



Title:	Approval of Phase II Design Contract for 325 Blake Road Restoration and Redevelopment
Resolution number:	21-075
Prepared by:	Gabriel Sherman (952) 641-4510 gsherman@minnehahacreek.org
Reviewed by:	Michael Hayman, Project Planning Manager
Recommended action:	Board approval of the Phase II design contract with HDR to bring 325 Blake Road Restoration and Redevelopment from schematic design through final design
Schedule:	December 2021/January 2022 – 60% design hearing and approval of 60% design First Quarter 2022 – Approval of 90% and final design
Budget considerations:	Fund name and code: Capital Projects, 3145-4340 and 3146-4340 (325 Blake Road and Cottageville Park Phase II) 2022 fund budget: \$3,512,970 (325 Blake Road and Cottageville Park Phase II) 2021 expenditures to date: \$421,512 of \$741,000 Requested amount of funding: \$777,869 (\$707,154 base design + 10% contingency)
Past Board action*:	Res # 20-066 Authorization to Execute a Cooperative Agreement with the City of Hopkins for Coordinated Planning, Improvements and Development for 325 Blake Road Res # 20-067 Authorization to Release the Request for Proposals for Design Services for 325 Blake Road Stormwater Management and Site Restoration Res # 20-083 Authorization to Contract for Site Survey for 325 Blake Road Regional Stormwater and Greenway Project Res # 20-091 Authorization to Contract for Design Services for the 325 Blake Road Regional Stormwater and Greenway Project Res # 21-063 Acceptance of 30% Design for 325 Blake Road Restoration and Redevelopment *The Resolutions listed above are specific to the design process and selection of design services. A full history of Board decisions related to the project is available.

Summary:

Background

In advancement of the Minnehaha Creek Watershed District's (MCWD) stormwater and greenway project at its 325 Blake Road and adjacent Cottageville Park properties in Hopkins, the Board authorized the release of a Request for Proposals (RFP) for design services (Res # 20-067) on August 27, 2020. Through a competitive process, HDR, Inc. was selected from among the seven qualified firms that submitted proposals. The original scope of work included in the RFP was for the full design of the project, from initiation through 100% design and construction oversight. However, due to the complexity of the project and the need to determine if a private development partner would be selected during the design process, the District opted to phase design.

MCWD therefore contracted with HDR to provide the full range of design services necessary to bring the regional stormwater and greenway improvements on approximately 4-6 acres of the 325 Blake Road site and Cottageville Park parcels through schematic design (Phase I). The contract included additional tasks to coordinate the design process with the potential solicitation and selection of a private developer, to ensure that a private development on the remaining roughly 10-12 acres of the site would be compatible with MCWD's baseline project requirements. This phasing of the design process was also intended to allow the Board an opportunity to assess the quality of HDR's work, with the intention of amending the contract through final design, assuming satisfactory completion of the initial phase.

The Phase I design work was initiated in January 2021 and culminated with the completion of a schematic design and accompanying design memorandum in September 2021. At the September 23, 2021 Board of Managers meeting, the MCWD Board of Managers accepted the schematic design as the preferred direction to carry the project forward to final design. The Board offered a variety of feedback on the design to help shape the Phase II design contract and the subsequent 60% design milestone. To further refine the approach to the Phase II design scope, MCWD staff led a discussion with the Board at the October 21, 2021 Policy and Planning Committee meeting around budgetary and timing considerations. The Board concurred with staff's recommendation that the full schematic design be brought through final design, while exploring the potential to phase construction of discreet project elements in consideration of the development's construction timeline.

Timeline and Next Steps

At the November 4, 2021 Board meeting, staff will bring forward the Phase II scope of work for HDR to advance the schematic design through final design. HDR is uniquely qualified to perform this second phase of design services, based upon their deep institutional knowledge of the project gained during Phase I design and technical understanding of the potential interaction between MCWD's regional stormwater facility and the private development's stormwater treatment. Based on the competitive process that was conducted during the initial selection of HDR and the satisfactory completion of Phase I, staff believes it is prudent to proceed as initially envisioned with an amendment to the existing contract.

In order to preserve flexibility at specific points in the design without building unnecessary cushion into the budget, the scope of work (Attachment 1) has been divided into a base contract and specific optional tasks that MCWD may choose to authorize. The base contract (Tasks 1-5) accounts for all project management, data collection and analysis, engineering and architecture to bring all project elements through final design and bid, as well as some support for community engagement. These tasks are covered under the base budget of \$707,154. On top of the base contract budget, a 10% contingency of \$70,715 will be included in the not-to-exceed amount to cover optional tasks as well as any unforeseen work necessary for the completion of project design (e.g., survey and geotechnical work).

Optional tasks include:

- 1.4 (Public Engagement) - More robust support for community engagement
- 2.2 (Creek Survey) - Collect and model Minnehaha Creek survey data downstream of the project boundaries to include data for the upcoming Greenway to Cedar Trail Connection and Streambank Restoration project. The incremental cost to extend the survey and modeling would be paid through a separate contract out of MCWD's planning budget, but the work would be performed concurrently.
- 3.6 (Update Triple Bottom Line) - An update to the triple bottom line analysis completed as part of schematic design
- 4.4 (Provide Two Separate Construction Packages) - If MCWD opts to phase construction, it may be necessary to produce multiple construction packages. This optional task accounts for the added expense of an additional construction package.

Following execution of the contract amendment, major anticipated project design milestones include:

- Schematic design community rollout at Alatus neighborhood meeting – November 15, 2021
- 60% community open house – December 2021/January 2022
- 60% design hearing and approval of 60% design – January 2022
- Approval of 90% and final design – First Quarter 2022

MCWD Board design liaisons are anticipated to maintain an active role in Phase II, providing direction and strategic guidance to bring the project through final design.

Supporting documents (list attachments):

- Attachment 1: Proposed scope of work



RESOLUTION

Resolution number: 21-075

Title: Approval of Phase II Design Contract for 325 Blake Road Restoration and Redevelopment

- WHEREAS the Minnehaha Creek Watershed District (MCWD) acquired 325 Blake Road, Hopkins, MN in 2011 as a key piece of the Minnehaha Creek Greenway in St. Louis Park and Hopkins;
- WHEREAS the MCWD is implementing a regional stormwater project at 325 Blake Road to treat polluted stormwater that flows into the creek from approximately 270 acres of surrounding area and to restore more than 1,000 feet of creek frontage and is planning for this work with three accompanying Cottageville Park parcels bordering the creek, collectively the 325 Blake Road Regional Stormwater and Greenway and Cottageville Park Phase II Riparian Restoration Project. The project is commonly referenced by its shortened title “325 Blake Road Restoration and Redevelopment”;
- WHEREAS as of March 2020, the construction of both the Powell Road and Lake Street stormwater diversion systems are complete, with the diversion structures remaining bulk-headed until the treatment facility at 325 Blake Road is constructed;
- WHEREAS on August 27, 2020 the MCWD Board of Managers authorized the execution of a Cooperative Agreement with the City of Hopkins for Coordinated Planning, Improvements and Development for 325 Blake Road (Res # 20-066);
- WHEREAS on August 27, 2020, the MCWD Board of Managers approved the release of a Request for Proposals for Design Services for 325 Blake Road Stormwater Management and Site Restoration (Res # 20-067), which seeks landscape architecture and engineering services to complete integrated stormwater management, ecological restoration, and public open space improvements at 325 Blake Road and accompanying parcels;
- WHEREAS on December 3, 2020 the MCWD Board of Managers authorized final negotiation and execution of a contract for design and engineering services for the 325 Blake Road Restoration and Redevelopment project with HDR, Inc.;
- WHEREAS due to project complexity and uncertainty, the MCWD Board of Managers determined it was prudent to contract for a scope of services that includes an additional task not solicited in the RFP to further define the public realm and potential redevelopment footprints and re-scope the later stages of the project after a schematic design (30% design) had been produced;
- WHEREAS the MCWD Board of Managers accepted the 30% design memorandum and schematic design for 325 Blake Road Restoration and Redevelopment on September 23, 2021 upon finding that HDR had satisfactorily completed the tasks and produced the deliverables included in the contract authorized by the MCWD Board of Managers on December 3, 2020; and that the schematic design satisfies all major project needs and accurately reflects the project goals defined in the Cooperative Agreement with the City of Hopkins for Coordinated Planning, Improvements and Development for 325 Blake Road;
- WHEREAS MCWD staff presented the schematic design to the Hopkins City Council on October 12, 2021 and the Council expressed support for the design and design direction;

- WHEREAS the schematic design will form the basis for detailed design and engineering as the 325 Blake Road Restoration and Redevelopment project proceeds into the next phase;
- WHEREAS HDR is uniquely qualified to perform the second phases of design, based upon HDR's institutional knowledge of the project;
- WHEREAS based on the competitive process that was conducted during the initial selection of HDR and the satisfactory completion of Phase I, staff believes it is prudent to proceed as initially envisioned with an amendment to the existing contract;
- WHEREAS the MCWD Board of Managers finds that is prudent to advance all project elements from schematic design through final design and produce a construction phasing plan;
- WHEREAS due to continued project uncertainty and potential construction phasing, HDR has provided an initial budget estimate for construction administration, but the fee will be negotiated and the services contracted for separately from the Phase II design contract based on the final construction phasing plan.

NOW, THEREFORE, BE IT RESOLVED that the Minnehaha Creek Watershed District Board of Managers authorizes the District Administrator, on advice of Counsel, to amend the Agreement between Minnehaha Creek Watershed District and HDR Engineering, Inc. (entitled "325 Blake Road Regional Stormwater and Greenway / Cottageville Park Phase II Riparian Restoration Schematic Design") to include a second phase of design and engineering services for the final design and optional construction administration of the 325 Blake Road Restoration and Redevelopment project, in an amount of \$707,154 for the base contract, and authorizes the Administrator to execute change orders in his discretion up to an additional 10% of the fee for an amount not to exceed \$777,869.

Resolution Number 21- 075 was moved by Manager _____, seconded by Manager _____. Motion to adopt the resolution ___ ayes, ___ nays, ___ abstentions. Date: November 4, 2021.

Secretary Date: _____

Attachment 1: Proposed Scope of Work

325 Blake Road Regional Stormwater and Greenway / Cottageville Park Phase II Riparian Restoration - Phase II Contract Amendment for 60/90/100% Design

Project Background

The 325 Blake Road Regional Stormwater and Greenway/Cottageville Park Phase II Riparian Restoration Project (“325 Blake Road Restoration and Redevelopment” or “Project”) includes, data collection, continued stormwater and hydraulic analysis, detailed design, cost analysis, interpretive planning, public engagement, preparation of construction documents and construction administration (contract option) for the construction of stormwater facilities, open space amenities, stream and riparian restoration and a trail network on four parcels – at 325 Blake Rd N, 415 Blake Rd N, 1308 Lake St NE, 1312 Lake St NE – and a small creek outlot (collectively the “Site”).

The previous scope of work (Phase I) advanced the project to 30% by producing two viable schematic designs: 1) A regional stormwater and greenway project integrated with the selected Developer’s (Alatus, LLC) preliminary site plan, and 2) A District-only regional stormwater and greenway project compatible with a future development. This Phase II scope of work will advance the project through final design (60/90/100%), including plans and specifications, permitting assistance, bidding assistance, and construction administration (contract option). Phase II design will proceed following the developer concept (See Figure 1) with the HDR team further developing elements from schematic design, reviewing and coordinating impacts within the MCWD/Developer Transition Zone, and setting criteria for the developer to use the Regional Stormwater Offset Zone to mitigate any reduction in the District’s stormwater treatment objectives. The 60% design will proceed following a process that integrates the project with the developer, while allowing a pivot, if necessary, to a District-only project compatible with future development following the 60% design milestone (only 1 design scenario will proceed to final design – either with current developer or compatible with future development). Final design will include preservation/restoration of the riparian corridor, stormwater pond(s), site grading, stormwater utilities, planting/vegetation, trails within the District’s public/stormwater area defined by schematic design, and project elements within the activity nodes. Developer facilities are being designed under a separate contract led by Developer.

SD Site Design - Developed

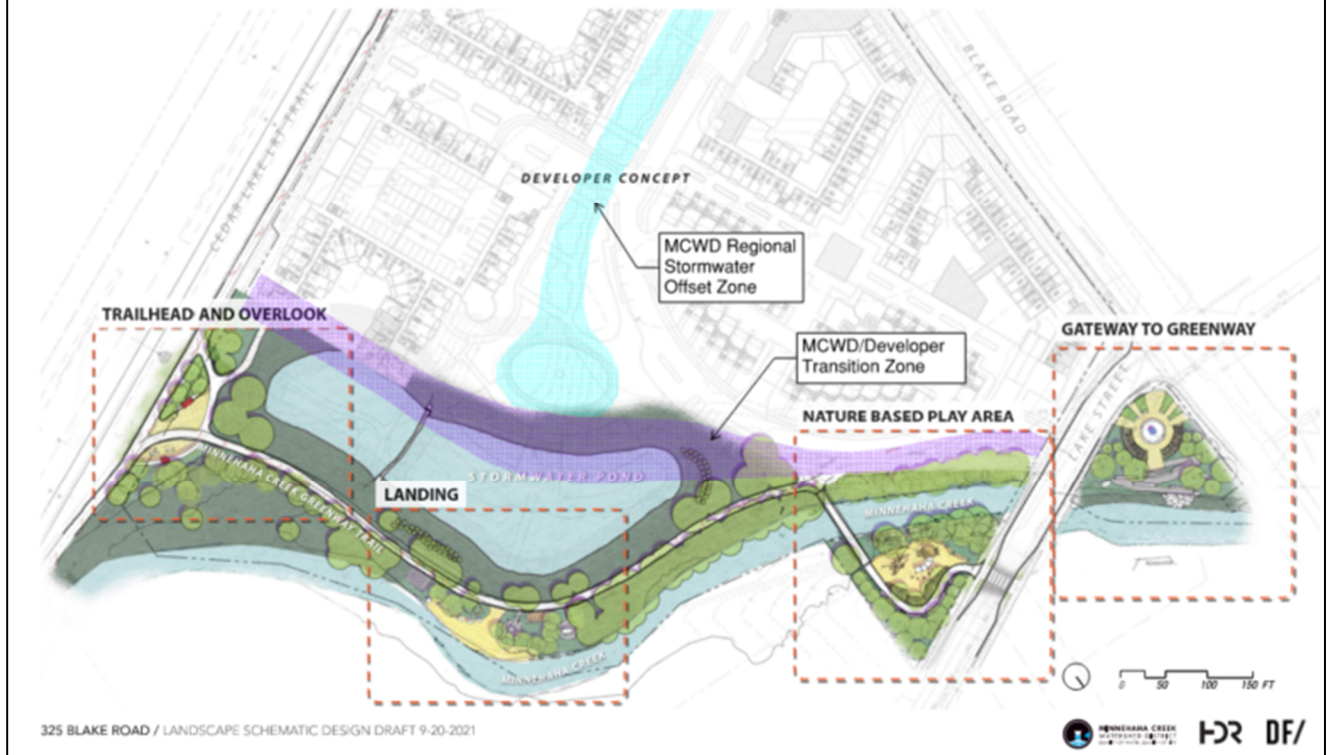


Figure 1 – Project Site and Coordination Zones

1. PROJECT MANAGEMENT AND COORDINATION

HDR will plan, perform, and document project management and design related coordination activities during the project. This task will include internal project management, progress meetings with the District, and coordination with the broader MCWD agency, the developer, City of Hopkins and other stakeholders at established milestones/meetings in accordance with the following tasks. It is assumed the majority of coordination will be performed through the design review process at the 60%/90% submittal milestones.

1.1. Project Management

This task includes the following over the anticipated 8-month project schedule to project bidding:

- Management of the scope, schedule, and budget
- Monthly invoicing and progress reports
- Coordination of the HDR project development team

1.2. MCWD Meetings and Coordination

This task includes the following:

- Weekly 0.5 hour meetings with the District project team (includes HDR project PM)
- O&M meeting following project kickoff (with 3 members of the HDR team)

- Up to 2 meetings with the District Design Liaison team (with 2 members of the HDR team)
- Up to 3 meetings with the District Board/Committee (with 2 members of the HDR team)
 - 1 hour of preparation are assumed prior to each Liaison/Board meeting
- Up to 2 meetings with Stantec (District's engineer) including 2 members of the HDR project team

1.3. Stakeholder Meetings and Coordination

All coordination with the developer, outside agencies, and other stakeholders will occur through the District and with their attendance or approval. Documentation of any decisions provided via email will be included in the project record. HDR will take meeting notes at any meeting held with entities outside the District and will publish notes to attendees for including in the project record documents.

Input from stakeholders on design elements will occur during the Kickoff and 60% and 90% reviews as well as the Public Engagement meetings under Task 1.4.

The Alatus construction phasing plan will be reviewed at the 60% and 90% milestones relative to potential MCWD construction phasing.

This task includes the following:

- Developer (Alatus)
 - Coordination meetings
 - Detailed Design Kickoff (1 meetings with 6 HDR team members)
 - 60% Review and Resolution (1 meeting with 3 HDR team members)
 - 90% Review and Resolution (1 meeting with 3 HDR team members)
 - Up to 3 additional coordination meetings with 3 HDR team members
- Hopkins City Council / Planning and Zoning Commission (1 meeting with 2 HDR team members)

1.4. Public Engagement

The HDR team will assist MCWD in public engagement for the project through the following tasks.

- Coordination with MCWD
 - Meetings
 - Assumption: 3 one-hour meetings with 3 HDR team members
 - Coordination with MCWD on 60% Open House strategy.
- Collaboration with City and Developer
 - Meetings
 - Assumption: 3 one-hour meetings with 3 HDR team members
 - Review and provide input on community engagement plan
 - Assumption: 2 hour of review for 2 staff
 - Review and provide feedback on influence of Developer/City engagement process on interpretation and wayfinding design.

- Assumption: 2 hour of review for 2 staff
- 60% Open House (one in-person, one virtual)
 - Hosting Virtual Meeting
 - 2 one-hour planning/practice meetings
 - Review meeting materials and virtual practice session
 - Virtual dress rehearsal
 - Assumption: 3-5 HDR staff for each meeting
 - Staffing meeting
 - Assumption: 3-5 HDR staff for 1 one-hour online meeting
 - Virtual meeting platform set-up
 - One draft and final meeting summary document
 - Hosting In-person Meeting (OPTION)
 - 2 one-hour planning/practice meetings
 - Review draft meeting plan
 - Check-in prior to in-person meeting
 - Assumption: 3-5 HDR staff for each meeting
 - Staffing meetings
 - Assumption: 3-5 HDR staff for one two-hour in-person meeting, plus set-up and take-down, mileage included
 - One draft and final meeting plan including COVID protocol
 - General meeting materials - signage, sign-in sheet, comment form and box, pandemic supplies (extra masks, hand sanitizer, wipes), individually packaged refreshments
 - One draft and final meeting summary document
 - Expenses: \$500 for printing meeting materials, meeting supplies, and individually packaged refreshments for the in-person open house.
 - Assumptions: MCWD will secure the venue, promote both meetings, and coordinate/fund all needed translation/interpretation.
 - Meeting materials
 - HDR will provide graphics, a survey or equivalent input activity, and boards (up to 10) for the in-person meeting.
 - HDR will provide public realm engagement materials for the virtual meeting that are consistent with the materials provided at the in-person open house.
 - Expenses: \$1000 for printing up to 10 boards.
- Newsletters
 - One-time update of timeline graphic at the start of the contract.
 - Provide reviewed content for up to three newsletters
 - Assumptions: MCWD will put the content into an email program and send. MCWD will be responsible for updating the project webpage. No printing or mailing costs are included.
- Project video update (OPTION)
 - Coordinating with MCWD staff to create updated video script
 - Developing updated graphics and securing images as called for in the script
 - Recording narration
 - Editing and producing updated video

- Creating closed captioning file in English
- Integrating translated script (coordinated by MCWD) into caption file
- Assumptions: HDR assumes the video is 2-3 minutes in similar style and level of effort to the last video.

2. DATA COLLECTION SUPPORTING DESIGN

The following additional data will be collected to support the final design and regulatory approvals.

2.1. Soil Borings and Testing

5 total SPT borings (HSA and Mud Rotary drilling methods) will be collected in the pond grading area and pedestrian bridge foundation area and lab testing performed to characterize soil and strength parameters

- (2) 50' Borings
- (1) 35' Boring
 - At boring completion, construct a 2" diameter PVC cased well with 5' screen (for slug test and groundwater monitoring)
- (2) Borings to Bedrock (approximately ~80'), with 5' coring into competent rock

All borings will be backfilled per state and local protocols

2.2. Creek Survey

A creek cross-section survey will be completed to support development of a HEC-RAS model of Minnehaha Creek through the project extent.

OPTION – extending survey further downstream for a future project near the Meadowbrook Road crossing.

Approximately 40 creek cross-section locations will be set between the upstream side of the Blake Road Bridge and downstream of the project to collect key hydraulic features, including riffle crests. Cross section survey data will be collected using RTK GPS and total station equipment for bathymetric and topographic points. Topographic survey data will extend up to 20 feet from top of bank. LiDAR and the 2021 Stantec survey will be used to supplement the survey data. At minimum each cross-section will include:

- an adjacent upland shot approximately 5-feet from top of the right and left bank,
- top of the right and left bank,
- toe of the right and left bank,
- edge of water and water surface elevation,
- a minimum 5 points along the channel bed,
- channel thalweg, and
- additional breakline data will be collected on all midchannel bars and islands within the survey reach
- Locations of downed trees or debris for future clearing

A .csv, .shp, .dwg or .gdb file will be provide with the relevant point elevation data collected including: documented projection and horizontal units, vertical datum and elevation units, and lat/long or northing and easting.

At the Lake Street NE, Blake Road, SWLRT Bridges, Cedar Lake Trail bridge and Meadowbrook Road bridges (OPTION) the following will be collected at minimum

- Bridge high chord and low chord
- Edge of structure at river centerline
- Abutment locations
- Channel bed elevations at crossing openings

The location of wetland delineation flags will be collected during the survey if available.

A .csv, .shp, .dwg or .gdb file will be provided of the relevant point data collected including: documented projection and horizontal units and lat/long or northing and easting.

3. ANALYSIS SUPPORTING DESIGN

3.1. Slope Stability/Foundation Analysis and Groundwater Review

An analysis of geotechnical conditions and stability and loading conditions for proposed design features will be performed using existing soils data as well as new soil borings proposed under this project (Task 2.1). This analysis includes the following:

- *Pond Slope Stability*: Soil boring results (both current and prior borings) will be used to develop two slope stability sections for the stormwater pond. Up to three hydraulic loading conditions will be analyzed between the pond and creek and slope stability of the pond slope will be reviewed.
- *Pedestrian Bridge*: The foundation conditions will be analyzed for the pedestrian bridge and coordinated with development of the performance specification.
- *Weir Wall*: The foundation and stability of the weir wall separating the north and south stormwater pond will be evaluated and used to advance the design of that structural element.
- *Groundwater Review*: Groundwater monitoring results will be analyzed and interpreted relative to influence on potential pond elevations.
- Results of these studies and supporting data will be summarized in the design summary memo.

3.2. Creek Hydraulic Modeling

A 1-dimensional HEC-RAS model of Minnehaha Creek will be developed using the creek cross-sections and bridge data collected in Task 2.2. The model will extend through the project limits.

OPTION – extending model further downstream for a future project near the Meadowbrook Road crossing.

The purpose of the model will be to increase detail and accuracy of the range of creek water levels along the project site and review modifications to bank grades and the floodplain area

to confirm no-rise. The model will be provided to the District at the completion of the modeling task.

Modeling results will be documented in the design summary memo. In addition, a “No Rise” certification letter will be developed and submitted to the floodplain management authority for the project. No coordination with FEMA is assumed.

3.3. Site Stormwater Modeling

3.3.A. Pond Analysis

The stormwater modeling will be updated and finalized to reflect the proposed design. Treatment performance will be analyzed and monitored as design is advanced.

The project will continue to use the District’s HydroCAD model to analyze stormwater flow, volumes, residence time, and water levels. The analysis will include reviewing up to six different rainfall/creek flow conditions to review the range of potential low-flow and high-flow conditions.

An overtopping analysis will be performed and used to design a stabilized pond overflow that will act as an auxiliary feature for the pond outlet, which will be sized to the 100-year storm event.

A storm water quality model will be developed to provide a more detailed review of treatment performance. A P-8 model or equivalent will be used to analyze regional stormwater treatment provided by the pond and any regional treatment measures on the developer site.

Results of the analysis will be summarized in the design summary memo and the updated HydroCAD and P-8 model provided to the District for their records.

3.3.B. Developer Feature Analysis/Review

This task includes establishing the design criteria, assisting with sizing and design, and updating the HydroCAD model to represent any regional stormwater treatment provided on the developer’s site. It is assumed the developer’s engineer will design the stormwater elements on the developer’s site. The HDR team will provide the developer’s engineer with the required criteria and sizing for the project to continue to meet the established stormwater treatment goals equivalent to the baseline alternative.

Model updates will be performed following design review milestones and periodic coordination with the developer’s engineer will fall under the Task 1.3, general coordination.

Results will be summarized in the design summary memo.

3.4. Site Interpretation and Wayfinding

The HDR team will work with District staff to develop an education/interpretation and wayfinding plan for the Site, which may include signage and other interactive features. The HDR team will develop a plan for integrating educational and interpretational features throughout the Site, highlighting unique or demonstrative areas. The Site’s interpretation will highlight the work of the District, City, and other partners in restoring the Minnehaha Creek

corridor and building the Minnehaha Creek Greenway. The wayfinding signage will both orient visitors to the site, and guide them to destinations on and off-site (Minnehaha Creek, LRT, Cedar Lake Regional Trail, Cottageville Park, etc.). Together, the site education/interpretation and wayfinding elements will play a role in the broader placemaking and site branding strategy with partners.

The HDR team will work with the District's Outreach staff to develop the Site's interpretive plan and create an overarching storyboard for the Site's interpretive elements. Once interpretive themes are developed, we will work with the district through a series of workshops to identify locations for interpretive elements. Interpretive elements are intended to be experiential and rely on text-based narrative only where necessary and will be integrated into site elements to create layered and nuanced meaning whenever possible. Locations will not be limited to the waysides identified during schematic design, but could also include smaller pull offs in the trail corridor, access points to the creek, or other locations that offer interpretive opportunities

A document will be provided summarizing the approach with exhibits illustrating the plan. Interpretive elements and wayfinding signage will be advanced and documented through design development (60%) and construction documentation (90/100%) to include full specifications, construction details, collaboration with graphic designers, and materials suppliers to select finishes. There is also the potential for coordinating those plans with an artist-led process being conducted by City of Hopkins/Alatus (See Task 1.4).

3.5. Permitting Support

Up to the allotted budget, the HDR team will support the District in obtaining the permits required for construction of the project's stormwater facilities from public regulatory and approval authorities, including those listed below by providing design background material required by permits.

The HDR team will advance designs that are in compliance with the rules and regulations for stormwater management, wetland protection, water body crossings and other applicable rules promulgated by permitting authorities, including the District, that apply to the Project. The HDR design memorandum, analysis/computations, and construction drawings will serve as the background material for the permits. The District is responsible for filling out, submitting, and paying for all permit applications. Anticipated permits include:

- City of Hopkins
- Minnehaha Creek Watershed District
- U.S. Army Corps of Engineers 404 Clean Water Act Permit/ Minnehaha Creek Watershed District Wetland Conservation Act Permit (Joint Application)
- MN DNR Public Water Works Permit
- MPCA SWPPP

Up to five meetings with 3 HDR team members are included with a combination of the agencies listed in this task to coordinate permitting requirements during the 60%/90% design phases and any comments received on submittals.

At 60% and 90% design milestones, the HDR team will review the permitting background material relative to Developer designs and overlapping permitting issues with the developer design will be reviewed and coordinated with the developer team (up to four meetings with 2 HDR team members included).

3.6. Update Triple Bottom Line Analysis (OPTION)

The HDR team will update the triple bottom line analysis completed as part of the schematic design at the 90% design phase. The six values identified in schematic design will be re-evaluated relative to the updated design and the scoring graphics and matrix updated. This analysis will be provided/documentated as an appendix to the design summary memo.

4. DESIGN DEVELOPMENT

The HDR team will advance analysis, design, and prepare construction drawings and specifications for approved 30% (schematic) design elements, including the following site and design elements:

- Greenway/Gateway Plaza (NE Quadrant of Blake and Lake)
 - Site preparation
 - Site grading and drainage
 - Construction staging and access
 - Trails and creek access
 - Landscape plantings
 - Plaza paving
 - Design features
 - Site furnishings
 - Water feature
 - Pergola/swing feature
 - Lighting and electric connection to pump.
 - Signage and interpretive elements
- Nature Play Area (SE Quadrant of Lake and the Creek)
 - Site preparation
 - Site grading and drainage
 - Construction staging and access
 - Trails and creek access
 - Landscape plantings
 - Design features
 - Nature-based play features/surfacing
 - Trailhead kiosk
 - Bench/pull-off
 - Stone seating
 - Lighting
- Blake Road Site (MCWD area of main site)
 - Site preparation
 - Overall site grading and surface drainage
 - Construction staging and access
 - Trails and creek access

- Pedestrian bridge over the creek to the nature play area
- Regional stormwater management
 - Pond excavation and grading
 - Maintenance access
 - Effectiveness Monitoring access
 - Storm sewer connections and piping
 - Installation of Fabricated Stoplogs into Powell Road MH (no street work assumed)
 - Design of Lake Street Stoplogs MH's (no street work assumed)
 - Weir wall (sheetpile w/ concrete cap and/or limestone block)
 - Pond outlet structure and piping
 - Stabilized overflow
- Riparian Corridor (preservation focus)
 - Spot stabilization
 - Replacement planting
 - Boulder/rock placement
 - Debris removal
 - Semi-formalized path connections between creek and trail.
- Trailhead area (Cedar Lake LRT Regional Trail)
 - Wayfinding signage/kiosk
 - Plaza paving
 - Landscape plantings
 - Benches
 - Seat walls
 - Interpretive elements
- Beach Landing
 - Seating and gathering areas
 - Benches
 - Hammocking posts
 - Pergola
 - Creek access
 - Short-term kayak storage
- Seeding/planting/surfacing
- Lighting
- MCWD/Developer transition zone
 - See Figure 1 for general area
 - Review and adjust grading and site improvements to interface with developer features and construction drawings.
 - Adjustments are assumed to be refinements from the current schematic design layout, major changes have not been included.
 - Provide input to developer on upland regional stormwater treatment (included as Task 3.3.B)

Design hours and fee were estimated in accordance with the listed or equivalent design elements. Design will be refined as the project advances, but these elements are reflective of the estimated level of effort.

The project construction documents will be developed in recognition of potential phasing of construction areas (i.e. regional stormwater pond and trail constructed at different time than gateway, nature play, trailhead and landing area). Construction documents will be developed assuming full build-out of each area with phasing of each area's construction reviewed relative to MCWD funding and Alatus plans. Potential construction phasing will be reviewed with MCWD at 60% and 90% milestones and a decision on separation of project areas defined following the 90% submittal. Phasing review is included in the base scope, separation of construction documents into two distinct phases is provided as an option (See Task 4.4)

4.1. 60% DESIGN DEVELOPMENT

The HDR team will develop 60% design by advancing the deliverables developed under schematic design and creating the documents necessary for project bidding and construction. Project features will be further detailed and construction requirements further defined.

4.1.A. DRAWINGS

See anticipated drawing list (attached) for preliminary list of construction drawings and design phase development. All construction drawing sheets and basefiles will be developed using AutoCAD Civil3D following HDR and DF CAD standards. Select interim CAD files will be shared with the developer and the District at the 60% and 90% submittal. Final CAD files will be submitted following 100% design. Interim drawing sheet submittals will be in PDF format. The drawing sheet size will be 11x17.

Design and accompanying construction drawing sheets will be advanced to 60% completion. Plan view drawings will be developed as well as major sections defining design. The objective is to provide sufficient detail to improve accuracy of costing, construction footprint, select materials, and illustrate the major design elements for District/stakeholder review. Detailed drawing notes as well as some sections and details will remain for the 90% phase.

4.1.B. TECHNICAL SPECIFICATIONS

Draft construction specifications (Divisions 01 and up) will be prepared using a combination of District Specifications, Minnesota Stormwater Manual, MnDOT Specifications, or other local agency material types. The specifications will be developed for use with the District's standard front-end documentation. The District is responsible for editing portions of the front-end contracting documents.

The 60% submittal will include the full specification table of contents and a portion of the sections to cover the major design/material elements of construction. A draft construction bid item list will be developed. Specifications will be developed using Microsoft Word and submitted as a PDF document for review.

The District will provide the design team with their front-ends (Division 0) for review during this phase.

4.1.C. OPINION OF PROBABLE COST

The opinion of probable cost will be further detailed and contingencies reduced. Where applicable, material quantities will be estimated using CAD-based take-offs. Smaller and non-variable construction items/elements will be lump sum. The HDR design team will

utilize MnDOT, RSMeans, vendor, and prior construction project sources for pricing. Design relative to cost estimate will be compared and discussed with the District as design advances relative to the District's overall project budget.

The opinion of probable cost is an estimate based on historical pricing. This project includes non-standard design items under a construction marketplace experiencing significant fluctuation in pricing – the HDR project team does not have control over contractor bids which may vary from the opinion of probable cost. Bid options will be reviewed with the District to offset construction budget risks. Construction phasing will be reviewed with the District to spread construction spending over a longer period.

A PDF of Opinion of Probable Cost table will be submitted with 60% design and the cost analysis will be documented in the Design Summary Memo.

4.1.D. DESIGN SUMMARY MEMO

The schematic design memo will be finalized and included as part of the project record. The design elements from the schematic design memorandum will be carried into a design summary memo for further development and documentation. The purpose of the memo will be to document the continued advancement of design and collect/document computations, and data supporting design. The memo will include meeting summary documents from the public engagement process as defined in Task 1.4.

A PDF version of the report will be submitted with the 60% design. The report will be developed to document the design elements advanced to 60% with remaining details to be completed under the 90% phase.

4.1.E. OPERATION, MAINTENANCE AND MONITORING PLAN (OMM Plan)

The HDR team will work with MCWD to develop a draft annual and long-term operations, maintenance, and monitoring plan for proposed stormwater management and landscape features, including an inspection plan, lifecycle expectations, associated maintenance tasks, methods, frequency, and estimated maintenance costs. The HDR team will develop draft maintenance tasks and the District will work with the team to develop hours and costs. The HDR team will include a table that relates maintenance task areas to division of responsibility (Developer, City, District) with maintenance responsibilities coordinated and assigned by the District.

The HDR team will work with the District's Research and Monitoring department to incorporate future monitoring of system performance in the project design. Monitoring equipment will be selected by the District with installation included as part of construction. The monitoring tasks will be linked to maintenance tasks within the OMM Plan.

The OMM Plan will be a separate document with a draft version developed as part of the 60% design. The Plan will be submitted as a PDF and contain text and exhibits. The construction drawings will be provided separately as a reference but no additional engineering or construction drawings outside of the Project construction package are anticipated. An initial meeting will be held with MCWD maintenance staff to discuss maintenance access needs relative to project layout and design, then the 60% and 90% submittals will be used to review and update the plan.

4.1.F. DESIGN REVIEW

The HDR Team will develop a comment tracking table in excel and carry this forward through design. Comments from the schematic design phase will be added to the table at the start of the 60% design phase and responses provided. Design relevant comments from the two public meetings (developer and 60% MCWD) will be included in the spreadsheet as well. A copy of the spreadsheet will be provided as part of the review process for reviewers to enter their comments. MCWD can provide comments in the tracking table prior to the 60% and 90% submittal milestones but the HDR Team will only provide responses as part of the 60% and 90% design review process. No comments impacting design are assumed for the 100% design submittal.

The District will publish the 60% drawings, specifications, and OMM plan for review by the District and District selected stakeholders and a copy of the comment tracking table for tracking comments. There will be a defined comment period (likely 2 weeks) followed by a comment response and resolution period (likely 2 weeks) that will be used to document the process. Comments received outside of the comment period can be incorporated upon MCWD approval, but are subject to scope/fee modifications if significant rework is required.

The HDR team will develop comment responses which will be reviewed by the District project management team prior to publishing to the wider review group. A comment resolution meeting will be held to confirm there is agreement on responses and approach moving forward between the design team and review team.

The District is responsible for resolving comment/approach conflicts between outside stakeholders.

NOTE – the 60% design milestone will be used to evaluate whether the project will continue under the Alatus development option or pivot to the District only design which will incorporate future development.

4.2. 90% DESIGN DEVELOPMENT

The HDR team will advance the design/deliverables to 90% completion following the same process documented in the 60% design development.

4.2.A. DRAWINGS

Design and accompanying construction drawing sheets will be advanced to 90% completion. All drawings and details will be developed and the drawing set will be “bid-ready” with any remaining details communicated to the District.

4.2.B. TECHNICAL SPECIFICATIONS

Construction specifications (Divisions 01 and up) will be completed and combined with District front-ends for a full project manual review. Any remaining gaps/items will be highlighted and documented for coordination with the District. The construction bid item list (tabulation) will be fully developed and bid item language provided for District review.

The HDR Team will assist the District in developing contractor qualification requirements/submittals to assist in the selection process during bidding.

The District will review its Division 0 sections and notate areas for update by the HDR Team. The HDR Team will review Division 0 and edit with appropriate design information. The District (and their legal counsel) will review the final draft from HDR as part of the 90% review process and provide final comments for incorporation in the final specification book as part of the 100% submittal.

4.2.C. OPINION OF PROBABLE COST

The opinion of probable cost will be further detailed and contingencies reduced. The opinion of probable cost will be linked to the construction bid item list.

A PDF of Opinion of Probable Cost table will be submitted with 90% design and the cost analysis will be documented in the Design Summary Memo. Bid options will continue to be reviewed. Construction phasing will be established and separate construction packages carried forward into 100% design under Task 4.4

4.2.D. DESIGN SUMMARY MEMO

The project design summary memo will be advanced to 90% completion.

4.2.E. OPERATION, MAINTENANCE AND MONITORING PLAN

The OMM plan will be advanced to 90% completion. It is assumed the 90% phase will be where decisions on cost and operation/maintenance activities are generally finalized. Any areas requiring continued coordination will be communicated to the District.

4.2.F. DESIGN REVIEW

The 60% comments will be resolved, carried forward into the 90% submittal and the tracking table updated. The District will publish the 90% drawings, specifications, and OMM plan for review by the District and District selected stakeholders and a copy of the comment tracking table for tracking comments. The 90% review process will follow a similar timeline and format to the 60% review.

4.3. 100% CONSTRUCTION PACKAGE

The HDR team will advance the design/deliverables to 100% completion following the same process documented in the 60% design development. All deliverables will be finalized and ready for project bidding and construction.

4.3.A. DRAWINGS

Design and accompanying construction drawing sheets will be advanced to 100% completion. All drawings and details will be developed and the set will be signed/sealed and ready for bidding. The AutoCAD model and sheet files will be provided to the District as part of this submittal.

4.3.B. TECHNICAL SPECIFICATIONS

The full project manual will be finalized and bidding and contracting details coordinated with the District. The HDR team will advise the District on engineering, design, construction, and scheduling elements of the contract. The District (and their legal counsel) will review the final draft from HDR as part of the 90% review process and

provide final comments for incorporation in the final specification book as part of the 100% submittal.

4.3.C. OPINION OF PROBABLE COST

The opinion of probable cost will be finalized and contingencies reduced. Any Bid Options being included in the bid package will be finalized.

4.3.D. DESIGN SUMMARY MEMO

The project design summary memo will be finalized and signed/sealed.

4.3.E. OPERATION, MAINTENANCE AND MONITORING PLAN

The OMM plan will be finalized. It will be submitted to the District in PDF and Word (.doc) format for any future modifications as the OMM plan is tested and refined.

4.3.F. DESIGN REVIEW

The District and any permitting agencies requiring a signed/sealed drawing set will be the only reviewers for the 100%. All design refinements are anticipated to have been resolved by the 90% review and the comment tracking table closed. The purpose of the 100% review is to obtain final project approval for bidding and construction. Final detailing of design is included but no design changes are assumed.

4.4. PROVIDE TWO SEPARATE CONSTRUCTION PACKAGES (OPTION)

This task includes separating the full 90% design package into two separate construction packages for the 100% submittal. The task does not include the 90-100% design, only the effort to separate the construction documents into two distinct construction packages.

The decision will be made following the 90% submittal but prior to the start of 100% design. The assumed separation will be:

- Package 1: Main Site – Pond, Landing, Trailhead
- Package 2: Outlots: Nature Play Area, Ped Bridge, Gateway

Construction documents will be separated into two separate bid packages. Design report, OMM manual and other project documents will remain as combined documents. All other project tasks including bid support and construction administration assume a single construction package and will need to be adjusted if a two-phase construction option is selected.

5. BID SUPPORT

5.1. BID PERIOD SUPPORT

Upon approval of 100% construction documents, HDR will assist District (in coordination with Developer if applicable) in issuing the construction documents for bidding. It is assumed the District will publish and host the bid documents on a site of their choosing. The following services are anticipated:

- Issue bidding documents that conform to applicable laws, statutes, city ordinances, building codes and other regulatory requirements, including 100% construction drawings and technical specifications.

- Attend a pre-bid meeting with the District (one meeting with 3 HDR team members)
- Respond to requests for information from prospective contractors, and issue necessary addenda.
- Attend bid opening, review received bids, and provide letter of recommendation for bid award. (one meeting with 3 HDR team members).

The District may elect to use the Developer’s contractor for construction of District site. The scope/fee assume there would be a similar level of effort due to the coordination required with the Developer’s contractor to communicate requirements, coordinate phasing, and finalize contract documents.

Schedule

Task Description	2021				2022					
	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June
Schematic Design (30%)	■									
Design Development (60%)			■	■	■	■				
Design Development (90%)						■	■	■		
Construction Documents (100%)								■	■	
Bidding and Award										■
Construction Oversight										■ →

Budget

See attached Table

Personnel

HDR Team

- HDR
 - Principal – Paul Dierking
 - PM – Andrew Judd
 - Technical Advisors –Eric Dove/Robbie Bryant
 - Civil Design Lead – Jake Huwe
 - Civil Design EIT – Abbie Berg
 - WR Lead – Mike Ryan
 - WR EIT – Rikita Patel
 - Structural Engineer – Jerry Mulvehill
 - Geotechnical Engineer – Greta Backman
 - Electrical Engineer – Andrew Kaner
 - StratComm Lead – Alicia Uzarek
- DF
 - Principal – Tom Whitlock
 - Lead LA – Jeff McMenimen
 - Task LA – Andrew Montgomery
 - Staff LA – Jacob Halsne
- Interfluve
 - Stream analysis/design lead - Jonathon Kusa
 - Stream analysis/design engineer - Maren Hancock

PRELIMINARY BLAKE ROAD CONSTRUCTION DRAWING LIST			PHASE		
TITLE	DISCIPLINE	SHEETS	60	90	FINAL
TITLE SHEET	CIVIL	1	X	X	X
GENERAL NOTES	CIVIL	1	X	X	X
SYMBOLOLOGY	CIVIL	1	X	X	X
SURVEY AND CONTROL	CIVIL	1	X	X	X
ALIGNMENT/POINT TABLES	CIVIL	2		X	X
STAGING AND ACCESS	CIVIL	3	X	X	X
CONSTRUCTION PHASING	CIVIL	3	X	X	X
TRAFFIC CONTROL	CIVIL	1		X	X
EROSION AND SEDIMENT CONTROL	CIVIL	4	X	X	X
DEMOLITION AND PRESERVATION	CIVIL	4	X	X	X
SITE LAYOUT PLAN	CIVIL/LA	5	X	X	X
SITE GRADING PLAN	CIVIL	5	X	X	X
SITE MATERIALS PLAN	LA	5	X	X	X
SITE PLANTING PLAN	LA	5	X	X	X
SITE IRRIGATION PLAN	LA	1		X	X
SITE LIGHTING PLAN	ELECT	3	X	X	X
TRAIL ALIGNMENT/PROFILE	CIVIL	4	X	X	X
STORM PIPE PLAN/PROFILES	CIVIL	3	X	X	X
POWELL/LAKE DIVERSION PLAN	CIVIL	1	X	X	X
GRADING SECTIONS	CIVIL	5	50%	X	X
POND OUTLET PLAN/DETAILS	STRUCT	4	50%	X	X
WEIR WALL PLAN/SECTIONS	STRUCT	2	50%	X	X
GENERAL STRUCTURAL DETAILS	STRUCT	2	50%	X	X
CIVIL SECTIONS AND DETAILS	CIVIL	8	50%	X	X
LA SECTIONS AND DETAILS	LA	24	50%	X	X
LIGHTING DETAILS	ELECT	4		X	X
STANDARD CONSTRUCTION DETAILS	ALL	8		X	X
TOTAL		110			