MAYO FERTILIZER
LAKE CITY, FLORIDA

INDEX:

CODE SUMMARY	
BUILDING CONSTRUCTION	TYPE III UNSPRINKLED UNPROTECTED
OCCUPANCY	STORAGE S-1 MAXIMUM HEIGHT = 55'
TOTAL FLOOR AREA	28,474 S.F.
MAXIMUM AREA TABLE 503 INCREASE SECTION 506.2	17,500 SF PER FLOOR 13,125 SF PER FLOOR*
MAXIMUM AREA PER FLOOR	30,625 SF ALLOWED

$$*I_f = 100\left[\frac{F}{P} - 0.25\right]\frac{W}{30} = 100\left[\frac{747}{747} - 0.25\right]\frac{30}{30} = 75\%$$

DESIGN LOADS:

ROOF LIVE LOAD= 20 PSF
FLOOR LIVE LOAD= 40 PSF
CORRIDOR LIVE LOAD= 80 PSF
WIND LOAD= 110 MPH

CODE COMPLIANCE BY ALL TRADES:

2004 FLORIDA BUILDING CODE
NFPA 101 – LIFE SAFETY CODE
2004 FLORIDA BUILDING CODE, PLUMBING
2004 FLORIDA BUILDING CODE, MECHANICAL
2004 FLORIDA BUILDING CODE, GAS
2005 NATIONAL ELECTRIC CODE, NFPA 70
2004 FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION
FLORIDA FIRE PREVENTION CODE 2004 EDITION
AMERICAN DISABILITIES ACT WITH ANSI A117.1

INSTRUCTIONS TO BIDDERS:

EACH CONTRACTOR BY MAKING HIS BID REPRESENTS THAT HE HAS READ AND UNDERSTANDS ALL DOCUMENTS AND THAT HE HAS VISITED THE SITE AND FAMILIARIZED HIMSELF WITH ALL CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED. THERE ARE PORTIONS OF THE WORK WHICH WILL REQUIRE THE CONTRACTOR TO PROPOSE AND UTILIZE HIS BEST JUDGEMENT AND EXPERIINCE IN ORDER TO ACCOMPLISH THE INTENT OF THE PLANS AND COMPLIANCE WITH CODES.

CERTIFICATION:

THESE PLANS FOR THE MAYO FERTILIZER FACILITY WILL COMPLY WITH SECTION 1600 OF THE FLORIDA BUILDING CODE, 2004 FOR A 110 MPH WIND LOAD, 3 SECOND GUST, EXPOSURE B, WITH THE INTERNAL PRESSURE OF + 0.18 AND – 0.18 INCLUDED IN THESE LOADS.
IMPORTANCE FACTOR 1

COMPONENTS/CLADDING ROOF = – 17.45 PSF
COMPONENTS/CLADDING WALLS = – 25.42 PSF
COMPONENTS/CLADDING OVERHANG = – 31.88 PSF

Curtis E. Keen 6/21/06
CURTIS E. KEEN, PE #23836

revised 4/12/06 to type 111/sf to inside measurements

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
LAKE CITY, FLORIDA

COVER SHEET

PROJECT No. MAYO\COVER | DRAWN BY: | DATE 04/12/06

C-0

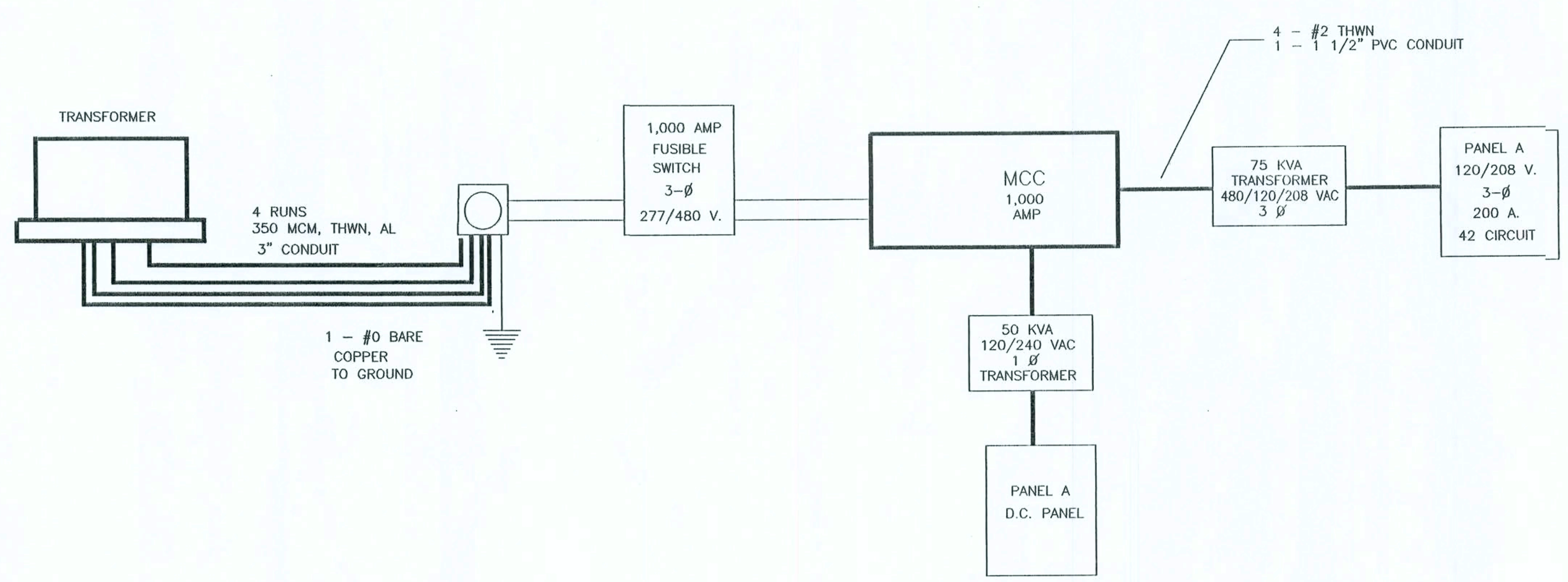
NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER O' RECORD FOR RESOLUTION & CLARIFICATION.

PANEL A — 120/208 VOLTS, 3 PHASE, 4 WIRE, 200 AMPS

10,000 AMPS. RMS. SYM. I.C. INTEGRATED EQUIPMENT RATING
☒ MAIN BREAKER ☐ FLUSH MOUNTED
☐ MAIN LUGS ONLY ☒ SURFACE MOUNTED

SERVES	TRIP			TRIP	SERVES
RACEWAY DW-1	20	1	2	20	RACEWAY DW-2
RACEWAY DW-3	20	3	4	20	RACEWAY DW-4
RACEWAY		5	6		RACEWAY
RACEWAY		7	8		RACEWAY
RACEWAY		9	10		RACEWAY
RACEWAY		11	12		RACEWAY
RACEWAY		13	14		RACEWAY
RACEWAY		15	16		RACEWAY
INSPECTION AREA RECEPTACLES	20	17	18	20	INSPECTION AREA LIGHTING
INSPECTION AREA 220 RECEPTACLE	20/	19	20	20/	OFFICE AREA 220 RECEPTACLE
	/2	21	22	/2	
OFFICE AREA RECEPTACLES	20	23	24	20	OFFICE AREA LIGHTING
ELECTRICAL AREA LIGHTING & REC.	20	25	26	20	CONTROL AREA LIGHTING & REC.
FUTURE ELECTRIC SPOUT	20	27	28	20	FUTURE ELECTRIC SPOUT
PROXIMITY LIMIT SWITCH FOR GATES	20	29	30	20	PROXIMITY LIMIT SWITCH FOR GATES
PROXIMITY LIMIT SWITCH FOR GATES	20	31	32	20	PROXIMITY LIMIT SWITCH FOR GATES
PROXIMITY LIMIT SWITCH FOR GATES	20	33	34	20	PROXIMITY LIMIT SWITCH FOR GATES
SPARE		35	36		SPARE
SPARE		37	38		SPARE
SPARE		39	40		SPARE
SPARE		41	42		SPARE

LOAD = 110 AMPS — SQUARE D TYPE NQOD



ELECTRICAL RISER

NOTES AC SYSTEM:

1. ELECTRICIAN SHALL PROVIDE ALL MOTOR STARTERS, INCLUDING ANY SOFT STARTS OR REVERSING MOTOR STARTERS REQUIRED BY OTHER EQUIPMENT.

NOTES DC SYSTEM:

1. LOCAL ELECTRICIAN IS RESPONSIBLE FOR CONDUIT, WIRE, AND FUSE PROTECTION ON THE 230VAC SINGLE PHASE AC POWER SUPPLIED TO THE BLENDER CONTROL PANEL.

2. DOOR DISCONNECT SWITCH

   A. – A DOOR DISCONNECT SWITCH IS PROVIDED IN THE BLENDER'S MAIN ELECTRICAL PANE. INCOMING POWER CONNECTS TO THE DOOR DISCONNECT LUG L1, L2 AND L3 AND GROUND LUG. (AS WELL AS NEUTRAL LUG IF 110V POWER IS NEEDED)

   B. – LOCAL ELECTRICIAN IS RESPONSIBLE FOR PROPER GROUNDING OF BLENDER CONTROl PANEL TO THREE-PHASE BREAKER PANEL THROUGH THE USE OF THE GROUNDING LUG PROVIDED IN THE BLENDER CONROL PANEL.

   C. – NO FUSE PROTECTION IS INCLUDED IN RANCO PANELS. LOCAL ELECTRICIAN SHALL PROVIDE A FUSED 230 VAC SINGLE PHASE POWER SUPPLY TO RANCO PANEL.

3. RANCO'S MOTOR CONTROL UNIT RECTIFIES POWER FROM AC TO DC. EACH DC MOTOR REQUIRES 10 AMPS OF 230 VAC SINGLE PHASE.

   EXAMPLE
   1 DC MOTOR = 10 AMPS OF 230 VAC SINGLE PHASE.
   9 DC MOTORS X 10 AMPS = 90 AMPS OF 230 VAC SINGLE PHASE.

4. LOCAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT AND WIRE FROM BLENDER AND ADDITIVE BINS TO SCALE DISPLAY ENCLOSURE AND FROM SCALE DISPLAY ENCLOSURE TO BLENDER CONTROL PANEL IN OFFICE.

5. ALL CONDUIT AND WIRING BETWEEN EMERGENCY STOP STATION ON BLENDER AND REMOTE BLENDER CONROL PANEL TO BE SUPPLIED BY LOCAL CONTRACTOR

DC SYSTEM REQUIREMENTS:

1. A 230 VAC SINGLE PHASE FUSED POWER SUPPLY IS REQUIRED FOR THE BLENDER CONTROL PANEL. ELECTRICIAN IS RESPONSIBLE FOR CONDUIT, WIRE, AND FUSE PROTECTION ON THIS 230VAC SINGLE PHASE POWER SUPPLY.

2. [A DOOR DISCONNECT SWITCH IS PROVIDED IN THE BLENDER CONTROL PANEL.] INCOMING 230 VAC POWER CONNECTS TO THE DOOR DISCONNECT LUGS L1 AND L2, GROUND LUG, AND NEUTRAL LUG.

3. LOCAL ELECTRICIAN IS RESPONSIBLE FOR PROPER GROUNDING OF BLENDER CONTROL PANEL TO THE SINGLE PHASE BREAKER PANEL THROUGH THE USE OF THE GROUNDING LUG PROVIDED IN THE BLENDER CONTROL PANEL.

Curtis Keen 6/21/06

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

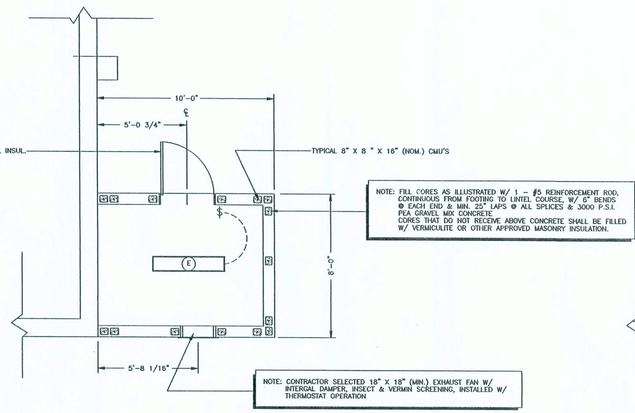
MAYO FERTILIZER
MAYO, FLORIDA

ELECTRICAL RISER & RELATED REQUIREMENTS
MISC. NOTES, REFERENCES & INSTRUCTIONS

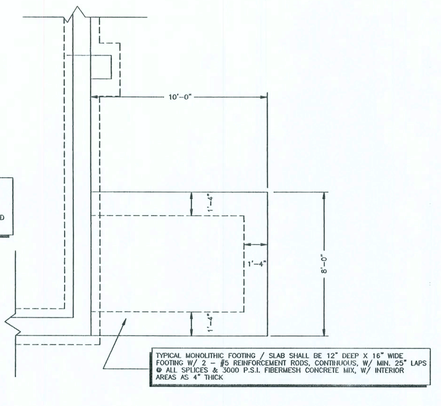
PROJECT No. F-MAYO-RE3.0.0.DWG — DRAWN BY: — SHEET No. E3.0.0 — DATE 12/18/05

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER of RECORD FOR RESOLUTION & CLARIFICATION.

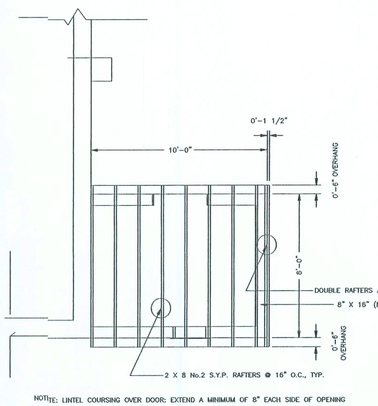
SCALE NOTE:
PLAN VIEWS: 1/4" = 1'-0
DETAILS/SECTIONS: N.T.S.



1 A2.0.0 DIMENSIONED FLOOR PLAN VIEW
ELECTRICAL REQUIREMENTS SHOWN



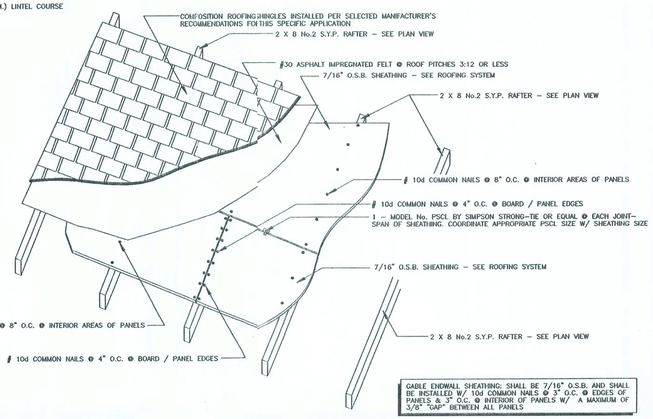
2 A2.0.0 DIMENSIONED FOUNDATION PLAN VIEW



3 A2.0.0 DIMENSIONED ROOF SYSTEM PLAN VIEW

SCHEDULE OF REQUIRED ROOF SYSTEM MECHANICAL FASTENERS

ROOF SYSTEM	No.	
	RAFTERS	LOCATION OF 2 X 8 No.2 S.Y.P. RAFTERS - SEE PLAYVIEW(S)
		1 - MODEL No. H4 BY SIMPSON STRONG-TIE OR EQU. @ EACH BEARING POINT OF RAFTER TO P.T. 2 X 8 TOP PLATE CONNECTIONS ATTACH DEVICE TO TRUSS W/ 4 - 8d COMMON NAILS- ATTACH DEVICE TO BUILT-UP GIRDER CONNECTIONS W/ 4 - 8d COMMON NAILS
		NOTE: P.T. 2 X 8 TOP PLATE SHALL BE ATTACHED TO LINTEL COURSE W/ 1/2" X 8" A307 ANCHOR BOLTS @ ALL CORNERS, 16" FROM ALL CORNERS & 48" O.C. MAXIMUM
NOTES	NOTE: SEE DETAILS ELSEWHERE THESE PLANS FOR ADDITIONAL REQUIREMENTS NOT LISTED HERE NOTE: CONTRACTOR SHALL COORDINATE W/ OTHER DEVICES RFED IN DETAILS AND/OR LISTED IN SCHEDULES TO ACHIEVE THE MINIMUM STRUCTURAL REQUIREMENTS	



5 A2.0.0 ROOFING & SHEATHING CONIECTIONS TO RAFTERS

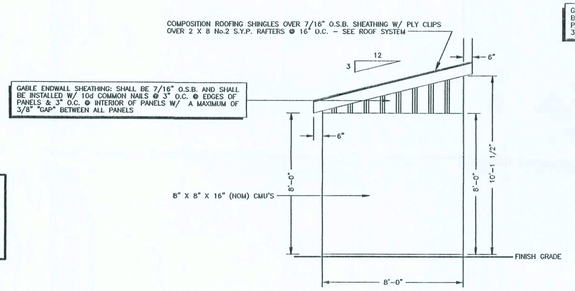
ELECTRICAL FIXTURE SYMBOLS

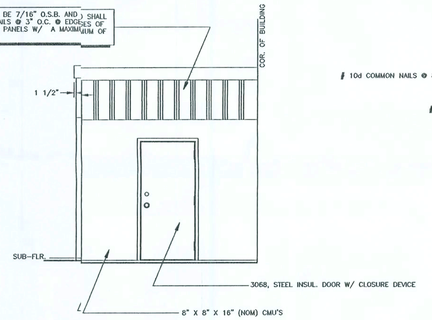
	FLUORESCENT STRIP FIXTURE, SURFACE MOUNTED
$	SINGLE POLE TOGGLE SWITCH MOUNTED @ 48" A.F.F.

NOTES:
CONTRACTOR SHALL VERIFY ALL MODEL NUMBERS AND PROVIDE ALL OPTIONS LISTED IN DESCRIPTIONS AND ANY OTHER HARDWARE REQUIRED FOR PROPER INSTALLATION OF ALL FIXTURES
ALL WORK SHALL BE IN EMT OR NMT CONDUIT
ALL WORK SHALL BE IN FULL COMPLIANCE W/ THE LATEST EDITION OF THE N.E.C.

NOTE: CONTRACTOR SHALL VERIFY ALL LUMENS & F.C. REQUIREMENTS W/ SELECTED LAMP SUPPLIER AND OWNER
AMP SUPPLIER TO VERIFY COMPLIANCE W/ ENERGY POLICY ACRT OF 1992 (EPAct) AND THE MINIMUM STANDARDS OF THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA.

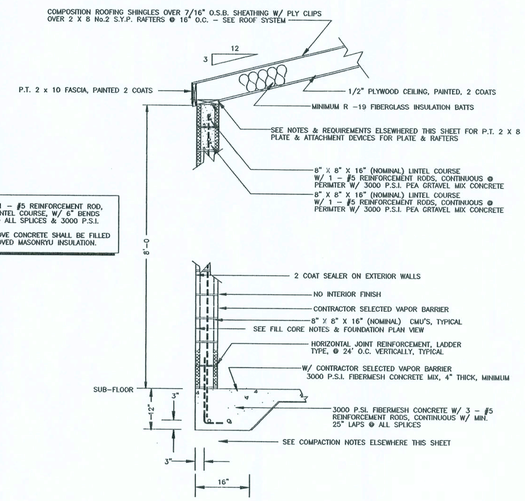
CONTRACTOR SHALL VERIFY THE FOLLOWING
SHIELDING MAY BE REQUIRED FOR USE OF COMPUTERS & SPECIFIC ELECTONIC VOICE OR DATA EQUIPMENT - COORDINATE W/ MANUFACTURER / SUPPLIER & ELECTRICAL CONTRACTOR TO PROVIDE AS REQUIRED.



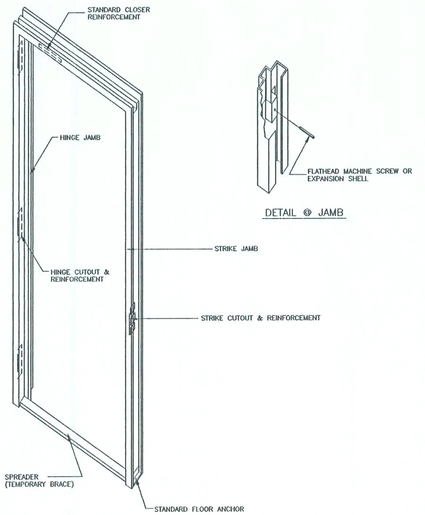


4 A2.0.0 EXTERIOR FINISH ELEVATIONS

NOTE: ILL CORES AS ILLUSTRATED W/ 1 - #5 REINFORCEMENT ROD, IONTINUOUS FROM FOOTING TO LINTEL COURSE, W/ 6" BENDS @ EACH END & MIN. 25" LAPS @ ALL SPLICES & 3000 P.S.I.
IORES THAT DO NOT RECEIVE ABOVE CONCRETE SHALL BE FILLED W/ VERMICULITE OR OTHER APPROVED MASONRYU INSULATION.



6 S1.1.0 SECTION THRU EXTERIOR WALL
TYPICAL @ SANCTUARY INTERIOR CMU WALL(S)
SCALE: N.T.S.



DETAIL @ JAMB

Curtis Keen
6/21/06

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC: EB 3761

MAYO FERTILIZER ELECTRIC ROOM
LAKE CITY, FLORIDA

ELECTRICAL BUILDING PLAN VIEWS
REFERENCED SECTIONS & DETAILS
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No.
ELECTRIC ROOM
DRAWN BY:
DATE
06/13/06
SHEET No.
T1.0.0

MAYO FERTILIZER
LAKE CITY, FLORIDA

INDEX:

CODE SUMMARY	
BUILDING CONSTRUCTION	TYPE V UNSPRINKLED UNPROTECTED
OCCUPANCY	STORAGE MAXIMUM HEIGHT = 41'
FLOOR AREA	31,353 S.F.
TOTAL FLOOR AREA	31,353 S.F.
MAXIMUM AREA TABLE 500	16,000 SF PER FLOOR
INCREASE SECTION 503.3.2	16,000 SF PER FLOOR
MAXIMUM AREA PER FLOOR	32,000 SF ALLOWED

DESIGN LOADS:

ROOF LIVE LOAD= 20 PSF
FLOOR LIVE LOAD= 40 PSF
CORRIDOR LIVE LOAD= 80 PSF
WIND LOAD= 110 MPH

CODE COMPLIANCE BY ALL TRADES:

2004 FLORIDA BUILDING CODE
NFPA 101 – LIFE SAFETY CODE
2004 FLORIDA BUILDING CODE, PLUMBING
2004 FLORIDA BUILDING CODE, MECHANICAL
2004 FLORIDA BUILDING CODE, GAS
2005 NATIONAL ELECTRIC CODE, NFPA 70
2004 FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION
FLORIDA FIRE PREVENTION CODE 2004 EDITION
AMERICAN DISABILITIES ACT WITH ANSI A117.1

INSTRUCTIONS TO BIDDERS:

EACH CONTRACTOR BY MAKING HIS BID REPRESENTS THAT HE HAS READ AND UNDERSTANDS ALL DOCUMENTS AND THAT HE HAS VISITED THE SITE AND FAMILIARIZED HIMSILF WITH ALL CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED. THERE ARE PORTIONS OF THE WORK WHICH WILL REQUIRE THE CONTRACTOR TO PROPOSE AND UTILIZE HIS BEST JUDGEMENT AND EXPERENCE IN ORDER TO ACCOMPLISH THE INTENT OF THE PLANS AND COMPLIANCE WITH CODES.

CERTIFICATION:

THESE PLANS FOR THE MAYO FERTILIZER FACILITY WILL COMPLY WITH SECTION 1600 OF THE FLORIDA BUILDING CODE, 2004 FOR A 110 MPH WIND LOAD, 3 SECOND GUST, EXPOSURE B, WITH THE INTERNAL PRESSURE OF + 0.18 AND – 0.18 INCLUDED IN THESE LOADS.
IMPORTANCE FACTOR 1

COMPONENTS/CLADDING ROOF = – 17.45 PSF
COMPONENTS/CLADDING WALLS = – 25.42 PSF
COMPONENTS/CLADDING OVERHANG = – 31.88 PSF

APPROVED
(Subject to Revisions)
Inspection Department
Lake City Fire Dept.
State Fire Inspector
License # 113369
By: _____ Date: 3-9-06

Curtis E. Keen 3/6/06
CURTIS E. KEEN, PE #23836

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4797
ENG. LIC. EB 3761

MAYO FERTILIZER
LAKE CITY, FLORIDA

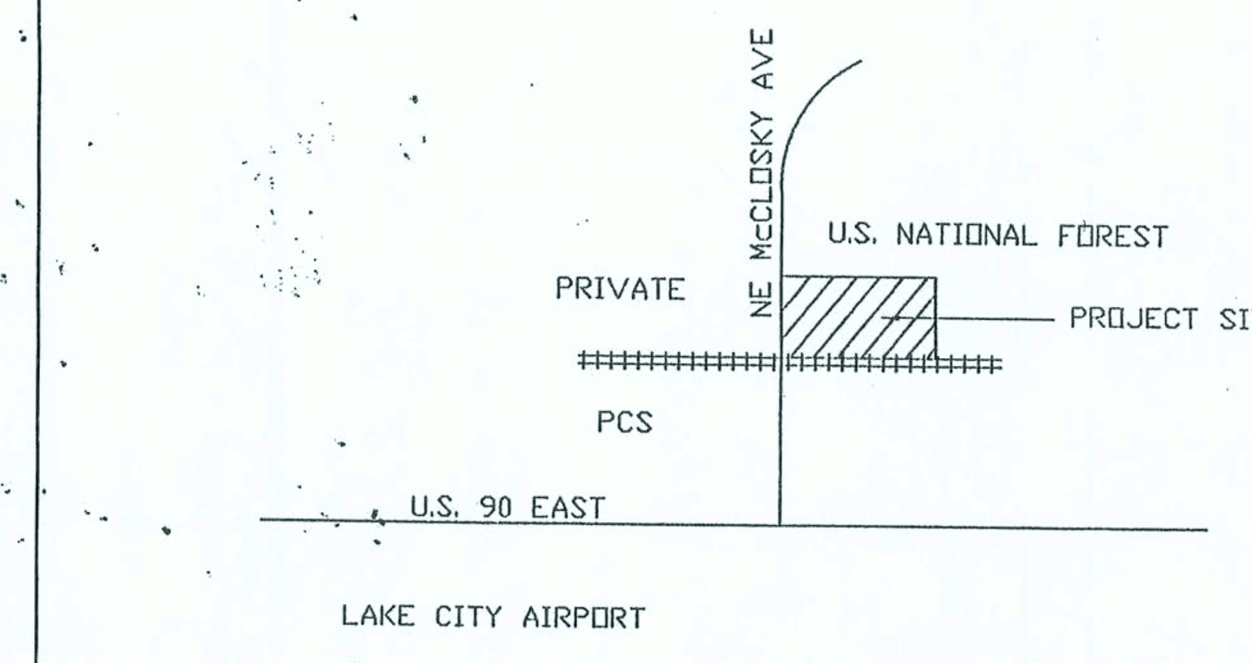
COVER SHEET

DRAWN BY:
DATE 02/22/06
PROJECT No. MAYOCOVER
C-0

SITE PLAN

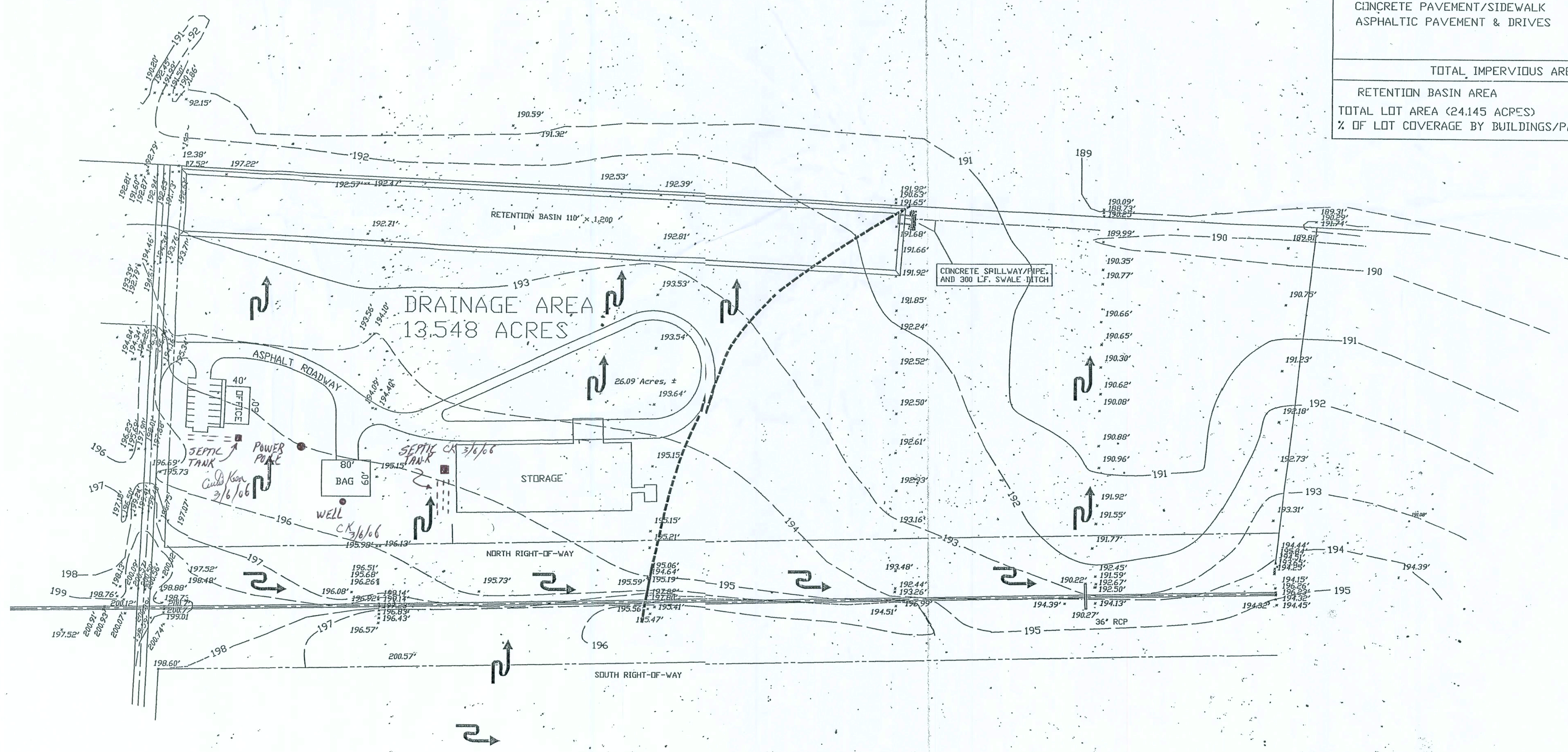
Scale: 1" = 100'

DESCRIPTION:
ALL THAT PORTION OF THE NE 1/4 OF THE NW 1/4, AND THE NW 1/4 OF THE NE 1/4 OF SECTION 36, TOWNSHIP 3 SOUTH, RANGE 17 EAST, WHICH LIES EAST OF FOREST SERVICE ROAD NO. 236 AND NORTH OF THE SEABOARD COASTLINE RAILROAD, AND IS DESCRIBED MORE PARTICULARLY AS FOLLOWS: COMMENCE AT THE NW CORNER OF SAID SECTION 36 AND RUN THENCE N.86°48'07"E., ALONG THE NORTH BOUNDARY OF SAID SECTION 36 A DISTANCE OF 1675.73 FEET TO THE EASTERLY RIGHT-OF-WAY OF FOREST SERVICE ROAD NO. 236 AND THE POINT OF BEGINNING; THENCE CONTINUE N.86°48'07"E., STILL ALONG THE NORTH BOUNDARY OF SAID SECTION 36 A DISTANCE OF 701.08 FEET TO THE NE CORNER OF SAID NE 1/4 OF THE NW 1/4; THENCE N.86°50'08"E., STILL ALONG SAID NORTH BOUNDARY OF SAID SECTION 36 A DISTANCE OF 1187.42 FEET TO THE NE CORNER OF SAID NW 1/4 OF THE NE 1/4; THENCE S.01°05'33"W., ALONG THE EAST LINE OF SAID NW 1/4 OF NE 1/4 A DISTANCE OF 502.11 FEET TO THE NORTHERLY RIGHT-OF-WAY OF SEABOARD COASTLINE RAILROAD; THENCE S.82°58'21"W., ALONG SAID RAILROAD RIGHT-OF-WAY A DISTANCE OF 1847.50 FEET TO THE EASTERLY RIGHT-OF-WAY OF FOREST SERVICE ROAD NO. 236; THENCE N.03°48'36"W., ALONG SAID EASTERLY RIGHT-OF-WAY A DISTANCE OF 624.90 FEET TO THE POINT OF BEGINNING.



LOCATION MAP

SITE DEVELOPMENT INFORMATION	
IMPERVIOUS AREAS:	
OFFICE BUILDING	2,400 S.F.
BAG BUILDING	4,800 S.F.
STORAGE/BLENDING BUILDING	35,214 S.F.
CONCRETE PAVEMENT/SIDEWALK	462 S.F.
ASPHALTIC PAVEMENT & DRIVES	45,116 S.F.
TOTAL IMPERVIOUS AREAS	87,992 S.F.
RETENTION BASIN AREA	132,000 S.F.
TOTAL LOT AREA (24.145 ACRES)	1,051,751 S.F.
% OF LOT COVERAGE BY BUILDINGS/PAVEMENT	8.4 %



Curtis Keen 3/6/06

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
904/362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER – LAKE CITY BRANCH
LAKE CITY, FLORIDA

SITE DEVELOPMENT PLAN
MISC. NOTES, REFERENCES AND INSTRUCTIONS

PROJECT No.	DRAWN BY:	DATE
SHAWLC/C-1		11/12/04
C-1		

NOTES:

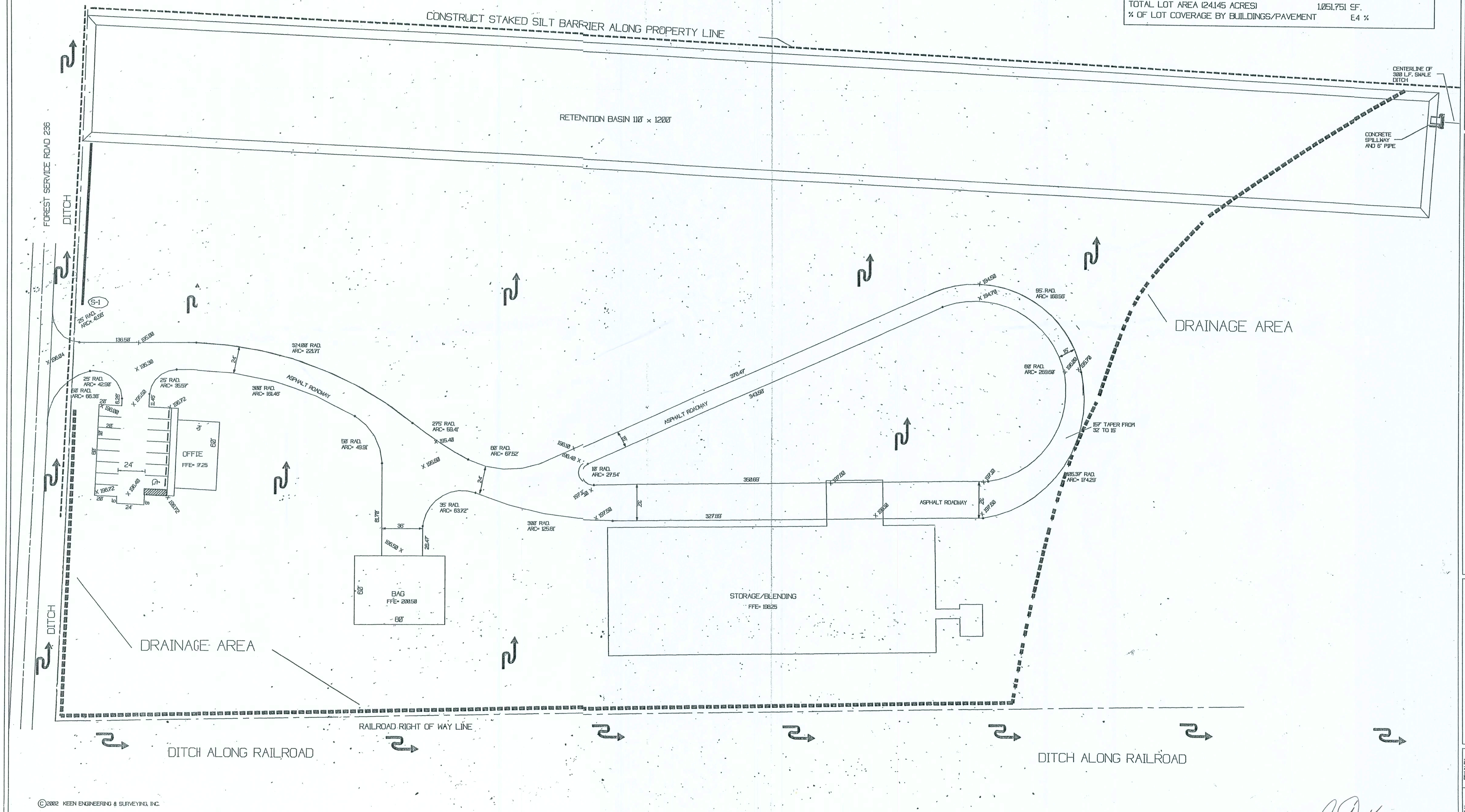
THE CONTRACTOR IS TO ADHERE TO THE E&SC PLAN FROM BEGINNING OF EARTHWORK UNTIL THE AS-BUILTS ARE COMPLETE. MAINTENANCE ITEMS FOR EROSION ARE TO BE STRICTLY ADHERED TO WITH NO EXCEPTIONS.

IF THE PROPOSED E&SC PLAN IS NOT WORKING OR DOES NOT APPEAR TO BE EFFECTIVE; THE CONTRACTOR IS TO IMMEDIATELY CONTACT THE ENGINEER AND USE THE BMPs IN THE FLORIDA EROSION AND SEDIMENT CONTROL INSPECTOR'S MANUAL TO IMPLEMENT A PLAN THAT WILL WORK.

SITE DEVELOPMENT INFORMATION

IMPERVIOUS AREAS:	
OFFICE BUILDING	2,400 S.F.
BAG BUILDING	4,800 S.F.
STORAGE/BLENDING BUILDING	35,214 S.F.
CONCRETE PAVEMENT/SIDEWALK	462 S.F.
ASPHALTIC PAVEMENT & DRIVES	45,116 S.F.
TOTAL IMPERVIOUS AREAS	87,992 S.F.
RETENTION BASIN AREA	132,000 S.F.
TOTAL LOT AREA (24.145 ACRES)	1,051,751 S.F.
% OF LOT COVERAGE BY BUILDINGS/PAVEMENT	E4 %

Scale: 1" = 40'



KEEN ENGINEERING & SURVEYING, INC.

9263 CR 417
LIVE OAK, FLORIDA 32060
904/362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER - LAKE CITY BRANCH
LAKE CITY, FLORIDA

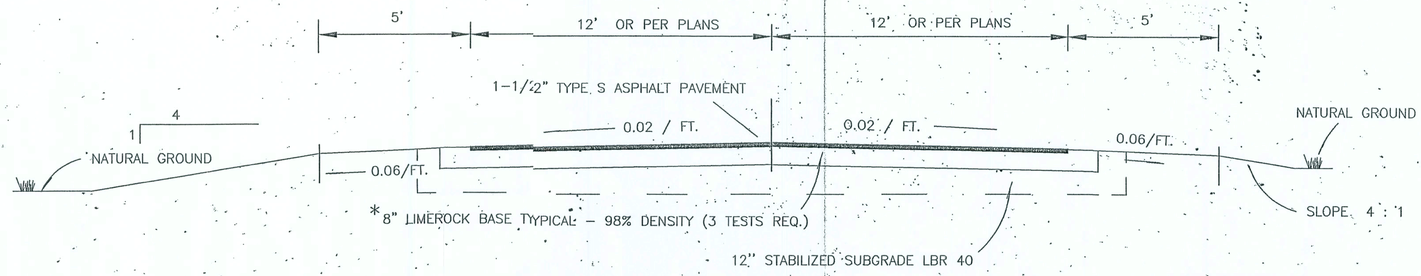
ENLARGED AREA OF DEVELOPMENT

PROJECT No.	DRAWN BY:
SHAWLC/C-1	
C-2	DATE 11/12/04

Curtis Keen 3/6/06

A/C-2.dwg 2/14/2005

SITE PLAN DETAILS

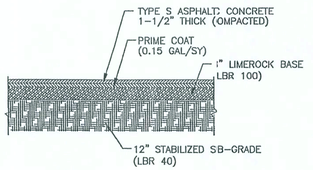


TYPICAL SECTION DRIVEWAY

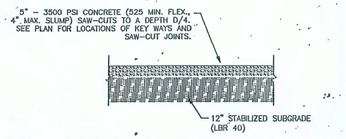
* TH. LIMEROCK BASE IS TO HAVE AN APPROVED PRIME COAT

SPECIFICATIONS:

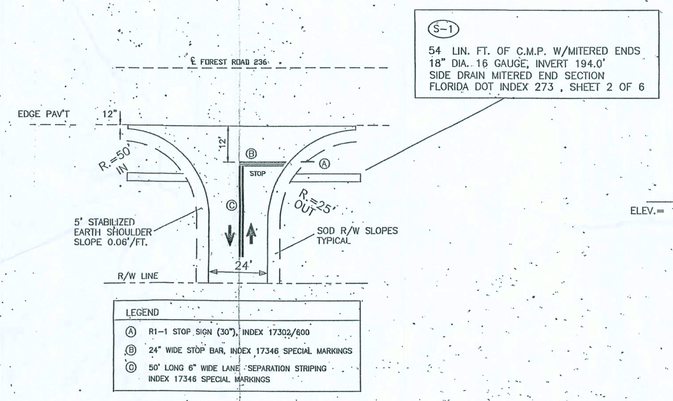
1. WEARING SURFACE: SECTION 300 OF FLA DOT STANDARD SPECIFICATIONS, LATEST EDITON
2. BASE COURSE: SECTION 200 OF FLA DOT STANDARD SPECIFICATIONS, LATEST EDITION
3. SUBGRADE: SECTION 160 OF FLA DOT STANDARD SPECIFICATIONS, LATEST EDITION



ASPHALT PAVING

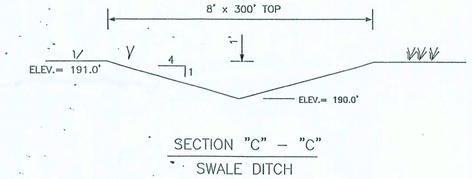


ALTERNATE BID CONCRETE PAVING

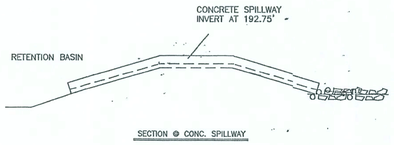


NOTE: ALL PAVEMENT MARKINGS ARE TO BE WITH THERMOPLASTIC (LEAD FREE) MATERIALS.

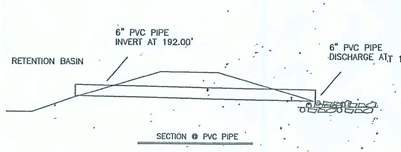
COUNTY DRIVEWAY CONNECTION



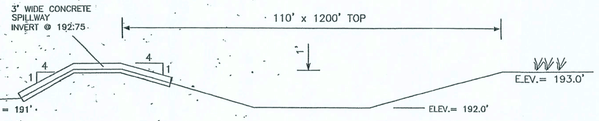
SECTION "C" - "C"
SWALE DITCH



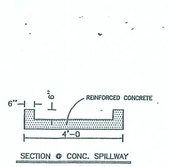
SECTION @ CONC. SPILLWAY



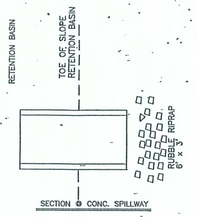
SECTION @ PVC PIPE



SECTION "A" - "A"
RETENTION BASIN



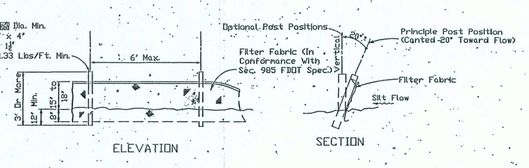
SECTION @ CONC. SPILLWAY



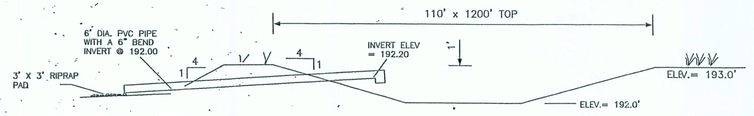
SECTION @ CONC. SPILLWAY

Note: Spacing for Type 3 Silt Fence to be in accordance with Chart 1, Sheet 1 of 3 and ditch installations at drainage structures Sheet 2 of 3.

Type 3 Silt Fence



TYPE 3 SILT FENCE



SECTION "B" - "B"
RETENTION BASIN

RETENTION BASIN NOTES:

1. ALL SLOPES STEEPER THAN 4:1 TO BE SODDED
2. ALL SLOPES STEEPER THAN 3:1 TO BE STAPLED SOD
3. ALL DISTURBED AREAS TO BE GRASSED AS FOLLOWS:

SEPTEMBER - MARCH	APRIL - AUGUST
70LBS./ACRE BAHIA	70LBS./ACRE BAHIA
20LBS./ACRE RYE	20LBS./ACRE MILLET

LEGEND:

BM = BENCHMARK ELEVATION

x 77.2 = PROPOSED ELEVATION

= EXISTING CONTOUR LINE

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
904/362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER - LAKE CITY BRANCH
LAKE CITY, FLORIDA

SITE DEVELOPMENT PLAN DETAILS
MISC. NOTES, REFERENCES AND INSTRUCTIONS

PROJECT No.	DRAWN BY:	DATE
BMAYO-3		11/12/04

C-3

Curtis Keen 3/6/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS OR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE AENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

SCALE NOTE:
PLAN VIEW: 3/32" = 1'-0

WOOD

1 All joists, beams, studs in bearing walls and colmns shall be douglas fir, southern yellow pine #2 or better.
2 Plywood shall be a minimum 1/2" C-D with extrior glue or as indicated on the drawings. Plywood shall be placed in a running bond.
3 Studs in nonbearing walls may be stud grade lumber.
4 Lumber for construction shall be S4S, grade staped, and have a moisture content of less than 19%.
5 Wood subject to moisture exposure shall be presure treated in accordance with applicable AWPB treatment.
6 Install rough carpentry work to comply with "Manual of House Framing" by National Forest Products Association and with recommendtions of American Plywood Association, unless otherwise indicated. For shething, underlayment and other products not covered in above standards, compl with recommended manufacturer of product involved for use intended. Set carpatry work to required levels and lines, with members plumb and true and cut to fit.
7 GluLam material shall be visually grade Southern Pine 24VF3.
8 Metal connector shall be equal those made by te Simpson Company.
9 If altered conditions are proposed review with enjineer prior to proceeding.

DOORS

1 Personell doors shall be solid core wood doors rimed for painting.
2 Hardware for doors shall be of metal not subjet to corrision.
3 Overhead doors shall be wood sectional doors pimed for painting on galvanized steel track. All metal parts shall be epoxy coated.
4 Tracks for overhead doors shall conform to the available space in the building.
5 Provide locking system on all overhead door.

CONCRETE QUALITY SCHEDULE

LOCATION	28 DAY STRENGTH LAB CURED CYLINDERS	28 DAY STRENGTH CORES	MAX. AGGREG. SIZE	CEMENT SACKS/YD	SLUMP ± 1"
BIN WALLS	4450	4000	1"	6	3 1/2
OTHER WALLS	3450	3000	1"	5 1/2	3 1/2
SLABS & FOOTINGS	3450	3000	1"	5 1/2	3 1/2

CEMENT CONTENT MAY VARY PROVIDED CONCRET STRENGTH IS MAINTAINED.

NAILING SCHEDULE

CONNECTION	NAILING
1. Joist to sill or girder, toenail	3-8d
2. Bridging to joist, toenail each side	2-8d
3. 1" x 6" (25 mm x 152 mm) subfloor or less to ach joist, face nail	2-8d
4. Wider than 1" x 6" (25 mm x 152 mm) subfloor o each joist, face nail	3-8d
5. 2" (51 mm) subfloor to joist or girder, blind ad face nail	2-16d
6. Sole plate to joist or blocking, typical face nil Sole plate to joist or blocking, at braced wallpanels	16d at 16" (406 mm) o.c. 3-16d per 16" (406 mm)
7. Top plate to stud, end nail	2-16d
8. Stud to sole plate	4-8d, toenail or 2-16d, end nail
9. Double studs, face nail	16d at 24" (610 mm) o.c.
10. Double top plates, typical face nail Double top plates, lap splice	16d at 16" (406 mm) o.c. 8-16d
11. Blocking between joist or rafters to top plate, toenail	3-8d
12. Rim joist to top plate, toenail	8d at 6" (152 mm) o.c.
13. Top plates, laps and intersections, face nail	2-16d
14. Continuous header, two pieces	16d at 16" (406 mm) o.c. along each edge
15. Ceiling joists to plate, toenail	3-8d
16. Continuous header to stud, toenail	4-8d
17. Ceiling joists, laps over partitions, face nail	3-16d
18. Ceiling joist to parallel rafters, face nail	3-16d
19. Rafter to plate, toenail	3-8d
20. 1" (25 mm) brace to each stud and plate, fac nail	2-8d
21. 1" x 8" (25 mm x 203 mm) sheathing or less tc each bearing, face nail	2-8d
22. Wider than 1" x 8" (25 mm x 203 mm) sheathin or less to each bearing, face nail	3-8d
23. Built-up corner studs	16d at 24" (610 mm) o.c.
24. Built-up girder and beams	20d at 32" (813 mm) o.c. at top and bottom and staggered 2-20d at ends and at each splice
25. 2" (51 mm) planks	2-16d at each bearing
26. Wood structural panels and particleboard[2]: Subfloor, roof and wall sheathing (to framig): (1 inch = 25.4 mm) ½" and less 19/32" - 3/4" 7/8" - 1" 1 1/8" -1 ¼" Combination subfloor-underlayment (to framig): (1" = 25.4 mm) 3/4" and less 7/8" - 1" 1 1/8" - 1 ¼"	 6d[3] 8d[4] or 6d[5] 8d[3] 10d[4] or 8d[5] 6d[5] 8d[5] 10d[4] or 8d[5]
27. Panel siding (to framing): ½" (13 mm) or less 5/8" (16 mm)	 6d[6] 8d[6]
28. Fiberboard sheathing[7]: ½" (13 mm) 25/32" (20 mm)	 No. 11 ga.[8] No. 16 ga.[9] 6d[4] No. 11 ga.[8] 8d[4] No. 16 ga.[9]
29. Interior paneling ¼" (6.4 mm) 3/8" (9.5 mm)	 4-d[10] 6-d[11]

1 Common or box nails may be used except where otherwise stated.
2 Nail spaced at 6 inches (152 mm) on center at edges, 12 inches (305 mm) at intermediate supports except 6 inches (152 mm) at all supports where spans are 48 inches (1219 mm) or more. Nails for wall sheathing may be common, box or casing.
3 Common or deformed shank.
4 Common.
5 Deformed shank.
6 Corrosion-resistant siding or casing nails
7 Fasteners spaced 3 inches (76 mm) on center t exterior edges and 6 inches (152 mm) on centers at intermediate supports.
8 Corriosion-resistant roofing nails with 7/16-inch diameter (11 mm) head and 1 1/2-inch (38 mm) length for 1/2-inch (13 mm) sheathing and 1 3/4-inch (44 mm) length for 25/32-inch (20 mm) sheathing.
9 Corriosion-resistant staples with nominal 7/16-ich (11 mm) crown and 1 1/8-inch (29 mm) length for 1/2-inch (13 mm) sheathing and 1 1/2-inch (38 mm) length for 2532-inch (20 mm) sheathing.
10 Panel supports at 16 inches (406 mm) [20 inche (508 mm) if strength axis in the long direction of the panel, unless otherwise marked.] Casing or finish nails space 6 inches (152 mm) on panel edges, 12 inches (305 mm) at intermediate supports.

Building Code Data

Building Type S2
Construction Type 5 Unprotected
Travel Distance Allowed = 200'
Bldg. Area = 29,768 s.f.
Total Occupants = 10 max.

GENERAL NOTES

1 Work shall be done in accordance with the the latest edition of the "Florida Building Code."
2 Details not shown shall be done similar to related details.
3 If conditions occur different than those shown contact Engineer prior to proceeding.
4 Keep site free of undue hazards during construction.
5 Upon completion of construction clean site of construction debris, trash, and other obstacles detrimental to the owners use of the property.
6 Coordinate trades so that all work runs smooth and that structure is not adversely affected in any manner.
7 After roof is up establish and maintain positive roof drainage.
8 Not used.
9 Waterproof all openings through building exterior.
10 Coordinate with Owner to prevent disruption of building operations.
11 If changes are initiated during construction relative to the building systems contact Engineer for review and approval prior to proceeding.
12 Provide Owner with complete set of Guarantees and Warrantees for all equipment upon completion of construction.
13 Provide Owner with one set of marked as built drawings at completion of work and with data relative to all equipment, systems, and materials used and installed permanently into the construction.
14 Provide Owner with proof of all insurance, (Builders Risk, Liability, Workers Comp.) bonds, and/or financial statements.
15 Use only reliable subcontractors with at least 5 years experience in the type of construction that they will be doing on this project and who are financially sound, and who have a record of cooperation on the work. Submit list of subcontractors to Owner for approval.
16 Review construction progress with Owner at regular intervals (weekly or monthly) to prevent conflicts with proposed building usage dates and in case of delays or departure from construction schedules which will adversely affect Owners schedule use additional labor to make up time.
17 Barricade or secure the site so that after working hours the site does not become an attractive nuisance or hazard to passerby's or allow access to other buildings, appurtenances, or equipment belonging to the owner.
18 Take care during construction to avoid damaging adjacent real or personal property or equipment and repair or replace same if damage does occur.
19 Coordinate with owner relative to location of any and all additional openings for mechanical equipment, floor drains and piping, and electrical equipment, conduit, power, wiring and switches. All work shall be in accordance with Mechanical Codes, Plumbing Codes, and National Electrical Codes and any other applicable ordinances or laws.
20 Take all due care to prevent pollution of air and prevent excessive erosion during construction.
21 Coat all exposed metals with two layers of epoxy paint.
22 Design Loads
Roof Live Load = 20 #/s.f.
Floor Live Load = 100 #/s.f.
For Wind
I = 1.0
Wind Speed = 110 mph
Exposure = B

DOOR SCHEDULE

MK	NO. & SIZE	MTL	FRM	LBL	NOTES (SEE BELOW)
1	1- 13'-0" x 19'-0" OH		AL	---	7
2	1- 13'-0" x 19'-0" OH		AL	---	7
3	1- 12'-0" x 19'-0" OH		AL	---	7
4	1- 12'-0" x 19'-0" OH		AL	---	7
5	1 -3'-0"x7'-0"	SCWOOD	WOOD	---	4,6,7
6	1- 14'-0" x 14'-0" OH		AL	---	7
7	1 - 3'-0"x7'-0"	SCWOOD	WOOD	---	4,6,7
8	1- 14'-0" x 14'-0" OH		AL	---	7
9	1 - 3'-0"x6'-8"	SCWOOD	HM	45 MIN	
10	1 - 3'-0"x6'-8"	SCWOOD	HM	---	
11	1- 14'-0" x 14'-0" OH		AL	---	7
12	1- 14'-0" x 14'-0" OH		AL	---	7
13	1- 14'-0" x 14'-0" OH		AL	---	7
14	1- 14'-0" x 14'-0" OH		AL	---	7
15	1 - 3'-0"x6'-8"	SCWOOD	HM	45 MIN	5,7
16	1 - 3'-0"x6'-8"	SCWOOD	WOOD	---	1,2,4,6,7
17	1 - 3'-0"x6'-8"	SCWOOD	HM	---	4,8
18	1 - 3'-0"x6'-8"	SCWOOD	WOOD	---	4,8
19	1 -12'-0"x12'-"				

THE HEIGHT OF ANY FLOOR LEVEL CHANGE PLUS THE HEIGHT OF ANY APPLIED THRESHOLD AT DOORWAY SILLS, SHALL NOT EXCEED 1/2", AND SHALL BE BEVELED W/ A SLOPE NO GREATER THAN 1 : 2.

NOTES
1= THRESHOLD
2= WEATHER STRIPPING
3= CLOSER
4= 1 1/2 PAIR BUTTS
5= 3 PAIR BUTTS
6= STOPS
7= LOCKSET
8= LATCHSET
9= PANIC HARDWARE
10= HC HARDWARE
11= BUTTON PUNCH LOCKS

SITEWORK

1 Satisfactory soils for fill shall be those meeting the requirements of the Unified Soil Classification types GW, GP, GM, GC, SW, SP, SM, and SC and shall be free of organics, trash, lumps, or stones larger than 2" in size with a PI less than 12.
2 Unsatisfactory soils for fill shall be those meeting the requirements of the Unified Soils Classification types OL, ML, CL, MH, CH, OH, and Pt.
3 Soils and fill to be compacted shall be compacted to 95% of maximum dry density as determined by ASTM D 1557.
4 Soil shall be compacted in 8" lifts, and each lift shall be tested for density by ASTM test D 1556 or approved equal method at a rate of 2 density tests per 5000 square feet. Rate of testing may be reduced by Engineer depending upon performance of construction and uniformity of soils. Test soil at bottom of footings at a rate of 1 test per every other footing. Test backfill soils on trenches at a rate of 1 test per 300 lineal feet of trench per lift of fill.
5 For each soil encountered or used run complete series of tests to determine soil classification and moisture density relations.
6 Lean concrete fill (f'c = 1500psi) may be used at the base of retaining walls, culverts, large diameter pipes and other appurtenances where base compaction will be overly difficult.
7 Strip site of all vegetation and deleterious materials prior to beginning of fill construction.
8 Where existing soil slopes exceed 1 vertical to 3 horizontal scarify existing soil and blend with fill material prior to compaction.
9 Store or waste, waste soil materials as advised by the owner or Engineer.
10 Provide a positive slope of the ground away from the foundation and ditches to carry off the run-off water.
11 Poison soil against termites or other detrimental insects or plants.
12 Soil treatment including stripping, blending, filling, compaction, and poisoning shall extend 5' beyond building lines.
13 Barricade, mark, light, and cover any trenches to be left open when unattended.
14 Foundations are designed to have a bearing capacity of 2000 pounds per square foot.
15 If site soil is excessively weak or clayey, contact Engineer for foundation redesign.
16 After stripping, scarify and compact top 6 inches of soil.

CONCRETE

1 Concrete construction shall meet the requirements of the American Concrete Institute "Building Code requirements for Reinforced Concrete ACI 318," and "Manual of Concrete Practice, Part 1 ACI 305 and ACI 306" latest edition.
2 Cement for concrete shall meet the requirements of ASTM C 150.
3 Aggregates for concrete shall meet the requirements of ASTM C 33.
4 Water for concrete shall be potable water from the city mains.
5 Test concrete for compression with 1 set of 3 cylinders for each 50 cubic yards of concrete placed on a given day. Break 1 cylinder at 7 days and the others at 28 days. Testing will be paid for by owner.
6 Concrete shall have strengths and characteristics as indicated in the Concrete Quality Schedule.
7 Sawed joints must be sawed with 24 hours of placement of the concrete.
8 Reinforcing steel shall meet the requirements of ASTM A615 GR 60 unless otherwise noted.
9 Not used.
10 Provide corner bars in beams to match horizontal reinforcing.
11 Slab reinforcing shall be in top 1/2 of slab or as shown.
12 Vibrate all concrete thoroughly into place.
13 Minimum cover of reinforcement shall be as required by code.
14 Moist cure concrete for 7 days after placing.
15 Provide vapor barrier of Polyethelene under floors.
16 Place control joints in slab to provide maximum slab size of 600 square feet.
17 Concrete temperature shall not exceed 90 degrees F during placement.
18 Concrete shall be placed in a manner to prevent segregation.
19 Concrete shall not be allowed to free fall more than 60".
20 Areas to receive concrete shall be clear of any debris and shall have reinforcing steel properly positioned prior to starting concrete placement.
21 For location of control or construction joints other than those shown verify with Engineer.
22 Reinforce all sidewalks with 6x6-10/10 Welded Wire Fabric.
23 Anchor Bolts shall meet the requirements of ASTM A 307
24 Anchor bolts and dowels shall be set in such a manner that their full embedded length shall be covered with concrete.
25 Lap splices shall be 40 bar diameters or as shown on the drawings
26 Detailing, fabrication, and placement of reinforcement of steel shall conform to current CRSI and ACI specifications.
27 Reinforcing steel shall be free of loose rust, mil scale and coatings that would reduce or destroy bond.
28 Reinforcing bars shall not be reduced in section, kinked or bent other than indicated.
29 Not used.
30 At openings in floor slab with interior corners less than 135 degrees provide 2-#4 x 4'-0" diagonal to corner.
31 Splice continuous top bars at midspan and continuous bottom bars over supports.
32 Support reinforcing steel on chairs.
33 Keep one set of concrete cylinders on site at all time to make samples in case concrete character changes.

NOTE: ALTERNATIVE BIDS SHALL BE PROVIDED FOR THE FOLLOWING ITEMS
WOOD HANDRAILS
FIBERGLASS HANDRAILS (SEE NOTES ELSEWHERE THESE PLANS)
STELL HANDRAILS
ABOVE HANDRAILS SHALL BE APPLICABLE @ ALL LOCATIONS AS REQUIRED BY DEAWINGS, CODES, REGULATORY STATUTES OR MANUFACTURER REQUIREMENTS

FIBERGLASS DECKING (SEE NOTES ELSEWHERE THESE PLANS)
APPLICABLE @ ALL AREAS OF ELEVATED DECKING, INTERIOR AND EXTERIOR

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

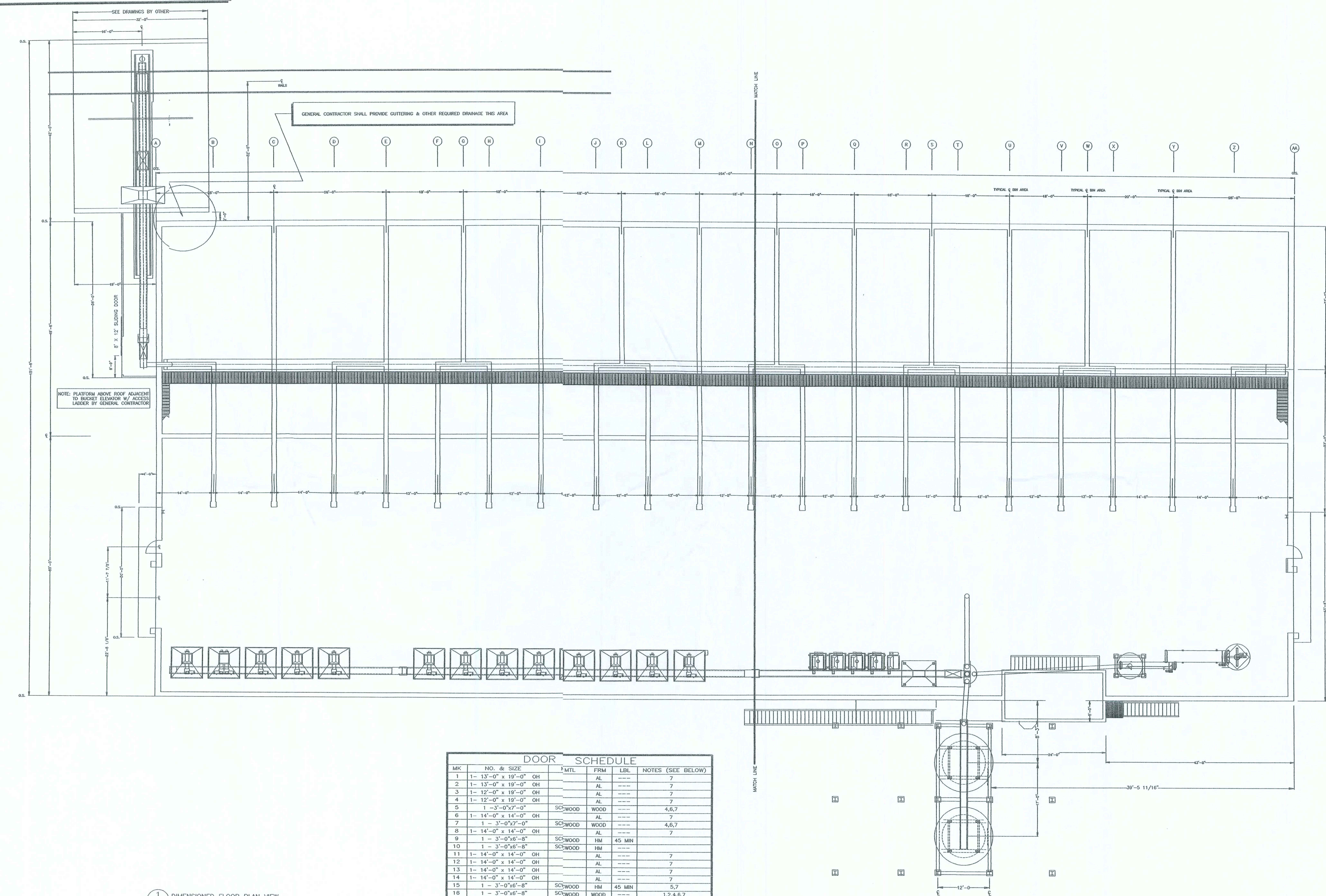
SCHEDULES & REQUIREMENTS
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No. F-MAYO-RA0.1.0.DWG
DRAWN BY:
SHEET No. A01.0
DATE 01/30/06

Curtis Keen
3/6/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATINS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIÆ ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

SCALE NOTE:
PLAN VIEW: 3/32" = 1'-0



1 / A1.0.0 DIMENSIONED FLOOR PLAN VIEW
REDUCED SCALE - SEE SCALE NOTE

DOOR SCHEDULE

MK	NO. & SIZE	MTL	FRM	LBL	NOTES (SEE BELOW)
1	1- 13'-0" x 19'-0" OH		AL	---	7
2	1- 13'-0" x 19'-0" OH		AL	---	7
3	1- 12'-0" x 19'-0" OH		AL	---	7
4	1- 12'-0" x 19'-0" OH		AL	---	7
5	1 -3'-0"x7'-0"	SCWOOD	WOOD	---	4,6,7
6	1- 14'-0" x 14'-0" OH		AL	---	7
7	1 - 3'-0"x7'-0"	SCWOOD	WOOD	---	4,6,7
8	1- 14'-0" x 14'-0" OH		AL	---	7
9	1 - 3'-0"x6'-8"	SCWOOD	HM	45 MIN	
10	1 - 3'-0"x6'-8"	SCWOOD	HM	---	
11	1- 14'-0" x 14'-0" OH		AL	---	7
12	1- 14'-0" x 14'-0" OH		AL	---	7
13	1- 14'-0" x 14'-0" OH		AL	---	7
14	1- 14'-0" x 14'-0" OH		AL	---	7
15	1 - 3'-0"x6'-8"	SCWOOD	HM	45 MIN	5,7
16	1 - 3'-0"x6'-8"	SCWOOD	WOOD	---	1,2,4,6,7
17	1 - 3'-0"x6'-8"	SCWOOD	HM	---	4,8
18	1 - 3'-0"x6'-8"	SCWOOD	WOOD	---	4,8
19	1- 8'-0" x 12'-0" SLIDING		STL		

THE HEIGHT OF ANY FLOOR LEVEL CHANGE PLUS THE HEIGHT OF ANY APPLIED THRESHOLD AT DOORWAY SILLS, SHALL NOT EXCEED 1/2", AND SHALL BE BEVELED W/ A SLOPE NO GREATER THAN 1 : 2.

NOTES
1=THRESHOLD
2=WEATHER STRIPPING
3=CLOSER
4=1 1/2 PAIR BUTTS
5=3 PAIR BUTTS
6=STOPS
7=LOCKSET
8=LATCHSET
9=PANIC HARDWARE
10=HC HARDWARE
11=BUTTON PUNCH LOCKS

Curtis Keen
3/6/06

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

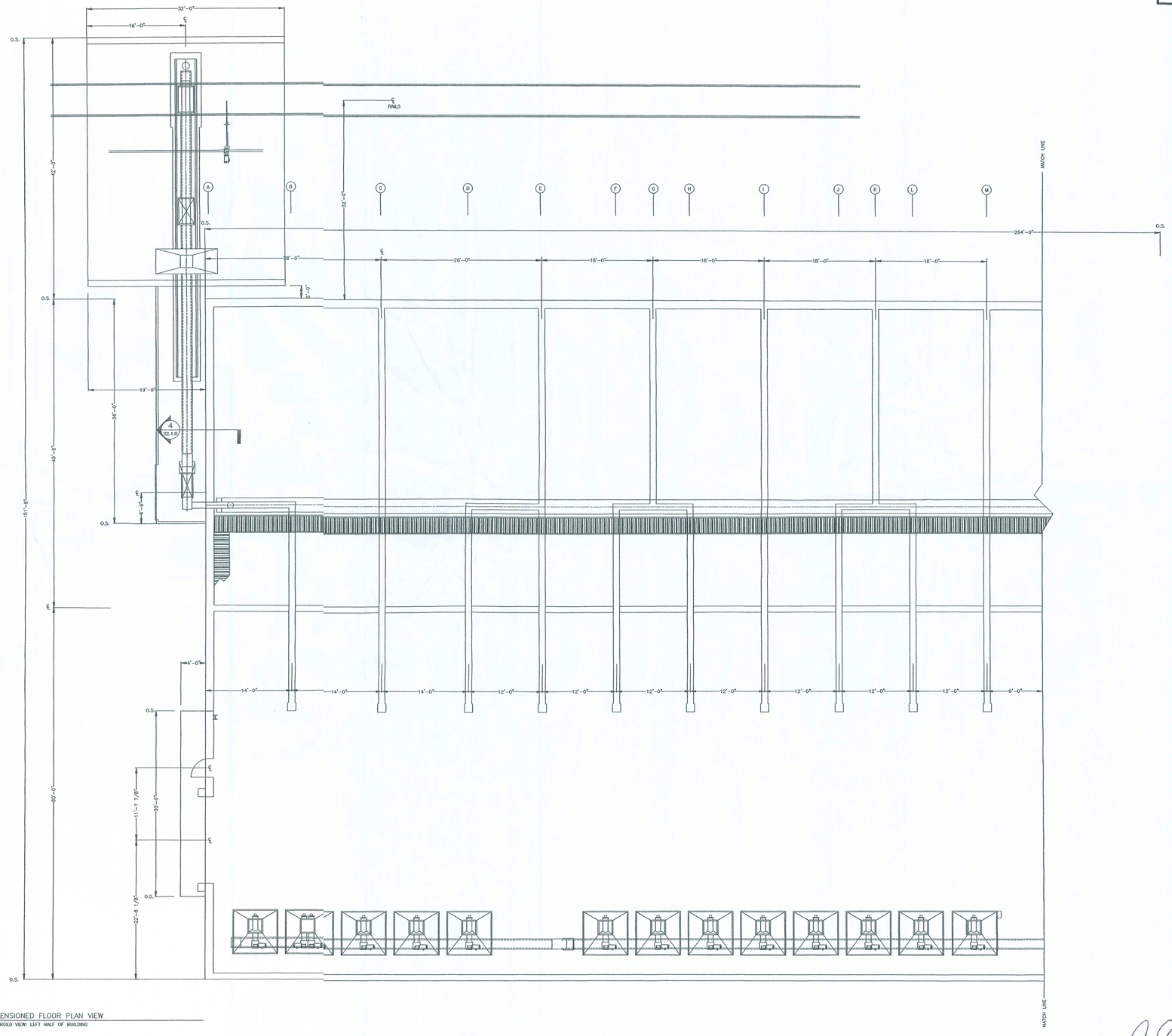
MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

DIMENSIONED FLOOR PLAN VIEW
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No.	DRAWN BY:
F-MAYO-RA1.0.0.DWG	
SHEET No. A1.0.0	DATE 01/30/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATWTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

SCALE NOTE:
PNN VIEW: 1/8" = 1'-0



1 / A1.1.0 DIMENSIONED FLOOR PLAN VIEW
ENLARGED VIEW: LEFT HALF OF BUILDING

Curtis Keen
3/6/06

KEEN ENGINEERING & SURVEYING, INC.
LIVE OAK, FLORIDA 32060
9263 CR 417
386-362-4787
ENG. LIC. EB 3761

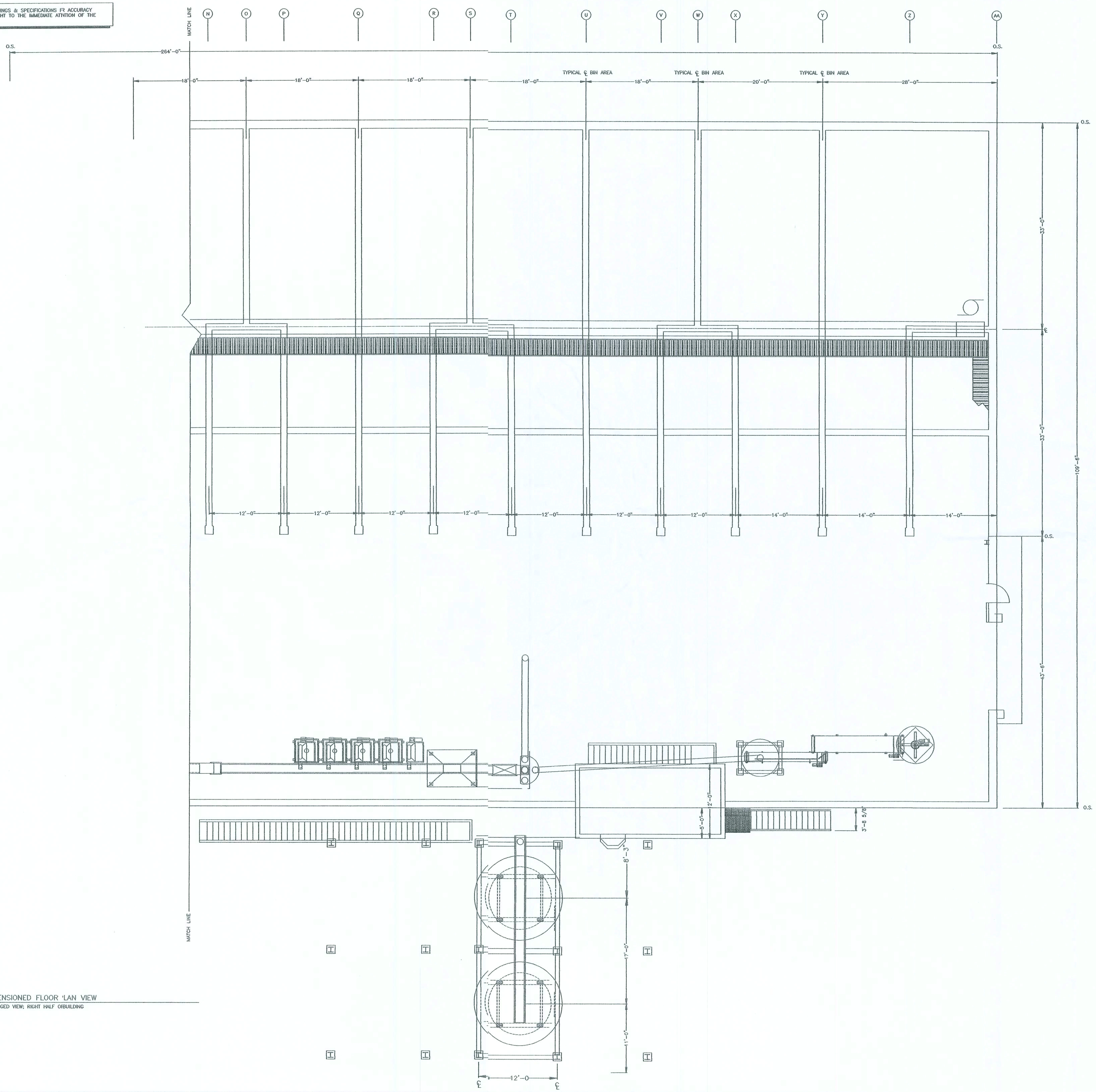
MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

ENLARGED DIMENSIONED FLOOR PLAN VIEW: LEFT HALF OF BUILDING
BASIC NOTES, REFERENCES & INSTALLATIONS

PROJECT No:	DRAWN BY:
F-MAYO-RA1.1.0.DWG	DATE: 01/30/06
SHEET No: A1.1.0	

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTNTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

SCALE NOTE:
PLAN VIEW: 1/8" = 1'-0



1 A1.2.0 DIMENSIONED FLOOR 'LAN VIEW
ENLARGED VIEW; RIGHT HALF OFBUILDING

KEEN ENGINEERING
& SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

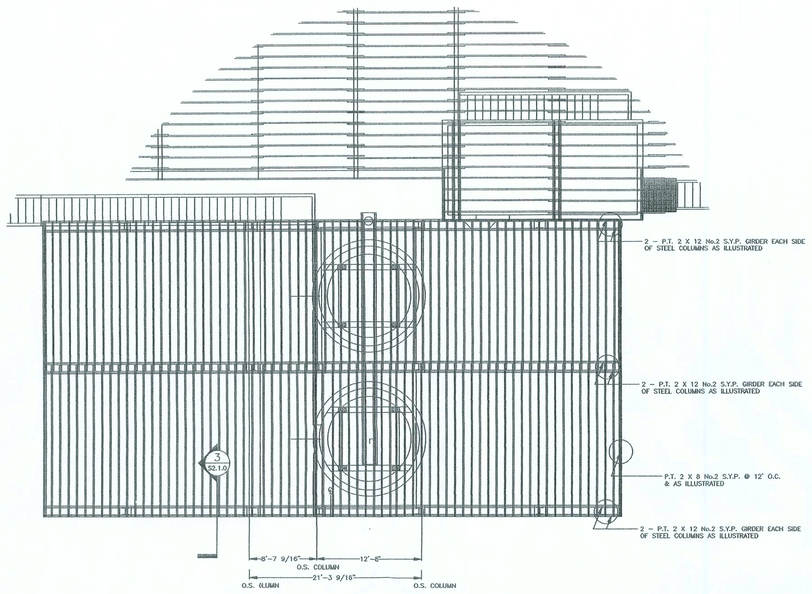
ENLARGED DIMENSIONED FLOOR PLAN VIEW: RIGHT HALF OF BUILDING
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No.	F-MAYO-RA1.2.0.DWG	DRAWN BY:
SHEET No.	A1.2.0	DATE 01/30/06

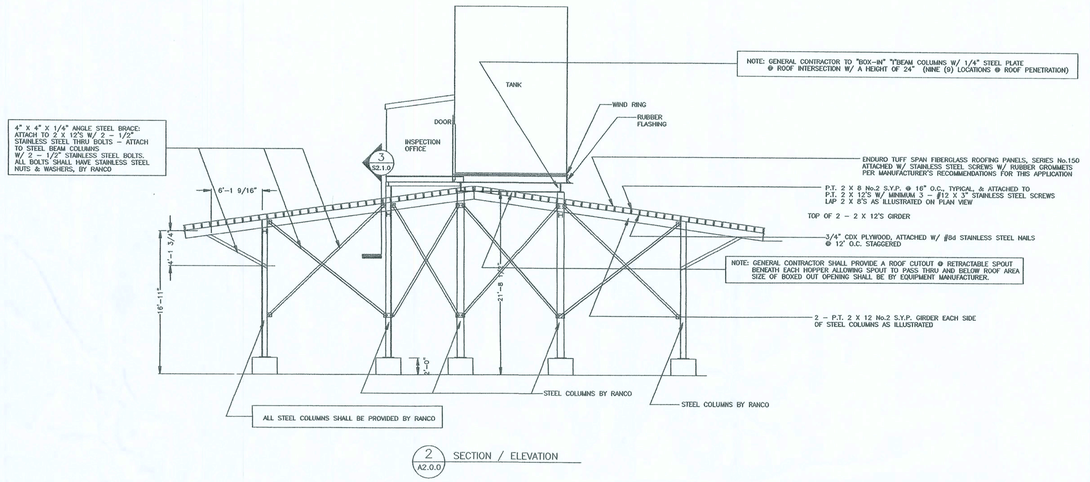
Curtis Keen
3/6/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCUACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION < THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

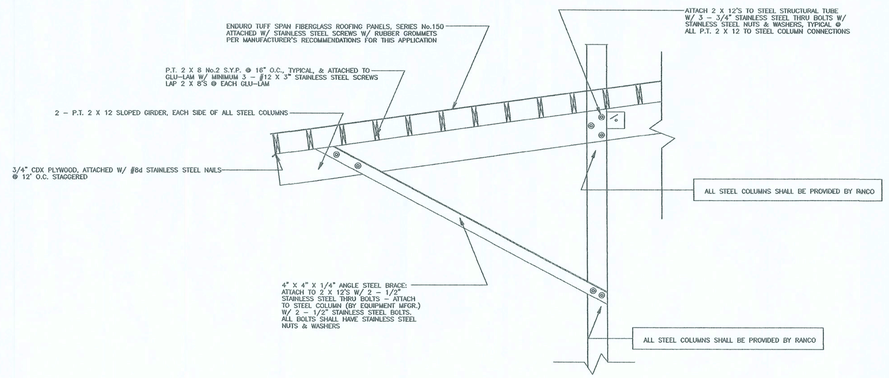
SCALE NOTE:
PLAN VIEW: AS NOTED
DETAILS: AS NOTED



1 A2.10 DIMENSIONED ROOF SYSTEM PLAN VIEW



2 A2.0.0 SECTION / ELEVATION



3 A2.0.0 DETAIL "A"
SCALE: N.T.S.

Curtis Keen
3/6/06

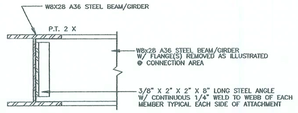
KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4767
ENG. LIC. EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

LOAD OUT BUILDING
REFERENCED SECTIONS & DETAILS
MISC. NOTES, REFERENCES & INSTRUCTIONS

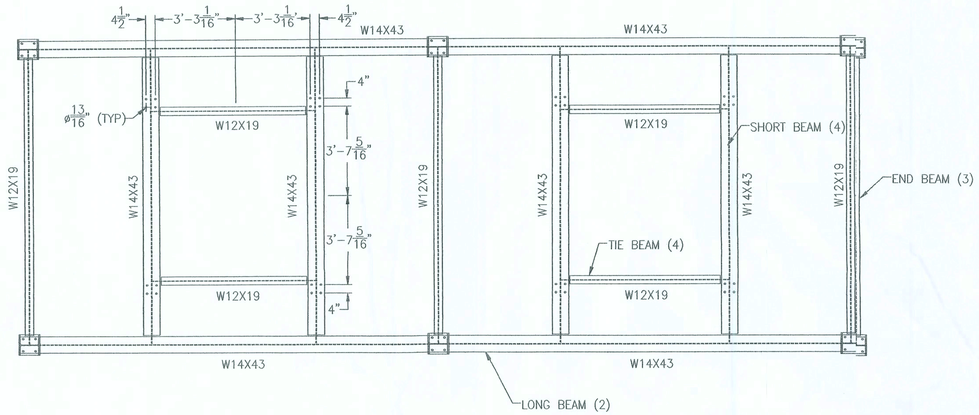
PROJECT No. F-MAYO-4942.0.0.DWG
DRAWN BY:
DATE 01/30/06
SHEET No. A2.0.0

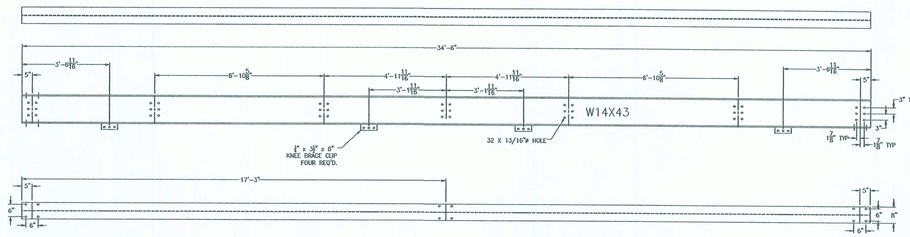
NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.



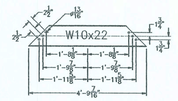
STEEL TO STEEL BENEATH OFFICE WALL

SEE DETAIL 2A & RELATED PLAN VIEWS SHEET A2.3.0 FOR STEEL BENEATH OFFICE WALL ADJACENT TO WINDSHIELD

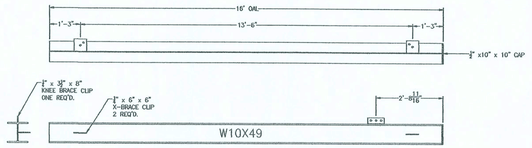




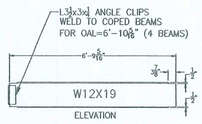
LONG BEAM – (TWO REQ'D.)



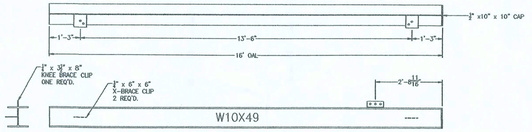
KNEE BRACE – (EIGHT REQ'D.)



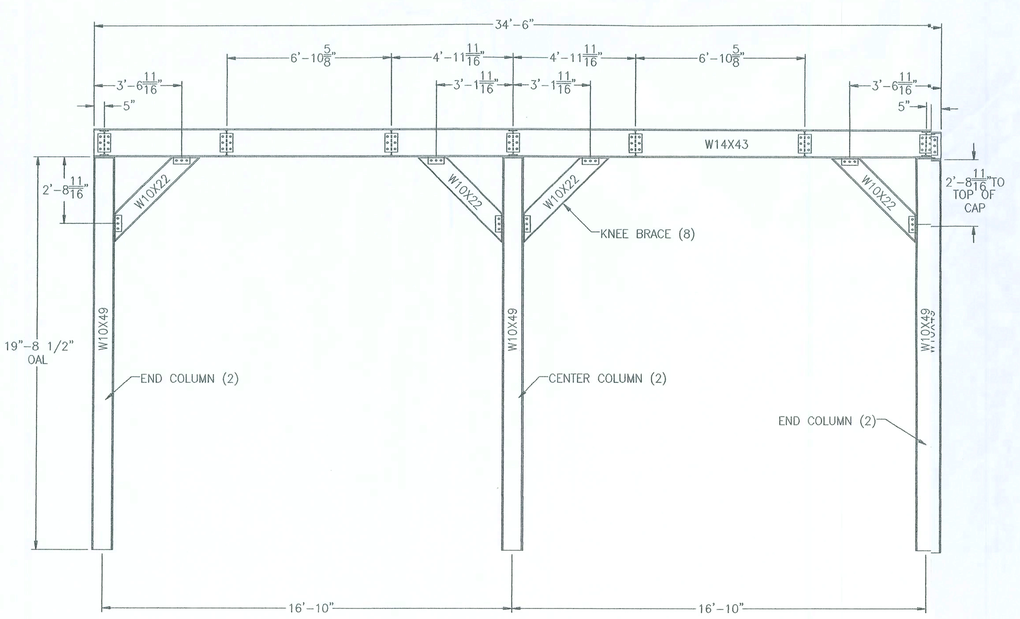
END COLUMNS – (TWO REQ'D.)

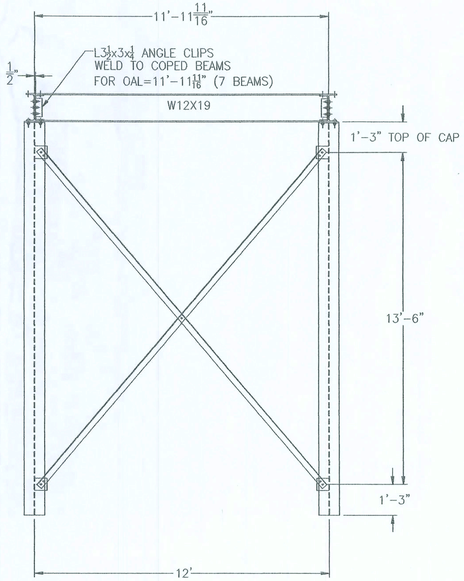


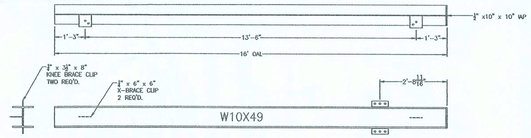
TIE BEAM – (FOUR REQ'D.)



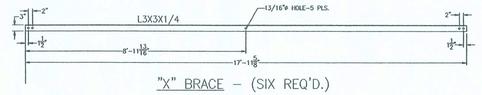
END COLUMNS – (TWO REQ'D.)



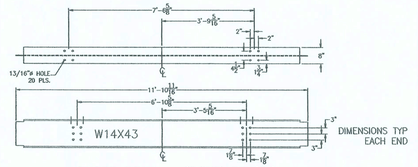




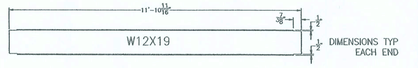
CENTER COLUMNS – (TWO REQ'D.)



"X" BRACE – (SIX REQ'D.)



SHORT BEAM – (FOUR REQ'D.)



END BEAM – (THREE REQ'D.)

SCALE NOTE:
PLAN VIEW: AS NOTED
DETAILS: AS NOTED

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

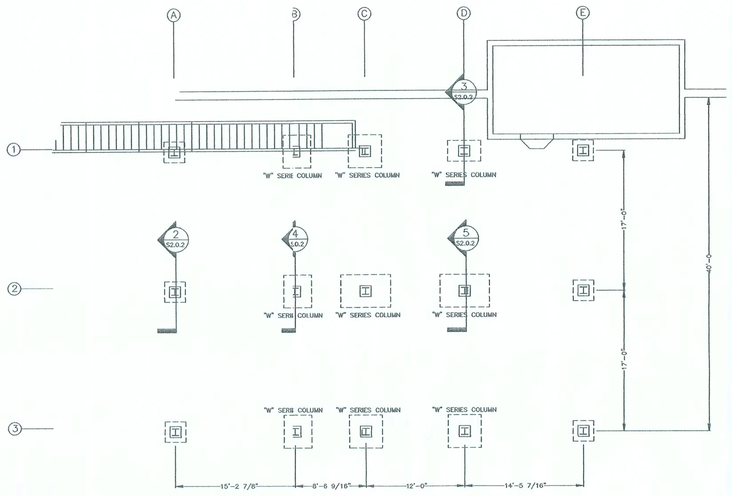
LOAD OUT, BUILDING STEEL REQUIREMENTS
REFERENCED SECTIONS & DETAILS
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No.	DRAWN BY:
F-MAYO-1842.0.1.DWG	DATE 12/18/05
SHEET No. A2.0.1	

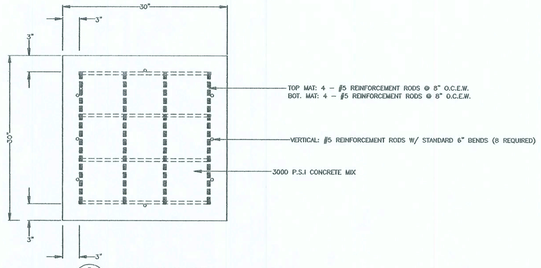
3/6/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCUACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION C THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

SCALE NOTE:
PLAN VIEW: AS NOTED
DETAILS: AS NOTED

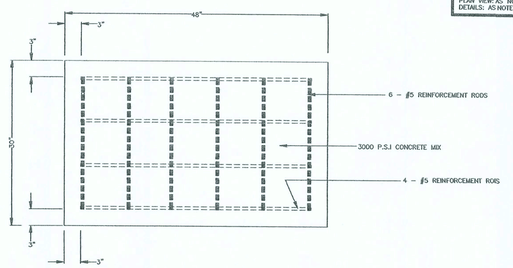


1 A2.0.2 DIMENSIONED FOUNDATION SYSTEM PLAN VIEW
N.T.S.



2 FOOTING PLAN VIEW
N.T.S.

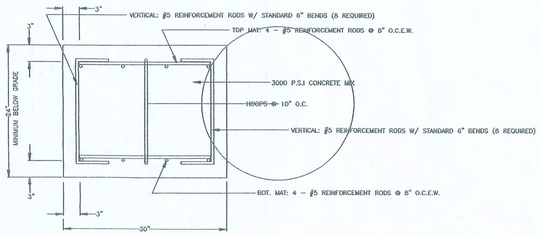
APPLICABLE @ A1,A2,A3,E1,E2 & E3



3 A2.0.2 FOOTING PLAN VIEW
N.T.S.

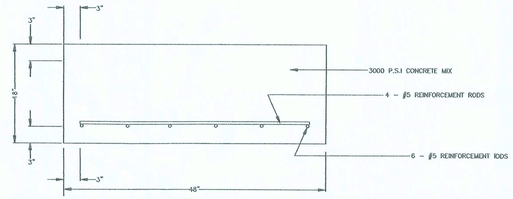
APPLICABLE @ D1

6A A2.0.2 TYPICAL PIER SECTION
N.T.S.



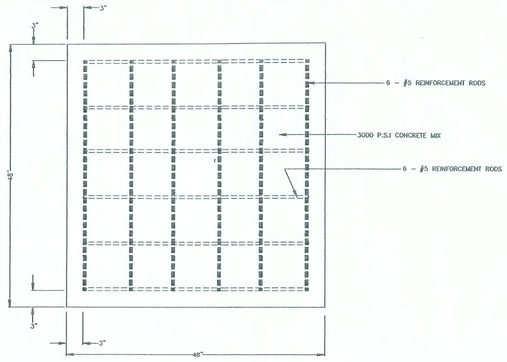
2A A2.0.2 FOOTING SECTION
N.T.S.

APPLICABLE @ A1,A2,A3,E1,E2 & E3

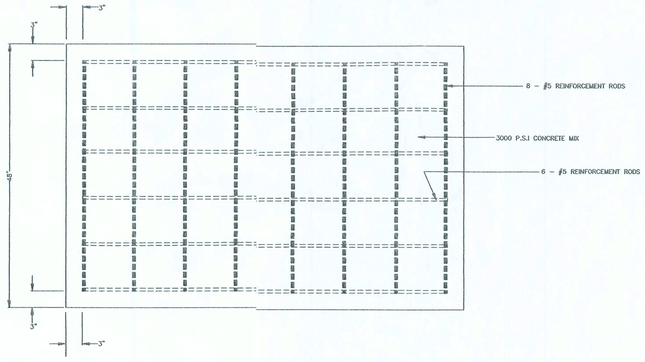


3A A2.0.2 FOOTING SECTION
N.T.S.

APPLICABLE @ D1

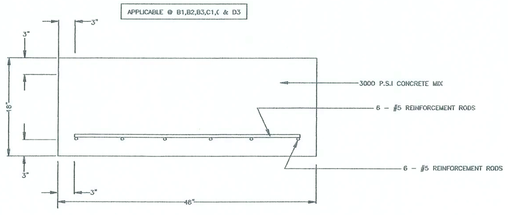


4 A2.0.2 FOOTING PLAN VIEW
N.T.S.



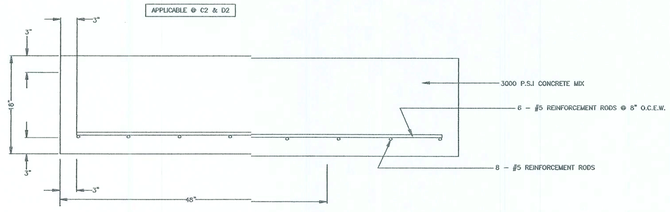
5 A2.0.2 FOOTING PLAN VIEW
N.T.S.

APPLICABLE @ B1,B2,B3,C1,C & D3

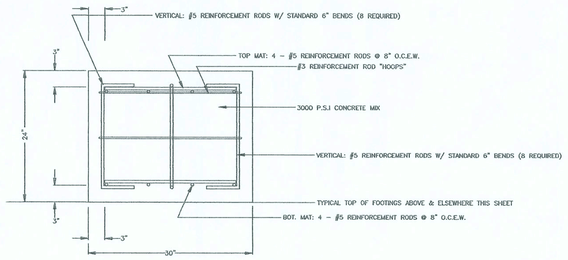


4A A2.0.2 FOOTING SECTION
N.T.S.

APPLICABLE @ C2 & D2



5A A2.0.2 FOOTING SECTION
N.T.S.



6A A2.0.2 TYPICAL PIER SECTION
N.T.S.

APPLICABLE @ ALL FOOTING LOCATIONS
SEE PLAN VIEW ESLEWHERE THIS SHEET

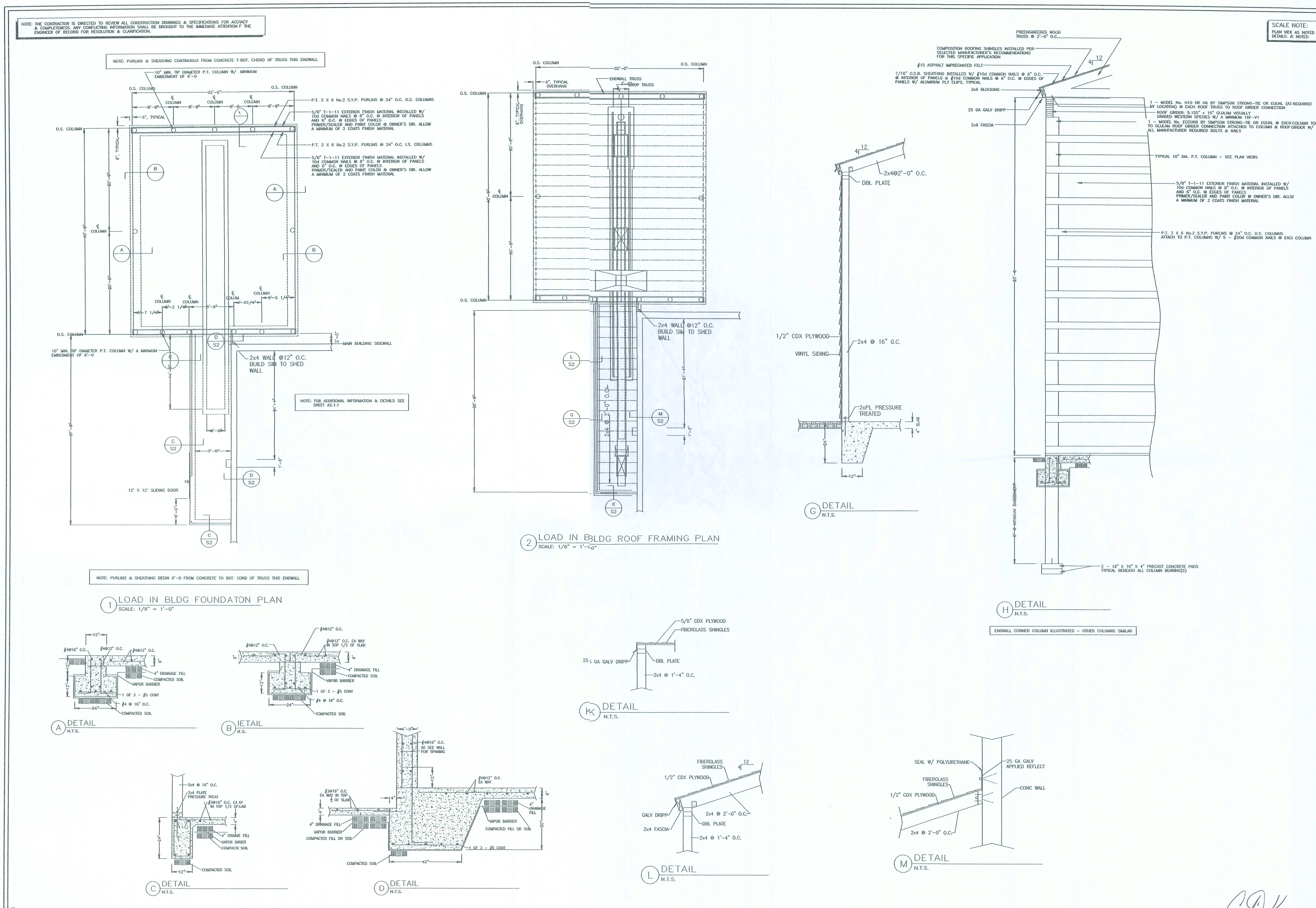
Curtis Keen
3/6/06

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

LOAD OUT BUILDING FOUNDATION PLAN VIEW
REFERENCED SECTIONS & DETAILS
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No. F-MAYO-R&D.0.2.DWG
DRAWN BY:
DATE 01/30/06
SHEET No. A2.0.2



© 2006 KEEN ENGINEERING & SURVEYING, INC.

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

LOAD IN BUILDING: DIMENSIONED FLOOR PLAN VIEW & RELATED ELEMENTS
REFERENCED SECTIONS & DETAILS
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No.	DRAWN BY:
F-MAYO-RA2.1.0.DWG	
SHEET No. A2.1.0	DATE 01/30/06

Curtis Keen
3/6/06

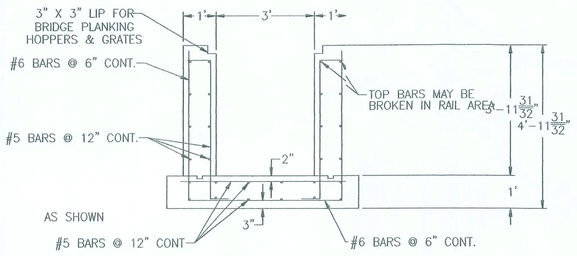
NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

NOTES:
1. ALLOWABLE SOIL BEARING PRESSURE IS 4000 LBS PER SQUARE FOOT.
2. FOUNDATION SHALL BE PLACED ON SOIL WHICH IS NOT SUBJECT TO FROST HEAVING ACTION.
3. IF DESIRED 6 MIL VAPOR BARRIER MAY BE PLACED UNDER ALL SLABS.
4. PLACE 4" GRANULAR SUB-BASE UNDER ALL SLABS
5. ALL FILL MATERIAL SHALL BE OF THE COARSE-GRAINED SOIL CLASSIFICATION
6. SOILS AND FILL TO BE COMPACTED SHALL BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY
7. CONCRETE SHALL DEVELOP A MINIMUM STRENGTH OF 3500 PSI AT 28 DAYS.
8. CONCRETE SHALL BE AIR ENTRAINED (5-7%).
9. ALL REINFORCING STEEL SHALL BE ASTM A 615 OR 60. ALL STEEL TO BE CONNUOUS OR LAP 30 BAR DIAMETERS MIN. UNLESS OTHERWISE SHOWN.
10. VIBRATE ALL CONCRETE THOROUGHLY INTO PLACE. VIBRATION SHALL BE INTERNALLY, DO NOT VIBRATE FORMS.
11. MINIMUM COVER OF REINFORCEMENT SHALL BE AS FOLLOWS:
    CONCRETE CAST AGAINST EARTH 3" MINIMUM
    CONCRETE CAST AGAINST FORMS 2" MINIMUM
12. CONCRETE TEMPERATURE SHALL NOT EXCEED 90 DEGREES F DURING PLACEMEN
13. MOIST CURE CONCRETE FOR 7 DAYS AFTER PLACING.

NOTICE: 1. THESE ARE SUGGESTED REQUIREMENTS ONLY AND ARE NO DESIGNED FOR A PARTICULAR SITE. WHERE SITE CONDITIONS REQUIRE VARIATIONS OR ADDITIONAL REQUIREMENTS, CONSULT PROJECT ENGINEER OR LOCAL CONTRACTOR. IN ADDITION, THE RECOMMENDATIONS CONTAIND IN THIS PRINT ARE SUBJECT TO STATE AND LOCAL CODES AND APPRVAL BY THE LOCAL RAILROAD AUTHORITY. CONFORMANCE TO ALL CODES AND RAILROAD SPECS IS THE SOLE RESPONSIBILITY OF THE LOCAL CONTRACOR.

2. ANY CONTAINMENT AREAS REQUIRED WILL BE DETERMINED BY STATE AND LOCAL CODES, AND ARE THE SOLE RESPONSIBILITY OF THE LOCAL CONTRACTOR.

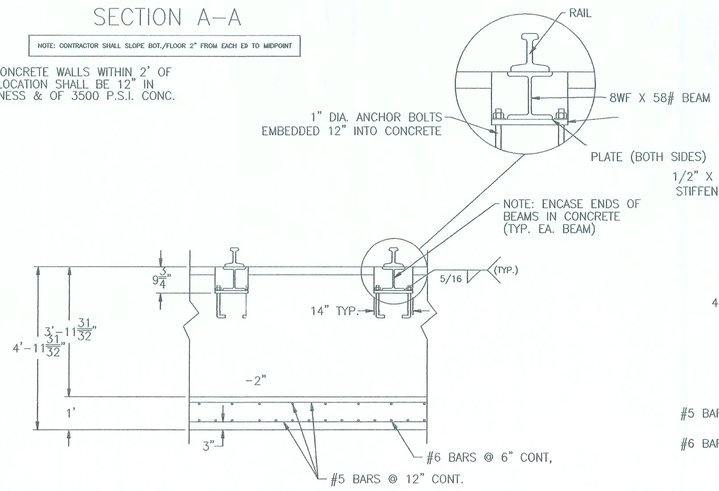
General Notes:
1. Spec.: Design, material and workmanship shall be in acordance with AREMA Chapter 8, Concrete Structures and Foundations and this Chapter 15, steel sructures.
2. Live Load: Cooper E80 with 28% impact.
3. Structural steel shall conform to A.S.T.M., A36
4. Concrete shall be proportioned to provide a minimum 2 days compressive strength of 3500 psi.
5. Reinforcing steel shall be deformed bars conforming to A.S.T.M. A615, Grade 40 or Grade 60.
6. Foundation material shall be adequate to support a load of 2.0 ton per square foot.
7. This drawing is intended as a guide in preparing a construction drawing. If pit is to be constructed under traffic, include plans for supporting the track. If pit is located adjacent to an operating track, include sheeting plans to support the operating track. All plans shall be submitted to the railway's chief engineer for approval.
8. No traffic will be permitted over pit until concrete has eached 2500 psi compressive strength.
9. Pits are to be located on tracks having a maximum sped of 10 mph.
10. Ground water pressure was not considered in the design and provisions must be made for drainage if necessary.
11. Plan must be adjusted to local conditions.
12. construction plans must be submitted to railroad's chiefengineer for approval.



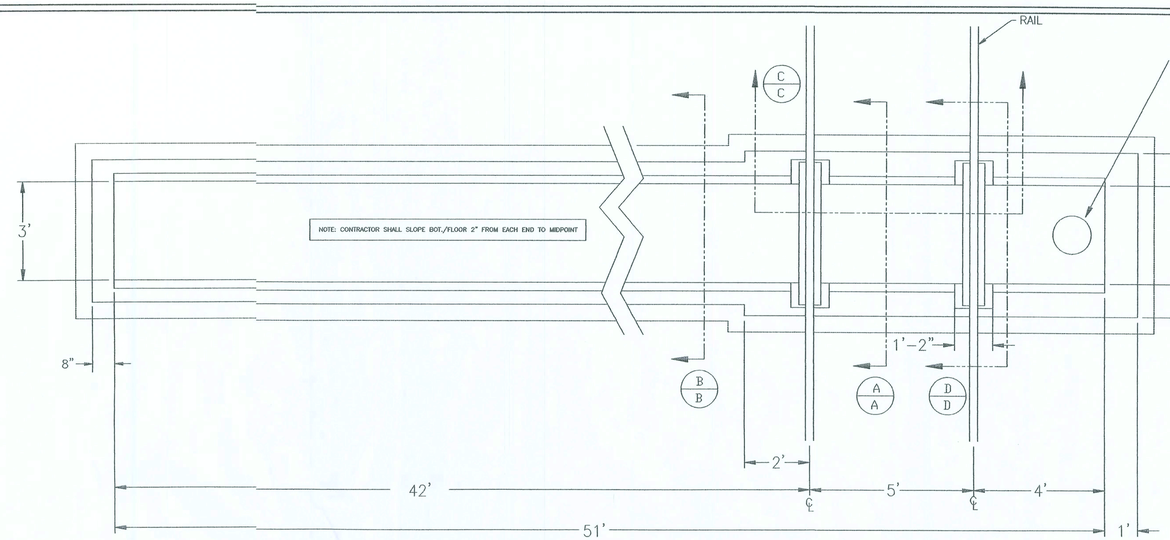
SECTION A-A

NOTE: CONTRACTOR SHALL SLOPE BOT./FLOOR 2" FROM EACH ED TO MIDPOINT

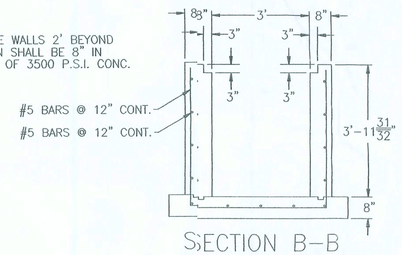
NOTE:
ALL CONCRETE WALLS WITHIN 2' OF RAIL LOCATION SHALL BE 12" IN THICKNESS & OF 3500 P.S.I. CONC.



SECTION C-C



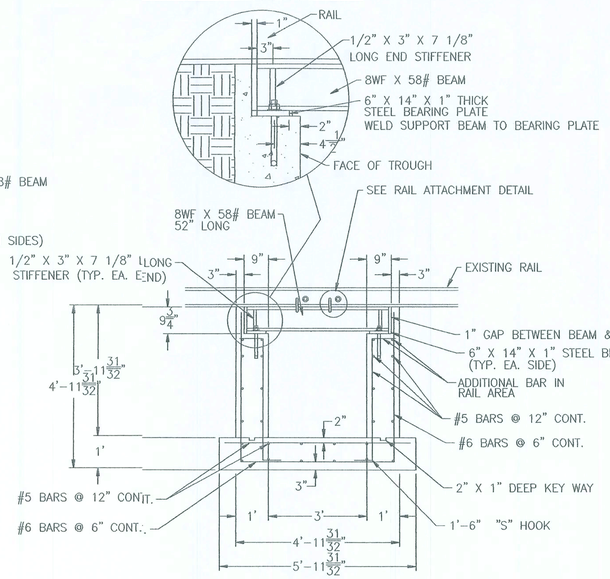
NOTE:
ALL CONCRETE WALLS 2' BEYOND RAIL LOCATION SHALL BE 8" IN THICKNESS & OF 3500 P.S.I. CONC. AS SHOWN



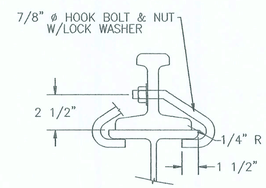
SECTION B-B

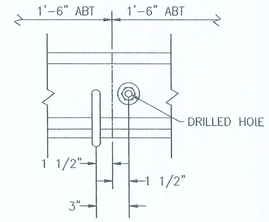
NOTE: COVER PIT OPENING W/ DOUBLE P.T. 2 X 8 No.2 S.Y.P.

NOTE: CONTRACTOR SHALL SLOPE BOT./FLOOR 2" FROM EACH END TO MIDPOINT



SECTION D-D





RAIL ATTACHMENT DETAIL
N.T.S.

Curtis Keen
3/6/06

SCALE NOTE:
PLAN VIEW: 1/8" = 1'-0

KEEN ENGINEERING & SURVEYING, INC.
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761
9263 CR 417

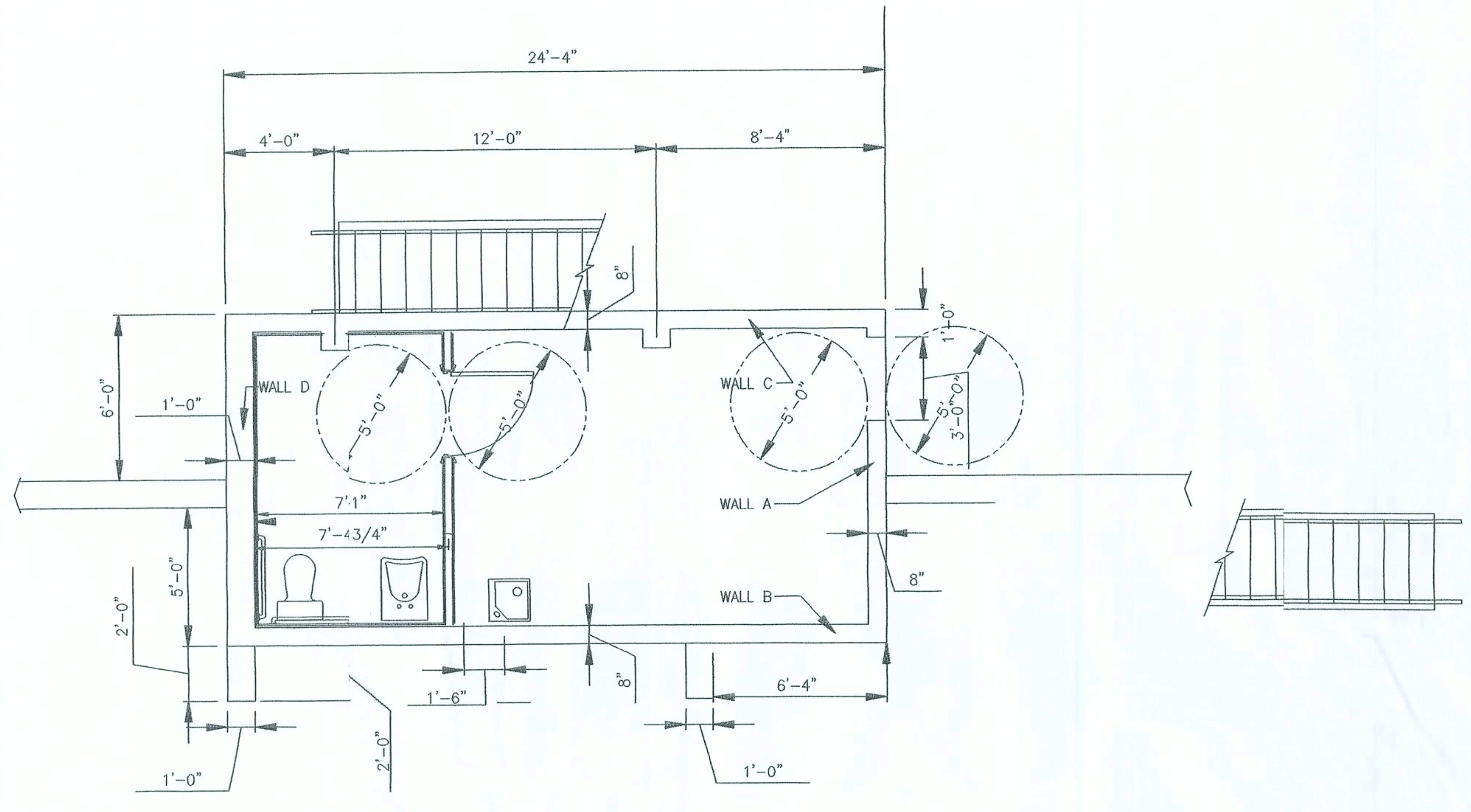
MAYO FERTILIZER
MAYO, FLORIDA

RECEIVING PIT DETAILS & REQUIREMENTS
MISC. NOTES, REFERENCES & INSTRUCTIONS

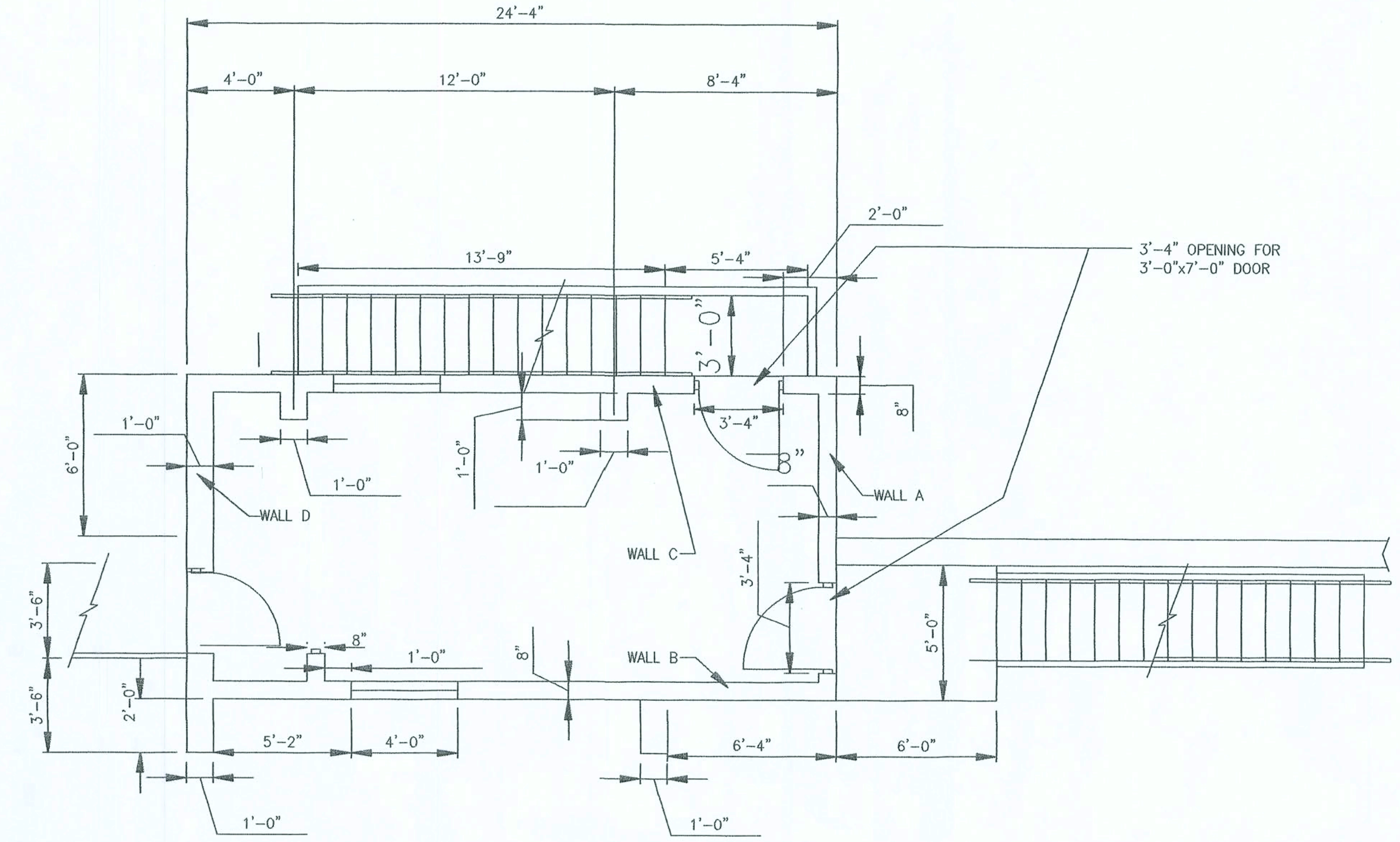
DRAWN BY:	
DATE:	01/30/06
PROJECT No.:	F-MAYO-42.1.1.DWG
SHEET No.:	A2.1.1

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

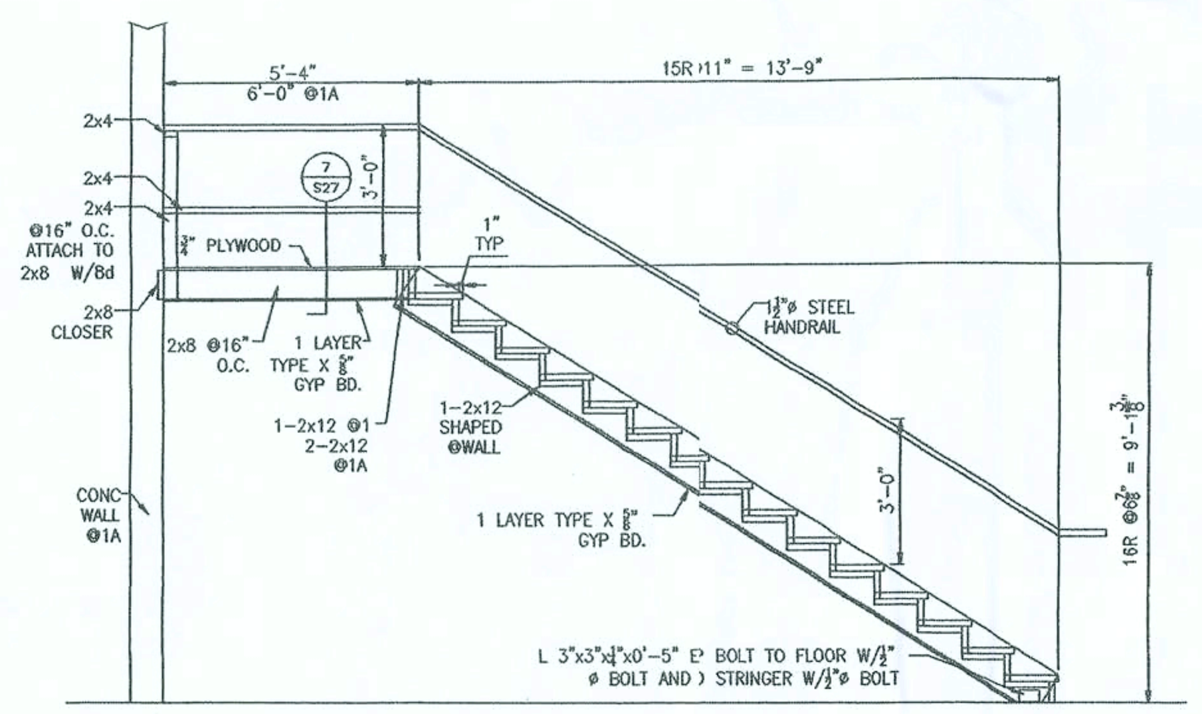
SCALE NOTE:
PLAN VIEW: AS NOTED
DETAILS: AS NOTED



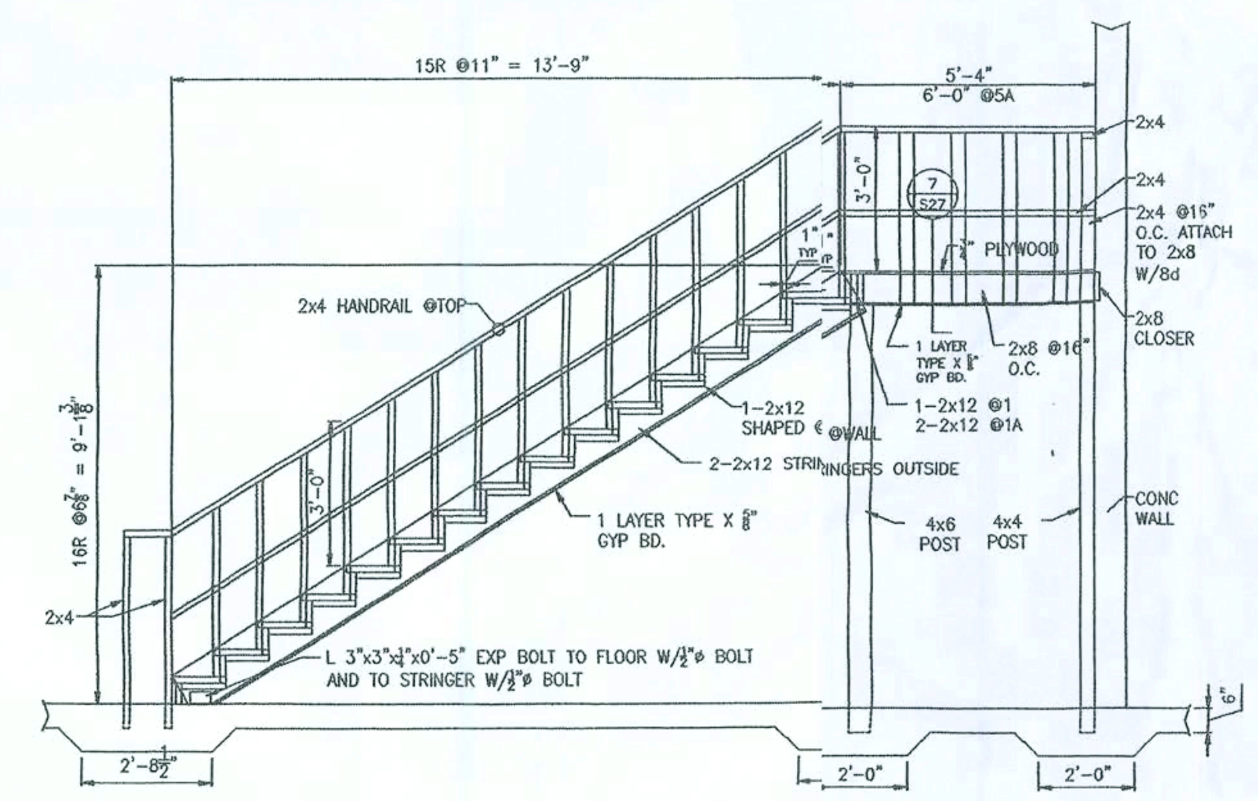
1 A2.2.0 OFFICE/CONTRC. AREA 1ST LEVEL PLAN VIEW



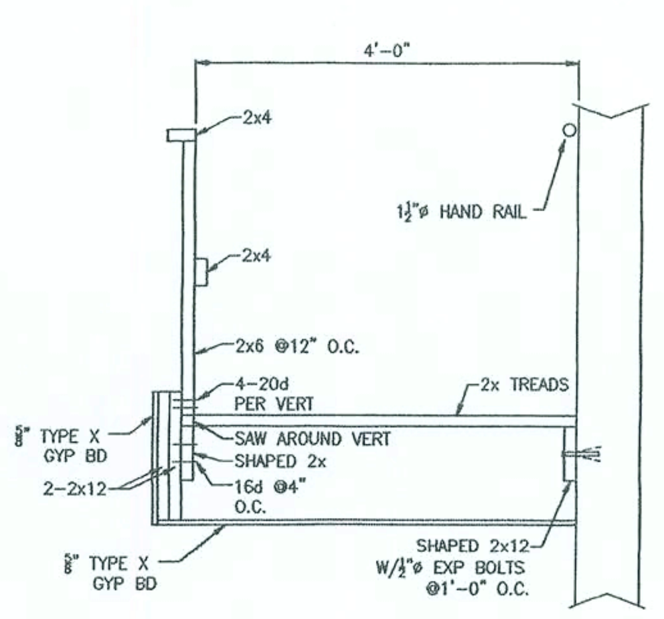
2 A2.2.0 OFFICE/CONTROL AREA 2ND LEVEL PLAN VIEW



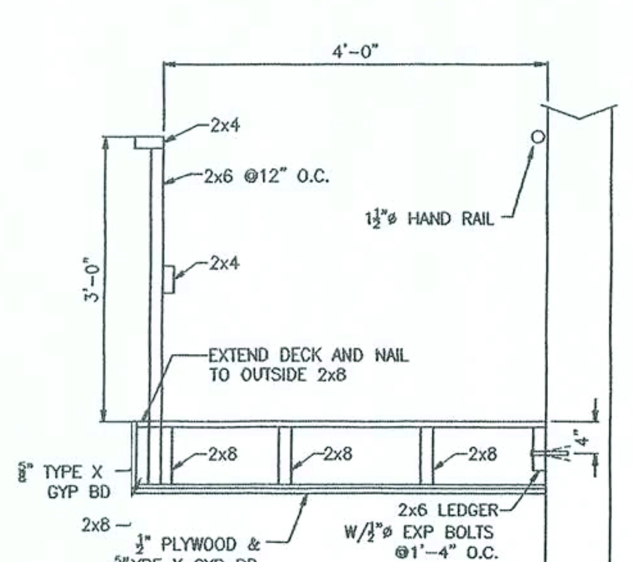
1A STAIR DETAIL
N.T.S.



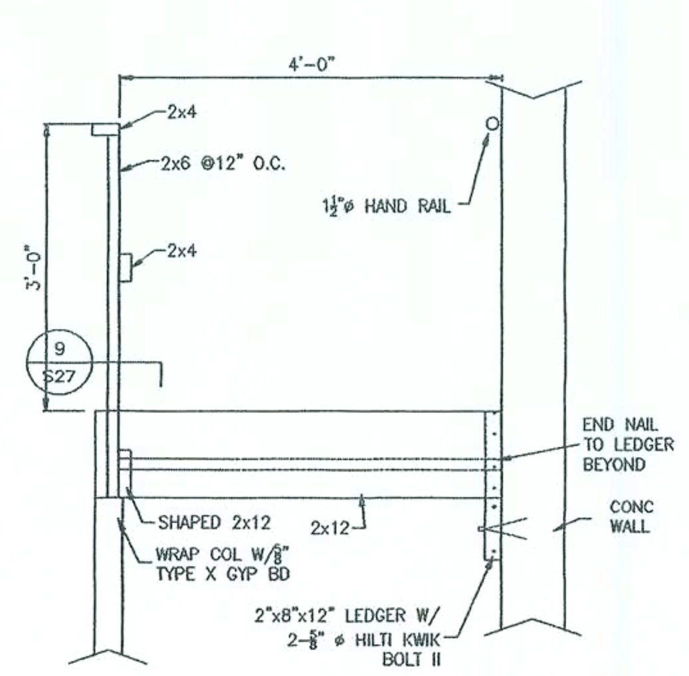
5 STAIR DETAIL
N.T.S.



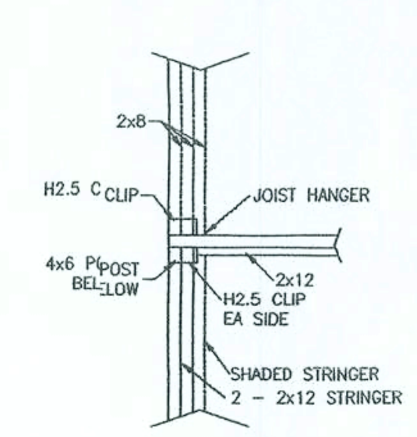
6 DETAIL
3/4"=1'-0"



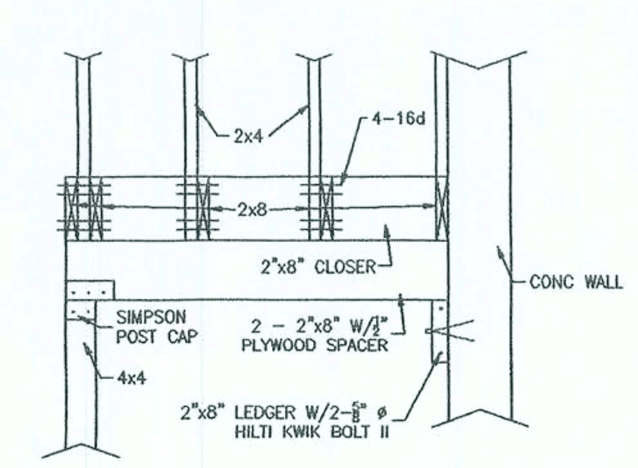
7 DETAIL
3/4"=1'-0"



8 DETAIL
3/4"=1'-0"



9 DETAIL
3/4"=1'-0"



10 DETAIL
3/4"=1'-0"

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

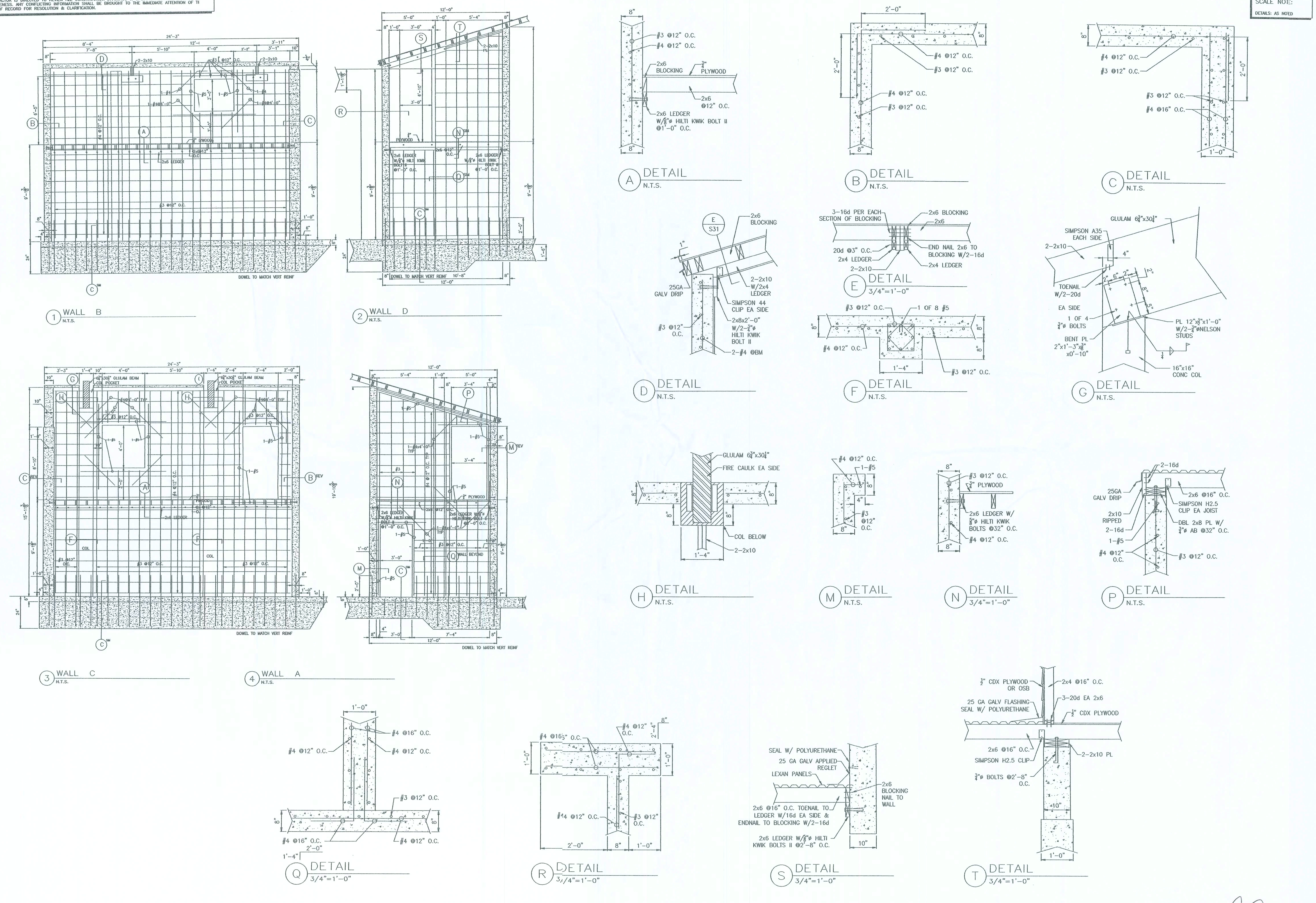
CONTROL OFFICE: DIMENSIONED FLOOR PLAN VIEW & RELATED ELEMENTS
REFERENCED SECTIONS & DETAILS
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No.	DRAWN BY:
F-MAYO-RA2.2.0.DWG	
SHEET No.	DATE
A2.2.0	12/18/05

Curtis Keen
3/6/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

SCALE NOTE:
DETAILS: AS NOTED



KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

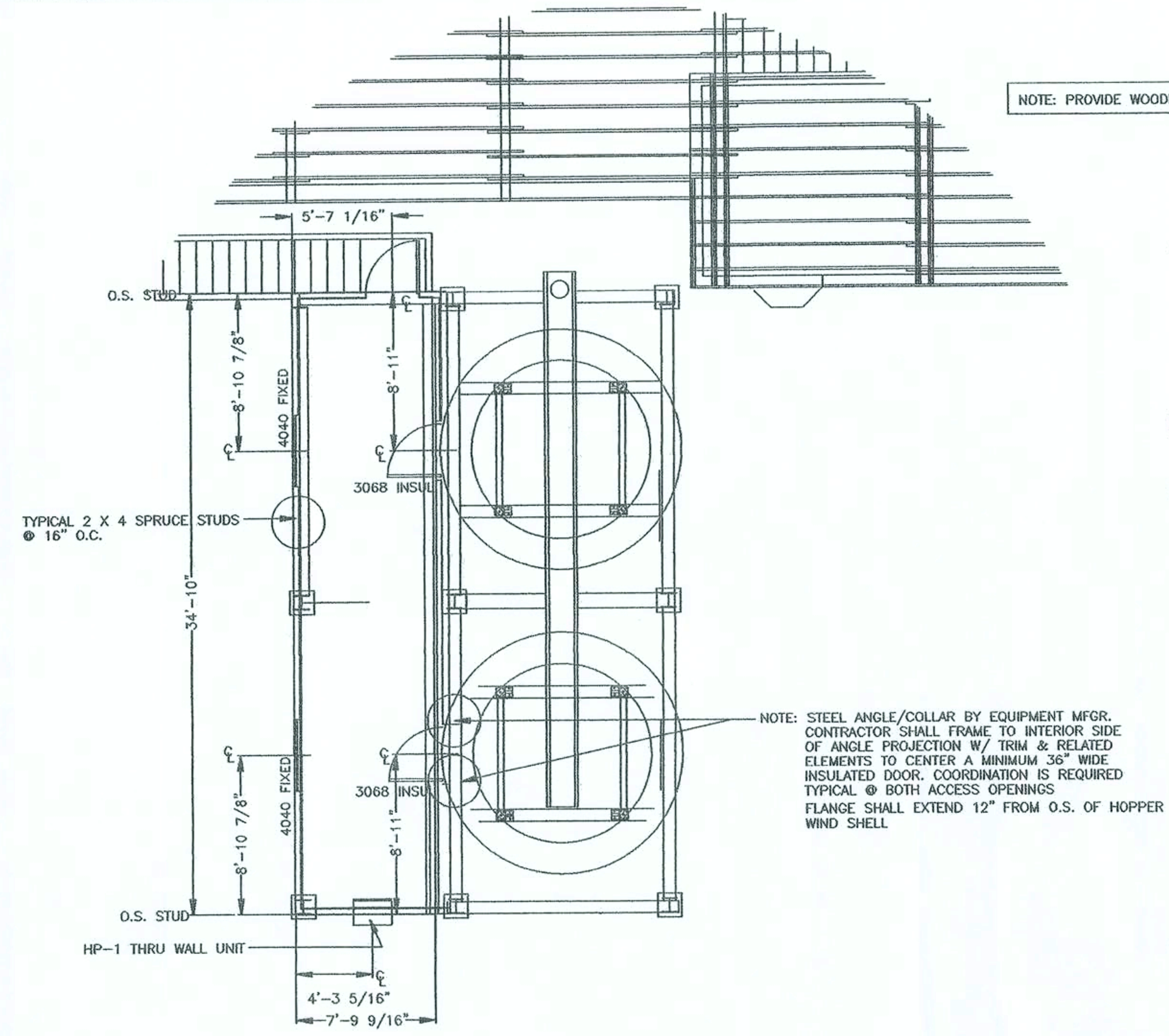
CONTROL OFFICE: RELATED ELEMENTS
REFERENCED SECTIONS & DETAILS
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No.	DRAWN BY:
F-MAYO-RA2.2.1.DWG	
SHEET No. A2.2.1	DATE 12/18/05

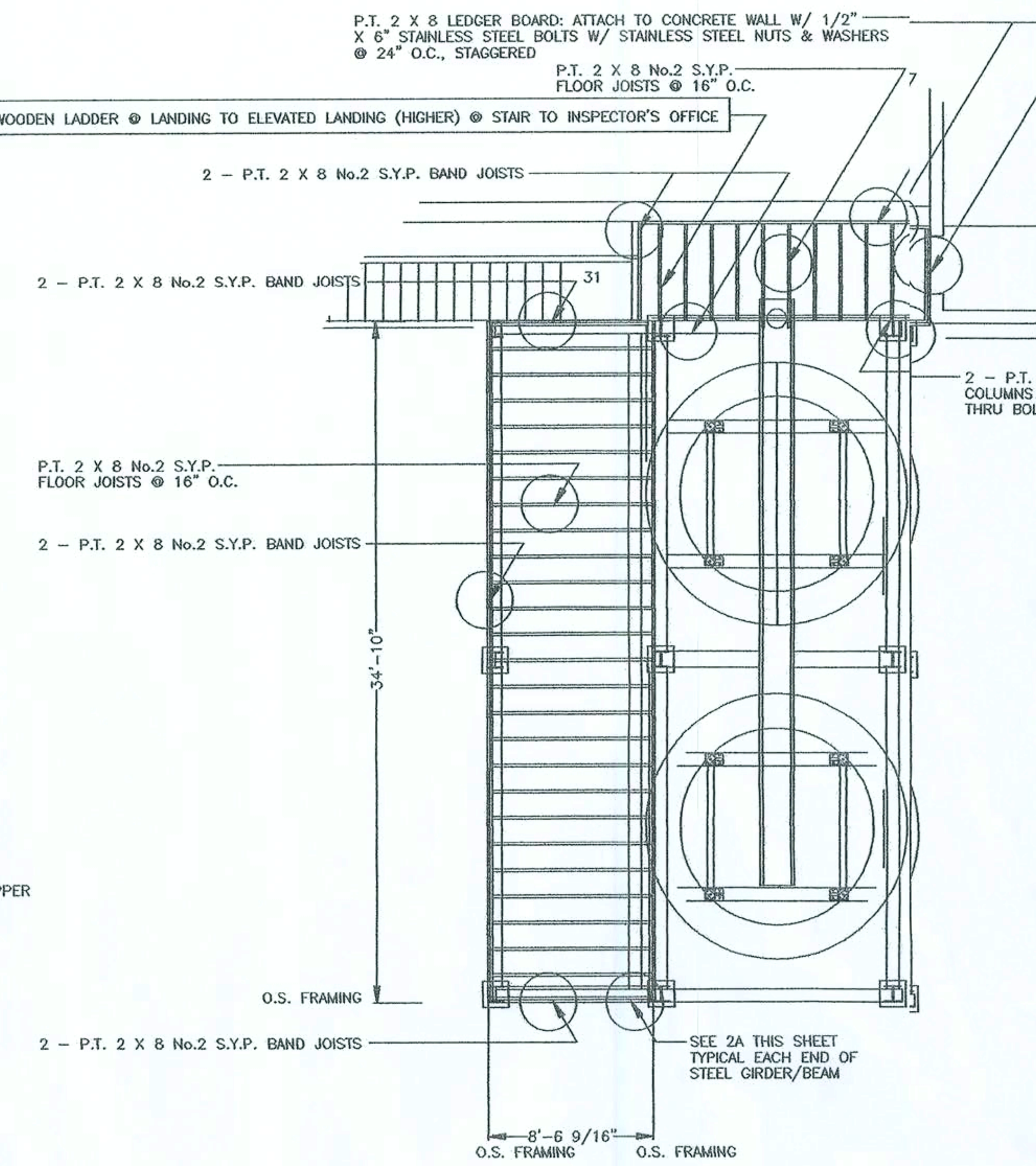
Curtis Keen
3/6/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURAC' & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF TE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

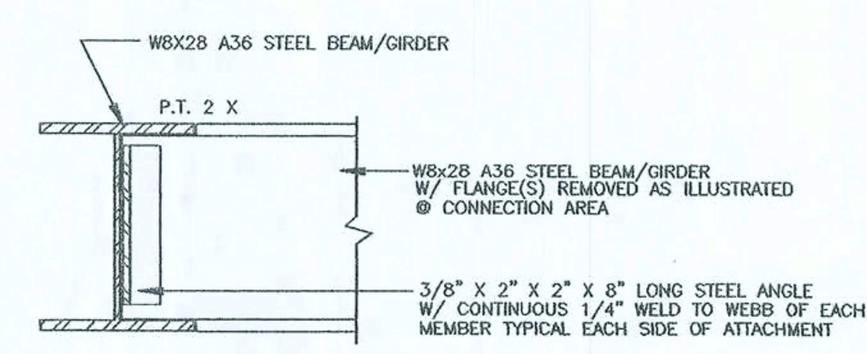
SCALE NO'E:



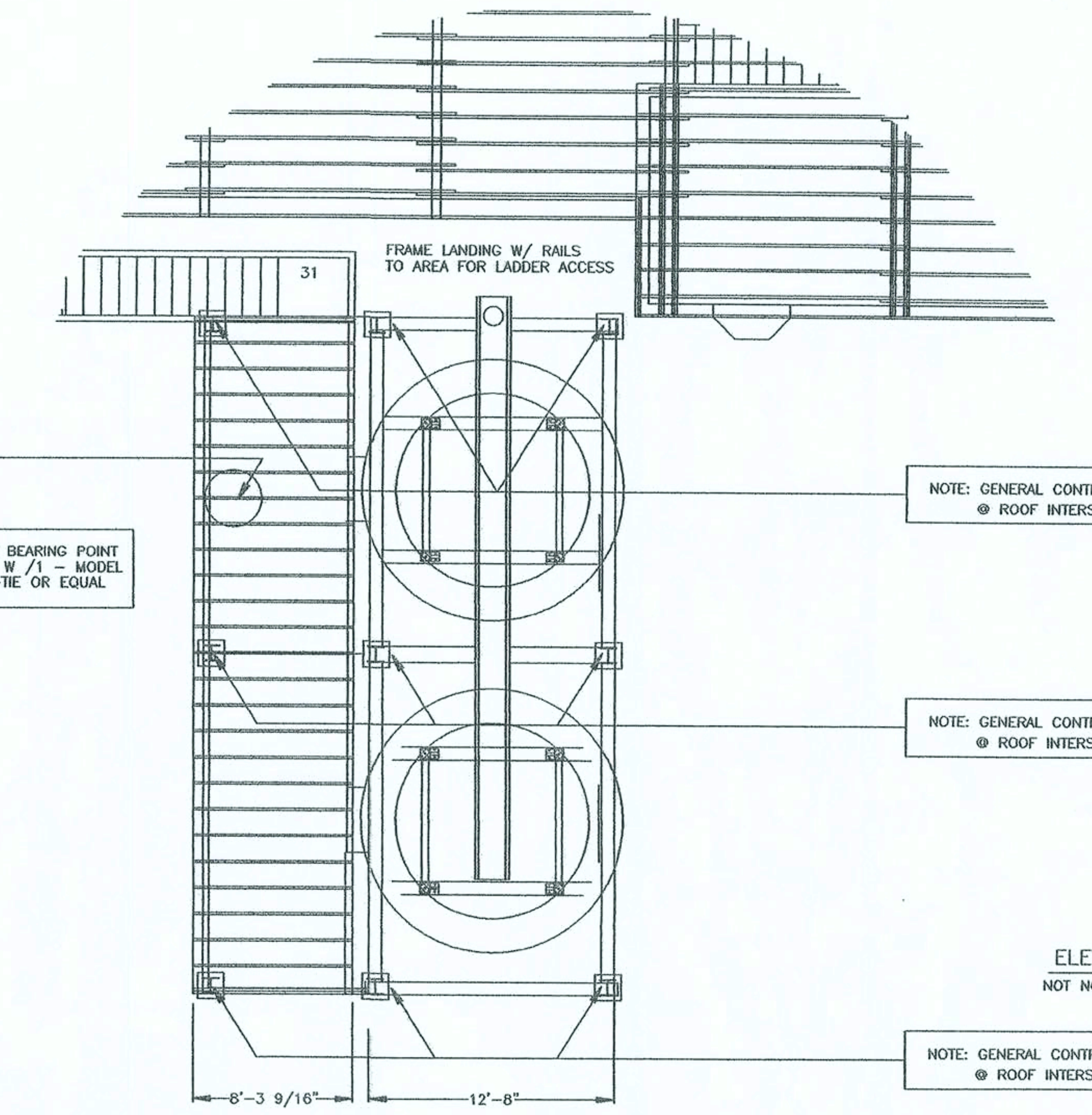
1 A2.3.0 DIMENSIONED PLAN VIEW



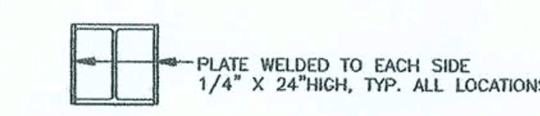
2 A2.3.0 DIMENSIONED FLOOR SYSTEM PLAN VIEW



2A A2.3.0 STEEL TO STEEL BENEATH OFFICE WALL

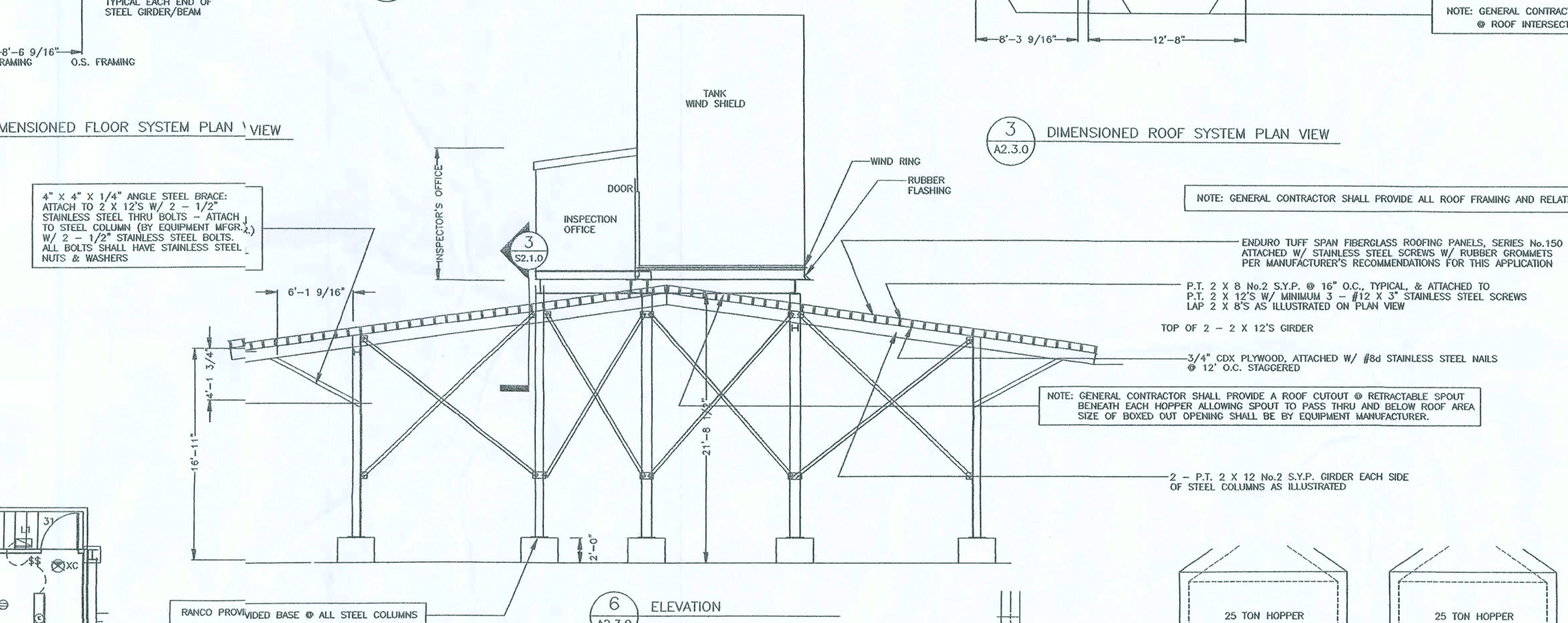


3 A2.3.0 DIMENSIONED ROOF SYSTEM PLAN VIEW



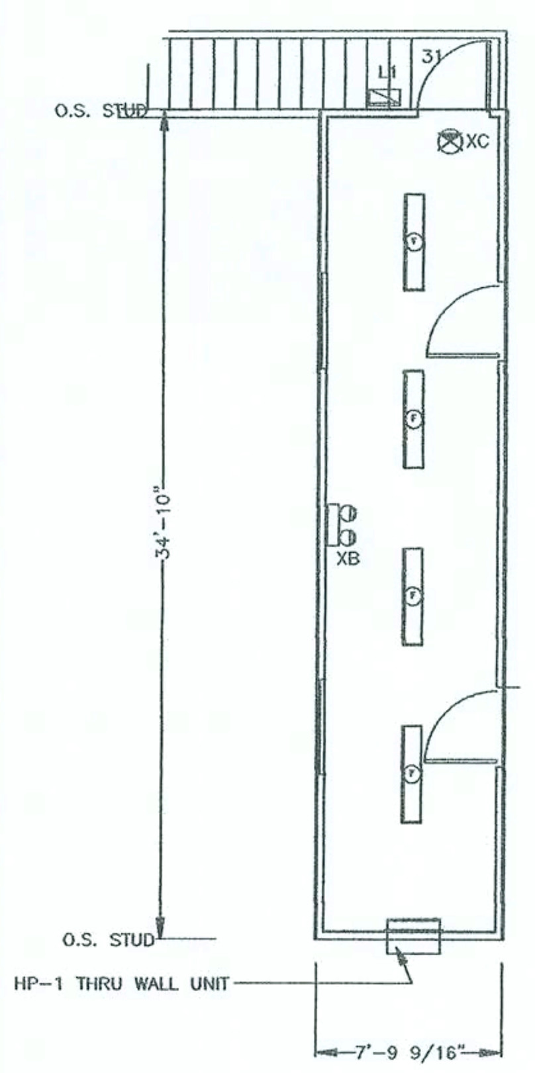
ELEVATION @ TOP STEEL
NOT NOTED OR SHOWN ON ALL SHEETS

NOTE: GENERAL CONTRACTOR SHALL PROVIDE ALL ROOF FRAMING AND RELATED ELEMENTS FOR LOAD-OUT AREA



6 A2.3.0 ELEVATION

NOTE: ALL STEEL COLUMNS TO BE PROVIDED BY RANCO



4 A2.3.0 LIGHTING PLAN VIEW

ELECTRICAI FIXTURE SYMBOLS

Symbol	Description
▭	FLUORESCEI STRIP FIXTURE, SURFACE MOUNTED
	EXIT SIGNAC - CEILING MOUNTED, SINGLE OR DOUBLE FACED DARKENED UADRANT INDICATES FACE, ARROWS AS INDICATED
	DUPLEX REEPTACLE, WALL MOUNTED 18" A.F.F. UNLESS OTHERWISE NOTED
WP	DUPLEX REEPTACLE, WALL MOUNTED 18" A.F.F. WEATHERPROOF BOX / CONNECTION
GFI	DUPLEX REEPTACLE W/ GROUND FAULT CIRCUIT INTERRUPTER, WALL MOUNTED
	220 RECEPACLE / CONNECTION - SEE PLANS
$	SINGLE POL TOGGLE SWITCH MOUNTED @ 48" A.F.F.
	SURFACE MUNTED 120/240V PANELBOARD, TOP @ 6'-6" A.F.F.
J	JUNCTION EX
D	DISCONNECTSWITCH: SIZE AS NOTED
	TELEPHONE)UTLET WALL MOUNTED 18" A.F.F. EXTEND 1" C. TO TELEPHONE BACKBOARD LOCATE ADIIONAL @ OWNERS DIRECTION - USE CAT. 5 WIRE
	TELEPHONE IATA OUTLET, WALL MOUNTED 18" A.F.F. UNLESS OTHERWISE INDICATD LOCATE ADIIONAL @ OWNERS DIRECTION - USE CAT 5 WIRE

NOTES:

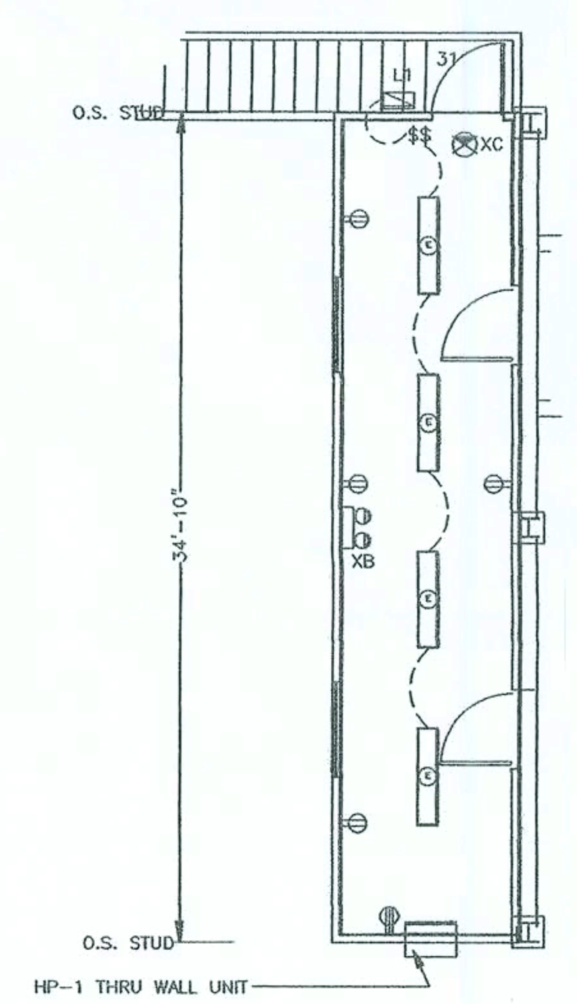
CONTRACTOR SHALL VERIF ALL MODEL NUMBERS AND PROVIDE ALL OPTIONS LISTED IN DESCREIPTIONS AND ANY OTHER HARDWAI REQUIRED FOR PROPER INSTALLATION OF ALL FIXTURES

ALL WORK SHALL BE IN IIT OR NMT CONDUIT

ALL WORK SHALL BE IN ILL COMPLIANCE W/ THE LATEST EDITION OF THE N.E.C.

LIGHTING FIXTIRE SCHEDULE

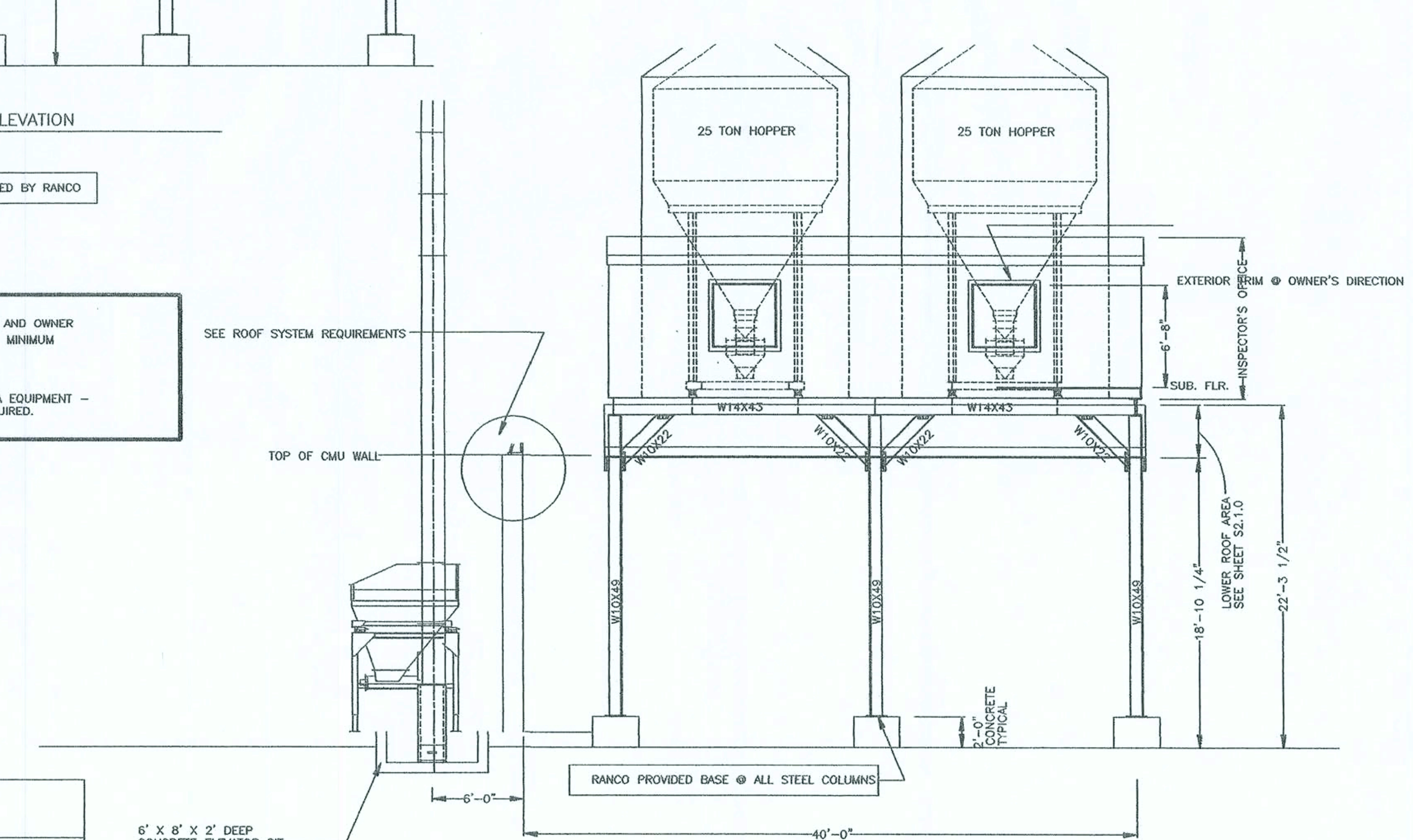
Type	Description
F	1' X 4' SURFACE MOUNTI FLUORESCENT W/ HIGH IMPACT CLEAR ACRYLIC DIFFUSER ALUMINUM HOUSING W/ WITE FINISH LAMPS: 2- 40W T12 48") INSTALLATION: SURFAC MOUNTED MANUFACTURER: LITHCIA MODEL No. DMS 2 40 120 ES AL VOLTAGE: 120 V.
N	ADDITIONAL DESIGNATIONSNDICATE NITE LIGHT
L1	WALL PACK II , WET LOCAION, FLUORSCENT, FULLY GASKETED & ENCLOSED W/ CAST ALUMINUN HOUSINGLOW VOLTAGE, ELECTRONIC BALLAST, INTERNALLY FUSED LAMPS: 1-LAMP INSTALLATION: SURFAC MOUNTED ABOVE "NITE DROP" ON SIDE WALL MANUFACTURER: HOLCHANE MODEL No. WL2K-26-Q-FL-XXBZ VOLTAGE: 120 V. WATTAGE: 26W.
XB	SELF CONTAINED EMERGEKY BATTERY PACK WITH TWO LIGHTING HEADS, TEST SWITCH AND WHITE NISH LAMPS: LED LAMPS (ROVIDED) INSTALLATION: WALL MUNTED 12" BELOW CEILING MANUFACTURER: SURETES AA1 VOLTAGE: 120 V. WATTAGE: 25 W.
XC	SELF CONTAINED EMERGEKY LED EXIT SIGN WITH CAST ALUMINUM HOUSING, RED LETTERS, SINGLE STECIL FACE, CAPABLE OF 90 MINUITES OPERATION ON BATTERY. PROVIDE WII ARROWS AS INDICATED ON PLAN VIEWS. LAMPS: LED LAMPS (ROVIDED) INSTALLATION: CEILINGMOUNTED MANUFACTURER: SURELITE CAX717000R-ARROWS AS INDICATED VOLTAGE: 120 V. WATTAGE: 5W
XCD	SAME AS TYPE "XC" EXCEIT DOUBLE FACED
XW	SAME AS TYPE "XC" EXCEIT WALL MOUNTED



5 A2.3.0 ELECTRICAL PLAN VIEW

NOTE: CONTRACTOR SHALL VERIFY ALL LUMENS & F.C. REQUIREMENTS W/ SELECTED LAMP SUPPLIER AND OWNER LAMP SUPPLIER TO VERIFY COMPLIANCE W/ ENERGY POLICY ACRT OF 1992 (EPAct) AND THE MINIMUM STANDARDS OF THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA.

CONTRACTOR SHALL VERIFY THE FOLLOWING SHIELDING MAY BE REQUIRED FOR USE OF COMPUTERS & SPECIFIC ELECTONIC VOICE OR DATA EQUIPMENT - COORDINATE W/ MANUFACTURER / SUPPLIER & ELECTRICAL CONTRACTOR TO PROVIDE AS REQUIRED.



7 A2.3.0 ELEVATION

① BASED UPON 96' AIR ENTERING CONDENSER
② PROVIDE FLEXIBLE CONNECTIONS @ ALL AIR HANDLING UNITS

CONTRACTOR TO PROVIDE FOR ADEQUATE CONDENSATION DRAINAGE TO PREVENT FREE WATER FLOW FROM HEAT PUMP UNITS AND TO THOROUGHLY SEAL/GASKET HEAT PUMP UNIT PENETRATION AGAINST MOISTURE AND AIR INFILTRATION.

AIR HANDLING UNIT SCHEDULE

UNIT	ARRGT	CFM	EXT S.P.	O.A. CFM	H.P.	COOLING			①	HEATING			LAYOUT BASIS	S.E.E.R.	HSPF	COP	WEIGHT	NOTES
						EAT WB	TOTAL MBH	SENSIBLE MBH	% RH	STAGE HEATING OR Kw	AMBIENT	MBH						
HP-1	THRU-WALL												1 1/2 TON THRU WALL HEAP UMP UNIT					①②

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

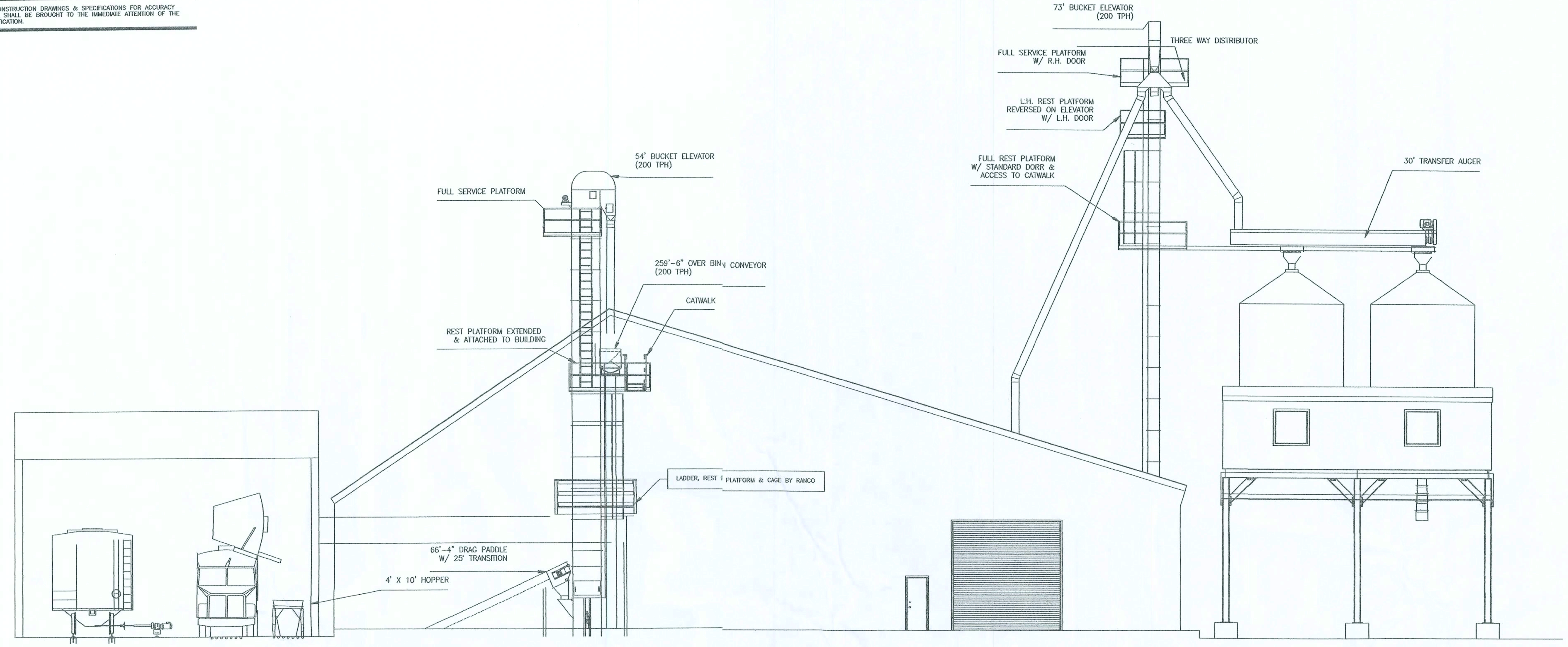
INSPECTION AREA: DIMENSIONED PLAN VIEWS
REFERENCED EXTERIOR FINISH ELEVATIONS
REFERENCED SECTIONS & DETAILS
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No.	DRAWN BY:
F-MAYO-RA2.3.0.DWG	
SHEET No. A2.3.0	DATE 01/30/06

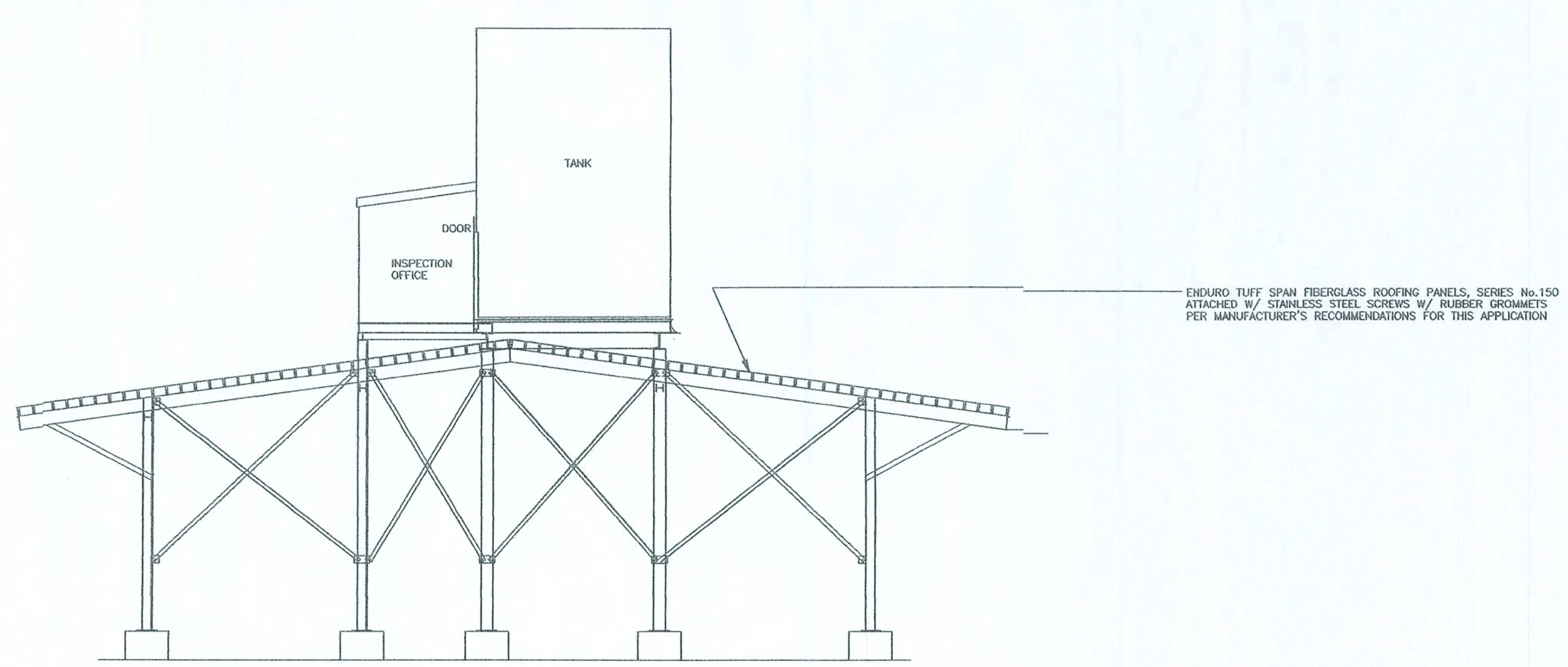
Curtis Keen
3/6/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

SCALE NOTE:
PLAN VIEW: AS NOTED



1 / A3.0.0 EXTERIOR FINISH ENDWALL ELEVATION VIEW
1/8" = 1'-0



2 / A3.0.0 EXTERIOR FINISH SIDEWALL @ LOAD-OUT ELEVATION VIEW
1/8" = 1'-0

KEEN ENGINEERING
& SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

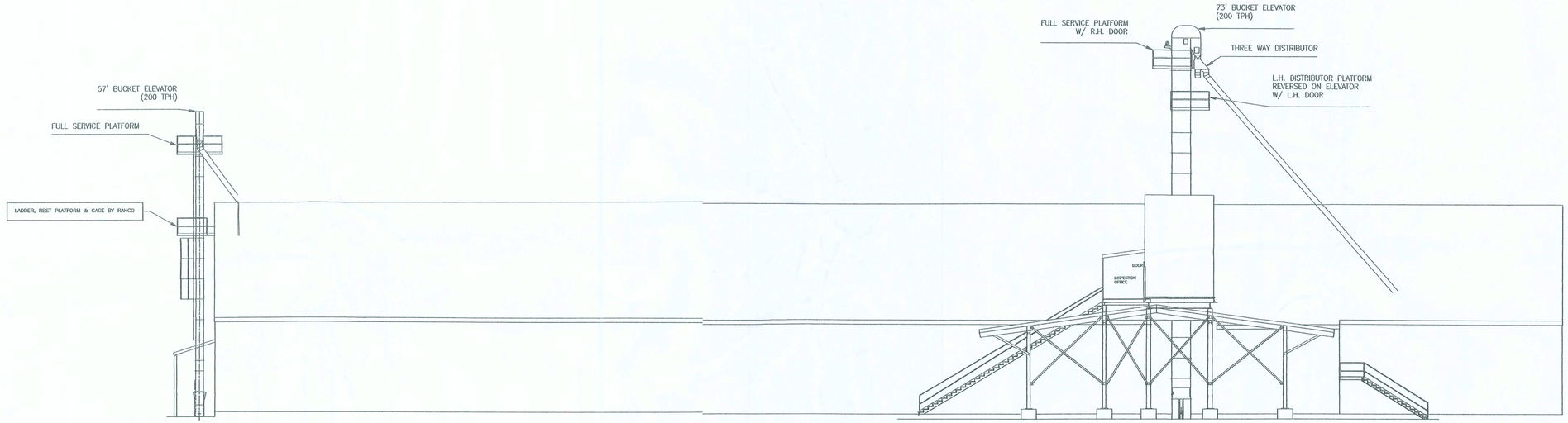
EXTERIOR FININSH ENDWALL ELEVATION
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No.	DRAWN BY:
F-MAYO-RA3.0.0.DWG	
SHEET No.	DATE
A3.0.0	01/30/06

Curtis Keen
3/6/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

SCALE NOTE:
PLAN VIEW: AS NOTED



1 / 3.1.0 EXTERIOR FINISH SIDEWALL ELEVATION VIEW
3/32" = 1'-0

Curtis Keen
3/6/06

KEEN ENGINEERING & SURVEYING, INC.
LIVE OAK, FLORIDA 32060
386-362-4782
ENG. LIC. EB 3761

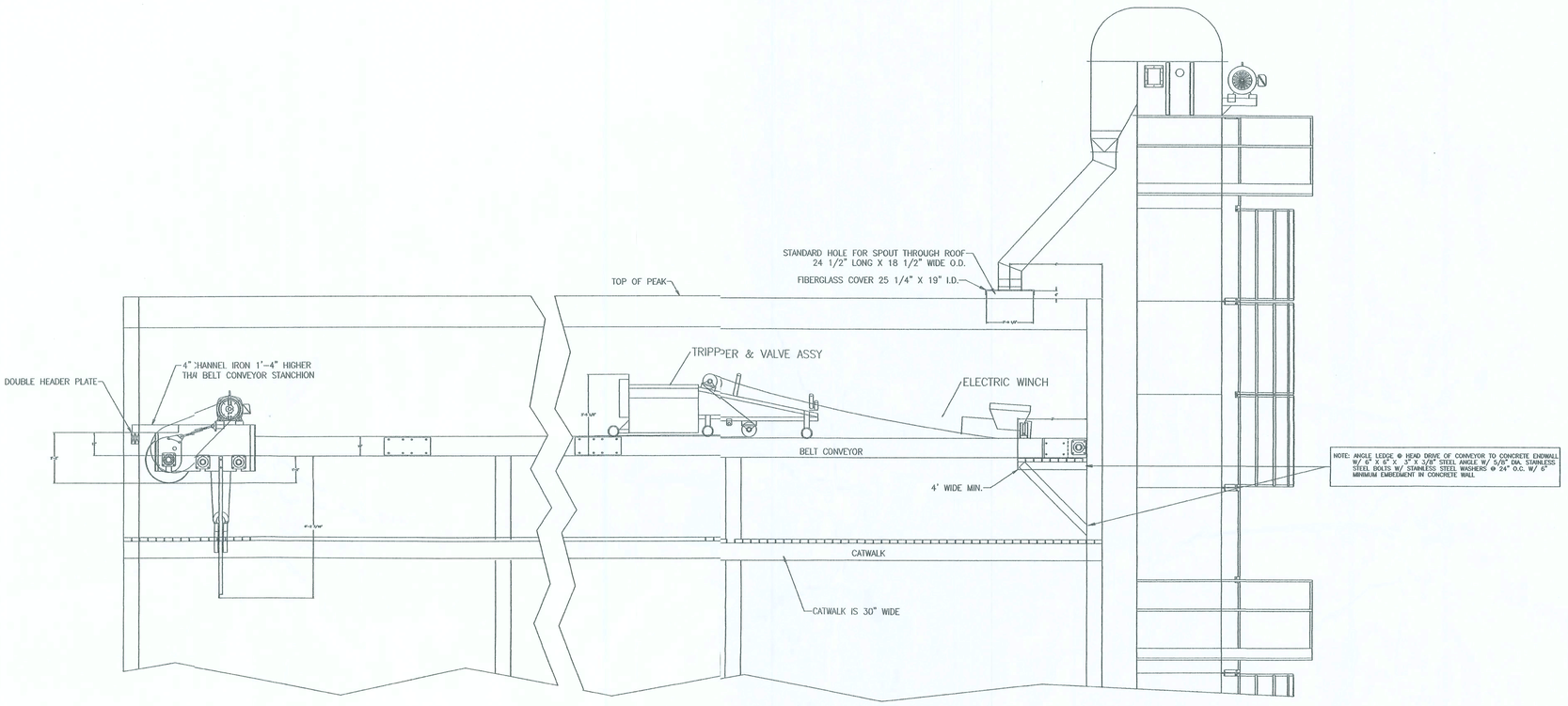
MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

EXTERIOR FINISH SIDEWALL ELEVATION VIEW
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No. F-MAYO-A3.1.0.DWG	DRAWN BY:
SHEET No. A3.1.0	DATE 01/30/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

SCALE NOTE:
PLAN VIEW: AS NOTED



SIDE ELEVATION – CATWALK & CONVEYOR STANCHION
200 TPH OVER BIN BELT CONVEYOR

Curtis Keen
3/6/06

KEEN ENGINEERING & SURVEYING, INC.
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761
9253 CR 417

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

CATWALK & CONVEYOR ENLARGED VIEWS
MISC. NOTES, REFERENCES & INSTRUCTIONS

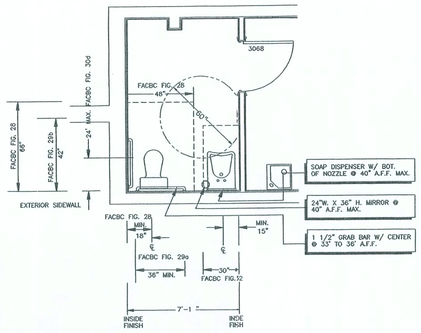
DRAWN BY:	
DATE	01/30/06
PROJECT No.	F-MAYO-RA3.2.0.DWG
SHEET No.	A3.2.0

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF TH ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

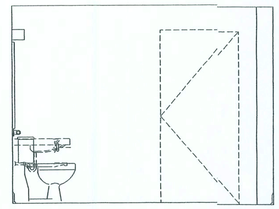
NOTE: THE OVERALL SIZE OF BUILDING HAS BEEN REDUCED. THE MATERIAL(S) OF CONSTRUCTION HAVE BEEN ALTERED OR CHANGED. THE CONTRACTOR IS DIRECTED TO COORDINATE BETWEEN ORIGINAL DRAWINGS BY JOHN G. MORRISON, ENGINEER, AND THE MORE RECENT DRAWINGS AND ALTERED DETAILS & SECTIONS BY THIS ENGINEER.
ALL EQUIPMENT SHALL BE BY "RANCO FERTILIZER SERVICE" & SHALL BE INSTALLED BY MANUFACTURER.

SCALE NOT:
PLAN VIEW: 3/32" = 1'-0

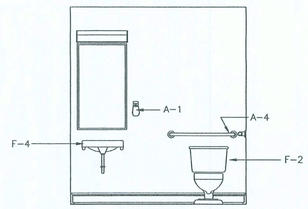
NOTE: FOR ADDITIONAL SPECIFIC REQUIREMENTS AND INFORMATION REGARDING ACCESSIBILITY AND INSTALLATION COMPLIANCES CONSULT THE MOST CURRENT EDITION OF THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION AND ANSI A 117.1 1996 AND TITLE III, PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT: PUBLIC ACCOMODATIONS AND COMMERCIAL FACILITIES.



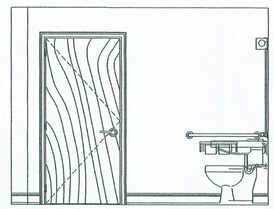
1 A4.0.0 ACCESSIBLE RESTROOM AREA



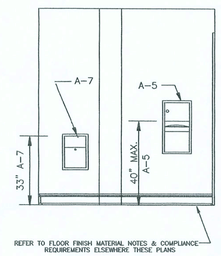
"A" INTERIOR WALL ELEVATION



"B" INTERIOR WALL ELEVATION



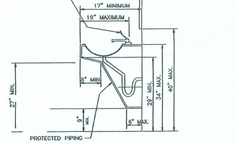
"C" INTERIOR WALL ELEVATION



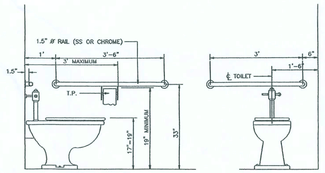
REFER TO FLOOR FINISH MATERIAL NOTES & COMPLIANCE REQUIREMENTS ELSEWHERE THESE PLANS

"D" INTERIOR WALL ELEVATION

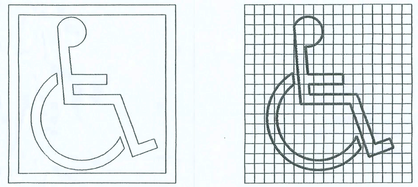
2 A4.0.0 UNISEX ACCESSIBLE RESTROOM INTERIOR ELEVATION



3 A4.0.0 LAVATORY REQUIRED CLEARANCES



4 A4.0.0 WATER CLOSET REQUIRED CLEARANCES



5 A4.0.0 PROPORTIONS OF INTERNATIONAL SYMBOL OF ACCESSIBILITY

ADDITIONAL REST ROOM ACCESSORIES			
ITEM No.	FIXTURE	MANUFACTURER	REMARKS
A-1	SOAP DISPENSER	#0350 BY AMERICAN SPECIALTIES, INC.	SURFACE MOUNTED, CHROME PLATED BRASS W/ INTERNAL ABS VALVE & 16 OZ. WHITE POLYETHYLENE GLOBE
A-2	MIRROR	#0600TA BY AMERICAN SPECIALTIES, INC.	ADJUSTABLE TILT FRAME OF 18 GA. STAINLESS STEEL W/ WELDED CORNERS & BOT. MTD. CONTINUOUS PIANO HINGE
A-3	TOILET TISSUE HOLDER	#0697GAL BY AMERICAN SPECIALTIES, INC.	STAINLESS STEEL TOILET TISSUE HOLDER & SHELF, DBL. DISPENSER TYPE 304 STAINLESS W/ 18 GA. SHELF
A-4	GRAB BARS	#3200 SERIES BY AMERICAN SPECIALTIES, INC.	1 1/2" STAINLESS STEEL GRAB BARS W/ SERIES 3800 SNAP ON FLANGE(S)
A-5	PAPER TOWEL DISPENSER	#8389 BY BOBRICK	STAINLESS STEEL PAPER TOWELL DISPENSER W/ WASTE RECEPTACLE - SEE DETAIL ELEVATION ABOVE FOR M.H.
A-7	FEMININE NAPKIN DISPOSAL	#B-3544 BY BOBRICK	SEE INTERIOR FINISH ELEVATIONS ABOVE

NOTES:

ALL PLUMBING FIXTURES IN WHITE

STOPS CR1912DL

PROVIDE 2 X WOOD BLOCKING FOR ALL TOILET ACCESSORIES
BLOCKING FOR GRAB BARS SHALL BE INTEGRAL WITH WALLS

MOUNTING HEIGHTS SHALL BE PER DETAILS OR AS OTHERWISE DIRECTED IN THESE PLANS

SHOWER SEAT (BY SHOWER MANUFACTURER) FOLD-UP, NON SLIP, SUPPORTING 250 LBF

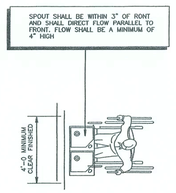
INSULATE ALL EXPOSED HOT WATER & DRAIN PIPES

CAULKING SHALL BE NEAT, SUBSTANTIAL, 1/4" MINIMUM CONCAVE SEALANT BEADS @ THE PERIMETER OF FOLLOWING LOCATIONS:

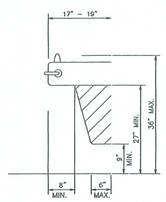
WATER CLOSET @ FLOOR
LAVATORY @ WALLS
SHOWER @ CORNERS OF WALL & FLOORS
ELSEWHERE AS DIRECTED IN THESE PLANS

COUNTER BACKSPLASH (@ LAB)
PROVIDE ENDSPLUSHES @ ALL COUNTERTOPS

ALL LAVATORIES TO HAVE CONTRACTOR SELECTED ANTI-SCALD DEVICES
ALL WATER SVC. LINES TO BE COPPER



6 A4.0.0 ACCESSIBLE DRINKING FOUNTAIN PLAN VIEW
SEE FLOOR PLAN FOR LOCATION(S)



7 A4.0.0 SPOUT HEIGHT & KNEE CLEARANCE
EQUIPMENT PERMITTED IN SHADED AREA

ACCESSIBLE RESTROOM PIPING INSULATION	
ALL PIPING SHALL BE INSULATED AS FOLLOWS:	
CW PIPING & RUNOUTS	1/2" THICK
HW PIPING (2" OR LESS)	1" THICK
HW PIPING (OVER 2")	1 1/2" THICK
HW RETURN PIPING	1/2" THICK

ALL INSULATION SHALL MEET UL 273 FOR FLAME & SMOKE STANDARDS. INSULATION SHALL BE EQUALED TO OWNERS/ CORNING FIBERGLASS ASJ/SSL-II W/ ALL SERVICE JACKET. ANY PIPING LOCATED IN AREAS SUBJECT TO FREEZING SHALL BE HEAT TAPED W/ DOUBLE THE THICKNESS OF THE ABOVE INSULATION. AREAS CONSIDERED SUBJECT TO FREEZING INCLUDES ATTIC & NON-HEATED AREAS (EXCLUDING CHASES).

PLUMBING FIXTURE SCHEDULE	
P-1R	WATER CLOSET - ADA FLOOR MOUNTED TANK TYPE RH TRIP ELONGATED TANK TYPE ADA HEIGHT, BRIGGS MODEL 4340 BOWL AND 4408 TANK W/ RIGHT HAND FLUSH LEVER AND TANK COVER LOCK (WHEN AVAILABLE) & OPEN FRONT SEAT AND COVER BENEKE 501 TM
P-2	ACCESSIBLE LAVATORY FIXTURE FURNISHED UNDER CASEWORK AS CULTURED MARBLE COUNTERTOP, PROVIDE MOEN CHATEAU L4601 SINGLE LEVER ADA COMPLIANT POP-UP FAUCET SET. ARRANGE CASEWORK TO COVER PIPING OR PROVIDE INSULATING JACKETS FOR PROTECTION OF WHEELCHAIR USERS.
P-4	ACCESSIBLE ELECTRIC WATER COOLER ELKAY EBFSA-8 WITH STAINLESS STEEL FINISH, P-TRAP, McGUIRE 2165 FLEXIBLE SUPPLIES WITH WHEEL HANDLE STOPS AND WROUGHT ESCUTCHEONS.

3/6/06

KEEN ENGINEERING & SURVEYING, INC.
LIVE OAK, FLORIDA 32060
9263 CR 417
386-362-4787
ENG. LIC. EB 3761

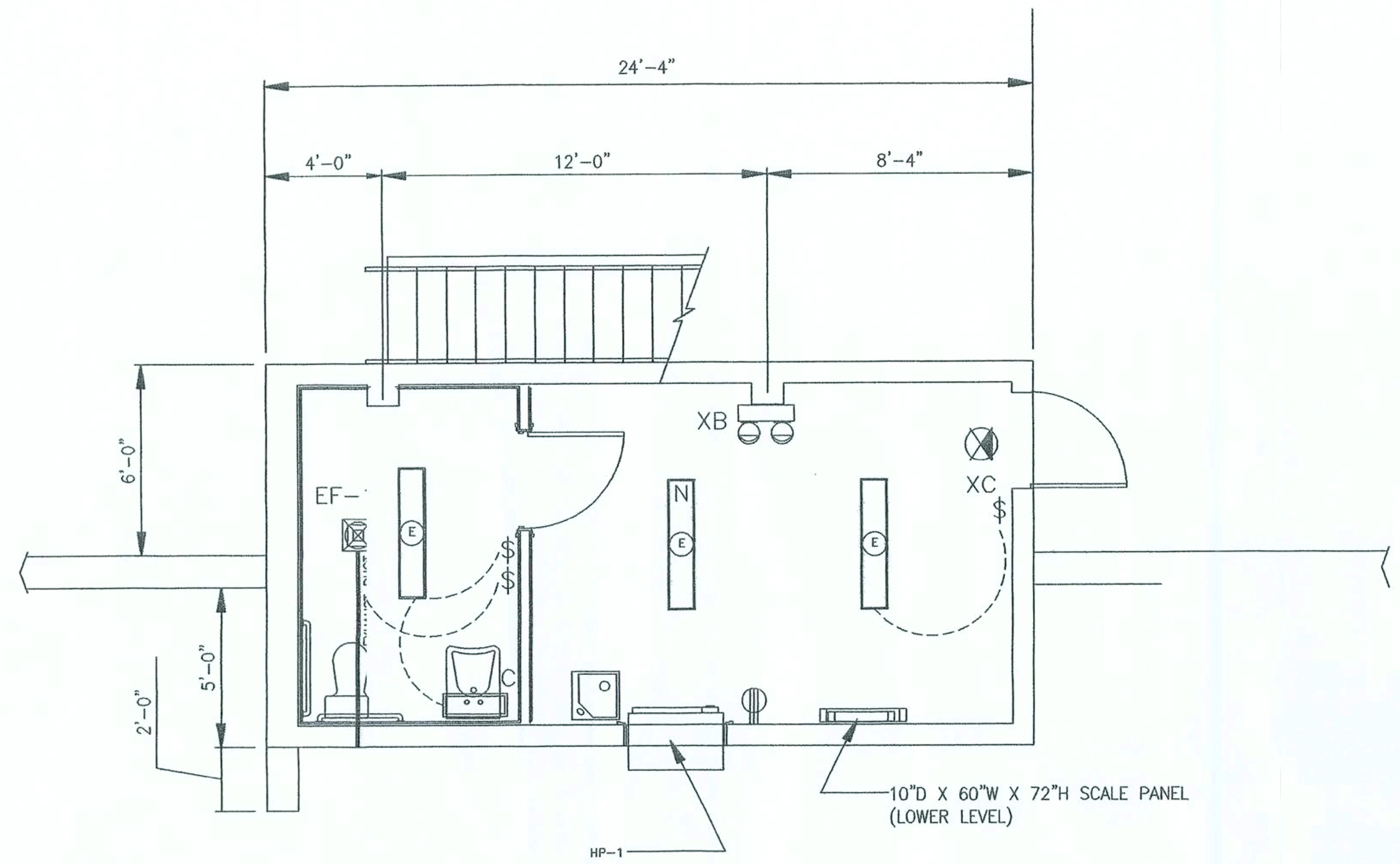
MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

ACCESSIBILITY REQUIREMENTS
REFERENCED SECTIONS & DETAILS
MISC. NOTES, REFERENCES & INSTRUCTIONS

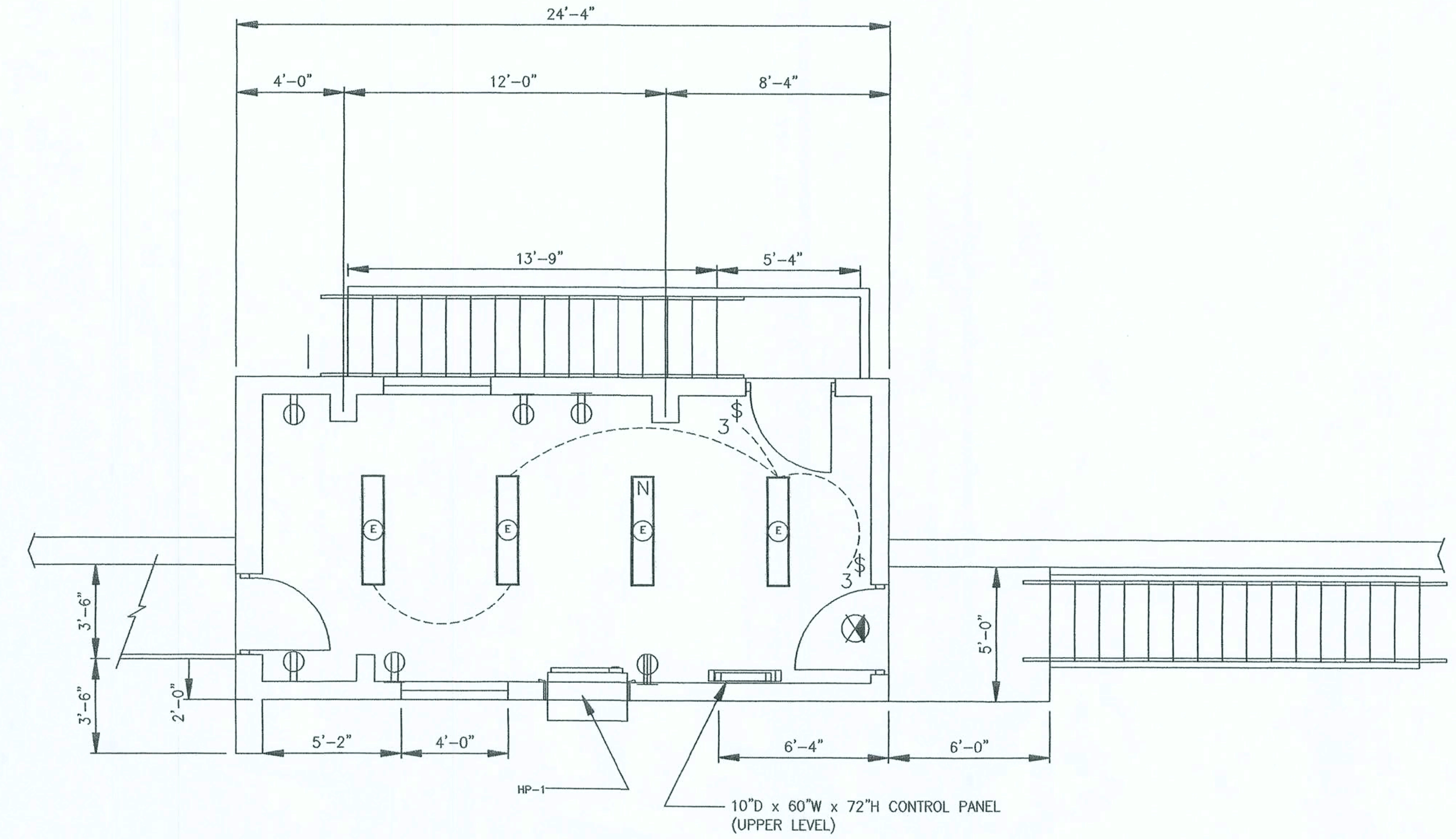
DRAWN BY:
DATE 12/18/05
PROJECT No. F-MAYO-PA4.0.0.DWG
SHEET No. A4.0.0

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURCY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OITHE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

SCALE NOTE:
PLAN VIEW: AS NOTED
DETAILS: AS NOTED



1 E1.0.0 ELECTRICAL OFFICE/CONTROL AREA 1ST LEVEL PLAN VIEW



2 E1.0.0 ELECTRICAL: OFFICE/CONTROL AREA 2ND LEVEL PLAN VIEW

NOTE: CONTRACTOR SHALL VERIFY ALL LUMENS & F.C. REQUIREMENTS W/ SELECTED LAMP SUPPLIER AND OWNER LAMP SUPPLIER TO VERIFY COMPLIANCE W/ ENERGY POLICY ACRT OF 1992 (EPAct) AND THE MINIMUM STANDARDS OF THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA.

CONTRACTOR SHALL VERIFY THE FOLLOWING
SHIELDING MAY BE REQUIRED FOR USE OF COMPUTERS & SPECIFIC ELECTONIC VOICE OR DATA EQUIPMENT – COORDINATE W/ MANUFACTURER / SUPPLIER & ELECTRICAL CONTRACTOR TO PROVIDE AS REQUIRED.

ELECTRICAL FIXTURE SYMBOLS

- 2' X 4' OR 2' X 2' RECESSED TROFFER
- FLUORESCENT STRIP FIXTURE, SURFACE MOUNTED
- RECESSED DOWNLIGHT OR SURFACE MOUNTED FIXTURE
- RECESSED DOWNLIGHT OR SURFACE MOUNTED FIXTURE WITH BATTERY INVERTER
- EXIT SIGNAGE – CEILING MOUNTED, SINGLE OR DOUBLE FACED DARKENED QUADRANT INDICATES FACE, ARROWS AS INDICATED

- DUPLEX RECEPTACLE, WALL MOUNTED 18" A.F.F. UNLESS OTHERWISE NOTED
- DUPLEX RECEPTACLE, FLOOR MOUNTED
- WP DUPLEX RECEPTACLE, WALL MOUNTED 18" A.F.F. WEATHERPROOF BOX / CONNECION
- GFI DUPLEX RECEPTACLE W/ GROUND FAULT CIRCUIT INTERRUPTER, WALL MOUNTED
- 220 RECEPTACLE / CONNECTION – SEE PLANS

- \$ SINGLE POLE TOGGLE SWITCH MOUNTED @ 48" A.F.F.
- \$ D SINGLE POLE DIMMER SWITCH WALL MOUNTED 48" A.F.F.
- \$ 3 THREE-WAY TOGGLE SWITCH

- TELEPHONE OUTLET WALL MOUNTED 18" A.F.F. LOCATE @ OWNER'S DIRECTION
- TELEPHONE DATA OUTLET, WALL MOUNTED 18" A.F.F. UNLESS OTHERWISE INDICAT) LOCATE ADDITIONAL @ OWNERS DIRECTION – USE CAT 5 WIRE
- TELEVISION COAXIAL OUTLET 18" A.F.F. LOCATE @ OWNER'S DIRECTION

- MECHANICAL EQUIPMENT – REFER TO HVAC NOTES & REQUIREMENTS

NOTES:

CONTRACTOR SHALL VERIFY ALL MODEL NUMBERS AND PROVIDE ALL OPTIONS LISTED IN DESCREIPTIONS AND ANY OTHER HARDWARE REQUIRED FOR PROPER INSTALLATION OF ALL FIXTURES

ALL WORK SHALL BE IN EMT OR NMT CONDUIT

ALL WORK SHALL BE IN FULL COMPLIANCE W/ THE LATEST EDITION OF THE N.E.C.

FAN SCHEDULE

UNIT	CFM	EXT S.P.	DRIVE	H.P./WATTS	TYPE	LAYOUT BASIS	LOCATION	NOTES
EF-1	300.0	0.125	DIRECT	90	CEILING	OWNER SELECTED	RESTROOM	MIN. CFM REQUIRED

CONTRACTOR TO PROVIDE HORIZONTAL DUCING FROM RESTROOM (AS ILLUSTRATED ON THE PLAN VIEW) W/ FIRE RATED DAMPERS AS REQUIRED TO COPLY W/ ALL APPLICABLE CODES AND REGULATORY STATUTES. ALL DUCTS SHALL BE BAFFLED AGAINST SIHT & SOUND TRANSMISSION.

LIGHTING FIXTURE SCHEDULE

B	1' X 4' SURFACE MOUNTED FLUORESCENT W/ HIGH IMPACT CLEAR ACRYLIC DIFFUSER ALUMINUM HOUSING W/ WHITE FINISH LAMPS: 2- 40W T12 (48") INSTALLATION: SURFACE MOUNTED MANUFACTURER: LITHONIA MODEL No. DMS 2 40 120 ES AL
C	WALL BRACKET FLUORESCENT W/ ONE-PIECE CONTOURED DIFFUSER (SPRING-LOADED) ELECTRONIC BALLAST, INTERNALLY FUSED LAMPS: 1-20W TS T12 (24) INSTALLATION: WALL BRACKETS MANUFACTURER: LITHONIA MODEL No. 11882 ES
N	ADDITIONAL DESIGNATIONS INDICATE NITE LIGHT
D	WALL PACK II , WET LOCATION, FLUORSCENT, FULLY GASKETED & ENCLOSED W/ CAST ALUMINUN HOUSING, LOW VOLTAGE, ELECTRONIC BALLAST, INTERNALLY FUSED LAMPS: 1-LAMP INSTALLATION: SURFACE MOUNTED ABOVE "NITE DROP" ON SIDE WALL MANUFACTURER: HOLOPHANE MODEL No. WL2K-26-Q-FL-XXBZ VOLTAGE: 120 V. WATTAGE: 26W.
XB	SELF CONTAINED EMERGENCY BATTERY PACK WITH TWO LIGHTING HEADS, TEST SWITCH AND WHITE FINISH LAMPS: LED LAMPS (PROVIDED) INSTALLATION: WALL MOUNTED 12" BELOW CEILING MANUFACTURER: SURELITES AA1 VOLTAGE: 120 V. WATTAGE: 25 W.
XC	SELF CONTAINED EMERGENCY LED EXIT SIGN WITH CAST ALUMINUM HOUSING, RED LETTERS, SINGLE STENCIL FACE, CAPABLE OF 90 MINUITES OPERATION ON BATTERY. PROVIDE WITH ARROWS AS INDICATED ON PLAN VIEWS. LAMPS: LED LAMPS (PROVIDED) INSTALLATION: CEILING MOUNTED MANUFACTURER: SURELITES CAX717000R-ARROWS AS INDICATED VOLTAGE: 120 V. WATTAGE: 5W
XCD	SAME AS TYPE "XC" EXCEPT DOUBLE FACED
XW	SAME AS TYPE "XC" EXCEPT WALL MOUNTED

AIR HANDLING UNIT SCHEDUIE

UNIT	ARRGT	CFM	EXT S.P.	O.A. CFM	H.P.	COOLING ①				HEATING			LAYOUT BASIS	S.E.E.R.	HSPF	COP	WEIGHT	NOTES
						EAT WB	TOTAL MBH	SENSIBLE MBH	% RH	STAGE HEATING OR Kw	AMBIENT	MBH						
HP-1	THRU-WALL												1 1/2 TON THRU WALL HEAP UMP UNIT					① ②

① BASED UPON 96° AIR ENTERING CONDENSER
② PROVIDE FLEXIBLE CONNECTIONS @ ALL AIR HANDLING UNITS

CONTRACTOR TO PROVIDE FOR ADEQUATE CONDENSATION DRAINAGE TO PREVENT FREE WATER FLOW FROM HEAT PUMP UNITS AND TO THOROUGHLY SEAL/GASKET HEAT PUMP UNIT PENETRATION AGAINST MOISTURE AND AIR INFILTRATION.

Curtis Keen
3/8/06

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

CONTROL OFFICE: DIMENSIONED ELECTRICAL PLAN VIEW
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No. F-MAYO-RE1.0.0.DWG
DRAWN BY:
SHEET No. E1.0.0
DATE 12/18/05

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTIONOF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

NOTE: THE OVERALL SIZE OF BUILDING HAS BEEN REDUCED. THE MATERIAL(S) OF CONSTRUCTION HAVE BEEN ALTERED OR CHANGED. THE CONTRACTOR IS DIRECTED TO COORDINATE BETWEEN ORIGINAL DRAWINGS BY JOHN G. MORRISON, ENGINEER, AND THE MORE RECENT DRAWINGS AND ALTERED DETAILS & SECTIONS BY THIS ENGINEER.
ALL EQUIPMENT SHALL BE BY "RANCO FERTILIZER SERVICE" & SHALL BE INSTALLED BY MANUFACTURER.

SCALE NOTE:
PLAN VIEW: 3/32" = 1'-0

LEGEND:

- CHANGE IN CONDUIT SIZE
- CONDUIT STAND, 30" TALL @ 40" CTRS
- CONDUIT RUN
- A.C. MOTOR
- D.C. MOTOR
- PULL BOX
- RUNNING LIGHT

CONDUIT RUNS MOUNTED ON 30" TALL CONDUIT MOUNTING POSTS. POSTS ARE SPACED AT 40" O.C. SEE UNDER TANK CONDUIT DETAIL ON PAGE 2C FOR AN ILLUSTRATION.

FOR CHANGES IN CONDUIT SIZES SEE LEADERS WHICH POINT TO CONDUIT RUNS.

PVC CONDUIT, FLEX, EXPANSION JOINTS, AND HANGERS RECOMMENDED.

RECEIVING EQUIPMENT START UP ORDER
ELECTRICAL INTERLOCKS ARE REQUIRED

1. OVER BIN BELT
2. BUCKET ELEVATOR
3. DRAG PADDLE

EXISTING RAILS

RAIL CAR OPENER
3 HP/4.8A @ 480VAC

42'

RECEIVING EQUIPMENT CONTROLS.
(BY LOCAL CONTRACTOR)
MUST INCLUDE AMMETER FOR
EACH PIECE OF EQUIPMENT.
(BY LOCAL CONTRACTOR)

32'

264'

DP-1 66'-4" DRAG PADDLE
25 HP/34.0A @ 480 VAC
WITH CAPACITANCE SWITCH ON
DISCHARGE TO DETECT PLUGGING

28'

BE-1 55' BUCKET ELEVATOR
20 HP/27.0A @ 480 VAC
WITH MOTION DETECTOR ON
LOWER BOOT ROLLER SHAFT

TRIPPER WINCH
1.5 HP/3.0A @ 480VAC

259'-6" OVER BIN BELT CONVEYOR
40 HP/52.0A @ 460 VAC
SOFT START REQ'D.

33'

109'-6"

DIRECT LOAD-OUT HOPPER
5 HP/7.6A @ 480VAC

BE-2 73' BUCKET ELEVATOR
20 HP/27.0A @ 480VAC WITH
MOTION DETECTOR ON LOWER
BOOT ROLLER SHAFT

BAGGING TURNTABLE
1 HP/2.1A @ 480VAC

AU-1 46' BLEND AUGER
30 HP/40.0A @ 480VAC

DP-3 86'-10" DRAG PADDLE
25 HP/34A @ 480VAC WITH
CAPACITANCE SWITCH IN
DISCHARGE TO DETECT PLUGGING

DP-2 55'-10" DRAG PADDLE
20 HP/27.0A @ 480VAC
WITH CAPACITANCE SWITCH IN
DISCHARGE TO DETECT PLUGGING

HOT AIR
SEALER

SEALING BELT CONVEYOR
1 HP/2.1A @ 480VAC

BAGGER (BY OTHERS)

EMERGENCY STOP

DW-13 DW-12 DW-11 DW-10 DW-9 DW-8 DW-7 DW-6 DW-5 DW-4 DW-3 DW-2 DW-1

AB-5 AB-4 AB-3 AB-2 AB-1

INCLINE CONVEYOR
1½ HP/3.0A @ 480VAC

FUTURE ELECTRIC SPOUT
½ HP @110VAC

10"D x 60"W x 72"H CONTROL PANEL
(UPPER LEVEL)
10"D X 60"W X 72"H SCALE PANEL
(LOWER LEVEL)

ELECTRIC R&P GATE – 3 REQ'D.
1 HP/2.1A @ 480VAC.–REVERSING STARTERS REQ'D.
w/2 110VAC PROXIMITY LIMIT SWITCHES PER GATE

ELECTRIC VIBRATOR
½ HP/1.1A @ 480VAC
(3PH) TWO REQ'D

NOTE: LOAD-OUT HOPPERS ARE ON
ELECTRONIC LOAD CELLS. SEE PRINT
2E OF 3 FOR SCALE WIRING NOTES

FUTURE ELECTRIC SPOUT
½ HP @110VAC

AU-2 26' OVER TANK AUGER
25 HP/34A @ 480VAC

42'

RUNNING LIGHT TYP.

CONDUIT RUN (TYP.)

ELECTRICAL SERVICE NOTES:

1. THE TOTAL OF ALL THE AC MOTORS PROVIDED BY RANCO IS 222 HP OR 306 AMPS OF 480 VAC 3-PHASE.
2. THE TOTAL OF ALL THE DC MOTORS PROVIDED BY RANCO IS 200 AMPS OF 230 VAC SINGLE PHASE. (RECTIFIERS SUPPLIED BY RANCO AS PART OF BLENDER CONTROL PANEL)
3. THESE AMPERAGE TOTALS ARE FOR ONLY THE EQUIPMENT/MOTORS RANCO IS PROVIDING. THESE TOTALS DO NOT INCLUDE ANY ALLOWANC FOR FACILITY LIGHTING, HEATING, A/C, VENTILATION, OTHER PLANT EQUIPMENT, ETC. THESE ADDITIONAL ELECTRICAL LOADS MUST BE CALCULATED AND ADDED IN BY OTHERS BEFORE TOTAL SERVICE LOAD IS DETERMINED.
4. RANCO'S DRAWINGS ONLY ILLUSTRATE THE MINIMUM ELECTRICAL REQUIREMENTS AND SUGGESTED LOCATIONS OF THESE ITEMS. THESE ARE RECOMMENDATIONS ONLY AND ARE TO BE CONFIMED BY ELECTRICIAN AND THE CUSTOMER.
5. PERMITS, INSPECTIONS, AND CONFORMANCE TO ALL APPLICABLE CODES IS THE ELECTRICIANS OR CUSTOMERS RESPONSIBILITY.

1 / E2.0.0 — DIMENSIONED ELECTRICAL PLAN VIEW
REDUCED SCALE – SEE SCALE NOTE

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC.: EB 3761

MAYO FERTILIZER
MAYO, FLORIDA

DIMENSIONED ELECTRICAL PLAN VIEW
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No.	DRAWN BY:
F-MAYO-RECO.DWG	
SHEET No.	DATE
E2.0.0	01/30/06

3/6/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

PANEL A — 277/480 VOLTS, 3 PHASE, 4 WIRE, 400 AMPS — 10,000 AMPS. RMS. SYM. I.C. INTEGRTED EQUIPMENT RATING — ☒ MAIN BREAKER ☐ MAIN LUGS ONLY — ☐ FLUSH MOUNTED ☒ SURFACE MOUNTED

SERVES	TRIP			TRIP	SERVES
DRAG PADDLE 1	50	1	2	40	BUCKET EVATOR 1
		3	4		
	3	5	6	3	
DRAG PADDLE 3	45	7	8	70	OVERBIN ELT CONVEYOR
		9	10		
	3	11	12	3	
DRAG PADDLE 2	40	13	14	40	BUCKET EVATOR 2
		15	16		
	3	17	18	3	
DIRECT LOAD-OUT HOPPER	20	19	20	20	BAGGING TRNTABLE
		21	22		
	3	23	24	3	
SEALING BELT CONVEYOR	20	25	26	20	RAIL CAROPENER
		27	28		
	3	29	30	3	
INCLINE CONVEYOR	20	31	32	20	TRIPPER INCH
		33	34		
	3	35	36	3	
		37	38		
		39	40		
		41	42		

LOAD = 224 AMPS — SQUARED TYPE NQOD

PANEL A — 277/480 VOLTS, 3 PHASE, 4 WIRE, 225 AMPS — 10,000 AMPS. RMS. SYM. I.C. INTEGRATED EQUIPMENT RATING — ☒ MAIN BREAKER ☐ MAIN LUGS ONLY — ☐ FLUSH MOUNTED ☒ SURFACE MOUNTED

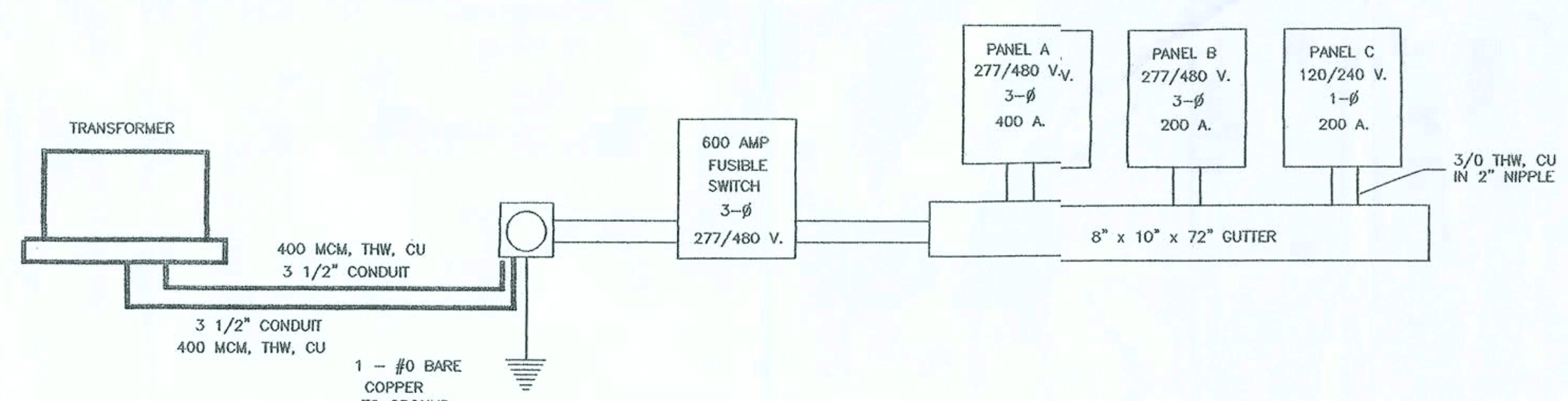
SERVES	TRIP			TRIP	SERVES
ELECTRIC R&P GATE	20	1	2	20	ELECTRIC VIBRATOR
		3	4		
	3	5	6	3	
ELECTRIC R&P GATE	20	7	8	20	ELECTRIC VIBRATOR
		9	10		
	3	11	12	3	
ELECTRIC R&P GATE	20	13	14	20	TRIPPER WINCH
		15	16		
	3	17	18	3	
OVER TANK AUGER 2	50	19	20	50	BLEND AUGER 1
		21	22		
	3	23	24	3	
		25	26		
		27	28		
		29	30		

LOAD = 120 AMPS — SQUARE D TYPE NQOD

PANEL B — 120/240 VOLTS, 1 PHASE, 3 WIRE, 200 AMPS — 10,000 AMPS. RMS. SYM. I.C. INTEGRATED EQUIPMENT RATING — ☒ MAIN BREAKER ☐ MAIN LUGS ONLY — ☐ FLUSH MOUNTED ☒ SURFACE MOUNTED

SERVES	TRIP			TRIP	SERVES
RACEWAY DW-1	20	1	2	20	RACEWAY DW-2
RACEWAY DW-3	20	3	4	20	RACEWAY DW-4
RACEWAY		5	6		RACEWAY
RACEWAY		7	8		RACEWAY
RACEWAY		9	10		RACEWAY
RACEWAY		11	12		RACEWAY
RACEWAY		13	14		RACEWAY
RACEWAY		15	16		RACEWAY
INSPECTION AREA RECEPTACLES	20	17	18	20	INSPECTION AREA LIGHTING
INSPECTION AREA 220 RECEPTACLE	20	19	20	20	OFFICE AREA 220 RECEPTACLE
	2	21	22	2	
OFFICE AREA RECEPTACLES	20	23	24	20	OFFICE AREA LIGHTING
ELECTRICAL AREA LIGHTING & REC.	20	25	26	20	CONTROL AREA LIGHTING & REC.
FUTURE ELECTRIC SPOUT	20	27	28	20	FUTURE ELECTRIC SPOUT
PROXIMITY LIMIT SWITCH FOR GATES	20	29	30	20	PROXIMITY LIMIT SWITCH FOR GATES
PROXIMITY LIMIT SWITCH FOR GATES	20	31	32	20	PROXIMITY LIMIT SWITCH FOR GATES
PROXIMITY LIMIT SWITCH FOR GATES	20	33	34	20	PROXIMITY LIMIT SWITCH FOR GATES
SPARE		35	36		SPARE
SPARE		37	38		SPARE
SPARE		39	40		SPARE
SPARE		41	42		SPARE

LOAD = 110 AMPS — SQUARE D TYPE NQOD



ELECTRICAL RISER

NOTES AC SYSTEM:

1. ELECTRICIAN SHALL PROVIDE ALL MOTOR STARTERS, INCLUDING ANY SOFT STARTS OR REVERSING MOTOR STARTERS REQUIRED BY OTHER EQUIPMENT.

NOTES DC SYSTEM:

1. LOCAL ELECTRICIAN IS RESPONSIBLE FOR CONDUIT, WIRE, AND FUSE PROTECTION ON THE 230VAC SINGLE PHASE AC POWER SUPPLIED TO THE BLENDER CONTROL PANEL.

2. DOOR DISCONNECT SWITCH

   A. – A DOOR DISCONNECT SWITCH IS PROVIDED IN THE BLENDER'S MAIN ELECTRICAL PANEL. INCOMING POWER CONNECTS TO THE DOOR DISCONNECT LUGS L1, L2 AND L3 AND GROUND LUG. (AS WELL AS NEUTRAL LUG IF 110V POWER IS NEEDED)

   B. – LOCAL ELECTRICIAN IS RESPONSIBLE FOR PROPER GROUNDING OF BLENDER CONTROL PANEL TO THREE-PHASE BREAKER PANEL THROUGH THE USE OF THE GROUNDING LUG PROVIDED IN THE BLENDER CONTROL PANEL.

   C. – NO FUSE PROTECTION IS INCLUDED IN RANCO PANELS. LOCAL ELECTRICIAN SHALL PROVIDE A FUSED 230 VAC SINGLE PHASE POWER SUPPLY TO RANCO PANEL.

3. RANCO'S MOTOR CONTROL UNIT RECTIFIES POWER FROM AC TO DC. EACH DC MOTOR REQUIRES 10 AMPS OF 230 VAC SINGLE PHASE.

   EXAMPLE
   1 DC MOTOR = 10 AMPS OF 230 VAC SINGLE PHASE.
   9 DC MOTORS X 10 AMPS = 90 AMPS OF 230 VAC SINGLE PHASE.

4. LOCAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT AND WIRE FROM BLENDER AND ADDITIVE BINS TO SCALE DISPLAY ENCLOSURE AND FROM SCALE DISPLAY ENCLOSURE TO BLENDER CONTROL PANEL IN OFFICE.

5. ALL CONDUIT AND WIRING BETWEEN EMERGENCY STOP STATION ON BLENDER AND REMOTE BLENDER CONTROL PANEL TO BE SUPPLIED BY LOCAL CONTRACTOR

DC SYSTEM REQUIREMENTS:

1. A 230 VAC SINGLE PHASE FUSED POWER SUPPLY IS REQUIRED FOR THE BLENDER CONTROL PANEL. ELECTRICIAN IS RESPONSIBLE FOR CONDUIT, WIRE, AND FUSE PROTECTION ON THIS 230VAC SINGLE PHASE POWER SUPPLY.

2. [A DOOR DISCONNECT SWITCH IS PROVIDED IN THE BLENDER CONTROL PANEL.] INCOMING 230 VAC POWER CONNECTS TO THE DOOR DISCONNECT LUGS L1 AND L2, GROUND LUG, AND NEUTRAL LUG.

3. LOCAL ELECTRICIAN IS RESPONSIBLE FOR PROPER GROUNDING OF BLENDER CONTROL PANEL TO THE SINGLE PHASE BREAKER PANEL THROUGH THE USE OF THE GROUNDING LUG PROVIDED IN THE BLENDER CONTROL PANEL.

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
MAYO, FLORIDA

ELECTRICAL REISER & RELATED REQUIREMENTS
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No.	DRAWN BY:
F-MAYO-RE3.0.0.DWG	
SHEET No. E3.0.0	DATE 12/18/05

Curtis Keen
3/6/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

REVISIONS		
DATE	NAME	DESCRIPTION
--- ---	--- ---	--- --- ---
--- ---	--- ---	--- --- ---

KEEN ENGINEERING & SURVEYING, INC.
8263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
MAYO, FLORIDA

NOTES AC SYSTEM:

1. ELECTRICIAN SHALL PROVIDE ALL MOTOR STARTERS, INCLUDING ANY SOFT STARTS OR REVERSING MOTOR STARTERS REQUIRED BY OTHER EQUIPMENT.

NOTES DC SYSTEM:

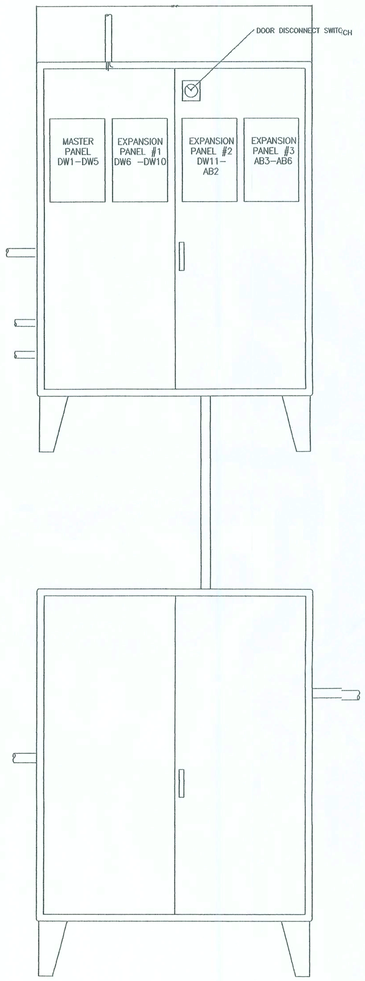
1. LOCAL ELECTRICIAN IS RESPONSIBLE FOR CONDUIT, WIRE, AND FUSE PROTECTION ON THE 230VAC SINGLE PHASE AC POWER SUPPLIED TO THE BLENDER CONTROL PANEL.
2. DOOR DISCONNECT SWITCH
   A. – A DOOR DISCONNECT SWITCH IS PROVIDED IN THE BLENDER'S MAIN ELECTRICAL PANEL. INCOMING POWER CONNECTS TO THE DOOR DISCONNECT LUGS L1, L2 AND L3 AND GROUND LUG. (AS WELL AS NEUTRAL LUG IF 110V POWER IS NEEDED)
   B. – LOCAL ELECTRICIAN IS RESPONSIBLE FOR PROPER GROUNDING OF BLENDER CONTROL PANEL TO THREE-PHASE BREAKER PANEL THROUGH THE USE OF THE GROUDING LUG PROVIDED IN THE BLENDER CONTROL PANEL.
   C. – NO FUSE PROTECTION IS INCLUDED IN RANCO PANELS. LOCAL ELECTRICIAN SHALL PROVIDE A FUSED 230 VAC SINGLE PHASE POWER SUPPLY TO RANCO PANEL.
3. RANCO'S MOTOR CONTROL UNIT RECTIFIES POWER FROM AC TO DC. EACH DC MOTOR REQUIRES 10 AMPS OF 230 VAC SINGLE PHASE.

   EXAMPLE
   1 DC MOTOR = 10 AMPS OF 230 VAC SINGLE PHASE.
   9 DC MOTORS X 10 AMPS = 90 AMPS OF 230 VAC SINGLE PHASE.
4. LOCAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT AND WIRE FROM BLENDER AND ADDITIVE BINS TO SCALE DISPLAY ENCLOSURE AND FROM SCALE DISPLAY ENCLOSURE TO BLENDER CONTROL PANEL IN OFFICE.
5. ALL CONDUIT AND WIRING BETWEEN EMERGENCY STOP STATION ON BLENDER AND REMOTE BLENDER CONTROL PANEL TO BE SUPPLIED BY LOCAL CONTRACTOR

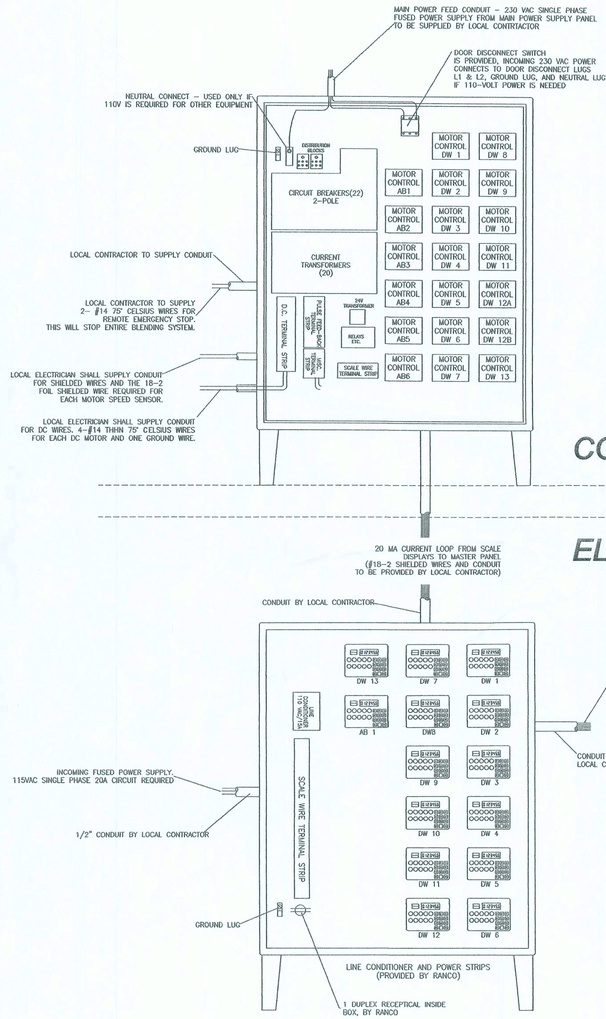
DC SYSTEM REQUIREMENTS:

1. A 230 VAC SINGLE PHASE FUSED POWER SUPPLY IS REQUIRED FOR THE BLENDER CONTROL PANEL. ELECTRICIAN IS RESPONSIBLE FOR CONDUIT, WIRE, AND FUSE PROTECTION ON THIS 230VAC SINGLE PHASE POWER SUPPLY.
2. [A DOOR DISCONNECT SWITCH IS PROVIDED IN THE BLENDER CONTROL PANEL.] INCOMING 230 VAC POWER CONNECTS TO THE DOOR DISCONNECT LUGS L1 AND L2, GROUND LUG, AND NEUTRAL LUG.
3. LOCAL ELECTRICIAN IS RESPONSIBLE FOR PROPER GROUNDING OF BLENDER CONTROL PANEL TO THE SINGLE PHASE BREAKER PANEL THROUGH THE USE OF THE GROUNDING LUG PROVIDED IN THE BLENDER CONTROL PANEL.

REMOTE BLENDER CONTROL PANEL 'A'
60" W x 72" H x 10" D ON 18" LEGS
DOORS CLOSED



REMOTE SCALE DISPLAY PANEL 'A'
60" W x 72" H x 10" D ON 12" LEGS
DOORS CLOSED



REMOTE BLENDER CONTROL PANEL 'B'
60" W x 72" H x 10" D ON 12" LEGS
MOTOR CONTROLS
DOORS OPEN

FOR ILLUSTRATION PURPOSES ONLY
CONDUITS MAY ENTER CABINET IN
LOCATIONS OTHER THAN SHOWN

REMOTE SCALE DISPLAY PANEL 'A'
60" W x 72" H x 10" D ON 12" LEGS
DOORS OPEN

FOR ILLUSTRATION PURPOSES ONLY
CONDUITS MAY ENTER CABINET IN
LOCATIONS OTHER THAN SHOWN

BLEND CONTROL SYSTEM

ELECTRICAL DETAILS & RELATED REQUIREMENTS
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROPERTY OF
RANCO
FERTISERVICE INC
P.O. BOX 329 – 701 HIGHWAY
SIOUX RAPIDS, IA 50585
TELE: (712) 283-2525
FAX: (712) 283-2303

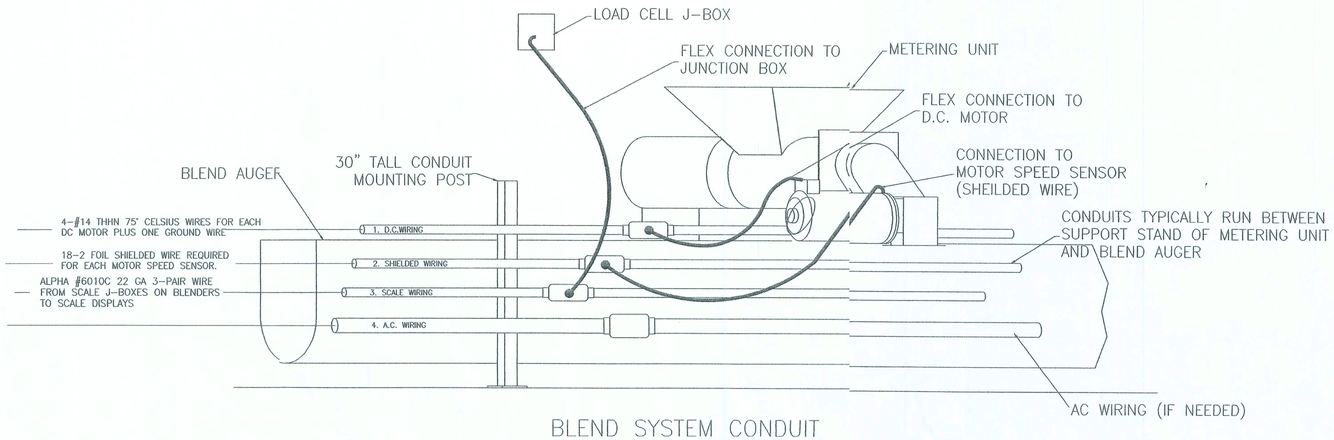
MAYO FERTILIZER

DRAWN BY:	SCALE:	DATE:	SHEET
DWNBY	SCALE	DATE	
CHECKED BY:	PLANT SIZE: PLANTSZ	FILE	OF SHEETS

DRAWN BY:
DATE 12/18/05
PROJECT No. F-MAYO-MEA0.0.DWG
SHEET No. E4.0.0

Curtis Keen 3/6/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.



BLEND SYSTEM CONDUIT

(PARTIAL DETAIL)

NOTES GENERAL:

1. PVC CONDUIT, FLEX & CONDUIT HANGERS RECOMMENDD.
2. LOCAL ELECTRICIAN SHALL SUPPLY CONDUITS AND WIRES FROM THE BLENDER CONTROL PANEL TO THE BLENDER.

   THESE CONDUITS WILL CONSIST OF:

   - ONE CONDUIT FOR SHIELDED WIRES, RANCO WILL PRVIDE THE 18-2 FOIL SHIELDED WIRE REQUIRED FOR EACH MOTOR SPEED SENSOR.
   - ONE CONDUIT FOR DC WIRES, ELECTRICIAN SHALL SUPPLY ONE GROUND WIRE, AND 4-#14 THHN 75° CELSIUS WIRES FOR EACH DC MOTOR.
   - ONE CONDUIT FOR SCALE WIRES
   - ONE CONDUIT FOR A.C. MOTOR WIRES

3. IF ADDITIONAL STOP/START STATIONS ARE REQUIRED. ELCTRICIAN SHALL PROVIDE ALL CONDUIT & WIRING FROM BLENDER CONTROL PANEL TO THE STOP/START STATION.
   A TYPICAL STOP/START STATION REQUIRES 1" CONDUIT AND 14-#14 75° CELSIUS WIRE.
4. IF RUNNING LIGHTS ARE REQUIRED, ELECTRICIAN SHALL SUPPLY ALL CONDUIT AND WIRING.

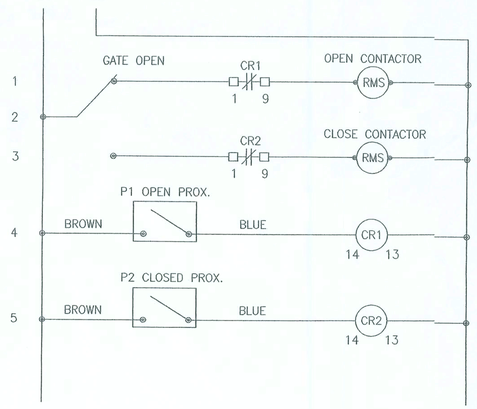
SUGGESTED CONDUIT SIZES

SHIELDED WIRES
- 0 - 8 BINS = 1.25" PVC CONDUIT
- 9 - 12 BINS = 1.5" PVC CONDUIT
- 12 - 22 BINS = 2.0" PVC CONDUIT

D.C. WIRES
- 0 - 8 BINS = 1.25" PVC CONDUIT
- 9 - 12 BINS = 1.5" PVC CONDUIT
- 12 - 22 BINS = 2.0" PVC CONDUIT

ADDITIONAL STOP/START
1" CONDUIT
FOURTEEN #14 WIRES WHEN CONTROLLING BLEND AUGER AND BUCKET ELEVATOR.
ADD THREE WIRES FOR EACH ADDITIONAL 3-PHASE MOTOR.

RACK & PINION GATE SCHEMATIC FOR PROXIMITY LIMIT SWITCHES



NOTES:

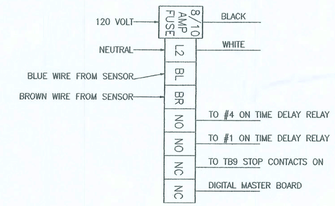
1 RMS= REVERSING MOTOR STARTER (SUPPLIED BY ELECTRICIAN)
CR1-1=TERMINAL BLOCK CONTACT IN JUNCTION BOX ON GRATE
CR1-9=TERMINAL BLOCK CONTACT IN JUNCTION BOX ON GRATE

2 SW-1=SELECTOR SWITCH (SUPPLIED BY ELECTRICIAN)

3 RMS= REVERSING MOTOR STARTER (SUPPLIED BY ELECTRICIAN)
CR2-1=TERMINAL BLOCK CONTACT IN JUNCTION BOX ON GATE
CR2-9=TERMINAL BLOCK CONTACT IN JUNCTION BOX ON GRATE

4 P1=NORMALLY OPEN PROXIMITY SWITCH
CR1=CONTROL RELAY 1 (120VAC)

5 P2=NORMALLY OPEN PROXIMITY SWITCH
CR2=CONTROL RELAY 2 (120VAC)



MOTION DETECTOR WIRING

SETTING THE MOTION DETECTOR

SETTING IS BY MEANS OF A POTENTIOMETER LOCATED ON THE BACK PANEL OF THE DEVICE.

- THE DETECTOR OUTPUT CONTACT IS CLOSED WHEN THE FREQUENCY TO BE CONTROLLED IS GREATER THAN THE DEVICE FREQUENDY SETTING.
- THE DETECTOR OUTPUT CONTACT IS OPEN WHEN THE FREQUENCY TO BE CONTROLLED IS LESS THAN THE DEVICE FREQUENCY SETTING.
- TURN THE POTENTIOMETER AS FAR AS IT WILL GO IN THE COUNTER-CLOCKWISE DIRECTION.
- BRING THE MOVING PART TO BE CONTROLED TO THE DESIRED TRIPPING SPEED.
- GRADUALLY TURN THE ADJUSTING POTENTIOMETER IN THE CLOCKWISE DIRECTION UNTIL THE LOAD IS DE-ENERGISED.

NOTE:

IF IT IS NOT POSSIBLE TO SIMULATE THE TRIPPING SPEED, REPEAT THE ABOVE OPERATIONS TAKING THE RATED SPEED OF THE MOVING PART AS A REFERANCE POINT. THEN SLIGHTLY SHIFT THIS POSITION IN THE COUNTER-CLOCKWISE DIRECTION BY A VALUE CORRESPONDING TO THE DESIRED DECELERATION.

IF THE DEVICE IS TRIPPED FOR AN INSUFFICIENT DECREASE IN SPEED, REPEAT ABOVE OPERATIONS INCREASING THE SHIFT.

THE SIGNAL LAMP LIGHTS UP WHEN DETECTOR XSA-V CONDUCTS.

NOTES AC SYSTEM:

1. ELECTRICIAN SHALL PROVIDE ALL MOTOR STARTERS, INCLUDING ANY SOFT STARTS OR REVERSING MOTOR STARTERS REQUIRED BY OTHER EQUIPMENT.
2. LOCAL ELECTRICIAN IS RESPONSIBLE FOR MOTOR PROTECTION (FUSED POWER SUPPLY FROM 3-PHASE BREAKER PANEL) AND ALL 3-PHASE CONDUIT AND WIRE FROM BUILDINGS MAIN ELECTRICAL PANEL TO THE MAIN BLENDER ELECTRICAL PANEL.
3. LOCAL ELECTRICIAN IS RESPONSIBLE FOR ALL CONDUIT AND WIRE RUNS FROM BLENDER ELECTRICAL PANEL TO ALL 3-PHASE MOTORS. ALL 3-PHASE MOTORS MUST BE PROPERLY GROUNDED.
4. LOCAL ELECTRICIAN IS RESPONSIBLE FOR CONDUIT AND WIRE RUNS (18-2 SHIELDED WIRE) FROM BLENDER ELECTRICAL PANEL TO THE SPEED SENSORS ON THE DC MOTORS ON THE BLENDER METER SCREWS.
5. LOCAL ELECTRICIAN IS RESPONSIBLE FOR CONDUIT AND WIRE RUNS (FOUR #14 THHN 75° CELSIUS WIRES + ONE GROUND WIRE) FROM BLENDER ELECTRICAL PANEL TO EACH OF THE DC MOTORS ON THE BLENDER METER UNITS.
6. IF MOTOR STARTERS ARE IN A SEPARATE PANEL FROM THE MAIN BLENDER ELECTRICAL PANEL THE LOCAL ELECTRICIAN IS RESPONSIBLE FOR 3/4" CONDUIT FROM MOTOR STARTER PANEL TO BLENDER ELECTRICAL PANEL. THIS IS FOR CONTROL WIRES FROM THE PUSH/PULL OPERATORS TO THE MOTOR STARTERS.
7. THE COILS FOR THE MOTOR STARTERS MUST BE 230VAC. LOCAL ELECTRICIAN IS RESPONSIBLE FOR 3-PHASE MOTOR PROTECTION (SEE AC SYSTEM NOTE #2)

NOTES DC SYSTEM:

1. LOCAL ELECTRICIAN IS RESPONSIBLE FOR CONDUIT, WIRE, AND FUSE PROTECTION ON THE 230V SINGLE PHASE AC POWER SUPPLIED TO THE BLENDER CONTROL PANEL.
2. DOOR DISCONNECT SWITCH
   A. - A DOOR DISCONNECT SWITCH IS PROVIDED IN THE BLENDER'S MAIN ELECTRICAL PANEL. INCOMING POWER CONNECTS TO THE DOOR DISCONNECT LUGS L1 AND L2 AND GROUND LUG. (AS WELL AS NEUTRAL LUG IF 110V POWER IS NEEDED)
   B. - LOCAL ELECTRICIAN IS RESPONSIBLE FOR PROPER GROUNDING OF BLENDER CONTROL PANEL TO SINGLE PHASE BREAKER PANEL THROUGH THE USE OF THE GROUNDING LUG PROVIDED IN THE BLENDER CONTROL PANEL.
   C. - A FUSED 230 VAC SINGLE PHASE POWER SUPPLY IS REQUIRED FROM THE SINGLE PHASE BREAKER PANEL IN ALL CASES.
3. RANCO'S MOTOR CONTROL UNIT RECTIFIES POWER FROM AC TO DC. EACH DC MOTOR REQUIRES 10 AMPS OF 230 VAC SINGLE PHASE.

   EXAMPLE
   1 DC MOTOR = 10 AMPS OF 230 VAC SINGLE PHASE.
   6 DC MOTORS X 10 AMPS = 60 AMPS OF 230 VAC SINGLE PHASE.

NOTES DW/SCALE SYSTEM:

1. LOCAL ELECTRICIAN IS RESPONSIBLE FOR CONDUIT AND WIRE RUNS (ALPHA #6010C 22 GA 3-PAIR WIRE) FROM THE SCALE DISPLAY ENCLOSURE IN THE ELECTRICAL ROOM TO THE JUNCTION BOXES ON THE DW BLENDER BINS AND DW ADDITIVE BINS.
2. LOCAL ELECTRICIAN IS RESPONSIBLE FOR CONDUIT AND WIRE RUNS (ALPHA # 6010C 22 GA 3-PAIR WIRE) FROM SCALE DISPLAY BOX FOR THE LOAD-OUT WEIGH HOPPERS TO THE JUNCTION BOXES ON THE HOPPER STRUCTURE.
3. LOCAL ELECTRICIAN IS RESPONSIBLE FOR CONDUIT AND WIRE RUNS (18-2 FOIL SHIELDED WIRE) FROM SCALE DISPLAY ENCLOSURE TO MASTER CONTROL PANEL ENCLOSURE IN THE CONTROL ROOM.

PROPERTY OF
RANCO FERTISERVICE INC
P.O. BOX 329 - 701 HIGHWAY
SIOUX RAPIDS, IA 50585
TELE: (712) 283-2525
FAX: (712) 283-2303

MAYO FERTILIZER

DRAWN BY:	SCALE:	DATE:	SHEET
DWNBY	SCALE	DATE	
CHECKED BY:	PLANT SIZE:	FILE	OF SHEETS
	PLANTSZ		

KEEN ENGINEERING & SURVEYING, INC.
LIVE OAK, FLORIDA 32060
386-362-4737
ENG. LIC. EB 3751

MAYO FERTILIZER
MAYO, FLORIDA

ELECTRICAL DETAILS & RELATED REQUIREMENTS
MISC. NOTES, REFERENCES & INSTRUCTIONS

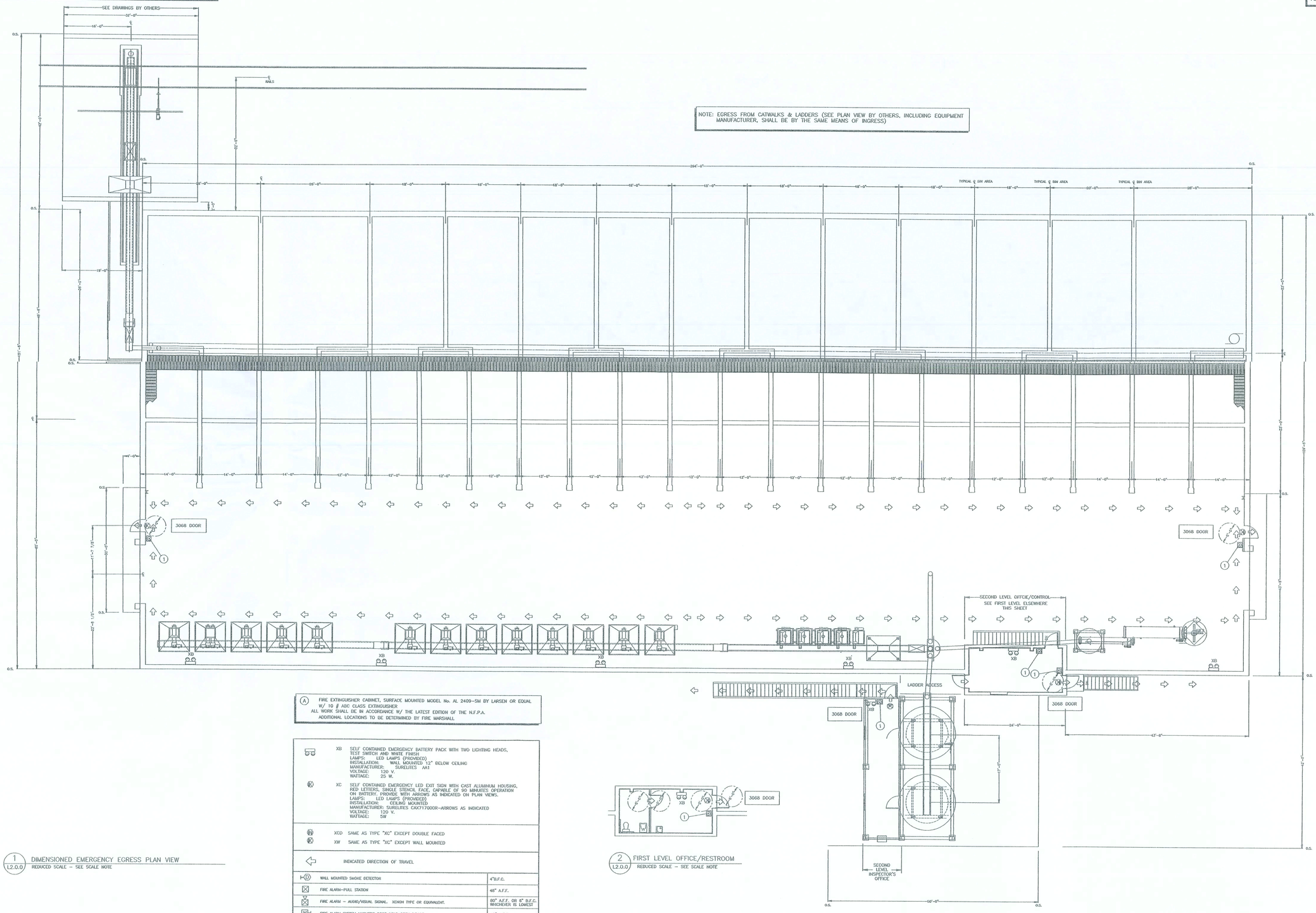
DRAWN BY:
DATE 12/18/05
PROJECT No. F-MAYO-RES.0.0.DWG
SHEET No. ES.0.0

3/6/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

SCALE NOTE:
PLAN VIEW: 3/32" = 1'-0

NOTE: EGRESS FROM CATWALKS & LADDERS (SEE PLAN VIEW BY OTHERS, INCLUDING EQUIPMENT MANUFACTURER, SHALL BE BY THE SAME MEANS OF INGRESS)



(A) FIRE EXTINGUISHER CABINET, SURFACE MOUNTED MODEL No. AL 2409-SM BY LARSEN OR EQUAL W/ 10 # ABC CLASS EXTINGUISHER
ALL WORK SHALL BE IN ACCORDANCE W/ THE LATEST EDITION OF THE N.F.P.A.
ADDITIONAL LOCATIONS TO BE DETERMINED BY FIRE MARSHALL

XB	SELF CONTAINED EMERGENCY BATTERY PACK WITH TWO LIGHTING HEADS, TEST SWITCH AND WHITE FINISH LAMPS: LED LAMPS (PROVIDED) INSTALLATION: WALL MOUNTED 12" BELOW CEILING MANUFACTURER: SURELITES AAI VOLTAGE: 120 V. WATTAGE: 25 W.	
XC	SELF CONTAINED EMERGENCY LED EXIT SIGN WITH CAST ALUMINUM HOUSING, RED LETTERS, SINGLE STENCIL FACE, CAPABLE OF 90 MINUTES OPERATION ON BATTERY. PROVIDE WITH ARROWS AS INDICATED ON PLAN VIEWS. LAMPS: LED LAMPS (PROVIDED) INSTALLATION: CEILING MOUNTED MANUFACTURER: SURELITES CAX7170OOR-ARROWS AS INDICATED VOLTAGE: 120 V. WATTAGE: 5W	
XCD	SAME AS TYPE "XC" EXCEPT DOUBLE FACED	
XW	SAME AS TYPE "XC" EXCEPT WALL MOUNTED	
	INDICATED DIRECTION OF TRAVEL	
D	WALL MOUNTED SMOKE DETECTOR	4'B.F.C.
	FIRE ALARM-PULL STATION	48" A.F.F.
	FIRE ALARM - AUDIO/VISUAL SIGNAL. XENON TYPE OR EQUIVALENT.	80" A.F.F. OR 6" B.F.C. WHICHEVER IS LOWEST
H	FIRE ALARM SYSTEM MAGNETIC DOOR HOLD OPEN DEVICE	48" A.F.F.
2	"PANIC" HARDWARE @ INDICATED DOORS	

1 L2.0.0 DIMENSIONED EMERGENCY EGRESS PLAN VIEW
REDUCED SCALE - SEE SCALE NOTE

2 L2.0.0 FIRST LEVEL OFFICE/RESTROOM
REDUCED SCALE - SEE SCALE NOTE

3/6/06

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

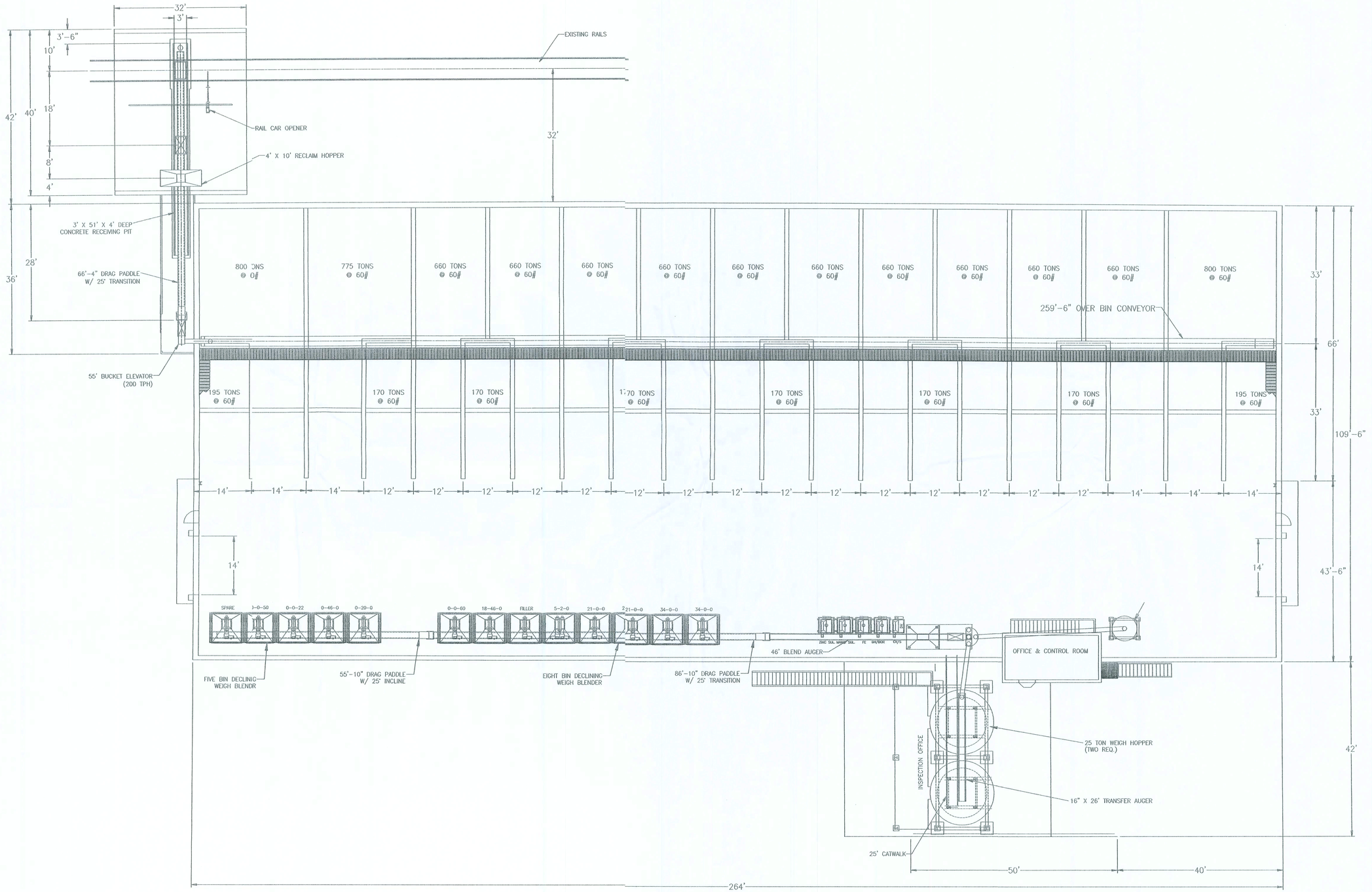
MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

DIMENSIONED EMERGENCY EGRESS PLAN VW
MISC. NOTES, REFERENCES & INSTRUCTION

PROJECT No.	DRAWN BY:	DATE
F-MAYO-RL2.0.0.DWG		01/30/06
SHEET No. L2.0.0		

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

SCALE NOTE:
PLAN VIEW: 3/32" = 1'-0



1 / M2.0.0 DIMENSIONED EQUIPMENT PLAI VIEW

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC: EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

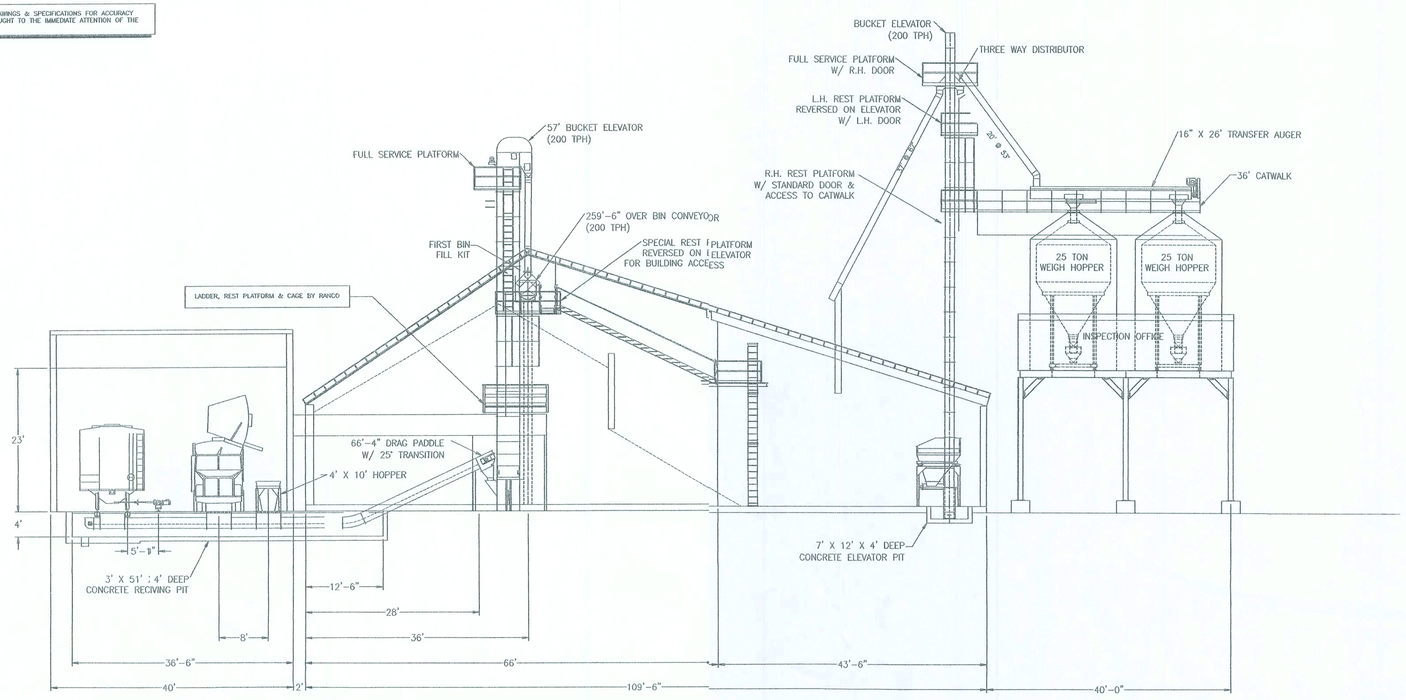
DIMENSIONED EQUIPMENT PLAN VIEW
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No. F-MAYO-R1&2.0.0.DWG
SHEET No. M2.0.0
DRAWN BY:
DATE 01/30/06

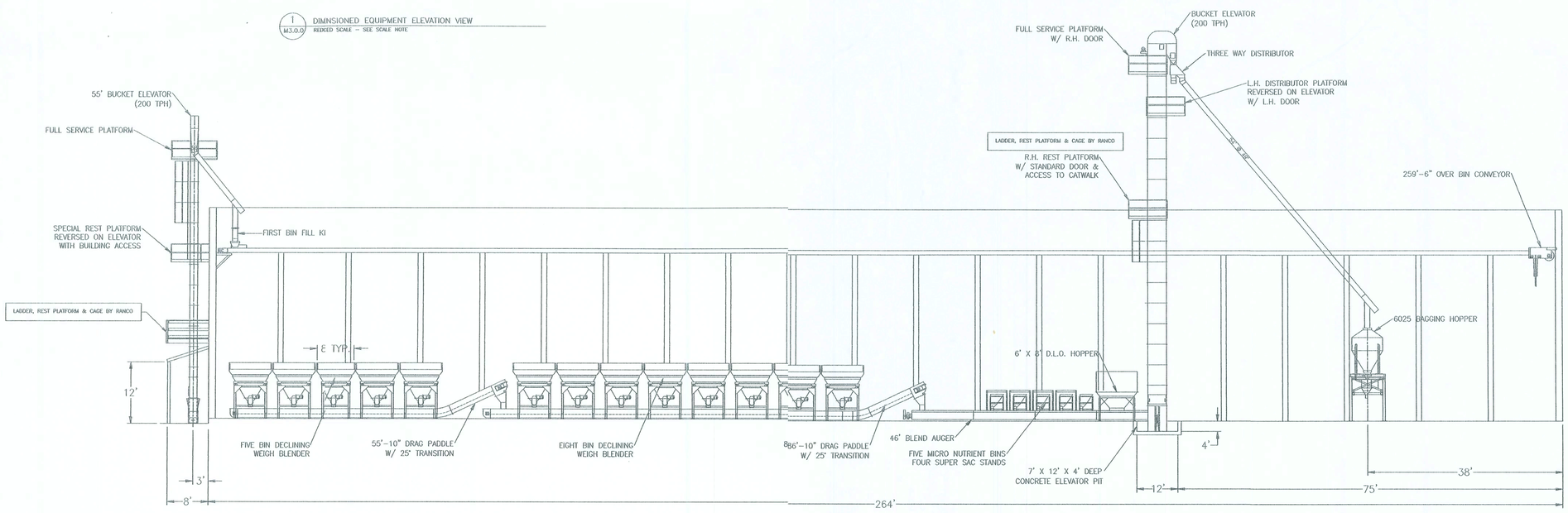
Curtis Keen
3/6/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

SCALE NOTE
PLAN VIEW: 3/32" = 1'-0



1 M3.0.0 DIMNSIONED EQUIPMENT ELEVATION VIEW
REDCED SCALE - SEE SCALE NOTE



2 M3.0.0 DIMENSIONED EQUIPMENT ELEVATION VIEW
REDUCED SCALE - SEE SCALE NOTE

Curtis Keen
3/6/06

KEEN ENGINEERING & SURVEYING, INC.
9265 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

DIMENSIONED EQUIPMENT ELEVATION VIEW
MISC. NOTES, REFERENCES & INSTRUCTIONS

DRAWN BY:
DATE 01/30/06
PROJECT No. F-MAYO-M&S.0.0.DWG
SHEET No. M3.0.0

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

PIPING INSULATION

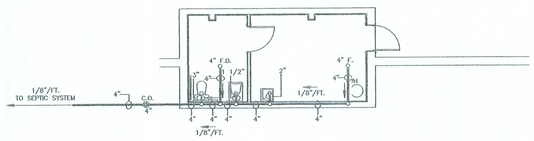
ALL PIPING SHALL BE INSULATED AS FOLLOWS:

CW PIPING & RUNOUTS	1/2" THICK
HW PIPING (2" OR LESS)	1" THICK
HW PIPING (OVER 2")	1 1/2" THICK
HW RETURN PIPING	1/2" THICK

ALL INSULATION SHALL MEET UL 273 FOR FLAME & SMOKE STANDARDS. INSULATION SHALL BE EQUALED TO OWNERS/: CORNING FIBERGLASS ASJ/SSL-II W/ ALL SERVICE JACKET. ANY PIPING LOCATED IN AREAS SUBJECT TO FREEZING SHALL BE HEAT TAPED W/ DOUBLE THE THICKNESS OF THE ABOVE INSULATION. AREAS CONSIDERED SUBJECT TO FREEZING INCLUDES ATTIC & NON-HEATED AREAS (EXCLUDING CHASES).

NOTE: THE OVERALL SIZE OF BUILDING HAS BEEN REDUCED. THE MATERIAL(S) OF CONSTRUCTION HAVE BEEN ALTERED OR CHANGED. THE CONTRACTOR IS DIRECTED TO COORDINATE BETWEEN ORIGINAL DRAWINGS BY JOHN G. MORRISON, ENGINEER, AND THE MORE RECENT DRAWINGS AND ALTERED DETAILS & SECTIONS BY THIS ENGINEER.
ALL EQUIPMENT SHALL BE BY "RANCO FERTILIZER SERVICE" & SHALL BE INSTALLED BY MANUFACTURER.

SCALE NOTE:
PLAN VIEW: 3/32" = 1-0



1 P2.0.0 ACCESSIBLE RESTROOM AREA

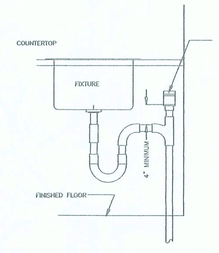
PLUMBING FIXTURE SCHEDULE

TAG	FIXTURE TYPE	RISER AND AIR CHAMBER FOR FIXTURE		FIXTURE NIPPLE (W/VALVE INLET)		CODE REQM'TS.		MTG. HEIGHT (FLR. to RIM)	REMARKS
		HW	CW	HW	CW	WASTE	VENT		
P1-R	WATER CLOSET	–	1-1/2"	–	1"	3"	2"	17"	ADA – RIGHT HAND TRIP
P-2	LAVATORY	3/4"	3/4"	1/2"	1/2"	2"	1-1/2"	34"	
P-3	TRAP PRIMER	–	–	–	1/2"	–	–	–	
P-4	ELEC. WATER COOLER	–	3/4"	–	1/2"	2"	1-1/2"	38"/27"	ADA

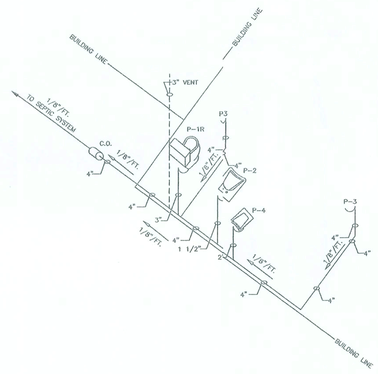
THROUGH-PENETRATION FIRESTOP SYSTEM SCHEDULE

SYMBOL	PENETRATING ITEM	TYPE OF WALL / FLOOR	F RATING (HOURS)	U L SYSTEM NUMBER			REMARKS
				HILTI	METACAULK	3M	
	PVC-PRESS 4"	CW CW	2 2	226 312	257 257	64(A)	
	PVC-PRESS 2"	CF	2	226	271	64(A)	
	PVC-DWV 6"	CF CW	2 2	300 300	336 336	64(F+) 64(F+)	
	PVC-DWV 4"	GW WF	2 2	312	258	48(A) 167, 451(B)	
	EMT 4"	CF CW GW	2 2 2	226 226 425	268 268 257	49 49, 95, 202 174(B)	
	TELCOM CABLE	GW CW CF	2 2 2	425 307 307	255 269 269	149 33, 447 33, 447	
	STEEL PIPE 10" UNINSULATED	CF CW GW	2 2 2	399 399 312	357 357 548	49, 161 49, 95 147(B)	
	STEEL PIPE 16" INSULATED	CF CW GW	2 2 2	399 312	443 444 444	91 91 147	
	COPPER PIPE 4" UNINSULATED	CW CW	2 2		442 442	49, 395 147(B)	
	COPPER PIPE 2" UNINSULATED	CF	2	400	429	91, 49	
	COPPER PIPE 3" INSULATED	CW	2		335	395, 91	

NOTE: CW = CONCRETE BLOCK WALL (CMU'S)
CF = CONCRETE FLOOR
GW = GYPSUM WALL
WF = WOOD FLOOR

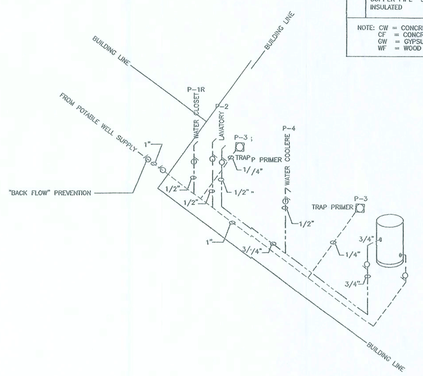


3 P2.0.0 DETAIL AIR ADMITTANCE VALVE



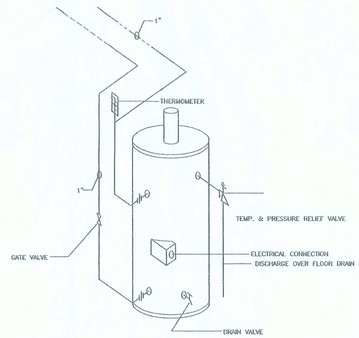
5 P2.0.0 SANITARY WASTE: PROJECTED SCHEMATIC VIEW

NOTE: RISERS ARE REPRESENTATIVE – CONSULT PLANS FOR PROPER HAND. ACTUAL RUN O PIPING WILL VARY SLIGHTLY. VENTS MAY BE CONNECTED TO REDCE NUMBER OF ROOF PENETRATIONS.



6 P2.0.0 POTABLE WATER: PROJECTED SCHEMATIC VIEW

NOTE: RISERS ARE REPRESENTATIVE – CONSULT PLANS FOR PROPER HAND. ACTUAL RUN OF PIPING WILL VARY SLIGHTLY.



4 P2.0.0 ELECTRIC WATER HEATER PIPING SCHEMATIC

Curtis Keen
3/6/06

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC: EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

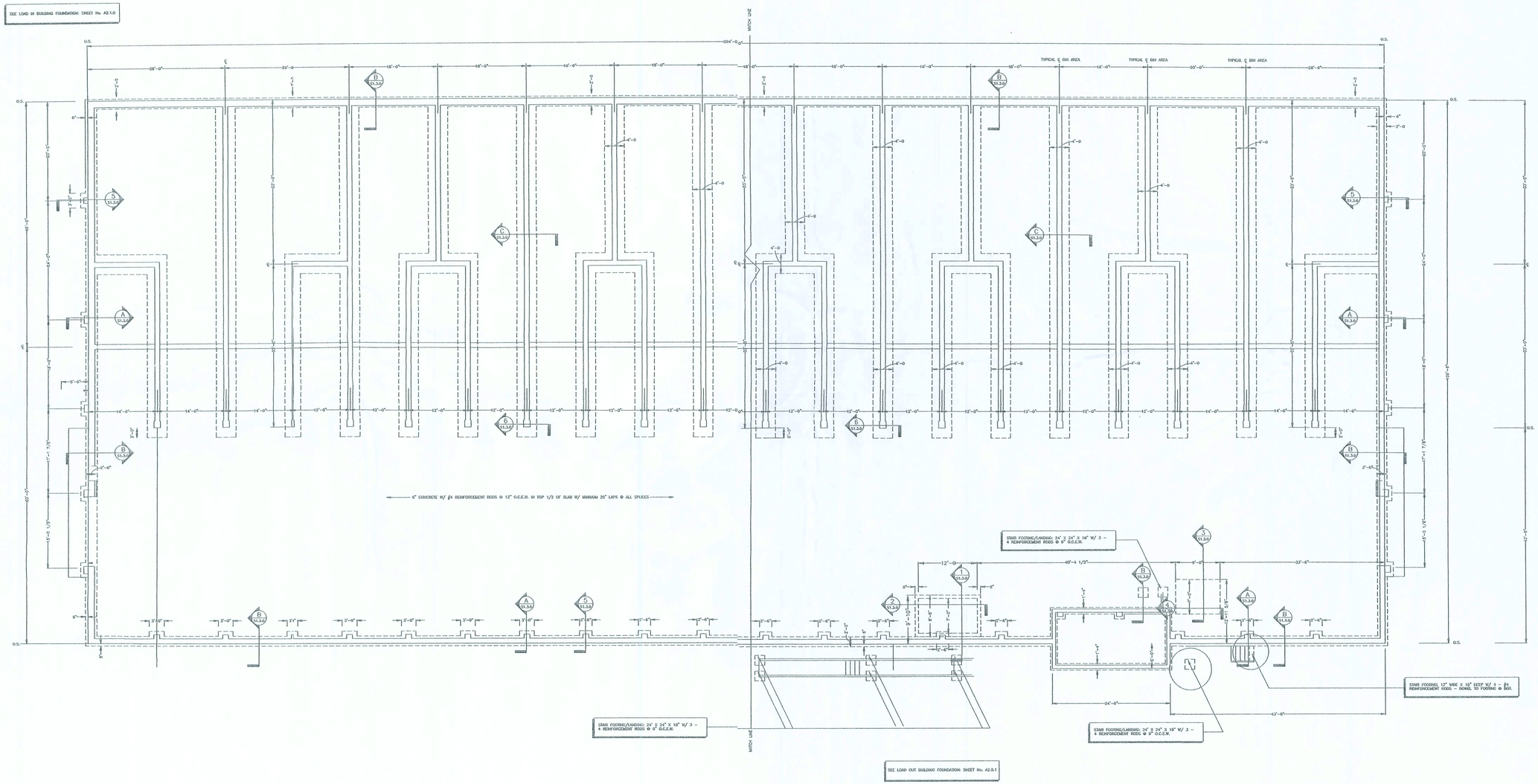
PLUMBING PLAN VIEWS
SCHEMATIC RISER PLAN VIEWS
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No.	DRAWN BY:
F-MAYO-#P2.0.0.DWG	DATE
SHEET No.	12/18/05
P2.0.0	

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

SCALE NOTE:
PLAN VIEW: 3/32" = 1'-0

SEE LOAD OF BUILDING FOUNDATION SHEET No. A2.1.0



SEE LOAD OUT BUILDING FOUNDATION SHEET No. A2.0.1

1 / S1.0.0 DIMENSIONED FOUNDATION PLAN V.W
SEE SCALE NOTE THIS SHEET

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

DIMENSIONED OVERALL FOUNDATION PLAN VIEW
MISC. NOTES, REFERENCES & INSTRUCTIONS

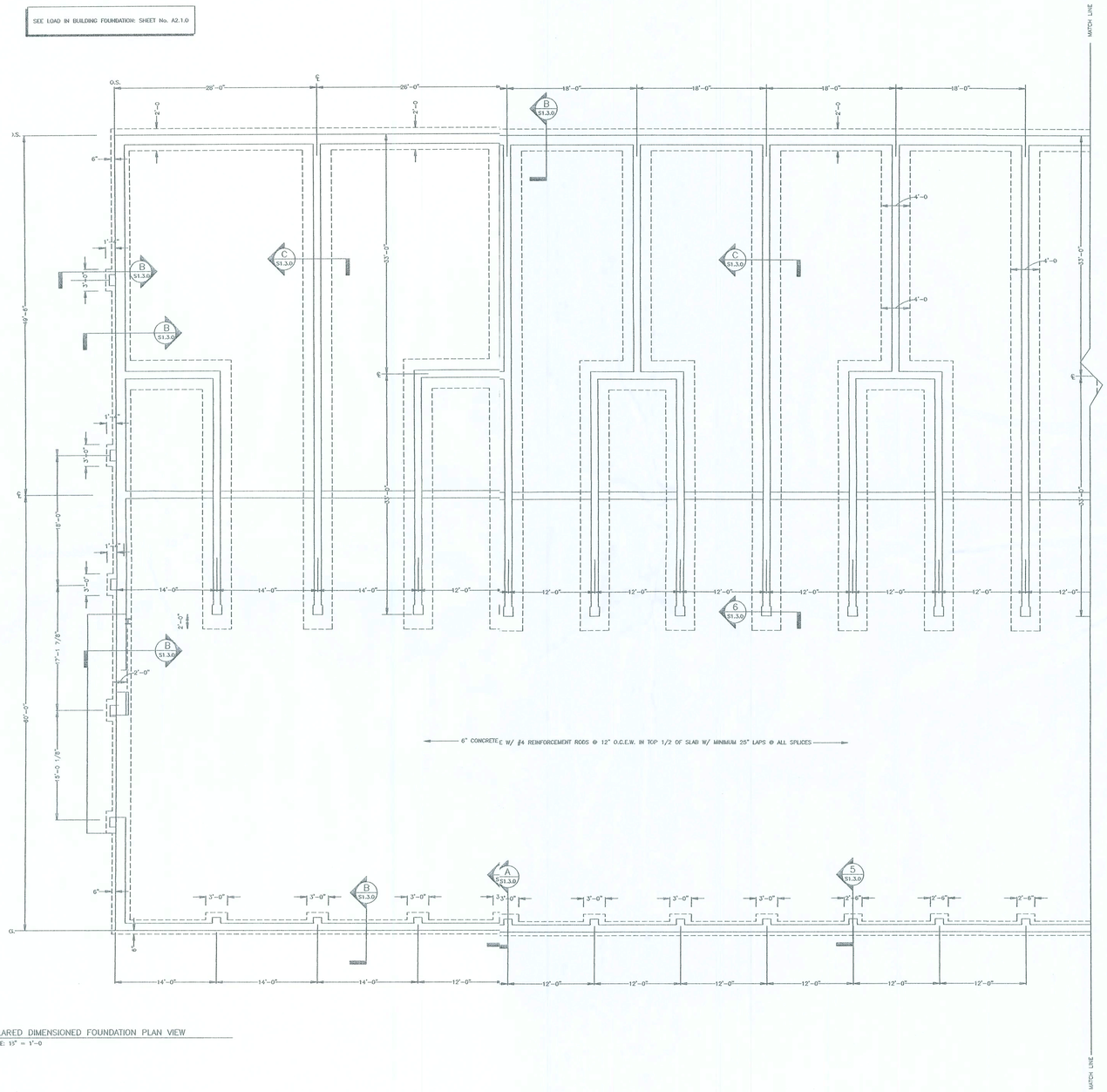
PROJECT No: F-MAYO-MS1.0.0.DWG
DRAWN BY:
DATE 01/30/06
SHEET No. S1.0.0

Curtis Keen
3/6/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTIN OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

SCALE NOTE:
PLAN VIEW: AS NOTED

SEE LOAD IN BUILDING FOUNDATION: SHEET No. A2.1.0



1 / S1.1.0 ENLARED DIMENSIONED FOUNDATION PLAN VIEW
SCALE: 1/8" = 1'-0

Curtis Keen
3/6/06

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG: LIC: EB 3761

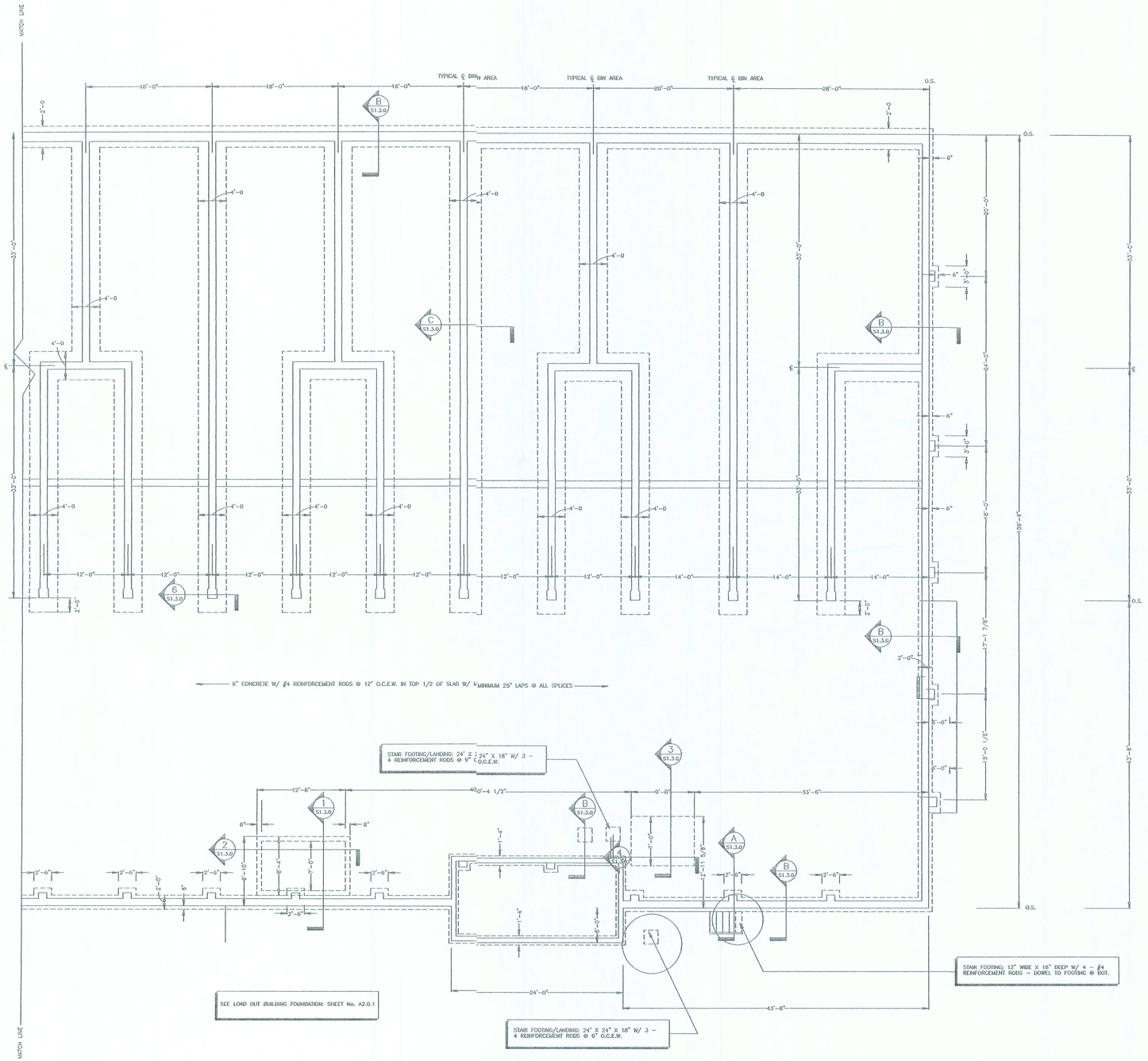
MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

ENLARGED DIMENSIONED FOUNDATION PLAN VIEW
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No.	DRAWN BY:
F-MAYO-RS1.1.0.DWG	DATE
SHEET No.	12/16/05
S1.1.0	

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

SCALE NOTE:
PLAN VIEW: AS NOTED



1 / S1.1.0 ENLARGED DIMENSIONED FOUNDATION PLAN VIEW
SCALE: 1/8" = 1'-0

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

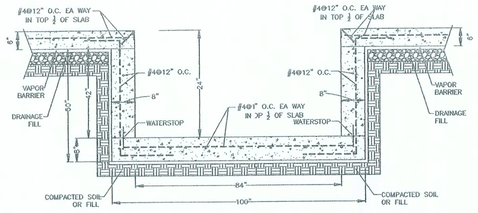
ENLARGED DIMENSIONED FOUNDATION PLAN VIEW
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No.: F-MAYO-FES1.2.0.DWG
DRAWN BY:
DATE: 12/18/05
SHEET No.: S1.2.0

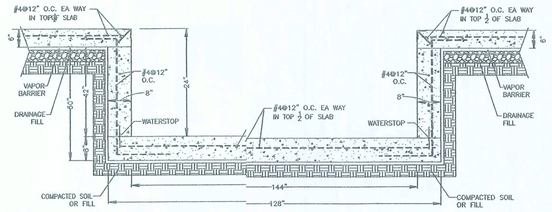
Curtis Keen
3/6/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

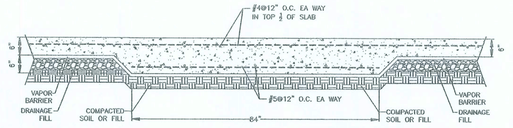
SCALE NOTE:
PLAN VIEW: AS NOTED
SECTIONS: AS NOTED



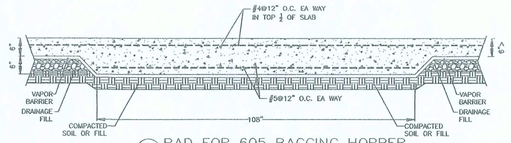
1 CONCRETE ELEVATOR PIT
N.T.S.



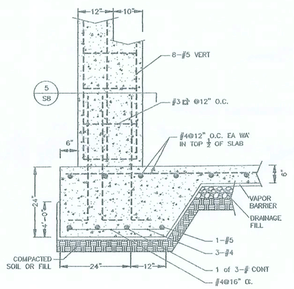
2 CONCRETE ELEVATOR PIT
N.T.S.



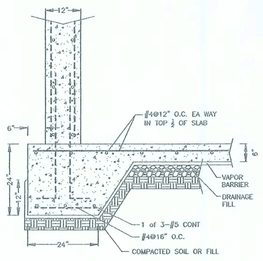
3 PAD FOR 605 BAGGING HOPPER
N.T.S.



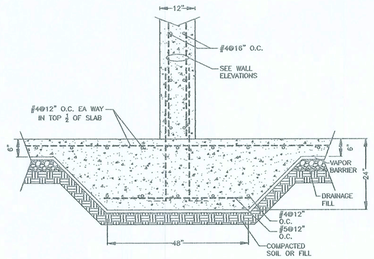
4 PAD FOR 605 BAGGING HOPPER
N.T.S.



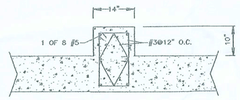
A DETAIL
N.T.S.



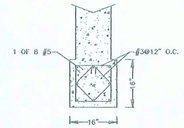
B DETAIL
N.T.S.



C DETAIL
N.T.S.



5 DETAIL
N.T.S.



6 DETAIL
N.T.S.

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

REFERENCED FOUNDATION SECTIONS & DETAILS
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No.	DRAWN BY:
F-MAYO-RS13.0.DWG	DATE 01/30/06
SHEET No. S1.3.0	

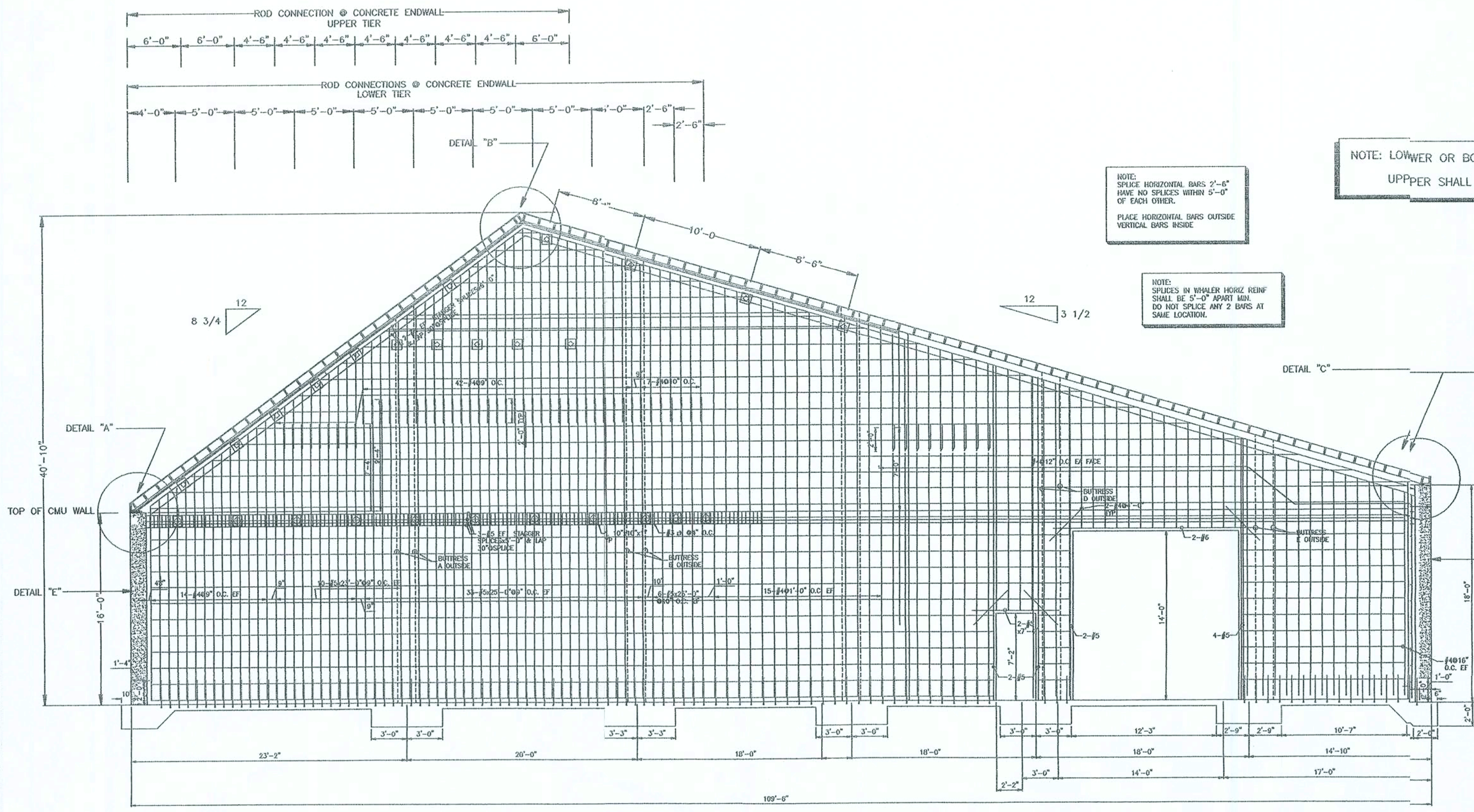
Curtis Keen
3/6/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

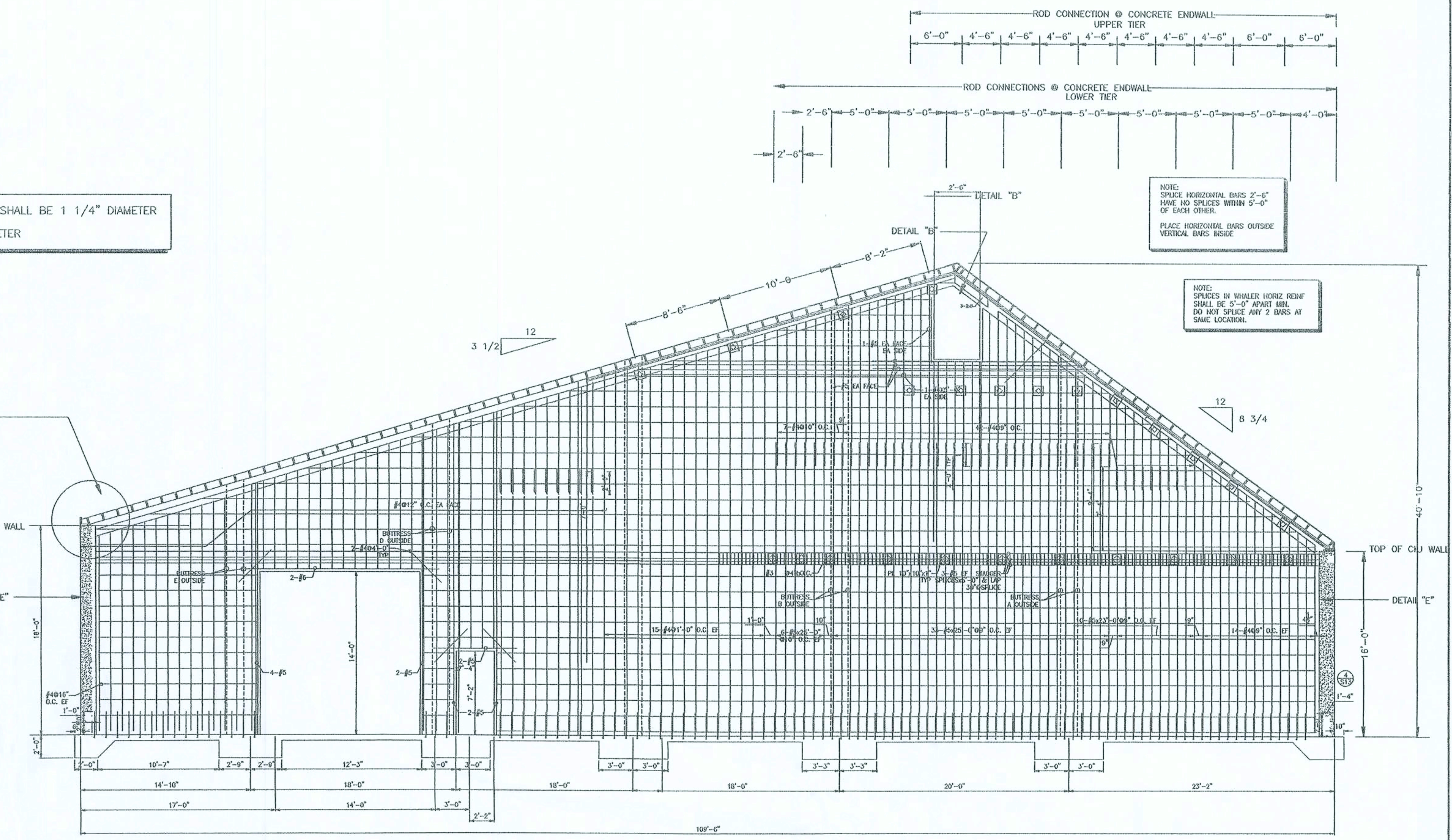
NOTE: LOWWER OR BOTTOM RODS SHALL BE 1 1/4" DIAMETER
UPPPER SHALL BE 1" DIAMETER

NOTE:
SPLICE HORIZONTAL BARS 2'-6"
HAVE NO SPLICES WITHIN 5'-0" OF EACH OTHER.
PLACE HORIZONTAL BARS OUTSIDE VERTICAL BARS INSIDE

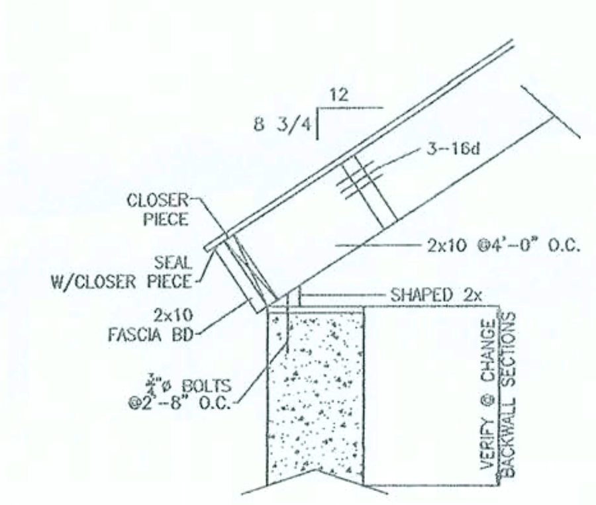
NOTE:
SPLICES IN WHALER HORIZ REINF SHALL BE 5'-0" APART MIN.
DO NOT SPLICE ANY 2 BARS AT SAME LOCATION.



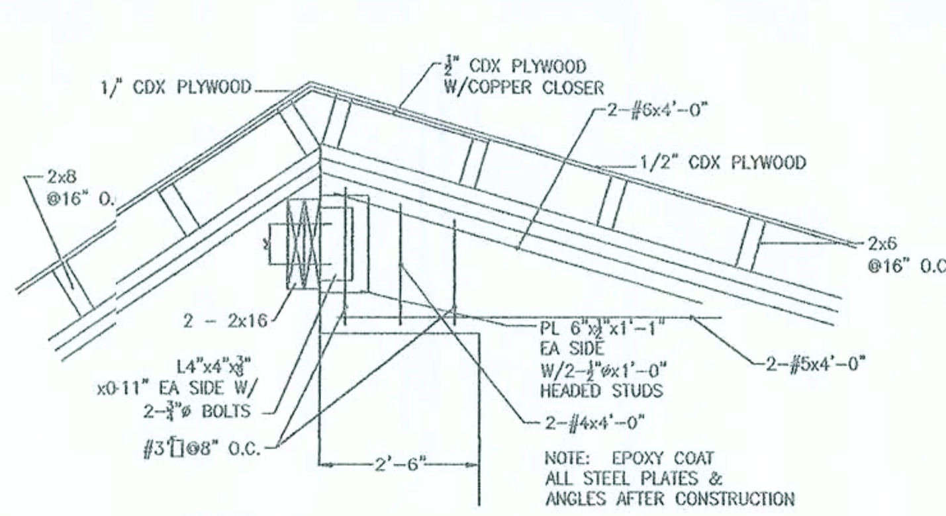
1 S2.0.0 ENDWALL THRU BUILDING
SCALE: 1/8" = 1'-0



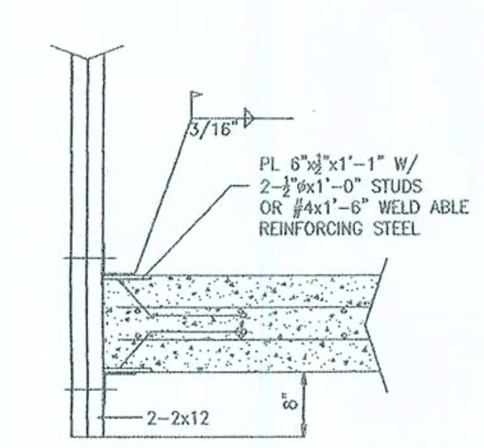
2 S2.0.0 ENDWALL THRU BUILDING
SCALE: 1/8" = 1'-0



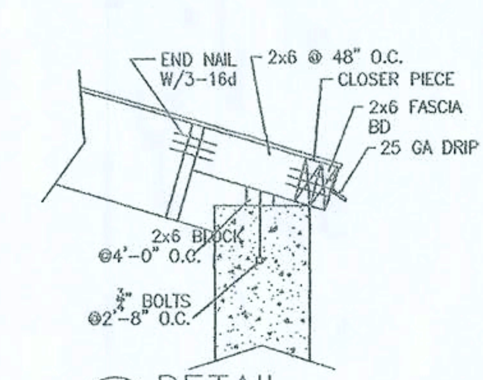
A DETAIL
N.T.S.



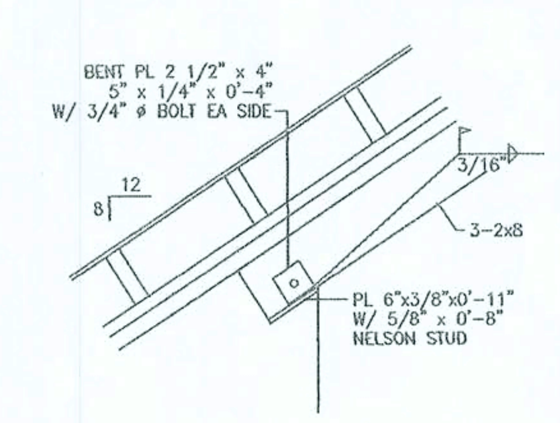
B DETAIL
N.T.S.



B1 DETAIL
N.T.S.



C DETAIL
N.T.S.



D DETAIL
N.T.S.

KEEN ENGINEERING
& SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

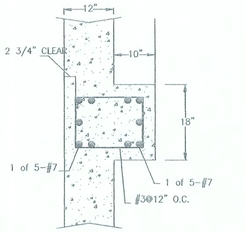
ENDWALL ELEVATIONAL SECTIONS
REFERENCED SECTIONS & DETAILS
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No. F-MAYO-RS2.0.0.DWG
DRAWN BY:
SHEET No. S2.0.0
DATE 12/18/05

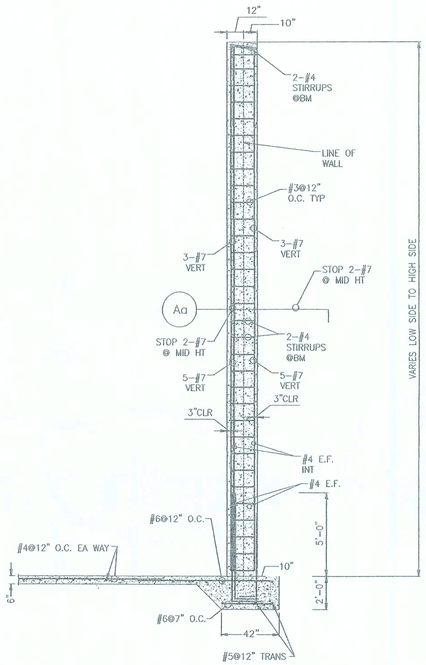
Curtis Keen
3/6/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

SCALE NOTE:
SECTIONS: AS NOTED

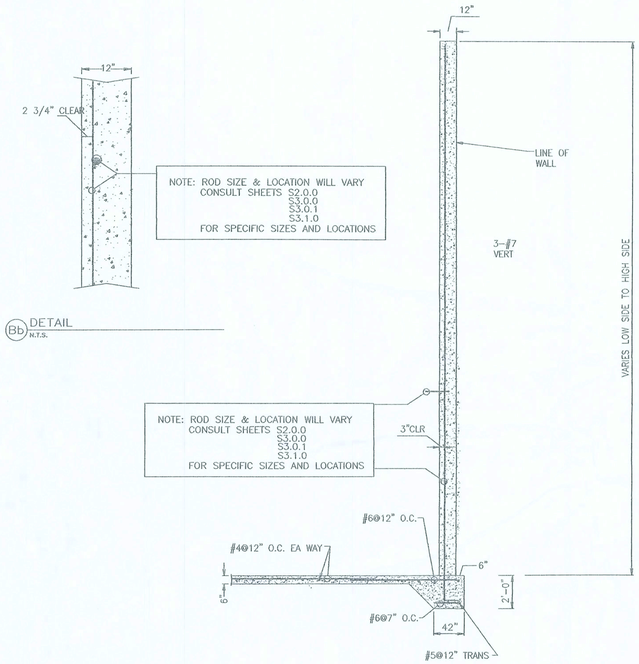


(Aa) DETAIL
N.T.S.



(A) DETAIL BUTTRESS A
N.T.S.

TYPICAL @ ALL BUTRESS LOCATIONS



(Bb) DETAIL
N.T.S.

(B) DETAIL BETWEEN BUTTRESS AREAS
N.T.S.

Curtis Keen
3/6/06

KEEN ENGINEERING & SURVEYING, INC.
LIVE OAK, FLORIDA 32060
9263 CR 417
386-362-4787
ENG. LIC. EB 3761

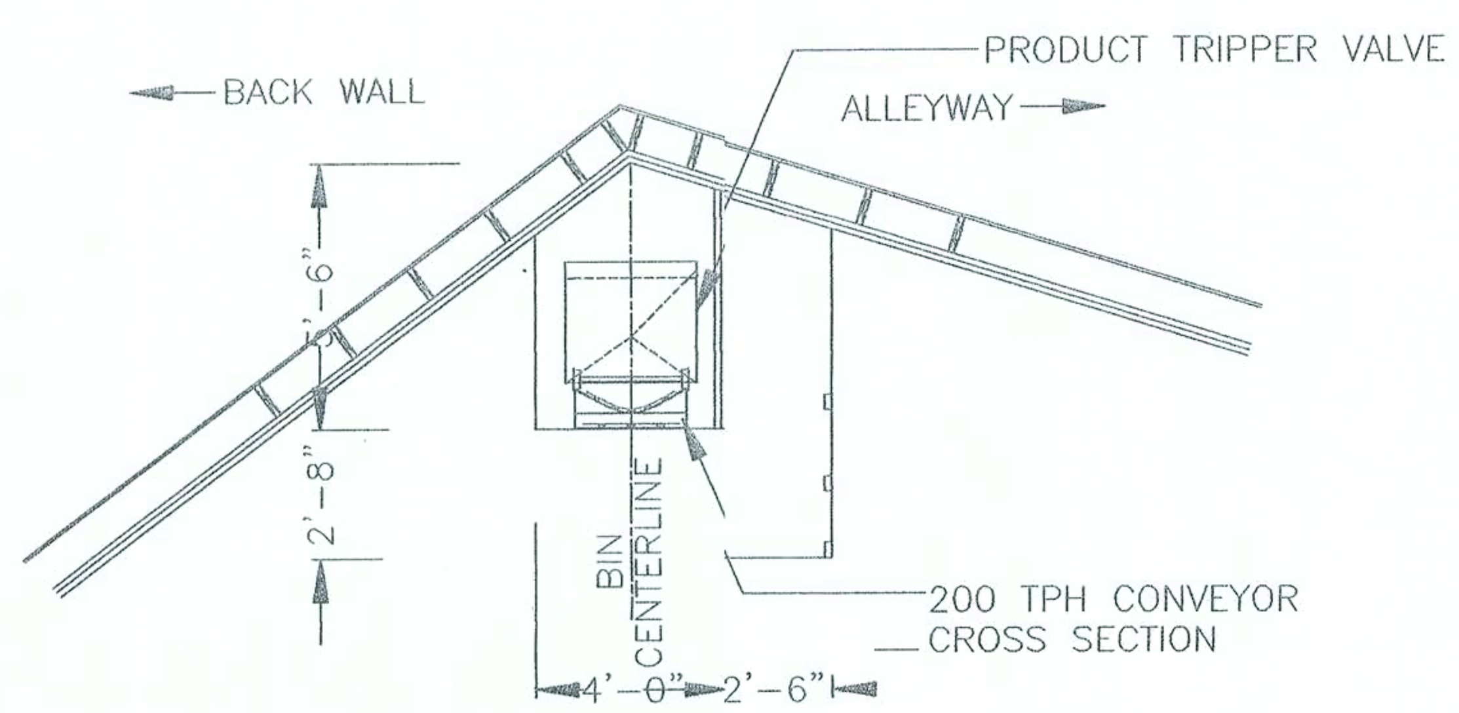
MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

REFERENCED ENDWALL SECTIONS & DETAILS
MISC. NOTES REFERENCES & INSTRUCTIONS

Drawn BY:
DATE 12/18/05
PROJECT No. F-MAYO-RS2.0.1.DWG
SHEET No. S2.0.1

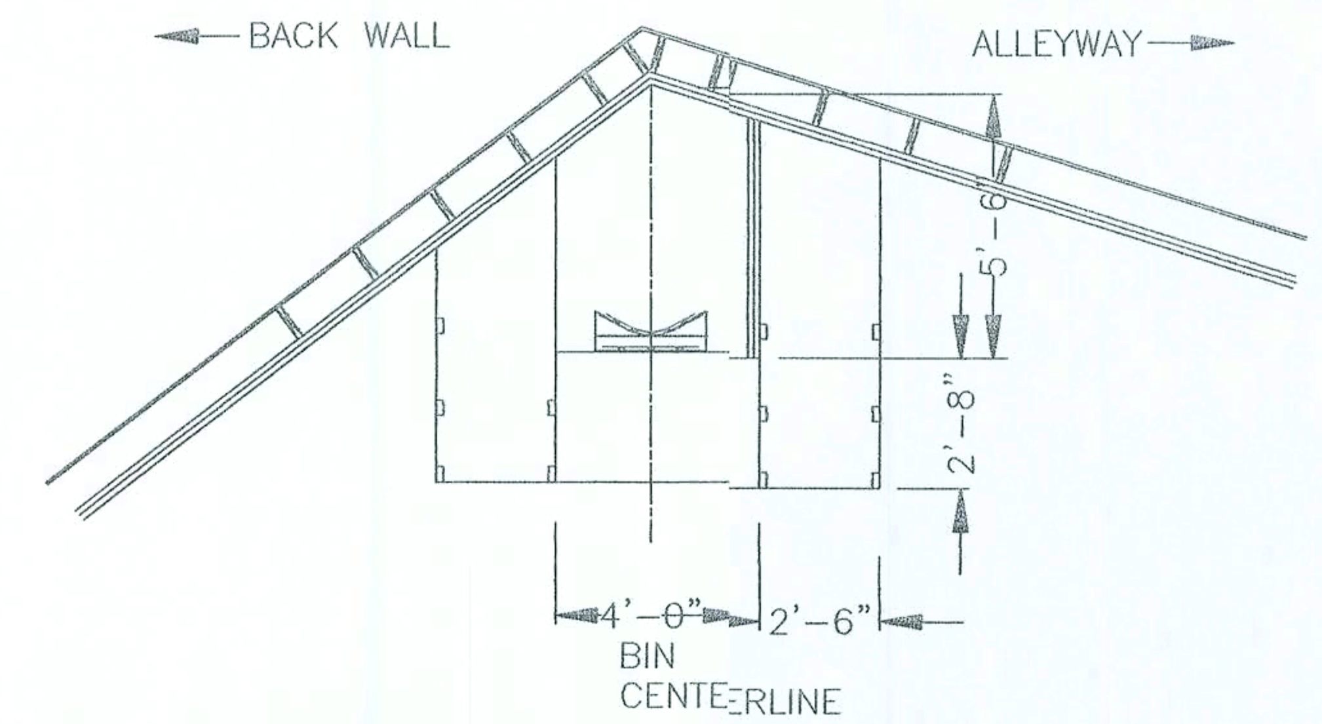
NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

SCALE NOTE: SECTIONS: AS NOTED



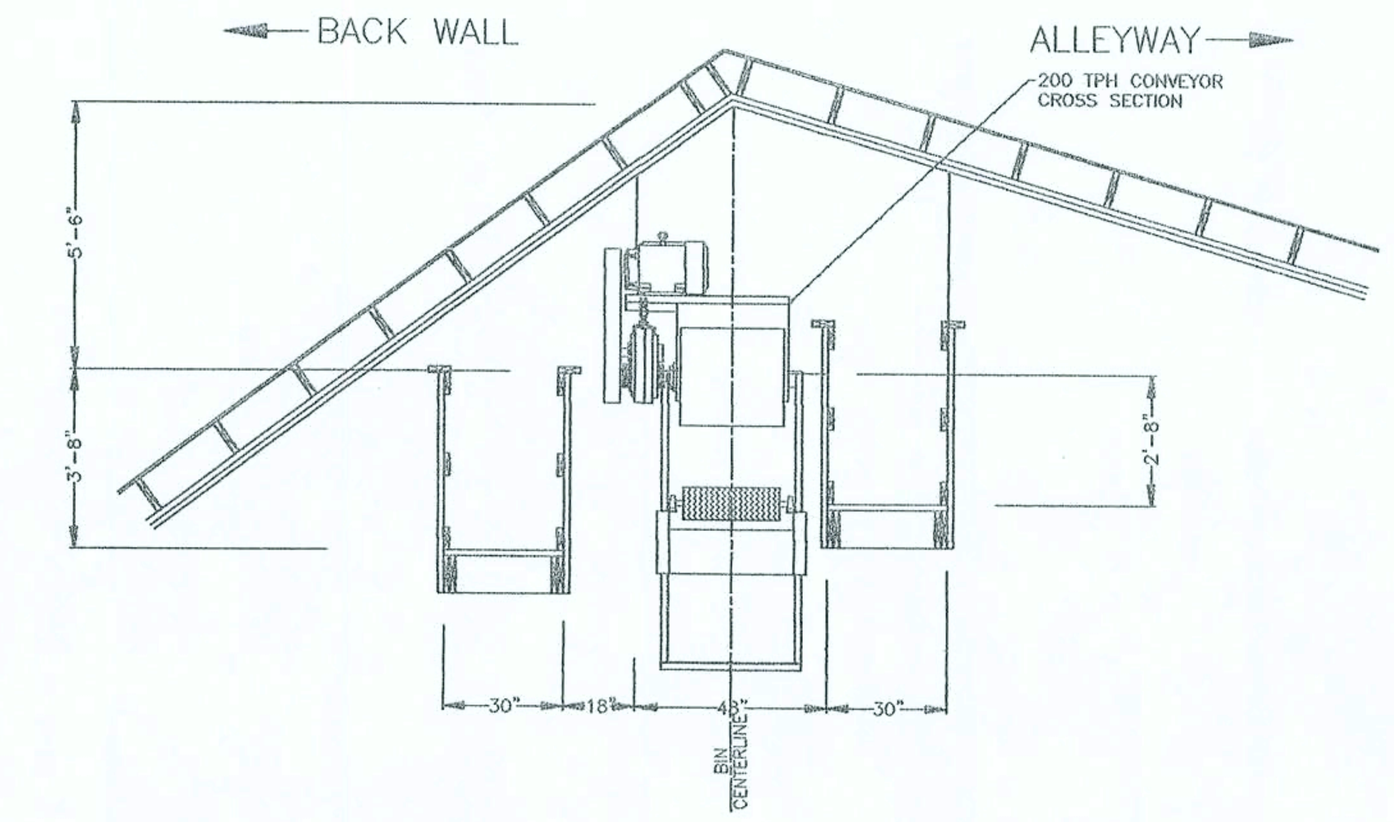
CONVEYOR CROSS SECTION SHOWING TRIPPER VALVE ON TOP

2 S2.1.0 SECTION "D" SCALE: N.T.S.



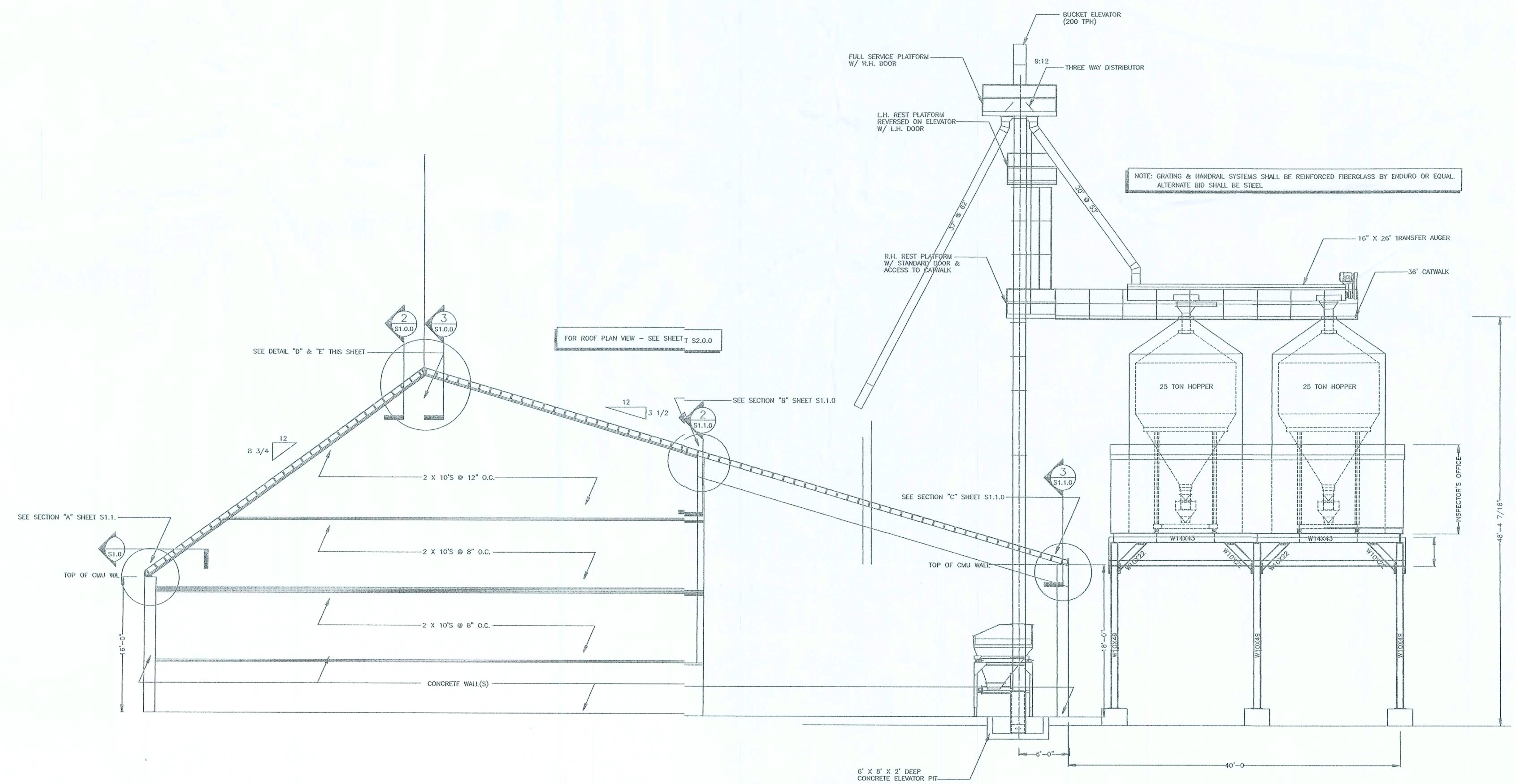
REQUIRED ON BOTH SIDES IN AREA OF CONVEYOR TAIL

3 S2.1.0 SECTION "E" SCALE: N.T.S.



REQUIRED ON BOTH SIDES IN AREA OF CONVEYOR HEAD

4 S2.1.0 SECTION "E" SCALE: N.T.S.



1 S2.1.0 TYPICAL SECTION THRU BUILDING SCALE: 1/8" = 1'-0"

Curtis Keen 3/6/06

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

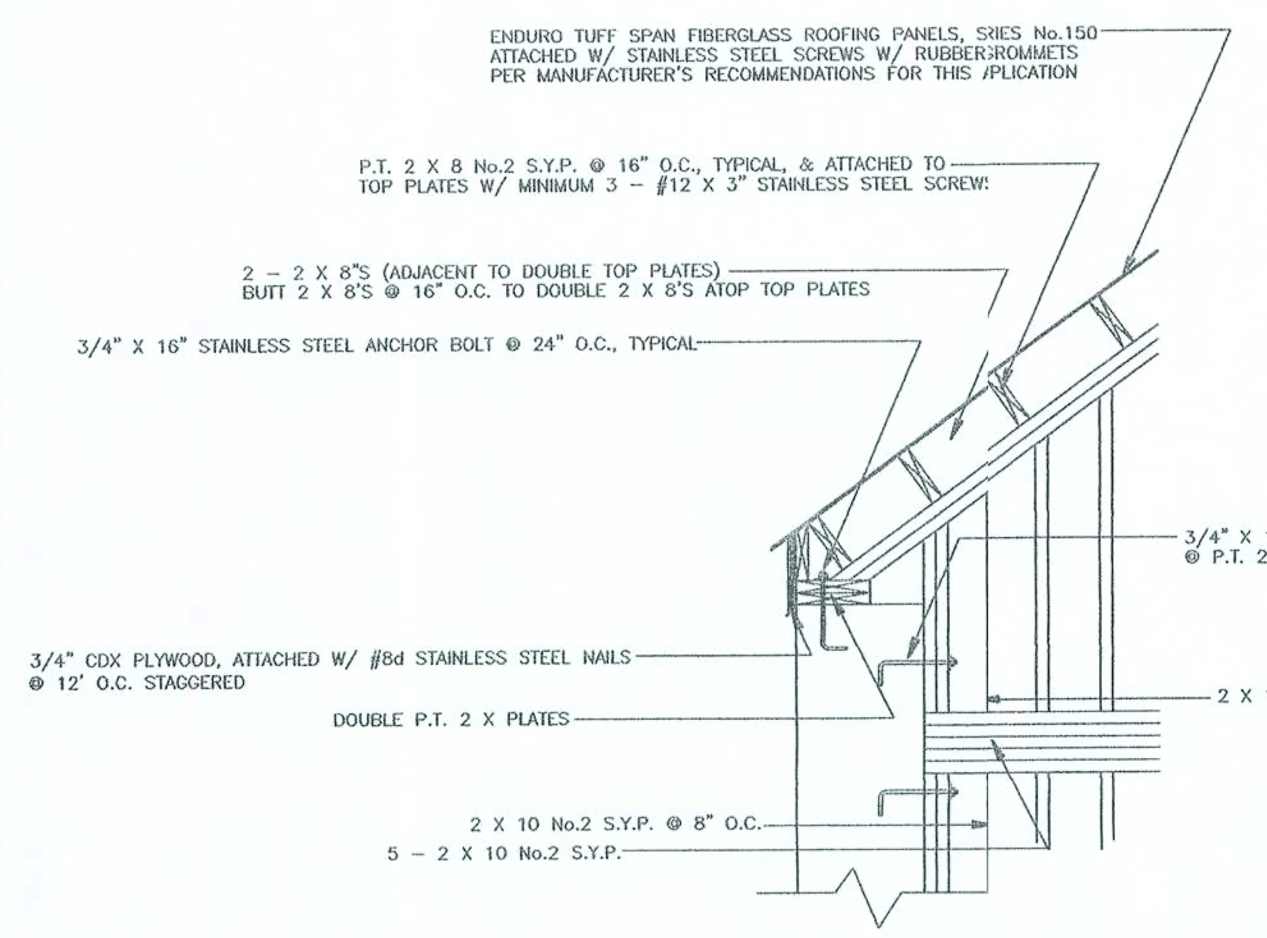
MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

TYPICAL INTERIOR ELEVATIONAL SECTIONS
REFERENCED SECTIONS & DETAILS
MISC. NOTES, REFERENCES & INSTRUCTIONS

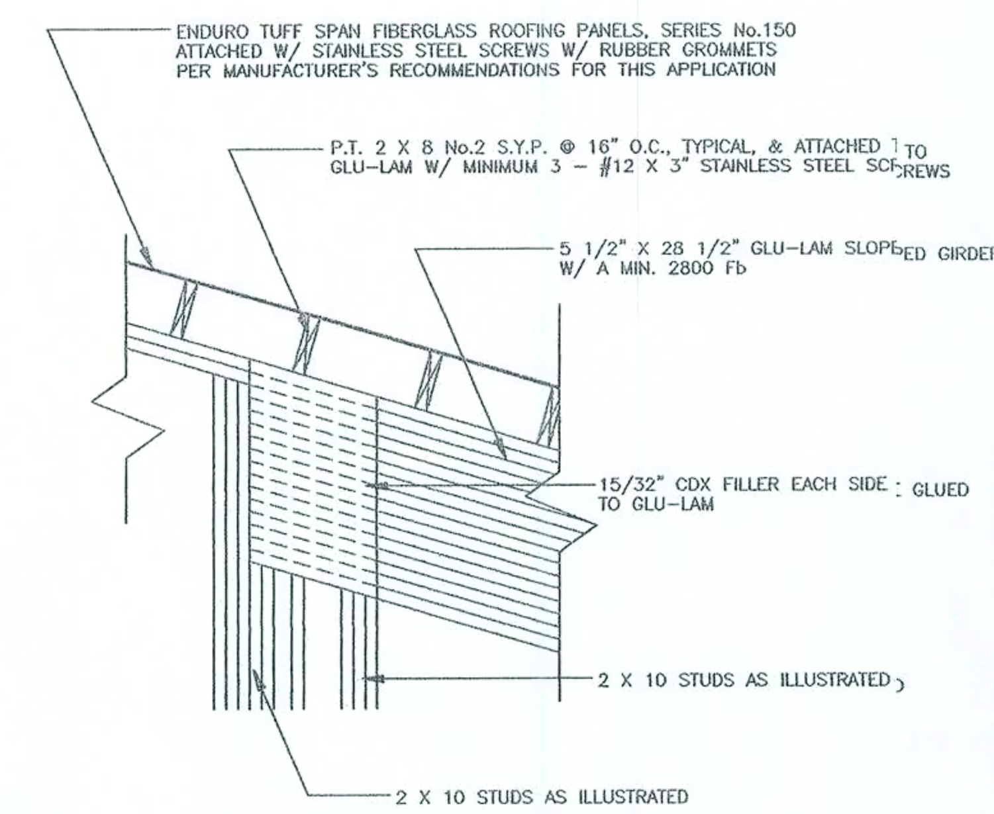
PROJECT No. F-MAYO-RS2.1.0.DWG	DRAWN BY:
SHEET No. S2.1.0	DATE 01/30/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

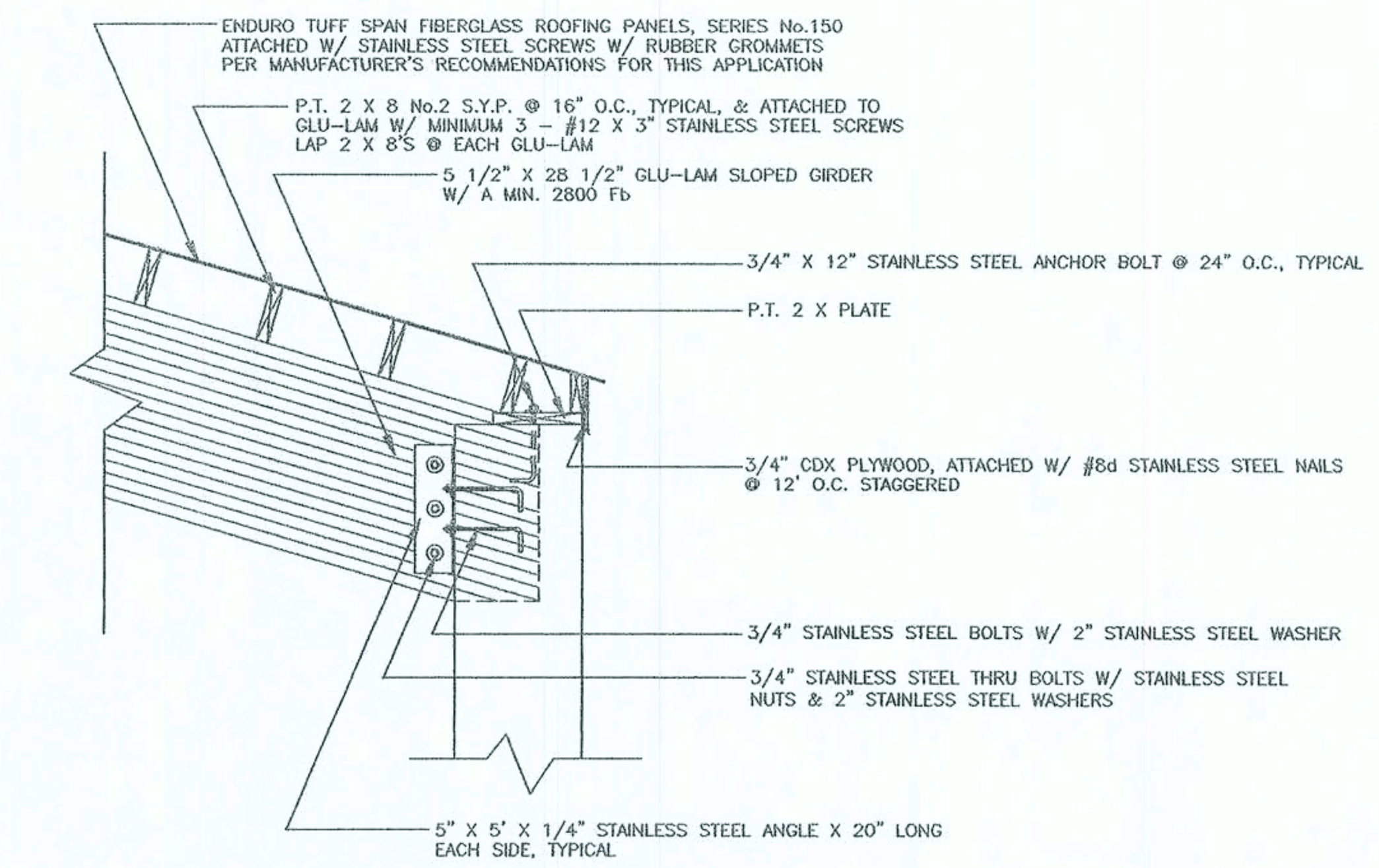
SCALE NOTE
SECTIONS: AS NOTED



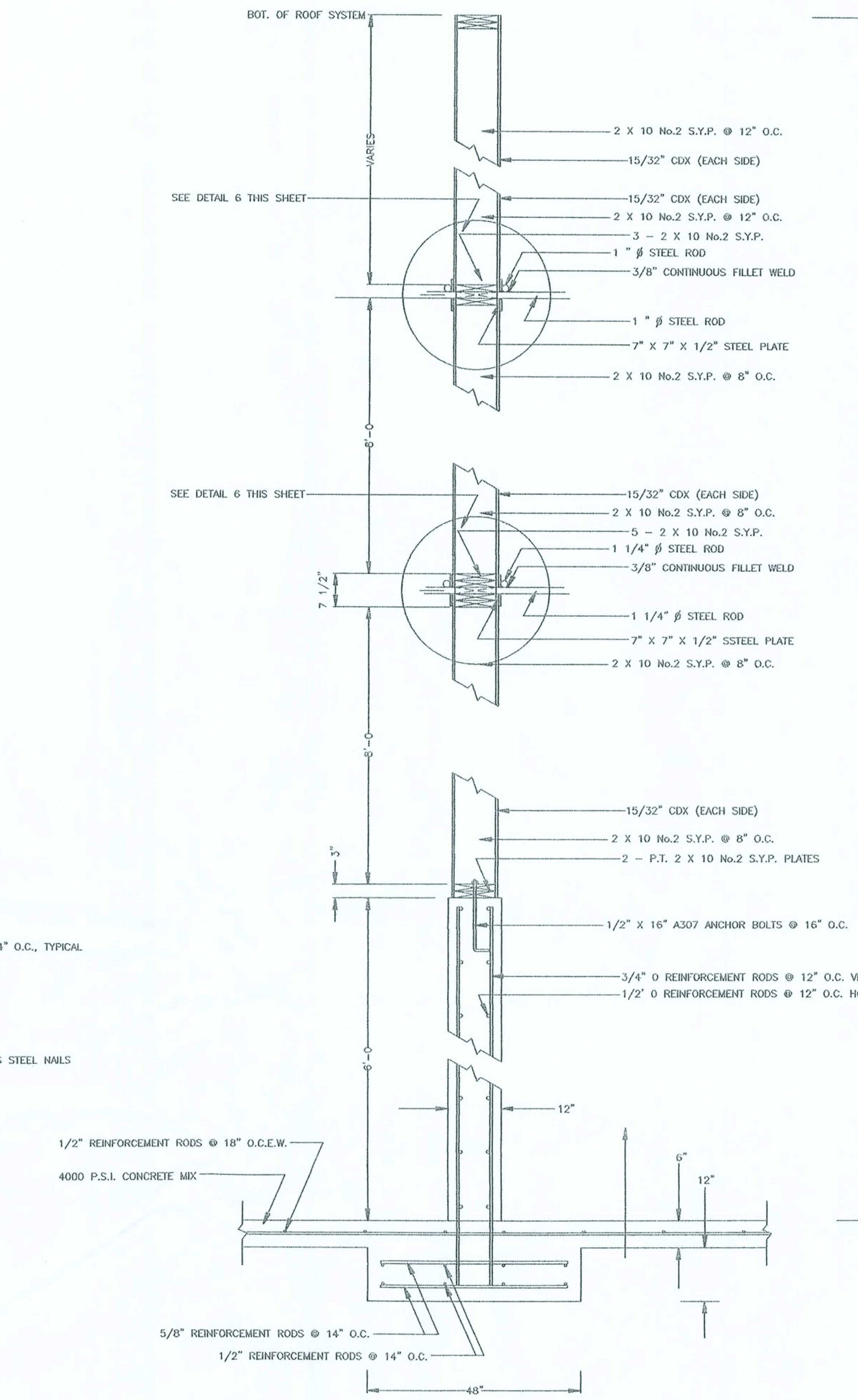
1 SECTION "A"
S2.1.1 SCALE: N.T.S.

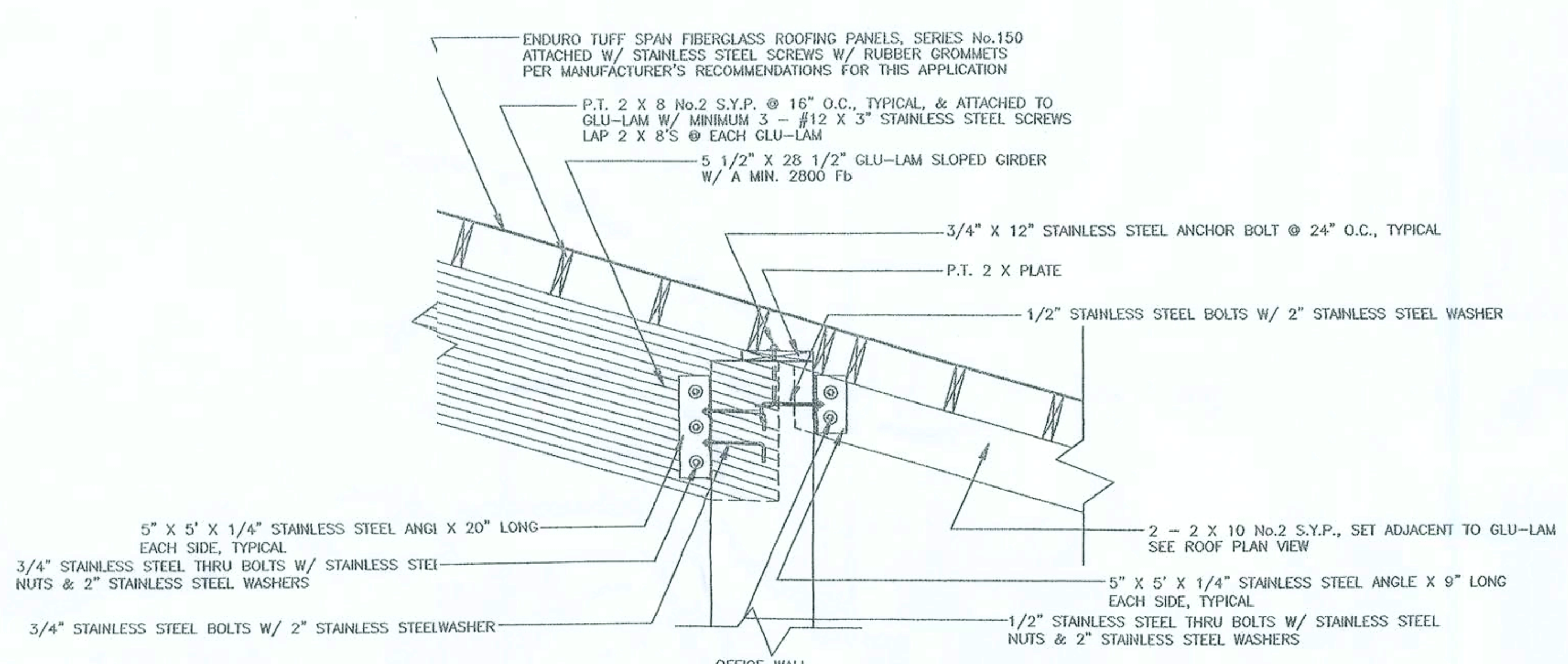


2 SECTION "B"
S2.1.1 SCALE: N.T.S.

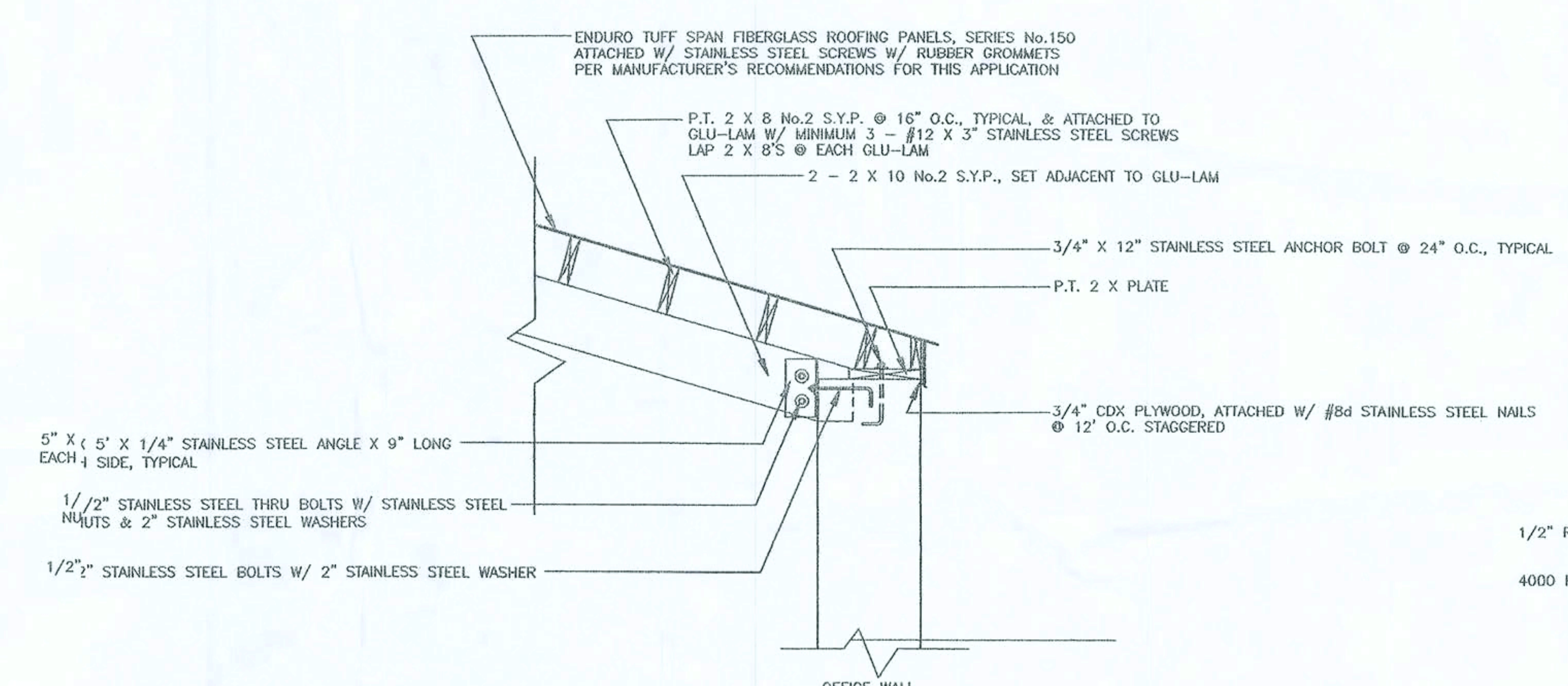


3 SECTION "C"
S2.1.1 SCALE: N.T.S.





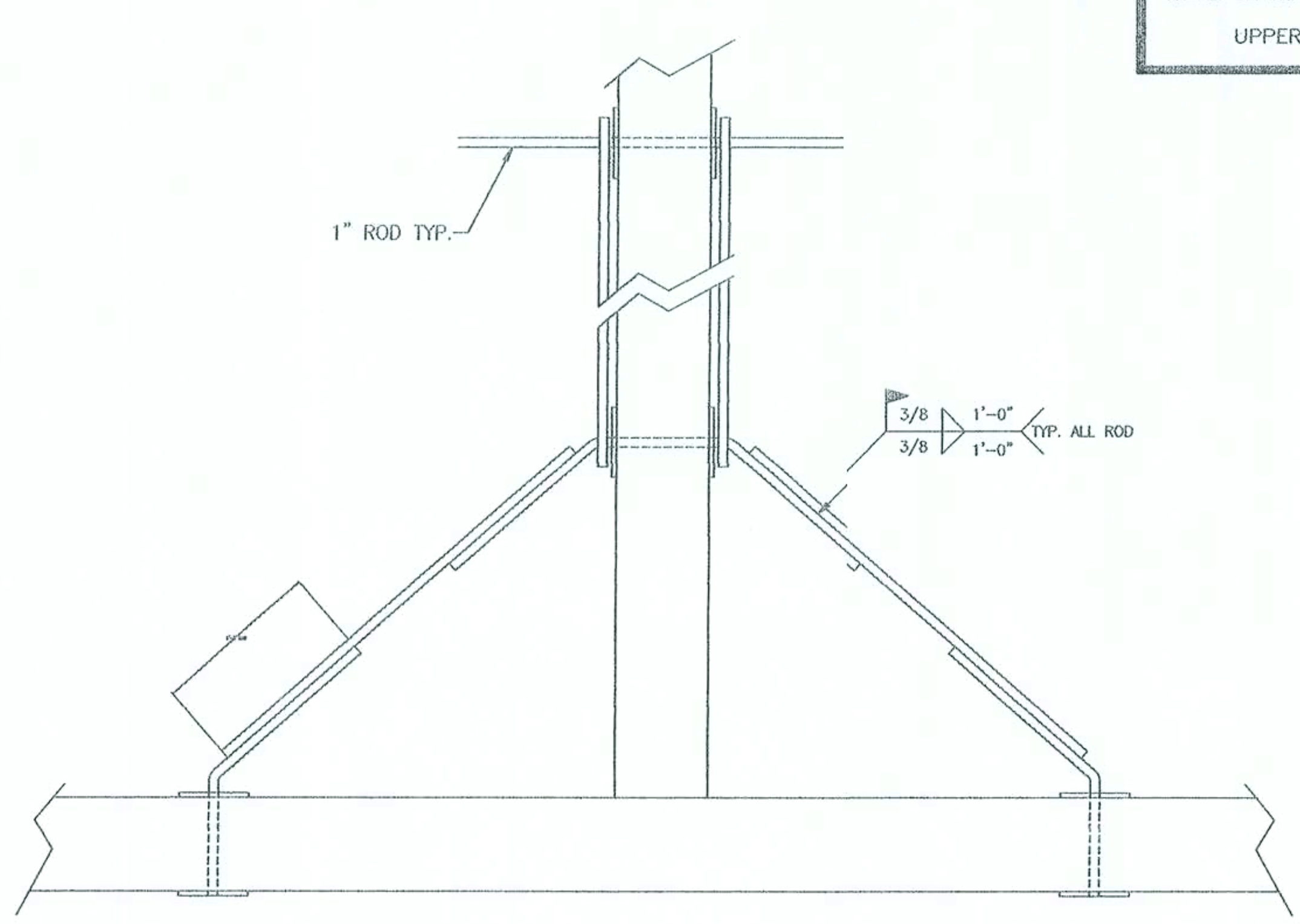
4 SECTION THRU INTERIOR SIDE OFFICE WALL/ROOF
S2.1.1 SCALE: N.T.S.



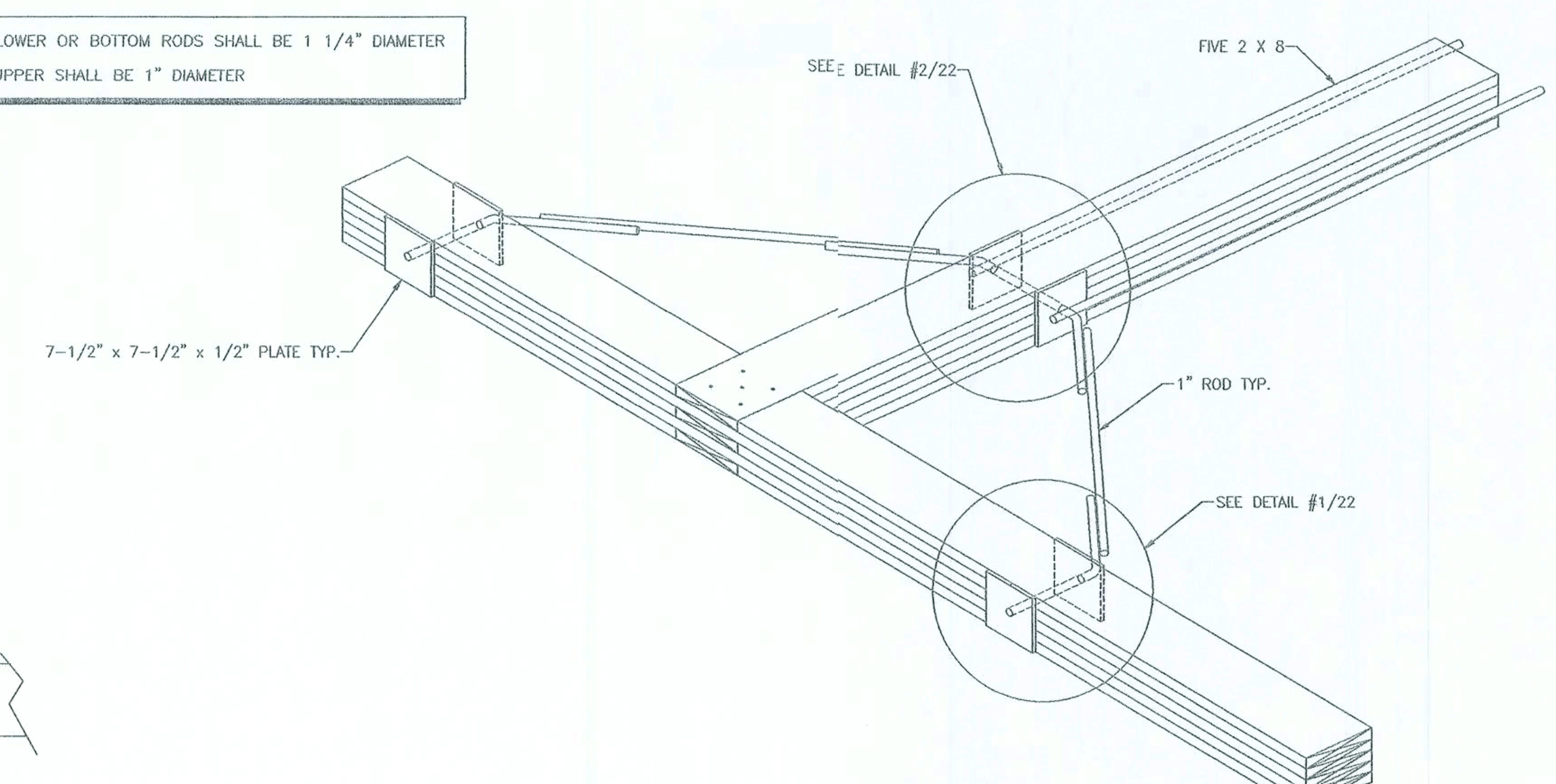
5 SECTION THRU EXTERIOR SIDE OFFICE WALL/ROOF
S2.1.1 SCALE: N.T.S.

7 TYPICAL SECTION THRU INTERIOR STUD WALLS
S2.1.1 SCALE: N.T.S.

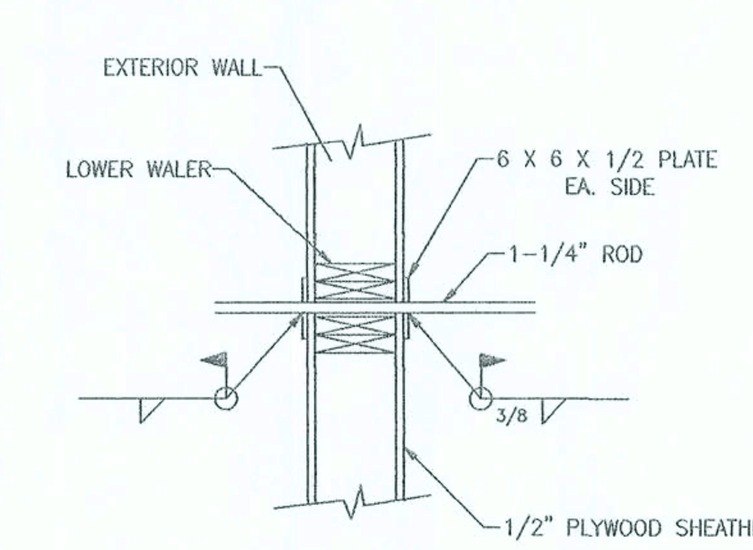
NOTE: LOWER OR BOTTOM RODS SHALL BE 1 1/4" DIAMETER
UPPER SHALL BE 1" DIAMETER



8 ROD CONNECTION DETAIL
S2.1.1 SCALE: N.T.S.



8 ROD CONNECTION DETAIL
S2.1.1 SCALE: N.T.S.



10 ROD CONNECTION DETAIL @ INTERIOR WALL
S2.1.1 SCALE: N.T.S.

NOTES:

1. ALL STRUCTURAL MEMBERED SHALL BE SOUTHERN YELLOW PINE #2 OR BETTER.
2. PLYWOOD SHALL BE MINIMUM 1/2" C-D WITH EXTERIOR GLUE, OR AS SPECIFIED. PLYWOOD SHALL BE NAILED WITH 8D COMMON NAILS AT 4" ON CENTERS AT PANEL EDGES AND AT 6" ON CENTER AT INTERMEDIATE SUPPORTS OR AS SPECIFIED.
3. ALL NAILS FOR PLYWOOD AND STUD CONNECTIONS SHALL BE COATED TO RESIST CORROSION.
4. CLIPS SHALL BE SIMPSON 135 OR EQUAL WITH GALVANIZED NAILS.
5. OVERLAP RODS A MINIMUM OF 1'-6" WELD OVERLAP CONTINUOUSLY OR A MINIMUM OF 1'-0". WELD DEPTH SHALL FILL AREA BETWEEN RODS TO A MINIMUM OF 3/8" WELD DEPTH. RODS SHALL BE WELDED ON BOTH SIDES OF LAP.
6. RODS SHALL BE PLACED SO RODS REMAIN IN SAME HORIZONTAL PLANE, I.E. PLACE RODS BESIDE ONE ANOTHER, NOT ABOVE OR BELOW ONE ANOTHER.
7. ALL RODS SHALL BE TENSIONED TO REMOVE ANY DEFLECTION PRIOR TO WELDING PLATES. PLATES SHALL BE WELDED TO RODS AROUND ENTIRE ROD CIRCUMFERENCE. DEPTH OF FILLET WELD SHALL BE MINIMUM OF 3/8".
8. ALL WELDING SHALL BE PERFORMED BY A COMPETENT WELDER. WELDS SHALL PENETRATE BOTH SURFACES TO DEVELOP FULL STRENGTH OF BOTH MEMBERS.
9. CORNER RODS SHALL BE HEATED AND BENT SHARPLY AT INTERIOR PLATES.
10. ROD SPACING MAY BE ADJUSTED SLIGHTLY TO AVOID NAILS AT STUD LOCATIONS.
11. DUST SHIELD IS NOT DESIGNED TO WITHSTAND ANY PRODUCT PRESSURE.

Curtis Keen
3/6/06

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

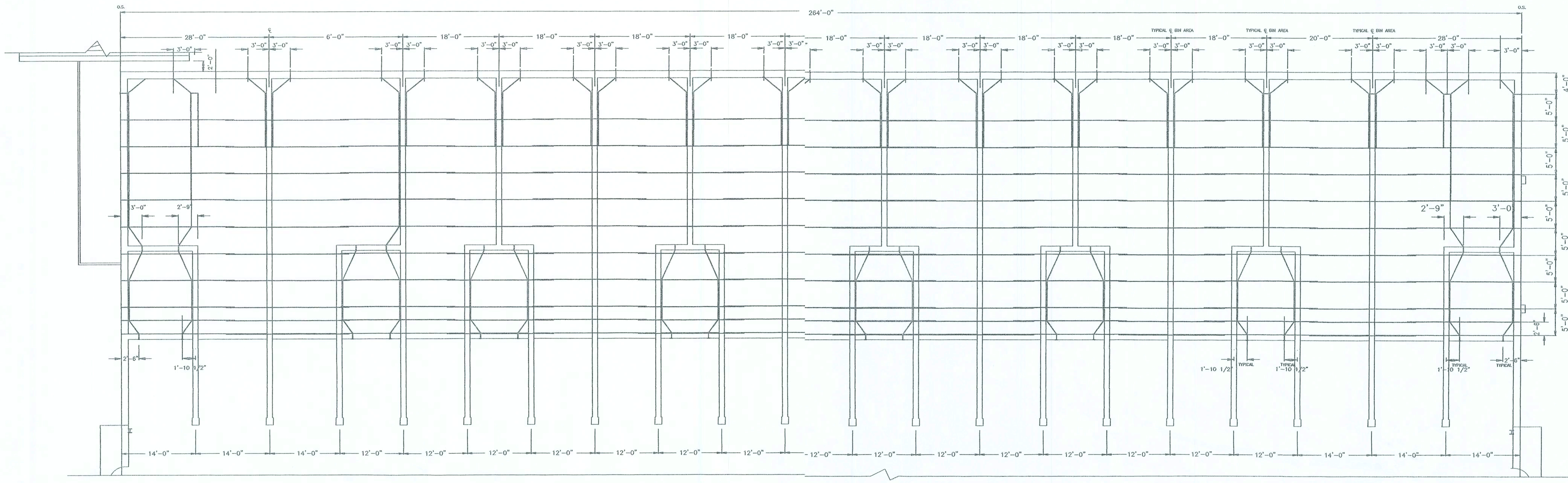
MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

REFERENCED SECTIONS & DETAILS
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No. F-MAYO-RS2.1.1.DWG
DRAWN BY:
SHEET No. S2.1.1
DATE 12/18/05

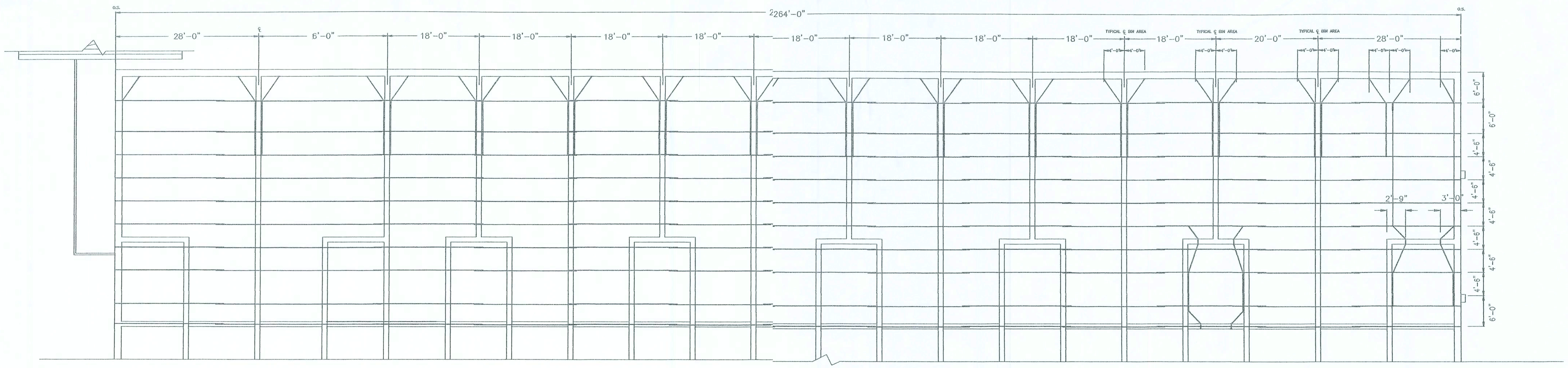
NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

SCALE NOTE:
SECTIONS: AS NOTED



1 A2.2.0 DIMENSIONED LOWER WALER ROD PLAN VIEW
SCALE: 3/32" = 1'-0

NOTE: LOWER OR BOTTOM RODS SHALL BE 1 1/4" DIAMETER
UPPER SHALL BE 1" DIAMETER



2 A2.2.0 DIMENSIONED UPPER WALER ROD PLAN VIEW

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

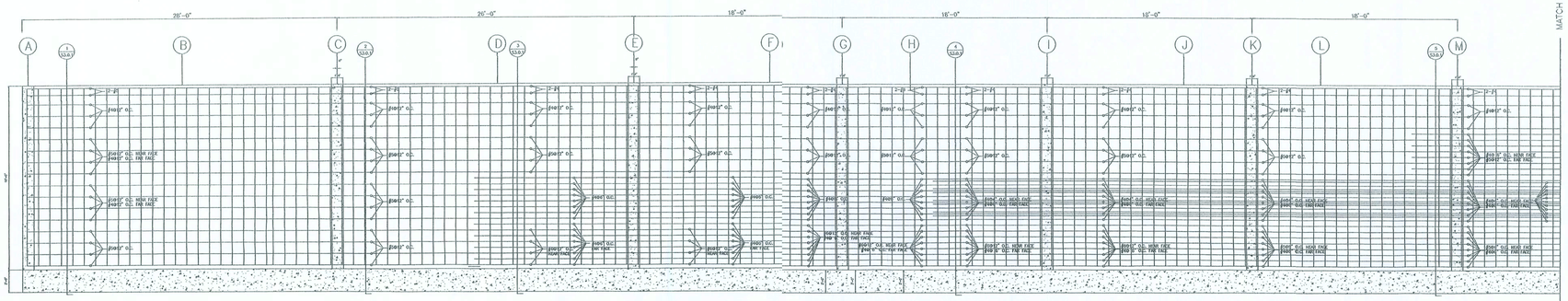
WALER ROD PLAN VIEW
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No.	DRAWN BY:
F-MAYO-RS2.2.0.DWG	
SHEET No.	DATE
S2.2.0	02/12/06

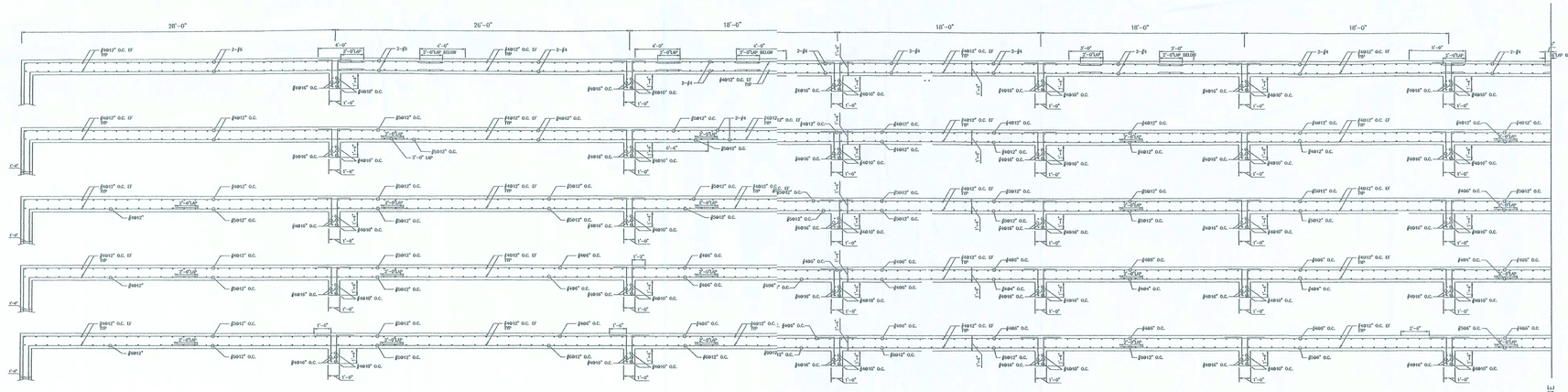
Curtis Keen
3/6/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

SCALE NOTE:
SECTIONS: AS NOTED



1 / S3.0.0 DIMENSIONED REAR WALL ELEVATION: ONE OF TWO
3/16" = 1'-0



(A) TOP 12" OF WALL
N.T.S.

(B) 12' TO 15' ABOVE FLOOR
N.T.S.

(C) 8' TO 12' ABOVE FLOOR
N.T.S.

(D) 4' TO 8' ABOVE FLOOR
N.T.S.

(E) 0' TO 4' ABOVE FLOOR
N.T.S.

KEEN ENGINEERING & SURVEYING, INC.
LIVE OAK, FLORIDA 32060
9263 CR 417
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

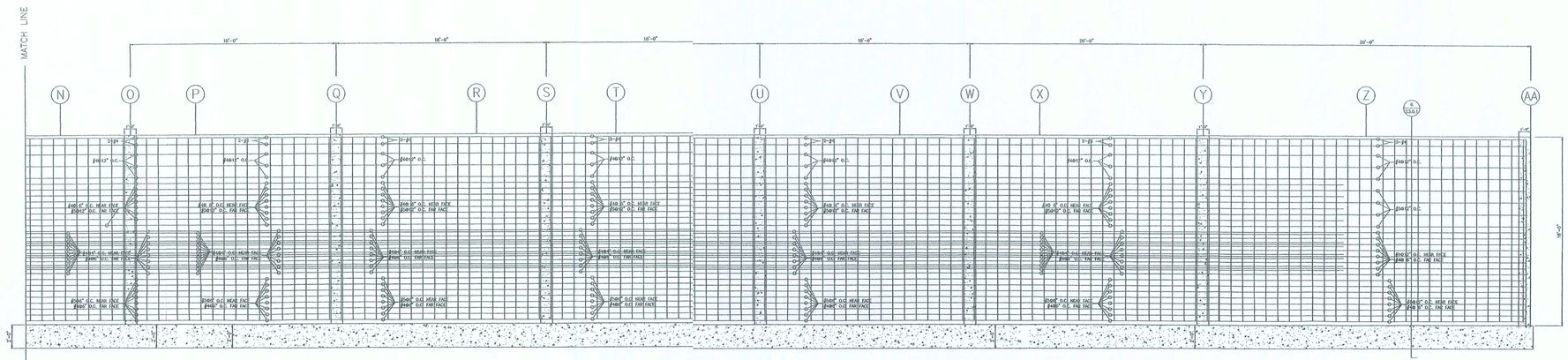
SIDEWALL ELEVATIONAL SECTIONS
REFERENCED SECTIONS & DETAILS
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No.	DRAWN BY:
F-MAYO-RS3.0.0.DWG	
SHEET No:	DATE
S3.0.0.A	12/18/05

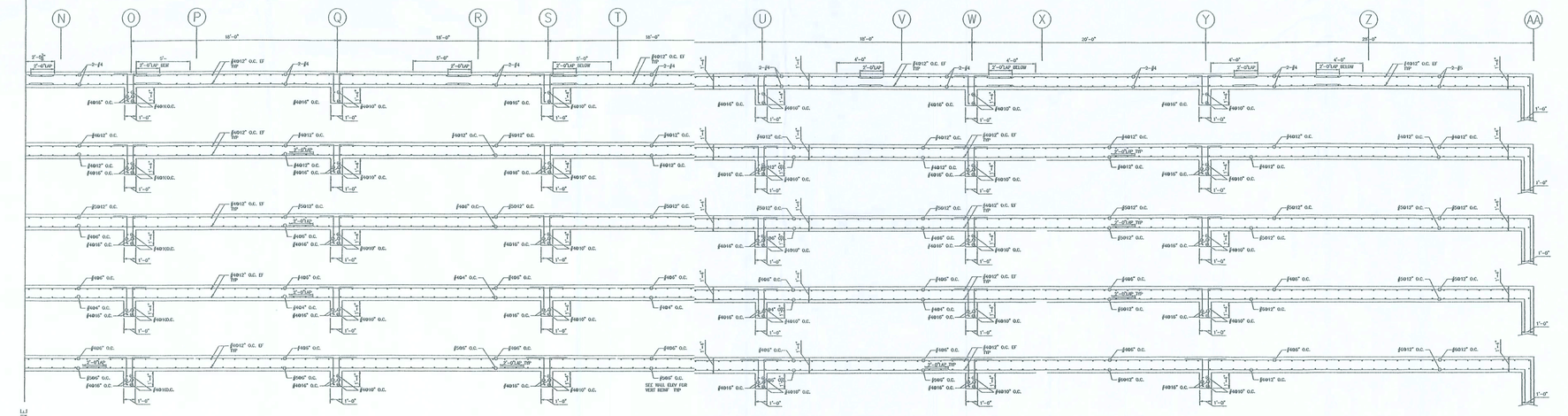
Curtis Keen
3/6/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

SCALE NOTE:
SECTIONS: AS NOTED



2 / S3.0.0 DIMENSIONED REAR WALL ELEVATION: TWO OF TWO
1/8" = 1'-0



Curtis Keen
3/6/06

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

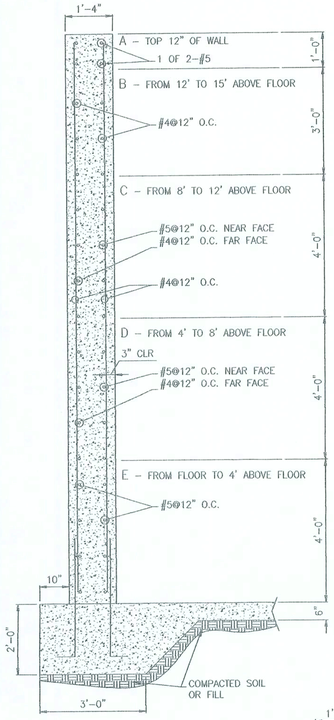
MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

SIDEWALL ELEVATIONAL SECTIONS
REFERENCED SECTIONS & DETAILS
MISC. NOTES, REFERENCES & INSTRUCTIONS

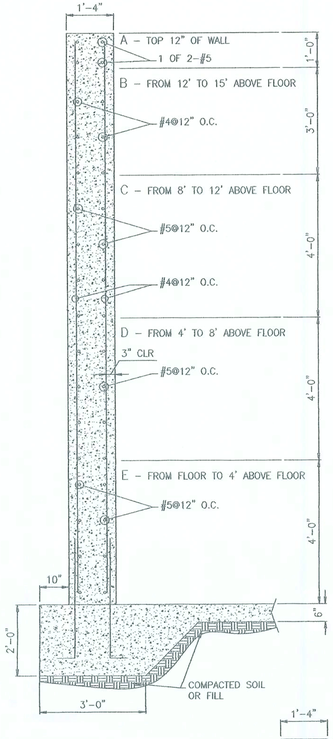
PROJECT No.	DRAWN BY:
F-MAYO-RBS3.0.0.DWG	DATE
SHEET No. S3.0.0.B	12/18/05

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

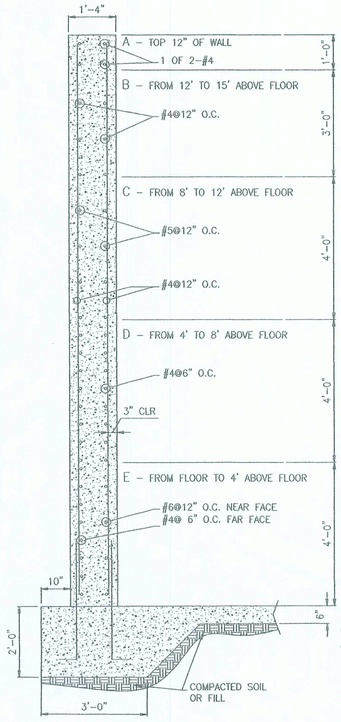
SCALE NOTE:
SECTIONS: AS NOTED



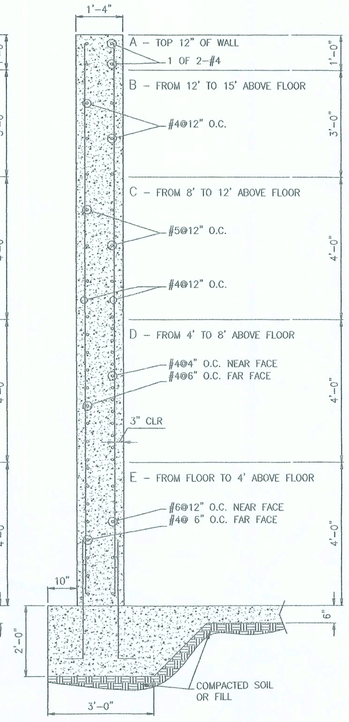
1 DETAIL N.T.S.



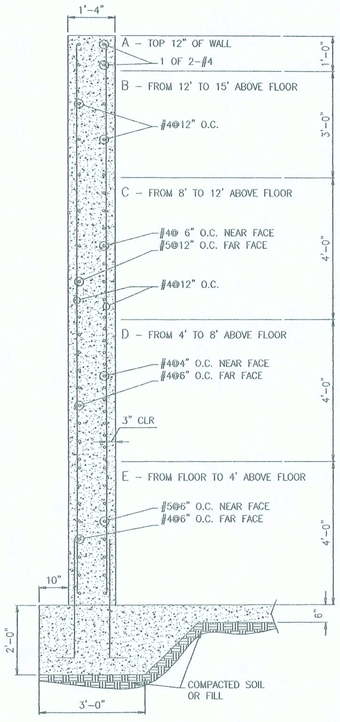
2 DETAIL N.T.S.



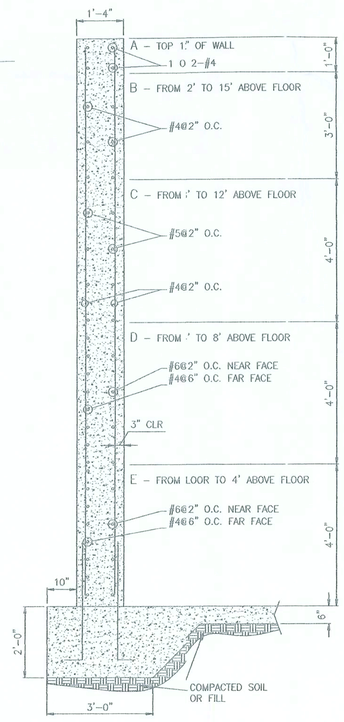
3 DETAIL N.T.S.



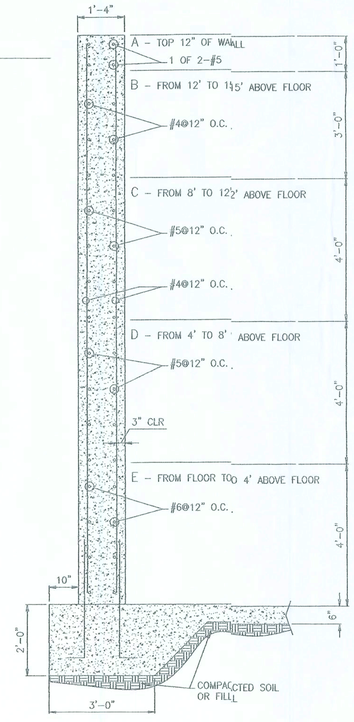
4 DETAIL N.T.S.



5 DETAIL N.T.S.



6 DETAIL N.T.S.



7 DETAIL N.T.S.

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

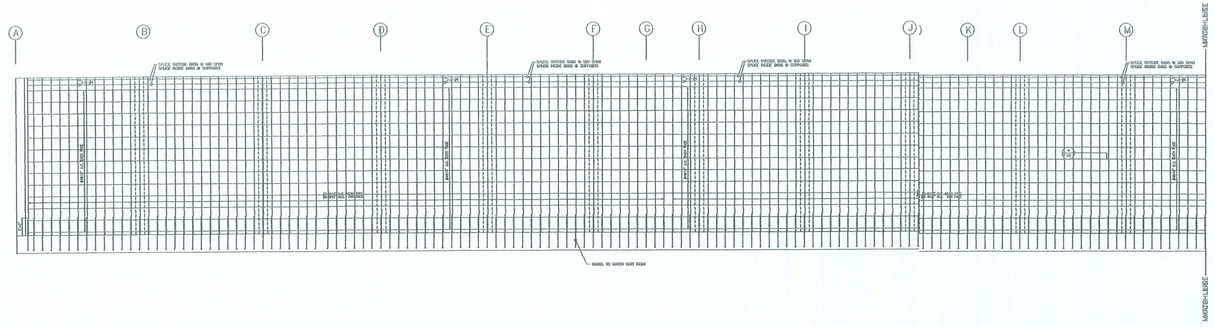
REFERENCED SECTIONS & DETAILS
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No.: F-MAYO-PRS3.0.1.DWG
SHEET No.: S3.0.1
DRAWN BY:
DATE: 12/16/05

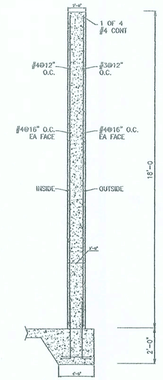
Curtis Keen
3/6/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

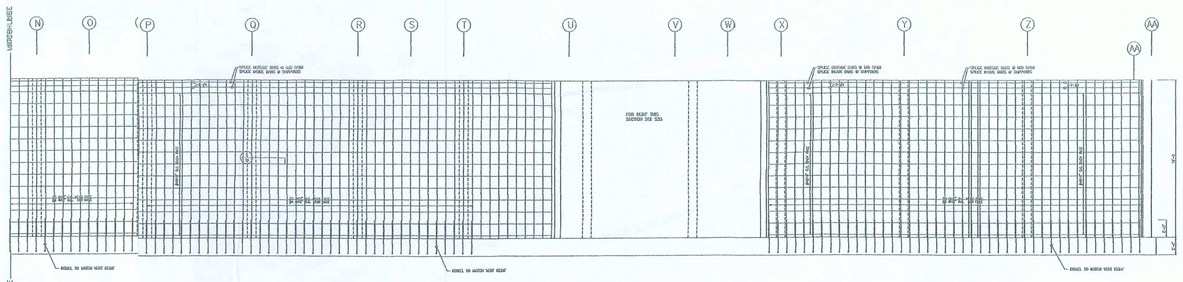
SCALE NOTE:
SECTIONS: AS NOTED



1 / S3.1.0 DIMENSIONED FRONT WALL ELEVATION: ONE OF T/O
1/8" = 1'-0



A WALLSECTION
N.T.S.



2 / S3.1.0 DIMENSIONED FRONT WALL ELEVATION: TWO OF TWO
1/8" = 1'-0

Curtis Keen
3/6/06

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

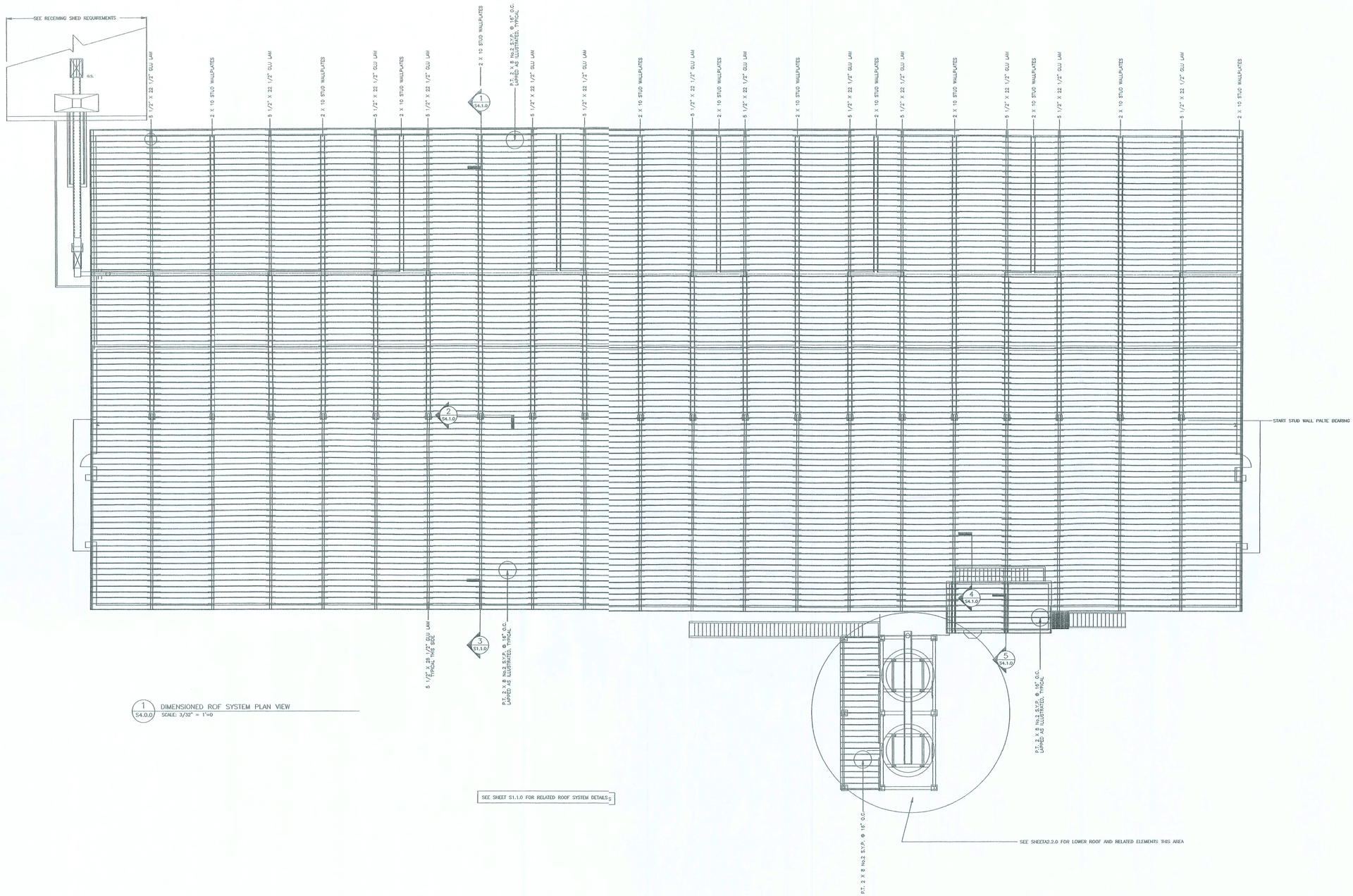
MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

SIDEWALL ELEVATIONAL SECTIONS
REFERENCED SECTIONS & DETAILS
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No.: F-MAYO-RS3.1.0.DWG
SHEET No.: S3.1.0
DRAWN BY:
DATE: 12/18/05

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

SCALE NOT:
PLAN VIEW: 3/32" = 1'-0



1 S4.0.0 DIMENSIONED ROF SYSTEM PLAN VIEW
SCALE: 3/32" = 1'=0

SEE SHEET S1.1.0 FOR RELATED ROOF SYSTEM DETAILS

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

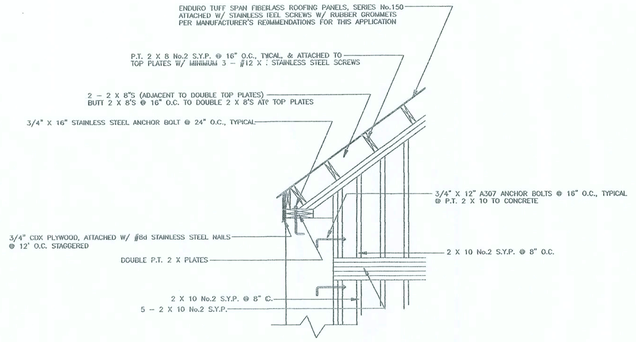
OVERALL ROOF SYSTEM PLAN VIEW
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No.	DRAWN BY:
F-MAYO-RS4.0.DWG	DATE
SHEET No.	01/30/06
S4.0.0	

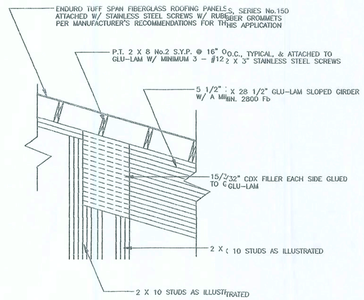
Curtis D. Keen
3/6/06

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

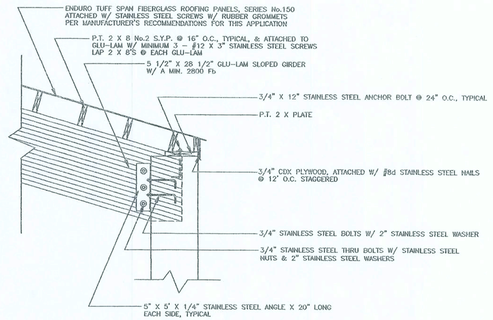
SCALE NOTE:
DETAILS NOT TO SCALE



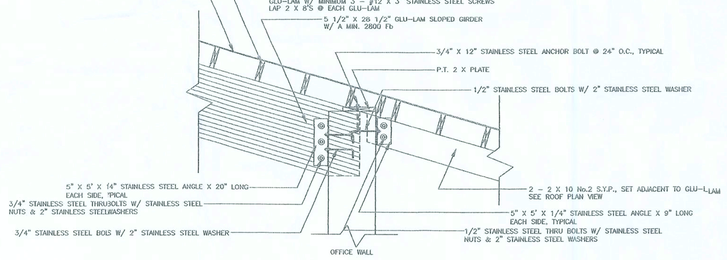
1 / S4.1.0 SECTION "A"
SCALE: N.T.S.



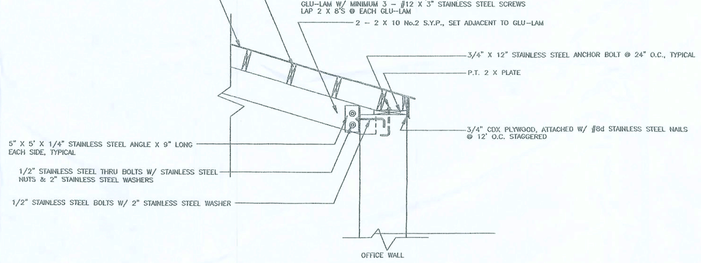
2 / S4.1.0 SECTION "B"
SCALE: N.T.S.



3 / S4.1.0 SECTION "C"
SCALE: N.T.S.



4 / S4.1.0 SECTION THRU INTERIOR SIDE OFFICE WALL/ROOF
SCALE: N.T.S.



5 / S4.1.0 SECTION THRU EXTERIOR SIDE OFFICE WALL/ROOF
SCALE: N.T.S.

Curtis Keen
3/6/06

KEEN ENGINEERING & SURVEYING, INC.
LIVE OAK, FLORIDA 32060
9263 CR 417
386-362-4787
ENG. LIC. EB 3761

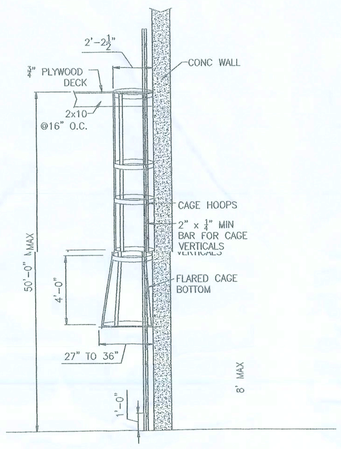
MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

ROOF SYSTEM REFERENCED DETAILS & SECTIONS
MISC. NOTES, REFERENCES & INSTRUCTIONS

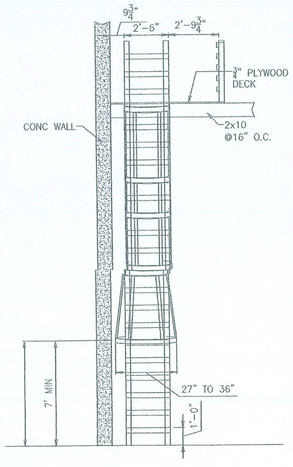
PROJECT No.	DRAWN BY:
F-MAYO-RS4.1.0.DWG	DATE
SHEET No.	11/22/05
S4.1.0	

NOTE: THE CONTRACTOR IS DIRECTED TO REVIEW ALL CONSTRUCTION DRAWINGS & SPECIFICATIONS FOR ACCURACY & COMPLETENESS. ANY CONFLICTING INFORMATION SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION & CLARIFICATION.

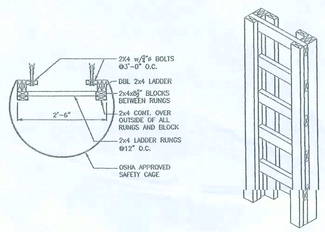
SCALE NOTE:
DETAILS NOT TO SCALE



1 TYPICAL LADDER DETAIL(S)
N.T.S.



2 TYPICAL LADDER DETAIL(S)
N.T.S.



3 DETAIL
N.T.S.

NOTE: LADDER W/ SAFETY CAGE SHALL BE LOCATED @ FOLLOWING AREA(S)

BUCKET ELEVATORS
OFFICE PLATFORM TO INSPECTOR'S OFFICE STAIR LANDING
EACH END OF BUILDING TO ACCESS BELT CONVEYOR

LADDERS & SAFETY CAGE SHALL PROVIDED BY RANCO

KEEN ENGINEERING & SURVEYING, INC.
9263 CR 417
LIVE OAK, FLORIDA 32060
386-362-4787
ENG. LIC. EB 3761

MAYO FERTILIZER
COLUMBIA COUNTY, FLORIDA

MISC. SECTIONS & DETAILS
MISC. NOTES, REFERENCES & INSTRUCTIONS

PROJECT No.: F-MAYO-RBS.0.0.DWG
SHEET No.: S5.0.0
DRAWN BY:
DATE: 11/22/05

Curtis Keen
3/6/06