

# NEIGHBORHOOD DRAINAGE IMPROVEMENTS

## FRENCH RIDGE PARK, ST. MARY'S PARK, AND IVANHOE/PHEASANT HILLS NEIGHBORHOODS

PREPARED FOR:  
CITY OF PLYMOUTH, MN  
CITY PROJECT NO. 18015

### LEGEND - EXISTING

— FO — FO —	FIBER OPTIC
— GAS — GAS —	GASMAIN
—   —   —	WATERMAIN
— > — > —	SANITARY SEWER
— — — — —	STORM SEWER
— OHU — OHU —	OVERHEAD UTILITIES
— TEL — TEL —	TELEPHONE LINE
— ELE — ELE —	ELECTRIC LINE
— CTV — CTV —	CABLE LINE
— o — o — o —	GUARDRAIL
— □ — □ — □ —	WOODEN FENCELINE
— x — x — x —	CHAINLINK FENCELINE
— * — * — * —	BARBED WIRE FENCELINE
— - - - -	BLOCK RETAINING WALL
⊙	BOLLARD
— T —	SIGN
⊕	FLAG POLE
⊕	HANDICAP SYMBOL
⊕	HYDRANT
⊕	LIGHT
⊕	HANDHOLE
⊕	UTILITY MANHOLE
⊕	POWER POLE
⊕	AIR CONDITIONER
⊕	ELECTRIC BOX
⊕	ELECTRIC MANHOLE
⊕	ELECTRICAL METER
⊕	ELECTRIC TRANSFORMER
⊕	CABLE TV BOX
⊕	TELEPHONE BOX
⊕	TELEPHONE MANHOLE
⊕	TRAFFIC LIGHT
⊕	TRAFFIC SIGNAL
⊕	GAS METER
⊕	GAS VALVE
⊕	WATER MANHOLE
⊕	WATER METER
⊕	WATER VALVE
⊕	CATCH BASIN
⊕	CATCH BASIN - BEEHIVE
⊕	CLEAN OUT
⊕	SANITARY MANHOLE
⊕	STORM MANHOLE
⊕	FLARED END SECTION
⊕	SOIL BORING
⊕	FOUND IRON MONUMENT
⊕	CAST IRON MONUMENT
⊕	SET IRON MONUMENT

### SHEET INDEX

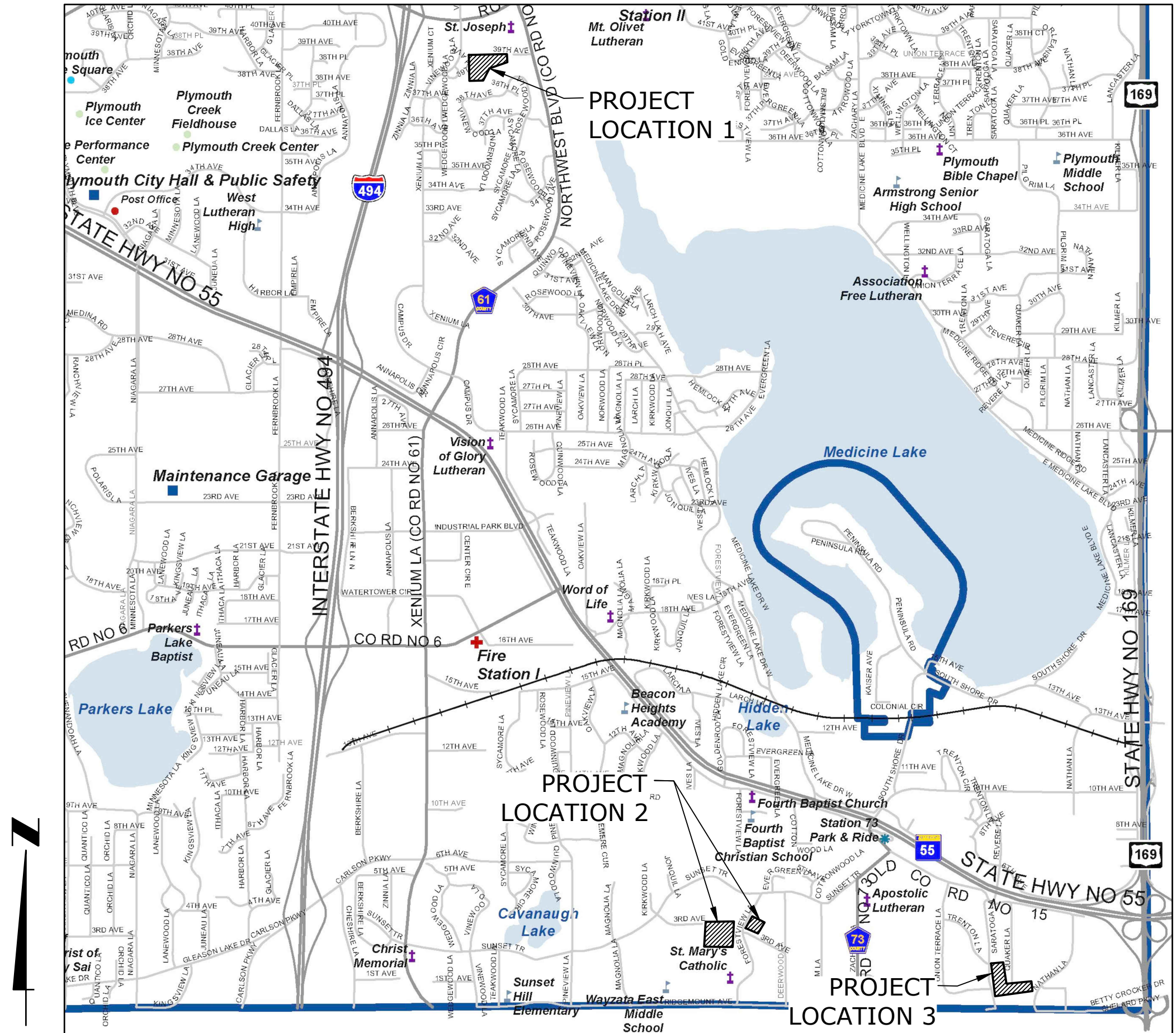
1	COVER SHEET
2	CONSTRUCTION PLAN: LOCATION 1 - FRENCH RIDGE PARK NEIGHBORHOOD
3	CONSTRUCTION PLAN: LOCATION 2 - ST. MARY'S PARK NEIGHBORHOOD
4	CONSTRUCTION PLAN: LOCATION 3 - IVANHOE-PHEASANT HILLS NEIGHBORHOOD
5	CONSTRUCTION DETAILS

### GENERAL NOTES

CONTRACTOR SHALL DETERMINE LOCATION OF EXISTING PUBLIC AND PRIVATE UTILITIES PRIOR TO CONSTRUCTION AND SHALL BE RESPONSIBLE FOR PRESERVING THESE. ANY REPAIRS NECESSARY DUE TO CONTRACTORS OPERATIONS SHALL BE MADE AT CONTRACTORS EXPENSE. BEFORE DIGGING CALL: GOPHER STATE ONE CALL (651) 454-0002.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL "C". THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINE FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF PLYMOUTH STANDARD SPECIFICATIONS.



LOCATION MAP  
NOT TO SCALE

**HTPO** Engineering • Surveying  
Landscape Architecture

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952-829-0700 • 952-829-7806 fax

HTPO PROJECT NO. 18-027

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.

Adam Pawelk  
Lic. No. \_\_\_\_\_ Date \_\_\_\_\_

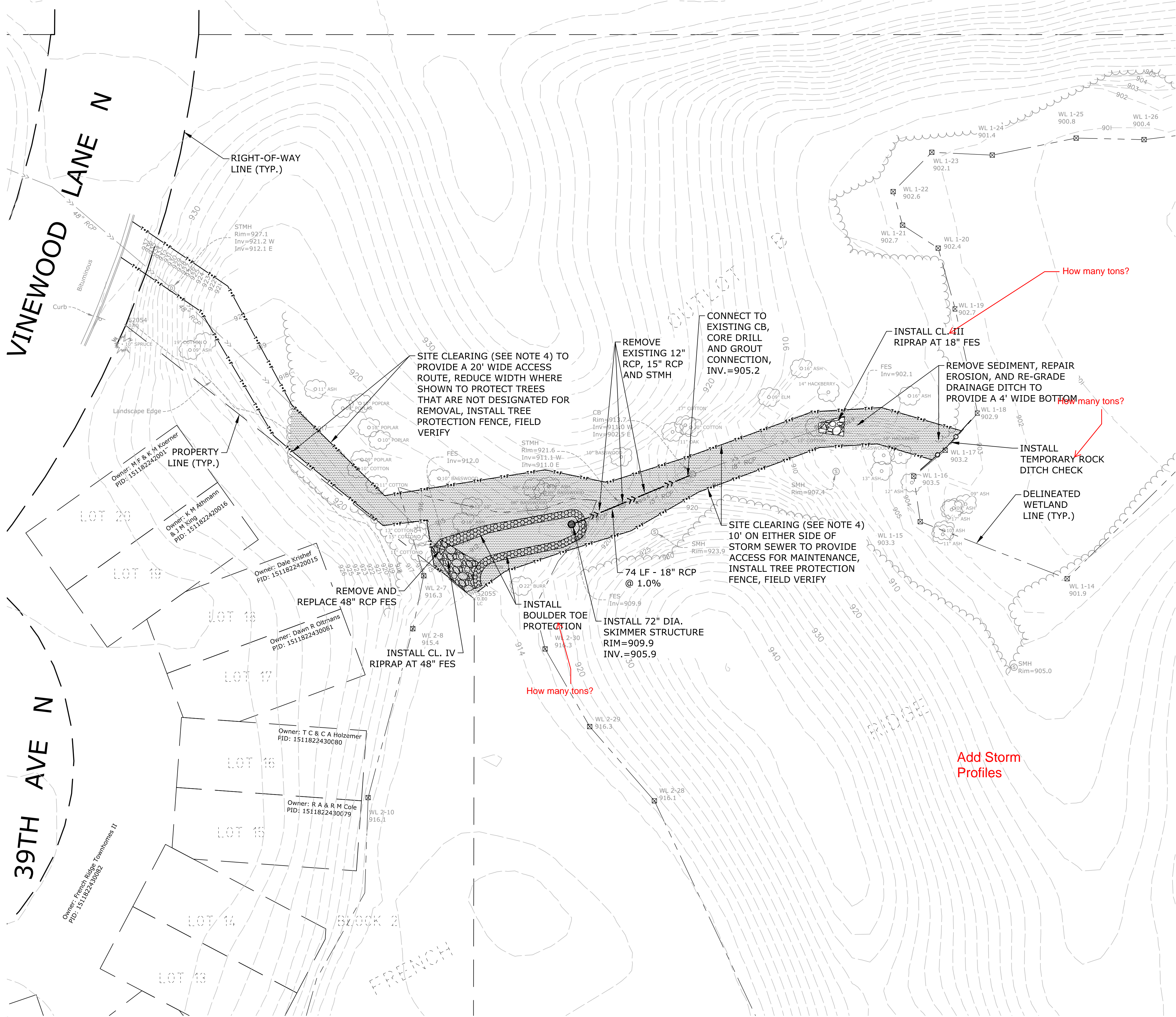
Date	Issues/Revisions
07-27-18	PRELIMINARY CITY REVIEW
08-15-18	NEIGHBORHOOD OPEN HOUSE
08-28-18	REGULATORY AGENCY REVIEW



**CALL BEFORE YOU DIG !**  
MINNESOTA LAW REQUIRES EXCAVATORS TO NOTIFY THE REGIONAL NOTIFICATION CENTER AT LEAST TWO (2) BUSINESS DAYS BUT NOT MORE THAN FOURTEEN (14) CALENDAR DAYS PRIOR TO EXCAVATION  
**GOPHER STATE ONE CALL**  
www.gopherstateonecall.org  
**1-800-252-1166**



FILE: P:\2018\18-027 - Plymouth Drainage Improvements\CAD\DWG\PLANS\DRG\18-027\_CIV-SITE-FRCH.dwg LAYOUT: 2  
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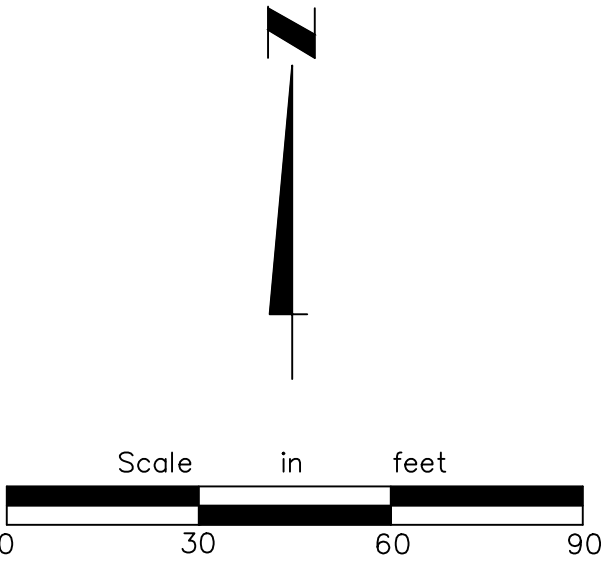
NOTES:

- THE EXISTING CONDITIONS ARE A COMPILATION OF FIELD SURVEYED LOCATIONS AND ELEVATIONS, MN TOO LIAR DATA, AND CITY AS-BUILT DOCUMENTS.
- EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AS SHOWN OR AS DIRECTED PRIOR TO COMMENCING CONSTRUCTION AND MAINTAINED THROUGHOUT CONSTRUCTION UNTIL SURFACE RESTORATION IS COMPLETE.
- COORDINATE SITE ACCESS WITH CITY TO MINIMIZE DISTURBANCE.
- SITE CLEARING INCLUDES BRUSH REMOVAL, REMOVAL OF DEAD, DISEASED, DISEASE SUSCEPTIBLE, AND LOW VALUE TREES, AND TREE PRUNING. ALL TREE REMOVAL SHALL BE FIELD VERIFIED AND APPROVED BY THE CITY PRIOR TO REMOVAL. PRUNE TREES AS DIRECTED TO OPEN UP CANOPY AND TO MINIMIZE DAMAGE TO TREES DURING CONSTRUCTION. ONLY TREES 8" DIAZ. OR GREATER ARE SHOWN.
- RESTORE SITE TO EXISTING CONDITIONS OR BETTER.
- DISTURBED GREENS AREAS SHALL BE RESTORED IN ACCORDANCE WITH MINOT 2575 AND INCLUDE INSTALLATION OF MIN. 4" TOPSOIL, SEED (MINOT 3876), TYPE 4 FERTILIZER GNP 0-10-20 (MINOT 3881) APPLIED AT A BULK RATE OF 120 LBS/AC, AND EROSION CONTROL BLANKET TYPE III (MINOT 3885). PRIOR TO PLACING TOPSOIL, SCARIFY COMPACTED SOILS TO A MIN. DEPTH OF 12" WHILE TAKING CARE TO AVOID UTILITIES, TREE ROOTS, AND OTHER EXISTING VEGETATION.
- SEED MIXES SHALL BE AS FOLLOWS:
  - CURRENTLY MAINTAINED AREAS - SEED MIX 25-131 APPLIED AT A RATE OF 220 LB/AC
  - DELINEATED WETLAND AREAS - SEED MIX 34-181 APPLIED AT A RATE OF 5 LB/AC
  - DRAINAGE DITCH AREAS - SEED MIX 34-261 APPLIED AT A RATE OF 32 LB/AC
  - ALL OTHER WOODED AREAS - SEED MIX 36-211 APPLIED AT A RATE OF 35 LB/AC (MINOT 3876)
- IF WEATHER CONDITIONS DO NOT ALLOW FOR THE PLACEMENT OF THE SEED AND BLANKET AS DETERMINED BY THE ENGINEER, DISTURBED AREAS SHALL BE TEMPORARILY RESTORED WITH TYPE 3 MULCH (MINOT 3882) AND SHALL BE INSTALLED BY WINTER MULCHING IN ACCORDANCE WITH MINOT 2575.3 C.7. FINAL RESTORATION AS NOTED ABOVE SHALL THEN OCCUR AFTER APRIL 15 OR AFTER THE SPRING SNOW MELT, WHICHEVER IS LATER.

LEGEND-PROPOSED:

- BOULDER TOE PROTECTION
- RIPRAP (FIELD STONE)
- SITE CLEARING AREA (SEE NOTE 4)
- TREE PROTECTION FENCE
- TEMPORARY ROCK DITCH CHECK
- SKIMMER STRUCTURE
- STORM PIPE

PRELIMINARY - NOT  
FOR CONSTRUCTION



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PROJECT NO.	18-027
DRAWN BY	ADC
DESIGN BY	AMP
CHECKED BY	

DATE	ISSUES / REVISIONS
07-27-18	PRELIMINARY CITY REVIEW
08-15-18	NEIGHBORHOOD OPEN HOUSE
08-28-18	REGULATORY AGENCY REVIEW

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.

LIC. NO. \_\_\_\_\_ DATE: \_\_\_\_\_

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COUNTY PROJECT NO.	
CITY PROJECT NO.	18015
CLIENT PROJECT NO.	

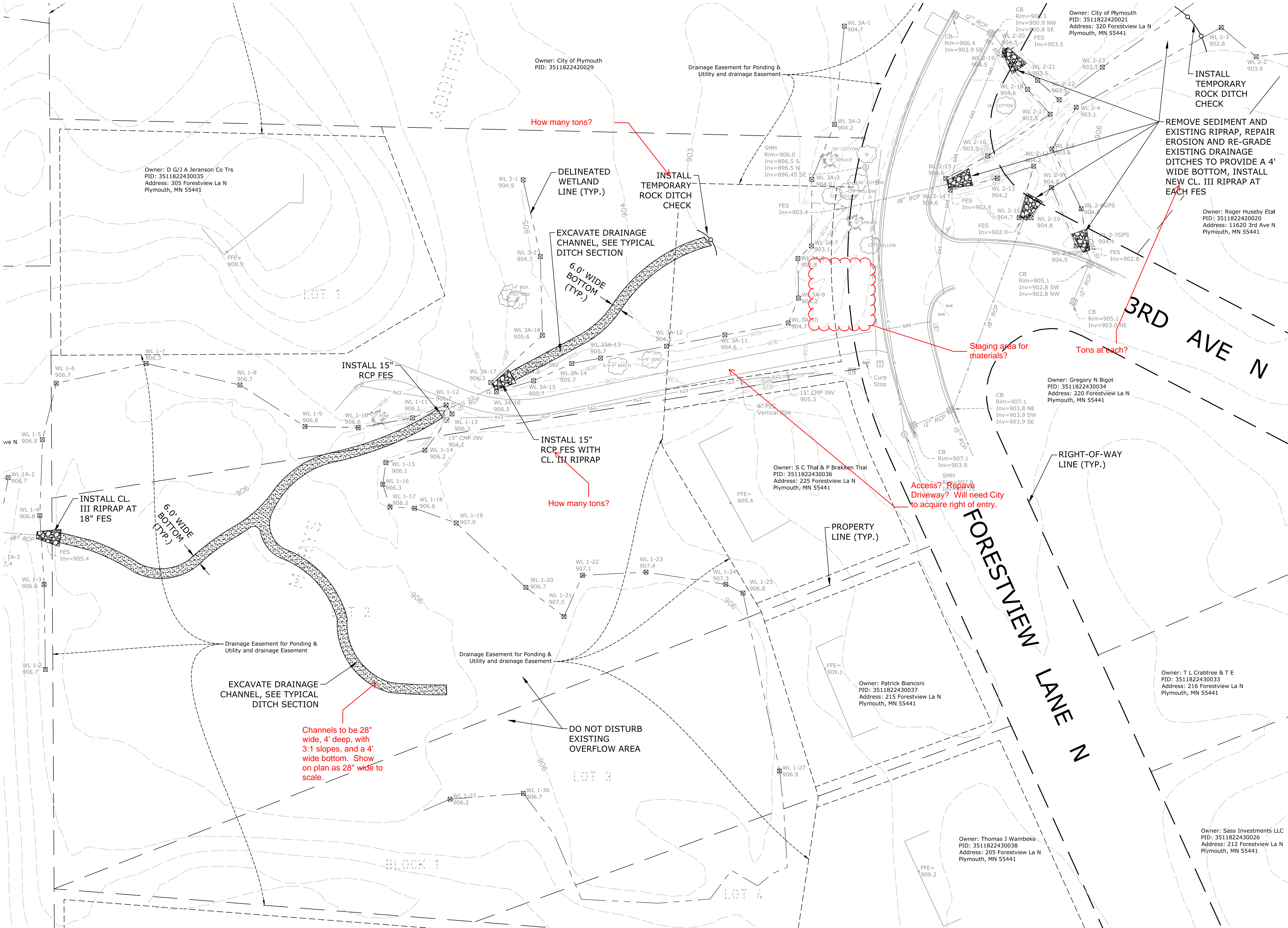
**CONSTRUCTION PLAN**  
LOCATION 1 - FRENCH RIDGE PARK NEIGHBORHOOD

**NEIGHBORHOOD DRAINAGE IMPROVEMENTS**  
PLYMOUTH, MN

SHEET **2**  
OF  
**5** SHEETS



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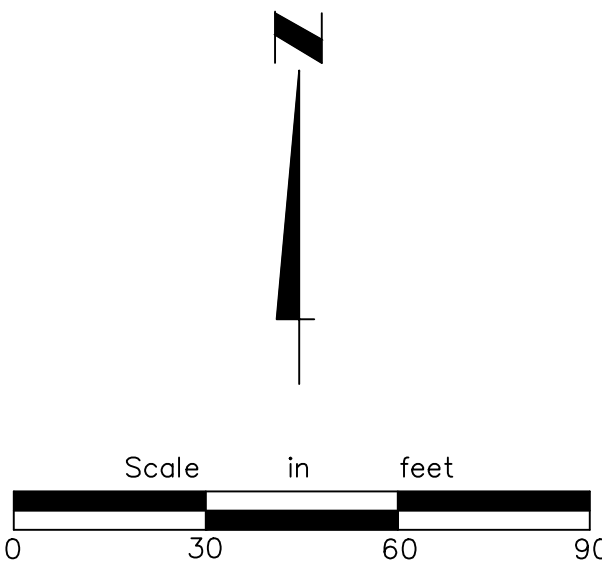
**NOTES:**

- THE EXISTING CONDITIONS ARE A COMPILATION OF FIELD SURVEYED LOCATIONS AND ELEVATIONS, MN TOPO LIDAR DATA, AND CITY AS-BUILT DOCUMENTS.
- EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO COMMENCING CONSTRUCTION AND MAINTAINED THROUGHOUT CONSTRUCTION UNTIL SURFACE RESTORATION IS COMPLETE.
- COORDINATE SITE ACCESS AND STAGING AREAS WITH CITY TO MINIMIZE DISTURBANCE. PROTECT EXISTING SITE FEATURES IN-PLACE, COORDINATE WITH CITY AND/OR PROPERTY OWNER IF RELOCATION OF FEATURES IS NEEDED FOR CONSTRUCTION.
- ALL TREE REMOVAL SHALL BE FIELD VERIFIED AND APPROVED BY THE CITY PRIOR TO REMOVAL. PRUNE TREES AS DIRECTED TO MINIMIZE DAMAGE TO TREES. ONLY TREES 8" DIA. OR GREATER ARE SHOWN.
- RESTORE SITE TO EXISTING CONDITIONS OR BETTER.
- DISTURBED GREENSPACE AREAS SHALL BE RESTORED IN ACCORDANCE WITH MNDOT 2575 AND INCLUDE INSTALLATION OF MIN. 4" TOPSOIL, SEED (MNDOT 3876), TYPE 4 FERTILIZER NPK 0-10-20 (MNDOT 3881) APPLIED AT A BULK RATE OF 120 LBS/AC, AND EROSION CONTROL BLANKET TYPE III (MNDOT 3885). PRIOR TO PLACING TOPSOIL, SCARIFY COMPACTED SOILS TO A MIN. DEPTH OF 12" WHILE TAKING CARE TO AVOID UTILITIES, TREE ROOTS, AND OTHER EXISTING VEGETATION.
- SEED MIXES SHALL BE AS FOLLOWS:
  - CURRENTLY MAINTAINED AREAS - SEED MIX 25-131 APPLIED AT A RATE OF 220 LB/AC
  - DRAINAGE DITCH AREA NORTH OF 3RD AVE ONLY - SEED MIX 34-261 APPLIED AT A RATE OF 32 LB/AC
  - ALL OTHER WETLAND AREAS - SEED MIX 34-271 APPLIED AT A RATE OF 12 LB/AC
- IF WEATHER CONDITIONS DO NOT ALLOW FOR THE PLACEMENT OF THE SEED AND BLANKET AS DETERMINED BY THE ENGINEER, DISTURBED AREAS SHALL BE TEMPORARILY RESTORED WITH TYPE 3 MULCH (MNDOT 3882) AND SHALL BE INSTALLED BY WINTER MULCHING IN ACCORDANCE WITH MNDOT 2575.3.C.7. FINAL RESTORATION AS NOTED ABOVE SHALL THEN OCCUR AFTER APRIL 15 OR AFTER THE SPRING SNOW MELT, WHICHEVER IS LATER.

**LEGEND-PROPOSED:**

- DRAINAGE DITCH
- RIPRAP (FIELD STONE)
- TEMPORARY ROCK DITCH CHECK

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**CONSTRUCTION PLAN**  
LOCATION 2 - ST. MARY'S PARK NEIGHBORHOOD  
**NEIGHBORHOOD DRAINAGE IMPROVEMENTS**  
PLYMOUTH, MN

SHEET **3**  
OF  
**5** SHEETS





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ISSUES / REVISIONS

PRELIMINARY CITY REVIEW

## NEIGHBORHOOD OPEN HOUSE

REGULATORY AGENCY REVIEW

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NOTES:

1. COORDINATE SITE ACCESS AND STAGING AREAS WITH CITY AND PROPERTY OWNERS TO MINIMIZE DISTURBANCE. PROTECT EXISTING SITE FEATURES IN-PLACE, COORDINATE WITH CITY AND/OR PROPERTY OWNER IF RELOCATION OF FEATURES IS NEEDED FOR CONSTRUCTION.
2. EROSION AND SEDIMENT CONTROL (ESC) MEASURES SHALL BE INSTALLED PRIOR TO COMMENCING CONSTRUCTION AND MAINTAINED THROUGHOUT CONSTRUCTION UNTIL SURFACE RESTORATION IS COMPLETE.
3. SITE CLEARING INCLUDES BRUSH REMOVAL, REMOVAL OF DEAD, DISEASED, DISEASE SUSCEPTIBLE, AND LOW VALUE TREES, AND TREE PRUNING. ALL TREE REMOVAL SHALL BE FIELD VERIFIED AND APPROVED BY THE CITY PRIOR TO REMOVAL. PRUNE TREES AS DIRECTED TO OPEN UP CANOPY AND TO MINIMIZE DAMAGE TO TREES DURING CONSTRUCTION. ALL TREE REMOVAL SHALL BE FIELD VERIFIED AND APPROVED BY THE CITY PRIOR TO REMOVAL. PRUNE TREES AS DIRECTED TO OPEN UP CANOPY AND TO MINIMIZE DAMAGE TO TREES DURING CONSTRUCTION. ONLY TREES WITH 8" DIA. OR GREATER ARE SHOWN.
4. RE-GRADE EXISTING DRAINAGE DITCH WHERE NOTED AND AS NEEDED TO PROVIDE POSITIVE DRAINAGE TO THE EAST TO THE EXISTING PIPE OUTLET ADJACENT TO NATHAN LANE.
5. YARD DRAINS SHALL BE MANUFACTURED BY TUF-TITE MODEL NO. 4HDS-1 OR APPROVED EQUAL AND SHALL BE A 4-HOLE DRAIN SUMP WITH INLET GRATE (GREEN). TOP OF YARD DRAIN SHALL HAVE A WIDTH OF 11"x11". PROVIDE 6" RISER SECTIONS WHERE REQUIRED. SEE CITY'S STANDARD SPECIFICATIONS FOR STORM SEWER CONSTRUCTION FOR ADDITIONAL INFORMATION.
6. RESTORE SITE TO EXISTING CONDITIONS OR BETTER.
7. DISTURBED GREENSPACE AREAS SHALL BE RESTORED IN ACCORDANCE WITH MNDOT 2575 AND INCLUDE INSTALLATION OF MIN. 4" TOPSOIL, SEED (MNDOT 3876), TYPE 4 FERTILIZER NPK 0-10-20 (MNDOT 3881) APPLIED AT A BULK RATE OF 120 LBS/AC, AND EROSION CONTROL BLANKET TYPE III (MNDOT 3885). PRIOR TO PLACING TOPSOIL, SCARIFY COMPACTED SOILS TO A MIN. DEPTH OF 12" WHILE TAKING CARE TO AVOID UTILITIES, TREE ROOTS, AND OTHER EXISTING VEGETATION.
8. SEED MIXES SHALL BE AS FOLLOWS:
  - CURRENTLY MAINTAINED AREAS - SEED MIX 25-131 APPLIED AT A RATE OF 220 LB/AC
  - ALL OTHER AREAS - SEED MIX 34-261 APPLIED AT A RATE OF 32 LB/AC
9. IF WEATHER CONDITIONS DO NOT ALLOW FOR THE PLACEMENT OF THE SEED AND BLANKET AS DETERMINED BY THE ENGINEER, DISTURBED AREAS SHALL BE TEMPORARILY RESTORED WITH TYPE 3 MULCH (MNDOT 3882) AND SHALL BE INSTALLED BY WINTER MULCHING IN ACCORDANCE WITH MNDOT 2575.3 C.7. FINAL RESTORATION AS NOTED ABOVE SHALL OCCUR AFTER APRIL 15 OR AFTER THE SPRING SNOW MELT, WHICHEVER IS LATER.

BID ALTERNATE NO. 1

1. ALL WORK RELATED TO THE INSTALLATION OF THE YARD DRAINS AND DRAIN TILE.

LEGEND-PROPOSED:

- |   |  |
|---|--|
|  | YARD DRAIN   |
|  | DRAIN TILE   |
|  | RIPRAP (FIELD STONE)                                 |
|  | SITE CLEARING AND GRADING AREA<br>(SEE NOTE 3 AND 4) |
|  | BOULDER TOE PROTECTION                               |
|  | TEMPORARY ROCK DITCH CHECK                           |



# CONSTRUCTION PLAN

## LOCATION 3 - IVANHOE-PHEASANT HILLS NEIGHBORHOOD

## NEIGHBORHOOD DRAINAGE IMPROVEMENTS

PLYMOUTH, MN

SHEET 4

F

SHEETS



