



City of Appleton

100 North Appleton Street
Appleton, WI 54911-4799
www.appleton.org

Meeting Agenda - Final Utilities Committee

Tuesday, December 8, 2020

5:00 PM

Council Chambers, 6th Floor

1. Call meeting to order
2. Roll call of membership
3. Approval of minutes from previous meeting
[20-1547](#) Approval of the November 10, 2020 Utilities Committee Meeting minutes.

Attachments: [November 10, 2020 Utilities Committee Meeting minutes](#)

4. Public Hearings/Apearances

5. Action Items

- [20-1548](#) Award of 2021A Stormwater Consulting Services Contract for 2021 Stormwater Management Plan Reviews to Brown and Caldwell in an amount not to exceed \$37,500.

Attachments: [2021A Plan Review Award Util Memo BC.pdf](#)

- [20-1550](#) Award of 2021B Stormwater Consulting Services Contract for 2021 Stormwater Management Plan Reviews to raSmith in an amount not to exceed \$37,500.

Attachments: [2021B Plan Review Award Util Memo raSmith.pdf](#)

- [20-1552](#) Approval to single source and award 2021C stormwater consulting services contract for Spartan Drive Apple Creek Culvert and Stormwater Management Practices (SMP) Final Design and Construction Documents with Brown and Caldwell (BC) in an amount not to exceed \$141,767.

Attachments: [2021C UC memo combined.pdf](#)

6. Information Items

[20-1604](#) Change Order 1, 2, and 3 to Great Lakes Mechanical in the amount of \$816 for the OCCT Apparatus Test Project resulting in the construction contract being increased to \$122,156 and a decrease in contingency from \$12,134 to \$11,318.

Attachments: [Change Order 1 2 3 OCCT Test Apparatus Project.pdf](#)

[20-1575](#) General Information Regarding the Main Break Report

Attachments: [Main Break Cost Allocation.pdf](#)

[20-1557](#) Monthly Reports for October:
- Water Distribution and Meter Team Monthly Report

Attachments: [Water Main Breaks October 2020.pdf](#)

7. Adjournment

Notice is hereby given that a quorum of the Common Council may be present during this meeting, although no Council action will be taken.

Reasonable Accommodations for Persons with Disabilities will be made upon Request and if Feasible.

For questions on the agenda, contact Chris Shaw at 920-832-5945 or Paula Vandehey at 920-832-6474.



City of Appleton

100 North Appleton Street
Appleton, WI 54911-4799
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Meeting Minutes - Final Utilities Committee

Tuesday, November 10, 2020

5:00 PM

Council Chambers, 6th Floor

1. Call meeting to order

Chairperson Meltzer called the Utilities Committee meeting to order at 5:00 p.m.

2. Roll call of membership

Present: 5 - Meltzer, Fenton, Otis, Prohaska and Smith

3. Approval of minutes from previous meeting

[20-1475](#)

Approval of the November 4, 2020 Special Utilities Committee Meeting minutes.

Attachments: [November 4, 2020 SPECIAL Utilities Committee Meeting Minutes.pdf](#)

Smith moved, seconded by Fenton, that the Minutes be approved. Roll Call.

Motion carried by the following vote:

Aye: 5 - Meltzer, Fenton, Otis, Prohaska and Smith

4. Public Hearings/Appearances

5. Action Items

[20-1476](#)

Approval to Single-Source and Award 2020H Stormwater Consulting Services Contract for Edgewood Drive (CTH JJ) Drainage Study to raSmith, Inc. in an amount not to exceed \$47,500.

Attachments: [2020H Edgewood Drive CTH JJ Drainage Study Approval Memo raSmith final 11-04-2020.pdf](#)

Prohaska moved, seconded by Fenton, that the Report Action Item be recommended for approval. Roll Call. Motion carried by the following vote:

Aye: 5 - Meltzer, Fenton, Otis, Prohaska and Smith

6. Information Items

[20-1495](#)

Resolution authorizing staff to finalize land transaction terms with the City of Menasha.

Attachments: [Finance Utilities - CRB Memo - 11-2020 - Authorizing Resolution.pdf](#)
[Authorizing Resolution \(with Menasha regarding Water Plant land needs\) - 11-5-20.pdf](#)

This item was discussed.

[20-1439](#)

Update on Service Line Warranty Program

This item was reviewed.

[20-1490](#)

Overview of Appleton's Water Distribution System

Attachments: [Distribution System Schematc.pdf](#)
[Water Tower - Utilities Committee.pdf](#)

This item was reviewed.

[20-1437](#)

Monthly Reports for July, August, and September 2020:

- Wastewater Treatment Plant Synopsis and Receiving Station Revenue Report
- Water Treatment Facility Synopsis
- Water Distribution and Meter Team Monthly Report - September

Attachments: [3rd Qrt 2020 Quarterly WW Synopsis.pdf](#)
[3rd Qrt 2020 Effluent Quality Summary.pdf](#)
[Receiving Station Revenue Report.pdf](#)
[2020 Q3 Water Synopsis.pdf](#)
[Water Main Breaks September 2020.pdf](#)

The reports were reviewed.

7. Adjournment

Smith moved, seconded by Fenton, that the Utilities Committee meeting be adjourned at 5:27 p.m.. Roll Call. Motion carried by the following vote:

Aye: 5 - Meltzer, Fenton, Otis, Prohaska and Smith

Department of Public Works – Engineering Division

MEMO

TO: Utilities Committee

FROM: Paula Vandehey, Director of Public Works
Pete Neuberger, Staff Engineer
Sue Olson, Staff Engineer

DATE: December 1, 2020

RE: Award of 2021A Stormwater Consulting Services Contract for 2021 Stormwater Management Plan Reviews to Brown and Caldwell in an amount not to exceed \$37,500.

The Department of Public Works is requesting approval of the 2021A Stormwater Consulting Services Contract with Brown and Caldwell (BC) for 2021 Stormwater Management Plan reviews in an amount not to exceed \$37,500. This is half of the approved budget for this work.

The scope of work provided will vary based on submittals received for review and includes erosion control plan review for large projects over an acre. Actual costs will be charged to the City on a time and material basis.

This would be the third year of a potential 5-year approval for this work. The Request for Proposals specifically stated: *“With satisfactory performance on this contract by the selected consultant and consistent staffing, the selected consultant may be contracted for this same work in 2020-2023 (five year maximum) without an RFP process.”* BC has provided excellent service during 2020, working efficiently with City staff and developers’ engineers.

Department of Public Works – Engineering Division

MEMO

TO: Utilities Committee

FROM: Paula Vandehey, Director of Public Works
Pete Neuberger, Staff Engineer
Sue Olson, Staff Engineer

DATE: December 1, 2020

RE: Award of 2021B Stormwater Consulting Services Contract for 2021 Stormwater Management Plan Reviews to raSmith in an amount not to exceed \$37,500.

The Department of Public Works is requesting approval of the 2021B Stormwater Consulting Services Contract with raSmith for 2021 Stormwater Management Plan reviews in an amount not to exceed \$37,500. This is half of the budget amount for this work.

The scope of work provided will vary based on submittals received for review and include review of erosion control plans for large projects over an acre. Actual costs will be charged to the City on a time and material basis.

In fall 2018, DPW solicited proposals from five engineering firms and received proposals from three of the firms. Both Brown and Caldwell and raSmith scored well and slight differences in pricing resulted in the 2019 award to Brown and Caldwell. However, due to several projects carried over from 2018 into 2019, two contracts were administered, one with each firm. The 2020 plan review work was also awarded to both consultants due to the number and extent of plan reviews needed.

Due to the number of submittals that have been received over the past few years and the length of time that many of these projects take to develop, staff found two contracts to be an efficient way to provide timely service and cost effectiveness to developers. Both firms are equally qualified for this work and hourly rates are comparable, as demonstrated in the RFP process and work completed in 2020.

Department of Public Works – Engineering Division

MEMO

TO: Utilities Committee

FROM: Paula Vandehey, Director of Public Works
Sue Olson, Staff Engineer
Pete Neuberger, Staff Engineer

DATE: December 1, 2020

RE: Approval to single source and award 2021C stormwater consulting services contract for Spartan Drive Apple Creek Culvert and Stormwater Management Practices (SMP) Final Design and Construction Documents with Brown and Caldwell (BC) in an amount not to exceed \$141,767.

The Department of Public Works is requesting approval to single source and award 2021C stormwater consulting services contract for Spartan Drive Apple Creek Culvert and Stormwater Management Practices (SMP) Final Design and Construction Documents with Brown and Caldwell in an amount not to exceed \$141,767. This project is funded through accounts 17014 and 5230.

BC has previously completed the stormwater analysis, 30% preliminary engineering, and 60% plans and permit applications for the Spartan Drive area. The original work was contracted after an RFP process and BC has continued to perform exceptionally well on this project, including design and construction assistance with the culvert and retaining wall at Bear Creek near Sommers Drive and Spartan Drive (Unit AA-19) and three stormwater ponds with road construction associated with Unit H-20. Permits for the Apple Creek stream crossing from the WDNR and ACOE are valid until 2023. Therefore, it will be most efficient to continue with BC to complete the final bidding documents for this phase. OMNNI will be a subconsultant to BC for structural and geotechnical work.

This phase includes:

- Construction of utilities and grade/gravel in Spartan Drive from the east end of Unit H-20 in the Clearwater Creek development to Meade Street
- Construction of the Apple Creek crossing, including a large culvert and end walls approximately 11 feet in height
- Compliance with DNR and ACOE permits limiting time and extent of disturbance within Apple Creek and associated wetlands
- Construction of 2 wet stormwater ponds for water quality and quantity control

All work in this phase is anticipated to be included in one bid package and is currently budgeted in 2022. The City will be designing the utility and roadway work that will be included in the bid package. BC will be designing the culvert and end walls and integrating geotechnical requirements

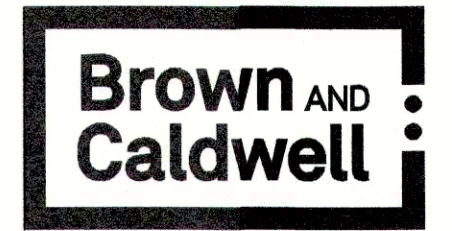
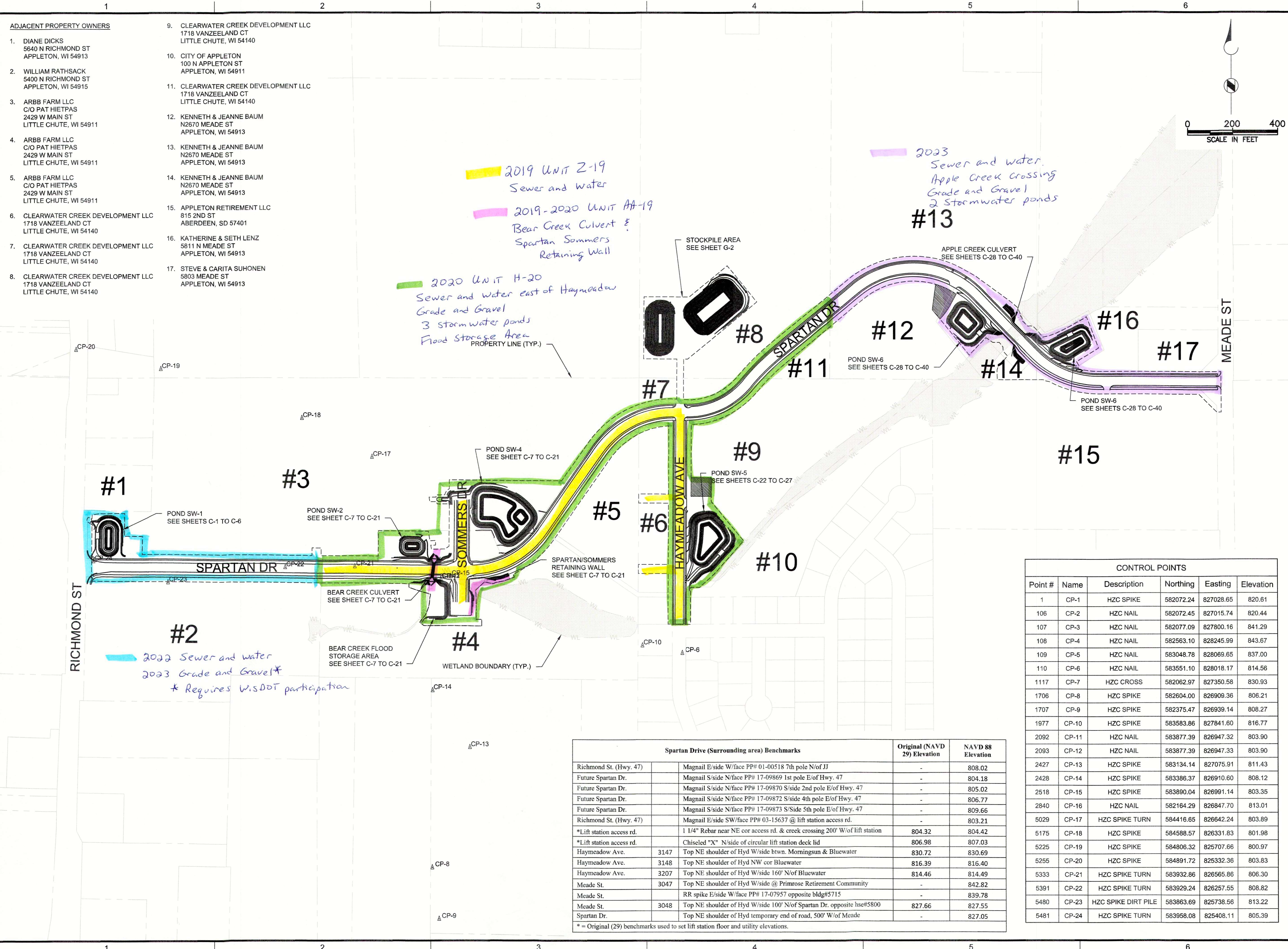
for the ponds and road, since they are adjacent to each other. The City will be designing the grade/gravel, which will be combined with the BC pond plans for construction.

Work performed by BC under this contract will include:

- Prepare agendas and attend approximately 11 meetings during the development of the bidding documents
- Review 60% plans developed for permitting with new information such as soils reports obtained in fall 2020, relocation of septic field for private home adjacent to Spartan Drive, completion of the Primrose development, and changes requested by the Clearwater Creek developer
- Update costs estimates for 2022 budget development
- Prepare final designs and specifications for 2 wet ponds and the Apple Creek culvert and end walls
- Update XPSWMM and WinSLAMM models for the final designs
- Prepare one bid package, incorporating City roadway and utility plans
- Combine earthwork calculations for the stormwater practices and the city street plans
- Provide engineer's estimate for the bid package
- Submit a new application for the WDNR Construction Site Permit, which has expired (WDNR Ch. 30 and ACOE permits remain in effect)
- Provide assistance during bidding to answer contractor questions

Staff anticipates one additional phase to complete Spartan Drive, to connect it to STH 47 (Richmond Street) in conjunction with WisDOT improvements to STH 47 for the connection. There is no schedule at this time for the work with WisDOT. Contracts will be brought forward to Utilities Committee and Council at the appropriate time.

Path: P:\APPLETON\CITY OF 150665 SPARTAN SW 60 PERCENT\CAD\2-SHEET\CIVIL\PERMIT\PLANSET FILENAME: 4-G-3_PROJECTLAYOUT.DWG PLOT DATE: 12/14/18 8:24 AM CAD USER: MIKE WEGNER



PERMIT APPLICATION DRAWINGS NOT FOR CONSTRUCTION



SPARTAN DRIVE STORMWATER TREATMENT

REVISIONS

REV	DATE	DESCRIPTION

LINE IS 2 INCHES AT FULL SIZE

DESIGNED: M WEGNER
DRAWN: M WEGNER
CHECKED: K MATTFIELD

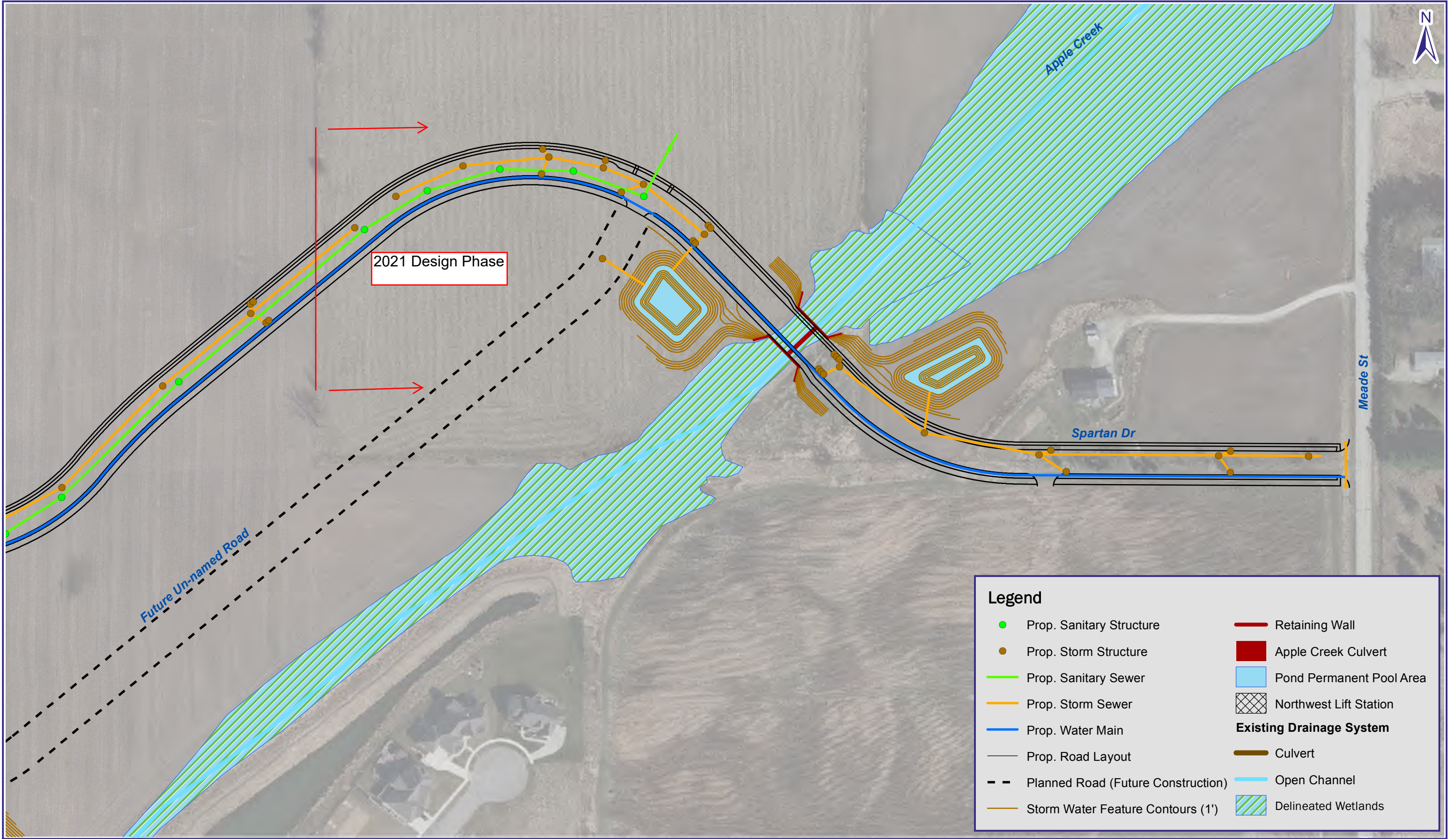
CHECKED:

APPROVED:

FILENAME: 4-G-3_PROJECTLAYOUT.DWG
BC PROJECT NUMBER: 150665
CLIENT PROJECT NUMBER: X-XX

GENERAL PROJECT LAYOUT

DRAWING NUMBER: G-3
SHEET NUMBER: 4 OF 60

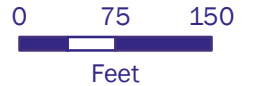


Legend

- Prop. Sanitary Structure
- Prop. Storm Structure
- Prop. Sanitary Sewer
- Prop. Storm Sewer
- Prop. Water Main
- Prop. Road Layout
- - Planned Road (Future Construction)
- Storm Water Feature Contours (1')
- Retaining Wall
- Apple Creek Culvert
- Pond Permanent Pool Area
- ▣ Northwest Lift Station
- Existing Drainage System**
- Culvert
- Open Channel
- ▨ Delineated Wetlands



Figure 1-6C
Proposed Components - East Spartan Area
Spartan Drive Permit Application
City of Appleton, WI





"...meeting community needs...enhancing quality of life."

Water Treatment Facility
2281 Manitowoc Rd.
Menasha, WI 54952
920-997-4200 tel.
920-997-3240 fax

TO: Chairperson Vered Meltzer and Members of the Utilities Committee

FROM: Utilities Director Chris Shaw

DATE: Thursday, December 03, 2020

RE: *Change Order 1, 2, and 3 to Great Lakes Mechanical in the amount of \$816 for the OCCT Apparatus Test Project resulting in the construction contract being increased to \$122,156 and a decrease in contingency from \$12,134 to \$11,318*

BACKGROUND

The OCCT Test Apparatus consists of lead service lines running in parallel with city water and with sample ports to collect water for lead content. The testing apparatus has been constructed and is currently in a conditioning phase to acclimate harvested lead service lines to the testing apparatus.

It is the intent of this project to test water produced through these lead service lines while mimicking household water use. The apparatus was constructed with four test runs. These test runs are composed of different plumbing compositions and are being fed with different treatment chemistries. The resulting sampling and analyses effort over the course of the upcoming year will yield testing data that will provide the utility with the water chemistry that is best suited for the city's distribution system.

To date, three change orders have been received and approved by the Utility. Change Order #1 was for initial materials substitutions that included fittings, valves, pumps, and instruments. These substitutions resulted in a reduction of \$1,702. Change Order #2 was for installing thrust clamps to hold the lead service lines from moving and for more robust pipe supports. These improvements stabilized the lead service lines at a cost of \$975. Change Order #3 was to prevent air and entrained air from off gassing and creating water turbulence. The resulting work included pump and chemical tank relocation and removing piping that could entrap air. The cost of this change order was \$1,543.



"...meeting community needs...enhancing quality of life."

Department of Utilities
Appleton Water Treatment Facility
2281 Manitowoc Road
Menasha, WI 54952
920-997-4200 tel.
920-832-5949 fax

TO: Chairperson Vered Meltzer and Members of the Utilities Committee

FROM: Public Works Director Paula Vandehey
DPW Deputy Director Nathan Loper
Utilities Director Chris Shaw

DATE: November 18, 2020

RE: *General Information Regarding the Main Break Report*

Background:

This memo is intended to bring information and context to main break water loss and expenses. The Department of Public Works produces a monthly report on water main breaks. The report identifies breaks by location, pipe type, size, construction year, and type of break. The report also estimates the duration of each break and the water loss in gallons. Based on the estimates for volume and duration, a revenue loss is determined and reported out. The revenue loss reported out is a fully burdened cost that is calculated from the residential water rate schedule.

Different Perspectives:

There are three different perspectives on how the value of the main break water loss could be reported out. These perspectives rely on assumptions regarding costs about the main break water. Listed below is a table that provides these different perspectives as it relates to the September data that was already presented to the Committee on November 10, 2020. These differing perspectives include a scrap rate, a residential rate, and a production rate.

September 2020 Main Break Value Table			
Value Assumption	Scrap Rate	Residential Rate	Production Rate
September Projected Value	\$0	\$20,691	\$2,796
Percent of September Revenues*	0.0%	1.29%	0.175%

*September Utility Revenues = \$1,598,000

Perspective Definitions:

- **Scrap Rate:** This perspective argues that the main break water was not metered or sold and therefore has no value. This is similar to water used in hydrant flushing and tower maintenance. In manufacturing the main break water loss would be analogous to scrap.
- **Residential Rate:** This perspective argues that the main break water should be valued as if it were metered and purchased. This is a fully burdened cost that includes all treatment, maintenance, distribution, debt service, and administration costs. This is the value currently being reported out.
- **Production Cost:** This perspective argues that each gallon of main break water has a production cost. The utility's production costs include natural gas, electrical, and chemical expenses. Other expenses that are not direct costs from the main break are not included. Examples of overhead expenses include depreciation, debt service and administrative costs. This argument states that these overhead costs would occur regardless of a main break and the accompanying water loss.

Revenue Context:

The September water sales resulted in revenues of \$1,598,000. From the table above, the water loss value from the September main breaks accounts for 0.0% to 1.29% of total revenue (depending on either the scrap, revenue, or production rate applied).

If you would like additional information, please feel free to contact any of the memo authors.

WATER MAIN BREAK/ JOINT LEAK REPORT - OCTOBER 2020

YEARLY WATER MAIN BREAK COMPARISON

<u>OCT 19</u>	<u>OCT 20</u>	<u>YTD 19</u>	<u>YTD 20</u>
9	5	70	71

LOCATION	WORK ORDER	TYPE OF PIPE	SIZE	YEAR	BREAK	ESTIMATED DURATION	ESTIMATED WATER LOSS IN GALLONS	DOLLAR VALUE OF WATER REVENUE LOSS**
Northland Ave. (West of Ballard)	276849	DIP	12"	1976	4" Hole	3 Hours	536,229	\$3,260.27
NOTES: Received report of water coing of of the road.								
Roemer Rd. (South of Capitol Dr.)	277284	DIP	12"	1980	3/16" Hole	176 Days	1,620,150	\$9,850.51
NOTES: Leak was found with the correlator. Estimated duration is based on soil saturation and the date of a previous main break in that area.								
1512 S. Memorial Dr.	277478	CIP	8"	1928	2" Hole	4 Hours	162,076	\$985.42
NOTES: Received call from APD of water bubbling out of road.								
2915 S. Gladys Ave.	277589	CIP	8"	1966	1/32" Crack	4 Hours	29,775	\$181.03
NOTES: Received report of water was bubbling on surface.								
3421 E. Crestview Dr.	277782	CIP	8"	1964	1/16" Crack	4 Hours	57,015	\$346.65
NOTES: Reported by the Sanitation Dept. picking up cans.								

**Water Loss is calculated at the residential rate of \$6.08 per 1000 gallons.