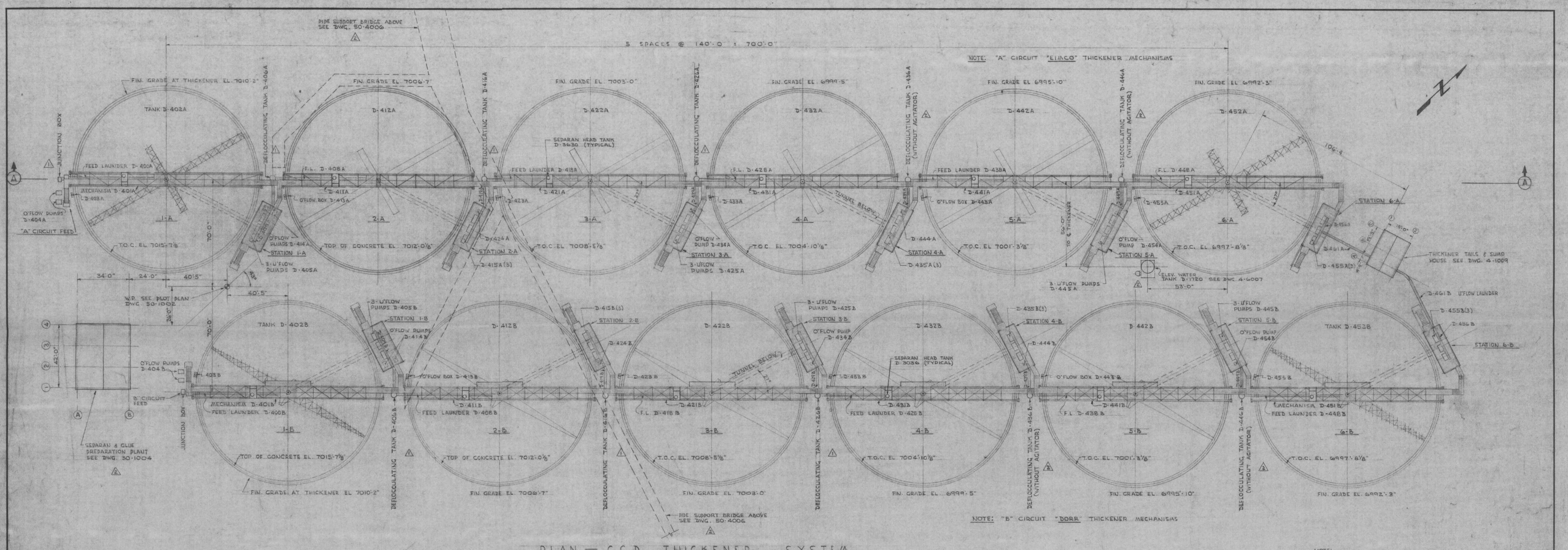


PLAN — C.C.D. THICKENER SYSTEM

SCALE 1" = 30'

D-406A, D-406B, D-416A
D-416B, D-426A, D-426B

DEFLOCCULATING MIXERS

'LIGHTNIN' MODEL L-DS-300
16" PROPELLER BLADE @ 431 R.P.M.
LOUIS ALLIS 3 HP. 1750 R.P.M. T.E.F.C.
GEAR DRIVE

NOTE:

FOR LAYOUT OF "A" AND "B" CIRCUIT FEEDS - SEE DWG. 4-1005

FOR LAYOUT OF PUMP STATIONS 1-A AND 1-B - SEE DWG. 4-1004

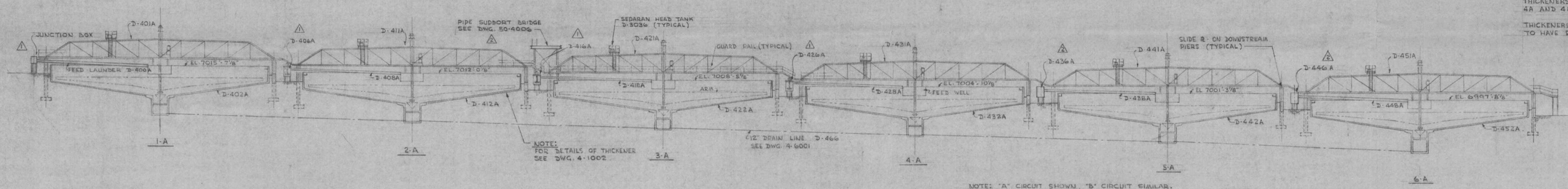
FOR LAYOUT OF PUMP STATIONS 2-A THRU 5-A AND 2-B THRU 5-B SEE DWG. 4-1006

FOR LAYOUT OF PUMP STATIONS 6-A AND 6-B SEE DWG. 4-1008

NOTE:

THICKENERS NO. 1A, 1B, 2A, 2B, 3A, 3B, 4A AND 4B TO HAVE ACID BRICK LINING

THICKENERS NO. 5A, 5B, 6A AND 6B TO HAVE PROTECTIVE MEMBRANE LINING



NOTE: FOR DETAILS OF THICKENER SEE DWG. 4-1002

NOTE: "A" CIRCUIT SHOWN, "B" CIRCUIT SIMILAR.

SECTION — A-A

SCALE 1" = 30'

D-401A, D-411A, D-421A
D-431A, D-441A, D-451A

"A" CIRCUIT 'ELMCO' THICKENERS (6)

LIFTING MECHANISM

WEST. 1 H.P. 1800 R.P.M. T.E.F.C.
FRAME # 182. W/SLIDE BASE, STYLE # 1780-001
CHAIN & SPROCKETS - BY 'ELMCO'

DRIVE MECHANISM

WEST. 3 H.P. 1800 R.P.M. T.E.F.C.
FRAME # 213. STYLE # 198A750-604, P-TYPE BASE
DIRECT COUPLED DRIVE - BY 'ELMCO'

D-401B, D-411B, D-421B
D-431B, D-441B, D-451B

"B" CIRCUIT 'DORR' THICKENERS (6)

LIFTING MECHANISM

WEST. 1 H.P. 1800 R.P.M. T.E.N.V.
FRAME # 182 W/SLIDE BASE
V-BELT DRIVE
MOTOR, BASE & DRIVE BY 'DORR - OLIVER'

DRIVE MECHANISM

WEST. 5 H.P. 640 R.P.M. T.E.F.C. GEAR MOTOR
FRAME # AHA 215 W/SLIDE BASE
V-BELT DRIVE
MOTOR, BASE & DRIVE BY 'DORR - OLIVER'

D-404A (2), D-404B (2)

THICKENER OVERFLOW PUMPS

CENTRIFUGAL 750 R.P.M. 'WILFLEY' MODEL 'H'
10" INTAKE, 6" DISCHARGE
WEST. 50 H.P. 1200 R.P.M. T.E.F.C. FRAME # 365 U
V-BELT DRIVE

D-414A(2), D-414B(2)

THICKENER OVERFLOW PUMPS

CENTRIFUGAL 860 R.P.M. 'WILFLEY' MODEL 'K'
10" INTAKE, 6" DISCHARGE
WEST. 50 H.P. 1200 R.P.M. T.E.F.C. FRAME # 405U
V-BELT DRIVE

D-424A, D-424B

THICKENER OVERFLOW PUMPS

CENTRIFUGAL 900 R.P.M. 'WILFLEY' MODEL 'H'
10" INTAKE 6" DISCHARGE
WEST. 50 H.P. 1200 R.P.M. T.E.F.C. FRAME # 405U
V-BELT DRIVE

D-434A, D-434B, D-444A, D-444B, D-454A, D-454B

THICKENER OVERFLOW PUMPS

CENTRIFUGAL 650 R.P.M. 'WILFLEY' MODEL 'H'
10" INTAKE 6" DISCHARGE
WEST. 25 H.P. 1200 R.P.M. T.E.F.C. FRAME # 364U
V-BELT DRIVE

D-405A (3), D-405B (3), D-415A (3), D-415B (3)
D-425A (3), D-425B (3), D-435A (3), D-435B (3)
D-445A (3), D-445B (3), D-455A (3), D-455B (3)

THICKENER OVERFLOW METERING PUMPS

NO. 6 'DORRCO', TYPE WR DUPLEX DIAPHRAGM SUCTION
WEST. 3 H.P. 1800 R.P.M. T.E.F.C. FRAME # 213
DRIVE SHEAVE - 5.2" P.D. WORTHINGTON 'QD' SHEAVE
DRIVEN SHEAVE - 12.0" P.D. WORTHINGTON 'QD' SHEAVE
2 WORTHINGTON - GOODYEAR V-BELTS NO. A-64
TYPE HY-T.

D-10

REVISIONS			
NO.	DATE	BY	
1	3-11-58	E.J.H.	DEFLOCCULATING TANKS ADDED, TANK LINING NOTE ADDED.
2	5-1-58	E.J.H.	GENERAL REVISION
3	9-2-58	E.J.H.	GENERAL REVISION

REVISIONS			
NO.	DATE	BY	

REFERENCES	
DWG. NO.	TITLE
4-1002	120 DIAMETER THICKENER & TUNNEL
4-1004	THICKENER PUMP ARRANGEMENT
4-6001	UNDERGROUND DRAINAGE
4-2001	EXCAVATION & GRADING

REFERENCES	
DWG. NO.	TITLE
4-3001	PLAN & ELEVATIONS
4-1009	TAILS SAMPLING HOUSE
30-1004	SEDARAN & GLUE PREPARATION PLANT
4-6009	C.C.D. THICKENER SYSTEM - PIPING.

APPROVED	
DATE	BY
2/19/58	HORK

DRAWING STATUS	
7/14	PRELIMINARY
7/14	FOR APPROVAL
	REFERENCE
7/24	APPROVED FOR CONST.
7/2	REVISED

PRINT RECORD								
BIDS								
VENDOR	8/Sep 8/Eng							
FIELD	7/24	7/19	7/1	7/2				
CUSTOMER	7/14	7/24	7/19	7/1	7/2			
DISPLAYED	7/14							

KERMAC NUCLEAR FUELS CORP.
URANIUM PROCESSING PLANT
GRANTS, NEW MEXICO

C.C.D. THICKENER SYSTEM
GENERAL ARRANGEMENT
GENERAL PLAN AND SECTION

ORDER-B-14500 ACCOUNT-

STEARNS-ROGER — ENGINEERS

DRAWN BY E. J. HOFFMAN
DATE 2-13-57
CHECKED F.S.B.
DATE 2-24-58

SCALE 1" = 30'
DRAWING NUMBER: 4-1003
REV. 3