BIG 903

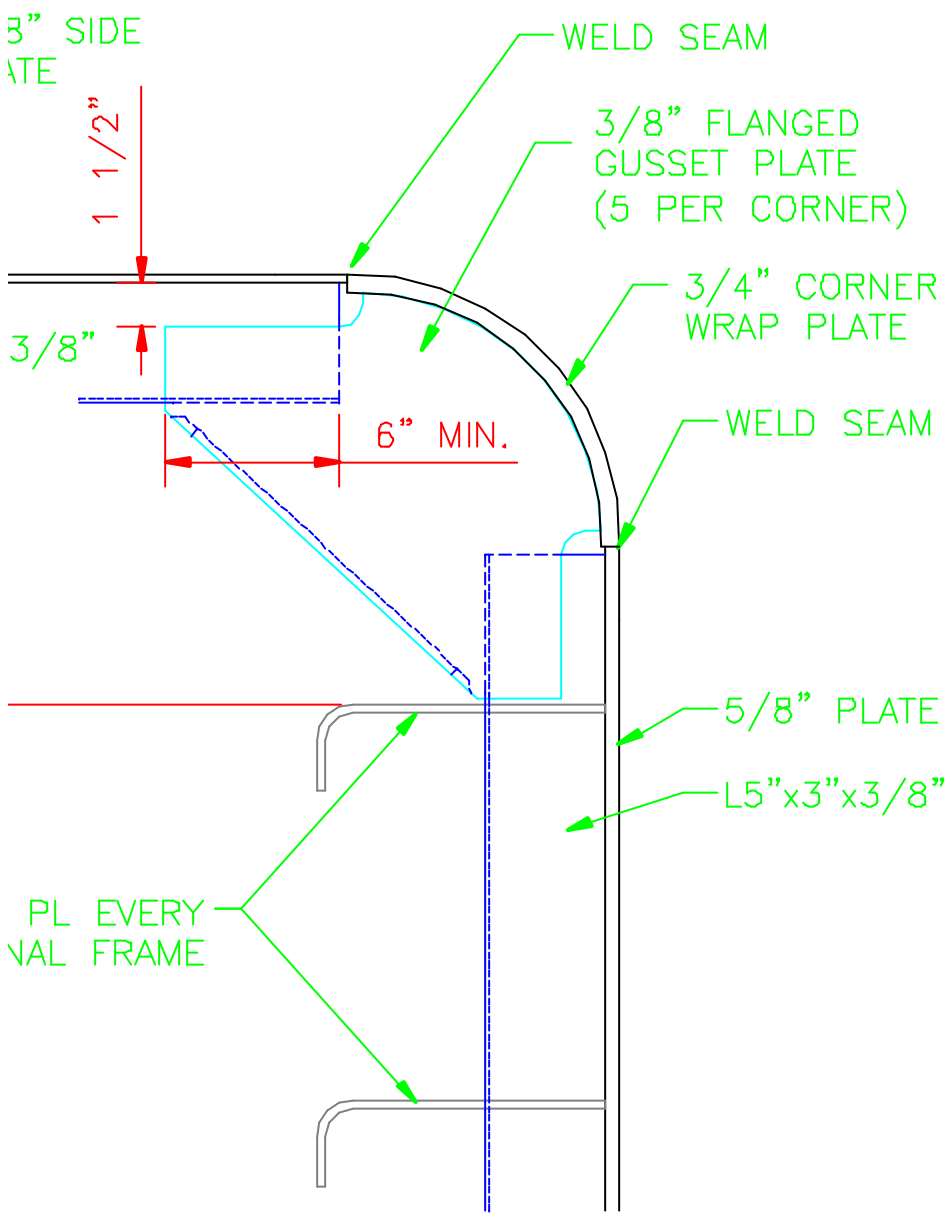
Design Specifications - Flat Deck Crane/Spud Barge (Hull E-09-41)

02/17/2009

CERES CONSULTING, L.L.C.
3808 Cookson Road
E. St. Louis, Il. 62201-2126

Length	150'-0" (Single rake approximately 19'6")
Width	54'-0"
Depth	8'-0"
Watertight Compartments	16 (4-bow, 9 mid-body, 3-stern)
Plating	3/4" corner plates 3/4" quarter decks 5/8" Deck (center 24'), 1/2" Deck (Outer 15') 3/8" sides (upper 3' 6") 3/8" bottom, 3/8" rake bottom 1/2" bilge knuckles (4' 6" and below) 5/8" headlog 5/8" transom
Framing	Deck longitudinal 18" centers (L 6" x 4" x 3/8") angles (12.30#) Deck longitudinal 18" centers (L 6" x 4" x 1/2") angles (16.20#) Crane runway (4 pieces each) Bottom longitudinal 18" centers (L 6" x 4" x 3/8") angles (12.30#) Side longitudinal 16" centers (L 5" x 3"x 3/8") angles (9.8# P/LF)
Transverse Framing	Spacing 5' centers Top 10" channel (C 10" x 20#) Bottom 10" channel (C 10" x 20#) Diagnals L4" x 4"x 5/16" angle (8.2# P/LF) Uprights L6" x 6"x 3/8" angle (14.9# P/LF)
Twin Tracking Longitudinal Bulkheads (6)	3/8" plating with L5" x 3"x 3/8" angles, one at each side at truss, and one angle between trusses both sides
Rake Long Bulkheads (3)	3/8" plating with L5" x 3"x 3/8" angles, one at each side at truss, and one angle between trusses both sides
Transverse Bulkheads (4)	3/8" plating with L4" x 3" x 5/16" angles 18" centers
Bitts	4-10" Double Bitts (1 each corner)
Kevels	8- 42" kevels (6 mid-body gunnels, 1 each end longitudinal centerline)
Buttons, Chocks	4- 10" Buttons (2 bow, 2 stern) plus 2- 9" open chocks (bow)
Manholes	20-18" "T-Bolt" flush watertight (galvanized lids) with access ladders
Rub Bars	Upper continuous 3/4" x 8" and lower continuous 3/4"x 8"
Zinc Anodes	6" x 12" x 1 1/4" weld (48)
Spud Wells	4- 27" x 27' x 11'6"
Spuds (optional)	2 - 24" x 24" x 60' or 24" x 24" x 48'

KEVELS 8-42 (6 MID-BODY @ GUNNELS, 1 EACH END ON CENTERLINE)
BUTTONS 4- 10" BUTTONS (2 EACH END)
MANHOLES 16-18"ø FLUSH WATERTIGHT (SEE PLAN FOR LOCATIONS)



GED PLAN @ TRANSOM
ER
1/2"= 1'-0"

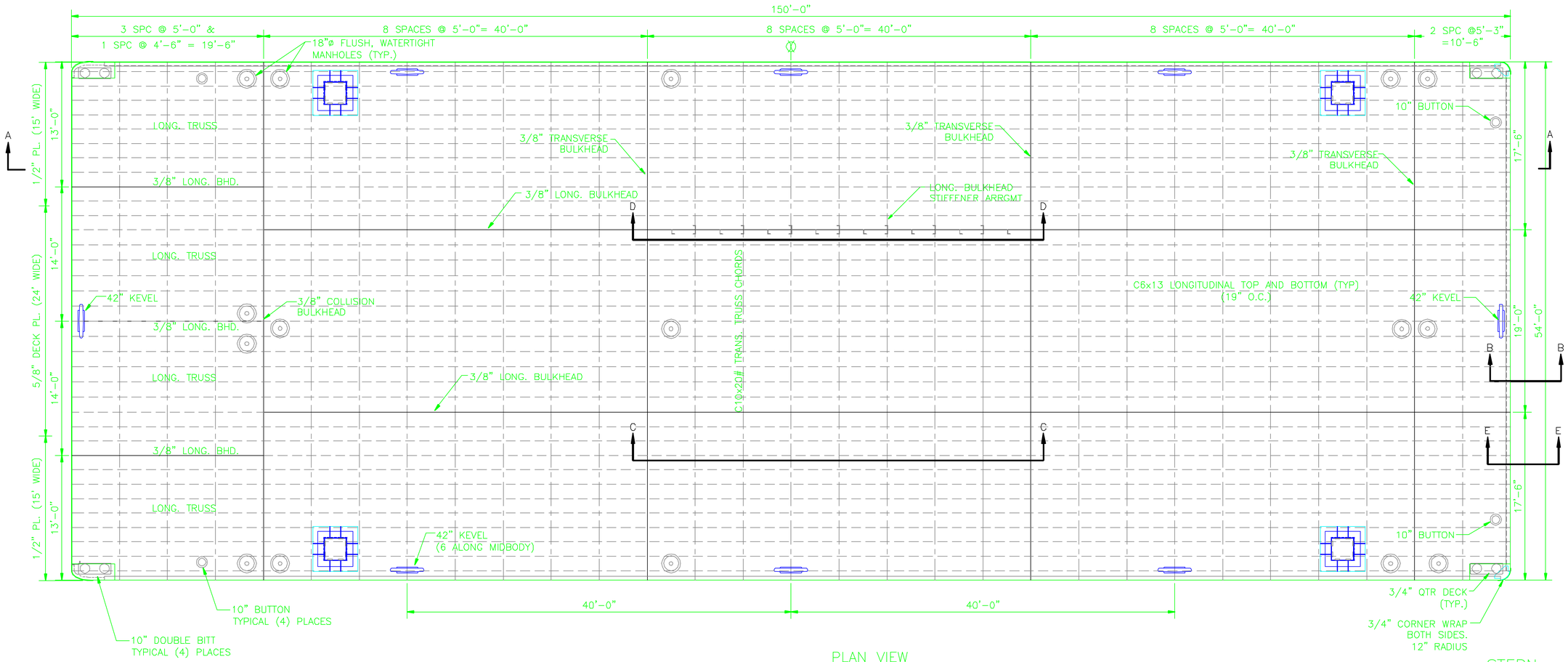
Draft	Dead Weight	Cargo Capacity
1' 8.1"	380	0
1' 9"	397	17
2' 0"	455	75
2' 3"	513	133
2' 6"	572	192
2' 9"	631	251
3' 0"	690	310
3' 3"	750	370
3' 6"	810	430
3' 9"	870	490
4' 0"	930	550
4' 3"	991	611
4' 6"	1052	672
4' 9"	1114	734
5' 0"	1176	796
5' 3"	1238	858
5' 6"	1300	920
5' 9"	1363	983
6' 0"	1426	1046
6' 3"	1489	1109
6' 6"	1552	1172
6' 9"	1614	1234
7' 0"	1677	1297
7' 3"	1739	1359
7' 6"	1801	1421
7' 9"	1864	1484
8' 0"	1926	1546

150'x54'x8' DECK BARGE
HULL "E-03-11"
HULL "E-04-12"

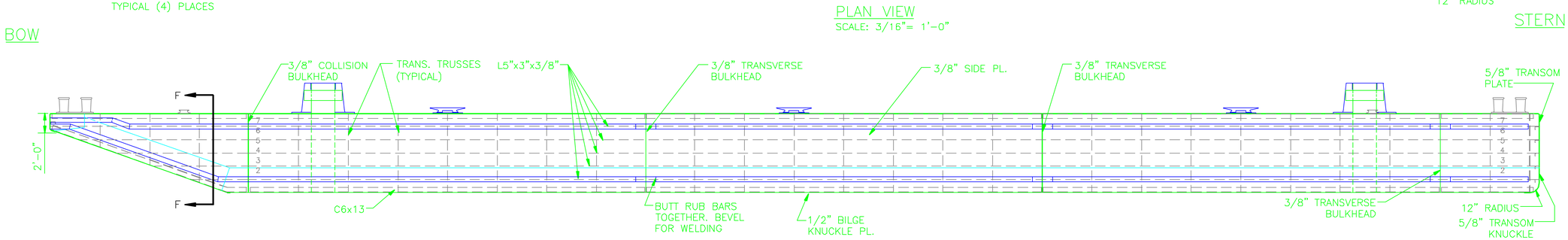
REVISIONS

#	DATE	DESCRIPTION
-	-	-

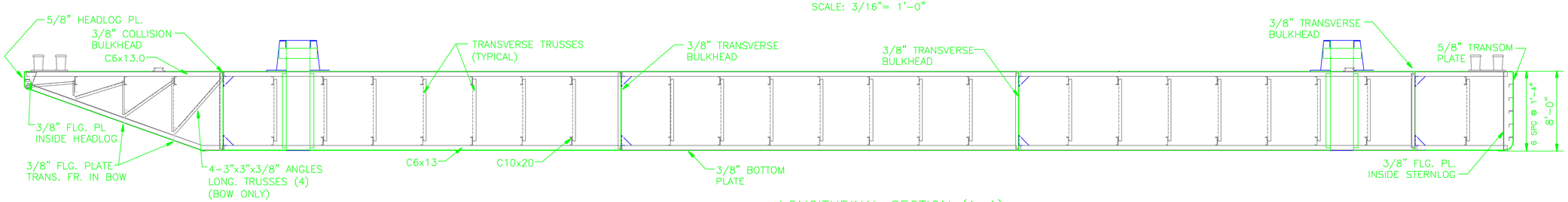
TITLE DETAILS
ISSUE DATE 9/5/03
PROJECT NO. MOBO3112
DRAWING NO. G03



PLAN VIEW
SCALE: 3/16"= 1'-0"



ELEVATION
SCALE: 3/16"= 1'-0"



LONGITUDINAL SECTION (A-A)
SCALE: 3/16"= 1'-0"

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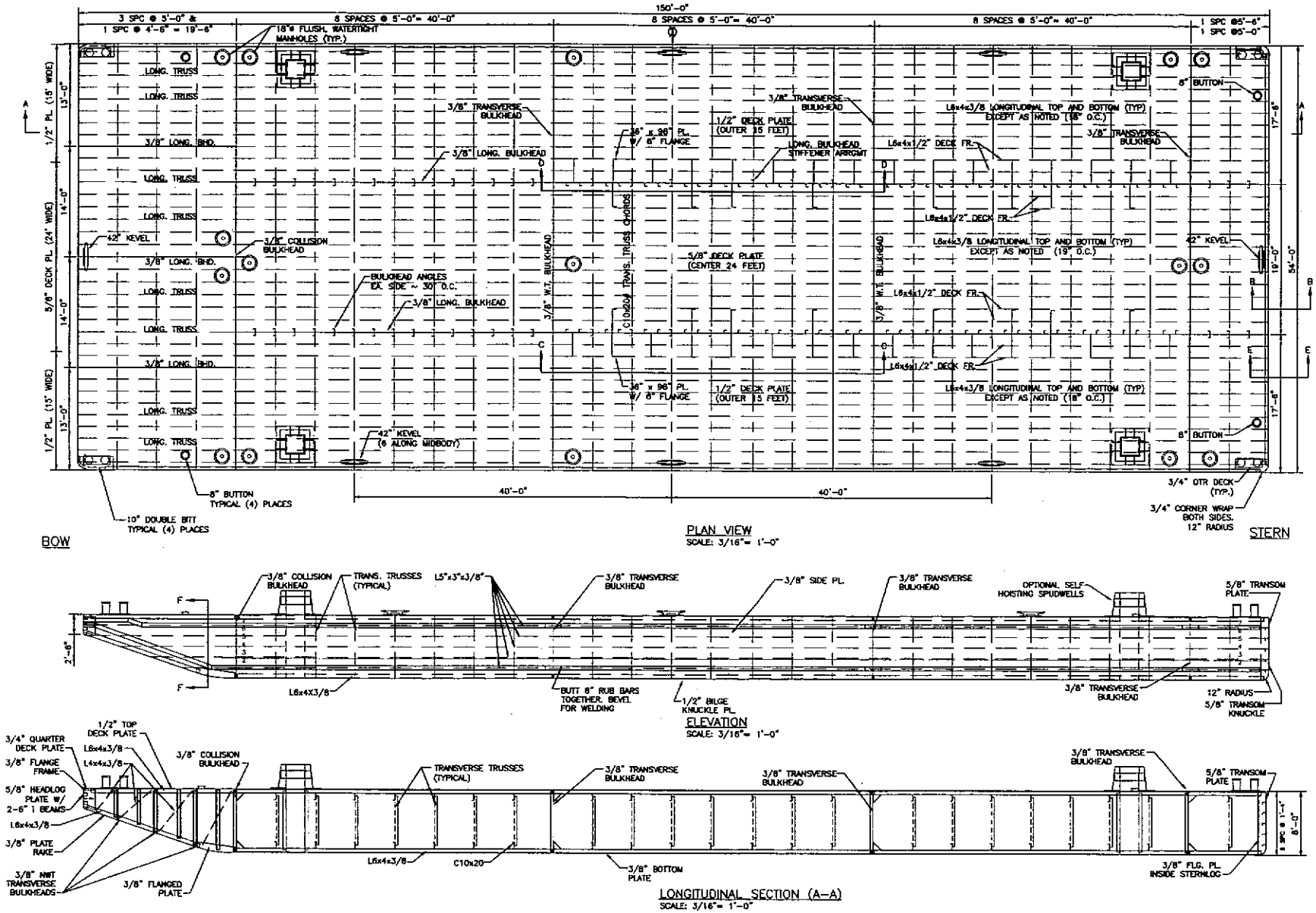
EAGLE FABRICATION
#1 RIVERVIEW AVENUE
SAUGET, ILLINOIS 62201
618/ 875-1153

150'x54'x8' DECK BARGE
HULL "E-03-11"
HULL "E-04-12"

REVISIONS #	DATE	DESCRIPTION
-	-	-

TITLE: GENERAL ARRANGEMENT
ISSUE DATE: 9/1/03
PROJECT NO.: M08031112
DRAWING NO.: G01



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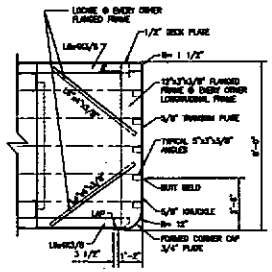
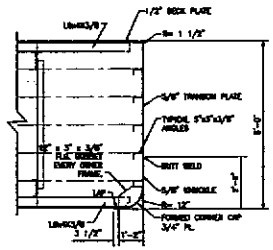
636-225-9106

BIG 903

ABS CLASSED
160'x64'x8' DECK BARGE
HULL "E-00-41"



SECTION THRU TRANSOM (B-B)
SCALE: 3/8"= 1'-0"



SECTION THRU TRANSOM (E-E)
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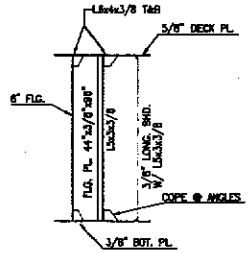
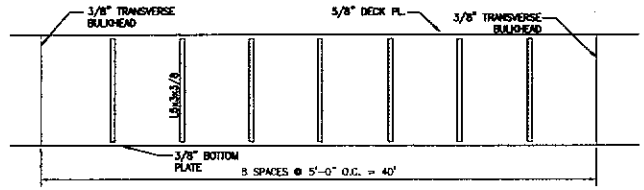
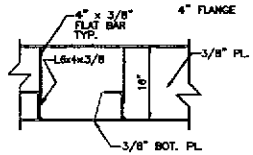


LONG. BULKHEAD SUPPORTS (24)
SCALE: 3/8"= 1'-0"

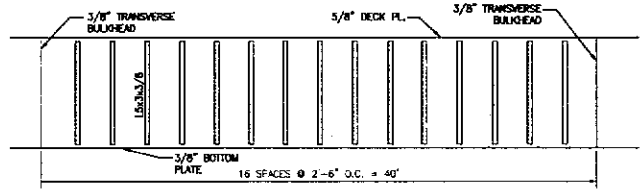


LONGITUDINAL SECTION (C-C)
SCALE: 1/4"= 1'-0"

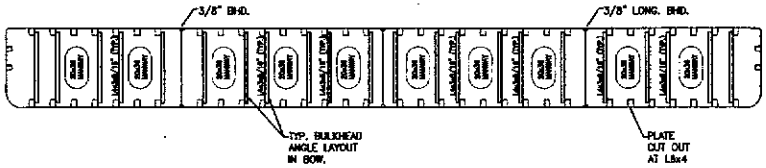
NOTE: "DEEP LONG. BULKHEAD SUPPORTS" NOT SHOWN. SEE DETAIL THIS SHEET.



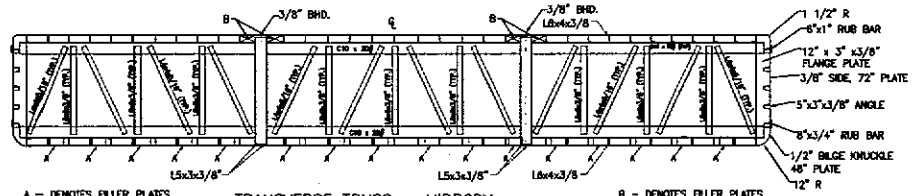
TRANSVERSE BOTTOM FRAME
SCALE: 1"= 1'-0"



LONGITUDINAL SECTION (D-D)
SCALE: 1/4"= 1'-0"



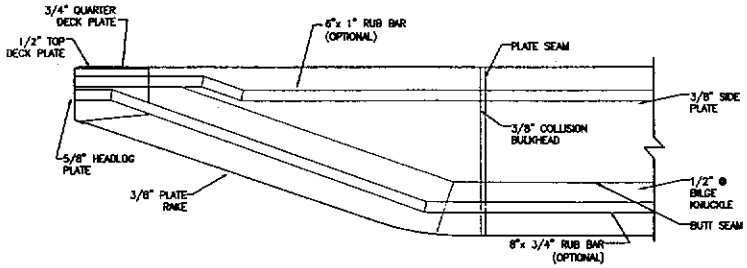
TRANSVERSE BULKHEAD -RAKE (F-F)
SCALE: 1/4"= 1'-0"



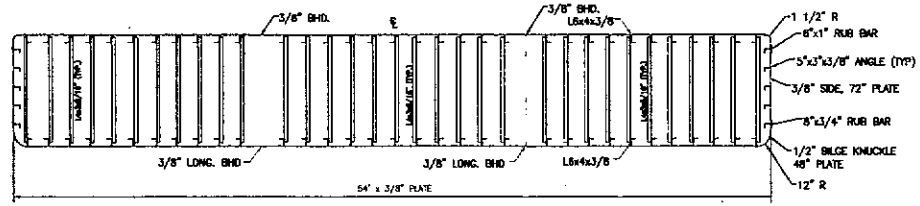
A - DENOTES FILLER PLATES 12" x 7" x 3/8" (16 REQUIRED PER TRUSS FRAME; TOTAL OF 352 PLATES OVER 22 TRUSS FRAMES.)

TRANSVERSE TRUSS - MIDBODY
SCALE: 1/4"= 1'-0"

B - DENOTES FILLER PLATES 16" x 6" x 3/8" (4 REQUIRED PER TRUSS FRAME; TOTAL OF 84 PLATES OVER 21 TRUSS FRAMES.)



RAKE ELEVATION
SCALE: 3/8"= 1'-0"



TRANSVERSE BULKHEAD
SCALE: 1/4"= 1'-0"

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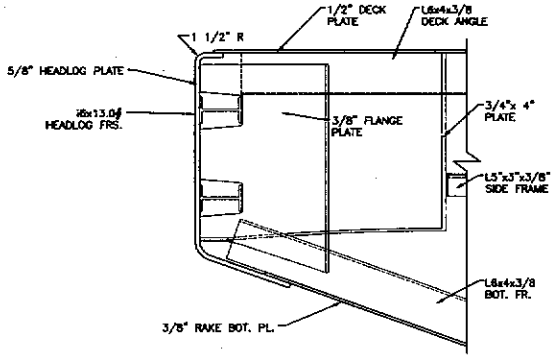
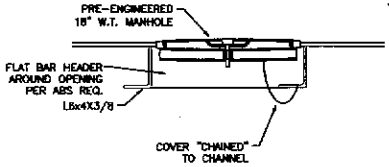
B/G 903

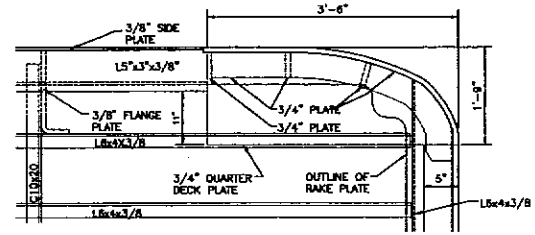
ABS CLASSED
160'x64'x9' DECK BARGE
HULL "E-09-11"



SECTION @ HEADLOG
SCALE: 1 1/2"= 1'-0"



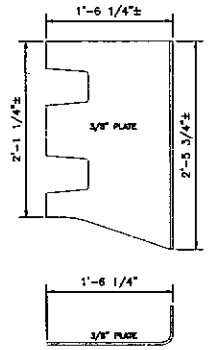
LONG. SECTION @ MANHOLE
SCALE: 1 1/2"= 1'-0"



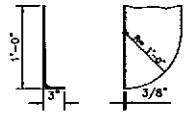
ENLARGED PLAN @ BOW CORNER
SCALE: 1 1/2"= 1'-0"

DESIGN SPECIFICATIONS—FLAT DECK CRANE BARGE (HULL E-09-41)

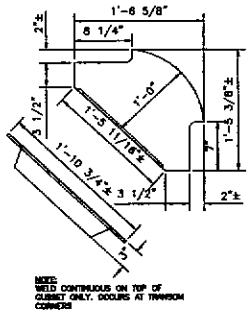
LENGTH	150'-0" (SINGLE BARGE)
WIDTH	64'-0"
DEPTH	12'-0"
TRANSVERSE COMPARTMENTS	18 (4-WIDE, 8 MID-BODY, 3-AFTERD)
PLATING	3/4" BOTTOM PLATE 3/4" BILGE PLATE 3/4" AND 5/8" DECK (SEE PLAN SET FOR LOCATIONS) 3/4" DECK COVER 2'-0" 3/4" DECK, 3/4" DECK 1/2" BLDG PARABLE (2'-0"AND BELOW) 5/8" HEADLOG 5/8" TRANSOM
FRAMING	DECK LONGITUDINAL, 6"x3" CHANNEL L5"x3"x3/8" & L5"x3"x3/8" (SEE PLAN GRA) BOTTOM LONGITUDINAL, 6"x3" CHANNEL L5"x3"x3/8" SIDE LONGITUDINAL, 6"x3" CHANNEL (L5"x3"x3/8") ANGLE BEAM P/A/F
TRANSVERSE FRAMING	BOTTOM: 6 3"x3" CHANNEL TOP—1" CHANNEL (C10x20) BOTTOM—10" CHANNEL (C10x20) CHANNELS-L4"x3"x 5/16" VERTICALS-L4"x3" 3/8" (L4x4 / 7) LONGITUDINAL BULKHEADS 3/8" PLATING W/ L5"x3"x3/8" ANGLES, ONE AT EACH SIDE SEAM, AND ONE ANGLE BETWEEN TWENTY ONE SIDE BOW BULKHEAD 3/8" PLATING W/ L5"x3"x3/8" ANGLES, ONE AT EACH SIDE SEAM, AND ONE ANGLE BETWEEN TWENTY ONE SIDE TRANSVERSE BULKHEADS 3/8" PLATING W/ L5"x3"x3/8" ANGLES @ 16" CENTERS COLLISION BULKHEADS 3/8" PLATING W/ L5"x3"x3/8" ANGLES @ 16" CENTERS BILGE BARS 2-L6x4 BOTTOM CHANNELS (1'-1" REPEATED AND 6") 3/4" (LOWER) BITTS 1-14" BOLLARD (1 EACH CORNER) FENDERS 6-18" (2 MID-BODY @ BARGE, 1 EACH END OF CONTINUUM) HATCHES 1-1'-0" HATCHES (2 EACH END) CHAINPLATES 16-10"X FLUSH CHAINPLATE (SEE PLAN GRA FOR LOCATIONS)



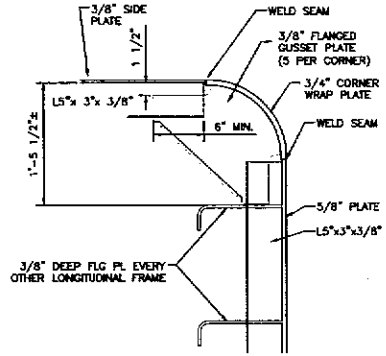
3/8" FLANGED HEADLOG STIFFENER
SCALE: 1 1/2"= 1'-0"



3/8" SIDE PLATE FLANGE DETAIL
SCALE: 1 1/2"= 1'-0"



3/8" GUSSET PLATE DETAIL
SCALE: 1 1/2"= 1'-0"



ENLARGED PLAN @ TRANSOM CORNER
SCALE: 1 1/2"= 1'-0"

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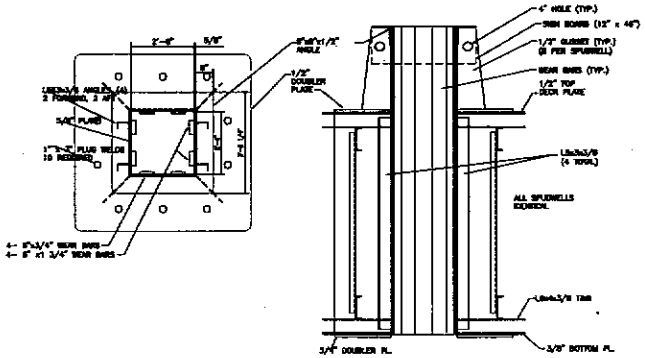
BIG 90 3

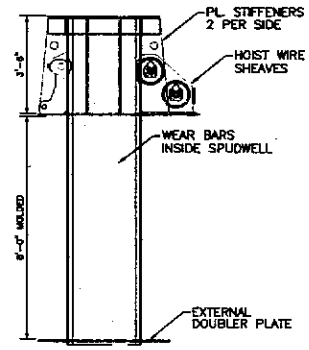
ABS CLASSED
150'x64'x8' DECK BARGE
HULL E-09-41

REVISIONS	DATE	DESCRIPTION
1	-	-
2	-	-
3	-	-

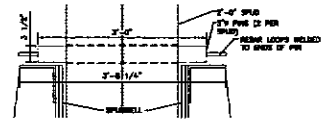
TITLE: DETAILS
ISSUE DATE: 2/17/99
PROJECT NO.: 1A0000-15
DRAWING NO.: 03



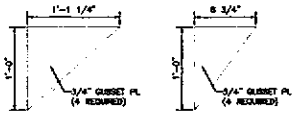
SPUDWELL DETAIL
SCALE: 1/2"= 1'-0"



SELF HOISTING (OPTIONAL) SPUDWELL DETAIL
SCALE: 1/2"= 1'-0"

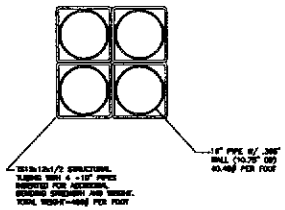


PIPE STOP DETAIL
SCALE: 1" = 1'-0"

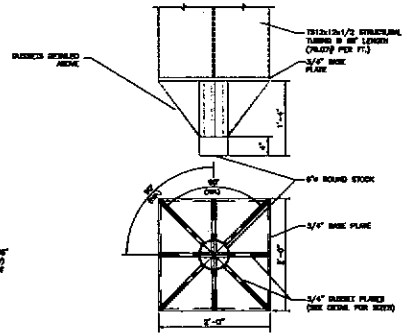


NOTE:
GUSSETS RADIATE OUT FROM ROUND STOCK AS SHOWN ON SPUD POINT DETAIL

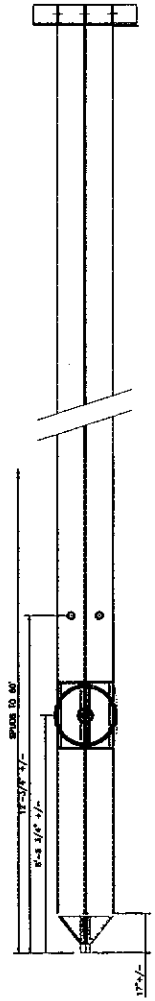
SPUD POINT GUSSET PLATES
SCALE: 1 1/2" = 1'-0"



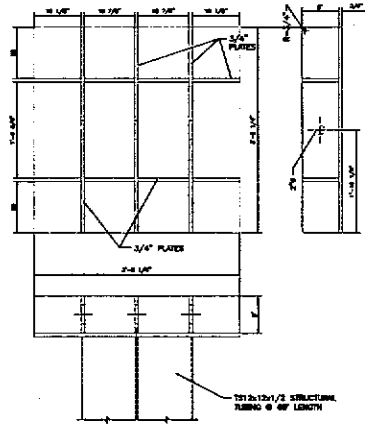
SPUD CROSS SECTION



SPUD POINT DETAIL
SCALE: 1"= 1'-0"



SPUD ELEVATION
SCALE: 1/2"= 1'-0"



SPUD DETAIL- @ CAP
SCALE: 1" = 1'-0"

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636-225-9106

BIG 903

ABS CLASSED
150'x54'x9' DECK BARGE
HULL "E-09-41"

REVISIONS		
#	DATE	DESCRIPTION

TITLE: SPUD / SPUDWELL DETAILS
ISSUE DATE: 5/17/06
PROJECT NO.:
DRAWING NO.: 004

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