



CITY of NOVI CITY COUNCIL

Agenda Item G
August 24, 2015

SUBJECT: Approval to award an amendment to the engineering services agreement with Spalding DeDecker Associates for additional design engineering services for the Eight Mile Road Pathway (Beck to Garfield) project in the amount of \$30,395; and approval of a resolution to amend the budget to add \$30,395 to this line item.

SUBMITTING DEPARTMENT: Department of Public Services, Engineering Division *BTC RJA*

CITY MANAGER APPROVAL: *[Signature]*

EXPENDITURE REQUIRED	\$ 30,395
AMOUNT BUDGETED	\$ 0
APPROPRIATION REQUIRED	\$30,395 (from additional revenue items)
LINE ITEM NUMBER	204-204.00-974.423

BACKGROUND INFORMATION:

An engineering agreement was awarded to Spalding DeDecker on August 25, 2014 for the design of the Eight Mile Pathway between Beck and just west of Garfield Road. The design fee was established using the standard fee curve percentage applied to a construction cost estimate of \$461,117. As the design of the project progressed, the estimated construction cost of the project has increased to \$767,041. The large increase in the estimated construction was caused by several factors:

- The need to construct a retaining wall, perform additional grading, and provide other work to preserve the front yard of the older home located within the existing right-of-way (based on numerous meetings with the property owner).
- There are several larger areas of poor soils along the alignment that require additional excavation and fill, and an engineered path cross-section (as a cheaper alternative to boardwalk). This added work is necessary in order to construct the pathway through areas of peat and other types of poor soils.
- Additional grading required to maintain the flow of the existing drainage system along the route.
- Compliance with requirements of the Road Commission for Oakland County, as the agency with jurisdiction over Eight Mile Road.
- A general increase in construction bid prices as shared in previous correspondence.

Each of these factors not only increased the construction cost estimate, but also required additional effort by the design consultant outside of the original project scope. Therefore, staff is recommending an amendment to the existing engineering agreement to provide additional design fees to the consultant.

The design of the project is complete; however, additional funds will be necessary to construct the pathway as originally scoped. There are two proposed developments on Eight Mile Road that are in the plan review process that would privately construct pathways that were originally part of this scope. The construction contract has been

crafted to show the pathway along the frontage of Dunhill Park (northwest corner of Eight Mile and Beck) and Ballantyne (northwest corner of Eight Mile and Garfield) as alternates. This will allow staff and City Council some flexibility in the contract award based on the status of these private development projects. Ballantyne has received final site plan approval, but has not yet started construction. Dunhill Park is in preliminary site plan review. If the pathway along the frontage of Ballantyne and Dunhill Park were removed from the project, the project would only be \$48,000 over budget.

The project will be advertised for bids this month so work can begin yet this construction season, with the remainder of the work to take place in spring 2016.

RECOMMENDED ACTION: Approval to award an amendment to the engineering services agreement with Spalding DeDecker Associates for additional design engineering services for the Eight Mile Road Pathway (Beck to Garfield) project in the amount of \$30,395; and approval of a resolution to amend the budget to add \$30,395 to this line item.

	1	2	Y	N
Mayor Gatt				
Mayor Pro Tem Staudt				
Council Member Casey				
Council Member Markham				

	1	2	Y	N
Council Member Mutch				
Council Member Poupard				
Council Member Wrobel				

RESOLUTION

NOW, THEREFORE BE IT RESOLVED that the following
Budget Amendment for the engineering for Sidewalk Seg# 109 Eight
Mile (Garfield to Beck) Project is authorized:

	INCREASE (DECREASE)
MUNICIPAL STREET FUND	
REVENUES	
Licenses, Permits, & Charges for Services	12,640
Property Tax Revenue	17,755
TOTAL REVENUES	\$ 30,395
APPROPRIATIONS	
Capital Outlay	30,395
TOTAL APPROPRIATIONS	\$ 30,395
Net Increase (Decrease) to Fund Balance	\$ -

I hereby certify that the foregoing is a true and complete copy of a
resolution adopted by the City Council of the City of Novi
at a regular meeting held on August 24, 2015

Maryanne Cornelius
City Clerk

Eight Mile Road Pathway

Base Bid with Alternates







Map Author:
Date:
Project:
Version #:

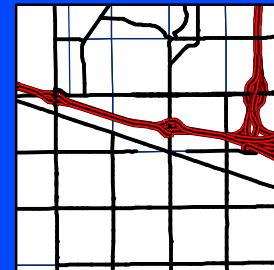
Amended By:
Date:
Department:

MAP INTERPRETATION NOTICE

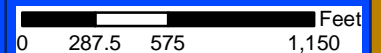
Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

Legend

-  Alternate_2
-  Alternate_1
-  Base_Bid
-  Existing Pathway



City of Novi
Engineering Division
Department of Public Services
26300 Lee BeGole Drive
Novi, MI 48375
cityofnovi.org



Authorization for Additional Services #1

Project: **Engineering Services for**
8 Mile Rd Pathway

Date: 07/29/2015

Description of Additional Services

The proposed design of the project has been updated to include:

- Peat excavation, swamp backfill and a "capillary break" to address the peat/muck areas found during the geotechnical investigation phase of the project.

Original scope of work:

- SDA will perform a topographic survey from the northern edge of 8 Mile Road approximately 30' to the northern ROW line. This survey will include all features including the drain crossings and existing utilities. Trees 8" and larger in diameter will also be surveyed.
- Soil borings and geotechnical investigation will be required as part of this project. Soil borings and geotechnical investigation are not included in our estimate and will be paid for separately by the City. It is estimated that 4 borings will be needed for the project.
- It is assumed that the pathway will connect on both sides to the existing pathway in front of Maybury Park Estates and that the existing pathway will remain in place.
- SDA will begin the process of identifying historical properties within the project limits early so any impacts can be avoided or coordinated with property owners.
- It is assumed that the newly constructed ADA ramps at Beck Rd will remain in place and the proposed pathway will tie in to the existing ramp.
- Existing ditches will be re-graded and the existing culvert under 8 Mile Road will be extended to the North to match the new ditch line.
- Assumptions of work are based on the ECT report dated August 1, 2014.
- A hydrological study of area drainage patterns is not included in this scope of services.
- SDA will prepare 50% plans for the City to review.
- SDA will prepare 100% plans and specifications and submit to the City for final review.
- SDA will assist the City during the bidding process as needed.

Amount authorized for original scope: \$41,040

Amount authorized for original additional services: \$1,080

Total Original amount authorized: \$42,120

Proposed scope of work:

During the geotechnical investigation, the City's Geotechnical consultant reported the existence of peat/muck for the majority of the project limits. Based on these findings they recommended following MDOT's standard plan for peat excavation and the placement of a "capillary break" layer to prevent water from rising into the

aggregate base section. The project design was altered to incorporate these recommendations. Below is a summary of the alterations:

- Additional typical sections for the varying conditions in the peat/muck areas.
- Revisions to the pathway alignment and profile to minimize fill in the peat/muck areas, avoid direct conflicts with the gas main and maintain drainage.
- Addition of the peat/muck limits to the profiles and calculation of the earthwork quantities needed for the new cross section.
- Revisions to the drainage design to accommodate the new alignment.
- Assessment of the probable cost of incorporating the recommendations versus the cost of a boardwalk.

Other additions to the Original Scope of Service:

- Division of quantities and the estimate for 2 Alternate Bid areas.
- Revision of the pathway alignment to reduce tree removals due to the new tree removal restrictions.
- Revisions to the area in front of the Teubert's home to minimize impacts to the property.

The construction estimate for the project rose significantly (from \$461,117 to \$767,041). The rise in estimated cost was due to the additional excavation and fill materials required in the peat/marsh sections as well as impacts to the alignment of the path, grading limits and proposed drainage necessary to maintain flow to the existing drainage system. The proposed budget amount is based on the Non-Motorized fee curve and the additional award is the difference between the new design fee and the original design awarded.

Proposed budget amount for new scope: \$60,596
Proposed budget amount for development of special cross sections: \$10,839
Proposed budget amount for additional services: \$1,080
Total Proposed budget amount: \$72,515

Based on the revised scope of services, we request authorization for an increase of \$30,395 to the amount authorized under the previous scope of services.

Spalding DeDecker Associates, Inc.

Requested by: Edward Strada Date: 07/30/2015
Edward Strada, Project Manager

CITY OF NOVI

Reviewed by: Brian Coburn Date: 8/5/15
Brian Coburn, Engineering Manager

Approved by: Rob Hayes Date: 8/5/15
Rob Hayes, Director of Public Services

Approved by: _____ Date: _____
Sue Morianti, Purchasing Manager

**8 MILE PATHWAY (GARFIELD ROAD TO BECK ROAD)
 OPINION OF PROBABLE CONSTRUCTION COST 90% REVISED**

PROJECT NAME: 8 Mile Pathway - 150' west of Garfield to Beck - Cost Estimate
 CLIENT NAME: City of Novi
 PREPARED BY: TER/ES

PROJECT NO: NV14004
 DATE: 08/03/15

BASE BID: GARFIELD ROAD TO STA 198+42

NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
1	02.02 Bonds, Insurance & Mobilization (5% max)	1	LS	\$ 25,613.00	\$ 25,613.00
2	02.02 Pre Construction Audio/Visual DVD Coverage	1	LS	\$ 3,500.00	\$ 3,500.00
3	30.13 Soil Erosion and Sedimentation Control Measures	1	LS	\$ 7,000.00	\$ 7,000.00
4	30.14 Temporary Traffic Control Devices	1	LS	\$ 5,000.00	\$ 5,000.00
5	30.15 Tree Protection Fencing (As Needed)	100	LF	\$ 2.00	\$ 200.00
6	30.16 Construction Protection Fencing - Orange	415	LF	\$ 3.00	\$ 1,245.00
7	30.17 Clearing and Grubbing	20	STA	\$ 400.00	\$ 8,040.00
8	30.18 Remove Tree, (8"-18"), Complete	2	EA	\$ 500.00	\$ 1,000.00
9	30.18 Remove Tree, (19"-36"), Complete	1	EA	\$ 1,000.00	\$ 1,000.00
10	30.19 Sidewalk, Remove	365	SF	\$ 2.50	\$ 912.50
11	30.20 Concrete Curb and Gutter, Remove	17	LF	\$ 20.00	\$ 340.00
12	30.21 HMA Driveway, Remove	92	SY	\$ 18.00	\$ 1,656.00
13	M203 Culv, End, Rem, Less than 24 Inch	1	EA	\$ 300.00	\$ 300.00
14	M203 Sewer, Rem, Less than 24 Inch	208	LF	\$ 25.00	\$ 5,200.00
15	M205 Excavation, Peat	1,850	CY	\$ 25.00	\$ 46,250.00
16	30.22 Subgrade Undercut (As Needed)	600	CY	\$ 50.00	\$ 30,000.00
17	30.23 Pathway Grading	13	STA	\$ 4,000.00	\$ 50,000.00
18	M205 Backfill, Swamp	650	CY	\$ 20.00	\$ 13,000.00
19	M205 Embankment, CIP	280	CY	\$ 20.00	\$ 5,600.00
20	02.06 Regrade Ditch	820	LF	\$ 20.00	\$ 16,400.00
21	30.24 Culv End Sect, Conc, 12 Inch, Complete	6	EA	\$ 1,500.00	\$ 9,000.00
22	30.24 Culv End Sect, Conc, 18 Inch, Complete	1	EA	\$ 2,000.00	\$ 2,000.00
23	M402 Sewer C76 CL IV, 12 Inch, Tr A	328	LF	\$ 65.00	\$ 21,320.00
24	30.25 Dr Structure, 48 Inch Dia, Low Head	2	EA	\$ 2,500.00	\$ 5,000.00
25	M403 Dr Structure Cover, EJ1040 Type N	2	EA	\$ 650.00	\$ 1,300.00
26	30.26 Str Rehab Type 1: Point Up Structure	1	EA	\$ 500.00	\$ 500.00
27	30.27 Str Rehab Type 2: Structure Cover Adjust	1	EA	\$ 600.00	\$ 600.00
28	30.28 Str Rehab Type 3: Reconstruct Structure	1	EA	\$ 900.00	\$ 900.00
29	30.29 Capillary Break	1,190	SY	\$ 25.00	\$ 29,750.00
30	30.30 Aggregate Base, 6 Inch, Limestone	2,430	SY	\$ 14.00	\$ 34,020.00
31	30.31 HMA Driveway, Complete	194	SY	\$ 46.00	\$ 8,924.00
32	30.32 Sidewalk, Conc, 4 Inch	16,395	SF	\$ 5.00	\$ 81,975.00
33	30.33 Sidewalk, Conc, 4 Inch, Colored	480	SF	\$ 10.00	\$ 4,800.00
34	30.34 ADA Ramp, Conc, 6 Inch	110	SF	\$ 7.50	\$ 825.00
35	30.35 ADA Detectable Warning Plate	14	SF	\$ 25.00	\$ 350.00
36	30.36 Concrete Curb and Gutter, Modified	17	LF	\$ 34.00	\$ 578.00
37	30.37 Composite Pedestrian Railing (As Needed)	50	LF	\$ 45.00	\$ 2,250.00
38	30.38 Modular Block Retaining Wall	825	FSF	\$ 70.00	\$ 57,750.00
39	30.39 Shrub Planting - Ludwig Spaeth Lilac	20	EA	\$ 200.00	\$ 4,000.00
40	30.39 Shrub Planting - Smooth Hydrangea	35	EA	\$ 100.00	\$ 3,500.00
41	30.40 Wetland Edge Seed Mix and Mulch Blanket	1,230	SY	\$ 8.00	\$ 9,840.00
42	2.00 Class "A" Sodding	355	SY	\$ 4.00	\$ 1,420.00
43	30.41 Restoration	1	LS	\$ 18,000.00	\$ 18,000.00
44	30.11 Permit Allowance	1	LS	\$ 1,000.00	\$ 1,000.00
45	30.42 Inspection Crew Days	25	DAY	\$ 640.00	\$ 16,000.00
Base Bid Subtotal					\$ 537,859.00

8 MILE PATHWAY (GARFIELD ROAD TO BECK ROAD)
OPINION OF PROBABLE CONSTRUCTION COST 90% REVISED

PROJECT NAME: 8 Mile Pathway - 150' west of Garfield to Beck - Cost Estimate
 CLIENT NAME: City of Novi
 PREPARED BY: TER/ES

PROJECT NO: NV14004

DATE: 08/03/15

ALTERNATE 1: STA 153-50 TO GARFIELD ROAD

NO.		ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
46	02.02	Bonds, Insurance & Mobilization (5% max)	1	LS	\$ 1,535.00	\$ 1,535.00
47	02.02	Pre Construction Audio/Visual DVD Coverage	1	LS	\$ 2,000.00	\$ 2,000.00
48	30.13	Soil Erosion and Sedimentation Control Measures	1	LS	\$ 2,000.00	\$ 2,000.00
49	30.14	Temporary Traffic Control Devices	1	LS	\$ 2,000.00	\$ 2,000.00
50	30.17	Clearing and Grubbing	1	STA	\$ 400.00	\$ 520.00
51	30.18	Remove Tree, (8"-18"), Complete	4	EA	\$ 500.00	\$ 2,000.00
52	30.18	Remove Tree, (19"-36"), Complete	1	EA	\$ 1,000.00	\$ 1,000.00
53	30.20	Concrete Curb and Gutter, Remove	17	LF	\$ 20.00	\$ 340.00
54	30.23	Pathway Grading	1	STA	\$ 4,000.00	\$ 5,200.00
55	30.30	Aggregate Base, 6 Inch, Limestone	170	SY	\$ 14.00	\$ 2,380.00
56	30.32	Sidewalk, Conc, 4 Inch	1,060	SF	\$ 5.00	\$ 5,300.00
57	30.34	ADA Ramp, Conc, 6 Inch	110	SF	\$ 7.50	\$ 825.00
58	30.35	ADA Detectable Warning Plate	14	SF	\$ 25.00	\$ 350.00
59	30.36	Concrete Curb and Gutter, Modified	17	LF	\$ 34.00	\$ 578.00
60	30.41	Restoration	1	LS	\$ 3,000.00	\$ 3,000.00
61	30.42	Inspection Crew Days	5	DAY	\$ 640.00	\$ 3,200.00
Alternate 1 Subtotal						\$ 32,228.00

8 MILE PATHWAY (GARFIELD ROAD TO BECK ROAD)
OPINION OF PROBABLE CONSTRUCTION COST 90% REVISED

PROJECT NAME: 8 Mile Pathway - 150' west of Garfield to Beck - Cost Estimate
 CLIENT NAME: City of Novi
 PREPARED BY: TER/ES

PROJECT NO: NV14004
 DATE: 08/03/15

ALTERNATE 2: STA 198+42 TO BECK ROAD

NO.		ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
62	02.02	Bonds, Insurance & Mobilization (5% max)	1	LS	\$ 10,156.00	\$ 10,156.00
63	02.02	Pre Construction Audio/Visual DVD Coverage	1	LS	\$ 2,000.00	\$ 2,000.00
64	30.13	Soil Erosion and Sedimentation Control Measures	1	LS	\$ 4,000.00	\$ 4,000.00
65	30.14	Temporary Traffic Control Devices	1	LS	\$ 3,000.00	\$ 3,000.00
66	30.16	Construction Protection Fencing - Orange	165	LF	\$ 3.00	\$ 495.00
67	30.17	Clearing and Grubbing	9	STA	\$ 400.00	\$ 3,760.00
68	30.18	Remove Tree, (8"-18"), Complete	9	EA	\$ 500.00	\$ 4,500.00
69	30.18	Remove Tree, (19"-36"), Complete	5	EA	\$ 1,000.00	\$ 5,000.00
70	M204	Fence, Rem	80	LF	\$ 3.00	\$ 240.00
71	M203	Culv, End, Rem, Less than 24 Inch	1	EA	\$ 300.00	\$ 300.00
72	M205	Excavation, Peat	935	CY	\$ 25.00	\$ 23,375.00
73	30.23	Pathway Grading	5	STA	\$ 4,000.00	\$ 18,400.00
74	M205	Backfill, Swamp	330	CY	\$ 20.00	\$ 6,600.00
75	M205	Embankment, CIP	158	CY	\$ 20.00	\$ 3,160.00
76	02.06	Regrade Ditch	265	LF	\$ 20.00	\$ 5,300.00
77	30.24	Culv End Sect, Conc, 18 Inch, Complete	3	EA	\$ 2,000.00	\$ 6,000.00
78	M402	Sewer C76 CL IV, 18 Inch, Tr A	301	LF	\$ 75.00	\$ 22,575.00
79	30.25	Dr Structure, 48 Inch Dia, Low Head	1	EA	\$ 2,500.00	\$ 2,500.00
80	30.25	Dr Structure, 60 Inch Dia, Low Head	1	EA	\$ 3,000.00	\$ 3,000.00
81	M403	Dr Structure Cover, EJ1040 Type N	2	EA	\$ 650.00	\$ 1,300.00
82	30.29	Capillary Break	665	SY	\$ 25.00	\$ 16,625.00
83	30.30	Aggregate Base, 6 Inch, Limestone	1,080	SY	\$ 14.00	\$ 15,120.00
84	30.32	Sidewalk, Conc, 4 Inch	7,555	SF	\$ 5.00	\$ 37,775.00
85	30.40	Wetland Edge Seed Mix and Mulch Blanket	460	SY	\$ 8.00	\$ 3,680.00
86	30.41	Restoration	1	LS	\$ 8,000.00	\$ 8,000.00
87	30.42	Inspection Crew Days	10	DAY	\$ 640.00	\$ 6,400.00
Alternate 2 Subtotal						\$ 213,261.00
OPINION OF PROBABLE CONSTRUCTION COST					Total Estimated Construction Cost: \$ 783,348.00	

In providing opinions of probable construction cost, the Client understands that the Consultant has no control over the cost or availability of labor, equipment or materials, or over market conditions or the Contractor's method of pricing, and that the Consultant's opinions of probable construction costs are made on the basis of the Consultant's professional judgement and experience. The Consultant makes no warranty, express or implied, that the bids or the negotiated cost of the Work will not vary from the Consultant's opinion of probable construction cost.