

<b>Project Name</b>	Brown's Creek Park Restoration	<b>Date</b>	07/7/2023
<b>To / Contact info</b>	BCWD Board of Managers		
<b>Cc / Contact info</b>	Karen Kill, District Administrator		
<b>From / Contact info</b>	Mike Majeski & Dan Mossing		
<b>Regarding</b>	Final Design & Implementation Scope of Services		

## Background

In January 2023, the Brown's Creek Watershed District secured funding through a MPCA 319 grant and approved EOR to develop a 30% project design for the proposed Brown's Creek Park Restoration Project. As part of the 30% design, EOR held a design charrette with MNDNR to discuss a preferred approach to address the degraded stream conditions within the project reach. It was agreed the design should prioritize reconnection of cutoff meanders, pattern adjustments to increase stream sinuosity, and grade control to reconnect the floodplain. Following the design charrette, EOR advanced the conceptual design and developed a 30% construction plan (attached) and cost estimate. The following scope of services provides a breakdown of tasks and hours to complete final design, permitting, and construction implementation of the Brown's Creek Park Restoration project.

## Scope of Services

The following outlines the anticipated tasks, hours, and schedule to advance the project through final design, obtain all necessary permits, and complete construction of the project.

### Task 1: EAW

The proposed design triggers a mandatory Environmental Assessment Worksheet under Minnesota Rules 4410.4300 subparts 26 and 27A. EOR will draft the EAW and assist BCWD staff with publishing and distributing requirements for the 30-day public comment period, compiling public comments, and assisting with preparing responses to comments received. The following is a list of items to be addressed by the EAW:

- o EAW document
- o Climate adaptation & resilience
- o Land use cover types & soils
- o Water resources
- o Wetland resources
- o Fish & wildlife
- o "What's In My Neighborhood" desktop search for potential hazardous materials / contamination previously documented near the project site
- o Historic properties
- o Cumulative potential effects
- o Collaborate with BCWD on public comments & responses received, preparing Finding of Facts

## **Task 2: Final Design & Construction Documents**

EOR will complete a Phase 1A archeological field investigation (subcontracted to Mississippi Valley Archeology Center), develop final construction plans, construction costs, specifications, and other construction documents, and prepare a construction project manual. EOR will also coordinate with DNR Parks & Trails staff to develop an ADA access "spur" off the Brown's Creek State Trail based on input from DNR & BCWD staff.

- A Phase 1A archeological field survey will be completed by Mississippi Valley Archeology Center and the report will be sent to the State Historic Preservation Office
- Develop final grade contours, refine excavation / fill quantities, and final design of an ADA access "spur" to the creek
- Develop a final construction plan and engineer's opinion of probable cost
- Develop final construction documents including a stormwater pollution prevention plan, specifications, and project manual

## **Task 3: Permitting & Related Services**

EOR will complete a no-rise certificate and obtain all necessary permits to implement the project.

- A no-rise document will be completed and sent to permitting agencies for review
- Completion of permit applications including the MNDNR Public Waters Work Permit, United States Army Corps of Engineers permit, and all local & watershed permits required for the project
- Review MNDNR Natural Heritage Information System data to determine the presence of any rare species in the project area and provide guidance to contractor to minimize disturbance to rare species
- Submit Level 1 wetland review & Joint Application to WCA (wetland permitting review & project approach were discussed with Washington Conservation District and DNR staff in December 2022)

## **Task 4: Construction Services**

Construction services will include online bidding and bid tabulations, submittals review, contractor recommendation, pre-construction meeting, construction supervision, as-built survey and record drawings, prepare pay applications, and attend meetings to complete the project. Two years of post-construction site inspections & vegetation monitoring will also be completed, including coordination with the contractor to address any maintenance items and invasive species.

- Utilize Quest CDN and tabulate bids
- Prepare bid summary and contractor recommendation memo
- Review construction submittals and hold a pre-construction meeting with the selected contractor
- Mark trees to harvest following pre-construction meeting
- EOR staff will provide construction oversight during the entire window of construction to ensure the project is implemented as designed
- An as-built survey will be completed and record drawings will be prepared to document project construction inputs
- Review contractor pay requests and prepare pay application memos
- Post-construction site inspections for two year (to be conducted spring & fall)
- Coordinate native tree and shrub plantings with contractor (post-construction)

## Key Deliverables

Key deliverables for this scope of services include the following:

- Environmental Assessment Worksheet and responses to comments
- Draft construction plans and construction specifications for staff and legal counsel review
- Final construction plans and construction specifications / bidding documents
- Project documents including a Level 1 wetland report, Phase 1A cultural resources report, and no-rise certificate
- Topographic data (electronic files)
- Construction as-built and record drawings, construction photographs
- Construction updates and presentation to the BCWD Board of Managers

## Project Assumptions

The following is a list of assumptions for this scope of services:

- BCWD to pay the MNDNR Public Waters Work Permit fee
- Desktop review of "What's In My Neighborhood" will satisfy EAW Question #12 Contamination/Hazardous Materials/Wastes, and as such no Phase 1 Environmental Assessment will be required per the DNR EAW example provided following the design charrette meeting in April 2023
- Construction of the project to occur over a 4-week period (weather dependent). EOR will provide construction oversight 4 days a week until substantial project completion but may reduce field visits depending on construction inputs scheduled during each week of construction

Engineering Task	Estimated Hours	Task Schedule	Fee & Expenses*
<b>Task 1: EAW</b>	95	August-September 2023	\$14,961
<b>Task 2: Final Design &amp; Construction Documents</b>	179	October-November 2023	\$30,873
<b>Task 3: Permitting &amp; Related Services</b>	66	November-December 2023	\$11,254
<b>Task 4: Construction Services</b>	202	Bidding & Contractor Selection (December-January 2024) Tree Harvest (January-March 2024) Construction (May-August 2024) Site Inspections & Veg. Maintenance (Fall 2024 & Spring/Fall 2025) Native Tree & Shrub Plantings (Spring 2025)	\$33,211
<b>Total</b>	542		<b>\$90,299</b>

\*includes mileage / equipment expenses, MVAC sub-contract for \$3,000

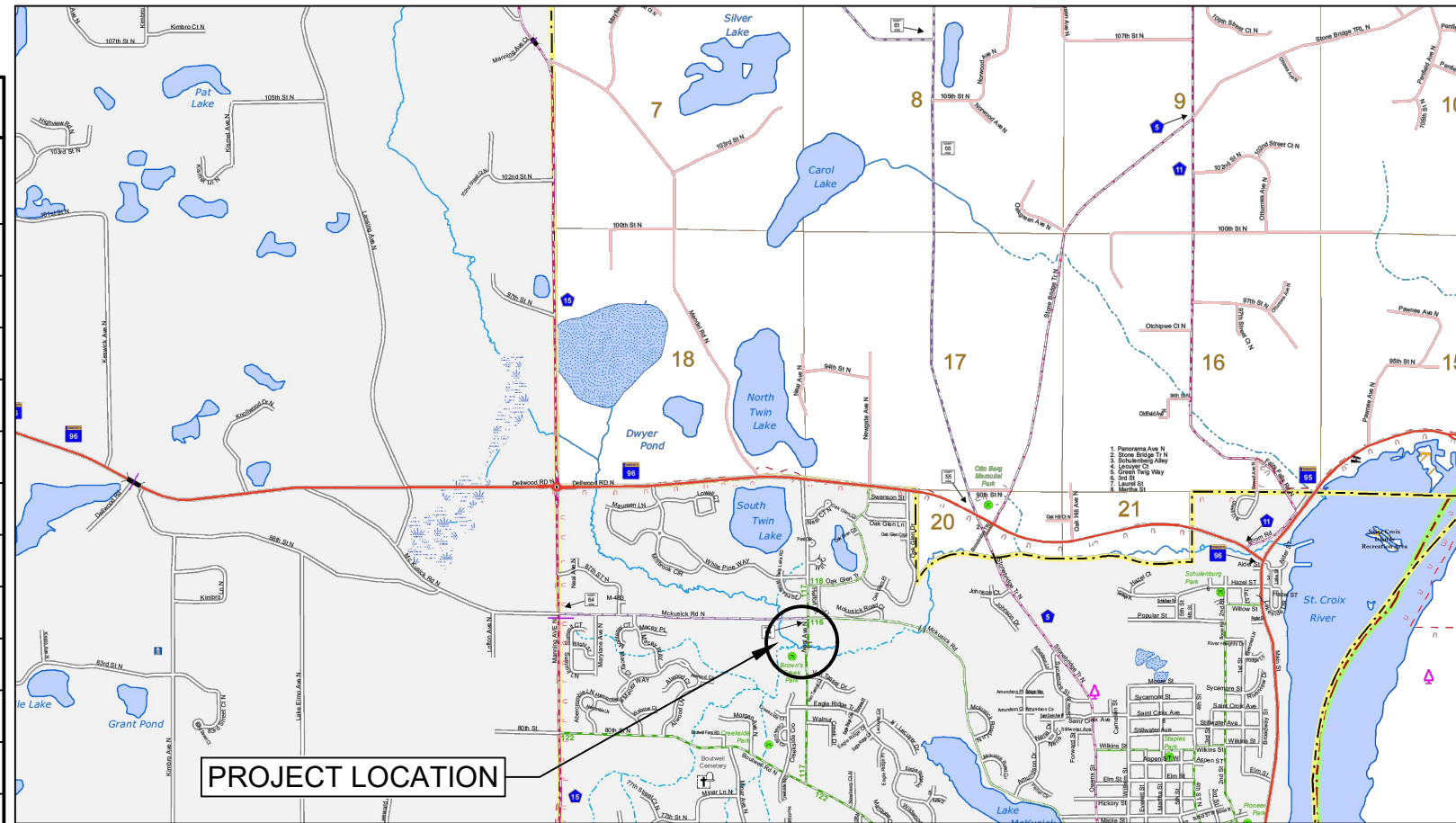
**Requested Action**

Approve Task 1 to complete an Environmental Assessment Worksheet not to exceed \$14,961 from account 947-0022 Brown's Creek Restoration.

**BROWN'S CREEK WATERSHED DISTRICT  
BROWN'S CREEK PARK  
STREAM RESTORATION**  
WASHINGTON COUNTY, STILLWATER, MN  
EXISTING CONDITIONS PLAN SET

**Sheet List Table**

Sheet Number	Sheet Title
01	TITLE SHEET
02	PROJECT OVERVIEW
03	TREE HARVEST PLAN 1
04	TREE HARVEST PLAN 2
05	TREE HARVEST PLAN 3
06	EXISTING STREAM PROFILE
07	EXISTING CONDITIONS PLAN & PROFILE - 1
08	EXISTING CONDITIONS PLAN & PROFILE - 2
09	EXISTING CONDITIONS PLAN & PROFILE - 3
10	EXISTING CONDITIONS PLAN & PROFILE - 4
11	EXISTING CROSS SECTIONS - 1
12	EXISTING CROSS SECTIONS - 2
13	EXISTING CROSS SECTIONS - 3
14	REFERENCE CROSS SECTIONS
15	PROPOSED PLAN & PROFILE - 1
16	PROPOSED PLAN & PROFILE - 2
17	PROPOSED PLAN & PROFILE - 3
18	PROPOSED PLAN & PROFILE - 4
19	PROPOSED PLAN & PROFILE - 5



WASHINGTON COUNTY  
MINNESOTA, USA

**PROJECT LOCATION, REFERENCE MAP**

**GENERAL NOTES**

**EXISTING UTILITIES**

THE LOCATION OF UNDERGROUND FACILITIES AND/OR STRUCTURES AS SHOWN ON THE PLANS ARE BASED ON AVAILABLE RECORDS AT THE TIME THE PLANS WERE PREPARED AND ARE NOT GUARANTEED TO BE COMPLETE OR CORRECT.

THE SUBSURFACE UTILITY INFORMATION SHOWN IS UTILITY QUALITY LEVEL D, AS DETERMINED USING THE GUIDELINES OF "C/ASCE 38-02 STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITIES 72 HOURS PRIOR TO CONSTRUCTION TO DETERMINE THE EXACT LOCATION OF ALL FACILITIES AND TO PROVIDE ADEQUATE PROTECTION OF SAID UTILITIES DURING THE COURSE OF WORK.

**CONSTRUCTION NOTE**

CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO MAINTAIN OPERATION OF EXISTING UTILITIES THROUGHOUT THE DURATION OF THE PROJECT. IN THE EVENT THAT AN INTERRUPTION OF SERVICE IS UNAVOIDABLE IN ORDER TO COMPLETE THE WORK, CONTRACTOR SHALL PROVIDE ADEQUATE NOTIFICATION TO ALL AFFECTED ENTITIES A MINIMUM OF 3 WORKING DAYS IN ADVANCE OF ANY INTERRUPTION.

**GOVERNING SPECIFICATIONS**

THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING FIELD MANUAL FOR TEMPORARY CONTROL ZONE LAYOUTS.

**GOPHER STATE ONE-CALL**

IT IS THE LAW THAT ANYONE EXCAVATING AT ANY SITE MUST NOTIFY GOPHER STATE ONE CALL (GSOC) SO THAT UNDERGROUND ELECTRIC, NATURAL GAS, TELEPHONE OR OTHER UTILITY LINES CAN BE MARKED ON OR NEAR YOUR PROPERTY BEFORE ANY DIGGING BEGINS. A 48-HOUR NOTICE, NOT INCLUDING WEEKENDS, IS REQUIRED. CALLS CAN BE MADE TO GSOC AT 1-800-252-1166 OR (651) 454-0002, MONDAY THROUGH FRIDAY (EXCEPT HOLIDAYS) FROM 7 A.M. TO 5 P.M.



**NOT FOR CONSTRUCTION**



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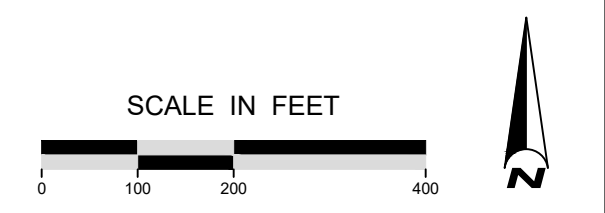
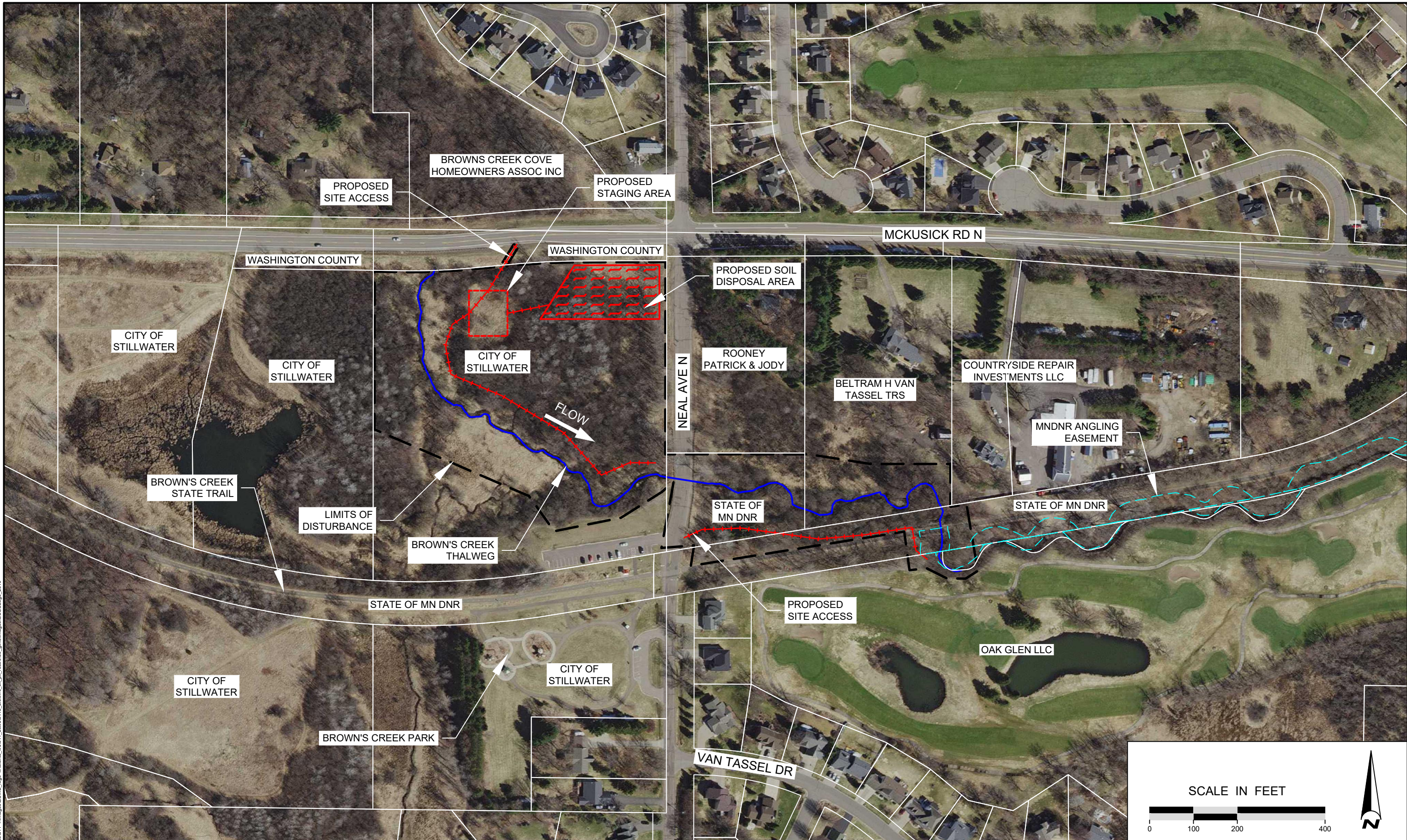
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DESIGNED BY: EOR  
DRAWN BY: DEM  
CHECKED BY: MJM  
EOR JOB #0041-0418



**BROWN'S CREEK PARK  
STREAM RESTORATION**  
WASHINGTON COUNTY, STILLWATER, MN  
BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

TITLE SHEET  
SHEET 01 OF 19



File Date: 06/30/2023  
 Project: 0041-0418-CD.dwg  
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 4001-0418-RBASE  
 4001-0418-RBASE  
 4001-0418-RBASE

**EOR** water ecology community  
 EMMONS & OLIVIER RESOURCES, INC.  
 1919 UNIV. AVE. W. #300 ST. PAUL, MN  
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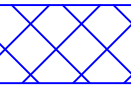
**BROWN'S CREEK WATERSHED DISTRICT**

CLIENT PROJECT #XXX-XXXX

**BROWN'S CREEK PARK STREAM RESTORATION**  
 WASHINGTON COUNTY, STILLWATER, MN  
 BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

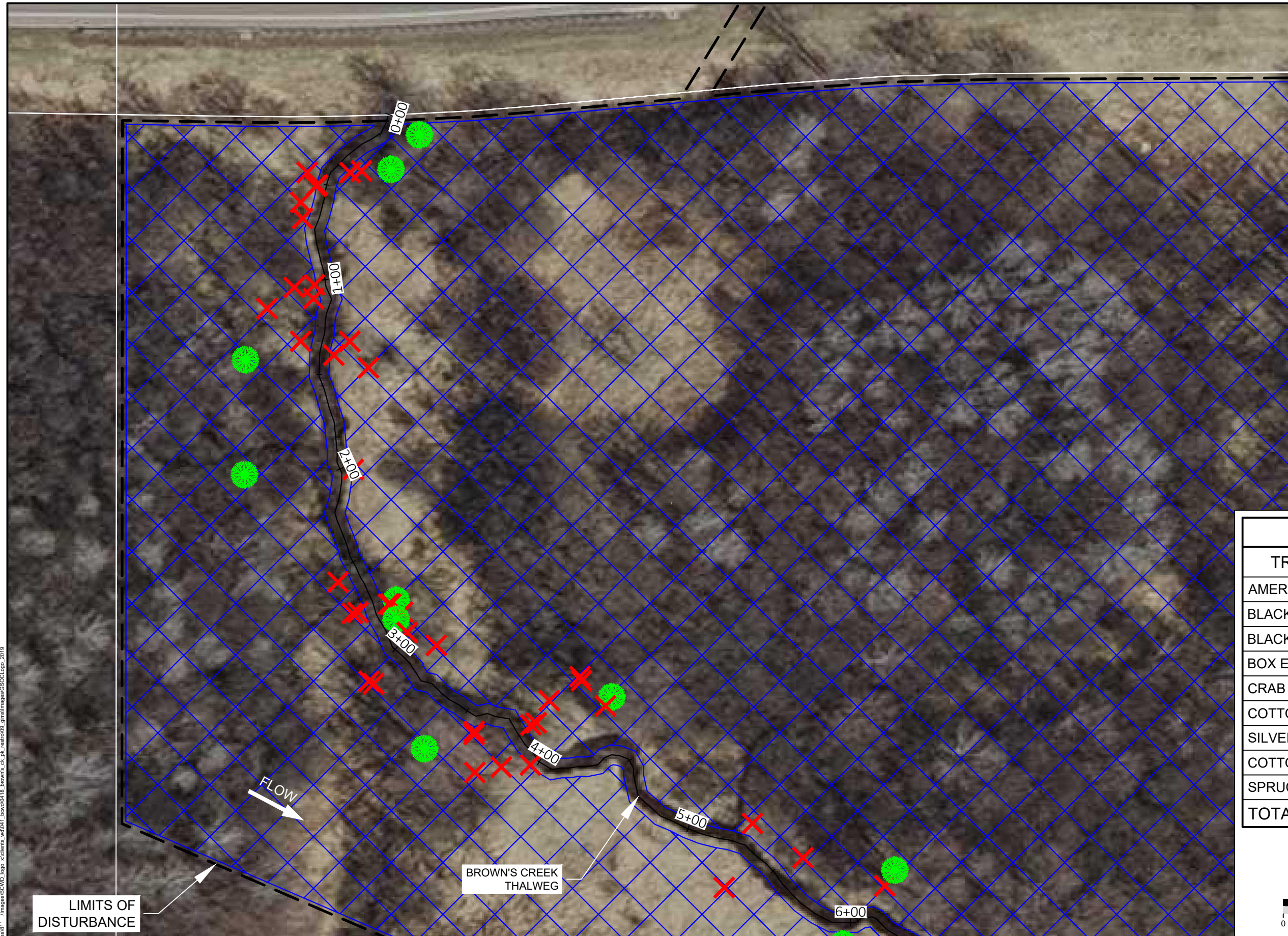
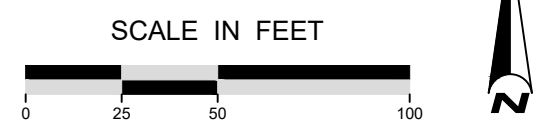
PROJECT OVERVIEW  
 SHEET 02 OF 19

**LEGEND**

-  TREE TO BE REMOVED
-  PRESERVE TREE
-  INVASIVE SHRUB REMOVAL AREA

NEAL AVENUE

TREES TO BE HARVESTED	
TREE TYPE	# TO BE REMOVED
AMERICAN ELM	2
BLACK LOCUST	1
BLACK WILLOW	2
BOX ELDER	184
CRAB APPLE	3
COTTONWOOD	1
SILVER MAPLE	17
COTTONWOOD	1
SPRUCE	1
<b>TOTAL</b>	<b>212</b>



LIMITS OF DISTURBANCE

BROWN'S CREEK THALWEG

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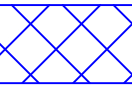


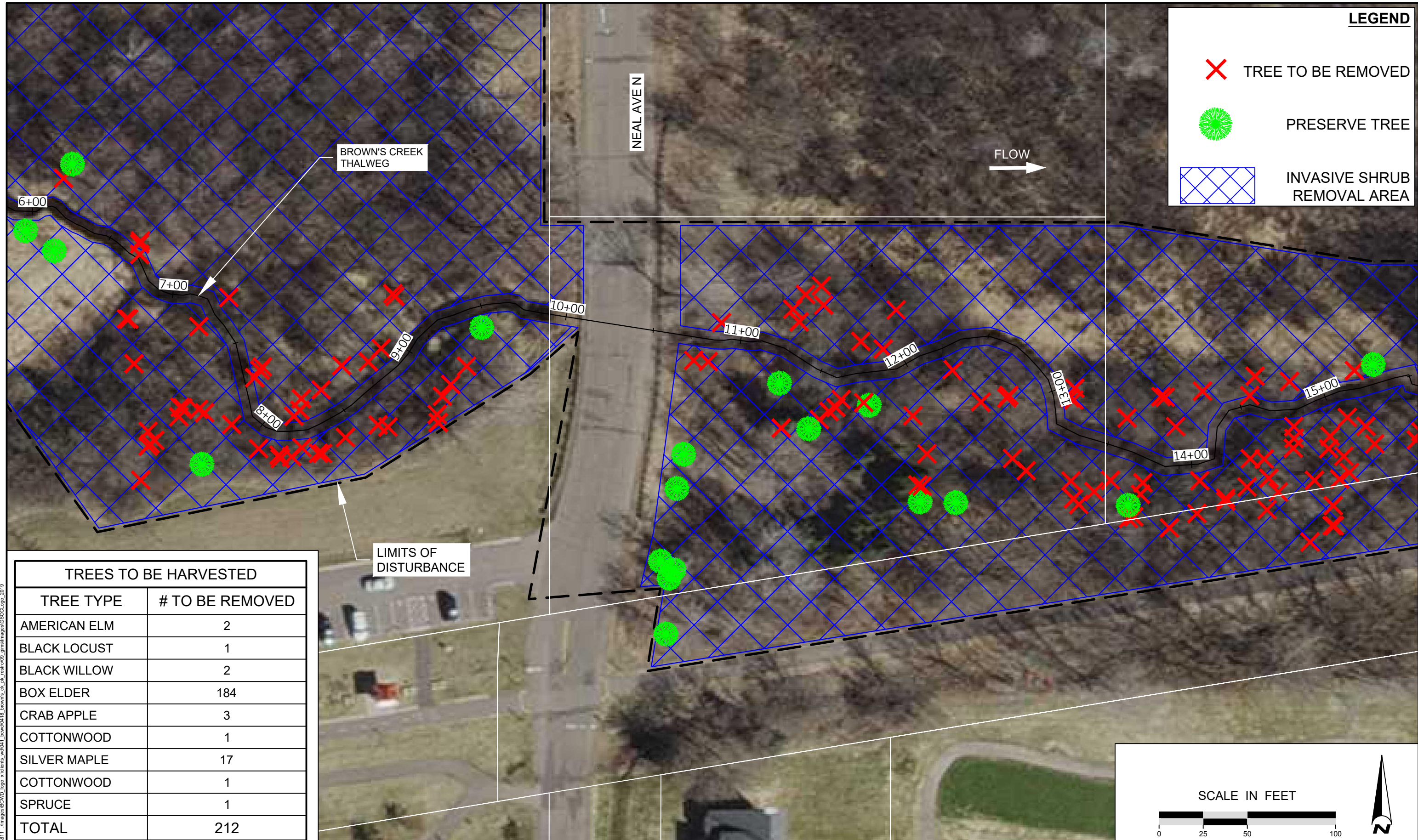
**BROWN'S CREEK PARK STREAM RESTORATION**  
 WASHINGTON COUNTY, STILLWATER, MN  
 BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

TREE HARVEST PLAN 1  
 SHEET 03 OF 19

File Date: 06/30/2023  
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**LEGEND**

-  TREE TO BE REMOVED
-  PRESERVE TREE
-  INVASIVE SHRUB REMOVAL AREA



TREES TO BE HARVESTED	
TREE TYPE	# TO BE REMOVED
AMERICAN ELM	2
BLACK LOCUST	1
BLACK WILLOW	2
BOX ELDER	184
CRAB APPLE	3
COTTONWOOD	1
SILVER MAPLE	17
COTTONWOOD	1
SPRUCE	1
<b>TOTAL</b>	<b>212</b>

**NOT FOR CONSTRUCTION**

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 40041\_0418-PAVE  
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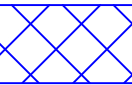
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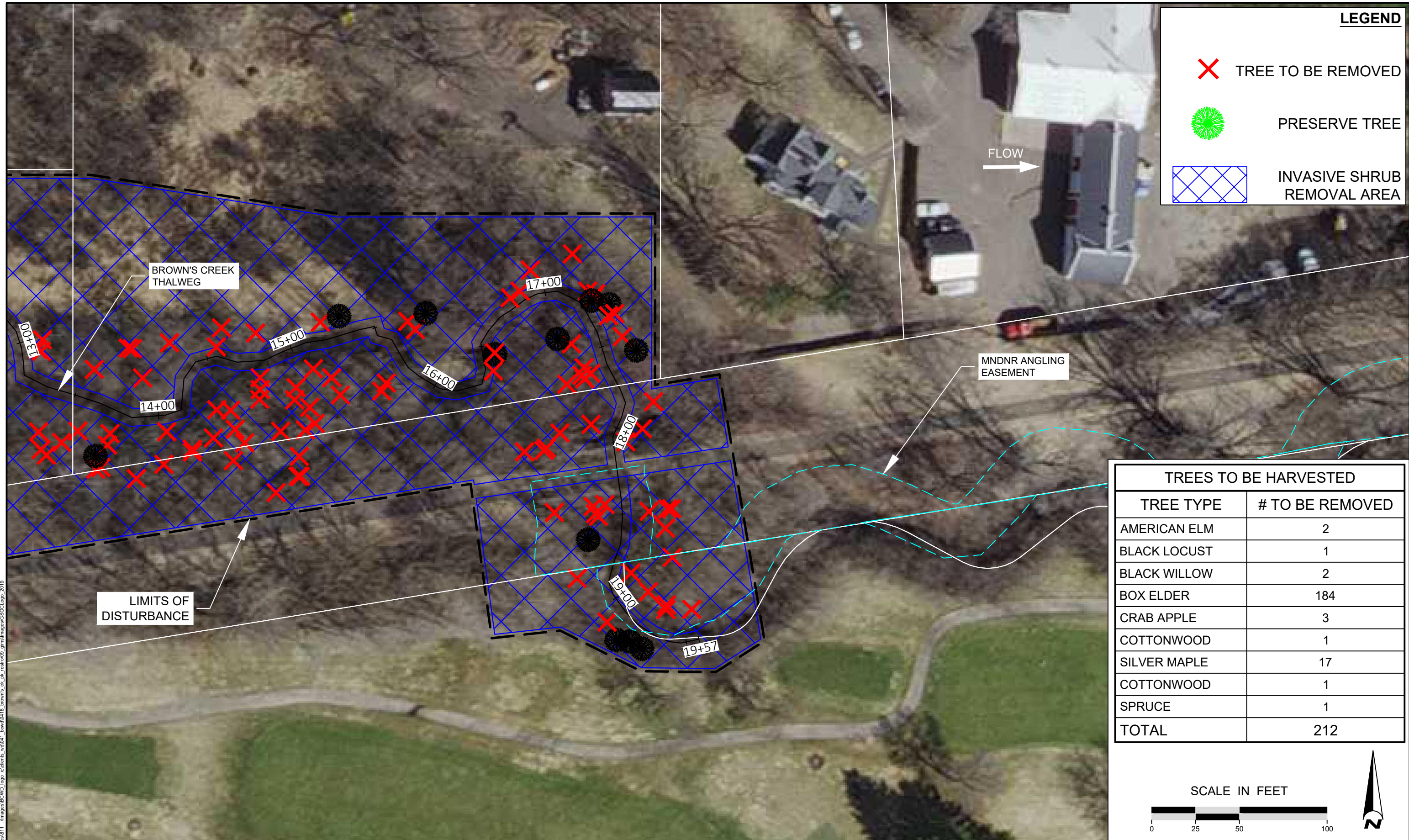
**BROWN'S CREEK PARK STREAM RESTORATION**  
 WASHINGTON COUNTY, STILLWATER, MN  
 BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

TREE HARVEST PLAN 2  
 SHEET 04 OF 19



**LEGEND**

-  TREE TO BE REMOVED
-  PRESERVE TREE
-  INVASIVE SHRUB REMOVAL AREA



TREES TO BE HARVESTED	
TREE TYPE	# TO BE REMOVED
AMERICAN ELM	2
BLACK LOCUST	1
BLACK WILLOW	2
BOX ELDER	184
CRAB APPLE	3
COTTONWOOD	1
SILVER MAPLE	17
COTTONWOOD	1
SPRUCE	1
<b>TOTAL</b>	<b>212</b>

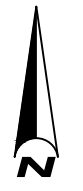
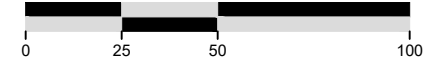
LIMITS OF DISTURBANCE

BROWN'S CREEK THALWEG

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SCALE IN FEET



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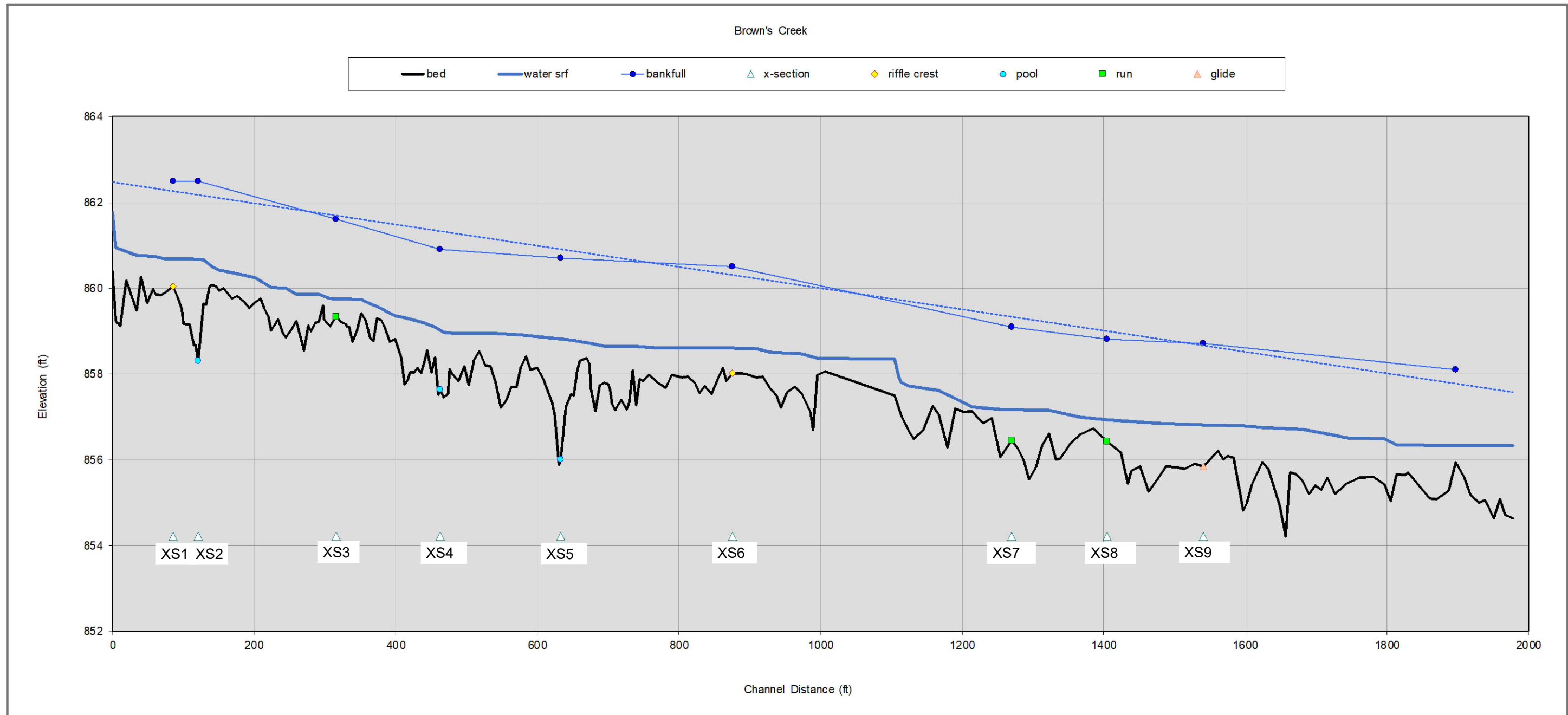


CLIENT PROJECT #XXX-XXXX

**BROWN'S CREEK PARK STREAM RESTORATION**  
 WASHINGTON COUNTY, STILLWATER, MN  
 BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

TREE HARVEST PLAN 3  
 SHEET 05 OF 19

File Date: 06/30/2023  
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NOTE:  
STREAM AND WATER PROFILE SURVEYED ON DECEMBER 2, 2022

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DATE	NO.	DESCRIPTION
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**BROWN'S CREEK PARK  
 STREAM RESTORATION**  
 WASHINGTON COUNTY, STILLWATER, MN

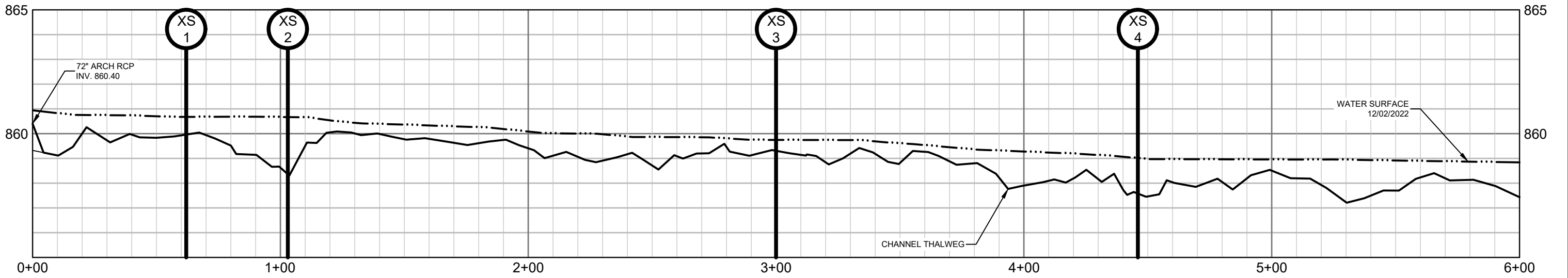
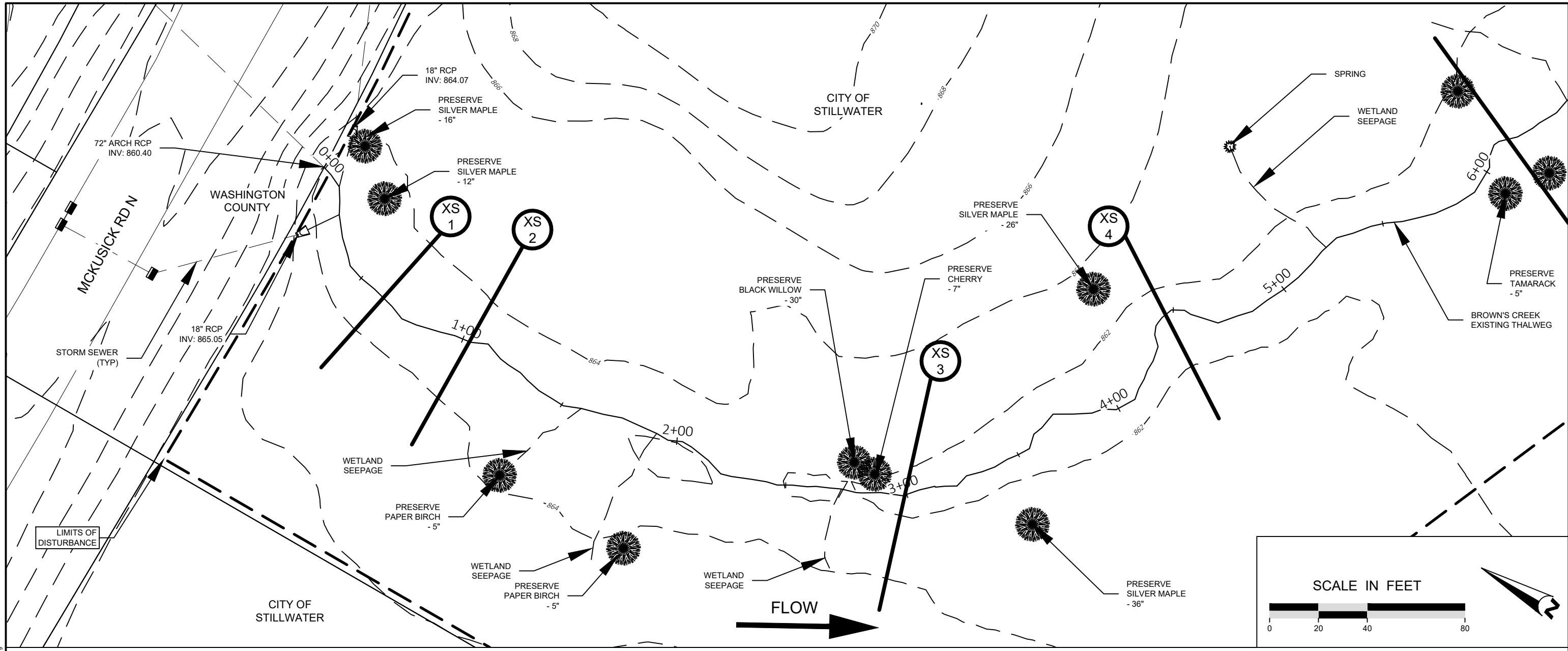
EXISTING STREAM  
 PROFILE

EOR JOB #0041-0418

CLIENT PROJECT #XXX-XXXX

BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

SHEET 06 OF 19



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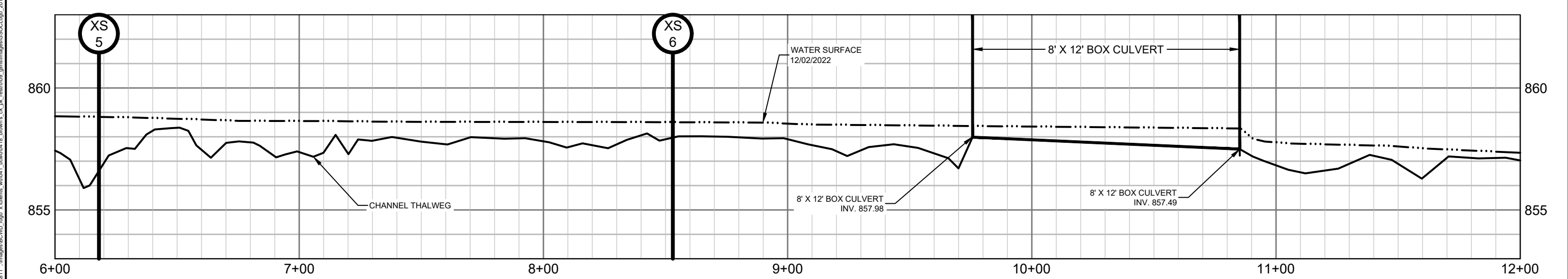
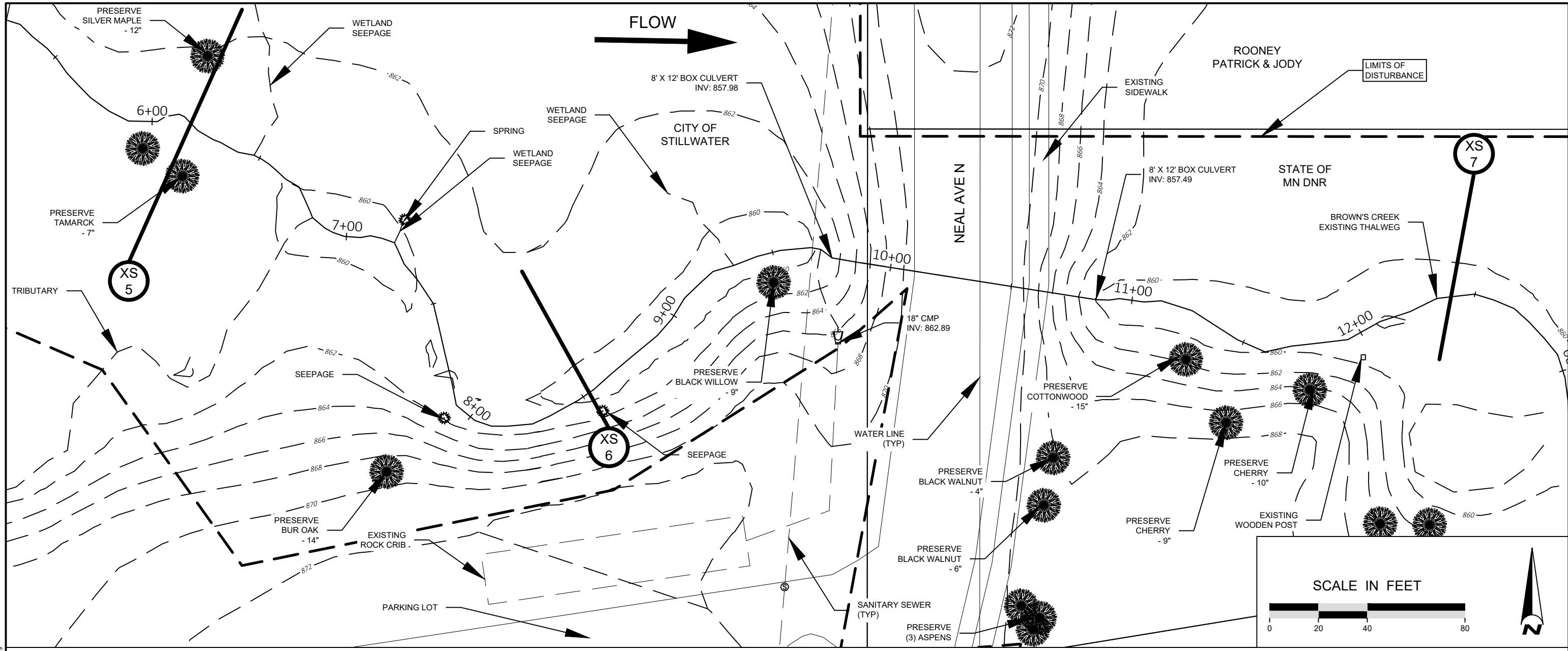
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**BROWN'S CREEK WATERSHED DISTRICT**  
 CLIENT PROJECT #XXX-XXXX

**BROWN'S CREEK PARK STREAM RESTORATION**  
 WASHINGTON COUNTY, STILLWATER, MN  
 BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

EXISTING CONDITIONS PLAN & PROFILE - 1  
 SHEET 07 OF 19

File Date: 06/30/2023  
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 Checker: X:\Clients\0041-0418-SURFACE  
 Engineer: X:\Clients\0041-0418-SURFACE  
 Project Manager: X:\Clients\0041-0418-SURFACE  
 Date: 06/30/2023

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NOT FOR CONSTRUCTION

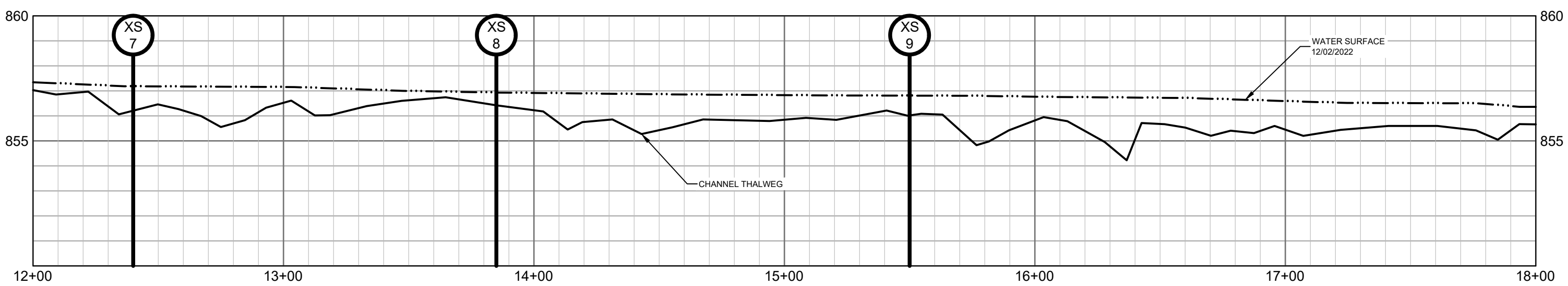
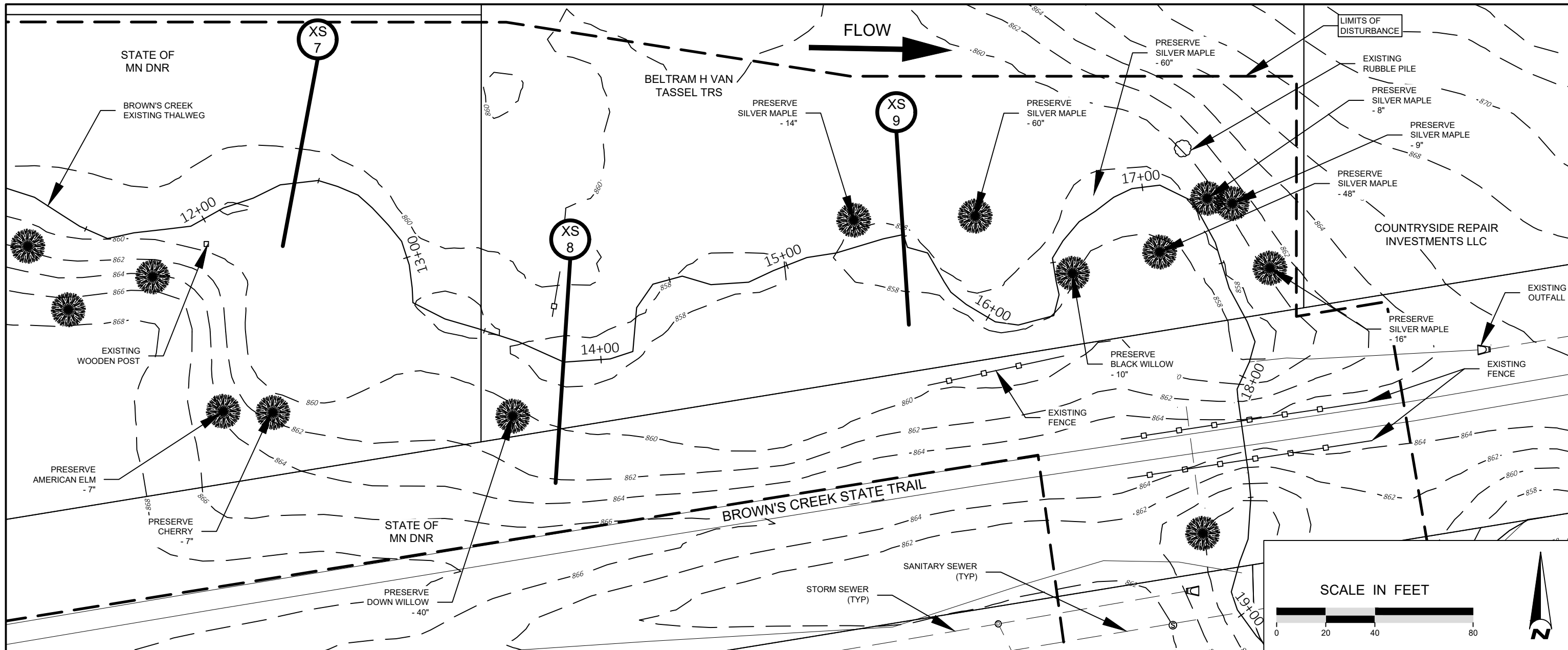
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 EOR JOB #0041-0418

**BROWN'S CREEK WATERSHED DISTRICT**  
 CLIENT PROJECT #XXX-XXXX

**BROWN'S CREEK PARK STREAM RESTORATION**  
 WASHINGTON COUNTY, STILLWATER, MN  
 BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

EXISTING CONDITIONS PLAN & PROFILE - 2  
 SHEET 08 OF 19



**NOT FOR CONSTRUCTION**



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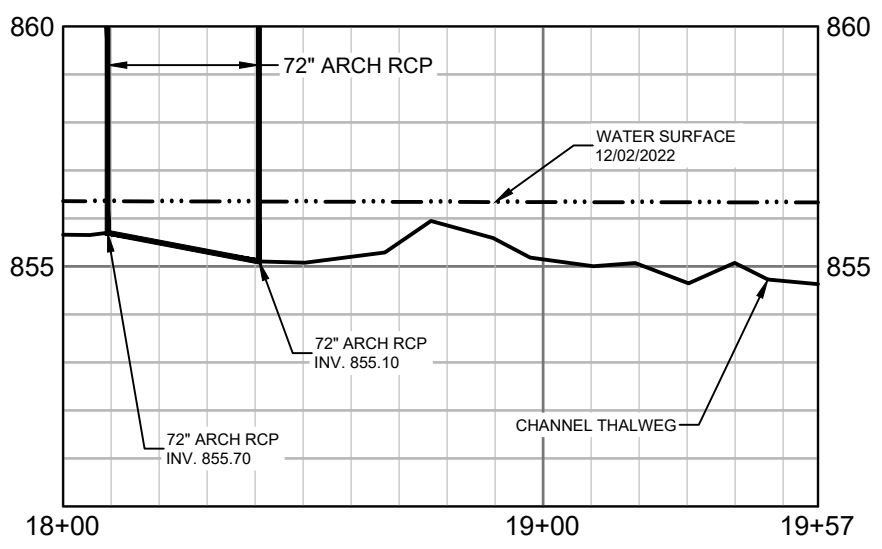
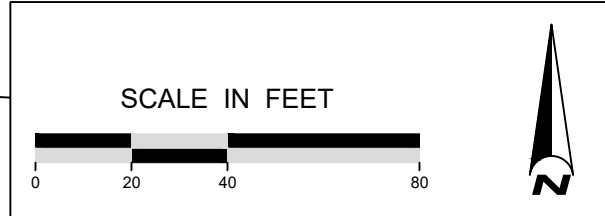
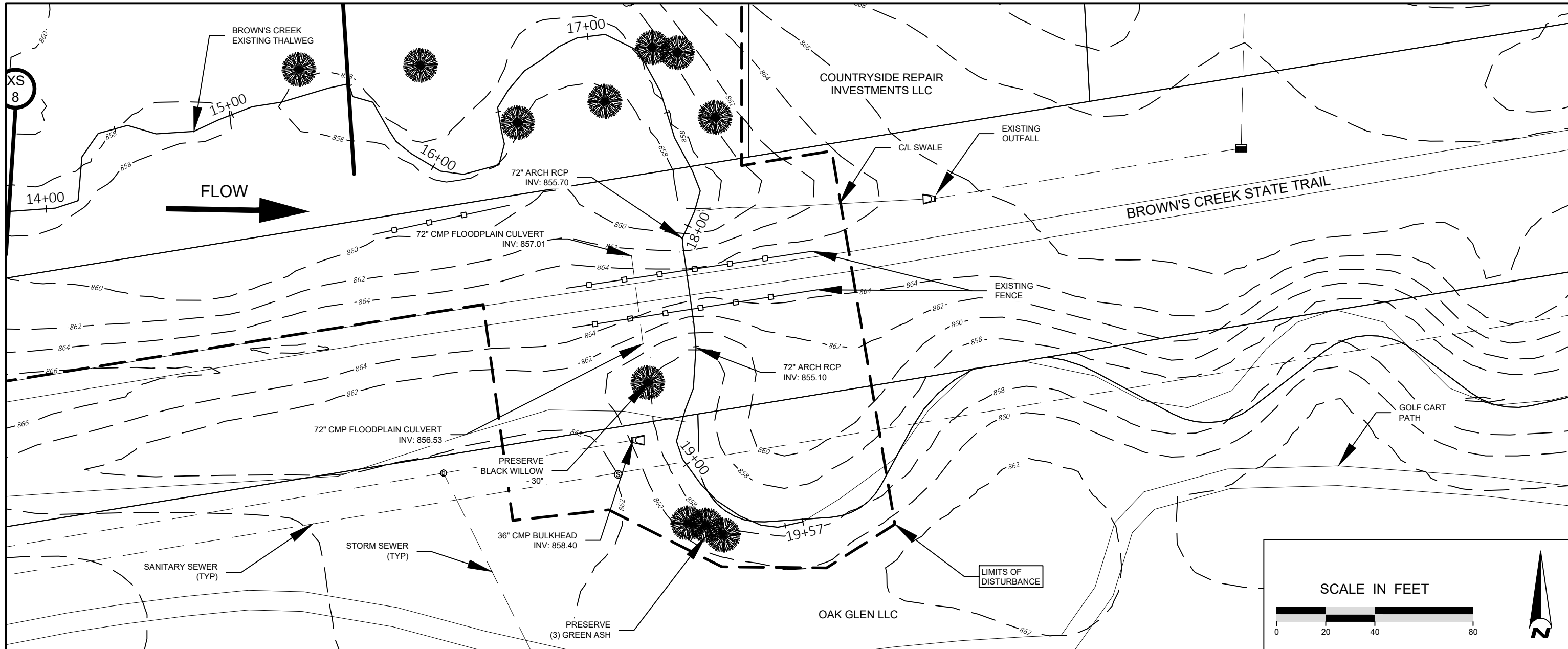
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 WASHINGTON COUNTY, STILLWATER, MN  
 BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

EXISTING CONDITIONS  
 PLAN & PROFILE - 3  
 SHEET 09 OF 19

File Date: 06/30/2023  
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 40041\_0418-SCALE: images: images\BCWD\_top\_images\BCWD\_top\_images\BCWD0418\_Brown's\_Ck\_Pk\_Restor09\_GNISMap0041\_0418-CD.dwg



**NOT FOR CONSTRUCTION**

File Date: 06/30/2023  
 Project: X:\Clients\W0041\_Brown's\_Ck\_Pk\_Restor09\_GNIS\Map\0041\_0418-CD.dwg  
 Xref: 40041\_0418-SURFACE  
 40041\_0418-XBASE  
 40041\_0418-REBASE  
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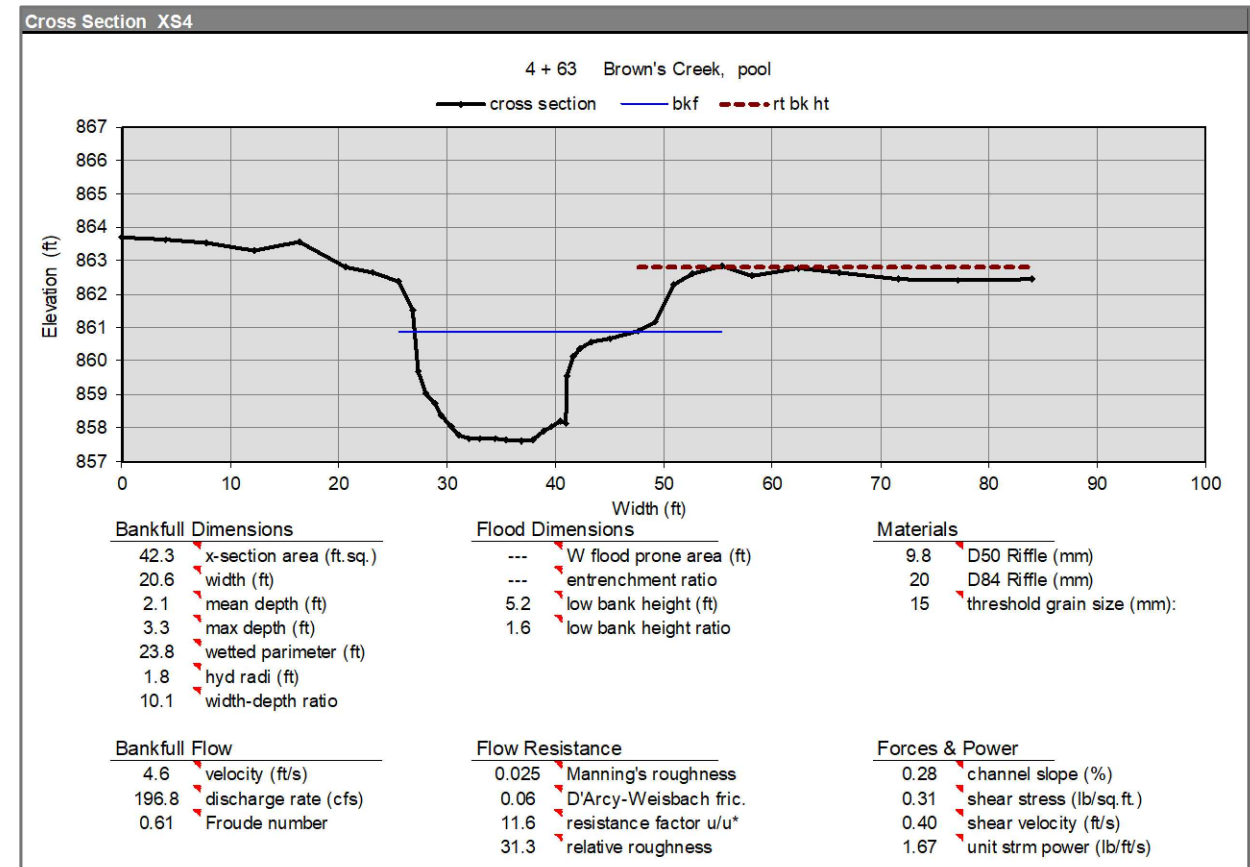
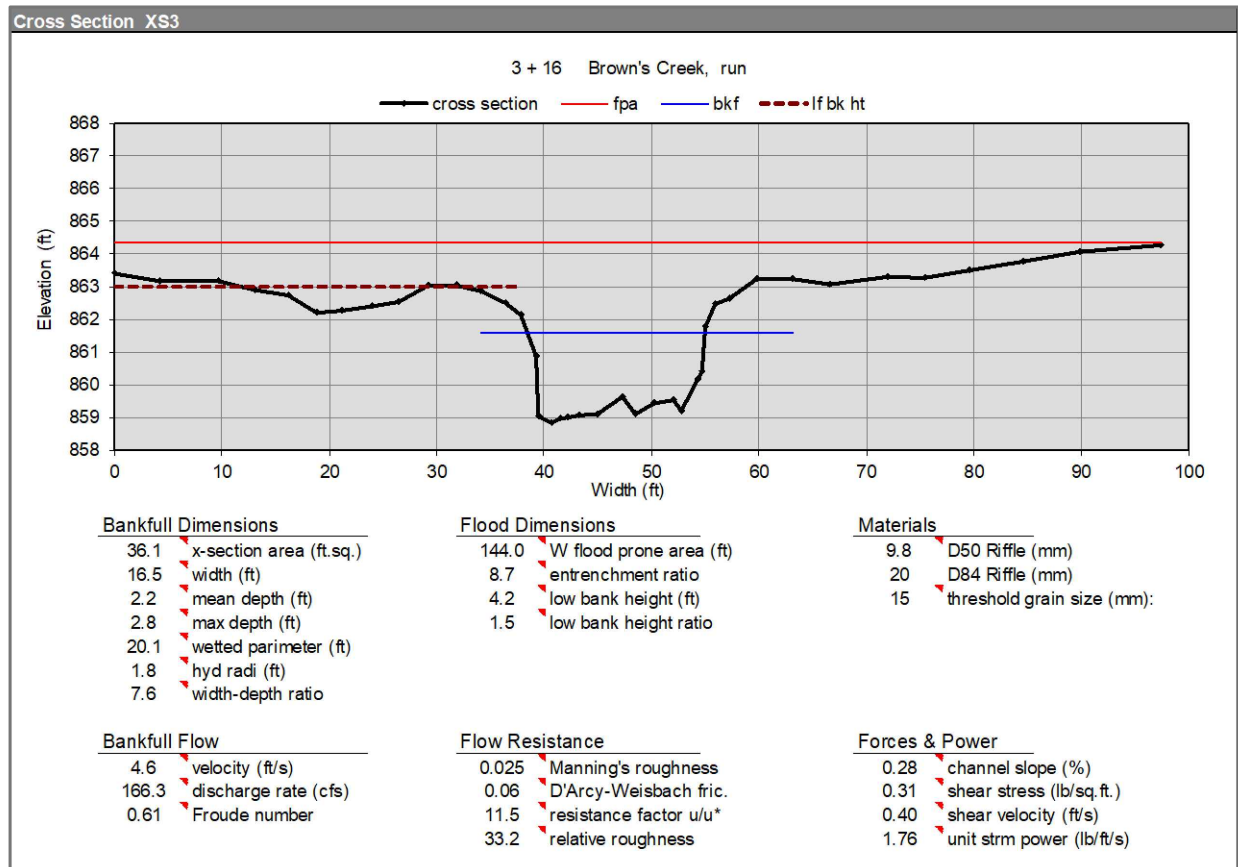
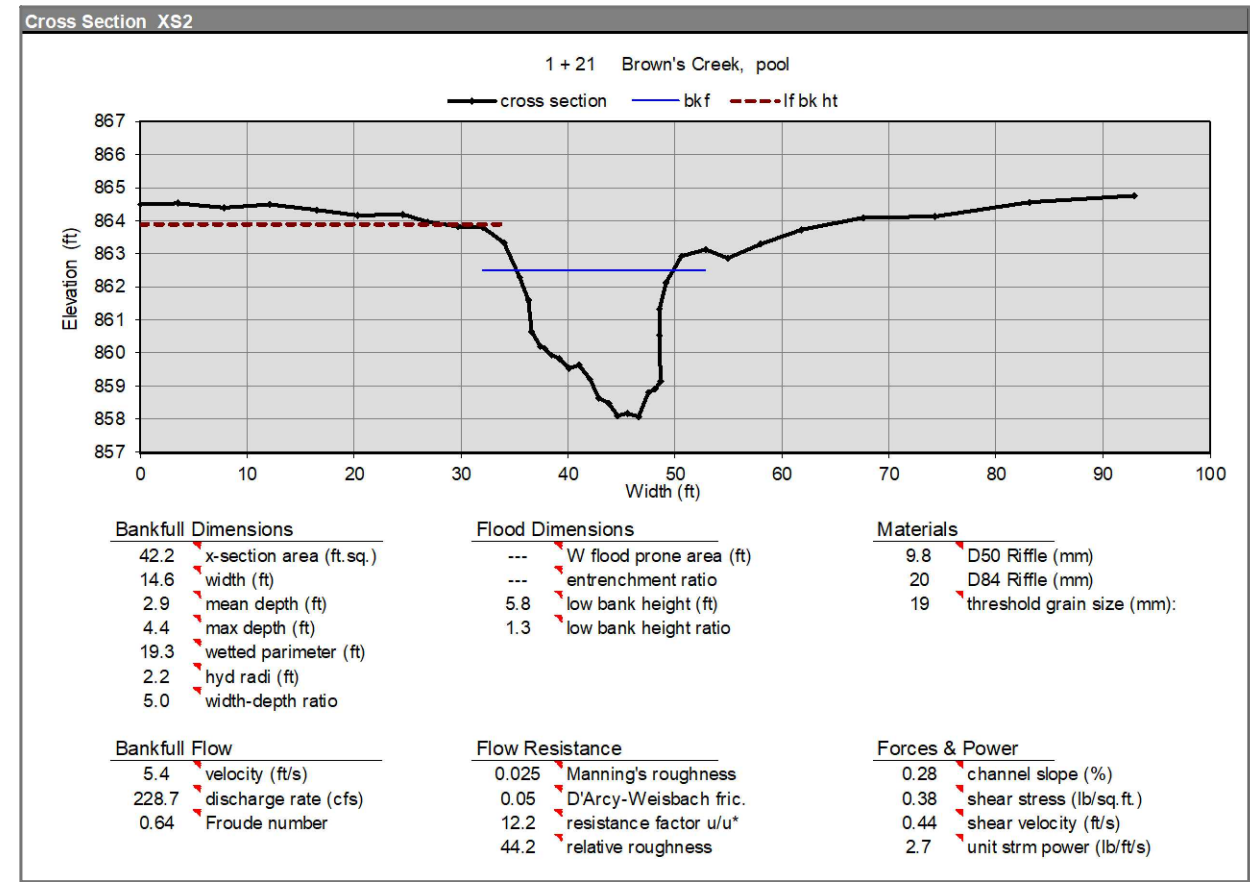
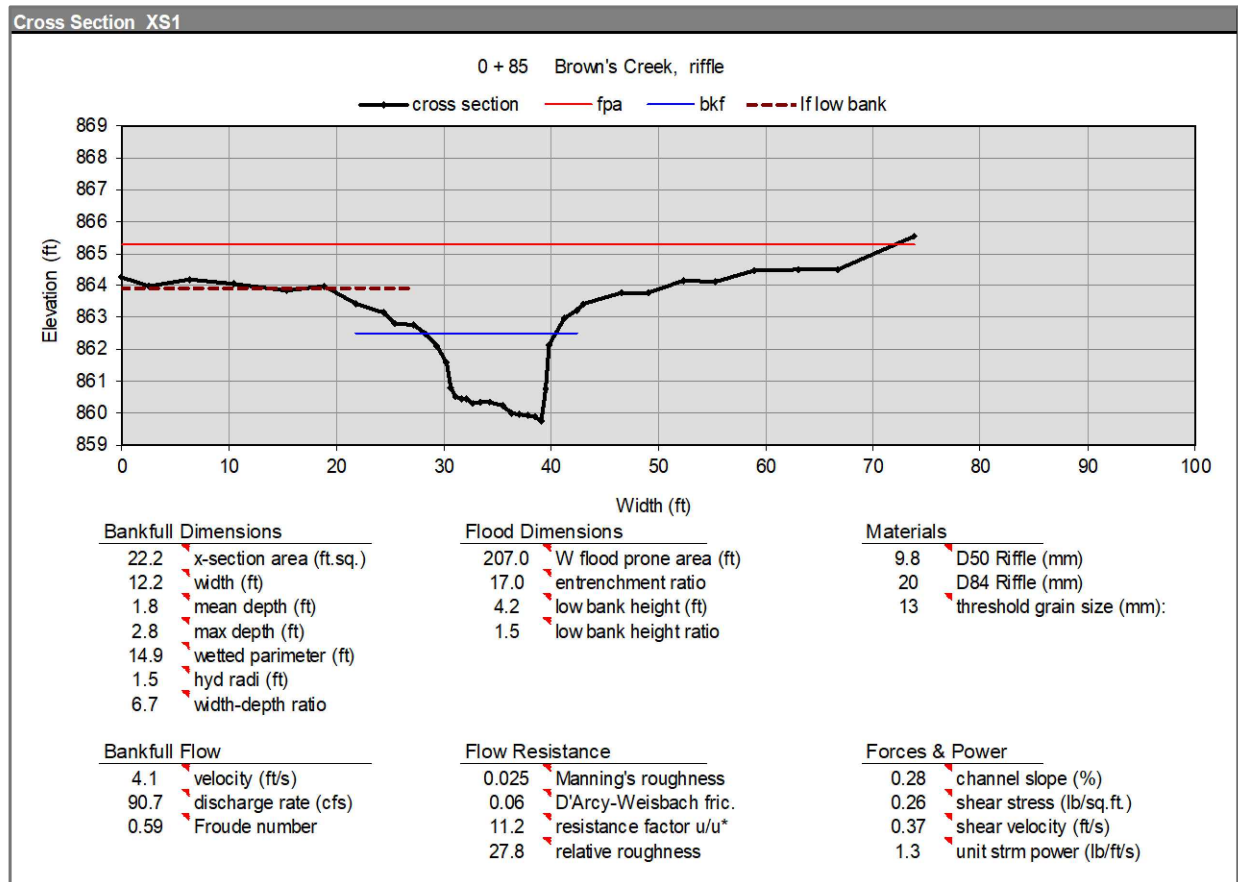
DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
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DESIGNED BY: EOR  
 DRAWN BY: DEM  
 CHECKED BY: MJM  
 EOR JOB #0041-0418



**BROWN'S CREEK PARK  
 STREAM RESTORATION**  
 WASHINGTON COUNTY, STILLWATER, MN  
 BROWN'S CREEK WATERSHED DISTRICT      OAKDALE, MN 55128

EXISTING CONDITIONS  
 PLAN & PROFILE - 4  
 SHEET 10 OF 19



NOTE:  
ALL CROSS SECTIONS ARE ORIENTED DOWNSTREAM W/ RIVER LEFT ON THE LEFT AND RIVER RIGHT ON THE RIGHT.

File: 06/30/2023  
 Xref: 40041\_0418-SURFACE  
 40041\_0418-RBASE  
 40041\_0418-LBASE  
 40041\_0418-LBASE



NOT FOR CONSTRUCTION

DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
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DESIGNED BY: EOR  
DRAWN BY: DEM  
CHECKED BY: MJM



**BROWN'S CREEK PARK  
STREAM RESTORATION**

WASHINGTON COUNTY, STILLWATER, MN

EOR JOB #0041-0418

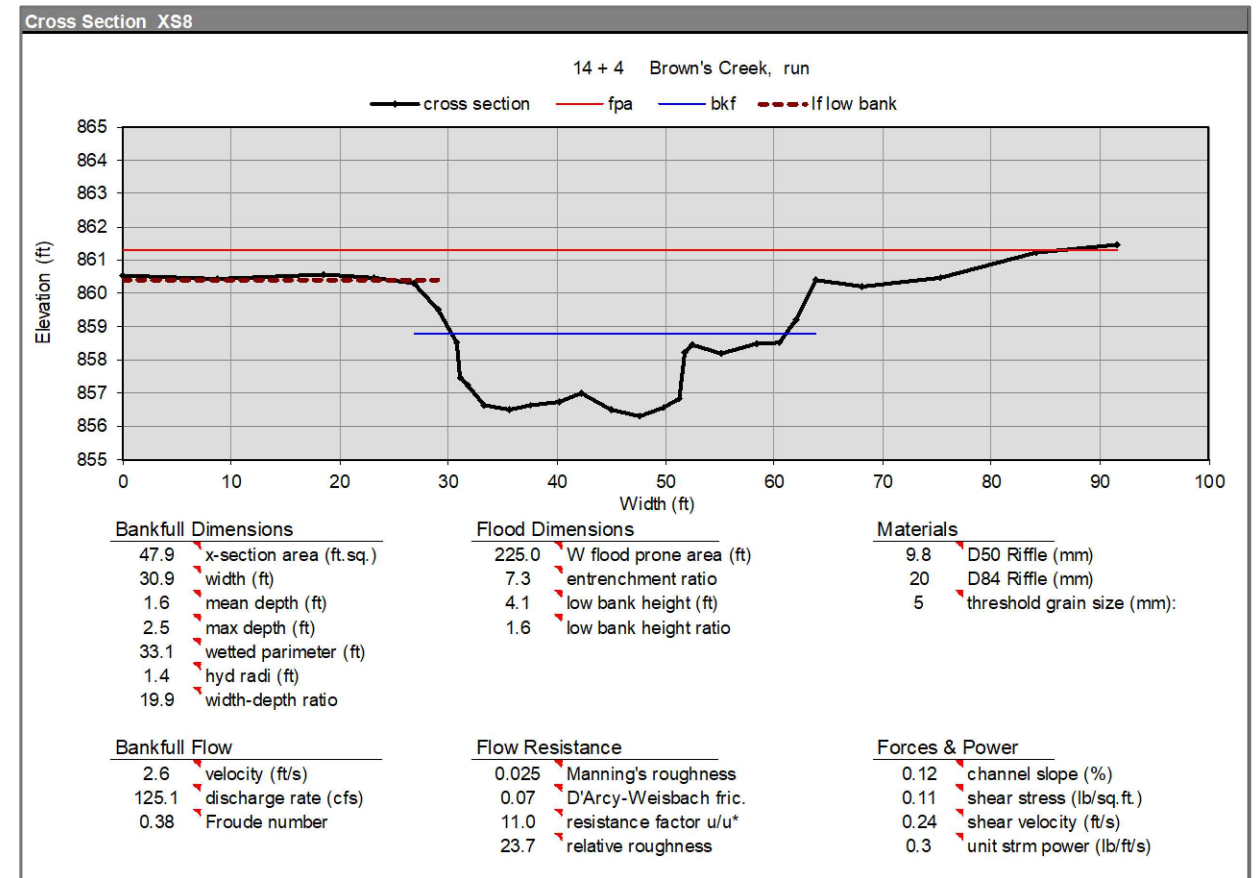
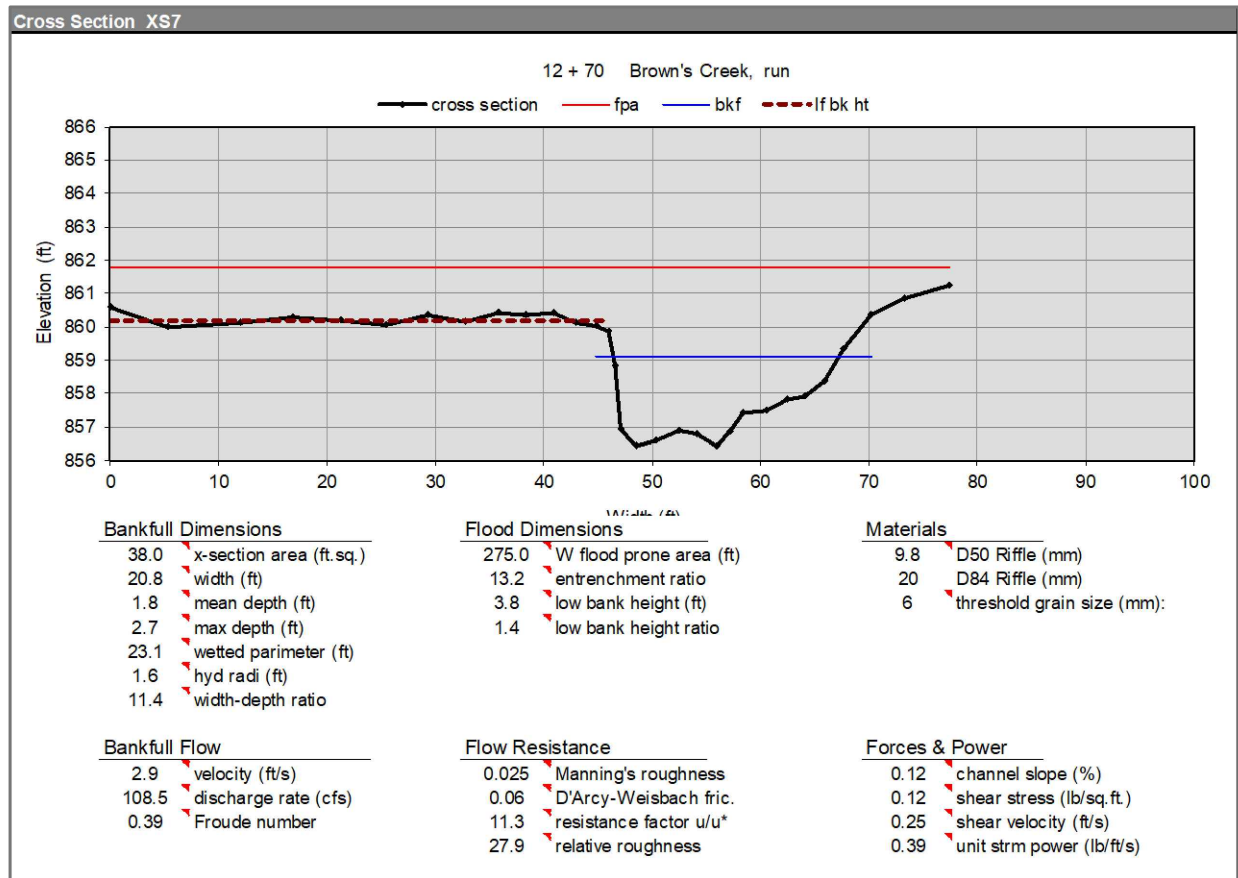
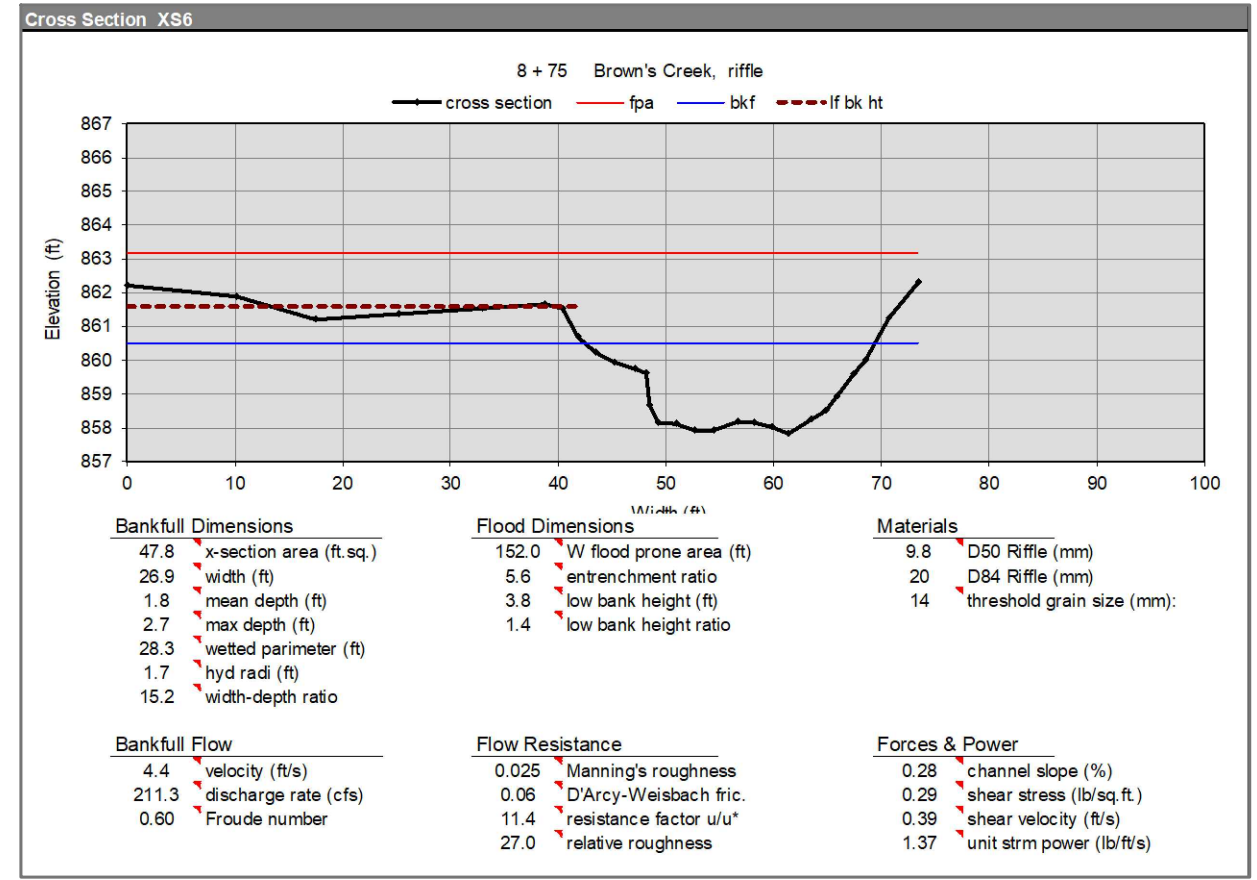
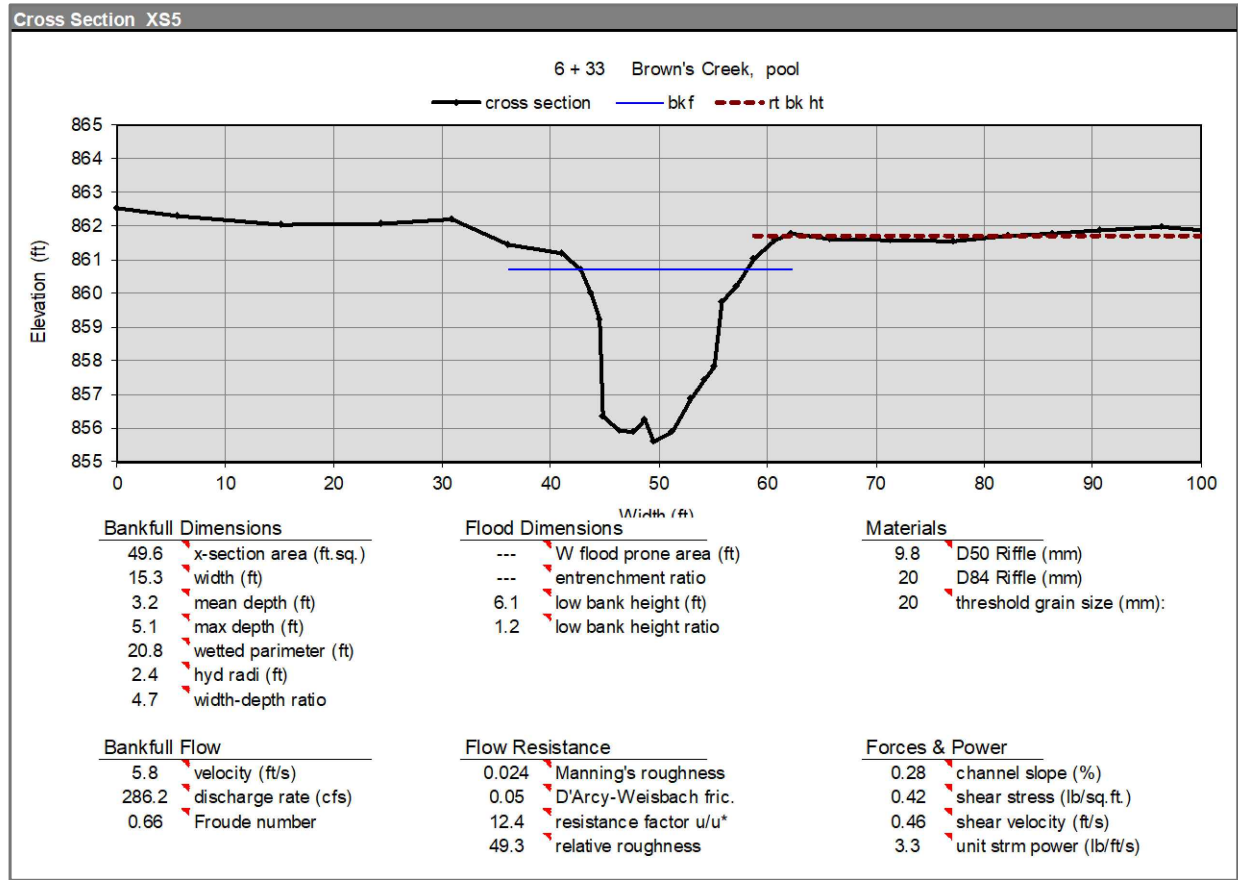
CLIENT PROJECT #XXX-XXXX

BROWN'S CREEK WATERSHED DISTRICT

OAKDALE, MN 55128

EXISTING CROSS  
SECTIONS - 1

SHEET 11 OF 19



NOTE:  
ALL CROSS SECTIONS ARE ORIENTED DOWNSTREAM W/ RIVER LEFT ON THE LEFT AND RIVER RIGHT ON THE RIGHT.

File Date: 06/30/2023  
 File Name: X:\Clients\W0041\_Brown's\_Ck\_Pk\_Rest09\_GNIS\Map0041\_0418-CD.dwg  
 Xref: 40041\_0418-SURFACE  
 40041\_0418-XBASE  
 40041\_0418-REBASE  
 40041\_0418-DBASE  
 Images: \images\BCVD\_top\_images\811\_images\811\_images\w0041\_brown's\_ck\_rest09\_gnis\images\GSC\Logo\_2019



**NOT FOR CONSTRUCTION**

DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
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DESIGNED BY: EOR  
DRAWN BY: DEM  
CHECKED BY: MJM



**BROWN'S CREEK PARK  
STREAM RESTORATION**  
WASHINGTON COUNTY, STILLWATER, MN

EXISTING CROSS SECTIONS - 2

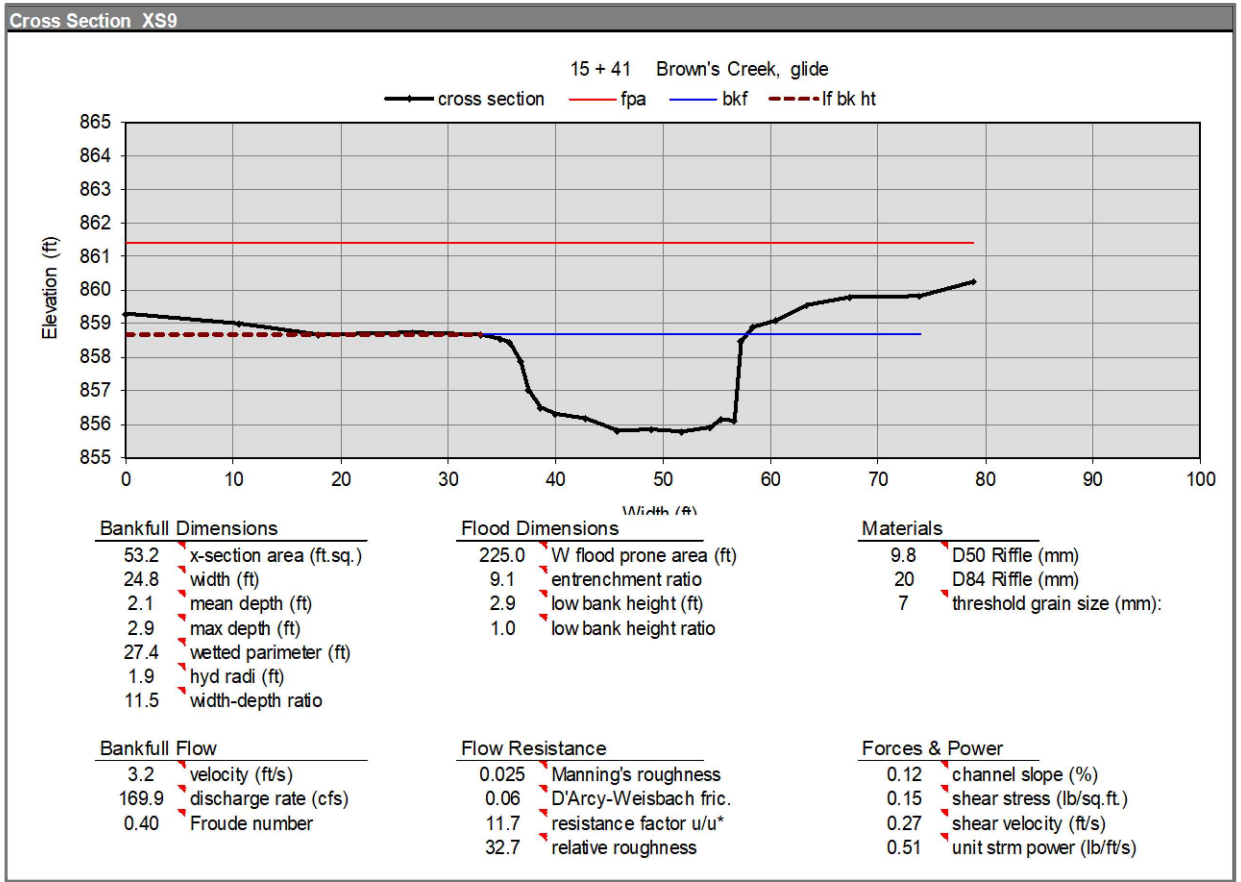
EOR JOB #0041-0418

CLIENT PROJECT #XXX-XXXX

BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

SHEET 12 OF 19





NOTE:  
ALL CROSS SECTIONS ARE ORIENTED DOWNSTREAM W/ RIVER LEFT ON THE LEFT AND RIVER RIGHT ON THE RIGHT.

**NOT FOR CONSTRUCTION**



DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
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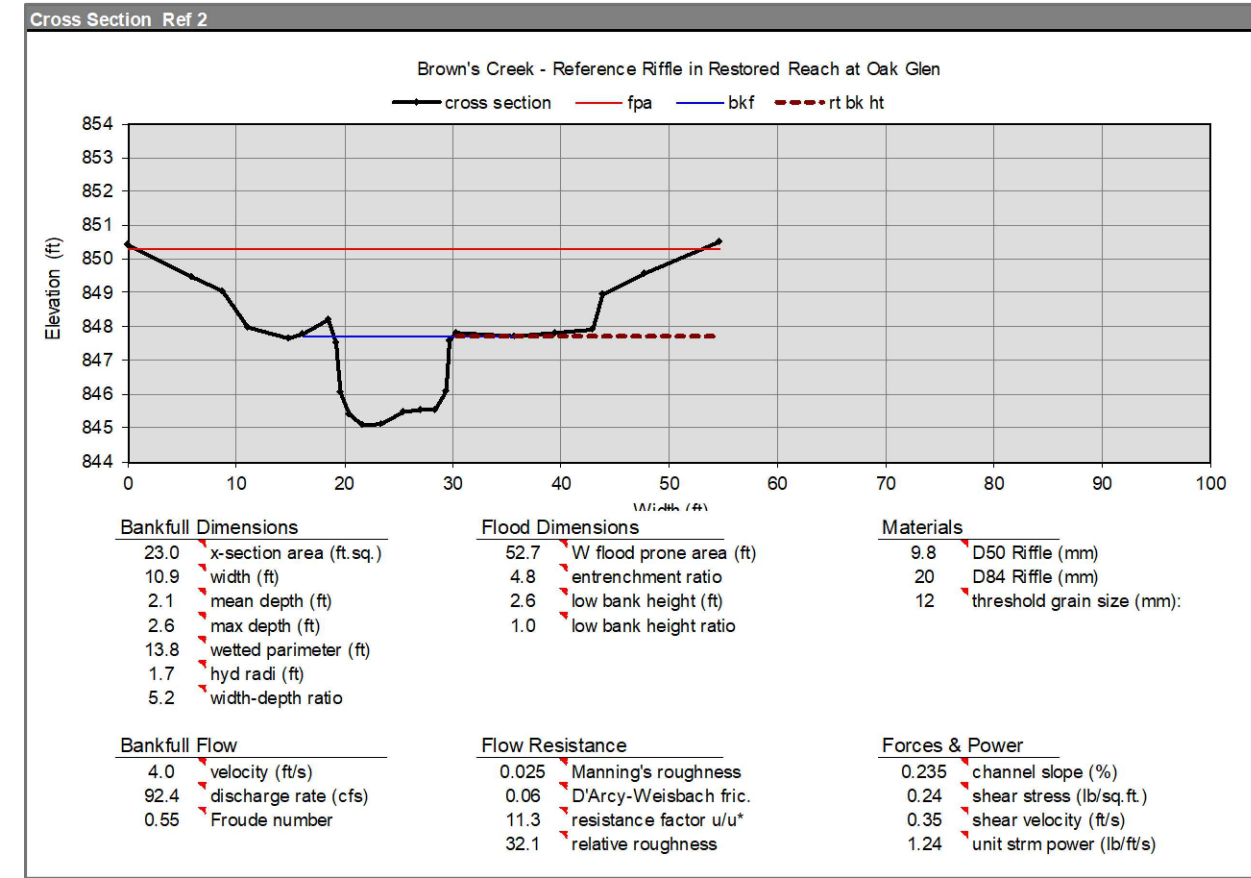
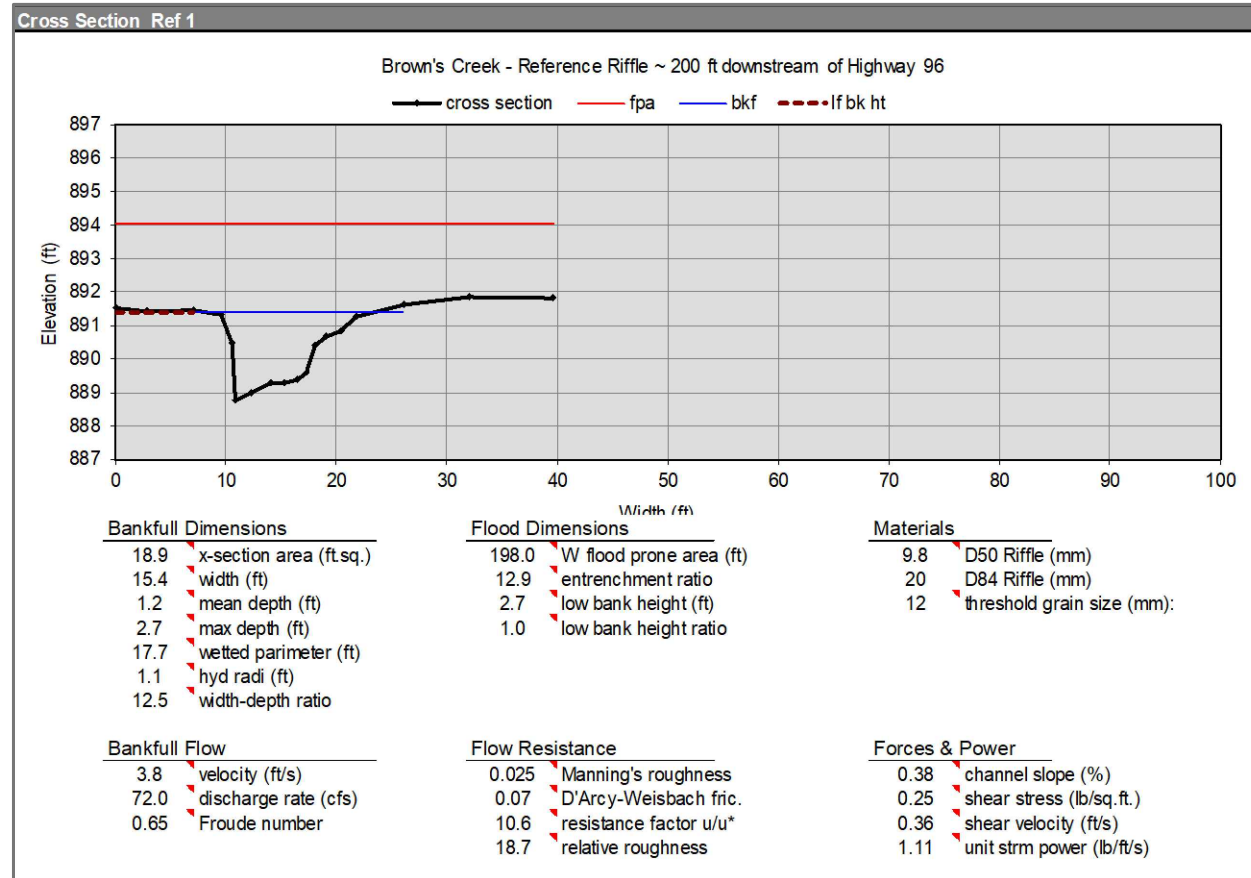
DESIGNED BY: EOR  
DRAWN BY: DEM  
CHECKED BY: MJM  
EOR JOB #0041-0418



**BROWN'S CREEK PARK  
STREAM RESTORATION**  
WASHINGTON COUNTY, STILLWATER, MN  
BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

EXISTING CROSS SECTIONS - 3  
SHEET 13 OF 19

File Date: 06/30/2023  
 Project: 40041-0418-CD.dwg  
 Xref: 40041-0418-SURFACE  
 40041-0418-XBASE  
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NOTE:

ALL CROSS SECTIONS ARE ORIENTED DOWNSTREAM W/ RIVER LEFT ON THE LEFT AND RIVER RIGHT ON THE RIGHT.

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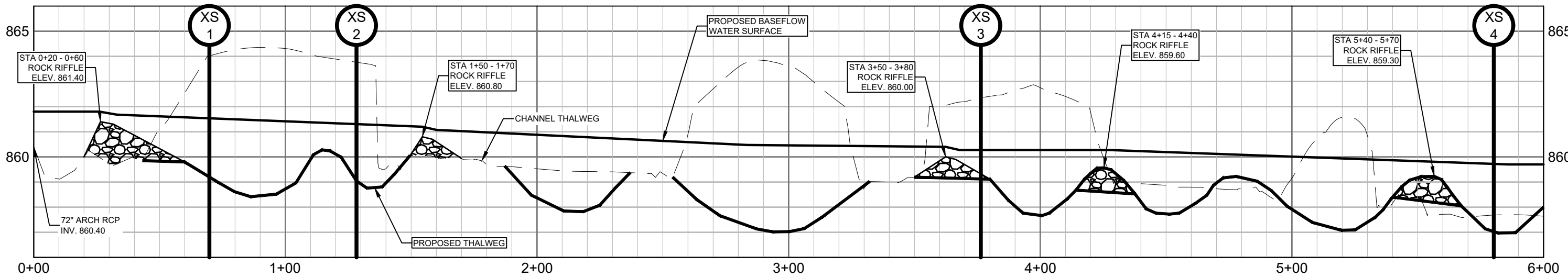
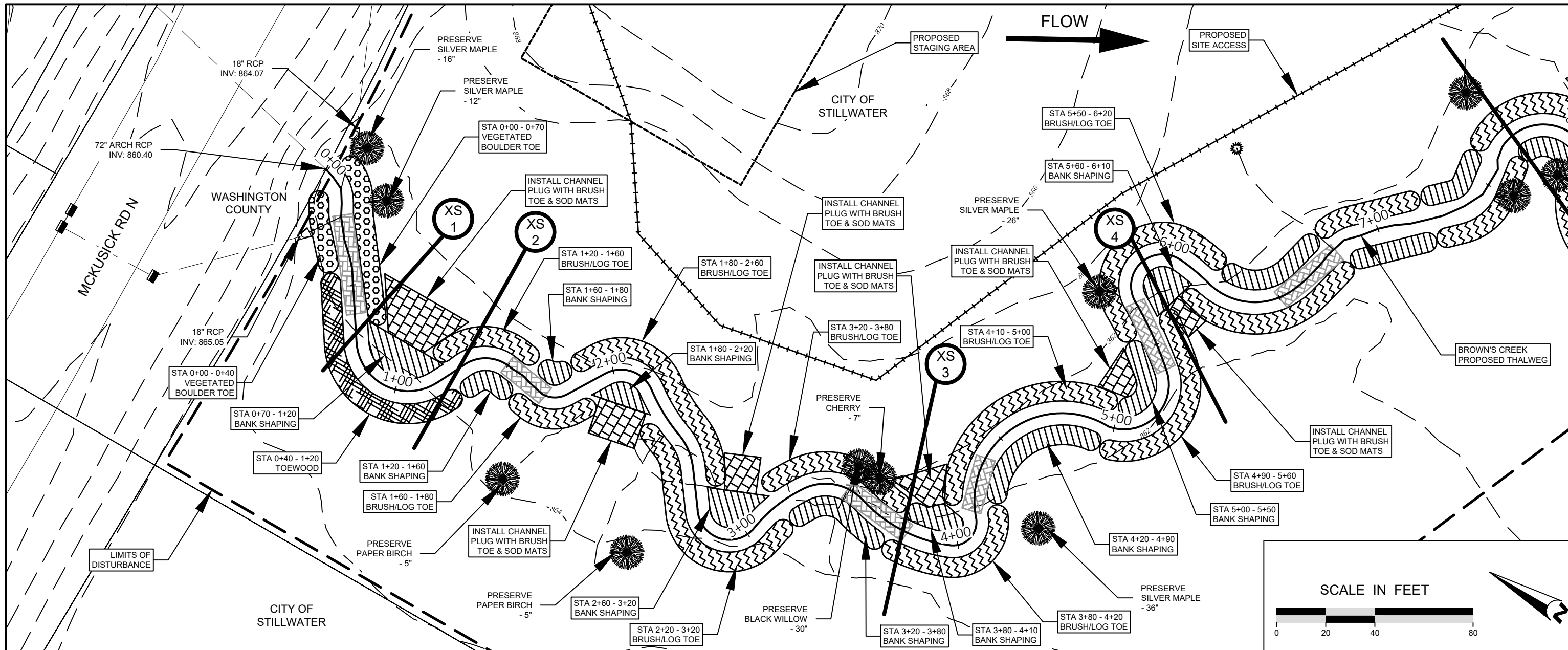
DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
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DESIGNED BY: EOR  
 DRAWN BY: DEM  
 CHECKED BY: MJM  
 EOR JOB #0041-0418



**BROWN'S CREEK PARK  
 STREAM RESTORATION**  
 WASHINGTON COUNTY, STILLWATER, MN

REFERENCE  
 CROSS SECTIONS



File: 06/30/2023  
 Path: C:\Users\jw0041\OneDrive\Documents\jw0041\BCWD\0418\_Brown's\_Ck\_Pk\_Restor09\_GNIS\Map\041\_0418-CD.dwg  
 Xref: 40041\_0418-SURFACE  
 40041\_0418-XBASE  
 40041\_0418-REBASE  
 40041\_0418-CD.dwg

**EOR** water ecology community  
 EMMONS & OLIVIER RESOURCES, INC.  
 1919 UNIV. AVE. W. #300 ST. PAUL, MN  
 TEL: 651.770.8448 WWW.EORINC.COM

NOT FOR CONSTRUCTION

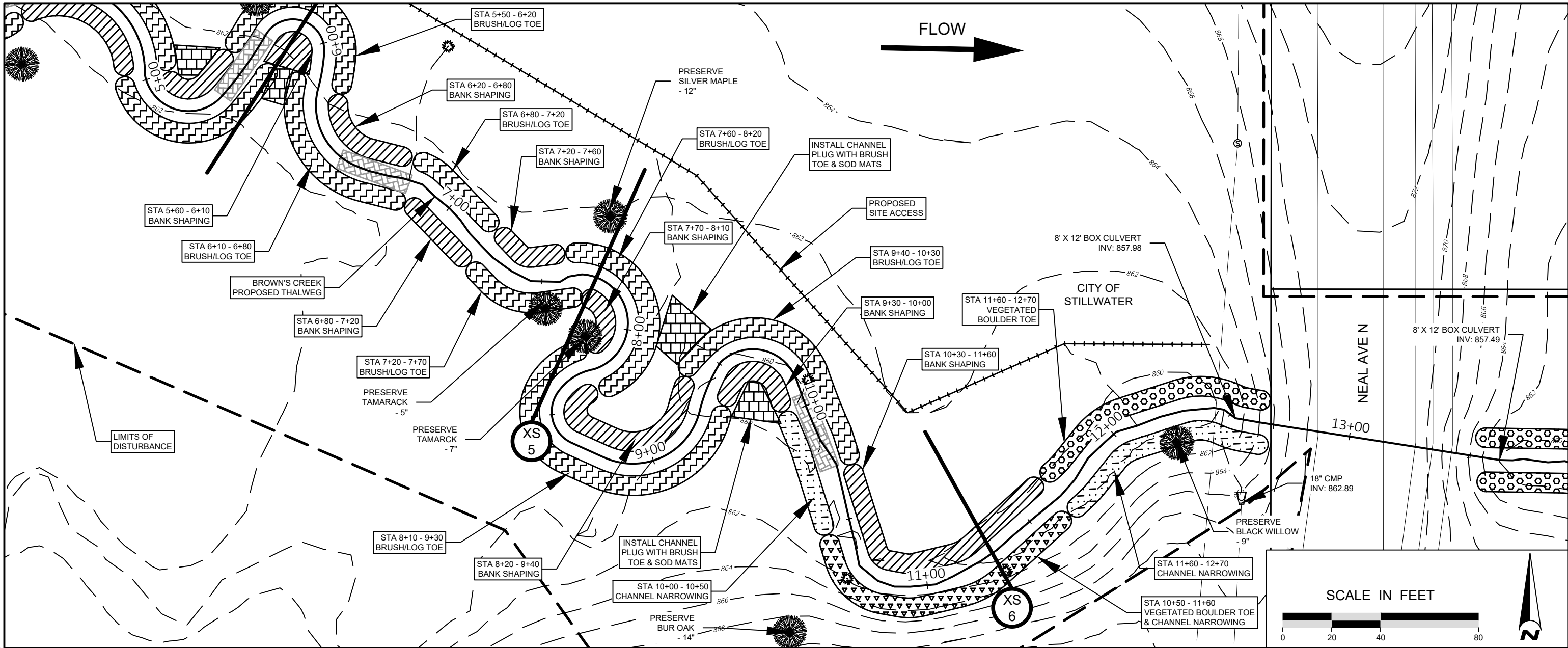
DATE	NO.	DESCRIPTION
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DESIGNED BY: EOR  
 DRAWN BY: DEM  
 CHECKED BY: MJM  
 EOR JOB #0041-0418

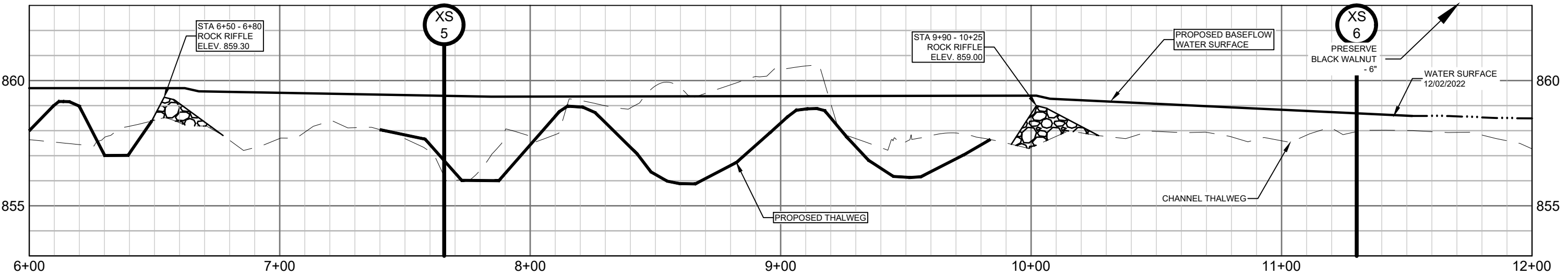
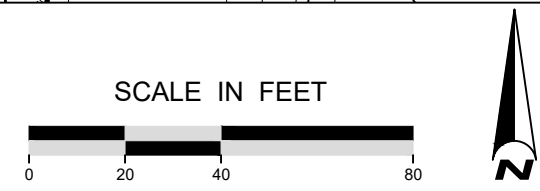
**BROWN'S CREEK**  
 WATERSHED DISTRICT  
 CLIENT PROJECT #XXX-XXXX

**BROWN'S CREEK PARK**  
**STREAM RESTORATION**  
 WASHINGTON COUNTY, STILLWATER, MN  
 BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

PROPOSED PLAN & PROFILE - 1  
 SHEET 15 OF 19



FLOW



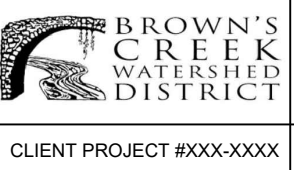
**NOT FOR CONSTRUCTION**

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 Xref: 40041\_0418-SURFACE  
 40041\_0418-REBASE  
 40041\_0418-RAISE  
 40041\_0418-CD.dwg  
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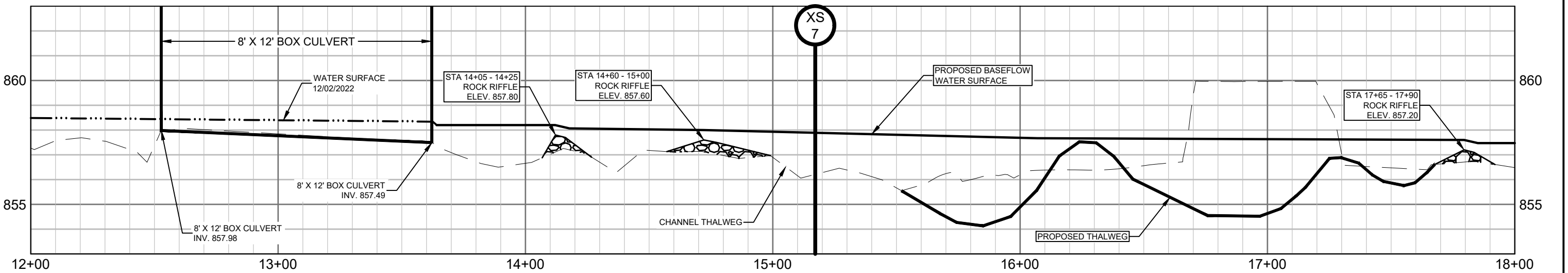
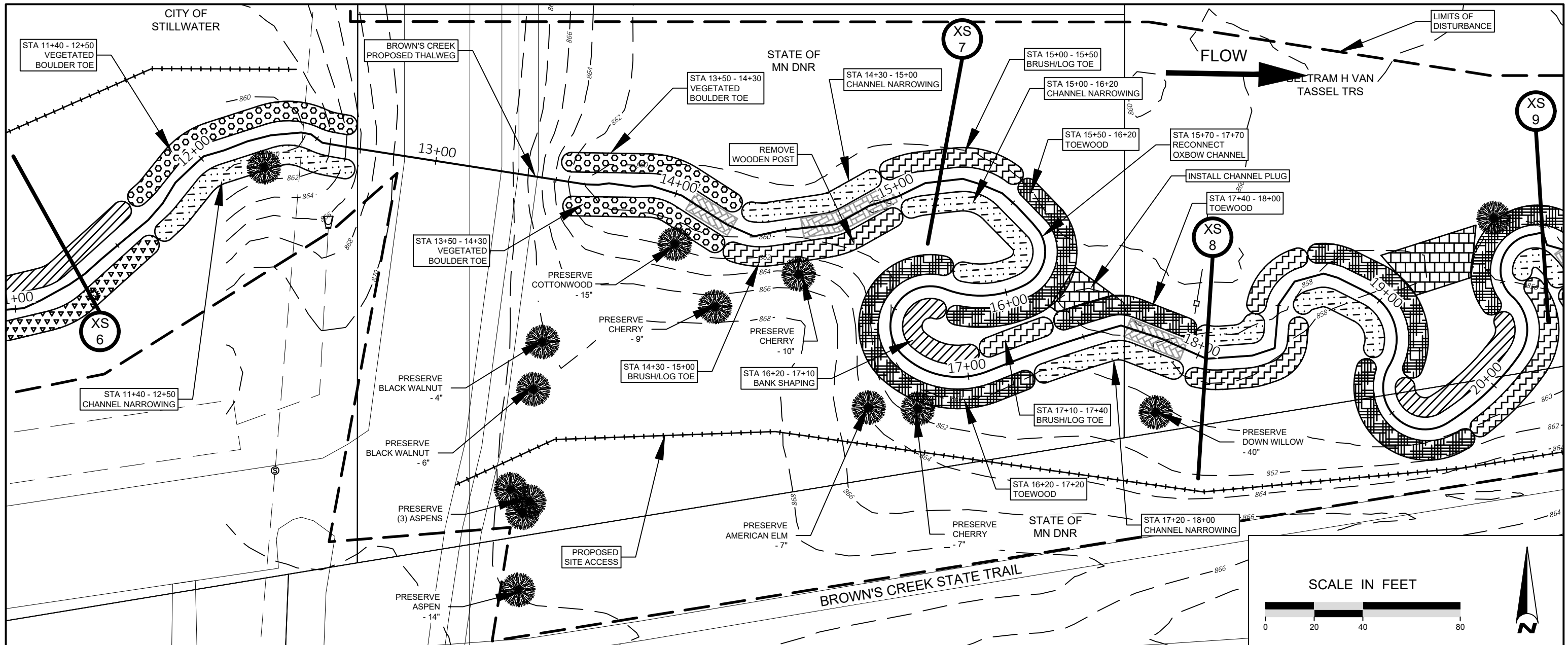
DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
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DESIGNED BY: EOR  
 DRAWN BY: DEM  
 CHECKED BY: MJM  
 EOR JOB #0041-0418



**BROWN'S CREEK PARK  
 STREAM RESTORATION**  
 WASHINGTON COUNTY, STILLWATER, MN  
 BROWN'S CREEK WATERSHED DISTRICT    OAKDALE, MN 55128

**PROPOSED PLAN &  
 PROFILE - 2**  
 SHEET 16 OF 19



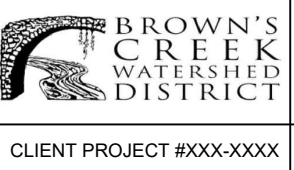
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 40041\_0418-RBASE  
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 40041\_0418-RBASE  
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 40041\_0418-CD.dwg



NOT FOR CONSTRUCTION

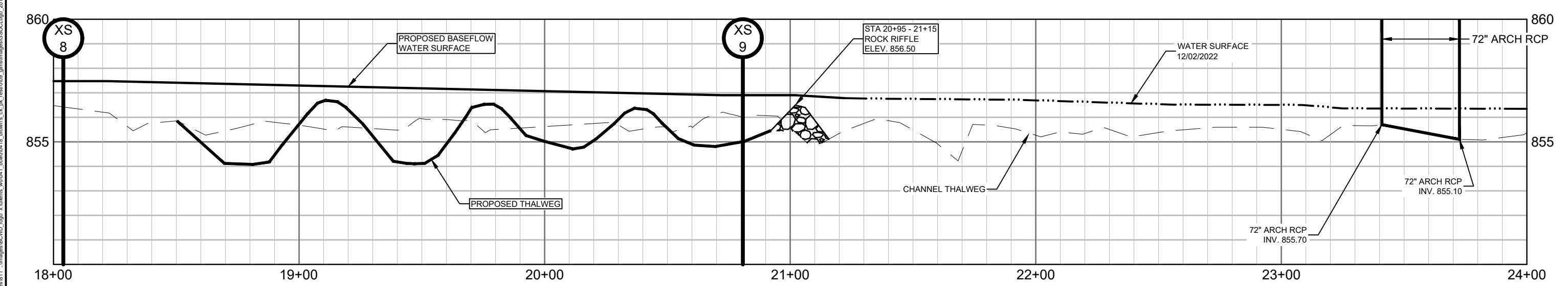
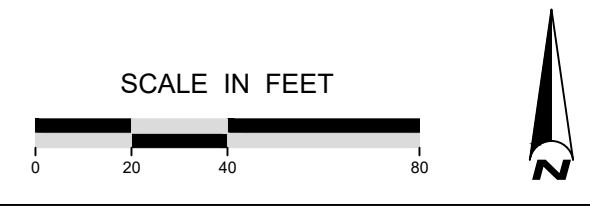
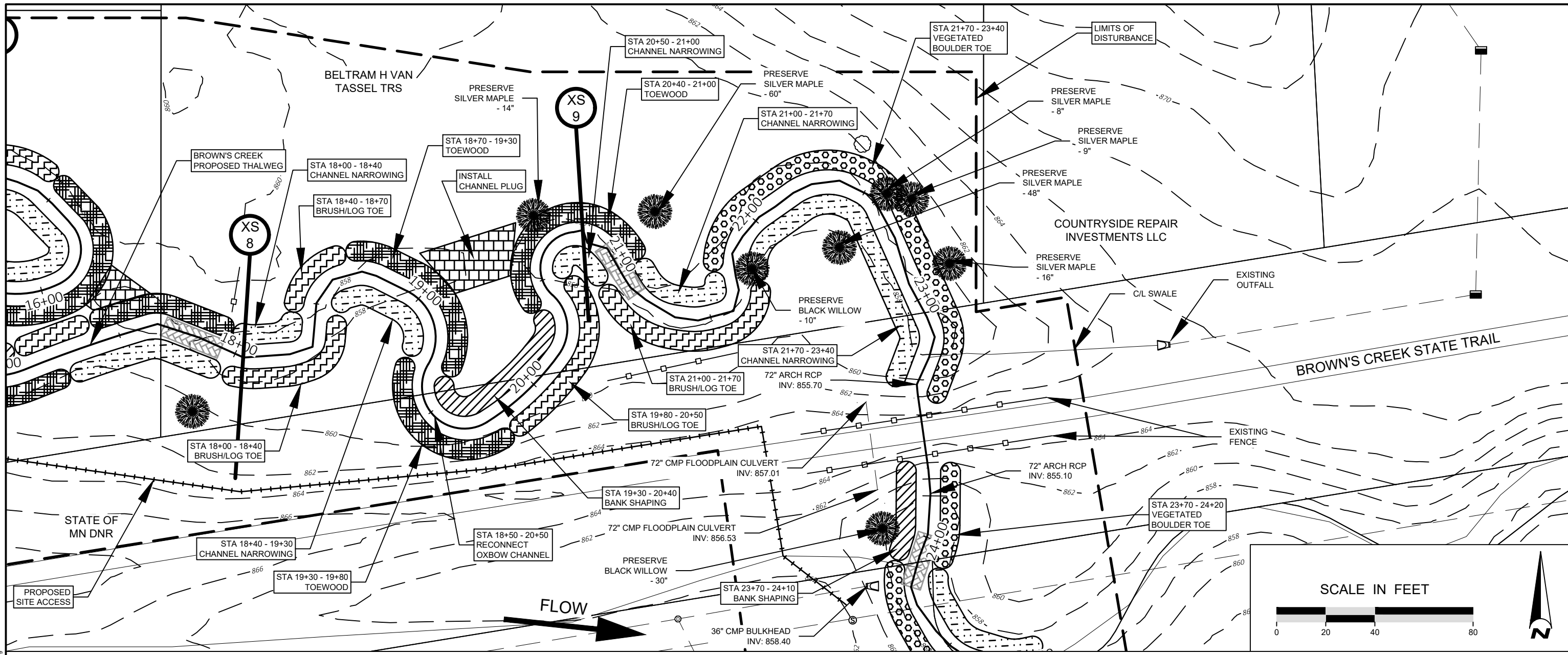
DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
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DESIGNED BY: EOR  
 DRAWN BY: DEM  
 CHECKED BY: MJM  
 EOR JOB #0041-0418



BROWN'S CREEK PARK  
 STREAM RESTORATION  
 WASHINGTON COUNTY, STILLWATER, MN  
 BROWN'S CREEK WATERSHED DISTRICT    OAKDALE, MN 55128

PROPOSED PLAN &  
 PROFILE - 3  
 SHEET 17 OF 19



**NOT FOR CONSTRUCTION**



DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
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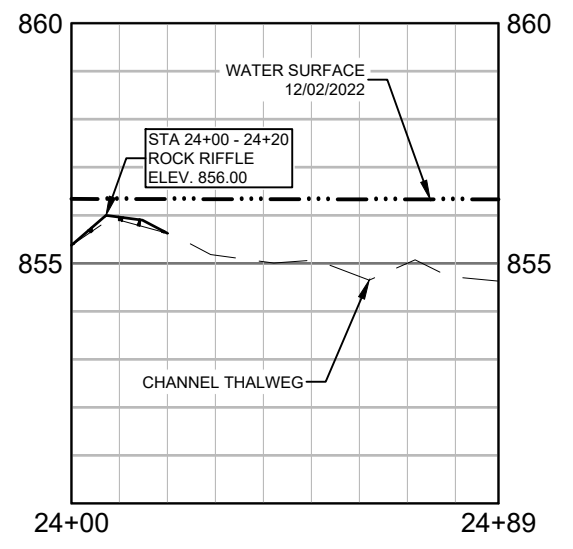
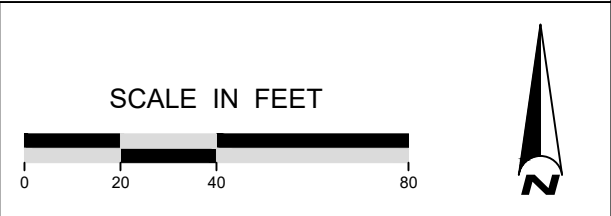
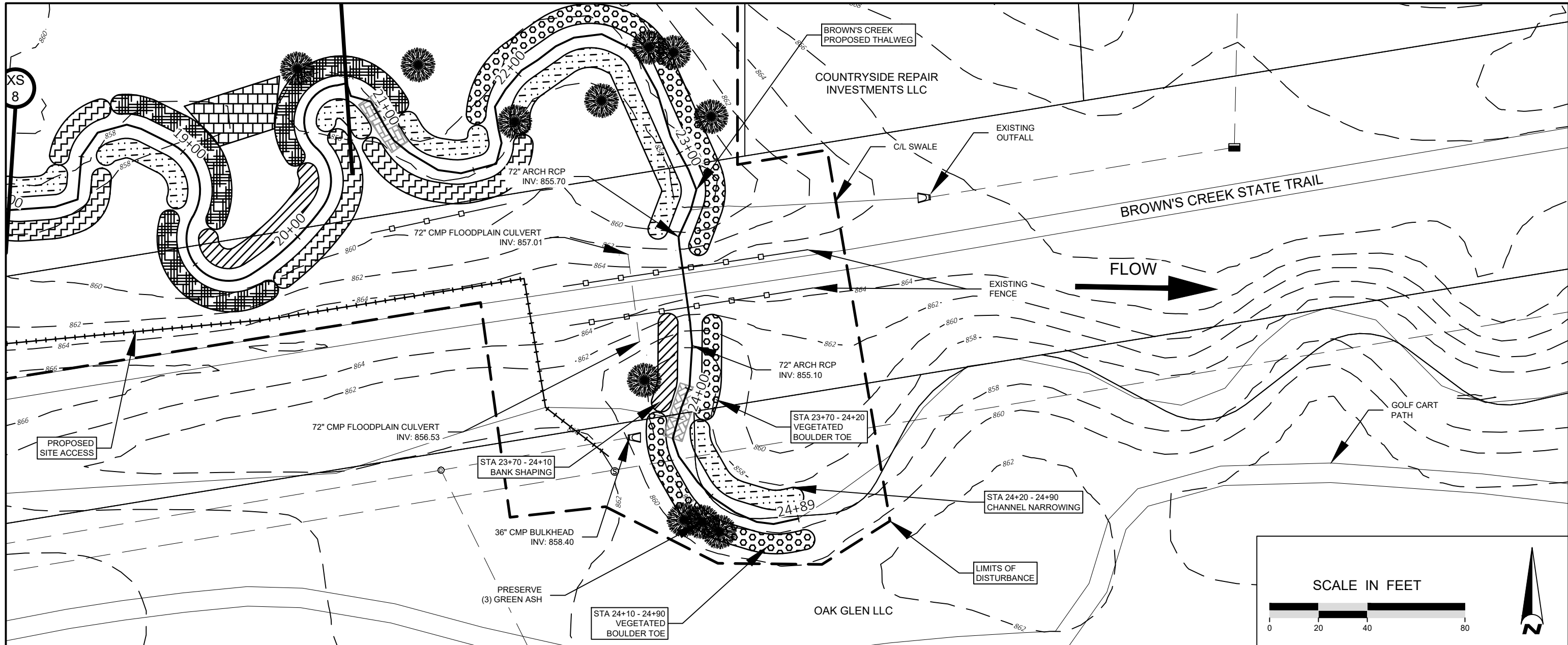
DESIGNED BY: EOR  
DRAWN BY: DEM  
CHECKED BY: MJM  
EOR JOB #0041-0418



**BROWN'S CREEK PARK  
STREAM RESTORATION**  
WASHINGTON COUNTY, STILLWATER, MN  
BROWN'S CREEK WATERSHED DISTRICT OAKDALE, MN 55128

PROPOSED PLAN & PROFILE - 4  
SHEET 18 OF 19

File: 06/30/2023  
 Clients: W0041\_BCWD0418\_Brown's\_Ck\_Pk\_Restor09\_GNISMap0041\_0418-CD.dwg  
 Xrefs: 40041\_0418-SURFACE  
 40041\_0418-RBASE  
 40041\_0418-REBASE  
 40041\_0418-CD.dwg



**NOT FOR CONSTRUCTION**

File Date: 06/30/2023  
 Project: X:\Clients\WD\041\_Brown's\_Ck\_Pk\_Restore\09\_GNIS\Map\0041\_0418-CD.dwg  
 Xref: 40041\_0418-SURFACE  
 40041\_0418-REBASE  
 40041\_0418-REBASE  
 40041\_0418-REBASE

**EOR** water ecology community  
 EMMONS & OLIVIER RESOURCES, INC.  
 1919 UNIV. AVE. W. #300 ST. PAUL, MN  
 TEL: 651.770.8448 WWW.EORINC.COM

DATE	NO.	DESCRIPTION
06/30/2023	1	30% DESIGN PLAN SET
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DESIGNED BY: EOR  
 DRAWN BY: DEM  
 CHECKED BY: MJM  
 EOR JOB #0041-0418

BROWN'S CREEK WATERSHED DISTRICT  
 CLIENT PROJECT #XXX-XXXX

**BROWN'S CREEK PARK STREAM RESTORATION**  
 WASHINGTON COUNTY, STILLWATER, MN  
 BROWN'S CREEK WATERSHED DISTRICT      OAKDALE, MN 55128

PROPOSED PLAN & PROFILE - 5  
 SHEET 19 OF 19