



K.C.W.

SURVEYOR'S OFFICE
Hamilton County

Kenton C. Ward, CFM
Surveyor of Hamilton County
Phone (317) 776-8495
Fax (317) 776-9628

Suite 188
One Hamilton County Square
Noblesville, Indiana 46060-2230

April 6, 2022

TO: Hamilton County Drainage Board

RE: **Elwood Wilson Drain E.M. Hare Arm Reconstruction (Revised)**

Attached are the plans, schedule of assessments and drainage shed map, for the Elwood Wilson Drain EM Hare Arm Reconstruction Project.

The Elwood Wilson Drain EM Hare Arm is located in Noblesville Township of Hamilton County and benefits properties in Sections 32 and 33 of Township 19 North, Range 5 East. The drain is currently tiled and is 8,197-feet-feet in length. The EM Hare Arm drainage shed is 765.94-acres. The area subject to assessment also includes acreage in Section 5 of Township 18 North, Range 5 East in Noblesville Township and acreage in Section 34 of Township 19 North, Range 5 East in Wayne Township.

The Elwood Wilson Drain EM Hare Arm discharges to the Home Depot Relocation Arm of the Elwood Wilson Drain on the east side of Presley Drive. The Home Depot Relocation Arm of the Elwood Wilson Drain discharges to the Elwood Wilson Main Ditch which then flows downstream through the Elias Gascho Arm, then flows through the Firestone Reconstruction Arm, and then flows through the Elwood Wilson Main Ditch to Stony Creek.

The attached plans, dated December 17, 2021 were prepared by Clark Dietz, Inc. The plans are for dredging a section of the Elwood Wilson Main Ditch, reconstructing the majority of the Home Depot Relocation Arm of the Elwood Wilson Drain, and reconstructing a portion of the EM Hare Arm of the Elwood Wilson Drain as an open ditch. The project will improve the flow characteristics of the Drain and will allow future reconstruction projects of the remainder of the EM Hare Arm of the Elwood Wilson Drain.

The drain stationing in this report reference the historic stationing of the drain. The project stationing of the construction plans by Clark Dietz does not follow the historic stationing.

I have made a personal inspection of the Drain. Upon doing so, I believe that the drain is practicable; will improve the public health; will be of public utility; and that the costs, damages and expenses of the proposed drain will probably be less than the benefits accruing to the owners of land likely to be benefited.

History

The Elwood Wilson Drain was established in approximately December of 1891 (Commissioner's Record No. 7, Page 153).

The EM Hare Arm of the Elwood Wilson Drain was petitioned on May 16, 1908. The record includes a Viewers Report dated June 8, 1908 (Ditch Construction Book 1885-1914, Page 323).

The Home Depot Relocation Arm of Elwood Wilson Drain was approved at hearing at the August 27, 2001 meeting of the Drainage Board (Hamilton County Drainage Board Meeting Minutes Book 6, Page 127)

Work Order History

Based on a search of the County's database for drainage complaints, there have been eighteen (18) Drainage Complaints logged in to the County's database for such complaints since 2001. The complaints are listed below.

Job #	Issue	Description	Location
DC-2001-00086	1/17/2002	Breakdown of tile; several holes	East of SR 37 & South of SR 32
DC-2001-00194	10/16/2001	Flooding in area	#18067 Promise Rd, Noblesville
DC-2002-00009	1/17/2002	Blow hole	North of SR 32 & West of Promise Rd
DC-2002-00235	5/14/2002	No headwall on surface drain	North of SR 32 & East of Presley Dr
DC-2003-00577	10/9/2003	Blow holes	181st St & Promise Rd
DC-2003-00639	11/10/2003	Broken tile	North of SR 32 & West of Promise Rd
DC-2006-00300	7/6/2006	Erosion	North of SR 32 & East of Presley Dr
DC-2008-00023	1/29/2008	Broken field tile	North of SR 32 & West of Promise Rd
DC-2011-00428	11/17/2011	Standing water	Near 181st St on both E and W sides of Promise Rd
DC-2012-00134	4/5/2012	Blow holes	North of SR 32 & East of SR 37

DC-2014-00254	5/14/2014	Erosion at gabion baskets	North of SR 32 & East of Presley Dr
DC-2014-00289	5/30/2014	Blow hole	North of 181st St & East of Promise Rd
DC-2014-00505	11/19/2014	Blow holes	North of SR 32 & West of Promise Rd
DC-2015-00238	5/13/2015	Blow hole	Near 181st St & West of Promise Rd
DC-2015-00469	10/8/2015	Rocks and sediment in Breather	North of 181st St & East of Promise Rd
DC-2016-00115	4/14/2016	Seven (7) blow holes	North of SR 32 & East of SR 37
DC-2018-00111	4/5/2018	Water overtopping road on 186th St	On 186th Street & West of Promise Rd
DC-2019-00035	2/1/2019	Drain clogged	North of 181st St & East of Promise Rd

There have been a total of 12 Work Orders since 2001 with a total value of \$19,897.93. The Work Orders are listed below.

Job #	Type of Repair	Cost (\$)	Date Complete
WO-2001-00156	Water boiling up; Investigate tile for blockage	\$3,251.20	1/10/2003
WO-2002-00010	Blow hole	\$294.00	8/12/2003
WO-2003-00239	Several blow holes	\$1,422.10	1/20/2005
WO-2004-00040	Repair holes and investigate tile for blockage	\$885.10	12/9/2005
WO-2008-00042	Several blow holes	\$852.55	2/5/2009
WO-2012-00049	Several holes; investigate tile for blockage	\$1,436.86	4/10/2012
WO-2012-00133	Three blow holes	\$1,485.20	5/29/2012
WO-2015-00008	Blow hole on regulated tile	\$546.00	2/25/2016
WO-2015-00198	Blow hole	\$1,125.70	6/23/2015
WO-2015-00384	Breather full of rocks and sediment	\$813.75	6/24/2016

WO-2016-00167	Seven blow holes	\$1,945.47	8/18/2016
WO-2017-00138	Repair holes and de-brush around structure and easement	\$5,840.00	6/13/2019

Existing Condition

The existing drain is comprised of the original clay field tile constructed in 1908. The 20" portion of the tile between Stations 81+97 and 79+60, just east of Presley Drive, was constructed in 1959. The Drain functions but is undersized by today's standards. The tile is at least 114-years old and has exceeded the expected service life of such a tile. Routine maintenance is required for the tile to function

It is common for ponding to occur after rain events in several of the fields within the watershed. Such ponding and saturated soil conditions affect crop production.

Promise Road, just north of 181st Street, regularly overtops during rain events.

The portion of the Elwood Wilson Main Ditch and the portion of the Home Depot Relocation Arm to be reconstructed with this project have accumulated sediment within the ditch that affects the capacity of the drain.

Reconstruction Project

Each aspect of the reconstruction project is recommended in the Elwood Wilson Drain, EM Hare Arm Hydraulic Study completed by Clark Dietz, Inc. dated December 2016.

The proposed open ditch and culverts were sized for runoff from the 100-year storm event from the watershed in the existing condition. The culverts were sized to convey runoff from the 100-year storm event within the watershed without overtopping the roadways. The open ditch was designed so that the runoff from the 100-year storm event within the watershed would remain below the top-of-bank.

While the project mainly involves the reconstruction of the EM Hare Arm of the Elwood Wilson Drain, certain portions of the Elwood Wilson Main Ditch and the Home Depot Relocation Arm of the Elwood Wilson Drain must also be reconstructed to improve the capacity of the Drain.

The project will be let by the Hamilton County Drainage Board and the construction contract will be managed by the Hamilton County Surveyor's Office.

The project includes the following:

1. Reconstruct the Elwood Wilson Main Ditch between Station 13+06 and Station 7+46 to re-establish the flowline and cross-sectional area of the ditch to improve the capacity of the Drain. The ditch configuration varies through this segment and includes a bag type cast-in-place retaining wall as follows, looking upstream:

Station		Side Slope		Bottom Width (ft)		Retaining Wall	
From	To	Left (H:V)	Right (H:V)	Left	Right	Left	Right
13+06	12+80	2:1	2:1	2	2	No	No
12+80	12+60	Transition	2:1	Transition	2	No	No
12+60	11+81	0.5:1	2:1	4	2	Yes	No
11+81	11+60	0.5:1	Transition	4	Transition	Yes	No
11+60	10+69	0.5:1	0.5:1	4	4	Yes	Yes
10+69	10+48	Transition	0.5:1	Transition	4	No	Yes
10+48	10+10	2:1	0.5:1	2	4	No	Yes
10+10	9+89	2:1	Transition	2	Transition	No	No
9+89	7+46	2:1	2:1	2	2	No	No

2. Reconstruct the Home Depot Relocation Drain between Station 7+29 and Station 0+00 to re-establish the flowline and cross-sectional area of the ditch to improve the capacity of the Drain. The ditch configuration is a 4-foot wide bottom with 3:1 side slopes.
 - i. The 135-foot segment of 21" RCP that currently drains the EM Hare Arm of the Elwood Wilson Drain and crosses Presley Drive will remain and not be reconstructed with this project.
3. Construct new open ditch as part of the EM Hare Arm of the Elwood Wilson Drain. The new open ditch will be constructed between Station 81+78 and Station 79+60 of the EM Hare Arm of the Elwood Wilson Drain. Station 81+78 of the new open ditch of the EM Hare Arm of the Elwood Wilson Drain is also Station 0+00 and the current end of the Home Depot Relocation Arm of the Elwood Wilson Drain. The ditch configuration is a 4-foot wide bottom with 3:1 side slopes. The length of the new open ditch is 218-feet.
 - i. The portion of the existing EM Hare of the Elwood Wilson Drain between Station 80+04 and Station 79+60 will be removed with this project.
 - ii. The portion of the existing EM Hare of the Elwood Wilson Drain between Station 81+97 (the current end of the Drain) and Station 80+04 will be abandoned in place with a bulkhead and breather placed at Station 80+04.
4. Reconstruct the existing EM Hare Arm of the Elwood Wilson Drain as an open ditch between Station 79+60 and Station 62+45. The ditch configuration is a 4-foot wide bottom with 3:1 side slopes. The existing tile will be demolished as the new open ditch is constructed.

5. Construct new open ditch as part of the EM Hare Arm of the Elwood Wilson Drain. The new open ditch will be constructed off of the alignment of the existing tile between Station 62+45 and Station 38+19 of the EM Hare Arm of the Elwood Wilson Drain. The alignment of the open ditch was shifted from the alignment of the existing tile to avoid impacting existing wetlands. The ditch configuration is a 4-foot wide bottom with 3:1 side slopes. The length of the new open ditch is 2,350-feet.
 - i. The portion of the existing EM Hare of the Elwood Wilson Drain between Station 62+45 and Station 60+72 will be removed with this project.
 - ii. The portion of the existing EM Hare of the Elwood Wilson Drain between Station 60+72 and Station 38+63 will be abandoned in place with a bulkhead and breather placed at Station 38+63.
 - iii. The portion of the existing EM Hare of the Elwood Wilson Drain between Station 38+63 and Station 38+19 will be removed with this project.
6. Reconstruct the existing EM Hare Arm of the Elwood Wilson Drain between Station 38+19 and Station 29+92 as an open ditch to improve the capacity of the drain. The ditch configuration is a 4-foot wide bottom with 3:1 side slopes. The existing tile will be demolished as the new open ditch is constructed.
7. The existing tile upstream of Station 29+92 will remain in place and discharge to the new open ditch at this station.
8. A rock chute for surface water flow to enter the new open ditch will be constructed between Station 30+44 and Station 29+22.
9. The installation of three 30-foot wide ditch crossings, per HCSO Detail C-2, as follows:
 - i. 63-LF of 7-foot x 5-foot Reinforced Concrete Box Structure at Station 70+04 on Parcel 10-07-32-00-00-013.001.
 - ii. 51-LF of 5-foot x 4-foot Reinforced Concrete Box Structure at Station 49+93 on Parcel 10-07-32-00-00-007.000.
 - iii. 51-LF of 5-foot x 4-foot Reinforced Concrete Box Structure at Station 43+93 on Parcel 10-07-33-00-00-012.000.
10. The installation of 187-feet of 12-foot x 7-foot Reinforced Concrete Box Structure under the Home Depot Entrance Drive.
11. The installation of 71-feet of 12-foot x 6-foot Reinforced Concrete Box Structure under Presley Drive.
12. The installation of 73-feet of 7-foot x 4-foot Reinforced Concrete Box Structure under Promise Road.
13. The cost estimate includes the installation of 15 surface water pipes with animal guard per HCSO Details OD-8 and O-2. These will be installed on an "as-needed" basis.
14. The cost estimate includes the installation of 95 tile outlets of various sizes with animal guards per HCSO Details O-1 and O-2. These will be installed on an "as-needed" basis.

15. The project will also include clearing of the easement area and removal of existing pavement, culverts, sidewalk, curb, gabion baskets, breathers, hand rail; fence removal and repair; the installation of rip-rap stabilization at various locations and at culvert crossings; temporary erosion control; native seeding areas; seeding for a 20-foot filter strip as noted in the Filter Strip section of this report; seeding and other stabilization of disturbed soil areas; maintenance of traffic; pavement, sidewalk, curb, and handrail repair; special backfill; removal and resetting of existing RCP end sections of tiles that drain to the existing open ditch; and other ancillary construction.
16. The soil excavated with the project will be placed within the adjacent regulated drain easement.
17. The project includes the installation of 2 sanitary sewer manholes, 160-feet of sanitary sewer, and 1 pipe plug for future connection. This sanitary sewer will not become part of the regulated drain system.

Permits

The provisional Regional General Permit, LRL-2019-795-sjk was issued by the Army Corps of Engineers on April 2, 2020. This permit was provisional pending the issuance of the IDEM Individual Water Quality Certification.

The Section 401 Water Quality Certification, IDEM Authorization Number 2020-111-29-ALF-A was issued on May 19, 2020.

The IDEM Authorization fo Construction of Sanitary Sewer System, Permit Approval No. 24344, was issued on January 7, 2022.

Staff of the Surveyor's Office or the Contractor will obtain construction entrance and road closure approvals from the Hamilton County Highway Department or the City of Noblesville.

Construction Cost

The Elwood Wilson EM Hare Arm reconstruction project was approved for letting at the November 22, 2021 meeting of the Drainage Board (Hamilton County Drainage Board Meeting Minutes, Book 20, Page 236).

One addendum was issued. The addendum issued the most current Common Construction Wage Rate determination prior to receiving bids and included a change to the deflection testing specification for the sanitary sewer as a condition of the IDEM Sanitary Sewer Construction permit.

Two bids were received at the Drainage Board meeting on January 10, 2022. One bid was from Morphey Construction in the amount of \$2,478,000. The second bid was from 5 Star Company, Inc. in the amount of 2,729,295.00 as entered on Page BF-3.

Morphey Construction submitted the lowest bid.

From the Morphey Construction bid, the construction cost of the project is estimated to be \$2,478,000.00. With a 15% contingency, the total construction cost is \$2,849,700.00

A detailed cost of construction is outlined below.

City of Noblesville Street Costs					
Line Item	Item Description	Quantity	Unit	Unit Cost	Total Cost
N1	Clearing [Presley Drive Culvert, Pavement, Curb and Gutter, and Sidewalk]	LS	1	\$ 15,000.00	\$ 15,000.00
N2	12 x 6 Box Culvert (Presley Drive)	LF	71	\$ 5,000.00	\$ 355,000.00
N3	Revetment Rip Rap with Geotextile	TON	25	\$ 180.00	\$ 4,500.00
N4	Presley Drive Roadway Pavement Repair	TON	328	\$ 133.00	\$ 43,624.00
N5	Concrete Curb and Gutter	LF	120	\$ 74.00	\$ 8,880.00
N6	Sidewalk Concrete	CYS	15	\$ 100.00	\$ 1,500.00
N7	Hand Rail Pedestrian	LF	144	\$ 300.00	\$ 43,200.00
N11	Maintenance of Traffic	LS	1	\$ 15,000.00	\$ 15,000.00
City of Noblesville Street Subtotal					\$ 486,704.00
15% Contingency					\$ 73,005.60
City of Noblesville Street Total					\$ 559,709.60

Home Depot Costs					
Line Item	Item Description	Quantity	Unit	Unit Cost	Total Cost
HD1	Clearing [Existing Entrance Drive Culvert, Pavement, Curb and Gutter]	LS	1	\$ 100,000.00	\$ 100,000.00
HD2	12 x 7 Box Culvert (Home Depot Entrance)	LF	187	\$ 3,163.00	\$ 591,481.00
HD3	Revetment Rip Rap with Geotextile	TON	33	\$ 180.00	\$ 5,940.00
HD4	Entrance Drive Pavement Repair	TON	243	\$ 140.00	\$ 34,020.00
HD5	Concrete Curb and Gutter	LF	175	\$ 68.00	\$ 11,900.00
HD6	Maintenance of Traffic	LS	1	\$ 5,000.00	\$ 5,000.00
Home Depot Subtotal					\$ 748,341.00
15% Contingency					\$ 112,251.15
Home Depot Total					\$ 860,592.15

City of Noblesville Sanitary Sewer Costs					
Line Item	Item Description	Quantity	Unit	Unit Cost	Total Cost
N8	Sanitary Sewer, Pipe, Type 2, Circular, 21 IN., ASTM F679, PS 46	LF	160	\$ 285.00	\$ 45,600.00
N9	Sanitary Sewer Manhole, Type A, with Casting	EA	2	\$ 12,222.00	\$ 24,444.00
N10	Sanitary Sewer Pipe Plug	EA	1	\$ 3,800.00	\$ 3,800.00
City of Noblesville Sanitary Sewer Subtotal					\$ 73,844.00
15% Contingency					\$ 11,076.60
City of Noblesville Sanitary Sewer Total					\$ 84,920.60

Hamilton County Highway Costs					
Line Item	Item Description	Quantity	Unit	Unit Cost	Total Cost
B13	Maintenance of Traffic	LS	1	\$ 3,500.00	\$ 3,500.00
B14	7 x 4 Box Culvert (Promise Road)	LF	73	\$ 2,000.00	\$ 146,000.00
B21	Promise Road Roadway Pavement Repair	SYS	138	\$ 100.00	\$ 13,800.00
Hamilton County Highway Subtotal					\$ 163,300.00
15% Contingency					\$ 24,495.00
Hamilton County Highway Total					\$ 187,795.00

Elwood Wilson EM Hare Costs					
Line Item	Item Description	Quantity	Unit	Unit Cost	Total Cost
B1	Clearing [General Clearing, Promise Road Culverts and Pavement, Gabion Baskets, Breathers, Trees, Farm Fence]	LS	1	\$ 13,000.00	\$ 13,000.00
B2	Temporary Erosion Control	LS	1	\$ 7,000.00	\$ 7,000.00
B3	Open Ditch Construction	LF	6010	\$ 22.00	\$ 132,220.00
B4	Tile Removal	LF	800	\$ 15.00	\$ 12,000.00
B5	Retaining Wall System	LS	1	\$ 299,731.00	\$ 299,731.00
B6	Surface Water Pipe	EA	15	\$ 2,000.00	\$ 30,000.00
B7	6" CMP Tile Drain Extension with Animal Guard	EA	20	\$ 800.00	\$ 16,000.00
B8	8" CMP Tile Drain Extension with Animal Guard	EA	20	\$ 1,000.00	\$ 20,000.00
B9	10" CMP Tile Drain Extension with Animal Guard	EA	20	\$ 1,100.00	\$ 22,000.00
B10	12" CMP Tile Drain Extension with Animal Guard	EA	25	\$ 1,200.00	\$ 30,000.00

Elwood Wilson EM Hare Costs (cotinued)					
Line Item	Item Description	Quantity	Unit	Unit Cost	Total Cost
B11	15" CMP Tile Drain Extension with Animal Guard	EA	5	\$ 1,500.00	\$ 7,500.00
B12	18" CMP Tile Drain Extension with Animal Guard	EA	5	\$ 2,000.00	\$ 10,000.00
B15	7 x 5 Box Culvert (Private Crossing - Station 54+15)	LF	63	\$ 1,300.00	\$ 81,900.00
B16	5 x 4 Box Culvert (Private Crossing - Station 74+26)	LF	51	\$ 1,200.00	\$ 61,200.00
B17	5 x 4 Box Culvert (Private Crossing - Station 80+26)	LF	51	\$ 1,200.00	\$ 61,200.00
B18	Revetment Rip Rap with Geotextile	TON	579	\$ 100.00	\$ 57,900.00
B19	Rock Chute with Geotextile	LS	1	\$ 15,000.00	\$ 15,000.00
B20	Fence Repair	LF	188	\$ 20.00	\$ 3,760.00
B22	Seeding Type 1 Area (Native Seed Mix)	ACRE	5	\$ 8,500.00	\$ 42,500.00
B23	Seeding Type 2 Area; Filter Strip Only (with fertilizer and straw mulch)	ACRE	3	\$ 8,600.00	\$ 25,800.00
B24	Seeding Type 3 Area (with fertilizer and straw mulch)	ACRE	6	\$ 7,800.00	\$ 46,800.00
B25	Remove and reset 36" RCP End Section	EA	1	\$ 1,500.00	\$ 1,500.00
B26	Remove and reset 24" RCP End Section	EA	3	\$ 1,500.00	\$ 4,500.00
B27	Remove and reset 18" RCP End Section	EA	2	\$ 1,500.00	\$ 3,000.00
B28	Remove and reset 12" RCP End Section	EA	1	\$ 1,300.00	\$ 1,300.00
Elwood Wilson EM Hare Subtotal					\$ 1,005,811.00
15% Contingency					\$ 150,871.65
Elwood Wilson EM Hare Total					\$ 1,156,682.65

Easements

The project will take place within existing regulated drain easements for the Elwood Wilson Drain, the Home Depot Relocation Arm,

and the EM Hare Arm and within the public right-of-way of Presley Drive and Promise Road. No additional easements are required for this project.

The statutory easement over the existing tile of the EM Hare Arm will be shifted between Stations 62+45 and 38+19 and between Stations 79+60 and 81+97 to follow the new open ditch. Between these stations, the existing tile will be removed or abandoned in place. The shifted easement will be 150-feet in width centered on the flowline of the new open ditch. The easement will be shifted on the following parcels:

Parcel No.:	Owner
11-07-32-00-00-016.002	Harger Farms, Inc.
10-07-32-00-00-009.000	Harger Farms, Inc.
10-07-32-00-00-007.000	Caledonia Development, Inc.
10-07-33-00-00-012.000	Fleck, Timothy J & Rebecca J

Filter Strips

20-foot filter strips are hereby established across the following parcels:

Parcel No.:	Owner	Side of Open Ditch
11-07-32-00-00-016.002	Harger Farms, Inc.	Both
10-07-32-00-00-013.001	Harger Farms, Inc.	Both
10-07-32-00-00-011.001	Harger Farms, Inc.	Both
10-07-32-00-00-013.002	Harger Farms, Inc.	Both
10-07-32-00-00-009.000	Harger Farms, Inc.	Both
10-07-32-00-00-007.000	Caledonia Development, LLC	Both
10-07-33-00-00-012.000	Fleck, Timothy J & Rebecca J	Both
10-07-33-00-01-001.000	Barton, Douglas D & Julie D	Both
10-07-33-00-00-012.001	Louks, Jason C & Lisa S	Both

10-07-33-00-00-002.000	ATS World Wide Real Estate III LLC [To Station 29+22]	Both
------------------------	---	------

Changes to the Drain

The reconstruction of the E.M. Hare will replace the existing tile or re-route the flow of water through an open ditch running roughly parallel to the existing tile. The Existing E.M. Hare Arm drain will be removed or abandoned in place between Stations 29+92 and 81+97. This will abandon or remove 5,205-feet of existing drain.

The newly reconstructed and or re-routed open ditch will begin at Station 29+92 and continue down-stream to Station 79+60. The newly constructed open ditch is reflected on the Construction Plans between Plan Station 94+00 and Plan Station 44+78. At this juncture, approximate Station 79+60 of the EM Hare Arm, an open ditch will be constructed to convey the flow of the newly constructed EM Hare open ditch to its confluence with the Home Depot Relocation Arm at Station 81+78. This new open ditch is reflected on the Construction Plans between Plan Station 44+78 and Plan Station 42+60. This will construct an additional 218-feet of open ditch.

With the changes mentioned above, the reconstruction project will have constructed or reconstructed 5,140-feet of drain and will have removed or abandoned 5,205-feet of drain. Therefore, the project will remove 65-feet of drain from the E.M. Hare Arm.

Project Costs

Clark Dietz, Inc. was contracted for Topographic Survey Services of the drain on April 23, 2018. The contract amount was \$63,700.00.

Clark Dietz, Inc. was contracted to provide Engineering Design, Soil Borings, Geotechnical Investigation, and Permitting Professional Services on November 14, 2018. The total value of the contract for these services is \$306,040.00.

A contract amendment for the design of the sanitary sewer design, development of bid documents, and permitting Professional Services was approved on July 26, 2021. The contract amount for these services is \$20,740.00. The cost for these services will be reimbursed by the City of Noblesville.

Clark Dietz, Inc. will be contracted for construction phase professional surveying services. These services include construction staking, periodic grade checks, and as-built drawings. The contract amount is \$126,670.00.

Clark Dietz, Inc. will be contracted for construction phase inspection services. These services include full time construction inspection for the construction of the retaining wall, the box culverts, and the wingwalls. These services include part time construction inspection for the construction of the open ditch. The contract will be a not-to-exceed amount of \$124,080.00.

Clark Dietz, Inc. will be contracted for construction administration services. These services include attendance at progress meetings, shop drawing review, and responding to contractor questions. The contract amount will be a not-to-exceed amount of \$13,240.00

The total value of the project is estimated to be as follows:

Construction	\$2,478,000.00
15% Construction Contingency	\$371,700.00
Professional Services: Topographic Survey [Clark Dietz, Inc.]	\$63,700.00
Professional Services: Design, Geotechnical, Soil Borings, Permitting [Clark Dietz, Inc.]	\$306,040.00
Professional Services: Sanitary Sewer Design [Clark Dietz, Inc.]	\$20,740.00
Professional Services: Construction Staking, Grade Checks, As-Built Drawings [Clark Dietz, Inc.]	\$126,670.00
Professional Services: Construction Inspection [Clark Dietz, Inc.]	\$124,080.00
Professional Services: Construction Administration [Clark Dietz, Inc.]	\$13,240.00
Total Project Cost	\$3,504,170.00

Project Funding

The costs for this project will be paid from the sources outlined below.

1. The cost of the new culvert under the Home Depot entrance drive shall be paid by Home Depot per IC 36-9-27-71. The lump sum cost to be charged to Home Depot is \$860,592.15. This amount includes a base cost of \$748,341.00 (Refer to Line Items HD1-HD-6 of the detailed cost estimate) and a 15% contingency equal to \$112,251.15.
2. The cost for the new culvert under Presley Drive shall be paid by the City of Noblesville per IC 36-9-27-71. The lump sum cost to be charged to the City of Noblesville is \$559,709.60. This amount includes a base cost of \$486,704.00 (Refer to Line Items N1-N7 and N11 of the detailed cost estimate) and a 15% contingency equal to \$73,005.60.
3. The cost for the new culvert under Promise Road shall be paid by the Hamilton County Highway Department per IC 36-9-27-71. The lump sum cost to be charged to the Hamilton County Highway Department is \$187,795.00. This amount includes a base cost of \$163,300.00 (Refer to Line Items B13, B14, and B21 of the detailed cost estimate) and a 15% contingency equal to \$24,495.00.
4. The cost for the Sanitary Sewer shall be paid by the City of Noblesville. Including the construction of the sanitary sewer with this reconstruction project, and payment for this work by the City of Noblesville, was first discussed in an email dated December 8, 2020. The lump sum cost to be charged to the City of Noblesville is \$105,660.60. This

amount includes professional services equal to \$20,740.00, a base construction cost of \$73,844.00 (Refer to Line Items N8-N10 of the detailed cost estimate) and a 15% construction contingency equal to \$11,076.60.

5. A portion of the project will be funded by the Coronavirus State and Federal Fiscal Recovery Funds of the American Rescue Plan. As of the date of this report, the first round of funds from this program is available. The total amount of the ARPA funds allocated for this project is \$200,000.00.
6. The remainder of the total project cost, \$1,590,412.70 shall be assessed equally by acreage over the remainder of the properties that benefit from the reconstruction project. The total acreage to be assessed is 765.94-acres. Based on this estimate, the rate per acre would be \$2.076.42.

To date, the County has paid the invoices for the various professional services from the Elwood Wilson Shed maintenance fund. The costs incurred to date total \$386,776.60. The maintenance fund balance is presently in the red \$382,819.41 due to the payment of these invoices from the Elwood Wilson Shed maintenance fund. The reconstruction assessment plus \$20,740.00 of the lump sum will be transferred to the Elwood Wilson Maintenance Fund.

The Elwood Wilson Shed collects \$47,520.44 annually for maintenance.

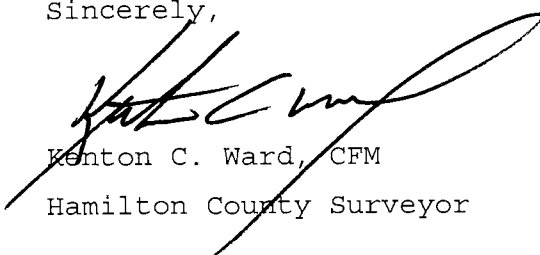
The final costs to be assessed shall be based on the actual construction contract amounts and any approved change orders.

For the costs to be paid by the Hamilton County Highway Department, the City of Noblesville Street Department, the City of Noblesville Sanitary Sewer, and the Home Depot, it is recommended that, at the discretion of the entity being assessed, the assessment be paid as one lump sum or allowed to be repaid over a period of five years, with interest, starting in 2023.

I believe that no damages will result to landowners by the reconstruction of this drain. Therefore, damages shall be set at \$0.00.

I recommend that a hearing be held for this matter on May 9, 2022.

Sincerely,



Kenton C. Ward, CFM
Hamilton County Surveyor

KCW/pl1

Elwood Wilson Drain R0126

E.M. Hare Arm Reconstruction

\$3,504,170.00 Project Cost
 -\$1,713,757.35 Lump Sums to Entities
 -\$200,000.00 ARPA's portion
-\$1,590,412.65 Reconstruction assess to entire shed.
 \$0.00

\$2,076.42 Rate per acre for entire 765.94 acres.
 The entities will pay their lump sum and will also be assessed
 their benefitted acreage at a rate of \$2,076.42.

The reconstruction assessment bills will be sent by the
 Treasurer's Office with an option to pay in full within the first
 years' billing cycle without interest. If not paid in full the
 portion of assessment that is deferred will have interest added.
 The payment details will be on the bill from the Treasurer.
 The reconstruction assessment and lump sum assessments
 together will create \$3,304,170.89 to be collected.

*Damages set at zero.

*No change in current maintenance assessment rates.

Hearing: May 9, 2022

Project cost not in amounts to be billed to entities portion: \$1,790,412.65
 American Rescue Plan (ARPA) portion: -\$200,000.00
 Shortage to be paid with a reconstruction assessment: \$1,590,412.65

Cost Estimate	Contingency	Total
\$2,478,000.00	\$371,700.00	\$2,478,000.00
Construction		\$371,700.00
15% Contingency		\$63,700.00
Topo Survey		\$306,040.00
Design,Geo,SoilBoring,Permit		\$20,740.00
Sanitary Sewer Design		\$126,670.00
Staking,GradeCheck,Asbuilts		\$124,080.00
Construction Inspection		\$13,240.00
Construction Administration		\$3,132,470.00
Totals to be paid by County Funds:	\$371,700.00	\$3,504,170.00

Entities to be billed:	Bid Amount	Contingency	Total
Home Depot (Entrance culvert)	\$748,341.00	\$112,251.15	\$860,592.15
City of Noblesville (Presley Dr)	\$486,704.00	\$73,005.60	\$559,709.60
County Highway (Promise Rd)	\$163,300.00	\$24,495.00	\$187,795.00
City of Noblesville (Sanitary Sewer)	\$73,844.00	\$11,076.60	\$84,920.60
City of Noblesville (Sanitary Sewer Design)	\$20,740.00		\$20,740.00
Sub-total:	\$1,492,929.00	\$220,828.35	\$1,713,757.35

Parcel	Owner	Desc	Rate	Ben	Entities Lump Sum	Rec. Asmt Total	% of Total
11-07-32-00-00-024.601	10000 Over Dr LLC	S32 T19 R5 Noblesville Commons PT 3	1.40Ac	1.40	\$2,907.00	\$2,907.00	0.18%
11-07-32-00-00-024.002	1333 Las Palmas Partners LLC	S32 T19 R5 Noblesville Commons Lot D	1.59Ac	1.59	\$3,301.52	\$3,301.52	0.21%
11-07-32-00-00-024.801	Advance Stores Company Inc	S32 T19 R5 Noblesville Commons Lot F		0.83	\$1,723.44	\$1,723.44	0.11%
10-07-32-00-00-015.000	Asbury IN Chev LLC	S32 T19 R5	4.31Ac	4.31	\$8,949.38	\$8,949.38	0.56%
10-07-33-00-00-002.000	ATS World Wide Real Estate III LLC	S33 T19 R5	52.22Ac	43.78	\$90,905.68	\$90,905.68	5.72%
10-07-33-00-00-002.002	ATS World Wide Real Estate III LLC	S33 T19 R5	3.19Ac	3.19	\$6,623.78	\$6,623.78	0.42%
10-07-33-00-00-010.000	ATS World Wide Real Estate III LLC	S33 T19 R5	78.40Ac	78.40	\$162,791.34	\$162,791.34	10.24%
10-07-33-00-01-001.000	Barton, Douglas D & Julie D	S33 T19 R5 Beck'S Little Acre Lot 1	1.53Ac	1.53	\$3,176.92	\$3,176.92	0.20%
10-07-33-00-01-002.000	Beck, Neil E	S33 T19 R5 Beck'S Little Acre Lot 2		0.98	\$2,034.90	\$2,034.90	0.13%
10-07-32-00-00-004.000	Board Of Commissioners Ham Co	S32 T19 R5	22.56Ac	7.74	\$16,071.50	\$16,071.50	1.01%
10-07-32-00-00-014.000	Brayco Land LLC	S32 T19 R5 Gill Subdivision Lot 1		2.60	\$5,398.70	\$5,398.70	0.34%
10-07-33-00-02-001.000	Bulger, Daniel R & Amy L	S33 T19 R5 McClintock Homestead Lot 1	2.91Ac	1.80	\$3,737.56	\$3,737.56	0.24%
10-07-33-00-00-013.000	Bustos, Marco A Avina	S33 T19 R5	0.78Ac	0.78	\$1,619.62	\$1,619.62	0.10%
10-07-32-00-00-007.000	Caledonia Development LLC	S32 T19 R5	61.20Ac	42.74	\$88,746.20	\$88,746.20	5.58%
10-07-33-00-00-011.000	Caledonia Development LLC	S33 T19 R5	24.50Ac	13.96	\$28,986.82	\$28,986.82	1.82%
10-07-33-00-00-019.000	Carter, Jeff & Victoria Nesbit Trustees	S33 T19 R5	0.78Ac	0.78	\$1,619.62	\$1,619.62	0.10%
11-07-32-00-00-016.201	City of Noblesville	S32 T19 R5	0.56Ac	0.56	\$1,162.80	\$1,162.80	0.07%
99-99-99-99-99-999.008	City Of Noblesville Clerk-Treasurer's Office	S32&33T19R5, S5T18R5 Presley, Promise, Cherry		22.14	\$45,971.94	\$45,971.94	2.89%
10-07-33-00-00-023.000	Derival, James Keith & Judith A	S33 T19 R5	0.93Ac	0.93	\$1,931.08	\$1,931.08	0.12%
11-07-32-00-00-020.000	Field Rubber Products Inc	S32 T19 R5	1.40Ac	1.40	\$2,907.00	\$2,907.00	0.18%
11-07-32-00-00-024.003	Field Rubber Products Inc	S32 T19 R5	0.51Ac	0.51	\$1,058.98	\$1,058.98	0.07%
11-07-32-00-00-024.004	Field Rubber Products Inc	S32 T19 R5	0.35Ac	0.35	\$726.76	\$726.76	0.05%
10-07-33-00-00-014.000	Fleck, Tim J & Rebecca J	S33 T19 R5	0.78Ac	0.78	\$1,619.62	\$1,619.62	0.10%
10-07-33-00-00-012.000	Fleck, Timothy J & Rebecca J	S33 T19 R5	44.43Ac	44.43	\$92,255.34	\$92,255.34	5.80%

Parcel	Owner	Desc	Rate	Ben	Rec. Asmt	% of Total
10-07-33-00-00-017.000	Gang, Thomas R & Roben E	S33 T19 R5 0.78Ac	Residential/Ag	0.78	\$1,619.62	0.10%
11-07-32-00-00-024.301	GSMS 2014 GC24 Foundation Drive LI	S32 T19 R5 Noblesville Commons Lot G	1.76Ac	1.76	\$3,654.50	0.23%
11-07-32-00-00-024.501	Hamilton County	S32 T19 R5 4.14Ac	Commercial	4.14	\$8,596.38	0.54%
99-99-99-99-99-999.001	Hamilton County Highway Department	S32 & 33 T19 R5, 181st, Mallery & Promise Rds	Commercial	23.22	\$48,214.48	3.03%
10-07-32-00-00-010.000	Harger Family Ptn LP	S32 T19 R5 7.13Ac	Residential/Ag	1.88	\$3,903.68	0.25%
10-07-32-00-00-009.000	Harger Farms Inc	S32 T19 R5 29.54Ac	Residential/Ag	29.40	\$61,046.76	3.84%
10-07-32-00-00-011.000	Harger Farms Inc	S32 T19 R5 3.76Ac	Residential/Ag	3.56	\$7,392.06	0.46%
10-07-32-00-00-011.001	Harger Farms Inc	S32 T19 R5 10.20Ac	Commercial	10.00	\$20,764.20	1.31%
10-07-32-00-00-013.000	Harger Farms Inc	S32 T19 R5 13.70Ac	Residential/Ag	13.70	\$28,446.96	1.79%
10-07-32-00-00-013.001	Harger Farms Inc	S32 T19 R5 16.20Ac	Commercial	16.20	\$33,638.00	2.12%
10-07-32-00-00-013.002	Harger Farms Inc	S32 T19 R5 18.20Ac	Commercial	18.20	\$37,790.84	2.38%
11-07-32-00-00-016.000	Harger Farms Inc	S32 T19 R5 4.08Ac	Residential/Ag	4.08	\$8,471.80	0.53%
11-07-32-00-00-016.002	Harger Farms Inc	S32 T19 R5 7.06Ac	Commercial	7.06	\$14,659.54	0.92%
12-07-34-00-00-002.000	Harger Farms Inc	S34 T19 R5 199.50Ac	Residential/Ag	21.76	\$45,182.90	2.84%
10-07-33-00-00-006.000	Harger, James T & Juanita T h&w	S33 T19 R5 40.00Ac	Residential/Ag	37.82	\$78,530.20	4.94%
12-07-34-00-00-031.000	Harger, James T & Juanita T h&w	S34 T19 R5 3.00Ac	Residential/Ag	2.65	\$5,502.52	0.35%
10-07-33-00-00-018.000	Hight, Larry J & Marilyn K h&w jtrs	S33 T19 R5 0.78Ac	Residential/Ag	0.78	\$1,619.62	0.10%
11-07-32-00-00-016.001	Home Depot USA Inc	S32 T19 R5 7.19Ac	Commercial	7.19	\$14,929.46	0.94%
11-07-32-00-00-021.000	Home Depot USA Inc	S32 T19 R5 7.29Ac	Commercial	7.29	\$15,137.10	0.95%
11-07-32-00-00-022.000	Home Depot USA Inc	S32 T19 R5 0.08Ac	Commercial	0.08	\$166.12	0.01%
11-07-32-00-00-023.000	Home Depot USA Inc	S32 T19 R5 1.29Ac	Commercial	1.29	\$2,678.58	0.17%
99-99-99-99-99-999.002	Indiana Department Of Transportation	S32 & 33 T19 R5, SR32	Commercial	21.33	\$44,290.04	2.78%
10-07-32-00-00-014.001	K & J Investments IV LLC	S32 T19 R5 Gill Subdivision Lot 2	Commercial	2.40	\$4,983.42	0.31%
11-11-05-00-00-001.101	K&J Investments IV LLC	S5 T18 R5 2.00Ac	Commercial	0.05	\$103.82	0.01%
10-07-33-00-00-024.000	Kandler, Jay C II	S33 T19 R5 0.65Ac	Residential/Ag	0.65	\$1,349.68	0.08%
10-07-33-00-00-022.000	Kern, Sandra L	S33 T19 R5 0.69Ac	Residential/Ag	0.69	\$1,432.74	0.09%
11-07-32-00-00-024.901	Kingsway Equities LLC	S32 T19 R5 Noblesville Commons Lot C	1.00Ac	1.00	\$2,076.42	0.13%
10-07-32-00-00-006.000	Kreagcraft Incorporated	S32 T19 R5 163.00Ac	Residential/Ag	35.14	\$72,965.40	4.59%
10-07-33-00-00-012.001	Louks, Jason C & Lisa S	S33 T19 R5 0.91Ac	Residential/Ag	0.91	\$1,889.54	0.12%
10-07-32-00-00-005.000	Mallery, Eula I & Linda Co Trustees of F	S32 T19 R5 20.00Ac	Residential/Ag	6.94	\$14,410.36	0.91%
10-07-33-00-00-005.002	McClintock Farm LP	S33 T19 R5 29.89Ac	Residential/Ag	10.73	\$22,280.00	1.40%
10-07-33-00-00-005.003	McClintock Farm LP	S33 T19 R5 3.09Ac	Residential/Ag	1.10	\$2,284.06	0.14%
11-07-32-00-00-024.102	Motels of Noblesville 2 LLP	S32 T19 R5 Noblesville Commons Lot J	2.11Ac	2.11	\$4,381.26	0.28%
10-07-33-00-00-029.001	Musselman, Joel & Darlene F	S33 T19 R5 19.14Ac	Residential/Ag	11.77	\$2,387.88	0.15%
10-07-33-00-00-029.101	Musselman, Joel & Darlene F	S33 T19 R5 0.78Ac	Residential/Ag	11.77	\$24,439.46	1.54%
10-07-33-00-00-021.000	Nichols, Michael F & Maureen K	S32 T19 R5 5.00Ac	Commercial	1.15	\$1,619.62	0.10%
10-07-32-00-00-019.000	Noble Industries Inc	S5 T18 R5 Terry Lee Crossing Lot Pt 6	4.44Ac	4.44	\$9,219.30	0.58%
11-11-05-00-00-001.003	Noble Industries Inc	S32 T19 R5 4.43Ac	Commercial	5.00	\$10,382.10	0.65%
11-07-32-00-00-024.001	Noblesville Commons LLC	S32 T19 R5 17.70Ac	Commercial	4.43	\$9,198.54	0.58%
11-07-32-00-00-016.101	Pedcor Investments-2003-L LP	S32 T19 R5 1.07Ac	Commercial	17.70	\$36,752.64	2.31%
10-07-33-00-00-028.000	Pickett, Rodd & Todd Pickett jtrs	S33 T19 R5 2.07Ac	Residential/Ag	1.02	\$2,117.96	0.13%
11-11-05-00-00-001.007	Realty Income Properties 26 LLC	S5 T18 R5 Terry Lee Crossing Lot 4	2.07Ac	2.07	\$4,298.20	0.27%
10-07-33-00-00-009.000	Reynolds, Leslie McMahon, Don B Mcl	S33 T19 R5 67.95Ac	Residential/Ag	33.44	\$69,435.48	4.37%
11-11-05-00-00-001.006	RHT Properties LLC 406 Clark Series 2	S5 T18 R5 Terry Lee Crossing Lot 3	2.14Ac	2.14	\$4,443.54	0.28%
10-07-33-00-00-004.000	Roudebush, Jeffery L	S33 T19 R5 40.00Ac	Residential/Ag	12.56	\$26,079.84	1.64%
10-07-33-00-00-008.000	Sanich, Jo Etta & Shirley Bailey T/C	S33 T19 R5 59.31Ac	Residential/Ag	6.09	\$12,645.40	0.80%
10-07-33-00-00-020.000	Schmidt, Ronald R & Elizabeth A	S33 T19 R5 0.63Ac	Residential/Ag	0.63	\$1,308.14	0.08%
10-07-32-00-00-017.000	Selective Properties LLC	S32 T19 R5 T 4.05Ac	Commercial	4.05	\$8,409.50	0.53%

Entities Lump Sum

\$187,795.00

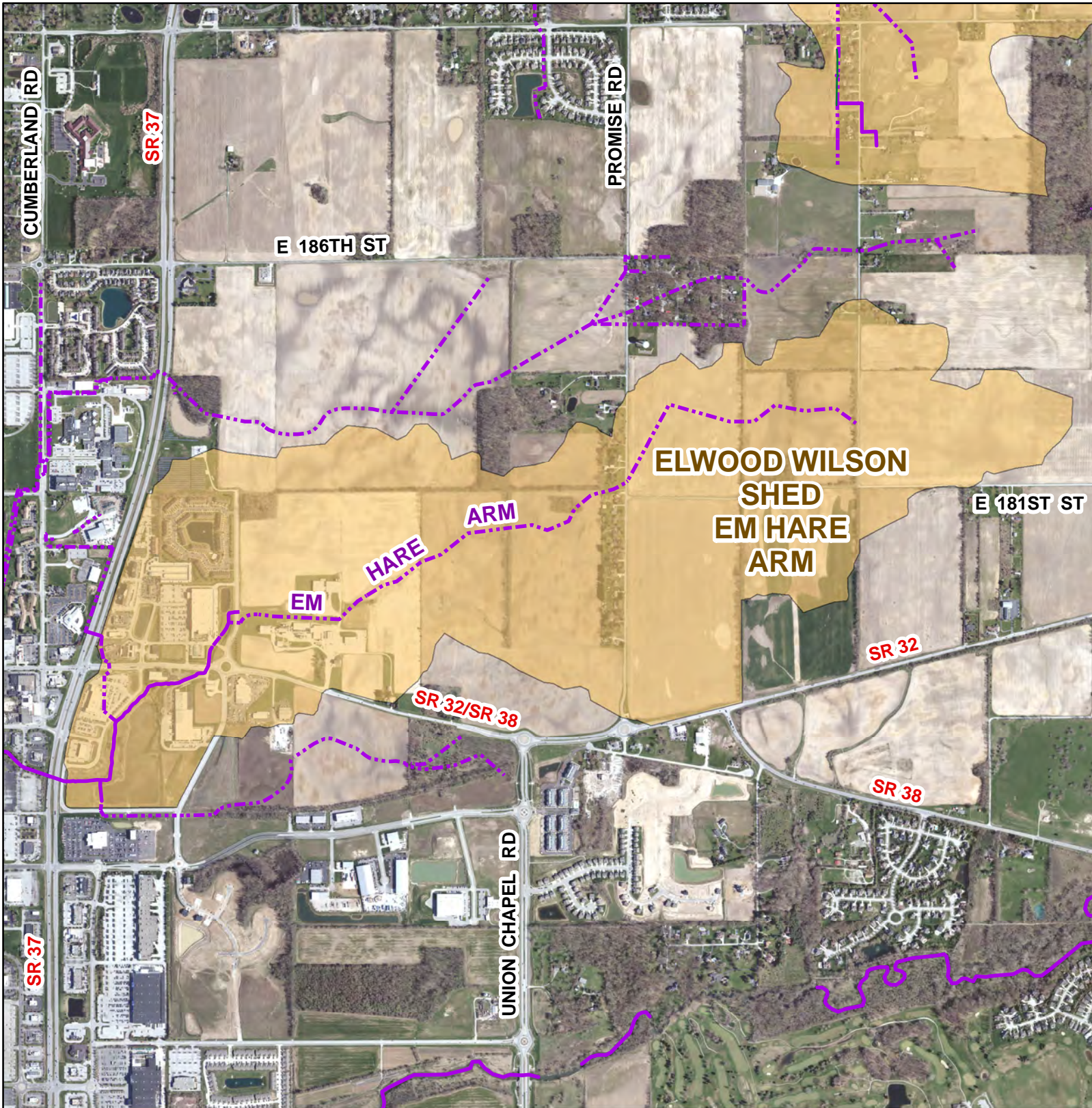
\$860,592.15

Parcel	Owner	Desc	Rate	Ben	Lump Sum	Rec. Asmt	% of Total
10-07-33-00-00-003.000	Selmier, Alice M Trustee of Alice M Sel	S33 T19 R5 40.00Ac	Residential/Ag	40.00		\$83,056.80	5.22%
10-07-33-00-00-015.000	Semler, Jason G & Angela L jtrs	S33 T19 R5 1.10Ac	Residential/Ag	1.10		\$2,284.06	0.14%
11-07-32-00-00-024.101	Speedway SuperAmerica LLC	S32 T19 R5 Noblesville Commons Lot E 1.29Ac	Commercial	1.29		\$2,678.58	0.17%
11-07-32-00-00-023.001	Star Financial Bank	S32 T19 R5 1.37Ac	Residential/Ag	1.37		\$2,844.70	0.18%
11-07-32-00-00-021.001	Storage Express Holdings LLC	S32 T19 R5 2.13Ac	Commercial	2.13		\$4,422.78	0.28%
11-07-32-00-00-024.611	Storage Express Holdings LLC	S32 T19 R5 Noblesville Commons PT 3	Commercial	0.95		\$1,972.60	0.12%
11-07-32-00-00-024.401	Teachers Credit Union	S32 T19 R5 1.20Ac	Commercial	1.20		\$2,491.70	0.16%
11-07-32-00-00-024.000	Terry Lee Crossing LLC	S32 T19 R5 3.55Ac	Commercial	3.55		\$7,371.30	0.46%
11-11-05-00-00-001.000	Terry Lee Crossing LLC	S5 T18 R5 28.78Ac	Commercial	21.83		\$45,328.26	2.85%
11-11-05-00-00-001.001	Terry Lee Crossing LLC	S5 T18 R5 11.51Ac	Residential/Ag	0.52		\$1,079.74	0.07%
10-07-33-00-00-025.000	Timmons, Daniel L & Lola Jane	S33 T19 R5 0.78Ac	Residential/Ag	0.78		\$1,619.62	0.10%
11-07-32-00-00-024.005	TLC Realty LLC	S32 T19 R5 Terry Lee Crossing Lot 1 9.77Ac	Commercial	9.77		\$20,286.62	1.28%
10-07-33-00-00-016.000	Wilkinson, Randall J	S33 T19 R5 0.78Ac	Residential/Ag	0.78		\$1,619.62	0.10%
Parcels: 85			Totals:	765.94	\$1,713,757.35	\$1,590,413.54	100.00%

The reconstruction assessment and lump sum assessments together will create \$3,304,170.89 to be collected.

HAMILTON COUNTY SURVEYOR'S OFFICE

- ELWOOD WILSON SHED-EM HARE ARM -



Printing Date: 4/7/2022
Prepared By: Darren Wilson, GISP
Hamilton County Surveyor's Office
One Hamilton County Square, Ste 188
Noblesville, IN 46060
317-776-8495

NO SCALE