ATTACHMENT A
SCOPE OF SERVICES

Project Background

The City of West Allis joined the Menomonee River Watershed Permit Group on November 30, 2012. Under that permit, the city is required to undertake certain activities related to city-wide stormwater pollution reduction practices. The City recently received two green solutions grants from Milwaukee Metropolitan Sewerage District (MMSD) for the installation of green infrastructure in conjunction with two parking lot reconstruction projects located in downtown West Allis. Both lots are located just south of Greenfield Avenue in Downtown West Allis; the first parking lot is located between 71st and 72nd Streets and is approximately 13,150 s.f. and the second parking lots is located adjacent to 74th Street and is approximately 10,000 s.f.

The following tasks will be completed as part of this scope of services:

Services:

AECOM will provide engineering design services for the survey and reconstruction of two City parking lots. More specifically, the Parking Lots located south of Greenfield Ave. and between 71st and 72nd Streets and the Parking Lot adjacent to 74th Street just south of Greenfield Ave. Design and survey limits are shown on the attached Figure.

1. Design Survey and Geotechnical Exploration:

1.1 Coordinate with City Staff to obtain benchmarks and survey control for the site and coordinate notification of property owners prior to initiating surveying.

1.2 Contact Digger's Hotline to have underground utilities marked prior to initiating topographic surveying.

1.3 Complete topographic survey of the project corridor as shown on Figure 1, including rims and inverts of existing storm structures necessary for local drainage, and all existing utilities marked by Digger's Hotline.

1.4 Prepare survey basemap in AutoCAD Civil 3D.

1.5 Stake and Conduct Soil Borings and Soils Analysis

a. Coordinate access to the site with the City of West Allis.

b. Prior to mobilization to the site, the drilling subcontractor will obtain public utility clearance at the individual boring locations through the Diggers Hotline public utility location service. AECOM will request the City of West Allis to locate and mark any private utilities that may be present at the individual soil boring locations. An AECOM representative will mark the borings at least three (3) day in advance of drilling activities.

c. The drilling subcontractor will mobilize a truck-mounted drill rig to complete four (4) soil borings total (i.e. two (2) borings per parking lot. The location and elevation of the boreholes will be documented in the site survey work for the project. If underground utilities or overhead structures are located near a proposed boring location, AECOM will coordinate with the City of West Allis for offsetting the boring locations while maintaining minimum safe working clearances. If required, offset distances will be included on the soil borings in the final geotechnical report. AECOM assumes that the boring locations will be accessible by a truck

mounted drill rig and no special precautions are required for work at the site. AECOM and the drilling subcontractor assume no specialized training is needed and that no special considerations or requirements will be presented for drilling at the identified locations, such as contaminated soil analysis or disposal.

d. The drilling subcontractor will advance the soil borings to a minimum termination depth of 15 feet, or to the point of practical refusal, whichever occurs sooner. If unsuitable soils are encountered at the proposed termination depths, the City of West Allis will be contacted to discuss further action. Based on past projects, AECOM defines unsuitable soils as granular soils with a Standard Penetration Test (SPT) N-value of less than 10 or cohesive soils with an unconfined compressive strength of less than 500 pounds per square foot (measured in the field with a hand penetrometer).

e. The drilling subcontractor will obtain representative samples at 2.5-foot intervals to the planned boring termination depths in the borings. Soil samples will be obtained using split-barrel sampling techniques with a calibrated, automatic hammer in general accordance with ASTM D1586. If necessary, cohesive soil samples may be collected using thin walled Shelby tubes having a 3-inch diameter and in general accordance with ASTM D1587.

f. The drilling subcontractor will provide a field person during the initial stages of the drilling operations to facilitate efficient progress of the subsurface investigation. The field staff will coordinate site access, confirm boring locations, and utility clearance for the proposed soil boring locations.

g. The drilling subcontractor will backfill and abandon the borehole in accordance with state regulations after completion. Excess auger cuttings/spoil material will be left at the site at a location designated by the City of West Allis. The City of West Allis will be responsible for removal and disposal of excess auger cutting/spoil material.

h. The drilling subcontractor will review and classify the retained samples from the soil borings in general accordance with the Unified Soil Classification System (USCS) as outlined in ASTM D2487 and ASTM D2488, and prepare final boring logs. Where cohesive soils are encountered, the unconfined compressive strength will be estimated using calibrated penetrometer tests. In granular soils, the internal angle of friction will be estimated based on engineering correlations with the SPT results obtained in-situ. The drilling subcontractor‘s base laboratory program will include a selection of the following routine classification and index tests to determine soil type and geotechnical parameters needed for design:

    1. Moisture content
    2. Unconfined Compressive Strength, as estimated by calibrated penetrometer
    3. Atterberg limits
    4. Grainsize distribution

1.6 The drilling subcontractor will prepare a Geotechnical Engineering report for the site under the direction of a Professional Engineer registered in the State of Wisconsin. The geotechnical report will describe the subsurface exploration program and provide geologic characterizations of the soil, groundwater, and bedrock conditions encountered in the borings and those expected during construction. A boring location diagram showing final soil boring locations, detailed boring logs, and the results of all geotechnical field and laboratory tests will also be included in the final report. The geotechnical report will also provide recommendations for the pavement structure, infiltration characteristics of the soils using the USDA soil classification and Table 2 of WDNR Technical Standard 1002 and site grading for the proposed work at the site.

2. Project Management/Meetings:

1. Provide project management services from contract approval to completion.

2. Attend one in-person kickoff meeting with City Staff (Engineering, Planning, Forestry, Public Works) to discuss options for vehicular circulation, stormwater management, and landscape opportunities to identify city preferences to be incorporated into the concept plans. The kickoff meeting will also verify scope, program, deliverables and milestone dates and can coincide with a site walk-through of both sites with the client / stakeholder team.

3. Attend one virtual meeting with City Staff to present options for parking lot design and choose final concept.

4. Attend one in-person meeting with the Downtown Business Improvement District (BID) after concept plan submittal and review. Figures for each site, will be prepared and identify the areas or permeable pavement, general water flow and capture and planting areas to support stormwater objectives and overall enhancements. Another exhibit will highlight the recommended plant and permeable paver palette with precedent images based on City preferences.

5. Attend one virtual design review meeting with City Staff at 60% completion to get feedback on concept plans and prepare for presentation to the BID.

6. Attend one virtual design review meeting at 90% completion to get feedback on items to be incorporated into the final plans and special provisions.

7. Attend one in-person pre-construction meeting.

3. Parking Lot Design

3.1 Prepare up to (3) sketch concept plans for each parking lot. Concept plans will show proposed locations of green infrastructure and landscaped areas, parking lot layout/stall modifications, and storm sewer layout.

3.2 Prepare 60% concept plans, quantities, and opinion of probable construction costs (OPCC), including a preliminary HydroCAD and WinSLAMM Analysis showing the anticipated total suspended solids (TSS) and total phosphorus (TP) removal efficiency compared to existing conditions.

3.3 Prepare 90% construction plans, special provisions, quantities, and OPCC. The plans will include:

a. Cover page;
b. Existing Conditions sheet(s) for each parking lot;
c. Standard details, notes, and abbreviations;
d. Demolition & Suggested Erosion Control sheet(s) for each parking lot;
e. Civil Facilities and Piping sheet(s) for each parking lot;
f. Civil Grading & Pavement Marking sheet(s) for each parking lot;
g. Landscaping & Planting Plan sheet(s) for each parking lot;
h. Plant Schedule, details, notes
i. Lighting Plans, including (2) removal sheets, (2) proposed lighting design sheets, and (2) details sheets

3.4 AECOM will perform lighting design services required for the installation of two public parking lot lighting systems. The design will include plans, special provisions, pay items, quantities and an OPCC for:

a. Removal of the existing parking lot lighting systems,
b. Installation of the proposed the proposed parking lot lighting systems,
c. Removal and replacement of two existing City CCTV cameras including design of festoon/holiday receptacles in each light pole.

The electrical/lighting plans will be developed to show the locations of the existing and new light poles, CCTV cameras, receptacles, handholes/manholes, controller and electrical utility service connection.

The design will also include the work to remove two existing City CCTV cameras and reinstall them on new lighting units. The cameras will be installed on poles at the locations provided by the City. AECOM will design and specify the necessary mounting hardware and brackets required for mounting the existing cameras on the new light poles.

The lighting design illumination levels will be developed according to the City of West Allis standards and lighting design criteria values in accordance with the AASHTO 2005 Roadway Lighting Guide. Photometric calculations will be performed with AGI32 lighting software to determine the optimum light pole spacing to meet the established average-maintained illumination and uniformity level target values.

The design shall provide a 120/240 volt, 1-phase, 3-wire lighting system. AECOM assumes that the new lighting system will be fed from local utility company transformers. The lighting design will include the locations of the new city light poles, concrete foundations, mast arms, HPS luminaires, lighting controllers or pole mounted breaker boxes, handholes, new utility service feeds, conduits and wires.

3.5 Prepare final construction plans, special provisions, quantities, and OPCC.

3.6 Assist with Bidding the project. Address contractor questions during the bidding process, issue any required addenda, and review any shop drawing submittals. Analyze the bids received and prepare a Letter of Recommendation regarding award of the contract, including preparation of a bid tabulation.

4. Baseline Reports

4.1 Coordinate with City staff to submit final documentation required as part of the MMSD Green Solutions funding. This may include updating WinSLAMM modeling per final design documents, calculating rainwater capture capacity, lessons learned, creation of figures for submittal to MMSD, photo log of construction activities, operations and maintenance plan, and other required documents per MMSD Green Solutions funding guidelines.

Assumptions / Conditions

1. Survey of the existing parking lots will be conducted once property corners and existing utilities have been located. Start of survey will be dependent on weather conditions and parking lots being clear of all snow.

2. The City will locate and mark all property corners, and city-owned utilities (e.g. electrical service lines to existing lights, water mains, water services, sanitary sewer mains and laterals, storm sewer mains and laterals, irrigation system, etc.) in the project limits prior to surveying.

3. The City will prepare the Project Manual and post the bidding documents on www.questcdn.com.

4. Geotechnical Exploration assumptions:
   - AECOM and drilling subcontractor assume that parking stalls at, and near, the location of each boring will be vacant to allow immediate access to each boring location. City Staff will coordinate barricading around each boring location to a minimum of a 15’ radius to ensure adequate access to each boring location.
   - AECOM and drilling subcontractor assume that environmentally hazardous impacted soils, construction debris, obstructions, or extremely difficult drilling conditions will not be

encountered while advancing the borings. In addition, rock coring costs have not been included. Should any of these conditions be encountered, AECOM is able to provide environmental compliance and oversight services at an additional cost.

- Obtaining subsurface samples can be hazardous, particularly when the exact location and positioning of underground structures and utilities are unknown. AECOM's drilling subcontractor will contact Diggers Hotline to clear public utilities; however, the City of West Allis shall assess the proposed boring locations to clear private utilities and subsurface structures.
- Neither AECOM nor drilling subcontractor will be held liable for damages to unidentified or misidentified subsurface structures or utilities or any damage or contamination to the site or surrounding properties occurring as a result if unidentified or misidentified public or private subsurface structures and utilities.
- Soil infiltration tests are currently not included in the parking lot sites due to cost and extent of anticipated disturbance. If soil infiltration tests are desired or required, this can be amended into the contract scope for an additional cost.

5. Electrical Design assumptions:
   - The City will provide details for the specific luminaires to be installed in the parking lot. AECOM will not be required to analyze/compare numerous types of luminaire options for the City from which to choose. Photometric calculations will be provided for only one specific luminaire for each lighting installation.
   - The design will utilize standard City of West Allis parking lot and pedestrian light poles, mast arms, luminaires, street lighting controllers and foundations. The City of West Allis will provide AECOM with standard detail drawings and special provisions for the equipment to be inserted into the contract documents with minimum effort. If there are no City standards for any of the electrical equipment specified for this project, AECOM will utilize WisDOT Standards, special provisions and pay items.
   - Each parking lot lighting system will require separate lighting controls due to the distance (2 blocks) between the two parking lots and voltage drop.
   - The local electric utility will provide a service feed to the new lighting controls. The service feed will be located near (1/2 block max.) to the parking lots.
   - The OPCC includes hours for providing electrical/lighting details for the meter/controller, CCTV camera mounting, and the light pole with concrete foundation and festoon receptacle. AECOM assumes that all remaining details and specs required for this project will be covered by West Allis and WisDOT standards.
   - No provisions will be provided for temporary power or lighting for the parking lot during construction.
   - The OPCC does not include hours to provide "Miscellaneous Quantities" drawings/spreadsheets within the design plan documents, as required by WisDOT.
   - The OPCC does not include developing wiring diagrams or load tables for the lighting circuits connected to the lighting control equipment. The branch circuit wiring types, sizes and quantities will be shown clearly on the plan drawings.
   - The OPCC does not include coordinating the electric utility service details with the local electric utility company. It is assumed that the Milwaukee office will perform this coordination work with the utility.
   - The OPCC does not include hours for meeting with the City of West Allis to discuss the project submittals. Hours have been provided for analyzing the client review comments forwarded by the project PM for the electrical designer to respond to and update the plans accordingly.

6. All submittals will be electronic. No hard copies are anticipated. Civil design documents will be provided in AutoCAD/Civil 3D.

7. Wetland screening review is not included.

8. No local, regional, or state permit applications or related fees are included.

9. No traffic control plans for street traffic are required as part of the proposed construction for any of the locations.

10. No municipal water or sanitary sewer impacts or design are required.

11. No renderings or 3D graphics are included.

12. Delays / time extensions and significant budget and value engineering revisions shall be cause for additional services.

13. Construction Related Services are not included in the scope of this agreement but can be provided as an additional service if requested.

Schedule:

The project schedule will be dependent on contract award and discussions with City Staff. However, a tentative schedule for the project is provide below. AECOM and CLIENT both acknowledge this schedule may be impacted and delayed by travel restrictions and/or other attempts to protect workers and limit the transmission of the COVID-19 virus. For the avoidance of doubt, a COVID-19 outbreak shall be considered a force majeure event under Article 12.01 of the General Conditions.

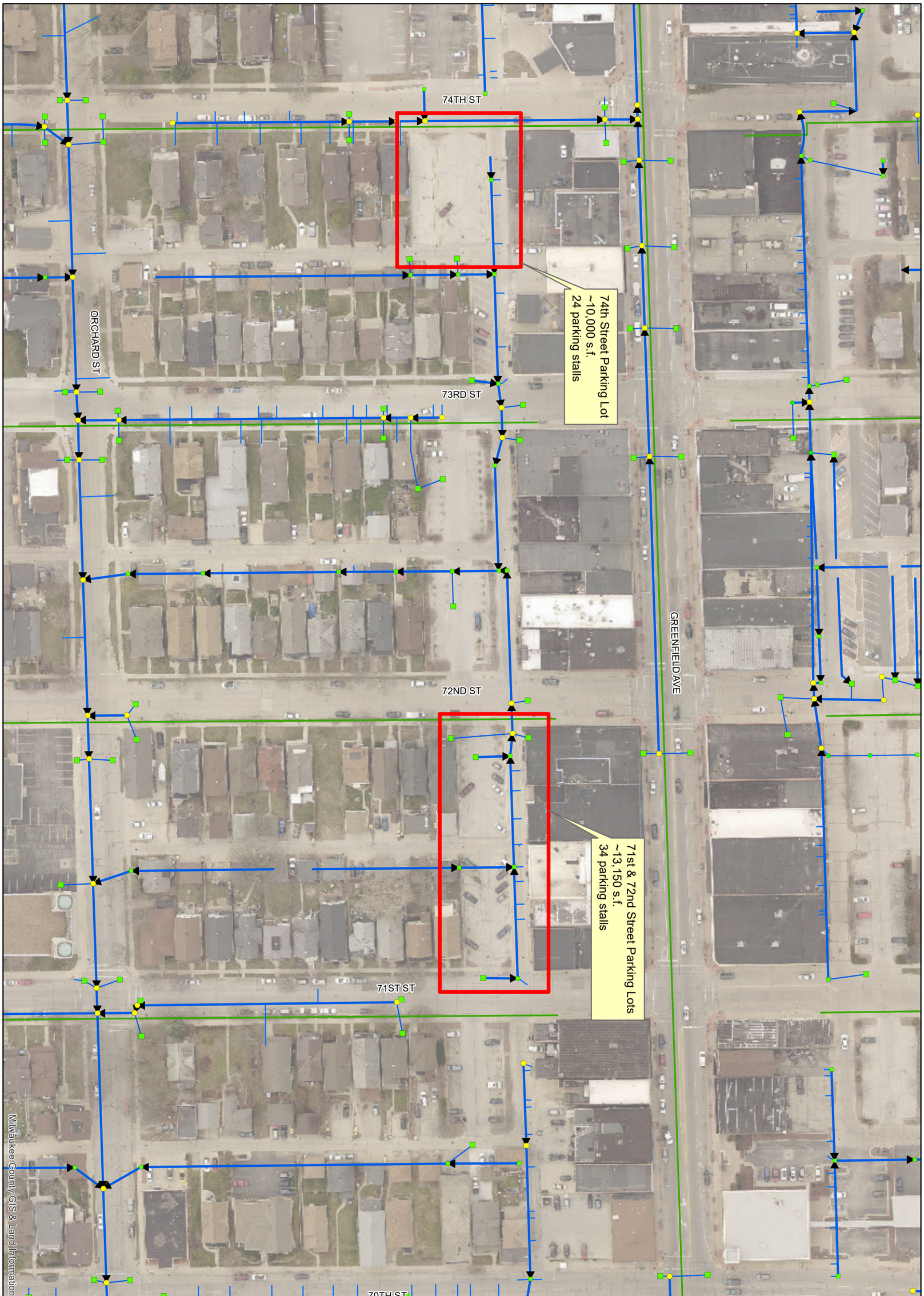
Topographic Survey Completed by end of February 2021, dependent on contract award and weather
Kickoff Meeting – February 2021
60% Concept Plans & Meeting – April 2021
Meeting with BID – April 2021
90% PS&E & Meeting – May 2021
Advertise for Bid – June 2021
Bid Opening – July 2021
Letter of Recommendation and Bid Tab – August 2021
Baseline Report submittal – Post-Project Completion – Fall 2021

Deliverables:

1 electronic copy (pdf) of 60% Plans and Opinion of Probable Construction Cost (OPCC)
1 electronic copy (pdf) of 90% Plans, Special Provisions, OPCC
1 electronic copy (pdf) of Final Plans, Special Provisions, OPCC
1 electronic copy (pdf) of Baseline Report for submittal to MMSD

Downtown Business Parking Lot Reconstruction
City of West Allis, WI
Fee Table

Task #	Task Name	Fee
1	**Design Survey & Geotechnical Exploration**	**$13,200**
1.1	Coordination with City Staff on Benchmarks & Survey Control	$500
1.2	Digger's Hotline Coordination	$200
1.3	Topographic Survey	$2,400
1.4	Prepare Survey Basemap in CAD	$2,900
1.5	Stake and Conduct Soil Borings and Soils Analysis (6 borings)	$6,100
1.6	Geotechnical Exploration Report	$900
2	**Project Administration / Meetings**	**$13,600**
2.1	Project Management	$3,100
2.2	Kick Off Meeting with City Staff	$2,800
2.3	Design Concept Selection	$1,600
2.4	60% Design Review Meeting	$700
2.5	Buisness Improvement District (BID) Meeting	$3,500
2.6	90% Design Review meeting	$1,400
2.7	Pre-Construction Meeting	$400
3	**Parking Lot Design**	**$69,400**
3.1	Sketch Concept Plans	$5,300
3.2	60% Concept Plans, Quantities, and Opinion of Probable Cost	$16,800
3.3	90% Plans, Specifications, Quantities, Opinion of Probable Cost	$15,200
3.4	Parking Lot Lighting Plans, Specs, Estimate (60, 90, & PS&E)	$22,300
3.5	Final Plans, Specifications, & Estimate	$8,000
3.6	Bidding Assistance (Addenda, Shop Drawing Review, Recommendation)	$1,900
4	**Baseline Reports**	**$1,600**
	Total	**$97,800**



Legend

- Project Location/Survey Limits
- Catch Basin
- Storm Manhole
- Manhole Catch Basin
- Storm Sewer
- Sanitary Sewer

N

0 50 100 Feet

Figure 1
Downtown Parking Lot Project Locations
City of West Allis, Wisconsin
January 2021

AECOM

Document Path: C:\Users\jacak\Documents\GIS\WestAllis\WestAllis_DT_Parking_Lots.mxd