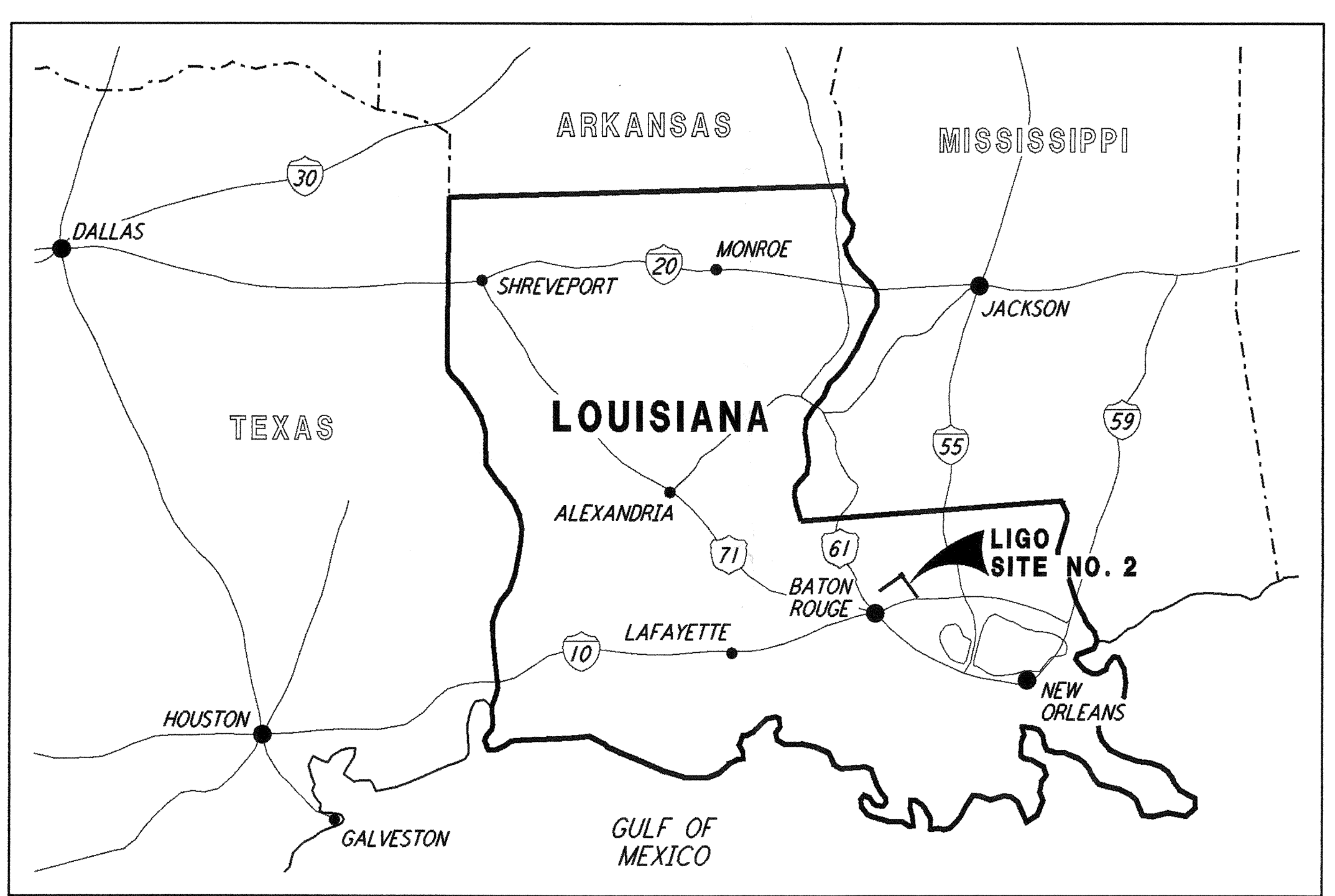
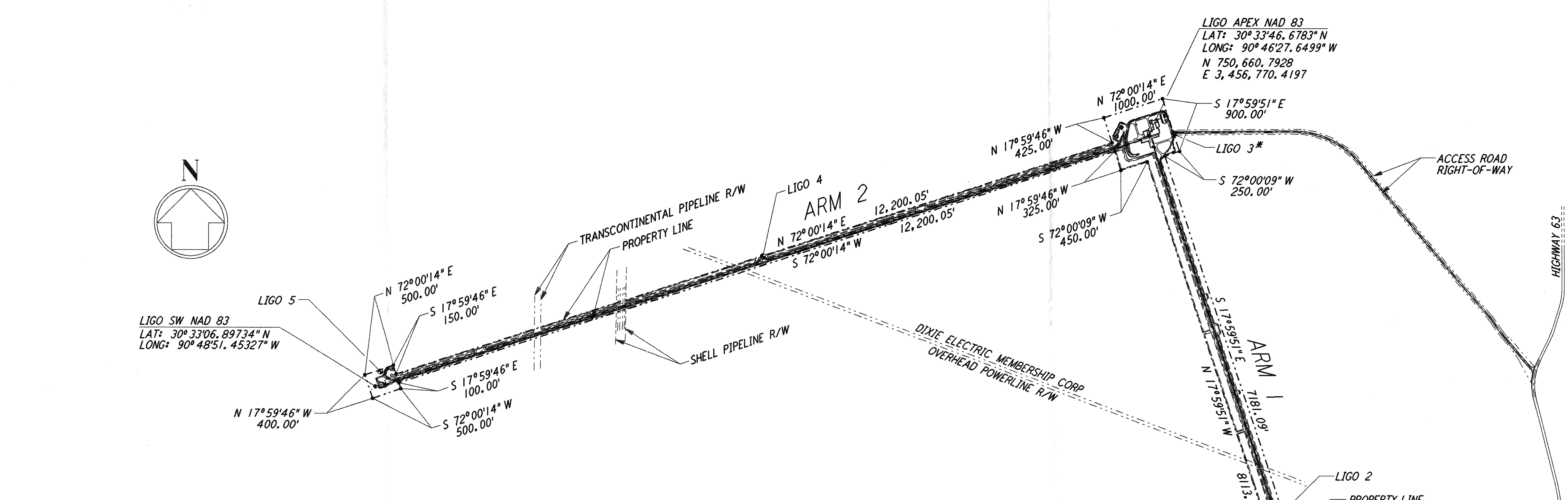
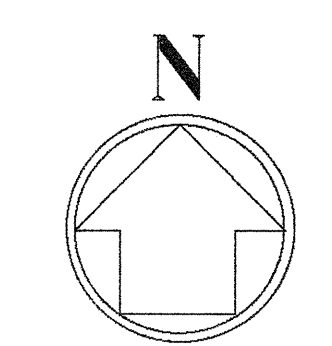
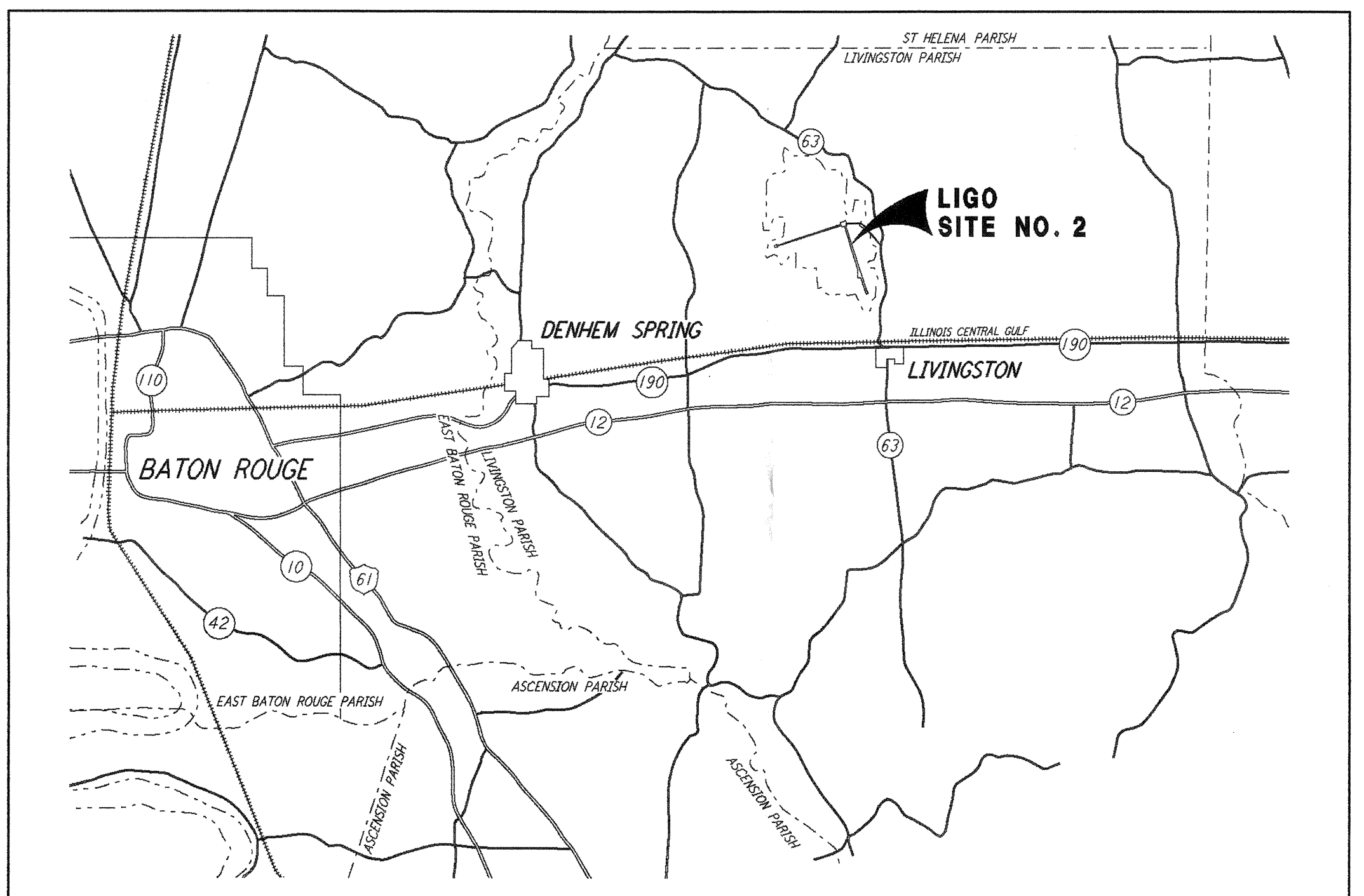


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DRAWING INDEX	
DRAWING NUMBER	DRAWING TITLE
<b>CIVIL</b>	
LA-C-501	CIVIL, DRAWING INDEX, LOCATION & VICINITY MAPS
LA-C-502	CIVIL, GENERAL NOTES, LEGEND & ABBREVIATIONS
LA-C-503	CIVIL, DRAWING MATRIX
LA-C-504	CIVIL, TYPICAL SECTIONS AND DETAILS
LA-C-505	CIVIL, CORNER STATION PLAN
LA-C-511	CIVIL, SOUTHWEST ARM, PLAN AND PROFILE, STA 0+00 TO STA 14+00
LA-C-512	CIVIL, SOUTHWEST ARM, PLAN AND PROFILE, STA 14+00 TO STA 28+00
LA-C-513	CIVIL, SOUTHWEST ARM, PLAN AND PROFILE, STA 28+00 TO STA 42+00
LA-C-514	CIVIL, SOUTHWEST ARM, PLAN AND PROFILE, STA 42+00 TO STA 56+00
LA-C-515	CIVIL, SOUTHWEST ARM, PLAN AND PROFILE, STA 56+00 TO STA 70+00
LA-C-516	CIVIL, SOUTHWEST ARM, PLAN AND PROFILE, STA 70+00 TO STA 84+00
LA-C-517	CIVIL, SOUTHWEST ARM, PLAN AND PROFILE, STA 84+00 TO STA 98+00
LA-C-518	CIVIL, SOUTHWEST ARM, PLAN AND PROFILE, STA 98+00 TO STA 112+00
LA-C-519	CIVIL, SOUTHWEST ARM, PLAN AND PROFILE, STA 112+00 TO STA 126+00
LA-C-520	CIVIL, SOUTHWEST ARM, PLAN AND PROFILE, STA 126+00 TO STA 133+00
LA-C-521	CIVIL, SOUTHWEST ARM, PUMP STATION, PLOT AND UTILITY PLAN
LA-C-531	CIVIL, SOUTHEAST ARM, PLAN AND PROFILE, STA 0+00 TO STA 14+00
LA-C-532	CIVIL, SOUTHEAST ARM, PLAN AND PROFILE, STA 14+00 TO STA 28+00
LA-C-533	CIVIL, SOUTHEAST ARM, PLAN AND PROFILE, STA 28+00 TO STA 42+00
LA-C-534	CIVIL, SOUTHEAST ARM, PLAN AND PROFILE, STA 42+00 TO STA 56+00
LA-C-535	CIVIL, SOUTHEAST ARM, PLAN AND PROFILE, STA 56+00 TO STA 70+00
LA-C-536	CIVIL, SOUTHEAST ARM, PLAN AND PROFILE, STA 70+00 TO STA 84+00
LA-C-537	CIVIL, SOUTHEAST ARM, PLAN AND PROFILE, STA 84+00 TO STA 98+00
LA-C-538	CIVIL, SOUTHEAST ARM, PLAN AND PROFILE, STA 98+00 TO STA 112+00
LA-C-539	CIVIL, SOUTHEAST ARM, PLAN AND PROFILE, STA 112+00 TO STA 126+00
LA-C-540	CIVIL, SOUTHEAST ARM, PLAN AND PROFILE, STA 126+00 TO STA 133+00
LA-C-541	CIVIL, SOUTHEAST ARM, PUMP STATION, PLOT AND UTILITY PLAN
<b>STRUCTURAL</b>	
LA-S-501	STRUCTURAL, BEAM TUBE ENCLOSURE, GENERAL NOTES, ABBREVIATIONS & LEGEND
LA-S-502	STRUCTURAL, KEY PLAN OF BEAM TUBE ENCLOSURE & PARTIAL ENLARGED PLANS
LA-S-502A	STRUCTURAL, SOUTHEAST ARM BEAM TUBE ENCLOSURE PARTIAL ENLARGED PLANS
LA-S-503	STRUCTURAL, BEAM TUBE ENCLOSURE PLANS, SECTIONS & DETAILS
LA-S-504	STRUCTURAL, KEY PLAN OF BEAM TUBE ENCLOSURE FOUNDATION & PARTIAL ENLARGED PLANS
LA-S-505	STRUCTURAL, BEAM TUBE ENCLOSURE, SECTIONS & DETAILS, SHEET 1
LA-S-506	STRUCTURAL, BEAM TUBE ENCLOSURE, SECTIONS & DETAILS, SHEET 2
LA-S-507	STRUCTURAL, BEAM TUBE ENCLOSURE, MID STATIONS "A" & "B" FOUNDATION PLANS
<b>ELECTRICAL</b>	
LA-E-505	ELECTRICAL, GROUNDING DETAILS
LA-E-507	ELECTRICAL, MID STATION A, GROUNDING & UNDERGROUND PLAN
LA-E-517	ELECTRICAL, MID STATION B, GROUNDING & UNDERGROUND PLAN



LOCATION MAP  
NOT TO SCALE



VICINITY MAP  
NOT TO SCALE

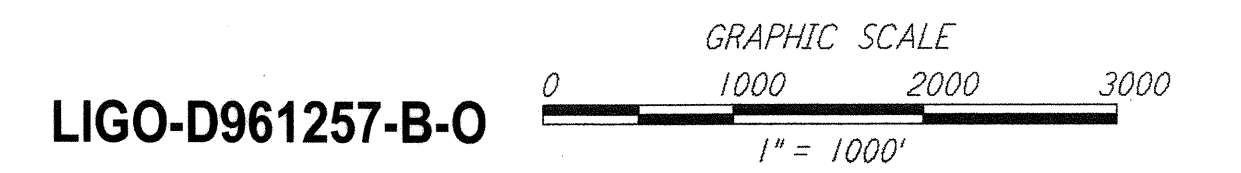
COORDINATE TABLE & ELEVATIONS FOR LIGO GPS POINTS

GPS POINT	COORDINATES		ELEVATION
	NORTH	EAST	
APEX	750660.79279	3456770.41970	-
LIGO 1*	738320.57379	3460989.05172	50.1859
LIGO 2	744519.64252	3458903.40003	54.8696
LIGO 3*	750681.37965	3457182.57992	58.6390
LIGO 4	748702.39005	3450520.15899	62.4526
LIGO 5	746819.76529	3444303.96185	58.6393
A 290	-	-	42.1193
Y 21	-	-	41.2794
S 294	-	-	42.4081

NOTE: GPS COORDINATE POINTS ARE HIGH ACCURACY  
 \* LIGO 1 AND LIGO 3 SHALL BE RE-ESTABLISHED BY CONTRACTOR IN NEW A LOCATION, TO BE DETERMINED.

**SURVEY NOTES:**

- PROPERTY LINE LOCATION AND LIGO ACCESS ROAD RIGHT-OF-WAY ARE BY A SURVEY PERFORMED BY ALEX THERIOT JR & ASSOCIATES, INC., DENHAM SPRINGS, DATED MARCH 12, 1993.
- HORIZONTAL AND VERTICAL CONTROLS ARE FROM A VERNON F. MEYER GPS SURVEY, AND ARE AS FOLLOWS:  
 HORIZONTAL CONTROL: ALL BEARINGS AND DISTANCES SHOWN HEREON ARE LAMBERT GRID, NAD 83/92, LOUISIANA SOUTH ZONE (1702).  
 VERTICAL CONTROL: ELEVATIONS SHOWN ARE MEAN SEA LEVEL, DATUM NAVD 88. ELEVATIONS ARE A LEAST SQUARES ADJUSTMENT HOLDING TO NAVD 88 VALUES OF NGS ADJUSTED ELEVATION OF BENCHMARK A 290, Y 21 AND S 294 (VERT. ORDER - FIRST CLASS 1)
- CALTECH WILL PROVIDE FIVE (5) GPS SURVEY MONUMENTS FOR INITIAL CONTROL OF THE WORK. ADDITIONAL (APPROXIMATELY 15) FIRST ORDER GPS MONUMENTS ARE NECESSARY TO ACCURATELY PLACE THE EQUIPMENT.
- ROUGH GRADING DRAWINGS WERE BASED ON AN APEX COORDINATE OF N 750662.6458, E 3456770.8116. THIS ROUGH GRADING APEX POINT, GRID, OR OTHER ROUGH GRADING COORDINATES SHALL NOT BE USED FOR THE CONTROL OF THE WORK IN THIS CONTRACT.



DRAWING NO.	DESCRIPTION	NO.	DATE	BY	CHKD	ENGR	PROJ	DESCRIPTION
B	7/24/96	WRB	ML	CP	TDM			ISSUED FOR BID
A	6/28/96	WRB	ML	JB	TDM			FINAL DESIGN REVIEW

DRAWN	WRB	6/24/96
CHECKED		
ENGINEER		
PROJ		

100 WEST WALNUT STREET  
PASADENA, CALIFORNIA

CALIFORNIA INSTITUTE OF TECHNOLOGY  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

LASER INTERFEROMETER  
GRAVITATIONAL-WAVE OBSERVATORY  
BEAM TUBE ENCLOSURE - LIVINGSTON, LA

TITLE	SCALE	CONTRACT NUMBER	PROJECT NUMBER
CIVIL DRAWING INDEX LOCATION & VICINITY MAPS	AS NOTED	PP150969	8094
SHEET NUMBER	LA-C-501		