



CITY of NOVI CITY COUNCIL

Agenda Item J
January 10, 2011

SUBJECT: Approval of a resolution of support for the Application for Trail License on ITC Property north of 11 Mile Road adjacent to the proposed Medilodge site.

SUBMITTING DEPARTMENT: Department of Public Services, Engineering Division *Beck*
Community Development Department, Planning Division

CITY MANAGER APPROVAL: 

BACKGROUND INFORMATION:

The representatives of Medilodge, a convalescent facility proposed for the north side of 11 Mile Road between Beck Road and Wixom Road, have offered to construct a public trail through a portion of the Medilodge property and within the adjacent ITC corridor as public benefit associated with the rezoning of the land (see attached sketch for trail location). The applicant continues to work through a number of details of the project and staff anticipates bringing a Planned Rezoning Overlay (PRO) Agreement to the City Council for consideration in upcoming months.

The pathway is part of a master planned regional trail that would extend from ITC Community Sports Park to Providence Park Hospital (see attached map) and eventually to Lakeshore Park. To facilitate the proposed trail improvements within the ITC corridor, staff has made contact with representatives of ITC to determine ITC's standards and approval process for trails within its corridor. Since the proposed trail would be open to the public, staff believes that it is appropriate for the City to be the applicant. One item required on the application (attached) is documented evidence that all municipalities and entities involved with the proposed trail officially support the license application. The enclosed resolution was prepared for consideration by the City Council for that purpose, to support the portion of the ITC trail shown as part of "Phase 3" on the attached map, through the ITC corridor north of Eleven Mile Road. Funding and/or construction for this portion of the trail through the ITC corridor and across the Medilodge property is expected to be provided by Medilodge as a part of the PRO Agreement for that site development.

The remaining application items are being assembled by Medilodge representatives and staff for submittal to ITC in the coming weeks. The connection to Beck Road from the Medilodge site has been discussed with Providence Hospital and easement documents are being drafted to locate a pathway over the existing sanitary sewer. The construction of the Providence portion of the pathway will be proposed as a Capital Improvement Program project for FY2011-12.

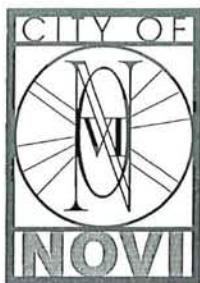
The attached suggested resolution in support of the trail should be seen as a first step in the process for the application for license submittal, and is required for initial review of trail location requirements. ITC has not yet shared the final version of terms and conditions for the license agreement, and staff has been working from a draft of the ITC trail policy as well. Since staff doesn't expect the general process to change much, this first step is

prepared for Council's approval. In the meantime, staff is checking with the City's insurer to make sure the City's various potential insurance/indemnification obligations under the likely policy and license can be met. If for some reason those change the City's course, we will let the Council know and proceed accordingly.

RECOMMENDED ACTION: Approval of a resolution of support for the Application for Trail License on ITC Property north of 11 Mile Road adjacent to the proposed Medilodge site.

	1	2	Y	N
Mayor Landry				
Mayor Pro Tem Gatt				
Council Member Fischer				
Council Member Margolis				

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



CITY OF NOVI
RESOLUTION OF SUPPORT
ITC TRAIL LICENSE APPLICATION

CITY COUNCIL

Mayor
David B. Landry

Mayor Pro Tem
Bob Gatt

Terry K. Margolis

Andrew Mutch

Kathy Crawford

Dave Staudt

Justin Fischer

City Manager
Clay J. Pearson

Director of Public Services/
City Engineer
Rob Hayes

- WHEREAS,** the enhancement of a regional trail system has been identified as a goal of the Novi City Council; and,
- WHEREAS,** the regional trail proposed within the ITC corridor north of 11 Mile Road is the first phase in a master planned regional pathway that would connect ITC Community Sports Park to Beck Road and Providence Hospital and eventually north to Lakeshore Park; and,
- WHEREAS,** the proposed development of the adjacent site presents an opportunity for the construction of the initial phase of a regional pathway system at minimal cost to the City of Novi; and,
- WHEREAS,** the proposed regional trail would provide safe non-motorized transportation for bicyclists and pedestrians within the City of Novi; and,
- WHEREAS,** the proposed regional trail would provide health benefits and economically-friendly family recreational opportunities to improve Novi's quality of life.

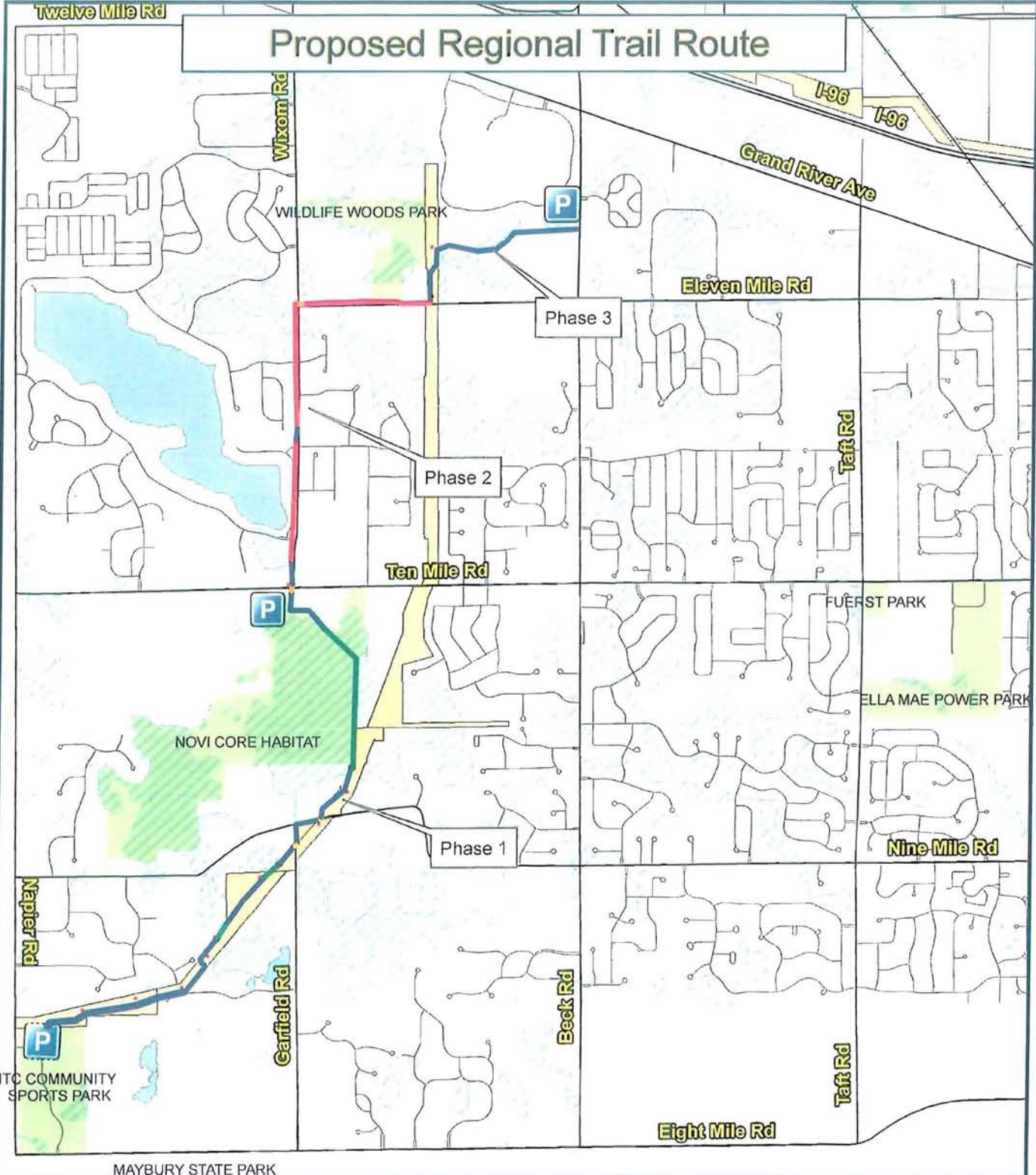
NOW, THEREFORE, BE IT RESOLVED that the Mayor and Novi City Council hereby support the ITC Trail License Application for the proposed construction of a pathway within ITC property as the initial phase of a larger regional trail system.

CERTIFICATION

I, Maryanne Cornelius, duly appointed City Clerk of the City of Novi, do 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 this 10th day of January, 2011.

Department of Public Services
Field Services Complex
26300 Delwal Drive
Novi, Michigan 48375
248.735.5640
248.735.5659 fax

Maryanne Cornelius
City Clerk



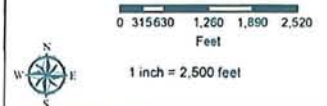
Map Author: Nathan Bartlett
 Date: 8/02/10
 Project: Engineering ITC Trail Route
 Version #: 1.2

Legend

- Parkland
- ITC Property
- WETLAND
- POTENTIAL PARKING
- Existing Pathway
- Proposed Pathway
- Proposed Boardwalk
- Proposed Road Crossing

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.

City of Novi
 Engineering Division
 Department of Public Services
 45175 W Ten Mile Rd
 Novi, MI 48375
 cityofnovi.org



MEMORANDUM



TO: Clay Pearson, City Manager

FROM: Barbara McBeth, AICP, Community Development
Brian Coburn, P.E.; Engineering Manager *BTC*

SUBJECT: Medilodge Project – Trail update

DATE: December 16, 2010

*12/20/10
To Mayor & City
Council Members*

File

Staff has had ongoing discussions with the representatives of Medilodge, the convalescent facility proposed for the north side of Eleven Mile Road between Beck and Wixom Roads, just east of the ITC corridor. The applicant continues to work through a number of details of the project, and anticipates bringing the PRO Agreement to the City Council for final approval in upcoming months.

As a part of the public benefit associated with the rezoning of the land, the applicant has offered to construct a public trail through a portion of the Medilodge property, and within the adjacent ITC corridor (see attached sketch of trail location). This proposed pathway was a part of the discussion at a City Council meeting last March. The proposed location avoids impact to natural features and would connect to existing and planned public pathways in the area. Initial discussions with Providence Park indicate support for a potential future pathway across the adjacent Providence Park property connecting the path on the Medilodge property with the paths along Beck Road.

To facilitate the proposed public trail improvements within the ITC corridor, staff has made contact with representatives of ITC to determine ITC's standards and approval process for trails within its corridor. Since the proposed trail would be open to the public, staff believes that it is appropriate for the City to be the applicant. The Application for Trail License on ITC property is attached for reference. Application items are currently being assembled by Medilodge representatives, as well as Planning and Engineering staff. *

One item that is required with the application is documented evidence that all municipalities and entities involved in the proposed trail officially support the application for license. For that purpose, staff will request that the City Council consider a suggested resolution in support of the proposed trail in January. The sample resolution is attached.))



APPLICATION FOR TRAIL LICENSE ON ITC *Transmission* PROPERTY

Applicant Name: Rob Hayes, PE, Director of Public Services/City Engineer

Applicant Municipality/Organization: City of Novi

Address: 45175 W. Ten Mile Road
Novi, MI 48375

Lead Contact: Lindon Ivezaj, Engineer

Telephone: (248) - 735-5694

Fax: (248) - 735-5633

E-mail address: livezaj@cityofnovi.org

Please provide a brief description of the length and purpose of the proposed pedestrian trail: Proposed trail is approximately 1000 feet long in the north/south direction and approximately 250 feet long in the east/west direction within the ITC corridor, extending north from Eleven Mile Road, between Wixom Road and Beck Road in Section 17 of the City of Novi. The proposed trail would be used for recreational and non-motorized transportation purposes. It would connect with other existing and proposed trails and sidewalks in the area and is considered the first phase of the planned Regional Trail Route on the west side of Novi.

Please complete or provide the following information with your signed application:

1. Provide a map showing the location of the entire proposed trail including locations adjacent to ITC property.
2. Provide six (6) survey or engineering drawings showing the proposed trail on ITC property and showing dimensions from all structures including towers, poles, guy wires and anchors, etc. Please include Section, Town and Range numbers.

3. Provide a physical description of the proposed trail, including proposed width and proposed type of construction (for example, asphalt, gravel, sand, etc), and include any unusual or unique conditions on the property, (drains and/or bridges, for example).
4. Provide a statement indicating whether additional property rights are required from other landowners in the area and, if so, whether you have or have not acquired these rights. If these rights have not been acquired, please include a timeline for acquisition of outstanding rights.
5. Provide documented evidence that all municipalities or entities involved in the proposed trail officially support this application for license.
6. Provide a projected plan showing detailed information regarding maintenance requirements for the proposed trail. Please include maintenance schedule and anticipated expenditures.
7. Provide information regarding restrictions or other constraints that need to be considered when reviewing this application (i.e. wetland permits, funding deadlines, etc.)
8. Remit a non-refundable administrative fee of \$600 per trail mile.

By submitting this Application, Applicant acknowledges that Applicant understands and agrees:

1. ITC may refuse to grant the license due to conflict with existing and/or future facility requirements or any other reason or may grant the license subject to any conditions, restrictions, or reservations it deems necessary or desirable.
2. If a license is granted, ITC will require an annual fee of \$600, the first installment of which will be payable before the executed license is delivered to the licensee.



Signature

Rob Hayes, PE
Print Name

City Engineer/Director of DPS
Title

December 14, 2010
Date

MEMORANDUM



TO: CLAY PEARSON, CITY MANAGER
FROM: BRIAN COBURN, P.E.; SENIOR CIVIL ENGINEER ^{File}
BEN CROY, P.E.; CIVIL ENGINEER
SUBJECT: PROPOSED REGIONAL PATHWAY SYSTEM
ITC COMMUNITY SPORTS PARK TO PROVIDENCE PARK
DATE: AUGUST 3, 2010

The Community Development Department has worked with the Walkable Novi Committee to identify several alternatives for a 4.5 mile long north-south regional pathway. The pathway would connect ITC Community Sports Park to the Providence Park Campus. We have evaluated the proposed routes to identify the most cost-effective and feasible alternative for the development of a preliminary design and cost estimate.

Proposed Phasing

Due to the length of the path being proposed, a phased approach to design and construction would be likely. The attached map shows the general location of the pathway, and designates three phases. Phase 1 of the pathway would begin at the ITC Community Sports Park, continue along the ITC corridor, cross near the Garfield and Nine Mile intersection, continue north again in the ITC corridor and end at the parking lot of Fire Station No. 4, where a parking area could be located. Phase 2 would be located along Wixom and Eleven Mile Roads, utilizing the existing path for the majority of that length, with some additional path and minor upgrades necessary. Phase 3 would connect the path from Eleven Mile to Beck Road using the ITC Corridor and Providence Park property. Another parking area near Beck Road may be possible at the Lanny's Pump Station on Beck Road.

Proposed Alignment

Phase 1 of the project is approximately 2.25 miles long and about 70 percent of the pathway in this phase is proposed within the ITC property. The specific location of the path within the ITC corridor would have to follow ITC's strict requirements, such as locating the path at the outer edge of their easement/property and only crossing under the electric transmission lines at specific locations. This phase also traverses a vast area of wooded wetlands not only on ITC property but also within the Novi property south of Fire Station 4. After walking a portion of the proposed route, it is apparent that a large length of boardwalk is required through not only the wetland system, but several other areas where poor soils exist.

The second phase of the project is 1.5 miles long and follows existing pathways along the west side of Wixom Road and the north side of 11 Mile Road to connect Fire Station 4 to the ITC corridor north of 11 Mile Road. The existing pathway along Wixom Road is only 8 feet wide (the proposed design width is 10 feet) and there are few gaps of

several hundred feet that would need to be constructed. The existing pathway along 11 Mile Road is only 5 feet wide and therefore would require reconstruction to a minimum of 8 feet, if not 10 feet wide, to accommodate the proposed users.

The third phase of the project is 0.75 miles long and utilizes the ITC corridor and an existing sanitary sewer easement on Providence Park property to make the connection to Beck Road from 11 Mile Road. This phase could also connect the regional path to Wildlife Woods Park and Providence Park's trail system by constructing spurs from the regional pathway. This phase requires coordination with the Medilodge site (located east of the ITC corridor on 11 Mile Road), which is in review with Community Development for a Planned Rezoning Overlay. The concept plan for Medilodge includes construction of a portion of the regional pathway. This phase also requires coordination with Providence Park Hospital which must grant additional easements for the proposed alignment through the site and potential parking at Beck Road.

Construction Techniques and Challenges

Staff has investigated two potential types of construction materials for paving the pathway. The first is the traditional asphalt path with aggregate base. The second involves the use of compacted limestone fines (particles of limestone smaller than 3/8 inch in diameter). This material has not yet been used in Novi, but was recently used on

a similar project in Southfield (see photos, right) and is less expensive, provides a firm stable surface that works well for pedestrians and bicyclists, and meets Americans with Disability Act requirements when installed properly. Additionally, the limestone material presents a more natural appearance in a natural setting than asphalt. Staff is researching the use of compacted limestone fine for



path construction in other communities, but based on initial discussions, it appears to be a viable method of construction. Limestone path construction appears to require some additional effort during construction (the specification for the limestone material is critical to the design, and therefore can be difficult to control during construction), and may require more maintenance immediately following construction where repairs may be needed (e.g over bad soils, water damage, etc.).



However, once a stable and firmly compacted path is achieved it appears that this type of path would prove to be durable for many years. This type of path has been installed in many locations in surrounding areas with reported success. The limestone path would most likely require an annual maintenance program that amounts to more than required for an asphalt path (limestone reshaping, leaf blowing, vegetation removal), but these costs may be offset in the future by the repairs typically required of an aging asphalt path.

Staff is also investigating other alternatives for the construction of the boardwalk through the wetlands. One option is to fill the wetlands and construct equalization culverts under the pathway; however the difficulty of hauling in fill over unstable soils to complete the work and the remote likelihood that a permit would be issued by MDNRE for this work makes this option unattractive. We will continue to discuss options with other communities as we discuss the use of limestone material.

Easements

The proposed alignment was developed to incorporate the fewest number of easements from the fewest number of property owners. As proposed, easements would be required from ITC, Providence Park Hospital, Lawrence Schmidt (property owner on Wixom Road), and Medilodge. The remainder of the alignment is located within the right-of-way, existing highway or pathway easements, or on City owned property. Easement acquisition should be begin at the time of preliminary design and should be completed before final design is completed.

Preliminary Construction Cost Estimates

The enclosed preliminary construction cost estimates were developed with very limited amount of field work and should therefore be used only for budgetary purposes. Without conducting a topographic survey, several assumptions were made in the development of the estimates. These assumptions are identified below:

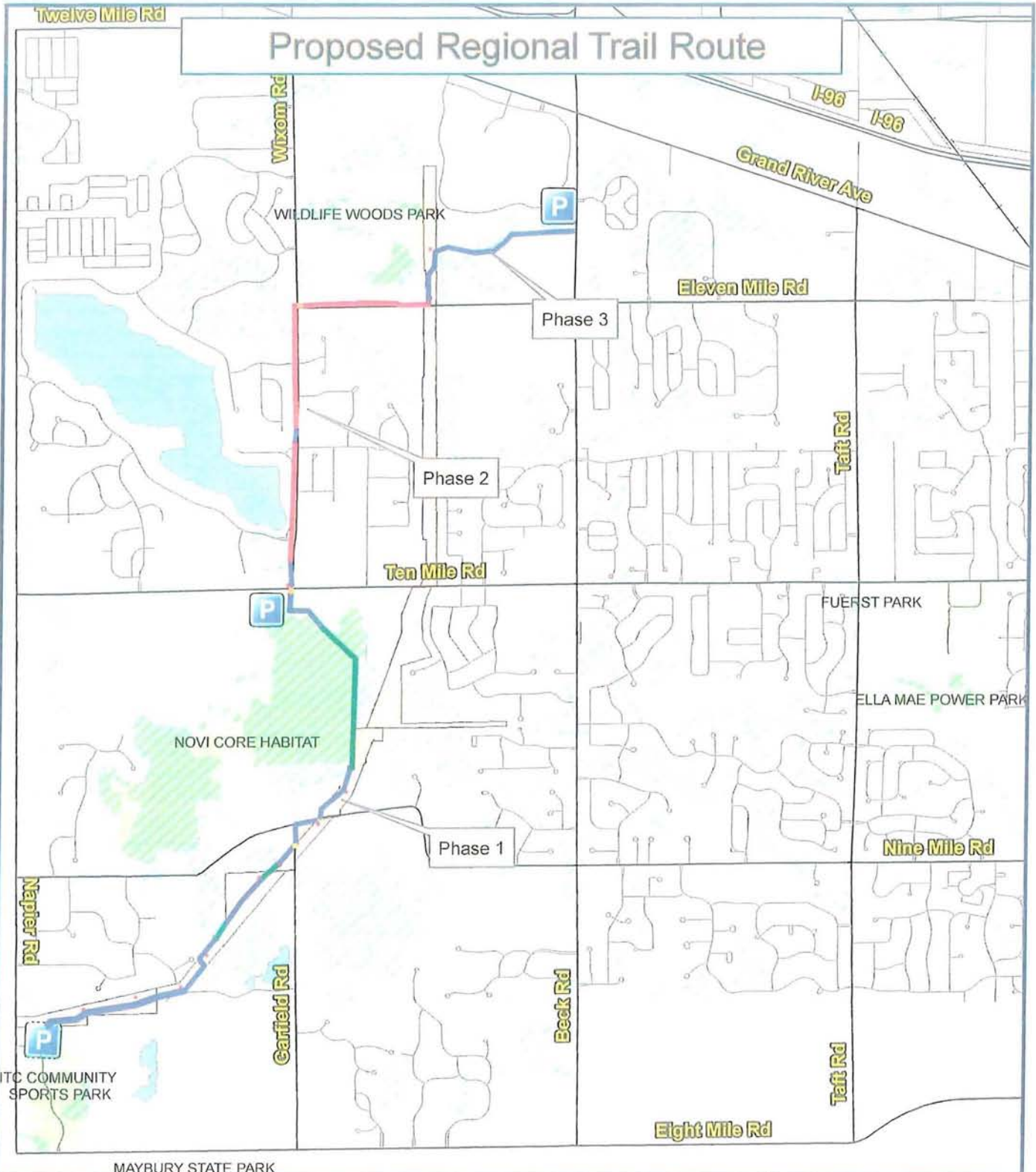
- The presence of wetlands and poor soils will require approximately 3,500 feet of 10-foot wide boardwalk for Phase 1 at a cost of \$1,000,000.
- The use of the compacted limestone fines is suitable for the pathway construction in Phase 1.
- The use of the existing 8-foot pathway along Wixom Road is acceptable.
- The replacement of the existing 5-foot sidewalk with an 8 foot or 10 foot wide pathway is required along 11 Mile Road.
- All easements will be granted at no cost.
- The proposed signal upgrade at 10 Mile Road and Wixom Road (scheduled for fall 2010 completion) will meet the requirements for the pathway and there will be no additional signal work required with this project.
- The pathway in Phase 3 will be asphalt and constructed to support trucks because it will be co-located on ITC's service road and within the city's sanitary sewer easement which requires occasional access by large vehicles.
- A contingency of 20% is included until topographic survey is complete.

Given these assumptions, the construction cost estimates are summarized as follows:

Phase/Description	Construction	Engineering, Legal & Administrative	Contingency	Total Estimate
Phase 1 (ITC Sports to Fire Station 4)—Limestone	\$1,646,000	\$411,000	\$329,000	\$2,386,000
Phase 2 (Fire Station 4 to ITC Corridor on 11 Mile)—Asphalt	\$80,000	\$20,000	\$16,000	\$116,000
Phase 3 (11 Mile to Beck via Providence Park)—Asphalt	\$267,000	\$67,000	\$53,000	\$387,000
Potential Parking at Fire Station 4	\$26,000	\$7,000	\$5,000	\$38,000
Potential Parking at Beck Road	\$26,000	\$7,000	\$5,000	\$38,000
Grand Total	\$2,045,000	\$512,000	\$408,000	\$2,965,000

Copies of the detailed construction cost estimates are attached for your reference. The estimates for the asphalt surface for Phase 1 and the limestone surface for Phase 3 are also included, but are not referenced above. The cost of the preferred methods and materials are included in the above table.

cc: Rob Hayes, P.E.; Director of Public Services/City Engineer
 Nancy Cowan, Acting Director of Parks, Recreation and Cultural Services
 Barbara McBeth; Deputy Community Development Director
 Mark Spencer, City Planner



Map Author: Nathan Bartlett
 Date: 8/02/10
 Project: Engineering ITC Trail Route
 Version #: 1.2

MAP INTERPRETATION NOTICE
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Legend

	Parkland		Existing Pathway
	ITC Property		Proposed Pathway
	WETLAND		Proposed Boardwalk
	POTENTIAL PARKING		Proposed Road Crossing


City of Novi

Engineering Division
 Department of Public Services
 45175 W Ten Mile Rd
 Novi, MI 48375
cityofnovi.org



0 315 630 1,260 1,890 2,520
 Feet

1 inch = 2,500 feet



**PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
PROJECT DESCRIPTION**

ITC Pathway - Phase 1 Asphalt Pathway (ITC Sports Park to Ten Mile Rd)

DATE: July 28, 2010

No.	Description	Unit	Estimated Quantity	Unit Price	Total
1	Soil Erosion Control	LF	17050	\$ 1.50	\$ 25,575.00
2	Maintaining Traffic	LSUM	1	\$ 1,000.00	\$ 1,000.00
3	Tree Removal	EA	245	\$ 500.00	\$ 122,500.00
4	Clearing and Grubbing	LF	2000	\$ 8.00	\$ 16,000.00
5	Pathway Grading	LF	8525	\$ 15.00	\$ 127,875.00
6	21AA Aggregate Base (6")	SY	10420	\$ 7.00	\$ 72,940.00
7	Undercutting of Soils	CY	1705	\$ 24.00	\$ 40,920.00
8	Asphalt (3")	SY	9472	\$ 16.00	\$ 151,555.56
9	10' wide boardwalk	LF	3500	\$ 300.00	\$ 1,050,000.00
10	Mid-Block Crossing	EA	2	\$ 4,000.00	\$ 8,000.00
11	Restoration	SY	18944	\$ 2.00	\$ 37,888.89
12	Mobilization (5%)	LSUM	1	\$ 82,712.72	\$ 82,712.72
CONSTRUCTION TOTAL					\$ 1,736,967.17
Engineering, Legal and Administrative (25%)					\$ 434,241.79
Contingency (20%)					\$ 347,393.43
BUDGET TOTAL					\$ 2,518,602.39

NOTES:

This estimate was based on the City GIS drawings/aerial photography. Cost may be strongly effected by soil types, existing water courses, etc.
 Estimate established using best cost information at the time. Cost of pavement and construction may increase.
 All pathways were estimated as 10' in width using a 3" bituminous over 6" aggregate cross section.

Cost per LF	\$	209.45
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By: Lindon Ivezaj

**PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
PROJECT DESCRIPTION**

ITC Pathway - Phase 1 Compacted Limestone (ITC Sports Park to Ten Mile Rd)

DATE: July 28, 2010

No.	Description	Unit	Estimated Quantity	Unit Price	Total
1	Soil Erosion Control	LF	17050	\$ 1.50	\$ 25,575.00
2	Maintaining Traffic	LSUM	1	\$ 1,000.00	\$ 1,000.00
3	Tree Removal	EA	245	\$ 500.00	\$ 122,500.00
4	Clearing and Grubbing	LF	2000	\$ 8.00	\$ 16,000.00
5	Pathway Grading	LF	8525	\$ 15.00	\$ 127,875.00
6	10' Crushed Limestone Pathway	LF	8525	\$ 19.00	\$ 161,975.00
7	Undercutting of Soils	CY	695	\$ 24.00	\$ 16,680.00
8	10' wide boardwalk	LF	3500	\$ 300.00	\$ 1,050,000.00
9	Mid-Block Crossing	EA	2	\$ 4,000.00	\$ 8,000.00
10	Restoration	SY	18944	\$ 2.00	\$ 37,888.89
11	Mobilization (5%)	LSUM	1	\$ 78,374.69	\$ 78,374.69
CONSTRUCTION TOTAL					\$ 1,645,868.58
Engineering, Legal and Administrative (25%)					\$ 411,467.15
Contingency (20%)					\$ 329,173.72
BUDGET TOTAL					\$ 2,386,509.45

NOTES:

This estimate was based on the City GIS drawings/aerial photography. Cost may be strongly effected by soil types, existing water courses, etc.
 Estimate established using best cost information at the time. Cost of pavement and construction may increase.
 All pathways were estimated as 10' in width using a compacted limestone surface.

Cost per LF	\$	198.46
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By: Lindon Ivezaj

**PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
PROJECT DESCRIPTION**

ITC Pathway - Phase 2 (Ten Mile and Wixom Rd to Eleven Mile Rd and ITC Easement)

DATE: July 28, 2010

No.	Description	Unit	Estimated Quantity	Unit Price	Total
1	Soil Erosion Control	LF	1575	\$ 1.50	\$ 2,362.50
2	Removal of Ex. Pavement	SY	555	\$ 7.00	\$ 3,885.00
3	Pathway Grading	LF	1575	\$ 15.00	\$ 23,625.00
4	Asphalt Pathway (4" Bit/6" 21AA Agg.)	SY	1400	\$ 28.00	\$ 39,200.00
5	Restoration	SY	3500	\$ 2.00	\$ 7,000.00
6	Mobilization (5%)	LSUM	1	\$ 3,803.63	\$ 3,803.63
CONSTRUCTION TOTAL					\$ 79,876.13
Engineering, Legal and Administrative (25%)					\$ 19,969.03
Contingency (20%)					\$ 15,975.23
BUDGET TOTAL					\$ 115,820.38

NOTES:

This estimate was based on the City GIS drawings/aerial photography. Cost may be strongly effected by soil types, existing water courses, etc.
 Estimate established using best cost information at the time. Cost of pavement and construction may increase.
 All pathways were estimated as 8' in width using a bituminous asphalt pavement.
 Phase 2 includes two segments along Wixom Rd, a new 515' section at the northwest corner as well as removal and replacement of a 160' segment of 3' wide sidewalk further north. The Phase 2 also includes removal of a 900' segment of concrete sidewalk along Eleven Mile Rd and replacing it with 8' wide asphalt pathway.

Cost per LF	\$	73.54
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By: Lindon Ivezaj

**PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
PROJECT DESCRIPTION**

ITC Pathway - Phase 3 Asphalt Pathway (Eleven Mile Rd to Beck Rd)

DATE: July 28, 2010

No.	Description	Unit	Estimate d Quantity	Unit Price	Total
1	Soil Erosion Control	LF	8000	\$ 1.50	\$ 12,000.00
2	Clearing and Grubbing	LF	1000	\$ 8.00	\$ 8,000.00
3	Pathway Grading	LF	3930	\$ 15.00	\$ 58,950.00
4	21AA Aggregate Base (6")	SY	1285	\$ 7.00	\$ 8,995.00
5	21AA Aggregate Base (8")	SY	3520	\$ 9.00	\$ 31,680.00
6	Undercutting of Soils	CY	820	\$ 24.00	\$ 19,680.00
7	Asphalt (3")	SY	3200	\$ 16.00	\$ 51,200.00
8	Asphalt (4")	SY	1170	\$ 22.00	\$ 25,740.00
9	Boardwalk (10')	LF	70	\$ 300.00	\$ 21,000.00
10	Restoration	SY	8740	\$ 2.00	\$ 17,480.00
11	Mobilization (5%)	LSUM	1	\$ 12,736.25	\$ 12,736.25
CONSTRUCTION TOTAL					\$ 267,461.25
Engineering, Legal and Administrative (25%)					\$ 66,865.31
Contingency (20%)					\$ 53,492.25
BUDGET TOTAL					\$ 387,818.81

NOTES:

This estimate was based on the City GIS drawings/aerial photography. Cost may be strongly effected by soil types, existing water courses, etc.

Estimate established using best cost information at the time. Cost of pavement and construction may increase.

All pathways were estimated as 10' in width using a 4" bituminous over 8" aggregate cross section in the ITC easement and 3" bituminous over 6" aggregate outside of the ITC easement.

Cost per LF	\$	96.95
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By: Lindon Ivezaj

**PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
PROJECT DESCRIPTION**

ITC Pathway - Phase 3 Compacted Limestone Pathway (Eleven Mile Rd to Beck Rd)

DATE: July 28, 2010

No.	Description	Unit	Estimated Quantity	Unit Price	Total
1	Soil Erosion Control	LF	8000	\$ 1.50	\$ 12,000.00
2	Clearing and Grubbing	LF	1000	\$ 8.00	\$ 8,000.00
3	Pathway Grading	LF	3930	\$ 15.00	\$ 58,950.00
4	10' Crushed Limestone Pathway	LF	2880	\$ 19.00	\$ 54,720.00
5	Asphalt (4")	SY	1170	\$ 22.00	\$ 25,740.00
6	21AA Aggregate Base (8")	SY	3520	\$ 9.00	\$ 31,680.00
7	Boardwalk (10')	LF	70	\$ 300.00	\$ 21,000.00
8	Undercutting of Soils	CY	410	\$ 24.00	\$ 9,840.00
9	Restoration	SY	8740	\$ 2.00	\$ 17,480.00
10	Mobilization (5%)	LSUM	1	\$ 11,970.50	\$ 11,970.50
CONSTRUCTION TOTAL					\$ 251,380.50
Engineering, Legal and Administrative (25%)					\$ 62,845.13
Contingency (20%)					\$ 50,276.10
BUDGET TOTAL					\$ 364,501.73

NOTES:

This estimate was based on the City GIS drawings/aerial photography. Cost may be strongly effected by soil types, existing water courses, etc.
 Estimate established using best cost information at the time. Cost of pavement and construction may increase.
 All pathways were estimated as 10' in width using a compacted limestone surface outside of the ITC easement.
 Pathways within the ITC eaement were estimated as 4" bituminous asphalt over 8" of

Cost per LF	\$	91.13
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By: Lindon Ivezaj

PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COSTS
PROJECT DESCRIPTION
 ITC Pathway - Asphalt Parking Lots (Fire Station 4 and Beck Rd Lift Station)

DATE: July 28, 2010

No.	Description	Unit	Estimated Quantity	Unit Price	Total
1	Soil Erosion Control	LF	500	\$ 1.50	\$ 750.00
8	Asphalt Pathway (4" Bit/6" 21AA Agg.)	SY	800	\$ 28.00	\$ 22,400.00
11	Striping	LF	684	\$ 1.50	\$ 1,026.00
13	Restoration	SY	270	\$ 2.00	\$ 540.00
14	Mobilization (5%)	LSUM	1	\$ 1,235.80	\$ 1,235.80
CONSTRUCTION TOTAL					\$ 25,951.80
Engineering, Legal and Administrative (25%)					\$ 6,487.95
Contingency (20%)					\$ 5,190.36
BUDGET TOTAL					\$ 37,630.11

NOTES:

This estimate was based on the City GIS drawings/aerial photography. Cost may be strongly effected by soil types, existing water courses, etc.
 Estimate established using best cost information at the time. Cost of pavement and construction may increase.
 Both parking lots were estimated on a 60' x 60' pavement section to accomodate 10 parking spaces each.

By: Lindon Ivezaj