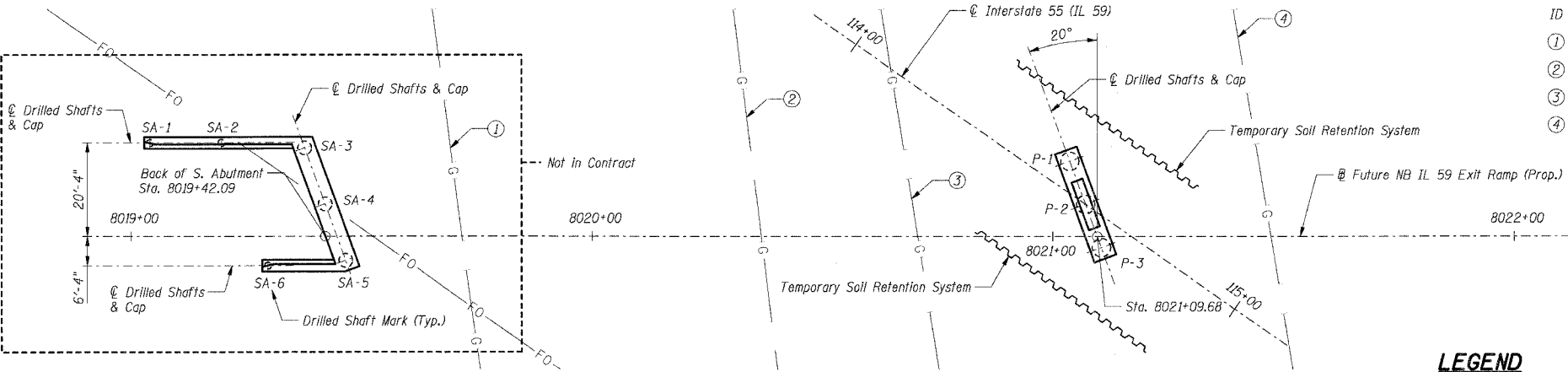
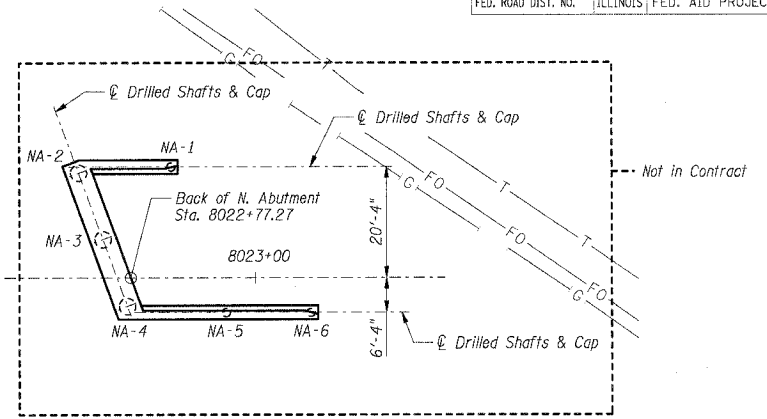


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	99 (I&2) WRS	WILL	334	259
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

KINDER MORGAN GAS PIPELINES

ID	DESIGNATION	DIAMETER
①	GC #1	30"
②	AM #4	36"
③	AM #2	24"
④	GC #3	36"



LEGEND

- T- Telephone Line
- G- Gas Line
- FO- Fiber Optic Line

SUBSTRUCTURE LAYOUT

BILL OF MATERIAL - ABUTMENTS

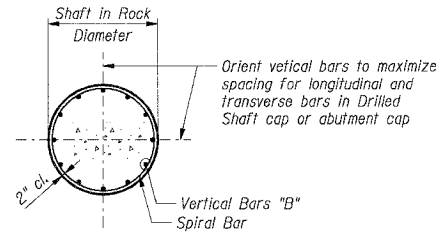
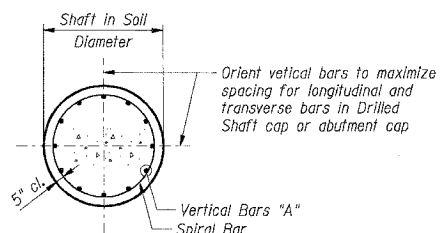
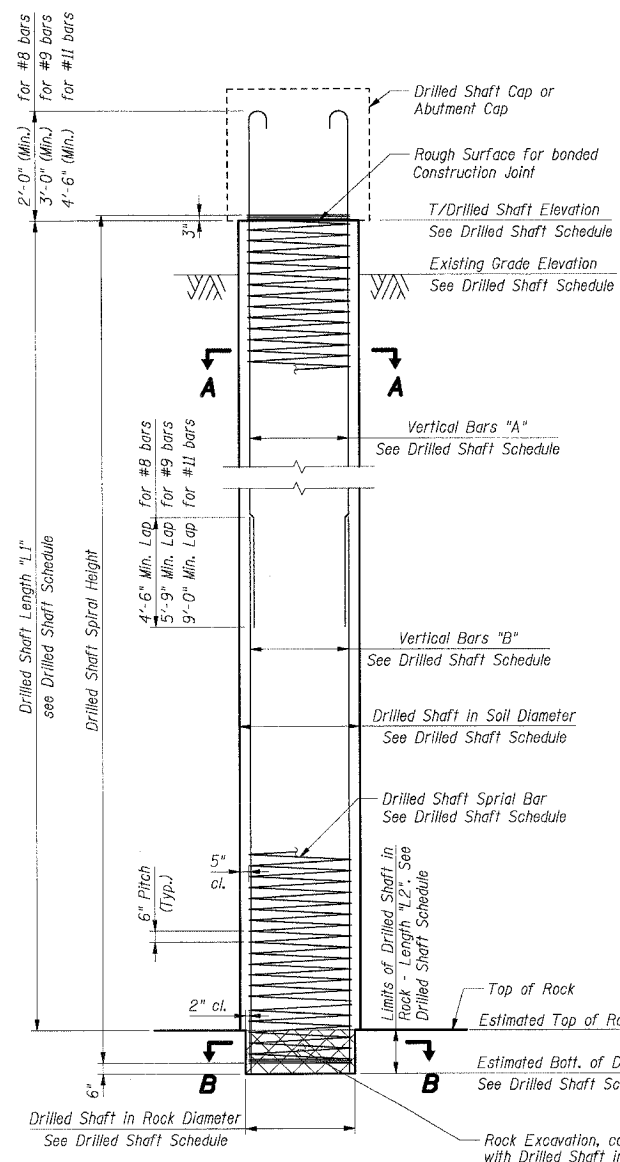
Item	Unit	Total
Drilled Shaft in Soil	Cu Yd	114.0
Drilled Shaft in Rock	Cu Yd	4.2
Reinforcement Bars	Lbs	21,690

BILL OF MATERIAL - PIER

Item	Unit	Total
Drilled Shaft in Soil	Cu Yd	27.3
Drilled Shaft in Rock	Cu Yd	3.0
Reinforcement Bars	Lbs	7,110

Notes:
 1. The quantities and reinforcement detailing are based on the top of shaft and the estimated top of rock elevations shown and may change based on the actual top of rock encountered at each shaft and the final top of shaft elevation.
 2. Soil and groundwater conditions may necessitate the use of wet or cased construction techniques. See boring logs and refer to special provision for Drilled Shafts.
 3. For detail layout of abutment and pier dimensions, see abutment and pier plans.

Mark	Location		Drilled Shaft in Soil		Drilled Shaft in Rock		Reinforcement			Top of Drilled Shaft Elevation	Bottom of Drilled Shaft Elevation*	Allow. Brg. Pressure (tsf)	Existing Grade Elevation*	QUANTITIES		Reinforcing Bars (Lbs)
	Station	Offset	Diameter	Length L1	Diameter	Length L2	Vertical Bars "A"	Vertical Bars "B"	Spiral Bar					Drilled Shaft in Soil (Cu Yd)	Drilled Shaft in Rock (Cu Yd)	
SA-1	8019+04.09	-20.33	24"	39'-10"	18"	2'-0"	6- #8v21	6- #8v20	1- #4sp20	611.32	569.5	100	593.6	4.7	0.2	1,010
SA-2	8019+19.59	-20.33	24"	39'-10"	18"	2'-0"	6- #8v21	6- #8v20	1- #4sp20	611.32	569.5	100	593.6	14.3	0.5	1,010
SA-3	8019+37.62	-19.22	42"	39'-10"	36"	2'-0"	12- #9v23	12- #9v22	1- #4sp21	611.32	569.5	100	593.6	14.3	0.5	2,620
SA-4	8019+42.07	-7.00	42"	39'-10"	36"	2'-0"	12- #9v23	12- #9v22	1- #4sp21	611.32	569.5	100	593.6	14.3	0.5	2,620
SA-5	8019+46.51	5.22	42"	39'-10"	36"	2'-0"	12- #9v23	12- #9v22	1- #4sp21	611.32	569.5	100	593.6	4.7	0.2	2,620
SA-6	8019+29.65	6.33	24"	39'-10"	18"	2'-0"	6- #8v21	6- #8v20	1- #4sp20	611.32	569.5	100	593.6	4.7	0.2	1,010
P-1	8021+03.71	-16.40	54"	15'-6"	48"	2'-0"	12- #11v29	12- #11v28	1- #4sp24	585.00	567.5	100	591.2	9.1	1.0	2,370
P-2	8021+07.13	-7.00	54"	15'-6"	48"	2'-0"	12- #11v29	12- #11v28	1- #4sp24	585.00	567.5	100	591.2	9.1	1.0	2,370
P-3	8021+10.55	2.40	54"	15'-6"	48"	2'-0"	12- #11v29	12- #11v28	1- #4sp24	585.00	567.5	100	591.2	9.1	1.0	2,370
NA-1	8022+84.61	-20.33	24"	39'-5"	18"	2'-0"	6- #8v25	6- #8v24	1- #4sp22	612.87	571.5	100	595.9	4.7	0.2	1,000
NA-2	8022+67.75	-19.22	42"	39'-5"	36"	2'-0"	12- #9v26	12- #9v25	1- #4sp23	612.87	571.5	100	595.9	4.7	0.2	2,600
NA-3	8022+72.20	-7.00	42"	39'-5"	36"	2'-0"	12- #9v27	12- #9v26	1- #4sp23	612.87	571.5	100	595.9	14.3	0.5	2,600
NA-4	8022+76.64	-5.22	42"	39'-5"	36"	2'-0"	12- #9v27	12- #9v26	1- #4sp23	612.87	571.5	100	595.9	14.3	0.5	2,600
NA-5	8022+94.67	6.33	24"	39'-5"	18"	2'-0"	6- #8v25	6- #8v24	1- #4sp22	612.87	571.5	100	595.9	14.3	0.5	1,000
NA-6	8023+10.17	6.33	24"	39'-5"	18"	2'-0"	6- #8v25	6- #8v24	1- #4sp22	612.87	571.5	100	595.9	4.7	0.2	1,000



Bar	A	B
sp20	41'-7"	1'-2"
sp21	41'-7"	2'-8"
sp22	41'-2"	1'-2"
sp23	41'-2"	2'-8"
sp24	17'-3"	3'-8"

BAR LIST - ABUTMENTS

Bar	No.	Size	Length	Shape
sp20	3	#4	41'-7"	W
sp21	3	#4	41'-7"	W
sp22	3	#4	41'-2"	W
sp23	3	#4	41'-2"	W
v20	18	#8	24'-0"	U
v21	18	#8	25'-0"	U
v22	36	#9	25'-0"	U
v23	36	#9	26'-7"	U
v24	18	#8	24'-0"	U
v25	18	#8	24'-7"	U
v26	36	#9	25'-0"	U
v27	36	#9	26'-2"	U

BAR LIST - PIER

Bar	No.	Size	Length	Shape
sp24	3	#4	17'-3"	W
v28	36	#11	15'-3"	U
v29	36	#11	17'-1"	U

ELEVATIONS SHOWN ON SHEETS 257 THRU 262 ARE BASED ON NGVD 29 VERTICAL DATUM, WHILE ALL OTHER CONTRACT 62895 ELEVATIONS ARE BASED ON NAVD 88 VERTICAL DATUM. ELEVATIONS SHOWN ON SHEETS 257 THRU 262 MUST BE CONVERTED TO NAVD 88 VERTICAL DATUM BY SUBTRACTING 0.31 FEET FROM ELEVATIONS DENOTED.

FOR EXAMPLE:
 ON SHT. 257 (C BRG. PIER, STA. 8021+09.68, EL. 623.44 (NGVD 29))
 CONVERT: EL. 623.44 (NGVD 29)
 - 0.31
 EL. 623.13 (NAVD 88)
 USE EL. 623.13

SHT. 3 OF 6

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 FAI ROUTE 55 (I-80 TO BLACK ROAD)
 WIDENING AND RESURFACING
 IL ROUTE 59 OVER I-55, S.N. 099-4642
 STA. 8021+17.13, SECTION 26HB-1BR & 114R-1
 WILL COUNTY

**SUBSTRUCTURE LAYOUT
 DRILLED SHAFT DETAILS & SCHEDULE**

SCALE: DRAWN BY MX
 DATE 02/23/07 CHECKED BY TMH

TENG TENG & ASSOCIATES, INC.
 ENGINEERS/ARCHITECTS/PLANNERS
 CHICAGO, ILLINOIS

DATE = 02/23/07
 FILE NAME = 022307.DWG
 PLOT SCALE = 1/8"=1'-0"
 USER = JH