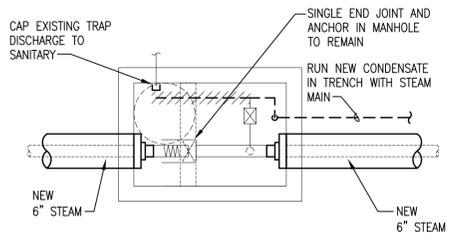
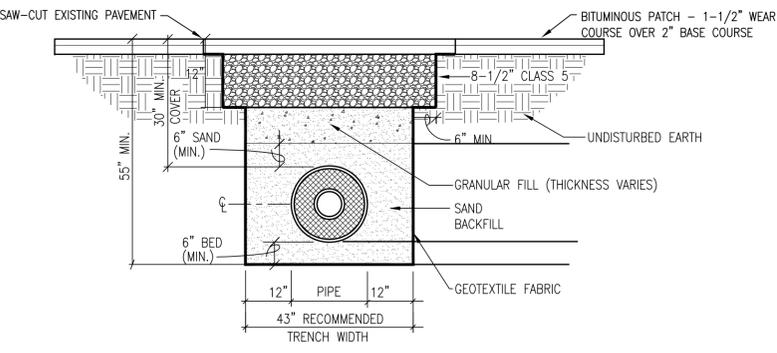


**MH#41**  
1/4" = 1'-0"



**MH#42**  
1/4" = 1'-0"



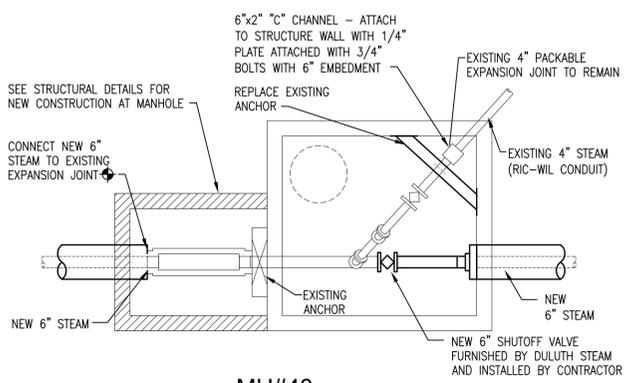
**SURFACE RESTORATION**  
NOT TO SCALE

- PLAN NOTES:**
- EXCAVATION CONTRACTOR SHALL TAKE DIRECTION AS TO LINE OF PIPING AND ELEVATIONS FROM PIPING CONTRACTOR.
  - PROVIDE EROSION CONTROL AT ALL EXCAVATIONS AS PER CITY OF DULUTH STANDARDS.
  - INSTALL UNDERGROUND PIPING IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
  - CONTRACTOR SHALL INCLUDE STATE HIGH-PRESSURE STEAM PERMIT IN HIS WORK.
  - CONTRACTOR WILL BE REQUIRED TO TRANSPORT FACTORY FABRICATED UNDERGROUND PIPE AND FITTINGS FROM DULUTH STEAM CO-OP TO JOBSITE.
- TRAFFIC CONTROL NOTES:**
- ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, INCLUDING THE FIELD MANUAL DATED JANUARY 2004.
  - MAINTAIN ONE LANE OF TRAFFIC IN ALLEY AT ALL TIMES (SERVING BUILDINGS FROM EITHER DIRECTION).
  - TRAFFIC CONTROL PLAN MUST BE APPROVED BY CITY ENGINEER PRIOR TO START OF WORK.

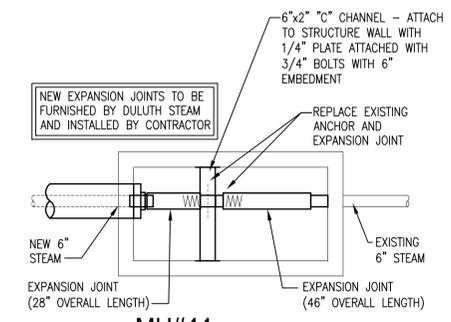
Revisions		
No.	Date	Description
1	-	ISSUED FOR MATERIAL PRICING - BID PACKAGE #1 - 502 ft. 6" PIPE
2	9/11/13	INSTALLATION BID PACKAGE #2 (CITY BID #13-27DS)
3	9/24/13	ALTERNATE ALLEY RE-PAVING

- SURFACE RESTORATION NOTES:**
- RESTORATION SHALL MATCH EXISTING MATERIALS AND THICKNESS SHOWN ARE MINIMUMS.
  - REPLACE CONCRETE CURB AND GUTTERS WHERE DISTURBED; MATCH EXISTING SHOULDER ELEVATIONS, PROVIDE STANDARD MNDOT B624 CURB AND GUTTER WITH 4" AGGREGATE BASE.
  - MATCH EXISTING SURFACE CONTOURS AND SLOPES.

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVES. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

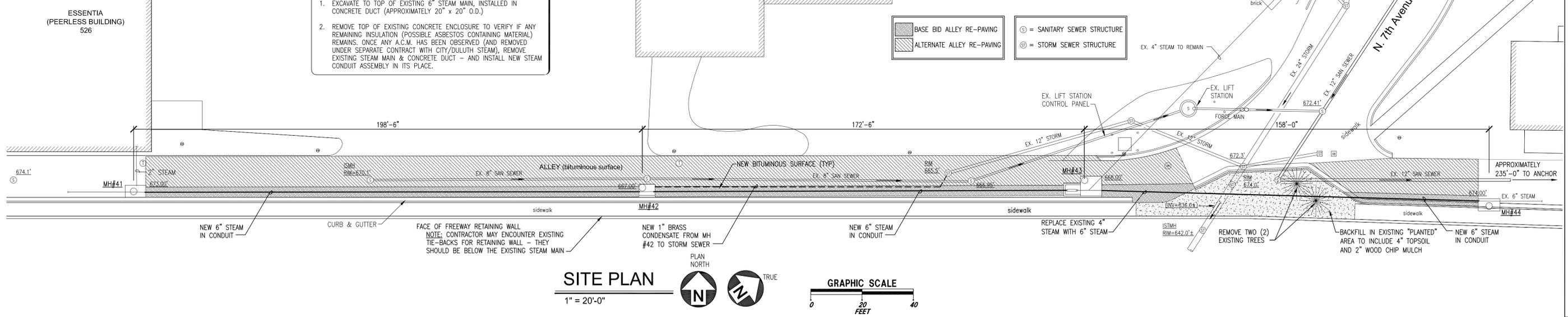


**MH#43**  
1/4" = 1'-0"

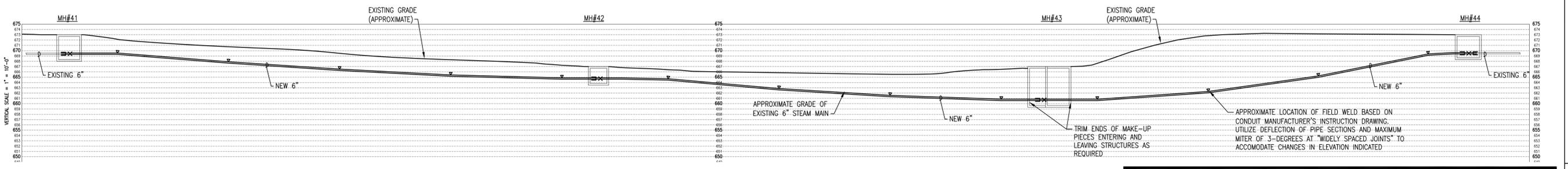


**MH#44**  
1/4" = 1'-0"

- EXCAVATION NOTES:**
- EXCAVATE TO TOP OF EXISTING 6" STEAM MAIN, INSTALLED IN CONCRETE DUCT (APPROXIMATELY 20" x 20" O.D.)
  - REMOVE TOP OF EXISTING CONCRETE ENCLOSURE TO VERIFY IF ANY REMAINING INSULATION (POSSIBLE ASBESTOS CONTAINING MATERIAL) REMAINS. ONCE ANY A.C.M. HAS BEEN OBSERVED (AND REMOVED UNDER SEPARATE CONTRACT WITH CITY/DULUTH STEAM), REMOVE EXISTING STEAM MAIN & CONCRETE DUCT - AND INSTALL NEW STEAM CONDUIT ASSEMBLY IN ITS PLACE.



**SITE PLAN**  
1" = 20'-0"



**SITE PROFILE**  
1" = 20'-0" HORIZONTAL/ 1"=10'-0" VERTICAL)

**APPROVAL**

Recommended for Approval \_\_\_\_\_ 20

CITY ENGINEER - DULUTH

**FOSTER, JACOBS & JOHNSON, INC.**  
PROFESSIONAL ENGINEERS

218.722.3060  
218.722.1931 fax  
Email: mail@fj.com

345 CANAL PARK DRIVE  
SUITE 200  
DULUTH, MINNESOTA 55802

**STEAM MAIN INSTALLATION - DULUTH STEAM**  
1st ALLEY & 7th AVE. E.  
DULUTH, MINNESOTA

DRAWN BY: MRA  
CHECKED BY: JRJ  
PROJECT NO.: 13016  
DATE: 9/11/2013  
FILENAME: G:\13016\07-13016M1.dwg

REVISIONS:

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 Engineer under the laws of the State of Minnesota.

James R. Johnson  
REG. NO.: 15920 DATE: 9/11/2013

DRAWING NO: **M1**  
Sheet 1 of 1