2486

RCRA PART B PERMIT APPLICATION SECTION J: CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS VOLUME 12 OF 13 OCTOBER 31, 1991

10/31/91

DOE-FO/EPA
~~100~~ 59
APPLICATION

[redacted]

2486

RCRA PART B PERMIT APPLICATION

October 31, 1991

SECTION J: CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS

(Volume 12 of 13)

Fernald Environmental Management Project

U.S. EPA Identification No. 0H6890008976
Ohio EPA Permit No. 05-31-0681

2486

DRUM STORAGE AREA

GENERAL IN PROCESS STORAGE WAREHOUSE BLDG. 71

DRUM RECONDITIONING BLDG. BLDG. 66

I-B WEATHER SHELTER

SAMPLING PLANT BLDG. I-A

BLDG. 72

308

2ND STREET

"A" STREET E 35+00

3000 GAL. LACEPEROXINO FUEL STORAGE TANKS (3) REMOVED-AUG. & SEPT., 90 (SEE 274-M-000071)

GAS PUMP

POLE PIGEON FED FROM BLDG. 308

CONDUITS BELOW GRADE

CLEANOUT

ELEC.DUCT 2'-0" R.T. 10°

4" FILL LINES

4" FILL LINE

NOTE: NEW (SPARE) FF-3" SECTION CAPPED & PLACED IN PREVIOUSLY OPEN TRENCH UNDER ROADWAY AT APPROX. ST. 1 DP.

MATCH LINE, SEE DWG. NO. 758-5500-G-00070, GRID 17

MATCH LINE, SEE DWG. NO. 758-5500-G-00071, GRID 18

MATCH LINE, SEE DWG. NO. 758-5500-G-00060, GRID 19

MATCH LINE, SEE DWG. NO. 758-5500-G-00061, GRID 24

S 19-25

SEP 30 '91

(X) NOT SCALE REDUCED DRAWING

NO.	REVISIONS	DATE	CHK'D BY	APPD.
NO.	REVISIONS	DATE	CHK'D BY	APPD.

NOTE: RMCO C.A.D. DRAWING NOT TO BE REVISED MANUALLY

WESTINGHOUSE MAT'LS. CO. OF OHIO
FERNALD, OHIO
FEED MATERIALS PRODUCTION CENTER
U.S. DEPARTMENT OF ENERGY

BLDGS. 66, 71 & 72 YARD AREA
GRID 27
UNDERGROUND UTILITIES
SCALE 1"=20'

22B-5500-P-00686 0

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-16-1
FERNALD, OHIO

1-4083

2486

PLOT PLAN

PLANT 1

(OUT TO OUT)

STORAGE

OFFICE

COPPER SHREDDER

OVEN

DRUM SPRAY BOOTH

SEE N.L.O DWG 1-4203 FOR BLDG. EXTENSION

PAINT SOLVENT STORAGE AREA

COPPER SHREDDER BAGHOUSE

SEP 19 '91

1. BALE CONVEYOR FOR SHOT BLASTING (DWG. 1-4134-1)
2. GRAVITY ROLLER CONVEYOR (DWG. 1-4181-2)
3. LIVE ROLLER CONVEYOR (DWG. 1-4181)
4. DRUM DUMPER (DWG. 1-4111)
5. PLATFORM (DWG. 1-4151)
6. GRAVITY ROLLER CONVEYOR 4" (DWG. 1-4131)
7. GRAVITY ROLLER CONVEYOR 3" (DWG. 1-4121)
8. GRAVITY ROLLER CONVEYOR 5" (DWG. 1-4151)
9. LIVE ROLLER CONVEYOR (DWG. 1-4181-2)
10. VIBRATOR PLATFORM (DWG. 1-4152)
11. VIBRATOR SHOT BLASTER
12. DRUM STEAM CLEANER (DWG. 1-4132)
13. LIVE ROLLER CONVEYOR 21-10" SECTIONS (DWG. 1-4133)
14. GRAVITY ROLLER CONVEYOR 6'-0" SECTION (DWG. 1-4132)
15. TRIMMER
16. REROLLER
17. SEAMER
18. DRUMS SPRAY BOOTH
19. BAKE OVEN
20. UPENDER
21. GRAVITY ROLLER CONVEYOR
22. PORTABLE GRAVITY ROLLER 10-10" SECTIONS (DWG. 1-4134)
23.
24.
25. GRAVITY ROLLER CONVEYOR (DWG. 1-4083)
26. AUGER DRUM SAMPLER
27. GRAVITY ROLLER CONVEYOR (DWG. 1-4082)
28. VIBRATOR DUST COLLECTOR
29. HOFFMAN VACUUM SYSTEM
30. PANGBORN DUST COLLECTOR
31. PIPING PIT & TRENCH (DWG. 1-4147)
32. ELECTRIC DRINKING WATER COOLER
33. MOTOR CONTROL CENTERS
34. GRAVITY ROLLER CONVEYOR 2"
35. GRAVITY ROLLER CONVEYOR 8"

SCALE FOR THIS DRAWING

DESIGN APPROVAL

REF. DWG. NO.	REF. DWG. TITLE	NO.	REVISIONS
1-4083	DWG LIST	3	BLDG. EXTENSION
1-4583-1	EQUIPMENT ARRANGEMENT	2	BALER & BALER BLDG. UNITED
		1	RECRAVN

IDENTIFICATION
OID 5500 M00716

NATIONAL LEAD COMPANY OF OHIO
FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO

U.S. ATOMIC ENERGY COMMISSION

PL 1 DRUM RECOND. BLDG.

EQUIPMENT LAYOUT

EQUIPMENT PRODUCTION

PROJECT NO. 1-27 CP-F-55-12

DESIGNED
APPROVED
DATE 7/1, 5...

DWG. NO.
1-4083

REV. NO. 3

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-16-2
3
FERNALD, OHIO

1-4133

2486

55' PORTABLE CONVEYOR TO STEAM CLEANER

END OF CONVEYOR

24'-3"

2'-0½" | 5'-5½" WINDOW | 2'-0½" | 10'-0" ROLLING DOOR MOTOR OPERATED | 3'-6"

14'-10"

8'-0½" | 1'-9"

SKIP PAN LOADER

VANE TYPE SINGLE PUMP

VANE TYPE DOUBLE PUMP

SCRAP METAL BALER BY NLO

NOTCH OUT 24"

OIL RESERVOIR

30 H.P. MOTOR

AUXILIARY COMPRESSION E298

COMPRESSION DOOR CYLINDER

EXISTING 24" CATCH BASIN RAISED TO BALER FLOOR LEVEL

NEW 24" CATCH BASIN

5'-6"

4'-1½"

8'-0"

9'-6"

3'-10½" | 5'-5½" WINDOW | 3'-10½" | 10'-0" ROLLING DOOR MOTOR OPERATED | 1'-3"

24'-3"

10'-0" ROLLING DOOR MOTOR OPERATED

18'-0"

1'-6"

5'-10½"

14'-0"

PLOT PLAN

EXISTING DRUM RECONDITIONING BLDG.

SCALE FOR THIS DRAWING

NOTES

1. BALER BUILDING TO HAVE A 7" THICK CONCRETE FLOOR WHICH IS TO BE PLACED ON THE COMPACTED EARTH PAD.
2. ALL BALER LINES REQUIRE AN 8" SLOPE PER 10' (MINIMUM) TO BE 3" LONG.

INDEX CODE

010.5500.M00760

U.S. DEPARTMENT OF ENERGY

ATTACHMENT J-16-3

PAGE 4

FERNALD, OHIO

REF. DWG. NO.	REF. DWG. TITLE
1-4091	DWG LIST
1-4138	SCRAP METAL BALER BLDG. DETAILS
1-4135	SCRAP METAL BALER BLDG. STEEL EL.
1-4134	SCRAP METAL BALER BLDG. ARCHITECTURAL

NO.	REVISIONS	DATE	BY

DRUM RECOND. BLDG. SCRAP METAL BALER 3232 LAYOUT

DEPARTMENT PRODUCTION

PROJECT NO. 1-33 | CP-F-55-57

DESIGNED | CHECKED | APPROVED | DATE

TRACED | DATE 7/--/57 | DWG. NO. 1-4133 | REV. 0

SCALE 1/4"=1'-0"

1-4136

2486

WINDOW JAMB

AT HEAD

AT SILL

SECTION A-A

DETAIL B
ANGLE FOR FLOOR

PLAN

SECTION C-C

SECTION B-B

DETAIL A
AT ROOF

DETAIL D

DESIGN APPROVAL

REF. DWG. NO.	REF. DWG. TITLE	NO.	REVISIONS	DATE	BY
1-4131	DWG LIST				
1-4134	SCRAP METAL BALER BLDG ARCHITECTURAL				
1-4135	SCRAP METAL BALER BLDG DETAILS	1			

INDEX CODE
010 5500 SCOTTI

NATIONAL LEAD COMPANY OF OHIO
FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO

U.S. ATOMIC ENERGY COMMISSION

SCRAP METAL BALER BLDG.
DETAILS

DWG. NO

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-16-4
5
FERNALD, OHIO

I-4297

LOCATION OF WORK 2486

PLANT 1

PLOT PLAN

PLAN

SECTION A-A

SECTION B-B

SECTION C-C

SECTION D-D

SECTION E-E

SECTION F-F

SECTION G-G

SECTION H-H

SECTION J-J

SECTION K-K

SECTION L-L

SECTION M-M

SECTION N-N

SECTION P-P

SECTION Q-Q

SECTION R-R

SECTION S-S

SECTION T-T

SECTION U-U

SECTION V-V

SECTION W-W

SECTION X-X

SECTION Y-Y

SECTION Z-Z

DETAIL A

DETAIL B

DETAIL C

DETAIL D

DETAIL E

DETAIL F

DETAIL G

DETAIL H

DETAIL J

DETAIL K

DETAIL L

DETAIL M

DETAIL N

DETAIL P

DETAIL Q

DETAIL R

DETAIL S

DETAIL T

DETAIL U

DETAIL V

DETAIL W

DETAIL X

DETAIL Y

DETAIL Z

SOUTH ELEVATION

WEST ELEVATION

PAINT-DRUM STORAGE RACK DETAIL

GENERAL NOTES

DESIGN APPROVAL

DIVISION	SIGNATURE	DATE
HEALTH & SAFETY		
PRODUCTION		
TECHNICAL		
MAINTENANCE		

INDEX CODE

PLANT	SYSTEM	UNIT	SEQ. NO.
01	0	5500	A 00872

NATIONAL LEAD COMPANY OF OHIO
FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO

U.S. ATOMIC ENERGY COMMISSION

PAINT & THINNER STORAGE BLDG
PLAN & ELEVATIONS

ENGINEERING DIVISION

PROJECT NO. 3-117 | CP- 58-1

DRAWN R.P. FENAIN E.M.E. | CHECKED | APPROVED | DATE 4 JUNE 1958 | SCALE 1/4"=1'-0" | DWG. NO. 1-4237 | REV. 1

SCALE FOR THIS DRAWING

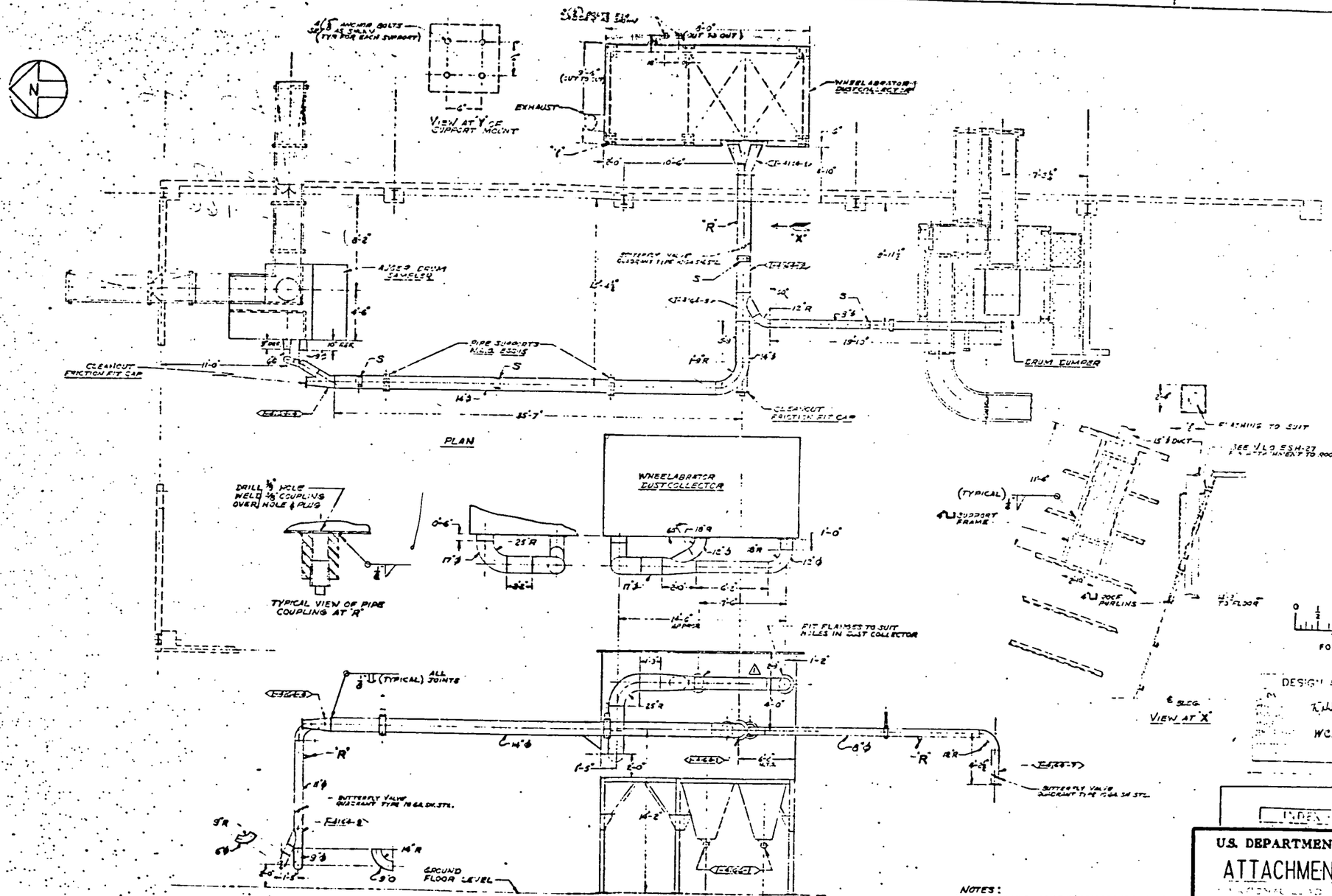
REF. DWG. NO.	REF. DWG. TITLE
I-4238	HEATING UNIT LAYOUT
I-4131	PIPING LAYOUT

NO.	REVISIONS	DATE	BY
1	CORRECTED SPRINKLER PIPING	10-1-58	MEE

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-16-5
6

1-4163

2486



NOTES:
1. ALL WELDING SHALL BE IN ACCORDANCE WITH THE AWS STD UNLESS OTHERWISE SPECIFIED.
2. DUCTWORK TO BE WELDED CONSTRUCTION.
3. JOINTS AT 'S' ARE MINIMUM THICKNESS - 1"L3 & WIDTH 1½ TIMES THE DIA OF PIPE.
4. 16GA SLIRON - 'S' REUSED FOR DUCTWORK.

REF. DWG. NO.	REF. DWG. TITLE
1-4091	DWG LIST
1-4166	VACUUM CLEAN SYSTEM (Dome Details)
1-4083	EXH. PARTICULATE
1-4164	MISTELECT DETAILS

NO.	REVISIONS	DATE	BY
2	DUCTWORK TO BALES REVISED	5/3/91	JJK
1	DUCTWORK REVISED W/DUSTCOLLECTOR	3/26/91	JJK

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-16-6
PAGE NO. 7
FERNALD, OHIO

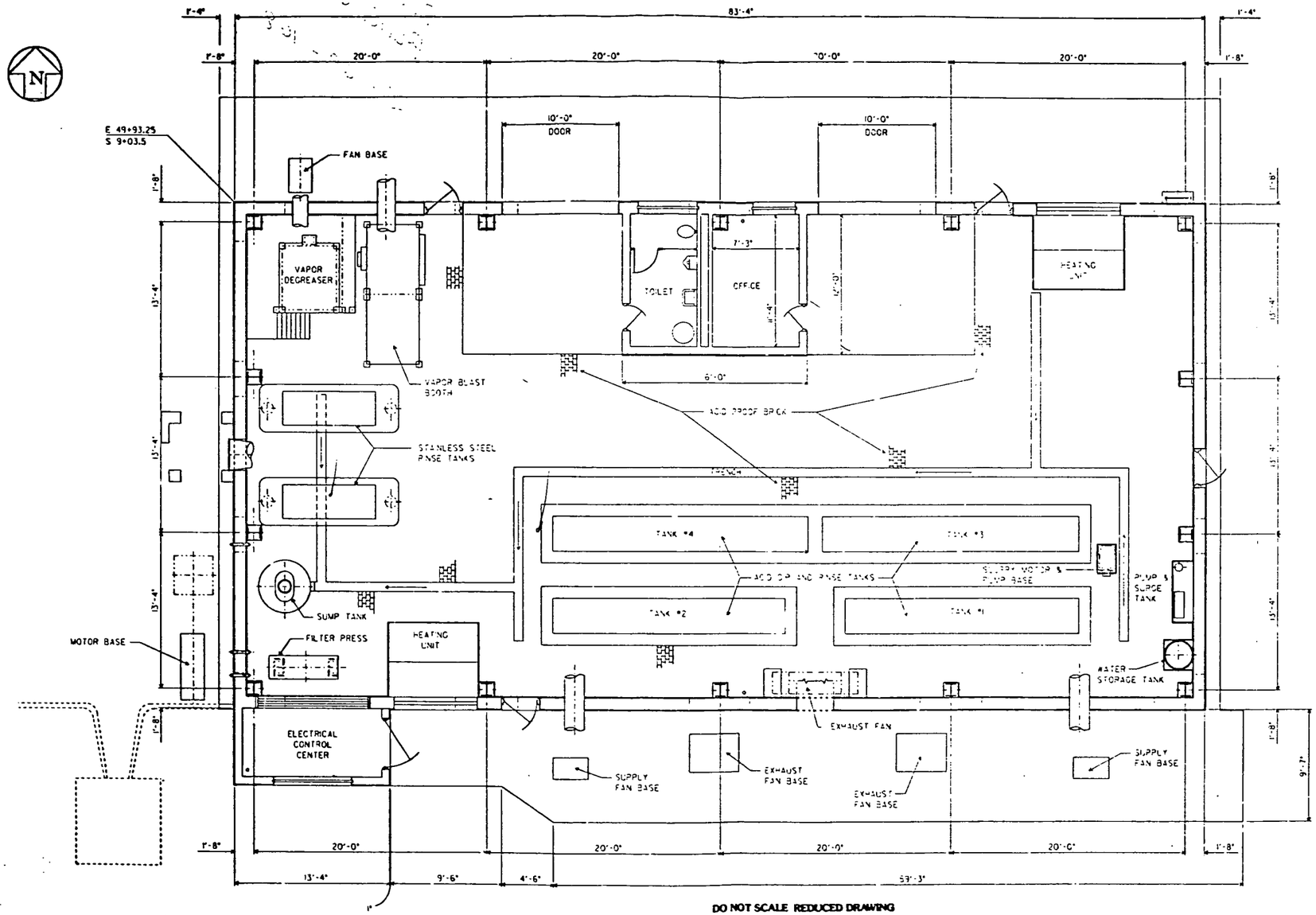
PLANT 1 — DRUM REDUCTION I&S
LAYOUT OF DUCTWORK FROM WHEELABRATOR DUST COLLECTOR TO AIR/GAS SAMPLER DRUM DUMPER & SCRAP METAL BALER

DEPARTMENT REDUCTION
PROJECT NO. 1-17 — CP-F-55-17
DRAWN / traced — CHECKED / APPROVED
DATE 1-10-90 — DWG. NO. 1-4163
SCALE 1/4"=1'-0" — SHT. 2 OF —

DESIGN APPROVAL
R.J. Whitaker 4/8
W.C. Hill 4/8

UNDER HOLE

DWG 6-6
#31



DO NOT SCALE REDUCED DRAWING

NO.	REVISIONS	DATE	DWN. BY	APPD.	NO.	REVISIONS	DATE	DWN. BY	APPD.	REF. DWG. NO.
										69X-5500-A-00035

NOTE: WMCO C.A.D. DRAWING NOT TO BE REVISED MANUALLY

APPROVALS			
CHEMICAL		QUAL. & T.	
CIVIL & STR.		MAINTENANCE	
ELECTRICAL		IND. SAFETY	
ENGINEER		G.A.	
INSTRUMENT		OPERATION	
MECHANICAL		FIRE & SAFETY	
		WASTE MANAGE	
CHECKED		D.O.E.	
APPROVED	Paul Wall		

WESTINGHOUSE MAT'LS. CO. OF OHIO
FERNALD, OHIO
FERNALD SITE OFFICE
U.S. DEPARTMENT OF ENERGY

BUILDING 63 — FIRST FLOOR
DECONTAMINATION BUILDING
FLOOR PLAN
1/4" = 1'-0"

DATE	69X-5500-A-00078	0

CAD CAM INC. FILE NAME: /USR/ECAD/1/69X/69X00078.DGN

SEP 20 '91

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-17-1
8
FERNALD, OHIO

2486

STORAGE BUILDING

DECONTAMINATION BUILDING No. 69

PLANT WAREHOUSE BLDG. "B"

PLANT WAREHOUSE BLDG. "A"

DETAIL G

DETAIL A

SECTION 2

PLAN VIEW

SECTION A-A

FOUNDATION PLANS & DETAILS

DO NOT SCALE REDUCED DRAWING

NOTES

1.- DOTTED LINES INDICATE UNDERGROUND PIPE LINES.
2.- STEAM AND CONDENSATE LINES TO BE PROVIDED WITH GUIDES AT PIPE SUPPORTS EXCEPT AS INDICATED.
3.- PLANT AIR ANCHORED AT PIPE SUPPORT.
4.- SEE ESP-29 AND ESP-31 FOR DETAILS OF STEAM TRAP.
5.- STEAM TRAP TO BE ENCLOSED WITH 2'-6"x4'-0" APPROVED BOX WITH DOOR, FABRICATE FROM 10 GA. PLATE.
6.- ALL CONCRETE HAS BEEN DESIGNED AND SHALL BE PLACED IN ACCORDANCE WITH THE ACI 318-77 CODE.
7.- EXISTING SUPPORT STANCHIONS SHALL BE USED FOR NEW PIPE SUPPORTS.
8.- ALL ANCHORED PIPES REMAINING AFTER PIPELINE MOVEMENT SHALL BE BROKEN OFF 6" BELOW GRADE AND REBAKED.
9.- ALL EXIST. PIPE ELEVATIONS ARE TO BE MAINTAINED AFTER RELOCATION. BOTTOM OF SLIDE PLATE SHOULD BE MAINTAINED AT 5'-6" ABOVE TOP OF STEEL CHANNEL SUPPORT.
10.- CIRCLED AREAS INDICATE WORK TO BE DONE UNDER SPECIFICATION 07-600-00.
11.- IN ORDER TO ENSURE THE CONTINUED OPERATION OF BUILDING No. 69, TEMPORARY PIPE CAPS & REDUCERS AT EXISTING PW-1 1/2"-P-W, S.S.H.N. HOT TO DETERMINE WITH INSTALLATION OF NEW PW-7588-7"-UB, EXISTING PW-1 1/2"-P-W SHALL BE TEMPORARILY CONNECTED TO EXISTING PW-12"-P-W AFTER NEW PW-7588-7"-UB HAS BEEN INSTALLED AND TESTED. DISCONNECT PW-1 1/2"-P-W FROM PW-12"-P-W, CONNECT EXISTING PW-12"-P-W PIPING TO NEW PW-7588-7"-UB AT TIE POINT 12 AND RETURN LINE TO SERVICE. DISCONNECT PW-1 1/2"-P-W FROM TEMPORARY CONNECTION AT TIE POINT 12 AND RETURN LINE TO SERVICE. PW-1 1/2"-P-W IS TO BE OUT OF SERVICE FOR THE MINIMUM AMOUNT OF TIME POSSIBLE. AFTER NEW PW-7588-7"-UB HAS BEEN PUT IN SERVICE, REMOVE APPROX. 725'-0" OF EXIST. PW-1 1/2"-P-W BETWEEN TIE POINTS 9 AND 12.
12.- EXISTING PW-1 1/2"-P-W IS CURRENTLY POSITIONED IN THE LOCATION OF NEW PW-7588-7"-UB.

LEGEND
EXISTING PIPING
NEW PIPING

FMPC INDEX CODE
69X-5530-P-00022

7	AS BUILT			
6	REVISION #2			
5	ENVIRONMENTAL/WASTEWATER DISCHARGE PERMIT (PD)			
4	REVISION #1			
3	REDRAWN - CFC			

UNITED STATES DEPARTMENT OF ENERGY
FEED MATERIALS PRODUCTION CENTER

A. M. KINNEY, INC.
CONSULTING ENGINEERS
CINCINNATI, OHIO

ENVIRONMENTAL, HEALTH & SAFETY IMPROVEMENTS

DECONTAMINATION BUILDING
LAYOUT OF SERVICE LINES

DRAWN		TRACED		CHECKED	
CUTLER	8-87	J.SCHLEMMER	8-87	J.SCHLEMMER	11-87

87-0-159 | 0087502 WBS 1.1.3.1.03 | 69X-5800-P-00022 | 7

INDEX CODE

BLD. NO.	DRWG.	CL.	SEQ NO.	REV.
22C	4445	P	00700	7

SEP 24 '91

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-17-2
9
FERNALD, OHIO

G-4027-5

2486

NO.	REVISIONS	BY	DATE
1	ADDED ELEVATIONS		
2	SECTIONS & ELEVATIONS		
3	CHANGE GRADES		
4	SUMP DET. & SECTION		
5	SITE PREPARATION NOTES		
6	ADDED 6" CONCRETE & 90° BEND		
7	ADDED 6" & 210' CONC PAD & SUMP		
8	DWG NOS 69X-5533-A-00033 & 35		
9	ADDED "GRATING" & "EXISTING"		
10	ADDED EXPANSION JOINTS		

REF. DWG. NO.	REF. DWG. TITLE
ESA-30	EXPANSION & CONTRACTION JOINTS
ESA-6	STANDARD LADDER RUNG & STEP
69X-5500-A	GENERAL PLOT PLAN (SEE 3)

DESIGN APPROVAL

INLET OPENING

GRADE LINE — EL. 589.00 — GRADE LINE

6" CLAY TILE

INV. EL. 587.00

EL. 582.33

2'-4"

9" — 6'-0" — 9"

SECTION B-B

4" ROLL CURB AROUND PERIMETER OF PAD

SECTION C-C

EXISTING RAILROAD TRACK #3

EXISTING RAILROAD

MAIN LINE

200'-0"

210'-0"

STONE PAD

SAWCUT AND REMOVE ±10'-0 OF EXIST. ROLL CURB

FOR EXPANSION JOINT TYING EXIST. CONCRETE PAD TO NEW CONCRETE PAD SEE DRAWING # GDX-5500-A-00008

FOR NEW PAD EXTENSION SEE DWG G9X-5533-A-00370

GRATING 589.4 INV. 583.9

8" REINF. CONC. PAD W/ 6" ROLL CURB

ROLL CURB EXTENDED FROM PAD TO SUMP INLET

FOR CONTRACTION JOINT SEE DWG. # 23X-5533-A-00033

PLAN

FLOAT FINISH

6'-0"

3/4"

1/2" @ 12" O.C. E.W.

2"

6"

6"

6"

6"x6"x5 GA. WELDED WIRE PAD REINFORCEMENT

CONC. APRON

EL. EL. 593.90

3/8" @ 12" O.C.

3/8" @ 18" O.C.

1/2" @ 12" O.C. E.W.

3'

8'

6'-0"

SECTION A-A

6" VITRIFIED CLAY DISCHARGE PIPE &

INV. EL. 593.23

INSTALL SPIGOT END OF 6" VITRIFIED CLAY 90° LONG ELBOW & CEMENT IN PLACE. SEE PLAN OF SUMP

REPLACE CATCH BASIN GRATING WITH 1/2" THICK STEEL PLATE & SEAL SO NEW 8" CONCRETE PAD CAN BE POURED

FOR EXPANSION JOINT SEE DWG. G0X-5500-A-00328

INDEX CODE: 00C 5500 P 00302

INDEX CODE: 00C 5500 S 00303

LOCATION OF WORK

PLOT PLAN

8" CLAY PIPE TO STORM SEWER

PLAN OF SUMP

SCALE "A"=1'-0"

CUT END OF SPIGOT & ALIGNMATE TO EXIST. PIPE AFTER BREAKING OUT EXIST'G CONCRETE & PIPE. SEE SECTION A-A

8" 45° WYE CLAY ELBOW

EL. ±582.0 IN SUMP

NEW 6" CONC. T

DETAIL OF T

See Dwg. 00C-5500-P-00309

GRATING 587.4 INV. 582.1

EL. 588.0

EL. 586.2

EXISTING CONC. STORM SEWER

EXISTING CATCH BASIN

EXISTING

SLOPE

GENERAL NOTES

1. All Concrete to be with a Float Finish.
2. Concrete Slabs are 6 inch Reinforced with 6x6 #5 welded Steel wire.
3. Concrete to be 3000 P.S.I. @ 28 Days
4. Mesh to lap a minimum of 6" in all directions at Splices.
5. The Sub-Contractor shall Verify the Locations & Dimensions of Existing Structures, Utilities, etc. before Proceeding with Excavation & Detailing.
6. Before Pouring Slabs, the Grounds is to be Inspected by Contractor's Engineers, and additional Excavation shall be Approved only by the Contractor's Engineer.
7. Expansion & Contraction Joints shall be Equally Spaced.

NOTE:

1. BOXED ELEVATIONS DENOTE EXISTING GROUND ELEVATIONS.
   UNDERLINED ELEVATIONS DENOTE NEW ELEVATIONS.
2. ——— DESIGNATES EXP. JOINTS.
   ——— DESIGNATES CONTR. JOINTS.

INDEX CODE	INDEX CODE
21X 5500 P C0219	21X 5500 S 00220
INDEX CODE	INDEX CODE
69X 5500 P 00055	69X 5500 S 00056

NATIONAL LEAD COMPANY OF OHIO
FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO

U.S. ATOMIC ENERGY COMMISSION

DECONTAMINATION AREA

STORAGE PAD FOR USED EQUIP. & SCRAP METAL

PROJ. 2140 — CP-F. 55-35

DRAWN J. PRICE, TRACED — CHECKED 5-5-55 — APPROVED J.F. 5-6-55

DATE 5-5-55 — DWG. NO. G-4027 — REV. 9

REDUCED DRAWING
DO NOT SCALE

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-17-3
10
FERNALD, OHIO

2486

MATCH LINE, SEE DWG. NO. 758-5500-G-0002, GRID 18

MATCH LINE, SEE DWG. NO. 758-5500-G-00099, GRID 17

DRUM STORAGE AREA

GENERAL IN PROCESS STORAGE WAREHOUSE BLDG. 71

30-B TRUCK DOCK STORAGE BLDG.

BLDG. 72

DRUM RECONDITIONING BLDG. BLDG.66

I-B WEATHER SHELTER

SAMPLING PLANT BLDG. I-A

PUMP HOUSE 2-E

F2-605

F2-606

F2-607

F2-608

2ND STREET

S 19+25

E 35+00

"A" STREET

E 35+85.64

E 36+97.36

MATCH LINE, SEE DWG. NO. 758-5500-G-0000A, GRID 19

MATCH LINE, SEE DWG. NO. 758-5500-G-0000B, GRID 24

DO NOT SCALE REDUCED DRAWING

LEGEND

NO.	REVISIONS	DATE	DRN. BY	APPD.
3	UPDATED	7/90	JS	CP

REF. DWG. NO.

WESTINGHOUSE MAT'LS. CO. OF OHIO
FERNALD, OHIO
FEED MATERIALS PRODUCTION CENTER
U.S. DEPARTMENT OF ENERGY

BLDG.66, 71 & 72 — YARD AREA

GRID 27
EXISTING SITE PLAN
SCALE-1"=20'

DATE 4-26-90 — 758-5500-G-00014 — 3

MAY 2 U '91

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-18-1
11
FERNALD, OHIO

2-486

FERROUS METAL SCRAP PILE

DECONTAMINATION PAD

BLDG. 69

ELECT TRENCH

6" DRAIN TILE

MATCH LINE, SEE DWG. NO. 22C-5500-P-00659, GRID 8

MATCH LINE, SEE DWG. NO. 22C-5500-P-00658, GRID 2

DO NOT SCALE, REDUCED DRAWING

NOTE: WHEN C.A.D. DRAWING NOT TO BE REVISED MANUALLY

NO.	REVISIONS	DATE	DWN. BY	APPD.	NO.	REVISIONS	DATE	DWN. BY	APPD.	REF. DWG. NO.

WESTINGHOUSE MATLS. CO. OF OHIO
FERNALD, OHIO
FEED MATERIALS PRODUCTION CENTER
U.S. DEPARTMENT OF ENERGY

BLDG. 69 YARD AREA
GRID 1
UNDERGROUND UTILITIES
SCALE 1"=20'
22C-5500-P-00660 | 0

SEP 2 5 '91

U.S. DEPARTMENT OF ENERGY
ATTACHMENT 12 J-18-2
FERNALD, OHIO

NORTH ACCESS ROAD E 58+29

'F' STREET E 56+30

'E' STREET E 53+45

E 55+00

MATCH LINE, SEE DWG. NO. 75C-5500-G-00021, GRID 3

MATCH LINE, SEE DWG. NO. 75F-5500-G-00022, GRID 6

MATCH LINE, SEE DWG. NO. 75A-5500-G-00004, GRID 9

LEGEND

EMERGENCY SHUT-OFF VALVE FOR GAS MAIN TO GAS METER HOUSE.

PLANT 6 WAREHOUSE 79A

200' EAST WATER TOWER

RECEIVING & INCOMING MATERIALS INSPECTION BLDG. 82A

VALVE PIT

TRUCK WEIGH SCALE 22C

SCALE

DO NOT SCALE REDUCED DRAWING

NOTE: WHC'S C.A.D. DRAWING NOT TO BE REVISED MANUALLY

NO.	REVISIONS	DATE	DWN. BY	APPD.
1	UPDATED			

NO.	REVISIONS	DATE	DWN. BY	APPD.	REF. DWG. NO.
			WMB GES	GEP	

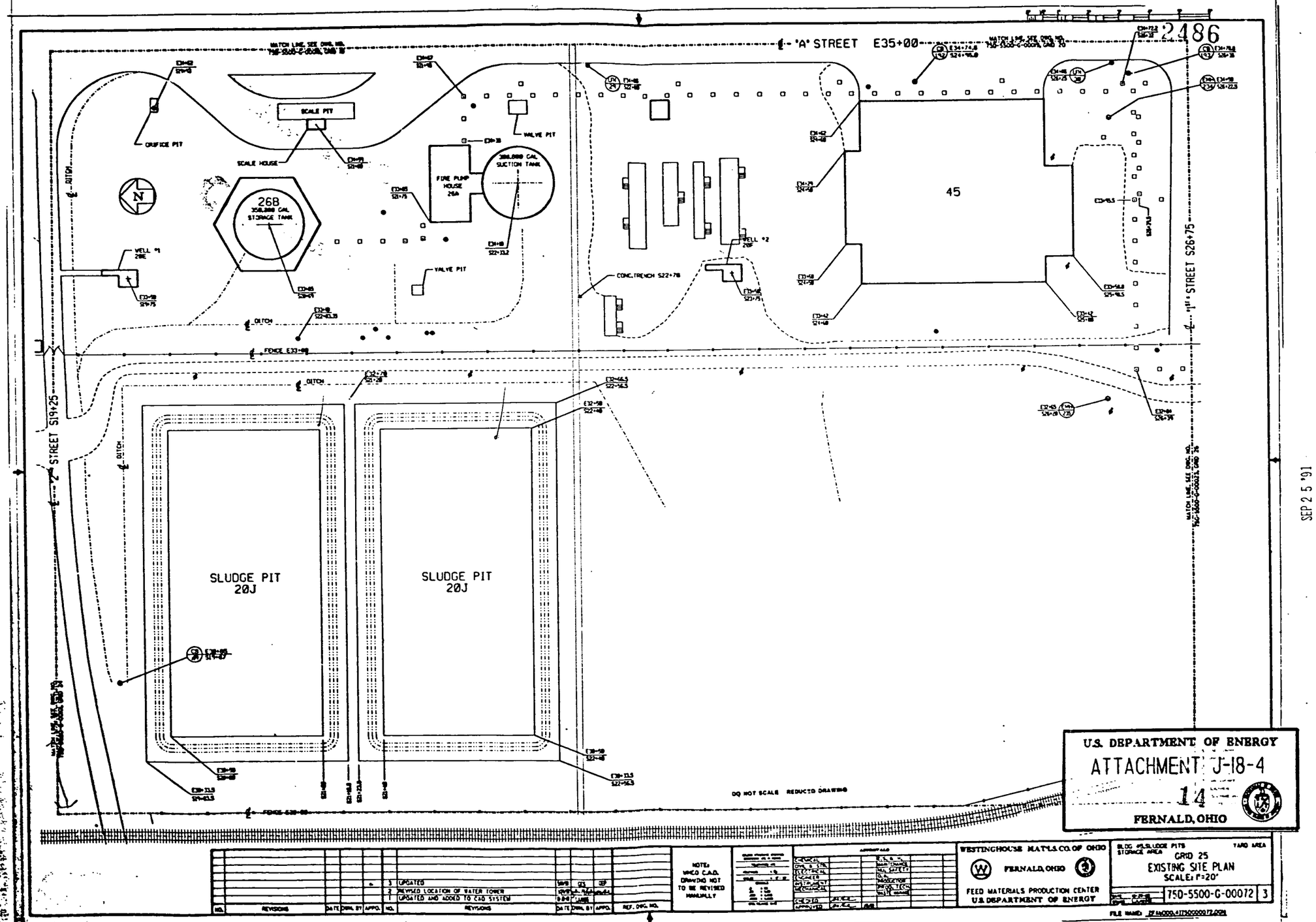
WESTINGHOUSE MAT'LS. CO. OF OHIO
FERNALD, OHIO
FEED MATERIALS PRODUCTION CENTER
U.S. DEPARTMENT OF ENERGY

BLDG. 79A2, & E. WATER TOWER YARD AREA
GRID 4
EXISTING SITE PLAN
SCALE-1"=20'

75F-5500-G-00103 1

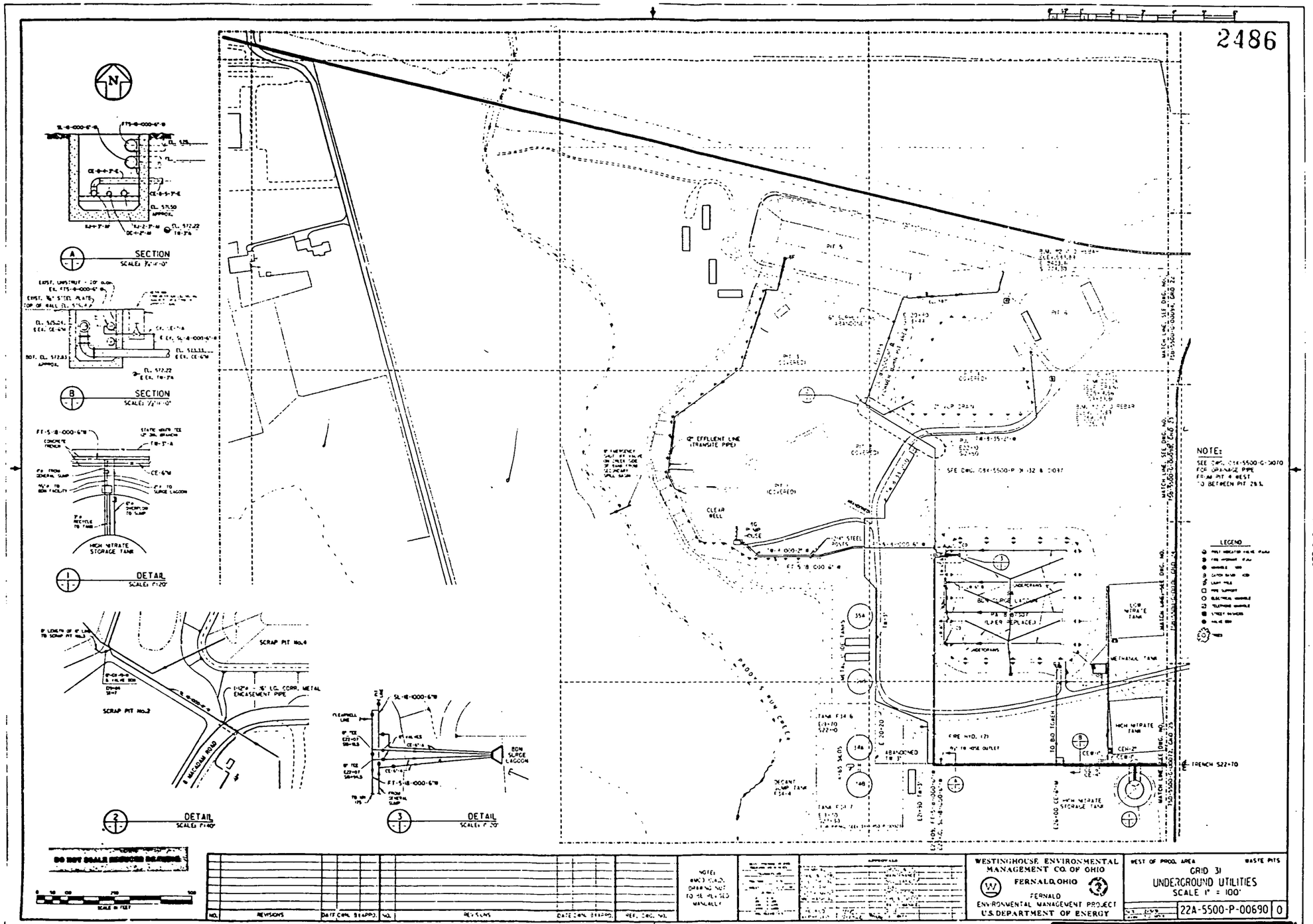
SEP 25 '91

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-18-3
13
FERNALD, OHIO



2486
'A' STREET E35+00
SCALE PIT
ORIFICE PIT
SCALE HOUSE
VALVE PIT
FIRE PUMP HOUSE 26A
SUCTION TANK
268
STORAGE TANK
WELL #1 20E
WELL #2 20F
CONC. TRENCH S22+78
45
DITCH
FENCE E33+00
STREET S19+25
STREET S26+75
SLUDGE PIT 20J
SLUDGE PIT 20J
DO NOT SCALE REDUCED DRAWING
U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-18-4
14
FERNALD, OHIO
WESTINGHOUSE MAT'LS CO. OF OHIO
FERNALD, OHIO
FEED MATERIALS PRODUCTION CENTER
U.S. DEPARTMENT OF ENERGY
GRID 25
EXISTING SITE PLAN
SCALE: 1"=20'
750-5500-G-00072
3
UPDATED
REVISED LOCATION OF WATER TOWER
UPDATED AND ADDED TO CAD SYSTEM
NOTE: WMCO C.A.D. DRAWING NOT TO BE REVISED MANUALLY

SEP 2 5 '91



U.S. DEPARTMENT OF ENERGY

ATTACHMENT J-18-5

15

FERNALD, OHIO

SEP 30 '91

KELLY SOLID WASTE
INCINERATOR GRID 19

2486

MAY 1 4 '91

REF. DWG. NO.	REF. DWG. TITLE	NO.	REVISIONS	DATE	BY
		2	AS BUILT CHANGES		
		1	[illegible]		

INDEX CODE
02F 5500 M 02805

NATIONAL LEAD COMPANY OF OHIO
FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO

U. S. DEPARTMENT OF ENERGY

INCINERATOR BLDG.
SOLID WASTE INCINERATOR
GENERAL ARRANGEMENT
PLAN & ELEV.

ENGINEERING DIVISION

APPROVALS

39A 5500 M C0025 2

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-18-6
16
FERNALD, OHIO

3000-H-53-A

2486

FOR CONTINUATION SEE DWG N° 3000-H-60-A

PAVED SCTF

3003

SILOS

PLANT LIGHT POLES

PLANT LIGHT POLE

Area Drain
Inv El. 580.0'

Area Drain
Inv El. 584.15

BLDG N° 67

Area Drain
Inv El. 580.5'

ST 10" VC PIPE

ST 12" VC PIPE

Area Drain
Inv El. 579.14'

FOR CONTINUATION SEE DWG N° 3000-H-52-A

FOR CONTINUATION

GRAVEL ROAD

FENCE

E 37+00

E 33+00

E 32+00

E 33+00

PLANT LIGHT POLE

PLANT LIGHT POLE

328 1450 P 00005

DO NOT SCALE REDUCED DRAWING

REVISIONS			
5			
4			
3			
2	UPDATED PER RES 1109 PF EP 40-55601 ADDED BLDG 67, PAVED STORAGE PAD, STORM DRAIN & SEWER, GRAVEL REMOVED PER CR	R.A.B.	
1			

UNITED STATES ATOMIC ENERGY COMMISSION
NEW YORK OPERATIONS OFFICE

CONTRACT No AT-30-1-1960

FEED MATERIALS PRODUCTION CENTER
FERNALD AREA

PLAN OF AREA A-3
UNDERGROUND SERVICES

DESIGNED		
DRAWN	CATALYTIC CONSTRUCTION CO.	
TRACED	APPROVED	
CHECKED	CONSTRUCTION	
G.F.N.	3000-H-53-A	2

SEP 30 '91

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-18-7
17
FERNALD, OHIO

U.S. DEPARTMENT OF ENERGY

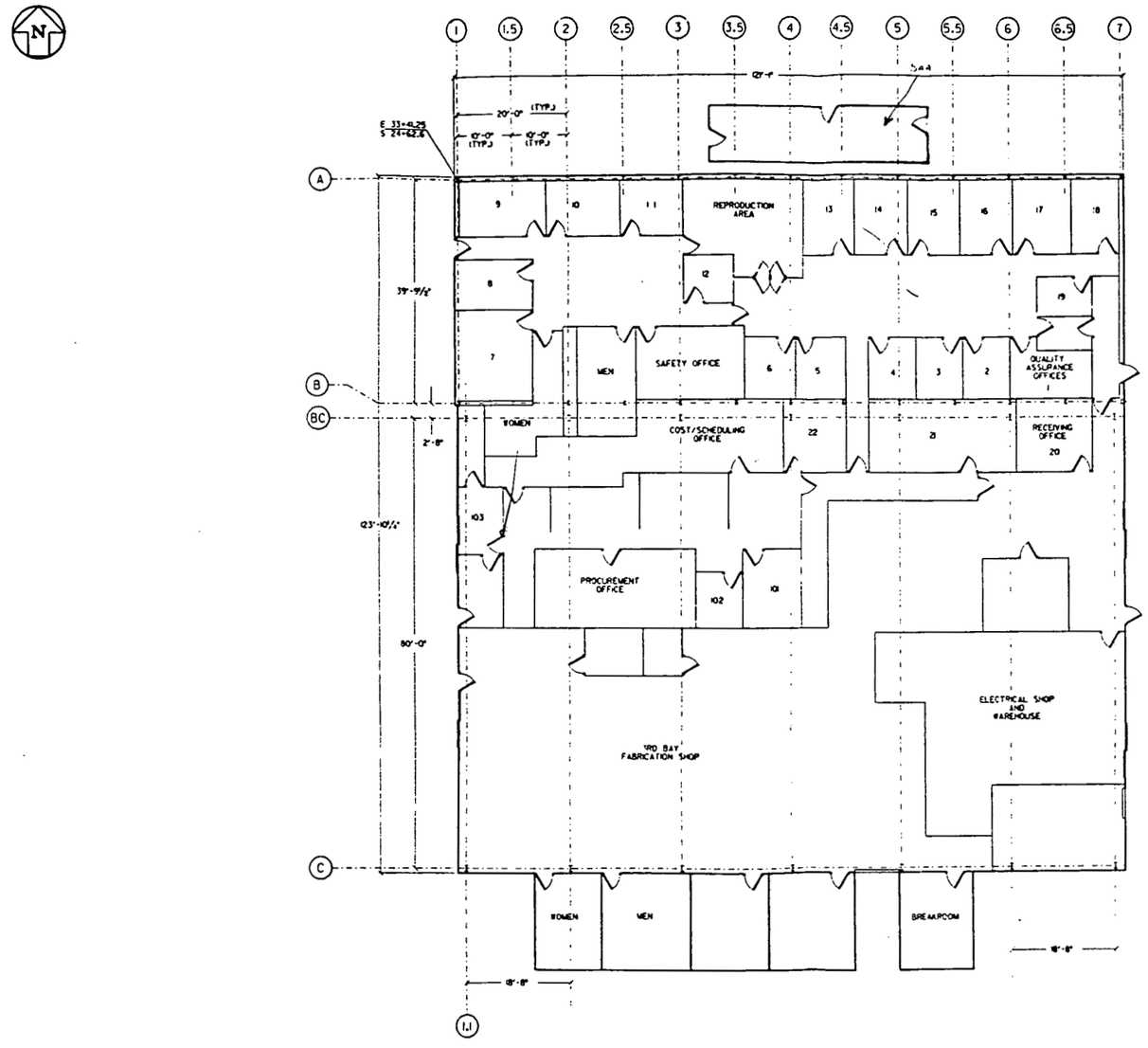
ATTACHMENT J-18-8

18

FERNALD, OHIO

SEP 30 '91

2486



U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-18-9
FERNALD, OHIO

19

NO.	REVISIONS	DATE	DWN. BY	APPD.	NO.	REVISIONS	DATE	DWN. BY	APPD.	45X-5500-E-00222 REF. DWG. NO.

NOTE: WMCO C.A.D. DRAWING NOT TO BE REVISED MANUALLY

APPROVALS: CHEMICAL, CIVIL & STR., ELECTRICAL, ENGINEER, INSTRUMENT, MECHANICAL, CHECKED, APPROVED; P.R.S. & T., MAINTENANCE, DAL SAFETY, IDA, PRODUCTION, FIRE & SAFETY, WASTE MANAGE, D.O.E., SECURITY

WESTINGHOUSE ENVIRONMENTAL MANAGEMENT CO. OF OHIO
FERNALD, OHIO
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
U.S. DEPARTMENT OF ENERGY

BUILDING #5
RUST ENGINEERING
FLOOR PLAN
1/8" = 1'-0"

45X-5500-A-00223 | 0

FILE NAME: [illegible]

2486

FLOOR PLAN

ELEVATION A

ELEVATION D

ELEVATION E

ELEVATION D

ELEVATION E

ELEVATION F

ELEVATION G

ELEVATION I

ELEVATION J

ELEVATION K

ELEVATION L

ELEVATION M

ELEVATION N

REFLECTED CEILING PLAN

DETAIL 1

TYP. FULL-HEIGHT DRYWALL PARTITION

TYP. O/G HEIGHT DRYWALL PARTITION

REDUCED DRAWING
DO NOT SCALE

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-18-10
20
FERNALD, OHIO

WMCO - FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO - U.S. DEPARTMENT OF ENERGY

EMERGENCY OPERATIONS CENTER

ARCHITECTURAL - PLANS, ELEVATIONS

DESIGN DATE - REVISION

A-1

ADMINISTRATION BLDG. 14
EOC

SEP - 9 '91

Health & Safety
Bldg. 53

FIRST FLOOR PLAN

SCALE 1/8" = 1'-0"
FINISH FLOOR ELEVATION = 58?'-6"

DO NOT SCALE   REDUCED DRAWING

⬡ DRAWING NOTES

2486

1. STAIR AND LANDING, METAL PANS FILLED WITH CONCRETE.
2. EXISTING STAIR AND LANDING.
3. PASSENGER ELEVATOR.
4. DUCT SHAFT.
5. WALL AS INDICATED TO BE FULL HEIGHT TO STRUCTURE TO PROVIDE SEPARATION BETWEEN CLEAN AND DIRTY SIDES.
6. SEE SHEET A-00265 FOR ENLARGED PLANS OF GAS CYLINDER STORAGE BUILDING
7. SEE SHEET A-00266 FOR ENLARGED PLANS OF CONNECTOR TO BUILDING A.
8. EXISTING CONNECTOR TO INVIVO MONITORING FACILITY.
9. FIRE EXTINGUISHER CABINET.
10. DELUGE SHOWERS, TOTAL OF THREE (3), SEE PIPING DRAWING P-7
11. ADJUSTABLE WOOD SHELVING, 12" DEEP, 6 SHELVES HIGH.
12. ADJUSTABLE WOOD SHELVING, 18" DEEP, 6 SHELVES HIGH.
13. 15"W X 12"D X 6'-0" HIGH LOCKERS, 5 UNITS WIDE
14. MONORAIL WITH ELECTRICALLY OPERATED HOIST, SEE SECTION 3 ON SHEET A-00262
15. VISION PANEL, SEE DETAIL B AND SECTION 2 ON SHEET A-00262.
16. NEW DRYWALL TO BE RETURNED TO EXISTING DUMBWAITER DOOR FRAME.
17. SURFACE MOUNTED TRACK FOR CUBICLE CURTAINS, REFER TO SHEET I-00278.
18. VERTICAL SLIDING PASS WINDOW, SEE DETAIL A AND SECTION 1 ON SHEET A-00262.
19. CHAIN LINK FENCE AND GATE, FULL HEIGHT TO CEILING.
20. EXISTING CONDENSATE RETURN PIT IN FLOOR TO BE INFILLED WITH NEW CONCRETE FLUSH TO MATCH EXG. ADJACENT CONCRETE FLOOR.
21. FRESH AIR INTAKE WELL TO BE INFILLED WITH COMPACTED BACKFILL.

GENERAL NOTES

A. WALL TYPES INDICATED BY (A) LETTER DESIGNATES TYPE, SEE WALL TYPES DETAILS ON SHEET A-00270.
B. FOR ENLARGED PLANS OF ELEVATOR AND STAIRS, SEE SHEET A-00264
C. FOR ENLARGED PLANS OF TOILET ROOMS, SEE SHEET A-00263
D. FOR DOOR SCHEDULES AND DETAILS, SEE SHEET A-00271
E. FOR WINDOW SCHEDULES AND DETAILS, SEE SHEET A-00272.
F. ALL FIRE RATED WALLS TO BE FULL HEIGHT TO STRUCTURE ABOVE
G. PATCH AND REPAIR ALL DAMAGED FLOORS RESULTING FROM REMOVAL OF ELECTRICAL DEVICES FROM FLOOR. PATCH CONCRETE FINISH TO MATCH EXISTING FINISH ADJACENT TO AFFECTED AREA.
H. INFILL ALL INTERIOR CMU WALLS, WHERE EXISTING DOORS ARE TO BE REMOVED, PRIOR TO INSTALLING FURRING AND DRYWALL.
J. BOTTOM OF ALL BULKHEADS, DESIGNATED BY ▭▭▭▭▭, TO BE AT 6'-0" AFF.
K. VINYL WALL BUMP RAIL TO BE INSTALLED IN CORRIDORS AS DESIGNATED ON ROOM FINISH SCHEDULE. FOR DETAIL SEE SECTION 8 ON SHEET A-00262.
L. PRIOR TO CUTTING ANY FLOOR OPENING, PROVIDE THE CONSTRUCTION MANAGER WITH A DETAILED PLAN SHOWING SIZE AND LOCATION OF OPENING IN NEW AND EXISTING FLOORS. DO NOT PROCEED WITH ACTUAL CUTTING OF OPENINGS UNTIL SO DIRECTED BY THE CONSTRUCTION MANAGER.

NUMBER OF SECTION OR LETTER OF DETAIL
DRAWING ON WHICH SECTION OR DETAIL IS TAKEN
DRAWING ON WHICH SECTION OR DETAIL IS SHOWN

SECTION & DETAIL KEY

0 4' 8' 16' 24'

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR MAT'L/FINISH	FLOOR BASE	WALL MAT'L/FINISH	CEILING MAT'L/FINISH	CEILING HGT.	REMARKS
[illegible]	CORRIDOR	CONC/VCT	VWB	DW/VWC	ACT	8'-4"	VINYL WALL BUMP RAIL
[illegible]	CORRIDOR				DW/PNT	8'-0"	
[illegible]	STAIR	[illegible]	VWB	DW/PNT			
[illegible]	[illegible]	[illegible]	VWB	DW/VWC	ACT	8'-0"	
[illegible]	[illegible]	[illegible]	VWB	DW/PNT/VWC	ACT	8'-0"	
[illegible]	ACCOUNTANTS	CONC/CPT	VWB	DW/PNT/VWC	ACT	8'-0"	
[illegible]	CLERKS	CONC/CPT	VWB	DW/VWC	ACT	8'-0"	
[illegible]	SUPERVISOR	CONC/CPT	VWB	DW/PNT/VWC	ACT	8'-0"	
[illegible]	SUPERVISOR	CONC/CPT	VWB	DW/PNT/VWC	ACT	8'-0"	
[illegible]	SUPERVISOR	[illegible]	VWB	DW/PNT/VWC	ACT	8'-0"	
[illegible]	[illegible]	[illegible]	VWB	DW/PNT/VWC	ACT	8'-0"	
[illegible]	[illegible]	[illegible]	VWB	DW/VWC	ACT	8'-0"	
[illegible]	HSS LABORATORY	CONC/SVF	SVCB	DW/PNT	ACT	8'-0"	
[illegible]	[illegible] TOILET	CONC/CT	CTCB	DW/CT	DW/PNT	8'-0"	
[illegible]	TOILET	CONC/CT	CTCB	DW/CT	DW/PNT	8'-0"	
[illegible]	[illegible] TOILET	CONC/CT	CTCB	DW/CT	DW/PNT	8'-0"	
[illegible]	[illegible]	CONC/VCT	VWB	DW/PNT	ACT	8'-0"	
[illegible]	RECEPTION/WAITING	CONC/CPT	VWB	DW/PNT	ACT	8'-0"	
[illegible]	STORAGE	CONC/VCT	VWB	CMU/PNT			
[illegible]	STAIR	CONC/SRF	VWB	CMU/PNT			
[illegible]	HEALTH RECORDS	CONC/CPT	VWB	DW/PNT	ACT	8'-0"	
[illegible]	PHYSICIAN/EXAM ROOM	CONC/CPT	VWB	DW/PNT	ACT	8'-0"	
[illegible]	PHYSICIAN/EXAM ROOM	CONC/CPT	VWB	DW/PNT	ACT	8'-0"	
[illegible]	PHYSICIAN/EXAM ROOM	CONC/CPT	VWB	DW/PNT	ACT	8'-0"	
[illegible]	PHYSICIAN/EXAM ROOM	CONC/CPT	VWB	DW/PNT	ACT	8'-0"	
[illegible]	WOMEN'S WARD	CONC/SVF	SVCB	DW/PNT	ACT	8'-0"	
[illegible]	TOILET	CONC/CT	CTCB	DW/CT	DW/PNT	8'-0"	
[illegible]	[illegible]	CONC/SVF	SVCB	DW/PNT	ACT	8'-0"	
[illegible]	MEN'S WARD	CONC/SVF	SVCB	DW/PNT	ACT	8'-0"	
[illegible]	TOILET	CONC/CT	CTCB	DW/CT	DW/PNT	8'-0"	

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR MAT'L/FINISH	FLOOR BASE	WALL MAT'L/FINISH	CEILING MAT'L/FINISH	CEILING HGT.	REMARKS
130	TOILET	CONC/SVF	SVCB	DW/PNT	ACT	8'-0"	
131	EMERGENCY WARD	CONC/SVF	SVCB	DW/PNT	ACT	8'-0"	
132	TOILET	CONC/CT	CTCB	DW/CT	DW/PNT	8'-0"	
133	TOILET	CONC/CT	CTCB	DW/CT	DW/PNT	8'-0"	
134	TOILET	CONC/CT	CTCB	DW/CT	DW/PNT	8'-0"	
135	DRESSING	CONC/CT	CTCB	DW/PNT	ACT	8'-0"	
136	HSS SUPPLIES	CONC/VCT	VWB	DW/PNT	ACT	8'-0"	
137	DECONTAMINATION	CONC/SVF	SVCB	DW/PNT	ACT	8'-0"	
138	JANITOR CLOSET	CONC	VWB	DW/PNT			
139	STAIR	CONC/SRF	VWB	CMU/PNT			
140	EPM LAB/TECHNICIANS	CONC/SVF	SVCB	DW/PNT	ACT	8'-0"	
140	EPM LAB/TECHNICIANS				ACT	8'-0"	
141	EPM FOREMAN	CONC/SVF	SVCB	DW/PNT	ACT	8'-0"	
142	MECHANICAL	CONC	VWB	DW/PNT			
143	STAIR	CONC/SRF	VWB	DW/PNT			
144	CORRIDOR	CONC/SVF	SVCB	DW/PNT	ACT	8'-0"	VINYL WALL BUMP RAIL
145	EPM SUPERVISOR	CONC/CPT	VWB	DW/PNT/VWC	ACT	8'-0"	
146	CLERK	CONC/CPT	VWB	DW/VWC	ACT	8'-0"	
147	TRAINING ASSISTANT	CONC/CPT	VWB	DW/PNT	ACT	8'-0"	
148	TOILET	CONC/CT	CTCB	DW/CT	DW/PNT	8'-0"	
149	IND. HYGIENE TECH.	CONC/CPT	VWB	DW/PNT	ACT	8'-0"	
150	RESPIRATOR FIT TEST	CONC/SVF	SVCB	DW/PNT	ACT	8'-0"	
151	IND. HYGIENE LAB	CONC/SVF	SVCB	DW/PNT	ACT	8'-0"	
151	IND. HYGIENE LAB				ACT	8'-0"	
152	CALIBRATION ROOM	CONC/SVF	SVCB	DW/PNT	ACT	8'-0"	
153	H&SAFETY INSPECTORS	CONC/SVF	SVCB	DW/PNT/VWC	ACT	8'-0"	
154	FIRE PROTECTION SPEC.	CONC/SVF	SVCB	DW/PNT/VWC	ACT	8'-0"	
155	CLERK	CONC/CPT	VWB	DW/VWC	ACT	8'-0"	
156	H&SAFETY SUPERVISOR	CONC/CPT	VWB	DW/PNT/VWC	ACT	8'-0"	
157	SAFETY ENGINEERS	CONC/CPT	VWB	DW/PNT/VWC	ACT	8'-0"	

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR MAT'L/FINISH	FLOOR BASE	WALL MAT'L/FINISH	CEILING MAT'L/FINISH	CEILING HGT.	REMARKS
158	MEN'S TOILET	CONC/CT	CTCB	DW/CT	DW/PNT	8'-0"	
159	WOMEN'S TOILET	CONC/CT	CTCB	DW/CT	DW/PNT	8'-0"	
160	H&S LIBRARY	CONC/CPT	VWB	DW/PNT	ACT	8'-0"	
161	H&S COMPUTER ROOM	CONC/CPT	VWB	DW/PNT	ACT	8'-0"	
162	ELECTRICAL	CONC	VWB	DW/PNT			
163	MECHANICAL	CONC	VWB	DW/PNT			
164	REG. COMP. TECH.	CONC/VCT	VWB	DW/PNT	ACT	8'-0"	
165	INSTRUMENT SHOP	CONC/VCT	VWB	DW/PNT	ACT	8'-0"	
166	CLERKS	CONC/CPT	VWB	DW/VWC	ACT	8'-0"	
167	[illegible] SUPERVISOR	CONC/CPT	VWB	DW/PNT/VWC	ACT	8'-0"	
168	IND. HYG. TECHNOLOGISTS	CONC/CPT	VWB	DW/PNT/VWC	ACT	8'-0"	
169	X-RAY STORAGE	CONC/VCT	VWB	CMU/PNT	ACT	8'-0"	
170	X-RAY PROCESSING	CONC/VCT	VWB	CMU/PNT	ACT	8'-0"	
171	X-RAY	CONC/VCT	VWB	CONC/PNT	ACT	8'-0"	
172	HSS STORAGE	CONC/VCT	VWB	DW/PNT	ACT	8'-0"	
173	HSS PROCESSING	CONC/CPT	VWB	DW/PNT	ACT	8'-0"	
174	EAG	CONC/VCT	VWB	DW/PNT	ACT	8'-0"	
175	AUDIOMETRY	CONC/VCT	VWB	DW/PNT	ACT	8'-0"	
176	VISION TESTING	CONC/VCT	VWB	DW/PNT	ACT	8'-0"	
177	SPACE	CONC/VCT	VWB	DW/PNT	ACT	8'-0"	
178	ELECTRICAL CLOSET	CONC	VWB	DW/PNT			
179	WOMEN'S LOUNGE	CONC/CT	CTCB	DW/VWC	DW/PNT	8'-0"	
180	WOMEN'S TOILET	CONC/CT	CTCB	DW/CT	DW/PNT	8'-0"	
181	MEN'S TOILET	CONC/CT	CTCB	DW/CT	DW/PNT	8'-0"	
182	ELEVATOR			DW/PNT			
183	CORRIDOR	CONC/VCT	VWB	DW/VWC	ACT	8'-4"	VINYL WALL BUMP RAIL
183	CORRIDOR				DW/PNT	8'-0"	
184	MECHANICAL	CONC		CMU/PNT			
185	GAS CYLINDER STORAGE	CONC		CMU/PNT			

NSS3CA02L001

0	CERTIFIED FOR CONSTRUCTION		

UNITED STATES DEPARTMENT OF ENERGY
FEED MATERIALS PRODUCTION CENTER

ESH BUILDING - EXPANSION & UPGRADE

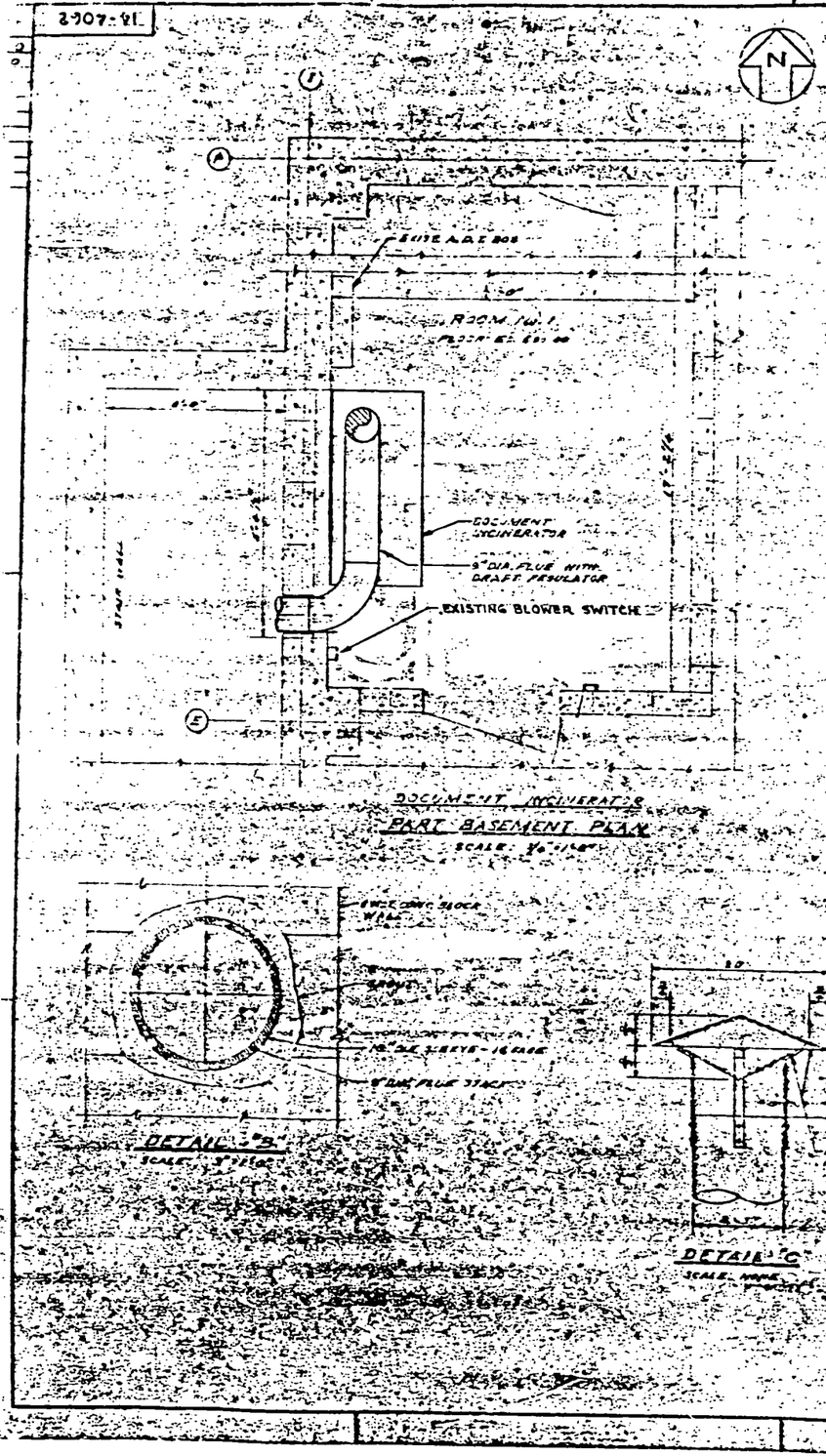
FIRST FLOOR PLAN &
ROOM FINISH SCHEDULE

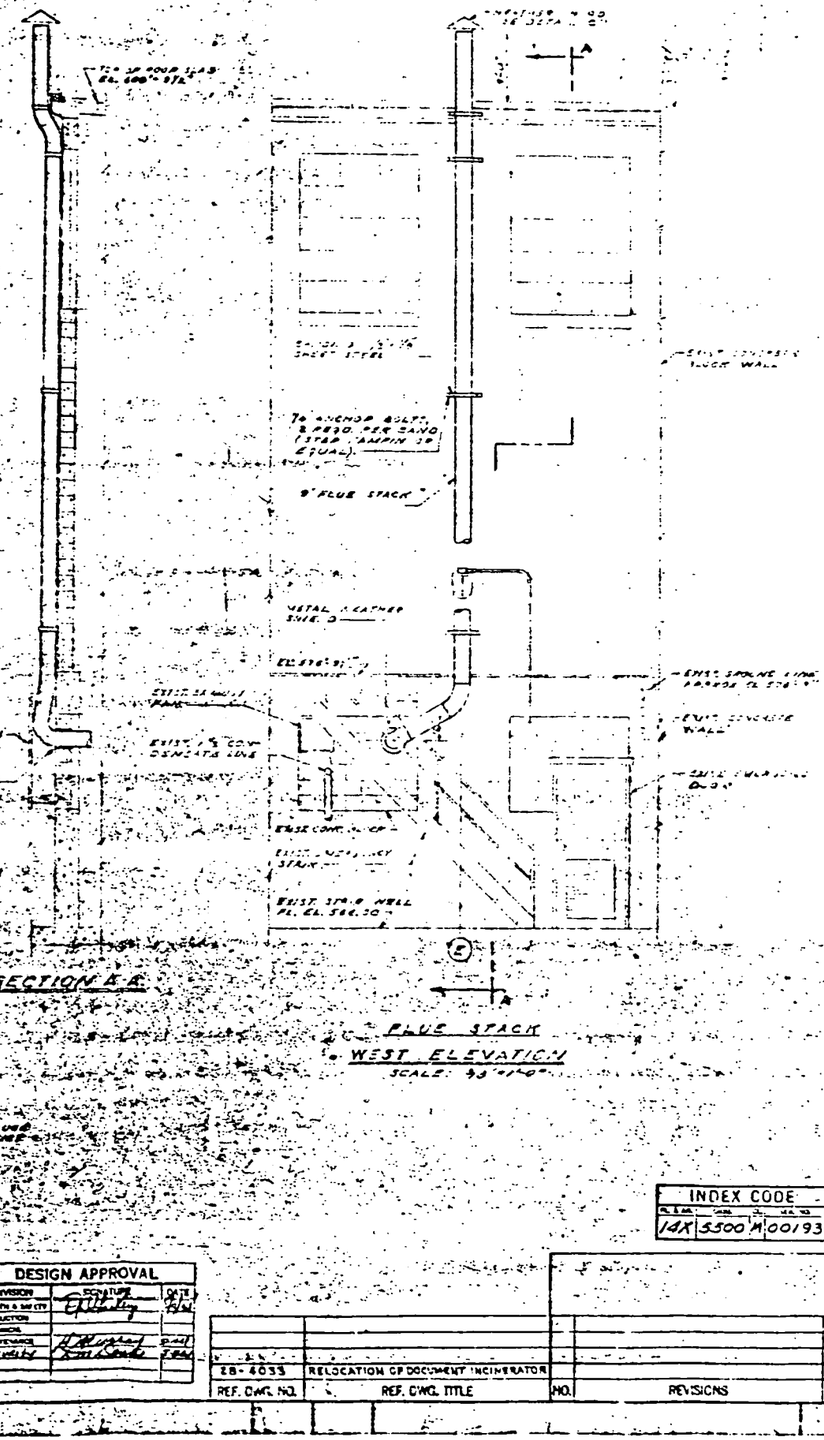
T. ARTMANN | T. TOENSMEYER | R. JACOB
BUILDING 53 | FIRST | 1/8" = 1'-0"
528-8600-A-00251 | A-4 | 0

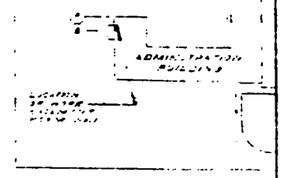
SEP - 9 '91

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-18-II
21
FERNALD, OHIO

2486







GENERAL NOTES:

1. REMOVE INCINERATOR & RELOCATE AT TURNSTILE AREA.
2. REMOVE ENTIRE STACK & SALVAGE SECTIONS FOR RE-USE AT NEW LOCATION AS REQ'D.
3. REMOVE ELECTRIC CABLE FROM WALL SWITCH TO FORCED DRAFT FAN.
4. FURNISH & INSTALL SHEET METAL COVER FOR HOLE IN WALL CAUSED BY REMOVAL OF DUCT.

JUN 4 '91

SCALE FOR THIS DRAWING IS

DESIGN APPROVAL		
DIVISION	SIGNATURE	DATE
HEALTH & SAFETY		
PRODUCTION		
TECHNICAL		
MAINTENANCE		
FACILITIES		

INDEX CODE

G, S & M	ORG.	SUB ORG.	ACTIVITY	PROJECT
14X	5500	M	00193	

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-18-12
22
FERNALD, OHIO

DEMOLITION OF DOCUMENT INCINERATOR
PLAN-ELEVATION - SECTION & DETAIL
ENGINEERING DIVISION

REF. DWG. NO.	REF. DWG. TITLE	NO.	REVISIONS	DATE	BY
28-4033	RELOCATION OF DOCUMENT INCINERATOR			5-3-91	

DWG. NO. 14-4062 C

SECURITY SOLID WASTE INCINERATOR WAS IN BLDG. 14 MOVED TO BLDG. 28

17

25-4017

2486

N

(NEW) REINF. CONC. RETAINING WALL

(EXIST.) GRATE

TOP OF BLACK TOP

#4 BARS

SECT. A-A

0+00

E 54+75.0

0+50

A

A

0+25

245'

ROAD

(NEW) REINF. CONC. TRENCH

TOP OF EXIST. CONC. PAD

DEPTH VARIES 6"TO 12" AT SUMP

#4 BARS @ 12"

#4 BARS

△ SECT. B-B

11'-2½"

(NEW) BLACK TOP AREA

(NEW) CONC. RETAINING WALL

0+34.5

E 54+60.5

EL594.9

1+00

EL594.3

30'-0"

FURNACE

1 MH 9

EL594.6

23'-0"

INCINERATOR

(EXIST) CONC. PAD

PART OF SUBCONTRACT 5-641

△ SECT. D-D

EL594.2

(NEW) BLACK TOP

10'-0"

EL594.3

EL594.4

E 54+33.1

1+44.9

EL593.9

(NEW) CONC. TRENCH

SLOPE

20'-0"

EL593.4

EL593.3

EL592.6

B

B

C

C

(NEW) SUMP & (NEW) PUMP

EXIST. 6' CULVERT UNDER ROAD

(EXISTING) BLACK TOP AREA

EL594.5

(NEW) DISCH. PIPELINE (2")

FENCE LINE

EL594.0

SEDIMENTATION TANKS

CHLORINE HOUSE

E

E

13'-0"

INV. EL593.5

ROAD

EL594.7

(NEW) 6" COPR. GALVANIZED CULVERT 38' LG.

D

D

INV. EL592.8

EL595.0

EXIST. CULVERT

(NEW) TRENCH

EL592.5

EL592.4

EXIST. DITCH

195'

PLAN

(1) PUMP - 1½" SQ. P.N. 3" SER. 1-1750 R.P.M. MOTOR 1½ H.P. 1750 R.P.M. 440 VOLT 3 PHASE P.N. 75 INCL. (FURNISHED BY NATIONAL LEAD CO. OF OHIO)

#4 BAR

(NEW) 4" ASBESTOS PIPE SHAFTS SEE DWG

#4 BARS - 12" O.C. BOTH WAYS

PROVIDE 2" EXPANSION FILLER

△ SECT. C-C

EL 595.0

WALL OF CONTACT BASIN

3'-0"

△ SECT. E-E

0 1 2 3

SCALE FOR THIS DRAWING

JUN 3 '91

DESIGN APPROVAL

DIVISION	SIGNATURE	DATE
HEALTH, SAFETY & ENVIRONMENT		
PRODUCTION		
TECHNICAL		
PLANT & SERVICE		

REF. DWG. NO.	REF. DWG. TITLE
25-4019	INCINERATOR PAD - SECTIONS
518.000-15MA-333	EXPANSION PLOT PLAN

NO.	REVISIONS	DATE	BY
3	SHOWING WORK UNDER S-641	5/24/91	A.S.
2	REPAIR EXIST. BLACK TOP & SLOPE TO CONC.	4-2-91	A.S.
1	GENERAL CHANGES	5-30-57	D.G.

U.S. DEPARTMENT OF ENERGY

ATTACHMENT J-18-13 33

NATIONAL LEAD COMPANY

FEED MATERIALS PRODUCTION

FERNALD, OHIO

U.S. ATOMIC ENERGY COMMISSION

SEWAGE TREATMENT AREA

INCINERATOR PAD

EXTENSION

DEPARTMENT ENGINEERING

PROJECT NO. 25-5 CP-F-5-33

DRAWN & TRACED P. STEPHENSON CHECKED APPROVED

DATE 5-31-57 DWG. NO. 25-4017 REV. 2

SCALE 1"= 10'-0"

SEWAGE TREATMENT PLT. INCINERATOR

18

2486

EXISTING COAL PILE

PLAN - COAL PILE DITCH, PIPING, AND SETTLING BASIN

SECTION

SECTION

DETAIL - CONNECTION FOR BOILER BLOWDOWN LINE

GENERAL NOTES

DO NOT SCALE REDUCED DRAWING

0	CERTIFIED FOR CONSTRUCTION	

UNITED STATES
DEPARTMENT OF ENERGY

WILEY & WILSON
ARCHITECTS - ENGINEERS - PLANNERS

WATER POLLUTION CONTROL

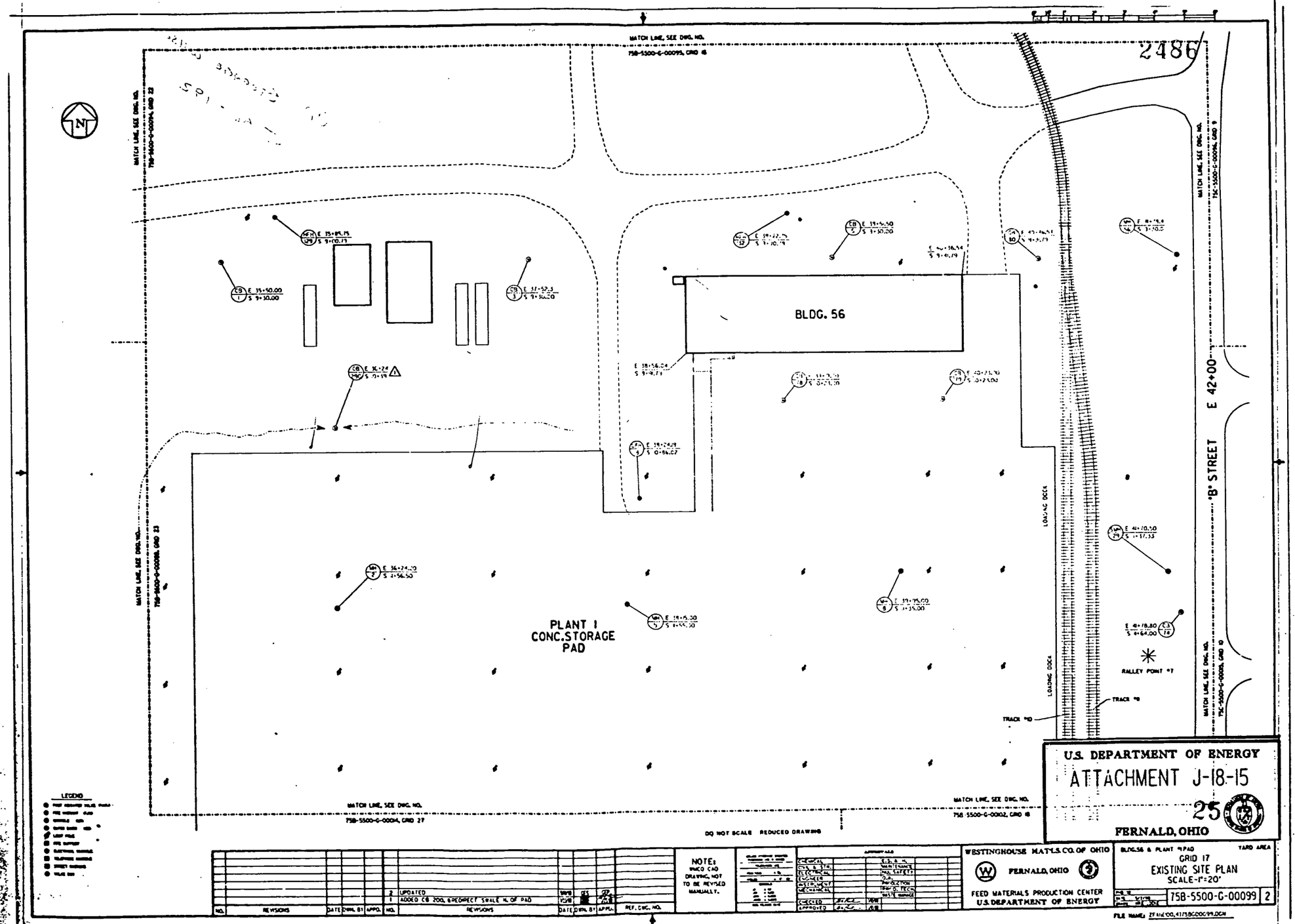
COAL PILE RUNOFF
PLAN & SECTIONS
DITCH, PIPING & SETTLING BASIN

83-0-146

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-18-14
24
FERNALD, OHIO

JUN 4 '91

28



2486
MATCH LINE, SEE DWG. NO.
BLDG. 56
PLANT I
CONC.STORAGE
PAD
"B" STREET
E 42+00
LOADING DOCK
RALLEY POINT #7
TRACK #8
TRACK #10
LEGEND
DO NOT SCALE REDUCED DRAWING
U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-18-15
25
FERNALD, OHIO
NOTE: WMCO CAD DRAWING, NOT TO BE REVISED MANUALLY.
WESTINGHOUSE MAT'LS. CO. OF OHIO
FERNALD, OHIO
FEED MATERIALS PRODUCTION CENTER
U.S. DEPARTMENT OF ENERGY
BLDG.56 & PLANT #1 PAD
YARD AREA
GRID 17
EXISTING SITE PLAN
SCALE-1"=20'
75B-5500-G-00099
2
2 UPDATED
1 ADDED CB 200, & REDIRECT SWALE N. OF PAD
REVISIONS
REF. DWG. NO.

SEP 2 5 '91

FIRE TRAINING FACILITY

2486

NO.	PRINTED	REV.
5	12-19-89	5
7	9-11-90	7
8	4-11-91	8
9	5-21-91	9
1	7-8-91	1

73X5500G00001

N

NEW BITUMINOUS CONC. SURFACED AREA

NEW FIRE BRIGADE TRAINING CENTER BUILDING - #75 SEE DWG. 73X-5500-A-00003

GRAVEL ROAD

EAST PLANT TOP ... ROAD

50+10.36

53+65

53+95

50 EL 599.1

9'-6" DIA. x 9'-0" I.D. STL TANK W/ CONC. PIERS SEE DWG. 73X-5500-A-00002

60 EL 589.7

7'-8" W x 37'0"LG. x 4'-6" D. BOTTOM OF OPEN STL TANK BURIED 3'-11" BELOW GRADE FOR LOCATION SEE DWG. 73X-5500A-00002

51+29

50 EL 590.7

50 EL 590.5

EXIST. FIRE HYDRANT RELOCATED SEE DWG. 73X-5500A-00002 FOR PROFILE

51+50

SEAL WELD

B.M. TOP of 4" POST U/S EDGE EL 593.35'

APPROX. 156'

51+90

FENCE 52+00

TRENCH 2'-0" DEEP INSTALL (2) 4" ALUM.

LIGHT POLE (REMOVED FROM WEST PROJECT). (2) 500 WATT FLOOD LIGHTS PER POLE. (FURNISHED BY N/S). TOGGLE SWITCH ON WEST POLE 4'-6" ABOVE GRADE.

3

PART OF THIS SUBCONTRACT

ROAD

RELOCATE BASE FROM HYDRANT NORTH TO NEW POSITION

60 K / 589.7

2

1. INSTALL 30 AMP. FUSIBLE DISCONNECT SWITCH ON EXIST. POLE.
2. TAP 240 VOLTS FROM EXIST. 7.5 KW TRANSFORMER.

FENCE 53+00

QUONSET #3

QUONSET #2

QUONSET #1

EDGE RR SILVER

53+86

RR 54+09 TRACK #2

RR 54+31 MAINLINE

B.M.-91
A
EL 590.13
54+70
E 41+45

1.8" vinyl
P 40+20

SECTION 1 - 1

SCALE 3/8" = 1'-0"

LEGEND

NEW

EXISTING

MAY 13 '91

REF. DWG. NO.	REF. DWG. TITLE	NO.	REVISIONS	DATE	BY
		3	ADDED (2) POLES, DISC. SW. & (2) LIGHTS & TOGGLE SW.	5-30-91	LMS
		2	CHANGED COORDINATE 2.0+45.73 TO 2.0+45.83 &	4-11-91	LMS
			ADDED LINE FOR 8" U.S. IRON PIPE	4-11-91	LMS
		1	ADDED BITUMINOUS CONC. SURFACED AREA	3-8-91	LMS

U.S. DEPARTMENT OF ENERGY

ATTACHMENT J-18-16

FERNALD, OHIO

U.S. ATOMIC ENERGY CO

FERNALD, OHIO

PLOT PLAN

ENGINEERING DIVISION

APPROVALS

ARCH. & STR.		H. & S.	
MECHANICAL		PROD.	
ELECTRICAL		TECH.	
CHEMICAL		MAINT.	
PROJ. ENGR.		OPERATIONS	

PROJ. NO. 5-321 | DR. 12-15 | DATE 11-21-15 | SCALE 1"=40'

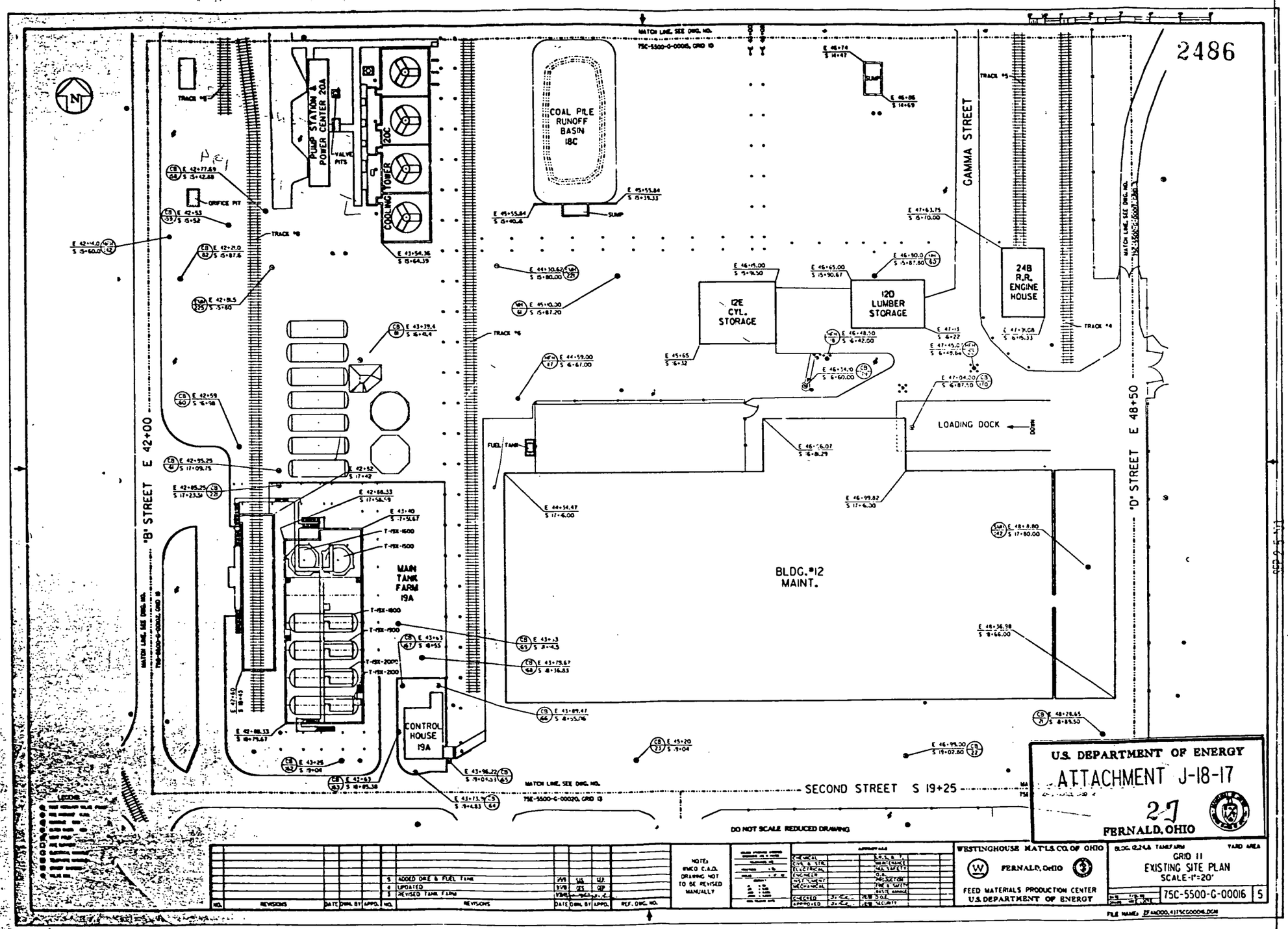
DRAWN | CHKD. | DES. | SR. DES. | CHKD. | DES. | TECH. NO.

CHECKED | APPROVED | 73X5500G00001 | REV. 3

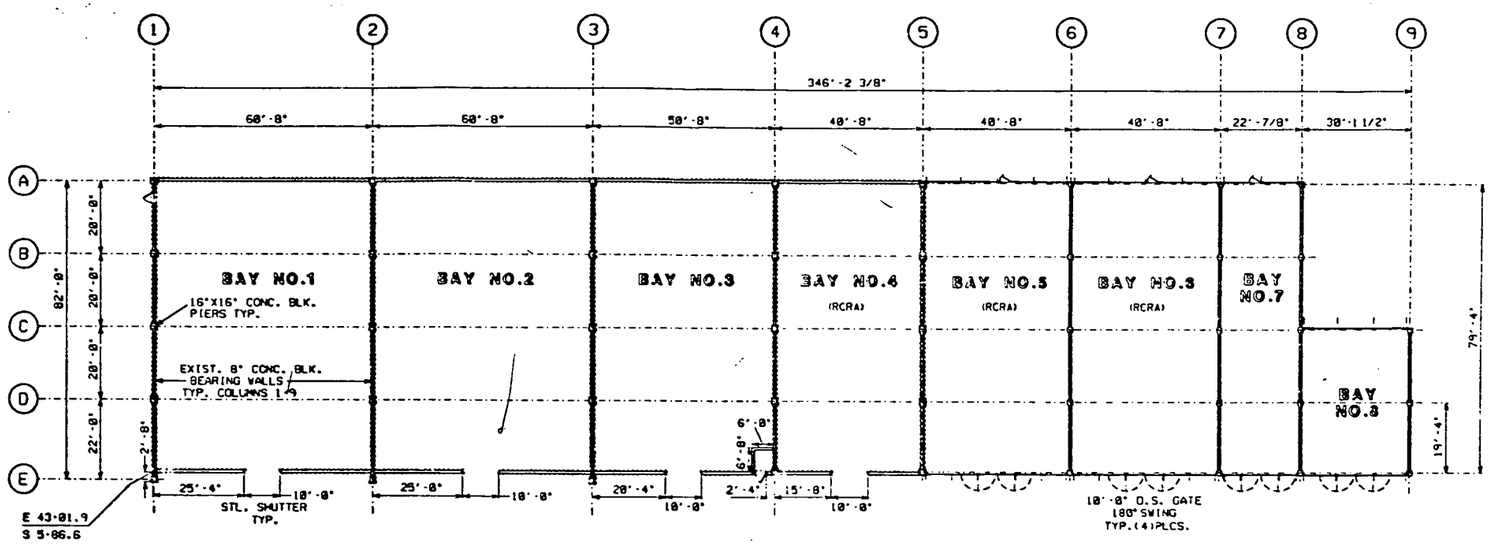
26

Fire Training Facility

79


2486
COAL PILE RUNOFF BASIN 18C
PUMP STATION & POWER CENTER 20A
COOLING TOWER 20C
VALVE PITS
ORIFICE PIT
GAMMA STREET
24B R.R. ENGINE HOUSE
12D LUMBER STORAGE
12E CYL. STORAGE
LOADING DOCK
FUEL TANK
BLDG. #12 MAINT.
MAIN TANK FARM 19A
CONTROL HOUSE 19A
"B" STREET E 42+00
"D" STREET E 48+50
SECOND STREET S 19+25
MATCH LINE, SEE DWG. NO. 75C-5500-G-00020, GRID 13
DO NOT SCALE REDUCED DRAWING
U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-18-17
27
FERNALD, OHIO
WESTINGHOUSE MAT'LS. CO. OF OHIO
FERNALD, OHIO
FEED MATERIALS PRODUCTION CENTER
U.S. DEPARTMENT OF ENERGY
GRID 11
EXISTING SITE PLAN
SCALE-1"=20'
75C-5500-G-00016
5
NOTE: WMCO C.A.D. DRAWING NOT TO BE REVISED MANUALLY
5 ADDED DIKE & FUEL TANK
4 UPDATED
3 REVISED TANK FARM
REVISIONS
REF. DWG. NO.

2486



DO NOT SCALE REDUCED DRAWING

NO.	REVISIONS	DATE	DWN. BY	APPD.	NO.	REVISIONS	DATE	DWN. BY	APPD.	REF. DWG. NO.
										75C-5500-G-00096
										63X-5500-S-00007
										63X-5500-A-00006
										63X-5500-G-00005

NOTE: WMCO C.A.D. DRAWING NOT TO BE REVISED MANUALLY

APPROVALS

CHEMICAL		I.R.S. & T.	
CIVIL & STR.		MAINTENANCE	
ELECTRICAL		NU. SAFETY	
ENGINEER		Q.A.	
INSTRUMENT		PRODUCTION	
MECHANICAL		FIRE & SAFETY	
		WASTE MANAGE	
CHECKED		Q.O.E.	
APPROVED		SECURITY	

WESTINGHOUSE MAT'LS. CO. OF OHIO
FERNALD, OHIO
FEED MATERIALS PRODUCTION CENTER
U.S. DEPARTMENT OF ENERGY

PLANT 63
KC-2 WAREHOUSE
FLOOR PLAN
1/16" = 1'-0"

63X-5500-A-00025 | 0

FILE NAME: ZFA:[00,4]63XA00025.DGN

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-18-18
28
FERNALD, OHIO

MAY 13 '91

2486

FENCE S5+00

BLDG 63
KC-2 WAREHOUSE

MCW CONSTRUCTION NORTH ACCESS ROAD E44+00.0

E46+17.24 S5+05.9

E42+81.9 S5+08.8

MCW OFFICE

E-OVER #2

TRACK #2

S6+05

S6+21

MAIN LINE

MATCH LINE, SEE DWG. NO. 75C-5500-G-00095, GRID 18

E44+78.8 S6+64.38

E44+69.05 S6+71.33

CB #79 E44+46 S7+31.3

E46+47.5 S7+31.3 MH #51

TRACK #4

DECONTAMINATION PAD

MATCH LINE, SEE DWG. NO. 75C-5500-G-00097, GRID 1

MH #54 E42+74.2 S7+38

TRACK #6

TRACK #8

MATCH LINE, SEE DWG. NO. 75C-5500-G-00095, GRID 17

MH #53 E42+75 S9+38

E43+72.29 CB #80 S9+34.9

MH #52 E44+46 S9+38.7

MH #52 E 47+05.8 S 9+38.7

E 46+46.33 S 9+53.33

MATCH LINE, SEE DWG. NO. 75C-5500-G-00095, GRID 19

DO NOT SCALE REFERENCED DRAWING

LEGEND

NOTE: WHEN C.A.D. DRAWING NOT TO BE REVISED MANUALLY

NO.	REVISIONS	DATE	DWN. BY	APPD.
1	UPDATED		WB	GES GCP

REF. DWG. NO.

WESTINGHOUSE MAT'LS. CO. OF OHIO
FERNALD, OHIO
FEED MATERIALS PRODUCTION CENTER
U.S. DEPARTMENT OF ENERGY

BUILDING 63 YARD AREA

GRID 9
EXISTING SITE PLAN
SCALE 1"=20'

75C-5500-G-00096 1

SEP 25 '91

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-18-19
29
FERNALD, OHIO

2486

13-4014

Tank-1 SPEC 100

Tank-2 SPEC 100

DIKE PLAN

ELEVATION

Note 1. 3000 p.s.i. CONCRETE (STRENGTH IN 28 DAYS) SHALL BE USED.
2. ELECTRICAL INSTALLATION FROM PUSHBUTTON TO PUMP SHALL BE EXPLOSION PROOF-CLASS I GROUP D

REF. DWG. NO.	REF. DWG. TITLE	NO.	REVISIONS	DATE	BY
13-3004	3000 GALS. SOL. STOR. TANKS	(1)	CHANGED MATL. TO #347 STAINLESS STEEL	11-14-54	KSS

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-19-1
NATIONAL LEAD COMPANY OF OHIO
FEED MATERIALS PRODUCTION CENTER
30
FERNALD, OHIO

PROJECT: SOLVENT STORAGE SYSTEM LAYOUT

B.M. CONFERS

DWG. NO. 13-00-

SCALE FOR THIS DRAWING

TANK 1 & 2

GRID 4

2486

13-3004

PRINTED	REV.
5-19-54	
5-20-54	
5-29-54	
6-11-54	2
9-2-54	2

SKETCH LADDER ELEV.

TANK CAPACITY
2000 GALS

NOTE

NATIONAL LEAD COMPANY OF OHIO
FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO

U.S. ATOMIC ENERGY COMMISSION

PLANT 13
2000 GALLONS SOLVENT
STORAGE TANK
ASSEMBLY

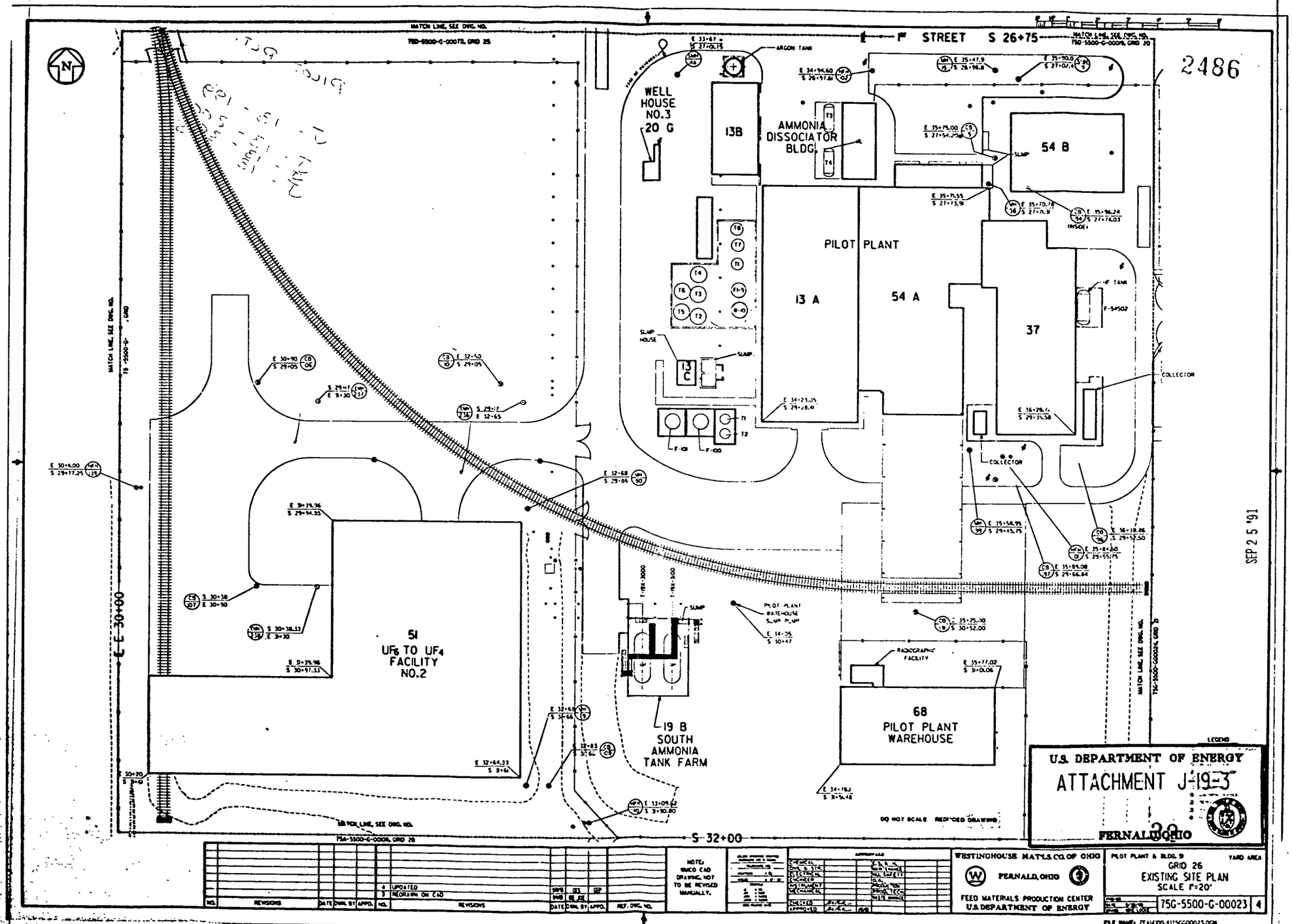
INDEX CODE
13B 5500M 00192

REF. DWG. NO.	REF. DWG. TITLE	NO.	REVISIONS	DATE	BY
		4			
		3			
		2	ADDED GUARDS & LADDER		
		1	LOCATION DIMENSIONS ADDED		

B. M.
TRACED
DATE
SCALE

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-19-2
31
FERNALD, OHIO

PLANT 13 TANK 1 & 2



2486
STREET S 26+75
WELL HOUSE NO.3 20 G
13B
AMMONIA DISSOCIATOR BLDG.
54 B
PILOT PLANT
13 A
54 A
37
13 C
51
UF6 TO UF4 FACILITY NO.2
19 B SOUTH AMMONIA TANK FARM
68 PILOT PLANT WAREHOUSE
RADIOGRAPHIC FACILITY
COLLECTOR
SUMP
SUMP HOUSE
ARGON TANK
PILOT PLANT WAREHOUSE SUMP PUMP
E 30+00
S 32+00
MATCH LINE, SEE DWG. NO.
DO NOT SCALE REDUCED DRAWING
SEP 2 5 '91
U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-19-3
FERNALD, OHIO
WESTINGHOUSE MAT'LS. CO. OF OHIO
FERNALD, OHIO
FEED MATERIALS PRODUCTION CENTER
U.S. DEPARTMENT OF ENERGY
PILOT PLANT & BLDG. 51
YARD AREA
GRID 26
EXISTING SITE PLAN
SCALE 1"=20'
75G-5500-G-00023
4
NOTE: WMCO CAD DRAWING, NOT TO BE REVISED MANUALLY.
4 UPDATED
3 REDRAWN ON CAD
REVISIONS
REF. DWG. NO.

13X 5500 S 00632

NO.	PRINTED	BY
2	6-15-83	D
1	1-16-83	D
0	7-7-82	DK

2486

N

10'-8"

11 BAYS @ 10'-0" = 110'-0"

5'-0"

96'-3"

20'-10"

4" ø VENT TRENCH SEE SECTION - II ON DWG 13X-5500-S-00633

REMOVE (11) 3TH STL FLOOR DRAINS AS REQ'D. FOR INSTALLATION OF NEW TRENCH SYSTEM.

EXISTING FLOOR: CEMENT FINISH, 8" CONC. SLAB W/ H-20 MESH REINF.

EXIST. 2'-0" ROLLED CONCRETE CURB

FOR SECTIONS 1 & 2 SEE DWG 13X-5500-S-00633

NEW TRENCH SEE DWG 13X-5500-S-00633 FOR SECTIONS 1 & 2

EXISTING FLOOR: ACID PROOF BRICK ON 8" CONCRETE SLAB

EXIST. TANK 3'-5"

EXISTING SUMP

SUMP, TYPE - I SEE DETAIL ON DWG 13X-5500-S-00633

SEE DWG 13X-5500-S-00633

SUMP, TYPE - III SEE DETAIL ON DWG 13X-5500-S-00633

SUMP, TYPE - I SEE DETAIL ON DWG 13X-5500-S-00633

SUMP, TYPE - III SEE DETAIL ON DWG 13X-5500-S-00633

EXIST. PLATFORM PIERS

EXISTING LANDING

EXIST. PUMP BASE

FOR CONTINUATION SEE DWG. 13X-5500-S-00633

MAY 2 1983

P L A N

U.S. DEPARTMENT OF ENERGY

ATTACHMENT J-19-4

33

NATIONAL LEAD COMPANY OF OHIO
FERNALD, OHIO

U. S. ATOMIC ENERGY COMMISSION

PILOT PLANT WET AREA
SUMP LIQUID COLLECTION SYSTEM
FRENCH AND SUMP LAYOUT

ENGINEERING DIVISION
APPROVALS

ARCH. & STR.			H. & S.		
MECHANICAL			PROD.		
ELECTRICAL			TECH.		
CHEMICAL			MAINT.		
ENGINEER			PL. OFFICE		

PROD. NO. 13-49 OP. 1-0 DATE 8-27-82 SCALE 1"=10'

DRAWN | DR. & DET. CHKD. | CL | SER. NO. | REV.
CHECKED | 13X | 5500 | S | 00632 | 0
APPROVED

REF. DWG. NO.	REF. DWG. TITLE
13X-5500-S-00633	TRENCH & SUMP LAYOUT & DETAILS

NO.	REVISIONS	DATE	BY

BLDG 13A

BARIUM CHLORIDE
SALT TREATMENT PLANT.

2486

MAINTENANCE SHOP AND STORAGE BUILDING

DISSOCIATED AMMONIA UNITS

WEATHER SHELTER

TRANSFORMER ROOM

UTILITY ROOM

ROLLING STL. DOOR

REFRIGERATION UNIT

ACID TANK

SUPPLY TANK

SCRUBBER UNITS

DIGESTOR D-1

FURNACE

FURNACE

THIS AREA NOT USED

DRUM CONVEYOR

FURNACE ROOM

MOTOR GENERATOR

TANK

PUMPS

FURNACE D-1

TANK

WOMEN'S ROOM

POWER GENERATOR

INDUCTION FURNACE F-2

HEAT TREAT FURNACE (NOT USED)

ANF TANK (UNDER ROOF)

ABANDON IN PLACE #C70-04-134

TANK W-13

FILTER PRESS D4-6

FILTER PRESS D4-7

TANK W-5

PUMP S-13-42

CONTROL BOX ROOM

500 GAL CARBONATE TANK F-13-3

SUMP PRECIPITATOR D-13-16 (D-15)

DISSOLVED LIQUOR FEED TANK F-13-21

DEMINL WATER TANK F-13-17 (F-4)

RAFFINATE STORAGE TANK F-13-15

TANK T-13

TANK T-15

TANK W-13

TANK T-14

TANK W-12

TANK F13A-12

TANK F13A-16

TANK D13A-111

TANK M-30

TANK T-99

TANK M-70

PUMP S-13-47

CONTROL ROOM

ELECTRICAL ROOM

COLLECTORS OFFICE

BATTERY ROOM CORRIDOR

OFFICE

MEN'S ROOM

LAB.

OFFICE

MEN'S ROOM

A TUCLAVE

AUTOCLAVE

AUTOCLAVE

SHIP BLASTER

SHIP BLASTER (NOT USED) HOIST

(DWG. 37A-5500-M-01231)

ABANDONED GREEN SALT BRIQUETTE MAKER

UP RAMP

FINES UNIT (NOT USED)

(ABANDONED) CHARGE STATION (FERRICYNE ONLY)

R4-1(2) EAST DUST COLLECTOR

ABANDON IN PLACE #C78-05-009

ABAND #C78-

JOLTER

TANK

CONTROL PANEL

PLASMA FURNACE

STACK

ROLLING STL. DOOR

ROLLING STL. DOOR

ROLLING STL. DOOR

(ABANDONED) CONTROL PANEL C813-1

6" PULSE COLUMN D-13-13

6" COLUMN PULSER S-13-40(D4-12)

THIS AREA IS INOPERATIVE NOT USED FOR 3-4 YEARS ⚠

PUMP 735-13-7006

OK STRIPPER SIEVE

SETTLER STATIONS

SURGE TANK & PUMP D-2

SCRUBBER D-13-5

STRIPPER D-13-6

AUTO. CONTROL PUMPS

COL. "C"

PUMP 735-13-7003

ROLLING STL. DOOR

ORGANIC FEED TANK & ACIDIFIER F-13-7

PLAN

SCALE: 3/32" = 1'-0"

LOCATION PLAN

REDUCED DRAWING
DO NOT SCALE

MAY 2 1 '91

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-19-5
34
FERNALD, OHIO

NO.	REVISIONS	DATE	DWN. BY	APPD
⚠	IDENTIFIED A. I. P. AREAS NOT USED	3/8/91	LAM	
⚠	ADDED BREAK ROOM	3/8/91		

REF. DWG. NO.	REF. DWG. TITLE
13X-5500-A-00055	PILOT PLANT-ANNEX FLOOR PLAN
13X-5500-A-00130	GROUND FLOOR PLAN
13X-5500-M-00027	PILOT PLANT EQUIPMENT ARRANGEMENT

APPROVALS

CIVIL & STR.	IN & S.
MECHANICAL	PRODUCTION
ELECTRICAL	TECHNICAL
CHEMICAL	MAINTENANCE
ENGINEER	A/E SAFETY
CHECKED	
APPROVED	

WESTINGHOUSE MAT'LS. CO. OF OHIO
FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO
U. S. DEPARTMENT OF ENERGY

PILOT PLANT GROUND FLOOR
EQUIPMENT LAYOUT
PLAN AT ELEV. 579'-0"
ENGINEERING DIVISION

PROJ. NO. 30-0134-22C	
DATE 11-14-84	13X-5500-M-00761 | 2
DRAWN J. LINCKMAN	

BARIUM CHLORIDE
SALT TREATMENT
FACILITY

124

2486

N

PROPOSED WAREHOUSE & ACCESS ROAD

LAB BLDG.

PILOT PLANT

SW CORNER FLOOR ELEV. 579.0

PILOT PLAN
SCALE: 1" = 20'-0"

100'-6"

376.03

376.03

377.67

BLDG LINE

E-MATERIALS STORAGE

FIN. FLOOR ELEV. 577.50

375.75

50'

377.0'

100'

20'

7' WOVEN WIRE FENCE

377.50

377.34

377.67

EXP JOINT

EXP JOINT

CONTRACTION JOINT

6" CONCRETE PAD (CON'T)

12'-0" GATE

377.00

377.00

377.0

377.0

DRAINAGE TRENCH

DRAINAGE TRENCH

376.25

376.25

PYROPHORIC SCRAP PAD

376.25

375.75

375.75

R=24'

EXP JOINT

R=24'

30'

16'

376.84

376.84

376.92

R=24'

EASEMENT

R=24'

PRESENT ROAD

377.84

377.84

377.92

1'-6"

VARIES

ENLARGED SECTION "AA"
(TYPICAL)

LEGEND:

(ELEV.) INDICATES PRESENT ELEV.

ELEV. INDICATES NEW ELEV.

MAY 2 0 '91

REDUCED DRAWING
DO NOT SCALE

INDEX CODE
68X 5500 4 00006

INDEX CODE
21G 5500 4 00152

DESIGN APPROVAL

DIVISION	SIGNATURE	DATE
PROJECT ENGR.	H. Elder	4/4/91
DIVISION HEAD	[illegible]	4/4/91

REF. DWG. NO.	REF. DWG. TITLE
68-4004	ENRICHED MATLS WHSE - ELECTRICAL
68-4005	ENRICHED MATLS WHSE - ELEVATIONS
68-4002	ENRICHED MATLS WHSE - LAYOUT

NO.	REVISIONS	DATE	BY
1	INDEX CODE DWG. NO. CHANGED	4/4/91	

NATIONAL LEAD COMPANY OF OHIO
FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO

U.S. ATOMIC ENERGY COMMISSION

ENRICHED MATERIAL WAREHOUSE
PLOT PLAN

DEPARTMENT ENGINEERING

PROJECT NO. 5-97 | CP-F-55-13

DRAWN | CHECKED | APPROVED | DATE

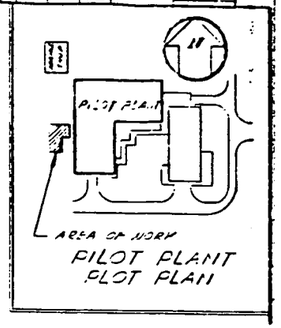
DWG. NO. 68-4001

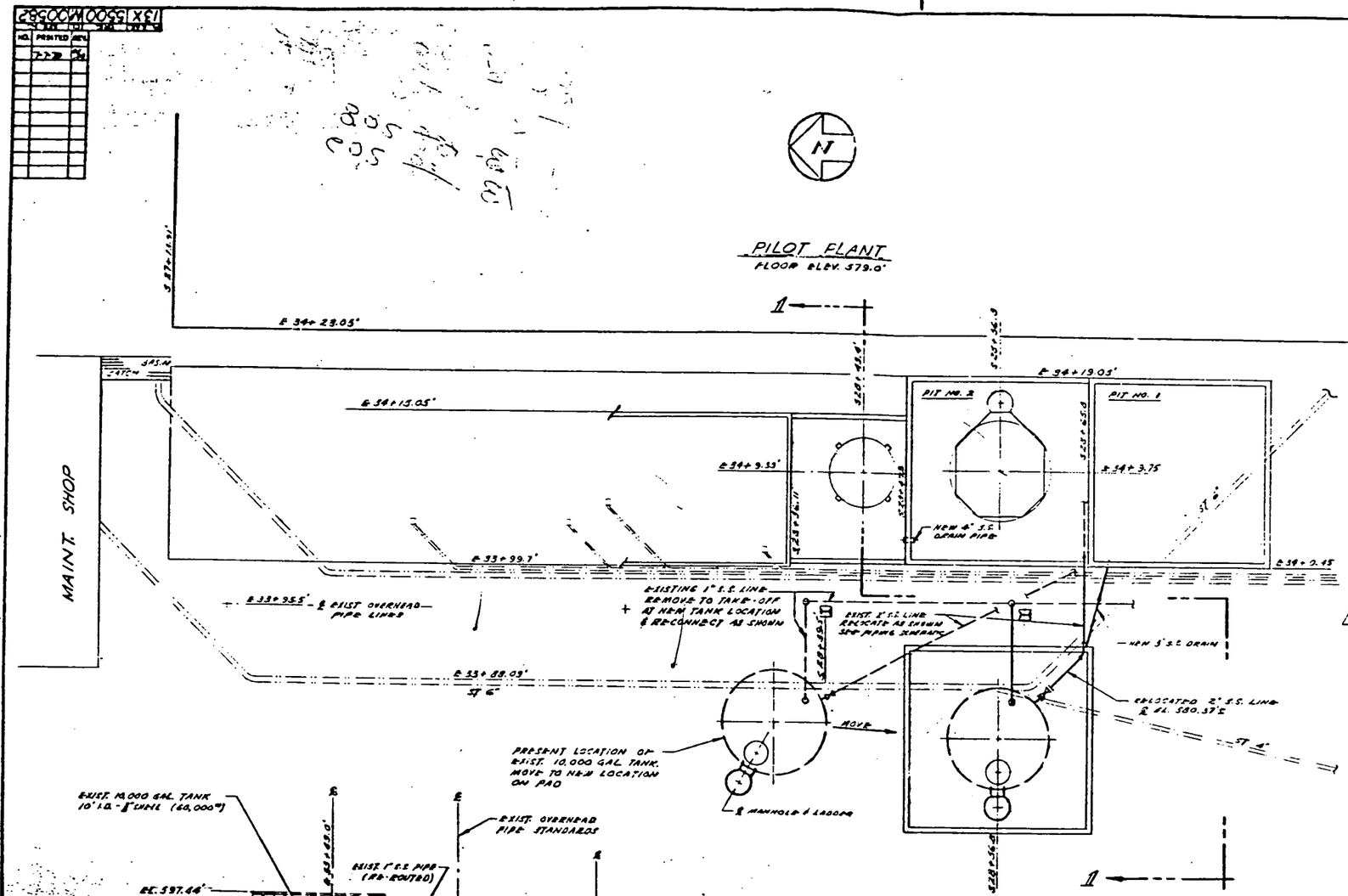
SCALE: 1" = 20'-0"

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-19-6
35
FERNALD, OHIO

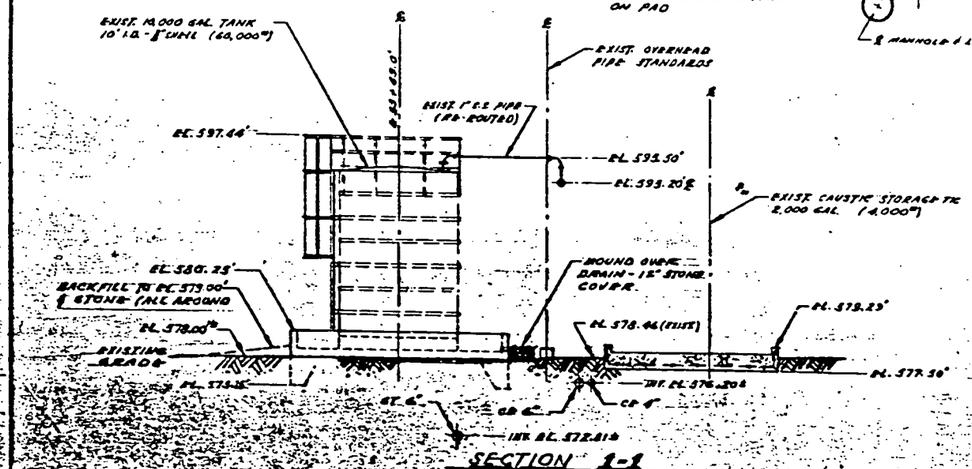
SOLVENTS, T-5 & T-6.

2486





LOCATION PLAN FOR NEW PADS



SECTION 1-1

GENERAL NOTES

1 - INSTALL NEW CONCRETE PADS AT LOCATIONS SHOWN & IN ACCORDANCE WITH DETAIL DWGS.

2 - RELOCATE 10,000 GALLON STAINLESS STEEL STORAGE TANK AS INDICATED.

3 - RE-ROUTE EXISTING 1" & 2" SCHEDULE 40 STAINLESS STEEL PIPE LINES TO 10,000 GALLON STORAGE TANK AS SHOWN

4 - GRADE AS CALLED FOR ON PLANS & IN DETAIL DWGS.

5 - PAINT AS CALLED FOR IN TECHNICAL SPECIFICATIONS.

NEW CONCRETE PADS

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-19-7
NATIONAL LEAD COMPANY OF OHIO
FEED MATERIALS PRODUCTION
FERNALD, OHIO
36

PILOT PLANT SUMP AREA
STORAGE TANK PADS
ARRANGEMENT & PIPING ALT.
LAYOUT & ELEVATION

ENGINEERING DIVISION
APPROVALS

ARCH. & STR.			M. & S.		
MECHANICAL			PROD.		
ELECTRICAL			TECH.		
CHEMICAL			MAINT.		
ENGINEER					

PROJ. NO. 13-137 — DATE 9-29-64 SCALE 1"=1'-0"
DRAWN A. LAR. CHKD. CT SER. NO. REV.
CHECKED 13X 5500 M00582 0
APPROVED

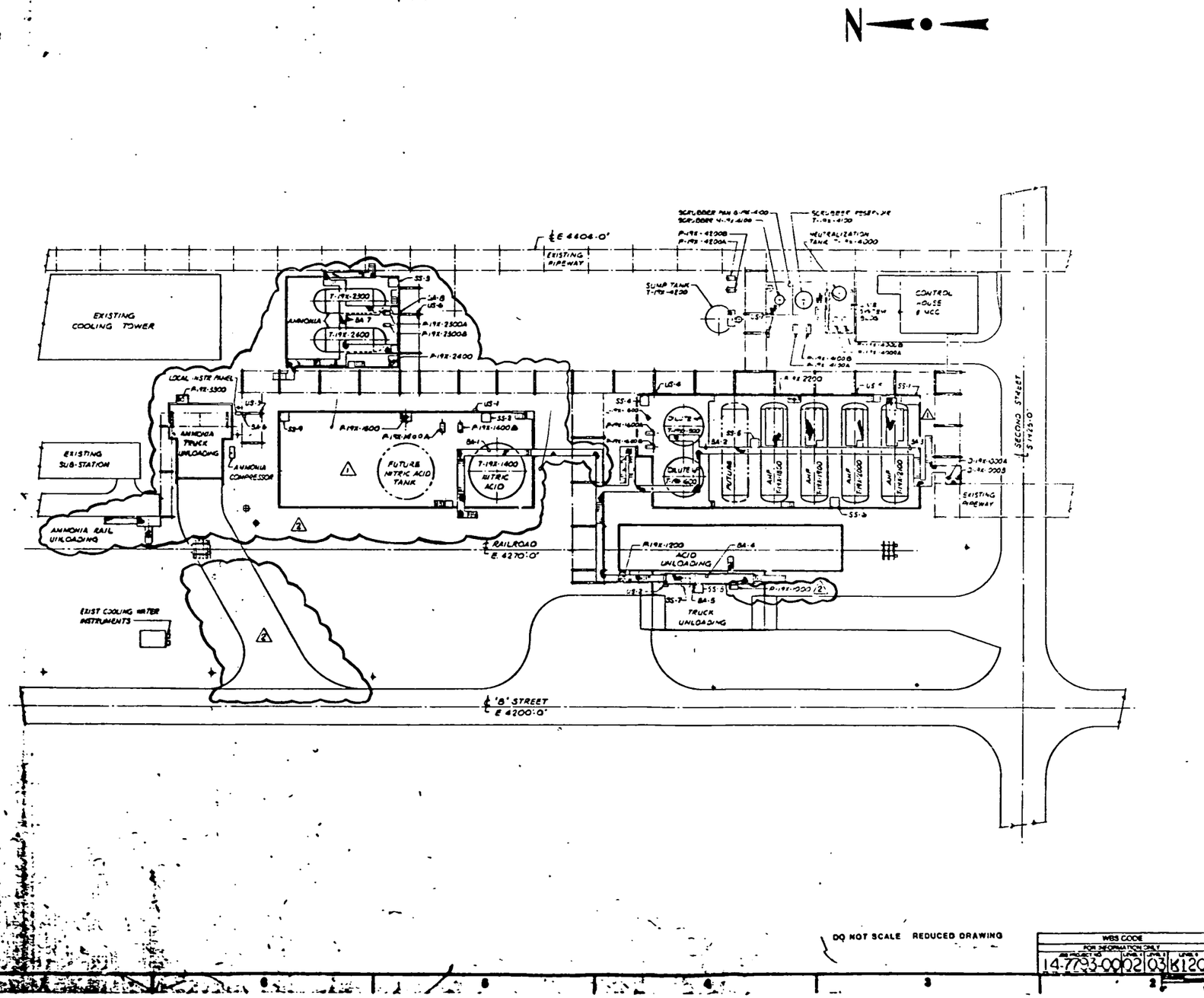
REF. DWG. NO.	REF. DWG. TITLE
SEE 5500-E-00579	STORAGE TANK 448 - CONC. FOUNDATION
SEE 5500-E-00580	STORAGE TANK #8 (10,000 GAL. TYP.) CONC.

NO.	REVISIONS	DATE	BY

T-5 & T-6

101

2486



REV NO	ISSUE OR REVISION PURPOSE DESCRIPTION	DATE	OPER	DOE
2	"NOT IN CONTRACT" KAW			
1	DELETED NITRIC ACID TK & FUTURE TK ALSO REVISED PLATFORMS KAW			
0	CERTIFIED FOR CONSTRUCTION			

UNITED STATES DEPARTMENT OF ENERGY

JACOBS ENGINEERING GROUP INC.
PASADENA, CALIFORNIA

DOE CONTRACT NO DE-AC05-85OR21462 A-E NO 3900

PROJECT NAME
PRODUCTIVITY & RADIOLOGICAL IMPROVEMENTS

DRAWING TITLE
TANK FARM PROJECT PLANT 19
AREA PLOTPLAN

DRAWN BY	DATE	DESIGNED, CHECKED BY	DATE	CHECKED BY	DATE
MK SMITH	4-22-76	MK SMITH	7-8-86		

PLANT: FMPC | BLDG | FLOOR | SCALE: 1"=20'-0" | CLASS

SUBMITTED FOR APPROVAL | APPROVAL RECOMMENDED | DRAWING APPROVED

DATE | OPER CONTRACTOR DATE | DOE DATE

WBS CODE
FOR INFORMATION ONLY

JOB PROJECT NO	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
14-7793-00	02	03	K	120

PROJECT NO	DRAWING NUMBER				REV NO
85-D-140	19X	3900	G	00224	2

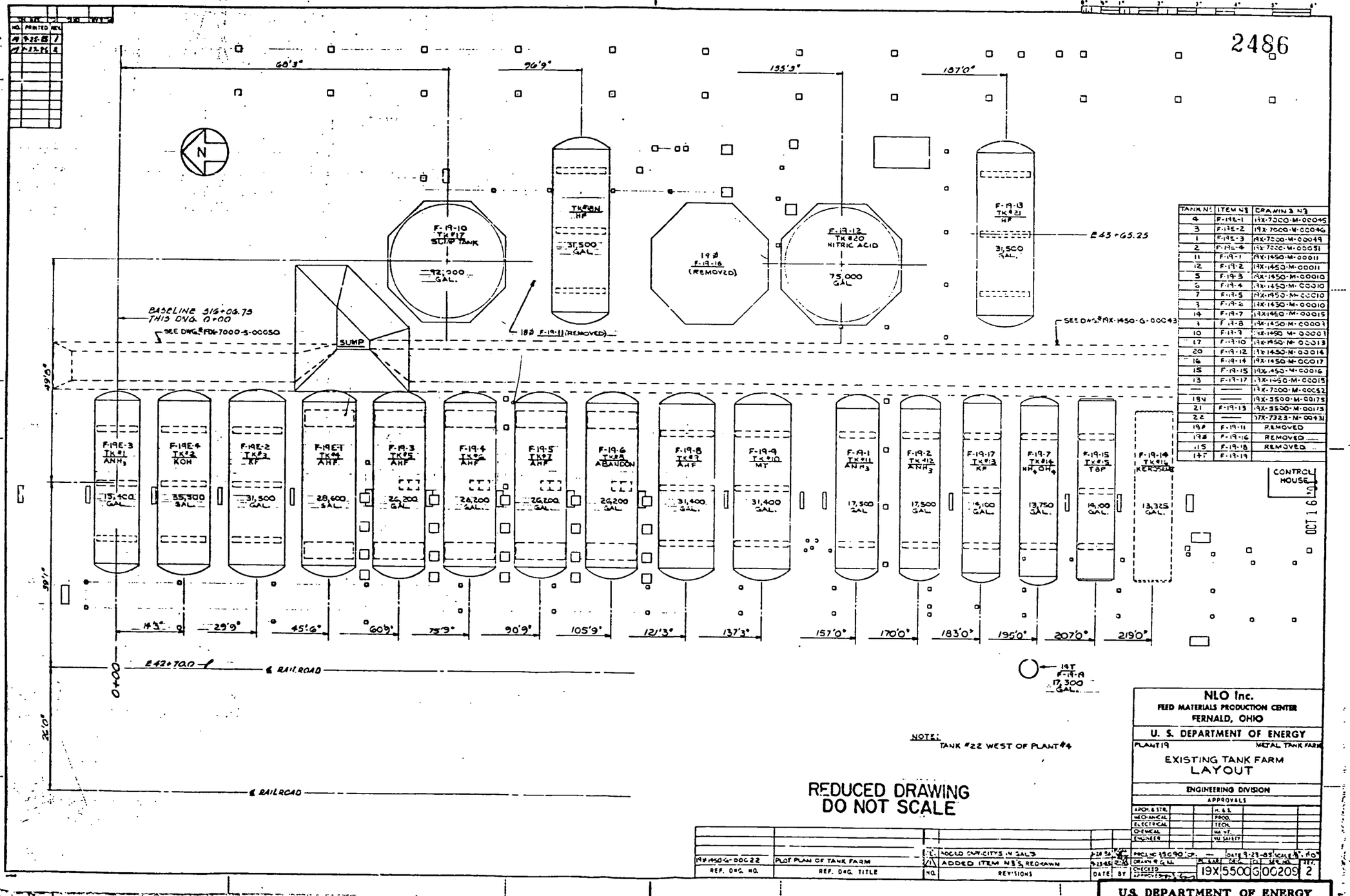
U.S. DEPARTMENT OF ENERGY

ATTACHMENT J-20-1

37

FERNALD, OHIO

2486



TANK NO.	ITEM NO.	DRAWING NO.
4	F-19E-1	19X-7000-M-00045
3	F-19E-2	19X-7000-M-00046
1	F-19E-3	19X-7000-M-00049
2	F-19E-4	19X-7000-M-00051
11	F-19-1	19X-1450-M-00011
12	F-19-2	19X-1450-M-00011
5	F-19-3	19X-1450-M-00010
6	F-19-4	19X-1450-M-00010
7	F-19-5	19X-1450-M-00010
8	F-19-6	19X-1450-M-00010
10	F-19-7	19X-1450-M-00015
1	F-19-8	19X-1450-M-00003
10	F-19-9	19X-1450-M-00001
17	F-19-10	19X-1450-M-00013
20	F-19-12	19X-1450-M-00016
16	F-19-14	19X-1450-M-00017
15	F-19-15	19X-1450-M-00016
13	F-19-17	19X-1450-M-00015
—	——	19X-7000-M-00052
18N	——	19X-5500-M-00175
21	F-19-13	19X-5500-M-00175
22	——	17X-7323-M-00931
19B	F-19-11	REMOVED
19B	F-19-16	REMOVED
15	F-19-18	REMOVED
19T	F-19-19	

NOTE:
TANK #22 WEST OF PLANT #4

REDUCED DRAWING
DO NOT SCALE

REF. DWG. NO.	REF. DWG. TITLE
19X-1450-G-00022	PLOT PLAN OF TANK FARM

NO.	REVISIONS	DATE	BY
2	ADDED CAPACITY'S IN GAL'S	9-28-88	R.C.S.
1	ADDED ITEM NO'S, RED-LINED	9-13-88	R.C.S.

NLO Inc.
FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO

U. S. DEPARTMENT OF ENERGY

PLANT 19 — METAL TANK FARM

EXISTING TANK FARM
LAYOUT

ENGINEERING DIVISION
APPROVALS

APPR. & STR.		H. & S.	
MECHANICAL		PROD.	
ELECTRICAL		TECH.	
CHEMICAL		MA. MT.	
ENGINEER		NU SAFETY	

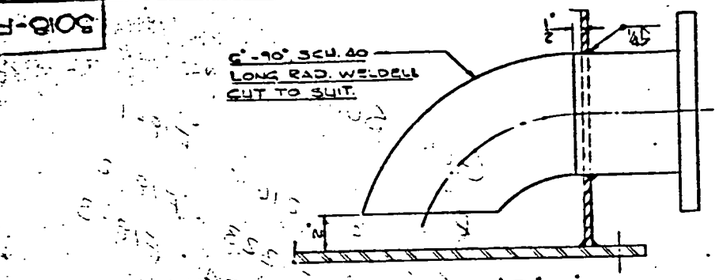
PROJ. NO. 1350 90 | DATE 9-29-83 | SCALE 1" = 40'
DRAWN R.C.S. | TR. SEC. | SEC. | CL. | MFG. NO. | REV.
CHECKED
APPROVED
19X 5500 G 00209 2

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-20-2
38

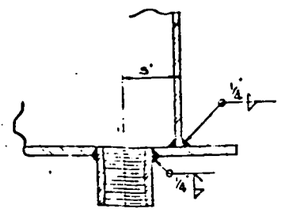
OCT 16 '00

3018-F-09-B

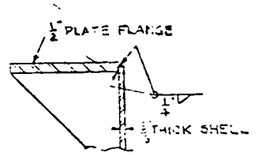
2486 Req'd No. 1
Req. No. 3018-F-L
Purchase No.



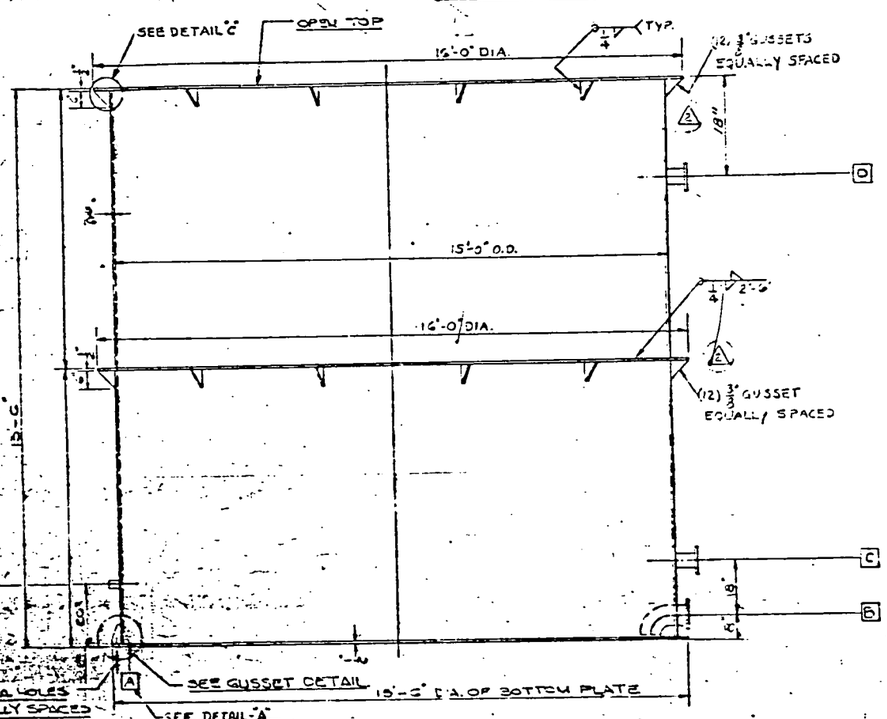
DETAIL - B
(SCALE 3"=1'-0")



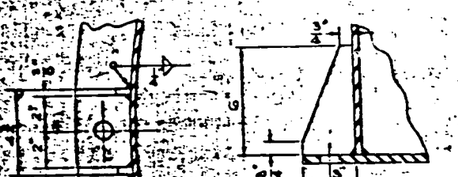
DETAIL - A
(SCALE 3"=1'-0")



DETAIL - C



ELEVATION



DETAIL OF GUSSET (16 REQ'D)
SCALE: 3"=1'-0"

MARK	SIZE	QTY.
A	4"	20
B	1½"	18
C	2"	30
D	3"	30
E	4"	330

General Notes

TANK TO BE ALL WELDED CONSTRUCTION IN ACCORDANCE WITH LATEST REVISION OF AMERICAN WELDING SOCIETY PROCEDURE.

MATERIAL
SHELL AND BOTTOM: ASTM. A-285 GR.C FLANGE QUALITY
FLANGES: ASTM. A-181 GR.1
COUPLINGS: ASTM A-181 GR.1
PIPE: ASTM. A-53
SUPPORTS: A.S.T.M. A-7 OR EQUAL
BOLTS: NONE
MANHOLE STUDS: NONE
NUTS: NONE
GASKETS: NONE
INSULATION: NONE
ALL BOLT HOLES TO STRADDLE NATURAL ℄S UNLESS OTHERWISE NOTED.
REMOVE ALL SCALE, RUST, GREASE, ETC.

PAINTING
INTERIOR AND EXTERIOR SHALL BE PAINTED WITH ONE SHOP COAT OF AMERCOAT #13 WASH PRIMER, AND ONE SHOP COAT OF AMERCOAT #13 SEAL COAT.
NORTH ARROW AND ITEM NO. TO BE PAINTED ON VESSEL

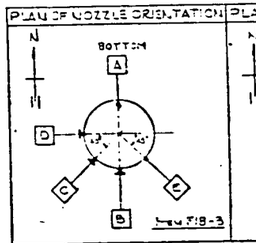
TEST
VESSEL TO BE WATERTIGHT

WEIGHTS
SHIPPING WEIGHT: 17,500 LBS
OPERATING WEIGHT: (FULL) 159,500 LBS. △1
TEST WEIGHT: 159,500 LBS.
CAPACITY: (FULL) 20,500 GALS

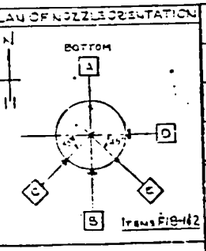
SPECIFICATIONS:
TANK TO BE FABRICATED TO C.C.C. CO. SPECIFICATIONS FOR ATMOSPHERIC TANKS AND HOPPERS PART IX SECTION 1A.

△2
△1

PLAN OF NOZZLE ORIENTATION



PLAN OF NOZZLE ORIENTATION



MK	DATE	REVISIONS	BY	APP'D
5				
4				
3	1/29/52	INCREASED PROJECTION WAS 8'-1" FROM S.S. SIDE WALL TO		
2	1/24/52	FLANGE RINGS & GUSSETS WERE ANGLES RINGS REVERSED POSITIONS OF NOZZLES C & E		
1	1/9/52	CHANGED NOZZLE ORIENTATIONS. CHANGED WEIGHTS: SHIPPING WAS 17,650 LBS, TEST & OPERATING WERE 210,700 LBS.		

0 ½ 1 2 3
SCALE FOR THIS DRAWING

INDEX CODE
18X | 1450 | M00003

MK	NO. REQ'D	SIZE	RATING & FACING	PROJECTION FROM S. VESSEL	SERVICE	REMARKS
E	1	1"	3000# COUPLING FLAT FACE		SAMPLE	
D	1	6"	150 LB. R.F. FLAT FACE	8'-4" △3	L.L.I.	
C	1	16"	150 LB. R.F. FLAT FACE	8'-4" △3	L.L.I.	
B	1	6"	150 LB. R.F. FLAT FACE	8'-1"	OUTLET	
A	1	1"	3000# COUPLING		DRAIN	

T. NOZZLE SCHEDULE

DESIGNED	
DRAWN	D. YOURE
TRACED	
CHECKED	J. BOYER 12-29-51
APPROVED FOR A. E. C. BY	
DATE	

UNITED

FEED MA

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-21-1
39
FERNALD, OHIO

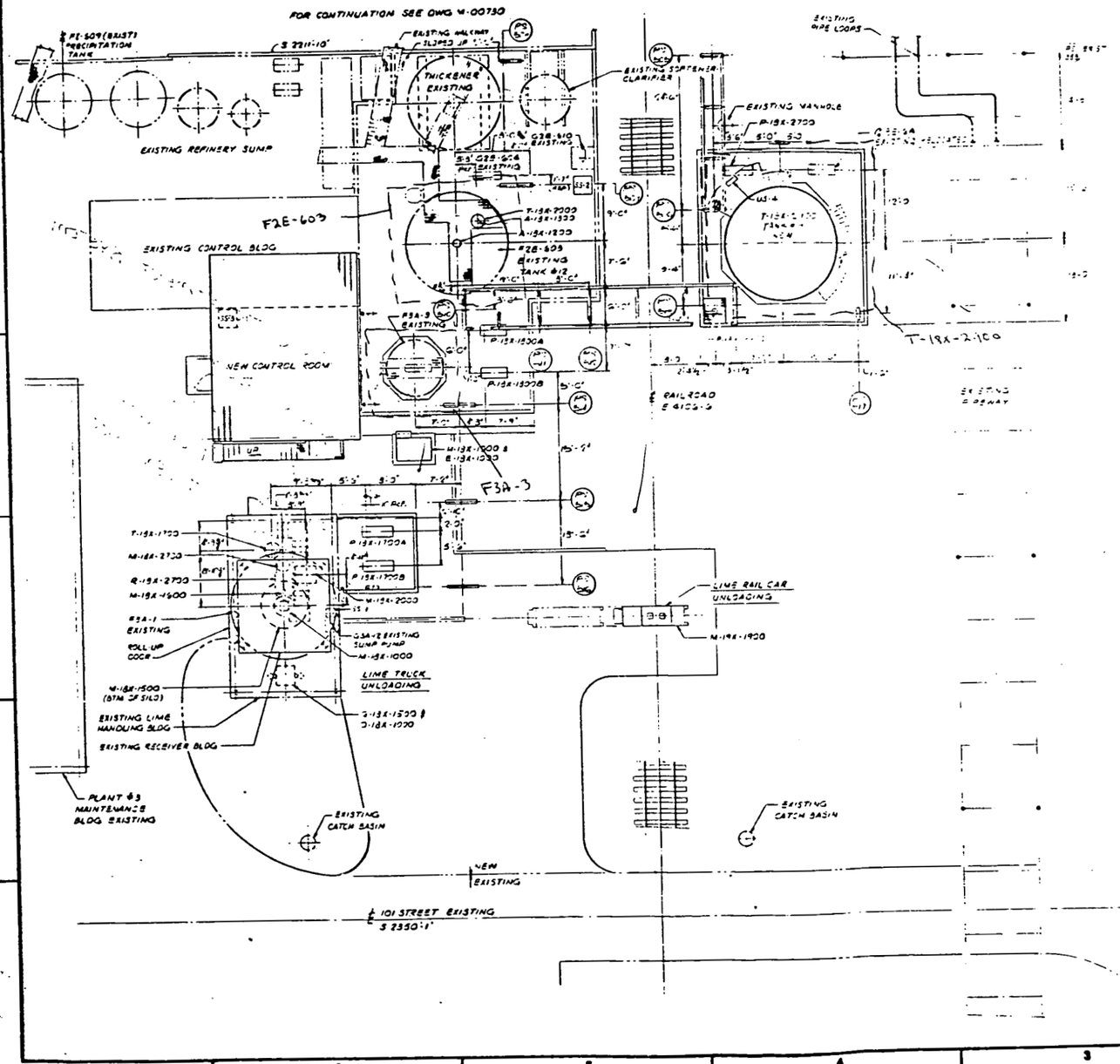
GENERAL SUMP RECEIVER TANK
15'-0" O.D. x 15'-0" HIGH
ITEM NO'S F18-1 F18-2 & F18-3

DATE	12-20-51
SCALE	½"=1'-0" UNLESS NOTED
OFFICE OF	CATALYTIC CONSTRUCTION CO. 1500 WALNUT STREET PHILA 2, PA.
APPROVED FOR CONSTRUCTION	
DRAWING NO.	3018-F-09-B
REVISION NO.	3

GR.0 5

F13-1
F13-2
F18-3
} Dimensions

REFERENCE DRAWING	
DRAWING NO.	TITLE
M-00730	GENERAL ARRANGEMENT PLAN - NORTH



DO NOT SCALE REDUCED DRAWING

NO.	ISSUE OR REVISION PURPOSE DESCRIPTION	INITIALS AND DATE		
0	CERTIFIED FOR CONSTRUCTION	SAH 5-21-91	JAH 5-21-91	DOE

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-21-2
PAGE 40 OF
FERNALD, OHIO

DRAWING TITLE
GENERAL SUMP PLANT 18
GENERAL ARRANGEMENT
PLAN - SOUTH

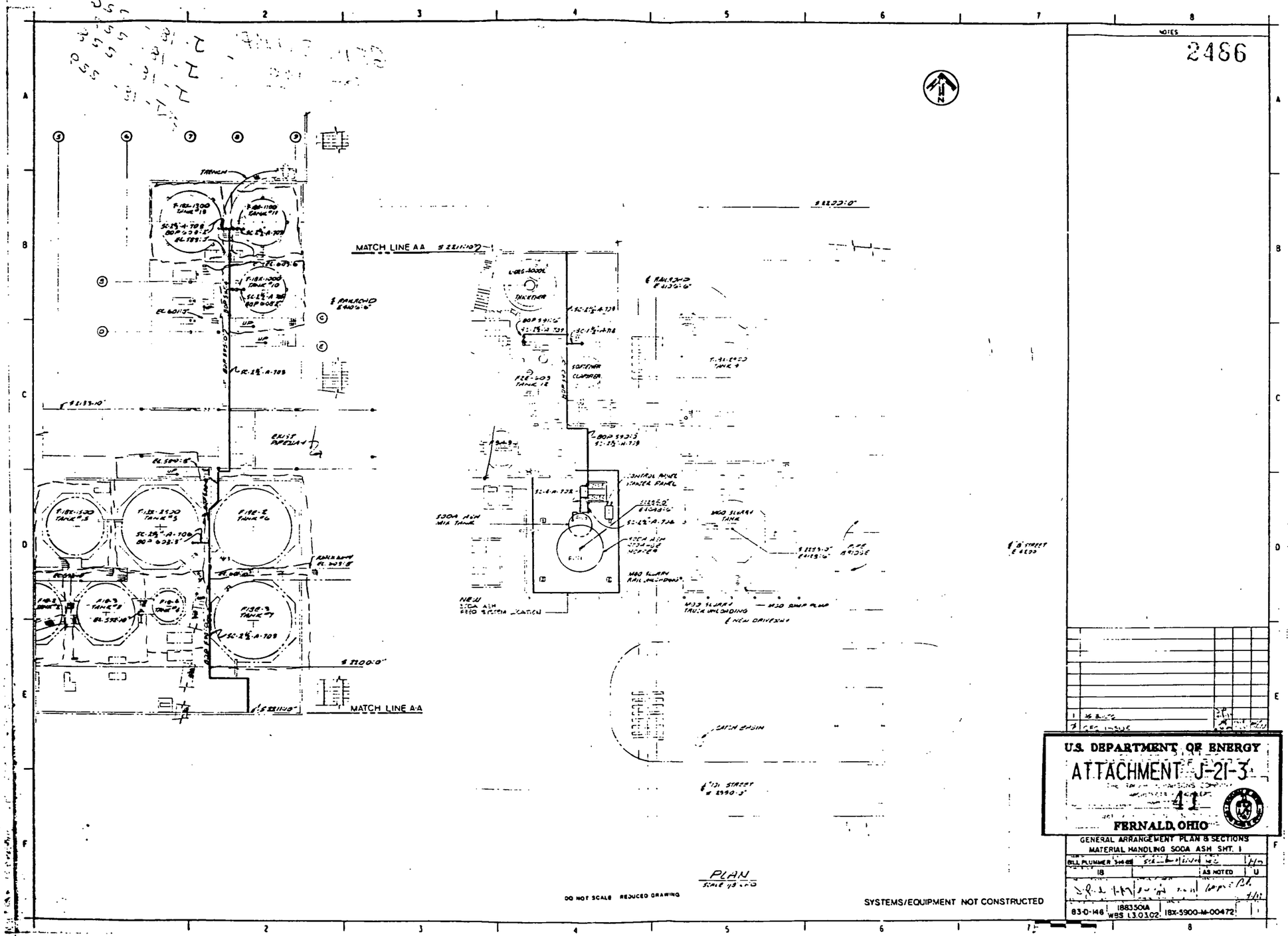
DRAWN BY	DATE	DESIGNED CHECKED BY	DATE	CHECKED BY	DATE
MR SMITH	11-5-90	MR SMITH	11-7-90	W KUHNE	10-21-91

PLANT	BLDG.	AREA	SCALE
FMPC			1/8 FD

SUBMITTED FOR APPROVAL — DATE 3-22-91
APPROVAL RECOMMENDED — DOE — DATE 3-22-91
DRAWING APPROVED — OPER CONTRACTOR — DATE — DOE — DATE 3-22-91

WBS CODE (FOR INFORMATION ONLY)					PROJECT NO.	DRAWING NUMBER				REV NO.
AG PROJECT NO		LEVEL 1		LEVEL 2						
01	8363-00	03	X	P102	86-D-149	18X	3900	M	00731	0

GRID 5
F3A-3
F2E-603
T-18X-2900

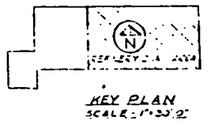


MAY 28 '91

F-18-4
F-18-2
F18-3
F18E-2
F18E-3

GRID 5
T-18X-1300
T-18X-1500
T-18X-2500
T-18X-1100
T-18X-1000

2486



KEY PLAN
SCALE: 1" = 200'-0"

PARTIAL PLAN AT ELEV 591'-0"

NEUTRALIZED SLUDGE TANK FEE 603

PLAN BELOW ELEV. 590'-0" UNLESS OTHERWISE NOTED

SCALE FOR THIS DRAWING

GENERAL NOTES

1. FOR SECTIONS, NOTES & ADDITIONAL REFERENCE DRAWINGS SEE DRAWING SEAL-CM-147.
2. FOR ELEVATIONS & FOOTINGS SEE DRAWING SEAL-CM-148.
3. ALL TANK LIDS TO BE 3 SEAM FLUED.
4. ALL DISCONNECTED LINES TO BE REMOVED OR CAPPED.

5250-2M 5143

REFERENCE DRAWING	NO.
BILL OF MATERIAL REF.	
SPECIFICATION REF.	

U. S. ATOMIC ENERGY COMMISSION

SINGMASTER & BREYER
CIVIL, STRUCTURAL & CHEMICAL ENGINEERS
NEW YORK, N.Y.

NATIONAL LEAD COMPANY OF OHIO
OPERATING CONTRACTOR OF
FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO

SEE FEEMEY-FEEMEY DWG. #1-20
FIRING ARRGT. EAST END
PLAN

APPROVED	DATE
DES.	
DET.	
CHKD.	
A.E.C.	

DRAWN CHECKED
DATE SCALE

5250-2M1-5143

REVISIONS

0237000P00666

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-21-4
42
FERNALD, OHIO

5250-18M-4003

2186

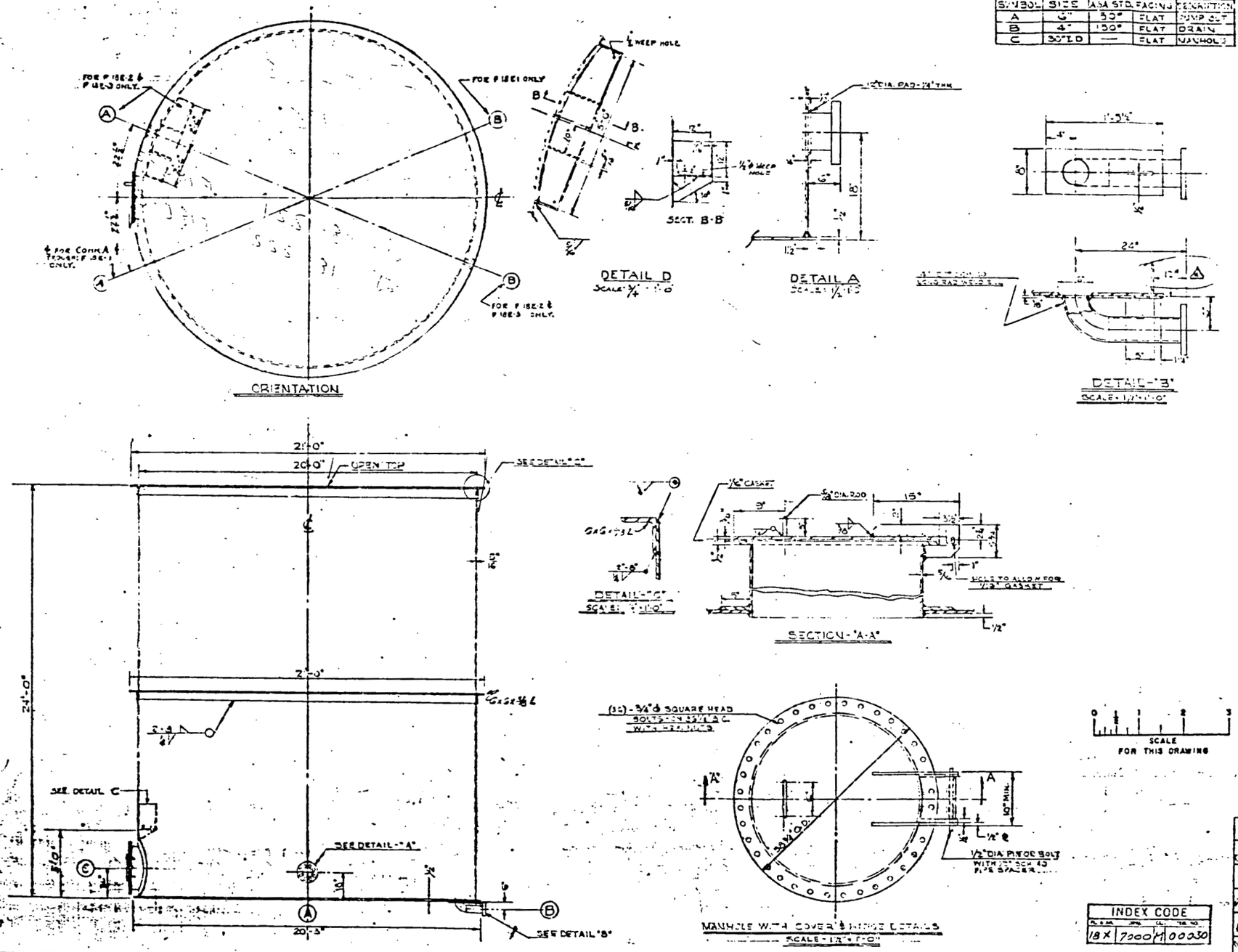


TABLE OF CONNECTIONS

SYMBOL	SIZE	ASA STD.	FACING	DESCRIPTION
A	6"	150#	FLAT	PUMP OUT
B	4"	150#	FLAT	DRAIN
C	30" I.D.	—	FLAT	MANHOLE

MATERIAL SPECIFICATION

PLATE	ASTM A-283 GR. C
FLANGES	ASTM A-101 GR. B
PIPE	ASTM A-33
BOLTS	ASTM A-307
GASKET	GARLOCK NO. 7021 OR EQUAL

DESIGN SPECIFICATION

1. THIS EQUIPMENT TO BE CONSTRUCTED AND STAMPED IN ACCORDANCE WITH API. STD. 12C - LATEST REVISIONS
2. DESIGN PRESSURE - ATMOSPHERIC
3. TEST PRESSURE - HYDROSTATIC HEAD

CONSTRUCTION NOTES

1. ALL BOLT HOLES TO STRADDLE REFERENCE ℄'S, UNLESS OTHERWISE NOTED.
2. ALL CONNECTIONS TO EXTEND "G" FROM OUTSIDE OF VESSEL TO FACE OF FLANGE UNLESS OTHERWISE NOTED.
3. ALL CONNECTIONS TO BE REINFORCED WITH 1/4" THK. PADS TO TWICE THE NOMINAL PIPE SIZE OR 4" DIA., WHICHEVER IS GREATER.
4. PAINTING IN ACCORDANCE WITH SPECIFICATION #3250-18M-SPEC-004
5. CONSTRUCTION OF CONNECTIONS TO BE SCH 40 PIPE WITH SLIP-ON OR WELD NECK FLANGES TO RATING & FACING GIVEN IN TABLE OF CONNECTIONS

TABLE OF WEIGHTS & CAPACITY

WEIGHT EMPTY	28,000 LBS.
WEIGHT FULL OF WATER	435,000 LBS. - 52,000 GALS.
OPERATING WEIGHT	425,000 LBS. - 47,000 GALS.

NO. REQUIRED:- THREE (3)

MARK NUMBERS:- F18E-1
F18E-2
F18E-3

DRAWING NO.	REV.
5250-18M-4003	4

REFERENCE DRAWING	NO.
INSTALLATION SPECIFICATION	5250-18M-4003
BILL OF MATERIAL	

U.S. DEPARTMENT OF ENERGY

ATTACHMENT J-21-5

43

FERNALD, OHIO

50,000 GAL.

GENERAL SUMP TANKS

APPROVED		DATE
S.B.S.	[signature]	7-29-57
M.L.C.D.	[signature]	7-29-56
A.E.C.	[signature]	8-30-56

DRAWN: [illegible] DATE: 10-[illegible]-55 CHECKED: [illegible] 7/29/55

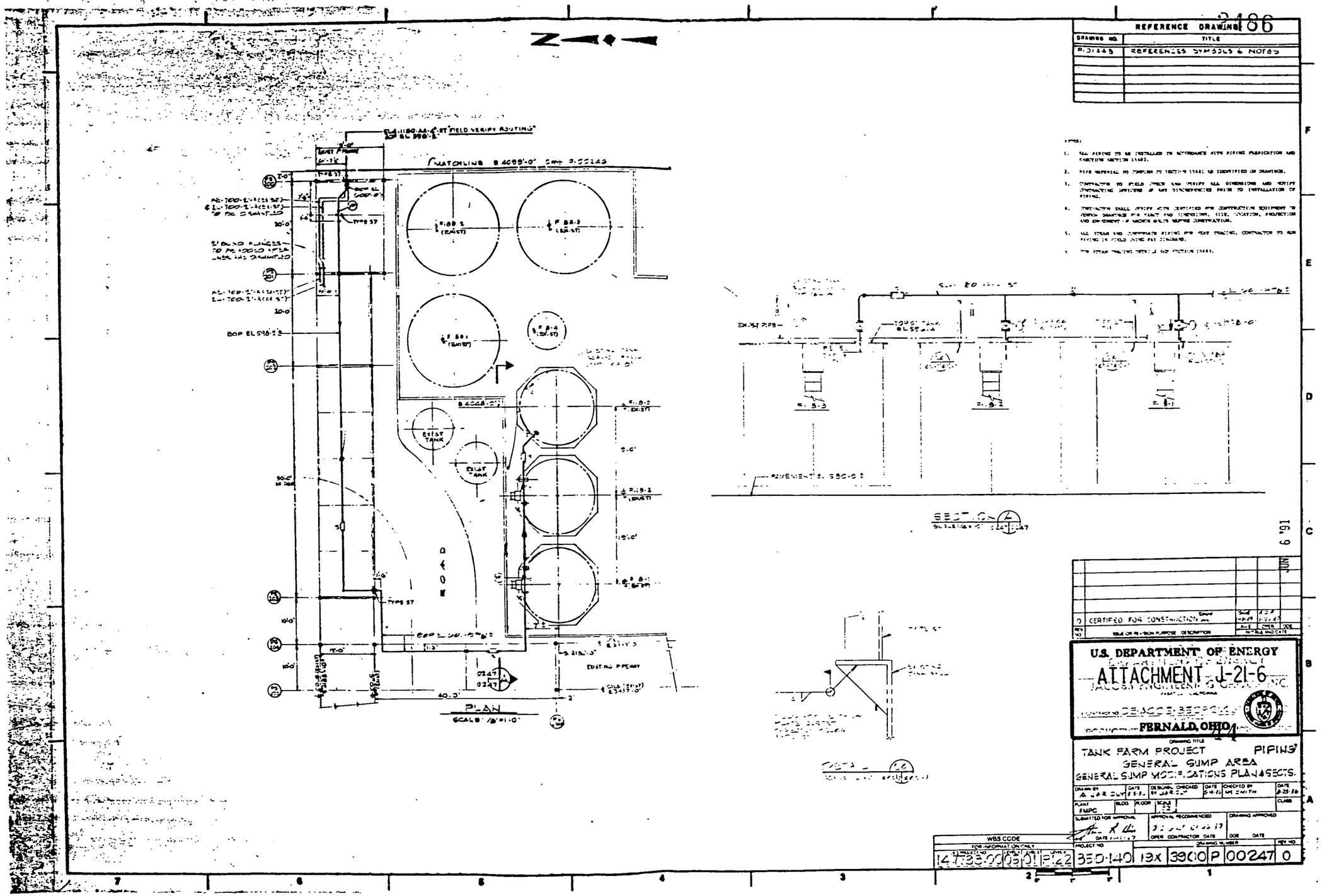
DWG. NO. 5250-18M-4003 REV. 4

INDEX CODE			
18X	7000	M	00030

NO.	REVISIONS	DATE	BY	CHK.
3	CHGD. DIM. DETAIL "B" FROM 16" TO 25"			
2	ADDED ORIENTATION OF CONNECTIONS & [illegible]			
1	APPROVED FOR CONSTRUCTION			
4	CHGD. PROJECTION OF CONN. "B"			

GR105

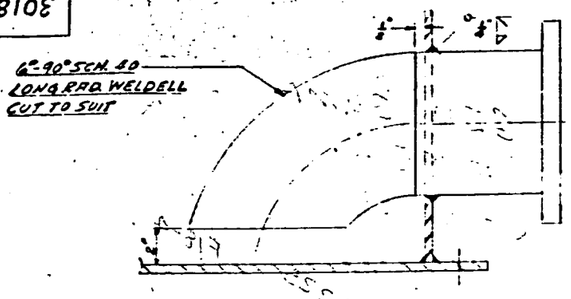
F18E-1
F18E-2



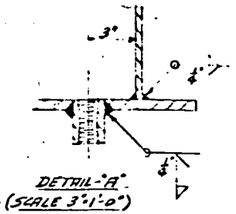
REFERENCE DRAWINGS
DRAWING NO.
TITLE
REFERENCES SYMBOLS & NOTES
MATCHLINE
EXIST TANK
EXIST TANK
ROAD
PLAN
SCALE 1/8"=1'-0"
SECTION
DETAIL
CERTIFIED FOR CONSTRUCTION
U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-21-6
FERNALD, OHIO
TANK FARM PROJECT
PIPING
GENERAL SUMP AREA
GENERAL SUMP MODIFICATIONS PLAN & SECTS.
WBS CODE
14733-00 05 01 P122 35D140 19X 3900 P 00247 0

3018-F-11-B

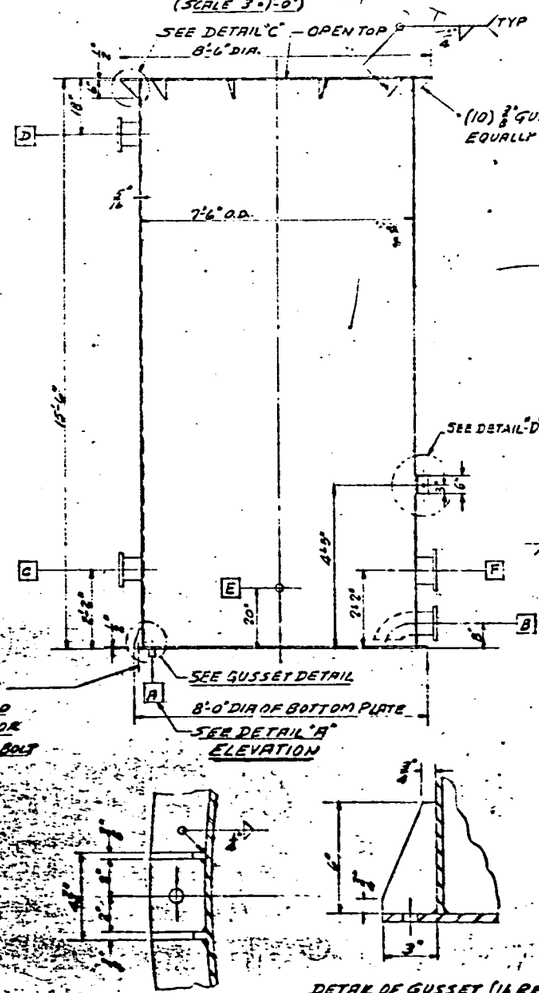
REQ'D. NO. 1
REQ. NO. 3219.02-F-2
PUR. ORD. NO.



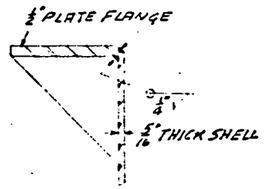
DETAIL "B"
(SCALE 3"=1'-0")



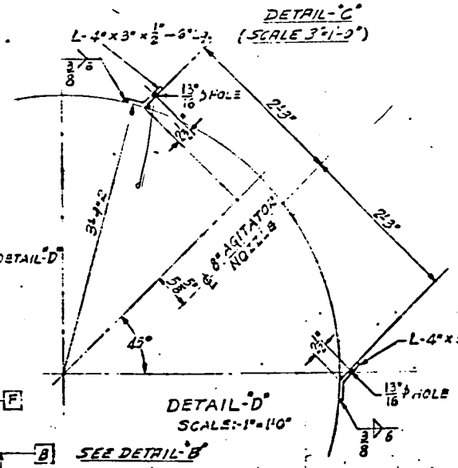
DETAIL "A"
(SCALE 3"=1'-0")



½" PLATE FLANGE



DETAIL "C"
(SCALE 3"=1'-0")



DETAIL "D"
SCALE:-1"=1'0"

DETAIL OF GUSSET (16 REQD.)
SCALE 3"=1'-0"

PRINT RECORD

DATE	STAGE	NO. PTS.
7/23/53	C	30

GENERAL NOTES

TANK TO BE ALL WELDED CONSTRUCTION IN ACCORDANCE WITH LATEST REVISION OF AMERICAN WELDING SOCIETY PROCEDURE.

MATERIAL
SHELL AND BOTTOM ASTM A 285 GR. C FLANGE QUALITY
FLANGES ASTM. A 181 GR. 1
COUPLINGS ASTM. A 181 GR. 1
PIPE ASTM. A 53
SUPPORTS ASTM. A 7 OR EQUAL
BOLTS NONE
MANHOLE STUDS NONE
NUTS NONE
GASKETS NONE
INSULATION NONE
ALL BOLT HOLES TO STRADDLE NATURAL ℄'S UNLESS OTHERWISE NOTED.
REMOVE ALL SCALE, RUST, GREASE, ETC

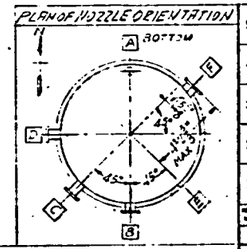
PAINTING
INTERIOR AND EXTERIOR SHALL BE PAINTED WITH ONE SHOP COAT OF AMERCOAT #13 WASH PRIMER, AND ONE SHOP COAT OF AMERCOAT #13 SEAL COAT.
NORTH ARROW AND ITEM NO. TO BE PAINTED ON VESSEL

TEST
VESSEL TO BE WATERTIGHT.

WEIGHTS
SHIPPING WT. 6150 LBS.
TEST WT. (FULL) = 43350 LBS.
OPERATING WT. (FULL) = 43350 LBS.
CAPACITY 5050 GALS.

SPECIFICATIONS:
TANK TO BE FABRICATED TO C.C.Co. SPECIFICATIONS FOR ATMOSPHERIC TANKS AND HOPPERS PAR IX SECTION IA.

PLAN OF NOZZLE ORIENTATION



MARK	QUAN.	SIZE	DESCRIPTION	PROJECTION FROM VESSEL	SERVICE	REMARKS
F	1	8"	150# R.F.S.O. FLAT FACE		AGITATOR	BOLT HOLES TO STRADDLE ℄ ON CENTER LINE
E	1	1	3000# COUPLING		SAMPLER	
D	1	6"	150# R.F.S.O. SLOT FACE	4'-7"	L.L.I.	
C	1	6"	150# R.F.S.O. SLOT FACE	4'-7"	L.L.I.	
B	1	6"	150# R.F.S.O. FLAT FACE	4'-3"	OUTLET	
A	1	1"	3000# COUPLING		DRAIN	

CONN: NO. REQ'D. SIZE — RATING & FACING

NOZZLE SCHEDULE

SCALE FOR THIS DRAWING
0 ½ 1 2 3

INDEX CODE
18X1450M00004

REVISIONS

NO.	DATE	DESCRIPTION	BASE BY	APP'D
5				
4				
3				
2				
1				

APPROVED FOR A. E. C. BY
DATE

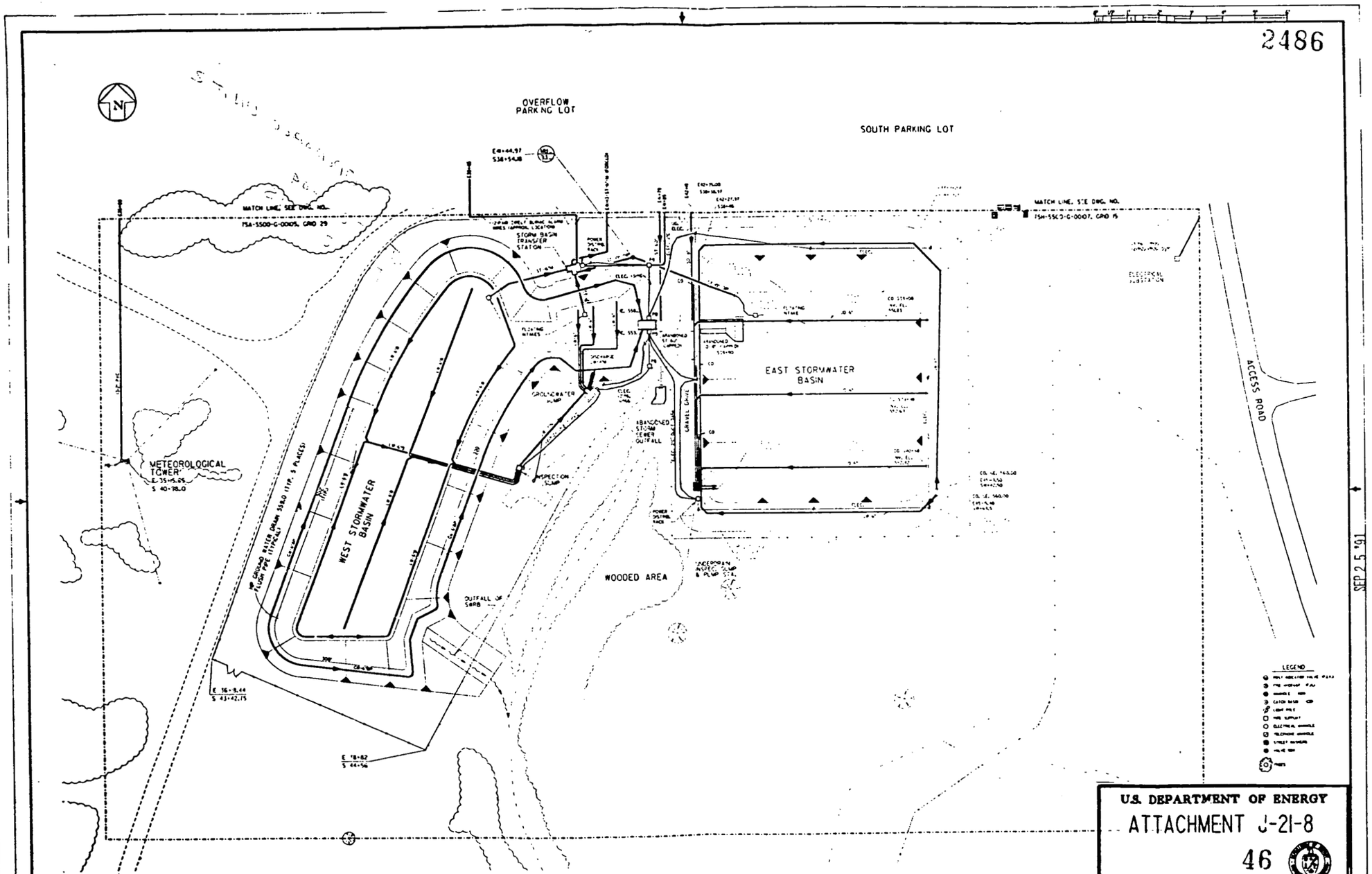
U.S. DEPARTMENT OF ENERGY
UNITED STATES ATOMIC ENERGY COMMISSION
ATTACHMENT J-21-7
CONTRACT No. AT 33-1-10
45

FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO

GENERAL SUMP RECEIVER TANK
7'-6" O.D. x 15'-6" HIGH
ITEM NO. F18-4 ✓

DATE	3-17-53
SCALE	½"=1'-0" EXCEPT AS NOTED
DRAWN	G.L. RUFE
DES.	PRESTON
CHECKED	G.L. RUFE
OFFICE OF	CATALYTIC CONSTRUCTION CO. 1528 WALNUT STREET PHILA. 2, PA.
	APPROVED FOR CONSTRUCTION
DRAWING NO.	3018-F-11-B
APPROVED	
REVISION NO.	

F18-4



SEP 25 '91

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-21-8
46
FERNALD, OHIO

2486

(2) BIO-SURGE LAGOON

PART PLAN - EXISTING SUBSTATION ROOM

SCALE: 1/8" = 1'-0"

METHANOL TANK PLAN

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

ALL WORK SHOWN ON THIS PLAN SHALL BE CLASS I, DIV 1, GROUP D EXPLOSION PROOF CONSTRUCTION

SURGE LAGOON PUMP STATION PLAN

SCALE: 1/8" = 1'-0"

POWER PLAN

SCALE: 1" = 30'-0"

SECTION "A-A"

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

SECTION "B-B"

SECTION "C-C"

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

DETAIL "A"

SCALE: 1/2" = 1'-0"

NOTES:

1. EXIST. POWER TO K-65 AREA RUNS FROM POWER PANEL THROUGH EXIST. BOOSTING TRANSFORMERS TO MANHOLE NE 220 BY WAY OF EXIST. DUCTBANK CONDUIT #22C-581 (SEE SECTION "A-A") AND TO POLE #79 BY WAY OF DUCTBANK CONDUIT #22C-547 (SEE SECTION "B-B" & "C-C"). REUSE TO POLE #79 THE EXIST. CONDUCTORS FROM BOOSTING TRANSFORMERS VERIFY THIS EXIST. CONDUCTORS FROM BOOSTING TRANSFORMERS OFFICER, IF FOUND OTHERWISE.

2. 30" MINIMUM BELOW FINISHED GRADE.

3. REMOVE EXIST OVERHEAD S/C W/ EXIST FROM POLE #-0 TO POLE #122 AND REPLACE WITH S/C W/ E/O. SHOWN NOT TO SCALE. USE PLAT DISTANCES IN P.E.D.

4. PULLBOX, ECHLIN SET MODEL B-8 OR EQUAL, CONDUIT BOX W/ 14 GA. 1/16" THICK PLATE I.D.

5. AA-900, FEDERAL SIGNAL MODEL 31X EXPLOSION PROOF HORN, LAH-500, FEDERAL SIGNAL MODEL 27X EXPLOSION PROOF BEACON RAY, HS-1113 SQUARE "D" TYPE SE-III OR EQUAL.

6. INSTALL CONDUIT, PULL CONTROL & POWER WIRE FOR SHAPE 3 VAPS, 3 OIL & TAPE SUFFICIENT LENGTH TO DISCONNECT SWITCH (MANUAL MOTOR STARTER) FOR FUTURE CONNECTION.

7. SEE DWG. "E-00346" FOR POLE DETAIL.

REFERENCE DWGS.

1. SEE DWG NO. E-00242 FOR LEGEND & GENERAL NOTES
2. SEE DWG NO. E-01 FOR LIST OF ELECTRICAL DWGS
3. SEE DWG NO. E-00369 FOR LEGEND & NOTES, AP DWG
4. SEE DWG NOS. AS FOLLOW FOR ASSOCIATED PLANS
   - E-00136 SITE PLAN
   - E-00110 SHOWS TEST ON METHANOL TANK GROUNDING
   - E-00103 SURGE LAGOON SHT. 2 OF 3
   - E-00314 SURGE LAGOON, SHT 3 OF 3
   - E-00332 SLOPE DETAILS
5. SEE DWG NOS. AS FOLLOWS FOR INTERCONNECTION WIRING:
   - E-010 CONTROL POWER DISTRIBUTION (SL)
   - E-024 I/O SCHEMATICS FOR RACK #24 & #3 VARY (SL)
   - E-027 I/O SCHEMATICS FOR RACK #27 & #3 VARY (SL) SHT 1 OF 5
   - E-030 I/O SCHEMATICS FOR RACK #30 & #3 VARY (SL) SHT 2 OF 5

DO NOT SCALE REDUCED DRAWING

MAY 13 '91

0528 3 16 84

NO	ISSUE OR REVISION PURPOSE DESCRIPTION	BY	CHK	DATE
3	ADDED PENCIL SUMPS FOR LAGOON - GMTS			
2	DEMO PLANT - GEN REVISION			
1	MISC INSTRUMENTATION REVISIONS			
0	CERTIFIED FOR CONSTRUCTION			

LOCKWOOD GREENE ARCHITECTS + ENGINEERS

UNITED STATES DEPARTMENT OF ENERGY

THIS DRAWING PREPARED BY WILEY & WILSON ARCHITECTS - ENGINEERS - PLANNERS LYNCHBURG, VIRGINIA

DOE CONTRACT NO. DE-AC01-83OR20064 A/E WO. 83140

PROJECT NAME: WATER POLLUTION CONTROL

DRAWING TITLE: BIODENITRIFICATION SYSTEM SURGE LAGOON SHEET 1 OF 3

DRAWN BY	DATE	DESIGNED AND CHECKED BY WILEY & WILSON	DATE	CHECKED BY	DATE
K.E.	1/16/84				

PLANT ENG.	BLDG. N.A.	FLOOR N.A.	SCALE (unless N.A.)			CLASS C

SUBMITTED FOR APPROVAL: [illegible] DATE: 1/17/84 — APPROVED: [illegible] DATE: 1/17/84

PROJECT NO.	DRAWING NO.	REV NO.
83-D-146	18A-1870-E-00312	3

U.S. DEPARTMENT OF ENERGY

ATTACHMENT J-21-9

47

FERNALD, OHIO

SEWAGE TREATMENT PLANT

EFFLUENT LINE TO GREAT MIAMI RIVER

SLUDGE DRYING BEDS

3021-S-30-A

DETAIL OF CONNECTION & MANHOLE

PROFILE OF SLUDGE LINES TO SEWAGE TREATMENT PLANT

FUTURE SPRINKLING FILTER

FUTURE SLUDGE DRYING BEDS

545'-5"

330'-0"

355'-0" SEWAGE TREATMENT PLANT AREA (3025)

OUTFALL SEWER 10'-6" DIAMETER CONCRETE PIPE, WEST BOUND SEWER

SEWAGE TREATMENT PLANT

INDEX CODE
21X 1450 PCC036

INDEX CODE
25X 1450 6 00002 21X 1450 6 00035

SCALE FOR THIS DRAWING
1" = 100' AS PER AGREEMENT NO. 3021-H-0001

REFERENCE DRAWINGS

TITLE	DWG. NUMBERS
GENERAL PLOT PLAN	3000-AA-02-A
SEWAGE TREATMENT PLANT PLOT PLAN	3025-S-980-A
PROFILE OUTFALL SEWER	3025-H-51-R
PLOT PLAN	3000-AA-01-A
PLAN & PROFILE OF OUTFALL SEWER	3025-S-51-R

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-21-II
49
FERNALD, OHIO

CATALYTIC CONSTRUCTION CO.
820 FINANCE STREET
PHILA. PA.

APPROVED FOR CONSTRUCTION

3021-S-30-A

3

MAY 10 '91

Sewage Treatment Plant
Sludge Drying Beds

2486

PLANT 2A

DIGESTION

EXTRACTION

DENITRATION

'A' STREET E35+00

2ND STREET S19+25

℄ S20+38.8

102ND STREET S21+60.5

'B' STREET E42+00

10TH STREET S23+50.1

398

39C

INCINERATOR PLANT BLDG 39A

HOT RAFFINATE BLDG 3E

CONTROL BLDG 3C

NAR TOWERS 3D

ELECTRICAL POWER CENTER BLDG

PLANT 3A MAINTENANCE BLDG

2C

GENERAL SUMP 18B

STORAGE BLDG 18

METAL DISSOLVER & CARBON FILTER BLDG 20

CONVEYOR TUNNEL

MATCH LINE, SEE DWG. NO. 750-5500-G-00004, GRID 27

MATCH LINE, SEE DWG. NO. 750-5500-G-00012, GRID 25

MATCH LINE, SEE DWG. NO. 750-5500-G-00020, GRID 20

MATCH LINE, SEE DWG. NO. 750-5500-G-00020, GRID 13

WATER VALVE BOX

DO NOT SCALE REDUCED DRAWING

NO.	REVISIONS	DATE	DRN. BY	APPD.
6	UPDATED			
5	REVISED GENERAL SUMP & ION FACILITY.	10/9	VJL	RP

NOTE: WHEN C.A.D. DRAWING NOT TO BE REVISED MANUALLY

WESTINGHOUSE MATLS. CO. OF OHIO

FERNALD, OHIO

FEED MATERIALS PRODUCTION CENTER

U.S. DEPARTMENT OF ENERGY

PLANT 2 & 3 YARD AREA

GRID 19

EXISTING SITE PLAN

SCALE 1"=20'

750-5500-G-00018 6

OCT 16 '91

U.S. DEPARTMENT OF ENERGY

ATTACHMENT J-21-12

2486

BURN PIT

PIT 5

PIT 6

PIT 3 (COVERED)

PIT 4 (COVERED)

PIT 2 (COVERED)

PIT 1 (COVERED)

2" EFFLUENT LINE (TRANSITE PIPE)

2" VCP DRAIN

CLEAR WELL

CHAIN LINK FENCE

SEE DWG. 08X-5500-P-00132 & 00097

NOTE:
SEE DWG. 014-5500-G-00070 FOR DRAINAGE PIPE FROM PIT 4 WEST TO BETWEEN PIT 2&3.

LEGEND

BON SURGE LAGOON

LOW NITRATE TANK

METHANOL TANK

HIGH NITRATE TANK

HIGH NITRATE STORAGE TANK

K-65 SAA

DECANT SUMP TANK F34-6

TANK F34-7

TANK F34-8

ABANDONED

FIRE HYD. 171

TRENCH S22+70

SCRAP PIT No.4

SCRAP PIT No.2

MACADAM ROAD

1-12"ø - 16' LG. CORR. METAL ENCASEMENT PIPE

SECTION
SCALE: 3/4"=1'-0"

SECTION
SCALE: 1/2"=1'-0"

DETAIL
SCALE: 1"=20'

DETAIL
SCALE: 1"=40'

DETAIL
SCALE: 1"=20'

SEP 25 '91

NO.	REVISIONS	DATE/DWN. BY/APPD.	NO.	REVISIONS	DATE/DWN. BY/APPD.	REF. DWG. NO.

NOTE: RMCO C.A.D. DRAWING NOT TO BE REVISED MANUALLY

WESTINGHOUSE ENVIRONMENTAL MANAGEMENT CO. OF OHIO
FERNALD, OHIO
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
U.S. DEPARTMENT OF ENERGY

WEST OF PROD. AREA — WASTE PITS
GRID 3I
UNDERGROUND UTILITIES
SCALE 1" = 100'

22A-5500-P-00690 | 0

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-22-1
51
FERNALD, OHIO

PIT 6

2486

PIT 6

EXISTING DRAINAGE DITCH

EXISTING WET CHEMICAL PIT #5

EXISTING FENCE

SPOIL AREA

TOP OF BERM EL. 590.0'

EXISTING GRAVEL ROAD

EXIST. RAMP

TOP OF BERM EL. 584.0'

EXISTING CONC. PAD

EXISTING NONFREEZE WATER HYDRANT

EXISTING DRY CHEMICAL PIT #4

EXISTING ELEC. POLE LINE

EXISTING ROAD

SPOIL AREA

PIT LINER

PLAN

SCALE: 1" = 40'

#4 BAR CONT.

#4 BARS @ 2'-0" O.C.

6"x6" - 6 GAGE WELDED WIRE REINF. MESH

TYPICAL CURB SECTION

SCALE 1"=1'-0"

20'-0"

6"x6" - 6 GAGE WELDED WIRE REINF. MESH

SLOPE 1/2" FT.

#4 BAR, CONTINUOUS

EL 584.0'

PIT LINER

SECTION-(1)

SCALE: 1"=1'-0"

EL. 583.0'

(2) #4 BARS, CONT.

EARTH CAP FILL

BERM EL. 584.0'

NAIL OR STAPLE MEMBRANE TO I-A DEGREED BENCH

EL. VARIES

PIT LINER

EL. 583.0'

TYPICAL LINE

SCALE: 1/4"

MAY 13 '91

U.S. DEPARTMENT OF ENERGY

ATTACHMENT J-22-2

52

FERNALD, OHIO

REDUCED DRAWING
DO NOT SCALE

REF. DWG. NO.	REF. DWG. TITLE	NO.	REVISIONS	DATE	BY
		2	DWG. NO. IS 21A-5500-A-00222.	5-11-90	R.L.S.
		1	DRAWN TO FROM C.P. DWG. TO CONST. DWG.	5-18-78	

SCRAP PIT AREA — PIT #6
STORAGE PIT FOR DRY RESIDUES
PIT LAYOUT & DETAILS

ENGINEERING DIVISION

APPROVALS

ARCH. & STR.		M. & S.	M.W. Schaub	4-11-91
MECHANICAL		PROD.		
ELECTRICAL		TECH.		
CHEMICAL		MAINT.	M. Wells	4-11-91
ENGINEER	4-12-78	7-16-79		

PROJECT NO. 7-544 | CONTR. NO. 7-3 | DATE 4-26-77 | SCALE AS NOTED

DRAWN L.M.S. | CHK. | CK. | QA | ISS. NO. | REV.

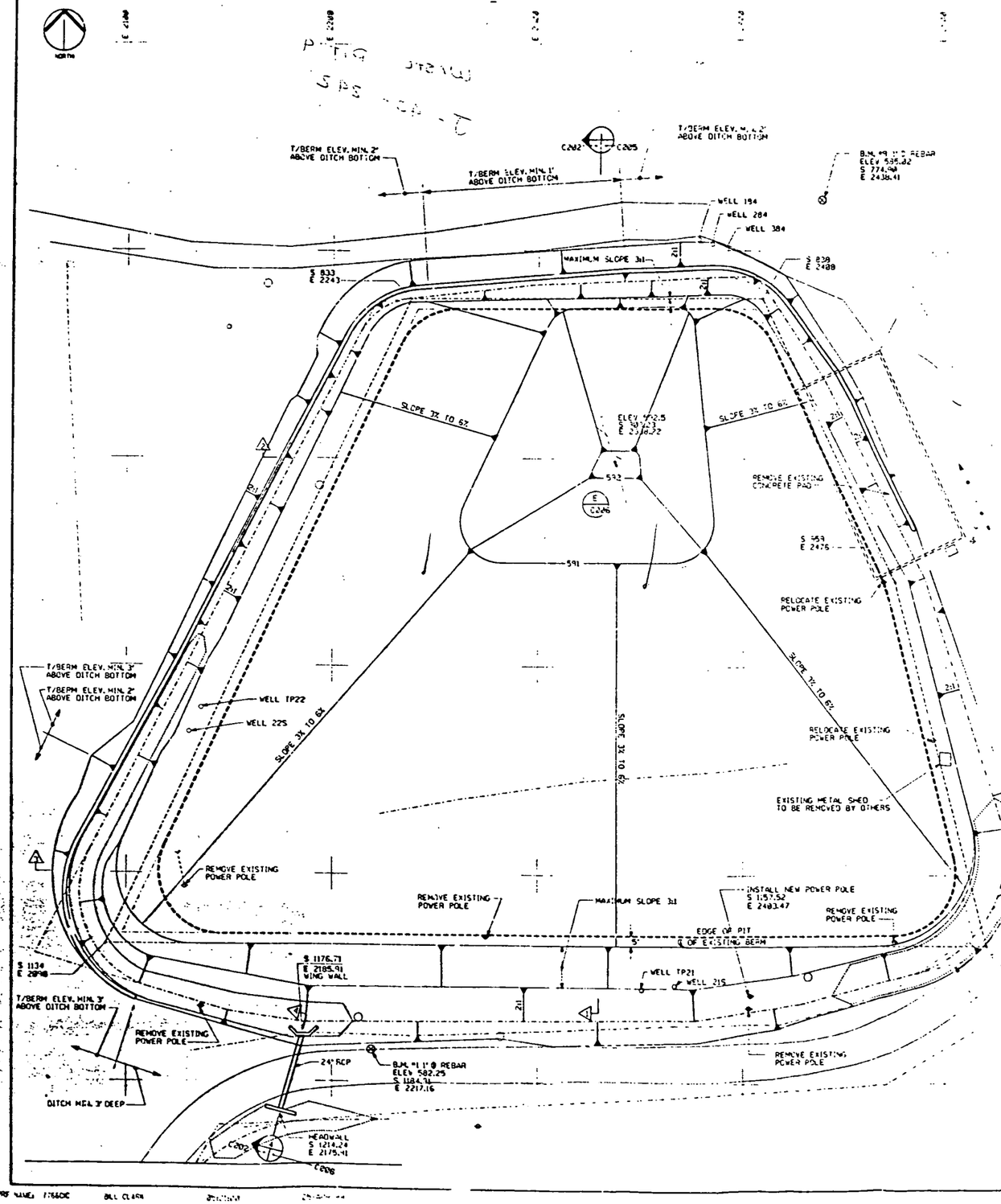
CHECKED

APPROVED

21A | 5500 | G | 00222 | 2

Waste Pit 6

2486



U.S. DEPARTMENT OF ENERGY

ATTACHMENT J-22-3

53

FERNALD, OHIO

DO NOT SCALE REDUCED DRAWING

COVER FOR PIT NO. 4
FEED MATERIAL PRODUCTION CENTER

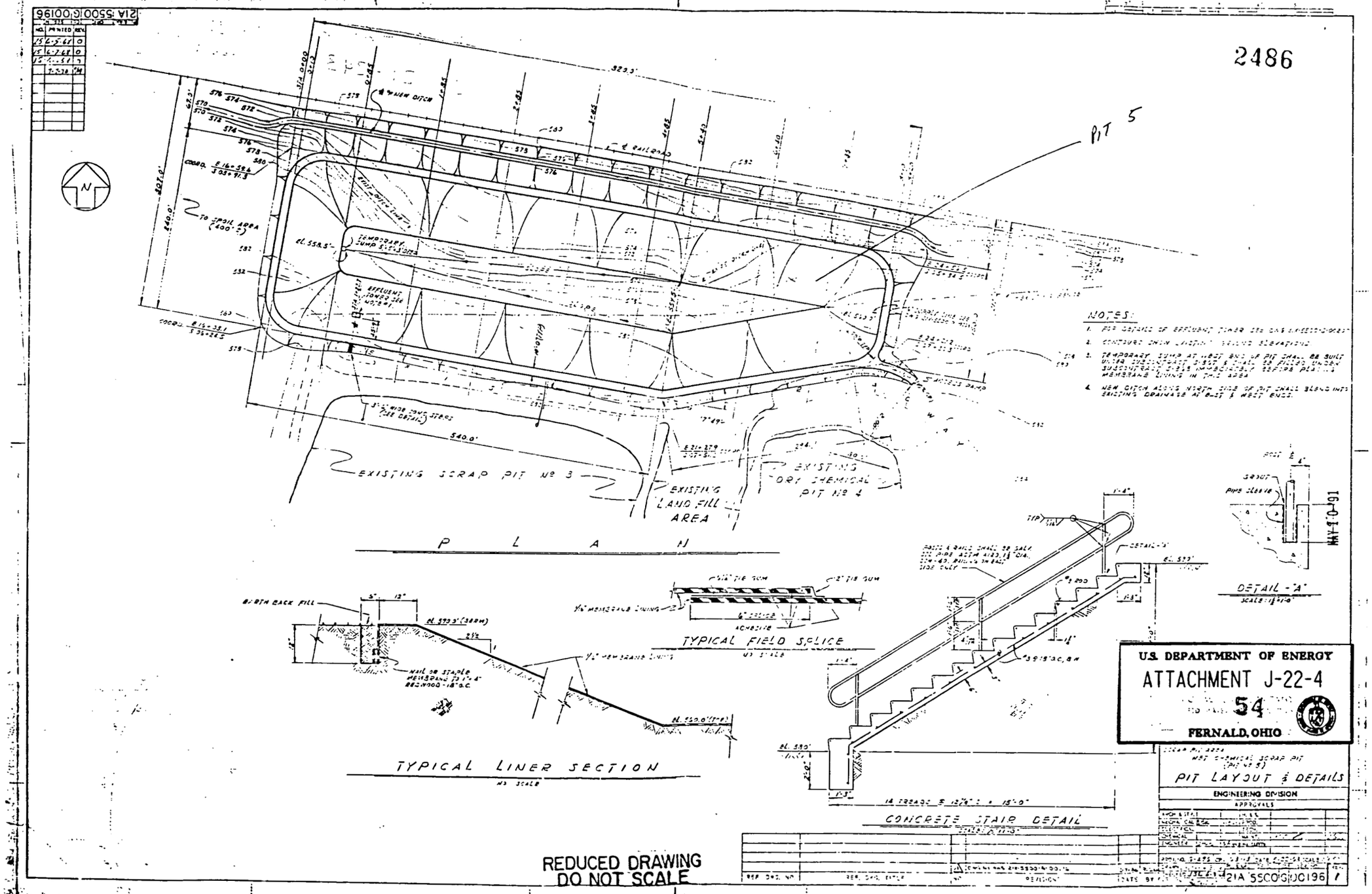
SITE LAYOUT PLAN

424-1900-G-EW321	C002	0

INDEX CODE

PIT 5

2486



U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-22-4
PAGE 54
FERNALD, OHIO

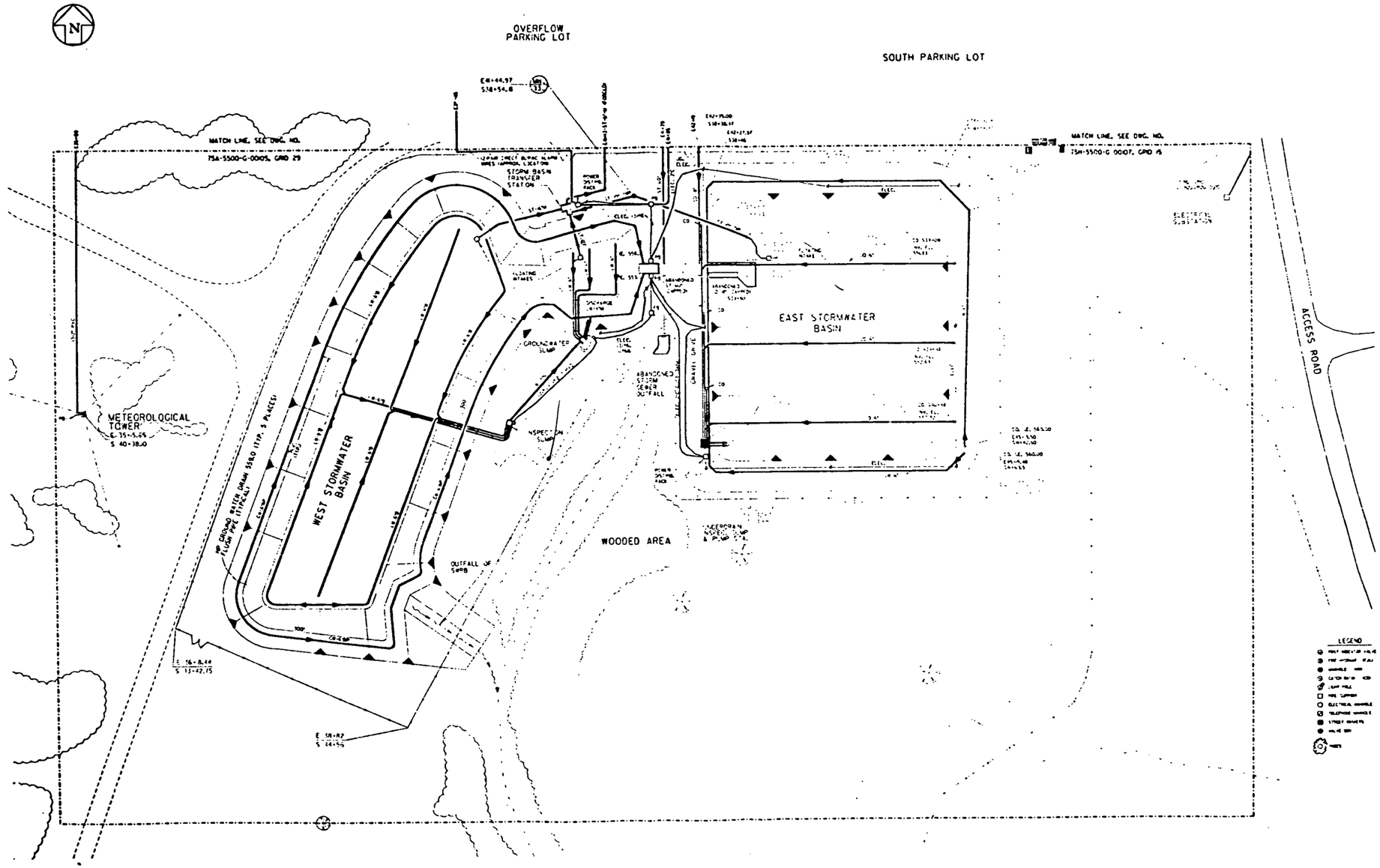
SCRAP PIT 5004
WEST CHEMICAL SCRAP PIT (PIT Nº 5)
PIT LAYOUT & DETAILS
ENGINEERING DIVISION
APPROVALS

21A 5500 G 00196 1

MAY 1 0 '91

Waste Pit No. 5

2486



SEP 3 0 '91

U.S. DEPARTMENT OF ENERGY
ATTACHMENT 55 1-23-1
FERNALD, OHIO

G-4027

2486

PRINTED	REV.
3-30-56	15
3-27-56	15
10/14/56	15
10-27-56	15
5-5-78	15
7-5-78	16
11-5-78	16
5-5-80	17
5-22-86	19

SECTION IB-IB

SECTION C-C

SECTION A-A

PLAN

FLOT PLAN

DETAIL OF T

PLAN OF SUMP

GENERAL NOTES

1. All Concrete to be Wood Float Finish.
2. Concrete Slab to be 8" thick Reinforced with 6"x6"/6x6 Welded Steel Wire.
3. Concrete to be 3000 P.S.I. @ 28 Days.
4. Mesh to Lap a minimum of 8" in all directions at Splices.
5. The Sub-Contractor shall Verify the Locations & Dimensions of Existing Structures, Utilities, etc. before Proceeding with Excavation & Detailing.
6. Before Pouring Slab, the Ground is to be Inspected by Contractor's Engineers, and additional Excavation shall be Approved only by the Contractor's Engineer.
7. Expansion & Contraction Joints shall be Equally Spaced.

NOTE:
1. BOXED ELEVATIONS DENOTE EXISTING GROUND ELEVATIONS.
2. UNDERLINED ELEVATIONS DENOTE NEW ELEVATIONS.
3. ——— DESIGNATES EXP. JOINTS.
——— DESIGNATES CONTR. JOINTS.

REPLACE CATCH BASIN GRATING WITH ¼" THICK STEEL PLATE & SEAL SO NEW 8" CONCRETE PAD CAN BE POURED.

INDEX CODE	INDEX CODE
21X 5500 P C0219	21X 5500 S 00220
INDEX CODE	INDEX CODE
69X 5500 P 00055	69X 5500 S 00056
INDEX CODE	
00C 5500 P 00302	
INDEX CODE	
00C 5500 S 00303	

DESIGN APPROVAL

DIVISION	SIGNATURE	DATE
ENG. & DES.		
PROJECTS		
CONSTRUCTION		

REDUCED DRAWING DO NOT SCALE

REF. DWG. NO.	REF. DWG. TITLE	NO.	REVISIONS	DATE	BY
69X-5500-S-00220	DECONTAMINATION STORAGE PAD EXPANSION	8	ADDED PAD EXPANSION	5-5-88	FFD
ESA-30	EXPANSION & CONTRACTION JOINTS	7	DWG. WAS 69X-5500-S-00068	6-14-78	FFD
ESA-6	STANDARD LADDER RUNGS & STEPS	6	ADDED 65'-8" x 210' CONC. PAD 3-11139	2-11-64	FFD
3000AA-01-A	GENERAL PLOT PLAN (REV 13)	5	ADDED NEW CONCRETE & 90° CATCH BASIN	7-1-75	FFD
		4	SUMP DETAIL, SECTION B, REINF.	11-5-78	FFD
		3	DRAINAGE CHANGES	10-1-75	FFD
		2	ADDITIONAL ELEVATIONS	9-6-55	FFD
		1	ADDED ELEVATIONS	7-1-55	E.A.

PROJECT	CP-F-55-35
DRAWING NO.	G-4027
SCALE	1"=40'-0"
DATE	5-5-55
DRAWN BY	J. PRICE
TRACED BY	C.E.S.
CHECKED BY	
APPROVED BY	

NATIONAL LEAD COMPANY OF OHIO
FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO

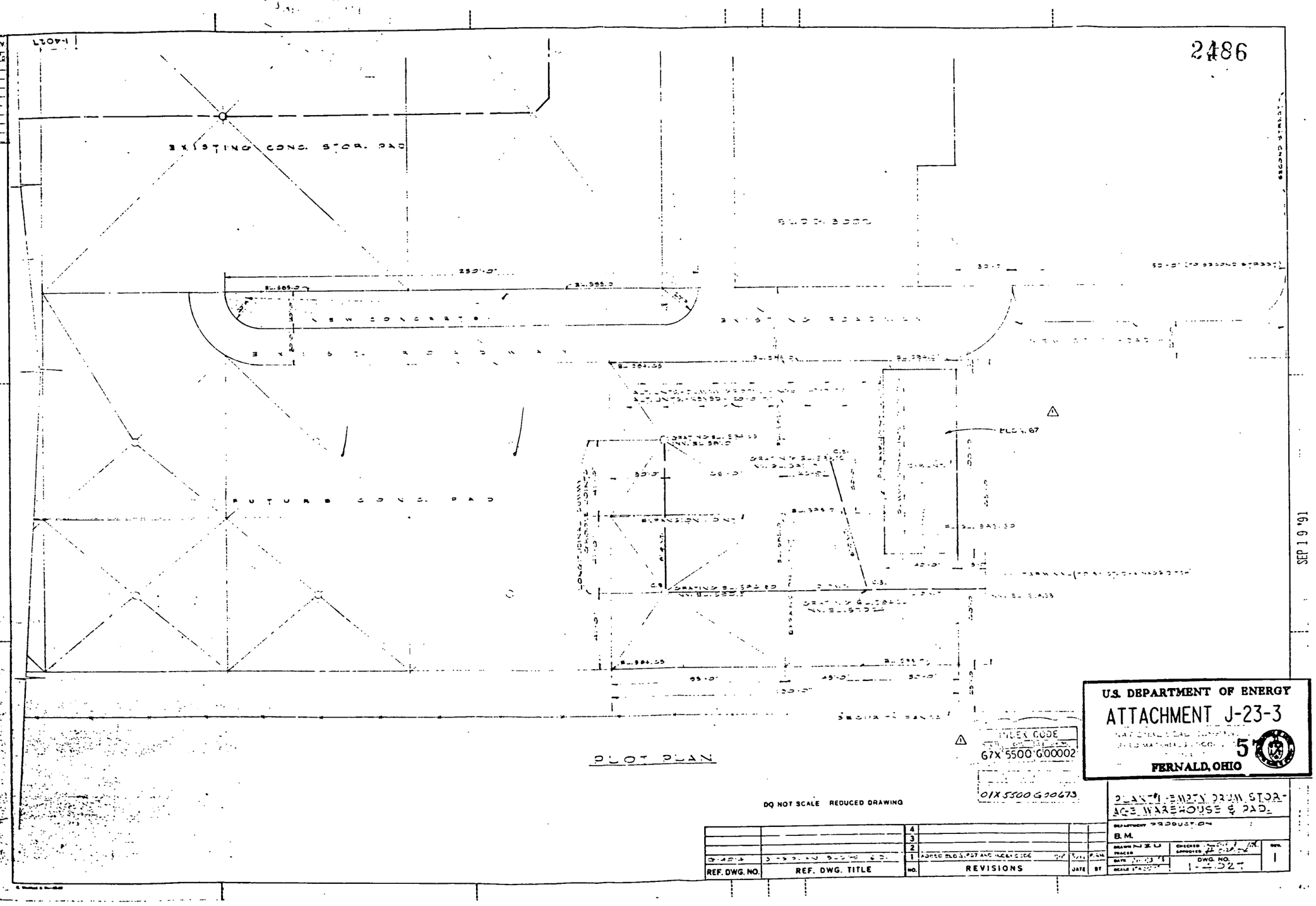
U.S. ATOMIC ENERGY COMMISSION

DECONTAMINATION AREA

STORAGE PAD FOR USED EQUIP. & SCRAP METAL

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-23-2
56
FERNALD, OHIO

2486



DO NOT SCALE REDUCED DRAWING

REF. DWG. NO.	REF. DWG. TITLE

NO.	REVISIONS	DATE	BY
4			
3			
2			
1	ADDED BLDG. POST AND INCREASED SIZE		

FILE CODE
67X 5500 G00002

01X 5500 G30673

U.S. DEPARTMENT OF ENERGY
ATTACHMENT J-23-3
5

FERNALD, OHIO

PLANT 1 - EMPTY DRUM STORAGE WAREHOUSE & PAD

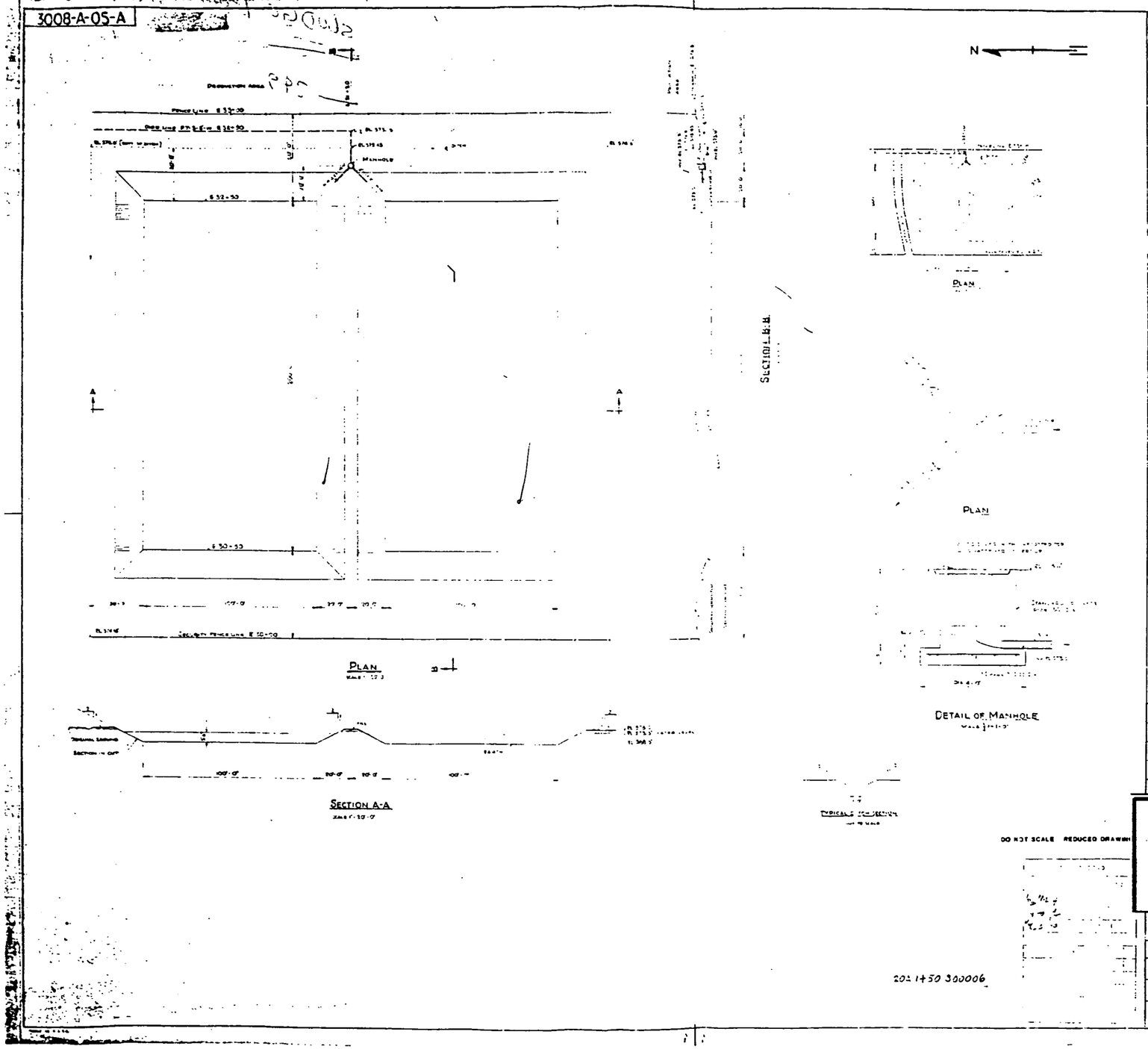
DEPARTMENT PRODUCTION
B. M.

DRAWN N.E.U. | CHECKED | APPROVED
DATE | DWG. NO. 1-2527 | REV. 1
SCALE

SEP 19 '91

3008-A-05-A

2486



GENERAL NOTES

REFERENCE DRAWINGS

TITLE	DRAWING NO.
PLOT PLAN PRODUCTION AREA	3000-AA-01-A
ORIGINAL GRADE PRODUCTION AREA	3021-S-06-A
PROCESS WATER AND FUEL GAS UNDERGROUND LINES	3022-H-06-A

DO NOT SCALE REDUCED DRAWING

U.S. DEPARTMENT OF ENERGY

ATTACHMENT J-23-4

58

FERNALD, OHIO

CONCRETE
SLUDGE PITS FOR BLOWDOWN LINE
WATER TREATMENT SYSTEM

CATALYTIC CONSTRUCTOR CO.

APPROVED FOR CONSTRUCTION

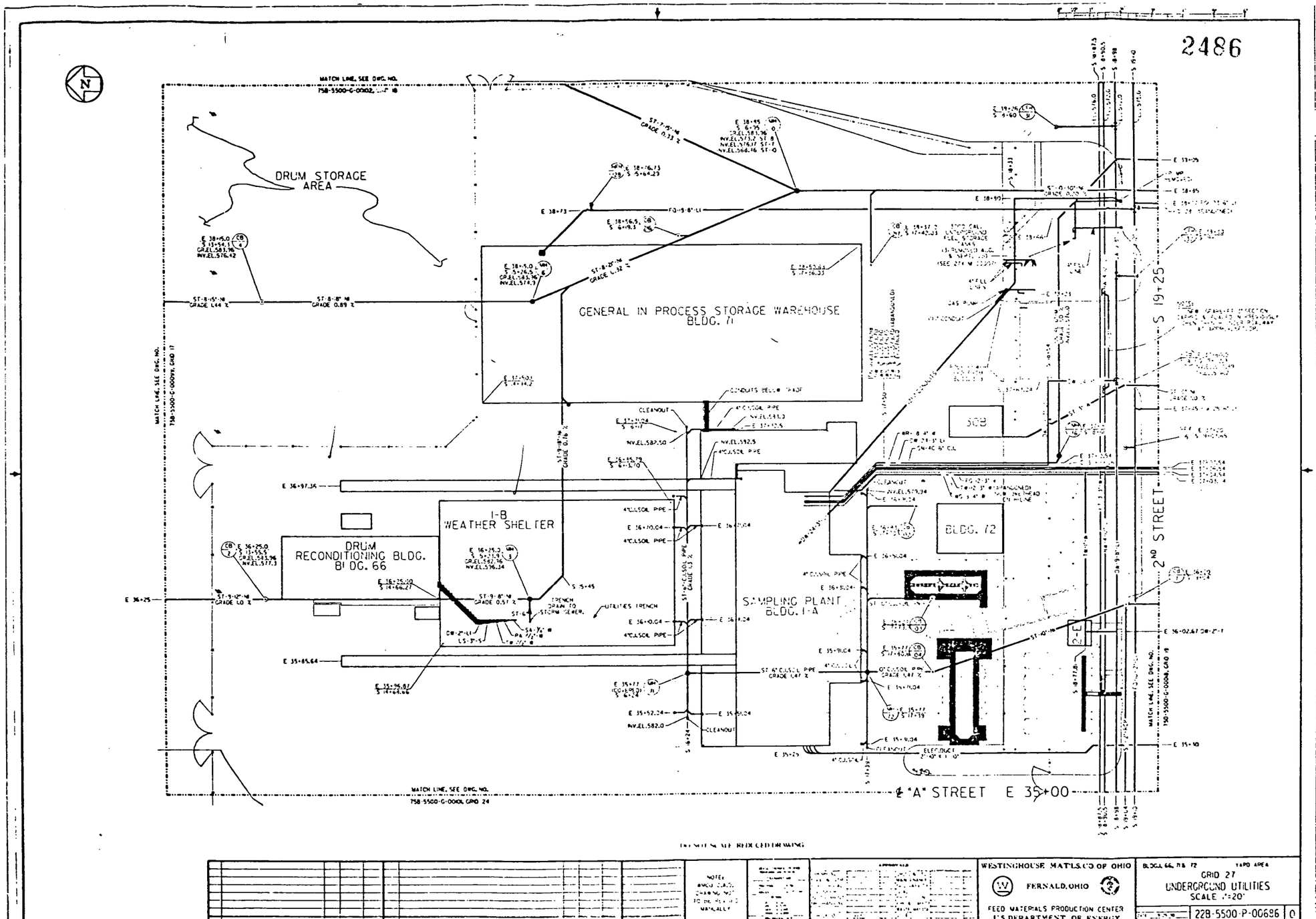
3008-A-05-A

202 1450 300006

JUN 4 '91

N. LIME SLUDGE
S. LIME SLUDGE

2486



SEP 30 '91

U.S. DEPARTMENT OF ENERGY

ATTACHMENT J-23-5

59

FERNALD, OHIO