CITRUS COUNTY BOARD OF COUNTY COMMISSIONERS
CITRUS COUNTY, FLORIDA

WACS ID# 39859
KGW(SED)
CL 1

CITRUS COUNTY CENTRAL SANITARY LANDFILL EXPANSION
LEACHATE TREATMENT FACILITY

D.E.R.
OCT 18 1988
SOUTH WEST DISTRICT
TAMPA

D.E.R.
OCT 18 1988
SOUTH WEST DISTRICT
TAMPA

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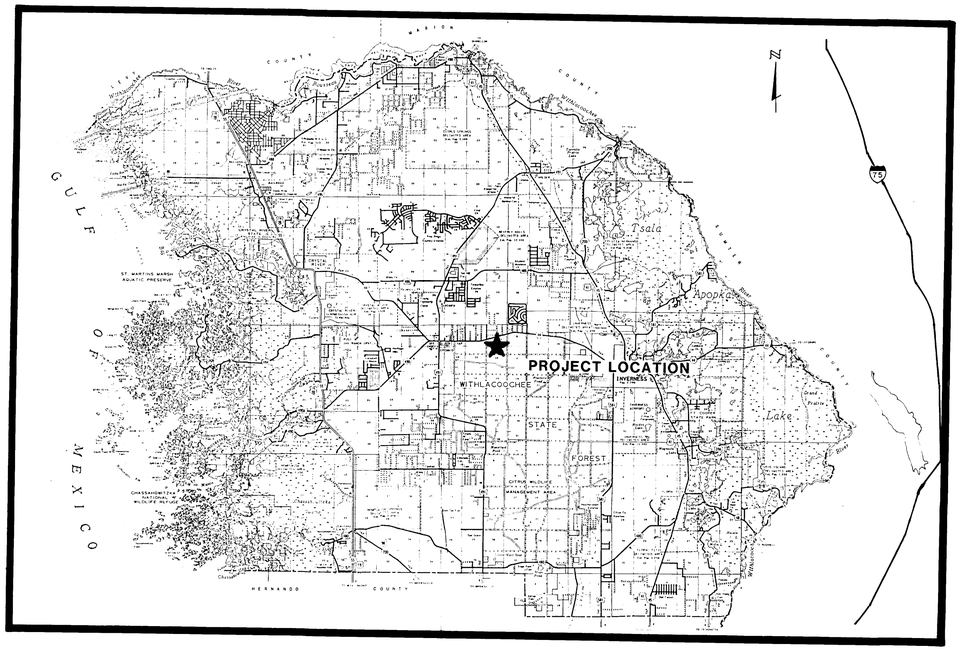

COMMISSIONERS

NICK BRYANT,	CHAIRMAN
WILLIAM J. (SKIP) HUDSON,	1st VICE CHAIRMAN
WILLIAM FRANK BROSKA,	2nd VICE CHAIRMAN
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F. ALEX GRIFFIN	

CITRUS COUNTY FLORIDA
Florida's Little Gem
EST. 1887

D.E.R.
OCT 18 1988
SOUTH WEST DISTRICT
TAMPA

PREPARED BY

POST, BUCKLEY, SCHUH & JERNIGAN INC.
CONSULTING ENGINEERS
TAMPA, FLORIDA

SEPTEMBER 1988

ENGINEERS PROJECT NUMBER 22-081.30

ABBREVIATIONS

MECHANICAL

Designation	Abbrev.
Acrylonitrile Butadiene Styrene	A.B.S.
Adapter	Adpt.
Alternate or Alternative	Alt.
Aluminum	Alum.
American Society for Testing Materials	A.S.T.M.
American Water Works Association	A.W.W.A.
Angle	Ang. or
Approximate	Approx.
Asphalt	Asph.
Assembly	Ass'y.
Automatic	Auto.
Auxiliary	Aux.
Ball Valve	B.V.
Bench Mark	B.M.
Bevel	Bev.
Bituminous	Bit.
Boiler	Blr.
Boiler Feed	B.F.
Bottom	Bott.
Bracket	Brkt.
Brass	Brs.
Building	Bldg.
Butterfly Valve	B.F.V.
Cable Television	CATV
Capacity	Cap.
Casing	Csg.
Cast Iron	C.I.
Center Line	C.L. or
Check Valve	C.V.
Concentric	Con.
Concrete	Conc.
Connection	Conn.
Construction	Const.
Copper	Cu.
Coupling	Cplg.
Deflection	Defl.
Degree	Deg. or (°)
Department	Dept.
Diameter	Dia.
Dimension	Dim.
Discharge	Disch.

Designation	Abbrev.
Drain	Dr.
Drawing	Dwg.
Ductile Iron	D.I.
Each	Ea.
Eccentric	Ecc.
Effluent	Eff.
Elbow	Ell.
Elevation	El. or Elev.
Engineer	Engr.
Equipment	Equip.
Exchange	Exch.
Exhaust	Exh.
Existing	Exist.
Expansion	Exp.
Fabricate	Fab.
Feet or Foot	Ft. or (')
Figure	Fig.
Fitting	Ftg.
Flange	Flg.
Force Main	F.M.
Gallon	Gal.
Gallons Per Minute	G.P.M.
Galvanized	Galv.
Gate Valve	G.V.
Gauge (or gage)	Ga.
Grade	Gr.
Grating	Grtg.
Handle	Hdl.
Hanger	Hgr.
Hardware	Hdw.
Height	Ht.
High Water Level	H.W.L.
Horizontal	Horiz.
Horse Power	H.P.
Hose Bibb	H.B.
Hour	Hr.
Hydraulic	Hyd.
Impeller	Imp.
Inch	In. or (")
Influent	Infl.
Inside Diameter	I.D.
Instrument	Inst.
Invert	Inv.
Joint	Jt.

Designation	Abbrev.
Lateral	Lat.
Left	Lt.
Length	Lgth.
Level	Lev.
Linear Feet	L.F.
Low Water Level	L.W.L.
Lubricate	Lub.
Maintenance	Maint.
Manual	Man.
Manufacturer	Mfr.
Manufacturing	Mfg.
Material	Mat'l.
Maximum	Max.
Mechanical	Mech.
Mechanical Joint	M.J.
Meter	M.
Million Gallons Per Day	M.G.D.
Minimum	Min.
Miscellaneous	Misc.
Motor Control Center	M.C.C.
Mounted	Mtd.
Mounting	Mtg.
National Pipe Thread	N.P.T.
Not in Contract	N.I.C.
Not to Scale	N.T.S.
Number	No.
Opening	Op'ng.
Openings	Op'gs.
Or Equal	O/E
Original	Orig.
Outside Diameter	O.D.
Painted	Ptd.
Panel	Pnl.
Phase	Ph.
Plain End	P.E.
Plate	Pl.
Plug Valve	P.V.
Plywood	Ply.
Point	Pt.
Polyvinyl Chloride	P.V.C.
Pound	lb.
Pounds Per Square Inch	P.S.I.
Pressure	Press.

Designation	Abbrev.
Pressure Relief Valve	P.R.V.
Process	Proc.
Product	Prod.
Proposed	Prop.
Quantity	Qty.
Radius	R.
Raw Sewage	R.S.
Reducer	Red.
Reference	Ref.
Reinforced Concrete Pipe	R.C.P.
Required	Req'd.
Restrained	Restr.
Return Activated Sludge	R.A.S.
Reverse	Rev.
Revolutions Per Minute	R.P.M.
Right	Rt.
Rivet	Riv.
Sanitary Sewer	San. Sew.
Schedule	Sch.
Schematic	Schem.
Section	Sect.
Service	Serv.
Sewer	Sew.
Sheet	Sht.
Sleeve	Slv.
Slotted	Slot.
Solenoid Valve	S.V.
Specifications	Specs.
Square	Sq.
Stainless Steel	St. Stl.
Standard	Std.
Steel	Stl.
Storm Sewer	S.S.
Symbol	Sym.
System	Sys.
Temperature	Temp.
Thick	Thk.
Thread	Thd.
Top of Slab	T.O.S. or T/Slab
Top of Wall	T.O.W. or T/Wall

Designation	Abbrev.
Transfer	Trans.
Typical	Typ.
Ultraviolet Polyvinyl Chloride	U.P.V.C.
Vacuum	Vac.
Valve	V.
Variable	Var.
Vertical	Vert.
Volume	Vol.
Waste Activated Sludge	W.A.S.
Water Level	W.L.
Water Main	W.M.
Waterproof	W.P.
Weight	Wt.
With	w/
Without	w/o

CIVIL

Designation	Abbrev.
Abutment	Abut.
Acre	Ac.
Alternate or Alternative	Alt.
Angle	Ang.
Apartment	Apt.
Approximate	Approx.
Asbestos Cement	A.C.
Asphalt	Asph.
Assembly	Assem.
Auxiliary	Aux.
Avenue	Ave.
Azimuth	Az.
Baseline	B. B.L. or B/L
Bearing	Brg.
Bench Mark	B.M.
Bituminous	Bit.
Block	Blk.
Blow Off	B.O.
Bottom	Bot. or Bott.
Boulevard	Blvd.
Building	Bldg.
Cable Television	CATV.
Capacity	Cap.
Cast Iron	C.I.
Catch Basin	C.B.
Center	Ctr.
Centerline	C/L
Chord	Chd.
Circle	Cir.
Circumference	Circ.
Clean Out	C.O.
Company	Co.
Concrete	Conc.
Connection	Conn.
Construction	Const.
Corner	Cor.
Corrugated Metal Pipe	CMP
Corrugated Metal Pipe Arch	CMPA
Cover	Cov.
Cross Section	X-Sect.
Cubic Feet (Foot)	CF
Cubic Yard	CY

Designation	Abbrev.
Culvert	Culv.
Curb and Gutter	C & G.
Decimal	Dec.
Degree	Deg.
Department	Dept.
Detour	Det.
Diagonal	Diag.
Diameter	Diam. or Dia.
Dimension	Dim.
Distance	Dist.
Drain	Dr.
Drawing	Dwg.
Ductile Iron	D.I.
Each	Ea.
Easement	Easm't.
East	E.
Edge of Pavement	EOP
Elbow	Ell.
Elevation	El.
Elliptical Reinforced Concrete Pipe	ERCP
Engineer	Eng.
Excavate	Exc.
Existing	Exist.
Feet or Foot	Ft.
Figure	Fig.
Fire Hydrant Assembly	F. H.
Fitting	Ftg.
Flange	Flg.
Gallon	Gal.
Gallons Per Minute	G.P.M.
Gate Valve	G.V.
Gauge or Gage	Ga.
Grade	Gr.
Grade Break	G.B.
Grade Elevation	G.E.
Gutter	Gtr.
Headwall	Hdwl.
High Point	H.P.
High Water Level	H.W.L.
Highway	Hwy.
Horizontal	Horiz.
Hose Bibb	H.B.

Designation	Abbrev.
Hour	Hr.
Hydraulic Grade Line	H.G.L.
Inch	In.
Inlet	Inl.
Inside Diameter	I.D.
Invert	Inv.
Irrigation	Irrig.
Joint	Jt.
Junction Box	J.B.
Lateral	Lat.
Left	Lt.
Length	Lgth.
Linear Feet	L.F.
Littoral Shelf	L.S.
Low Water Level	L.W.L.
Manhole	M.H.
Material	Mat'l.
Maximum	Max.
Mean High Water	M.H.W.
Mechanical Joint	M.J.
Meter	M.
Minimum	Min.
Minute	Min. or (')
Miscellaneous	Misc.
Monument	Mon.
North	N.
Not in Contract	N.I.C.
Not to Scale	N.T.S.
Number	No.
Outside Diameter	O.D.
Parallel	Par.
Parking	Pkng.
Parkway	Pkwy.
Pavement	Pavt.
Phase	Ph.
Point	Pt.
Point of Curvature	P.C.
Point of Intersection	P.I.
Point of Tangency	P.T.
Point of Vertical Curve	P.V.C.
Point of Vertical Intersection	P.V.I.
Point of Vertical Tangent	P.V.T.
Polyvinyl Chloride	PVC

Designation	Abbrev.
Product	Prod.
Profile	Pf.
Profile Grade	P.G.
Property Line	P.L. or ℄
Proposed	Prop.
Quadrant	Quad.
Radial	Rad.
Radius	R.
Railroad	R.R.
Range	R.
Record	Rec.
Reducer	Red.
Reference	Ref.
Reinforced Concrete Pipe	R.C.P.
Required	Req'd.
Right	Rt.
Right-of-Way	R/W
Rim Elevation	R.E.
Road	Rd.
Sanitary Sewer	S.S.
Schedule	Sched.
Seasonal High Waterline	SHWL
Second	Sec.
Section	Sect.
Service	Svc.
Sheet	Sht.
Shoulder	Shldr.
Sidewalk	S.W.
Soil Pipe	S.P.
South	S.
Specifications	Specs.
Square	Sq.
Square Feet	SF
Square Yard	SY
Standard	Std.
Station	Sta.
Storm Sewer	St.S.
Street	St.
Surface	Sur.
Symbol	Sym.
System	Sys.
Tangent	Tan.
Taper	Tpr.
Telephone	Tel.

Designation	Abbrev.
Television	T.V.
Terminal	Term.
Thick	Thk.
Thousand	M.
Toe of Slope	T.O.S.
Top of Bank	T.O.B.
Township	Twp.
Typical	Typ.
U.S. Geological Survey	U.S.G.S.
Valve	V.
Vertical	Vert.
Vertical Curve	V.C.
Vitrified Clay Pipe	V.C.P.
Volume	Vol.
Water Level	W.L.
Water Main	W.M.
Waterproof	W.P.
West	W.
With	w/
Without	w/o

SYMBOL AND DESCRIPTION

MECHANICAL

SINGLE LINE PIPING:

- Joint
- Bend - 90°
- Bend - 90° (Turned down)
- Bend - 90° (Turned up)
- Bend - 45°
- Bend 45° (Turned down)
- Bend 45° (Turned up)
- Tee
- Tee (Turned down)
- Tee (Turned up)
- Cross
- Lateral or wye
- Reducer - Concentric
- Reducer - Eccentric
- Union
- Cap or plug

EQUIPMENT SYMBOLS:

- Pressure gauge assembly
- Strainer
- Base mounted pump
- Flow tube
- Rotometer
- Basket Strainer
- Flexible Connection
- Backflow Preventer
- Emergency Shower w/ Eyewash
- Floor Drain
- Equipment Base Drain
- Cleanout (Gravity)
- Cleanout (Pressure)
- Running Trap
- Downspout
- Vent thru Roof
- Yard Hydrant
- Seal Water Pressure Reducing System
- Seal Water Connection
- Sample Funnel
- Pulsation Dampener
- Pressure Service Water
- Diaphram Seal
- Temperature Indicating/Control
- Hose Bibb
- Back Pressure Valve
- Direction of Flow
- Hanger Support
- Vacuum Gauge
- Thermometer
- Water Meter

PIPE CONVENTIONS:

- Existing pipe below ground or hidden
- Existing pipe above ground and visible
- Existing pipe to be removed or abandoned
- New pipe below ground or hidden
- New pipe above ground and visible

JOINT CONVENTIONS:

- Flanged joint pipe
- Mechanical joint pipe
- Push-on joint pipe
- Blind flange
- Blind flange w/ flushing connection (BF w/FC)
- Flexible coupling w/ thrust ties
- Mechanical joint plug
- Mechanical joint cap
- Flanged coupling adapter w/ tie rods (FCA)
- Bolted flexible coupling w/ tie rods (BFC)
- Mechanical joints with tie rods
- Grooved coupling

VALVE SYMBOLS:

- Gate valve, etc. (Specify type)
- Globe valve
- Check valve w/ direction of flow
- Air release valve
- Needle valve
- Balancing valve
- Hose gate
- Safety valve
- Diaphragm
- Solenoid
- In-line pressure Relief valve
- Drain or mud valve
- Pinch valve
- Butterfly valve
- 3-Way valve
- Angle valve
- Plug valve
- Ball valve
- Pressure Reducer
- Cock valve
- Ball check valve
- Double leaf check
- Pressure regulating valve
- Air check valve

VALVE OPERATOR SYMBOLS (ON FLOW DIAGRAMS)

- Handwheel operator
- Lever operator
- Float operator
- Chainwheel operator
- Solenoid operator
- Motor operator (on-off)
- Motor operator with electronic positioner
- Hydraulic or pneumatic cylinder operator
- Hydraulic diaphragm
- Pneumatic diaphragm

SECTION INDICATOR:

Section LETTER designation

Number of the drawing on which the sectional view was drawn

A / M-5

The center portion of this line shall be omitted over the body of the plan.

B / M-5

The line within the indicator shall be horizontal, parallel to the top or bottom of our title block.

TITLE FOR SECTIONAL VIEW:

SECTION A / M-2 — SCALE 1/4"=1'-0"

Section letter designation

Number of the drawing on which the plan was drawn and the section indicated.

CIVIL

PROPOSED	EXISTING (screen if possible)	DESCRIPTION
		Paved roadways, driveways, parking lots, etc.
		Unpaved roadways, driveways, parking lots, shoulders, etc. (Freehand)
		Railroad track or tracks
		Sidewalk
		Curb
		Curb and gutter
		Fence
		Guard rail
		Guard posts
		Stone fence
		Swale
		Narrow ditch or stream (Freehand)
		Wide ditch or stream (Freehand)
		Shore line (Freehand)
		Steep slope or bank
		Individual tree
		Palm tree
		Hedge or hedge row (Freehand)
		Woods - Tree line (Freehand)
		Brush (Freehand)
		Marsh or mangrove with limit line (Freehand)
		Building
W	W	Well
8.0	4.3	Spot elevations
B.NO. 23		Soil boring location and number
		Utility pole
		Pole and guy anchor
		Light pole
		Sign
		Telephone, Cable TV, or signal box
		U.S. Highway
		State Road
50 55 (Freehand)	50 55 (Freehand)	Contours - Number every other or every fifth contour line - draw with O pen. Draw intermediate lines with OO pen.
W	W	Water line
F.M.	F.M.	Force main w/direction of flow
SAN.	SAN.	Sanitary sewer line w/direction of flow
G	G	Gas line
U.T.	U.T.	Underground telephone
O.T.	O.T.	Overhead telephone
U.E.	U.E.	Underground electric
O.E.	O.E.	Overhead electric
		Storm sewer line
F	F	Fuel line
CATV	CATV	"Cable Television" underground cable
		Casing pipe
MH		Manhole
		Valve (see utility conventions for specific types)
		Fire hydrant assembly
C.B.	C.B.	Drain inlet or catch basin
		Bend, cross, tee, wye, plug
8" 12"		Reducer
W.M.	W.M.	Water meter
		Hose bib
W	W	Blow off
SAN.	SAN.	Clean out

OCT 18 1988
SOUTH WEST DISTRICT
TAMPA

PBSJ POST, BUCKLEY, SCHUH & JERNIGAN, INC.	CLIENT: CITRUS COUNTY, FLORIDA DEPARTMENT OF TECHNICAL SERVICES	PROJECT: CITRUS COUNTY CENTRAL LANDFILL EXPANSION LEACHATE TREATMENT FACILITY	TASK: LEGEND, SYMBOLS AND ABBREVIATIONS

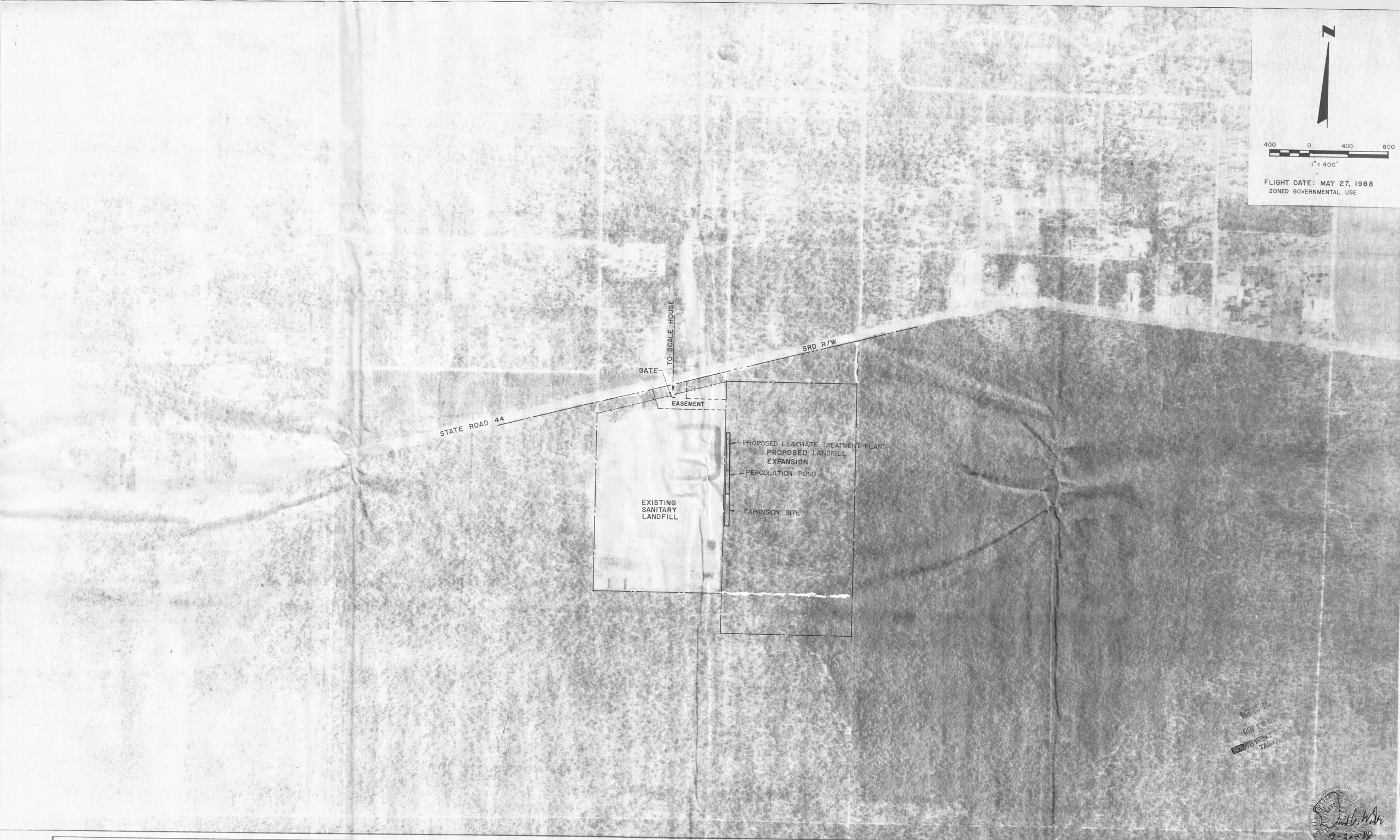
ORIGINAL AUGUST 1988
REVISIONS: 1 2 3 4 5 6 7 8 9 10 11 12

NOT VALID FOR CONSTRUCTION UNLESS SIGNED IN THIS BLOCK

JOB NO. 22-081.30
DRAWN WPS
DESIGNED C.L.
CHECKED DAW
QC

SHEET G-2

REPRO PRODUCTS INC. 2A



PBS&J
POST BUCKLEY SCHUH & JERNIGAN, INC.

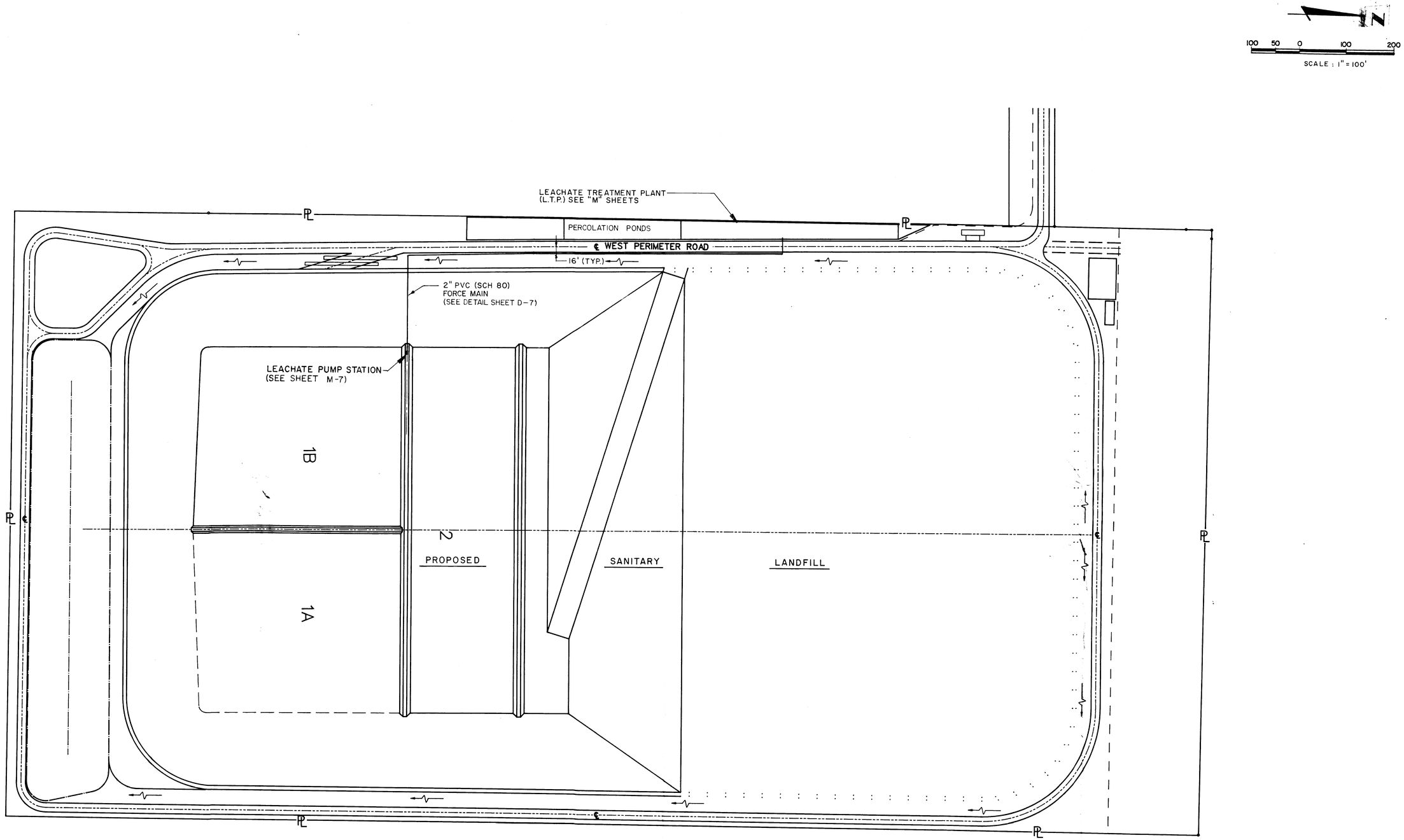
CLIENT	PROJECT	TASK
CITRUS COUNTY, FLORIDA DEPARTMENT OF TECHNICAL SERVICES	CITRUS COUNTY CENTRAL LANDFILL EXPANSION LEACHATE TREATMENT FACILITY	GENERAL AREA MAP

ORIGINAL AUGUST 1988
REVISIONS:
1 2 3 4 5 6 7 8 9 10 11 12

NOT VALID FOR CONSTRUCTION UNLESS SIGNED IN THIS BLOCK

JOB NO. 22-081.30
DRAWN D.D.
DESIGNED TEI
CHECKED DAV
QC

SHEET C-1

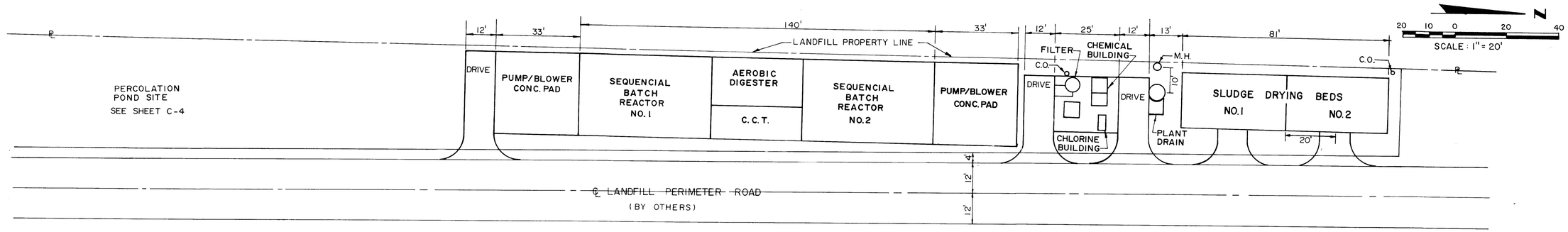


NOTE: LEACHATE PUMP STATION AND FORCE MAIN SHALL BE PART OF THIS CONTRACT AND COORDINATED WITH LANDFILL CONTRACT.

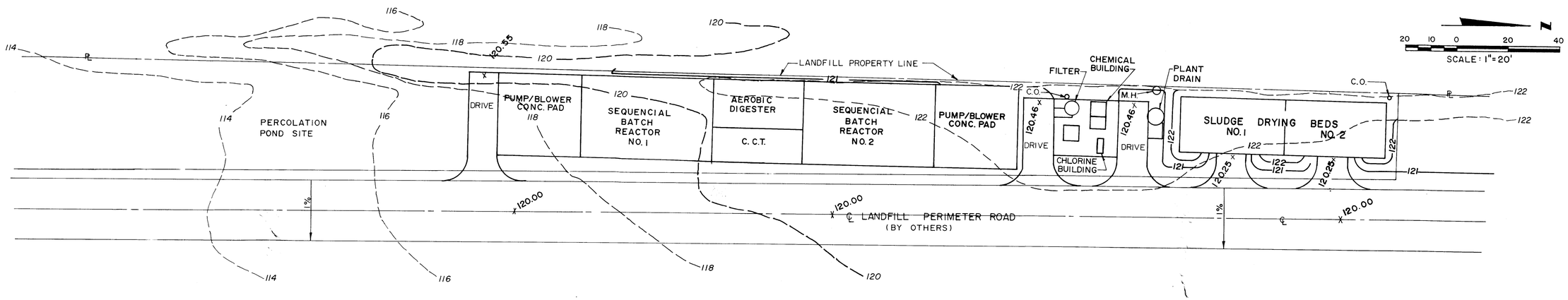
PBSJ POST, BUCKLEY, SCHUH & JERNIGAN, INC.	CLIENT: CITRUS COUNTY, FLORIDA DEPARTMENT OF TECHNICAL SERVICES	PROJECT: CITRUS COUNTY CENTRAL LANDFILL EXPANSION LEACHATE TREATMENT FACILITY	TASK: OVERALL SITE PLAN	ORIGINAL AUGUST 1988 REVISIONS: 1 2 3 4 5 6 7 8 9 10 11 12	NOT VALID FOR CONSTRUCTION UNLESS SIGNED IN THIS BLOCK

JOB NO. 22-081.30
DRAWN FS
DESIGNED DW
CHECKED DAW
QC
SHEET C-2

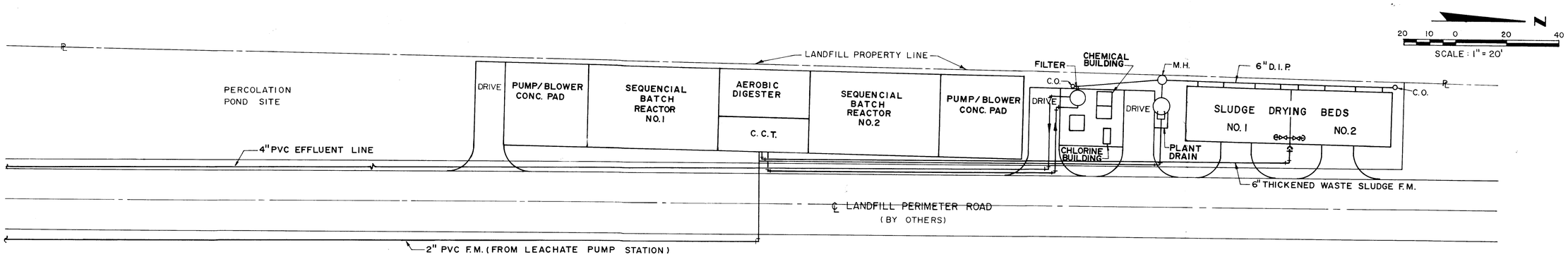
REPRO PRODUCTS INC. 2A



HORIZONTAL PROJECT CONTROL



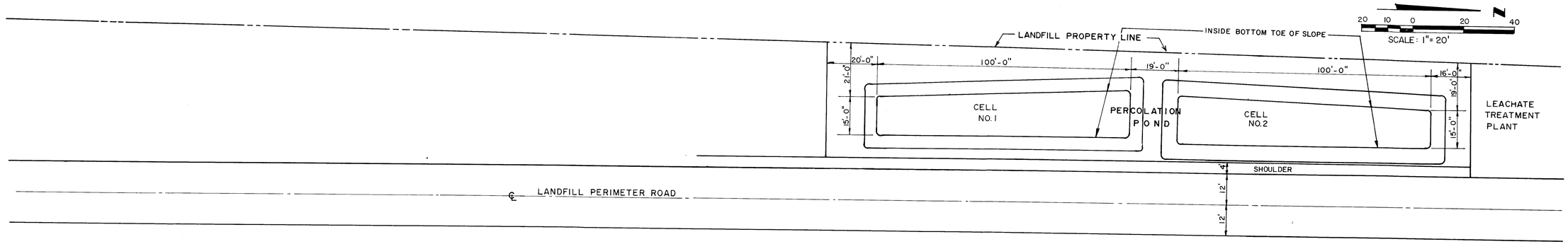
DRAINAGE & GRADING



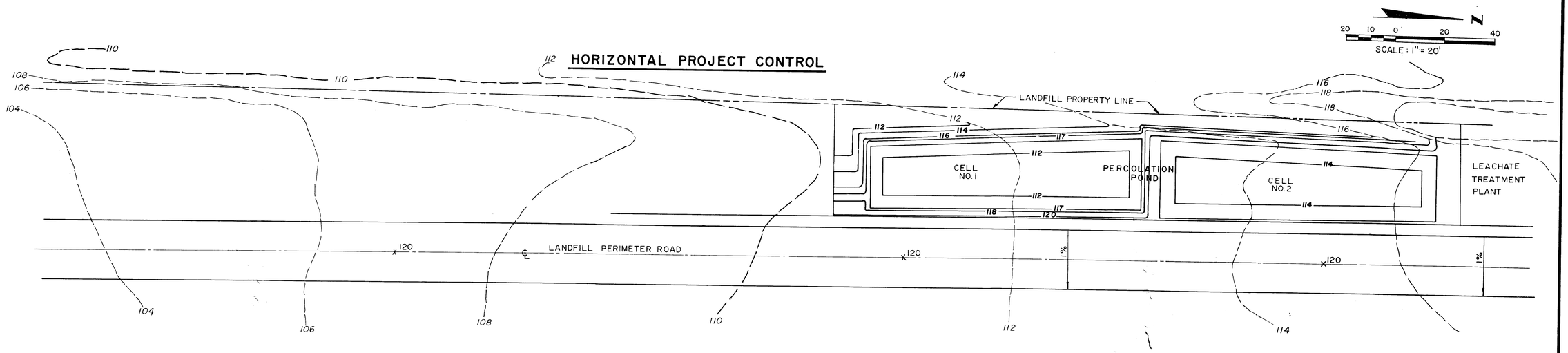
YARD PIPING

	CLIENT	PROJECT	TASK			
PBS&J POST, BUCKLEY, SCHUH & JERNIGAN, INC.	CITRUS COUNTY, FLORIDA DEPARTMENT OF TECHNICAL SERVICES	CITRUS COUNTY CENTRAL LANDFILL EXPANSION LEACHATE TREATMENT FACILITY	LEACHATE TREATMENT PLANT SITE PLANS	ORIGINAL AUGUST 1988 REVISIONS: 1 2 3 4 5	6 7 8 9 10 11 12	NOT VALID FOR CONSTRUCTION UNLESS SIGNED IN THIS BLOCK	JOB NO. 22-081.30 DRAWN DESIGNED CHECKED QC SHEET C-3

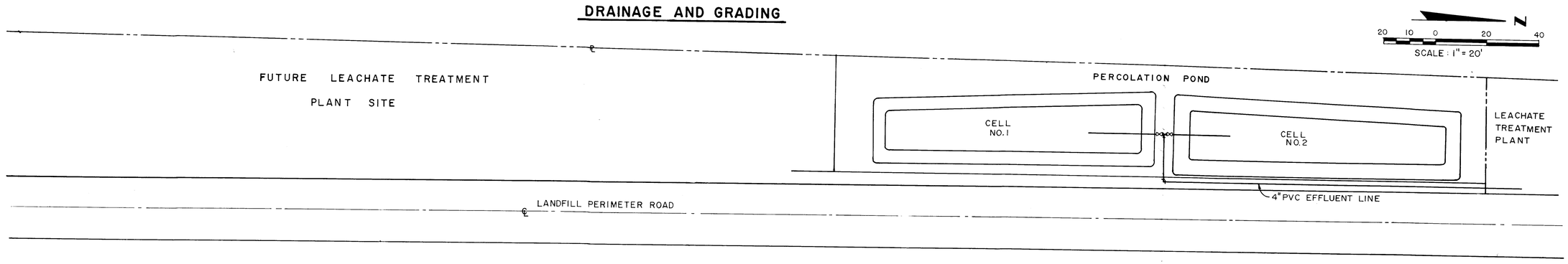
REPRO PRODUCTS INC. 2A



HORIZONTAL PROJECT CONTROL



DRAINAGE AND GRADING

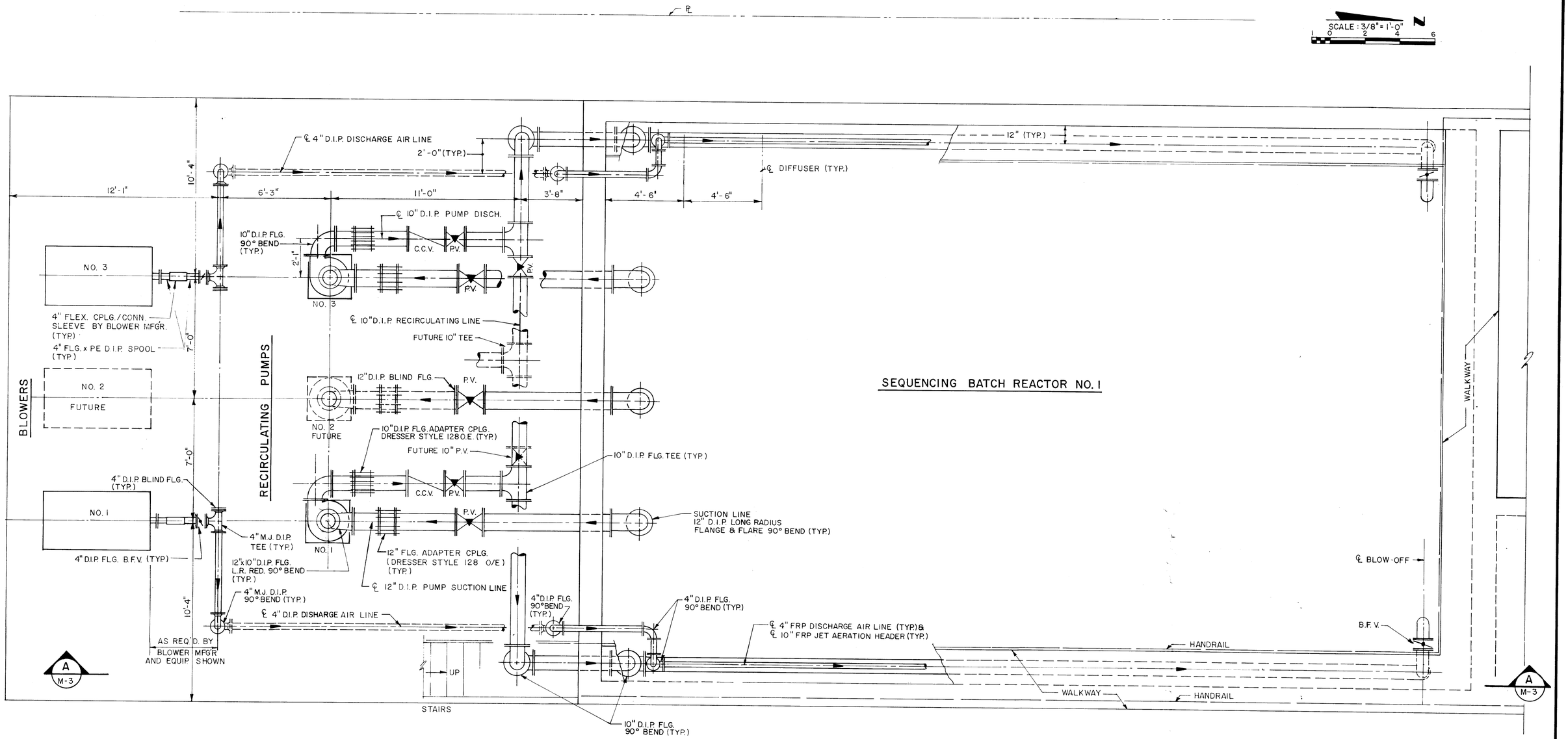


YARD PIPING

	CLIENT	PROJECT	TASK		
PBSJ POST, BUCKLEY, SCHUH & JERNIGAN, INC.	CITRUS COUNTY, FLORIDA DEPARTMENT OF TECHNICAL SERVICES	CITRUS COUNTY CENTRAL LANDFILL EXPANSION LEACHATE TREATMENT FACILITY	PERCOLATION POND SITE PLANS	ORIGINAL AUGUST 1988 REVISIONS: 1 2 3 4 5 6 7 8 9 10 11 12	NOT VALID FOR CONSTRUCTION UNLESS SIGNED IN THIS BLOCK

JOB NO. 22-081.30
DRAWN R Daly
DESIGNED DAW
CHECKED DAW
QC
SHEET C-4

REPRO PRODUCTS INC.



NOTE:

1. EQUIPMENT ARRANGEMENT TO BE SIMILAR BUT OPPOSITE FOR SEQUENCING BATCH REACTOR NO. 2.

PLAN

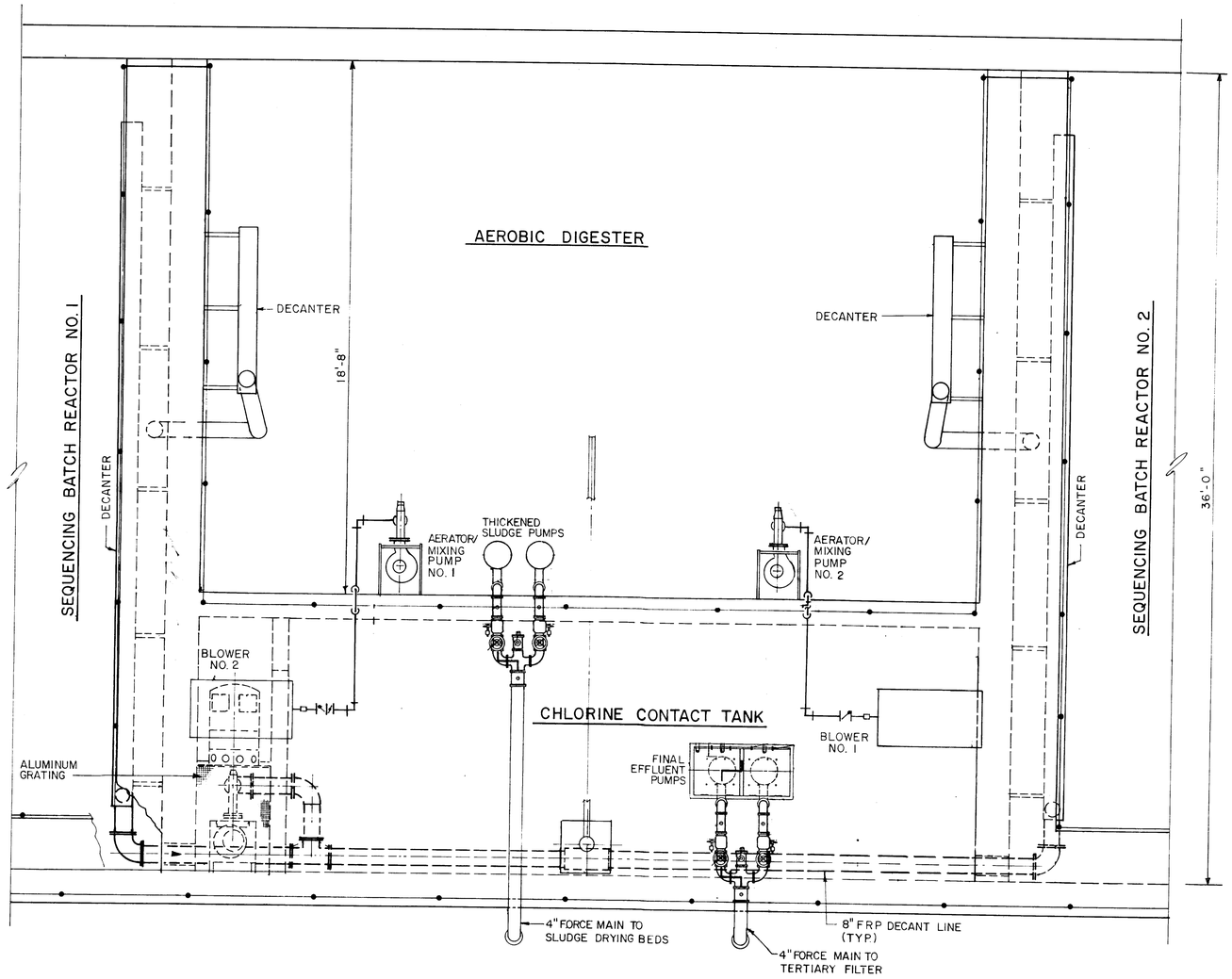
PBSJ POST, BUCKLEY, SCHUH & JERNIGAN, INC.	CLIENT: CITRUS COUNTY, FLORIDA DEPARTMENT OF TECHNICAL SERVICES	PROJECT: CITRUS COUNTY CENTRAL LANDFILL EXPANSION LEACHATE TREATMENT FACILITY	TASK: SEQUENCING BATCH REACTOR	ORIGINAL AUGUST 1988 REVISIONS: 1 2 3 4 5 6 7 8 9 10 11 12

NOT VALID FOR CONSTRUCTION UNLESS SIGNED IN THIS BLOCK

JOB NO. 22-081.32
DRAWN R. Dally
DESIGNED RAW
CHECKED RAW
QC
SHEET M-1

REPRO PRODUCTS INC. 2A

SCALE: 3/8" = 1'-0"



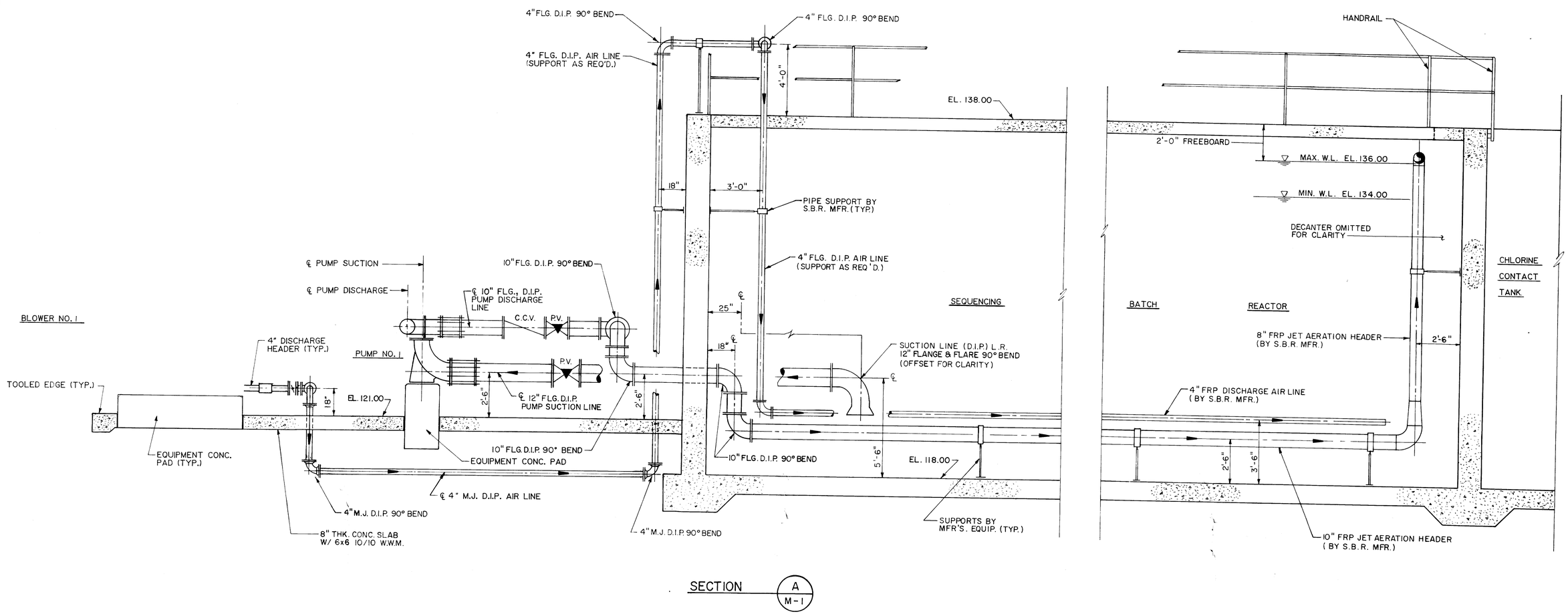
PLAN

PBSJ POST, BUCKLEY, SCHUH & JERNIGAN, INC.	CLIENT: CITRUS COUNTY, FLORIDA DEPARTMENT OF TECHNICAL SERVICES	PROJECT: CITRUS COUNTY CENTRAL LANDFILL EXPANSION LEACHATE TREATMENT FACILITY	TASK: AEROBIC DIGESTOR AND CHLORINE TANK	ORIGINAL AUGUST 1988 REVISIONS: 1 2 3 4 5 6 7 8 9 10 11 12

NOT VALID FOR CONSTRUCTION UNLESS SIGNED IN THIS BLOCK

JOB NO. 22-081.30
DRAWN D. Dally
DESIGNED DPW
CHECKED DAW
QC
SHEET M-2

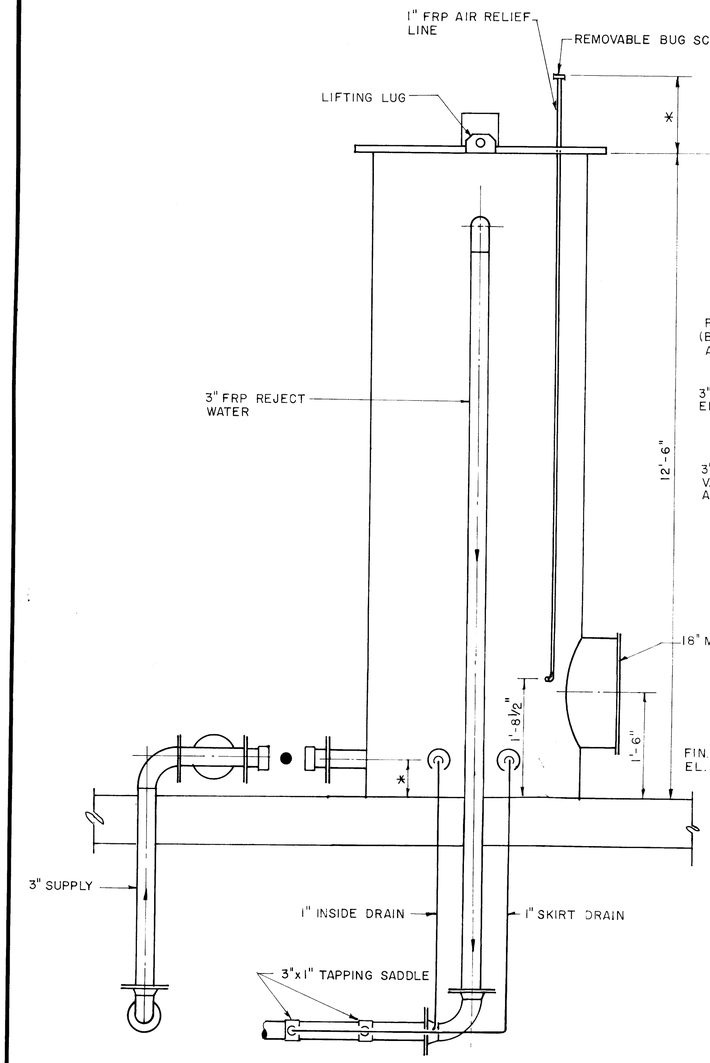
REPRO PRODUCTS INC. 2A



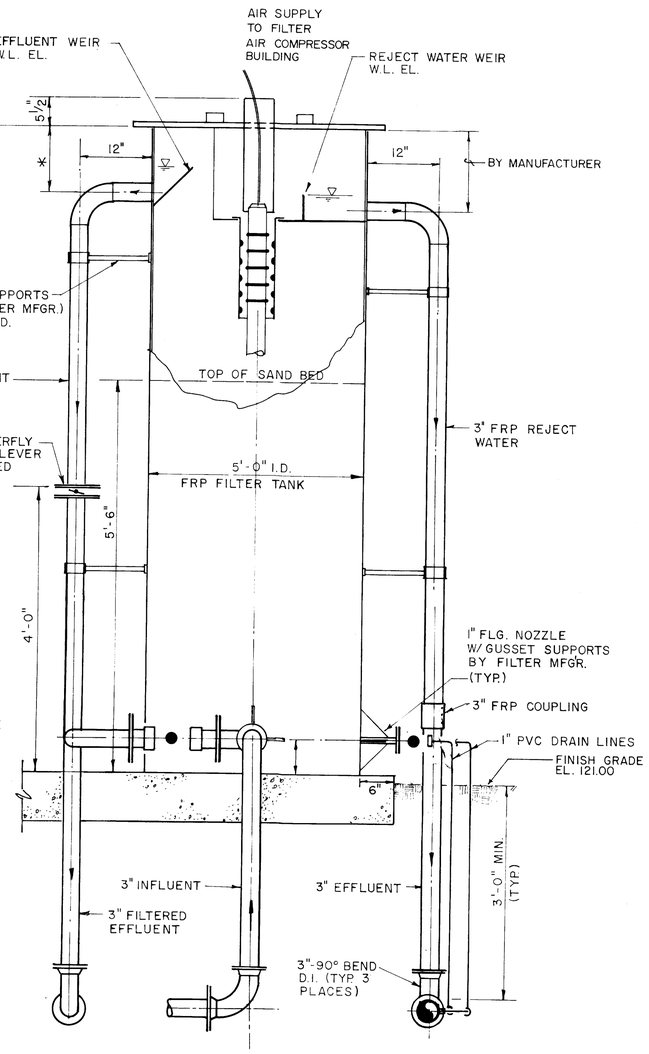
	CLIENT	PROJECT	TASK			
PBSJ POST, BUCKLEY, SCHUH & JERNIGAN, INC.	CITRUS COUNTY, FLORIDA DEPARTMENT OF TECHNICAL SERVICES	CITRUS COUNTY CENTRAL LANDFILL EXPANSION LEACHATE TREATMENT FACILITY	SEQUENCING BATCH REACTORS - SECTION	ORIGINAL AUGUST 1988 REVISIONS: 1 2 3 4 5	6 7 8 9 10 11 12	NOT VALID FOR CONSTRUCTION UNLESS SIGNED IN THIS BLOCK

JOB NO. 22-081.38
DRAWN RDdy
DESIGNED DAW
CHECKED DAW
QC
SHEET M-3

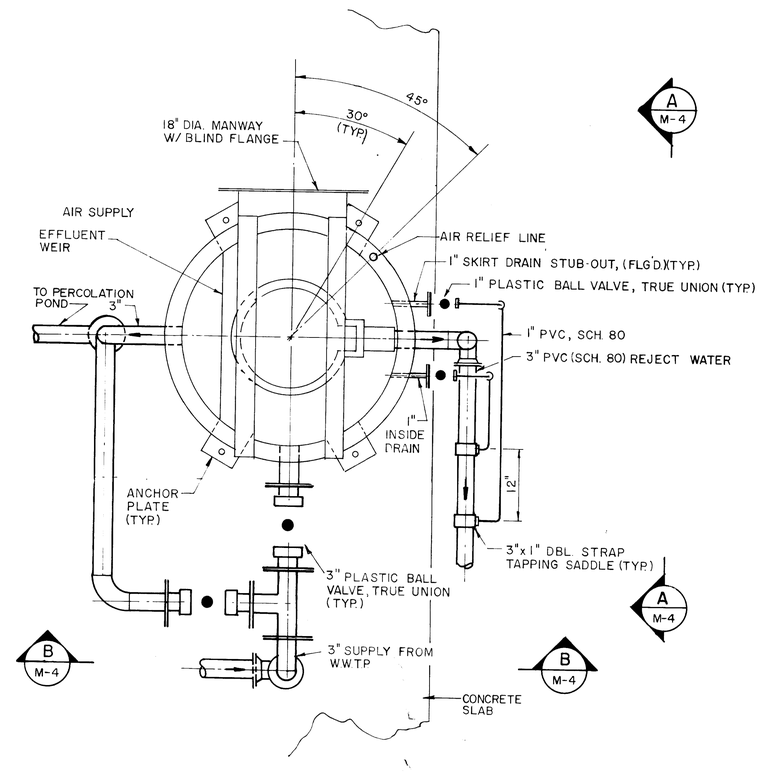
REPRO PRODUCTS INC. 2A



SECTION A M-4
SCALE: 1" = 1'-0"



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

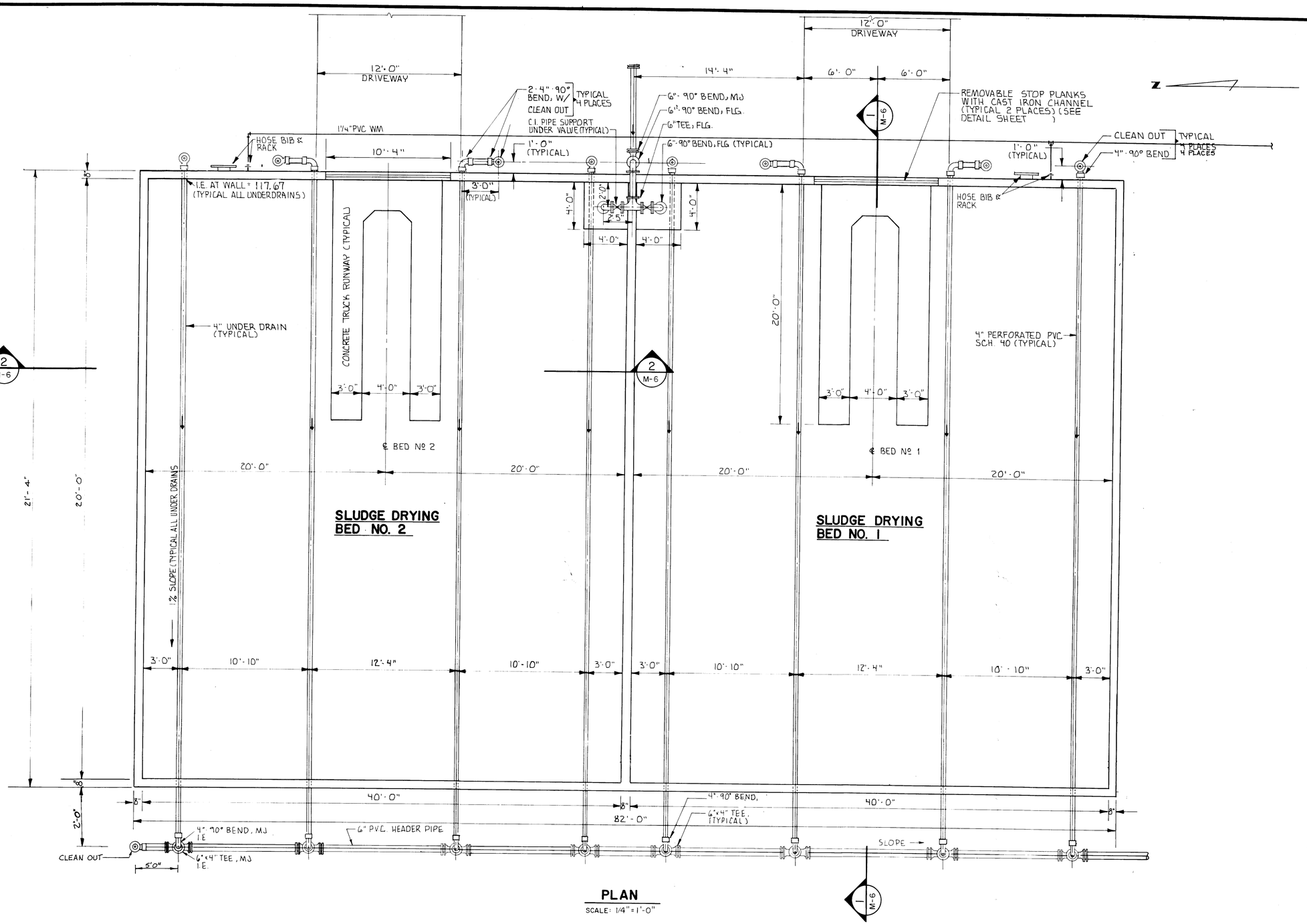


PLAN
SCALE: 1" = 1'-0"

PBSJ POST, BUCKLEY, SCHUH & JERNIGAN, INC.	CLIENT: CITRUS COUNTY, FLORIDA DEPARTMENT OF TECHNICAL SERVICES	PROJECT: CITRUS COUNTY CENTRAL LANDFILL EXPANSION LEACHATE TREATMENT FACILITY	TASK: EFFLUENT FILTER PLAN AND ELEVATIONS	ORIGINAL AUGUST 1988 REVISIONS: 1 2 3 4 5 / 6 7 8 9 10 11 12	NOT VALID FOR CONSTRUCTION UNLESS SIGNED IN THIS BLOCK

JOB NO. 22-081.30
DRAWN DPDolly
DESIGNED DAM
CHECKED DAM
QC
SHEET M-4

REPRO PRODUCTS INC. 2A



PLAN

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

9-30-88

CLIENT	PROJECT	TASK
CITRUS COUNTY, FLORIDA	CITRUS COUNTY	SLUDGE DRYING BEDS
DEPARTMENT OF	CENTRAL LANDFILL EXPANSION	
TECHNICAL SERVICES	LEACHATE TREATMENT FACILITY	

POST, BUCKLEY, SCHUH & JERNIGAN, INC.

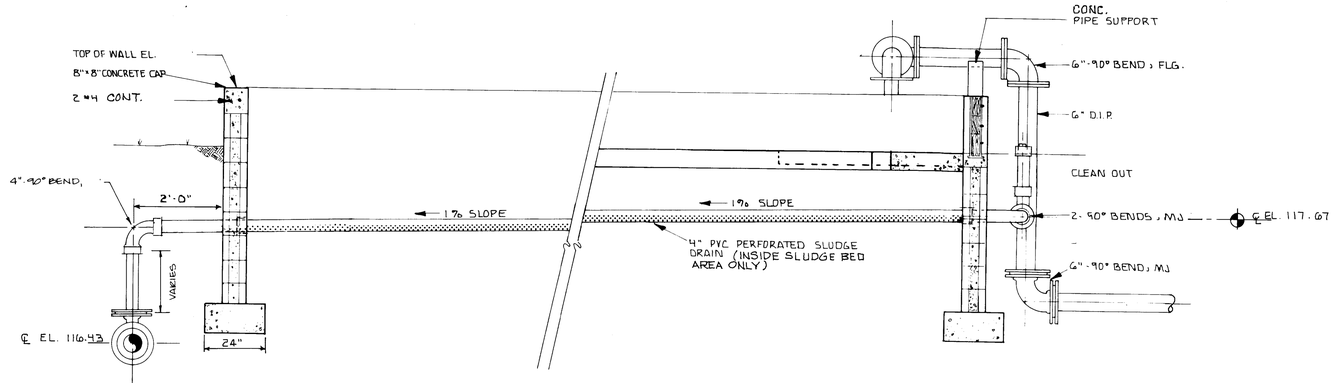
ORIGINAL AUGUST 1988
REVISIONS:
1 ____ 2 ____ 3 ____ 4 ____ 5 ____
6 ____ 7 ____ 8 ____ 9 ____ 10 ____ 11 ____ 12 ____

NOT VALID FOR CONSTRUCTION UNLESS SIGNED IN THIS BLOCK

JOB NO. 22-081.30
DRAWN R. Stratton
DESIGNED JAV
CHECKED JAV
QC DAW

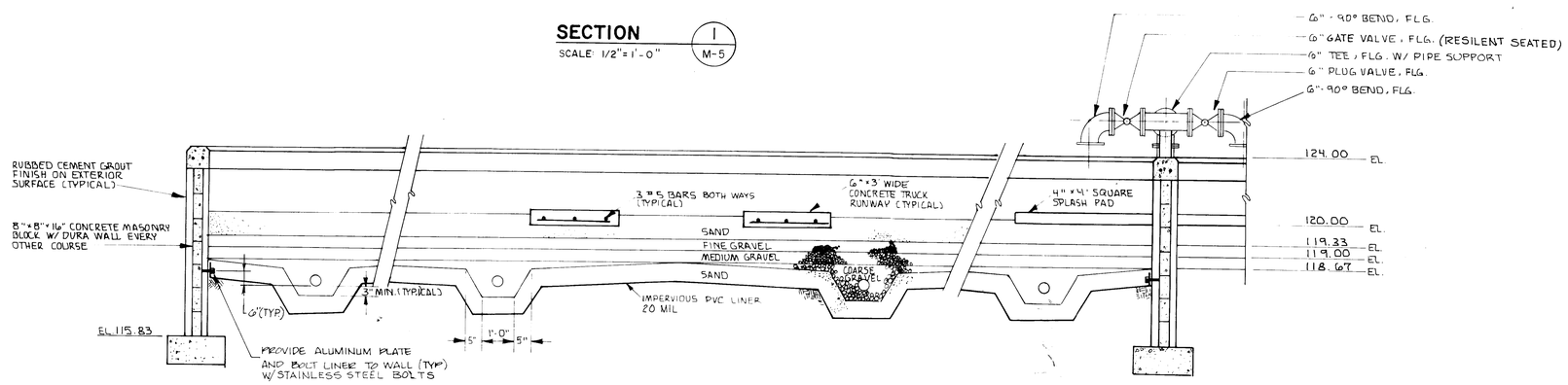
SHEET M-5

REPRO PRODUCTS INC



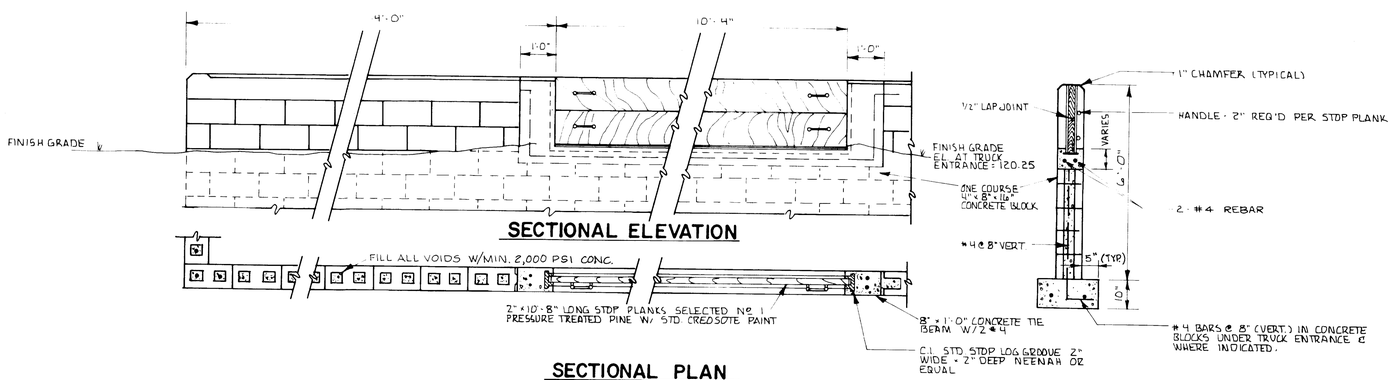
SECTION 1 / M-5

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



SECTION 2 / M-5

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



SECTIONAL ELEVATION

SECTIONAL PLAN

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

CLIENT	PROJECT	TASK
CITRUS COUNTY, FLORIDA	CITRUS COUNTY	SLUDGE DRYING BED – SECTIONS
DEPARTMENT OF	CENTRAL LANDFILL EXPANSION	
TECHNICAL SERVICES	LEACHATE TREATMENT FACILITY	

PBSJ POST, BUCKLEY, SCHUH & JERNIGAN, INC.

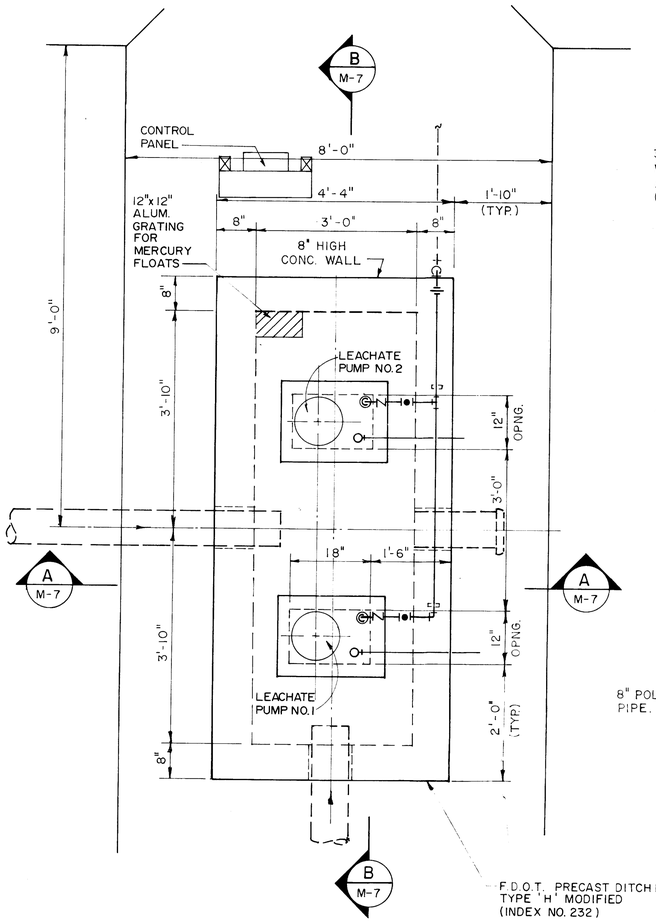
ORIGINAL AUGUST 1988
REVISIONS: 1 2 3 4 5 6 7 8 9 10 11 12

NOT VALID FOR CONSTRUCTION UNLESS SIGNED IN THIS BLOCK

JOB NO. 22-081.30
DRAWN K. Strathmann
DESIGNED JAV
CHECKED JAV
QC DAW

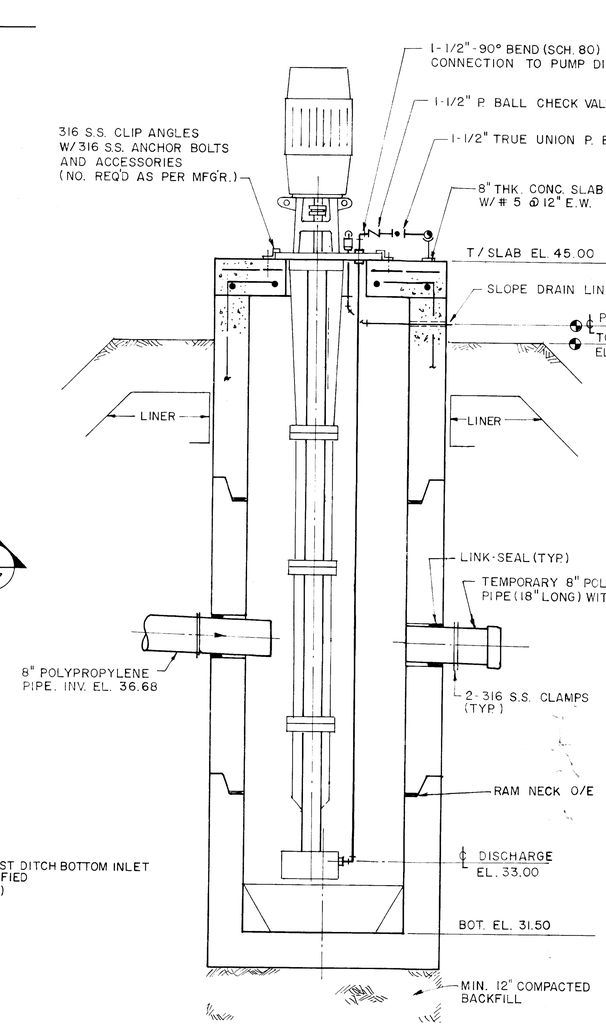
SHEET M-6

REPRO PRODUCTS INC



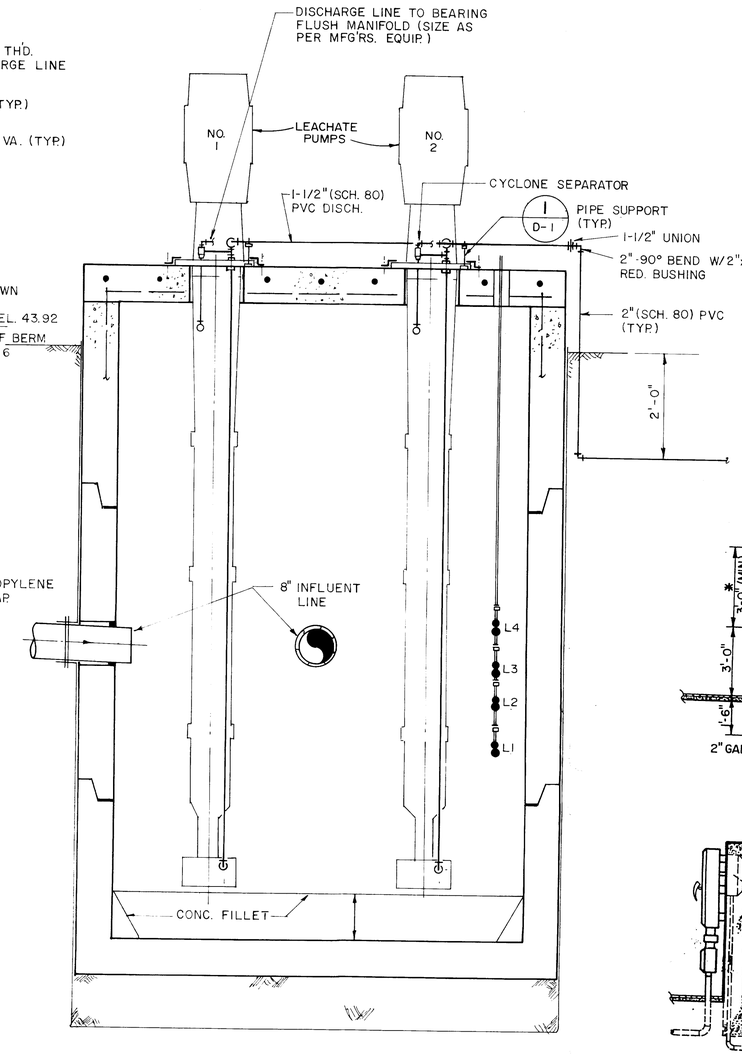
PLAN

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



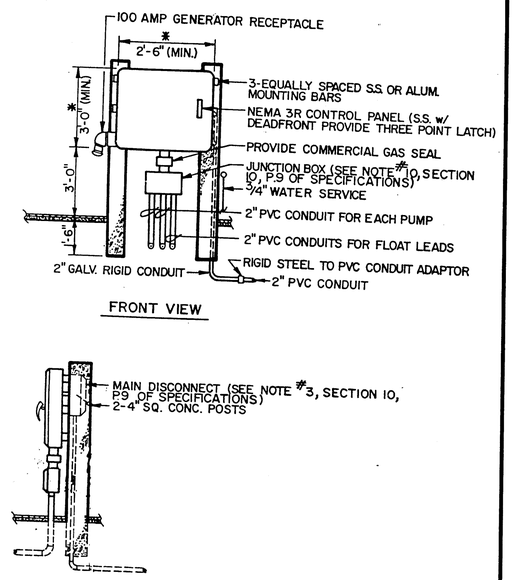
SECTION A

SCALE: 3/4" = 1'-0" (A / M-7)



SECTION B

SCALE: 3/4" = 1'-0" (B / M-7)



CONTROL PANEL

N.T.S.

PUMP SPECIFICATIONS

PUMPS REQUIRED 2
MANUFACTURER & MODEL NO. VANTON
PUMP SIZE 1 1/2"
CAPACITY 30
TOTAL HEAD (FEET) 110
IMPELLER NO.
MOTOR REQUIREMENTS 5 HP., 460 VOLTS, 3 PHASE
SPEED (RPM) 3600

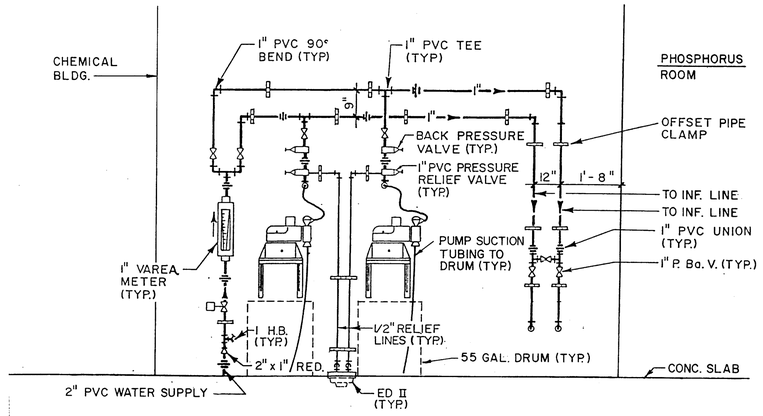
LIQUID LEVEL REGULATORS

L-1 LOW LEVEL REGULATOR BOTH PUMPS OFF
L-2 2 LEVEL REGULATOR LEAD PUMP STARTS
L-3 3rd LEVEL REGULATOR BOTH PUMPS ON (LAG PUMP STARTS)
L-4 4th LEVEL REGULATOR HIGH LEVEL ALARM ON

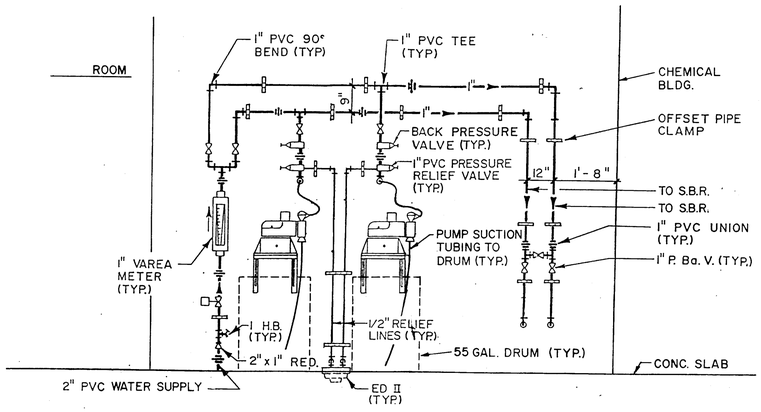
PBSJ POST, BUCKLEY, SCHUH & JERNIGAN, INC.	CLIENT: CITRUS COUNTY, FLORIDA DEPARTMENT OF TECHNICAL SERVICES	PROJECT: CITRUS COUNTY CENTRAL LANDFILL EXPANSION LEACHATE TREATMENT FACILITY	TASK: LEACHATE PUMP STATION	ORIGINAL AUGUST 1988 REVISIONS: 1 2 3 4 5 6 7 8 9 10 11 12	JOB NO. 22-081.30 DRAWN DAW DESIGNED CLD CHECKED DAW QC SHEET M-7

NOT VALID FOR CONSTRUCTION UNLESS SIGNED IN THIS BLOCK

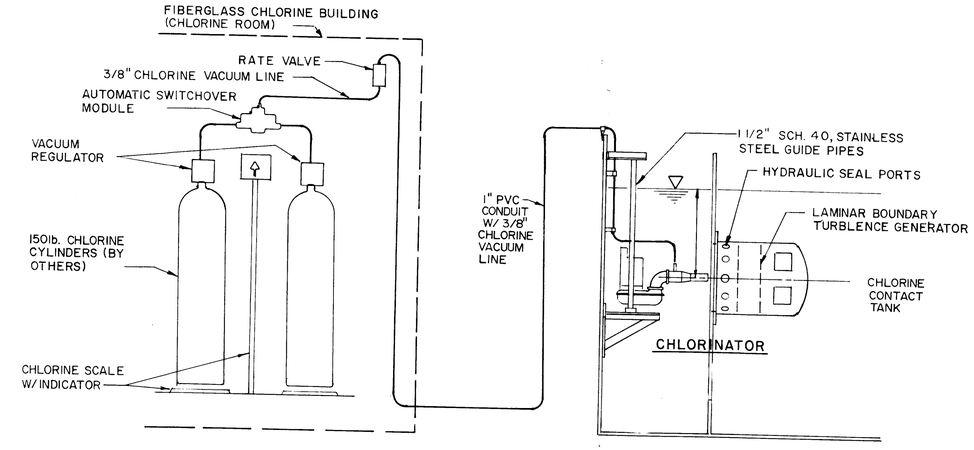
REPRO PRODUCTS INC. 2A



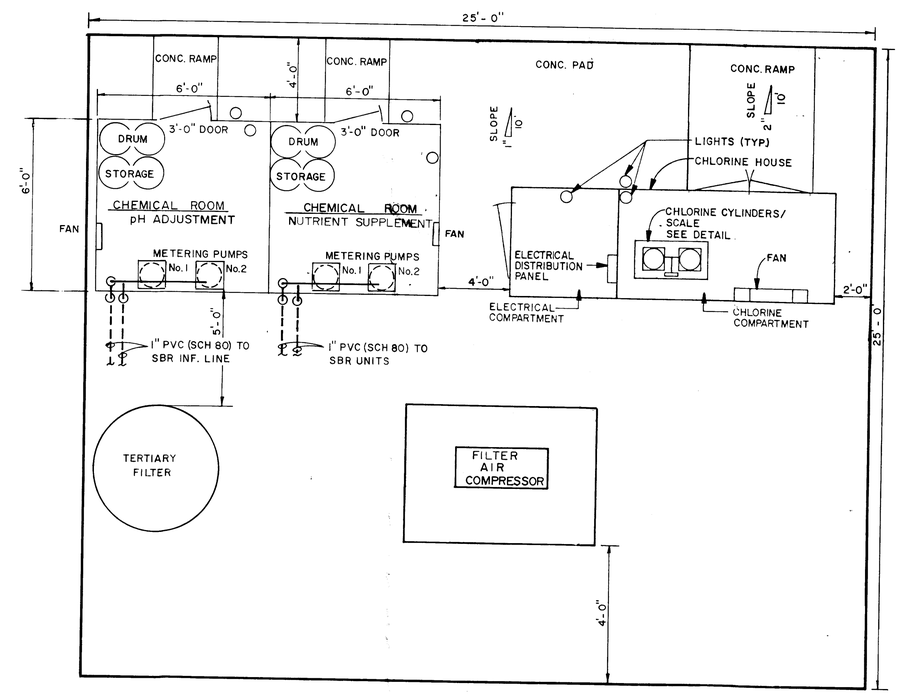
CHEMICAL ROOM
pH ADJUSTMENT



CHEMICAL ROOM
NUTRIENT SUPPLEMENT



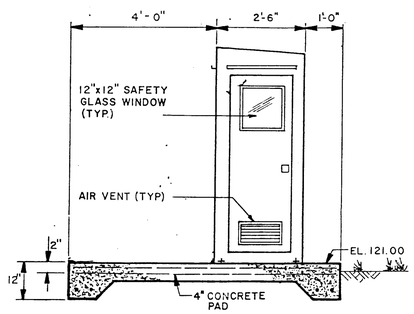
CHLORINATION SCHEMATIC
NTS



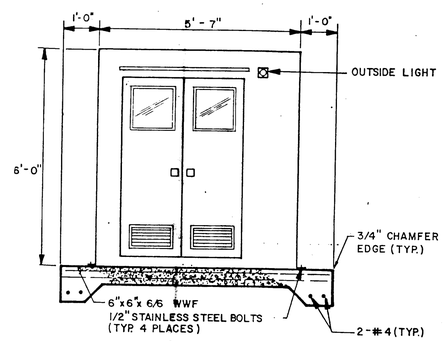
NOTES:

1. FAN TO BLOW INWARD AND BE LOCATED NEAR THE BOTTOM OF BUILDING.
2. AUTOMATIC SWITCHOVER MODULE AND RATE VALVE TO BE WALL MOUNTED IN FIBERGLASS CHLORINE BUILDING.
3. CHEMICAL BUILDING SIMILAR IN CONSTRUCTION, EXCEPT SIZE AS NOTED.

CHEMICAL BLDG. PLAN CHLORINATION BLDG.



WEST ELEVATION

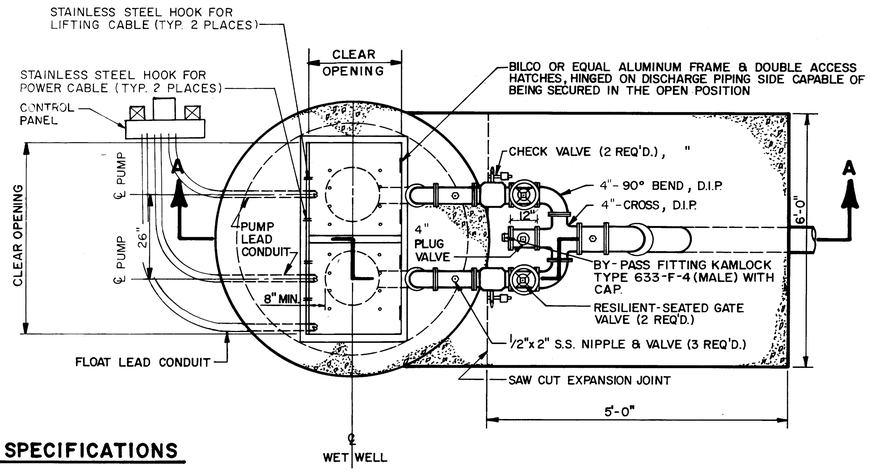


NORTH ELEVATION

9-30-88

	CLIENT	PROJECT	TASK			
PBSJ POST, BUCKLEY, SCHUH & JERNIGAN, INC.	CITRUS COUNTY, FLORIDA DEPARTMENT OF TECHNICAL SERVICES	CITRUS COUNTY CENTRAL LANDFILL EXPANSION LEACHATE TREATMENT FACILITY	CHEMICAL AND CHLORINATION SYSTEMS	ORIGINAL AUGUST 1988 REVISIONS: 1 2 3 4 5	6 7 8 9 10 11 12	NOT VALID FOR CONSTRUCTION UNLESS SIGNED IN THIS BLOCK	JOB NO. 22-081.30 DRAWN DESIGNED CHECKED QC SHEET M-8

301972
REPRO PRODUCTS INC. 2A

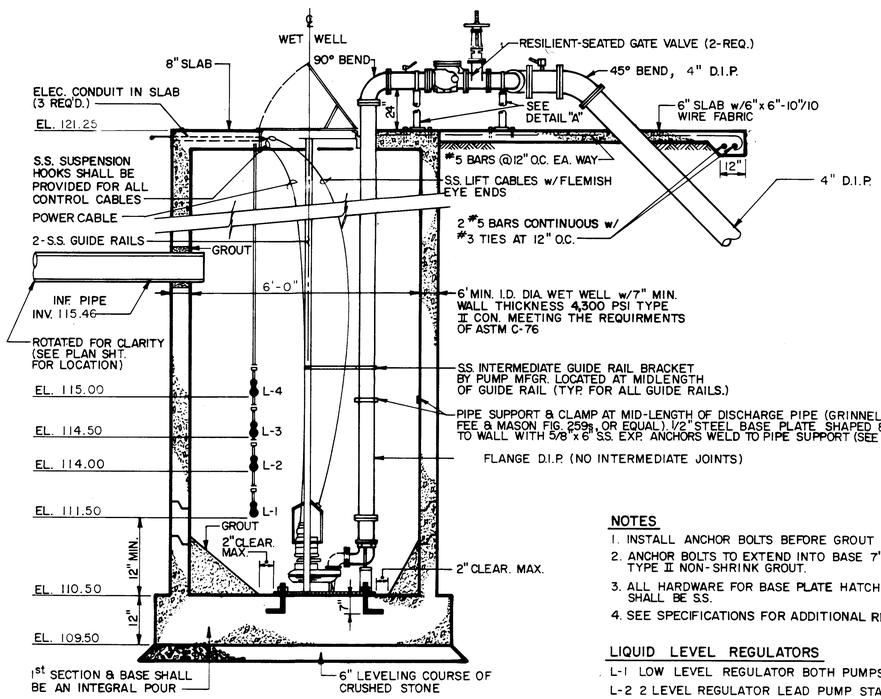


PUMP SPECIFICATIONS

PUMPS REQUIRED	2
MANUFACTURER & MODEL NO.	FLYGT, CP 3060
PUMP SIZE	
CAPACITY (GPM)	160
TOTAL HEAD (FEET)	27
IMPELLER NO.	8
MOTOR REQUIREMENTS	3 HP, 230 VOLTS, 3 PHASE
SPEED	1150 RPM

PLAN

N.T.S.



SECTION A-A

N.T.S.

NOTES

1. INSTALL ANCHOR BOLTS BEFORE GROUT IS POURED.
2. ANCHOR BOLTS TO EXTEND INTO BASE 7" & SET w/ TYPE II NON-SHRINK GROUT.
3. ALL HARDWARE FOR BASE PLATE HATCH COVER SHALL BE S.S.
4. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

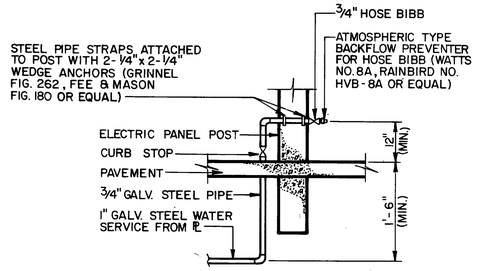
LIQUID LEVEL REGULATORS

L-1 LOW LEVEL REGULATOR BOTH PUMPS OFF

L-2 2 LEVEL REGULATOR LEAD PUMP STARTS

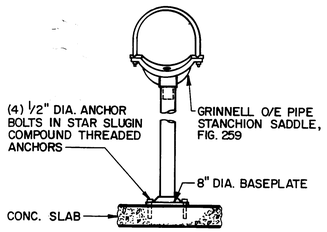
L-3 3rd LEVEL REGULATOR BOTH PUMPS ON (LAG PUMP STARTS)

L-4 4th LEVEL REGULATOR HIGH LEVEL ALARM ON



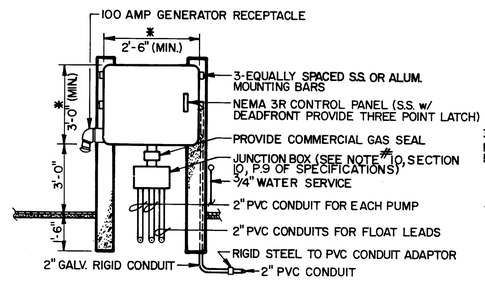
WATER SERVICE RISER

N.T.S.

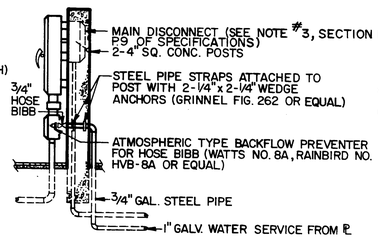


PIPE SUPPORT DETAIL "A"

N.T.S.



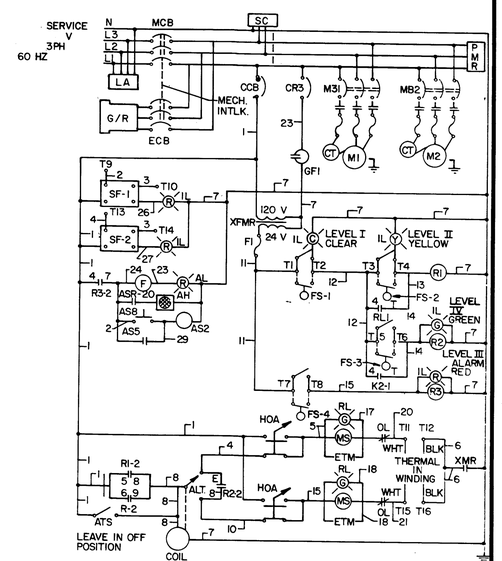
FRONT VIEW

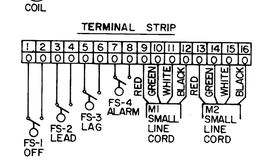


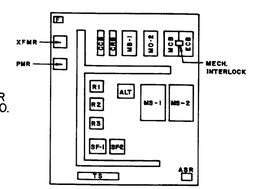
SIDE VIEW

CONTROL PANEL

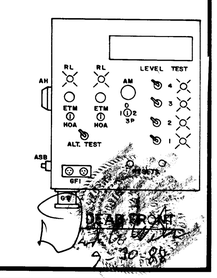
N.T.S.







BACK PLATE



PBSJ POST, BUCKLEY, SCHUH & JERNIGAN, INC.	CLIENT: CITRUS COUNTY, FLORIDA DEPARTMENT OF TECHNICAL SERVICES	PROJECT: CITRUS COUNTY CENTRAL LANDFILL EXPANSION LEACHATE TREATMENT FACILITY	TASK: PLANT DRAIN PUMP STATION

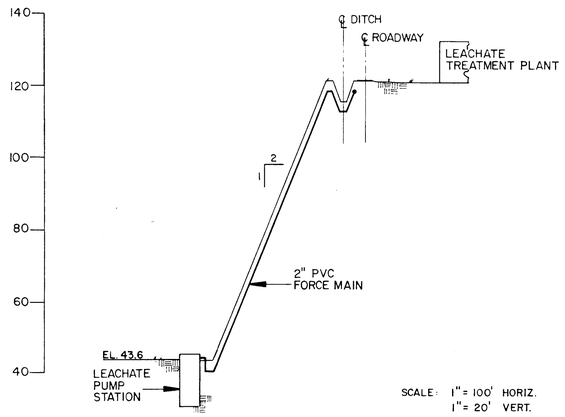
ORIGINAL AUGUST 1988
REVISIONS: 1 2 3 4 5 6 7 8 9 10 11 12

NOT VALID FOR CONSTRUCTION UNLESS SIGNED IN THIS BLOCK

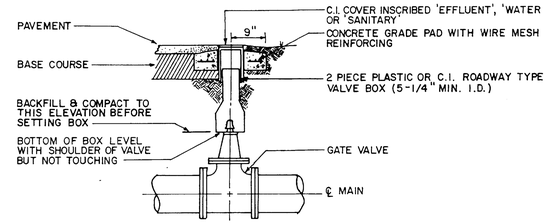
JOB NO. 22-081.30
DRAWN
DESIGNED
CHECKED
QC

SHEET M-9

REPRO PRODUCTS INC. 2A

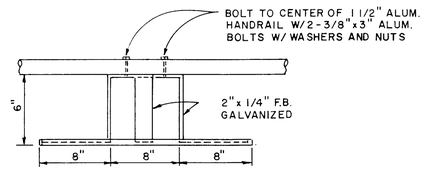


FORCE MAIN PROFILE DETAIL

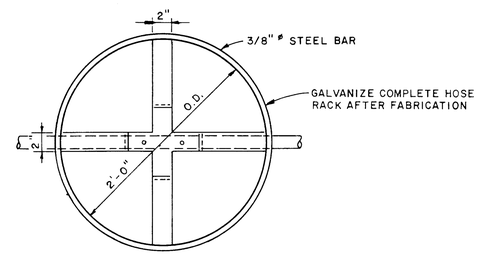


GATE VALVE AND BOX

NTS



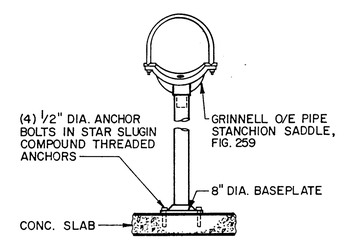
PLAN



ELEVATION

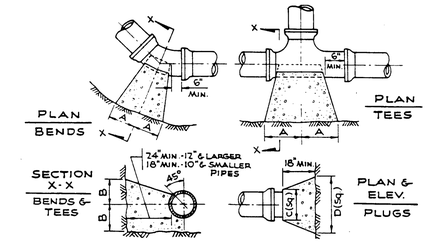
HOSE RACK

NTS



PIPE SUPPORT DETAIL (1 / M-7)

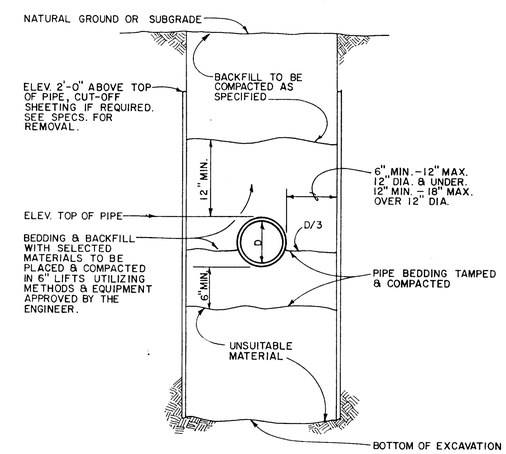
NTS



SOIL	SIZE	1/4 BEND		1/8 BEND		1/16 BEND		TEE		PLUG	
		A	B	A	B	A	B	A	B	C	D
4000 PSF	6"	8"	10"	6"	8"	3"	8"	8"	8"	10"	15"
	8"	12"	12"	8"	10"	5"	9"	9"	12"	12"	20"
	10"	16"	14"	10"	12"	6"	10"	11"	14"	14"	25"
	12"	19"	16"	12"	14"	8"	11"	14"	16"	16"	30"
	14"	23"	18"	14"	16"	10"	12"	16"	18"	18"	34"
	16"	26"	20"	16"	18"	11"	13"	18"	20"	20"	38"
2000 PSF	6"	16"	10"	9"	10"	6"	8"	10"	12"	10"	21"
	8"	22"	13"	12"	13"	8"	10"	13"	16"	12"	29"
	10"	26"	17"	14"	17"	10"	13"	16"	20"	14"	36"
	12"	29"	21"	16"	21"	11"	16"	18"	24"	16"	41"
	14"	35"	24"	19"	24"	12"	20"	22"	27"	18"	48"
	16"	38"	27"	21"	27"	12"	24"	24"	30"	20"	54"

TYPICAL THRUST BLOCKS FOR WATER MAINS

NTS



NOTES:

1. FOR TRENCHES IN PAVED AREAS OR AREAS TO RECEIVE NEW PAVEMENT, SEE PAVEMENT SPECIFICATIONS, THIS SHEET.
2. WHERE BACKFILL IS PLACED BELOW WATER LEVEL IN THE TRENCH, THE BACKFILL MATERIAL SHALL BE CAREFULLY AND UNIFORMLY RAMMED AROUND BOTH SIDES OF THE PIPE TO PROPERLY BED AND SUPPORT THE PIPE. NO SPECIFIC DENSITY REQUIRED UNTIL THE FILL HAS REACHED A LEVEL 12 INCHES ABOVE WATER TABLE AT WHICH ELEVATION AND ABOVE, ALL BACKFILL SHALL BE COMPACTED AS SPECIFIED.

TYPICAL TRENCH SECTION

NTS

PBSJ
POST, BUCKLEY, SCHUH & JERNIGAN, INC.

CLIENT	PROJECT	TASK
CITRUS COUNTY, FLORIDA	CITRUS COUNTY	MISCELLANEOUS DETAILS
DEPARTMENT OF	CENTRAL LANDFILL EXPANSION	
TECHNICAL SERVICES	LEACHATE TREATMENT FACILITY	

ORIGINAL AUGUST 1988
REVISIONS:
1 2 3 4 5 6 7 8 9 10 11 12

NOT VALID FOR CONSTRUCTION UNLESS SIGNED IN THIS BLOCK

JOB NO. 22-081.30
DRAWN
DESIGNED
CHECKED
QC

SHEET D-1

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REPRO PRODUCTS INC. 2A