

Action Item # 3– 161st Street and Carey Road Rounabout Design

The Westfield Public Works Department is recommending the following Change Orders for consideration:

Original Contract Amount	\$183,730.00
Change Order #1 – Vertical Curve Correction	\$4,600.00
Change Order #2 – Additional topographic survey	\$2,500.00
Change Order #3 – Drainage Outlet permit	\$800.00
Change Order #4 – Landscape Design	\$14,900.00
Change Order #5 – Watermain Design- Deduct	\$(14,000.00)
Change Order Request Total	\$8,800.00
<u>Revised Contract Amount</u>	<u>\$192,530.00</u>

The Westfield Public Works Department recommends that the Board of Public Works and Safety consider these Change Orders for approval.



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June 30, 2009

Mr. Neil VanTrees, P.E.
Westfield Public Works
2706 E. 171st Street
Westfield, IN 46074

Re: Supplemental No. 1
Roundabout Intersection Design
161st Street and Carey Road

Dear Mr. VanTrees:

Pursuant to the original agreement dated February 2009, between the City of Westfield, Indiana (City) and DLZ Indiana, LLC (DLZ) for the subject Project, we are pleased to submit this fee proposal for additional services not included in the original agreement. The following tasks constitute additional services:

1. Vertical Curve Correction:

DLZ proposes to mitigate the stopping sight distance deficiency due to the existing crest vertical curve on the east leg of the intersection. At the time of the original agreement, the criteria and vertical curve data were unavailable and, therefore, the curve correction was not included in the original scope of services. The existing curve does not meet the criteria for Project design speed of 45mph. DLZ will design the plans and profile for this vertical curve correction to meet the Project design criteria. Additionally, cost estimates and earthwork quantities will be calculated for the bid documents. DLZ requests the additional lump sum fee in the amount of **\$4,600.00** for this task, which includes the additional effort for developing a plan and profile sheet and cross section sheets, as required.

2. Additional Survey:

DLZ proposes to collect additional topography on two areas for the purposes of adequate drainage design and which may also be used for drainage detention purposes. These two areas



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are shown in the “Attachment A” (aerial view) and labeled as Area One and Area Two. The proposed scope of additional survey shall be as follows:

Survey Control

DLZ shall provide additional survey grade control as necessary to accomplish the capture of additional data needed to map the expanded survey area as shown on the attachment.

Topography

Topography shall be electronically data collected and processed in Eagle Point format.

The additional topo area(s) shall not include previously captured topography which fall(s) within the shaded area(s) shown on the attachment.

Drainage/sewer structures found within the survey limits shall be located and sized and connected to key offsite structures if they exist.

Other topographic features that fall within the survey limits shall be located and shall include:

- Trees over 8 inches (Edge of tree-lines in heavily wooded areas)
- Significant landscaping and fences
- Driveways, walks and their surface types
- Buildings and /or dwellings
- Roadway surface types
- Utility installations if at surface or otherwise marked

Deliverables

DLZ shall provide the following deliverables upon completion of the survey:

- All electronic files in Eagle Point format
- DLZ shall incorporate the additional survey into the project base drawing



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Assumptions/Conditions

The fees listed below were calculated based upon the following assumptions.

- DLZ shall have unrestricted access to the survey site and adjoining lands.
- The limits of the survey shall be as described herein.

Compensation

For performance of the foregoing “Scope of Services”, DLZ requests a lump Sum fee in the amount of **\$2,500.00**.

3. Drainage Outlet Permit:

The Hamilton County Surveyor’s Office has requested an Outlet permit since the drainage from the proposed detention basin would end up in the Kirkendall Legal Drain. DLZ had initially identified only a Rule 5 permit under the original scope of services. The Hamilton County Surveyor’s Office also requested that in addition to the Rule 5 permit, the County would also like to see a substantive O&M manual for the BMP’s. The O&M manual is considered an additional service since it was not included in the original Project Agreement. For the additional permit and the preparation of the O&M manual, DLZ requests an additional lump sum fee in the amount of **\$800.00**.

4. Landscape Design:

Detailed design of the landscaping will be performed for the Conceptual Alternative # 3, previously submitted to the City (Please refer to Attachment B). This alternative uses native plants in an informal, naturalistic way for a variety of seasonal interest.

In addition to the landscape design, the berms in the northeast and southwest quadrant will be designed for aesthetic reasons. Furthermore, it is anticipated that the existing earthwork from the



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roadway cut sections will be utilized to construct these berms that will, in conjunction with landscaping, help to screen adjacent residences from the basin. Intersection approach sight distances will be evaluated to verify unrestricted view across the berms for safer travel through the roundabout. The final deliverable will include plans, profiles, cross sections (berms only), specifications and cost estimate, as deemed necessary for inclusion in the bid documents. As a part of this scope, DLZ will also attend one (1) meeting in the City of Westfield offices to review the landscaping design and obtain City's comments, if any. For the additional landscape and berm design, DLZ requests a lump sum fee in the amount of **\$14,900.00**.

5. Watermain Design:

Pursuant to the original agreement, DLZ was approved to perform the watermain design/relocation for a lump sum fee of \$14,000.00. However, as the design progressed, the City directed DLZ that this task will not be required. Therefore, the previously approved fee of **\$14,000.00** for the watermain design is being reallocated under this supplemental to be applied towards the aforementioned additional tasks (Nos. 1 through 4 above).

TOTAL FEES

Based on the aforementioned additional four (4) tasks and the reallocation for the watermain design fee (No. 5 above), DLZ requests a Total Additional Lump Sum Fee of **\$8,800.00 (Eight Thousand and Three Hundred Dollars)** for this Supplemental No. 1. The total Lump Sum fee for the Project is now increased from **\$183,730.00** to **\$192,530.00**.

TERMS AND CONDITIONS

All terms and conditions of the original agreement dated February 2009 between the City and DLZ remain valid.



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DLZ Indiana, LLC is pleased to submit this Proposal. Should you have any questions, please do not hesitate to contact our office at your convenience. We thank you for your continued trust in our Firm.

Sincerely,

DLZ Indiana, LLC

Agreed and Accepted – City of Westfield, Indiana

Mark C. Jacob
Vice President

Name

Haseeb A. Ghumman, PE, PTOE
Project Manager

Title

Date

Enc: Attachments A and B

M:\proj\0963\0638-Westfield Roundabout\Agreements\SA # 1\SA#1 Scope.docx

ATTACHMENT A



ATTACHMENT B

Conceptual Alternative #3

Alternative 3 uses native plants in an informal, naturalistic way for a variety of seasonal interest.

The Central Island planting scheme uses small ornamental trees to provide a vertical element and seasonal color. The understory would be a select palette of low profile prairie flowers and grasses. The mix of plant materials should provide flowering interest from spring until fall. In this alternative, the lawn band not only acts as a spacer, but provides a clean manicured edge to contrast the natural look of the planting area. All plants used within or near the roadway will be salt tolerant.

In this concept, the splitter islands are a mixture of paving and planting. The narrow ends of the splitter islands will be stamped colored concrete, as the narrow planting area may limit the success of plants in this area. The wider ends have a 2' band of the stamped concrete with low profile wildflowers and grasses in the center. The band will act as a manicured border similar to the lawn border in the Central Island. Plant materials in the splitter islands are limited to 2' in height due to the critical sight distance zones.

Deciduous, evergreen, and ornamental trees are located in irregular groupings along the streetscape (except those areas limited by critical sight distances). The loose natural groupings promote traffic calming on the approach to the roundabout and match adjacent streetscapes along the 161st Street trail.

On the southwest & northwest corners, the low berm is planted entirely with a low profile prairie mix. The large area will provide high impact color to the intersection as well as limit mowing, although it will require yearly maintenance. As the berm transitions to the basin, a low profile grass such as fescue will be used to plant the entire area. In Alternates 1 & 2, the parkway area is planted with lawn. However, in this Alternative, low profile prairie/wildflower mix is used with a lawn border for a manicured appearance.

A planting buffer of ornamental and deciduous trees, along with some evergreens, helps to screen adjacent residences from the basin and intersection impacts.



Westfield Roundabout - 161st & Carey

Conceptual Alternative #3



FEE JUSTIFICATION FOR FIELD SURVEY

Additional Topographic Survey - 161st Street and Carey Road

DLZ Indiana, LLC

\$2,500

DESCRIPTION	HOURS BY CLASSIFICATION				TOTALS:
	Surveyor	Party Chief	Inst. Oper.	Cad Tech	Budget
Research Activities:					
- Old Field Books, Plans					\$0.00
- Utility Plans, Contact Information and Field Meetings					\$0.00
- Section Corner Information					\$0.00
- Deeds and Property Owner Names & Addresses					\$0.00
- Other Recorded Documents					\$0.00
- Drainage Maps					\$0.00
- Bench Marks & Control Points					\$0.00
- Send letters to property owners					\$0.00
- Zoning					\$0.00
- Field Reconnaissance					\$0.00
- Document Review					\$0.00
Field Activities:					
Search / Excavate					
- Section Corners					\$0.00
- Bench Marks & Survey Control Points					\$0.00
- Title/Property Evidence					\$0.00
Horizontal Control and Field Activity Notes:					
- Off-site traverse					\$0.00
- On-site traverse					\$0.00
- GPS Surveying					\$0.00
Vertical Control and Field Activity Notes:					
- Off-site					\$0.00
- On-site					\$0.00
Witnesses:					
- Section Corners					\$0.00
- Traverse and alignment control points					\$0.00
Set Survey Monuments:					
- Mainline(s)					\$0.00
- S Line(s)					\$0.00
- T-line(s)					\$0.00
- Boundary					\$0.00
- Miscellaneous Staking					\$0.00
Topographic Survey:					
- Mainline(s)					\$0.00
- S-Line(s)					\$0.00
- T Line(s)					\$0.00
- Site Design Topo			14.0		\$1,492.26
- Detailed Sketches					\$0.00
- Sanitary and Storm Sewer Investigation					\$0.00
Other Field Related Work:					
- Locate Boundary / Title Evidence					\$0.00
- Field Check					\$0.00
- Stream Sections					\$0.00
- Bridge Detail					\$0.00
Office Activities					
Data Preparation					\$0.00
Project Proposal Preparation					\$0.00
Project Administration					\$0.00
Project Coordination					\$0.00
Travel Time					\$0.00
Download and cleanup		2.0		10.0	\$863.18
Field Book Preparation					\$0.00
Topography Mapping					\$0.00
Boundary Resolution (including Easements)					\$0.00
Report Preparation					\$0.00
Plat Preparation					\$0.00
Review	1.0				\$130.00
Revisions					\$0.00
TOTAL - Hours:	1.0	16.0	0.0	10.0	27.00
HOURLY RATES - 2009	\$130.00	\$106.59	\$97.50	\$65.00	
DIRECT SALARY COSTS:	\$130.00	\$1,705.44	\$0.00	\$650.00	\$2,485.44
TOTAL LABOR BUDGET					\$2,485.44

OTHER SURVEY DIRECT PROJECT COSTS:

EXPENSES

- MILEAGE -	_____ /mile	\$0.00
- LODGING -	_____ /night	\$0.00
- MEALS -	_____ days x \$25.0	\$0.00
- COPIES (DEEDS, PLATS, RAILROAD PLANS, ETC.) =		\$0.00
- EQUIPMENT RENTAL -		\$0.00
- TITLE SERVICES -		\$0.00
TOTAL DIRECT COSTS		\$0.00
TOTAL FIELD SURVEY BUDGET		\$2,485.44

TOTAL FIELD SURVEY BUDGET (ROUNDED)

\$2,500.00

Outlet Permit and O&M Manual - Additional Fees

	MANHOURS BY CLASSIFICATION								TOTAL HOURS /TASK	TOTAL DOLLARS /TASK
	DIV. MGR.	DEPT. MGR.	PROJ. MGR.	ENGR. III	ENGR. II	ENGR. I	TECH	Clerical		
Permit Application & coordination		1			1				2	\$272.50
O&M Manual		2			2				4	\$545.00
TOTAL-HOURS:	0	3	0	0	3	0	0	0	6	\$817.50
HOURLY RATES - 2009	\$175.00	\$160.00	\$135.00	\$122.50	\$112.50	\$90.00	\$65.00	\$50.00		
TOTAL FEE	\$0.00	\$480.00	\$0.00	\$0.00	\$337.50	\$0.00	\$0.00	\$0.00		\$817.50
OTHER DIRECT COSTS										\$0.00
TOTAL FEE (rounded)										\$800.00

OTHER DIRECT COSTS										
										\$0.00
TOTAL DIRECT COSTS:										\$0.00

LANDSCAPE DESIGN - Additional Fees

Landscape Design for Option # 3

TASKS	MANHOURS BY CLASSIFICATION								TOTAL HOURS /TASK	TOTAL DOLLARS /TASK
	DIV. MGR.	DEPT. MGR. (LA)	PROJ. MGR.	LA	ENGR. III	ENGR. I	Designer (Landscape)	Technician		
100% Plans & Profiles	1	1	2	4			40		48	\$4,095.00
Sight Distance Calcs for Berms			1		2				3	\$380.00
Berm Design, Cross Sections & Earthwork Calcs			4		12	20			36	\$3,810.00
Specs, Qtys., Cost Estimate			2	2		8	8		20	\$1,835.00
One Meeting in Westfield, IN			3				8		11	\$1,005.00
Final Tracings & Bid Documents		1	2	4	4	8	12		31	\$3,030.00
QA/QC	1		4						5	\$715.00
TOTAL-HOURS:	2	2	18	10	18	36	68	0	154	\$14,870.00
HOURLY RATES - 2009	\$175.00	\$160.00	\$135.00	\$122.50	\$122.50	\$90.00	\$75.00	\$65.00		
TOTAL FEE	\$350.00	\$320.00	\$2,430.00	\$1,225.00	\$2,205.00	\$3,240.00	\$5,100.00	\$0.00		\$14,870.00
OTHER DIRECT COSTS										\$0.00
TOTAL FEE (rounded)										\$14,900.00

OTHER DIRECT COSTS											
											\$0.00
TOTAL DIRECT COSTS:											\$0.00