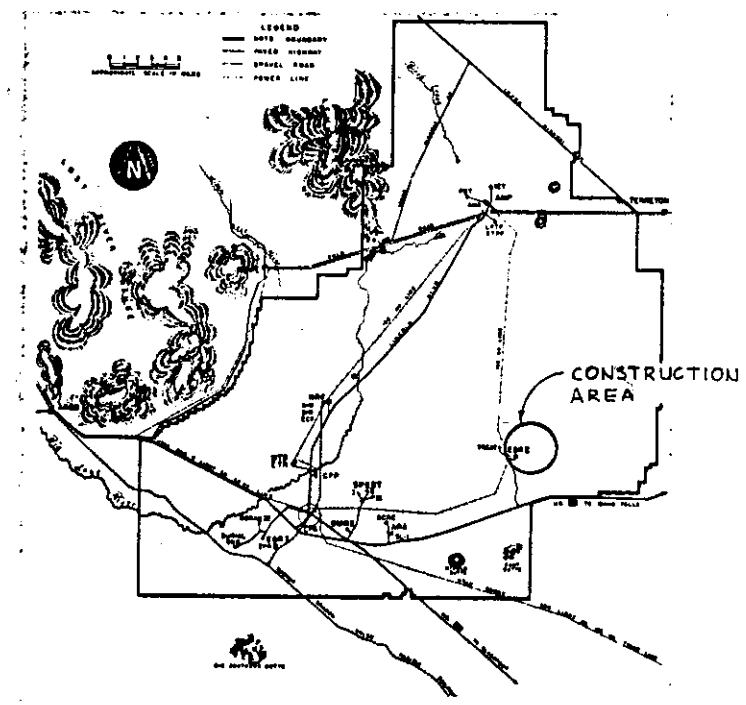
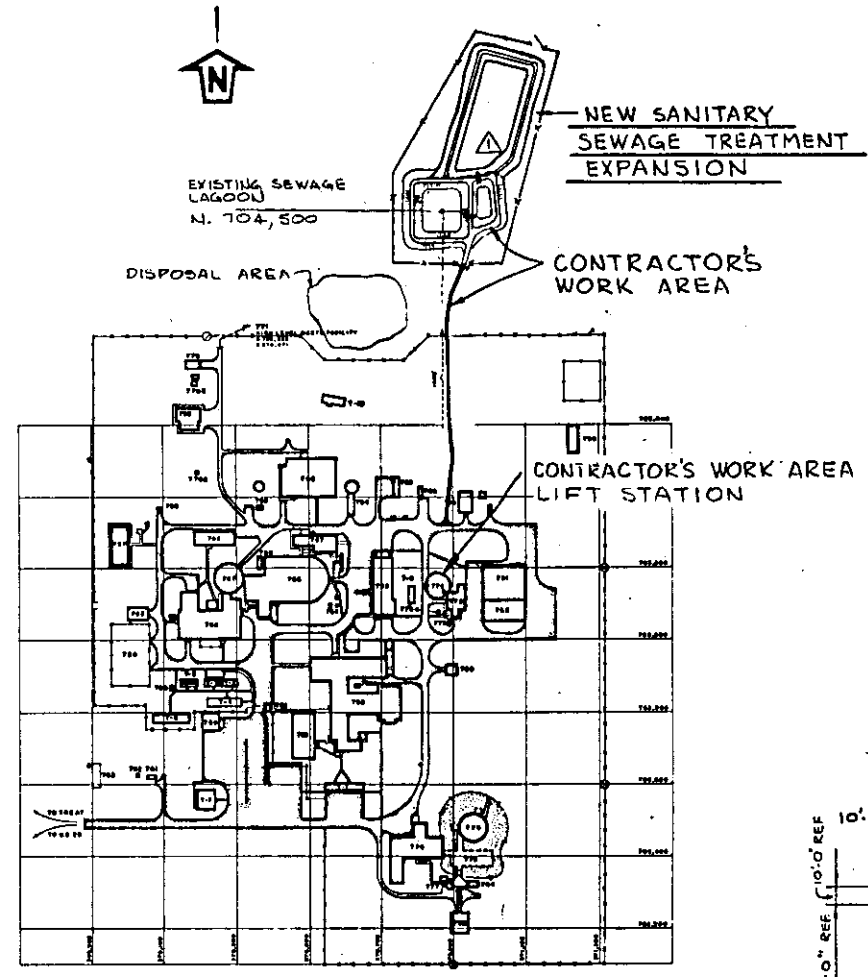
REFERENCE 21

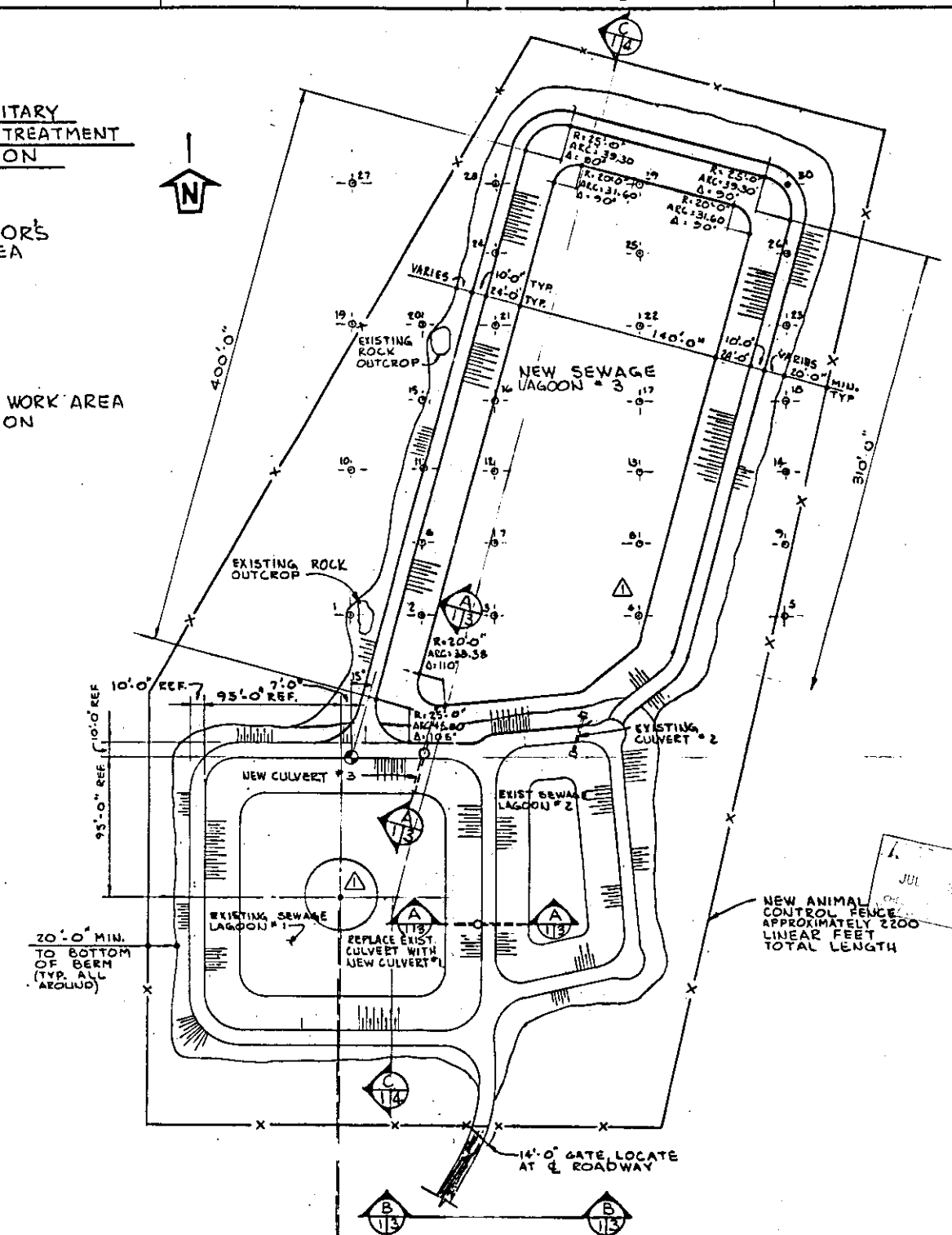
Engineering Drawings:
W7790-0103-DD-01 (pgs. 1-4 of 4)
IPE-779-1 (pgs. 4, 5 of 9)



NATIONAL REACTOR TESTING STATION



PLAN — ARGONNE WEST

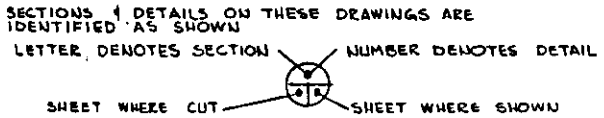


PLAN · SEWAGE TREATMENT EXPANSION

SCALE 2 1" = 50'-0"

GENERAL NOTE:

1. SECTIONS & DETAILS ON THESE DRAWINGS ARE IDENTIFIED AS SHOWN



2. MAKE & MODEL NUMBERS SHOWN ARE THOSE ON WHICH THE DESIGN IS BASED NOT TO ELIMINATE APPROVED EQUALS.

PROBE HOLE LOG

HOLE Nº	GROUND ELEVATION	ROCK ELEVATION
1	5118.95	5116.35
2	5117.90	5113.90
3	5117.50	5114.50
4	5118.35	5114.30
5	5119.25	5115.25
6	5118.60	5116.35
7	5117.25	5113.85
8	5117.95	5114.35
9	5118.95	5114.95
10	5118.95	5116.70
11	5118.30	5114.30
12	5117.65	5114.45
13	5118.30	5116.50
14	5119.50	5115.50
15	5117.90	5114.90
16	5118.00	5114.00
17	5117.70	5114.50
18	5119.65	5117.85
19	5117.40	5113.40
20	5117.25	5115.25
21	5117.30	5113.65
22	5117.30	5114.10
23	5119.25	5115.25
24	5117.15	5115.00
25	5117.10	5114.00
26	5119.40	5119.40
27	5115.90	5112.60
28	5116.30	5113.80
29	5117.10	5115.10
30	5118.80	5116.05

DRAWING CONSISTING OF 4 SHEETS

APPR'D	DATE	APPR'D	DATE
RALPH R. PONTO	7-31-74	R. J. TEUNIS	7-31-74
W.C. PERSKY	7-31-74		
R.C. WATSON	7-31-74		

MICRO-FILM STAMP
6-6-75(0)
7-25-75(1)

APPROVED CONST.	R.P. HEARN	DATE 7/31/74	SERVICE REQ NO. 80733/62492
STAFF APPROVAL		7/31/74	CHECKED J. LEWIS 7/24/74
REPRESENTATIVE	R.J. TEUNIS	—	DRAWN BY G. HURLEY 5/24/74

TOLERANCES, UNLESS OTHERWISE NOTED
FRACTIONAL ± 1/8
DECIMAL ± .005
ANGLE ± 1°
ELEMENTS TO HAVE "V" OR NO ARCHIVED FINISH. REMOVE ALL BURRS.

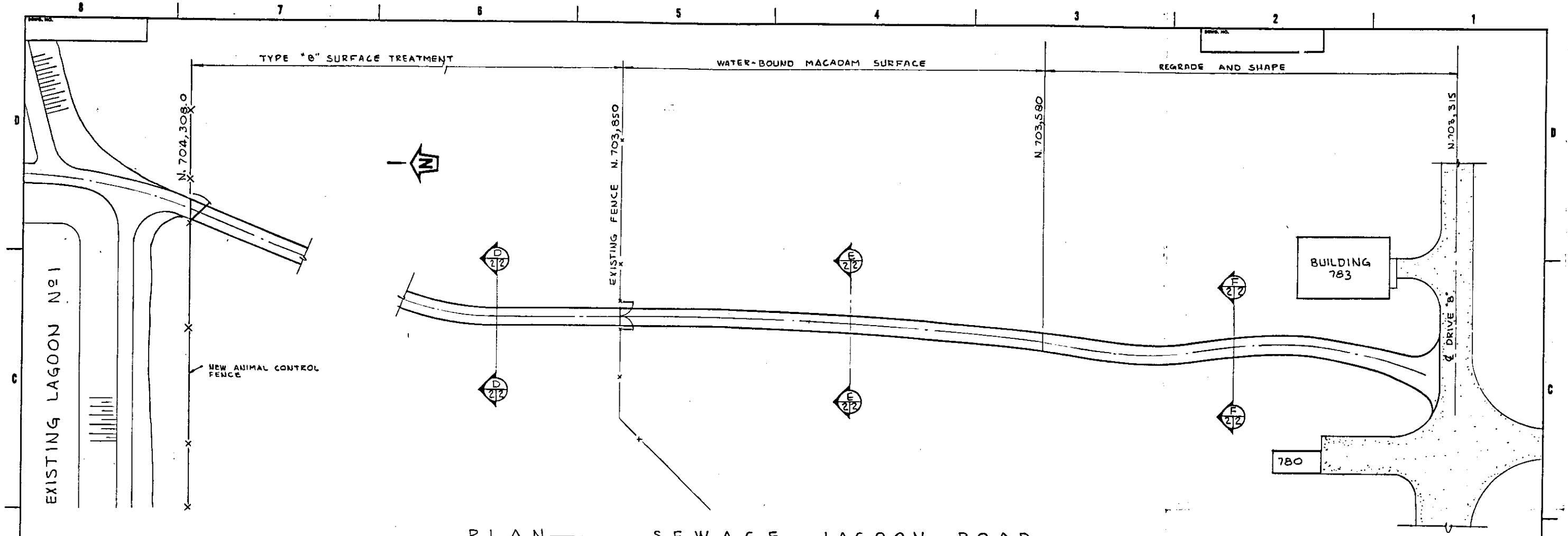
SYM.	ZONE	CHANGE	DATE	BY	CK'D.
1	GB	AS PER D.C.N. W7790-001	7/31/74	DL	DEC

DATE 6-3-74 | SHEET Nº 1 OF 4

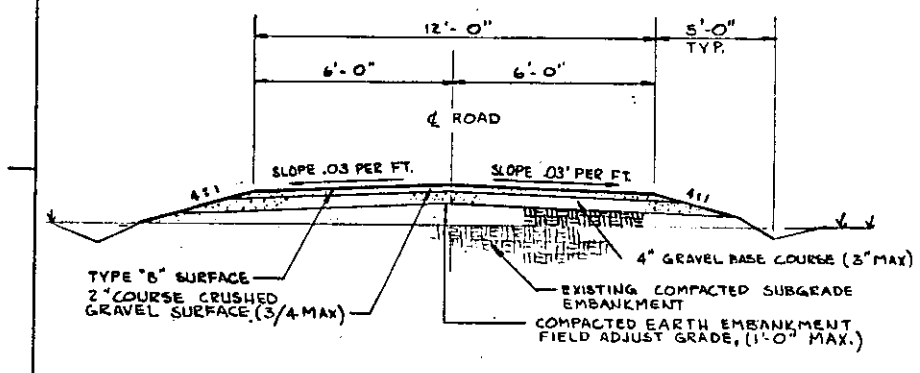
ARGONNE NATIONAL LABORATORY

SANITARY SEWAGE TREATMENT EXPANSION — FACILITY 779
PLANS & PROBE HOLE LOG.
ARGONNE WEST N.R.T.S.

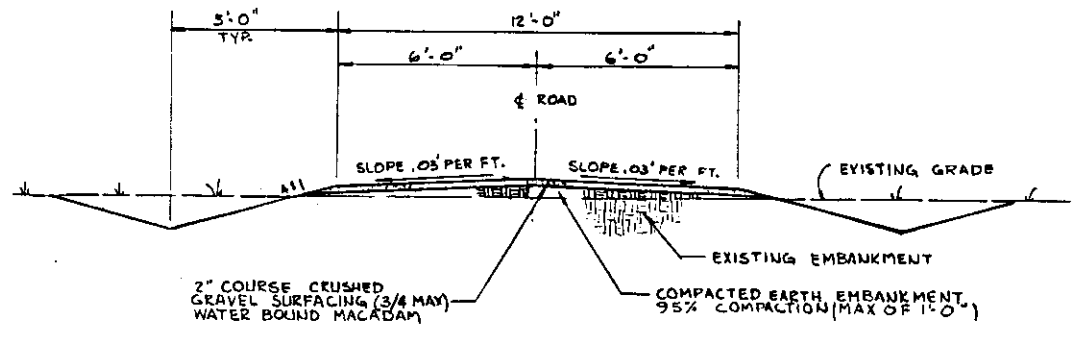
W7790-0103-DD-01 REV.



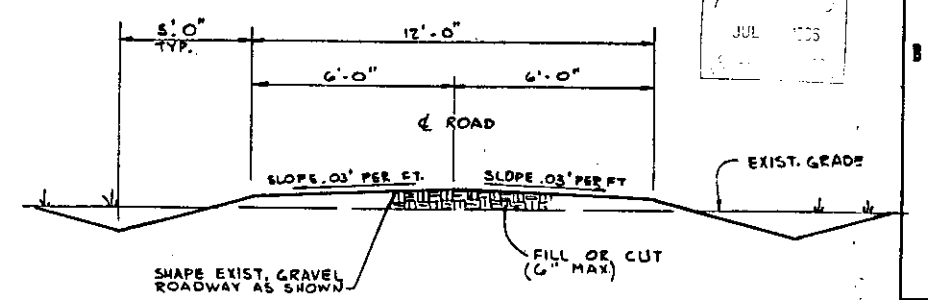
PLAN — SEWAGE LAGOON ROAD
MAINTAIN EXISTING HORIZONTAL ALIGNMENT
SCALE : 1" = 30'-0"



SECTION D 2/2
SCALE : 3/8" = 1'-0"



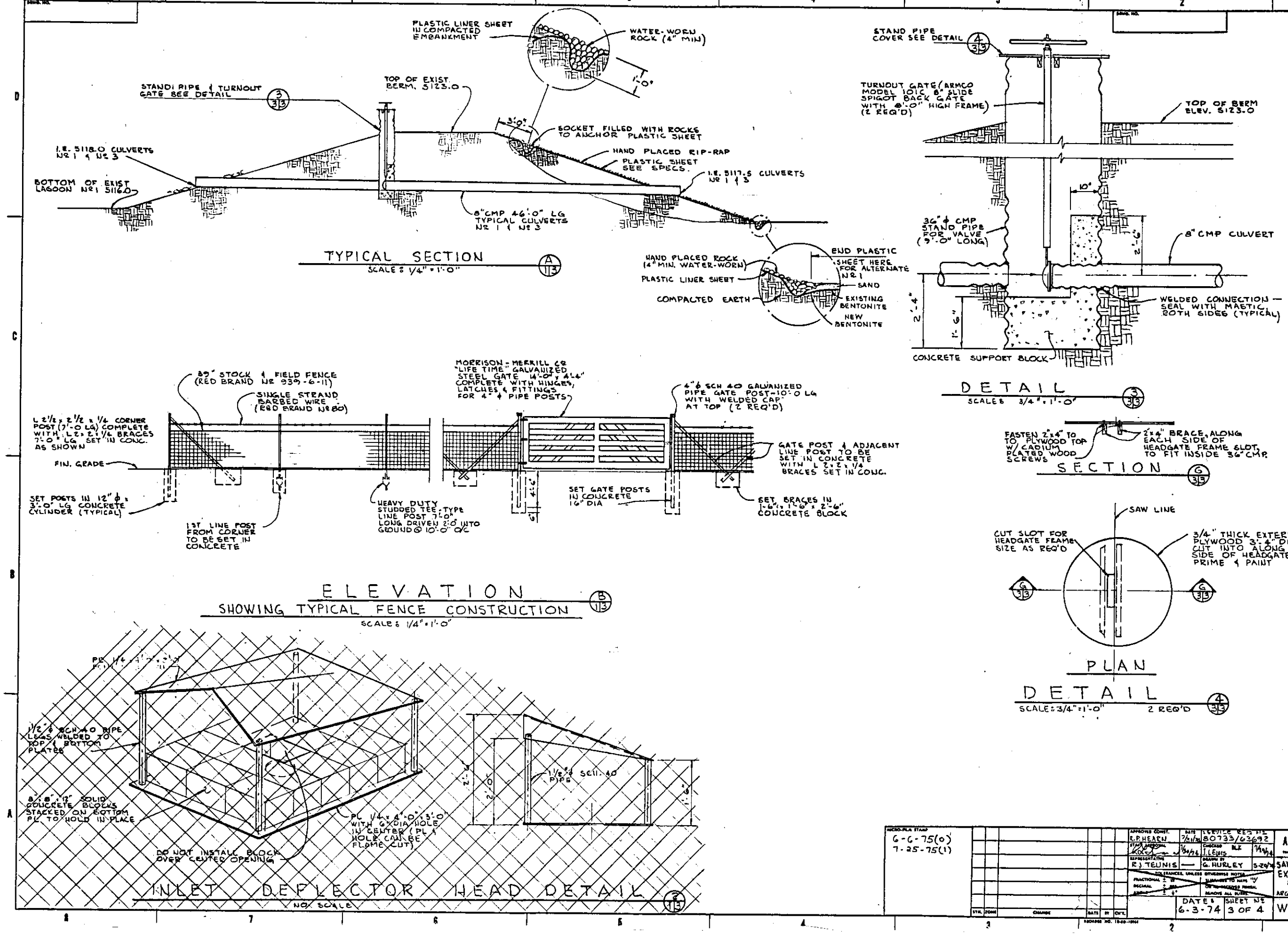
SECTION E 2/2
SCALE : 3/8" = 1'-0"



SECTION F 2/2
SCALE : 3/8" = 1'-0"

JUL 1975

MICRO-FILM STAMP 6-6-75(0) 7-25-75(1)	APPROVED CONST. R. P. HEARN	DATE 7/31/76	SERVICE GEO NO. 80723/63692	ARGONNE NATIONAL LABORATORY	
	STATE APPROVAL	7/30/74	CHECKED J. LEWIS	SANITARY SEWAGE TREATMENT EXPANSION — FACILITY 7719 ROADWORK PLAN & SECTIONS	
	REPRESENTATIVE R. J. TEUNIS	—	DRAWN BY G. HURLEY 5/16/76	ARGONNE WEST	U.R.T.S.
	TOLERANCES, UNLESS OTHERWISE NOTED: FRACTIONAL ± 1/8", DECIMAL ± .005, ANGLE ± 1/4°		SURFACES TO HAVE 1/4" OR NO ACCEPTED FINISH. REMOVE ALL BURRS.	DATE: 6-3-74	SHEET No 2 OF 4
SYM. ZONE CHANGE DATE BY CHK.				W7790-0103-DD-01	REV.

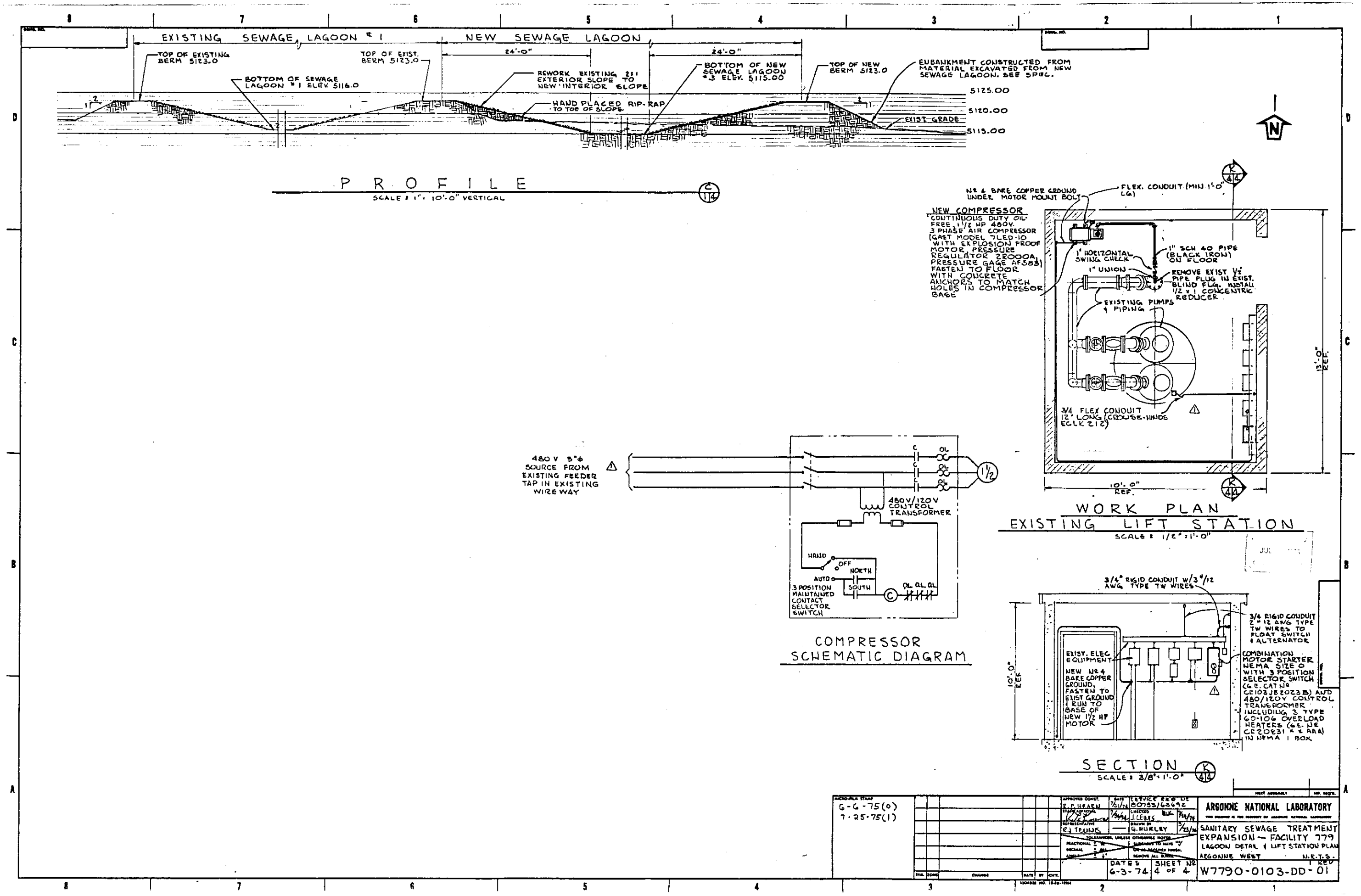


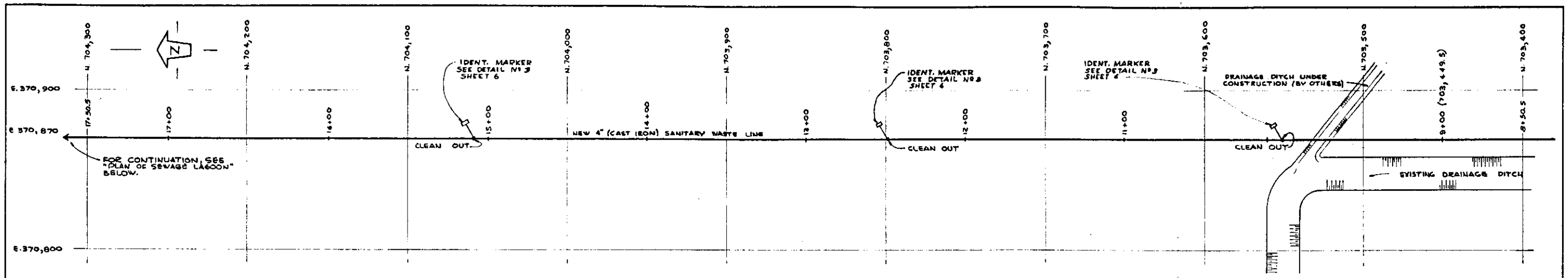
MICRO-FILM STAMP
6-6-75(0)
7-25-75(1)

STR.	ZONE	CHANGE	DATE	BY	CK'D

APPROVED CONST.	DATE 7/31/74	I.E.P.U.C. REF. NO. 80733/63692	ARGONNE NATIONAL LABORATORY
STAFF ENGINEER	7/30/74	CHECKED R.E.	THIS DRAWING IS THE PROPERTY OF ARGONNE NATIONAL LABORATORY
REPRESENTATIVE R. J. TEUNIS		DRAWN BY G. HURLEY 5-29-74	SANITARY SEWAGE TREATMENT EXPANSION — FACILITY 779
		DO NOT SCALE DRAWINGS UNLESS OTHERWISE NOTED.	MISC. SECTIONS & DETAILS
FRACTIONAL ±		DRAWINGS TO HAVE "V" OR TRACERED FINISH.	ARGONNE WEST U.R.T.S.
DECIMAL ±		REMOVE ALL BURRS.	
ANGULAR ±		DATE 6-3-74	SHEET Nº 3 OF 4
			W7790-0103-DD-01 REV.

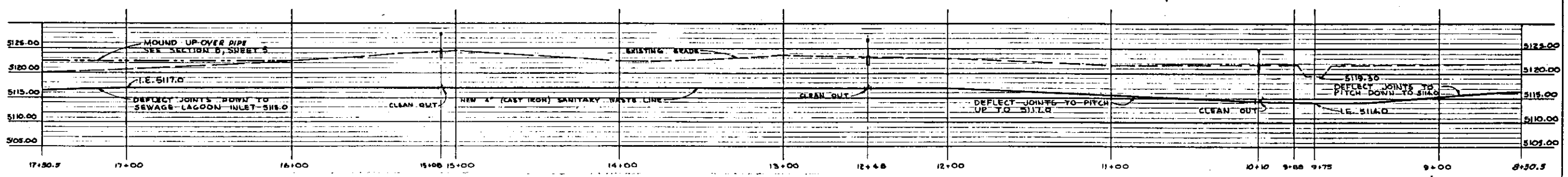
NEXT ASSEMBLY | NO. REQ'D.


EXISTING SEWAGE LAGOON # 1
NEW SEWAGE LAGOON
24'-0"
24'-0"
TOP OF EXISTING BERM 5123.0
TOP OF EXIST. BERM 5123.0
BOTTOM OF SEWAGE LAGOON # 1 ELEV 5116.0
REWORK EXISTING 2:1 EXTERIOR SLOPE TO NEW INTERIOR SLOPE
HAND PLACED RIP-RAP TO TOE OF SLOPE
BOTTOM OF NEW SEWAGE LAGOON #3 ELEV. 5115.00
TOP OF NEW BERM 5123.0
EMBANKMENT CONSTRUCTED FROM MATERIAL EXCAVATED FROM NEW SEWAGE LAGOON. SEE SPEC.
5125.00
5120.00
EXIST. GRADE
5115.00
PROFILE
SCALE: 1" = 10'-0" VERTICAL
NEW COMPRESSOR
CONTINUOUS DUTY OIL FREE, 1 1/2 HP 480V. 3 PHASE AIR COMPRESSOR (GAST MODEL 7LED-10 WITH EXPLOSION PROOF MOTOR, PRESSURE REGULATOR 2R000A, PRESSURE GAGE AF583) FASTEN TO FLOOR WITH CONCRETE ANCHORS TO MATCH HOLES IN COMPRESSOR BASE
Nº 4 BARE COPPER GROUND UNDER MOTOR MOUNT BOLT
FLEX. CONDUIT (MIN 1'-0" LG)
1" HORIZONTAL SWING CHECK
1" SCH 40 PIPE (BLACK IRON) ON FLOOR
1" UNION
REMOVE EXIST 1/2" PIPE PLUG IN EXIST. BLIND FLG. INSTALL 1/2 x 1 CONCENTRIC REDUCER
EXISTING PUMPS & PIPING
3/4 FLEX CONDUIT 12" LONG (CROUSE-HINDS ECLK 212)
13'-0" REF.
10'-0" REF.
WORK PLAN
EXISTING LIFT STATION
SCALE: 1/2" = 1'-0"
480 V 3"φ SOURCE FROM EXISTING FEEDER TAP IN EXISTING WIRE WAY
480V/120V CONTROL TRANSFORMER
HAND
OFF
NORTH
AUTO
SOUTH
3 POSITION MAINTAINED CONTACT SELECTOR SWITCH
COMPRESSOR SCHEMATIC DIAGRAM
3/4" RIGID CONDUIT W/3 #/12 AWG TYPE TW WIRES
3/4 RIGID CONDUIT 2 # 12 AWG TYPE TW WIRES TO FLOAT SWITCH & ALTERNATOR
EXIST. ELEC EQUIPMENT
NEW Nº 4 BARE COPPER GROUND, FASTEN TO EXIST GROUND & RUN TO BASE OF NEW 1 1/2 HP MOTOR
COMBINATION MOTOR STARTER NEMA SIZE 0 WITH 3 POSITION SELECTOR SWITCH (G.E. CAT Nº CR103JB2023B) AND 480/120V CONTROL TRANSFORMER INCLUDING 3 TYPE 60-106 OVERLOAD HEATERS (G.E. Nº CR20831 K & AAA) IN NEMA 1 BOX
10'-0" REF.
SECTION
SCALE: 3/8" = 1'-0"
6-6-75(0)
7-25-75(1)
APPROVED CONST. R.P. HEARN 7/31/74
CHECKED J. LEWIS 7/24/74
DRAWN BY G. HURLEY 5/23/74
TOLERANCES, UNLESS OTHERWISE NOTED
DATE: 6-3-74
SHEET Nº 4 OF 4
ARGONNE NATIONAL LABORATORY
SANITARY SEWAGE TREATMENT EXPANSION — FACILITY 779
LAGOON DETAIL & LIFT STATION PLAN
ARGONNE WEST
N.R.T.S.
W7790-0103-DD-01



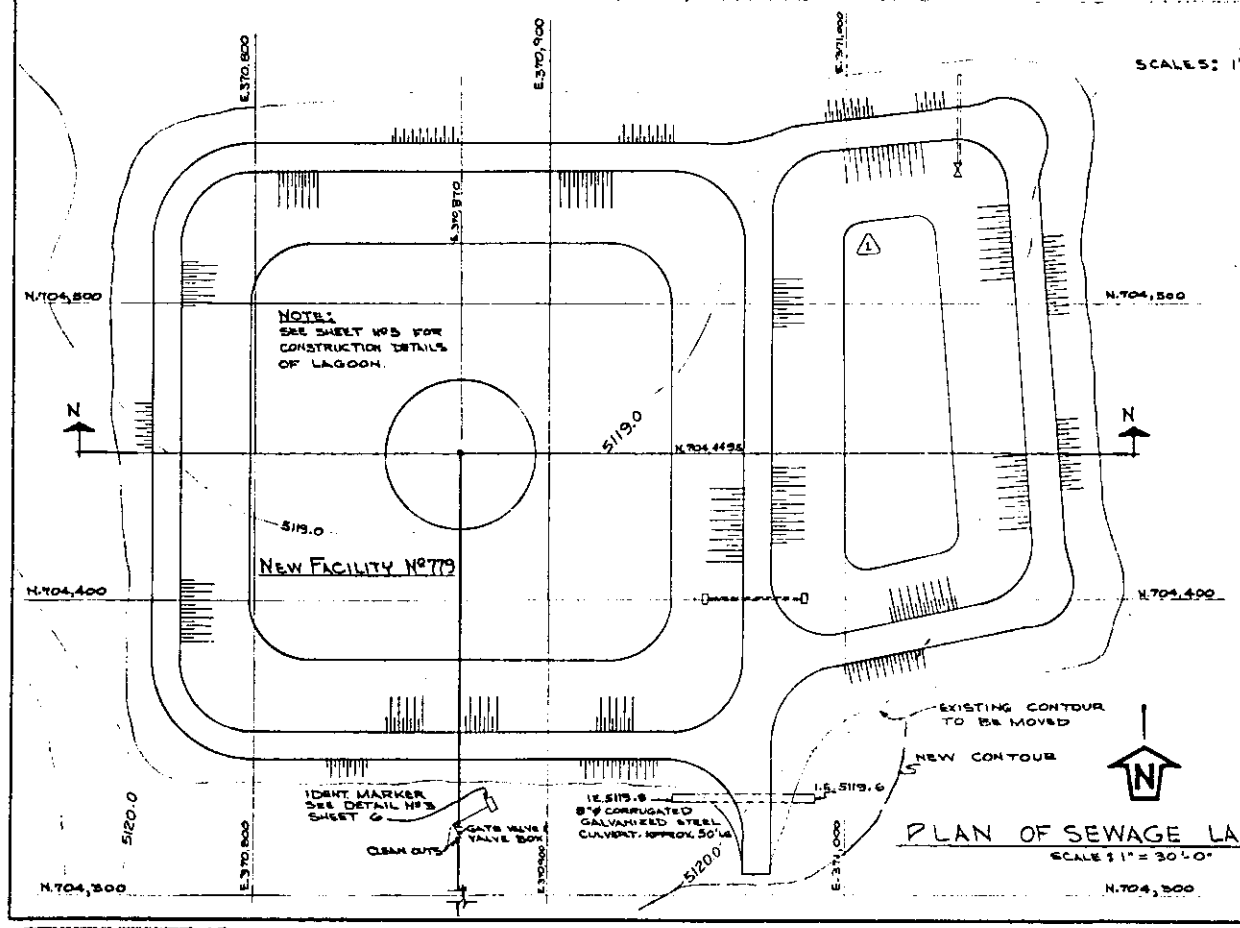
PLAN OF SEWER LINE (CONTINUED)

SCALE: 1" = 30'-0"



PROFILE

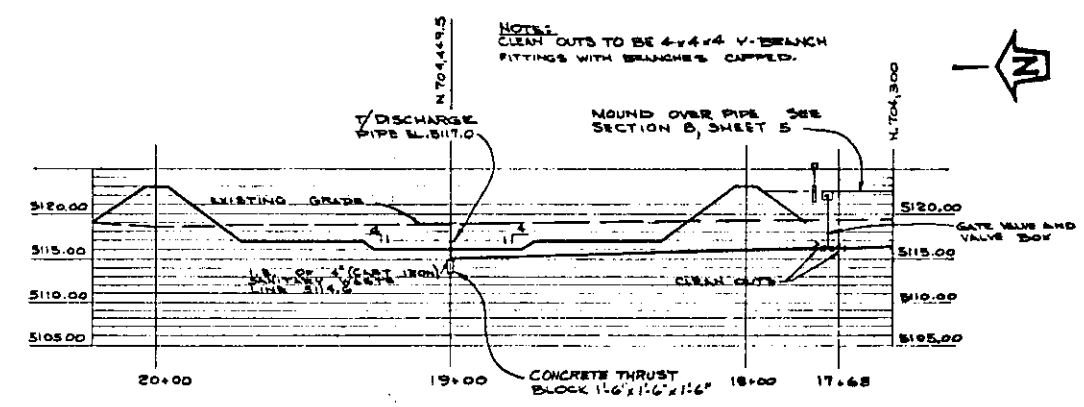
SCALES: 1" = 10'-0" (VERT.) - 1" = 30'-0" (HORIZ.)



PLAN OF SEWAGE LAGOON

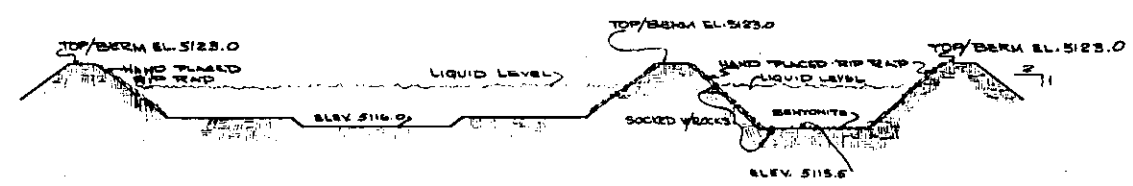
SCALE: 1" = 30'-0"

NOTE: CLEAN OUTS TO BE 4"x4"x4" V-BRANCH FITTINGS WITH BRANCHES CAPPED.



SEWAGE LAGOON PROFILE

SCALES: 1" = 10'-0" (VERT.) - 1" = 30'-0" (HORIZ.)



SECTION - N

SCALE: 1" = 10'-0" (VERT.) 1" = 30'-0" (HORIZ.)

7-28-75(4)

MICRO-FILM: 5-15-74(1)

SYM.	REVISIONS	DATE	BY
1	ADDITION TO LAGOON	4-28-71	TKM

ARGONNE NATIONAL LABORATORY

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SANITARY & INDUSTRIAL WASTE DISPOSAL SYSTEM NEW FACILITIES Nº 778 & 779

PARTIAL PLAN & PROFILE (Nº 2)

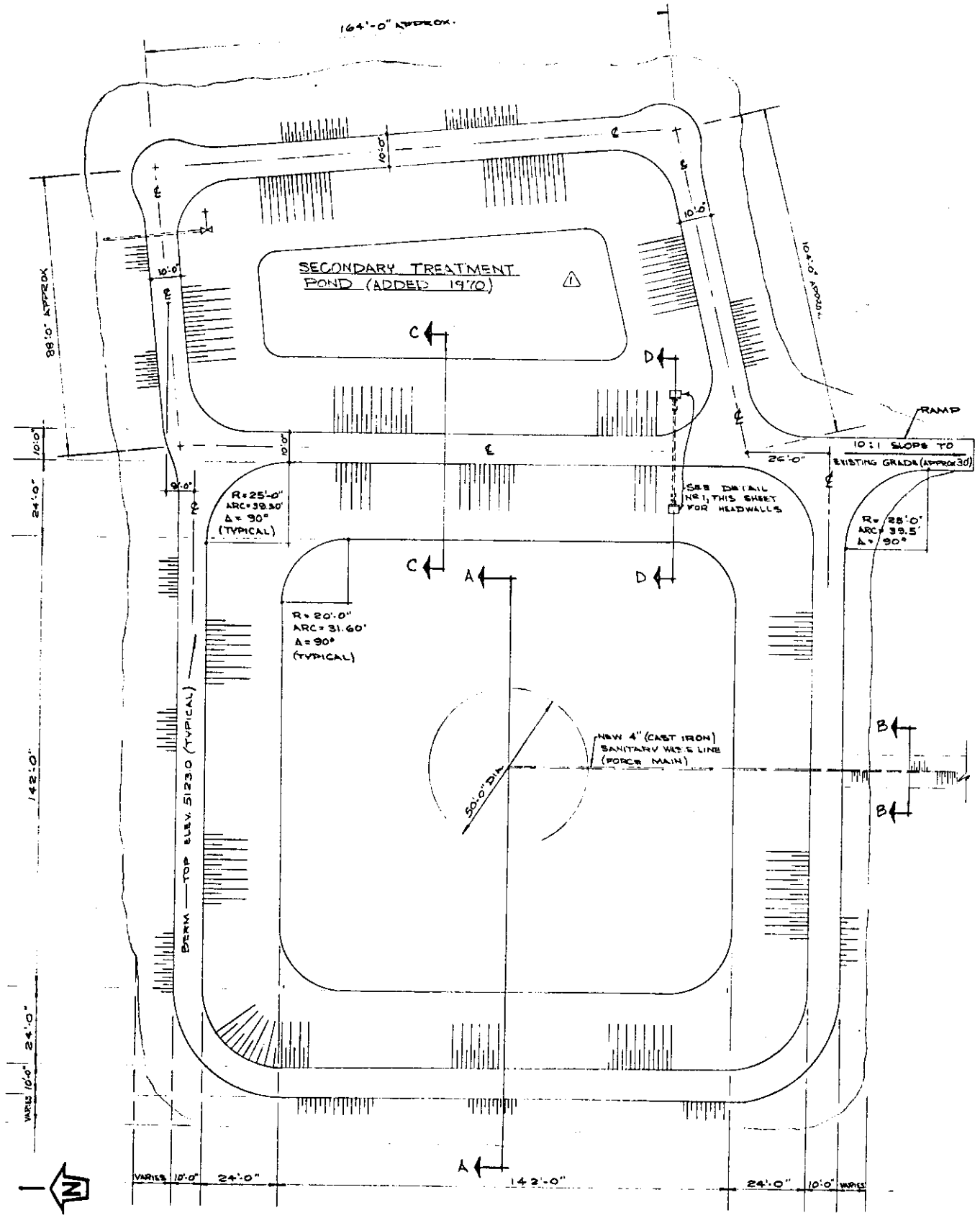
EAST AREA

NRTS

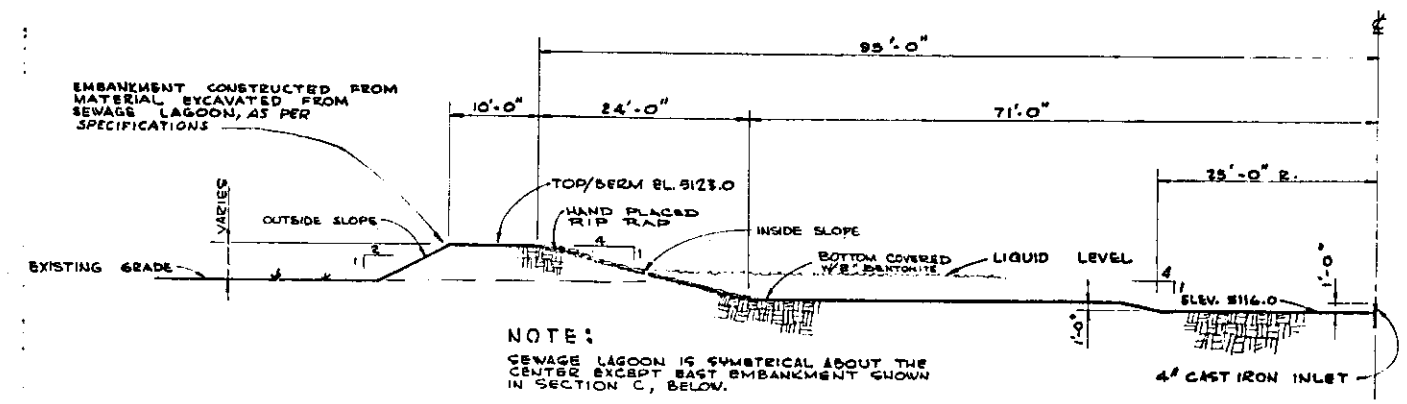
REQ. & W. O. No.	DRAWN BY	CHECKED BY	APPROVAL BY	DATE
80052	GMH		H.A. FLAUGHER	9-2-65

IDAHO PLANT ENGINEERING DRAWING NUMBER	SHEET	DATE
IPE-779-1	4 of 9	7-20-65

ADMISSION
JUL 1996



PLAN — SEWAGE LAGOON
NEW FACILITY Nº 779
SCALE: 1" = 20'-0"

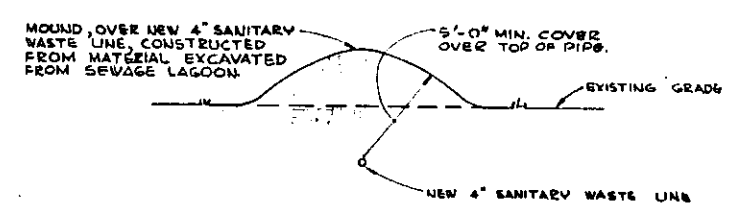


NOTE:
SEWAGE LAGOON IS SYMETRICAL ABOUT THE CENTER EXCEPT EAST EMBANKMENT SHOWN IN SECTION C, BELOW.

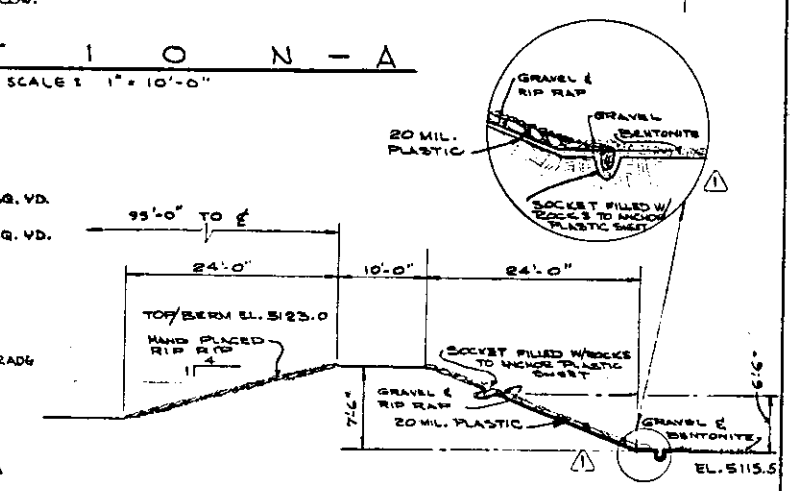
S E C T I O N — A
SCALE: 1" = 10'-0"

NOTE:
PRIME TOP AND BOTH SLOPES OF ENTIRE EMBANKMENT AND BOTTOM OF ENTIRE LAGOON WITH "PENEPRIME" AS FOLLOWS:

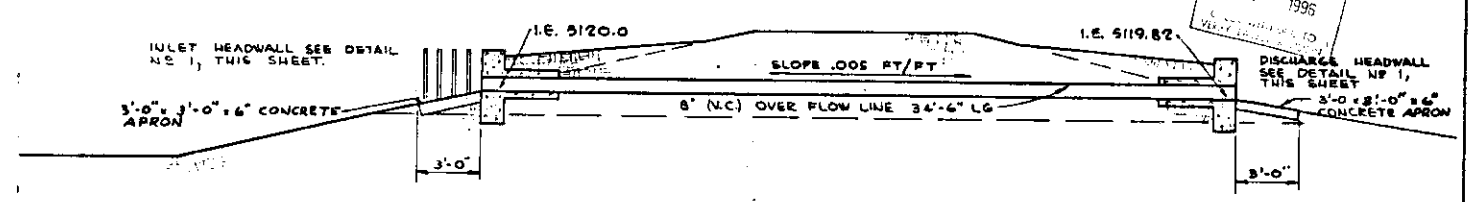
EMBANKMENT OUTSIDE SLOPES: 0.5 GALLONS/SQ. YD.
LAGOON BOTTOM, INSIDE SLOPES, TOP OF BERM AND RAMP: 1.0 GALLONS/SQ. YD.



SECTION B
SCALE: 1/4" = 1'-0"



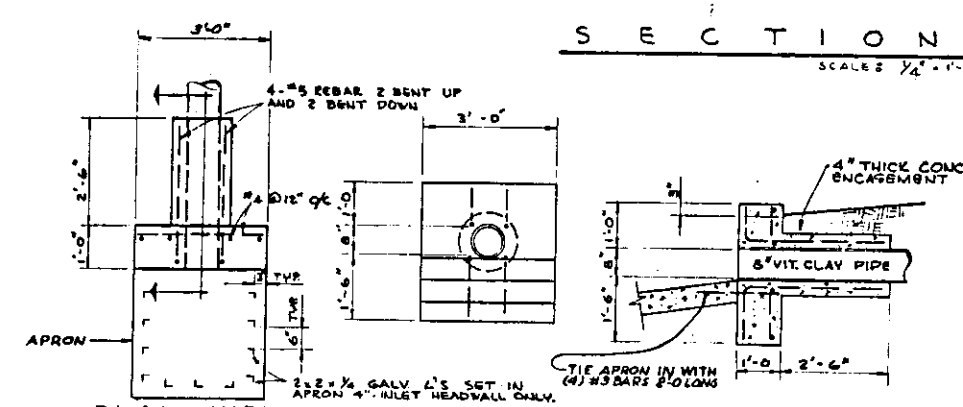
SECTION C
SCALE: 1" = 10'-0"



S E C T I O N D
SCALE: 1/4" = 1'-0"

APPROVED JUL 1996

MICRO-FILM
5-15-74 (1)
7-28-75 (4)



PLAN VIEW — FRONT VIEW — SECTION

D E T A I L Nº 1
SCALE: 1/2" = 1'-0"

SYM.	REVISIONS	DATE	BY
1	ADDITION TO LAGOON	4-29-75	PEM

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SANITARY & INDUSTRIAL WASTE DISPOSAL SYSTEM
NEW FACILITIES Nº 778 & 779
SEWAGE LAGOON LAYOUT & DETAILS
EAST AREA — NRTS

REG. & W. O. No.	DRAWN BY	CHECKED BY	APPROVED BY	DATE
80052	GMW			8 1-65

ISLAND PLANT ENGINEERING	DRAWING NUMBER	SHEET	DATE
	IPE-779-1	5 of 9	7-20-65