

MEETING DATE: November 9, 2017

TITLE: Ordering of the Arden Park Restoration Project and approval of a Cooperative Agreement with the City of Edina and Consultant Contract for the design of the Arden Park Restoration Project

RESOLUTION NUMBER: 17-069

PREPARED BY: Renae Clark

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REVIEWED BY: Administrator Counsel Program Mgr. (Name): _____
 Board Committee Engineer Other

WORKSHOP ACTION:

<input type="checkbox"/> Advance to Board mtg. Consent Agenda.	<input type="checkbox"/> Advance to Board meeting for discussion prior to action.
<input type="checkbox"/> Refer to a future workshop (date): _____	<input type="checkbox"/> Refer to taskforce or committee (date): _____
<input type="checkbox"/> Return to staff for additional work.	<input type="checkbox"/> No further action requested.
<input checked="" type="checkbox"/> Other (specify): <u>FINAL ACTION</u>	

PURPOSE or ACTION REQUESTED:

1. Formally order the Arden Park project
2. Authorization to enter into a Cooperative of Agreement with the City of Edina to collaborate in the development of the design and construction for Arden Park which integrates creek restoration, natural resource improvements and broader community goals for the park.
3. Authorization to contract with Inter-Fluve for the not to exceed amount of \$440,265 to lead the design for Arden Park with the City of Edina responsible for \$204,600 pursuant to the terms of the Agreement.

PROJECT/PROGRAM LOCATION:

Arden Park, Minnehaha Creek at West 54th St., Edina

PROJECT TIMELINE: (see attachment 4 for details)

- 50% Design – Jan – May 2018
- Final Design – October 2018
- Bid Award – December 2018
- Construction – Jan – October 2019

PROJECT/PROGRAM COST:

Fund name and number:	54 th Street Stream Restoration, 3147
Current budget:	\$ 751,361
City contribution	\$ 204,600
Expenditures to date:	\$ 120,074
Requested amount of funding:	\$ 235,665

PAST BOARD ACTIONS:

- On October 10, 2013, the Board of Managers approved resolution 13-101, providing authorization to investigate feasibility of removing the 54th St. grade control structure in Minnehaha Creek, while maintaining recreational functionality.
- On March 13, 2014, the Board of Mangers approved resolution 14-020, providing authorization to work with the City of Edina to incorporate fish passage into the 54th St. road reconstruction project.
- On May 22, 2014, the Board of Mangers held a Public hearing in consideration of ordering the 54th St. Bypass Channel Project. (No action required).
- On September 25, 2014, the Board of Managers approved resolution 14-075, ordering the 54th St. Bypass Channel Project in the amount of \$118,750.
- On January 29, 2015, the Board of Mangers approved resolution 15-009: authorizing staff to pursue plans for removal of the West 54th St. grade control structure and restoration of Reach 15 through Arden Park in lieu of the previously ordered fish bypass channel project.
- On April 14, 2016 staff provided a briefing to the Board of Mangers regarding design development process with respect to the adjusted CIP schedule set by the Board of Managers on April 7, 2016.
- On July 14, 2016, staff provided a briefing to the Board of Managers contextualizing the Arden Park project within a newly developed Project Prioritization Framework developed as part of organizational strategic planning.
- On August 25, 2016, the Board of Managers approved resolution 16-071, authorizing a Memorandum of Agreement with the City of Edina and also approving a consultant contract with Hart Howerton to develop an integrated concept plan for Arden Park.
- On February 9, 2017, staff provided a briefing to the Board of Managers for the review of the draft concept plan for Arden Park, cost estimate, funding, and schedule.
- On May 25, 2017, staff provided a briefing to the Board of Managers to review a proposed partnership framework with the City of Edina for advancing the project to design and construction, project status, and schedule.
- On July 13, 2017, staff provided a briefing to the Planning and Policy Committee of the Board of Managers to review project cost estimates, proposed project cost allocations between the City of Edina and MCWD under the draft Agreement structure, and a proposed funding plan.
- On October 26, 2017, the Board of Managers held a public hearing for the Arden Park Restoration Project.

SUMMARY:

Background:

Minnehaha Creek is a regional, recreational and ecological system that is part of a 47 square mile geography which includes five urbanized cities including Minneapolis and the Chain of Lakes. Since the 1950's, development and urbanization have impacted the ecological and community value of the creek system. The creek has been ditched, adjacent wetlands filled, the surrounding corridor has been fragmented, and polluted runoff has increased. For these reasons, Minnehaha Creek Watershed District (MCWD) is strategically focused within this system to improve water quality, restore the creek system and its associated floodplain and wetlands to reduce flooding, and improve the ecological function and value of the corridor. The approach to this work is through collaboration with public and private partners to integrate our goals and knowledge of the natural system with community goals throughout the corridor.

History:

In 2014, the City of Edina and MCWD signed a Memorandum of Understanding (MOU) identifying areas of collaboration within the realms of land use planning, stormwater management, economic development, flood mitigation, parks and public land management, greenway development and water resource improvements. Under that MOU, the District and City examined options for removal of an existing grade control structure (dam) within Minnehaha Creek in conjunction with the City's W. 54th Street bridge replacement project. From an ecological view, the dam has altered the function and value of the creek system by removing a mile of habitat for spawning and forage for fish below. It increases residence time of water and surface area making the water warmer, increasing algal growth and causes accumulation of decaying vegetation which uses oxygen and creates an environment that is not good for fish or the instream insects that fish eat. Minnehaha Creek is impaired for both fish and macroinvertebrate index of biotic integrity (IBI). Based on a 2003 DNR survey, fish species using the creek include northern pike, largemouth bass, smallmouth bass, bluegill, green sunfish, minnows, shiners, and suckers. While there are a number of stressors affecting fish IBI in Minnehaha Creek, habitat and connectivity are critical components.

During project development, a bypass pipe alternate was designed to provide fish passage while preserving a "standing wave" recreational feature that formed in the creek, downstream of the grade control structure, which was highly valued by an engaged kayaking community. Prior to bridge reconstruction, likely due to flood flows in the Creek, the "standing wave" no longer formed. With support of the City and a letter of support from the engaged group of kayakers, who initially opposed removal of the structure, the Board directed staff to abandon the bypass pipe alternative and pursue planning for removal of the grade control structure and restoration of the creek corridor through Arden Park in a coordinated way to achieve multiple natural resource and community benefits.

On August 16, 2016 Edina City Council authorized a Memorandum of Agreement with MCWD establishing a cooperative framework to jointly develop a Concept Plan for Arden Park which integrates creek corridor ecological improvements and water quality goals with the goals of the City's strategic plan for parks, recreation and trails, and integrates the riparian environment into the public use experience.

Project Description and Benefits:

The goal of the Arden Park project is to combine natural resource restoration goals with city and community goals for Arden Park in a way that connects people to the resource. The project would restore and enhance 17 acres of urban Minnehaha Creek corridor within Edina. The Arden Park Concept Plan includes removal of the grade control structure (dam) and a remeandered creek. The Plan integrates the valued rustic character and natural areas with upgraded park amenities.

In summary the Arden Park Concept Plan provides the following benefits:

- Connects nine miles of stream habitat by removing a dam
- Restores approximately 2,000 feet of stream channel
- Treats up to 100 acres of stormwater runoff from the surrounding neighborhoods
- Restores critical urban wildlife habitat including floodplain forest and wetland
- Provides new canoeing/kayaking loops while eliminating the need to portage across W. 54^t
- Provides increased visual and physical access to the creek for fishing and passive enjoyment with new trails
- New, multi-purpose shelter building
- Updated playground

Cooperative Agreement Summary:

Building on the August 2016 MOU, the Cooperative Agreement provides for the District to retain a consultant to prepare a design for Arden Park that incorporates the identified natural resources improvements with creek access, trails and park improvements identified on the concept plan. The Agreement does not include the Park shelter building or the playground upgrades which will be designed and constructed by the City of Edina as part of an independent process. Because the central element of the project is creek restoration with stormwater management and natural areas restoration and management, the District will retain the design consultant. The City must concur in the choice of consultant and the design scope.

There are three check points with the public, Edina Park Commission, City Council and MCWD Board of Managers which are at 30%, 50%, and 90%. The 50% and 90% designs are subject to City concurrence. Project adjustments after bid opening may be made if bid prices exceed estimates by greater than certain percentages.

Costs for design and construction are shared as follows:

Project Element	Cost Estimate	MCWD Costs	City Cost	Assumptions	Grants Targeted
Facilities	\$ 1,119,000.00		\$ 1,119,000.00	Shelter demo part of creek restoration	
Paths - main pedestrian routes	\$ 335,000.00		\$ 335,000.00	Main arterial trail and bridge, Brookview sidewalk	
Creek trail connections, overlooks and canoe landings	\$ 497,000.00	\$ 248,500.00	\$ 248,500.00	Nature trail and boardwalk at north end of park, main arterial trail bridge, corridor vegetation restoration	\$137,600 (CLP)
Creek restoration	\$ 1,243,600.00	\$1,243,600.00		creek remeander, floodplain landscape, canoe landing at W. 54th, creek access at north end of park, creek overlook south of W. 54th St.	\$200,000 (CLP)
Stormwater management	\$ 890,000.00	\$ 445,000.00	\$ 445,000.00	LID design, pollinator garden, educational signage, pervious pavements around shelter (\$290)	\$300,000 (Clean Water Funds) \$200,000 Metropolitan Council
Total Estimate	\$ 4,084,600.00	\$1,937,100.00	\$ 2,147,500.00	Design costs are shared according to funding responsibilities	
Design Cost	419330	\$ 213,490.00	\$ 205,970.00		

Note: Grant awards for costs that are shared equally will be distributed equally.

Consultant Contract Summary:

A consultant team consisting of Inter-Fluve, Hart Howerton and Wenck Associates is proposed due to their unique knowledge and experience working on Minnehaha Creek over the previous 15 years. In a technical capacity, Inter-Fluve conducted the District's 2003 and 2012 Stream Assessments throughout the Minnehaha Creek Watershed District, including Minnehaha Creek. In 2006, Inter-Fluve was hired by Methodist Hospital to design a remeander and stormwater management similar in scope to Arden Park. Inter-Fluve was later awarded a contract through a competitive proposal process to design the District's Minnehaha Preserve project also known as Reach 20, which was similar in scope and scale to Arden Park Restoration Project. The Inter-Fluve, Hart Howerton, and Wenck Associates team also designed Cottageville Park for the City of Hopkins.

The District's governance policies state that the District Administrator will not purchase any professional service in excess of \$25,000 without obtaining written quotes or bids or without utilizing a Qualification Based Selection process. Staff recommends that the Board make an exception from this policy to authorize a contract with Inter-Fluve, with Hart Howerton and Wenck Associates as subconsultants, on the basis of the unique knowledge and experience of this team with respect to the project.

In addition to its very local experience, Inter-Fluve specializes in restoring fisheries, streams, and dam removals across the country. Lead staff on the Arden Park project team share their expertise and experience by leading coursework for schools such as Harvard University. It is this combination of project specific scientific knowledge and experience locally, and world-wide, that District staff recommend that the proposed consultant team and negotiated scope of work provides the best value and expertise for this project.

The design process will include three phases which include an initial phase of creating an optimal creek alignment that maximizes ecological lift of the creek system, preserves trees, and limits cost. This phase will also include gaining a better technical understanding of the site conditions and a feasibility and layout for stormwater management practices. The second phase will produce design details and plan sheets, further define in-stream, creek edge, and creek access conditions, and produce trail layout and bridge designs. The last phase will create a 90% plan for final approval of the City and MCWD. This phase will include obtaining the necessary permits for the project. The consultant costs are allocated between the District and City in the budget attached to the consultant scope, in accordance with the terms of the Cooperative Agreement.

At their meeting on September 19, 2017, the City of Edina Council voted to approve the Cooperative Agreement and concurred in the attached consultant scope.

ATTACHMENTS:

1. Cooperative Agreement between MCWD and City of Edina
 - a. Attachment A: Concept Plan
 - b. Attachment B: Concept Project Cost Estimate
 - c. Attachment C: Creek Remeander Limit Area Sketch
 - d. Attachment D: Stormwater Facility Area Limit Sketch
2. Inter-Fluve project design scope, budget, and schedule
3. Public process summary
4. Project Schedule and Design Process

RESOLUTION

RESOLUTION NUMBER: 17-069

TITLE: **Ordering the Arden Park Restoration Project, approving a Cooperative Agreement with the City of Edina and Authorizing a Contract for Project Design**

WHEREAS, the Minnehaha Creek Watershed District watershed management plan (WMP) capital improvement program includes a Minnehaha Creek Stream Restoration Project which encompasses stream restoration work that would enhance riparian corridor vegetation; stabilize streambanks through bioengineering; add fish and macroinvertebrate habitat; create pool-riffle complexes; incorporate woody debris; remove select grade controls; and enhance educational and recreational opportunities;

WHEREAS, there is a grade control structure in Minnehaha Creek at the 54th St. bridge in Edina that was recommended for removal in the 2003 Stream Assessment because it is a barrier to fish passage and creates an impoundment causing accumulation of sediment and degradation of aquatic habitat upstream;

WHEREAS, Minnehaha Creek is on the State's Impaired Waters List for both fish and macroinvertebrate index of biotic integrity;

WHEREAS, in October 2013, the MCWD Board of Managers ("Board") authorized staff to investigate alternatives for the West 54th St. grade control structure in coordination with the City of Edina's proposed street reconstruction;

WHEREAS, a standing wave formed at the downstream end of the grade control structure that was a regional attraction for whitewater paddlers, and the Board directed that any alternatives maintain the existing recreational functionality;

WHEREAS, staff recommended a bypass channel alternative that would allow for fish passage but would leave the structure intact, and the Board ordered the project on September 25, 2015;

WHEREAS, it was subsequently discovered that, following the record flooding of 2014, the standing wave no longer formed and there was further deterioration of the spillway presenting potential entrapment hazards for paddlers;

WHEREAS, given the loss of the wave, on January 29, 2015, the Board authorized staff to pursue plans to remove the grade control structure and restore the upstream reach throughout Arden Park;

WHEREAS, on August 25, 2016, the Board of Managers approved a Memorandum of Agreement with the City of Edina and a consultant contract with Hart Howerton/Inter-Fluve to develop a concept plan for Arden Park which integrates the following goals:

- Restoration of natural stream function and fish passage by actions including removing the grade control structure
- Water resource and riparian habitat improvement which will enhance creek access and draw attention to the role of natural elements in visual composition of the park
- Natural resource, surface water, soils stability, and drainage improvements which will provide opportunities to enhance existing and future park recreation value
- Public safety;

WHEREAS, staff negotiated a Cooperative Agreement with the City of Edina to coordinate in the development and share the costs of design and construction of the Arden Park Restoration Project which incorporates stream restoration and further community goals as indicated within the Concept Plan for Arden Park and further defined in the attached Agreement;

WHEREAS, Staff solicited a project design proposal from a design team consisting of Interfluve, Hart Howerton and Wenck Associates, due to their unique experience of integrated water resources and park planning for the Watershed District on Cottageville Park and Minnehaha Preserve, and Methodist Hospital, and their familiarity with the proposed project gained through previous feasibility analysis and their work on the Arden Park concept design;

WHEREAS, the total Project construction cost is estimated at \$4,084,600, of which \$1,937,100 would be allocated to the Minnehaha Creek Watershed District and \$2,147,500 to the City of Edina;

WHEREAS, in accordance with Minnesota Statutes § 103B.251, subdivision 3, the Board held a duly noticed public hearing on ordering of the Project on October 26, 2017, at which time all interested parties had the opportunity to speak for and against the Project;

WHEREAS, the Board, with the assistance of MCWD and City staff, has duly considered public input provided at the public hearing;

WHEREAS, the Edina City Council approved the attached Cooperative Agreement and consultant scope of work at its September 19, 2017 Council meeting;

WHEREAS, the Board of Managers finds that the Project will be conducive to public health and promote the general welfare, and is in compliance with Minnesota Statutes §§103B.205 to 103B.255 and the MCWD's WMP adopted pursuant to §103B.231;

NOW, THEREFORE, BE IT RESOLVED, that pursuant to Minnesota Statutes § 103B.251 and the WMP, the MCWD Board of Managers orders the Project, with a total estimated MCWD cost (including design, construction, and construction oversight) of \$2,350,590

BE IT FURTHER RESOLVED the Board of Managers hereby approves the presented Cooperative Agreement with the City of Edina providing for coordination and cost sharing in design and construction of the Arden Park Restoration Project, integrating creek restoration, creek corridor improvements, stormwater management and park improvements, and authorizes the Board President to execute the agreement, with any further non-material changes and on advice of counsel, and authorizes the MCWD Administrator to implement the agreement, including developing and carrying out the public information plan and cooperating with the City to seek grant funding;

BE IT FINALLY RESOLVED the Board of Mangers hereby authorizes the District Administrator to execute a project design contract with Inter-Fluve in accordance with the presented scope of work, with non-material changes and on advice of counsel, for the not to exceed amount of \$440,265.

Resolution Number 17-069 moved by Manager _____, seconded by Manager _____.
Motion to adopt the resolution ___ ayes, ___ nays, ___ abstentions. Date: November 9, 2017.

Secretary Date: November 9, 2017

PROJECT AGREEMENT
City of Edina and Minnehaha Creek Watershed District

ARDEN PARK IMPROVEMENT PROJECT

This Agreement is made by and between the Minnehaha Creek Watershed District, a watershed district with purposes and powers as set forth at Minnesota Statutes Chapters 103B and 103D ("District"), and the City of Edina, a statutory city and political subdivision of the State of Minnesota ("City").

Recitals

A. Arden Park is a public park owned by the City through which Minnehaha Creek runs. The creek channel in this location has been altered by urban flows and its riparian ecology has been affected by urban uses.

B. The District would like to restore the channel and its riparian corridor for water quality and ecologic purposes. Through its strategic plan for parks, recreation and trails, the City has determined that the park warrants substantial capital maintenance and improvement, and the parties would like to integrate these purposes into a single park redesign project that incorporates the creek environment into the recreational experience.

C. In addition, the parties would like to incorporate regional stormwater management into the park, as an opportunity to treat stormwater runoff from surrounding developed hard surface before it discharges into the creek.

D. In August 2016, the parties entered into a memorandum of agreement to jointly develop a concept plan for the Arden Park Improvement Project ("Project"). The concept plan is Attachment A to this Agreement, and has been approved by both the City Council and the District Board of Managers.

E. At this time, the parties share the following general Project intent: removals, demolition, grading, stormwater and creek work are to occur in 2018, and trail and natural resource work are to occur in 2019.

F. The parties hereby enter into this Agreement for the design, construction and maintenance of channel restoration and park improvements consistent with the approved concept plan.

Terms

A. Scope

1. The Project scope includes the improvements listed here. Except as one or more may be excluded pursuant to the procedures in this Agreement, all of these improvements will be incorporated into Project construction. The City may construct or install additional improvements in conjunction with, or after, Project construction. For each category of improvements, the notation in parentheses states how design and construction cost is allocated, subject to the further terms of this Agreement.

Facilities (City cost)

Lawn area seeding and regrading
Storm drain, water and sewer line relocates

Paths (City cost**)

10'-wide parks path
6'-wide trail connections to nature trail
Brookview Avenue sidewalk
Lookout terrace off of Brookview Avenue

Trails & Vegetation (cost shared equally*)

Main arterial bridge
Nature trail & wood boardwalk at north end of park
North pedestrian bridge
Buckthorn removal, native vegetation restoration in extended corridor

Creek Restoration (District cost)

Canoe landing and creek overlook at 54th Street
Canoe and tubing put-in and landing at north end of park
Grading and creek remeander
Native vegetation restoration in creek corridor
Park shelter demolition

Stormwater Management (cost shared equally)

Sediment capture feature, north end of park
Bioretention basins (2), west side of creek
Low-impact demonstrations associated with park shelter (e.g., native vegetation & pollinator garden, green roof/cistern, pervious pavement)

*** The City cost for the Main arterial bridge is the cost replacement in-kind; the District cost is for extending the span, and demolishing the bridge to accommodate the creek restoration.**

**** The City cost for Path improvements is the cost for standard asphalt surface. In its discretion, the District may include and elect an add alternate for pervious paving and will bear the incremental cost.**

B. Design

2. The following attachments are incorporated into this Agreement:

- a. Attachment A: Concept Plan;
- b. Attachment B: Concept Project Cost Estimate;

c. Attachment C: Creek Remeander Area Limit Sketch; and

d. Attachment D: Stormwater Facility Area Limit Sketch

3. The District will retain one or more consultants to complete design studies, design the Project, assist in procurement and provide construction oversight. The consultant choice and the consultant scope of work will be subject to City approval, not to be unreasonably withheld. The scope of work and the billing terms thereunder will be organized so that design costs can be apportioned between the District and City as specified in this Agreement. The terms of the consultant contract as to professional warranty, duty of care, indemnification and hold harmless, intellectual property rights and document right of use will extend to both the District and the City.

4. At the District's request, the City will provide information in its possession relevant to the feasibility work. This includes, but is not limited to, information regarding any subsurface structures and requirements for relocations of and connections to City stormwater and other utility infrastructure. At the District's request, the parties will cooperate to identify permissible tree removal.

5. The District will provide a draft 50% design report to the City for comment and its consultant will prepare a final 50% design report. If the report identifies an obstacle to implementing the Project consistent with Attachments A and B, the parties will collaborate in good faith to identify agreeable modifications. Subject to the District right to construct the Creek Restoration elements as set forth at paragraph 17, below, either party may withdraw from this Agreement if it concludes that there is no agreeable modification.

6. Proceeding to design is conditioned on the District Board of Managers ordering the project pursuant to Minnesota Statutes §103B.251.

7. The City will timely inform the District of its requirements for grades, soils and utility installations and relocates within the Project area. Utility work that is not needed for the Project may be omitted from the design. The District will prepare a 50% Project design that, among other elements, includes a rough grading plan; assessment of soil quality, contamination, geophysics and groundwater levels; and cut/fill balance. The 50% design will provide for rough grades as specified by the City for subsequent construction of park improvements not included in the Project.

8. The District will transmit the 50% design with preliminary cost estimate for City concurrence. The District and City will work in good faith to reconcile any differences as to the 50% design and the District will produce the 90% design.

9. The design will include a maintenance plan that specifies inspection and maintenance terms for Stormwater Management improvements and native vegetation management. The parties will coordinate to develop the plan as a part of the 50% design and it will be finalized within the 90% design.

10. The District will transmit the 90% design to the City, along with an engineer's revised cost estimate, for concurrence.

C. Construction

11. The District will obtain all permits and approvals for the Project. The City will cooperate as landowner. The City will timely process all applicable city permits. Pursuant to Minnesota Statutes §103D.335, subdivision 24, the City will not charge a fee for any such permit.

12. The District will prepare contract documents and procure construction through sealed bid or Best Value method, after consultation with the City as to method and any relevant terms of the procurement process. If the District uses Best Value method, the City will participate in evaluating technical proposals and bids. The contract documents will reflect Project and phase deadlines to which the District and City have agreed.

13. In its judgment, the District may procure the Project by means of a single contract, or may segment the work to better achieve Project purposes. The parties may agree to remove the improvement titled "Low-impact demonstrations associated with park shelter" from the contract documents and pursue that improvement by separate contract or arrangements.

14. The City will supply construction limits, access routes, subsurface structure information and any other relevant information to the District for contract document preparation. The City and District will establish City construction inspection requirements and the District will incorporate these into the contract documents. These requirements may include a phasing of substantial completion inspection and approval by the City.

15. The contract documents will include the following:

a. The bid form will arrange and itemize work so that the City's reimbursement obligation for a given invoice can be determined.

b. The contract will state substantial and final completion dates agreeable to the City.

c. The contract will require that the contractor:

(i) Provide performance and payment bonds, which may be reduced to a warranty or maintenance bond after Project completion;

(ii) Name the City as an additional insured under the contractor's commercial general liability policy, for work and completed operations;

(iii) Indemnify the City for the contractor's negligent acts and those of its subcontractors;

(iv) Extend duties of care and warranties to the City;

(v) Determine the location of and protect all utilities and structures;

(vi) Comply with local traffic and site control requirements; and

(vii) Restore or repair any damage to the City's lands and facilities.

16. The City will afford necessary and convenient access and construction limits for the work and will be responsible to maintain work-in-progress insurance for commercially covered property and hazards, for the benefit of the contractor and the District.

17. Termination of this Agreement before bid opening is authorized pursuant to the following terms:

a. Either party may terminate this Agreement. The party will be obligated for its share of design consultant costs incurred to the time of termination and for all consultant costs incurred after the publication of the bid solicitation.

b. If the City chooses to terminate, on District request it will convey to the District a perpetual easement allowing the District to construct and maintain the Creek Restoration, Facilities and/or Stormwater Management improvements, assign its rights to any grant funds applicable to these improvements, and bear the cost of Facilities work. The easement will provide for reasonably convenient access and the right to work and construct within the limits defined on Attachments C and D. The easement will provide for cooperation as to relocating utilities, and overall good faith to facilitate the District's work.

c. If the District chooses to terminate, on City request it will assign to the City both the design contract and its rights to grant funds.

17A. After the bids have been opened the parties must concur in the award of the bid. If the Parties do not concur in the award of a bid, this agreement shall terminate.

18. Adjustments to the Project after bid opening but before award of contract will occur as follows:

a. Either party may direct that a Sediment capture feature, Bioretention basin or Trails & Vegetation improvement be deleted from the work if the bid price of that improvement exceeds the engineer's 90% cost estimate by more than 20 percent. In that event, the improvement will be retained if the other party agrees to pay that part of the overage above 20 percent.

b. The City may direct that one or more Paths improvements be deleted from the work. It will be responsible for any increase in price of any other contract element item to accommodate the deletion.

c. The District may delete one or more Creek Restoration improvements from the work if the bid price of the improvement, or the total for the improvements, exceeds the engineer's 90% cost estimate by more than 20 percent. The work will be retained if the City agrees to pay that part of the overage above 20 percent.

d. If the parties concur that adjustments to the Project under this paragraph make it appropriate for the City to manage construction, they will cooperate to assign the District's contract rights and obligations to the City.

19. During the work, the District, in its judgment, may make work changes with or without field directive, or by work change directive or change order. Notwithstanding any other term of this Agreement, City approval of a work change is not required unless it would affect: (a) the design of

an improvement other than Creek Restoration improvements; (b) the City's Project cost; or (c) City maintenance requirements.

20. The City engineer will promptly consider a proposed work change for approval, which will not be unreasonably withheld. The City engineer's delegated authority to approve a work change that increases the City's portion of the contract price is limited to 10 percent of that part of the bid price allocated to the City, aggregate of all work changes.

21. The City may disapprove a work change concerning a Facilities or Paths improvement, but will be responsible: (a) to determine appropriate disposition as to that improvement; and (b) for all contract price adjustments resulting from disapproval. The District may disapprove a work change concerning a Creek Restoration improvement, but will be responsible: (a) to determine appropriate disposition as to that improvement; and (b) for all contract price adjustments resulting from disapproval. In either case, if the work change is prompted by circumstances not reasonably anticipated, the parties will consult to determine the appropriate modification and any price adjustment resulting from that will be allocated in accordance with paragraph 29, below.

22. A work change to a Stormwater Management or Trails & Vegetation improvement that the construction oversight consultant deems reasonably necessary to successfully construct the improvement will be authorized unless both parties agree otherwise. In the latter event, the parties will consult to determine the appropriate disposition. Any price adjustment will be allocated in accordance with paragraph 29, below.

23. The City has the right of concurrence in substantial completion of all improvements other than Creek Restoration improvements. The District will notify the City when it considers the Project, or a previously designated phase thereof, to be substantially complete. The City will have ten business days thereafter to inspect and transmit its written concurrence or lack thereof. The City will withhold concurrence only on a material deviation from plans and specifications and its written notice will specifically describe the deviation and the contract basis to withhold concurrence. In that event, the parties will cooperate in good faith to resolve the City's objection.

24. The District's construction oversight consultant will certify completion and supply a copy of signed record drawings to the City.

D. Public information

25. The City and District together will develop, prepare and implement a plan for public information and input during the course of Project development, construction and maintenance.

E. Maintenance

26. When the District engineer has certified completion and delivered record drawings to the City, ownership of all improvements will vest in the City. At this time, the parties will record mutual covenants in which the City will maintain the Paths, Trails & Vegetation, and Stormwater Management improvements, and the District will maintain the Creek Restoration improvements, in accordance with the maintenance plan specified at paragraph 9, above. On the District's request, the City will make reasonable arrangements for the District's occupation of the park property for maintenance under this paragraph.

F. Funding

28. Each party will bear its own process and administrative costs in carrying out this Agreement and implementing the project.

29. Each party will bear costs of the design and construction contracts as follows:

a. The City will bear costs relating to Facilities and Paths improvements, except for certain incremental costs allocated to the District by the footnote of paragraph 1, above.

b. The District will bear costs relating to Creek Restoration improvements.

c. The parties will share equally costs relating to Trails & Vegetation and Stormwater Management improvements.

d. The parties will share equally all costs that cannot reasonably be allocated to the preceding specific categories of improvements.

30. The parties will work together, and may work separately, to identify and seek applicable grant funding. When applying for grants, the parties will cooperate to seek the broadest scope of Project funding. Any grant funds will be applied to the appropriate improvement costs. Required cost-share and reductions in funding obligation will be allocated to one or both parties in accordance with the cost allocations set forth in the preceding paragraph. In applying for and administering any grant, the parties will endeavor for the grant to be assignable as between them in the event either party withdraws from the Project.

31. The City and District may use stormwater charges or any other authorities it possesses to generate the revenues to cover its Project costs. Either party may finance its costs as it chooses.

32. The District will invoice the City from time to time, and no more frequently than monthly, for those design and construction costs for which the City is responsible. The City will reimburse for undisputed costs within 30 days of invoice receipt. On request, the District will further document costs incurred.

33. Each party will assume all maintenance costs for those improvements for which it bears primary maintenance responsibility pursuant to paragraph 26, above. The City will bear the cost of any performance monitoring required under any District or other permit.

G. Regulatory treatment

34. Attachment D shows area of opportunity for each stormwater management facility. The level of water quality treatment, and volume and peak flow management will be maximized during the design, while remaining consistent with the parks use of the land.

35. Based on stormwater management facility record drawings and technical specifications, the District will quantify the treatment capacity outcomes.

36. As-built capacity of a facility exceeding intended capacity will be owned by the City. To the extent not prohibited by terms of grant funding, and as otherwise consistent with District stormwater management rules, the City may allocate this capacity as it chooses for its own compliance purposes, or for the compliance purposes of third-party development or redevelopment, within the specified catchments.

37. For any development or redevelopment that will use a Project facility for compliance, the City must approve the debiting of facility capacity and must confirm that the facility is current on maintenance. The City will maintain, and share with the District, an accounting of the use of facility capacity.

H. Standard terms

38. Each party agrees to hold harmless, defend and indemnify the other party from and against that portion of any and all liability, loss, claim, damage or expense (including reasonable attorney fees, costs and disbursements) that the indemnified party may incur as a result of the performance of this Agreement due to any negligent act or omission of the indemnifying party or any other act or omission that subjects it to liability in law or equity. Notwithstanding, Minnesota Statutes chapter 466 and other applicable law govern liability of the City and the District. This Agreement creates no right in and waives no immunity, defense or liability limit with respect to any third party or the other party to this Agreement.

39. This Agreement is not a joint powers agreement under Minnesota Statutes §471.59 and nothing herein constitutes either party's agreement to be responsible for the acts or omissions of the other party pursuant to subdivision 1(a) of that statute. Each party is responsible for its own employees for any claims arising under the Workers Compensation Act.

40. The execution of this Agreement on behalf of the District Board of Managers and the City Council authorizes all delegations of authority by those bodies expressly contained herein.

41. Each communication under this Agreement will be made to the following representatives:

Administrator, Minnehaha Creek Watershed District
15320 Minnetonka Boulevard
Minnetonka MN 55345
Re: Arden Park Project, Edina

Manager, City of Edina
4801 W 50th Street
Edina MN 55424

Contact information will be kept current. A party may change its contact by written notice to the other party.

42. This Agreement incorporates all terms and understandings of the parties concerning the Project. An amendment to this Agreement must be in writing and executed by the parties. A

party's failure to enforce a provision of this Agreement does not waive the provision or that party's right to enforce it subsequently. All above Recitals are incorporated into this Agreement.

43. This Agreement is effective on execution by both parties and unless terminated as expressly provided herein, will expire five years thereafter. Paragraphs 26 and 34-39 will survive expiration.

IN WITNESS WHEREOF the parties execute this Agreement by their authorized officers.

CITY OF EDINA

By  Date: _____
Its Mayor

By  Date: 9/18/17
Its City Manager

Approved for form and execution:

MCWD Counsel

MINNEHAHA CREEK WATERSHED DISTRICT

By _____
Its President

Date:



Arden Park Concept Plan Cost Estimate - Agrmt. Attachment B
May-17

	Item	Description/Assumption	Cost Estimate	CITY	MCWD	City Contingency
Park Facilities (City Cost and Separate Scope)	Park shelter	year round facility with rest rooms (green roof as alternate)	\$650,000	\$650,000		\$ 50,000.00
	Park shelter terrace and creek overlook*	5000 Sq. Ft. Paved surface and four six foot benches (Pervious surface as alternate)	\$16,000	\$16,000		\$ 40,000.00
	Ice Rink Replacement including 6 lights*	\$30,000 (rink) \$35,000 (lights), assumes rink in same location with grass surface	\$65,000	\$65,000		
	Aluminum bleacher seating - four levels, 20' long	small work frame roofed and open sided ht with wood bench for changing	\$12,000	\$12,000		
	Playground upgrades/expansion*		\$125,000	\$125,000		
	Playground seating area and benches	360 SF seating area and two 6-foot benches	\$7,000	\$7,000		
	Night Lighting	confined to arterial park trail onl. Pedestrian scaled LED type downlighting, pole mounted. 17 light poles approx. 100 feet apart.	\$114,000	\$114,000		
	Upland Landscape	Landscape for new park elements and supplementary to existing park landscape. Creek corridor planning included in Creek cost opinion (native and pollinator landscaping as alternate)	\$25,000	\$25,000		\$ 75,000.00
	Park furnishings	6 additional park benches, 4 trash receptacles	\$15,000	\$15,000		
Park Facilities (City Cost)	Lawn area seeding and regrading, storm drain, water and sewer line relocates (Misc. site costs)	storm drains and piping in open lawn, removal of existing warming hut, regrading and seeding great lawn, tree protection, utilities (water line and sewer line relocates) (Soil amendments, clean water BMPs retrofit into drainage as alternate)	\$90,000	\$90,000		\$ 10,000.00
		Park Facilities Subtotal	\$1,119,000	\$1,119,000	\$0	\$ 175,000.00
Paths (City Cost)	10' wide asphalt parks path	3" asphalt with 6 inches of class five over compacted subgrade. @ \$40 /LF (District option to replace with pervious pavement at their expense)	\$48,000	\$48,000		
	6' wide asphalt trail (connections to nature trail)	3" asphalt with 6 inches of class five over compacted subgrade. @ \$24 /LF (District option to replace with pervious pavement at their expense)	\$36,000	\$36,000		
	Brookview Avenue Sidewalk (6' wide concrete)	4" concrete with 6" deep class 5 base over compacted subgrade. 1452 LF @ \$140/LF	\$205,000	\$205,000		
	Brookview Ave. Overlook Terraces (2)	(\$23,000 ea.) dark, modular brick type paver on sand leveling surface with 6" deep class 5 over compacted subgrade. \$8.00/SF for paving, 360 SF of paving at each location, two 6-foot benches per overlook, 8" wide X 18" deep concrete curb at slope embankment edge for each terrace, 30 LF painted, custom metal railing set into concrete frost footing at each location	\$46,000	\$46,000		
		Park Facilities Subtotal	\$335,000	\$335,000	\$0	\$ -

Trails & Vegetation (cost shared equally)	Main arterial trail bridge	12-foot steel bridge to support truck weight, includes abutments	\$170,000	\$85,000	\$85,000
	Nature Trail & Wood Boardwalk at north end of park	6' wide X 210 linear feet of pressure treated wood deck with wood railings and painted metal gridded guard between wood posts set onto paired helical screw foundations at 12' spacing, 6 x 6 pressure treated wood stair leading from wood deck to Oaklawn Ave. sidewalk (cost includes metal rail on one side of stair)	\$76,000	\$38,000	\$38,000
	Stair connection from Minnehaha Blvd. to Flood Plain Trail	Assume 5' wide poured concrete stair with railing	\$6,000	\$3,000	\$3,000
	North Pedestrian bridge (north nature trail)	7-foot wide with wood railing detailing, abutments, helical screw structure below grade	\$80,000	\$40,000	\$40,000
	Nature Trail on south end - near Minnehaha Blvd	Pervious crushed rock over leveling course. Sand subgrade where required.	\$15,000	\$7,500	\$7,500
	Natural Resource Restoration (extended corridor)	Removal of buckthorn, selective tree thinning, native plantings, tree planting and seeding.	\$150,000	\$75,000	\$75,000
		Trails & Vegetation subtotal	\$497,000	\$248,500	\$248,500
Creek Restoration and Associated Improvements (District Cost)	Creek Overlook at South of 54th Street	Paved path connection from public sidewalk, assume 360 SF, 3" asphalt with 6" compacted class 5 base over compacted subgrade. Viewing terrace on grade with dark color modular brick paving set on sand base with 6" compacted class 5 base over compacted subgrade, 150 SF and one 6-foot bench	\$4,000		\$4,000
	Alternate to add pervious pavement parks path on 10' wide parks loop and 6' wide nature trail connections		\$33,600		\$33,600
	Canoe and tubing put-in and landing at north end of park	200 SF terrace on grade with dark color modular brick paving set on sand base with 6" compacted class 5 base over compacted subgrade. One 6-foot wide bench, 20 linear foot long floating wood landing connected to terrace with piers to adjust to varying water levels.	\$8,000		\$8,000
	Canoe Landing at 54th Street	200 SF viewing terrace on grade with dark color modular brick paving set on sand base with 6" compacted class 5 base over compacted subgrade, two 6-foot wide benches, 20 linear foot long floating wood landing connected to terrace with piers to adjust to varying water levels.	\$11,000		\$11,000
	Creek Remeander Project	See assumptions on separate sheet	\$1,050,000		\$1,050,000
	Floodplain Landscape	trees, shrubs and seed mix according to Floodplain Forest, Inner bend and Outer Back planting zones per IF Vegetation Concept Drawing	\$137,000		\$137,000
		Subtotal Creek Restoration	\$1,243,600		\$1,243,600
				\$ -	

Stormwater Management (Split Cost)	Stormwater management north of playground	Sediment capture, filtration, or clean water feature	\$400,000	\$200,000	\$200,000	
	Stormwater bio retention basins	Basins 1-3 identified in SEH Stormwater Management Plan for 54th St. and Arden Park Area Jan. 30, 2014 or alternate sites as determined in design phase	\$200,000	\$100,000	\$100,000	
	Low Impact (zero runoff) Development Demonstration / Pollinator Garden, Green Roof, Stormwater, Pervious Patio, Educational Signage,	May replace portion of "facilities" items noted above with bid alternate for LID demonstration.	\$290,000	\$145,000	\$145,000	
		Stormwater Subtotal	\$890,000	\$445,000	\$445,000	\$ -
Total Project Est.			\$4,084,600	\$2,147,500	\$1,937,100	\$175,000



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX,

**Arden Park: Tree Survey
and Proposed Grading Extents
June 4, 2017**



0 100 200 Feet



1 inch = 100 feet

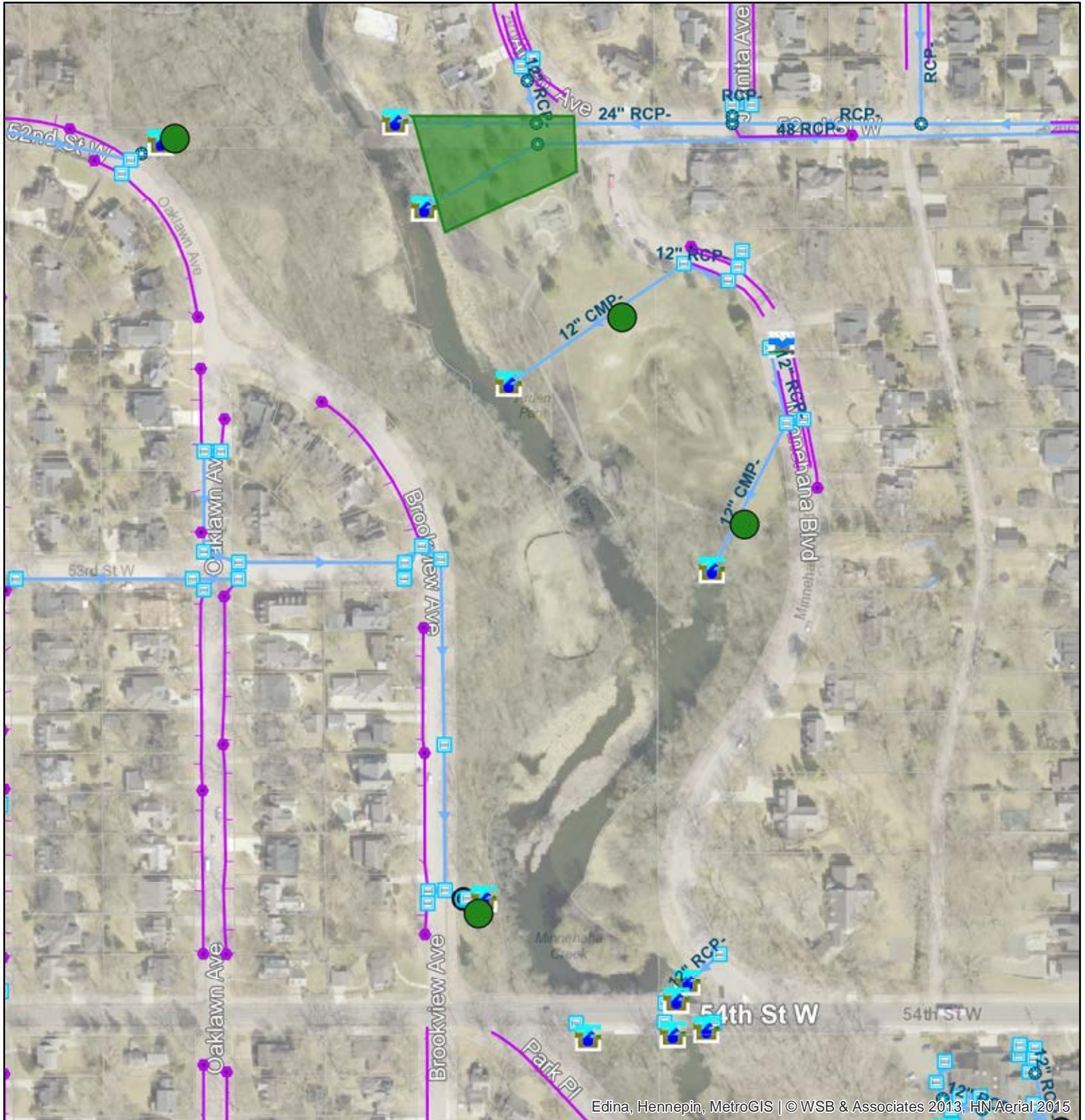
Legend

- - - Proposed Channel Extents - Concept
- Proposed Grading Extents - Concept
- * Wenck Surveyed Tree Location (2016)

Notes:

- Concept design grading for stream, Grading limits do not account for additional park amenities or grading north of park limits
- Tree Survey by Wenck Oct 2016

Attachment D - Storm Facility Area Limit Sketch



Edina, Hennepin, MetroGIS | © WSB & Associates 2013, HN Aerial 2015

1 in = 200 ft

Control Valve

- Control
- Backflow Control
- Outlet
- Inlet

Lift Station

- Pump Station

Manhole

- Catch Basin
- Manhole
- Sump
- Treatment Structure
- Unknown Structure
- Sump Cleanout

Sump Drain Tile

- Drain Tile
- Service

Pressurized Main

- Abandoned
- Active

Gravity Main

- Collector
- Private
- Abandon



The CITY of EDINA



May 23, 2017
Map Powered by DataLink
from WSB & Associates

Arden Park Restoration Project
FINAL DESIGN, BIDDING SUPPORT, and
DRAFT CONSTRUCTION OVERSIGHT SCOPE

Submitted July 25, 2017

1. VALUE ENGINEERING AND DESIGN STUDIES

1.1. Project Kick-off and Value Engineering Meeting

1.1.1. Inter-Fluve (IFI), Wenck, and Hart Howerton (HH) will participate in a 2 hour kickoff and value engineering discussion at MCWD offices. City of Edina representatives will attend this meeting as well. Inter-Fluve will facilitate the meeting.

The kick-off portion of the meeting will discuss overall project goals, success metrics, communication plan, delivery schedule, and other relevant project initiation topics.

The value engineering portion of the meeting will include a technical assessment of the channel design relative to the desired construction budget. It is anticipated that the channel length and planform as well as the bridges and park recreations (trail) features will be reviewed concurrently.

1.2. Stormwater site design

1.2.1. Inter-Fluve will work closely with Wenck to complete a concept level stormwater hydrology and off-site drainage review to inform discussion of stormwater treatment Best Management Practices (BMPs) to be incorporated into the site. The analysis will include computation of drainage areas, as well as existing runoff volumes and runoff rates for the 1.1", 1-yr, 10-yr, and 100-yr rainfall events using XPSWMM. The analysis will be completed using LiDAR, aerial photographs, collected geotechnical data and survey data provided by the City of Edina.

1.2.2. Inter-Fluve will facilitate one meeting with MCWD and City staff to review the existing stormwater discharges through the park and develop preferred conceptual best management practice (BMP) options. Inter-Fluve, Hart Howerton, and Wenck will participate in the meeting.

1.2.3. Inter-Fluve will develop conceptual stormwater treatment BMP plans for the site. The conceptual plans will include plan view layouts and opinion of probable construction costs.

Deliverables

- Stormwater site design memorandum and concept plans.
- Engineer's Opinion of Probable Cost for stormwater BMPs.

Assumptions

- Stormwater BMPs will be filtration, wetland, swale, or other non-active treatment solutions.

1.3. Central Vehicular Bridge Design

Bridge design effort will include the selection of up to three bridge styles from national pre-cast bridge manufacturers by Hart Howerton. Based on the available options, the preferred bridge style could be selected by MCWD and City Staff, or alternatively brought to the community for public input.

During this process, IFI will be responsible for the hydraulic analysis and recommendation of bridge span. The bridge's lowest chord elevation will be designed to comply with DNR clearance requirements (OHWM plus 3 feet). The proposed bridge design will be evaluated at base-flow as well as high water (i.e. 100yr). Wenck will be responsible for two hours of structural input on bridge construction and establishment of a design envelope. Conceptual bridge cost estimates will be solicited from up to two bridge manufacturers. Geotechnical boring information for abutment design will be collected and assessed under Task 2, prior to 50% design completion.

Deliverables

- Preliminary bridge plan, span, and elevations.
- Summary studies of hydrologic impacts.
- Final Schematic Design level bridge design with plan and elevations
- Opinion of Probable Cost obtained from two national level bridge design companies.

1.4. Small Pedestrian Bridge Design

Bridge design effort will include the selection of up to three bridge styles from national pre-cast bridge manufacturers by Hart Howerton. Based on the available options, the preferred bridge style could be selected by MCWD and City Staff, or alternatively brought to the community for public input.

During this process, IFI will be responsible for the hydraulic analysis and recommendation of bridge span. The bridge's lowest chord elevation will be designed to comply with DNR clearance requirements (OHWM plus 3 feet). The proposed bridge design will be evaluated at base-flow as well as high water (i.e. 100yr). Wenck will be responsible for two hours of structural input on bridge construction and establishment of a design envelope. Conceptual bridge cost estimates will be solicited from up to two bridge manufacturers. Geotechnical boring information for abutment design will be collected and assessed under Task 2, prior to 50% design completion.

Deliverables

- Preliminary bridge type, span, and elevation recommendation.
- Summary studies of hydrologic impacts and various footing designs
- Opinion of Probable Cost obtained from two national level bridge design companies.

1.5. Park Shelter and View Terrace

HH will facilitate an initial work session including the City of Edina staff and the MCWD to determine desired program for the building. The meeting will also solicit input on the appropriate size of the formal terrace area based on desired use. Based on this input, an estimated building size, building envelope, and terrace extent will be recommended by the design team. A recommended list of utilities and other building requirements such as mechanical, electrical and plumbing will be summarized. The assumptions required to estimate utility (sanitary, water supply, and electrical) needs for the Park shelter will be documented.

Based on the anticipated hydraulic conditions, proposed bridge elevation, and anticipated site grades within the Great Lawn, a proposed building elevation will be recommended. The results will be summarized into a report that will become the basis of future design.

Deliverables

- Building/Terrace Site Kickoff Work Session with City of Edina Staff and MCWD
- Site Plan
- Mechanical and Electrical Systems Recommendations

Assumptions

- The City of Edina will provide a park structure and terrace program guidance

to inform the use, required amenities, and size of the proposed pavilion structure and terrace area.

- The scope does NOT include development of conceptual design studies.
 - Conceptual design studies are recommended to appropriately evaluate the approximate size of the building (including a building footprint), relationships of the various building uses internally, relationship of the building to the site, preliminary building images and materials, summary square footages of interior spaces and building functions.
- The scope does NOT include any input from an architect to the geotechnical borings and geotechnical recommendations for structural building or terrace foundation systems suitable for this location.
- The scope does NOT include the following:
 - Building Floor Plan
 - Building Section and Exterior Elevations
 - Architectural Materials Description for Pavilion
 - Preliminary Probable Construction Costs for Pavilion or Terrace
 - Program and Materials Description for Terrace
 - Landscape Schematic Site Plan

2. GEOTECHNICAL INVESTIGATION

Generally, the geotechnical scope will include the following investigations and recommendations:

- Borings at two proposed pedestrian bridge locations. Geotech to provide recommendations for abutment design.
- Borings at two proposed overlook locations. Geotech to provide recommendations for design of terraces including any walls and railings.
- Evaluation of building foundation location. Geotech to coordinate with structural engineers on the design team to provide recommendations for building footings.
- Borings at proposed stormwater sites to inform final design of potential BMPs.
- Sampling and soil amendment recommendations based on desired landscaping and vegetation establishment plan. This data will be used for Phase I and Phase II of the project.
- Boardwalk helical pier test installation - install a test helical pier recording installation torque at approx. 2.5' increments to an adequate depth to reach target capacities for the project.
- For the boardwalk Static Load Test, install a test helical pier, construct a test frame, and run a load test recording deflection vs load to confirm performance with the design requirements.

- All material would be removed at the completion of each test.

Deliverables

- All field testing and analysis will be documented in design reports.

3. Survey and Sediment Sampling

3.1. Final Design Survey and Sediment Cores

3.1.1. City will survey site for topography, infrastructure, utilities, trees (over 6" DBH), curbs, streets, trails, retaining walls, and sidewalks as identified by the Design Team.

3.1.2. In coordination with the City, Inter-Fluve will collect needed additional bathymetry data for the site and approximately 500 ft upstream and downstream. The collected bathymetry data will be blended with existing topographic data and survey data from the City to create a topographic map. Tasks will include obtaining the following data:

- Manual cores and probes will examine soils and potential bedrock contacts below the maximum predicted depth of excavation. These depths are assumed to be shallow, within five feet of the existing channel bed.
- Bathymetry of the stream within the channel, sufficient for constructing a one-dimensional hydraulic model for final design and providing impounded sediment estimates for earthwork computations.
- A detailed longitudinal profile of the bed will be developed.

3.2. Impoundment Sediment Management Plan

3.2.1. A brief sediment management plan will be completed for the site. The plan will include recommendations for impounded sediment management and include adaptive management options that allow for adjustments during construction based on natural variability in flow. The plan will also account for management of any constituents of concern, if they are identified during the sediment sampling phase of the project. A sediment management plan will be required by MPCA if constituents of concern are identified.

4. 50% Design (Design Development)

4.1. Overview of approach

Through the design development phase, the team will analyze and develop the foundational information required to establish the location, elevation, alignment, scale, and associated materials required to meet the success metrics and intent outlined in the concept designs and value engineering

recommendations (Task 1). The design team will develop plans, opinion of probable construction costs, and a design report to document the design decisions. The task will also include public involvement to provide information to the public and allow for public input on discrete project elements, which will be determined by the project team in coordination with MCWD and the City.

Design Development Drawings (50%) – Following the Task 1 meetings, the Inter-Fluve team will develop design drawings to the 50% design level for client, stakeholder, and agency review and permitting.

The 50% plans are anticipated to include up to 60 sheets:

- Cover sheet (1 sheet) – Project locations and drawing index- IFI
- General Notes (1 sheet) - IFI
- Site Plan - An aerial photo, approximate topographic contours, site access, control points, and staging areas. (1 sheet) - IFI
- Existing Plan – Existing topography, air photo, channel alignment, infrastructure (4 sheets) - IFI
- Proposed Creek Plan/Profile – Proposed alignment, treatments, earthwork, and any other proposed channel modifications/treatments. (4 sheets) - IFI
- Creek Grading Details – Riparian wetland and stormwater BMP grading, per current Stormwater Plan – one grassed swale, two bioretention areas, and one wetland or ponding area details. - IFI (5 sheets)
- Typical Creek Section – Cross sections showing general treatment layout - IFI (4 sheets)
- Canoe and Tubing Landing Plan - IFI (3 sheets)
- Fishing Access (below 54th Street) Plan – Hart Howerton (1 sheet)
- Site Lighting Concept– Hart Howerton (1 sheet)
- Electrical Utility layout for building feed and trail lighting (2 sheets)
- Water and Sewer Utility Sheets – Wenck (1 sheet)
- Storm sewer – Wenck (3 sheets)
- Building Demolition– Wenck (2 sheets)
- Structural at dam removal location – Wenck (1 sheet)
- Site Erosion and Sediment Control Notes and Details - IFI (2 sheets)
- Typical Creek Restoration details - IFI (up to 8 sheets)
- Trail Alignments – Hart Howerton (2 sheets)
- Terrace and Creek Edge Section(s) – Hart Howerton (1 sheet)
- Boardwalk Alignment – Hart Howerton (2 sheets)

- Stairs – Hart Howerton and Wenck (2 sheets)
- Overlook Layout Plans with key Spot Elevations – Hart Howerton (2 sheets)
- Overlook structural details –Wenck (2 sheets)
- Pedestrian Bridges – IFI (2 sheets)
- General Site Planting Plans with Plant/Seed List – Hart Howerton (4 sheets)

4.2. Hart Howerton Scope

4.2.1. Park Shelter

No further development of the Park Shelter is included in the DD phase.

4.2.2. Creek Terrace

The Creek Terrace DD drawings will illustrate and describe the development of the Terrace edge and connection with creek corridor. This will include further development of Terrace layout, grading and elevations, creek edge design, and concept lighting.

4.2.3. Other Park Features (Identified in the sheet list above)

These DD drawings will illustrate and describe the development of the approved design and shall include further development of layout, key spot grading on hard surfaces and conceptual site lighting (needed for electrical utility planning). Hart Howerton will develop a site planting plan with plant species identified. Hart Howerton will provide up to 24 hours of general design input and support for DD drawing elements related to park aesthetics.

4.2.4. Public Involvement

Hart Howerton will participate in one public meeting, to be held during the Design Development Phase. The meeting will be coordinated and organized by MCWD or the City. Hart Howerton provide 16 hours of graphic support for the meeting and will attend with one staff.

Deliverables

- DD plan sheets as listed above.
- DD level of Opinion of Probable Cost for elements noted as Hart Howerton responsibility within sheet list above.

4.3. Wenck Scope

4.3.1. DD Design and Plans

- Building Demolition – Wenck will lead the development of a demolition plan for the warming house. As part of the design

process Wenck will test will conduct a hazardous material analysis of the building to test for asbestos, PCBs, lead and other hazardous material that would impact methods for building demolition. Through the completion of the testing Wenck will develop a demolition plan and sequence which facilitates demolition in a compliant manner. Testing results will be provided to the City for record keeping purposes.

- Terraces – Two terraces located along Brookview Avenue have been proposed to facilitate formal viewing of the park. Wenck will provide structural and geotechnical design of the terraces with layout assistance from Hart Howerton. The layout will include design plans along with supporting calculations.
- Stair Connections from Minnehaha Blvd. and Brookview Avenue – Three sets of stairs have been proposed which will enable residents to better access the Creek. Our design team will review geotechnical information collected and to develop stair plans and specifications to facilitate construction. It is assumed Hart Howerton will assist in the layout of the stair cases.
- Northern Wooden Boardwalk – The design of the boardwalk on the northern end of the park will require structural and geotechnical design to ensure stability. Wenck will review the geotechnical analysis completed and leverage design layouts provided from Hart Howerton.
- Dam Retaining Wall – The existing retaining wall downstream of the existing dam and near the abutment edge of 54th St. Bridge is proposed to be replaced. Wenck will review geotechnical information and provide a revised design which incorporates the new park layout. Wenck will integrate the proposed park features into the design to ensure stability and aesthetics to wall.

4.3.2. Wenck will provide design support services for the following tasks during the DD phase:

- Storm Sewer and Site Drainage
- Erosion and Sediment Control
- Park Shelter Foundation analysis

4.3.3. Opinion of Probable Cost

Wenck will provide Opinion of Probable Costs to Inter-Fluve for the design plans for all items listed in 4.3.1. Our format will comply with that established by Inter-Fluve and as described in 4.4.3.

Deliverables

- Progress Design Development submittal (50%) drawings submitted in 11 x 17" PDF format. CAD drawings in electronic format.
- Engineer's Opinion of Probable Cost.
- Hazardous material sampling results

Assumptions

- Overlook terraces will be less than four feet in height.
- No structural improvements associated with the existing bridge piers are included in the scope. If structural impacts to the bridge are required, they can be added via addendum.
- No utility relocations are included in the scope. If a utility relocation is required for the dam removal, it can be added via addendum.
- Boardwalk designs will be similar in design to existing boardwalks in the City of Edina or along Minnehaha Creek.

4.4. Inter-Fluve Scope

4.4.1. DD Design and Plans

- *Hydrology and Hydraulics* – The proposed conditions HEC-RAS model will be updated to reflect changes in design from the value engineering meeting and updated survey. Iterations of the proposed channel dimensions will be examined for shear stress and capacity to transport sediment. Model results will be used to refine the designed channel cross section, planform, bed and bank materials, and other design details.
- *Design Analysis* – The design team Inter-Fluve will design channel bed, bank and habitat components to remain stable at a 100-year design flow which will require a stability analysis, and moment force analysis. The design team will review potential scour at the new bridge locations to inform the abutment design, based on the proposed stream profile. The design analysis will also include evaluation of proposed building pad elevations for the proposed pavilion/warming-house and coordination time to complete two modeling iterations with the architect/engineering team developing the proposed structure.

- *Design Report* - Inter-Fluve will develop the basis of design report based on work completed thus far. The report will capture project goals and performance criteria and summarize proposed design elements, design calculations, and the methods leading to the design. This document will include sediment sampling results, no-rise discussion, stormwater aspects, and stream design methodology. This document will serve as a record of engineering due diligence on the project and will be updated and submitted as a component of the 50% design submittal. The design report is intended to provide information and documentation for MCWD and will be available for public distribution.

Inter-Fluve will provide primary design services for the following elements:

- Stormwater BMP Design
- Erosion and Sediment Control
- Canoe and Tubing Landings
- Creek Remeander Design
- Creek Fishing Access
- Floodplain Landscaping

4.4.2. Design Support

Inter-Fluve will provide design support services for the other elements of the DD task, to support effective integration of all designs into a cohesive design package.

4.4.3. Opinion of Probable Cost

An Engineers Opinion of Probable Cost (EOPC), based on the conceptual estimate, will be developed in conjunction with the 50% design submittal. The EOPC will be submitted as a bid item list, itemizing estimated quantities and units for all in-stream elements only intended for bidding, and tied directly to measurement and payment as defined in the specifications. Inter-Fluve will provide leadership to the team to develop a holistic OPC for the design development phase. .

4.4.4. Public Involvement

Inter-Fluve will participate in one public meeting, to be held during the Design Development Phase. The meeting will be coordinated and organized by MCWD or the City. Inter-Fluve will provide graphics for the meeting and will attend with two staff.

Deliverables

- Progress Design Development submittal (50%) drawings submitted in 11 x 17" PDF format. CAD drawings in electronic format.
- Engineer's Opinion of Probable Cost.
- Design Report, as described, submitted in PDF format.

Assumptions

- Changes to the planform, channel dimensions and grading may be made in response to client comments that are received. Topographic or alignment layout changes after the 50% design delivery will require an addendum.
- The proposed conditions model will show "no-rise" in water surface elevations relative to the existing conditions model output developed under this contract. Development of materials required for requesting a Letter of Map Revision from FEMA is not included in this task.
- Bid items will follow MNDOT bid Items as much as feasible.

5. 90% DESIGN

5.1. General overview of effort

5.1.1. Through the Construction Document phase, starting with 90% design, the team will build upon the 50% plans to develop a plan set that is ready for bidding. The design team will update or develop plans, opinion of probable construction costs, technical specifications, and a basis of design report. The task will also include public involvement to provide information to the public. The 90% plans are anticipated to include up to 90 sheets. Sheets developed in addition to those listed in the 50% plan set include structural details (boardwalk and overlooks), staging sheets, BMP detail sheets, and other miscellaneous site and utility detail sheets.

5.2. Hart Howerton Scope

5.2.1. Hart Howerton has no 90% Design and Plans responsibility. All 90% designs to be delivered by Inter-Fluve or Wenck.

5.2.2. Design Support for following

- Canoe and Tubing Landings(s)
- Trails and Overlooks
- Boardwalk
- Stairs
- Bridges
- Planting plan for proposed riparian area

5.2.3. Review of Opinion of Probable Cost

5.2.4. Review associated technical specifications developed by Inter-Fluve, MCWD, and Wenck.

5.3. Wenck Scope

5.3.1. 90% Design and Plans

Through the review process of the 50% design plans by the City and MCWD, Wenck will provide revised plans which incorporate edits and revisions requested. These plans will be integrated into the 90% design plan package.

5.3.2. Design Support

Wenck will continue to support design activities outlined in Task 4.

5.3.3. Opinion of Probable Cost

Updated Opinion of Probable Costs will be provided to Inter-Fluve based on edits and adjustments to the 90% design.

5.3.4. Technical Specifications

Technical specifications associated with design elements listed in Task 4 will be provided to Inter-Fluve which can be incorporated into the construction and bidding documents.

5.4. Inter-Fluve Scope

5.4.1. 90% Design and Plans

- *Hydrology and Hydraulics* – The proposed conditions model will be updated to reflect changes in design from the 50% drawings. Iterations of the proposed channel dimensions will be examined for shear stress and capacity to transport sediment. Model results will be used to refine the designed channel cross section, planform, bed and bank materials, and other design details.
- *Drawings (90%)* – Following client review of the 50% design, Inter-Fluve will develop design drawings to the 90% design level for client and stakeholder review.
- *Design Report* - Inter-Fluve will refine and update the design report based on changes from the 50% comments.
- *Design Leadership* – In addition to the items identified as Inter-Fluve led design elements in the DD phase and the supporting design role, we will also take on the construction document responsibilities for the pedestrian bridges. We anticipate using bridge manufacturer's specifications to develop a performance specification for the bridge and abutments.

5.4.2. Design Support

Inter-Fluve will continue to provide design support to the tasks outlined in Task 4. In addition, Inter-Fluve will be regularly checking in on other design partners and tracking project elements delivered by other team members.

5.4.3. Opinion of Probable Cost

- *Engineer's Opinion of Probable Cost* – A formal EOPC, based on the general estimates developed in Task 4, will be developed in conjunction with the 90% design submittal. The EOPC will be submitted as a bid item list, itemizing estimated quantities and units for all elements intended for bidding, and tied directly to measurement and payment as defined in the specifications.

5.4.4. Technical Specifications

Special technical specifications developed by Inter-Fluve team will detail various project components such as erosion and sediment control during construction, utilities, earthwork, stormwater BMP construction, channel components, overlooks, access points, trails, and revegetation of the proposed riparian area. Draft technical specifications will be submitted for client review in conjunction with the 90% design submittal. Inter-Fluve will be responsible for consolidation of technical specifications from all design partners.

Deliverables

- Progress submittal (90%) drawings submitted in 11 x 17" PDF format. CAD drawings in electronic format.
- Engineer's Opinion of Probable Cost.
- Technical Specifications.
- Design Report, as described, submitted in PDF format.

Assumptions

- The final planting plans for the proposed riparian area (i.e. area accounting for grading disturbances related solely to stream realignment) will be the responsibility of Inter-Fluve. Inter-Fluve's responsibilities also include development of technical specifications, and opinion of probable cost for these items. The planting plans will focus on natural and native restoration design.
- Planting plans for the upland area (i.e. including the proposed building area, areas outside of the proposed riparian area and outside of the grading disturbances related to stream realignment) will not be refined beyond the DD level by the Inter-Fluve design team. It's assumed plans and other deliverables

for these upland elements will be addressed at a later phase and under a separate contract

- Construction drawings included in the Bid Package will be formatted at 11in x17in.

6. 99% DESIGN

6.1. General overview

6.1.1. The design team will update plans, opinion of probable construction cost, technical specifications, and a basis of design report. The 99% Project delivery will be a complete bid package for MCWD and City review. It will include front-end documentation and supporting design documents. This submittal is intended to allow a full review of the bid package prior to signatures and the initiation of the bidding process.

6.2. Hart Howerton Scope

6.2.1. Hart Howerton has no 99% Design and Plans responsibility. All 99% designs to be delivered by Inter-Fluve or Wenck.

6.2.2. Design Support for following

- Canoe and Tubing Landings(s)
- Trails and Overlooks
- Boardwalk
- Stairs
- Bridges
- Planting plan for proposed riparian area

6.2.3. Review of Opinion of Probable Cost

6.2.4. Review Technical Specifications and 99% Bid Package.

6.3. Wenck Scope

6.3.1. 99% Design and Plans

Through the review of 90% design plans Wenck will incorporate edits provided by the City, MCWD and partners into design elements listed in 4.3.1.

6.3.2. Design Support

Wenck will provide review support on design elements noted in 4.3.2

6.3.3. Opinion of Probable Cost

Through the review of updates in the 99% design Wenck will update the Opinion of Probable Cost for items noted in 4.3.1.

6.3.4. Technical Specifications and Bid Package

Technical specifications will be updated with based on edits developed in the 90% design. Review of 99% Bid Package.

6.4. Inter-Fluve Scope

6.4.1. 99% Design and Plans

- *Hydrology and Hydraulics* – The proposed conditions model will be updated to reflect changes in design from the 90% drawings. This effort is anticipated to be minimal and Inter-Fluve has allocated 7 hours to this task.
- *Drawings (99%)* – Following client review of the 90% design (Task 5), Inter-Fluve will developed design drawings to the 99% design level for client and stakeholder review.
- *Design Report* - Inter-Fluve will refine and update the design report based on changes from the 90% comments. This effort is anticipated to be minimal and Inter-Fluve has allocated 8 hours to this task.

6.4.2. Design Support

Inter-Fluve will provide design support on tasks listed in the Inter-Fluve scope (above in Tasks 4 and 5).

6.4.3. Opinion of Probable Cost

A formal EOPC, based on the general estimates developed in Task 5, will be developed in conjunction with the 99% design submittal. The EOPC will be submitted as a bid item list, itemizing estimated quantities and units for all elements intended for bidding, and tied directly to measurement and payment as defined in the specifications.

6.4.4. Technical Specifications and Front End Documents

- *Technical Specifications* – Technical specifications will detail various project components such as erosion and sediment control during construction, earthwork, stormwater BMP construction, channel components, and revegetation of the proposed riparian area. Draft technical specifications will be submitted for client review in conjunction with the 99% design submittal. Inter-Fluve will be responsible for consolidation of technical specifications from all design partners.
- *Front End Documents* - Inter-Fluve will be responsible for developing the Front End Documents for the bid package. Inter-Fluve will work closely with MCWD to develop the document package based on the Reach 20-22 document and other recent documents. Inter-Fluve has

updated most of the necessary specification sections within Division 0 and Division 1 based on EJCDC 2013 General Conditions, but MCWD will review and provide any necessary updates to Division 0 and Division 1 of the bid package for additional specifications required. Inter-Fluve will be responsible for compilation of the full Bid Package.

Deliverables

- Progress submittal (99%) drawings submitted in 11 x 17" PDF format. CAD drawings in electronic format.
- Engineer's Opinion of Probable Cost.
- Design Report, as described, submitted in PDF format.
- Draft 99% Bid Package for review. These documents will include development of a project Bid Package using the Construction Specifications Institute (CSI) formatting and 2013 Engineers Joint Documents Committee Design and Construction (EJCDC) contract. Technical Specifications updated during the 99% design phase will be incorporated into the Bid Package.

7. 100% DESIGN

7.1. General overview

The design team will finalize plans, opinion of probable construction cost, full project manual specifications, and a basis of design report. The 100% Project delivery will be a complete bid package for MCWD utilize during the Bidding phase of the project.

7.2. Hart Howerton Scope

7.2.1. Hart Howerton has no 100% Design and Plans responsibility. All 100% designs to be delivered by Inter-Fluve or Wenck.

7.2.2. Design Support for following

- Canoe and Tubing Landings(s)
- Trails and Overlooks
- Boardwalk
- Stairs
- Bridges
- Planting plan for the proposed riparian area

7.2.3. Review of Opinion of Probable Cost

7.2.4. Review Technical Specifications and Bid Package

7.3. Wenck Scope

7.3.1. 100% Design and Plans

Wenck will finalize plans for items noted in 4.3.1 to go to the bidding phase and provide 100% design plans.

7.3.2. Design Support

Wenck will provide final design assistance for items noted in 4.3.2 to facilitate development of 100% design plans.

7.3.3. Opinion of Probable Cost

A final Opinion of Probable Cost will be developed for items noted in 4.3.1.

7.3.4. Technical Specifications

Specifications will be finalized for 100% and incorporated into the final specification package for the project. Review of 100% Bid Package.

7.4. Inter-Fluve Scope

7.4.1. 100% Design and Plans

- Following client review of the 99% design (Task 6), Inter-Fluve will developed design drawings to the 100% design level.
- *Special Technical Specifications* – Final technical specifications will be submitted with the 100% design plans.
- *Design Report*- Inter-Fluve will refine and update the design report based on changes from the 99% comments.

7.4.2. Design Support

Inter-Fluve will provide design support on tasks listed in the Inter-Fluve scope (above in Tasks 4 and 5).

7.4.3. Opinion of Probable Cost

A final EOPC, based on edits from Task 6, will be developed in conjunction with the 100% design submittal.

7.4.4. Technical Specifications and Front End Documents

Inter-Fluve will update and compile comments and produce a final bid package, including front end bid documents, technical specifications, plans, and relevant reports (e.g. geotechnical).

Deliverables

- Engineer's Opinion of Probable Cost.
- Design Report, as described, submitted in PDF format.
- Final 100% Bid Package for advertisement and release.

8. PERMITTING AND ENVIRONMENTAL COMPLIANCE

8.1. *Pre-Application Meeting* – MCWD to facilitate. Inter-Fluve to attend.

8.2. *Section 106 and EAW Historical and Archeological Compliance*

- Cultural resources literature review
- Archaeological assessment including a site visit
- Property specific research and visual assessment for the dam near 54th Street
- Participation in an agency meeting

8.3. *Permit Applications* – MCWD will prepare applications to submit the following permits using material developed for the 50% Design Package. Inter-Fluve will provide graphical support for permit submittals and has allocated 24 hours for this effort.

8.3.1. *USACE Clean Water Act Section 404 Permit*

8.3.2. *MPCA / USACE Clean Water Act Section 401 Water Quality Certification*

8.3.3. *MPCA - NPDES Construction Stormwater Permit (to be submitted upon project award to a construction contractor)*

8.3.4. *MPCA Dredge Permit* – The complexity of this permit is dependent upon the impounded sediment characterization. Inter-Fluve has allocated 16 hours for the coordination with MPCA, preparation, and submittal of the permit. Additional hours may be required if contamination is identified.

8.3.5. *City of Edina Conditional Use Permit*

8.3.6. *DNR Public Waters Permit*

8.3.7. *MCWD / DNR Wetland Conservation Act Permit*

8.3.8. *Environmental Assessment Worksheet (EAW)* – MCWD will complete an EAW submittal which is anticipated to be required based on length of stream impacted by the Arden Park Restoration project. The City of Edina is anticipated to be the Responsible Governmental Unit (RGU) for the EAW process. MCWD will complete a Draft and Final EAW for submittal.

8.3.9. *Wetland Conservation Act Permit* – MCWD staff will be responsible for submitting and obtaining any applicable wetland permit. Inter-Fluve has included 8 hours of engineering and science support effort to this task.

8.3.10. *No Rise Documentation* – The hydraulic analysis will include a formal comparison of modeled (HEC-RAS) existing and proposed condition water

surfaces associated with the regulatory flood in accordance with federal and City of Edina requirements.

8.3.11. *Phase 1 Environmental Site Assessment* – A Phase 1 environmental site assessment for the park will be completed to enable excavation of materials on site and ensure the potential for contaminated materials is addressed.

Deliverables

- Draft and Final Permit submittals as outlined above.
- Permit graphical support
- Phase 1 Environmental Site Assessment

Assumptions

- Wetland delineation has been completed by others under previous tasks.
- Surveys associated with Endangered Resources review are not included in this scope.
- The proposed conditions model will show “no-rise” in water surface elevations relative to the existing conditions model output developed under this contract. Development of materials required for requesting a Letter of Map Revision from FEMA is not included in this task. If desired, development and submittal of such information can be added via addendum.

9. BID PERIOD SUPPORT

9.1. *Pre-bid meeting* – Following dispersal of bids, Inter-Fluve staff will attend and assist MCWD at a pre-bid meeting for interested contractors. Notice of the pre-bid meeting will be included in the bid package. Advertisement of the bid is the responsibility of MCWD.

9.2. *Respond to Requests for Information/Addenda* –Inter-Fluve will respond to Requests for Information (RFIs) submitted by potential bidders during the solicitation period, and will prepare addenda if required. Responses will be prepared in writing and submitted electronically to MCWD for distribution to plan holders.

9.3. *Review bids* - Inter-Fluve will review submitted bids and develop and award recommendation.

Deliverables

- Attendance at the pre-bid meeting
- Written responses to RFIs and Addenda submitted electronically. One addendum is included in the scope and fee.

- Bid Award Review and Recommendation Memo

Assumptions

- MCWD will advertise the bids and distribute bid documents.
- Documents will be prepared for only one bidding process.
- Bid documents will be made available electronically, in PDF format only.

10. PROJECT MANAGEMENT AND DESIGN TEAM MEETINGS

10.1. *Project Management* – Inter-Fluve will manage the design team throughout the design and bid phase. The project management will include monthly billing, monthly project updates, and regular project phone call check-ins as requested by the City or MCWD.

10.2. *Team meetings* – Assume 24 meetings at Edina or MCWD. Meeting will include:

- *Design Review Meetings after each submittal (except the 100%)* - Inter-Fluve will attend an in-person design review meeting at MCWD to discuss plan comments following review of the 50%, 90%, and 99% design documents. This meeting is intended to provide the Inter-Fluve design team with clear direction for development of the next level of plan development. We have allocated two hours per meeting. A total of three (3) meetings are anticipated.
- *Monthly Team meetings* - Design integration with MCWD, City, and design team members throughout the project design phase will be critical. The coordination is anticipated to include merging of plan sets, OPC, and specifications to allow for a single design package. We have included monthly meetings through the duration of the project to facilitate communication and decisions. We have allocated two hours per monthly meeting. A total of 16 meetings are anticipated.
- *Other design meetings as needed (up to 5 meetings)*

Deliverables

- Inter-Fluve to provide meeting minutes for meetings noted.
- Monthly invoicing.

11. CONSTRUCTION OBSERVATION - DRAFT

11.1. *Pre-construction Meeting* - The Inter-Fluve Project Manager will attend the pre-construction meeting to work with the oversight team leadership to establish communication protocols, verify assignment of responsibilities, and discuss outstanding construction questions with the oversight team, owners, and contractor on the project site.

- 11.2. *Preliminary Schedule Reviews* - Assist with discussions with the Contractor related to requirements of the Contract, including sequencing of construction and schedule of values breakdown.
- 11.3. *Review of Contractor Submittals* - Inter-Fluve will communicate with the project partners (MCWD and City of Edina) and Contractor, review Contractor submittals relative to dam removal and channel design as necessary. Inter-Fluve will review these documents and submit to MCWD for final review. General tasks for all submittals will include:
- Review Contractor's submittals of information and shop drawings for the Project and either mark "No Exceptions Taken," "Make Corrections Noted," "Revise and Resubmit," or "Rejected" on each submittal. Provide MCWD with a brief written narrative of what is required from the Contractor for items the team mark on each submittal response.
 - Ensure that copies of submittals reviewed are stamped, dated, and signed by the person performing the review.
 - Review items that have been submitted by the Contractor as a substitution or an "approved equal" for specified items. Ensure that each substituted item meets the performance requirements specified in the Project specifications and ensure its compatibility with other components of the project. Consult with MCWD's Project Manager regarding acceptability of the proposed substitution.
 - Upon completion of review, return the submittals with any written narratives to MCWD.
- 11.4. *Pay Request Review* - Task completed by MCWD.
- 11.5. *Develop Field Orders for minor changes to the Work (FO's)* – Inter-Fluve will provide written response for up to ten (10) FO's throughout the construction phase.
- 11.6. *Respond to Requests for Information (RFI's)* – Inter-Fluve will respond to up to five (5) questions and issues raised by the general contractor during construction. Major issues will be coordinated and discussed with MCWD. Inter-Fluve will provide recommendations for review and MCWD will be responsible for submission to the Contractor.
- 11.7. *Develop Change Order (CO) Packages* - Inter-Fluve will provide written response for up to three (3) CO's packages throughout the construction phase.
- 11.8. *Construction observation (general)* – It is anticipated that MCWD and the City of Edina will be able to provide daily field observation for the duration of the project. The Consultant team will be responsible for specific observation as outlined below.

- 11.9. *Construction observation (structural and civil)* - Task completed by Wenck – see detailed scope.
- 11.10. *Construction observation (stormwater, dam removal, and stream restoration construction)* - Inter-Fluve will provide up to 480 hours of stream construction observation during the dam removal associated channel construction and vegetation planting of the riparian area. Inter-Fluve will also participate via phone call in up to ten (10) weekly construction meetings throughout the construction phase. Direct communication with the Contractor will be the responsibility of MCWD. Communication with regulators is the responsibility of MCWD. Inter-Fluve will provide photo documentation of activities occurring during the oversight time Inter-Fluve has staff on-site. It's assumed post construction observation and maintenance period enforcement of the planted vegetation within the riparian area will be completed by MCWD staff.
- 11.11. *Construction observation (Landscape Architecture)* – Hart Howerton will provide up to 80 hours of construction support for items including material submittal reviews, overlook staking, trail and boardwalk staking, site reviews, site walkthrough, punchlist development, and other miscellaneous tasks as needed and approved by MCWD.
- 11.12. *Monthly Construction Meetings* –Inter-Fluve will organize and facilitate monthly construction meetings throughout the duration of the project. Jonathon Kusa will attend ten (10) monthly meetings, Marty Melchior will attend six (6) meetings via phone for key construction phases.
- 11.13. *Weekly construction logs* - Task completed by MCWD or City of Edina.
- 11.14. *Remotely Respond to Questions* - Inter-Fluve has included up to 40 hours of staff time to remotely respond to questions from the Contractor and oversight team. Due to the multi-disciplinary nature of this project, we anticipate coordination during the trail, stairs, boardwalk, and overlook construction phases of the project, but we do not anticipate having river restoration specialty staff on-site for these portions of the project.
- 11.15. *Site walk-through* - The design team will conduct one final site walk-throughs with the Contractor; the walk through will follow substantial completion of the project, at which point a punchlist will be developed.
- 11.16. *As-built / Record Documents* – The Inter-Fluve team will provide a red-lined plan set documenting the as-build conditions of the project. The documentation will only include activities observed when a design team member was on site. The City and MCWD are responsible for documenting all other activity as needed for their records.

FEE ESTIMATE:

The following fee estimate is based on the detailed scope provided above. We look forward to discussing the scope and answering any questions you may have.



Project: Arden Park, MN

	Minnehaha Creek Watershed District		City of Edina		Total Hours	Total Fee
	%	\$	%	\$		
Task 1 - Value Engineering and Design Studies	36%	\$16,300	64%	\$29,370	345	\$45,640
Project Kick-off and Value Engineering Meeting	50%	4130	50%	4130	-	\$8,250
Stormwater Site Design and Meeting	50%	5630	50%	5630	-	\$11,250
Bridge and Pavillion Study	25%	6540	75%	19610	-	\$26,140
Task 2 - Geotechnical Investigation	50%	\$11,700	50%	\$11,700	21	\$23,390
Geotech Investigation and Report (Braun)	50%	7510	50%	7510	-	\$15,020
Helical Pile testing and report (Atlas Foundation)	50%	4190	50%	4190	-	\$8,370.0
Task 3 - Survey (Bathymetry)	100%	\$13,780	0%	\$0	102	\$13,780
Final Design Bathymetry	100%	9760	0%	0		\$9,760
Sediment Management Plan	100%	4020	0%	0		\$4,020
Task 4 - 50% Design (DD)	51%	\$66,240	49%	\$62,980	931	\$129,200
H&H Model - Final Design (Stormwater)	50%	3870	50%	3870		\$7,730
H&H Model - Final Design (Creek)	100%	9100	0%	0		\$9,100
Design Report	50%	3750	50%	3750		\$7,500
Plans and OPC	50%	44080	50%	44080		\$88,150
Public Mtg support	50%	5440	50%	5440		\$10,880
Electrical / Plumbing	0%	0	100%	5840		\$5,840
Task 5 - 90% Design	53%	\$27,600	47%	\$24,660	389	\$52,250
H&H Model Updates	100%	2940	0%	0		\$2,940
Design Report Update	50%	730	50%	730		\$1,460
Plans, Specs, and OPC	50%	21560	50%	21560		\$43,120
Public Mtg support	50%	2370	50%	2370		\$4,730
Task 6 - 99% Design	53%	\$15,550	47%	\$13,960	225	\$29,490
H&H Model Updates	100%	1590	0%	0		\$1,590
Design Report Update	50%	620	50%	620		\$1,230
Plans, Specs, OPC and Bid Package	50%	13340	50%	13340		\$26,670
Task 7 - Final (100%) Construction Documents	50%	\$10,740	50%	\$10,740	159	\$21,470
Design Report Finalization	50%	580	50%	580		\$1,160
Plans, Specs, and OPC	50%	7160	50%	7160		\$14,320
Bid Package	50%	3000	50%	3000		\$5,990.0
Task 8 - Permitting and Environmental Compliance	54%	\$12,250	46%	\$10,480	78.00	\$22,700
EAW (MCWD lead)	50%	1590	50%	1590		\$3,170
No - Rise	100%	1770	0%	0		\$1,770
Permit Application support (graphics)	50%	1840	50%	1840		\$3,670
Wenck (Phase 1 for Bldg Demo)	50%	1380	50%	1380		\$2,750
Historical and Archeological Investigation	50%	5670	50%	5670		\$11,340
Task 9 - Bidding Support	50%	\$4,890	50%	\$4,890	71	\$9,770
Task 10 - Project Management	50%	\$35,820	50%	\$35,820	453	\$71,640
TASK 1 - 10 TOTAL	51%	\$214,870	49%	\$204,600	2774	\$419,330
Task 11 - Construction Management	50%	\$69,260	50%	\$69,260	925	\$138,510
TASK 1 - 11 TOTAL	51%	\$284,130	49%	\$273,860	3699	\$557,840

Note: Hours shown do not account for geotechnical services

SCHEDULE

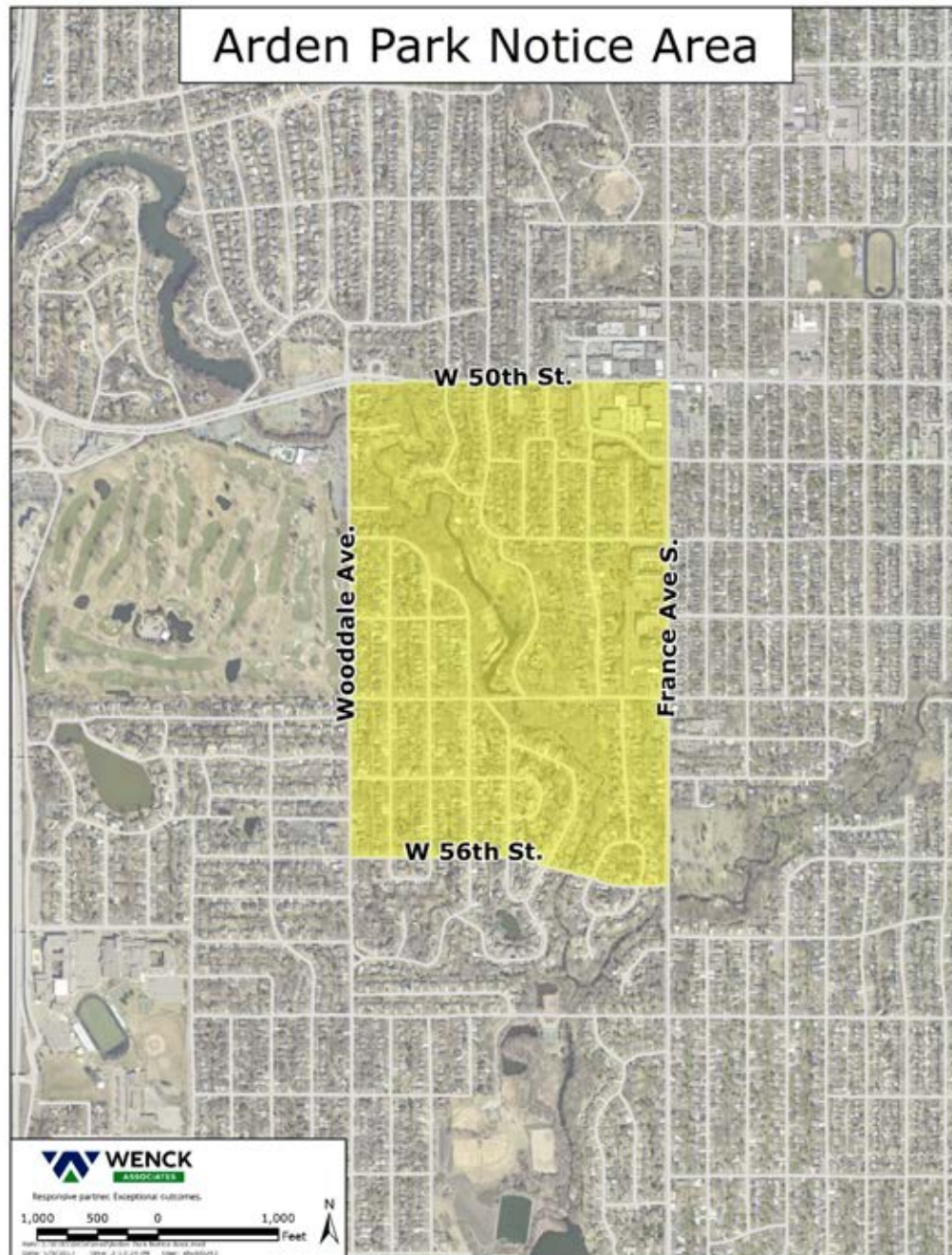
Inter-Fluve, Inc.			Arden Park Final Design			Minnehaha Creek Watershed District City of Edina																							
ID	Task Mode	Task Name	Duration	Start	Finish	2018												2019											
						Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
1		Notice to Proceed (Phase I Design and Bidding)	1 day	Mon 11/27/17	Mon 11/27/17																								
2		Survey Data Collection (City)	1 mon	Tue 12/5/17	Mon 1/1/18																								
3		Impounded Sediment Sampling and Testing (current contract)	5 wks	Tue 12/5/17	Mon 1/8/18																								
4		Geotech Investigation and Report	2 mons	Tue 12/5/17	Mon 1/29/18																								
5		Design Studies (bridges, stormwater treatment, pavilion)	6 wks	Tue 1/9/18	Mon 2/19/18																								
6		50% Design (DD)	3 mons	Tue 2/20/18	Mon 5/14/18																								
7		Review and Comment	3 wks	Tue 5/15/18	Mon 6/4/18																								
8		90% Design	2 mons	Tue 6/5/18	Mon 7/30/18																								
9		Review and Comment	3 wks	Tue 7/31/18	Mon 8/20/18																								
10		99% Design	6 wks	Tue 8/21/18	Mon 10/1/18																								
11		Review and Comment	2 wks	Tue 10/2/18	Mon 10/15/18																								
12		100% Design	4 wks	Tue 10/16/18	Mon 11/12/18																								
13		Permitting (EAW and all permits) - MCWD	7 mons	Tue 6/5/18	Mon 12/17/18																								
14		Bidding	1 mon	Tue 11/27/18	Mon 12/24/18																								
15		Phase 1: Construction NTP	6 mons	Tue 1/1/19	Mon 6/17/19																								
16		Phase 2: Park Structure	6 mons	Mon 5/27/19	Fri 11/8/19																								

Project: Arden_Final_Design_052 Date: Mon 11/6/17	Task		External Tasks		Manual Task		Finish-only	
	Split		External Milestone		Duration-only		Deadline	
	Milestone		Inactive Task		Manual Summary Rollup		Progress	
	Summary		Inactive Milestone		Manual Summary			
	Project Summary		Inactive Summary		Start-only			

Public Process Summary

Concept Plan development process:

Through a public input process over the previous 12 months, co-lead with City staff, the draft Concept Plan was developed (Attachment A). The process included three planned community meetings to establish our respective goals for the park and develop a concept plan to achieve those goals. These meetings were notice by mail to over 700 households to an area bounded by Wooddale-France Ave. and 50th – 56th Street.



After community meeting #3 there was feedback from the community that the public notice process was not adequate and that many residents were not engaged and concerned about losing the waterfall feature created by the grade control structure. In effort to ensure robust

community participation, the approval process was paused and two additional community meetings were hosted to continue to listen and understand the goals of the community. A summary of the public engagement process is as follows.

Public Process Summary		2016			2017											
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Concept Development	Community Meeting #1	■														
	Draft Concept Developed	■	■													
	Community Meeting #2		■													
	Parks Commission Meeting			■												
	Council Review and Briefing				■											
	MCWD Board Review and Briefing				■											
	Final Concept Developed					■	■									
	Community Meeting #3								■							
	Parks Commission Meeting									■						
	Community Listening Session & Informational Meeting #4									■						
	Public Informational Meeting #5										■					
	Council Review and Briefing											■				
	City of Edina Public Hearing												■			

As part of the additional community meetings, we heard that the waterfall feature created by the grade control structure has created a valued community place. Other common themes consistent throughout the process include maintaining the parks rustic character, recreation including kayaking, tubing and fishing, gathering spaces, and facility upgrades.

On September 6, 2017, Edina City Council held a public hearing which had substantial community attendance of both project proponents and opponents. At their meeting on September 19, 2017, City council held their deliberations and voted to approve the Arden Park Concept Plan and authorize a Cooperative Agreement.

Project Ordering Process:

A public notice was distributed and published as further described below which provided a project description, estimated project cost and how the cost will be paid, and the location, time and nature of the public hearing held at the District office on October 26, 2017.

General Public:

- A postcard notice was mailed to the public notice area identified above bounded by Wooddale-France Ave. and 50th – 56th Street
- The notice was emailed to citizens engaged during design and requested to be shared through local social networking channels
- Notice was published in the Star Tribune on Monday, October 2, and Tuesday, October 10, 2017
- Notice and a press release was published in the City of Edina legal newspaper Edina Sun Current on October 18, 2017 and in the Southwest Journal on October 20, 2017
- Notice was posted on the District website on the project webpage and in the public notice section.

Cities and Counties:

- Notice and a copy of the Arden Park Restoration Concept Plan was mailed and emailed to all City Administrators within the Watershed District, Hennepin and Carver County, for distribution to Mayor’s and the County Boards.

