CITY OF MYRTLE BEACH, SOUTH CAROLINA

DEPARTMENT OF PUBLIC WORKS

WATER POLLUTION CONTROL FACILITIES

1979

MYRTLE BEACH WASTEWATER TREATMENT PLANT

PROJECT NO. C-450494-03

VOLUME II OF
CONTRACT DOCUMENTS

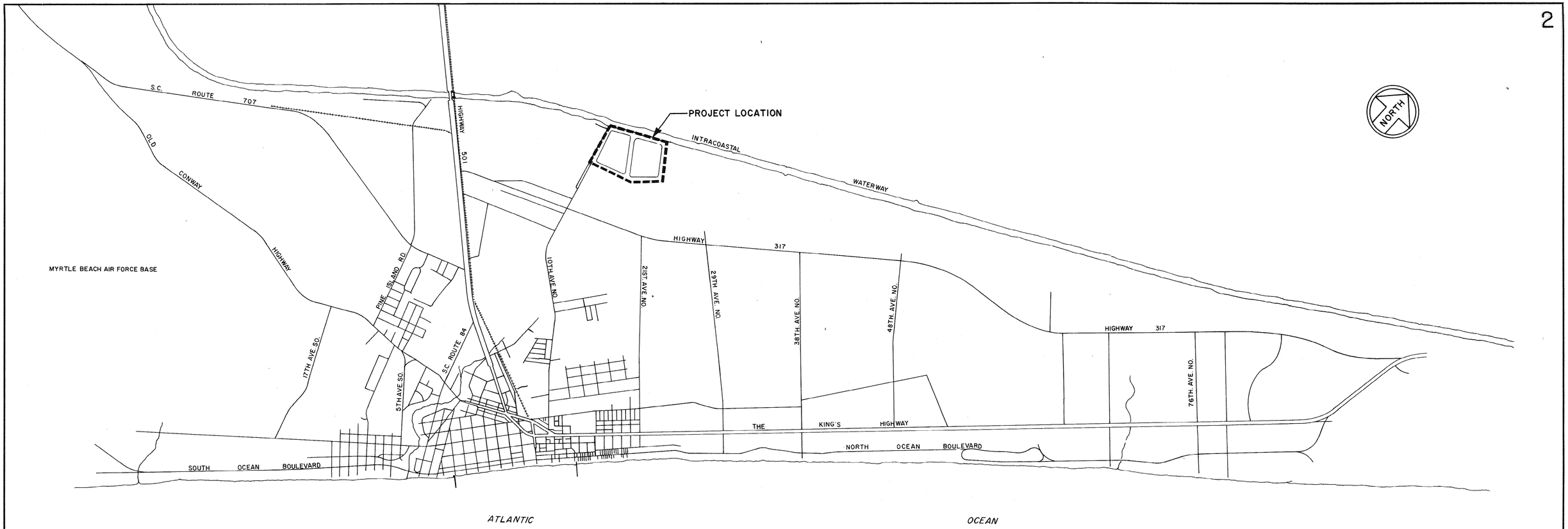
CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS
404 JAMES ROBERTSON PKWY.
NASHVILLE, TENNESSEE

51-002-001
~~51-0015~~

SHEET NO. G-1

RECORD

78284



SITE LOCATION

AREA OF WORK

1. SITE DEVELOPMENT
2. GRIT TANKS
3. LAGOON
4. ROTATING BIOLOGICAL CONTACTORS
5. FLOCCULATOR-CLARIFIERS AND CLARIFIERS
6. SLUDGE HOLDING TANK
7. SLUDGE COMPOSTING
8. CONTROL CENTER
9. PROCESS CENTER
10. WELL HOUSE

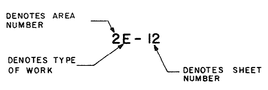
TYPE OF WORK

G	GENERAL
SD	SITE DEVELOPMENT
A	ARCHITECTURAL
S	STRUCTURAL
P	PROCESS
M	MECHANICAL
E	ELECTRICAL
X	MISCELLANEOUS

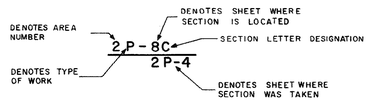
LEGEND

EXISTING CUT CONCRETE
EXISTING CUT MASONRY
EXISTING MASONRY TO BE REMOVED
EXISTING PIPING AND EQUIPMENT
EXISTING PIPING AND EQUIPMENT TO BE REMOVED
PROPOSED CUT MASONRY
PROPOSED CUT CONCRETE
PROPOSED PIPING AND EQUIPMENT

SHEET NUMBERING SYSTEM



SECTION NUMBERING SYSTEM



MYRTLE BEACH WASTEWATER TREATMENT PLANT

PROJECT NO. C-450494

SUBMITTED

CONSOER, TOWNSEND & ASSOCIATES

BY Sam L McIlwain SOUTH CAROLINA CERTIFICATE NO. 06847 DATE 1/9/80

RECOMMENDED FOR APPROVAL

George W. Howland Jr. DIRECTOR OF PUBLIC WORKS DATE 1/9/80

APPROVED CITY MANAGER DATE 1/9/80

APPROVED Erick B. Kier MAYOR DATE 1-9-80

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51-002-002

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CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
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CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

LOCATION MAP

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OF SHEETS
PROJECT NO. 78284

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SOUTH CAROLINA PROFESSIONAL ENGINEER No. 4547 SIDNEY L. McILLWAIN

51-002-003

NO.	DATE	DESCRIPTION	APPROVED
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CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

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OF SHEETS
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SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 6847 RAYMOND L. McILLWAIN

51-002-004

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED W.J.W.
DRAWN R.L.J.
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DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

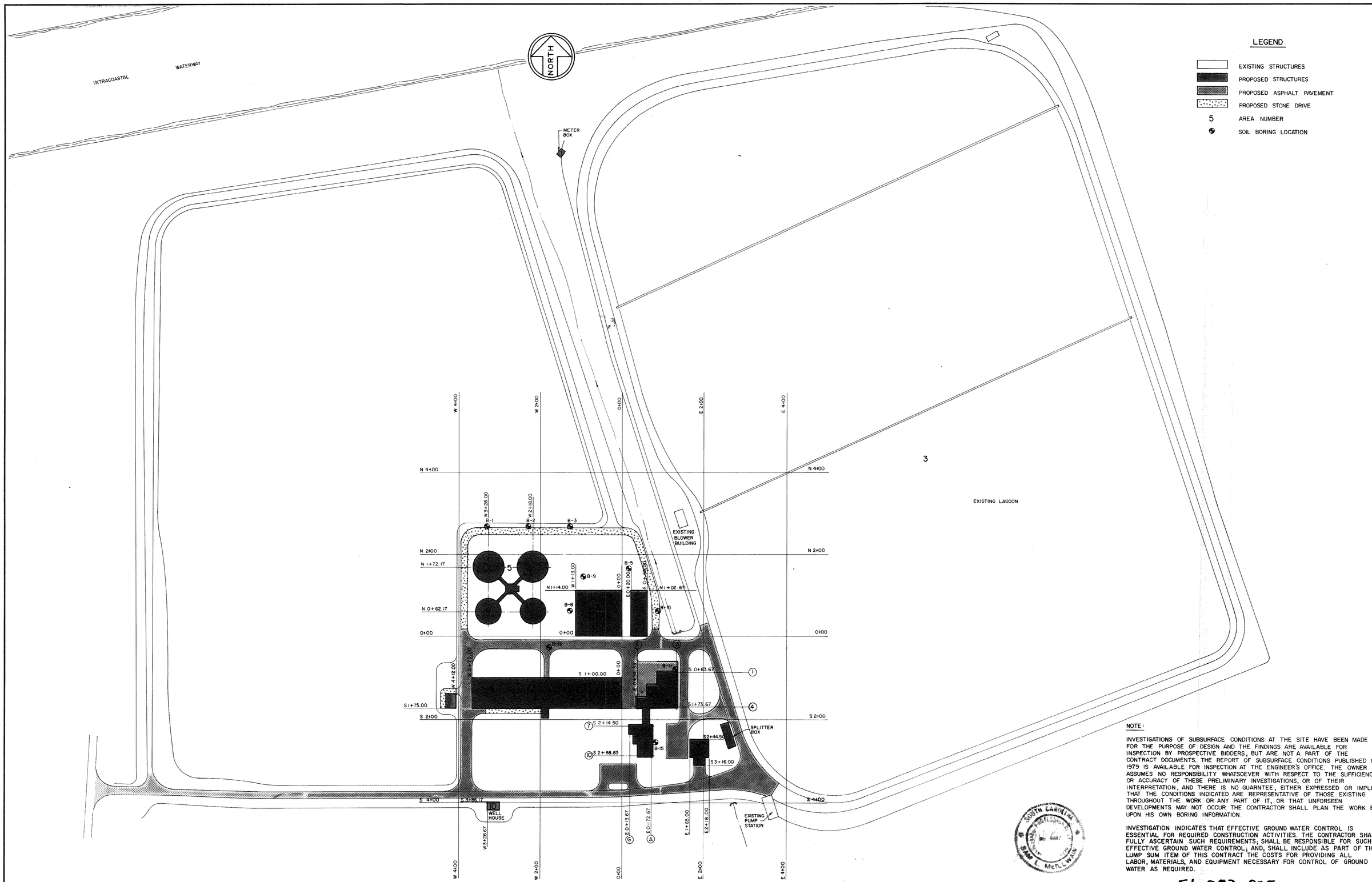
SCALE
NONE

SHEET INDEX

SHEET G-4 OF SHEETS

PROJECT NO. 78284

54-004-S RECORD



LEGEND

- EXISTING STRUCTURES
- PROPOSED STRUCTURES
- PROPOSED ASPHALT PAVEMENT
- PROPOSED STONE DRIVE
- 5 AREA NUMBER
- SOIL BORING LOCATION

NOTE:

INVESTIGATIONS OF SUBSURFACE CONDITIONS AT THE SITE HAVE BEEN MADE FOR THE PURPOSE OF DESIGN AND THE FINDINGS ARE AVAILABLE FOR INSPECTION BY PROSPECTIVE BIDDERS, BUT ARE NOT A PART OF THE CONTRACT DOCUMENTS. THE REPORT OF SUBSURFACE CONDITIONS PUBLISHED IN 1979 IS AVAILABLE FOR INSPECTION AT THE ENGINEER'S OFFICE. THE OWNER ASSUMES NO RESPONSIBILITY WHATSOEVER WITH RESPECT TO THE SUFFICIENCY OR ACCURACY OF THESE PRELIMINARY INVESTIGATIONS, OR OF THEIR INTERPRETATION, AND THERE IS NO GUARNTEE, EITHER EXPRESSED OR IMPLIED, THAT THE CONDITIONS INDICATED ARE REPRESENTATIVE OF THOSE EXISTING THROUGHOUT THE WORK OR ANY PART OF IT, OR THAT UNFORSEEN DEVELOPMENTS MAY NOT OCCUR THE CONTRACTOR SHALL PLAN THE WORK BASED UPON HIS OWN BORING INFORMATION.

INVESTIGATION INDICATES THAT EFFECTIVE GROUND WATER CONTROL IS ESSENTIAL FOR REQUIRED CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL FULLY ASCERTAIN SUCH REQUIREMENTS; SHALL BE RESPONSIBLE FOR SUCH EFFECTIVE GROUND WATER CONTROL; AND, SHALL INCLUDE AS PART OF THE LUMP SUM ITEM OF THIS CONTRACT THE COSTS FOR PROVIDING ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR CONTROL OF GROUND WATER AS REQUIRED.

51-002-005

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED W.J.W.
DRAWN R.L.J.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
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CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1"=100'

CONSTRUCTION LAYOUT - CONTROL LINES AND SOIL BORING LOCATIONS

SHEET ISD-1
OF SHEETS
PROJECT NO. 78284

51-005 5 RECORD

OUTSIDE PIPING

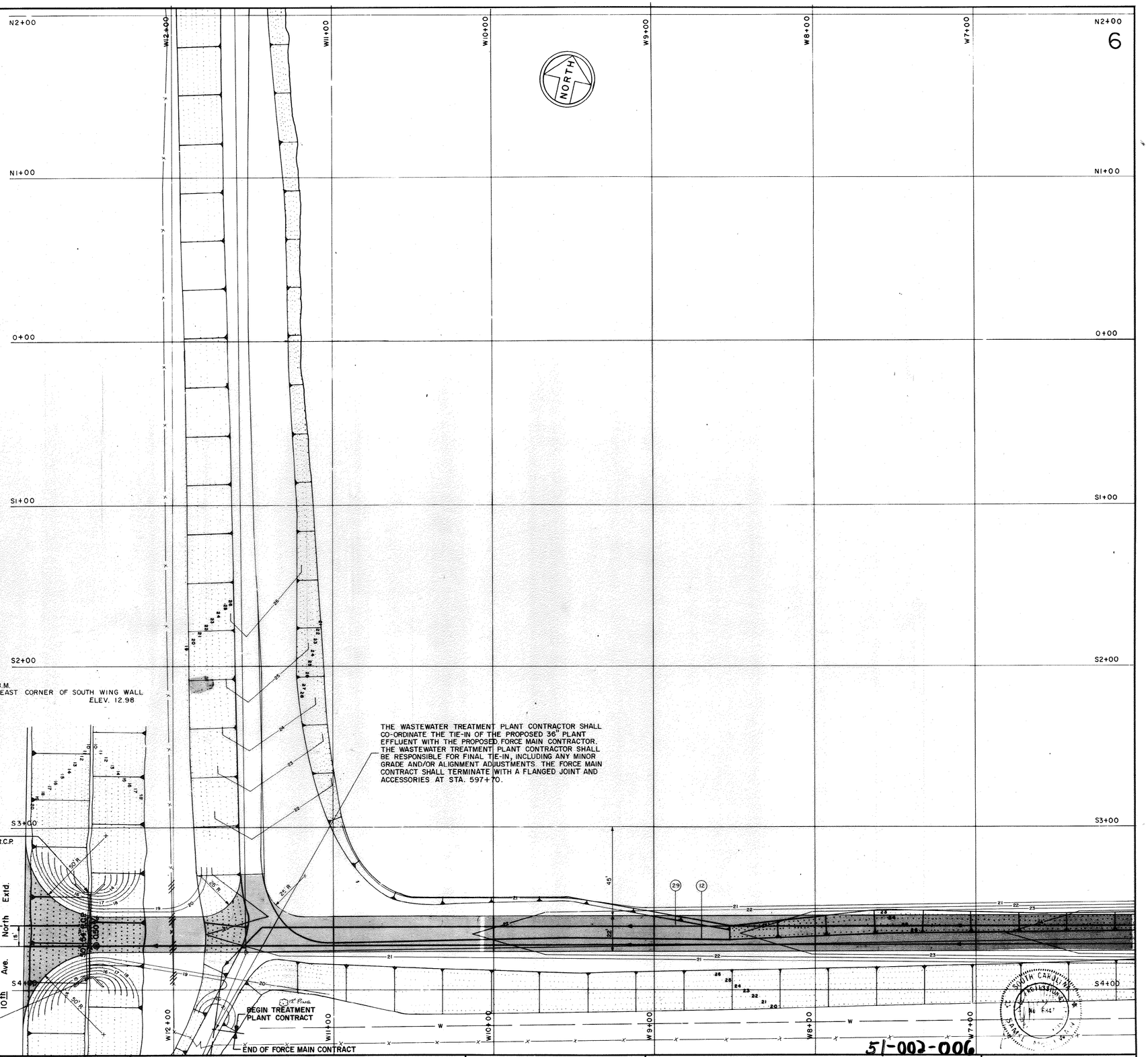
BURIED PRESSURE PIPELINES

LINE NO.	SIZE	SERVICE	TYPE	JOINT
1.	48"	Raw Wastewater	R.C.P.P.	S.E.R.G.
2.	48"	Grit Tank Effluent	R.C.P.P.	S.E.R.G.
3.	42"	Lagoon Influent	R.C.P.P.	S.E.R.G.
4.	30"	R.B.C. Influent	R.C.P.P.	S.E.R.G.
5.	24"	R.B.C. Effluent	D.I.	M.J. or P.O.
6.	24"	CLARIFIER INFLUENT	D.I.	M.J. or P.O.
7.	36"	Lagoon Effluent	R.C.P.P.	S.E.R.G.
8.	8"	Sludge	D.I.	M.J. or P.O.
9.	2½"	Lime Slurry Recirculation	G.S.P.	M.J. or P.O.
10.	6"	Sludge Holding Tank Influent	D.I.	M.J. or P.O.
11.	48"	FINAL EFFLUENT	R.C.P.P.	S.E.R.G.
12.	8"	City Water	D.I.	M.J. or P.O.
13.	2"	Sampling	P.V.C.	
14.	2-1/2"	High Pressure Effluent	P.V.C.	
15.	2"	High Pressure Effluent	P.V.C.	
16.	1-1/2"	High Pressure Effluent	P.V.C.	
17.	10"	Tank Drainage	D.I.	M.J. or P.O.
18.	18"	Low Pressure Air	D.I.	M.J. or P.O.
19.	16"	Low Pressure Air	D.I.	M.J. or P.O.
20.	14"	Low Pressure Air	D.I.	M.J. or P.O.
21.	12"	Low Pressure Air	D.I.	M.J. or P.O.
22.	10"	Low Pressure Air	D.I.	M.J. or P.O.
23.	8"	Low Pressure Air	D.I.	M.J. or P.O.
24.	6"	Low Pressure Air	D.I.	M.J. or P.O.
25.	4"	Low Pressure Air	D.I.	M.J. or P.O.
26.	8"	Scum	G.L.C.I.	M.J. or P.O.
27.	6"	Scum	G.L.C.I.	M.J. or P.O.
28.	1/2"	High Pressure Air	G.S.P.	T.O.S.
29.	36"	Plant Effluent	R.C.P.P.	S.E.R.G.
30.	4"	Spray Water	D.I.	M.J. or P.O.
31.	2-1/2"	Spray Water	G.S.P.	T.O.S.
32.	36"	Splitter Box Bypass	R.C.P.P.	S.E.R.G.
33.	36"	Lagoon Influent	R.C.P.P.	S.E.R.G.
34.	24"	Flocculator-Clarifier Influent	D.I.	M.J. or P.O.
35.	1-1/2"	Alum	P.V.C.	
36.	1"	Chlorine Solution	P.V.C.	
37.	1"	Lime Slurry	P.V.C.	
38.	6"	Sludge Holding Tank Supernatant	D.I.	M.J. or P.O.
39.	4"	Liquid Sludge	D.I.	M.J. or P.O.
40.	6"	Drain	D.I.	M.J. or P.O.
41.	8"	Well Water	D.I.	M.J. or P.O.
42	1-1/4"	High Pressure Effluent	P.V.C.	

GRAVITY SEWERS AND DRAINS

LINE NO.	SIZE	SERVICE	TYPE	JOINT
A	18"	Tank Drainage	D.I.	M.J. or P.O.
B	12"	Tank Drainage	D.I.	M.J. or P.O.
C	10"	Tank Drainage	D.I.	M.J. or P.O.
D	8"	Tank Drainage	D.I.	M.J. or P.O.
E	6"	Tank Drainage	D.I.	M.J. or P.O.
F	4"	Tank Drainage	D.I.	M.J. or P.O.
G	4"	Splash Pad Drain	P.V.C.	

NOTE:
1. FOR LEGEND AND GENERAL NOTES SEE SHEET ISD-6.



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NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

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DRAWN R.A.D.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1" = 30'

SITE DEVELOPMENT

SHEET ISD-2
OF SHEETS
PROJECT NO. 78284

51-006 5

7

NOTES:
1. FOR LEGEND AND GENERAL NOTES SEE SHEET ISD-6.
2. FOR LIST OF PROPOSED OUTSIDE PIPING SEE SHEET ISD-2.

FLOCCULATOR-CLARIFIER
FLOCCULATOR-CLARIFIER
CLARIFIER
CLARIFIER
5
4
ROTATING BIOLOGICAL CONTACTORS
6
SLUDGE HOLDING TANK
7
SLUDGE COMPOSTING PAD
9
PROCESS CENTER
8
OPERATIONS CENTER
GRIT TANKS
2
3
10
EXISTING LAGOON
EXISTING PUMPING STATION
BLOWER BUILDING
DEODORIZING PAD
MANHOLE "B"
M.H. "A"
CHAMBER "A"
CHAMBER "D"
MCC & PSI PAD
MCC P22 PAD
SWGR SI PAD
BACKFLOW PREVENTORS
FLAG POLE
VALVE BOX
CONCRETE CURB
LIQUID SLUDGE LOADING STATION
GENERATOR FUEL TANK (550 GAL. CAPACITY)
GENERATOR PAD
PROPANE TANKS
GENERATOR FUEL TANK
GENERATOR PAD
SPLITTER BOX
Inv. Elev. 12.8±
Total Deflection Of 3°± Shall Be Accomplished In 3 Joints
50 S.Y. OF GROUTED RUBBLE RIP-RAP
ENDWALL
Inv. Elev. 10.88, 72" R.C.P.
Inv. Elev. 11.75, 30" R.C.P.
DROP M.H.
Inv. Elev. 0.76, W.
Inv. Elev. 15.00, S.
STD. M.H.
Inv. Elev. 17.00
SITE DRAIN
Rim Elev. 28.00
Inv. Elev. 19.90
SIGN "EMPLOYEE PARKING"
SIGN "HANDICAPPED PARKING ONLY"
SIGN "VISITORS & EMPLOYEES & AUTHORIZED VEHICLES ONLY"
SIGN "AUTHORIZED VEHICLES ONLY"
STD. INLET
Rim Elev. 33.00
Inv. Elev. 29.00
STD. M.H.
Inv. Elev. 20.50
STD. INLET
Rim Elev. 33.00
Inv. Elev. 27.58, W.
Inv. Elev. 27.38, E.
6' DIA. M.H.
Inv. Elev. 28.00
STD. M.H.
Inv. Elev. 19.60
Inv. Elev 13.88, S.
Inv. Elev 13.48, N.
Inv. Elev. 15.56, E
STD. M.H.
Inv. Elev. -0.42
STD. M.H.
Inv. Elev. -1.78
STD. M.H.
Inv. Elev. -2.05
STD. M.H.
Inv. Elev. -2.30
STD. M.H.
Inv. Elev. -2.22
STD. M.H.
Inv. Elev. -1.67
SITE DRAIN
Rim Elev. 17.75
Inv. Elev. 12.24
SITE DRAIN
Rim Elev. 18.00
Inv. Elev. 15.00
SITE DRAIN
Rim Elev. 18.00
Inv. Elev. 14.00, E.
Inv. Elev. 16.72, S.
SITE DRAIN
Rim Elev. 19.00
Inv. Elev. 12.78
SITE DRAIN
Rim Elev. 19.00
Inv. Elev. 15.76, E.
Inv. Elev. 15.10, W.
SITE DRAIN
Rim Elev. 18.00
Inv. Elev. 13.17
SITE DRAIN
Rim Elev. 19.00
Inv. Elev. 15.50
SITE DRAIN
Rim Elev. 19.00
Inv. Elev. 14.88, W.
Inv. Elev. 14.48, N.
115'-15" R.C.P. @ 1.00%
100'-15" R.C.P. @ 0.52%
152'-15" R.C.P. @ 0.80%
166'-15" R.C.P. @ 1.40%
70'-8" D.I.P. @ 2.40%
50'-8" D.I.P. @ 2.40%
183'-15" R.C.P. @ 4.20%
150'-18" R.C.P. @ 0.48%
115'-24" R.C.P. @ 0.48%
70'-18" R.C.P. @ 0.40%
150'-15" R.C.P. @ 0.48%
30'-4" D.I.P. @ 1.00%
(17'-6" D.I.P. @ 1.00%)
70'-8" D.I.P. @ 2.30%
8" SAN.
20" FM
Inv. Elev. 19.90
Inv. Elev. 13.91
Inv. Elev. 19.00

N2+00 N1+00 0+00 S1+00 S2+00 S3+00 S4+00
W5+00 W4+00 W3+00 W2+00 W1+00 0+00 E1+00 E2+00 E3+00

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED S. P. S.
DRAWN R. A. D.
CHECKED S. L. M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

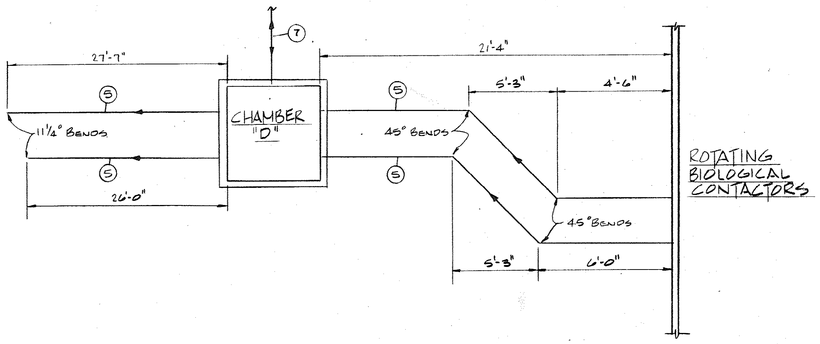
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

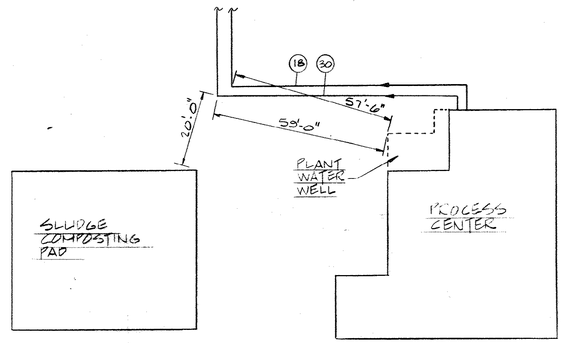
SCALE
1" = 30'

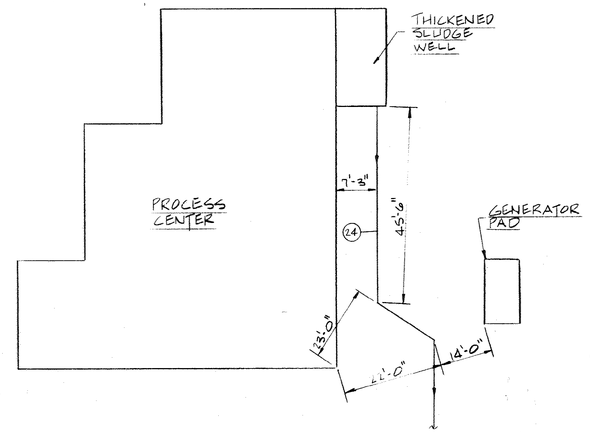
SITE DEVELOPMENT

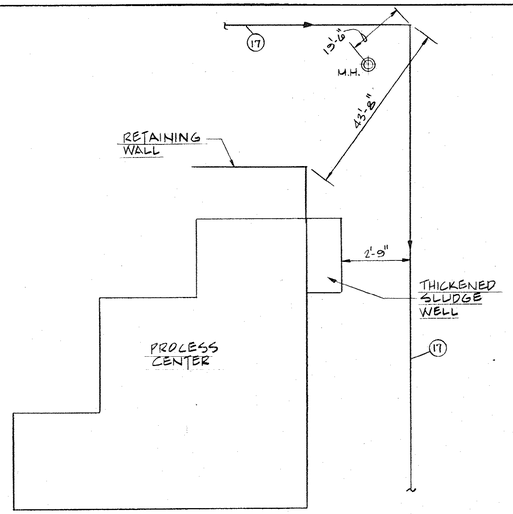
SHEET ISD-3
OF SHEETS
PROJECT NO. 78284

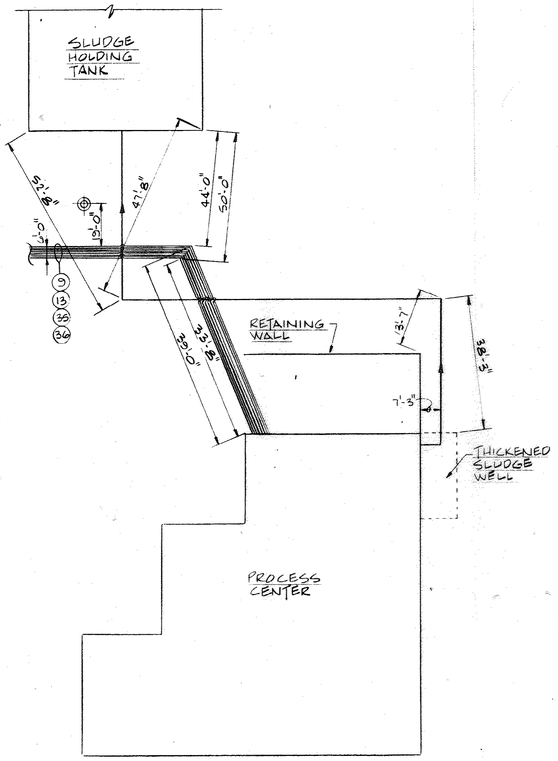
51-003-007
51-007 S
RECORD

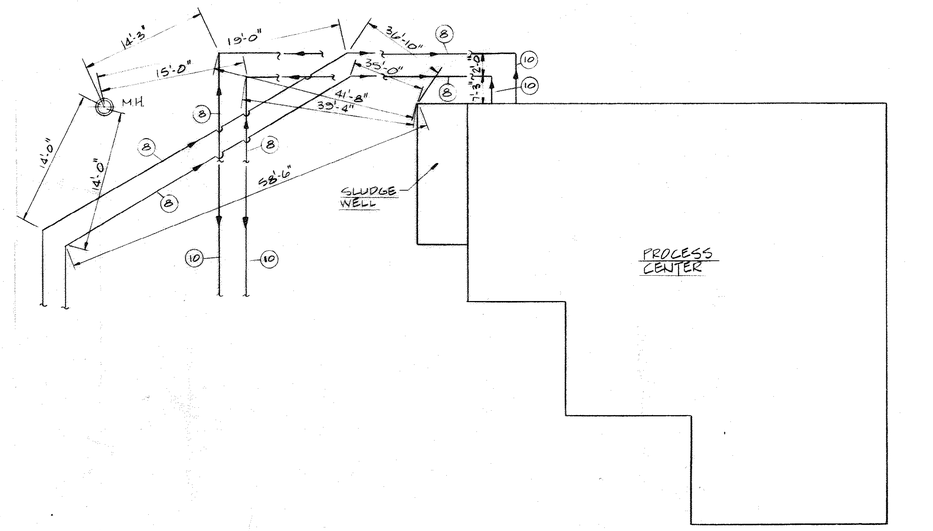












NOTES:
1. SEE DRAWING SD-2 FOR OUTSIDE PIPING LIST.
2. SEE DRAWING SD-3 AND PLAN DRAWINGS FOR ADDITIONAL OUTSIDE PIPING LOCATIONS.

51-002-008

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED
DRAWN
CHECKED
DATE

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

OUTSIDE PIPING RELOCATION SKETCHES

SHEET ISD-3A
OF SHEETS
PROJECT NO. 78284

~~51-002-008~~ S

W5+00 W4+00 W3+00 W2+00 W1+00 0+00 E1+00 E2+00 E3+00

N8+00 N7+00 N6+00 N5+00 N4+00 N3+00 N2+00

NORTH

NOTES

1. FOR LEGEND AND GENERAL NOTES SEE SHEET ISD-6.
2. FOR LIST OF PROPOSED OUTSIDE PIPING SEE SHEET ISD-2.

FOR PIPE CROSSING DETAIL SEE SH. ISD-7

EXISTING BLOWER BUILDING

10 S.Y. OF GROUTED RUBBLE RIP-RAP

ENDWALL
Inv. Elev. 9.10 , 24" R.C.P.

SITE DRAIN
Rim Elev. 18.00
Inv. Elev. 13.39, S.&W.
Inv. Elev. 10.50, E.

SITE DRAIN
Rim Elev. 18.00
Inv. Elev. 9.46

STD. M.H.
Rim Elev. 20.00
Inv. Elev. 14.48

CHAMBER "C"

CHAMBER "B"

210' - 15" R.C.P. @ 0.52%

160' - 24" R.C.P. @ 0.52%

64' - 24" R.C.P. @ 0.69%

FLOCCULATOR-CLARIFIER

FLOCCULATOR-CLARIFIER

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 6441

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED S.P.S.
DRAWN R.A.D.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1" = 30'

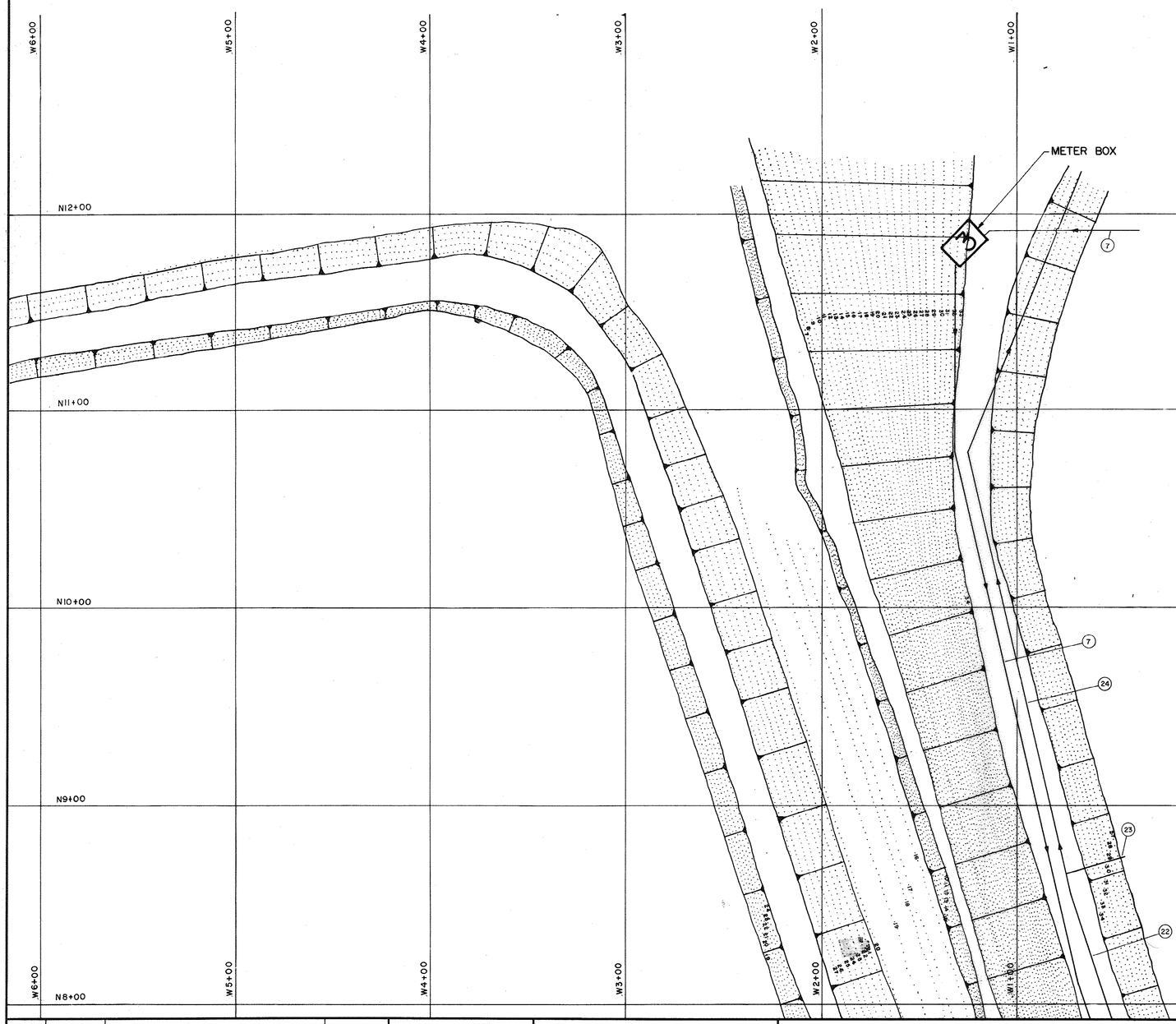
SITE DEVELOPMENT

SHEET ISD-4
OF SHEETS

PROJECT NO. 78284

51-002-009
ST-002-S
RECORD

NOTES
1. FOR LEGEND AND GENERAL NOTES SEE SHEET ISD-6.
2. FOR LIST OF PROPOSED OUTSIDE PIPING SEE SHEET ISD-2.



SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER SAM J. McILLWAIN No. 6462

51-002-010

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED S. P. S.
DRAWN R. A. D.
CHECKED S. L. M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

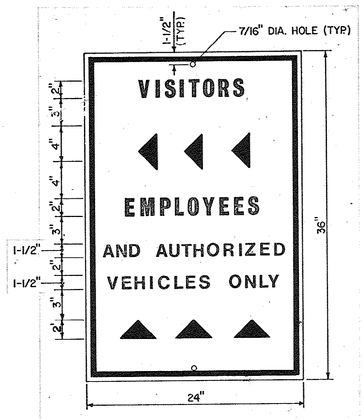
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

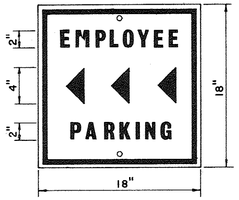
SCALE
1" = 30'

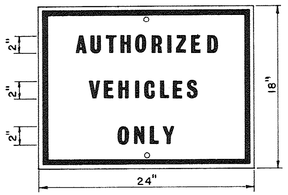
SITE DEVELOPMENT

SHEET ISD-5
OF SHEETS
PROJECT NO. 78284

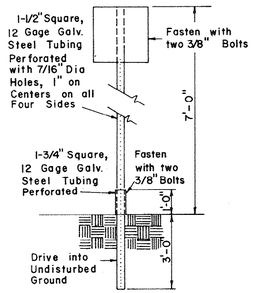
51-010 S
RECORD





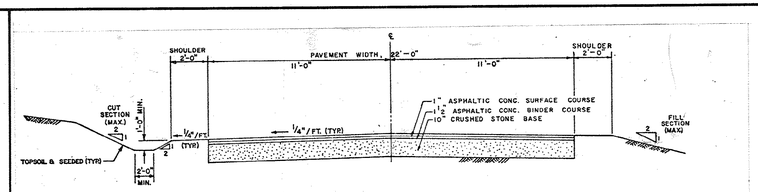


NOTE: Signs are to be formed steel painted white with blue enamel characters

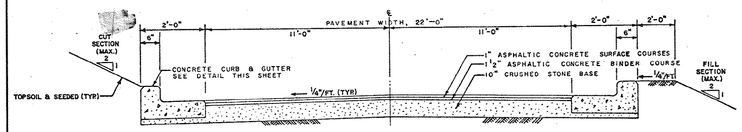


SIGN & SIGN POST DETAILS

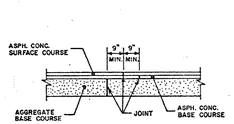
NOT TO SCALE



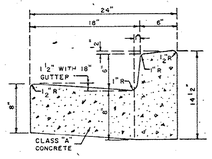
TYPICAL ROAD SECTION



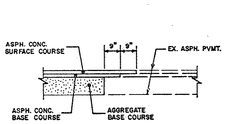
TYPICAL ROAD SECTION
WITH CONCRETE CURB & GUTTER



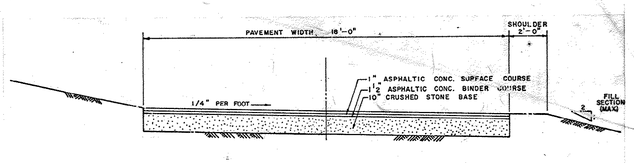
CONSTRUCTION JOINT
FOR ASPHALT PAVEMENT



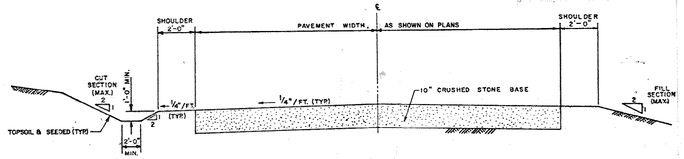
TYPICAL CROSS-SECTION OF
CURB & GUTTER



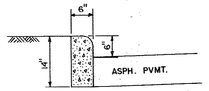
JOINT TO MATCH
EXISTING PAVEMENT



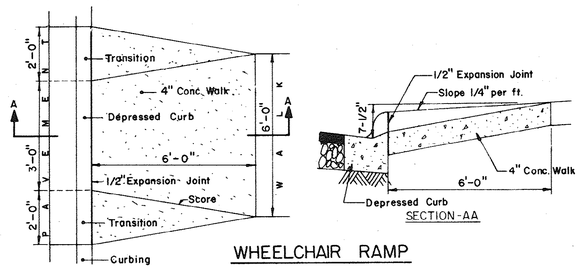
TYPICAL ROAD SECTION
WITHOUT CROWN



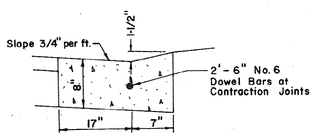
TYPICAL CRUSHED STONE
ROAD SECTION



CONCRETE CURB DETAIL



WHEELCHAIR RAMP



DEPRESSED CURB

LEGEND

SYMBOLS

- 420 — EXISTING CONTOUR LINE
- 418 — PROPOSED CONTOUR LINE
- EXISTING BACKFILL SLOPE
- (19.8) PROPOSED ELEVATION
- EXISTING OUTSIDE PIPING
- EXISTING MANHOLE
- EXISTING SITE DRAIN
- EXISTING UTILITY POLE
- EXISTING UTILITY POLE WITH GUY WIRE
- 6"—G— EXISTING GAS LINE
- 6"—W— EXISTING WATER LINE
- EXISTING GAS VALVE
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- EXISTING HEADWALL
- —x—x— EXISTING FENCE
- PROPOSED YARD HYDRANT
- PROPOSED BULKHEAD
- EXISTING STREET WASHER
- E EXISTING ELECTRICAL DUCT BANK AND MANHOLE / HANDHOLE
- PROPOSED OUTSIDE PROCESS PIPING
- PROPOSED STORM SEWER
- PROPOSED MANHOLE
- PROPOSED STANDARD INLET OR SITE DRAIN
- PROPOSED FIRE HYDRANT
- PROPOSED HEADWALL
- PROPOSED CHAIN-LINK FENCE
- PROPOSED SIGN
- PROPOSED GUARD RAIL
- PROPOSED CONCRETE WALK
- OUTSIDE PIPING TO BE ABANDONED
- FENCE TO BE REMOVED
- PROPOSED ROADWAY
- PROPOSED ROADWAY WITH CURB AND GUTTER
- PROPOSED CRUSHED STONE ROADWAY
- PROPERTY LINE
- Ⓐ COLUMN LINE
- GUTTER X-SLOPE TOWARD PAVEMENT

ABBREVIATIONS

B.M.	BENCHMARK	STA.	STATION
ELEV.	ELEVATION	℄	CENTER LINE
℞	PROPERTY LINE	Δ	DEFLECTION ANGLE
MON.	MONUMENT	T.	TANGENT LENGTH
INV.	INVERT	L.	LENGTH OF CURVE
R.	RADIUS OF CURVE	STD.	STANDARD
P.C.	POINT OF CURVATURE	M.H.	MANHOLE
P.I.	POINT OF INTERSECTION	CONC.	CONCRETE
P.T.	POINT OF TANGENCY	PVMT.	PAVEMENT
P.R.C.	POINT OF REVERSE CURVATURE	ASPH.	ASPHALT
P.C.C.	POINT OF COMPOUND CURVATURE	R.C.P.	REINFORCED CONCRETE PIPE

GENERAL NOTES

1. FOR LIST OF PROPOSED OUTSIDE PIPING, SEE SHEET NO. ISD-2.
2. THE LOCATION OF EXISTING UNDERGROUND PIPING IS SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UNDERGROUND PIPING PRIOR TO COMMENCING WORK IN EACH AREA. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE ANY AND ALL UNDERGROUND PIPING.
3. INSTALLATION OF PROPOSED FENCING AND REMOVAL AND STORAGE OF ANY EXISTING FENCING TO BE COORDINATED WITH THE OWNER. CONTRACTOR TO INSURE THAT ENTIRE PLANT SITE IS FENCED AT ALL TIMES.
4. PROPOSED FENCE SHALL CONFORM TO CONTRACT SPECIFICATIONS. DIMENSIONS AND DIRECTION OF GATE OPENINGS SHALL BE AS INDICATED ON DRAWINGS.
5. ALL AREAS WITHIN EXISTING AND PROPOSED PLANT FENCING NOT COVERED BY BUILDINGS, PAVEMENT, AND APPURTENANCES SHALL BE TOPSOILED AND SEEDED UNLESS SUCH AREAS HAVE EXISTING LAWN ESTABLISHED.
6. EXISTING PAVEMENT DAMAGED BY CONSTRUCTION, SHALL BE REPLACED OR RESTORED BY CONTRACTOR AS DIRECTED BY THE ENGINEER.
7. ALL TREES AND SHRUBBERY DISPLACED BY PROPOSED IMPROVEMENTS SHALL BE TRANSPLANTED OR REPLACED BY THE CONTRACTOR TO LOCATIONS WITHIN THE SITE AS DIRECTED BY THE ENGINEER.
8. EXISTING PAVEMENT AND GUTTER SHALL BE NEAT LINE CUT WITH AN ASPHALT CUTTING CHISEL AND/OR CONCRETE SAW WHERE EXISTING AND PROPOSED PAVEMENT CONNECTS. PROPOSED PAVEMENT SHALL BE BLENDED AT THESE LOCATIONS TO MATCH EXISTING PAVEMENT.
9. THE LOCATION OF EXISTING UNDERGROUND ELECTRICAL INSTALLATIONS ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UNDERGROUND ELECTRICAL INSTALLATIONS PRIOR TO COMMENCING WORK IN EACH AREA. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE ANY AND ALL UNDERGROUND ELECTRICAL INSTALLATIONS.
10. A CONSTRUCTION SCHEDULE WHICH CAN BE EFFECTIVELY COORDINATED WITH THE GRADING AND CLEARING ACTIVITY, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO BEGINNING THE CONSTRUCTION.
11. EROSION AND SEDIMENTATION CONTROL:
    A. ROADWAYS AND PARKING LOTS SHALL BE PAVED OR OTHERWISE STABILIZED AND EXPOSED AREAS SUBJECT TO EROSION SHALL BE COVERED BY MEANS OF MULCHING OR VEGETATION AS QUICKLY AS FEASIBLE.
    B. WHENEVER POSSIBLE, NATURAL VEGETATION SHALL BE RETAINED AND TOPSOIL SHALL BE REMOVED AND STOCKPILED BEFORE GRADING BEGINS.

51-002-011

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED S. P. S.
DRAWN R. A. D.
CHECKED S. L. M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

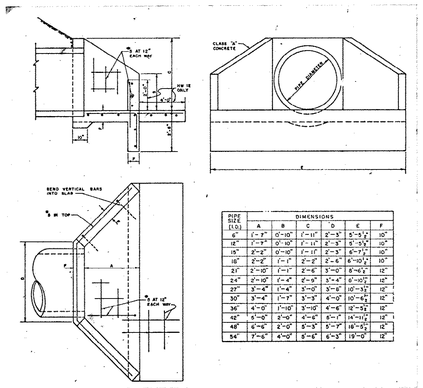
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

SITE DEVELOPMENT DETAILS

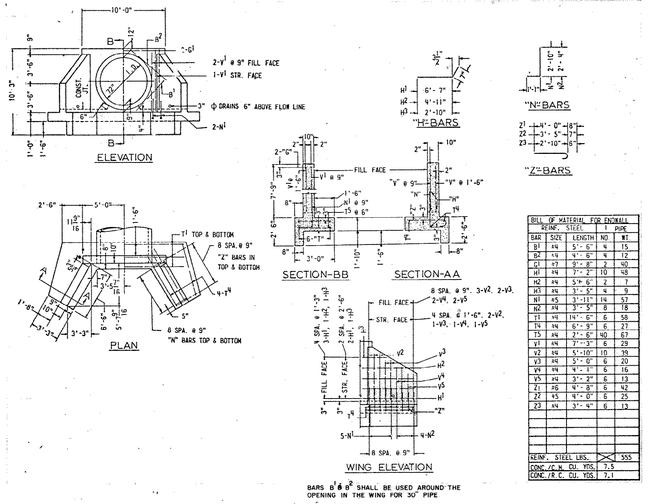
SHEET ISD-6
OF SHEETS
PROJECT NO. 78284

54-011 5 RECORD



PIPE SIZE (I.D.)	DIMENSIONS A	B	C	D	E	F
6"	1'-7"	0'-10"	1'-11"	2'-3"	5'-3½"	10"
12"	1'-7"	0'-10"	1'-11"	2'-3"	5'-3½"	10"
15"	2'-2"	0'-10"	1'-11"	2'-3"	6'-1"	10"
18"	2'-8"	1'-1"	2'-6"	2'-6"	6'-10½"	10"
21"	2'-10"	1'-1"	2'-6"	3'-0"	6'-6½"	12"
24"	2'-10"	1'-4"	2'-9"	3'-4"	6'-10½"	12"
27"	3'-4"	1'-4"	3'-0"	3'-6"	8'-0½"	12"
30"	3'-4"	1'-7"	3'-3"	4'-0"	10'-6½"	12"
36"	4'-0"	1'-10"	3'-10"	4'-6"	12'-5½"	12"
42"	4'-0"	2'-0"	4'-4"	5'-0"	14'-0½"	12"
48"	4'-6"	2'-0"	5'-3"	5'-9"	16'-5½"	12"
54"	5'-6"	4'-0"	5'-6"	6'-3"	19'-0"	12"

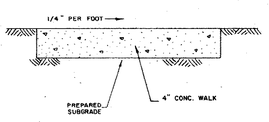
CONCRETE ENDWALL
For Single 6" To 54" Pipes



BILL OF MATERIAL FOR ENDWALL				
REINF. STEEL			1 PIPE	
BAR	SIZE	LENGTH	NO	WT.
B1	#4	5'-6"	4	15
B2	#5	6'-6"	4	12
C1	#3	9'-8"	2	40
H1	#4	7'-2"	10	48
H2	#4	5'-6"	2	7
H3	#4	3'-5"	4	9
N1	#5	3'-11"	14	57
N2	#4	3'-5"	8	18
T1	#4	14'-6"	6	58
T4	#4	6'-5"	6	27
T5	#4	7'-6"	40	67
V1	#4	7'-3"	6	29
V2	#4	5'-10"	10	39
V3	#4	5'-0"	6	20
V4	#4	4'-1"	6	16
V5	#4	3'-2"	6	13
Z1	#5	4'-8"	6	42
Z2	#5	4'-0"	6	25
Z3	#4	3'-4"	6	13
REINF. STEEL LBS.				555
CONC./C.Y. CU. YDS.				7.5
CONC./R.C. CU. YDS.				7.1

CONCRETE ENDWALL
For Single 72" Pipe

CONCRETE ENDWALLS



CONCRETE WALK

NOTE:
PREFORMED JOINT FILLER MATERIAL TO CONFORM TO AASHO M 213. SIDEWALKS TO BE SCORED TRANSVERSLY AT 5'-0" INTERVALS. PROVIDE 1/2" EXPANSION JOINTS AT 30'-0" INTERVALS, BETWEEN NEW AND EXISTING WALKS, AND WHERE WALKS ARE ADJACENT TO BUILDING, OR AS SHOWN ON PLANS. SLOPE WALKS 1/4" PER FOOT IN DIRECTION OF DRAINAGE.

CONTRACTION JOINTS IN CURBS ADJACENT TO BITUMINOUS PAVEMENTS SHALL BE PROVIDED AT 10'-0" INTERVALS. 1/2" EXPANSION JOINTS SHALL BE PLACED AT ENDS OF CURVED SECTIONS, AND AT UNIFORM INTERVALS NOT TO EXCEED 60'.

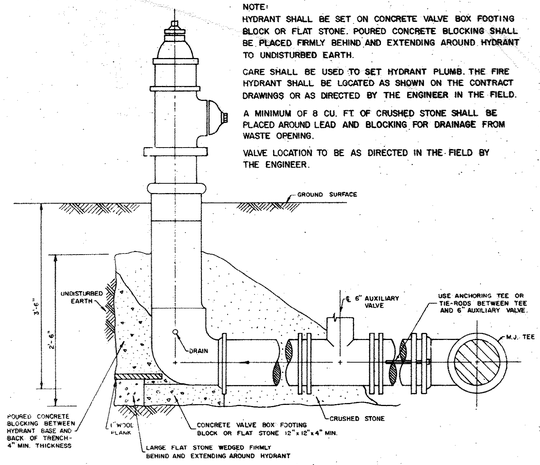
JOINTS IN CURBS ADJACENT TO P.C.C. PAVEMENT SHALL COINCIDE WITH PAVEMENT JOINTS.

NOTE:
HYDRANT SHALL BE SET ON CONCRETE VALVE BOX FOOTING BLOCK OR FLAT STONE. POURED CONCRETE BLOCKING SHALL BE PLACED FIRMLY BEHIND AND EXTENDING AROUND HYDRANT TO UNDISTURBED EARTH.

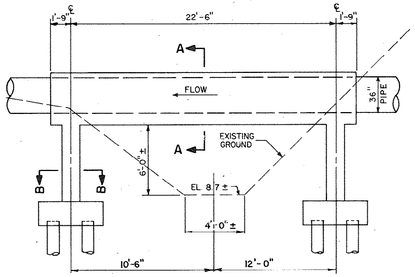
CARE SHALL BE USED TO SET HYDRANT PLUMB. THE FIRE HYDRANT SHALL BE LOCATED AS SHOWN ON THE CONTRACT DRAWINGS OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

A MINIMUM OF 8 CU. FT. OF CRUSHED STONE SHALL BE PLACED AROUND LEAD AND BLOCKING FOR DRAINAGE FROM WASTE OPENING.

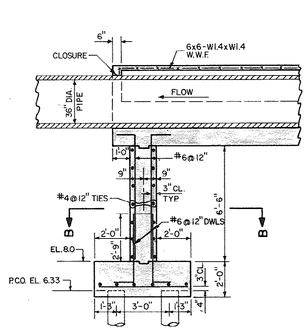
VALVE LOCATION TO BE AS DIRECTED IN THE FIELD BY THE ENGINEER.

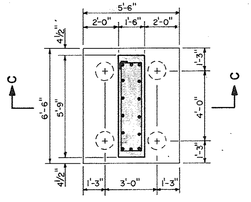


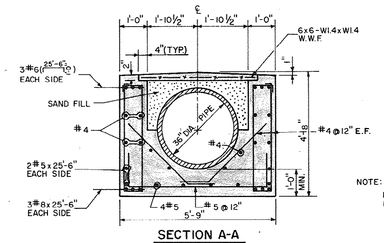
FIRE HYDRANT



PILE NOTE:
ALL PILES SHOWN ON THIS SHT. SHALL BE TREATED TIMBER OR DRILLED-IN-PLACE CONCRETE BEARING PILES (BEARING CAPACITY 20 TONS). SEE SHT XS-1 AND SPEC'S. FOR PILE DETAILS.

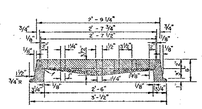




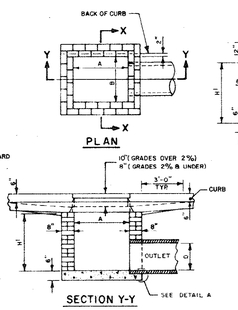


NOTE:
PROVIDE POCKET FOR PIPE FLANGE AS REQUIRED

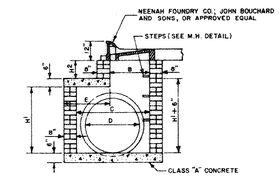
PIPE CROSSING DETAIL

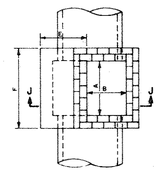


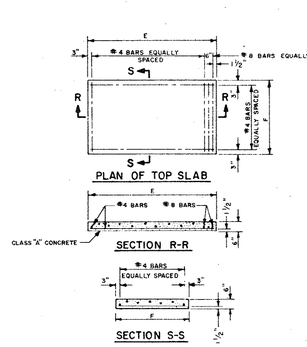
DIMENSIONS FOR SITE DRAINS							
DIMENSIONS OF BOX AND PIPE						COVER DIMENSION	
PIPE	SPAN	WIDTH	WIDTH	HEIGHT	HEIGHT		
D	A	B	C	MIN H¹	H²	E	F
15"	2'-1.4"	2'-4"	—	2'-6"	—	—	—
18"	"	"	—	2'-10"	—	—	—
24"	"	"	—	3'-4"	—	—	—
30"	"	"	3'-4"	3'-2"	VARIES	1'-10"	4'-4"
36"	"	"	3'-10"	3'-8"		2'-4"	4'-4"



DIMENSIONS FOR CURB & GUTTER INLETS								
DIMENSIONS OF BOX AND PIPE							COVER DIMENSION	
PIPE	SPAN	WIDTH	WIDTH	HEIGHT	HEIGHT			
D	A	B	C	MIN H¹	H²		E	F
15"	3'-0"	2'-2"	—	2'-6"	—		—	—
18"	"	"	—	2'-10"	—		—	—
24"	"	"	—	3'-4"	—		—	—
30"	"	"	3'-4"	3'-2"	VARIES		1'-10"	4'-4"
36"	"	"	3'-10"	3'-8"			2'-4"	4'-4"

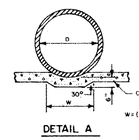






GENERAL NOTES:
1. ALL INLETS OVER 3'-6" IN DEPTH TO BE PROVIDED WITH STEPS 1'-0" ON CENTERS. STEPS SHALL BE IN ACCORDANCE WITH STD. M.H. DETAIL.
2. ALL EXPOSED CONC. CORNERS TO BE CHAMFERED 1". CLASS 'A' CONC. TO BE USED.
3. ALL MORTAR JOINTS ARE TO BE 1/2" ±1/8".
4. ALL EXPOSED JOINTS WILL BE CONCAVE TOOLED.
5. FORMS ARE TO BE USED FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
6. FOR 8'-0" IN HEIGHT OR LESS USE 8" WALL OVER 8'-0" IN HEIGHT USE 12" WALL TO 6'-0" FROM TOP OF WALL AND 8" WALL FOR THE REMAINING 6'-0".

STANDARD BRICK INLET



51-002-012

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED S.P.S.
DRAWN R.A.D.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

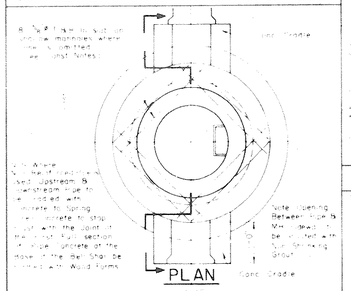
SITE DEVELOPMENT DETAILS

SHEET ISD-7
OF SHEETS
PROJECT NO. 78284

51-012 S RECORD

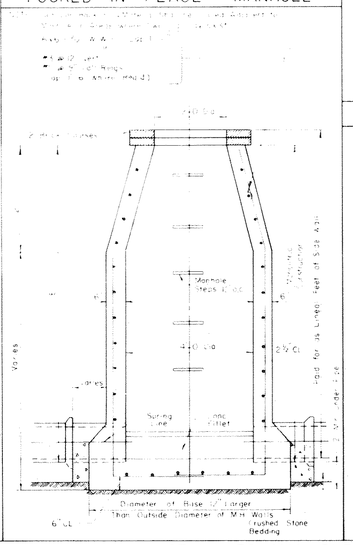
STANDARD MANHOLES

FOR SEWERS 36" DIAMETER & SMALLER

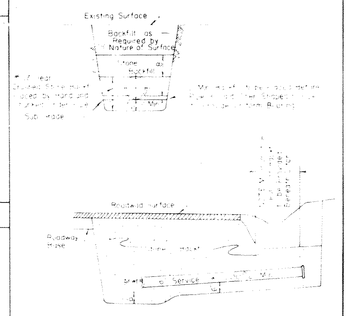


CONSTRUCTION NOTES

POURED - IN - PLACE MANHOLE

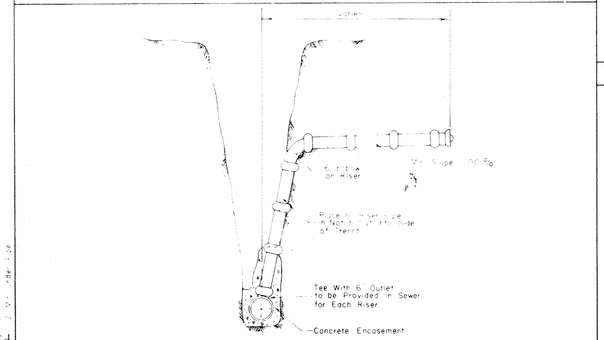


SERVICE LINE



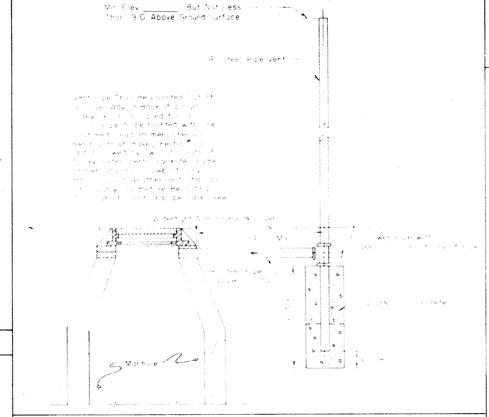
CONCRETE CAP

SEWER SERVICE RISER INSTALLATION

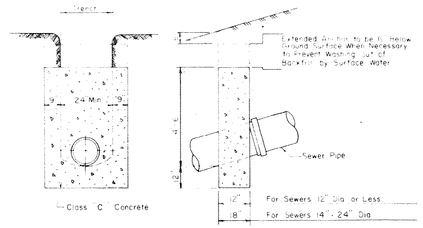


NOTE: All Cost of Concrete Encasement Required for Riser Pipe Installation, Including Joint Tee and 6" Pipe Encasement Will Be Merged Into Price Per Lineal Foot of 6" Riser and/or Services. No Additional Compensation Will be Allowed for Riser Installation

VENT PIPE ASSEMBLY



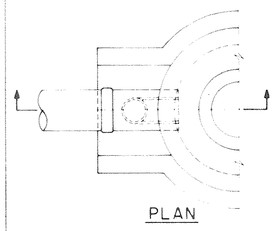
CONCRETE ANCHOR

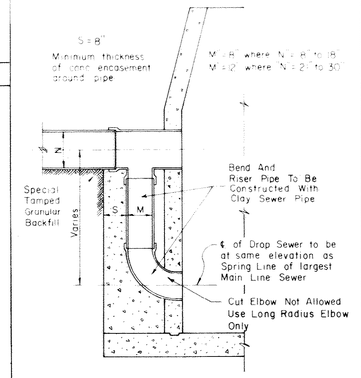


NOTE: Provide no Anchor on Grades Less Than 20% Unless Noted. Provide Anchor 36" C-C On Grades Between 20% and 34%. Provide Anchor 24" C-C On Grades Between 34% and 50% For Conditions Other Than Shown Hereon Provide Anchors as Required by the Contract or Ordered by the Engineer in the Field

Concrete Shall be Paid for Under Contract Item for Concrete Cradle and/or Encasement

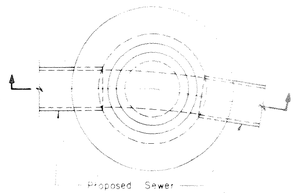
DROP PIPE FOR STANDARD MANHOLES





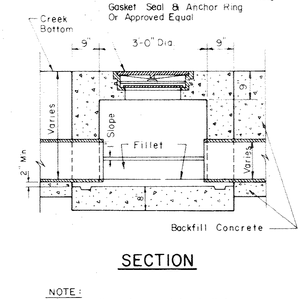
CREEK BOTTOM MANHOLE

12



PLAN

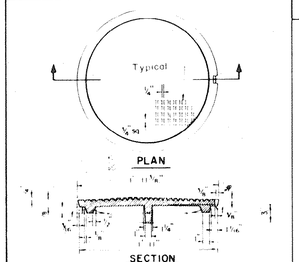
Manhole Frame & Cover
John Bouchard & Sons Foundry
Cat No 1121 Or Neenah Foundry
Cat No R-1755-C With "O" Ring
Gasket Seal & Anchor Ring
Or Approved Equal



SECTION

NOTE: Sidewall and top slab shall be monolithic

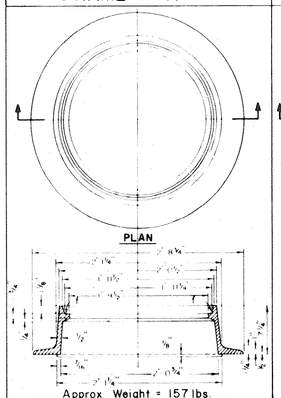
WATERTIGHT MANHOLE COVERS



STANDARD MANHOLE FRAMES & COVERS

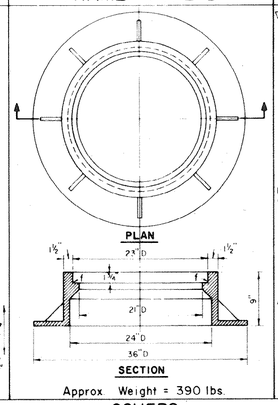
FRAMES

FRAME - NO. 11



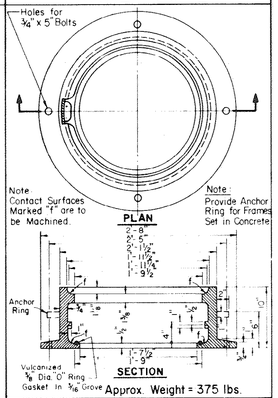
Approx. Weight = 157 lbs.

FRAME - TYPE "B"



Approx. Weight = 390 lbs.

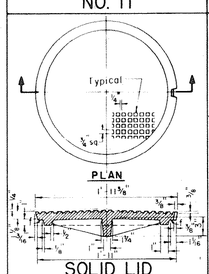
FRAME - NO. 12



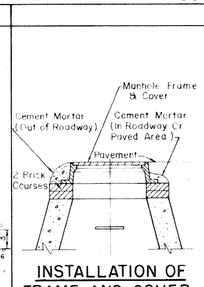
Approx. Weight = 375 lbs.

COVERS

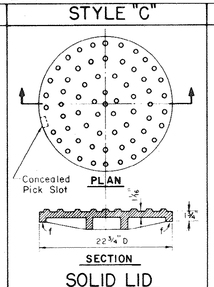
NO. 11



Approx. Weight 150 lbs.

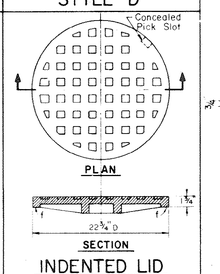


STYLE "C"



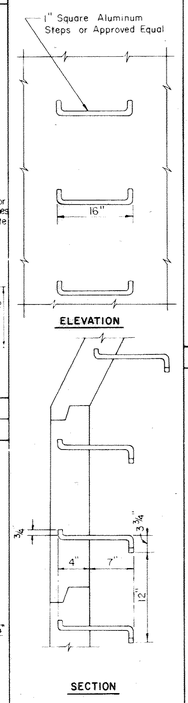
Approx. Weight 150 lbs

STYLE "D"



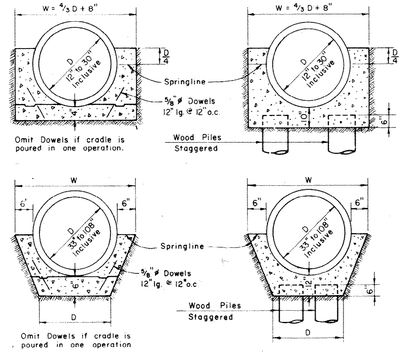
Approx. Weight 150 lbs.

STANDARD LADDER STEPS



CONCRETE CRADLES

STANDARD CRADLE



STANDARD CRADLE DIMENSIONS & PAYMENT VOLUMES			
Internal Pipe Diameter	Width as shown	Payment Volumes of Concrete Cradle in Cubic Yards per Lineal Feet of Pipe	
D	W	Without Piling	With Piling
12"	24"	.052	.089
15"	28"	.065	.108
18"	32"	.078	.127
21"	36"	.092	.147
24"	40"	.107	.169
27"	44"	.122	.189
30"	48"	.142	.216
33"	52½"	.123	.189
36"	56"	.136	.207
42"	63"	.163	.244
48"	70"	.191	.282
54"	77"	.222	.323
60"	84"	.254	.365
66"	91"	.288	.409
72"	98"	.324	.455
78"	105"	.362	.503
84"	112"	.401	.553
90"	118"	.443	.604
96"	125"	.487	.657
108"	138"	.579	.769

NOTES

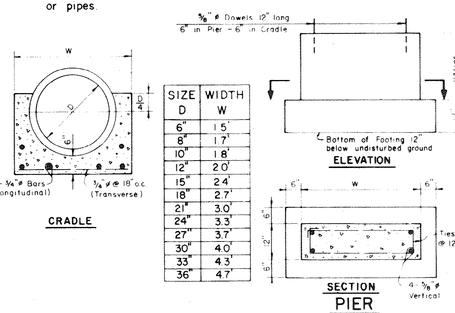
Concrete cradle shall be furnished and placed at locations shown on the contract drawings or at locations ordered by the Engineers. Concrete cradle shall be placed from the outside surface of the pipe to the undisturbed sides of the trench, with the minimum cross section as shown in Sections and dimensions for each pipe size as shown in table.

When a contract provides for payment for concrete cradle at a unit price per cubic yard, allowance for payment will be made on the basis of the installed lineal feet of each pipe size cradled multiplied by the volume in cubic yards per lineal feet as shown in the table regardless of the concrete volume actually placed.

When a contract provides for payment for the installation of a sewer including cradle, the complete cost of cradle shall be included in the unit bid and contract price for the sewer and no extra allowance will be made for furnishing and placing concrete cradle.

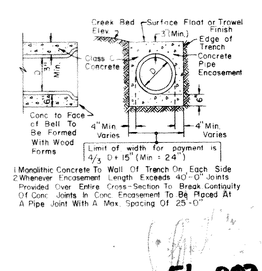
SPECIAL REINFORCED CRADLE

NOTE: Build reinforced cradle supported by piers at maximum 10 ft. intervals across excavations to carry and prevent settlement of new or existing sewers, conduits or pipes.



SIZE D	WIDTH W
6"	15"
8"	17"
10"	18"
12"	20"
15"	24"
18"	27"
21"	30"
24"	33"
27"	37"
30"	40"
33"	43"
36"	47"

CONCRETE ENCASEMENT



1 Monolithic Concrete To Wall Of Trench On Each Side
2 Whenever Encasement Length Exceeds 40'-0" Joints Provided Over Entire Cross-Section To Break Continuity Of Conc Joints In Conc Encasement To Be Placed At A Pipe Joint With A Max. Spacing Of 25'-0"

THIS CONTRACT INCLUDES ITEMS CHECKED IN FOLLOWING TABULATIONS

1	Manhole for Sewers 36" Dia & Smaller	X
2	Service Line	X
3	Concrete Cap	X
4	Service Riser	X
5	Drop Pipe for Standard Manholes	X
6	Creek Bottom Manhole	X
7	Watertight Manhole Covers	X
8	Manhole Frame - No. 11	X
9	" " Type "B"	X
10	" " No. 12	X
11	Manhole Covers - No. 11	X
12	" " Style "C"	X
13	" " Style "D"	X
14	Standard Ladder Steps - Straight Wall	X
15	" " " Curved Wall	X
16	Concrete Cradle - Standard Cradle	X
17	Concrete Cradle - Special Reinforced Cradle	X
18	Concrete Encasement	X
19	Vent Pipe Assembly	X
20	Concrete Anchor	X

51-002-013

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED S.P.S.
DRAWN R.A.D.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

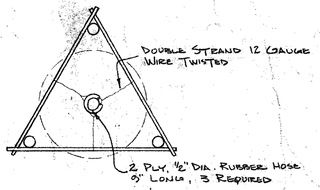
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

SEWER CONSTRUCTION DETAILS

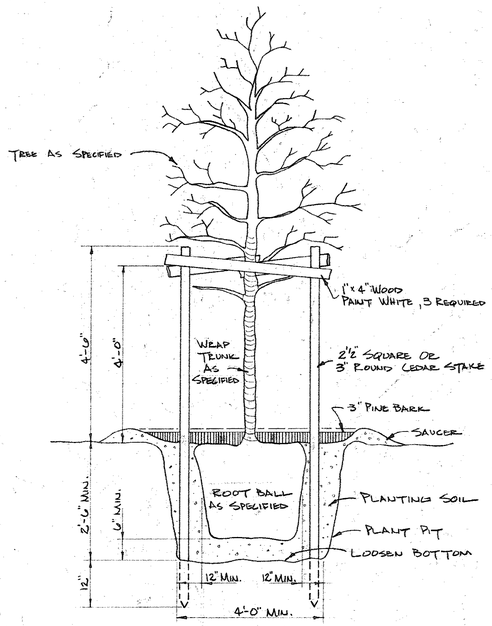
SHEET ISD-8
OF SHEETS
PROJECT NO. 78284

51-013 S RECORD



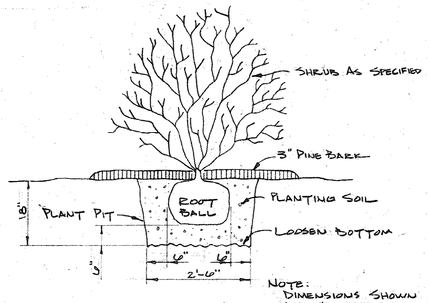
PLAN

PLANT LIST					
KEY	QUANITY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
B	9	MAGNOLIA GRANDIFLORA	SOUTHERN MAGNOLIA	8'-0"	
C	5	PINUS THUNBERGI	JAPANESE BLACK PINE	4'-0"	MASSING SCREEN
D	11	LAGERSTROEMIA INDICA	CREPE MYRTLE	6'-0"	
E	49	COTONEASTER HORIZONTALIS	BLUE PACIFIC JUNIPER	6"	
F	5	CORNUS MAS	KWANSAN CHERRY	6'-0"	
G	4	QUERCAS PALUSTRIS	PIN OAK	3"	
H	6	BETULA NIGRA	RIVER BIRCH	2"	
J	7	MALUS ANGUSTIFOLIA	FLOWERING CRABAPPLE	6'-0"	



ELEVATION

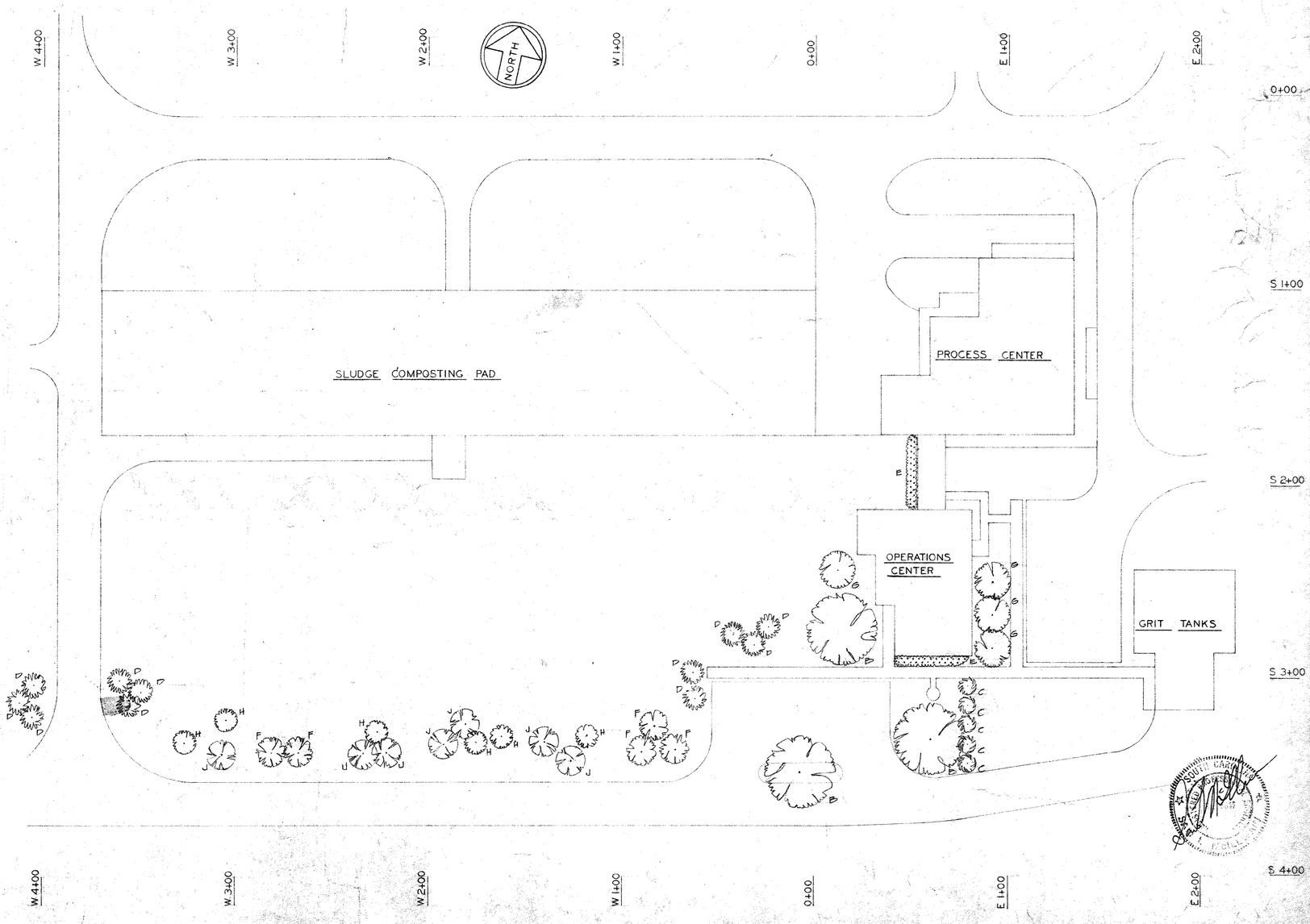
TREE PLANTING DETAIL
NO SCALE



NOTE: DIMENSIONS SHOWN ARE MINIMUM

ELEVATION

SHRUB PLANTING DETAIL
NO SCALE



NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED C.J.B.
DRAWN R.L.J.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

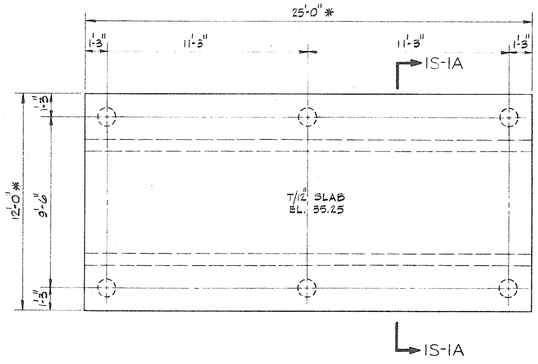
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1"= 30'

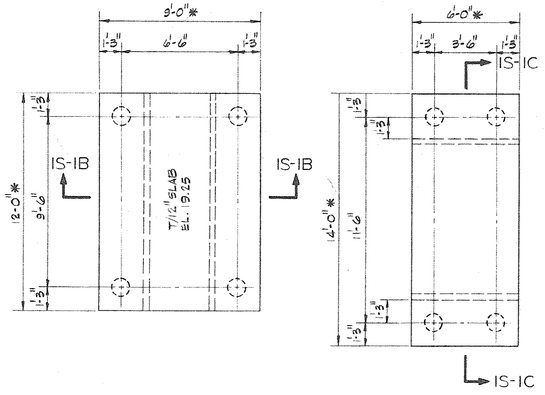
LANDSCAPING

SHEET ISD-9
OF SHEETS
PROJECT NO. 78284

51-002-014
51-014 S RECORD



SWITCHGEAR 'S1'
P.C.O. EL. 33.25



MCC 'P41' AND MCC 'P51'
P.C.O. EL. 17.92

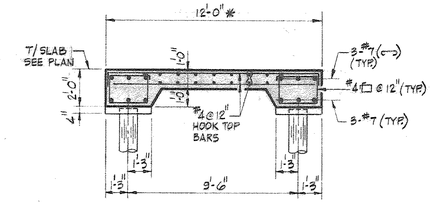
MCC 'P22'
GENERATER NO. 1 & 2

EQUIPMENT	T/12"SLAB ELEV.	P.C.O. ELEV.
GENERATOR NO. 1	35.75	34.75
GENERATOR NO. 2	34.75	33.75
MCC 'P22'	35.75	34.75

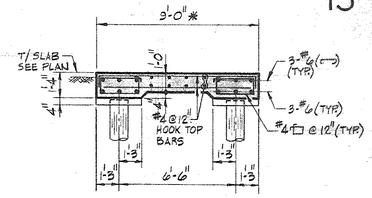
ELECTRICAL EQUIPMENT PAD DETAILS

NOTES:

ALL PILES UNDER ELECTRICAL EQUIPMENT PADS SHALL BE TREATED TIMBER OR DRILLED-IN-PLACE CONCRETE BEARING PILES (BEARING CAPACITY 20 TONS). SEE SHT. XS-1 AND SPEC'S FOR PILE DETAILS.



SECTION IS-1A



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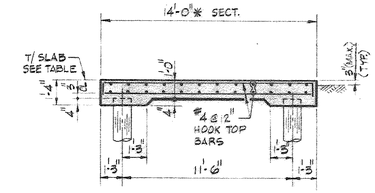
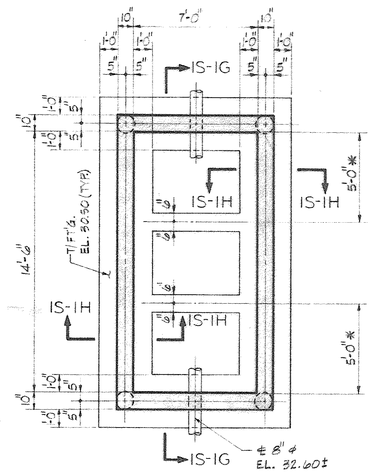
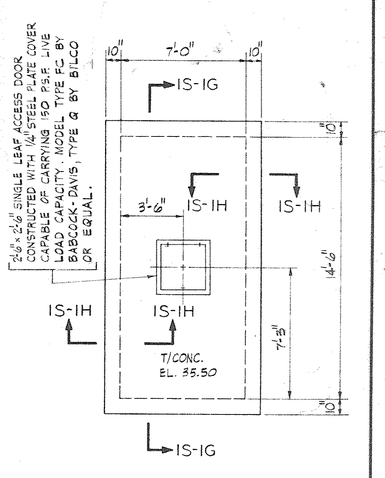


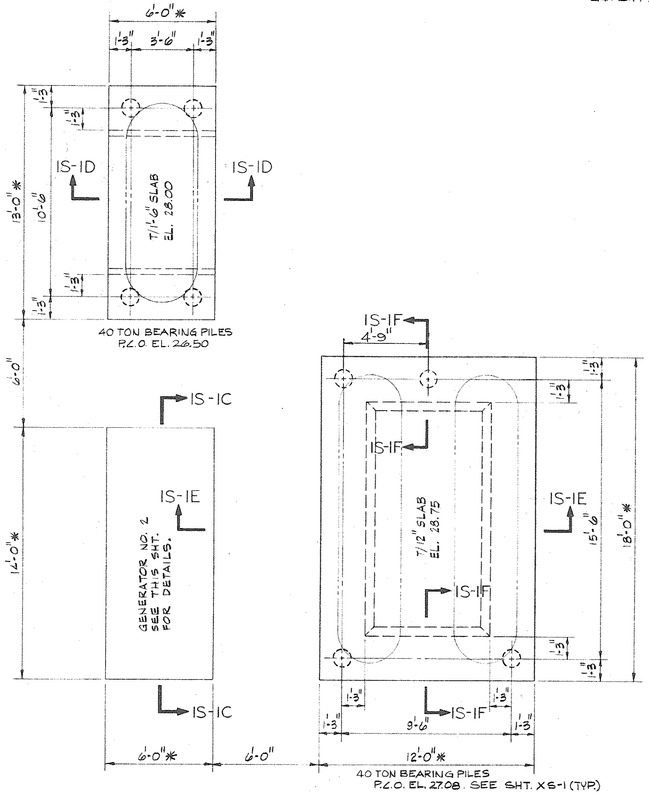
SECTION IS-1C

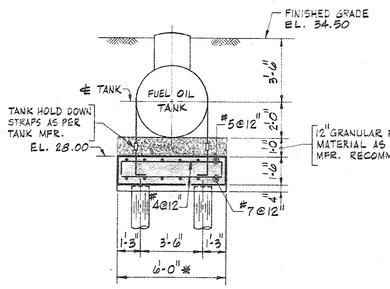


FOUNDATION PLAN
20 TON BEARING PILES
P.C.O. EL. 23.33. SEE SHT. XS-1.

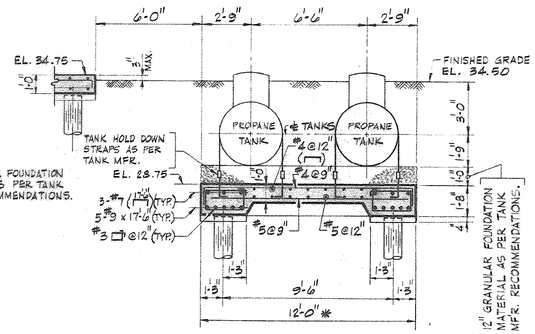


TOP PLAN





SECTION IS-1D



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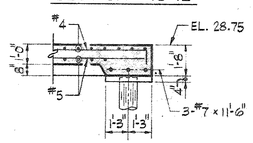
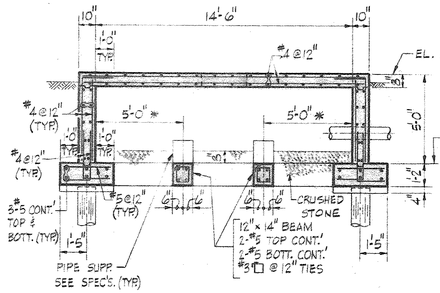
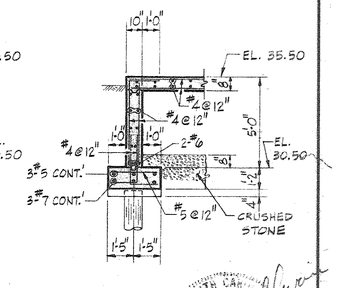


SECTION IS-1F



SECTION IS-1G

NOTE: PLACE BACKFILL TO SAME LEVEL ALL AROUND.



SECTION IS-1H

DUAL BACKFLOW PREVENTOR.

FUEL OIL STORAGE TANK PAD DETAILS

51-002-015

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED S.K.L./T.G.
DRAWN R.W.H.
CHECKED H.R.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

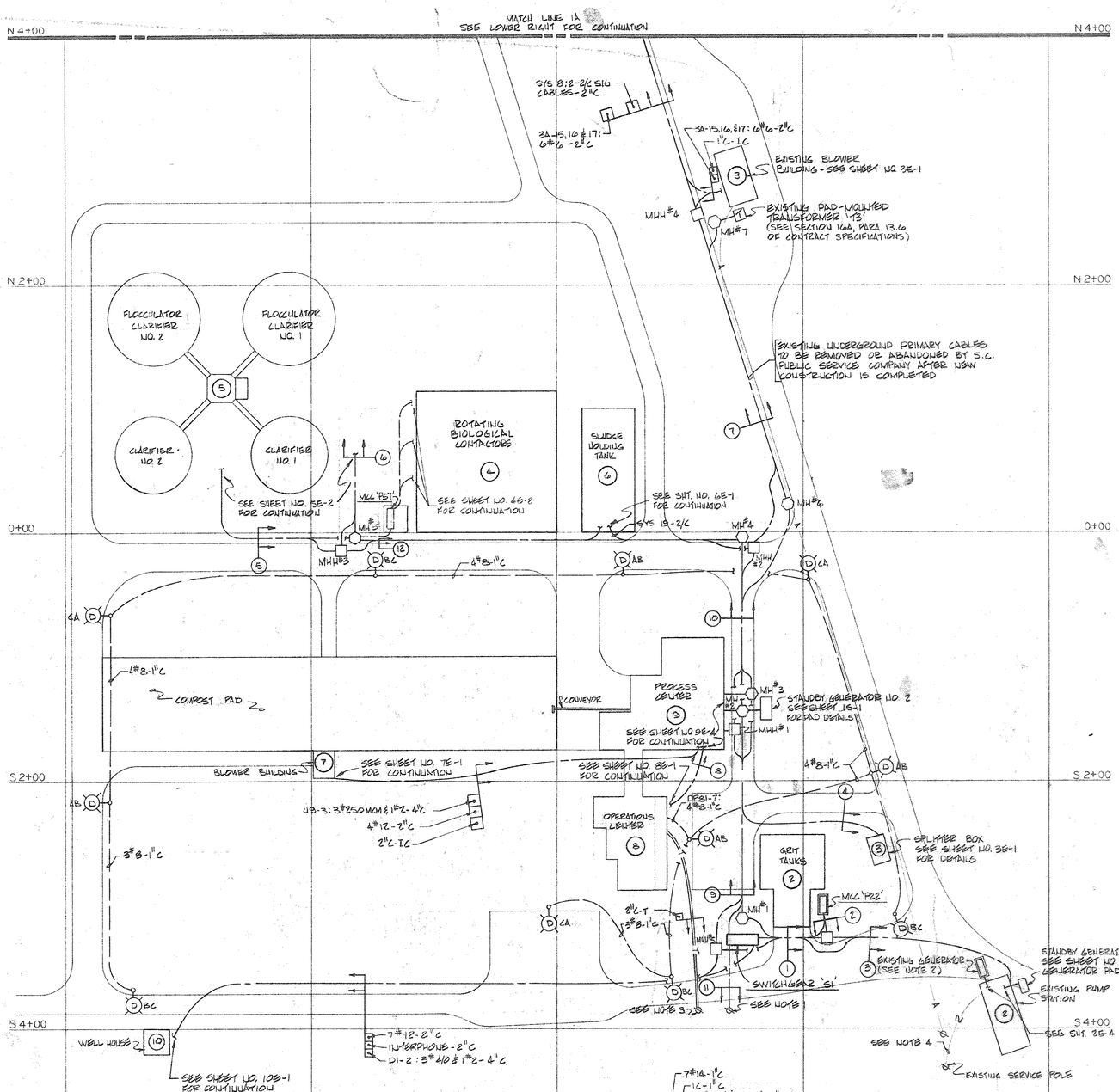
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

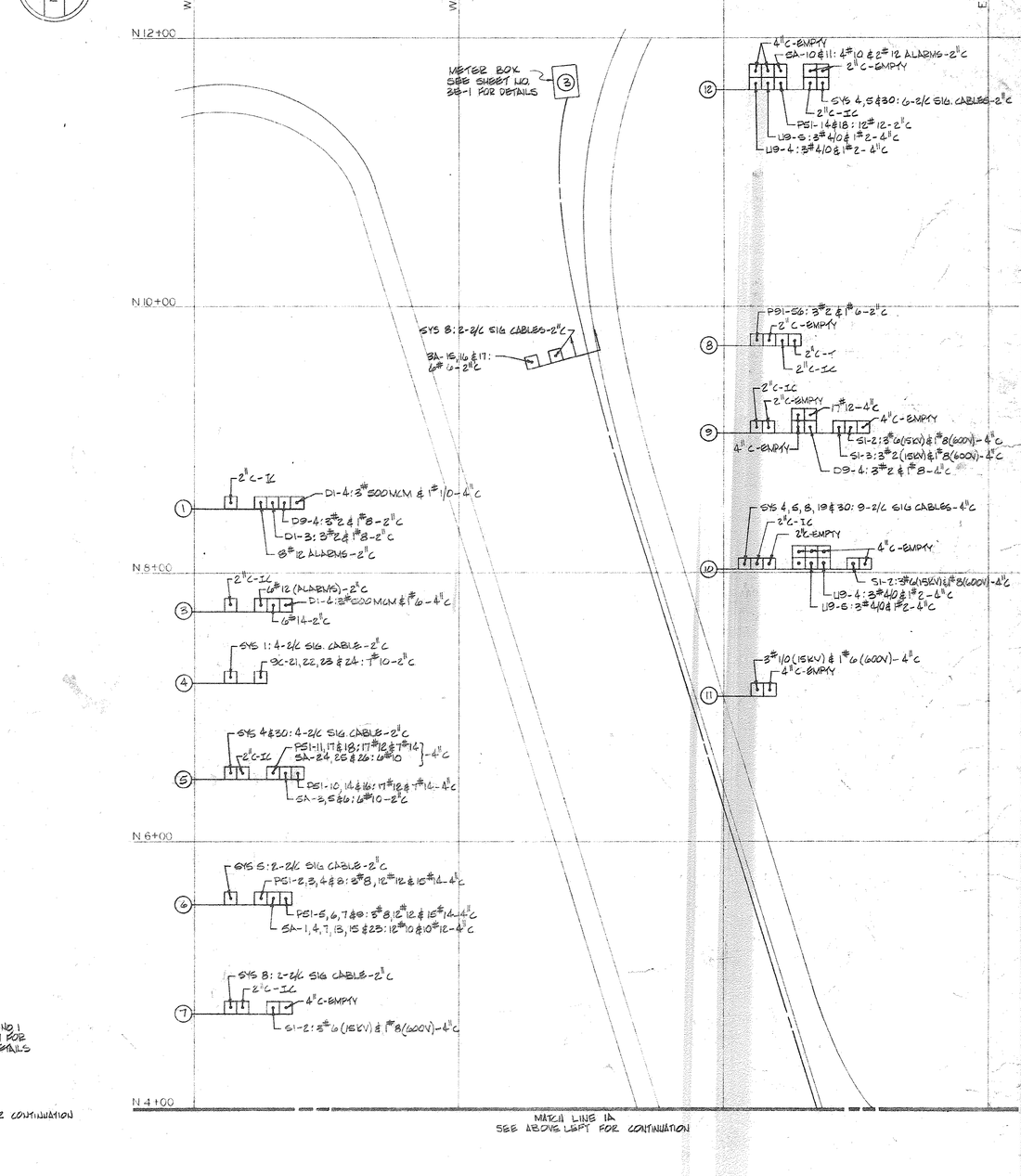
SCALE
1/4"=1'-0"

FUEL OIL STORAGE TANK AND ELECTRICAL EQUIPMENT PADS

SHEET IS-1
OF SHEETS
PROJECT NO. 78284

51-015





NOTES:

1. SANTEE COOPER PUBLIC SERVICE AUTHORITY WILL PROVIDE A SINGLE PRIMARY FEEDER AT 12,470 VOLTS TO THE PLANT SITE. THEY WILL FURNISH AND INSTALL THE RISER POLE WITH PRIMARY METERING ON THE POLE.

   THE CONTRACTOR SHALL FURNISH AND INSTALL PRIMARY CONDUITS AND CABLES FROM SWITCHGEAR 'S1' TO THE RISER POLE. THE CONTRACTOR SHALL EXTEND CONDUITS AND CABLES UP RISER POLE AND PROVIDE TERMINATION IN ACCORDANCE WITH SANTEE COOPER REQUIREMENTS.

2. EXISTING GENERATOR AND CONCRETE PAD SHALL BE REMOVED BY CONTRACTOR. THE CONTRACTOR SHALL DELIVER GENERATOR TO A PLANT SITE LOCATION DESIGNATED BY THE OWNER.

3. CONTRACTOR SHALL FURNISH AND INSTALL CONDUIT AND RISER POLE FOR TELEPHONE LINE. CONDUIT SHALL BE TERMINATED IN ACCORDANCE TO TELEPHONE COMPANY REQUIREMENTS.

4. EXISTING SERVICE (2-3#500 MCM-3½"C) SHALL BE REMOVED BY SANTEE COOPER AFTER NEW SERVICE IS OPERATIONAL.

5. ALL ELECTRICAL DUCT INSTALLED UNDER ROADWAYS SHALL BE REINFORCED DUCT AS DETAILED ON SHT. 2E-2.

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.N.C.
DRAWN R.W.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

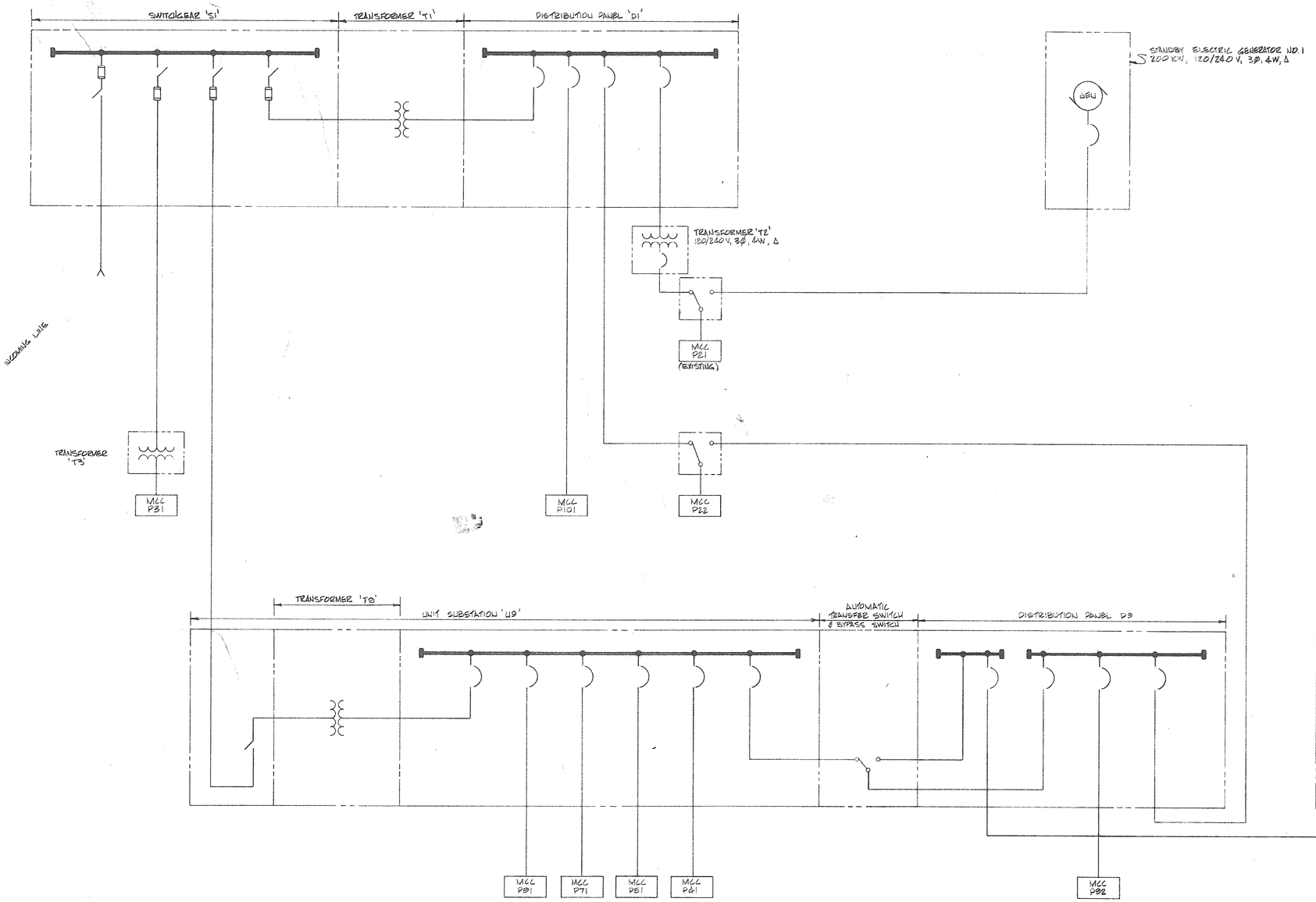
SCALE
1" = 50'-0"

SITE PLAN — ELECTRICAL

51-003-016

SHEET 1E-1
OF SHEETS
PROJECT NO. 78284

51-016



NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.N.G.
DRAWN K.R.H.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

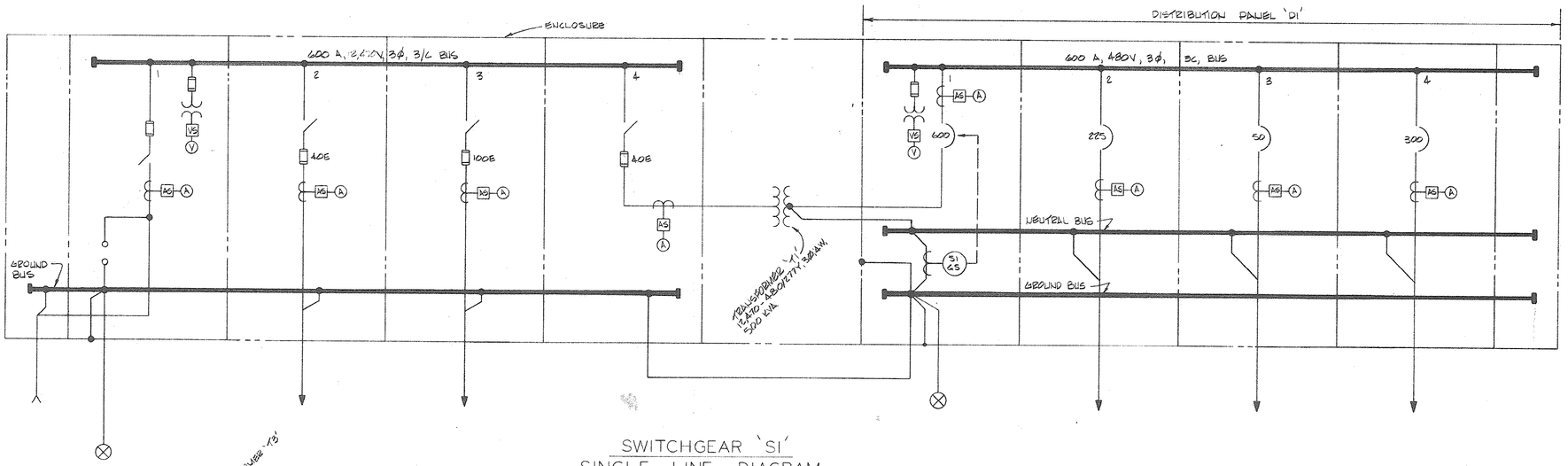
OVERALL SINGLE LINE DIAGRAM

51-003-07

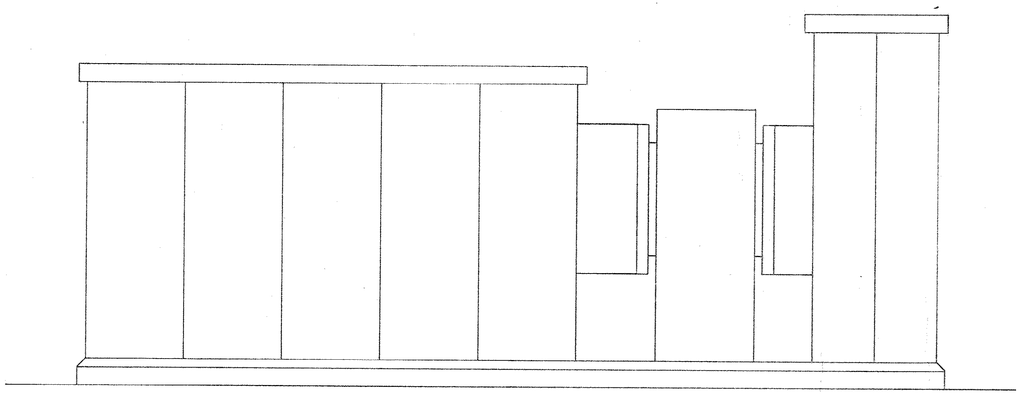
SHEET 1E-2
OF SHEETS
PROJECT NO. 78284

SD-017 S

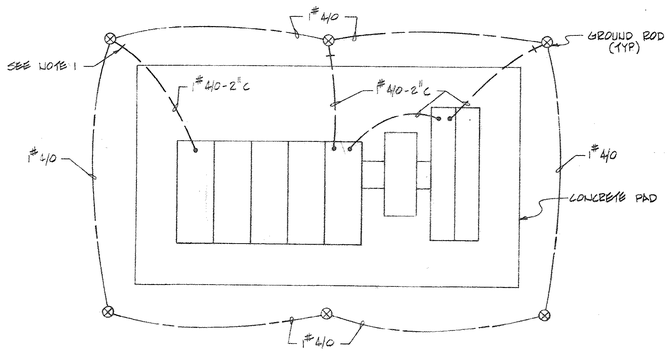
RECORD



SWITCHGEAR 'S1'
SINGLE LINE DIAGRAM



SWITCHGEAR 'S1'
FRONT ELEVATION VIEW
OUTDOOR ENCLOSURE



SWITCHGEAR 'S1'
GROUNDING PLAN

NOTES:
1. TERMINATE CONDUIT 1'-0" OUTSIDE PAD.

51-002-018

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED J.N.G.
DRAWN K.R.H.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

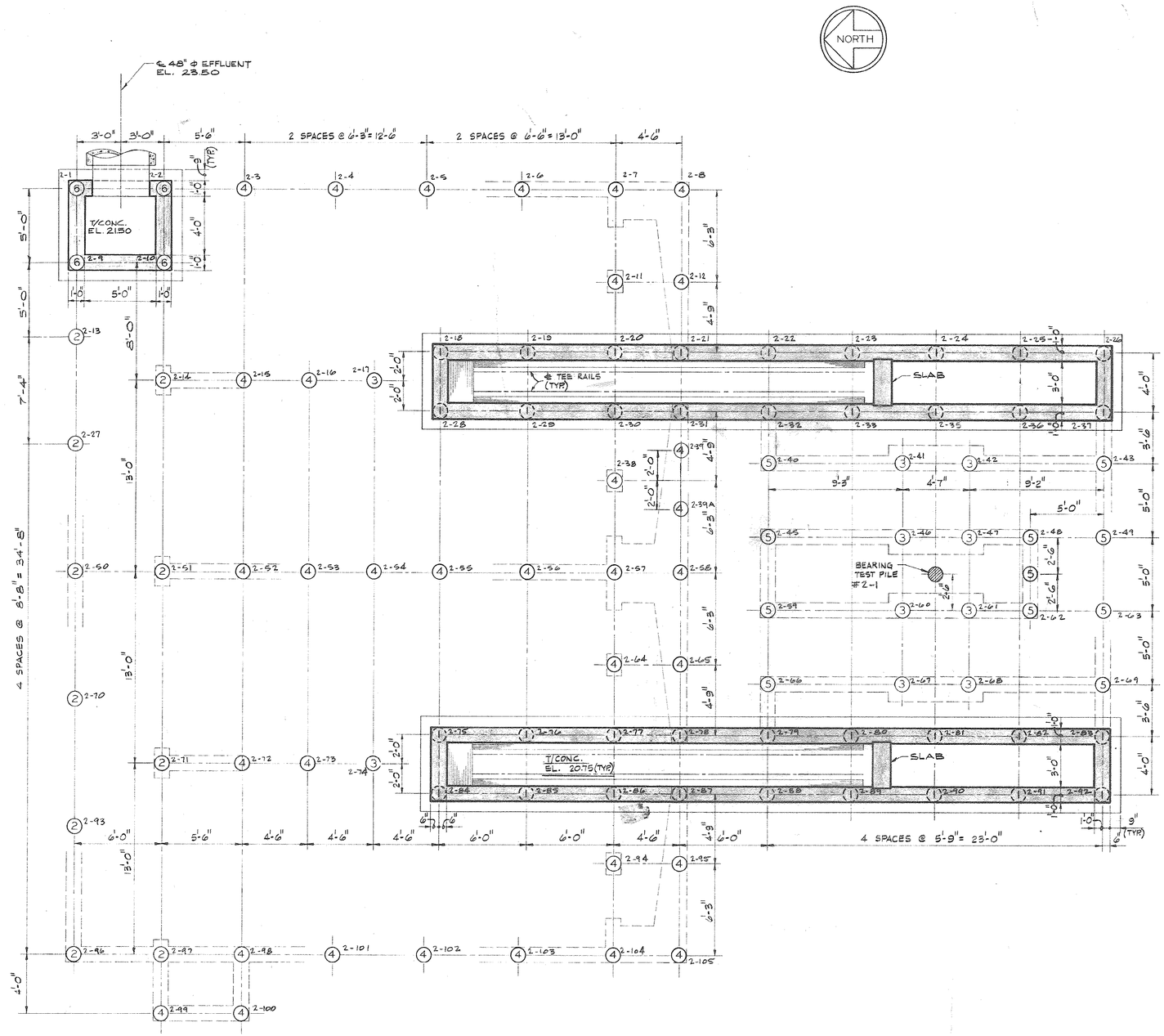
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

SWITCHGEAR 'S1'
SINGLE LINE DIAGRAM & ELEVATION

SHEET 1E-3
OF SHEETS
PROJECT NO. 78284

51-018-S



PILE CUT-OFF SCHEDULE	
①	EL. 13.75
②	EL. 24.50
③	EL. 24.58
④	EL. 26.00
⑤	EL. 26.50
⑥	EL. 20.00

NOTES:

ALL PILES SHOWN ON THIS SHEET SHALL BE DRILLED-IN-PLACE CONCRETE BEARING PILES (BEARING CAPACITY = 40 TONS). SEE SHT. XS-1 AND SPEC'S. FOR PILE DETAILS.

▨ INDICATES BEARING TEST PILE

51-002-019

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED S.K.L.
DRAWN R.W.H.
CHECKED T.P.G.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

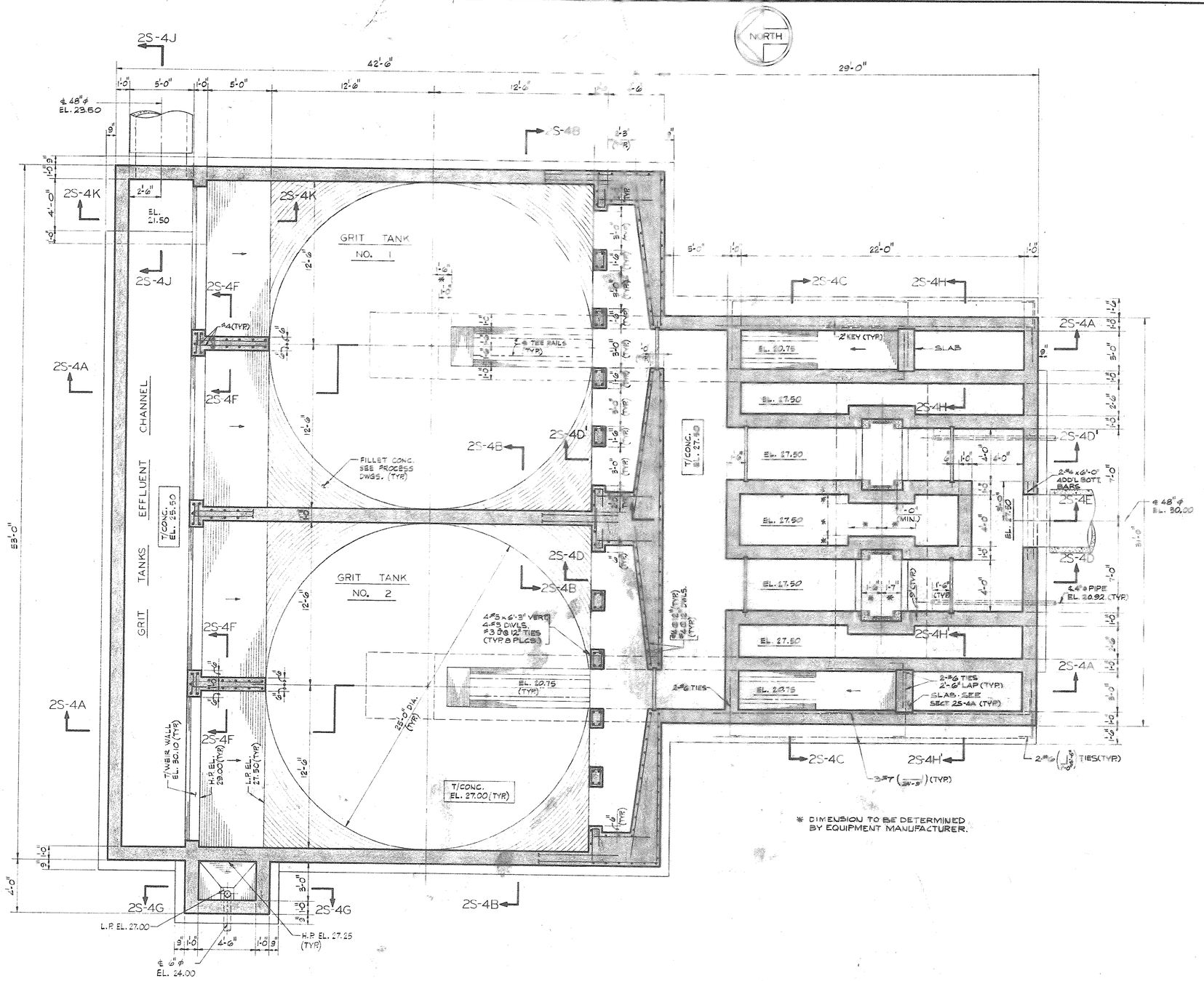
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

SCREENING CHAMBER AND GRIT TANKS FOUNDATION PLAN

SHEET 2S-1
OF SHEETS
PROJECT NO. 78284

51-002S RECORD



* DIMENSION TO BE DETERMINED BY EQUIPMENT MANUFACTURER.

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED S.K.L.
DRAWN R.W.H.
CHECKED T.P.G.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

SCREENING CHAMBER AND GRIT TANKS BASE PLAN

SHEET 2S-2
OF ~~SHEETS~~
PROJECT NO. 78284

51-003-020

~~51-020~~ 5 RECORD

NORTH

42'-6" 29'-0"

E 2+03.00

E 1+50.00

S 2+44.50

S 3+16.00

2S-4J 2S-4K 2S-4F 2S-4A 2S-4B 2S-4D 2S-4E 2S-4C 2S-4H 2S-4D' 2S-4H' 2S-4G

POCKET FOR BRIDGE BEAM. SEE EQUIP MF'R. DWGS. (TYP.)

BRIDGE BEAMS BY EQUIP. MF'R. (TYP.)

GRIT TANK NO. 1

GRIT TANK NO. 2

EFFLUENT CHANNEL

GRIT TANKS

STEEL WALKWAY BY EQUIP MF'R. (TYP.)

6'x6'x24" CONC. CURB

T/WALL EL. 36.00

EL. 36.00

T/CHECKERED PLATE EL. 36.00

CHECKERED PLATE

GRATING

T/GRATING EL. 36.00

GRATING SUPPORT (TYP.)

T/CONC. EL. 35.00 (TYP.)

25'-0" DIA. (TYP.)

53'-0"

SECTION 2S-3A (TYP.) 4 PLCS.
1" = 1'-0"

T/GRATING EL. 36.00

℄ W8x18

T/S W8x18 EL. 35.81

2-3/4" H.S. BOLTS

PL 1/4"x3½"x5½" 1/4"

EMBED ANCHOR PL. ½"x8"x6" CNTRD. @ W8x18 W/4-3/4"Øx(—9"—7½") A.B.'S. WELDED TO BACK OF PLATE.

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED S.K.L.
DRAWN R.W.H.
CHECKED T.P.G.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4"=1'-0"

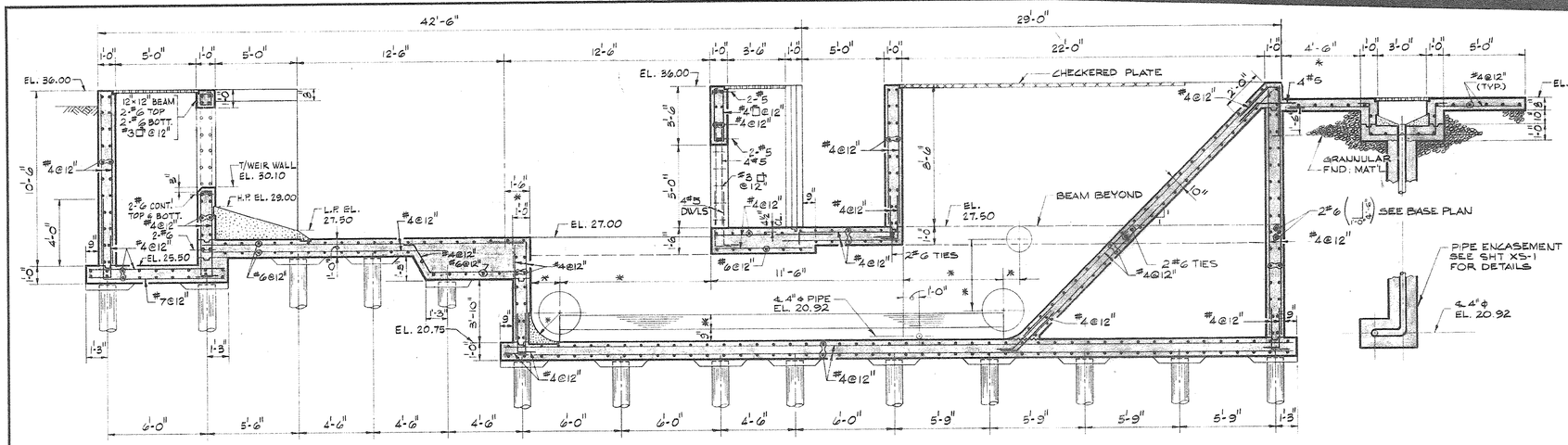
SCREENING CHAMBER AND GRIT TANKS TOP PLAN

51-037S

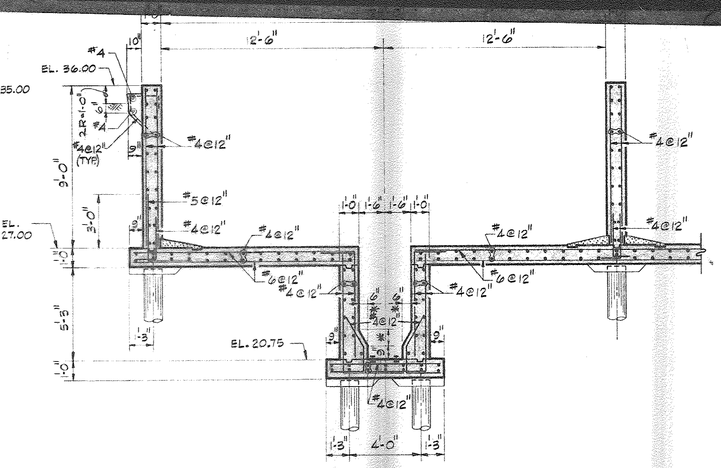
51-002-021

SHEET 2S-3
OF SHEETS

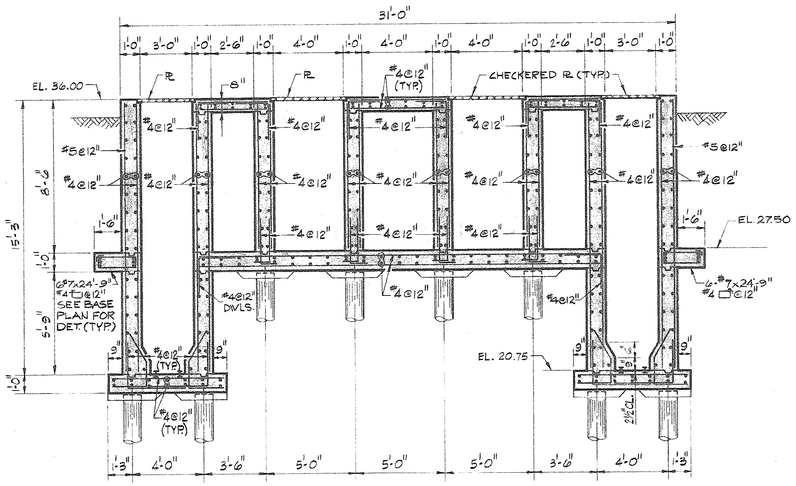
PROJECT NO. 7 E.C.04



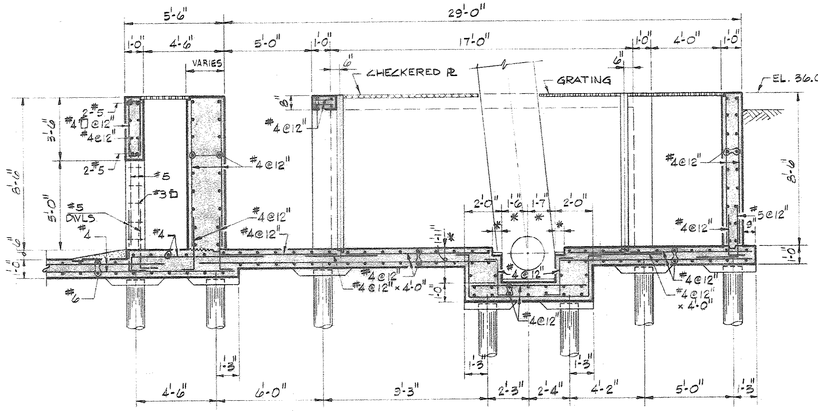
SECTION 2S-4A



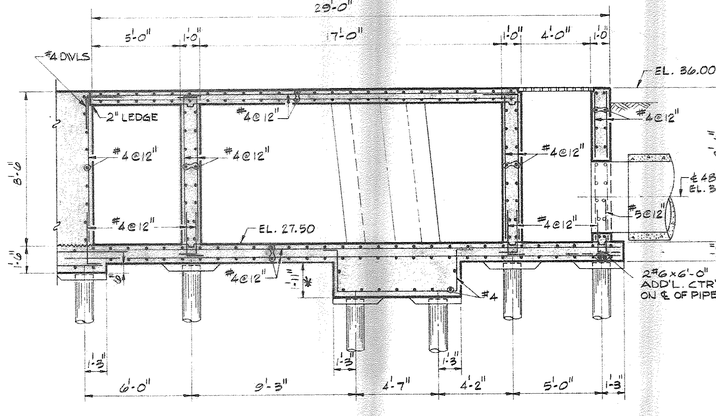
SECTION 2S-4B



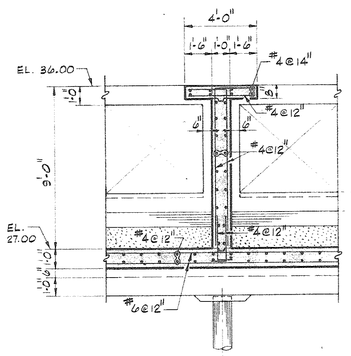
SECTION 2S-4C



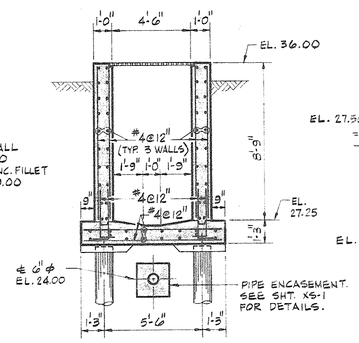
SECTION 2S-4D (SHOWN)
SECTION 2S-4D' (SIMILAR)



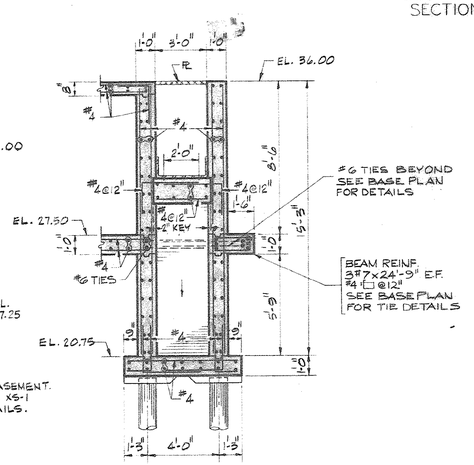
SECTION 2S-4E



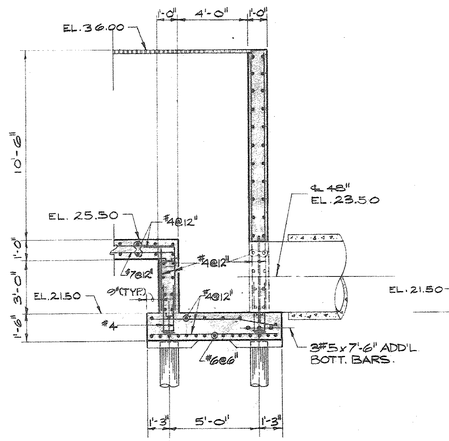
SECTION 2S-4F



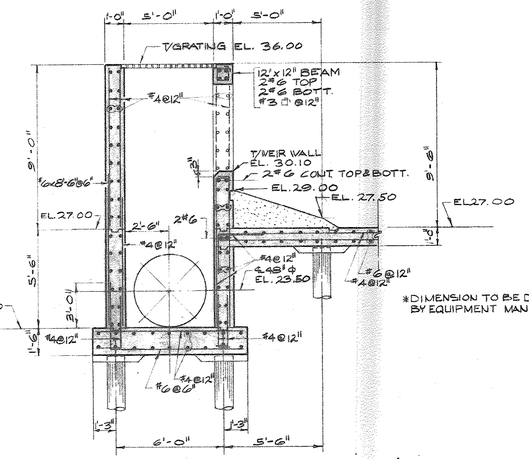
SECTION 2S-4G



SECTION 2S-4H (SHOWN)
SECTION 2S-4H' (OPP. HAND)



SECTION 2S-4J



SECTION 2S-4K

51-001-022

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED S.K.L.
DRAWN R.W.H.
CHECKED T.P.G.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

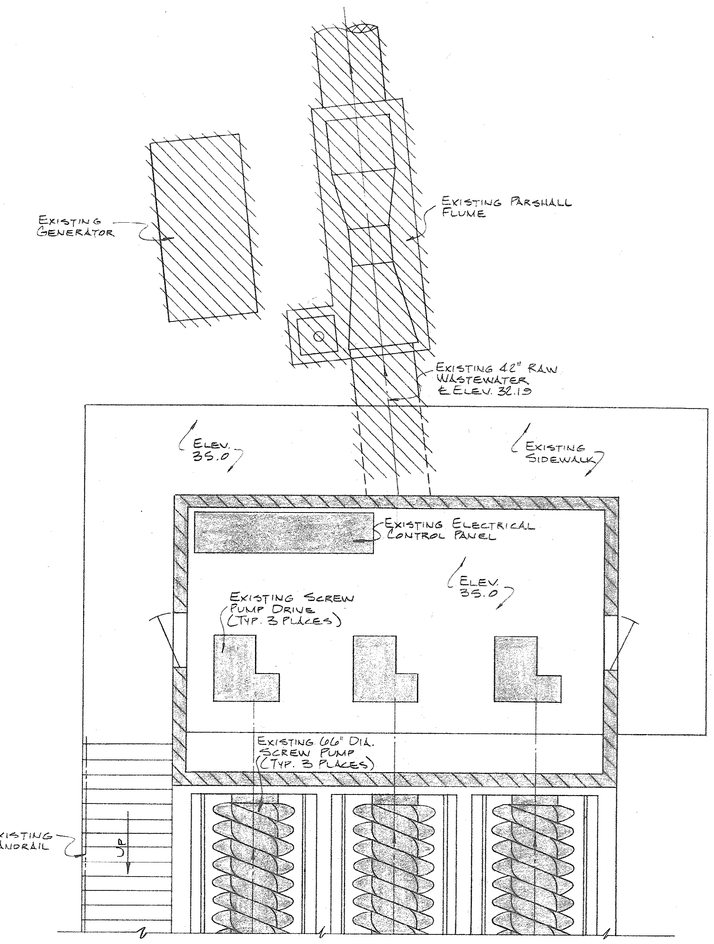
SCREENING CHAMBER AND GRIT TANKS SECTIONS

51-022S

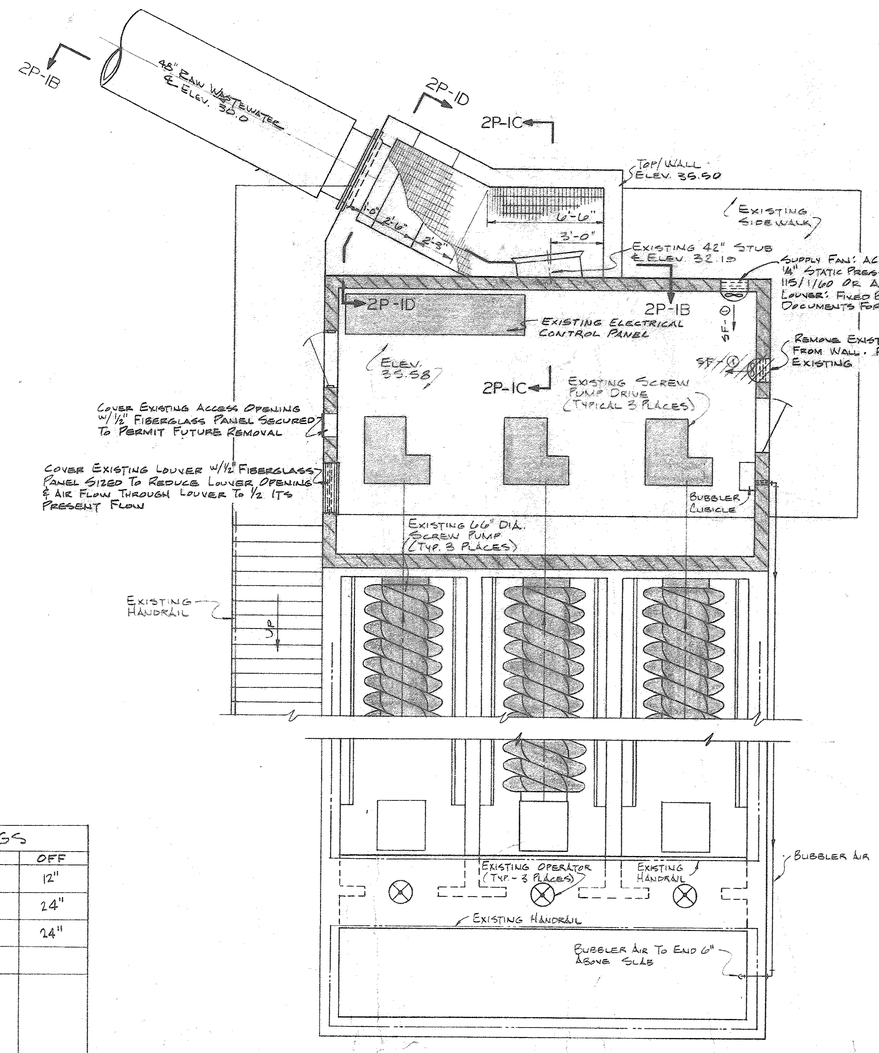
SHEET 2S-4
OF SHEETS
PROJECT NO. 78284

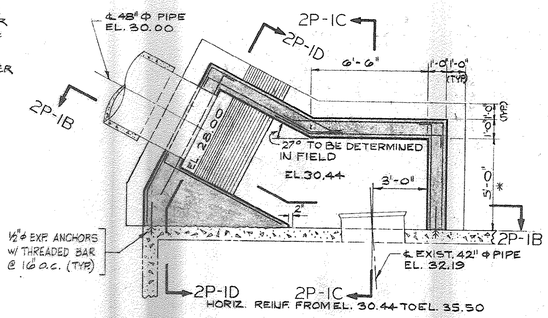
RECORD

NOTE:
THE CONTRACTOR SHALL SUBMIT FOR REVIEW AND APPROVAL A SCHEDULE INDICATING TIME, PROCEDURES, AND METHODS TO BE EMPLOYED TO MAINTAIN THE CONTINUOUS OPERATION OF THE LIFT STATION. UPON COMPLETION AND APPROVAL BY THE ENGINEER OF THE PROPOSED FACILITY, THE CONTRACTOR SHALL REMOVE THE EXISTING 42" LINE AND DIVERT ALL FLOW TO THE NEW 48' LINE. PROCEDURE FOR REMOVING AND PLUGGING OF THE EXISTING 42" LINE SHALL BE SUBMITTED AND APPROVED BY THE ENGINEER PRIOR TO OPERATION.

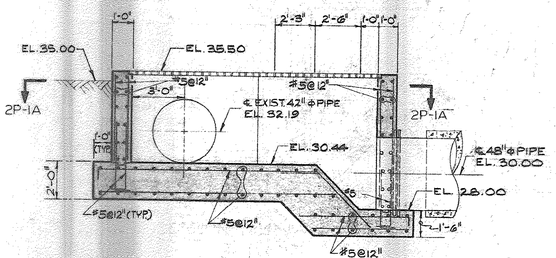


EXISTING PLAN

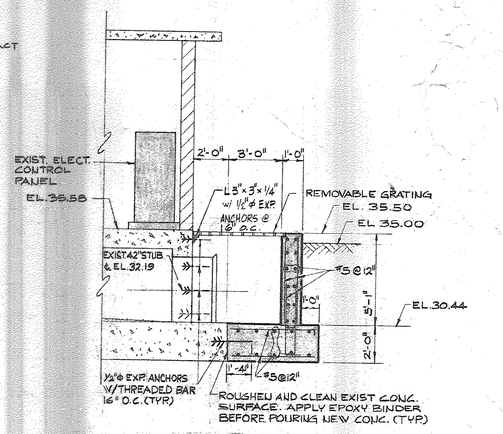




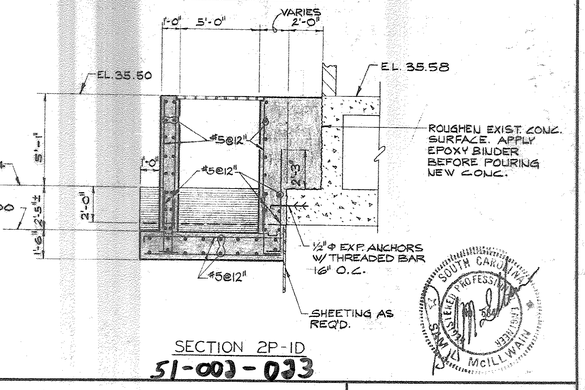
PART SECTIONAL PLAN 2P-1A



SECTION 2P-1B



SECTION 2P-1C



SECTION 2P-1D

PUMP SETTINGS		
	ON	OFF
LEAD PUMP	36"	12"
LAG PUMP	48"	24"
LAGLAG PUMP	54"	24"
ALARM	54"	

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED W.J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

MODIFICATIONS TO EXISTING PUMPING STATION PLANS AND SECTION

SHEET 2P-1
OF SHEETS
PROJECT NO. 78284

51-002-033

~~51-023~~ S
RECORD

NORTH

48" GRIT TANKS EFFLUENT ℄ ELEV. 23.50

2P-4A

2P-4C

2P-4B

GRIT TANKS EFFLUENT CHANNEL

GRIT TANK NO. 1

GRIT TANK NO. 2

15'-0" DIA.

ROTATION

SCRAPER ASSEMBLY (TYPICAL)

FLOW DEFLECTOR (TYPICAL 10 PLACES) TO BE SUPPLIED BY GRIT TANK EQUIPMENT MANUFACTURER

TOP WEIR ELEV. 30.77 (TYPICAL)

ELEV. 29.50

ELEV. 27.50

ELEV. 27.0

ELEV. 20.75

H.P. ELEV. 29.0 (TYP.)

L.P. ELEV. 27.50

H.P ELEV. 27.25 (TYP.)

L.P. ELEV. 27.0

AIR DIFFUSER. SEE SHT. X-1 FOR DETAIL (TYP.)

AIR DIFFUSER SEE SHT. X-1 FOR DETAIL (TYP.)

PROVIDE VALVE BOX TO SURFACE W/NUT OPERATOR

4" TANK DRAINAGE ℄ ELEV. 20.92

4" PLUG DRAIN VALVE. (TYPICAL 2 PLACES)

CONC. ENCASEMENT

CHLORINE DIFFUSER HEADER ℄ ELEV. 30.0

48" RAW WASTEWATER ℄ ELEV. 30.0

48" x 72" SLIDE GATE (TYPICAL 4 PLACES)

36" x 72" SLIDE GATE (TYP 2 PLACES)

2" L.P. AIR ℄ ELEV. 34.94

4" L.P. AIR ℄ ELEV. 34.50

4" L.P. AIR ℄ ELEV. 31.21

10" TANK DRAINAGE ℄ ELEV. 27.92

6" SCUM ℄ ELEV. 24.0

6" L.P. AIR ℄ ELEV. 31.21

8" TANK DRAINAGE ℄ ELEV. 20.75

8" TANK DRAINAGE ℄ ELEV. 20.92

2" RAW WASTEWATER SAMPLING. ℄ ELEV. 26.0

1" CHLORINE SOLUTION ℄ ELEV. 30.0

STANDARD 4'-0" DIAMETER MANHOLE. INV. ELEV. 20.42

* DIMENSION TO BE DETERMINED BY EQUIPMENT MANUFACTURER

51-002-024

DESCRIPTION / REVISIONS	APPROVED	DESIGNED W.J.W. / DRAWN C.E.E. / CHECKED S.L.M. / DATE 12-3-79	CONSOER, TOWNSEND & ASSOCIATES, CONSULTING ENGINEERS	CITY OF MYRTLE BEACH, SOUTH CAROLINA, DEPARTMENT OF PUBLIC WORKS	SCALE 1/4" = 1'-0"

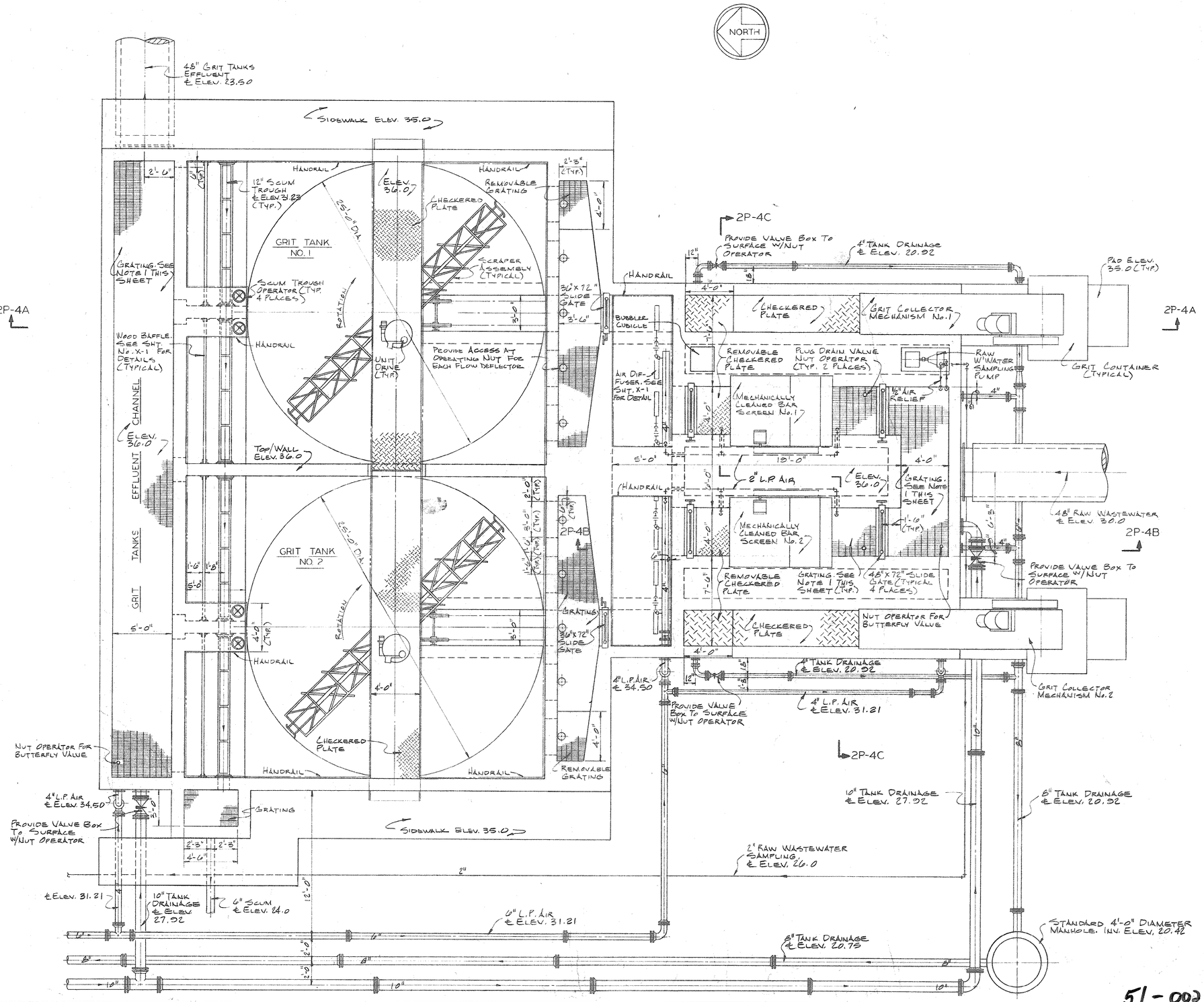
SCREENING CHAMBER AND GRIT TANKS BASE PLAN

SHEET 2P-2 OF SHEETS

PROJECT NO. 78284

51-024 5

RECORD



NOTES:
1. PROVIDE 2'-0" WIDE REMOVABLE GRATING SECTIONS CENTERED ON AIR DIFFUSER DROP ASSEMBLY

SAMUEL L. McILLWAIN — SOUTH CAROLINA — REGISTERED PROFESSIONAL ENGINEER — No. 6887

51-002-025

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED W.J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

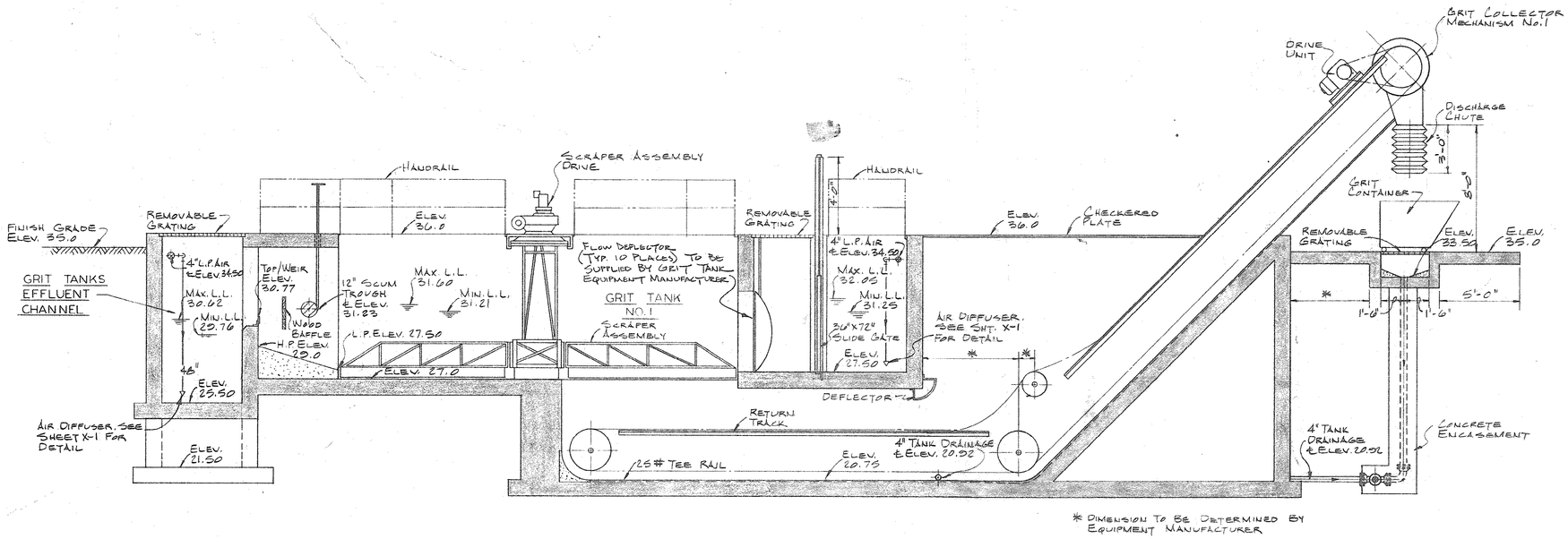
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

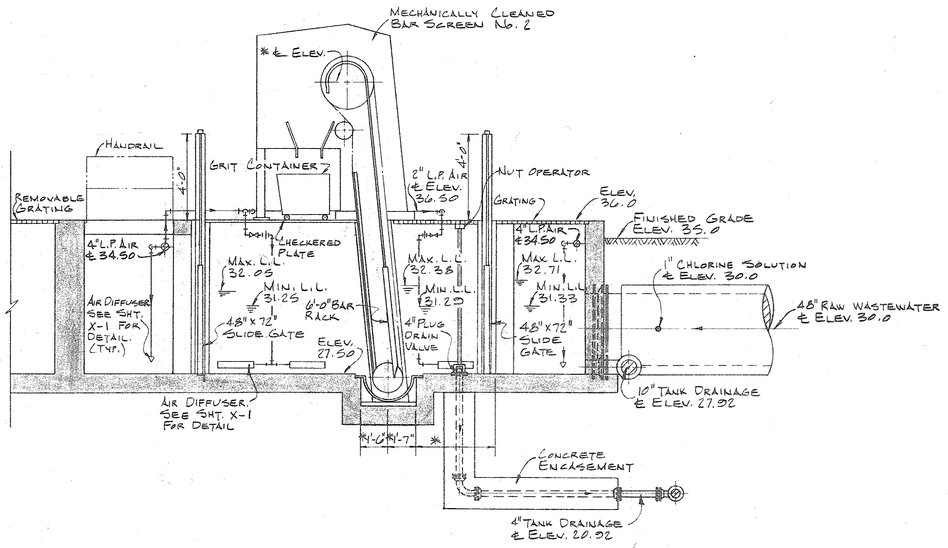
SCREENING CHAMBER AND GRIT TANKS TOP PLAN

SHEET 2P-3
OF SHEETS
PROJECT NO. 78284

51-025 5 RECORD

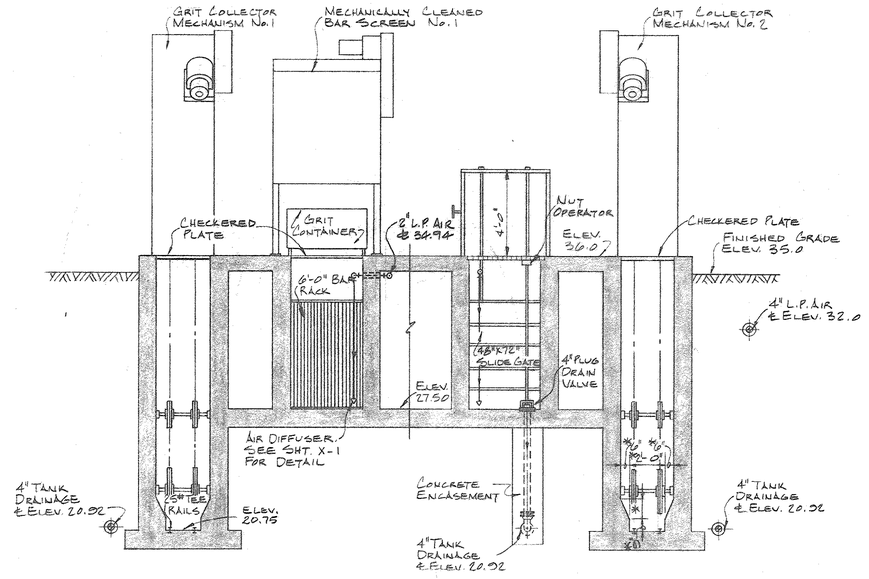


SECTION 2P-4A
2P-2, 2P-3



SECTION 2P-4B
2P-2, 2P-3

* DIMENSION AND/OR ELEVATION TO BE DETERMINED BY EQUIPMENT MANUFACTURER



SECTION 2P-4C
2P-2, 2P-3

51-002-026

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED W.J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

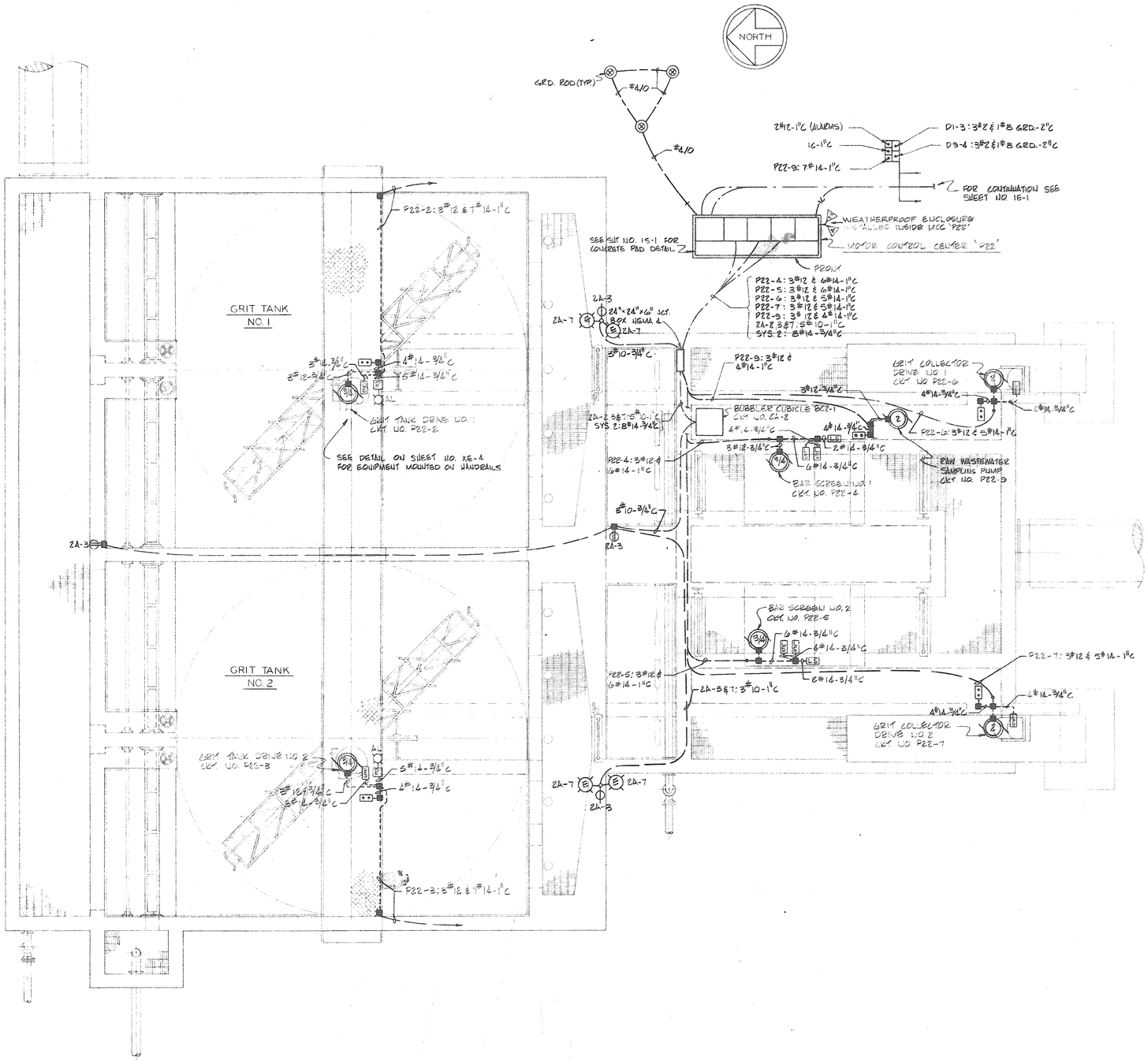
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

SCREENING CHAMBER AND GRIT TANKS SECTIONS

SHEET 2P-4
OF SHEETS
PROJECT NO. 78284

51-036 S
RECORD



NOTES:

1. SEE SHT. NO. XE-5 FOR SYMBOLS AND LEGEND.

51-007-027

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.N.G.
DRAWN R.C.W.-K.R.H
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

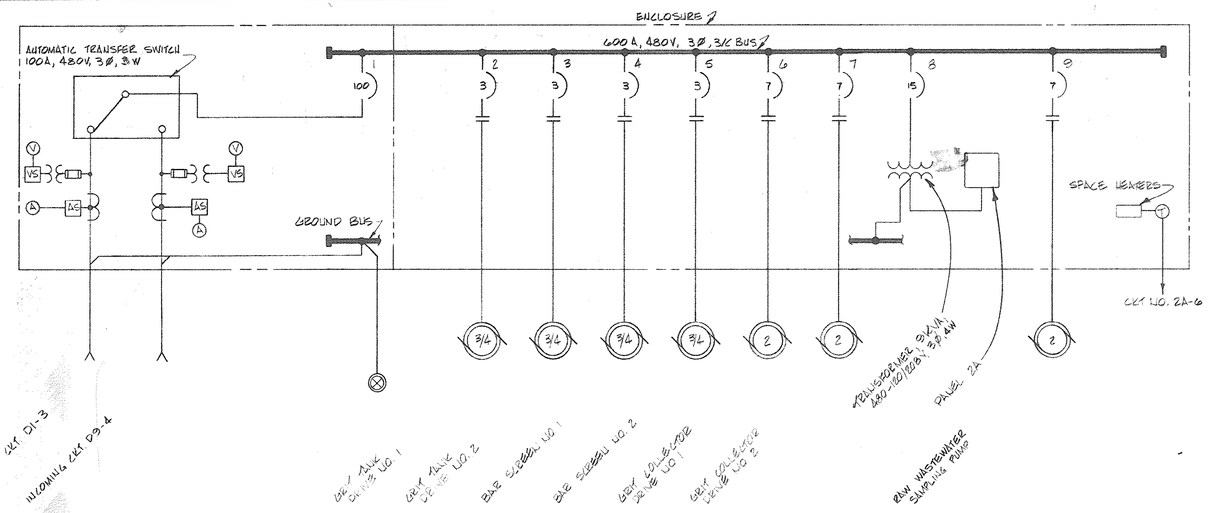
SCALE
1/4" = 1'-0"

BAR SCREEN & GRIT TANKS
PLAN-ELECTRICAL

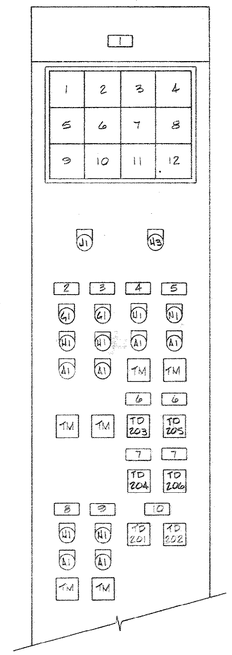
SHEET 2E-1
OF SHEETS
PROJECT NO. 78284

SP-057 S

RECORD



SINGLE LINE DIAGRAM
MOTOR CONTROL CENTER PANEL 'P22'



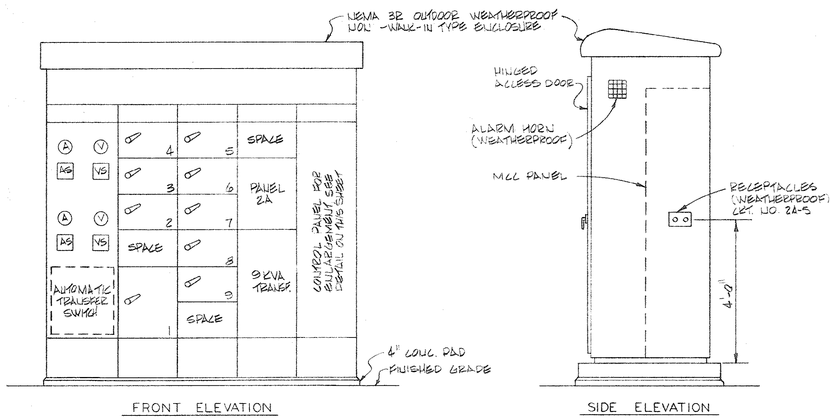
CONTROL PANEL
FRONT ELEVATION
NO SCALE

CONTROL PANEL NAMEPLATE SCHEDULE

NAMEPLATE NO.	SIZE	ENGRAVED
1		ALARM PANEL APE-1
2		GRIT TANK DRIVE NO. 1
3		GRIT TANK DRIVE NO. 2
4		GRIT COLLECTOR DRIVE NO. 1
5		GRIT COLLECTOR DRIVE NO. 2
6		COLLECTOR ON TIME
7		COLLECTOR OFF TIME
8		BAR SCREEN NO. 1
9		BAR SCREEN NO. 2
10		BAR SCREEN CONTROL SYSTEM

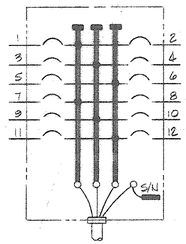
ALARM PANEL NAMEPLATE SCHEDULE

NAMEPLATE NO.	ENGRAVED			
	FIRST LINE	SECOND LINE	THIRD LINE	FOURTH LINE
1	GRIT	TANK NO. 1	OVERLOAD	
2	GRIT	TANK NO. 2	OVERLOAD	
3	GRIT	COLLECTOR	NO. 1	OVERLOAD
4	GRIT	COLLECTOR	NO. 2	OVERLOAD
5	BAR	SCREEN NO. 1	OVERLOAD	
6	BAR	SCREEN NO. 1	HIGH	HEAD LOSS
7	BAR	SCREEN NO. 2	OVERLOAD	
8	BAR	SCREEN NO. 2	HIGH	HEAD LOSS
9	BLANK			
10	BLANK			
11	BLANK			
12	BLANK			



MOTOR CONTROL CENTER PANEL 'P22'

BAR SCREEN CONTROL SYSTEM
RECEPTACLE
RECEPTACLE
TANK LIGHTS
SPARE
SPARE



BUBBLER CUBICLE
ALARM PANEL
MCC 'P22' SPACE HTRS.
SPARE
SPARE
SPARE

PANEL '2A'
120/208V, 3Ø, 4W, S/N
100 AMP MAIN LUGS ONLY
12 1P-20AMP CKT. BREAKERS

NOTES:

1. MOTOR CONTROL CENTER NAMEPLATES SHALL BE ENGRAVED TO CORRESPOND TO DESIGNATION ON SINGLE LINE DIAGRAM.
2. FOR PLAN LOCATION OF MCC 'P22', SEE SHEET NO. 2E-1.

51-002-028

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.N.G.
DRAWN K.R.H.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

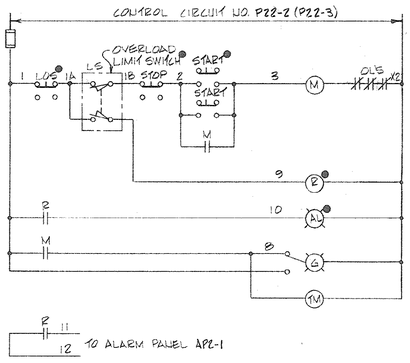
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

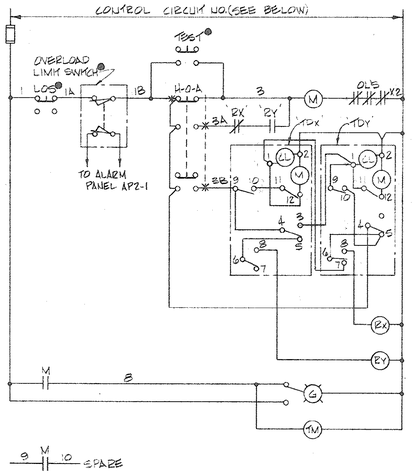
MOTOR CONTROL CENTER 'P22'
SINGLE LINE DIAGRAM & ELEVATION

SHEET 2E-2
OF SHEETS
PROJECT NO. 78284

~~51-078~~ RECORD

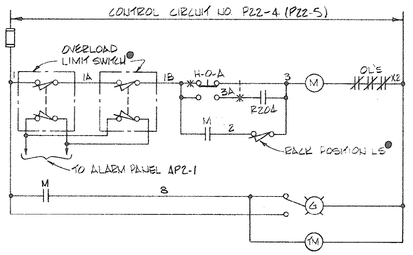


GRIT TANK NO. 1 (NO. 2)

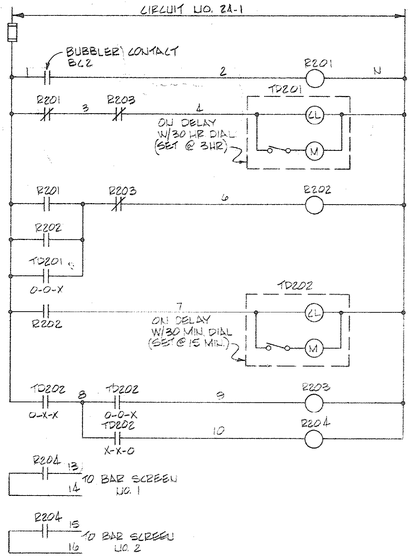


DESIGNATION	CKT. NO.	'TDX'	'TDY'	'RX'	'RY'
GRIT COLLECTOR DRIVE NO. 1	P22-6	TD203	TD204	R205	R206
GRIT COLLECTOR DRIVE NO. 2	P22-7	TD205	TD206	R207	R208

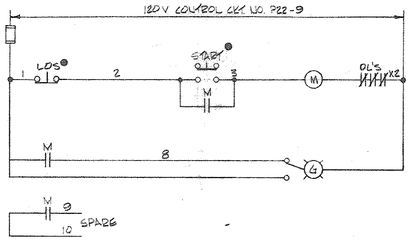
TD 203 & TD 205 - ON TIMER, 0 TO 3 HR RANGE, SET AT 30 MIN.
TD 204 & TD 206 - OFF TIMER, 0 TO 3 HR RANGE, SET AT 2 HR.



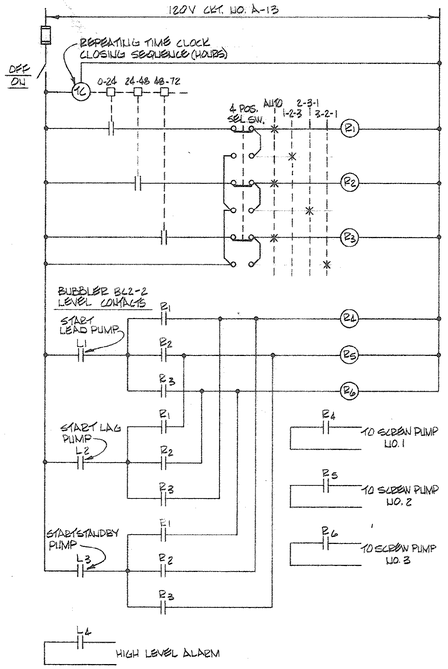
BAR SCREEN NO. 1 (NO. 2)



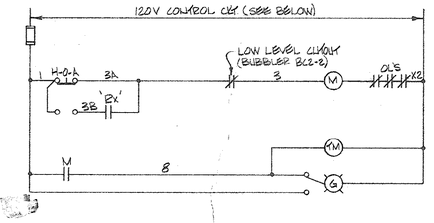
BAR SCREEN CONTROL SYSTEM



RAW WASTEWATER SAMPLING PUMP



SCREW PUMP CONTROL CIRCUIT



DESIGNATION	CKT. NO.	'RX'
SCREW PUMP NO. 1	P21-2	R4
SCREW PUMP NO. 2	P21-3	R5
SCREW PUMP NO. 3	P21-4	R6

NOTES:

1. THE MOTOR CONTROL CENTER MANUFACTURER SHALL USE THE NUMBERS SHOWN ON THE SCHEMATIC WIRING DIAGRAMS ON THIS SHEET ON TERMINAL BLOCKS OF THE STARTER UNITS. THE CONTRACTOR SHALL IDENTIFY ALL CONTROL CONDUCTORS INSTALLED WITH THE SAME NUMBERS BY THE USE OF SELF-STICKING TAGS. THE IDENTIFICATION SHALL ALSO INCLUDE THE CIRCUIT NUMBER WHERE MORE THAN ONE CIRCUIT IS IN THE SAME ENCLOSURE.
2. ALL CONTROL WIRES INSTALLED BY THE CONTRACTOR SHALL BE COLOR CODED AS FOLLOWS:

WIRE DESIGNATION	COLOR
1, 1A	BLACK
2	RED
3	BLUE
X2	WHITE
8	YELLOW
10	ORANGE
OTHERS	AS APPROVED

LEGEND

● AT MOTOR

△ AT MAIN CONTROL PANEL (MCP)

UNLESS OTHERWISE INDICATED ALL EQUIPMENT AND DEVICES SHALL BE LOCATED IN THE MOTOR CONTROL CENTER.

51-003-029

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.N.C.
DRAWN K.R.H.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

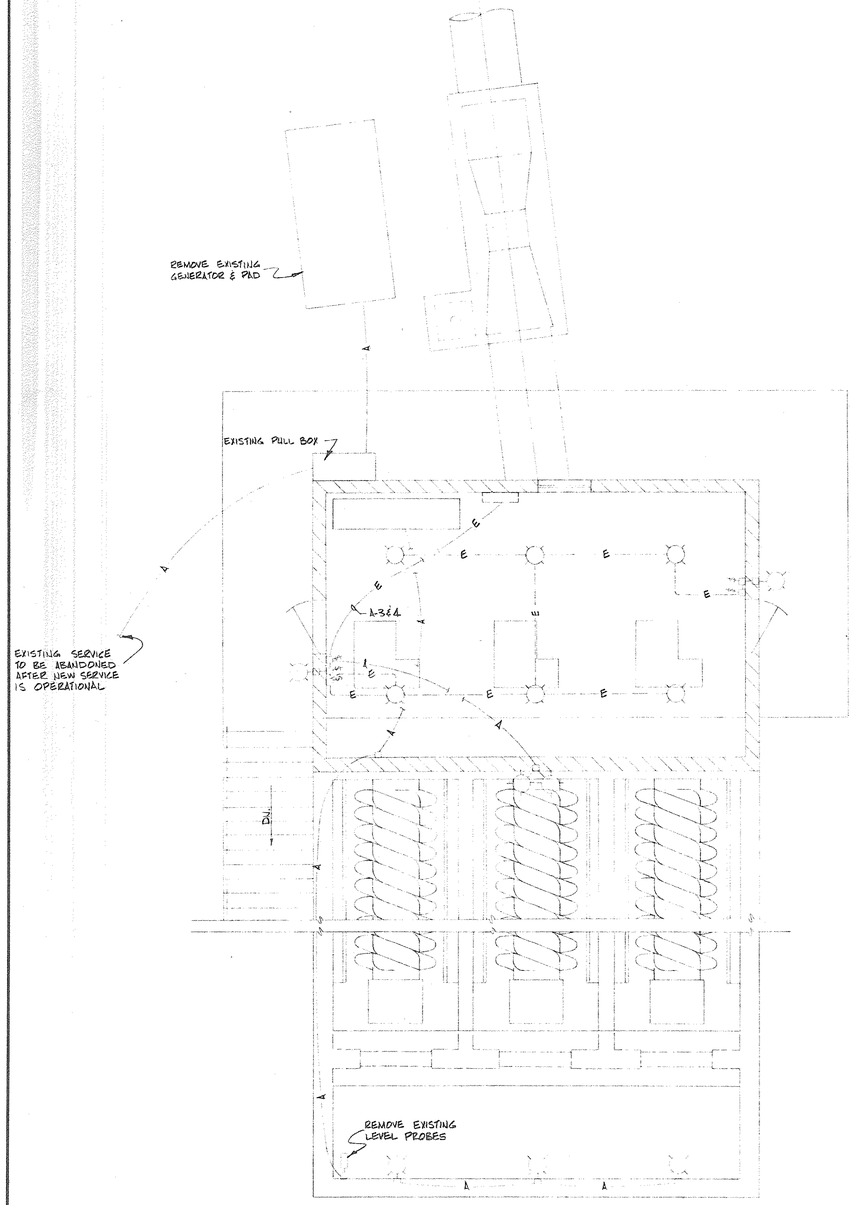
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

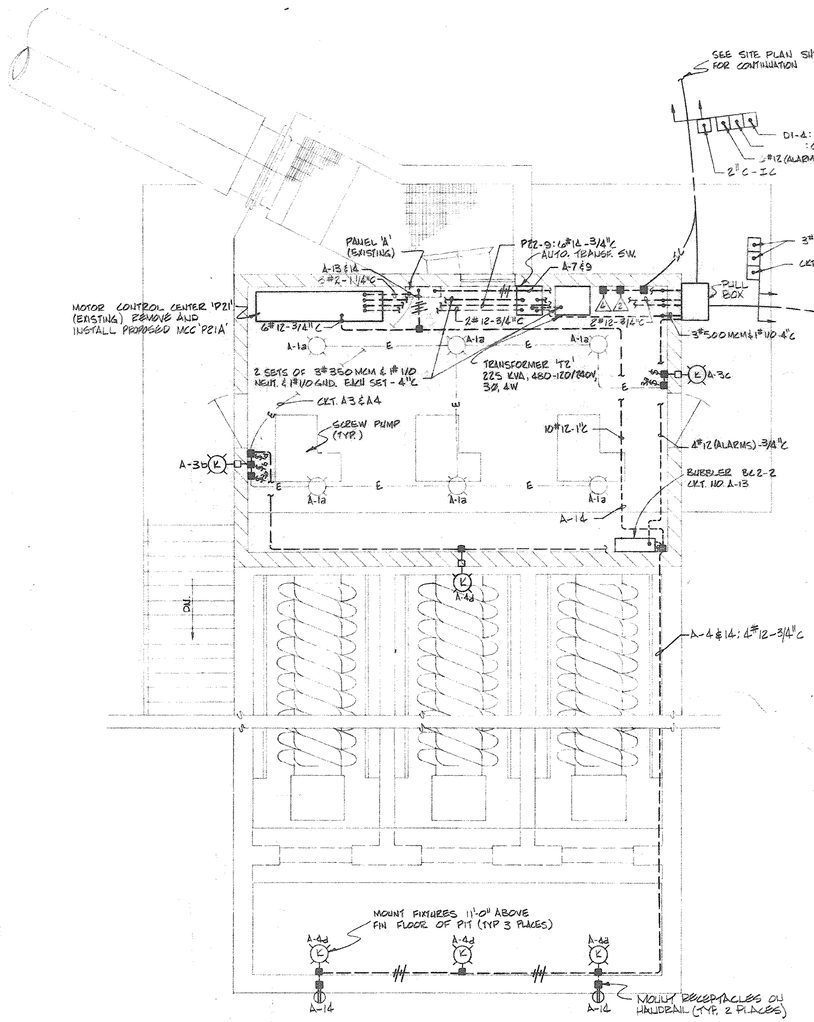
MOTOR CONTROL CENTER 'P22'
SCHEMATIC WIRING DIAGRAMS

SHEET 2E-3
OF SHEETS
PROJECT NO. 78284

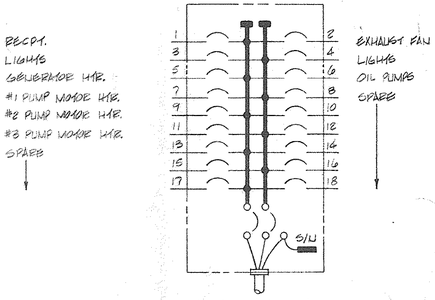
51-003-5



PUMP STATION - REMOVAL PLAN



PUMP STATION - MODIFICATION PLAN



STANDBY ELECTRIC GENERATOR NO.1
200 KW, 120/240 V, 3Ø, 4W
(SEE SHT. NO. 1S-1 FOR CONCRETE PAD DETAIL.)

NOTES:

1. UNLESS OTHERWISE NOTED, EXISTING ELECTRICAL INSTALLATION TO REMAIN.

2. CONTRACTOR SHALL SURVEY THE EXISTING CIRCUITS AND CONTROLS IN MOTOR CONTROL CENTER "P21" AND PREPARE WIRING SCHEMATIC DIAGRAMS FOR ALL CIRCUITS. EXISTING WIRING SHALL BE IDENTIFIED AND TAGGED WITHIN THE MOTOR CONTROL CENTER, AND ALL CIRCUITS SHALL BE INDENTIFIED WITH NEW NAMEPLATES.

51-003-030

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED J.N.G.
DRAWN R.W.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

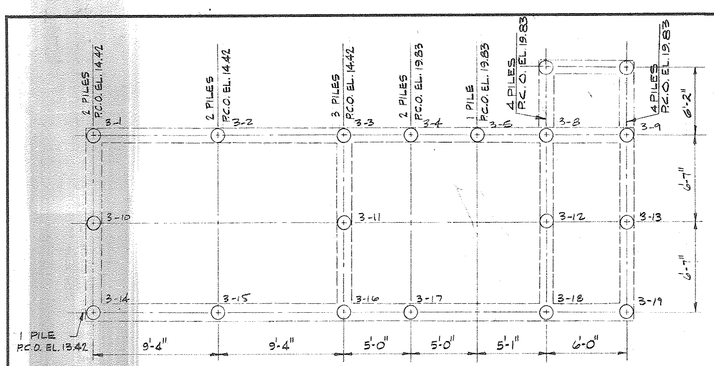
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

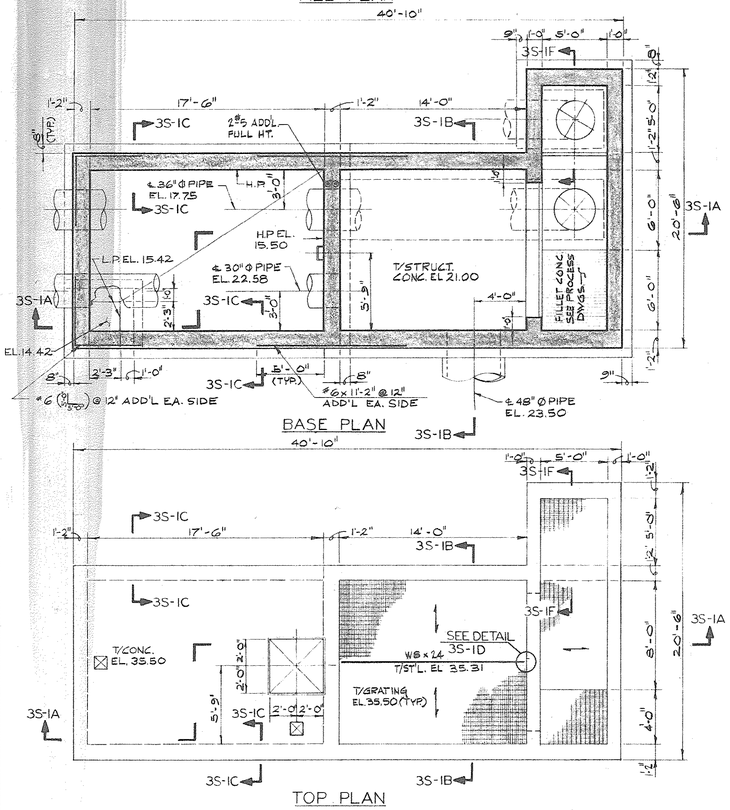
EXISTING PUMP STATION
ELECTRICAL MODIFICATIONS

SHEET 2E - 4
OF SHEETS
PROJECT NO. 78284

51-030



PILE PLAN

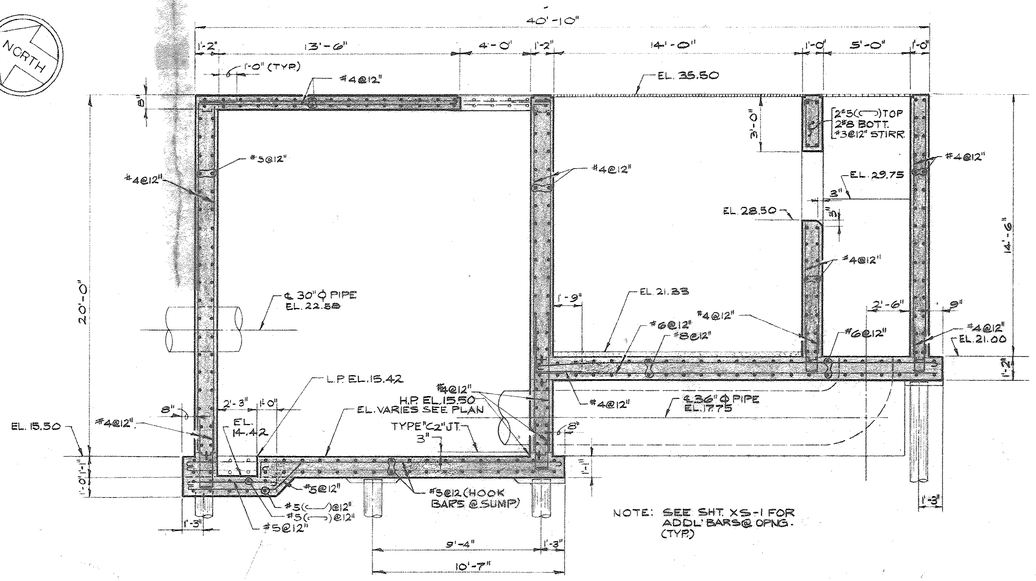


BASE PLAN

TOP PLAN

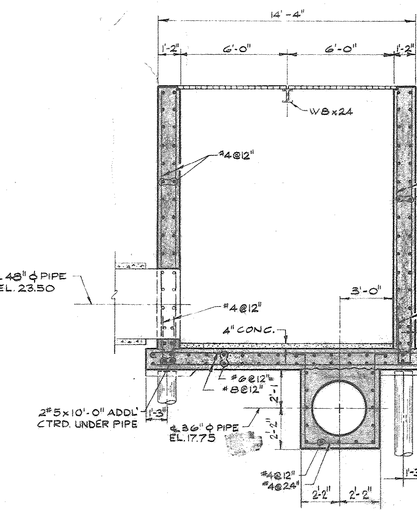
SPLITTER BOX

NOTE:
ALL PILES SHOWN ON THIS SHEET SHALL BE DRILLED-IN-PLACE CONCRETE BEARING PILES (BEARING CAPACITY-40 TONS). SEE SHT. XS-1 AND SPECS. FOR PILE DETAILS.

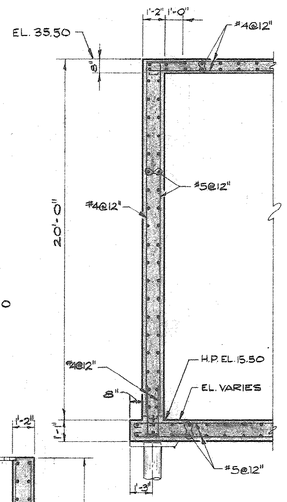


NOTE: SEE SHT. XS-1 FOR ADDL' BARS @ OPNG. (TYP.)

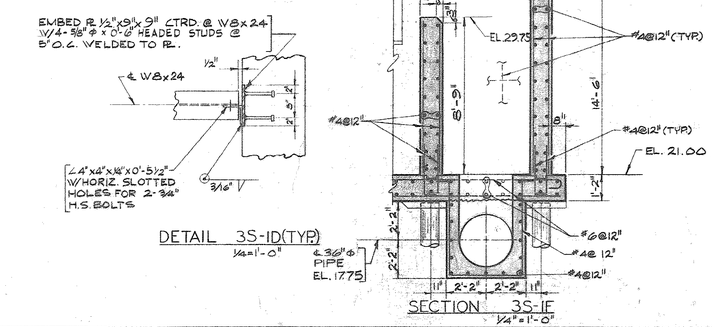
SECTION 3S-1A
1/4"=1'-0"

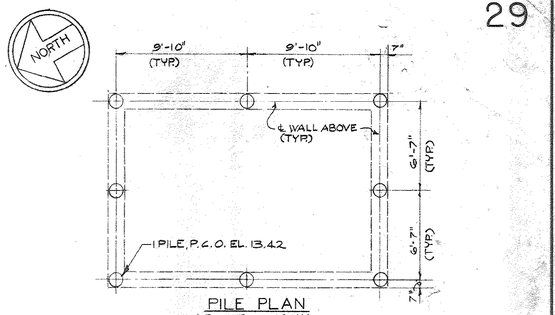


SECTION 3S-1B
1/4"=1'-0"

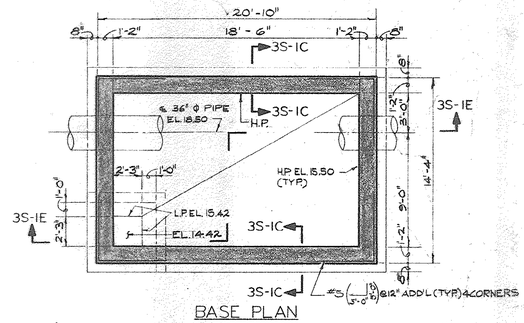


SECTION 3S-1C
1/4"=1'-0"

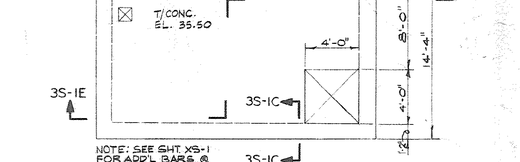




PILE PLAN
P.C.O. EL. 14.42 U.N.

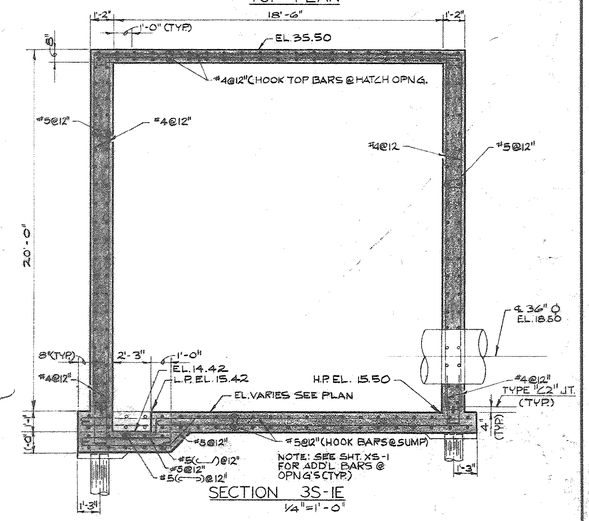


BASE PLAN



NOTE: SEE SHT. XS-1 FOR ADD'L BARS @ OPNG'S (TYP.)

TOP PLAN



SECTION 3S-1E
1/4"=1'-0"

METER BOX

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED J.S/H.R.
DRAWN R.K.
CHECKED H.R.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
3/16" = 1'-0"
UNLESS NOTED

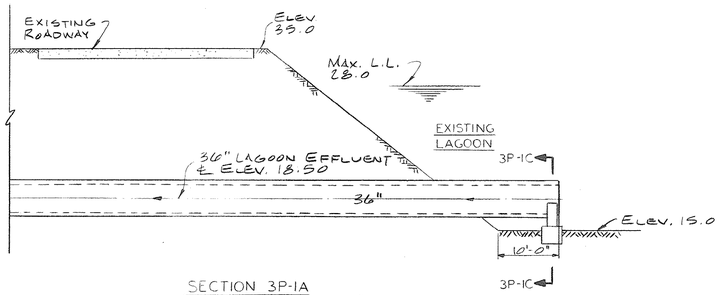
SPLITTER BOX AND METER BOX PLANS AND SECTIONS

51-002-031

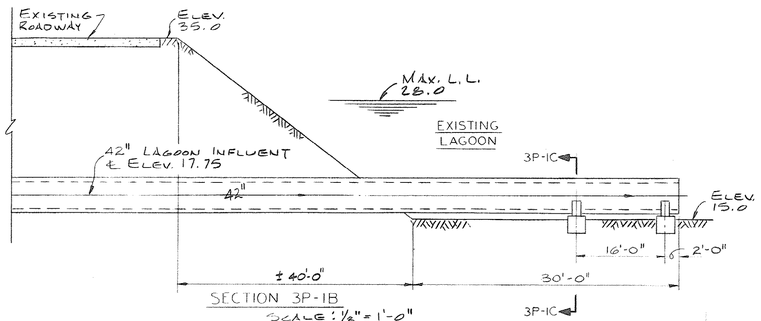
SHEET 3S-1
OF SHEETS
PROJECT NO. 78284

~~51-0315~~

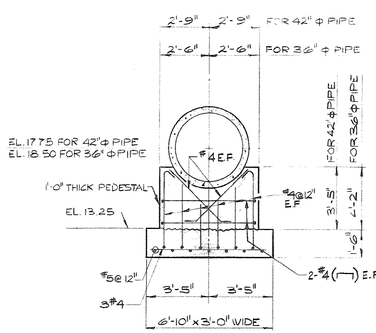
RECORD



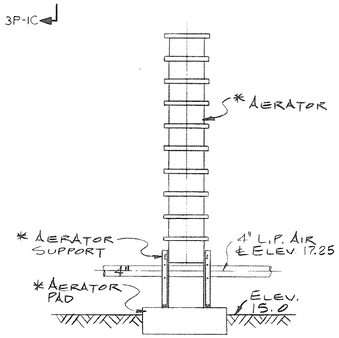
SECTION 3P-1A
Scale: 1/8" = 1'-0"



SECTION 3P-1B
Scale: 1/8" = 1'-0"

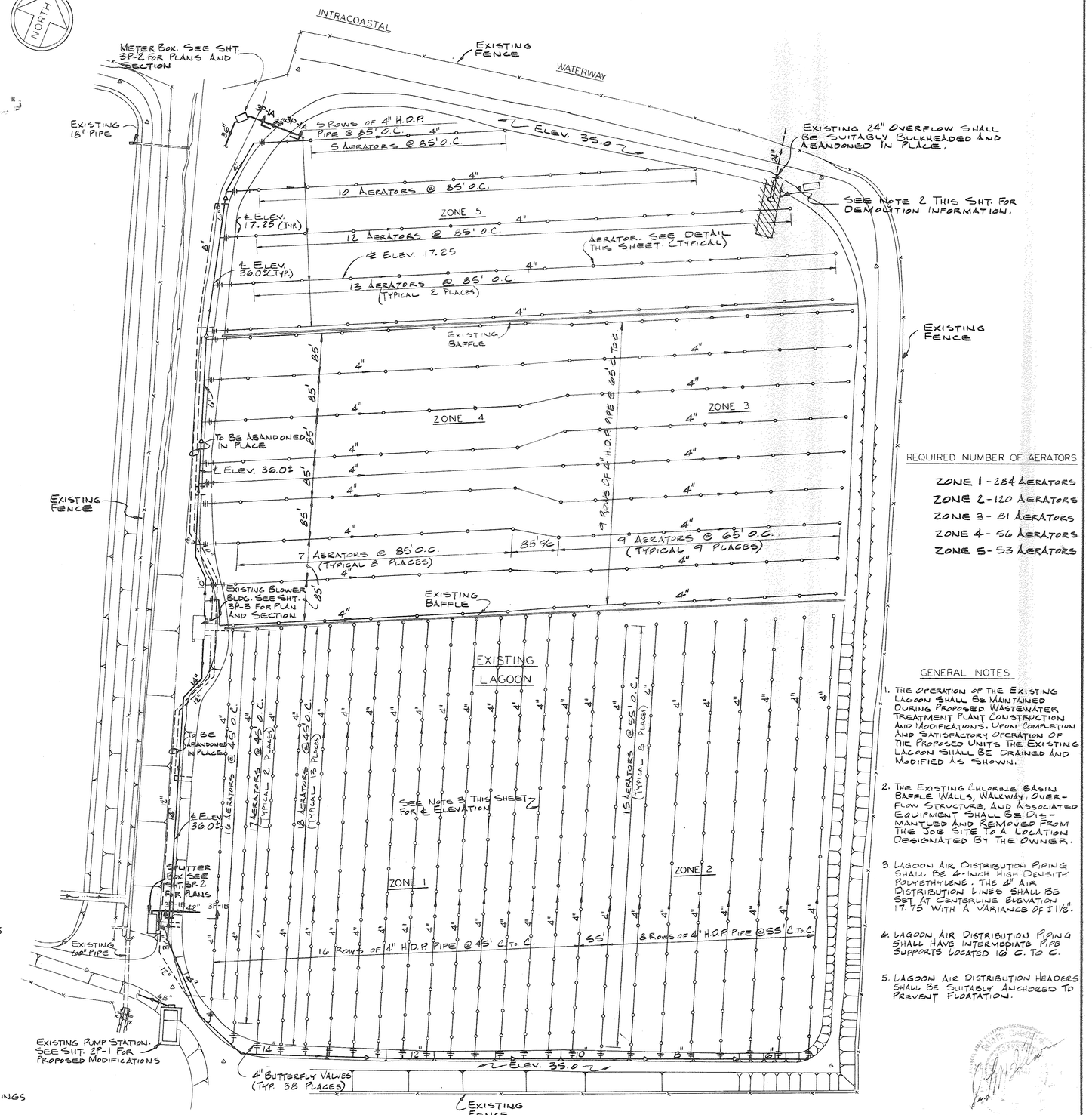


SECTION 3P-1C
¼"-1'-0"



AERATOR DETAIL
Scale: None

* See Manufacturer's Drawings For Details.



REQUIRED NUMBER OF AERATORS

ZONE 1 - 284 AERATORS
ZONE 2 - 120 AERATORS
ZONE 3 - 81 AERATORS
ZONE 4 - 56 AERATORS
ZONE 5 - 53 AERATORS

GENERAL NOTES

1. THE OPERATION OF THE EXISTING LAGOON SHALL BE MAINTAINED DURING PROPOSED WASTEWATER TREATMENT PLANT CONSTRUCTION AND MODIFICATIONS. UPON COMPLETION AND SATISFACTORY OPERATION OF THE PROPOSED UNITS THE EXISTING LAGOON SHALL BE DRAINED AND MODIFIED AS SHOWN.
2. THE EXISTING CHLORINE BASIN BAFFLE WALLS, WALKWAY, OVERFLOW STRUCTURE, AND ASSOCIATED EQUIPMENT SHALL BE DISMANTLED AND REMOVED FROM THE JOB SITE TO A LOCATION DESIGNATED BY THE OWNER.
3. LAGOON AIR DISTRIBUTION PIPING SHALL BE 4-INCH HIGH DENSITY POLYETHYLENE. THE 4" AIR DISTRIBUTION LINES SHALL BE SET AT CENTERLINE ELEVATION 17.75 WITH A VARIANCE OF ± 1½".
4. LAGOON AIR DISTRIBUTION PIPING SHALL HAVE INTERMEDIATE PIPE SUPPORTS LOCATED 16' C. TO C.
5. LAGOON AIR DISTRIBUTION HEADERS SHALL BE SUITABLY ANCHORED TO PREVENT FLOATATION.

51-002-03

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED W.J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

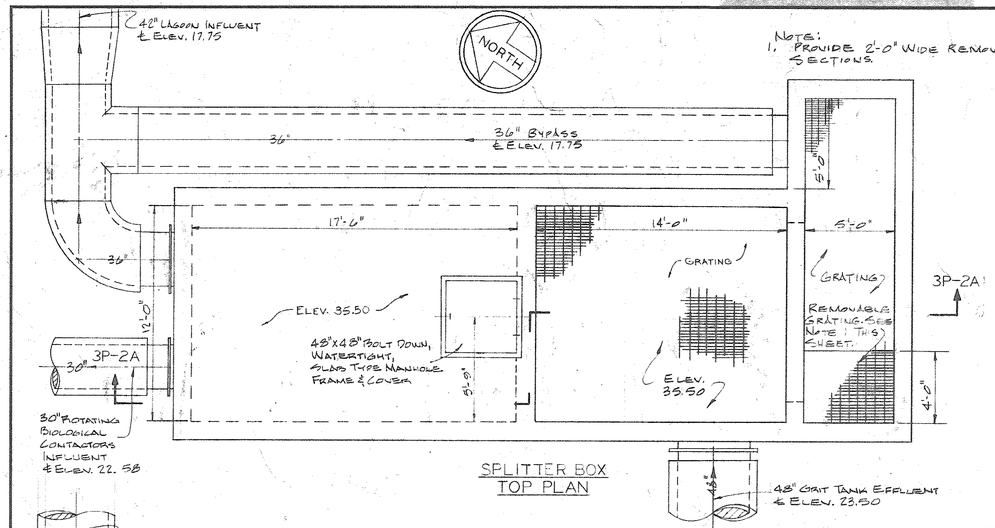
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1" = 100'
UNLESS NOTED

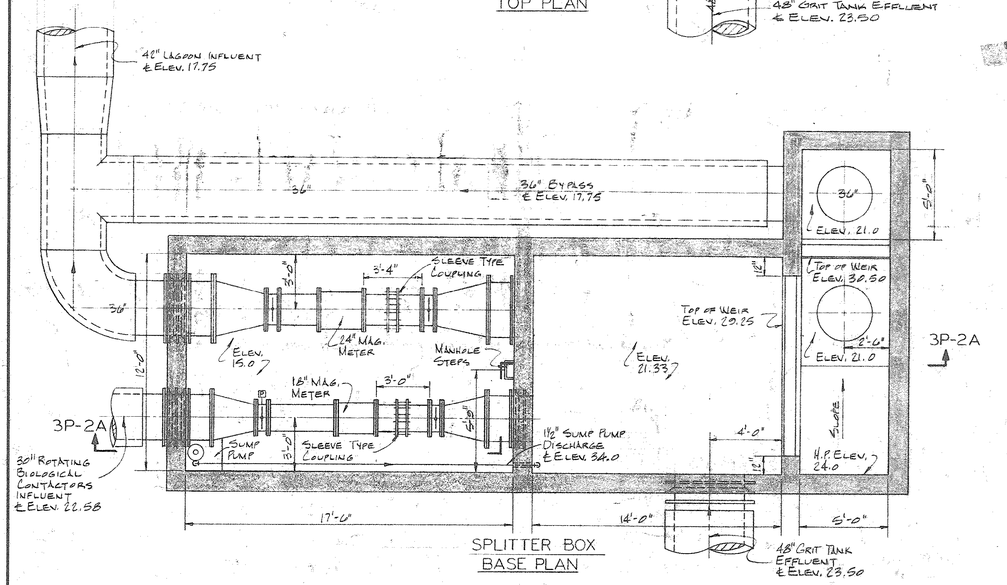
PROPOSED MODIFICATIONS AND ADDITIONS TO EXISTING LAGOON

SHEET 3P-1
OF SHEETS
PROJECT NO. 78284

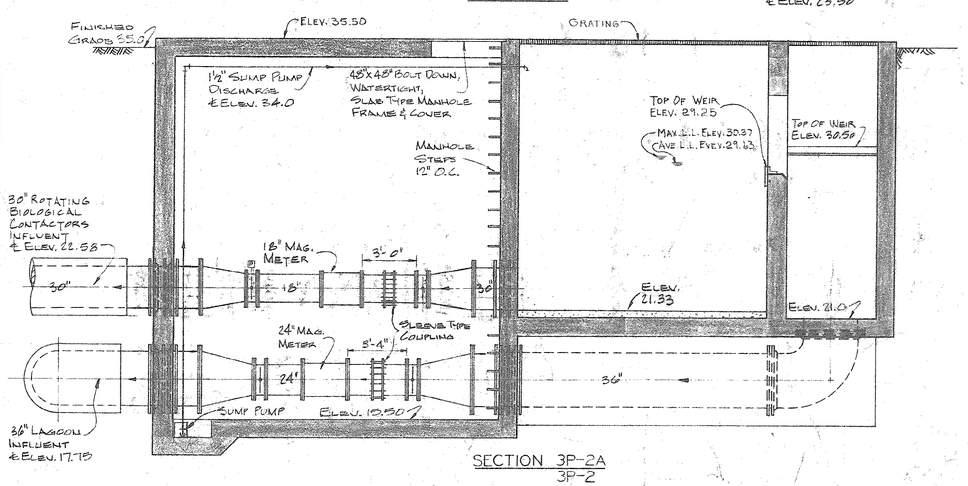
51-002 S RECORD



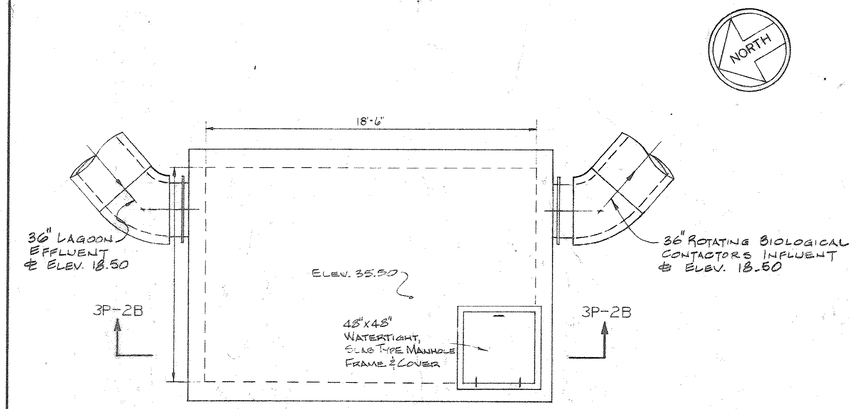
SPLITTER BOX
TOP PLAN



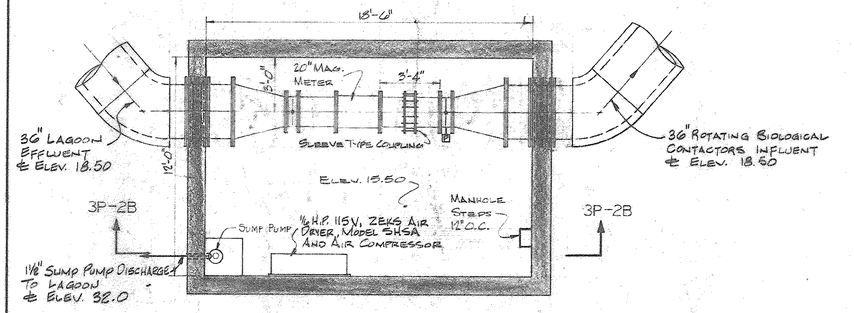
SPLITTER BOX
BASE PLAN



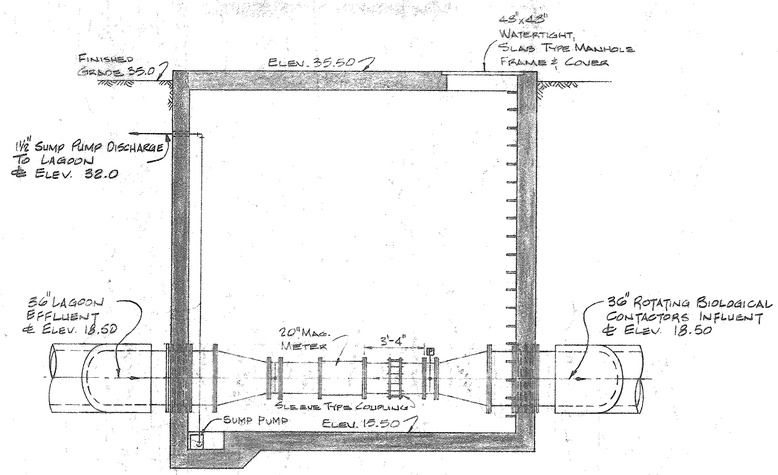
SECTION 3P-2A
3P-2



METER BOX
TOP PLAN



METER BOX
BASE PLAN



SECTION 3P-2B
3P-2

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED W.J.W.
DRAWN B.T.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

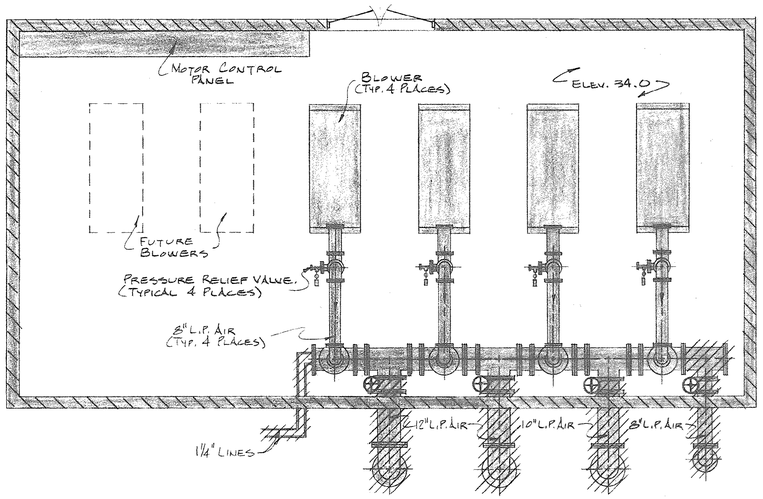
SPLITTER BOX AND METER BOX PLANS AND SECTIONS

SHEET 3P-2
OF SHEETS
PROJECT NO. 78284

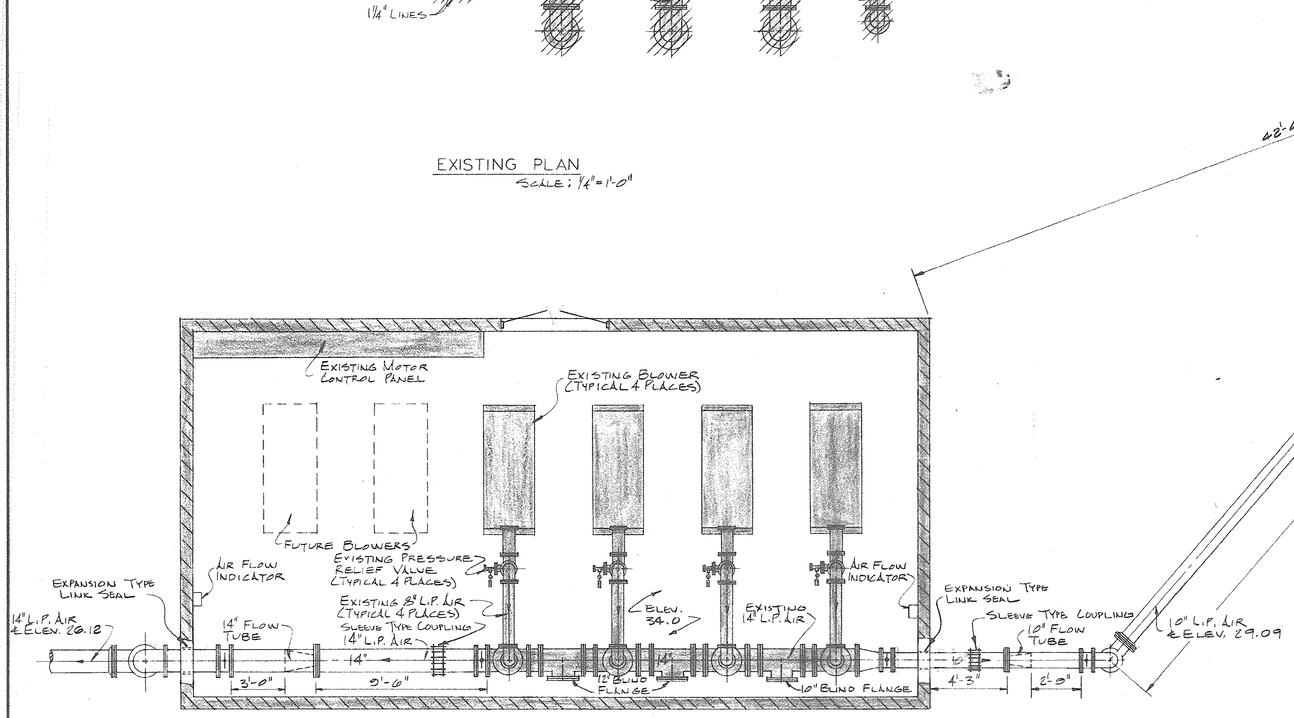
51-002-033

51-002-S RECORD

NORTH



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



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

51-003-034

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED W.J.W.
DRAWN B.T., C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

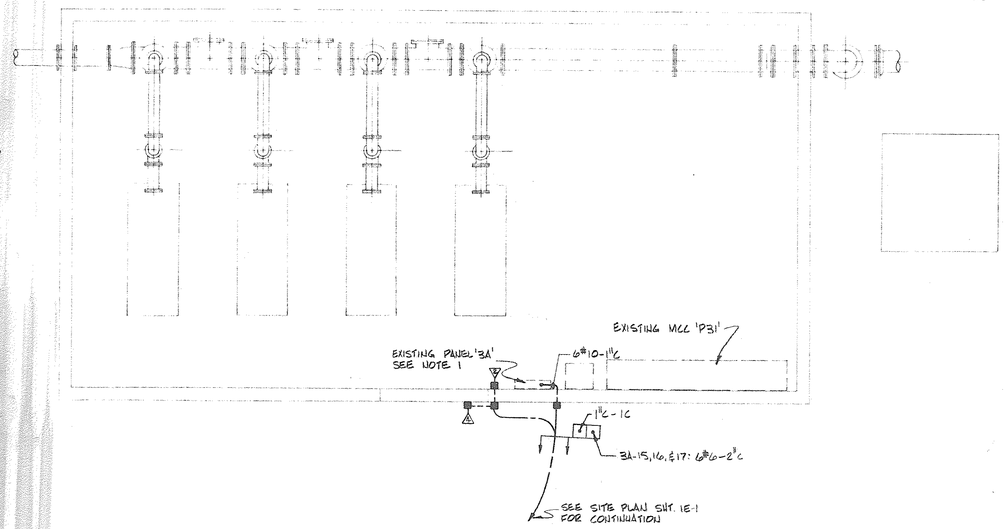
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
AS NOTED

MODIFICATIONS TO EXISTING BLOWER BUILDING PLANS

SHEET 3P-3
OF SHEETS
PROJECT NO. 78284

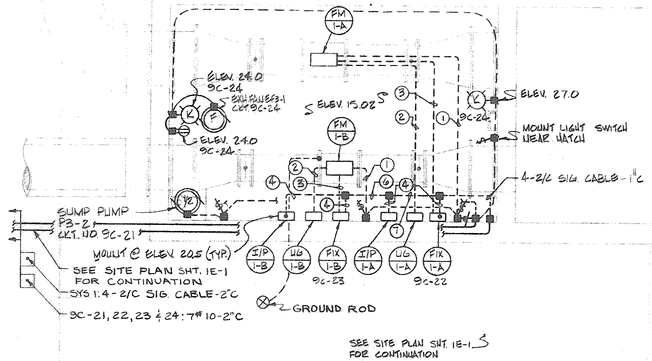
54-0345



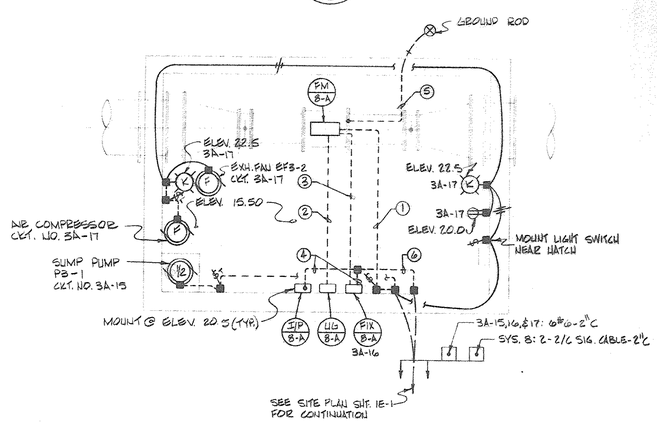
EXISTING BLOWER BUILDING

NOTES:

1. INSTALL 3 20A-1P CIRCUIT BREAKERS IN EXISTING PANEL '3A' FOR CKTS. 3A-15,16,&17.
2. SEE SHEET XE-5 FOR ELECTRICAL SYMBOLS & LEGEND



SPLITTER BOX PLAN



METER BOX PLAN

① – 2#12-¾"C
② – INSTALL SHIELDED CABLES FURNISHED BY MFG. IN-¾"C
③ – INSTALL 2#12 WITH THE SHIELDED CABLES FURNISHED BY MFG. IN-¾"C.
④ – 2/C SIG. CABLE-¾"C
⑤ – #8 BARE GROUND-½"C
⑥ – 2-2/C SIG. CABLES-¾"C
⑦ – 3-2/C SIG CABLES-¾"C

51-603-035

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.N.G.
DRAWN K.R.H.-R.W.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

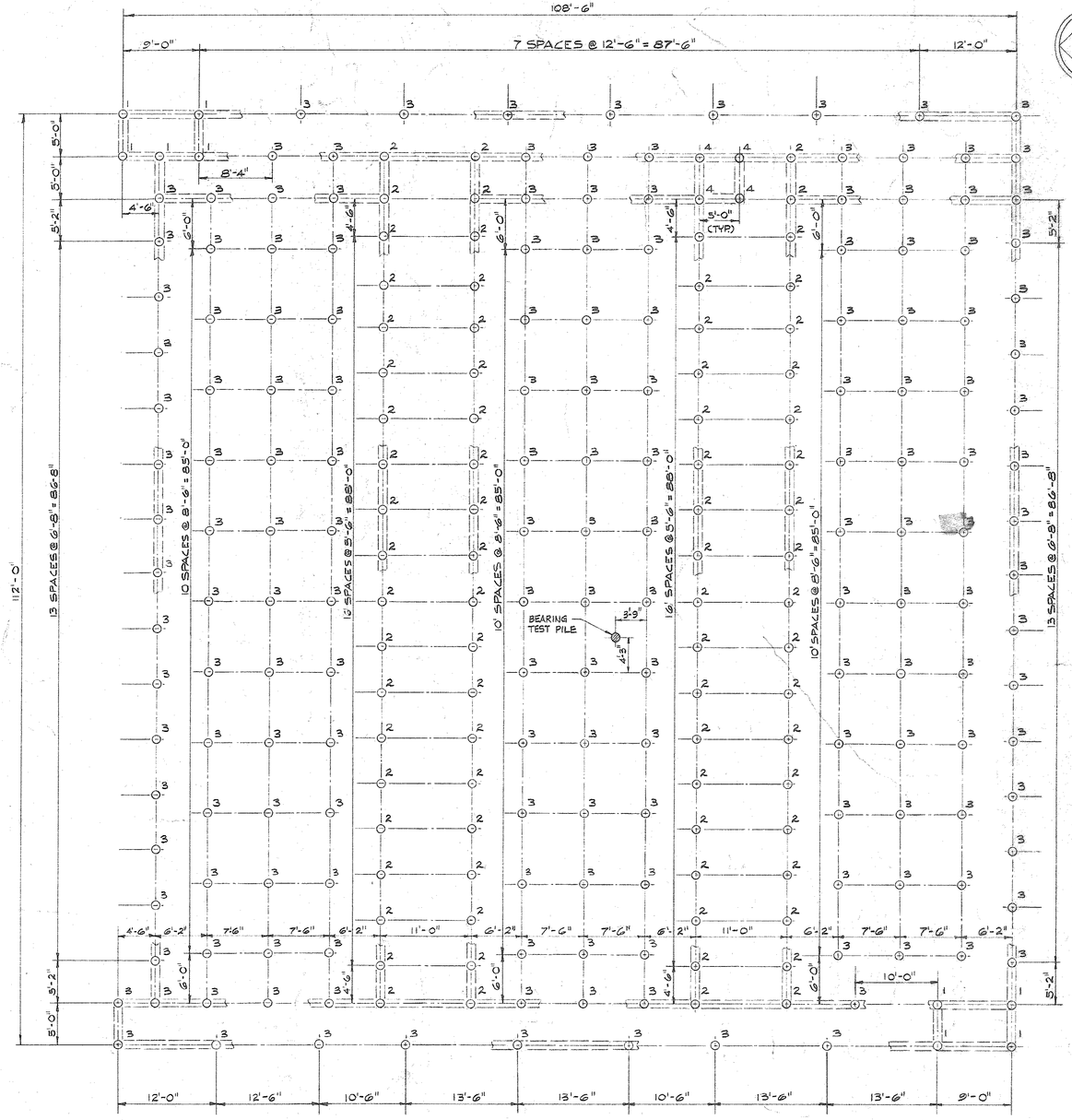
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
¼"=1'-0"

SPLITTER & METER BOX PLAN – ELECTRICAL

SHEET 3E-1
OF SHEETS
PROJECT NO. 78284

51-035 S



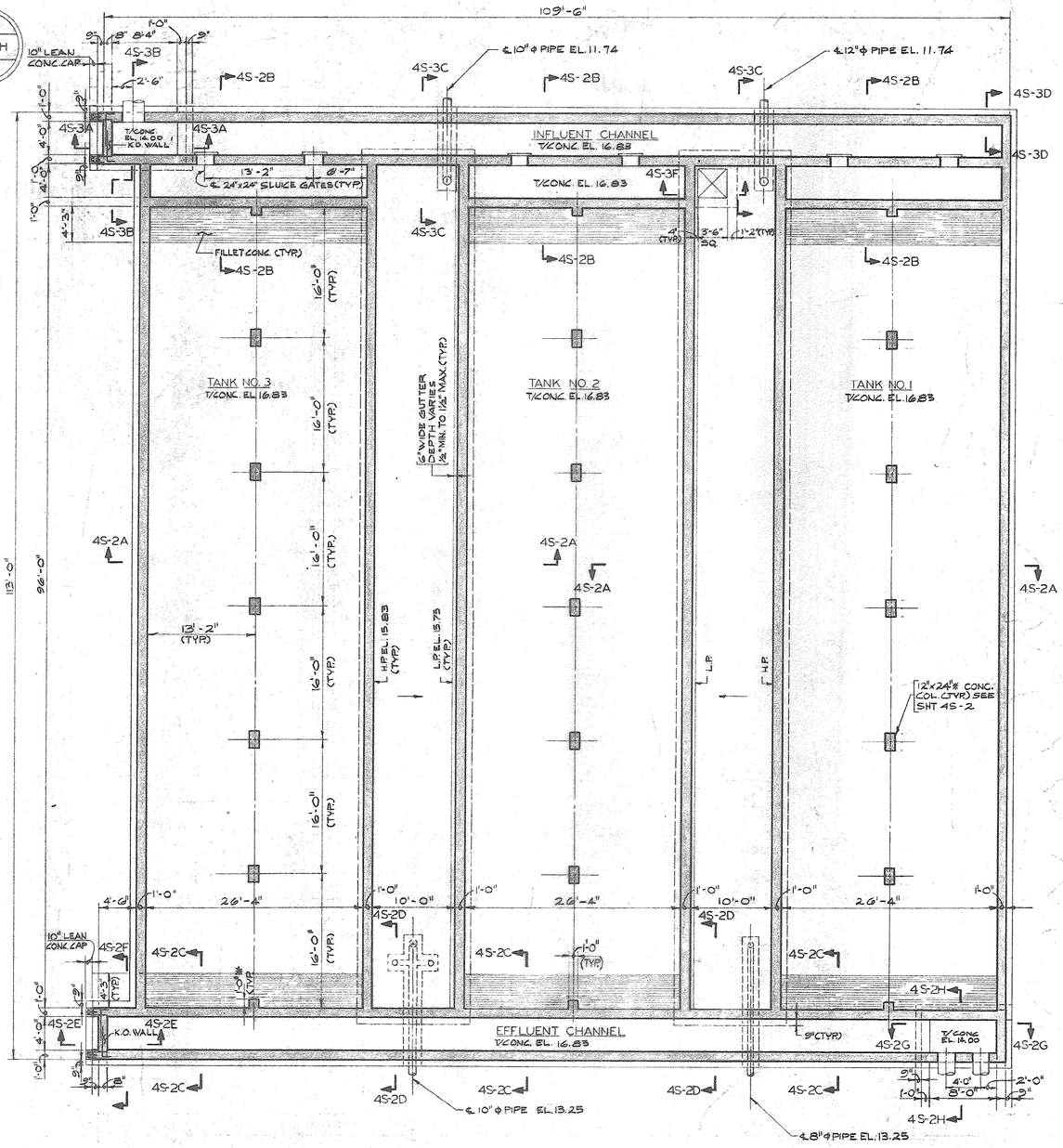
PILE PLAN

PILE CUT-OFF SCHEDULE	
MARK	ELEVATION
1	EL. 12.67
2	EL. 14.50
3	EL. 15.50
4	EL. 8.75

NOTES:

ALL PILES SHOWN ON THIS SHEET SHALL BE TREATED TIMBER OR DRILLED-IN-PLACE CONCRETE BEARING PILES (BEARING CAPACITY 20 TONS) SEE SHEET XS-1 AND SPEC'S FOR PILE DETAILS.

▨ INDICATES BEARING TEST PILE.



BASE PLAN

NOTES:

ALL PILES SHOWN ON THIS SHEET SHALL BE TREATED TIMBER OR DRILLED-IN-PLACE CONCRETE BEARING PILES (BEARING CAPACITY 20 TONS) SEE SHEET XS-1 AND SPEC'S FOR PILE DETAILS.

▨ INDICATES BEARING TEST PILE.

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED S.K.L.
DRAWN R.K.
CHECKED H.R.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

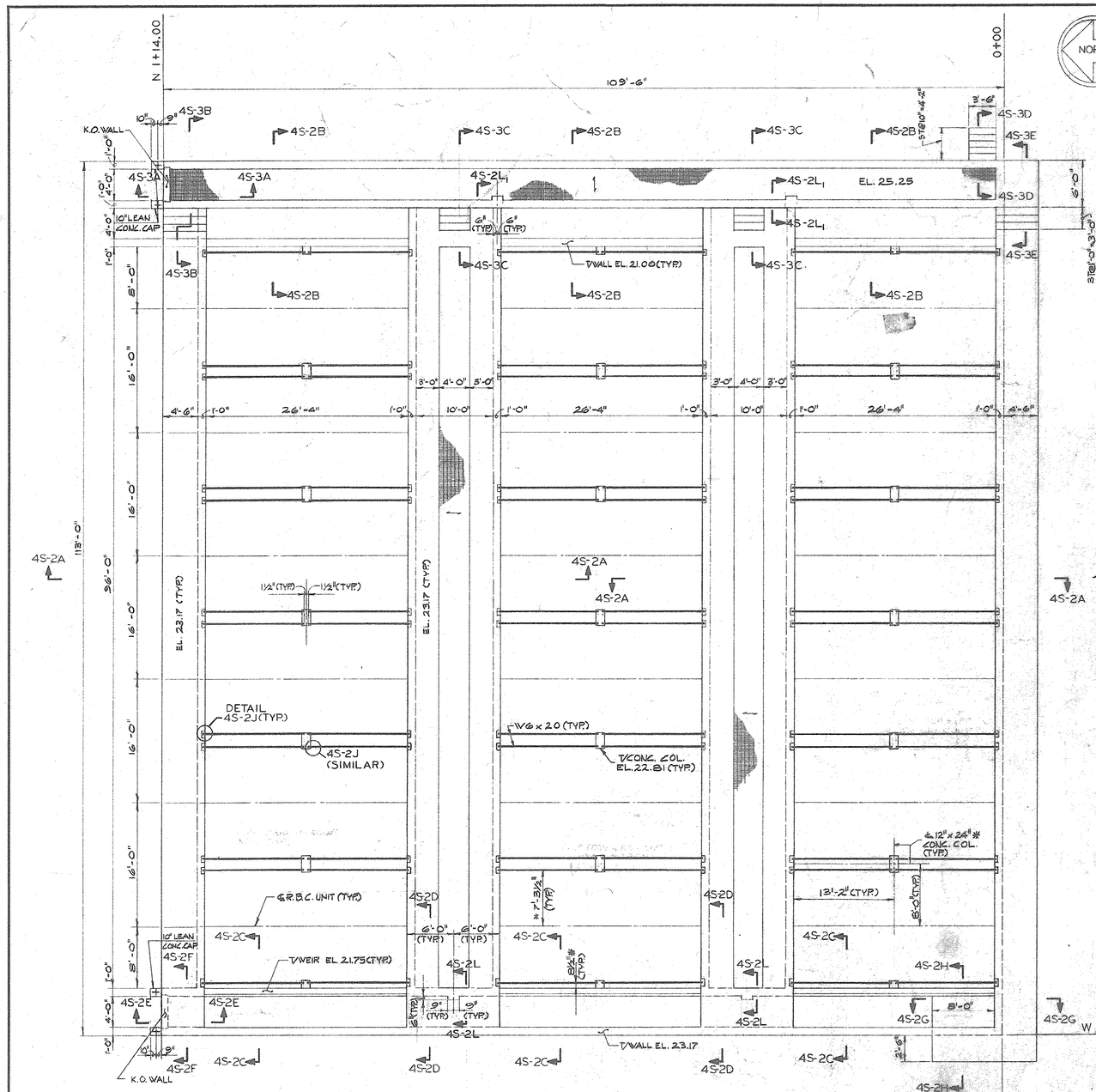
SCALE
1/8" = 1'-0"

ROTATING BIOLOGICAL CONTACTORS
PILE AND BASE PLANS

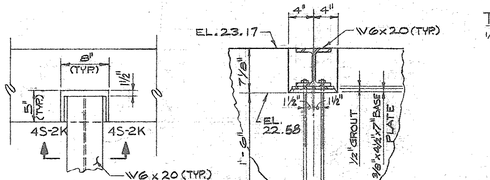
SHEET 4S-1
OF SHEETS
PROJECT NO. 78284

51-002-036

RECORD

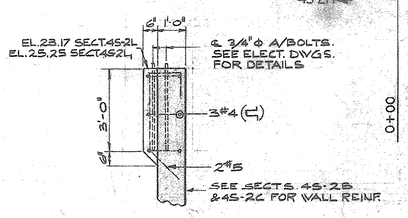


TOP PLAN
1/8" = 1'-0"

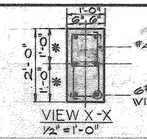


DETAIL 4S-2J (TYP.)
1" = 1'-0"

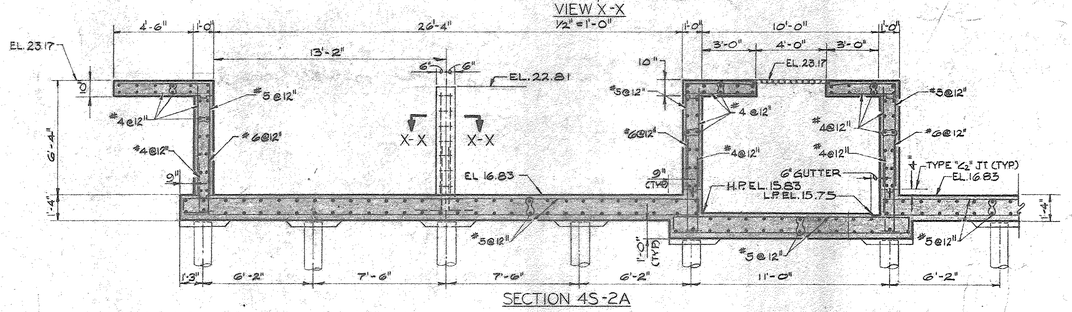
SECTION 4S-2K
1" = 1'-0"



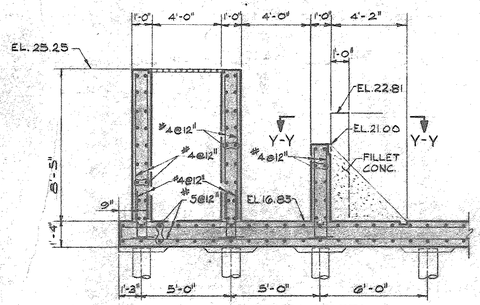
SECTION 4S-2L & 4S-2L1
3/8" = 1'-0"



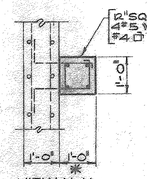
VIEW X-X
½" = 1'-0"



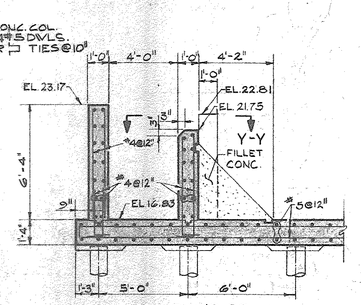
SECTION 4S-2A



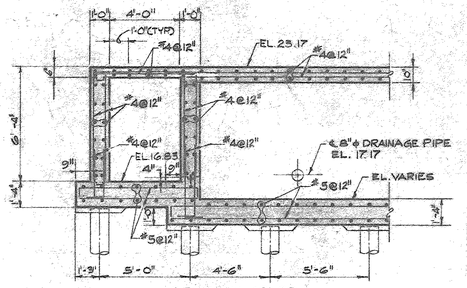
SECTION 4S-2B



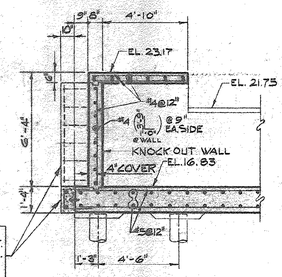
VIEW Y-Y
½" = 1'-0"



SECTION 4S-2C

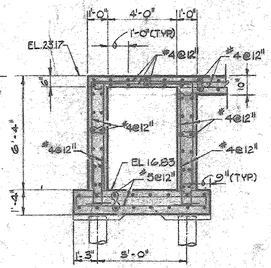


SECTION 4S-2D

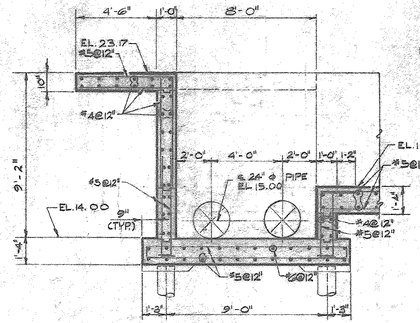


SECTION 4S-2E

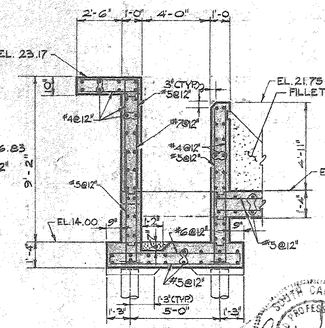
10" LEAN CONC. CAP
TYPE E1 FUTURE EXP. JT. COVERED W/ TAR PAPER. PROVIDE 2#4 W/ 3 (⊏ ⊐) @ 12" O.C.



SECTION 4S-2F



SECTION 4S-2G



SECTION 4S-2H

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 6847
SAM L. McILLWAIN

51-002-037

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED S.K.L.
DRAWN R.K.
CHECKED H.R.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

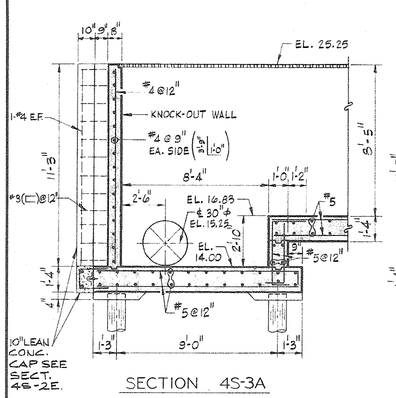
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"
UNLESS NOTED

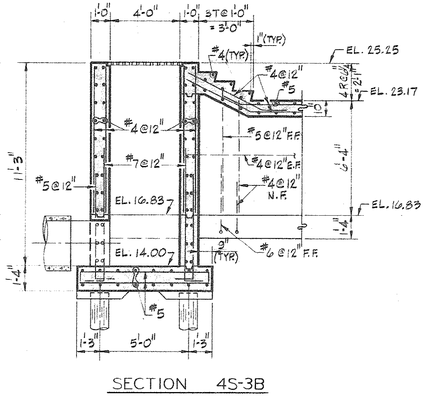
ROTATING BIOLOGICAL CONTACTORS
TOP PLAN AND SECTIONS

SHEET 4S-2
OF SHEETS
PROJECT NO. 78284

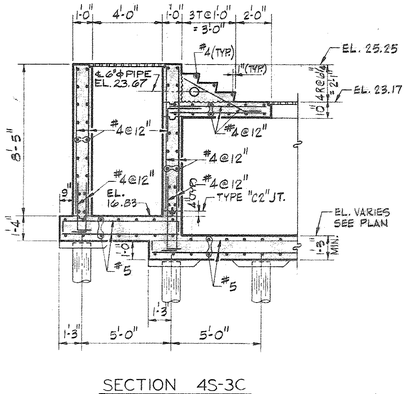
51-002-37A RECORD



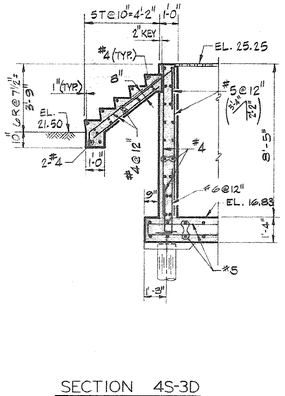
SECTION 4S-3A



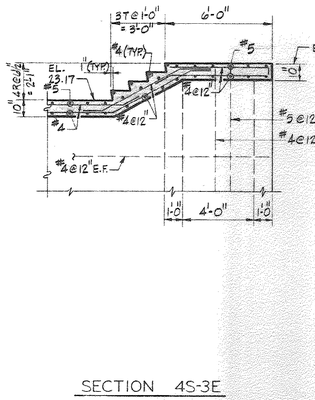
SECTION 4S-3B



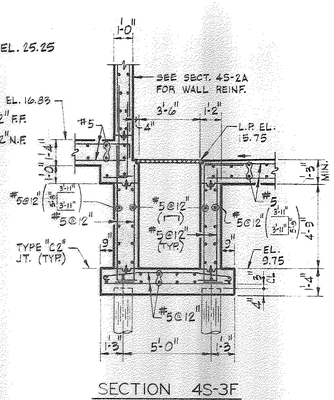
SECTION 4S-3C



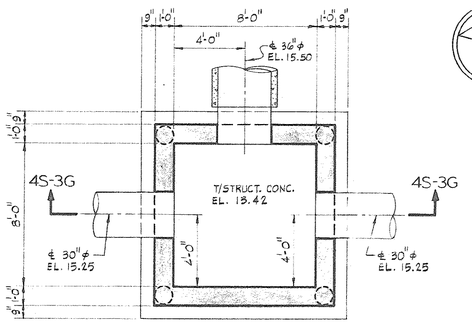
SECTION 4S-3D



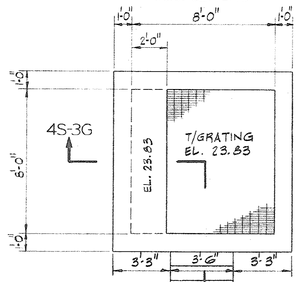
SECTION 4S-3E



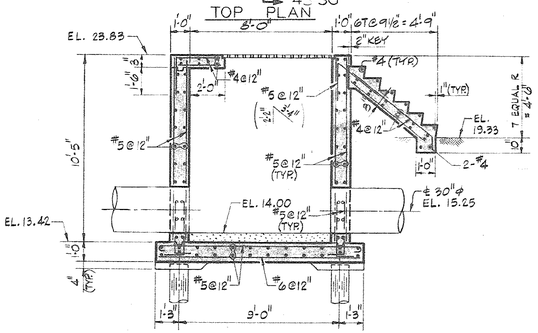
SECTION 4S-3F



BASE PLAN
P.C.O. EL. 12.42

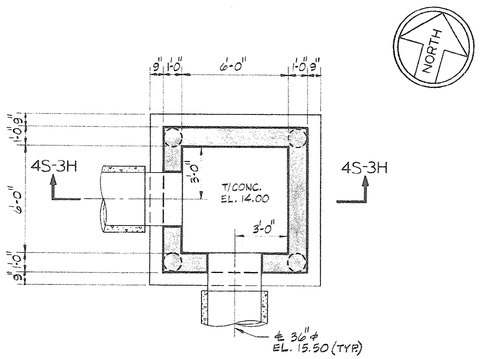


TOP PLAN

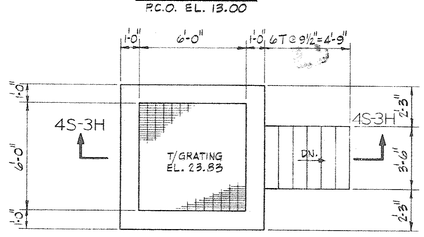


SECTION 4S-3G

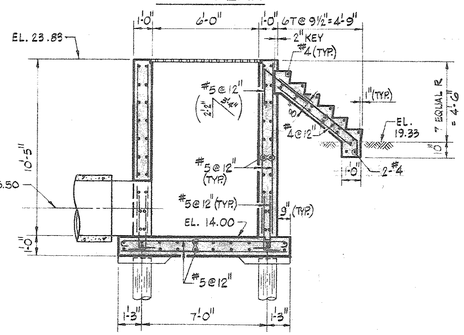
JUNCTION CHAMBER "A"



BASE PLAN
P.C.O. EL. 13.00

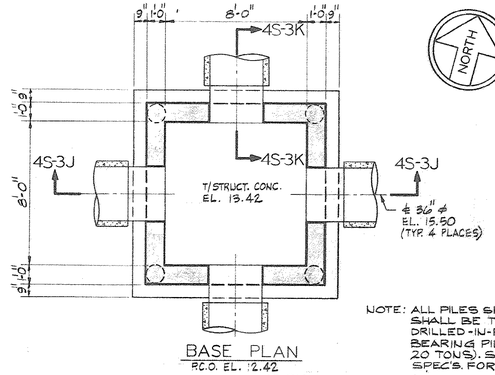


TOP PLAN



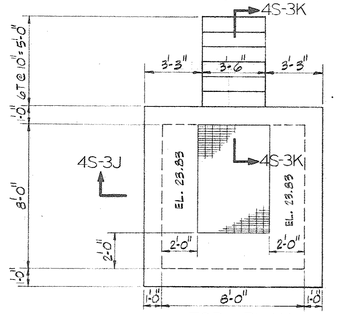
SECTION 4S-3H

JUNCTION CHAMBER "B"

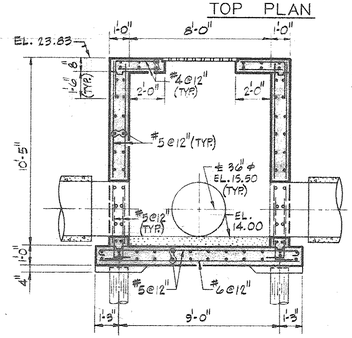


BASE PLAN
P.C.O. EL. 12.42

NOTE: ALL PILES SHOWN ON THIS SHT. SHALL BE TREATED TIMBER OR DRILLED-IN-PLACE CONCRETE BEARING PILES (BEARING CAPACITY 20 TONS). SEE SHT. XS-1 AND SPECS. FOR PILE DETAILS.

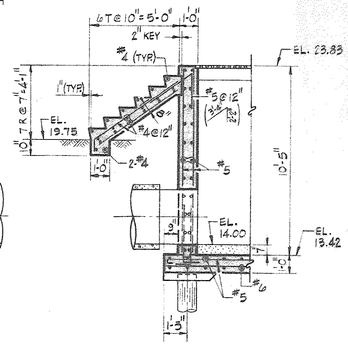


TOP PLAN

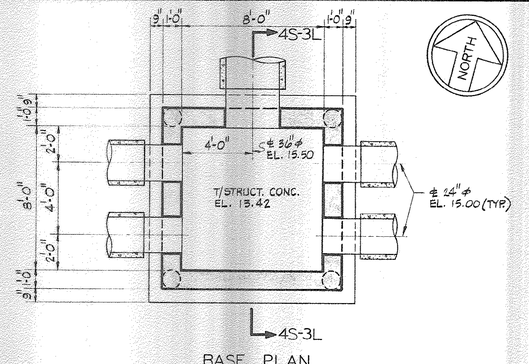


SECTION 4S-3J

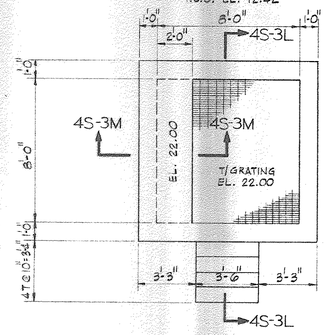
JUNCTION CHAMBER "C"



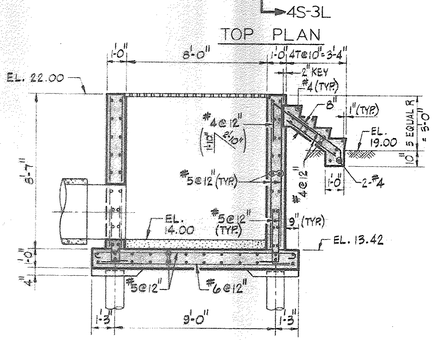
SECTION 4S-3K



BASE PLAN
P.C.O. EL. 12.42

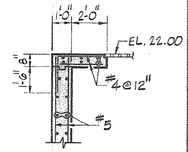


TOP PLAN



SECTION 4S-3L

JUNCTION CHAMBER "D"



SECTION 4S-3M

51-002-038

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED S.K.L.
DRAWN R.W.H.
CHECKED H.R.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

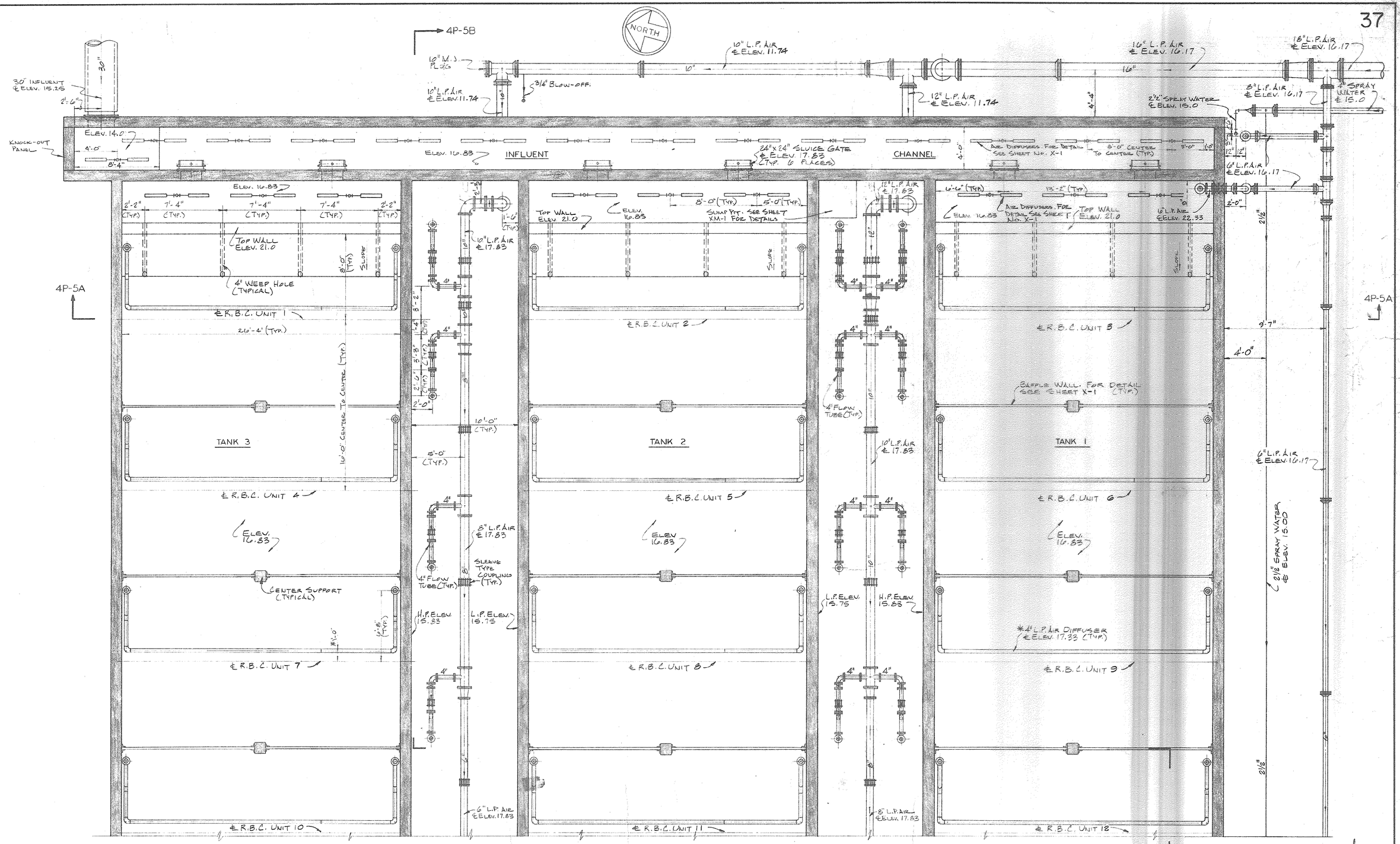
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

JUNCTION CHAMBERS "A" THRU "D"
PLANS AND SECTIONS

SHEET 4S-3
OF SHEETS
PROJECT NO. 78284

AS BUILTS RECORD



* DIMENSION AND/OR ELEVATION TO BE DETERMINED BY EQUIPMENT MANUFACTURER.

51-002-039

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED W.J.W.
DRAWN R.L.J., C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4"=1'-0"

ROTATING BIOLOGICAL CONTACTORS
BASE PLAN

SHEET 4P-1
OF SHEETS
PROJECT NO. 78284

51-039 RECORD

NORTH

4P-5B

E.R.B.C. UNIT 7

E.R.B.C. UNIT 8

E.R.B.C. UNIT 9

E.R.B.C. UNIT 10

TANK 3

E.R.B.C. UNIT 11

TANK 2

E.R.B.C. UNIT 12

TANK 1

E.R.B.C. UNIT 13

ELEV. 16.83

E.R.B.C. UNIT 14

ELEV. 16.83

E.R.B.C. UNIT 15

26'-4" (TYP.)

ELEV. 16.83

E.R.B.C. UNIT 16

E.R.B.C. UNIT 17

E.R.B.C. UNIT 18

6" L.P. AIR ℄ 17.83

4" L.P. AIR ℄ 17.83

8" L.P. AIR ℄ 17.83

4" BLIND FLANGE

4" FLOW TUBE (TYPICAL)

6" BLIND FLANGE

4" FLOW TUBE (TYPICAL)

CENTER SUPPORT (TYPICAL)

SLEEVE TYPE COUPLING (TYP.)

BAFFLE WALL. FOR DETAIL SEE SHEET X-1 (TYP.)

21⅛" SPRAY WATER ℄ ELEV. 15.00

6" L.P. AIR ℄ ELEV. 16.17

H.P. ELEV. 15.83

L.P. ELEV. 15.75

10" CLEAN-OUT

8" TANK DRAINAGE ℄ ELEV. 17.17

CONCRETE ENCASED UNDER SLAB

8'-0" (TYP.)

SLOPE

10'-0" CENTER TO CENTER (TYP.)

L.P. ELEV. 15.75

H.P. ELEV. 15.83

8" CLEAN-OUT

8" TANK DRAINAGE ℄ ELEV. 17.17

CONCRETE ENCASED UNDER SLAB

SLOPE

4" L.P. AIR DIFFUSER ℄ ELEV. 17.33 (TYP.)

4'-0"

5'-7"

KNOCK-OUT PANEL

TOP WEIR ELEV. 22.50 (TYP. 3 PLACES)

EFFLUENT

ELEV. 16.83

AIR DIFFUSERS. FOR DETAIL SEE SHEET NO. X-1

CHANNEL

CHLORINE DIFFUSER HEADER ℄ ELEV. 17.58

℄ ELEV. 21.0

EL. 14.0

24" DIA. SLUICE GATE ℄ ELEV. 15.0 (TYP. 2 PLACES)

6" L.P. AIR ℄ ELEV. 16.17

2½"

1"

2⅛" SPRAY WATER ℄ ELEV. 17.00

1" CHLORINE SOLUTION ℄ ELEV. 17.0

24" EFFLUENT ℄ ELEV. 15.0

24" EFFLUENT ℄ ELEV. 15.0

8" TANK DRAINAGE ℄ ELEV. 13.25

10" TANK DRAINAGE ℄ ELEV. 13.25

* DIMENSION AND/OR ELEVATION TO BE DETERMINED BY EQUIPMENT MANUFACTURER

4P-5B

51-003-040

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED W.J.W.
DRAWN R.L.J., C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

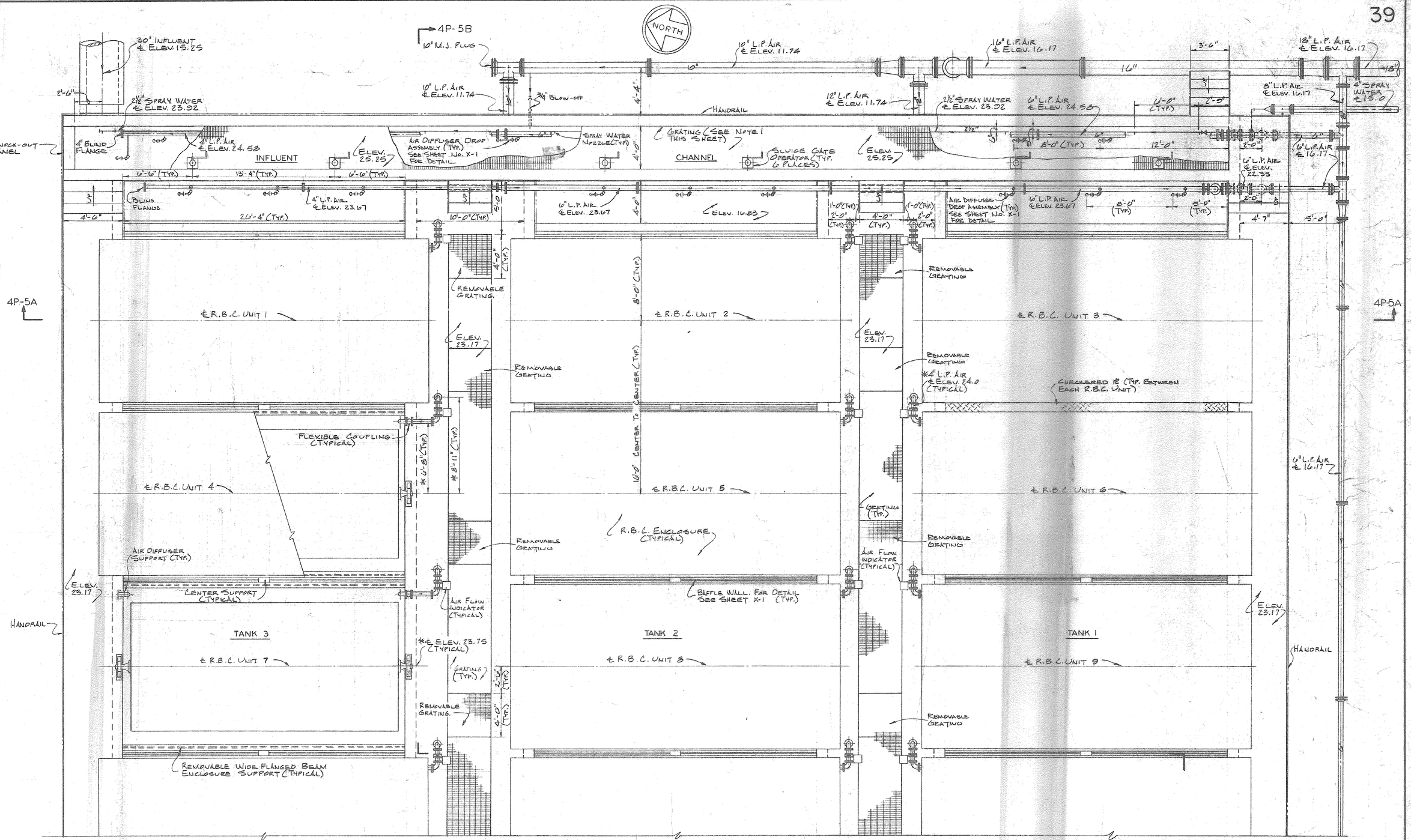
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
¼"= 1'-0"

ROTATING BIOLOGICAL CONTACTORS
BASE PLAN

SHEET 4P-2
OF SHEETS
PROJECT NO. 78284

RECORD



* ℄ ELEVATION AND/OR DIMENSION TO BE DETERMINED BY EQUIPMENT MANUFACTURER.

SOUTH CAROLINA PROFESSIONAL ENGINEER 6647 SARA L. McILLWAIN

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED W.J.W.
DRAWN R.L.J., C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4"=1'-0"

ROTATING BIOLOGICAL CONTACTORS
TOP PLAN

SHEET 4P-3 OF SHEETS
PROJECT NO. 78284

51-002-041
51-041-S RECORD

NORTH

4P-5B

REMOVABLE GRATING
AIR DIFFUSER SUPPORT (TYP.)
FLEXIBLE COUPLING (TYPICAL)
GRATING (TYP.)
ELEV. 23.17
TANK 3
℄ R.B.C. UNIT 10
*℄ ELEV. 23.75 (TYPICAL)
4'-6"
20'-4" (TYPICAL)
10'-0" (TYP.)
2'-0" (TYP.)
REMOVABLE WIDE FLANGED BEAM ENCLOSURE SUPPORT (TYPICAL)
HANDRAIL
℄ R.B.C. UNIT 13
*6'-8" (TYP.)
*8'-11" (TYP.)
REMOVABLE GRATING
2'-0" (TYP.)
4'-0" (TYP.)
TANK 2
℄ R.B.C. UNIT 11
R.B.C. ENCLOSURE (TYPICAL)
℄ R.B.C. UNIT 14
16'-0" CENTER TO CENTER (TYP.)
8'-0" (TYP.)
REMOVABLE GRATING
TANK 1
℄ R.B.C. UNIT 12
4'-7"
5'-0"
ELEV. 23.17
6" L.P. AIR ℄ 16.17
℄ R.B.C. UNIT 15
CHECKERED PL (TYP. BETWEEN EACH R.B.C. UNIT)
HANDRAIL
CENTER SUPPORT (TYPICAL)
4" L.P. AIR *℄ ELEV. 24.0 (TYPICAL)
AIR FLOW INDICATOR (TYPICAL)
BAFFLE WALL. FOR DETAIL SEE SHEET XP-8 (TYP.)
℄ R.B.C. UNIT 16
℄ R.B.C. UNIT 17
℄ R.B.C. UNIT 18
4'-2" (TYP.)
KNOCK-OUT PANEL
4'-0"
8'-0" (TYP.)
AIR DIFFUSER DROP ASSEMBLY (TYP.) SEE 4" SHEET X-1
EFFLUENT
4" L.P. AIR ℄ ELEV. 22.33
2½"
SPRAY WATER NOZZLE (TYP.)
2½" SPRAY WATER ℄ ELEV. 21.67
CHANNEL
6" L.P. AIR ℄ ELEV. 22.33
2'-5"
6'-0" (TYP.)
HANDRAIL
SLUICE GATE OPERATOR (TYP. 2 PLACES)
1'-0"
8" TANK DRAINAGE ℄ ELEV. 13.25
10" TANK DRAINAGE ℄ ELEV. 13.25
24" EFFLUENT ℄ ELEV. 15.0
2½" SPRAY WATER ℄ ELEV. 17.00
24" EFFLUENT ℄ ELEV. 15.0
1" CHLORINE SOLUTION ℄ 17.00
6" L.P. AIR ℄ ELEV. 16.17
CHAMBER "D"
4P-5B

*℄ ELEVATION AND/OR ELEVATION TO BE DETERMINED BY EQUIPMENT MANUFACTURER

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 6847 SAMUEL L. McILLWAIN

51-002-042

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED W.J.W.
DRAWN R.L.J., C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

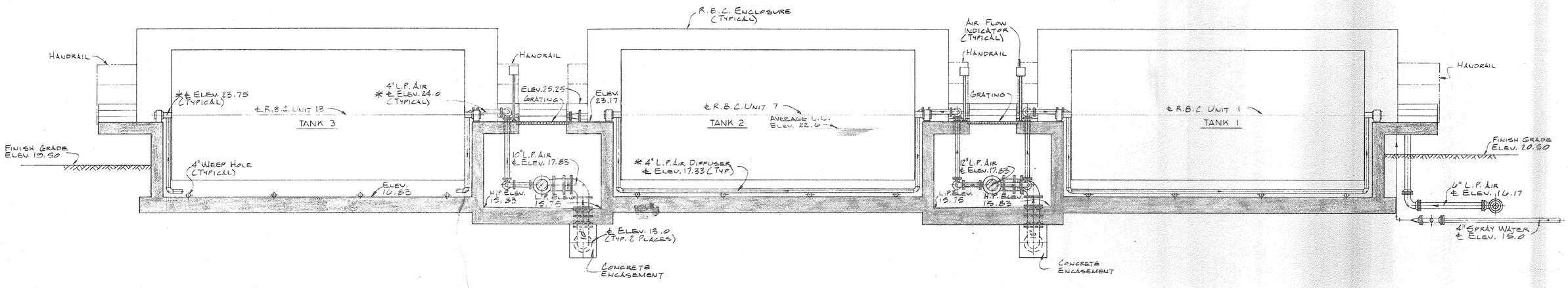
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" 1'-0"

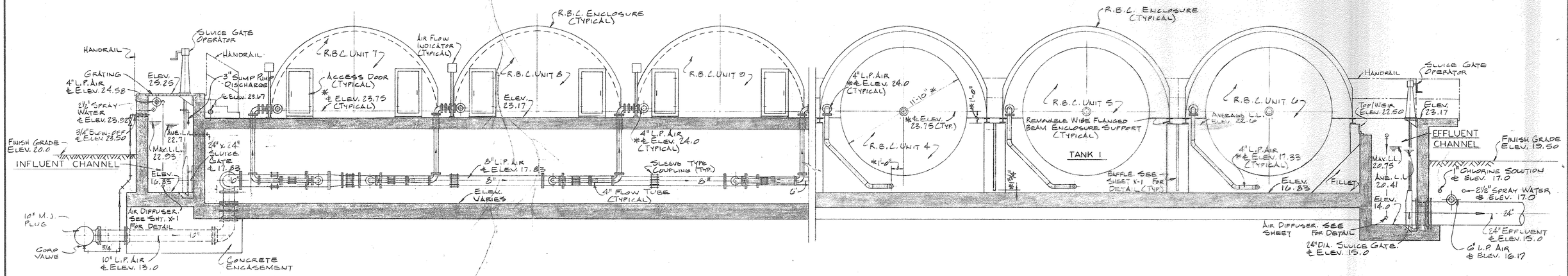
ROTATING BIOLOGICAL CONTACTORS
TOP PLAN

SHEET 4P-4
OF SHEETS
PROJECT NO. 78284

51-002-5 RECORD



SECTION 4P-5A
4P-1, 4P-3



SECTION 4P-5B
4P-1, 2, 3, 4

* ℄ ELEVATION AND/OR DIMENSION TO BE DETERMINED BY EQUIPMENT MANUFACTURER

51-002-043

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED W.J.W.
DRAWN R.L.J., C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

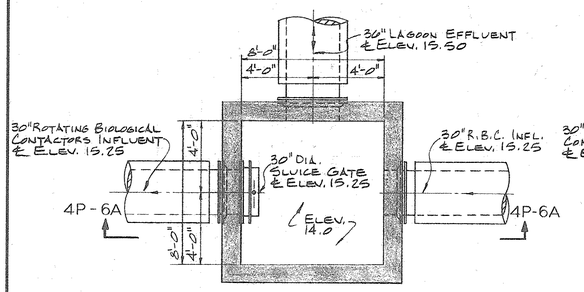
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4"=1'-0"

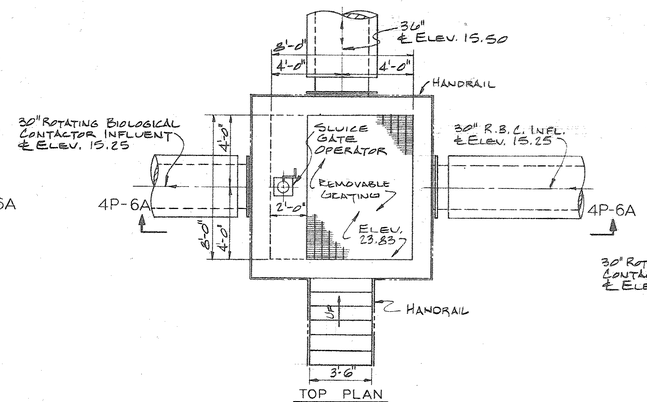
ROTATING BIOLOGICAL CONTACTORS
SECTIONS

SHEET 4P-5
OF SHEETS
PROJECT NO. 78284

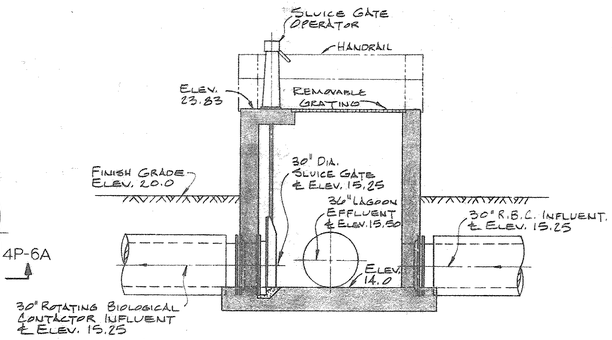
AS BUILTS RECORD



BASE PLAN

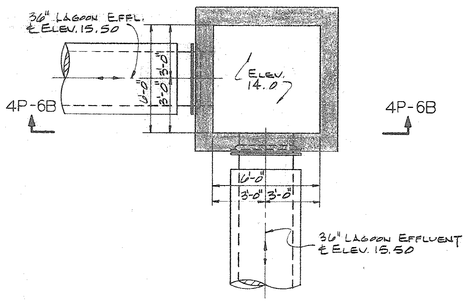


TOP PLAN

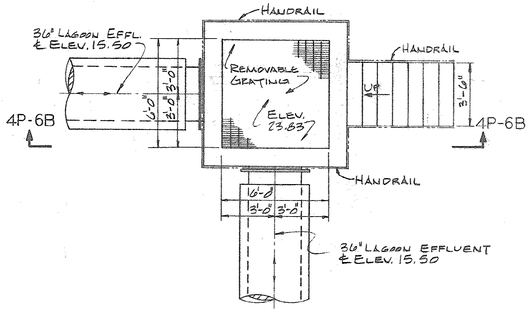


SECTION 4P-6A
4P-6

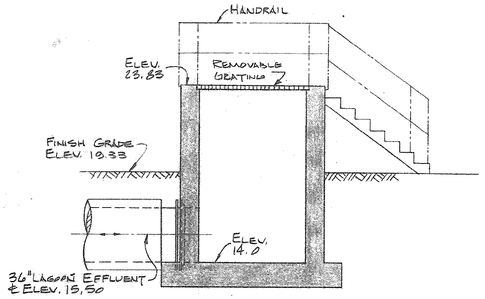
JUNCTION CHAMBER "A"



BASE PLAN



TOP PLAN



SECTION 4P-6B
4P-6

JUNCTION CHAMBER "B"

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED W.J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

JUNCTION CHAMBERS "A" & "B"
PLANS AND SECTIONS

51-002-044

SHEET 4P-6
OF SHEETS
PROJECT NO. 78284

STORM RECORD

NORTH

INFLUENT CHANNEL

* SA-21 WP

SA-19 E SA-19

SA-21

* SA-19 & 21: 3 #10-3/4" C *

* SEE DETAIL ON SHEET XE-6 FOR TANK LIGHTING INSTALLATION (TYP. 4 PLACES)

3 #12-3/4" C

* SUMP PUMP CONTROL PANEL - NEMA 4 MOUNTED ON HANDRAIL (SEE MECH. DWGS.)

5 #16-3/4" C

SUMP PUMPS SP-4-1A & 1B

LEVEL PROBES

PE1-12: 3 #10 & 2 #12 (ALLEM.) - 1" C *

ELEV. 25.25

SA-16 E SA-16

SA-18

SA-16 & 18: 5 #10-3/4" C *

* SA-18 WP

* MOUNT REMS ON HANDRAIL SEE DETAIL, SHEET XE-6 (TYP.)

COVER (TYP.)

NO. 1

NO. 2

NO. 3

4E-1A

ELEV. 23.17

NO. 4

NO. 5

NO. 6

NO. 7

NO. 8

NO. 9

* SA-19 & 21

* SA-21

* SA-16 & 18

* SA-18

MATCH LINE 'A' FOR CONTINUATION SEE SHT. 4E-2

ELEV. 23.17

* SA-16 & 18

PE1-12

ELEV. 15.92

SECTION 4E-1A

LIGHTING STANDARD - SEE DETAIL, SHEET XE-6

ELEV. 23.17

EFFLUENT CHANNEL

FIN. GRADE

24 x 24 x 16 NEMA 4 JCT. BOX

CONDUITS AS MARKED ON PLAN

SECTION 4E-1B

LEGEND

* INDICATES BASE BID ITEM

SEE SHEET NO. XE-5 FOR ELECTRICAL SYMBOLS & LEGEND.

51-003-045

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.N.G.
DRAWN R.W.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

ROTATING BIOLOGICAL CONTACTORS (R.B.C.)
PLAN-ELECTRICAL

SHEET 4E-1
OF SHEETS
PROJECT NO. 78284

51-045 S RECORD

NORTH

MATCH LINE '4A'
FOR CONTINUATION SEE SHEET NO. 4E-1

NO. 10

NO. 11

NO. 12

NO. 13

NO. 14

NO. 15

NO. 16

NO. 17

NO. 18

*SA-19&21

SA-19&21:
3#10-3/4"C *

SA-21 SA-19

SA-17

*SA-16&18

SA-16&18:
3#10-3/4"C *

4E-1B

PS1-12:3#10&#12-1"C

SA-18

SA-14

*UBMA 4 JCT. BOX
24 x 24 x 6
(TYP. 3 PLACES)

*2 COVER (TYP.) 2e

*SA-18

WP
*SA-18

EFFLUENT

CHANNEL

TO MCC 'PS1'
FOR CONTINUATION SEE SITE
PLAN SHEET NO. 1E-1

2"C - EMPTY

TO MCC 'PS1'
FOR CONTINUATION SEE SITE
PLAN SHEET NO. 1E-1

SA-17,19&21: 5#10-2"C *

TO MCC 'PS1'
FOR CONTINUATION SEE SITE
PLAN SHEET NO. 1E-1

{PS1-1E: 3#10 &2#12
SA-14,16&18: 5#10} 2"C *

LEGEND

* INDICATES BASE BID ITEM

SEE SHEET NO. 4E-5 FOR ELECTRICAL SYMBOLS & LEGEND

51-003-046

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED J.N.G.
DRAWN R.W.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

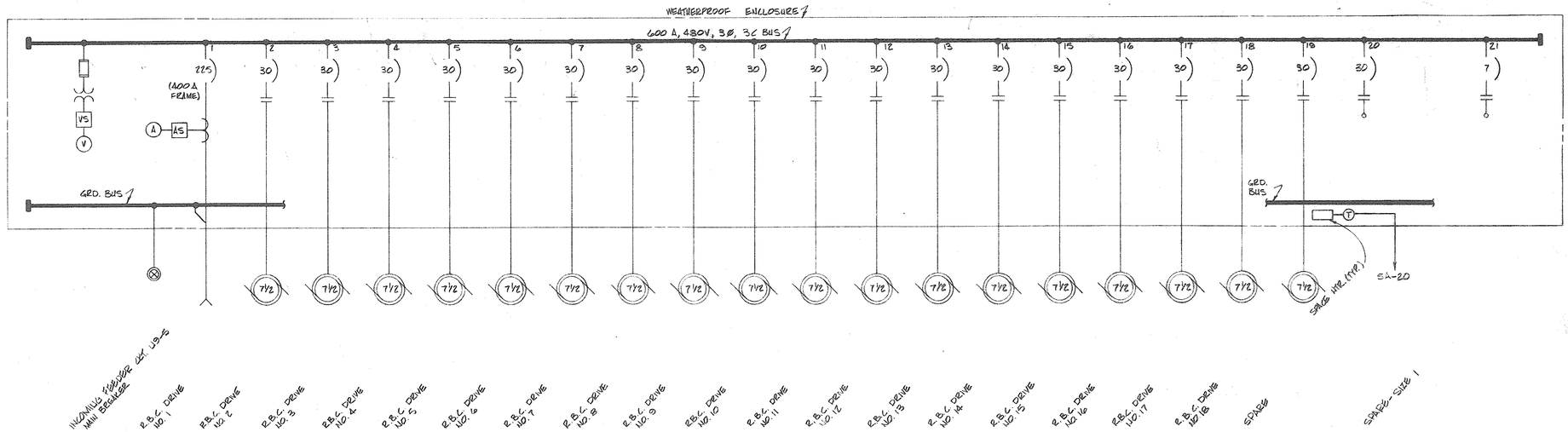
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

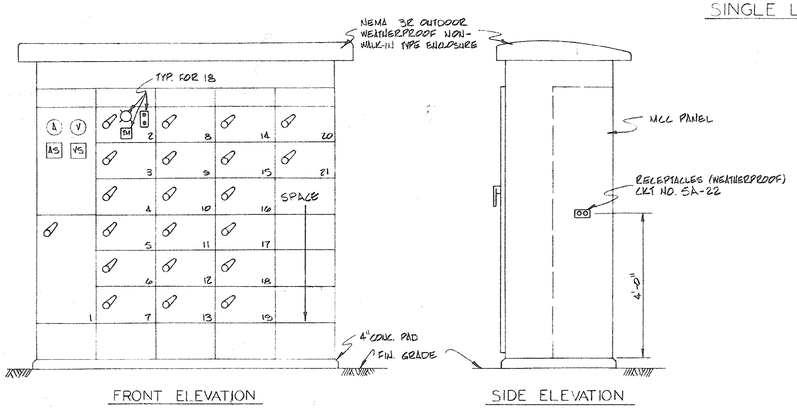
ROTATING BIOLOGICAL CONTACTORS (R.B.C.)
PLAN-ELECTRICAL

SHEET 4E-2
OF SHEETS
PROJECT NO. 78284

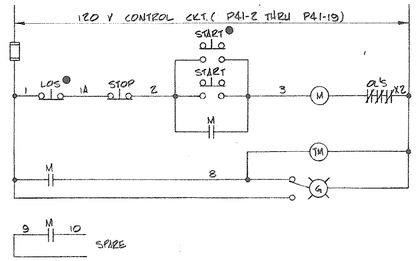
SA-0965 RECORD



MOTOR CONTROL CENTER 'P41'
SINGLE LINE DIAGRAM



MOTOR CONTROL CENTER 'P41'
(SEE SHEET 15-1 FOR CONCRETE PAD DETAIL AND SHEET 18-1 FOR LOCATION)



ROTATING BIOLOGICAL CONTACTORS (R.B.C.)
NO. 1 THRU NO. 18

MCC 'P41' NOT INSTALLED IN THIS CONTRACT

SEE NOTE ON SHEET 4E-1

NOTES:

1. THE MOTOR CONTROL CENTER MANUFACTURER SHALL USE THE NUMBERS SHOWN ON THE SCHEMATIC WIRING DIAGRAMS ON THIS SHEET ON TERMINAL BLOCKS OF THE STARTER UNITS. THE CONTRACTOR SHALL IDENTIFY ALL CONTROL CONDUCTORS INSTALLED WITH THE SAME NUMBERS BY THE USE OF SELF-STICKING TAGS. THE IDENTIFICATION SHALL ALSO INCLUDE THE CIRCUIT NUMBER WHERE MORE THAN ONE CIRCUIT IS IN THE SAME ENCLOSURE.
2. ALL CONTROL WIRES INSTALLED BY THE CONTRACTOR SHALL BE COLOR CODED AS FOLLOWS.

WIRE DESIGNATION	COLOR
1, 1A	BLACK
2	RED
3	BLUE
X2	WHITE
8	YELLOW
10	ORANGE
OTHERS	AS APPROVED

3. MOTOR CONTROL CENTER NAMEPLATES SHALL CORRESPOND WITH THE DESIGNATION ON THE SINGLE LINE DIAGRAM.

LEGEND

● AT MOTOR

UNLESS OTHERWISE INDICATED ALL EQUIPMENT AND DEVICES SHALL BE LOCATED IN THE MOTOR CONTROL CENTER.

SEE SHEET NO. XE-5 FOR OTHER SYMBOLS & LEGEND.

51-003-047

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED J.N.G.
DRAWN R.W.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

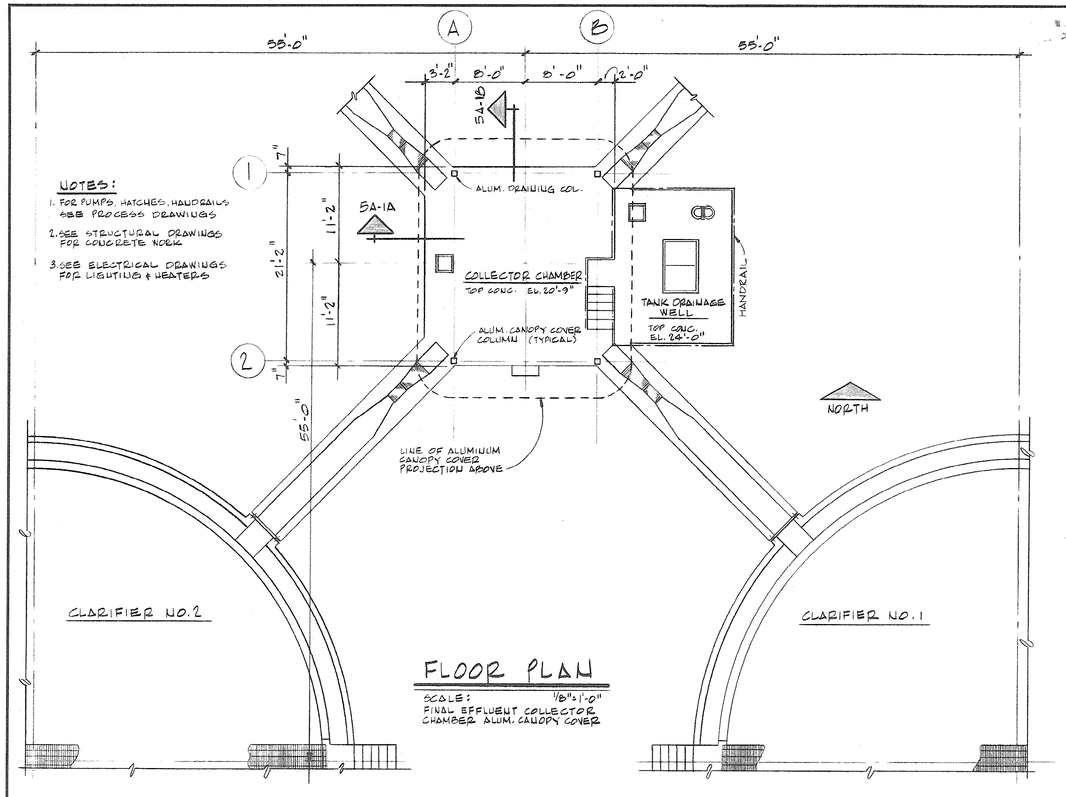
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

MOTOR CONTROL CENTER 'P41'
SINGLE LINE DIAGRAM & ELEVATION

SHEET 4E-3
OF SHEETS
PROJECT NO. 78284

5M0478

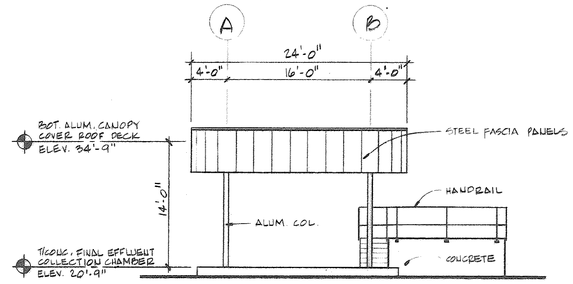


NOTES:

1. FOR PUMPS, HATCHES, HANDRAILS SEE PROCESS DRAWINGS
2. SEE STRUCTURAL DRAWINGS FOR CONCRETE WORK
3. SEE ELECTRICAL DRAWINGS FOR LIGHTING & HEATERS

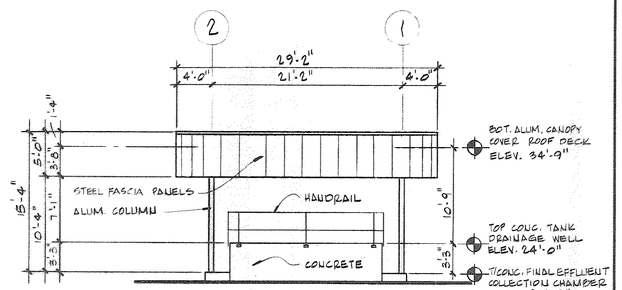
FLOOR PLAN

SCALE: 1/8"=1'-0"
FINAL EFFLUENT COLLECTOR CHAMBER ALUM. CANOPY COVER



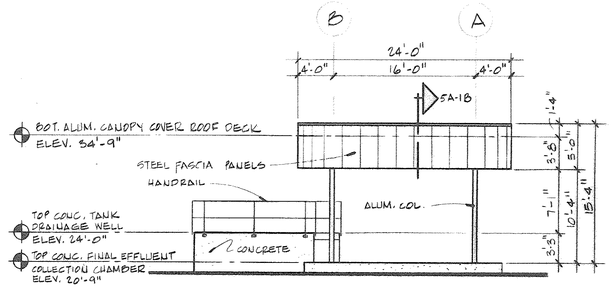
SOUTH ELEVATION

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



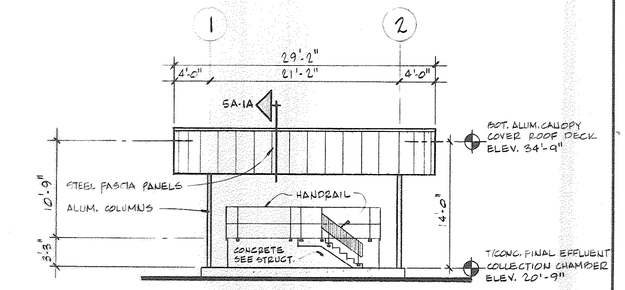
EAST ELEVATION

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



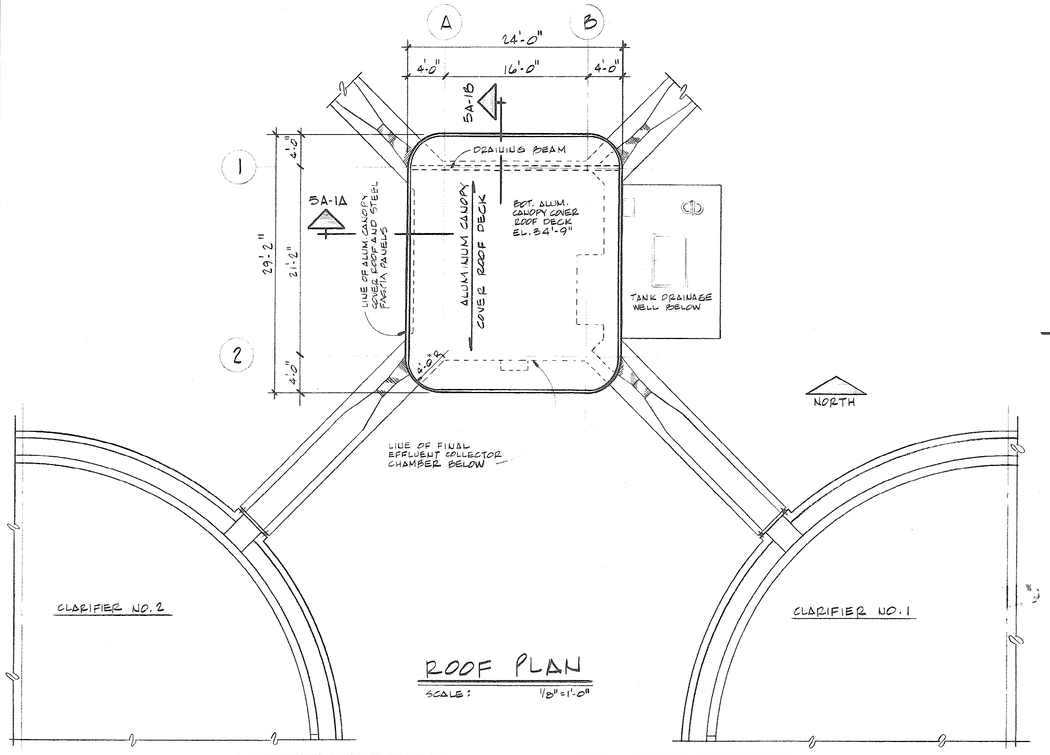
NORTH ELEVATION

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



WEST ELEVATION

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



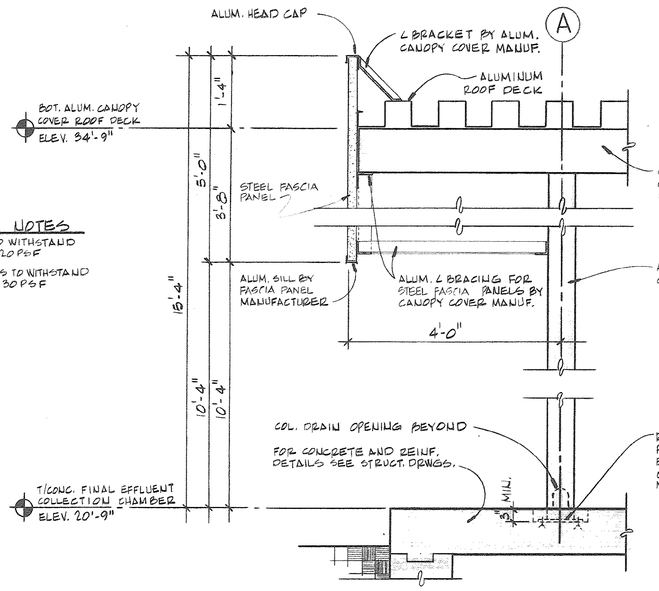
ROOF PLAN

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

GENERAL NOTES

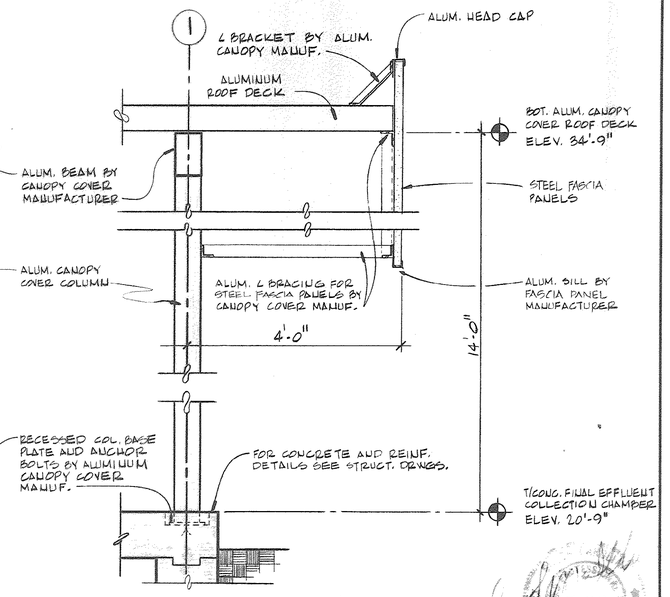
ROOF DECK TO WITHSTAND LIVE LOAD = 20 PSF

FASCIA PANELS TO WITHSTAND WIND LOAD = 30 PSF



SECTION 5A-1A

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



SECTION 5A-1B

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

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED CB
DRAWN CB
CHECKED ROM
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

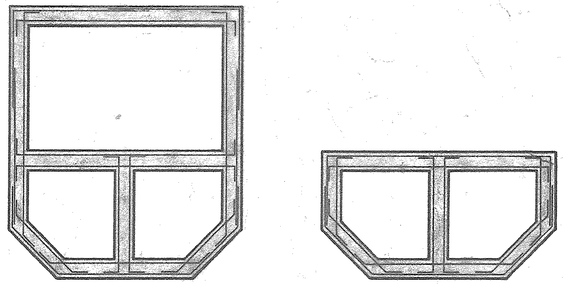
SCALE
AS NOTED

FINAL EFFLUENT COLLECTOR CHAMBER
CANOPY PLANS ELEVATIONS & SECTIONS

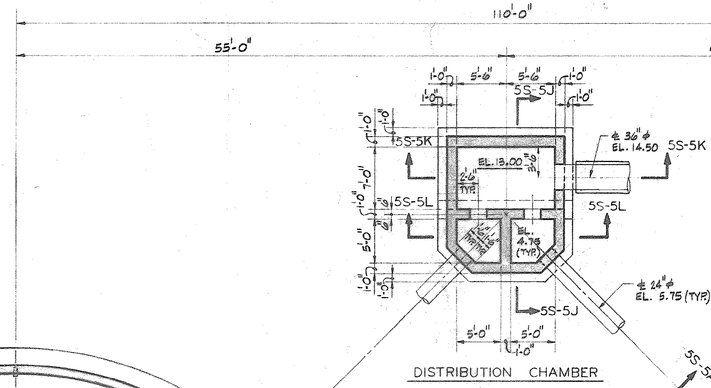
SHEET 5A-1
OF SHEETS
PROJECT NO. 78284

51-002-048

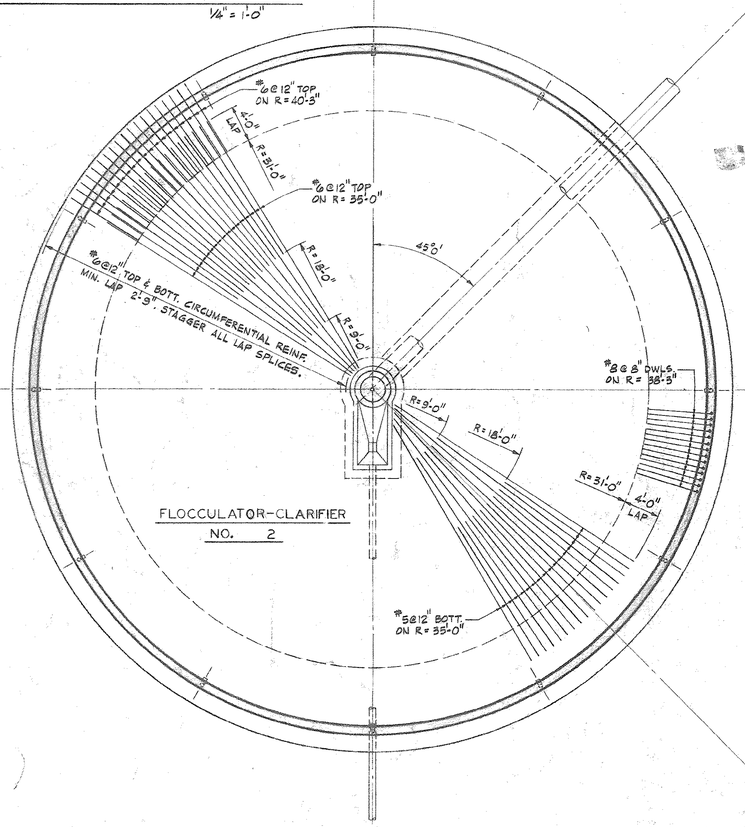
51-002-05 RECORD



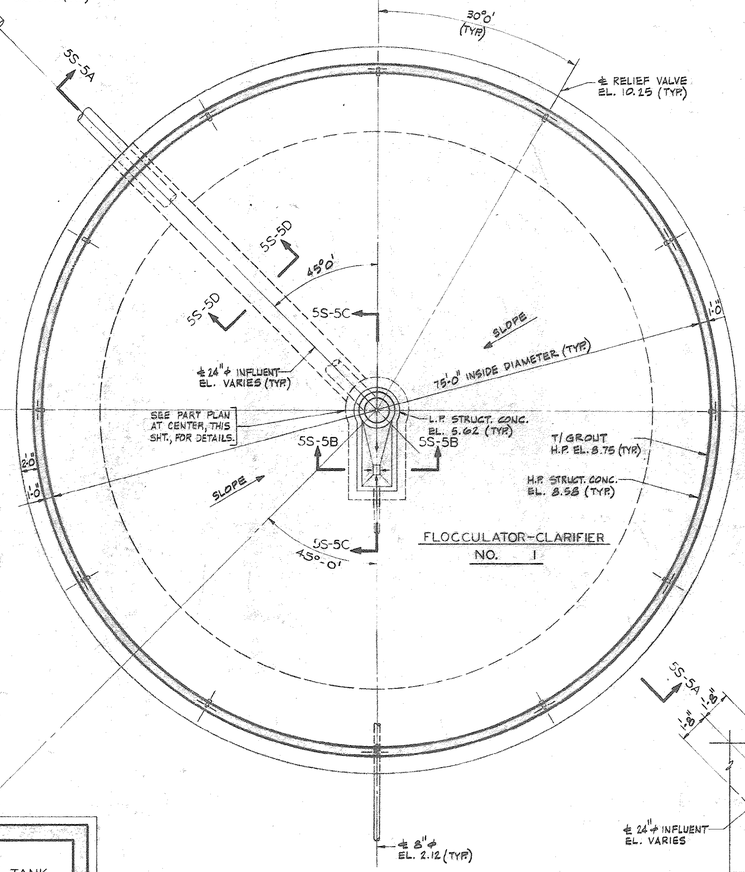
HORIZONTAL BAR PLACEMENT IN DISTRIBUTION CHAMBER
1/2" = 1'-0"



DISTRIBUTION CHAMBER

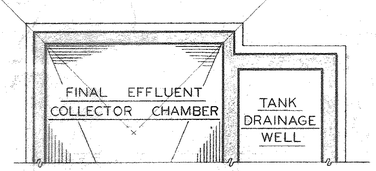


FLOCCULATOR-CLARIFIER NO. 2

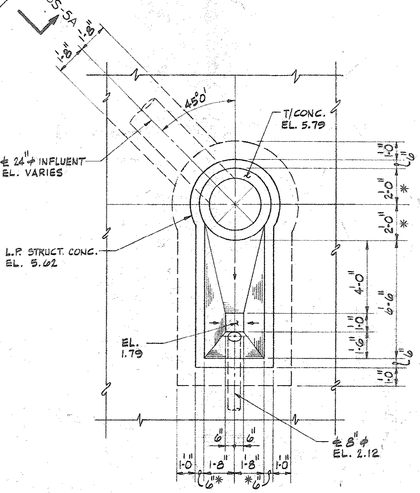


FLOCCULATOR-CLARIFIER NO. 1

NOTE: SECTIONS FOR FLOCCULATOR-CLARIFIER NO. 2 ARE THE SAME AS FLOCCULATOR-CLARIFIER NO 1.



SEE SHT. 5S-2 FOR DETAILS.



PART PLAN AT CENTER
1/4" = 1'-0"

51-002-049

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED H.R.
DRAWN B.M./R.K.
CHECKED S.K.L.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

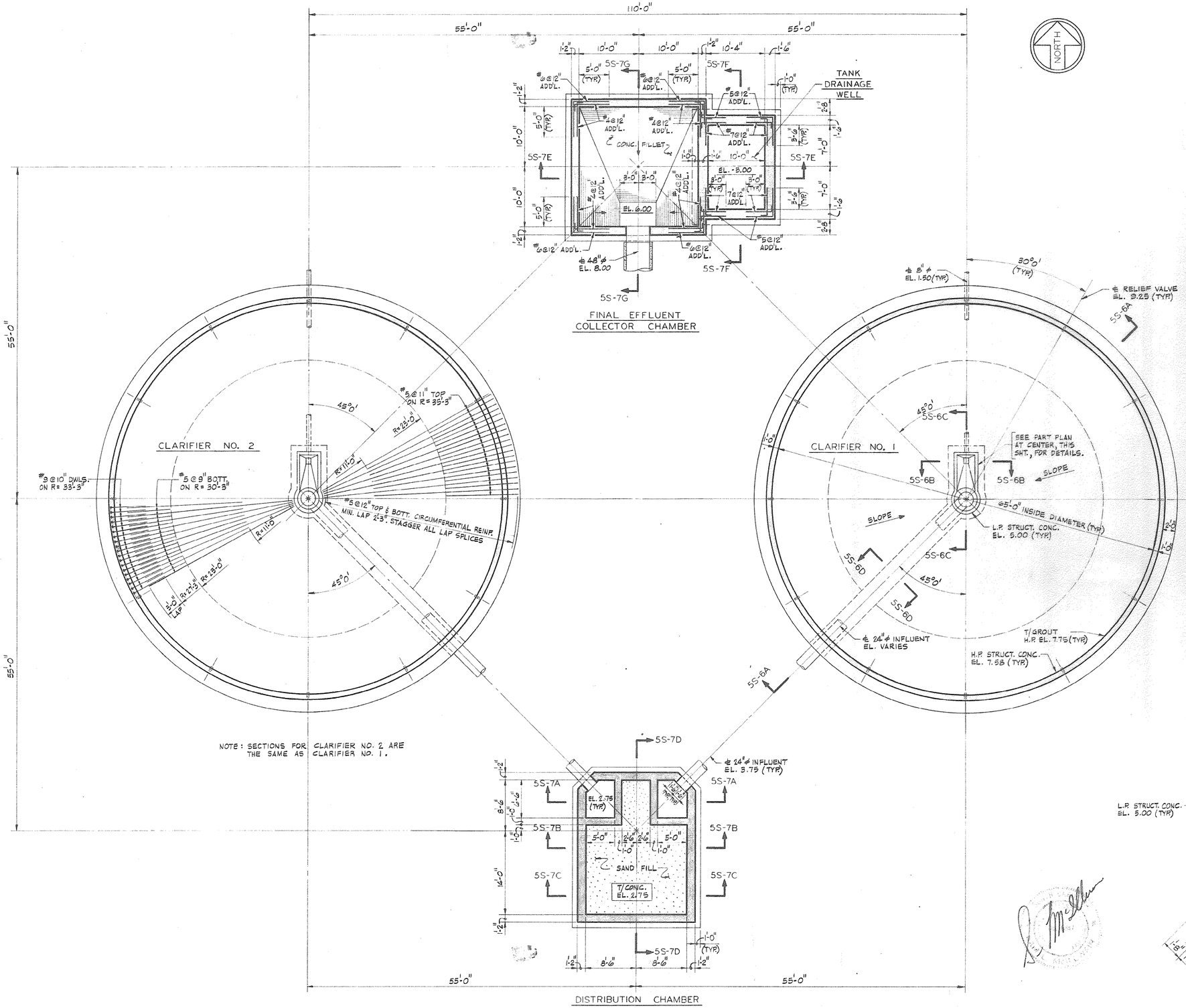
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/8" = 1'-0" U.N.

FLOCCULATOR-CLARIFIERS
BASE PLAN

SHEET 5S-1
OF SHEETS
PROJECT NO. 78284

AS-BUILT RECORD



51-003-050

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED T.G.
DRAWN B.M./R.K.
CHECKED S.K.L.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

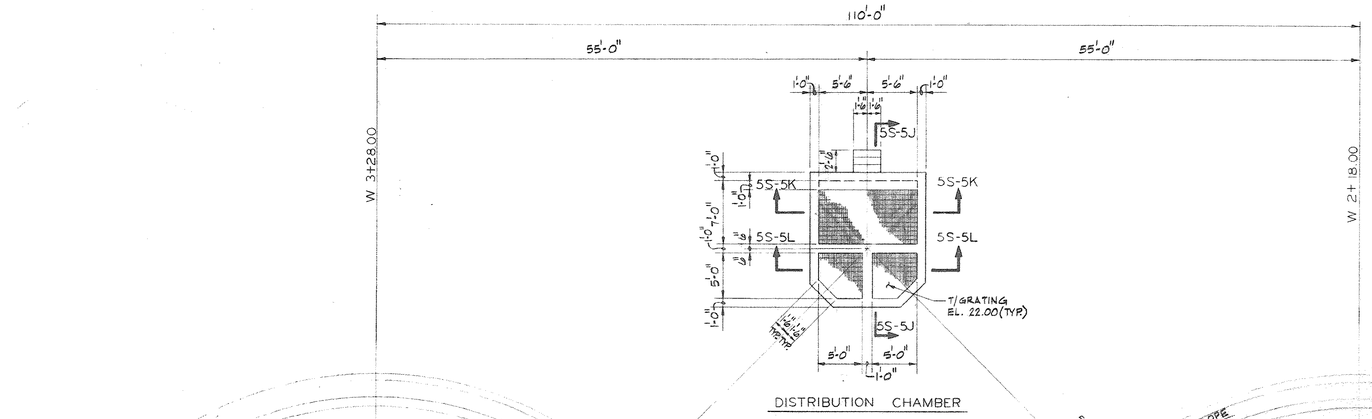
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

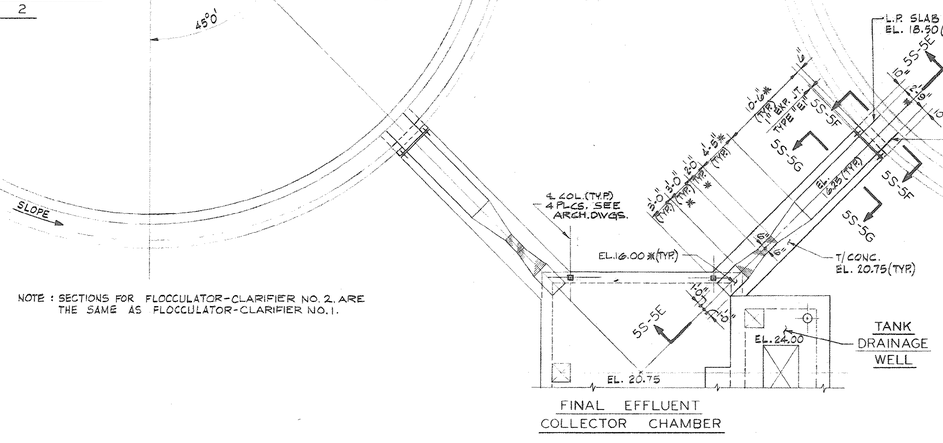
SCALE
1/8" = 1'-0" U.N.

CLARIFIERS
BASE PLAN

SHEET 5S-2
OF SHEETS
PROJECT NO. 78284

51-003-S RECORD





NOTE : SECTIONS FOR FLOCCULATOR-CLARIFIER NO. 2, ARE THE SAME AS FLOCCULATOR-CLARIFIER NO. 1.

SEE SHT. 5S-4 FOR DETAILS.

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED H.R.
DRAWN R.K.
CHECKED S.K.L.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

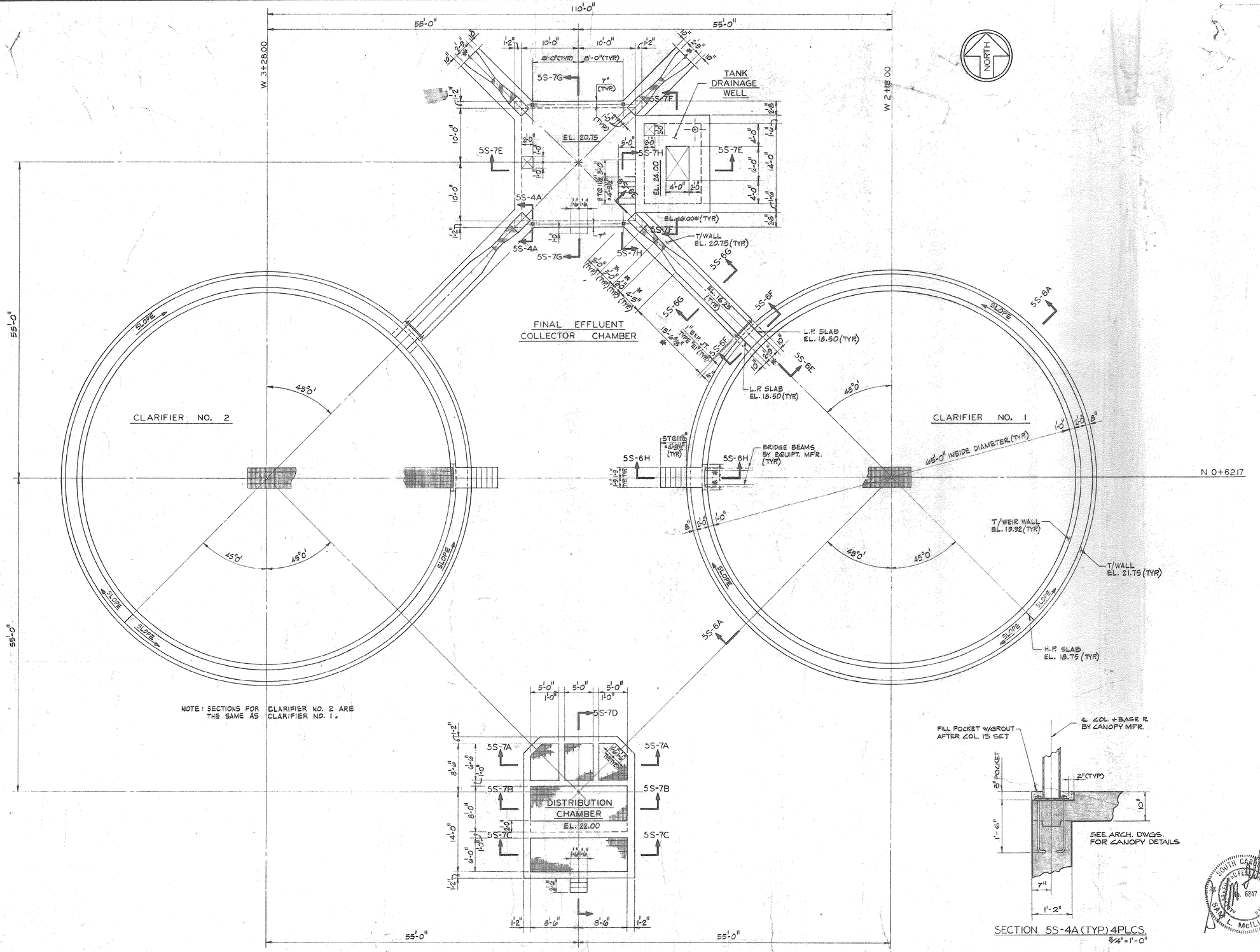
SCALE
1/8" = 1'-0"

FLOCCULATOR-CLARIFIERS
TOP PLAN

SHEET 5S-3
OF SHEETS
PROJECT NO. 78284

51-002-051

AS RECORD



51-003-053

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED T.G.
DRAWN R.K.
CHECKED S.K.L.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

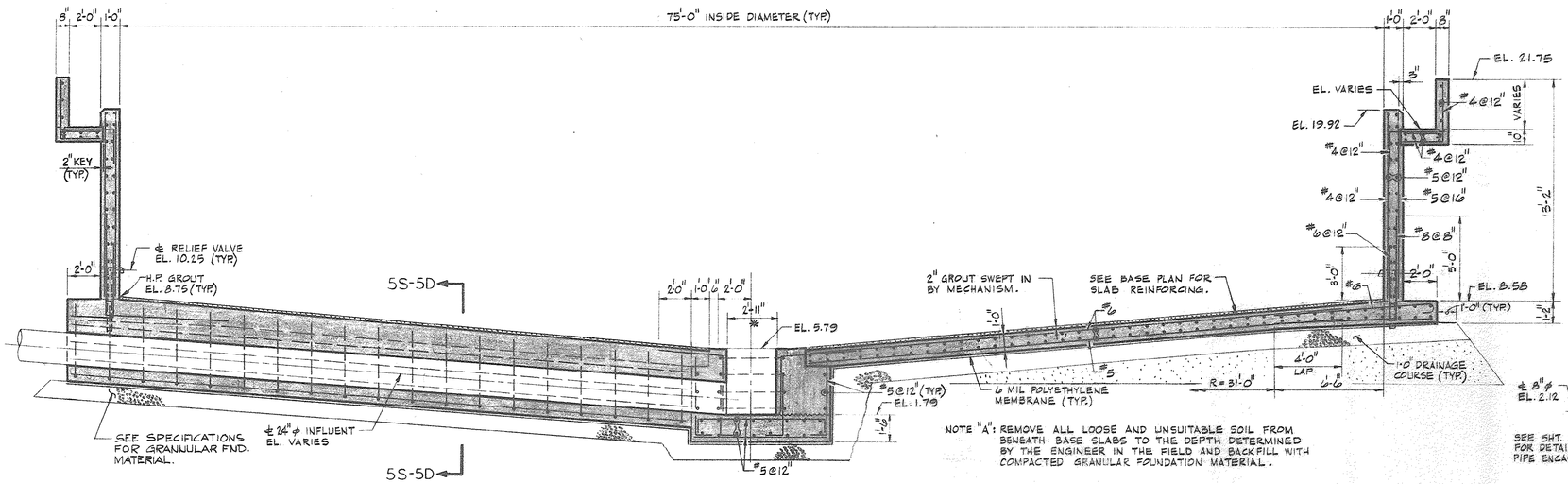
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/8" = 1'-0" U.N.

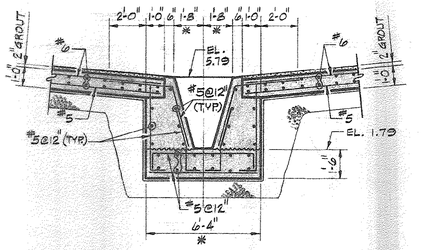
CLARIFIERS
TOP PLAN

SHEET 5S-4
OF SHEETS
PROJECT NO. 78284

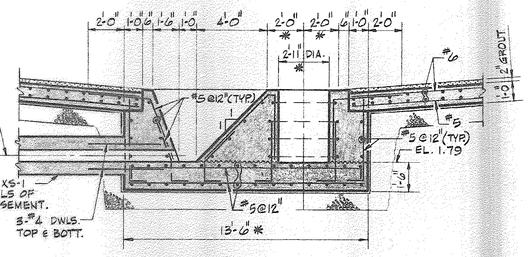
RECORD



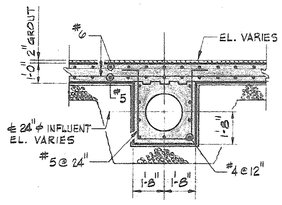
SECTION 5S-5A

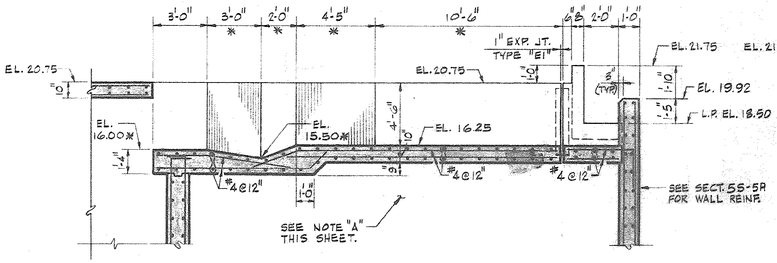


SECTION 5S-5B



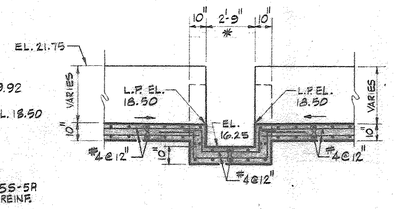
SECTION 5S-5C



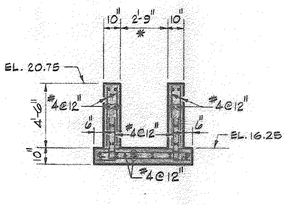


SECTION 5S-5D

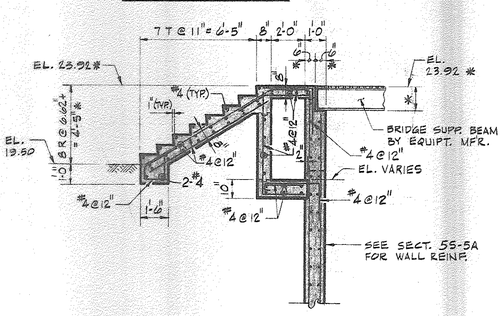
SECTION 5S-5E



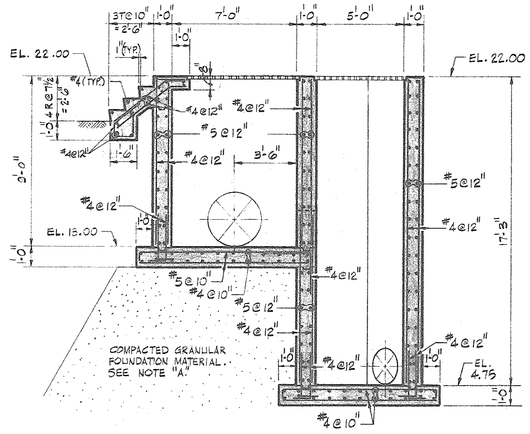
SECTION 5S-5F



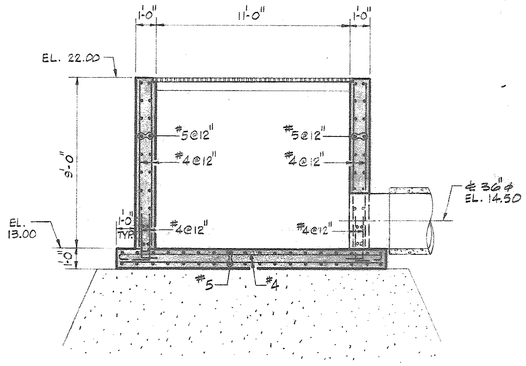
SECTION 5S-5G



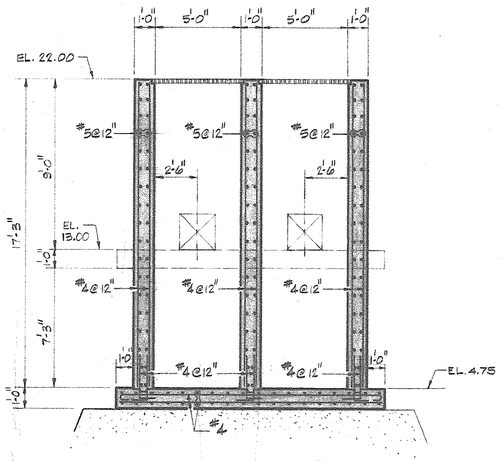
SECTION 5S-5H



SECTION 5S-5J



SECTION 5S-5K



SECTION 5S-5L

51-003-053

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED H.R.
DRAWN R.K.
CHECKED S.K.L.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

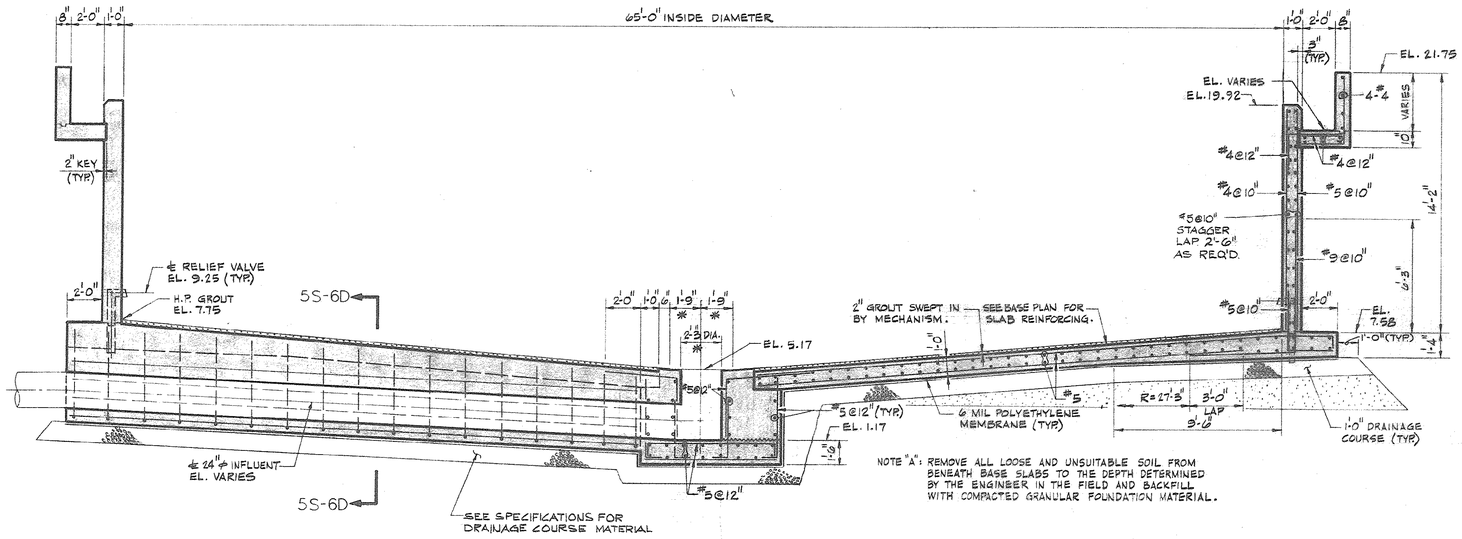
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1' - 0"

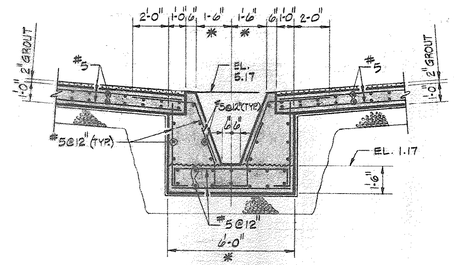
FLOCCULATOR - CLARIFIERS SECTIONS

SHEET 5S-5
OF SHEETS
PROJECT NO. 78284

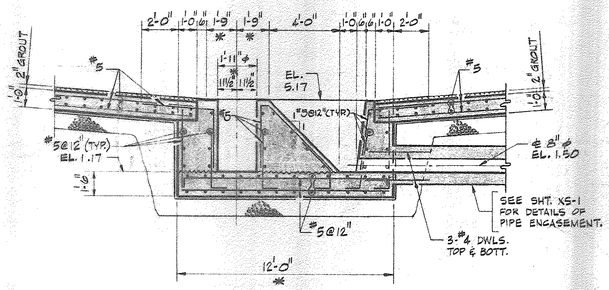
51-053-3 RECORD



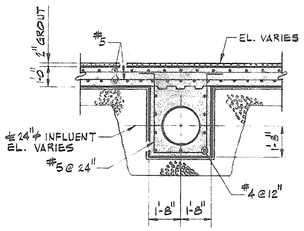
SECTION 5S-6A



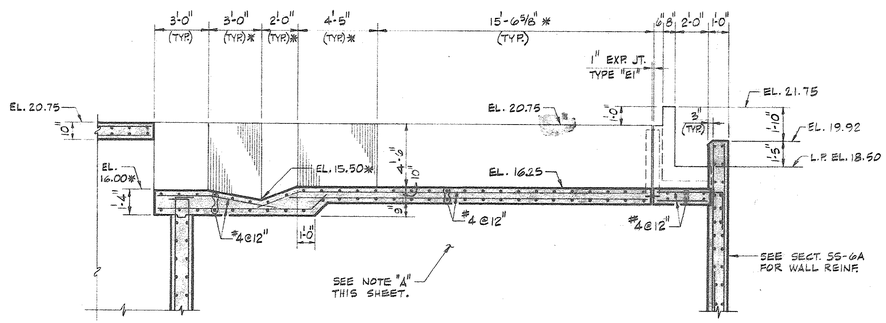
SECTION 5S-6B



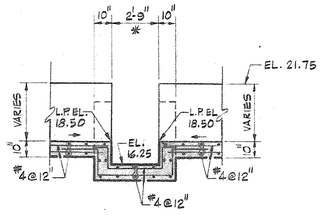
SECTION 5S-6C



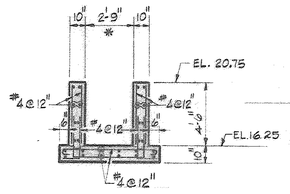
SECTION 5S-6D



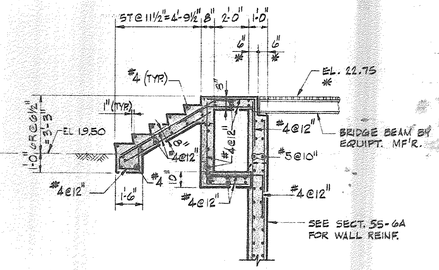
SECTION 5S-6E



SECTION 5S-6F



SECTION 5S-6G



SECTION 5S-6H

JAMES R. GARRIS
No. 6847
REGISTERED
PROFESSIONAL
ENGINEER
BACH L. WAIN

51-002-054

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED T.G.
DRAWN R.K.
CHECKED S.K.L.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

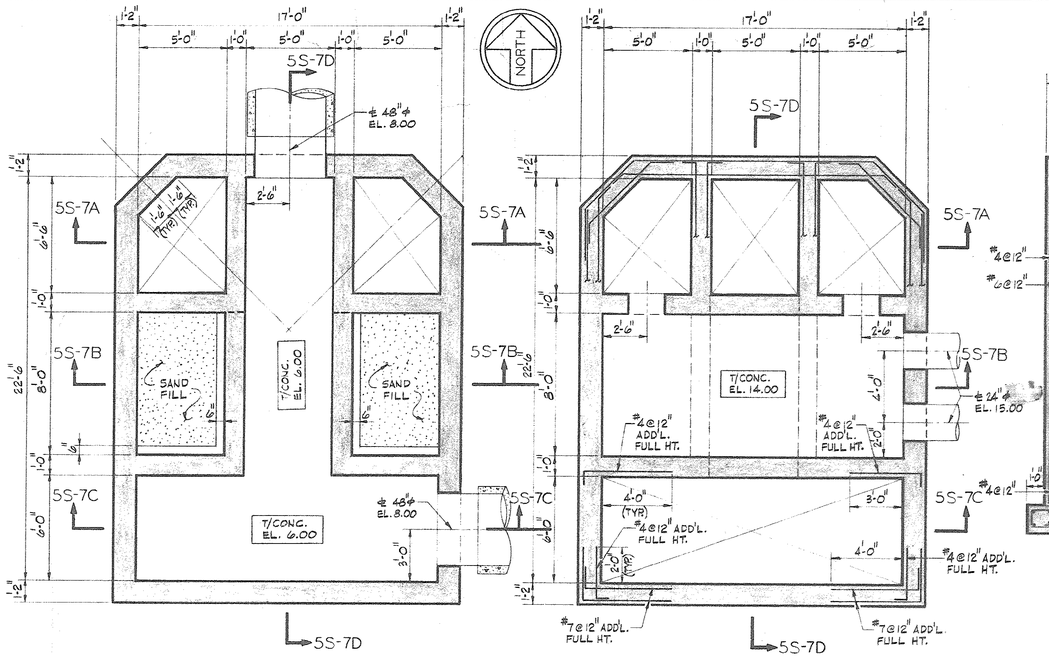
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

CLARIFIERS
SECTIONS

SHEET 5S-6
OF SHEETS
PROJECT NO. 78284

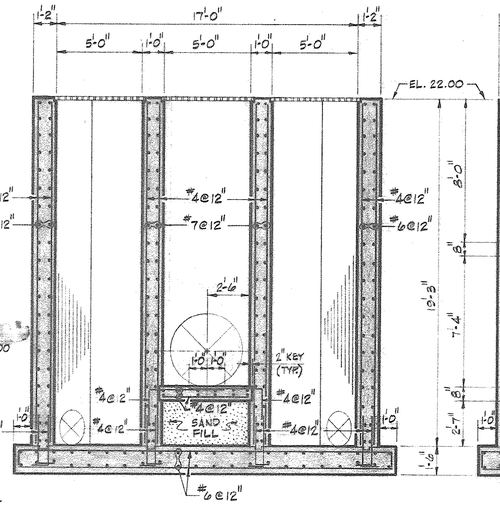
51-002-54 RECORD



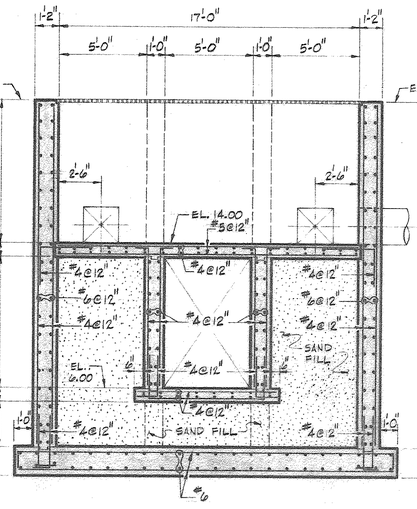
PLAN AT EL. 6.00

PLAN AT EL. 14.00

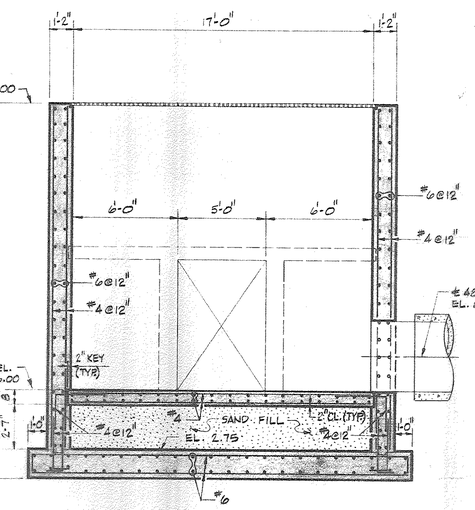
DISTRIBUTION CHAMBER



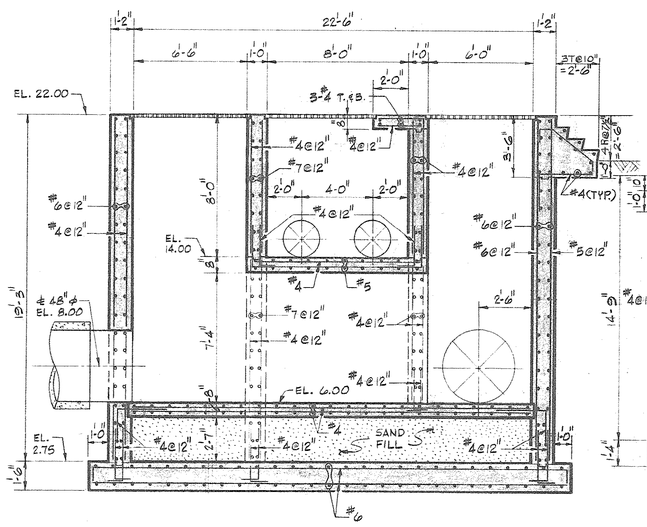
SECTION 5S-7A



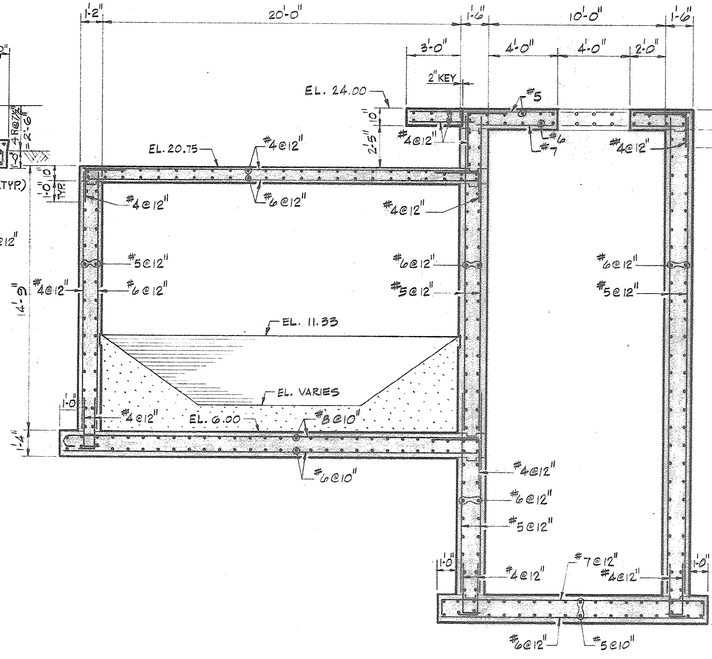
SECTION 5S-7B



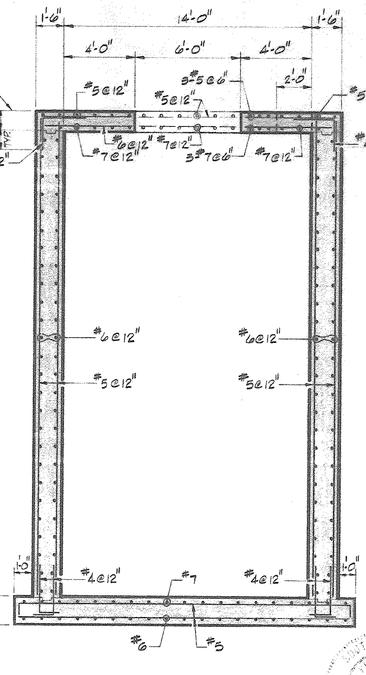
SECTION 5S-7C



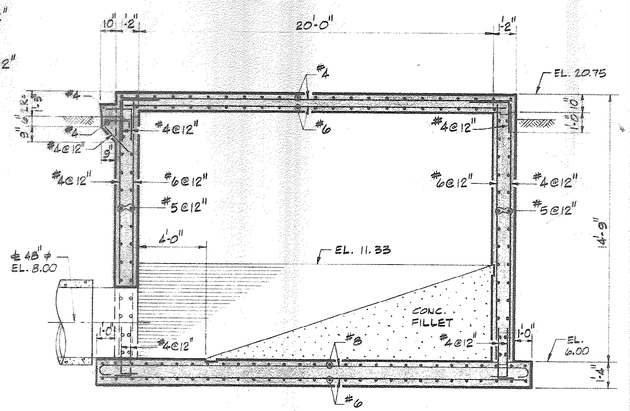
SECTION 5S-7D



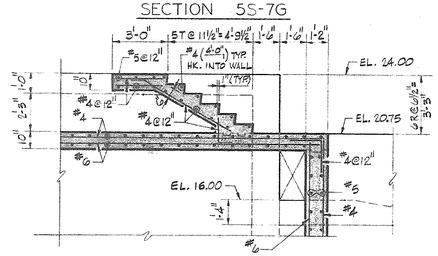
SECTION 5S-7E



SECTION 5S-7F



SECTION 5S-7G



SECTION 5S-7H

51-003-055

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED T.G.
DRAWN R.K.
CHECKED S.K.L.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

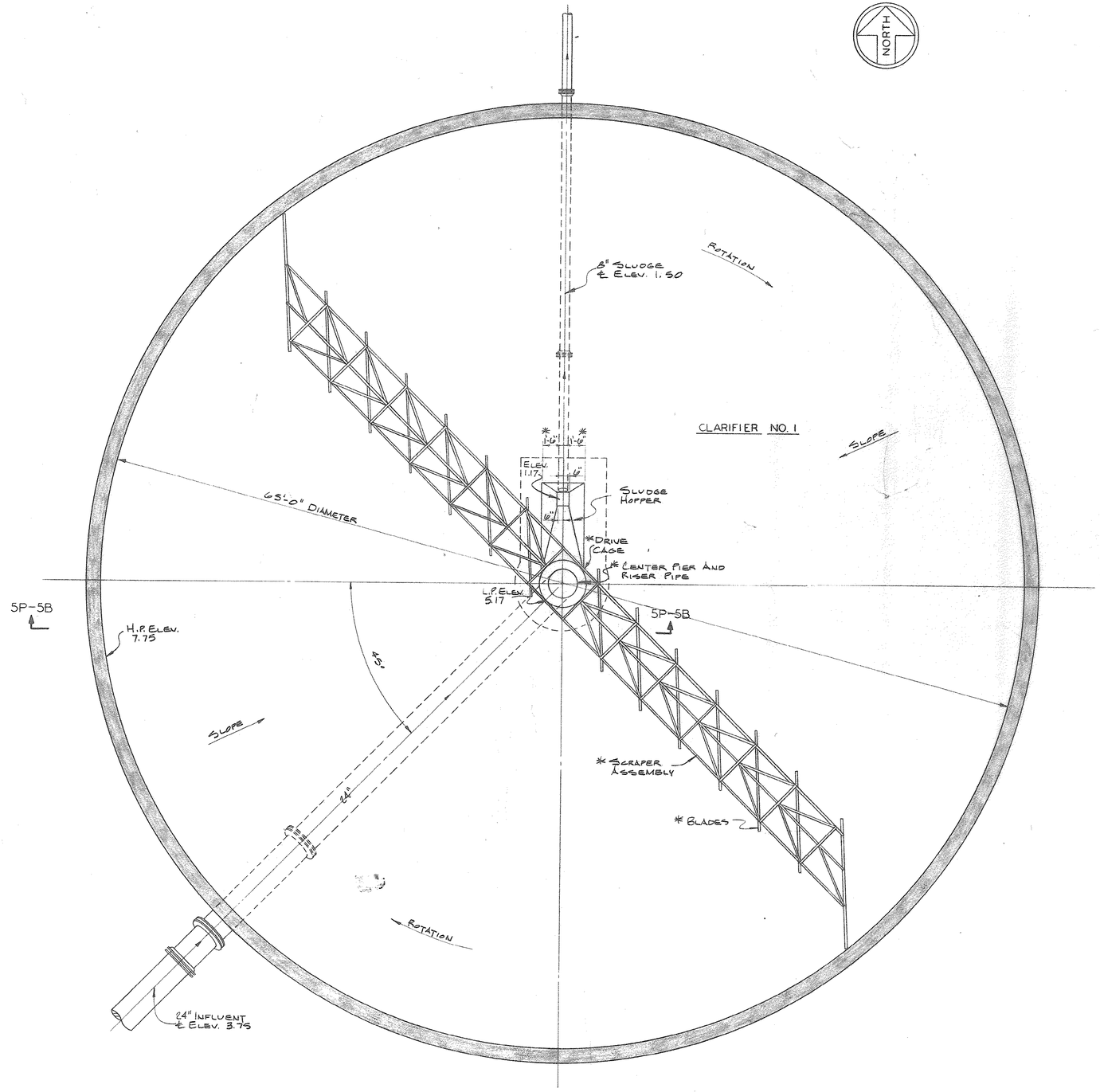
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

CLARIFIERS-DISTRIBUTION AND FINAL EFFLUENT COLLECTOR CHAMBERS PLANS AND SECTIONS

SHEET 5S-7 OF SHEETS
PROJECT NO. 78284

51-003-55 RECORD



* SEE MANUFACTURER'S DRAWINGS FOR DIMENSION AND/OR DETAILS.

NOTE:
CLARIFIER NO. 1 IS SHOWN IN TRUE PLAN.
CLARIFIER NO. 2 IS SIMILAR IN DETAILS OF TANK AND EQUIPMENT.

SOUTH CAROLINA — REGISTERED PROFESSIONAL ENGINEER — 19647 — JAMES L. McILLWAIN

51-003-056

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED W.J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

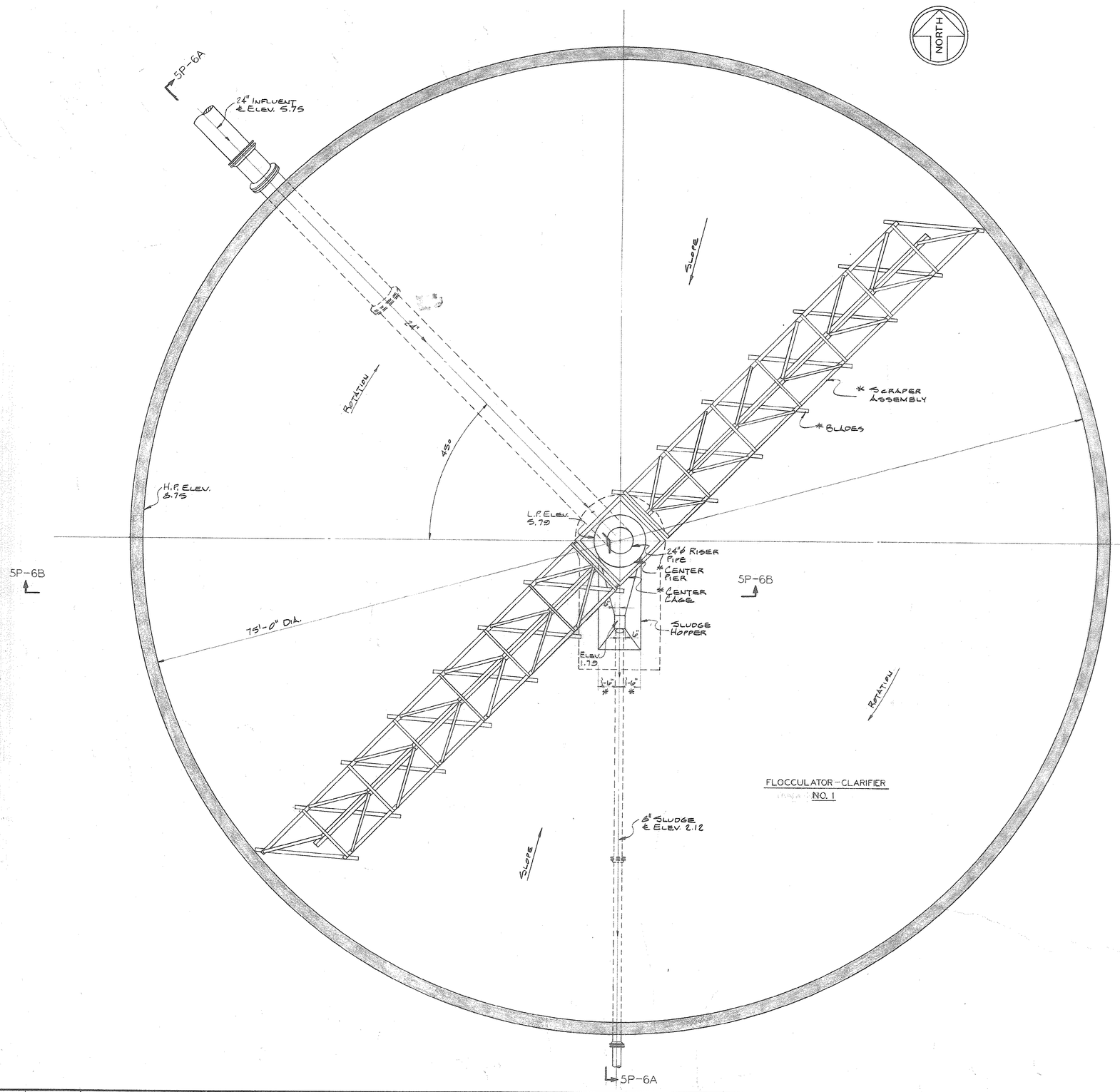
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4"=1'-0"

CLARIFIER NO. 1
BASE PLAN

SHEET 5P-1
OF SHEETS
PROJECT NO. 78284

51-056-5 RECORD



* SEE MANUFACTURER'S DRAWINGS FOR DIMENSION AND/OR DETAILS

NOTE:
FLOCCULATOR-CLARIFIER No.1 IS SHOWN IN TRUE PLAN. FLOCCULATOR-CLARIFIER No. 2 IS SIMILAR IN DETAILS OF TANK AND EQUIPMENT.

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER SAMUEL L. McILLWAIN 8057

51-002-057

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED W.J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4"=1'-0"

FLOCCULATOR-CLARIFIER
BASE PLAN

SHEET 5P-2
OF SHEETS
PROJECT NO. 78284

GW-05575 RECORD

MANHOLE "B"
℄ ELEV. -1.93
12" TANK DRAINAGE
12"
1½"
24" DIA. M.H. FRAME AND CAGE
STANDARD 6'-0" DIAMETER MANHOLE. TOP OF MANHOLE ELEV. 19.50. BOTTOM ELEV. -3.50. SEE SHEET 5P-6 FOR DETAIL.
FINAL EFFLUENT COLLECTOR CHAMBER
(SEE SHT. 5P-8 FOR PLANS AND SECTIONS)
ELEV. 20.75
SETTLED WASTEWATER SAMPLING PUMP No. 1
ELEV. 24.0
4'-10"
BUBBLER CUBICLE
℄ ELEV. 22.0
℄ ELEV. 22.25
5'-0"
PROVIDE VALVE BOX TO SURFACE WITH NUT OPERATOR (TYPICAL 2 PLACES)
NORTH
℄ ELEV. -2.0
℄ ELEV. -2.0
12" TANK DRAINAGE
12"
24" DIA. MANHOLE FRAME AND COVER
MANHOLE "A"
STANDARD 6'-0" DIAMETER MANHOLE. TOP OF MANHOLE ELEV. 19.50. BOTTOM OF MANHOLE ELEV. -3.50. SEE SHEET 5P-5 FOR DETAIL.
10" TANK DRAINAGE ℄ ELEV. 16.0
12" TANK DRAINAGE
8" SLUDGE ℄ ELEV. 1.50
5P-5A
CLEANOUTS
℄ ELEV. 0.38
8" SLUDGE ℄ ELEV. 1.50
CLEANOUT
8" SLUDGE ℄ ELEV. 1.50
PARSHALL FLUME (TYP. 2 PLACES)
HANDRAIL
18" TANK DRAINAGE
16'-0"
℄ ELEV. -2.1
TOP / WALL ELEV. 20.75
FLOW
℄ ELEV. 16.25
8" SCUM ℄ ELEV. 12.75
CLEAN-OUT
HANDRAIL
10" TANK DRAINAGE ℄ ELEV. 16.0
STANDARD 5'-0" DIAMETER MANHOLE. TOP OF MANHOLE ELEV. 20.0. BOTTOM ELEV. -2.95
℄ ELEV. 5.72
CLARIFIER EFFLUENT CHANNEL
L.P. ELEV. 18.50
ROTATION
PROVIDE 6" DROP PIPE ASSEMBLY. SEE SHT. 13D-8 FOR DETAIL
HANDRAIL
15" AREA DRAINAGE
FLOW
45°
* SKIMMER BLADE
* BLADE
* SCRAPER ASSEMBLY
65'-0" DIAMETER
* INFLUENT BAFFLE
CLEANOUT
8" SCUM ℄ ELEV. 12.75
TELESCOPIC VALVE OPERATOR
HANDRAIL
* WALKWAY ELEV.
5P-5B
5P-5B
* SCUM TROUGH
* SCRAPER ASSEMBLY DRIVE
BOTTOM V-NOTCH ELEV. 20.0
5'-0"
3'-0"
3'-0"
2'
2'
2'
NOTE: SEE CLARIFIER No. 1 THIS SHEET FOR LABELING.
55'-0"
48"
15"
2'-0"
110'-0"
CLEANOUT
CLARIFIER NO. 2
1½" ALUM ℄ ELEV. 14.50
48" FINAL EFFLUENT ℄ ELEV. 8.0
2" SETTLED WASTE-WATER SAMPLING NO. 2 ℄ ELEV. 14.50
2" SETTLED WASTE-WATER SAMPLING NO. 1 ℄ ELEV. 14.50
2½" LIME SLURRY ℄ ELEV. 14.50
5P-5A
24"
24" CLARIFIER INFLUENT ℄ ELEV. 3.75 (TYP. 2 PLACES)
CLEANOUT
CLARIFIERS DISTRIBUTION CHAMBER
(SEE SHEET No. 5P-7 FOR PLANS AND SECTIONS)
ELEV. 22.0
* 1'-3"
* SCUM BAFFLE
CLARIFIER NO. 1
8" SLUDGE ℄ ELEV. 2.12
TOP / WALL ELEV. 21.75
8" SLUDGE ℄ ELEV. 1.50
FLOW
H.P. ELEV. 18.75
HANDRAIL
CLEANOUT
8" SCUM ℄ ELEV. 12.75
4'-0"
8'
* DIMENSIONS, ELEVATIONS, AND DETAILS TO BE DETERMINED BY EQUIPMENT MANUFACTURER.

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 6847 SAMUEL McILLWAIN

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED W.J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
3/16" = 1'-0"

CLARIFIERS
TOP PLAN

SHEET 5P-3
OF SHEETS
PROJECT NO. 78284

51-003-058

SUBMITTED Record

GRATING

FLOCCULATOR-CLARIFIER DISTRIBUTION CHAMBER
(SEE SHEET No. SP-7 FOR PLANS AND SECTIONS)

ELEV. 22.0

NORTH

45°

110'-0"

24'

24'

24" FLOCCULATOR-CLARIFIER INFLUENT @ ELEV. 5.75 (TYP. 2 PLACES)

SP-6A

HANDRAIL

FLOW

H.P. ELEV. 18.75

FLOW

NOTE:
SEE FLOCCULATOR-CLARIFIER No. 1 THIS SHEET FOR LABELING.

ROTATION

* BAFFLE (TYPICAL 8 PLACES)

1½" ALUM. MOUNT PIPE TO SIDE OF WALK

1" LIME SLURRY. MOUNT PIPE TO SIDE OF WALK

CLEANOUT

8" SCUM @ ELEV. 12.75

TELESCOPIC VALVE OPERATOR

* WALKWAY SUPPORTS

SCRAPER ASSEMBLY DRIVE

* INFLUENT BAFFLE

28'-0"

75'-0" DIA.

HANDRAIL

AGITATOR DRIVE (TYPICAL 2 PLACES)

TOP WALL ELEV. 21.75

* GRATING ELEV.

HANDRAIL

5P-6B

BOTTOM OF V-NOTCH ELEV. 20.0

* SCUM TROUGH

1½" ALUM. MOUNT PIPE TO SIDE OF WALK

1" LIME SLURRY. MOUNT PIPE TO SIDE OF WALK

* SCRAPER ASSEMBLY

* BLADES

* SKIMMER BLADE

2'-0"

45°

CLEANOUT

1" LIME SLURRY @ ELEV. 14.0

1½" WATER

55'-0"

FLOW

SP-9B

ROTATION

1½" ALUM @ ELEV. 14.50

L.P. ELEV 18.50

HANDRAIL

ELEV. 16.25

FLOCCULATOR-CLARIFIER EFFLUENT CHANNELS

FLOCCULATOR-CLARIFIER NO. 2

FLOCCULATOR-CLARIFIER NO. 1

* SCUM BAFFLE

HANDRAIL

* DIMENSIONS, DETAILS, AND ELEVATIONS TO BE FURNISHED BY THE EQUIPMENT MANUFACTURER

1½" WATER

PARSHALL FLUME (TYP. 2 PLACES)

TOP WALL ELEV. 20.75

CLEANOUT

CLEANOUT

CLEANOUT

8" SCUM @ ELEV. 12.75

8" SLUDGE @ ELEV. 2.12

CLEANOUT

8" SLUDGE @ ELEV. 2.12

NOTE:
FOR PIPING LOCATIONS, SEE SHEET No. SP-3

CLEANOUT

CLEANOUT

8" SLUDGE @ ELEV. 2.12

STANDARD 6'-0" DIAMETER MANHOLE. TOP OF MANHOLE ELEV. 13.50. BOTTOM ELEV. -3.50 SEE SHEET SP-6 FOR DETAIL

24" DIA M.H. FRAME AND COVER

MANHOLE "B"

ELEV. -1.93

11½" SUMP DISCHARGE @ ELEV. 16.0

12" TANK DRAINAGE

FINAL EFFLUENT COLLECTOR CHAMBER
(SEE SHEET SP-8 FOR PLANS AND SECTIONS)

MIXING TANK

SP-9B

PUMP No. 1

SETTLED WASTEWATER SAMPLING PUMP No. 2

LIME SLURRY FEED PUMP No. 2

ELEV. 20.75

TANK DRAINAGE WELL

ELEV. 24.0

PROVIDE VALVE BOX TO SURFACE WITH NUT OPERATOR (TYPICAL 2 PLACES)

5P-6A

MANHOLE "A"

ELEV. -2.0

12" TANK DRAINAGE

11½" SUMP DISCHARGE @ ELEV. 16.0

8" SLUDGE @ ELEV. 2.12

ELEV. -2.0

STANDARD 6'-0" DIAMETER MANHOLE. TOP OF MANHOLE ELEV. 13.50 BOTTOM ELEV. -3.50 SEE SHT SP-5 FOR DETAIL

12" TANK DRAINAGE

51-002-059

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED W.J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

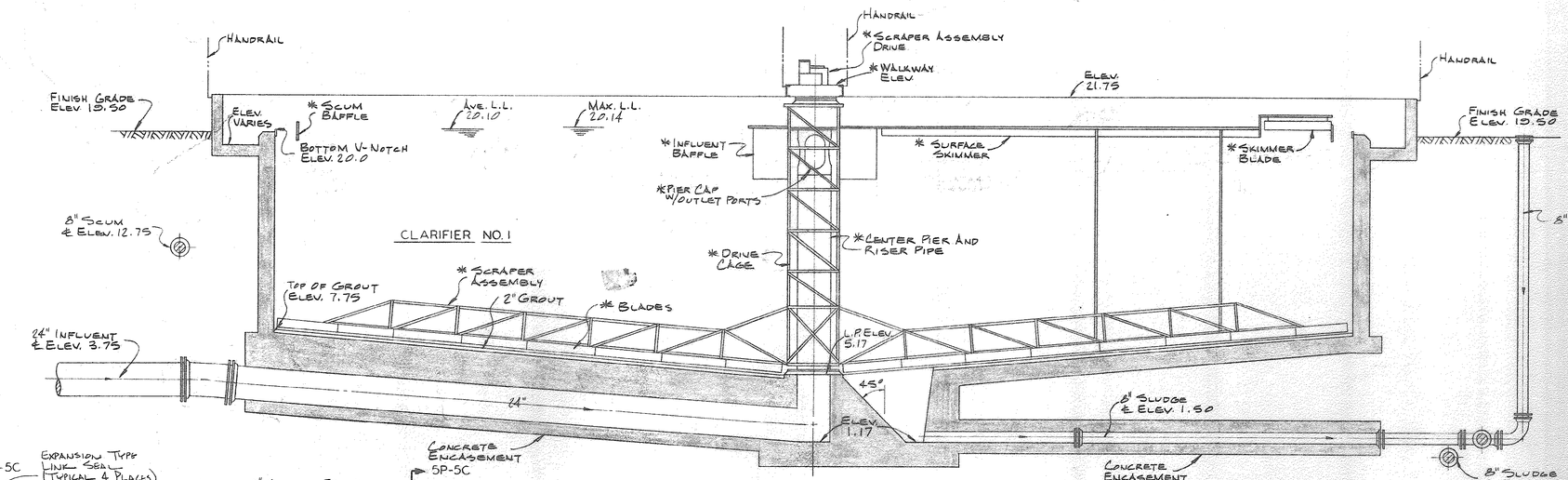
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
3/16" = 1'-0"

FLOCCULATOR-CLARIFIERS
TOP PLAN

SHEET 5P-4
OF SHEETS
PROJECT NO. 78284

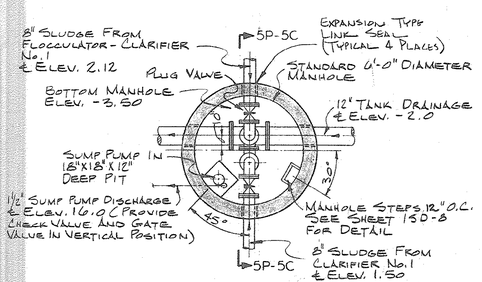
SHOARS RECORD



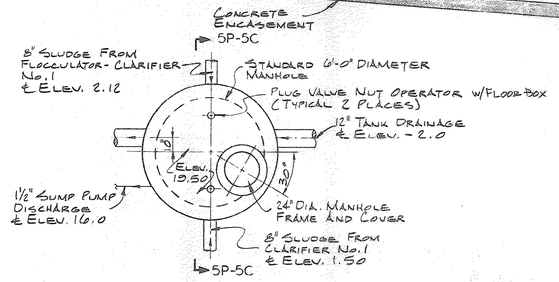
* SEE MANUFACTURER'S DRAWINGS FOR ELEVATIONS AND/OR DETAILS.

NOTE:
CLARIFIER NO. 1 IS SHOWN IN TRUE SECTION.
CLARIFIER NO. 2 IS SIMILAR IN DETAILS OF TANK AND EQUIPMENT.

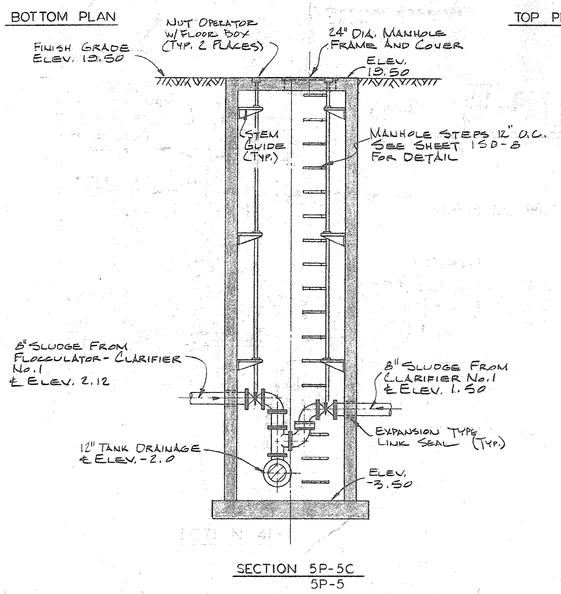
SECTION 5P-5A
5P-1&3



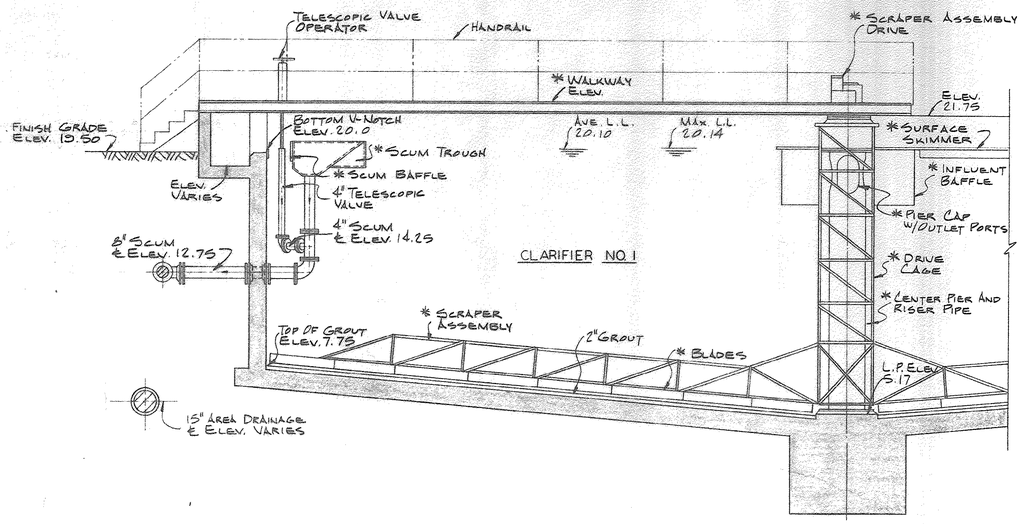
BOTTOM PLAN



TOP PLAN



SECTION 5P-5C
5P-5



SECTION 5P-5B
5P-1&3

DETAIL OF MANHOLE "A"

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED W.J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

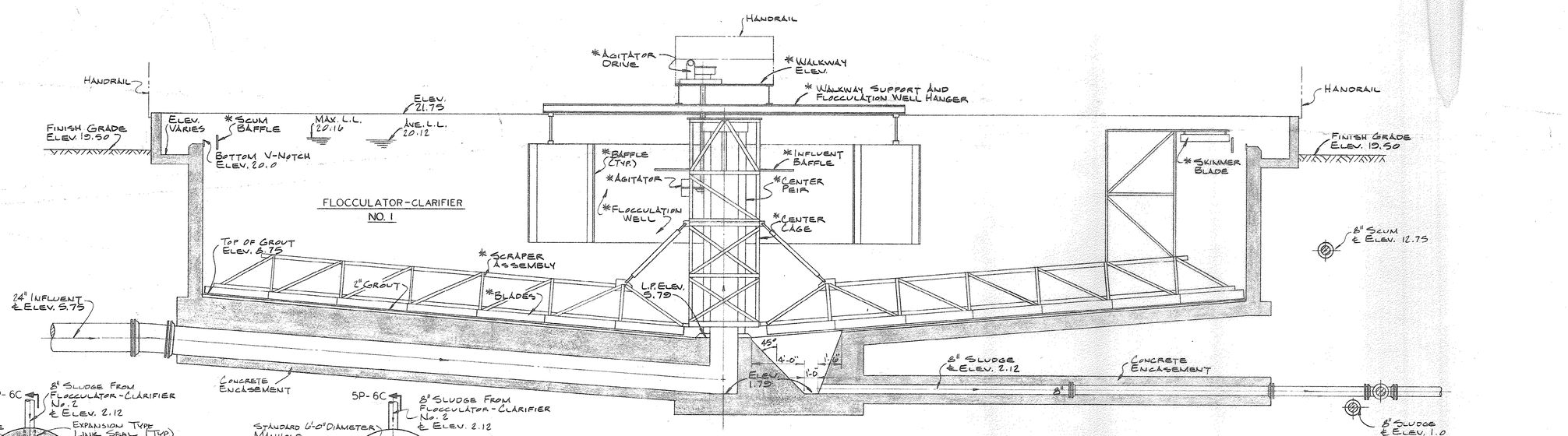
SCALE
1/4" = 1'-0"

CLARIFIER NO. 1
SECTIONS

SHEET 5P-5
OF SHEETS
PROJECT NO. 78284

51-003-066

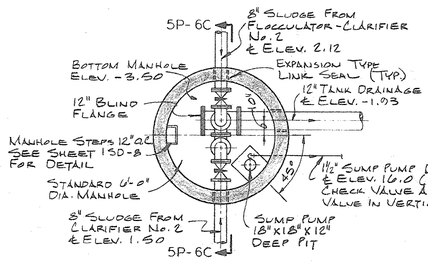
AS BUILT RECORD



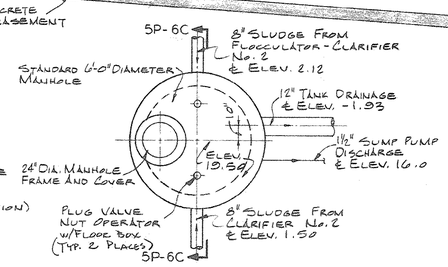
* SEE MANUFACTURER'S DRAWINGS FOR ELEVATIONS AND/OR DETAILS

SECTION 5P-6A
5P-2&4

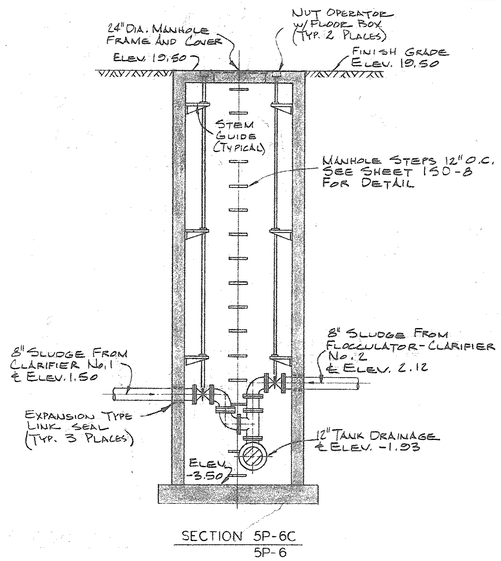
NOTE: FLOCCULATOR-CLARIFIER No. 1 IS SHOWN IN TRUE SECTION. FLOCCULATION TANK No. 2 IS SIMILAR IN DETAILS OF TANK AND EQUIPMENT.



BOTTOM PLAN

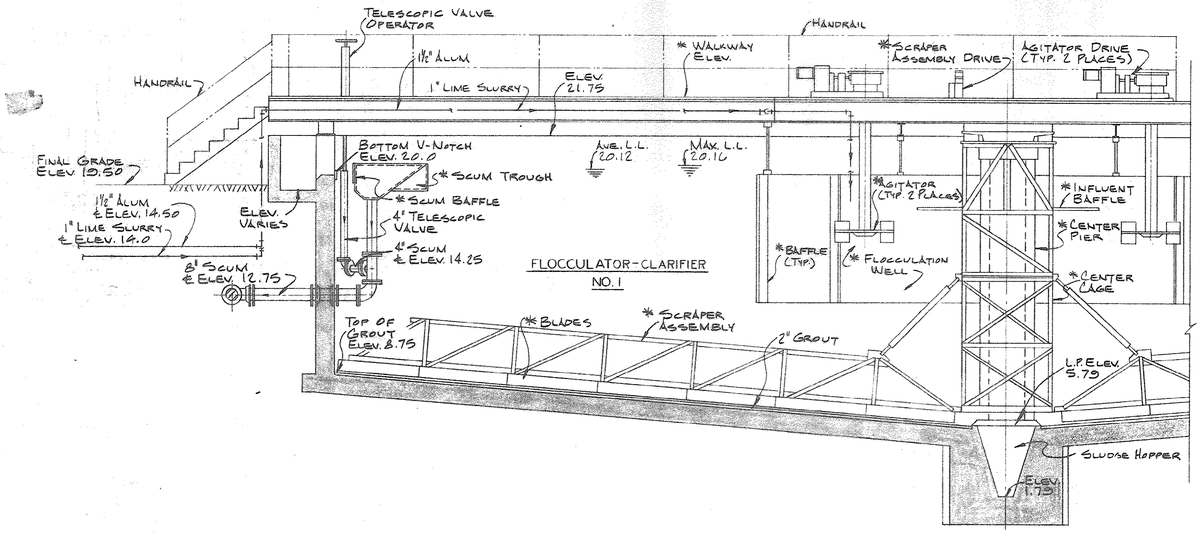


TOP PLAN



SECTION 5P-6C
5P-6

DETAIL OF MANHOLE "B"



SECTION 5P-6B
5P-2&4

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 6847 W. L. McILWAIN

51-003-061

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED W.J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

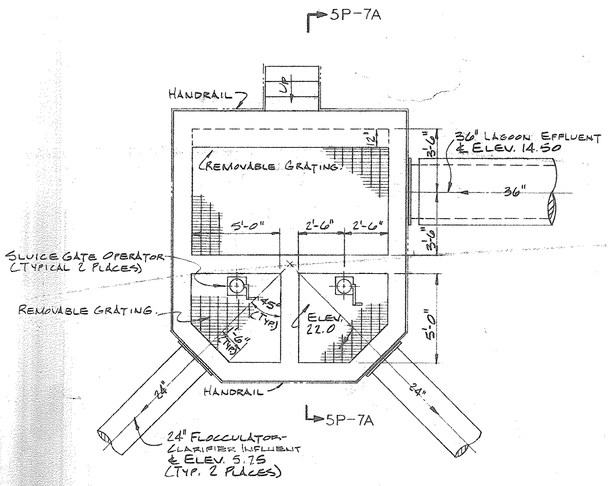
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4"=1'-0"

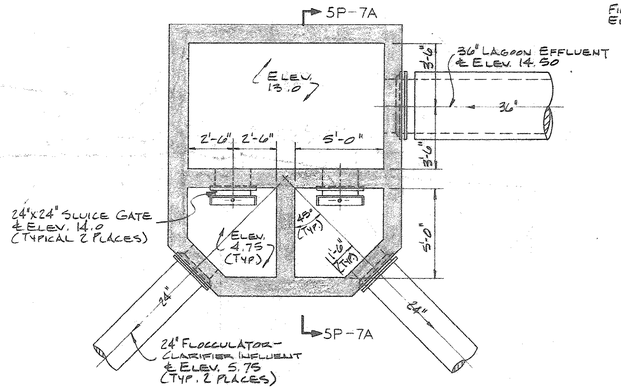
FLOCCULATOR-CLARIFIER SECTIONS

SHEET 5P-6
OF SHEETS
PROJECT NO. 78284

AS-BUILT RECORD

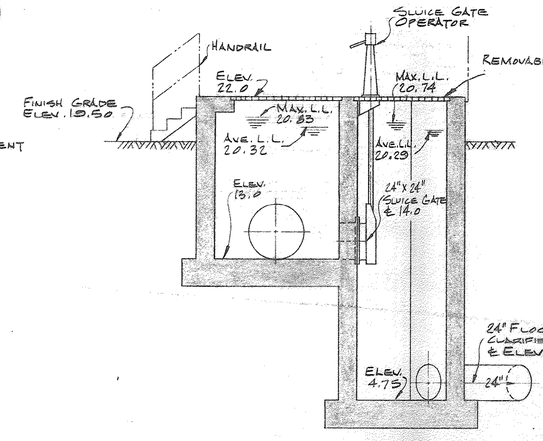


TOP PLAN

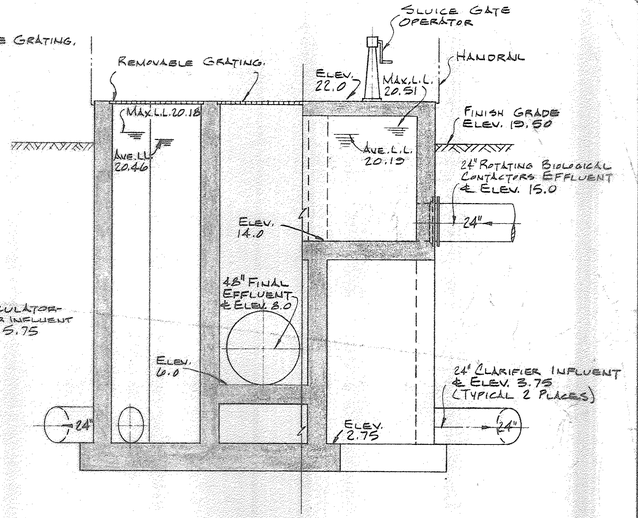


BOTTOM PLAN

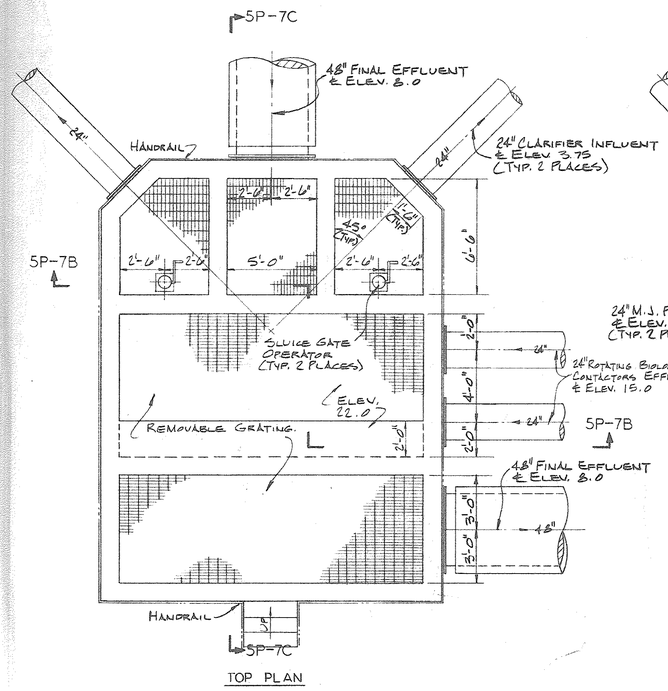
FLOCCULATOR-CLARIFIER
DISTRIBUTION CHAMBER



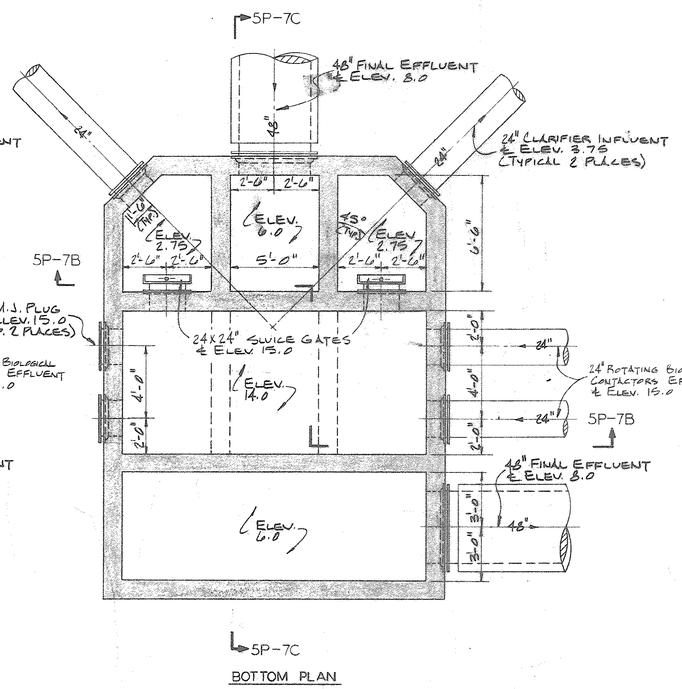
SECTION 5P-7A
5P-7



SECTION 5P-7B
5P-7

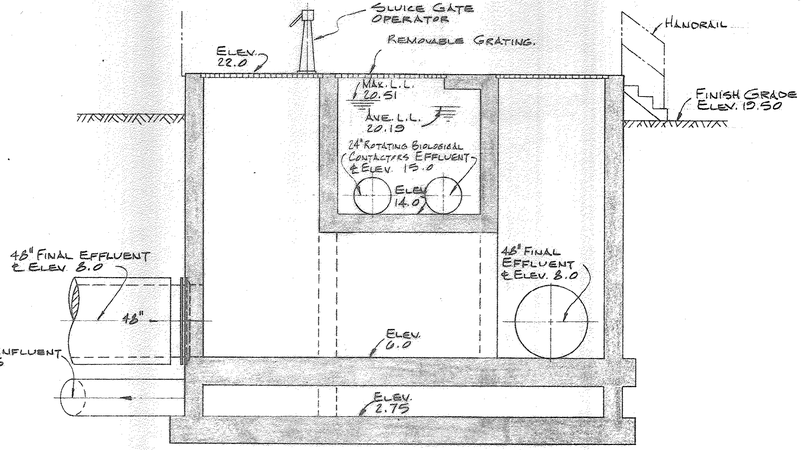


TOP PLAN



BOTTOM PLAN

CLARIFIERS DISTRIBUTION
CHAMBER



SECTION 5P-7C
5P-7

SOUTH CAROLINA
PROFESSIONAL
ENGINEER
SAM L. McILLWAIN

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED W.J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

FLOCCULATOR-CLARIFIERS & CLARIFIERS
DISTRIBUTION CHAMBERS
PLANS AND SECTIONS

51-003-062

SHEET 5P-7
OF SHEETS
PROJECT NO. 78284

51-003 RECORD

FLOCCULATOR-CLARIFIER NO. 2

FLOCCULATOR-CLARIFIER NO. 1

FLOCCULATOR-CLARIFIER EFFLUENT CHANNEL

1" LIME SLURRY ℄ ELEV. 14.0

1½" ALUM ℄ ELEV. 14.50

2" SETTLED WASTEWATER SAMPLING ℄ ELEV. 16.50

L.P. ELEV. 18.50

SCUM BAFFLE

BOTTOM V-NOTCH ELEV. 20.0

HANDRAIL

TOP OF WALL ELEV. 20.75 (TYPICAL)

TOP OF WALL ELEV. 21.75

DROP CHAIN (TYPICAL)

CLEANOUT

8" SLUDGE ℄ ELEV. 2.12

8" SCUM ℄ ELEV. 12.75

MIXING TANK

PINCH VALVE

OVER-FLOW

SETTLED WASTEWATER SAMPLING PUMP No. 2

LIME SLURRY FEED PUMP No. 2

LIME SLURRY FEED PUMP No. 1

30"x30" BALTDOWN, WATERTIGHT, SLAB TYPE MANHOLE FRAME AND COVER (TYP. 2 PLACES)

FINAL EFFLUENT COLLECTOR CHAMBER

SETTLED WASTEWATER SAMPLING PUMP No. 1

1" PRESSURE RELIEF (TYP. 2 PLACES)

STEP

30"x30" SLAB TYPE WATERTIGHT MANHOLE FRAME & COVER

TANK DRAINAGE WELL

12" VENT ℄ ELEV. 26.0 W/BIRD SCREEN

4'-0"x4'-0" WATERTIGHT HATCHWAY

BUBBLER CUBICLE

1½" H.P. AIR ℄ ELEV. 15.50

PROVIDE VALVE BOX TO SURFACE W/ NUT OPERATOR (TYPICAL 2 PLACES)

10" TANK DRAINAGE ℄ ELEV. 16.0

1½" SUMP DISCHARGE ℄ ELEV. 14.15

12" TANK DRAINAGE

STILLING WELL (TYP. 4 PLACES)

8" SLUDGE ℄ ELEV. 1.50

2" SETTLED WASTEWATER SAMPLING ℄ ELEV. 16.50

18" TANK DRAINAGE ℄ ELEV. -2.20

℄ ELEV. -2.1

STANDARD 5'-0" DIAMETER MANHOLE. TOP OF MANHOLE ELEV. 20.0. BOTTOM ELEV. -2.05

PROVIDE 10" DROP PIPE ASSEMBLY, SEE SHT. 150-B FOR DETAIL

CLARIFIER EFFLUENT CHANNEL

15" ARCH DRAINAGE ℄ ELEV. 5.72

2" SETTLED WASTEWATER SAMPLING No. 1 ℄ ELEV. 14.50

1½" ALUM ℄ ELEV. 14.50

2" SETTLED WASTEWATER SAMPLING No. 2 ℄ ELEV. 14.50

2½" LIME SLURRY ℄ ELEV. 14.50

48" FINAL EFFLUENT ℄ ELEV. 8.0

CLARIFIER NO. 2

CLARIFIER NO. 1

TOP PLAN

NORTH

1" LIME SLURRY ℄ ELEV. 14.0

8" SLUDGE ℄ ELEV. 2.12

H.P. ELEV. 11.33 (TYPICAL)

FINAL EFFLUENT COLLECTOR CHAMBER

SLOPE

6'-0"

ELEV. 6.0

TANK DRAINAGE WELL

℄ ELEV. -3.0

TANK DRAINAGE PUMP No. 1

TANK DRAINAGE PUMP No. 2

PROVIDE VALVE BOX TO SURFACE W/ NUT OPERATOR (TYPICAL 2 PLACES)

8" TANK DRAINAGE ℄ ELEV. 16.0

1½" H.P. AIR ℄ ELEV. 15.50

℄ ELEV. 22.0

BUBBLER AIR

℄ ELEV. -2.25

1½" SUMP DISCHARGE ℄ ELEV. 14.15

1½" SUMP DISCHARGE ℄ ELEV. 14.15

48" FINAL EFFLUENT ℄ ELEV. 8.0

18" TANK DRAINAGE

1½" SUMP DISCHARGE ℄ ELEV. 14.15

5P-9A

BASE PLAN

* DIMENSION TO BE DETERMINED BY THE EQUIPMENT MANUFACTURER

SOUTH CAROLINA PROFESSIONAL ENGINEER McILLWAIN

51-002-063

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED W.J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

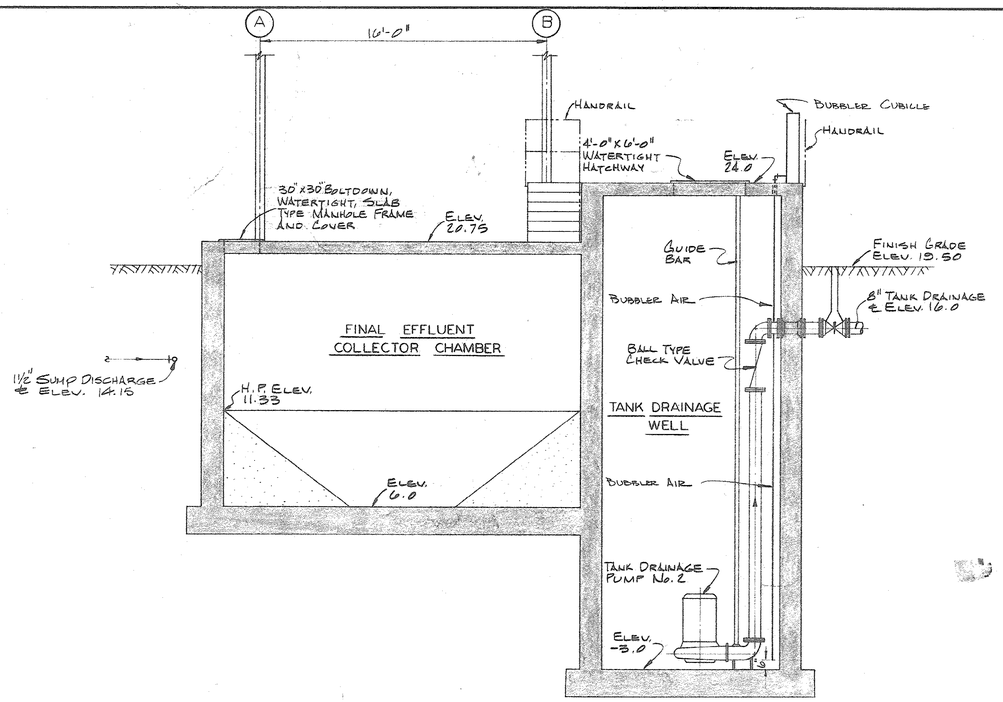
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
¼"=1'-0"

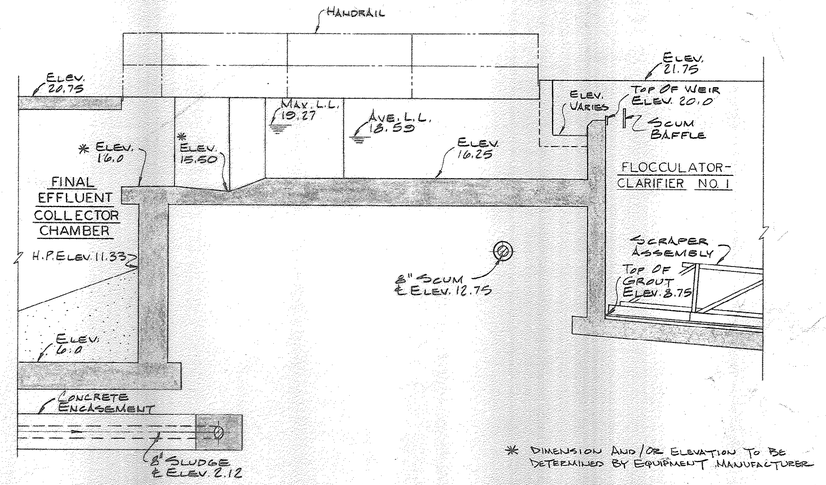
FINAL EFFLUENT COLLECTOR CHAMBER AND TANK DRAINAGE WELL TOP AND BOTTOM PLANS

SHEET 5P-8
OF SHEETS
PROJECT NO. 78284

RECORD

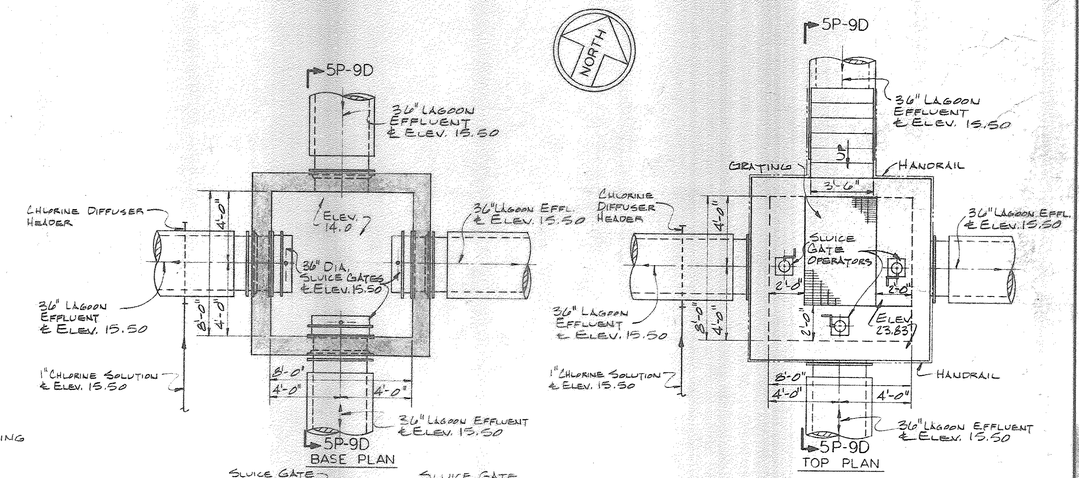


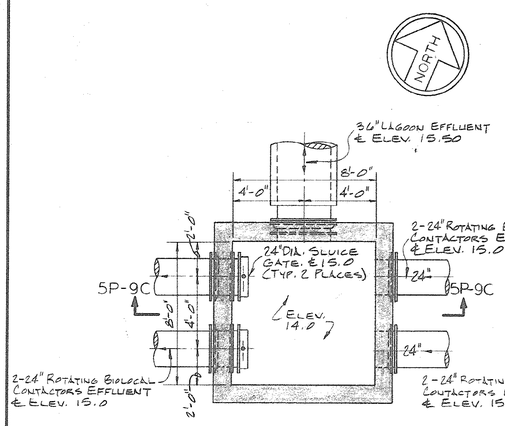
SECTION 5P-9A
5P-8



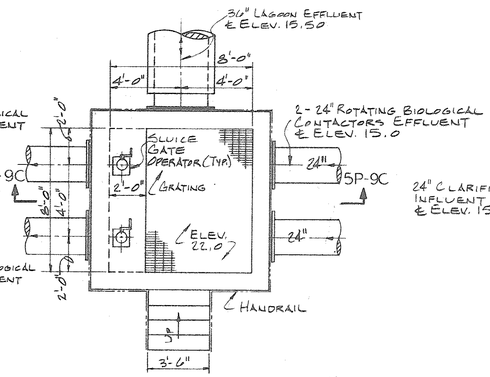
* DIMENSION AND/OR ELEVATION TO BE DETERMINED BY EQUIPMENT MANUFACTURER

SECTION 5P-9B
5P-4&8

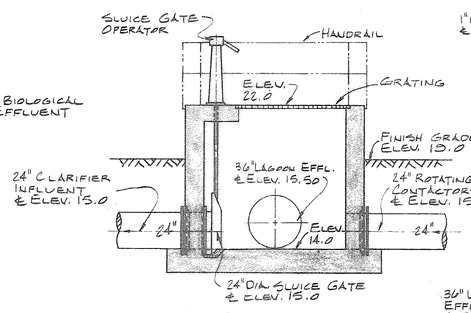




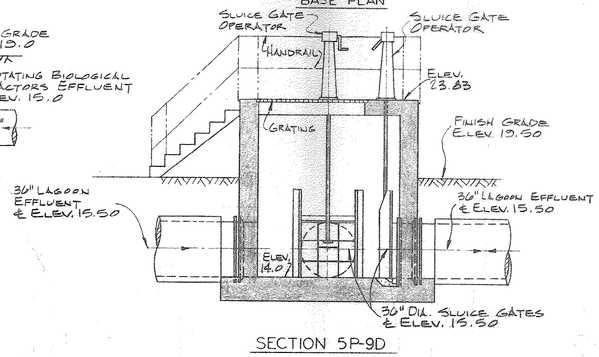
BASE PLAN



TOP PLAN



SECTION 5P-9C



SECTION 5P-9D

JUNCTION CHAMBER "D"

JUNCTION CHAMBER "C"

51-002-064

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED W.J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

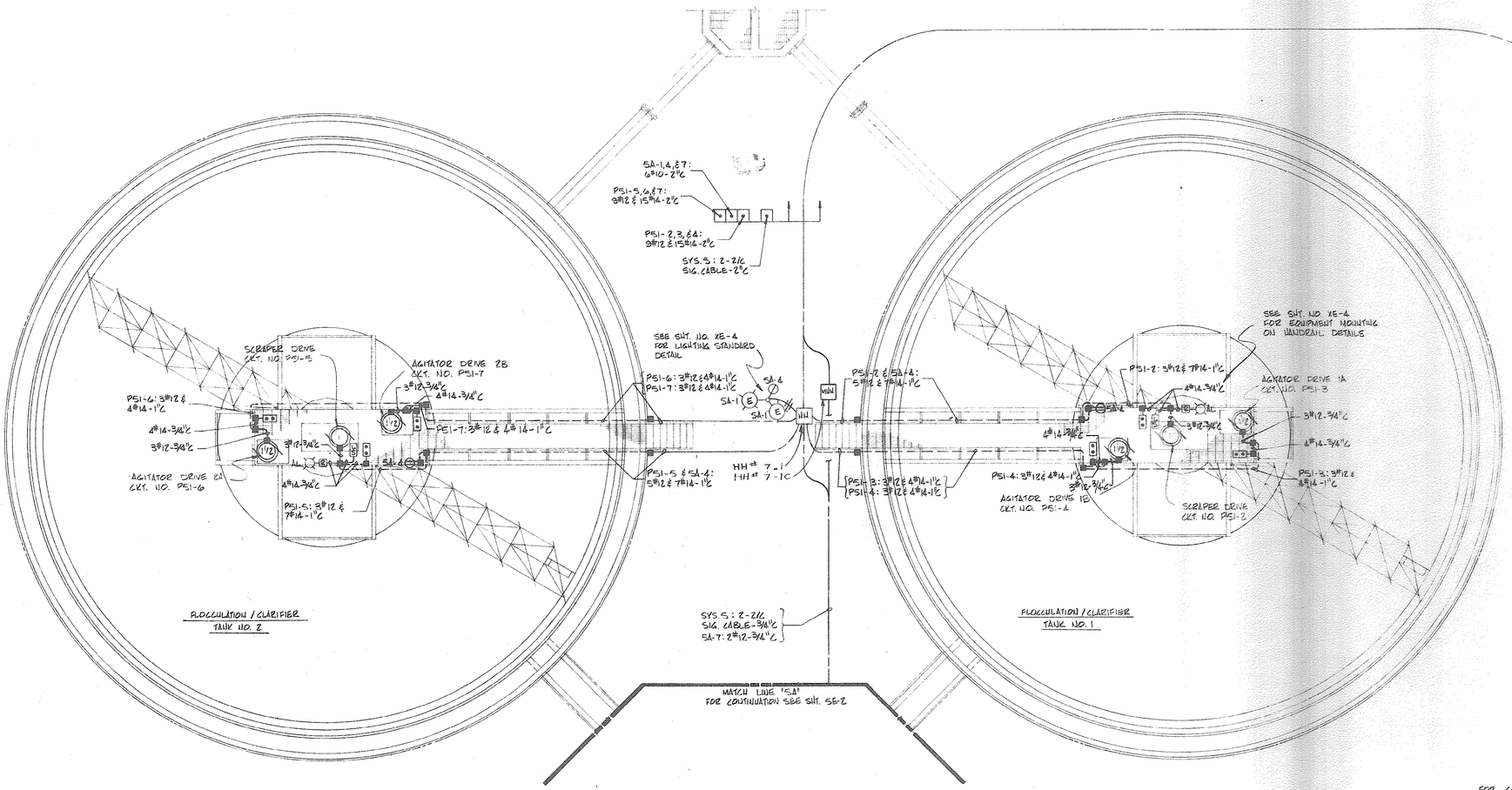
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
¼"=1'-0"

FLOCCULATOR-CLARIFIERS & CLARIFIERS
MISCELLANOUS DETAILS
AND SECTIONS

SHEET 5P-9
OF SHEETS
PROJECT NO. 78284

51-064-S RECORD



NOTE:

1. SEE SHT. NO. XE-5 FOR SYMBOLS AND LEGEND

51-002-065

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED J.N.G.
DRAWN R.W.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

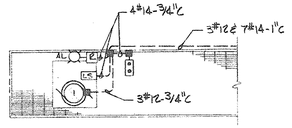
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/8" = 1'-0"

FLOCCULATOR/CLARIFIER TANKS
PLAN-ELECTRICAL

SHEET 5E-1
OF SHEETS
PROJECT NO. 78284

RECORD



SCRAPER DRIVE DETAIL
TYPICAL 2 PLACES
NO SCALE

MATCH LINE "5A" FOR CONTINUATION SEE SHT. SE-1

NORTH

5A-7: 2#12-3/4"C SYS.5: 2-2/C SIG. CABLE-3/4"C

5A-13: 2#10-3/4"C

2#10-3/4"C

FOR CONTINUATION SEE SHEET SE-4

5A-13 & 23: 4#10 & SYS. 6: 10#12-2"C PS1-8: 3#8 & 3#12-2"C PS1-9: 3#8 & 3#12-2"C

FINAL EFFLUENT COLLECTION CHAMBER SEE SHT. NO. SE-4 FOR ELECTRICAL WORK IN THIS AREA

SUMP PUMP SP.S-1 CKT. NO. 5A-13

5A-15: 2#10-3/4"C

SUMP PUMP SP.S-2 CKT. NO. 5A-15

TANK DRAINAGE WELL SEE SHT. NO SE-4 FOR ELECTRICAL WORK IN THIS AREA

FOR CONTINUATION SEE SHEET SE-4

PARSHALL FLUME (TYP.)

5A-5: 2#12-3/4"C SYS. 4: 2/C SIG. CABLE-3/4"C

5A-5: 2#12-3/4"C SYS. 4: 2-2/C SIG. CABLE-1"C

SYS. 4: 2-2/C SIG. CABLE-1"C SYS. 30: 2-2/C SIG. CABLE-1"C 1"C-1C

PS1-14: 7#12 & PS1-16: 7#12-2"C PS1-17: 7#12 PS1-18: 7#12 & 5A-24, 25, & 26: 6#10-2"C 5A-5: 2#12-3/4"C

SEE DETAIL THIS SHT. (TYPICAL 2 PLACES)

PS1-11: 3#12 & 7#14-1"C

5A-6

SCRAPER DRIVE CKT. NO. PS1-11

5A-6: 2#12-3/4"C

5A-6 E 5A-3

E 5A-3

MH

PS1-10: 3#12 & 7#14-1"C

5A-6

5A-6: 2#12-3/4"C

SCRAPER DRIVE CKT. NO. PS1-10

CLARIFIER NO. 2

CLARIFIER NO. 1

FOR CONTINUATION SEE SITE PLAN SHT NO 1E-1

PS1-14: 7#12, PS1-16: 7#12, PS1-10: 3#12 & 7#14-1"C

5A-3, 5, & 6: 6#10-2"C

PS1-11: 3#12 & 7#14, PS1-17: 7#12, PS1-18: 7#12, & 5A-24, 25, & 26: 6#10-1"C

SYS. 4 & 30: 4-2/C SIG. CABLE-2"C

2"C-1C

FOR CONTINUATION SEE SHEET NO.SE-1

SYS. 5: 2-2/C SIG. CABLE-2"C

PS1-5, 6, & 7: 3#12 & 1S#14-2"C

5A-1, 4, & 7: 6#10-2"C

PS1-2, 3, & 4: 3#12 & 1S#14-2"C

SYS. 5

MH

MH

SYS. 5: 2-2/C SIG. CABLE-2"C

5A-1, 4, & 7: 6#10 5A-13, 15, 23, & SYS. 6: 6#10 & 10#12-1"C

PS1-5, 6, & 7: 3#12 & 1S#14, PS1-8: 3#8 & 3#12-1"C

PS1-2, 3, & 4: 3#12 & 1S#14 PS1-8: 3#8 & 3#12-1"C

FOR CONTINUATION SEE SITE PLAN SHT NO. 1E-1

51-002-066

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.N.G.
DRAWN R.W.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

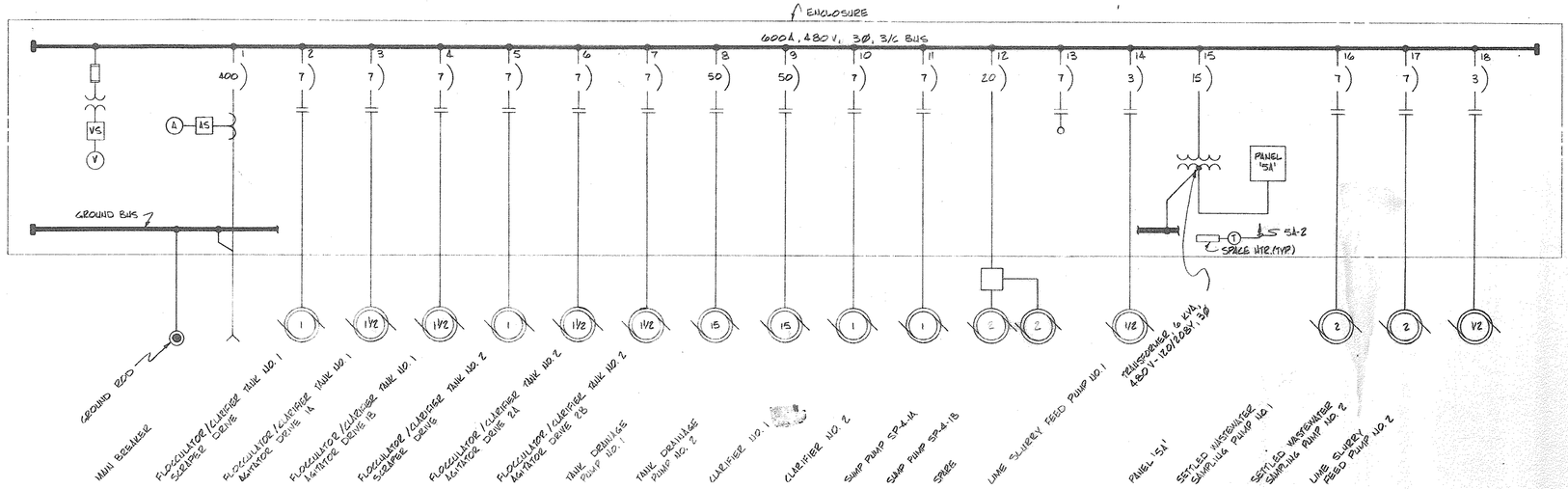
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/8" = 1'-0"

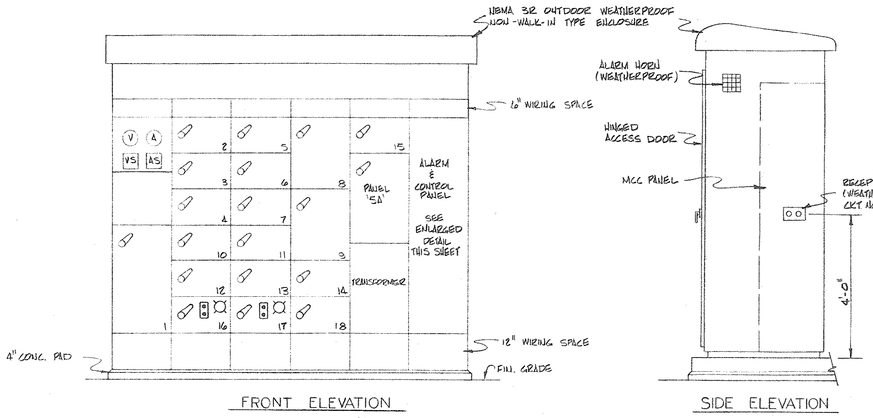
CLARIFIER TANKS
PLAN-ELECTRICAL

SHEET 5E-2
OF SHEETS
PROJECT NO. 78284

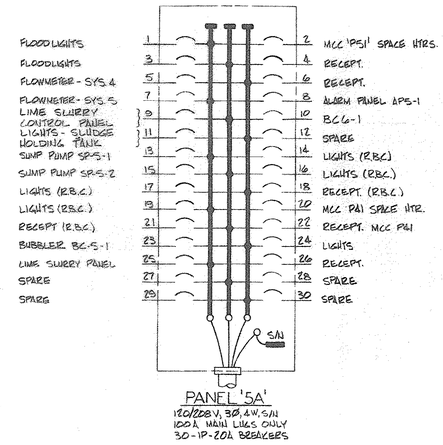
51-066 S RECORD



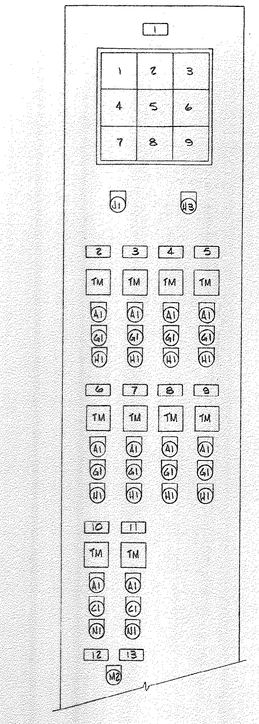
MOTOR CONTROL CENTER 'P5I'
SINGLE LINE DIAGRAM



MOTOR CONTROL CENTER PANEL 'P5I'
(SEE SHEET NO. 15-1 FOR CONCRETE PAD DETAIL)



PANEL '5A'
120/208 V, 3Ø, 4W, S/N
100A MAIN LUGS ONLY
30-1P-20A BREAKERS



ALARM & CONTROL PANEL
NO SCALE
SEE SHEET NO. X5-1 FOR DEVICE SCHEDULE

CONTROL PANEL NAMEPLATE SCHEDULE

NAMEPLATE NO.	NAMEPLATE SIZE	ENGRAVED
1		ALARM PANEL APS-1
2		FLOCCULATOR/CLARIFIER TANK NO. 1 SCRAPER DRIVE
3		FLOCCULATOR/CLARIFIER TANK NO. 2 SCRAPER DRIVE
4		CLARIFIER TANK NO. 1 SCRAPER DRIVE
5		CLARIFIER TANK NO. 2 SCRAPER DRIVE
6		FLOCCULATOR/CLARIFIER AGITATOR DRIVE 1A
7		FLOCCULATOR/CLARIFIER AGITATOR DRIVE 1B
8		FLOCCULATOR/CLARIFIER AGITATOR DRIVE 2A
9		FLOCCULATOR/CLARIFIER AGITATOR DRIVE 2B
10		TANK DRAINAGE PUMP NO. 1
11		TANK DRAINAGE PUMP NO. 2
12		PUMP NO. 1
13		PUMP NO. 2

ALARM PANEL NAMEPLATE SCHEDULE

NAMEPLATE NO.	ENGRAVED			
	FIRST LINE	SECOND LINE	THIRD LINE	FOURTH LINE
1	FLOCCULATOR	CLARIFIER	TANK NO. 1	OVERLOAD
2	FLOCCULATOR	CLARIFIER	TANK NO. 2	OVERLOAD
3	CLARIFIER	TANK NO. 1	OVERLOAD	
4	CLARIFIER	TANK NO. 2	OVERLOAD	
5	TANK	DRAINAGE	WELL	HIGH LEVEL
6	SUMP PUMP	SP-4-1	HIGH LEVEL	
7	SLUDGE	HOLDING TANK	HIGH LEVEL	
8	BLANK			
9	BLANK			

51-002-067

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.N.G.
DRAWN R.W.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

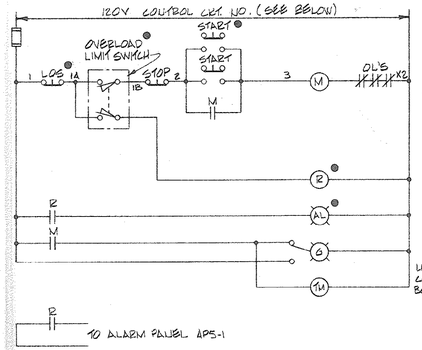
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

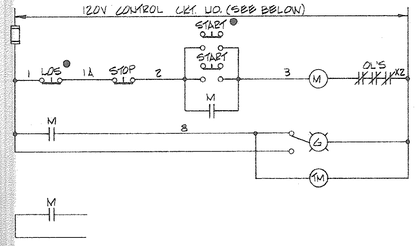
MOTOR CONTROL CENTER 'P5I'
SINGLE LINE DIAGRAM & ELEVATION

SHEET 5E-3
OF SHEETS
PROJECT NO. 78284

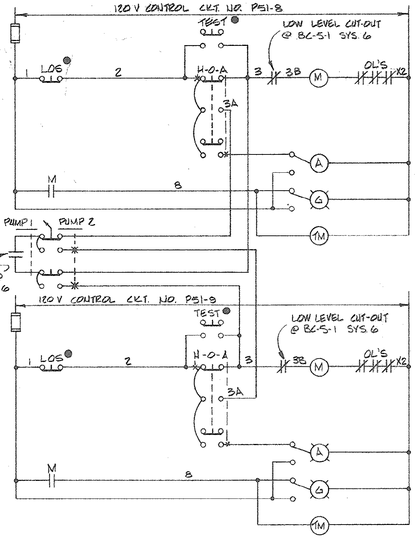
54-067 5 RECORD



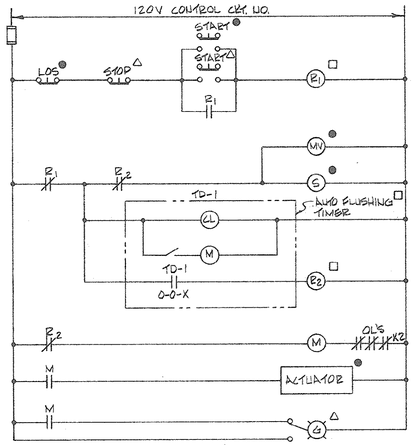
DESIGNATION	CKT. NO.
FLOCCULATION/CLARIFIER TANK NO. 1 SCRAPER DRIVE	PS1-2
FLOCCULATION/CLARIFIER TANK NO. 2 SCRAPER DRIVE	PS1-5
CLARIFIER TANK NO. 1 SCRAPER DRIVE	PS1-10
CLARIFIER TANK NO. 2 SCRAPER DRIVE	PS1-11



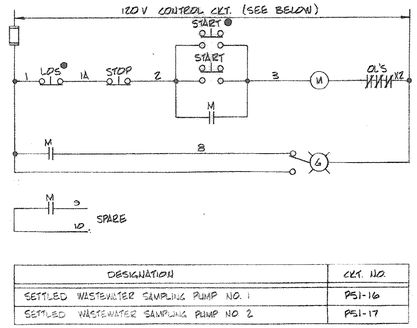
DESIGNATION	CKT. NO.
FLOCCULATION/CLARIFIER AGITATOR DRIVE NO. 1A	PS1-3
FLOCCULATION/CLARIFIER AGITATOR DRIVE NO. 1B	PS1-4
FLOCCULATION/CLARIFIER AGITATOR DRIVE NO. 2A	PS1-6
FLOCCULATION/CLARIFIER AGITATOR DRIVE NO. 2B	PS1-7



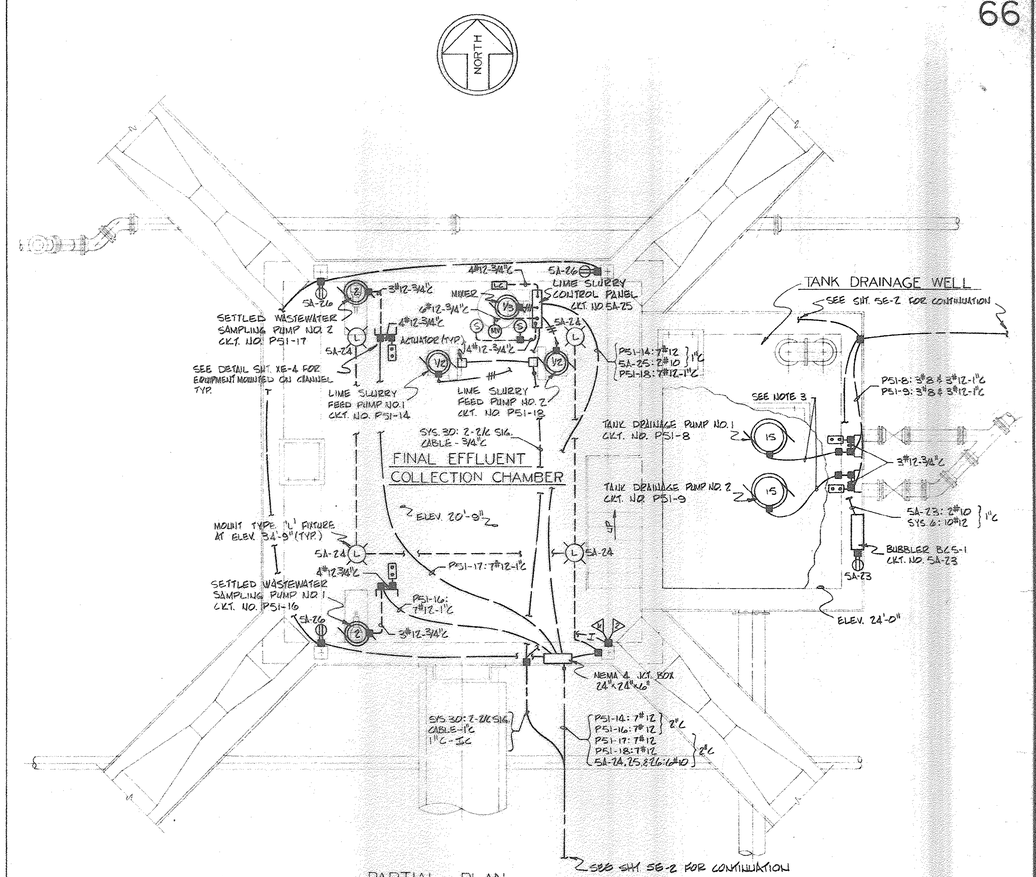
TANK DRAINAGE PUMPS



LIME SLURRY FEED PUMPS NO. 1 (NO. 2)



DESIGNATION	CKT. NO.
SETTLED WASTEWATER SAMPLING PUMP NO. 1	PS1-16
SETTLED WASTEWATER SAMPLING PUMP NO. 2	PS1-17



NOTES:

1. THE MOTOR CONTROL CENTER MANUFACTURER SHALL USE THE NUMBERS SHOWN ON THE SCHEMATIC WIRING DIAGRAMS ON THIS SHEET ON TERMINAL BLOCKS OF THE STARTER UNITS. THE CONTRACTOR SHALL IDENTIFY ALL CONTROL CONDUCTORS INSTALLED WITH THE SAME NUMBERS BY THE USE OF SELF-STICKING TAGS. THE IDENTIFICATION SHALL ALSO INCLUDE THE CIRCUIT NUMBER WHERE MORE THAN ONE CIRCUIT IS IN THE SAME ENCLOSURE.
2. ALL CONTROL WIRES INSTALLED BY THE CONTRACTOR SHALL BE COLOR CODED AS FOLLOWS.

WIRE DESIGNATION	COLOR
1, 1A	BLACK
2	RED
3	BLUE
X2	WHITE
8	YELLOW
10	ORANGE
OTHERS	AS APPROVED

3. CONNECT CABLE FURNISHED BY MFG. AS INDICATED.

LEGEND

- ● AT MOTOR
- △ AT MAIN CONTROL PANEL (MCP)
- □ AT LIME SLURRY CONTROL PANEL

UNLESS OTHERWISE INDICATED ALL EQUIPMENT AND DEVICES SHALL BE LOCATED IN THE MOTOR CONTROL CENTER.

51-002-068

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.N.G.
DRAWN K.R.H.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

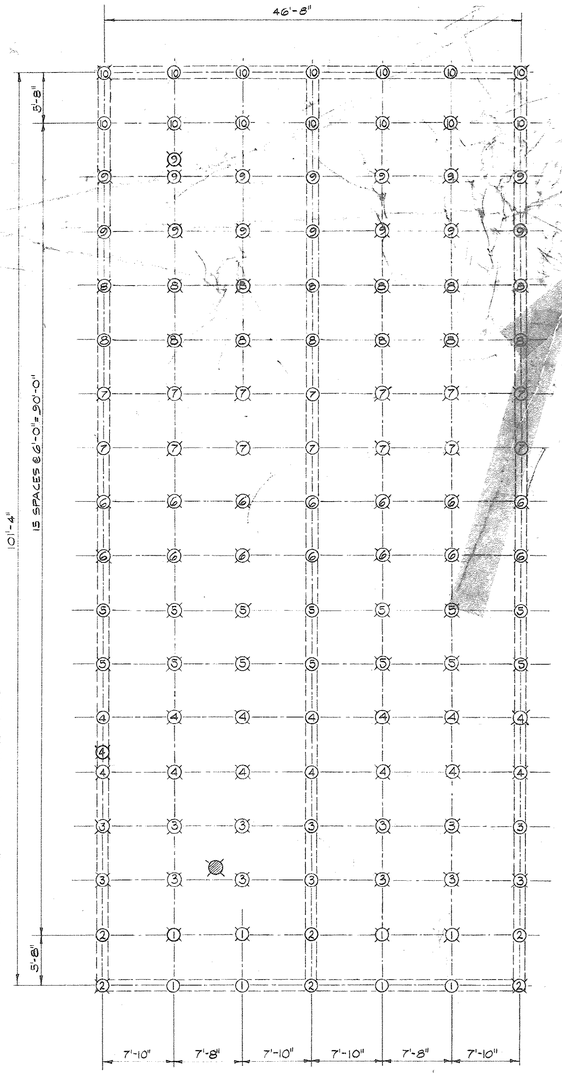
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

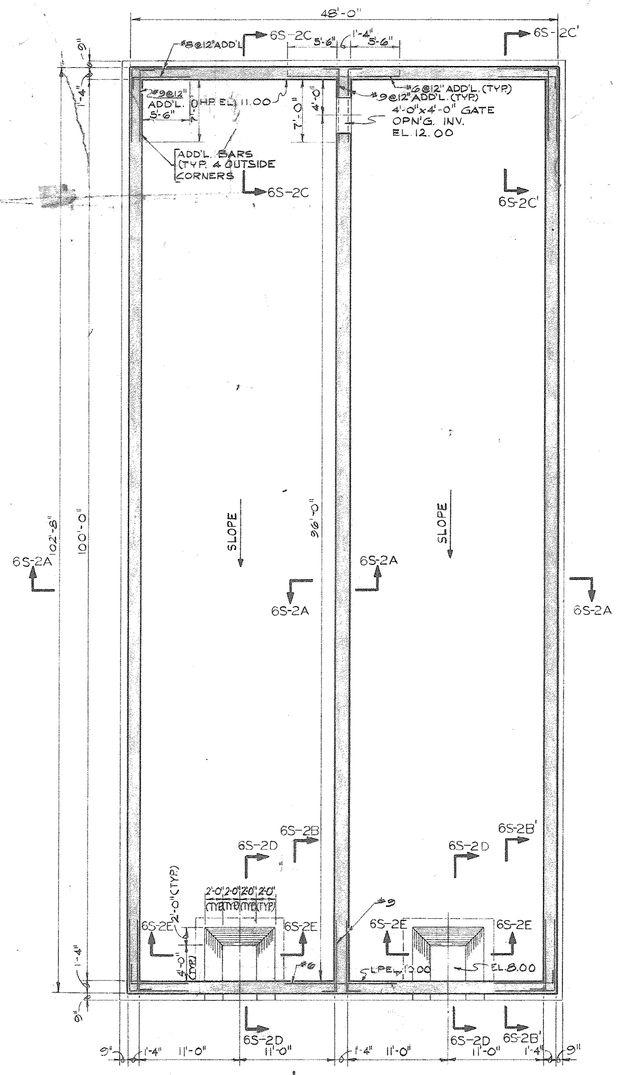
MOTOR CONTROL CENTER 'P51'
SCHEMATIC WIRING DIAGRAMS

SHEET 5E-4
OF SHEETS
PROJECT NO. 78284

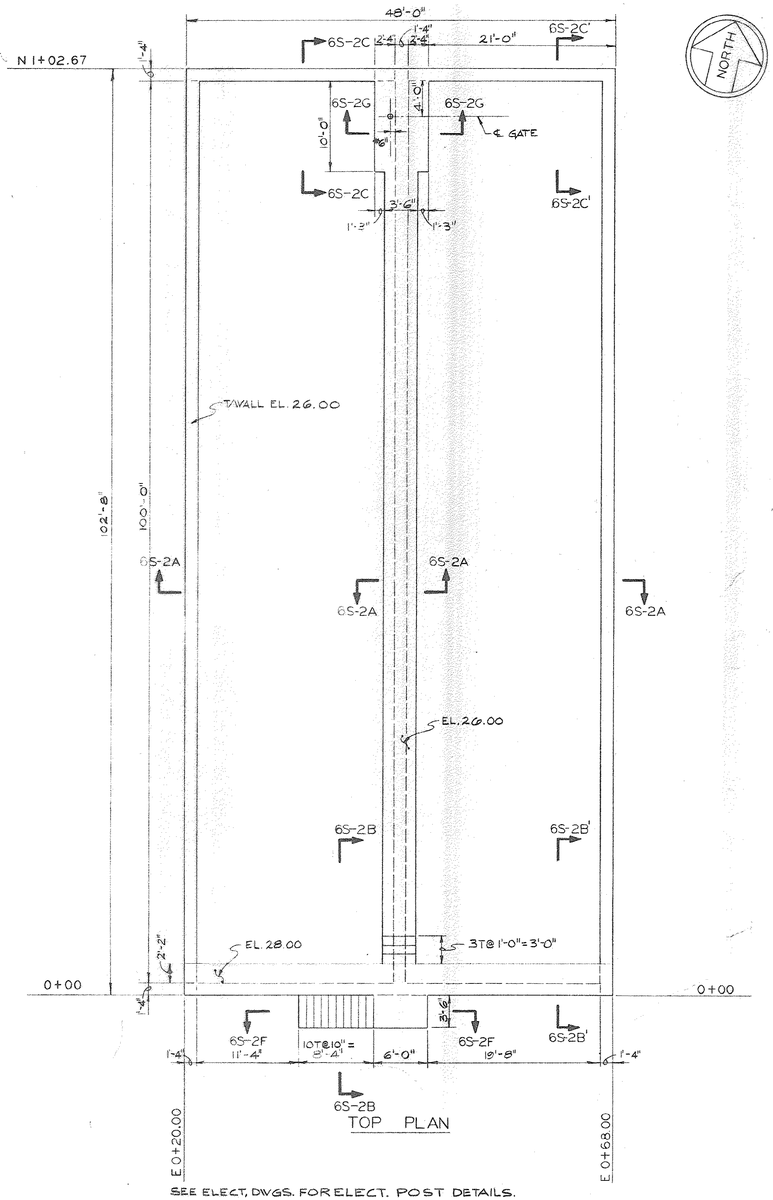
51A0685 RECORD



PILE PLAN



BASE PLAN



TOP PLAN

SEE ELECT. DWGS. FOR ELECT. POST DETAILS.

PILE CUT-OFF SCHEDULE	
MARK	ELEVATION
1	EL. 6.50
2	EL. 8.55
3	EL. 8.67
4	EL. 8.79
5	EL. 8.93
6	EL. 9.03
7	EL. 9.15
8	EL. 9.27
9	EL. 9.39
10	EL. 9.50

NOTES:

ALL PILES SHOWN ON THIS SHEET SHALL BE DRILLED-IN-PLACE CONCRETE PILES. SEE SHT. XS-1 AND SPEC'S FOR PILE DETAILS.

○ INDICATES BEARING PILE - 40 TON CAPACITY

⌀ INDICATES TENSION PILE - 40 TON BEARING CAPACITY AND 15 TON TENSION CAPACITY

▨ INDICATES TENSION TEST PILE

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED S.K.L.
DRAWN R.K.
CHECKED T.P.G.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

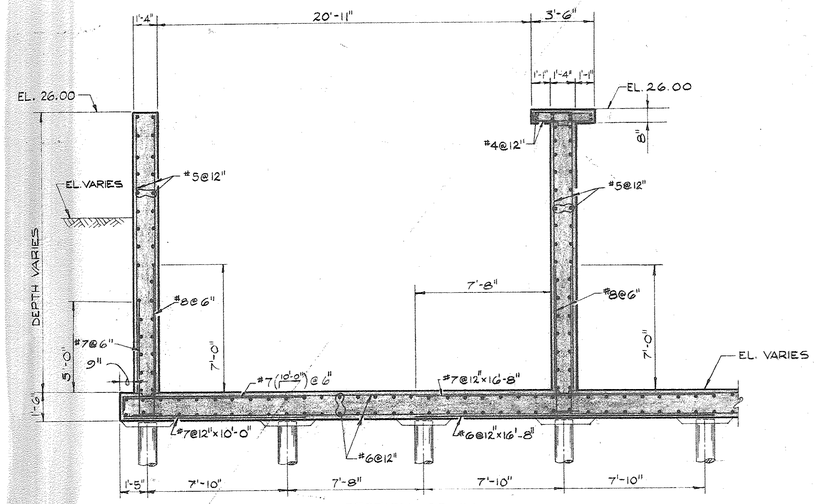
SCALE
1/8"=1'-0"

SLUDGE HOLDING TANK
PILE, BASE AND TOP PLAN

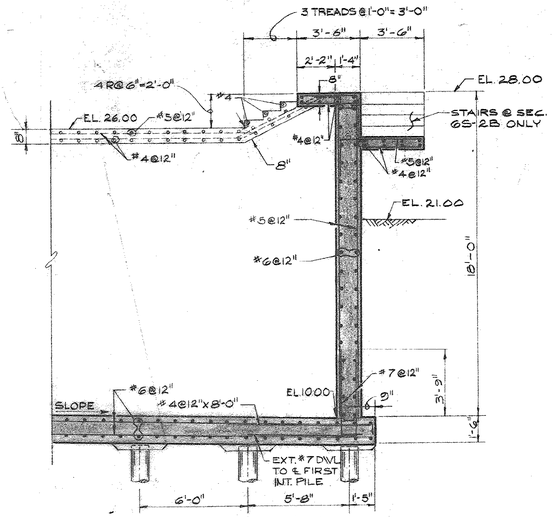
SHEET 6S-1
OF SHEETS
PROJECT NO. 78284

51-002-067

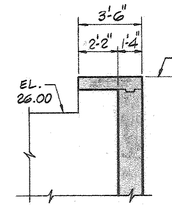
51-002 S RECORD



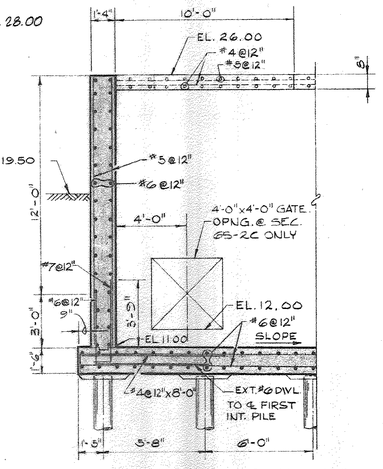
SECTION 6S-2A



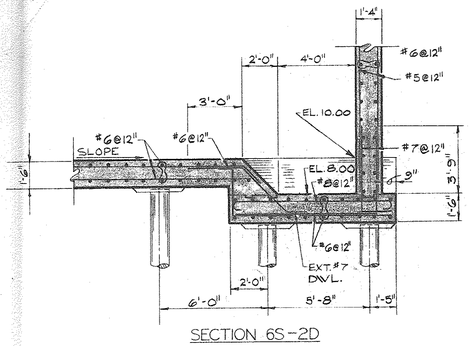
SECTION 6S-2B (SHOWN)
SECTION 6S-2B' (SIMILAR)



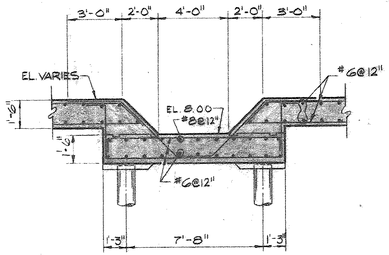
SECTION 6S-2B'



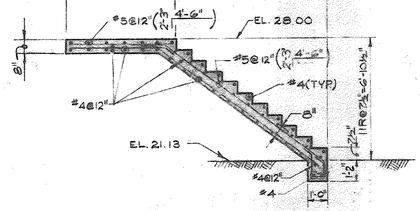
SECTION 6S-2C (SHOWN)
SECTION 6S-2C' (SIMILAR)



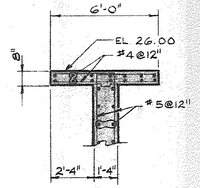
SECTION 6S-2D



SECTION 6S-2E



SECTION 6S-2F



SECTION 6S-2G

51-002-070

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED S.K.L.
DRAWN R.K.
CHECKED T.P.G.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

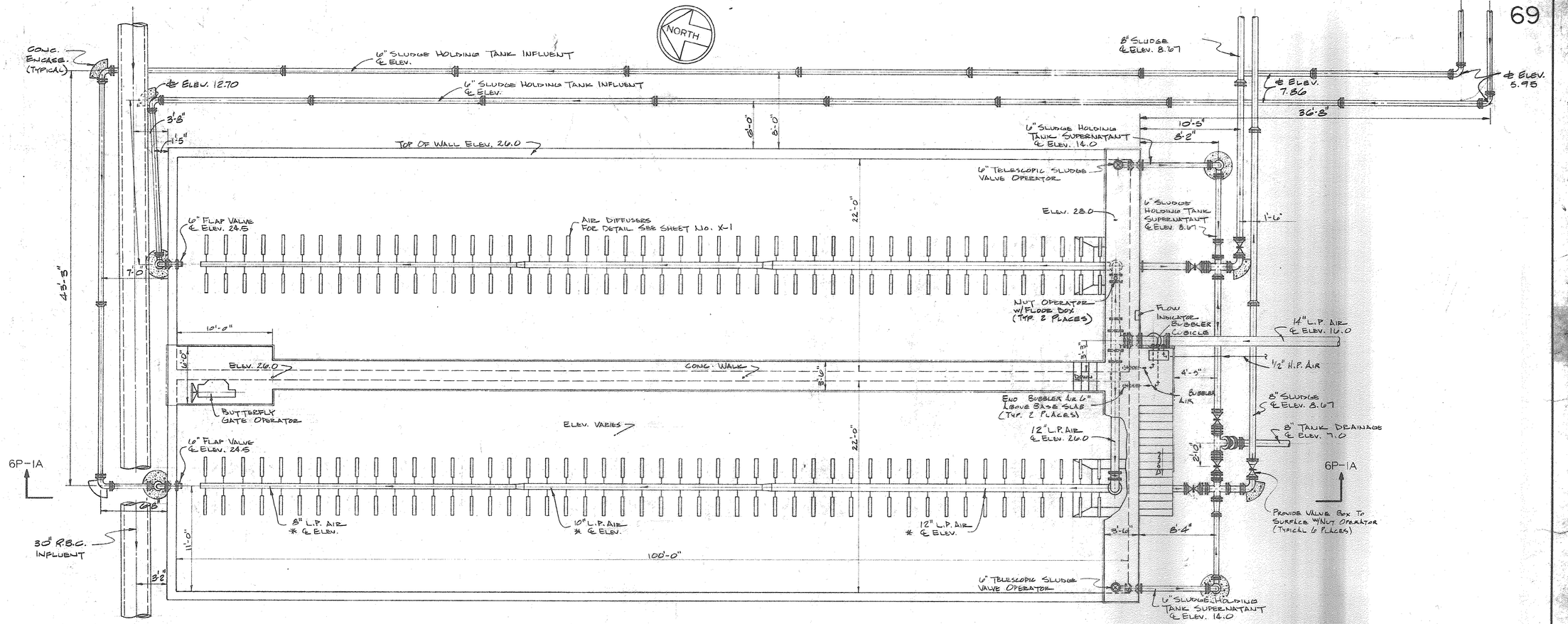
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

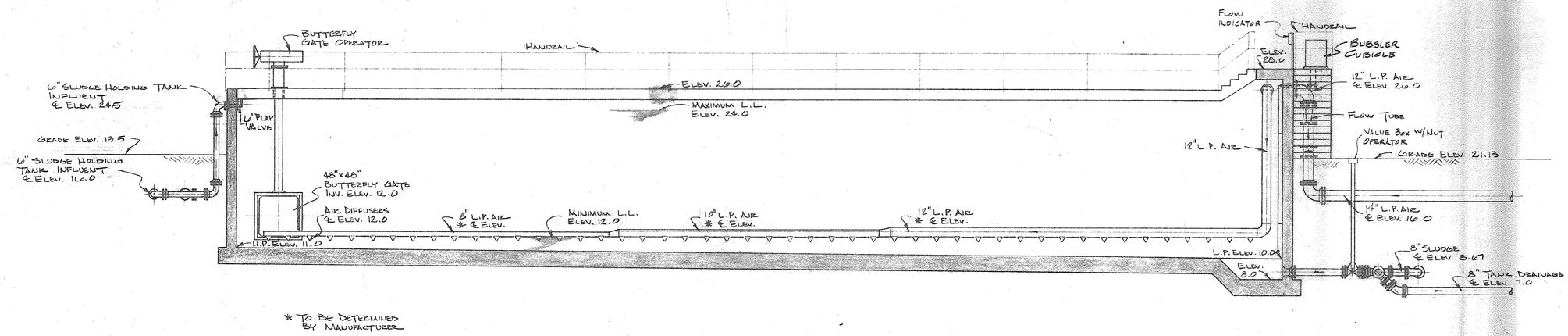
SLUDGE HOLDING TANK
SECTIONS

SHEET 6S-2
OF SHEETS
PROJECT NO. 78284

51402015 RECORD



PLAN



* TO BE DETERMINED BY MANUFACTURER

SECTION 6P-1A
6P-1

51-002-071

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED W.J.W.
DRAWN R.L.J.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

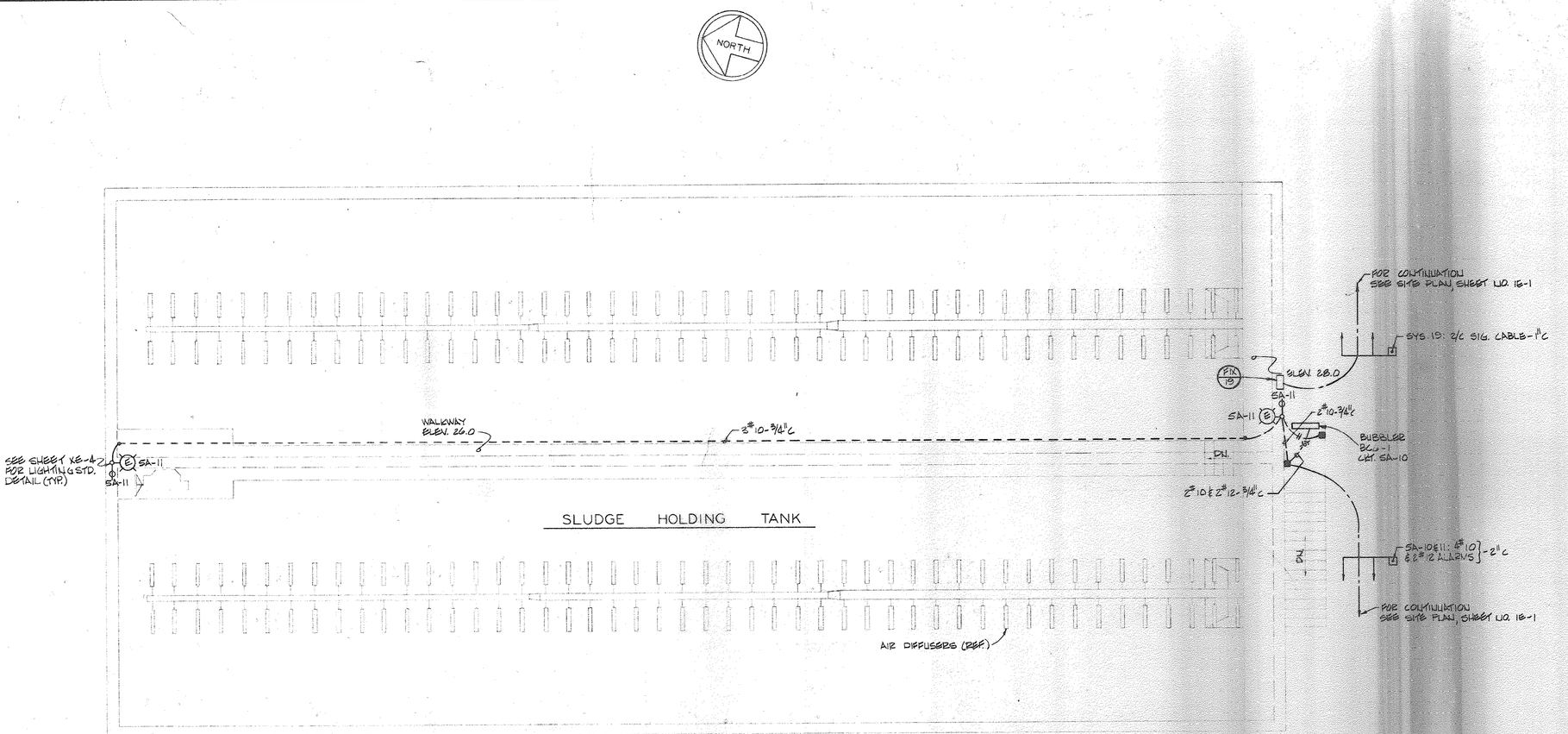
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
3/16"= 1'-0"

SLUDGE HOLDING TANK
PLAN & SECTION

SHEET 6P-1
OF SHEETS
PROJECT NO. 78284

RECORD



SLUDGE HOLDING TANK PLAN

SCALE — 3/16" = 1'-0"

NOTES:
1. SEE SHEET NO. XE-5 FOR SYMBOLS & LEGEND.

51-003-072

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED J.N.G.
DRAWN R.C.W.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
3/16" = 1'-0"

SLUDGE HOLDING TANK PLAN ELECTRICAL

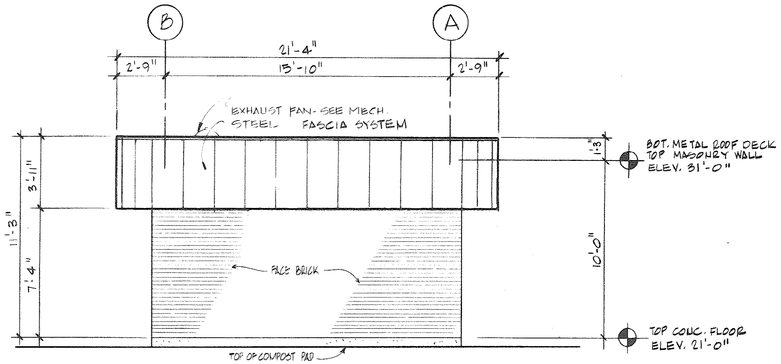
SHEET 6E-1
OF SHEETS
PROJECT NO. 78284

APPROVED RECORD

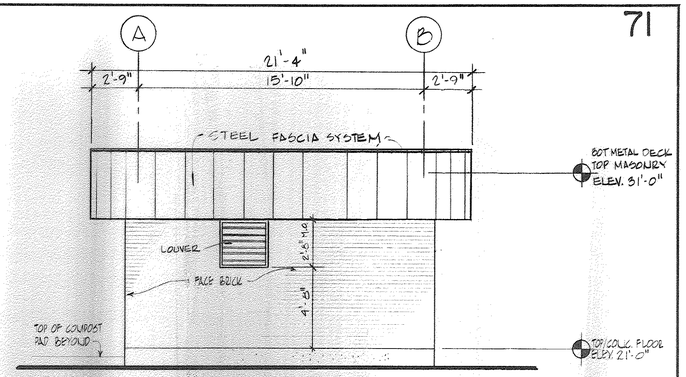
ROOM FINISH SCHEDULE

RM.#	RM. DESCRIPTION	FLOOR	BASE	WALL	CEILING HEIGHT	CEILING MATERIAL	REMARKS
7-100	BLOWER ROOM	I.F.	C.B.	C.B.	—	S.C.	SEE NOTE #1

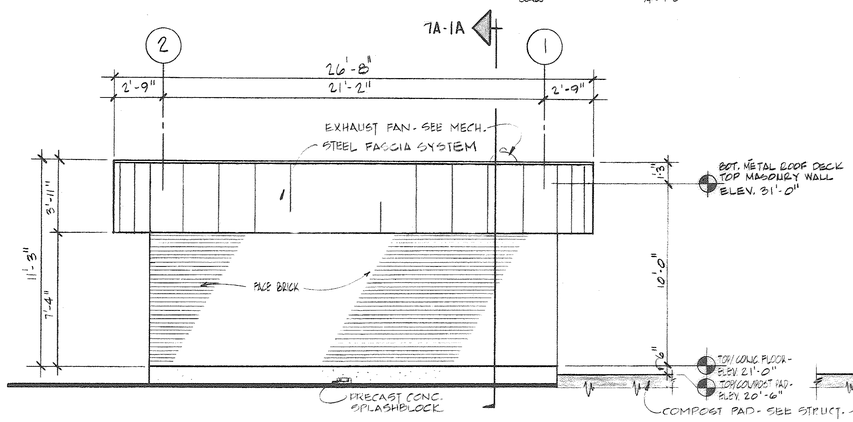
NOTE #1 - PAINT CB. BASE DIFFERENT COLOR THAN WALL - INSTALL I.F ON EQUIPMENT BASE CURBS



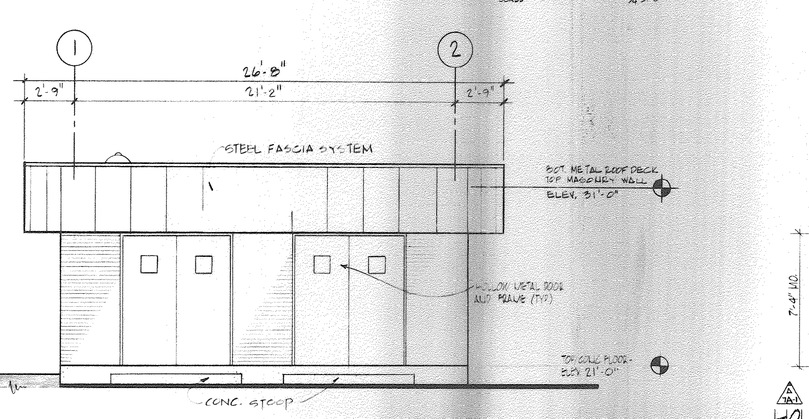
NORTH ELEVATION
SCALE: 1/4"=1'-0"



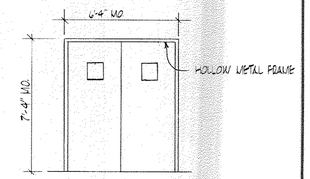
SOUTH ELEVATION
SCALE 1/4"=1'-0"



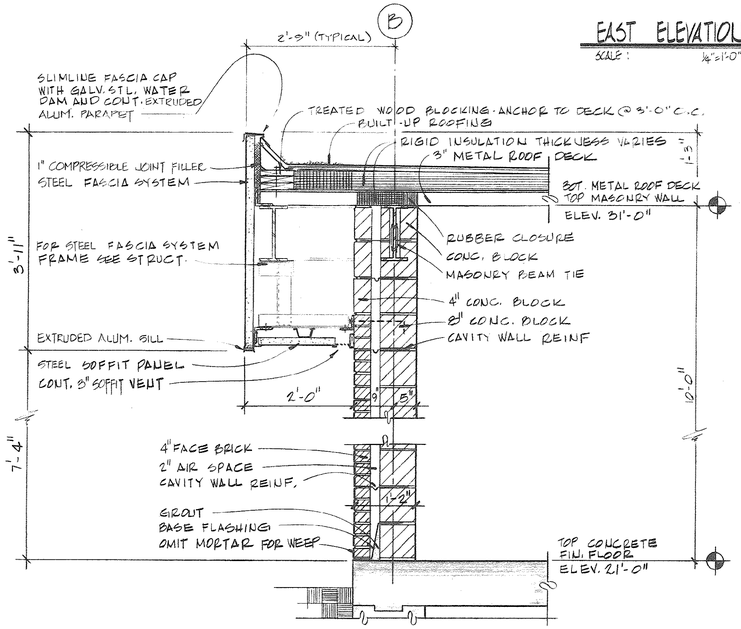
EAST ELEVATION
SCALE: 1/4"=1'-0"



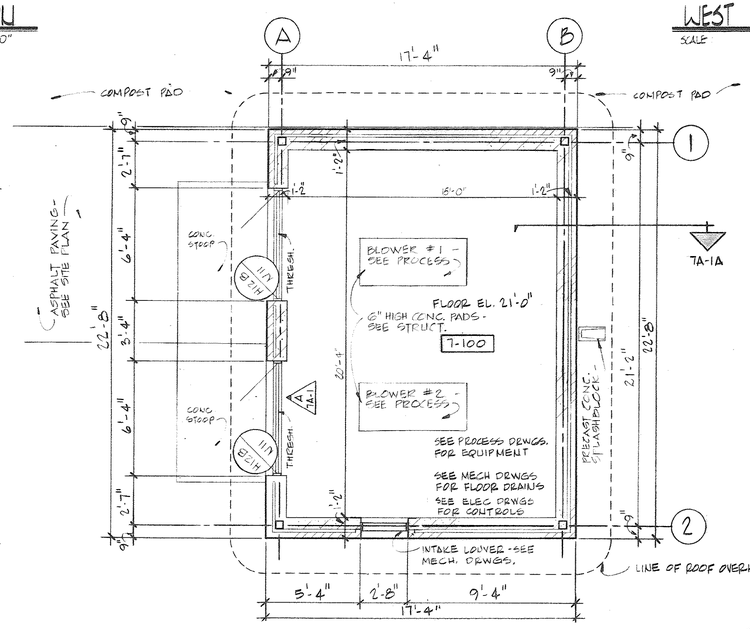
WEST ELEVATION
SCALE 1/4"=1'-0"



3 DETAIL
ELEVATION
HOLLOW METAL FRAME
SCALE: 1/2"=1'-0"

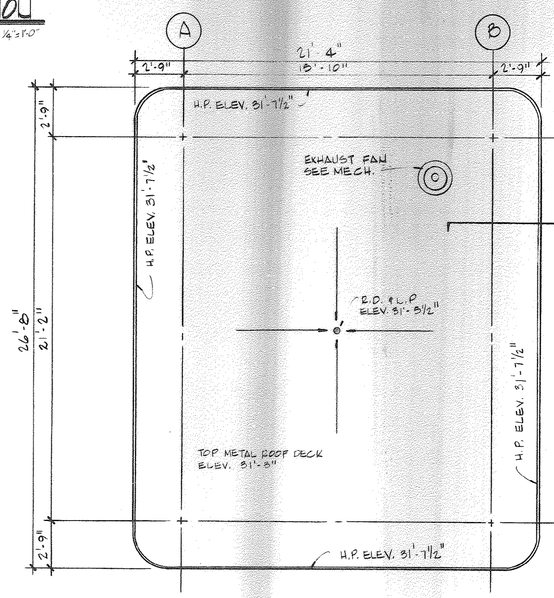


SECTION 7A-1A
SCALE: 3/4"=1'-0"



FIRST FLOOR PLAN
SCALE: 1/4"=1'-0"

NORTH



ROOF PLAN
SCALE 1/4"=1'-0"

NOTE:
HP = HIGH POINT
LP = LOW POINT OF TOP OF RIGID ROOF INSULATION

51-003-073

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED CB
DRAWN WAL
CHECKED RQM
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
AS NOTED

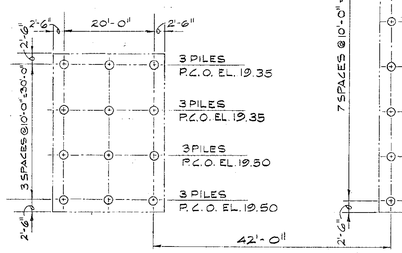
BLOWER BUILDING – FLOOR PLAN, ROOF PLAN, ELEVATIONS AND WALL SECTIONS

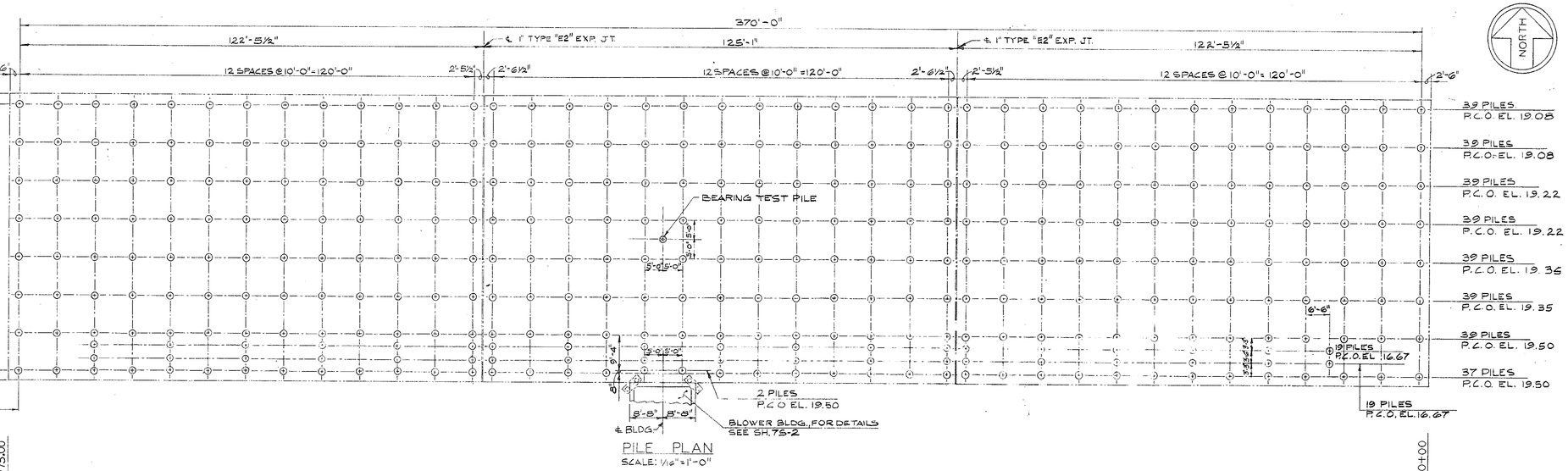
SHEET 7A-1
OF SHEETS
PROJECT NO. 78284

STAMPED RECORD

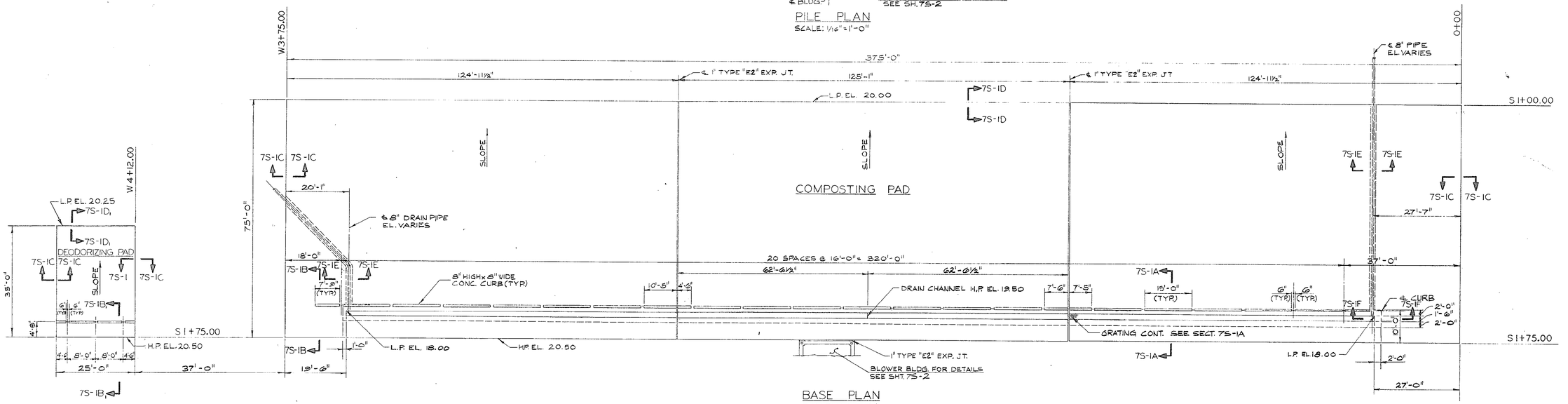
NOTES:
ALL PILES SHOWN ON THIS SHEET SHALL BE TREATED TIMBER OR DRILLED-IN-PLACE CONCRETE BEARING PILES (BEARING CAPACITY 20 TONS) SEE SHT. XS-1 AND SPEC'S FOR PILE DETAILS.

⊕ INDICATES BEARING TEST PILE.



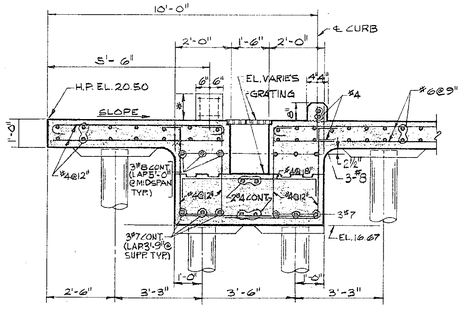


PILE PLAN
SCALE: 1/16" = 1'-0"

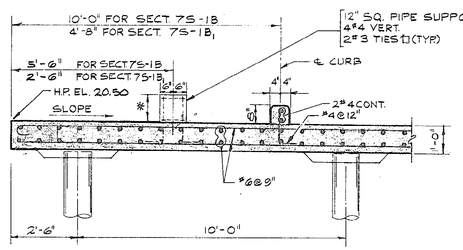


COMPOSTING PAD

BASE PLAN
SCALE: 1/16" = 1'-0"

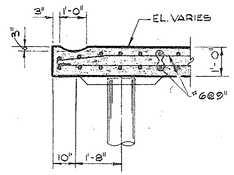


SECTION 7S-IA
SCALE: 3/8" = 1'-0"

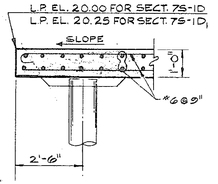


* NOTE: SEE PROCESS DWGS. FOR PIPE SUPPORT DETAILS

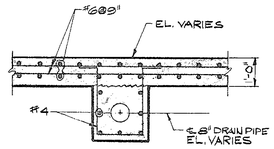
SECTION 7S-IB AND 7S-IB,
SCALE: 3/8" = 1'-0"



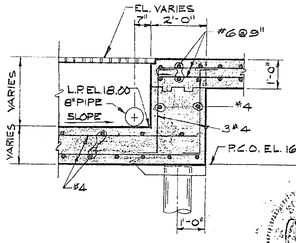
SECTION 7S-IC
SCALE: 3/8" = 1'-0"



SECTION 7S-ID AND 7S-ID,
SCALE: 3/8" = 1'-0"



SECTION 7S-IE
SCALE: 3/8" = 1'-0"



SECTION 7S-IF
SCALE 3/8" = 1'-0"

51-003-074

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED H.R.
DRAWN R.K.
CHECKED T.P.G.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

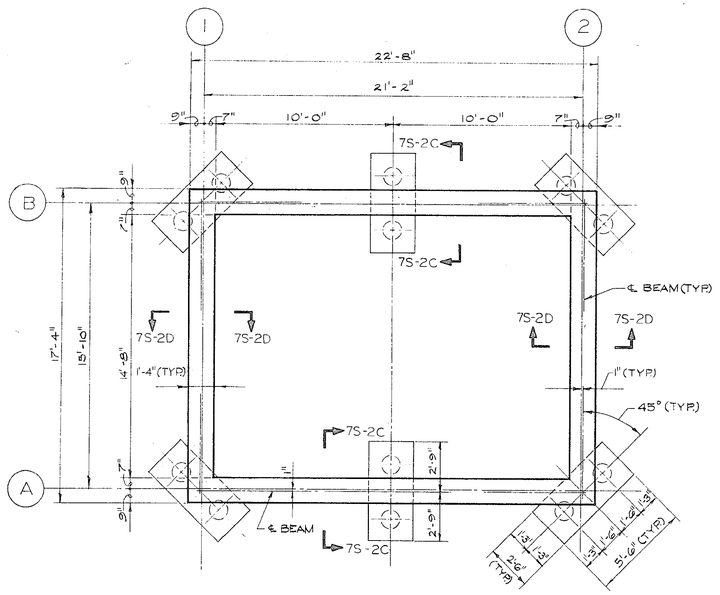
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
AS NOTED

COMPOSTING AND DEODORIZING PADS
PLANS AND SECTIONS

SHEET 7S-1
OF SHEETS
PROJECT NO. 78284

SHADOW SPECIFICATIONS



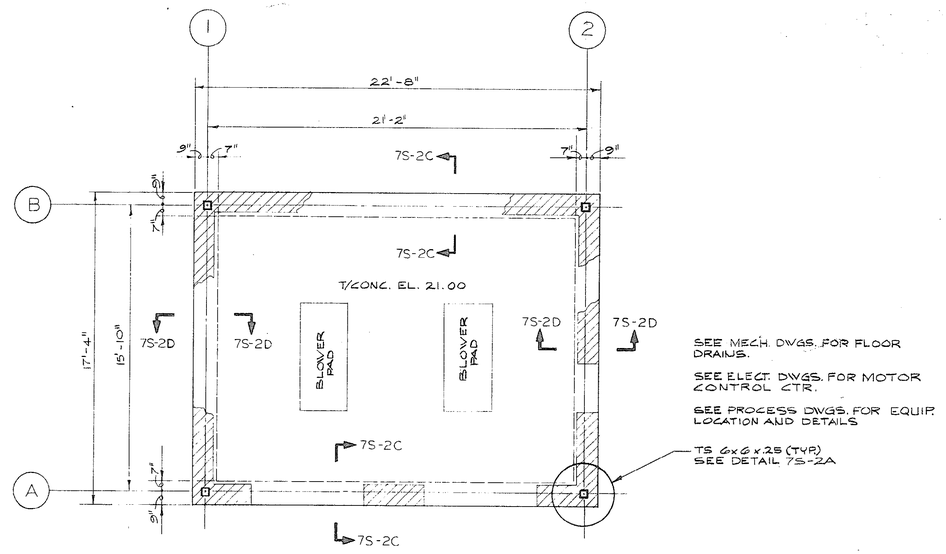
FOUNDATION PLAN
1/4" = 1'-0"

NOTE:

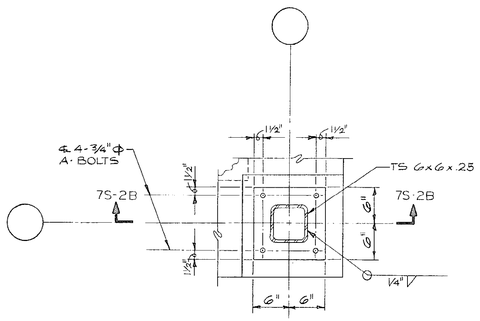
ALL PILES SHOWN ON THIS SHT. SHALL BE TREATED TIMBER OR DRILLED-IN-PLACE CONCRETE BEARING PILES (BEARING CAPACITY = 20 TONS) SEE SHT. XS-1 AND SPEC'S FOR PILE DETAILS.

PILE CUT-OFF ELEVATION FOR ALL PILES SHOWN ON THIS SHT. SHALL BE 16.75.

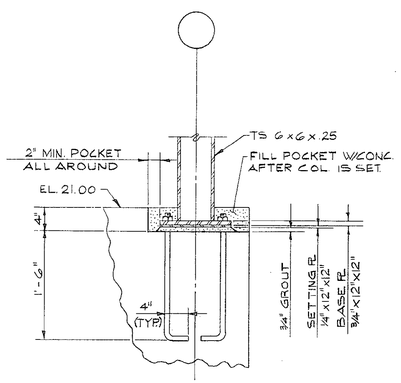
℄ OF PILE CAP IS SAME AS ℄ OF BEAM ABOVE.



GRADE FLOOR PLAN
1/4" = 1'-0"

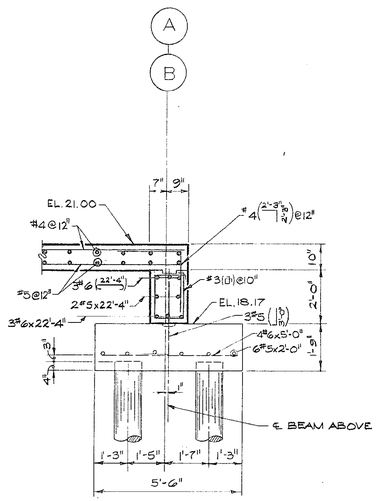


DETAIL 7S-2A

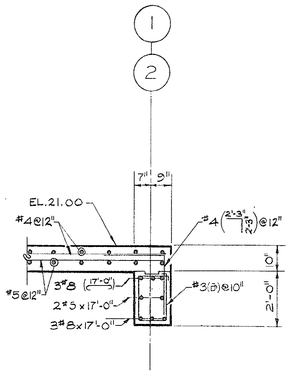


SECTION 7S-2B

TYPICAL BASE PLATE DETAILS (4 REQ'D)
1" = 1'-0"



SECTION 7S-2C
3/8" = 1'-0"



SECTION 7S-2D
3/8" = 1'-0"

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED S.K.L.
DRAWN R.K.
CHECKED T.P.G.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

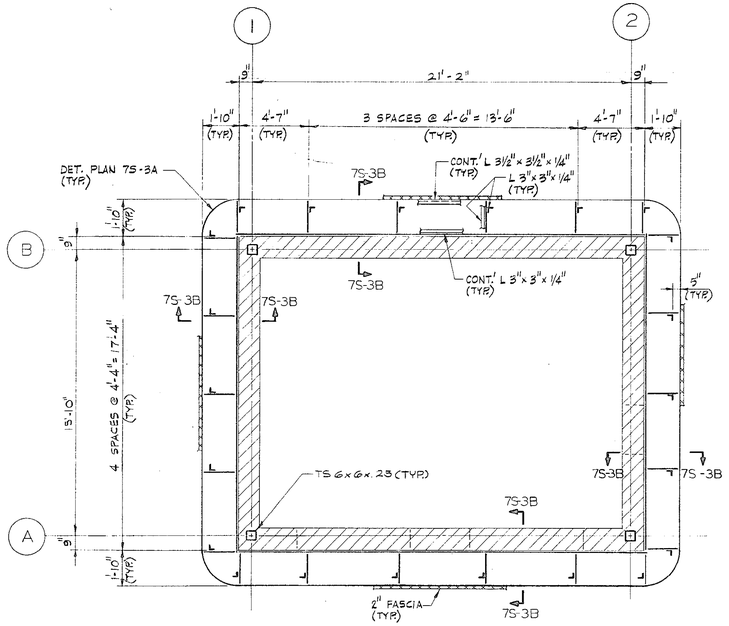
SCALE
AS NOTED

BLOWER BUILDING
FOUNDATION AND GRADE FLOOR PLANS

SHEET 7S-2
OF SHEETS
PROJECT NO. 78284

51-002-075

51-002-075 S RECORD



FASCIA SUPPORT FRAMING PLAN
1/4"=1'-0"

NORTH

ROOF NOTES:

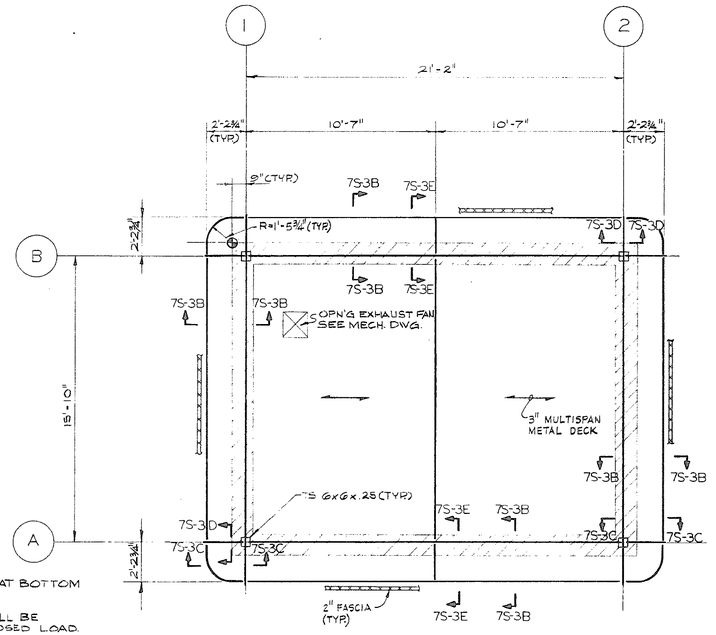
METAL DECK SHALL BE 3" DEEP, RIBBED TYPE WITH FLAT BOTTOM PLATE, 18/8 GAGE PAINTED STEEL (Fs = 20,000 P.S.I.).

METAL DECK SHALL HAVE A MIN. "S" OF 0.97 IN.³ AND SHALL BE CAPABLE OF SUPPORTING 55.0 P.S.F. TOTAL SUPERIMPOSED LOAD.

DECK MANUFACTURER SHALL PROVIDE DECK REINFORZING AT OPENINGS AS REQUIRED.

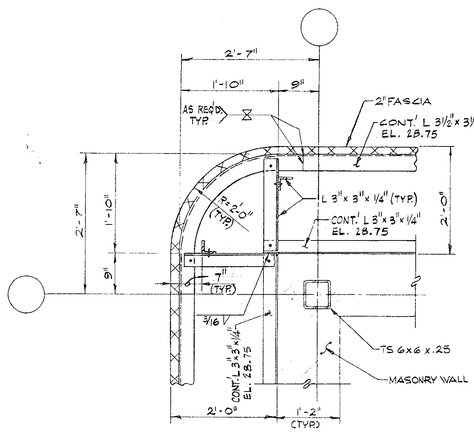
METAL DECK SHALL BE WELDED TO SUPPORTS, AND LONGITUDINAL JOINTS OF DECK SHALL BE WELDED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

ALL LOOSE LINTELS FOR 14" WALLS SHALL CONSIST OF ONE L 6"x6"x5/16" AND TWO Ls 6"x3½"x5/16" (LLV-91).

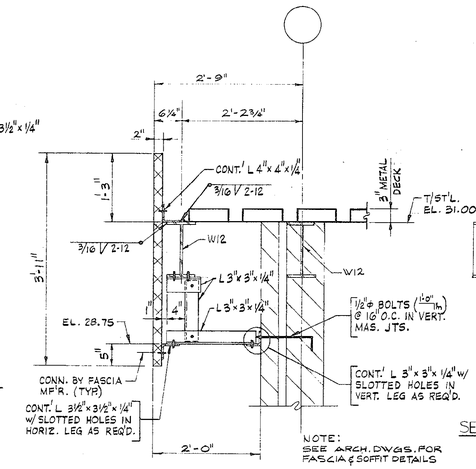


ROOF FRAMING PLAN
T/ST'L. EL. 31.00
1/4"=1'-0"

NOTE: ALL ROOF FRAMING MEMBERS SHALL BE W12x26.

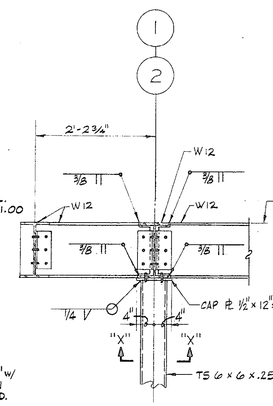


DETAIL PLAN 7S-3A (TYP.)

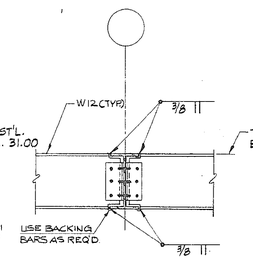


NOTE:
SEE ARCH. DWGS. FOR FASCIA & SOFFIT DETAILS

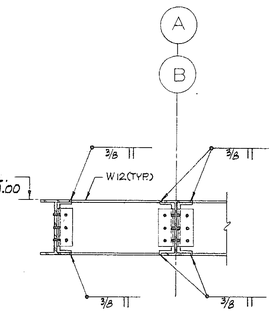
SECTION 7S-3B (TYP.)



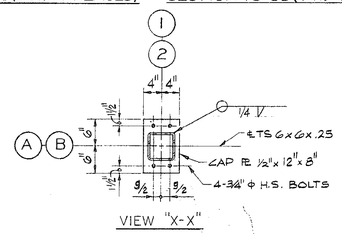
SECTION 7S-3C (TYP. 4 PLACES)



SECTION 7S-3D (TYP. 8 PLACES)



SECTION 7S-3E



VIEW "X-X"

51-002-076

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED T.P.G.
DRAWN R.J.K.
CHECKED T.P.G.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

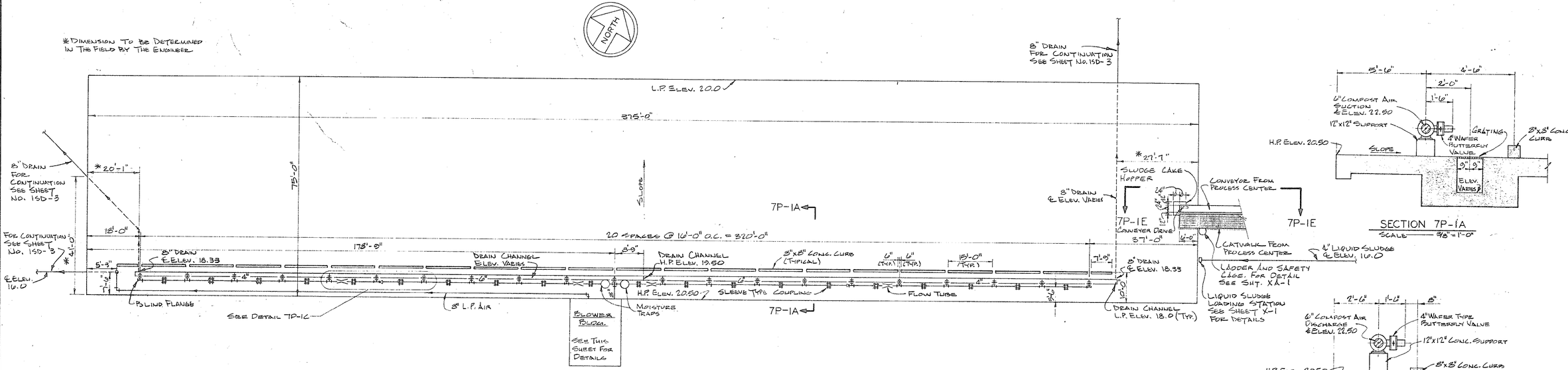
SCALE
3/4"=1'-0"
UNLESS NOTED

BLOWER BUILDING
FASCIA SUPPORT AND ROOF FRAMING PLANS

SHEET 7S-3
OF SHEETS
PROJECT NO. 78284

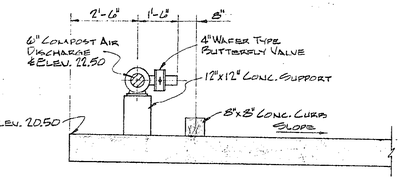
AS BUILT RECORD

*DIMENSION TO BE DETERMINED IN THE FIELD BY THE ENGINEER

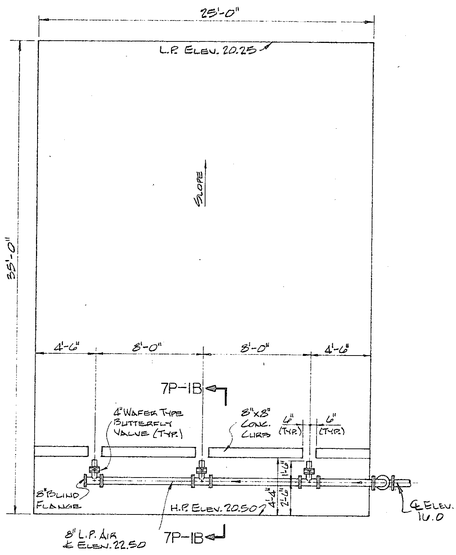


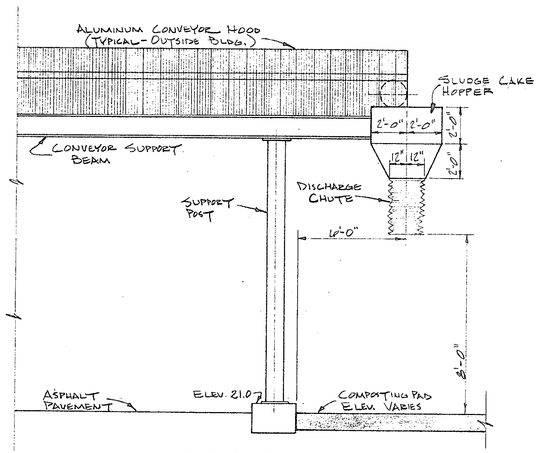
COMPOSTING PAD
SCALE 1/16"=1'-0"

SECTION 7P-1A
SCALE 3/8"=1'-0"



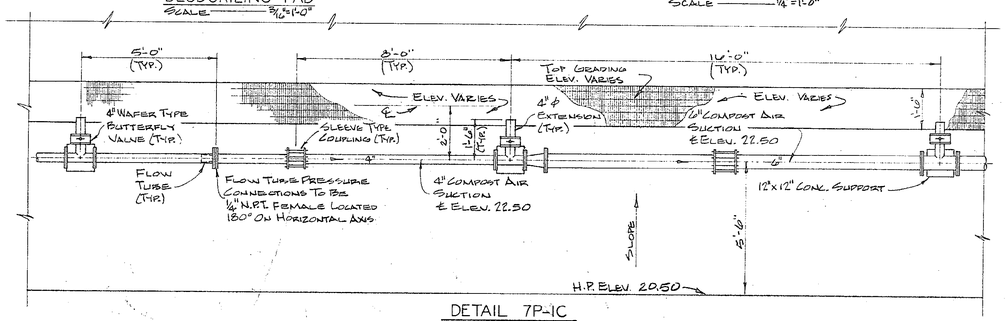
SECTION 7P-1B
SCALE 3/8"=1'-0"



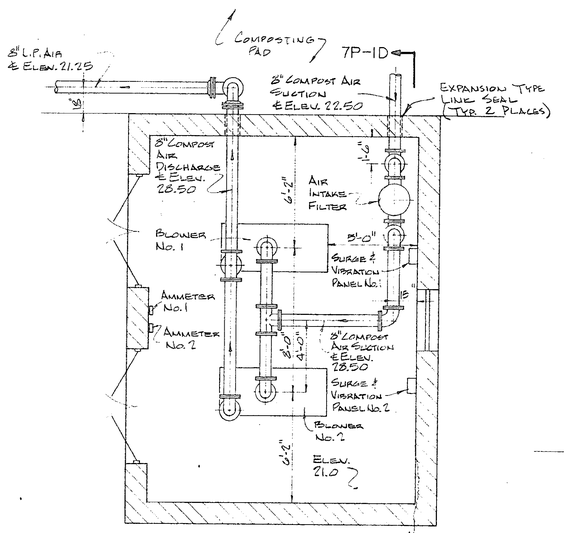


SECTION 7P-1E
SCALE 1/4"=1'-0"

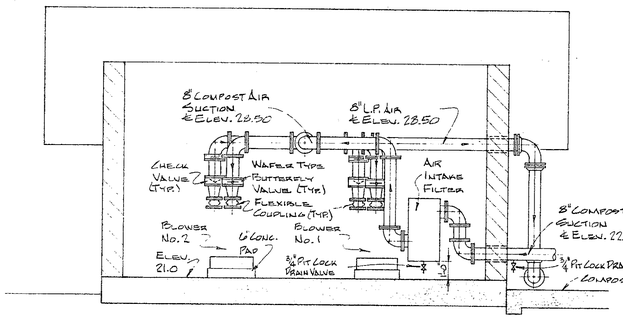
DEODORIZING PAD
SCALE 3/16"=1'-0"



DETAIL 7P-1C
SCALE 3/8"=1'-0"



BLOWER BLDG. PLAN VIEW
SCALE 1/4"=1'-0"



SECTION 7P-1D
SCALE 1/4"=1'-0"

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED W.J.W.
DRAWN J.D.H., R.L.J.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

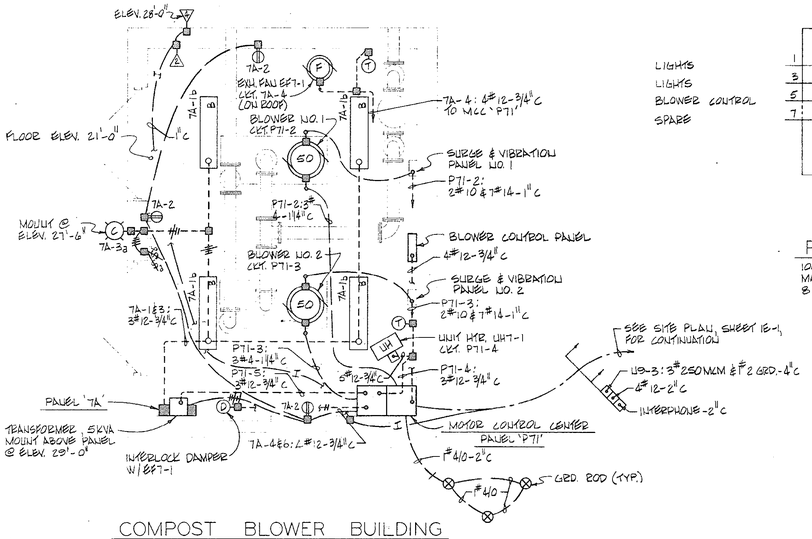
SCALE
AS NOTED

SLUDGE COMPOSTING PAD AND BLOWER BLDG. PLANS, SECTIONS AND DETAILS

SHEET 7P-1 OF SHEETS
PROJECT NO. 78284

51-003-077

AS BUILTS RECORD

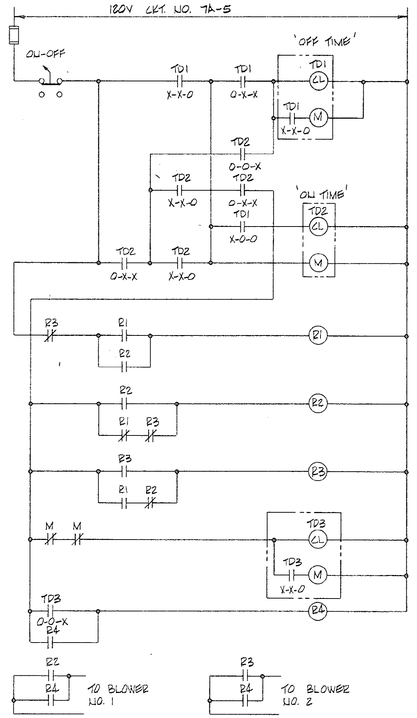


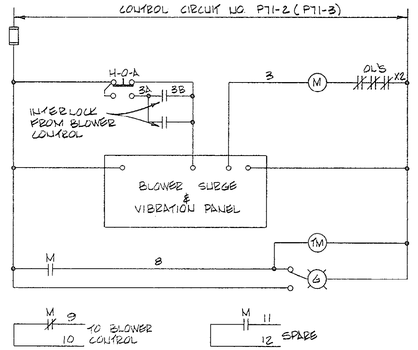
COMPOST BLOWER BUILDING
FLOOR PLAN
SCALE ——— 1/4" = 1'-0"

1	LIGHTS
3	LIGHTS
5	BLOWER CONTROL
7	SPARE
2	RECPT.
4	EF7-1
6	MCC SPACE HTR.
8	SPARE

S/W

PANEL 7A
100 AMP., 120/240 V. 1Ø, 3W, MAIN LUGS ONLY
8 1P-20A BREAKERS

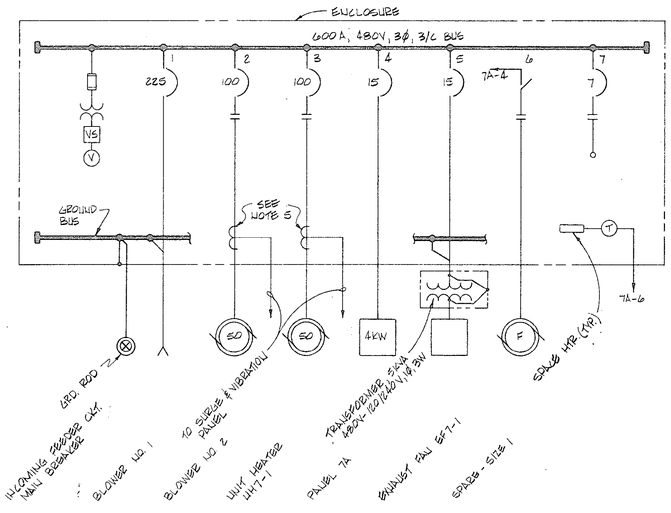




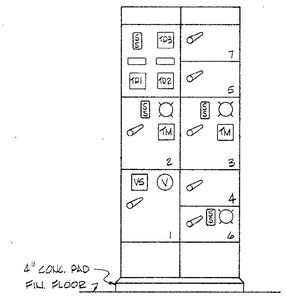
BLOWER NO. 1 (NO. 2)

BLOWER CONTROL

TD1 'OFF TIMER', 0-3 HR. RANGE, SET AT 1 HR.
TD2 'ON TIMER', 0-3 HR. RANGE, SET AT 30 MIN.
TD3, 0-30 SEC. RANGE, SET AT 10 SEC.



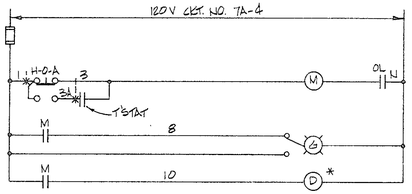
SINGLE LINE DIAGRAM
MOTOR CONTROL CENTER PANEL 'P7I'



ELEVATION VIEW
MOTOR CONTROL CENTER PANEL 'P7I'
SCALE ——— NONE

NOTES: CONT.

5. INSTALL CTS FURNISHED UNDER SECTION 19 OF THE CONTRACT SPECIFICATIONS.



EXHAUST FAN EF7-1

NOTES:

1. THE MOTOR CONTROL CENTER MANUFACTURER SHALL USE THE NUMBERS SHOWN ON THE SCHEMATIC WIRING DIAGRAMS ON THIS SHEET ON TERMINAL BLOCKS OF THE STARTER UNITS. THE CONTRACTOR SHALL IDENTIFY ALL CONTROL CONDUCTORS INSTALLED WITH THESE SAME NUMBERS BY THE USE OF SELF-STICKING TAGS. THE IDENTIFICATION SHALL ALSO INCLUDE THE CIRCUIT NUMBER WHERE MORE THAN ONE CIRCUIT IS IN THE SAME ENCLOSURE.
2. ALL CONTROL WIRES INSTALLED BY THE CONTRACTOR SHALL BE COLOR-CODED AS FOLLOWS.

WIRE DESIGNATION	COLOR
1, 1A	BLACK
2	RED
3	BLUE
X2	WHITE
8	YELLOW
10	ORANGE
OTHERS	AS APPROVED

3. MOTOR CONTROL CENTER NAMEPLATES SHALL CORRESPOND WITH THE DESIGNATION ON THE SINGLE LINE DIAGRAM.
4. SEE SHEET 7E-1 FOR UNIT HEATER SCHEDULE.

LEGEND

● AT MOTOR
* REMOTE
ALL DEVICES WITHOUT FURTHER DESIGNATION SHALL BE LOCATED IN THE MOTOR CONTROL CENTER PANEL.

SEE SHEET NO. 7E-5 FOR OTHER SYMBOLS & LEGEND

51-003-078

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED J.N.G.
DRAWN K.R.H.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

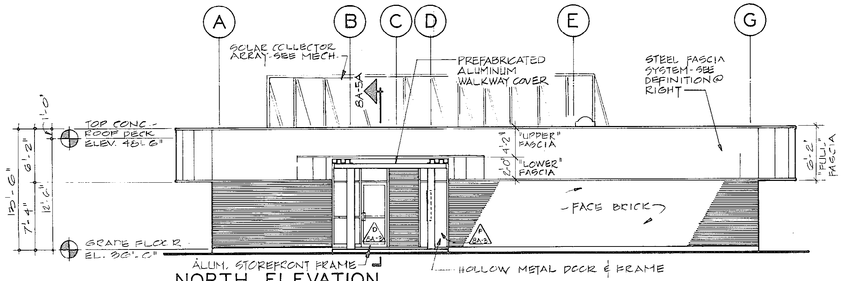
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
AS NOTED

COMPOST BLOWER BUILDING
ELECTRICAL

SHEET 7E-1
OF SHEETS
PROJECT NO. 78284

51A0785



NORTH ELEVATION

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

STEEL FASCIA SYSTEM DEFINITIONS

FOR FASCIA MANUFACTURERS, QUALITY & OTHER SPECIFICS - SEE CONTRACT SPECIFICATIONS!

THE FOLLOWING DEFINITIONS ARE IN REFERENCE TO DIRECTIONS & DIMENSIONS OF THE FASCIA SYSTEM AS NOTED ON THE CONTRACT DRAWINGS' EXTERIOR ELEVATIONS & ROOF PLAN:

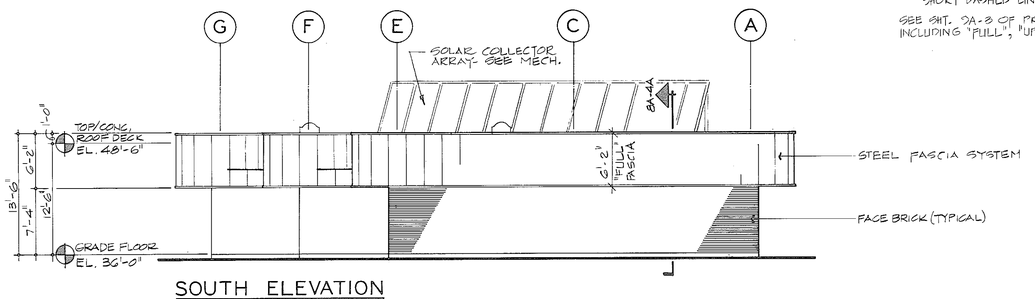
"FULL" FASCIA - REFERS TO THOSE SECTIONS OF FASCIA THAT ARE CONTINUOUS ONE-PIECE CONSTRUCTION FROM THE HIGHEST POINT TO THE LOWEST POINT WHERE IT MEETS THE SOFFIT.

"UPPER" FASCIA - REFERS TO THE CONTINUATION OF THE LINE OF DIRECTION OF THE "FULL" FASCIA BUT IN A LESSER HEIGHT DIMENSION.

BOTH "FULL" & "UPPER" FASCIAS ARE DENOTED BY THE SOLID OUTSIDE LINE OF THE ROOF PLAN, SHT. 9A-7.

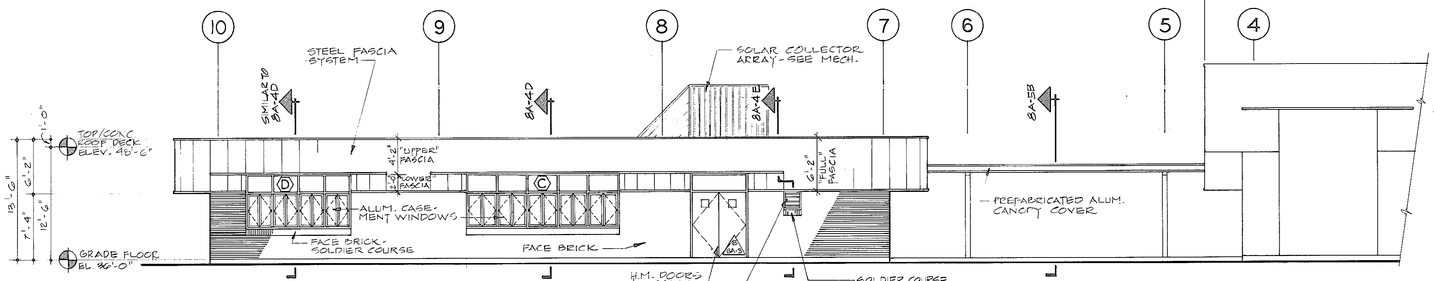
"LOWER" FASCIA - REFERS TO THE SECTIONS OF FASCIA THAT "TURN INTO" THE MASONRY WALL OF THE BUILDING. THIS OCCURS AT OPENINGS, WINDOWS, DOORS AS SHOWN BY THE SHORT DASHED LINE ON THE ROOF PLAN, SHT. 9A-7.

SEE SHT. 9A-8 OF PROCESS BUILDING FOR A PERSPECTIVE VIEW INCLUDING "FULL", "UPPER", AND "LOWER" FASCIAS.



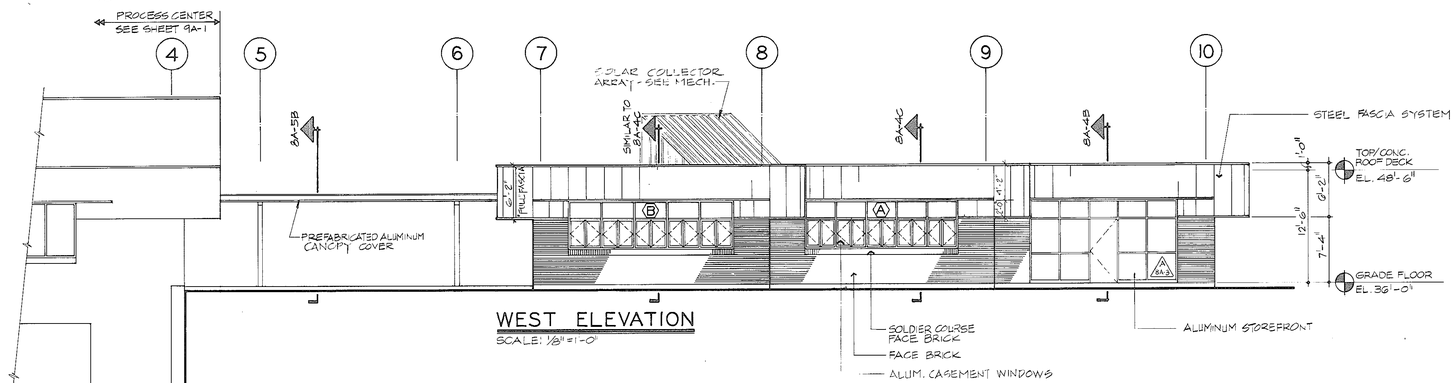
SOUTH ELEVATION

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



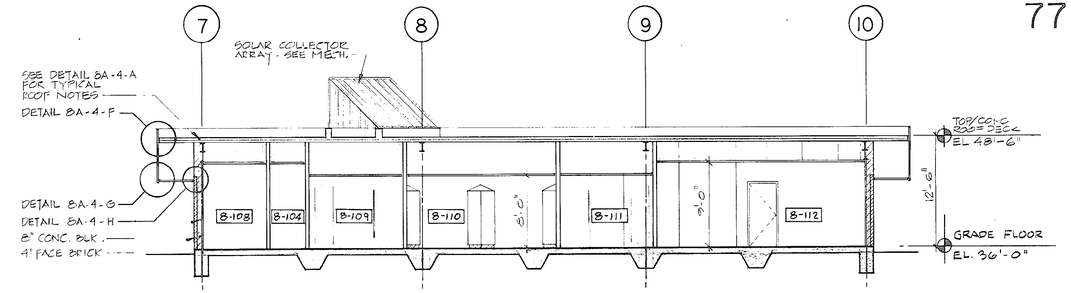
EAST ELEVATION

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



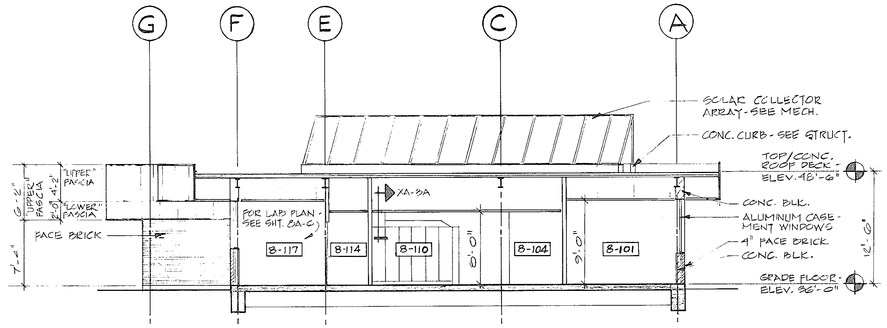
WEST ELEVATION

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



SECTION 8A-1A

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



SECTION 8A-1B

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

ROOM FINISH SCHEDULE

ROOM NO.	DESCRIPTION	FLOOR	BASE	WALLS	CEILING FINISH	CEILING HEIGHT	REMARKS
8-100	MECHANICAL	HC	C.B. / R.B.	C.B. / DRYWALL	EC	—	VINYL - RAJAMAHAL - MIST IGM
8-101	CONFERENCE	CARPET	RB	VWC	AMF	9'-0"	↓
8-102	RECORD STORAGE	↓	↑	VWC	AMF	9'-0"	
8-103	OFFICE	↓	↑	VWC	AMF	9'-0"	VINYL - RAJAMAHAL - HONEY BEIGE 3003
8-104	CORRIDOR	TERR	CT	VWC	AMF	9'-0" / 8'-0"	
8-105	CLOSET	TERR	RB	DRYWALL	PGC	8'-0"	
8-106	CLOSET	CARPET	↓	↓	PGC	8'-0"	
8-107	CLOSET	CARPET	↓	↓	PGC	8'-0"	
8-108	MUD ROOM	TERR	CT	CT	PGC	9'-0"	
8-109	MEN'S TOILET	↓	↓	↓	PGC	8'-0"	
8-110	LOCKER ROOM	↓	↓	↓	AMF	8'-0"	
8-111	WOMEN'S TOILET	↓	↓	↓	PGC	8'-0"	
8-112	SECRETARY/LOBBY	TERR.	RB	VWC	AMF	9'-0"	VINYL - RAJAMAHAL - HONEY BEIGE 3003
8-113	SAMPLE ROOM	↓	CT	DRYWALL	AMF	9'-0"	
8-114	CORRIDOR	↓	↓	↓	AMF	8'-0"	
8-115	GENERAL LABORATORY	↓	↓	↓	AMF	9'-0"	
8-116	STORAGE	↓	↓	↓	AMF	9'-0"	
8-117	BACTERIOLOGY LAB.	↓	↓	↓	AMF	9'-0"	

REGISTERED PROFESSIONAL ENGINEER No. 6.4 STATE OF SOUTH CAROLINA

51-003-079

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED PB-DCG
DRAWN WP-DCG
CHECKED ROM
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

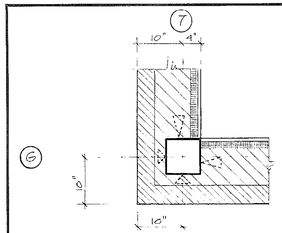
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
AS NOTED

CONTROL CENTER
ELEVATIONS AND BUILDING SECTIONS

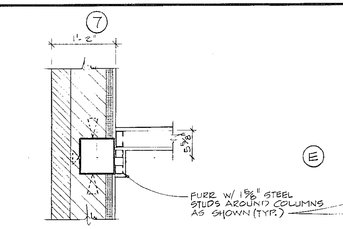
SHEET 8A-1
OF SHEETS
PROJECT NO. 78284

AS BUILTS RECORD



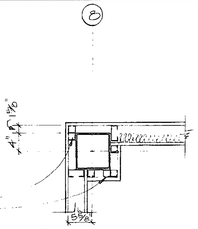
DETAIL 8A-2-A

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



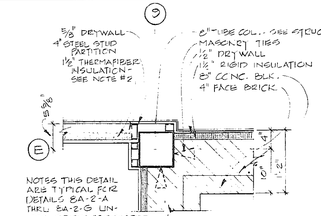
DETAIL 8A-2-B

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



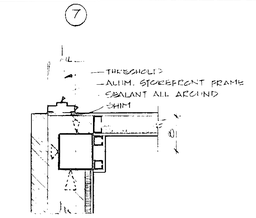
DETAIL 8A-2-C

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



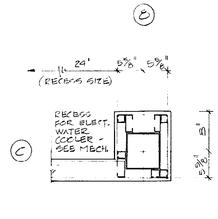
DETAIL 8A-2-D

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



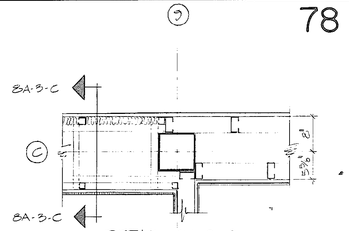
DETAIL 8A-2-E

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



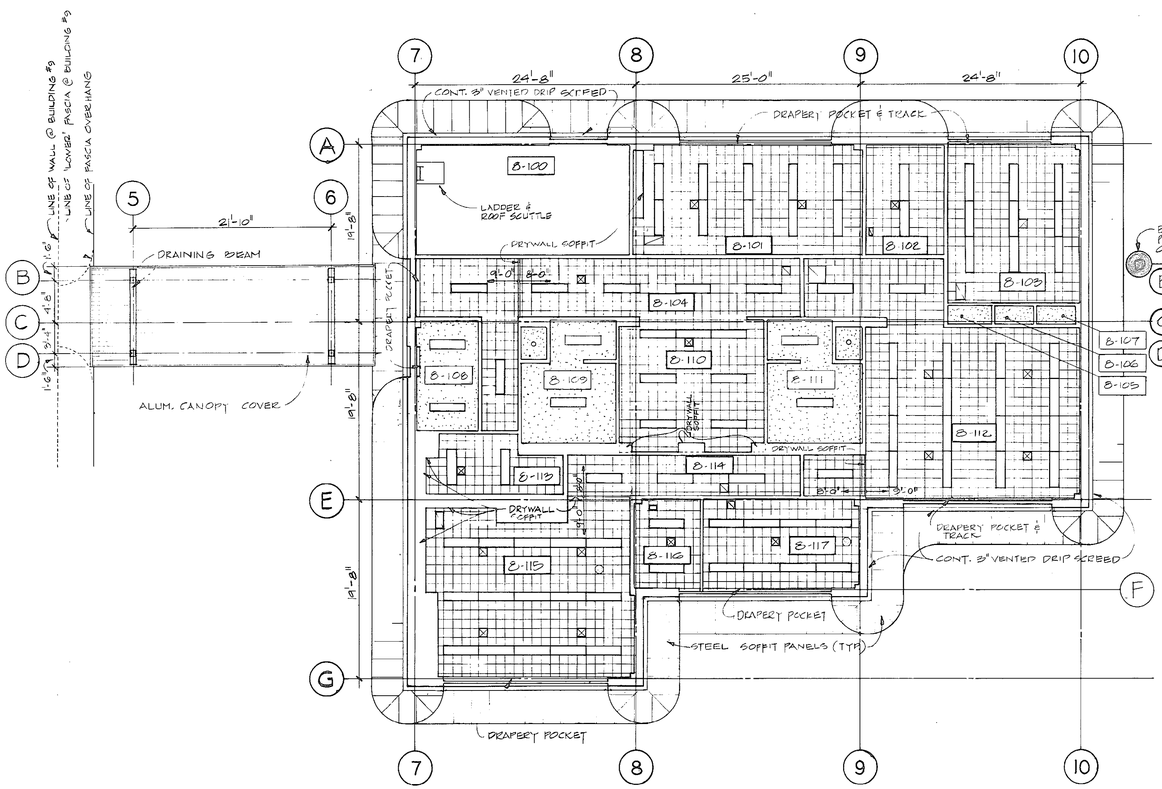
DETAIL 8A-2-F

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



DETAIL 8A-2-G

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



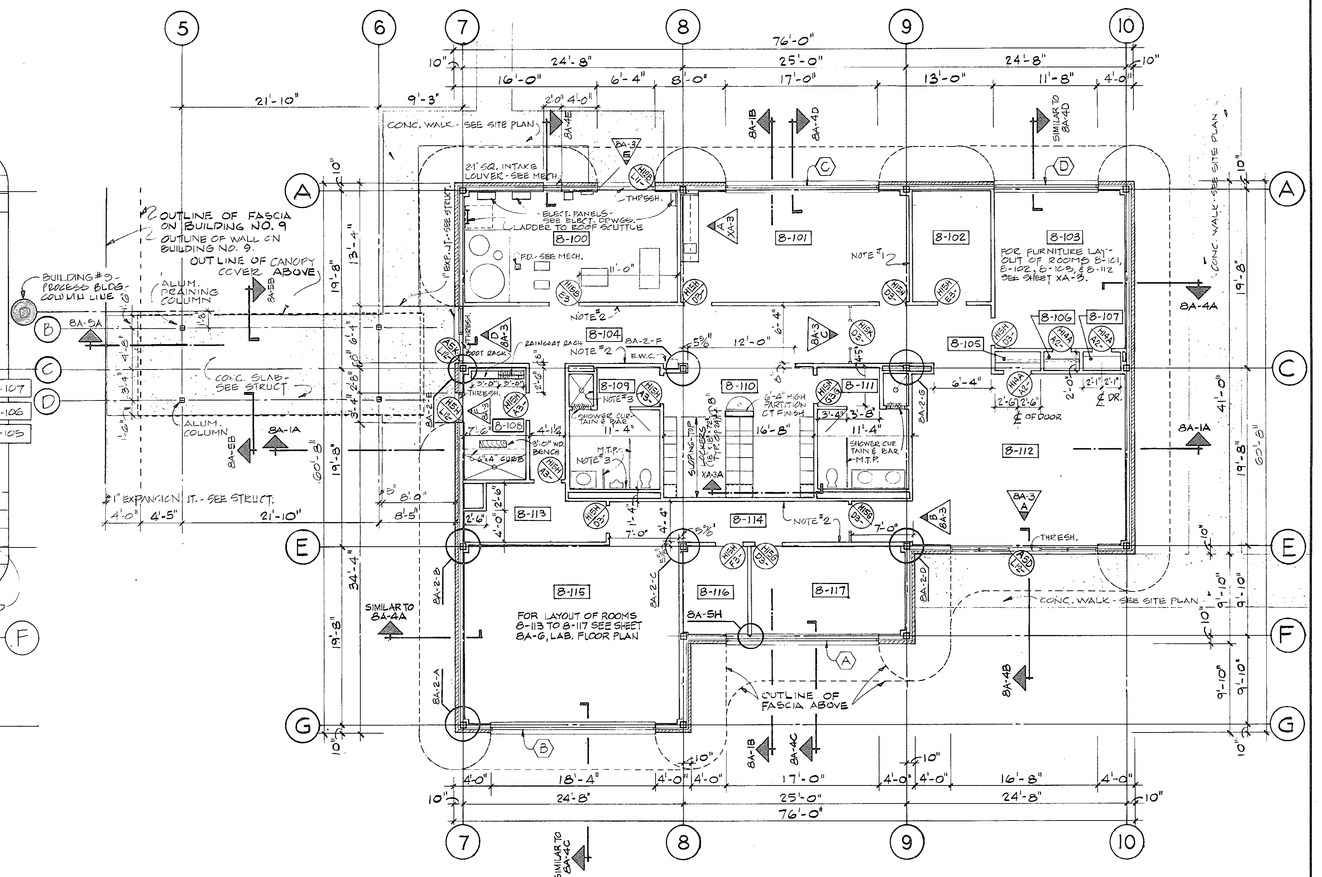
REFLECTED CEILING PLAN

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

NORTH

LEGEND

- SUPPLY AIR
- RETURN AIR
- FLUORESCENT FIXTURE



GRADE FLOOR PLAN

SCALE: 1/8" = 1'-0" TYP. FLOOR EL. +36'-0"

NORTH

NOTES:

1. ALL INTERIOR PARTITIONS SHALL BE ONE-LAYER 5/8" DRYWALL CONSTRUCTION EACH SIDE SCREWED ON 4" STANDARD METAL STUDS @ 1'-4" MAX. O.C. UNLESS OTHERWISE NOTED. SEE SHEET 8A-3 FOR DETAILS.
2. PARTITIONS ALONG CORRIDORS AND MECHANICAL ROOM SHALL BE ONE-LAYER 5/8" SHEETROCK FIRECODE 'C' GYPSUM WALL BOARD EACH SIDE SCREWED ON 4" STANDARD METAL STUDS @ 1'-4" MAX. O.C. WITH 1 1/2" THERMAFIBER SOUND ATTENUATION BLANKET STAPLED TO BACK OF WALLBOARD AT ROOM SIDE.
3. WALLS ON ROOM SIDE OF TOILETS, SHOWER AREA, AND MUD ROOM SHALL BE ONE-LAYER 5/8" WATERPROOFED GYPSUM WALLBOARD.
4. ALL INTERIOR DIMENSIONS ARE TAKEN TO FACE OF METAL STUDS OR COLUMN CENTER LINES.

NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 6501 DAVID L. ROLLMAN

51-003-080

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED PB
DRAWN WCP
CHECKED ROM
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

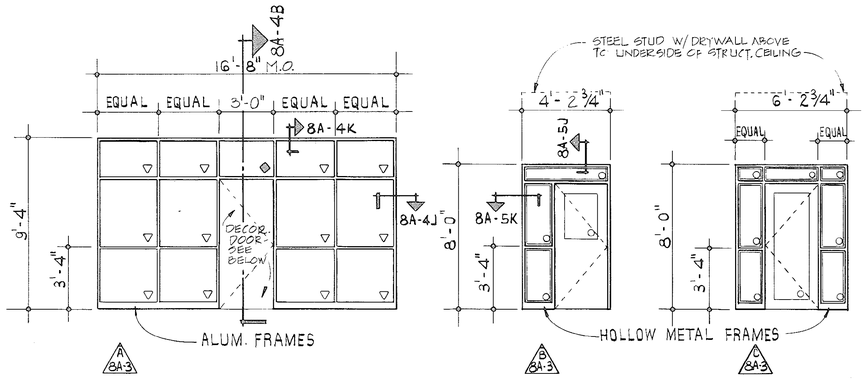
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
AS NOTED

CONTROL CENTER
GRADE FLOOR AND REFLECTED CEILING PLANS

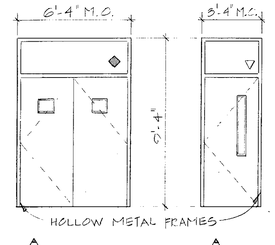
SHEET 8A-2
OF SHEETS
PROJECT NO. 78284

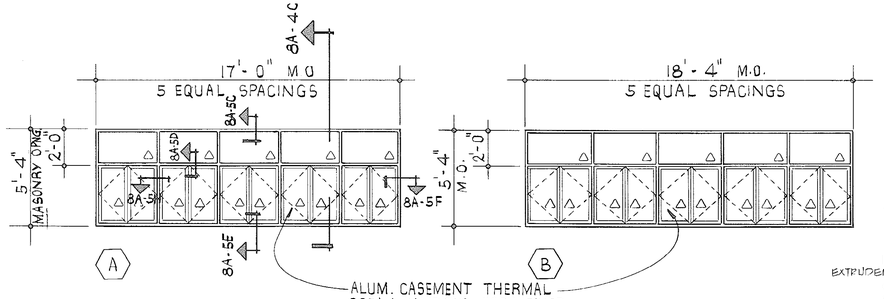
51A084 S RECORD

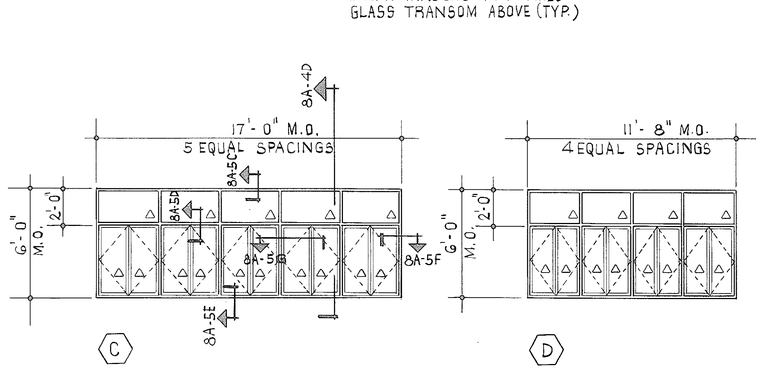


STOREFRONT & INTERIOR ELEVATIONS

SCALE: 1/4" = 1'-0" 8A-1, 8A-2

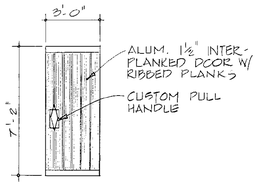






WINDOW ELEVATIONS

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

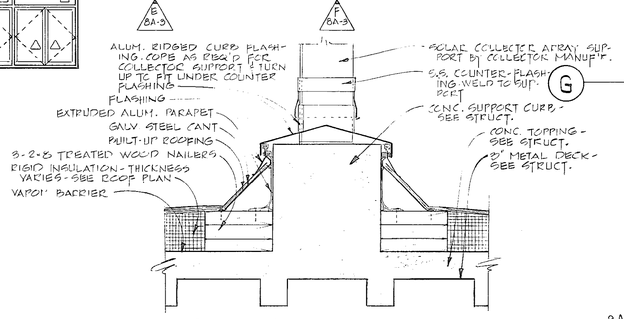


DECORATOR DOOR

SCALE: ½" = 1'-0"

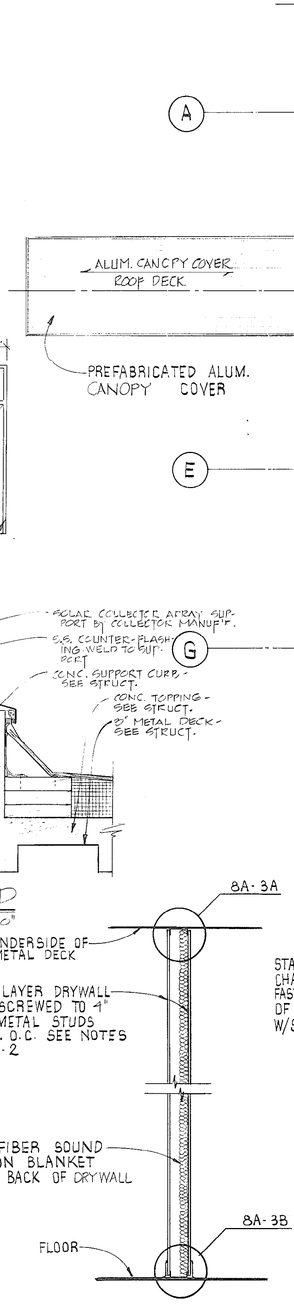
GLAZING SCHEDULE

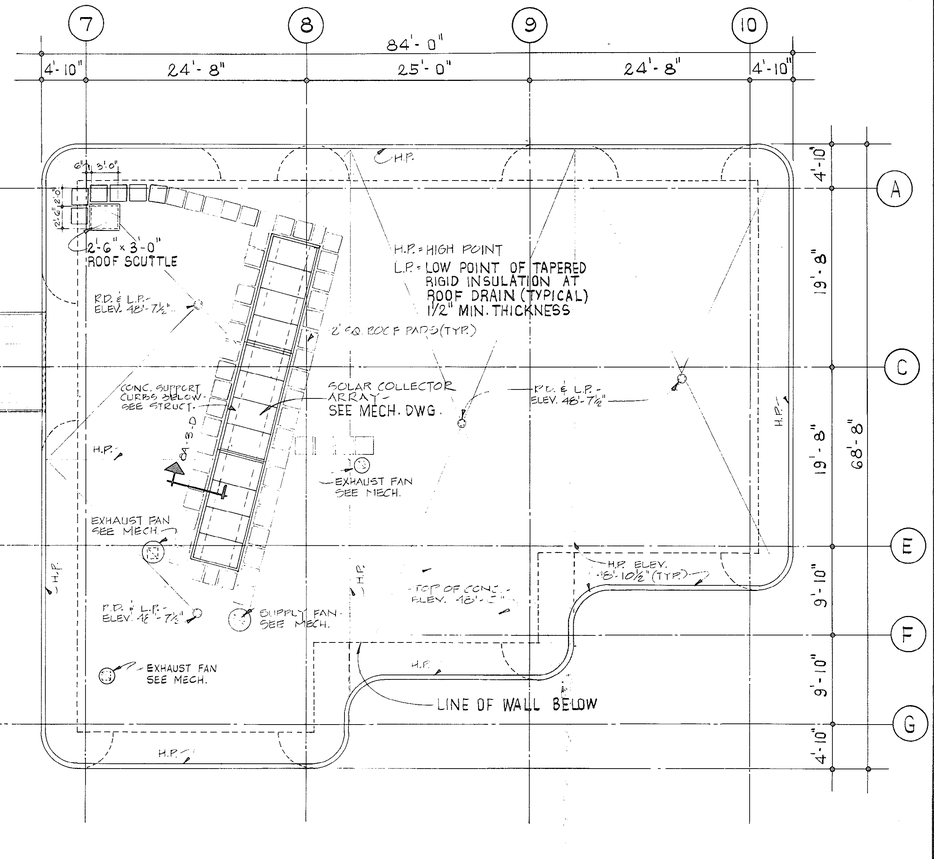
- □ - 1/4" BRONZE TEMPERED GLASS
- ○ - 1/4" CLEAR TEMPERED GLASS
- ◈ - 1" INSULATED METAL PANEL
- ◇ - 1/4" METAL PANEL
- △ - THERMAL INSULATING GLASS 1/4" BRONZE GLASS EXTERIOR 1/2" AIR SPACE AND 1/4" FLOAT GLASS INTERIOR
- ▽ - THERMAL INSULATING GLASS 1/4" BRONZE TEMPERED GLASS EXTERIOR 1/2" AIR SPACE AND 1/4" CLEAR TEMPERED GLASS INTERIOR



SECTION 8A-3-D

SCALE: 1½" = 1'-0"

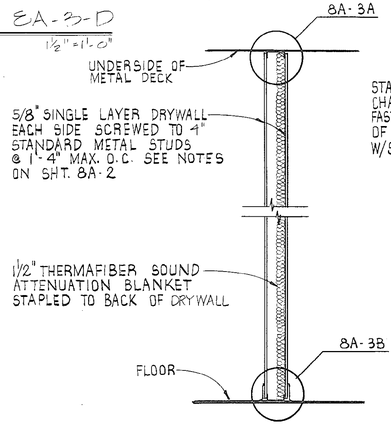




ROOF PLAN

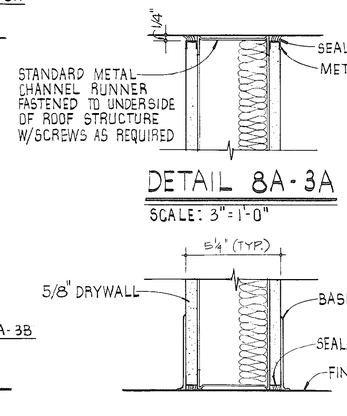
SCALE: 1/8" = 1'-0"

NORTH



TYPICAL INTERIOR PARTITION

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

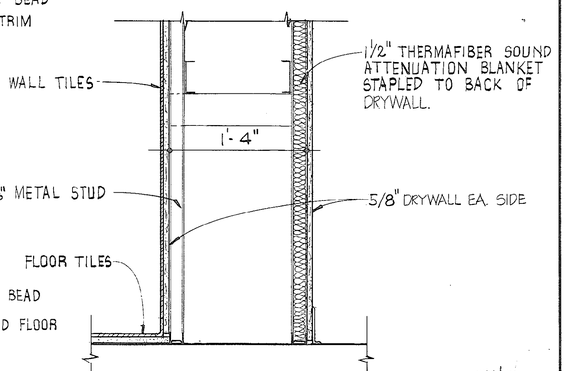


DETAIL 8A-3A

SCALE: 3" = 1'-0"

DETAIL 8A-3B

SCALE: 3" = 1'-0"



TYPICAL TOILET CHASE WALL SECTION 8A-3-C

SCALE: 1½" = 1'-0"

51-003-081

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED P.B.
DRAWN F.C.A.
CHECKED R.O.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

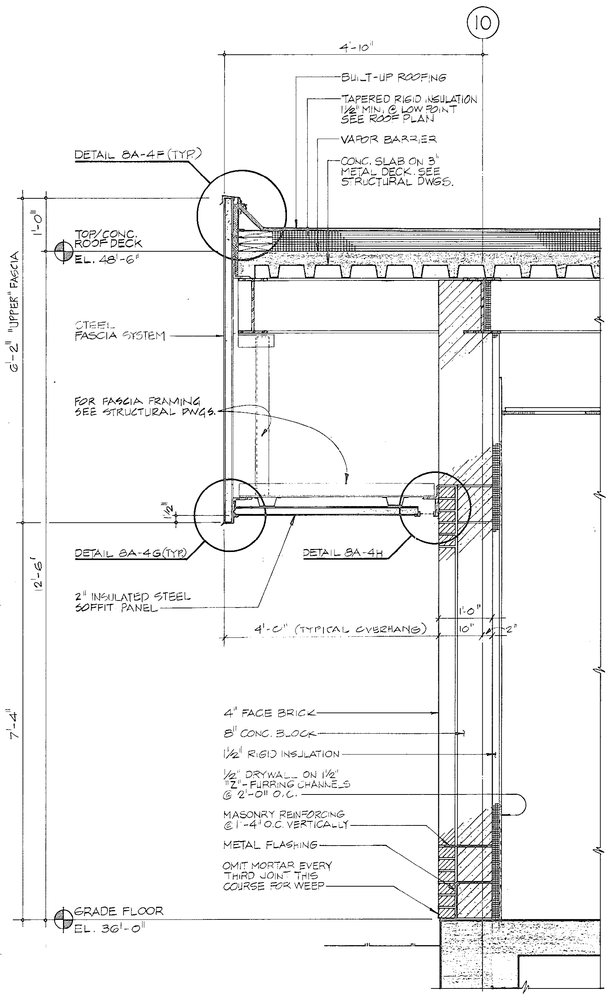
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
AS NOTED

CONTROL CENTER
ROOF PLAN AND DETAILS

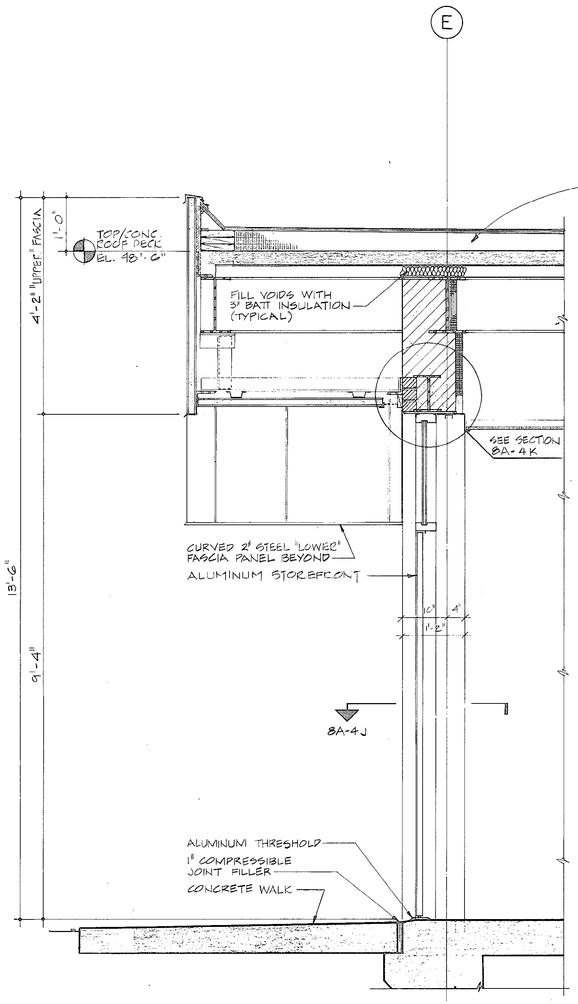
SHEET 8A-3
OF SHEETS
PROJECT NO. 78284

RECORD



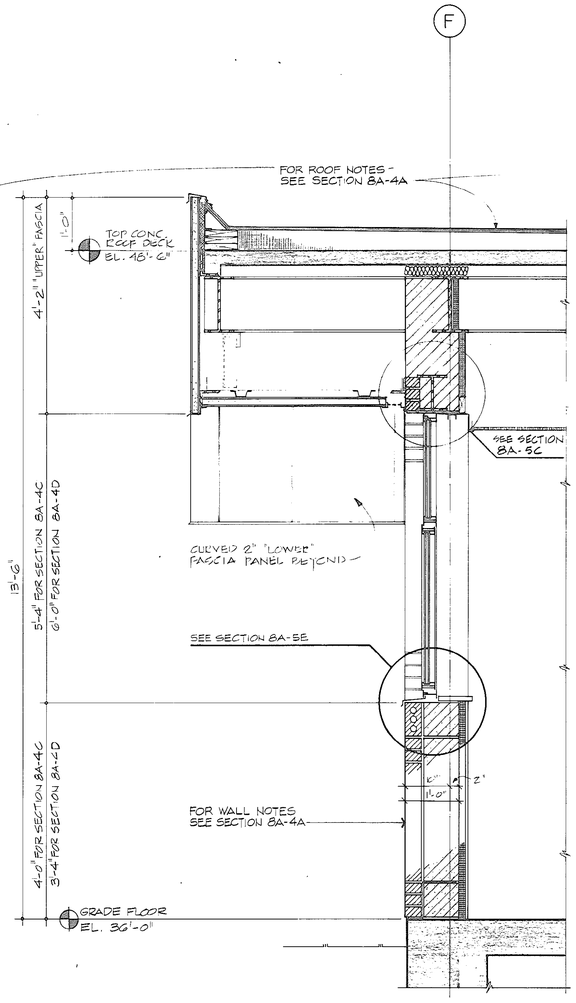
SECTION 8A-4A

SCALE: 3/4"=1'-0" 8A-2



SECTION 8A-4B

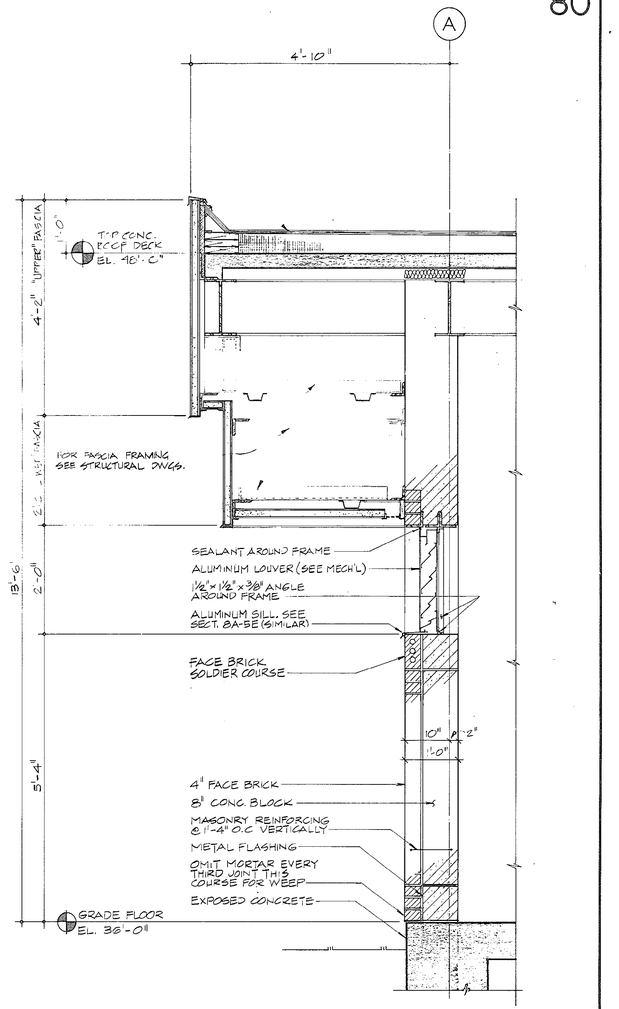
SCALE: 3/4"=1'-0" 8A-2



SECTION 8A-4C

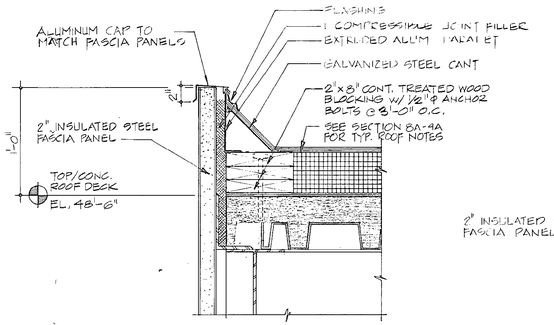
SCALE: 3/4"=1'-0" 8A-2

SECTION 8A-4D SIMILAR



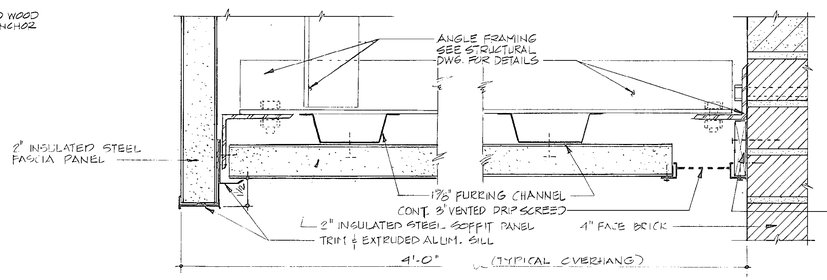
SECTION 8A-4E

SCALE: 3/4"=1'-0" 8A-2



DETAIL 8A-4F

SCALE: 1½"=1'-0" 8A-4

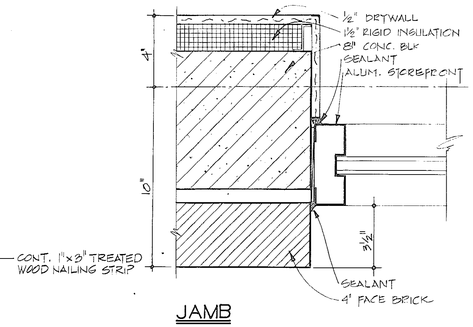


DETAIL 8A-4G

SCALE: 3"=1'-0" 8A-4

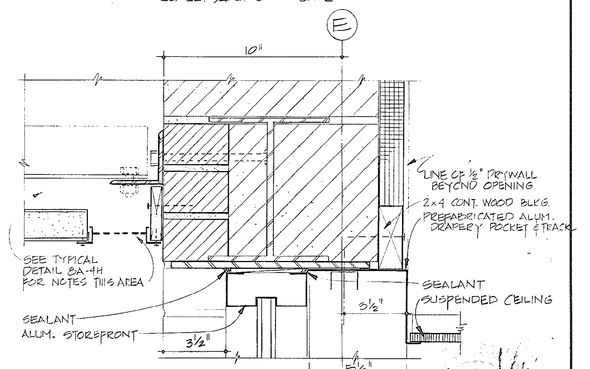
DETAIL 8A-4H

SCALE: 3"=1'-0" 8A-4



JAMB SECTION 8A-4J

SCALE: 3"=1'-0"



HEAD SECTION 8A-4K

SCALE: 3"=1'-0"

51-003-083

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED DCG
DRAWN DCG
CHECKED ROM
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

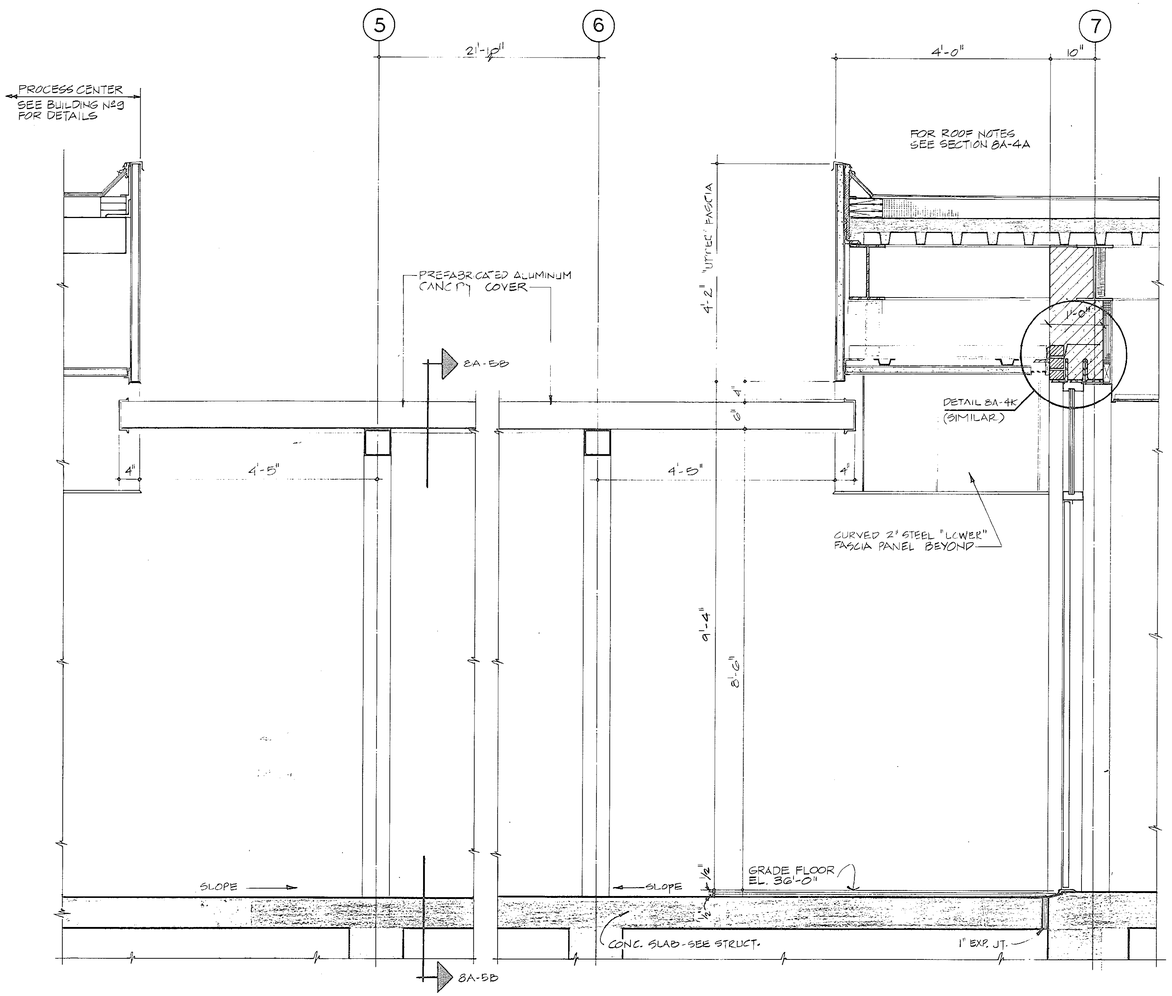
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
AS NOTED

CONTROL CENTER
WALL SECTIONS

SHEET 8A-4
OF SHEETS
PROJECT NO. 78284

RECORD

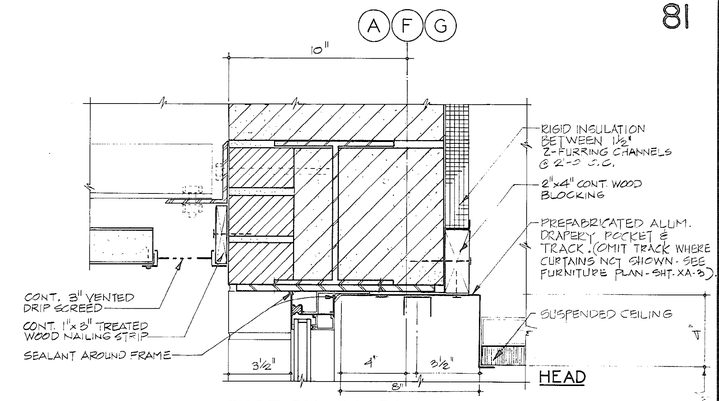


SECTION 8A-5A

SCALE: 3/4" = 1'-0" 8A-2

SECTION 8A-5B

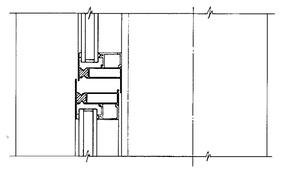
SCALE 3/4" = 1'-0"



HEAD

SECTION 8A-5C

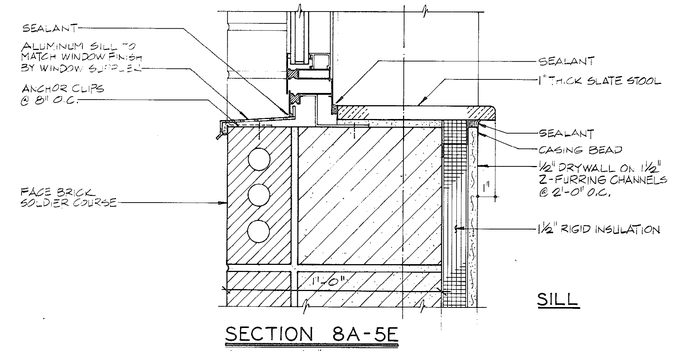
SCALE: 3" = 1'-0"



HORIZONTAL
MULLION

SECTION 8A-5D

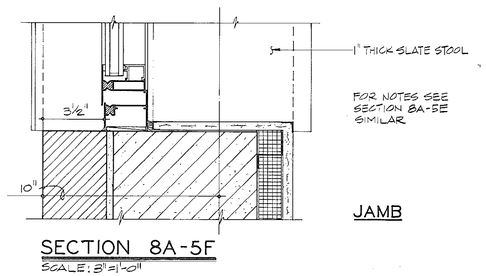
SCALE: 3" = 1'-0"



SILL

SECTION 8A-5E

SCALE 3" = 1'-0"



JAMB

SECTION 8A-5F

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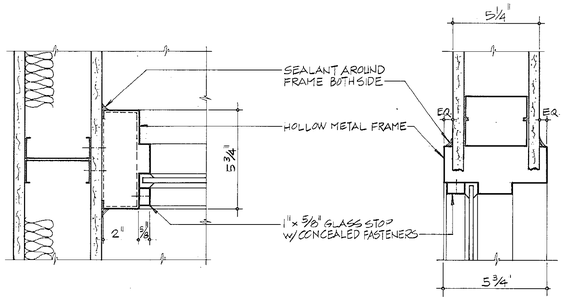
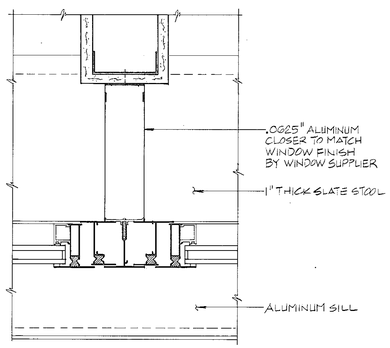


JAMB

SECTION 8A-5K

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



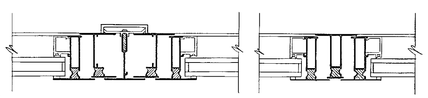
HEAD

SECTION 8A-5J

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

DETAIL 8A-5H

SCALE: 3" = 1'-0" 8A-2



VERTICAL MULLION

SECTION 8A-5G

SCALE: 3" = 1'-0"

51-002-083

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED DCG
DRAWN DCG
CHECKED ROM
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

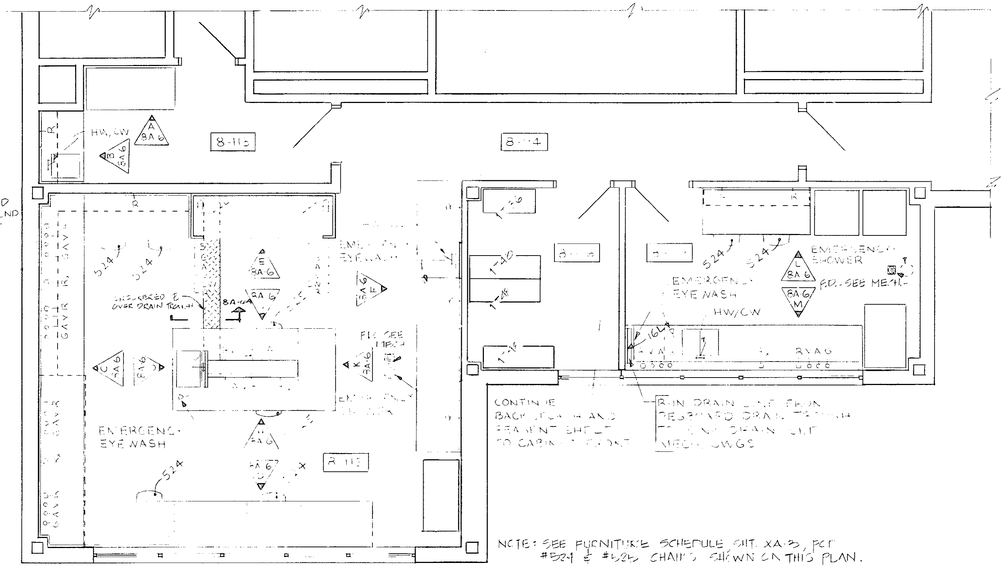
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
AS NOTED

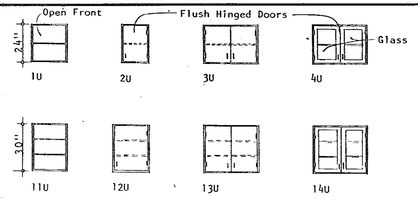
CONTROL CENTER
SECTIONS AND DETAILS

SHEET 8A-5
OF SHEETS
PROJECT NO. 78284

AS RECORD

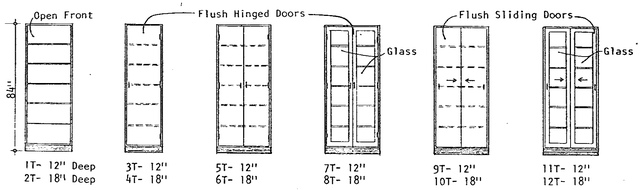


LABORATORY FLOOR PLAN
SCALE 1/4"=1'-0"

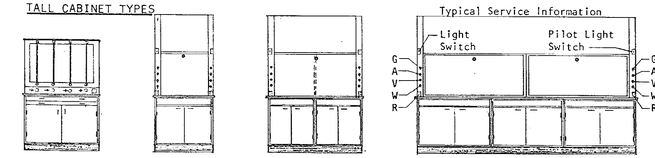


Top of all cabinets 84 inches above fin. floor

WALL CABINET TYPES



TALL CABINET TYPES

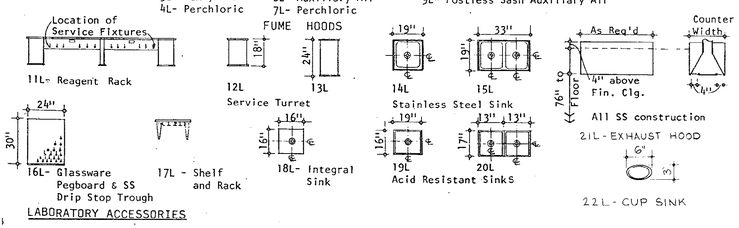


1L- Titration Table

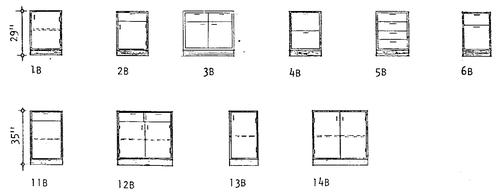
2L- Standard
3L- Aux'y Air
4L- Perchloric

5L- Standard
6L- Auxiliary Air
7L- Perchloric

8L- Postless Sash Standard
9L- Postless Sash Auxiliary Air

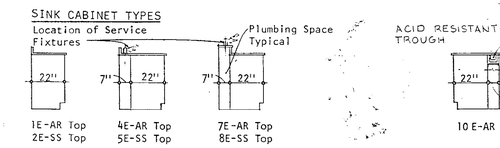


LABORATORY ACCESSORIES



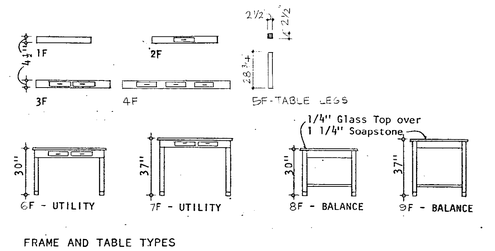
BASE CABINET TYPES

SINK CABINET TYPES

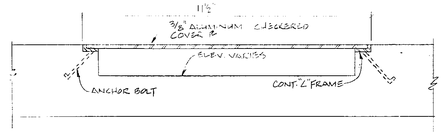


All Plumbing Spaces to be Covered with Closure Panels

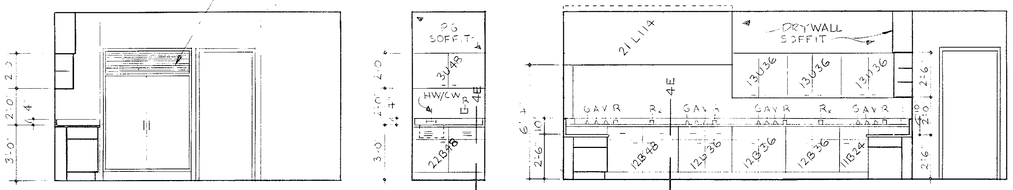
END CONDITION AND CONTINUOUS COUNTERTOPS



FRAME AND TABLE TYPES



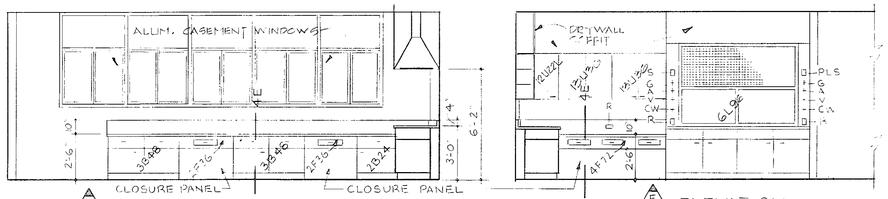
SECTION 8A-6A
SCALE: NONE



A 8A-6 ELEVATION SCALE 1/4"=1'-0"

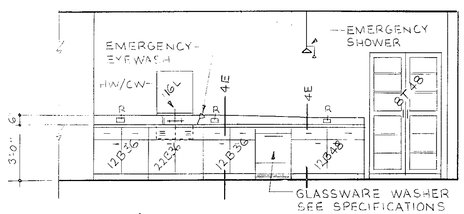
B 8A-6 ELEVATION SCALE 1/4"=1'-0"

C 8A-6 ELEVATION SCALE 1/4"=1'-0"

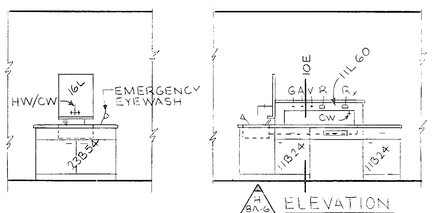


D 8A-6 ELEVATION SCALE 1/4"=1'-0"

E 8A-6 ELEVATION SCALE 1/4"=1'-0"

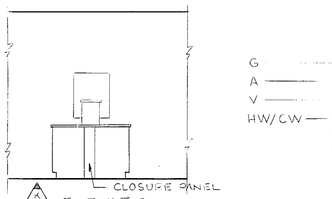


F 8A-6 ELEVATION SCALE 1/4"=1'-0"

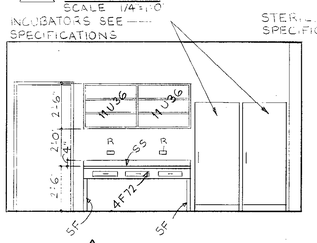


G 8A-6 ELEVATION SCALE 1/4"=1'-0"

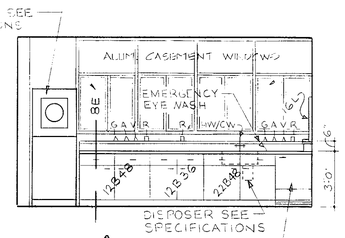
H 8A-6 ELEVATION (OPP. HAND) SCALE 1/4"=1'-0"



J 8A-6 ELEVATION SCALE 1/4"=1'-0"



K 8A-6 ELEVATION SCALE 1/4"=1'-0"



L 8A-6 ELEVATION SCALE 1/4"=1'-0"

UNDERCOUNTER REFRIGERATOR SEE SPECIFICATIONS

LEGEND

G	GAS COCK	CW	COLD WATER
A	AIR COCK	R	RECEPTACLE (115V)
V	VACUUM COCK	R_x	RECEPTACLE (230V)
HW/CW	HOT WATER COLD WATER MIXING FAUCET	S	LIGHT SWITCH
		PLS	PILOT LIGHT SWITCH

AR - 1 1/2" ACID RESISTANT COUNTERTOP WITH ACID RESISTANT SINK WHERE INDICATED.

SS - 1 1/2" STAINLESS STEEL COUNTERTOP WITH INTEGRAL SINK WHERE INDICATED.

COUNTERTOP IDENTIFICATION

FURNITURE TYPE
FRONT LENGTH IN INCHES
HINGED LEFT WHEN INDICATED
2B 24 L

FURNITURE INDICATION

GENERAL NOTES

- PROVIDE ALL SCRIBES AND FILLERS NECESSARY TO MAKE WALL TO WALL INSTALLATION.
- ALL EXPOSED BACKS AND BOTTOMS OF WALL CABINETS TO HAVE FLUSH FINISH SURFACES.
- PROVIDE 4" MIN. HIGH COUNTER CURB AT ALL WALLS. CURBS ON LOWER COUNTERS TO LINE UP WITH CURBS ON ADJACENT HIGHER COUNTER.
- TOP OF ALL WALL AND TALL CABINETS NOT FURRED FROM WALL OR CEILING TO HAVE SLOPING TOPS.
- TOP OF ALL FUME HOODS NOT FURRED FROM WALL OR CEILING TO HAVE FULL-HEIGHT FRONT AND END PANELS.
- ALL SINKS SHALL BE 7 1/2" DEEP UNLESS OTHERWISE NOTED.
- ALL TABLE FRAMES LOCATED IN FRONT OF PLUMBING SPACES, HEATING PIPES OR EQUIPMENT TO HAVE MATCHING KNEE SPACE PANELS.
- CABINETRY CONSTRUCTION.

ALL ENAMELLED STEEL FLUSH CONSTRUCTION IN ROOMS B-113, 8-115

ALL STAINLESS STEEL FLUSH CONSTRUCTION IN ROOM B-117

51-007-084

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED ROM/GLP
DRAWN GLP
CHECKED ROM
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

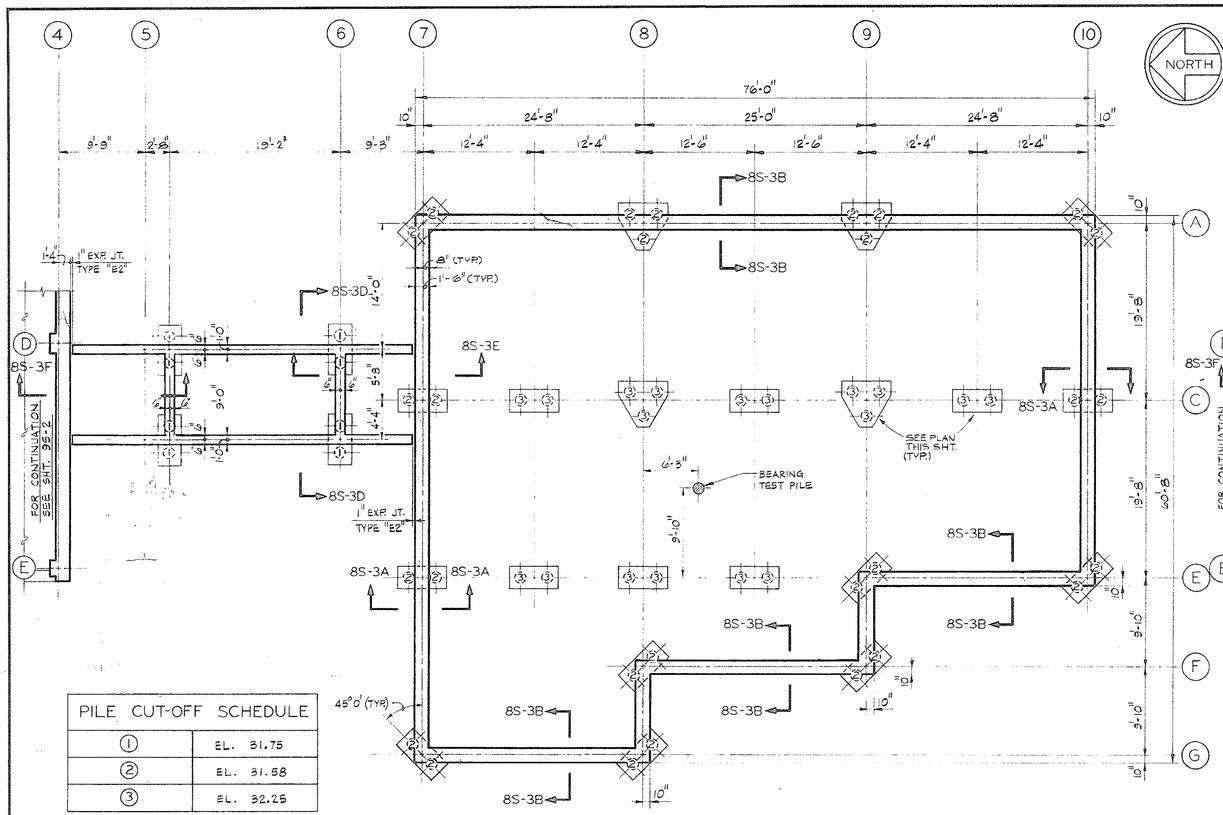
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
AS NOTED

CONTROL CENTER
LABORATORY PLAN AND SCHEDULES

SHEET 8A-6
OF SHEETS
PROJECT NO. 78284

AS-BUILT RECORD



PILE CUT-OFF SCHEDULE	
①	EL. 31.75
②	EL. 31.58
③	EL. 32.25

NOTES :

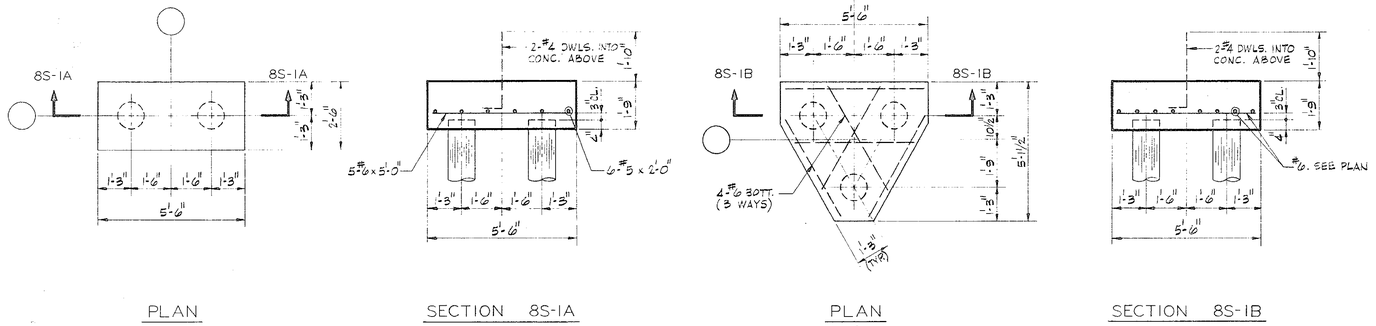
ALL PILES SHOWN ON THIS SHEET SHALL BE DRILLED-IN-PLACE CONCRETE BEARING PILES (BEARING CAPACITY - 40 TONS). SEE SHT. XS-1 AND SPEC'S. FOR PILE DETAILS.

▨ INDICATES BEARING TEST PILE

℄ OF PILE CAP IS THE SAME AS ℄ OF COLUMN ABOVE UNLESS NOTED.

FOUNDATION PLAN

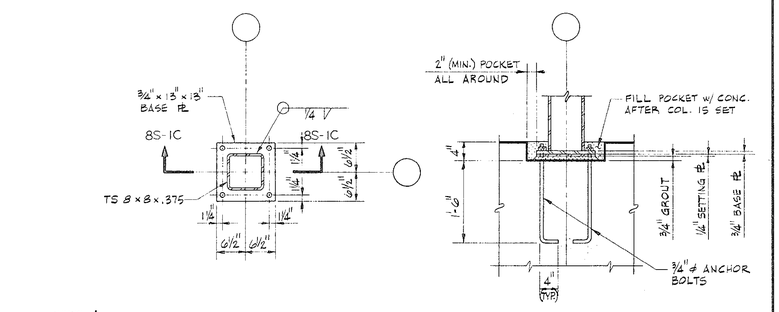
FIRST FLOOR PLAN



PLAN — SECTION 8S-1A — PLAN — SECTION 8S-1B

PILE CAP DETAILS

3/8" = 1'-0"



PLAN — SECTION 8S-1C

TYPICAL BASE PLATE DETAILS

3/4" = 1'-0"

51-002-085

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED T.P.G.
DRAWN R.W.H.
CHECKED J.S.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

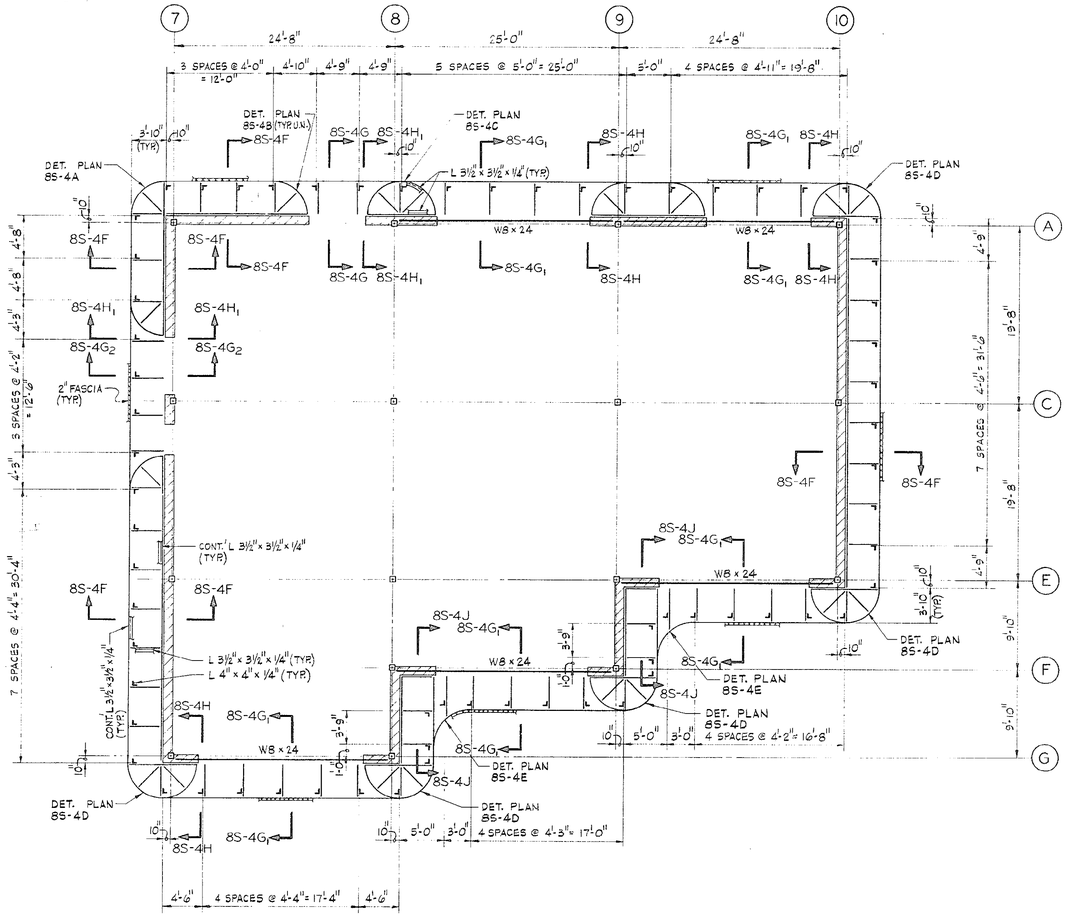
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/8" = 1'-0" U.N.

CONTROL CENTER
FOUNDATION AND FIRST FLOOR PLANS

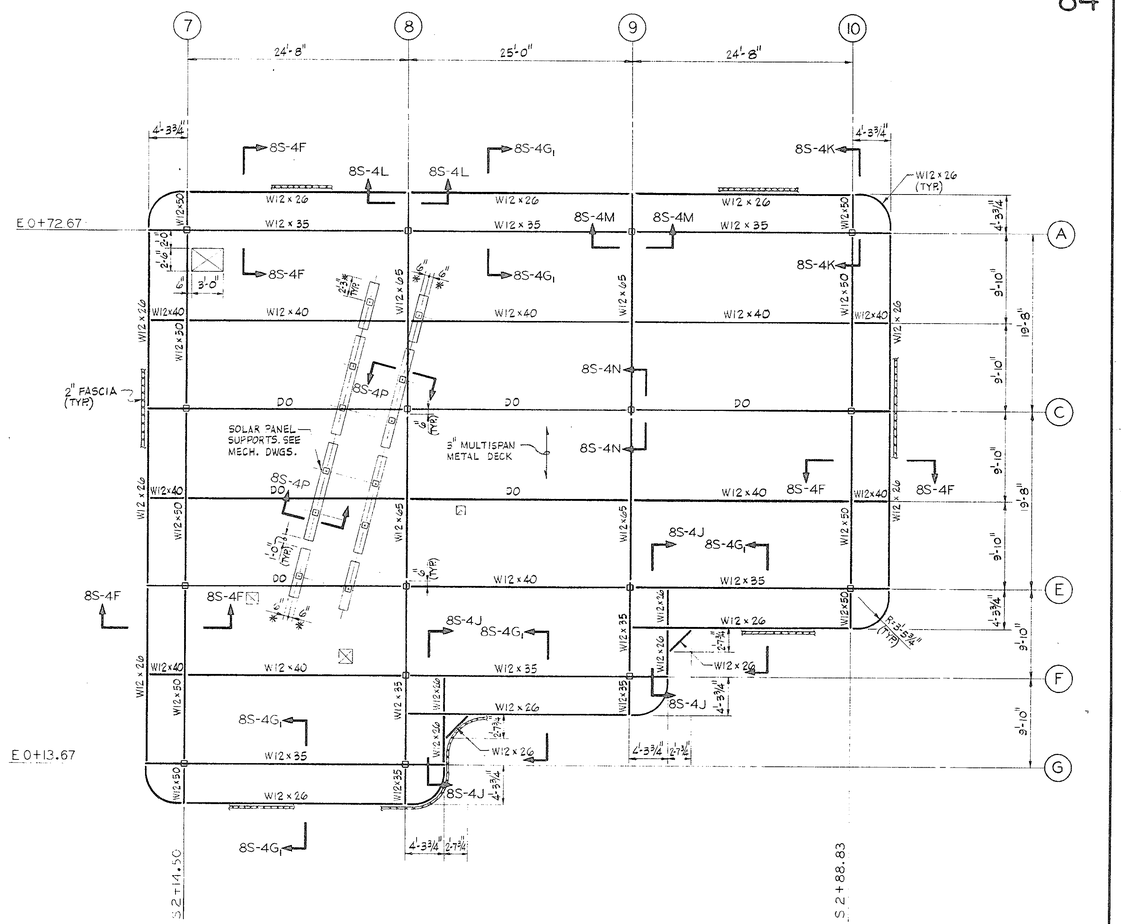
SHEET 8S-1
OF SHEETS
PROJECT NO. 78284

51A085S RECORD



FASCIA SUPPORT FRAMING PLAN

NORTH



ROOF FRAMING PLAN

T/ST'L. EL. 48.00

ROOF NOTES:

METAL DECK SHALL BE 3" DEEP, RIBBED TYPE WITH FLAT BOTTOM PLATE, 18/18 GAGE PAINTED STEEL (f_s = 20,000 P.S.I.).

METAL DECK SHALL HAVE A MIN. "S" OF 0.97 IN.^{3} AND SHALL BE CAPABLE OF SUPPORTING 105 P.S.F. TOTAL SUPERIMPOSED LOAD, INCLUSIVE OF CONC. FILL.

DECK MANUFACTURER SHALL PROVIDE DECK REINFORCING AT OPENINGS AS REQUIRED.

METAL DECK SHALL BE WELDED TO SUPPORTS AND LONGITUDINAL JOINTS OF DECK SHALL BE WELDED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

ALL CONC. FILL OVER METAL DECK SHALL BE CLASS "A" LIGHTWEIGHT CONC. SEE SECTIONS FOR THICKNESS AND REINFORCING OF CONC. FILL.

AGGREGATE FOR LIGHTWEIGHT CONCRETE SHALL CONSIST OF CELLULAR AND GRANULAR INORGANIC MATERIAL CONFORMING TO ASTM C330. CONCRETE MADE WITH LIGHTWEIGHT AGGREGATE SHALL HAVE A MAXIMUM AIR DRY UNIT WEIGHT OF 110 LBS./C.F.

51-002-086

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED T.P.G.
DRAWN R.W.H.
CHECKED J.S.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/8" = 1'-0"

CONTROL CENTER
FASCIA SUPPORT AND ROOF FRAMING PLANS

SHEET 8S-2
OF SHEETS
PROJECT NO. 78284

51-002-5 RECORD

BEAM SCHEDULE

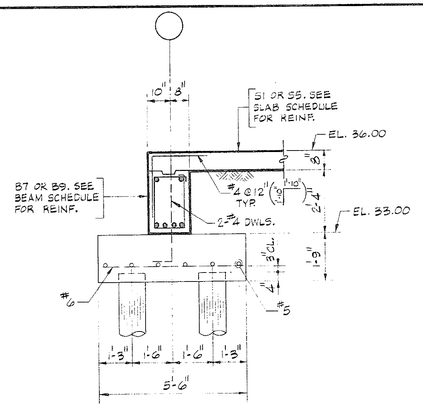
MARK	SIZE "B"	SIZE "D"	REINFORCING BOTTOM	REINFORCING TOP	STIRRUPS NO.	STIRRUPS SIZE	STIRRUPS TYPE	STIRRUPS SPACING EA. END	SUPP. BARS	REMARKS
B1	18"	28"	6-#9	3-#8 CONT.'	28	#4	□	1@12",9@8",4@12"		
B2	18	28	3-#9	3-#8 CONT.'	22	#4	□	11@12"		
B3	18	28	5-#9	3-#7 CONT.'	22	#4	□	11@12"		
B4	18	28	6-#9	4-#7 CONT.'	22	#5	□	11@12"		
B5	18	28	5-#9	4-#6 CONT.'	22	#5	□	11@12"		
B6	19	28	3-#7	2-#6 CONT.'	8	#3	□	1@17", 3@12"		
B7	18	28	4-#7	2-#7 CONT.'	18	#3	□	1@16", 8@12"		
B8	18	28	3-#7	2-#7 CONT.'	18	#3	□	1@16", 8@12"		
B9	18	28	4-#6	2-#6 CONT.'	18	#3	□	1@16", 8@12"		
B10	18	28	5-#6	3-#6 CONT.'	22	#3	□	1@12", 10@10"		
B11	18	28	5-#6	3-#7 CONT.'	22	#4	□	1@12", 10@10"		
B12	18	28	5-#8	3-#7 CONT.'	22	#4	□	1@12", 10@10"		
B13	18	28	3-#6	———	10	#3	□	1@14", 4@10"		
B14	18	28	3-#7	3-#6 CONT.'	22	#3	□	1@12", 10@10"		EXTEND TOP #6 BARS ACROSS B13 AND HOOK @ SUPPORT.
B15	18	28	3-#8	3-#6 CONT.'	22	#3	□	1@12", 10@10"		
B16	18	28	3-#9	2-#8 CONT.'	22	#4	□	1@12", 10@10"		
B17	18	28	3-#7	2-#8 CONT.'	22	#3	□	1@12", 10@10"		
B18	18	28	3-#8	2-#8 CONT.'	22	#3	□	1@12", 10@10"		

NOTE: ALL STIRRUP SPACINGS FOR 1ST STIRRUP SHALL BE MEASURED FROM COLUMN LINES.

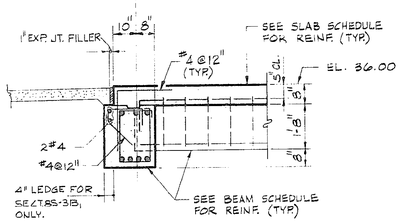
SOLID SLAB SCHEDULE

MARK	THICKNESS	STRAIGHT BOTTOM REINFORCING	TOP REINFORCING	REMARKS
S1	8"	#4@12"	#4@12" CONT.'	
S2	8"	#5@12"	#4@12" CONT.'	
S3	8"	#4@12"	#4@12" CONT.'	
S4	8"	#4@12"	#4@12" CONT.'	
S5	8"	#5@12"	#4@12" CONT.'	

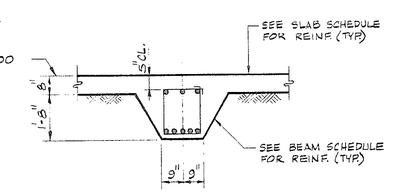
NOTE: TEMPERATURE REINFORCING IN ALL SLABS SHALL BE #4@18" CONT.' TOP & BOTTOM.
SEE SHT. XS-1 FOR TYPICAL DETAILS FOR BEAM OR SLAB REINFORCEMENT



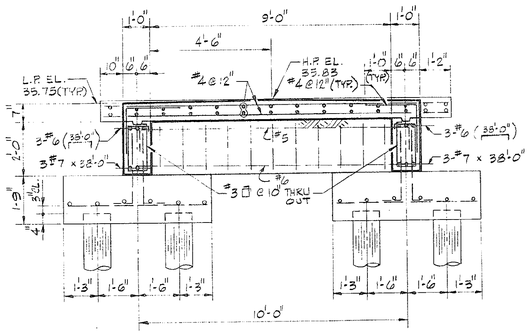
SECTION 8S-3A



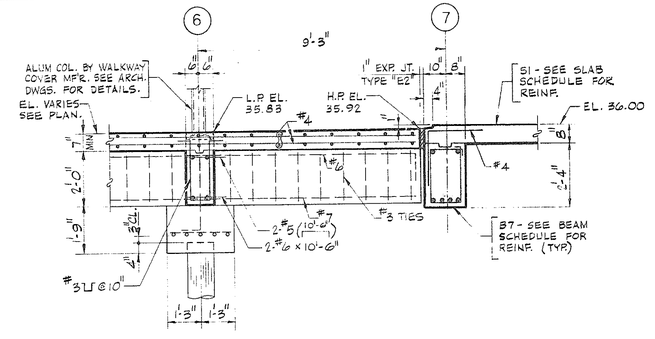
SECTION 8S-3B
SECTION 8S-3B1



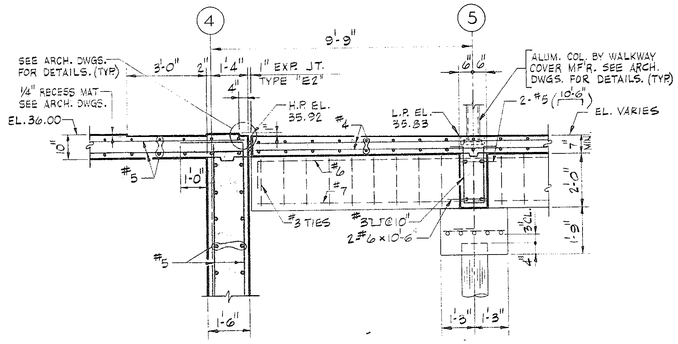
SECTION 8S-3C (TYP.)



SECTION 8S-3D



SECTION 8S-3E



SECTION 8S-3F

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED T.P.G.
DRAWN R.W.H.
CHECKED J.S.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

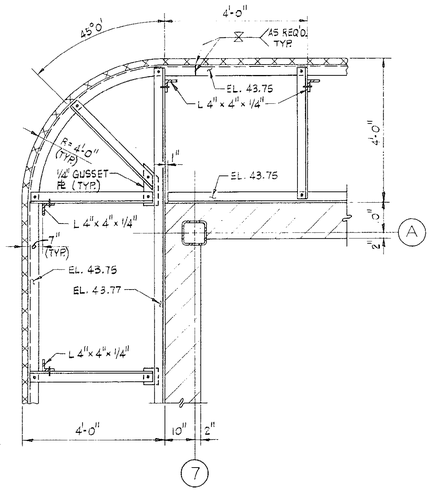
SCALE
3/8"=1'-0"

CONTROL CENTER
SCHEDULES AND SECTIONS

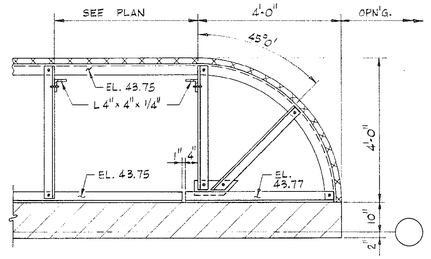
SHEET 8S-3
OF SHEETS
PROJECT NO. 78284

51-002-087

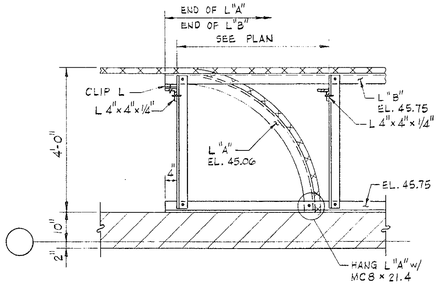
51-087 5 RECORD



LOWER FASCIA FRAMING

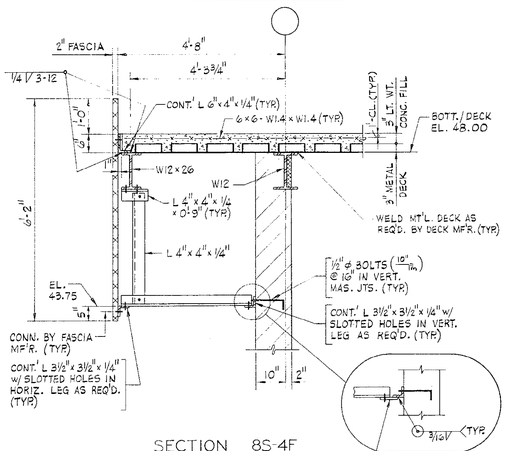


LOWER FASCIA FRAMING



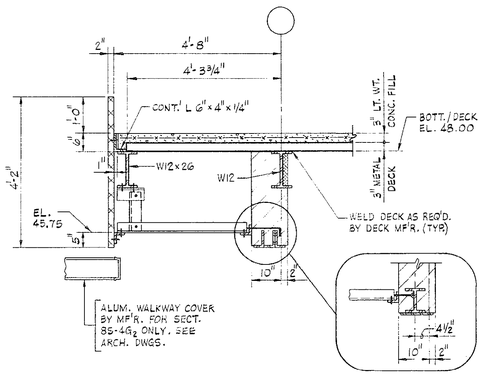
UPPER FASCIA FRAMING

DETAIL PLAN 8S-4A



SECTION 8S-4F

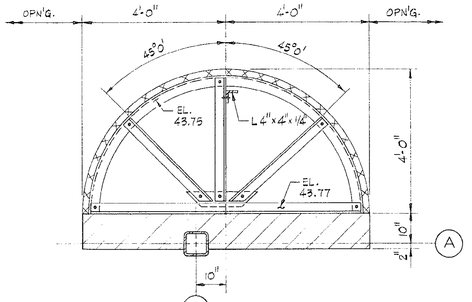
DETAIL PLAN 8S-4B(TYP.)



SECTION 8S-4G

SECTION 8S-4G$_1$

SECTION 8S-4G$_2$



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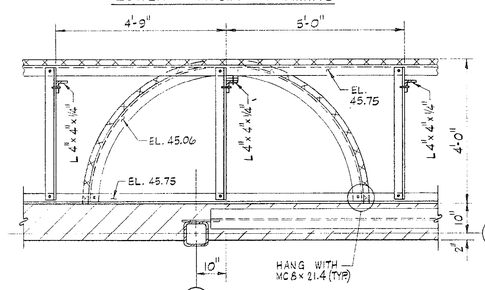
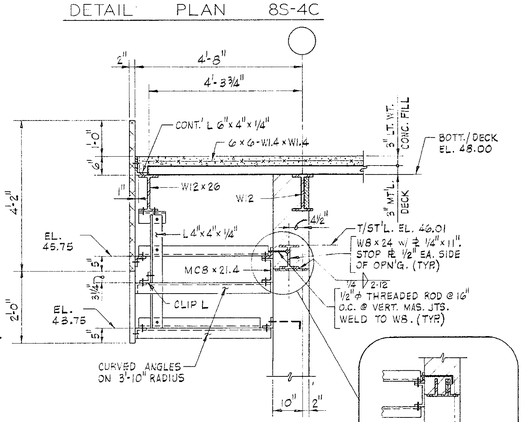


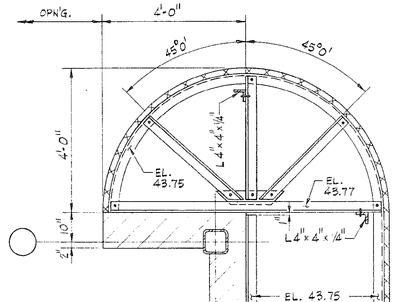
UPPER FASCIA FRAMING

DETAIL PLAN 8S-4C



SECTION 8S-4H

SECTION 8S-4H$_1$



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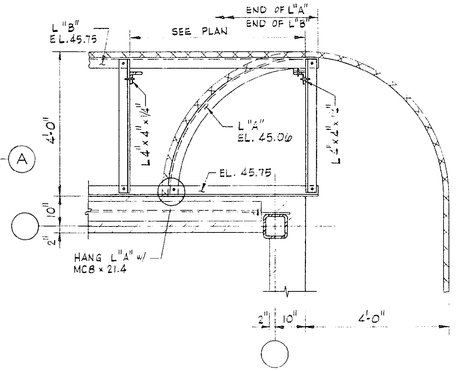
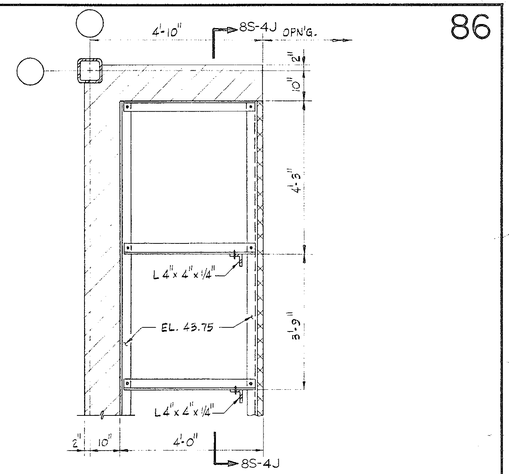


UPPER FASCIA FRAMING

DETAIL PLAN 8S-4D



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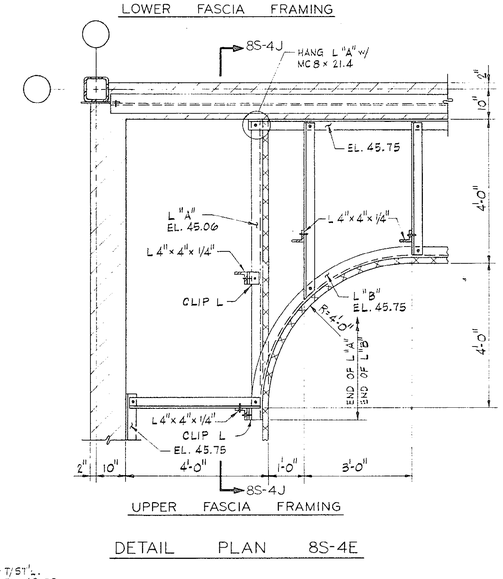

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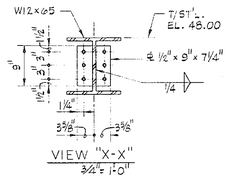
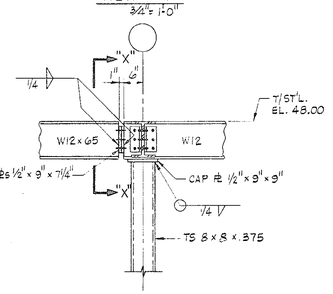
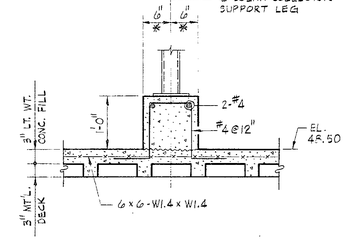
DETAIL PLAN 8S-4E







SECTION 8S-4P
3/4" = 1'-0"

SECTION 8S-4J

SECTION 8S-4K(TYP.)

SECTION 8S-4L(TYP. 17 PLACES)

SECTION 8S-4M(TYP.)

SECTION 8S-4N(TYP. 4 PLACES)

NOTE: ALL ANGLES SHOWN ON THIS SHEET ARE L 3 1/2" x 3 1/2" x 1/4" UNLESS OTHERWISE NOTED.

51-003-088

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED T.P.G.
DRAWN R.W.H.
CHECKED J.S.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

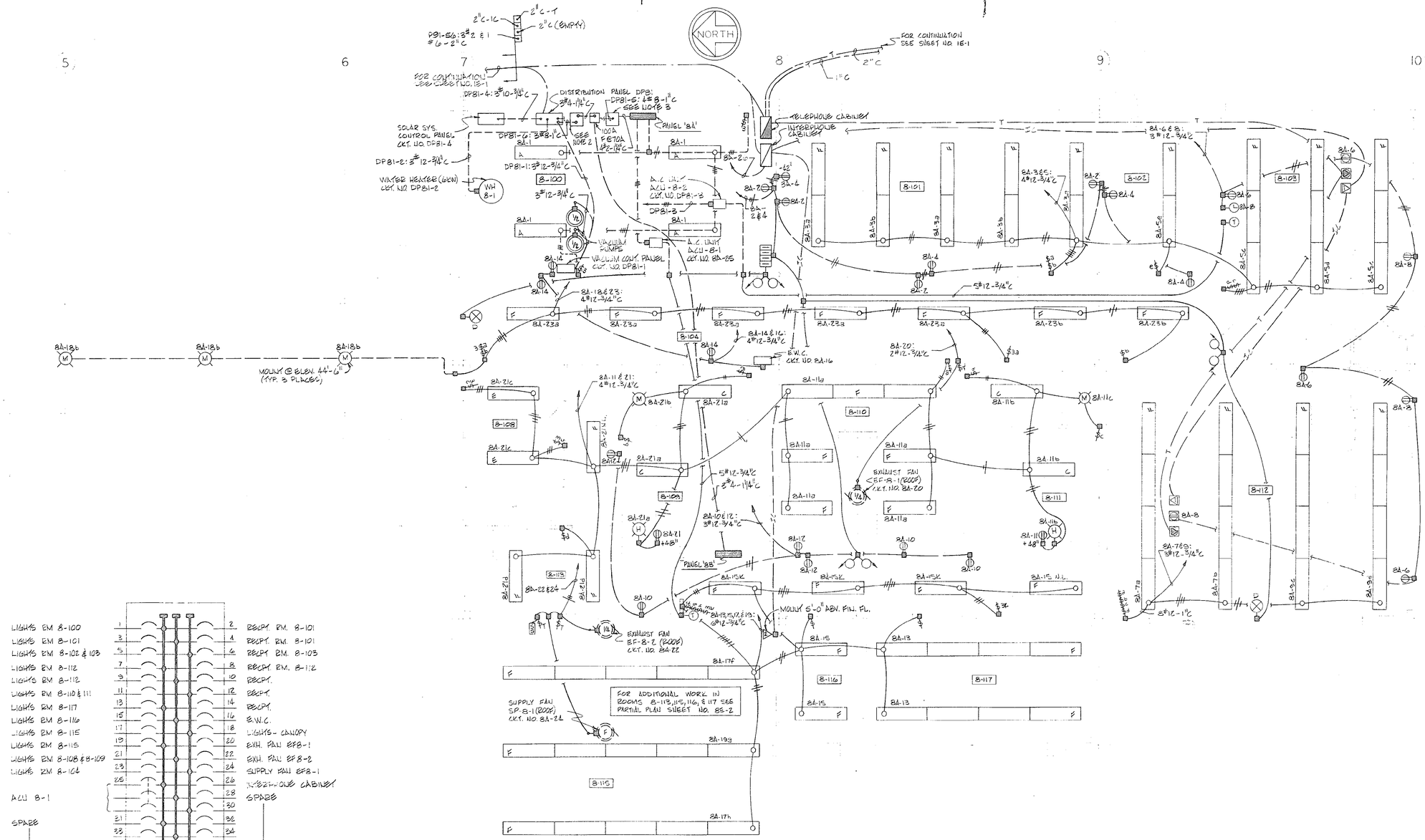
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

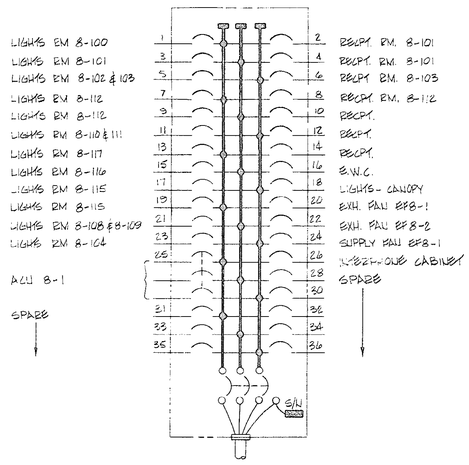
SCALE
1/2" = 1'-0" U.N.

CONTROL CENTER
ROOF SECTIONS

SHEET 8S-4
OF 1 SHEETS
PROJECT NO. 78284

AS RECORD





PANEL '8A'

225 A, 120/208V, 3 ϕ, 4W
W/ 100 A MAIN BREAKER
1 3P-20A BREAKER
33 1P-20A BREAKERS

NOTES:
1. MOLLY TYPE (H) FIXTURE 7'-0" ABOVE FINISHED FLOOR.
2. 15 KVA TRANSFORMER 480-120/240, 1 PHASE 3 WIRE, 60 HZ.
3. 30 KVA TRANSFORMER 480-120/208, 3 PHASE 4 WIRE 60 HZ.

51-003-089

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.N.G.
DRAWN R.C.W.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

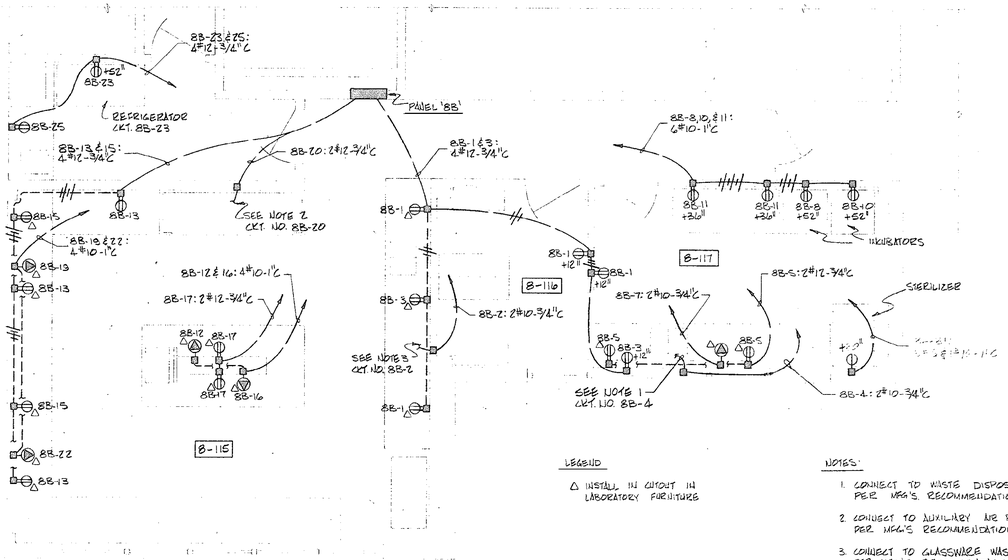
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

CONTROL CENTER
GRADE FLOOR PLAN - ELECTRICAL

SHEET 8E-1
OF SHEETS
PROJECT NO. 78284

Filmed as Record



LEGEND

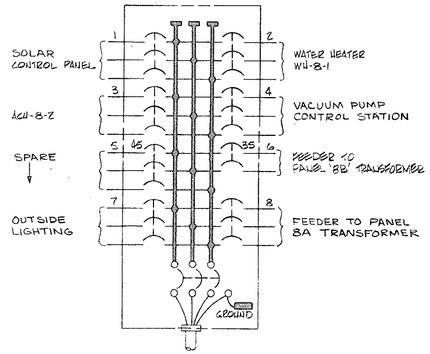
△ INSTALL IN CUTOUT IN LABORATORY FURNITURE

NOTES:

1. CONNECT TO WASTE DISPOSAL PER MFG'S. RECOMMENDATIONS.
2. CONNECT TO AUXILIARY AIR PANEL PER MFG'S RECOMMENDATIONS.
3. CONNECT TO GLASSWARE WASHER PER MFG'S. RECOMMENDATIONS.

PARTIAL PLAN
LABORATORY AREA

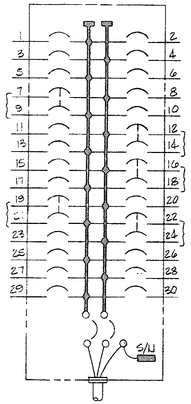
(SEE SHEET 8E-1 FOR ADDITIONAL WORK IN THIS AREA)



DISTRIBUTION PANEL DP81

225 A, 480Y, 3Ø, 3W
W/100A MAIN BREAKER
6 3P-20A BREAKERS
1 3P-65A BREAKER
1 2P-35A BREAKER

RECPT. RM 8-115 & 116
RECPT. RM 8-115 & 117
RECPT. RM 8-117
RECPT. RM 8-117
RECPT. RM 8-117
RECPT. RM 8-115
RECPT. RM 8-115
RECPT. RM 8-115
RECPT.
REFRIGERATOR - RM 8-118
RECPT. RM 8-113
SPARE



PANEL '8B'

225 A, 120/240 V, 1Ø, 3W
W/70A MAIN BREAKER
5 2P-20A BREAKERS
20 1P-20A BREAKERS

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED J.N.G.
DRAWN R.C.W.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

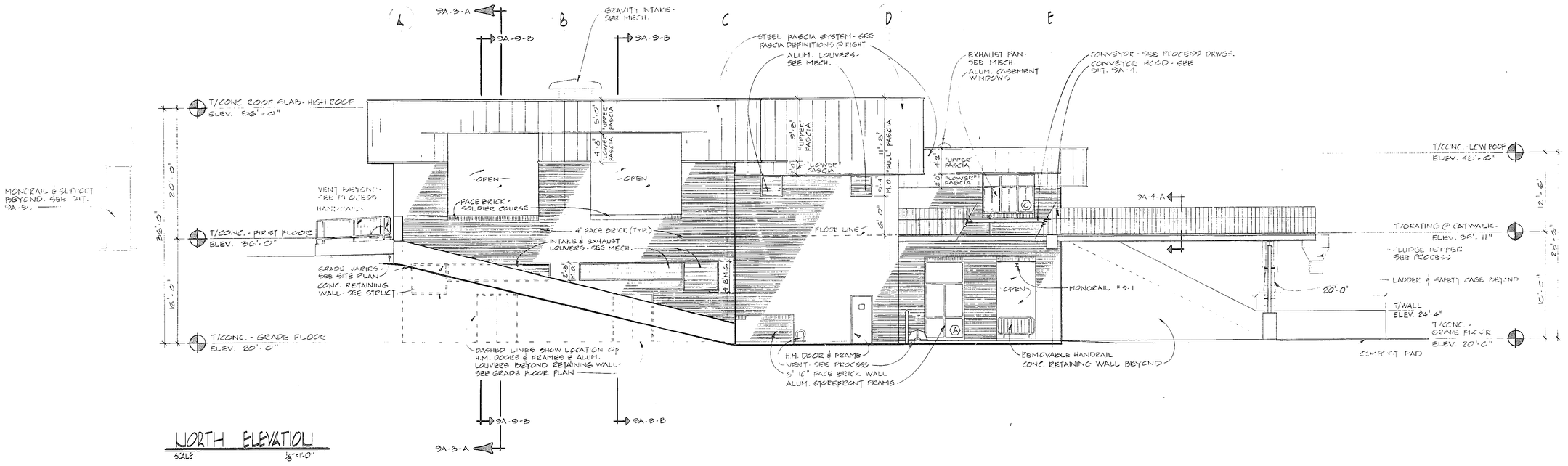
SCALE
1/4" = 1'-0"

CONTROL CENTER
LABORATORY PARTIAL PLAN - ELECTRICAL

SHEET 8E-2
OF SHEETS
PROJECT NO. 78284

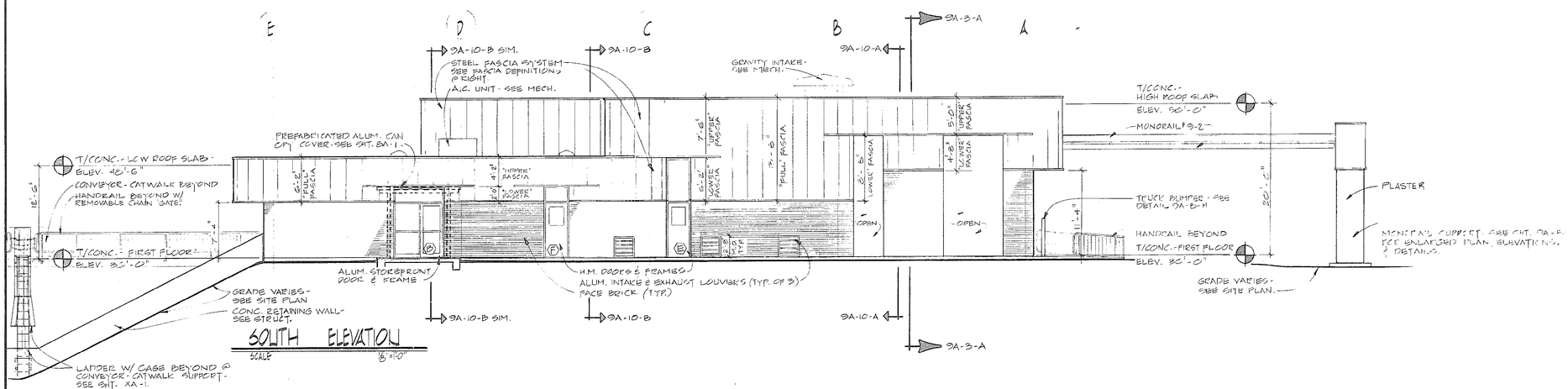
51-003-090

51-003 S RECORD



NORTH ELEVATION

SCALE 1/8"=1'-0"



SOUTH ELEVATION

SCALE 1/8"=1'-0"

STEEL FASCIA SYSTEM DEFINITIONS:

FOR FASCIA MANUFACTURER'S QUALITY AND OTHER SPECIFICS - SEE CONTRACT SPECIFICATIONS.

THE FOLLOWING DEFINITIONS ARE IN REFERENCE TO DIMENSIONS AND DIRECTIONS OF THE FASCIA SYSTEM AS NOTED ON THE CONTRACT DRAWINGS' EXTERIOR ELEVATIONS AND ROOF PLAN:

"PULL" FASCIA - REFERS TO THOSE SECTIONS OF FASCIA THAT ARE CONTINUOUS ONE-PIECE CONSTRUCTION FROM THE HIGHEST POINT TO THE LOWEST POINT WHERE IT MEETS THE SOFFIT.

"UPPER" FASCIA - REFERS TO THE CONTINUATION OF THE LINE OF DIRECTION OF THE "PULL" FASCIA BUT IN A LESSER HEIGHT DIMENSION.

BOTH "PULL" AND "UPPER" FASCIAS ARE DENOTED BY THE SOLID OUTSIDE LINE OF THE ROOF PLAN, SHEET 9A-7

"LOWER" FASCIA - REFERS TO THE SECTIONS OF FASCIA THAT "TURN INTO" THE MASONRY WALL OF THE BUILDING. THIS OCCURS AT OPENINGS, WINDOWS, DOORS, AND CORNER AS SHOWN BY THE INNER DASHED LINE ON THE ROOF PLAN, SHEET 9A-7.

SEE SHEET 9A-8 FOR A PERSPECTIVE VIEW INCLUDING "PULL", "UPPER", AND "LOWER" FASCIAS.

51-603-091

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED CJB
DRAWN WAL MED
CHECKED ROM
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

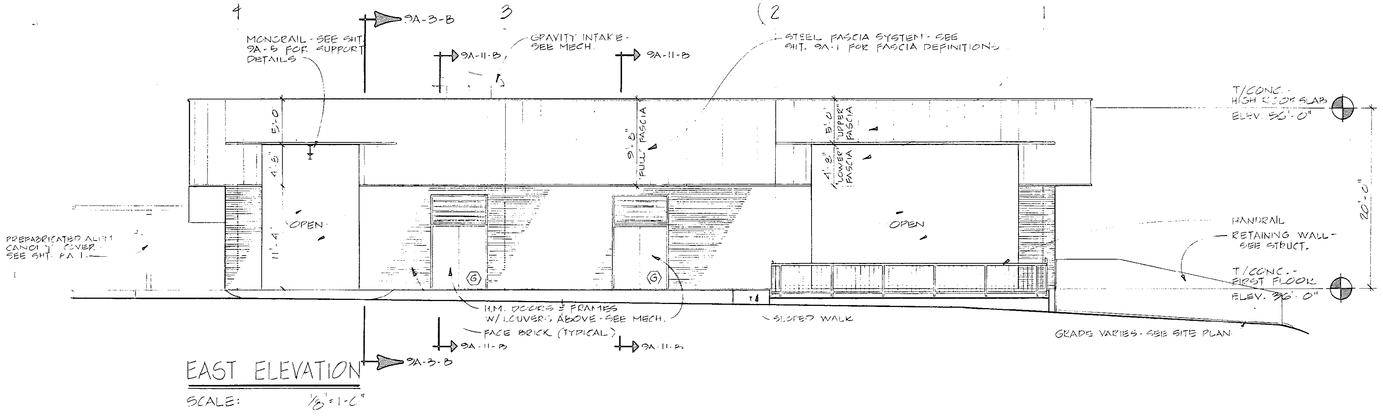
SCALE
AS NOTED

PROCESS CENTER
ELEVATIONS

SHEET 9A-1
OF SHEETS
PROJECT NO. 78284

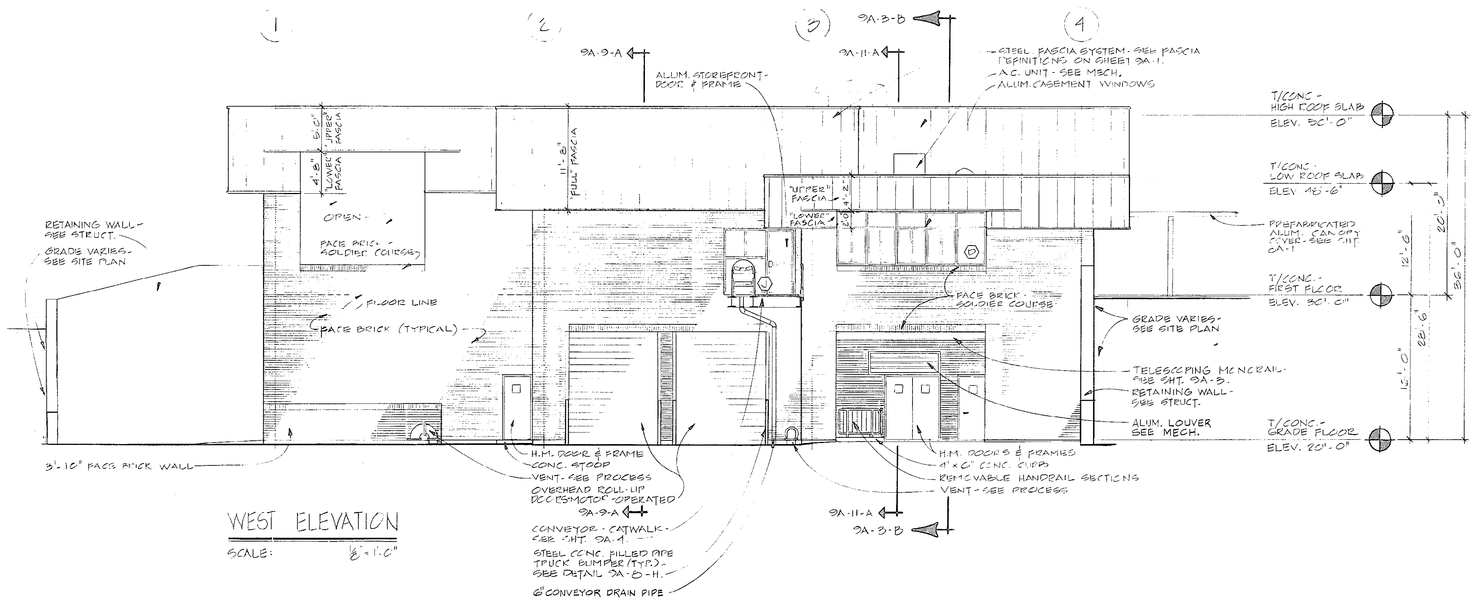
BW-09H 5

RECORD



EAST ELEVATION

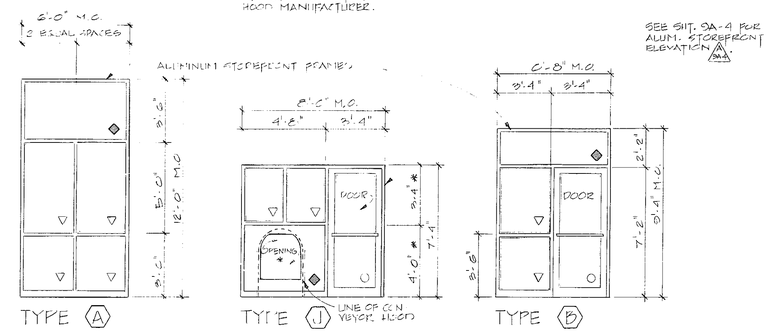
SCALE: 1/8" = 1'-0"



WEST ELEVATION

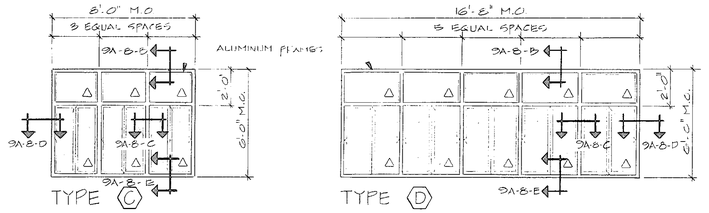
SCALE: 1/8" = 1'-0"

*DIMENSION TO BE VERIFIED BY METAL CONVEYOR HOOD MANUFACTURER.



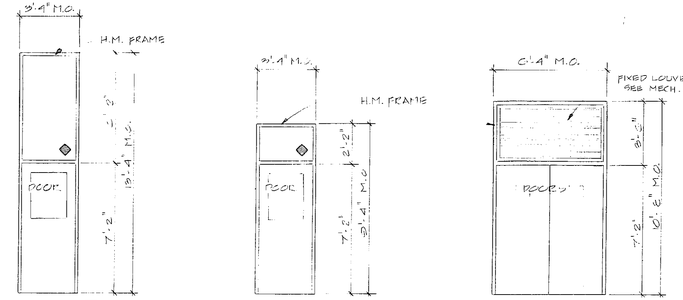
ALUMINUM STOREFRONT FRAMES

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



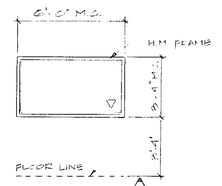
ALUMINUM CASEMENT WINDOWS

SCALE 1/4" = 1'-0"



HOLLOW METAL EXTERIOR FRAMING

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



HOLLOW METAL INTERIOR WINDOW FRAMING

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

GLAZING LEGEND

▽ = 1" INSULATING GLASS:
(1/4" CLEAR TEMPERED PLATE INSIDE)
(1/2" AIR SPACE)
(1/4" TINTED TEMPERED PLATE OUTSIDE)

○ - 1/4" TINTED TEMPERED PLATE

◆ = 1" INSULATED METAL PANEL

△ = 1" INSULATING GLASS:
(1/4" FLOAT GLASS INSIDE)
(1/2" AIR SPACE)
(1/4" TINTED GLASS OUTSIDE)

51-092-097

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED CJB
DRAWN WAL MED
CHECKED ROM
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

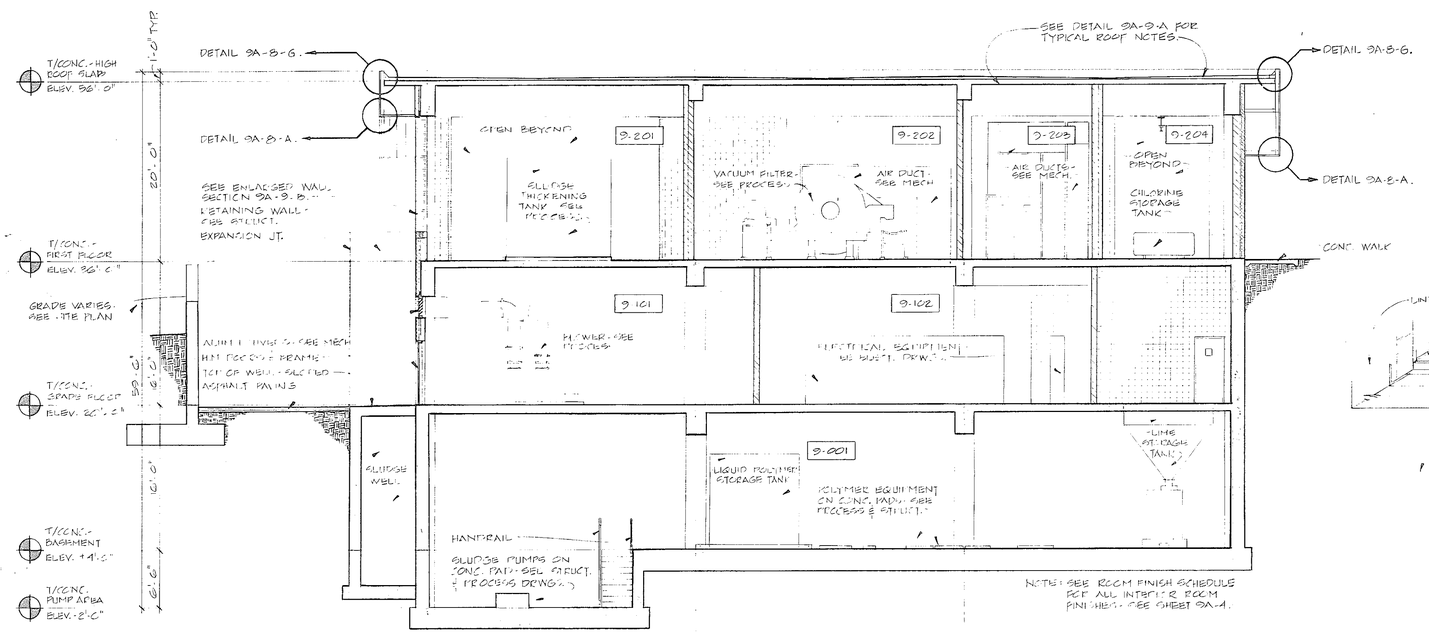
SCALE
AS NOTED

PROCESS CENTER
ELEVATIONS

SHEET 9A-2
OF SHEETS
PROJECT NO. 78284

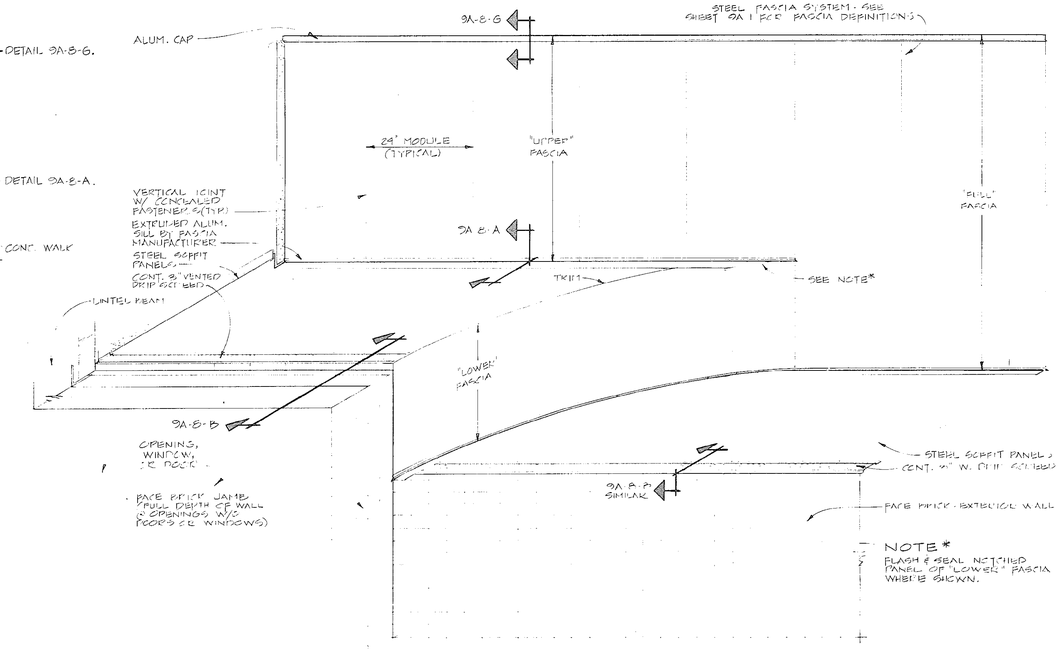
51-092-S

RECORD



SECTION 9A-3-A

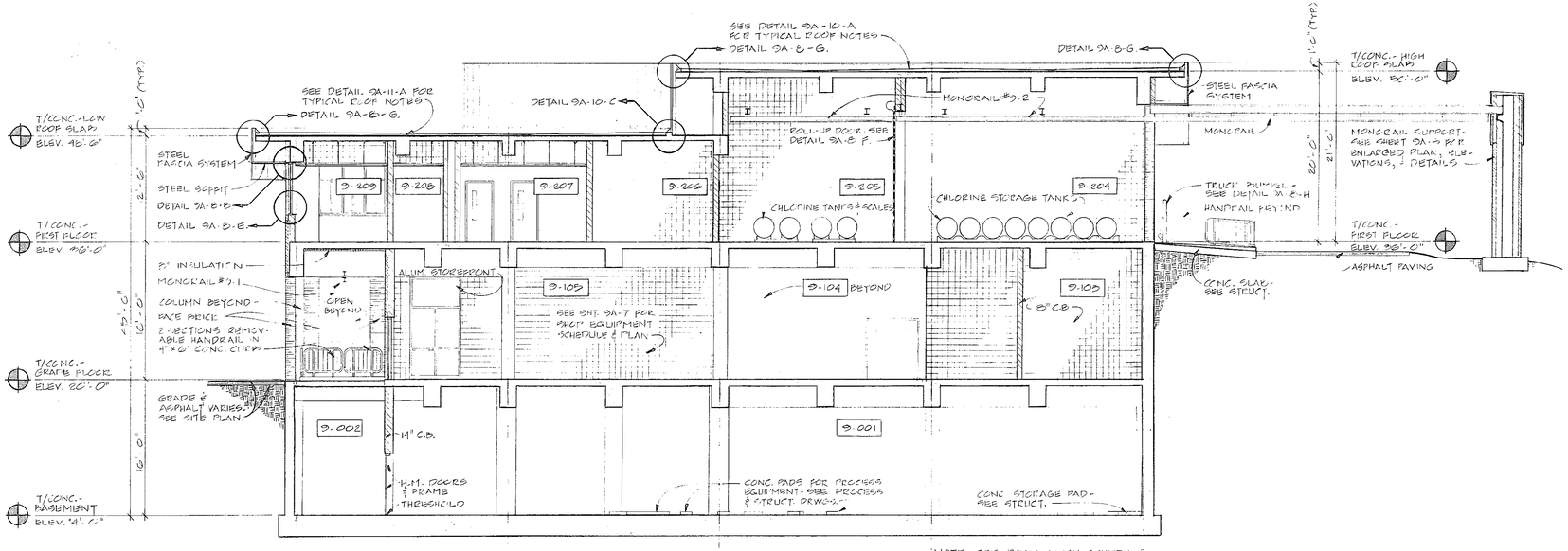
SCALE: 1/8" = 1'-0"



TYPICAL FASCIA @ OPENING

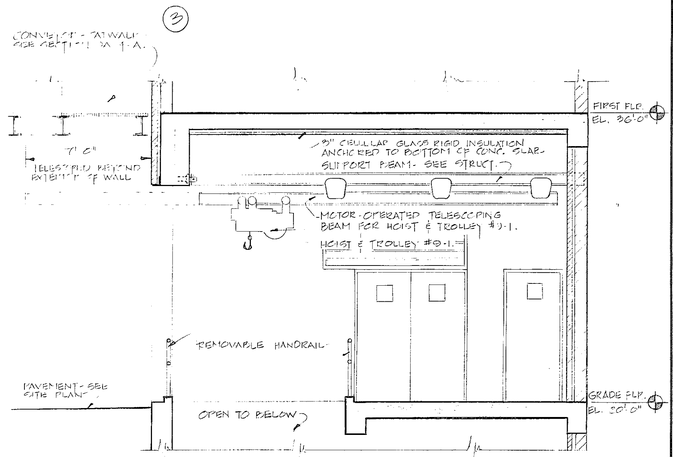
DETAIL 9A-3-A

SCALE



SECTION 9A-3-B

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



SECTION 9A-3-C

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

51-002-093

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED CJB
DRAWN MED
CHECKED ROM
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

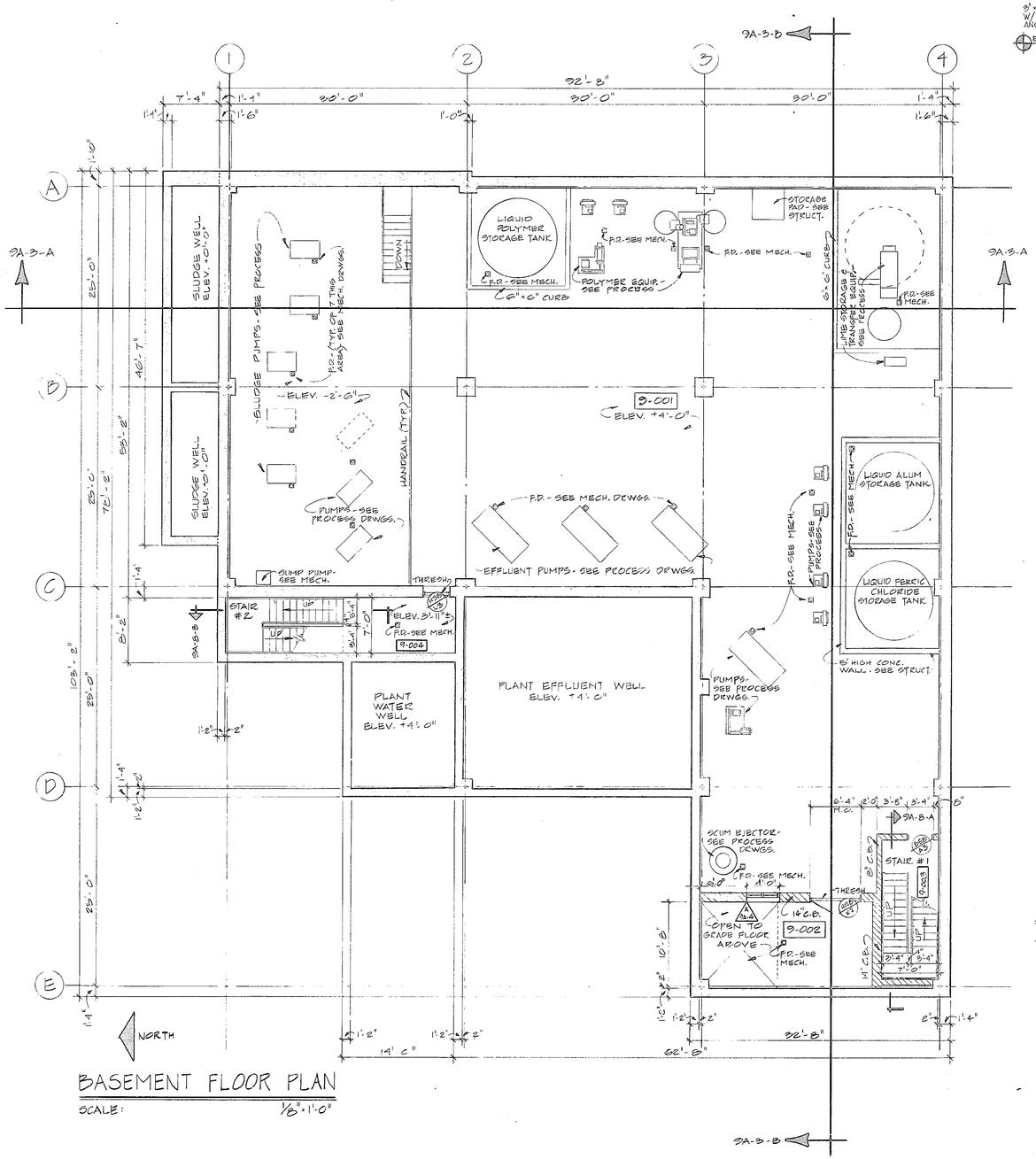
SCALE AS NOTED

PROCESS CENTER
CROSS-SECTIONS & DETAILS

SHEET 9A-3
OF SHEETS
PROJECT NO. 78284

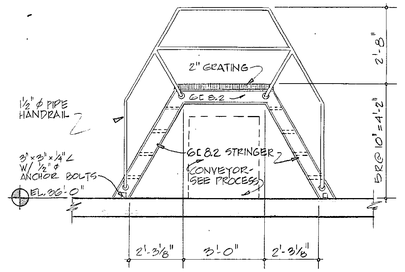
51-002-093 S

RECORD 92

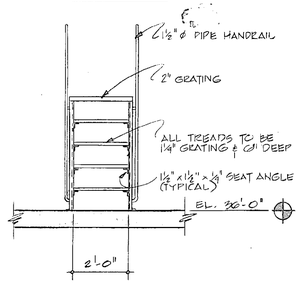


BASEMENT FLOOR PLAN

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



SIDE VIEW



FRONT VIEW

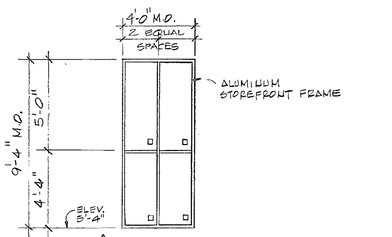
DETAIL 9A-4-B

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

ROOM FINISH SCHEDULE

ROOM #	ROOM DESCRIPTION	FLOOR	BASE	WALLS	CEILING MATERIAL	CEILING HEIGHT	REMARKS
9-001	BASEMENT	H.C.	CONC. / C.B.	CONC. / C.B.	S.C.	—	
9-002	EQUIPMENT REMOVAL WELL	H.C.	CONC. / C.B.	CONC. / C.B.	S.C.	—	
9-003	STAIR #1	TERR.*	R.B.	P.G.	—	—	*"FLOOR" INCLUDES FLOOR, TREADS AND LANDINGS.
9-004	STAIR #2	H.C.*	CONC	CONC.	—	—	*"FLOOR" INCLUDES FLOOR, TREADS AND LANDINGS.
9-101	BLOWER ROOM	H.C.	CONC. / C.B.	CONC. / C.B.	S.C.	—	
9-102	ELECTRICAL ROOM	H.C.	CONC. / C.B.	CONC. / C.B.	S.C.	—	
9-103	LIME STORAGE	H.C.	CONC. / C.B.	CONC. / C.B.	S.C.	—	
9-104	GARAGE	H.C.	CONC.	C.B.	S.C.	—	
9-105	SHOP - STORAGE AREA	H.C.	CONC. / C.B.	CONC. / C.B.	S.C.	—	
9-106	CORRIDOR	TERR.	R.B.	P.G.	P.G.C.	9'-4"	
9-107	STAIR #1	TERR.*	—	P.G.	—	—	*"FLOOR" INCLUDES FLOOR, TREADS AND LANDINGS.
9-108	STAIR #2	H.C.*	—	P.B.	—	—	*"FLOOR" INCLUDES FLOOR, TREADS AND LANDINGS.
9-201	SLUDGE THICKENING ROOM	I.F.	C.B.	C.B.	S.C.	—	
9-202	VACUUM FILTER ROOM	I.F.	C.B.	C.B.	S.C.	—	
9-203	MECHANICAL ROOM	I.F.	C.B.	C.B.	S.C.	—	
9-204	CHLORINE STORAGE	I.F.	C.B.	C.B.	S.C.	—	
9-205	CHLORINE SCALE ROOM	I.F.	C.B.	C.B.	S.C.	—	
9-206	CHLORINE ROOM	I.F.	C.B.	C.B.	S.C.	—	
9-207	VESTIBULE	TERR.	P.B.	P.G.	AMPL	9'-0"	
9-208	TOILET	C.T.	C.T.	C.T.	P.G.C	8'-0"	
9-209	CONTROL ROOM	TERR.	R.B.	P.G. / VNC	AMPL	9'-0"	VINYL - RAJAMAHAL HONEY BEIGE 3003
9-210	SAMPLER AREA	I.F.	C.B.	C.B.	S.C.	—	
9-211	STAIR #1	TERR.*	—	P.G.	AMPL	8'-0"	*"FLOOR" INCLUDES FLOOR, TREADS AND LANDINGS.

NOTE: ALL CONC. BLK. BASES TO BE PAINTED DIFFERENT COLOR THAN WALLS.

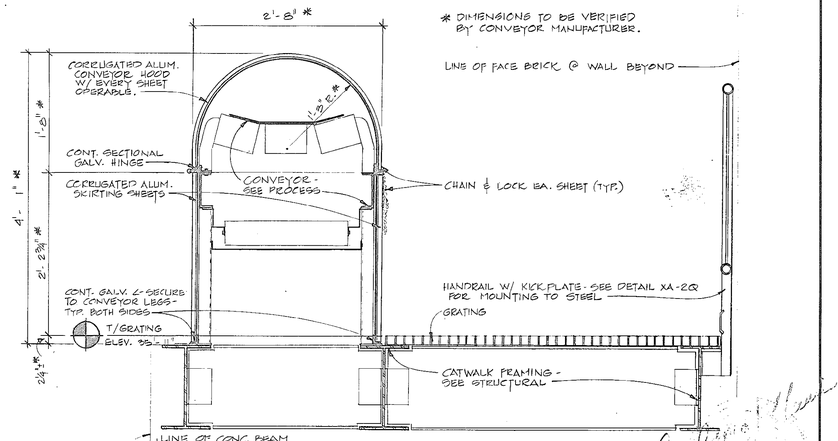


9A-4 ELEVATION

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

GLAZING LEGEND

□ = 1" INSULATING GLASS
(¼" CLEAR TEMPERED PLATE INSIDE
½" AIR SPACE
¼" CLEAR TEMPERED PLATE OUTSIDE)



SECTION 9A-4-A

SCALE: 1" = 1'-0"

51-002-094

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED CJB
DRAWN MED
CHECKED ROM
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

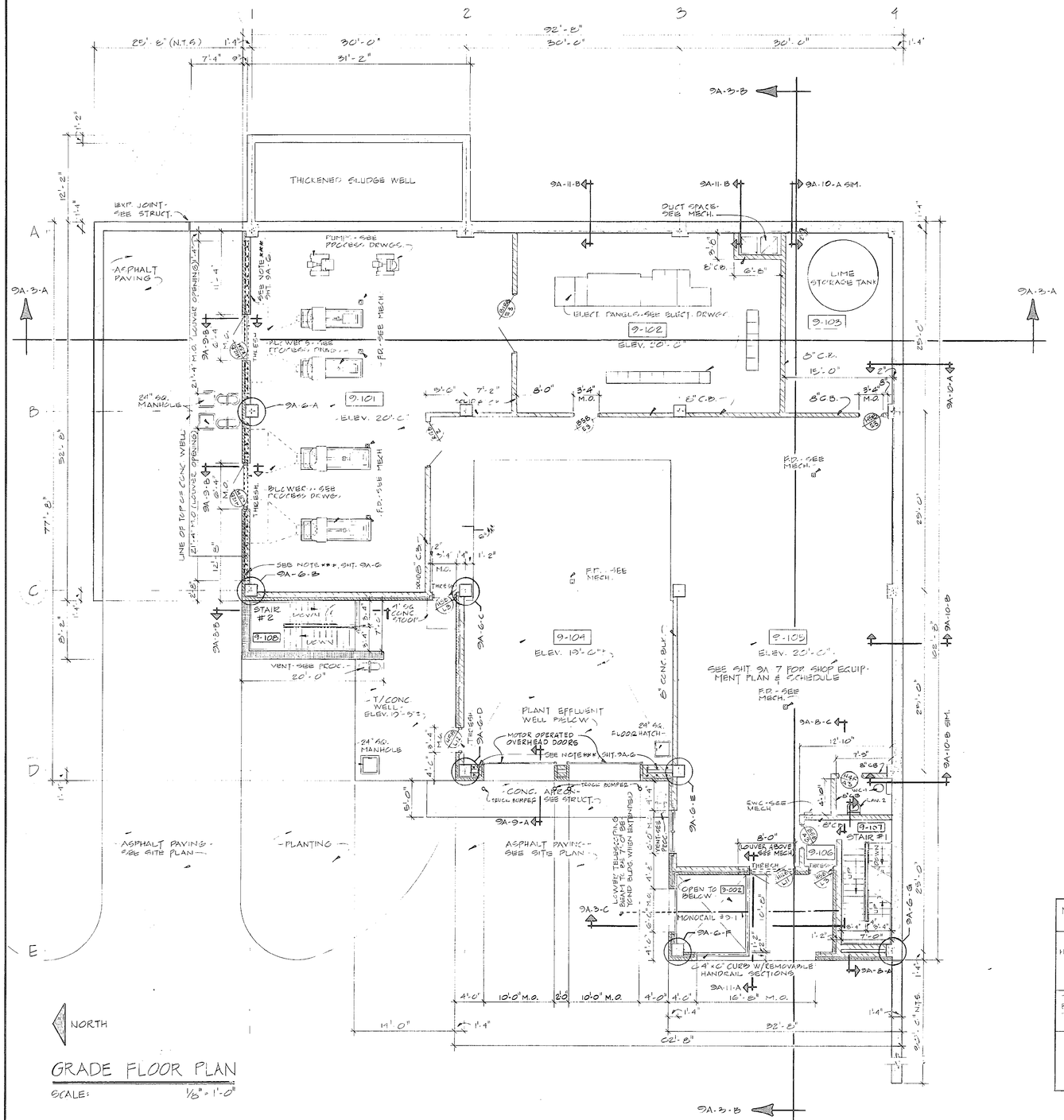
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE AS NOTED

PROCESS CENTER
BASEMENT FLOOR PLAN, SCHEDULES & DETAILS

SHEET 9A-4 OF SHEETS
PROJECT NO. 78284

RECORD


1
2
3
4
A
B
C
D
E
25'-8" (N.T.S.)
30'-0"
32'-2"
30'-0"
30'-0"
31'-2"
THICKENER SLUDGE WELL
EXP. JOINT - SEE STRUCT.
ASPHALT PAVING
PUMP - SEE PROCESS DWGS.
SEE NOTE *** SHT. 9A-6
9A-3-A
9A-3-B
9A-11-B
9A-10-A SIM.
DUCT SPACE - SEE MECH.
LIME STORAGE TANK
9-103
ELECT. PANELS - SEE ELECT. DRWGS.
9-102
ELEV. 20'-0"
FD. - SEE MECH.
24" SQ. MANHOLE
9A-6-A
9-101
ELEV. 20'-0"
BLOWERS - SEE PROCESS DRWGS.
9A-3-B
9A-10-A
9A-3-C
9A-6-F
9A-6-E
9A-6-G
9A-6-D
9A-6-C
9A-6-B
9A-11-A
9A-9-A
9A-9-B
9A-7-A
9A-7-B
9A-7-C
9A-7-D
9A-7-E
9A-7-F
9A-7-G
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9A-7-I
9A-7-J
9A-7-K
9A-7-L
9A-7-M
9A-7-N
9A-7-O
9A-7-P
9A-7-Q
9A-7-R
9A-7-S
9A-7-T
9A-7-U
9A-7-V
9A-7-W
9A-7-X
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9A-7-EE
9A-7-FF
9A-7-GG
9A-7-HH
9A-7-II
9A-7-JJ
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9A-7-KKK
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9A-7-SSS
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9A-7-UUU
9A-7-VVV
9A-7-WWW
9A-7-XXX
9A-7-YYY
9A-7-ZZZ
9A-7-AAAA
9A-7-BBBB
9A-7-CCCC
9A-7-DDDD
9A-7-EEEE
9A-7-FFFF
9A-7-GGGG
9A-7-HHHH
9A-7-IIII
9A-7-JJJJ
9A-7-KKKK
9A-7-LLLL
9A-7-MMMM
9A-7-NNNN
9A-7-OOOO
9A-7-PPPP
9A-7-QQQQ
9A-7-RRRR
9A-7-SSSS
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9A-7-UUUU
9A-7-VVVV
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9A-7-XXXX
9A-7-YYYY
9A-7-ZZZZ
9A-7-AAAAA
9A-7-BBBBB
9A-7-CCCCC
9A-7-DDDDD
9A-7-EEEEE
9A-7-FFFFF
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9A-7-PPPPP
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9A-7-RRRRR
9A-7-SSSSS
9A-7-TTTTT
9A-7-UUUUU
9A-7-VVVVV
9A-7-WWWWW
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9A-7-YYYYY
9A-7-ZZZZZ
9A-7-AAAAAA
9A-7-BBBBBB
9A-7-CCCCCC
9A-7-DDDDDD
9A-7-EEEEEE
9A-7-FFFFFF
9A-7-GGGGGG
9A-7-HHHHHH
9A-7-IIIIII
9A-7-JJJJJJ
9A-7-KKKKKK
9A-7-LLLLLL
9A-7-MMMMMM
9A-7-NNNNNN
9A-7-OOOOOO
9A-7-PPPPPP
9A-7-QQQQQQ
9A-7-RRRRRR
9A-7-SSSSSS
9A-7-TTTTTT
9A-7-UUUUUU
9A-7-VVVVVV
9A-7-WWWWWW
9A-7-XXXXXX
9A-7-YYYYYY
9A-7-ZZZZZZ
9A-7-AAAAAAA
9A-7-BBBBBBB
9A-7-CCCCCCC
9A-7-DDDDDDD
9A-7-EEEEEEE
9A-7-FFFFFFF
9A-7-GGGGGGG
9A-7-HHHHHHH
9A-7-IIIIIII
9A-7-JJJJJJJ
9A-7-KKKKKKK
9A-7-LLLLLLL
9A-7-MMMMMMM
9A-7-NNNNNNN
9A-7-OOOOOOO
9A-7-PPPPPPP
9A-7-QQQQQQQ
9A-7-RRRRRRR
9A-7-SSSSSSS
9A-7-TTTTTTT
9A-7-UUUUUUU
9A-7-VVVVVVV
9A-7-WWWWWWW
9A-7-XXXXXXX
9A-7-YYYYYYY
9A-7-ZZZZZZZ
9A-7-AAAAAAAA
9A-7-BBBBBBBB
9A-7-CCCCCCCC
9A-7-DDDDDDDD
9A-7-EEEEEEEE
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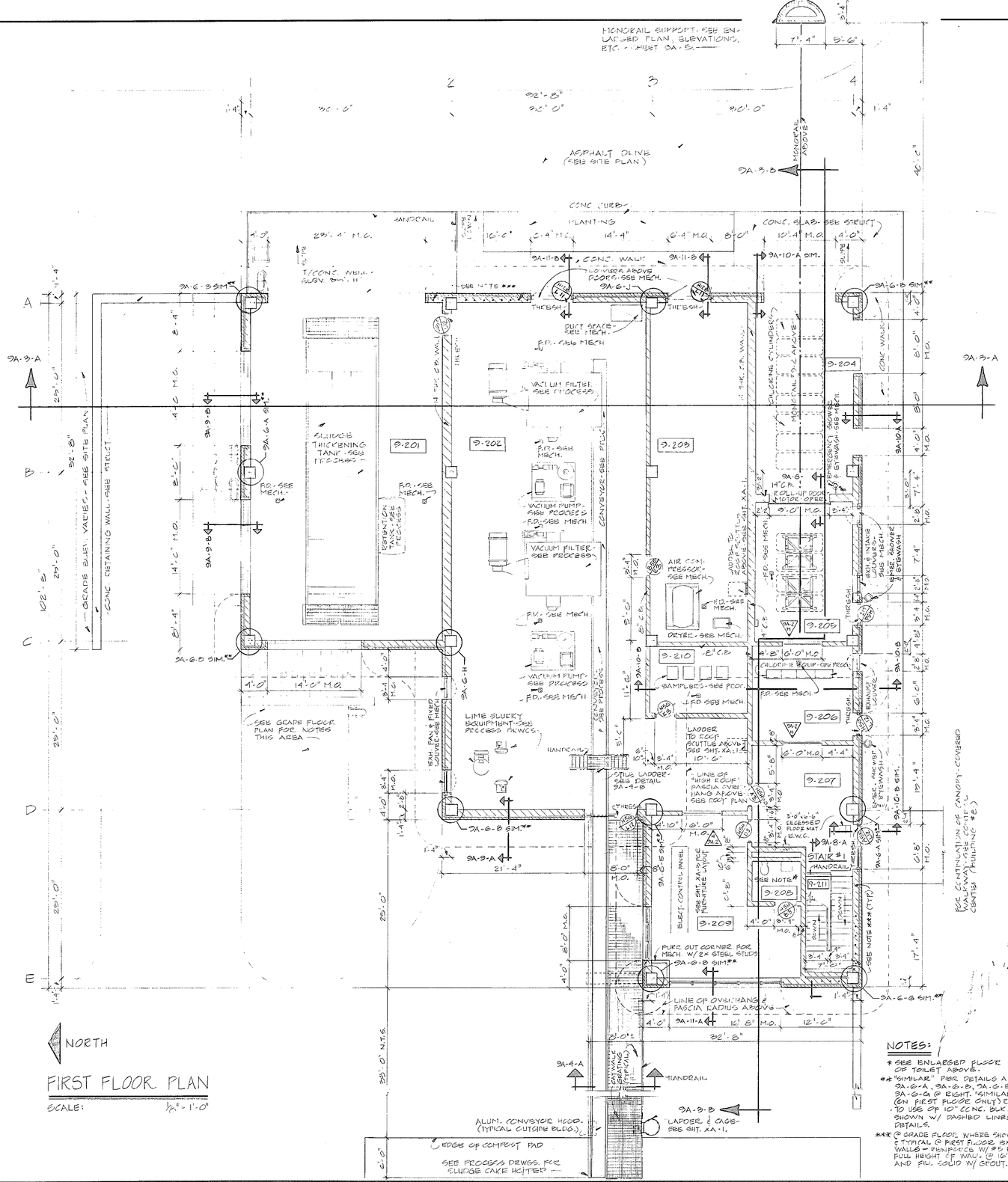
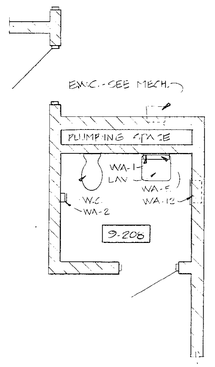
9A-7-WWWWWWWWWWWWWWWWWWWWWWWWWWWW
9A-7-XXXXXXXXXXXXXXXXXXXXXXXXXXXX
9A-7-YYYYYYYYYYYYYYYYYYYYYYYYYYYY
9A-7-ZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
9A-7-AAAAAAAAAAAAAAAAAAAAAAAAAAAAA
9A-7-BBBBBBBBBBBBBBBBBBBBBBBBBBBB
9A-7-CCCCCCCCCCCCCCCCCCCCCCCCCCCC
9A-7-DDDDDDDDDDDDDDDDDDDDDDDDDDDD
9A-7-EEEEEEEEEEEEEEEEEEEEEEEEEEEE
9A-7-FFFFFFFFFFFFFFFFFFFFFFFFFFFF
9A-7-GGGGGGGGGGGGGGGGGGGGGGGGGGGG
9A-7-HHHHHHHHHHHHHHHHHHHHHHHHHHHH
9A-7-IIIIIIIIIIIIIIIIIIIIIIIIIIII
9A-7-JJJJJJJJJJJJJJJJJJJJJJJJJJJJ
9A-7-KKKKKKKKKKKKKKKKKKKKKKKKKKKK
9A-7-LLLLLLLLLLLLLLLLLLLLLLLLLLLL
9A-7-MMMMMMMMMMMMMMMMMMMMMMMMMMMM
9A-7-NNNNNNNNNNNNNNNNNNNNNNNNNNNN
9A-7-OOOOOOOOOOOOOOOOOO



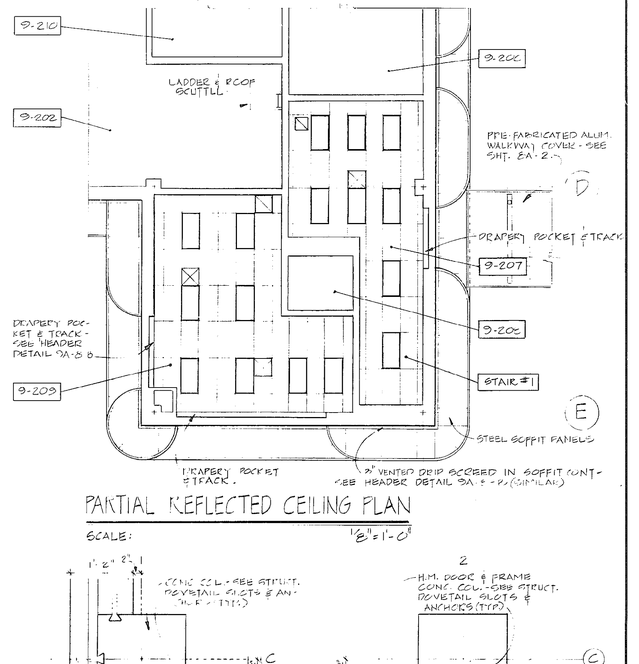
FIRST FLOOR PLAN

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



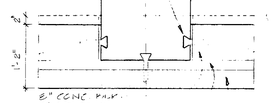
ROOM #9-208 ENLARGED FLOOR PLAN

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



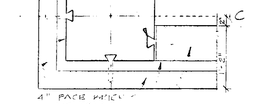
PARTIAL REFLECTED CEILING PLAN

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



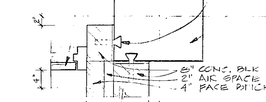
DETAIL 9A-6-A

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



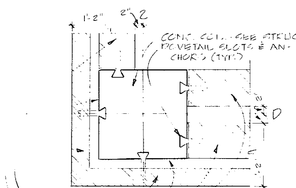
DETAIL 9A-6-B

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



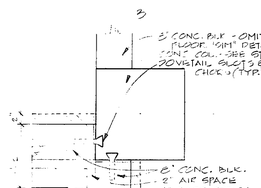
DETAIL 9A-6-C

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



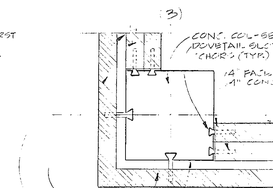
DETAIL 9A-6-D

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



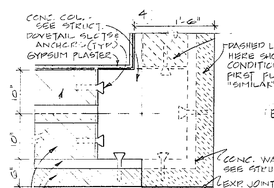
DETAIL 9A-6-E

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



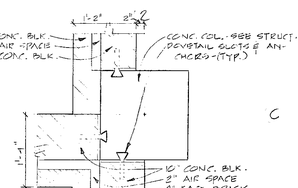
DETAIL 9A-6-F

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



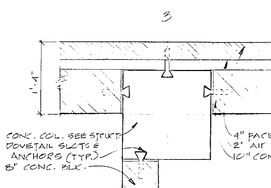
DETAIL 9A-6-G

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



DETAIL 9A-6-H

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



DETAIL 9A-6-J

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

NOTES:

* SEE ENLARGED FLOOR PLAN OF TOILET ABOVE.

** "SIMILAR" PIER DETAILS ARE 9A-6-A, 9A-6-B, 9A-6-E & 9A-6-G @ EIGHT "SIMILAR" (ON FIRST FLOOR ONLY) REFERS TO USE OF 10" CONC. BLK. AS SHOWN W/ DASHED LINES IN DETAILS.

*** @ GRADE FLOOR, WHERE SHOWN & TYPICAL @ FIRST FLOOR EXTERIOR WALLS - PUNPOSE W/ #5 BARS FULL HEIGHT OF WALL @ 10" O.C. AND FILL SOLID W/ GROUT.

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED CJB
DRAWN MED
CHECKED ROM
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE AS NOTED

PROCESS CENTER
FIRST FLOOR PLAN, REFLECTED CEILING PLAN & DETAILS

SHEET 9A-6 OF SHEETS
PROJECT NO. 78284

51-003-076

AS-BUILTS RECORD

SHOP EQUIPMENT SCHEDULE

ITEM #	MFG.	CAT. #	DESCRIPTION
600	G	H-42 2W	PARTS WASHER COMPLETE WITH PUMPING UNIT WITH SWITCH, HOSES FOR PISTOL GRIP NOZZLE AND FLEXIBLE METAL NOZZLE WITH VALVE, LARGE BASKET RACK, AUTOMATIC SAFETY COVER AND ½" DRAIN
	PA	32	
601	LY	38-1018	36" W x 24" D x 84" H METAL STORAGE CABINET WITH FOUR (4) SHELVES AND TWO HINGED DOORS WITH KEYED CYLINDER LOCKS
	EQ	1710	
602	HA	312-26	GAS CYLINDER TRUCK 48" H x 35" W WITH 24" x 13" BASE PLATE
	N	CRT-312-2T	
602 A	M	20-002	OXYGEN ACETYLENE WELDING OUTFIT WITH WELDING HANDLE & MIXER, CUTTING ATTACHMENT, SINGLE STAGE OXYGEN REGULATOR, SINGLE STAGE ACETYLENE REGULATOR, WELDING TIPS, CUTTING TIPS, GOGGLES, SPARK LIGHTER, DUO WELL HOSE WITH CONNECTIONS, TIP CLEANER KIT AND METAL TOOL BOX
	TU	W-31 SM-1006	
603	MI	250TWIN	ARC WELDER 460 V. A.C./D.C., 60 HZ SINGLE PHASE W/ COMPLETE ACCESSORY SET AND RUNNING GEAR INCLUDING WELDERS HOOD
	LI	K-1053	
604	POL	124-289-52	96" L x 29" W x 35" H METAL WORK BENCH W/ METAL TOP, METAL LOWER SHELF AND ONE (1) 15 3/4" W x 20" L x 6 3/4" H METAL DRAWER W/ KEYED CYLINDER LOCK
	LY	221-2A	
605	CO	206 M2	6" COMBINATION PIPE VISE WITH SWIVEL BASE
	RI	61 CPW	
606	RO	15-350	15" DRILL PRESS FLOOR MODEL WITH VARIABLE SPEED 5/4 H.P., 3 PHASE 460 V. 1725 RPM. MOTOR WITH 120 V. PUSH BUTTON STATION, MAGNETIC STARTER, TRANSFORMER AND THREE (3) LEG OVERHEAD PROTECTION
	CL	1671	
606 A	CLEV.	223-84 600-84	HIGH SPEED DRILL BIT SET IN FRACTIONAL SIZES OF 1/16" TO 1/2" BY 64THS, WIRE GAUGE DRILL BIT SET IN SIZE NUMBERS (1) TO (60)
	MC	29242 D28 29242 D52	
607	RO	23-212	7" PEDESTAL GRINDER WITH ½ H.P., 3 PHASE, 460 V., 60 HZ., 3450 RPM MOTOR WITH 120 V. PUSH BUTTON STATION, MAGNETIC STARTER TRANSFORMER & 3 LEG OVERLOAD PROTECTION, ACCESSORIES TO INCLUDE WATERPOT, TWIN-LITE SAFETY SHIELDS, DRILL GRINDING ATTACHMENT, DIAMOND WHEEL DRESSER AND TWO (2) ALUMINUM OXIDE GRINDING WHEELS 1"x7" 60 GRIT GRADE N AND 1"x7" 46 GRIT GRADE M
	BAL	73090	
608	RO	49-881	DUST COLLECTOR WITH ½ H.P., 3 PHASE, 460 V, 60 HZ, 3450 RPM MOTOR WITH 120 V PUSH BUTTON STATION, MAGNETIC STARTER TRANSFORMER AND 3 LEG OVERLOAD PROTECTION, DUST COLLECTOR TO BE COMPLETE WITH HOSES AND FITTINGS FOR 7" PEDESTAL GRINDER
	SE	013	
609	W	31F-MP4	75 TON HYDRAULIC PRESS, 2 HP, 460 V, 3-PHASE MOTOR WITH MAGNETIC STARTER, 3 LEG OVERLOAD PROTECTION AND CONTROLS
	D	75 H	
610	RO	15-330	14" METAL/WOOD CUTTING BAND SAW WITH STAND, ½ HP THREE (3) PHASE, 460 V, 60 HZ, 1725 RPM MOTOR WITH 120 V. PUSH BUTTON STATION MAGNETIC STARTER, TRANSFORMER AND THREE (3) LEG OVERLOAD PROTECTION, BAND SAW TO BE COMPLETE WITH ALL ACCESSORIES PLUS 6-½" WIDE METAL AND WOOD CUTTING BLADES OF EACH TYPE
	CL	1671	
611	BG	3626	12'-0" LONG METAL STORAGE RACK (FOR LUMBER STOCK) MADE FROM FOUR (4) SINGLE FACED SECTIONS 84" H x 36" W x 24" DEEP AND ONE (1) SINGLE FACED END RACK
	PP	461624	
612	LY	57120 57101	12'-0" LONG METAL STORAGE RACK (FOR METAL STOCK) MADE FROM FOUR (4) SINGLE FACED SECTIONS 84" H x 36" W x 24" DEEP AND ONE (1) SINGLE FACED END RACK
	EQ	1063 1083	
613	BG	LM101	48" W x 24" D x 108" H PLYWOOD STORAGE RACK
614	BG	TM12C	62" W x 22" D x 84" H METAL TOOL STORAGE CABINET WITH TWO HINGED DOORS ABOVE AND TWO (2) HINGED DOORS BELOW
	H	5565-024	
615	CO	10RDW	WOODWORKER VISE WITH 4" x 10" JAW SIZE
	RI	10-W-CD	

MANUFACTURERS LIST

BA - BUILD ALL CORPORATION
N59 W14500 BOROLINK AVE
MENOMONEE FALLS, WISC. 53051

BG - BRIDGEHEAD AND GARRET
4560 EAST 71ST STREET
CLEVELAND, OHIO 44105

BAL - BALDOR ELECTRIC COMPANY
10330 ROOSEVELT ROAD
WESTCHESTER, ILLINOIS

CO - COLUMBIAN VISE AND MFG. CO
90 THE WARREN GROUP P.O. BOX 68
HIRAM, OHIO 44234

CLEV - CLEVELAND TWIST DRILL CO.
6600 WEST TOUHY
NILES, ILLINOIS

CL - CLAUSING COLCHESTER
630 WEST MONROE
CHICAGO, ILLINOIS

D - DAKE CORPORATION
GRAND HAVEN, MICHIGAN

EQ - EQUIPTO
225 W. HILAND AVE
AURORA, ILLINOIS 60507

G - GRAY MILL CORPORATION
3705 NORTH LINCOLN
CHICAGO, ILLINOIS

H - HOLLOWELL DIV. OF SPS TECH.
TOWNSHIP LINE ROAD
HATFIELD, PENNSYLVANIA 19440

HA - HARPER TRUCKS INC.
P.O. BOX 33
WICHITA, KANSAS

KF - KLEEN-FLO COMPANY
6600 WASHINGTON AVENUE
S. EDEN PRAIRIE, MINN.

LY - LYON METAL PRODUCTS
400 WEST MADISON
CHICAGO, ILLINOIS

LI - LINCOLN ELECTRIC CO
205 BEIMAN STREET
BUFFALO, NEW YORK

MI - MILLER ELECTRIC MFG. CO.
APPLETON, WISCONSIN
54911

M - MARQUETTE MFG. CO
BOX 8720
MILWAUKEE, WISCONSIN

MC - MCMASTER CARR
P.O. BOX 4355
CHICAGO, ILLINOIS

N - NATIONAL MFG. CO.
P.O. BOX 8108
CHARLOTTE, N.C. 28208

PP - PAXTON PATTERSON
3719 WEST 65TH ST.
CHICAGO, ILLINOIS

POL - POLLARD BROTHERS MFG CO
5504 N. NORTHWEST HIGHWAY
CHICAGO, ILLINOIS

RO - ROCKWELL INTERNATIONAL
4535 NORTH AVENUE
CHICAGO, ILLINOIS

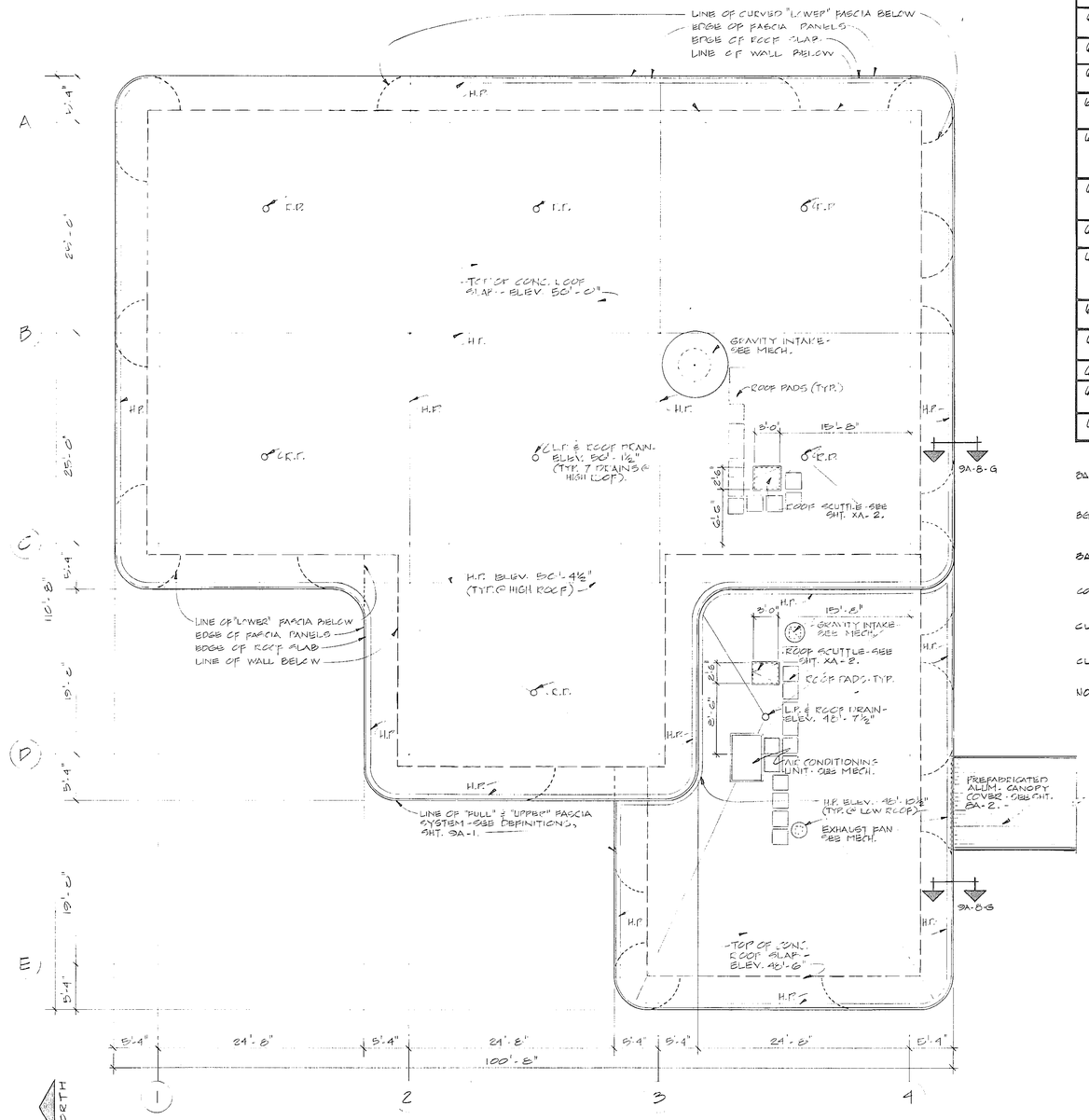
RI - THE RIGID TOOL COMPANY
400 CLARK STREET
ELYRIA, OHIO

SE - SETCO INDUSTRIES
5880 HILLSIDE AVENUE
CINCINNATI, OHIO

TU - TURNER INDUSTRIAL PRODUCTS
SYCAMORE, ILLINOIS

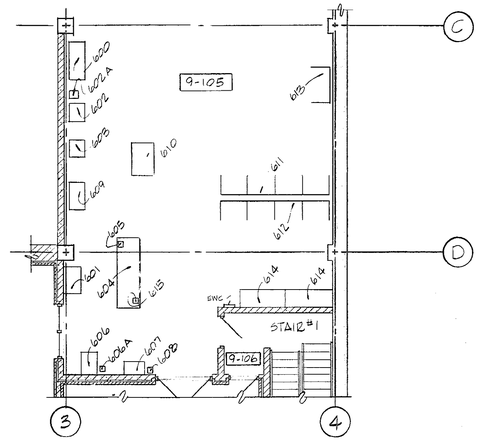
W - K.R. WILSON
ARCADE, NEW YORK

NOTE: PRODUCTS LISTED IN SHOP EQUIPMENT SCHEDULE MAY BE SELECTED FROM OTHER SUPPLIERS OR MANUFACTURERS OF EQUIVALENT QUALITY



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

NOTE: L.P. = LOW POINT
H.P. = HIGH POINT = TOP ELEVATION OF TAPERED RIGID ROOF INSULATION



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

51-003-097

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED CJB
DRAWN MED
CHECKED ROM
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

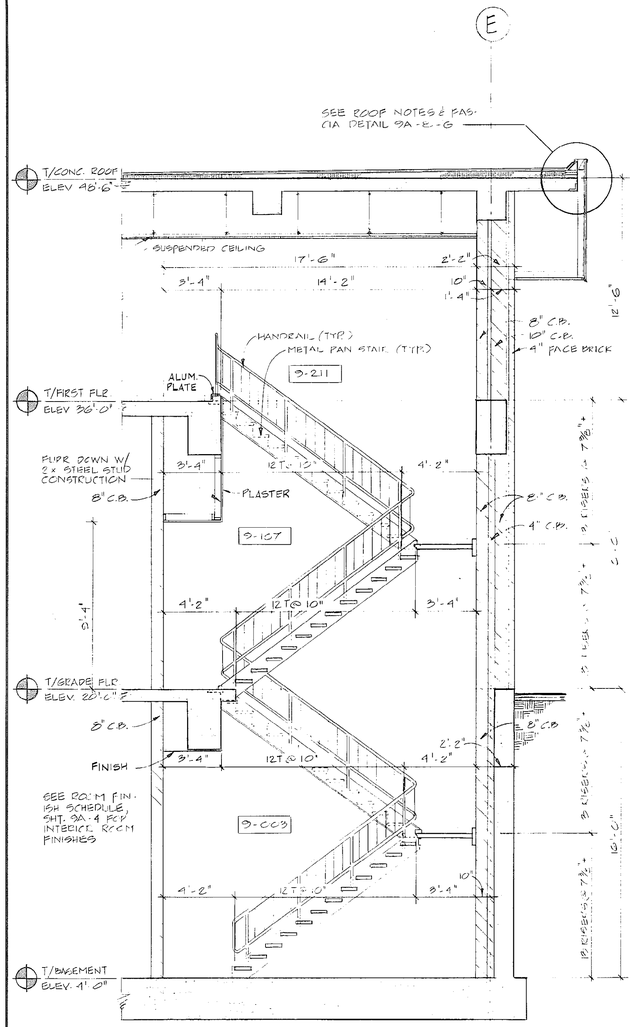
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
AS NOTED

PROCESS CENTER
ROOF PLAN & SHOP PLAN

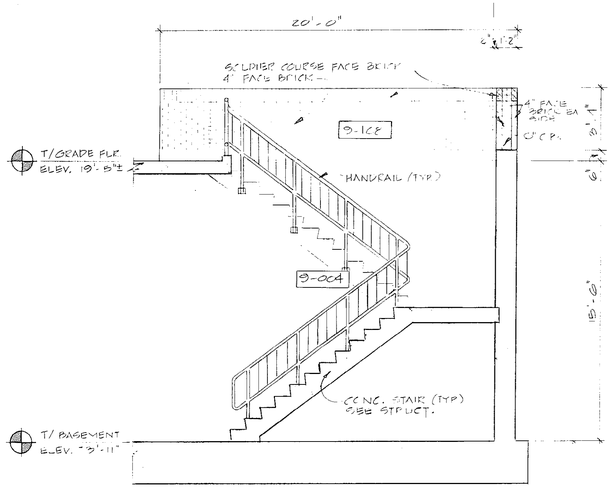
SHEET 9A-7
OF SHEETS
PROJECT NO. 78284

51-003-097 S RECORD



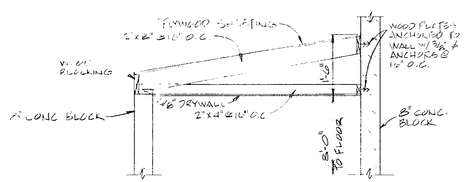
STAIR NO. 1
SECTION 9A-8-A

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



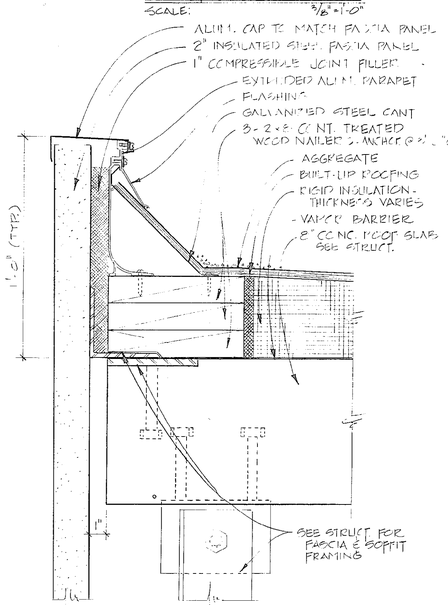
STAIR NO. 2
SECTION 9A-8-B

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



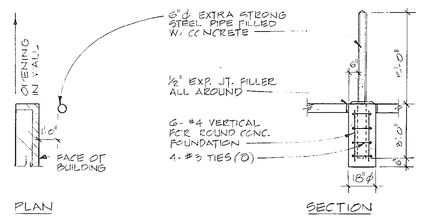
SECTION 9A-8-C

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



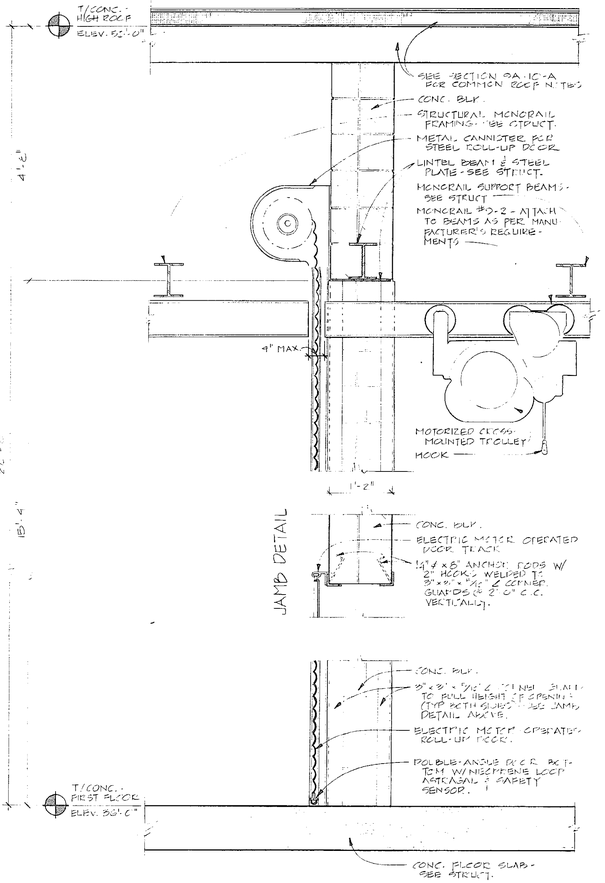
DETAIL 9A-8-G

SCALE: 3" = 1'-0"



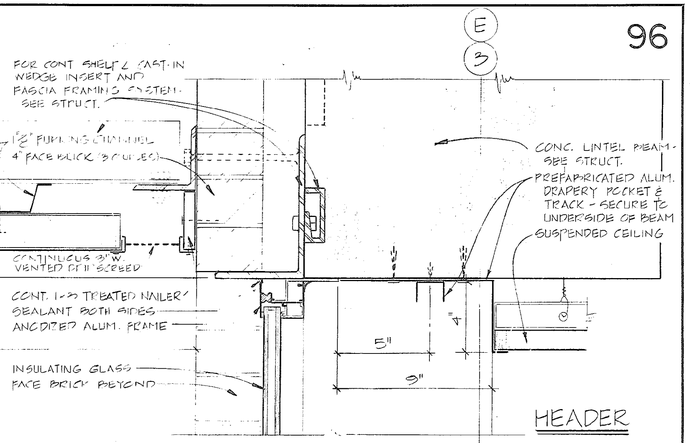
TYPICAL TRUCK BUMPER
DETAIL 9A-8-H

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



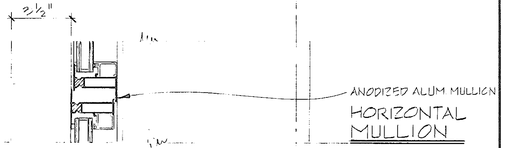
INTERIOR MOTOR-OPERATED ROLL-UP DOOR
DETAIL 9A-8-F

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



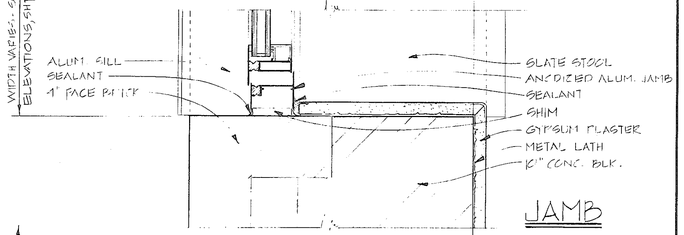
DETAIL 9A-8-B

SCALE: 3" = 1'-0"



DETAIL 9A-8-C

SCALE: 1" = 1'-0"



DETAIL 9A-8-D

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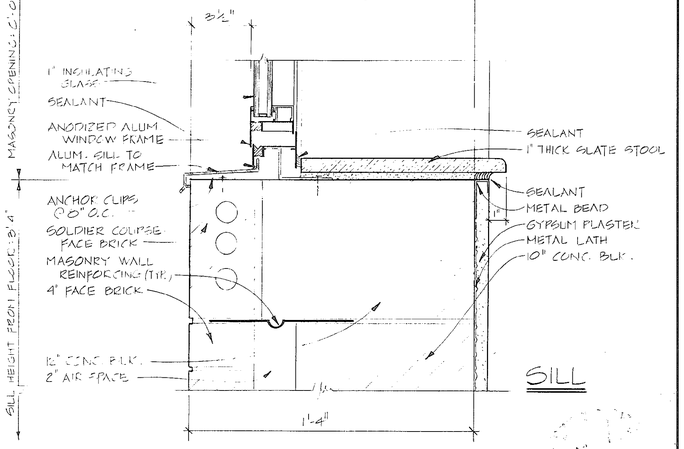


DETAIL 9A-8-E

SCALE: 3" = 1'-0"

51-003-098

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED CJB
DRAWN MED
CHECKED ROM
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

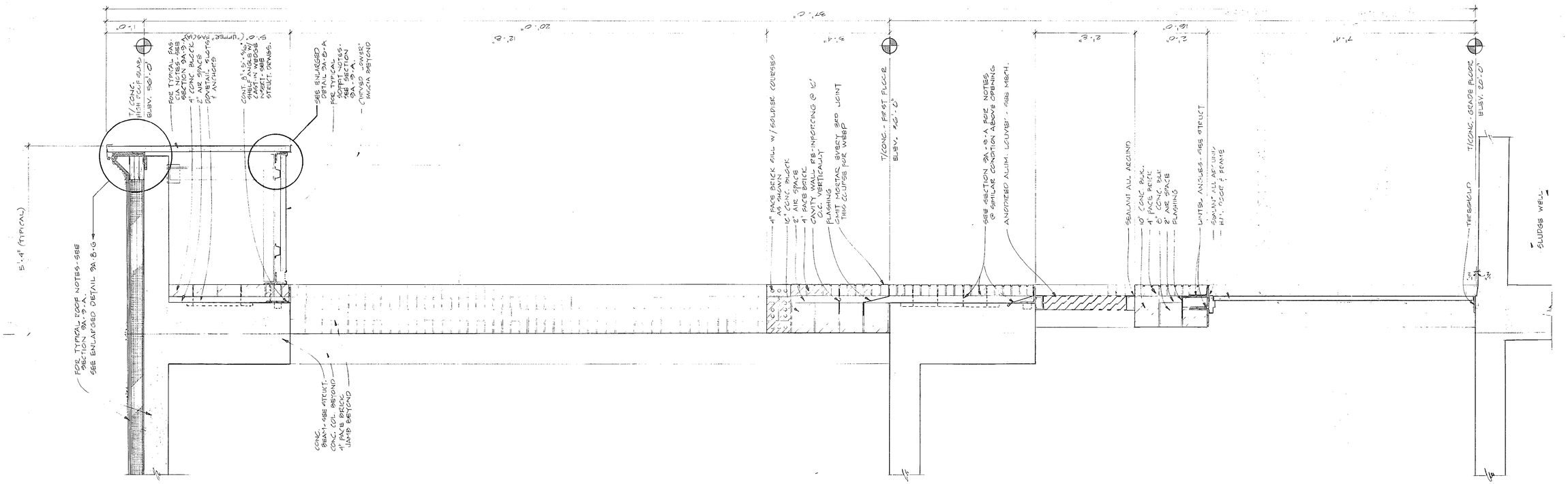
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

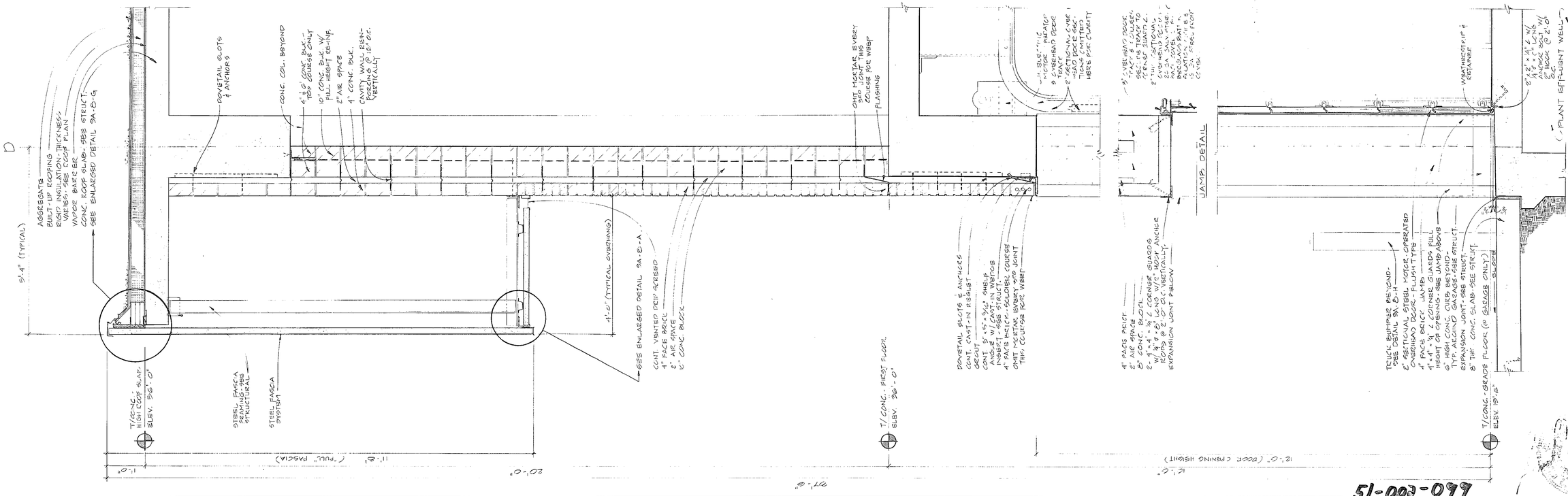
SCALE AS NOTED

PROCESS CENTER
STAIR SECTIONS & DETAILS

SHEET 9A-8
OF SHEETS
PROJECT NO. 78284

RECORD





51-003-099

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DRAWN MED
CHECKED ROM
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

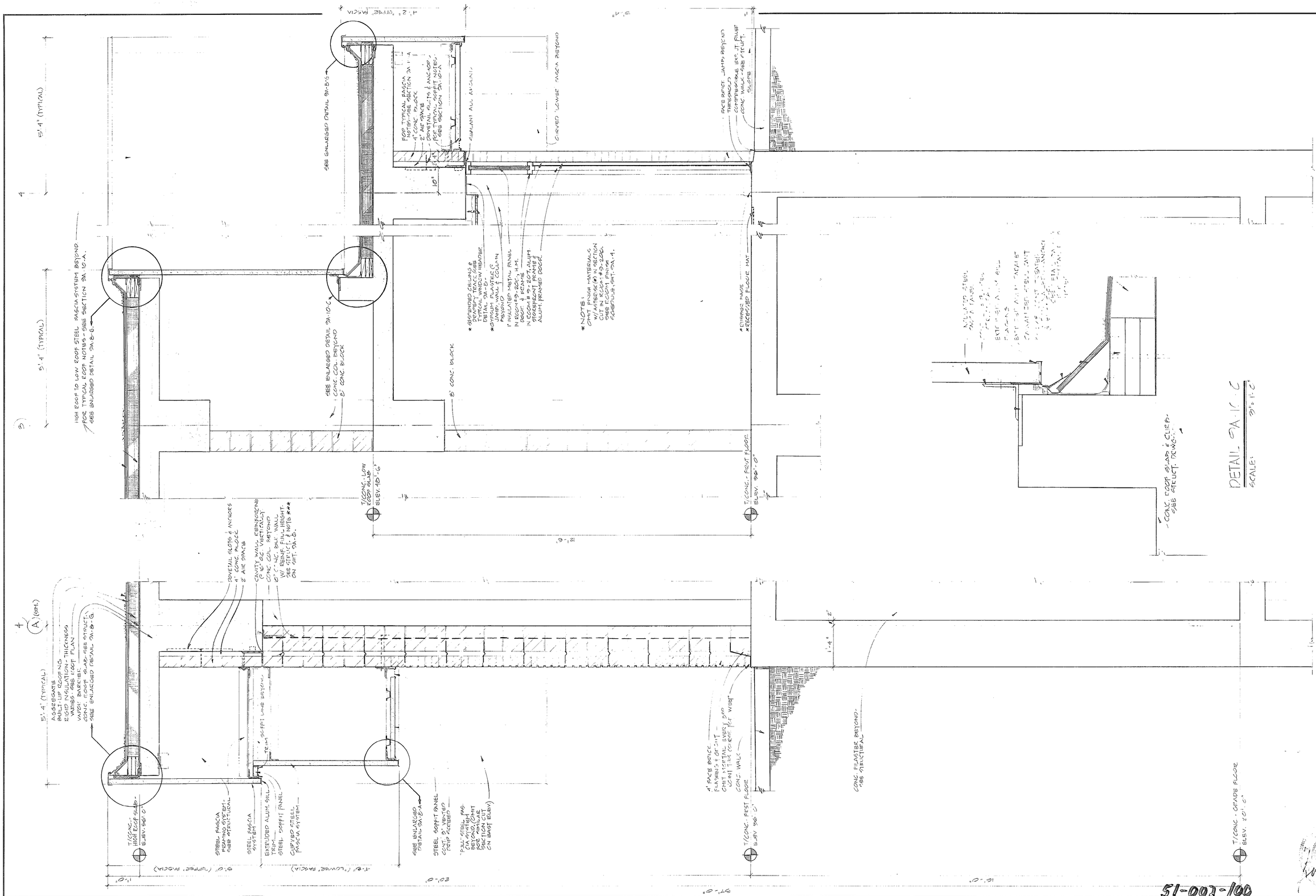
SCALE AS NOTED

PROCESS CENTER
WALL SECTIONS

SHEET 9A-9
OF SHEETS
PROJECT NO. 78284

51-003-099 5

RECORD



NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED CJB
DRAWN MED
CHECKED ROM
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
AS NOTED

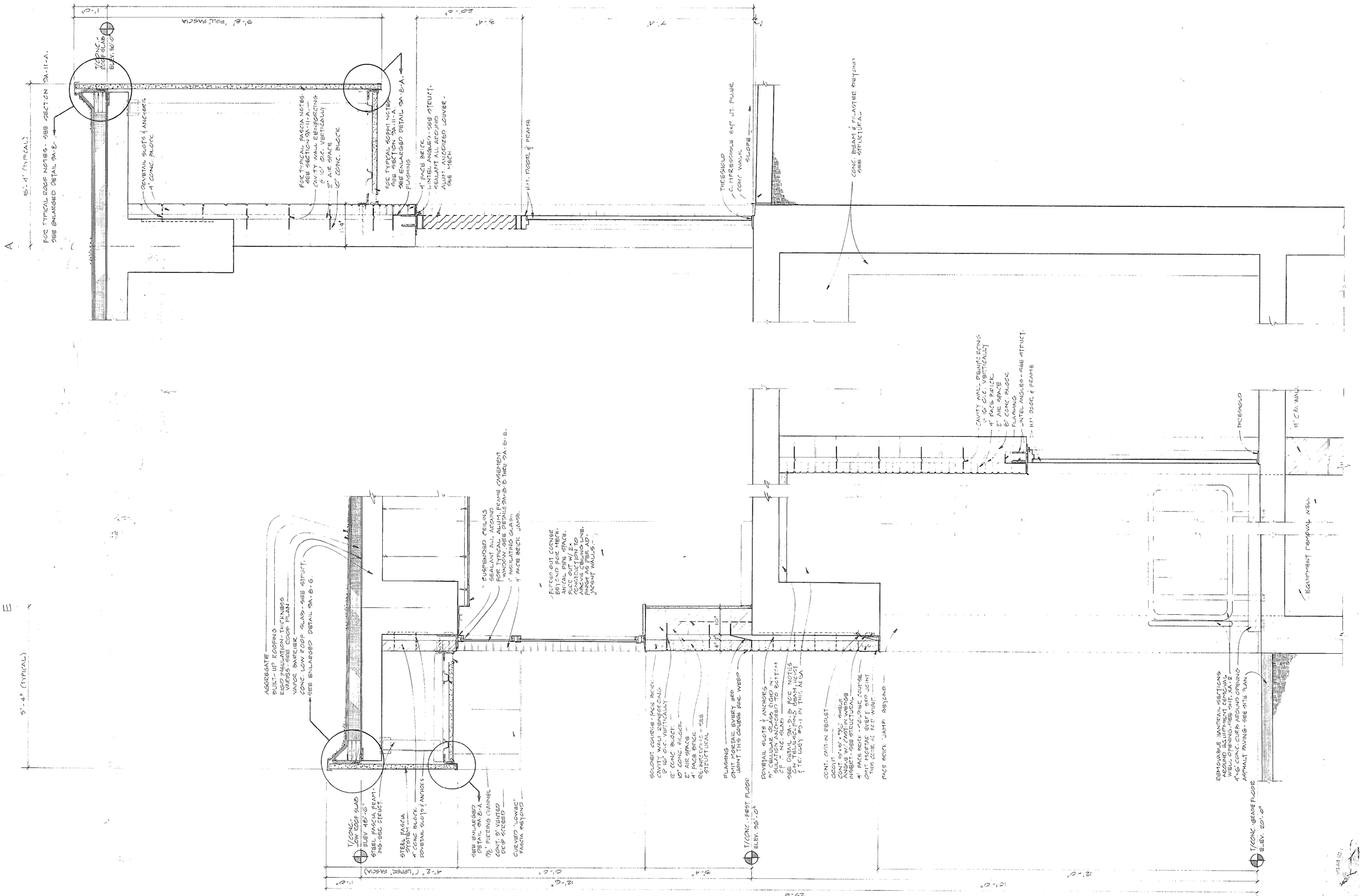
PROCESS CENTER
WALL SECTIONS

SHEET 9A-10
OF SHEETS
PROJECT NO. 78284

51-003-100

51-400-5

RECORD



51-002-101

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED CJB
DRAWN MED
CHECKED ROM
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

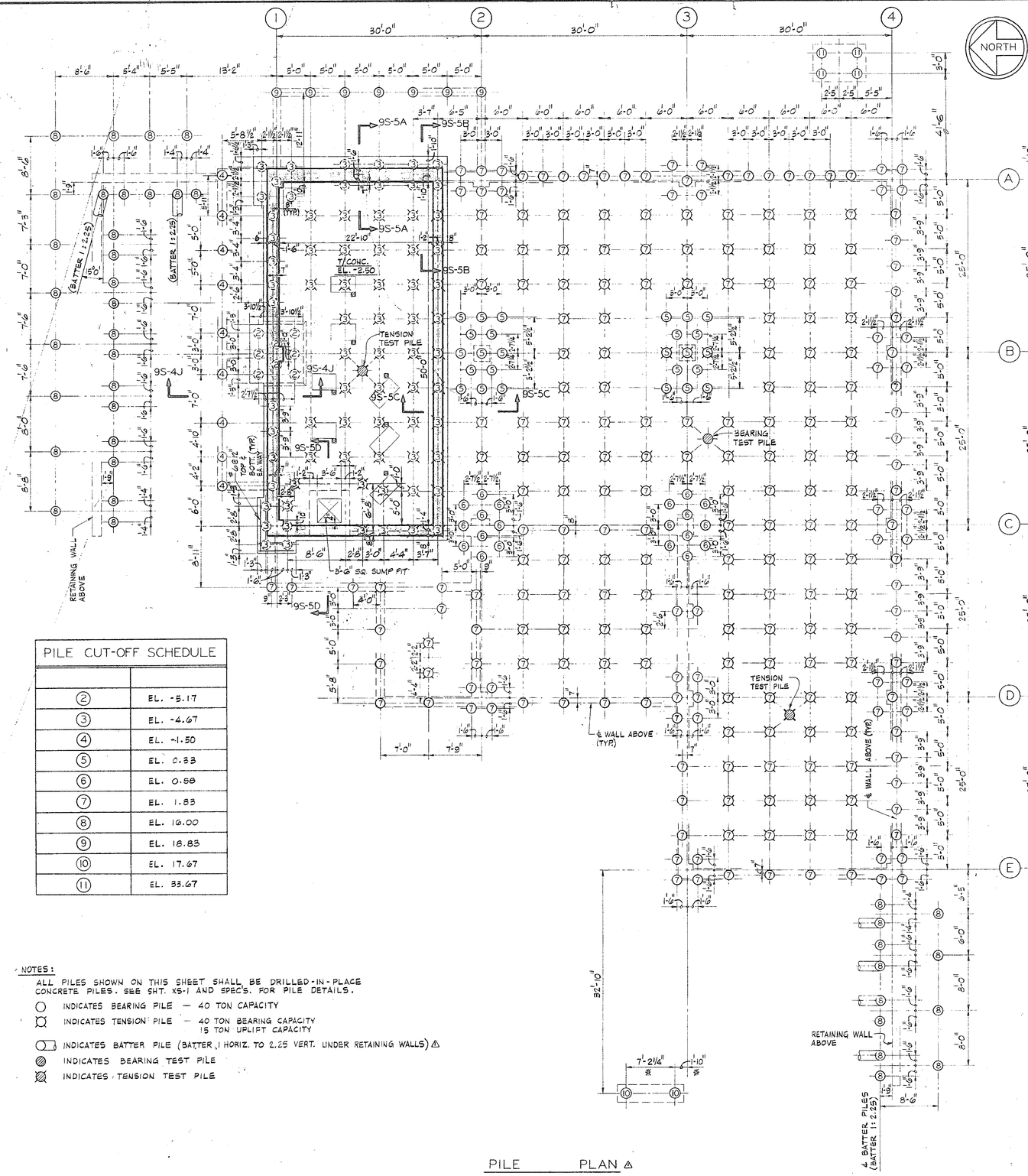
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
AS NOTED

PROCESS CENTER
WALL SECTIONS

SHEET 9A-11
OF SHEETS
PROJECT NO. 78284

AS RECORD



PILE CUT-OFF SCHEDULE	
②	EL. -5.17
③	EL. -4.67
④	EL. -1.50
⑤	EL. 0.33
⑥	EL. 0.50
⑦	EL. 1.83
⑧	EL. 16.00
⑨	EL. 18.83
⑩	EL. 17.67
⑪	EL. 33.67

NOTES:

ALL PILES SHOWN ON THIS SHEET SHALL BE DRILLED-IN-PLACE CONCRETE PILES. SEE SHT. XS-1 AND SPEC'S. FOR PILE DETAILS.

- ○ INDICATES BEARING PILE — 40 TON CAPACITY
- ⊠ INDICATES TENSION PILE — 40 TON BEARING CAPACITY, 15 TON UPLIFT CAPACITY
- INDICATES BATTER PILE (BATTER 1 HORIZ. TO 2.25 VERT. UNDER RETAINING WALLS) ⚠
- ▨ INDICATES BEARING TEST PILE
- ⊠ INDICATES TENSION TEST PILE

PILE PLAN ⚠

NOTES:

⚠ 1. EXCAVATE EXISTING SOIL ON WEST AND NORTH SIDE AT AN ANGLE OF 30°0' TO HORIZONTAL AND BACKFILL WITH ENGINEER APPROVED MATERIAL. SEE SPEC'S. FOR COMPACTION.

⚠ 2. DO NOT PLACE BACKFILL UNTIL CONCRETE IN GRADE FLOOR SLABS HAS ATTAINED 28 DAY COMPRESSIVE STRENGTH OF 3,000 P.S.I.

BASEMENT PLAN

51-003-102

NO.	DATE	DESCRIPTION	APPROVED
⚠	11-20-81	REVISION DUE TO ELIMINATION OF BATTERED PILES	S.L.M.

REVISIONS

DESIGNED J.S./H.R.
DRAWN R.W.H.
CHECKED J.S.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

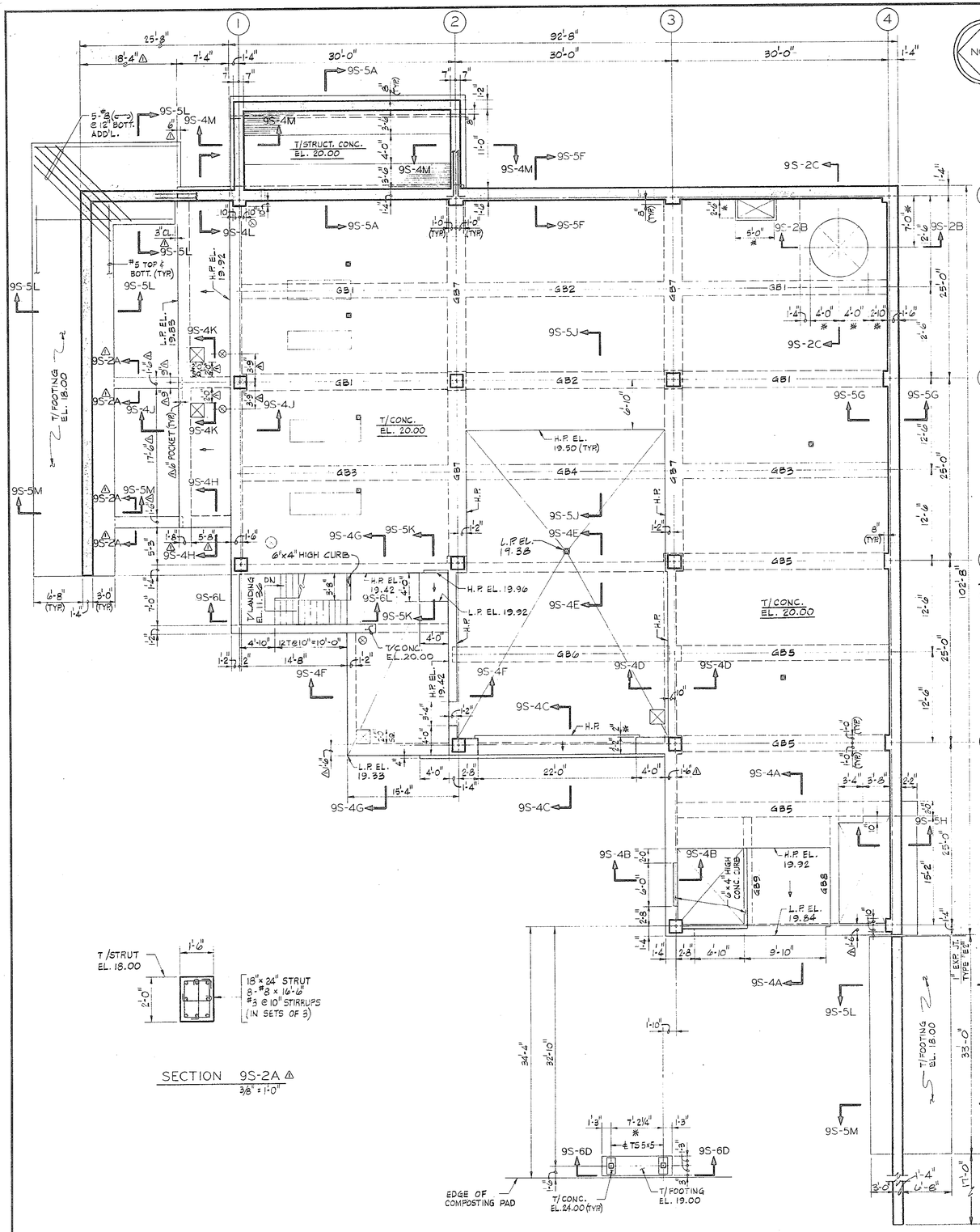
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/8" = 1'-0"

PROCESS CENTER
PILE AND BASEMENT PLANS

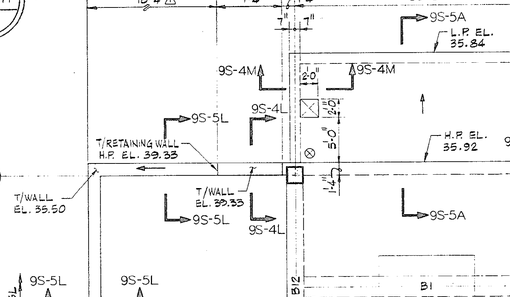
SHEET 9S-1
OF SHEETS
PROJECT NO. 78284

RECORD



GRADE FLOOR PLAN

SECTION 9S-2A ⚠
3/8" = 1'-0"

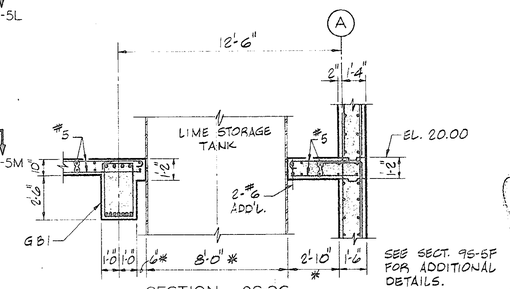


SECTION 9S-2B
1/4" = 1'-0"

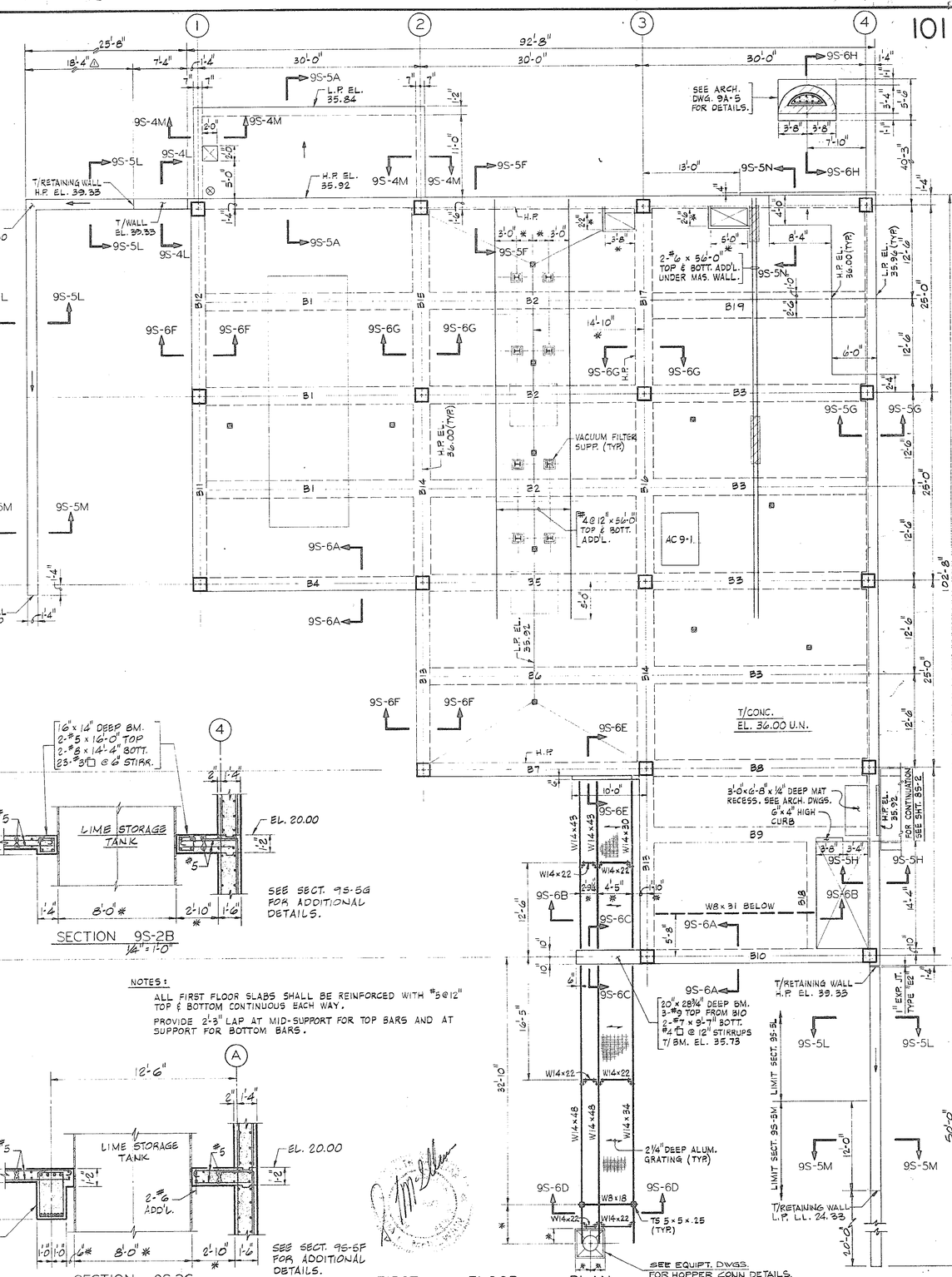
NOTES:

ALL FIRST FLOOR SLABS SHALL BE REINFORCED WITH #5@12" TOP & BOTTOM CONTINUOUS EACH WAY.

PROVIDE 2'-3" LAP AT MID-SUPPORT FOR TOP BARS AND AT SUPPORT FOR BOTTOM BARS.



SECTION 9S-2C
1/4" = 1'-0"



FIRST FLOOR PLAN

51-002-103

NO.	DATE	DESCRIPTION	APPROVED
⚠	11-20-81	REVISION DUE TO ELIMINATION OF BATTERED PILES	S.L.M.

REVISIONS

DESIGNED J.S./H.R.
DRAWN R.W.H.
CHECKED J.S.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

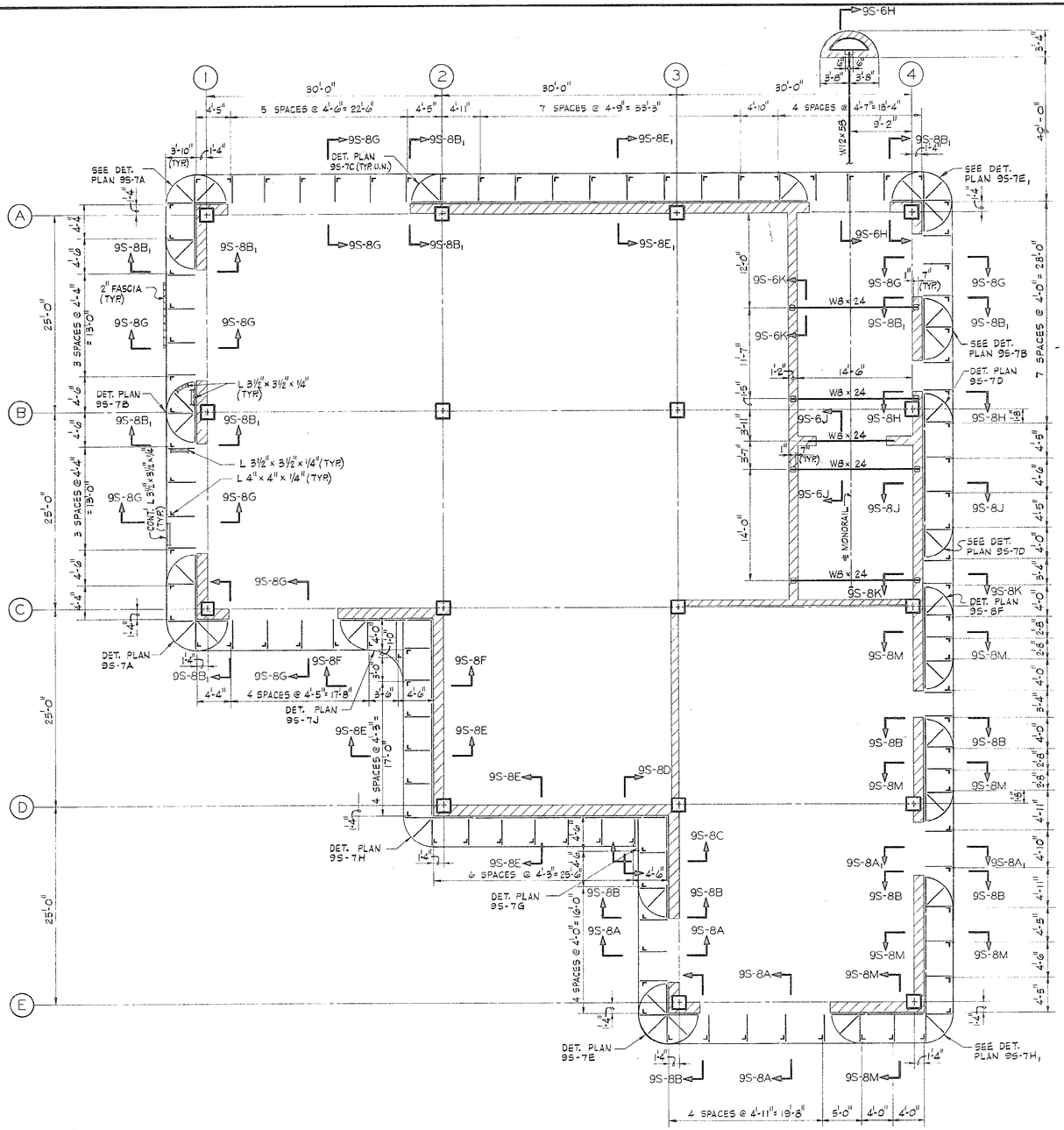
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/8" = 1'-0" U.N.

PROCESS CENTER
GRADE FLOOR AND FIRST FLOOR PLANS

SHEET 9S-2
OF SHEETS
PROJECT NO. 78284

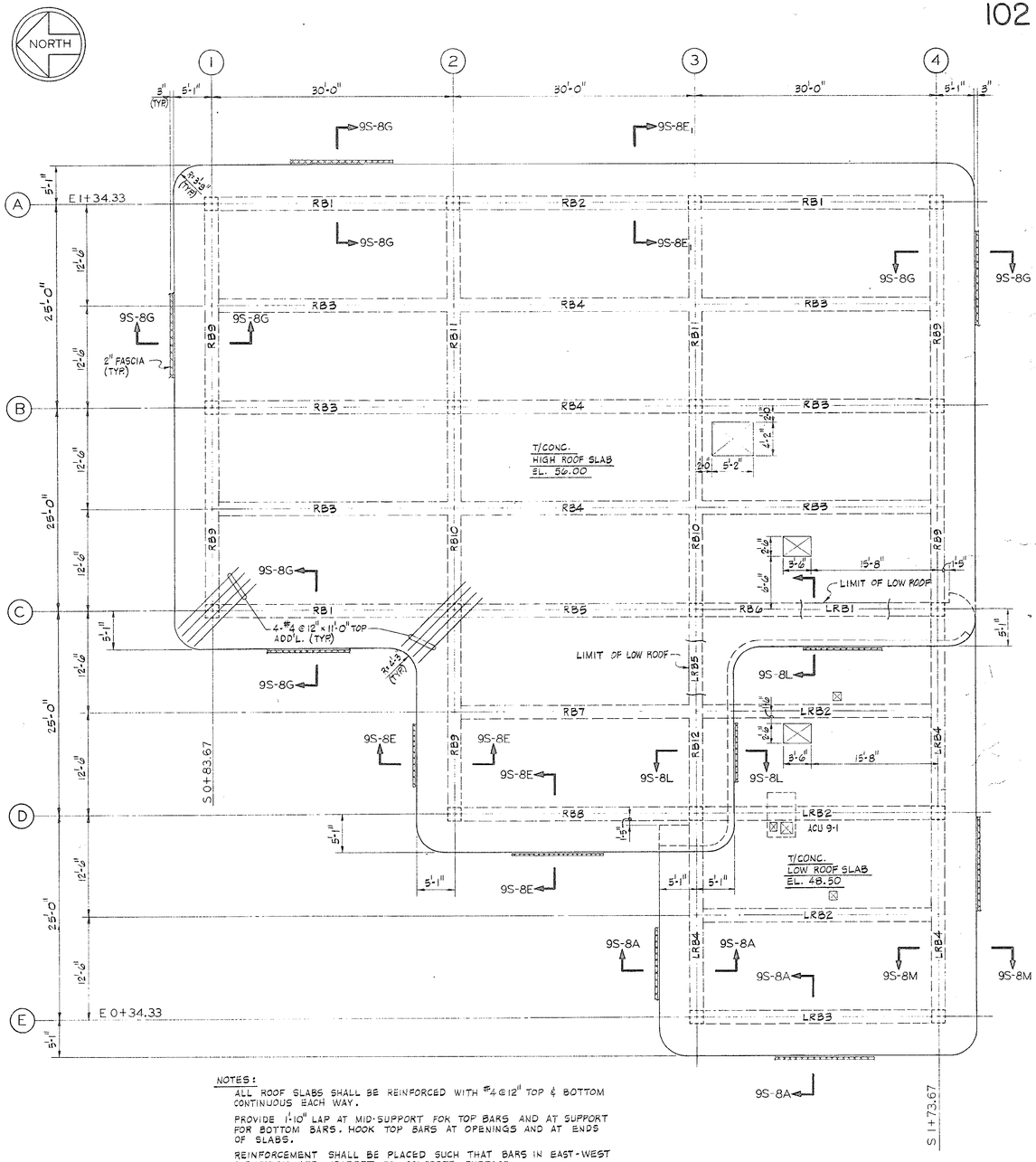
AS BUILT RECORD



FASCIA SUPPORT FRAMING PLAN

ALL LINTELS IN 1'-2" MASONRY WALLS SHALL CONSIST OF ONE ANGLE 6" × 6" × 5/16" AND TWO ANGLES 6" × 3½" × 5/16" (⌊⌊ 6 × 3½) U.N.

ALL LINTELS IN 1'-4" MASONRY WALLS SHALL CONSIST OF ONE ANGLE 6" × 3½" × 5/16" AND TWO ANGLES 6" × 6" × 5/16" (⌊⌊ 6 × 6) U.N.



NOTES:

ALL ROOF SLABS SHALL BE REINFORCED WITH #4 @ 12" TOP & BOTTOM CONTINUOUS EACH WAY.

PROVIDE 1'-10" LAP AT MID-SUPPORT FOR TOP BARS AND AT SUPPORT FOR BOTTOM BARS. HOOK TOP BARS AT OPENINGS AND AT ENDS OF SLABS.

REINFORCEMENT SHALL BE PLACED SUCH THAT BARS IN EAST-WEST DIRECTION ARE NEAREST TO CONCRETE SURFACE.

SEE SHT. XS-1 FOR ADDITIONAL REINFORCING AT OPENINGS.

ROOF FRAMING PLAN

51-003-104

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.S./H.R.
DRAWN R.W.H.
CHECKED J.S.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

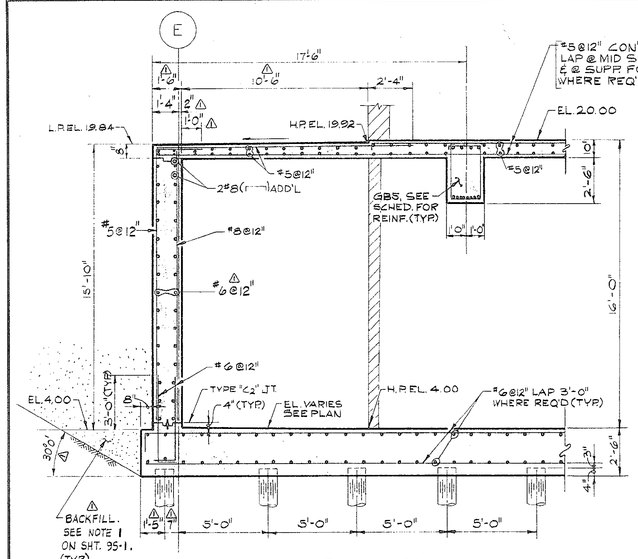
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/8" = 1'-0"

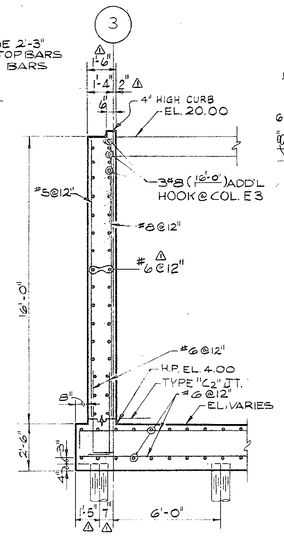
PROCESS CENTER
FASCIA SUPPORT AND ROOF FRAMING PLANS

SHEET 9S-3
OF SHEETS
PROJECT NO. 78284

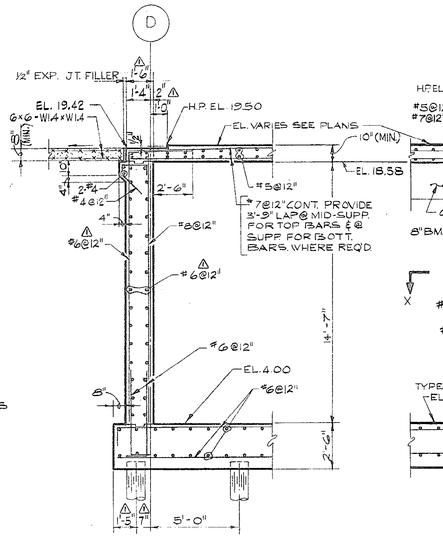
SHADOWS RECORD



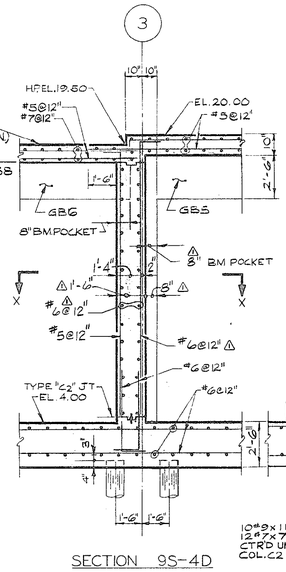
SECTION 9S-4A



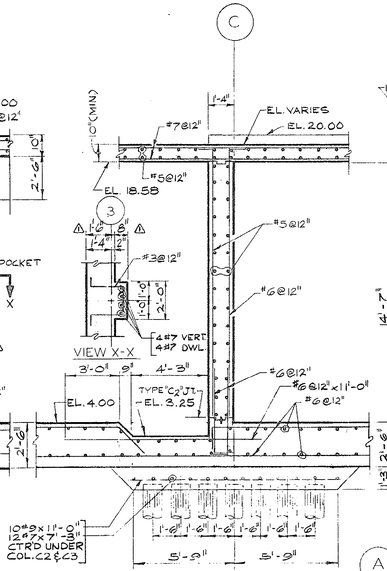
SECTION 9S-4B



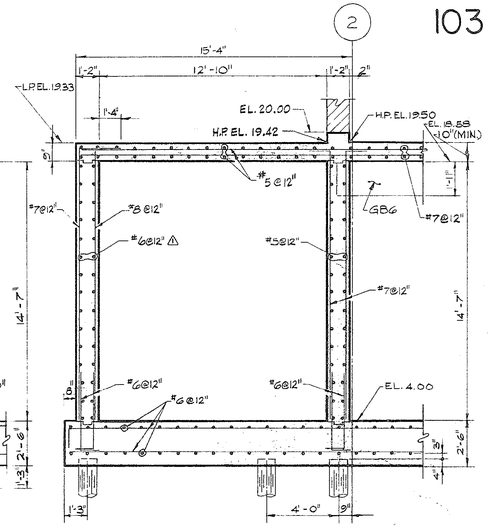
SECTION 9S-4C



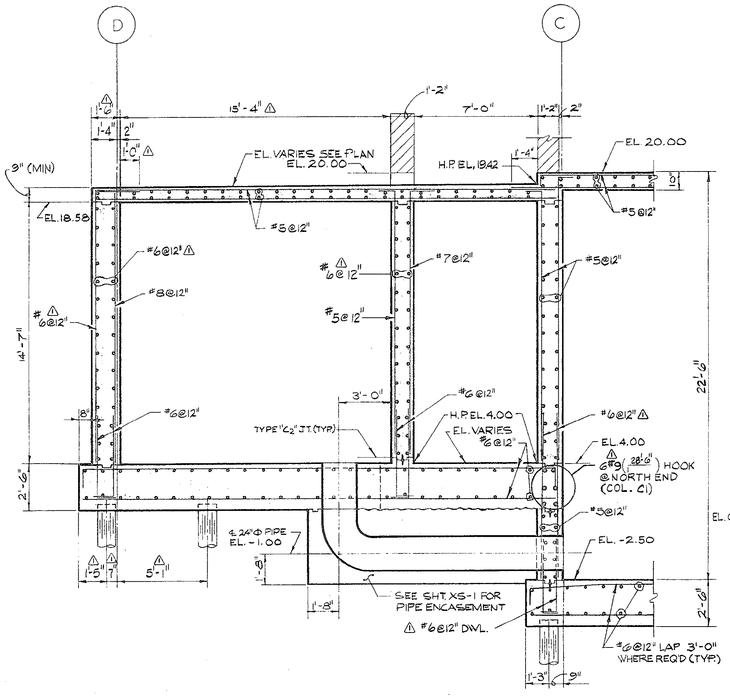
SECTION 9S-4D



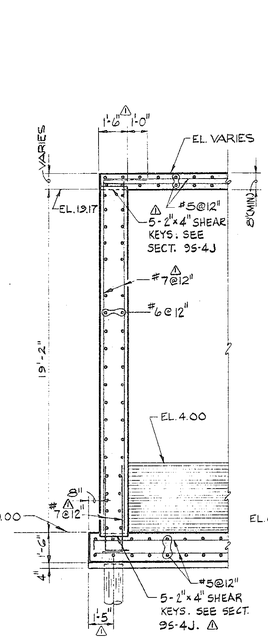
SECTION 9S-4E



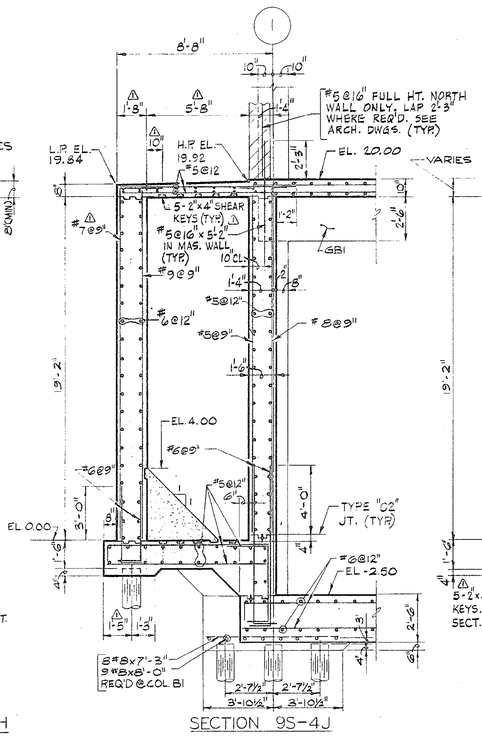
SECTION 9S-4F



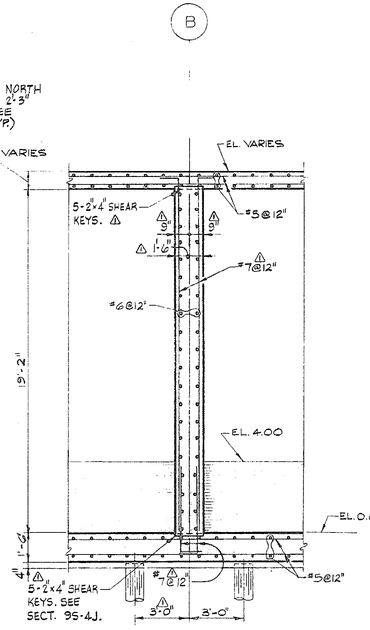
SECTION 9S-4G



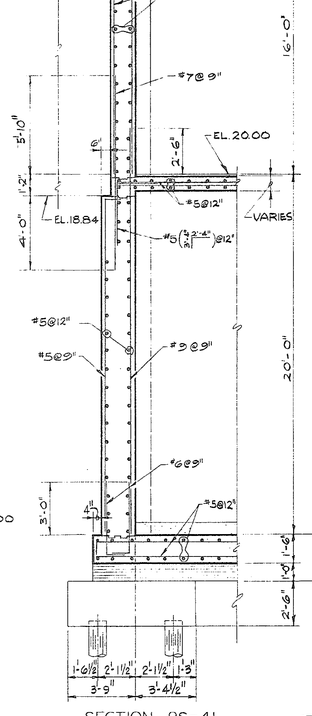
SECTION 9S-4H



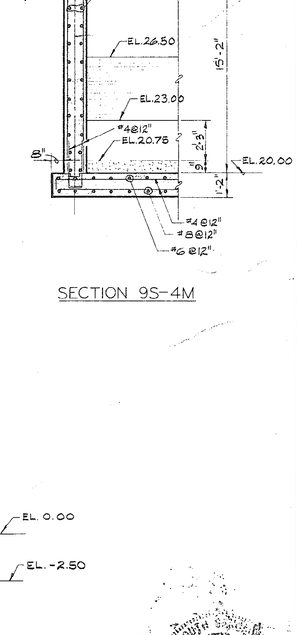
SECTION 9S-4J



SECTION 9S-4K



SECTION 9S-4L



SECTION 9S-4M

NO.	DATE	DESCRIPTION	APPROVED
1	11-20-81	REVISION DUE TO ELIMINATION OF BATTERED PILES	S.L.M.

REVISIONS

DESIGNED J.S./H.R.
DRAWN R.K.
CHECKED J.S.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

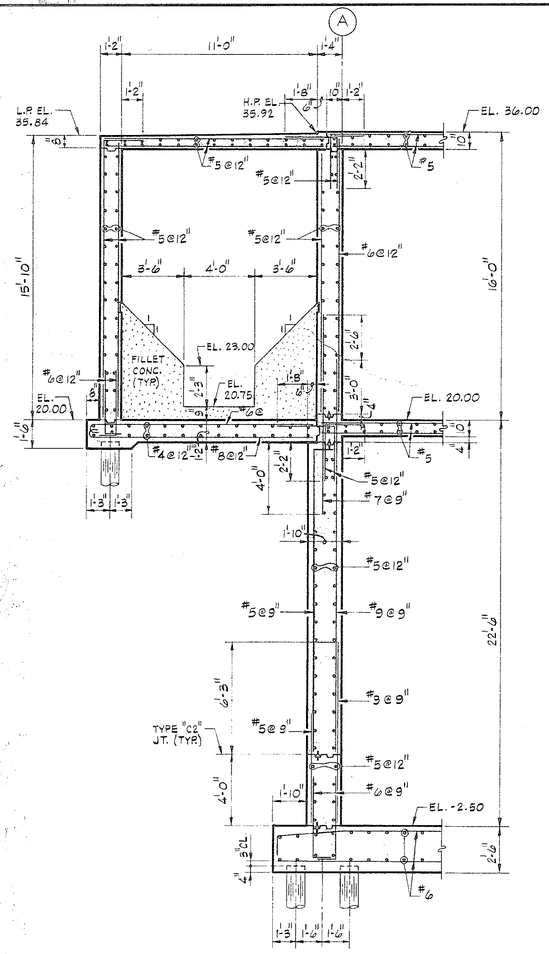
SCALE
1/4" = 1'-0"

PROCESS CENTER
SECTIONS

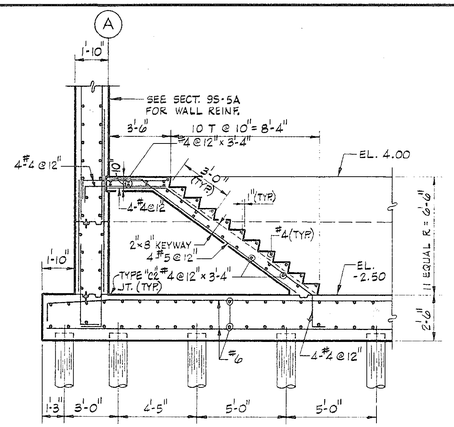
SHEET 9S-4
OF SHEETS
PROJECT NO. 78284

51-D02-105

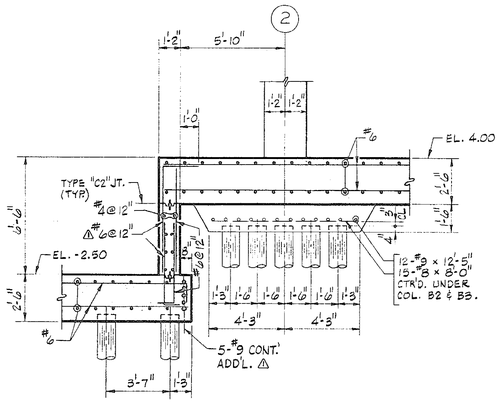
STAMP 5 RECORD



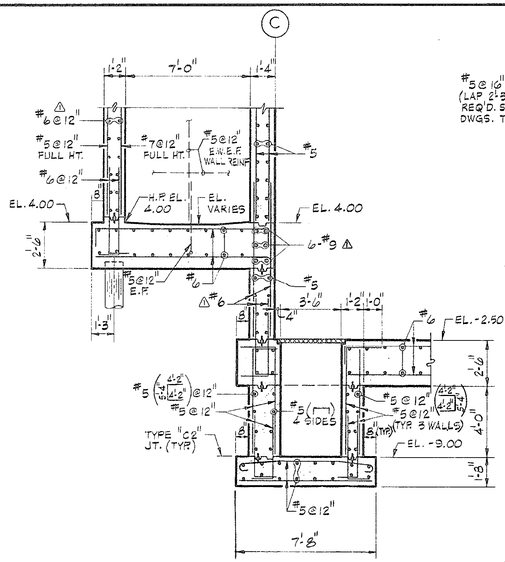
SECTION 9S-5A



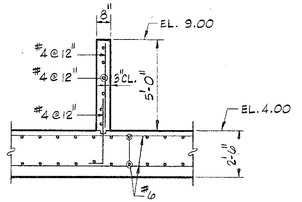
SECTION 9S-5B



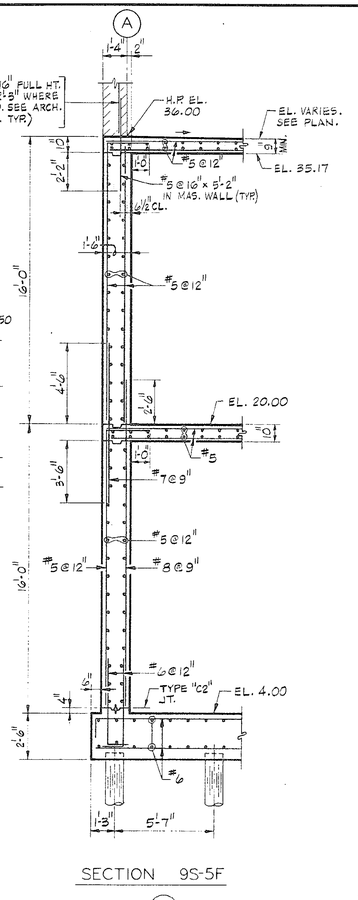
SECTION 9S-5C



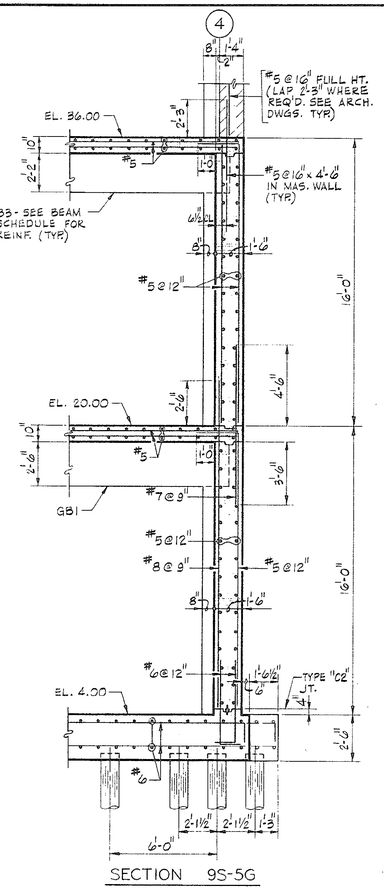
SECTION 9S-5D



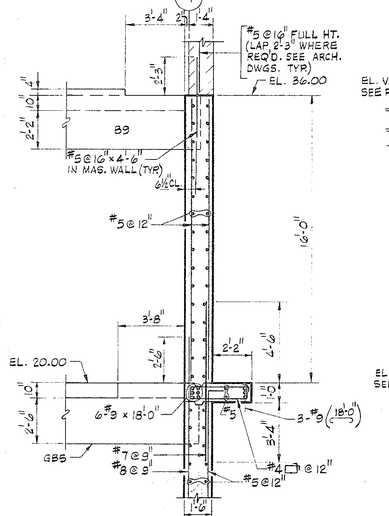
SECTION 9S-5E (TYP.)



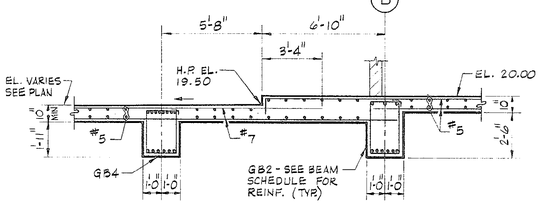
SECTION 9S-5F



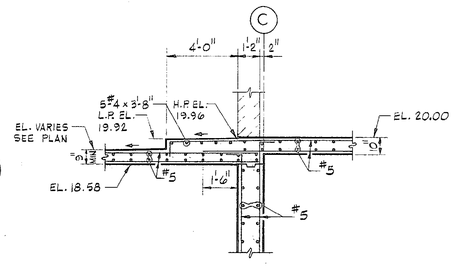
SECTION 9S-5G



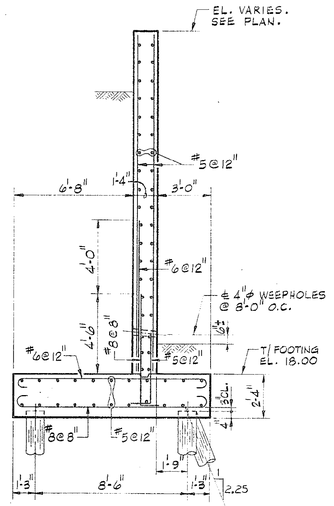
SECTION 9S-5H



SECTION 9S-5J



SECTION 9S-5K



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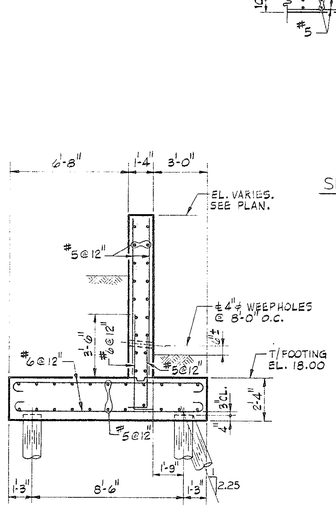
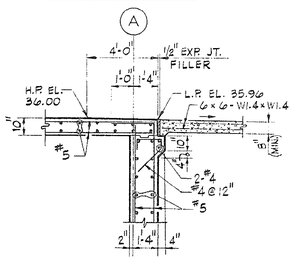


SECTION 9S-5M



SECTION 9S-5N

NO.	DATE	DESCRIPTION	APPROVED
Δ	11-20-81	REVISION DUE TO ELIMINATION OF BATTERED PILES	S.L.M.

REVISIONS

DESIGNED J.S./H.R.
DRAWN R.W.H.
CHECKED J.S.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

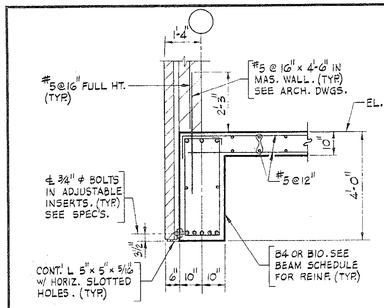
SCALE
¼" = 1'-0"

PROCESS CENTER SECTIONS

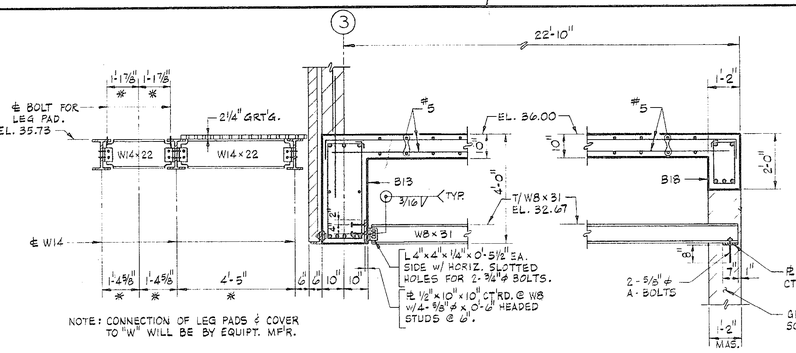
SHEET 9S-5
OF SHEETS
PROJECT NO. 78284

51-002-106

RECORD

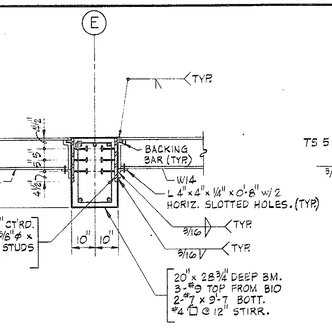


SECTION 9S-6A

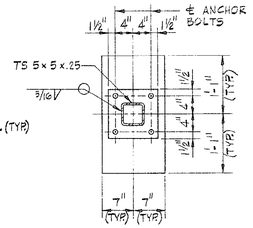


NOTE: CONNECTION OF LEG PADS & COVER TO "W" WILL BE BY EQUIPT. MF'R.

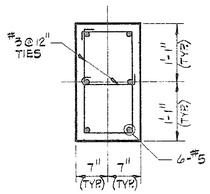
SECTION 9S-6B



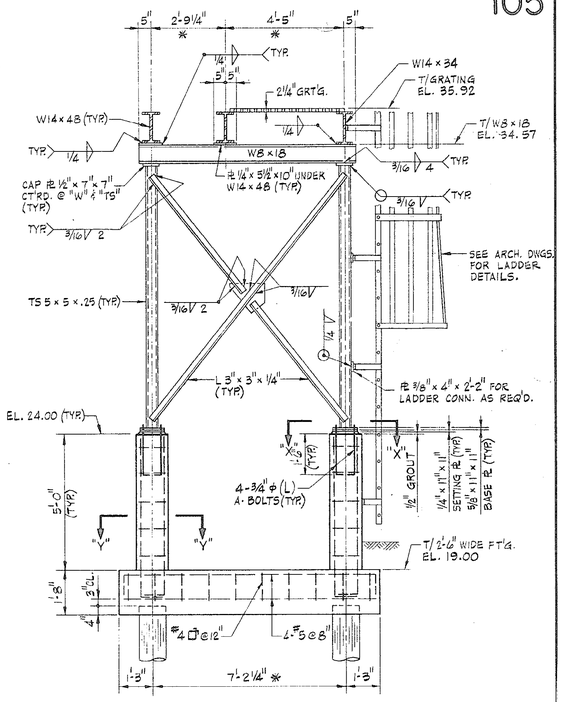
SECTION 9S-6C



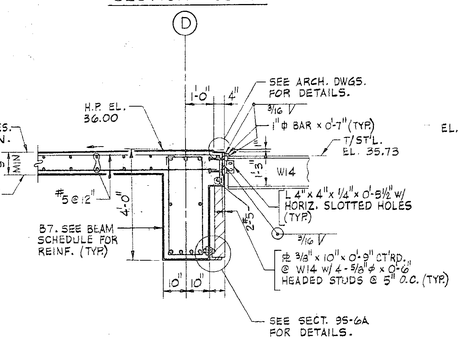
VIEW "X-X" (TYP.)
3/4" = 1'-0"



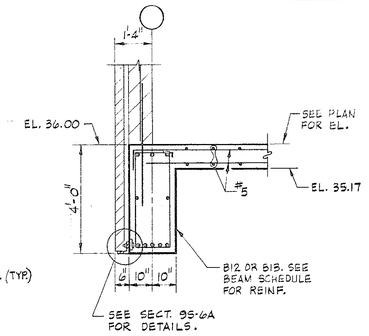
VIEW "Y-Y" (TYP)
3/4" = 1'-0"



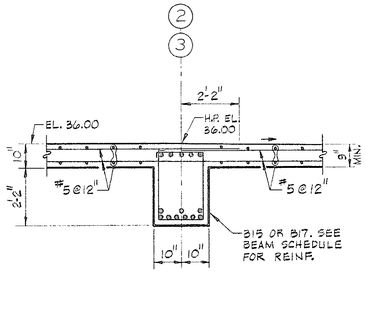
SECTION 9S-6D



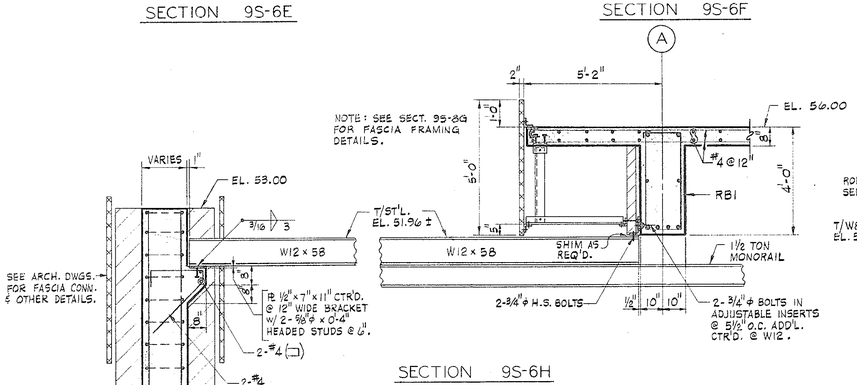
SECTION 9S-6E



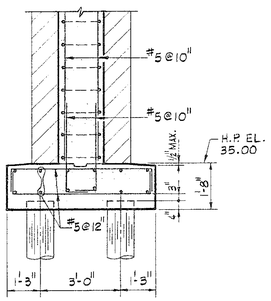
SECTION 9S-6F

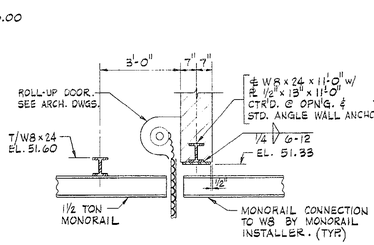


SECTION 9S-6G

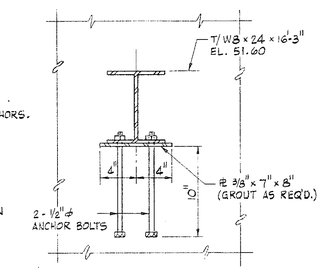


SECTION 9S-6H

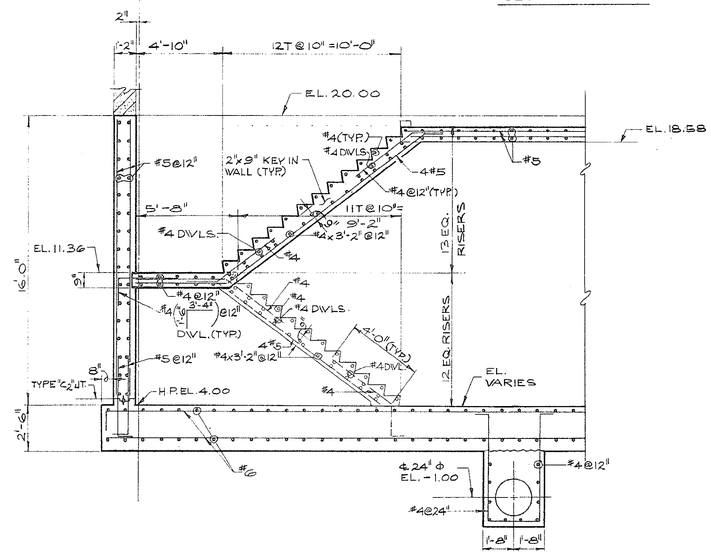




SECTION 9S-6J



SECTION 9S-6K
(TYP. EA END, 4 BEAMS)
1 1/2" = 1'-0"



SECTION 9S-6L
1/4" = 1'-0"

51-003-107

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.S.
DRAWN R.W.H.
CHECKED J.S.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

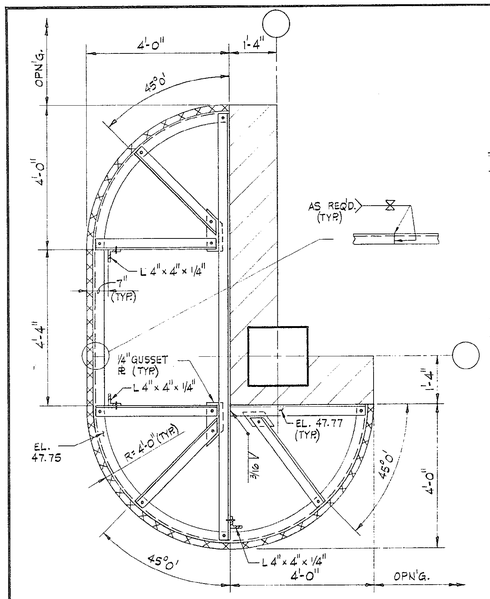
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
3/8" = 1'-0" U.N.

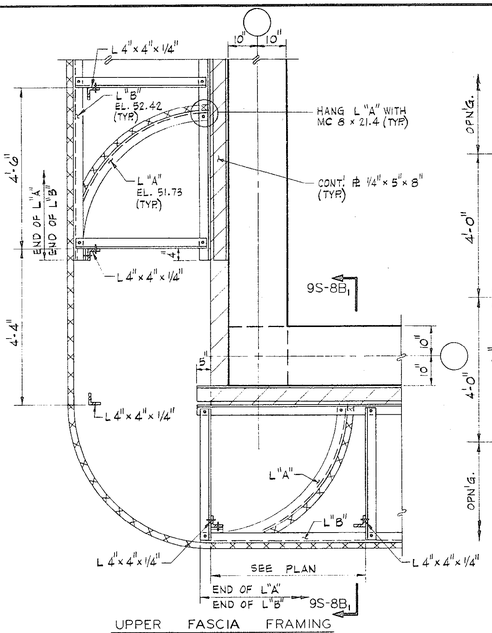
PROCESS CENTER SECTIONS

SHEET 9S-6
OF SHEETS
PROJECT NO. 78284

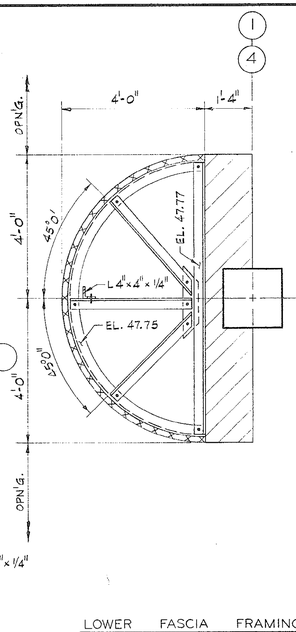
AS RECORD



LOWER FASCIA FRAMING



UPPER FASCIA FRAMING



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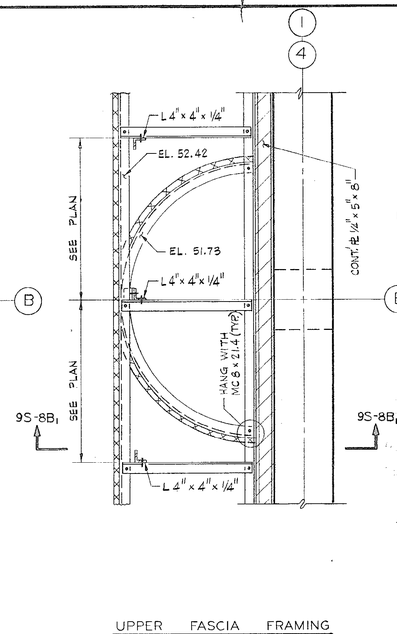

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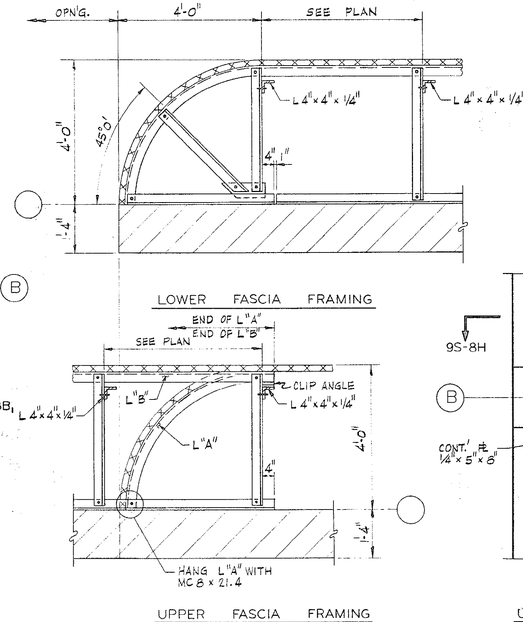
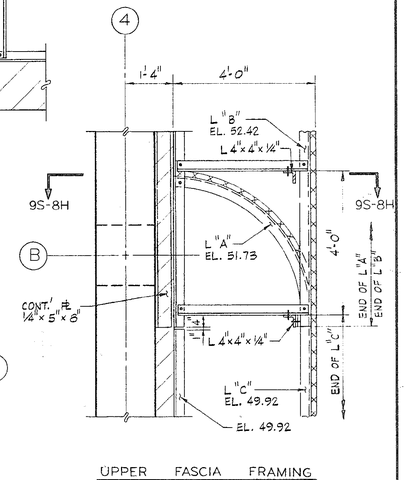


LOWER FASCIA FRAMING

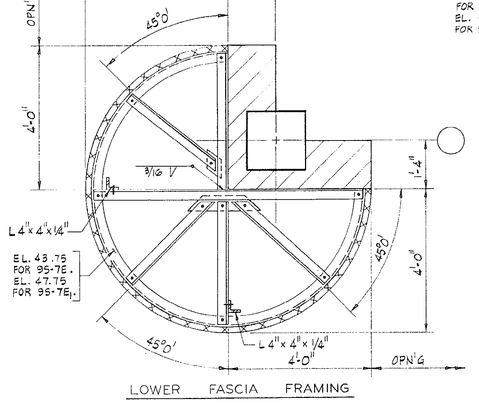
UPPER FASCIA FRAMING



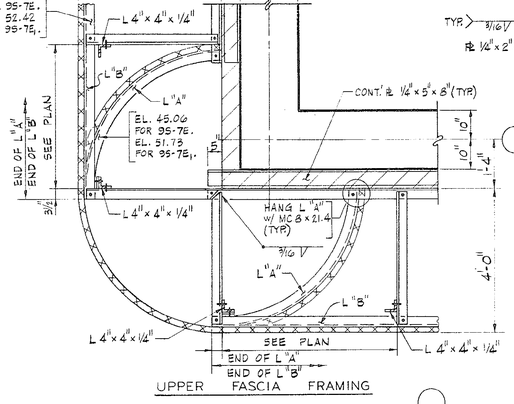
UPPER FASCIA FRAMING

NOTE: SEE DETAIL PLAN 9S-7C FOR LOWER FASCIA FRAMING.

DETAIL PLAN 9S-7A

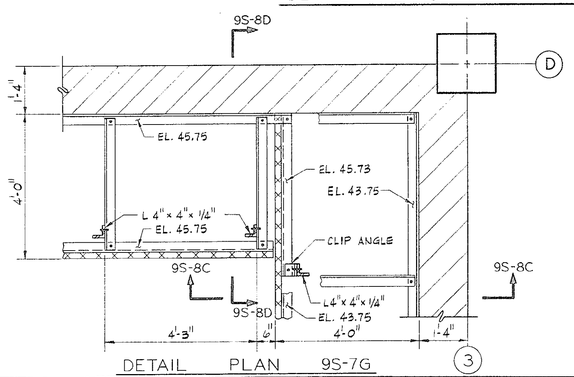


LOWER FASCIA FRAMING

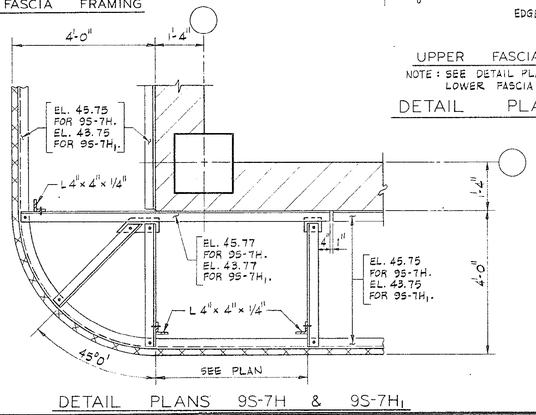


UPPER FASCIA FRAMING

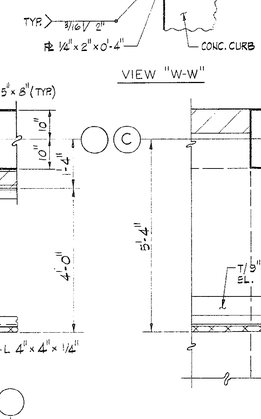
DETAIL PLANS 9S-7E & 9S-7E1



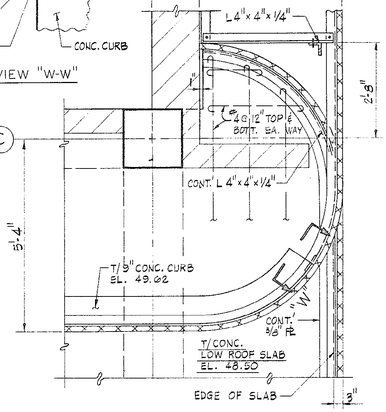
DETAIL PLAN 9S-7G



DETAIL PLANS 9S-7H & 9S-7H1



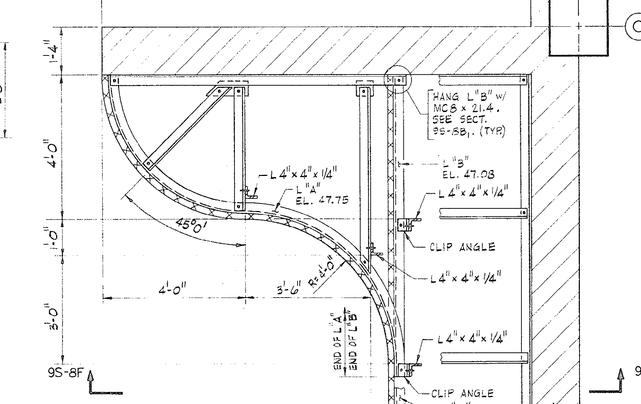
VIEW "W-W"



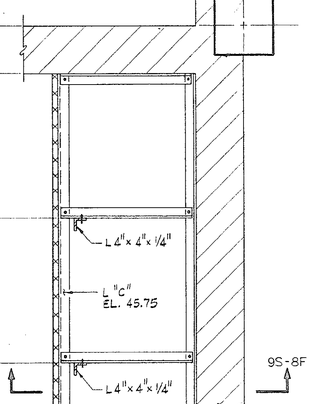
UPPER FASCIA FRAMING

NOTE: SEE DETAIL PLAN 9S-7C FOR LOWER FASCIA FRAMING.

DETAIL PLAN 9S-7B



VIEW "X-X"

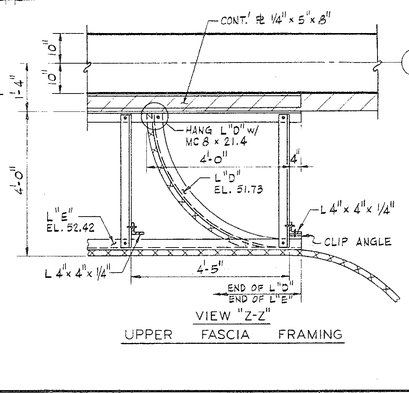


VIEW "Y-Y"

LOWER FASCIA FRAMING

DETAIL PLAN 9S-7C(TYP.)

DETAIL PLAN 9S-7D



VIEW "Z-Z"

UPPER FASCIA FRAMING

NOTE: ALL ANGLES SHOWN ON THIS SHEET ARE L 3 1/2" x 3 1/2" x 1/4" UNLESS OTHERWISE NOTED.

DETAIL PLAN 9S-7J

51-003-108

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.S.
DRAWN R.W.H.
CHECKED J.S.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

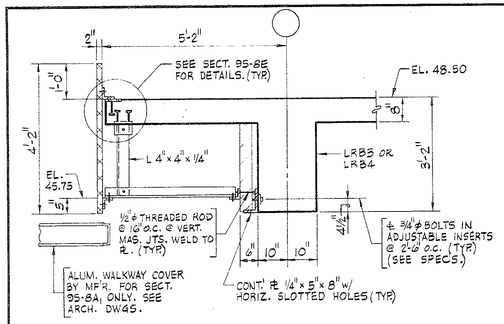
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/2" = 1'-0"

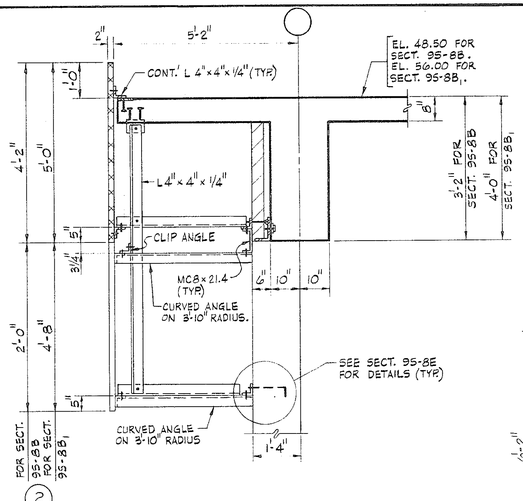
PROCESS CENTER
FASCIA FRAMING DETAILS

SHEET 9S-7
OF SHEETS
PROJECT NO. 78284

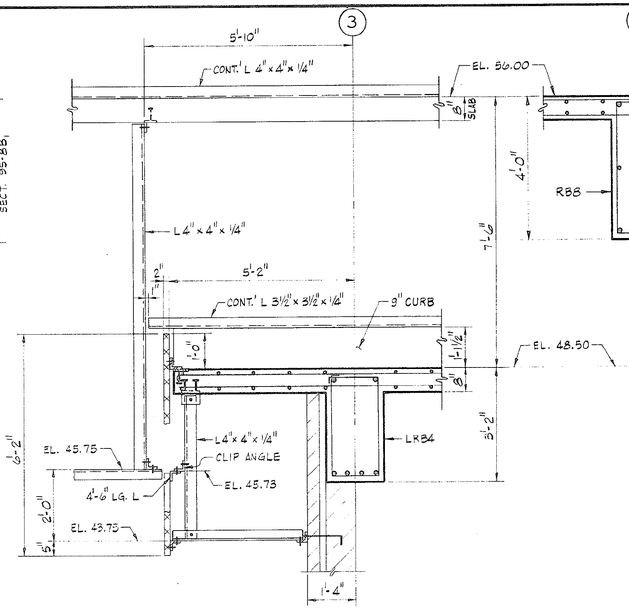
51-003-108 S RECORD



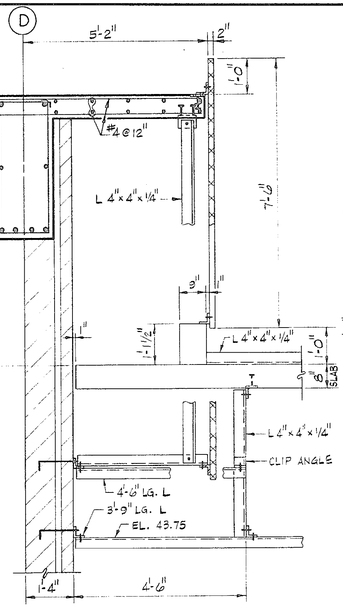
SECTION 9S-8A
SECTION 9S-8A1



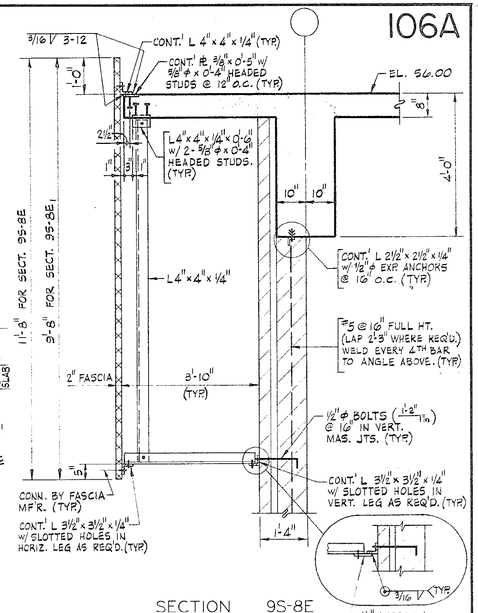
SECTION 9S-8B
SECTION 9S-8B1



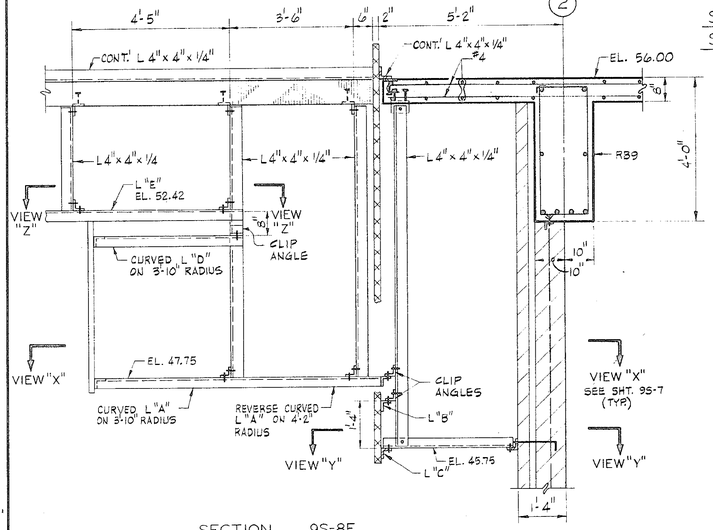
SECTION 9S-8C



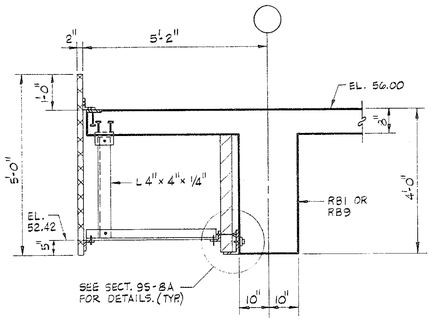
SECTION 9S-8D



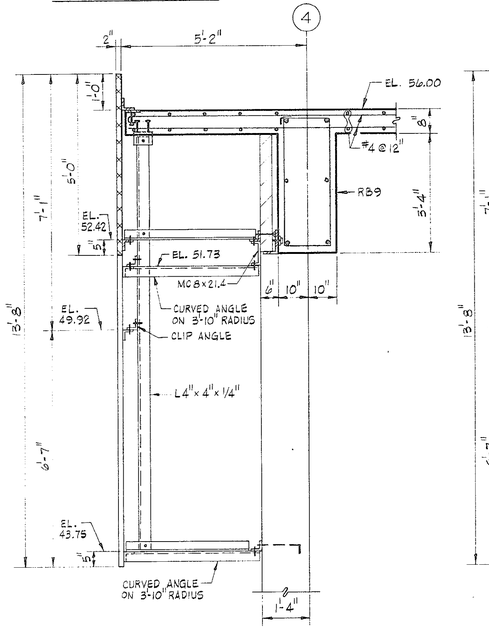
SECTION 9S-8E
SECTION 9S-8E1



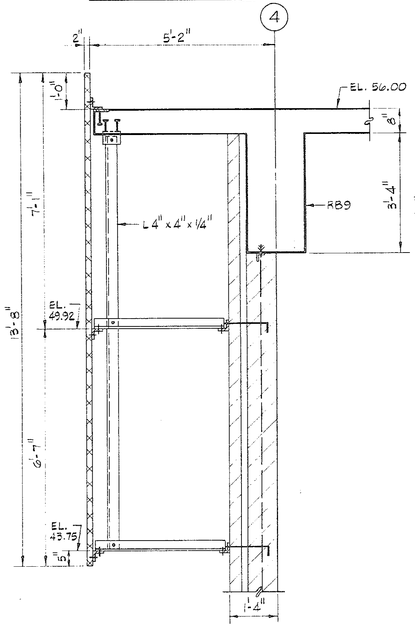
SECTION 9S-8F



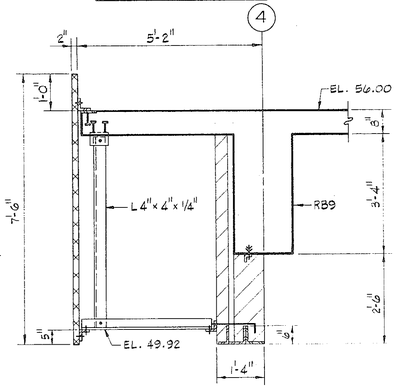
SECTION 9S-8G



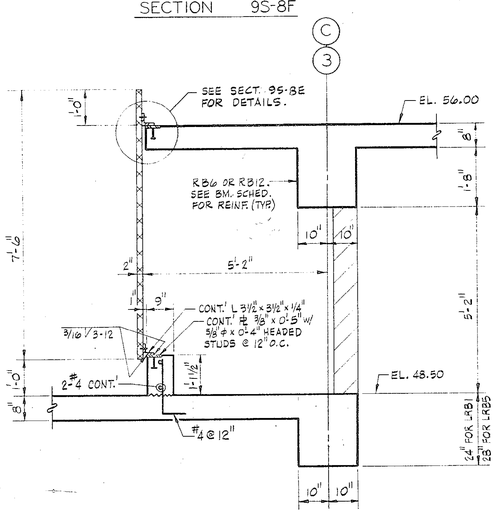
SECTION 9S-8H



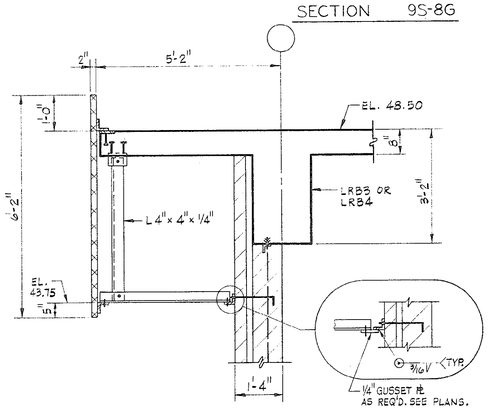
SECTION 9S-8J



SECTION 9S-8K



SECTION 9S-8L



SECTION 9S-8M

NOTE: ALL ANGLES SHOWN ON THIS SHEET ARE L 3 1/2" x 3 1/2" x 1/4" UNLESS OTHERWISE NOTED.

51-002-109

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED J.S.
DRAWN R.W.H.
CHECKED J.S.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/2" = 1'-0"

PROCESS CENTER
SECTIONS

SHEET 9S-8
OF SHEETS
PROJECT NO. 78284

51-002-109S RECORD

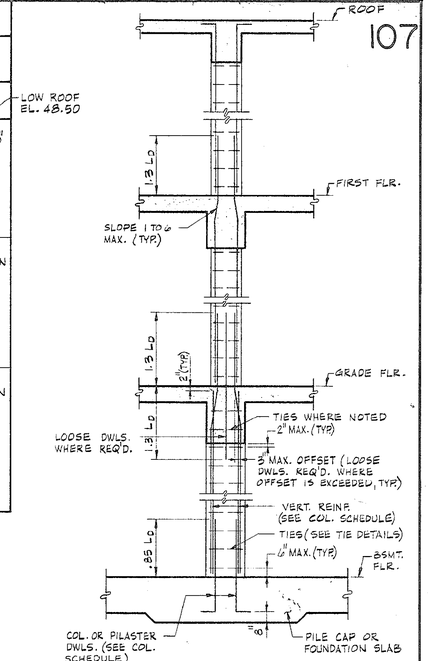
BEAM SCHEDULE

MARK	SIZE "B"	SIZE "D"	REINFORCING BOTTOM	REINFORCING TOP	STIRRUPS NO	STIRRUPS SIZE	STIRRUPS TYPE	STIRRUPS SPACING EA. END	SUPR BARS	REMARKS
GB1	24"	40"	7-#9	4-#9 CONT.'	38	#4	□	1@3", 11@7", 7@12"		
GB2	24	40	6-#9	3-#9 CONT.'	34	#4	□	1@4", 9@8", 7@12"		
GB3	24	40	6-#10	4-#9 CONT.'	36	#4	□	1@2", 10@8", 7@12"		HOOK TOP BARS @ COL. LINE ② OR ③.
GB4	24	VARIES 33 (MIN.)	6-#9	8-#9 CONT.'	34	#4	□	1@4", 9@8", 7@12"		EXTEND 2-#9 BOTT. BARS 3'-8" INTO GB3. BOTT. OF BEAM EL. 16.67.
GB5	24	40	8-#9	4-#8 CONT.'	36	#4	□	1@2", 10@8", 7@12"		HOOK TOP BARS EA. END.
GB6	24	VARIES 33 (MIN.)	9-#9	5-#9 CONT.'	34	#4	□	1@4", 9@8", 7@12"		EXTEND TOP BARS 10'-0" INTO GB5. BOTT. OF BEAM EL. 16.67.
GB7	28	40	8-#10 1ST LAYER 2-#10 2ND LAYER	5-#10 CONT.'	48	#5	□	1@2", 23@6"		EXTEND 2-#10 2ND LAYER BOTT. BARS 4'-8" INTO ADJACENT SPAN.
GB8	14	20	3-#8	2-#7 CONT.'	22	#3	□	1@2", 10@8"		
GB9	14	VARIES 18 (MIN.)	3-#8	2-#7 CONT.'	22	#3	□	1@2", 10@8"		BOTT. OF BEAM EL. 18.33
B1	24	36	8-#9	4-#9 CONT.'	34	#4	□	1@4", 9@8", 7@12"		
B2	24	VARIES 35 (MIN.)	5-#9	3-#9 CONT.'	30	#4	□	1@5", 5@10", 9@12"		BOTT. OF BEAM EL. 33.00.
B3	24	36	6-#9	3-#9 CONT.'	30	#4	□	1@5", 5@10", 9@12"		
B4	20	48	5-#9	2-#9 CONT.'	28	#4	□	1@6", 13@12"		2-#5(1E.F) SIDE BARS.
B5	24	VARIES 35 (MIN.)	5-#9	3-#9 CONT.'	28	#4	□	1@6", 13@12"		BOTT. OF BEAM EL. 33.00.
B6	24	VARIES 35 (MIN.)	6-#9	4-#9 CONT.'	30	#4	□	1@5", 5@10", 9@12"		BOTT. OF BEAM EL. 33.00.
B7	20	48	4-#8	3-#8 CONT.'	28	#4	□	1@6", 13@12"		2-#5(1E.F) SIDE BARS.
B8	24	36	5-#8	3-#9 CONT.'	28	#4	□	1@6", 13@12"		
B9	24	36	7-#9	3-#9 CONT.'	28	#4	□	1@6", 13@12"		
B10	20	48	5-#9	3-#9 CONT.'	28	#4	□	1@6", 13@12"		EXTEND 3-#9 TOP BARS FULL INTO CANTILEVER & HOOK. 2-#5(1E.F) SIDE BARS
B11	20	48	5-#9	2-#9 CONT.'	24	#4	□	1@2", 11@12"		2-#5(1E.F) SIDE BARS.
B12	20	48	5-#9	3-#9 CONT.'	24	#4	□	1@2", 11@12"		2-#5(1E.F) SIDE BARS.
B13	20	48	5-#9	3-#10 CONT.'	24	#4	□	1@2", 11@12"		2-#5(1E.F) SIDE BARS.
B14	24	36	7-#10	3-#10 CONT.'	40	#5	□	1@2", 8@8", 11@8"		EXTEND 3-#10 BOTT. BARS 4'-0" INTO B13.
B15	24	36	6-#11 1ST LAYER 3-#10 2ND LAYER	5-#10 CONT.'	46	#5	□	1@3", 22@6"		EXTEND 3-#10 2ND LAYER BOTT. BARS 4'-6" INTO B14.
B16	24	36	7-#10	3-#10 CONT.'	36	#5	□	1@2", 17@8"		
B17	24	36	6-#10 1ST LAYER 2-#10 2ND LAYER	4-#10 CONT.'	46	#5	□	1@3", 22@6"		EXTEND 2-#10 2ND LAYER BOTT. BARS 4'-6" INTO B16.
B18	14	24	3-#8	2-#7 CONT.'	22	#3	□	1@2", 10@8"		
B19	42	85	11-#9	3-#9 (20'-7" (1-7") INTO B2 3-#9 (30'-6" (1'-7")	36	#5	▭	1@4", 4@9", 13@10"		HOOK TOP BARS @ WALL.
LRB1	20	24	4-#9	2-#9 CONT.'	28	#4	□	1@6", 13@12"		
LRB2	20	24	6-#9	3-#9 CONT.'	28	#4	□	1@6", 13@12"		
LRB3	20	38	4-#8	2-#8 CONT.'	28	#4	□	1@6", 13@12"		
LRB4	20	38	4-#7	2-#8 CONT.'	24	#4	□	1@2", 11@12"		
LRB5	20	28	4-#8	3-#8 CONT.'	24	#4	□	1@2", 11@12"		
RB1	20	48	4-#7	2-#8 CONT.'	28	#4	□	1@6", 13@12"		2-#4 (1E.F) SIDE BARS.
RB2	20	48	4-#7	2-#7 CONT.'	28	#4	□	1@6", 13@12"		2-#4 (1E.F) SIDE BARS.
RB3	20	28	4-#9	2-#9 CONT.'	28	#4	□	1@6", 13@12"		
RB4	20	28	4-#8	2-#8 CONT.'	28	#4	□	1@6", 13@12"		
RB5	20	28	4-#7	2-#8 CONT.'	28	#4	□	1@6", 13@12"		
RB6	20	28	4-#8	2-#9 CONT.'	28	#4	□	1@6", 13@12"		
RB7	20	28	5-#9	3-#8 CONT.'	28	#4	□	1@6", 13@12"		
RB8	20	48	4-#8	2-#8 CONT.'	28	#4	□	1@6", 13@12"		2-#4 (1E.F) SIDE BARS.
RB9	20	48	4-#7	2-#8 CONT.'	24	#4	□	1@4", 11@12"		2-#4 (1E.F) SIDE BARS.
RB10	20	28	5-#9	2-#9 CONT.'	24	#4	□	1@4", 11@12"		
RB11	20	28	6-#9	3-#9 CONT.'	28	#4	□	1@4", 13@10"		EXTEND 1-#9 BOTT. BAR 3'-6" INTO RB10.
RB12	20	28	4-#9	2-#9 CONT.'	24	#4	□	1@4", 11@12"		

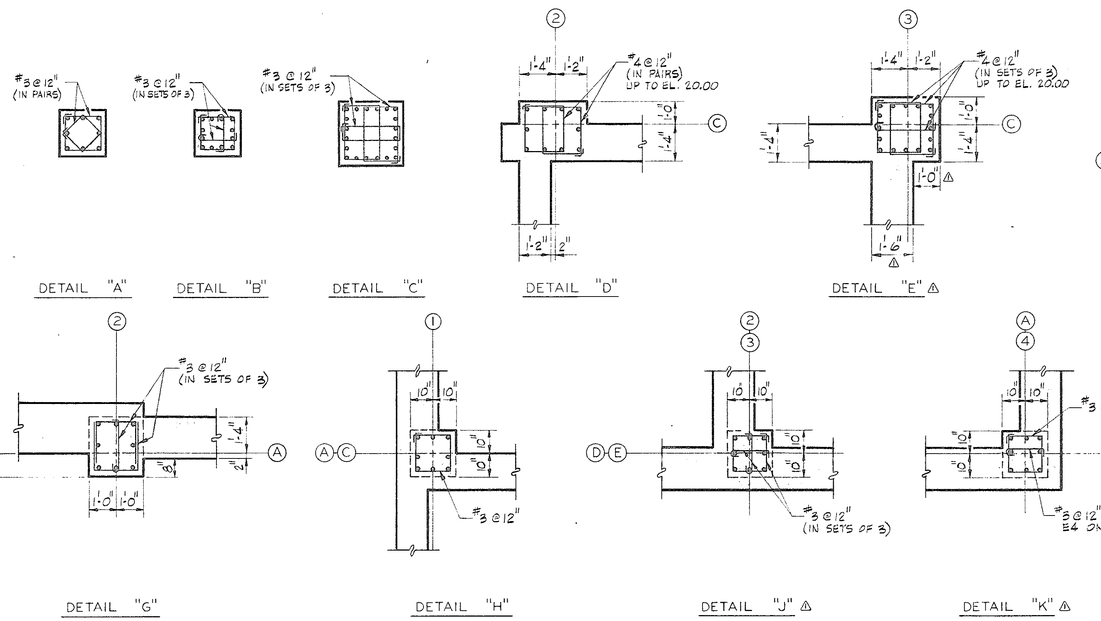
NOTE: SEE SHT. XS-1 FOR TYPICAL DETAILS FOR BEAM REINFORCEMENT.

CONCRETE COLUMN SCHEDULE

COLUMN MARK / HIGH ROOF EL. 56.00	A1	B1	C1	A2	A3	A4	B4 C4	B2 B3	C2	C3	D2	D3	D4	E3	E4
LOW ROOF EL. 48.50															LOW ROOF EL. 48.50
COL. SIZE	20"×20"	20"×20"	20"×20"	20"×20"	20"×20"	20"×20"	20"×20"	20"×20"	20"×20"	20"×20"	20"×20"	20"×20"	20"×20"	20"×20"	20"×20"
VERT. REINF.	8-#7	8-#7	8-#7	8-#7	8-#7	8-#7	8-#7	8-#7	8-#7	8-#7	8-#7	8-#7			8-#7
DETAIL	"A"	"A"	"A"	"A"	"A"	"A"	"A"	"A"	"A"	"A"	"A"	"A"	"A"	"A"	"A"
FIRST FLOOR EL. 36.00															
COL. OR PILASTER SIZE	SEE PLAN	20"×20"	20"×20"	SEE PLAN	SEE PLAN	SEE PLAN	SEE PLAN	20"×20"	20"×20"	20"×20"	20"×20"	20"×20"	SEE PLAN	20"×20"	SEE PLAN
VERT. REINF.	8-#8	8-#8	8-#8	8-#8	8-#8	8-#8	8-#8	12-#10	8-#10	12-#10	8-#8	8-#8	8-#8	8-#8	8-#8
DETAIL	"H"	"A"	"A"	"G"	"F"	"K"	"F"	"B"	"A"	"B"	"A"	"A"	"F"	"A"	"K"
GRADE FLOOR EL. 20.00															
COL. OR PILASTER SIZE	SEE PLAN	SEE PLAN	SEE PLAN	SEE PLAN	SEE PLAN	SEE PLAN	SEE PLAN	28"×28"	SEE PLAN	SEE PLAN	SEE PLAN	SEE PLAN	SEE PLAN	SEE PLAN	SEE PLAN
VERT. REINF.	8-#8	8-#8	8-#8	8-#8	8-#8	8-#8	8-#8	20-#10	10-#10	16-#10	8-#8	10-#8	8-#8	8-#8	8-#8
DETAIL	"H"	"F"	"H"	G	"F"	"K"	"F"	"C"	"D"	"E"	"J"	"L"	"F"	"J"	"K"
BASEMENT EL. 4.00				8-#8 DWLS. 1'-0"	8-#8 DWLS. 1'-0"	8-#8 DWLS. 1'-0"	8-#8 DWLS. 1'-0"	20-#10 DWLS. 2'-4"	10-#10 DWLS. 2'-4"	16-#10 DWLS. 2'-4"	8-#8 DWLS. 1'-0"	10-#8 DWLS. 1'-0"	8-#8 DWLS. 1'-0"	8-#8 DWLS. 1'-0"	8-#8 DWLS. 1'-0"
EL. -2.50	8-#8 DWLS. 1'-0"	8-#8 DWLS. 2'-4"	8-#8 DWLS. 1'-0"												



TYPICAL COLUMN ELEVATION



COLUMN TIE DETAILS

NO.	DATE	DESCRIPTION	APPROVED
⚠	11-20-81	REVISION DUE TO ELIMINATION OF BATTERED PILES	S.L.M.

REVISIONS

DESIGNED J.S./H.R.
DRAWN R.W.H.
CHECKED J.S.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

PROCESS CENTER
SCHEDULES AND DETAILS

SHEET 9S-9
OF SHEETS
PROJECT NO. 78284

51-003-110

AS BUILTS RECORD

NORTH

90'-0"

30'-0" | 30'-0" | 30'-0"

1 2 3 4

A B C

9P-7A 9P-9A 9P-10A 9P-11A 9P-8A

NOTE; ALL PIPING UNDER THICKENED SLUDGE WELL SHALL BE CONCRETE ENCASED.

8" SLUDGE FROM FLOCCULATOR-CLARIFIERS @ ELEV. 2.12

8" SLUDGE FROM SLUDGE HOLDING TANK @ ELEV. 8.67

6" SLUDGE TO SLUDGE HOLDING TANK @ ELEV. 5.50

16" L.P. AIR @ ELEV. 16.0

6" L.P. AIR @ ELEV. 16.0

SLUDGE WELL 10'-0" DIA. 4 AIR DIFFUSERS @ 21'-0" O.C. (TYPICAL)

SLUDGE PUMP No. 5

SLUDGE PUMP No. 4

SLUDGE PUMP No. 3

SLUDGE PUMP No. 2

SLUDGE PUMP No. 1

6" L.P. AIR @ ELEV. 14.33

4" L.P. AIR @ ELEV. 14.33

BUBBLER CUBICLE

BUBBLER AIR (TYPICAL)

6" SLUDGE @ 6.83

4" SLUDGE METER

HANDRAIL

ELEV. -2.50

6" SCUM @ ELEV. 13.50

6" SLUDGE @ ELEV. 5.50

6" SLUDGE @ 6.83 (TYP. 5 PLACES)

8" TANK DRAINAGE @ ELEV. 0.33 (TYP. 2 PLACES)

8" SLUDGE FROM CLARIFIERS @ ELEV. 1.50

18" L.P. AIR @ ELEV. 13.50

6" PUMP SUCTION @ ELEV. 0.25 (TYP. 5 PLACES)

2½" LIME SLURRY RECIRCULATION @ ELEV. 10.0

1" CHLORINE SOLUTION TO R.B.C. EFFLUENT @ ELEV. 8.50

1½" ALUM @ 10.0

1" CHLORINE SOLUTION TO JUNCTION CHAMBER "2" @ ELEV. 8.50

2½" LIME SLURRY RECIRCULATION @ ELEV. 3.0

2" SETTLED WASTEWATER SAMPLING No. 1 @ ELEV. 3.0

2" SETTLED WASTEWATER SAMPLING No. 2 @ ELEV. 10.0

8" TANK DRAINAGE @ ELEV. -1.17

2½" LIME SLURRY RECIRC. @ ELEV. 5.0

8" THICKENER RECIRC. @ ELEV. 14.0

6" THICKENER RECIRCULATION @ ELEV. 15.50

24" BLIND FLANGE

PLANT WATER PUMP No. 3

PLANT WATER PUMP No. 2

PLANT WATER PUMP No. 1

6" PLANT WATER @ 14.50, SEE SHT. 9M-3 FOR CONT.

4" SPRAY WATER @ 11.0

24" PUMP SUCTION @ ELEV. -1.0

8" SLUDGE @ ELEV. 16.50

3" POLYMER SUPPLY @ ELEV. 14.50

POLYMER FEED PUMP No. 3

POLYMER FEED PUMP No. 1

1½" POLYMER TO FLOTATION THICKENERS @ ELEV. 15.0

6'-6" 4" VENT @ ELEV. 16.0 5'-0" LIQUID POLYMER STORAGE TANK

3" OVER-FLOW

6" x 6" CURB

1½" POLYMER TO VACUUM FILTERS, @ ELEV. 15.0

2" POLYMER TRANSFER @ ELEV. 13.0

2" PROTECTED WATER SEE SHT. 9M-3 FOR CONT.

LIQUID POLYMER TRANSFER PUMP

NOTE: SEE POLYMER FLOW DIAGRAM No. 8, SHEET No. XP-4 FOR REQUIRED VALVES AND PIPING.

DRY POLYMER STORAGE PAD

2" DRAIN AND OVERFLOW. (TYPICAL 2 PLACES)

POLYMER MIXING TANK (TYPICAL 2 PLACES)

POLYMER FEEDER HOPPER

1½" PROTECTED WATER. SEE SHT. No. 9M-3 FOR CONTINUATION

2½" LIQUID ALUM SUPPLY @ ELEV. 15.0

2½" FERRIC CHLORIDE SUPPLY @ 15.0

LIME STORAGE HOPPER

3" DUST VENT

3" DRAIN AND OVERFLOW

LIME SLAKER

3" LIME SLURRY

250 GAL. LIME SLURRY TANK

2½" LIME SLURRY RECIRC. @ 14.0

6" x 6" CURB

1½" ALUM @ ELEV. 12.0

2½" LIME SLURRY RECIRCULATION @ ELEV. 13.0

1½" ALUM @ ELEV. 13.0

LIME SLURRY RECIRCULATION PUMP

2" SETTLED WASTEWATER SAMPLING No. 1 @ ELEV. 12.0

SCR PANELS

2" SETTLED WASTEWATER SAMPLING No. 2 @ ELEV. 13.0

1½" FERRIC CHLORIDE @ ELEV. 13.0

1½" FERRIC CHLORIDE @ ELEV. 12.0

8" CITY WATER @ ELEV. 15.50

8" CITY WATER @ ELEV. 17.0

6" BACK PRESSURE VALVE

NOTE: SEE ALUM. FLOW DIAGRAM No. 7, SHEET No. XP-4 FOR REQUIRED VALVES AND PIPING

@ ELEV. 16.25

M.H. STEPS

GRAB BAR

@ ELEV. 15.0

4" VENT @ 16.0

LIQUID ALUM STORAGE TANK

LIQUID ALUM FEED PUMP No. 2

3" OVER-FLOW

LIQUID ALUM FEED PUMP No. 1

36" PLANT EFFLUENT @ ELEV. 13.0

30" BLIND FLANGE

PLANT EFFLUENT PUMP No. 3

PLANT EFFLUENT PUMP No. 2

PLANT EFFLUENT PUMP No. 1

24" PUMP SUCTION @ ELEV. 0.75 (TYP. 3 PLACES)

1" CHLORINE SOLUTION @ ELEV. 14.75

FLEXIBLE COUPLING (TYPICAL 6 PLACES)

BUBBLER CUBICLE

BUBBLER AIR

LIQUID FERRIC CHLORIDE STORAGE TANK

FERRIC CHLORIDE FEED PUMP No. 1

4" VENT @ 16.0

2" PLANT WATER

1½" FLUSHING WATER

2½" DRAIN DOWN TO SUMP @ 2.50

2½" LIME SLURRY RECIRCULATION

LIME SLURRY BYPASS AND FLUSHING DETAIL (NO SCALE)

CHEMICAL STORAGE TANK CAPACITIES

LIQUID POLYMER STORAGE TANK —	4,800 GAL.
LIQUID ALUM STORAGE TANK —	4,800 GAL.
LIQUID FERRIC CHLORIDE STORAGE TANK —	4,800 GAL.
LIME STORAGE HOPPER —	1,250 CU. FT.
LIME SLURRY TANK —	250 GAL.

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 5,000 S. L. McILWAIN

51-003 - 111

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED W. J. W.
DRAWN C. E. E.
CHECKED S. L. M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

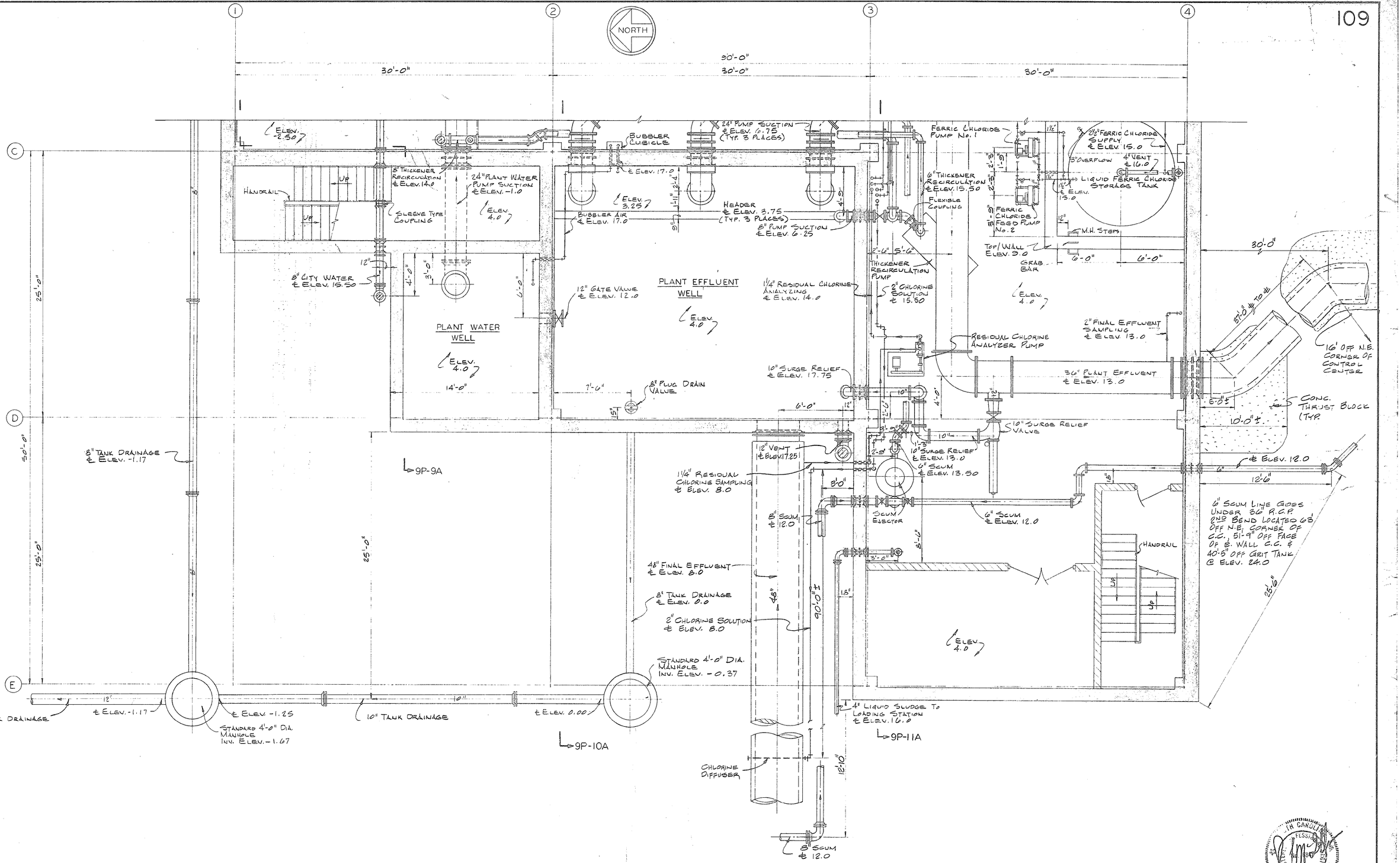
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
¼" = 1'-0"

PROCESS CENTER BASEMENT PLAN

SHEET 9P-1
OF SHEETS
PROJECT NO. 78284

AS RECORDED



NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED W.J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

PROCESS CENTER
BASEMENT PLAN

SHEET 9P-2
OF SHEETS
PROJECT NO. 78284

51-002-112

AS BUILTS RECORD

NORTH

THICKENED SLUDGE WELL
7 AIR DIFFUSERS @ 2'-0" C. C.
7 AIR DIFFUSERS @ 2'-0" C. C.
L.P. ELEV. 23.0
H.P. ELEV. 26.50
ELEV. 20.75
END 6" FROM BOTTOM
4'-0"
12" TANK DRAINAGE @ ELEV. 17.50
4" PUMP SUCTION @ ELEV. 20.42 (TYP.) 12'-0"
BUBBLER AIR @ ELEV. 32.0
6" L.P. AIR @ 31.83
9P-9A
9P-10A
9P-11A
9P-7A
9P-8A
AIR PRESSURE INDICATOR 6'-0"
VIBRATION AND SURGE PANEL
L.P. ELEV. 19.83
H.P. ELEV. 19.92
SLUDGE WELL
THICKENED SLUDGE PUMP No. 2
@ ELEV. 27.50
16" L.P. AIR @ ELEV. 25.83
BLOWER No. 4
BLOWER No. 3
BLOWER No. 2
BLOWER No. 1
12" VENT @ ELEV. 23.0 PROVIDE BIRD SCREEN (TYPICAL)
24"x24" SLAB TYPE I BOLTDOWN, WATERPROOF, MANHOLE FRAME AND COVER (TYP. 2 PLACES)
BLOWER INTAKE, SEE MECH. DWGS. FOR DETAILS
AIR PRESSURE INDICATOR
VIBRATION AND SURGE PANEL
8" THICKENER RECIRCULATION @ ELEV. 31.0
RETAINING WALL
BUBBLER CUBICLE
1½" POLYMER
8" THICKENED SLUDGE @ ELEV. 34.0
4" VENT
1½" POLYMER TO VACUUM FILTERS
THICKENED SLUDGE PUMP No. 1
2" SLUDGE METER (TYP. 2 PLACES)
4" THICKENED SLUDGE @ ELEV. 29.0
12" TANK DRAINAGE @ ELEV. 31.0
3" POLYMER SUPPLY
2½" LIQUID ALUM SUPPLY
2½" FERRIC CHLORIDE SUPPLY
4" UP TO VAT OVERFLOW
4" UP TO VAT DRAIN
4" UP TO WASH TROUGH DRAIN
ELEV. 20.0
6" TANK DRAINAGE @ ELEV. 31.0
4" UP TO FILTRATE DISCHARGE
4" UP TO SNUBBER
1½" FERRIC CHLORIDE
1½" FERRIC CHLORIDE @ ELEV. 31.0
4" LIQUID SLUDGE @ ELEV. 29.0
2½" THICKENER RECIRCULATION @ ELEV. 31.0
2½" LIME SLURRY RECIRCULATION @ ELEV. 31.0
4" LIME SLURRY SUPPLY
LIME STORAGE HOPPER
3" VENT @ 33.50
2" DUST VENT
DUST COLLECTOR PLATFORM
LADDER
2½" LIME SLURRY RECIRCULATION @ ELEV. 31.50

* DIMENSION TO BE DETERMINED BY EQUIPMENT MANUFACTURER

NO.	DATE	DESCRIPTION	APPROVED
A	8-3-82	TANK DRAINAGE FROM VACUUM FILTERS	

REVISIONS

DESIGNED W.J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

PROCESS CENTER
GRADE FLOOR PLAN

SHEET 9P-3 OF 8 SHEETS
PROJECT NO. 78284

51-002-113

51-002-113/5 RECORD

NORTH

1 2 3 4

30'-0" 30'-0" 30'-0" 30'-0"

C D E

25'-0" 50'-0" 25'-0"

18" L.P. AIR ℄ ELEV. 30.58

8" THICKENER RECIRCULATION ℄ ELEV. 31.0

ELEV. 20.0

6" THICKENER RECIRCULATION ℄ ELEV. 31.0

H.P. ELEV. 19.42

STOOP

HANDRAIL

UP

UP

2½" LIME SLURRY RECIRCULATION ℄ ELEV. 31.0

ELEV. 19.50

2" SETTLED WASTEWATER SAMPLING No. 2 ℄ ELEV. 31.0

1" CHLORINE SOLUTION ℄ ELEV. 29.50

1½" RESIDUAL CHLORINE ANALYZING ℄ ELEV. 31.0

4" VENT

1" CHLORINE SOLUTION ℄ ELEV. 31.0

2" RAW WASTEWATER SAMPLING ℄ ELEV. 32.0

2" SETTLED WASTEWATER SAMPLING No. 1 ℄ ELEV. 31.0

2" FINAL EFFLUENT SAMPLING ℄ ELEV. 32.0

1½" CHLORINE SOLUTION ℄ ELEV. 29.50

4'-0"

12" 12"

12" VENT ℄ ELEV. 21.50 (PROVIDE BIRD SCREEN)

9P-4A 9P-4A

8" CITY WATER ℄ ELEV. 23.0

H.P. ELEV. 19.42

FLOOR BOX AND NUT OPERATOR FOR 12" GATE VALVE

30"x30" WATERTIGHT HATCH

PLANT WATER WELL

30"x30" SLAB TYPE, WATERTIGHT, BOLT-DOWN MANHOLE FRAME AND COVER

ELEV. 20.0

2½" LIME SLURRY RECIRCULATION ℄ ELEV. 31.50

FLOOR BOX AND NUT OPERATOR FOR PLUG ORLIN VALVE

OVERHEAD DOOR

6'-0"

L.P. ELEV. 19.33

14'-0"

4" LIQUID SLUDGE ℄ ELEV. 29.0

12" VENT ℄ ELEV. 23.0 (PROVIDE BIRD SCREEN)

3'-0"

12"

9P-9A

9P-10A

HANDRAIL

ELEV. 4.0

9P-11A

RETAINING WALL

8" CITY WATER ℄ ELEV. 23.0

8" x 18" FLANGE

6" AIR GAP W/BIRD AND INSECT SCREEN

FINISH GRADE ELEV. 19.0

ELEV. VARIES

12" 12" 12" 12"

PLANT WATER WELL

SECTION 9P-4A

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 9447 SAMUEL L. McILWAIN

51-002-114

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED W.J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
¼" = 1'-0"

PROCESS CENTER
GRADE FLOOR PLAN

SHEET 9P-4
OF SHEETS
PROJECT NO. 78284

GRADING S RECORD

NORTH

30'-0" | 30'-0" | 30'-0"

9P-9A

4" DRAIN (A.R. PVC) ℄ ELEV. 34.0 SEE ISD-3 FOR CONT.

L.P. ELEV. 35.84

30"X30" SLAB TYPE, WATERTIGHT, BOLT-DOWN MANHOLE FRAME AND COVER

THICKENED SLUDGE WELL

12" VENT ℄ ELEV. 39.0 (PROVIDE BIRD SCREEN)

H.P. ELEV. 35.92

SLOPE

6'-0"

#4 @ 12" EA. WAY.

6"x6" CURB

4" TYPE "A" F.D.

① 2½" FERRIC CHLORIDE SUPPLY ℄ ELEV. 39.0

② 2½" LIQUID ALUM SUPPLY ℄ ELEV. 39.0

③ 3" POLYMER SUPPLY ℄ ELEV. 39.0

9P-10A

QUICK RELEASE COUPLING (TYP 3 PLACES)

BOTTOM OF MONORAIL ELEV. 46.0. SEE ARCH. DRAWINGS FOR DETAILS

9P-11A

1" LIME SLURRY W/ QUICK RELEASE COUPLING ℄ ELEV. 39.50

A 9P-7A

LADDER

HANDRAIL

ACCESS PLATFORM ELEV. 44.0

GRATING

4'-6"

6" SCUM ℄ ELEV.

8" THICKENED SLUDGE EFFLUENT

6" SLUDGE ℄ ELEV.

2'-6"

* SKIMMER DRIVE

1½" POLYMER ℄ ELEV. 46.0

4" VENT

1½" POLYMER ℄ ELEV. 46.50

14'-0"

* 8'-3"

* 7'-0"

2'-0"

4" SLUDGE ℄ ELEV. 44.0

SLUDGE CONDITIONING TANK No. 2

VACUUM FILTER No. 2

1½" LIME SLURRY ℄ 46.0

BUBBLER AIR ℄ 45.50

1½" FERRIC CHLORIDE ℄ 46.50

4'-0" (TYP.)

VACUUM RECEIVER (TYPICAL)

10'-8"

BUBBLER CUBICLE

VACUUM PUMP No. 2

14'-3"

7'-0"

SLUDGE CONDITIONING TANK No. 1

VACUUM FILTER No. 1

BUBBLER AIR ℄ ELEV. 45.50

1½" LIME SLURRY ℄ ELEV. 46.0

6" VACUUM * ℄ ELEV. 45.75

FILTRATE PUMP (TYPICAL)

SILENCER (TYPICAL)

4" FILTRATE (TYPICAL)

24" BELT CONVEYER

RETAINING WALL

15'-0"

50'-0"

85'-0"

B

C 9P-8A

SLUDGE THICKENING TANK

ROTOMETER. SEE FLOW DIAG. No. 3, SUP. XPd. FOR DTLS. (TYP. 2 PLACES)

DIFFUSERS

1½" FERRIC CHLORIDE ℄ 46.50

RETENTION TANK

¾" PLANT WATER. SEE MECH. DWGS. FOR CONT.

6" THICKENER RECIRCULATION * ℄ ELEV.

* 7'-6"

8" THICKENER RECIRCULATION * ℄ ELEV.

4" DRAIN * ℄ ELEV.

12" THICKENER SUBNATANT * ℄ ELEV.

ACCESS PLATFORM ELEV. 44.0

LADDER

* 5'-0"

* 4'-3"

2'-0"

HANDRAIL

GRATING

10'-6"

ELEV. 36.0

ELEV. 36.0

3" VENT

9P-7A

CHLORINE CONTAINER

CONTAINER CRADLES

ELEV 36.0

EMERGENCY SHOWER

OVERHEAD DOOR

4" VENT

CHLORINE CONTAINER

CHLORINE MANIFOLD

CHLORINE SCALES

EMERGENCY SHOWER

CHLORINE LEAK DETECTOR

CHLORINE SCALE DIAL

1" CHLORINE ℄ ELEV. 46.0

9P-8A

4" VENT

* FOR DIMENSIONS, ELEVATIONS, AND DETAILS, SEE MANUFACTURER'S DRAWINGS.

51-002-1115

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED W. J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

PROCESS CENTER
FIRST FLOOR PLAN

SHEET 9P-5
OF SHEETS
PROJECT NO. 78284

SAMUEL McILLWAIN
REGISTERED ENGINEER
SOUTH CAROLINA

SAMUEL McILLWAIN RECORD

NORTH

1 2 3 4

90'-0"
30'-0" 30'-0" 30'-0"

C D E

25'-0" 50'-0" 25'-0"

RETAINING WALL

FILTRATE PUMP
SILENCER
4" FILTRATE
6" VACUUM @ ELEV. 45.75
VACUUM RECEIVER
VACUUM PUMP No. 1

½" LIME SLURRY @ ELEV. 46.0

24" BELT CONVEYER

4'-6" 3'-0"

2" LIME SLURRY RECIRCULATION
2½" PINCH VALVE
MIXING TANK
2" OVER FLOW
LIME SLURRY FEED PUMP No. 1
LIME SLURRY FEED PUMP No. 2

9'-0" 2'-0" 2'-0" 4'-0"

ELEV. 36.0

MONORAIL
1" CHLORINE @ ELEV. 46.0
4" VENT
3'-6"
No. 1 No. 2
CHLORINATORS
CHLORINE ANALYZER
CHLORINE DETECTOR

1 2 3 4
SEE LIST BELOW FOR TYPE OF SAMPLER

1. SETTLED WASTEWATER SAMPLER No. 1
2. SETTLED WASTEWATER SAMPLER No. 2
3. FINAL EFFLUENT SAMPLER
4. RAW WASTEWATER SAMPLER

GRATING

ELEV. 36.0

ELEV. 36.0

UP UP

ELEV. 36.0

ALUMINUM HOOD OVER CONVEYER OUTSIDE OF BUILDING. SEE ARCH. DRAWINGS FOR DETAILS

9P-9A

9P-10A

9P-11A

SEE SHEET 7P-1 FOR CONTINUATION

* FOR DIMENSIONS, ELEVATIONS, AND DETAILS, SEE MANUFACTURER'S DRAWINGS

RETAINING WALL

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
J. McIL. WAIN

51-002-116

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED W.J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

PROCESS CENTER
FIRST FLOOR PLAN

SHEET 9P-6
OF SHEETS
PROJECT NO. 78284

51-116 S RECORD

4 3 2 1

30'-0" 30'-0" 30'-0"

50'-0"

3" VENT WITH INSECT SCREEN

4" VENT ℄ ELEV. 59.0

PROVIDE INSECT SCREEN

BOTTOM OF MONORAIL ELEV. 46.0. SEE ARCHITECTURAL DRAWINGS FOR DETAILS

1½" FERRIC CHLORIDE ℄ ELEV. 46.50

1½" LIME SLURRY ℄ ELEV. 46.0

1½" POLYMER ℄ ELEV. 46.50

4" SLUDGE ℄ ELEV. 44.0

VACUUM FILTER No. 2

SLUDGE CONDITIONING TANK No. 2

℄ ELEV. 39.0

24" BELT CONVEYER

HANDRAIL

1½" POLYMER ℄ ELEV. 46.0

ACCESS PLATFORM ELEV. 44.0

LADDER

6" SLUDGE ℄ ELEV.

6" SCUM ℄ ELEV.

SLUDGE THICKENING TANK

FINISHED GRADE ELEV. 35.50

CHLORINE CONTAINER

ELEV. 36.0

3" VENT ℄ 33.50

2½" LIME SUPPLY ℄ ELEV. 32.0

8" THICKENED SLUDGE ℄ ELEV. 34.0

℄ ELEV. 34.0

6" SCUM ℄ ELEV. 34.0

1½" L.P. AIR ℄ 30.75

L.P. AIR ℄ ELEV. 31.83

12" TANK DRAINAGE ℄ ELEV. 31.0

3" POLYMER SUPPLY

2½" LIQUID ALUM SUPPLY

2½" FERRIC CHLORIDE SUPPLY

2" SLUDGE METER

4" THICKENED SLUDGE ℄ ELEV. 29.0

THICKENED SLUDGE PUMP No. 1

THICKENED SLUDGE PUMP No. 2

4" PUMP SUCTION ℄ ELEV. 28.92 (TYP 2 PLACES)

℄ ELEV. 27.50

12" VENT ℄ ELEV. 23.0 (PROVIDE INSECT SCREEN)

H.P. ELEV. 19.92

L.P. ELEV. 19.83

FINISH GRADE ELEV. 19.50

TOP / WALL ELEV. 39.33

FINISHED GRADE ELEV. 35.50

LIME STORAGE HOPPER

ELEV. 20.0

2½" FERRIC CHLORIDE SUPPLY ℄ ELEV. 15.0

2½" LIQUID ALUM SUPPLY ℄ ELEV. 15.0

1½" POLYMER TO FLOTATION THICKENERS ℄ ELEV. 15.0

4" VENT ℄ ELEV. 16.0

1½" POLYMER ℄ ELEV. 15.0

2" POLYMER TRANSFER ℄ ELEV. 13.0

6" SCUM ℄ ELEV. 13.50

4" L.P. AIR ℄ 14.33

SLUDGE WELL

8" SLUDGE FROM SLUDGE HOLDING TANK ℄ ELEV. 8.67

2½" LIME SLURRY RECIRCULATION ℄ ELEV. 14.0

LIME SLAKER

GRIT CONVEYER

GRIT CONTAINER

6"X6" CURB

LIME SLURRY RECIRCULATION PUMP

POLYMER MIXING TANK (TYPICAL 2 PLACES)

POLYMER FEEDER HOPPER

POLYMER FEED PUMP No. 1

POLYMER FEED PUMP No. 2

LIQUID POLYMER STORAGE TANK

ELEV. 4.0

6"X6" CURB

HANDRAIL

6" SLUDGE ℄ ELEV. 6.83

6" SLUDGE TO SLUDGE HOLDING TANK ℄ ELEV. 5.50

8" SLUDGE FROM FLOCCULAR CLARIFIER ℄ ELEV. 2.12

AIR DIFFUSER ℄ ELEV. 2.0

ELEV. 0.0

SLUDGE PUMP No. 5

ELEV. -2.50

4" PUMP SUCTION ℄ ELEV. 0.25

* ELEVATION TO BE DETERMINED BY EQUIPMENT MANUFACTURER

SECTION 9P-7A
9P-1,3,5

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED W.J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

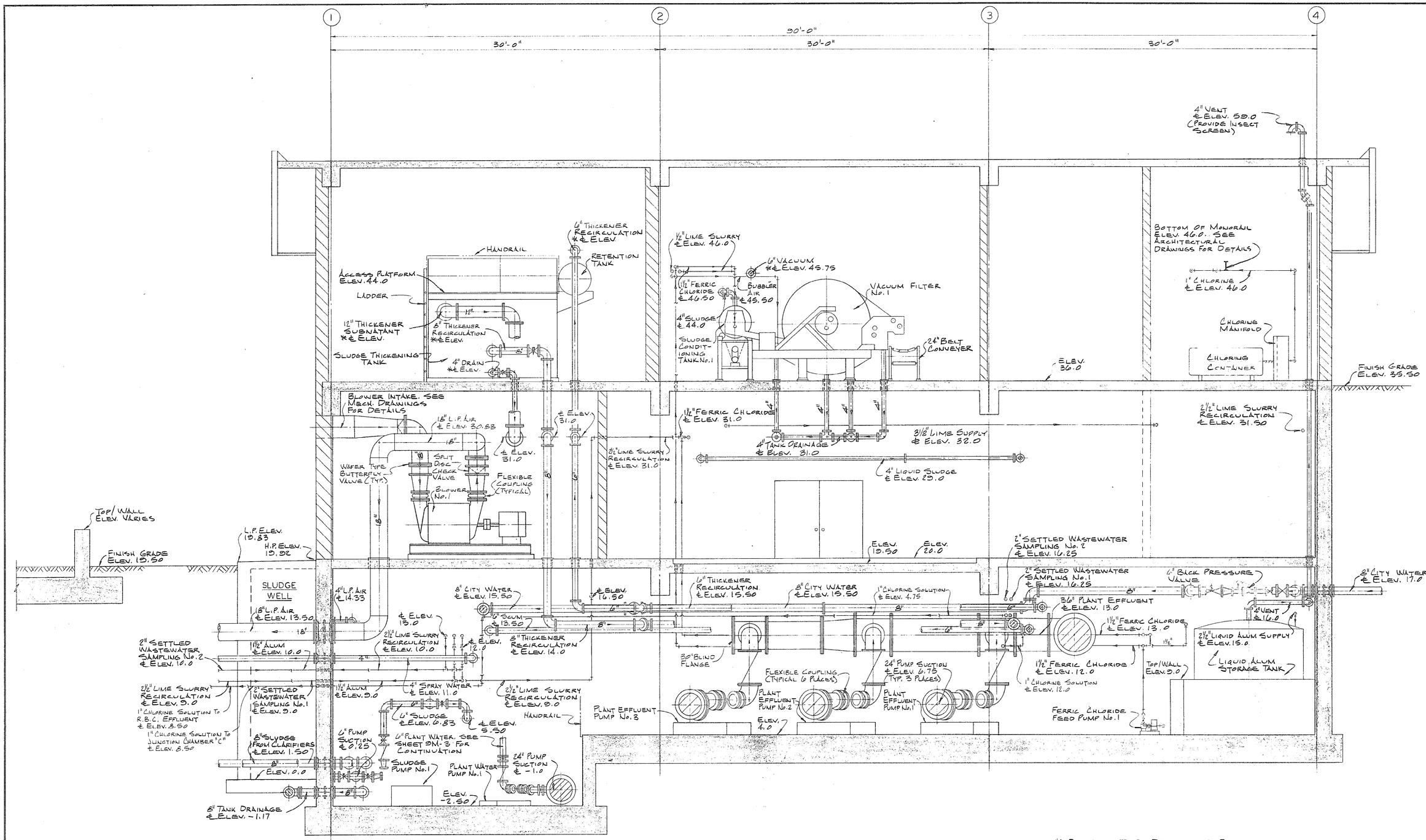
SCALE
1/4" = 1'-0"

PROCESS CENTER
SECTION

SHEET 9P-7
OF SHEETS
PROJECT NO. 78284

51-003-117

RECORD



✳ ELEVATION TO BE DETERMINED BY THE EQUIPMENT MANUFACTURER.

SECTION 9P-8A
9P-1,3,5

51-002-118

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED W.J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

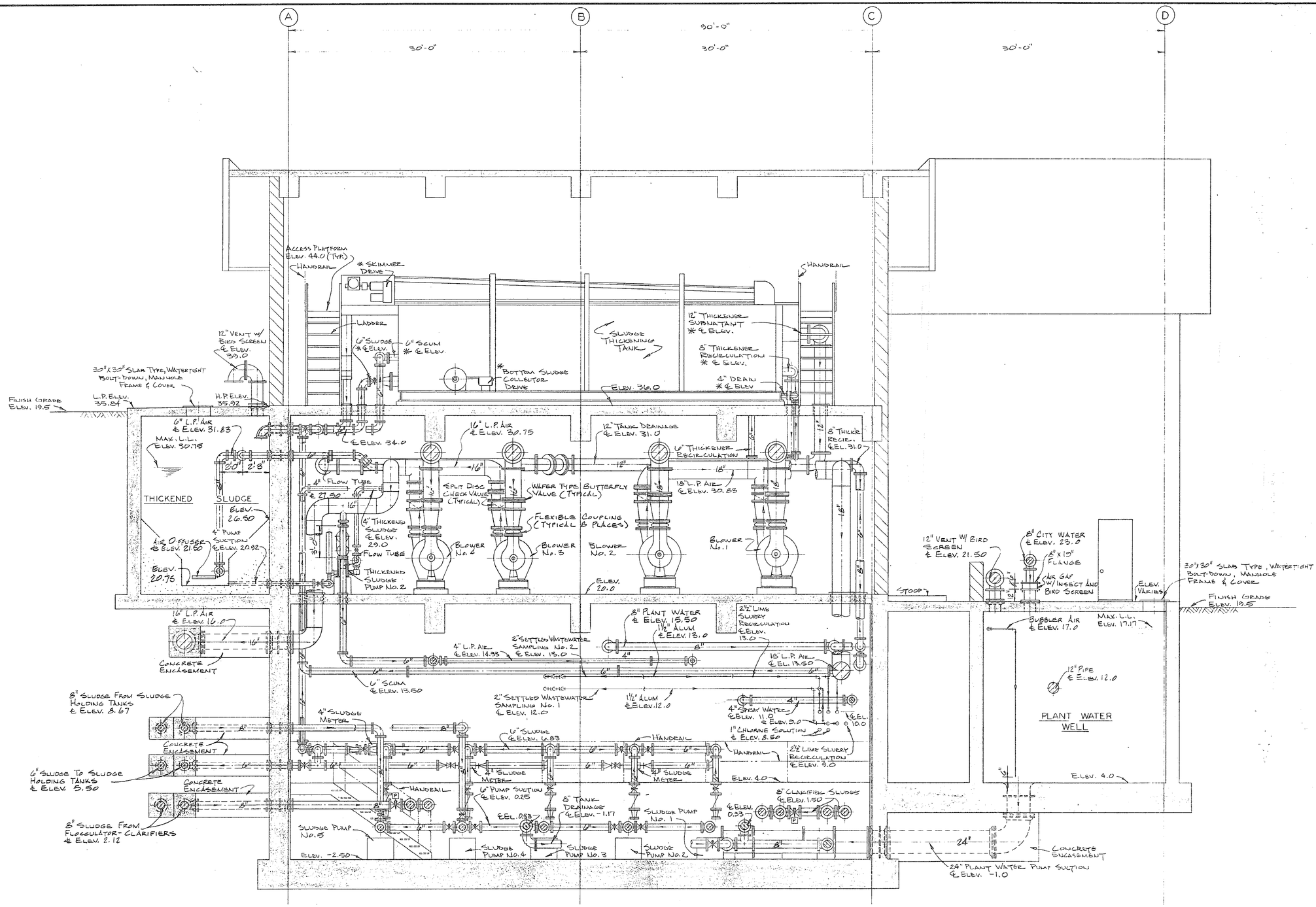
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
¼" = 1'-0"

PROCESS CENTER
SECTION

SHEET 9P-8
OF SHEETS
PROJECT NO. 78284

AS BUILTS RECORD



* SEE MANUFACTURER'S DRAWINGS FOR ELEVATIONS, DETAILS, ETC.

SECTION 9P-9

9P-1,2,3,4,5

51-002-119

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED W.J.W.
DRAWN C.E.E., R.L.J.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

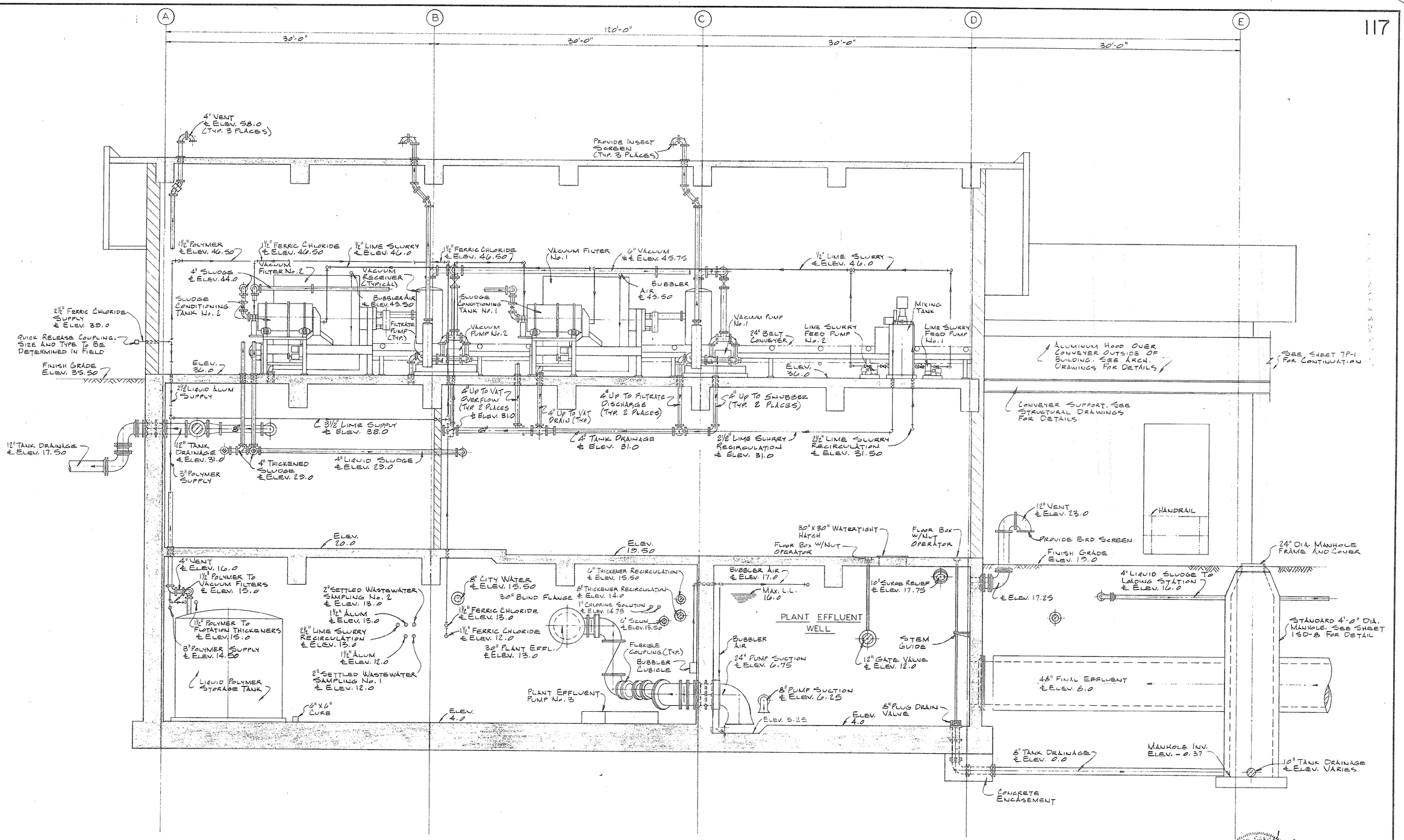
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

PROCESS CENTER SECTION

SHEET 9P-9 OF SHEETS
PROJECT NO. 78284

AS BUILT RECORD



SECTION 9P-10A
9P-1, 2,3,4,5,6

*ELEVATION TO BE DETERMINED BY EQUIPMENT MANUFACTURER

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED W.J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

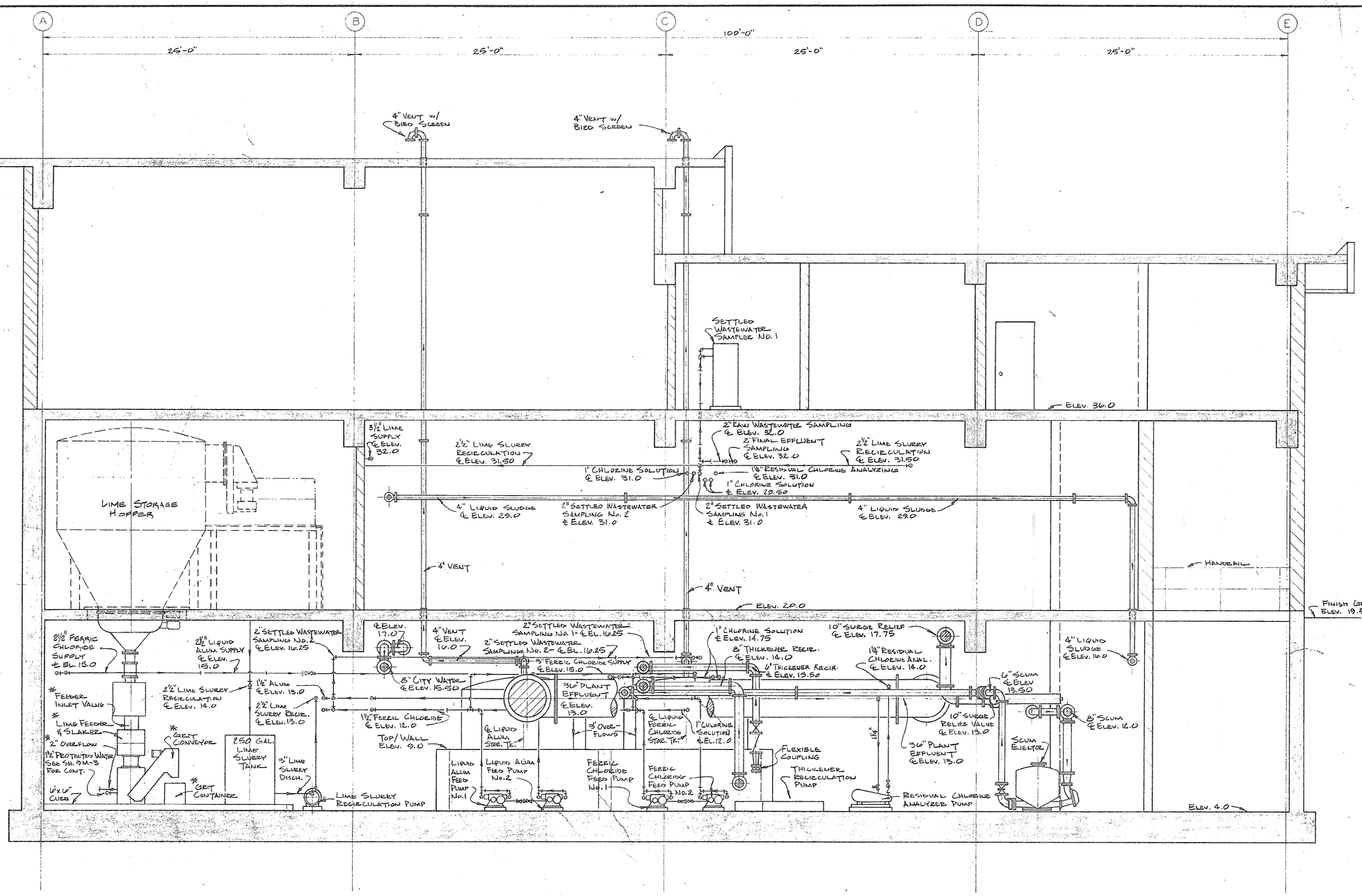
SCALE
1/4" = 1'-0"

PROCESS CENTER
SECTION

SHEET 9P-10
OF SHEETS
PROJECT NO. 78284

51-002-130

AS-BUILT RECORD



* SEE MANUFACTURER'S DRAWINGS FOR DETAILS.

SECTION 9P-11A
9P-2, 9P-4, 9P-6

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
McILLWAIN

51-002-121

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED W.J.W.
DRAWN R.L.J.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

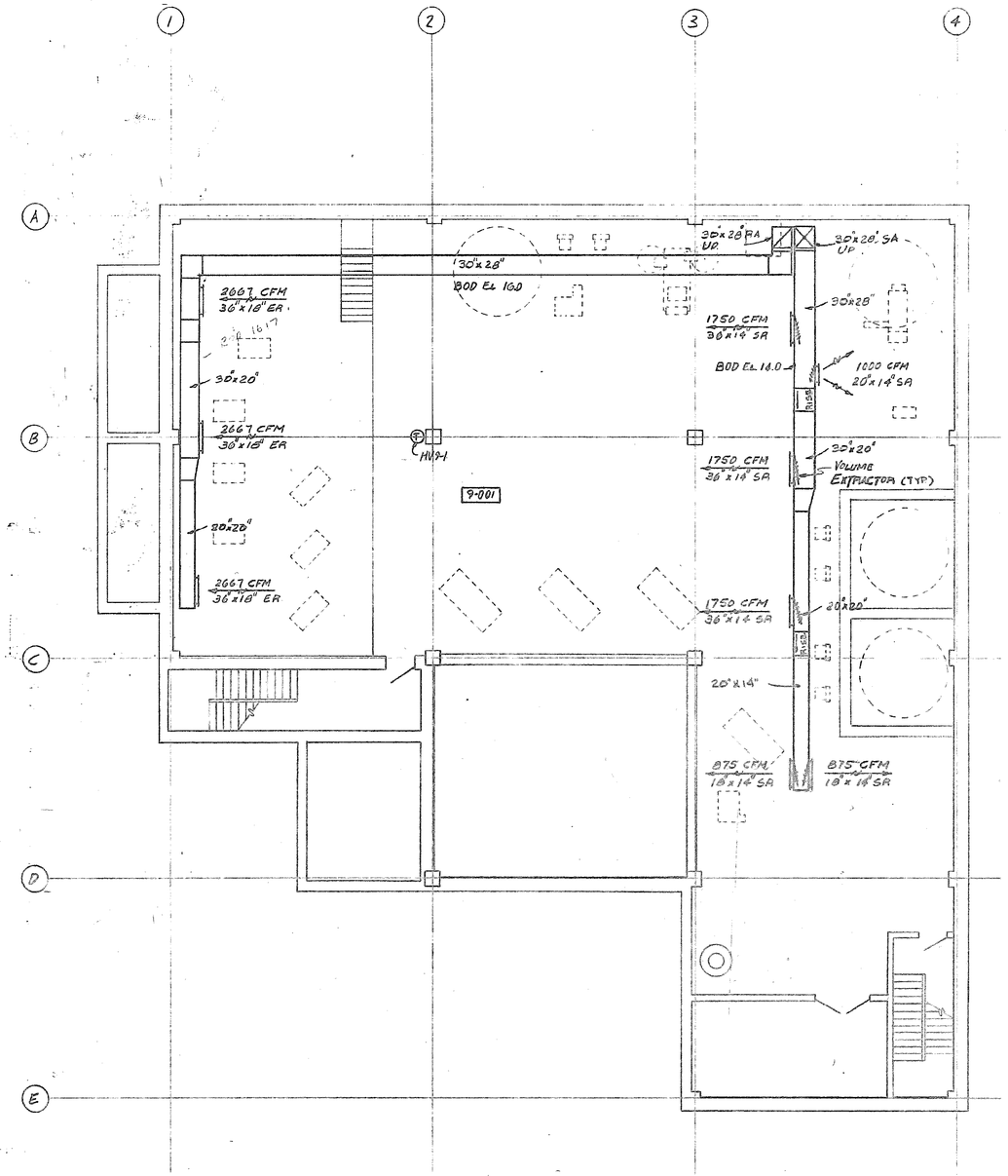
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
¼" = 1'-0"

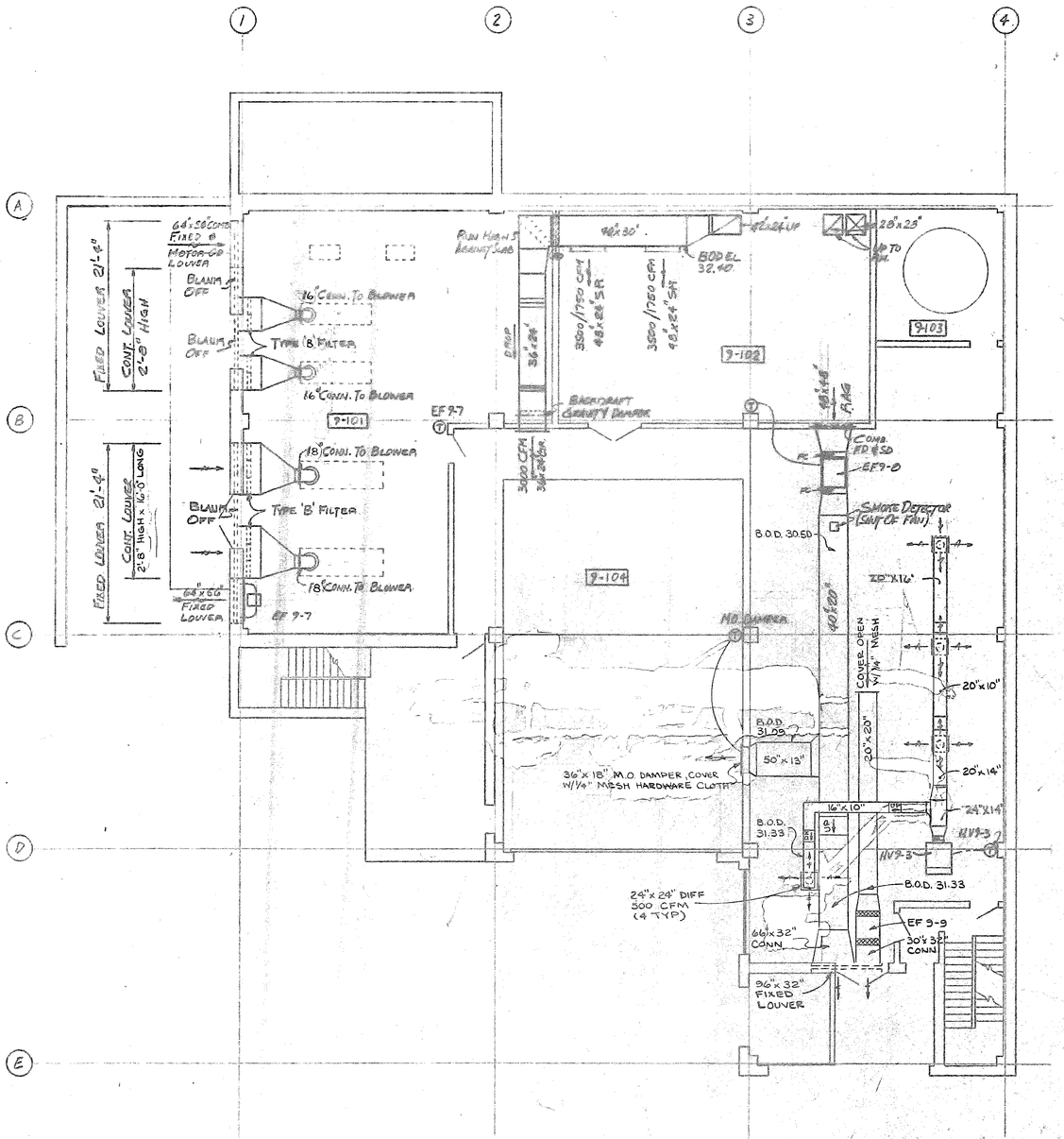
PROCESS CENTER
SECTION

SHEET 9P-11
OF SHEETS
PROJECT NO. 78284

RECORD



BASEMENT FLOOR PLAN



GRADE FLOOR PLAN

51-002-122

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED CC
DRAWN AE
CHECKED PMC
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

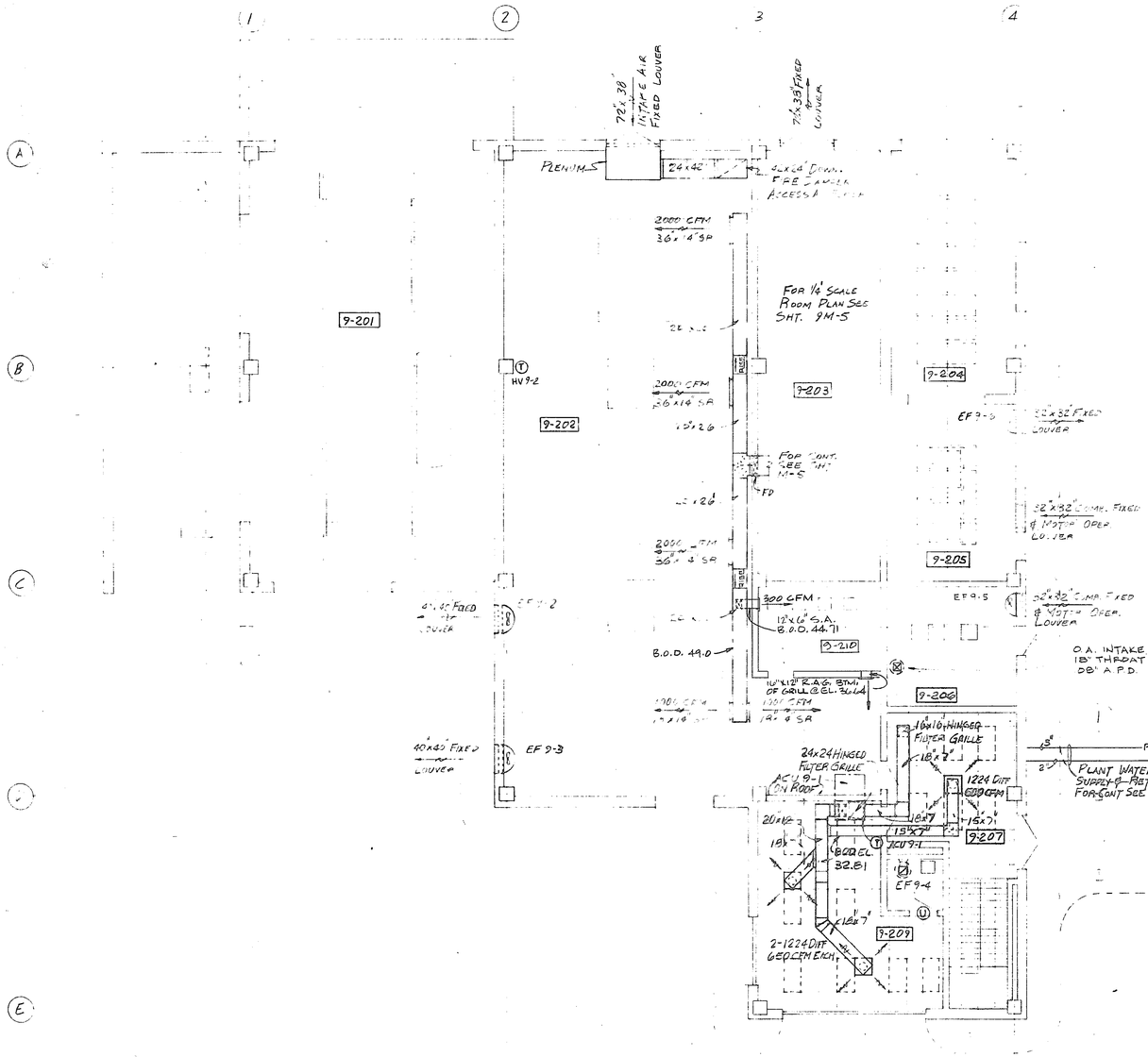
SCALE
1/8" = 1'-0"

PROCESS CENTER
BASEMENT & GRADE FLOOR PLANS
HVAC

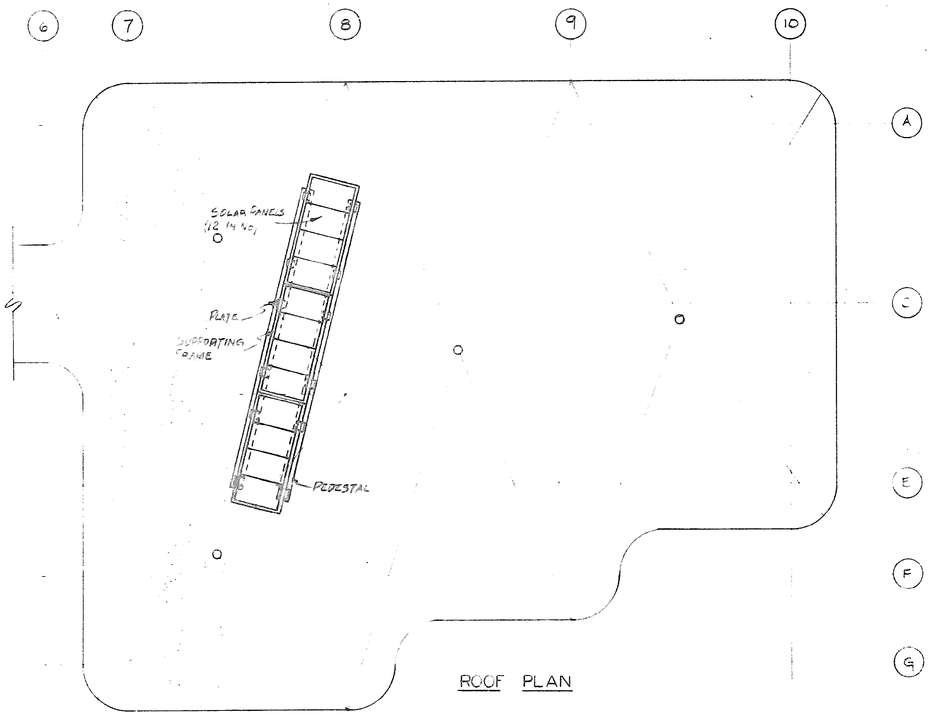
SHEET 9M-1
OF SHEETS
PROJECT NO. 78284

STAMPED

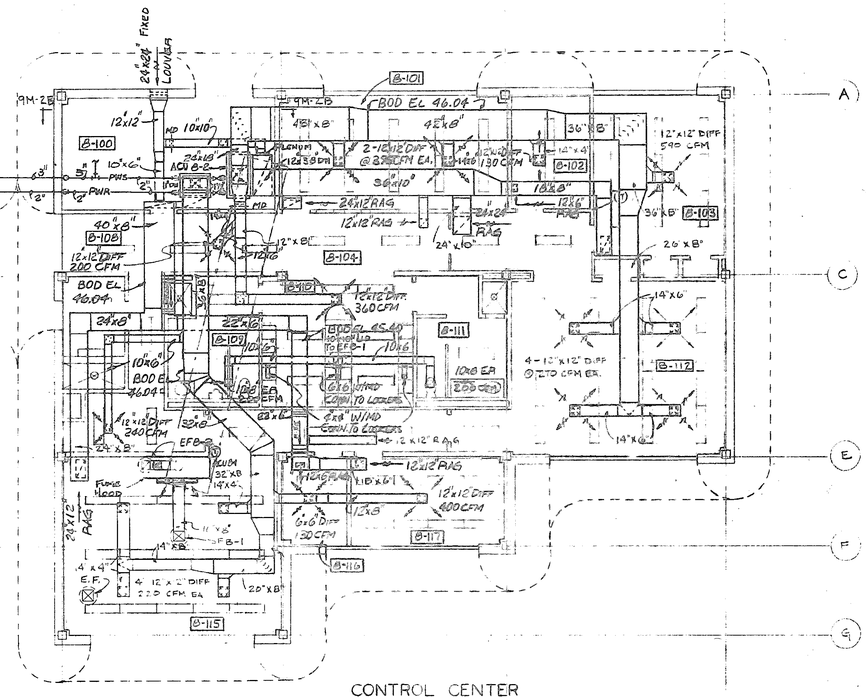
NORTH



PROCESS CENTER



ROOF PLAN



CONTROL CENTER

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED CC
DRAWN AE
CHECKED PMC
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

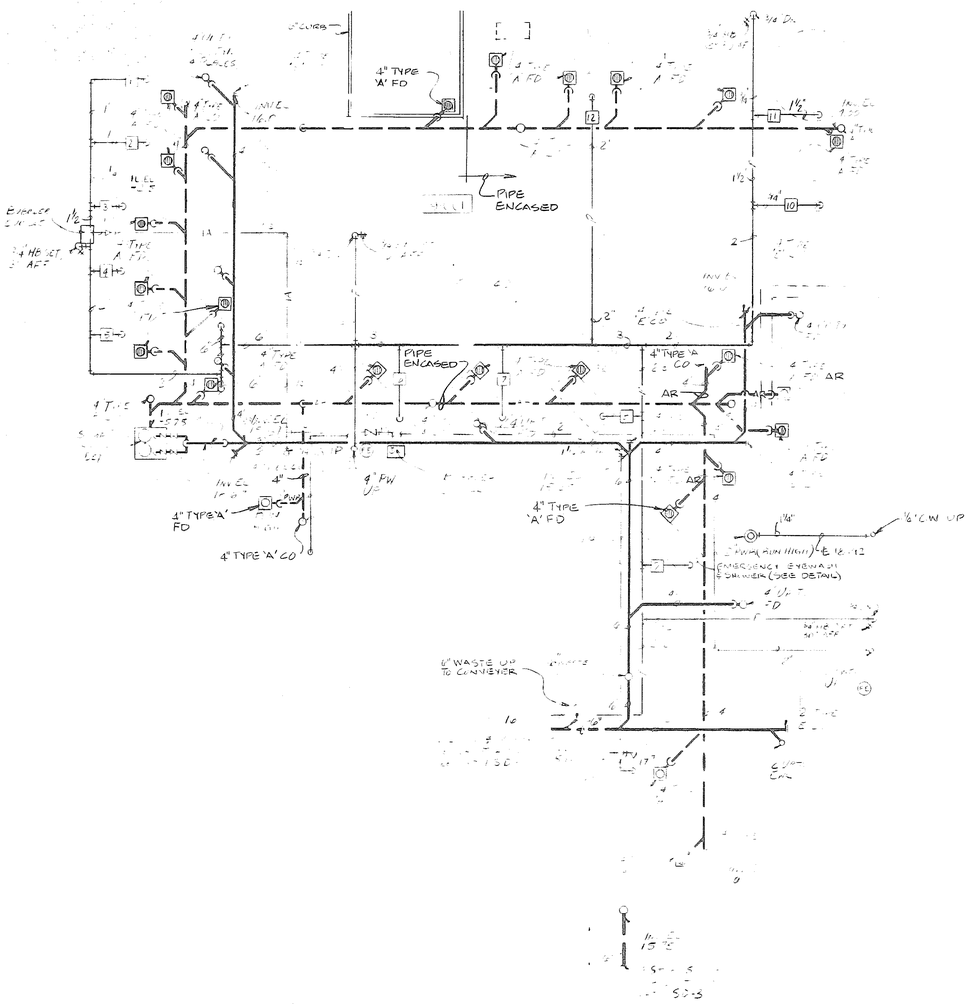
SCALE
1/8"= 1'-0"

PROCESS CENTER & CONTROL CENTER
FIRST FLOOR PLAN
HVAC

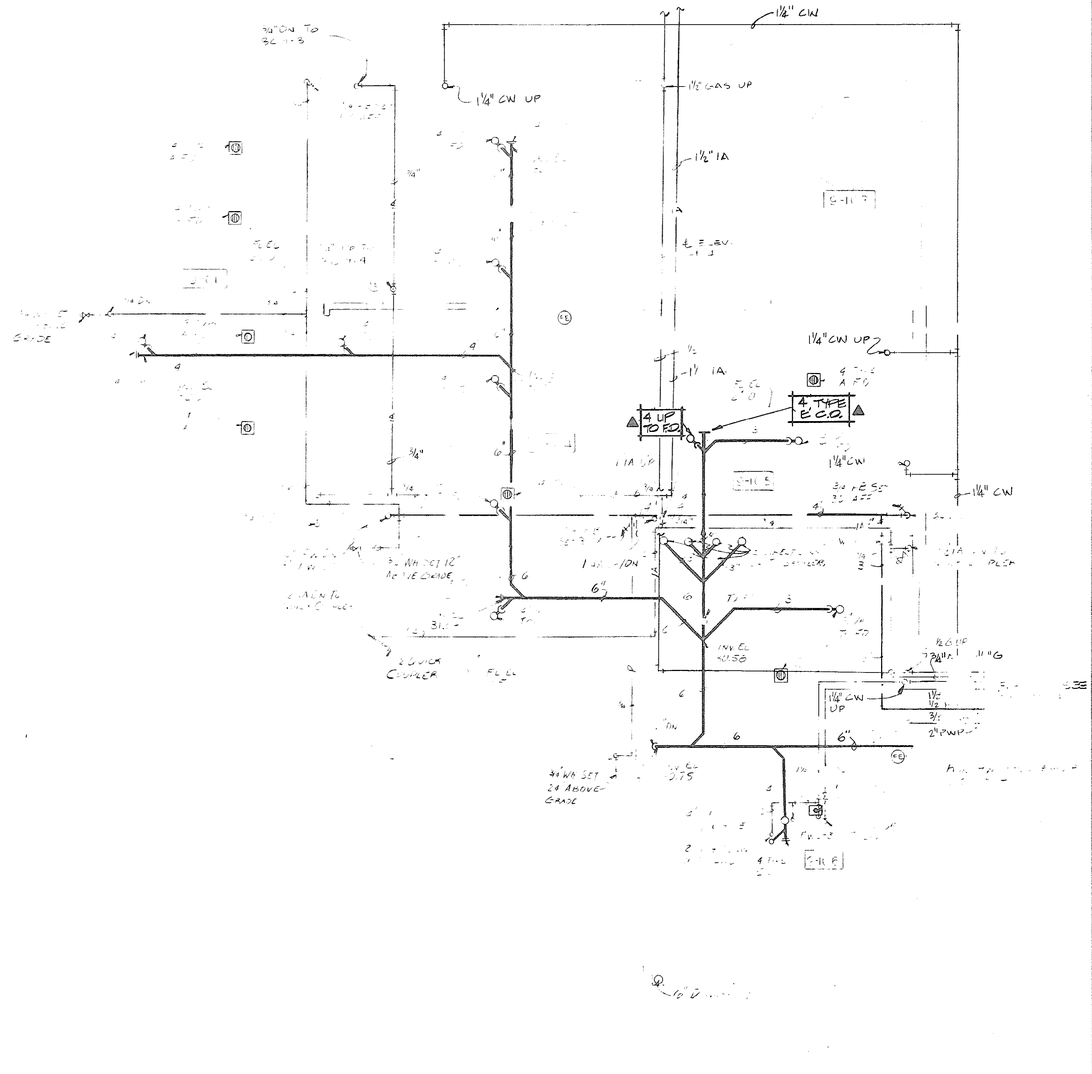
SHEET 9M-2
OF SHEETS
PROJECT NO. 78284

51-002-133

AS BUILTS ORD



EAST WING BASEMENT FLOOR PLAN



WEST WING BASEMENT FLOOR PLAN

NO	DATE	DESCRIPTION	APPROVED
1	9-9-81	DRAIN LINES FROM VACUUM PUMPS	J.T.M.

REVISIONS

DESIGNED CC
DRAWN A.E.
CHECKED P.M.C.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

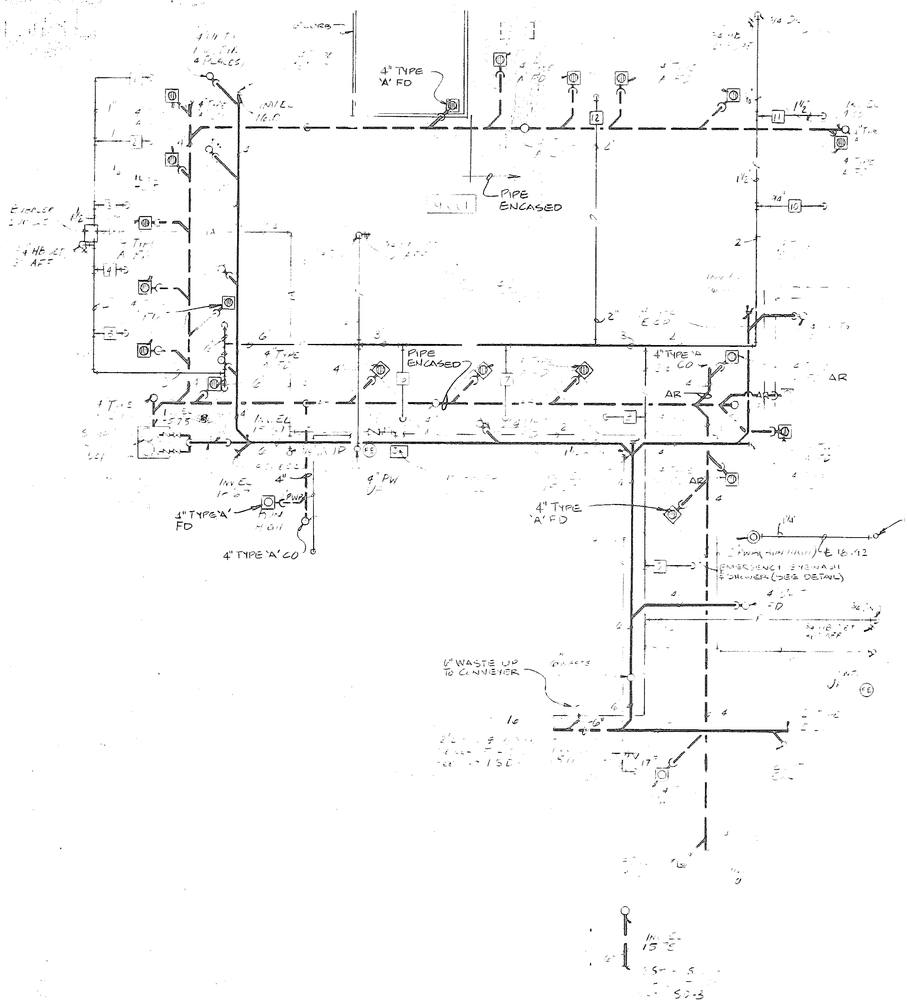
SCALE
1/8"= 1'-0"

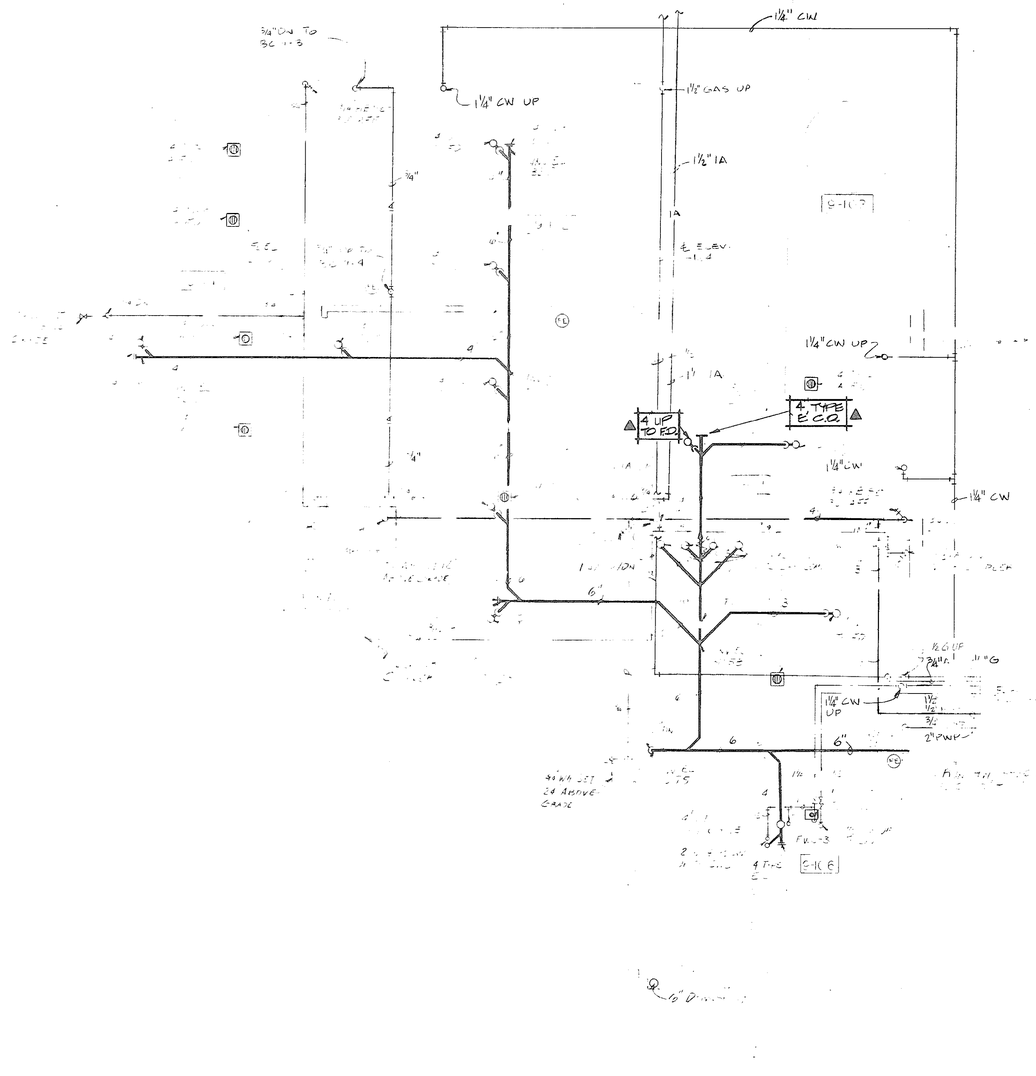
PROCESS CENTER
BASEMENT & GRADE FLOOR PLANS
PLUMBING

SHEET 9M-3
OF SHEETS
PROJECT NO. 78284

51-002-134

51-1204 RECORD





BASEMENT & GRADE FLOOR PLAN

NO.	DATE	DESCRIPTION	APPROVED
1	9-9-81	DRAIN LINES FROM VACUUM PUMPS	J.T.M.

REVISIONS

DESIGNED CC
DRAWN A.E.
CHECKED P.M.C.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/8"= 1'-0"

PROCESS CENTER
BASEMENT & GRADE FLOOR PLANS
PLUMBING

SHEET 9M-3
OF SHEETS
PROJECT NO. 78284

51-002-125

5/17/84 S RECORD

2-1,000 GAL STORAGE TANKS. SEE SPEC FOR ACCESSORIES.

1½" RUN UNDERGROUND

¾" WH SET 12" ABOVE GRADE

EMERGENCY EYEWASH AND SHOWER (SEE DET.)

1¼" CW DN.

9-201

9-202

9-203

9-204

9-205

9-206

9-207

9-208

9-210

EMERGENCY EYEWASH AND SHOWER (SEE DET.)

1½" PW TO SITE HYDRANTS

EMERGENCY EYEWASH AND SHOWER, SEE DET.

EWC-3

ACID RESISTANT WASTE LINE

ACID RESISTANT WASTE LINE

PROCESS CENTER

CONTROL CENTER

NO.	DATE	DESCRIPTION	APPROVED
1	8-5-81	⊘ - ACID RESISTANT WASTE LINE	EMC.
2	9-9-81	ACID RESISTANT WASTE LINE	J.T.M.
3	9-21-81	ACID RESISTANT WASTE LINE	J.T.M.

REVISIONS

DESIGNED CC
DRAWN AE
CHECKED PMC
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

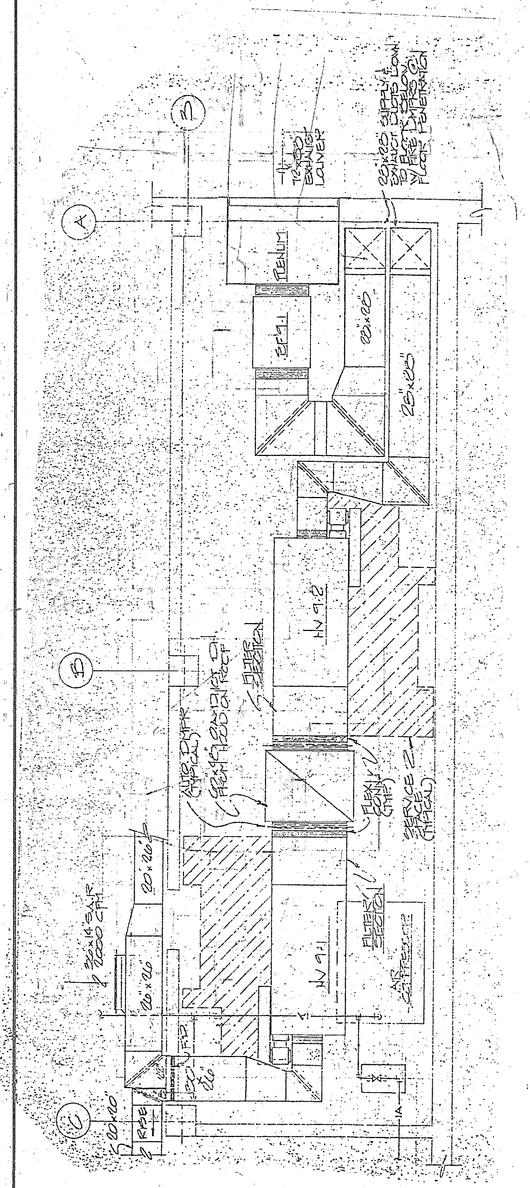
SCALE
1/8"=1'-0"

PROCESS CENTER & CONTROL CENTER
FIRST FLOOR PLAN
PLUMBING

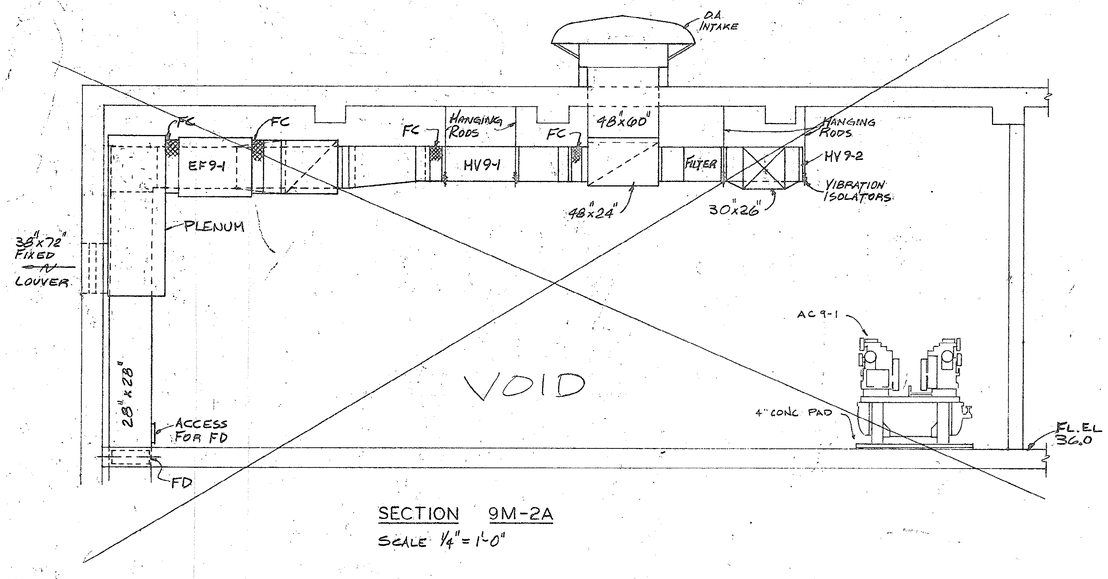
51-002-126

SHEET 9M-4
OF
PROJECT NO. 78284

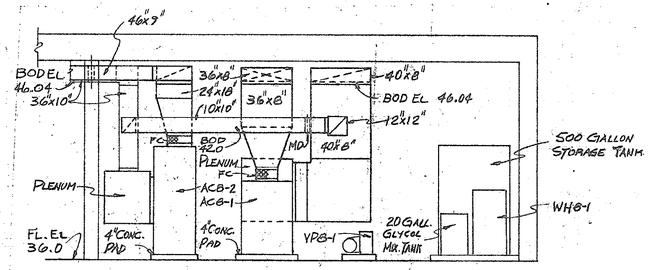
STATUS 5 RECORD



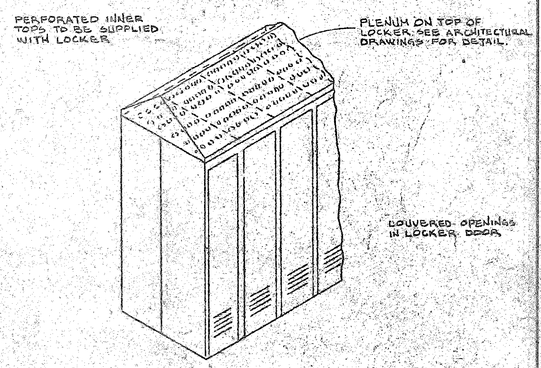
PROCESS CENTER
EQUIPMENT RM. PLAN
SCALE 1/4" = 1'-0"



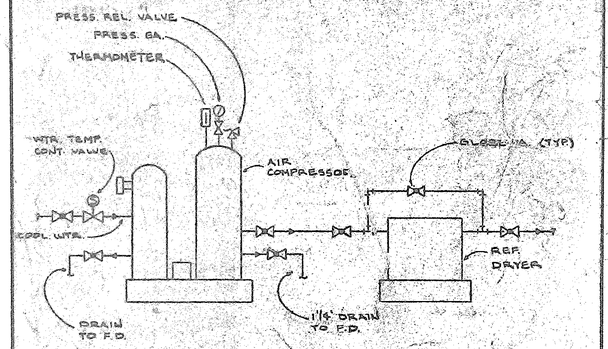
SECTION 9M-2A
SCALE 1/4" = 1'-0"



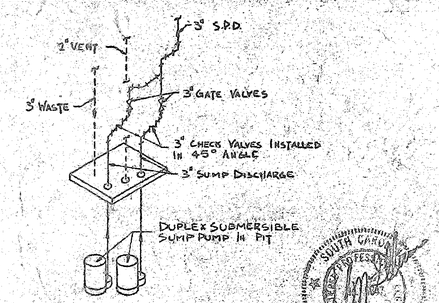
SECTION 9M-2B
SCALE 1/4" = 1'-0"



DETAIL 9M-5A
LOCKER VENTILATION



DETAIL 9M-5B
AIR COMPRESSOR AND REF DRYER



DETAIL 9M-5C
SUMP PUMP

51-002-137

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED C.C.
DRAWN A E
CHECKED P M C
DATE 12-3-79

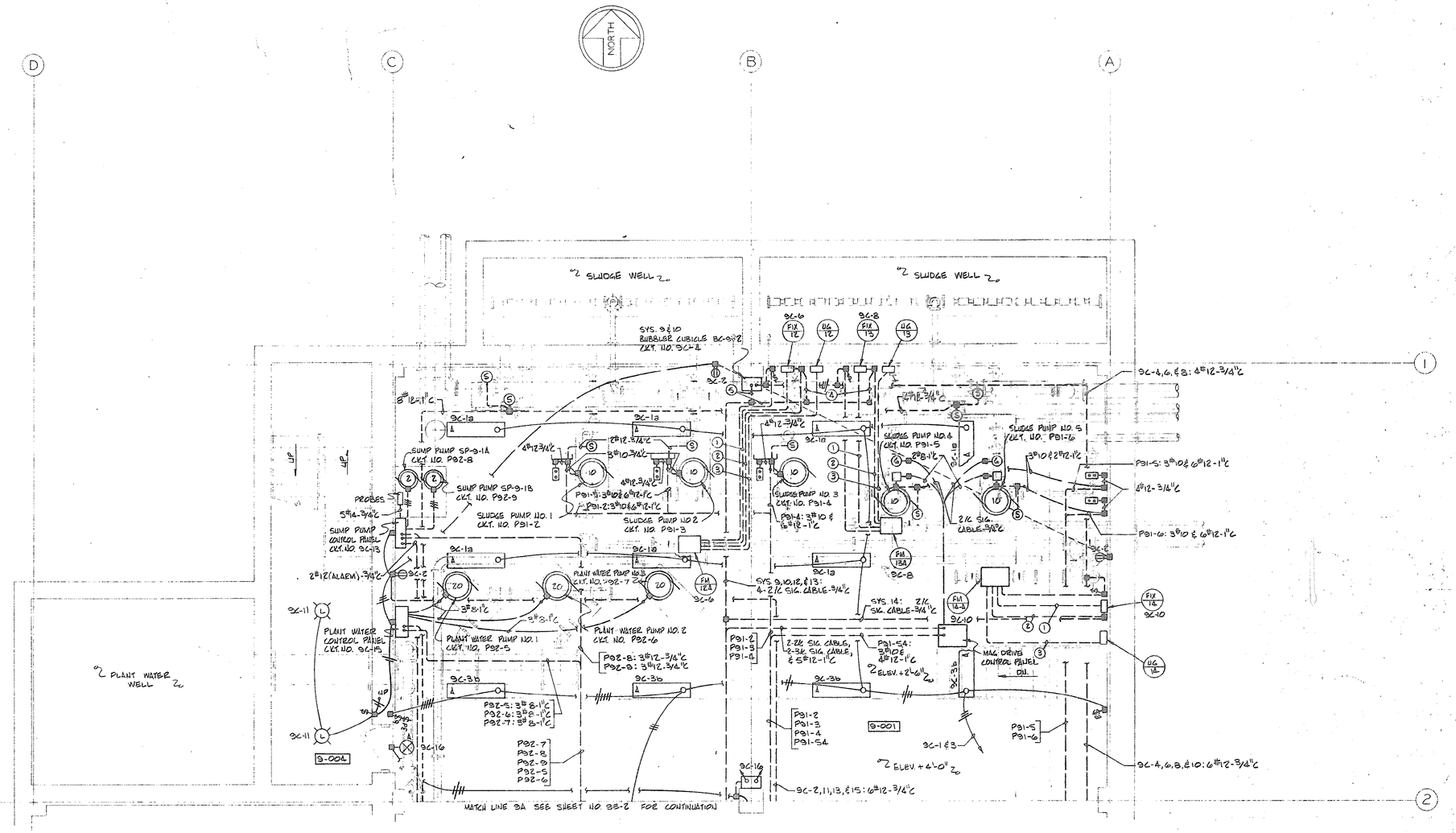
CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
AS NOTED

PROCESS CENTER & CONTROL CENTER
PLANS & SECTIONS

SHEET 9M-5
OF SHEETS
PROJECT NO.



NOTES:

1. INSTALL 2#12 & SHIELDED CABLES FURNISHED BY INST. MFG - 3/4"C
2. INSTALL SHIELDED CABLE FURNISHED BY INST. MFG.-3/4"C
3. TERMINATE CONDUIT FLUSH WITH FLOOR WITH COUPLING & RECESSED PLUG.

① INSTALL 2#12 WITH SHIELDED CABLE FURNISHED BY INST. MFG.- 3/4"C
② #8 BARE GROUND - 1/2"C
③ INSTALL SHIELDED CABLE FURNISHED BY INST. MFG.- 3/4"C
④ 2/C SIG. CABLE - 3/4"C
⑤ 2-2/C SIG CABLE - 3/4"C

51-003-128

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.N.G.
DRAWN R.W.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

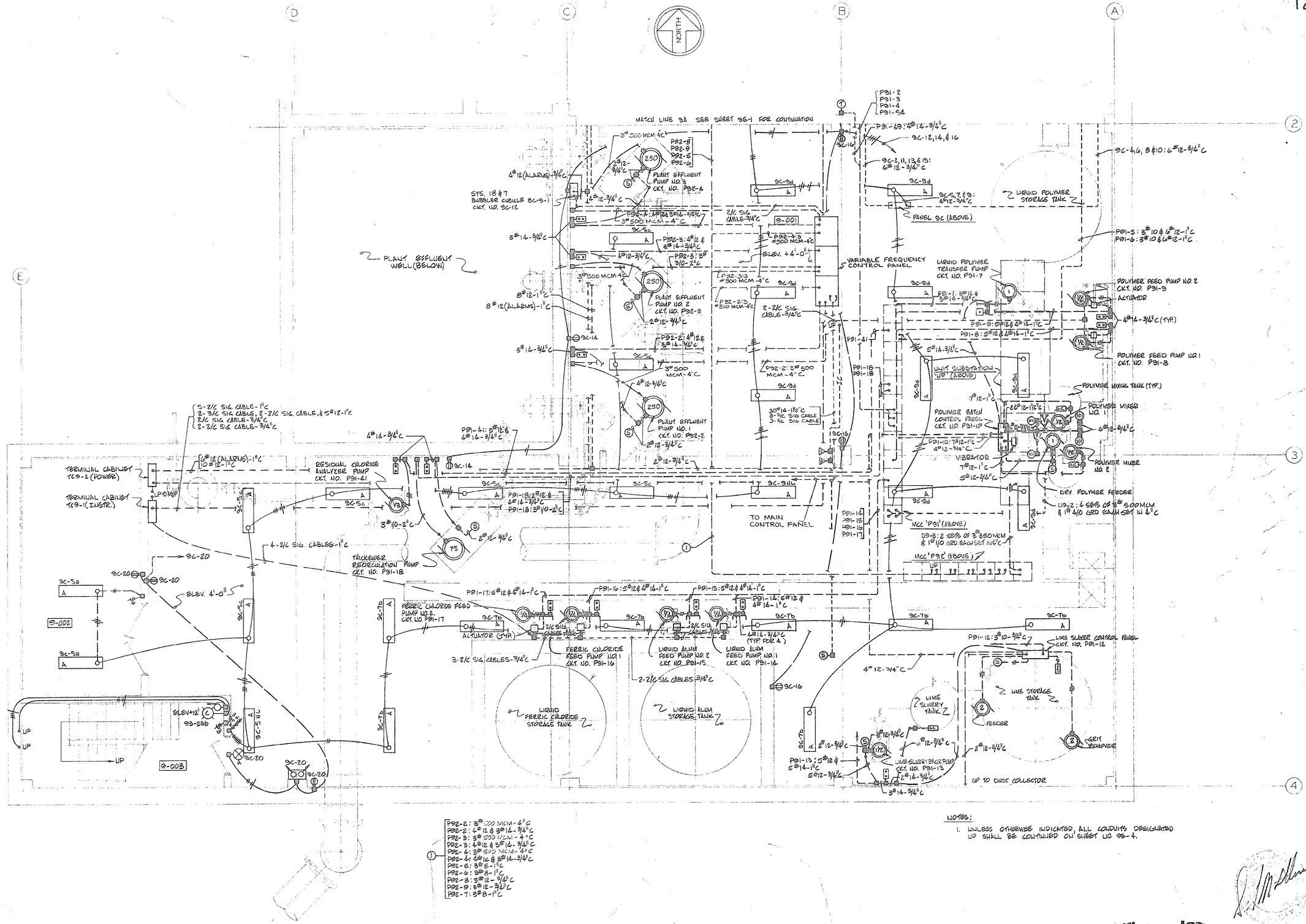
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

PROCESS CENTER
BASEMENT FLOOR PLAN — ELECTRICAL

SHEET 9E-1
OF SHEETS
PROJECT NO. 78284

AS BUILT RECORD



51-003-139

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.N.G.
DRAWN R.W.
CHECKED D.A.D.
DATE 12-3-79

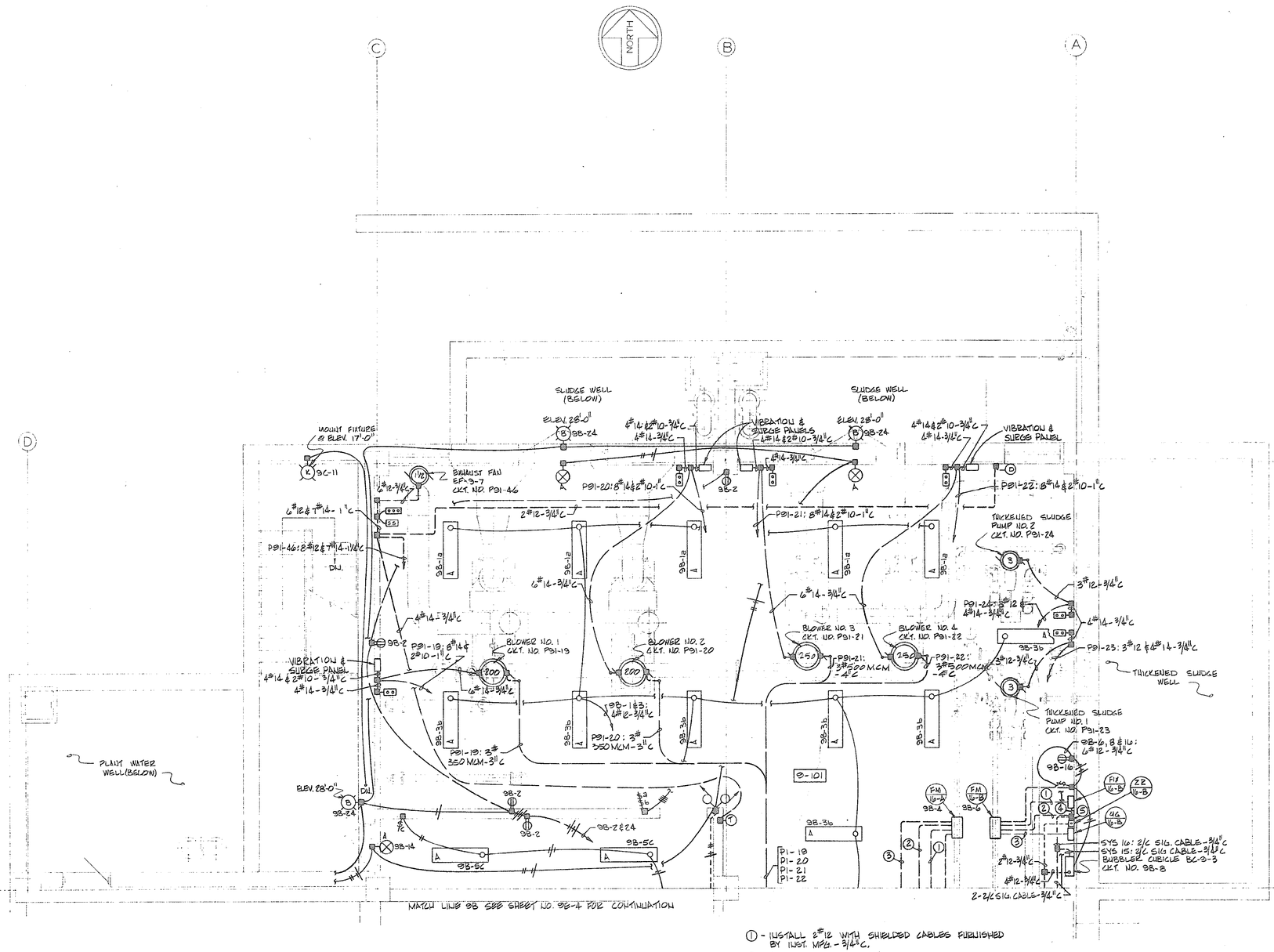
CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

PROCESS CENTER
BASEMENT FLOOR PLAN — ELECTRICAL

SHEET 9E-2
OF SHEETS
PROJECT NO. 78284


NORTH
C
B
A
D
1
2
SLUDGE WELL (BELOW)
ELEV. 28'-0"
MOUNT FIXTURES @ ELEV. 17'-0"
EXHAUST FAN EF-3-7 CKT. NO. P31-46
VIBRATION & SLUDGE PANEL
BLOWER NO. 1 CKT. NO. P31-19
BLOWER NO. 2 CKT. NO. P31-20
BLOWER NO. 3 CKT. NO. P31-21
BLOWER NO. 4 CKT. NO. P31-22
THICKENED SLUDGE PUMP NO. 2 CKT. NO. P31-24
THICKENED SLUDGE PUMP NO. 1 CKT. NO. P31-23
THICKENED SLUDGE WELL
PLANT WATER WELL (BELOW)
P31-46: 8#12 & T#14 - 1"C
P31-19: 8#14 & 2#10 - 1"C
P31-20: 8#14 & 2#10-1"C
P31-21: 8#14 & 2#10-1"C
P31-22: 8#14 & 2#10-1"C
P31-23: 3#12 & 4#14-3/4"C
P31-19: 3# 350 MCM-3"C
P31-20: 3# 350 MCM-3"C
P31-21: 3#500 MCM -4"C
P31-22: 3#500 MCM -4"C
2#12-3/4"C
4#14-3/4"C
6#14-3/4"C
4#14 & 2#10-3/4"C
4#14 & 2#10 - 3/4"C
2#12-3/4"C
4#12-3/4"C
2-2/C SIG. CABLE-3/4"C
SYS 16: 2/C SIG. CABLE-3/4"C
SYS 15: 2/C SIG. CABLE-3/4"C
BUBBLER CUBICLE BC-2-3
CKT. NO. 98-8
98-1a
98-1b
98-3a
98-3b
98-5C
98-6
98-8
98-14
98-16
98-24
98-36
98-2
98-2 & 24
98-2 & 3
98-2 & 4
98-2 & 5
98-2 & 6
98-2 & 7
98-2 & 8
98-2 & 9
98-2 & 10
98-2 & 11
98-2 & 12
98-2 & 13
98-2 & 14
98-2 & 15
98-2 &

NORTH

MATCH LINE 9B SEE SHEET NO 9B-3 FOR CONTINUATION

ELEV. 28'-0"

9B-24

6#14-3/4"C.

8#14-3/4"C

DP91-1: 3#12-3/4"C

P91-48: 3#12 & 4#14-1"C

EXHAUST FAN EF 9-9 CKT. NO. P91-48

3#12 & 8#14-1"C

P91-44: 3#12 & 4#14-3/4"C
P91-38: 5#12 & 6#14-1"C
P91-33: 4#12 & 6#14-1"C
P91-43: 3#12 & 4#14-3/4"C

9B-5a, 5b, 5c, 5d

9B-5: 6#12-3/4"C
9B-7: 4#12-3/4"C

OVERHEAD DOOR OPERATOR CKT. DP91-1

ELEV. 19.50

9-104

9B-7a, 7b, 7c, 7d

OVERHEAD DOOR OPERATOR CKT. DP91-1

ARC WELDER CKT. DP91-3

HYDRAULIC PRESS CKT. DP91-4

MONORAIL 9-1 CKT. DP91-2

DRILL PRESS CKT. DP91-5

SEE NOTE

9B-22

9B-22 & 26

1-1/4"C

1"C

DP91-5: 3#12-3/4"C

OPEN TO BELOW

GRINDER CKT. DP91-6

DP91-6: 3#12-3/4"C

DUST COLLECTOR CKT. DP91-7

DP91-7: 3#12-3/4"C

LIP TO MCP

5#14 IN EACH OF 4-2"C

DP91-4: 3#12-3/4"C

DP91-3: 3#6-1"C

PARTS WASHER CKT. NO. 9B-26

BAND SAW CKT. DP91-8

DP91-8: 3#12-3/4"C

9B-13a, 13b, 15a, 15b, 17a, 17b, 19a, 19b

9B-13, 15, 17 & 19: 6#12-3/4"C

2#12-3/4"C

3-2/C SIG. CABLE-2"C

SMOKE DETECTOR (W/K WITH BEEP-S)

3#14-1-1/2"C

1"C-T
1"C-1C

DP91-5, 6, 7 & 8

9-105

9B-20

9B-20a

9B-20b

9B-23

9B-23a

9B-23b

SEE NOTE 1

DP91-2: 3#12-3/4"C

9-106

9-107

ELEV. +20'

ELEV. +28'

9B-18

9B-18a

HV-9-3 CKT. NO. P91-51

DUCT HEATER CKT. NO. P91-52

P91-51: 5#12 & 4#14-3/4"C

4#14-3/4"C

P91-52: 3#10-3/4"C

9B-36

9B-36a

SYS 15 & 16: 2-2/C SIG. CABLE-3/4"C

6#12-3/4"C

3-2/C SIG. CABLE-3/4"C

2#12-3/4"C

4#8-1"C

9B-16

9B-16a

9B-16b

9B-16c

9B-16d

9B-16e

9B-16f

9B-16g

9B-16h

9B-16i

9B-16j

9B-16k

9B-16l

9B-16m

9B-16n

9B-16o

9B-16p

9B-16q

9B-16r

9B-16s

9B-16t

9B-16u

9B-16v

9B-16w

9B-16x

9B-16y

9B-16z

PANEL '9C'

9B-4

9B-4 & 14: 4#12-3/4"C

P92-14: 4#10-3/4"C

9C-17

8#12-1"C

9B-9 & 11: 4#12-3/4"C

9C-16 & 18

UNIT SUBSTATION 'U9'

9-102

9B-6, 8 & 16: 6#12-3/4"C

SI-3: 3#2 (15KV) & 1#6 (600V)-5"C EMPTY-5"C

TO MH #3 FOR CONTINUATION SEE SHEET NO. 1E-1

9B-12

9B-6, 8, 12 & 16: 8#12-3/4"C

GRD. ROD (TYP.)

1#4/0

1#4/0-2"C

9C-21, 22, 23, 24, 25, & 27

9B-10

9B-10a

9B-10b

9B-10c

9B-10d

9B-10e

9B-10f

9B-10g

9B-10h

9B-10i

9B-10j

9B-10k

9B-10l

9B-10m

9B-10n

9B-10o

9B-10p

9B-10q

9B-10r

9B-10s

9B-10t

9B-10u

9B-10v

9B-10w

9B-10x

9B-10y

9B-10z

P91-10: 3#6-1"C

1-1/4"C

4#14-3/4"C

9B-5: 3#N0 & 1#2-4"C
9B-4: 3#1/0 & 1#2-4"C

9C-21, 22, 23, 24, 25 & 27

9B-1: 3 SETS OF 3#500 MCM & 1#3/0 GRD. EACH SET IN 4"C

9B-4: 3#2 & #6-4"C

TO MH #2 FOR CONTINUATION SEE SHEET NO. 1E-1

9C-21, 22, 23 & 24: 7#10-2"C
9C-25 & 27: 4#10-2"C
10#12-2"C

10#12-1"C

TO MH #1 FOR CONTINUATION SEE SHEET NO 1E-1

2"C (EMPTY)

4"C (EMPTY)

2"C-1C

SYS. 4, 5, 8, 9, & 30: 9-2/C SIG. CABLE-4"C

7#14-3/4"C

6#12-3/4"C

P91-47: 8#12 & 7#14-1-1/2"C

MOTOR CONTROL CENTER PANEL 'P91'

10"#12-1"C TO AUTO TRANSFER SWITCH

MOTOR CONTROL CENTER PANEL 'P92'

9B-10 & 12

4#8-1"C

EXHAUST FAN EF-9-8 CKT. NO. P91-47

PANEL '9B'

P92-13: 4#10-3/4"C

DIST. PANEL DP91 CKT. P91-40

9B-21

9B-21a

9B-21b

9B-21c

9B-21d

9B-21e

9B-21f

9B-21g

9B-21h

9B-21i

9B-21j

9B-21k

9B-21l

9B-21m

9B-21n

9B-21o

9B-21p

9B-21q

9B-21r

9B-21s

9B-21t

9B-21u

9B-21v

9B-21w

9B-21x

9B-21y

9B-21z

U9-3: 3#250 MCM & 1#2-3"C

P91-56: 3#2 & 1#6-2"C

2"C

LIME STORAGE TANK

DUST COLLECTOR

9-103

2#12-3/4"C

9B-18 & 20

9B-18

9B-20

FOR CONTINUATION SEE SHEET NO. 1E-1

U9-3: 3#250MCM & 1#2-4"C
4#12-2"C
2"C-1C

P91-56: 3#2 & 1#6-2"C
2"C SPARE
2"C-T
2"C-1C

FOR CONTINUATION SEE SHEET NO. 1E-1

NOTE:

1. CONNECT PER MANUFACTURER REQUIREMENTS.

51-002-131

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.N.G.
DRAWN R.W.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

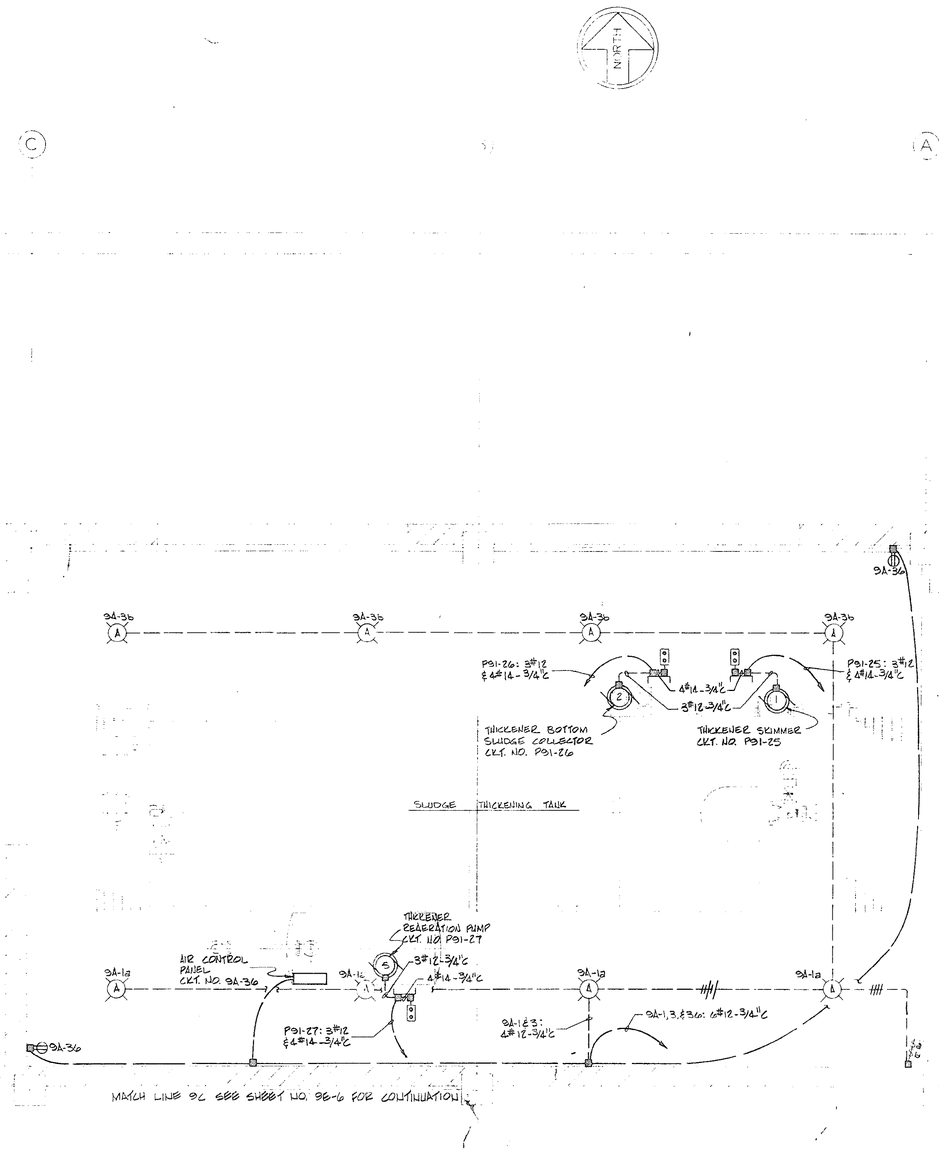
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

PROCESS CENTER
GRADE FLOOR PLAN — ELECTRICAL

SHEET 9E-4
OF SHEETS
PROJECT NO. 78284

AS BUILT RECORD



NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.N.G
DRAWN R.W.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

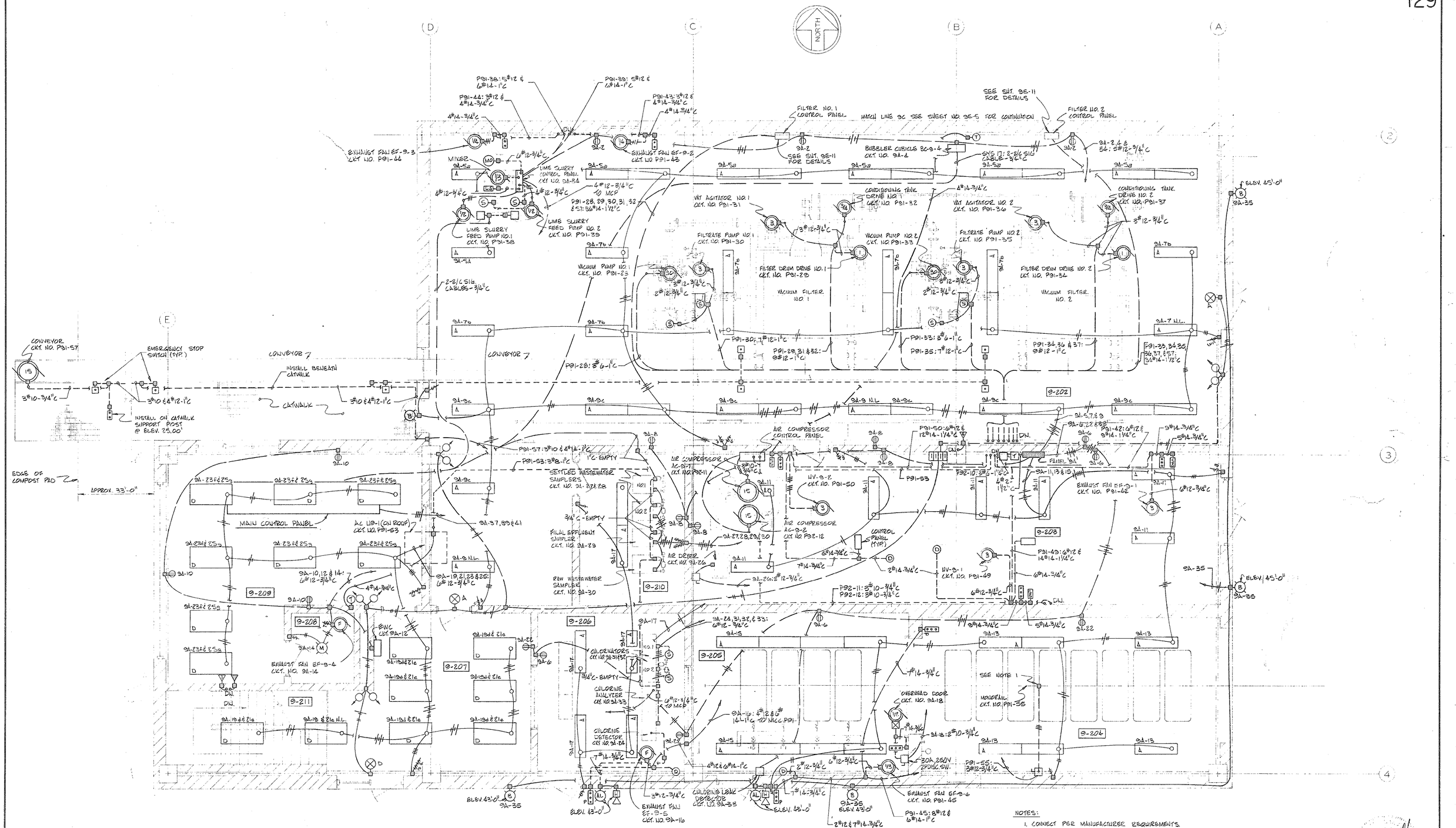
SCALE
1/4" = 1'-0"

PROCESS CENTER
FIRST FLOOR PLAN — ELECTRICAL

SHEET 9E-5
OF SHEETS
PROJECT NO. 78284

51-002-132

RECORD



NOTES:

1. CONNECT PER MANUFACTURER REQUIREMENTS.
2. INSTALL SPECIAL CABLE FURNISHED BY MANUFACTURER IN 3/4" C.
3. MOUNT TYPE [A] FIXTURES IN ROOMS 9-206, & 9-210 9' ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED. OTHER TYPE [A] FIXTURES SHOWN ON THIS SHEET SHALL BE MOUNTED 10' ABOVE FINISHED FLOOR.

51-007-133

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.N.G.
DRAWN R.W.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

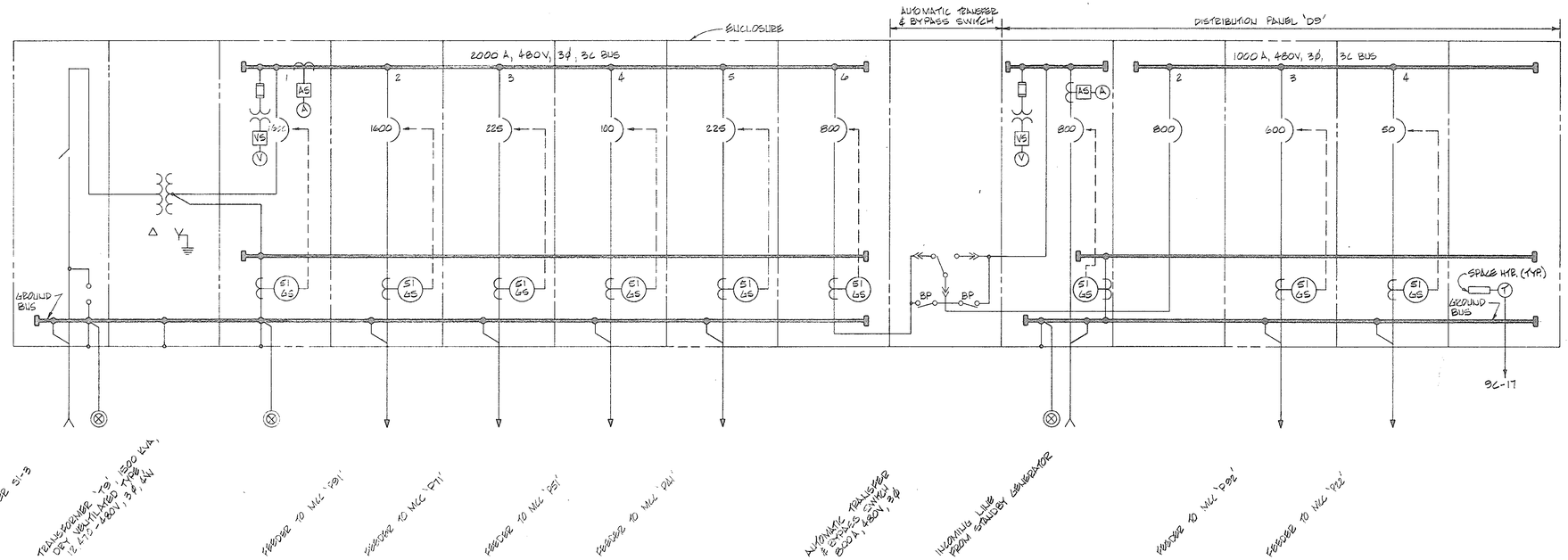
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
1/4" = 1'-0"

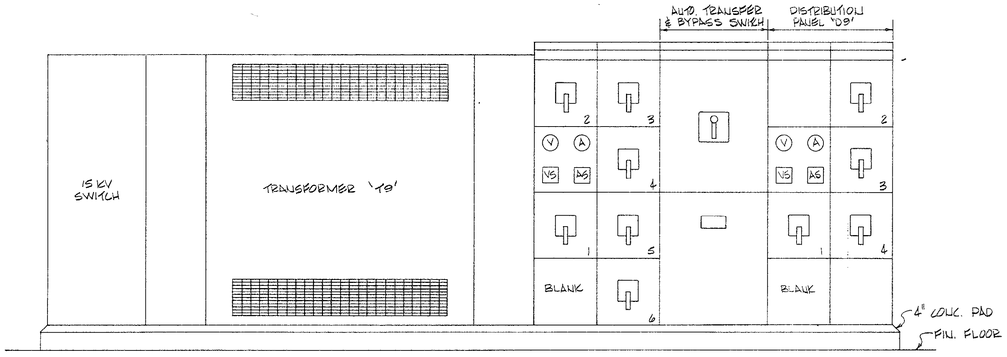
PROCESS CENTER
FIRST FLOOR PLAN — ELECTRICAL

SHEET 9E-6
OF SHEETS
PROJECT NO. 78284

51-007-133 5



UNIT SUBSTATION 'U9'
SINGLE LINE DIAGRAM



UNIT SUBSTATION 'U9'
FRONT ELEVATION VIEW
SCALE — 1/2" = 1'-0"

NOTES:
1. SEE SHEET NO. 9E-4 FOR PLAN LOCATION OF UNIT SUBSTATION 'U9'.

51-002-134

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED J.N.G.
DRAWN K.R.H.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

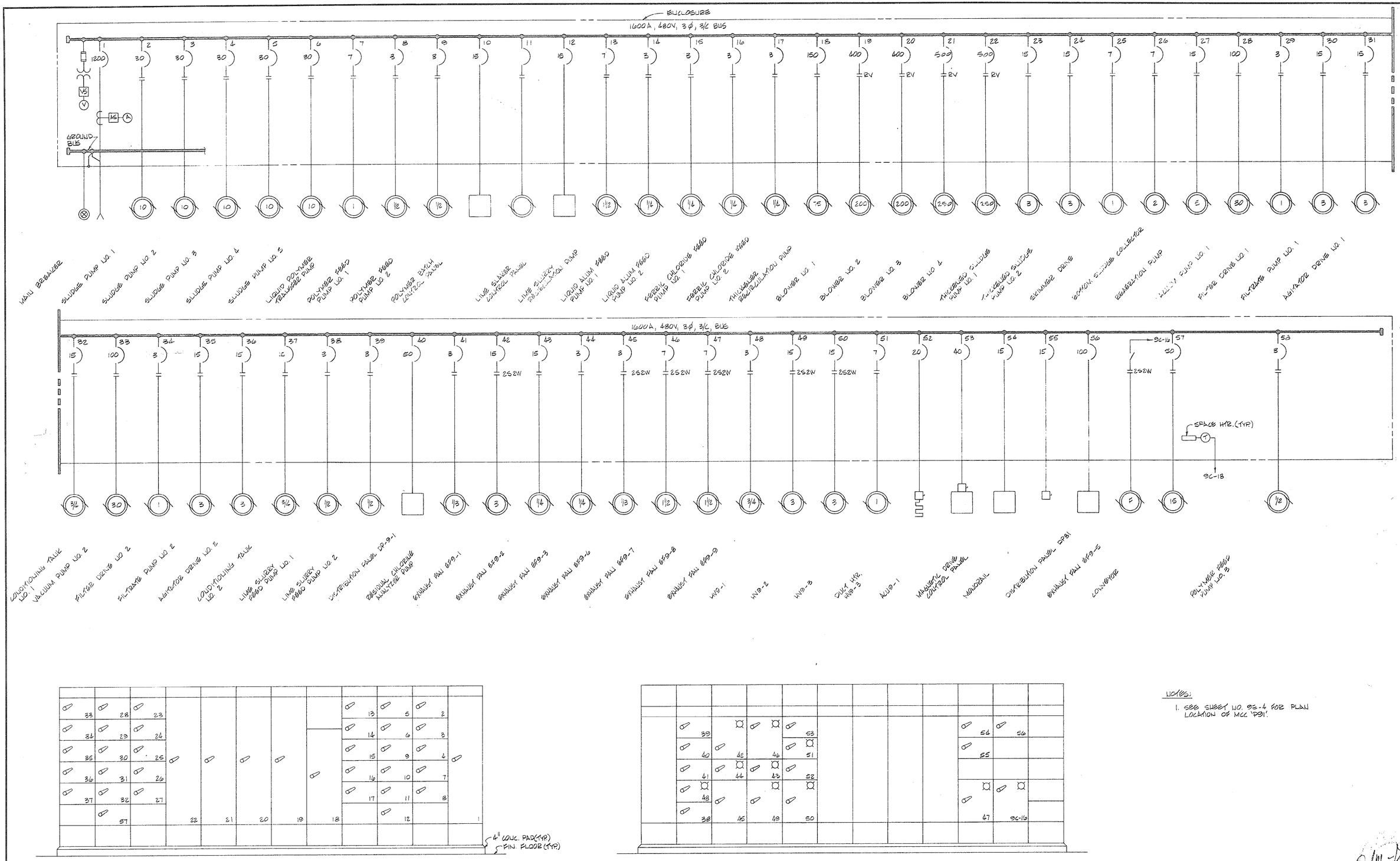
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

UNIT SUBSTATION 'U9'
SINGLE LINE DIAGRAM & ELEVATION

SHEET 9E-7
OF SHEETS
PROJECT NO. 78284

51-1343



FRONT ELEVATION

REAR ELEVATION

MOTOR CONTROL CENTER PANEL 'P91'

NOTES:

1. SEE SHEET NO. 9E-4 FOR PLAN LOCATION OF MCC 'P91'.

51-003-135

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED J.N.G.
DRAWN K.R.H.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

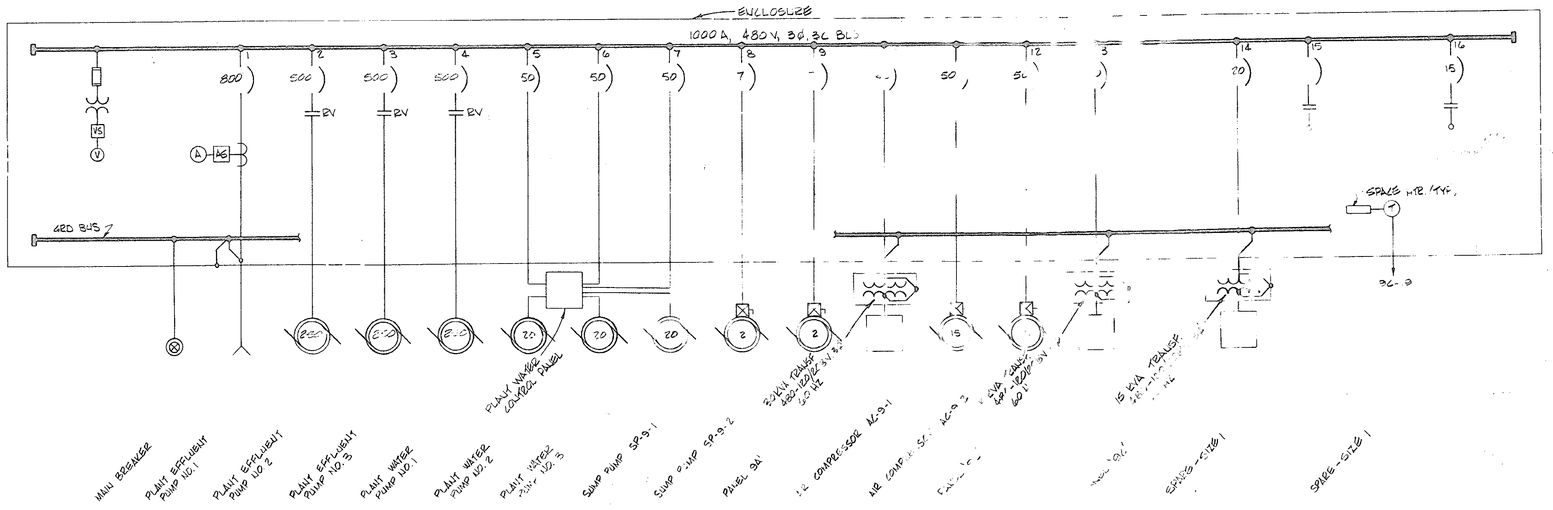
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

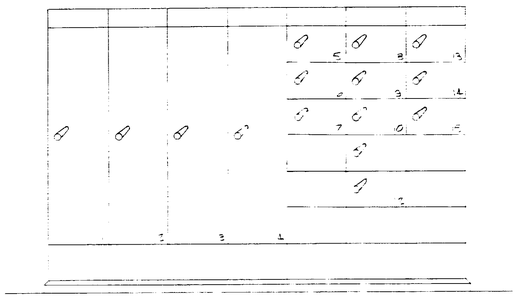
MOTOR CONTROL CENTER PANEL 'P91'
SINGLE LINE DIAGRAM & ELEVATION

SHEET 9E-8
OF SHEETS
PROJECT NO. 78284

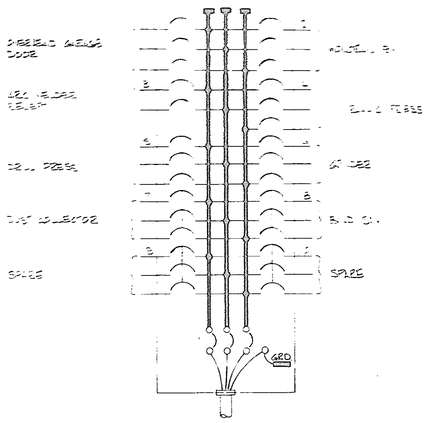
SHEET 5



MOTOR CONTROL CENTER 'P92'
SINGLE LINE DIAGRAM

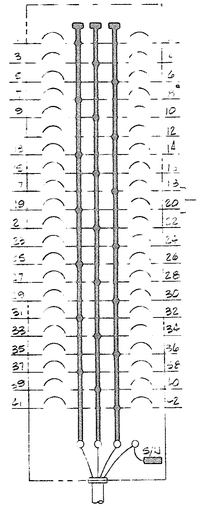


MOTOR CONTROL CENTER P92'
FRONT ELEVATION



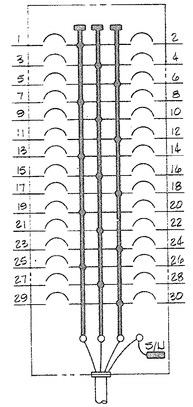
DISTRIBUTION PANEL DP-9-1

480 V, 3Ø, 3 W
50 A MAIN BREAKER
1-30/2 BREAKER
9-15/3 BREAKERS



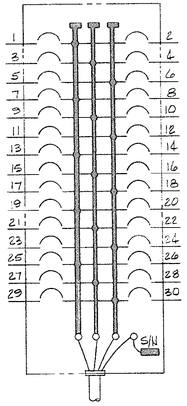
PANEL '9A'

120/208 V, 3Ø, 4 W
225 A MAIN LUGS ONLY
1-20/2 BREAKER
40-20/1 BREAKERS



PANEL '9B'

120/208 V, 3Ø, 4 W
100 A MAIN LUGS ONLY
30-20/1 BREAKERS



PANEL '9C'

120/208 V, 3Ø, 4 W
100 MAIN LUGS ONLY
30-20/1 BREAKERS

NOTES:

1. SEE SHEET NO. 9E-4 FOR PLAN LOCATION OF MCC 'P92'

51-002-136

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED J.N.G.
DRAWN R.W.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

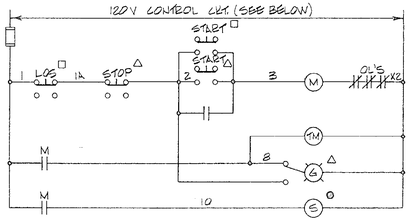
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

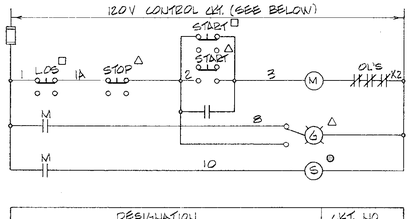
MOTOR CONTROL CENTER PANEL 'P92'
SINGLE LINE DIAGRAM & ELEVATION

SHEET 9E-9
OF SHEETS
PROJECT NO. 78284

51-002-136 S

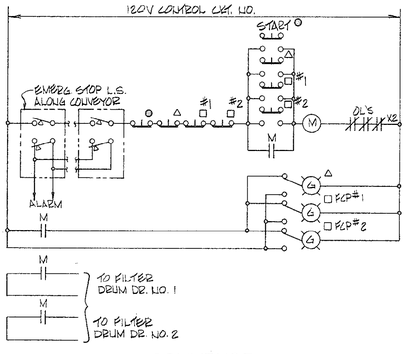


DESIGNATION	CKT. NO.
VACUUM PUMP NO. 1	P91-28
VACUUM PUMP NO. 2	P91-33
THICKENER RECIRCULATION PUMP	P91-18

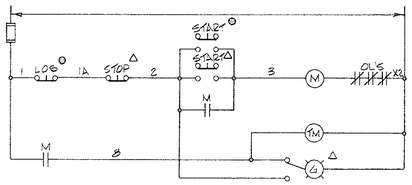


DESIGNATION	CKT. NO.
FILTRATE PUMP NO. 1	P91-30
FILTRATE PUMP NO. 2	P91-35

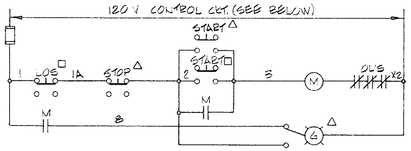
DESIGNATION	CKT. NO.
FILTER DRUM DRIVE NO. 1	P91-29
FILTER DRUM DRIVE NO. 2	P91-34



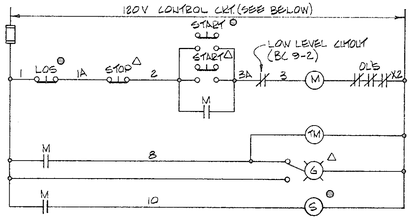
CONVEYOR



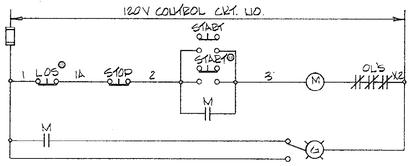
DESIGNATION	CKT. NO.
BOTTOM SLUDGE COLLECTOR DRIVE	P91-26
SKIMMER DRIVE	P91-25
RECIRCULATION PUMP	P91-27



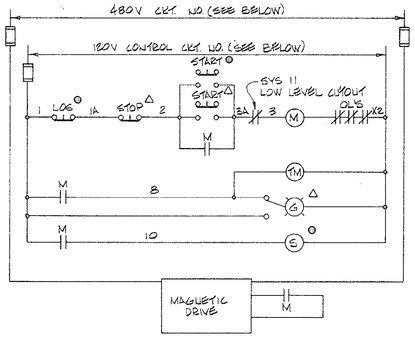
DESIGNATION	CKT. NO
VAT AGITATOR DRIVE NO. 1	P91-31
VAT AGITATOR DRIVE NO. 2	P91-36
CONDITIONING TANK NO. 1	P91-32
CONDITIONING TANK NO. 2	P91-37



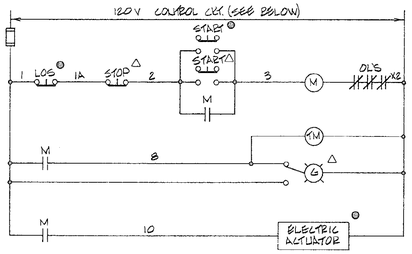
DESIGNATION	CKT. NO.
SLUDGE PUMP NO. 1	P91-2
SLUDGE PUMP NO. 2	P91-3
SLUDGE PUMP NO. 3	P91-4



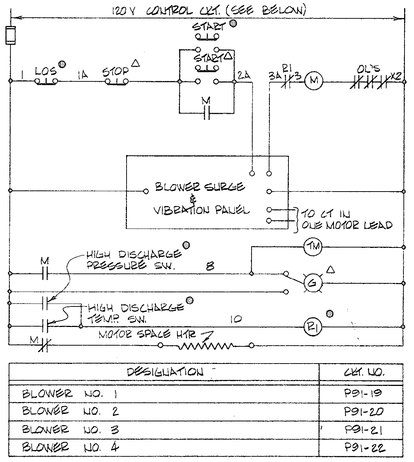
RESIDUAL CHLORINE ANALYZER PUMP



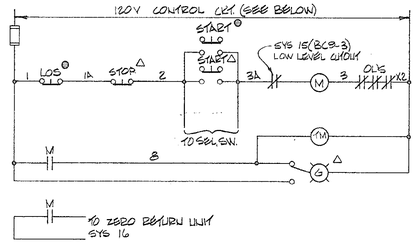
DESIGNATION	CKT. NO.
SLUDGE PUMP NO. 4	P91-5
SLUDGE PUMP NO. 5	P91-6



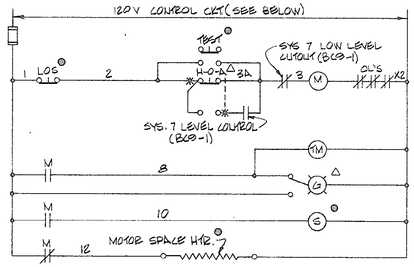
DESIGNATION	CKT. NO.
POLYMER FEED PUMP NO. 1	P91-8
POLYMER FEED PUMP NO. 2	P91-9
LIQUID ALUM FEED PUMP NO. 1	P91-14
LIQUID ALUM FEED PUMP NO. 2	P91-15
FERRIC CHLORIDE FEED PUMP NO. 1	P91-16
FERRIC CHLORIDE FEED PUMP NO. 2	P91-17



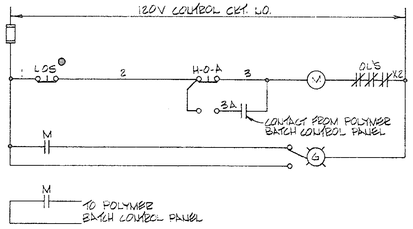
DESIGNATION	CKT. NO.
BLOWER NO. 1	P91-19
BLOWER NO. 2	P91-20
BLOWER NO. 3	P91-21
BLOWER NO. 4	P91-22



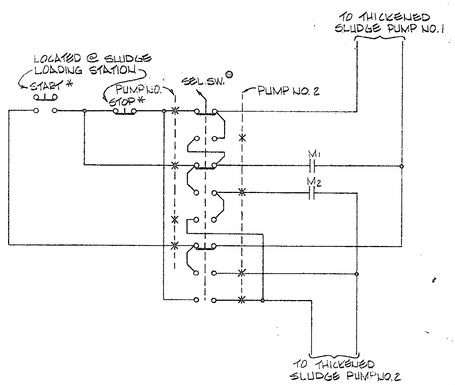
DESIGNATION	CKT. NO.
THICKENED SLUDGE PUMP NO. 1	P91-23
THICKENED SLUDGE PUMP NO. 2	P91-24



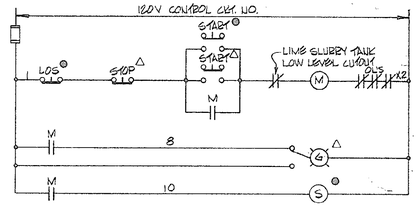
DESIGNATION	CKT. NO.
PLANT EFFLUENT PUMP NO. 1	P92-2
PLANT EFFLUENT PUMP NO. 2	P92-3
PLANT EFFLUENT PUMP NO. 3	P92-4



LIQUID POLYMER TRANSFER PUMP



THICKENED SLUDGE PUMP SELECTOR SWITCH



LIME SLURRY RECIRCULATION PUMP

NOTES:

1. THE MOTOR CONTROL CENTER MANUFACTURER SHALL USE THE NUMBERS SHOWN ON THE SCHEMATIC WIRING DIAGRAMS ON THIS SHEET ON TERMINAL BLOCKS OF THE STARTER UNITS. THE CONTRACTOR SHALL IDENTIFY ALL CONTROL CONDUCTORS INSTALLED WITH THESE SAME NUMBERS BY THE USE OF SELF-STICKING TAGS. THE IDENTIFICATION SHALL ALSO INCLUDE THE CIRCUIT NUMBER WHERE MORE THAN ONE CIRCUIT IS IN THE SAME ENCLOSURE.

2. ALL CONTROL WIRES INSTALLED BY THE CONTRACTOR SHALL BE COLOR-CODED AS FOLLOWS:

WIRE DESIGNATION	COLOR
1,1A	BLACK
2	RED
3	BLUE
X2	WHITE
8	YELLOW
10	ORANGE
OTHERS	AS APPROVED

LEGEND

- ⊙ AT MOTOR
- △ AT MAIN CONTROL PANEL
- × REMOTE
- □ AT THEIR RESPECTIVE FILTER CONTROL PANEL
- ▲ AT LIQUID SLUDGE LOADING STATION

ALL DEVICES WHOLLY FURTHER DESIGNATION SHALL BE LOCATED IN THE MOTOR CONTROL CENTER PANELS.

51-003-137

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED J.N.G.
DRAWN K.R.H.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

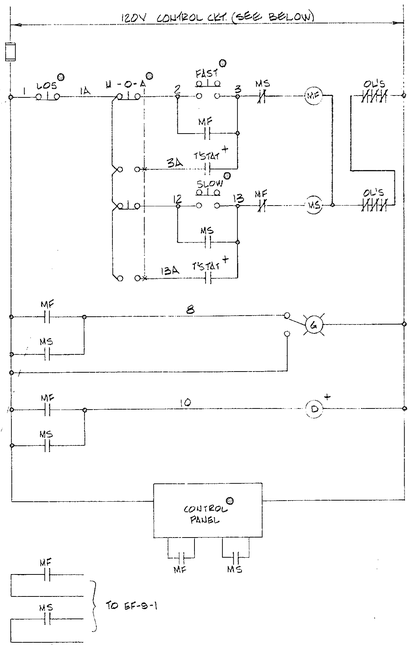
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

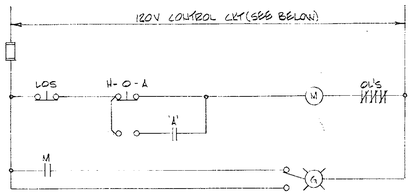
MOTOR CONTROL CENTER PANELS 'P91' & 'P92' SCHEMATIC WIRING DIAGRAMS

SHEET 9E-10
OF SHEETS
PROJECT NO. 78284

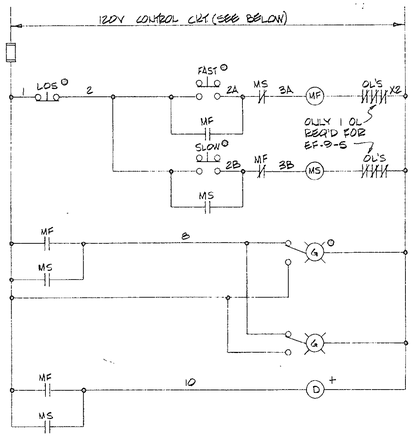
5



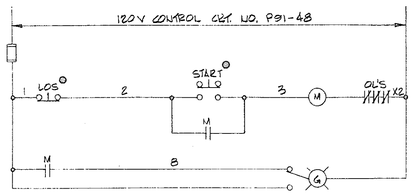
DESIGNATION	CKT. NO.
HV-9-1	P91-49
HV-9-2	P91-50



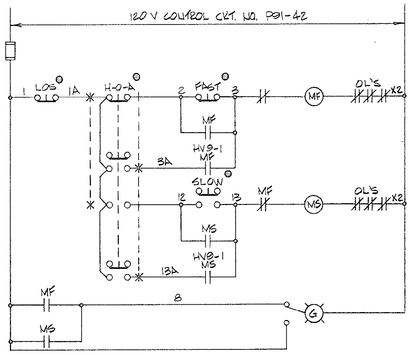
DESIGNATION	CKT. NO.	INTERLOCK 'A'
EXHAUST FAN EF-9-2	P91-43	HV-9-2 (LOW SPEED)
EXHAUST FAN EF-9-3	P91-44	HV-9-2 (HIGH SPEED)



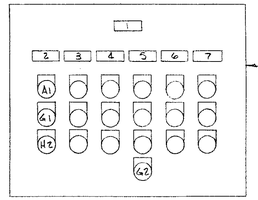
DESIGNATION	CKT. NO.
EXHAUST FAN EF-9-5	9A-16
EXHAUST FAN EF-9-6	P91-45



EXHAUST FAN EF-9-9

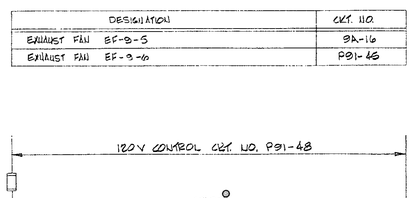


EXHAUST FAN EF-9-1



FILTER CONTROL PANEL NO. 1 (NO. 2)

NAMEPLATE SIZE	NAMEPLATE NO.	ENGRAVED
A	1	FILTER CONTROL PANEL NO. 1 (NO. 2)
B	2	VACUUM PUMP NO 1 (NO. 2)
B	3	FILTRATE PUMP NO. 1 (NO. 2)
B	4	MT AGITATOR NO. 1 (NO. 2)
B	5	FILTER DRUM DRIVE NO. 1 (NO. 2)
B	6	CONDITIONING TANK DRIVE NO. 1 (NO. 2)
B	7	CONVEYOR



DESIGNATION	CKT. NO.
EXHAUST FAN EF-9-7	P91-46
EXHAUST FAN EF-9-8	P91-47

LEGEND

⊙ LT MOTOR

UNLESS OTHERWISE INDICATED ALL EQUIPMENT AND DEVICES SHALL BE LOCATED IN THE MOTOR CONTROL CENTER

NOTES:

1. THE MOTOR CONTROL CENTER MANUFACTURER SHALL USE THE NUMBERS SHOWN ON THE SCHEMATIC WIRING DIAGRAMS ON THIS SHEET ON TERMINAL BLOCKS OF THE STARTER UNITS. THE CONTRACTOR SHALL IDENTIFY ALL CONTROL CONDUCTORS INSTALLED WITH THE SAME NUMBERS BY THE USE OF SELF-STICKING TAGS. THE IDENTIFICATION SHALL ALSO INCLUDE THE CIRCUIT NUMBER WHERE MORE THAN ONE CIRCUIT IS IN THE SAME ENCLOSURE
2. ALL CONTROL WIRES INSTALLED BY THE CONTRACTOR SHALL BE COLOR CODED AS FOLLOWS.

WIRE DESIGNATION	COLOR
1, 1A	BLACK
2	RED
3	BLUE
X2	WHITE
9	YELLOW
10	ORANGE
OTHER	AS APPROVED

51-003-138

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.N.G.
DRAWN R.W.
CHECKED D.A.D.
DATE 12-3-79

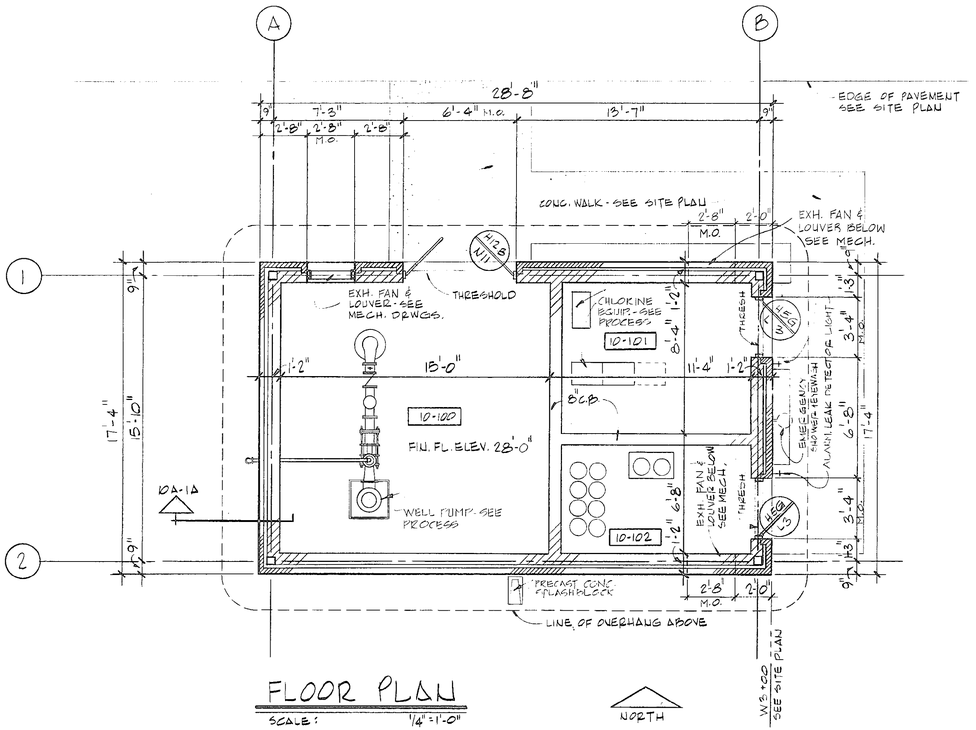
CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

MOTOR CONTROL CENTER PANELS 'P91' & 'P92'
SCHEMATIC WIRING DIAGRAMS

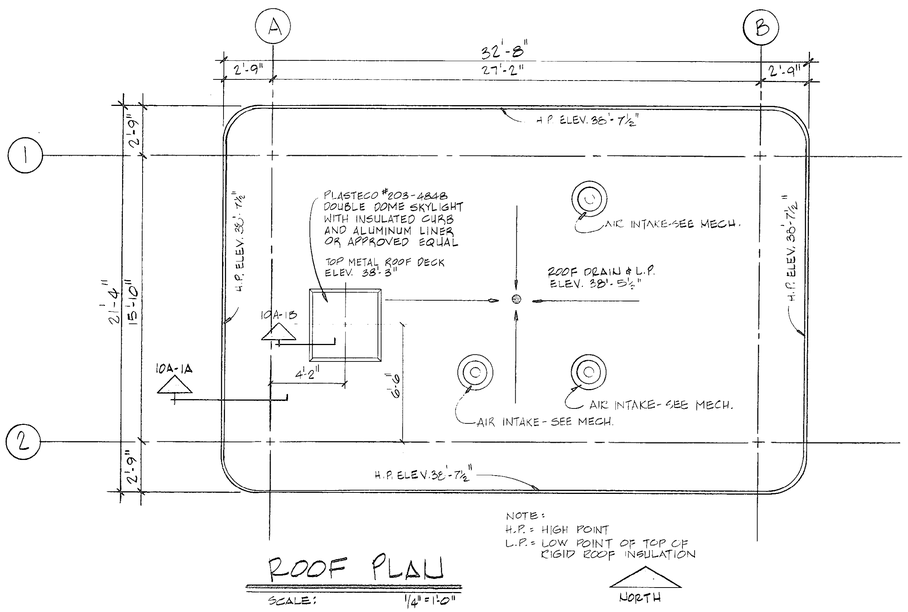
SHEET 9E-11
OF SHEETS
PROJECT NO. 78284



FLOOR PLAN

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

NORTH

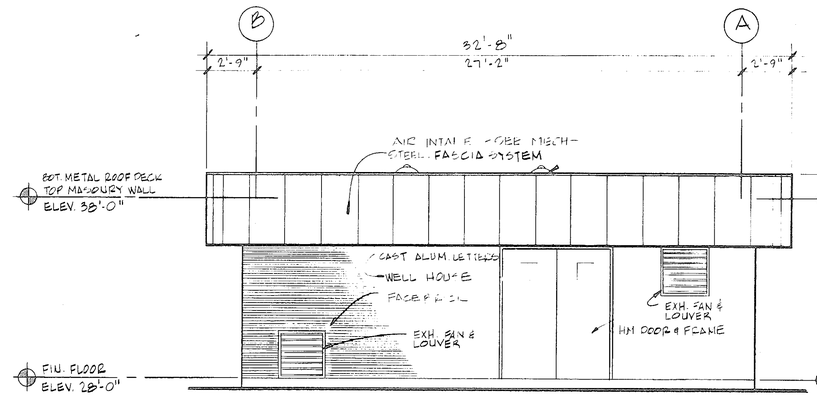


NOTE:
H.P. = HIGH POINT
L.P. = LOW POINT OF TOP OF RIGID ROOF INSULATION

ROOF PLAN

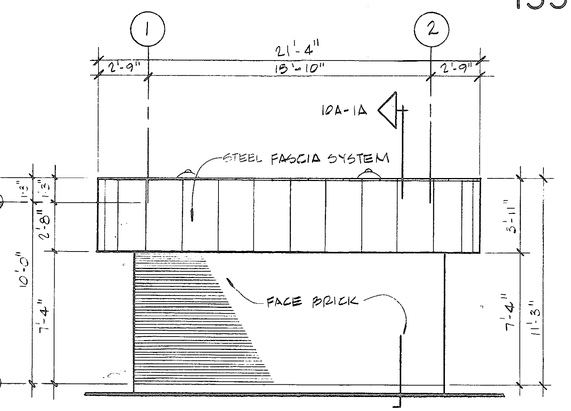
SCALE: 1/4"=1'-0"

NORTH



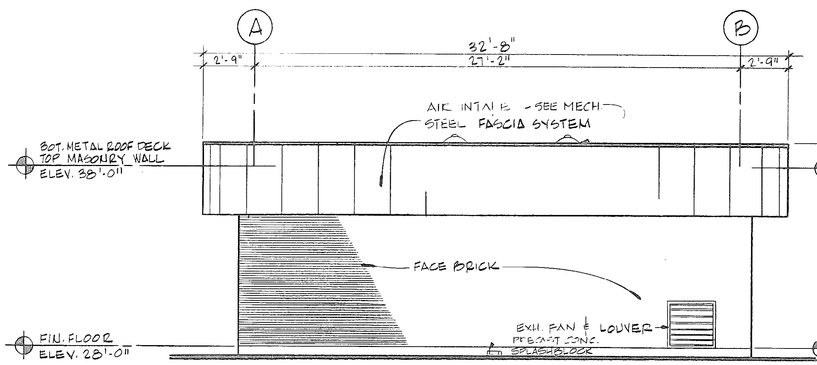
NORTH ELEVATION

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



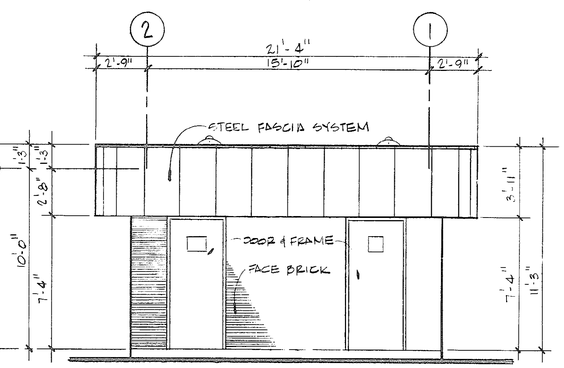
WEST ELEVATION

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



SOUTH ELEVATION

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

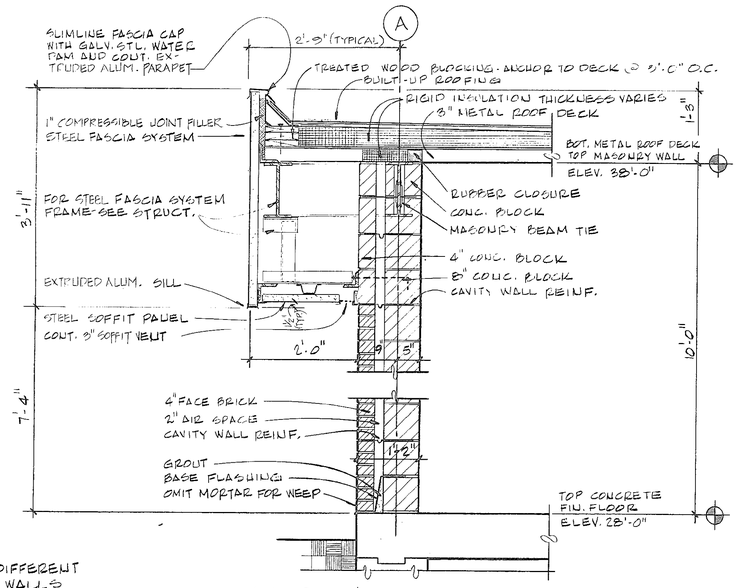


EAST ELEVATION

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

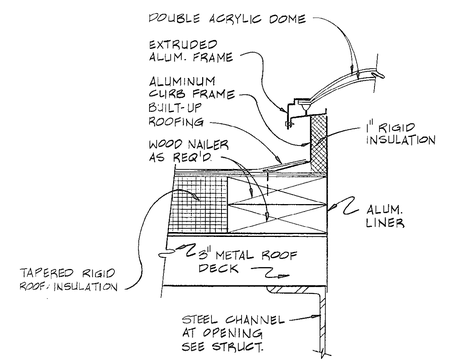
NOTES:

1. SKYLIGHT SHALL BE DESIGNED TO SUPPORT 40 PSF LIVE LOAD AND 20 PSF UPLIFT.
2. INSTALL IN COMPLIANCE WITH MANUFACTURERS PRINTED INSTRUCTIONS. USE NON MAGNETIC STAINLESS STEEL FASTENERS FOR FIELD CONNECTIONS.



SECTION 10A-1A

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



SECTION 10A-1B

N.T.S.

ROOM FINISH SCHEDULE						
ROOM NO.	DESCRIPTION	FLOOR	BASE	WALLS	CEILING	REMARKS
10-100	WELL PUMP ROOM	I. F.	C. B.	C. B.	S. C.	SEE NOTE #1
10-101	CHLORINE ROOM	I. F.	C. B.	C. B.	S. C.	SEE NOTE #1
10-102	CHLORINE STORAGE	I. F.	C. B.	C. B.	S. C.	SEE NOTE #1

NOTE #1.
PAINT C.B. BASE A DIFFERENT COLOR THAN C.B. WALLS
INSTALL I.F. ON ALL EQUIPMENT CURBS & BASES

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED CB
DRAWN CB
CHECKED ROM
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

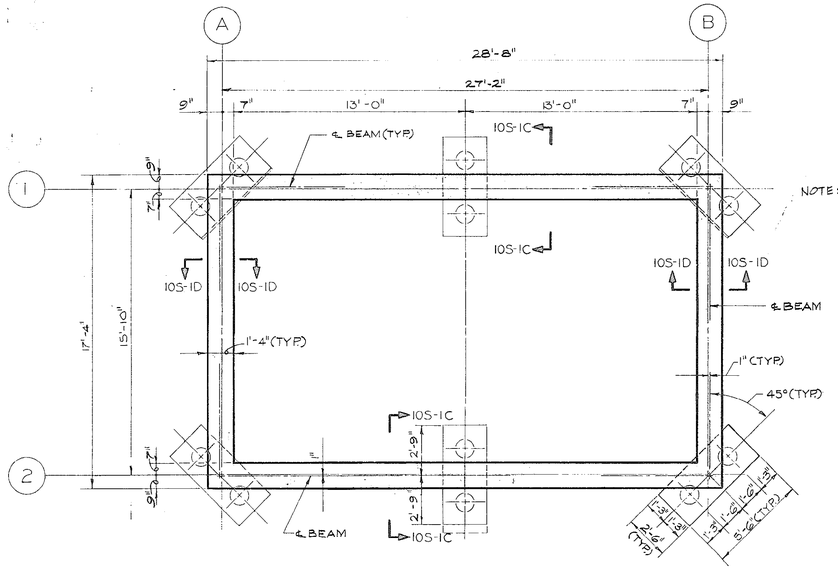
SCALE
AS NOTED

WELL HOUSE
PLANS, ELEVATIONS, SECTIONS

SHEET 10A-1
OF SHEETS
PROJECT NO. 78284

51-003-139

AS-BUILT RECORD



NOTE: FOOTING SIZES WERE INCREASED ON NORTH CORNERS & SOUTH CENTER FOR WALL SUPPORT.

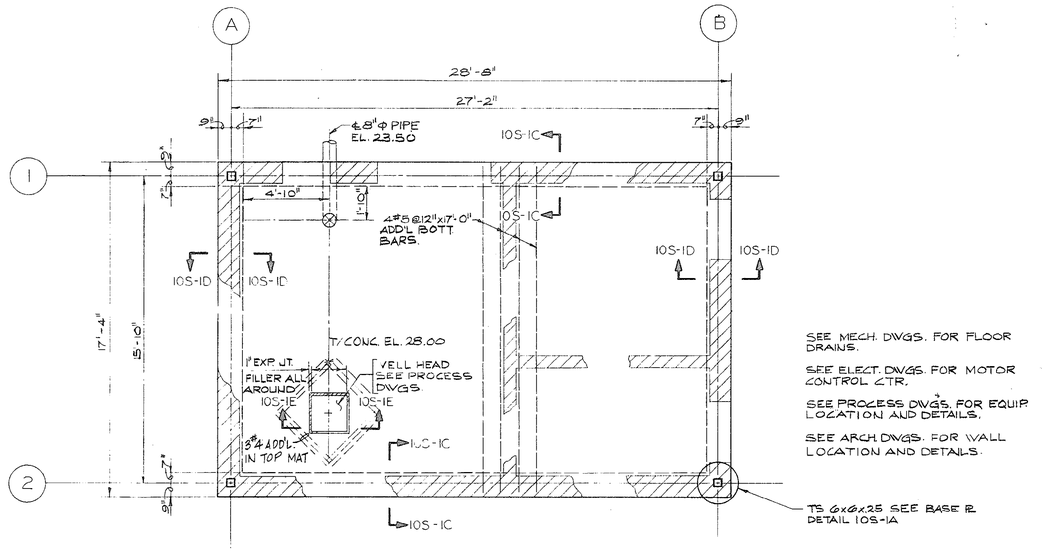
FOUNDATION PLAN
1/4"=1'-0"

NOTE:

ALL PILES SHOWN ON THIS SHT. SHALL BE TREATED TIMBER OR DRILLED-IN-PLACE CONCRETE BEARING PILES (BEARING CAPACITY=20 TONS) SEE SHT. XS-1 AND SPEC'S FOR PILE DETAILS.

PILE CUT-OFF ELEVATION FOR ALL PILES SHOWN ON THIS SHT. SHALL BE 23.75.

℄ OF PILE CAP SAME AS ℄ OF BEAM ABOVE.



SEE MECH. DWGS. FOR FLOOR DRAINS.

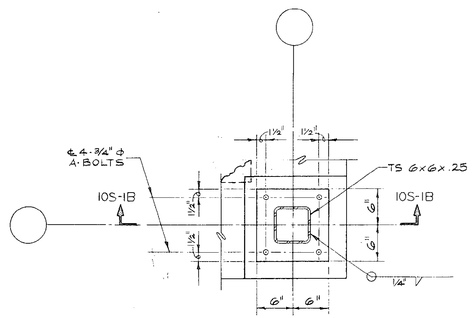
SEE ELECT. DWGS. FOR MOTOR CONTROL CTR.

SEE PROCESS DWGS. FOR EQUIP. LOCATION AND DETAILS.

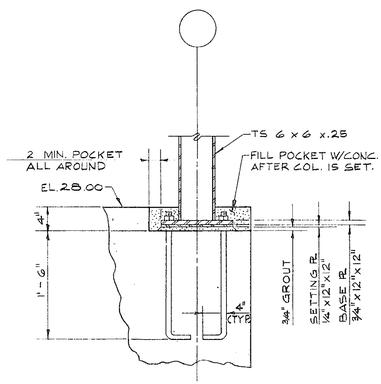
SEE ARCH. DWGS. FOR WALL LOCATION AND DETAILS.

TS 6x6x.25 SEE BASE PL. DETAIL 10S-1A

GRADE FLOOR PLAN
1/4"=1'-0"

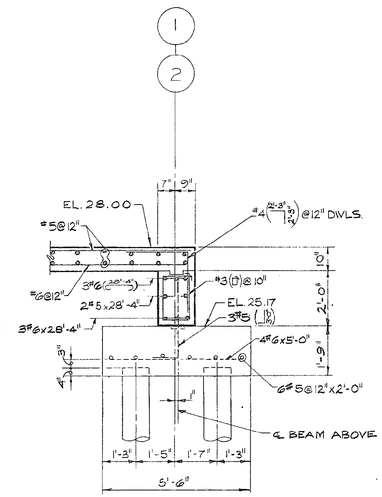


DETAIL 10S-1A

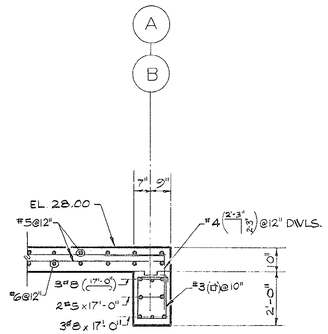


SECTION 10S-1B

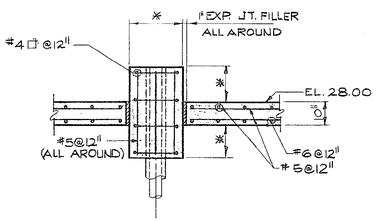
TYPICAL BASE PLATE DETAILS (4 REQ'D)
1"=1'-0"



SECTION 10S-1C
3/8"=1'-0"



SECTION 10S-1D
3/8"=1'-0"



SECTION 10S-1E
3/8"=1'-0"

51-002-140

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED S.K.L.
DRAWN R.K.
CHECKED T.P.G.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

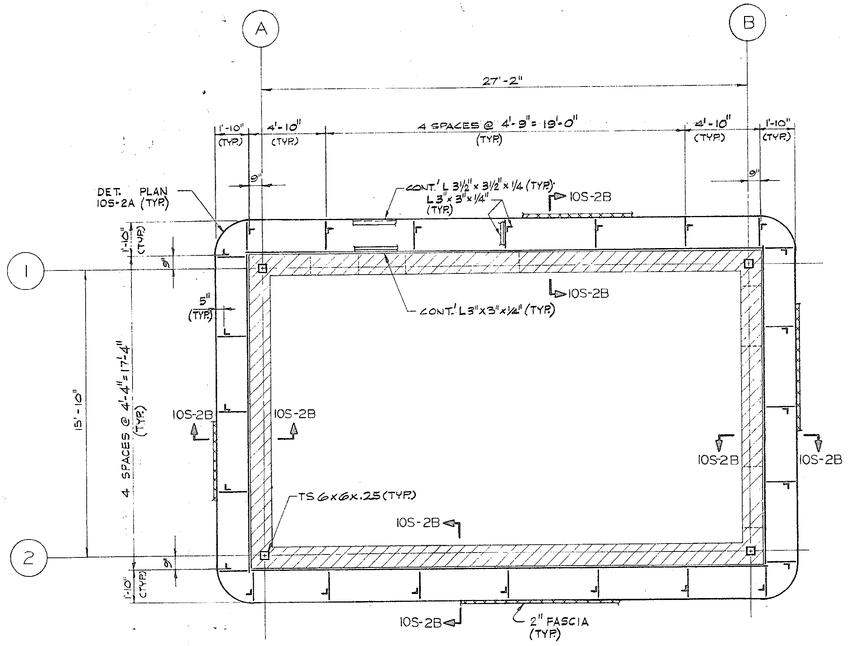
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
AS NOTED

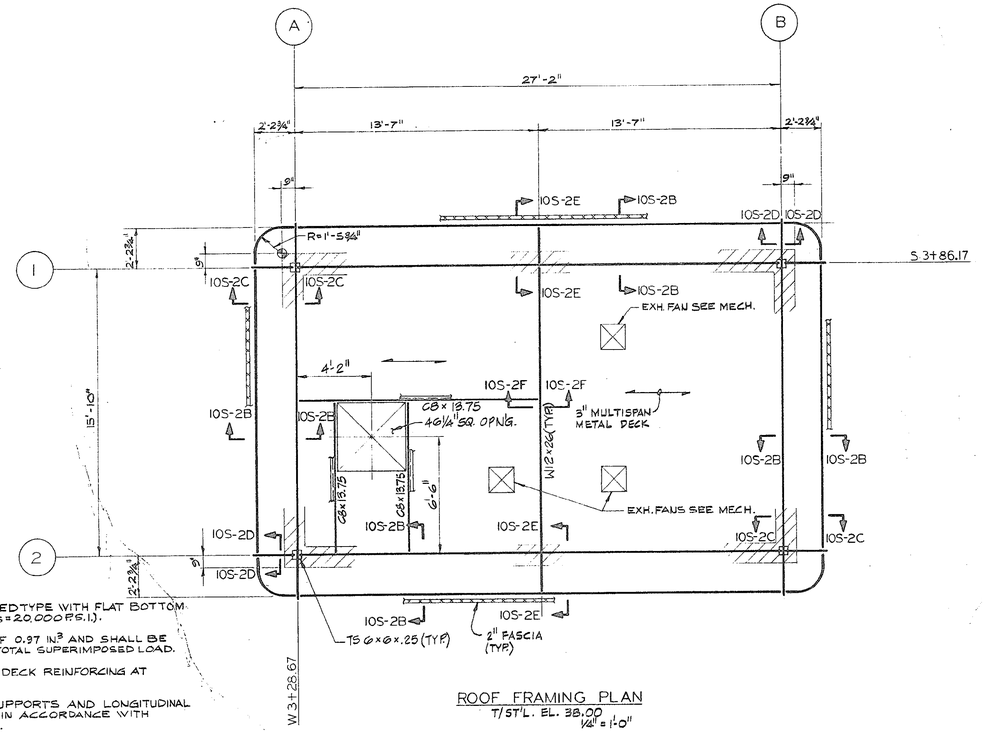
WELL HOUSE
FOUNDATION AND GRADE FLOOR PLANS

SHEET 10S-1
OF SHEETS
PROJECT NO. 78284

SAVANNAH S RECORD



FASCIA SUPPORT FRAMING PLAN
1/4" = 1'-0"



ROOF FRAMING PLAN
T/ST'L. EL. 38.00
1/4" = 1'-0"

NOTE: ALL ROOF FRAMING MEMBERS SHALL BE W12 x 26.

ROOF NOTES:

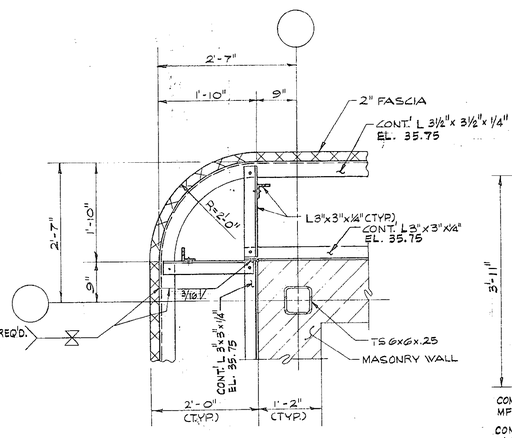
METAL DECK SHALL BE 3" DEEP, RIBBED TYPE WITH FLAT BOTTOM PLATE, 18/18 GAGE PAINTED STEEL (f_s = 20,000 P.S.I.).

METAL DECK SHALL HAVE A MIN. "S" OF 0.97 IN^3 AND SHALL BE CAPABLE OF SUPPORTING 85.0 P.S.F. TOTAL SUPERIMPOSED LOAD.

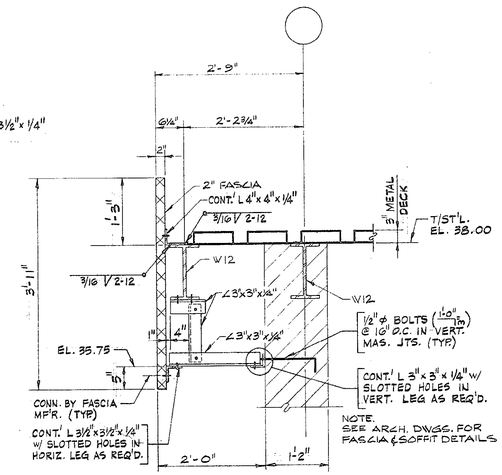
DECK MANUFACTURER SHALL PROVIDE DECK REINFORCING AT OPENINGS AS REQUIRED.

METAL DECK SHALL BE WELDED TO SUPPORTS AND LONGITUDINAL JOINTS OF DECK SHALL BE WELDED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

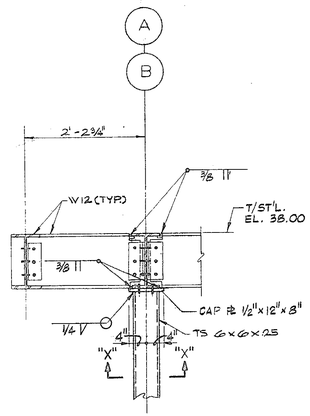
ALL LOOSE LINTELS FOR 14" WALLS SHALL CONSIST OF ONE L 6" x 6" x 5/16" AND TWO L'S 6" x 3½" x 5/16" (JJL-91).



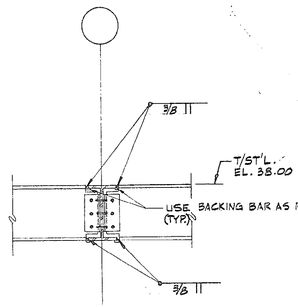
DETAIL PLAN 10S-2A(TYP.)



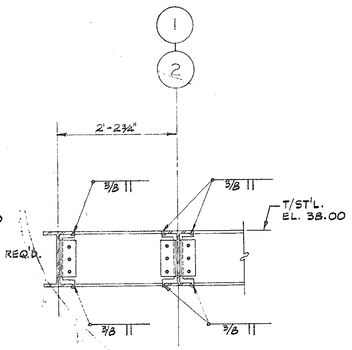
SECTION 10S-2B (TYP.)



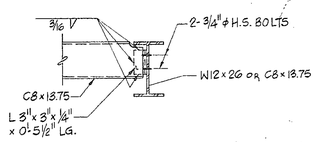
SECTION 10S-2C (TYP. 4 PLACES)



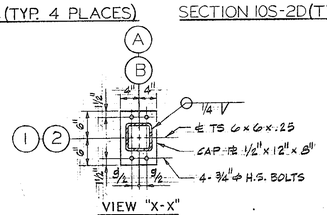
SECTION 10S-2D (TYP. 8 PLACES)



SECTION 10S-2E



SECTION 10S-2F(TYP.)



VIEW "X-X"

51-002-141

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED T.P.G.
DRAWN R.J.K.
CHECKED T.P.G.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

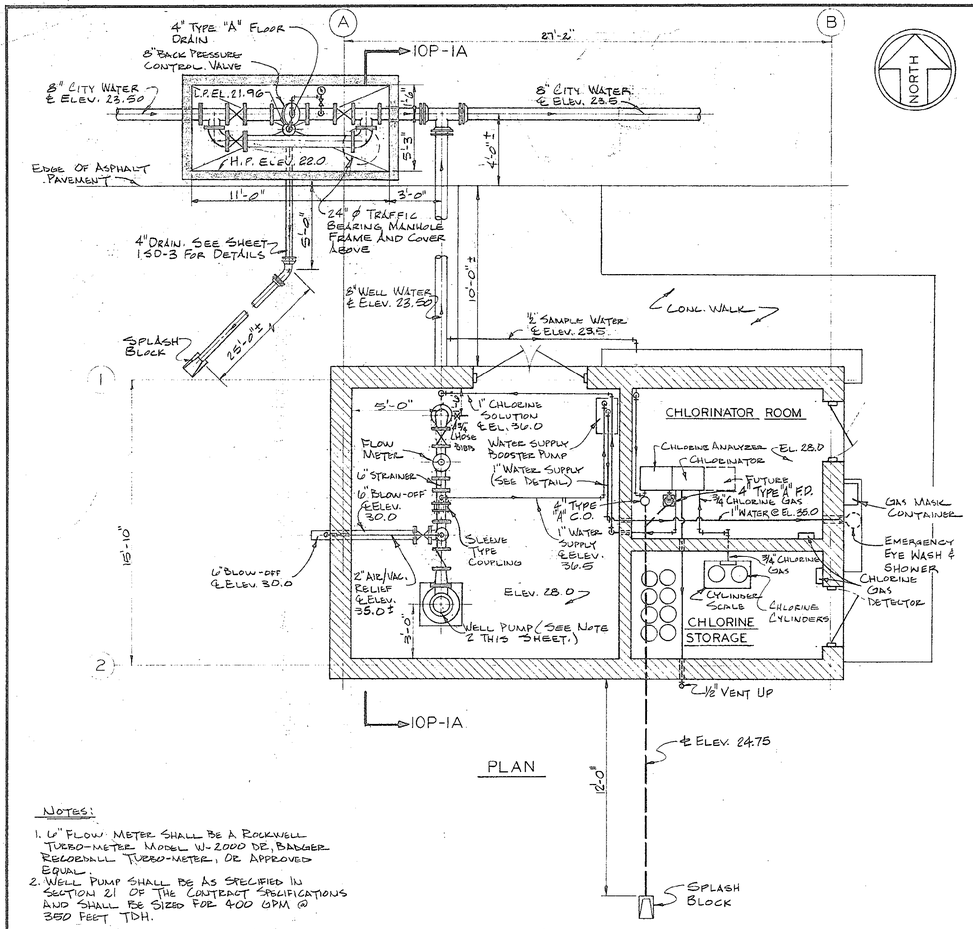
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
3/4" = 1'-0"
UNLESS NOTED

WELL HOUSE
FASCIA SUPPORT AND ROOF FRAMING PLANS

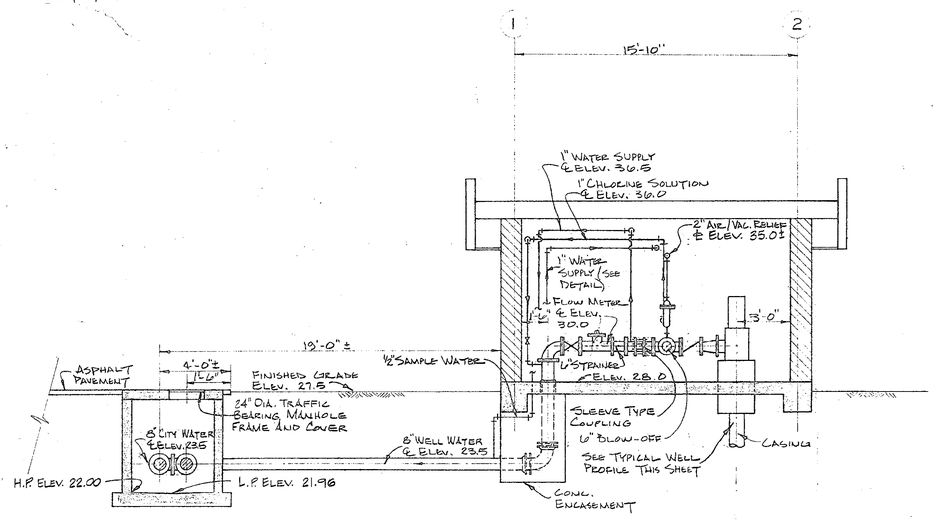
SHEET 10S-2
OF SHEETS
PROJECT NO. 78284

SCDHEC RECORD

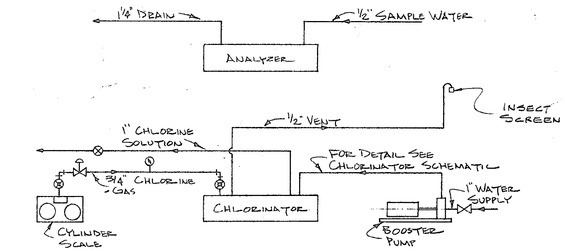


NOTES:

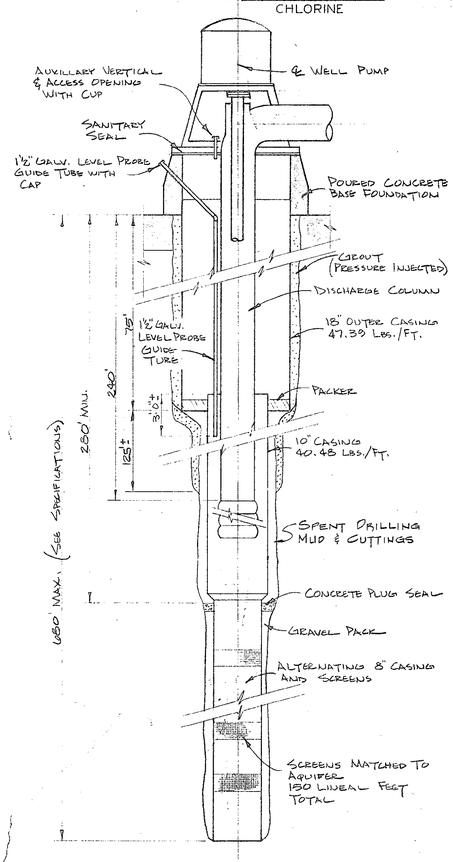
1. 6" FLOW METER SHALL BE A ROCKWELL TURBO-METER MODEL W-2000 DE, BADGER RECORDALL TURBO-METER, OR APPROVED EQUAL.
2. WELL PUMP SHALL BE AS SPECIFIED IN SECTION 21 OF THE CONTRACT SPECIFICATIONS AND SHALL BE SIZED FOR 400 GPM @ 350 FEET TDH.



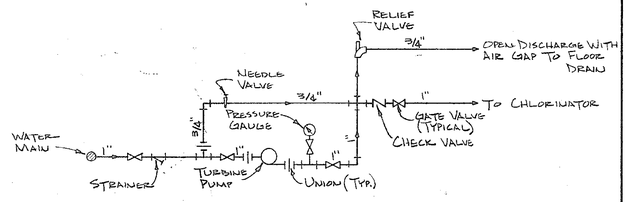
SECTION 10P-1A
10P-1



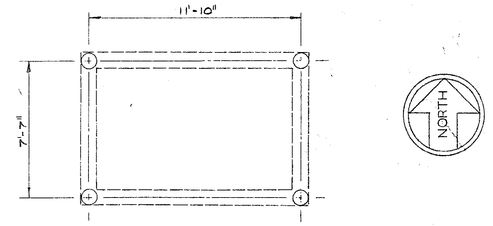
FLOW DIAGRAM
CHLORINE



TYPICAL WELL PROFILE
SCALE: NONE



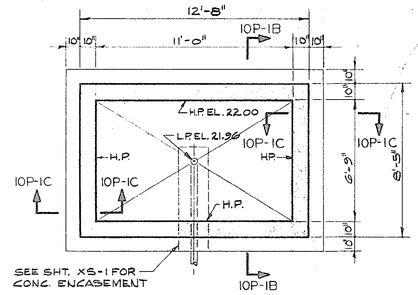
WATER SUPPLY TO CHLORINATOR SCHEMATIC
SCALE: NONE



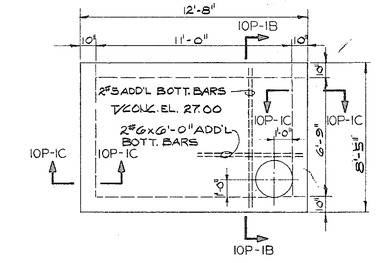
PILE PLAN
P.C.O. EL. 21.00

NOTES:

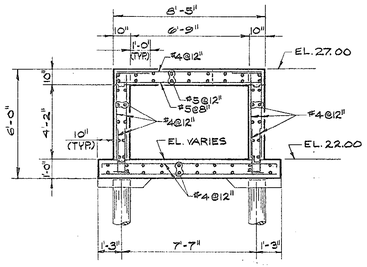
ALL PILES SHOWN ON THIS SHEET SHALL BE TREATED TIMBER OR DRILLED-IN-PLACE CONCRETE BEARING PILES (BEARING CAPACITY 20 TONS). SEE SHTEET XS-1 AND SPEC'S FOR PILE DETAILS.



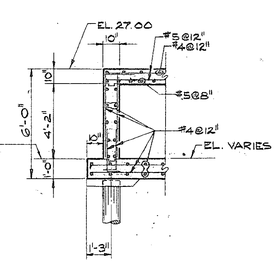
BASE PLAN



TOP PLAN



SECTION 10P-1B



SECTION 10P-1C

STRUCTURAL DETAILS

51-003-142

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED W.J.W.
DRAWN R.L.J.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

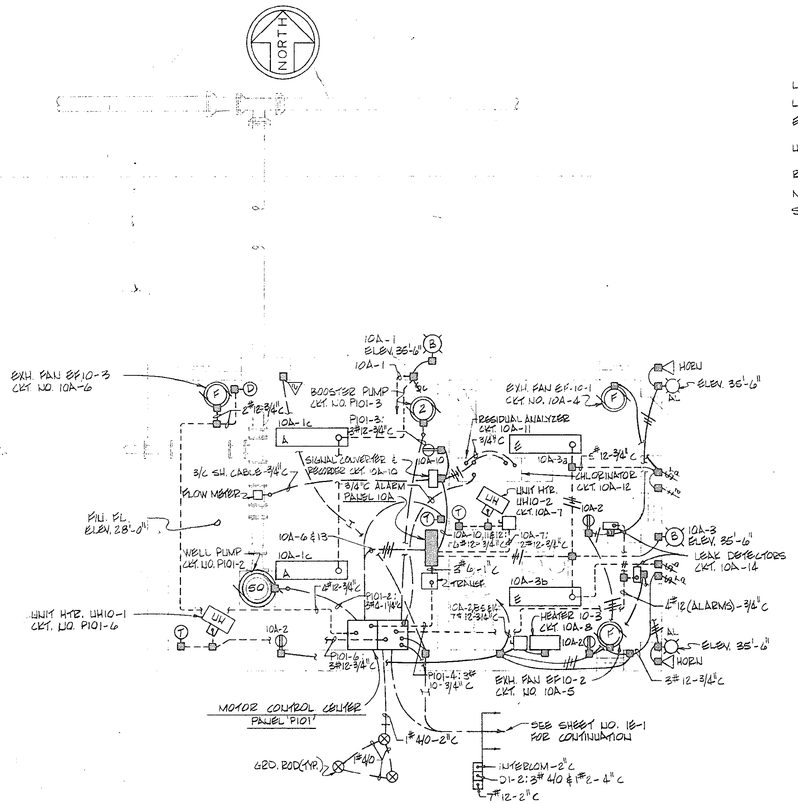
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
¼" = 1'-0"

WELL HOUSE
PLAN, SECTIONS, & DETAILS

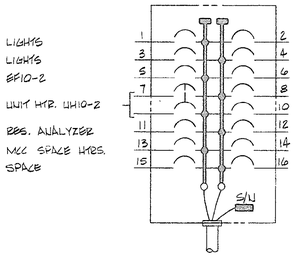
SHEET 10P-1
OF SHEETS
PROJECT NO. 78284

AS BUILT RECORD



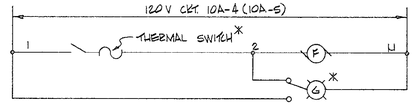
WELL HOUSE PLAN

SCALE ——— 1/4" = 1'-0"

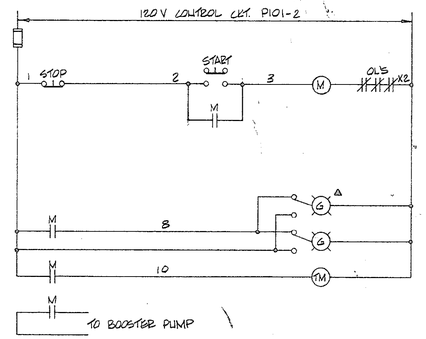


PANEL 10A

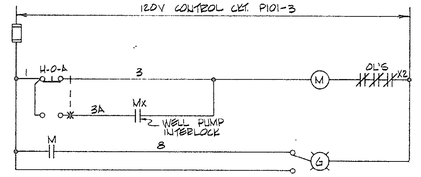
100 AMP, 120/240V, 1Φ, 3W
MAIN LUGS ONLY
14 1P-20A BREAKERS
1-2P-20A BREAKER



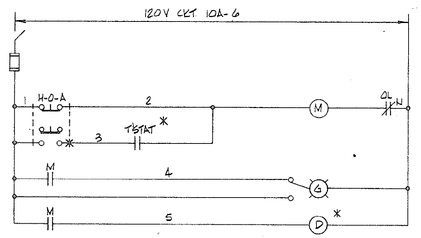
EXHAUST FAN EF10-1 (EF10-2)



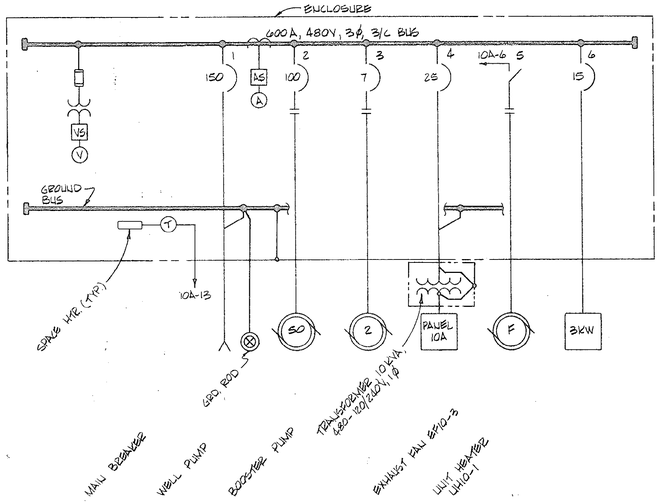
WELL PUMP



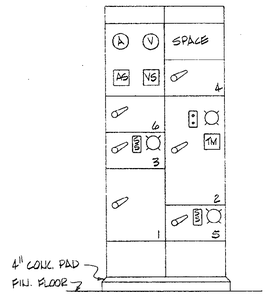
BOOSTER PUMP



EXHAUST FAN EF10-3



SINGLE LINE DIAGRAM
MOTOR CONTROL CENTER PANEL 'P101'



ELEVATION VIEW
MOTOR CONTROL CENTER PANEL 'P101'

SCALE ——— NONE

NOTES:

1. THE MOTOR CONTROL CENTER MANUFACTURER SHALL USE THE NUMBERS SHOWN ON THE SCHEMATIC WIRING DIAGRAMS ON THIS SHEET ON TERMINAL BLOCKS OF THE STARTER UNITS. THE CONTRACTOR SHALL IDENTIFY ALL CONTROL CONDUCTORS INSTALLED WITH THESE SAME NUMBERS BY THE USE OF SELF-STICKING TAGS. THE IDENTIFICATION SHALL ALSO INCLUDE THE CIRCUIT NUMBER WHERE MORE THAN ONE CIRCUIT IS IN THE SAME ENCLOSURE.
2. ALL CONTROL WIRES INSTALLED BY THE CONTRACTOR SHALL BE COLOR-CODED AS FOLLOWS.

WIRE DESIGNATION	COLOR
1, 1A	BLACK
2	RED
3	BLUE
X2	WHITE
8	YELLOW
10	ORANGE
OTHERS	AS APPROVED

3. SEE SHEET 1E-1 FOR UNIT HEATER SCHEDULE

LEGEND

- ● AT MOTOR
- △ AT MAIN CONTROL PANEL
- * REMOTE

ALL DEVICES WITHOUT FURTHER DESIGNATION SHALL BE LOCATED IN THE MOTOR CONTROL CENTER PANELS.

51-002-143

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.N.G.
DRAWN K.R.H.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
AS NOTED

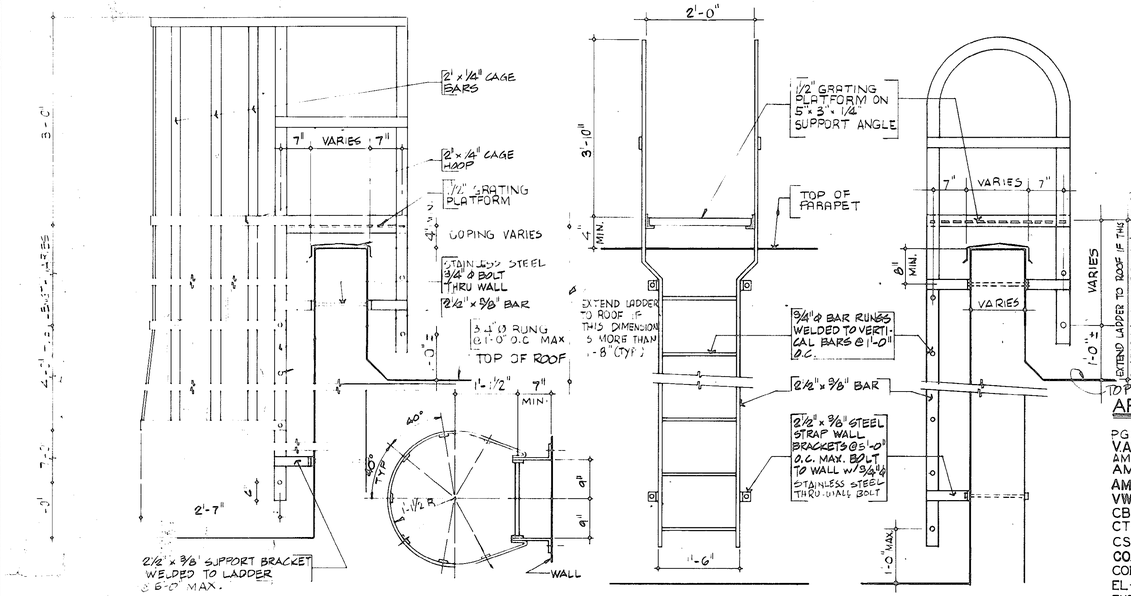
WELL HOUSE — ELECTRICAL

SHEET 10E-1
OF SHEETS
PROJECT NO. 78284

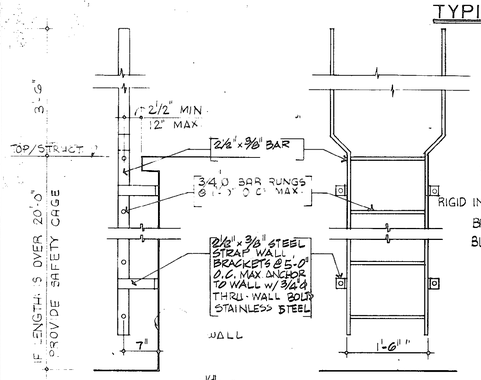
SEA-NWB 3

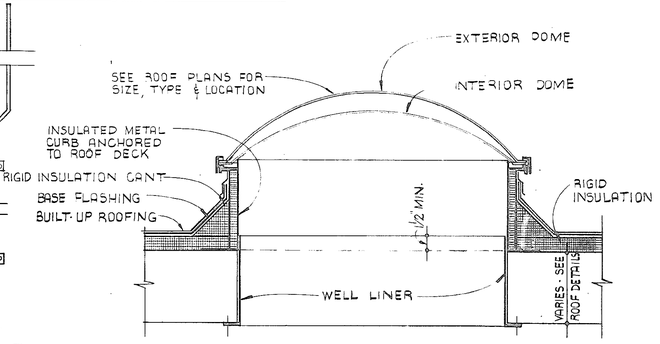
OBSCURE GLASS FOR TOILET ROOMS

140

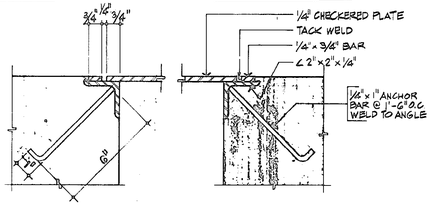


TYPICAL LADDER DETAIL

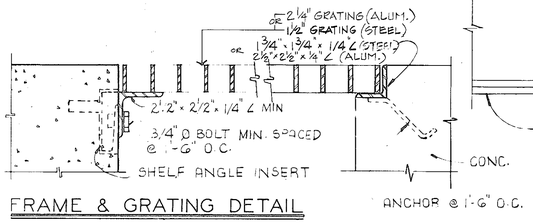




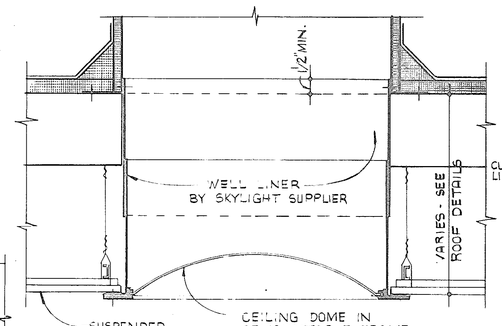
SKYLIGHT DETAIL



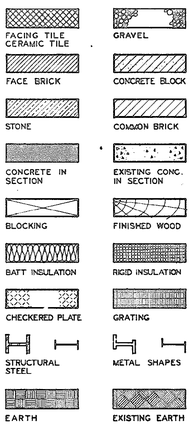
FRAME & COVER DETAIL



FRAME & GRATING DETAIL



CEILING SKYLIGHT DETAIL



ARCHITECTURAL SYMBOLS

PGC — GYPSUM PLASTER CEILING (NEMA TYPE "F")
VAT — VINYL ASBESTOS TILE
AMFL — ACOUSTICAL TILE MINERAL FISSURED LAY-IN (TYPE "G")
AMT — ACOUSTICAL TILE-METAL PAN (NEMA TYPE "M")
AMF — ACOUSTICAL TILE-MINERAL FISSURED (NEMA TYPE "K")
VWC — VINYL WALL COVERING
CB — CONCRETE MASONRY UNIT
CT — CERAMIC GLAZED TILE
CS — CONCRETE SURFACE
CONT. — CONTINUOUS
CONC — CONCRETE
EL — ELEVATION
EXP.JT — EXPANSION JOINT
FB — FACE BRICK
FLR — FLOOR
FT-I — CLAY FACING TILE
FD — FLOOR DRAIN
HC — HARDENED CONCRETE
H.P. — HIGH POINT
IF — INDUSTRIAL FLOORING
L.P. — LOW POINT
MAX — MAXIMUM
MIN — MINIMUM
O.C. — ON CENTER
PC — PORTLAND CEMENT PLASTER
PG — GYPSUM PLASTER
N.T.S. — NOT TO SCALE
RB — RUBBER BASE
RD — ROOF DRAIN
TYP — TYPICAL
UNP — UNPAINTED
SIM. — SIMILAR
STR — STRUCTURAL
M.O. — MASONRY OPENING
TERR — THIN SET TERRAZZO
S.C. — STRUCTURAL CEILING

ABBREVIATIONS AND KEY TO ROOM FINISHES

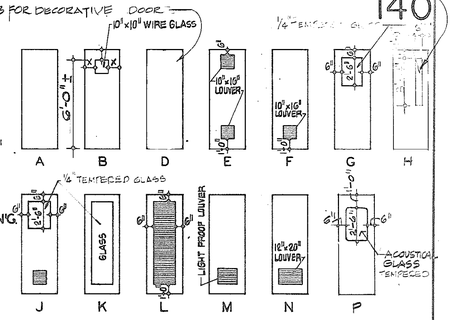
DOOR AND HARDWARE SCHEDULE

SEE SHT. BA-3 FOR DECORATIVE DOOR

A. ALUMINUM DOOR	1 - 2'-0" X 7'-2"	11 - 2 - 2'-6" X 7'-2"
B. FLUSH HOLLOW METAL "B" LABEL	2 - 2'-4" X 7'-2"	12 - 2 - 3'-0" X 7'-2"
F. STAINLESS STEEL DOOR	3 - 2'-6" X 7'-2"	13 - 2 - 3'-2" X 7'-2"
K. FLUSH METAL COVERED (KALAMEIN)	4 - 2'-8" X 7'-2"	14 - 2'-8" X 7'-0"
H. FLUSH HOLLOW METAL	5 - 3'-0" X 7'-2"	15 - 3'-0" X 7'-0"
M. FLUSH WOOD - MINERAL CORE	6 - 3'-4" X 7'-2"	16 - 2 - 3'-0" X 7'-0"
S. FLUSH WOOD - SOLID CORE	7 - 3'-8" X 7'-2"	17 - 2 - 3'-0" X 9'-10"
W. FLUSH WOOD - HOLLOW CORE	8 - 3'-2" X 7'-2"	
R. SOUND INSULATING DOOR	9 - 3'-0" X 9'-10"	18 - 2 - 3'-10" X 8'-0"
Z. HOLLOW METAL - SCREEN DOOR	10 - 2 - 3'-8" X 7'-2"	19 - 3'-6" X 7'-0"
		20 - 3'-0" X 7'-11½"

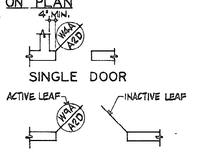
FIELD CHECK OPENG.

ALL DOORS 1¾" THICK UNLESS OTHERWISE NOTED.



KIND OF DOOR

TYPICAL DOOR INDICATION ON PLAN



SIZE OF DOOR

TYPE OF DOOR

DOOR REQUIREMENTS
HARDWARE REQUIREMENTS
W4A
A2D

NOTE:
IF ONE LETTER OR NUMBER IS OMITTED IN THE SYMBOL THE OTHER TWO LETTERS AND/OR NUMBERS APPLY IN ORDER AS SHOWN ON THIS DETAIL.
FOR ADDITIONAL HARDWARE REQUIREMENTS SEE SPECIFICATIONS.

LOCKSETS AND BOLTS

A - PASSAGE LATCH
B - BATHROOM LOCKSET
D - DORMITORY LOCKSET
E - CLASSROOM LOCKSET
F - STOREROOM LOCKSET
G - DEADLOCK
H - EXTERIOR DOOR LOCKSET
J - COMMUNICATING DOOR LOCKSET
K - 6" FLUSH BOLT TOP AND BOTTOM INACTIVE LEAF DOUBLE CYLINDER DEADLOCK ACTIVE LEAF
L - PANIC HARDWARE CROSS BAR TYPE
M - 6" FLUSH BOLT TOP AND BOTTOM INACTIVE LEAF PASSAGE LATCH ACTIVE LEAF
N - 6" FLUSH BOLT TOP AND BOTTOM INACTIVE LEAF CLASSROOM LOCKSET ACTIVE LEAF
P - STORE DOOR LOCKSET
R - DOUBLE CYLINDER DEADLOCK
S - 6" FLUSH BOLTS EACH LEAF - ROOM SIDE
T - ONE-WAY DEADLOCK
Z - MANUFACTURERS STANDARD HARDWARE FOR SOUND DOORS INCLUDING HINGES, PASSAGE LATCH, CLOSER AND DOOR STOP.

STOPS, HOLDERS AND CLOSERS

EACH LEAF

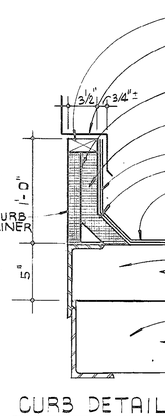
1 - SINGLE ACTING FLOOR CHECK
2 - FRICTION DOOR HOLDER
3 - CLOSER AND DOOR STOP
4 - DOOR STOP
5 - DOOR STOP AND HOLDER
6 - DOOR STOP, HOLDER AND CLOSER
7 - DOOR STOP AND HOLDER AND CLOSER ACTIVE LEAF
8 - DOUBLE ACTING FLOOR CHECK
9 - SINGLE ACTING FLOOR CHECK DOOR STOP AND HOLDER
10 - CLOSER AND OVERHEAD DOOR STOP WITH HOLDER - ACTIVE LEAF.
11 - CLOSER, OVERHEAD DOOR STOP - AND FLOOR STOP WITH EXTENSION
12 - CLOSER, OVERHEAD DOOR STOP AND FLOOR STOP WITH EXTENSION

ACCESSORIES

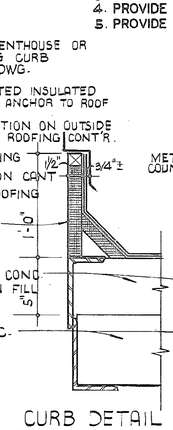
EACH LEAF

A - 2 PUSH PLATES
2 KICK PLATES
B - PUSH PLATE
C - 2 KICK PLATES
D - 2 PUSH PLATES
E - KICK PLATE
DOOR PULL
F - KICK PLATE
G - PUSH PLATE
DOOR PULL
H - DOOR PULL
J - KICK PLATE
PUSH PLATE
K - PUSH PLATE
PULL PLATE
L - 2 PUSH BARS
DOOR PULL
M - 2 DOOR PULLS

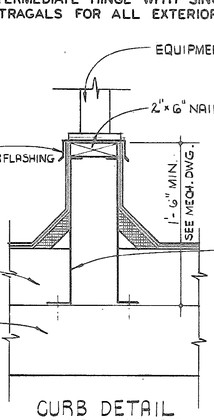
NOTE: 1. IF CLOSER WILL NOT MOUNT ON HINGED SIDE OF DOOR, PROVIDE PARALLEL ARMS FOR SOFFIT MOUNTING AND MOUNT ON RECESSED SIDE OF DOOR.
2. ALL DOOR SHALL OPEN 95°.
3. ALL CLOSERS, EXCEPT FOR TOILET ROOMS, STAIRWELL, AND LABELLED DOORS TO HAVE HOLD OPEN ACTION.
4. PROVIDE INTERMEDIATE HINGE WITH SINGLE ACTION FLOOR CHECKS.
5. PROVIDE ASTRAGALS FOR ALL EXTERIOR DOUBLE DOORS.



CURB DETAIL



CURB DETAIL

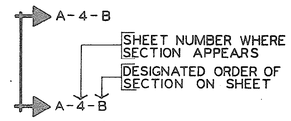


CURB DETAIL EQUIP. SUPPORT

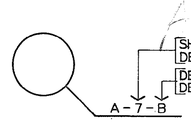
GENERAL NOTES

1 — ALL OPENINGS REQUIRED FOR WINDOWS, DOORS OR EQUIPMENT SHALL BE SIZED FROM SHOP DRAWINGS. DIMENSIONS SHOWN ON PLAN ARE NOMINAL.
2 — TYPICAL DETAILS ON THIS SHEET ARE TO BE USED WHEN CALLED FOR ON THE PLANS AND ELEVATIONS.
3 — DOOR AND DOOR FRAME SHALL BE OF THE SAME MATERIAL UNLESS OTHERWISE NOTED.

SECTION NOTATION



DETAIL NOTATION



51-003 - 144

REVISIONS				
NO.	DATE	DESCRIPTION	APPROVED	

DESIGNED C.B.
DRAWN D.C.G. F.C.A.
CHECKED M.Z.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

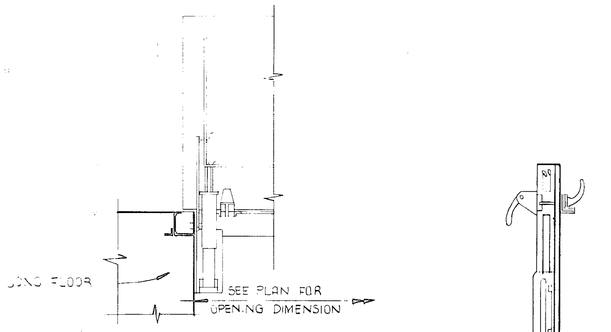
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

STANDARD DETAILS

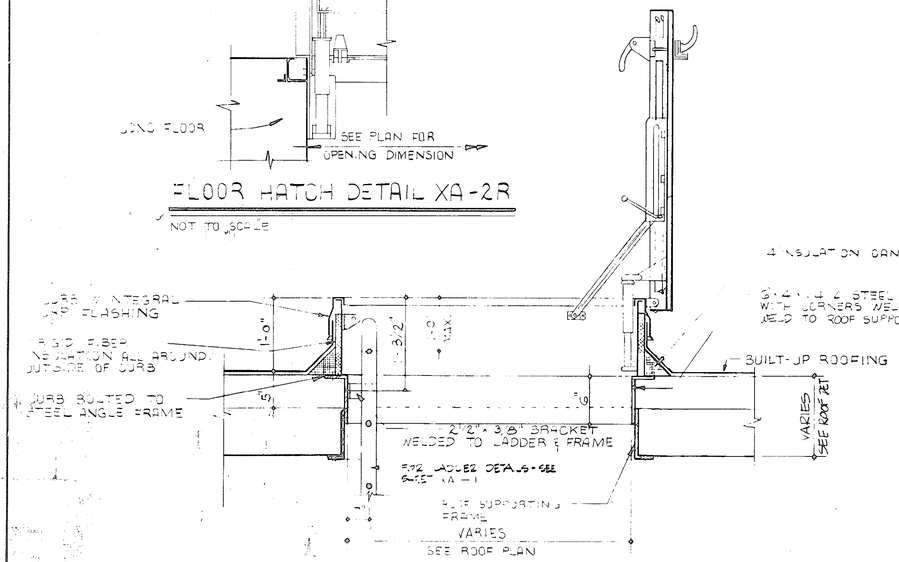
SHEET XA-1
OF SHEETS
PROJECT NO 78284

FINAL AS RECORD



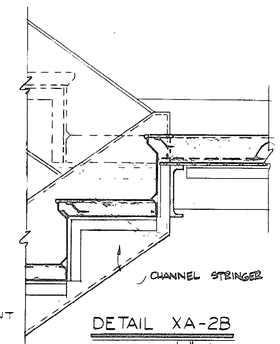
FLOOR HATCH DETAIL XA-2R

NOT TO SCALE



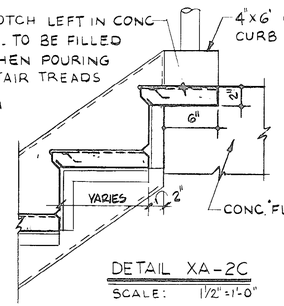
ROOF SCUTTLE DETAIL XA-2A

SCALE: 1" = 1'-0"



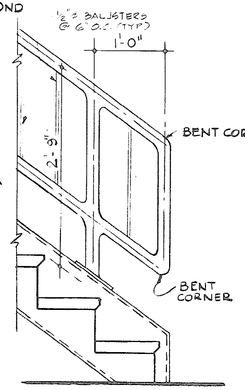
DETAIL XA-2B

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



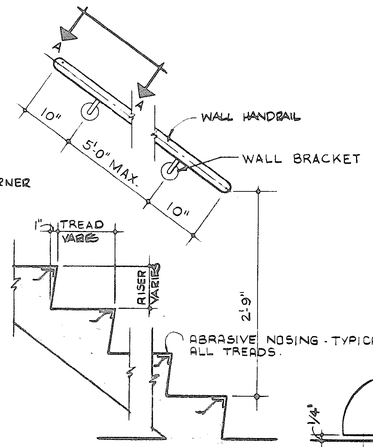
DETAIL XA-2C

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



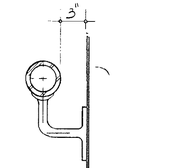
DETAIL XA-2D

SCALE: 1" = 1'-0"



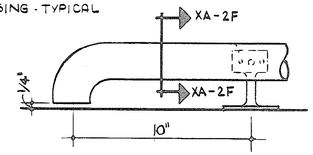
DETAIL XA-2E

SCALE: 1" = 1'-0"



SECTION XA-2F

SCALE 3" = 1'-0"

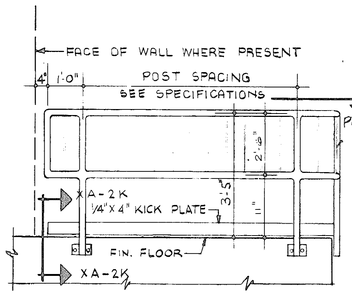


VIEW A-A

SCALE: 3" = 1'-0"

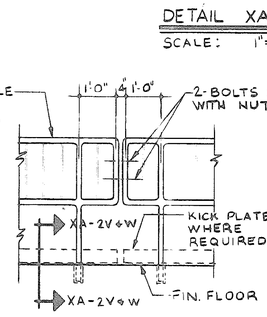
DETAIL XA-2G

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



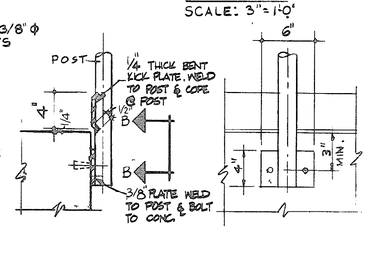
DETAIL XA-2H PLAN H

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



DETAIL XA-2J

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

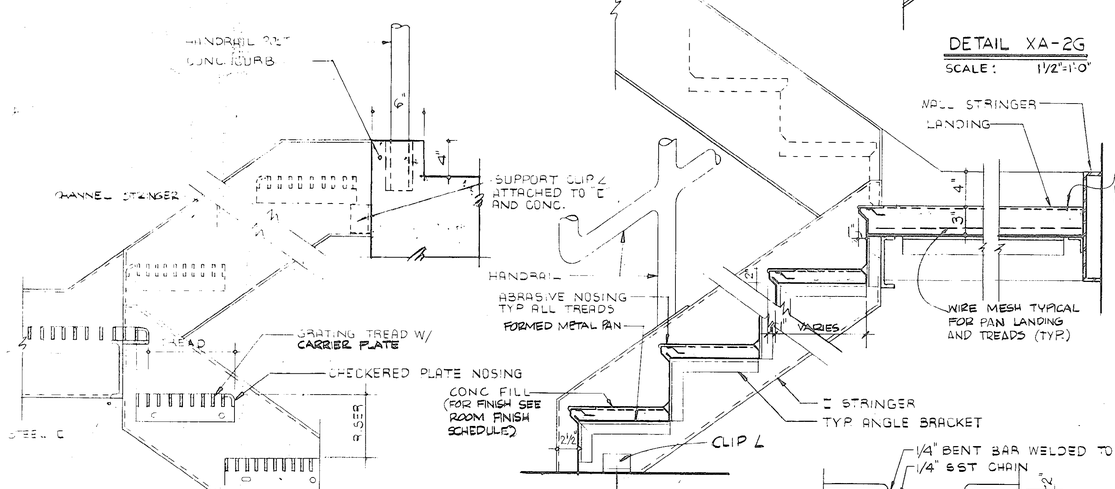


SECTION XA-2K

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

VIEW B-B

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

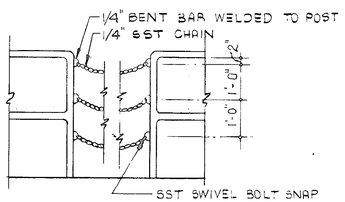


DETAIL XA-2M

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

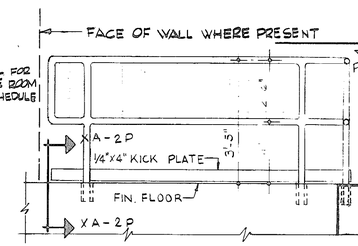
DETAIL XA-2L

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



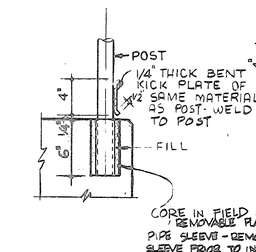
DETAIL XA-2S

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



DETAIL XA-2N PLAN N

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



SECTION XA-2P

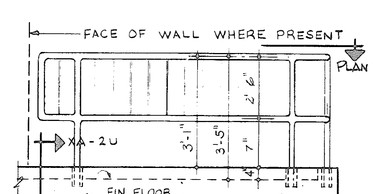
SCALE: 1 1/2" = 1'-0"

DETAIL XA-2Q

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

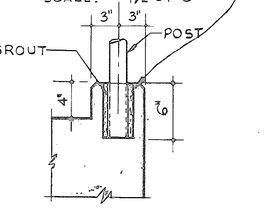
VIEW C-C

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



DETAIL XA-2T PLAN T

SCALE 1/2" = 1'-0"



REMOVABLE HANDRAILS

SECTION XA-2U

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

SECTION XA-2V

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

SECTION XA-2W

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

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED C.B.
DRAWN F.C.A.
CHECKED M.Z.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

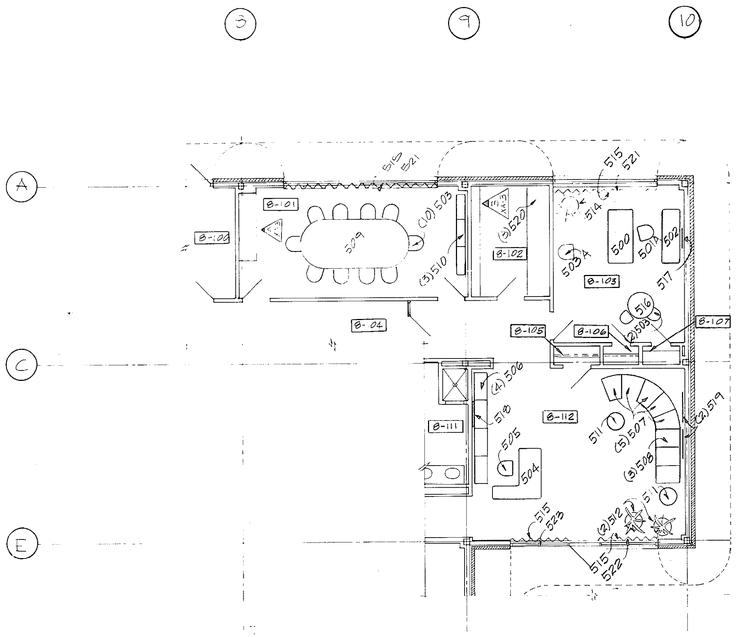
SCALE
AS SHOWN

STANDARD DETAILS

51-003-145

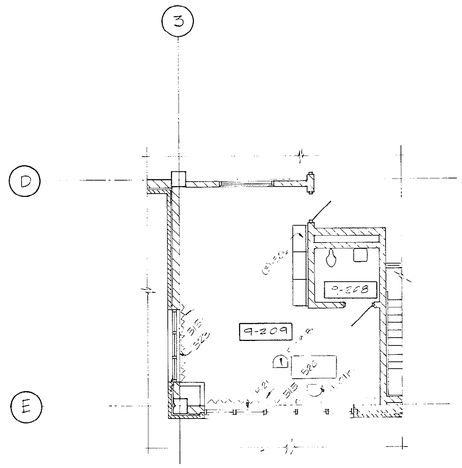
SHEET XA-2
OF SHEETS
PROJECT NO. 78284

AS BUILTS RECORD



PARTIAL FURNITURE PLAN (CONTROL CENTER)

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



FURNITURE PLAN (PROCESS CENTER)

KITCHEN EQUIPMENT SCHEDULE

ITEM #	MFR.	CAT. #	DESCRIPTION
700	HAM S.C.		WALL CABINET - 36" WIDE x 12" DEEP x 18" HIGH, TWO DOOR
701	HAM S.C.		WALL CABINET - 24" WIDE x 12" DEEP x 18" HIGH TWO DOOR
702	HAM S.C.		WALL CABINET - 30" WIDE x 12" DEEP x 18" HIGH, TWO DOOR
703	HAM S.C.		1/4" THICK PLASTIC LAMINATE COUNTER TOP, BACK AND SIDE SPLASH, FORMED PLASTIC EDGE
704	HAM S.C.		SINGLE BOWL SINK - 18" x 18" x 7 1/4" DEEP SCA TABLE TYPE STEEL, SELF RIMMING 4" RADIUS
705	HAM S.C.		BASE CABINET - 24" WIDE x 34 1/2" HIGH TWO DOOR
706	MACVEL / U-LINE	MR 1110 HS / CS	7 CU.FT. UNDERCOUNTER REFRIGERATOR - 24" WIDE x 34 1/2" HIGH
707	HAM S.C.		BASE CABINET - 30" WIDE x 34 1/2" HIGH, TWO DOOR

MANUFACTURERS LIST

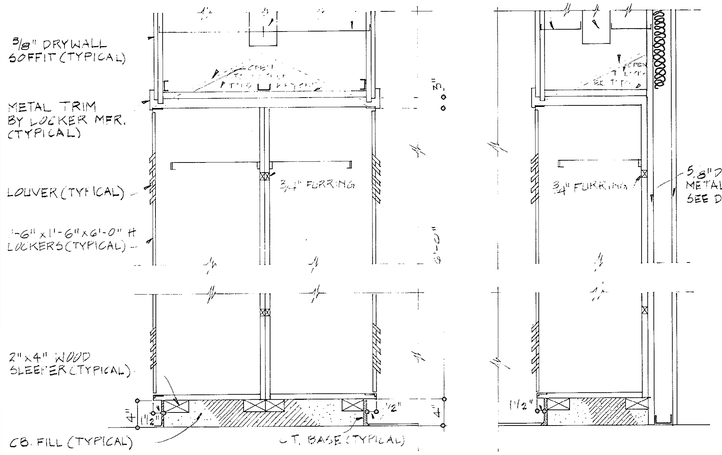
HAM - HAMILTON INDUSTRIES
TWO RIVERS, WISCONSIN 54241

S.C. - ST. CHARLES MANUFACTURING CO.
ST. CHARLES, ILLINOIS 60174

MACVEL - MACVEL INDUSTRIES, LLC.
STURGIS, MICHIGAN 49091

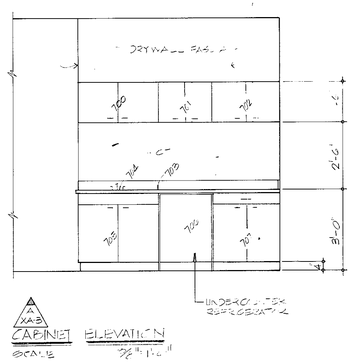
U-LINE - U-LINE CORPORATION
MILWAUKEE, WISCONSIN 53223

NOTE: PRODUCTS LISTED IN KITCHEN EQUIPMENT SCHEDULE MAY BE REPLACED FROM TIME TO TIME BY PRODUCTS OF MANUFACTURERS OF EQUIVALENT QUALITY



SECTION XA-3A

SCALE: 1"=1'-0"



XA-3 CABINET ELEVATION

SCALE 3/4" = 1'-0"

FURNITURE SCHEDULE

ITEM #	MFGR	MFGR #	DESCRIPTION
500	ST	9075-C	DOUBLE PEDESTAL DESK, 65 x 35 STANDARD TRIM 2751 TAN VALUE I FINISH 2763 LIGHT OAK LAMINATED TOP LOCKS
	GF	765 EFR, D-5, D-5	GROMMETS, LOCK, QIA, BEIGE #1 R2D LIGHT OAK LAMINATE
501	HM	05310 DT A 4443 EMERALD HOPSACK B. 4443 EMERALD VINYL	SWIVEL-TILT ARMCHAIR, 5 STAR BASE, DARK NEUTRAL SHELL & BASE WHEELS FOR HARD FLOOR SURFACES
	SU	CS1008 POL A(B)	F107 GREEN UPHOLSTERY
502	ST	9039-F	STORAGE UNIT, STANDARD TRIM, 2751 TAN VALUE I FINISH 2763 LIGHT OAK LAMINATE LOCKS
	GF	704 HC HC-1, HC-8, HC-1	BLADE BASE, LOCK Q A BEIGE #1, R2D LIGHT OAK LAMINATE
503	HM	05309 DT A 4443 EMERALD HOPSACK B. 4443 EMERALD VINYL	SWIVEL ARMCHAIR 5-STAR BASE DARK NEUTRAL SHELL & BASE WHEELS FOR HARD FLOOR SURFACES
	SU	CS 2006 (T0B) A (B)	F107 GREEN UPHOLSTERY
504	ST	9059-A W. 9005-A	SECRETARIAL DESK, STANDARD TRIM 2751 TAN VALUE I FINISH 2763 LIGHT OAK LAMINATE TOP, LOCKS
	GF	700EDAR W/ E-5 SOUL	GROMMETS, LOCK, Q A BEIGE #1 R2D LIGHT OAK LAMINATE
505	HM	05333 DT	SECRETARIAL CHAIR, 4443 EMERALD HOPSACK, DARK NEUTRAL BASE & SHELL, WHEELS FOR HARD FLOOR SURFACES
	SU	CS80308 (T0B, A(B)	F 07 GREEN UPHOLSTERY
506	ST	036-281 2-DRAWER W/ 32" TOP	36" 2-DRAWER LEGAL LATERAL FILE 2751 TAN VALUE I FINISH 2763 LIGHT OAK LAMINATE TOP LOCKS
	GF	362L, ECCP	LOCKS Q A BEIGE #1, R2D LIGHT OAK LAMINATE
507	HM	CM102 W/ CM104	22 1/2° WIDE WEDGE SEATING MODULE 4443 EMERALD HOPSACK
		500078 W/ 793208 W/ 793206	GRADE 6000 FABRIC
508	HM	CM101 W/ CM 104	STRAIGHT MODULE 4443 EMERALD HOPSACK
	V	500072 W 793203 W/ 793206	GRADE 6000 FABRIC
509	HM	ET160 OL	CONFERENCE TABLE, 54" x 144" OAK LAMINATE TOP
	W	DT 60144	MP11 OAK, DARK NEUTRAL TRIM & BASE
510	ST	2294	BOOKCASE, 42"H x 37 1/8"W x 15"D 2751 TAN VALUE I FINISH 2763 LIGHT OAK TOP
	GF	34215-C	QIA BEIGE #1, R2D LIGHT OAK LAMINATE
511	SU	TA516	ROUND PEDESTAL TABLE, 24"W x 16"H TOBACCO BROWN BASE NATURAL OAK TOP
	SG	201-C	LIGHT OAK
512	MCD	P180904	24" PLANTER W/ 3'-5" LIVING ARAUCARIA (NORFOLK ISLAND PINE) CHAR BROWN
	PPP	C2424	
513	MCD	P180904	24" PLANTER W/ LIVING 4'-5" FICUS EXOTICA (BENJAMINA) CHAR BROWN
	PPP	C2424	
514	MCD	P180904	24" PLANTER W/ 3'-5" LIVING SCHEFFLERA, CHAR BROWN
	PPP	C2424	
515	C	"GRENADIER" FLAX	DRAPERY, CEILING TO 1" ABOVE SILL LINE, 100% FULLNESS, RIPPLEFOLD
	AR	"IRISH PLAID NATURAL"	
516	HM	ET102 OL	36" PEDESTAL TABLE OAK LAMINATE
	W	RT36	MP11 OAK, DARK NEUTRAL TRIM AND BASE
517	AC	SANDSCAPE	22" x 30" FRAMED ETCHING BY GALAMBOS
	SC		DETMAR PRINT
518	GA	BA 71Z	"BOOMERANG" 34" x 34" STRETCHED TEXTILE GRAPHIC
	A		
519	GR	RM102	"PIPES" 44" x 44" STRETCHED TEXTILE GRAPHIC
	A		
520	ST	347-451	4 DRAWER LEGAL FILE, LOCK 275 TAN VALUE I FINISH
	GF	34 RCL	
526	ST	9059-C	SECRETARIAL DESK, STANDARD TRIM, 2751 TAN VALUE I FINISH 2763 LIGHT OAK LAMINATE LOCKS
	GF	760 F D-5, D-5	GROMMETS, LOCK QIA BEIGE #1 R2D LIGHT OAK LAMINATE
521	K	9400 SERIES	DRAPERY TRACK SYSTEM BRONZE 2-WAY DRAW, HEAVY-DUTY PULLEYS RIPPLEFOLD, 100% FULLNESS OVERLAP MASTER CARRIER
	GR	9-300-1	
522	K	9400 SERIES	DRAPERY TRACK SYSTEM BRONZE ONE-WAY LEFT DRAW (CORD ON LEFT) RIPPLEFOLD, 100% FULLNESS
	GR	9-300-1	
523	K	9400 SERIES	DRAPERY TRACK SYSTEM BRONZE ONE-WAY RIGHT DRAW (CORD ON RIGHT) RIPPLEFOLD, 100% FULLNESS
	GR	9-300-1	
524	HM	05837 DT	ARMLESS SWIVEL CHAIR 5-STAR BASE 4643 EMERALD VINYL DARK NEUTRAL SHELL AND BASE WHEELS FOR HARD FLOOR SURFACES
	SU	CS 2007 T0B A B D	A 07 202 VINYL
525	HM	06847 DT DT	SWIVEL STOOL 5 STAR BASE 4643 EMERALD VINYL DARK NEUTRAL SHELL & BASE WHEELS FOR HARD FLOOR SURFACES
	ST	451-720	5790 GREEN VINYL 6201 TAN VALUE 5 SHELL & BASE

NOTES

1 FINISH EACH DESK WITH McD FLAME RETARDANT THERMOPLASTIC LETTERTRAY 2999.0 AND 231510 WASTEBASKET (PPP)

2 FINISH EACH LOUNGE TABLE AND CONFERENCE TABLE WITH FLAME RETARDANT THERMOPLASTIC ASHTRAY 290610 (PPP)

MANUFACTURERS LIST

A — ARTAFAX, SYRACUSE, N.Y.

AC — ART CONNECTION, INC., 8407 MELROSE PLACE, LOS ANGELES, CA. 90069

GA — GRAPHILIA, AC GRAPHICS, P.O. BOX 887, SAN RAPHAEL, CA. 94902

GF — GF BUSINESS EQUIPMENT, INC., YOUNGSTOWN, OHIO 44510

GR — GRABER CO., 1384 MERCHANDISE MART, CHICAGO, ILL 60654

HM — HERMAN MILLER, ZEELAND, MICHIGAN

LL — LEVOLOR LORENZTZEN, INC., 4650-D FREDERICK DR, SW, ATLANTA, GA. 30336

McD — McDONALD PRODUCTS CORP., BUFFALO, N.Y. 14210

PPP — PETER PEPPER PRODUCTS, GARDENA, CALIFORNIA

SC — SILVER CLOUD GALLERY, 730 N. FRANKLIN, CHICAGO, ILL 60610

SG — STENDIG, INC., 950 MERCHANDISE MART, CHICAGO, ILL 60654

ST — STEELCASE, GRAND RAPIDS, MICHIGAN

SU — SUHAR, 1015 MERCHANDISE MART, CHICAGO, ILL 60654

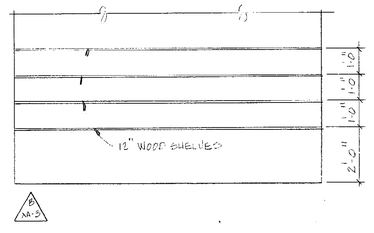
V — VECTA CONTRACT, DALLAS, TEXAS 75247

W — WESTINGHOUSE, 906 MERCHANDISE MART, CHICAGO, ILL 60654

K — KIRSCH CO. [illegible]

C — C.F. CASE OF CHICAGO, CHICAGO, ILLINOIS [illegible]

NOTE: PRODUCTS LISTED IN FURNITURE SCHEDULE MAY BE REPLACED FROM TIME TO TIME BY PRODUCTS OF MANUFACTURERS OF EQUIVALENT QUALITY



XA-3

51-003-146

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED N.V.F.
DRAWN B.B.
CHECKED R.O.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

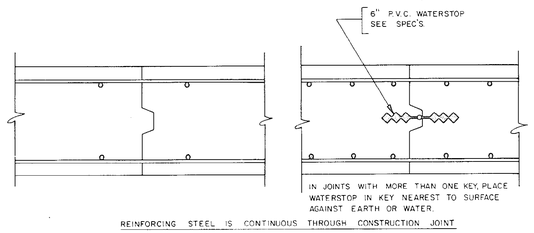
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
AS NOTED

ARCHITECTURAL STANDARDS
FURNITURE PLAN AND SCHEDULES

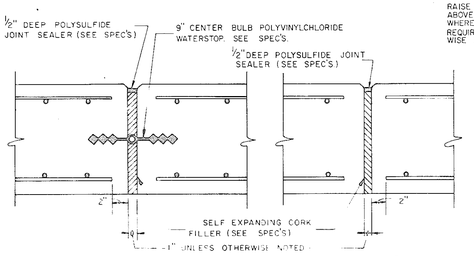
SHEET XA-3
OF SHEETS
PROJECT NO. 78284

AS BUILT RECORD



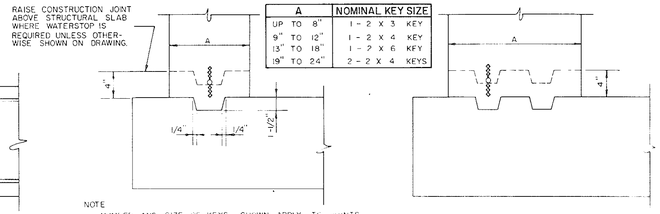
TYPE C1 TYPE C2

CONSTRUCTION JOINTS



TYPE E1 TYPE E2

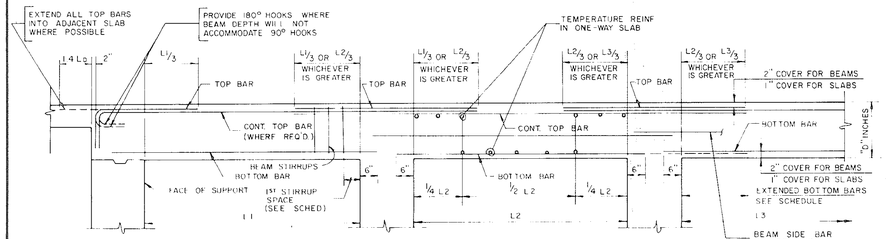
EXPANSION JOINTS



A	NOMINAL KEY SIZE
UP TO 8"	1 - 2 X 3 KEY
9" TO 12"	1 - 2 X 4 KEY
13" TO 18"	1 - 2 X 6 KEY
19" TO 24"	2 - 2 X 4 KEYS

CONSTRUCTION JOINTS

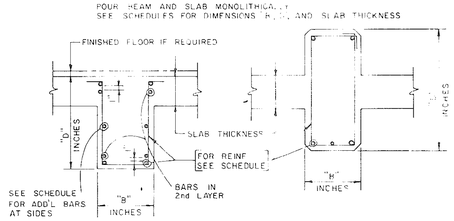
KEY DETAILS



EXTERIOR SPAN INTERIOR SPAN INTERIOR SPAN

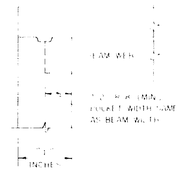
THESE DETAILS APPLY UNLESS OTHERWISE SHOWN OR NOTED

TYPICAL DETAILS FOR BEAM OR SLAB REINFORCEMENT



STANDARD BEAM UPTURNED BEAM

TYPICAL BEAM SECTION



TYPICAL BEAM POCKET

SLAB DETAIL AT RE-ENTRANT CORNER

GENERAL NOTES FOR STRUCTURES

CONCRETE

1. DESIGN AND CONSTRUCTION SHALL CONFORM TO THE LATEST "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" OF THE AMERICAN CONCRETE INSTITUTE
2. ALL REINFORCING BARS SHALL BE DEFORMED BILLET-STEEL CONFORMING TO A.S.T.M. A 615 GRADE 60. ARRANGEMENT AND DETAILS OF REINFORCING STEEL, INCLUDING BAR SUPPORTS AND SPACERS SHALL BE IN ACCORDANCE WITH THE LATEST A.C.I. DETAILING MANUAL UNLESS OTHERWISE NOTED
3. ALL SLAB AND BEAM REINFORCEMENT SHALL HAVE A MINIMUM EXTENSION INTO THE SUPPORT IN ACCORDANCE WITH THE LATEST A.C.I. CODE. IF SUCH EXTENSION IS NOT POSSIBLE, BARS SHALL TERMINATE IN STANDARD HOOKS
4. HORIZONTAL WALL REINFORCEMENT AND TEMPERATURE REINFORCEMENT SHALL LAP A MINIMUM OF [illegible] UNLESS WALL DOWELS AND WALL BAR EXTENSIONS AND ALL STRESS SPLICES SHALL HAVE A MINIMUM OF L_d UNLESS OTHERWISE NOTED
5. PROVIDE ALL WALL DOWELS FROM FOUNDATIONS OR CONSTRUCTION BELOW OF SAME SIZE AND SPACING AS VERTICAL STEEL, SEE COLUMN SCHEDULE/SECTIONS
6. ALL BEAMS AND SLABS RUN PARALLEL WITH BEAMS OR WALL USE #4 @ 12" x 5'-0" LONG TOP BARS IN SLAB AT RIGHT ANGLES TO SAME. HOOK BARS AT SPANDRELS
7. CONCRETE COVER TO ALL THE OVER FOR REINFORCING STEEL SHALL BE AS FOLLOWS:
   - SLABS:
     - TOP SURFACE OF FORMED SLABS [illegible] ¾"
     - SLABS ON GRADE AND DRIVEWAYS [illegible] 1½"
     - SLABS IN CONTACT WITH LIQUID [illegible] 2"
     - BOTTOM OF SLAB IN FILL OR SUSPENDED [illegible] 3"
   - FOOTINGS:
     - TOP [illegible] 2½"
     - BOTTOM [illegible] 3"
   - WALLS:
     - EXPOSED TO EARTH OR WEATHER [illegible] ½"
     - NOT EXPOSED TO EARTH OR WEATHER IN THICKNESS WITH POURS LESS THAN 10 FEET HIGH [illegible] ¾"
     - NOT EXPOSED TO EARTH OR WEATHER IN THICKNESS WITH POURS MORE THAN 10 FEET HIGH [illegible] 1½"
   - BEAMS AND GIRDERS:
     - TOP, BOTTOM, OR SIDE OF LONGITUDINAL REINF. [illegible] 2"
   - STIRRUPS:
     - SEE FOR VERTICAL BARS [illegible] 2"
8. UNLESS OTHERWISE NOTED, TEMPERATURE REINFORCEMENT IN ONE WAY SLABS SHALL BE AS FOLLOWS:
   - SLABS 5" OR LESS: #4 @ 12"
   - SLABS OVER 5" THRU 7": #4 @ 12"
   - SLABS OVER 7" THRU 10": #5 @ 16"
   - SLABS OVER 10" THRU 12": #5 @ 12"
9. LOCATIONS OF VERTICAL CONSTRUCTION JOINTS SHOWN OR NOTED ON THE PLANS ARE APPROXIMATE AND DEVIATION FROM THOSE SHOWN SHALL HAVE THE APPROVAL OF THE ENGINEER
10. OPENINGS IN FRAMING CONCRETE WORK MUST BE MADE IN THE CENTER OF THE SPAN. NO INDISCRIMINATE OR ARBITRARY KEYWAY REINFORCEMENT SHALL EXTEND THROUGH THESE JOINTS UNLESS REQUIRED FOR CONTINUITY
11. USE A "CK" JOINT FOR ALL CONSTRUCTION JOINTS IN WALLS WHICH SEPARATE AREAS OF [illegible] INCLUDE FROM PERMANENTLY DRY AREAS SUCH AS TUNNELS, GALLERIES, BASEMENT [illegible] USE TYPE "CK" JOINT AT ALL OTHER CONSTRUCTION JOINTS UNLESS OTHERWISE NOTED ON DRAWINGS OR SPECIFIED.
12. CONCRETE WALLS AND PARTITIONS SHALL BE POURED IN MAXIMUM LENGTHS OF 60 FEET BETWEEN VERTICAL CONSTRUCTION JOINTS
13. ALL INTERIOR SLABS 4" OR LESS IN THICKNESS, REINFORCED WITH W.W.F. AND POURED AGAINST SOIL SHALL BE POURED IN A CHECKERBOARD PATTERN OF 25 FEET OR LESS IN EACH DIRECTION
14. ALL CONCRETE SLABS OVER 8" IN THICKNESS, REINFORCED WITH BARS, AND POURED AGAINST SOIL SHALL BE POURED IN A CHECKERBOARD PATTERN OF 60 FEET OR LESS IN EACH DIRECTION.
15. ALL EXPOSED EDGES OF BEAMS, COLUMNS, SLABS, AND WALLS SHALL BE CHAMFERED ¾" UNLESS OTHERWISE NOTED.
16. REFER TO PROCESS, MECHANICAL, ARCHITECTURAL, AND ELECTRICAL DRAWINGS FOR ALL SLEEVES, PIPES, CONDUITS, AND MISCELLANEOUS ANCHORING DEVICES TO BE INCORPORATED IN THE CONSTRUCTION.

STRUCTURAL STEEL

1. STRUCTURAL STEEL SHALL CONFORM TO THE LATEST A.I.S.C. SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS." ALL STRUCTURAL STEEL SHALL BE A.S.T.M. A 36
2. ELEVATIONS OF STEEL BEAMS SHOWN ON FRAMING PLANS REFER TO TOP OF FLANGE, UNLESS OTHERWISE NOTED
3. ALL BOLTED CONNECTIONS SHALL BE MADE WITH ¾" DIAMETER A.S.T.M. A-325N BOLTS EXCEPT AS OTHERWISE NOTED OR REQUIRED. ALL BEAM CONNECTIONS NOT DETAILED ON CONTRACT DRAWINGS SHALL BE SELECTED TO SUPPORT ONE-HALF THE TOTAL UNIFORM LOAD CAPACITY AS TABULATED IN ALLOWABLE LOADS ON BEAMS IN THE MANUAL OF STEEL CONSTRUCTION (7TH EDITION) OF A.I.S.C.
4. FIELD CONNECTIONS SHALL BE FASTENED W/HIGH STRENGTH STEEL BOLTS, EXCEPT AS OTHERWISE SHOWN OR NOTED
5. ALL WELDING SHALL CONFORM TO THE LATEST SPECIFICATION OF THE AMERICAN WELDING SOCIETY
6. LOOSE LINTELS SHALL HAVE A MINIMUM OF 8" ON MASONRY UNLESS OTHERWISE NOTED. WHERE LINTEL BEARS ON CMU BLOCK, GROUT 2 COURSES SOLID
7. WALL BEARING BEAMS SHALL HAVE STANDARD ANGLE WALL ANCHORS CONFORMING TO A.I.S.C. DETAILS UNLESS OTHERWISE NOTED

GENERAL

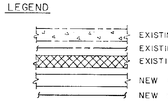
1. ALL EXCAVATION FOR STRUCTURES SHALL BE KEPT DEWATERED DURING CONSTRUCTION OPERATIONS UNTIL BACKFILL IS IN PLACE
2. DETAILS SHOWN ON THE DRAWING ARE TYPICAL DETAILS AND SHALL BE USED WHERE THEY APPLY IN PART WHERE THEY APPLY EXCEPT WHERE MODIFIED BY DETAILED DRAWINGS AND SPECIFICATIONS ONLY THE TYPES OF EXPANSION JOINTS AND CONSTRUCTION JOINTS SHOWN ON THE PLANS AND SPECIFICATIONS ARE INCLUDED IN THIS WORK
3. ALL OPEN TANKS AND CHANNELS SUPPORTED ON SOIL SHALL BE PROTECTED AGAINST FROST ACTION AND DAMAGE FROM HEAVING BY INSULATING THE BOTTOM SLAB WITH A LAYER OF INSULATING MATERIAL PLACED WITHIN THE TANK THICK ENOUGH TO PREVENT FROST PENETRATION.

ABBREVIATIONS

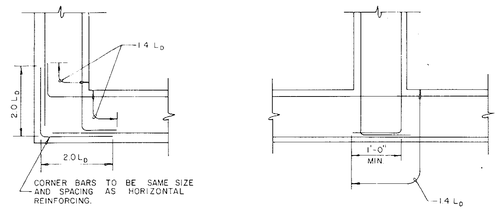
HORIZ = HORIZONTAL	B/B = BACK TO BACK	T/STL = TOP OF STEEL
E.F. = EACH FACE	BOTT = BOTTOM	VERT = VERTICAL
T = TOP	BT = BENT	HT = HEIGHT
T/SL = TOP OF SLAB	STR = STRAIGHT	H.P. = HIGH POINT
T/BM = TOP OF BEAM	ALT BT = ALTERNATE BARS BENT	P.C.O. = PILE CUT OFF
EL = ELEVATION	CTRD = CENTERED	REINF = REINFORCING
E.W. = EACH WAY	C/C = CENTER TO CENTER	U.N. = UNLESS NOTED
SPCG = SPACING	L.P. = LOW POINT	

*DIMENSIONS NOTED THUS TO BE DETERMINED BY EQUIPMENT MANUFACTURER, OR GENERAL CONTRACTOR.

LEGEND

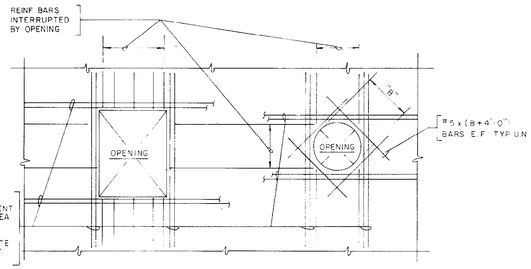


BAR SIZE	DEVELOPMENT LENGTH "L_D"
#3	12"
#4	12"
#5	15"
#6	19"
#7	26"
#8	35"
#9	44"
#10	56"
#11	68"

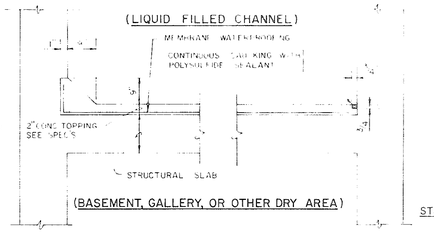


CORNER INTERSECTION

TYPICAL DETAILS OF HORIZ. WALL REINFORCEMENT

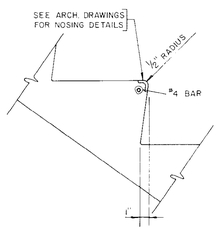


ADDITIONAL REINFORCING STEEL AT OPENINGS IN WALLS AND SLABS

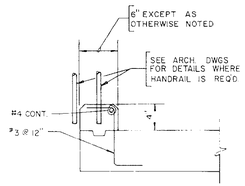


WITH FILLET WITHOUT FILLET

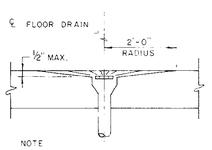
TYPICAL DETAIL WATERPROOFED CHANNEL



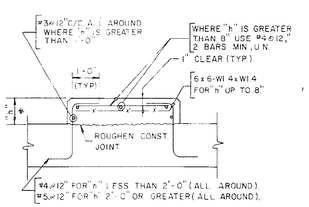
TYPICAL CONC. STAIR TREAD DETAIL



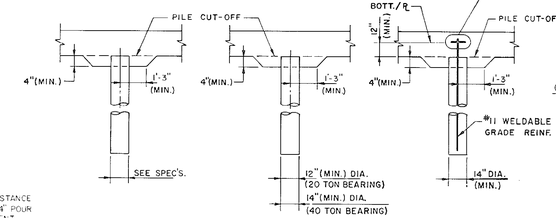
TYP. CONC. CURB DETAIL



TYPICAL DETAIL - PITCHED SLAB AT FLOOR DRAIN



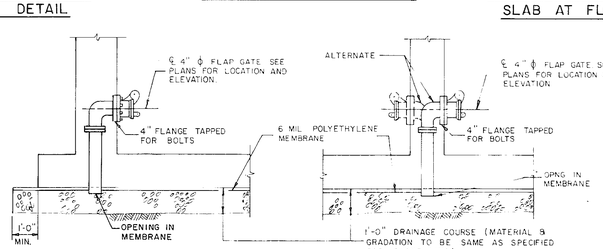
TYPICAL EQUIPMENT PAD



TIMBER PILE (20 TON BEARING) DRILLED-IN-PLACE CONCRETE PILE DRILLED-IN-PLACE CONCRETE PILE (40 TON BEARING) (15 TON UPLIFT)

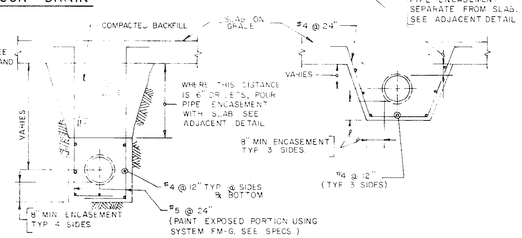
BEARING PILES TENSION PILE

TYPICAL PILE DETAILS



EXTERIOR WALL INTERIOR WALL

RELIEF VALVE DETAIL



SEPARATE FROM SLAB MONOLITHIC WITH SLAB

PIPE ENCASEMENT

51-003-147

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.S.
DRAWN R.W.
CHECKED J.S.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

STRUCTURAL NOTES AND DETAILS

SHEET XS-1
OF SHEETS
PROJECT NO. 78284

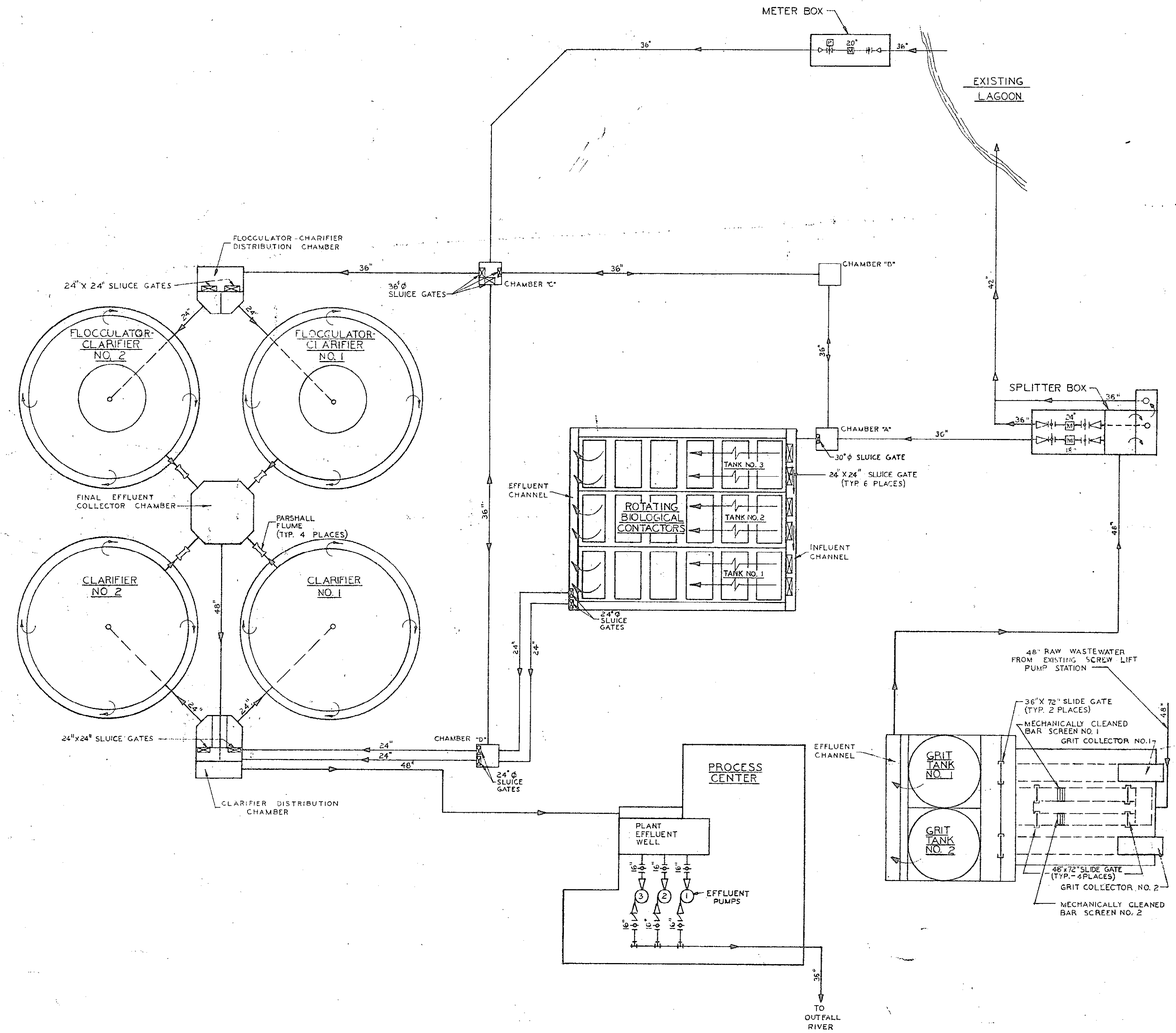
AS BUILT RECORD

FLOW DIAGRAM INDEX

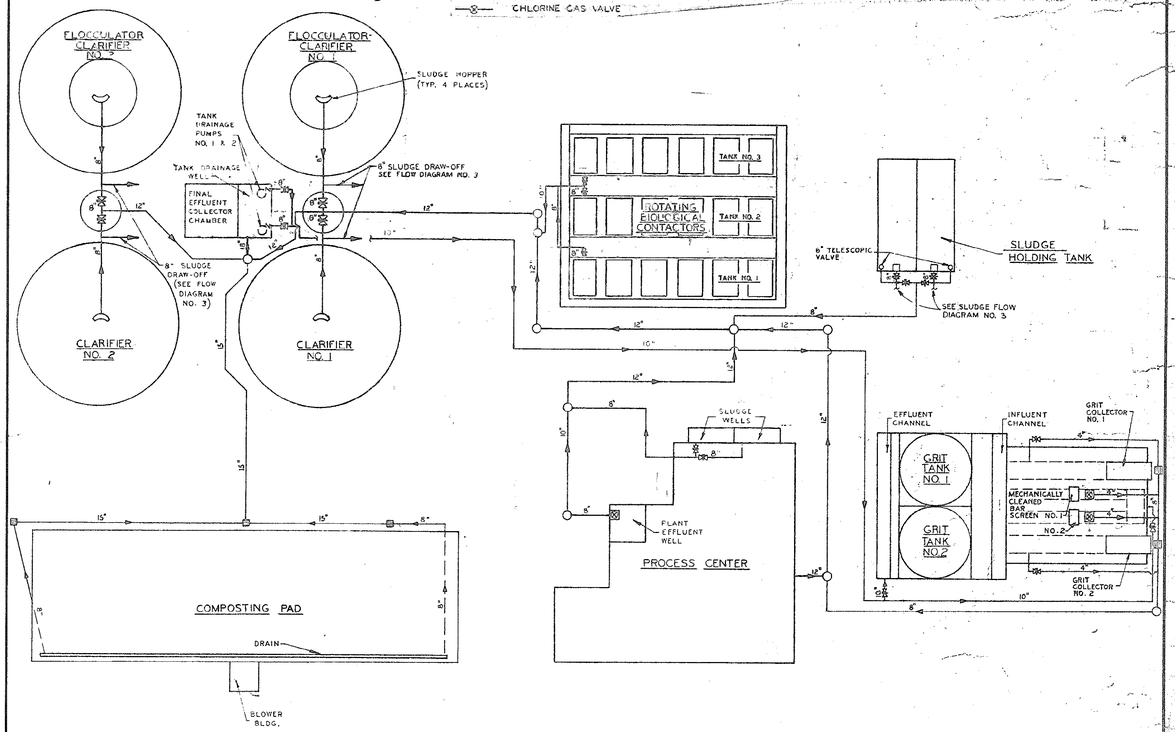
No.	Title
1	Raw Wastewater to Final Effluent
2	Tank Drainage
3	Sludge
4	Scum & Grit
5	Sludge Thickening and Thickened Sludge
6	Low Pressure Air
7	Alum
8	Polymer
9	Ferric Chloride
10	Lime
11	Chlorine
12	Sampling

FLOW DIAGRAM SYMBOLS

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
10"	PIPE SIZE AND DIRECTION OF FLOW		CHECK VALVE
	BLIND FLANGE		FLAP VALVE
	GATE VALVE		SLUICE GATE
	GATE VALVE W/ELECTRIC OPERATOR		STOP GATE OR SLIDE GATE
	GATE VALVE W/PNEUMATIC OPERATOR		PUMP OR BLOWER
	PLUG VALVE		MAGNETIC FLOW METER
	PLUG VALVE W/ELECTRIC OPERATOR		ROTOMETER
	PLUG VALVE W/PNEUMATIC OPERATOR		FLOW TUBE
	3 WAY PLUG VALVE		ORIFICE PLATE
	BUTTERFLY VALVE		DENSITY METER
	BUTTERFLY VALVE W/ELECTRIC OPERATOR		AMMONIA TYPE UNION
	BUTTERFLY VALVE W/PNEUMATIC OPERATOR		PRESSURE GAUGE
	BUTTERFLY VALVE PNEUMATIC OPERATOR W/POSITIONER		VENT
	MUD VALVE OR PLUG DRAIN VALVE		DRIP TRAP
	PINCH VALVE		STRAINER
	GLOBE VALVE		M.J. PLUG
	YARD HYDRANT		BUTTERFLY CHANNEL GATE
	GAS RELIEF VALVE		BUTTERFLY CHANNEL GATE W/ELECTRIC MODULATOR
	SOLENOID VALVE		BUTTERFLY CHANNEL GATE W/ELECTRIC MOTOR
	BALL VALVE		SILENCER
	SAMPLING VALVE		MOTORIZED SLUICE GATE
	PRESSURE CONTROL VALVE RELIEF OR REDUCING		MANHOLE
	REDUCER		INLET
	CHLORINE GAS VALVE		



FLOW DIAGRAM NO. 1
RAW WASTEWATER TO FINAL EFFLUENT



FLOW DIAGRAM NO. 2
TANK DRAINAGE

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED W.J.W.
DRAWN B.T.
CHECKED S.L.M.
DATE 12-3-78

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

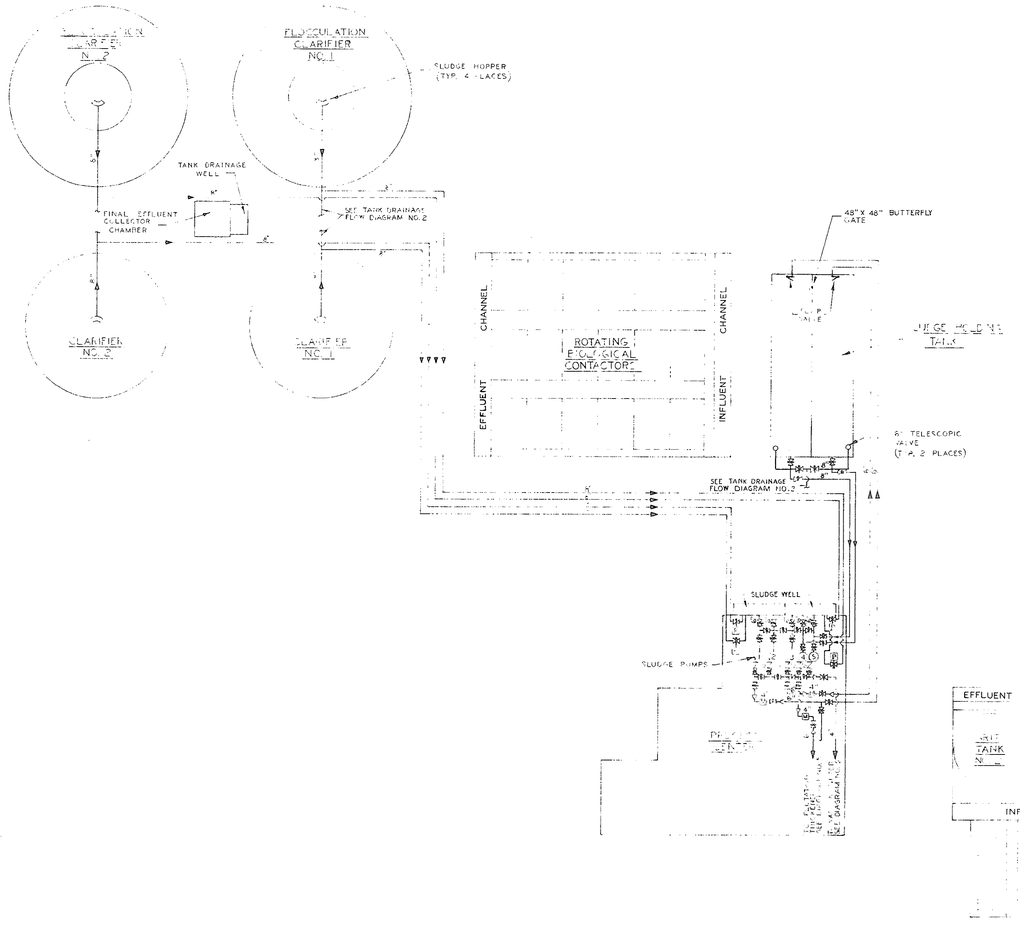
SCALE
NONE

FLOW DIAGRAMS

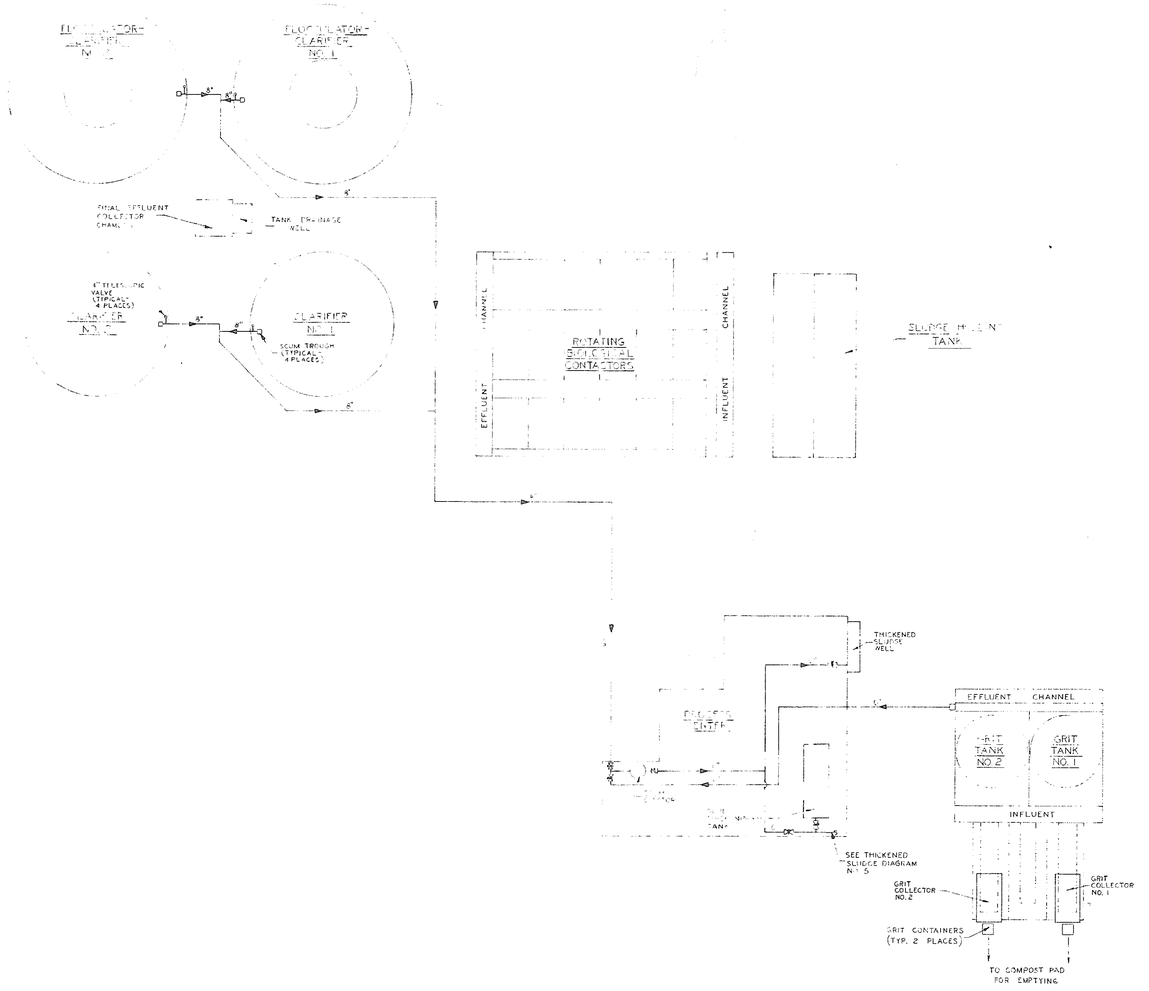
SHEET XP-1
OF SHEETS
PROJECT NO. 78284

51-003-148

SWMS RECORD



FLOW DIAGRAM NO. 3
SLUDGE



FLOW DIAGRAM NO. 4
GRIT

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED WJW
DRAWN JDH
CHECKED SLM
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

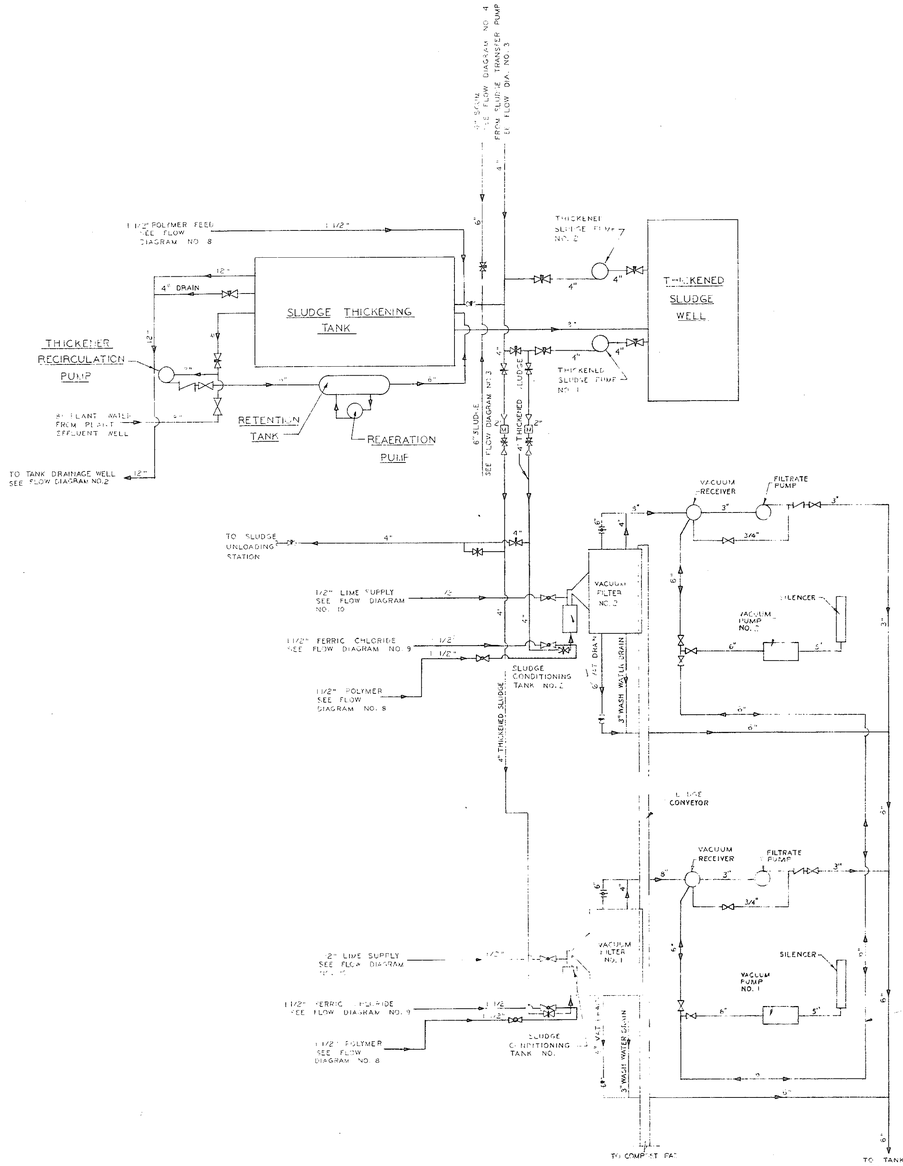
SCALE
NONE

FLOW DIAGRAMS

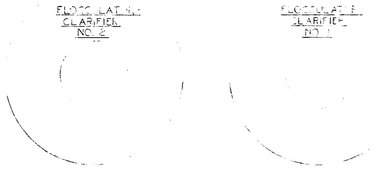
SHEET XP-2
OF SHEETS
PROJECT NO. 78284

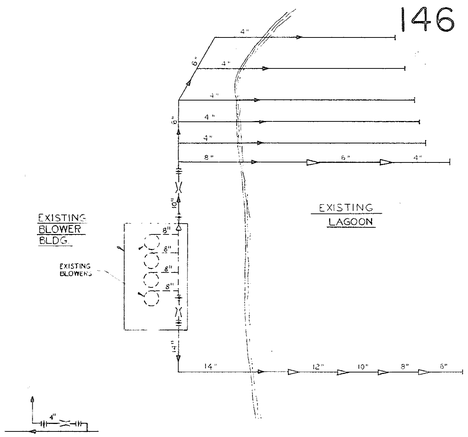
51-002-147

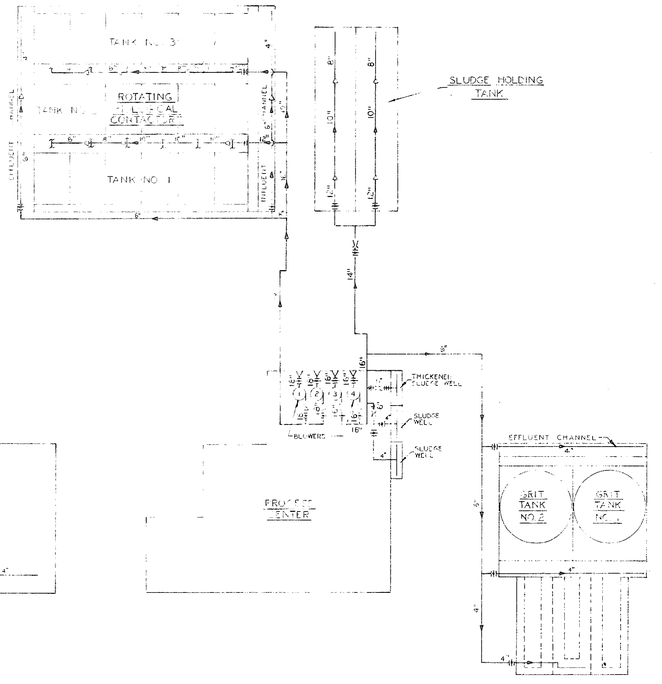
RECORD



FLOW DIAGRAM NO. 5
SLUDGE THICKENER AND THICKENED SLUDGE







FLOW DIAGRAM NO. 6
LOW PRESSURE AIR

51-002-150

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED W.J.W.
DRAWN BT
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

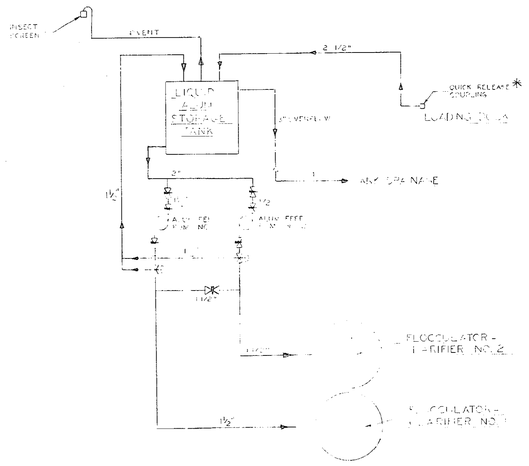
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

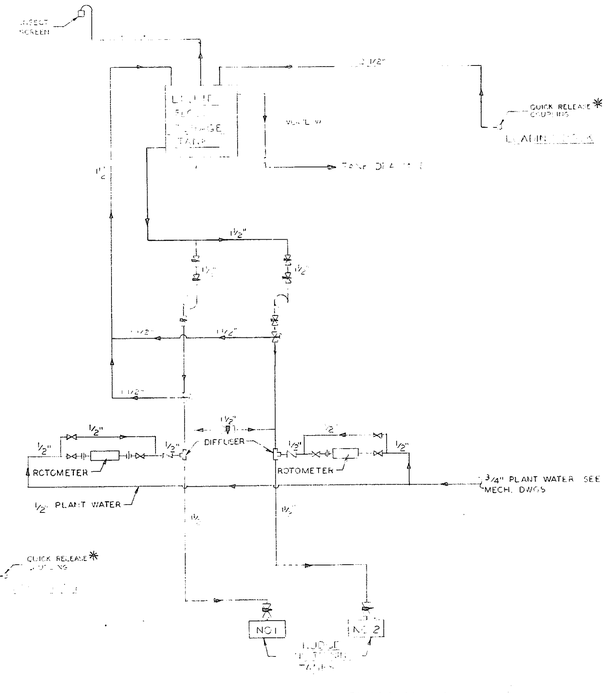
FLOW DIAGRAMS

SHEET XP-3
OF SHEETS
PROJECT NO. 78284

51A130 3 RECORD

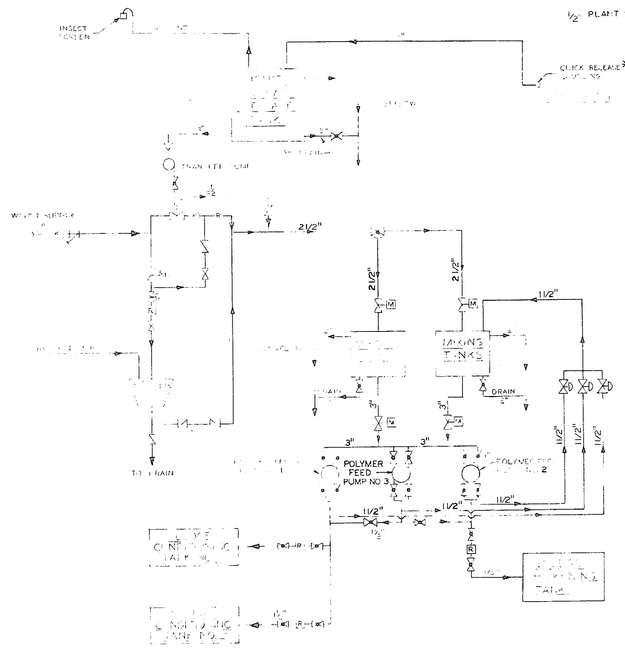


FLOW DIAGRAM NO. 7
ALUM

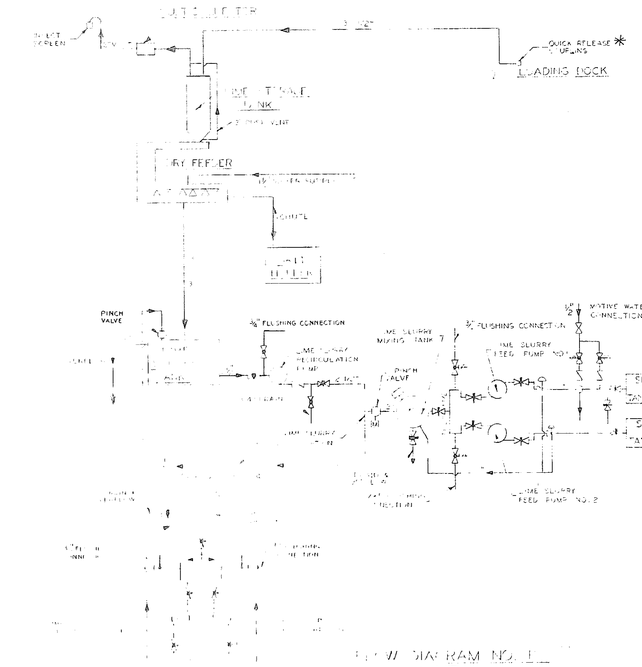


FLOW DIAGRAM NO. 3
FERRIC CHLORIDE

NOTE:
SIZE AND TYPE OF [illegible] SHALL BE AS DETERMINED BY FIELD



FLOW DIAGRAM NO. 5
POLYMER



FLOW DIAGRAM NO. 1
LIME

50-003-151

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED W.J.W.
DRAWN B.T.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

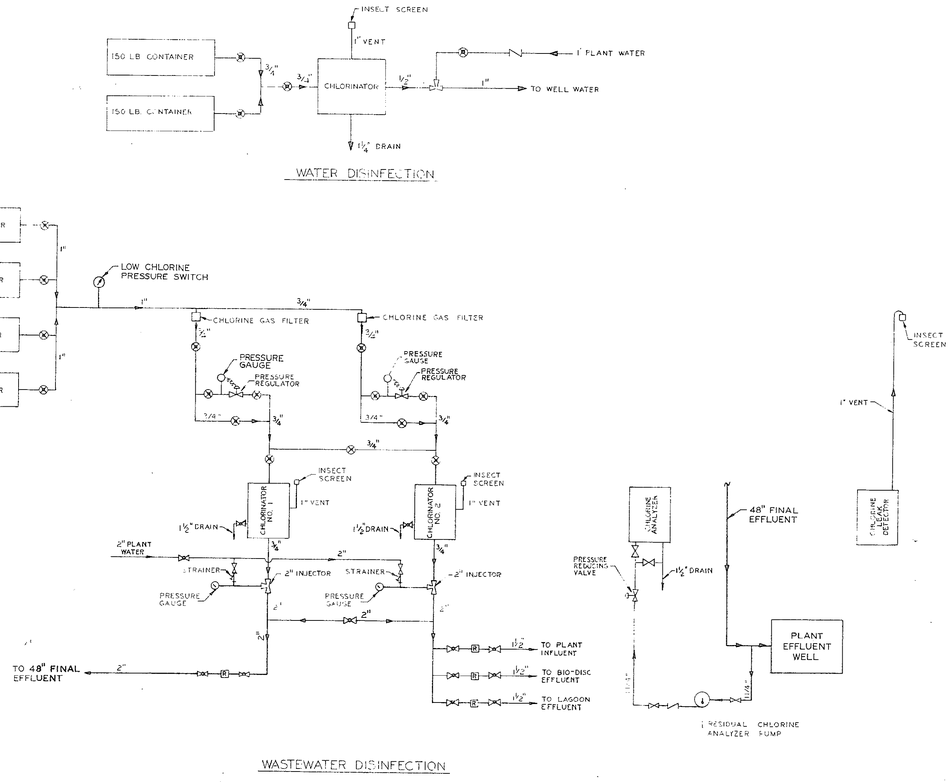
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

FLOW DIAGRAMS

SHEET XP-4
OF SHEETS
PROJECT NO. 78284

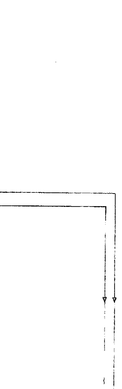
SUBMITTED S RECORD



WATER DISINFECTION

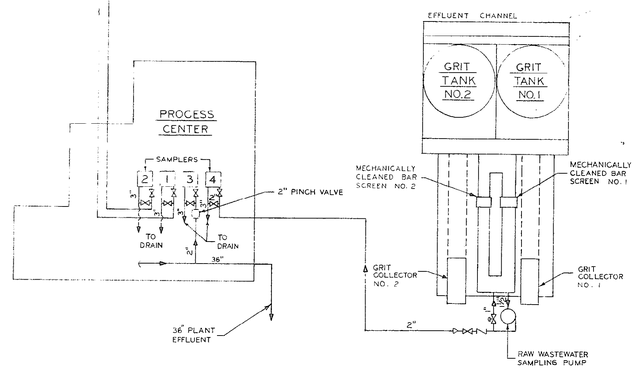
WASTEWATER DISINFECTION

FLOW DIAGRAM NO. 11
CHLORINE



SAMPLERS

1. SETTLED WASTEWATER SAMPLER NO. 1
2. SETTLED WASTEWATER SAMPLER NO. 2
3. FINAL EFFLUENT SAMPLER
4. RAW WASTEWATER SAMPLER



FLOW DIAGRAM NO. 12
SAMPLING

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED WJW
DRAWN JDH
CHECKED SLM
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

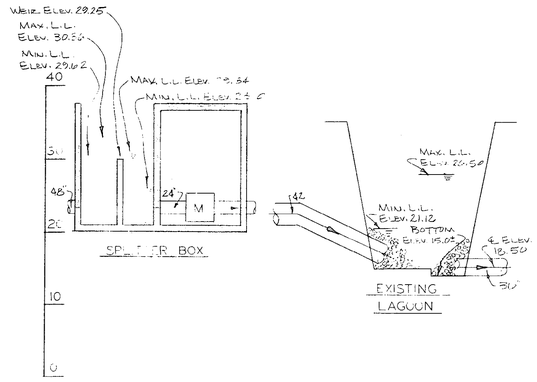
SCALE
NONE

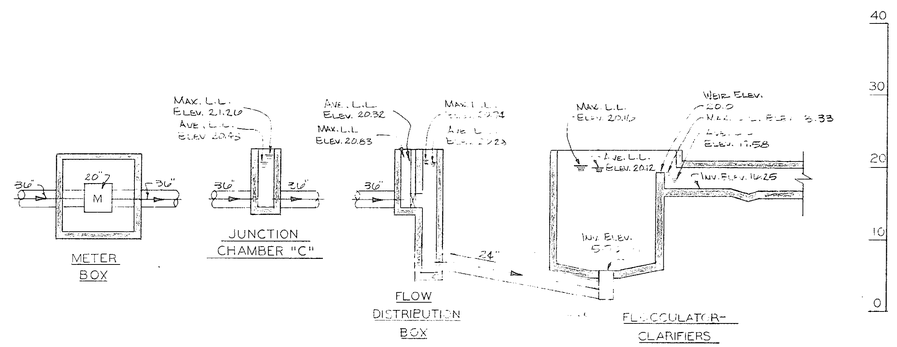
FLOW DIAGRAMS

SHEET XP-5
OF SHEETS
PROJECT NO. 78284

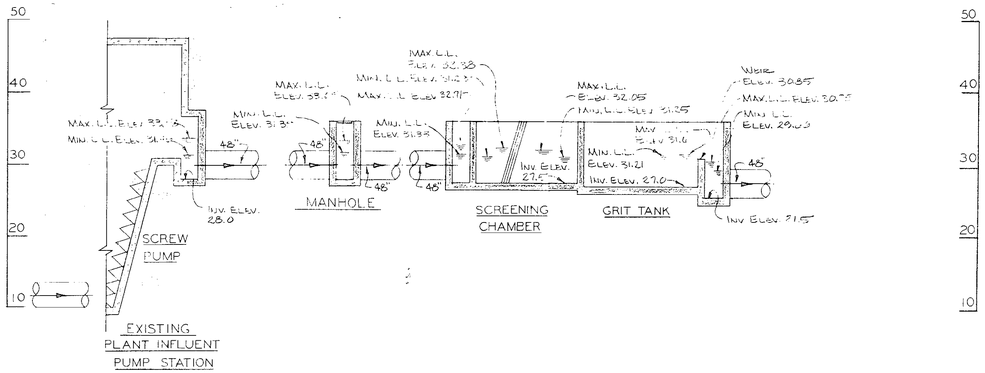
51-002-152

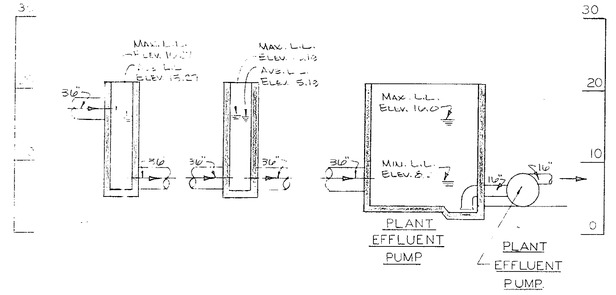
10-12-84 S RECORD

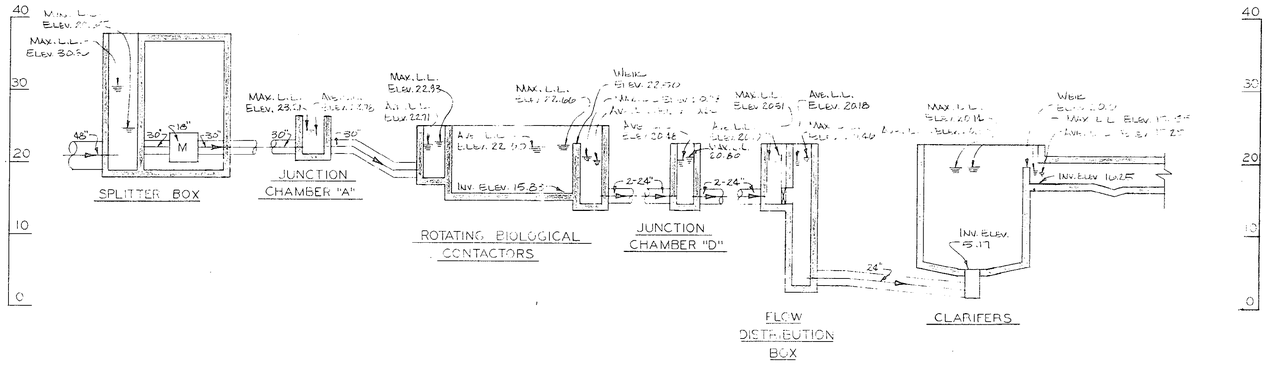




LAGOON FLOW







ROTATING BIOLOGICAL CONTACTORS FLOW

51-007-153

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED W.J.W.
DRAWN R.L.J.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

HYDRAULIC PROFILE

SHEET XP-6
OF SHEETS
PROJECT NO. 78284

51A-183-5 RECORD

MAJOR PLUG VALVES

No. Required	Size	Service	Location	Ends	Operation
2	10"	Tank Drainage	Grit Tanks - Area 2	M.J.	Manual w/Nut Operator
2	4"	Tank Drainage	Grit Tanks - Area 2	M.J.	Manual w/Nut Operator
3	8"	Tank Drainage	RBC - Area 4	Flanged	Manual w/ Handwheel
2	8"	Tank Drainage Eff.	Tank Drainage Well-Area 5	M.J.	Manual w/ Extended Operator
2	8"	Tank Drainage	Manhole "A"	Flanged	Manual w/ Extended Operator
2	8"	Tank Drainage	Manhole "B" - Area 5	Flanged	Manual w/ Extended Operator
2	8"	Tank Drainage	Sludge Holding Tank-Area 6	M.J.	Manual w/ Extended Operator
4	8"	Sludge Draw Off	Sludge Holding Tank-Area 6	M.J.	Manual w/ Extended Operator
1	4"	Liquid Sludge	Compositing Pad - Area 7	Flanged	Manual w/ Handle
3	6"	Scum	Process Center - Area 9	Flanged	Manual w/ 1 Handle 2 Chainwheel
1	6"	Scum	Process Center - Area 9	Flanged	Manual w/ Chainwheel
1	8"	Scum	Process Center - Area 9	Flanged	Manual w/ Chainwheel
2	8"	Tank Drainage	Process Center - Area 9	Flanged	Manual w/ Handwheel
2	4"	Thickened Sludge Suction	Process Center - Area 9	Flanged	Manual w/ Handle
2	4"	Thickened Sludge Discharge	Process Center - Area 9	Flanged	Manual w/ Handle
7	4"	Thickened Sludge	Process Center - Area 9	Flanged	Manual w/ Chainwheel
2	2"	Thickened Sludge	Process Center - Area 9	Flanged	Manual w/ Chainwheel
14	6"	Sludge Suction	Process Center - Area 9	Flanged	Manual w/ Handwheel
5	6"	Sludge Discharge	Process Center - Area 9	Flanged	Manual w/ Handle
2	6"	Sludge	Process Center - Area 9	Flanged	Manual w/ Chainwheel
4	8"	Sludge	Process Center - Area 9	Flanged	Pneumatic
10	6"	Sludge	Process Center - Area 9	Flanged	Manual w/ 1 Handle 9 Chainwheel
6	4"	Sludge	Process Center - Area 9	Flanged	Manual w/ 1 Handle 4 Chainwheel
1	8"	Thickener Recirculation	Process Center - Area 9	Flanged	Manual w/ Handle
2	4"	Vacuum Filter Drain	Process Center - Area 9	Flanged	Manual w/ Handle

PLUG DRAIN VALVES

No. Required	Size	Service	Location	Ends	Operation
2	4"	Tank Drainge	Grit Tank - Area 2	Flanged	Manual w/ Nut Operator
1	8"	Tank Drainge	Plant Effluent Well-Area 9	Flanged	Manual w/ Nut Operator

SLUICE GATES

No. Req'd	Size	Location	Frame Type	Thimble Type	Max. Head Ft. Seating	Max. Head Ft. Unseating	Operation
6	24"x24"	RBC Influent-Area 4	Flanged	F-PE	10	10	Manual w/Ext. Operator
2	24" Dia	RBC Effluent - Area 4	Flanged	F-MJ	10	10	Manual w/ Ext. Operator
1	30" Dia	Junction Chamber 'A' Area 4	Flanged	F-MJ	10	10	Manual w/Ext. Operator
2	24"x24"	Flocculator Distribution Chamber-Area 5	Flanged	F-PE	10	10	Manual w/Ext. Operator
2	24"x24"	Clarifier Distribution Chamber-Area 5	Flanged	F-PE	10	10	Manual w/Ext. Operator
3	36" Dia	Junction Chamber 'C' Area 5	Flanged	F-MJ	10	10	Manual w/Ext. Operator
2	24" Dia	Junction Chamber 'D' Area 5	Flanged	F-MJ	10	10	Manual w/Ext. Operator

SLIDE GATES

No. Req'd	Size	Location	Operation	Head
2	36"x72"	Grit Tanks - Area 2	Manual	5 ft.
4	48"x72"	Grit Tanks - Area 2	Manual	5 ft.

BUTTERFLY GATES

No. Req'd	Size	Location	Operation
1	48"x48"	Sludge Holding Tanks - Area 6	Manual

MAJOR GATE VALVES

No. Req'd	Size	Service	Location	Ends	Operation	Type
2	8"	Thickener Recirculation	Process Center-Area9	Flanged	Manual	GV-2
1	6"	Thickener Recirculation Discharge	Process Center-Area 9	Flanged	Manual	GV-2
1	4"	City Water	Process Center-Area 9	Flanged	Manual	GV-1
1	8"	City Water	Process Center-Area 9	Flanged	Pneumatic	GV-1
1	8"	City Water	Process Center-Area 9	Flanged	Manual	GV-1
3	8"	City Water	Well House-Area 10	Flanged	Manual	GV-1
2	6"	City Water	Well House-Area 10	Flanged	Manual	GV-1
1	12"	Plant Effluent Well	Process Center - Area 9	Flanged	Manual w/Nut Operator	GV-2

MAJOR CHECK VALVES

No. Req'd	Size	Service	Location	Ends	Pressure Class	Type
2	8"	Tank Drainage Discharge	Tank Drainage Well-Area 5	Flanged	150	Ball
2	8"	Blower Discharge	Blower Bldg. Area 7	Flanged	25	Split Disc.
3	6"	Plant Water Discharge	Process Center Area 9	Flanged	125	Cushioned
3	18"	Plant Effluent Discharge	Process Center Area 9	Flanged	125	Cushioned
2	18"	Blower Discharge	Process Center Area 9	Flanged	25	Split Disc.
2	12"	Blower Discharge	Process Center Area 9	Flanged	25	Split Disc.
1	6"	Thickener Recirculation Discharge	Process Center Area 9	Flanged	125	Swing
5	6"	Sludge Pump Discharge	Process Center Area 9	Flanged	25	Swing
1	6"	Well Pump Discharge	Well House Area 10	Flanged	250	Swing

BUTTERFLY VALVES

No. Req'd	Size	Service	Location	Operation	Class	Type
3	4"	LP Air	Grit Tank-Area 2	Manual	25	BV-3
1	24"	Raw Wastewater	Splitter Box-Area 3	Manual/Handwheel	25	BV-2
1	18"	Raw Wastewater	Splitter Box-Area 3	Manual/ Handwheel	25	BV-2
1	24"	Raw Wastewater	Splitter Box-Area 3	Manual/ Handwheel	25	BV-2
1	18"	Raw Wastewater	Splitter Box-Area 3	Pneumatic w/ Positioner	25	BV-2
1	20"	Raw Wastewater	Meter Box-Area 3	Pneumatic w/ Positioner	25	BV-2
1	20"	Raw Wastewater	Meter Box-Area 3	Manual/ Handwheel	25	BV-2
2	14"	LP Air	Existing Blower Bldg. Area 3	Manual/ Handwheel	25	BV-3
2	10"	LP Air	Existing Blower Bldg. Area 3	Manual/ Handwheel	25	BV-3
1	12"	LP Air	RBC - Area 4	Manual/ Handwheel	25	BV-3
1	10"	LP Air	RBC - Area 4	Manual/ Handwheel	25	BV-3
36	4"	LP Air	RBC - Area 4	Manual	25	BV-3
3	6"	LP Air	RBC - Area 4	Marual	25	BV-3
1	14"	LP Air	Sludge Holding Tank-Area 6	Manual/ Handwheel	25	BV-3
2	12"	LP Air	Sludge Holding Tank-Area 6	Manual w/ Ext. Operator	25	BV-3
21	4"	Compost Suction	Compost Pad-Area 7	Manual	25	BV-3
2	8"	Compost Suction	Blower Bldg.-Area 7	Manual	25	BV-3
2	8"	Compost Discharge	Blower Bldg.-Area 7	Manual	25	BV-3
3	4"	Compost Discharge	Deodorizing Pad - Area 7	Manual	25	BV-3
3	6"	Plant Water Suction	Process Center-Area 9	Manual	125	BV-2
3	6"	Plant Water Discharge	Process Center-Area 9	Manual	125	BV-2
3	24"	Plant Effluent Suction	Process Center-Area 9	Manual/ Handwheel	75	BV-2
3	18"	Plant Effluent Discharge	Process Center-Area 9	Manual/ Handwheel	75	BV-2

BUTTERFLY VALVES (cont'd.)

2	18"	Blower Suction	Process Center-Area 9	Manual/ Handwheel	25	BV-3
2	18"	Blower Discharge	Process Center-Area 9	Manual/ Handwheel	25	BV-3
2	16"	Blower Suction	Process Center-Area 9	Manual/ Handwheel	25	BV-3
2	16"	Blower Discharge	Process Center-Area 9	Manual/ Handwheel	25	BV-3
3	6"	LP Air	Process Center-Area 9	Manual	25	BV-3
2	4"	LP Air	Process Center-Area 9	Manual	25	BV-3

BACK PRESSURE VALVES

No. Req'd	Size	Service	Location	Capacity	Pressure Upstream	Pressure Downstream
1	6"	City Water	Process Center Area 9	350 GPM	55 psi	25 psi
1	8"	City Water	Well House Area 10	400 GPM	70 psi	40 psi

PUMP SCHEDULE

Pump	Type	No. Req'd	Location (Area)	Capacity	TDH (ft.)	Speed
Plant Effluent *	HSCP	3	9	7000 GPM	65	1,175 RPM
Recirculation	SESCP	1	9	600 GPM	175	1,750 RPM
Sludge						
1. Variable Speed	NCRIP	2	9	265 GPM-300 GPM	27-39	1,000 tp 1,200 RPM
2. Constant Speed	NCRIP	3	9	350 GPM	20	1,170 RPM
Thickened Sludge	PP	2	9	85 GPM	50	49 SPM
Tank Drainage	SCP	2	4	1,200 GPM	30	1,750 RPM
Plant Water	HSCP	3	9	175 GPM	190	3,500 RPM
Lime Slurry	SESCP	1	9	60 GPM	110	1,750 RPM
Raw Wastewater Sampling	SPCP	1	2	50 GPM	45	2,600 RPM
Settled Wastewater Sampling	SPCP	2	5	30 GPM	60	2,000 RPM
Cl_2	PCP	1	9	10 GPM	40 PSI	275 RPM
Polymer Transfer	PCP	1	9	16 GPM	35	135 RPM
Polymer Feed	SDMP	3	9	208 GPH	-	195 SPM
Alum Feed	SDMP	2	9	23.3 GPH	-	22 SPM
Ferric Chloride Feed	SDMP	2	9	23.3 GPH	-	22 SPM
Lime Feed	SDMP	2	9	38.3 GPH	-	36 SPM
Lime Feed	SDMP	2	5	70.8 GPH	-	66 SPM
Well	VTP	1	10	400 GPM	350	1,750 RPM
Cl_2 Solution	CCTP	1	10	7.5 GPM	320	1,750 RPM
Scum Ejector		1	9	100 GPM	50	

PUMP LEGEND

SESCP - STANDARD END SUCTION CENTRIFUGAL PUMP
HSCP - HORIZONTAL SPLIT CASE PUMP
NCRIP - NON-CLOG RECESSED IMPELLER
PP - PLUNGER PUMP
SPCP - SELF-PRIMING CENTRIFUGAL PUMP
PCP - PROGRESSING CAVITY PUMP
SDMP - SINGLE DIAPHRAM METERING PUMP
VTP - VERTICAL TURBINE PUMP
SCP - SUBMERSIBLE CENTRIFUGAL PUMP
ESCSP - END SUCTION CENTRIFUGAL SLURRY PUMP
CCCP - CLOSED COUPLE CENTRIFUGAL PUMP
CCTP - CLOSED COUPLE TURBINE PUMP

* - 1. Plant Effluent Pumps

a. Each plant effluent pump shall at a minimum meet the following conditions and requirements.

	Capacity (GPM)	TDH	Available NPSH (Ft)	Min. Overall Drive & Pump Eff.
Two Pump Operating Mode	4200	95	35	73
Single Duty Point Operating Mode	7000	50	31	70

b. The above listed TDH includes the static head, velocity head and all suction and discharge piping losses, but does not include any head losses encountered between the intake and discharge connections of the pump.

c. The maximum rotational speed of the raw wastewater pumps and drive assemblies shall not exceed 1750 RPM. Power consumption to determine the overall motor and pump efficiency shall be measured at the motor. The H.P. rating for the motor and drive assemblies shall not be less than 200 H.P.

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED W.J.W.
DRAWN C.E.E.
CHECKED S.L.M.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

VALVE AND PUMP SCHEDULE

SHEET XP-7
OF SHEETS
PROJECT NO. 78284

51-003-154

50A15145 RECORD

INSTRUMENTATION TABLE

COMPLETE GENERAL IDENTIFICATIONS
/COMBINATIONS OF LETTERS/
SECOND AND THIRD LETTERS (TYPE OF DEVICE)

		CONTROLLING DEVICES: RECORDING	CONTROLLING DEVICES: INDICATING	CONTROLLING DEVICES: CONTROL LOW/HIGH	CONTROLLING DEVICES: CONTROL LOW/HIGH	MEASURING DEVICES: TRANSMITTING	MEASURING DEVICES: RECORDING	MEASURING DEVICES: INDICATING	COMPUTING DEVICE: SUMMATING	COMPUTING DEVICE: SUMMATING	TOTALIZER: RATIO	TOTALIZER: RECORDING	ALARM DEVICES: INDICATING	ALARM DEVICES: ALARM LOW/HIGH	ALARM DEVICES: ALARM LOW/HIGH	PRIMARY ELEMENT	PRIMARY ELEMENT: WELLS
		RC	IC	CL	CH	X	R	T	S	Y	Q	F	RA	IA	AL	AH	E	W
ANALYSIS	A-	ARC	AIC	ACL		AX	AR	AT					ARA	AIA	AAL	AAH	AE	
TEMPERATURE	T-	TRC	TIC	TC	TCH	TX	TR	TI					TRA	TIA	TAL	TAH	TE	TW
FLOW	F-	FRC	FIC			FX	FR	FI	FS	FY	FQ	FF	FRA	FIA	FAL	FAH	FE	
LEVEL	L-	LRC	LIC	LCL	LCH	LX	LR	LI					LRA	LIA	LAL	LAH	LE	
PRESSURE	P-	PRC	PIC	PCL	PCH	PX	PR	PI		PY			PRA	PIA	PAL	PAH	PE	
DIFFERENTIAL PRESSURE	dP-	dPRC	dPIC	dPCL	dPCH	dPX	dPR	sPI					dPRA	dPIA	dPAL	dPAH		
DENSITY	D-	DRC	DIC	DCL	DCH	DX	DR	DI					DRA	DIA	DAL	DAH	DE	
HAND	H-		HIC															
CURRENT	I-		IIC	ICL	ICH										IAL	IAH		
SPEED	S-	SRC	SIC			SX	SR	SI	SS			SD	SRA	SIA			SE	
VICOSITY	V-	VRC	VIC			VX	VR	VI					VRA	VIA			VE	
WEIGHT	W	SRC	WIC			WX	WR	WI	WS		Q		SRA	SIA			WE	
POSITION	Z		ZIC															

HIGH SIGNAL SELECTOR

SUMMATOR

INTEGRATOR

MULTIPLIER

INSTRUMENT PROVIDED UNDER SEPERATE CONTRACT

LOCALLY MOUNTED INSTRUMENT

REAR PANEL MOUNTED INSTRUMENT

FRONT PANEL MOUNTED INSTRUMENT

ABBREVIATIONS

D.O.	DISSOLVED OXYGEN
MLS	MANUAL LOADING STATION
MAG	MAGNETIC FLOWMETER
BBL	BUBBLER LEVEL SYSTEM
TEMP	TEMPERATURE
SS	SUSPENDED SOLIDS
RA	RESIDUAL ANALYZER (CHLORINE)
BC	BUBBLER CUBICLE
MCP	MAIN CONTROL PANEL

MAGNETIC FLOWMETER

BUTTERFLY VALVE

MOTOR OPERATED BUTTERFLY VALVE

CYLINDER OPERATED BUTTERFLY VALVE

INSTRUMENT ELECTRICAL CONNECTIONS

INSTRUMENT AIR LINES

MATCH LINE	LINE SIZE TO SHEET

MOTORIZED SLUICE GATE

PUMP

CURRENT-TO-PNEUMATIC TRANSDUCER

FLOW TUBE

PARSHALL FLUME

COMBUSTIBLE GAS MONITOR

ANALYZERS

BUBBLER

ELECTRODE

INDICATOR

CONTROLLER

RATIO STATION

TOTALIZER

RECORDER

MANUAL LOADING STATION

PUSHBUTTON

LIGHT

SELECTOR SWITCH

PIPE AND CHANNEL CODE

ML	MIXED LIQUOR
PE	PRIMARY EFFLUENT
PLE	PLANT EFFLUENT
RAS	RETURN ACTIVATED SLUDGE
RS	RAW SLUDGE
TS	THICKENED SLUDGE
TSE	THICKENER SUBNATANT
WAS	WASTE ACTIVATED SLUDGE

51-002-155

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.N.G.
DRAWN N.E.H.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

INSTRUMENTATION SYMBOLS AND LEGEND IDENTIFICATION

SHEET XP-8
OF SHEETS
PROJECT NO. 78284

SPECIFICATION 5 RECORD

SYSTEM NO.	DESCRIPTION	PRIMARY METER	METER SIZE	METER LOCATION	RANGE	FUNCTION	FUNCTION LOCATION	ITEM NO.	QUANTITY	REMARKS
1	DEGRITTED WASTEWATER FLOW	MAGNETIC FLOW METER	18" 20"	SPLITTER BOX	0-12 MGD 0-25 MGD	IX IC RQ	METER MCP MCP	1A 1B	1 1	1. FLOW SHALL BE CONTROLLED THROUGH A FLOW DIVIDING SYSTEM. 2. PROVIDE I/A CONVERTER TO CONTROL PNEUMATIC BUTTERFLY VALVES
2	BAR SCREEN LOSS OF HEAD	BUBBLER		BAR SCREEN	0-6'	IXCA	BC2-1	2A 2B		INITIATE SCREEN CLEANING CONTROL CIRCUIT AND PROVIDE HIGH ALARM
4	CLARIFIER EFFLUENT	PARSHALL FLUME	12"		0-5 MGD	IX I	METER MCP	4A 4B	2	
5	FLOCCULATOR - CLARIFIER EFFLUENT	PARSHALL FLUME	12"		0-7.5 MGD	IX I	METER MCP	5A 5B	2	
6	TANK DRAINAGE WELL LEVEL	BUBBLER			0-25'	IX CA	BC5-1			1. START/STOP CONTACTS FOR PUMP CONTROL 2. LOW LEVEL PUMP CUTOFF 3. HIGH LEVEL ALARM
7	FINAL EFFLUENT WELL LEVEL	BUBBLER		PROCESS BLDG. BSMT.	0-16'	IX CA	BC9-1		1	1. START/STOP CONTACTS FOR PUMP CONTROL 2. LOW LEVEL PUMP CUTOFFS 3. HIGH LEVEL ALARM
8	LAGOON EFFLUENT	MAGNETIC FLOW METER	20"	METER BOX	0-15 MGD	IX IC RQ	METER MCP MCP		1	PROVIDE I/P CONVERTER TO CONTROL PNEUMATIC VALVE
9	CLARIFIER SLUDGE WELL LEVEL	BUBBLER		PROCESS BLDG. BSMT.		IX A	BC9-2		1	
10	FLOCCULATOR - CLARIFIER SLUDGE WELL LEVEL	BUBBLER		PROCESS BLDG. BSMT.		IX A	BC9-2			
11	SLUDGE HOLDING TANK LIQUID LEVEL	BUBBLER		SLUDGE HOLDING TANK		IX A	BC6-1		1	
12	CLARIFIER SLUDGE FLOW TO HOLDING TANK	MAGNETIC METER	4"	PROCESS BLDG. BSMT.	0-400 GPM	IX I	METER MCP		1	
13	FLOCCULATOR - CLARIFIER SLUDGE FLOW TO HOLDING TANK	MAGNETIC FLOW METER	4"	PROCESS BLDG. BSMT.	0-400 GPM	IX I	METER MCP		1	
14	HOLDING TANK SLUDGE FLOW TO THICKENER	MAGNETIC FLOW METER	4"	PROCESS BLDG. BSMT.	0-300 GPM	IX IC	METER MCP		1	1. PROVIDE SIGNAL FOR SPEED CONTROL OF SLUDGE TRANSFER PUMPS. 2. PACE POLYMER FEED PUMPS
15	THICKENED SLUDGE WELL LEVEL	BUBBLER		PROCESS BLDG. GRADE FL.	0-15'	IX IA	BC9-3 MCP		1	1. HIGH-LOW LEVEL ALARMS 2. LOW LEVEL CUTOFF
16	THICKENED SLUDGE FLOW TO VACUUM FILTERS	SLUDGE MAGNETIC FLOW METER	4"	PROCESS BLDG. GRADE FL.	0-100 GPM	IX I	METER MCP	16A 16B	2	1. PROVIDE POSITIVE ZERO RETURN 2. PACE FERRIC CHLORIDE AND LIME FEED PUMPS 3. PROVIDE CONTINUOUS ULTRASONIC CLEANING
17	VACUUM FILTER VAT LEVEL	BUBBLER		PROCESS BLDG. 1st FL.	0-2'	IA	BC9-4	17A 17B	1	HIGH LEVEL ALARM

SYSTEM NO.	DESCRIPTION	PRIMARY METER	METER SIZE	METER LOCATION	RANGE	FUNCTION	FUNCTION LOCATION	ITEM NO.	QUANTITY	REMARKS
18	PLANT WATER WELL LEVEL	BUBBLER		PROCESS BLDG. BSMT.	0-12'	IX IA	BC9-1 MCP		1	1. HIGH-LOW LEVEL ALARM 2. LOW LEVEL PUMP CUTOFF 3. HIGH-LOW LEVEL CONTACTS TO CLOSE/OPEN SOLENOID VALVE
19	AIR FLOW TO SLUDGE HOLDING TANK	INSERT FLOW TUBE		SLUDGE HOLDING TANK	0-4000 CFM	IX I	METER MCP		1	FLOW TUBE SIZE SHALL BE 14"
20	AIR FLOW TO SLUDGE WELLS	INSERT FLOW TUBE		PROCESS BLDG.	0-500 CFM		METER MCP	20A 20B	2	
21	AIR FLOW FROM COMPOSTING PAD	INSERT FLOW TUBE	4" 6"	COMPOST PAD	0-200 CFM 100-400 CFM	I I	METER METER	21A 21B 21C 21D	2 2	
22.	AIR FLOW TO R.B.C.	INSERT FLOW TUBE	4"	R.B.C.	0-250 CFM	I	METER	22A 22R	18	
26	POLYMER FEED TO THICKENER & VACUUM FILTERS	MANUAL LOADING STATIONS 4-20MADC		MCP						1. PROVIDE 1 MAN/AUTO LOADING STATION AND 2 MANUAL STATIONS
27	FERRIC CHLORIDE FEED TO VACUUM FILTERS	MANUAL LOADING STATION		MCP						PROVIDE MAN/AUTO LOADING STATION
28	LIME FEED TO FLOCCULATOR/ CLARIFIERS	MANUAL LOADING STATION								PROVIDE MAN/AUTO LOADING STATION
29	ALUM. FEED TO FLOCCULATOR/ CLARIFIERS	MANUAL LOADING STATION		MCP						
30	LIME FEED TO FLOCCULATOR/ CLARIFIERS	MANUAL LOADING STATION		MCP						

NO.	DATE	DESCRIPTION	APPROVED
REVISIONS			

DESIGNED J.N.G.
DRAWN R.W.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

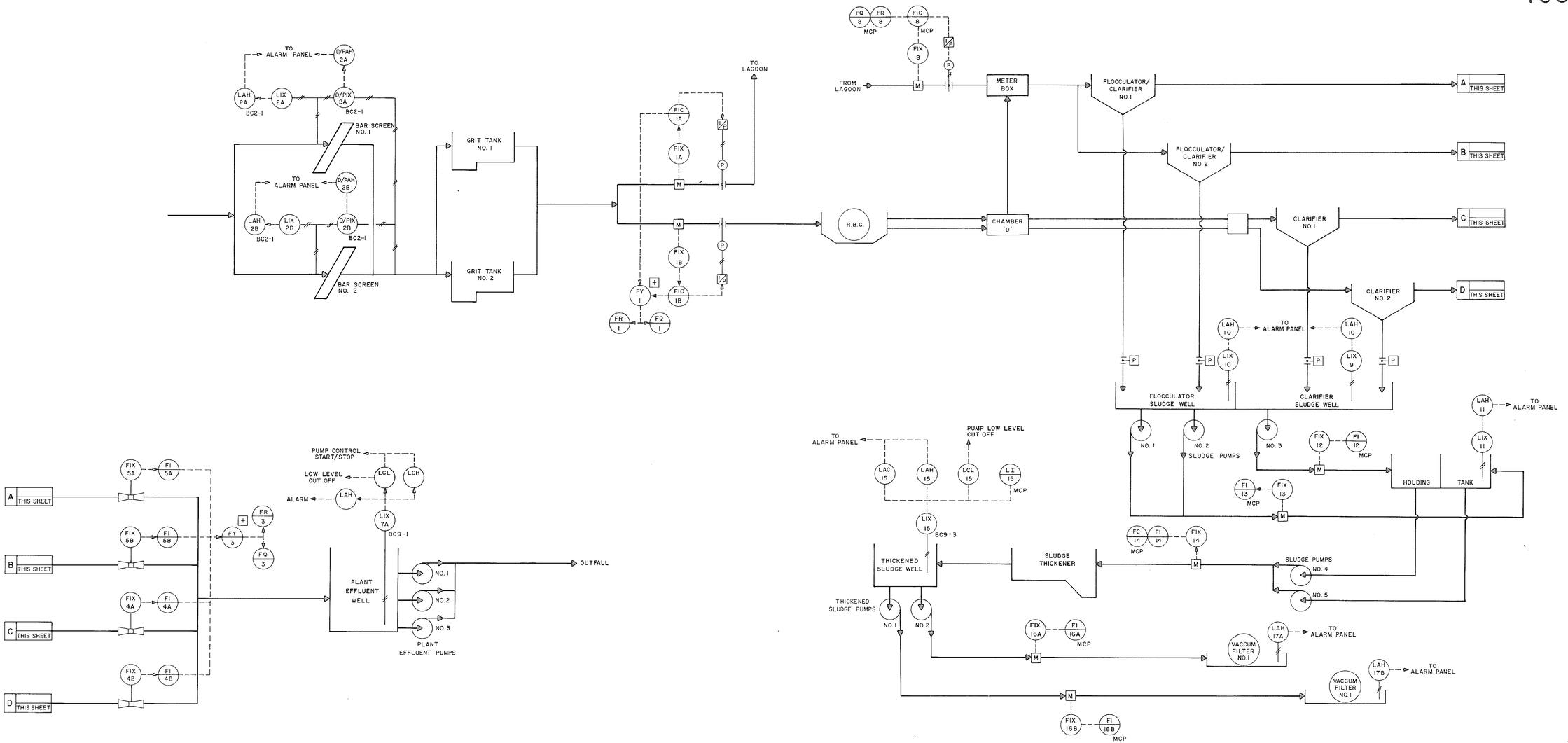
SCALE
NONE

INSTRUMENTATION SYSTEMS REQUIREMENTS TABLE

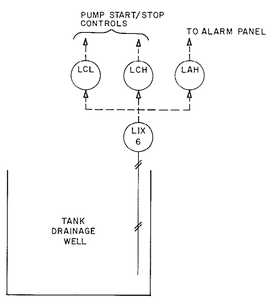
SHEET XP-9
OF SHEETS
PROJECT NO. 78284

51-007-156

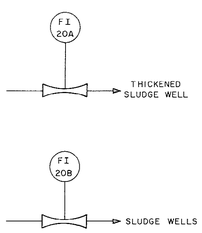
470-1565 RECORD



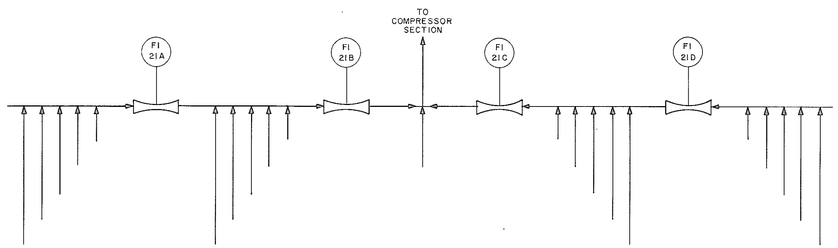
SYSTEM 19
AIR FLOW TO
SLUDGE HOLDING TANK



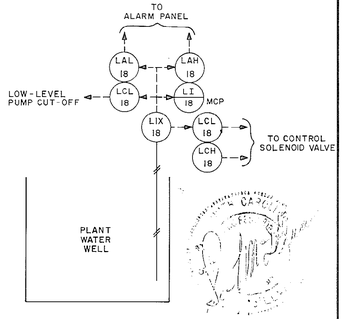
SYSTEM 6
TANK DRAINAGE WELL LEVEL



SYSTEM 20
AIR FLOW TO
SLUDGE WELLS



SYSTEM 21
AIR FLOW FROM COMPOSTING PAD



SYSTEM 18
PLANT WATER WELL LEVEL

51-002-157

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.N.G.
DRAWN N.E.H.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

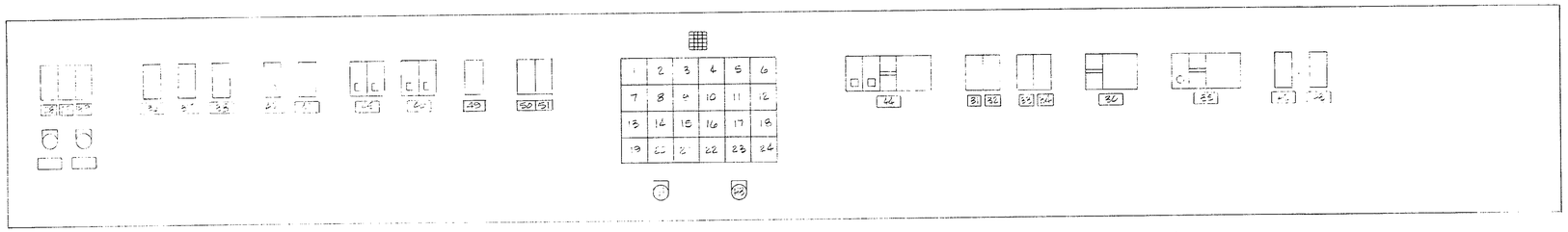
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

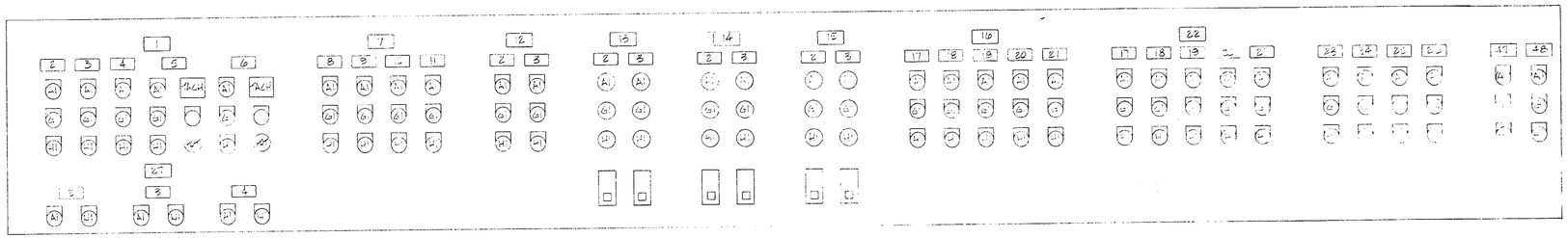
SCALE
NONE

INSTRUMENTATION
LOOP DRAWINGS

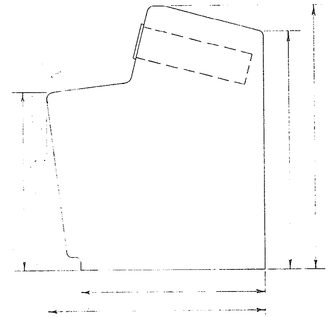
SHEET XP-10
OF SHEETS
PROJECT NO. 78284

80-ASW 5 RECORD





MAIN CONTROL PANEL (MCP)



SIDE ELEVATION
MAIN CONTROL PANEL

CONTROL PANEL NAMEPLATE SCHEDULE

NAMEPLATE NO.	SIZE	ENGRAVED
1		SLUDGE PUMPS
2		PUMP NO. 1
3		PUMP NO 2
4		PUMP NO 3
5		PUMP NO 4
6		PUMP NO 5
7		SLUDGE THICKENER
8		BOTTOM SLUDGE NO. SLUDGE DRIVE
9		SKIMMER DRIVE
10		RE-AERATION PUMP
11		RE-CIRCULATION PUMP
12		THICKENED SLUDGE PUMPS
13		LIME FEED PUMPS
14		FERRIC CHLORIDE FEED PUMPS
15		POLYMER FEED PUMPS
16		VACUUM FILTER NO. 1
17		VACUUM PUMP
18		FILTRATE PUMP
19		FILTER DRUM DRIVE
20		VAT AGITATOR DRIVE
21		CONDITIONING TANK DRIVE
22		VACUUM FILTER NO. 2
23		BLOWER NO. 1
24		BLOWER NO. 2
25		BLOWER NO. 3
26		BLOWER NO. 4
27		PLANT EFFLUENT [illegible]
28		CLARIFIER SLUDGE [illegible]
29		FLOC-CLARIFIER SLUDGE [illegible]
30		FINAL EFFLUENT FLOW
31		CLARIFIER NO. 1 EFFLUENT FLOW
32		CLARIFIER NO. 2 EFFLUENT FLOW
33		FLOC-CLARIFIER NO. 1 EFFLUENT FLOW
34		FLOC-CLARIFIER NO. 2 EFFLUENT FLOW

ALARM PANEL NAMEPLATE SCHEDULE

NAMEPLATE NO	ENGRAVED			
	FIRST LINE	SECOND LINE	THIRD LINE	FOURTH LINE
1	[illegible]			
2	[illegible]			
3	[illegible]			
4	FINAL	EFFLUENT	WELL	HIGH LEVEL
5	CLARIFIER	SLUDGE	HIGH LEVEL	
6	FLOCULATOR	CLARIFIER	SLUDGE WELL	HIGH LEVEL
7	SLUDGE	HOLDING	TANK	HIGH LEVEL
8	THICKENED	SLUDGE WELL	LOW LEVEL	
9	THICKENED	SLUDGE WELL	HIGH LEVEL	
10	VACUUM	FILTER NO. 1	VAT	HIGH LEVEL
11	VACUUM	FILTER NO. 2	VAT	HIGH LEVEL
12	PLANT	WATER WELL	LOW LEVEL	
13	PLANT	WATER WELL	HIGH LEVEL	
14	POLYMER	SYSTEM		
15	LIME SLAKER	SYSTEM		
16	[illegible]			
17	[illegible]			
18	PLANT	EFFLUENT	CHLORINE	SYSTEM
19	CHLORINE	LEAK		
20	WELL HOUSE	CHLORINE	SYSTEM	
21	WELL HOUSE	CHLORINE	LEAK	
22	BLANK			
23	BLANK			
24	BLANK			

CONTROL PANEL NAMEPLATE SCHEDULE (CONT.)

NAMEPLATE NO	SIZE	ENGRAVED
35		[illegible]
36		[illegible]
37		[illegible]
38		[illegible]
39		[illegible]
40		[illegible]
41		[illegible]
42		[illegible]
43		[illegible]
44		[illegible]
45		[illegible]
46		[illegible]
47		LIME SLURRY RECIRCULATION PUMP
48		CONVEYOR
49		PLANT EFFLUENT WELL LEVEL
50		SLUDGE HOLDING TANK SECTION "A"
51		SLUDGE HOLDING TANK SECTION "B"

NOTE:
1. SEE SHEET XP-8 & XP-9 FOR ADDITIONAL SYMBOLS.

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.N.G.
DRAWN K.R.H.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

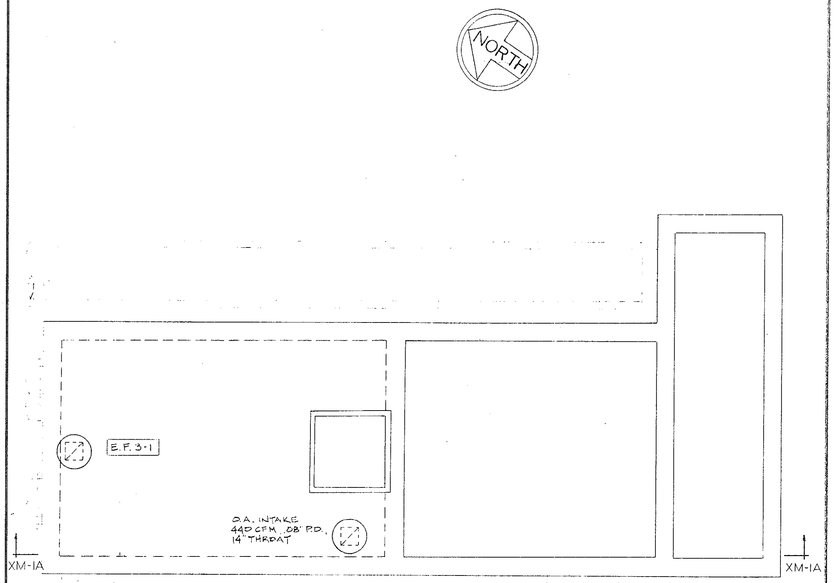
SCALE
NONE

INSTRUMENTATION
PANEL LAYOUTS

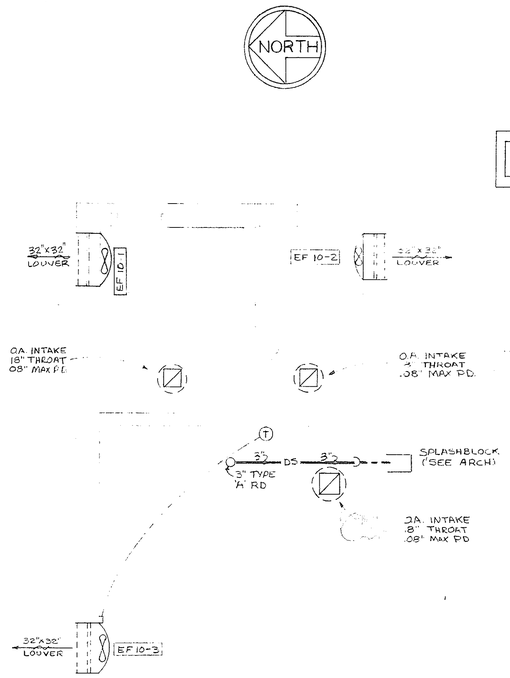
SHEET XP-11
OF SHEETS
PROJECT NO. 78284

SOUTH CAROLINA
REGISTERED
PROFESSIONAL
ENGINEER
D. A. MOULTRIE

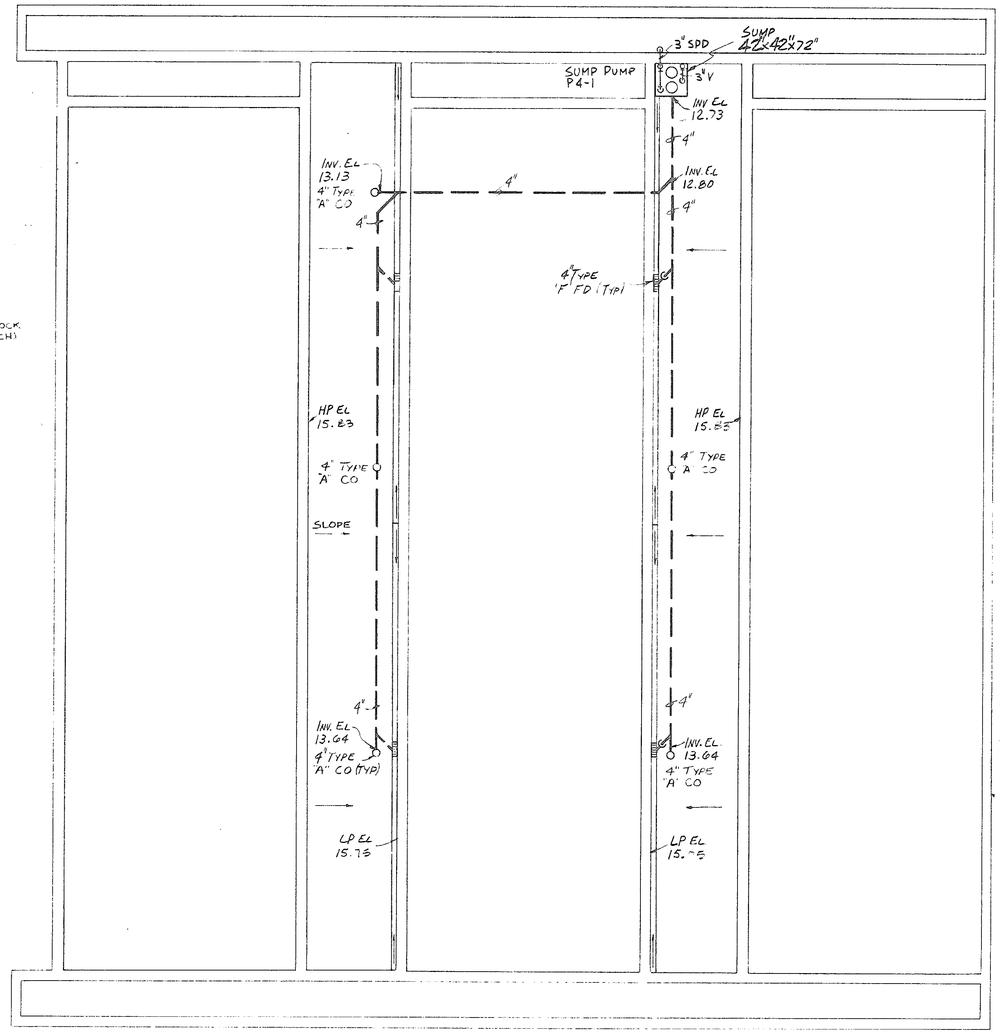
56-002-158
56-002-158 RECORD



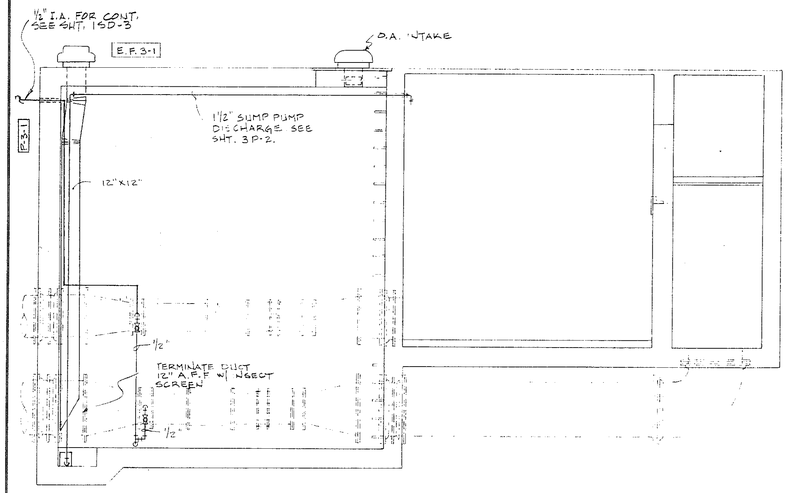
SPLITTER BOX
TOP PLAN
AREA 3
SCALE: 1/4" = 1'0"



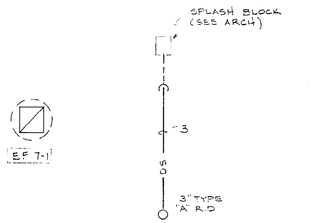
WELLHOUSE VENTILATION PLAN
AREA 10
SCALE: 1/4" = 1'0"



ROTATING BIOLOGICAL CONTACTORS
AREA 4
SCALE: 1/8" = 1'0"



SPLITTER BOX
SECTION XM-1A
SCALE: 1/4" = 1'0"



BLOWER BLDG PLAN
AREA 7
SCALE: 1/4" = 1'0"

50-003-159

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED CC
DRAWN AE
CHECKED PMC
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

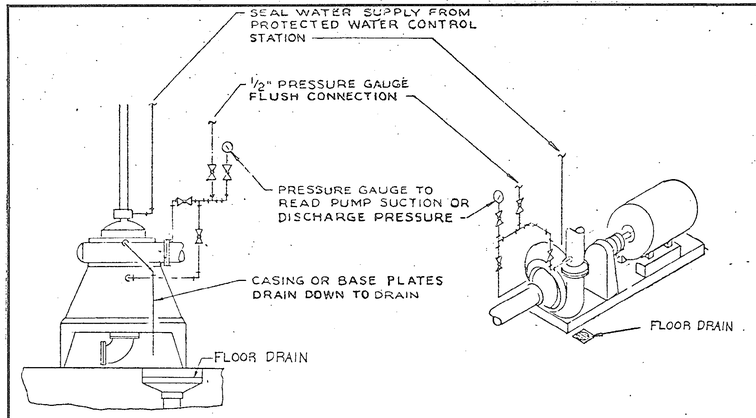
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
AS NOTED

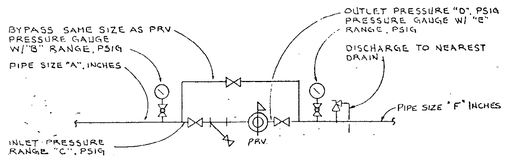
ROTATING BIOLOGICAL CONTACTORS
WELL HOUSE & BLOWER BUILDING
SPLITTER BOX
HVAC & PLUMBING

SHEET XM-1
OF SHEETS
PROJECT NO. 78284

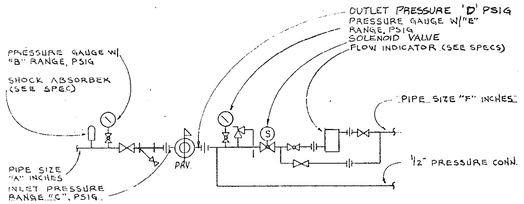
50-159-3 RECORD



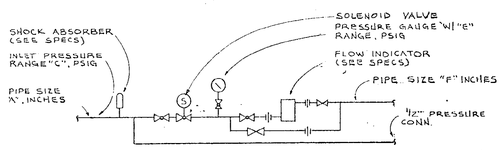
TYPICAL PUMP SEAL CONNECTION
NO SCALE



STATION TYPE 1



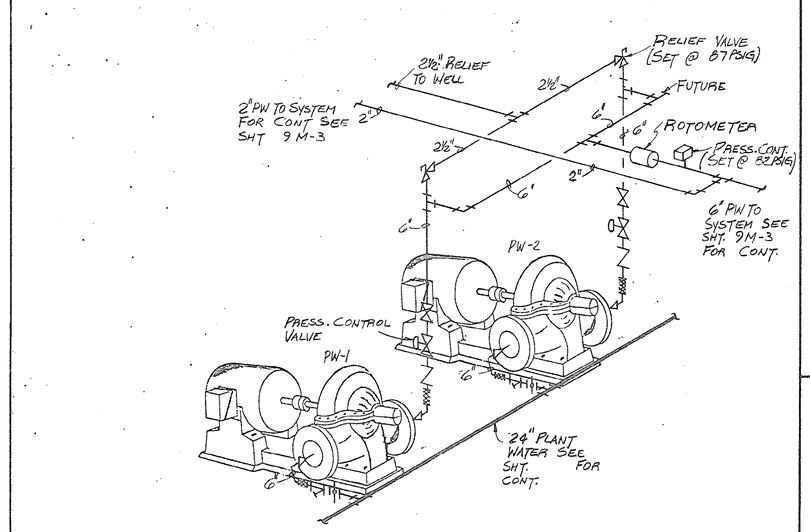
STATION TYPE 2



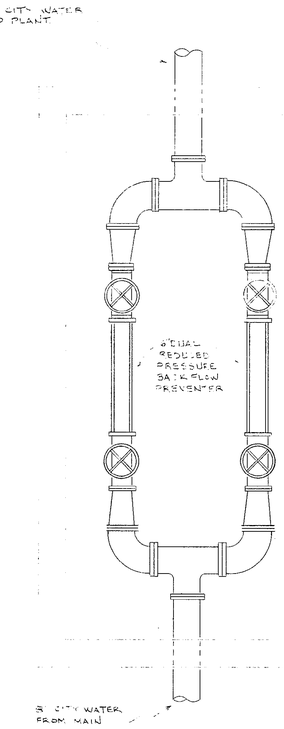
STATION TYPE 3

SYMBOL	LOCATION	TYPE	FLOW G.P.M.	A	B	C	D	E	F	RELIEF VALVE SETTING P.S.I.	REMARKS
1 2	BSMT. SLUDGE PUMP	2	5	3/4"	0-160	60-100	20	0-60	3/4"	25	
3 4 5	BSMT. SLUDGE PUMP	2	5	3/4"	0-160	60-100	12	0-60	3/4"	17	
6 7 8	BSMT. PLANT EFF. PUMP	2	5	3/4"	0-160	60-100	29	0-60	3/4"	34	
9	BSMT. THICK RECIRC. PUMP	3	5	3/4"	—	60-100	—	0-160	3/4"	—	
10	BSMT. LIME SLURRY PUMP	2	5	3/4"	0-160	60-100	23	0-160	3/4"	28	
11	BSMT. LIME PLANT WATER	2	18	1 1/2"	0-160	60-100	40	0-160	1 1/2"	45	
12	BSMT. POLYMER PLANT WATER	2	55	2"	0-160	60-100	50	0-160	2"	55	
13 14	VAC. FILTER FIRST FLOOR	1	32	2"	0-160	60-100	40	0-160	2"	45	
15 17	VAC. FILTER FIRST FLOOR	3	5	3/4"	—	60-100	—	0-160	3/4"	—	
16 18	FILTRATE PUMP FIRST FLOOR	3	10	1 1/4"	—	60-100	—	0-160	1 1/4"	—	
19 20	CHLORINATOR FIRST FLOOR	2	95	2 1/2"	0-160	60-100	30	0-160	2 1/2"	35	
21	LIME SLURRY PUMP FIRST FLOOR	2	5	3/4"	0-160	60-100	40	0-160	3/4"	45	
22	CLARIFIER AREA 2	2	5	3/4"	0-160	60-100	40	0-160	3/4"	45	

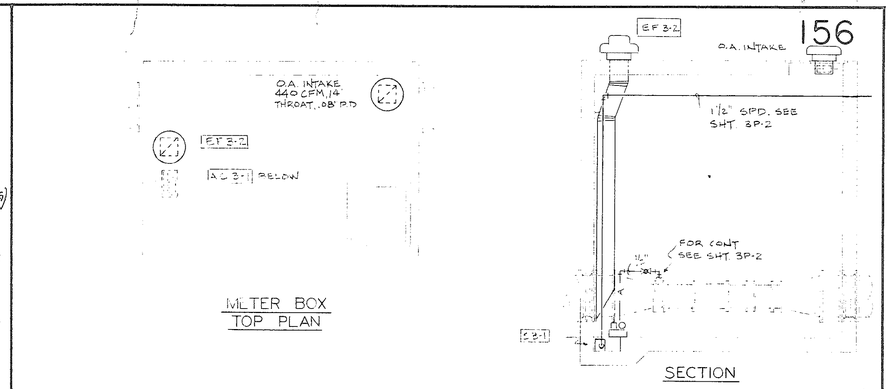
DETAIL XM-2B
PROTECTED WATER STATIONS & DETAILS

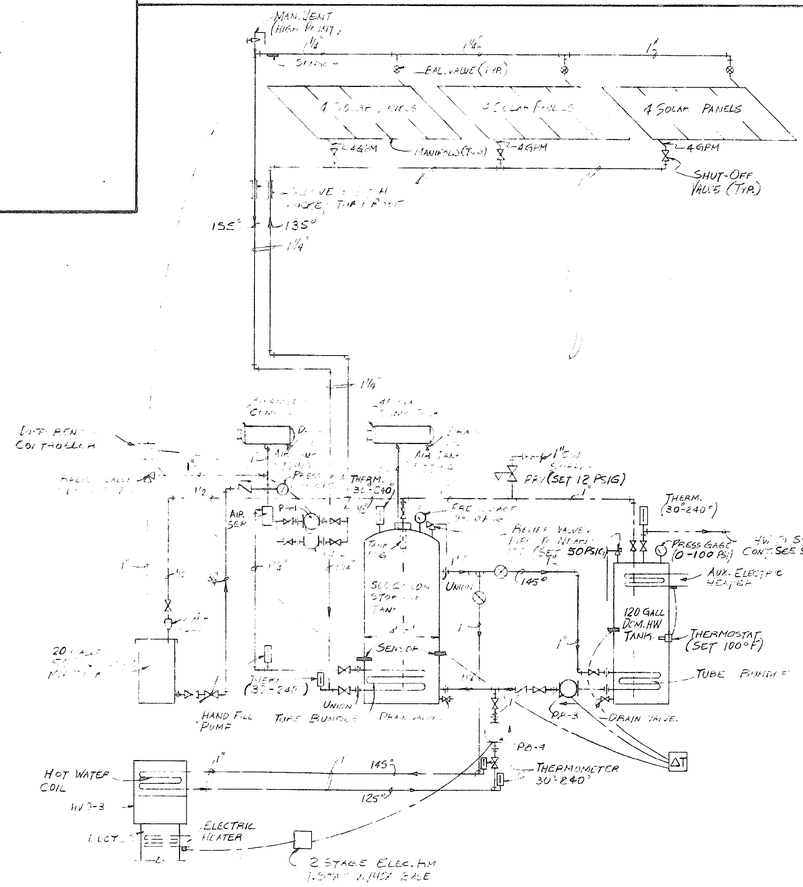


DETAIL XM-2A
PLANT WATER PUMP CONNECTIONS



DETAIL XM-2C
DUAL BACKFLOW PREVENTER





SOLAR DOM. HOT WATER HEATING SYSTEM
NO SCALE

NOTE: WATER TEMPERATURES SHOWN ARE FOR DESIGN PURPOSES AND WILL VARY.

50-002-160

50-160-S RECORD

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED C.C.
DRAWN A.E.
CHECKED P.M.C.
DATE 12-3-79

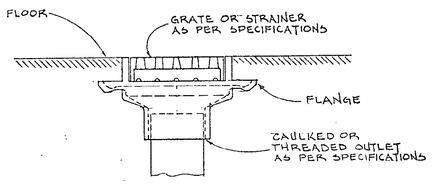
CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

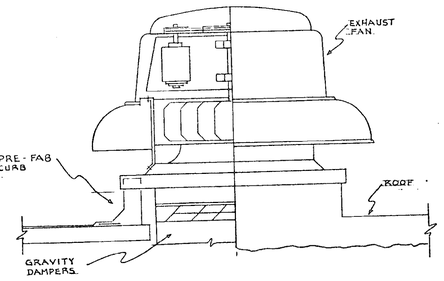
SCALE
AS NOTED

METER BOX FLOOR PLAN
HVAC & PLUMBING

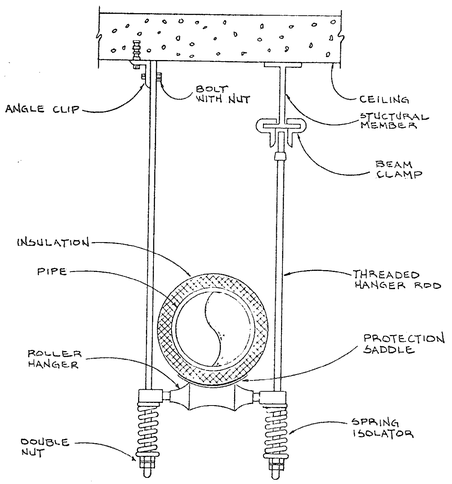
SHEET XM-2
OF SHEETS
PROJECT NO. 78284



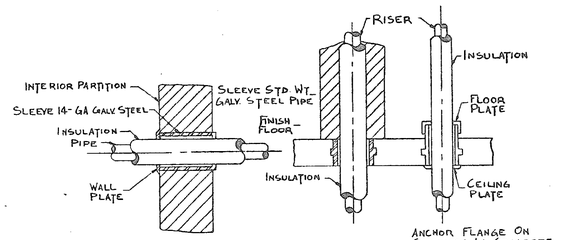
DETAIL XM-3A
FLOOR DRAIN



DETAIL XM-3B
EXHAUST FAN



DETAIL XM-3C
ROLLER TYPE PIPE HANGER



NOTE: EXPOSED RISERS THROUGH WOOD FLOORS AND PLASTERED CEILINGS TO BE PROVIDED WITH NICKEL PLATE BRASS FLOOR AND CEILING PLATES HELD FIRMLY TO PIPE WITH BRASS SET SCREWS.

SLEEVE SCHEDULE

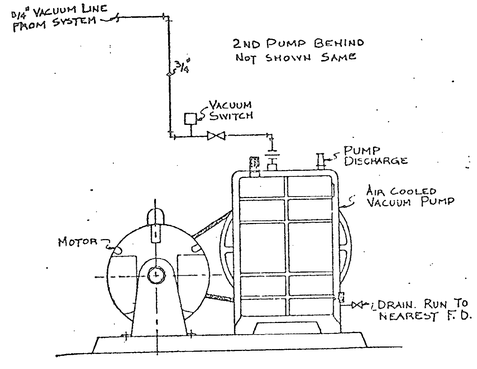
RISER SIZE	SLEEVE SIZE: RISER INSULATED STD. THICKNESS	SLEEVE SIZE: RISER NOT INSULATED	RISER SIZE	SLEEVE SIZE: RISER INSULATED STD. THICKNESS	SLEEVE SIZE: RISER NOT INSULATED
1/2"	3"	1 1/4"	3"	6"	5"
3/4"	3"	1 1/2"	3 1/2"	8"	5"
1"	3 1/2"	2"	4"	8"	6"
1 1/4"	4"	2 1/2"	5"	8"	8"
1 1/2"	4"	2 1/2"	6"	10"	8"
2"	6"	3 1/2"	8"	12"	10"
2 1/2"	6"	4"			

DETAIL XM-3D
PIPE SLEEVES - MASONRY WALLS AND FLOORS

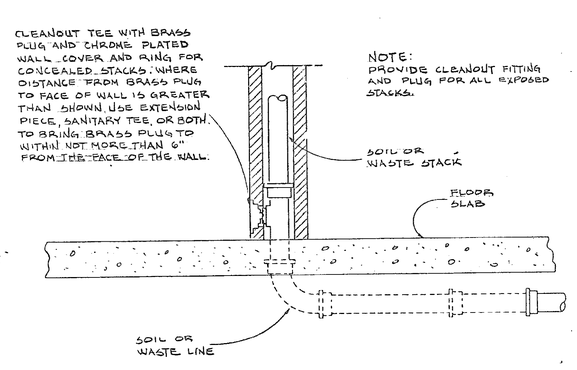
HVAC LEGEND

157

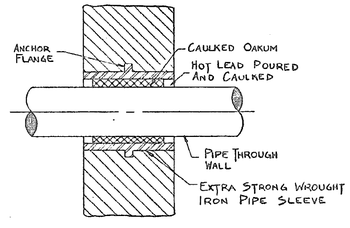
SYMBOL	DESCRIPTION
HHWS	HEATING HOT WATER SUPPLY
HHWR	HEATING HOT WATER RETURN
CHS	CHILLED WATER SUPPLY
CHR	CHILLED WATER RETURN
	LOW PRESSURE STEAM
	MEDIUM PRESSURE STEAM
	HIGH PRESSURE STEAM
1024 SCD	10 IN DIA NECK, 24 IN FACE, SUPPLY CEILING DIFFUSER
E.R.	EXHAUST REGISTER
R.A.R.	RETURN AIR REGISTER
S.A.R.	SUPPLY AIR REGISTER
	SUPPLY AIR DUCT
	RETURN AIR DUCT
	EXHAUST AIR DUCT
T	THERMOSTAT FOR ZONE NO 1
SD	SMOKE DETECTOR
U	UNDERCUT DOOR



DETAIL XM-3E
VACUUM PUMP



DETAIL XM-3F
WALL CLEANOUT



SLEEVE SCHEDULE

PIPE SIZE	SLEEVE SIZE	PIPE SIZE	SLEEVE SIZE
1/2"	2"	3"	5"
3/4"	2"	4"	6"
1"	2 1/2"	5"	8"
1 1/4"	3"	6"	8"
1 1/2"	3"	8"	10"
2"	4"		
2 1/2"	4"		

DETAIL XM-3G
PIPE SLEEVE - WATERPROOFED WALL

PLUMBING LEGEND

SYMBOL	DESCRIPTION
	SOIL, WASTE, OR DRAIN BELOW FL. OR UNDERGR.
	SOIL, WASTE, OR DRAIN ABOVE FLOOR
	COLD WATER
	HOT WATER
	HOT WATER RECIRCULATING LINE
PW	PROTECTED WATER
SPD	SUMP PUMP DISCHARGE
G	GAS
A	AIR
V	VACUUM
V	VENT
IA	INSTRUMENT AIR
DW	DISTILLED WATER
DIW	DEIONIZED WATER
AR	ACID RESISTANT
DS	STORM SEWER - DOWNSPOUT
FOS	FUEL OIL SUPPLY
FOR	FUEL OIL RETURN
FOV	FUEL OIL VENT

REGISTERED SOUTH CAROLINA PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED CC
DRAWN AE
CHECKED PMC
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

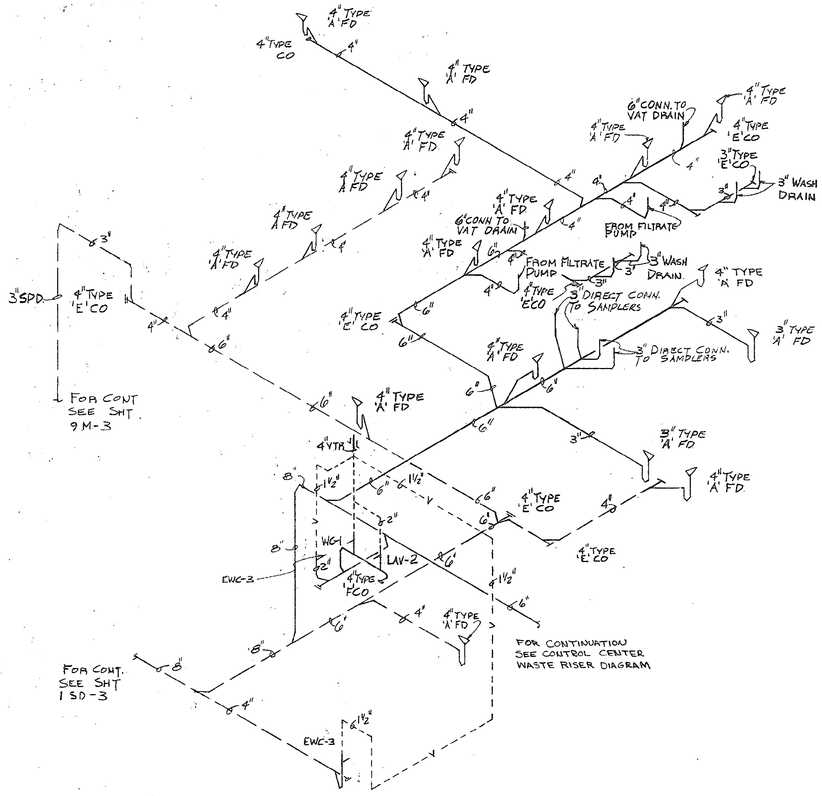
DETAILS
HVAC & PLUMBING

50-003-161

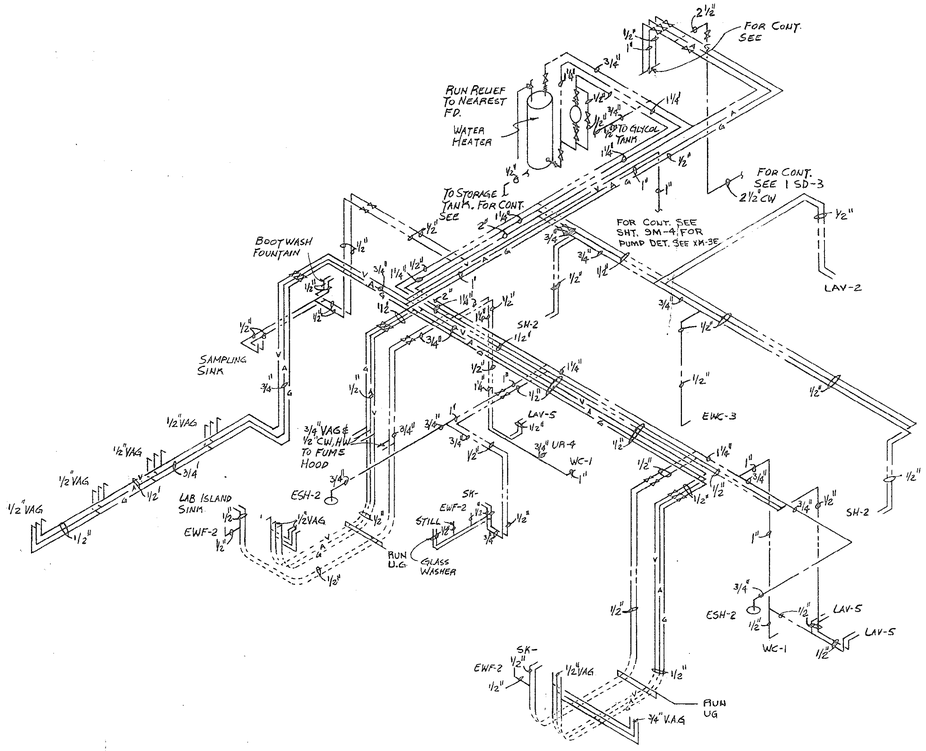
SHEET XM-3
OF SHEETS
PROJECT NO. 78284

50-162 5

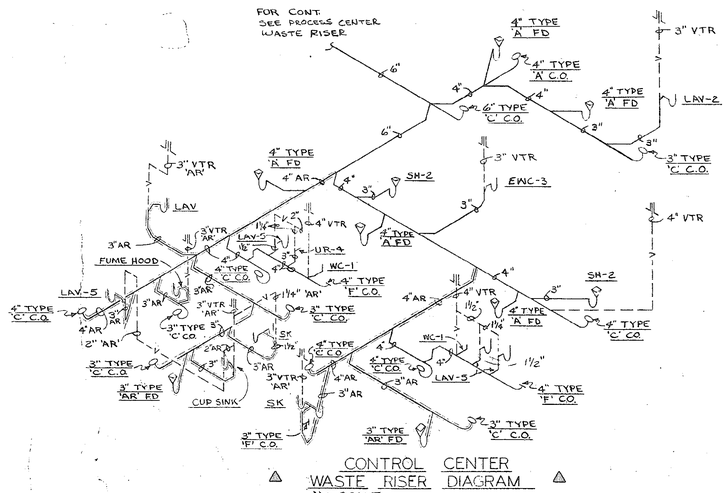
RECORD



WASTE RISER DIAGRAM
NO SCALE



LAB RISER DIAGRAM
No SCALE



CONTROL CENTER
WASTE RISER DIAGRAM
No SCALE

NO.	DATE	DESCRIPTION	APPROVED
1	3-9-81	WASTE RISER DIAGRAM	NEH
2	3-22-81	△ WASTE RISER DIAGRAM	J.T.M.

REVISIONS

DESIGNED CC
DRAWN AE
CHECKED PMC
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

DETAILS
PLUMBING

51-008-162

SHEET XM-4
OF SHEETS
PROJECT NO. 78284

50-160 5 RECORD

HEAT - VENT UNIT SCHEDULE

DESIGNATION	TYPE	LOCATION	FAN CFM	FAN ESP IN WG	FAN RPM	FAN MAX OUT VEL	MOTOR HP	MOTOR V	MOTOR PH	MOTOR HZ	MOTOR TYPE	HEATING ENT. AIR	HEATING MIN. CAPACITY	FILTER (THROW AWAY)	CONTROL MODE	REMARKS
HV9-1	DIRECT FIRED	EQUIPT. RM.	8000 4000	.60	900	3000	3	460	3	60	L4-1	20°	300 MBH	4-20"x25"x2"	2	2 SPEED MOTOR INTERLOCK W/ 2 SPEED EF9-1 HORIZ. MTD.
HV9-2	DIRECT FIRED	EQUIPT. RM	8000 4000	.60	900	300	3	460	3	60	L4-1	20°	300 MBH	4-20"x25"x2"	2	2 SPEED MOTOR INTERLOCK W/ EF9-2, EF9-3. HORIZ. MTD.
HV9-3	HORIZONTAL AIR HANDLER	SHOP	2000	.50	1390	2000	1	460	3	60	L4-1	55°	41 MBH, 6 GPM 125°F. H_2O 110°F H_2O 5' MAX. PD.	LOW VELOCITY	3	15 KW HEAT COIL IN SUPPLY DUCT. (2 STAGE CONTROL)

AIR CONDITIONING UNIT SCHEDULE

DESIGNATION	TYPE	COOLING CAP. (80/67 ENT)	HEATING CAP.	FAN TOTAL CFM	FAN O. AIR CFM	FAN EXT. S.P.	FAN DRIVE	FAN HP	CONDENSER GPM	CONDENSER MAX. P.D	CONDITIONS COOLING	CONDITIONS HEATING	ELECTRICAL	CONTROL MODE	REMARKS
ACU8-1	WATER TO AIR HEAT PUMP	55 MBH TC 34 MBH SC	52 MBH	1650	300	.50"	DIRECT MULTI-SPEED	3/4	9	10 FT	75° ENT H_2O 80/67 ENT EVAP	60° ENT. H_2O 70° ENT AIR	208V, 3PH, 60HZ	4	MOTOR TYPE L2-1
ACU8-2	WATER TO AIR HEAT PUMP	103 MBH TC 76 MBH SC	105 MBH	3150	550	.60	BELT	1½	26	10FT	75° ENT. H_2O 80/67° ENT. EVAP	60° ENT. H_2O 70° ENT AIR	460V, 3PH, 60Hz	4	MOTOR TYPE L4-1
ACU 9-1	AIR COOLED ROOFTOP	30 MBH TC 22 MBH SC	20 KW HEATER (2 ST. @ 10 KW)	1800	100	.50	DIRECT 4 SPEED	½	——	——	95° ENT. COND 67° WB ENT. EVAP.	70° ENT. AIR	460 V, 3PH, 60HZ	4	95° ENT CONDENSER 2 STAGE HEATING

PUMP SCHEDULE

DESIGNATION	LOCATION	DESCRIPTION	PUMP TYPE	PUMP GPM	PUMP FT HD	PUMP RPM	MOTOR HP	MOTOR V	MOTOR PH	MOTOR HZ	MOTOR TYPE	CONTROL MODE	REMARKS
P8-1, P8-2	EQUIPT. ROOM	SOLAR COLLECTOR SYSTEM	INLINE	12	20	1750	¼	115	1	60	S-1	1	50% GLYCOL CAP STANDBY
P8-3	EQUIPT. ROOM	SOLAR DOMESTIC H.W. SUPPLY	INLINE	12	13	1750	¼	115	1	60	S-1	1	
P8-4	EQUIPT. ROOM	SOLAR HTG. H.W. SUPPLY	INLINE	6	20	1750	¼	115	1	60	S-1	1	
P8-5	EQUIPT. ROOM	RECIRC. DOMESTIC H.W.	INLINE	5	8	1750	1/12	115	1	60	S-1	1	
P9-1	BSMT	SUBMERSIBLE SUMP PUMP	DUPLEX	100	35	1750	2	460	3	60	L4-7	SEE EQUIPT SPEC	FURNISH INSTALL & ALTERNATOR
P3-1, P3-2	METER BOX & SPLITTER BOX	EMERGENCY SUMP PUMP	DUPLEX	30	30	1750	½	115	1	60	S-3	SEE EQUIPT SPEC.	
P4-1	PIPE GALLERY.	SUBMERSIBLE SUMP PUMP	DUPLEX	100	20	1750	1½	460	3	60	L4-7	SEE EQUIPT SPEC.	FURNISH NEMA CON. PANEL ENCLOSURE W. STARTER ALTERNATORS ETC
FS-1, FS-2	SEE SITE PLAN	SUBMERSIBLE SUMP PUMP	SIMPLEX	50	30	1750	½	115	1	60	S-3	SEE EQUIPT SPEC.	

WATER HEATER SCHEDULE

DESIGNATION	LOCATION	INPUT KW.	STO. CAP	GPH 100° RISE	NO. ELEMENTS	HEAT EXCHANGER MBH	HEAT EXCHANGER GPM	HEAT EXCHANGER EWT	HEAT EXCHANGER WPD	HEAT EXCHANGER FOUL FACTOR	ELECTRICAL V	ELECTRICAL PH	ELECTRICAL HZ	REMARKS
WH-8-1	MECH. ROOM	6	120 GAL.	24.5	2	50	12	145°F	5'	.001	460	3	60	

SOLAR STORAGE TANK SCHEDULE

DESIGNATION	LOCATION	STORAGE CAPACITY	HEAT EXCHANGER MBH	HEAT EXCHANGER GPM	HEAT EXCHANGER EWT	HEAT EXCHANGER WPD	HEAT EXCHANGER FOUL FACTOR	REMARKS
S.T. 8-1	MECH. ROOM	500 GAL.	60	12	155° F	5'	.001	

FAN SCHEDULE

DESIG.	LOCATION	DESCRIPTION	CFM	TSP IN. WG	RPM	WHEEL DIA IN	DRIVE	MOTOR HP	MOTOR V	MOTOR PH	MOTOR HZ	MOTOR TYPE	CONTROL MODE	REMARKS
EF9-1	EQ. RM	INLINE DUCT	8000 4000	3/8	865	24	BELT	3	460	3	60	L4-1	2	2 SPEED. INTERLOCK W/ HV 9-1
EF9-2	VAC. FILTER RM.	VANEFELLER	4000	1/8	560	30	BELT	¼	460	3	60	L4-3	2	INTERLOCK W/HV 9-2
EF 9-3	VAC. FILTER RM.	PROPELLER	4000	1/8	560	30	BELT	¼	460	3	60	L4-3	2	INTERLOCK W/HV 9-2
EF 9-4	TOILET	CEILING	130	¼	1550	—	DIRECT	1/50	115	1	60	S-1	—	WIRE WITH LIGHT SWITCH MAX. SONES 3.1
EF9-5	CHLORINE ROOM	PROPELLER	1600 800	1/8	1140	24	DIRECT	⅛	115	1	60	S-2	5	2-SPEED INTERLOCK W/ MOTOR OPER. LOUVER
EF9-6	CHLORINE SCALE ROOM	PROPELLER	3000 1500	¼	1140	24	DIRECT	⅓	460	3	60	L4-3	5	2 SPEED INTERLOCK W/ MOTOR OPER. LOUVER
EF9-7	BLOWER ROOM	PROPELLER	12000 6000	¼	450	48	BELT	1½	460	3	60	L4-1	5	2SPEED T.STAT OPER. INT. W/ MOTOR OPER LOUVER
EF 9-8	ELECT. ROOM	INLINE DUCT	2000 3500	½	750	24	BELT	1½	460	3	60	L4-1	7	2 SPEED 2 STAGE T.STAT OPERATED
EF 9-9	SHOP GARAGE	INLINE DUCT	3500	¼	960	18	BELT	¾	460	3	60	L4-1	8	MANUAL
EF 8-1	TOILET LOCK. RM	POWER ROOF VENTILATOR	600	3/8	1090	10	BELT	¼	115	1	60	S-1	8	MANUAL
EF 8-2	LAB HOOD EXHAUST	POWER ROOF VENTILATOR	1000	5/8	1600	14	BELT	¼	115	1	60	S-1	9	INTERLOCK W/SF 8-1
SF 8-1	LAB HOOD SUPPLY	POWER ROOF VENTILATOR	700	1/8	1550	9	DIRECT	1/12	115	1	60	S-1	9	INTERLOCK W/EF 8-2
EF 7-1	BLOWER BLDG.	CENTRIFUGAL	1500	¼	1300	10	BELT	¼	115	1	60	S-1	6	1 SPEED, 1 STAGE INTER W. MOTOR OPER. LOUVER
EF 10-1 10-2	WELLHOUSE	PROPELLER	450	⅛	411	16	BELT	1/12	115	1	60	S-2	8	MANUAL
EF 10-3	WELLHOUSE	PROPELLER	700	¼	1550	24	BELT	⅛	115	1	60	S-1	6	1 SPEED 1 STAGE INTER W. MOTOR OPER LOUVER
EF 3-1 & EF 3-2	SPLITTER BOX & METER BOX	CENTRIFUGAL	440	¼	1550	8	DIRECT	1/20	115	1	60	S-1		INTERLOCK WITH LIGHT SWITCH

AIR COMPRESSOR SCHEDULE

DESIG	LOCATION	SCFM	PSIG	MOTOR HP	MOTOR V	MOTOR PH	MOTOR HZ	MOTOR TYPE	TYPE	REMARKS
AC9-1	EQUIPT ROOM	30	100	2@15	460	3	60	L4-1	DUPLEX OIL FREE	
AC8-1	METER BOX	2.7	150	½	115	1	60	S-1	SIMPLEX	

AIR DRYER SCHEDULE

DESIG	LOCATION	TYPE	SCFM	PSIG	EAT	DEW PT	ELECTRICAL HP	ELECTRICAL V	ELECTRICAL PH	ELECTRICAL HZ	ELECTRICAL TYPE	REMARKS
D9-1	EQUIPT. ROOM	REF	30	100	100F	35° F	⅓	115	1	60	S-1	W/AUTO COND. TRAP

VACUUM PUMP SCHEDULE

DESIG.	LOCATION	TYPE	CAPACITY	PRESSURE	ELECTRICAL HP	ELECTRICAL V	ELECTRICAL PH	ELECTRICAL HZ	ELECTRICAL TYPE	REMARKS
VP 8-1 & VP 8-2	MECH. ROOM	DUPLEX	150 LPM (EA)	21 HG	½	460	3	60	L4-1	2-STAGE

OA INTAKE: (SUPPLY AIR FOR SF 8-1) GRAVITY. ALUMINUM, RATED AT 650 CFM @.04" FD, 16" THROAT, BIRDSCREEN

NO.	DATE	DESCRIPTION	APPROVED
		REVISIONS	

DESIGNED CC
DRAWN AE
CHECKED PMC
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

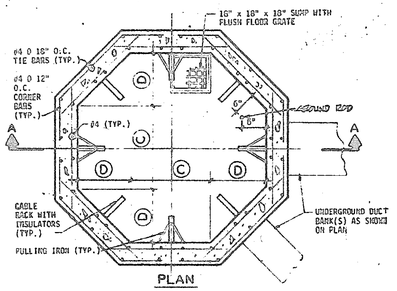
SCALE
NONE

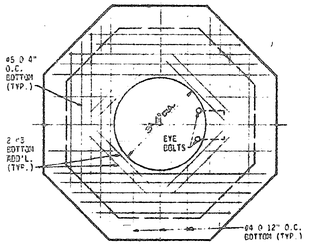
SCHEDULES

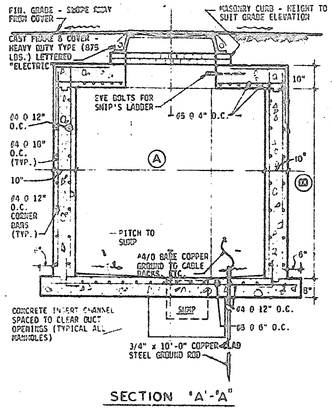
SD-003-163

SHEET XM-5
OF SHEETS
PROJECT NO. 78284

SD-163 5

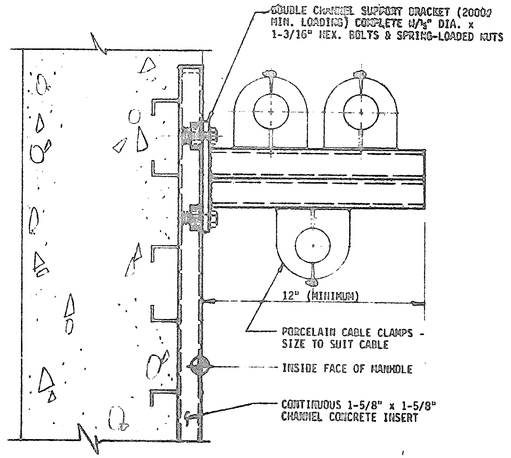






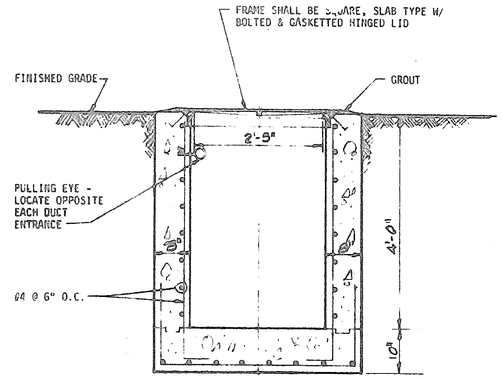
DIMENSIONAL DATA				
SERVICE	Ⓐ	Ⓑ	Ⓒ	Ⓓ
SIGNAL/COMMUN				
600V-4.8KV	8'-0"	6'-6"	3'-0"	2'-6"
5.0 KV				
15.0 KV	8'-0"	6'-6"	3'-0"	2'-6"

TYPICAL ELECTRICAL MANHOLE CONSTRUCTION DETAILS

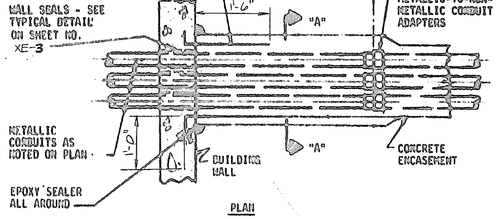


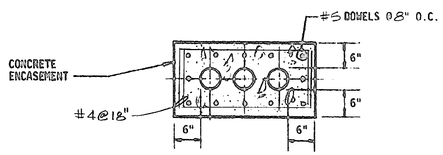
(NEW CONSTRUCTION)

MISCELLANEOUS TYPICAL MANHOLE CONSTRUCTION DETAILS



TYPICAL ELECTRICAL HANDHOLE CONSTRUCTION DETAILS

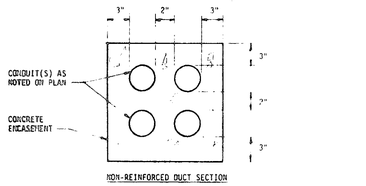


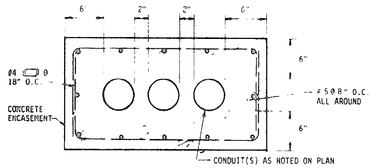


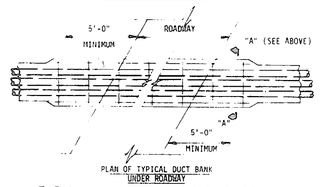
(NEW CONSTRUCTION)

UNDERGROUND DUCT BANK ENTRANCE AT BUILDING WALL

(No SCALE)







TYPICAL UNDERGROUND DUCTBANK INSTALLATION DETAILS

51-003-164

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED J.N.G.
DRAWN R.W.
CHECKED D.A.D.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

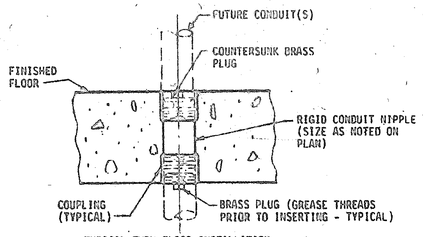
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

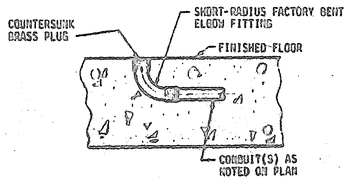
ELECTRICAL DETAILS I

SHEET XE-2
OF SHEETS
PROJECT NO. 78284

50-164-5 RECORD



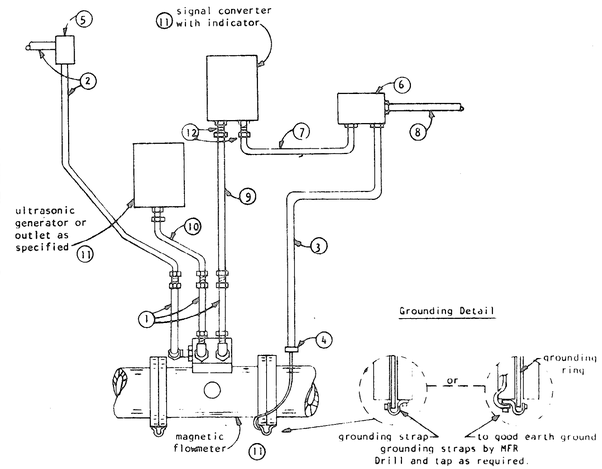
TYPICAL THRU-FLOOR INSTALLATION
FOR CONDUITS 1½" OR LARGER



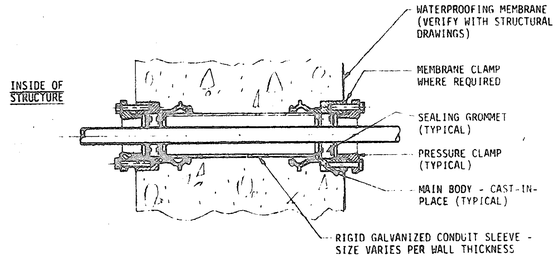
TYPICAL IN-FLOOR INSTALLATION
FOR CONDUITS 1½" AND SMALLER

TYPICAL CONDUIT TERMINATION AT FUTURE EQUIPMENT LOCATION

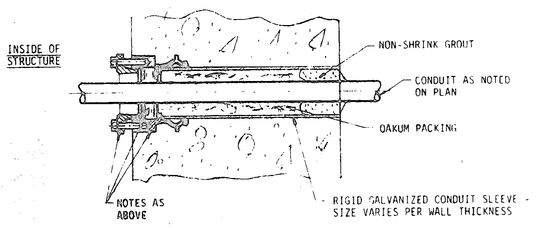
1. 3/4" flexible conduit
2. 2 #12 - 3/4" C. 120 V. power
3. #8 bare ground - 1/2" C.
4. conduit hub with grounding connector
5. disconnect switch, 1P-20 amp.
6. junction box
7. 2/C. sig. cable - 3/4" C.
8. 2/C. sig. cable #8, ground. - 3/4" C.
9. Install 2 #12, with the shielded cables furnished by inst. mfr. - 3/4" C.
10. Install shielded cable furnished by mfr. in - 3/4" C.
11. Equipment furnished and installed under Division 23, Instrumentation work.
12. 3/4" conduit x 1/2" npt adaptor



TYPICAL INSTALLATION DETAIL
Magnetic Flowmeter

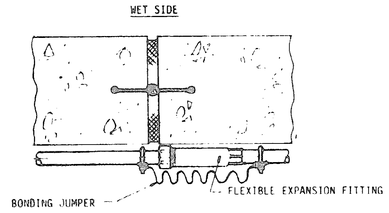


DOUBLE ENDED TYPE - FOR NEW CONSTRUCTION
WITH MEMBRANE



SINGLE ENDED TYPE - FOR NEW CONSTRUCTION

TYPICAL CONDUIT SEAL DETAILS



FOR NEW OR EXISTING CONSTRUCTION

TYPICAL EXPANSION JOINT DETAIL

51-002-165

NO	DATE	DESCRIPTION	APPROVED	REVISIONS

DESIGNED J. N. G.
DRAWN K. W.
CHECKED J. A. C.
DATE 1-1974

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

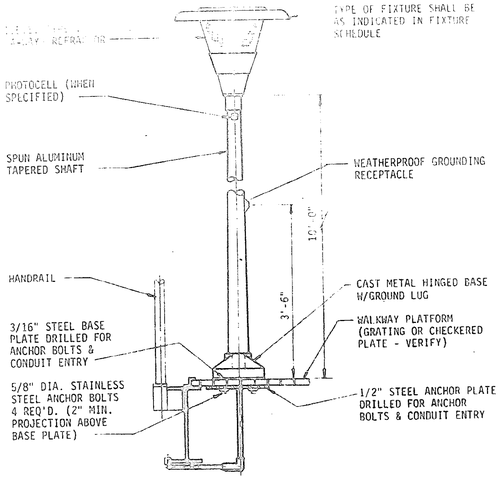
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
NONE

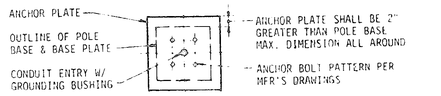
ELECTRICAL DETAILS II

SHEET XE-3
OF SHEETS
PROJECT NO. 79284

50A165 S

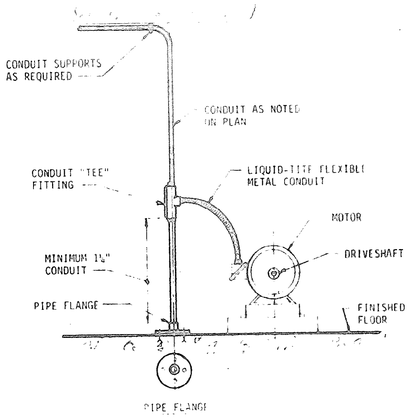


ELEVATION

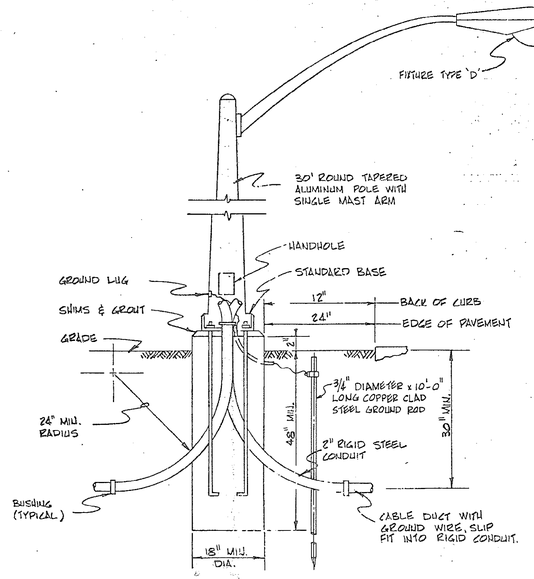


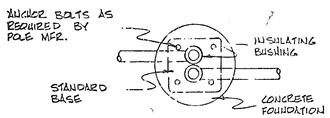
BASE PLAN

TYPICAL WALKWAY PLATFORM MOUNTED LIGHTING STANDARD INSTALLATION DETAIL

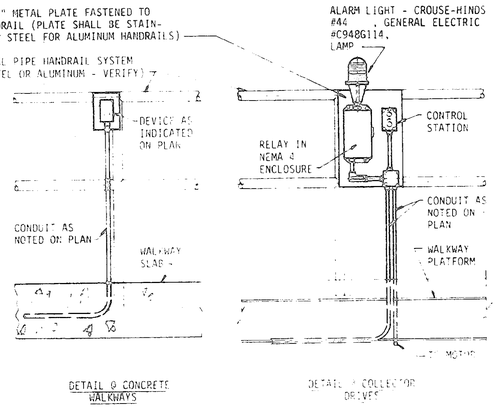


TYPICAL CONDUIT SUPPORT DETAIL



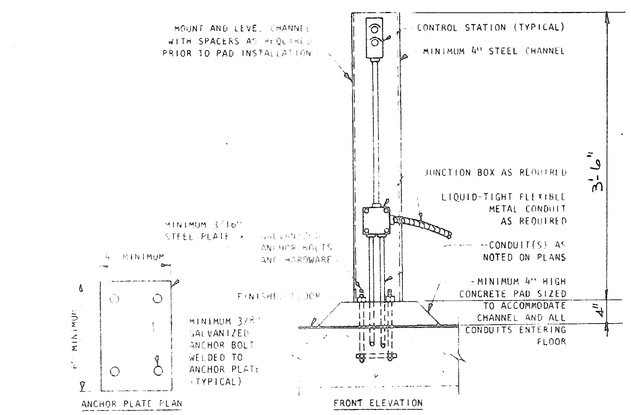


ROADWAY LIGHT INSTALLATION DETAIL



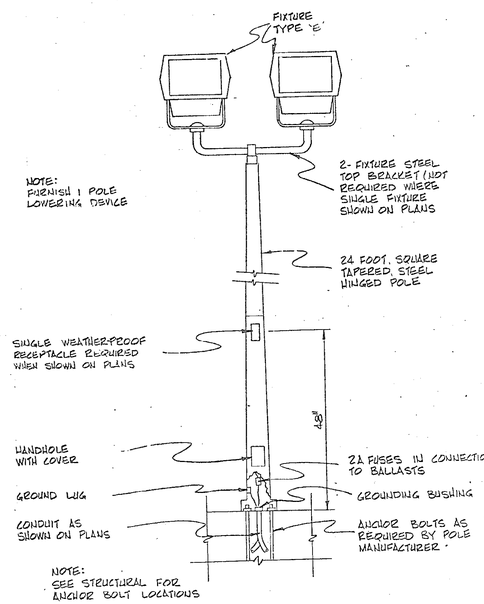
DETAIL @ METAL PLATE OF GRATING WALKWAYS | DETAIL @ CONCRETE WALKWAYS | DETAIL @ COLLECTOR DRIVES

TYPICAL DETAILS - INSTALLATION OF EQUIPMENT ON METAL PIPE HANDRAIL



(NEW CONSTRUCTION)

TYPICAL STEEL CHANNEL MOUNTING DETAIL



FLOODLIGHT INSTALLATION DETAIL

57-002-166

DESIGN	ENGINEER, TOWNSEND	CITY OF MYRTLE BEACH, SOUTH CAROLINA DEPARTMENT OF PUBLIC WORKS	SCALE	SHEET XE-4

78084

50-4469 S

- INCANDESCENT OR H.I.D. TYPE FIXTURE - LETTER INDICATES TYPE AS SHOWN IN FIXTURE SCHEDULE. ("A-1a" INDICATES CIRCUIT NO. 1 FROM PANEL "A" ON SWITCHLEG "a")
- BRACKET MOUNTED FIXTURE (DITTO FOR DESIGNATION)
- FLUORESCENT LIGHTING FIXTURE (DITTO FOR DESIGNATION)
- POLE-MOUNTED INCANDESCENT OR H.I.D. TYPE LUMINAIRE. (LETTER INDICATES TYPE AS SHOWN IN FIXTURE SCHEDULE)
- BATTERY - POWERED EMERGENCY LIGHTING FIXTURE. ARROWS INDICATE NUMBER OF LAMPS
- EMERGENCY LIGHTING SYSTEM BATTERY POWER PACK
- REMOTE BATTERY - POWERED LAMPHEAD
- EXIT & DIRECTIONAL SIGN. SUBSCRIPT INDICATES TYPE AS SHOWN IN SCHEDULE
- SINGLE POLE TOGGLE SWITCH (NUMBER INDICATES MOUNTING HEIGHT)
- TWO-POLE TOGGLE SWITCH (DITTO FOR DESIGNATION)
- THREE-WAY TOGGLE SWITCH (DITTO FOR DESIGNATION)
- FOUR-WAY TOGGLE SWITCH (DITTO FOR DESIGNATION)
- MANUAL MOTOR STARTER W/THERMAL OVERLOAD PROTECTION (DITTO FOR DESIGNATION)
- MOMENTARY CONTACT SWITCH (DITTO FOR DESIGNATION)
- KEY-OPERATED SWITCH (DITTO FOR DESIGNATION)
- 600 WATT INCANDESCENT DIMMER ("DX" INDICATES 1500 WATT)
- SINGLE CONVENIENCE RECEPTACLE (NUMBER INDICATES MOUNTING HEIGHT)
- DUPLEX CONVENIENCE RECEPTACLE (DITTO FOR DESIGNATION)
- SINGLE CONVENIENCE RECEPTACLE IN FLOOR W/ADJUSTABLE FLOOR BOX, FLAP TYPE PLATE & CARPET FLANGE WHERE REQUIRED
- DUPLEX CONVENIENCE RECEPTACLE IN FLOOR W/ADJUSTABLE FLOOR BOX, FLAP TYPE PLATE & CARPET FLANGE WHERE REQUIRED
- SINGLE SPECIAL-PURPOSE RECEPTACLE (SUBSCRIPT INDICATES TYPE OF RECEPTACLE AS SCHEDULED NUMBER INDICATES MOUNTING HEIGHT)
- SINGLE SPECIAL-PURPOSE RECEPTACLE IN FLOOR W/ADJUSTABLE FLOOR BOX, TRIM PLATE & FLANGE WHERE REQUIRED. (DITTO FOR DESIGNATION)
- CONVENIENCE RECEPTACLE FURNISHED AS A PART OF THE CABINETRY OR FURNITURE - CONNECT AS DIRECTED BY MFG.
- CLOCK W/OUTLET AS REQUIRED. OUTLET SHALL BE INSTALLED 8'-0" A.F.F. UNLESS OTHERWISE NOTED. (9" CLOCK UNLESS OTHERWISE INDICATED)
- LIGHTING PANEL
- DISTRIBUTION PANEL
- CABINET OR PULL BOX AS NOTED
- OUTLET OR JUNCTION BOX
- ELECTRIC MOTOR - NUMBER INDICATES HORSEPOWER
- FRACTIONAL HORSEPOWER MOTOR (1/8 HP OR LESS)
- GENERATOR
- UNFUSED SAFETY SWITCH, 3P-30A. 600V. UNLESS OTHERWISE NOTED
- FUSED SAFETY SWITCH, 3P-600V.; (NUMBER INDICATES FUSE SIZE)
- COMBINATION 480V. 3-POLE CKT PROTECTIVE DEVICE & FVNR MAGNETIC STARTER W/480V-120V CONTROL TRANSFORMER & MINIMUM (3) AUX. CONTACTS SUBSCRIPT INDICATES SPECIAL TYPE
- SINGLE UNIT PUSHBUTTON STATION
- 2-UNIT PUSHBUTTON STATION
- 3-UNIT PUSHBUTTON STATION
- "HAND-OFF-AUTOMATIC" SELECTOR SWITCH
- CONTROL STATION LETTER INDICATES TYPE AS SCHEDULED

- VACUUM SWITCH
- LIMIT SWITCH
- FLOW SWITCH
- PRESSURE SWITCH
- TORQUE SWITCH
- PNEUMATIC - ELECTRIC SWITCH
- FLOAT SWITCH
- ELECTRO - PNEUMATIC VALVE
- SOLENOID VALVE
- TEMPERATURE ACTUATED DEVICE
- ELECTRIC THERMOSTAT
- ELECTRIC DAMPER MOTOR
- UNIT HEATER
- ALARM BELL
- ALARM LIGHT - CROUSE - HINDS CAT. NO. 44722 G.E. CO. CAT. NO. C947G010, HUGHEY PHILIPS 0821 REQ WITH 100 WATT "A" LAMP
- RELAY - SQUARE D CLASS 8501, TYPE DW20, CUTLER HAMMER CAT. NO. H2612 OR EQUAL
- ALARM HORN
- UNDERFLOOR DUCT & JUNCTION BOX W/ALL NECESSARY FITTINGS, SUPPORTS, NIPPLES, ETC. TO ACCOMMODATE THE TYPE & NUMBER OF OUTLETS INDICATED
- UNDERGROUND CONCRETE ENCASED DUCT BANK (4" NON-METALLIC CONDUIT MIN.MUM UNLESS OTHERWISE NOTED) SECTION INDICATION DENOTES NUMBER & SIZE OF DUCTS AS NOTED ON PLAN
- EXPOSED CONDUIT
- CONDUIT CONCEALED IN CEILING OR WALL
- CONDUIT CONCEALED IN FLOOR SLAB OR UNDER FLOOR SLAB (CONDUITS 1 1/2" OR LARGER SHALL BE INSTALLED UNDER FLOOR SLAB) CONDUITS RUN UNDER FLOOR SLAB SHALL BE ENCASED IN CONCRETE
- HOMERUN TO PANEL AS NOTED

CONDUIT SYSTEM NOTES

1. ANY CONDUIT WITHOUT FURTHER DESIGNATION, INDICATES 2 #12 IN 3/4" CONDUIT. GREATER NUMBER OF WIRES ARE INDICATED AS FOLLOWS: —#— (3-WIRES) —##— (4-WIRES) ETC. LONGER HATCHMARK INDICATES NEUTRAL CONDUCTOR
2. CONDUITS IMBEDDED IN STRUCTURAL CONCRETE (FLOOR SLABS, ETC) SHALL BE SO LOCATED AS NOT TO UNDULY IMPAIR THE STRENGTH OF THE CONSTRUCTION, AND SHALL BE SPACED NOT LESS THAN TWO TIMES THE CONDUIT O.D. BETWEEN ADJACENT CONDUITS EXCEPT WHERE CROSSING OR OTHERWISE APPROVED BY THE ENGINEER.

COMMUNICATION SYSTEMS

- TELEPHONE UTILITY SYSTEM OUTLET
- TELEPHONE UTILITY SYSTEM OUTLET IN FLOOR W/ADJUSTABLE FLOOR BOX AND SUITABLE PLATE AND W/CARPET FLANGE WHERE REQUIRED
- TELEPHONE UTILITY SYSTEM CONDUIT
- TELEPHONE UTILITY SYSTEM
- INTERCOM SYSTEM OUTLET NUMBER DENOTES TYPE OF STATION REQUIRED AS SCHEDULED
- INTERCOM SYSTEM OUTLET IN FLOOR W/ADJUSTABLE FLOOR BOX AND SUITABLE PLATE AND W/CARPET FLANGE WHERE REQUIRED. NUMBER DENOTES TYPE OF STATION REQUIRED AS SCHEDULED.
- INTERPHONE SYSTEM OUTLET. NUMBER DENOTES TYPE OF INSTRUMENT REQUIRED AS SCHEDULED
- INTERPHONE SYSTEM OUTLET IN FLOOR W/ADJUSTABLE FLOOR BOX AND SUITABLE PLATE AND W/CARPET FLANGE WHERE REQUIRED. NUMBER DENOTES TYPE OF STATION REQUIRED AS SCHEDULED
- SOUND SYSTEM OUTLET. NUMBER DENOTES TYPE OF STATION REQUIRED AS SCHEDULED
- SOUND SYSTEM OUTLET IN FLOOR W/ADJUSTABLE FLOOR BOX AND SUITABLE PLATE AND W/CARPET FLANGE WHERE REQUIRED. NUMBER DENOTES TYPE OF EQUIPMENT REQUIRED AS SCHEDULED
- COMMUNICATION SYSTEMS POWER SUPPLY AND TERMINAL CABINET
- COMMUNICATION SYSTEMS CONDUIT

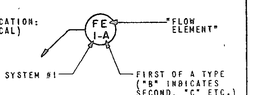
REMODELING WORK

- INDICATES NEW DEVICE(S) IN EXISTING OUTLET. REMOVE EXISTING DEVICE(S) AND INSTALL NEW DEVICE AS INDICATED
- EXISTING DEVICE(S) WHICH SHALL BE REMOVED
- EXISTING OUTLET AND DEVICE TO REMAIN
- INDICATES EXISTING DEVICE(S) OR FIXTURE(S) SHALL BE REMOVED AND A BLANK COVER PLATE INSTALLED OVER EXISTING OUTLET. WHERE NEW FINISH IS TO BE APPLIED, OMIT PLATE AND FILL W/GROUT
- INDICATES EXISTING LIGHTING FIXTURE(S) WHICH SHALL BE REMOVED
- EXISTING CONDUIT AND WIRE SHALL REMAIN
- EXISTING CONDUIT, WIRE, BOXES, ETC. WHICH SHALL BE REMOVED
- EXISTING CONDUIT WHICH SHALL BE ABANDONED, DISCONNECT AND REMOVE EXISTING CONDUCTORS. CUT OFF CONDUIT FLUSH W/FINISHED SURFACE AND FILL W/GROUT
- EXISTING CONDUIT WHICH SHALL BE REUSED. REMOVE EXISTING CONDUCTORS AND INSTALL NEW CONDUCTORS AS INDICATED OR NOTED ON PLAN

METERING SYSTEM

- PRESSURE TRANSMITTER
- PRESSURE INDICATOR
- LEVEL INDICATOR
- LEVEL TRANSMITTER
- TEMPERATURE TRANSMITTER
- FLOW ELEMENT ("A-24" INDICATES POWER CIRCUIT NUMBER)
- FLOW TRANSMITTER
- FLOW INDICATOR
- CURRENT-TO-PNEUMATIC TRANSDUCER
- ULTRASONIC GENERATOR
- ZERO RETURN UNIT
- DENSITY METER ("A-22" INDICATES POWER CIRCUIT NUMBER)
- OXIDATION REDUCTION POTENTIAL PROBE
- PH PROBE
- SLUDGE LEVEL PROBE
- DISSOLVED OXYGEN PROBE
- DIFFERENTIAL PRESSURE TRANSMITTER

- MOTORIZED OPERATOR
- METERING SYSTEM CONDUIT



SCHEMATIC WIRING DIAGRAMS

- PUSHBUTTON, MOMENTARY CONTACT, DOUBLE CIRCUIT, N.C.
- PUSHBUTTON, MOMENTARY CONTACT, DOUBLE CIRCUIT, N.O.
- SELECTOR SWITCH - "HAND-OFF-AUTO", UNLESS OTHERWISE NOTED OR SCHEDULED
- PUSHBUTTON, MAINTAINED CONTACT, DOUBLE CIRCUIT
- PUSH-TO-TEST TRANSFORMER - TYPE PILOT LIGHT ASSEMBLY AND LEGEND PLATE "G" INDICATES GREEN COLOR CAP W/"MOTOR RUN" LEGEND, "A" INDICATES AMBER COLOR CAP W/"AUTO." LEGEND. (OTHER COLORS SHALL BE AS SPECIFIED OR SCHEDULED.)
- STARTER COIL
- CONTROL RELAY
- ELAPSED TIME METER
- CONTACT, N.O.
- CONTACT, N.C.
- OVERLOAD
- MANUAL MOTOR STARTER
- LIMIT SWITCH (N.C.)
- LIMIT SWITCH (N.O.)
- LIMIT SWITCH (N.O. - HELD CLOSED)
- LIMIT SWITCH (N.C. - HELD OPEN)
- FLOW SWITCH (OPENS WITH FLOW)
- FLOW SWITCH (CLOSES WITH FLOW)
- TEMPERATURE ACTUATED SWITCH (OPENS ON TEMP. RISE)
- TEMPERATURE ACTUATED SWITCH (CLOSES ON TEMP. RISE)
- FLOAT OPERATED SWITCH (OPENS ON RISE)
- FLOAT OPERATED SWITCH (CLOSES ON RISE)
- PRESSURE SWITCH (OPENS ON RISE)
- PRESSURE SWITCH (CLOSES ON RISE)
- VACUUM SWITCH (OPENS ON RISE)
- VACUUM SWITCH (CLOSES ON RISE)
- TORQUE SWITCH (OPENS ON INCREASE)
- TORQUE SWITCH (CLOSES ON INCREASE)
- MOTORIZED TIME DELAY RELAY
- TIME DELAY RELAY CONTACT "O" = OPEN "X" = CLOSED RESET → O - O - X ← TIMED OUT TIMING
- PNEUMATIC OR STATIC TIME DELAY RELAY
- PNEUMATIC OR STATIC TIME DELAY RELAY CONTACT. ("T.C." DENOTES TIMED CLOSING - "T.O." DENOTES TIMED OPENING)

SINGLE LINE DIAGRAMS

- TRANSFORMER, POWER OR CONTROL
- TRANSFORMER, GROUNDED
- #(3)4160 120V — POTENTIAL TRANSFORMER (PT) - (*SUBSCRIPT INDICATES QUANTITY AND VOLTAGE RATIO)
- CAPACITOR (THREE PHASE)
- SURGE ARRESTORS (THREE)
- NEUTRAL, MOTOR OR GENERATOR
- 600 — A,B,C, D,E,F, G,H,J, K,L,M — INSULATED CASE OR POWER CIRCUIT BREAKER NUMBER INDICATES TRIP RATING. LEGEND AS FOLLOWS:
  - A = INSULATED CASE
  - B = POWER CKT. BKR.
  - C = ELECTRIC OPERATOR
  - D = DUAL MAGNETIC TRIP
  - E = SOLID STATE TRIP
  - F = ADJ. INSTANTANEOUS SETTING
  - G = ADJ. MAG. DELAY W/FIXED INST.
  - H = ADJ. SHORT TIME TRIP POINT
  - J = ADJ. SHORT TIME DELAY TIME
  - K = ADJ. GRD. FAULT TRIP POINT
  - L = ADJ. GRD. FAULT DELAY TIME
  - M = FIXED INST.

- THERMAL MAGNETIC CIRCUIT BREAKER OR MOTOR CIRCUIT PROTECTOR (600/0R LESS) AS SPECIFIED NUMBER INDICATES TRIP RATING
- FUSE (NUMBER INDICATES AMPERE RATING)
- SWITCH AS SPECFIED (E INDICATES ELECTRIC OPERATOR)
- MOLDED CASE CIRCUIT "BREAKER," OR MOTOR CIRCUIT PROTECTOR, MAGNETIC STARTER, CONTROL TRANSFORMER, AUX. CONTACTS, ETC. AS SPECIFIED. NUMBER INDICATES TRIP RATING
- FUSED SWITCH MAGNETIC STARTER: CONTROL TRANSFORMER, AUX. CONTACTS, ETC. AS SPECIFIED **(NUMBER INDICATES AMPERE RATING)**
- 50/5 (300/5) — CURRENT TRANSFORMERS (CT) ("SUBSCRIPT INDICATES QUANTITY AND RATIO)
- CURRENT TRANSFORMER. RING OR DOUGHNUT TYPE. NUMBER INDICATES RATIO
- CIRCUIT BREAKER (OVER 600V.)
- FUSE AND CONTACTOR (OVER 600V) WITH DISCONNECT PROVISION
- SEPARABLE CONNECTORS
- CABLE TERMINATORS
- INDICATING LIGHT
- SPACE HEATER
- RTD — RESISTANCE TEMPERATURE DETECTOR
- 27 — UNDERVOLTAGE RELAY
- 32 — DIRECTIONAL POWER RELAY
- 40 — FIELD CURRENT RELAY
- 46 — PHASE REVERSE, OPEN PHASE, PHASE BALANCE CURRENT RELAY
- 46B — PHASE REVERSE AND OPEN PHASE CURRENT RELAY
- 46C — PHASE REVERSE AND PHASE UNBALANCE CURRENT RELAY
- 47 — PHASE SEQUENCE VOLTAGE RELAY
- 49 — MACHINE THERMAL RELAY
- 50 — INSTANTANEOUS OVERCURRENT RELAY
- 50G — GROUND INSTANTANEOUS OVERCURRENT RELAY
- 50GS — GROUND SENSOR INSTANTANEOUS OVERCURRENT RELAY
- 51 — TIME OVERCURRENT RELAY
- 51G — GROUND TIME OVERCURRENT RELAY
- 51GS — GROUND SENSOR TIME OVERCURRENT RELAY
- 55 — POWER FACTOR RELAY
- 59 — OVERVOLTAGE RELAY
- 67 — DIRECTIONAL OVERCURRENT RELAY
- 81 — FREQUENCY RELAY
- 86 — LOCKING-OUT RELAY
- 87 — DIFFERENTIAL PROTECTIVE RELAY
- FC — FIELD CONTACTOR
- PFR — POWER FACTOR RELAY
- PF — POWER FACTOR METER
- A — AMMETER
- V — VOLTMETER
- SY — SYNCHROSCOPE
- T — TEMPERATURE METER
- VA — VOLTAMMETER
- WH — WATTHOUR METER (I = IMPULSE DEVICE)
- WHD — WATTHOUR DEMAND METER
- S — INSTRUMENT TRANSFER SWITCH
- GF — GROUND FAULT RELAY
- 50N — RESIDUAL GROUND INSTANTANEOUS OVERCURRENT RELAY
- 51N — RESIDUAL GROUND TIME OVERCURRENT RELAY
- K — KEY INTERLOCK

ABBREVIATIONS

P	SIGNIFIES WITH PILOT LIGHT
RV	SIGNIFIES REDUCED VOLTAGE
REV	SIGNIFIES REVERSING
2S	SIGNIFIES TWO SPEED
L.O.	SIGNIFIES "LOCK-OUT" ATTACHMENT
L.O.S.	SIGNIFIES "LOCK-OUT" ATTACHMENT ON "STOP" PUSH BUTTON OPERATOR

FIRE ALARM SYSTEM

- F — STATION FIRE ALARM SYSTEM INSTRUMENT AS SPECIFIED OR SCHEDULED
- B — FIRE ALARM SYSTEM BELL
- C — FIRE ALARM SYSTEM CHIME
- S — SMOKE DETECTOR
- D — RATE-OF-RISE HEAT DETECTOR
- DFT — FIXED TEMPERATURE HEAT DETECTOR
- F — FIRE ALARM SYSTEM CONDUIT

MISCELLANEOUS

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 6847 SAMUEL McCUTCHEON

51-002-167

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED
DRAWN RSC
CHECKED J.N.G.
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES LTD.
CONSULTING ENGINEERS

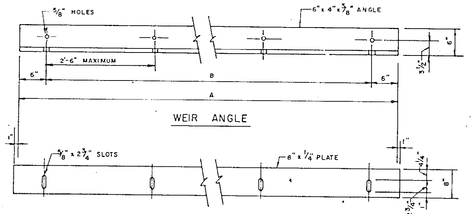
CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

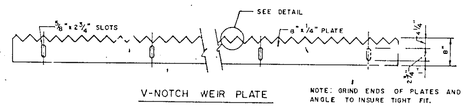
SCALE
NONE

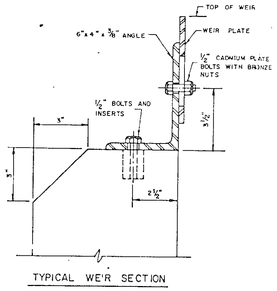
ELECTRICAL SYMBOLS & LEGEND

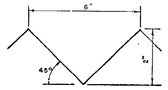
SHEET XE-5
OF SHEETS
PROJECT NO 78284

50A1567 5 RECORD

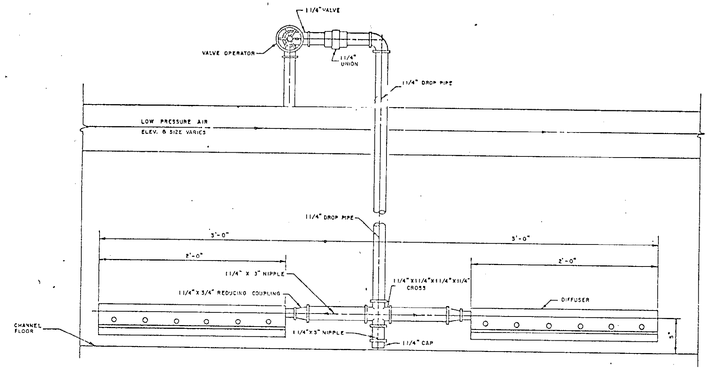




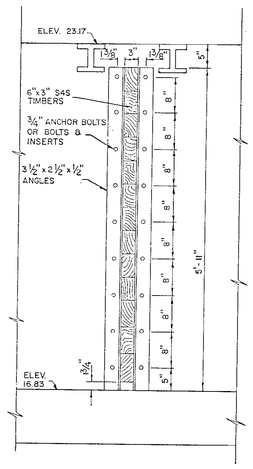


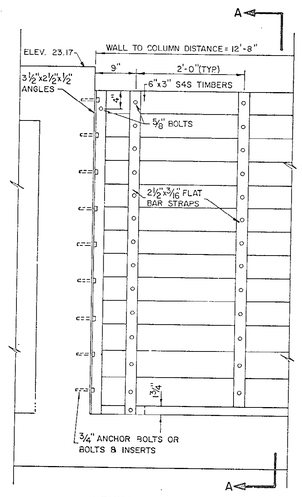


WEIR SCHEDULE				
LOCATION	ELEVATION TOP OF WEIR	NO. REQ'D.	DIMENSIONS A	DIMENSIONS B
GRIT TANKS	30.85	4	11'-0	10'-0"
FLOCCULATOR-CLARIFIERS	20.0	2	AS REQUIRED	
CLARIFIERS	20.0	2	AS REQUIRED	
SPLITTER BOX	29.25	1	10'-0"	9'-6"
	30.30	1	3'-0"	4"
ROTATING BIOLOGICAL CONTACTORS	22.50	3	26'-4"	25'-6"



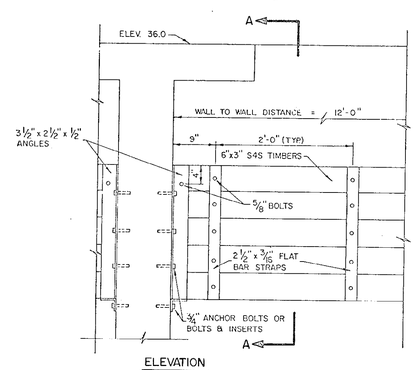
TYPICAL DETAIL OF CHANNEL DIFFUSER INSTALLATION

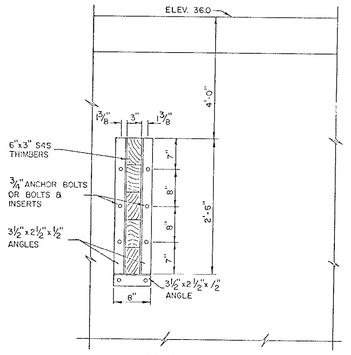




ROTATING BIOLOGICAL CONTACTORS
BAFFLE DETAIL

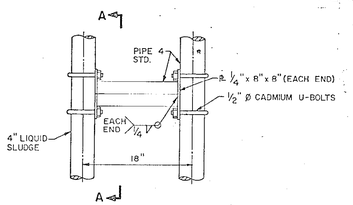
SCALE: ¾" = 1'-0"

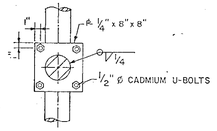




GRIT TANKS
BAFFLE DETAIL

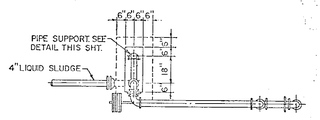
SCALE: ¾" = 1'-0"

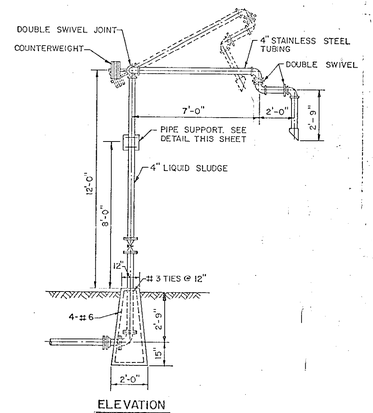




PIPE SUPPORT DETAIL

SCALE: 1" = 1'-0"





LIQUID SLUDGE
LOADING STAND

SCALE: ¾" = 1'-0"

51-001-168

NO.	DATE	DESCRIPTION	APPROVED

REVISIONS

DESIGNED W.J.W
DRAWN R.L.J
CHECKED S.L.M
DATE 12-3-79

CONSOER, TOWNSEND & ASSOCIATES
CONSULTING ENGINEERS

CITY OF MYRTLE BEACH, SOUTH CAROLINA
DEPARTMENT OF PUBLIC WORKS

SCALE
AS NOTED

MISCELLANEOUS DETAILS

SHEET X-1
OF SHEETS
PROJECT NO. 7828