignment, Storm Sewer, and Resurfacing Improvement Project; and

WHEREAS, the project involved the resurfacing of approximately one mile of asphalt pavement, upgrade of handicap ramps, repair of existing sidewalk, installation of new sidewalk from Pearl Road to Big Creek Parkway on the north side, replacement of the existing storm sewer (Woodcreek Drive to Stroud Road) and re-alignment of the curve near Stroud Road.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF MIDDLEBURG HEIGHTS, STATE OF OHIO, AS FOLLOWS:

Section 1: That the Mayor and Finance Director are hereby authorized to enter into an agreement with Osborn Engineering for professional engineering services for the Smith Road Re-Alignment, Storm Sewer, and Resurfacing Improvement Project, consistent with the proposal which is attached hereto and marked "Exhibit A".

Section 2: It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this Resolution were adopted in an open meeting of this Council, and that all deliberations of this Council and any of its committees that resulted in such formal actions were in meetings open to the public, in compliance with all legal requirements, including Chapter 107 of the Middleburg Heights Code and Section 121.22 of the Ohio Revised Code.

Passed: 2/14/23

David Bortolotto
President of Council

Attest: M. Meola
Clerk of Council

Approved On: 2-15-23

Presented to Mayor: 2/15/23

Matthew J. Cash
Mayor

| | Yea | Nay |
|---|---|---|
| Bortolotto | X | |
| Ali | X | |
| Sage | X | |
| Meany | X | |
| McGregor | X | |
| Ference | X | |
| Grech | X | |

I, Mary Ann Meola Clerk of the Council of the City of Middleburg Hts., Ohio, hereby certify that Res. 2023-17 adopted by the Council of the City of Middleburg Hts., on 2/14/23 was posted for a period of fifteen days, beginning 2/15/23 and remained so posted for fifteen days at the two posting places as designated by Charter.

Mary Ann Meola
Clerk

**CERTIFICATE**

I, Mary Ann Meola, Clerk of Council of the City of Middleburg Heights, Ohio, do hereby certify that the foregoing is a true and accurate copy of Res. 2023-17 passed on the 14th day of February 2023 by said Council.

Mary Ann Meola
Clerk of Council

OSBORN
ENGINEERING

February 10, 2023

Mr. James Herron
Director of Public Service
City of Middleburg Heights
City Hall 15700 E. Bagley Road
Middleburg Heights, Ohio 44130

**Re: Professional Design Services Scope and Fee Proposal**
**Smith Road Re-Alignment, Storm Sewer and Resurfacing Improvement Project**
**Middleburg Heights, Ohio**

Dear Mr. Herron,

Osborn Engineering is pleased to offer our professional engineering design services for the above referenced project. The project involves the resurfacing of approximately one mile of asphalt pavement, upgrade of handicap ramps, repair of existing sidewalk, installation of new sidewalk from Pearl Road to Big Creek Parkway on the north side, replacement of the existing storm sewer (Woodcreek Drive to Stroud Road), and re-alignment of the curve near Stroud Road. The overall project limits are Smith Road (CR -64) from Sheldon Road to Pearl Road in Middleburg Hts. This will be a joint project between the City of Middleburg Heights and Cuyahoga County.

Much of our experience from recent projects involving storm sewer replacement and pavement rehabilitation projects that we have designed over the last several years is directly applicable to your project.

**Project Understanding:**

The design for this project was originally started in 2014 and at that time the plans were advanced to a Stage 1 completion before the project was put on hold. As part of the stage 1 plans, Osborn subcontracted with Hoffman-Metzker, Inc. to prepare a survey base map of the existing conditions as they existed in 2014. Due to the delay of the project until now we will need to update the existing survey data for the current project. Osborn also subcontracted with PSI to perform pavement cores of the existing pavement. The pavement cores are still useful for the current project as there has not been any major resurfacing of the street since the cores were performed. The previous work on the development of the stage 1 plans can be used as a starting point for the new design scope but must be thoroughly reviewed as many of the standards have changed as well as the scope of services from a relatively simple resurfacing project to the current scope.

**CLE** 1111 Superior Ave, Ste 2100, Cleveland, OH 44114
t 216 861 2020 | **www.osborn-eng.com**

The added scope includes realignment of the existing roadway curve near Stroud Road, replacement of storm sewers, and sidewalk improvements to the north side of Smith Road from Big Creek Parkway to Pearl Road.

From the meetings with Northeast Ohio Regional Sewer District (NEORSD) it was determined that the storm sewer along Smith Road is undersized. The County has attempted to televise and inspect the storm sewers with limited success. As part of this project the storm sewers contributing to the Smith/Stroud Road intersection will be replaced. The limits of replacement along Smith Road are approximately 300 feet west of Woodcreek Drive to the railroad tracks that cross Smith Road. The proposed storm sewer will be placed on the south side of Smith Road and will have crossovers to the north side to pick up drainage as needed. NEORSD is planning a detention project near this location, the proposed storm sewers and road realignment should be coordinated with this project for a seamless connection. Osborn has met with NEORSD to discuss their project status.

The existing roadway curvature is also well below the required geometry for the design speed of the street. The realignment of Smith Road will make this roadway safer to travel than its current configuration. The road realignment will shift the road to the north around the curve and extend the Stroud Road intersection to Smith Road. The limits of the road realignment are from 100 feet east of Stroud Road to the Railroad tracks. As part of the realignment project, we are recommending replacing approximately 300 feet of the aging 12-inch watermain along Smith Road (from east of railroad tracks to 100 feet east of Stroud Road) as the city has experienced several failures and leaks throughout the years. With the realignment of Smith Road in this location, there is at least one fire hydrant that would need to be relocated. According to available online data from the Cleveland Water Department (CWD) the existing watermain was installed in 1924.

Finally, the city is in the process of completing a multi-purpose trail on Smith Road east of Pearl Road and would desire to be able to provide connectivity for pedestrians and bicyclists from Pearl Road to Big Creek Parkway. This will include the addition of sidewalks on the north side of Smith Road and striping of a shared bicycle lane on the Smith Road vehicular drive lanes.

**Scope of Services:**

***Phase 1 – Schematic Design***

A. Updated topographic survey and base mapping (Subcontractor TBD)
   -Verify all existing features including utilities, vertical and horizontal control, and man-made improvements within the Smith Road right of way.
   - Additional topographic mapping to encompass the realignment of Smith Road
   - Inspect manholes and catch basins to determine their condition, inverts, size and direction of the conduits within to determine connectivity.

- Proposed right of way plat for realignment of Smith Road

B. Review of pavement cores (previously prepared by PSI in 2015)
C. Additional soil borings (by PSI) for realigned section of Smith Road
D. Review and update of previously prepared Stage 1 plans from 2015
E. Development of construction documents for the entire project limits
F. Project Management
   - Project Kickoff Meeting with County, City, CWD, NEORSD and other pertinent stakeholders
   - Coordination of subconsultants and design staff, monthly progress reports and invoicing

**Phase 1 – Fee:**

| | |
|---|---|
| Osborn Engineering | $22,422.00 |
| Updated Topographic Survey and Base map development | $50,450.00 |
| ROW Plat | $8,700.00 |
| Soil Borings | $5,600.00 |
| **Total Phase 1 fee** | **$87,172.00** |

***Phase 2 – Design Development***

This phase will consist of further design development of the plans and incorporation of all comments by the City and County regarding the Schematic Design.

Further development of the Smith Road curve re-alignment near Stroud Road and design of any necessary utility relocations identified during the Schematic Design. The preliminary right of way plat will be developed to determine the limits of the needed additional right of way. Coordination with First Energy will be facilitated to determine any design constraints caused by the revised roadway elevation.

The storm sewer replacement will be further developed to determine size requirements and location of needed catch basins and yard drains to convey stormwater to the proposed future detention basin by NEORSD. The outlet of the new storm sewer will be the existing conveyance channel along the railroad tracks, which will be redirected to the future detention basin when constructed.

The anticipated resurfacing section will consist of milling and resurfacing of the repaired asphalt roadway with approximately three inches of new asphalt. We anticipate the asphalt will be laid in two courses, a 1 1/2" intermediate course and a 1 1/2" surface course on top of a pre-seal layer of #8 limestone with an asphalt emulsion bedding to repair cracks and surface irregularities of the remaining milled asphalt surface.

We anticipate the following plan sheets will be created:

| | | |
|---|---|---|
| A. | Title Sheet | 1 Sheet |
| B. | Schematic Plan | 1 Sheet |
| C. | Typical Pavement Sections | 4 Sheets |
| D. | General Notes | 6 Sheets |
| E. | Maintenance of Traffic Plans | 12 Sheets |
| F. | General Summary Sheets | 3 Sheets |
| G. | Traffic Control and Striping Plans | 4 Sheets |
| H. | Plan and Profile Sheets | 7 Sheets |
| I. | Storm Sewer Cross Sections | 2 Sheets |
| J. | Grading Details | 2 Sheets |
| K. | SWPPP | 4 Sheets |
| L. | Typical Details | 6 Sheets |
| M. | Right of Way Plat | 1 Sheet |

**Engineers Cost Estimate:**

Osborn will prepare an Engineers Estimate of the probable construction cost at this stage of design. The cost estimate will be based upon current cost trends in the industry.

**Plan Review Meeting:**

Osborn will conduct a plan review meeting with Stakeholders to include CWD, Cuyahoga County, NEORSD, and the city. At this time, we anticipate a separate meeting with each review agency to discuss the specific review comments related to them.

**Phase 2 – Fee:**

| | |
|---|---|
| Osborn Engineering | $63,574.00 |
| **Total Phase 2 fee** | **$63,574.00** |

***Phase 3 – Construction Documents***

From the Design Development drawings, Osborn will incorporate applicable design review comments from review agencies into a final set of Construction Documents (CD's). This set of documents will be the final set of drawings and issued with the construction contract advertisement by the County.

This CD's set the final typical section for the resurfacing portion of the project. The design quantity of base and partial depth repair will be determined by a site visit in which Osborn will observe the existing surface failures exhibited in the existing pavement surface and identify the estimated limits of each repair. Final quantities and locations of repair will be determined during construction. The existing sidewalk will also be field observed to create quantities of repair needed to correct

trip hazards, cracked, or broken sections that make the sidewalk ADA non-compliant.

The storm sewer replacement will be finalized at this stage. Utility conflicts will be resolved by calls for lowering or deflection as needed. Proposed storm catch basins and yard drains will be shown at proper locations in the roadway to collect runoff and direct water to underground storm sewer collection system and ultimately to the proposed detention basin, which is under consideration by NEORSD to be constructed by a separate contract.

The proposed re-alignment will be shown on the plan and profile sheets. The realignment will be designed with vertical and horizontal curves to meet the intended design speed where possible. An overall grading plan will be created to identify the proper grading and spot elevations needed to construct the intersection of Stroud and Smith Road.

Final plan sheet development will be incorporated into this phase of design. This plan set will be used for permitting and final plan review/coordination with NEORSD, plan review by CWD, Cuyahoga County Department of Public Works, and City of Middleburg Hts.

**Engineers Cost Estimate:**

Osborn will prepare an Engineers Estimate of the probable construction cost at this stage of design. The cost estimate will be based upon current cost trends in the industry. This Engineers Estimate will be used to finalize budgets for the project.

**Plan Review Meeting:**

Osborn will conduct a plan review meeting with Stakeholders to include CWD, Cuyahoga County, NEORSD, and the city. At this time, we anticipate a separate meeting with each review agency to discuss the specific review comments related to them.

**Phase 3 – Fee:**

| | |
|---|---|
| Osborn Engineering | $66,994.00 |
| **Total Phase 3 fee** | **$66,994.00** |

***Phase 4 – Final Tracings and Bidding***

Final incorporation of applicable design comments from previous phase plan review meeting. Completion of plans and creation of pdf bid set of construction plans to be used for bidding. Final quantities will be provided to the County in Excel format to allow for insertion into their bidding documents.

Construction plans will be prepared in accordance with the City of Middleburg Heights and Cuyahoga County standards and following the requirements of ADA regulations. Ohio Department of Transportation Construction and Material Specifications (ODOT CMS) will be utilized for the road construction items. Construction details will conform to Middleburg Heights, CWD, ODOT and Cuyahoga County.

Osborn Engineering will assist the County in responding to any questions during the bidding phase and prepare revised plans, if necessary, for the County to issue to all Bidders.

**Engineers Cost Estimate:**

Osborn will prepare a Final Engineers Estimate of the probable construction cost. The cost estimate will be based upon current cost trends in the industry. This Engineers Estimate will be used for bidding of the project.

**Phase 4 – Fee:**

| | |
|---|---|
| Osborn Engineering | $24,848.00 |
| General Reimbursables | $300.00 |
| **Total Phase 4 fee** | **$25,148.00** |

***Phase 5 – Construction Phase Assistance***

Osborn Engineering is including a Construction Phase allowance of $5,000, which provides for up to 25 hours total of professional support (primarily from home office) and up to 4 visits to the construction site.

**Phase 5 – Fee:**

| | |
|---|---|
| Osborn Engineering | $5,000.00 |
| **Total Phase 5 fee** | **$5,000.00** |

**Design Fee Summary:**

| | |
|---|---|
| Phase 1 – Schematic Design | $87,172.00 |
| Phase 2 – Design Development | $63,574.00 |
| Phase 3 – Construction Documents | $66,994.00 |
| Phase 4 – Final Tracings and Bidding | $25,148.00 |
| Phase 5 – Construction Assistance | $5,000.00 |
| **TOTAL DESIGN FEE =** | **$247,888.00** |

**Exclusions**

Services that are not a part of this proposed scope of work include:

1. Preparation of grant applications such as Ohio Public Works Commission (OPWC) or Community Development Block Grants (CDBG). We can provide separate proposals for

these services if the city desires.

2. Environmental investigations or testing.
3. Geotechnical investigations or testing beyond the pavement samples.
4. Construction materials testing.
5. Full time construction inspection. This service can be provided under a separate proposal at the time of construction.
6. As-built field survey and As-built plans. These services can also be provided for an additional fee.
7. Preparation of bid documents other than those stated earlier.
8. Review of shop drawings and submittals from the Contractor.
9. Administration of the construction contracts and disbursement payments. This will be performed by the city or the County.
10. Review of Contractor's pay requests, or review of Contractor's certified payroll for conformance to prevailing wages. This will be performed by the city or the County.

Our lump sum fee for the stated scope of work is **$247,888.00** for the design phases 1 – 5 including all normal reimbursable expenses and subconsultant fees. We will invoice monthly based on the percent of work completed to date.

We anticipate the Construction Documents will be complete by late Fall 2023 and ready for bidding by Cuyahoga County in January 2024. We anticipate submitting our plans for review at the SD, DD and CD levels of completion. The actual review intervals will be determined by the City's and County's requirements. After award of the contract and prior to beginning the design phase Osborn will prepare a detailed project schedule based on input from the City and the County.

Please feel free to call if any revisions or clarifications are required. Again, we appreciate this opportunity and are prepared to start work upon your authorization.

Respectfully Submitted,
**OSBORN ENGINEERING**
**Scott A. Vura, P.E., LEED AP**

By: Daniel J. Gerson, PE, PS
Director of Municipal Engineering