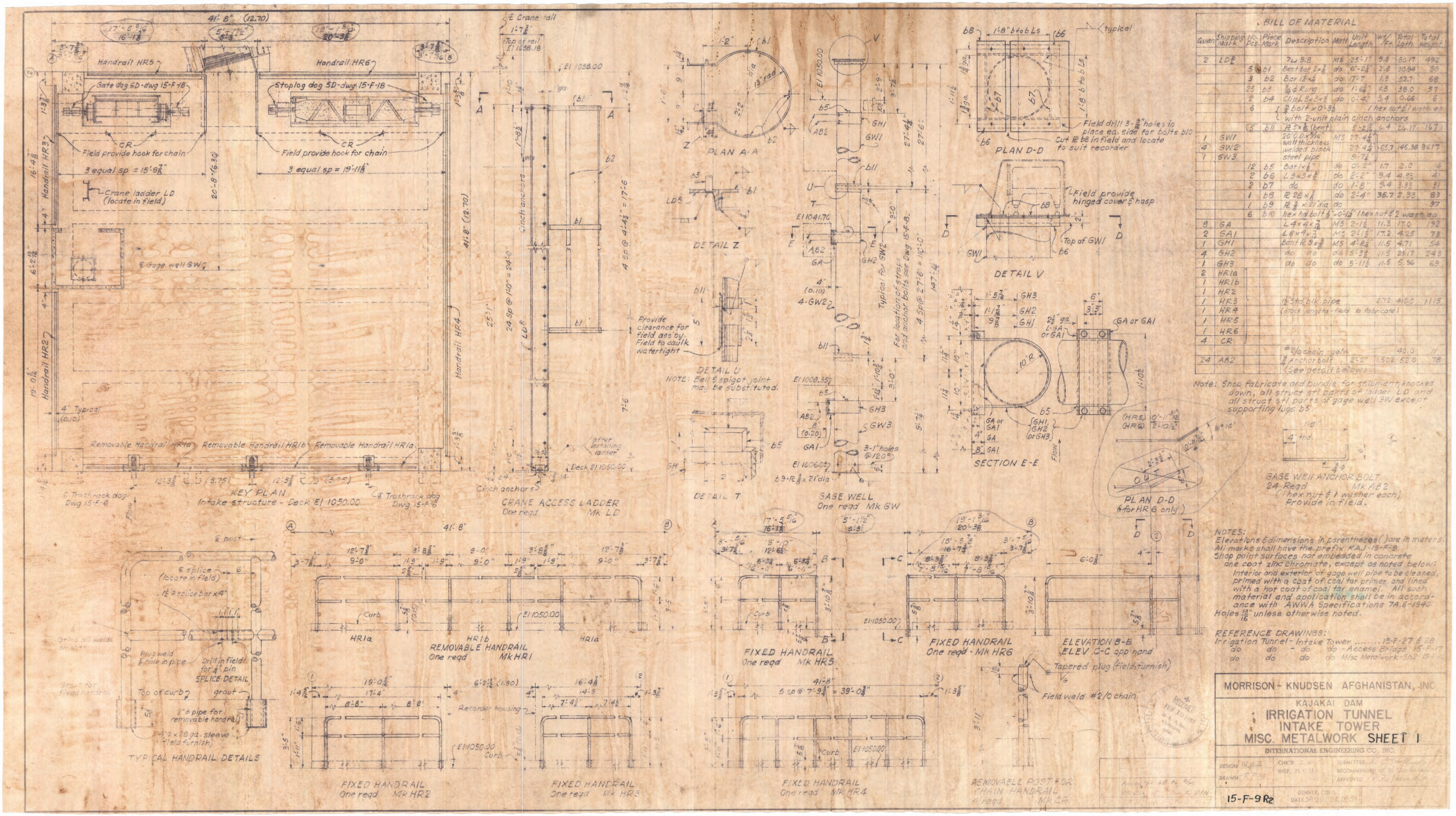

BILL OF MATERIAL

Quan	Shipping Mark	No. Pcs	Piece Mark	Description	Matl	Unit Length	Wt/Ft	Total Length	Total Weight
2	LD	2		7L 9.8	MS	25'-1"	9.8	50.17	492
		5	b1	Bent bar 2×⅝	do	6'-2½"	2.8	30.84	80
		3	b2	Bar 13×⅝	do	17'-7"	1.3	52.7	68
		25	b3	¾ϕ Ring	do	1'-6½"	1.5	38.0	57
		2	b4	Clip L 3×3×⅜	do	0'-4"	5.4	0.66	6
		6		⅝ϕ bolt × 0'-3½" (1 hex nut & 1 washer each with 2-unit plain cinch anchors					
		5	b11	R 5×⅜ (bent)		5'-2½"	6.4	26.17	167
1	SW1			20'0 D×5/16" wall thickness welded black steel pipe	MS	27'-4½"	55.7	146.38	8617
4	SW2					27'-4½"			
1	SW3					9'-7½"			
		12	b5	Bar 1×⅜	do	0'-2"	1.7	2.0	4
		2	b6	L 3×3×⅜	do	2'-2"	9.4	4.93	41
		2	b7	do	do	1'-8"	9.4	3.33	31
		1	b8	R 26×⅜	do	2'-4"	36.7	2.33	83
		1	b9	R ⅜ × 21"dia	do				37
		6	b10	hex hd bolt ⅝"-0'-12" (hex nut & 2 washers ea					
8	GA			L 4×4×⅜	MS	2'-1½"	11.3	17.0	192
2	GA1			L 8×4×½	MS	2'-1½"	17.2	4.25	73
1	GH1			Bent R 9×⅜	MS	4'-8½"	11.5	4.71	54
4	GH2			do	do	do	11.5	21.17	243
1	GH3			do	do	do	11.5	5.96	69
2	HR1a								
1	HR1b								
1	HR2								
1	HR3			12" Std blk pipe			672	410.0	1115
1	HR4			(stock lengths - field to fabricate)					
1	HR5								
1	HR6								
4	CR								
				⅜ϕ chain req'd				40.0	11
24	AB2			⅞ Anchor bolt (See detail below)		2'-5"	1.502	52.0	78

Note: Shop fabricate and bundle for shipment knocked down, all struct str parts of ladder LD and all struct str parts of gage well SW except supporting lugs b5.

NOTES:
Elevations & dimensions in parentheses ( ) are in meters.
All marks shall have the prefix KA.I-15-F-18.
Shop paint surfaces not embedded in concrete one coat zinc chromate, except as noted below:
Interior and exterior of gage well pipe to be cleaned, primed with a coat of coal tar primer and lined with a hot coat of coal tar enamel. All such material and application shall be in accordance with AWWA Specifications 74.6-1940.
Holes 13/16" unless otherwise noted.

REFERENCE DRAWINGS:
Irrigation Tunnel - Intake Tower ..... 15-F-27 & 28
do do - do do - Access Bridge 15-F-17
do do do do - Misc Metalwork - Sht 2 15-F-9

MORRISON - KNUDSEN AFGHANISTAN, INC.

KAJAKAI DAM
IRRIGATION TUNNEL
INTAKE TOWER
MISC. METALWORK SHEET 1

INTERNATIONAL ENGINEERING CO., INC.

DESIGN W.E.B. CHK'D C.W.H. SUBMITTED
DRAWN E.P.N. INSP. H.V.H. RECOMMENDED
APPROVED
DENVER, COLO. DATE 2-20-61

15-F-9 R2