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April 13, 2011

Mayor Daniel J. McLaughlin
Village of Orland Park
14700 Ravinia Avenue
Orland Park, IL 60462

Re: Phase I Engineering Design Services
143rd Street – Wolf Road to Southwest Highway

Dear Mayor McLaughlin:

Please find attached a proposal to complete Phase I Engineering Design Services for the above reference project. The proposed services account for changes to the scope of this project which are detailed in the attached documents.

We appreciate the opportunity to provide engineering services to the Village of Orland Park. Please call me at (312) 946-7104 if you have any questions or require additional information.

Very truly yours,
McDonough Associates Inc.

A handwritten signature in cursive script that reads "Feroz Nathani".

Feroz Nathani, PE
President

Phase I Update
Illinois Route 7 (143rd Street) - Wolf Road to Southwest Highway
Village of Orland Park

Scope of Work

143rd Street Phase I Update

The project will consist of updating the current Phase I Project Development report and environmental items based on the new right-of-way agreement with the Forest Preserve District of Cook County along with the new requirements from the March 15, 2001 FHWA/IDOT coordination meeting. Existing traffic will need to be counted and projected to 2040, geometry will need to be revised based on the new ROW as well as Complete Streets requirements, all environmental work will need to be revisited and closed, a new public meeting will need to be held and the Project Development report and exhibits will need to be revised and resubmitted to IDOT for approval. The Location Drainage Study and Hydraulic Report have previously been approved and will require addendums to account for the new geometry. All work will be performed in full accordance with IDOT standards, procedures, requirements and criteria. NOTE - This project will meet the limits of the improvements to Southwest Highway on the west leg of the intersection of Southwest Highway and 143rd Street.

Southwest Highway Realignment Studies

The project will consist of preparing an Intersection Design Study for the potential realignment of the intersection at 143rd Street and Southwest Highway. The project will update the recommendations and findings made in the IDOT Phase I Report for 143rd Street to reflect the recent clearing of commercial buildings on the NW corner of the intersection. The updated study will look at new alignment possibilities that were not available as alternatives during the original study. The project will also look at 2040 traffic projections for the intersection. A public meeting will be held to present the findings of the intersection improvement study to all stakeholders and interested parties. All work will be performed in full accordance with IDOT standards, procedures, requirements and criteria.

143rd Phase I Update Working Tasks

Total Man-hours

1.0 Update Data Collection / Gather Information	
Request and Plot Latest Utility Atlas Sheets	6
Request Latest Existing Roadway Plans	2
Property Delineation and Ownership	8
Taxing Maps	2
Planning Maps	2
Existing Drainage Plans	0
Development Plans	4
<i>Sub-Total</i>	24
2.0 Early Project Coordination	
Re-establish Design Criteria - Horizontal / Vertical	6
Prepare New Work Plan	2
Prepare New Project Schedule	2
<i>Sub-Total</i>	10
3.0 Update Phase I Field Survey	
Horizontal Control and Centerline Survey	8
Vertical Control, Benchmarks and Ties	8
Topographic Information	0
Property Corners	0
Drainage Survey	16
New Developments and Construction	48
Cross Sections	0
<i>Sub-Total</i>	80

4.0 Update Traffic Analysis & Intersection Design Study	
24 Hour machine counts	Included by others
AM Peak Hour Directional Counts	Included by others
PM Peak Hour Directional Counts	Included by others
Year 2040 Projected Traffic (ADT and DHV)	16
Capacity Analysis	24
Traffic Signal Warrants	12
Intersection Design Study Plans (3 Intersections)	300
Intersection Autoturn Exhibits	24
	<i>Sub-Total</i>
	376
5.0 Update Crash Analysis	
Compile Crash Reports and Records (most recent three years)	4
Analysis of Collision Accident Data	4
Prepare Crash Analysis Report and Exhibits	16
	<i>Sub-Total</i>
	24
6.0 143rd Street Alternative Alignments and Design Analysis	
Horizontal Alignment Analysis	24
Vertical Alignment Analysis	16
Typical Section Study	16
Roadway Geometrics, Lanes, Median and Widths	4
Turn Storage Requirements, Tapers and Turn Radii	4
Retaining Walls, Side slopes and Guardrail vs. ROW Issues	8
Temporary Construction Easements	2
Plan Geometrics for IDS	24
Profile Geometrics for IDS	24
Cross Section Impact Analysis	4
Determine Right-Of-Way and Easement Requirements	4
Pavement Marking Details	2
Complete Streets Design	16
Utility Relocations	4
Safety Issues	4
	<i>Sub-Total</i>
	156
7.0 Streetscaping Issues	
Landscaping Issues	Not Included
Street Lighting Issues	
Decorative Features	
	<i>Sub-Total</i>
8.0 Socio-Economic Business Establishment Issues	
Meet with Businesses	Not Included
Economic Issues	
Traffic and Access Issues	
Parking Issues	
Safety Issues	
	<i>Sub-Total</i>
9.0 Maintenance of Traffic and Detour Route Analysis	
Detour Route Analysis	0
Construction Staging Issues	8
Plan Packaging Options	4
	<i>Sub-Total</i>
	12
10.0 Hydraulic Report Addendum	
Hydraulic Analysis Based on New Culvert Length	32
Revise Waterway Information Tables	16
Revise Compensatory Storage Calculations and Site Plan	16
Permit Summary for Floodway	8
Revise Hydraulic Report, Data Sheets, and PBDHR BLR 10210	32
Update General Plan and Elevation for Culvert	8
	<i>Sub-Total</i>
	112

11.0 Location Drainage Study Addendum		
Update Existing Conditions		16
Revise Proposed Drainage Plan and Profiles		80
Analyze New Drainage Alternatives		16
Storm Sewer Calculations and Detention Calculations		72
Amend Location Drainage Study Report and Exhibits		48
Meetings and Coordination		24
	<i>Sub-Total</i>	256
12.0 Structural Studies		
Retaining Wall Analysis and Calculations		Not Included
Culverts and Wingwall Analysis and Calculations		
Retaining Wall Alternatives		
Culverts and Wingwall Alternatives		
Preliminary TS&L for Retaining Walls		
Preliminary TS&L for Culverts and Wingwalls		
Structural Recommendations		
Structural Cost Estimate		
	<i>Sub-Total</i>	
13.0 Wetland Delineation, Classification, Mitigation		
Delineation		Not Included
Classification		
Mitigation		
Avoidance Alternatives		
Wetland Impact Re-Assessment and WIE Forms		
	<i>Sub-Total</i>	16
14.0 Environmental Studies		
Environmental Survey Request Form		0
Eco Cat On-Line Application		2
Archaeological, Historical and Architectural Inventory		0
Preliminary Environmental Site Assessment		
Hazardous Waste		0
Special Waste		0
Air Analysis		0
Noise Analysis		0
Section 4(f) Evaluation - Closeout with FPDCC		24
Wetland Permits		0
Revisit and Close all ECAD Items		32
Floodway and Floodplain Permits		0
Tree and Vegetation Evaluation		0
	<i>Sub-Total</i>	58
15.0 Meetings, Coordination and Special Issues		
Forest Preserve District of Cook County		16
Illinois Nature Preserve		0
Cook County Highway Department		4
Illinois Historic Preservation Officer		0
Illinois Department of Natural Resources		0
US Army Corps of Engineers		0
Illinois Department of Transportation		24
FHWA		4
Coordination of Services by Others		2
	<i>Sub-Total</i>	50
16.0 143rd Street Public Involvement (Informational Meeting)		
Compile Mailing List from List of Property Owners		2
Prepare and Mail Informational Brochures		4
Prepare Public Meeting Displays and Presentation		24
Secure Public Meeting Site		by Orland Park
Hold Public Meeting and Gather Input		16
Prepare Summary of Comments at Public Meeting		8
Transportation to Meeting (2 trips)		
	<i>Sub-Total</i>	54

17.0 Cost Estimate		
Preliminary		6
Final		4
	<i>Sub-Total</i>	10
18.0 143rd Street Phase I Project Development Report		
Revise PDR Text and Exhibits		48
Compile Final Report		16
	<i>Sub-Total</i>	64
19.0 In-House Direct Costs		
Printing and Reproductions		
Preliminary Submittal		
Xerox Copies		
Paper Plots		
Blue-line Copies		
PreFinal Submittal		
Xerox Copies		
Paper Plots		
Blue-line Copies		
Vellum Plots		
Final Submittal		
Xerox Copies		
Paper Plots		
Blue-line Copies		
Vellum Plots		
Mylar Plots		
Survey Vehicle Transportation		
Field Survey Trips		
Meeting Transportation		
Meeting Trips		
Special Meeting Exhibits and Presentation Material		
Public Meeting Room Rental		
Public Meeting Brochures		
Public Meeting Exhibit Printing/Mounting		
		\$ 2,000.00
20.0 Services By Others		
Aerial Photography		Not Included
Soil Borings / Wetland Borings / Pavement Cores		Not Included
Traffic Counting (Peak Hours, Directional and 24-Hour Tube)		\$ 6,000.00
Hazardous / Special Waste Site Assessment Survey		
Air Analysis		
Noise Analysis		
Erosion Control Plans		Not Included
Water Quality Issues		
Wetland Delineation and Classification		

Estimate Total Man-Hours	1302
Estimate Average Hourly Wage Rate \$	43.50
Multiplier	2.8
Sub-Total \$	158,583.60
In-House Costs and Services by Others (see above) \$	8,000.00
Project Sub-Total \$	166,583.60

Southwest Highway Realignment Working Tasks

Total Man-hours

1.0 Southwest Highway Realignment Study & Intersection Design Study		
Horizontal Alignment Analysis		24
Vertical Alignment Analysis		16
Typical Section Study		4
Roadway Geometrics, Lanes, Median and Widths		4
Turn Storage Requirements, Tapers and Turn Radii		4
Retaining Walls, Side slopes and Guardrail vs. ROW Issues		4
Temporary Construction Easements		2
Plan Geometrics for IDS		8
Profile Geometrics for IDS		8
Cross Section Impact Analysis		4
Determine Right-Of-Way and Easement Requirements		4
Pavement Marking Details		2
School Access Issues		16
Utility Relocations		4
24 Hour machine counts		Included by others
AM Peak Hour Directional Counts		Included by others
PM Peak Hour Directional Counts		Included by others
Capacity Analysis		12
Traffic Signal Warrants		4
Intersection Design Study Plans (3 Intersections)		100
Intersection Autoturn Exhibits		8
	<i>Sub-Total</i>	228
2.0 Railroad Coordination		
Meetings and Coordination		4
Grades and Crossing		4
Signal Equipment & Railroad Preemption		4
	<i>Sub-Total</i>	12
3.0 Southwest Highway Public Involvement (Informational Meeting)		
Prepare Public Meeting Displays and Presentation		24
Secure Public Meeting Site		by Orland Park
Hold Public Meeting and Gather Input		16
Public Outreach and Follow Up with School and Property Owners		16
Transportation to Meeting (2 trips)		
	<i>Sub-Total</i>	56
4.0 Cost Estimate		
Preliminary		6
Final		4
	<i>Sub-Total</i>	10
5.0 Southwest Highway Phase I Project Development Report		
Prepare PDR Text and Exhibits		24
Compile Final Report		8
	<i>Sub-Total</i>	32
6.0 In-House Direct Costs		
Printing and Reproductions		
Preliminary Submittal		
Xerox Copies		
Paper Plots		
Blue-line Copies		
PreFinal Submittal		
Xerox Copies		
Paper Plots		
Blue-line Copies		
Vellum Plots		
Final Submittal		
Xerox Copies		
Paper Plots		
		\$ 1,000.00

Blueline Copies	
Vellum Plots	
Mylar Plots	
Survey Vehicle Transportation	
Field Survey Trips	
Meeting Transportation	
Meeting Trips	
Special Meeting Exhibits and Presentation Material	
Public Meeting Room Rental	
Public Meeting Brochures	
Public Meeting Exhibit Printing/Mounting	
7.0 Services By Others	
Aerial Photography	
Soil Borings / Wetland Borings / Pavement Cores	Not Included
Traffic Counting (Peak Hours, Directional and 24-Hour Tube)	\$ 2,000.00
Hazardous / Special Waste Site Assessment Survey	
Air Analysis	
Noise Analysis	
Erosion Control Plans	Not Included
Water Quality Issues	
Wetland Delineation and Classification	

Estimate Total Man-Hours	338	
Estimate Average Hourly Wage Rate \$		43.50
Multiplier	2.8	
Sub-Total \$		41,168.40
In-House Costs and Services by Others (see above) \$		3,000.00
Project Sub-Total \$		44,168.40

PROJECT GRAND TOTAL \$ 210,752.00