



Bassett Creek Watershed Management

Item 5C.
BCWMC 10-20-22

MEMO

To: BCWMC Commissioners and Alternate Commissioners
From: BCWMC Technical Advisory Committee
Date: October 11, 2022

RE: Recommendations on Channel Maintenance Fund

The BCWMC Technical Advisory Committee met on October 5th to discuss multiple items. Attendees included:

City/Partner	Technical Advisory Committee Members and Others
Crystal	Absent
Golden Valley	RJ Kakach and Drew Chirpich
Medicine Lake	Susan Wiese
Minneapolis	Katie Kowalczyk
Minnetonka	Sarah Schweiger
New Hope	Nick Macklem
Plymouth	Ben Scharenbroich and Chris LaBounty
Robbinsdale	Mike Sorensen
St. Louis Park	Erick Francis
Others	Rachael Crabb (MPRB), Laura Jester, Karen Chandler, Alternate Commissioner Hauer

Channel Maintenance Fund Request for Plymouth Creek Project

The BCWMC maintains a Channel Maintenance Fund to help finance minor stream maintenance, repair, stabilization, sediment removal projects, smaller restoration projects, and/or portions of larger stream restoration projects. Policies related to this fund are found in the BCWMC Policy Manual in Section 3.5. www.bassettcreekwmo.org/application/files/3815/9050/1896/BCWMC_Policies_2016_Revisions_plus_20_20_DPA.pdf.

Each year, \$25,000 of annual operating funds are transferred to this long-term account. Cities with a portion of the BCWMC Trunk System are allocated a portion of the funds according to a formula. Cities can accumulate funds over time. Currently, the City of Plymouth has \$25,099 in Channel Maintenance Funds available.

The City of Plymouth is requesting the use of \$25,099 to repair a section of Plymouth Creek that was originally included in the Commission’s 2010 Plymouth Creek Restoration Project just west of West

Medicine Lake Park. However, the work was not completed at that time in this section, as the landowners were unwilling to participate in the project. Now, the current landowners are willing to have the project completed in this section of the creek.

The total project cost is estimated at \$50,000 - \$75,000. Project design is underway and will be reviewed by the Commission Engineer. The project will include stabilization of a highly eroded section using root wads, rock toe, and native plantings. An agreement between the city and the BCWMC is needed before work can begin.

Recommendations:

- The BCWMC Technical Advisory Committee (TAC) recommends that the Commission approve the use of \$25,099 in BCWMC Channel Maintenance Funds for the Plymouth Creek Restoration Project at 12615 24th Avenue North by the City of Plymouth
- The BCWMC TAC recommends that the Commission approve the attached agreement with the City of Plymouth.

Additional Discussion Topics

The TAC also began discussions on a request from Shingle Creek WMC to update the legal boundary of the watersheds. That discussion is ongoing as affected cities review and comment on proposed changes to the boundary. We expect this item to come before the Commission at the November meeting.

The TAC also discussed city activities related to chlorides and climate resiliency as part of the challenging issues analysis for the 2025 Watershed Management Plan. The information gathered from TAC members will be included with information gathered from other sources and presented to the Commission and/or Plan Steering Committee in the future.

**AGREEMENT FOR USE OF BASSETT CREEK WATERSHED MANAGEMENT COMMISSION
CHANNEL MAINTENANCE FUNDS**

This Agreement is made this _____ day of _____, 202__, by and between the Bassett Creek Watershed Management Commission, a Minnesota joint powers organization, (“BCWMC”) and the City of Plymouth, a Minnesota municipal corporation (“City”);

WHEREAS, the BCWMC has established a program to work in cooperation with member cities to fund channel maintenance projects; and

WHEREAS, the City has applied to the BCWMC for funds for a channel maintenance project in the City, a description of which is attached hereto as Exhibit A and is made part of this Agreement (the “Project”); and

WHEREAS, the BCWMC is willing to provide funding for the City’s Project in accordance with the terms and conditions hereinafter set forth.

NOW, THEREFORE, on the basis of the premises and the mutual covenants hereinafter set forth, the parties hereto agree as follows:

1. The City agrees to undertake and complete the work of the Project as described in the attached Exhibit A, and in accordance with BCWMC’s policies regarding such grant projects. The City may request a change in the Project, which may be authorized, in writing, by the BCWMC’s Administrator or Engineer.
2. The plans for the Project shall be reviewed by the BCWMC’s Engineer, who may approve or require modifications to the Plans. Project design, construction and maintenance will conform to all conditions of approval imposed by the BCWMC.
3. The City shall require that engineers, architects and contractors for the work of each part of the Project have liability insurance in the amount of at least the current statutory limits specified in Minnesota Statutes, Chapter 466, and that the BCWMC and the BCWMC’s Engineer are named as additional insureds on such policies. Before commencing construction of the Project, the City shall provide to the BCWMC a Certificate of Insurance demonstrating compliance with this requirement. The Certificate shall provide that the insurance may not be cancelled without giving the certificate holder the same notice of cancellation as is given to the policyholder. The City will require that the contractor defend, indemnify, protect and hold harmless the BCWMC and the City, their agents, officers, and employees, from all claims or actions arising from performance of the work of the Project conducted by the contractor.
4. The City shall undertake, or cause to be undertaken, the Project in accordance with the approved plans. Contracts will be awarded by the City in accordance with all applicable public bidding and contracting requirements including, but not limited to, requiring the contractor to provide performance and payment bonds to the extent required by law. The City will supervise the work of the contractor; however, the BCWMC may observe and review the work of the Project until it is completed. The City will pay the contractor and all other expenses related to the construction of the Project and keep and maintain complete records of such costs incurred.
5. The City shall be responsible for securing, or causing to be secured, all necessary permits for the work of the Project.

6. Upon completion of the work of the Project, the City shall secure record drawings prepared by the design engineer or architect, with a certification by the Contractor that the work was completed according to the approved plans. A copy of the record drawings and certification shall be forwarded to the BCWMC's Engineer.
7. The City will submit invoices to the BCWMC, no more frequently than monthly, for partial reimbursement for the work of the Project. Reimbursable expenses include out-of-pocket costs incurred for construction and the costs of design, engineering, and contract administration. Reimbursement will be made subject to the following limitations:
 - a) Total reimbursement for the work of the Project will not exceed \$25,099.00, and no reimbursement will be made for costs paid to the City by other parties.
 - b) Reimbursements will be made from that part of the BCWMC's Creek and Streambank Trunk System Maintenance, Repair and Sediment Removal Fund (the "Channel Maintenance Fund") allocated to channel maintenance in the City. If the cost of the Project exceeds \$25,099.00, the City may apply to the BCWMC for additional reimbursement from funds allocated to the City in the Channel Maintenance Fund.
8. Claims by the City for reimbursement shall be accompanied by such proof of costs as may reasonably be requested by the BCWMC, and the books and records of the City shall be available for inspection by the BCWMC upon reasonable notice during normal business hours. If the City intends to seek reimbursement for design, engineering, or contract administration by City staff, it is required to maintain and provide to the BCWMC detailed time records showing daily records of time spent, description of activities, staff personnel involved, and rate of total compensation. Hourly rates charged will include pro-rated salary and fringe benefits in accordance with the schedule of rates attached to this Agreement as Exhibit B, which rates are subject to annual adjustment commensurate with changes in City costs of salary and benefits.
9. The BCWMC shall reimburse the City for eligible expenses in accordance with this Agreement within 45 days of receipt of an invoice therefor, provided the BCWMC determines the invoice contains adequate details to allow reimbursement. If the BCWMC determines an invoice is not adequate, within 10 days of receipt it shall notify the City in writing of the additional information needed to make the invoice complete.
10. This Agreement will terminate on the third anniversary of the effective date of this Agreement, unless extended by mutual agreement of the City and the BCWMC. The BCWMC will have no obligation to reimburse claims not submitted prior to the termination date, or any agreed upon extension.
11. The parties agree that the BCWMC's participation in the Project is limited to the payment of channel maintenance grant funds in accordance with this Agreement. This Agreement does not make the BCWMC a partner, agent or co-venturer in the City's Project and the BCWMC will incur no responsibility or liability for the work of the City's Project.
12. The City will defend, indemnify, protect and hold harmless the BCWMC and its officers, employees, and agents from any claims arising out of the design, construction, or maintenance of the Project, including environmental claims. Nothing herein shall be deemed a waiver of the limitations of liability in Minnesota Statutes, Chapter 466.

13. This Agreement, including the attached exhibits and BCWMC Channel Maintenance Fund policies, contains all negotiations and agreements between BCWMC and City regarding the subject of this Agreement. No other agreements or understandings regarding this Agreement may be used to bind either party.
14. City's books, records, documents and accounting procedures and practices relevant to this Agreement are subject to examination by the State of Minnesota and the State Auditor or Legislative Auditor, as appropriate, for a minimum of six years from the end of this Agreement.
15. City shall comply with applicable provisions of the Minnesota Government Data Practices Act, Minnesota Statutes, Chapter 13.

IN WITNESS WHEREOF, the parties have executed this Agreement effective as of the date and year first written above.

BASSETT CREEK WATERSHED
MANAGEMENT COMMISSION

By: _____
Chair

And by: _____
Secretary

CITY OF PLYMOUTH

By: _____
Mayor

And by: _____
Manager

PRELIMINARY SITE CONSTRUCTION PLANS

FOR

PLYMOUTH CREEK REPAIR

PLYMOUTH, MN

EXHIBIT A

CERTIFICATION:
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

LICENSE NO.:
DATE:

SUB CONSULTANT:

ISSUE NO.	DESCRIPTION	DATE
1	60% PLAN SET	08/17/2022
2	90% PLAN SET	09/28/2022

PLYMOUTH CREEK REPAIR
12615 24TH AVE N & 12621 24TH AVE N
PLYMOUTH, MN 55441

CLIENT:



3400 PLYMOUTH BLVD
PLYMOUTH, MN 55447
PHONE: 763-509-5000
WWW.PLYMOUTHMN.COM

PROJECT NO.: 0017-01

DWN BY: PAG CHKD BY: LNJ APPD BY: LNJ

ISSUE DATE: 09/28/2022

ISSUE NO.: 2

SHEET TITLE:

COVER SHEET

SHEET NO.:

G-101

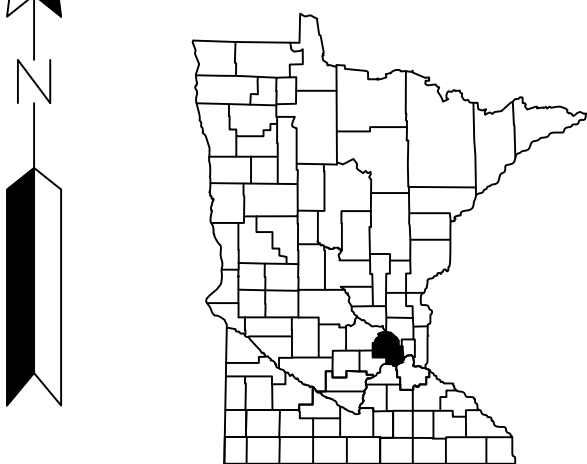
Project Team

CITY OF PLYMOUTH
BEN SCHAREN BROICH - WATER RESOURCES SUPERVISOR
3400 PLYMOUTH BLVD
PLYMOUTH, MN 55447
PHONE - (763) 509-5527

LANDSCAPE ARCHITECT:
MIDWEST WETLAND IMPROVEMENTS, LLC
LUCIUS JONETT, PLA
P.O. BOX 448
VICTORIA, MN 55386
CELL - (952) 261-9990

VICINITY MAP

NOT TO SCALE



PROJECT LOCATION
CITY: PLYMOUTH
COUNTY: HENNEPIN



Sheet List Table	
Sheet Number	Sheet Title
G-101	COVER SHEET
G-102	GENERAL NOTES
C-101	SITE ACCESS PLAN
C-102	SITE PLAN
C-201	CHANNEL CROSS SECTIONS
C-801	DETAILS
C-802	DETAILS
C-803	DETAILS
C-804	DETAILS

GOVERNING SPECIFICATIONS

1. CITY OF PLYMOUTH STANDARD SPECIFICATIONS AND REQUIREMENTS.
2. MINNESOTA DEPARTMENT OF TRANSPORTATION (MN/DOT) "STANDARD SPECIFICATIONS FOR CONSTRUCTION" LATEST EDITION AND SUPPLEMENTS.
3. CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM) STANDARD SPECIFICATIONS FOR UTILITIES LATEST EDITION.
4. APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES

GENERAL NOTES

1. NO WORK IS ALLOWED BELOW THE ORDINARY HIGH WATER LEVEL OF THE CREEK BETWEEN MARCH 15 AND JUNE 15 DUE TO FISH SPawning HABITAT AND DNR WORK IN PUBLIC WATERS EXCLUSION DATES.
2. UNTIL REVISION BLOCK STATES "ISSUED FOR CONSTRUCTION", THE PLAN SET IS NOT CERTIFIED FOR CONSTRUCTION.
3. EXISTING CONDITIONS SHOWN ARE FROM A COMBINATION OF TOPOGRAPHIC SURVEY AND LIDAR DATA COMPLETED BY THE CITY OF PLYMOUTH, DATED MAY 6, 2022. EXISTING FEATURES MAY NOT BE EXACT TO THEIR LOCATION. CONTRACTOR RESPONSIBLE FOR VERIFYING THE CONDITIONS OF THE SITE AND MUST IMMEDIATELY NOTIFY THE ENGINEER OF DISCREPANCIES OR VARIATIONS FROM THE DRAWINGS.
4. CONTRACTOR RESPONSIBLE FOR CONTACTING GOPHER STATE ONE CALL (1-800-252-1166) A MINIMUM OF 48 HOURS IN ADVANCE (EXCLUDING HOLIDAYS AND WEEKENDS) BEFORE STARTING WORK FOR LOCATIONS OF UNDERGROUND UTILITIES.
5. CONTRACTOR SHALL ANTICIPATE PRIVATE UTILITY CONFLICTS THROUGHOUT THE PROJECT AREAS AND MUST COORDINATE THE RELOCATION OR PROTECTION OF EXISTING UTILITIES.
6. QUANTITIES ARE APPROXIMATE, AND MAY VARY TO ALLOW COMPLETION OF WORK.
7. WORK AND MATERIALS MUST COMPLY WITH CITY, COUNTY, STATE, AND FEDERAL (INCLUDING OSHA) REGULATIONS AND CODES.
8. CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS TO ADJACENT PROPERTIES THROUGHOUT CONSTRUCTION.
9. CONTRACTOR SHALL COORDINATE AND MAINTAIN MAIL, GARBAGE, AND RECYCLING SERVICES TO PROPERTIES THROUGHOUT CONSTRUCTION.
10. CONSTRUCTION LIMITS ARE TO PROPERTY LINE UNLESS SHOWN OR NOTED OTHERWISE. CONTRACTOR SHALL RESTRICT CONSTRUCTION ACTIVITIES TO AREAS DESIGNATED ON PLANS WITHIN THE CONSTRUCTION LIMITS.
11. CONTRACTOR SHALL PRESERVE AND PROTECT EXISTING PAVEMENT, SITE FEATURES, UTILITIES, TREES, ETC., UNLESS NOTED OR SHOWN OTHERWISE.
12. EXISTING PAVEMENT AND SITE CONDITIONS HAVE BEEN DOCUMENTED, AND ANY DAMAGE TO THE EXISTING PAVEMENT, CURBING, STRIPING, OR OTHER SITE FEATURE TO REMAIN MUST BE REPLACED BY THE CONTRACTOR, TO OWNER'S SATISFACTION, AT NO ADDITIONAL COST TO THE OWNER.
13. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING CONSTRUCTION AND WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES.
14. CONTRACTOR MUST IMMEDIATELY NOTIFY THE OWNER AND ENGINEER OF DISCREPANCIES OR CONFLICTS IN THE CONTRACT DOCUMENTS BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS ARE TO BE MADE WITHOUT PRIOR APPROVAL FROM THE OWNER AND ENGINEER. FAILURE TO NOTIFY OWNER AND ENGINEER OF AN IDENTIFIABLE CONFLICT BEFORE PROCEEDING WITH INSTALLATION RELIEVES OWNER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.
15. CONTRACTOR SHALL HAVE ONE COPY OF EACH REQUIRED CONSTRUCTION PERMIT AND ONE COPY OF THE MOST CURRENT AND COMPLETE SET OF CONSTRUCTION DOCUMENTS (INCLUDING PLANS, SPECIFICATIONS, GEOTECHNICAL REPORT, SPECIAL CONDITIONS AND PROVISIONS, ETC.) AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
16. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR IMPLEMENTATION AND ENFORCEMENT OF SAFE WORK PRACTICES, INCLUDING BUT NOT LIMITED TO PERSONNEL MONITORING, USE OF TRENCHING, SHEETING, AND SHORING, SCAFFOLDING; MATERIALS HANDLING AND DRILLING; OPERATION OF EQUIPMENT; AND SAFETY OF PUBLIC DURING PROGRESS OF WORK.
17. CONTRACTOR SHALL PLAN FOR AND ENSURE PERSONNEL COMPLY WITH PROVISIONS OF OSHA SAFETY AND HEALTH STANDARDS (29 CFR 1910) AND GENERAL CONSTRUCTION STANDARDS (29 CFR 1926) AS APPROPRIATE.
18. CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH WORK. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS FOR SAFETY OF EMPLOYEES ON PROJECT SITE AND OTHER PERSONS AND ORGANIZATIONS WHO MAY BE AFFECTED BY THE PROJECT. CONTRACTOR'S DUTIES AND RESPONSIBILITIES FOR SAFETY IN CONNECTION WITH WORK SHALL CONTINUE UNTIL SUCH TIME AS ALL WORK IS COMPLETED, AND ENGINEER HAS ISSUED NOTICE TO CONTRACTOR THAT WORK IS COMPLETE.
19. HAZARDOUS MATERIALS, INCLUDING BUT NOT LIMITED TO OIL, GASOLINE, PAINT AND OTHER HAZARDOUS SUBSTANCES MUST BE PROPERLY STORED, BY THE CONTRACTOR, INCLUDING SECONDARY CONTAINMENTS, TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. RESTRICTED ACCESS TO STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MUST BE IN COMPLIANCE WITH MCPA REGULATIONS. CONTRACTOR SHALL REMOVE SPILL OF FUELS, OILS, OR OTHER CHEMICALS IMMEDIATELY UPON DETECTION.

REMOVAL / DEMOLITION NOTES

1. SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
2. CONTRACTOR SHALL REVIEW FEATURES NOT SPECIFICALLY IDENTIFIED ON PLAN FOR SALVAGE OR REMOVAL THAT CONFLICT WITH CONSTRUCTION WITH THE ENGINEER.
3. MATERIALS REMOVED/DEMOLISHED BY CONTRACTOR BECOME PROPERTY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED. CONTRACTOR SHALL LOAD AND HAUL MATERIAL OFF-SITE AND PROPERLY DISPOSE OF MATERIALS IN ACCORDANCE WITH APPLICABLE REGULATIONS. CONTRACTOR MUST LEAVE THE SITE IN A CONDITION TO THE SATISFACTION OF THE OWNER AND ENGINEER.
4. IN THE EVENT THAT UNKNOWN CONTAINERS OR TANKS ARE ENCOUNTERED, THE CONTRACTOR MUST CONTACT THE ENGINEER IMMEDIATELY. ALL CONTAINERS OR TANKS MUST BE DISPOSED OF PROPERLY AT A REGULATED/PERMITTED FACILITY.
5. CONTRACTOR SHALL REVIEW ALL TREE REMOVALS WITH THE OWNER AND LANDSCAPE ARCHITECT PRIOR TO REMOVAL OPERATIONS.
6. CLEARING AND GRUBBING OPERATIONS MUST COMPLY WITH THE FOLLOWING:
 - A. PROTECT ALL TREES AND PLANTS NOT DESIGNATED FOR REMOVAL.
 - B. CONDUCT OPERATIONS IN SUCH A MANNER THAT DOES NOT DAMAGE PROTECTED TREES AND VEGETATION.
 - C. CUT, REMOVE, AND DISPOSE OF TREES, BRUSH, SHRUBS, WINDFALLS, LOGS, STUMPS, ROOTS, FALLEN TIMBER, AND OTHER VEGETATION NOT DESIGNATED FOR HARVEST OR REUSE.
 - D. BACKFILL DEPRESSIONS WITH NATIVE SOILS OR SUITABLE FILL MATERIAL AS REQUIRED BY DESIGN OR AS DIRECTED BY THE LANDSCAPE ARCHITECT AND COMPACT BACKFILL AS DIRECTED.
 - E. DISPOSE OF DEBRIS IN ACCORDANCE WITH APPLICABLE REGULATIONS.
 - F. CONSIDER BENEFICIAL USE DESIGNATIONS FOR UNADULTERATED WOOD, WOOD CHIPS, BARK AND SAWDUST.
 - G. NO BURYING OF CLEARED AND GRUBBED WASTE WITHIN THE CONSTRUCTION LIMITS.

EROSION CONTROL NOTES

1. SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
2. CONTRACTOR SHALL CONFORM TO AND CONDUCT INSPECTIONS IN ACCORDANCE WITH THE NPDES PERMIT AND SWPPP REQUIREMENTS.
3. BEFORE SITE DISTURBANCE AND AS REQUIRED AS CONSTRUCTION PROGRESSES, CONTRACTOR SHALL INSTALL, MAINTAIN, REPAIR, AND REPLACE EROSION PREVENTION MEASURES AND SEDIMENT CONTROL DEVICES (INLET PROTECTION, CONSTRUCTION ENTRANCE, SILT FENCE, TEMPORARY EROSION PREVENTION BLANKET, ETC.) IN ACCORDANCE WITH THE SWPPP, NPDES PERMIT, AND CITY, STATE, AND WATERSHED DISTRICT PERMITS.
4. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DEPENDING ON SITE CONDITIONS DURING CONSTRUCTION. COORDINATE WITH ENGINEER.
5. CONTRACTOR SHALL STABILIZE ALL EXPOSED SOIL AREAS WITHIN THE CONSTRUCTION LIMITS WITHIN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE THAT HAS TEMPORARILY (WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS) OR PERMANENTLY CEASED. STABILIZATION MUST BE INITIATED PROMPTLY.
6. CONTRACTOR SHALL REMOVE ANY SEDIMENT THAT HAS TRACKED ONTO PAVED SURFACES BOTH ON AND OFFSITE WITHIN 24 HOURS AND AS DIRECTED BY CITY, OWNER, ENGINEER. SWEEP STREET IN ACCORDANCE WITH CITY, COUNTY, STATE AND NPDES PERMIT REQUIREMENTS.
7. CONTRACTOR SHALL PHASE GRADING WORK TO MINIMIZE THE DURATION THAT DISTURBED SOIL IS EXPOSED.
8. CONTRACTOR SHALL LOCATE SOIL STOCKPILES NO LESS THAN 50 FEET FROM ROADWAYS, STORMWATER INLETS, PONDS, WETLANDS, DRAINAGE CHANNELS, AND OTHER SURFACE WATERS. IF REMAINING FOR MORE THAN 7 DAYS, STABILIZE THE STOCKPILES BY MULCHING, VEGETATED COVER, TARPS, OR OTHER MEANS IN ACCORDANCE WITH THE NPDES PERMIT. PLACE PERIMETER SEDIMENT CONTROLS AROUND STOCKPILES TO CONTROL EROSION. COVER TEMPORARY STOCKPILES LOCATED ON PAVED SURFACES IF LEFT FROM MORE THAN 24 HOURS.
9. CONTRACTOR SHALL REMOVE ALL EROSION CONTROL MEASURES AFTER SITE HAS BEEN STABILIZED AND VEGETATION IS ESTABLISHED AS DIRECTED BY ENGINEER. EROSION CONTROL MEASURES USED FOR CONSTRUCTION MUST NOT BE REMOVED UNTIL AUTHORIZED BY OWNER OR ENGINEER.
10. STREAMBANK STABILIZATION PRACTICES SHALL CONSIST OF TWO LAYERS OF EROSION PREVENTION BLANKET. TEMPORARY EROSION PREVENTION BLANKET, CATEGORY 20 NATURAL FIBER NETTING WILL BE ON THE BOTTOM AGAINST THE GROUND. WITH TEMPORARY EROSION PREVENTION BLANKET, CATEGORY 37 ROLANKA BIOD-MAT 40, OR APPROVED EQUIVALENT OVER THE TOP. BOTH BLANKETS WILL BE STAKED INTO THE GROUND TOGETHER WITH WOOD STAKES AS SPECIFIED.
11. MN STATE SEED MIXES USED ON THIS PROJECT INCLUDE:
 - 11.1. 25-131 LOW MAINTENANCE TURF MIX SEEDED AT 220 LB/ACRE - FOR ALL TURF GRASS RESTORATION AREAS.
 - 11.2. 34-261 RIPARIAN SOUTH & WEST MIX SEEDED AT 31.5 LB/ACRE - FOR ALL STABILIZED STREAMBANK AND BRUSH MATTRESS AREAS.

GRADING NOTES

1. SEE GENERAL NOTES FOR ADDITIONAL PROJECT AND SITE INFORMATION.
2. PROPOSED CONTOURS ARE TO FINISHED SURFACE GRADE, UNLESS NOTED OTHERWISE.
3. THE SITE HAS NOT NECESSARILY BEEN DESIGNED TO BALANCE THE ON-SITE MATERIALS. ADDITIONAL ONSITE EXCAVATION OF SOIL MAY BE NECESSARY TO ACHIEVE THE FINAL GRADES SHOWN ON THE DRAWINGS. CONTRACTOR SHALL COORDINATE ADDITIONAL ONSITE BORROW AREAS WITH OWNER AND ENGINEER. EXCESS MATERIAL, UNLESS NOTED OTHERWISE, IS THE PROPERTY OF THE CONTRACTOR AND IS TO BE MOVED AND DISPOSED OF OFFSITE IN ACCORDANCE WITH APPLICABLE LAWS.
4. CONTRACTOR SHALL PROVIDE TOPSOIL, SEED/SOD, AND MULCH IN ACCORDANCE WITH THE SITE PLAN.
5. ALL DISTURBED PVIOUS AREAS ARE TO RECEIVE .6 INCHES OF IMPORTED TOPSOIL, UNLESS NOTED OTHERWISE

DEWATERING NOTES

1. CONTRACTOR SHALL ANTICIPATE BASE FLOW AND STORMWATER RUNOFF IN THE CREEK CHANNEL. NO BID ITEM HAS BEEN PROVIDED FOR DEWATERING AS ALL DEWATERING WORK NECESSARY FOR CONSTRUCTION WILL BE CONSIDERED INCIDENTAL TO OTHER WORK.
2. CONTRACTOR SHALL OBTAIN APPLICABLE REQUIRED PERMITS (INCLUDING MN DNR WATER APPROPRIATION PERMIT) AND SUBMIT DEWATERING PLAN TO ENGINEER FOR REVIEW. DEWATERING MUST MEET PERMIT REQUIREMENTS AND BE ACCEPTED BEFORE STARTING CONSTRUCTION ACTIVITIES.
3. CONTRACTOR MUST DEWATER IN ACCORDANCE WITH THE PROJECT SWPPP AND NPDES PERMIT.
4. CONTRACTOR MUST DISCHARGE TURBID OR SEDIMENT-LADEN WATER RELATED TO DEWATERING OR BASIN DRAINING (E.G. PUMPED DISCHARGES, TRENCH/DITCH CUTS FOR DRAINAGE) TO A TEMPORARY OR PERMANENT SEDIMENTATION BASIN ON THE PROJECT SITE UNLESS INFESIBLE. CONTRACTOR MAY DISCHARGE FROM THE TEMPORARY OR PERMANENT SEDIMENTATION BASINS TO THE SURFACE WATERS IF THE BASIN WATER HAS BEEN VISUALLY CHECKED TO ENSURE ADEQUATE TREATMENT HAS BEEN OBTAINED IN THE BASIN AND THAT NUISANCE CONDITIONS (SEE MINNESOTA RULES CHAPTER 7050.0210, SUBPART 2) WILL NOT RESULT FROM THE DISCHARGE. IF THE WATER CANNOT BE DISCHARGED TO A SEDIMENTATION BASIN PRIOR TO ENTERING THE SURFACE WATER, IT MUST BE TREATED WITH THE APPROPRIATE BMPs (E.G. SILT BAGS), SUCH THAT THE DISCHARGE DOES NOT ADVERSELY AFFECT THE RECEIVING WATER OR DOWNSTREAM PROPERTIES. IF THE CONTRACTOR MUST DISCHARGE WATER THAT CONTAINS OIL OR GREASE, THE CONTRACTOR MUST USE AN OIL-WATER SEPARATOR OR SUITABLE FILTRATION DEVICE (E.G. CARTRIDGE FILTERS, ABSORBENTS PADS) PRIOR TO DISCHARGING THE WATER. THE CONTRACTOR MUST ENSURE THAT DISCHARGE POINTS ARE ADEQUATELY PROTECTED FROM EROSION AND SCOUR. THE DISCHARGE MUST BE DISPERSED OVER NATURAL ROCK RIPRAP, SANDBAGS, PLASTIC SHEETING, OR OTHER ACCEPTED ENERGY DISSIPATION MEASURES.
5. CONTRACTOR MUST DISCHARGE WATER FROM DEWATERING OR BASIN DRAINING ACTIVITIES IN A MANNER THAT DOES NOT CAUSE NUISANCE CONDITIONS, EROSION IN RECEIVING CHANNELS OR ON DOWN SLOPE PROPERTIES, OR INUNDATION IN WETLANDS CAUSING SIGNIFICANT ADVERSE IMPACT TO THE WETLAND.
6. IF THE CONTRACTOR IS USING FILTERS WITH BACKWASH WATER, THE CONTRACTOR MUST HAUL THE BACKWASH WATER AWAY FOR DISPOSAL, RETURN THE BACKWASH WATER TO THE BEGINNING OF THE TREATMENT PROCESS, OR INCORPORATE THE BACKWASH WATER INTO THE SITE IN A MANNER THAT DOES NOT CAUSE EROSION. THE CONTRACTOR MAY DISCHARGE BACKWASH WATER TO THE SANITARY SEWER IF PERMISSION IS GRANTED BY THE SANITARY SEWER AUTHORITY. THE CONTRACTOR MUST REPLACE AND CLEAN THE FILTER MEDIA USED IN DEWATERING DEVICES WHEN REQUIRED TO RETAIN ADEQUATE FUNCTION.

TREE PRESERVATION NOTES

1. CONTRACTOR SHALL PROTECT EXISTING TREES THAT ARE NOT TO BE REMOVED. DO NOT PERFORM ACTIONS WITHIN THE DRIP LINE AREA THAT MAY HARM THE TREE AND COMPACT THE SOIL, INCLUDING EXCAVATION, STORING MATERIALS, PARKING AND TRAFFIC DURING CONSTRUCTION. WHERE CONSTRUCTION REQUIRES DISTURBANCE WITHIN THE PROTECTED AREAS, DISTURB THE ROOT ZONE AS LITTLE AS POSSIBLE.
2. WHEN TREE ROOTS ARE ENCOUNTERED THAT MUST BE REMOVED, CONTRACTOR SHALL CUT ROOTS CLEANLY AS FAR FROM THE TREE AS POSSIBLE AND IMMEDIATELY WATER AND BACKFILL OVER THE ROOTS TO PREVENT DRYING.

HORIZONTAL AND VERTICAL CONTROL NOTES

1. THE HORIZONTAL CONTROL FOR THIS PLAN IS NAD83 HENNEPIN COUNTY COORDINATES SYSTEM US FOOT.
2. THE VERTICAL CONTROL FOR THIS PLAN IS NAVD88



P.O. BOX 448
VICTORIA, MN 55386
PHONE: (952) 261-9990
WWW.MIDWESTWETLANDS.COM

CERTIFICATION:
I HEREBY CERTIFY THAT THIS PLAN SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

LICENSE NO.: _____
DATE: _____

SUB CONSULTANT:

ISSUE NO.:	1	2										

DATE:	DESCRIPTION:
08/17/2022	60% PLAN SET
09/28/2022	90% PLAN SET

PLYMOUTH CREEK REPAIR
12615 24TH AVE N & 12621 24TH AVE N
PLYMOUTH, MN 55441

PROJECT TITLE:

CLIENT:



3400 PLYMOUTH BLVD
PLYMOUTH, MN 55447
PHONE: 763-509-5000
WWW.PLYMOUTHMN.COM

PROJECT NO.: 0017-01

DWN BY: PAG CHKD BY: LNJ APPD BY: LNJ

ISSUE DATE: 09/28/2022

ISSUE NO.: 2

SHEET TITLE:

GENERAL NOTES

SHEET NO.:

G-102

NOT FOR CONSTRUCTION

DATE	DESCRIPTION	ISSUE NO.
08/17/2022	60% PLAN SET	1
09/28/2022	90% PLAN SET	2

PLYMOUTH CREEK REPAIR
12615 24TH AVE N & 12621 24TH AVE N
PLYMOUTH, MN 55441

PROJECT TITLE:

CLIENT:



3400 PLYMOUTH BLVD
PLYMOUTH, MN 55447
PHONE: 763-509-5000
WWW.PLYMOUTHMN.COM

PROJECT NO.: 0017-01

DWN BY: PAG CHKD BY: LNJ APP'D BY: LNJ

ISSUE DATE: 09/28/2022

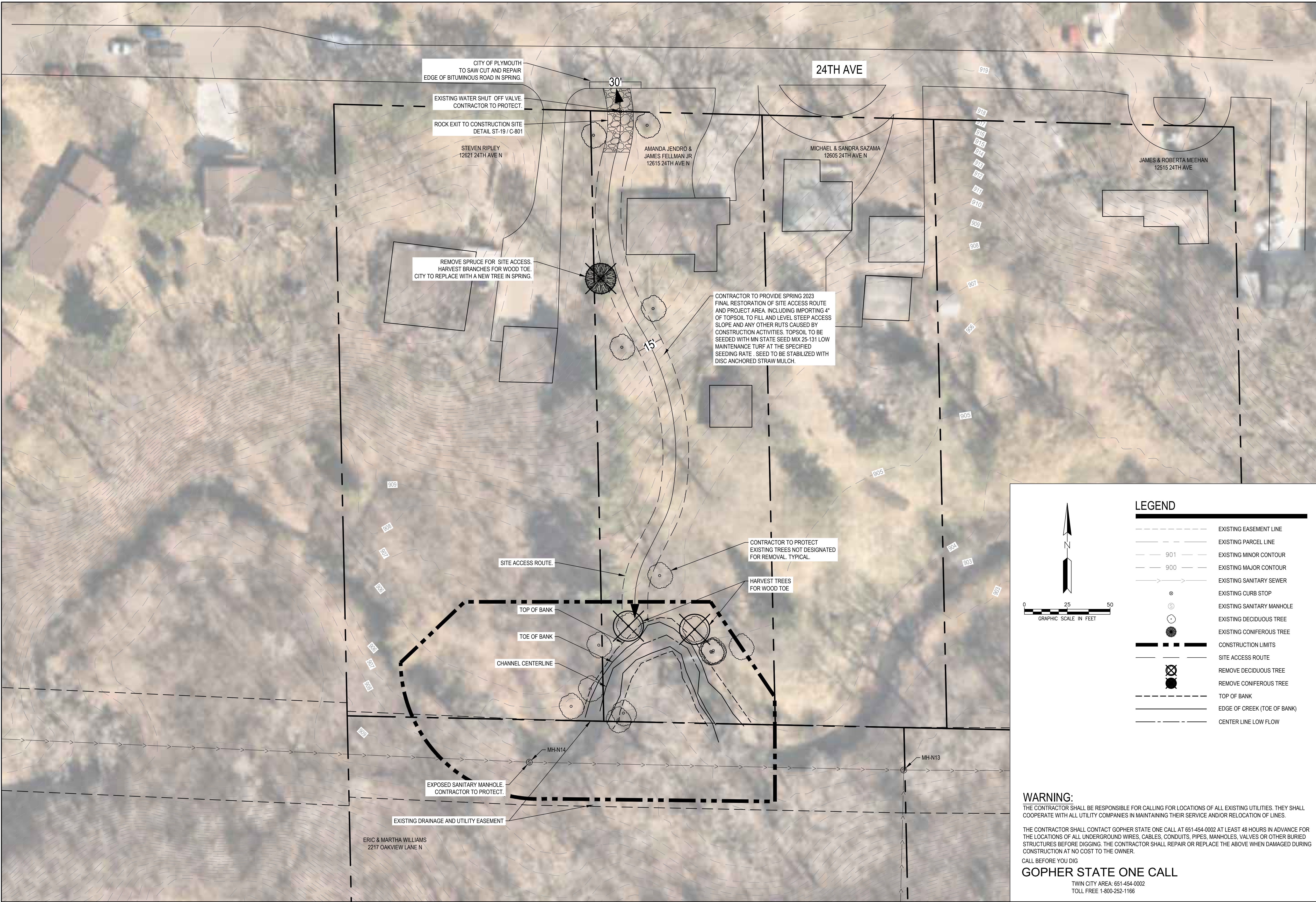
ISSUE NO.: 2

SHEET TITLE:

SITE ACCESS PLAN

SHEET NO.:

C-101



LEGEND

- EXISTING EASEMENT LINE
- EXISTING PARCEL LINE
- 901 EXISTING MINOR CONTOUR
- 900 EXISTING MAJOR CONTOUR
- EXISTING SANITARY SEWER
- EXISTING CURB STOP
- EXISTING SANITARY MANHOLE
- EXISTING DECIDUOUS TREE
- EXISTING CONIFEROUS TREE
- CONSTRUCTION LIMITS
- SITE ACCESS ROUTE
- REMOVE DECIDUOUS TREE
- REMOVE CONIFEROUS TREE
- TOP OF BANK
- EDGE OF CREEK (TOE OF BANK)
- CENTER LINE LOW FLOW

WARNING:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CALL BEFORE YOU DIG
GOPHER STATE ONE CALL
TWIN CITY AREA: 651-454-0002
TOLL FREE 1-800-252-1166

Not For Construction

ISSUE NO.	DESCRIPTION	DATE
1	60% PLAN SET	08/17/2022
2	90% PLAN SET	09/28/2022

ISSUE NO.	DESCRIPTION	DATE
1	60% PLAN SET	08/17/2022
2	90% PLAN SET	09/28/2022

PLYMOUTH CREEK REPAIR
12615 24TH AVE N & 12621 24TH AVE N
PLYMOUTH, MN 55441

PROJECT TITLE:
CLIENT:



3400 PLYMOUTH BLVD
PLYMOUTH, MN 55447
PHONE: 763-509-5000
WWW.PLYMOUTHMN.COM

PROJECT NO.: 0017-01

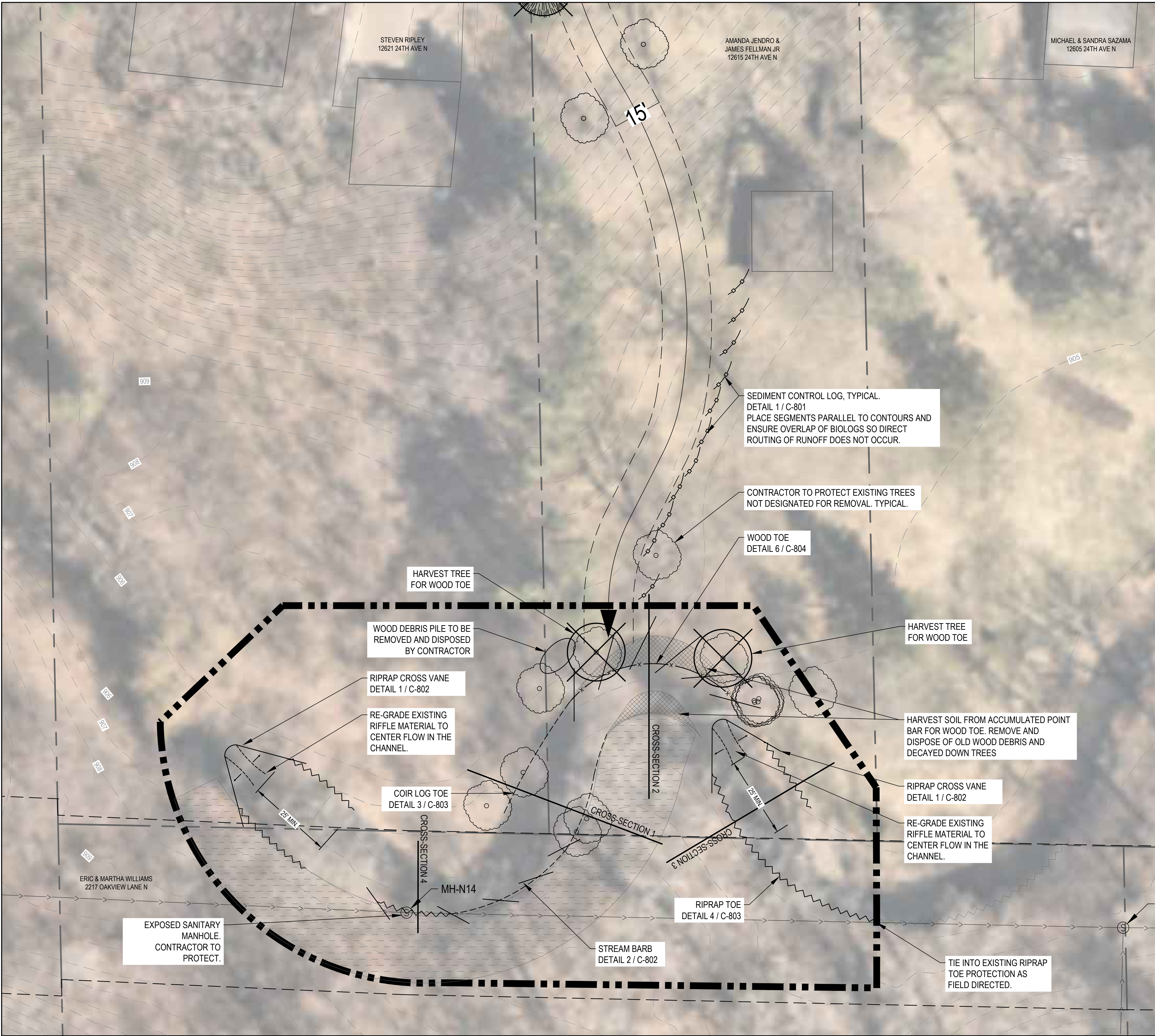
DWN BY: PAG
CHKD BY: LNJ
APPD BY: LNJ

ISSUE DATE: 09/28/2022

ISSUE NO.: 2

SHEET TITLE:
SITE PLAN

SHEET NO.:
C-102



SEDIMENT CONTROL LOG, TYPICAL.
DETAIL 1 / C-801
PLACE SEGMENTS PARALLEL TO CONTOURS AND ENSURE OVERLAP OF BIOLOGS SO DIRECT ROUTING OF RUNOFF DOES NOT OCCUR.

CONTRACTOR TO PROTECT EXISTING TREES NOT DESIGNATED FOR REMOVAL. TYPICAL.

WOOD TOE
DETAIL 6 / C-804

HARVEST TREE FOR WOOD TOE

WOOD DEBRIS PILE TO BE REMOVED AND DISPOSED BY CONTRACTOR

RIPRAP CROSS VANE
DETAIL 1 / C-802

RE-GRADE EXISTING RIFFLE MATERIAL TO CENTER FLOW IN THE CHANNEL.

COIR LOG TOE
DETAIL 3 / C-803

CROSS SECTION 4

MH-N14

EXPOSED SANITARY MANHOLE.
CONTRACTOR TO PROTECT.

STREAM BARB
DETAIL 2 / C-802

RIPRAP TOE
DETAIL 4 / C-803

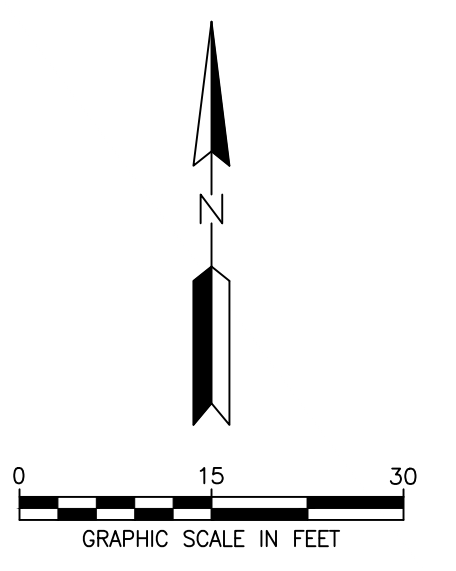
HARVEST TREE FOR WOOD TOE

HARVEST SOIL FROM ACCUMULATED POINT BAR FOR WOOD TOE. REMOVE AND DISPOSE OF OLD WOOD DEBRIS AND DECAYED DOWN TREES

RIPRAP CROSS VANE
DETAIL 1 / C-802

RE-GRADE EXISTING RIFFLE MATERIAL TO CENTER FLOW IN THE CHANNEL.

TIE INTO EXISTING RIPRAP TOE PROTECTION AS FIELD DIRECTED.



LEGEND

---	EXISTING EASEMENT LINE
---	EXISTING PARCEL LINE
901	EXISTING MINOR CONTOUR
900	EXISTING MAJOR CONTOUR
---	EXISTING SANITARY SEWER
○	EXISTING CURB STOP
○	EXISTING SANITARY MANHOLE
○	EXISTING DECIDUOUS TREE
○	EXISTING CONIFEROUS TREE
---	CONSTRUCTION LIMITS
---	SITE ACCESS ROUTE
○	REMOVE DECIDUOUS TREE
○	REMOVE CONIFEROUS TREE
---	COIR LOG TOE & RE-GRADE BANK
---	RIPRAP TOE
x	WOOD TOE
---	SEDIMENT CONTROL LOG
---	BUCKTHORN REMOVAL & TREATMENT

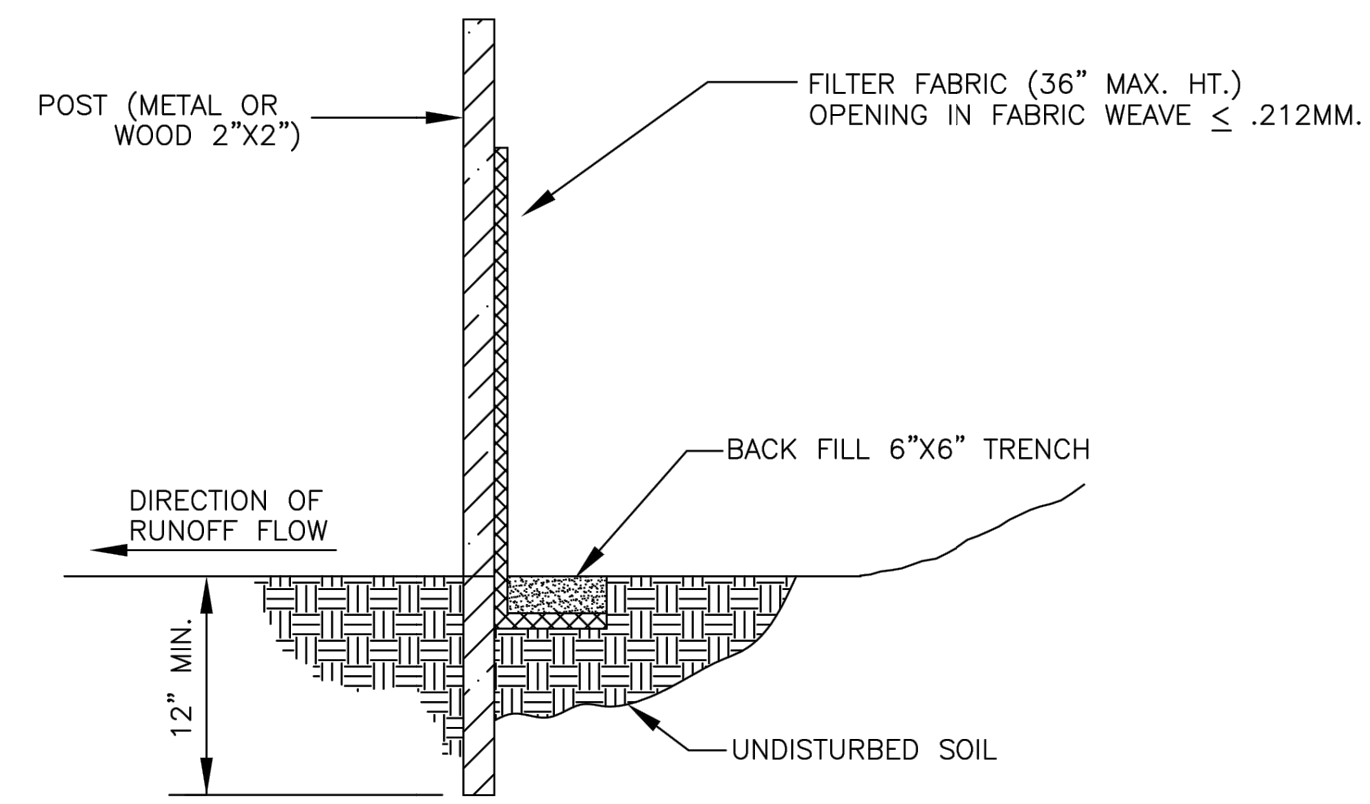
WARNING:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND/OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

CALL BEFORE YOU DIG
GOPHER STATE ONE CALL
TWIN CITY AREA: 651-454-0002
TOLL FREE 1-800-252-1166

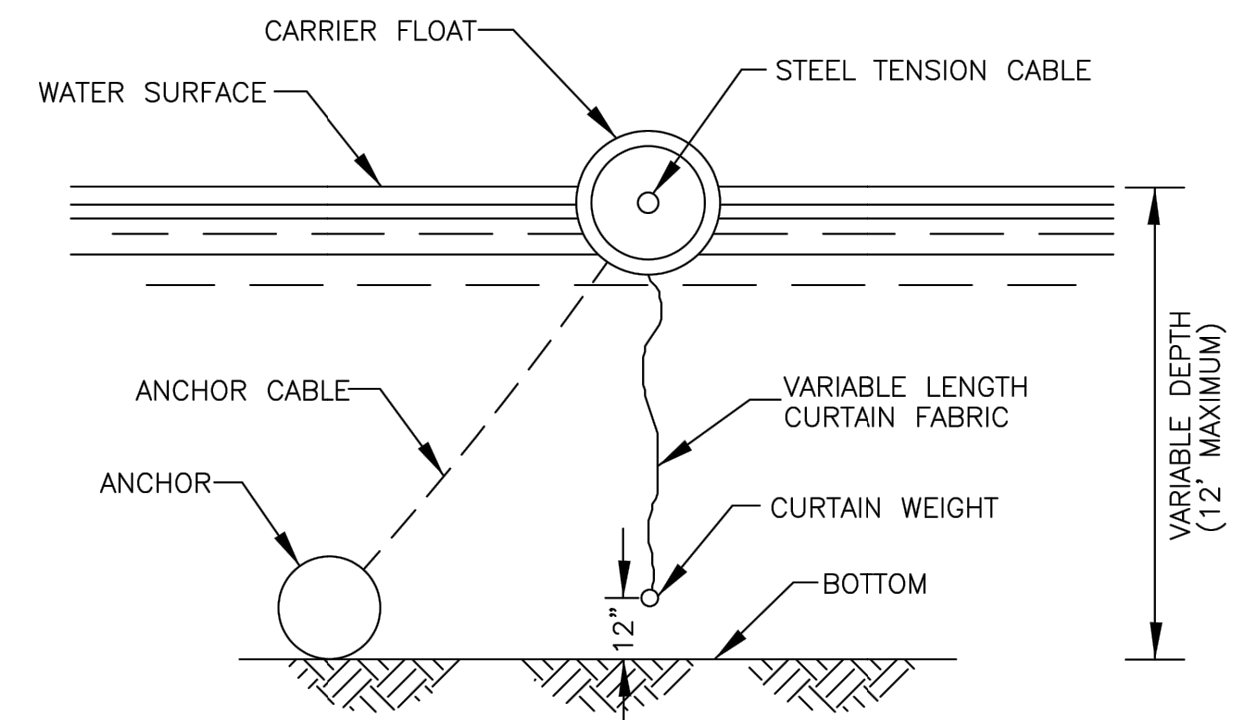
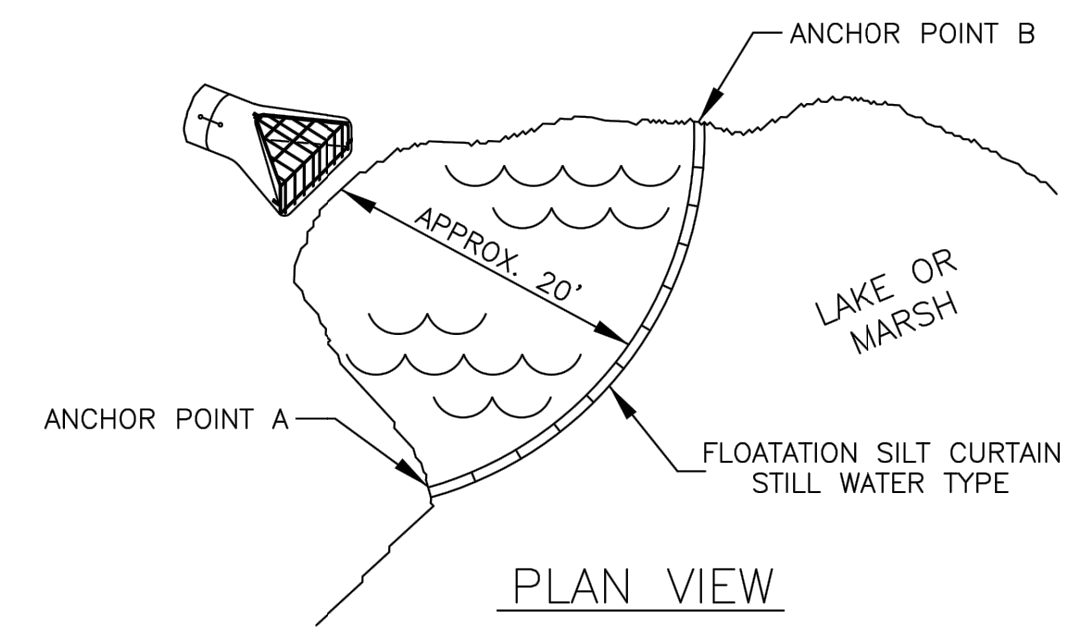
NOTES:

1. DIG A 6"x6" TRENCH ALONG THE INTENDED FENCE LINE.
2. DRIVE ALL POSTS INTO THE GROUND AT THE DOWNHILL SIDE OF THE TRENCH.
3. LAY OUT SILT FENCE ON THE UPHILL SIDE ALONG THE FENCE LINE, AND BACK FILL.
4. WOOD POSTS MAY BE SPACED UP TO 5 FEET APART. STEEL POSTS MAY BE SPACED UP TO 6 FEET APART
5. REMOVE SILT FENCE AFTER TURF IS ESTABLISHED.



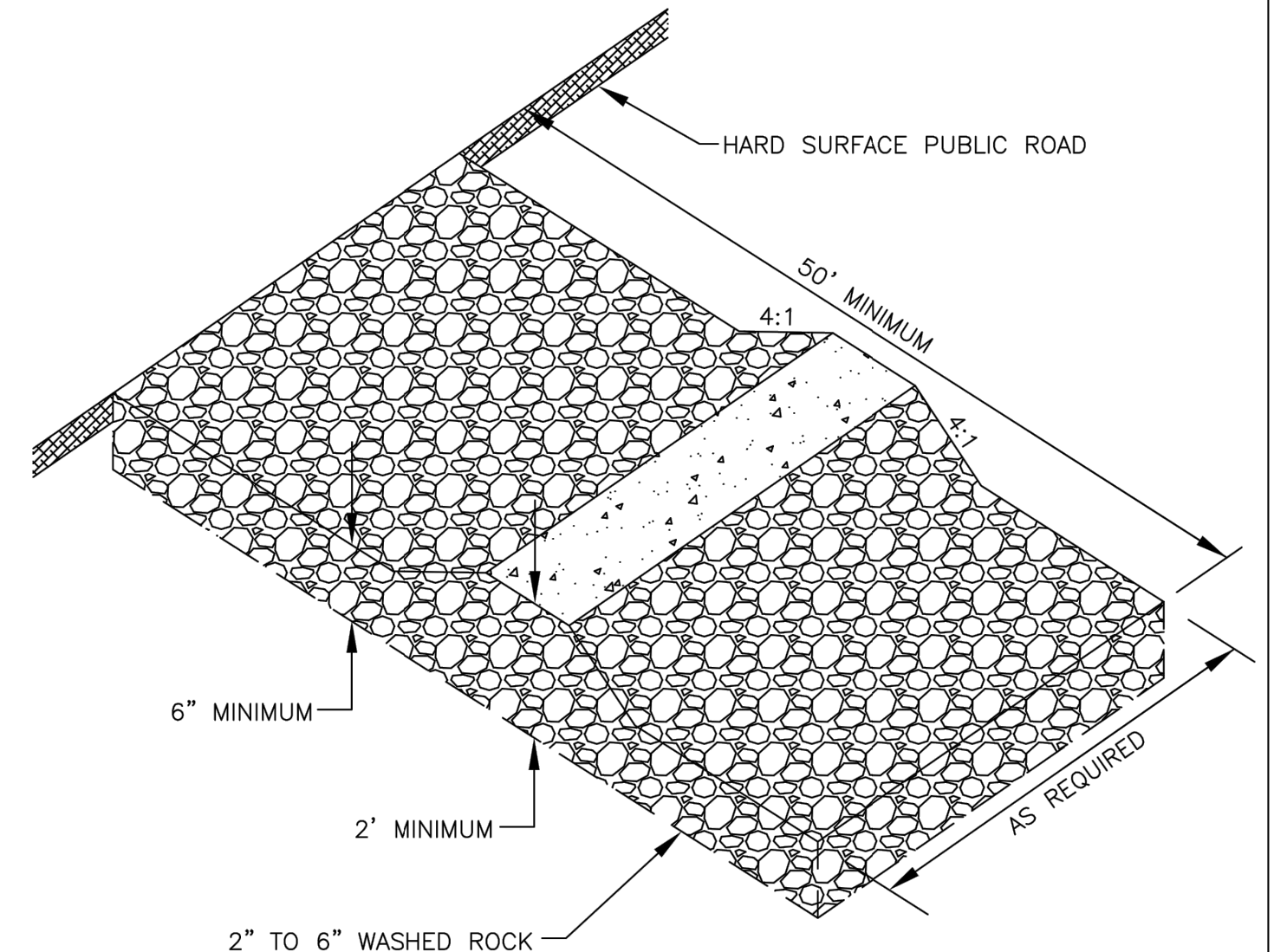
STANDARD DETAILS
SILT FENCE DETAIL
CITY OF PLYMOUTH

PUBLISHED 1-22
CITY PL. NO. ST-18
REVISED 1-20



STANDARD DETAILS
FLOATATION SILT CURTAIN DETAIL
CITY OF PLYMOUTH

PUBLISHED 1-22
CITY PL. NO. ST-17
REVISED 3-16

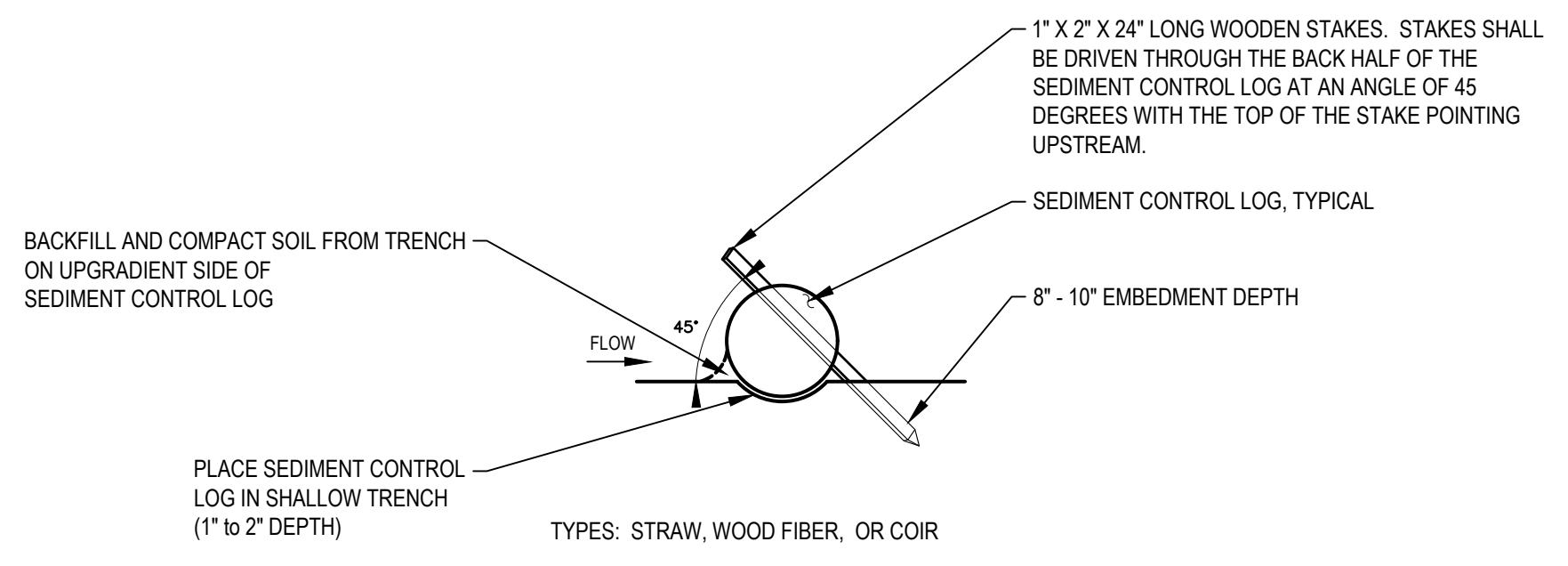


NOTES:
ROCK SHOULD BE 2" TO 6" IN SIZE SUCH AS WASHED ROCK OR CRUSHED CONCRETE
A GEOTEXTILE FABRIC MAY BE USED UNDER THE ROCK TO PREVENT MIGRATION OF THE UNDERLYING SOIL INTO THE STONE.

STANDARD DETAILS
ROCK EXIT TO CONSTRUCTION SITE
CITY OF PLYMOUTH

PUBLISHED 1-22
CITY PL. NO. ST-19
REVISED 1-20

NOTE: OVERLAP ADJACENT LOGS A MINIMUM OF 12"



1
C-801 SEDIMENT CONTROL LOGS

CERTIFICATION:
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

LICENSE NO.:
DATE:

SUB CONSULTANT:

ISSUE NO.:	1	2
------------	---	---

DESCRIPTION:	60% PLAN SET	90% PLAN SET
--------------	--------------	--------------

DATE:	08/17/2022	09/28/2022
-------	------------	------------

DATE:	08/17/2022	09/28/2022
DESCRIPTION:	60% PLAN SET	90% PLAN SET

STANDARD DETAILS
ROCK EXIT TO CONSTRUCTION SITE
CITY OF PLYMOUTH

PUBLISHED 1-22
CITY PL. NO. ST-19
REVISED 1-20

PLYMOUTH CREEK REPAIR
12615 24TH AVE N & 12621 24TH AVE N
PLYMOUTH, MN 55441



3400 PLYMOUTH BLVD
PLYMOUTH, MN 55447
PHONE: 763-509-5000
WWW.PLYMOUTHMN.COM

PROJECT NO.: 0017-01

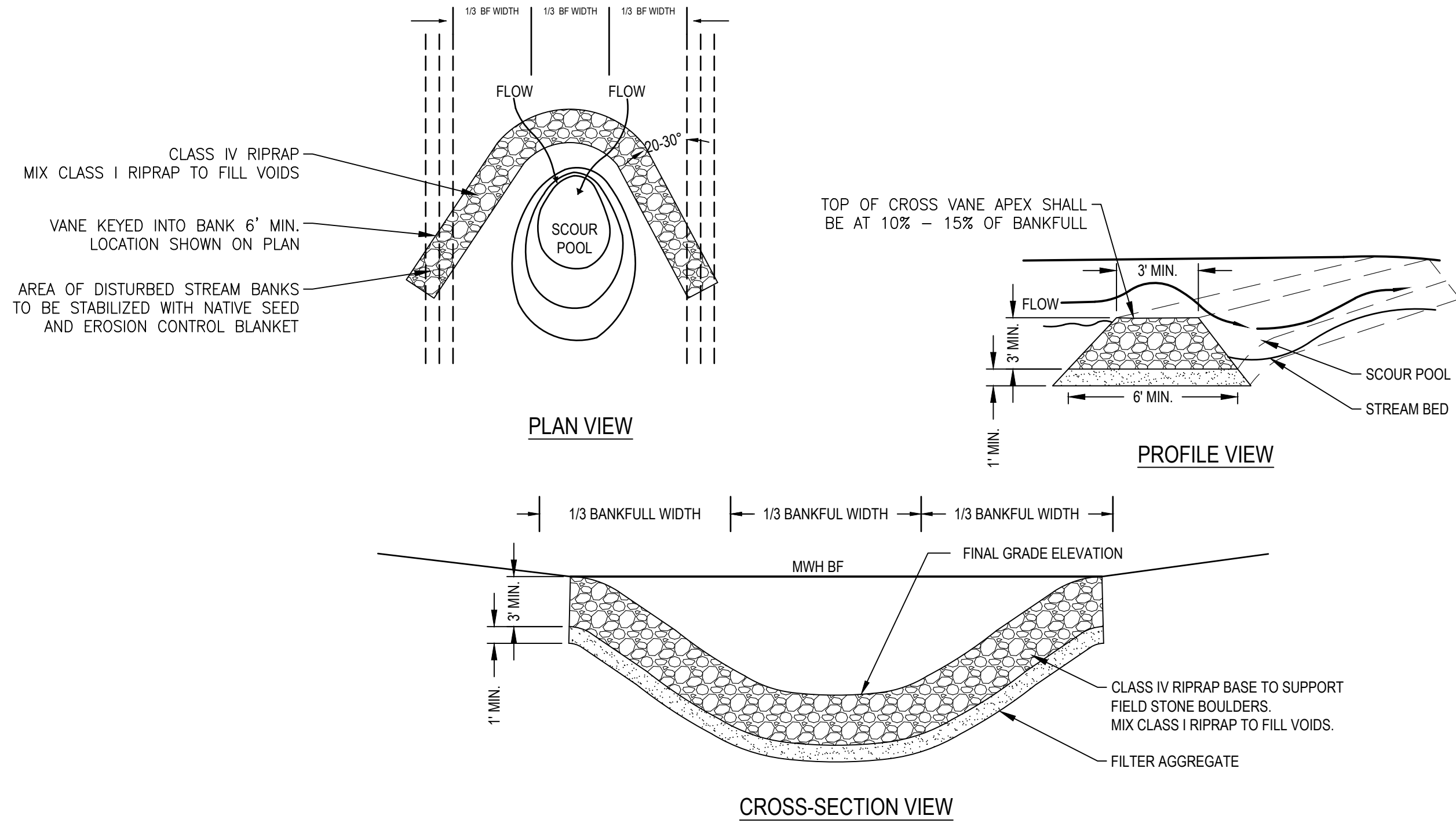
DWN BY: PAG
CHKD BY: LNJ
APPD BY: LNJ

ISSUE DATE: 09/28/2022

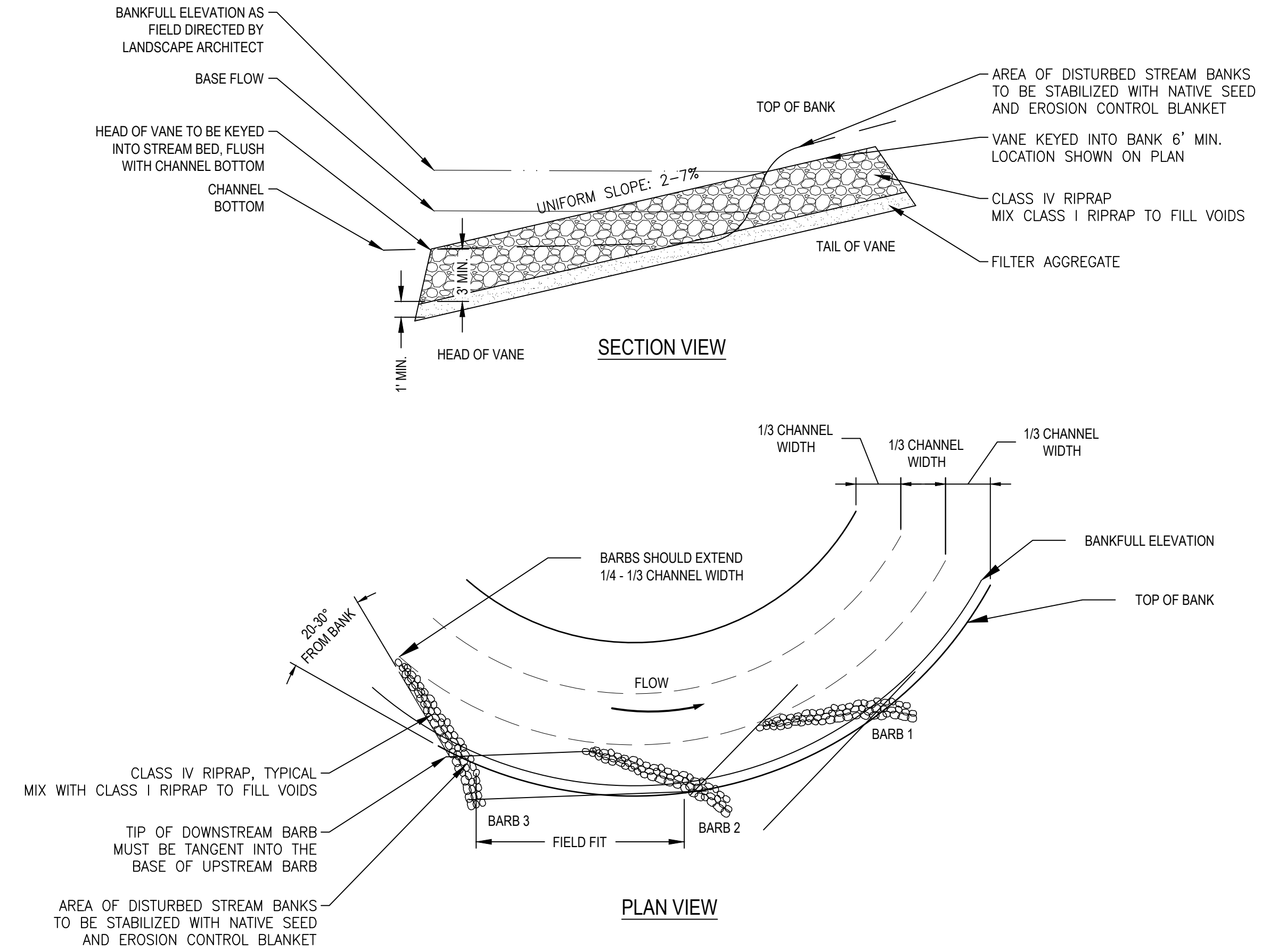
ISSUE NO.: 2

SHEET TITLE:
DETAILS

SHEET NO.:
C-801



1 RIPRAP CROSS VANE
C-802 NOT TO SCALE



2 RIPRAP STREAM BARB
C-802 NOT TO SCALE

CERTIFICATION:
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

LICENSE NO.:
DATE:

SUB CONSULTANT:

ISSUE NO.	DESCRIPTION	DATE
1	60% PLAN SET	08/17/2022
2	90% PLAN SET	09/28/2022

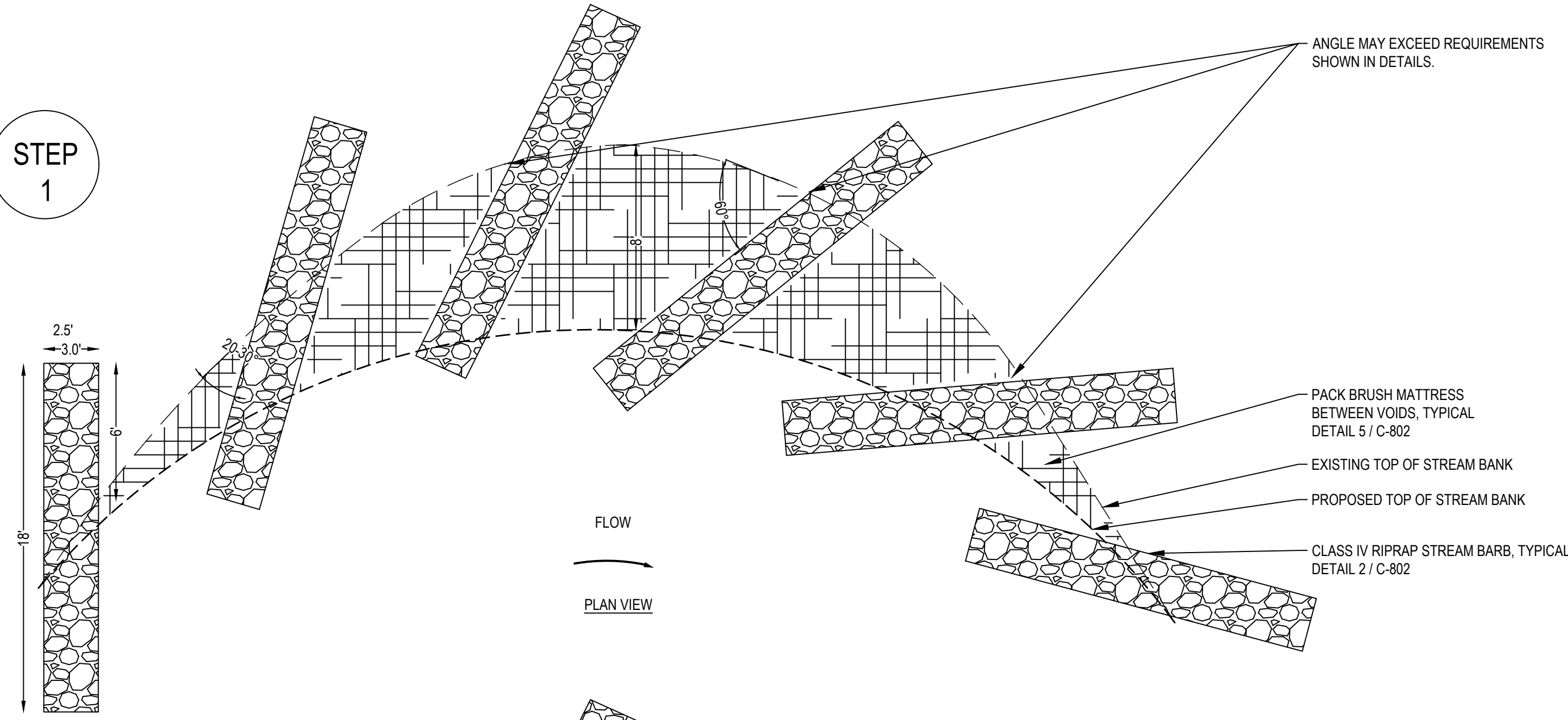
**PLYMOUTH CREEK
REPAIR**
12615 24TH AVE N & 12621 24TH AVE N
PLYMOUTH, MN 55441

CLIENT:
City of Plymouth
3400 PLYMOUTH BLVD
PLYMOUTH, MN 55447
PHONE: 763-509-5000
WWW.PLYMOUTHMN.COM

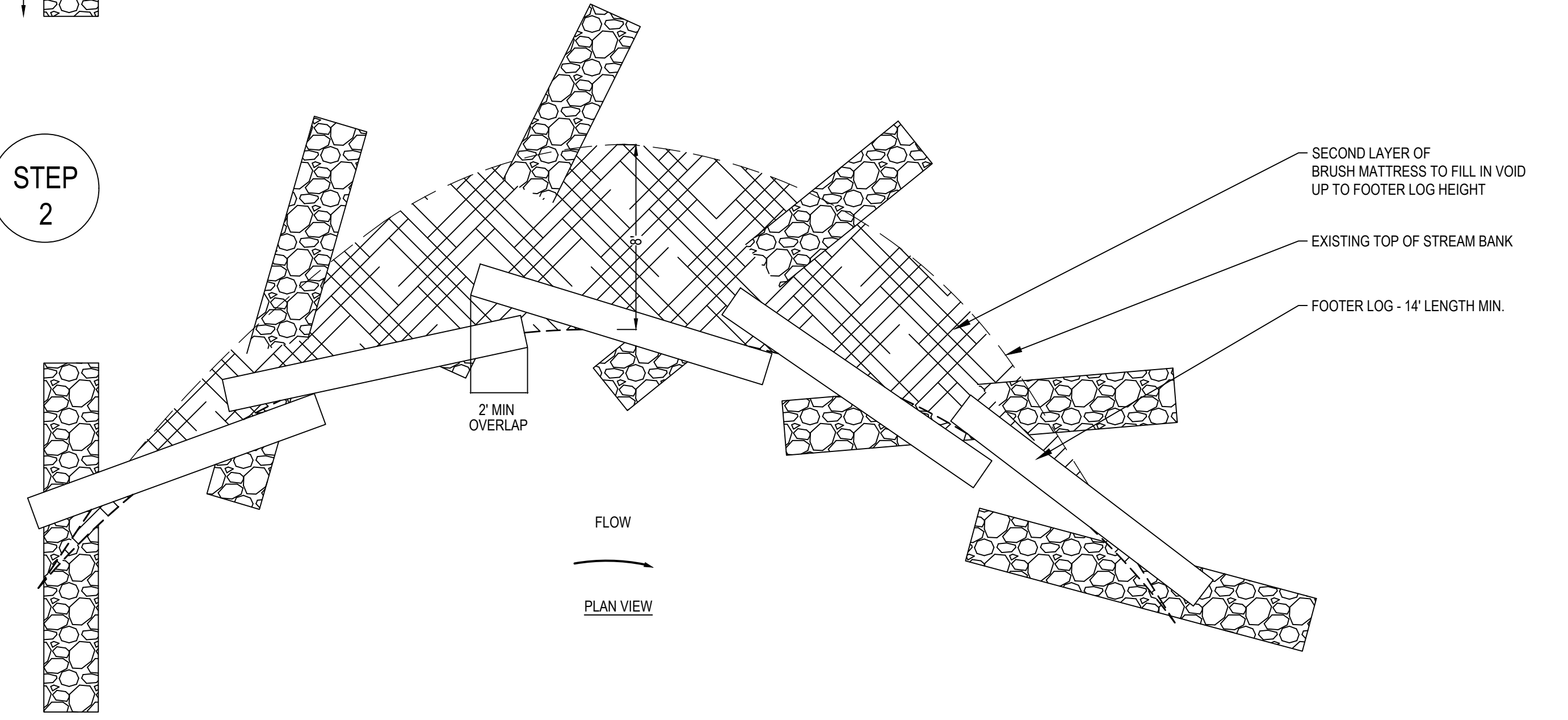
PROJECT NO.: 0017-01
DWN BY: PAG | CHKD BY: LNJ | APP'D BY: LNJ
ISSUE DATE: 09/28/2022
ISSUE NO.: 2

SHEET TITLE:
DETAILS
SHEET NO.:
C-802

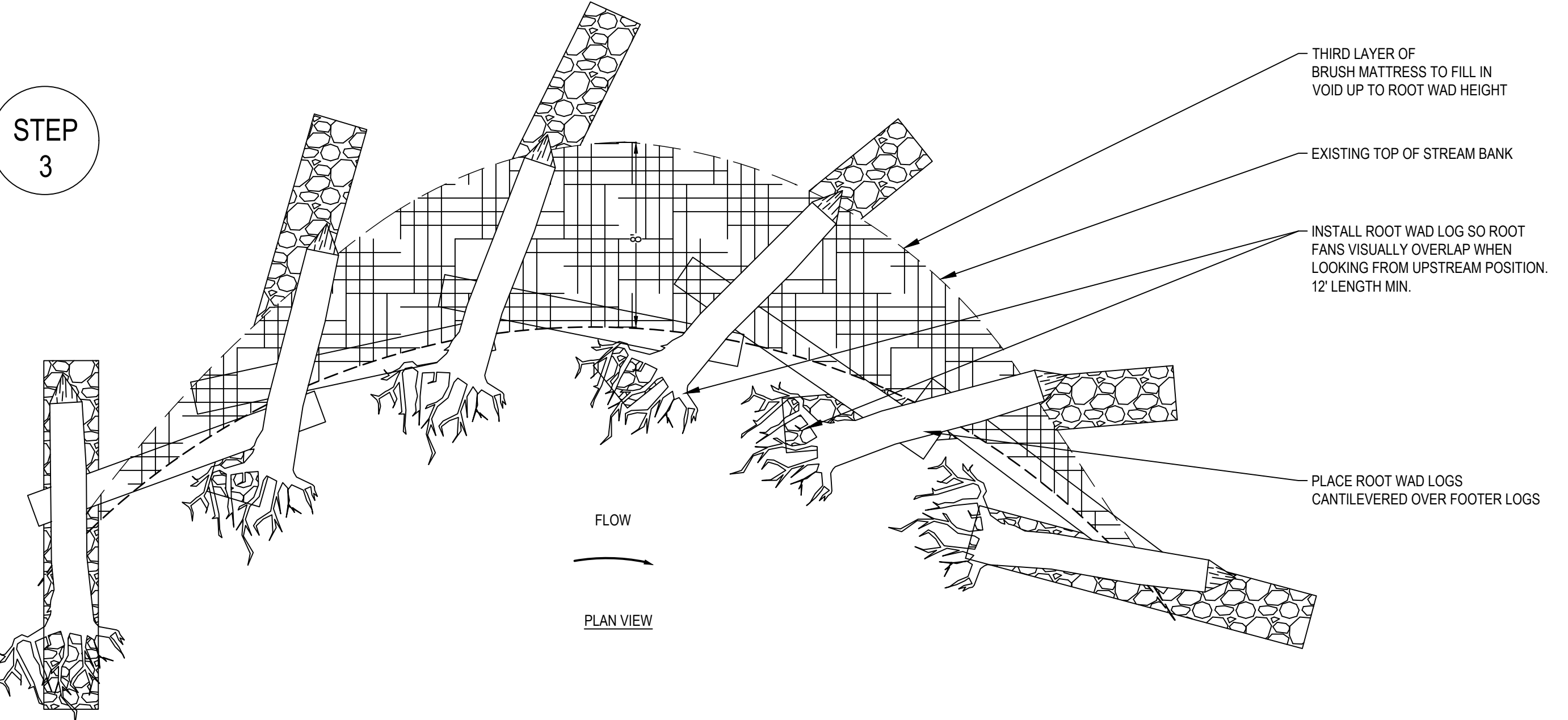
STEP 1



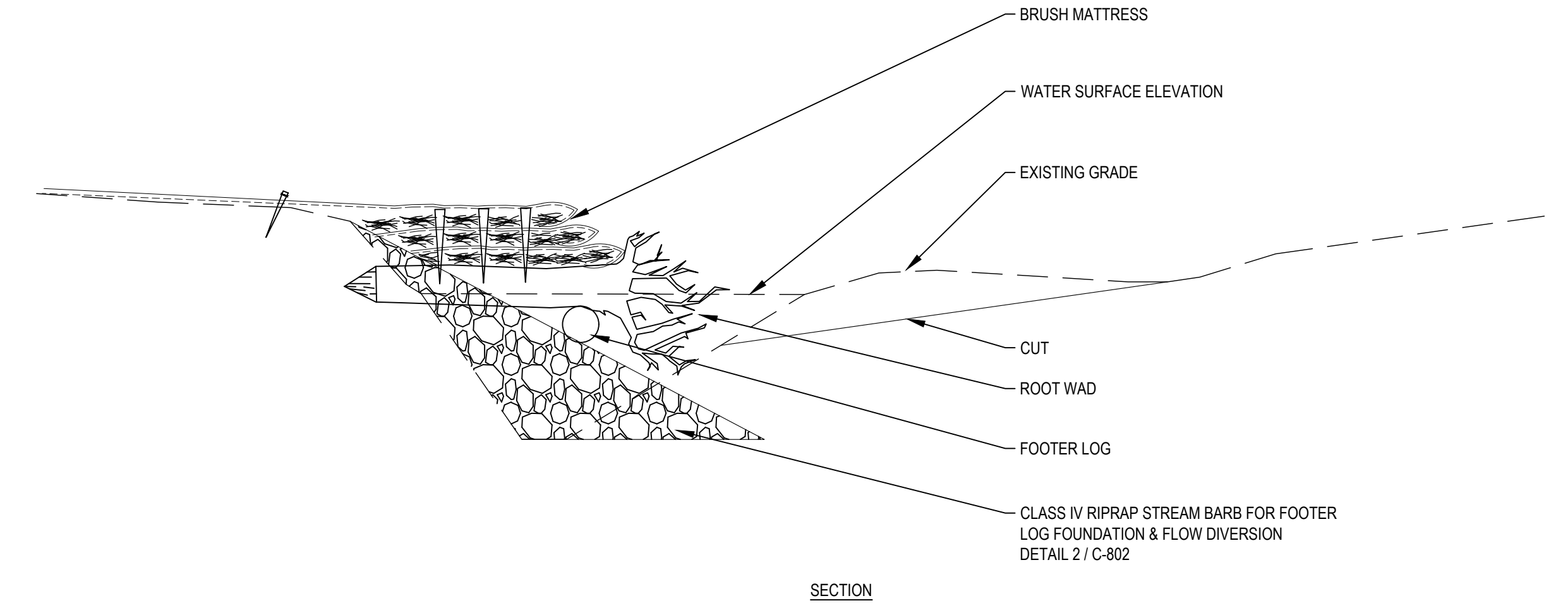
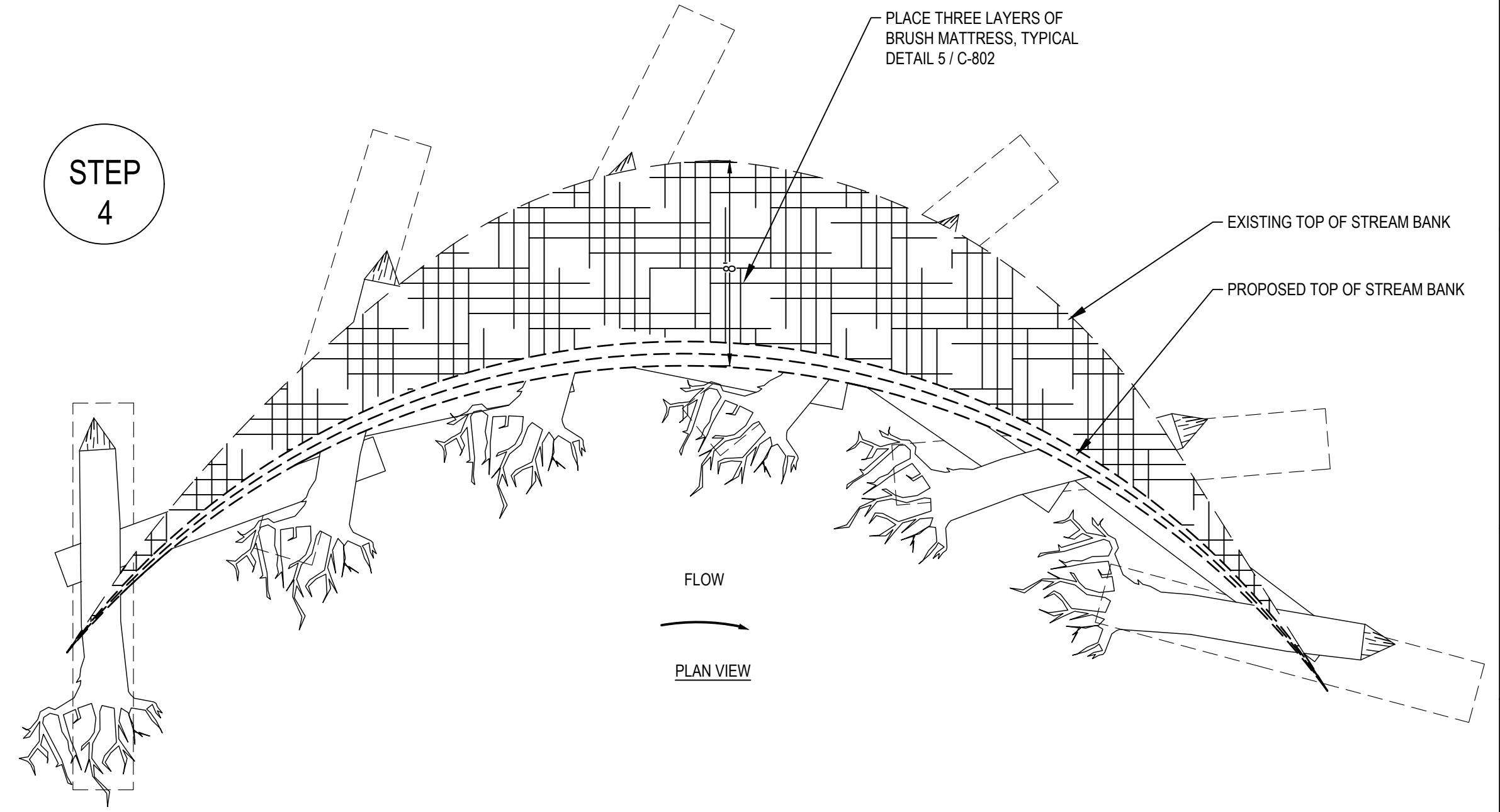
STEP 2



STEP 3



STEP 4



6 WOOD TOE CONSTRUCTION DETAILS
 C-804 NOT TO SCALE

MIDWEST WETLAND improvements
 P.O. BOX 448
 VICTORIA, MN 55386
 PHONE: (952) 261-9990
 WWW.MIDWESTWETLANDS.COM

CERTIFICATION:
 I HEREBY CERTIFY THAT THIS PLAN SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PROJECT TITLE: **PLYMOUTH CREEK REPAIR**
 12615 24TH AVE N & 12621 24TH AVE N
 PLYMOUTH, MN 55441

CLIENT: **City of Plymouth**
 3400 PLYMOUTH BLVD
 PLYMOUTH, MN 55447
 PHONE: 763-509-5000
 WWW.PLYMOUTHMN.COM

DATE	DESCRIPTION	ISSUE NO.
08/17/2022	60% PLAN SET	1
09/28/2022	90% PLAN SET	2

PROJECT NO.: 0017-01
 DWN BY: PAG CHKD BY: LNJ APPD BY: LNJ
 ISSUE DATE: 09/28/2022
 SHEET TITLE: **DETAILS**
 SHEET NO.: **C-804**