City of Joliet

Public Service Committee

Meeting Agenda

Committee Members
Councilman Larry E. Hug, Chairman
Councilman Pat Mudron
Councilwoman Sherri Reardon

Monday, November 18, 2024 **4:30 PM** **City Hall, Council Chambers**

Citizens who are unable to attend the meeting can email comments in advance of the meeting to publiccomment@joliet.gov.

ROLL CALL

APPROVAL OF MINUTES

Public Service Minutes 11/04/2024 **TMP-7894**

Attachments: 110424 Public Service Minutes.pdf

CITIZENS TO BE HEARD ON AGENDA ITEMS

This section is for anyone wanting to speak regarding agenda items and are allowed a maximum of 4 minutes. It is not a question and answer period and staff, and the Committee members do not generally respond to public comments. The City Clerk has a copy of the public speaking procedures; please note, speakers who engage in conduct injurious to the harmony of the meeting shall be called to order by the Presiding Officer and may forfeit the opportunity to speak.

CONTRACTS

Award of Contract for the Well Rock 3 Emergency Rehabilitation to Water Well Solutions LLC in the amount of $181,197.00 **ID-1900-20**

Award of Contract for the Well 28D Rehabilitation to Great Lakes Water Resources Group in the amount of $184,226.00 **ID-1901-20**

Award of Contract for the Public Utilities Department Portable Generator Purchase Project to Metropolitan Industries in the amount of $139,999.00 **ID-1902-20**

Purchase of One (1) Bucket Truck from Custom Truck One Source Inc. in the amount of $157,012.00 **ID-1903-20**

Award of Contract for the Pilcher Park (Highland Park Drive) Culvert Repair Project to Len Cox & Sons Excavating in the amount of $187,990.00 **ID-1904-20**

Professional Services Agreement for Preliminary Engineering for the 2026 Water System Rehabilitation Program to Baxter & Woodman Inc. in the amount of $866,400.00 **ID-1905-20**

Award of Contract for the 2024 Resurfacing Contract B - MFT Section No. 24-00567-00-RS to PT Ferro Construction Co. in the amount of $2,019,296.84 **ID-1906-20**

CHANGE ORDERS/PAY ESTIMATES/FINAL PAYMENTS

Amendment No. 4 to the Professional Services Agreement for the Alternative Water Source Program to Stantec Consulting Services Inc. in the amount of $117,057,335.00 **ID-1907-20**

Attachments: awsp_stantec_amend_4_20241107_v3.pdf

ORDINANCES AND RESOLUTIONS

Ordinance Amending Chapter 31 of the Code of Ordinances in Regard to Local Limits and Administrative Enforcement Remedies **ID-1908-20**

Attachments: 2024 Local Limits Ordinance.docx

Resolution Appropriating Motor Fuel Tax Funds for the 2024 Resurfacing Contract B - MFT Section No. 24-00567-00-RS in the amount of $2,019,296.84 **ID-1909-20**

Attachments: Resolution

NEW OR OLD BUSINESS, NOT FOR FINAL ACTION OR RECOMMENDATION

PUBLIC COMMENT

This section is for anyone wanting to speak regarding non-agenda items and are allowed a maximum of 4 minutes. It is not a question and answer period and staff, and the Committee members do not generally respond to public comments. The City Clerk has a copy of the public speaking procedures; please note, speakers who engage in conduct injurious to the harmony of the meeting shall be called to order by the Presiding Officer and may forfeit the opportunity to speak.

ADJOURNMENT

This meeting will be held in an accessible location. If you need a reasonable accommodation, please contact The City Clerk Office, 150 West Jefferson Street, Joliet, Illinois 60432 at (815) 724-3780.

Memo

File #: TMP-7894 **Agenda Date:**11/18/2024

City of Joliet

150 West Jefferson Street
Joliet, IL 60432

Meeting Minutes - Pending Approval

Monday, November 4, 2024

4:30 PM

City Hall, Council Chambers

Public Service Committee

Committee Members
Councilman Larry E. Hug, Chairman
Councilman Pat Mudron
Councilwoman Sherri Reardon

ROLL CALL

Present Councilman Larry E. Hug, Councilman Pat Mudron and Councilwoman Sherri Reardon

ALSO PRESENT

Greg Ruddy - Public Works Director, Allison Swisher - Public Utilities Director, Anthony Anczer - Deputy Director Engineering

APPROVAL OF MINUTES

A motion was made by Councilman Pat Mudron, seconded by Councilwoman Sherri Reardon, to approve the October 15, 2024 Public Service Minutes. The motion carried by the following vote:

Aye: Councilman Hug, Councilman Mudron and Councilwoman Reardon

Public Service Minutes 10/15/2024 **TMP-7832**

Attachments: 101524 Public Service Minutes.pdf

CITIZENS TO BE HEARD ON AGENDA ITEMS

No one present.

CONTRACTS

Approve Annual Software Payment for the Sensus Analytics, RNI SAAS Systems, and Sensus Customer Portal to Core & Main LP in the amount of $92,156.00 **ID-1886-20**

Anthony Anczer, Deputy Director Engineering, discussed the Annual Software Payment for the Sensus Analytics, RNI SAAS Systems, and Sensus Customer Portal, in the amount of $92,156.00, on behalf of Core & Main LP.

Award a Contract for the 2024 Lumec Materials Purchase Order No. 1 to Signify North America Corporation in the amount of $59,700.00 **ID-1887-20**

Greg Ruddy, Public Works Director, discussed the Award of Contract for the 2024 Lumec Materials Purchase Order No. 1, in the amount of $59,700.00, on behalf of Signify North America Corporation.

Approve Payment for “Non-specialized” Soil Disposal to Waste Management Inc. in the amount of $30,862.00 **ID-1888-20**

Allison Swisher, Public Utilities Director, discussed the Payment for "Non-specialized" Soil Disposal, in the amount of $30,862.00, on behalf of Waste Management Inc.

A motion was made by Councilwoman Sherri Reardon, seconded by Councilman Pat Mudron, to recommend ID-1886-20, 1887-20, and 1888-20 for approval by full Council. The motion carried by the following vote:

Aye: Councilman Hug, Councilman Mudron and Councilwoman Reardon

CHANGE ORDERS/PAY ESTIMATES/FINAL PAYMENTS

Change Order No. 1 for the 2023 MFT Resurfacing Contract C - Section No. 23-00561-00-RS to PT Ferro Construction Co. in the Amount of $20,150.86, and Payment No. 5 and Final in the Amount of $66,646.17 ID-1889-20

Greg Ruddy discussed Change Order No. 1 for the 2023 MFT Resurfacing Contract C - Section No. 23-00561-00-RS, in the amount of $20,150.86, and Payment No. 5 and final in the amount of $66,646.17, on behalf of PT Ferro Construction Co.

Change Order No. 1 for the Combined Sewer Overflow Long Term Control Plan Phase IV- Eastside and Westside Combined Sewer Overflow Regulators to D Construction Inc. in the amount of $168,441.10 ID-1890-20

Anthony Anczer discussed Change Order No. 1 for the Combined Sewer Overflow Long Term Control Plan Phase IV- Eastside and Westside Combined Sewer Overflow Regulators, in the amount of $168,441.10, on behalf of D Construction Inc.

Change Order No. 1 for the 2024 Sewer Cleaning and Televising Program to National Power Rodding in the amount of $28,560.00 ID-1891-20

Anthony Anczer discussed Change Order No. 1 for the 2024 Sewer Cleaning and Televising Program, in the amount of $28,560.00, on behalf of National Power Rodding.

A motion was made by Councilman Pat Mudron, seconded by Councilwoman Sherri Reardon, to recommend ID-1889-20, 1890-20, and 1891-20 for approval by full Council. The motion carried by the following vote:

Aye: Councilman Hug, Councilman Mudron and Councilwoman Reardon

LICENSES AND PERMITS

Application for a Drive Thru Permit for a Dunkin Restaurant at 600 Collins Street ID-1892-20

Attachments: 1. 600 Collins Dunkin Drive Thru Permit Application.pdf
2. 600 Collins Dunkin Drive Thru Permit Request Letter.pdf
3. 600 Collins Dunkin Drive Thru Permit Exhibit.pdf

Greg Ruddy discussed the Application for a Drive Thru Permit for a Dunkin Restaurant at 600 Collins Street.

A motion was made by Councilman Pat Mudron, seconded by Councilwoman Sherri Reardon, to forward ID-1892-20 without recommendation of full Council.

The motion carried by the following vote:

Aye: Councilman Hug, Councilman Mudron and Councilwoman Reardon

ORDINANCES AND RESOLUTIONS

Resolution Approving an Easement Agreement with the Joliet Park District for the Pilcher Park (Highland Avenue) Culvert Repair Project **ID-1894-20**

Attachments: Resolution
Final Easement Agreement with City of Joliet 2024 1011.pdf
Exh. A Easement Plat Final 07-16-24 City of Joliet Pilcher Park.pdf

Greg Ruddy discussed the Resolution Approving an Easement Agreement with the Joliet Park District for the Pilcher Park (Highland Avenue) Culvert Repair Project.

Resolution for the City of Joliet and Fairmont Community Partnership Group, Inc. Partnership Agreement for the Fairmont Sanitary Sewer and Community Improvements Project **ID-1895-20**

Attachments: Resolution
Fairmont Community Partnership Group Partnership Agreement_gal edits 10-24-24.pdf

Allison Swisher discussed the Resolution for the City of Joliet and Fairmont Community Partnership Group, Inc. Partnership Agreement for the Fairmont Sanitary Sewer and Community Improvements Project.

Resolution Authorizing Execution of an Intergovernmental Agreement between the County of Will and the City of Joliet for Funding of Improvements for the Fairmont Sewer System **ID-1896-20**

Attachments: Resolution
IGA WC-COJ Sewer Improvements 102824.pdf

Allison Swisher discussed the Resolution Authorizing Execution of an Intergovernmental Agreement between the County of Will and the City of Joliet for Funding of Improvements for the Fairmont Sewer System.

A motion was made by Councilwoman Sherri Reardon, seconded by Councilman Pat Mudron, to recommend ID-1894-20, 1895-20, and 1896-20 for approval by full Council. The motion carried by the following vote:

Aye: Councilman Hug, Councilman Mudron and Councilwoman Reardon

NEW OR OLD BUSINESS, NOT FOR FINAL ACTION OR RECOMMENDATION

Councilman Pat Mudron inquired about the Water Main Project Area by the St. Joseph

Hospital.

Report of Hydrant Repairs, Valve, Utilities Contracted Services, and Water Main Breaks **TMP-7864**

Attachments: Valve Hydrant Break Report 10-23-2024 .pdf

Allison Swisher discussed the Report of Hydrant Repairs, Valve, Utilities Contracted Services, and Water Main Breaks.

PUBLIC COMMENT

No one present.

ADJOURNMENT

A motion was made by Councilwoman Sherri Reardon, seconded by Councilman Pat Mudron, to adjourn. The motion carried by the following vote:

Aye: Councilman Hug, Councilman Mudron and Councilwoman Reardon

City of Joliet

150 West Jefferson Street
Joliet, IL 60432

Memo

File #: ID-1900-20 **Agenda Date:**11/18/2024

TO: Mayor and City Council

FROM: Beth Beatty, City Manager

SUBJECT:
Award of Contract for the Well Rock 3 Emergency Rehabilitation to Water Well Solutions LLC in the amount of $181,197.00

BACKGROUND:
Well Rock 3 was originally drilled in 1951 by J.P. Miller Artesian Well Company and was last serviced in 2020. Due to an unexpected failure, the well pumping equipment needs to be removed for inspection. A set of specifications was prepared by City staff for the rehabilitation of the well, and the Well Rock 3 Emergency Rehabilitation Project was advertised in the Labor Record on Thursday, October 10, 2024.

The Public Service Committee will review this matter.

CONCLUSION:
On Monday, October 28, 2024, at 10:15 a.m., four (4) sealed bids were opened and read in the City Hall Conference Room 1 for the Well Rock 3 Emergency Rehabilitation Project. The bid summary is as follows:

CONTRACTOR	BID AS READ
Water Well Solutions Illinois LLC, Elburn, IL	$181,197.00
Great Lakes Water Resource Group, Joliet, IL	$193,500.00
Layne Christensen Company Inc, Aurora, IL	$230,300.00
Cahoy Pump Service Inc, Sumner, IA	$250,032.00
Engineer’s Estimate	$225,500.00

The low bid by Water Well Solutions LLC is 20% below the engineer’s estimate.

Funds will be charged to the Water and Sewer Improvement Fund / Water Supply / Construction (Org 50180011, Object 557200, $181,197.00).

RECOMMENDATION:
Based on the above, it is recommended that the Mayor and City Council award the Contract for the Well Rock 3 Emergency Rehabilitation project, in the amount of $181,197.00, to Water Well Solutions LLC.

City of Joliet

150 West Jefferson Street
Joliet, IL 60432

Memo

File #: ID-1901-20 **Agenda Date:**11/18/2024

TO: Mayor and City Council

FROM: Beth Beatty, City Manager

SUBJECT:
Award of Contract for the Well 28D Rehabilitation to Great Lakes Water Resources Group in the amount of $184,226.00

BACKGROUND:
Well 28D was originally drilled in 2006 by Layne Western Company and was last serviced in 2014. Due to the age of the equipment and the reduced pumping capacity, the well equipment needs to be removed for routine maintenance. A set of specifications was prepared by City staff for the rehabilitation of the well, and the Well 28D Rehabilitation Project was advertised in the Labor Record on Thursday, October 10, 2024.

The Public Service Committee will review this matter.

CONCLUSION:
On Thursday, October 24, 2024, at 10:00 a.m., three (3) sealed bids were opened and read in the City Hall Conference Room 1 for the Well 28D Rehabilitation Project. The bid summary is as follows:

CONTRACTOR	BID AS READ
Great Lakes Water Resources Group, Joliet, IL	$184,226.00
Cahoy Pump Service, Sumner, IA	$201,414.00
Layne Christensen Company Inc, Beecher, IL	$229,210.00
Engineer's Estimate	$237,230.00

The low bid by Great Lakes Water Resources Group is 23% below the engineer's estimate.

Funds will be charged to the Water and Sewer Improvement Fund / Water Supply / Construction (Org 50180011, Object 557200, $184,226.00).

RECOMMENDATION:
Based on the above, it is recommended that the Mayor and City Council award the Contract for the Well 28D Rehabilitation, in the amount of $184,226.00, to Great Lakes Water Resources Group.

City of Joliet

150 West Jefferson Street
Joliet, IL 60432

Memo

File #: ID-1902-20 **Agenda Date:**11/18/2024

TO: Mayor and City Council

FROM: Beth Beatty, City Manager

SUBJECT:
Award of Contract for the Public Utilities Department Portable Generator Purchase Project to Metropolitan Industries in the amount of $139,999.00

BACKGROUND:
The City of Joliet Department of Public Utilities utilizes portable backup generators to provide emergency power during outages at sanitary sewer lift stations. The City currently has three portable units. One of the units is over 20 years old and has become obsolete. Purchasing a current model generator is necessary in order to be ready for emergency power outages. City staff prepared a set of specifications for the purchase of a replacement unit.

The Public Utilities Department Generator Purchase contract was advertised in the Labor Record on Thursday, October 10, 2024. The Public Service Committee will review this matter.

CONCLUSION:
On Monday, October 28, 2024, at 10:00 a.m., two (2) sealed bids were opened and read in the City Hall Conference Room 1 for the Public Utilities Department Portable Generator Purchase. The bid summary is as follows:

CONTRACTOR	BID AS READ
Metropolitan Industries	$139,999.00
Taza Construction	$190,350.00
Engineer's Estimate	$125,000.00

The low bid by Metropolitan Industries is 11% above the engineer's estimate.

Funds will be charged to the Water and Sewer Improvement Fund / Equipment / Lift Stations (Org 50180031, Object 557500, $139,999.00).

RECOMMENDATION:
Based on the above, it is recommended that the Mayor and City Council award the Public Utilities Department Portable Generator Purchase, in the amount of $139,999.00, to Metropolitan Industries.

City of Joliet

150 West Jefferson Street
Joliet, IL 60432

Memo

File #: ID-1903-20 **Agenda Date:**11/18/2024

TO: Mayor and City Council

FROM: Beth Beatty, City Manager

SUBJECT:
Purchase of One (1) Bucket Truck from Custom Truck One Source Inc. in the amount of $157,012.00

BACKGROUND:
The Roadways Division has utilized man-lift units passed down from the Electric Division to complete the tree maintenance needs of the City. One (1) of these units was taken out of service and needs replacement due to excessive wear and repair costs. A replacement vehicle has been difficult to locate due to supply chain issues. A unit has been located that meets the Roadways Division needs and is available for immediate purchase. The Public Service Committee will review this matter.

CONCLUSION:
A search was conducted for availability of a similar unit once this vehicle was identified. Several like units were located and compared:

- $157,012.00 - Custom Truck One Source Inc. - 2024 Ford F550 LT40 Flat Deck (New)
- $174,990.00 - Runnion Equipment - 2022 International Duralift (New)
- $175,000.00 - Iron-Planet - 2019 Freightliner Versalift (Used)
- $192,167.00 - Altec Equipment Sales - 2024 F750 Ford Altec (New)
- $469,979.00 - Battle Motors Electric Terex Solutions plus infrastructure - 2024 (New)

The low bid is from Custom Truck One Source Inc. in the amount of $157,012.00.

Section 2-438 of the City of Joliet Code of Ordinances states that purchases over $25,000.00 may be awarded without written specifications or bidding under certain circumstances. One (1) of these circumstances applies:

(f) Purchases when authorized by a concurring vote of two-thirds (2/3) of the Mayor and City Council

Sufficient funds are available for this purchase request in the 2024 Roadways Capital Improvement Funds (Org 30090290 Object 557500, $157,012.00).

RECOMMENDATION:
Based upon the above, it is recommended that the Mayor and City Council approve the purchase of one (1) bucket truck, in the amount of $157,012.00, from Custom Truck One Source Inc.

City of Joliet

150 West Jefferson Street
Joliet, IL 60432

Memo

File #: ID-1904-20 **Agenda Date:**11/18/2024

TO: Mayor and City Council

FROM: Beth Beatty, City Manager

SUBJECT:
Award of Contract for the Pilcher Park (Highland Park Drive) Culvert Repair Project to Len Cox & Sons Excavating in the amount of $187,990.00

BACKGROUND:
The Mayor and City Council previously approved the 2024 City of Joliet Budget, which included the Pilcher Park Culvert Repair Project. The project was advertised on Thursday, October 24, 2024. The Public Service Committee will review this matter.

CONCLUSION:
On November 7, 2024, at 10:30 A.M., five (5) sealed bids were received for the Pilcher Park Culvert Repair Project. The bid summary is as follows:

CONTRACTOR	BID AMOUNT
Len Cox & Sons Excavating	$187,990.00
PT Ferro	$196,786.59
Performance Construction & Engineering	$238,788.00
Austin Tyler Construction	$254,893.02
H. Linden & Sons	$283,842.00
Engineer's Estimate	$228,511.00

The low bid by Len Cox & Sons in the amount of $187,990.00 is 17.73% below the engineer's estimate. Sufficient funds exist utilizing the Engineering Capital Improvement Fund/ Pilcher Park Culvert Repair (Org 30090270, Object 557500, $187,990.00).

RECOMMENDATION:
Based on the above, it is recommended that the Mayor and City Council award the Pilcher Park Culvert Repair Project, in the amount of $187,990.00, to Len Cox & Sons Excavating.

Memo

File #: ID-1905-20 **Agenda Date:**11/18/2024

TO: Mayor and City Council

FROM: Beth Beatty, City Manager

SUBJECT:
Professional Services Agreement for Preliminary Engineering for the 2026 Water System Rehabilitation Program to Baxter & Woodman Inc. in the amount of $866,400.00

BACKGROUND:
On January 5, 2021, the Mayor and City Council approved Resolution 7613, committing to water conservation through the reduction of non-revenue water in order to comply with the allocation requirements of the Level of Lake Michigan Act, 615 ILCS 50, and the corresponding State regulations. A condition of the City's Lake Michigan water allocation permit is completion of the City's Non-Revenue Water Reduction Plan. A major component of this Plan is water main replacement. The water main replacement must be sufficient to achieve the reduction of non-revenue water from the City's water system to not more than 10 percent by the year 2030. For the 2026 water main replacement program, 18 miles of water main have been identified for replacement. This is 3% of the total water distribution system.

In order to have contract documents ready to bid in time for the 2026 construction season, preliminary engineering for the 2026 Water System Rehabilitation Program need to begin at this time. Projects to be included in the 2026 program are identified in the table below. The preliminary estimated construction cost for the projects is $62,500,000 and will be funded using state and federal low interest loan programs. A more detailed cost estimate will be provided as a scope item of this preliminary design contract.

Project·Name¤	Location·Description¤	Feet¤	Miles¤
Cunningham·Phase·1¤	Raynor,·Kelly,·Wilcox,·Oakland,·Clement,·and·Vine·(Moran·to·Ruby);·Highland·(Moran·to·Ross);·Nicholson·(Moran·to·Will·Co·building);·Ross·(Wilcox·to·Oakland,·Clement·to·Highland,·and·Nicholson·to·Vine)¤	10,850¤	2.1¤
Emerald·Lawns·Phase·2¤	Lemorr·(Roosevelt·to·Midland);·Dellmar·(Midland·to·Schriber);·Loral·(Midland·to·Kenilworth);·Kenilworth·(Dellmar·to·Black);·Junie·Ct;·Catherine·(Clara·to·Schriber);·Dawes·(Plainfield·to·Black);·Roosevelt·(Midland·to·Dawes);·Agnes;·Schriber·(Lemorr·to·Catherine);·Bryan·(west·end·to·Dawes);·Loral·(Midland·to·Kenilworth,·west·end·to·Dawes)¤	14,100¤	2.7¤
Forest·Park·Phase·4¤	Charlesworth·(Woodruff·to·1032·Charlesworth);·Woodward·(Charlesworth·to·dead·end);·Belle·(Ewing·to·Draper);·Fairview·(Woodruff·to·Belle);·Draper·(Woodruff·to·south·of·creek);·Woodruff·(Fairview·to·Arthur);·Ewing;·Williamson·(Magnolia·to·Draper)¤	10,350¤	2.0¤
Fourth·and·Eastern¤	York·(Washington·to·Osgood);·Eastern·(Osgood·to·5th);·Sherman·(Osgood·to·4th);·Marion·(York·to·Eastern);·Lincoln·(Eastern·to·Richards);·Mound·(Sherman·to·Richards);·3rd·(Eastern·to·Richards);·Bartleson·(Sherman·to·Richards);·4th·(Chicago·to·Richards)¤	10,600¤	2.0¤
Glenwood·and·West·Acres¤	Border·(West·Acres·to·Glenwood);·West·Acres·(Border·to·Larkin);·Glenwood·(St·Joe's·Hospital·to·Larkin).·Abandon·rear·yard·mains·between·Madison-Border,·Palladium-West·Acres,·and·West·Acres-Glenwood¤	7,000¤	1.3¤
Heggie·Park·Phase·1¤	Lloyds·(Meeker·to·Chase);·Royce·(Francis·to·Cleveland);·Francis,·Meeker,·Chase,·and·Cleveland·(Collins·to·Henderson).·Abandon·railroad·crossing·(Cleveland·to·Ward)¤	10,000¤	1.9¤
Larkin·(Theodore·to·Glenwood)¤	Lois·(Vernon·to·Black);·Larkin·(Theodore·to·Glenwood);·Vernon·(Lois·to·Larkin);·Asbury·Circle·Dr;·Glenwood·(Larkin·to·Woodlawn).·Abandon·side·yard·main·between·Lois·and·Larkin.·Glenwood·should·be·DI·pipe¤	14,500¤	2.7¤
Oneida¤	Oneida·(Prairie·to·Center);·Wilcox·(Oneida·to·midblock);·Clement·(midblock·to·Oneida);·Nicholson·(Oneida·to·Jefferson).¤	4,500¤	0.9¤
Twin·Oaks·Phase·2¤	Meadow·Wood·(south·of·Rosemont);·Westport·Dr;·Rosemont·Dr;·Pamela·Ct;·Jeffrey·Dr;·Coventry·Ct;·Randy·Rd;·Twin·Oaks·(Randy·to·Rebecca);·Twin·Oaks·Apt¤	6,700¤	1.3¤
Virginia·Phase·2¤	Garnsey·(Virginia·to·Benton,·Cass·to·Jerome);·Henderson·(Jackson·to·Washington);·Virginia·(Garnsey·to·Henderson);·Dover·(Garnsey·to·Henderson);·Cass·(west·of·creek·to·Henderson);·Delaware·Pl;·Jerome;·Norton·(dead·end·to·Henderson)¤	7,300¤	1.4¤
Total¤	¤	95,900¤	18.2¤

A qualifications-based selection is required to insure reimbursement for engineering fees from

potential loan funding. In Fall 2021 the City published a Request for Qualifications for water system rehabilitation for the 2023 - 2030 water main replacement program. Ten (10) qualifications were received, four (4) firms were interviewed, and the selection committee consisting of staff from both the public utilities and public works departments identified Baxter & Woodman Inc. as the most qualified firm to complete design engineering services for the program. Baxter & Woodman Inc. successfully completed the design for the City's 2017 - 2025 water main replacement projects. Baxter & Woodman Inc. was requested to provide a proposal for design engineering of the 2026 projects. Due to the economy of scale that this large quantity of design work includes, our negotiations with Baxter & Woodman included lowering the standard billing rates to a 3.0 multiplier for design work, which will save the City over 10% compared to standard billing rates. The Public Service Committee will review this matter.

CONCLUSION:
Baxter & Woodman Inc. has provided a proposal to complete preliminary design engineering for the 2026 Water System Rehabilitation Program. The Professional Services Agreement for the project, for an amount not to exceed $866,400.00, represents the cost of surveying, survey breakdown, preparing CAD base sheets, utility coordination, and preliminary design for 10 projects. This fee is approximately 1.4% of the construction costs which is within industry standards for a project of this magnitude. As this preliminary design phase of the project is completed, and the scope of the detailed design is determined, a proposal to complete detailed design and bidding services will be provided as an amendment to this contract.

Section 2-438 of the City of Joliet Code of Ordinance states that purchases over $25,000.00 may be awarded without written specifications under certain circumstances. Two (2) of these circumstances apply:

(f) Purchases when authorized by a concurring vote of two-thirds (2/3) of the Mayor and City Council;

(g) Purchases of professional services.

Funds will be charged to the Water Main Replacement Fund / Professional Services (Org 53880000, Object 557200, $866,400.00).

RECOMMENDATION:
Based on the above, it is recommended that the Mayor and City Council approve the Professional Services Agreement for Preliminary Engineering for the 2026 Water System Rehabilitation Program, in the amount of $866,400.00, on behalf of Baxter & Woodman Inc.

City of Joliet

150 West Jefferson Street
Joliet, IL 60432

Memo

File #: ID-1906-20 **Agenda Date:**11/18/2024

TO: Mayor and City Council

FROM: Beth Beatty, City Manager

SUBJECT:
Award of Contract for the 2024 Resurfacing Contract B - MFT Section No. 24-00567-00-RS to PT Ferro Construction Co. in the amount of $2,019,296.84

BACKGROUND:
The Mayor and City Council previously approved the 2024 City of Joliet Budget. The 2024 Resurfacing Contract B is a part of this budget. The project was advertised on Thursday, October 10, 2024. The Public Service Committee will review this matter.

CONCLUSION:
On October 29, 2024, at 10:00 A.M., four (4) sealed bids were received for the 2024 MFT Resurfacing Contract B. The bid summary is as follows:

CONTRACTOR	BID AMOUNT
P. T. Ferro Construction Co.	$2,019,296.84
Gallagher Asphalt	$2,079,998.98
Austin Tyler Construction	$2,127,244.83
D Construction	$2,362,565.15
Engineer’s Estimate	$2,187,247.00

The low bid by PT Ferro Construction Co., in the amount of $2,019,296.84, is 7.68% below the engineer’s estimate. Sufficient funds exist utilizing the Motor Fuel Tax Funds / Infrastructure (Org 20090270, Object: 557200, $2,019,296.84).

RECOMMENDATION:
Based on the above, it is recommended that the Mayor and City Council award the 2024 Resurfacing Contract B, in the amount of $2,019,296.84, on behalf of PT Ferro Construction Co.

Memo

File #: ID-1907-20 **Agenda Date:**11/18/2024

TO: Mayor and City Council

FROM: Beth Beatty, City Manager

SUBJECT:
Amendment No. 4 to the Professional Services Agreement for the Alternative Water Source Program to Stantec Consulting Services Inc. in the amount of $117,057,335.00

BACKGROUND:
On April 21, 2020, the Mayor and City Council approved a Professional Services Agreement, in the amount of $3,477,804.00, for Stantec Consulting Services, Inc. for the Alternative Water Source Program. This contract included evaluation of two Lake Michigan water sources with the understanding that subsequent amendments would be issued for preliminary design, final design and construction related services. Subsequently, Amendment No. 1 for preliminary design engineering, in the amount of $17,920,901.00, was approved January 28, 2021, Amendment No. 2, in the amount of $0.00 was approved May 17, 2022, and Amendment No. 3 for final design engineering in the amount of $61,783,972.00 was approved September 6, 2022.

Engineering for the Alternative Water Source Program is being completed by a Consultant Team with technical expertise in large water supply and delivery projects as well as strong local knowledge required to support and advise the City and the Grand Prairie Water Commission on this program. The Consultant Team is being led by Stantec Consulting Services, Inc. with Crawford, Murphy & Tilly (CMT) as a major subconsultant and additional support from subconsultants including Engineering Enterprises Inc. (EEI), Strand Associates, Cornwell Engineering Group, V3, and Images Inc. This team was selected using a qualifications-based selection process in April 2020 to provide professional services for an approximately 10-year period for preliminary and final design engineering, land acquisition support, construction related engineering services, funding / financial support, public relations, government affairs, and overall program management.

The Program Team's scope of work includes effort for the Grand Prairie Water Commission system as well as improvements within Joliet's system. Commission improvements include approximately 62 miles of water transmission main, three (3) 55.3 MGD pump stations, three water storage facilities with a total volume of 9.5 MG, 13 water delivery structures, and a regional SCADA system. The current budget for implementation of the Commission system is $1.446 billion. Joliet improvements include six (6) distribution pump stations, six (6) standpipes or elevated water tanks with a total capacity of 17 MG, approximately 3.6 miles of distribution main improvements (8-inch to 24-inch diameter), local SCADA system updates, and a new water and sewer garage and administration facility. The current budget for implementation of the Joliet improvements is $192 million.

In June 2024, the City entered into a Program Management Agreement with the Grand Prairie Water Commission. In this agreement, the City of Joliet is identified as the Program Manager and is

responsible for contracting for development of the Program which includes engineering design, program management, and construction management for the water commission improvements. Costs associated with this work will be credited back to Joliet's contribution to the water commission.

At this time, the Program Team has completed preliminary design engineering for all 28 Commission work packages and eight (8) Joliet work packages. Final design is progressing on all work packages. Bids for the first Commission work package have been received and construction is anticipated to begin in the first quarter of 2025. The Public Service Committee will review this matter.

CONCLUSION:
Stantec Consulting Services Inc. has prepared Amendment No. 4 which includes scope for both Commission and Joliet only projects. A summary of the major scope elements is provided in Table 1 on the following page.

The City's independent review firm, Burns & McDonnell, has reviewed the Amendment No. 4 proposal and indicated that their comments on the proposal have been addressed. The Amendment No. 4 proposal was reviewed by the GPWC Technical Advisory Committee (TAC) on October 23, 2024. At that meeting the TAC made a recommendation that the GPWC Board of Commissioners support approval of Amendment No. 4 by the Joliet City Council. The GPWC Board of Commissioners reviewed the Amendment No. 4 proposal at its November 7, 2024 meeting and confirmed its support for approval of the amendment by the Joliet City Council.

Section 2-438 of the City of Joliet Code of Ordinance states that purchases over $25,000.00 may be awarded without written specifications under certain circumstances. Two (2) of these circumstances apply to this instance:

(f) Purchases when authorized by a concurring vote of two-thirds (2/3) of the Mayor and City Council;

(g) Purchases of professional services.

Funds will be charged to the Alternative Water Source Program - Regional Water Commission (Org 53180000, Object 557200, $106,976,391.00) and to the Alternative Water Source Program - Joliet Only (Org 54080000, Object 557200, $10,080,944.00).

Table 1 - Stantec Amendment No. 4 Fee Breakdown

Amendment No. 4 Scope Element	Amendment No. 4 Fee (Joliet)	Amendment No. 4 Fee (Commission)	Notes
Extension of Program Management/External Coordination	$2,159,013	$18,621,336	Extension of these scope items for 2 years (Sept 2024 – August 2026)
New Design Scope	$1,013,818	$13,689,732	Scope to complete design for work packages not fully authorized in Amend. No. 3
Supplemental Design Scope (supplement to scope authorized in Amendment No. 3)	$690,021	$1,483,640	Additional scope required to address design changes, risks realized and external requirements
Supplemental SUE, Soils Management (supplement to scope authorized in Amendment No. 3)	$0	$3,587,346	Supplemental subsurface utility engineering (SUE) and soils management testing required based on preliminary design, soils and utility analysis
Supplemental Land Acquisition Support (supplement to scope authorized in Amendment No. 3)	$0	$5,871,870	Significant increase in the number of easements required due to strategic changes in transmission main alignment
Engineering Services During Construction/ Construction Management for select work packages	$5,818,092	$62,285,652	Office-based design staff and on-site construction management staff for projects anticipated to start construction before September 2026
Addition to Owner Controlled Fund	$400,000	$1,436,815	Owner controlled fund that can only be accessed with explicit approval by Director
TOTAL	**$10,080,944**	**$106,976,391**	

RECOMMENDATION:

Based on the above, the Administration recommends that the Mayor and City Council approve Amendment No. 4 to the Professional Services Agreement for the Alternative Water Source Program which will be substantially the same as that attached, in the amount of $117,057,335.00, on behalf of Stantec Consulting Services Inc.

CITY OF JOLIET, ILLINOIS
AMENDMENT TO AGREEMENT
FOR PROFESSIONAL CONSULTING SERVICES
AMENDMENT NO. 4

ALTERNATIVE WATER SOURCE PROGRAM

PROGRAM MANAGEMENT (2024 – 2026), FINAL DESIGN (2024 – 2028) AND CONSTRUCTION MANAGEMENT (2024 – 2029)

This Amendment to Agreement (Amendment No. 4) is made and entered into this 20th day of November, 2024 by and between the City of Joliet, Illinois, an Illinois Municipal Corporation, (hereinafter called the "City"), having its offices at 150 W. Jefferson, Joliet, IL 60432 and Stantec Consulting Services, Inc. (hereinafter called the "Consultant"), an entity authorized to do business in the State of Illinois, whose principal address in Illinois is: 350 N. Orleans Street, Suite 8000N, Chicago, IL 60654.

Whereas, Consultant and City did enter into a written Agreement on April 21, 2020 whereby Consultant agreed to perform engineering services; and

Whereas, Consultant and City did agree to a written Amendment (Amendment No. 1) on February 28, 2021 whereby Consultant agreed to perform additional engineering and program management services; and

Whereas, Consultant and City did agree to a written Amendment (Amendment No. 2) on May 17, 2022 whereby the City authorized modifications to the previously authorized scope and budget for engineering and program management services; and

Whereas, Consultant and City did agree to a written Amendment (Amendment No. 3) on September 6, 2022 whereby the City authorized modifications to the previously authorized scope and budget for final design engineering and program management services; and

Whereas, it is the desire of the parties to enter into this Amendment No. 4 to Agreement under which the Consultant agrees to perform additional program management services, final design services, engineering services during construction, and construction management services for the Alternative Water Source Program.

Now therefore, for and in consideration of the covenants and agreements herein set forth, it is agreed by and between the parties hereto, that the said Agreement is hereby amended in the following particulars:

1. Article 8.31 of the Agreement is modified to read as follows:

   8.3.1. Direct Labor Cost (DLC) shall be defined as the total direct wages regularly paid to all personnel authorized by the City to charge person-hours directly to the project. Compensation for the Direct Labor Cost (DLC) of any individual, including principals, engaged in the work under this Agreement shall be invoiced at that individual's authorized, regular direct wage rate, but in no case shall that rate exceed $125.00 per hour, unless otherwise specifically approved by the City in writing.

2. Attachment A is amended to include the Scope and Budget for Program Management (2024-2026), Final Design (2024-2028) and Construction Management (2024-2028) included as Attachment A4 to this Amendment.

3. Attachment B is amended to include the basis of compensation for the new scope of services authorized under this Amendment No. 4. The basis of compensation for the new scope is included as Attachment B4 to this Amendment. The Total, Not-to-Exceed amount of this contract is hereby increased to $200,240,012 as indicated below:

Original Contract Amount:	$ 3,477,804
Amendment No. 1	$ 17,920,901
Amendment No. 2	$ 0
Amendment No. 3	$ 61,783,972
Amendment No. 4	$117,057,335
Adjusted Contract Amount	$200,240,012

Except as amended by the provisions hereof and Amendment Nos. 1, 2 and 3, the Agreement between the parties hereof dated April 21, 2020 shall be and remains in full force and effect.

In witness whereof, the parties hereto have executed this Amendment to Agreement on the day and year first above written, with the expressed intent of the parties that said Amendment No. 4 to Agreement, including Attachments A4 and B4 are hereby incorporated into and made a part of said original Agreement as amended by Amendment Nos. 1, 2 and 3 and shall be effective pursuant thereto.

IN WITNESS WHEREOF, the undersigned have placed their hands and seals upon and executed this Amendment to Agreement in triplicate as though each copy hereof were an original and that there are no other oral agreements that have not been reduced to writing in this statement.

Stantec Consulting Services, Inc.
350 N. Orleans Street, Suite 8000N
Chicago, IL 60654

By: _____
Beth Knackstedt, PE, SE
Vice President

ATTEST
By: _____
T. Joe Johnson, PE
Vice President

City of Joliet
150 W. Jefferson Street
Joliet, Illinois 60432

By: _____
Terry D'Arcy
Mayor, City of Joliet

ATTEST
By: _____
Lauren O'Hara
City Clerk (Seal)

ATTACHMENT A4

CITY OF JOLIET ALTERNATIVE WATER SOURCE PROGRAM

AMENDMENT NO. 4 SCOPE OF SERVICES

PROGRAM MANAGEMENT (2024 – 2026),
FINAL DESIGN (2024 – 2028) AND CONSTRUCTION MANAGEMENT
(2024 – 2029)

11/07/2024

Attachment A4

ALTERNATIVE WATER SOURCE PROGRAM
SCOPE OF SERVICES: PROGRAM MANAGEMENT (2024 – 2026), FINAL DESIGN (2024 – 2028) AND CONSTRUCTION MANAGEMENT (2024-2029)

ALTERNATIVE WATER SOURCE PROGRAM GOALS AND OVERVIEW

The Consultant and its subconsultants (hereafter referred to as the Consultant Team) will provide the services necessary to support the Grand Prairie Water Commission (GPWC or Commission – formerly referred to as the Regional Water Commission or RWC) and Joliet as the Commission Program Manager in its implementation of the AWSP over multiple years. The goal of the Program is to design, construct, and bring into operation a new system for supplying Joliet and GPWC Members with treated Lake Michigan water supplied by the Chicago Department of Water Management (CDWM). Over the life of this Program, Consultant Team services are expected to include overall program management, preliminary design, final design engineering, permitting, funding support, construction engineering and other related tasks. Services authorized under this scope include continuation of Program Management and External Coordination services for a two-year period, engineering for the Final Design Engineering phase of the Program for select work packages, and engineering services during construction (office) and construction management services (field) for work packages anticipated to begin construction prior to September 1, 2026. Program Management, External Coordination, Design, Engineering Services During Construction, and Construction Management services beyond the scope defined in this amendment will be authorized under a future amendment planned for consideration in mid-2026.

PROGRAM SCOPE OF SERVICES – FINAL DESIGN PHASE AND PROGRAM MANAGEMENT

This Scope of Services describes Oversight/Program Management, External Coordination, Engineering Design, Engineering Services During Construction, and Construction Management tasks to be performed by the Consultant Team to advance program progress in accordance with the June 2024 *Basis of Design* that was an exhibit to the Intergovernmental Agreement for Program Management between the GPWC and the City of Joliet. Tasks are divided into two major groupings:

- Regional tasks include management, coordination, engineering, and construction management tasks for program elements associated with the GPWC water transmission system extending from the Chicago Connection Facilities to the individual points of delivery for GPWC Members. For the Regional tasks, the City of Joliet will function as the Commission's Program Manager (CPM).

- Joliet Only tasks include management, coordination, engineering, and construction management tasks for improvements within the Joliet water system that are required to transition the system from a distributed groundwater supply to a new GPWC Lake Michigan water supply that relies on a limited number of delivery points. For the Joliet Only tasks, the City of Joliet will function as the Owner for the proposed improvements.

Billings for tasks under each grouping will be tracked and submitted to Joliet on separate monthly invoices to facilitate accounting for Regional and Joliet Only services.

Services to be provided under this amendment include tasks that will vary in duration and anticipated completion date. The continuation of Program Management and External Coordination tasks described in this scope will be performed over a two-year period extending from September 1, 2024, through August 31, 2026. Durations and completion dates for design, engineering services during construction, and construction management tasks are identified in the scope description for each task. These services will result in the preparation of multiple deliverables including technical memoranda, reports, design drawings,

technical specifications, bidding documents, and construction documentation. All deliverables will be submitted in electronic format (pdf) except where specifically noted.

The City and GPWC will obtain the following services under separate contract with entities other than the Consultant Team: legal services, federal and state advocacy, analysis/development of water and sewer rate studies, financial advising for bond issuance, independent review services, and design and construction engineering for water main replacement to achieve non-revenue water reduction.

Detailed scopes of services for individual tasks to be performed under each grouping are presented below.

REGIONAL TASKS

RA000 Oversight/ Program Management – Regional

Close coordination with the GPWC and comprehensive management of tasks associated with the overall delivery of the regional elements of the AWSP will be essential to the successful progress of the Program. Regional Oversight/Program Management tasks include communication and reporting with the GPWC and the CPM, Public Outreach activities, management and maintenance of a region-wide geographic information system (GIS) for the program, and provision of a range of program management services through the Consultant Program Management Office (PMO) as defined below.

RA100 Program Management Coordination Meetings and Special Assistance

Members of the Consultant Team will attend and participate in meetings with the City of Joliet acting as the CPM as described below.

RA100.01 Routine Coordination Meetings

The Consultant Team Program Managers will participate in a weekly conference call with the CPM Program Director to discuss upcoming activities, meetings, submittals, and actions required. The Program Managers will also conduct three weekly meetings each month (as listed below) to promote coordination between members of the Program Team on regional Program issues, review current and upcoming Program activities, and identify issues requiring action with the CPM.

- Program External Coordination Meeting (Week 1) - The Consultant Team Program Managers and External Coordination Leads will meet once each month to review actions and coordination needed to drive communication and progress with external program stakeholders (Chicago, regional partners, IDNR, funding agencies, government officials and legislators, general public)

- Program Technical Coordination Meeting (Week 2) – The Consultant Team Program Managers, Design Manager, CIP Leads, and Technical Resource Leads will participate in a monthly technical coordination meeting to review actions and coordination needed to drive progress and consistency across program design efforts.

- Program Review Meeting (Week 4) - The Consultant Team Program Managers, Program Delivery Manager, Design Manager and Program Construction Manager will participate in a formal monthly review of program progress with the CPM Program Director and a representative of the Independent Review (IR) firm. A monthly Program Status Report will be presented to the CPM Program Director during each of these meetings.

The Consultant Team will document key points from the meetings in meeting notes. Budget for participation in these meetings by the Program Managers, Design Manager, Program Delivery Manager, and Program Construction Manager is included under Task RA1100.

RA100.03 Technical Assistance to the Program Director

The Consultant Team will provide a senior professional with extensive utility experience (Ted Meckes) to serve as a technical assistant to the CPM Program Director. This individual will coordinate with the Director

on a weekly basis and provide oversight of the Program through reviews of deliverables, direct coordination with the Consultant Team and GPWC Member representatives, and coordination with external permitting and right-of-way entities. Budget is included for 25 person-hours of support per week.

RA200 Public Outreach

The Consultant Team will support the CPM through the implementation of a Public Education and Outreach Strategy for the GPWC. A total budget of $250,000 is included in Amendment No. 4 for public education and outreach efforts for the GPWC through August 2026. This budget will cover the performance of routine communication activities including preparation of quarterly communications toolkits for the GPWC Members, preparation of a quarterly GPWC newsletter, and maintenance and management of the GPWC website. During the period covered by this Amendment, the website will be revised to provide information on the timing and availability of GPWC bid documents and the location and status of construction activities.

This task also includes Chicago community outreach including participation by the Consultant Team in quarterly Durkin Neighborhood Community Meetings, meeting with Chicago stakeholders and implementing a Chicago community outreach plan. It is anticipated that this would continue to be coordinated by Danielle Gallet (Waterwell). A budget of $150,000 has been included in Amendment No. 4 for Waterwell to coordinate, develop and implement the Chicago neighborhood outreach plan from September 1, 2024, to August 31, 2026.

RA300 Region-Wide GIS Management

The Consultant Team will continue to host, maintain, and support use of the web-based GIS portal (Canopy) previously created for the Program. The GIS is an element of the overall Program Management Information System deployed to support program delivery. Effort included in this task is for maintenance and management of the web-based GIS portal for use by Consultant Team members and development and support of a public-facing, map-based application for presenting information regarding the status of GPWC construction projects. The application will be hosted on the Commission's website. Information regarding the status of AWSP work packages will be updated on a regular basis by members of the Program construction management team. Provisions for receipt and tracking of external comments related to the construction work will be developed and maintained in conjunction with overall Program Management activities. Effort associated with routine use of the GIS portal by team members for each of the work packages has been included in the respective CIP tasks.

The GIS portal will be secure, and password protected, allowing specific users to view the data and others to edit the data if needed. The following information will continue to be managed within the portal: communication with owning entities, utilities, permitting, land acquisition, environmental flags and field work, photo logs, geotechnical data, and key project constraints/decisions. The Consultant Team will use/refine reporting tools developed previously to support preparation of monthly project status reports through production of tabular or graphical summaries related to:

- Transmission main alignment
- Land, easement, and/or right-of-way acquisition
- Areas of environmental significance and/or concern
- Environmental and construction permitting
- Field investigation status and progress
- Overall program design progress
- Location and status of GPWC construction activities (public-facing)

Data will continue to be stored by the Consultant Team using AWS (Amazon Web Services) cloud server storage and backups of the data will be available if needed. Hosting of the data is included in this item for the period from September 1, 2024, through August 31, 2026. There is no direct charge for these hosting services. The Program Director, Technical Assistant to the Program Director and the Consultant Team will have secure access to the portal throughout this phase of the project delivery. Population and creation of the GIS data layers are included with those elements of this project scope. Quarterly training sessions (2 hours each) will be provided to introduce and/or refresh Team member knowledge of the system-wide GIS.

Program Management Services (Tasks RP200, RA400, RA500, RP600, RA800, RA/RP900, RP1000, RA1100)

The Consultant Team will designate specific staff as members of the Program Management Office (PMO) responsible for consultant management, monitoring, and reporting tasks related to the overall delivery of the Alternative Water Source Program. Consultant Team positions considered to be within the PMO include:

- Co-Program Managers (2)
- Program Construction Manager
- Program Delivery Manager
- Governance and Risk Management Lead and supporting risk analyst
- Program Controls Manager
- Procurement and Contracts Administration Lead
- Scheduling Lead and support staff
- Cost Controls, WIFIA and SRF Compliance Lead
- Program Management Information System support staff
- Document Controls and Reporting Lead

Services to be provided by these individuals and information related to the allocation of their time across tasks are described below.

RP200 Program Management Plan

The Program Delivery Manager is responsible for directing the update and maintenance of the Program Management Plan (PgMP) developed and implemented by the Consultant Team under previously authorized scope. Under Amendment No. 4, the Consultant Team will develop/finalize sections of the PgMP including the Management Authority Matrix, the Construction Management Plan, the System Commissioning and Start-up Plan, and the Water Source Transfer Strategy. The Consultant Team will conduct an annual review of the PgMP and make updates where necessary.

RA400 Program Governance and Administration

Initial processes for governance and administration of the Program including completion and documentation of reviews by the Independent Review Team and Joliet, completion and documentation of technical and stage gate reviews, and workflows and processes associated with change management were defined and implemented under previously authorized scope and documented in the PgMP . Under Amendment No. 4, the Consultant Team will coordinate with the CPM to refine these processes to be consistent with the processes established in the Commission Formation documents and support efficient and transparent decision-making and delivery of the Program.

Key objectives of the governance and administration efforts will be to confirm that established review and approval processes are followed, maintain thorough documentation of approvals required to advance Program activities, and administer the Program change management process. Budget and hours included in this task are for the Governance and Risk Lead to perform activities as outlined below.

- Administration of the activities identified in the Program Governance Plan
- Scheduling, planning, supporting and documentation of milestone and stage gate reviews,
- Tracking and documentation of proposed changes as they progress through the established change management process, and
- Confirmation that decisions and approvals are being made in accordance with the Management Authority Matrix

RA500 Health and Safety Plan

The Consultant Team will monitor and implement the program level Health and Safety Plan prepared for its staff under Amendment No. 2 including provisions for identifying and addressing potential hazards during site visits and field investigations. Activities under this task will also include establishing requirements for maintaining the health and safety of Consultant Team personnel during the construction phase of the

Program. The Health and Safety Plan is prepared for internal use by the Consultant Team and a copy will be provided to the CPM upon request.

The Consultant team will prepare quarterly Health and Safety Status summaries to document the overall safety performance for the AWSP based on information compiled for the Consultant Team or provided by Program contractors.

RP600 Procurement and Contract Administration

Under previous Amendments, scope was authorized for development of Procurement and Contract Administration Plan boilerplate templates for procurement documents consistent with the Program Delivery Strategy.

Under Amendment No. 4, the Consultant Team will administer procurements, in coordination with Program and Commission legal counsel, for the 14 GPWC contracts identified in the Program Baseline Schedule 2.0 for bidding before August 31, 2026, and identified in Table 4 included under Task RC000. These services will include preparing solicitation documents (using the aforementioned templates), publishing advertisements, communicating with prospective respondents, organizing pre-proposal or pre-bid meetings (or individual proprietary meetings if the Commission elects to use this approach), responding to questions and preparing addenda, receiving proposals or bids, administering proposal evaluations or bid openings, preparing award recommendations and notices, preparing final contract documents, routing documents for approval, securing signatures and required support documents (e.g., insurance/bonds), and issuing Limited Notices to Proceed (LNTPs) and Notices to Proceed (NTPs).

The procurement and contract administration activities will, to the extent practicable, use workflows and processes within the PMIS to promote consistency, efficiency, tracking, and effective records management. Activities that must occur outside the PMIS (e.g., advertisements) will be documented and the records handled in accordance with the current version of the Procurement and Contracts Administration Plan. The Consultant Team will also maintain a procurement forecast with a three-month look-ahead and share the information with the Public Outreach Team for posting to the GPWC website.

Under this task, the Consultant Team will prepare for and conduct two contractor outreach events in the GPWC service area (one in 2025, one in 2026) to promote awareness of the Program among potential contractors, vendors, and suppliers. The events will also be structured to solicit input from potential contractors on issues such as procurement procedures, processes for documenting compliance with funding agency requirements, recent market conditions that could impact Program implementation, and potential adjustments to current plans for packaging and sequencing of work.

RA800 Program Quality Management

During the course of the AWSP, a wide range of deliverables will be generated for submittal to Joliet as the CPM and/or the GPWC. Under this task, the Program Quality Manager will monitor the implementation of the Program Quality Management Plan (QMP), assist in the scheduling and documentation of quality reviews, and confirm that the processes and procedures defined in the QMP are being followed.

The QMP processes will be documented in sufficient detail to demonstrate compliance with the overall quality objectives for the Program and confirm that outcomes from project reviews are appropriately implemented.

RA900/RP900 Risk and Value Management

Under Amendment No. 4 the Consultant Team, led by the Governance and Risk Management Lead, will continue to implement the Risk and Value Management Plan to drive the proactive identification, avoidance, transfer, and/or mitigation of critical risks. Output from the risk and value management efforts will be tracked by the Governance and Risk Management Lead to confirm that it is incorporated into final designs. The Governance and Risk Management Lead will work with the Design Manager, CIP Leads, Work Package and CPM staff to perform risk management activities summarized below and detailed in the Risk and Value Management Plan.

- Continue to implement the risk identification, evaluation, and management strategy established previously for the Program through activities including regular review and assessment of risks at the CIP and/or Work Package level.
- Provide a risk profile update including specific note of risk of highest concern, new risks, and/or risks for which the likelihood or occurrence or the consequence of occurrence have changed significantly for inclusion in the monthly program reporting packet.
- Track progress related to risk mitigation strategies formulated for serious risks.
- Update the cost and schedule risk analysis annually in support of program re-baselining efforts to provide the CPM and the GPWC with an improved understanding of the potential impact of various risks on Program completion date and/or cost.

Some aspects of the risk management process and its documentation will require coordination with AWSP's legal counsel.

RP1000 Program Controls

The technical complexity, geographical footprint, intergovernmental coordination requirements, multi-source funding, and expectations for controlled, efficient, and transparent execution of the AWSP warrant a programmatic approach to delivery. The basic processes and tools needed to support effective management and delivery of the Program are established and in use and Amendment No. 4 establishes budget for continued support by the program controls team.

During the period between September 1, 2024, and August 31, 2026, the Consultant Team will:

- Implement the processes and procedures described in the Program Management Plan (PgMP) to provide structure and procedural clarity for comprehensive program operations, including program governance, health and safety, procurement and contract administration, local and disadvantaged business utilization, quality and risk management, program monitoring and reporting, and document control.
- Maintain and update the Master Program Budget Baseline, review consultant and contractor requests for payment, track cash flow and actual costs, develop program forecasts, maintain documentation of compliance with funding requirements, and support overall program financial reporting. It is anticipated that the Program Budget and Schedule Baseline will be updated (re-baselined) annually in the third quarter of each year to support preparation of Program and Commission budgets. However, it is likely that an interim update may be needed in early 2025 to consider trends related to Program costs.
- Maintain and update the Master Program Schedule Baseline, review consultant and contractor schedule submittals, analyze impacts on overall program schedule, work with program leaders to evaluate mitigation measures, and support overall program reporting.
- Implement the processes defined in the Document Control Plan to confirm that program documents are properly captured and organized for reference and retrieval, including review and refinement of document control processes.
- Produce Program reports including:
    - A monthly Program Reporting Packet describing program progress summary, program costs, program cash flow, program schedule, project specific design progress, and issues or changes with the potential to impact overall Program cost or schedule,
    - A monthly Program Manager Report that presents program level information on progress relative to schedule, expenditures relative to budget, and progress toward completion of design tasks,
    - Quarterly and annual reporting on Commission activities to funding agencies (USEPA, IEPA), and
    - An annual Program Summary Report for distribution to elected officials and the public that describes overall program progress, expenditures, schedule status, highlights, and accomplishments.

- Maintain and manage the continued use of a Program Management Information System (PMIS) to support the processes and procedures required during construction.
- Provide a framework to support GPWC development of processes, procedures, and resources for short- and long-term operation as a regional water commission (as described under Task RB200).

The budget for Amendment No. 4 also includes costs for two additional years of licensing of program management software as shown in the table below. Costs shown in Table 1 are budget values based on estimates obtained from the software vendors. Amounts are shown as totals and allocated between the GPWC (RP1000) and Joliet Only (JA300) tasks.

Table *1 - Amendment No. 4 PMIS Budget*

	Q2 2025	Q2 2026	**Total**	**GPWC Costs RP1000**	**Joliet Costs JA300**
PMIS (Unlimited users)	$160,000	$160,000	**$320,000**	**$256,000**	**$64,000**
SharePoint (200 users)	$120,000	$132,000	**$252,000**	**$201,600**	**$50,400**
Primavera P6 (4 users)	$7,200	$7,920	**$15,120**	**$12,100**	**$3,020**
Acumen (1 user)	$4,000	$4,400	**$8,400**	**$6,720**	**$1,680**
Total	$291,200	$304,320	**$595,520**	**$476,420**	**$119,100**

RA1100 Program Management

Program Management leadership positions to be filled by the Consultant Team include the following:

- Co-Program Managers (2)
- Program Construction Manager
- Program Delivery Manager

The Program Managers are responsible for assisting the Program Director with oversight of all aspects of AWSP implementation including governance, performance, changes, resources, and corrective actions.

The Program Delivery Manager is responsible for project-level governance, risk management, quality management, cost and schedule management, funding administration and compliance, monitoring and reporting, and implementation and maintenance of systems and tools for the overall Program. The Program Delivery Manager will lead the coordination with the Client's Independent Review Firm (IR) on their quarterly reviews.

The Program Construction Manager is responsible for developing and implementing construction phase processes, managing construction management staff, and overseeing the construction program to verify objectives for safety, quality, cost, schedule and commissioning are met. The Program Construction Manager is responsible for interfacing with Program staff, vendors and construction contractors, supporting day-to-day administration of construction contracts, coordinating with the Program Leadership Team to resolve issues and prioritize decisions and leading the resolution of construction claims.

The budget under this task includes near full-time or full-time involvement of the Consultant Team staff assigned to the leadership positions for the period of September 1, 2024, through August 31, 2026 as summarized below even though these individuals may be involved in the oversight, management, or delivery of other Program tasks:

- Program Manager, 36 hours per week
    - other 4 hours per week allocated to Task JA300

- Program Manager/Client Liaison, 30 hours per week
  - other 10 hours per week allocated to tasks RB100, RB200
- Program Delivery Manager, 36 hours per week
  - other 4 hours per week allocated to Task JA300
- Program Construction Manager, 36 hours per week
  - other 4 hours per week allocated to Task JA300

RA1200 Program Administration

The scope of this task includes overall management, coordination, and administration of this Contract. Administration of the contract involves Consultant Team project management, project controls, and financial support staff. Specific functions to be provided by this team include preparation of monthly invoices and progress reporting, reviewing and confirming project charges, overall management and coordination of the External Coordination, Design, and Program Delivery teams to confirm that tasks are being completed in accordance with this scope; that resources are available and aware of upcoming tasks to be completed; issuing, monitoring, and managing subcontracts, subcontractor submittals, and subcontractor billings; meeting with CIP and work package leads to capture earned value and estimate to complete data for individual work packages; monitoring and acting upon internal data related to progress toward schedule milestones, expenditures, earned value performance, staff utilization relative to the established workplan, and risk data; informal coordination and meetings with the CPM, other Consultant Team members, and/or external parties; and production and submittal of monthly Consultant Team invoices.

Credit for Remaining Amendment 3 Budget

At the completion of two-year duration of the Amendment No. 3 Oversight/Program Management services, approximately $550,000 of budget remained. That budget will be carried forward and is applied as a credit against the projected cost for Amendment No. 4 Oversight/Program Management services.

RB000 External Coordination - Regional

Advancement of the Alternative Water Source Program will continue to require extensive coordination with entities beyond the GPWC and CPM. Program-level external coordination activities are defined in this portion of the Amendment No. 4 Scope of Services.

RB100 Chicago Department of Water Management (CDWM) Coordination

The final water supply agreement negotiated between the cities of Joliet and Chicago in 2023 (JCWSA) established the terms and conditions that govern the supply of water to the GPWC by Chicago. Under Amendment No. 4 scope, the Consultant Team will work with the CPM and the GPWC to continue coordination with the City of Chicago as required to support assignment of the JCWSA to the GPWC, implement the JCWSA and support Program delivery. Specific efforts are anticipated to include:

- Support for assignment of JCWSA from Joliet to GPWC (RB100.01)
- Monthly coordination with Chicago regarding Program progress and elements of WSA (RB100.01)
- Comprehensive audit of Chicago Cost of Service Study (for 2024) (RB100.02)

Note that review of the annual Cost of Service Study for 2025 has not been included in this scope for Amendment 4 because the information is not required to be provided by Chicago until October 1, 2026. This effort will be included in a future Amendment.

RB100.01 Chicago-Joliet WSA Implementation

The Program Manager/Client Liaison will participate in regularly scheduled monthly meetings with the CPM and the City of Chicago to review, discuss, and address issues related to implementation of the JCWSA. The Program Manager/Client Liaison and support staff will participate in regularly scheduled biweekly meetings with the CIP1 Program Team and the City of Chicago to provide support on issues related to implementation of the JCWSA. The Consultant Team will communicate relevant issues to the Program Team as appropriate. Budget included in this task includes time for the Program Manager/Client Liaison and support staff responsible for assisting with documentation of meetings and communications. Effort for

Design Team coordination with Chicago on technical or construction issues is included under Tasks RC010, RC100, and the construction management tasks for the Chicago work packages.

RB100.02 Comprehensive Audit of Chicago's Cost of Service Study

In accordance with Section 17.5D of the JCWSA, the Consultant Team will perform a comprehensive audit of Chicago's Annual Cost-of-Service Study performed using Audited Financials for Chicago's Fiscal Year 2024. This will be a detailed review performed within one hundred fifty (150) days after receipt of all required information from Chicago. Draft results of the review will be submitted to and discussed in a review meeting with the CPM. Following the meeting, the Consultant Team will issue a final version of the review memo to be presented to the City of Chicago. The Consultant Team will participate in up to three meetings (2 virtual, 1 in person) with the CPM and Chicago to resolve any issues identified in the review memo.

Budget included in this task includes time for the financial specialists responsible for the audit of Chicago's cost of service studies and for support from the Program Manager/Client Liaison.

RB200 Regional Water Commission Development

The Consultant Team will continue to plan for and facilitate discussions with the GPWC Technical Advisory Committee (TAC) and the GPWC Board of Commissioners (BOC), from September 1, 2024, through August 31, 2026.

This amendment includes continued coordination by the Program Manager/Client Liaison with the members of the GPWC as required to provide regular updates on the progress of the Program and to assist in start-up and functioning of the Commission. Specific activities to be completed will include:

- Weekly regional coordination conference calls with the CPM and Consultant Team for planning of meetings and review of presentation materials
- Planning, preparation of presentation materials, and participation in monthly meetings of the TAC and the Board of Commissioners
- Support of efforts by the CPM and outside legal staff to implement GPWC formation documents including the Intergovernmental Agreement (IGA) which formally created the GPWC, the GPWC water supply agreement with the individual GPWC members, GPWC governing documents (bylaws, rules and policies, etc.), and the Program Management Agreement between the GPWC and CPM
- Coordination with the CPM, financial services professionals, and members of the Program Team to develop and present a Program Budget and a Commission Budget to the TAC and BOC as required by the GPWC water supply agreement. The Program Budget will be updated annually and prepared for presentation to the TAC each September. The Commission Budget will be updated annually and prepared for presentation to the BOC in October and for BOC approval in December.
- Coordination with the GPWC and its legal, financial services, and insurance consultants to support the development of select GPWC policies. The Consultant Team's efforts in these areas will be to provide planning input on technical activities related to development, implementation, and maintenance of a GPWC Geographic Information System (GIS) and a GPWC Asset Management system, and to support policy development being led by others. Implementation of specific IT, accounting, personnel, GIS, or asset management software solutions for the GPWC is not part of this scope.

Budget allocated to this task is for participation in these activities by the Program Manager/Client Liaison, the Funding Strategy Lead, and support staff. Budget for participation in select TAC and BOC meetings by other members of the Consultant Team is included in tasks related to the specific activities for which those individuals are responsible.

Administrative services (preparation/distribution of agendas, meeting logistics and set-up, preparation/distribution of meeting notes, etc.) for these TAC and BOC meetings are being provided by others under separate contracts and are not part of this scope.

RB300 Regulatory, Environmental, Permitting Management

During the period from September 1, 2024, through August 31, 2026, the Consultant Team will continue to implement the Regulatory, Environmental, and Permitting Governance Framework developed previously. Efforts will include coordination, monitoring, and oversight of actions needed to comply with regulatory, environmental, and permitting requirements for the Program. Specific activities to be completed under this task include:

- maintenance of data related to the status of environmental and construction permits and preparation of monthly updates on the status of regulatory, environmental, and permitting activities associated with the final design phase of program delivery (to be included in the Program Status Report submitted to the CPM for the monthly Program Review meeting),
- coordination, oversight, and monitoring of environmental field investigations performed in support of final design and permitting activities for regional AWSP infrastructure projects,
- coordination with permitting agencies to support review of the AWSP by the US Army Corps of Engineers (USACE) and other related agencies (e.g., State Historic Preservation Office, IDNR, IEPA, US Fish and Wildlife) in conjunction with final review and negotiation of the WIFIA loan for construction of the regional program elements, and
- Identification of the need for and coordination of strategic high-level outreach by the CPM to permitting and/or regulatory agencies with the potential to significantly impact the progress of the overall Program.

Scope and budget for regulatory, environmental, or permitting activities identified as being necessary for individual work packages (including environmental documentation required by IEPA or USEPA for funding) are included under tasks designated for the respective work packages or related allowances.

A budget of $85,000 total ($42,500 per year) is also included under this task for payment of fees to the USACE for 20% of a full-time equivalent staff person to support and facilitate permit reviews by the agency over a two-year period.

RB400 Land Acquisition Management

Previously authorized amendments to Stantec's agreement included scope and budget for land acquisition management efforts, land acquisition activities related to procurement of sites for GPWC facilities, and allowance funds to be used for land acquisition activities related to procurement of temporary and permanent easements along the proposed transmission main alignments. The status of previously authorized scope and proposed additional services related to each of these activities to be provided by the Consultant Team under Amendment No. 4 are described below.

Land Acquisition Management

Under Amendment No. 4 the Consultant Team will continue to manage and coordinate Program-related land acquisition activities through ongoing coordination with Design Team members, Program legal staff, and the CPM Program Director. The Consultant Team will participate in biweekly meetings with the CPM Program Director to review the status of active land acquisition efforts. Land acquisition efforts for both the GPWC and Joliet will be reviewed in a single meeting with costs split between tasks RB400 and JB400. The Team will maintain a listing of parcels for which GPWC land acquisition efforts are in progress that includes documentation of the status of activities including title requests, survey plat and legal description preparation, appraisals, Phase I Environmental Site Assessments (ESA), and purchase negotiations.

Land Acquisition Activities for GPWC Sites

Scope and budget for land acquisition services for a total of 7 regional sites were authorized under prior amendments. These sites were associated with the following CIPs: CIP #1 (SWPS site and 2 parcels at Durkin Park), Intermediate Pump Station CIP #3, Intermediate Standpipe CIP #4, and 2 future pump station facilities along the transmission main. As of August 2024, 5 of the 7 sites had been successfully acquired. Several potential locations for the 2 future pump stations have been investigated, but acquisition of sites has not yet begun. Amendment No. 4 scope and budget for land acquisition activities related to acquisition

of GPWC sites includes supplemental budget required to cover the costs of additional services already completed and new budget to complete the acquisition of sites for the future pump stations.

- Supplemental budget is required to cover the costs for the unanticipated evaluation of multiple sites for CIP #3, CIP #4 and the future pump station in Crest Hill. The evaluation of multiple sites was required due to challenges identifying suitable, available parcels for purchase, During the process of site selection, the Consultant Team researched and evaluated sites in Palos Park, Lemont, and nearby areas that were not selected for final acquisition.

- New budget is required under Amendment No. 4 to support Consultant Team efforts related to completion of land acquisition efforts for the 2 future pump station sites through provision of research, title work, appraisal, Phase I ESA, and negotiation activities.

Procurement of Temporary and Permanent Easements for Transmission Main

Given the level of design available at the start of Amendment No. 3, a budget of $2,000,000 was designated as an allowance for land acquisition services related to the procurement of temporary and permanent easements for CIP #2 and CIP #6 transmission main improvements. No budget from this allowance was allocated under Amendment No. 3. Table 2 shows the proposed allocation of this allowance amount for easement acquisition for individual work packages under this Amendment No. 4. This allocation results in the full use of the $2,000,000 allowance.

Estimates of the total number of easements required for each work package are described under the Engineering section of this scope. Where additional budget beyond that allocated as shown in Table 2 is needed for acquisition of the easements needed for individual work packages, that additional budget is defined in the Engineering scope for those work packages.

Table 2 - Allocation of RAL3/RB400 Easement Acquisition Allowance to Commission Work Package Budgets

	Amendment 3 CIP #2 and #6 Easement Allowance	Amendment 3 Approved Allowance Authorizations	Proposed Amendment 4 Allowance Authorization	Authorized Land Acquisition Budget as of Amendment 4
Remaining CIP #2 and #6 Easment Allowance	$ 2,000,000	$ 2,000,000	$ -	$ -
AWSP-02-01		$ -	$ 111,523	$ 111,523
AWSP-02-02		$ -	$ 242,924	$ 242,924
AWSP-02-03		$ -	$ 323,845	$ 323,845
AWSP-02-04		$ -	$ 304,909	$ 304,909
AWSP-02-05		$ -	$ 76,227	$ 76,227
AWSP-02-06		$ -	$ 76,227	$ 76,227
AWSP-06-01		$ -	$ 15,245	$ 15,245
AWSP-06-02		$ -	$ 25,136	$ 25,136
AWSP-06-03		$ -	$ 30,491	$ 30,491
AWSP-06-04		$ -	$ 232,238	$ 232,238
AWSP-06-05		$ -	$ 561,234	$ 561,234
Total		$ -	$ 2,000,000	$ 2,000,000

A separate allowance of $800,000 was designated to fund as needed title work. As design progressed, a portion of the title research allowance funds were allocated to individual work packages. Table 3 shows the current status of approved title research allowance authorizations for CIP #2 and #6. The balance of the original allocation ($756,800) is retained for allocation as needed to complete title research under Amendment No. 4.

Table 3 - Allocation of RAL3/RB400 Title Research Allowance to Commission Work Package Budgets

	Amendment 3 CIP #2 and #6 Easement Allowance	Amendment 3 Approved Allowance Authorizations	Proposed Amendment 4 Allowance Authorization	Authorized Land Acquisition Budget as of Amendment 4
Remaining CIP #2 and #6 Title Research Allowance	$ 800,000	$ 756,800	$ 756,800	$ 756,800
AWSP-02-01		$ -	$ -	$ -
AWSP-02-02		$ -	$ -	$ -
AWSP-02-03		$ -	$ -	$ -
AWSP-02-04		$ -	$ -	$ -
AWSP-02-05		$ -	$ -	$ -
AWSP-02-06		$ -	$ -	$ -
AWSP-06-01		$ 6,600	$ -	$ 6,600
AWSP-06-02		$ 4,200	$ -	$ 4,200
AWSP-06-03		$ 3,600	$ -	$ 3,600
AWSP-06-04		$ 11,400	$ -	$ 11,400
AWSP-06-05		$ 17,400	$ -	$ 17,400
Total		$ 43,200	$ -	$ 43,200

RB500 Field Investigation Coordination and Management

Under this task the Consultant Team will continue to implement the field investigation framework documents established during the preliminary engineering phase of the Program for additional field, utility, or environmental investigations to be performed between September 1, 2024, and August 31, 2026. As scope and budget for most of the anticipated investigations were included in previous amendments, it is anticipated that the activities to be overseen under this task will be primarily associated with geotechnical and utility investigations for the CIP#6 Regional Transmission Main work packages (not included in previous amendments) and supplemental field, utility, or environmental investigations determined to be necessary to complete design for the other work packages included in Amendment No. 4.

RB600 Sustainability Strategy Management

The Consultant Team will continue to monitor and report on sustainable elements being incorporated into the designs for the GPWC work package improvements reviewed previously. A workshop will be conducted with the CIP #6 Team at the start of the 60% design effort to review the sustainable elements identified for incorporation into the design for the CIP #6 work packages. Reviews of sustainability measures for other CIPs were authorized previously under Amendment No. 3.

The Sustainability Lead will provide updates regarding the status of sustainability efforts across the Program for incorporation into the monthly Program review packages and prepare slides highlighting specific Program accomplishments related to Sustainability for use in end-of-the-year updates to the TAC (once in December 2024, once in December 2025).

RB700 Funding Agency Coordination - Regional

The Consultant Team will continue to coordinate activities related to implementation, monitoring, and updating of a plan for funding and financing of the regional elements of the AWSP. These efforts will focus on continued coordination with GPWC representatives, external financial advisors, and the Program Team; monitoring and refinement of the funding strategy for the commission improvements; support of ongoing WIFIA loan procurement and coordination efforts for the commission; and support of ongoing SRF loan procurement and coordination efforts for the commission.

RB700.01 Water Commission Financial Coordination

The Consultant Team will coordinate with and report to representatives of the GPWC on items related to funding and financing of the AWSP. Financial coordination activities will include:

- Scheduling, leading, and documenting monthly meetings with members of the financial team selected to advise the GPWC on plans for funding/financing of the AWSP.
- Participating in monthly Program External Coordination Meetings
- Coordinating with the Program Reporting team responsible for WIFIA and SRF reporting to confirm that reporting requirements are being met
- Assisting with the identification, pursuit, and administration of grant funding opportunities

It is anticipated that the activities described in the bullets above will be performed concurrently for both the GPWC and the City of Joliet as a member of the GPWC. Budget for these activities is allocated to this task (RB700.01) and task JB700.01 accordingly. Other GPWC-specific financial coordination activities to be completed by the Consultant Team include:

- Providing a summary of funding/financing activities, milestones, and decisions required for incorporation into the monthly Program Status Report to the CPM

RB700.02 Funding Strategy Update

Beginning in Q3 2024, the Consultant Team will submit and present to the TAC and the GPWC Board a semi-annual (September, March) funding strategy update that documents progress against the established AWSP Funding Strategy and identifies recommended modifications to the strategy as well as their impacts on overall AWSP costs. The September updates will include the preparation of a funding strategy update memo and presentation coordinated with the annual presentation of the Program Budget and distribution of updated projections of members' adjusted shares, members' adjusted percentage shares, and members' payment shares. Based on the fall funding strategy update, the Program Team will prepare and submit to the USEPA WIFIA Program Administrators an updated Financial Model and Financial Plan.

The March updates will include a PowerPoint presentation of observations related to budgeted, actual, and forecasted expenditures, market conditions, historic and anticipated escalation factors, and current and projected interest rate trends as a prelude to the annual budget re-baselining process scheduled for the third quarter of each year. The March updates will not include presentation of revised budget or member obligations data.

Concurrently with the funding strategy updates, the Program Team will coordinate with the CPM on the designation of funding sources for individual work packages. The Team will establish and maintain a guide for staff responsible for processing work package invoices to confirm that reimbursement requests are properly assigned to the correct GPWC funding source.

RB700.03 WIFIA Funding Support

The GPWC anticipates closing on a USEPA WIFIA loan to support AWSP construction activities in early 2025. The Consultant Team will provide support for ongoing coordination with USEPA related to WIFIA items, financial discussions related to closing of the WIFIA loan and required quarterly and annual reporting for the loan. Efforts will include:

- **USEPA/WIFIA Coordination.** The Consultant Team will lead the GPWC's ongoing coordination efforts with USEPA related to WIFIA funding. The Team will prepare for and participate in bi-weekly calls with USEPA during negotiation of the WIFIA construction loan (Sept 2024 through February 2025) and monthly calls thereafter to confirm expectations regarding Commission use of WIFIA funds. Specific topics expected to be addressed with USEPA include loan application and drawdown timing and overall Program progress. A total of 30 calls are anticipated between September 2024 and August 2026.
- **Management of Quarterly and Annual Reporting on the Joliet WIFIA Loan for AWSP Development.** The Consultant Team will manage and coordinate the preparation of quarterly construction monitoring reports, submittal of documentation for eligible project costs as the basis for loan disbursements, and annual reports required under the City of Joliet's AWSP Development loan agreement with USEPA. Materials will be prepared and submitted to the CPM for final approval/signature, and then submitted to USEPA.
- **Management of Quarterly and Annual Reporting on the GPWC WIFIA Loan.** The Consultant Team will manage and coordinate the preparation of quarterly construction monitoring reports, submittal of documentation for eligible project costs as the basis for loan disbursements, and annual reports required under the GPWC's loan agreement with USEPA. Materials will be prepared and submitted to the CPM for final approval/signature, and then submitted to USEPA.

RB700.04 State Revolving Fund Coordination

The Consultant Team will continue to coordinate discussions with the Illinois Environmental Protection Agency (IEPA) regarding the use of State Revolving Fund loan moneys over a multi-year period during Program implementation. Specific efforts during the design phase of the Program covered by Amendment No. 4 will include:

- Preparation and submittal of funding nomination forms for projects included in the GPWC Project Plans submitted to USEPA,
- Preparation and submittal of a second project plan to position additional GPWC projects for potential SRF loan funding,
- Participation in periodic (up to 4) conference calls with IEPA to provide updates on GPWC's plans, review provisions for coordination of SRF funding with WIFIA funding and confirm IEPA's expectations related to the timing and content of funding nomination and project plan submittals,

Scope and budget for support to the CPM for preparation and submittal of 7 work package-specific SRF loan applications and supporting materials were previously authorized under Amendment 3.

RB800 Governmental Outreach/Coordination

The Consultant Team will continue to coordinate between the CPM, the GPWC and the retained Advocacy Services Firms on local, state and federal issues related to implementation of Program elements for the Commission. These efforts will be coordinated with, but tracked separately from, government outreach efforts for the City of Joliet's water system improvements as described in Task JB800. Specific tasks to be performed will include:

- **Coordination with Advocacy Services Firm** – The Government Outreach Lead from the Consultant Team will meet with the Federal and State Advocacy Services Firms each month to evaluate progress and identify actions required. The Government Outreach Lead will participate in the Program External Coordination calls to provide relevant updates to the CPM Program Director and other members of the Consultant Team. The Government Outreach Lead will prepare draft materials for review and provide feedback on written materials and talking points developed by others, in conjunction with the Advocacy Services Firms. Such materials will be used in outreach to elected and regulatory officials for accuracy and to ensure they align with the GPWC's goals and message.
- **Monthly Updates to the GPWC Board –** The Governmental Outreach Lead will provide monthly updates on advocacy activities to the CPM Program Director and Project Managers for incorporation into the monthly Program Manager report.

- **Outreach** - Where appropriate, the Government Outreach Lead will supplement the outreach efforts of the Advocacy Services Firms through calls and/or meetings with key decision-makers.
- **Government Outreach Strategy Update** – Annually (in the fall of each year concurrent with presentation of a draft budget to the GPWC) the Government Outreach Lead will meet with the CPM and the retained Advocacy Services Firms to discuss the Commission's priorities and strategy for government outreach during the next 12-month period. Based on this meeting, the Government Outreach Lead will prepare/update and submit to the CPM a bullet point Government Outreach Strategy summary that lists key Federal and State advocacy objectives for the next 12-month period.

Credit for Remaining Amendment 3 Budget
At the completion of the two-year duration of the Amendment No. 3 External Coordination services, approximately $373,683 of budget remained. That budget will be carried forward and is applied as a credit against the projected cost for Amendment No. 4 External Coordination services.

RC000 Engineering – Regional

Amendment No. 3 included scope and budget for two years of Program Design Management as well as engineering services through final design and bidding for 15 of the 28 regional work packages that make up the AWSP. Amendment No. 3 engineering services for other work packages were scoped to no more than 30% design.

Under Amendment No. 4, the Consultant Team will provide:

- two additional years of Program Design Management services (September 2024 through August 2026),
- engineering services through final design and bidding for 12 AWSP work packages,
- supplemental engineering and land acquisition services determined to be necessary to complete final design and bidding for the initial set of Amendment No. 3 work packages,
- office engineering services during construction for 13 work packages expected to begin construction before the end of August 2026, and
- field construction management services for 13 work packages expected to begin construction before the end of August 2026.

Services related to final design, bidding, and office engineering during construction are defined in this section of the Amendment No. 4 scope of services. The scope for field construction management services to be performed under Amendment No. 4 is described separately under Section RD000.

It is assumed that all work packages will be delivered using a Design/Bid/Build contracting approach. Preparation of final design and bidding documents will be in accordance with the configuration, features, and key design criteria of the proposed system as outlined in the June 2024 Basis of Design report.

Table 4 summarizes the categories of services included in Amendment No. 4 for the regional work packages.

Table 4 - ALTERNATIVE WATER SOURCE PROGRAM – AMENDMENT NO. 4 SCOPE FOR REGIONAL WORK PACKAGES

CIP	Work Package ID	Work Package Description	**Supplemental Services:** Additional Design and Bidding Services for work packages previously authorized through Final Design and Bidding	**New Scope: Final Design Activities through Bidding**	**New Scope: Engineering Services During Construction and Construction Management Services**
CIP #1 Chicago Connection Facilities	AWSP-01-01	Tunnel Extension	X		X
	AWSP-01-02	Suction Well (4 MG)	X		X
	AWSP-01-03	Low Service Pump Station and High Service Pump Station	X		
CIP #2 Finished Water Transmission Main	AWSP-02-01	Water Transmission Main – A	X		X
	AWSP-02-02	Water Transmission Main – B	X		X
	AWSP-02-03	Water Transmission Main – C	X		
	AWSP-02-04	Water Transmission Main – D	X		
	AWSP-02-05	Water Transmission Main – E	X		X
	AWSP-02-06	Water Transmission Main – F	X		X
CIP #3 Intermediate Pump Station 1 and Storage Facility 1	AWSP-03-01	Intermediate Pump Station 1 and Storage Facility 1	X		X
CIP #4 Intermediate Storage Facility 2	AWSP-04-01	Intermediate Storage Facility 2			
CIP #5 System-wide SCADA and Communications	AWSP-05-01	Fiber and Network Installation			
	AWSP-05-02	SCADA Programming/Integration		X	
	AWSP-05-03	Video Surveillance		X	
	AWSP-05-04	Security System		X	
CIP # 6 Regional Transmission System	AWSP-06-01	Regional Water Transmission System-A		X	X
	AWSP-06-02	Regional Water Transmission System-B		X	
	AWSP-06-03	Regional Water Transmission System-C		X	X
	AWSP-06-04	Regional Water Transmission System-D		X	
	AWSP-06-05	Regional Water Transmission System-E		X	
	AWSP-06-06	Metering Delivery Structures 1		X	X
	AWSP-06-07	Metering Delivery Structures 2		X	X
	AWSP-06-08	Metering Delivery Structures 3	X		
	AWSP-06-09	Metering Delivery Structures 4		X	
CIP #7 Mega Crossings	AWSP-07-01	Water Transmission Main: Cal-Sag Crossing	X		X
	AWSP-07-02	Water Transmission Main: Des Plaines Crossing	X		X
CIP #10 Commission Office	AWSP-10-01	Potential Office for Commission Administration/Operations	Scope for Controls and Operations Center moved to AWSP-03-01		
CIP #11 Start-up and Commissioning	AWSP-11-01	System-wide Start-up and Commissioning		X	X (ESDC Only)

A standardized approach will be used as the basis for completion of final design engineering, bidding support, and office engineering services during construction for all regional work packages to facilitate consistency and coordination. The Consultant Team will deliver final design documents for each work package (in digital format) and provide bidding services for each work package through award of construction contract. The standardized approach to these phases of engineering services is described below. Descriptions of work package specific scope elements follow the presentation of the standardized approaches.

Approach to Final Design Engineering and Bidding – The standardized approach to final design engineering and bidding services defined in Amendment No. 3 will continue to be used for scope being performed under Amendment No. 4. Elements of the standardized approach include the following:

- **Work Package Management and Meetings** – For work packages being advanced through final design and bidding under Amendment No. 4, the CIP Lead for each infrastructure project will manage all activities related to the completion of the final design deliverables included under that CIP. Management activities will include confirmation of project design workplan responsibilities, scope, schedule, and budget with staff assigned to the infrastructure project, coordination of design task activities through regular meetings/calls, monitoring of design task progress and expenditures, and coordination with the Design Manager and other CIP Leads during monthly Technical Coordination Meetings/Calls. In addition to the monthly Technical Coordination meetings with the other CIP Leads, each CIP Lead will have Design Progress calls with the Design Manager on a bi-weekly basis.

  Work package design teams will attend two (2) review meetings with the CPM and the Independent Reviewer after each of the design submittals. It is assumed that the review process will be completed as outlined in the March 2023 version of the Program Quality Management Plan. The review process is assumed to take no longer than one month from delivery of the submittal to the CPM.

- **Design Standards Development** – Design standards to be used across the regional work packages being advanced through final design and bidding under Amendment No. 4, including equipment/component manufacturers, drawing standard details, and standard specifications, will be developed by the responsible CIP #5, #6, and #11 leads as outlined in the March 2023 Program Design Guide. The various standards will be developed as an early activity during the 60% design phase.

- **Field Investigations** – Field survey and geotechnical investigations required to support final design engineering were authorized under Amendment No. 3 for all regional work packages except for AWSP-10-01 – Commission Office. Subsurface Utility Engineering (SUE) and Soil Management field investigations were authorized under Amendment No. 3 for the CIP #2 work packages. Field investigations included in Amendment No. 4 scope are those required to support final design for CIP #6 as well as supplemental investigations determined to be necessary to complete design for other work packages.

  Field Survey

  Field survey services included in Amendment No. 4 will be performed in accordance with the scope description in Section RC000 of Amendment No. 3. Specific field survey activities included in Amendment No. 4 are described in the relevant work package scope descriptions.

  Office personnel will produce the surveys using Autodesk Civil 3D 2023. Survey results will be documented as:

- Autodesk C3D topographic surface TIN maps
- Field notes and photographs
- Property plats of survey (only for properties specified herein). All plats of survey will be stamped by a Professional Land Surveyor licensed in Illinois.

Geotechnical Investigations

Most geotechnical investigations required to support the design of the proposed AWSP work packages were authorized under Amendment No. 3 and are complete or in progress. Supplemental geotechnical investigations included in Amendment No. 4 will be performed in accordance with the scope description in Section RC000 of Amendment No. 3 and include:

- Borehole scans to be conducted in borings for tunnel shafts for mega-crossings (AWSP-07-01, AWSP-07-02).

A more detailed description of these geotechnical investigations is provided in the scope sections for individual work packages.

Environmental Investigations - Soil Management

Environmental investigations required to support design of the proposed AWSP improvements include the following activities:

- Performing desktop analyses to identify Potentially Impacted Properties (PIPs).
- Developing a sample analysis plan for each work package and completing soil borings, sample collection, and soil analysis in compliance with the plan.
- Developing soil management plans for each of the work packages.

Budget for soil management investigations for CIP #2, CIP #3, CIP #4, and CIP #7 was authorized under Amendment No. 3 as an allowance for “RAL1 – Environmental Investigation Allowance (Soils)”. The amount authorized was an estimated value reflecting a preliminary analysis of the information available at that time and assumed approximately 256 sample locations across these CIPs. Based on results from the completed PIP screenings for those CIPs, it is estimated that an additional 264 borings will need to be performed under Amendment No. 4 to complete the soil characterization and certification. The number of additional borings needed for each work package is listed in the Field Investigations section of each work package.

PIP Screening, soil characterization, and soil management plans for CIP-06 were not included in the scope or allowance budget authorized under Amendment No. 3 and are included herein for performance under Amendment No. 4. Based on the available information, it has been estimated that PIP screening and Sample Analysis Plans will be required for all work packages under CIP-6. It is estimated that borings, sampling and analysis will be required at approximately 415 locations across the CIP #6 packages. The number of borings needed for each work package is listed in the Field Investigations section of each work package.

Subsurface Utility Investigations

Amendment No. 3 included an allowance for SUE Investigations anticipated to be required for segments of large diameter transmission main. As design progressed, it was determined that significantly more SUE investigation work than had been anticipated was necessary to support development of reliable design drawings for the AWSP. The allowance authorized under Amendment No. 3 was only sufficient to support SUE investigations for work packages AWSP-02-01 and AWSP-02-06. Funding for SUE investigations for work packages AWSP-02-02 and AWSP-02-05 was provided under Amendment No. 3 through deferral of 100% design activities and use of

that budget for the SUE efforts. Amendment No. 4 includes budget to replace the deferred design budget used to fund SUE investigations for work packages AWSP-02-02 and AWSP-02-05 as well as the performance of SUE investigations for the following work packages:

- AWSP-02-03 – Finished Water Transmission Main – C
- AWSP-02-04 – Finished Water Transmission Main – D
- AWSP-06-01 – Regional Water Transmission Main – A
- AWSP-06-02 – Regional Water Transmission Main – B
- AWSP-06-03 – Regional Water Transmission Main – C
- AWSP-06-04 – Regional Water Transmission Main – D
- AWSP-06-05 – Regional Water Transmission Main – E

- **Environmental Analysis –** Environmental investigations required to support final design activities for the CIP #6 transmission main work packages under Amendment No. 4 will be completed in accordance with the framework/governance document developed during the preliminary design phase and specific scopes developed for individual work packages. Investigations completed as part of the final design phase will be documented by amending the environmental investigation plan for each work package. See scopes for individual work packages for details pertaining to environmental analysis that will be completed as part of the final design phase.

- **Final Design Engineering** – Final design engineering services performed under Amendment No. 4 will be provided in accordance with the scope presented in Section RC000 of Amendment No. 3 and work package specific sections of Amendment No. 3 for select work packages as noted in Table 4 . Deliverables for the final design phase will include submittals at the 60%, 90%, and 100% stages of the design. In addition, a ready to advertise set of contract documents suitable for bidding of the work package will also be prepared. Each submittal will include contract drawings and specifications. The Preliminary Engineering Report (PER) that was compiled as part of the preliminary design phase will be updated and submitted with the 60% and 90% deliverables. All deliverables for the final design will be in electronic format (e.g., hardcopies are not anticipated). At the 60% submittal a “design freeze” will be initiated and no major changes to the project’s scope/components will be made so the team can focus on finalizing the design documents

- **Cost Estimating** – AACE Class 3 and 2 Opinions of Probable Construction Costs (OPCC) will be provided with the 60% and 100% submittals for work packages being advanced from 30% design through final design and bidding under Amendment No. 4 as identified in Table 4. Construction schedules will be developed to support the development of the 60% and 100% OPCCs. Interim OPCCs completed before/after the Class 3 and 2 OPCCs are excluded from this scope of work. Given the volatility of market conditions, the OPCC should not be relied upon after 3 months, therefore the timing of completion of the Class 2 OPCC for each work package will be evaluated on a case-by-case basis.

- **Land Acquisition** – Scope and budget were authorized under Amendment No. 3 for coordination between the Consultant Team and land acquisition specialists responsible for the efforts described previously in Task RB400. As design progressed, budget initially allocated as an Amendment No. 3 allowance was also designated for land acquisition efforts related to specific work packages. Land acquisition scope and budget included in Amendment No. 4 is for supplemental coordination and acquisition efforts beyond those previously authorized. Scope descriptions for supplemental land acquisition activities to be completed under Amendment No. 4 are provided in the scope statements for the individual work packages that follow. Activities anticipated to support acquisition of temporary and permanent easements include:

Activity	Temporary Easements	Permanent Easements
Coordination with Design Team	X	X
Title Commitments and Updates	X	X
Appraisal	X	X
Review Appraisal	X	X
Phase I ESA		X
Negotiations	X	X

- **Permitting –** The Consultant Team will coordinate and manage required to apply for and pursue permits related to utility construction, construction within controlled rights-of-way, site development and/or zoning, building design, or environmental aspects for work packages being advanced from 30% design to bidding under Amendment No. 4. Application fees related to the permits will be paid directly by the CPM or GPWC. Lists of the permitting agencies used to scope level of effort are provided in the scope statements for the individual work packages that follow. For this scope of services, it is assumed that an average of 24 hours per permitting agency will be required.

- **Bidding Assistance –** After submittal of the ready to advertise contract documents, the Consultant Team will assist with bidding activities as defined in Section RC000 of Amendment No. 3. Conformed documents will be completed as part of the office engineering services during construction tasks described separately.

In addition to the standard work package elements listed above, additional hydraulic analysis for the final design of the regional system will be completed as part of this scope:

- **Hydraulic Analysis for Final Design –** The hydraulic analysis for the proposed water transmission system is documented in the June 2024 Basis of Design. Under Amendment No. 4, the Consultant Team will perform limited additional steady state and transient analyses (up to 320 person-hours of effort) to evaluate impacts of final transmission main alignment changes on hydraulic design conditions for the pumps at the HSPS and Intermediate Pump Station 1. Findings of the updated hydraulic analysis will be documented in a technical memorandum.

Approach to Office Engineering Services During Construction – Under Amendment No. 4, the Consultant Team will provide Office Services During Construction for the following GPWC CIPs and work packages:

- CIP 1 (AWSP-01-01, 01-02)
- CIP 2 (AWSP-02-01, 02-02, 02-05, 02-06)
- CIP 3 (AWSP-03-01)
- CIP 6 (AWSP-06-01, 06-03, 06-06, 06-07)
- CIP 7 (AWSP-07-01, 07-02)
- CIP 11 (AWSP-11-01)

Office Engineering Services During Construction will also be provided for the CIP 8 City of Joliet AWSP improvements as listed below. Additional scope description for services to be provided for the CIP 8 work packages is provided in Section JC000 of this Amendment.

- CIP 8 (JOL-08-02, 08-03, 08-04, 08-09)

The standardized approach to provision of office engineering services during construction includes the following elements.

- **Work Package Management** - The CIP/Work Package Lead will manage all activities related to Office Engineering Services During Construction. Management activities will include confirmation of construction responsibilities, scope, schedule, and budget with staff assigned to the construction project, coordination of task activities through regular meetings/calls/emails, monitoring of task progress and expenditures, and coordination with the Design Manager/Program Project Manager, Program Construction Manager/Resident Engineer, and other CIP Leads.

- **Conformed Document –** The Consultant Team will prepare a conformed set of documents for each work package by incorporating addenda issued during bidding into the bid set drawings and specifications. Conformed documents will be provided in electronic (pdf) format.

- **Submittal Review –** The Consultant Team will review and provide comments on contractor technical submittals/shop drawings through the PMIS. Contractual/Division 1 submittals will be reviewed and managed by the Construction Management Team in the field. The number of submittals assumed for each work package is documented in the individual work package descriptions that follow. It is assumed that 20% of the submittals will be reviewed and accepted upon initial submission, 60% of the submittals will require two (2) review cycles, and 20% of submittals will require three (3) review cycles. For this scope of services, it is assumed that each submittal review, inclusive of resubmittals, will require an average of 12 hours of effort.

  The Consultant Team shall process requests and return comments within fifteen (15) working days for Submittal/Shop Drawings. If the Consultant Team determines that an assignment is above average in volume or complexity, the Consultant Team will notify the CPM to request a time extension and provide a new completion date. This request will be made before the initial time deadline.

- **RFI Review/Response –** The Consultant Team will prepare responses to Requests for Information (RFI) submitted by the contractor. RFI's will be reviewed by the Construction Management Team in the field and forwarded on to the office engineering staff, as appropriate. It is assumed that roughly 80% of RFIs received will need to be addressed by the office engineering staff while field staff will resolve the other 20%. The number of RFIs assumed to require office engineering response for each work package is documented in the individual work package descriptions that follow. It is assumed, for this scope of work, that 25% of the RFI's will require two (2) responses.

  The Consultant Team shall process requests and return comments within five (5) working days for Requests for Information (RFIs). If the Consultant Team determines that an assignment is above average in volume or complexity, the Consultant Team will notify the CPM to request a time extension and provide a new completion date. This request will be made before the initial time deadline.

- **Change Order Preparation/Review –** It is assumed for this scope of work that Change Orders will be prepared by the Construction Management Team to modify the contract documents and accommodate changes that occur during construction (unforeseen site conditions, contractor-proposed alternative construction methods, etc.) at the direction of the CPM. A request for a change order may be initiated either by the Contractor, a member of the Construction Management Team representing the GPWC, or the GPWC itself.

  This task includes effort for the office Consultant Team to assist the Construction Management Team with evaluation of Contractor's Change Order proposals or change orders compiled by the GPWC or Construction Management Team.

  The office Consultant Team shall review materials for a Request for Quotation (revised or new specifications and drawings) within five (5) working days of the identification of the need for a change

order and return comments on contractor-issued change order proposals within seven (7) working days. If the office Consultant Team determines that an assignment is above average in volume or complexity, the office Consultant Team will notify the CPM to request a time extension and provide a new completion date. This request will be made before the initial time deadline. It is assumed that each change order/proposal review will require an average of 8 hours of effort.

The number of change orders assumed for each work package is documented in the individual work package descriptions that follow.

- **Shop Witness Testing -** The office Consultant Team will witness shop testing of materials and equipment prior to delivery as detailed in the individual work package descriptions that follow. Observations made during shop witness testing will be documented in writing.

- **Miscellaneous Field Meetings –** The office Consultant Team will participate in miscellaneous field meetings throughout the construction duration for each work package to provide engineering support to the field staff. The various types of meetings anticipated are described below. The number of meetings assumed for each work package is documented in the individual work package descriptions that follow.

  - **Pre-Construction Meeting -** This task includes one (1) ½-day Pre-Construction Meeting for each work package. The meeting will be attended by two (2) office Consultant Team members.

  - **Miscellaneous Field Meetings -** The task includes two (2) ½-day meetings attended by two (2) office Consultant Team members each month over the construction duration. For select tasks, this also includes two (2) additional site visits from office Consultant Team member experts who reside outside of Illinois. Each out-of-state visit consists of one (1) office Consultant Team member expert onsite for duration of three (3) days, excluding travel time. Although included in the Scope of Work, each out-of-state visit shall be approved in writing by the Commission prior to the site visit.

  - **Conference Calls** - Includes two (2) one-hour conference calls attended by two (2) office Consultant Team members each month over the construction duration.

- **Permitting Assistance –** The office Consultant Team will provide permitting assistance to the Construction Management Team throughout the duration of construction. This will include items such as:

  - Attendance at meetings with permitting agencies listed in the individual work package sections that follow (e.g., Jurisdictional right of way entities such as IDOT, CDOT, CCDOT, WCDOT; Illinois Department of Natural Resources (IDNR), state and federal Environmental Protection Agencies (EPA), and the U.S. Army Corps of Engineers (USACE), etc.)
  - Providing design input necessary for updating/monitoring or coordination of permits obtained by the Consultant Team on behalf of the Commission. It is assumed that the Contractor will update/monitor/coordinate activities associated with permits acquired by the Contractor.

  The anticipated level of effort for permitting assistance is described in the individual work package descriptions that follow.

- **Utility Coordination Assistance** – The office Consultant Team will provide utility coordination assistance during construction activities. This will include items such as:

- Serving as a liaison between the field construction management team and major utility entities impacted by the construction.
- Monitoring and reporting on the status of relocation work being performed by utilities ahead of or in conjunction with construction.
- Monitoring and reporting on the status of communications between the field construction management team and major utility entities impacted by the construction.
- Attendance at meetings with utility agencies impacted by the work when requested by the work package resident engineer.

Lists of the utility agencies used to estimate the required level of effort are provided in the scope statements for the individual work packages that follow.

- **Commissioning and Start-up Assistance –** The office Consultant Team will coordinate with the Commissioning and Start-up Contractor hired under AWSP-11-01 before completion of the first AWSP work package.
  - The team will provide design input at critical milestones/activities identified in the Commissioning and Startup Plan (e.g., review of C&SU plan for the specific work package). It is assumed 40 hours of effort will be required for this activity per work package.
  - This task will also include one person-week (40 person-hours) of effort associated with assistance in the field during Commissioning and Start-up and punch list activities for conveyance work packages. 60 person hours of field support during Commissioning and Star-up is assumed for non-conveyance work packages involving a range of disciplines.

- **Preparation of Record Drawings** – The office Consultant Team will use completed as-built drawing mark-ups provided by the Contractor, construction phase GPS data compiled by the Contractor, and notes recorded by Consultant Team field representatives for each work package to prepare record drawings. The Construction Management Team will review the submittals/shop drawings, RFIs, change orders, inspection records, and other correspondence issued during construction to check that changes made during construction have been incorporated into the as-built mark-up drawings produced by the Contractor. It is assumed that each drawing included in the contract documents will require an average of 1 hour of effort for incorporating as-built markups into the record drawings.

RC010 Program Design Management

Under Amendment No. 4, management of engineering design and production of bidding documents will continue to be led by the Program Design Manager for the period from September 2024 through August 2026. Management activities will continue to include coordination of design elements across CIPs; inter-disciplinary coordination; confirmation of workplan responsibilities; monitoring of design progress, schedule and expenditures; and coordination with the Program Managers and Program Delivery Manager. The design management team will also continue to:

- Coordinate with the individual CIP leads regularly, assist them with completing project-specific design management activities, and verify quality management tasks are scheduled and completed.
- Lead regular Design Team meetings, oversee and coordinate design across work packages, and confirm AWSP design standards are implemented consistently.
- Track, analyze, and regularly report design status.
- Manage the design schedule and budget in coordination with the Controls Manager, and assist the Controls Manager with setup, monitoring, and maintenance of the design document portions of the PMIS.
- Oversee and participate in project deliverable reviews as well as change and risk management activities and value engineering reviews.

- Assist with preparation and review of procurement documents.
- Support other AWSP tasks, including permitting, land acquisition, public outreach, and funding.

New scope under Amendment No. 4 includes:

- Overseeing office-based design team staff providing engineering services during construction.

RC100 CIP #1: Chicago Connection Facilities

Final design engineering and bidding support services for the CIP #1 work packages were authorized under Amendment No. 3. Budget originally allocated for bidding support was authorized for use in procurement of a Program Construction Manager at Risk (CMAR). As the CMAR procurement is no longer proceeding and these work packages are to follow a traditional design-bid-build process, the budget for bidding support services on each work package is included in Amendment No. 4.

Amendment No. 4 scope and budget for these work packages is limited to:

- Supplemental design services required to address greater than anticipated coordination and design changes required by coordination with the City of Chicago, its tunnel connection design consultant, other related Chicago agencies, and the Chicago Park District.
- Bidding support services.
- Office engineering services during construction as outlined in Section RC000.

RC101 AWSP-01-01: Tunnel Extension

Scope and budget for completion of final design engineering and bidding support services for the tunnel extension were authorized under Amendment No. 3. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

<u>Supplemental Design Services</u>

During final design of the tunnel extension, effort required for coordination with the Chicago Department of Water Management (CDWM) and its tunnel connection design consultant exceeded the amount anticipated. Greater than anticipated effort was required to obtain and gain consensus on considerations including hydraulic operating levels at the CDWM tunnel connection, and elevations and configurations for the tunnel extension and tunnel connection.

<u>Bidding Support Services</u>

- Ready-to-Advertise – Modify the 100% design documents as required for bidding. It is assumed that this effort will not require any changes to the design aspects of the documents, but rather only changes related to finalizing the drawings/specifications for bidding (e.g., signing/sealing drawings, finalizing front end documents based on bid date, etc.)

  Bidding Assistance – After submittal of the ready to advertise contract documents, the Consultant Team will assist with bidding activities as defined in Section RC000 of Amendment No. 3. Conformed documents will be completed as part of the office engineering services during construction tasks described separately.

<u>Office Engineering Services During Construction</u>

Effort required for office engineering services during construction for the tunnel extension has been estimated based on the framework presented in Section RC000.

- Work Package Management – Work Package Management as described in Section RC000 will be provided for the anticipated construction duration of 20 months.

- Conformed Documents – A total of 100 hours have been included for compiling conformed documents as defined in Section RC000.
- Submittal Reviews – It is assumed that a total of 40 original submittals and subsequent resubmittals be reviewed for this work package as defined in Section RC000.
- RFI Reviews - It is assumed that the office Consultant team will respond to a total of 50 RFIs for this work package as defined in Section RC000.
- Change Order Preparation/Review – It is assumed that 10 change orders will be reviewed for this work package as defined in Section RC000.
- Shop Witness Testing – No shop witness testing is anticipated for work package AWSP-01-01.
- Field and Miscellaneous Meetings. A construction duration of 20 months has been assumed for the reoccurring meetings listed below.
    - Pre-Construction Meeting – It is assumed that two (2) Consultant Team members will attend the ½-day Pre-Construction Meeting.
    - Miscellaneous Meetings - A total of 40 ½-day meetings will be attended by up to two (2) office Consultant Team members.
    - Conference Calls – A total of 40 one-hour conference calls are anticipated over the duration of this project.
- Permitting Assistance – Assistance will be provided to support permitting activities with the Chicago Department of Transportation (CDOT) during construction.
- Utility Coordination Assistance – Assistance will be provided for coordination with the Chicago Park District, the Village of Oak Lawn, the City of Chicago, and CDWM on the protection of existing utilities during construction.
- Commissioning and Startup Assistance – Commissioning and Startup Assistance will be provided as defined in RC000.
- Preparation of Record Drawings - It is assumed 55 record drawings will be compiled based on the as-built conditions documented by the construction contractor as defined in Section RC000.

RC102 AWSP-01-02: Suction Well

Scope and budget for completion of final design engineering and bidding support services for the suction well were authorized under Amendment No. 3. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

Supplemental Design Services

During final design of the suction well, effort required for coordination with the Chicago Park District and CDWM for issues including stormwater management, site layout and landscaping, and overflow potential control exceeded the amount anticipated.

Bidding Support Services

- Bidding Assistance – After submittal of the ready to advertise contract documents, the Consultant Team will assist with bidding activities as defined in Section RC000 of Amendment No. 3. Conformed documents will be completed as part of the office engineering services during construction tasks described separately.

Office Engineering Services During Construction

Effort required for office engineering services during construction for the suction well has been estimated based on the framework presented in Section RC000.

- Work Package Management – Work Package Management as described in Section RC000 will be provided for the anticipated construction duration of 24 months.
- Conformed Documents – A total of 100 hours have been included for compiling conformed documents as defined in Section RC000.
- Submittal Reviews – It is assumed that a total of 50 original submittals and subsequent resubmittals be reviewed for this work package as defined in Section RC000.

- RFI Reviews - It is assumed that the office Consultant team will respond to a total of 60 RFIs for this work package as defined in section RC000.
- Change Order Preparation/Review – It is assumed that 12 change orders will be reviewed for this work package as defined in section RC000.
- Shop Witness Testing – It is assumed that there will be two (2) shop witnessed tests provided under this activity. Each shop witnessed test is assumed to require one (1) team member for a total of two (2) days.
    - Large Diameter Valves
    - Lift Station
- Field and Miscellaneous Meetings. A construction duration of 24 months has been assumed for the reoccurring meetings listed below.
    - Pre-Construction Meeting – It is assumed that two (2) team members will attend the ½-day Pre-Construction Meeting.
    - Miscellaneous Meetings - A total of 48 ½-day meetings will be attended by up to two (2) office consultant team members.
    - Conference Calls - A total of 48 one-hour conference calls are anticipated over the duration of this project.
- Permitting Assistance – Assistance will be provided for the following Commission-obtained permits:
    - CDOT
    - Chicago Dept. of Streets and Sanitation, Bureau of Forestry
- Utility Coordination Assistance – Assistance will be provided for utility coordination with the Chicago Park District, the Village of Oak Lawn, the City of Chicago, and CDWM
- Commissioning and Startup Assistance – Commissioning and Startup Assistance will be provided as defined in RC000.
- Preparation of Record Drawings - It is assumed 80 record drawings will be compiled based on the as-built conditions documented by the construction contractor as defined in Section RC000.

RC103 AWSP-01-03: Low Service and High Service Pump Stations

Scope and budget for completion of final design engineering and bidding support services for the low service and high service pump stations were authorized under Amendment No. 3. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

Supplemental Design Services

During final design of the Low Service Pump Station, significantly greater effort than anticipated was required for design changes driven by City of Chicago representatives. Chicago's requirement to provide individual venturi meters on each of the pumps in the low service pump station required a major change in the size of the lower level of the station and significant redesign effort by civil, structural, mechanical, and electrical design staff. Maintenance of traffic (MOT) and stormwater management requirements defined for the project by Chicago during final design also required additional design effort.

Bidding Support Services

- Bidding Assistance – After submittal of the ready to advertise contract documents, the Consultant Team will assist with bidding activities as defined in Section RC000 of Amendment No. 3. Conformed documents will be completed as part of the office engineering services during construction tasks described separately.

RC200 CIP #2: Finished Water Transmission Main

Final design engineering and bidding support services for the CIP #2 work packages were authorized under Amendment No. 3. Amendment No. 4 scope and budget for these work packages is limited to:

- Performance of a stray current interference study required due to the proximity of proposed transmission main to high voltage electric transmission lines.

- Supplemental design services required to address alignment and/or design changes driven by right-of-way, regulatory, or permitting agencies.
- Supplemental survey required for evaluation/design of alignments within segments of large diameter transmission main (ComEd right-of-way, right-of-way along Forest Preserve District of Cook County land holdings, etc.)
- Supplemental survey and land acquisition activities required to support negotiation and documentation of easements beyond those originally anticipated.
- Office engineering services during construction as outlined in Section RC000.

Stray Current Interference Study

An AC interference study will be performed on the AWSP water transmission main system (CIP #2 and CIP #6 segments) to identify potential design considerations required by the proposed co-location of water main with existing ComEd transmission powerlines. The study includes approximately 24 transmission powerlines (>60 kV) and will be performed using CDEGS software computer modeling. The assessment covers AC voltages, safety risks to personnel, and integrity risks from AC corrosion and coating damage.

For pipeline sections over 30-inch diameter, both coated steel and concrete options will be evaluated for powerline effects and AC mitigation requirements. Tasks to be completed as part of the study plan include:

- Data Collection:
  - Review and gather pipeline and powerline information.
  - Site survey procedure preparation for soil resistivity measurements.
  - Processing soil resistivity data.

- Soil Resistivity Site Survey:
  - Measure deep soil resistivities at discontinuities and shallow measurements at intervals.
  - Approximately 50 soil resistivity measurements, including photos and GPS coordinates.
  - 10-day on-site survey during frost-free conditions.

- AC Modeling:
  - Use SES CDEGS software to model induced AC voltages.
  - Assess AC corrosion risk and touch voltage risk at above-grade appurtenances.
  - Perform fault modeling to determine touch potentials, coating damage, and arcing risks.
  - Provide results for both coated steel and concrete pipe options (>30-inch diameter).

- Mitigation Design:
  - Utilize computer modeling to determine mitigation requirements.
  - Ensure safety, minimize AC corrosion risk (for coated pipe), and address coating stress.
  - Design mitigation adhering to industry, local standards, and codes.
  - Provide conceptual design for coated steel and concrete pipe options (>30-inch diameter).

- Final Report:
  - Issue a comprehensive final report with findings, conclusions, recommendations, and conceptual mitigation system designs.
  - Share a draft report for client review, incorporating feedback into the final version.

Budget for the portion of the Stray Current Interference Study related to the CIP #2 work packages is included under task RC200. Budget for the portion of the study related to the CIP #6 work packages is included separately under task RC600.

RC201 AWSP-02-01 Finished Water Transmission Main – A

Scope and budget for completion of final design engineering and bidding support services for the Finished Water Transmission Main – Segment A were authorized under Amendment No. 3. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

- Supplemental land acquisition activities required to support negotiation and documentation of easements beyond those originally anticipated.
- Supplemental survey services as required to prepare easements and legal descriptions.
- Supplemental soil management borings.
- Office engineering services during construction as outlined in Section RC000.

Supplemental Land Acquisition Activities

Upon completion of the 30% design for this work package, the design team determined that the number of easements required is significantly greater than anticipated when Amendment No. 3 was prepared. Budget for non-survey services related to acquisition of the original easements is allocated as shown in Section RB400. Additional scope and budget for services related to the acquisition of the easements required is included in Amendment No. 4. The table below shows the number of additional easements assumed to be required for AWSP-02-01.

	Permanent Easements	**Temporary Easements**
Amend No. 4 Requirements	1	38
Amend No. 3 Allowance	$111,523	
Supplemental Easement Acquisition	$404,663	
Total Easement Acquisition Budget	$516,186	

Supplemental Survey

Under Amendment No. 4, the Consultant Team will provide supplemental survey services required to prepare the easement drawings and legal descriptions for the additional required easements.

Supplemental Soil Management Borings

A total of 92 supplemental soil management borings are projected to be required to support completion of the soil management plan for AWSP-02-01.

Office Engineering Services During Construction

Effort required for office engineering services during construction for Finished Water Transmission Main – Segment A has been estimated based on the framework presented in Section RC000.

- Work Package Management – Work Package Management as described in Section RC000 will be provided for the anticipated construction duration of 29 months.
- Conformed Documents – A total of 100 hours have been included for compiling conformed documents as defined in Section RC000.
- Submittal Reviews – It is assumed that a total of 90 original submittals and subsequent resubmittals be reviewed for this work package as defined in Section RC000.
- RFI Reviews - It is assumed that the office Consultant Team will respond to a total of 100 RFIs for this work package as defined in section RC000.
- Change Order Preparation/Review – It is assumed that 14 change orders will be reviewed for this work package as defined in section RC000.

- Shop Witness Testing – It is assumed that there will be two (2) shop witnessed tests provided under this activity.
- Each shop witnessed test is assumed to require one (1) team member for a total of two (2) days.
    - Large diameter valves
    - Large diameter transmission main
- Field and Miscellaneous Meetings. A construction duration of 29 months has been assumed for the reoccurring meetings listed below.
    - Pre-Construction Meeting – It is assumed that two (2) team members will attend the ½-day Pre-Construction Meeting.
    - Miscellaneous Meetings - A total of 58 ½-day meetings will be attended by up to two (2) office Consultant Team members.
    - Conference Calls - A total of 58 one-hour conference calls are anticipated over the duration of this project.
- Permitting Assistance – Assistance will be provided for the following Commission-obtained permits:
    - CDOT construction permit
    - Cook County Department of Transportation and Highways construction permit
    - IEPA drinking water construction permit
    - IDOT utility permit
- Utility Coordination Assistance – Assistance will be provided for utility coordination with the following entities:
    - ComEd
    - People's Gas
    - CDWM (sewer, water)
    - CDOT (lighting, signals, drainage)
- Commissioning and Startup Assistance – Commissioning and Startup Assistance will be provided as defined in RC000.
- Preparation of Record Drawings - It is assumed 340 record drawings will be compiled based on the as-built conditions documented by the construction contractor as defined in Section RC000.

RC202 AWSP-02-02 Finished Water Transmission Main – B

Scope and budget for completion of final design engineering and bidding support services for the Finished Water Transmission Main – Segment B were authorized under Amendment No. 3. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

- Supplemental land acquisition activities required to support negotiation and documentation of easements beyond those originally anticipated.
- Supplemental survey of ComEd transmission line towers and required elevations as well as services as required to prepare easements and legal descriptions.
- Bathymetric survey at a new location from the MWRD property crossing the Cal-Sag channel and topographic survey for areas north of the Cal-Sag channel.
- Subsurface Utility Engineering Investigations (Restore design budget used to fund SUE previously).
- Office engineering services during construction as outlined in Section RC000.

<u>Supplemental Land Acquisition Activities</u>

Upon completion of the 30% design for this work package, the design team determined that the number of easements required is significantly greater than anticipated when Amendment No. 3 was prepared. Budget for non-survey services related to acquisition of the original easements is allocated as shown in Section RB400. Additional scope and budget for services related to the acquisition of the easements required is included in Amendment No. 4. The table below shows the number of additional easements assumed to be required forAWSP-02-02.

	Permanent Easements	Temporary Easements
Amend No. 4 Requirements	53	64
Amend No. 3 Allowance	$242,924	
Supplemental Easement Acquisition	$1,039,366	
Total Easement Acquisition Budget	$1,282,290	

Supplemental Survey Services

Under Amendment No. 4, the Consultant Team will also provide survey services required to locate four (4) tower bases for ComEd transmission line towers along the proposed alignment, determine the elevations of sag points on the transmission lines and connection points on the ends of the tower arms, and prepare the easement drawings and legal descriptions for the additional required easements. Survey services under Amendment No. 4 will also include a bathymetric survey at a new location from the MWRD property crossing the Cal-Sag channel and topographic survey for areas north of the Cal-Sag channel crossing.

Subsurface Utility Investigations (SUE)

Desktop utility investigations and coordination with right-of-way entities during the development of 30% design documents for AWSP-02-02 determined that subsurface utility investigations (SUE) required to support final design activities were significantly more extensive than planned during the development of Amendment No. 3. To maintain design progress for AWSP-02-02, Amendment No. 3 budget for the 100% Design and Ready-to-Advertise tasks ($349,947) was reallocated by the CPM for completion of the necessary SUE investigations. Amendment No. 4 includes budget to offset this deferral and replenish the original budget for completion of the 100% Design and Ready-to-Advertise tasks.

Office Engineering Services During Construction

Effort required for office engineering services during construction for Finished Water Transmission Main – Segment B has been estimated based on the framework presented in Section RC000.

- Work Package Management – Work Package Management as described in Section RC000 will be provided for the anticipated construction duration of 26 months.
- Conformed Documents – A total of 100 hours have been included for compiling conformed documents as defined in Section RC000.
- Submittal Reviews – It is assumed that a total of 90 original submittals and subsequent resubmittals be reviewed for this work package as defined in Section RC000.
- RFI Reviews - It is assumed that the office Consultant Team will respond to a total of 100 RFIs for this work package as defined in section RC000.
- Change Order Preparation/Review – It is assumed that 14 change orders will be reviewed for this work package as defined in section RC000.
- Shop Witness Testing – It is assumed that there will be two (2) shop witnessed tests provided under this activity. Each shop witnessed test is assumed to require one (1) team member for a total of two (2) days.
    - Large diameter valves
    - Large diameter transmission main
- Field and Miscellaneous Meetings. A construction duration of 26 months has been assumed for the reoccurring meetings listed below.
    - Pre-Construction Meeting – It is assumed that two (2) team members will attend the ½-day Pre-Construction Meeting.
    - Miscellaneous Meetings - A total of 52 ½-day meetings will be attended by up to two (2) office Consultant Team members.

    - Conference Calls - A total of 52 one-hour conference calls are anticipated over the duration of this project.
- Permitting Assistance – Assistance will be provided for the following Commission-obtained permits:
    - ComEd construction permit
    - Village of Palos Hills construction permit
    - MWRD construction permit
    - IEPA drinking water construction permit
    - IDNR waterway crossing permit
    - IDOT utility permit
- Utility Coordination Assistance – Assistance will be provided for utility coordination with the following entities:
    - ComEd
    - Village of Palos Hills
- Commissioning and Startup Assistance – Commissioning and Startup Assistance will be provided as defined in RC000.
- Preparation of Record Drawings - It is assumed 240 record drawings will be compiled based on the as-built conditions documented by the construction contractor as defined in Section RC000.

RC203 AWSP-02-03 Finished Water Transmission Main – C

Scope and budget for completion of final design engineering and bidding support services for the Finished Water Transmission Main – Segment C were authorized under Amendment No. 3. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

- Supplemental design services for realignment adjacent to Forest Preserve District of Cook County (FPDCC) properties.
- Supplemental land acquisition activities required to support negotiation and documentation of easements beyond those originally anticipated.
- Subsurface Utility Engineering Investigations.
- Supplemental soil management borings.

<u>Supplemental Design Services</u>

Amendment No. 4 includes additional effort by the Consultant Team for the redesign of approximately 3.4 miles of transmission main, which moved alignment but remained in the same rights-of-way (123rd and LaGrange Road), and the new design of approximately 1.2 miles of transmission main, which moved to different rights-of-way (86th Street and 119th). Amendment No. 4 also includes effort associated with the permitting of the transmission main alignment adjacent to FPDCC properties.

<u>Supplemental Land Acquisition Activities</u>

Upon completion of the 30% design for this work package, the design team determined that the number of easements required is significantly greater than anticipated when Amendment No. 3 was prepared. Budget for non-survey services related to acquisition of the original easements is allocated as shown in Section RB400. Additional scope and budget for services related to the acquisition of the easements required is included in Amendment No. 4. The table below shows the number of additional easements assumed to be required forAWSP-02-03.

	Permanent Easements	Temporary Easements
Amend No. 4 Requirements	21	36
Amend No. 3 Allowance	$323,845	
Supplemental Easement Acquisition	$282,152	
Total Easement Acquisition Budget	$605,997	

Supplemental Survey Services

Under Amendment No. 4, the Consultant Team will provide survey services required to establish base topographic mapping for new areas along the south side of the Cal-Sag Channel, along 86th Avenue, and along 119th Street between 86th Avenue and Kean Avenue. Survey of these areas is required as a result of changes to the Basis of Design transmission main alignment made to obtain approval from the FPDCC. Supplemental survey will also be prepared to locate right-of-way boundaries along properties owned by the FPDCC and prepare the easement drawings and legal descriptions for the additional required easements.

Supplemental Soil Management Borings

A total of 44 supplemental soil management borings are projected to be required to support completion of the soil management plan for AWSP-02-03.

Subsurface Utility Investigations (SUE)

Desktop utility investigations and coordination with right-of-way entities during the development of 30% design documents for AWSP-02-03 determined that subsurface utility investigations (SUE) required to support final design activities are likely to be significantly more extensive than planned during the development of Amendment No. 3, as shown in the table below. Budget is included in Amendment No. 4 to fund performance of the SUE investigations required to support final design for work package AWSP-02-03.

SUE Investigations AWSP-02-03	Amend No. 3 Estimated SUE Investigation Locations	Amend No. 4 Estimated SUE Investigation Locations
Test Hole/Potholing	1	53
Electromagnetic Locating	10	45
Sonde	0	0

RC204 AWSP-02-04 Finished Water Transmission Main – D

Scope and budget for completion of final design engineering and bidding support services for the Finished Water Transmission Main – Segment D were authorized under Amendment No. 3. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

- Supplemental engineering services required for design of additional sections of trenchless water transmission main
- Supplemental land acquisition activities required to support negotiation and documentation of easements beyond those originally anticipated
- Subsurface Utility Engineering Investigations
- Supplemental soil management borings

Supplemental Design Services

Design investigations and coordination with right-of-way entities determined that more segments of proposed work package AWSP-02-04 transmission main will need to be constructed using trenchless methods than previously projected. Supplemental design budget is required to support the completion of this additional design.

Supplemental Land Acquisition Activities

Upon completion of the 30% design for this work package, the design team determined that the number of easements required is significantly greater than anticipated when Amendment No. 3 was prepared. Budget for non-survey services related to acquisition of the original easements is allocated as shown in Section RB400. Additional scope and budget for services related to the acquisition of the easements required is included in Amendment No. 4. The table below shows the number of additional easements assumed to be required for AWSP-02-04.

	Permanent Easements	**Temporary Easements**
Amend No. 4 Requirements	41	46
Amend No. 3 Allowance	$304,909	
Supplemental Easement Acquisition	$739,436	
Total Easement Acquisition Budget	$1,044,345	

Supplemental Survey Services

Under Amendment No. 4, the Consultant Team will also provide survey services required to locate right-of-way boundaries along the transmission main alignment and prepare the easement drawings and legal descriptions for the additional required easements. Supplemental topographic survey is also required to obtain information on a portion of Archer Avenue widened and repaved following completion of the original aerial survey of the alignment.

Subsurface Utility Investigations (SUE)

Desktop utility investigations and coordination with right-of-way entities during the development of 30% design documents for AWSP-02-04 determined that subsurface utility investigations (SUE) required to support final design activities are likely to be significantly more extensive than planned during the development of Amendment No. 3 as shown in the table below. Budget is included in Amendment No. 4 to fund performance of the SUE investigations required to support final design for work package AWSP-02-04.

SUE Investigations AWSP-02-04	**Amend No. 3 Estimated SUE Investigation Locations**	**Amend No. 4 Estimated SUE Investigation Locations**
Test Hole/Potholing	26	135
Electromagnetic Locating	18	50
Sonde	0	0

Supplemental Soil Management Borings

A total of 44 supplemental soil management borings are projected to be required to support completion of the soil management plan for AWSP-02-04.

RC205 AWSP-02-05 Finished Water Transmission Main – E

Scope and budget for completion of final design engineering and bidding support services for the Finished Water Transmission Main – Segment E were authorized under Amendment No. 3. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

- Supplemental Survey
- Supplemental land acquisition activities required to support negotiation and documentation of easements beyond those originally anticipated
- Supplemental design services required to analyze alternative alignments and address permitting requirements
- Subsurface Utility Engineering Investigations
- Office engineering services during construction as outlined in Section RC000.

Supplemental Land Acquisition Activities

Upon completion of the 30% design for this work package, the design team determined that the number of easements required is significantly greater than anticipated when Amendment No. 3 was prepared. Budget for non-survey services related to acquisition of the original easements is allocated as shown in Section RB400. Additional scope and budget for services related to the acquisition of the easements required is included in Amendment No. 4. The table below shows the number of additional easements assumed to be required for AWSP-02-05.

	Permanent Easements	**Temporary Easements**
Amend No. 4 Requirements	31	28
Amend No. 3 Allowance	$76,227	
Supplemental Easement Acquisition	$547,338	
Total Easement Acquisition Budget	$623,565	

Supplemental Design Services

Additional budget for design services is required to support the analysis of alternative transmission main alignments at several locations within work package AWSP-02-05, and development of additional design details to accommodate IDOT signalization not previously identified.

Supplemental Survey Services

Under Amendment No. 4, the Consultant Team will provide survey services required to locate four (4) tower bases for ComEd transmission line towers along the proposed alignment, determine the elevations of sag points on the transmission lines and connection points on the ends of the tower arms, and prepare the easement drawings and legal descriptions for the additional required easements. Additional topographic survey will also be performed to provide accurate base mapping for a portion of the transmission main alignment modified in response to ComEd restrictions regarding construction adjacent to a substation site.

Subsurface Utility Investigations (SUE)

Desktop utility investigations and coordination with right-of-way entities during the development of 30% design documents for AWSP-02-05 determined that subsurface utility investigations (SUE) required to support final design activities were significantly more extensive than planned during the development of Amendment No. 3. To maintain design progress for AWSP-02-05, Amendment No. 3 budget for the 100% Design and Ready-to-Advertise tasks ($273,442.25) was reallocated by the CPM for completion of the necessary SUE investigations. Amendment No. 4 includes budget to offset this deferral and replenish the original budget for completion of the 100% Design and Ready-to-Advertise tasks.

Office Engineering Services During Construction

Effort required for office engineering services during construction for Finished Water Transmission Main – Segment E has been estimated based on the framework presented in Section RC000.

- Work Package Management – Work Package Management as described in Section RC000 will be provided for the anticipated construction duration of 27 months.
- Conformed Documents – A total of 100 hours have been included for compiling conformed documents as defined in Section RC000.
- Submittal Reviews – It is assumed that a total of 90 original submittals and subsequent resubmittals be reviewed for this work package as defined in Section RC000.
- RFI Reviews - It is assumed that the office Consultant team will respond to a total of 80 RFIs for this work package as defined in section RC000.
- Change Order Preparation/Review – It is assumed that 13 change orders will be reviewed for this work package as defined in section RC000.
- Shop Witness Testing – It is assumed that two (2) shop witnessed tests will be provided under this activity. Each shop witnessed test is assumed to require one (1) team member for a total of two (2) days.
    - Large diameter valves
    - Large diameter water transmission main
- Field and Miscellaneous Meetings. A construction duration of 27 months has been assumed for the reoccurring meetings listed below.
    - Pre-Construction Meeting – It is assumed that two (2) team members will attend in-person the ½-day Pre-Construction Meeting.
    - Miscellaneous Meetings - A total of 54 ½-day meetings will be attended in-person by up to two (2) office Consultant Team members.
    - Conference Calls - A total of 54 one-hour conference calls are anticipated over the duration of this project.
- Permitting Assistance – Assistance will be provided for the following Commission-obtained permits:
    - IEPA drinking water construction permit
    - IDNR waterway crossing permit
    - Canadian National Railroad utility crossing permit
    - IDOT utility permit
    - USACE environmental permit
    - WCDOT construction permit
    - Village of Romeoville construction permit
    - City of Crest Hill
- Utility Coordination Assistance – Assistance will be provided to coordinate with the following entities during construction:
    - ComEd
    - Nicor
    - ONEOK NGL Pipeline, LLC, Natural Gas Pipeline of America
    - Comcast
    - AT&T
    - Fibernet
    - IDOT (e.g. signalization, lighting, drainage)
    - WCDOT (e.g. signalization, lighting, drainage)
- Commissioning and Startup Assistance – Commissioning and Startup Assistance will be provided as defined in RC000.
- Review of As-Builts - It is assumed 350 record drawings will be compiled based on the as-built conditions documented by the construction contractor as defined in Section RC000.

RC206 AWSP-02-06 Finished Water Transmission Main – F

Scope and budget for completion of final design engineering and bidding support services for the Finished Water Transmission Main – Segment F were authorized under Amendment No. 3. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

- Supplemental land acquisition activities required to support negotiation and documentation of easements beyond those originally anticipated
- Supplemental survey services as required to prepare easements and legal descriptions
- Supplemental soil management borings
- Supplemental design services due to a change in design alignment
- Office engineering services during construction as outlined in Section RC000.

Supplemental Land Acquisition Activities

Upon completion of the 30% design for this work package, the design team determined that the number of easements required is significantly greater than anticipated when Amendment No. 3 was prepared. Budget for non-survey services related to acquisition of the original easements is allocated as shown in Section RB400. Additional scope and budget for services related to the acquisition of the easements required is included in Amendment No. 4. The table below shows the number of additional easements assumed to be required for AWSP-02-06.

	Permanent Easements	**Temporary Easements**
Amend No. 4 Requirements	8	10
Amend No. 3 Allowance	$76,227	
Supplemental Easement Acquisition	$197,918	
Total Easement Acquisition Budget	$274,145	

Supplemental Survey

Under Amendment No. 4, the Consultant Team will also provide survey services required to prepare the easement drawings and legal descriptions for the additional required easements.

Supplemental Soil Management Borings

A total of 84 supplemental soil management borings are projected to be required to support completion of the soil management plan for AWSP-02-06.

Supplemental Design Services

During 30% design, concerns were identified regarding the condition of a twin box culvert on Gaylord Road north of Theodore Road that could be impacted by water main construction. Additional effort is required to complete a structural inspection of the box culvert and identify actions required to protect it during construction.

Office Engineering Services During Construction

Effort required for office engineering services during construction for Finished Water Transmission Main – Segment F has been estimated based on the framework presented in Section RC000.

- Work Package Management – Work Package Management as described in Section RC000 will be provided for the anticipated construction duration of 22 months.
- Conformed Documents – A total of 100 hours have been included for compiling conformed documents as defined in Section RC000.

- Submittal Reviews – It is assumed that a total of 90 original submittals and subsequent resubmittals be reviewed for this work package as defined in Section RC000.
- RFI Reviews - It is assumed that the office Consultant Team will respond to a total of 80 RFIs for this work package as defined in section RC000.
- Change Order Preparation/Review – It is assumed that 11 change orders will be reviewed for this work package as defined in section RC000.
- Shop Witness Testing – It is assumed that two (2) shop witnessed tests will be provided under this activity.
    - Large diameter valves
    - Large diameter water transmission main
- Field and Miscellaneous Meetings. A construction duration of 22 months has been assumed for the reoccurring meetings listed below.
    - Pre-Construction Meeting – It is assumed that two (2) team members will attend the ½-day Pre-Construction Meeting.
    - Miscellaneous Meetings - A total of 44 ½-daymeetings will be attended by up to two (2) office Consultant Team members.
    - Conference Calls - A total of 44 one-hour conference calls are anticipated over the duration of this project.
- Permitting Assistance – Assistance will be provided for the following Commission-obtained permits:
    - WCDOT construction permit
    - Forest Preserve of Will County construction permit
    - IEPA drinking water construction permit
    - IDNR waterway crossing permit
    - Canadian National Railroad utility crossing permit
    - IDOT utility permit
- Utility Coordination Assistance – Assistance will be provided to coordinate with the following entities during construction:
    - ComEd
    - AT&T
    - Comcast
    - Nicor
    - Adesta
    - City of Crest Hill (water and sewer)
    - City of Joliet (water and sewer)
- Commissioning and Startup Assistance – Commissioning and Startup Assistance will be provided as defined in RC000.
- Review of As-Builts - It is assumed that a total of 300 as-built drawings will be reviewed for this work package as defined in section RC000.

RC300 CIP #3 Intermediate Pump Station 1 and Storage Facility 1

RC301 AWSP-03-01 Intermediate Pump Station 1 and Storage Facility 1

Scope and budget for completion of final design engineering and bidding support services for the Intermediate Pump Station 1 and Storage Facility 1 CIP were authorized under Amendment No. 3. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

<u>Addition for Controls and Operations Center</u>

Consultant Team will prepare conceptual plans of a 4000-square foot building addition to the Intermediate Pump Station 1 to house the Controls and Operations Center for review with the GPWC Technical Advisory Committee (TAC). Considering input from the TAC and assuming no changes from the current Basis of Design concept, the Consultant Team will prepare 90%, 100%, and Ready-to-Advertise documents for integration into the AWSP-03-01 bidding documents.

Office Engineering Services During Construction

Effort required for office engineering services during construction for Intermediate Pump Station 1 and Storage Facility 1 has been estimated based on the framework presented in Section RC000.

- Work Package Management – Work Package Management as described in Section RC000 will be provided for the anticipated construction duration of 28 months.
- Conformed Documents – A total of 100 hours have been included for compiling conformed documents as defined in Section RC000.
- Submittal Reviews – It is assumed that a total of 120 original submittals and subsequent resubmittals be reviewed for this work package as defined in Section RC000.
- RFI Reviews - It is assumed that the office Consultant Team will respond to a total of 150 RFIs for this work package as defined in section RC000.
- Change Order Preparation/Review – It is assumed that 14 change orders will be reviewed for this work package as defined in section RC000.
- Shop Witness Testing – It is assumed that two (2) shop witnessed tests will be provided under this activity. Each shop witnessed test is assumed to require one (1) team member for a total of two (2) days.
    - Pumps/Motors/VFDs
    - Large diameter water transmission main
- Field and Miscellaneous Meetings. A construction duration of 28 months has been assumed for the reoccurring meetings listed below:
    - Pre-Construction Meeting – It is assumed that two (2) team members will attend the ½-day Pre-Construction Meeting.
    - Miscellaneous Meetings - A total of 56 ½-day progress meetings will be attended by up to two (2) office Consultant Team members.
    - Conference Calls - A total of 56 one-hour conference calls are anticipated over the duration of this project.
- Permitting Assistance – Assistance will be provided for the following Commission-obtained permits:
    - IEPA drinking water construction permit
    - Cook County Department of Transportation and Highway construction permit
    - Village of Lemont construction permit
- Utility Coordination Assistance – Assistance will be provided to coordinate with the following entities during construction:
    - ComEd
    - Nicor
    - AT&T
    - Comcast
    - Village of Lemont (water, sewer)
- Commissioning and Startup Assistance – Commissioning and Startup Assistance will be provided as defined in RC000.
- Review of As-Builts - It is assumed 180 record drawings will be compiled based on the as-built conditions documented by the construction contractor as defined in Section RC000.

RC400 CIP #4 Intermediate Storage Facility 2

RC401 AWSP-04-01 Intermediate Storage Facility 2

Scope and budget for completion of final design engineering and bidding support services for the Intermediate Storage Facility 2 were authorized under Amendment No. 3. Services to be performed by the Consultant Team under Amendment No. 4 are limited to performance of a drain tile survey of the site.

Given the agricultural nature of the Black Road and County Line site where AWSP-04-01 is to be constructed, it is necessary to perform a survey of existing drain tile within the site. Information from the survey will be used to identify measures needed to maintain appropriate drainage within and at the perimeter of the site.

Details of the approach used to perform the drain tile survey are presented in Section RC600 under the general description of the design approach for the regional transmission main.

Addition for Controls and Operations Center

Consultant Team will prepare conceptual plans of a 4000-square foot building addition to the Intermediate Pump Station 1 to house the Controls and Operations Center for review with the GPWC Technical Advisory Committee (TAC). Considering input from the TAC and assuming no changes from the current Basis of Design concept, the Consultant Team will prepare 90%, 100%, and Ready-to-Advertise documents for integration into the AWSP-03-01 bidding documents.

RC500 CIP #5: Regional SCADA

Amendment No. 3 included scope and budget for engineering services through final design and bidding for AWSP-05-01. Under Amendment No. 4, scope and budget is included for engineering services through final design and bidding for the following:

- AWSP-05-02: SCADA Programming and Installation
- AWSP-05-03: Video Surveillance
- AWSP-05-04: Security System

Amendment No. 4 scope and budget for CIP#5 also includes additional Design Coordination and Standards Development effort for:

- Providing technical information and guidance to develop multiple presentations for TAWG meetings regarding fiber conduit and cable costs and installation implications.
- Review of access point locations and appropriate detail call outs for 11 miles of fiber not originally included in the Basis of Design but added based on evaluation of SCADA communication options.

RC502 AWSP-05-02 SCADA Programming and Installation

The SCADA Programming and installation package includes programming and installation of the SCADA equipment at the GPWC control center and integration of the controllers and equipment at the facilities into a common system. The SCADA equipment at the control center includes two (2) operator interface computers, software alarm dialer, Historian server, Programmable Automation Controller, cellular modem, and firewall/security appliance between the SCADA network and the Regional Communication System network. Equipment on the Regional Communication System network include a virtual server for historian, reporting, and maintenance software and several computers for maintenance personnel to access historian, reporting and maintenance software.

Amendment No. 4 services include:

- Work Package Management services will be provided as defined by section RC000.
- Meetings and Coordination will be provided as defined by section RC000.
- Final Design Engineering will be provided as described in section RC000. There will be approximately 10 drawings, 26 front end specification sections and 10 technical specification sections provided.

  These documents will be submitted at the following milestones of the design development:
  - 60% Design – The 60% design submittal will consist of the following:
    a. Draft specifications of all sections to be used in the project
    b. Preliminary Engineering Report, updated to reflect the 60% design
    c. High Service Pump Station Plan, Intermediate Standpipe 1 and Pump Station Plan, Commission Control Room Plan, and three (3) typical delivery structure plans showing the physical location of the equipment
    d. Standard Details drawing

  - 90% Design – The 90% design submittal will advance plans and specifications to a 90% level of completion
  - 100% Design – The final design submittal will advance plans and specifications to a 100% level of completion
  - Ready-to-Advertise – Modify the 100% design documents as required for bidding. It is assumed that this effort will not require changes to the design aspects of the documents, but rather only changes related to finalizing the drawings/specifications for bidding (e.g., signing/sealing drawings, finalizing front end documents based on bid date, etc.)
- Cost Estimating – As described in section RC000, Class 3 and 2 OPCCs will be submitted with the 60% and 100% design packages, respectively.
- Bidding Assistance – Bidding assistance activities as defined in section RC000 will be provided for this work package. It is assumed that this work package will be advertised in January 2027.

Design and specification of Commission Enterprise systems such as human resources software, phone systems, personnel radios, billing/invoicing system/software associated with the Commission's non-water delivery operations are not included in this scope of services.

Layout of the Control and Operations Center as well as design and specification of operator consoles, video walls, public address system, specialized lighting, etc. for the control room will be completed under design tasks for work package AWSP-03-01. Design and specification of ancillary equipment and/or material required for the control room such as heating, ventilation, air conditioning, specialized floor coverings, and communications systems will also be completed under work package AWSP-03-01.

RC503 AWSP-05-03 Video Surveillance

The Video Surveillance system includes installation of video surveillance systems at each of the facilities associated with the High Service Pump Station Plan, Intermediate Standpipe 1 and Pump Station Plan.

Amendment No. 4 services include:

- Work Package Management services will be provided as defined by section RC000.
- Meetings and Coordination will be provided as defined by section RC000.
- Final Design Engineering will be provided as described in section RC000. There will be approximately 10 drawings, 26 front end specification sections and 10 technical specification sections provided.
  These documents will be submitted at the following milestones of the design development:
  - 60% Design – The 60% design submittal will consist of the following:
    a. Draft specifications of all sections to be used in the project
    b. Preliminary Engineering Report, updated to reflect the 60% design
    c. High Service Pump Station Plan, Intermediate Standpipe 1 and Pump Station Plan, and Commission Control Room Plan showing the physical location of the equipment
    d. Camera Mounting Details drawing
    e. Standard Details drawing
  - 90% Design – The 90% design submittal will advance plans and specifications to a 90% level of completion
  - 100% Design – The final design submittal will advance plans and specifications to a 100% level of completion
  - Ready-to-Advertise – Modify the 100% design documents as required for bidding. It is assumed that this effort will not require changes to the design aspects of the documents, but rather only changes related to finalizing the drawings/specifications for bidding (e.g., signing/sealing drawings, finalizing front end documents based on bid date, etc.)
- Cost Estimating – As described in section RC000, Class 3 and 2 OPCCs will be submitted with the 60% and 100% design packages, respectively.

- Permitting – Building permits for the installation of the video surveillance system required by municipalities in which the facilities are located will be identified in the specifications. It will be the responsibility of the Contractor to obtain these permits based on the Contractor's planned installation method and schedule.
- Bidding Assistance – Bidding assistance activities as defined in section RC000 will be provided for this work package. It is assumed that this work package will be advertised in Q2 2028.

RC504 AWSP-05-04 Security System

The Security System includes installation of security systems consisting of card readers, electric strikes, request to exit devices, etc. at the Suction Well, High Service Pump Station Plan, Intermediate Pump Station 1 and Storage Facility 1, and Intermediate Storage Facility 2.

Amendment No. 4 services include:

- Work Package Management services will be provided as defined by section RC000.
- Meetings and Coordination will be provided as defined by section RC000.
- Final Design Engineering will be provided as described in section RC000. There will be approximately 10 drawings, 26 front end specification sections and 10 technical specification sections provided.
  These documents will be submitted at the following milestones of the design development:
  - 60% Design – The 60% design submittal will consist of the following:
    a. Draft specifications of all sections to be used in the project
    b. Preliminary Engineering Report, updated to reflect the 60% design
    c. High Service Pump Station Plan, Intermediate Pump Station 1 and Intermediate Storage Facility 1 Plan, Intermediate Storage Facility 2 Plan, and Commission Control and Operations Center Room Plan showing the physical location of the equipment
    d. Device Mounting Details drawing
    e. Standard Details drawing
  - 90% Design – The 90% design submittal will advance plans and specifications to a 90% level of completion
  - 100% Design – The final design submittal will advance plans and specifications to a 100% level of completion
  - Ready-to-Advertise – Modify the 100% design documents as required for bidding. It is assumed that this effort will not require changes to the design aspects of the documents, but rather only changes related to finalizing the drawings/specifications for bidding (e.g., signing/sealing drawings, finalizing front end documents based on bid date, etc.)
- Cost Estimating – As described in section RC000, Class 3 and 2 OPCCs will be submitted with the 60% and 100% design packages, respectively.
- Permitting – Building permits for the installation of the security system required by municipalities in which the facilities are located will be identified in the specifications. It will be the responsibility of the Contractor to obtain these permits based on the Contractor's planned installation method and schedule.
- Bidding Assistance – Bidding assistance activities as defined in section RC000 will be provided for this work package. It is assumed that this work package will be advertised in Q2 2028.

RC600 CIP #6: Regional Transmission Main

The Regional Water Transmission Main included in CIP #6 consists of piping 48" in diameter and smaller required to convey water from the last segment of the 60"/66" diameter Finished Water Transmission Main to the delivery points for the Water Commission members. The finished water transmission main consists of the large diameter pipe (66" and 60" diameter) designed under CIP #2 (work packages AWSP-02-01 through AWSP-02-06). The smaller transmission main 48" in diameter and less are considered Regional

Transmission Mains designed and constructed as CIP #6. The regional transmission main design will include the pipe itself and appurtenances such as isolation valves, air release valves, accesses, and blow offs. The conduit and handholes for SCADA communications will also be included along the pipeline.

Additionally, CIP #6 includes the water delivery structures that are required between the regional transmission main and each Commission member's distribution system. Each Commission member has one or more delivery sites for a total of 13 delivery structures across the Commission's system. Each water delivery structure will be capable of metering and controlling water flow. Water delivery structure design will include the below-grade structure, associated piping, meters, valves, and the necessary infrastructure for SCADA, electrical, HVAC, and communication improvements.

The approximately 25 miles of regional transmission main and 13 delivery structures are divided into 9 work packages for design, bidding, and construction, identified as follows:

AWSP-06-01 Regional Transmission Main – A
AWSP-06-02 Regional Transmission Main – B
AWSP-06-03 Regional Transmission Main – C
AWSP-06-04 Regional Transmission Main – D
AWSP-06-05 Regional Transmission Main – E
AWSP-06-06 Water Delivery Structure 1
AWSP-06-07 Water Delivery Structure 2
AWSP-06-08 Water Delivery Structure 3
AWSP-06-09 Water Delivery Structure 4

Amendment No. 3 covered the scope and budget for preliminary engineering design (30%) of all five (5) regional transmission main work packages and three (3) water delivery structure work packages. Additionally, Amendment No. 3 covered the scope and budget for both preliminary engineering and final engineering (100%) for one (1) water delivery structure work package. Amendment No. 4 will cover the scope and budget to take the remaining eight (8) work packages from preliminary engineering through final engineering (30% to 100% design) and bidding.

General – Regional Transmission Main

The general scope items that apply to all the packages are described and specific information with assumed quantities for each is identified in the following sections for each work package. All assumptions are based on the transmission main alignment presented in the 2024 Basis of Design Report.

- Work Package Management – Services will be provided as defined by Section RC000 for both preliminary engineering and final design phases.
- Meetings and Coordination – Services will be provided as defined by Section RC000 for both preliminary engineering and final design phases. Additionally, the work package team will coordinate and facilitate meetings with permit entities along the package route.
- Design Standards Development – Services will be provided as defined by Section RC000 and will occur after the completion of the PER and during the 60% design phase. Design standards applicable to the regional transmission main will be developed once and used for each of the individual work packages.
- Field Investigations – Services will be provided as defined by Section RC000.
    - Field Survey
        - Preparation of Easement Documents
    - Drain Tile Survey
        - In areas where construction has the potential to impact existing agricultural drain tiles, a survey of the existing system is necessary.
        - Field reconnaissance and record research work will be completed in efforts to identify all areas which are typical to installation of existing drain tile. Existing features such as soils,

water table, topographical elevations, surface channels, depressions, wetlands and natural drainage ingress and egress locations are considered.

- Following field review, investigation areas are staked and slit trenched or hand probed to verify the existence of drain tile. All existing drain tiles encountered during the investigation procedure are logged on field mapping and repaired to their original state according to U.S.D.A. Natural Resource Conservation Service construction repair practices. Following specific point locations, drain tile routes are located by surface probing or electronic detection and field staked at 50' intervals including cut stakes for invert elevations where requested. Any existing drain tile not encountered during slit trenching or probe transect procedures will remain unknown.
- Record mapping shall be performed according to typical civil engineering mapping standards.
- Where necessary, existing drain tile routes will be located in the field by GPS location systems (<1m., Illinois State Plane East NAD 83) and recorded on final plans. The field staking process will include pipe invert cut stakes at all perimeter locations, strategic interior locations and 50' interval pin flagging along tile routes for electronic survey location by the project engineer if deemed necessary.
- Final drain tile mapping will be computer drafted on a base map including recent color digital aerial photography, topography and project limits. Mapped information will include the location of all existing drain tile routes and applicable drainage findings encountered during the field investigation process. A field report shall be attached to the plan containing evaluation information including size, flow, system effectiveness, restrictive siltation, pipe invert to ground surface depth, pipe type / quality, system classification and specific field notes.

- Environmental Investigations
  - Soil Management Program
    - Soil Sampling and Data Collection – Develop Sample Analysis Plan to determine frequency and location of soil samples. Collect samples and perform laboratory analysis based on plan
    - Soil Management Plan – Based on soil data, soils will be evaluated for worker safety and classified for offsite disposal, including preparation of LPC forms and coordination of soil acceptance with local facilities
  - Environmental Field Surveys
    - Wetland Delineation
    - Survey of threatened and endangered species
    - Cultural Resources/archaeological Investigations
    - Stream/Ditch Evaluation
- Existing Utility Investigations
  - Subsurface Utility Investigations (SUE)
    - Manage the SUE investigations including:
      - Utility Locating- Level A or Level B
      - Survey coordination
      - Permitting coordination
    - Use Canopy database to coordinate information
    - Coordinate with the Consultant Team to identify and compile utility locate needs and locations
    - Integrate other corridor field investigation needs into the SUE program (e.g. soil boring, etc.)
    - Field investigations of existing utilities including traffic control and survey using one or more of the following methodologies:

Test Hole/Potholing

- Underground utility to be exposed by non-destructive excavation method. The horizontal location, vertical location, material, size, quantity, and condition of utility facility to be documented using this locating method.
- As part of this task, the pavement core depth and material type can be documented. The Joliet AWSP Consultant Team can use this information for the pavement restoration plan.

Electromagnetic Locating

- Underground utility to be located using electromagnetic methods. This method provides non-destructive approximate locating of underground utilities using electromagnetic signals or low frequency communication signals by coupling the location device with a utility tracer wire. The approximate horizontal location and approximate vertical location of the utility to be documented using this locating method.

- Final Design Engineering services will be provided as described in section RC000. These documents will be submitted at the following milestones of the design development:
  - 60% Design - Advance the project design from the 30% level, adding additional details to the drawings, providing preliminary specifications, Geotechnical Interpretive Report of the boring and testing performed, an updated Preliminary Engineering Report and proposed outline of the Geotechnical Baseline Report.
  - 90% Design – Advance the project design from the 60% level, adding additional details to the drawings, providing completed specifications, Geotechnical Baseline Report, and Engineering Report.
  - 100% Design – Complete project design and submit all drawings, specifications, Geotechnical Data Report and Engineering Report.
  - Ready-to-Advertise – Modify the 100% design documents as required for bidding. It is assumed that this effort will not require changes to the design aspects of the documents, but rather only changes related to finalizing the drawings/specifications for bidding (e.g., signing/sealing drawings, finalizing front end documents based on bid date, etc.)

The design drawing submittals are anticipated to include the following sheets:

60%, 90% 100% Design
• Cover Sheet • Location and Vicinity Maps • List of Drawings • Common Symbols • Common Abbreviations • General Notes and Symbols • Overall Site Plan • Alignment and Control • Easements • Demolition – Overall/Key Plan • Demolition Sheets • Regional Main – Overall/Key Map • Regional Main Plan & Profile Sheets • Regional Main – Specific Detailed Plans • Regional Main Details • Boring/Crossing Details

60%, 90% 100% Design
• Corrosion Control Details • SCADA Details • Utility Relocation Plan & Profile • Water Main Details • Sanitary Sewer Details • Storm Sewer Details • Restoration – Overall/Key Plan • Restoration Plan Sheets • Roadway Restoration Details • SESC – Overall/Key Plan • SESC Plan Sheets • SWPP Details • MOT – Overall • MOT Plan sheets • MOT – Intersection/Multistage • MOT – Temp Signals • MOT – Details • Structural Plans • Structural Details • Mechanical Plans • Mechanical Details • Soil Boring – Overall Plan and Boring Data • SUE – Overall Plan and Pothole Data

- Cost Estimating – As described in section RC000, Class 3 and 2 OPCCs will be submitted with the 60% and 100% design packages, respectively.
- Land Acquisition – The CIP #6 transmission main design teams will coordinate with and support the land acquisition specialists responsible for the efforts described in the Amendment No. 3 scope for task RB400. Based on the 30% design activities completed, the design teams have produced updated estimates of the number and type of acquisitions required for each CIP #6 transmission main work package. Budget for prior acquisition estimates developed under Amendment No. 3 is included in the land acquisition allowance previously authorized under Amendment No. 3. Budget included under Amendment No. 4 is for additional acquisition activities determined to be necessary and is included in the individual work package budgets.
- Utility Relocation Coordination – Coordination and management of utility data requests, data obtained from each utility, conflicts between existing utilities with proposed regional transmission main, and if needed, coordination of relocation of existing utilities.

  <u>Existing Utility Coordination and Data Collection</u>
  - JULIE Design Stage Locate Request
    - Prepare and submit JULIE design stage locate requests based on current transmission main alignment upon direction from design engineer.
  - Update the utility database for the corridor.
    - Compile the information received from the design stage locate requests and update the corridor's utility database.
    - Follow up with the facility owners and municipalities as needed to collect the data.

    - Manage this database and make this information available to the design section engineers.
- QA/QC of the base file
    - Work with design engineer to review CAD base utility file.

Corridor Wide Utility Tracking and Standards

A specific member of the Consultant Team will be responsible for utility tracking and standards which will include the following general tasks:

- Create a Design Utility Report (DUR)
    - Prepare DUR's for each design section using Canopy database. The DUR tracks the coordination, relocation, costs, review status, permitting, etc. for each utility.
    - Provide DUR's to each design engineer and review status.
    - Create overall DUR for programmatic level reporting.
- Create a Notification of Utility Interference (NOI)
    - With the design engineer determine if the proposed transmission main may be in conflict with existing facilities and prepare NOIs. Track information in Canopy database system.
    - Document the responses from the facility owner and track the precautions or protection measures needed for construction.
- Standards and Specifications
    - Develop utility standards and specifications to be used in each construction package. This will allow for uniform utility standards and specifications throughout the program. Standards and specifications will include such topics such as utility contacts and requirements associated with watch and protect, construction protection, and clearances.

Utility Reimbursement Program

- Coordinate with design engineer and manage a Utility Reimbursement Program to fund the utility relocations required for this project. Utility Reimbursement Program will document and track funding, estimating, utility agreements between water commission and utility companies, utility work orders, utility change orders, and invoices.

Utility Relocation Analysis

- Coordinate between the Consultant Team and utility company to develop a utility relocation cost benefit analysis to determine the most economical solution to utility conflicts.
    - Coordinate between the design engineer and utility company to develop a schedule analysis. This will determine what the best option is to keep the project on schedule, whether it be redesigning transmission main around the utility or relocating the utility.

- Corrosion Protection – Analysis of soil conditions and design of a passive cathodic protection system.
- Permitting – Permit requirements will be determined, applications prepared, and submittals completed by the Consultant Team. Additional or overall permit tracking will occur at the design level.
- Bidding Assistance – Bidding assistance activities as defined in section RC000 will be provided for this work package.

Stray Current Interference Study

An AC interference study will be performed on the CIP #6 portions of the AWSP water transmission main system as described under task RC200 and documented in a single report addressing potential stray current interference issues along the transmission main alignment. Budget for the portion of the analysis related to CIP #6 is included under RC600.

RC601 AWSP-06-01 Regional Transmission Main – A

Scope and budget for preliminary design services for Regional Transmission Main – Section A were authorized under Amendment No. 3. Under Amendment No. 4 the preliminary engineering design will be progressed through final design, bidding support and engineering services during construction. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

Meetings and Coordination

- Consultant Team Meetings – One (1) per week per design phase.
- GPWC Member Community Meetings - monthly
- Permit Agency Meetings – One (1) per agency per design phase; excludes environmental and pipeline permitting agencies.

Field Investigations

- Existing Utility Investigation – The allocation of utility investigations is estimated as follows:

SUE	Estimated No. Of Locations
Test Hole/Potholing	85
Electromagnetic Locating	15
Sonde	35

Design Engineering

Drawing Sheet Estimate:

Phase	No. Of Sheets
60%, 90%, 100%	285 (each submittal)

Land Acquisition

Upon completion of the 30% design for this work package, the design team determined that the number of easements required is greater than anticipated when Amendment No. 3 was prepared. Budget for non-survey services related to acquisition of the original easements is allocated as shown in Section RB400. Additional scope and budget for services related to the acquisition of the easements required is included in Amendment No. 4. The table below shows the number of additional easements assumed to be required for AWSP-06-01.

	Permanent Easements	Temporary Easements
Amend No. 4 Requirements	16	29
Amend No. 3 Allowance	$15,245	
Supplemental Easement Acquisition	$451,649	
Total Easement Acquisition Budget	$466,894	

Anticipated Permits

Type/Entity	No. Of Permits	Notes
IEPA	4	NOI, Construction, LPC-662, LPC-663
USACE	1	Joint Permit
Municipal	2	Romeoville, Crest Hill; 1 permit/work package
Will Co. DOT	1	1 permit/work package
ComEd	1	1 permit/crossing

Railroad	1	CN Railroad: 1 permit/crossing
Pipeline	3	ONEOK NGL Pipeline, Natural Gas Pipeline Co of America (KMI); 1 permit/crossing
Total	**14**	

Office Engineering Services During Construction

Effort required for office engineering services during construction for the tunnel extension has been estimated based on the framework presented in Section RC000.

- Work Package Management – Work Package Management as described in Section RC000 will be provided for the anticipated construction duration of 26 months.
- Conformed Documents – A total of 100 hours have been included for compiling conformed documents as defined in Section RC000.
- Submittal Reviews – It is assumed that a total of 80 original submittals and subsequent resubmittals be reviewed for this work package as defined in Section RC000.
- RFI Reviews - It is assumed that the office Consultant Team will respond to a total of 80 RFIs for this work package as defined in section RC000.
- Change Order Preparation/Review – It is assumed that 13 change orders will be reviewed for this work package as defined in section RC000.
- Shop Witness Testing – No shop witness testing is anticipated for this work package
- Field and Miscellaneous Meetings. A construction duration of 26 months has been assumed for the reoccurring meetings listed below.
    - Pre-Construction Meeting – It is assumed that two (2) team members will attend the ½-day Pre-Construction Meeting.
    - Miscellaneous Meetings - A total of 52 ½-day meetings will be attended by up to two (2) office Consultant Team members.
    - Conference Calls - A total of 52 one-hour conference calls are anticipated over the duration of this project.
- Permitting Assistance – Assistance will be provided for the following Commission-obtained permits:
    - IEPA drinking water construction permit
    - USACE environmental permit
    - Village of Romeoville construction permit
    - City of Crest Hill construction permit
    - WCDOT construction permit
    - Canadian National Railroad utility crossing permit
    - ONEOK NGL Pipeline, Natural Gas Pipeline Co of America (KMI) utility crossing permit
- Utility Coordination Assistance – Assistance will be provided to coordinate with the following entities during construction:
    - ComEd
    - Nicor
    - ONEOK
    - Kinder Morgan
    - Comcast
    - AT&T
    - Village of Romeoville (water, sewer)
    - City of Crest Hill (water, sewer)
    - WCDOT (signalization, lighting, drainage)

- Commissioning and Startup Assistance – Commissioning and Startup Assistance will be provided as defined in RC000.
- Preparation of Record Drawings - It is assumed 285 record drawings will be compiled based on the as-built conditions documented by the construction contractor as defined in Section RC000.

RC602 AWSP-06-02 Regional Transmission Main – B

Scope and budget for preliminary design services for Regional Transmission Main – Section B were authorized under Amendment No. 3. Under Amendment No. 4 the preliminary engineering design will be progressed through final design, bidding support and engineering services during construction. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

Meetings and Coordination

- Consultant Team Meetings – One (1) per week per design phase
- GPWC Member Community Meetings - monthly
- Permit Agency Meetings – One (1) per agency per design phase; excludes environmental and pipeline permitting agencies.

Field Investigations

Existing Utility Investigation – The allocation of utility investigations is estimated as follows:

SUE	Estimated No. Of Locations
Test Hole/Potholing	77
Electromagnetic Locating	11

Design Engineering

Drawing Sheet Estimate:

Phase	No. Of Sheets
60%, 90%, 100%	275 (each submittal)

Land Acquisition

Upon completion of the 30% design for this work package, the design team determined that easements are not required for AWSP-06-02.

Anticipated Permits

Type/Entity	No. Of Permits	Notes
IEPA	4	NOI, Construction, LPC-662, LPC-663
USACE	2	Joint Permit
IDNR	2	Stream Crossings
Municipal	1	Joliet; 1 permit/work package
IDOT	2	1 permit/crossing
FPD Will County	1	1 permit/crossing
ComEd	1	1 permit/crossing
Pipeline	1	Natural Gas Pipeline Co of America (KMI); 1 permit/crossing
Total	**14**	

RC603 AWSP-06-03 Regional Transmission Main – C

Scope and budget for preliminary design services for Regional Transmission Main – Section C were authorized under Amendment No. 3. Under Amendment No. 4 the preliminary engineering design will be progressed through final design, bidding support and engineering services during construction. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

Meetings and Coordination

- Consultant Team Meetings – One (1) per week per design phase
- GPWC Member Community Meetings - monthly
- Permit Agency Meetings – One (1) per agency per design phase; excludes environmental and pipeline permitting agencies.

Field Investigations

- Existing Utility Investigation – The allocation of utility investigations is estimated as follows:

SUE	Estimated No. Of Locations
Test Hole/Potholing	17
Electromagnetic Locating	13

Design Engineering

Drawing Sheet Estimate:

Phase	No. Of Sheets
60%, 90%, 100%	180 (each submittal)

Land Acquisition

Upon completion of the 30% design for this work package, the design team determined that the number of easements required is greater than anticipated when Amendment No. 3 was prepared. Budget for non-survey services related to acquisition of the original easements is allocated as shown in Section RB400. Additional scope and budget for services related to the acquisition of the easements required is included in Amendment No. 4. The table below shows the number of additional easements assumed to be required for AWSP-06-03.

	Permanent Easements	Temporary Easements
Amend No. 4 Requirements	1	2
Amend No. 3 Allowance	$30,491	
Supplemental Easement Acquisition	$4,135	
Total Easement Acquisition Budget	$34,626	

Anticipated Permits

Type/Entity	No. Of Permits	Notes
IEPA	4	NOI, Construction, LPC-662, LPC-663
USACE	1	Joint Permit
Municipal	2	Joliet, Shorewood; 1 permit/work package

IDOT	2	1 permit/crossing
Pipeline	1	Natural Gas Pipeline Co of America (KMI); 1 permit/crossing
Total	**10**	

Office Engineering Services During Construction

Effort required for office engineering services during construction for Finished Water Transmission Main – Segment B has been estimated based on the framework presented in Section RC000 above.

- Work Package Management – Work Package Management as described in Section RC000 will be provided for the anticipated construction duration of 26 months.
- Conformed Documents – A total of 100 hours have been included for compiling conformed documents as defined in Section RC000.
- Submittal Reviews – It is assumed that a total of 90 original submittals and subsequent resubmittals be reviewed for this work package as defined in Section RC000.
- RFI Reviews - It is assumed that the office Consultant Team will respond to a total of 80 RFIs for this work package as defined in section RC000.
- Change Order Preparation/Review – It is assumed that 13 change orders will be reviewed for this work package as defined in section RC000.
- Shop Witness Testing – It is assumed that two (2) shop witnessed tests will be provided under this activity. Each shop witnessed test is assumed to require one (1) team member for a total of two (2) days.
    - Large diameter valves
    - Large diameter water transmission main
- Field and Miscellaneous Meetings. A construction duration of 26 months has been assumed for the reoccurring meetings listed below.
    - Pre-Construction Meeting – It is assumed that two (2) team members will attend in-person the ½-day Pre-Construction Meeting.
    - Miscellaneous Meetings - A total of 52 ½-day progress meetings will be attended in-person by up to two (2) office Consultant Team members.
    - Conference Calls - A total of 52 one-hour conference calls are anticipated over the duration of this project.
- Permitting Assistance – Assistance will be provided for the following Commission-obtained permits:
    - IEPA drinking water construction permit
    - USACE environmental permit
    - City of Joliet construction permit
    - Village of Shorewood construction permit
    - IDOT utility permit
    - Natural Gas Pipeline Co of America (KMI) utility crossing permit
- Utility Coordination Assistance – Assistance will be provided to coordinate with the following entities during construction:
    - ComEd
    - Nicor
    - Natural Gas Pipeline Co of America (KMI)
- Commissioning and Startup Assistance – Commissioning and Startup Assistance will be provided as defined in RC000.
- Preparation of Record Drawings - It is assumed 180 record drawings will be compiled based on the as-built conditions documented by the construction contractor as defined in Section RC000.

RC604 AWSP-06-04 Regional Transmission Main – D

Scope and budget for preliminary design services for Regional Transmission Main – Section D were authorized under Amendment No. 3. Under Amendment No. 4 the preliminary engineering design will be

progressed through final design, bidding support and engineering services during construction. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

Meetings and Coordination

- Consultant Team Meetings – One (1) per week per design phase.
- GPWC Member Community Meetings - monthly
- Permit Agency Meetings – One (1) per agency per design phase; excludes environmental and pipeline permitting agencies.

Field Investigations

- A drain tile survey is required along segments of the AWSP-06-04 alignment as listed below. The drain tile survey will be performed using the approach outlined under Section RC600.

Location	Length
Black Road	8,854’
County Line Road	16,090’
Mound Road	1,932’

- Field Survey – Processing additional LIDAR data to widen the survey base file limits to ensure overlap with the water main alignment shift into the farm field.

- Utility Investigation – The allocation of utility investigations is estimated as follows:

SUE	Estimated No. Of Locations
Test Hole/Potholing	12
Electromagnetic Locating	25

Design Engineering

Drawing Sheet Estimate:

Phase	No. Of Sheets
60%, 90%, 100%	400 (each submittal)

Land Acquisition

Upon completion of the 30% design for this work package, the design team determined that the number of easements required is greater than anticipated when Amendment No. 3 was prepared. Budget for non-survey services related to acquisition of the original easements is allocated as shown in Section RB400. Additional scope and budget for services related to the acquisition of the easements required is included in Amendment No. 4. The table below shows the number of additional easements assumed to be required for AWSP-06-04.

	Permanent Easements	Temporary Easements
Amend No. 4 Requirements	33	30
Amend No. 3 Allowance	$232,238	
Supplemental Easement Acquisition	$450,380	
Total Easement Acquisition Budget	$682,618	

Anticipated Permits

Type/Entity	No. Of Permits	Notes
IEPA	4	NOI, Construction, LPC-662, LPC-663
USACE	1	Joint Permit
Municipal	1	Shorewood: 1 permit/work package
Troy Township	1	1 permit/work package
Seward Township	1	1 permit/work package
IDOT	1	1 permit/crossing
ComEd	1	1 permit/crossing
Pipeline	7	Northern Illinois Gas Co., Enbridge Energy, ONEOK NGL Pipeline, Natural Gas Pipeline Co of America (KMI), Amoco Oil Co., Guardian Pipeline, ANR Pipeline Co.; 1 permit/crossing
Total	**17**	

RC605 AWSP-06-05 Regional Transmission Main – E

Scope and budget for preliminary design services for Regional Transmission Main – Section E were authorized under Amendment No. 3. Under Amendment No. 4 the preliminary engineering design will be progressed through final design, bidding support and engineering services during construction. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

Meetings and Coordination

- Consultant Team Meetings – One (1) per week per design phase
- GPWC Member Community Meetings - monthly
- Permit Agency Meetings – One (1) per week per design phase, excludes environmental and pipeline permitting agencies.

Field Investigations

- Existing Utility Investigation – The allocation of utility investigations is estimated as follows:

SUE	Estimated No. Of Locations
Test Hole/Potholing	16
Electromagnetic Locating	0

- A drain tile survey is required along segments of the AWSP-06-05 alignment. The drain tile survey will be performed using the approach outlined under Section RC600.

Design Engineering

Drawing Sheet Estimate:

Phase	No. Of Sheets
60%, 90%, 100%	410 (each submittal)

Land Acquisition

Upon completion of the 30% design for this work package, the design team determined that the number of easements required is greater than anticipated when Amendment No. 3 was prepared. Budget for non-survey services related to acquisition of the original easements is allocated as shown in Section RB400. Additional scope and budget for services related to the acquisition of the easements required is included in Amendment No. 4. The table below shows the number of additional easements assumed to be required for AWSP-06-05.

	Permanent Easements	Temporary Easements
Amend No. 4 Requirements	36	38
Amend No. 3 Allowance	$561,234	
Supplemental Easement Acquisition	$212,795	
Total Easement Acquisition Budget	$774,029	

Anticipated Permits

Type/Entity	No. Of Permits	Notes
IEPA	4	NOI, Construction, LPC-662, LPC-663
IDNR	1	Stream Crossing
USACE	1	Joint Permit
Municipal	2	Minooka, Channahon; 1 permit/work package
Kendall Co. Highway Dept.	1	1 permit/work package
Seward Township	1	1 permit/work package
Aux Sable Township	1	1 permit/work package
Grundy County	1	1 permit/work package
IDOT	2	1 permit/crossing
Railroad	2	CSX Railroad, EJE Railroad; 1 permit/crossing
ComEd	1	1 permit/crossing
Pipeline	5	Northern Illinois Gas Co. (Nicor), Kinder Morgan, Northern Border Pipeline Co. (3); 1 permit/crossing
Total	**22**	

General – Water Delivery Structures

The Water Delivery Structures will be used as the delineation point between the GPWC-owned infrastructure and member community-owned infrastructure. There will be a total of 13 Delivery Structures based on the 2024 Basis of Design report. Delivery Structure Work Packages and groupings are as follows:

AWSP-06-06 (Construction 2025-2026)

- Joliet Primary Water Delivery Structure (Vault Structure and Site Civil Only)
- Channahon Primary Water Delivery Structure (Vault Structure and Site Civil Only)
- Minooka Primary Water Delivery Structure (Vault Structure and Site Civil Only)
- Minooka Secondary Water Delivery Structure (Vault Structure and Site Civil Only)

AWSP-06-07 (Construction 2026-2027)

- Joliet Secondary Water Delivery Structure (Vault Structure and Site Civil Only)
- Romeoville Primary Water Delivery Structure (Vault Structure and Site Civil Only)
- Romeoville Secondary Water Delivery Structure (Vault Structure and Site Civil Only)
- Joliet Quaternary Water Delivery Structure (Vault Structure and Site Civil Only)

AWSP-06-08 (Construction 2027-2028)

- Mechanical, Electrical, and Plumbing (MEP) Installation (AWSP-06-06 WDS and AWSP-06-08)
- Shorewood Primary Water Delivery Structure (Vault Structure, Site Civil and MEP)
- Joliet Tertiary Water Delivery Structure (Vault Structure, Site Civil and MEP)
- Crest Hill Secondary Water Delivery Structure (Vault Structure, Site Civil and MEP)

AWSP-06-09 (Construction 2027-2029)

- Mechanical, Electrical, and Plumbing Installation (AWSP-06-07 WDS and AWSP-06-09)
- Crest Hill Primary Water Delivery Structure (Vault Structure, Site Civil and MEP)
- Channahon Secondary Water Delivery Structure (Vault Structure, Site Civil and MEP)

Amendment No. 3 covered the scope and budget for preliminary engineering design (30%) of all four (4) water delivery structure work packages and preliminary and final engineering design for one (1) work package (AWSP-06-08). Amendment No. 4 will cover the scope and budget to take the remaining three (3) water delivery structure work packages (AWSP-06-06, AWSP-06-07, AWSP-06-09) from preliminary design through final design; and provide office engineering services during construction for AWSP-06-06 and AWSP-06-07.

Note that a formal 60% submittal will not be included, but interim progress set will be reviewed with the commission.

Amendment No. 4 services include:

- Work Package Management services will be provided as defined by section RC000.
- Meetings and Coordination – In addition to the meeting and coordination activities outlined in section RC000, the Consultant Team will coordinate with member communities and their third-party site designers.
- Design Standards Development – Design standards applicable to the water delivery structures which are developed during the final design of the work package AWSP-06-08 facilities, as scoped under previous amendment, will be refined for the other work packages under this amendment.
- Field Investigations – The Consultant Team will coordinate with Member Communities to complete geotechnical investigations as described below. It is assumed that field survey and environmental investigations for these sites will be provided by the member communities.
    - Soil Management Program

  - Soil Sampling and Data Collection – Develop Sample Analysis Plan to determine frequency and location of soil samples. Collect samples and perform laboratory analysis based on plan.
  - Soil Management Plan – Based on soil data, soils will be evaluated for worker safety and classified for offsite disposal, including preparation of LPC forms and coordination of soil acceptance with local facilities.
- Final Design Engineering services, as described generally in section RC000 with details included below, will be provided for work packages AWSP-06-06, AWSP 06-07, and AWSP 06-09.
- Cost Estimating – As described in section RC000, Class 2 OPCC's will be developed based on the 100% design package for AWSP-06-06, AWSP-06-07, and AWSP-06-09. Under Amendment No. 4, no additional OPCCs will be prepared for AWSP-06-08.
- Early Procurement Package – No early procurement packages are included in this scope.
- Land Acquisition – Land acquisition and site layout design are to be completed by member community third-party designers prior to Delivery Structure final design. Land acquisition is not planned for this work package, however, communication with commission member communities regarding necessary plot size, location, and temporary and permanent easement extents for the commission is included.
- Bidding Assistance – Bidding services as described in section RC000 will be provided for all water delivery structure work packages

RC606 AWSP-06-06 Water Delivery Structure 1

Scope and budget for preliminary design services for AWSP-06-06 were authorized under Amendment No. 3. Under Amendment No. 4 the preliminary engineering design will be progressed through final design, bidding support and engineering services during construction. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

<u>Design Engineering</u>

- 90% Design – Advance the project design from the 30% level, adding additional details to the drawings, providing completed specifications and Geotechnical Interpretive Report of the boring data provided by the member communities, final Preliminary Engineering Report (updated from 30%), and a Class 2 OPCC.
- 100% Design – Complete project design and submit all drawings and specifications.
- Ready-to-Advertise – Modify the 100% design documents as required for bidding. It is assumed that this effort will not require changes to the design aspects of the documents, but rather only changes related to finalizing the drawings/specifications for bidding (e.g., signing/sealing drawings, finalizing front end documents based on bid date, etc.)

It is assumed that the final bid set of documents for work package AWSP-06-06 will contain up to 105 drawings as listed below.

G (General) -Sheets
• Cover Sheet • Location and Vicinity Maps • List of Drawings • Common Symbols • Common Abbreviations • Soil Borings • Pipe Schedule
C (Civil) -Sheets
• General Notes and Symbols

• Overall Site Plans, Control Points, Easements, Grading Plans, Traffic Management Plan • Site Improvements • Water Main Details • Restoration or Landscape Plans • Soil Erosion and Sediment Control • SWPP Details
S (Structural) -Sheets
• General Notes and Symbols • Structural Plan and Sections • Structural Details
M (Mechanical) -Sheets
• General Mechanical Notes and Symbols • Mechanical Plan and Sections • Mechanical Details
I (Instrumentation and Controls) -Sheets
• General I&C Notes and Symbols • I&C Details and Control Schematics • PIDs
E (Electrical) -Sheets
• Electrical Site Plan • Electrical Plan (Power and Lighting) • One-Line Diagram • Electrical Details and Conduit Schedules
HVAC (Building Mechanical) -Sheets
• General HVAC Notes and Symbols • General Plumbing Notes and Symbols • HVAC Plan and Sections • HVAC Details • Plumbing Plan and Sections • Plumbing Details
A (Architectural) -Sheets
• General Mechanical Notes and Symbols • Life Safety Plan

Office Engineering Services During Construction

Effort required for office engineering services during construction for this work package has been estimated based on the framework presented in Section RC000.

- Work Package Management – Work Package Management as described in Section RC000 will be provided for the anticipated construction duration of 15 months.
- Conformed Documents – A total of 80 hours have been included for compiling conformed documents as defined in Section RC000.
- Submittal Reviews – It is assumed that a total of 20 original submittals and subsequent resubmittals be reviewed for this work package as defined in Section RC000.
- RFI Reviews - It is assumed that the office Consultant Team will respond to a total of 40 RFIs for this work package as defined in section RC000.

- Change Order Preparation/Review – It is assumed that eight (8) change orders will be reviewed for this work package as defined in section RC000.
- Shop Witness Testing – It is assumed that one (1) shop witnessed test will be provided under this activity.
    - Flowmeters or Flow Control Valves
- Field and Miscellaneous Meetings. A construction duration of 15 months has been assumed for the reoccurring meetings listed below.
    - Pre-Construction Meeting – It is assumed that two (2) team members will attend the ½-day Pre-Construction Meeting.
    - Miscellaneous Meetings - A total of 15 ½-day meetings will be attended by up to two (2) office Consultant Team members.
    - Conference Calls - A total of 30 one-hour conference calls are anticipated over the duration of this project.
- Permitting Assistance – Assistance will be provided for the following Commission-obtained permits:
    - IEPA drinking water construction permit
- Utility Coordination Assistance – Assistance will be provided to coordinate with the following entities during construction:
    - ComEd
    - Nicor
- Commissioning and Startup Assistance – Commissioning and Startup Assistance will be provided as defined in RC000.
- Preparation of Record Drawings - It is assumed 105 record drawings will be compiled based on the as-built conditions documented by the construction contractor as defined in Section RC000.

RC607 AWSP-06-07 Water Delivery Structure 2

Scope and budget for preliminary design services for AWSP-06-07 were authorized under Amendment No. 3. Under Amendment No. 4 the preliminary engineering design will be progressed through final design, bidding support and engineering services during construction. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

<u>Design Engineering</u>

- 90% Design – Advance the project design from the 30% level, adding additional details to the drawings, providing completed specifications and Geotechnical Interpretive Report of the borings provided by member communities, final Preliminary Engineering Report (updated from 30%), and a Class 2 OPCC.
- 100% Design – Complete project design and submit all drawings and specifications.
- Ready-to-Advertise – Modify the 100% design documents as required for bidding. It is assumed that this effort will not require changes to the design aspects of the documents, but rather only changes related to finalizing the drawings/specifications for bidding (e.g., signing/sealing drawings, finalizing front end documents based on bid date, etc.)

It is assumed that the final bid set of documents for work package AWSP-06-07 will contain up to 105 drawings as listed below.

G (General) -Sheets
• Cover Sheet • Location and Vicinity Maps • List of Drawings • Common Symbols • Common Abbreviations • Soil Borings

• Pipe Schedule
C (Civil) -Sheets
• General Notes and Symbols • Overall Site Plans, Control Points, Easements, Grading Plans, Traffic Management Plan • Site Improvements • Water Main Details • Restoration or Landscape Plans • Soil Erosion and Sediment Control • SWPP Details
S (Structural) -Sheets
• General Notes and Symbols • Structural Plan and Sections • Structural Details
M (Mechanical) -Sheets
• General Mechanical Notes and Symbols • Mechanical Plan and Sections • Mechanical Details
I (Instrumentation and Controls) -Sheets
• General I&C Notes and Symbols • I&C Details and Control Schematics • PIDs
E (Electrical) -Sheets
• Electrical Site Plan • Electrical Plan (Power and Lighting) • One-Line Diagram • Electrical Details and Conduit Schedules
HVAC (Building Mechanical) -Sheets
• General HVAC Notes and Symbols • General Plumbing Notes and Symbols • HVAC Plan and Sections • HVAC Details • Plumbing Plan and Sections • Plumbing Details
A (Architectural) -Sheets
• General Mechanical Notes and Symbols • Life Safety Plan

Office Engineering Services During Construction

Effort required for office engineering services during construction for this work package has been estimated based on the framework presented in Section RC000.

- Work Package Management – Work Package Management as described in Section RC000 will be provided for the anticipated construction duration of 15 months.
- Conformed Documents – A total of 80 hours have been included for compiling conformed documents as defined in Section RC000.
- Submittal Reviews – It is assumed that a total of 20 original submittals and subsequent resubmittals be reviewed for this work package as defined in Section RC000.

- RFI Reviews - It is assumed that the office Consultant Team will respond to a total of 40 RFIs for this work package as defined in section RC000.
- Change Order Preparation/Review – It is assumed that eight (8) change orders will be reviewed for this work package as defined in section RC000.
- Shop Witness Testing – It is assumed that one (1) shop witnessed test will be provided under this activity.
    - Flowmeters or Flow Control Valves
- Field and Miscellaneous Meetings. A construction duration of 15 months has been assumed for the reoccurring meetings listed below.
    - Pre-Construction Meeting – It is assumed that two (2) team members will attend the ½-day Pre-Construction Meeting.
    - Miscellaneous Meetings - A total of 15 ½-day meetings will be attended by up to two (2) office Consultant Team members.
    - Conference Calls - A total of 30 one-hour conference calls are anticipated over the duration of this project.
- Permitting Assistance – Assistance will be provided for the following Commission-obtained permits:
    - IEPA drinking water construction permit
- Utility Coordination Assistance – Assistance will be provided to coordinate with the following entities during construction:
    - ComEd
    - Nicor
- Commissioning and Startup Assistance – Commissioning and Startup Assistance will be provided as defined in RC000.
- Preparation of Record Drawings - It is assumed 105 record drawings will be compiled based on the as-built conditions documented by the construction contractor as defined in Section RC000.

RC608 AWSP-06-08 Water Delivery Structure 3

Scope and budget for completion of final design engineering for AWSP-06-08 were authorized under Amendment No. 3. Services to be performed by the Consultant Team under Amendment No. 4 are soils management, permitting, and bidding support as described in section RC000.

RC609 AWSP-06-09 Water Delivery Structure 4

Scope and budget for preliminary design services for AWSP-06-09 were authorized under Amendment No. 3. Under Amendment No. 4 the preliminary engineering design will be progressed through final design and bidding support. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

<u>Design Engineering</u>

- 90% Design – Advance the project design from the 30% level, adding additional details to the drawings, providing completed specifications and Geotechnical Interpretive Report of the borings provided by member communities, final Preliminary Engineering Report (updated from 30%), and a Class 2 OPCC.
- 100% Design – Complete project design and submit all drawings and specifications.
- Ready-to-Advertise – Modify the 100% design documents as required for bidding. It is assumed that this effort will not require changes to the design aspects of the documents, but rather only changes related to finalizing the drawings/specifications for bidding (e.g., signing/sealing drawings, finalizing front end documents based on bid date, etc.)

It is assumed that the final bid set of documents for work package AWSP-06-09 will contain up to 84 drawings as listed below.

G (General) -Sheets
• Cover Sheet • Location and Vicinity Maps • List of Drawings • Common Symbols • Common Abbreviations • Soil Borings • Pipe Schedule
C (Civil) -Sheets
• General Notes and Symbols • Overall Site Plans, Control Points, Easements, Grading Plans, Traffic Management Plan • Site Improvements • Water Main Details • Restoration or Landscape Plans • Soil Erosion and Sediment Control • SWPP Details
S (Structural) -Sheets
• General Notes and Symbols • Structural Plan and Sections • Structural Details
M (Mechanical) -Sheets
• General Mechanical Notes and Symbols • Mechanical Plan and Sections • Mechanical Details
I (Instrumentation and Controls) -Sheets
• General I&C Notes and Symbols • I&C Details and Control Schematics • PIDs
E (Electrical) -Sheets
• Electrical Site Plan • Electrical Plan (Power and Lighting) • One-Line Diagram • Electrical Details and Conduit Schedules
HVAC (Building Mechanical) -Sheets
• General HVAC Notes and Symbols • General Plumbing Notes and Symbols • HVAC Plan and Sections • HVAC Details • Plumbing Plan and Sections • Plumbing Details
A (Architectural) -Sheets
• General Mechanical Notes and Symbols • Life Safety Plan

RC700 CIP #7: Mega Crossings

Final design engineering and bidding support services for the CIP #7 work packages were authorized under Amendment No. 3. Amendment No. 4 scope and budget for these work packages is limited to:

- Geophysical borehole scanning to better define rock characteristics and support the trenchless design.
- Supplemental land acquisition activities required to support negotiation and documentation of easements beyond those originally anticipated.
- Fish barrier modelling, testing, and design services.
- Office engineering services during construction as outlined in Section RC000.

RC701 AWSP-07-01: Cal-Sag Crossing

Scope and budget for completion of final design engineering and bidding support services for the Cal Sag Crossing were authorized under Amendment No. 3. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

Geophysical Borehole Scanning

Based on the information obtained thus far in the geotechnical boring program, the design team has determined that geophysical borehole scans will provide additional information to better define the rock characteristics. Budget has been included for scans of two (2) holes and drilling support.

Supplemental Land Acquisition Activities

Upon completion of the 30% design for this work package, the design team determined that the number of easements required is greater than anticipated when Amendment No. 3 was prepared. Budget for non-survey services related to acquisition of the original easements is allocated as shown in Section RB400. Additional scope and budget for services related to the acquisition of the easements required is included in Amendment No. 4. The table below shows the number of additional easements assumed to be required for AWSP-07-01.

	Permanent Easements	**Temporary Easements**
Amend No. 4 Requirements	3	3
Amend No. 3 Allowance	$0	
Supplemental Easement Acquisition	$64,286	
Total Easement Acquisition Budget	$64,286	

Office Engineering Services During Construction

During construction of the Cal Sag Mega Crossing, the following office support tasks are anticipated to include:

- Work Package Management – Work Package Management as described in Section RC000 will be provided for the anticipated construction duration of 27 months.
- Conformed Documents – A total of 100 hours have been included for compiling conformed documents as defined in Section RC000.
- Submittal Reviews – It is assumed that a total of 50 original submittals and subsequent resubmittals be reviewed for this work package as defined in Section RC000.
- RFI Reviews - It is assumed that the office Consultant Team will respond to a total of 50 RFIs for this work package as defined in section RC000.
- Change Order Preparation/Review – It is assumed that 14 change orders will be reviewed for this work package as defined in section RC000.

- Shop Witness Testing – It is assumed that three (3) shop witnessed tests will be provided under this activity. Each shop witnessed test is assumed to require one (1) team member for a total of two (2) days.
  - Large diameter valves
  - Large diameter water transmission main
  - Large diameter water transmission main pipe transition assembly
- Field and Miscellaneous Meetings. A construction duration of 27 months has been assumed for the reoccurring meetings listed below.
  - Pre-Construction Meeting – It is assumed that two (2) Consultant Team members will attend the ½-day Pre-Construction Meeting.
  - Miscellaneous Meetings - A total of 54 ½-day meetings will be attended by up to two (2) office Consultant Team members.
  - Conference Calls – A total of 54 one-hour conference calls with up to 2 Consultant Team members
- Permitting Assistance – Assistance will be provided for the following Commission-obtained permits:
  - IEPA drinking water construction permit
  - MWRD construction permit
  - Village of Palos Park construction permit
  - USACE Section 408 waterway crossing permit
- Permitting Compliance - Monthly site visits will be undertaken to confirm compliance with environmental permitting requirements.
- Utility Coordination Assistance – Assistance will be provided to coordinate with the following entities during construction:
  - Buckeye Partners Pipeline Company
  - ComEd
  - West Shore Pipeline Company
  - Nicor
- Commissioning and Startup Assistance – Commissioning and Startup Assistance will be provided as defined in RC000.
- Preparation of Record Drawings - It is assumed 30 record drawings will be compiled based on the as-built conditions documented by the construction contractor as defined in Section RC000.

RC702 AWSP-07-02: Des Plaines River Crossing

Scope and budget for completion of final design engineering and bidding support services for the Cal Sag Crossing were authorized under Amendment No. 3. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

Geophysical Borehole Scanning

Based on the information obtained thus far in the geotechnical boring program, the design team has determined that geophysical borehole scans will provide additional information to better define the rock characteristics. Budget has been included for scans of two (2) holes and drilling support.

Fish Barrier Modeling

Modeling of the currents from the Fish Barrier will be completed to understand how it might affect the tunnel and the transmission main over the long term.

Fish Barrier Testing

Electrical impulse testing of the currents from the Fish Barrier will be completed to understand how it might affect the tunnel and the transmission main over the long term.

Fish Barrier Mitigation

A mitigation system will be designed to protect the transmission main from negative impacts due to stray currents over the long term.

Supplemental Land Acquisition Activities

Upon completion of the 30% design for this work package, the design team determined that the number of easements required is greater than anticipated when Amendment No. 3 was prepared. Budget for non-survey services related to acquisition of the original easements is allocated as shown in Section RB400. Additional scope and budget for services related to the acquisition of the easements required is included in Amendment No. 4. The table below shows the number of additional easements assumed to be required for AWSP-07-02.

	Permanent Easements	**Temporary Easements**
Amend No. 4 Requirements	12	3
Amend No. 3 Allowance	$0	
Supplemental Easement Acquisition	$194,128	
Total Easement Acquisition Budget	$194,128	

Office Engineering Services During Construction

During construction of the Des Plaines Mega Crossing, the following office support tasks are anticipated to include:

- Work Package Management – Work Package Management as described in Section RC000 will be provided for the anticipated construction duration of 36 months.
- Conformed Documents – A total of 100 hours have been included for compiling conformed documents as defined in Section RC000.
- Submittal Reviews – It is assumed that a total of 70 original submittals and subsequent resubmittals be reviewed for this work package as defined in Section RC000.
- RFI Reviews - It is assumed that the office Consultant team will respond to a total of 60 RFIs for this work package as defined in section RC000.
- Change Order Preparation/Review – It is assumed that 18 change orders will be reviewed for this work package as defined in section RC000.
- Shop Witness Testing – It is assumed that three (3) shop witnessed tests will be provided under this activity. Each shop witnessed test is assumed to require one (1) team member for a total of two (2) days.
    - Large diameter valves
    - Large diameter water transmission main
    - Large diameter transmission main pipe transition assembly
- Field and Miscellaneous Meetings. A construction duration of 36 months has been assumed for the reoccurring meetings listed below.
    - Pre-Construction Meeting – It is assumed that two (2) Consultant Team members will attend the ½-day Pre-Construction Meeting.
    - Miscellaneous Meetings - A total of 72 ½-day meetings will be attended by up to two (2) office Consultant Team members.
    - Conference Calls – A total of 72 one-hour conference calls with up to two (2) Consultant Team members.
- Permitting Assistance – Assistance will be provided for the following Commission-obtained permits:
    - IEPA drinking water construction permit
    - Will County Forest Preserve construction permit

  - USACE Section 408 waterway crossing permit
  - Village of Romeoville construction permit
  - NRG access/construction permit
  - Citgo access/construction permit
- Permitting Compliance - Monthly site visits will be undertaken to confirm compliance with environmental permitting requirements.
- Utility Coordination Assistance – Assistance will be provided to coordinate with the following entities during construction:
  - ComEd
  - Village of Romeoville (water, sewer)
  - Nicor
  - AT&T
- Commissioning and Startup Assistance – Commissioning and Startup Assistance will be provided as defined in RC000.
- Preparation of Record Drawings - It is assumed 40 record drawings will be compiled based on the as-built conditions documented by the construction contractor as defined in Section RC000.

RC1000 CIP #10 Commission Office

Amendment No. 4 does not include additional scope and budget for design of a commission office. Coordination with the Village of Romeoville regarding buildout of office space at the Ovation Center will be performed using budget previously allocated under Amendment No. 3. Services related to the design of a 4,000 square foot building addition at the CIP #3 Pump Station to house the GPWC Controls and Operations Center will be performed as part of work package AWSP-03-01. The effort for the design of the building addition has been included in CIP #3.

RC1100 CIP #11 System-wide Commissioning and Start-up

RC1101 AWSP-11-01: System-wide Commissioning and Start-up

Scope and budget for preparation of a preliminary Commissioning and Start-up (C&SU) Plan for the regional elements of the AWSP was included in Amendment No. 3.

Once the preliminary C&SU Plan is approved, the Consultant Team will prepare draft and final bidding documents for procurement of a System-wide Commissioning Contractor. The procurement documents will define the responsibilities of the contractor related to:

- Inspection of individual work packages as construction is completed.
- Maintenance and/or protection of constructed infrastructure between acceptance of the original construction and placement of the infrastructure into services.
- System-wide commissioning and start-up.

The Consultant Team will assist with bidding phase including answering bidder questions, issuing up to two (2) addenda, and evaluation of proposals, and recommendation letter.

Once a Commissioning Contractor has been selected, the Consultant Team will monitor the activities of the Commissioning Contractor and coordinate activities through the construction phase including coordination with the various Work Package Contractors, system-wide integrator (AWSP-05-02) and the GPWC. During this phase the Commissioning Contractor will develop the final C&SU Plan including detailed activities for the three main phases of the C&SU task as defined in the preliminary C&SU Plan: maintenance, pre-commissioning, and commissioning.

As construction of a Work Package is complete and handed over to the GPWC, the maintenance phase for that Work Package will begin. The maintenance phase will end once system pre-commissioning and commissioning take place. During this maintenance phase, the Commissioning Contractor will maintain the components of each of the Work Packages. Following the maintenance phase, the Commissioning Contractor will be responsible for system wide pre-commissioning and commissioning as outlined in the C&SU plan. Budget for oversight of field activities associated with the maintenance, pre-commissioning, and commissioning phases of the system-wide commissioning and start-up plan will be included under Task RD1101 in a future Amendment.

RD000 Construction Management

The Consultant Team will provide Construction Management (CM) Services as outlined below for GPWC and Joliet construction contracts. Amendment 4 will include CM services for the work packages listed in RC000, Table 4.

Construction Management Services

The Consultant Team will plan and organize the construction management work necessary for construction of the AWSP as set forth below. The Consultant Team members providing CM services (CM Team) shall provide the following services:

- Obtain Contractor's detailed construction schedule (baseline and progress), evaluate progress and coordinate with controls to ensure correlation between the Master Program Schedule, Master Program Deliverable List and construction contracts.
- Initiate and lead pre-construction meetings, prepare minutes, and track action items to completion.
- Review and respond to construction Contractor submittals. Distribute submittals to Design Team and coordinate a timely response. Review answers and prepare formal response to construction Contractor within contract required number of days of receipt. Update the submittal log in the program management information system.
    - Prior to any review of Contractor submittals, Contractor shall confirm in writing that it has reviewed the submittal, and that the submittal complies with the Contract Documents and are, where required by applicable law, properly signed and sealed by the authoring professional retained by the Contractor.
    - Review of Contractor submittals does not constitute approval or acceptance of any error, omission, discrepancy or deviation contained in Contractor submittal.
- Review and respond to construction Contractor Requests for Information (RFI). Distribute RFIs to Design Team and coordinate a timely response. Review answers and prepare formal response to construction Contractor within contract required number of days of receipt. Update the RFI log in the program management information system and coordinate changes to the specifications and drawings, if necessary, as determined by CM Team and Design Team.
- Schedule and conduct weekly construction progress meetings with the construction Contractor. Provide meeting agendas and discuss the schedule, specifically the two-week look ahead, near-term critical activities, clarifications and problems which need resolution, coordination with other Contractors, status of change orders, submittals, RFI, safety issues, Occupational Safety and Health Administration visits and citations, and other topics. Identify action items, assign responsibility for the action and date the action is to be completed. Prepare notes of the meetings and include identified action items and respective due date.
- Conduct other coordination meetings and workshops as necessary to discuss and resolve issues relating to the management and coordination across all work packages. Document the meetings and record action items assigned to project team members.
- Review administrative submittals received from the construction Contractor for general conformance with the intent of the contract documents' requirements. Check each submittal against the construction Contractor's schedule for potential impacts. Provide written comments on the

submittal and return to the construction Contractor as required per contract. Review of Contractor submittals does not constitute approval or acceptance of any error, omission, discrepancy or deviation contained in Contractor submittal. Any proposed alternate, substitute or deviation from Project requirements must be specifically identified in writing by Contractor and submitted to CM Team

- Review and coordinate approval of a Schedule of Values.
- Conduct monthly schedule and progress payment reviews with the construction Contractor. Receive and review construction Contractor pay requests for processing according to the contract terms. Use the Schedule of Values and actual quantities installed (as reported by the Contractor) as a basis for the recommendation.
- Coordinate with the Consultant Team Permitting Lead who will provide compliance field inspections in accordance with permit requirements.
- Coordinate evaluation of "or-equal" product substitution requests with the Design Team, and procurement vendors and manufacturers. If cost differential is identified, prepare change documentation with assistance from the Program Controls Team.
- Compile Contractor's required construction and inspector's daily construction reports into the program management information system.
- Generate and track Non-Conformance Reports from identification through resolution.
- Provide cost estimates and related support for baseline claims.
- Initiate and review Change Orders when a change in the work or an emergency requires immediate commitment and direction without engineering review or design issuance.
- Manage the Design Change process as needed to maintain the design intent.
- Prepare change documentation for GPWC review and approval. Participate in regularly scheduled meetings with the Program Director and designated member representatives to review and process change orders.
- Identify and track potential changes to the work. Update the change log in the program management information system and monitor all construction, Contractor or Commission initiated, changes to the work. Prepare written justification and cost estimates for each extra work or change item with assistance from the Program Controls Team. Justification shall include a statement of extra work or change, background leading to issue, resolution alternatives, and resolution recommendation for action through the change process. Support preparation of change orders and the finalization of negotiations and receipt of all supporting documentation. Manage execution of contract documents. Support Program Procurement for implementation of change orders as required and amend contract accordingly. Track and maintain change order log in program management information system.
- Actively seek early identification of potential claims. Investigate the of extent, value, potential for settlement or potential for litigation based on information available to the Consultant Team. Initiate and coordinate a written response.
- Upon the project completion, verify that the construction Contractor has made all payments to the subcontractors and vendors, and that any stop notices or liens have been released. This verification is based solely on the Consultant Team's review of the Final Lien Waiver from the construction Contractor prior to recommending final payment.
- Coordinate initial interim operations of projects with the construction Contractor and Commissioning Contractor. This coordination will be accomplished by the Consultant Team through initiating meetings among the construction Contractor and Commissioning Contractor.
- Maintain a working set of red lines throughout the construction phase and generate as-built record drawings at the end of construction. The red lines will be provided by the construction Contractor, using the issued for construction documents prepared by the Design Team. The Consultant Team will not separately validate the accuracy or completeness of such red lines
- Follow up with the construction Contractor so that all Operations and Maintenance (O&M) Manuals are submitted completely.

- Take the lead in negotiating and closing out the construction contract.
- Where appropriate, recommend acceptance of the work by preparing a letter of Certificate of Substantial Completion. Such recommendations are based on the visual observations by the CM Team.
- Where appropriate, recommend final payment for completed work, in the form of release of retention to the construction Contractor in accordance with contract requirements.
- Prepare detailed project lists of deficiencies and omissions actually observed and identified at substantial completion of the project. Upon written notification by the construction Contractor of its correction of deficiencies, schedule, coordinate, and conduct a final walk-through and project review prior to the acceptance of work. Based on CM Team's visual observations, determine whether work, testing, clean-up, and construction Contractor demobilization are complete.

Construction Inspection

Construction Inspectors in the field will observe construction installation to assess whether it is generally in accordance with the drawings and specifications through the following activities:

- Observe for general compliance with plans and specifications regarding standards, workmanship, and quality. Coordinate the Contractor's pre-construction and post-construction inspections where applicable to determine impact of construction activities on proximate features.
- Coordinate permit compliance field inspections in accordance with permit requirements including environmental and cultural resources inspections.
- Confer with the construction Contractors' field representative regarding work or materials that deviate from plans and specification. Issue non-compliance reports and tags and observe that approved corrective measures are applied and documented.
- Document key materials delivered to the field and confirm stored materials are generally protected from the usual weather elements.
- Review Contractor's survey procedures for general compliance with the specifications. Document whether the Contractor is implementing contract required procedures based on the visual observations.
- Attend pre-construction, progress and other meetings as required.
- Prepare Daily Inspection Reports on approved forms. Include date, day of week, weather conditions, record activity, labor and equipment performing work by activity. The reports will include a description of work performed and document issues identified, clarifications provided to the construction Contractor, corrections that were completed from previous day's work, visitors and incident(s).
- Prepare incident reports as needed and follow up with the Contractor for the Contractor to implement corrective measures. Assess responsibility for claims of damage to existing infrastructure, roadways, structures or property based on pre-construction video prepared by the Contractor and verify that damage not identified as a pre-existing condition in the video is to be addressed by the Contractor.
- Maintain a working set of red line drawings. Cross check the inspectors red line drawing with the Contractor's red lines on a monthly basis.
- Maintain a photographic log in accordance with the program standard procedures. Log all photographs in the program management information system.
- Confirm that project records are properly stored in the program management information system.

Testing at Work Package Completion

The CM Team will provide resources to support the startup and testing of the AWSP facilities constructed as part of each work package. Note that the AWSP projects that are completed early in the program will require GPWC to undertake interim maintenance activities prior to their incorporation with other AWSP

projects to complete the integrated AWSP delivery system. Testing responsibilities to be provided by the CM Team include:

- Managing the preparation of a start-up sequence plan and initiate equipment and systems checks.
- Compiling documentation provided by equipment suppliers including standard operating procedures, installation instructions, and O&M manuals.
- Witnessing start-up, testing and package completion activities. Collect and evaluate facility testing and performance data.
- Assisting in the troubleshooting, debugging, and resolution of problems related to the package completion.
- At the end of the testing period, prepare a Summary Report addressing the following:
    - Outline the work accomplished during the testing effort.
    - Document compliance of equipment, systems and processes with specified performance criterion and design requirements based on the results of the testing.
    - Document the receipt of O&M documentation required by the construction contract.
    - Document outstanding observed deficiencies or omissions in the constructed work according to terms of the construction contract.
    - Where appropriate make recommendations for potential modifications to the facilities including equipment, valving, piping, controls, etc. in an effort to optimize operations and/or provide life-cycle cost savings. No guarantee is provided in regard to foregoing.
    - Where appropriate make recommendations for changes needed to standard operating procedures in an effort to optimize the operation of built facilities, minimize maintenance and preserve the integrity of the assets. No guarantee is provided in regard to foregoing.
    - Where appropriate identify changes to O&M staffing in an effort to optimize operations or preserve the integrity of the assets. No guarantee is provided in regard to foregoing.

Safety

The Consultant Team Safety Officers will support the safe performance of the construction phase activities by:

- Implementing the program health and safety plan and review and update the plan on an annual basis.
- Reviewing Contractor safety plans for the limited purpose of confirming that safety plans have been developed, and not for the purpose of reviewing the plans for adequacy or sufficiency.
- Conducting periodic site visits to support safe work environments for Program staff and to observe Contractor compliance with their safety plans and contract requirements.
- Preparing safety reports and statistics for inclusion in the monthly Program Reports.
- Supporting the Commission and Commission Members with preparation and implementation of security, and evacuation and emergency response plans.

For the avoidance of doubt, Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Neither the Consultant Team's role on the Project or site attendance will relieve the Contractor from its sole and exclusive responsibility to take all necessary precautions for the safety of, and protection to prevent damage, injury, or loss to:

- all persons on the Site or who may be affected by the Work;
- all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
- other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

Construction Management Team

The CM Team for each construction contract will include a combination of a Project Construction Manager, Lead Resident Engineer (LRE), Resident Engineer (RE), Field Engineer and Inspectors. The CM Team will be led by the Program Construction Manager (PgCM) supported by a Safety Officer, Controls staff, Cost Engineers, and Schedulers. The CM Team roles and responsibilities are defined as follows:

Program Construction Manager: The Program Construction Manager is responsible for developing and implementing construction phase program management processes, managing the Consultant Team construction management staff, overseeing the construction program to track and monitor objectives for safety, quality, cost, schedule and commissioning. The Program Construction Manager is responsible for interfacing with Program staff, vendors and construction Contractors, supporting day-to-day administration of construction contracts, coordinating with the Program Leadership Team to resolve issues and prioritize decisions and leading the resolution of construction claims. Scope and budget for the Program Construction Manager has been included in RA1100.

Project Construction Manager: The Project Construction Manager reports directly to the Program Construction Manager and has responsibility for overseeing the construction field staff, monitoring project progress, developing construction staff reporting deliverables, continuous training and management of construction staff assignments across the various projects. The Project Construction Manager is responsible for interfacing with Program Construction Manager, construction contractors, supporting day-to-day activities of CM staff, coordinating with the field CM team to resolve issues, develop options for change order management, and lending to the resolution of construction claims.

Lead Resident Engineers: The LREs report directly to the Project Construction Manager and have responsibility for administering a sub-program of construction contracts, including management of the Consultant Team field staff. The LREs lead the construction change management process, support claims resolution, perform RE duties when RE's are not available, consolidate daily/weekly/monthly reporting, coordinate with other LRE's and the PgCM to resolve potential conflicts, prioritize issues resolution and manage CM Team staff across the Program, and identify risks and provides mitigation strategies.

Resident Engineers: The REs are responsible for the day-to-day activities related to administration and oversight of construction contracts, including coordinating regular meetings, managing the Contractor payment process, managing the Consultant Team onsite staff, document the Contractor's implementation of health and safety plans, evaluating potential contract changes, observing equipment testing, and reporting on and following non-conformances through resolution. The REs may have responsibility for administration of 1 or more construction contracts.

Field Engineers: The Field Engineers provide on-site support to the REs. The Field Engineers manage the workflow for the Consultant Team's project documentation (daily reports, submittal reviews, RFI responses, meeting notes); coordinate materials testing, and review pay applications.

Inspectors: The Inspectors are responsible for observing and documenting stored materials and construction activities, and visual observations of work for general conformance with the contract documents. The inspectors document key activities in the program management information system daily. Inspectors will vary according to the tasks of the project. Inspection will be performed on construction installation activities, welding specifications, restoration quantities and verification.

Safety Officer: The Safety Officer role has been defined above.

Schedulers: The Schedulers review and analyze monthly Contractor schedule submittals and coordinate with the Program Scheduler to update the overall Program Schedule. The Schedulers may also participate in schedule meetings with the Contractor. The Schedulers will also provide schedule review and analysis as part of the change, claims and risk processes.

Cost Engineers: The Cost Engineers provide support to the CM Team with loan compliance tracking, review of contract payment applications, and review of Contractor estimates in support of the change process. The Cost Engineers will also assist the CM Team with the preparation of estimates for RFI responses.

Controls Staff: The Controls staff is available to assist Schedulers, Cost Engineers and Field Engineers with document management support for Program tools.

As work packages prepare for bidding, the PgCM will adjust the organization structure to efficiently deliver the CM services described in this section. The PgCM will provide semi-annual updates to the GPWC Program Director, and a formal presentation of staffing needs annually. The PgCM will have overall responsibility for managing existing staff and onboarding new staff such that the appropriate skill sets are available and assigned to the right construction contract.

Figure A4-1 provides the assumed level of effort (indicated as Full Time Equivalents) for the CM Team by month based on the current construction schedule. The figure shows projected staffing for all GPWC work packages. However, scope and budget included in Amendment No. 4 only includes services to be provided by:

- CM Support staff (CM Support, Schedulers, Controls, Safety Officer, Cost Engineers, and QA/Claims/Risk) through August 2026.
- LREs, REs, Field Engineers and Inspectors for the work packages expected to go to bid before September 2026.

GPWC work packages for which construction management services are not included in Amendment No. 4 are shaded in the figure.

Construction management services for City of Joliet improvements included in CIP #8 will follow a similar approach with a Lead Resident Engineer overseeing CIP 8 work and reporting to the Program Construction Manager. More detailed scope related to the provision of construction management services for CIP #8 are presented in Section JD000.

The Consultant Team will meet with the CPM semi-annually to review the organizational chart and resource plan for construction management services and make adjustments as necessary based on the progress of individual work packages.

Clarifications

1. Unless otherwise expressly stated in the above, the Consultant Team's review of any works or submittals provided by the Contractor is for the limited purpose of documenting its completion and does not mean that the Consultant Team has reviewed the same for adequacy, sufficiency or completeness.
2. No approval, acceptance or issuance of payment certification by the Consultant Team, or any other act or omission on the part of the Consultant Team, constitutes the Consultant Team's approval or acceptance of the Contractor's work, nor any omissions, deficiencies or defects therein contained.
3. The Consultant Team does not control and cannot be held liable for any deviations in cost and/or schedule from the planned Program schedule and budget.
4. The Consultant Team will not be responsible for and will not have control, charge or supervision of construction means, methods, techniques, sequences, or procedures, or for safety precautions and

programs required in connection with the Work in accordance with the applicable construction safety legislation, other regulations or general construction practice. The Consultant Team will not be responsible for any Contractor's failure to carry out the Work in accordance with the Contract Documents. The Consultant Team will not have control over, charge of or be responsible for the acts or omissions of the Contractor, Subcontractors, Suppliers, or their agents, employees, or any other persons performing portions of the Work.

5. The Consultant Team's recommendations, if any, are of a technical advisory nature only and shall not be considered legal advice to GWPC.

RAL5 Soil and Utility Construction Support Allowance (Commission)

In recognition of the potential need for support to resolve unidentified issues related to utility coordination or soil management issues during construction of the planned GPWC improvements, an allowance of $1,528,110 is included in Amendment No. 4.

Updated October 2024

		Est. Value	Start	Final Acceptance	Closeout		2024				2025											2026											2027											2028											2029											2030										
							S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Program Construction Manager							1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50	0.50	0.50
CM Support			1/1/2025		12/31/2030	Project CM																							1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00											
						Restoration Lead																													1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00																		
						Schedulers					0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.50	0.50	0.50	1.00	1.00	1.00	2.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00	2.00	0.50	0.50	0.50	0.50	0.50	0.50																		
						Controls					0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.50	0.50	0.50	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	0.50	0.50	0.50	0.50	0.50	0.50																		
						Cost Engineers																	0.50	0.50	0.50	0.50	0.50	0.50	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
						QA/Risk/Claims																	0.50	0.50	0.50	0.50	0.50	0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Resident Engineer CIP 1									1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00														
Safety Officer CIP 1 ***Share with 3 & 4***											0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50														
Restoration Inspector CIP 1																																						1.00	1.00	1.00	1.00																1.00	1.00	1.00	1.00															
Site Inspector CIP 1																						1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00														
Field Engineer CIP 1										1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00														
CDWM-01-01	Chicago Tunnel Connection	$50,000,000	3/20/2026	2/4/2027	3/17/2027	Oversight by Others																																																																												
* AWSP-01-01	Tunnel Extension	$24,810,000	12/1/2024	10/31/2026	12/31/2026	Tunnel Insp Shift 1						1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25																																																										
						Tunnel Insp Shift 2						1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25																																																										
* AWSP-01-02	Suction Well	$35,420,000	3/16/2026	1/13/2028	3/13/2028	Inspector 1																					1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25																																			
AWSP-01-03	LS PS and HS PS	$95,940,000	1/1/2027	9/23/2029	11/28/2029	Inspector 1																														1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25														
Lead Resident Engineer CIP 3 & 4 + Delivery Structures																				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00																
Safety Officer CIP 3, 4, 5 & delivery structures																							0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50																			
Restoration/Site Inspector CIP 3 & 4 + Delivery Structures																								1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00																
Resident Engineer CIP 3, 4 & Delivery Strucutres																				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00																
Field Engineer CIP 3 & 4 & Delivery Structures																								1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.25																					
* AWSP-03-01	IPS 1 & ISF 1	$41,080,000	5/4/2026	8/30/2028	10/13/2028	Inspector 1																									1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50																											
AWSP-04-01	Int Storage Facility 2	$13,500,000	4/21/2027	2/8/2029	3/23/2029	Inspector 1																															0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	1.00	1.00	1.00	1.00	1.00																						
* AWSP-06-06	Water Delivery Str - 1	$4,265,000	9/30/2025	9/30/2026	11/13/2026	Inspector 1																1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50	0.50	0.50																																																		
* AWSP-06-07	Water Delivery Str - 2	$4,774,000	5/19/2026	5/18/2027	6/30/2027	Inspector 1																									0.50	0.50	0.50	1.00	1.00	1.00	1.00	1.00	0.50	0.50	0.50																																									
AWSP-06-08	Water Delivery Str - 3	$9,058,000	1/7/2027	12/27/2028	2/9/2029	Inspector 1																														0.50	0.50	0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50																							
AWSP-06-09	Water Delivery Str - 4	$7,000,000	12/7/2027	6/29/2029	8/13/2029	Inspector 1																																									0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	1.00	1.00	1.00	1.00	1.00	1.00																		
Lead Resident Engineer CIP 6 & 7																							1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00																		
Safety Officer CIP 6																								0.50	0.50	0.50	0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50																		
Safety Officer CIP 7																										1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50																			
Restoration Inspector CIP 6																													1.00	1.00	0.25	0.25	0.25	0.25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.25	0.25	0.25	0.25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.25	0.25	0.25	0.25	0.25																				
Restoration Inspector CIP 6																													1.00	1.00	0.25	0.25	0.25	0.25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.25	0.25	0.25	0.25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.25	0.25	0.25	0.25	0.25																				
Restoration Inspector CIP 7																																															1.00	1.00	1.00	1.00						1.00	1.00	1.00	1.00																				
Resident Engineer CIP 6 Transmission Main																								1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00																		
Field Engineer AWSP-06-01, AWSP-06-02 & AWSP-06-03																									1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50																								
* AWSP-06-01	Regional Transmission Main - A	$35,040,000	8/7/2026	10/26/2028	12/12/2028	Inspector Crew 1																													1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00																										
						Inspector Crew 2																													1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00																										
						Welding Insp																													1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25																										
AWSP-06-02	Regional Transmission Main - B	$56,376,000	2/12/2027	6/13/2028	7/26/2028	Inspector Crew 1																															1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.00																														
						Inspector Crew 2																															1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.00																														
* AWSP-06-03	Regional Transmission Main - C	$61,749,000	6/16/2026	8/4/2028	9/18/2028	Inspector Crew 1																										1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.00																													
						Inspector Crew 2																										1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.00																													
						Welding Insp																										1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25																													
Field Engineer AWSP-06-04 & AWSP-06-05																														1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50																								
AWSP-06-04	Regional Transmission Main - D	$44,448,000	2/26/2027	11/6/2028	12/21/2028	Inspector Crew 1																																1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00																										
						Inspector Crew 2																																1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00																										
						Welding Insp																																1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25																										
AWSP-06-05	Regional Transmission Main - E	$46,761,000	8/9/2027	4/25/2029	6/7/2029	Inspector Crew 1																																									1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.00																				
						Inspector Crew 2																																									1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.00																				
						Welding Insp																																																							1.25	1.25	1.25	1.25	1.25	1.25																				
Resident Engineer CIP 7																							1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00																		
Field Engineer AWSP-07-01																								1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50																												
* AWSP-07-01	Cal-Sag Crossing	$39,094,000	5/6/2026	7/12/2028	8/23/2028	Tunnel Insp Shift 1																										1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.00																													
						Tunnel Insp Shift 2																										1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25																																		
Field Engineer AWSP-07-02																										1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50																		
* AWSP-07-02	Des Plaines River Crossing	$52,418,000	7/29/2026	5/30/2029	7/12/2029	Tunnel Insp Shift 1																													1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.00																			
						Tunnel Insp Shift 2																													1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25																						
Lead Resident Engineer CIP 2																					1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50	0.50	0.50	0.50	0.50																
Safety Officer CIP 2																								0.50	0.50	0.50	0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50																		
Restoration Inspector CIP 2																									1.00	1.00	1.00	1.00	1.00	1.00	0.25	0.25	0.25	0.25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.25	0.25	0.25	0.25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.25	0.25	0.25	0.25	0.25	0.25	0.25																		
Restoration Inspector CIP 2																									1.00	1.00	1.00	1.00	1.00	1.00	0.25	0.25	0.25	0.25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.25	0.25	0.25	0.25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.25	0.25	0.25	0.25	0.25	0.25	0.25																		
Resident Engineer AWSP-02-01 & AWSP-02-02																					1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50																													
Field Engineer AWSP-02-01 & AWSP-02-02																						1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50																													
Welding Inspector AWSP-02-01 & AWSP-02-02																								1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25																													
* AWSP-02-01	Finished Water Transmission Main - A	$101,650,000	3/10/2026	6/19/2028	8/1/2028	Inspector Crew 1																					1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.00	1.25	1.25	1.25	1.25																														
						Inspector Crew 2																					1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.00	1.25	1.25	1.25	1.25																														
* AWSP-02-02	Finished Water Transmission Main - B	$91,980,000	5/1/2026	7/13/2028	8/24/2028	Inspector Crew 1																										1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.00																													
						Inspector Crew 2																										1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.00																													
Resident Engineer AWSP-02-03 & AWSP-02-04																													1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50																	
Field Engineer AWSP-02-03 & AWSP-02-04																														1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.50																	
Welding Inspector AWSP-02-03 & AWSP-02-04																															1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25																		
AWSP-02-03	Finished Water Transmission Main - C	$130,080,000	10/5/2026	6/28/2029	8/10/2029	Inspector Crew 1																																1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.00																		
						Inspector Crew 2																																1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.00																		
AWSP-02-04	Finished Water Transmission Main - D	$124,880,000	9/14/2026	6/7/2029	7/20/2029	Inspector Crew 1																															1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.00																		
						Inspector Crew 2																															1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.00	1.25	1.25	1.25	1.25	1.25	1.00																		

Figure A4-1 Assumed CM Teal Level of Effort - GPWC Work Packages (Shaded tasks and effort are not part of Amendment No. 4 scope, but are shown to provide an indication of anticipated effort for future tasks)

Updated October 2024		Est. Value	Start	Final Acceptance	Closeout	
Resident Engineer AWSP-02-05 & AWSP-02-06						
Field Engineer AWSP-02-05 & AWSP-02-06						
Welding Inspector AWSP-02-05 & AWSP-02-06						
AWSP-02-05	Finished Water Transmission Main - E	$120,810,000	6/26/2026	10/5/2028	11/20/2028	Inspector Crew 1 Inspector Crew 2
AWSP-02-06	Finished Water Transmission Main - F	$67,180,000	4/20/2026	1/11/2028	2/24/2028	Inspector Crew 1 Inspector Crew 2
Lead Resident Engineer CIP 5						
Field Engineer CIP 5						
AWSP-05-01	Fiber & Network Inst.	$9,988,000	12/17/2027	10/2/2029	11/15/2029	Inspector 1
AWSP-05-02	SCADA Prog. & Inst.	$400,000	5/12/2027	11/27/2029	1/11/2030	Covered by RE
AWSP-05-03	Video Surveillance	$1,096,000	8/17/2028	5/1/2029	5/30/2029	AWSP-05-01 Insp
AWSP-05-04	Security System	$618,000	8/17/2028	5/1/2029	1/11/2030	AWSP-05-01 Insp
AWSP-11-01	Start-up & Comm.	$1,839,000	7/25/2029	7/21/2030	7/21/2030	Comm. Eng
AWSP-10-01	Commission Office		6/25/2027	6/11/2029	7/24/2029	Covered by 03-01

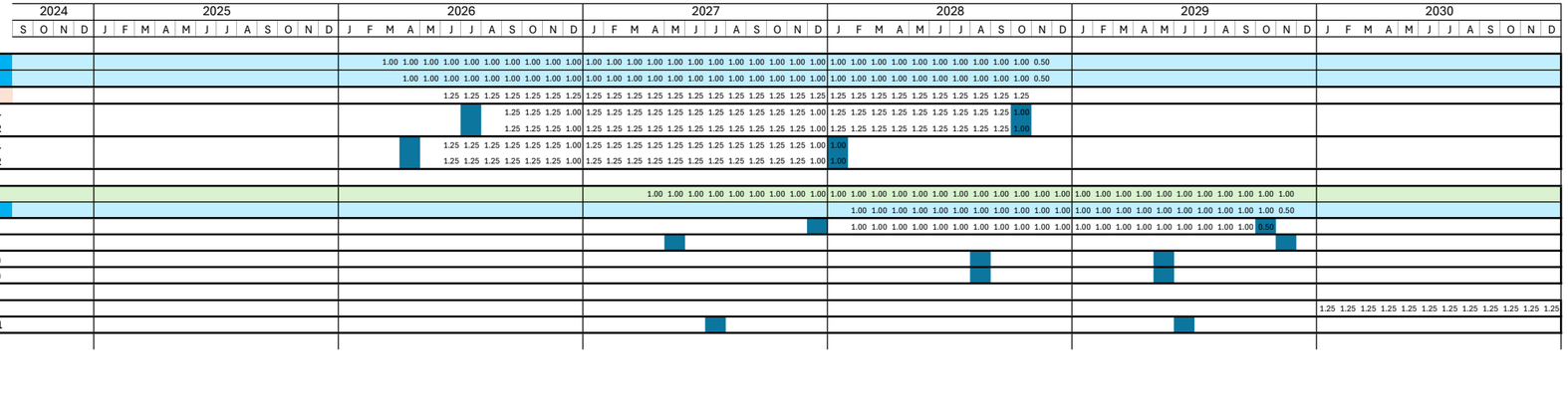

Figure A4-1 Assumed CM Teal Level of Effort - GPWC Work Packages (Shaded tasks and effort are not part of Amendment No. 4 scope, but are shown to provide an indication of anticipated effort for future tasks)

JOLIET ONLY TASKS

The Amendment No. 4 scope also includes oversight, program management, external coordination, engineering design services, office engineering services during construction, and field construction management services for infrastructure needed within the City of Joliet water system to accept and effectively distribute treated Lake Michigan water supplied from the GPWC regional water transmission system. The City of Joliet will be responsible for the cost of design, implementation, and funding of these improvements separate from the regional improvements to be implemented by the GPWC. For the balance of this scope these "Joliet Only" improvements are referred to as the "Joliet AWSP Water System Improvements" described below.

JA000 Oversight / Program Management Joliet AWSP Water System Improvements

JA100 City Meetings and Special Assistance

Members of the Consultant Team will participate in meetings and with the City of Joliet and provide special assistance as described below.

JA100.01 City Meetings

The Consultant Team Program Managers will support City staff efforts to provide periodic updates on the Alternative Water Source Program to Joliet elected officials and the public. Support services may include:

- Preparation of slides and participation in presentations at up to eight (8) City Council Meetings planned to occur on a quarterly basis. These updates will be scheduled as necessary to inform or seek input from the Council on issues related to Joliet's participation in the GPWC, land acquisition for Joliet water system improvements or Joliet's funding strategy/decisions.
- Preparation of slides and participation in two (2) rounds of one-on-one meetings with City Council members to discuss specific details related to Joliet's participation in the Alternative Water Source Program.

JA100.02 Special Assistance to Joliet's Director of Public Utilities

The Consultant Team will provide a senior professional with extensive utility experience (Ted Meckes) to serve as a special assistant to Joliet's Director of Public Utilities. This individual will coordinate with the Director on a weekly basis and provide input on technical issues through reviews of deliverables for Joliet improvement and/or direct coordination with the Consultant Team. Budget is included for up to 5 person-hours of support per week.

JA200 Public Outreach

The Consultant Team will support the City of Joliet through the refinement and implementation of its Public Outreach Strategy. A total budget of $328,500 is included in Amendment No. 4 for public outreach efforts for the City of Joliet through August 31, 2026. Scope includes website maintenance and updates, production of monthly outreach materials, continued administration of the City's Water Conservation Group, implementation of the quarterly incentive program, and preparation of support materials for community outreach events. Detailed backup for the use of this public outreach budget to accomplish specific tasks will be presented to the DPU within 45 days after authorization of Amendment No. 4.

JA300 Program Management – Joliet AWSP Water System Improvements

Oversight, external coordination, and design tasks related to the Joliet AWSP Water System Improvements will be managed in accordance with the Program Management tasks described under heading RP000 Program Management, but in a scaled, fit-for-purpose approach. The focus of Program Management activities for the Joliet Only project is to confirm that the scope, schedule, and budget established for these improvements, as well as risks, issues, decisions, and changes, are effectively tracked and managed to provide for successful completion of the projects. Costs associated with these efforts will be tracked explicitly so that they are properly separated from costs associated with management of the regional elements of the AWSP.

Specific program management activities described under Task RP000 for the GPWC that will be scaled for implementation to support the delivery of Joliet's AWSP-related capital improvement projects include:

- Health and Safety Planning
- Procurement and Contract Administration Support
    - for work packages JOL-08-02, JOL-08-03, JOL-08-04
- Local and DBE Utilization
- Quality Management
- Risk and Value Management
- Budget and Cost Controls
- Schedule Maintenance/Management
- Document Control
- Independent Review Coordination

It is important to note that management of Joliet's Water Main Replacement Program (WMRP) is not included in this scope of services. The Consultant Team's responsibilities for WMRP work are limited to design, bidding support, ESDC, and construction management support for the parallel water main projects described under Task JC815. The Consultant Team will coordinate with Joliet's lead consultant for the WMRP to establish appropriate procedures by which the WMRP Consultant can provide critical data and reports related to the WMRP for production of required WIFIA and/or SRF reports. However, with the exception of the projects defined in Task JC815, neither design nor construction contracts associated with the WMRP are intended to be incorporated into or managed within the proposed AWSP PMIS system.

JA400 City-wide GIS Management

The Consultant Team will maintain the web-based GIS portal previously created for the Program (Canopy) for use in compiling, organizing, managing, manipulating, and presenting geospatial data required to support design and construction of the Joliet AWSP Water System Improvements. Geospatial data related to the Joliet AWSP Water System Improvements will also be input to the City of Joliet GIS to support coordinated mapping of all water utility capital projects. The Consultant Team will maintain information related to the Joliet AWSP Water System Improvements and the GPWC water transmission main improvements within the Joliet GIS. Information related to the City's Water Main Replacement Program will be input and maintained by others.

JA500 Program Administration – Joliet AWSP Water System Improvements

The Consultant Team project management, project controls, and financial support staff will be responsible for overall management, coordination, and administration of CIP#8 activities. Specific functions to be provided by this team include confirming that tasks are being completed in accordance with this scope, that resources are available and aware of upcoming tasks to be completed; issuing, monitoring, and managing subcontracts, subcontractor submittals, and subcontractor billings; meeting with work package leads to capture earned value data for individual work packages; monitoring and acting upon internal data related to progress toward schedule milestones, expenditures, earned value performance, staff utilization relative to the established workplan, risk data; informal coordination and meetings with the City, other Consultant Team members, and/or external parties, and production and submittal of monthly Consultant Team invoices.

JB000 External Coordination – Joliet AWSP Water System Improvements

JB200 Regional Commission Coordination

Under task JB200, the Consultant Team will continue to support Joliet's participation in TAC and GPWC Board meetings from September 1, 2024, through August 31, 2026. The Consultant Team will develop and compile Joliet specific information (such as information on the status of Joliet's water source transfer testing

or the nature and timing of planned Joliet system improvements) as required to support Commission activities. A level of effort by one person of 4 hours per month is allowed for this task.

JB300 Regulatory, Environment, Permitting Management

JB300.01 REP Management

The Consultant Team will continue to implement the established Regulatory, Environmental, and Permitting Governance Framework and Plan as it applies to Joliet Only improvements included in the Alternative Water Source Program. Efforts will include coordination, monitoring, and oversight of actions needed to comply with regulatory, environmental, and permitting requirements for the Joliet AWSP Water Distribution Improvements. Specific activities to be completed under this task include:

- maintenance of data and preparation of monthly updates on the status of regulatory, environmental, and permitting activities associated with the final design phase of delivery
- coordination, oversight, and monitoring of environmental field investigations performed in support of final design and permitting activities for the Joliet AWSP Water System Improvements
- coordination of activities related to provision of environmental documentation required to support SRF and WIFIA funding for Joliet water system improvement projects.

JB300.02 Non-Revenue Water Reduction Support

The City of Joliet has retained others to direct its efforts to reduce levels of non-revenue water and comply with its Lake Michigan water allocation. Under this sub-task, the Consultant Team will provide up to 40 person-hours of on-call support as directed by the City in support of these efforts. Responsibilities may include interpretation of previous analyses and/or review of analyses/recommendations made by others.

JB300.03 Well Dashboards

The Consultant Team will continue to work with City of Joliet staff to review the City's well monitoring data and develop a well management memorandum annually (1 in 2025 and 1 in 2026). The well management memorandum development process includes compilation of data supplied by the City, data review and analysis, a meeting with City staff, updates to the master dashboard, updates to well management tables and graphs and memorandum development. Completion of this task is dependent upon the availability of data from the City.

JB400 Land Acquisition Management

Previously authorized amendments to Stantec's agreement included scope and budget for land acquisition management efforts, land acquisition activities related to procurement of sites for City of Joliet facilities, and land acquisition activities related to procurement of temporary and permanent easements along the proposed water distribution main alignments. The status of previously authorized scope and proposed additional services related to each of these activities to be provided by the Consultant Team under Amendment No. 4 are described below.

Land Acquisition Management

Under Amendment No. 4 the Consultant Team will continue to manage and coordinate Program-related land acquisition activities through ongoing coordination with Design Team members, Program legal staff, and the City of Joliet's Director of Public Utilities (DPU). The Consultant Team will participate in monthly meetings with the DPU to review the status of active land acquisition efforts. Land acquisition efforts for both the GPWC and Joliet will be reviewed in a single meeting with costs split between tasks RB400 and JB400. The Team will maintain a listing of parcels for which City of Joliet land acquisition efforts are in progress that includes documentation of the status of activities including title requests, survey plat and legal description preparation, appraisals, Phase I Environmental Site Assessments (ESA), and purchase negotiations.

Land Acquisition Activities for City of Joliet Sites
Scope and budget for land acquisition services for a total of 6 City of Joliet sites were authorized under prior amendments. These sites include:

- Southeast Elevated Water Storage Tank site (JOL-08-02)
- West/Central Elevated Water Storage Tank site (JOL-08-02) (Black and Bronk Location)
- Stryker Pump Station and Water Storage Facility site (JOL-08-05, JOL-08-06)
- West/Central High Pressure Zone Pump Station and Storage Facility site (JOL-08-05, JOL-08-06)
- Joliet Tertiary Water Delivery Structure site (John Leach Park Location)
- Joliet Water and Sewer Garage site (JOL-08-09)

As of August 2024, 3 of the 6 sites had been successfully acquired, and arrangements for acquisition of the other three sites are progressing toward completion.

Under Amendment No. 4 budget for land acquisition activities related to acquisition of City of Joliet sites including supplemental budget required to cover the costs of additional services already completed and new budget to complete the acquisition of sites for the remaining facilities as described below will be taken from the previously authorized JAL3/JB400 Land Acquisition allowance.

- Supplemental budget is required to cover the costs for the unanticipated evaluation of multiple sites for the proposed elevated water storage tanks (5 sites evaluated but not used), Joliet secondary and tertiary water delivery structures and associated storage and pumping facilities (5 sites evaluated but not used), and the Joliet Water and Sewer Garage (5 sites evaluated but not used). The evaluation of multiple sites was required due to challenges identifying suitable, available parcels for purchase and negotiating the acquisition of sites with landowners. During the process of site selection, the Consultant Team researched and evaluated fifteen sites other than those selected for final acquisition. Evaluation efforts conducted for these additional sites included initial investigations of interest, site research, title commitments, legal descriptions, appraisals, negotiations, and Phase 1 ESA's.
- New budget is required under Amendment No. 4 to support Consultant Team efforts related to completion of land acquisition efforts for the Southeast Elevated Tank site, , the John Leach Park site, and the Glosky Property to be used for construction of the Joliet Water and Sewer Administration and Garage building.

The amount to be used from the JAL3/JB400 allowance for the activities is $133,635. No supplemental budget is required for these activities under Amendment No. 4.

Procurement of Temporary and Permanent Easements for Joliet AWSP Improvements
Given the level of design available at the start of Amendment No. 3, a budget of $400,000 was designated as an allowance for land acquisition services related to the procurement of temporary and permanent easements for City of Joliet AWSP water system improvements. Considering the plan to use funds from this allowance to cover the activities described in above, the available allowance balance is $266,365. As of August 2024, no other funds have been authorized for use from this allowance. Based on the progression of the design of the improvements, this budget can now be assigned to individual work packages Table 5 shows the basis for allocation of the JAL3/JB400 Allowance for CIP #8 Land Acquisition to the specific CIP #8 work packages under Amendment No. 4. The allocation of land acquisition budget to individual CIP #8 work packages leaves a balance of $38,350 in the JAL3/JB400 allowance for use in addressing land acquisition support activities not currently identified such as potential Phase II Environmental Site Assessments or eminent domain support. Funds from this allowance will only be used with specific authorization from the Director of Public Utilities.

Table 5 – Allocation of JAL3/JB400 Allowance to Joliet Work Packages

	Easement Acquisition			
	Amendment 3 JAL3/JB400 Allowance	Allowance Balance after Amendment 3 Authorizations	Allowance Balance after Amendment Authorizations	Remaining JAL3/JB400 Allowance
JAL3/JB400	$ 400,000	$ 400,000	$ 38,350	$ 38,350
		Amendment 3 Allowance Authorizations	Amendment 4 Allowance Authorization	Authorized Budget as of Amendment 4
JB400		$ -	$ 133,635	$ 133,635
JC802		$ -	$ -	$ -
JC803		$ -	$ 62,186	$ 62,186
JC804		$ -	$ 62,186	$ 62,186
JC805		$ -	$ 41,457	$ 41,457
JC806		$ -	$ 20,729	$ 20,729
JC807		$ -	$ 41,457	$ 41,457
JC808		$ -	$ -	$ -
JC809		$ -	$ -	$ -

JB500 Field Investigation Coordination and Management

Under this task the Consultant Team will coordinate and maintain the field investigation framework established during the preliminary engineering phase of the Program for additional field, utility, or environmental investigations to be performed between September 1, 2024, and August 31, 2026. As scope and budget for most of the anticipated investigations were included in previous amendments, it is anticipated that the activities to be overseen under this task will be primarily associated with supplemental field, utility, or environmental investigations determined to be necessary to complete design for Joliet Only work packages.

JB600 Sustainability Strategy Management

The Consultant Team will continue to monitor and report on sustainable elements being incorporated into the designs for the Joliet Only work package improvements reviewed previously. A workshop will be conducted with the CIP #8 Team early during the 60% design effort to review the sustainable elements identified for incorporation into the designs.

The Sustainability Lead will provide updates regarding the status of sustainability efforts across CIP 8 for presentation to the City during monthly CIP 8 review meetings and prepare slides highlighting specific accomplishments related to Sustainability for use in annual updates to the Joliet City Council (once in 2024, once in 2025).

JB700 Funding Coordination

The Consultant Team will continue to coordinate activities related to implementation, monitoring, and updating of Joliet's plan for funding and financing of the Joliet Only improvements associated with the Program. These efforts will focus on continued coordination with City Finance Department staff, external financial advisors, and the Program Team; monitoring and refinement of the funding strategy for the Joliet Only improvements; review of reporting for activities being funded under Joliet's existing WIFIA loans; support of ongoing WIFIA loan procurement, and coordination efforts for Joliet; and support of ongoing SRF loan procurement and coordination efforts for Joliet. Effort associated with preparation and submittal of

reports for development activities being performed under Joliet's existing WIFIA loans is included under Task JA300 and is not part of this task.

JB700.01 Financial Team Coordination

The Consultant Team will coordinate with and report to City of Joliet staff on items related to funding and financing of the AWSP. Financial coordination activities will include:

- Scheduling, leading, and documenting monthly meetings with members of the financial team selected to advise the City on plans for funding/financing of the Joliet AWSP Water System Improvements.
- Coordinating with the Program Reporting team responsible for WIFIA and SRF reporting to confirm that reporting requirements are being met.

It is anticipated that the activities described in the bullets above will be performed concurrently for both the GPWC and the City of Joliet as a member of the GPWC. Budget for these activities is allocated to this task (JB700.01) and Task RB700.01 accordingly.

JB700.02 Funding Strategy Update

The Consultant Team will perform a review and update of the strategy for funding/financing implementation of the City's Alternative Water Source Program improvements obligations, Joliet Only Alternative Water Source Program Improvements, Joliet's Water Main Replacement Program, and Joliet's routine capital improvement program for Public Utilities Program in the summer of 2025 and the summer of 2026. The strategy will be used to inform the City's development of its annual budget. A draft of the strategy will be submitted to and reviewed with the City's Financial Team. The Consultant Team will revise the draft based on comments from the Financial Team.

JB700.03 WIFIA Funding Support

Submittal of a third Joliet WIFIA loan request to USEPA to fund additional costs associated with Joliet Only improvements was previously anticipated before the end of 2023 and was included in the Amendment No. 3 scope. However these activities did not occur before September 2024. Under Amendment No. 4 the Consultant Team will assist the City with pursuit of a new WIFIA loan for construction of the Joliet AWSP water system improvements using remaining Amendment No. 3 funds. Pursuit of the loan will require submittal of a new Letter of Interest (LOI), a new Loan Request Form, and supporting documents. Specific services to be provided by the Consultant Team in support of these efforts include:

- **USEPA/WIFIA Coordination.** The Consultant Team will lead Joliet's ongoing coordination efforts with USEPA related to WIFIA funding. The Team will prepare for and participate in up to 4 conference calls with USEPA to confirm expectations regarding Joliet's planned 2024 LOI and loan request. Specific topics expected to be addressed with USEPA include coordination with previous WIFIA loan efforts completed by Joliet, loan application and drawdown timing, and coordination of borrowing with other funding mechanisms (e.g., SRF loans, revenue bonds).

- **Preparation of a 2024 WIFIA Letter of Interest and Loan Request Form.** The Consultant Team will lead and coordinate efforts required to prepare and submit a new LOI and follow-up Loan Request Form for Joliet's AWSP water system improvements. Effort associated with these activities will include assembling the required environmental questionnaire and supporting materials documentation necessary to accompany the 2024 WIFIA Loan Request. The process of preparing the loan request form will include development of an application outline/checklist that identifies required materials and assigns responsibility for their preparation, preparation of a draft application package for City review, and preparation of a final application package based on receipt of one, consolidated set of comments on the draft application.

Payment of the application fee required with submittal of the WIFIA Loan Request (if necessary) is not part of this Scope of Services. Once the application fee amount is determined, it will be paid directly to USEPA by the City.

- **Support of Negotiations and Closing for the 2024 WIFIA Loan Application.** Following submittal of the 2024 WIFIA loan application for Joliet Only improvements, the Consultant Team will support negotiations related to closing of the new loan. Since Joliet has an executed master credit agreement in place with USEPA for WIFIA funding, it is anticipated that the effort required to support negotiation of the new loan will be modest. The budget for this task includes up to 40 person-hours of support for conference calls, review of materials provided by USEPA, and/or provision of materials required to support the loan closing process.

JB700.04 State Revolving Fund Coordination

The Consultant Team will coordinate ongoing discussions with the Illinois Environmental Protection Agency (IEPA) to continue to position the City for use of State Revolving Fund loan monies for Joliet only projects. Specific efforts during this design phase of the Program will include:

- Participation in periodic (up to 4) conference calls with IEPA to provide updates on Joliet's plans, review provisions for coordination of SRF funding with WIFIA funding, and confirm IEPA's expectations related to the timing and content of funding nomination and project plan submittals,
- Preparation and submittal of Funding Nomination formwork and other related communication with IEPA for any projects the City requests remain in position for possible SRF funding. Preparation and submittal of one additional Project Plan to position more Joliet Only projects for potential SRF funding, and
- Support of general financial reporting required under the SRF program.

Scope and budget for support to the City for preparation and submittal of a defined number of work package-specific SRF loan applications and supporting materials was previously authorized.

JB700.05 Affordability Support

Impacts of the Alternative Water Source Program on the affordability of water remains a significant concern for many water customers within the City of Joliet. The Consultant Team will continue to serve as a resource to Joliet for the identification, evaluation, and potential implementation of affordability strategies suitable for the community. A budget for up to 80 person-hours of support for affordability analyses or presentation is included in the Amendment 4 budget.

JB800 Government Outreach / Coordination

The Consultant Team will continue to coordinate with City of Joliet staff on local, state, and federal issues related to the City of Joliet's water system improvements. These efforts will be coordinated with but tracked separately from government outreach efforts for the Regional AWSP as described in Task RB800. Specific tasks to be performed will include:

- **Coordination with the Public Utilities Director and City Manager** – The Government Outreach Lead will coordinate with the Public Utilities Director on an established schedule to identify, discuss, and plan for outreach efforts required to support Joliet's alternative water source and water main replacement specific activities. The Government Outreach Lead will draft and provide feedback on Joliet specific written materials and talking points developed to support government outreach efforts. Such materials will be used in outreach to Joliet elected and regulatory officials for accuracy and to ensure they align with the City's goals and message.
- **Government Outreach Strategy Update** – Annually (in the fall of each year) the Government Outreach Lead will meet with City of Joliet staff to discuss the Public Utilities Department's priorities and strategy for government outreach during the next 12-month period. Based on this meeting, the

Government Outreach Lead will prepare/update and submit to Joliet a Government Outreach Strategy summary that lists key objectives for Joliet for the next 12-month period.

JC000 Engineering – Joliet AWSP Water System Improvements

JC800 CIP #8: Joliet AWSP Water System Improvements

Amendment No. 3 included scope and budget for engineering services through final design and bidding for 8 of the 9 CIP#8 construction work packages that make up the AWSP. Engineering services through final design and bidding have already been completed for one work package, JOL-08-01 SCADA System Upgrades. Engineering services during construction and construction management services for that work package are being provided by others outside of the scope of the AWSP.

The schedule for completion of design of the other CIP #8 work packages has been extended approximately 8 months due to challenges finalizing site selection and configurations for one of the elevated tanks (JOL-08-02), the West & Central High Pressure Zone Pump Station and Storage Facility (JOL-08-05/06), Joliet's secondary and tertiary water delivery structures, the Washington Street Pump Station (JOL-08-07), and the proposed new Water and Sewer Garage (JOL-08-09). In addition, work scope for improvements related to the Essington Pumping Station Upgrades have moved from work package JOL 08-03 to work package JOL 08-07.

Amendment 4 scope and budget for the CIP #8 work packages includes:

- Supplemental Design Coordination and Work Package Management services required given the extended schedule for completion of design of certain work packages.
- Supplemental design services required to address alignment and/or design changes driven by site selection challenges, right-of-way, regulatory, or permitting agencies.
- Office engineering services during construction as outlined in Section RC000 above.

Table 6 summarizes the categories of services included in Amendment No. 4 for the Joliet Only work packages.

Table 6 - ALTERNATIVE WATER SOURCE PROGRAM – AMENDMENT NO. 4 SCOPE FOR JOLIET ONLY WORK PACKAGES

CIP	Work Package ID	Work Package Description	**Supplemental Services:** Additional Design and Bidding Services for work packages previously authorized through Final Design and Bidding	**New Scope: Final Design Activities through Bidding**	**New Scope: Engineering Services During Construction and Construction Management Services**
CIP #8 Joliet AWSP System Improvements	JOL-08-01	SCADA System Upgrades (services beyond bidding support removed from Program scope)			
	JOL-08-02	Elevated Storage Tanks (West & Central, Southeast)	X		X
	JOL-08-03	Ridge Road Booster Station, Ingalls Ave Pump Station Upgrades, Morgan St PRV Station	X		X
	JOL-08-04	Distribution System Improvements	X		X
	JOL-08-05	Storage Tanks (West & Central, Stryker, Washington St)	X		
	JOL-08-06	Pump Stations (West & Central, Stryker)	X	X	
	JOL-08-07	Washington St Pump Station and Essington Pump Station Upgrades	X		
	JOL-08-08	Existing Facility Repurposing, Demolition, and Rehabilitation			
	JOL-08-09	Water and Sewer Garage Improvements	X	X	X

For Task JC800, supplemental budget is required to provide for ongoing overall coordination across the work package design teams and with City of Joliet staff responsible for providing input during design. Supplemental services also include additional meetings and project management services associated with schedule delays and extensions.

JC802 JOL-08-02: Elevated Storage Tanks

Scope and budget for completion of final design engineering and bidding support services for the Elevated Storage Tanks were authorized under Amendment No. 3. Supplemental Services already performed but beyond the original authorized scope of services and new services to be performed by the Consultant Team under Amendment No. 4 are described below.

Supplemental Design Services

Supplemental budget is required to account for the time and effort involved in evaluating alternative sites for the Southeast High Pressure Zone tank, revising the location after completion of initial 30% design drawings for the project, and coordinating with the site Developer to establish details related to site layout and access coordination. An IDOT Access Permit application and coordination has also been added to the design effort. A total of 160 person-hours of additional effort is required to provide for this additional scope.

Office Engineering Services During Construction

Effort required for office engineering services during construction for Elevated Storage Tanks has been estimated based on the framework presented in Section RC000 above.

- Work Package Management – Work Package Management as described in Section RC000 will be provided for the anticipated construction duration of 20 months.
- Conformed Documents – A total of 80 hours have been included for compiling conformed documents as defined in Section RC000.
- Submittal Reviews – It is assumed that a total of 20 original submittals and subsequent resubmittals will be reviewed for this work package as defined in section RC000.
- RFI Reviews - It is assumed that the office Consultant team will respond to a total of 20 RFIs for this work package as defined in section RC000.
- Change Order Preparation/Review – It is assumed that 6 change orders will be reviewed for this work package as defined in section RC000.
- Field and Miscellaneous Meetings. A construction duration of 20 months has been assumed for the reoccurring meetings listed below.
    - Pre-Construction Meeting – It is assumed that 2 team members will attend the ½-day Pre-Construction Meeting.
    - Miscellaneous Meetings - A total of 10 ½-day meetings will be attended by one (1) office consultant team members.
    - Conference Calls - A total of 40 one-hour conference calls will be attended by up to two (2) office consultant team member.
- Permitting Assistance – Assistance will be provided for the following Commission-obtained permits:
    - IEPA drinking water construction permit
- Utility Coordination Assistance – Assistance will be provided to coordinate with the following entities during construction:
    - ComEd
- Commissioning and Startup Assistance – Commissioning and Startup Assistance will be provided as defined in RC000.
- Preparation of Record Drawings - It is assumed 45 record drawings will be compiled based on the as-built conditions documented by the construction contractor as defined in Section RC000.

JC803 JOL-08-03: Booster Pump Station, Ingalls Ave PS Upgrades, Morgan St PRV

Scope and budget for completion of final design engineering and bidding support services for JOL-08-03 were authorized under Amendment No. 3. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

Essington Pumping Station Upgrades

Scope and budget for Essington Pumping Station Upgrades has been moved from JOL-08-03 to JOL-08-07 with Amendment 4. This adjustment in scope results in a net reduction in the design budget allocated to this task under previous amendments.

Land Acquisition Allowance Assignment

As noted under Task JB400, Amendment No. 4 includes authorization to use a portion of the JAL3/JB400 allowance to support easement acquisition activities for the Ridge Road Pump Station, the Ingalls Pump Station improvements, and Morgan Street PRV station. As described under Task JB400, $62,186 of the JAL3/JB400 land acquisition allowance is assigned to task JC803 for the acquisition of 3 temporary and 3 permanent easements on 3 individual parcels. Easement needs are with Plainfield Park District, Plainfield School District 202, and between the City of Joliet and GPWC on the Ingalls Station site.

Office Engineering Services During Construction

Effort required for office engineering services during construction for Ridge Road Booster PS, Ingalls Ave PS Upgrades, Morgan St PAS has been estimated based on the framework presented in Section RC000 above.

- Work Package Management – Work Package Management as described in Section RC000 will be provided for the anticipated construction duration of 24 months.
- Conformed Documents – A total of 100 hours have been included for compiling conformed documents as defined in Section RC000.
- Submittal Reviews – It is assumed that a total of 110 original submittals and subsequent resubmittals will be reviewed for this work package as defined in section RC000.
- RFI Reviews - It is assumed that the office Consultant team will respond to a total of 40 RFIs for this work package as defined in section RC000.
- Change Order Preparation/Review – It is assumed that 6 change orders will be reviewed for this work package as defined in section RC000.
- Field and Miscellaneous Meetings. A construction duration of 24 months has been assumed for the reoccurring meetings listed below.
    - Pre-Construction Meeting – It is assumed that 2 team members will attend the ½-day Pre-Construction Meeting.
    - Miscellaneous Meetings - A total of 24 ½-day meetings will be attended by one (1) office consultant team member.
    - Conference Calls - A total of 48 one-hour conference calls will be attended by up to two (2) office consultant team members.
- Permitting Assistance – Assistance will be provided for the following Commission-obtained permits:
    - IEPA drinking water construction permit
- Utility Coordination Assistance – Assistance will be provided to coordinate with the following entities during construction:
    - ComEd
- Commissioning and Startup Assistance – Commissioning and Startup Assistance will be provided as defined in RC000.
- Preparation of Record Drawings - It is assumed 75 record drawings will be compiled based on the as-built conditions documented by the construction contractor as defined in Section RC000.

JC804 JOL-08-04: Distribution System Improvements

Scope and budget for completion of final design engineering and bidding support services for Distribution System Improvements were authorized under Amendment No. 3. Following the authorization of Amendment No. 3, the specific distribution system improvements to be designed were modified based on changes in system requirements and decisions regarding coordination of AWSP water distribution system improvements and City of Joliet water main replacement projects.

Services to be performed by the Consultant Team under Amendment No. 4 are described below.

Supplemental Design Services

Additional effort by the Consultant Team has been included for:

- Meetings with the City Staff and consultants related to water main bid packages and coordination with other City projects.
- Preparation and evolution of the comprehensive City Water Main Improvements Summary memo and associated figures to document locations of needed water main projects for the City Staff and other Consultants, provide support for the work package or City program which the project will be managed, and coordinate the schedule for the project in attempt to avoid concurrent and adjacent construction issues.
- Evaluation of multiple alternatives for the Mall Loop water main alignment.
- Meetings with Plainfield Township Supervisor and performance of several additional investigations related to conditional requests for approval of use of Von Esch rights-of-way.
- Design of additional water main for Morgan Street Distribution system removal and replacement.
- Redesign and relocation of the water main from Woodruff to Fairmount and Garvin.
- Coordination and meetings with Water Main Replacement Program team for Morgan Street, Washington Street, and Fairmount and Garvin where the WMRP projects and AWSP projects overlap and needed additional coordination as field conditions became clearer.

Land Acquisition Allowance Assignment

As noted under Task JB400, Amendment No. 4 includes authorization to use a portion of the JAL3/JB400 allowance to support easement acquisition activities for the required AWSP water distribution system improvements within the Joliet system. As described under Task JB400, $62,186 of the JAL3/JB400 land acquisition allowance is assigned to task JC804 for the acquisition of 3 temporary and 3 permanent easements on 3 individual parcels.

Office Engineering Services During Construction

- Work Package Management – Work Package Management as described in Section RC000 will be provided for the anticipated construction duration of 20 months.
- Conformed Documents – A total of 100 hours have been included for compiling conformed documents as defined in Section RC000.
- Submittal Reviews – It is assumed that a total of 50 original submittals and subsequent resubmittals will be reviewed for this work package as defined in section RC000.
- RFI Reviews - It is assumed that the office Consultant team will respond to a total of 50 RFIs for this work package as defined in section RC000.
- Change Order Preparation/Review – It is assumed that 12 change orders will be reviewed for this work package as defined in section RC000.
- Field and Miscellaneous Meetings. A construction duration of 20 months has been assumed for the reoccurring meetings listed below.
    - Pre-Construction Meeting – It is assumed that 2 team members will attend the ½-day Pre-Construction Meeting.

    - Miscellaneous Meetings - A total of 20 ½-day meetings will be attended by one (1) office consultant team member.
    - Conference Calls - A total of 40 one-hour conference calls will be attended by up to two (2) office consultant team members.
- Permitting Assistance – Assistance will be provided for the following Commission-obtained permits:
    - IEPA drinking water construction permit
    - IDOT right-of-way construction permit
- Utility Coordination Assistance – Assistance will be provided to coordinate with the following entities during construction:
    - ComEd
    - Nicor
    - AT&T
    - Comcast
    - City of Joliet
    - MCI/Verizon
- Commissioning and Startup Assistance – Commissioning and Startup Assistance will be provided as defined in RC000.
- Preparation of Record Drawings - It is assumed 204 record drawings will be compiled based on the as-built conditions documented by the construction contractor as defined in Section RC000.

JC805 JOL-08-05: Storage Tanks

Scope and budget for completion of final design engineering and bidding support services for Storage Tanks to be constructed at the Stryker, West/Central High Pressure Zone site, and Washington Street were authorized under Amendment No. 3. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

Land Acquisition Allowance Assignment

As noted under Task JB400, Amendment No. 4 includes authorization to use a portion of the JAL3/JB400 allowance to support easement acquisition activities for the West & Central High Pressure Zone, Stryker, and Washington Street storage facilities. As described under Task JB400, $41,457 of the JAL3/JB400 land acquisition allowance is assigned to task JC805 for the acquisition of 2 temporary and 2 permanent easements on 2 individual parcels. The easements assigned to this project are for the delivery stations at West and Central Pressure zone station at the Black and County Line site and at the Stryker Station site. The easements are between the City of Joliet and the GPWC.

JC806 JOL-08-06: Pump Stations

Scope and budget for completion of final design engineering and bidding support services for Pump Stations were authorized under Amendment No. 3. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

New Design Scope

The City has requested a new equipment storage building be designed for construction at the City-owned property near Black Road and County Line Road where the new WCHPZ Pump Station will be constructed. The new building is intended to be similar to a storage building recently constructed by the City at its Eastside WWTP but will not include a wash bay. The building will have approximate dimensions of 60 feet by 124 feet and will be constructed with interior insulated metal wall girts, exterior masonry walls, and a sloped metal roof. The new building will include up to 12 garage doors, one restroom, one storage closet, up to 4 access doors, floor drains, ventilation and heating equipment, as well as interior and exterior lighting.

Design services for this building will include:

- Participation in a meeting with City staff to confirm a location for the proposed building on the site and mark-up layout drawings from the Eastside WWTP site building for use in documenting expectations regarding the layout and configuration of the building.
- Performance of additional geotechnical investigations (up to 2 borings) as required to support design of the proposed building.
- Preparation and submittal of 60%, 90%, and 100% design documents (plans and specifications) for the proposed storage building in parallel with plans for the WCHPZ Pump Station.
- Coordination of permitting for the new storage building with permitting for the WCHPZ Pump Station
- Performance of technical reviews of the 60%, 90%, and 100% design deliverables, and
- Preparation of OPCCs for the proposed new equipment storage building at the 60% and 90% design milestones in accordance with the overall design approach for CIP #8 improvements.

This facility represents an addition to the overall scope and budget for the Joliet AWSP Water System Improvements.

Supplemental Design Services

Delays in the final identification of a site for the West/Central High Pressure Zone facilities and analyses performed to assess various configurations for the proposed pumping facilities at the West/Central High Pressure Zone location resulted in greater than anticipated design efforts. Additional efforts not anticipated in the Amendment No. 3 scope but completed or planned to be completed by the Consultant Team included:

- Development of preliminary layouts and site plans for Troy Middle School Property before the property became no longer available.
- Development of preliminary layouts and alternative tank sizing for potential new sites including two locations near County Line Road and Van Dyke, Jones Elementary School, and the Black and County Line Road site.
- Attendance at meetings, preparation of calculations and correspondence, and performance of modeling and system investigations to search for alternative locations for the WCHPZ station.
- Additional work package management and meetings and coordination due to schedule delays and changes in siting for WCHPZ pump station.

Additional effort by the Consultant Team has been included for the Stryker site as follows:

- Development of an initial site plan using site terrain to minimize storage tank sidewall height with the pumping station and storage tanks on the north side of the site.
- Revising the site plan to shift the pumping station and storage tanks to the south side of the site to accommodate the potential addition of a public works administration building..
- Revision of sizing and design for the proposed pumps and related equipment based on the City request to lower than tank height.

A total of 268 person-hours of additional effort is projected to be required for completion of these tasks.

Land Acquisition Allowance Assignment

As noted under Task JB400, Amendment No. 4 includes authorization to use a portion of the JAL3/JB400 allowance to support easement acquisition activities for the West & Central High Pressure Zone and Stryker Pump Station improvements. As described under Task JB400, $20,729 of the JAL3/JB400 land acquisition allowance is assigned to task JC806 for the acquisition of 1 temporary and 1 permanent easements on 1 individual parcels. This easement is for the water main leaving the Stryker site to the east out to Midland Avenue.

JC807 JOL-08-07: Washington St Pump Station and Essington Pump Station Upgrades

Scope and budget for completion of final design engineering and bidding support services for a new Washington Street Pump Station and modifications to the Essington Pump Station were authorized under

Amendment No. 3. In Amendment No. 3 design services for the Essington Pump Station were included under Task JC803. Following changes in the plan and schedule for construction of the upgrades at the Essington Pump Station, scope and budget for those services were moved to Task JC807. Services to be performed by the Consultant Team under Amendment No. 4 are described below.

Supplemental Design Services

Additional effort by the Consultant Team for the Essington Pumping Station has been included for:

- Investigation of numerous locations along the proposed GPWC transmission main and the City's existing raw water transmission main for a water delivery structure due to the difficulty in obtaining property and/or easements for the water delivery transmission main construction from Glenwood Avenue and Infantry Drive to the Essington Pumping Station property. Development of multiple site designs and conceptual layouts related to placement of the water delivery structures and water mains at a new site location.
- Performance of an alternative siting analysis and conceptual cost opinions associated with five alternative configurations of receiving and delivery stations in the Essington Pumping Station area. Preparation of memorandum summarizing the findings of the analysis.
- Efforts related to development of site layout alternatives and land acquisition support for the City of Joliet water delivery structure to be located at John Leach Park.

Additional effort by the Consultant Team for the Washington Street Pumping Station has been included for:

- Investigation of five alternative site layouts to minimize impacts to the neighboring properties and minimize the amount of the existing City property which is impacted.

Effort associated with these supplemental design services totals approximately 235 person-hours.

Land Acquisition Allowance Assignment

As noted under Task JB400, Amendment No. 4 includes authorization to use a portion of the JAL3/JB400 allowance to support easement acquisition activities for the Washington Street Pump Station and the Essington Pump Station Improvements. As described under Task JB400, $41,457 of the JAL3/JB400 land acquisition allowance is assigned to task JC807 for the acquisition of 2 temporary and 2 permanent easements on 2 individual parcels. These easements are from the Joliet Park District for the City's infrastructure and for the GPWC's infrastructure.

JC809 JOL-08-09: Water and Sewer Garage Improvements

Scope and budget for completion of final design engineering and bidding support services for new Water and Sewer Garage Improvements for the City of Joliet were authorized under Amendment No. 3. However, analyses of multiple sites were required to identify a suitable location for the Water and Sewer Garage. Subsequently, preliminary engineering efforts and field investigations at the site resulted in the identification of specific changes required to the design scope for the facility. Services to be performed by the Consultant Team under Amendment No. 4 include efforts to accommodate these design changes as described below.

Supplemental Design Services

Additional effort by the Consultant Team has been included for:

- Engineering evaluation of additional sites (Mission and McDonough, McDonough and SE Frontage Rd, Hollywood Rd, Caton Farm and Frontage Rd, Rock Run) prior to acquiring the Glosky site.
- Extension of water and sewer service to the site.
- Connection of Rock Island Avenue to Route 6 including an at grade crossing of the Railroad, including a traffic study required by IDOT, or evaluation and design of an extension of Rock Island Avenue to Cherry Lane

- Site layout/roadway design due to significant grade change from Meadow Road into the property, and
- Geotechnical analysis and design of soil stabilization measures required due to the placement of uncontrolled fill on the property.

Office Engineering Services During Construction

- Work Package Management – Work Package Management as described in Section RC000 will be provided for the anticipated construction duration of 20 months.
- Conformed Documents – A total of 80 hours have been included for compiling conformed documents as defined in Section RC000.
- Submittal Reviews – It is assumed that a total of 100 original submittals and subsequent resubmittals will be reviewed for this work package as defined in section RC000.
- RFI Reviews - It is assumed that the office Consultant team will respond to a total of 40 RFIs for this work package as defined in section RC000.
- Change Order Preparation/Review – It is assumed that 12 change orders will be reviewed for this work package as defined in section RC000.
- Shop Witness Testing – It is assumed that there will be no shop witnessed tests provided under this activity.
- Field and Miscellaneous Meetings. A construction duration of 20 months has been assumed for the reoccurring meetings listed below.
    - Pre-Construction Meeting – It is assumed that 4 team members will attend the ½-day Pre-Construction Meeting.
    - Miscellaneous Meetings - A total of 20 ½-day meetings will be attended by one (1) office consultant team member.
    - Conference Calls - A total of 40 one-hour conference calls will be attended by up to two (2) office consultant team members.
- Permitting Assistance – Assistance will be provided for the following Joliet-obtained permits:
    - IDOT right-of-way construction permit
    - Joliet Building permit
    - Joliet sewer permit
- Utility Coordination Assistance – Assistance will be provided to coordinate with the following entities that may be providing utility service to the completed facility:
    - ComEd
    - Nicor
    - AT&T
    - Comcast
    - City of Joliet
- Commissioning and Startup Assistance – Commissioning and Startup Assistance will be provided as defined in RC000.
- Preparation of Record Drawings - It is assumed 45 record drawings will be compiled based on the as-built conditions documented by the construction contractor as defined in Section RC000.

JC810 JOL-08-10: Joliet Distribution System Master Planning

Amendment 4 includes 22 hours per month during the period of September 2024 through August 2026 (total of 528 person-hours) for ongoing distribution system modeling services required to address CIP #8 design questions and assist the City's Water Main Replacement Program Team with proper sizing and configuration of replacement water main such that parallel mains are eliminated and an adequate level of service is provided before and after switching sources and during emergency operations. These conditions are occurring throughout the Low Zone, along Washington, in the Raynor and Broadway area, and in the Stryker and Midland area.

Budget also includes hours for general modeling, memo preparation, and coordination required to address other distribution system planning questions.

JC815 JOL-08-15: Water Main Replacement Program – Parallel Projects

The City has identified three locations where City of Joliet water main projects are to be constructed in the same right-of-way as proposed GPWC water transmission main projects. The three locations include:

- Infantry from John Leach Park to Richmond (approximately 1,300 linear feet of new water main required to support Joliet's transition to a GPWC supply
- Infantry from Richmond to Jefferson (approximately 800 linear feet of aged water main replacement)
- McDonough from Joyce to Stryker (approximately 5,700 linear feet of aged water main replacement)

To provide for the efficient design and subsequent construction of these improvements, and eliminate the need for two separate construction projects in the same areas, the Consultant Team will prepare design and bidding documents for these improvements to be incorporated into the AWSP-06-02 bid package. A total of 26 additional drawing sheets are expected to be required to present the design for these parallel water main improvements.

Design and bidding activities for these projects will be performed in a manner generally consistent with the water transmission main design approach outlined in Section RC600 and the City of Joliet water main design standards used for work package JOL-08-04 and the City's Water Main Replacement Program (WMRP). Standard details and specifications from the City's WMRP will be used for these projects and adapted where necessary based on specific project requirements. The design will provide for service line replacement up to the curb box. No lead service line replacement is currently anticipated as part of this work. Should lead services be identified along the proposed water mains, the Consultant Team will notify the City and request authorization for additional direction and/or budget before proceeding with that aspect of the design.

It is anticipated that survey, geotechnical, and utility investigations being performed for the AWSP-06-02 work package will generally provide sufficient information to support the design of these parallel projects. Budget is included in this scope for up to two additional borings, should they be determined to be required. No budget for additional survey or SUE investigations beyond that being performed for AWSP-06-02 is included in this scope.

The design documents for the parallel projects will be developed in a manner to allow for integration into the bidding package for AWSP-02-06, but will clearly delineate project work, pay items, and costs to be attributed separately to the GPWC and the City of Joliet during construction.

Design for the parallel projects will be incorporated into the 60% design submittal (and subsequent submittals) for AWSP-02-06 and will be reviewed concurrently with that work package. Anticipated construction costs for the parallel projects will be defined in conjunction with the development of the 60% and 90%/100% OPCCs for AWSP-06-02, and will be shown separately so that anticipated Commission and Joliet Only costs are identified.

If necessary, the Consultant Team will prepare an IEPA water main construction permit application for the parallel projects to be submitted to IEPA with the permit application for AWSP-06-02.

JD000 Construction Management – Joliet AWSP Water System Improvements

Construction management tasks related to the Joliet AWSP Water System Improvements will be performed in accordance with the Construction Management tasks described under heading RD000 Construction Management, but in a scaled, fit-for-purpose approach. A single Lead RE will have overall responsibility for the Joliet Only projects. Each Joliet Work Package will have Field Engineers and Inspectors assigned. The LRE will be supported by the CM Team (Program Construction Manager, Safety Officer, Schedulers, Cost Engineers, and Controls Staff). Costs associated with these efforts will be tracked explicitly so that they are properly separated from costs associated with management of the regional elements of the AWSP. The scope and budget included in Amendment 4 covers work packages JOL-08-02, JOL-08-03, JOL-08-04 and JOL-08-09.

Figure A4-2 provides the assumed level of effort (indicated as Full Time Equivalents) for the CM Team by month based on the current construction schedule for the Joliet Only work packages. Estimated effort for work packages not included in this Amendment No. 4 is shown on shaded lines for reference only.

JAL5 Soil and Utility Construction Support Allowance (Joliet Only)

In recognition of the potential need for support to resolve unidentified issues related to utility coordination or soil management issues during construction of the planned CIP #8 improvements, an allowance of $125,000 is included in Amendment No. 4.

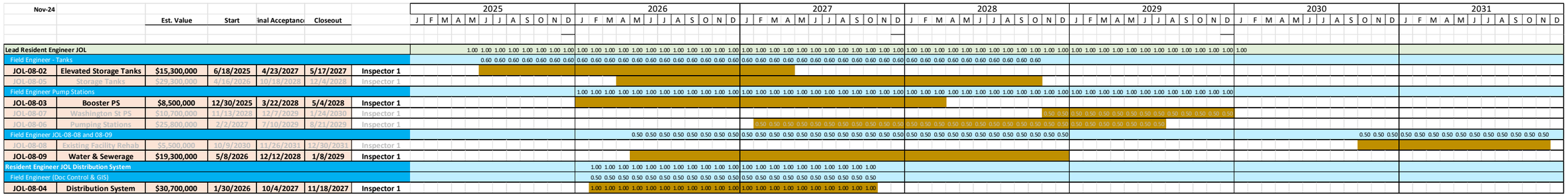

Figure A4-2 Alternative Water Source Program Construction Management Resource Plan – Joliet Only Tasks (November 2024)

ATTACHMENT B4

CITY OF JOLIET ALTERNATIVE WATER SOURCE PROGRAM

AMENDMENT NO. 4 BASIS OF COMPENSATION

PROGRAM MANAGEMENT (2024 – 2026),
FINAL DESIGN (2024 – 2028) AND CONSTRUCTION MANAGEMENT
(2024 – 2029)

11/07/2024

Attachment B4

JOLIET ALTERNATIVE WATER SOURCE PROGRAM
AMENDMENT NO. 4 BASIS OF COMPENSATION AND DETAILED FEE BREAKDOWN
November 7, 2024

		Consultant Team				Amendment 3 Reconciliation	
Task Code	Task Name	Estimated Level of Effort (hours)	Estimated Labor Billings	Estimated Reimbursable Costs	**Estimated Total Costs**	Amendment #3 Remaining Budget	**Amendment #4 Fee Request**
RA000/ RP000	**Oversight / Program Management**	**60,081**	**$ 13,185,985**	**$ 544,696**	**$ 13,730,681**	**$ 550,000**	**$ 13,180,681**
RA100	Program Management Coordination Meetings	2,698	$ 713,220	$ 1,300	$ 714,520	$ 225,000	$ 489,520
RA200	Public Outreach	1,083	$ 383,024	$ 16,976	$ 400,000	$ -	$ 400,000
RA300	Region-wide GIS Management	1,728	$ 317,294	$ -	$ 317,294	$ (125,000)	$ 442,294
RA400/ RP400	Program Governance and Administration	936	$ 143,960	$ -	$ 143,960	$ 350,000	$ (206,040)
RA500/ RP500	Health and Safety Plan	468	$ 71,980	$ -	$ 71,980	$ -	$ 71,980
RA800/ RP800	Program Quality Management	936	$ 143,960	$ -	$ 143,960	$ 85,000	$ 58,960
RA900/ RP900	Risk and Values Management	1,336	$ 207,647	$ -	$ 207,647	$ 300,000	$ (92,353)
RA1100	Program Management	13,676	$ 4,304,502	$ 50,000	$ 4,354,502	$ -	$ 4,354,502
RA1200	Program Administration	9,556	$ 1,542,824	$ -	$ 1,542,824	$ -	$ 1,542,824
RP100	Program Management Office Mobilization	-	$ -	$ -	$ -	$ 175,000	$ (175,000)
RP200	Program Management Plan (PgMP)	288	$ 59,374	$ -	$ 59,374	$ -	$ 59,374
RP300	Program Delivery Strategy	-	$ -	$ -	$ -	$ 100,000	$ (100,000)
RP600	Procurement and Contract Administration	6,760	$ 974,651	$ -	$ 974,651	$ -	$ 974,651
RP700	Local and DBE Utilization Plan	-	$ -	$ -	$ -	$ 25,000	$ (25,000)
RP1000	Program Controls	20,616	$ 4,323,550	$ 476,420	$ 4,799,970	$ (730,000)	$ 5,529,970
RP1500	Pre-Construction Planning	-	$ -	$ -	$ -	$ 70,000	$ (70,000)
RP1600	Independent Review Coordination	-	$ -	$ -	$ -	$ 75,000	$ (75,000)
RB000	**External Coordination - Regional**	**9,565**	**$ 2,255,365**	**$ 107,800**	**$ 2,363,165**	**$ 373,683**	**$ 1,989,482**
RB100	CDWM Coordination	1,476	$ 366,926	$ 2,780	$ 369,706	$ 50,000	$ 319,706
RB200	Regional Commission Development	1,516	$ 411,025	$ 2,780	$ 413,805	$ -	$ 413,805
RB300	Regulatory, Environmental, Permitting Management	2,695	$ 629,042	$ 85,000	$ 714,042	$ 125,000	$ 589,042
RB400	Land Acquisition Management - Regional	1,020	$ 179,303	$ 14,460	$ 193,763	$ -	$ 193,763
RB500	Field Investigation Coordination and Management - Regiona	376	$ 70,740	$ -	$ 70,740	$ 10,000	$ 60,740
RB600	Sustainability Strategy Management - Regional	288	$ 63,908	$ -	$ 63,908	$ 40,000	$ 23,908
RB700	Funding Agency Coordination - Regional	1,528	$ 385,738	$ 2,780	$ 388,518	$ -	$ 388,518
RB800	Government Outreach and Coordination	666	$ 148,683	$ -	$ 148,683	$ 148,683	$ (0)
RC000	**Engineering - Regional**	**155,796**	**$ 32,093,406**	**$ 6,053,416**	**$ 38,146,822**	**$ 940,000**	**$ 37,206,822**
RC010	Program Design Management	14,651	$ 3,191,173	$ 100,000	$ 3,291,173	$ (160,000)	$ 3,451,173
RC100	**CIP #1 Chicago Connection Facilities - Final Design**	**6,384**	**$ 1,343,776**	**$ 17,400**	**$ 1,361,176**	**$ -**	**$ 1,361,176**
RC100	Design Coordination/Standards Development	-	$ -	$ -	$ -	$ -	$ -
RC101	AWSP-01-01: Tunnel Extension Final Design	2,297	$ 517,629	$ 8,700	$ 526,329	$ -	$ 526,329
RC102	AWSP-01-02: Suction Well Final Design	2,800	$ 583,278	$ 8,700	$ 591,978	$ -	$ 591,978
RC103	AWSP-01-03: Low Service and High Service Pump Stations Fi	1,287	$ 242,869	$ -	$ 242,869	$ -	$ 242,869
RC200	**CIP #2 Finished Water Transmission Main**	**38,452**	**$ 7,756,690**	**$ 2,744,393**	**$ 10,501,083**	**$ -**	**$ 10,501,083**
RC200	Design Coordination/Standards Development	1,046	$ 160,056	$ 8,000	$ 168,056	$ -	$ 168,056
RC201	AWSP-02-01 Finished Water Transmission Main - A	5,897	$ 1,106,655	$ 268,580	$ 1,375,235	$ -	$ 1,375,235
RC202	AWSP-02-02 Finished Water Transmission Main - B	9,942	$ 2,284,218	$ 583,501	$ 2,867,719	$ -	$ 2,867,719
RC203	AWSP-02-03 Finished Water Transmission Main - C	3,322	$ 567,097	$ 485,860	$ 1,052,957	$ -	$ 1,052,957
RC204	AWSP-02-04 Finished Water Transmission Main - D	6,626	$ 1,153,602	$ 869,640	$ 2,023,242	$ -	$ 2,023,242
RC205	AWSP-02-05 Finished Water Transmission Main - E	6,461	$ 1,483,308	$ 355,472	$ 1,838,780	$ -	$ 1,838,780
RC206	AWSP-02-06 Finished Water Transmission Main - F	5,157	$ 1,001,754	$ 173,340	$ 1,175,094	$ -	$ 1,175,094
RC300	**CIP #3 Intermediate Pump Station and Standpipe**	**4,610**	**$ 1,234,098**	**$ 7,800**	**$ 1,241,898**	**$ -**	**$ 1,241,898**
RC400	**CIP #4 Intermediate Standpipe 2 and Auxiliary Pump Statio**	**-**	**$ -**	**$ 21,450**	**$ 21,450**	**$ -**	**$ 21,450**
RC500	**CIP #5 Regional SCADA**	**2,593**	**$ 639,136**	**$ -**	**$ 639,136**	**$ -**	**$ 639,136**
RC500	Design Coordination/Standards Development	443	$ 125,741	$ -	$ 125,741	$ -	$ 125,741
RC501	AWSP-05-01 Fiber and Network Installation	-	$ -	$ -	$ -	$ -	$ -
RC502	AWSP-05-02 SCADA Programming/Integration	809	$ 197,465	$ -	$ 197,465	$ -	$ 197,465
RC503	AWSP-05-03 Video Surveillance	730	$ 172,130	$ -	$ 172,130	$ -	$ 172,130
RC504	AWSP-05-04 Security System	611	$ 143,800	$ -	$ 143,800	$ -	$ 143,800

Attachment B4

JOLIET ALTERNATIVE WATER SOURCE PROGRAM
AMENDMENT NO. 4 BASIS OF COMPENSATION AND DETAILED FEE BREAKDOWN
November 7, 2024

		Consultant Team				Amendment 3 Reconciliation	
Task Code	**Task Name**	Estimated Level of Effort (hours)	Estimated Labor Billings	Estimated Reimbursable Costs	**Estimated Total Costs**	Amendment #3 Remaining Budget	**Amendment #4 Fee Request**
RC600	**CIP #6 Regional Transmission Main**	**79,248**	**$ 15,496,746**	**$ 2,852,633**	**$ 18,349,379**	**$ 1,100,000**	**$ 17,249,379**
RC600	Design Coordination/Standards Development	2,703	$ 777,379	$ 2,000	$ 779,379	$ -	$ 779,379
RC601	AWSP-06-01 Regional Transmission Main - Segment A	17,368	$ 3,083,052	$ 681,723	$ 3,764,775	$ 100,000	$ 3,664,775
RC602	AWSP-06-02 Regional Transmission Main - Segment B	8,200	$ 1,613,428	$ 417,000	$ 2,030,428	$ 50,000	$ 1,980,428
RC603	AWSP-06-03 Regional Transmission Main - Segment C	16,459	$ 3,331,458	$ 380,960	$ 3,712,418	$ 550,000	$ 3,162,418
RC604	AWSP-06-04 Regional Transmission Main - Segment D	12,194	$ 2,393,202	$ 542,890	$ 2,936,092	$ 225,000	$ 2,711,092
RC605	AWSP-06-05 Regional Transmission Main - Segment E	15,021	$ 2,748,943	$ 748,460	$ 3,497,403	$ 175,000	$ 3,322,403
RC606	AWSP-06-06 Water Delivery Structure 1	2,955	$ 613,530	$ 23,800	$ 637,330	$ -	$ 637,330
RC607	AWSP-06-07 Water Delivery Structure 2	2,707	$ 573,864	$ 23,800	$ 597,664	$ -	$ 597,664
RC608	AWSP-06-08 Water Delivery Structure 3	298	$ 55,113	$ 16,000	$ 71,113	$ -	$ 71,113
RC609	AWSP-06-09 Water Delivery Structure 4	1,343	$ 306,778	$ 16,000	$ 322,778	$ -	$ 322,778
RC700	**CIP #7 Mega Crossings**	**7,861**	**$ 1,810,358**	**$ 309,740**	**$ 2,120,098**	**$ -**	**$ 2,120,098**
RC701	AWSP-07-01 Cal-Sag Crossing	3,046	$ 726,512	$ 98,040	$ 824,552	$ -	$ 824,552
RC702	AWSP-07-02 Des Plaines Crossing	4,815	$ 1,083,846	$ 211,700	$ 1,295,546	$ -	$ 1,295,546
RC1000	**Commission Office Space Needs Assessment & Schematic I**	-	**$ -**	**$ -**	**$ -**	**$ -**	$ -
RC1100	**CIP #11 Start-up and Commissioning**	**1,998**	**$ 621,428**	**$ -**	**$ 621,428**	**$ -**	$ 621,428
RD000	**Construction Management - Regional**	**262,097**	**$ 46,450,336**	**$ 7,184,145**	**$ 53,634,481**	**$ -**	**$ 53,634,481**
RD100	Construction Management Support	33,691	$ 7,138,548	$ 726,165	$ 7,864,713	$ -	$ 7,864,713
RD101	AWSP-01-01: Tunnel Extension	14,467	$ 2,335,398	$ 281,601	$ 2,617,000	$ -	$ 2,617,000
RD102	AWSP-01-02: Suction Well	12,257	$ 1,955,688	$ 341,762	$ 2,297,450	$ -	$ 2,297,450
RD201	AWSP-02-01: Finished Water Transmission Main - A	22,670	$ 3,751,593	$ 887,966	$ 4,639,559	$ -	$ 4,639,559
RD202	AWSP-02-02: Finished Water Transmission Main - B	21,203	$ 3,602,293	$ 807,789	$ 4,410,082	$ -	$ 4,410,082
RD205	AWSP-02-05: Finished Water Transmission Main - E	26,217	$ 4,501,514	$ 1,048,587	$ 5,550,100	$ -	$ 5,550,100
RD206	AWSP-02-06: Finished Water Transmission Main - F	16,859	$ 2,830,472	$ 597,305	$ 3,427,777	$ -	$ 3,427,777
RD301	AWSP-03-01: Intermediate Pump Station and Standpipe	19,707	$ 3,548,945	$ 430,160	$ 3,979,105	$ -	$ 3,979,105
RD601	AWSP-06-01: Regional Transmission Main - Segment A	17,623	$ 2,994,488	$ 359,286	$ 3,353,775	$ -	$ 3,353,775
RD603	AWSP-06-03: Regional Transmission Main - Segment C	22,568	$ 3,864,710	$ 580,271	$ 4,444,980	$ -	$ 4,444,980
RD606	AWSP-06-06: Water Delivery Structure 1	3,206	$ 533,766	$ 53,165	$ 586,931	$ -	$ 586,931
RD607	AWSP-06-07: Water Delivery Structure 2	3,325	$ 572,581	$ 57,871	$ 630,451	$ -	$ 630,451
RD701	AWSP-07-01: Cal-Sag Crossing	20,774	$ 3,682,851	$ 433,262	$ 4,116,112	$ -	$ 4,116,112
RD702	AWSP-07-02: Des Plaines Crossing	27,528	$ 5,137,489	$ 578,956	$ 5,716,445	$ -	$ 5,716,445

Attachment B4

JOLIET ALTERNATIVE WATER SOURCE PROGRAM
AMENDMENT NO. 4 BASIS OF COMPENSATION AND DETAILED FEE BREAKDOWN
November 7, 2024

		Consultant Team				Amendment 3 Reconciliation	
Task Code	**Task Name**	Estimated Level of Effort (hours)	Estimated Labor Billings	Estimated Reimbursable Costs	**Estimated Total Costs**	Amendment #3 Remaining Budget	**Amendment #4 Fee Request**
JA000	**Oversight / Program Management - Joliet Water System I**	**7,551**	**$ 1,643,601**	**$ 145,975**	**$ 1,789,576**	**$ 425,000**	**$ 1,364,576**
JA100	City Meetings	546	$ 144,268	$ -	$ 144,268	$ 75,000	$ 69,268
JA200	Public Outreach	1,602	$ 326,625	$ 1,875	$ 328,500	$ 75,000	$ 253,500
JA300	CIP8 Management	4,088	$ 952,578	$ 144,100	$ 1,096,678	$ 200,000	$ 896,678
JA400	City-wide GIS Management	288	$ 55,578	$ -	$ 55,578	$ 40,000	$ 15,578
JA500	CIP8 Administration	1,027	$ 164,553	$ -	$ 164,553	$ 35,000	$ 129,553
JB000	**External Coordination - Joliet**	**3,152**	**$ 672,598**	**$ 18,190**	**$ 690,788**	**$ 250,000**	**$ 440,788**
JB200	Regional Commission Coordination	96	$ 26,192	$ -	$ 26,192	$ 50,000	$ (23,808)
JB300	Regulatory, Environmental, Permitting Mgmt	1,265	$ 262,924	$ -	$ 262,924	$ 150,000	$ 112,924
JB400	Land Acquisition Management	609	$ 115,445	$ 18,190	$ 133,635	$ -	$ 133,635
JB500	Field Investigation Coord and Mgmt	42	$ 7,902	$ -	$ 7,902	$ -	$ 7,902
JB600	Sustainability Strategy Management	96	$ 21,303	$ -	$ 21,303	$ -	$ 21,303
JB700	Funding Agency Coordination	700	$ 163,686	$ -	$ 163,686	$ 50,000	$ 113,686
JB800	Governmental Outreach/Coordination	344	$ 75,147	$ -	$ 75,147	$ -	$ 75,147
JC000	**Engineering - Joliet**	**17,215**	**$ 3,676,332**	**$ 160,782**	**$ 3,837,114**	**$ -**	**$ 3,837,114**
JC800	CIP #8 Joliet AWSP Water System Improvements	1,606	$ 487,284	$ -	$ 487,284	$ -	$ 487,284
JC802	JOL-08-02 Elevated Storage Tanks	1,061	$ 225,322	$ -	$ 225,322	$ -	$ 225,322
JC803	JOL-08-03 Booster Pump Station, Upgrades, Morgan St PRV	1,677	$ 339,822	$ 26,790	$ 366,612	$ -	$ 366,612
JC804	JOL-08-04 Distribution System Improvements	3,726	$ 676,929	$ 30,690	$ 707,619	$ -	$ 707,619
JC805	JOL-08-05 Storage Tanks	156	$ 26,197	$ 15,260	$ 41,457	$ -	$ 41,457
JC806	JOL-08-06 Pumping Stations	956	$ 201,035	$ 17,630	$ 218,665	$ -	$ 218,665
JC807	JOL-08-07 Washington St Pumping Station	1,300	$ 221,589	$ 15,260	$ 236,849	$ -	$ 236,849
JC809	JOL-08-09 Water and Sewerage Garage Improvements	4,597	$ 1,057,348	$ 43,152	$ 1,100,500	$ -	$ 1,100,500
JC810	Distribution System Master Planning	528	$ 100,000	$ -	$ 100,000	$ -	$ 100,000
JC815	WMRP: Parallel Projects	1,608	$ 340,807	$ 12,000	$ 352,807	$ -	$ 352,807
JD000	**Construction Management - Joliet**	**20,305**	**$ 3,469,683**	**$ 805,432**	**$ 4,275,115**	**$ -**	**$ 4,275,115**
JD802	JOL-08-02: Elevated Storage Tanks	3,794	$ 722,284	$ 168,436	$ 890,720	$ -	$ 890,720
JD803	JOL-08-03: Booster Pump Station, Upgrades, Morgan St PRV	4,763	$ 825,058	$ 123,218	$ 948,277	$ -	$ 948,277
JD804	JOL-08-04: Distribution System Improvements	9,093	$ 1,394,036	$ 331,531	$ 1,725,567	$ -	$ 1,725,567
JD809	JOL-08-09: Water and Sewer Garage Improvements	2,655	$ 528,305	$ 182,247	$ 710,552	$ -	$ 710,552
Total - Amendment 4 Base Scope		**273,665**	**$ 103,447,306**	**$ 15,020,436**	**$ 118,467,742**	**$ 2,538,683**	**$ 115,929,059**
Allowances			**$ (708,540)**	**$ -**	**$ (708,540)**	**$ -**	**$ (708,540)**
RAL1	Environmental Investigation Allowance (Soils)				$ -		
RAL2	Field Investigation Allowance (Utilities)				$ -		
RAL3/RB400	CIP 2 & 6 Land Acquisition Allowance		$ (2,000,000)		$ (2,000,000)	$ -	$ (2,000,000)
RAL4	PMIS Allowance				$ -		
RAL5	Soil and Utility Construction Support Allowance		$ 1,528,110		$ 1,528,110	$ -	$ 1,528,110
JAL1	Environmental Investigation Allowance (Soils)				$ -		
JAL2	Field Investigation Allowance (Utilities)				$ -		
JAL3/JB400	CIP 8 Land Acquisition Allowance		$ (361,650)		$ (361,650)	$ -	$ (361,650)
JAL4	PMIS Allowance				$ -		
JAL5	Soil and Utility Construction Support Allowance		$ 125,000		$ 125,000	$ -	$ 125,000
OTH	Miscellaneous Allowance (Environmental Permitting)				$ -		
Owner-Controlled On-Call Tasks			**$ 2,000,000**		**$ 2,000,000**	**$ 163,185**	**$ 1,836,815**
	Owner Controlled Fund - Commission		$ 1,600,000		$ 1,600,000	$ 163,185	$ 1,436,815
	Owner Controlled Fund - Joliet		$ 400,000		$ 400,000	$ -	$ 400,000
Total Fee - Amendment No. 4					**$ 119,759,203**	**$ 2,701,868**	**$ 117,057,335**
Total Fee - Amendment No. 4 (Commission Tasks)			**$ 95,113,202**	**$ 13,890,057**	**$ 109,003,259**	**$ 2,026,868**	**$ 106,976,391**
Total Fee - Amendment No. 4 (Joliet Only Tasks)			**$ 9,625,565**	**$ 1,130,379**	**$ 10,755,944**	**$ 675,000**	**$ 10,080,944**

City of Joliet

150 West Jefferson Street
Joliet, IL 60432

Memo

File #: ID-1908-20 **Agenda Date:**11/18/2024

TO: Mayor and City Council

FROM: Beth Beatty, City Manager

SUBJECT:
Ordinance Amending Chapter 31 of the Code of Ordinances in Regard to Local Limits and Administrative Enforcement Remedies

BACKGROUND:
The United States Environmental Protection Agency (USEPA) regulations require wastewater treatment plants have an Industrial Pretreatment Program. The City of Joliet instituted its Industrial Pretreatment Program in 1986 in accordance with federal guidelines. The federal regulations require industrial wastewater customers to comply with certain discharge standards called local limits. The local limits that are adopted by the City must be based on scientific data derived from actual samples from the City's collection system, receiving streams and wastewater treatment plants which are utilized to calculate the plants' effective removal rates. The City of Joliet's NPDES (National Pollutant Discharge Elimination System) permits require a periodic re-evaluation and revision (if needed) of the local limits. The Public Service Committee will review this matter.

CONCLUSION:
The Department of Public Utilities has undertaken the process of re-evaluating the local limits. After sampling was completed, the data was processed using the guidelines set forth by the USEPA and revisions to the City's local limits were calculated. Proposed changes to the local limits were submitted to the Public Service Committee on March 6, 2023 for permission to submit to USEPA for approval. Upon approval from the Public Service Committee the local limits were sent to USEPA. On July 18, 2024 the USEPA tentatively approved the proposed local limits.

RECOMMENDATION:
Based on the above, the Administration recommends that the Mayor and City Council approve the attached ordinance amending Chapter 31 of the Code of Ordinances in regard to local limits and administrative enforcement remedies.

ORDINANCE NO.

ORDINANCE AMENDING CHAPTER 31 OF THE CODE OF ORDINANCES IN REGARD TO LOCAL LIMITS AND ADMINISTRATIVE ENFORCEMENT REMEDIES

WHEREAS, the Mayor and City Council of the City of Joliet, Illinois (City) have the authority to adopt ordinances and to promulgate rules and regulations that pertain to its government and affairs and protect the public health, safety, and welfare of its citizens; and

WHEREAS, the City owns and operates three wastewater treatment plants; and

WHEREAS, the United States Environmental Protection Agency (USEPA) regulations require wastewater treatment plants have an Industrial Pretreatment Program; and

WHEREAS, the City instituted its Industrial Pretreatment Program in 1986 in accordance with federal guidelines; and

WHEREAS, the federal guidelines require industrial wastewater customers comply with certain discharge standards called local limits; and

WHEREAS, the local limits adopted by the City must be based on scientific data derived from actual samples from the City's collection system, receiving streams and wastewater treatment plants which are utilized to calculate the plants' effective removal rates; and

WHEREAS, the City's National Pollutant Discharge Elimination System permits require a periodic re-evaluation and revision (if needed) of the local limits; and

WHEREAS, the City has undertaken the process of re-evaluating the local limits; and

WHEREAS, the USEPA has reviewed and approved the proposed local limits; and

WHEREAS, the City of Joliet is a home rule unit of local government.

NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF JOLIET, ILLINOIS, PURSUANT TO ITS HOME RULE AND STATUTORY AUTHORITY, AS FOLLOWS:

SECTION 1: The Mayor and City Council hereby find that the recitals contained in the preamble to this Ordinance are true, correct and complete and are hereby incorporated into this Ordinance by reference.

SECTION 2: Effective December 1, 2024, Chapter 31, Water and Sewers, of the Code of Ordinances is hereby amended as follows:

Sec. 31-284 (b) is amended to read as follows:

(b) Toxic Pollutants

No User shall Discharge any Wastewater containing concentrations greater than the Daily Maximum Local Limits as set forth below into any sewers that connect either directly or indirectly to the POTW Works.

POLLUTANT (total unless otherwise listed)	**CONCENTRATION (mg/l)**	
	Daily Maximum	Instantaneous
Arsenic	0.4	
Cadmium	0.7	
Chromium	23	
Copper	0.9	
Cyanide	1.0	
Lead	2.0	
Mercury (see Section 31-283)	0.0005	
Nickel	1.3	
Phosphorus	31	
Silver	3.2	
Zinc	3.9	

Sec. 31-360 (d) is amended to read as follows:

(d) Each detected Violation of the plan of action, compliance schedule, and permit, will result in an NOV being issued to the User. When NOV #3 (total of three NOVs) is issued, a "ticket" shall be issued to the User, Authorized Representative except for pH and Oil & Grease violations. The ticket is a legal notice requiring the User to appear in court, either Will or Kendall County Circuit Court or the City Adjudication Court. The City shall charge assessments to the User as provided for in the ordinance. The City's Adjudication Court standards are outlined in Chapter 3.

SECTION 3: This Ordinance and every provision thereof shall be considered separable and the invalidity of any section, clause, paragraph, sentence or provision of the Ordinance shall not affect the validity of any other portion of this Ordinance. In the event any portion of this Ordinance establishing rates is found to be invalid, the most recently adopted Ordinance adopted prior to this Ordinance which establishes rates for such usage shall apply and be given full force and effect.

SECTION 4: All Ordinances or parts of ordinances conflicting with any of the provisions of this Ordinance shall be stricken and the same is hereby repealed to the extent of such conflict.

SECTION 5: The City Clerk is hereby directed to publish this Ordinance.

SECTION 6: This Ordinance shall be in full force and effect from and after its passage, approval and publication as provided by law.

PASSED this _____ day of _____, 2024.

_____ _____

MAYOR ***CITY CLERK***

VOTING YES: _____

VOTING NO: _____

NOT VOTING: _____

City of Joliet

150 West Jefferson Street
Joliet, IL 60432

Memo

File #: ID-1909-20 **Agenda Date:**11/18/2024

TO: Mayor and City Council

FROM: Beth Beatty, City Manager

SUBJECT:
Resolution Appropriating Motor Fuel Tax Funds for the 2024 Resurfacing Contract B - MFT Section No. 24-00567-00-RS in the amount of $2,019,296.84

BACKGROUND:
The 2024 Resurfacing Contract B includes resurfacing projects on various streets throughout the City and is funded by Motor Fuel Tax Funds. The Public Service Committee will review this matter.

CONCLUSION:
Funding for this project will come from Motor Fuel Tax (MFT) Funds. Since Motor Fuel Tax Funds are used for this project, the State of Illinois requires the Mayor and City Council to approve a MFT Resolution. Please find attached a Motor Fuel Tax Resolution appropriating $2,019,296.84 for the 2024 MFT Resurfacing Contract B Project.

RECOMMENDATION:
Based on the above, it is recommended that the Mayor and City Council approve the MFT resolution appropriating Motor Fuel Tax Funds.

Illinois Department of Transportation

Resolution for Improvement Under the Illinois Highway Code

Is this project a bondable capital improvement?

☐ Yes ☒ No

Resolution Type	Resolution Number	Section Number
Original		24-00567-00-RS

BE IT RESOLVED, by the Council (Governing Body Type) of the City (Local Public Agency Type)

of Joliet (Name of Local Public Agency) Illinois that the following described street(s)/road(s)/structure be improved under the Illinois Highway Code. Work shall be done by Contract (Contract or Day Labor).

For Roadway/Street Improvements:

Name of Street(s)/Road(s)	Length (miles)	Route	From	To
Various	1.67			

For Structures:

Name of Street(s)/Road(s)	Existing Structure No.	Route	Location	Feature Crossed

BE IT FURTHER RESOLVED,

1. That the proposed improvement shall consist of

Mill and overlay HMA through 2024 MFT Resurfacing Contract B

2. That there is hereby appropriated the sum of Two million nineteen thousand two hundred ninety-six and 84/100 Dollars ($2,019,296.84) for the improvement of said section from the Local Public Agency's allotment of Motor Fuel Tax funds.

BE IT FURTHER RESOLVED, that the Clerk is hereby directed to transmit four (4) certified originals of this resolution to the district office of the Department of Transportation.

I, Lauren O'Hara (Name of Clerk) City (Local Public Agency Type) Clerk in and for said City (Local Public Agency Type)

of Joliet (Name of Local Public Agency) in the State aforesaid, and keeper of the records and files thereof, as provided by statute, do hereby certify the foregoing to be a true, perfect and complete original of a resolution adopted by

Council (Governing Body Type) of Joliet (Name of Local Public Agency) at a meeting held on _____ (Date).

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this _____ (Day) day of _____ (Month, Year).

(SEAL, if required by the LPA)

Clerk Signature & Date

Approved

Regional Engineer Signature & Date
Department of Transportation