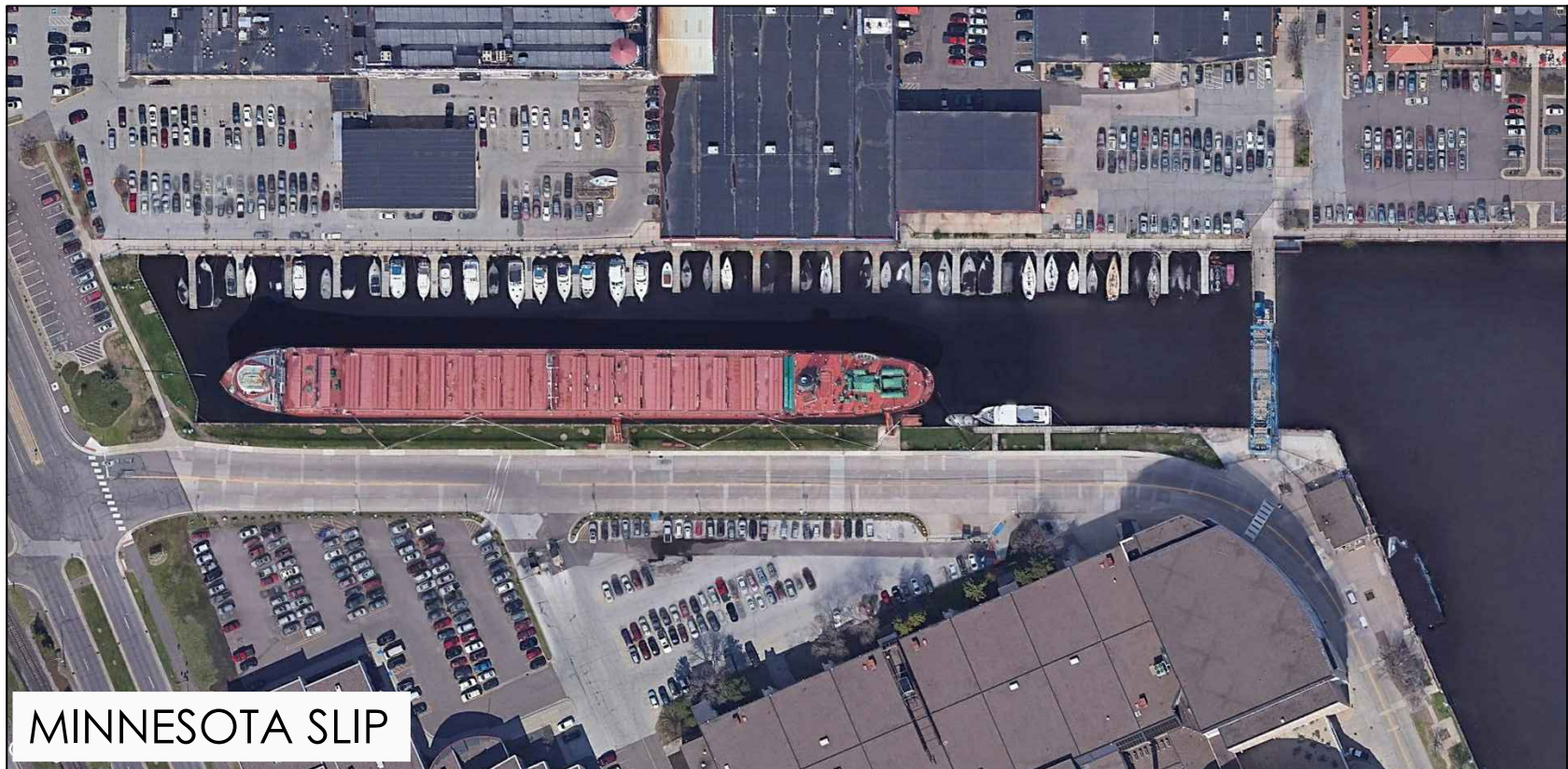


CITY OF DULUTH, MINNESOTA

IRVIN RELOCATION DESIGN

ST. LOUIS COUNTY
DULUTH, MINNESOTA



OWNERS

CITY OF DULUTH

ERIC BIRKELAND
PROJECT MANAGER
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218.730.4435

DECC

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EXECUTIVE DIRECTOR
CTOWNSEND@DECC.ORG
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DESIGN TEAM

AMI CONSULTING ENGINEERS

91 MAIN STREET
SUPERIOR, WI 54880
715.718.2193

STRUCTURAL/ MARINE ENGINEER

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CHASE.DEWHIRST@AMIENGINEERS.COM

PERMITTING

BETHANY ROSEMORE
BETHANY.ROSEMORE@AMIENGINEERS.COM



Know what's below.
Call before you dig.

THE LOCATIONS OF UNDERGROUND UTILITIES HAVE BEEN PROVIDED BY THE UTILITY OWNER, ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION OF ALL UTILITIES BEFORE COMMENCING CONSTRUCTION PER STATE LAW.

GOVERNING SPECIFICATIONS

THE 2016 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS FOR CONSTRUCTION AND THE 2016 VERSION OF THE
DULUTH STANDARD CONSTRUCTION SPECIFICATIONS SHALL GOVERN.

SURVEY/LAYOUT INFORMATION:

COORDINATE SYSTEM: MN COUNTY COORDINATE SYSTEM

DATUM: ST. LOUIS TRANSVERSE MERCATOR 96

GEOID: G12B

BENCHMARK HELD: AA9913

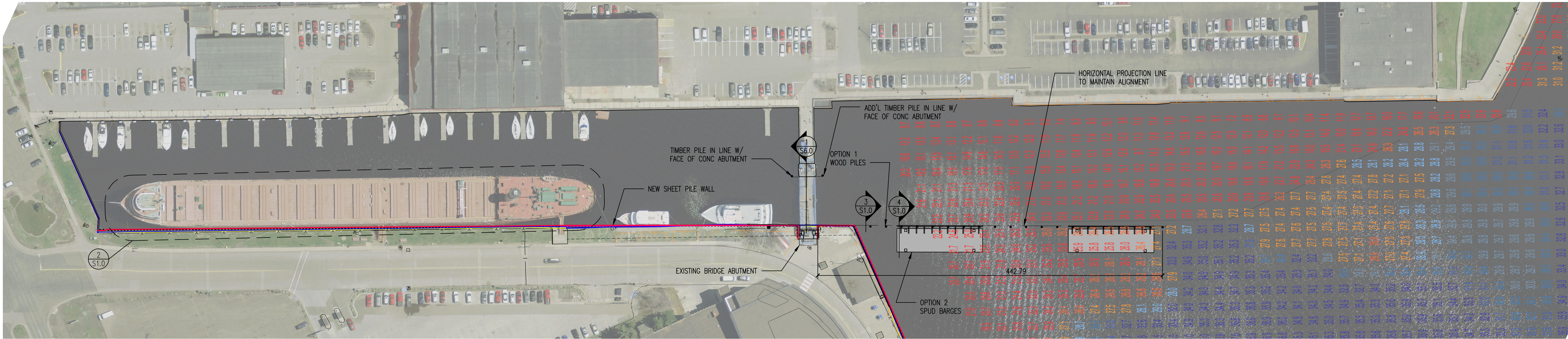
GENERAL PROJECT NOTES:

1. BIDDER WILL VISIT THE SITE TO UNDERSTAND THE SCOPE OF WORK. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ITEMS THAT COULD HAVE BEEN IDENTIFIED BY A SITE VISIT, STUDYING THE TOPOGRAPHIC & BATHYMETRIC SURVEYS, THOROUGHLY REVIEWING ALL PLANS AND REPORTS, AND ADDITIONAL INFORMATION REQUESTED FOR CLARIFICATION PRIOR TO BIDDING.
2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS PRIOR TO STARTING WORK.
3. EXISTING TOPOGRAPHIC, AND BATHYMETRIC INFORMATION TAKEN FROM SURVEYS DATED 05/08/18 (TOPO) AND 08/08/17 & 05/08/18 (BATHY). SUPPLEMENTAL INFORMATION, GATHERED FROM SITE VISITS, RECORD DRAWINGS AND PLANS OBTAINED FROM CLIENT, ARE SHOWN AS APPROXIMATE LOCATIONS ONLY AND SHALL BE FIELD VERIFIED PRIOR TO OR DURING CONSTRUCTION. CONTACT ENGINEER IMMEDIATELY IF ANY DISCREPANCIES ARE DISCOVERED.
4. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ONSITE LOCATIONS OF EXISTING UTILITIES. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING UTILITIES OR STRUCTURES LOCATED AT THE WORK SITE.
5. PROVIDE AND MAINTAIN TRAFFIC CONTROL DEVICES WHERE NECESSARY (INCIDENTAL). PLACEMENT OF THESE DEVICES SHALL BE APPROVED BY THE CITY AND ENGINEER PRIOR TO PLACEMENT. TRAFFIC CONTROL DEVICES SHALL MEET THE REQUIREMENTS OF THE WMUTCD, CURRENT ADDITION.
6. CONTRACTOR SHALL MAINTAIN FULL ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION AND TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES.
7. ALL CONSTRUCTION WORK SHALL BE COMPLETED WITHIN CITY APPROVED WORKING HOURS.
8. INSTALL CONTROL FENCING AND BARRICADING AS NECESSARY TO PROTECT THE PUBLIC.

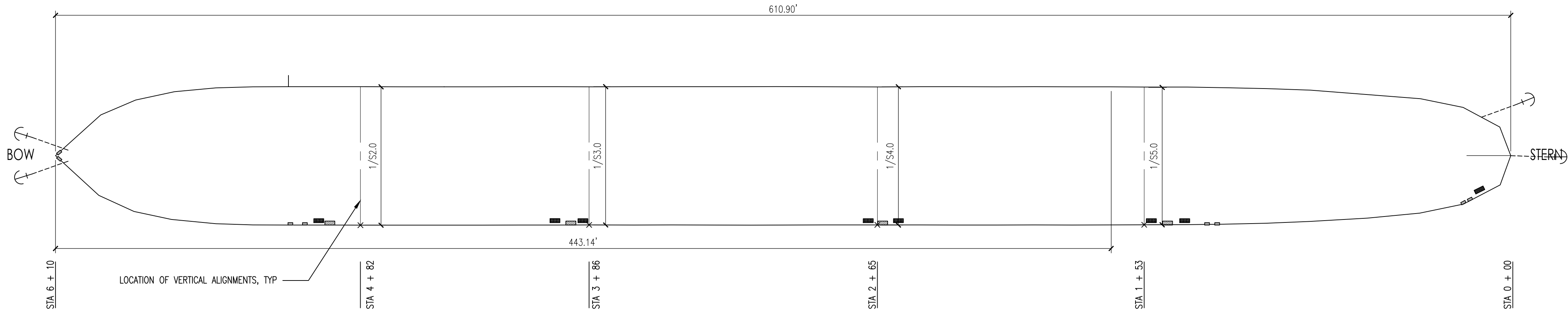
SHEET INDEX

COV	Cover Sheet
S1.0	Plans & Sections
S2.0	Irvin Section 1+53
S3.0	Irvin Section 2+65
S4.0	Irvin Section 3+86
S5.0	Irvin Section 4+82
S6.0	MN Slip Ped. Bridge Survey

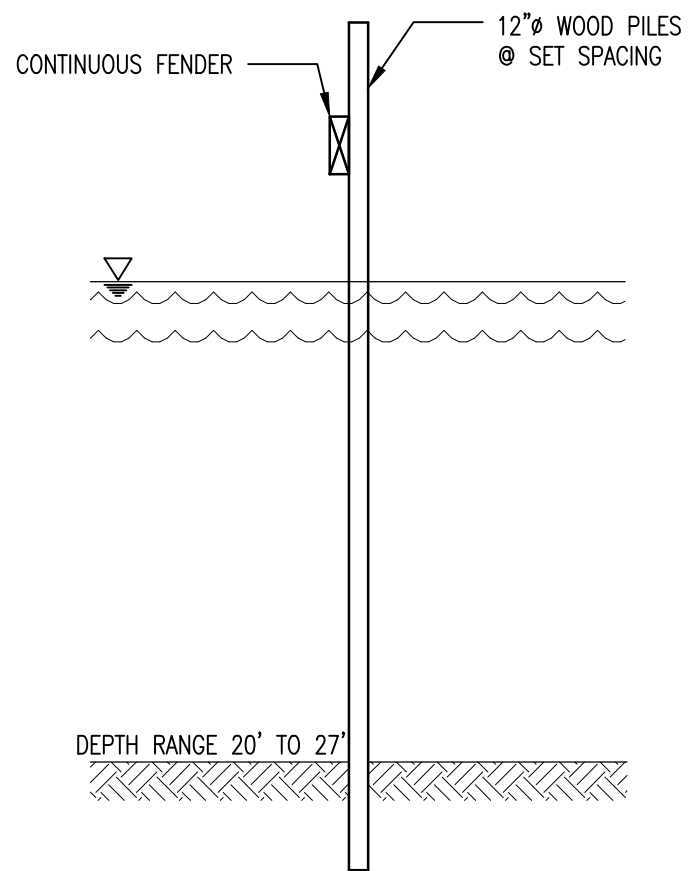
4/12/2018 2:54 PM
2/20/18/181078 Irvin Relocation Design's CAD/LI Marine/S1.0 Irvin Temp Location.dwg
© COPYRIGHT - AMI CONSULTING ENGINEERS P.A., 2008



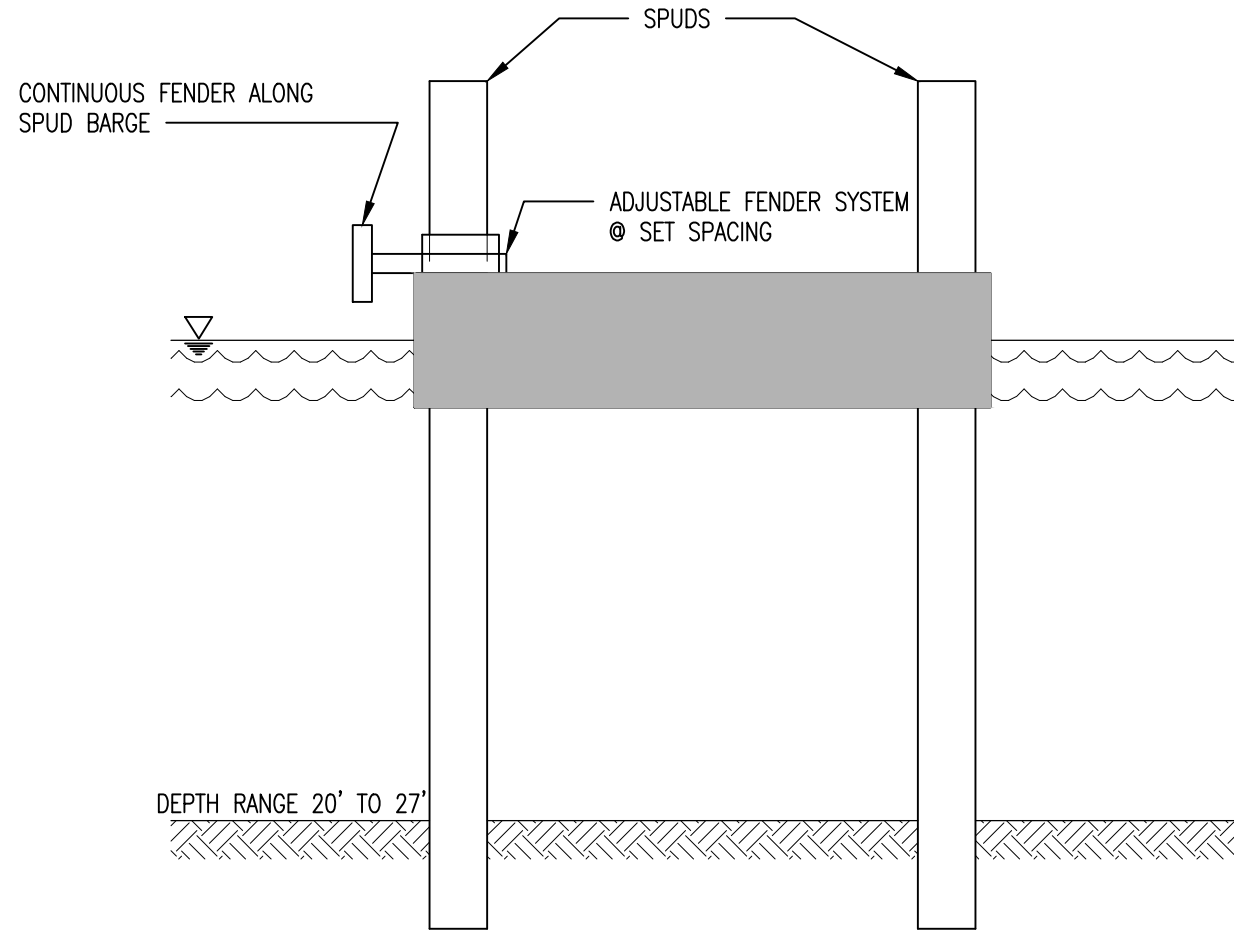
1 Minnesota Slip - Plan
SCALE: 1" = 70' - 0" ON 22" X 34" PLOT



2 S.S. William A. Irvin - Plan
SCALE: 1" = 30' - 0" ON 22" X 34" PLOT



3 Option 1 - Wood Piles
SCALE: 1" = 10' - 0" ON 22" X 34" PLOT



4 Option 2 - Spud Barges
SCALE: 1" = 10' - 0" ON 22" X 34" PLOT

MAX VELOCITY OF VESSEL DURING
MOVEMENT= _____

MAX WIND SPEED= _____

PRELIMINARY
FOR CONSTRUCTION

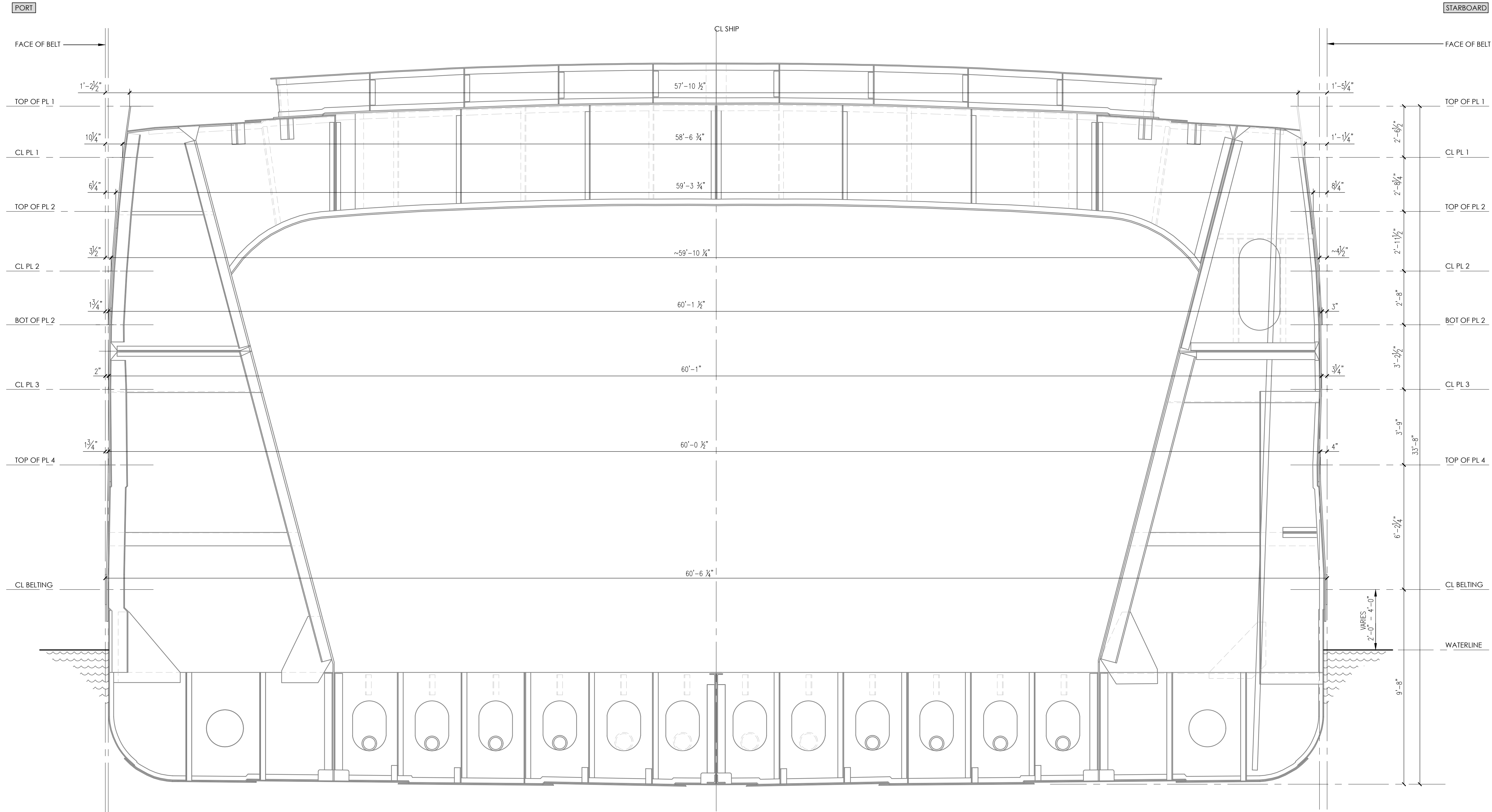
REV.	DESCRIPTION	REV.	DATE

Irvin Relocation Design
City of Duluth
350 Harbor Drive
Duluth, Minnesota

Plans and Sections

JOB No: 181078
DATE: _____
DRAWN BY: SAJ
DESIGNED BY: CWS

SHEET:
S1.0



1 IRVIN SECTION AT STA 1 + 53
S2.0 3/8" = 1'-0" (24 X 36 PLOT)

- NOTES:
1. STATIONING BEGINS AT THE STERN OF THE IRVIN AT THE EXTREME MEASUREMENT OF TOP OF PLATE 1. SEE 2/S1.0.
 2. ALL MEASUREMENTS HAVE AN ACCURACY OF 1"±.

REV.	DESCRIPTION	DATE	REV.

Irvin Relocation Design
City of Duluth
350 Harbor Drive
Duluth, Minnesota
Irvin Section at Sta 1 + 53
Section 1

JOB No: 181078
DATE:
DRAWN BY: DLB
DESIGNED BY: CAD

SHEET:
S2.0



NOTES:

1. STATIONING BEGINS AT THE STERN OF THE IRVIN AT THE EXTREME MEASUREMENT OF TOP OF PLATE 1. SEE 2/S1.0.
2. ALL MEASUREMENTS HAVE AN ACCURACY OF 1"±.

NOT FOR CONSTRUCTION

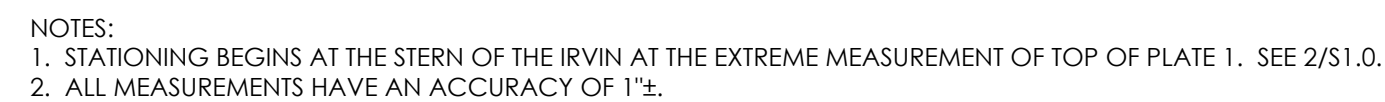
[illegible]

Irvin Relocation Design
City of Duluth
350 Harbor Drive
Duluth, Minnesota

Irvin Section at Sta 2 + 65
Section 2

JOB No: 181078
DATE:
DRAWN BY: DLB
DESIGNED BY: CAD

SHEET:
S3.0





- NOTES:
1. STATIONING BEGINS AT THE STERN OF THE IRVIN AT THE EXTREME MEASUREMENT OF TOP OF PLATE 1. SEE 2/S/1.0.
2. ALL MEASUREMENTS HAVE AN ACCURACY OF 1"±.

[illegible]

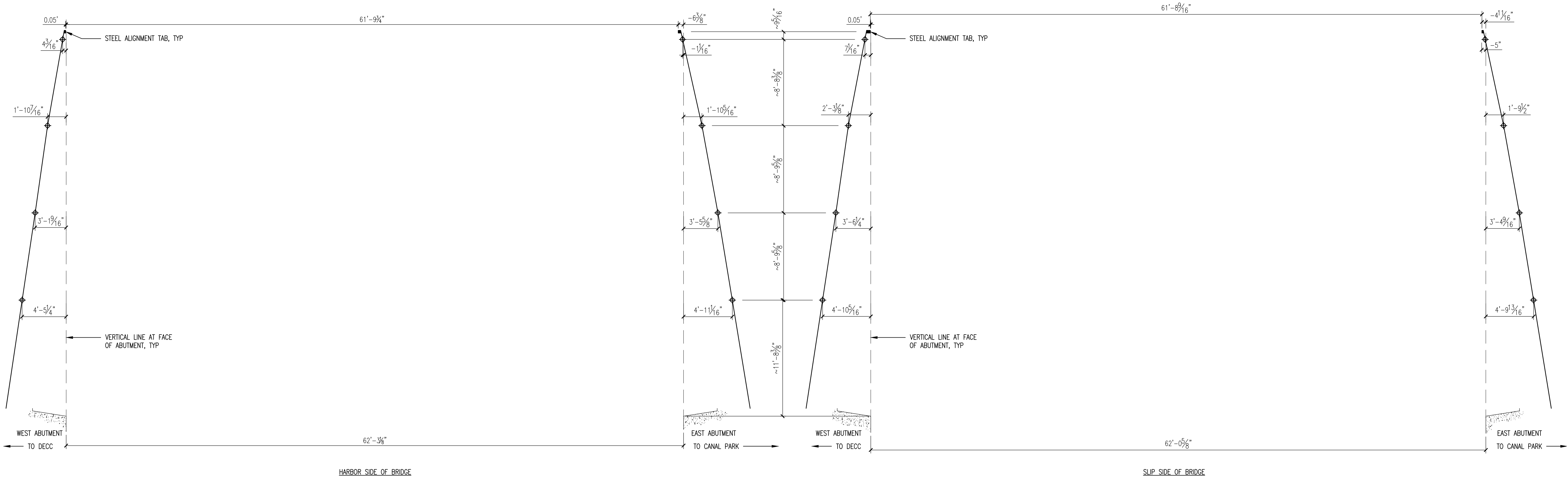
Invin Relocation Design
City of Duluth
350 Harbor Drive
Duluth, Minnesota

Invin Section at Sta 4 + 82
Section 4

JOB No: 181078
DATE:
DRAWN BY: DLB
DESIGNED BY: CAD

SHEET:

\$5.0



NOTES:
- NEGATIVE DIMENSIONS INDICATE SECTIONS OF BRIDGE WHICH OVERHANG THE CONCRETE ABUTMENT WHEN LIFTED
+ LIGHTING AND CONDUIT NOT SHOWN FOR CLARITY
⊕ INDICATES LOCATION OF MAIN BRIDGE MEMBER

1
S6.0 MINNESOTA SLIP REDESTRIAN BRIDGE
SCALE: 3/16" = 1'-0" ON 22" x 34" PLOT

NOT FOR CONSTRUCTION
PRELIMINARY

REV.	BY:	DESCRIPTION	REV.	DATE:

Irvin Relocation Design
City of Duluth
350 Harbor Drive
Duluth, Minnesota
Cross Sections
Pedestrian Bridge

JOB No: 181078
DATE:
DRAWN BY: PJB
DESIGNED BY: ZLM

SHEET:
S6.0