

## ATTACHMENT #7

EXHIBIT A  
PAGE 1 OF 13

## Project Understanding

Floyd Browne Group proposes that the City of Mason, the neighborhood and Floyd Browne collaborate as partners for this project. It is our intent to participate in this project **with** the City versus simply preparing the design package. Floyd Browne stresses open communication with the client. The City, neighborhood and Floyd Browne will all be involved in the progress of this project.

We will attend a kick-off meeting, alternative presentation meeting, monthly progress meetings, comment compliance meetings and will also prepare written progress reports to insure that close communication is maintained.

In addition, Floyd Browne Group will meet all federal, state and local design standards including those of the American Disabilities Act, Ohio Department of Transportation and the City of Mason.

This project is being proposed due to the rapid development in the area. Members of our staff have met with City personnel and have visited the site to better understand the project and to identify critical issues. It is our understanding; the City would like to widen Mason Road to three (3) lanes from Main Street to the west corporation limit, including turn lanes, traffic signal warrant study at Mason Road and Sarah Drive; widen Main Street to three (3) lanes from Forest Avenue to the proposed city park as an alternate design; and correct some drainage issues on Mason Road east of Birchwood Farms Drive, as well as, the replacement and/or evaluation of three (3) culverts.

The project will be divided into two (2) design phases. The first phase will involve upgrading the drainage channel east of Birchwood Farms Drive and the enhancement of the drainage basin south of Mason Road. The drainage channel discharges into the detention basin and has caused severe erosion at the inlet. This phase is scheduled for construction in August of 2005.

The second phase will involve the widening of Mason Road and possibly Main Street. Included in the project will be a new vertical and horizontal alignment of Mason Road; lane addition; turn lanes; curb and gutter; sidewalk; raised medians; possible traffic signal; bike path; storm sewers; catch basins; replacement of two (2) culverts; the evaluation and possible replacement of a third culvert; decorative street lighting; and identifying, plating, appraising and negotiating drainage easements and right-of-way. The second phase should be under construction in December 2005.

Our approach will be to divide the design phases into two (2) parts – Preliminary Engineering and Final Engineering. The Preliminary Engineering product will be a planning document that will form a solid foundation from which the project can move forward into final design. The document will include the evaluation of possible roadway alignment alternatives in the area of the horizontal curve on Mason Road between West Church Street and Concord Crossing Drive. The report will make recommendations as to which alternative should be considered for final design.

Both Design Phases will follow the same overall plan development process. However, the first design phase has a more aggressive schedule and not all the engineering tasks will apply.

Finally, the City has requested a one-page temporary left turn lane plan be included for the future entrance to the Mason Early Childhood Center.

*verbiage added or revised*  
*verbiage deleted*

Preliminary Engineering will include:

- All Preliminary Engineering (planning)
- Environmental/permitting
- Geotechnical investigation
- Identification of ~~three (3)~~ alternatives
- Traffic Investigation
- Drainage study
- Utility coordination
- Public involvement
- Red flag summary
- ~~And more~~

EXHIBIT A  
PAGE 2 OF 13

Final Engineering will involve:

- Completion of the final design of the preferred alternative
- Project Specifications
- Engineer's construction cost opinion

General Preliminary Engineering Tasks will include:

1. Pre-Design Investigation
2. Review existing information
3. Basemap preparation from existing data (i.e. GIS, City/County plans etc.)

#### *Pre-Design Investigation*

Floyd Browne Group will meet with City personnel to discuss the direction of the project. In addition, our engineers will participate in an on-site meeting with the City to determine specific issues, such as, homes in the possible road alignment, utility relocations and the drainage issues.

#### *Review existing Information*

Floyd Browne will collect existing information such as traffic counts, site drawings, as-built drawings, sub-division drawings, existing right-of-way drawings, utility drawings, etc. from the appropriate agencies. We will review the data to determine if the information can be used and will promptly notify the City of any additional data needed.

#### *Basemap Preparation*

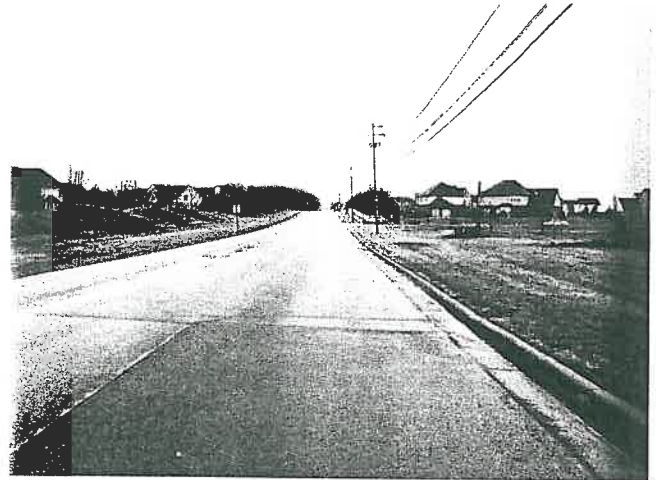
A basemap will be generated in AutoCad showing the existing roads, driveways, right-of-way, property lines, property owners, contours, utilities, streams/rivers, buildings, railroads, etc. Floyd Browne Group will collect existing information from the City's/County's GIS database. This information will provide enough information to determine which alternative can be carried forward into final design. Therefore, in order to minimize costs, field survey will not be completed during this stage. Floyd Browne will provide the City with a completed basemap for review.

**The substance of the Preliminary Engineering will include evaluating the alternatives generated to determine which preliminary design should be further developed into final design. In order to accurately evaluate the alternatives, the following tasks must be completed:**

*verbiage added or revised*  
*verbiage deleted*

design and engineering *solutions for your world*

- A. Development of Alternatives (as needed)
- B. Red Flag Summary and Identification of Fatal Flaws
- C. Preliminary Traffic Projections/Traffic Study/Signal Warrant
- D. Environmental Evaluation/Permitting
- E. Geotechnical Investigation (pavement design, depth of bedrock and soil type)
- F. Drainage Study (provide for additional impervious areas, size culverts)
- G. Preliminary R/W
- H. Conceptual Maintenance of Traffic
- I. Preliminary Line, Grade, & Typical (LG&T) plans
- J. Evaluation of primary scenario and each alternative
- K. Preliminary Engineering Report
- L. Public Meeting (if Authorized)



#### *Development of Alternatives (as needed)*

Using City/ODOT standards and a 35 mph design speed, we will develop the "optimum" alignment for the roadway as the first alternate. The horizontal alignment in the area between West Church Street and Concord Crossing Drive is of particular concern. Our goal is to meet the required design standards with minimal impact to the adjacent property owners. With input from the City, our staff will "fine tune" the alternates as needed. At this point, other options may be brainstormed for consideration into the analysis.

#### *Red Flag Summary*

A preliminary analysis will be completed to determine if the alternates have any *Red Flags*. Red Flags are areas of concern including, but not limited to, environmental and engineering issues. These areas are not necessarily areas to be avoided, but rather may entail additional study coordination, creative design approaches, or increased right-of-way and/or construction costs.



#### *Traffic Projections*

Richard Oaks, with Oaks Engineering, has teamed with Floyd Browne to perform the Traffic Engineering. Mr. Oaks and members of our staff will meet with the City to discuss the future traffic needs and the land use plan. From this information, we would make recommendations for additional hose counts and manual turn counts to supplement any existing traffic data. Included in the count data would be the signal warrant counts at Mason Road and Sarah Drive. We would then prepare a summary document from the above study and meet with the City to discuss the traffic projections.

*verbiage added or revised*  
*verbiage deleted*



EXHIBIT APAGE 4 OF 13*Environmental Evaluation/Permitting*

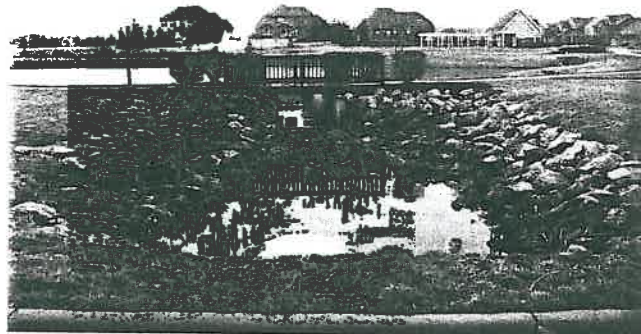
Floyd Browne personnel will submit a Stormwater Notice of Intent (NOI) with the Southwest District Office of Ohio EPA, Division of Surface Water. The NOI will qualify construction activities under the National Pollutant Discharge Elimination System (NPDES) General Permit. We will work with Ohio EPA to ensure that the project meets the requirements of the New Phase II Storm Water Regulations.

*Geotechnical Investigation*

The purpose of this study is to determine the physical characteristics of the soil strata for the development of the project. Included in the soils report will be soil conditions and ground water levels with respect to roadway and footer construction, recommendations for the allowable bearing capacity for foundation construction and pavement design. The report will be used to determine the California Bearing Ration (CBR) value. In addition, depth of the bedrock will be determined. The report will also provide Geotechnical information to aide in the repair of the eroding detention inlet.

*Drainage Study*

It will be necessary to determine the water shed boundary for the area with drainage issues (Birchwood Farms Drive area) and the remaining two (2) culverts. Once the boundaries have been determined, we will be able to size the culverts and determine a possible solution for the drainage channel. The full roadway build out will be taken into consideration when sizing the culverts. We will need to determine if the 18" culvert can handle the new flow. If not, it will need to be replaced. Otherwise, it would be possible to extend the culvert to accommodate the new roadway width.

*Preliminary Right-of-Way (R/W)*

The proposed R/W needs for the alternatives will be developed. Preliminary R/W quantities will be evaluated and summarized. Each preliminary design will minimize the need for additional R/W. The width of the future R/W will be determined by the City's thoroughfare plan.

*Conceptual Maintenance of Traffic*

Mr. Oaks would prepare a Conceptual Maintenance of Traffic plan for the various alternatives. He will do so with the understanding that access must be maintained to all commercial and residential drives. Closing the road for different functions will be necessary, i.e. culvert replacements. A detour plan will be required.

*verbiage added or revised*  
*verbiage deleted*

design and engineering *solutions for your world*

*Preliminary Line, Grade, & Typical (LG&T) plans*

This task is where the “meat” of the preliminary engineering occurs. Using the GIS basemap, preliminary profiles for each alternative will be developed. The horizontal and vertical alignments will be set along with the typical cross-section. Preliminary quantities of the major items (i.e. R/W, cut/fill material, pavement, etc.) will be calculated in order to evaluate the financial feasibility of each scenario.

*Evaluation of Each Alternative (as needed)*

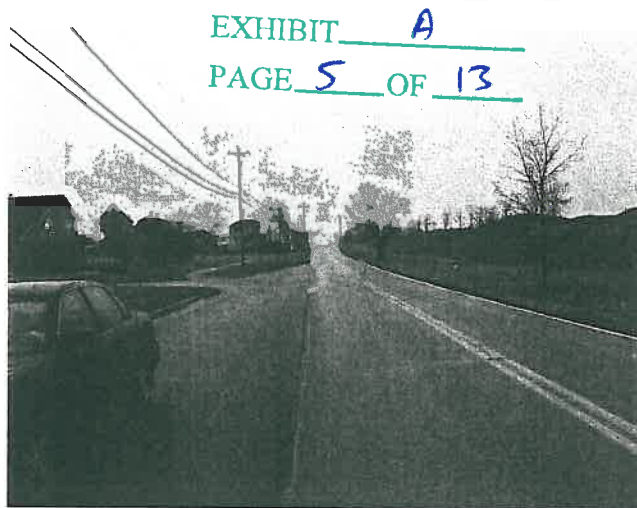
Floyd Browne will evaluate each alternative, if required, based on a variety of comparative measures in matrix form. Examples of comparative measures include quantifying the number of impacts identified through technical analysis, red flag identification, costs, and long term versus short term solutions. An evaluation matrix will be prepared to facilitate the comparisons of the alternatives. A preferred alternative will be recommended from this analysis. A discussion on why this preferred alternative is being carried forward versus the other alternatives will be presented. At this point, we recommend a public meeting (if authorized) be held to present the preferred alternative to the adjacent property owners and the general public.

*Preliminary Engineering Report*

The Preliminary Engineering Report will be the final deliverable for the Preliminary Engineering Phase. The report will summarize the results of the analysis and will recommend a preferred alternative to be carried forward into final design. We will provide three copies to the City for review and comment.

*Public Meeting (if Authorized)*

Prior to finalizing the Preliminary Engineering, Floyd Browne Group will assist the City in holding a public meeting. Key members of our staff will attend the meeting to provide technical assistance. We will prepare; (a) exhibits showing the primary scenario and each alternative (if required), (b) a project summary, (c) preliminary construction cost estimates (d) traffic model showing each alternative (if required) (e) comparative matrix.



*verbiage added or revised*  
*verbiage deleted*

design and engineering *solutions for your world*

**PART II – FINAL ENGINEERING**

The tasks associated with this part of the project will take the preferred alternative from the Preliminary Engineering Report and complete the final design. The major tasks include;

- A. Detailed Analysis of Existing Conditions
- B. Geotechnical Report
- C. Field Survey
- D. Drainage Analysis and Design
- E. Traffic Studies
- F. Design Plans
  - a. Roadway Plan
  - b. Lighting Plan
  - c. Striping and Signing Plan
  - d. Maintenance of Traffic Plan
- G. Plan Review Submissions and Utility Coordination
- H. Permit Applications
- I. Right-of-Way Plans
- J. Construction Cost Estimates
- K. Public Meeting (*if authorized*)
- L. Storm Water Pollution Prevention Plan
- M. Right-of-Way Appraisal, Negotiations and Acquisitions
- N. Bidding Assistance
- O. Basic Construction Assistance
- P. As-Built Plans
- Q. Alternate Services

*Detailed Analysis of Existing Conditions*

This task will involve evaluating the existing soil conditions, watershed information, culverts, existing grades, traffic counts, and utilities (private and public). Floyd Browne will utilize the City's GIS system as well as the County's GIS. We will gather utility information from the appropriate utility company.

*Geotechnical Report*

A report shall be prepared documenting the groundwater conditions and the physical/engineering characteristics of the subsurface soils. The report will be prepared per ODOT specifications and will recommend a pavement section. The report will be submitted to the City for approval.

*Field Survey*

Floyd Browne Group will perform a Topographical survey from the west corporation limit to West Main Street. Should the Main Street widening be included in the project, a Topographical survey will also be conducted. Limits of the survey will be 25' from the edge of the R/W.



Cross sections will be provided at a minimum of 50' intervals. Due to the congestion on Main Street, cross-sections will be provided at a minimum of 25' intervals. The cross-sections at the existing culverts will be provided at 25' intervals for a distance of 100' from the existing edge of pavement in both up and downstream directions.

Horizontal and vertical control will be tied to the Warren County Control Network. The survey will be completed using GPS (RTK) methods, as well as, conventional methods. The survey will also be tied into NAD 83 Ohio South State Plane Coordinates. Elevations will be in NAVD 88 using GEOID 99.

Several bench marks will be established at points throughout the survey envelope. The locations will be placed so as to minimize the chance of destruction during construction. Descriptions and locations N,E,Z will be noted on the appropriate drawings.

OUPS will be contacted before the commencement of the survey. Utilities noted as not being contacted will be notified at the time of the OUPS call. Floyd Browne Group can not be held liable for the markings, actions or inactions of the utility owners. Utility poles will be located and identified by owner tag or tag number on pole. If the size or type of sanitary or storm sewers cannot be determined without entering the structure, those features will be placed using existing data, and noted as such.

Individual trees will be located and identified by type (deciduous / coniferous) and trunk size. Trees in clusters will be outlined with individual trees eight inches and above being located within the cluster.

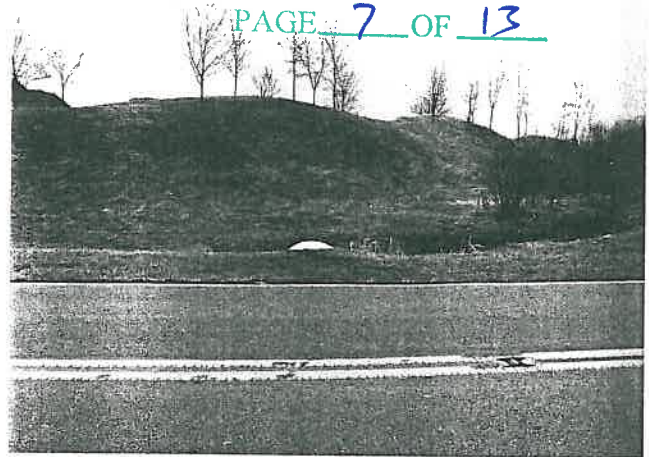
The topographic survey will include information within 25 feet (25') on either side of the proposed right-of-way (RW) centerline.

### *Design Plans*

#### *Roadway*

Mason Road will be widened from two (2) lanes to three (3) lanes. Included in the roadway portion of the job will also be sidewalk, bike path, curb and gutter, storm water work and culvert replacement. The same improvement is true on Main Street from Forest Avenue to the proposed City Park (if authorized). A design speed of 35 MPH will be used to establish the geometrics and the vertical and horizontal alignments. Design exceptions may be required in order to avoid possible physical constraints along the project, i.e. homes on Mason Road and Main Street.

EXHIBIT A  
PAGE 7 OF 13



*verbiage added or revised*  
*verbiage deleted*

design and engineering *solutions for your world*



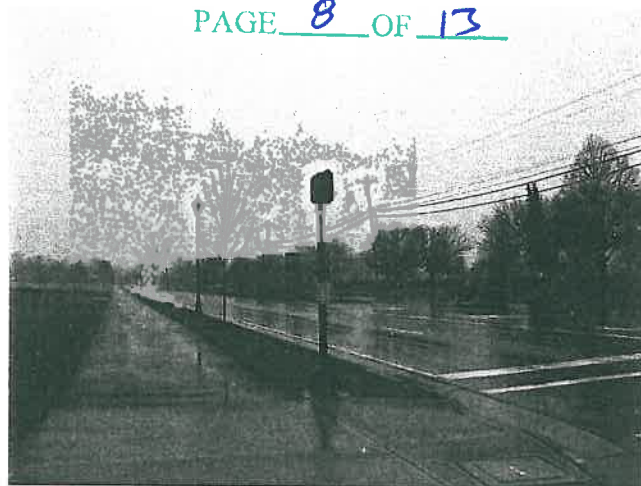
EXHIBIT     A      
PAGE   8   OF  13 

*Lighting Plan*

A street lighting plan will be prepared in accordance with City standards. The type of street lights will match the existing lights on Mason-Montgomery Road and Tylersville Road.

*Striping and Signing Plan*

The striping and signing plan will be prepared in accordance with the current edition of the Manual of Uniform Traffic Control Devices (MUTCD). Thermoplastic pavement markings, high reflective signs shall be specified.



*Maintenance of Traffic Plan*

Using the information from the Preliminary Maintenance of Traffic Plan, a detailed Maintenance of Traffic Plan will be prepared for the preferred alternate design. Again, access to all commercial businesses and residential drives will be maintained. In addition, the construction sequence will be taken into consideration when finalizing the plan.

*Plan Review Submission and Utility Coordination*

Floyd Browne Group will provide a full set of plans for the City to review at 30% and 60% completion. An Engineer's Construction Cost Opinion will be provided with each submission, including the final plan submission. Area Utility Companies will also receive a full set of construction plans at each staged review. Any comments from them will be incorporated into the plans.

*Permit Applications*

Floyd Browne Group will prepare and submit to Ohio EPA the Storm Water Notice of Intent (NOI) Permit Application, the Storm Water Pollution Prevention Plan Permit Application and the required Permit Application required by RailAmerica. No other permits are anticipated at this time.

*Public Meeting (if authorized)*

Prior to finalizing the construction documents, our firm will assist the City in holding a public meeting. Our Engineers will attend the meeting to provide technical assistance. We will prepare; (a) exhibits showing the proposed alignment, (b) a project summary, (c) preliminary construction cost estimates.

*Storm Water Pollution Prevention Plan*

Because this project will more than likely disturb more than one total acre, a Storm Water Pollution Prevention Plan will be required. The purpose of this plan is to minimize the impacts of construction runoff to the watershed. The plan will meet the standards set forth by ODOT. We will submit the plan to the City for approval prior to the start of construction. The contractor should keep this plan on site at all times.

*verbiage added or revised*  
*verbiage deleted*



### *Right-of-Way Acquisition*

This work will be sub-contracted to Dion Connor of CDS Associates, Inc. Mr. Connor will be responsible for appraisals, negotiating and acquiring any needed R/W. This work shall be in compliance with City and/or ODOT standard practices.

### *Construction Cost Estimates*

Floyd Browne Group will prepare an Engineer's cost estimate for the preferred alternate using prevailing wage scale as provided by ODOT. The estimate will be prepared in excel format and submitted to the City for review.

### *Bidding Assistance*

During bidding, the project manager and senior designer will be available to answer questions related to the plans, technical specifications, and contract documents. Floyd Browne Group will also provide addenda items as required.

### *Basic Construction Assistance*

During construction, the project manager will make periodic site visits based on the various stages of construction to observe the progress and quality of the work. In addition, the inspector and project manager will review shop drawings for project specifications conformance, process change orders and payment applications and attend monthly construction meetings. The project manager will provide meeting minutes. ~~manager and senior designer will be available to answer questions related to the plans, technical specifications, and shop drawings.~~

### *As-Built Plans*

After the project is constructed, we will provide as-built plans in compliance with City standards. The new roadway, utilities, (i.e. storm lines, waterlines, etc.) will be located and all inverts shown in red. Mylars and electronic files will be provided.

At the conclusion of the Final Engineering Phase, Floyd Browne Group will provide ten (10) sets of construction plans and specifications for bidding purposes. One (1) set of mylars will be provided. In addition, the City will receive one (1) copy of the engineer's construction cost opinion, technical specifications, soil boring logs and soil test report, as well as, survey field notes. Finally, a digital copy of all information shall be provided to the City on CD Rom.

### *Alternate Services*

#### *Construction Inspection*

The construction phase will commence with the award of the construction contract and will terminate upon written approval of final payment by the City of Mason, or 30 days after completion of construction period, whichever occurs first. If additional services are required beyond the estimated construction period, then said services would necessitate payment of additional fees. For this project, the estimated construction period is eight months or 1600 hours of inspection.

*verbiage added or revised*  
*verbiage deleted*

EXHIBIT A

~~After written authorization to proceed, Floyd Browne will make periodic visits to the site at intervals appropriate to the various stages of construction as the City deems appropriate (assume an average of two trips per week) in order to observe the progress and quality of the executed work and to determine in general if the work is proceeding in accordance with the Contract Documents; he will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the work; he shall not supervise, direct, or have control over Contractor's work nor shall the engineer have authority over or responsibility for the construction means, methods, techniques, sequences or procedures or the safety precautions incident thereto; his efforts will be directed toward providing assurance for the City that the completed Project will conform to the requirements of the Contract Documents, but he will not be responsible for the Contractor's failure to perform the construction work in accordance with the Contract Documents; and during such visits and on the basis of his on-site observations as an experienced and qualified design professional, he will keep the City informed of the progress of the work, will endeavor to guard the City against defects and deficiencies in the work of the Contractor and may recommend disapproval or rejection of work as failing to conform to the Contract Documents.~~

*verbiage added or revised*  
*verbiage deleted*

Attachment #8, Rev 4/5/05

## Professional Design Services

EXHIBIT A  
PAGE 11 OF 13
**Professional Design Services for Mason Road Widening and Drainage Improvements. Itemized per the Request for Proposal:**

|   |                                |                                |
|---|--------------------------------|--------------------------------|
| Traffic Maintenance Design – Mason Rd.  |                                | \$ 6,300                       |
| Phased Plan Design for Drainage Improvements, Phase 1   |                                | \$ 29,600                      |
| Drainage Design – Mason Rd.   |                                | \$ 57,100                      |
| Road Widening and New Roadway – Mason Rd. Includes geotechnical services, street lighting, and street stripping and signage.  |                                | \$124,800                      |
| Fee for Each Public Input Meeting. Estimate 3 meetings.   | \$400 per meeting, total.      | \$ 1,200                       |
| Base Fee for Easement and Right of Way Takes  |                                |                                |
| Appraisals and negotiations. Estimate 15 properties.  | See Assumptions and Exclusions | See Assumptions and Exclusions |
| Platting and legal for easements. Estimate 6 of 15 properties are easements.  | \$800 per property.            | \$ 4,800                       |
| Platting, legal and setting pins for permanent right-of-way takes. Estimate 9 of the 15 properties requires takes.  | \$1,750 per property.          | \$ 15,750                      |
| West Main St. Alternative – Includes geotechnical services, drainage design, roadway design, traffic maintenance design, street lighting, and street stripping and signage. |                                | \$ 59,800                      |
| Construction Inspection. 1,600 hours  | \$55.00 per hour - total       | \$ 88,000                      |

**Not to exceed fee for Professional Design Services, less Acquisition Services: \$387,350**

Reimbursable expenses (i.e., prints, reproductions, photos, mileage, etc.) are not included in the price shown for professional services.

Expenses incurred will be billed at direct cost plus 15% in addition to the professional services amount.

*design and engineering solutions for your world*



Mileage will be billed at standard IRS rate.

EXHIBIT A

For this project no mark-up will be added to outside professional services.

PAGE 12 OF 13

**Not to exceed fee for prints and reproductions:**

**\$6,300** ✓

**Not to exceed fee for mileage:**

**\$1,400** ✓

### Assumptions and Exclusions

- ✓ • Attached is a proposal from CDS for the subconsultant services of Mr. Dion C. Conner for acquisition services. Mr. Conner will use the services of a third-party appraiser. As of this submittal, with the project information available, firm prices for appraisals were not obtained. Title work and closings will be handled by the City of Mason. Floyd Browne Group will work with any provider of acquisition services as selected by the City of Mason. Floyd Browne Group's total fee for coordinating these services will be \$200 per parcel. \* 15 = \$3,000  
\* Assume \$3,000 / parcel x 15 = \$45,000
- X If a signal is included at Mason Road and Sarah Drive, the additional design fee for installation will be \$7,500.
- X If traffic control is required during the field exploration phase of the Geotechnical study, the cost will be billed at a rate of \$700 per day.
- ✓ • As built drawings have been included and will be prepared from redline drawings maintained by the contractor or resident representative. As built survey time been included to confirm top elevation and invert elevation of drainage structures and sanitary sewers.

**Attachment #8  
Personnel / Task Summary**

EXHIBIT A  
PAGE 13 OF 13

| Task                                   | Principal | PM or TL | Proj Engr | Engr Tech | Chief | Survey Crew |          |
|--|-----------|----------|-----------|-----------|-------|-------------|----------|
| <b>GENERAL</b>                         |           |          |           |           |       |             |          |
| Meetings                               | 40        | 62       |           |           |       |             | 102      |
| Alternative & Selection                | 10        | 16       |           |           |       |             | 26       |
| Traffic Study                          |           |          |           |           |       |             | Sub      |
| <b>SURVEY</b>                          |           |          |           |           |       |             |          |
| Research & Control                     |           | 8        |           | 24        | 8     | 20          | 60       |
| Survey                                 |           |          |           | 40        | 20    | 130         | 190      |
| <b>ENVIRONMENTAL</b>                   |           |          |           |           |       |             |          |
| NOI / SPPP                             |           | 8        | 40        | 24        |       |             | 72       |
| <b>DESIGN</b>                          |           |          |           |           |       |             |          |
| <b>Drawing Development</b>             |           |          |           |           |       |             |          |
| Gen Dwgs / Schematic / Typ Sections    |           |          | 40        | 42        |       |             | 82       |
| Develop Plans / Utility Data           |           |          |           | 160       |       |             | 160      |
| Plan / Profile Storm/Road              |           | 40       | 236       | 420       |       |             | 696      |
| Station Cross Sections                 |           |          | 30        | 224       |       |             | 254      |
| Std. Const. Details. Road /Util / Bike |           |          |           | 30        |       |             | 30       |
| Drainage                               |           | 32       | 16        |           |       |             | 48       |
| Specifications                         |           |          | 40        | 16        |       |             | 56       |
| Soils Evaluation                       |           |          |           |           |       |             | Sub      |
| <b>Special Structures / Details</b>    |           |          |           |           |       |             |          |
| Road Intersection                      |           |          | 30        | 30        |       |             | 60       |
| Stream Crossings - Box                 |           |          | 32        | 60        |       |             | 92       |
| Stream Crossings - Pipe                |           |          | 16        | 16        |       |             | 32       |
| <b>Road</b>                            |           |          |           |           |       |             |          |
| Maintenance of Traffic Plan            |           |          |           |           |       |             | Sub      |
| Traffic Control Plan                   |           |          |           |           |       |             | Sub      |
| <b>Lighting</b>                        |           |          |           |           |       |             |          |
| Quantity / Opinion of Cost             |           |          | 98        | 104       |       |             | 202      |
| Quality Control                        | 48        | 24       | 56        |           |       |             | 56       |
|  |           |          |           |           |       |             | 72       |
| <b>ADDITIONAL SERVICES</b>             |           |          |           |           |       |             |          |
| Bidding Services                       |           | 40       |           |           |       |             | 40       |
| Construction Services                  |           |          | 80        |           |       |             | 80       |
| Resident Representative                |           |          |           |           |       |             | Separate |
| As Built Drawings                      |           | 24       |           | 40        |       |             | 64       |
|  |           |          |           |           |       |             |          |
|  |           |          |           |           |       |             | 2474     |
|  | 98        | 254      | 714       | 1230      | 28    | 150         | 2474     |

