



June 23, 2015

Mr. John J. Ingram
Infrastructure Maintenance Director
Village of Orland Park
14700 S. Ravinia Avenue
Orland Park, Illinois 60462

Subject: Orlan Brook Drive Culvert Replacement - Design Services

Dear Mr. Ingram:

Baxter & Woodman is pleased to submit this proposal to provide Design Services for replacing the Orlan Brook Drive culvert. Enclosed is a description of how we would perform the requested services and an estimate of our costs for the work.

PROJECT UNDERSTANDING

The Village needs to replace two 72-inch culverts underneath Orlan Brook Drive, located south of the intersection with Wheeler Drive. A field inspection revealed that the pipes have significant deflection throughout the barrels. In addition, portions of the roadway pavement structure above the culvert have been undermined, requiring emergency patches by Public Works Staff over the past year. We understand that the Village would like to construct the culverts as soon as possible and use a cost-efficient approach to the improvement.

The work will be done within a floodplain and there are mapped wetlands within the limits of the improvement. The existing culverts are made of arch shaped, corrugated metal pipe but the Village wishes to replace the culverts with precast concrete culvert and end treatments. It is assumed that the MWRD would consider this work a Maintenance Activity and would therefore not require a Watershed Management Ordinance (WMO) permit. This assumption will need to be confirmed during the design process.

The Orland Brook Drive culverts convey water between two detention ponds that are on-line with Tinley Creek. The tributary drainage area to the culverts is less than 1 square mile, so a floodway construction permit from IDNR is not needed. Coordination with the USACE and Will/South-Cook Soil and Water Conservation District will be necessary to obtain permits for this project.

Our scope of services and engineering fees are presented on the following pages.



SCOPE OF SERVICES

1. TOPOGRAPHIC SURVEY

- *Topographic Survey:* Perform topographic survey—the limits will be 60 feet to the north and south of the structure (120-feet total). State plane coordinates and NAVD 88 will be used for horizontal and vertical controls.
- *Structures:* Collect drainage structure condition, inverts, size, and flow direction.
- *Terrain Model:* Download and develop digital terrain model for use in design and plan preparation.
- *Right of Way*: Field-locate existing property corners and utilize available tax parcel information to establish an approximate right-of-way.
- No additional right-of-way or easements are anticipated. Work to complete Plat of Easement or Plat of Dedication is not included.

2. CIVIL DRAWINGS

- *Drainage and Utilities Design:* Prepare the culvert and storm sewer design for the proposed improvements. It is assumed that the project outfalls will be maintained and not modified as part of this project.
- *Erosion Control Plan:* Prepare Soil Erosion and Sediment Control (SESC) Plans for approval from the Will/South-Cook Soil and Water Conservation District (SWCD). Agency review fees are not included within this agreement and shall be paid for separately by the Village.
- Estimate of Cost and Time: Prepare summary of quantities and an engineer's estimate of cost.
- *Specifications:* Prepare special provisions in accordance with Village guidelines to specify items not covered by the Standard Specifications for Road and Bridge Construction.

3. ENVIRONMENTAL COORDINATION & PERMITS

ECOCAT: Prepare an ECOCAT environmental screening through the IDNR website to identify
potentially impacted natural resources. Provide additional project information to review
ECOCAT agencies to evaluate impact. Consultation fees are not included in the scope of this
project and would be a separate expense to the Village if required. Unique design measures
to mitigate impacts from the ECOCAT will be considered additional services.



- *Historic Preservation Coordination:* Submit necessary documentation to the Illinois Historical Preservation Agency to obtain a "no significant historical resources" statement for the area of the Project.
- Wetland Delineation Report: Perform wetland delineation of the area during the growing season; including documentation of baseline vegetation, hydrology, and soils information.
 Prepare a Wetland Delineation Report and Exhibits that summarize the methodology used, site description, and results of survey. It is assumed that no wetland mitigation will be required for this project.
- *Clean Water Act Permit:* Prepare a Joint Application to the U.S. Army Corps of Engineers (USACE) for work within Waters of the United States. Processing is anticipated under the jurisdiction of the USACE Regional Permit No. 3 and/or 7.
- *Clean Construction or Demolition Debris (CCDD):* The contractor will provide testing during construction to comply with Form 663. CCDD testing and completion of Form 663 is not included in this scope and the amount of potentially contaminated soils will be determined during construction.

4. BIDDING ASSISTANCE

- Provide design assistance and clarification for bid documents. Assist the Village with coordination and scheduling during the bid process.
- 5. QA/QC—Perform in-house peer and milestone reviews by senior staff during project initiation, conceptual review, preliminary, prefinal, and final submittals. Provide ongoing reviews of permitting and utility coordination efforts. Conduct milestone reviews of subconsultants and provide feedback throughout the progress of work.
- 6. GEOTECHNICAL REPORT— Utilize Soil and Material Consultants to take one pavement core of the surface and base material for determining the composition of the existing pavement material within the project limits. Take two 15-foot soil borings total (1 core and 2 borings estimated).
- 7. STRUCTURAL PLANS—Not included IDOT Highway Standard end treatments will be specified.
- 8. MANAGE PROJECT—Plan, schedule, and control the activities that must be performed to complete the project including budget, schedule, and scope. Coordinate with Village and project team to ensure the goals of the project are achieved. Prepare and submit monthly invoices and provide regular updates to the Village.



ENGINEERING FEE

Our engineering fee for the above stated scope of services will be based on our hourly billing rates for actual work time performed plus reimbursement of out-of-pocket expenses, including travel costs which in total will not exceed \$25,200. All terms and conditions of the Master Agreement dated March 17, 2015 with the Village of Orland Park shall apply.

We appreciate the opportunity to work with the Village of Orland Park on this project and we are available to begin work immediately upon your notice to proceed. If you find this proposal acceptable, please sign one copy and return for our files. Please do not hesitate to call me 708-478-2090 if you have any questions or need additional information.

Sincerely,

BAXTER & WOODMAN, INC. CONSULTING ENGINEERS

ent / Wold

Derek J. Wold, P.E. Vice President

Attachment

C: Tara Orbon, P.E., Transportation Department Manager

AUTHORIZED BY: ______

TITLE: _____

DATE:

VILLAGE OF ORLAND PARK, IL

 $I: \ Crystal\ Lake \ \ ORLPK \ 150623-Orlan\ Brook\ Culvert \ \ Contract \ \ 150623Proposal_as\ sent_6-23-15.doc$