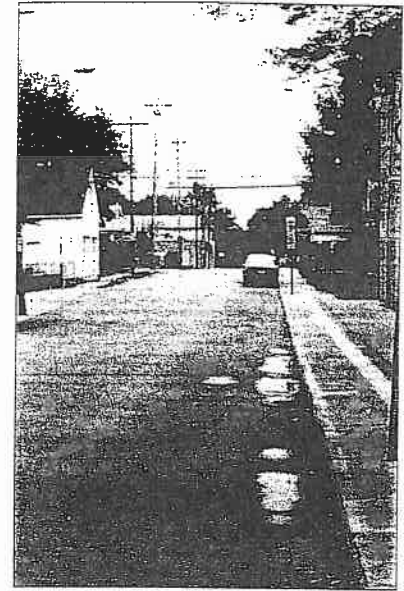


## Project Understanding

The City of Mason intends to resolve an existing drainage problem along East Street. Water currently moves from the west to the east, and is not effectively captured in a storm sewer system. Due to a lack of effective collection, the low-lying properties on the east side of East Street are currently in the drainage course.

The project is relatively straightforward in nature and will utilize curb and gutter on the east side of the road to direct the water into newly constructed catch basins and pipe, which will tie-in to the existing manhole in Tucker Street. Pavement grinding and overlays will be used to reshape the roadway as required to properly direct the water.



## Project Approach

M•E has developed the following project approach based on the following contacts and information:

- RFQ distributed by the City of Mason dated May 2, 2002
- Various conversations with City staff
- Field visits

The project limits are from Church Street to North Street for a project length of approximately 350 feet.

M•E endorses the practice of an initial kick-off meeting with all parties involved in the delivery of the proposed project. These meetings help establish the project scope and schedule to help get the project off to a good start. We recommend a monthly progress meeting with the City staff to maintain communications and resolve problems as they occur. We understand that the City desires 30/60/90 submissions for this project and our approach incorporates this requirement.

### ✦ Survey ✦

M•E proposes to use survey crews based out of our Cincinnati office to maintain project schedule. Prior to conducting any survey work, we will notify the City and distribute flyers to the property owners. The survey will include:

- existing roadway alignment including locating centerline monumentation
- reference points and bench marks
- roadway cross sections (25-foot interval typical)



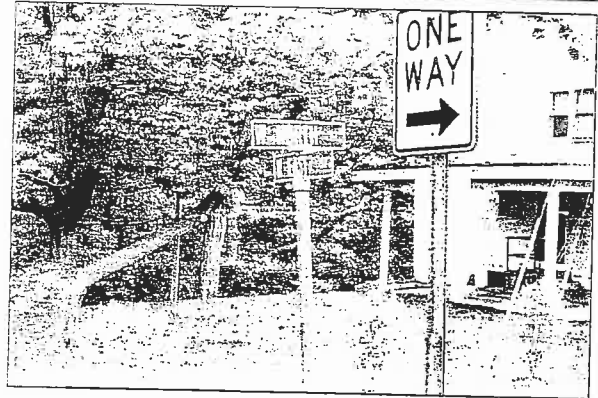
- driveway profiles and alignment
- side road alignment and profiles
- roadway topography identification
- drainage features, including nearby and downstream facilities
- property and ROW lines based on field survey and available property research
- utility identification from provided plans and field markings by respective utility companies
- significant trees near the project limits
- base mapping will be compiled in AutoCAD

All survey activities will be performed to City of Mason standards.



### †Utility Coordination †

The initial utility coordination will include contacting Ohio Utility Protection Services (OUPS) for markouts and notifying all utility owners regarding the project to request any plans that are available. We will field locate all observable or marked out utilities and submit our preliminary plans to the utility companies for their review. At the time of preliminary plan submission, we will assess the potential utility conflicts and work with the City and the utilities to avoid the conflicts or relocate the facilities. We plan to meet with any affected utilities directly to attempt to establish the exact the depth of the facility and any concerns or special construction requirements. Throughout the design process, M•E Companies will keep the City informed of the status of all utility coordination issues to avoid potential project delays.



### Drainage Analysis and Study

Upon completion of the base plan, we will review the existing drainage courses, calculate drainage areas and determine flows for the 10- and 25-year events. We will also review the existing drainage calculations for the previously completed project, to determine if that system is still sufficient. Based on our analysis, we will prepare a report that summarizes our findings, presents alternative solutions, preliminary design (30 submission) and cost estimates for each alternate. We will identify ROW and easement needs for each alternative as part of the report. We will work with the City to finalize our alignments. Upon approval of our report, we will proceed to final design.



### Plan Development and Specifications

Final plans will be prepared in English following City Standards and ODOT's Specifications and Standard Drawings Manual. We propose to meet with the City monthly or more frequently as necessary to maintain the project schedule. The current ODOT Location and Design Manual will be the basis for roadway design guidelines. The plans will be prepared on standard sheets at the following scales:

|                  |                                       |
|------------------|---------------------------------------|
| Plan and Profile | Horizontal 1" = 20', Vertical 1" = 5' |
| Cross Sections   | Horizontal 1" = 5', Vertical 1" = 5'  |

The plans will include the following:

- ✓• title sheet
- ✓• typical sections
  - general summary sheet
  - general notes and quantities
  - pavement details (intersection details)
- ✓• roadway plan and profile sheets
  - cross sections (25-foot typical spacing proposed)
  - storm sewers will be shown on the plan & profile sheets, with additional profiles where necessary
  - erosion control
- ✓• maintenance of traffic plans
- ✓ M•E will prepare the bid documents including the plans, bid proposal and technical specifications.

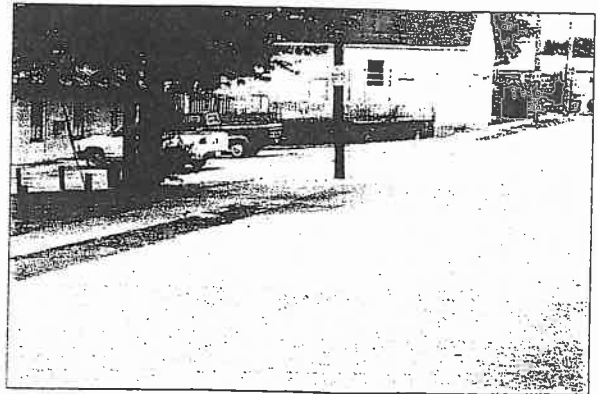
We will provide a 60 and 90 submission at progress meetings. The final submission will include a final construction cost estimate. The construction cost estimate will utilize average prices from the ODOT Summary of Contracts Awarded, which is based on prevailing wages.

### Erosion Control

Erosion control plans and notes will be prepared that utilize Best Management Practices (BMP's).

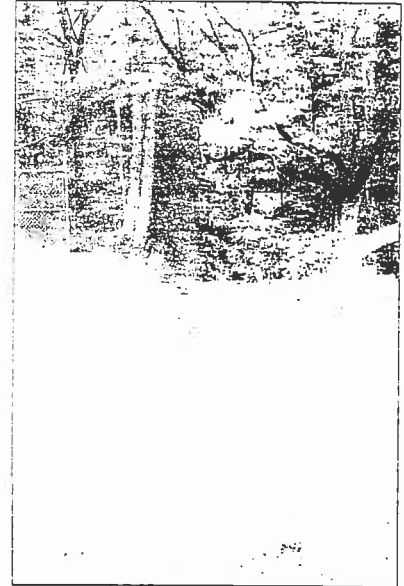
### Right-of-Way and Easement Preparation

Based on our review of the project, we anticipate that the proposed pipe will run in the street, and as such ROW and easements may not be required. Should ROW or easements be required for this



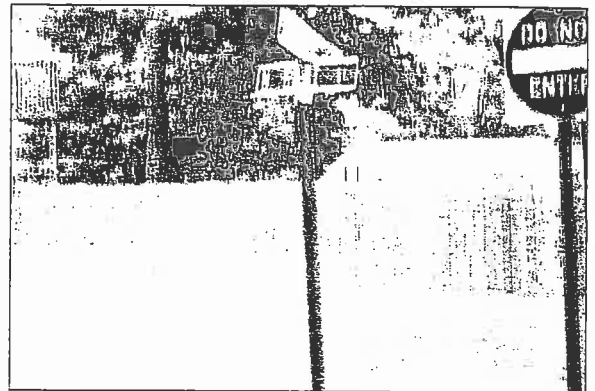


project, M•E has the expertise and capacity to expedite the production of the required documents. M•E will begin with a search at the Warren County Courthouse to obtain ownership, parcel numbers, subdivision plats and legal descriptions for the affected properties in the project areas. The research will also include any available roadway plans or plats from the Warren County Engineer's Office. Preliminary ROW and easement needs will be discussed in our initial report. To save money we propose to use dedication plats instead of complete ROW plans.



**ROW and Easement Acquisition**

As one of the premier real estate and ROW acquisition firms in the Midwest, M•E acquires 1,000 to 1,200 properties annually for public and private clients in Ohio, Kentucky, West Virginia and Indiana. We propose to deliver this project in the same successful manner that we completed the Mason-Montgomery Road project for the City last year. The project was completed in the most expedient and cost efficient manner possible, helping to deliver the aggressive schedule desired by the City.



Our firm possesses a number of unique advantages in the completion of the ROW acquisition portion of this assignment. Our experience and performance on the Mason-Montgomery Road project has allowed our staff to form relationships with City personnel that will help expedite the acquisition process, allowing for timely resolution of questions and issues that may develop over the course of the project. M•E has a great amount of experience working within the Warren County Courthouse and Recorder's Office, which enables us to expedite the title research, closing and recording. As a by-product of the significant amount of work, we have performed in the project area; our appraisal staff has assembled vast amounts of property sales data and information, which reduce the research needed to complete the often time-consuming appraisal valuations. Our local presence will also be reflected in the accuracy of the appraisal valuations, as well as consistency in the treatment of property owners by M•E relative to that of previous projects. Due to the fact that our design and acquisition staff all work for one firm, we are able to coordinate seamlessly, which will allow us to begin ROW acquisition tasks during the preliminary design process.

For purposes of providing a price proposal for this project, we have assumed that five easements will be required for this project.



**Shop Drawing Review and Construction Services**

Our team will prepare a final construction cost-estimate, attend the pre-bid and answer questions during the bidding process. Our team will be available 24 hours a day via cell phone during construction, to address questions or emergencies.

**Additional Construction Services**

The M•E team is prepared to provide construction inspection and administration services for the entire project. M•E is very familiar with ODOT inspection requirements, having performed construction management for the Michael A. Fox Highway, construction inspection for ODOT District 8 for the last two years, and having provided inspection services on the three largest LPA projects in the State of Ohio. We can provide full management of the project, including resident engineer, we can provide partial inspection services of critical items such as the bridge and earthwork compaction or any variation in between.

Additionally, we can provide EEO and prevailing wage conformance, schedule review, change order review, claims mitigation and analysis and can also provide recommendations on requests for payment.

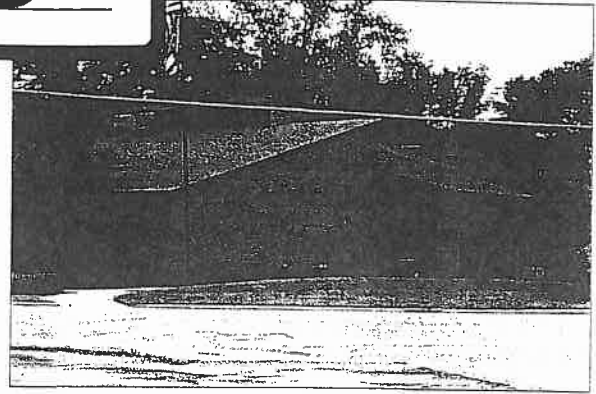
Per the scope, we have provided an estimate to provide an inspector and vehicle for this project. We have estimated that part-time inspection will be required.

Our typical inspectors have Asphalt Institute and ACI inspection certificates and have more than 20 years inspection experience on large, complex roadway projects.

## Project Understanding

The City of Mason intends to resolve an existing drainage problem at the intersection of South Forest Avenue and First Avenue; to provide a storm sewer system to address future growth at the Library and in the drainage area; and to eliminate other minor drainage problems. The area in question is approximately 10 acres and includes portions of Forest

Avenue, U.S. 42, South West Street, Short Street and East Street. There is an existing storm sewer system within the drainage area that consists of various pipes, manholes, catch basins and ditches that have been constructed over a period of years.



As-built the existing system is critical to the success of the project. The end result of the project will be a new collector sewer being constructed to the Muddy Creek. As such, any laterals that enter the existing system will need to be identified and analyzed to determine if they require upsizing at the time of the trunk construction. Based on the alignment of the existing system, it is likely that the proposed trunk will be constructed on top of the existing system. Portions of the existing system are in easements while other portions will require new easements. The parts of the project that pass through yard areas will require special details and provisions on the plans to protect adjacent property.

## Project Approach

M•E has developed the following project approach based on the following contacts and information:

- RFQ distributed by the City of Mason dated May 2, 2002
- Various conversations with City staff
- Field visits

The project limits begin at the intersection of South Forest Avenue and First Avenue and extend for the width of the drainage area to the discharge point at the Muddy Creek.

M•E endorses the practice of an initial kick-off meeting with all parties involved in the delivery of the proposed project. These meetings help establish the project scope and schedule to help get the project off to a good start. We recommend a monthly progress meeting with the City staff to maintain communications and resolve problems as they occur. We understand that the City desires 30/60/90 submissions for this project and our approach incorporates this requirement.



### Survey

M•E proposes to use survey crews based out of our Cincinnati office to maintain project schedule. Prior to conducting any survey work, we will notify the City and distribute flyers to the property owners. Since the main purpose of the survey is to gather enough information to analyze and construct the proposed system, our survey will proceed in two phases. In the first phase, we plan to utilize the City GIS as a base plan, that would be augmented by detailed survey at South Forest and First: location and identification of all storm sewers and utilities in the project area; property line determination in the area of the existing trunk and along the likely path; and some topo along the likely trunk path. This information will be used to analyze the problem and determine a solution. Upon approval of the solution by the City, we will perform a detailed survey along the trunk route. This detailed survey would include all property line establishment along the route; all features that may be affected by the construction and the existing topography.

The survey will be to City of Mason standards and will include: existing road, sidewalk, and curb; reference points and bench marks; drainage features, including nearby and downstream facilities; property and ROW lines based on field survey and available property research; utility identification from provided plans and field markings by respective utility companies and significant trees near the project limits. All base mapping will be compiled in AutoCAD.

### Utility Coordination

The initial utility coordination will include contacting Ohio Utility Protection Services (OUPS) for markouts and notifying all utility owners regarding the project to request any plans that are available. We will field locate all observable or marked out utilities and submit our preliminary plans to the utility companies for their review. Utility facilities within the area include water, sewer, gas, electric, phone and cable. Due to the size of this project, it is likely that construction will impact utilities. At the time of preliminary plan submission, we will assess the potential utility conflicts and work with the City and the utilities to avoid the conflicts or relocate the facilities. We plan to meet with any affected utilities directly to attempt to establish the exact the depth of the facility and any concerns or special construction requirements. Throughout the design process, M•E Companies will keep the City informed of the status of all utility coordination issues to avoid potential project delays.

### Drainage Analysis and Study

Upon completion of the base plan, we will review the existing drainage courses, calculate drainage areas and determine flows for the 10- and 25-year events (or larger, as directed by the City). Based on our analysis, we will prepare a report that summarizes our findings, presents





alternative solutions, preliminary design (30 submission) and cost estimates for each alternate. We will identify ROW and easement needs for each alternative as part of the report. We will work with the City to finalize the alignments. Upon approval of our report and alignment, we will complete the survey and proceed to final design.



### Plan Development and Specifications

Final plans will be prepared in English following City Standards and ODOT's *Specifications and Standard Drawings Manual*. We propose to meet with the City monthly or more frequently as necessary to maintain the project schedule. The current ODOT *Location and Design Manual* will be the basis for roadway design guidelines. The plans will be prepared on standard sheets at the following scales:

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- storm sewer profiles
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M•E will prepare the bid documents including the plans, bid proposal and technical specifications.

We will provide a 60 and 90 submission at progress meetings. The final submission will include a final construction cost estimate. The construction cost estimate will utilize average prices from the ODOT Summary of Contracts Awarded, which is based on prevailing wages.

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Erosion control plans and notes will be prepared that utilize Best Management Practices (BMP's).





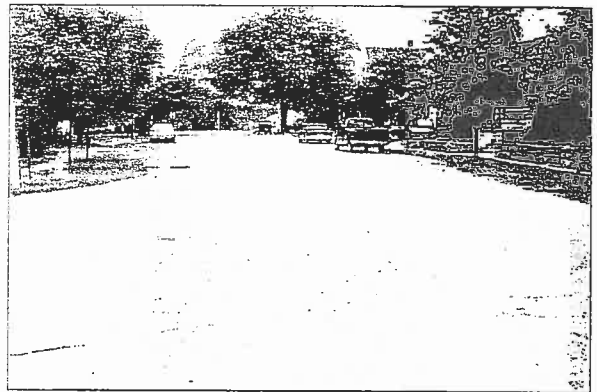
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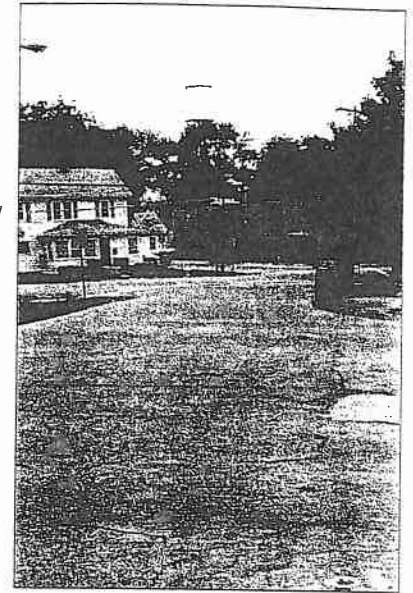
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